

Cree Mineral Exploration Board  
ANNUAL REPORT 2022-2023  
&  
ACTION PLAN 2023-2024

Submitted to:

MINISTÈRE DE L'ÉNERGIE ET DES RESSOURCES NATURELLES, QUEBEC  
(QUEBEC MINISTRY OF ENERGY AND NATURAL RESOURCES)

And

CREE NATION GOVERNMENT, QUEBEC

Youcef Larbi,  
Marlene MacKinnon,

Wemindji 2023

CREE MINERAL EXPLORATION BOARD

Directors:

Andy Baribeau, President

Anthony MacLeod

Sam Bosum

Mark Wadden

Marc Leblanc, MENR representative

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## 1. INTRODUCTION

The **Cree Mineral Exploration Board** (the CMEB, the Board) was formed pursuant to Chapter 5 of the Agreement entitled *Agreement concerning a New Relationship between le Gouvernement du Québec and the Crees of Quebec* (the Agreement). Its functions are aimed at developing and enhancing mineral exploration in Eeyou Istchee (the Cree Territory). To achieve this, it will benefit from a minimum annual budget of \$300,000 per year provided by the Quebec Ministry of Energy and Natural Resources (MERN).

The CMEB head office was opened in Wemindji in March 2003 and a sub-office was opened in Mistissini in 2005. The activities of the CMEB are oriented towards mineral resource exploration in Eeyou Istchee in a context of sustainable economic development.

The executives and directors of the CMEB are submitting this yearly activity report describing the CMEB and detailing its activities and projects for the fiscal year April 2022 to March 2023. This report is prepared in accordance with Section 7 of the *Agreement concerning Mineral Resources Development in the James Bay Cree Territory*, and in accordance with section 6.4 of the Quebec Mineral Exploration Assistance Program (QMEAP) framework provided as per Schedule 1 of the Agreement. The report includes the following areas of activity: awareness and promotion, training, job opportunities and assistance, prospecting, autonomous prospectors and developing entrepreneurs.

## 2. BACKGROUND

Chapter 5 of the Agreement entitled *Agreement concerning a New Relationship between le Gouvernement du Québec and the Crees of Quebec* concerns mining. In particular, referring to Section 5.3:

*Quebec will promote and facilitate the participation of the James Bay Crees in mineral exploration activities in the Territory. In particular, Quebec and the Crees will set up before April 1st, 2002 a Mineral Exploration Board which will be largely composed of Cree representatives but with some representation by Quebec.*

The Cree Mineral Exploration Board was duly set up in accordance with that section of the Agreement. The remainder of Section 5.3 specifies the purpose of the Board and the financial terms:

*This Board benefits as of the 2001-02 Financial Year from the available regular program funding of Quebec for such purposes presently set at three hundred thousand dollars (\$300,000) per Financial Year. The main purposes of this Mineral Exploration Board will be to:*

- a) Assist the Crees in accessing mineral exploration opportunities;*
- b) Facilitate the development of mineral exploration activities by Cree Enterprises;*
- c) Facilitate and encourage the access by the Crees and Cree Enterprises to regular Quebec program funding and other encouragements for mineral exploration activities;*
- d) Act as an entry mechanism for offers of services by Crees and Cree Enterprises in the field of mineral exploration.*

On March 22nd 2002, the Cree Nation Government (CNG) (at that time the Cree Regional Authority), the Quebec Government and the Cree Mineral Exploration Board signed an additional and specific Agreement entitled *Agreement concerning Mineral Resources Development in the James Bay Region*. Section 6 of the Agreement on Mineral Resources Development states the obligations of the CNG as, (among others), to:

*Cover CMEB administrative expenses from its operating budget may include among others rent and office expenses, accounting and audit fees, the transportation and travel expenses of CNG representatives for meetings of the board of directors of the CMEB.*

## 3. THE MISSION OF THE BOARD

Shortly after the Board became operational in the fall of 2002, a five year work plan was developed and adopted by the Board. This was the plan submitted to the MERN for the 2002-03 funding of the CMEB. Activities of the Board address the following five programs:

### Awareness and Promotion

The CMEB works with local schools to develop a program with the students based on Eeyou Istchee geology. This can be expanded in the future to include other schools under the jurisdiction of the Cree School Board. We also work with other Cree organizations involved in the various fields of the mining industry to raise awareness and promotion, and to inform people about mining activities in Cree Territory. It is also the intention of the Board to attend economic development related conferences and seminars at the Cree level to enhance awareness and promotion of the industry.

### Training and Job Assistance

The Board works very closely with Cree Human Resources Development (CHRD) - Territorial Programs sector to examine various ways of approaching training and job assistance to benefit the Cree population in general. It is our understanding that the MERN will be involved in assisting us in approaching the different mining companies in the territory about possible job opportunities for Crees. The Board will also be working with the local entities embarking on training programs in the mining sector.

#### Assistance to Prospectors

The geologists of the Board provide technical assistance whenever required by a Cree prospector. The Chief Geologist will also be developing basic prospectors training packages at the local levels to increase the number of prospectors active in the territory. It is the objective of the Board to make this assistance a priority for the future activities of licensed Cree prospectors.

#### Project Development and Entrepreneur's Assistance

Due to the volume of financial requests from this sector, the Board developed a system whereby requests and submissions have to be received by a particular date to be considered for funding. The other sector of interest is that of joint ventures between Crees and non-Crees on exploration projects. The CMEB will continue funding similar viable projects.

#### Geosciences Expertise and Technical Assistance

The Board continues to maintain its database on mineral exploration activities in Eeyou Istchee. This information is available when required by Cree entities and individuals. We also want to be in a position to respond technically to any environmental concerns that may arise as a result of a particular project.

### **4. ACTIVITIES OF THE BOARD 2022-2023**

The activities summarized in this section include:

1. Meetings and resolutions;
2. 2022-2023 work plan (Reminder);
3. Awareness and promotion;
4. Training and job assistance;
5. Field projects with training;
6. Prospector assistance;
7. Project development and entrepreneur assistance;
8. New projects;
9. Geosciences;
10. Collaborations;
11. Public services and interventions.

#### 4.1 MEETINGS AND RESOLUTIONS 2022-2023

The following resolutions were adopted by the executives and directors during CMEB meetings held from April 2022 to March 2023.

DATE	RESOLUTION	SUBJECT
<p>June 1, 2022</p> <p>Via video conference</p>	<p>2223-01</p>	<p>On a motion duly made by Mark Wadden and seconded by Sam R. Bosum, it was resolved that the meeting adopts Resolution 2223-01:</p> <p>The Directors reviewed the draft minutes of the Board’s Video/telephone conference held on March 1, 2022 (hereafter referred to as: «Minutes»);</p> <p>The Board of Directors hereby approves the Minutes;</p> <p>The Corporate Secretary be and is hereby authorized to do all things deemed necessary to give effect to the present Resolution.</p>
	<p>2223-02</p>	<p>On a motion duly made by Mark Wadden and seconded by Sam R. Bosum, it was resolved that the meeting adopts Resolution 2223-02:</p> <p>The Corporation has executed on January 14, 2020, with the Ministry of Energy and Natural Resources and the Cree Nation Government an agreement entitled: « Agreement on Mineral Resource Development in the Eeyou-Istchee—James Bay Territory 2019–2022» which expired on March 31, 2022;</p> <p>The Board of Directors reviewed the following document entitled: «Agreement on Development of the Mineral Resource of the Eeyou-Istchee James Bay Territory 2022–2025» (hereinafter referred to as: «MENR-CNG-CMEB 2022–2025 Agreement»);</p> <p>The Board of Directors hereby approves the MENR-CNG-CMEB 2022–2025 Agreement;</p> <p>The Board of Directors hereby recommends to the CNG’s Executive Committee to approve and execute the MENR-CNG-CMEB 2022–2025 Agreement;</p> <p>The President be is hereby authorized to execute the MENR-CNG-CMEB 2022–2025 Agreement on behalf of the Corporation;</p> <p>The Corporate Secretary be and is hereby authorized to do all things deemed necessary to give effect to the present Resolution.</p>



<p>October 18, 2022 Via video conference</p>	<p>2223-03</p>	<p>On a motion duly made by Sam Bosum and seconded by Mark Wadden it was resolved that the meeting adopts Resolution 2223-03:</p> <p>The Directors reviewed the draft minutes of the Board’s meetings held on November 29, 2021 and June 1, 2022 (hereafter referred to as: «Minutes»);</p> <p>The Board of Directors hereby approves the Minutes;</p> <p>The Corporate Secretary be and is hereby authorized to do all things deemed necessary to give effect to the present Resolution.</p>																								
	<p>2223-04</p>	<p>On a motion duly made by Andy Baribeau and seconded by Anthony MacLeod it was resolved that the meeting adopts Resolution 2223-04:</p> <p>The following Individual Prospector Agreements submitted for ratification have been reviewed by the Directors (hereafter collectively referred to as: «Agreements 2022-04 to 23»)</p> <table border="1"> <thead> <tr> <th>Proponent / Project</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>2022-04 Thomas Blackned Tartiana R08-VC19 Project</td> <td>\$9,940</td> </tr> <tr> <td>2022-05 Robert Ratt Mist East Project Phase 2</td> <td>\$9,900</td> </tr> <tr> <td>2022-06 Dennis Moar Waapikun Project</td> <td>\$8,700</td> </tr> <tr> <td>2022-07 Norman Grant A54W01 Prospecting project</td> <td>\$6,700</td> </tr> <tr> <td>2022-08 Larry Desgagné Gold Mountain Prospecting Project</td> <td>\$9,550</td> </tr> <tr> <td>2022-09 Thomas Wapachee R-17 Prospecting Project</td> <td>\$7,300</td> </tr> <tr> <td>2022-10 Norman Grant FG26 Project</td> <td>\$7,700</td> </tr> <tr> <td>2022-11 Thomas Blackned Lorraine R08 - RE03 Project</td> <td>\$9,940</td> </tr> <tr> <td>2022-12 Neil Wapachee Kaanemgkashit Phase IV- Project</td> <td>\$6,700</td> </tr> <tr> <td>2022-13 Norman Grant N24 Project</td> <td>\$7,700</td> </tr> <tr> <td>2022-14 Neil Wapachee Jeenawmii Project</td> <td>\$7,700</td> </tr> </tbody> </table>	Proponent / Project	Amount	2022-04 Thomas Blackned Tartiana R08-VC19 Project	\$9,940	2022-05 Robert Ratt Mist East Project Phase 2	\$9,900	2022-06 Dennis Moar Waapikun Project	\$8,700	2022-07 Norman Grant A54W01 Prospecting project	\$6,700	2022-08 Larry Desgagné Gold Mountain Prospecting Project	\$9,550	2022-09 Thomas Wapachee R-17 Prospecting Project	\$7,300	2022-10 Norman Grant FG26 Project	\$7,700	2022-11 Thomas Blackned Lorraine R08 - RE03 Project	\$9,940	2022-12 Neil Wapachee Kaanemgkashit Phase IV- Project	\$6,700	2022-13 Norman Grant N24 Project	\$7,700	2022-14 Neil Wapachee Jeenawmii Project	\$7,700
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		2022-15 Joshua Blacksmith W24A Exploration Project	\$7,900
		2022-16 Robert Kitchen Mishegamish Exploration Project	\$10,000
		2022-17 Joshua Blacksmith W24A Exploration Project	\$9,300
		2022-18 Thomas Blackned Jamesee- R08 - V03 Project	\$9,940
		2022-19 Larry Desgagné -Volcano Gold Prospecting Project	\$10,000
		2022-20 Mike Voyageur TB Lake M26 Prospecting Project	\$6,700
		2022-21 Thomas Wapachee R-17 Phase 2 Prospecting Project	\$7,800
		2022-22 Rock A Sheshamush NE Whapmagoostui Exploration Project	\$9,918
		2022-23 Norman Grant - CH33 Exploration Project	\$7,500
		TOTAL	\$170,888
	<p>The Agreements 2022-04 to 23 are admissible for funding in accordance with the provisions of section 4.1 of the Agreement on Development of the Mineral Resources of the Eeyou Istchee - James Bay Territory 2022–2025 and section 11.5 of its Appendix 1;</p> <p>The Corporation has adopted resolution 1718-14 approving a policy entitled: «Chief Geologist/Director General’s Spending Authority» to a maximum amount of \$10,000»;</p> <p>The Board of Directors hereby ratifies Agreements 2022-04 to 16 for the corresponding amount referred to herein;</p> <p>The President, the Corporate Secretary and the Chief Geologist are hereby authorized to do all things deemed necessary to give effect to the present Resolution.</p>		

	2023-05	<p>On a motion duly made by Andy Baribeau and seconded by Mark Wadden it was resolved that the meeting adopts Resolution 2223-05:</p> <p>The Board of Directors has reviewed the following document: «Cree Mineral Exploration Board, Draft Financial Statements, March 31, 2022» (hereafter referred to as: «Audited Financial Statements 2021–2022»);</p> <p>The Board of Directors hereby approves the Audited Financial Statements 2021–2022;</p> <p>The President, Mr. Andy Baribeau and Mr. Mark Wadden be and are hereby authorized to sign the Audited Financial Statements 2021–2022 on behalf of the Corporation;</p>
	2023-06	<p>On a motion duly made by Anthony MacLeod and seconded by Andy Baribeau it was resolved that the meeting adopts Resolution 2223-06:</p> <p>The Board of Directors has reviewed the following documents entitled: «Nimsken Corporation Inc., 2022 Application for financial Assistance for Diamond Drilling Program, Rush Lake DDH Project – Phase II NTS 32G15 Area, October 17, 2022» (hereinafter referred to as the: «Proposal»)</p> <p>The Proposal is admissible for funding in accordance with the provisions of section 4.1 of the Agreement on Development of the Mineral Resources of the Eeyou Istchee - James Bay Territory 2022–2025 and section 11.5 of its Appendix 1 (hereinafter referred to as the: «Agreement»);</p> <p>The total amount of the Proposal is \$75,500 and in accordance with the above-mentioned provisions of the Agreement, the maximum amount admissible for funding consists into 75% of admissible expenditures, up to the maximum amount of \$56,625;</p> <p>The Proposal is foreseen to be carried out on Category 1 Lands of Oujé-Bougoumou and is the continuity of the Nimsken Exploration’s project previously approved by the Corporation by Resolution 1920-18 and for which the resolution from the Cree First Nation of Oujé-Bougoumou dated February 17, 2020, authorizing exploration works on Oujé-Bougoumou’s Category 1 lands is attached as Schedule D to the funding agreement #2020-01 and for which the project area of the Proposal remains substantially similar;</p> <p>Mr. Sam R. Bosum has filed in the record of the Corporation a continuing declaration of interest with respect to the Proponent and accordingly, abstained himself from voting and participating into the deliberation of the present Resolution;</p> <p>The Board of Directors hereby approves the Proposal for the maximum</p>

		<p>amount of FIFTY-SIX THOUSAND SIX HUNDRED AND TWENTY-FIVE DOLLARS (\$56,625);</p> <p>The Corporation shall enter into a funding agreement with Nimsken Corporation;</p> <p>The President, the Corporate Secretary and the Chief Geologist/Director General be and are hereby authorized to do all things deemed necessary to give effect to the present Resolution.</p>
	2223-07	<p>On a motion duly made by Anthony MacLeod and seconded by Andy Baribeau it was resolved that the meeting adopts Resolution 2223-07:</p> <p>The Board of Directors has reviewed the following documents entitled: «<i>Nimsken Corporation Inc., 2022 Application for financial Assistance for an Induced Polarization and Magnetometric Survey, Rush Lake IP Project NTS 32G15 Area, May 31, 2022</i>» (hereinafter referred to as the: «Proposal»)</p> <p>The Proposal is admissible for funding in accordance with the provisions of section 4.1 of the Agreement on Development of the Mineral Resources of the Eeyou Istchee - James Bay Territory 2022–2025 and section 11.5 of its Appendix 1 (hereinafter referred to as the: «Agreement»);</p> <p>The total amount of the Proposal is \$100,840 and in accordance with the above-mentioned provisions of the Agreement, the maximum amount admissible for funding consists into 75% of admissible expenditures, up to the maximum amount of \$75,000;</p> <p>Mr. Sam R. Bosum has filed in the record of the Corporation a continuing declaration of interest with respect to the Proponent and accordingly, abstained himself from voting and participating into the deliberation of the present Resolution;</p> <p>The Board of Directors hereby approves the Proposal for the maximum amount of SEVENTY-FIVE THOUSAND DOLLARS (\$75,000);</p> <p>The Corporation shall enter into a funding agreement with Nimsken Corporation;</p> <p>The President, the Corporate Secretary and the Chief Geologist/Director General be and are hereby authorized to do all things deemed necessary to give effect to the present Resolution.</p>

	2223-08	<p>On a motion duly made by Anthony MacLeod and seconded by Andy Baribeau it was resolved that the meeting adopts Resolution 2223-08:</p> <p>The Board of Directors has reviewed the following documents entitled: «<i>Nimsken Corporation Inc., 2022 Application for financial Assistance for an Induced Polarization and Magnetometric Survey, Philippon South East Project - NTS 32G15 Area, July 28, 2022</i>» (hereinafter referred to as the: «Proposal»)</p> <p>The Proposal is admissible for funding in accordance with the provisions of section 4.1 of the Agreement on Development of the Mineral Resources of the Eeyou Istchee - James Bay Territory 2022–2025 and section 11.5 of its Appendix 1 (hereinafter referred to as the: «Agreement»);</p> <p>The total amount of the Proposal is \$58,320 and in accordance with the above-mentioned provisions of the Agreement, the maximum amount admissible for funding consists into 75% of admissible expenditures, up to the maximum amount of \$43,740;</p> <p>Mr. Sam R. Bosum has filed in the record of the Corporation a continuing declaration of interest with respect to the Proponent and accordingly, abstained himself from voting and participating into the deliberation of the present Resolution;</p> <p>The Board of Directors hereby approves the Proposal for the maximum amount of FORTY-THREE THOUSAND SEVEN HUNDRED FORTY DOLLARS (\$43,740);</p> <p>The Corporation shall enter into a funding agreement with Nimsken Corporation;</p> <p>The President, the Corporate Secretary and the Chief Geologist/Director General be and are hereby authorized to do all things deemed necessary to give effect to the present Resolution.</p>
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	2223-09	<p>On a motion duly made by Andy Baribeau and seconded by Anthony MacLeod it was resolved that the meeting adopts Resolution 2223-09:</p> <p>The Board of Directors has reviewed the following documents entitled: «<i>Natives Exploration Services Reg'd, Diamond Drill Hole Program on the Mina Gold Property, - NTS 32G11 Guercheville and Drouet Townships, September 30, 2022</i>» (hereinafter referred to as the: «Proposal»)</p> <p>The Proposal is admissible for funding in accordance with the provisions of sections 4.1 of the Agreement on Development of the Mineral Resources of the Eeyou Istchee - James Bay Territory 2022–2025 and section 11.5 of its Appendix 1 (hereinafter referred to as the: «Agreement»);</p> <p>The total amount of the Proposal is \$61,620 and in accordance with the above-mentioned provisions of the Agreement, the maximum amount admissible for funding consists into 75% of admissible expenditures, up to the maximum amount of \$46,215;</p> <p>Mr. Sam R. Bosum has filed in the record of the Corporation a continuing declaration of interest with respect to the Proponent and accordingly, abstained himself from voting and participating into the deliberation of the present Resolution;</p> <p>The Board of Directors hereby approves the Proposal for the maximum amount of FORTY-SIX THOUSAND TWO HUNDRED FIFTEEN DOLLARS (\$46,215);</p> <p>The Corporation shall enter into a funding agreement with Nimsken Corporation;</p> <p>The President, the Corporate Secretary and the Chief Geologist/Director General be and are hereby authorized to do all things deemed necessary to give effect to the present Resolution.</p>
March 6, 2023 In Toronto and via video conference	2323-10	<p>On a motion duly made by Mark Wadden and seconded by Andy Baribeau it was resolved that the meeting adopts Resolution 2223-10:</p> <p>The Directors reviewed the draft minutes of the Board's meeting held on October 18, 2022 (hereafter referred to as: «Minutes»);</p> <p>The Board of Directors hereby approves the Minutes as commented at the present meeting;</p> <p>The Corporate Secretary be and is hereby authorized to do all things deemed necessary to give effect to the present Resolution.</p>

	2223-11	<p>On a motion duly made by Andy Baribeau and seconded by Mark Wadden it was resolved that the meeting adopts Resolution 2223-11:</p> <p>The following Individual Prospector Agreements submitted for ratification have been reviewed by the Directors (hereafter collectively referred to as: «Agreements»):</p> <table border="1"> <thead> <tr> <th>Proponent / Project</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td>2022-24 Robert Ratt—Mist East Project Phase 3</td> <td>\$10,000</td> </tr> <tr> <td>2022-29 Neil Wapachee—Kamikukumeu Project</td> <td>\$9,100</td> </tr> <tr> <td>2023-01 Thomas Blackned—Jamesee K306 Project</td> <td>\$8,700</td> </tr> <tr> <td style="text-align: right;">TOTAL</td> <td>\$27,800</td> </tr> </tbody> </table> <p>The Agreements are admissible for funding in accordance with the provisions of section 4.1 of the Agreement on Development of the Mineral Resources of the Eeyou Istchee—James Bay Territory 2022–2025 and section 11.5 of its Appendix 1;</p> <p>The Corporation has adopted resolution 1718-14 approving a policy entitled: «Chief Geologist/Director General’s Spending Authority» to a maximum amount of \$10,000»;</p> <p>The Board of Directors hereby ratifies the Agreements for the corresponding amount referred to herein;</p> <p>The President, the Corporate Secretary and the Chief Geologist are hereby authorized to do all things deemed necessary to give effect to the present Resolution.</p>	Proponent / Project	Amount	2022-24 Robert Ratt—Mist East Project Phase 3	\$10,000	2022-29 Neil Wapachee—Kamikukumeu Project	\$9,100	2023-01 Thomas Blackned—Jamesee K306 Project	\$8,700	TOTAL	\$27,800
Proponent / Project	Amount											
2022-24 Robert Ratt—Mist East Project Phase 3	\$10,000											
2022-29 Neil Wapachee—Kamikukumeu Project	\$9,100											
2023-01 Thomas Blackned—Jamesee K306 Project	\$8,700											
TOTAL	\$27,800											

#### 4.2 ACTION PLAN 2022-2023 (REMINDER)

Since The beginning of CMEB activities in 2003, the mining industry is on an increasing trend. This past year, we observed a major decrease in investment and exploration projects. The CMEB has to face the new mining situation in Eeyou Istchee. The priority is the application of the five programs of the Cree Mineral Exploration Board as submitted to the Cree Nation Government and the Ministère de l'Énergie et des Ressources naturelles (MERN). This includes the creation of projects with low expenses usually handled by prospectors, the preparation of training programs and the creation of job opportunities within the exploration companies and mines in Eeyou Istchee; to keep informing the communities about mining activities on their traplines on a regular basis; establishing communication and networking between the tallyman and the local authority and the mining industry, and helping Cree prospectors and companies develop exploration projects. ***The CMEB will participate in improving the environmental aspect related to mining impacts and encourage environmentally safe mining and exploration activities; and will participate actively in the North Development planning. The Crees want to develop mining in Eeyou Istchee but it has to be done appropriately to protect the environment and wildlife in a philosophy of sustainable development. By building bridges of good communication and mutual development, we will be able to count on sustainable development (The Grand Chief Abel Bosum). On the same subject, the CMEB's President Reggie Mark and the Board members insist on the sustainable character of the CMEB. The Board members believe that we have to keep undertaking the best practices to succeed in exploration project realization. We are improving our communication tools and we insist that the mining companies and the CMEB consult the local population at the very beginning. The process will benefit all parties concerned and a mutual understanding will lead to sustainable development.***

##### 1. Awareness Activities

- Information visits in the communities with the collaboration of the Cree School Board schools and participating in the internal events. The latter is the best domain where promoting the Earth sciences.
- Minerals Exploration Learning and Information adapted and organized for the Tally-Person and the trappers concerns for each community in Eeyou Istchee. We will meet and inform the Tallyman and the trappers about exploration activities on the land and within their own traplines.
- Open door in communities Career Fairs to keep prospectors and the interested people up-to-date on new technology in mineral resources. This will keep our people in touch with the mining activities and with the new techniques and/or equipment.
- As every year, CMEB will visit schools of Cree School Board during la Semaine Minière. We will do presentations about natural sciences and mineral resources.
- Sponsoring of university graduate Cree students in the field of mineral resources, geology and environment.
- Continue publishing and updating the Tally-person traplines map, geo-touristic maps, geo-trapline maps, and Eeyou Istchee Geological and Projects Location maps.
- The Tally-Person Interactive Map is specifically for the Exploration Company's needs. The map contains layers: 1. Google Map, 2. Traplines and number for each the trapline (ex. W23), 3. NTS 1/50 000 grid for better location, and The Cree Communities location. This map is updated continually by getting the information directly from the sources (tally-person family) or via the Cree Trappers Association, CMEB's collaborator.



- Website update and creation of webpage for the Cree youth and for the Tally-Persons on (cmeb.org) site. This will contain educational and entertainment materiel. Organizing social media tools for the Crees (Facebook and Twitter).
- Continue collaborating with MERN in exchanging data and visiting the MERN mapping camps with young Crees. This improves the youth's knowledge considerably. Many thanks to Ministère de l'Énergie et des Ressources naturelles.
- Cree-Quebec mining table where CMEB needs to show to the politicians the reality of the field and communication. For years, the CMEB has been suggesting that the MERN add Cree references when it is time to take a mining title by the mining industry. This will increase the efficiency of communication and facilitate the information to the tally-persons and the chiefs, which will avoid many misunderstandings.
- Collaborating with the CTA in Recognizing Metal Mineralization training for tally-person and trappers. The CTA is the most important CMEB partner.

## **2. *Training and Knowledge Update Activities***

- The CMEB has as objective to teach a number of prospectors in each community, the art of prospecting. These courses will be the go-to people for the community in terms of “what is happening in mining exploration in the territories and in other places”. We will conduct the minerals prospecting courses in the summer 2021. We will strengthen the knowledge of the new prospectors and guide the Tallyman-Prospectors in the field.
- Prospectors program, CMEB will organize four weeks update training with our junior prospectors this summer 2021, in the community of Mistissini or through Webinars. The latter is offered to new trainees can be from all over the Cree land. It is based on the needs of the Crees and job opportunities in Eeyou Istchee. The field work is based on technical preparation and on data from previous geological compilation and from several known targets.
- Workshop for prospectors who had at least one field project done (Postponed in 2020 and 2021 due to COVID protocols). The workshop consists of one week with specialists in the domain of prospecting, legal aspects, GIS and assays.
- Workshop (mining 101) for entrepreneurs in mining industry. This program helps Crees seeking opportunities in the mining industry to learn about running private companies in mining services and establishing agreements.
- Creation of new college program 2021-2022 in Environment related to Mineral Resources. This will be done with the collaboration of the CHRD, NISKAMOON, CSB and CEGEP.
- The Cohort 2020-2021 for AEC geology college program built in collaboration with the CHRD, CMEB and CÉGEP de St-Félicien, graduated during the summer 2021. This is a technical program; the students are full time and are on «Stage» for the summer. The program of Geology Technician became possible because of the collaboration between the CMEB, CHRD and le CÉGEP de St-Félicien at Chibougamau.

## **3. *Prospecting and Explorations Activities***

- Repeated every year, the CMEB encourages Cree and non-Cree companies to start new exploration projects by suggesting certain areas in Eeyou Istchee.

- Encourage Cree prospectors and help them find new projects.
- Help new Cree prospectors trainees build their firsts prospecting projects.
- Writing geological report for each prospector. This year it will be about 15 reports and at least 5 reports from Cree companies to be verified and submitted to the Board. And update geological maps in Eeyou Istchee, fall 2022.
- Exploration activities report in Eeyou Istchee produced in December 2021.

#### **4. *Promotion Activities***

- Participate and be a partner in different promotion and information events. The CMEB collaborates with Quebec Mine and “la Semaine Minière”, several comities concerning exploration and social acceptability. Le Congrès de l'exploration minière du Québec, and of Cree Mining Conference within SAENCAT annual conference (Secretariat to the Cree Nation Abitibi-Témiscamingue Economic Alliance—as major member and as a promoter).
- For the 14th year in the row, CMEB is hosting the Rock Competition. This last year we had 7 participants from all over Eeyou Istchee. We hope to have more than 10 people for the next deadlines October 31st, 2022.
- The CMEB continues to award academic scholarships to secondary-5 students graduating from CSB schools. We expect at least one from each of the ten community
- Update the guideline book for exploration companies already published on the CMEB website.
- Promote the CMEB via MERN, Cree Nation Government, Cree Trappers Association, Société de la Baie James, TJCM and the Secretariat to the Cree Nation Abitibi-Témiscamingue Economic Alliance.
- Promote Earth Sciences in class and in the field for youth in primary and secondary grades in April and May.
- Promoting Geology and Minerals Exploration in local Science and Career Fairs.
- Promoting Cree Exploration companies and Cree services available for mining industry in all the event such as Quebec Mine, PDAC, Xplor, Xplore Abitibi, and other local and regional events
- Provide the latest news related to the Earth Sciences and Minerals Exploration on CMEB's website.
- Compile geological data from summer mapping projects and from Minerals Exploration activities.
- The CMEB continually maintains and updates a database on mining and staking activities by companies and prospectors in Eeyou Istchee. This information will be published and updated on the CMEB website to ensure that tallymen and companies are informed.

#### **5. *Business creation support activities***

In the near future, we'll meet with the communities and individuals who want to create an exploration company. We are planning to create 1 company and starting getting one of them on the public market.

### **Recommendations**

### 1 For Training and Job Creation:

- It is imperative that more people be trained for the various job opportunities in mineral exploration on Cree territory. Business partnerships with mining companies will be an important reality in the near future which is linked to the Nord Development. The forward progress of exploration projects, especially in the Opinaca Reservoir, the Otish Mountains areas, Nemaska-Ouje-Bougoumou- Waswanipi area and along the Trans-Taiga road, will create job opportunities for members of all Cree communities.
- Consolidate and develop prospecting, blasting and drilling courses with interested, motivated and educated young women and men;
- Encourage training in the environmental sciences;
- Organize with Cégeps and universities a program concerning mineral resources and the environment for technicians and Bachelor degrees in mineral resources and the Earth sciences.

Because of the distances between the communities, the communication is difficult. We have to establish a regional information network find new trainees, new prospectors and post-secondary students in all communities willing to study the Earth sciences away from home. *The fibre-optic telecommunications recently installed between the communities will improve communication, facilitate training and increase the flow of information in our mineral resources domain.*

### 2 For Promotion:

The Cree Mineral Exploration Board continues to successfully promote Cree land mineral resources and raises awareness in Cree communities via schools and presentations in the communities. The CMEB helps prospectors develop their expertise. Concerning the new prospectors training program; the CMEB effectively delivers this program whenever needed. With reference to awareness, it is important to inform communities and Cree organizations about mining realities and avoid false expectations. Mining companies also benefit from any information concerning the needs in the Cree Territory for environmental protection, employment, and economic development.

### 3 Finally:

It is recommended that the Cree Mineral Exploration Board:

- Develops joint ventures for Cree Exploration and Services companies with other non-Cree Exploration and Services companies on advanced projects to share exploration risks;
- Each member of Cree Mineral Exploration board will promote the services of CMEB to the Crees. The Crees need to know more about the CMEB. This will facilitate the access to all the information about mining and its related jobs in Eeyou Istchee.
- Emphasizes grassroots exploration projects from the standpoint of offering more knowledge and information about minerals potential, this will help to bring new companies to Eeyou Istchee;
- Develops partnerships with the MERN resident geologists to generate new projects and new activities such as conferences and sciences activities. «la Semaine Minière»
- With reference to the Autonomous Prospectors Program - the CMEB is working closely with the prospectors in the development of their exploration projects by supplying knowledge in geology and business and report-writing services;
- Advises the communities about different investments in Exploration Projects and be part of this big business in Eeyou Istchee;

- Maintains the North-South Mineral Exploration network; using the different tools and mechanisms such as the universities and CEGEPs, and sciences activities for our youth.

### **4.3 AWARENESS AND PROMOTION**

#### Conferences and promotional events

The representatives of the CMEB took part in several promotional events such as conferences and workshops. During these mining events, the CMEB presented posters and various information related to mining exploration in Eeyou Istchee, more particularly at the mining week in April 2021 and the 2021 CSB career fairs.

The CMEB conducted mineral identification activities with the Voyageur Memorial School in Mistissini in October 2021.

As usual, the Board members will take part in the annual conference of the “Canadian Aboriginal Mineral Association” (CAMA). This conference was an excellent opportunity to exchange information on mining activities and mineral exploration with other First Nations from across Canada.

At the Québec Exploration conference, organized by the MERN in November 2022, the CMEB distributed pamphlets explaining the programs and the objectives of the Corporation at its kiosk. One of the highlights of this Conference was the high interest of participants for the CMEB’s publication entitled: «Mining Activity in Eeyou Istchee Report for 2021».

The CMEB also took part in Québec’s delegation at the Prospectors and Developers Association of Canada’s conference in March 2022 in Toronto. This event remains the ideal occasion to establish business contacts and to attract investors in Eeyou Istchee.

During these mineral resources related events, many junior exploration companies active in Eeyou Istchee showed great interest in the CMEB exploration and technical training programs. These conferences were an excellent occasion to promote the mineral potential on traditional lands of Eeyou Istchee and also an opportunity to establish work links and collaboration with the industry.

The CMEB also intends to continue its advertising campaign in order to promote its programs in Cree communities by means of: Cree magazines (such as The Nation and Destination Air Creebec), various radio advertisements, as well as events which focus on sciences and careers in the Cree School Board establishments.

In order to promote interest in the mining industry in Eeyou Istchee, and inform mining companies, Cree tallymen and the public at large, the CMEB is continuing upgrading the CMEB website and a Geo-Touristic Map.

#### Media promotional activity

The CMEB is seen in wide-reaching promotional media. The MERN provides promotion and a very good visibility. Some of the communication materiel is prepared and distributed by the MERN. The CMEB website became operational on the Internet at the end of October 2005 and its URL was sent to government agencies, mining companies and service suppliers. The CMEB plans to have its website hyperlinked to the government, the Cree Trappers Association and the Association de l’Exploration Minière du Quebec website pages.

The CMEB is visible in the communities and all of Eeyou Istchee by publishing promotional information in Cree magazines and other publications (the Nation, Destination, Air Creebec, Indiana, The Prospector News, and in regional Abitibi and northern Quebec newspapers), through announcements on community radio and Eeyou TV, and at special events such as Cree science fairs and sports activities.

#### ***4.4 TRAINING AND JOB ASSISTANCE***

The Cree Mineral Exploration Board is studying a way to establish infrastructures for training in all Cree communities. The objective is to offer the same normalized provincial level training in all communities. Several training programs and requests have been conducted by the CMEB to prepare people for jobs in the mineral resources domain.

The CMEB believes that education in any field starts at an early age. The Earth sciences, including geology, mineral exploration and environmental studies, have to be included in our exploration and prospecting culture and in society in general. The CMEB participates by giving presentations in schools and at scientific activities in different communities. Furthermore, the CMEB participates in prospecting training offered by different Cree organizations in the communities. The CMEB geologists teach several courses in these training programs (general geology, environment, mineralogy and mineral exploration and prospecting techniques).

The CMEB is investigating various methods of improving its Training and Job Assistance program. To this end, the Board is examining ways of developing On-the-Job training in partnership with the Government of Quebec, universities and the industry. It is also considering ways of updating and promoting training programs developed by several Cree organizations and mining companies in Eeyou Istchee. Finally, it aims to work with the Cree Human Resources Development and the Cree School Board in training and job assistance in the mining industry. The Board has developed a professional level of training in mineral resources. The CMEB staff conducted an applied training course in the field which highlighted geology, mineral exploration and the environment. This program also has as objective to motivate the trainees to pursue studies in the mineral resources and the environment at the CEGEP and university levels. The program includes geology, mineral processing and exploration, the environment and mapping. The trainees learn about rocks, minerals, and their chemical composition.

Most of the mineral prospecting and drilling trainees in the last four years were hired by exploration companies operating in Eeyou Istchee.

#### **CREES HIRED TO WORK IN EXPLORATION**

Cree workers are involved in several projects in Eeyou Istchee. There are over 120 Cree workers hired in the mining industry, and other Cree workers are independent. The independent prospectors are trained and/or funded by the CMEB and prospectors are hired by the mining industry via the CMEB.

#### **TRAINING OF THE CMEB STAFF**

Ms. Josephine Natawapineskum, the CMEB head office secretary in Wemindji, has been trained on SIGEOM and other computer graphics programs and continues gaining proficiency in using computer mapping programs such as Microstation and ArcGIS. The Chief Geologist, Mr. Youcef Larbi, took courses in mineral resources. The courses are related to conferences and congresses. Ms. Marlene MacKinnon, the Mistissini office Natural Sciences Technician, took the James Bay Advisory Committee on the Environment workshop training on acquisition and dissemination of environmental and social knowledge on the Eeyou Istchee James Bay territory.

#### ***4.5 CMEB TRAINING PROGRAM***

#### **CMEB TRAINING – INITIATION TO PROSPECTING PROGRAM**

## PURPOSE OF THE PROJECT

This project has as objective the training of Cree youth in prospecting techniques and categorizing outcrops on Mistissini Category 1 Land. The trainers were Marlene MacKinnon and Youcef Larbi. The prospector trainees are from Cree communities in Eeyou Istchee.

Due to COVID-19 protocols, the 2021 Prospecting program trained Cree prospectors on-loine via Zoom.

## PROJECT OBJECTIVES

The CMEB PROSPECTING COURSE:

- Trained fourteen Cree youths (the trainees, students) in prospecting glacial terrain;
- Trained the students in prospecting techniques;
- Identified, located and mapped boulders and outcrops.

## TRAINING OBJECTIVES

At the end of the program, the students were able to:

- Read a map;
- Learn the basics of mineral prospecting techniques (geophysics, line cutting, sampling)
- Plot information on a map;
- Navigate with a GPS and a compass;
- Precisely locate features (waypoints) with a GPS;
- Learn the basics of Quaternary geology
- Recognize geomorphological features in the field;
- Identify geological features in the field;
- Identify rocks and minerals;
- Identify mineralization in the field;
- Sample soil, outcrops and boulders.

## PROGRAM OUTLINE AND SCHEDULE

### PROGRAM CONTENT

#### Introduction

Understand the work of prospecting, its challenges, its difficulties, its risks and its purposes.

Geology, what is it? Importance of prospecting, role of the prospectors and their working methods

#### General geology

Understand the Earth, its form and composition.

#### Earth history

#### Earth composition

#### Minerals identification

Identify the main minerals encountered in the province of Quebec.

#### Metallic-minerals identification

#### Non-metallic minerals identification

#### Rock identification

Know the three main types of rocks and be able to recognize them in the field and differentiating between boulders and the outcrops.

#### Metamorphic rocks

#### Sedimentary rocks

#### Igneous rocks

### Rock textures and Structure

Know common forms, arrangements and internal structures of rocks.

Faults, folds

Veins, dykes, sills

Pegmatitic, aplitic textures

### Geology

Be aware of the geology of Quebec and Eeyou Istchee from the point of view of geological provinces, stratigraphic units, structural features and surface forms.

General geology

James Bay geology

### Mineralization

Know the different mineralization types and processes: To be able to choose a prospecting site and to point out interesting prospecting target by knowing which type of mineralization to encounter.

### Mineralization identification

Mineralization type

### Map and compass

Use topographic maps, a compass and a GPS in the field.

### Topographical maps

Air photos

Compass

Using topographic map and compass

Using Global positioning system (GPS)

### Prospecting techniques

Know various prospecting methods including direct and indirect prospecting methods and carry out documentation consultation and prospecting target evaluation.

Basic methods for prospecting

Geophysics, Line cutting and Sampling (rocks, soil and stream sediment)

Mapping of showings

Identification of outcrops

Boulder tracing

## ***4.6 PROSPECTOR PROJECTS***

The CMEB offered financial and technical support to a prospector on the following projects. The projects are in alphabetical order of the prospectors' last names then agreement number.

### **THOMAS BLACKNED, TARTIANNA R08-VC19, AGR 2022-04**

#### **Location**

The project is located north of Camp Km312 where the prospectors rest after work. It is accessible to the prospector project area. It is about an hour and half driving (100 km) on a gravel road from the Cree Nation of Waskaganish. Once arrived at the junction of the Billy Diamond Highway, Km 237, we need to

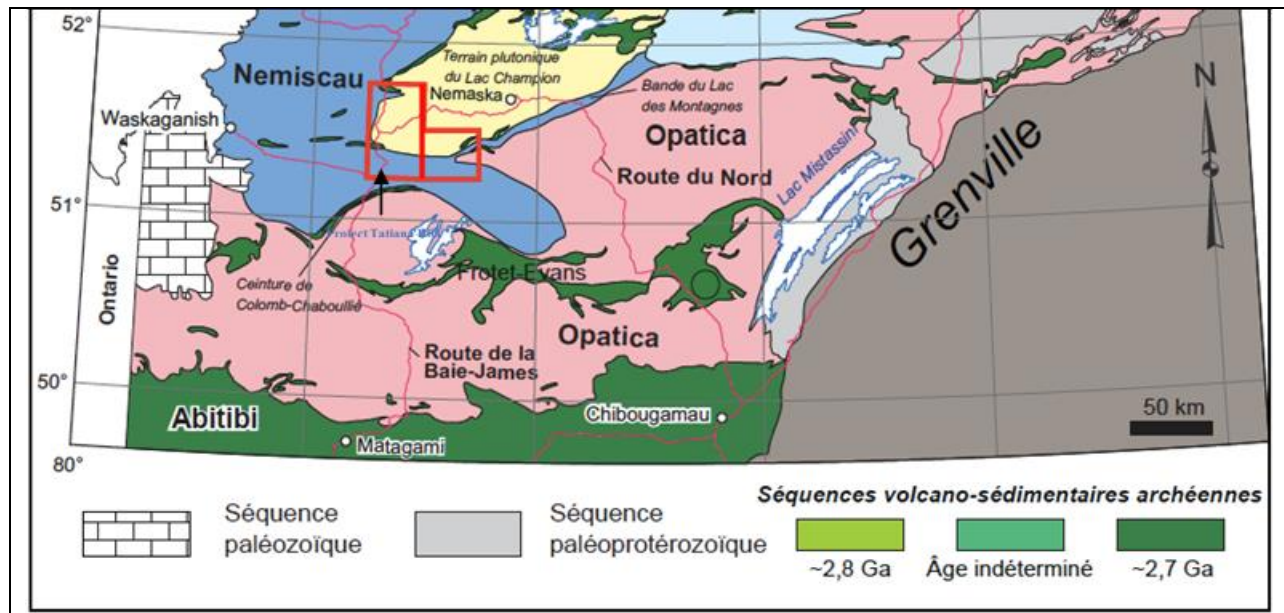
drive 209 kms north. The prospected area is about 8 km east of the highway, it is accessible on foot and ATVs. The prospectors use their family camp at km 321 to avoid travelling back home every day.



### Regional Geology

The project is located in the north part of the Superior Province, which itself lies in the heart of the Canadian Shield mainly made up of Archean rocks. The general metamorphism is at the greenschist facies, except in the vicinity of intrusive bodies, where it can go to the amphibolite-to-granulite facies. The Superior Province has been divided in several subunits; the property straddles the boundary between the La Grande subprovince to the north and the Nemiscau subprovince to the south and east.





The rocks in the prospected area are mainly of Archean age and are cut by a number of Neoproterozoic to Mesoproterozoic diabase dykes. The region is included in the Superior Province which covers almost half of Quebec's territory and which stretches west to Manitoba. The Superior Province forms the heart of the Canadian Shield, one of the largest existing Precambrian cratons. It is composed of about twenty subprovinces which are traditionally grouped into four types based on lithological, structural, metamorphic and metallogenic characteristics (Card and Ciesielski, 1986; Card, 1990; Hocq, 1994; Percival et al., 2012): 1) the subprovinces dominated by plutonic rocks of tonalite-trondhjemite type more or less deformed granodiorite (TTG); 2) the subprovinces composed of volcanic and sedimentary complexes metamorphosed to the greenschist and amphibolite facies which form belts delimiting plutonic domains; 3) mainly the subprovinces are made up of high-grade metasedimentary rocks cut by granitic intrusions; and 4) the subprovinces formed of orthogneiss and paragneiss presenting a metamorphism reaching the granulites facies. The boundaries between these subprovinces are generally defined by regional deformation zones which mark lithological, metamorphic, structural contrasts, with metallogenic or geophysical signatures. The targeted area lies at the border of two geologically contrasting areas of the Superior Province: the Nemiscau subprovince, south and west, and the Lac Champion Plutonic Terrain belonging to the La Grande subprovince, to the northwest. The Lac Champion Plutonic Terrain (Hocq, 1994) consists mainly of intermediate and felsic intrusive rocks, variably distorted. This domain initially formed the southern portion of the La Grande subprovince (Card and Ciesielski, 1986). Hocq (1994) does not link it to the Nemiscau subprovince. Hocq (1994) considered that the belts of green rocks of the Middle and Lower Eastmain formed the boundary between the Nemiscau and La Grande subprovinces. However, Champion Lake shows more lithological and geophysical affinities with the plutonic domains of the La Grande subprovince (D'Amours, 2011; Moukhsil, 2001). The latter has an old tonalitic base, the Langelier Complex, the age of installation of which is between 3390 and 2790 Ma (Goutier et al., 1999, Goutier et al., 2002; Davis et al., 2014) and on which rest the Mesoarchean and Neoproterozoic metavolcanic and metasedimentary units.

The Lac Champion Plutonic Terrain also separates the metasedimentary Nemiscau and Opatica subprovinces which are connected to each other only by a narrow band of volcanic and sedimentary rocks, areas designated as the Lac des Montagnes Group (Valiquette, 1975). Here again, Hocq (1994) integrated the Lac des Montagnes Group into the plutonic Opatica subprovince located further south, despite significant differences in composition.

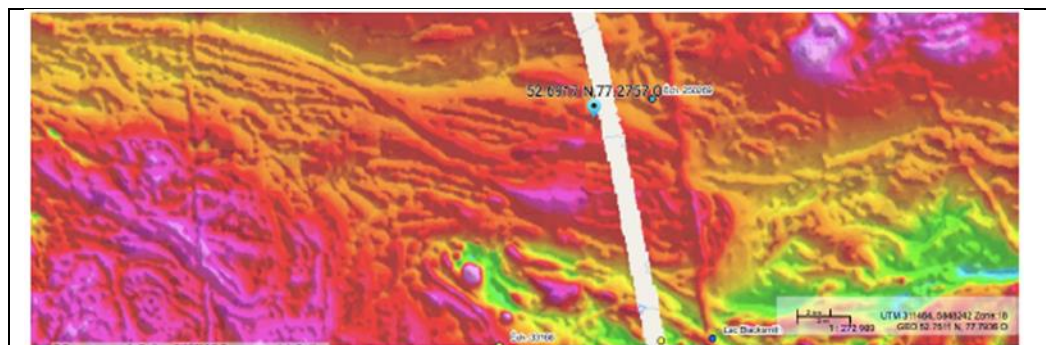
South and west of the prospected region, the Nemiscau subprovince mainly consists of varied migmatized metasedimentary rocks associated with lesser amounts of mafic metavolcanic rocks and intrusive rocks of

granodioritic and granitic composition (Card and Ciesielski, 1986; Hocq, 1994, Ciesielski, 1998). A U-Pb age on zircons at  $2672 \pm 2$  Ma from a biotite granite cutting the metasedimentary rocks of the Nemiscau subprovince (Davis et al., 1995) represents the minimum age for the sedimentary sequence crosscutting event. Southwest of the mapped area, the contact zone between the Nemiscau and Opatoca subprovinces is marked by the Columbus-Chaboullié Belt, a narrow band of volcanic and sedimentary rocks, oriented NE-SW in the west and E-W in the east (Bandyayera and Daoudene, 2017). This belt mainly includes volcanic rocks, intermediate materials injected by mafic and ultramafic intrusions and, to a lesser extent, felsic volcanic rocks, iron formations, wackes and conglomerates. Two U-Pb ages on zircons from felsic volcanic rocks indicate that this volcanic sequence took place at  $2756.8 \pm 4.4$  and  $2760.3 \pm 6.4$  Ma; one of the four volcanic cycles dated between 2752 and 2705 Ma (Moukhsil et al., 2003). To the east, the Nemiscau subprovince is connected to the Opinaca by a narrow strip of volcanic and sedimentary rocks, the Lac des Montagnes Group (Valiquette, 1975; Hocq, 1994). Little work has been done to date on the nature of the contact between the Nemiscau and La Grande subprovinces (Lac Champion Plutonic Terrain). This contact could however represent an important metallotect and the boundary between Opinaca and La Grande subprovinces.

### Local Geology

The following is the lithology we find in the field all over the prospected area (NTS 32N14):

Biotite-rich granite; leucocratic granitic pegmatite with biotite  $\pm$  garnet  $\pm$  muscovite; alaskite; granodiorite and paragneiss enclaves, amphibolized basalt and amphibolite; ++ biotite-sillimanite-cordierite-garnet-staurolite-kyanite paragneiss; diabase; conglomerate and some wacke; amphibolized basalt and amphibolite; tonalite and pyroxene and hornblende-rich granodiorite; granodiorite; diorite, quartziferous diorite; and finally, tonalite and trondhjemite.



South and west of the prospected region, the Nemiscau subprovince mainly consists of varied migmatized metasedimentary rocks associated with lower amounts of mafic metavolcanic rocks and intrusive rocks of granodioritic and granitic composition (Card and Ciesielski, 1986; Hocq, 1994, Ciesielski, 1998). A U-Pb age on zircons at  $2672 \pm 2$  Ma from a biotite granite cutting the metasedimentary rocks of the Nemiscau

subprovince (Davis et al., 1995) represents the minimum age for crosscutting the sedimentary sequence. Southwest of the mapped area, the contact zone between the Nemiscau and Opatica subprovinces is marked by the Columbus- Chaboullié Belt, a narrow band of volcanic and sedimentary rocks, NE-SW oriented in the west and E-W in the east (Bandyayera and Daoudene, 2017). This belt mainly includes intermediate volcanic rocks injected by mafic and ultramafic intrusions and, to a lesser extent, felsic volcanic rocks, iron formations, wackes and conglomerates. Two ages U-Pb on zircons from felsic volcanic rocks indicate that this volcanic sequence took place at  $2756.8 \pm 4.4$  and  $2760.3 \pm 6.4$  Ma one of the four volcanic cycles dated between 2752 and 2705 Ma (Moukhsil et al., 2003). To the east, the Nemiscau subprovince is connected to the Opinaca subprovince by a narrow strip of volcanic and sedimentary rocks, the Lac des Montagnes Group (Valiquette, 1975; Hocq, 1994). Little work has been done to date on the nature of the contact between the Nemiscau and La Grande subprovinces (Lac Champion Plutonic Terrain). This contact and the boundary between the Opinaca and La Grande could however represent an important metallogenic belt.

### **Known Mineralization**

Mineralization is relatively unknown in this area. The minerals found in recent years are: molybdenum (Mo); gold (Au); tungsten (W); silver (Ag); and lithium (Li). James Bay in general, and the Nemaska region in particular, are also known for their significant potential for lithium mineralization in pegmatites. The volcano-sedimentary units of the Lac des Mountains Group are indeed injected with intrusions of pegmatitic granite, some of which contain lithium minerals such as spodumene or petalite (Laferrière, 2009). The best example is undoubtedly the Whabouchi deposit owned by Nemaska Lithium located east of the mapped area, in NTS sheet 32O/12. A resources estimation has established that the Whabouchi pegmatite, dated at  $2577 \pm 13$  Ma (Beland, 2011; Bynoe, 2014), contains resources of more than 12 Mt of ore grading 1.6%  $\text{Li}_2\text{O}$  (Païement et al., 2016). In places, beryl (Be) accompanies the spodumene in pegmatites, notably in Whabouchi (Laferrière, 2009). Some ultramafic rocks show strong anomalies in chromium (Cr) and nickel (Ni). Some samples from a stratiform intrusion of peridotite containing a layer of pyroxenite gave grades of 0.43% and 0.2% Cr. They can contain up to 5% opaque minerals with 0.18% Cr. The ultramafic rocks also have anomalous Ni contents including between 652 and 1150 ppm. Some basalt close to the ultramafic rocks provided a grade 0.12% Cu and 137 ppb Au.

### **Work Done**

I started by going to our camp from Chisasibi and coordinating to get my co-workers (Tyler Blueboy and Gianna Salt) to Camp Km312 from Waskaganish. We had a delay in June for a week because Gianna and Tyler fell sick and had to wait for their recovery.

On our first day we were able to get 3 samples of rock and some Beep Mat signals because they were big boulders, and we could not chip off for sampling. The area had burnt some years ago and had lots of fallen trees and lots of exposed rock to sample.

The next day we had 3 samples, 4 Beep Mat signals, same area and we encountered heavy rain in the afternoon.

This day was not too promising, we had one sample in the morning and the Beep Mat reading was exceptionally low, the area had a boulder hill and again burnt area and but towards end of our day, in this area I took a picture of a small rock which had a gold colour, I told my co-workers this is fool's gold, it had low reading (hope am wrong).

This morning, the area had big boulders but still managed to get 3 rock samples and about 8 Beep Mat signals.

This day our first rock hit 3500, our highest reading so far, we noticed there were lots of veins, but some readings were not too high on them, some were exceptionally long. Some had readings over 1000. The

area took us about 2 hours to reach, this week the weather was nice and no rain forecasted. The area we prospected was far from camp and took us at least 9 hours to complete our day.

We had a similar day, we had lots of pictures of Beep Mat signal numbers with coordinates from GPS indicated. We were getting used to walking in the moss area on our way to the site, which can be hard on the legs, especially on a hot day but we got to sacrifice our body to obtain our goal. We had about 14 Beep Mat signals and 3 rock samples.

On July 7, we were at Km 318, in this area, when the guys work here in the field, they did not have a Beep Mat, we went around looking for the Beep Mat signals in which they submitted rock samples, we found the readings exceptionally low. We had 4 Beep Mat signals and 3 rock samples, and we had to cut our day short but went back again the last day to make up the work we were only able to do in the morning because it was heavy rain all afternoon on July 7, 2022, and we did not want to go to Km 458 just to do half a day because gas at km381 is currently \$2.45 a liter.

I really enjoyed working with Tyler and Gianna, they are fast learners and I think the experience we have gained throughout the years and the course Tyler took last summer only benefited the group we have so far. We saw a helicopter doing a few trips a few kilometers away and told the gang, I hope we are not on someone's claim (LOL). We had about 9 Beep Mat signals and 3 rock samples for the day.

This would be our last day at Km 458, we were 2 kilometers away from the center radius of the coordinates we had, as we got closer it took us 5 hours trekking to and back from the area, we had to detour a lake which only made our trekking longer to reach the area and did not leave us much time to do our sampling. The area was beautiful, we could see miles and miles all around us.

As mentioned on day 11, we went back to Km 318, to do the extra hours we missed because of heavy rain in the afternoon from the other day. Today we had 8 Beep Mat signals and 4 rocks.

In total with rocks taken and Beep Mat signals taken our last TTG number was 98. As the pictures submitted, we started with TTG-1 and ended with TTG-98.

#### Sampling:

Coordinates for rocks and Beep Mat signals:

TTG-1 (N5148242-W07725308)-H1238, Mag1174-Rock

TTG-2 (N5148473, W07725308)-H908, M874-Rock

TTG-3 (N5148470, W07725307)-H1135, M932-Rock

TTG-4 (N5148465, W07725316)-H1006, M972-Beep Mat signal

TTG-5 (N5148466, W07725323)-H2018, M1931-Beep Mat signal

TTG-6 (N5148461, W07725335)-H3130, M3034-Beep Mat signal

TTG-7 (N5148458, W07725340)-H1061, M1068-Beep Mat signal

TTG-8 (N5148452, W07725344)-H743, M743-Rock

TTG-9 (N5148452, W07725352)-H1192, M1092-Rock

TTG-10 (N5148450, W07725354)-H3731, M3707-Beep Mat signal

TTG-11 (N5148442, W07725352)-H750, M650-Rock

TTG-12 (N5148447, W07725354)-H1732, M1632-Beep Mat signal

TTG-13 (N5148444, W07725359)-H1222, M1114-Rock (Zn & V & Li significant)

TTG-14 (N5148445, W07725364)-H1099, M964-Rock

TTG-15 (N5148443, W07725368)-H1654, M1624-Beep Mat signal

TTG-16 (N5148440, W07725365)-H2116, M2001-Beep Mat signal

TTG-17 (N5148439, W07725369)-H4735, M4496-Rock

TTG-18 (N5148437, W07725373)-H1762, M1631-Beep Mat signal

TTG-19 (N5202415, W07717514)-H1115, M1079-Beep Mat signal

TTG-20 (N5202408, W07717516)-H403, M403-Rock

TTG-21 (N52686945, W077345901)-H1200, M860-Beep Mat signal

TTG22 (N52686832, W077346016)-H2008, M2006-Beep Mat signal

TTG-23 (N52686754, W077346816)-H2118, M2154-Beep Mat signal

TTG24 (N52687073, W077345803)-H408, M409-Rock

TTG25 (N52687398, W077345687)-H700, M686-Beep Mat signal

TTG26 (N52687524, W077345749)-H409, M402-Rock (Li significant)

TTG27 (N52687496, W077345975)-H2620, M2502-Beep Mat signal

TTG28 (N52487422, W077346209)-H407, M395-Rock (Li significant)

TTG29 (N52687492, W077346187)-H2168, M2079-Beep Mat signal

TTG30 (N52687644, W077346204)-H2093, M2023-Beep Mat signal

TTG31 (N52687204, W07734646)-H1033, M1010-Beep Mat signal

TTG32 (N52687425, W077346019)-H2116, M2161-Beep Mat signal

TTG33 (N52687306, W077345921)-H913, M896-Beep Mat signal

TTG34 (N52687166, W077346108)-H3500, M3420-Beep Mat signal

TTG35 (N52687107, W077346405)-H606, M543-Beep Mat signal

TTG36 (N52687044, W077346625)-H2900, M2766-Rock

TTG37 (N52686904, W077346663)-H1060, M978-Rock

TTG38 (N52687263, W077344959)-H1325, M1322-Beep Mat signal

TTG39 (N52687211, W077344878)-H1039, M1035-Rock (Li significant)

TTG40 (N52687191, W077344826)-H3103, M3014-Beep Mat signal

TTG41 (N52687877, W077345131)-H2043, M1992-Beep Mat signal

TTG42 (N52687856, W077344972)-H600, M491-Rock (Li significant)

TTG43 (N52687968, W077344949)-H3313, M3182-Beep Mat signal

TTG44 (N52687963, W077344949)-H467, M457-Rock (Li significant)

TTG45 (N52681986, W077351706)-H513, M468-Beep Mat signal

TTG46 (N52682000, W077351728)-H902, M838-Beep Mat signal

TTG47 (N5268202, W077351623)-H1515, M1440-Beep Mat signal

TTG48 (N52682106, W077351166)-H480, M430-Beep Mat signal

TTG49 (N52682136, W077351016)-H1635, M1549-Beep Mat signal

TTG50 (N5268221, W077351422)-H960, M880-Beep Mat signal

TTG51 (N52681993, W077351857)-H450, M403-Beep Mat signal

TTG52 (N52682145, W077252139)-H1245, M1157-Beep Mat signal

TTG53 (N52681943, W077352286)-H306, M263-Rock (Li significant)

TTG54 (N52681851, W077352237)-H828, M762-Rock

TTG55 (N5268152, W077350573)-H600, W566-Beep Mat signal

TTG56 (N52681541, W077350659)-H915, M857-Beep Mat signal

TTG57 (N52681447, W077350545)-H1722, M1627-Beep Mat signal

TTG58 (N52681377, W077350599)-H625, M556-Beep Mat signal

TTG59 (N52681344, W077350773)-H1400, M1340-Beep Mat signal

TTG60 (N52681236, W077350089)-H617, M588-Beep Mat signal

TTG61 (N51818645, W077418994)-H797, M732-Beep Mat signal

TTG62 (N51818778, W077418669)-H1152, M1066-Rock

TTG63 (N51818518, W077419165)-H1746, M1653-Beep Mat signal

TTG64 (N51818323, W077419312)-H3970, M3760-Beep Mat signal

TTG65 (N51818382, W077419339)-H909, M860-Beep Mat signal

TTG66 (N51818255, W077419322)-H1686, M1587-Rock

TTG67 (N52696277, W077317125) H630, M600-Beep Mat signal

TTG68 (N52696943, W077316799)-H124, M150-Rock

TTG69 (N52696943, W077316799)-H447, M402-Beep Mat signal

TTG70 (N52695937, W077316948)-H825, M765-Beep Mat signal

TTG71 (N52695819, W077316919)-H554, M510-Beep Mat signal

TTG72 (N52695813, W077316955)-H160, M181-Rock

TTG73 (N52695767, W077316616)-H952, M900-Beep Mat signal

TTG74 (N52695793, W077316311)-H952, M900-Beep Mat signal

TTG75 (N52695792, W077316091)-H1535, M1457-Beep Mat signal  
TTG76 (N52695791, W077316015)-H1111, M1042-Beep Mat signal  
TTG77 (N526695904, W077316242)-H643, M692-Rock  
TTG78 (N52695980, W077316304)-H1046, M978-Beep Mat signal  
TTG79 (N52696013, W077316505)-H1647, M1554-Beep Mat signal  
TTG80 (N52695561, W077315540)-H803, M709-Beep Mat signal  
TTG81 (N52695351, W077315153)-H1130, M1031-Beep Mat signal  
TTG82 (N52695324, W077315112)-H360, M304-Rock  
TTG83 (N52695143, W077314983)-H827, M747-Beep Mat signal  
TTG84 (N52695042, W077315101)-H751, M686-Beep Mat signal  
TTG85 (N52695048, W077314906)-H752, M669-Beep Mat signal  
TTG86 (N52695048, W0774906)-H1331, M1235-Beep Mat signal  
TTG87 (N51818759, W077418819)-H1155, M1090-Beep Mat signal  
TTG88 (N51818907, W077418931)-H956 M888-Rock  
TTG89 (N51818855, W077418306)-H2104, M1978-Beep Mat signal  
TTG90 (N51818906, W077418263)-H521, M452-Beep Mat signal  
TTG91 (N51811902, W077418249)-H3000, M2830-Beep Mat signal  
TTG92 (N51819023, W077411807)-H1061, M960-Beep Mat signal  
TTG93 (N51819177, W077417759)-H450, M400-Beep Mat signal  
TTG94 (N51819122, W077418081)-H1611, M1500-Beep Mat signal  
TTG95 (N51819299, W077417849)-H2491, M2348-Beep Mat signal  
TTG96 (N51812768, W077412612)-H307, M252-Rock (Li significant)  
TTG97 (N51819302, W077411753)-H4366, M4146-Rock  
TTG98 (N51819279, W077417702)-H924, M860-Rock

# of SAMPLES : 27		Au-AA23/ME-ICP41										
PROJECT : Agr.2022-04												
SAMPLE	Au	Co	Cr	Cu	Fe	La	Li	Mn	Ni	Ti	V	Zn
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm
TTG-3		11	119	21	8,05		20	275	48	0,17	88	75
TTG-8					2,4			38		0,02	14	11
TTG-9			21		5,76			133		0,03	54	25
TTG-13	0,009	25	20	26	7,48		60	417	17	0,29	257	126
TTG-14	0,007	19		27	5,94			362	15	0,12	230	43
TTG-17					6,03	40		87		0,03	55	23
TTG-24					0,69			33		0,02	6	5
TTG-26					2,08		30	280		0,19	27	40
TTG-28					2,64	20	30	429		0,27	35	50
TTG-36					1,28			40		0,03	18	8
TTG-37					1,55		20	253		0,13	15	35
TTG-39					2,42		30	318		0,18	28	44
TTG-42				11	3,41	20	40	562		0,29	28	69
TTG-44					3,59		40	474		0,25	30	69
TTG-53			33	31	3,14		40	369	13	0,19	37	63
TTG-54			20	9	1,31			161		0,08	16	30
TTG-62					2,88			91		0,02	13	17
TTG-66					1,36		20	130	9	0,07	5	34
TTG-68					0,17			18				
TTG-72			14		0,24			24				
TTG-77				18	2,99	40	20	461		0,23	33	56
TTG-82					1,3			72		0,04	13	7
TTG-86					0,41			35				
TTG-88			14		6,34			141		0,09	102	72
TTG-96		17	62		3,81		30	445	29	0,24	107	56
TTG-97				13	1,91		20	72		0,03	18	23
TTG-98			25		1,73		20	131		0,1	11	37

### Assays and Mineralization

Thirty samples have been collected in this project and 27 samples have been assayed. The data shows some traces of (Zn and V) on the Sample TTG-13, which also contains a significant Li value.

The assay shows many other significant values of lithium (Samples TTG96, TTG53, TTG44, TTG42, TTG39, TTG28 and TTG26). Those values added to the lithological knowledge of the area which consists essentially of leuco-granites, the area seems to have a real potential in terms rare earth elements and rare metals such as lithium (Li).

### Conclusion and Discussion

The project is located in a leuco-granitic and pegmatitic geological environment where usually the exploration is concentrated on REE and rare metals. The prospecting work should focus on those granitoids and the pegmatites that occupy that part of Eeyou Istchee.

The prospected area is one of the most interesting economically in Eeyou Istchee. The rare earth elements and the rare metals are now the most explored.

Critical minerals are important for the Quebec strategy and the Cree Nation Government. Based on the geological and economic information, we suggest to the Board to keep funding prospector Thomas Blackned's projects. Thomas is prospecting with other great prospectors that have been trained by CMEB.



## THOMAS BLACKNED, R08-RE03 LORRAINE, AGR 2022-11

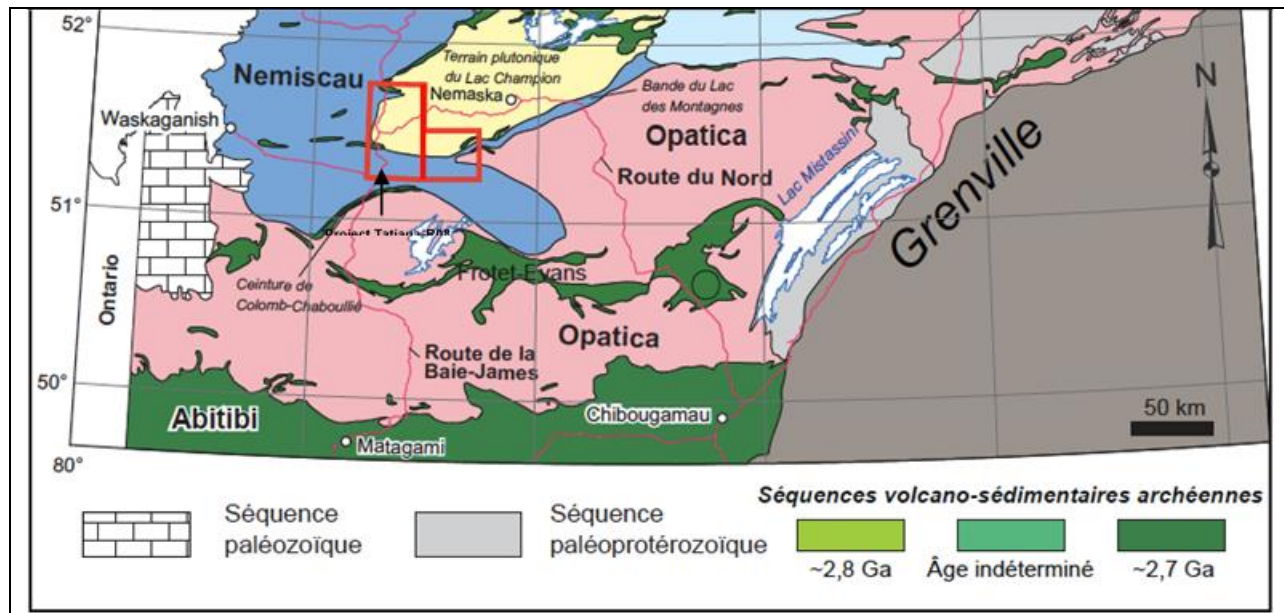
### Location

The project is located 60 km east of the Cree Nation of Eastmain. The prospector and his two helpers use his Camp Km312 for resting after work. It is about an hour and half driving (45 km) on the highway and 30 km on the gravel road towards Eastmain community. The prospected area is in Category 2 land, limited by restricted area in the north and the Category 1 land boundary in the west. It is accessible on foot and ATVs.



### Regional Geology

The project is located in the north part of the Superior Province, which itself lies in the heart of the Canadian Shield and is mainly made up of Archean rocks. The general metamorphism is at the greenschist facies, except in the vicinity of intrusive bodies, where it can go to the amphibolite-to-granulite facies. The Superior Province has been divided into several subunits; the property straddles the boundary between the La Grande subprovince to the north and the Nemiscau subprovince to the south and east.



The rocks in the prospected area are mainly of Archean age and are cut by a number of Neoproterozoic to Mesoproterozoic diabase dykes. The region is included in the Superior Province which covers almost half of Quebec's territory and which stretches west to Manitoba. The Superior Province forms the heart of the Canadian Shield, one of the largest existing Precambrian cratons. It is composed of about twenty subprovinces which are traditionally grouped into four types based on lithological, structural, metamorphic and metallogenic characteristics (Card and Ciesielski, 1986; Card, 1990; Hocq, 1994; Percival et al., 2012): 1) the subprovinces dominated by plutonic rocks of tonalite-trondhjemite type more or less deformed granodiorite (TTG); 2) the subprovinces composed of volcanic and sedimentary complexes metamorphosed to the greenschist and amphibolite facies which form belts delimiting plutonic domains; 3) mainly the subprovinces made up of high-grade metasedimentary rocks cut by granitic intrusions; and 4) the subprovinces formed of orthogneiss and paragneiss presenting a metamorphism reaching the granulite facies. The boundaries between these sub-provinces are generally defined by regional deformation zones which mark lithological, metamorphic, and structural contrasts, with metallogenic or geophysical signatures. The targeted area lies at the border of two geologically contrasting areas of the Superior Province: the Nemiscau subprovince, south and west, and the Lac Champion Plutonic Terrain belonging to the La Grande subprovince, to the northwest. The Lac Champion Plutonic Terrain (Hocq, 1994) consists mainly of intermediate and felsic intrusive rocks, variably distorted. This domain initially formed the southern portion of the La Grande subprovince (Card and Ciesielski, 1986). Hocq (1994) does not link it to the Nemiscau subprovince. Hocq (1994) considered that the belts of green rocks of the Middle and Lower Eastmain formed the boundary between the Nemiscau and La Grande subprovinces. However, Champion Lake shows more lithological and geophysical affinities with the plutonic domains of the La Grande subprovince (D'Amours, 2011; Moukhsil, 2001). The latter has an old tonalitic base, the Langelier Complex, the age of installation of which is between 3390 and 2790 Ma (Goutier et al., 1999, Goutier et al., 2002; Davis et al., 2014) and on which rest the Mesoproterozoic and Neoproterozoic metavolcanic and metasedimentary units.

The Lac Champion Plutonic Terrain also separates the metasedimentary Nemiscau and Opatica subprovinces which are connected to each other only by a narrow band of volcanic and sedimentary rocks, areas designated as the Lac des Montagnes Group (Valiquette, 1975). Here again, Hocq (1994) integrated the Lac des Montagnes Group into the plutonic Opatica subprovince located further south, despite significant differences in composition.

South and west of the prospected region, the Nemiscau subprovince mainly consists of varied migmatized metasedimentary rocks associated with lesser amounts of mafic metavolcanic rocks and intrusive rocks of

granodioritic and granitic composition (Card and Ciesielski, 1986; Hocq, 1994, Ciesielski, 1998). A U-Pb age on zircons at  $2672 \pm 2$  Ma from a biotite granite cutting the metasedimentary rocks of the Nemiscau subprovince (Davis et al., 1995) represents the minimum age for the sedimentary sequence crosscutting event. Southwest of the mapped area, the contact zone between the Nemiscau and Opatica subprovinces is marked by the Columbus- Chaboullié Belt, a narrow band of volcanic and sedimentary rocks, oriented NE-SW in the west and E-W in the east (Bandyayera and Daoudene, 2017). This belt mainly includes volcanic rocks, intermediate materials injected by mafic and ultramafic intrusions and, to a lesser extent, felsic volcanic rocks, iron formations, wackes and conglomerates. Two U-Pb ages on zircons from felsic volcanic rocks indicate that this volcanic sequence took place at  $2756.8 \pm 4.4$  and  $2760.3 \pm 6.4$  Ma; one of the four volcanic cycles dated between 2752 and 2705 Ma (Moukhsil et al., 2003). To the east, the Nemiscau subprovince is connected to the Opinaca by a narrow strip of volcanic and sedimentary rocks, the Lac des Montagnes Group (Valiquette, 1975; Hocq, 1994). Little work has been done to date on the nature of the contact between the Nemiscau and La Grande subprovinces (Lac Champion Plutonic Terrain). This contact could however represent an important metalotect and the boundary between the Opinaca and La Grande subprovinces.

### **Known Mineralization**

The mineralization is relatively unknown in this area. The minerals found these past years are: molybdenum (Mo); gold (Au); tungsten (W); silver (Ag); lithium (Li). James Bay in general, and the Nemaska region in particular, are also recognized for their significant potential for lithium mineralization in pegmatites. The volcano-sedimentary units of the Lac des Montagnes Group are indeed injected with pegmatitic granite intrusions, some of which contain lithium minerals such as spodumene or petalite (Laferrière, 2009). The best example is undoubtedly the Whabouchi deposit owned by Nemaska Lithium located east of the mapped area, in NTS sheet 32O/12. A resources estimation established that the Whabouchi pegmatite, dated at  $2577 \pm 13$  Ma (Beland, 2011; Bynoe, 2014), contains resources of more than 12 Mt of ore grading 1.6%  $\text{Li}_2\text{O}$  (Paiement et al., 2016). In places, beryl (Be) accompanies the spodumene in the pegmatites, notably in Whabouchi (Laferrière, 2009). Some ultramafic rocks show strong anomalies in chromium (Cr) and nickel (Ni). Some samples from a stratiform intrusion of peridotite containing a layer of pyroxenite gave grades of 0.43% and 0.2% Cr. They can contain up to 5% opaque minerals with 0.18% Cr. The ultramafic rocks also have anomalous Ni contents assaying between 652 and 1150 ppm. Some basalts close to the ultramafic rocks provided grades of 0.12% Cu and 137 ppb Au.

Two elements are associated with pegmatite dykes: lithium and molybdenum. Lithium mineralization (Li) (#101 to 104) are intimately associated with dykes of granitic pegmatite rich in spodumene and locally in lepidolite. Mineralization belongs to the class of rare elements, to the LCT family (Li-Cs-Ta) and to the albite-spodumene type according to the classification of Cern (1991a).

The most important mineralization corresponds to the Cyr-Lithium deposit (#102) with resources of 121,500 t at 1.7%  $\text{Li}_2\text{O}$  per vertical meter (Pelletier, 1975). Lithium is usually found in spodumene crystals, which are locally more than a meter long (photo 27). These crystals are associated with pegmatitic dykes (quartz-albite-muscovite) and can reach 60 meters over a length of a few hundred meters. The eastern extension of this deposit [Cyr-2 (#101)] also shows interesting potential with selected samples reaching 4.42% by weight  $\text{Li}_2\text{O}$  (Valiquette, 1974).

A second sector with potential for lithium is located in the southern part of NTS sheet 33C/01. This sector had previously been identified as harboring rare earth pegmatites (Carlson, 1962). Further work instead demonstrated potential for lithium with the identification two new showings. The Rose showing (#103; photo 28) and the Green showing (#104) show a very similar background to that of the Cyr-Lithium deposit (#102). Values in lithium reaching 2.5%  $\text{Li}_2\text{O}$  have been obtained. However, the values for the other rare metals are rather low (Rb <1300 ppm; Be <129 ppm; Nb <69 ppm; Ta <50 ppm), which is typical of albite spodumene type pegmatites (CERN}+, 1991a). This type of pegmatite is also associated with the Preissac-Lacorne batholith in the Abitibi subprovince where they were mined by Quebec Lithium (Boily, 1995; Mulja et al., 1995a and 1995b; Ste-Croix and Doucet, 2001).

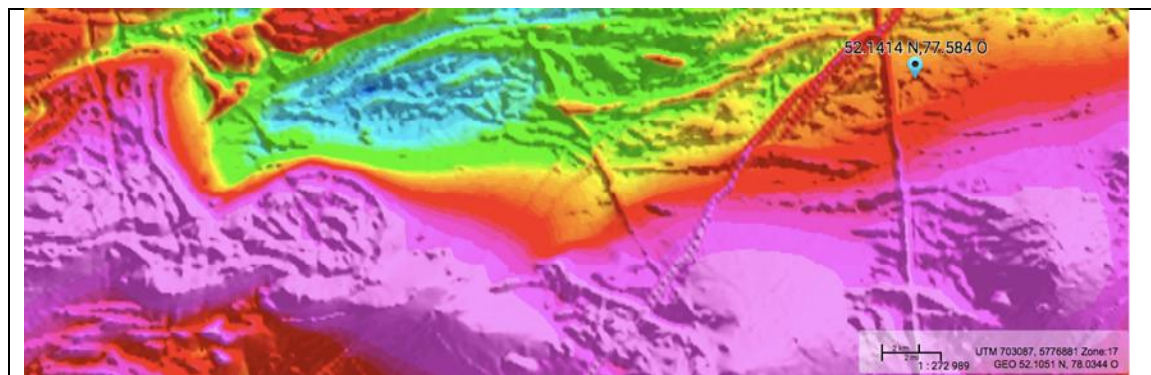
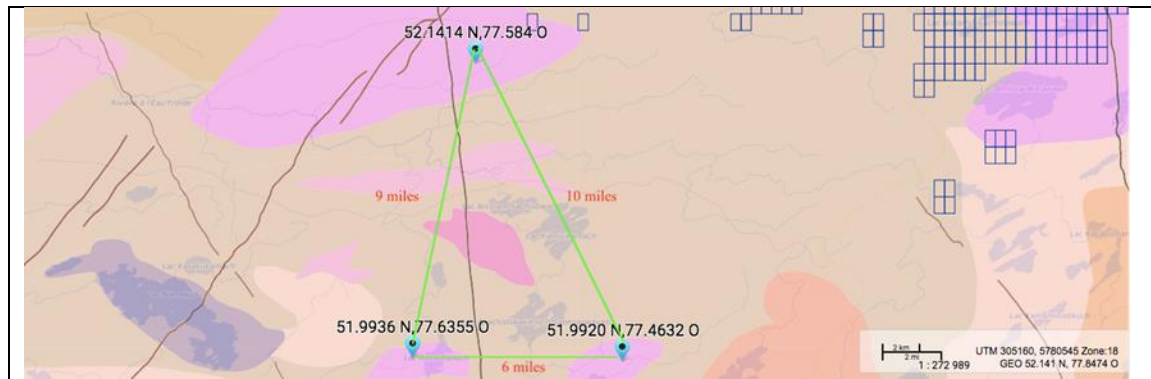
Molybdenum (Mo) mineralization is found especially along the Matagami-Radisson road between km 406 and 415 (# 106 to 108). Molybdenite is found in quartz veinlets cutting pegmatites (photo 29) or disseminated in thin pegmatitic dykes. Anomalous bismuth values (up to 0.18% Bi over 30 cm; Labelle, 1980) are also associated with these showings. The pegmatites usually contain muscovite and garnet. The presence of molybdenum (Mo) in association with pegmatites is poorly documented in the literature and the most popular examples known are the molybdenum deposits associated with Preissac and Moly Hill plutons of the Preissac-Lacorne batholith (Boily, 1995; Mulja et al., 1995a and 1995b; Taner et al., 1998).

### Local Geology

Below is the lithology we find in the field all over the prospected area:

Tonalite, granodiorite, paragneiss enclaves, garnet amphibolite paragneiss; presence locally of intermediate to felsic tuff, some Banded Iron Formation, garnet tourmaline pegmatite, garnet paragneiss, amphibolite, amphibolitized basalt, felsic to mafic tuff and some graphite sedimentary rocks.

Locally, we observe two major geological formations. In the western part of the area, there is the Akakanipanch batholith, which is made up of felsic rocks, mainly tonalite, granodiorite and remnants of paragneiss. Many pegmatites are also known to occur in this batholith. In the eastern part of the area we find the paragneiss of the Auclair Formation.

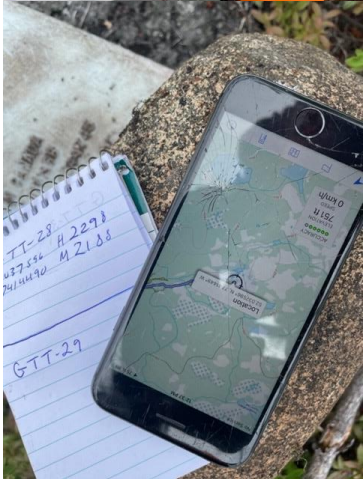
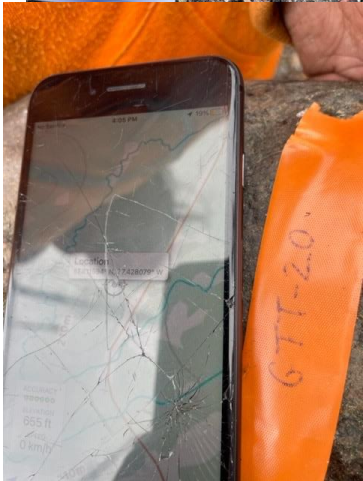
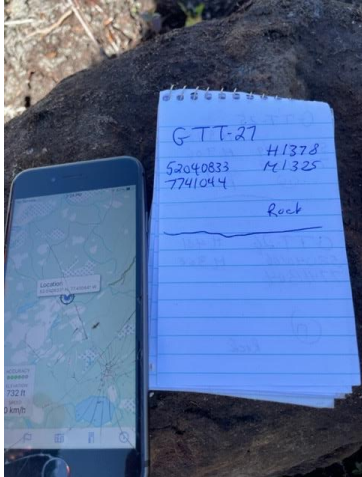
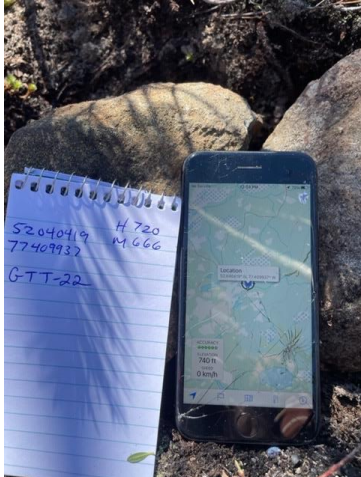


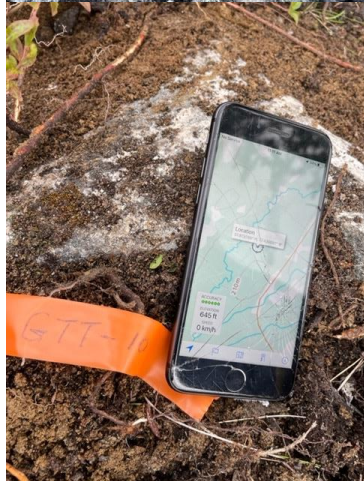
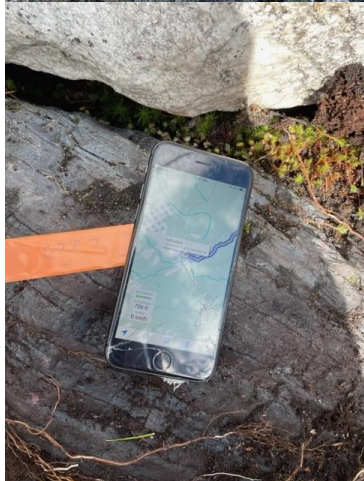
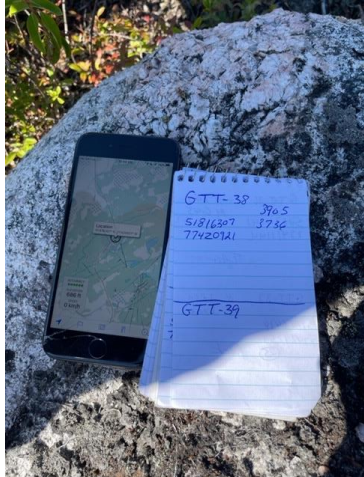
### Work Done

Ten days prospecting for a team of 2 prospectors and a helper. Travelling on the Eastmain access road to km 312. 24 samples have been taken from different lithologies but the most of samples are pegmatites and leuco-granites. Some rainy days helped to prepare the collected samples for assay. Here is the list of samples and those tagged that we could not sample. (R for rock and BM for Beep Mat):

GTT-1 N52043522, W77396058, H420, M392, BM    GTT-2, N52043335, W77396126; H643, M614, BM  
 GTT-3, N52043738, W77396281; H811, M779, BM    GTT-4, N52043574, W77396548; H963, M940, BM

GTT-5, N52043507, W77396599; H525, M520, **R** BM  
GTT-6, N52042646, W77397033; H409, M393,  
GTT-7, N52043061, W77397074; H3240, M3061, **R** M1386, **R**  
GTT-8, N51813595, W77429104; H2534,  
GTT-9, N51813336, W77429671; H932, M863, BM  
GTT-10, N51813329, W77430014; H404, M373,  
GTT-11, N51813088, W77430248; H1515, M1425, **R** M490, BM  
GTT-12, N51813061, W77430792; H514,  
GTT-13, N51812853, W77431409; H2498, M2342, **R** M4891, **R**  
GTT-14, N51812713, W77431543; H5126,  
GTT-15, N51813701, W77429401; H2907, M2764, BM  
GTT-16, N51811648, W77427652; H1250,  
GTT-17, N51811807, W77427902; H5238, M4895, **R** M3818, **R**  
GTT-18, N51811640, W77427850; H4039,  
GTT-19, N51811651, W77428194; H7017, M6634, **R** M2886, **R**  
GTT-20, N51811479, W77428236; H3065,  
GTT-21, N51811599, W77428065; H1135, M1046, **R** M666, **R**  
GTT-22, N52040419, W77409937; H720,  
GTT-23, N52040081, W77410588; H712, M657, **R** M578, **R**  
GTT-24, N52040123, W77410456; H634,  
GTT-25, N52039979, W77411719; H978, M906, **R** M368, **R**  
GTT-26, N52040106, W77411719; H401,  
GTT-27, N52040833, W77410440, H1378, M1325, **R** M2188, **R**  
GTT-28, N52037596, W77414490; H2298,  
GTT-29, N52037553, W77414459, H417, M384, **R** M3653, **R**  
GTT-30, N52037488, W77414979, H3822,  
GTT-31, N52037528, W77415141; H524, M493, **R** M1853, BM  
GTT-32, N52037776, W77414976; H1948,  
GTT-33, N52037898, W77414534; H1624, M1522, BM  
GTT-34, N52034441, W77410255; H685,  
GTT-35, N52034178, W77410629; H508, M486, **R** M634, **R**  
GTT-36, N52034341, W77411144; H693, M645,  
BM







**Assays and Mineralization**

More than thirty samples have been collected in this project and 24 samples have been sent to the laboratory. The data shows some anomalic, significant and traces of rare metals and others.



# of SAMF Au-AA23/ME-ICP41													
PROJECT : LORRAINE-R08-RE03													
SAMPLE	Ag	Be	Co	Cr	Cu	Fe	La	Li	Mn	Ni	Ti	V	Zn
	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm
GTT-5			1	33	13	2,93	70		40	8	0,05	75	16
GTT-7		0,8	1	11	2	19,1			9100	4		4	6
GTT-8			3	13	4	7,49			127	6	0,04	53	43
GTT-11	0,5		3	10	1	1,8	70		94	6	0,05	11	35
GTT-13			14	33	2	3,01		110	367	23	0,22	78	81
GTT-14			5	9	1	9,71			110	6	0,04	141	40
GTT-16			2	9	1	3,01			88	2	0,02	30	20
GTT-17			4	14	-1	7,14			89	5	0,03	48	26
GTT-18			14	34	25	4,87			178	29	0,16	140	27
GTT-19			2	11	1	4,31			65	4	0,02	28	19
GTT-20			21	284	33	3,18			129	132	0,05	42	12
GTT-21			2	18	1	3,77			67	4	0,03	53	16
GTT-22			7	10	12	2,42	40		188	11	0,12	38	31
GTT-23			28	8	9	8,67		40	673	16	0,22	147	105
GTT-24			5	9	1	2,86	50		148	5	0,14	39	53
GTT-25			18	18	122	3,58			252	37	0,19	216	20
GTT-26			14	21	43	3,63			515	15	0,22	71	85
GTT-27			16	199	15	4,88	40	30	395	51	0,37	114	78
GTT-28			28	17	49	5,81			327	58	0,34	130	53
GTT-29			13	17	35	3,06			548	12	0,2	74	65
GTT-30			31	78	50	5,54			339	166	0,11	150	24
GTT-31			11	35	66	2,87			483	15	0,14	55	58
GTT-34			21	18	72	3,23			231	42	0,16	84	32
GTT-35			8	89	15	2,04	30		213	36	0,22	31	44
GTT-37			3	5	1	4,7			80	3	0,05	62	25
GTT-38			3	35	2	5,14			114	4	0,08	28	37
GTT-39			2	8	1	4,53			65	2	0,04	55	10
GTT-40			3	7	2	6,8			69	5	0,02	25	9
GTT-41			8	32	1	1,8			205	24	0,11	40	28
GTT-42			2	12	1	2,69			61	3	0,04	25	27
GTT-43			15	8	14	6,91			399	16	0,18	227	46
GTT-44			4	9	1	3,57			133	5	0,05	22	46
GTT-46		10,5			12	0,27			214				
GTT-47		0,8			4	0,24			171				

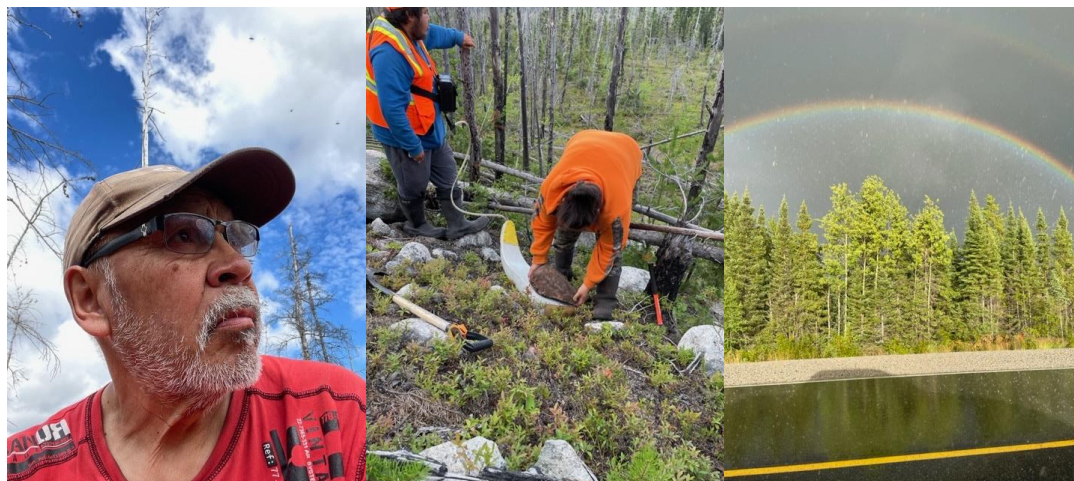
The assay shows many other significant values of rare metals (Samples GTT-46, GTT-5, GTT-11, GTT-13). Those values added to the lithological knowledge of the area which consists essentially of leuco-granites, the area seems to have a real potential in terms rare earth elements and rare metals such as (Be) GTT-46 and (Li) GTT-13. Other samples reveal some good values in Mn (GTT-7) and some significant values in Cr (GTT-20, 27), Fe (GTT-7), Ti (GTT-13, 26, 27, 28, 35, 44), V (GTT-30), Ni (GTT-29, 39) and Zn (GTT-23).

### Conclusion and Discussion

The project is located in an area dominated by leuco-granitic and pegmatitic geological environment where usually the exploration is concentrated on REE and rare metals. The prospecting work should focus on those granitoids and the spodumene-bearing pegmatites.

The prospected area looks to be one of the most interesting economically in Eeyou Istchee. The rare earth elements and the rare metals are now the most explored and their market demands are high.

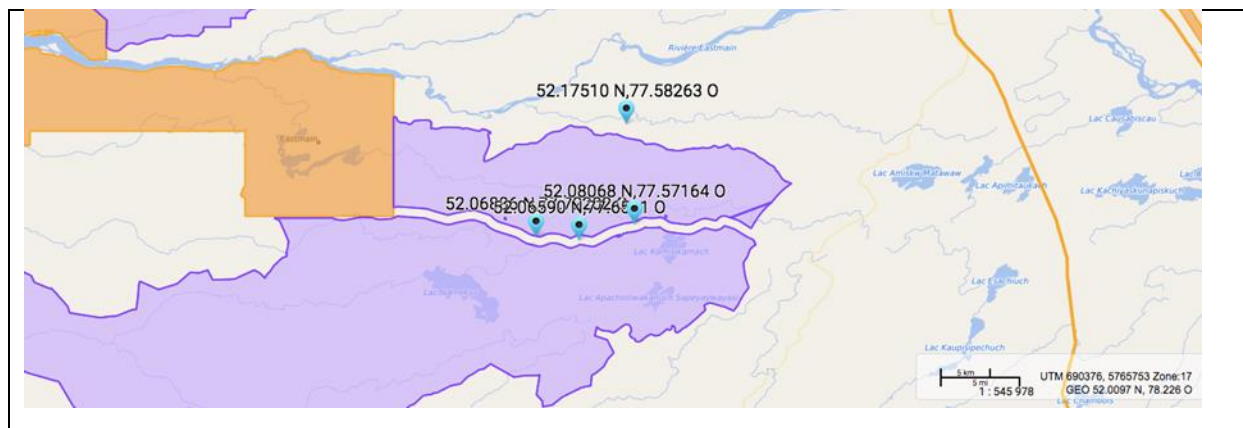
We suggest to the Board to keep funding these projects where the prospectors Thomas, Tyler and the helper Giana are doing serious job. Thomas and Tyler have been trained by CMEB.



### THOMAS BLACKNED, JAMESEE- R08 - VC03 PROJECT, AGR 2022-18

#### Location

The project is located 120 km southeast of the Cree Nation of Eastmain. The prospector and his two helpers drive for an hour and a half to get to the field. Most of the trip is on the gravel road from the Eastmain community. The prospected area is in Category 2 land, limited by restricted area in the north and the Category 1 land boundary in the west. It is accessible on foot and ATVs.

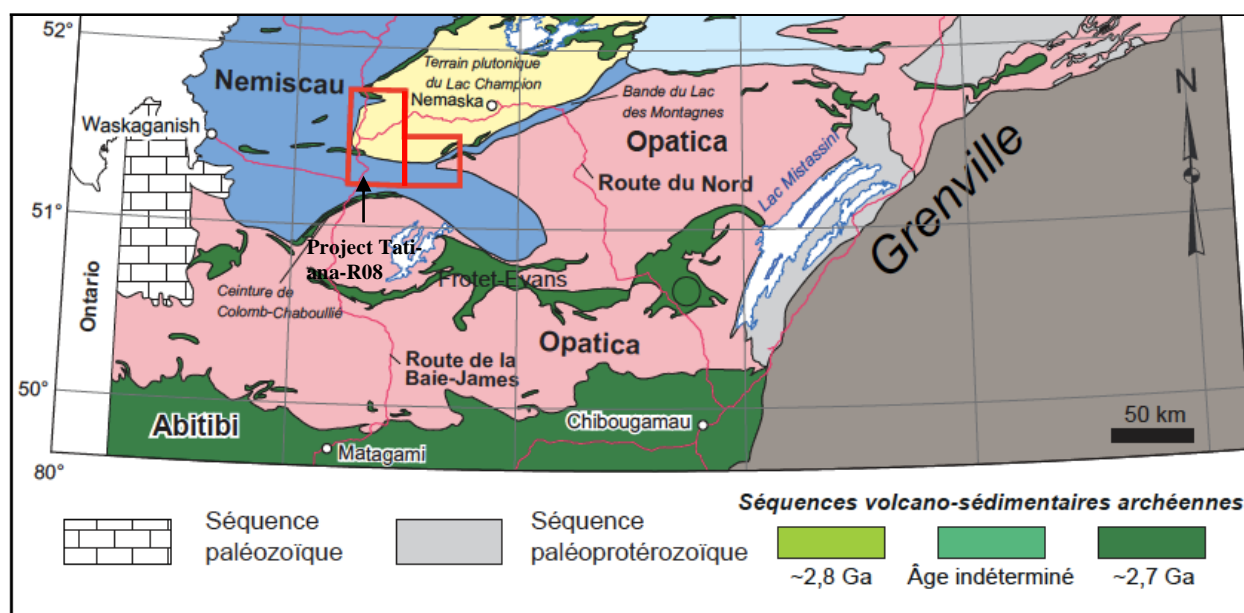




### Regional Geology

The project is located in the north part of the Superior Province, which itself lies in the heart of the Canadian Shield mainly made up of Archean rocks. The general metamorphism is at the greenschist facies, except in the vicinity of intrusive bodies, where it can go to the amphibolite-to-granulite facies. The Superior Province has been divided in several subunits; the property straddles the boundary between the La Grande subprovince to the north and the Nemiscau subprovince to the south and east.

The rocks in the prospected area are mainly of Archean age and are cut by a number Neoproterozoic to Mesoproterozoic diabase dykes. The region is included in the Superior Province which covers almost half of Quebec's territory and which stretches west to Manitoba. The Superior Province forms the heart of the Canadian Shield, one of the largest existing Precambrian cratons. It is composed of about twenty subprovinces which are traditionally grouped into four types based lithological, structural, metamorphic and metallogenic (Card and Ciesielski, 1986; Card, 1990; Hocq, 1994; Percival et al., 2012): 1) the subprovinces dominated by plutonic rocks of type tonalite-trondhjemite- more or less deformed granodiorite (TTG); 2) the sub-provinces composed of volcanic complexes and sedimentary metamorphosed to the facies of green shales and amphibolites which form belts delimiting plutonic domains; 3) mainly the subprovinces made up of metasedimentary rocks high grade cut by granitic intrusions; and 4) the subprovinc-



es formed of orthogneiss and paragneiss presenting a metamorphism reaching the facies of granulites. The boundaries between these subprovinces are generally defined by regional deformation zones which mark lithological, metamorphic, structural, metallogenic or geophysical contrasts. The targeted area lies at the border of two geologically contrasting areas of the Superior Province: the Nemiscau subprovince, south and west, and the Champion Lake Plutonic Terrain belonging to the La Grande subprovince, to the northwest. The Champion Lake Plutonic Terrain (Hocq, 1994) mainly consists of intrusive, felsic and intermediate rocks, variably distorted. This domain initially formed the southern portion of the La Grande subprovince (Card and Ciesielski, 1986) before Hocq (1994) does not link it to the Nemiscau subprovince. Hocq (1994) considered that the belts of green rocks of the Middle and Lower Eastmain formed the boundary between the Nemiscau and La Grande subprovinces. However, Champion Lake shows more lithological and geophysical affinities with the plutonic domains of the La Grande subprovince (D'Amours, 2011; Moukhsil, 2001). The latter has an old tonalitic base, the Langelier Complex, the age of installation is between 3390 and 2790 Ma (Goutier et al., 1999, Goutier et al., 2002; Davis et al., 2014) and on which rest the Mesoarchean and Neoproterozoic metavolcanic and metasedimentary units.

The Champion Lake Plutonic Terrain also separates the metasedimentary Nemiscau and Opinaca subprovinces which are connected to each other only by a narrow band of volcanic and sedimentary rocks, areas designated as the Lac des Montagnes Group (Valiquette, 1975). Here again, Hocq (1994) integrated the Lac des Montagnes Group into the plutonic Opinaca subprovince located further south, despite significant differences in composition.

South and the west of the prospected region, the Nemiscau subprovince mainly consists of varied migmatized metasedimentary rocks associated with lesser amounts of mafic metavolcanic rocks and intrusive rocks of granitic and granodioritic composition (Card and Ciesielski, 1986; Hocq, 1994, Ciesielski, 1998). A U-Pb age on zircons at  $2672 \pm 2$  Ma from a biotite granite cutting the metasedimentary rocks of the Nemiscau subprovince (Davis et al., 1995) represents the minimum age for the sedimentary sequence crosscutting event. Southwest of the mapped area, the contact zone between the Nemiscau and Opinaca subprovinces is marked by the Columbus-Chaboullié Belt, a narrow band of volcanic and sedimentary rocks, oriented NE-SW in the west and E-W in the east (Bandyayera and Daoudene, 2017). This belt mainly includes volcanic rocks, intermediate materials injected by mafic and ultramafic intrusions and, to a lesser extent, felsic volcanic rocks, iron formations, wackes and conglomerates. Two U-Pb ages on zircons from felsic volcanic rocks indicate that this volcanic sequence took place at  $2756.8 \pm 4.4$  and  $2760.3 \pm 6.4$  Ma; one of the four volcanic cycles dated between 2752. and 2705 Ma (Moukhsil et al., 2003). To the east, the Nemiscau subprovince is connected to the Opinaca by a narrow strip of volcanic and sedimentary rocks, the Lac des Montagnes Group (Valiquette, 1975; Hocq, 1994). Little work has been done to date on the nature of the contact between the Nemiscau and La Grande subprovinces (Champion Lake Plutonic Terrain). This contact could however represent an important metalotect and the boundary between the Opinaca and La Grande subprovinces.

### **Known Mineralization**

The mineralization is relatively unknown in this area. The minerals found in recent years are: molybdenum (Mo); gold (Au); tungsten (W); silver (Ag); lithium (Li). James Bay in general, and the Nemaska region in particular, are also recognized for their significant potential for lithium mineralization in pegmatites. The volcano-sedimentary units of the Lac des Montagnes Group are indeed injected with pegmatitic granite intrusions, some of which contain lithium minerals such as spodumene or petalite (Laferrière, 2009). The best example is undoubtedly the Whabouchi deposit owned by Nemaska Lithium located east of the mapped area, in NTS sheet 32O/12. A resources estimation established that the Whabouchi pegmatite, dated at  $2577. \pm 13$  Ma (Beland, 2011; Bynoe, 2014), contains resources of more than 12 Mt of ore grading 1.6%  $\text{Li}_2\text{O}$  (Paiement et al., 2016). In places, beryl (Be) accompanies spodumene in the pegmatites, notably in Whabouchi (Laferrière, 2009). Some ultramafic rocks show strong anomalies in chromium (Cr) and nickel (Ni). Some samples from a stratiform intrusion of peridotite containing a layer of pyroxenite gave grades of 0.43% and 0.2% Cr. They can contain up to 5% opaque minerals with 0.18% Cr.

The ultramafic rocks also have anomalous Ni contents assaying between 652 and 1150 ppm. Some basalts close to the ultramafic rocks provided grades of 0.12% Cu and 137 ppb Au.

Two elements are associated with pegmatite dykes: lithium and molybdenum. Lithium mineralization (Li) is intimately associated with dykes of granitic pegmatite rich in spodumene and locally in lepidolite. Mineralization belongs to the class of rare elements, to the LCT family (Li-Cs-Ta) and to the albite-spodumene type according to the classification of Cern (1991a).

The most important mineralization corresponds to the Cyr-Lithium deposit, 381Km, with resources of 121,500 t at 1.7% Li<sub>2</sub>O per vertical meter (Pelletier, 1975). Lithium is usually found in spodumene crystals, which are locally more than a meter long. These crystals are associated with pegmatitic dykes (quartz-albite-muscovite) and can reach 60 meters over a length of a few hundred meters. The eastern extension of this deposit [Cyr-2 (Km381)] also shows interesting potential with selected samples reaching 4.42% by weight Li<sub>2</sub>O (Valiquette, 1974).

A second sector with potential for lithium is located in the southern part of NTS sheet 33C/01. This sector had previously been identified as harboring rare earth pegmatites (Carlson, 1962). Further work instead demonstrated potential for lithium with the identification two new showings. The Rose showing and Green showing show a very similar background to that of the Cyr-Lithium deposit. Values in lithium reaching 2.5% Li<sub>2</sub>O have been obtained. However, the values for the other rare metals are rather low (Rb <1300 ppm; Be <129 ppm; Nb <69 ppm; Ta <50 ppm), which is typical of albite spodumene type pegmatites (CERN}+, 1991a). This type of pegmatite is also associated with the Preissac-Lacorne batholith in the Abitibi subprovince where they were mined by Quebec Lithium (Boily, 1995; Mulja et al., 1995a and 1995b; Ste-Croix and Doucet, 2001).

Molybdenum (Mo) mineralization is found especially along the Matagami-Radisson road between km 406 and 415. Molybdenite is found in quartz veinlets cutting pegmatites or disseminated in thin pegmatitic dykes. Anomalous bismuth values (up to 0.18% Bi over 30 cm; Labelle, 1980) are also associated with these showings. The pegmatites usually contain muscovite and garnet. The presence of molybdenum (Mo) in association with pegmatites is poorly documented in the literature and the most popular examples known are the molybdenum deposits associated with Preissac and Moly Hill plutons of the Preissac-Lacorne batholith (Boily, 1995; Mulja et al., 1995a and 1995b; Taner et al., 1998).

### **Local Geology**

Below is the lithology that we find in the field all over the prospected area:

White granitic pegmatite, muscovite-garnet ± biotite ± tourmaline

Paragneiss, garnet ± sillimanite ± cordierite, generally migmatized

Granodiorite and granite injected by paragneiss

Felsic and mafic tuff and paragneiss

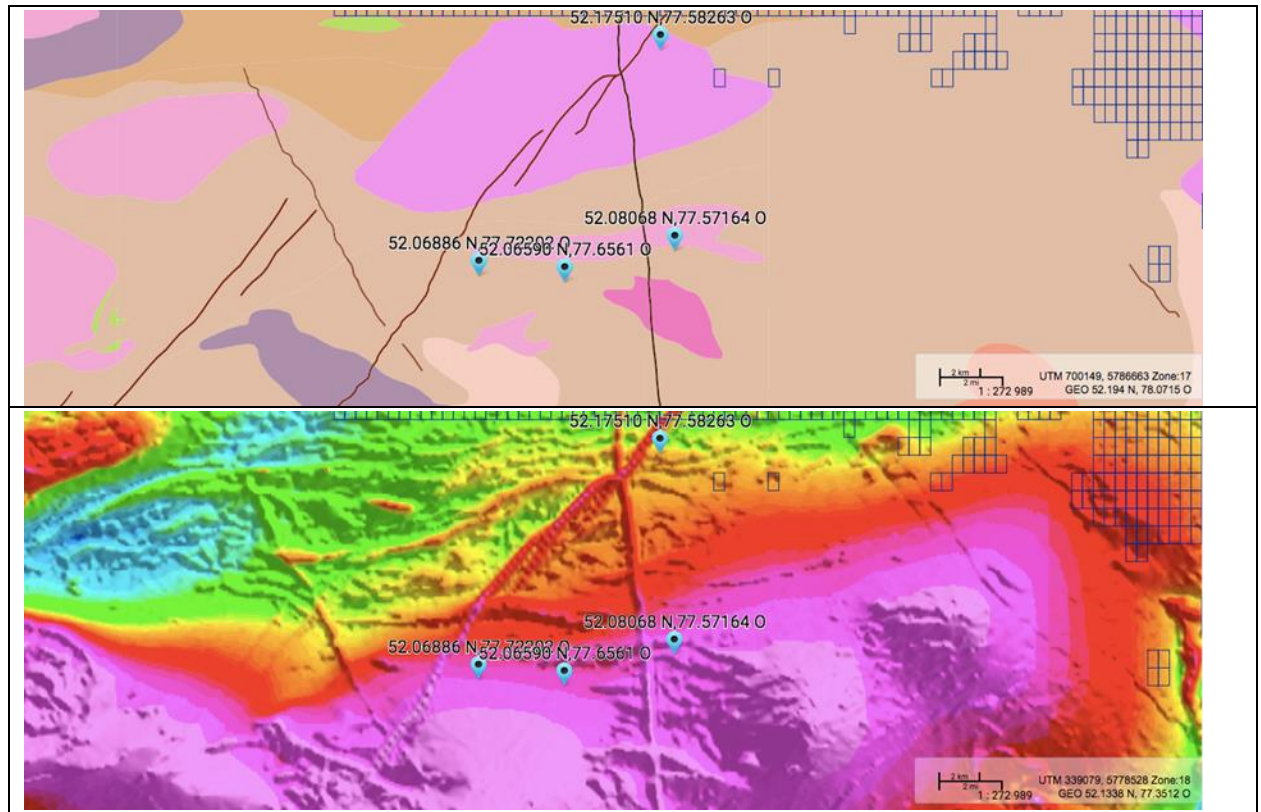
Amphibolite basalt and amphibolite

Metatexite issued from paragneiss, injected by granite, biotite ± garnet

Leucogranite

Gabbro and pyroxenite

Locally, we can observe two important geological entities. In the north, we can observe an east-west corridor of volcanic rocks and mafic plutonic rocks. Technically these rocks contain gold and basic metals. In the south, we find felsic plutonic rocks, mainly tonalite, granodiorite and remnants of paragneiss. Many pegmatites and leucogranites are also known to appear as stylolites or batholiths. This latter lithology is targeted for REE and rare metals such as lithium, beryllium, and molybdenum.



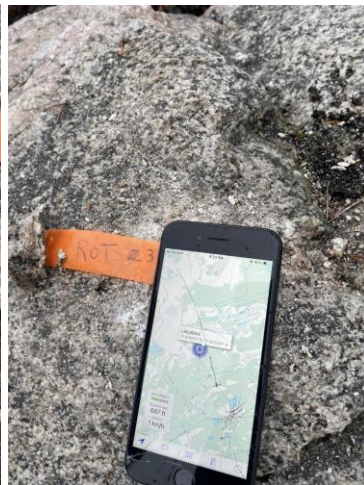
## Work Done

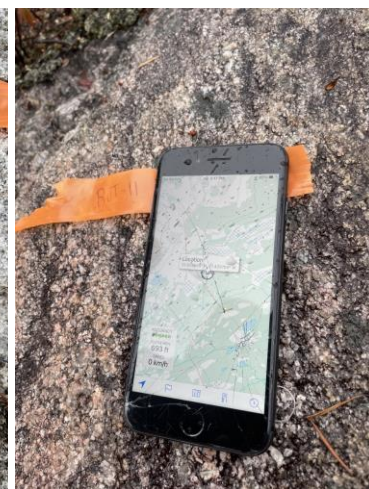
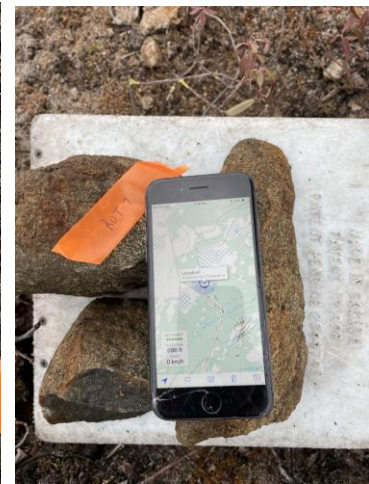
Ten days prospecting for Thomas Blackned team of 2 prospectors and a helper. They travelled every day from their Camp Km312 or from Eastmain to the prospected area. They collected 48 samples of different lithology but the most of the samples are pegmatites and leuco-granites; looking for spodumene. Some rainy days were used to prepare the collected samples for assays. Here is the list of samples and those tagged that we could not sample. (**Rock** and Tag for Beep Mat):

ROT-1, 51.82867N, 77.42585W, <b>Rock</b>	ROT-2, 51.82915N, 77.42412W, <b>Rock</b>
ROT-3, 51.82934N, 77.42398W, <b>Rock</b>	ROT-4, 51.82914N, 77.424809W, Tag
ROT-5, 51.829243N, 77.425031W, <b>Rock</b>	ROT-6, 51.829327N, 77.424813W, Tag
ROT-7, 51.829323N, 77.42459W, <b>Rock</b>	ROT-8, 51.829232N, 77.424504W, Tag
ROT-9, 51.829309N, 77.424298W, Tag	ROT-10, 51.829375N, 77.42428W, <b>Rock</b>
ROT-11, 51.829647N, 77.423652W, Tag	ROT-12, 51.829596N, 77.423661W, <b>Rock</b>
ROT-13, 51.829655N, 77.4223748W, <b>Rock</b>	ROT-14, 51.829731N, 77.423735W, Tag
ROT-15, 51.829721N, 77.422974W, <b>Rock</b>	ROT-16, 51.830016N, 77.423189W, <b>Rock</b>
ROT-17, 51.829896N, 77.423225W, <b>Rock</b>	ROT-18, 51.829955N, 77.422817W, <b>Rock</b>
ROT-19, 51.830037N, 77.42261W, <b>Rock</b>	ROT-20, 52.069878N, 77.577949W, <b>Rock</b>
ROT-21, 52.069964N, 77.578031W, Tag	ROT-22, 52.070004N, 77.578303W, <b>Rock</b>

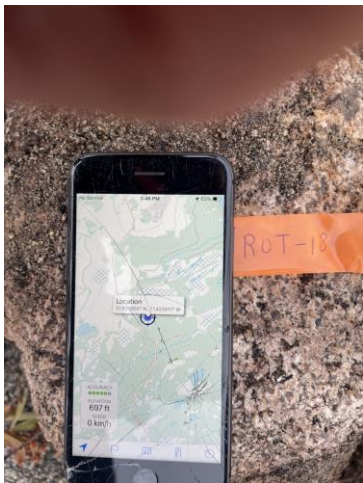
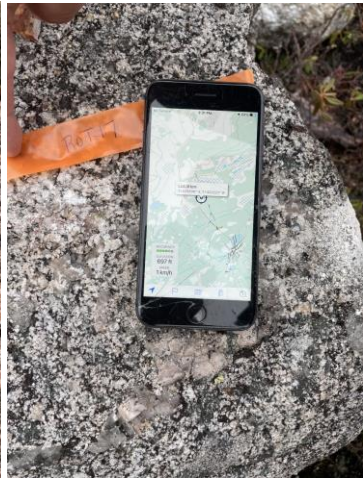
ROT-23, 52.070205N, 77.578316W, **Rock**  
ROT-25, 52.070428N, 77.577737W, **Rock**  
ROT-27, 52.06994N, 77.577643W, **Rock**  
ROT-29, 52.06954N, 77.577672W, **Rock**  
ROT-31, 52.069382N, 77.57825W, **Rock**  
ROT-33, 52.069842N, 77.5788856W, Tag  
ROT-35, 52.05356N, 77.589295W, **Rock**  
ROT-37, 52.053164N, 77.589216W, **Rock**  
ROT-39, 52.053591N, 77.588994W, Tag  
ROT-41, 52.050405N, 77.589826W, **Rock**  
ROT-43, 52.050463N, 77.58982W, **Rock**  
ROT-45, 52.050214N, 77.589808W, **Rock**  
ROT-47, 52.049991N, 77.589892W, **Rock**  
ROT-49, 52.049981N, 77.589794W, **Rock**  
ROT-51., 52.066495N, 77.586588W, **Rock**  
ROT-53, 52.066959N, 77.58573W, **Rock**  
ROT-55, 52.066969N, 77.583916W, **Rock**  
ROT-57, 52.066913N, 77.58352W, **Rock**  
ROT-59, 52.067263N, 77.58214W, **Rock**  
ROT-61, 52.067622N, 77.58139W, **Rock**

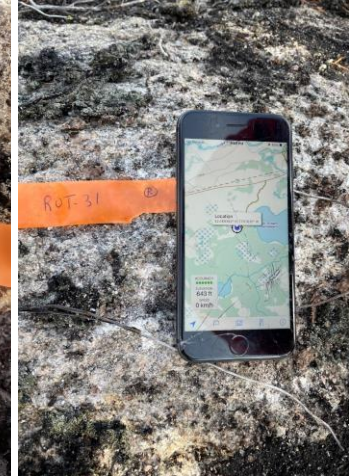
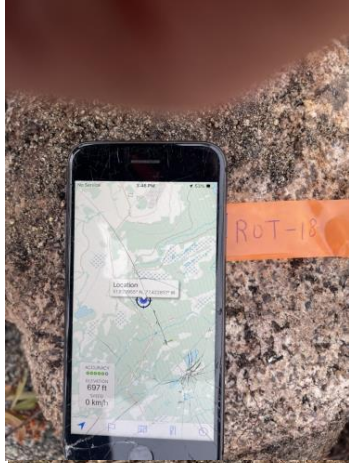
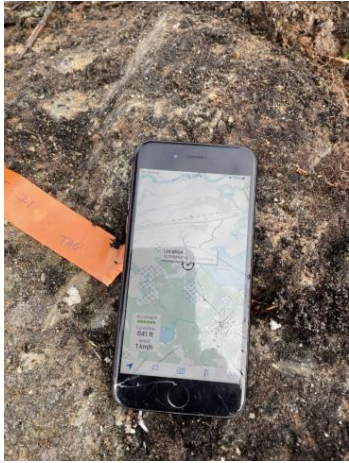
ROT-24, 52.070255N, 77.57807W, Tag  
ROT-26, 52.069924N, 77.576885W, **Rock**  
ROT-28, 52.069762N, 77.577893W, **Rock**  
ROT-30, 52.069924N, 77.577672W, Tag  
ROT-32, 52.069766N, 77.578854W, **Rock**  
ROT-34, 52.069903N, 77.578787W, **Rock**  
ROT-36, 52.053221N, 77.589201W, **Rock**  
ROT-38, 52.052414N, 77.589027W, **Rock**  
ROT-40, 52.053454N, 77.58903W, **Rock**  
ROT-42, 52.050462N, 77.589795W, **Rock**  
ROT-44, 52.050202N, 77.589684W, Tag  
ROT-46, 52.05015N, 77.590051W, **Rock**  
ROT-48, 52.049976N, 77.589808W, **Rock**  
ROT-50, 52.066381N, 77.587069W, Tag  
ROT-52., 52.066607N, 77.586548W, **Rock**  
ROT-54, 52.066934N, 77.583826W, **Rock**  
ROT-56, 52.067024N, 77.583639W, **Rock**  
ROT-58, 52.067244N, 77.582954W, **Rock**  
ROT-60, 52.067536N, 77.581587W, Tag  
ROT-62, 52.069942N, 77.587958W, **Rock**

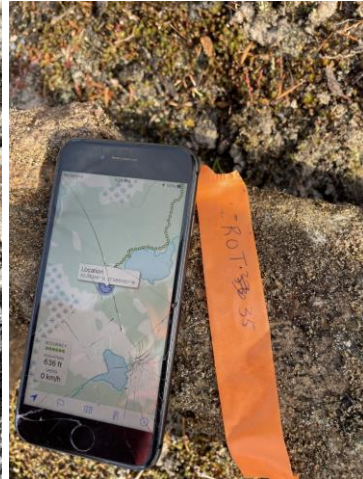


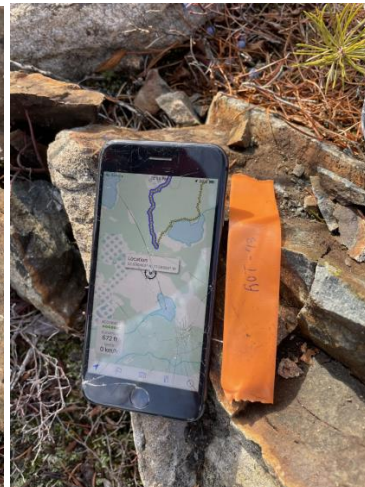
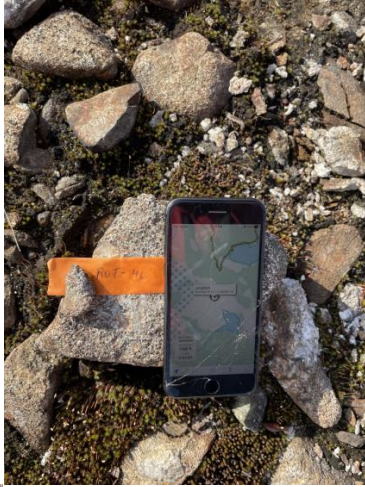
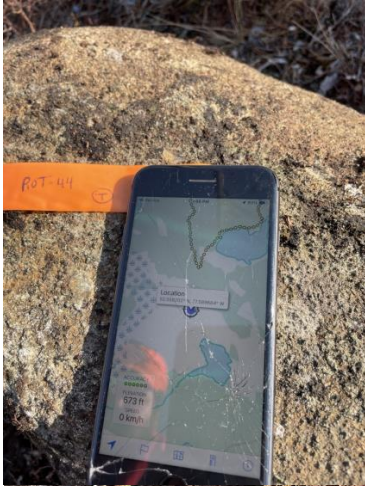
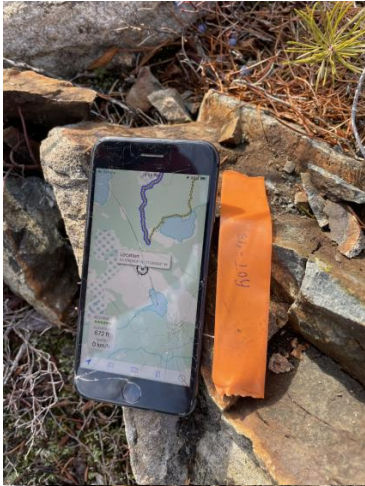


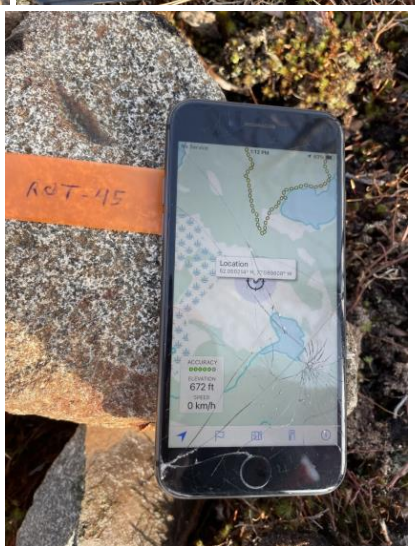
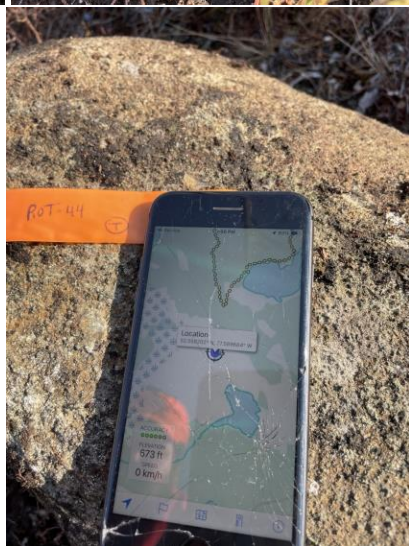
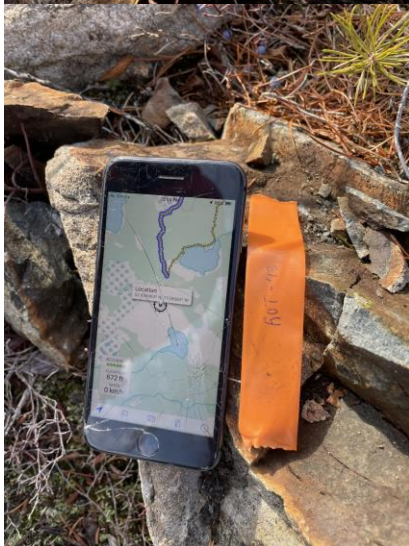
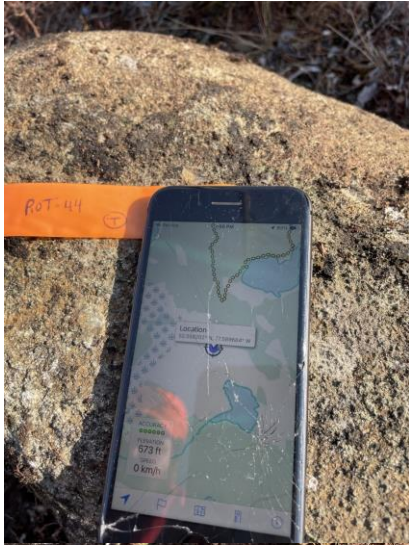


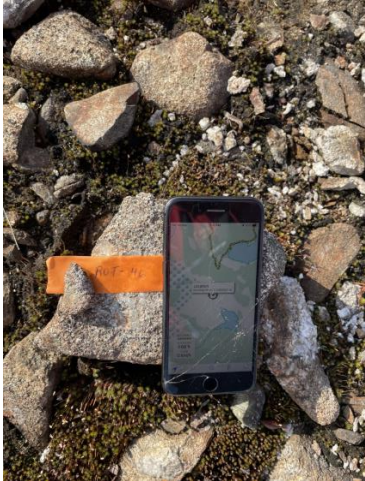














### Assays and Mineralization

More than sixty samples have been collected in this project and 48 samples have been sent to the laboratory. The data shows some anomalous, significant and traces of rare metals and copper.

The assay shows many other significant values of rare metals (Samples ROT-17, ROT-1). Those values added to the lithological knowledge of the area, which consists essentially of leuco-granites, suggest the area seems to have some potential in terms of rare earth elements such as (La) (ROT-2, ROT-17, ROT-36, ROT-61). Other samples reveal some good values in Cu (ROT-12, ROT-13 and ROT-38 to ROT-49 and ROT-53), some values in V to be considered (ROT-1 and ROT-7 to ROT-15, ROT-128, ROT-37 to ROT-52, ROT-55 and ROT-62) and finally interesting values of Zn (ROT-1, ROT-17, ROT-23, ROT-52).

# of SAMPLES : 48 Analyse ME-ICP41								
PROJECT : Agreement 2022-18								
	Ba	Cu	La	Li	Ni	Ti	V	Zn
	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
ROT-1	340	16	30	50	105	0.42	150	104
ROT-2	70	3	40	20	15	0.2	40	52
ROT-3	60	8	20	10		0.14	28	47
ROT-5	20	2		30		0.07		36
ROT-7	90	21		20	37	0.33	202	70
ROT-10	10	16			34	0.16	228	72
ROT-12	20	115			39	0.17	172	24
ROT-13	20	129			37	0.15	133	36
ROT-15	110	16	30	20	25	0.29	165	78
ROT-16	40	3	30	20		0.06	27	42
ROT-17	60	5	40	230	45	0.3	41	195
ROT-18	70	5		20		0.12	26	64
ROT-19	30	2				0.17		21
ROT-20	30	8				0.15	36	15
ROT-22	40	2				0.01		7
ROT-23	180	37	30	40	54	0.4	63	109
ROT-25	150	21		20	31	0.28	52	73
ROT-26	250	9	20		11	0.18	67	77
ROT-27	50	9	20	20	10	0.15	31	45
ROT-28	460	59	20	30	64	0.3	103	84
ROT-29	30	27	20		14	0.17	59	39
ROT-31	70	6	20			0.13		31
ROT-32	60	4				0.09		32
ROT-34	30	22	30	30		0.2	38	29
ROT-35	170	9	10	20		0.25	87	51
ROT-36	110	2	40	20		0.16	29	63
ROT-37	60	52			52	0.28	200	75
ROT-38	30	140			24	0.24	222	56
ROT-40	50	121			18	0.24	211	56
ROT-41	30	132			37	0.31	323	78
ROT-42	30	145			30	0.24	245	64
ROT-43	20	135			28	0.3	182	72
ROT-45	40	139			24	0.19	212	43
ROT-46	30	133			26	0.22	210	55
ROT-47	30	148			35	0.32	240	74
ROT-48	40	141			42	0.42	257	73
ROT-49	30	138			31	0.23	228	53
ROT-51	250	25	20		39	0.28	229	93
ROT-52	120	12	30	20	19	0.2	156	101
ROT-53	40	151		20	42	0.13	86	44
ROT-54	240	44	20	30	67	0.29	93	73
ROT-55	20	77			15	0.21	250	38
ROT-56	60	22	20	20	14	0.17	41	54
ROT-57	30	12		20	38	0.23	95	59
ROT-58	410	45	20	20	46	0.29	90	71
ROT-59	850	44		40	27	0.42	110	76
ROT-61	1070	16	40	40	13	0.41	94	70
ROT-62	80	37			41	0.22	169	59

### Conclusion and Discussion

There are great lithologies for basic metals and gold but the project area is globally dominated by leucogranitic and pegmatitic geological environments where usually the exploration is concentrated on REE and rare metals. The prospecting work should focus on those granitoids and the spodumene-bearing pegmatites.

Presently, the prospected area appears to be one of the most interesting economically in Eeyou Istchee, especially since many companies staked the area looking for lithium. The rare earth elements and the rare metals are now the most explored and the market demands are high.

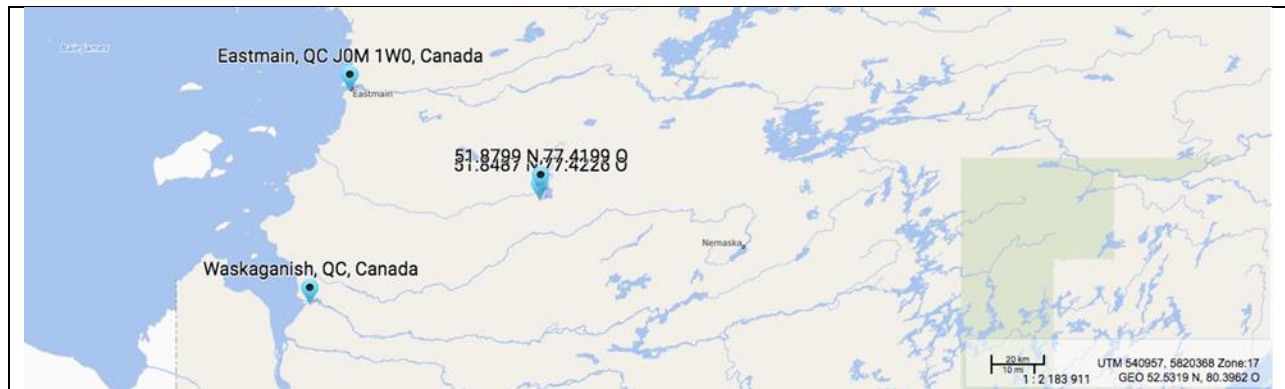
We suggest to the Board to keep funding these projects where the prospectors Thomas, Tyler and the helper Giana are doing a serious job. Thomas and Tyler have been trained by CMEB.





**THOMAS BLACKNED, JAMESEE- K306, AGR 2023-01**  
**Project Location**

The project area is located at equal distance and about 70 km from the Cree Nations of Waskaganish and Eastmain. It is accessible using the Billy Diamond Highway. ATVs are used to go off road and reach the areas to prospect. The prospectors and helper travel every day to and from Camp Km312 on the Billy Diamond Highway.

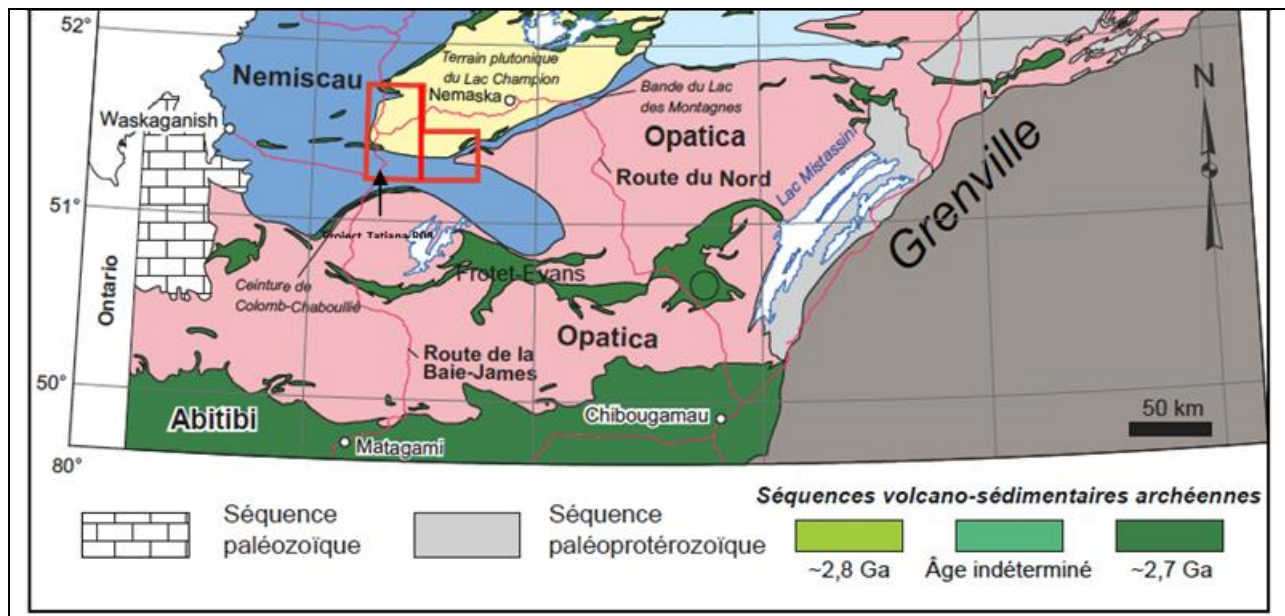


**General Geology**

The project is located in the north part of the Superior Province, which itself lies in the heart of the Canadian Shield and is mainly made up of Archean rocks. The general metamorphism is at the greenschist facies, except in the vicinity of intrusive bodies, where it can go to the amphibolite-to-granulite facies. The Superior Province has been divided into several sub-units; the property straddles the boundary between the La Grande subprovince to the north and the Nemiscau subprovince to the south and east.

The rocks in the prospected area are mainly of Archean age and are cut by a number Neoproterozoic to Mesoproterozoic diabase dykes. The region is included in the Superior Province which covers almost half of Quebec's territory and which stretches west to Manitoba. The Superior Province forms the heart of the Canadian Shield, one of the largest existing Precambrian cratons. It is composed of about twenty sub-provinces which are traditionally grouped into four types based lithological, structural, metamorphic and metallogenic characteristics (Card and Ciesielski, 1986; Card, 1990; Hocq, 1994; Percival et al., 2012): 1) the sub-provinces dominated by plutonic rocks of tonalite-trondhjemite- more or less deformed granodiorite (TTG) type; 2) the sub-provinces composed of volcanic and sedimentary complexes metamorphosed to the facies of greenschists and amphibolites which form belts delimiting plutonic domains; 3) mainly the sub-provinces made up of high-grade metasedimentary rocks cut by granitic intrusions; and 4) the sub-provinces formed of orthogneiss and paragneiss presenting a metamorphism reaching the facies of granu-

lites. The boundaries between these subprovinces are generally defined by regional deformation zones which mark lithological, metamorphic, structural, metallogenic or geophysical contrasts. The targeted area lies at the border of two geologically contrasting areas of the Superior Province: the Nemiscau subprovince, south and west, and the Champion Lake Plutonic Terrain belonging to the La Grande subprovince, to the northwest. The Champion Lake Plutonic Terrain (Hocq, 1994) mainly consists of intrusive, felsic and intermediate rocks, variably distorted. This domain initially formed the southern portion of the La Grande subprovince (Card and Ciesielski, 1986) before Hocq (1994) does not link it to the Nemiscau subprovince. Hocq (1994) considered that the belts of green rocks of the Middle and Lower Eastmain formed the boundary between the Nemiscau and La Grande subprovinces. However, Champion Lake shows more lithological and geophysical affinities with the plutonic domains of the La Grande subprovince (D'Amours, 2011; Moukhsil, 2001). The latter has an old tonalitic base, the Langelier Complex, the age of installation is between 3390 and 2790 Ma (Goutier et al., 1999, Goutier et al., 2002; Davis et al., 2014) and on which rest the Mesoarchean and Neoarchean metavolcanic and metasedimentary units.



The Champion Lake Plutonic Terrain also separates the metasedimentary Nemiscau and Opatica subprovinces which are connected to each other by a narrow band of volcanic and sedimentary rocks, areas designated as the Lac des Montagnes Group (Valiquette, 1975). Here again, Hocq (1994) integrated the Lac des Montagnes Group into the plutonic Opatica subprovince located further south, despite significant differences in composition.

South and west of the prospected region, the Nemiscau subprovince mainly consists of varied migmatized metasedimentary rocks associated with lesser amounts of mafic metavolcanic rocks and intrusive rocks of granitic and granodioritic composition (Card and Ciesielski, 1986; Hocq, 1994, Ciesielski, 1998). A U-Pb age on zircons at  $2672 \pm 2$  Ma from a biotite granite cutting the metasedimentary rocks of the Nemiscau subprovince (Davis et al., 1995) represents the minimum age for the sedimentary sequence crosscutting event. Southwest of the mapped area, the contact zone between the Nemiscau and Opatica subprovinces is marked by the Columbus-Chaboulié Belt, a narrow band of volcanic and sedimentary rocks, oriented NE-SW in the west and E-W in the east (Bandyayera and Daoudene, 2017). This belt mainly includes volcanic rocks, intermediate materials injected by mafic and ultramafic intrusions and, to a lesser extent, felsic volcanic rocks, iron formations, wackes and conglomerates. Two ages U-Pb on zircons from felsic volcanic rocks indicate that this volcanic sequence took place at  $2756.8 \pm 4.4$  and  $2760.3 \pm 6.4$  Ma; one of the four volcanic cycles dated between 2752. and 2705 Ma (Moukhsil et al., 2003). To the east, the Nemiscau subprovince is connected to the Opatica by a narrow strip of volcanic and sedimentary rocks, the

Lac des Montagnes Group (Valiquette, 1975; Hocq, 1994). Little work has been done to date on the nature of the contact between the Nemiscau and La Grande subprovinces (Champion Lake Plutonic Terrain). This contact could however represent an important metallotect and the boundary between the Opinaca and La Grande subprovinces.

### **Known Mineralisation**

The mineralisation is relatively unknown in this area. The minerals found recently are: molybdenum (Mo); gold (Au); tungsten (W); silver (Ag); lithium (Li). James Bay in general, and the Nemaska region in particular, are also recognized for its significant potential for lithium mineralization in pegmatites. The volcano-sedimentary units of the Lac des Montagnes Group are indeed injected with pegmatitic granite intrusions, some of which contain lithium minerals such as spodumene or petalite (Laferrrière, 2009). The best example is undoubtedly the Whabouchi deposit owned by Nemaska Lithium located east of the mapped area, in NTS sheet 32O/12. A resources estimation established that the Whabouchi pegmatite, dated at  $2577. \pm 13$  Ma (Beland, 2011; Bynoe, 2014), contains resources of more than 12 Mt of ore grading 1.6%  $\text{Li}_2\text{O}$  (Païement et al., 2016). In places, beryl (Be) accompanies spodumene in the pegmatites, notably in Whabouchi (Laferrrière, 2009). Some ultramafic rocks show strong anomalies in chromium (Cr) and nickel (Ni). Some samples from a stratiform intrusion of peridotite containing a layer of pyroxenite gave grades of 0.43% and 0.2% Cr. They can contain up to 5% opaque minerals with 0.18% Cr. The ultramafic rocks also have anomalous Ni contents assaying between 652. and 1150 ppm. Some basalt close to the ultramafic rocks provided a grade 0.12% Cu and 137 ppb Au.

Two substances are associated with pegmatite dykes: lithium and molybdenum. Lithium mineralization (Li) is intimately associated with dykes of granitic pegmatite rich in spodumene and locally in lepidolite. Mineralization belongs to the class of rare elements, to the LCT family (Li-Cs-Ta) and to the albite-spodumene type according to the classification of Cern (1991a).

The most important mineralization corresponds to the Cyr-Lithium deposit, 381Km, with resources of 121,500 t at 1.7%  $\text{Li}_2\text{O}$  per vertical meter (Pelletier, 1975). Lithium usually found in spodumene crystals which are locally more than a meter long. These crystals are associated with pegmatitic dykes (quartz-albite-muscovite) and can reach 60 meters over a length of a few hundred meters. The eastern extension of this deposit [Cyr-2 (Km381)] also shows interesting potential with selected samples reaching 4.42% by weight  $\text{Li}_2\text{O}$  (Valiquette, 1974).

A second sector with potential for lithium is located in the southern part of NTS sheet 33C/01. This sector had previously been identified as harboring rare earth pegmatites (Carlson, 1962). Further work instead demonstrated potential for lithium with the identification two new showings. The Rose showing and the Green showing show a very similar background to that of the Cyr-Lithium deposit. Values in lithium reaching 2.5%  $\text{Li}_2\text{O}$  have been obtained. However, the values for the other rare metals are rather low (Rb <1300 ppm; Be <129 ppm; Nb <69 ppm; Ta <50 ppm), which is typical of albite-spodumene type pegmatites (CERN+, 1991a). This type of pegmatite is also associated with the Preissac-Lacorne batholith in the Abitibi subprovince where they were mined by Quebec Lithium (Boily, 1995; Mulja et al., 1995a and 1995b; Ste-Croix and Doucet, 2001).

Molybdenum (Mo) mineralization is found especially along the Matagami-Radisson road between km 406 and 415. Molybdenite is found in quartz veinlets cutting pegmatites or disseminated in thin pegmatitic dykes. Anomalous bismuth values (up to 0.18% Bi over 30 cm; Labelle, 1980) are also associated with these showings. The pegmatites usually contain muscovite and garnet. The presence of molybdenum (Mo) in association with pegmatites is poorly documented in the literature and the most popular examples known are the molybdenum deposits associated with Preissac and Moly Hill plutons of the Preissac-Lacorne batholith (Boily, 1995; Mulja et al., 1995a and 1995b; Taner et al., 1998).

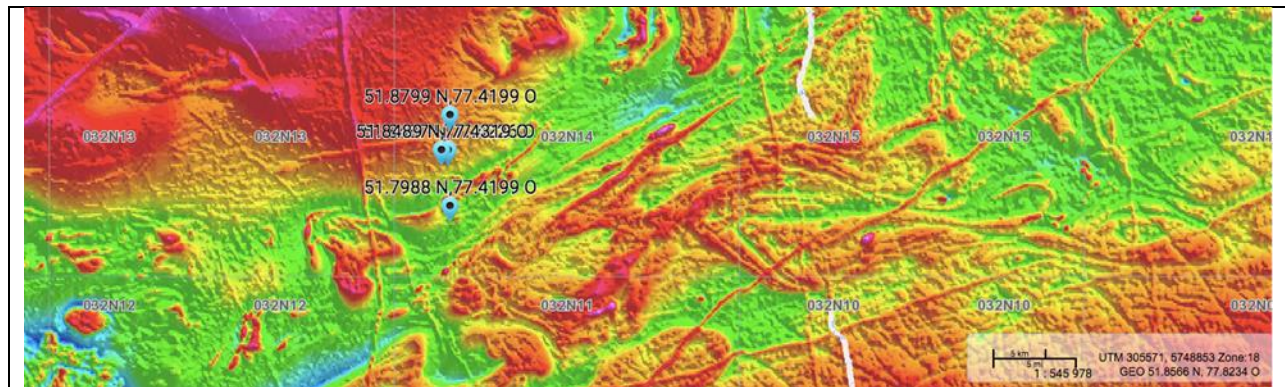
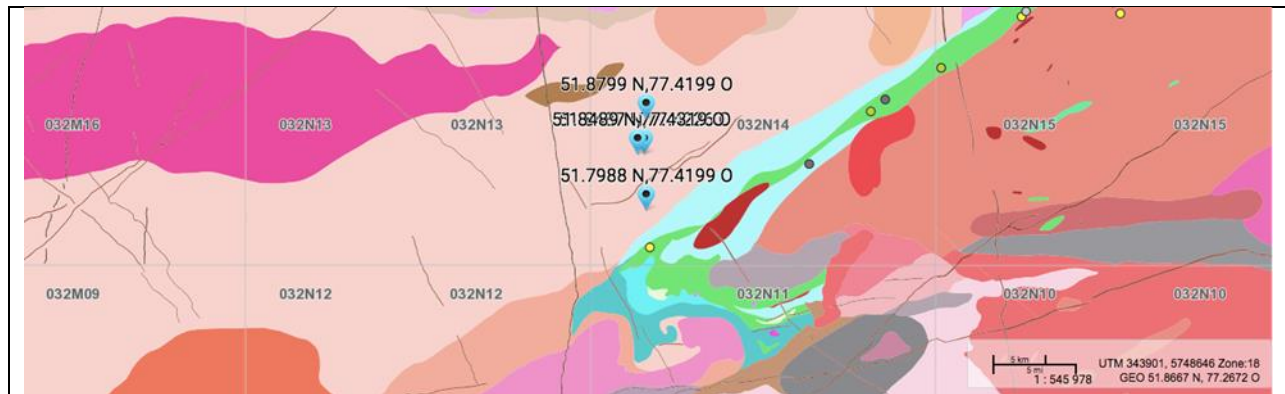
### **Local Geology**

Here are the lithologies that we find in the field all over the prospected area:

Metatexite, paragneiss protolith

Biotite  $\pm$  hornblende  $\pm$  garnet  $\pm$  andalusite  $\pm$  sillimanite  $\pm$  cordierite paragneiss

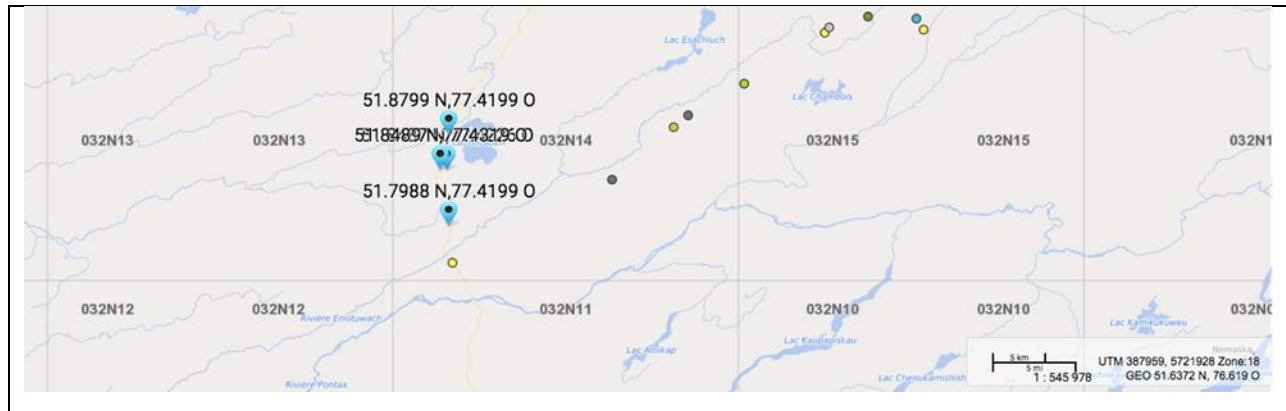
Leucogranite  
 Siltstone, mudstone and locally conglomerates  
 Diorite  
 Amphibolized basalt and amphibolite  
 Wacke; with conglomerate layers  
 Gabbro to gabbro-norite  
 Tonalite, granodiorite and paragneiss enclaves  
 Amphibolite basalt protolith; layers of intermediate to felsic tuff and BIF



Locally, we can observe two important geological entities. In the north, we can observe an east-west corridor of volcanic rocks and mafic plutonic rocks. Technically these rocks contain gold and basic metals. In the south we find felsic plutonic rocks, mainly tonalite, granodiorite and remnants of paragneiss. Many pegmatites and leucogranites are also known to appear as stylolites or batholiths. This latter lithology is targeted for REE and rare metals such as lithium, beryllium, and molybdenum.

### Local Mineralisation

Locally, many targets have been discovered through prospecting, exploration and mapping projects in the area.



The geology of the prospected area is favourable for poly-metallic and basic metals, some rare metals and rare earth elements. Those targets are defined as: gold (Au), lithium (Li), tantalite (Ta), molybdenum (Mo), silver (Ag), chromite (Cr) and copper (Cu) targets.

### Work Done

R = Rock, T = Beep Mat Target

- PTT-1 7742258, 51848694, H-2000, M-1946, R - PTT-2 5184864, 77432716, H-3600, M3495, R
- PTT-3 51848489, 7743179, H1257, M1207, R - PTT-4 51849045, 77432633, H4130, M3988, R
- PTT-6 51848967, 77431888, H-672, M-629, R- PTT-5 51848921, 77431884, H-5622, M-5389, T
- PTT-7 51849177, 77431619, H-4900, M-4772, R - PTT-8 51848716, 77432242, H-492, M-478, T
- PTT-9 51848188, 77432568, H-2333, M-2449, R - PTT-10 51848532, 77432679, H-3933, M3802, R
- PTT-11 51848492, 77432761, H-513, M-506, T- PTT-12 51848407, 77432745, H-2120, M-2035, R
- PTT-13 5184868, 77432883, H-1823, M1755, R- PTT-14 51849238, 7743194, H-504, M494, R
- PTT-15 51848997, 77431935, H-573, M-415, T- PTT-16 5184892, 77431599, H-725, M674, T
- PTT-17 51849187, 77430622, H-937, M961, R- PTT-18 5184976, 77430745, H-604, M573, R
- PTT-19 51840138, 77430797, H865, 845, R- PTT-20 51840945, 77429626, H-1035, M984, R
- PTT-21 51840805, 77429831, H-687, M-650, R- PTT-22 51840712, 77428802, H616, M577, T
- PTT23 51840741, 7742881, H-719, M-668, R - PTT-24 51798797, 77419917, H-680, M658, R
- PTT-25 51798789, 77419699, H-968, M-928, R - PTT-26 51798743, 77419017, H-996, M-943, R
- PTT-27 51798781, 77419853, H-1091, M-1030, R-PTT-29 51798961, 77419909, H-3864, M3703, R
- PTT-28 51799038, 77419977, H-879, M-827, R - PTT-30 51798749, 77419804, H-1105, M-1058, R
- PTT-31 51798797, 77419561, H-514, M-485, T- PTT-32 51798733, 77419596, H-552, M-525, R
- PTT-33 51798715, 77419758, H-2899, M-2685, T- PTT-35 51798692, 7741936, H-760, M-738, R
- PTT-36 51798606, 7741965, H-620, M-594, R- PTT-37 51798466, 77419699, H-582, M-559, T

PTT-38 51798478, 77419712, H-1504, M-1448, R- PTT-39 51798455, 77419747, H-4830, M-4637, R  
PTT-40 5179852, 7741822, H-1343, M-1289, T-PTT-41 51798306, 77419662, H-2080, M-2013, R  
PTT-42 51798312, 77418938, H-859, M-860, R- PTT-43 51798321, 77418951, H-578, M555 T  
PTT-44 51798392, 77418863, h-1962, M-1868, T- PTT-45 5179382, 77418806, H-1710, M1629, R  
PTT-46 51798391, 77414765, H-2211, M-2138, R- PTT-47 51798335, 7741832, H-1746, M-1695, R  
PTT-48 51798111, 77419237, H-2225, M-2135, R- PTT-49 51798299, 77419489, H-586, M-556, R  
PTT-50 51798274, 77419441, H-969, M-912, T-PTT-51 5179855, 77419838, H-777, M738, R  
PTT-52 51798451, 77418000, H-836, M-789, R-PTT-53 51798971, 77414181, H664, M-626, R  
PTT-54 51798853, 77419842, H-6385, M-6122, R- PTT-55 51799276, 77419492, H-2473, M-2350, R  
PTT-56 51799375, 77417245, H-1764, M-1661, R- PTT 57 51799278, 77419275, H-530, M-488, T  
PTT-58 51799359, 77419109, H-1800, M-1730, R- PTT 59 51799363, 77419197, H-703, M-680, T  
PTT-60 51799352, 77419163, H-885, M-835, R- PTT-61 51799476, 77419207, H-844, M-789, R  
PTT-62 51799325, 77419438, H-1240, M-1165, T- PTT-63 5179885, 77419902, H-2544, M-2236 T

### **Results and Discussion**

More than sixty samples have been collected in this project and 48 samples were sent to the laboratory. The data shows some anomalous, significant and traces of gold (Au), rare metals (Li) and copper (Cu). The assays show many other significant values of rare metals (Samples PTT-9, PTT-20, PTT-25). Those values add to the lithological knowledge of the area which consists essentially of leucogranites. The area seems to have potential in terms of basic metals revealed in some good values in Cu (PTT-2, PTT-12 and PTT-64). Some samples contain traces of gold (Au) (PTT-47), some values in Zn (PTT-25) and finally interesting values of phosphorus (PTT-1, PTT-38).

PROJECT 2023-01-K306 Au-AA23/ME-ICP41														
	Au	Co	Cr	Cu	Fe	La	Li	Mn	Ni	P	Ti	V	Zn	
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	
PTT-1			4	21	4	1,74		30	159	9	1880	0,12	26	47
PTT-2			16	14	126	3,53			291	35	310	0,18	176	24
PTT-3			21	35	61	3,91		30	353	54	290	0,21	130	62
PTT-4			4	7	2	5,58	30		117	5	110	0,04	49	37
PTT-6			3	6	1	1,79	40		334	3	240	0,1	13	39
PTT-7			7	271	2	2,28			87	85	120	0,04	42	6
PTT-9			9	4	6	4,34		120	678	2	880	0,28	33	75
PTT-10			15	22	20	5,53			400	14	550	0,14	135	33
PTT-12			15	13	113	3,53			283	28	340	0,19	161	35
PTT-13			30	9	57	5,16		30	398	46	720	0,24	186	97
PTT-14			5	9	6	1,58			226	6	490	0,14	26	48
PTT-17			22	2	29	4,84			280	10	400	0,32	191	45
PTT-18			1	8	1	1,17			65	1	190	0,04	9	20
PTT-19			22	6	72	4,34			352	17	470	0,27	170	53
PTT-20			5	19		3,04		40	282	7	700	0,17	28	87
PTT-21			7	14	17	2,46	30		165	11	140	0,12	18	23
PTT-23			4	15	11	1,64			149	10	390	0,06	30	13
PTT-24			6	11		2,04	20		222	10	210	0,13	23	23
PTT-25			21	165	25	3,66	30	40	399	53	950	0,21	93	142
PTT-26			5	5	3	2,53			234	1	220	0,13	4	36
PTT-27			9	4	16	3,61			306	3	720	0,18	42	64
PTT-28			3	5	1	1,74			264	3	190	0,11	14	27
PTT-29			31	15	56	5,4			295	49	790	0,21	192	71
PTT-30			3	6		1,62	20		175	3	170	0,08	13	18
PTT-32			5	13		1,95			86	12	410	0,04	57	9
PTT-35			6	3	3	2,19		30	224	2	520	0,19	23	49
PTT-36			6	7	5	2,49	30		301	8	340	0,16	31	42
PTT-38			1	3		0,57			61	2	2590		3	3
PTT-39			30	15	54	5,81			361	58	530	0,32	126	58
PTT-41			3	7	10	1,51	30	30	161	3	270	0,09	18	40
PTT-42			3	4	7	0,94			112	2	60	0,05	10	16
PTT-43			8	17		1,77			253	12	570	0,16	34	36
PTT-45			6	4	6	2,54	20		384	3	420	0,17	24	45
PTT-46			16	45	12	3,68			217	46	720	0,13	69	43
PTT-47	0,012		28	68	77	4,66			345	63	390	0,33	113	35
PTT-48			38	19	79	6,1			317	59	620	0,33	107	59
PTT-49			9	22	9	2,31			186	24	510	0,1	45	36
PTT-51			1	4		0,93	20		97	1	40	0,02	6	7
PTT-52			25	58	76	4,81			597	51	460	0,15	149	44
PTT-53			6	24		1,5	20		226	12	560	0,14	28	37
PTT-54			33	18	128	6,42			409	60	580	0,35	142	54
PTT-55			13	9	97	3,09			217	21	290	0,18	153	36
PTT-56			14	19	109	2,87			225	40	240	0,14	117	27
PTT-58			12	16	5	3,37	40		415	19	780	0,24	55	60
PTT-60			3	7	8	1,62			202	2	240	0,09	15	33
PTT-61			6	11	2	1,81	20		248	7	480	0,15	27	53

## Conclusion and Recommendation

There are great lithologies for basic metals and gold but the project area is globally dominated by leucogranitic, pegmatitic, and some crustal geological environments where usually the exploration is concentrated on basic metals and rare metals. The prospecting work should focus on those granitoids and the spodumene-bearing pegmatites. The area is explored for lithium by a lot of companies.

The prospector works close to his community, and has undertaken many projects in this area. He reveals several good prospects, especially in lithium concentration.

Based on the assays data and the rock samples, we believe that this project has an interesting potential for improvement. We believe it is worthwhile to do more work and studies in this area. A deposit has to be discovered before the companies stake all the land.

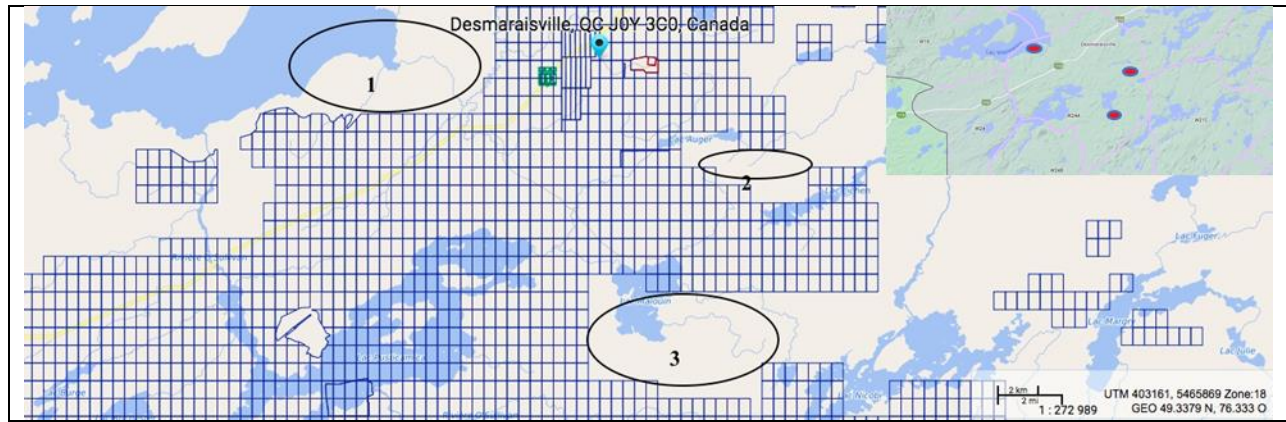
We recommend to the prospector to continue better defining this area and the mineral potential in it with a focus on lithium. We need to see more grass root data which means more samples and mores assays. We also recommend to encourage Mr. Blackned and his prospector partners not to give up. I personally believe that he is on the right track.





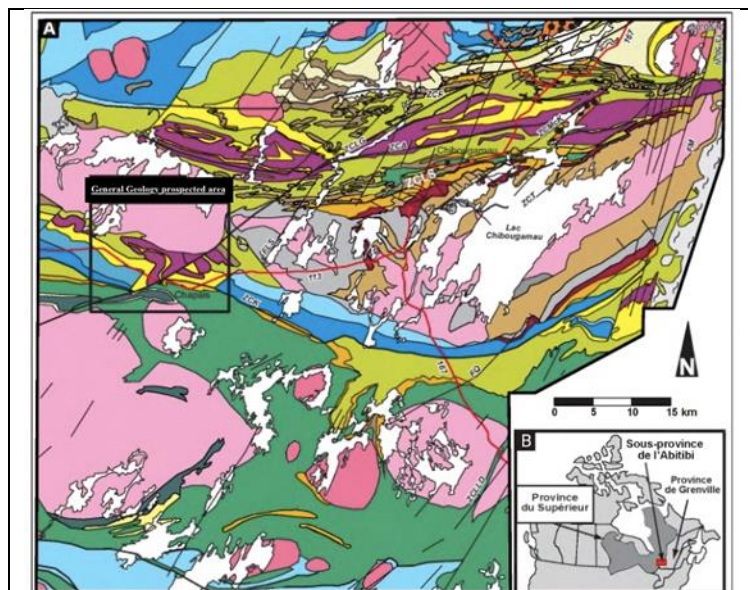
**JOSHUA BLACKSMITH, W24A EXPLORATION PROJECT, AGR. 2022-15**  
**Project Location & Access**

The project field is represented by three areas scattered in different places between 20 kms and 30 kms from the Cree nation of Waswanipi. All three areas are accessible by car and by ATV. There are a lot of forestry roads in the areas.



### General Geology

The Superior Province has been tectonically stable since ca. 2.6 Ga (Percival, 2007) and forms the basement of the northeast part of the North American continent. This Archean craton is composed of a large number of tectono-stratigraphic units, traditionally subdivided into 4 types of sub-provinces (Card and Ciesielski, 1986; Card et al., 1990). These sub-provinces and the units that compose them would have successively amalgamated from north to south during the Kenoran orogeny, between 2.72 and 2.68 Ga (Percival et al., 2006; Percival, 2007). The southeast area of the Superior Province includes the Opatoca, Abitibi and Pontiac subprovinces. In the north, the Opatoca Subprovince, consists mainly of a complex mixture of intrusive TTG-type rocks (Benn et al., 1992; Sawyer & Benn, 1993; Sawyer, 1998).



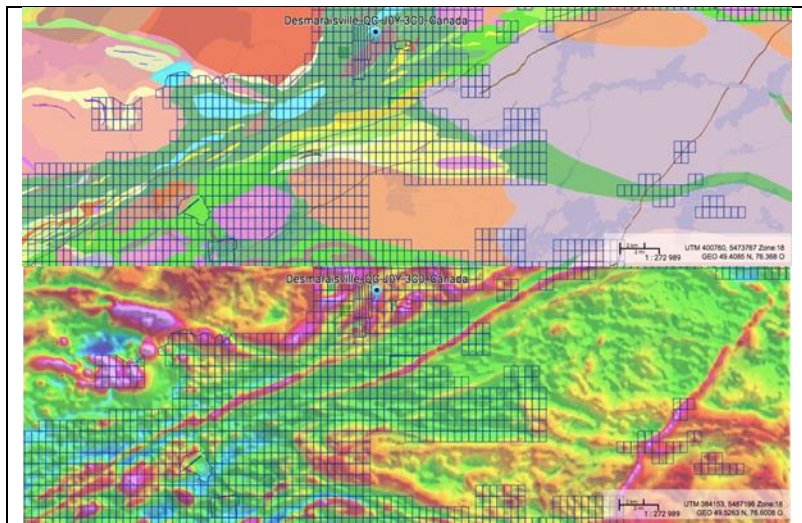
The geological setting north of Matagami is typical of Archean VMS terrains. It is characterized by volcanic sequences that filled a large, regional synvolcanic basin within which second and third order sub-basins were developed and controlled by synvolcanic faulting that also strongly influenced the distribution of sulphide deposits and the trends associated with mineralization. Stratigraphy is layer-cake with a marked change from lowermost rhyolite/dacite volcanism (Watson Lake Formation) to mafic ande-

site/basalt volcanism (Wabasse Group). The sequence was concomitantly intruded by the giant Bell River Complex which was the likely heat source for the wide-spread hydrothermal activity that occurred throughout the Matagami Camp.

Studies suggest that significant amounts of hydrothermally generated sulphides remain to be discovered in the Matagami Camp. Massive sulphide mineralization is best developed along the Key Tuffite stratigraphic marker horizon that is consistently developed throughout the Matagami Camp near the change from felsic to mafic volcanism at the top of the Watson Lake Formation. Recent discoveries at Bracemac and McLeod demonstrate massive sulphide development at other tuffite units higher in the sequence within the Wabasse Group. Sulphide mineralization at all stratigraphic levels is typically underlain by strong, hydrothermal plumbing systems developed within footwall rocks as mineralized fluids passed through the rock along synvolcanic fault structures. These alteration zones are comprised primarily of intense chlorite/talc alteration (termed “Pipe” alteration) and are indicative of potential for sulphide development.

### Local Geology

The prospected area geology is well known for its Archaean volcanic rocks of the Obatogamau Formation which is the primary lithology of this sector and this segment of the greenstone belt is oriented along a NE-SW axis.



Since the number of outcrops is reduced, there is a slight difficulty in defining the contacts. The lithology observed consists of lavas and tuffs of intermediate to felsic composition. All the lithologies are cut by very long Proterozoic diabase dykes.

### Work Done

**Day 1:** Travelling to set up campsite and waiting for Norman Grant to arrive.

**Day 2:** Plan the area for prospecting, detailed information on location, discussion on where to begin the work, etc.

**Day 3:** Rain delay- stayed at camp.

**Day 4:** Prospecting begins in Zone 3, travel to location and view the terrain and try to find areas to prospect.

*JN001: description- high granite mixture with quartz. Location: N 49°20.990' W 076°05.484'*

*JN002: description- light rock. Location: N49°20.987' W076°05.549'*

*JN003: description- granite quartz and biotite. Location: N49°21.001' W076°05.539'*

**Day 5:** Prospecting in Zone 3 continues, walking in rough terrain to locate areas for prospecting.

*JN004: description- granite. Location: N 49°21.014' W 076°05.844'*

JN005: description- quartz vein. Location: N49°20.686' W 076°06.020'

**Day 6:** Prospecting on Zone 1, near Waswanipi Lake. This area is a swamp.

**Day 7:** Stayed at camp, rain delay. Recap of previous days prospecting work.

**Day 8:** Prospecting on Zone 2, walking to get to location of prospecting.

JN006: description- granite mix with pink quartz and biotite.

JN007: description- Location: swamp area.

JN008: description- purple quartz. Florentine. Location: N 49°27.274' W076° 06.399'

**Day 9:**

JN009: description- gabbro vein quartz and hematite. Location: N 49° 27.054' W 076° 04.816'

JN010: description- granite quartz and biotite. Location: N 49°27.216' W076° 04.454'

JN011: description- pink quartz. White quartz. Location: N 49°24.757' W076° 10.712'

JN012: description- copper. Location: Outside of CMEB's zones but still on trapline W24A

JN013: description- gabbro. Location: N 49° 26.032 W 076° 12.600'

**Day 10:** Travel day home from campsite.

### Prospector impressions

It was a great opportunity to be able to work in the land of W24A. This is where I hunt, fish and trap and I was happy to be able to prospect in this area. As you know, this was my first time as a prospector and with the guidance of Norman Grant, he really helped with establishing certain rocks on the trapline. Norman would point out the type of rock we would need to find and this is how I would understand how the prospector works in the field.

### **Known Mineralisation**

A lot of prospecting has been carried out in the map-area with some geophysical work and even a considerable amount of drilling in the area. We observe pyrite-bearing gneisses in the western part. Bodies of granitic rock containing disseminated chalcopyrite appear to be the most favorable hosts for sulphide ore deposits within area.

The geologists observed mainly sphalerite and pyrite, and, in minor quantities, pyrrhotite and chalcopyrite in samples from the prospected area. In microscopy, we also observe, in small quantities, galena on the surface and in drill holes and accessory magnetite in some veins at depth. The concentrations, textures and associations of these metallic phases as well as the relationships they have with the gangue are the subject of this section.



A few cubes of galena and up to 5% pyrite were noted along fractures in an outcrop of metasedimentary rock in the Frotet- Evans volcanic zone about 0.6 miles west of mile 101.7 on the Matagami L.G. 2 road. A grab sample assayed 0.01% Cu, 0.02% Zn, 0.02% Pb, 0.001 oz/ton Au and 0.017 oz/ton Ag.

Amphibolites, paragneisses and iron formations of the Rocher Complex represent prospective zones for exploration for stratiform mineralization of exhalative origin composed of pyrrhotite and pyrite accompanied by traces of chalcopyrite and sphalerite. The disseminated or semi-massive to massive lenses miner-

alization is transposed into the S1 foliation, and remobilized into close to tight P2 fold hinges. During mapping of Rocher Lake, Franconi (1974) noted that this mineralization was localized preferentially at the contact between amphibolitized basalts and mafic to intermediate volcanoclastic rocks or paragneisses. The rheological contrast between xenoliths composed of amphibolites and paragneisses and enclosing rocks composed of foliated to gneissic intrusive rocks or massive intrusive rocks favored the development of a network of fractures and faults. These structures, commonly injected with syn-kynematic felsic intrusions, allowed remobilization of the disseminated stratiform mineralization.

### Project Mineralisation and Assay

The area is known for its great potential for mineralisation. The Lac Pusticamica area is known for gold and silver, Zone S.O. for copper, Zone D for zinc and Le Tac for diamonds.

A total of 13 samples were collected and sent to the laboratory for assays. The results are very modest and do not show the real potential of the prospected area. The values are very weak as was always expected during the first grass roots work.

We had no anomalies but some interesting values in manganese (Mn = 1020) and others as a trace of gold (Au) JN002 and silver (Ag) JN001, and titanium (Ti) JN001-JN003-JN004. Added to those elements, there are some REE and rare metals such as lanthanum (La) and lithium (Li).

PROJECT : M-26 Au-AA23 / ME-ICP41													
Agr. 2022-15													
	Au	Ag	Co	Cr	Cu	Fe	La	Li	Mn	Ni	P	Ti	V
	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
JN001		0,3	7	39	23	1,64	30		254	15	1180	0,2	
JN002	0,008		8	68	9	0,75			111	18	40	0,02	
JN003			6	63	24	1,4			192	18	730	0,17	
JN004			8	36	15	1,64		30	248	16	1010	0,21	
JN005				28	2	0,25			24	2			
JN006			6	27	14	1,13			179	11	650	0,15	
NJ007													
NJ008			6	34	4	0,97			107	30	340	0,16	
NJ009			10	25	3	2,64		30	366	21	370	0,01	
NJ010			4	16	3	1,18			200	6	180	0,08	
NJ011			9	39	26	1,91			365	27	380		
NJ012			36	156	33	9,37			1020	123	310	0,08	
NJ013			12	48	20	2,18			232	49	340	0,13	

### Recommendations

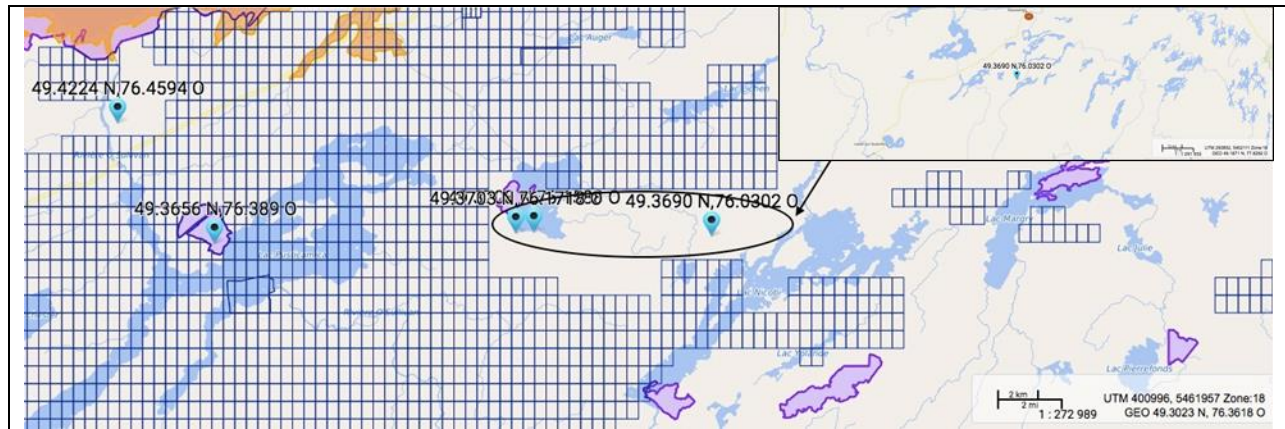
This project was not successful; first reason is the fact that the project targeted only gold to define the nature of the possible targets. The region is very well studied and there is more to discover, we need to see more sampling from this area. The area is known for its great potential. We recommend that the prospector do more bibliographic research concerning any geological or exploration data that can give him more information to choose the best area for prospecting. We also recommend that the prospector should cover all REE, rare metals and basic and precious metals.



**JOSHUA BLACKSMITH, W24A PHASE 2 EXPLORATION PROJECT, AGR 2022-17**

**Project Location**

The project is located about 30 km south of the Cree Nation of Waswanipi. It is accessible by Highway 113 and gravel forestry roads. The prospector and his helper, traveled very day from Waswanipi to the prospected area.

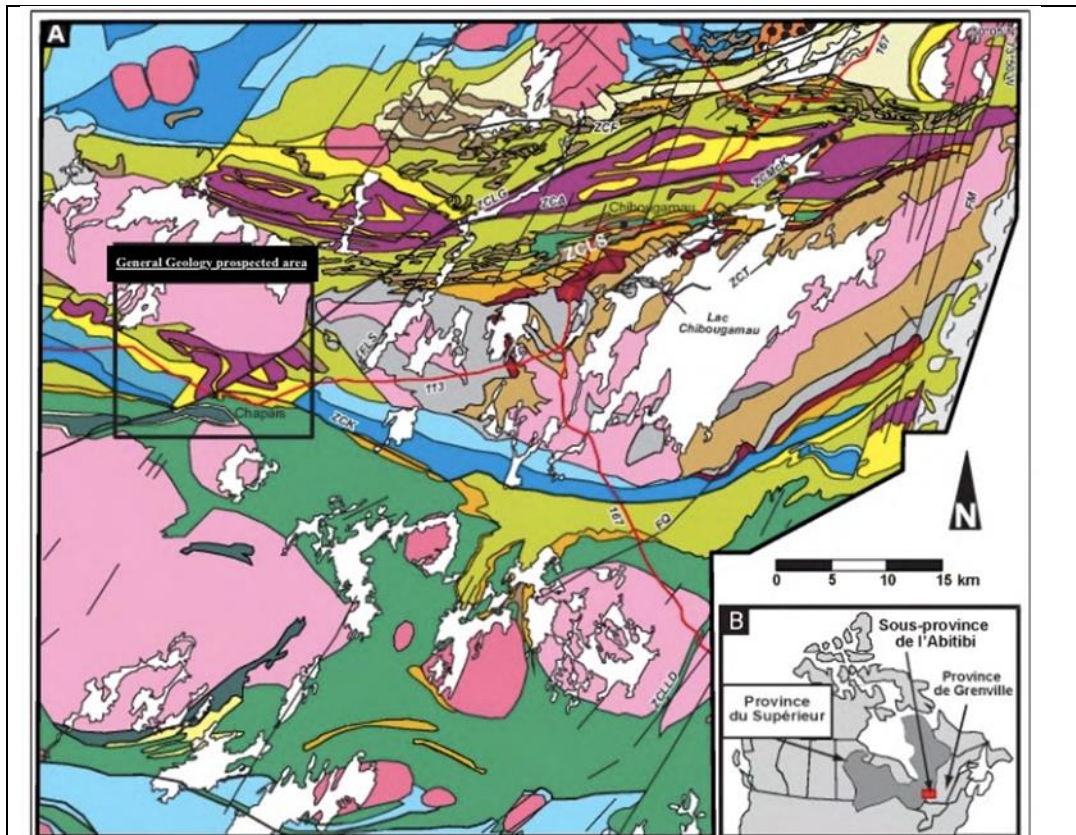


### General Geology

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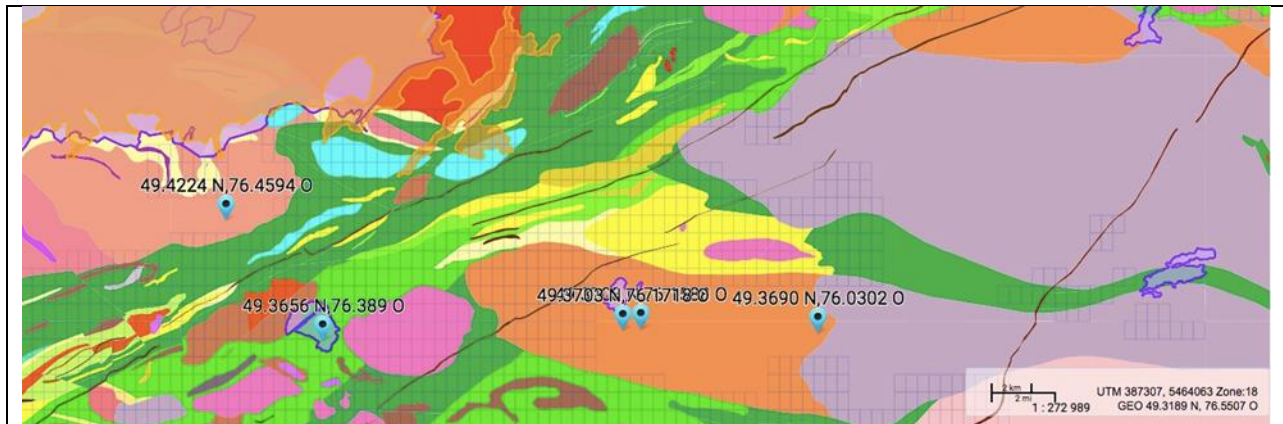
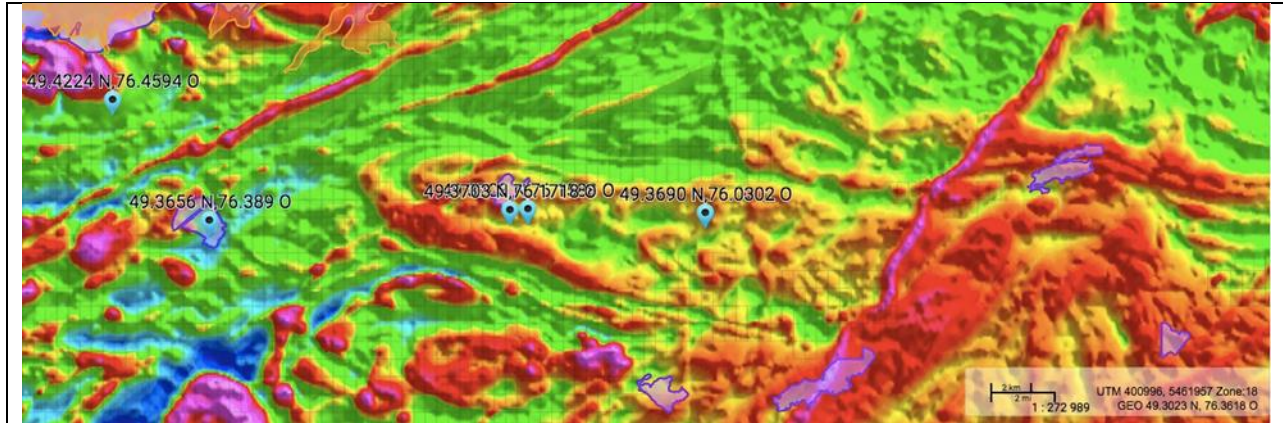
### Local Geology

Below is the observed lithology:

- \*Tonalite of the Lichen Pluton
- \*Quartzic diorite, syenite, quartzic syenite of the Lichen Pluton
- \*Granodiorite of the Obatogamau Formation
- \*Lapilli and/or block felsic pyroclasts of the Obatogamau Formation
- \*Basalt schist, protolith and gabbro
- \*Wacke
- \*Pillow basalt of Obatogamau Formation

The prospected area geology is well known for its Archaean volcanic rocks of the Obatogamau Formation which is the primary lithology of this sector and this segment of the greenstone belt oriented along a NE-SW axis. Since the number of outcrops is reduced, there is a slight difficulty in defining contacts. The observed lithology consists of lavas and tuffs of intermediate to felsic composition. All the lithologies are cut by very long Proterozoic diabase dykes.

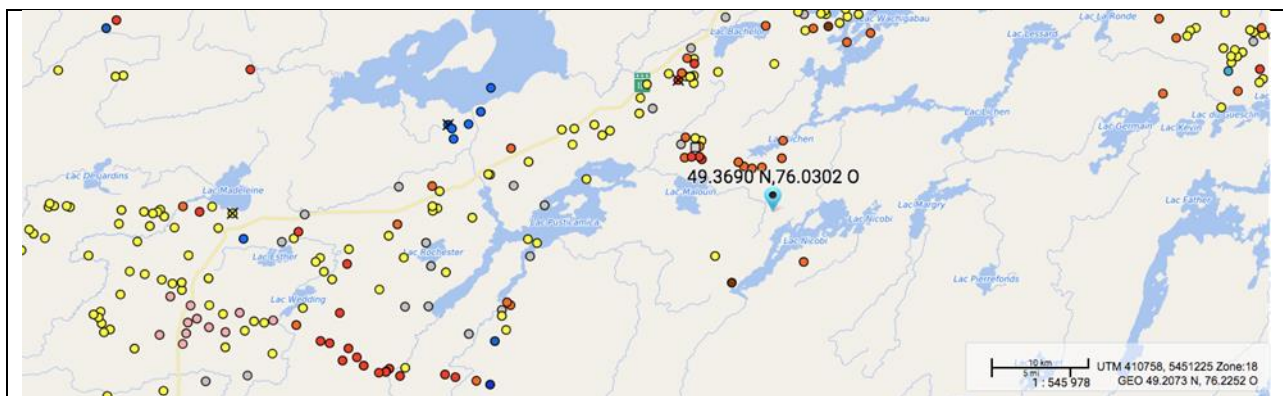




**Known Mineralisation**

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### **Work Done**

**Day 1:** Travelling to set up the campsite and prepare for what we need during our time at camp. Establish how to proceed with prospecting work.

**Day 2:** Drive and check out certain areas on the trapline. Brainstorming on this work and which area to begin prospecting. Study the map with the team, Norman Grant and helper Ian Saganash. Prepare and help Ian understand the upcoming prospecting work.

**Day 3:** Travel day to Val-D'Or to purchase equipment for the upcoming project, prospecting hammer, sample bags, and gloves.

**Day 4:** Drive to other locations on the map to view the specific areas for prospecting. An ATV was used during this trip. First day of sampling begins with Ian and Norman.

*JNI014: rock sample description- heavy, dark blue colour on this rock with some yellow, bronze and white shiny objects on the rock. Location: N 49°23.689' /W 076°00.630'*

*JNI015: rock sample description- heavy rock, dark blue colour with some brown shading on the sample, a few white veins on this sample. Location: N 49°23.970' /W 076°00.411'*

*JNI016: description- heavy rock with dark blue colour and white veins in a few places on this rock. A few bronze and yellow spots around the rock. Location: N 49°23.995' /W 076°00.397'*

**Day 5:** Rain delay, we stayed at campsite until the heavy rain stopped and discussed the potential locations of bedrock. Prospecting begins on Zone 3, travel to location and view the terrain and try to find areas to prospect.

**Day 6:** Rain delay

*JNI017: rock sample description- very dark rock, the whole rock is similar to black shading with a few white veins or quartz on the sample. Location: N 49°23.400' /W 075°59.342'*

*JNI018: rock sample description- heavy rock and many areas have a mixture of white and black dotted areas on this sample. Location: N 49°23.226' /W 075°59.085'*

*JNI019: description- light rock with pink or red colour along with black dots, white dots, and shiny white dots around the sample. Location: N 49°23.485' /W 075°59.392'*

**Day 7:**

*JNI020: rock sample description- light rock with a big amount of white shiny objects along with bronze and yellow colour around the sample. Location: N 49°24.120' /W 076°00.245'*

*JNI021: rock sample description- light rock with a green and blue colour around the rock and a few white shiny objects. Location: N 49°24.120' /W 076°00.252'*

*JNI022: description- very heavy rock with black, white and pink dotted line. Also, white shiny objects on this rock, Location: N 49°22.267' /W 076°09.849'*

**Day 8:**

*JNI023: rock sample description- light rock with white and pink colouring all around the rock. Also, black dots inside the rock. Location: N49°25.790' /W076°27.257'*

JNI024: rock sample description- pink rock with some white shading around the sample. With some blue and black dots. Location: N49°25.780/W076°27.289

JNI025: description- pink and white rock all around, heavy rock. Along with some green colours in the rock sample and white shiny objects. Location: N 49°25.781'/W 076°27.268'

JNI026: description- pink rock with some blue shiny dotted locations on this sample. Also, green and white shiny objects. Location: N49°25.774'/W 076°27.275'

**Day 9:**

JNI027: rock sample description- the rock is light and not heavy. Dark blue colour with bronze and orange colouring along with white shiny objects. Location: N49°21.596'/W076°22.899'

JNI028: rock sample description- quartz, a big vein of white shiny object was extracted from this location, dark blue and black colour on this rock. Location: N49°21.601'/W076°22.902'

JNI029: description- heavy rock with bronze, yellow areas on the rock. Along with some white shiny objects. Location: N49°21.600'/W076°22.902'

JNI030: description- red and pink rock, very light and has some bronze areas and black, white dotted areas around the rock. Location: N49°21.600'/W076°22.901'

JNI031: description- heavy, black and rock with shiny red object and shiny white objects as well. Location: N49°21.601/W076°22.901

**Day 10:** Clean the camp, pack up the vehicle, ATV and boat. Travel day home from campsite.

**Prospector Impressions:**

Once again, we've successfully completed another prospecting project on our family trapline W24A. I was happy to continue another project in collaboration with the Cree Mineral Exploration Board and I would like to thank you for this opportunity. This was my second project on our trapline and I was able to invite my family member to help with this project, he has worked in the prospecting field before here in the community of Waswanipi.

This project was like the first project completed by me and with the assistance of Norman Grant. Every day, I was able to understand and locate specific rocks and this was key information that I will use every day while prospecting. Prospecting is something I will always enjoy, the physical work, the identification of rock is very interesting.

**Assays and Mineralisation**

The area is known for a great potential for mineralisation

Lac Pusticamica: gold and silver

Zone SO: copper

Zone D: zinc

Le Tac: diamonds

A total of 18 samples were collected and sent to the laboratory for assays. The results are very modest but show some interesting values. This reflects the potential of the area which is geologically located in the Abitibi Greenstone Belt.

We had no anomalies but some interesting values in gold (Au) 0.012 JNI 028&030, manganese anomaly (Mn = 776), JNI017, silver (Ag = 2.3 ppm) JNI015, and titanium (Ti = 0,34%) JNI017&18 and finally some chromite (Cr = 386ppm) JNI020&17&18. We also observed very promising values of REE and rare metals such as Lanthanum JNI017 (La=210 ppm).

Data: ME- ICP41/Au- AA23														
	Ag	Co	Cr	Cu	Fe	La	Mn	Ni	P	Ti	V	Zn	Au	

	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
JNI014			9		0.81	10	80			0.01	4	8	
JNI015	2.8	12	31	74	2.63	40	357	22	900	0.2	41	52	
JNI016			9		0.86	20	77			0.02	6	10	0.009
JNI017	0.3	20	253	21	6.29	210	776	70	1100	0.34	90	151	
JNI018		18	272	18	5.01	130	764	73	1400	0.28	71	141	
JNI019			11		0.53		53						0.007
JNI020	0.3	25	386	88	4.35	40	584	125	1020	0.24	72	108	
JNI021		3	14		1.47	10	173		250	0.08	14	30	
JNI022		2	13		1.13		123		150	0.06	12	19	
JNI023		8	105		1.74	20	351	57	510	0.13	25	56	
JNI024		5	17		1.66	10	211		320	0.1	15	42	0.009
JNI025	0.3	15	42	191	2.72	20	345	67	900	0.2	28	53	
JNI026		6	19		2.19	70	326	12	590	0.22	30	60	0.006
JNI027			10	6	0.8		93				2	5	
JNI028			12		0.63		103				3	7	0.01
JNI029			10		0.72		72		30		4	11	0.009
JNI030			13		0.59		63						0.012
JNI031		11	25	17	4.99		110	72	460	0.58	48	12	

### Conclusion and Recommendation

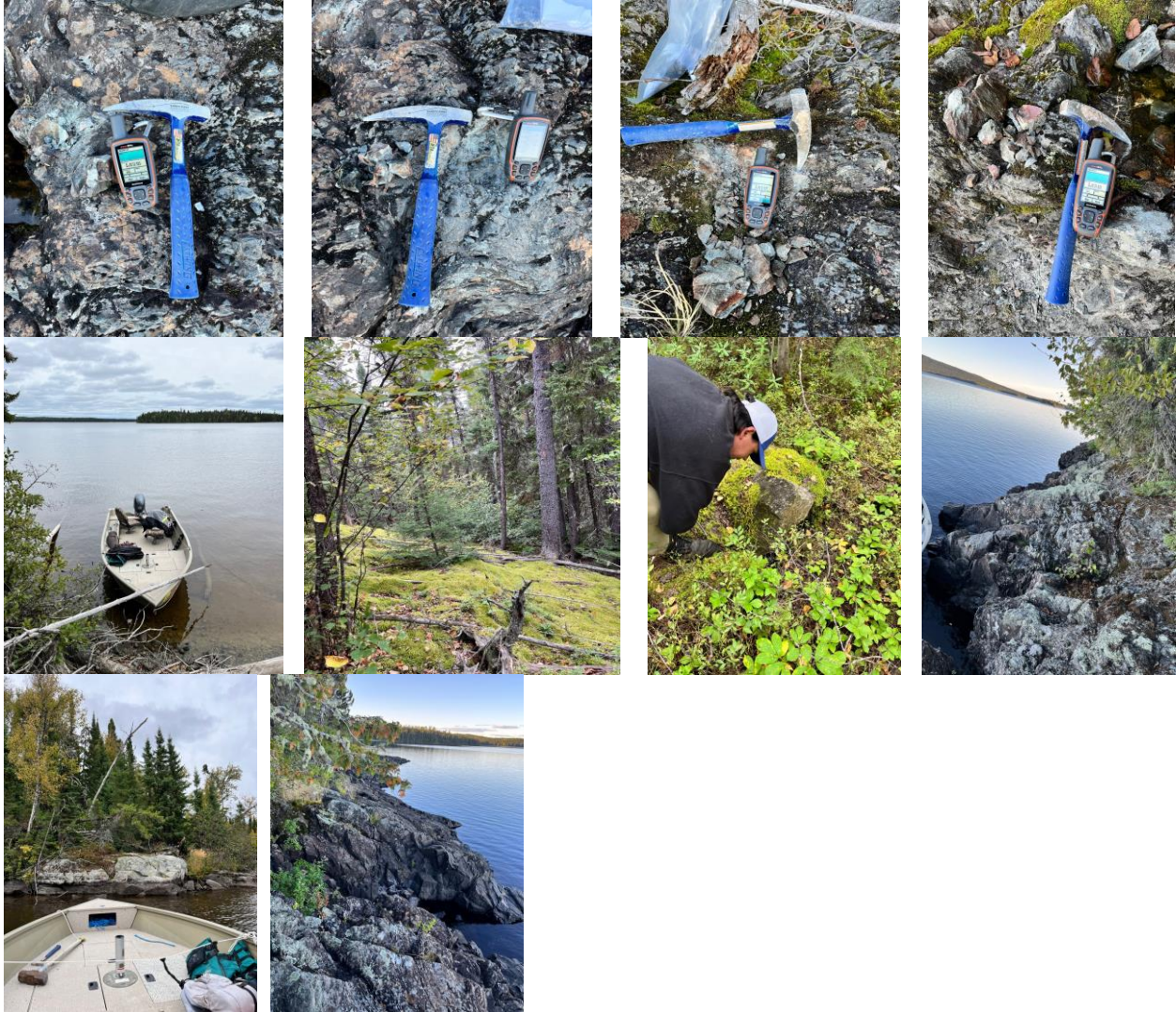
Regarding the great geology (greenstone belt) and the high potential of the prospected area, we believe that this area is a good prospect and needs to be investigated further with more sampling and assays.

Geologically, the area seems to showing some interesting aspects for possible mineralisation. We are in the Abitibi Belt which is very well known in terms of mineralisation models. It is possible to better characterize the prospected area and define targets and conductors.

We recommend to the Board to encourage the prospector; he has a great exploration project with a great economic potential.

We also recommend to continue a grassroot sampling project. We need to see more targets.

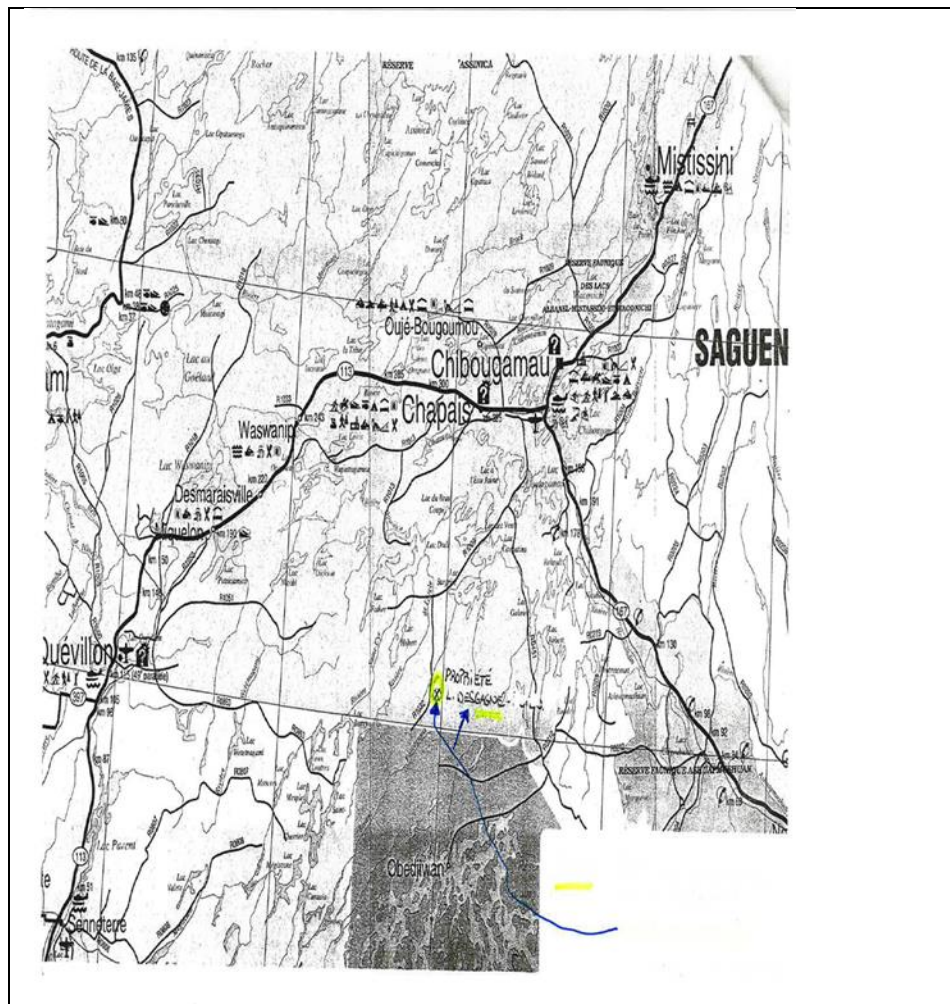




## **LARRY DESGAGNÉ, GOLD MOUNTAIN PROJECT, AGR 2022-08**

### **Location**

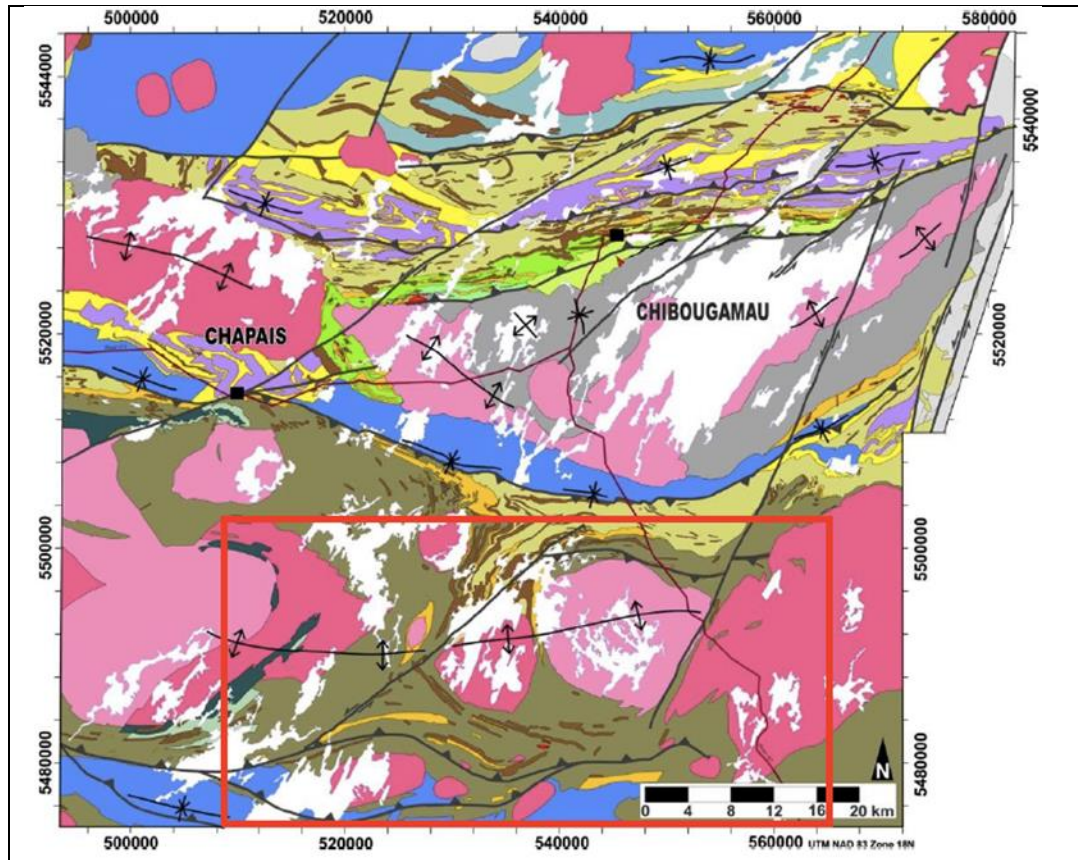
The project is located near the community of the Waswanipi Cree Nation and it is easily accessed from Highway 113 or Highway 167. Reaching the prospected site is not possible without using the forestry trails and without crossing a couple of hills. All the claims are staked around Frank Lake as shown in the following figure. Some of these claims are accessible only by boat. This was not a concern for this first phase of the Gold Mountain project.



### General Geology

The prospected area is in the Superior Province (4 to 2.5 Ga) which occupies a large part of the North American continent and covers one third of Quebec. This geological province forms the central part of the Canadian Shield. It is known worldwide for its numerous deposits of copper, gold, zinc, nickel and silver. More recently, important discoveries of diamond showings in intersecting kimberlite rocks have been made in this province.

Moreover, it is subdivided into a dozen subprovinces, half of which are located in Quebec. The best known is the Abitibi subprovince, which is the largest of the Archean volcano-sedimentary belts in the world, renowned for its deposits of copper, zinc, silver and gold.



The Abitibi subprovince is the richest Archean greenstone belt. It contains 14 mining districts, where thousands of Canadians reside. These districts developed around discrete clusters of more than 80 massive sulfide deposits (VMS) and along major domain-bounding faults that host over 50 gold deposits. However, base metal reserves have declined considerably over the last 10 years. The prospected area is part of the Abitibi greenstone belt which has not been extensively explored.

### Local Geology

There is very little geological information on this sector; even on SIGEOM Examine which has many compilation maps of the Abitibi subprovince that includes the NTS sheet 32G/05. However, there is no detailed geology of the prospected area. There may be a GIS map 91-01 (Summary of Currie-Lesueur greenstones), which could be interesting even if it is borderline with the prospector's claims.

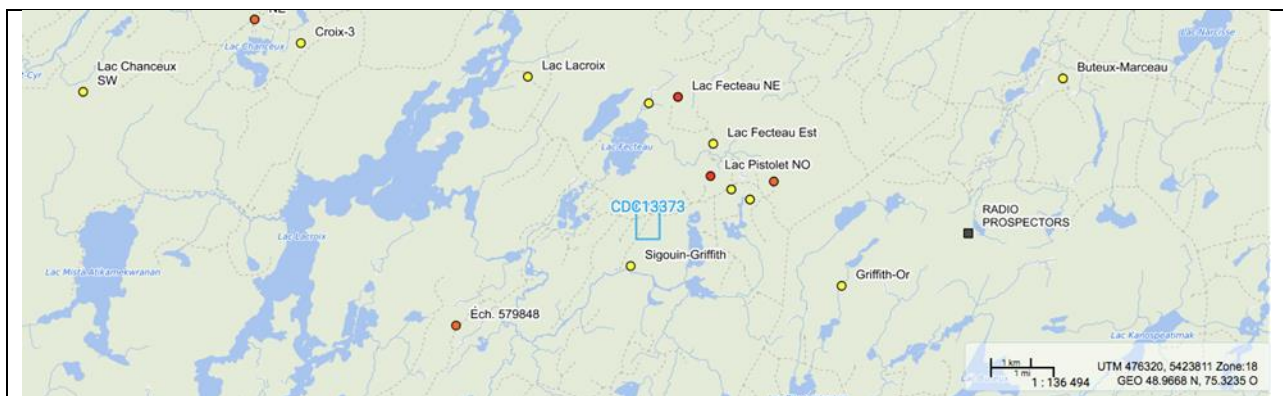
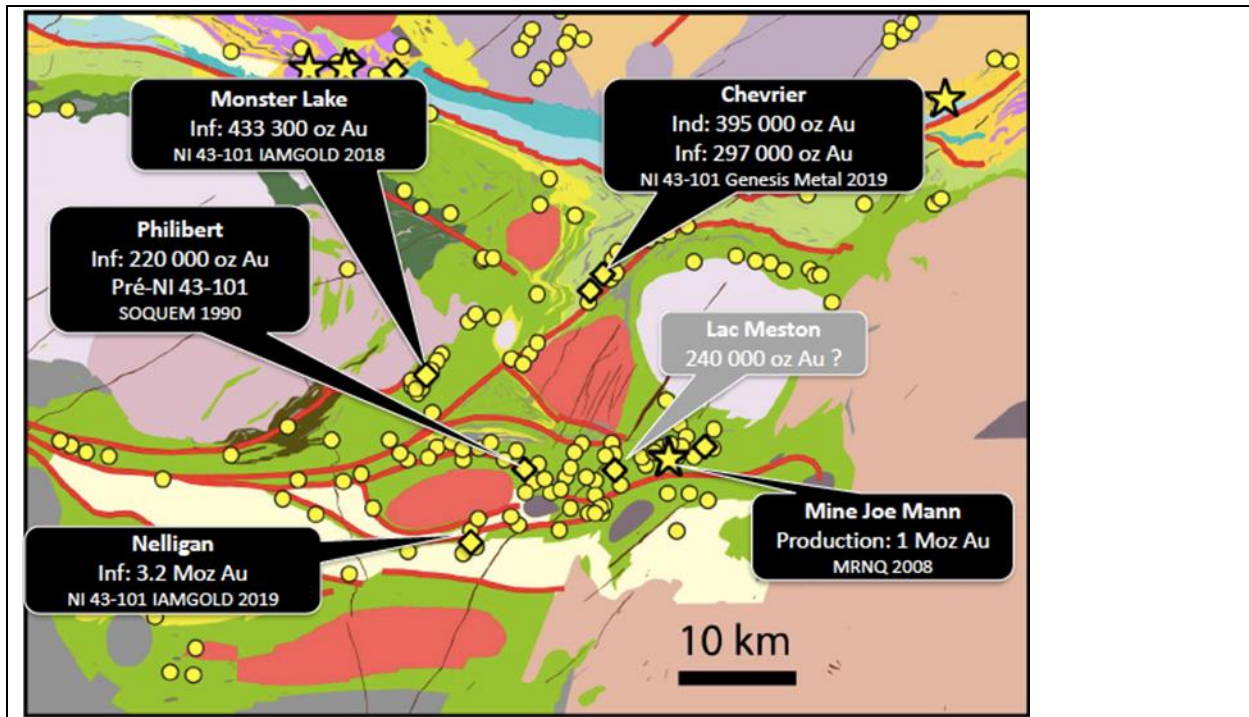




The project claims are all located in the southwestern part of NTS sheet 32G/05, just south of Frank Lake. They straddle the eastern end of a thin band of mafic volcanic rocks, about 1 km wide which is oriented east-west. These mafic volcanic rocks with plagioclase phenocrysts are probably part of the Obatogamau Formation, the base of the first volcanic cycle (plain) of tholeiitic affinity. We can also observe the presence of a diabase dyke trending north-east through the claims. Finally, it is possible that within this band, there are co-magmatic gabbro dykes and copper ore. These dykes, when present, could possibly correspond to the copper showings on the property (Field notes, Desgagné, Houle and Larbi. 2008).

**Known Mineralization**

The mineralization is amazing when we explore the Gold Mountain project. Many targets have been found as shown on the following map. Several other targets are present in the region studied. Tuffs of the Blondeau Formation contain masses of massive sulphides and sulphides remobilized in veins. Sills of the Cummings Complex contain sulphides (1-2% pyrite and pyrrhotite, and some chalcopyrite) disseminated in quartz veins. Pyrite-pyrrhotite-chalcopyrite mineralization also occurs as fracture filling along fault zones. Finally, massive pyrite zones are present within the Obatogamau Formation.



## Work done

July 26 Logistic preparation  
July 27 Field preparation and moving tools to the bush preparing the chainsaw to cut the trees  
July 28 Finishing cutting the wood and opening a trail  
July 4 Prospecting and sampling  
July 5 Prospecting and sampling  
August 6 Prospecting and sampling  
August 7 Prospecting and sampling. Sample number 572 9292  
August 8 Prospecting and sampling. Sample number 572 9293  
August 9 Prospecting and sampling sample number 572 9294 erratic block  
August 10 Prospecting and sampling sample number 572 9295  
August 11 Prospecting  
August 12 Samples preparation for shipping  
August 15 Report preparation

## Results and Discussion

The Gold Mountain project shows a mineralized boulder where the lithology consists mostly of ultramafic volcanic rocks, gabbro and tonalites cut by centimetric veins of quartz.

The geology of the area suggests that the mineralization capacity is very important. The basaltic rocks and gabbros are the hosts of the deposits and the granite is the energy provider to remobilize the metals in the hot water from deep earth to the surface. These rocks have been sampled and sent for assays. The data obtained are very consistent and show encouraging values in gold (Au) of 3.4 g/t and 3.2 g/t. some vanadium (V) and zinc (Zn) and traces of copper (Cu), chromite (Cr) and silver (Ag).

PROJECT : MONTAIN GOLD 2020 Au-AA23/ME-ICP41													
	Au	Ag	Co	Cr	Cu	Fe	Li	Mn	Ni	Pb	Ti	V	Zn
	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm
S729288	0,007	0,5	28	5	56	5,24	10	350	2		0,29	17	56
S729289	0,006		21	4	75	4,64	10	413	2		0,23	16	68
S729290	0,005		12	15	129	1,56	10	190	17		0,09	17	23
S729291	0,009		31	192	52	10,95	30	2730	67		0,55	209	141
S729292	0,008	0,3	73	138	466	8,97	30	1650	84		0,54	127	125
S729293	0,009	0,9	72	145	492	12,2	30	1865	98	355	0,46	163	335
S729294	0,016	0,3	78	132	265	9,25	30	1690	98	26	0,37	127	218
S729295		0,4	21	5	54	12,25	10	9410	7		0,01	26	31
S729296	3,4	0,6	47	70	137	5,33	10	547	118		0,15	60	32
S729297	3,2	0,6	44	55	118	4,57	10	556	85		0,16	49	22

## Conclusion and Recommendations

This prospecting project has produced great information about mineralization and the assays show through the different samples, that there is a great potential to be discovered; 3.2 g/t gold is very good. We believe that more needs to be known and studied in this area. We recommend to the prospector to continue defining this area more and the mineral potential in it. Conductors have to be better defined and others have to be found. The ones already known are not enough to make the project optionable.

We recommend to the Board of the CMEB to keep encouraging Mr. Desgagné to prospect in Eeyou Istchee. Larry is a good prospector with extensive knowledge in exploration. We believe in the potential of this prospector to find more targets in Eeyou Istchee.

## LARRY DESGAGNÉ, VOLCANO GOLD PROJECT, AGR 2022-19

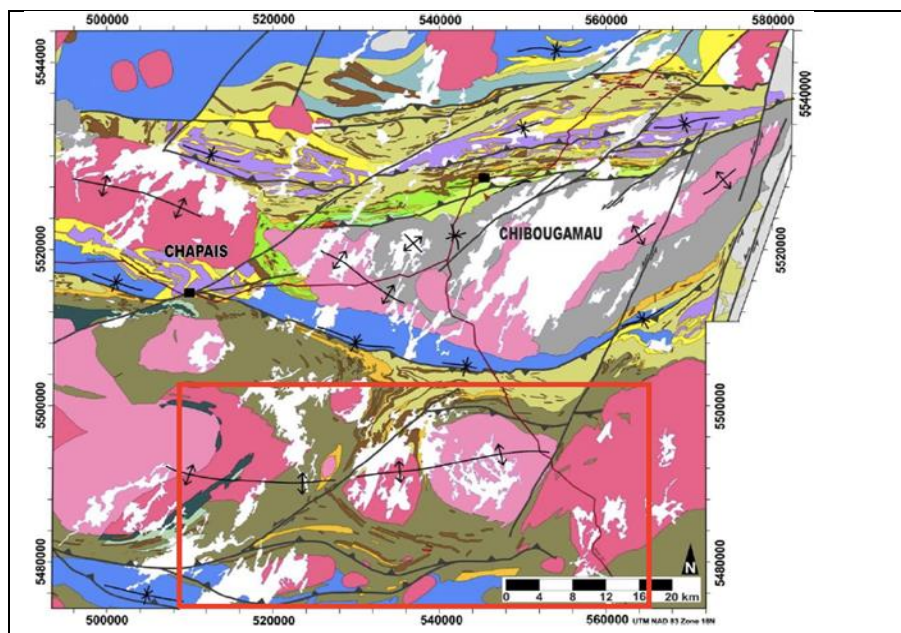
### Location



The project is located 100 km southeast of the Waswanipi Cree Nation. It is easily accessed from Highway 113 and even from Highway 167. To get to the prospected site, the prospector drives the forestry trails using an ATV. All the staked claims are around Vivier Lake as shown in the figure above. Some of these claims are accessible only by boat.

### General Geology

The prospected area is part of the Superior Province (4 to 2.5 Ga) which occupies a large part of the North American continent and covers one third of Quebec. This geological province forms the central part of the Canadian Shield. It is known worldwide for its numerous deposits of copper, gold, zinc, nickel and silver. More recently, important discoveries of diamond showings in intersecting kimberlite rocks of this province have been made. Moreover, it is subdivided into a dozen subprovinces, half of which are located in Quebec. The best known is the Abitibi subprovince, which is the largest of the Archean volcano-sedimentary belts in the world, renowned for its deposits of copper, zinc, silver and gold.



The Abitibi subprovince is the richest Archean greenstone belt. It contains 14 mining districts, where

thousands of Canadians reside. These districts developed around discrete clusters of more than 80 massive sulfide deposits (VMS) and along major domain-bounding faults that are hosts to over 50 gold deposits. However, base metal reserves have declined considerably over the last 10 years. Volcano Gold is part of the Abitibi greenstone belt which is underexplored.

### **Local Geology**

The prospecting region has been the subject of mapping and prospecting work since the 1940s. Freeman mapped the Yvonne Lake region and gold showings were discovered by prospectors. The most detailed data concerns the eastern part where, following the discovery of uranium mineralization, detailed mapping was undertaken. All the claims of the project are located in the southwestern part of NTS sheet 32G/02. The property is characterized by the presence of metasediments, mainly greywackes, interbedded with quartzites, argillites and slates. There are iron and/or graphitic formations. Two conductive strips are present in the area. The sedimentary sequence is very strong in the western part of the actual claims. In the central and eastern part, mafic to felsic lava flows are intercalated.

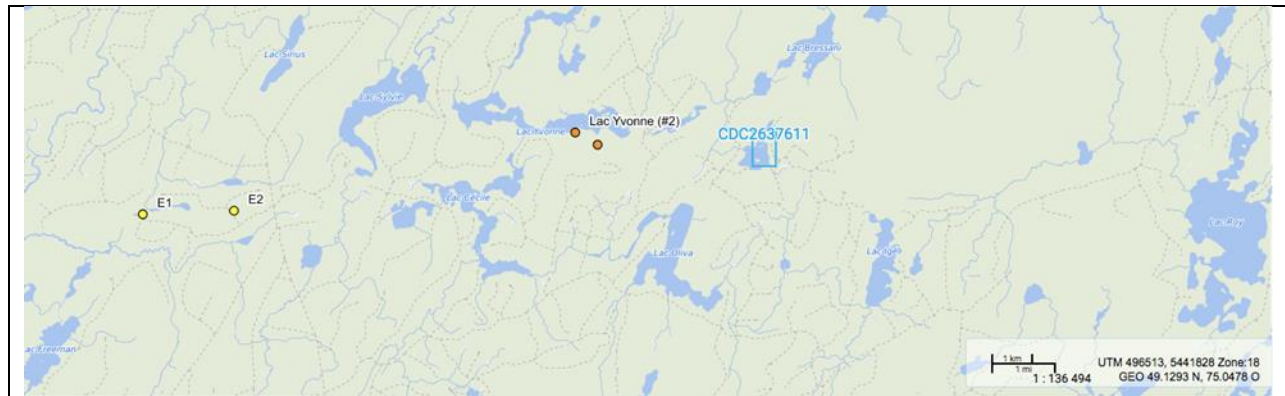


There is strong amphibolitization in the volcanic rocks. The horizons observed during the reconnaissance are oriented E-W and dip steeply to the north or south. We note a gradual transition from sediments to a granitic anatexite. Exploration work has highlighted the presence of a shear zone along the intrusive contact. The greywackes proximal to the granite are altered, silicified and enriched with iron sulphides: pyrite and pyrrhotite. Many NE-SW oriented fractures are defined in this area.

### **Local Mineralization**

Prospecting work revealed several NE fracture zones at the interior of the pegmatitic granite. These fracture zones contain magnetite, ilmenite and small grains of uraninite. Sometimes traces of autunite, samarskite and torbernite were also noted. Mineralized fractures are sometimes related to the presence of thin diabase dykes.

Other mineralization was discovered, and in particular gold, associated with the long shear zone along the contact between the granite and the greywackes. It is characterized by silicification and a strong impregnation of iron sulphides (py-po). A drill hole located in this area intersected 3.4 g/t gold over 0.4m.



### Work Done

- 22 August administrative preparation
- 14 August second day of preparation: Forest intervention permit
- 14 September the first visit in the field localizing some outcrops on the claims
- 15 September take the ATV and the boat to Vivier Lake
- 16 September first day prospecting
- 17 September Second day of prospecting
- 19 September stripping outcrop and washing it
- 20 September channeling and sampling
- 21 September preparation of samples for shipping to the lab by bus
- 22 September preparing photos and list of samples
- 27 September sending the samples to the lab
- 28 September preparation of the report

### *Sample numbering, location and description*

- 67881: 0504854–5441810 channeling sampling pyrite
- 67882: 0504649–5441809 channeling disseminated pyrite
- 67883: 0504649–5441809 channeling disseminated pyrite
- 67884: 0504851–5441807 disseminated pyrite
- 67885: 0504851–5441809 pyrite in carbonate
- 67886: 0504847–5441811 disseminated pyrite
- 67887: 0504847–5440811 disseminated pyrite
- 67888: 0504847–5441811 disseminated pyrite
- 67889: 0504847–5441811 disseminated pyrite
- 67890: 0504847–5441811 disseminated pyrite
- 67891: 0504864–5441824 grab sample mineralization fine pyrite
- 67892: 0504862–5441812 grab sample mineralization pyrite in carbonate
- 67893: 0504864–5441818 grab sample mineralization pyrite in carbonate
- 67894: 0504862–5441817 grab sample mineralization pyrite in carbonate
- 67895: 0504867–5441817 grab sample mineralization pyrite in carbonate

### Results and Discussion

The Volcano Gold project shows mineralization where the lithology consists mostly of volcanic rocks, gabbro and tonalites cut by centimetric quartz veins.

The geology of the area suggests that the mineralization capacity is very important. The basaltic rocks and gabbros are the hosts of the deposit and the granite is the energy provider to remobilize the metals in the hot water from deep earth to the surface. These rocks have been sampled and sent for assay.

The data obtained are very consistent and show encouraging values in gold (Au) at 2.9 g/t and 1 g/t, and

silver (Ag) 2.3 g/t. Some values of lead (Pb) and zinc (Zn) and traces of copper (Cu) and chromite (Cr) were obtained.

PROJECT : Volcano Gold 2022 Au-AA23/ME-ICP41														
	Au	Ag	Co	Cr	Cu	Fe	Li	Mn	Ni	Pb	Ti	V	W	Zn
	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
67881	0,816	0,8	34	83	123	3,09		429	79		0,18	79		32
67882	2,86	0,7	48	76	149	4,42		460	128		0,16	79	20	41
67883	1,005	2,3	47	130	138	5,48	30	442	116	178	0,21	105	20	362
67884	0,005	0,7	14	15	22	1,66		279	11	9	0,07	25		59
67885	0,007	0,2	5	15	19	1,75		302	12	15	0,08	25		57
67886	0,011	1,9	25	14	16	1,49		198	13	11	0,06	14		60
67887		0,3	14	16	9	1,56		221	11	5	0,06	16		50
67888	0,017	0,3	14	17	11	1,77		240	14	12	0,08	18		72
67889	0,005	0,7	22	20	12	1,65		259	14	8	0,08	21		55
67890	0,021	0,4	18	43	26	2,22	20	318	22	11	0,12	39		72
67891	0,013		17	123	14	1,86		324	48		0,1	40		34
67892	0,021		23	123	26	2,7	20	349	72		0,1	55		55
67893	0,189	0,6	43	124	131	4,55		538	122		0,16	77		41
67894	0,394	0,4	42	117	139	3,99	20	788	103		0,15	74		32
67895	0,113		37	118	120	3,65	20	545	112		0,1	83		39

**Conclusion and Recommendations**

This prospecting program has produced great information about the mineralization and the assays show through the different samples, that there is a great potential of 2.9 g/t of gold and 2.3 g/t silver (Ag). These are good values that could facilitate an option from a junior company. We recommend to the prospector to continue prospecting in this area and try to find the big deposit. Maybe some geophysics would help determine the structure of the conductors. Those already found are not enough to bring the project to another level.

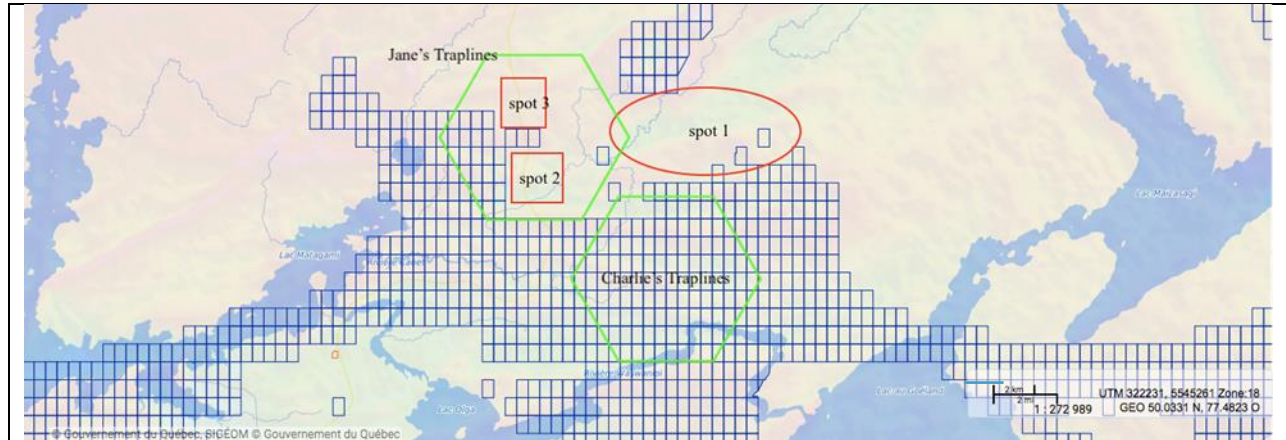
We recommend to the Board of the CMEB to keep encouraging Mr. Desgagné for prospecting projects in Eeyou Istchee. Larry is a good prospector and has extensive knowledge and experience. We believe in the potential of this prospector to discover more targets in Eeyou Istchee.

**NORMAN GRANT, A-54/W-01 TRAPLINE PROJECT, AGR 2022-07**

**Location**



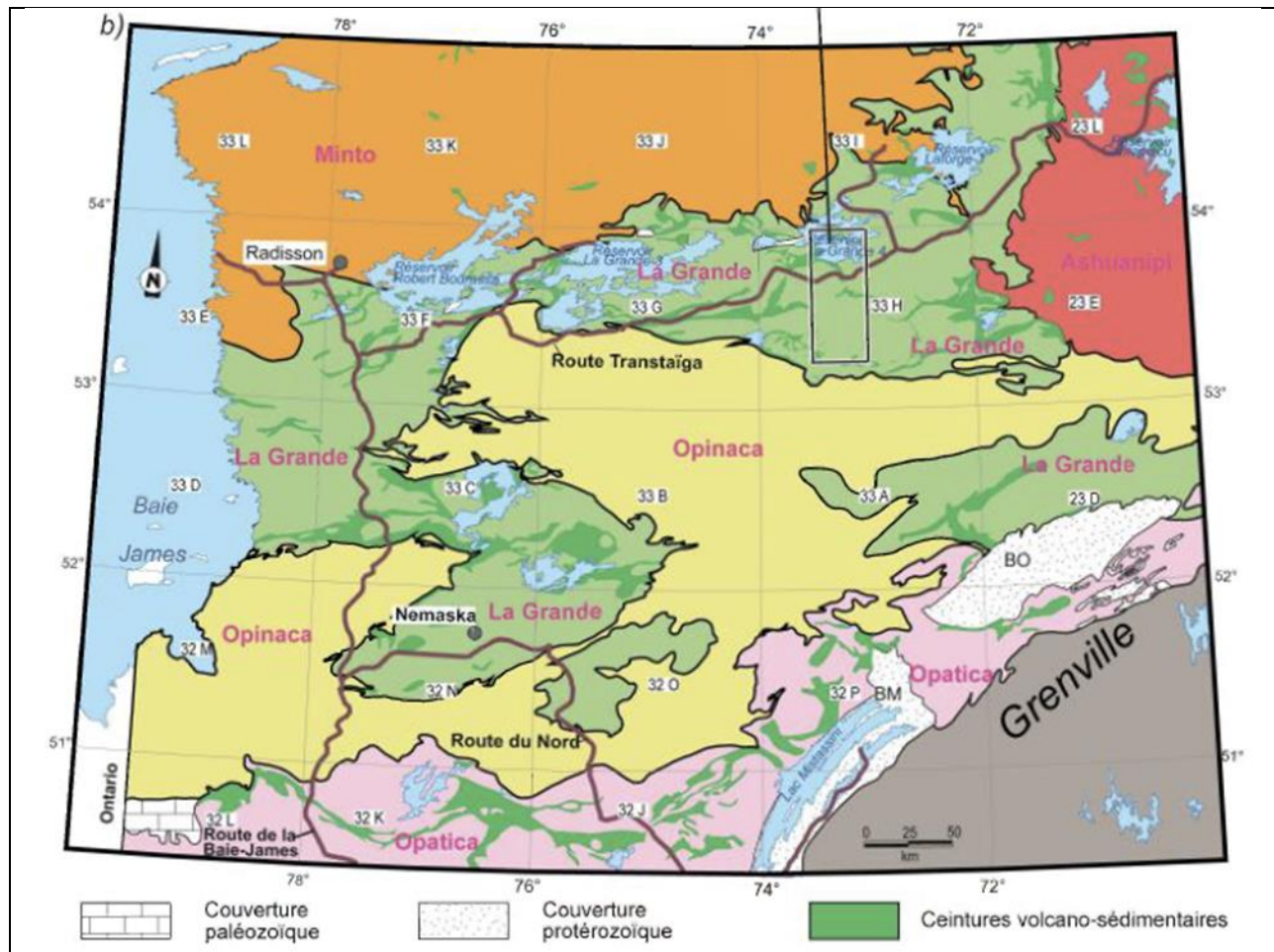
The prospected site is about 45 km west-northwest of the town of Matagami and about 20 km west of the Billy Diamond Highway (Km 84). The access to the prospected field is possible through the Nottaway River which provides good access to the central part of the map-area and may be reached from Matagami via the Bell River and Matagami Lake with only two very short portages. Or simply by ATV and canoe from the Billy Diamond Highway.



### General Geology

The Superior Province has been tectonically stable since ca. 2.6 Ga (Percival, 2007) and forms the base-ment of the northeast part of the North American continent. This Archean craton is composed of a large number of tectono-stratigraphic units, traditionally subdivided into 4 types of subprovinces (Card and Ciesielski, 1986; Card et al., 1990). These subprovinces and the units that compose them would have suc-cessively amalgamated from north to south during the Kenoran orogeny, between 2.72 and 2.68 Ga (Per-cival et al., 2006; Percival, 2007). The southeast area of the Superior Province includes the Opatoca, Abit-ibi and Pontiac subprovinces. In the north, the Opatoca subprovince consists mainly of a complex mixture of intrusive TTG-type rocks (Benn et al., 1992; Sawyer & Benn, 1993; Sawyer, 1998).

The geological setting north of Matagami is typical of Archean VMS terrains. It is characterized by vol-canic sequences that filled a large, regional synvolcanic basin within which second and third order sub-basins were developed and controlled by synvolcanic faulting that also strongly influenced the distribu-tion of sulphide deposits and the trends associated with mineralization. Stratigraphy is layer-cake with a marked change from lowermost rhyolite/dacite volcanism (Watson Lake Formation) to mafic ande-site/basalt volcanism (Wabasse Group). The sequence was concomitantly intruded by the giant Bell Riv-er Complex which was the likely heat source for the wide-spread hydrothermal activity that occurred throughout the Matagami Camp.



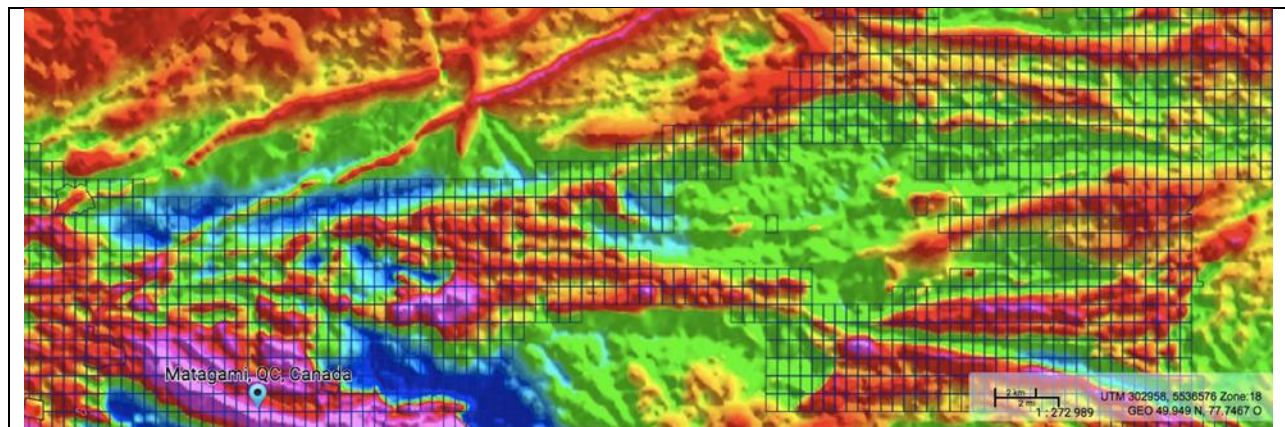
Studies show that significant amounts of hydrothermally generated sulphides remain to be discovered in the Matagami Camp. Massive sulphide mineralization is best developed along the Key tuffite stratigraphic marker horizon that is consistently developed throughout the Matagami Camp near the change from felsic to mafic volcanism at the top of the Watson Lake Formation. Recent discoveries at Bracemac and McLeod demonstrate massive sulphide development at other tuffite units higher in the sequence within the Wabasse Group. Sulphide mineralization at all stratigraphic levels is typically underlain by strong hydrothermal plumbing systems developed within footwall rocks as mineralized fluids passed through the rock along synvolcanic fault structures. These alteration zones are comprised primarily of intense chlorite/talc alteration (termed “Pipe” alteration) and are indicative of potential for sulphide development.

### Local Geology

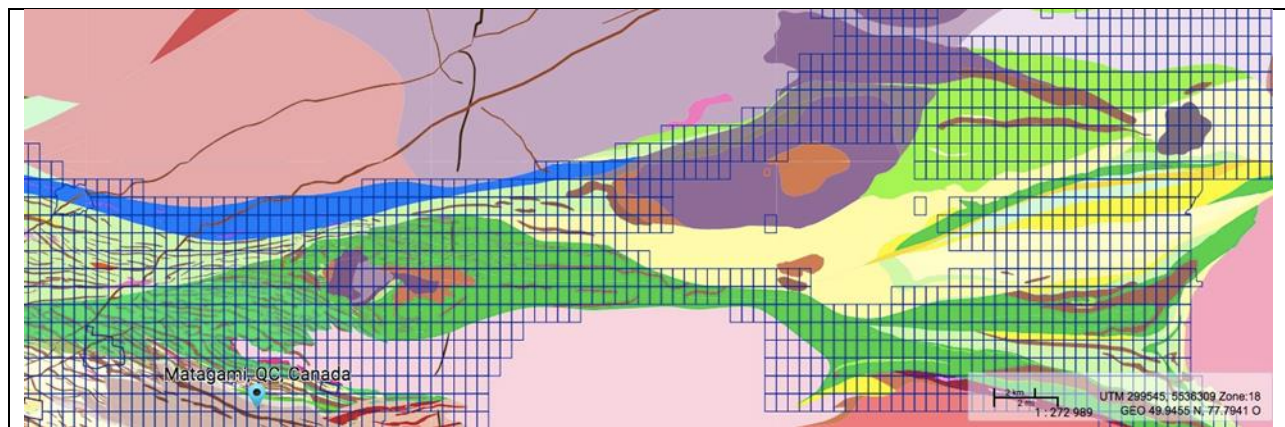
The geology of the prospected area is composed of several lithologic assemblages:

- Assemblage of gneiss, migmatites locally banded and some felsic intrusive rocks.
- Biotite-rich granite, felsic intrusions, migmatite, banded migmatite, undifferentiated gneiss.
- Biotite-rich gneiss and biotite-rich paragneiss.
- Assemblage of trondhjemite, quartz-diorite and diorite.
- Massive gneissic and migmatitic diorites.
- Diorite, quartz-diorite, hornblende and biotite-rich tonalite, foliated and gneissic, might locally contain magnetite and garnet.
- Dioritic to tonalitic gneiss and tonalite.
- Biotite and magnetite ± hornblende granite.





### Known Mineralization



The map area is geologically very rich but little prospecting has been carried out except for a few geophysical surveys of limited extent and a small amount of drilling in areas of pyrite-bearing gneisses in the western part. Bodies of granitic rock containing disseminated chalcopryrite appear to be the most favorable hosts for sulphide ore deposits within the map area.

Disseminated pyrite, pyrrhotite and/or chalcopryrite were noted in a few outcrops of gneiss and schist within the map area. However, sulphide mineralization in the map area is not common outside the Frotet-Evans volcanic zone which crosses the northern part of the area (see Preliminary Open File Report DP-194 "Region du Lac Wagama" by Antoine Franconi, December 1973, Dept. Nat. Res., Quebec for details on the mineralization in the volcanic zone).

About 0.2% disseminated chalcopryrite and smaller amounts of pyrrhotite were noted.

Rusty-weathering lenses of cubic pyrite with a few grains of chalcopryrite in a quartz gangue are exposed over a strike length of 200 feet in rapids on Kitchigama River close to the prospected area. The lenses are 1 to 6 inches in width and occur in an outcrop of migmatite at the contact of amphibolite bands and pegmatite. An assay of a selected grab sample from one of the lenses gave the following results: 0.03% Cu, 0.019% Zn, 0.001 oz/ton Au and 0.032 oz/ton Ag.

Rusty-weathering lenses, usually less than a foot in length, and about 10 inches in width, containing disseminated pyrite, pyrrhotite and minor chalcopryrite occur in an outcrop of garnet-actinolite-quartz schist on the north shore of Soscumica Lake. A selected grab sample was assayed with the following results: 0.10% Cu, 0.25% Zn, 0.003 oz/ton Au and 0.006 oz/ton Ag. Smaller amounts of sulphides and magnetite were noted inland to the south in the same rock unit. This rock unit appears to be quite narrow: disseminated magnetite helps to outline it on the aeromagnetic map.

A few cubes of galena and up to 5% pyrite were noted along fractures in an outcrop of metasedimentary rock in the Frotet- Evans volcanic zone about 0.6 miles west of mile 101.7 on the Matagami LG2 (Trans-Taiga) road. A grab sample assayed 0.01% Cu, 0.02% Zn, 0.02% Pb, 0.001 oz/ton Au, and 0.017 oz/ton Ag.

Structures in the area, commonly injected with syn-kinematic felsic intrusions, allowed remobilization of the disseminated stratiform mineralization.

### **Work Done**

**Day 1:** Travel day to meet with helper in Matagami, (Benoit Blacksmith). Head to camp to settle in.

**Day 2:** Scouting area and discussing our plan for where to begin work, get material, boat, 4-wheeler and tools needed ready for field work.

**Day 3:** First day in the field, picked up 3 samples on the 4-wheeler, bad weather in the afternoon had to go back to camp.

Sample 1 - NB001 coordinates: N50°03'10.7" W77°07'13.9"

Description: Granite, spots of mineralization in some areas, mostly quartz around.

Sample 2 - NB002 coordinates: N50°03'15.1" W77°07'08.1"

Description: Similar to sample 1, more granite.

Sample 3 – NB003 coordinates: N50°03'13.2" W77°07'05.4"

Description: Granite, some mineralization and mostly quartz.

**Day 4:** Beautiful day to start off, very hot. Today we managed to pick up 4 samples with the 4-wheeler.

Sample 4 – NB004 coordinates: N50°03'27.8" W77°06'41.21"

Description: Granite mixed with quartz.

Sample 5 – NB005 coordinates: N50°03'34.0" W77°06'34.2"

Description: Similar to Sample 4.

Sample 6 – NB006 coordinates: N50°03'32.2" W77°06'41.7"

Description: Granite, mineralization in the quartz (pyrite, hematite and biotite).

Sample 7 – NB007 coordinates: N50°03'32.7" W77°06'53.1"

Description: Very similar to sample 6.

**Day 5:** Today wasn't a very good day to be in the field, we decided to go for a truck ride to Nemaska to pick up more gas for our boat and 4-wheeler. We only picked up 2 samples.

Sample 7 – NB007 coordinates: N50°03'56.9" W77°07'08.9"

Description: Granite mixed with quartz.

Sample 8 – NB008 coordinates: N50°04'05.6" W77°07'08.0"

Description: Similar to sample 7

**Day 6:** Rain and thunderstorm in the morning so we left late in the afternoon to see if we could manage to get samples. We didn't want to risk anything to get sick so we decided to go back to camp.

**Day 7:** Today was a better day for us, we managed to get 4 samples on the ATV.

Sample 9 – NB009 coordinates: N50°03'25.8" W77°06'18.0"

Description: Granite with mineralization, magnetic and big vein of quartz.

Sample 10 – NB010 coordinates: N50°03'25.6" W77°06'25.9"

Description: Similar too sample 9 but vein disappeared underground.

Sample 11 – NB011 coordinates: N50°03'16.8" W77°06'29.3"

Description: Granite mixed with quartz.

Sample 12 – NB012 coordinates: N50°03'03.4" W77°06'49.0"

Description: Similar to sample 11.

**Day 8:** Today was our day to go on the boat, nice day to attack the shorelines and try to attack the high mag area. We managed to get 3 samples, had to turn back due to motor problems.

Sample 13 – NB013 coordinates: N50°04'13.6" W77°05'51.8"

Description: Small contact with granite and basalt no sign of mineralization.

Sample 14 – NB014 coordinates: N50° 04'14.4" W77°05'45.1"

Description: Granite, basalt disappeared (swamp area)  
 Sample 15 – NB015 coordinates: N50° 04'28.1" W77° 05'35.9"

Description: Similar to sample 14.

**Day 9:** Last day in the field we decided to go in the morning and pick up what we could with the boat, we managed to pick up 2 samples. We had to pack camp today and put stuff away.

Sample 16 – coordinates: N50° 03'57.4 W77° 06'10.1"

Description: Very swampy managed to find a small bedrock, mostly granite mixed with quartz.

Sample 17 – coordinates: N50° 03'51.9 W77° 06'10.1"

Description: Similar to sample 16.

**Day 10:** Finalizing of report and travel back home.

### Mineralization

In total, 18 samples were collected and sent to the laboratory for assays. The results are generally modest and do not show the real potential of the prospected area. But a couple of samples showed impressive values in zinc (more than 1000 ppm) and silver (16.5 ppm) which shows impressive values on sample NB017. We had no anomalies but some interesting values in a trace of gold (Au) and copper (Cu) and traces of nickel (Ni). In addition to these metallic minerals, some rare metals such as lanthanum (La) and lithium (Li) have been detected.

PROJECT : Agr.2022-07 Norman Grant /Au-AA23-ME-ICP41																
SAMPL	Au	Ag	Ba	Co	Cr	Cu	Fe	La	Li	Ni	Pb	Ti	V	Zn	Zn	
	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	
NB001			40				1,38					9	0,02	8	18	
NB002			50				0,49					5	-0,01	3	3	
NB003			40				0,74					4	0,01	6	7	
NB004			50				0,77	30				10	0,04	5	19	
NB005			50				0,75	30				21	0,03	5	19	
NB006			20				1,03					4	0,04	7	31	
NB007			40				0,42					8	0,01	2	6	
NB008			30				0,41					5	0,01	2	8	
NB009			30				0,45					6	0,01	2	8	
NB010			110		54		1,36		60	63		5	0,06	18	36	
NB011			30		18		2,42	60				12	0,08	28	29	
NB012			40		21	15	1,17		40			5	0,1	13	40	
NB013			120		53		1,15		50	36		6	0,07	21	27	
NB014			40		16		1,24		30	11		18	0,09	16	55	
NB015			140	15	67		1,75		90	107		6	0,04	22	44	
NB016	0,006		50	7	49		0,76			17		3	0,08	41	41	
NB017	0,007	16,5	20	51	74	103	12,1		30	46		30	0,01	65	>10000	1,085

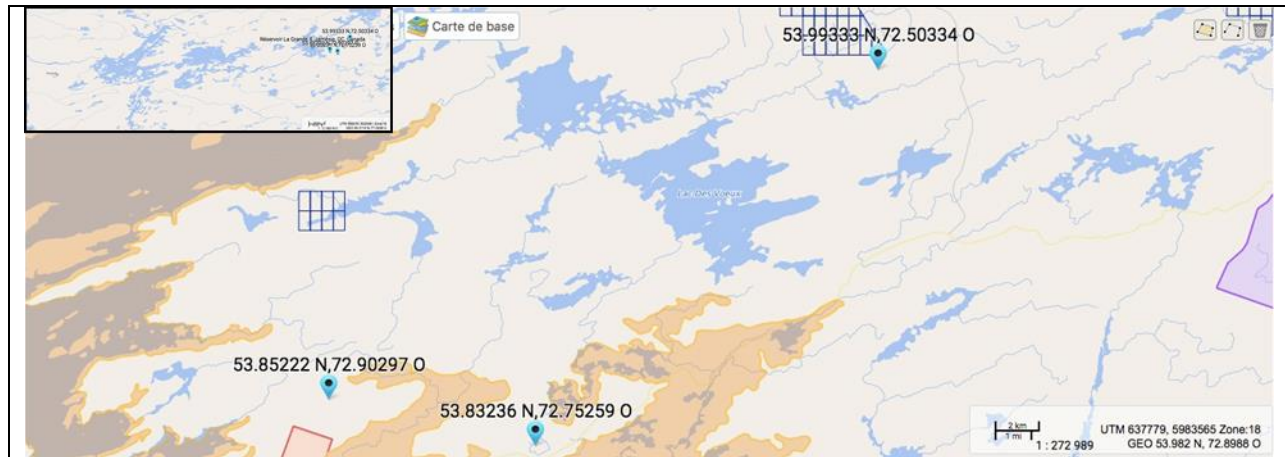
### Conclusion and Recommendations

Geologically, we have a good knowledge of the area showing some interesting aspects for possible mineralization. We are in the Abitibi belt which is well known in terms of mineralization models. It is possible to better characterize the prospected area and define targets and conductors. The values of Ag and Zn are incentives to produce other great projects in this area.

We recommend to the Board to encourage the prospector Norman Grant, he has a great exploration project with a great economic potential. After this grassroot step, we recommend to do another grassroot sampling project. We need better definition of the targets.

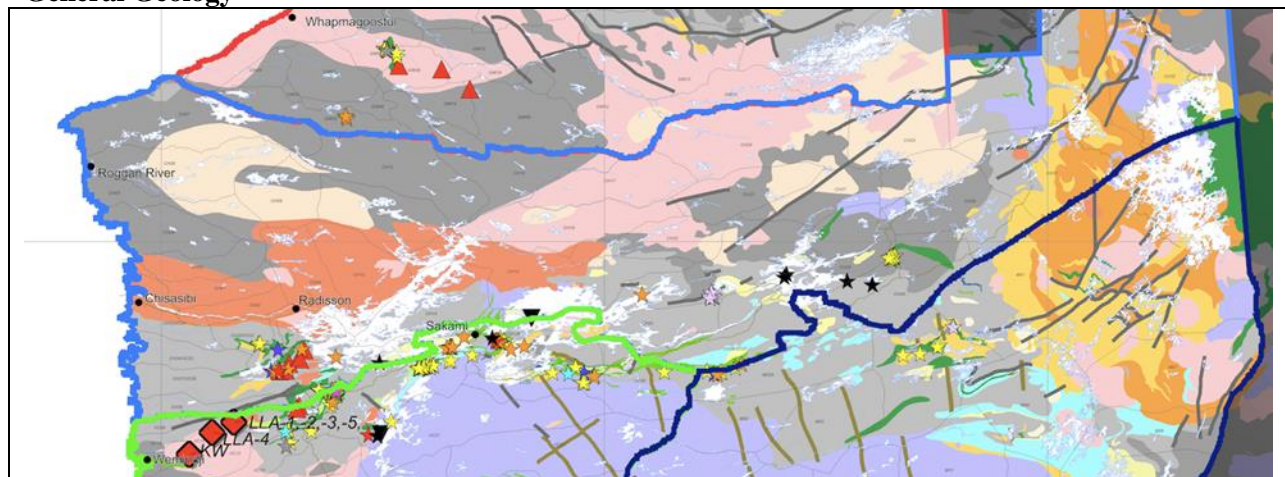
### NORMAN GRANT, FG-26, AGR 2022-10

#### Location



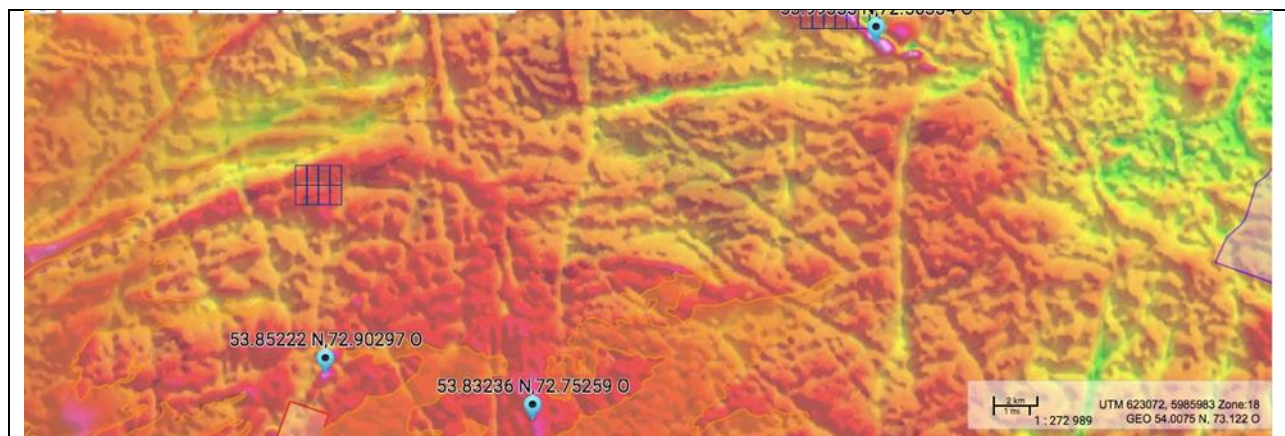
The prospected area is located at about 400 Km northeast of the Chisasibi Cree Nation, just above the north side of the Trans-Taiga road near Des Voeux Lake. The Trans-Taiga is a special environment where the exploration is very interesting because of the accessibility to the outcrops, the great visibility and the favorable geology. The project is also in the Chisasibi traplines with simple and easy accessibility.

### General Geology



The areas are underlain by Archean rocks of the Superior Province. They are interpreted as a series of volcanic troughs that comprise the larger La Grande greenstone belt, which consists of a series of such volcanic troughs running 350 km, in an east-west direction along the boundary between granitoid gneisses of the Ungava subprovince to the north and the larger Laguiche sedimentary domain to the south. The said belt consists of a succession of isoclinally folded volcanic rocks comprising a lower sequence of basalts overlain by felsic tuffs, rhyodacites and sediments that are in turn succeeded by an upper sequence of basalt and komatiite. Plutons of granodioritic composition syntectonically intrude the volcanic succession.

### Local Geology



The project is located in the geological Guyer Corridor. This group of rocks is located in the eastern extension of the long volcanic band of La Grande, in which Virginia mining Inc. delineated a deposit in the LG-2 reservoir area (4,000,000 metric tonnes, at 2.7 Au g/t, in gold resources, La Grande Sud). The geology of the property is characterized by a bimodal volcanosedimentary sequence, composed mainly of basalt and rhyolite. Certain rhyolitic flows evolve in thickness towards bands of pyritic sericite schists that can reach up to 100 meters thick. An iron formation crosses the northern part of the property in its east-west axis, near the contact with granite intrusions where the volcanic sequence is truncated. Basaltic and rhyolitic flows host several generations of sills and ultramafic to felsic porphyry dykes. A late syenitic pluton occurs at the southern edge of the rhyolitic volcanics. Stratigraphy varies from east-west to slightly north-west and the metamorphism is at the levels of greenschists with lower amphibolites, and locally upper amphibolites. The geology along the Trans-Taiga road is characterized by a volcanosedimentary assemblage dominated by mafic lavas. The latter were affected by a high-grade metamorphism (lower amphibolite) and they present the hornblende-biotite-garnet assemblage.

### Known Mineralization

We found several quartz-magnetite iron formations near the Ashtart, Nemesis and Helen lakes, in the central volcano-sedimentary band, and near Lac Meunier in the southeast volcanic band of rocks. Bands of iron formations have a thickness that varies from a few centimeters to several meters. Groups of magnetite-rich and fine-grained rocks are at high content. Some bands show a little disseminated pyrite. Disseminated pyrite and, more rarely, chalcopyrite were observed in metavolcanic, metasedimentary and plutonic rocks. We also noted some veins of pyrite and chalcopyrite, as well as silicified zones, in the volcano-sedimentary rocks.

Sulphide mineralization in the form of pyrite and pyrrhotite are the most abundant metallic minerals found on the project area. This mineralization is found as: disseminations within Banded Iron Formation, and as narrow bands associated near Banded Iron Formation, generally with recrystallised chert. Chalcopyrite in the form of fine disseminations and veinlets is found in the area of Lac de la Corvette. Many samples in the area of this mineralization returned an assay of 1.4% Cu. Samples showing sphalerite which is also associated with folded iron formation on the Lac Corvette. A selected grab sample analyzed >10,000 ppm Zn. An anomalous gold value of 3.22 g/t was obtained from an older sampling of sheared iron formation. Visible fracture-controlled galena was also encountered and is associated with anomalous gold.

### **Work Done**

**Day 1:** Flying to Chisasibi to meet tallyman George Bearskin.

**Day 2:** Travel to Mirage and tallyman's land within the area to see and start marking territories to locate for work.

**Day 3:** We started to sample today with the ATV and made our way within camp area, very much tundra and hard place to sample. We ran into a company that are in exploration which gave us an idea to keep looking around. We managed to pick up several samples around the tallyman's area as requested and we managed to get 3 samples.

Sample 1 - NG001 coordinates: N53° 51'.685" W072° 38'.401" Description: granite mixed with quartz some mineralization of magnetite and possible hematite, potential for lithium (spodumene).

Sample 2 - NG002 coordinates: N53° 51'.685" W072° 38'.423" Description: Very similar to sample 1 but more quartz.

Sample 3 - NG003 coordinates: N53° 51'.866" W072° 37'.247" Description: Very similar to sample 1 and 2 but some gabbro.

**Day 4:** Had problems with the 4-wheeler had to turn back for camp and figure out what was wrong but managed to pick up 2 samples.

Sample 4 - NG004 coordinates: N53° 51'.543" W072° 37'.663"

Sample 5 - NG005 coordinates: N53° 51'.532" W072° 37'.632" Both samples were similar. Description: granite mixed with quartz.

**Day 5:** Today we went on the truck and managed to get 4 samples, was a nice day.

Sample 6 - NG006 and NG006A coordinates: N53° 51'.768" W072° 39'.229" Description: granite mixture of quartz, some mineralization of biotite and muscovite.

Sample 7 - NG007 coordinates: N53° 51'.776" W072° 39'.220" Description: Similar to sample 6.

Sample 8 - NG008 coordinates: N53° 50'.544" W072° 42'.675" Description: granite and mixture of quartz some mineralization of muscovite and biotite.

Sample 9 - NG009 coordinates: N53° 50'.031" W072° 43'.473" Description: granite and mostly mixture of quartz.

Sample 10 - NG010 coordinates: N53° 50'.019" W072° 43'.503" Description: Very similar to sample 9.

**Day 6:** Tallyman requested to fly on a helicopter for the day, we decided to go and enjoy as he requested.

**Day 7:** Today we had a chance to go out only in the morning, rain delay so we decided to stay at camp and relax but we managed to get 2 samples.

Sample 11 - NG011 coordinates: N53° 49'.699" W072° 44'.441" Description: mostly granite and a mixture of quartz.

Sample 12 - NG012 coordinates: N53° 49'.678" W072° 44'.454" Description: Similar to sample 11.

**Day 8:** Rain delay, couldn't go out due to a big thunderstorm. Decided to stay at camp.

**Day 9:** We were travelling today but we stopped for 2 samples on our way back, it is 600kms to Chisasibi but we still managed to stop and take 2 last samples before leaving camp.

Sample 13 - NG 0013 coordinates: N53° 49'.559" W072° 44'.818" Description: Granite and quartz.

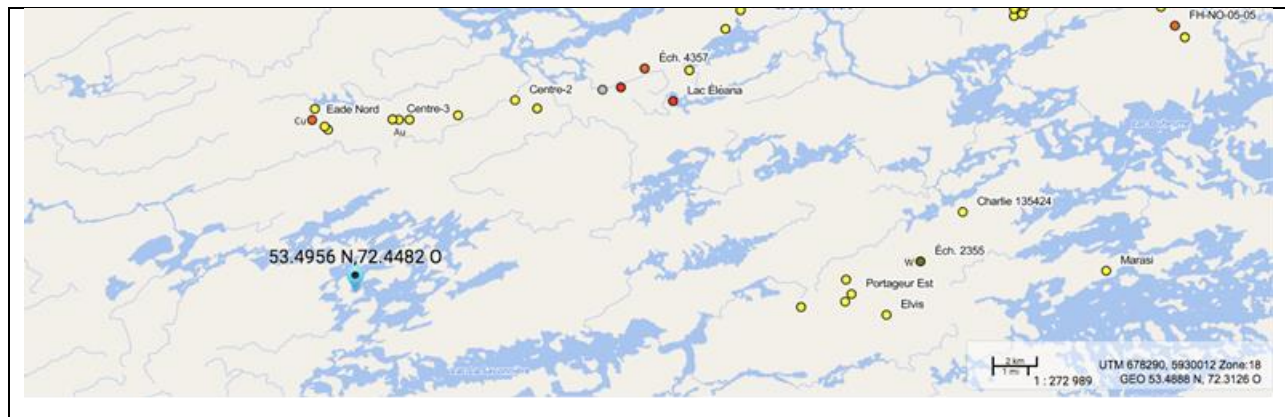
Sample 14 - NG0014 coordinates: N53° 49'.559" W072° 45'.091"

**Day 10:** Report and its submission.

### Local Mineralization

Based on the previous geo-economic studies, we know that the area is gold, copper and silver rich. Recently, a lot of lithium (spodumene) discoveries have been made.

The assay results on this project's samples are not in accordance with the huge potential of the area. However, samples such as NG009 shows good values in silver (Ag) and beryllium (Be). The same sample shows non-negligible value in Cu and REE (La). The other samples do not contain any good values or traces of mineralization.



PROJECT FG-26/ME-ICP41													
SAMPLE	Ag	Be	Co	Cr	Cu	Fe	La	Li	Ni	Ti	V	Zn	
	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	
NG001			3	17	10	1,15				5	0,11	21	23
NG002			3	22	2	1,37				5	0,09	16	36
NG003			8	29	6	2,64	50	20	13	0,21		42	67
NG004			3	20	2	1,52	40			6	0,12	28	29
NG005			4	10	10	2,31				4	0,11	32	41
NG006			5	23	10	1,93	30	20	8	0,13		36	39
NG007			4	21	5	1,36	40	20	9	0,12		24	30
NG008			6	36	2	2,26		20	9	0,16		40	48
NG009	1	0,6	8	13	141	2,08	40	20	15	0,25		51	43
NG010			7	32	18	2,19	40	20	14	0,21		47	47
NG011			1	13	3	0,62				1	0,01	6	8
NG012													
NG013			7	52	3	1,72	30	20	27	0,16		34	39
NG014													
NG006A			3	14	2	0,88	50			6	0,07	13	26

### Conclusion and Recommendations

The area is recognized for its great economic potential. Even if no huge targets have been found for this project, it is worthwhile going back, but checking first that the area is not claimed by other companies.

We believe that the sampling was not well done. This will be corrected by working with the prospector to improve his technique.

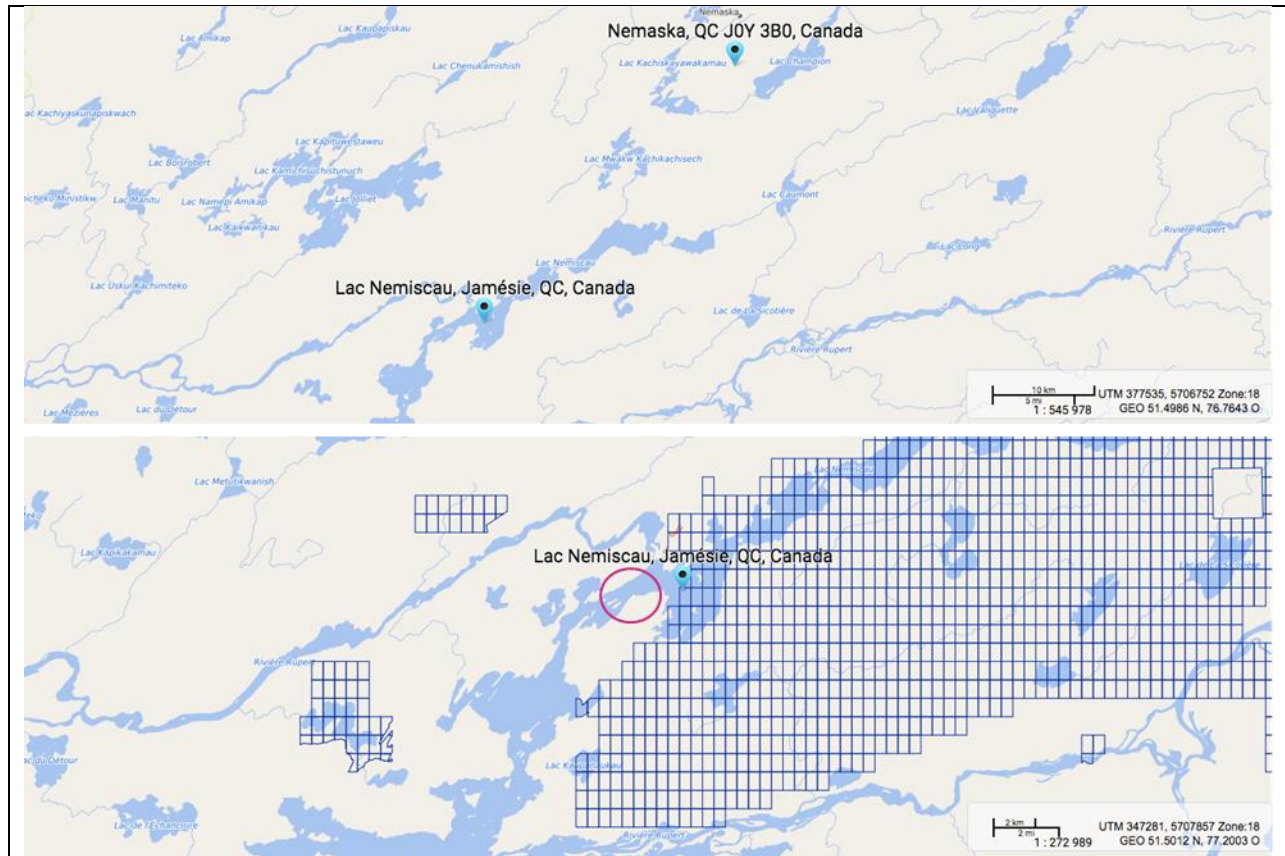
Recommendation to the Board is to keep encouraging the prospector to elaborate other projects that increase his experience and the chance to hit new targets.

### NORMAN GRANT, PROJECT N24, AGR 2022-13

#### Location

Project N24 is located around Lake Nemiscau about 35 km southwest of the Cree Nation of Nemaska. It is accessible by boat and ATV. It is not far from the Nemaska lithium deposit and several other known deposits such as the Valiquette Ni and EPG Target. The prospector worked all the 10 days on this area and lived in the tallyman's cabin.



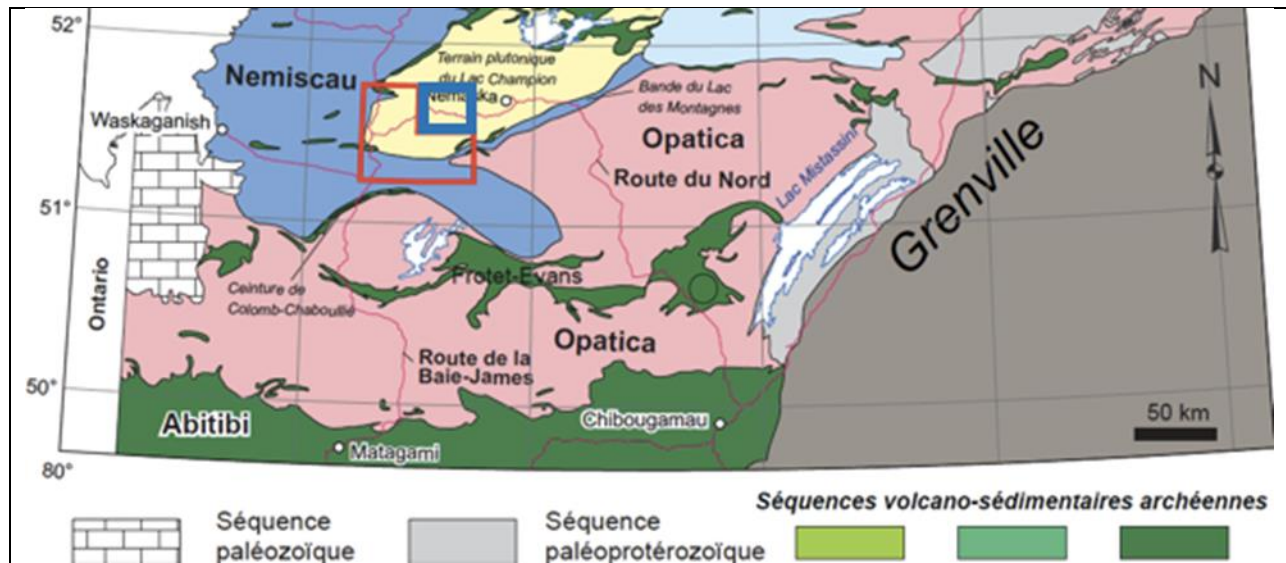


## General Geology

Geologically the area is located among three Archean subprovinces of the Superior. From north to south, it is in the La Grande subprovince, the Nemiscau and Opatica subprovinces, separated from each other by shear zones. The Nemiscau subprovince is connected to the metasedimentary Opinaca subprovince by a narrow band of volcanic and sedimentary rocks of Lac des Mountains Group (Valiquette, 1975).

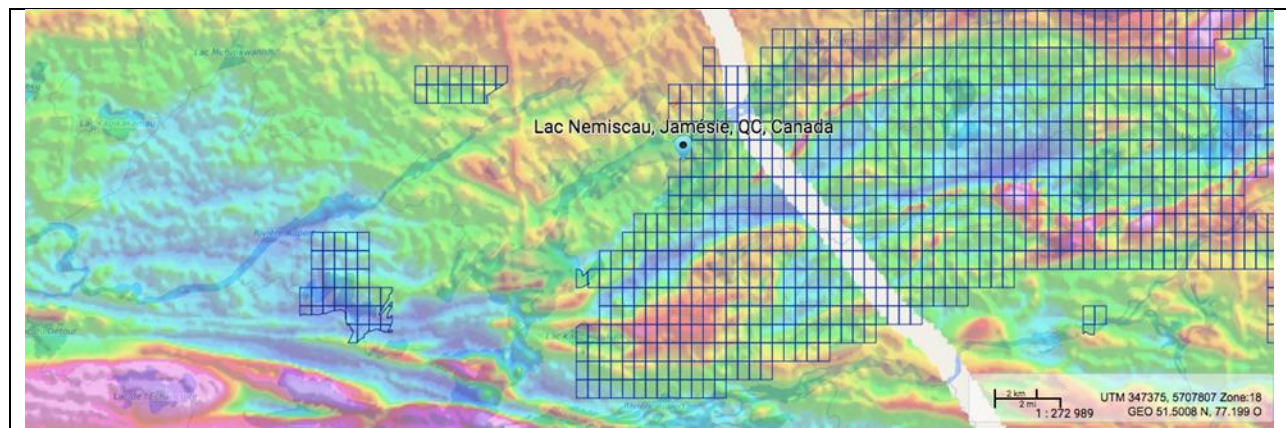
In the region where the work related to the project is supervised, the heart of the Nemiscau subprovince is mainly made up of metasedimentary rocks and variably distorted and migmatized felsic intrusive rocks. Along the northern and southern parts of the Nemiscau subprovince, kilometer extension strips mainly composed of assemblages of volcanic rocks and mafic to ultramafic intrusive rocks are present. These bands of green rocks are regularly arranged along the tectonic contacts between the Nemiscau subprovince and the neighbouring La Grande and Opatica subprovinces. Locally, the contact between the subprovinces is masked by the presence of late intrusions.

The Nemiscau subprovince constitutes a narrow band, E-W direction, at the heart of which metasedimentary rocks and felsic plutonic rocks outcrop in the form of structural domes and show a mineralogical assembly characteristic of the metamorphic granulites facies. Towards the borders of Nemiscau, the metasedimentary and metavolcanic units present a mineralogical assembly typical of the amphibolite facies.



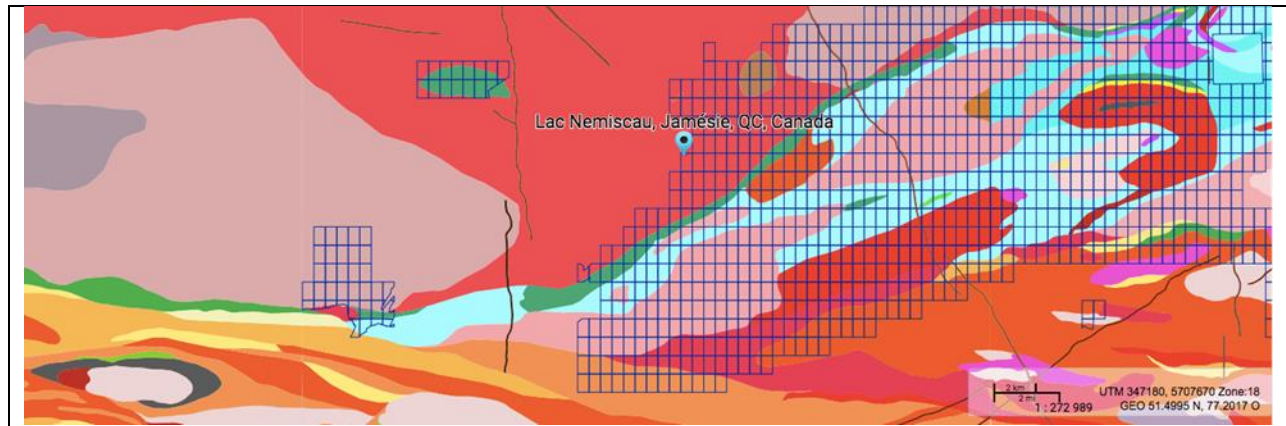
### Local Geology

Some lithology consists entirely of biotite gneissic rocks and are so flaky that the rock resembles a shale. A coarser biotite shale outcrops in places same as in the northern edge of the area on the Broadback River in contact with the granite. Chlorite and sericite schists also occur.



The lithology defined by Dube (1974) and observed in the field is as follow:

Kilometres long diabase and gabbro dikes and satellites of pegmatite and aplitite in a wide unit of pink or white granite and foliated granite. There is gray hornblende granite; foliated gray granite, granodiorite, foliated and sometimes massive quartz-diorite. It also consists of paragneiss, migmatized paragneiss bedded with amphibolites. In the mafic rocks, we find foliated diorite, amphibolites, metavolcanics, and associated tuffs and paragneiss. Finally, some ultramafic rocks: peridotites, serpentinites, actinolite and tremolite rocks.



### Known Mineralization

Small hand specimens of metabasalts containing about 5% disseminated pyrite were found at an abandoned Hydro-Québec camp at the west end of Nemiscau Lake, however the outcrops were not seen. Paragneiss containing approximately 10% pyrite with minor pyrrhotite occurs about 2 miles inland from the south shore of Nemiscau Lake, directly across from the abandoned Nemiscau Hudson Bay Company post, and is apparently responsible for the high magnetic values seen in the southwestern corner of the Nemiscau aeromagnetic map.



A magnetic anomaly 5 miles long and 1 mile wide, produced by both magnetite-bearing paragneiss and ultrabasic rocks, crosses Caumont Lake. In the paragneiss, magnetite occurs in layers nearly 1 inch thick, whereas in the ultrabasic rocks it appears as both disseminated crystals and in very thin veinlets.

Along the Rupert River in the eastern part of the area, a series of magnetic highs has been interpreted as representing magnetite-bearing paragneiss despite the absence of outcrops. This inference is based on the presence of one outcrop of magnetite-bearing paragneiss occurring within the area delimited by the aeromagnetic highs. Between 1962 and 1965, in the eastern part of the area, Canadian Nickel Company Limited drilled 19 holes ranging in depth from 66 to 483 feet. The highest assays obtained were 0.24% copper, 0.16% nickel, 0.07% zinc and minor amounts of gold and palladium.

Some work highlighted the presence of mineralized zones in the mapped region (Wallach, 1973; Girard and Schrijver, 1975; Charbonneau, 2007; Boudrias, 2012; Levesque, Michaud and Caron, 2012). The Caumont property consists of four blocks of claims distributed throughout the Lac des Montagnes Group, from NE of Lake Nemiscau, to the west, to NE of Lac Caumont, to the east (Lévesque, Michaud and Caron, 2012).

This sector was assessed in particular for its potential in Ni-Cu-PGE in ultramafic intrusions (Wallach, 1973). Analysis of a serpentinized ultramafic rock sample cut by veins of chrysotile gave a content of 2860 ppm Ni (Boudrias, 2012).

North of the prospected region, geological reconnaissance work carried out in the 1970s indicated the presence of areas mineralized in pyrite and chalcopyrite in the mafic volcanics rocks of the Anatacau-Pivert Formation (Girard and Schrijver, 1975).

From a geological point of view, this region consists mainly of metasedimentary rocks of the Nemiscau subprovince as well as part of the volcano-sedimentary unit of the Anatacau-Pivert Formation. From 2003 to 2006, De Beers collected more than a thousand till samples for indicator minerals and drilled twenty boreholes (Boucher et al., 2007).

James Bay in general, and the Nemiscau region in particular, is also recognized for its significant potential for lithium mineralization in pegmatites. The volcano-sedimentary units of the Lac des Mountains Group are indeed injected with pegmatitic granite intrusions, some of which contain lithium minerals such as spodumene or petalite (Laferrière, 2009). The best example is undoubtedly the Whabouchi deposit owned by Nemaska Lithium. A recent resource estimation established that the Whabouchi pegmatite, emplacement at  $2577 \pm 13$  Ma (Beland, 2011; Bynoe, 2014), contains resources of more than 12 Mt of ore grading 1.6% Li<sub>2</sub>O (Paiement et al., 2016). In places, beryl accompanies the spodumene in the pegmatites, especially in Whabouchi (Laferrière, 2009). Beryl can also be present (Bandyayera and Daoudene, 2017). Beryl mineralization in a pegmatite was recorded in sheet 32N06, about 4 km west of Lake Mezières (Gillain, 1965).

### **Work Done**

Using the ATVs and the boat in the prospected area, we collected 10 samples in 10 days.

Sample NN001 - Coordinates: N51°42'.828" W76°75'.883" Description: granite mixed with quartz some mineralization such as biotite and maybe some muscovite.

Sample NN002 – Coordinates: N51°43'.402" W76°76'.740" Description: Similar to Sample NN001.

Sample NN003 – Coordinates: N51°42'.501" W76°42'.501" Description: granite mixed with lots of quartz some pegmatite.

Sample NN004 – Coordinates: N51°42'.718" W76°78'.421" Description: Similar to Sample NN003 but lost it in the rough.

Sample NN005 – Coordinates: N51°33'.008" W76°88'.833" Description: granite mixed with quartz, some mineral but not much.

Sample NN006 – Coordinates: N51°30'.843" W76°78'.335" Description: lots of rapids tried our best to get a sample, similar to sample NN005.

Sample NN007 – Coordinates: N51°32'.205" W76°76'.539" Description: granite, quartz and some mineralization (biotite)

Sample NN008 – Coordinates: N51°34'.785" W76°85'.774" Description: Similar to NN007.

Sample NN009 – Coordinates: N51°33'.560" W76°83'.458" Description: granite and quartz vein.

Sample NN010 – Coordinates: N51°35'.946" W76°85'.066" Description: followed quartz vein but disappeared. Granite and quartz.

### **Mineralization and Assays**

Mineralization reported by the prospector seems very disseminated and consists of few amounts of pyrite sometimes pyrrhotite. He also mentions the presence of spodumene in white pegmatite and granite.

The assays data are consistent with the field observation. We can note that:

- 1- Even weak, there are trace values of Li.
- 2- Anomalous values of vanadium, zinc and copper.

We also observe isolated values in REE (La) and base metals.

PROJECT : Agr.2022-13 Project N24											
Au-AA23/ME-ICP41											
	Ag	Co	Cr	Cu	Fe	La	Li	Ni	Ti	V	Zn
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm
NN001		2	22	2	0,99		10	5	0,06	16	19
NN002		5	32	10	0,93		10	19	0,08	17	59
NN003		20	188	24	3,59	30	40	97	0,34	86	54
NN004		12	18	42	2,34	60	20	22	0,18	67	57
NN005		9	40	8	2,64	40	30	19	0,19	51	57
NN006		17	20	129	2,9		10	43	0,15	122	37
NN007		14	66	32	4,06	30	40	43	0,3	55	81
NN008		9	56	26	1,53		10	27	0,03	31	15
NN009	0,4	42	25	82	8,46		10	24	0,42	261	164
NN010		43	37	77	9,85		10	32	0,09	319	155

### Conclusion and Recommendations

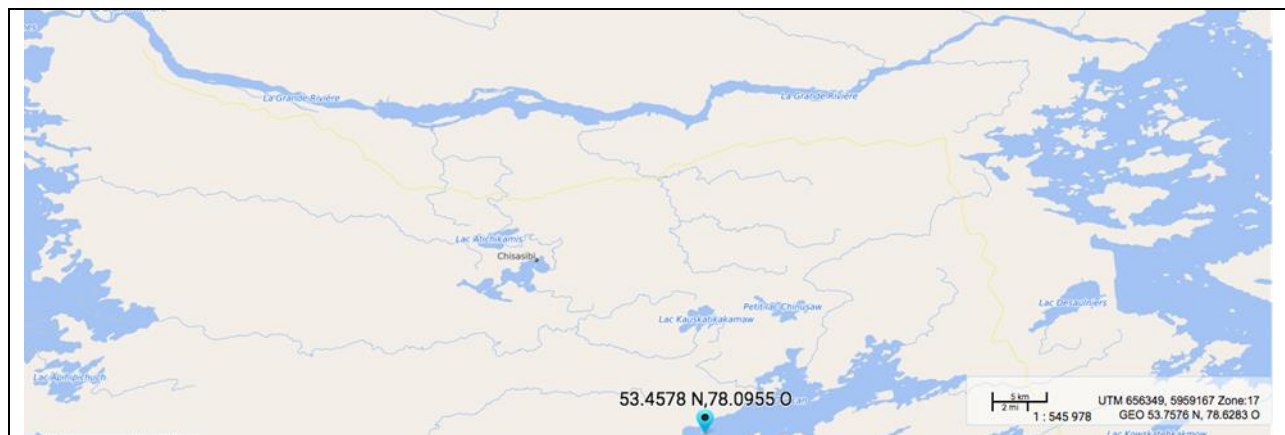
Mister Grant is a prospector trying to make a discovery.

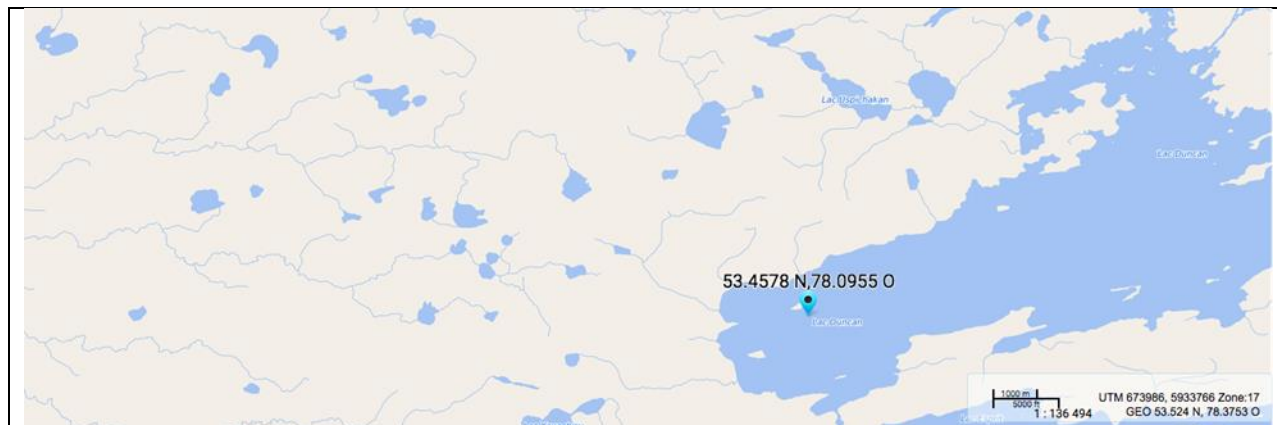
Regarding the assays data and the rock samples, we believe that this project has an oriented mineralization potential, maybe Li. We believe that more needs to be known and studied in this area. Some ores have to be discovered and we believe that, with regards to the geological environment of this area, there is hope of finding a great target.

We recommend to the prospector to continue working in this area and define the mineral potential in it. We need to see more grassroots data which means more samples and more assays.

### NORMAN GRANT, CH33 PROJECT, AGR 2022-23

#### Project Location





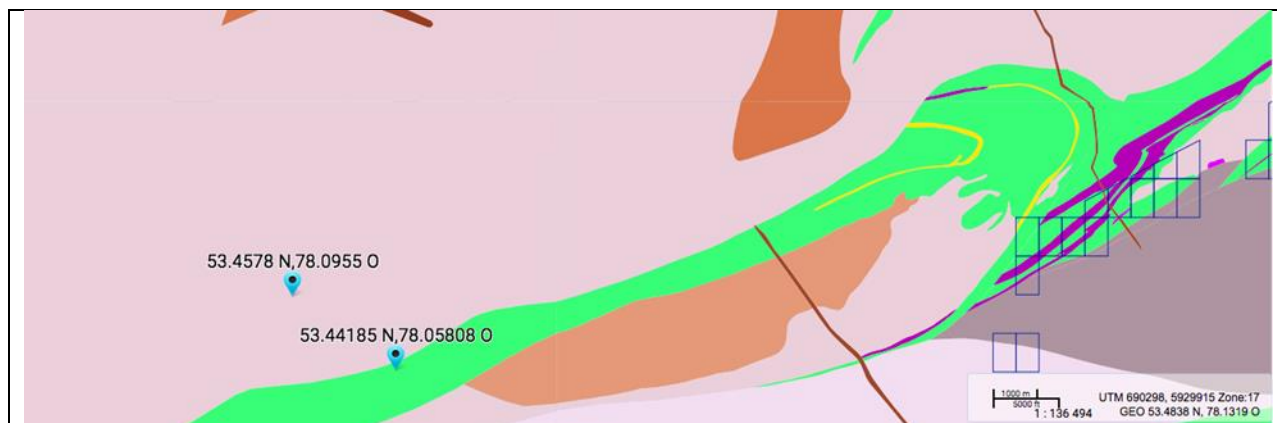
The prospected area is located at about 120 Km southeast of the Chisasibi Cree Nation, just on the east side of the Billy Diamond Highway near Duncan Lake. This area is known as a special environment where the exploration is very interesting because of the accessibility to outcrops, the great visibility and the favorable basic metals geology. The project is also in the Chisasibi traplines with simple and easy accessibility by ATV and boat.

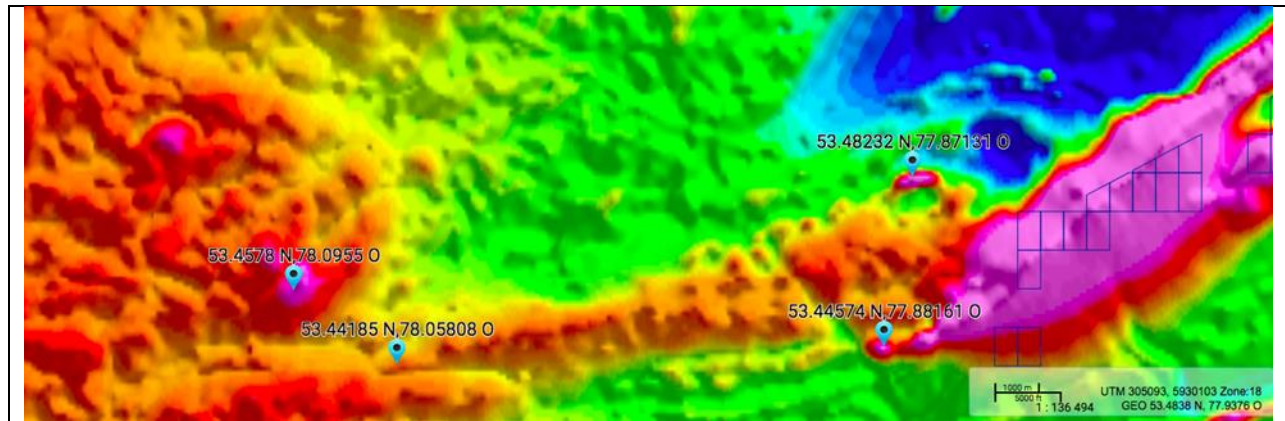
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### Local Geology

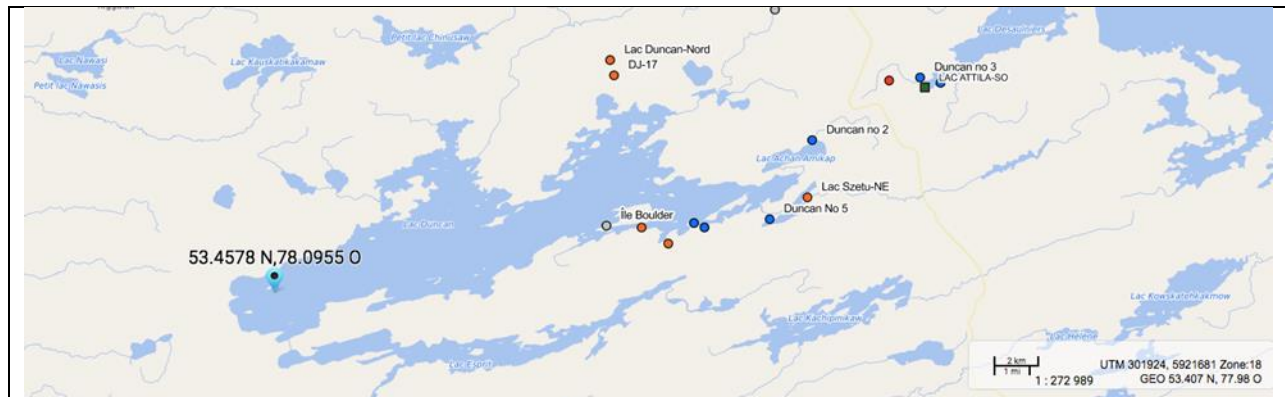
The project is located in the geological Guyer Corridor. This band of rocks is located in the eastern extension of the long of La Grande volcanic belt, in which Virginia Mining Inc. delineated a deposit in the LG-2 reservoir area (4,000,000 metric tonnes, at 2.7 Au g/t, in gold resources, La Grande Sud).





The geology of the property is characterized by a bimodal volcanosedimentary stack, composed mainly of basalt and rhyolite. Certain rhyolitic flows evolve in thickness towards bands of pyritic sericite schists that can reach up to 100 meters thick. An iron formation crosses the northern part of the property in its east-west axis, near the contact with granite intrusions where the volcanic stack is truncated. Basaltic and rhyolitic flows host several generations of sills and ultramafic to felsic porphyry dykes. A late syenitic pluton occurs at the southern edge of the rhyolitic volcanics. Stratigraphy varies from east-west to slightly north-west and the metamorphism is at the levels of greenschists with lower amphibolites, and locally upper amphibolites. The geology along the Trans-Taiga road is characterized by a volcanosedimentary assemblage dominated by mafic lavas. The latter were affected by a high-grade metamorphism (lower amphibolite) and they present the hornblende-biotite-garnet assemblage.

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We found several quartz-magnetite iron formations near the Ashtart, Nemesis and Helen lakes, in the central volcano-sedimentary band, and near of Lac Meunier in the southeast volcanic band of rocks. Bands of iron formations have a thickness that varies from a few centimeters to several meters. Groups of magnetite-rich and fine-grained rocks are at high content. Some bands show a little disseminated pyrite.

Disseminated pyrite and, more rarely, chalcopyrite were observed in metavolcanic, metasedimentary and plutonic rocks. We also noted some veins of pyrite and chalcopyrite, as well as silicified zones, in the volcano-sedimentary rocks.

Sulphide mineralization in the form of pyrite and pyrrhotite are the most abundant metallic minerals found on the project area. This mineralization is found as: disseminations within Banded Iron Formation, and as narrow bands associated near Banded Iron Formation, generally with recrystallized chert. Chalcopyrite in the form of fine disseminations and veinlets is found in the area of Lac Corvette. Many samples in the area from different sample of this mineralization returned an assay of 1.4% Cu. Samples showing

sphalerite which is also associated with folded iron formation on the Lac Corvette. A selected grab sample analyzed >10,000 ppm Zn. An anomalous gold value of 3.22 g/t was obtained from an old sampling, of sheared iron formation. Visible fracture-controlled galena was also encountered and is associated with anomalous gold.

### **Work Done**

**Day 1:** Travel to Chisasibi to meet Donna Sam for the project.

**Day 2:** Preparation and scouting for areas to be prospected, checking on material and motor for boat.

**Day 3:** Huge thunderstorm on our first day, we tried to go out on the boat but we only managed to get it out on the shore, was too windy.

**Day 4:** Today we managed to get 3 samples.

Sample1 – Coordinates: ND001 – N53°42'577" W77°57'600" Description: granite mixed with quartz and biotite

Sample2 – Coordinates: ND002 – N53°42'550" W77°57'584" Description: similar to sample 1

Sample3 – Coordinates: ND003 – N53°42'556" W77°57'616" Description: granite mixed with pink quartz and biotite

**Day 5:** Today we managed to get on the boat with a small motor, we managed to pick up 4 samples.

Sample4 – Coordinates: ND004 – N53°42'509" W78°00'248" Description: basalt mixed with smoky quartz and biotite

Sample5 – Coordinates: ND005 – N53°42'507" W78°00'279" Description: Similar to sample 4

Sample6 – Coordinates: ND006 – N53°43'593" W78°05'662" Description: granite mixed with pink quartz

Sample7 – Coordinates: ND007 – N53°42'593" W78°05'129" Description: similar to sample 6

**Day 6:** Hard rain and thunderstorm

**Day 7:** Light rain but we ran into heavy rain later throughout the day, managed to get 2 samples.

Sample8 – Coordinates: N53°40'646" W78°10'432" Description: granite with quartz vein

Sample9 – Coordinates: N53°40'671" W78°10'433"

**Day 8:** Rain delay, pouring rain.

**Day 9:** Today we tried to get as much as we could, its our last day and we still managed to get 3 samples through the rain.

Sample10 – Coordinates: N53°40'291" W78°16'330" Description: granite mixed with quartz and biotite

Sample11 – Coordinates: N53°39'548" W78°21'674" Description: granite mixed with smoky quartz

Sample12 – Coordinates: N53°39'568" W78°22'453"

### **Mineralization and Assay**



PROJECT : Agr.2022-23 Norman Grant - CH33 Exploration Project												
Au-AA23/ME-ICP41												
	Au	Be	Co	Cr	Cu	Fe	La	Li	Ni	Ti	V	Zn
	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm
ND001			15	58	5	3,1	20	20	25	0,21	59	78
ND002	0,008	0,7	16	45	3	3,2	20	20	25	0,2	49	93
ND003	0,006	0,8	18	60	18	3,14	20	20	28	0,17	48	80
ND004	0,008		19	54	24	3,87	20	30	42	0,28	74	81
ND005			8	27	14	1,97	30	20	14	0,19	36	56
ND006	0,008		16	49	27	3,49	20	20	23	0,22	60	81
ND007	0,005		9	38	8	2,12	20		15	0,19	36	44
ND008	0,007		3	11	7	1,27			3	0,1	13	36
ND009			4	13	4	1,27			7	0,08	17	27
ND010			11	41	50	1,68	20		28	0,12	42	27
ND011			7	20	9	2,32	40	20	10	0,17	41	54
ND012			8	20	1	2,76	30	30	10	0,05	43	75

This area is known for being gold and basic metals rich. Recently, a lot of discoveries have been made such as the Duncan Lake zinc/copper deposit. Assay results on this project samples are not in accordance with the huge potential of the area. However, samples such as ND006 and ND004 show interesting trace values of gold (Au) and beryllium (Be) (ND002 and ND003). The same samples shows non-negligible values of zinc and REE (La).

### Conclusion and Recommendations

The area is recognized for its great economic potential. Even if no good targets have been found in the project area, it worth going back but first making sure that the area is not claimed by other companies.

We believe that the sampling was not well done. This will be corrected by working with the prospector to improve his technique.

Recommendation to the Board is to keep encouraging the prospector to elaborate other projects that increase his experience and the chance to hit new targets.

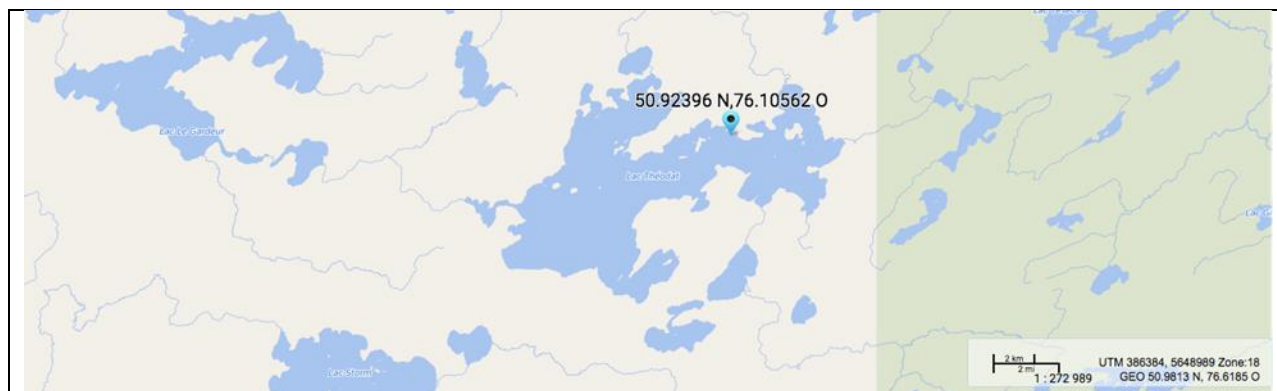


**ROBERT KITCHEN, MISHIGAMISH PROJECT, AGR 2022-16**

**Location and Access**

The project is in the Evans-Frotet Greenstone Belt and is located at approximately 100 km north of the Ouje-Bougoumou Cree Nation. Access to the belt is provided by the Waswanipi-Mattagami road or, on the western side, by the Mattagami-James Bay paved road. Three other forestry roads provide a seasonal

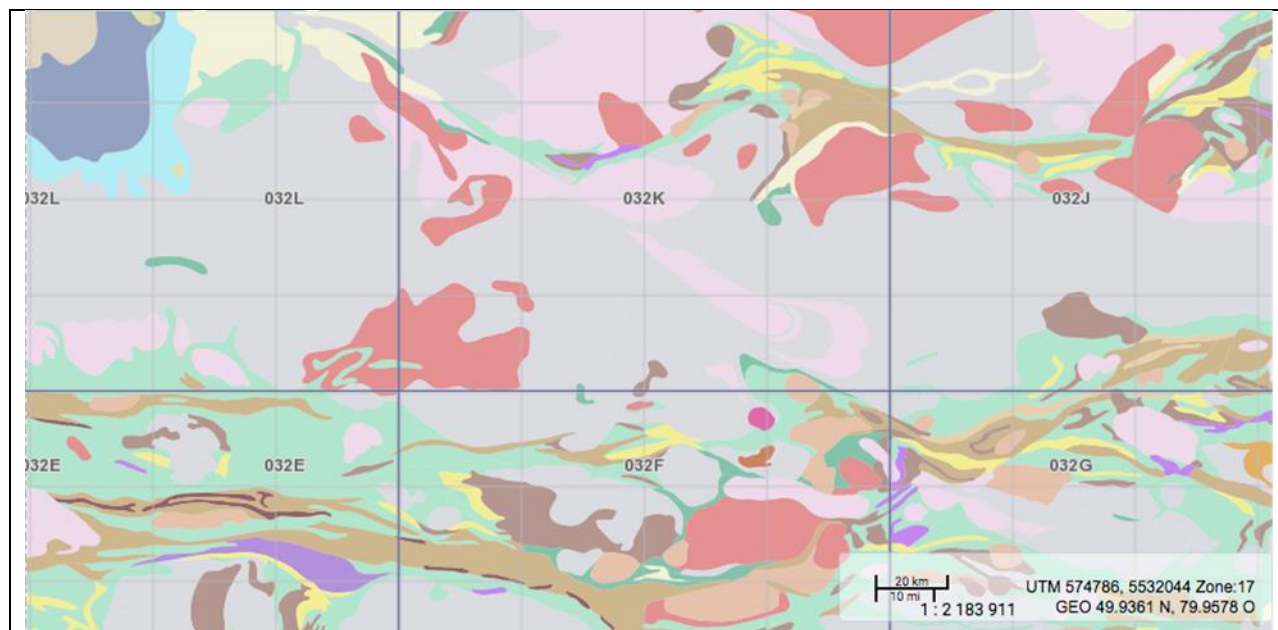
access to the central part of the belt. From these roads, a plane or helicopter is required to reach the most remote areas.



### General Geology

The Superior Province has been tectonically stable since ca. 2.6 Ga (Percival, 2007) and forms the base-ment of the northeast part of the North American continent. This Archean craton is composed of a large number of tectono-stratigraphic units, traditionally subdivided into 4 types of subprovinces (Card and Ciesielski, 1986; Card et al., 1990). These subprovinces and the units that comprise them would have successively amalgamated from north to south during the Kenoran Orogeny, between 2.72 and 2.68 Ga (Percival et al., 2006; Percival, 2007). The southeast area of the Superior Province includes the Opatoca, Abitibi and Pontiac subprovinces. In the north, the Opatoca Subprovince, consists mainly of a complex mixture of intrusive TTG-type rocks (Benn et al., 1992; Sawyer & Benn, 1993; Sawyer, 1998).

The geological setting north of Matagami is typical of Archean VMS terrains. It is characterized by vol-canic sequences that filled a large, regional synvolcanic basin within which second and third order sub-basins were developed and controlled by synvolcanic faulting that also strongly influenced the distribu-tion of sulphide deposits and the trends associated with mineralization. Stratigraphy is layer-cake with a marked change from lowermost rhyolite/dacite volcanism (Watson Lake Formation) to mafic ande-site/basalt volcanism (Wabasse Group). The sequence was concomitantly intruded by the giant Bell Riv-er Complex which was the likely heat source for the wide-spread hydrothermal activity that occurred throughout the Matagami Camp.



The Frotet-Evans Greenstone Belt is located in the Superior Province. The main lithologies consist of massive and pillowed basaltic lavas, mafic to felsic pyroclastics, and minor felsic lavas. Sedimentary rocks such as shale, greywacke, conglomerate and arkose are the major constituents of the central part of the belt. Intrusive rocks are composed of subconcordant gabbro sills often associated to the basalt flows and small syenitic stocks. Several plutons, with a composition varying from ultramafic to felsic, occur along the belt. The nature of the belt is interpreted to be a deep oceanic environment which is favorable to the formation of volcanogenic massive sulphide deposits (Simard, 1987).

The belt occupies the center of an anticline which was first recognized by Gillet (1966) then reinterpreted by Brisson (1995) in the most recent regional mapping. Brisson also recognized several E-W thrusting faults. Previous work reported NW faults particularly along the Broadback River and in the eastern part of the belt where NE structures were also recognized. Several quartz veins and shear zones were also interpreted in several zones.

The metamorphic grade of the Frotet-Evans belt grades from the greenschist facies in the core of the belt to an amphibolite grade toward the exterior at the contact with the gneissic terrane. Garnet, quartz, feldspars, aluminosilicates and different amphiboles compose the mineralogical assemblage of the gneisses. C alteration (termed "Pipe" alteration) are present and are indicative of potential for sulphide development.

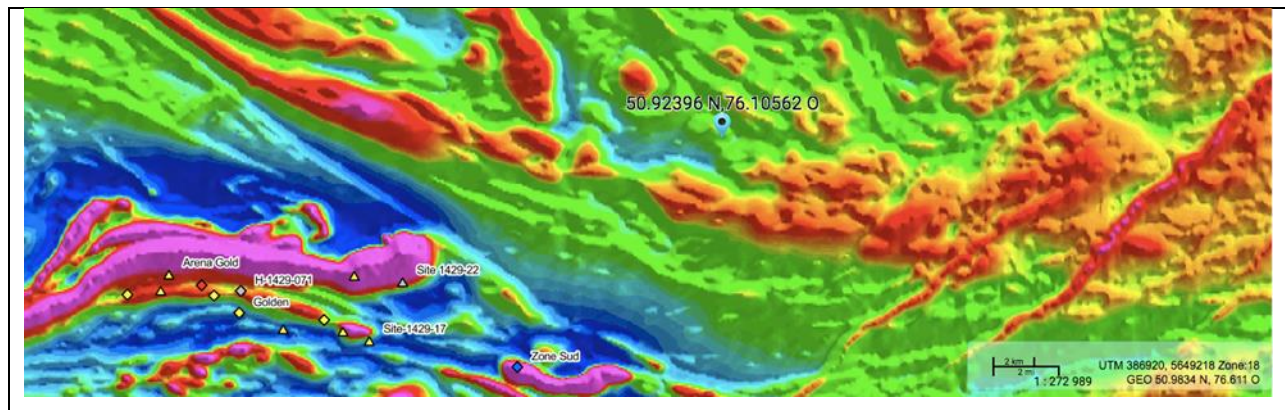
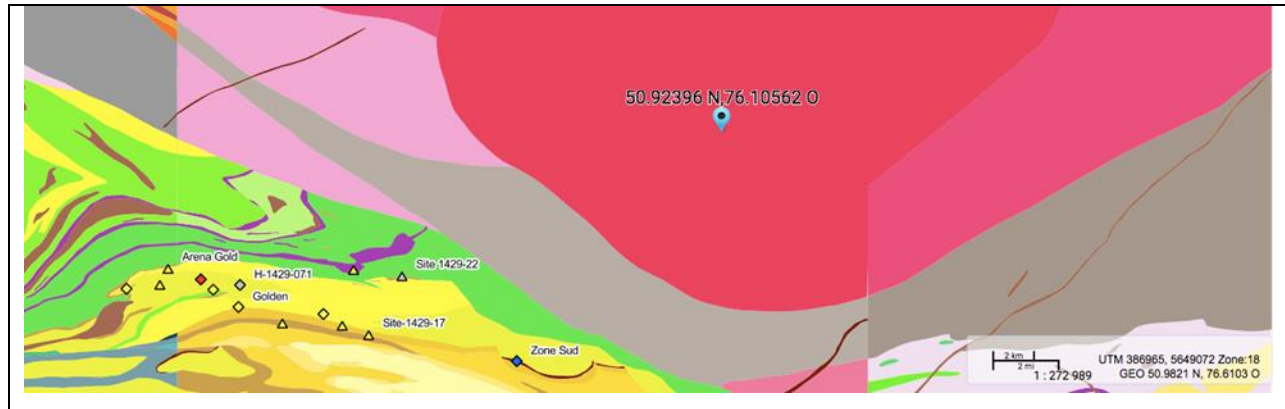
### Local Geology

The prospected area is part of the Evans-Frotet Greenstone Belt and dominated by big masses of granitoids. It is very common to observe some supracrustal rocks.

Here is the lithology of the prospected area:

- \* Metatexite derived from paragneiss, containing 20 to 50% mobilisate; biotite ± garnet granite injections
- \* Neo-Archean peridotite
- \* Diatexite derived from paragneiss, containing 50 to 90 % mobilisate and from 10 to 30% paragneiss enclaves
- \* Tésécau 1 Pluton - granite porphyroid
- \* Anatectic granite with enclaves of paragneiss and pegmatite
- \* Theodat 6 Complex - granite and pegmatite
- \* Théodat 2 Complex - granodiorite and granodioritic gneiss, granitic dykes and pegmatites

- \* Archean pegmatite
- \* Théodat 1 Complex - biotite gneiss
- \* Archean - biotite gneiss
- \* Archean tonalite
- \* Storm 1 Formation - felsic to intermediate tuff
- \* Gardeur 1 Formation - andesite
- \* Storm 1 Formation - felsic to intermediate tuff

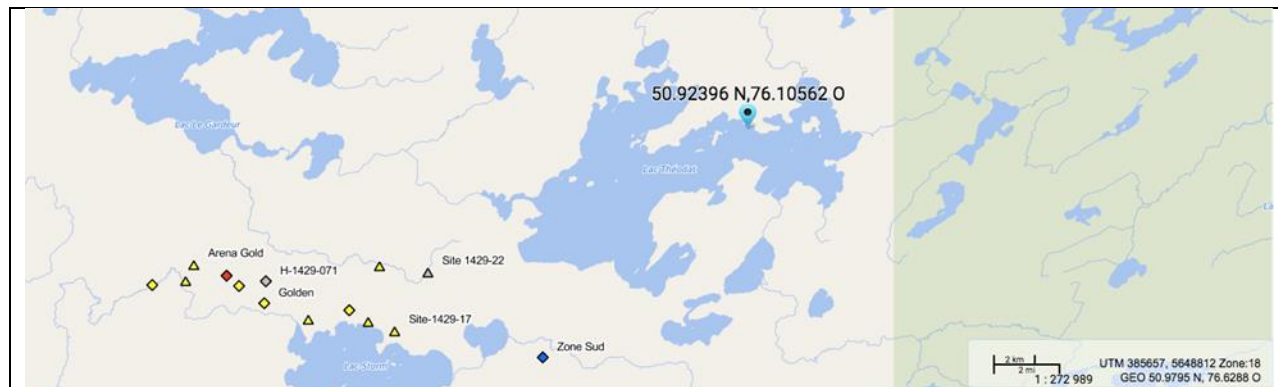


### Known Mineralisation

The Frotet-Evans belt hosts several Cu, Pb and Au showings in its eastern part. In the central and western parts, little exploration work was done in comparison with the oriental side, but a few Cu and Au occurrences are reported in assessment and government reports. The most recent MRNQ mapping program (Brisson, 1995), over the 32J/11 and 12 NTS sheets, led to the discovery of Cu and Au occurrences in the eastern part of the mapped area, the best results returned 3.39% Cu and 4.1 g/t Au in grab samples.

During the Cominco reconnaissance program, several old showings described in the government reports or in the assessment files were visited to evaluate their economic potential. A few sulphide showings returned anomalous values mainly in Cu but also in Zn and Pb. No significant Au value was detected. The anomalous values are related to disseminated sulphides in felsic and mafic volcanics as well as in some sedimentary rocks. The areas having returned the best results were staked. Most of the mineralization was observed in moderate to highly altered rocks. The alterations are diverse also depending on the grade of metamorphism. The most common alteration minerals are sericite, chlorite and anthophyllite. The silicifi-

ation is pervasive over the sampled areas. Andalusite, garnet, fuchsite and tourmaline were also observed.



## Work Done

### Prospecting Project Report W-05B Trapline

**Day 1** Packing up day in Nemaska for the longer journey

**Day 2** Travel day with my helpers to the site by truck, it took a bit longer as we transported the big boat at the same time. Head to camp to settle in and prepare the camp. Cut and split firewood with 4-wheeler and truck and also got spring water. Very windy day.

**Day 3** Got the boat in the water and test it out on the small river, and did some maintenance to the 4-wheeler. It was very windy to get out on the lake. Scouting area and discussing our plan for where to begin work, get material, boat, 4-wheeler and tools needed ready for fieldwork.

**Day 4** On the first day on the field, picked up 3 samples on the 4-wheeler, bad weather in the morning, head out in the afternoon and got back before it got dark. **Sample 1 – Sample 3** See the report on Excel spreadsheets. Description: granite, spots of mineralization in some areas, mostly quartz around.

**Day 5** Overcast day to start off, Today, we managed to pick up 4 samples with the truck **Sample 4 – Sample 7**. Description: granite mixed with quartz.

**Day 6** Today was a beautiful day to be on the field, we decided to take our big boat out on the lake. We picked up 3 samples on bedrock along the lake. **Sample 8- Sample 10** Description: granite - quartz.

**Day 7** Again today was a beautiful day to be on the field, we decided to take our big boat out on the lake. We picked up 3 samples on bedrock along the lake. **Sample 11 - Sample 13** Description: granite- quartz.

**Day 8** We had a rest day and had to stay at camp since a tornado warning was forecasted in the James Bay and our area. Planned a few more potential areas to work on.

**Day 9** Again, bad weather and decided to slowly pack up and hope for a clear break in the sky. We put all our equipment and 4-wheeler away in my shed. We left our big boat behind.

**Day 10** Travel home back to Nemaska with all the gold (smiley).



### **Assays and Mineralisation**

A number of 16 samples were collected and sent to the laboratory for assays. The results are very modest and do not show the real potential of the prospected area. The values are very weak as was always expected during the first grass root work.

We had no anomalies but some interesting values as traces of cobalt (Co) and chromium (Cr), traces of zinc (Zn), vanadium (V), titanium (Ti), and very low values of copper (Cu). Added to these metallic minerals, the assays show some lithium (Li) as rare metals and lanthanum (La) as REE.

VO22263501 / Au- AA23/ME- ICP41											
	Co	Cr	Cu	Fe	La	Li	Mn	Ni	Ti	V	Zn
	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm
NTE 001	8	41	6	1.92		20	301	20	0.17	51	33
NTE 002	8	153		1.83		20	428	33	0.12	42	34
NTE 003	12	44		1.63		10	346	24	0.11	59	18
NTE 004	7	33		2.64	20	40	386	17	0.19	40	65
NTE 005	6	25	9	2.06	20	30	319	17	0.16	32	50
NTE 006	1	9		0.41			57	2	0.02	4	9
NTE 007	8	44	13	2.49		40	417	24	0.19	43	59
NTE 008	1	6		0.79	20	10	89	2	0.03	5	14
NTE 009	1	14	12	2.21	20	20	159	3	0.05	11	16
NTE 010	1	14		0.53			78	3	0.02	6	7
RK8	4	20	7	2.04		20	185	8	0.13	24	50
RK9		3		0.71	20		22	2		11	2
RK10	4	12	21	2.63	20	10	261	4	0.11	18	49
RK11	2	6	6	1.47		10	102	2	0.07	13	28
RK12	16	186	12	3.9		70	540	62	0.3	101	75
RK13				0.32			31				2

### Conclusion and Recommendation

Geologically, the area seems to show very interesting aspects for possible mineralisation. The project is in the Abitibi Belt which is very well known in terms of mineralisation models. It is better to characterize the prospected area and define new targets and conductors.

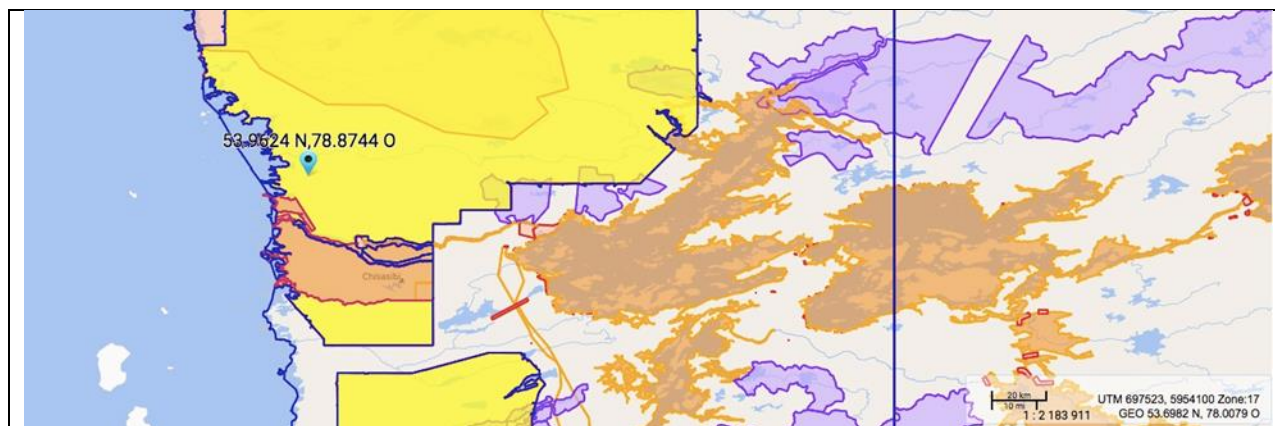
We recommend to the Board to encourage the prospectors Robert and Laura, they are beginners with a lot of energy and excitement. They have a great exploration project in a great geological area. After this first step of grass-roots, we recommend to do another grass-root sampling project. This is the way to find new targets.

### DENNIS MOAR, WAAPIKUN PROJECT, AGR 2022-06

#### Location and Access

The project area is located in Eeyou Istchee about 25 km North of Chisasibi. It is accessible by a 55 km long gravel road. It is close to the Great Whale River. A short walk or an ATV ride accesses the prospected area. The prospector used his car and a rented ATV.

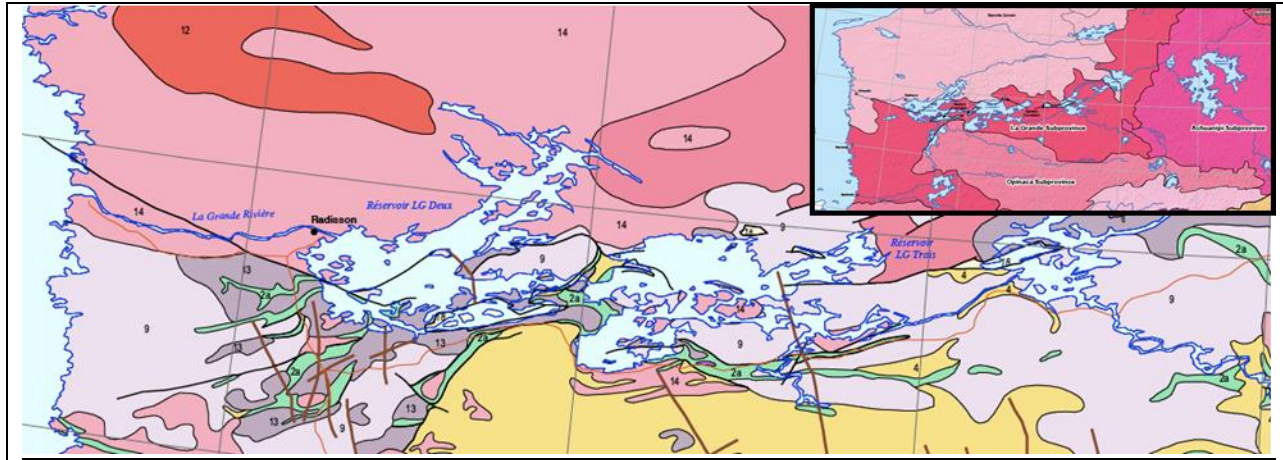




### General Geology

The prospecting project's area is part of the Superior Province (4 to 2.5 Ga) which occupies a large part of the North American continent and covers one third of Quebec. This province forms the central part of the Canadian Shield. It is known worldwide for its numerous deposits of copper, gold, zinc, nickel and silver. More recently, important discoveries of diamond showings in intersecting kimberlite rocks have been made in this province. Moreover, it is subdivided into a dozen subprovinces, half of which are located in Quebec. The project field is in large part located in LaGrande subprovince and in part on the Opinaca Subprovince.

LaGrande subprovince is made up of volcano-sedimentary rocks (Card and Ciesielski, 1986). The stratigraphy shows an arenitic basin (Apple Formation) deposited on the basement gneissic rocks (Langelier Complex). This data informed us about the existence of the opening of a rift (Yasinski Group) and shows sedimentary sequences indicative of a deep-sea environment dominated by mafic tholeiitic volcanic rocks. There are wackes and conglomerates (Shabudowan and Ekomiak formations) sitting on volcanic rocks that have been exposed by fluvial erosion.



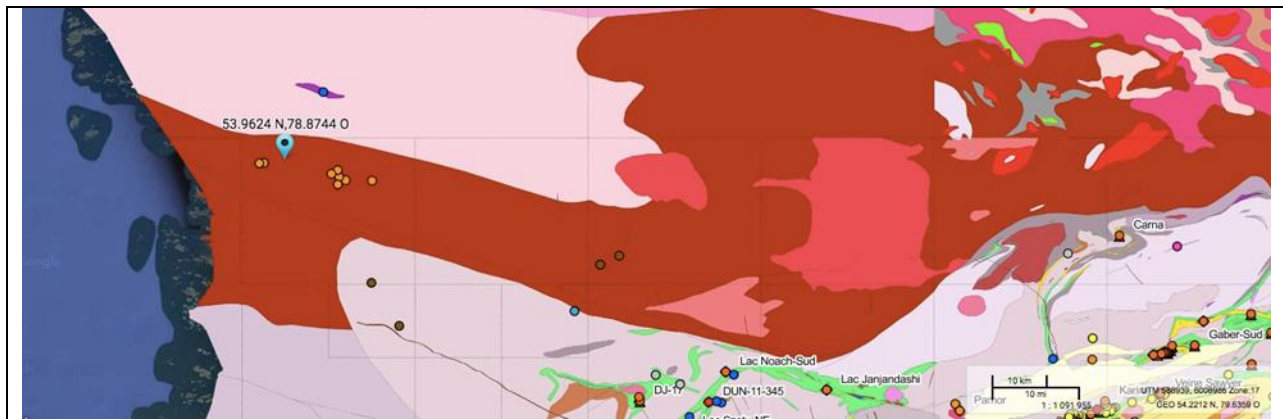
### Local Geology

All the consolidated rocks encountered in place are of Archean age with the exception of diabases, certain quartz veins and certain pegmatites which are of Proterozoic age.

The lithology consists of major discordance diabase pegmatite intrusive contact and granite and quartz-monzonite intrusive contact. Quartz veins - pegmatite - mylonite (stress period), granodiorite with minor quantities of diorite (4) of quartz-diorite and of migmatite paragneiss with migmatized metavolcanic amphibolite.

With the exception of metavolcanic rocks and paragneiss which outcrop in the southern part of the study area, the vast majority of the terrain is composed of acidic and intermediate intrusive rocks.

A very intense cataclysmic period affected this region during the Kenoran Orogeny and gave rise to the observed mylonite. The following paragraphs give a description of the rocks encountered.



Unit 1: metavolcanic: The few outcrops of metavolcanic rocks encountered are represented by a very well foliated black equigranular amphibolite. Hornblende, very strongly altered in biotite, is the main constituent with very little visible feldspars. We find disseminated pyrite in very small quantities, as well as chlorite and epidote. The metavolcanics have only been encountered inside paragneisses and the volcanic origin of these amphibolites is not proven.

Unit 2: biotite paragneiss: The fine-grained gray biotite paragneiss has alternating small light and dark beds. It locally contains beds of amphibolite oriented parallel to the foliation which varies considerably in thickness. The dip is sub-vertical. The composition of the rock varies considerably but quartz with K-feldspars and plagioclases are the main constituents. Biotite is always present altered to chlorite. Hornblende is rarely observed.

The other minerals observed are pyrite in very small quantities, magnetite, epidote and hematite. Partially migmatized zones have been recognized at different places. A few quartz veins intersect all these rocks with rare pegmatites.

The paragneiss has been recognized in several places as enclaves in the granodiorite. These enclaves can reach 100 feet in length. Some are green due to chloritization of biotite in the vicinity of the mylonite zone.

Units 3 and 4: granodiorite and diorite: This gray to pinkish gray and locally greenish intrusive rock has a coarse grain size and a porphyritic texture. At some locations near the shear zone the feldspathic porphyries exhibit the characteristics of porphyroblasts caused by the onset of shearing. The porphyries become more rounded, oriented according to the deformations and biotite surrounds them.

The essential minerals that compose it are the feldspars (plagioclase and potassium feldspars) which represent 60 to 90% of the rock, the quartz which varies between 2 and 10% and the biotite which accounts for 10 to 40%. The other minerals identified are sphene, chlorite, epidote, magnetite and pyrite. In the fractures, we recognize hematite (reddish), specularite (grey), chlorite, calcite, pyrite and at one place some grains of chalcopyrite. Feldspar phenocrysts often show Carlsbad twinning.

This rock, in addition to being cut by numerous veins of quartz, aplite and pegmatite, contains mafic xenoliths mainly made up of biotite and enclaves of biotite paragneiss.

The diorite that constitutes certain outcrops has the same characteristics as granodiorite. It probably results from a local concentration of plagioclase and biotite because the content of mafic minerals is higher than in granodiorite while K-feldspars decrease.

Unit 5: Mylonite: Mylonite is usually pinkish to greyish in color and finely foliated on the altered surface due to the grinding of the feldspars, whereas on the fresh surface it is usually greenish-grey.

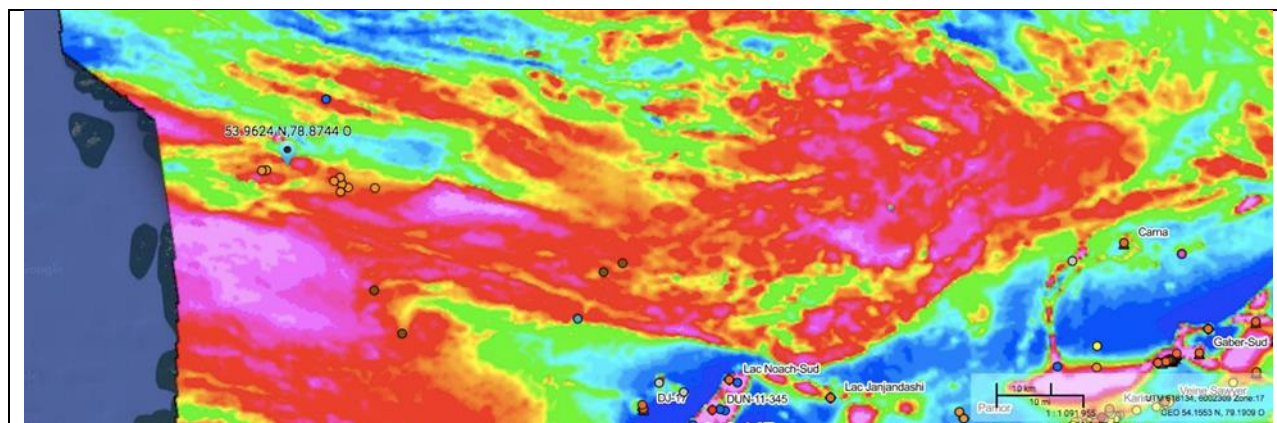
Moving away from the center, one encounters a few partially preserved and very rounded feldspar crystals. Further on, the rock becomes schistose and only the feldspar phenocrysts are recognizable, then becomes less and less foliated further from the center. Different aspects of mylonite are seen further away from its center.

Molybdenite on the wall of a quartz vein and yellow alteration in ferro-molybdenite can be seen. (Km 70 on the road to Chisasibi). The width of mylonite varies around three quarters of a mile. Including the schistose and very foliated zones on each side, the width varies between 1 and 2 miles. It is easily recognized on aerial photographs and is the only unit that has been located on geological maps.

Unit 6: Quartz-monzonite: This equigranular pink rock varies in grain size from fine to coarse. It very often presents the characteristics of an intrusive whereas locally we observe a gradational transition to granodiorite. It forms elliptical mountains with a rounded top and whose major axis is oriented WNW. along the main structural direction.

It occurs north of the mylonite zone between two major faults and is very abundant just north of the La Grande River in the southwest corners of 33 F 13 and southeast of 33 E 16. There are a lot of pegmatites and few quartz veins. A few diabases intersect it. It is characterized by a very high background noise in radiometry which easily differentiates it from other units.

It is also very fractured and locally schistose over 1 to 2 inches wide. These features indicate that the shear zone was active for some time after the emplacement of the quartz-monzonite.

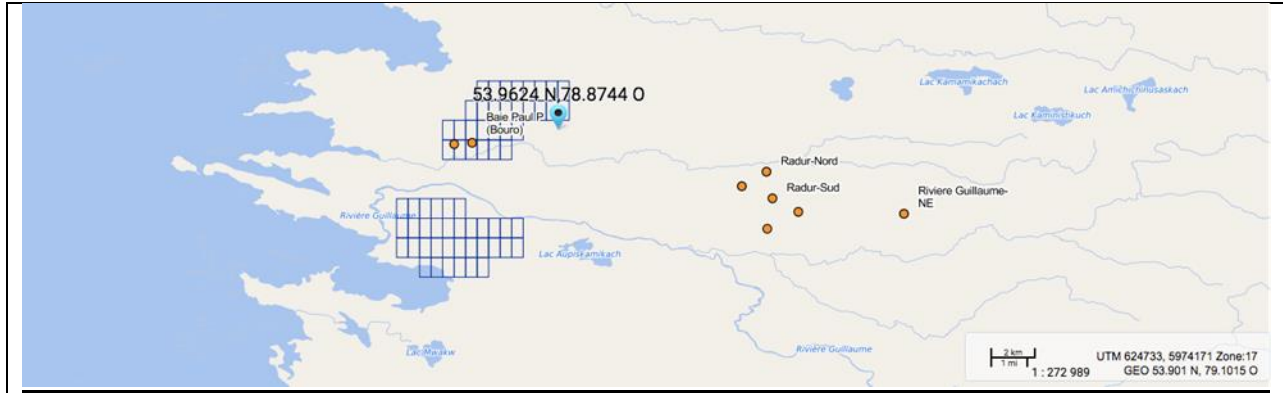


The intrusion of this rock follows shear zones and major en echelon faults that are oriented WNW and probably took advantage of these areas of weakness to put themselves in place. This placement was accompanied by pronounced hematization. The composition of quartz-monzonite is as follows: potassium feldspar (microcline) 50 to 60% plagioclase (albite) 20 à 30% quartz 10 to 15% biotite 1 to 2% sphene magnetite allanite 1% alteration: chlorite, epidote, hematite 1%.

The results of the analyzes show that the quartz-monzonite has a lower K<sub>2</sub>O content than the pegmatites. The Yasinski Group, which overlies the Apple Formation, consists mainly of basalt, andesite and iron formation. Bands of sandstone, lenses of polygenic conglomerate and some felsic volcanics are intercalated there. The volcanics of Yasinski Group are overlain by sandstones and polygenic conglomerates (Shabudowan and Ekomiak formations). The volcano-sedimentary sequence shows an evolution of continental margin to a deeper sea environment. Upper sedimentary rocks bear witness to a tectonic convergence, an uplift of intrusive rocks and their erosion. A new generation of hornblende tonalite, hornblende monzodiorite and quartz diorite (Duncan intrusions and Amisach Wat pluton) emplaced after the first phases of deformation. All these rocks are injected by gabbros and meter to kilometer intrusions of peridotite and pyroxenite (Menarik Complex and Chapus Bay pyroxenite). The last Archean magmatic events of the region are the emplacement of lamprophyres and ovoid plutons (Tipitipisu pluton, Bruce Lake syenite, Taylor Lake granite plutons, Goutier et al., 1998g) and late-tectonic plutons associated with pegmatites (Vieux-Comptoir Granite; Goutier et al., 1998g). The gneiss of the Langelier Complex shows deformation and metamorphism prior to the formation of the volcano-sedimentary sequence. The first two phases of deformation affecting supracrustal rocks, younger than the Langelier Complex, are associated with NE-SW mylonite zones, NW dipping, and overlapping with the gneisses. The third phase, probably coaxial, picks up the mylonites and deforms them into folds, locally kilometers in size. A domed folding phase and basins, at the level of the subprovinces, is responsible for the uplift and the exposure of highly metamorphosed areas. The large dextral shear, partly separating the Bienville and La Grande subprovinces, is associated with a more recent fifth phase extending from the Whapmagoostui region to that of Waswanipi.

### Known Mineralization

Examination of statutory works submitted to the ministry (GM series), as well as the visit of the main mineralized showings, made it possible to characterize the mineralization present in the Yasinski Lake area. These works, completed compilations by Gauthier (1996) and Gauthier and para. (1997), suggest the presence of at least 15 types of mineralized deposits in the greater Yasinski area. Table 2 (in the appendix) summarizes the characteristics of these mineralizations. The territory covered by the Passe Chimusuminu (33F/11) and Lac Vion (33F/12) NTS sheets has four types of mineralization: - Algoma-type oxide facies iron formation (type II); - Algoma-type sulphide facies iron formation (type III); - Lac Long type epigenetic mineralization (type VIII); - Late polymetallic vein mineralization (type XIII).



**Work Done**

Sample locations for project Waapikun:

Waapikun sample 1- N53°57'36.5" W078°54'48.6"

Waapikun sample 2- N53°57'36.7" W078°54'47.0"

Waapikun sample 3- N53°57'39.1" W078°54'39.9"

Waapikun sample 4- N53°57'45.3" W078°54'22.9"

Waapikun sample 5- N53°57'45.3" W078°54'21.7"

Waapikun sample 6- N53°57'45.3" W078°54'21.8" Mag\*

Waapikun sample 7- N53°57'45.6" W078°54'21.9" Mag\*

Waapikun sample 8- N53°57'45.6" W078°54'23.0" Mag\*

Many lithologies have been sampled in the prospected area in the perspective of testing the metallic and non-metallic minerals.

Many pink granites, paragneiss, granitic gneiss, migmatite, amphibolite enclaves, rusty unidentified rocks and very magnetic black rock (old basaltic rocks).

**Mineralization**

The sampling has been targeted to analyze rocks for rare metals such as lithium and beryllium; rare earth mineral (lanthanum) and basic metals (Co, Cr, Cu ...).

The assay shows some traces of Be and Li (60 ppm); and REE (La) (60 ppm). There are no high target values even in metals where we observe some chromite values and very few traces of Cu, Co, Fe, Ti, V and Zn.

# of SAMPLES : 8 Au-AA23/ME-ICP41																			
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	Be	Co	Cr	Cu	Fe	La	Li	Ni	Ti	V	Zn
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm
W-S1		4	35	5	1,48	40	30	11	0,13	20	33
W-S2	0,6	1	23	3	0,69			3	0,02	6	12
W-S3		6	29	5	1,8			12	0,16	36	33
W-S4	0,5	13	142	3	2,35		60	68	0,24	42	65
W-S5		4	29	1	1,38			8	0,1	20	28
W-S6	0,5	8	11	17	2,22	60		5	0,12	31	35
W-S7	0,5	7	127	27	2,39		50	36	0,16	41	50
W-S8	0,6	4	15	37	2,73	40	30	5	0,2	34	65

### Conclusion and Recommendations

As with other areas in the Chisasibi region, the prospected area is mapped at large scale and needs smaller scale mapping at 1/250000. The geology seems to show good mineral potential such as basic metals and rare metals (Cr, Be, Li etc.). The project defined a new anomalic area for chromite. The collected data and the quality of the lithology suggest that we should do more sampling. The geology is good but the mineralization is not representative.

We recommend to the prospector to prospect in the same region but changing the area to the southeast where there are more volcanic and sedimentary rocks. My recommendation to the Board is to encourage the prospector Dennis Moar. He enjoys prospecting and is a hard worker. Dennis needs to continue developing his techniques in the mineral prospecting by doing new projects in Eeyou Istchee.



**ROBERT RATT, MIST EAST PROJECT PHASE 2, AGR 2022-05**  
**Location and General Geology**

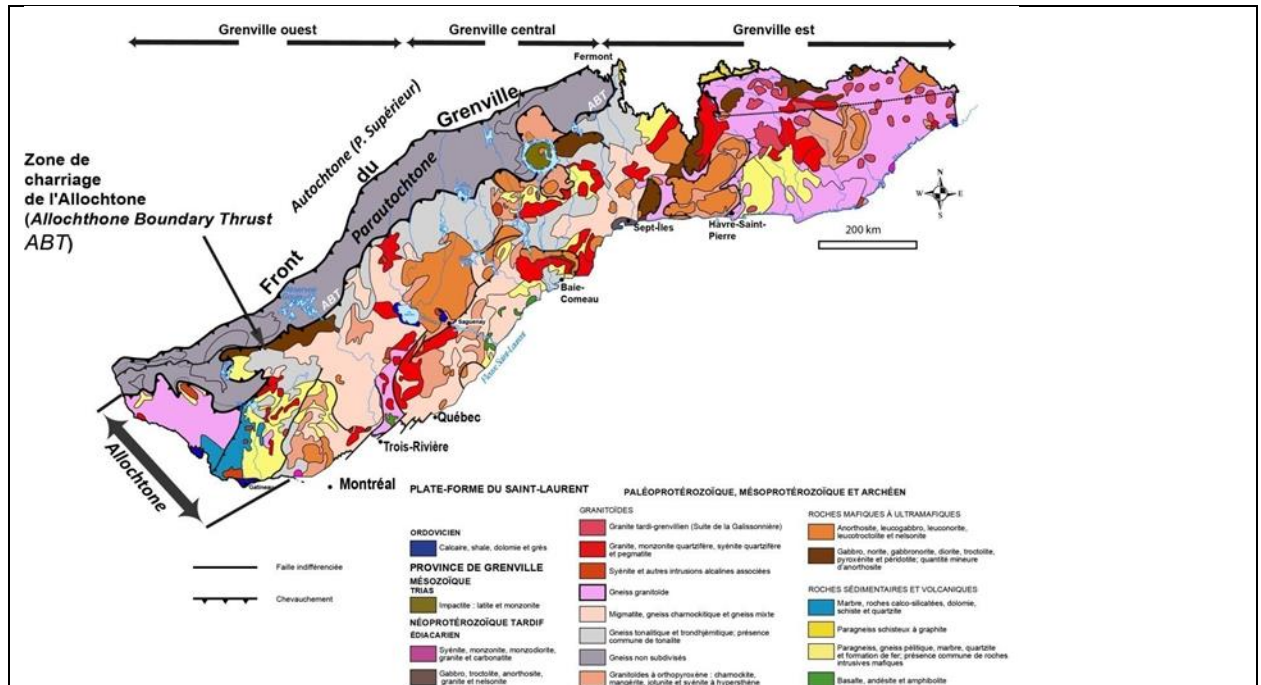
The Mist East Project is located on the Mistissini Trapline M46A about 60 km east of the Cree Nation of Mistissini. It is accessible via the Highway 167 and forestry roads. This is the first time that an Eeyou prospector works on the geological domain of the Grenville Province.



The Mist East project is located at the contact of the southeast part of the Superior geological Province which is the Opatica subprovince containing Mistissini Basin, and the Parautochthonous zone of the Grenville Province. It is represented by a band parallel to the Grenville Front and consists of Archean or Proterozoic rocks (lower-Aphebian or middle-Helikian) supposed to be in continuity with the Autochthonous (Superior Province). The Parautochthonous is characterized by numerous terrains (terranes). The prospected area has been strongly affected, both in terms of deformation and metamorphism, by the various orogenic episodes of the Grenville ( $\pm 1.1$  Ga). The effects of this tectonic polyphase are perceptible at the regional and local level as well as at the outcrop level. The number of faults and folds created by the collision of two massive provinces (Superior and Grenville) and the various geological aspects characterized by different lithologies is a potential prospect for great discoveries.

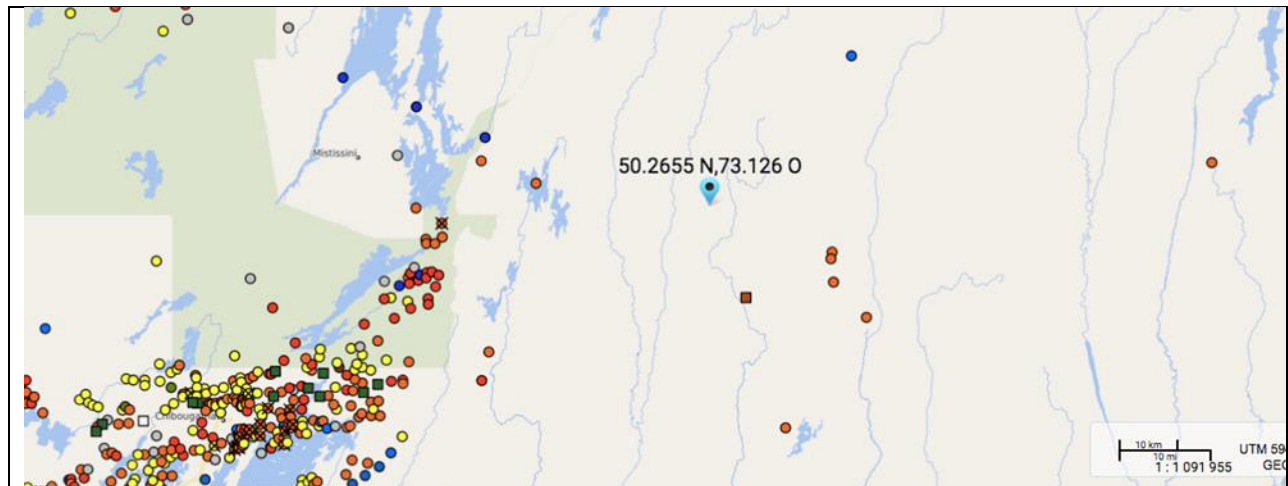
Generally, the Grenville Province is divided into two parts, the Parautochthonous and the Allochthonous. The two zones are separated by a major thrust structure called the Allochthon Boundary Thrust (Rivers et al., 1989). The Parautochthon consists of rocks mainly of Archean age in contact with rocks of the Superior Province and bound to the northwest by the Grenville Front located near the Grenvillian Range. The Allochthon is composed of rocks of Paleoproterozoic to Mesoproterozoic age. The Grenville Province is largely underlain by gneiss complexes consisting of high-grade metamorphic rocks. It also contains the greatest quantity of anorthositic intrusions known in the world (Ashwal and Wooden, 1983). The Grenville Front constitutes a major discontinuity of the North American continent resulting from the collision of the Allochthonous with the rocks already in place (Autochthonous) of the southeastern part of the Superior Province. It is generally accepted that the Grenville Front is the first significant manifestation of the upwelling of deep crustal levels of Archean rocks (Rivers et al., 1989; Indares and Martignole, 1989). The Grenville Front is a zone of fracturing and mylonitization along steep to moderate dipping surfaces to the southeast and south. This zone testifies to the transition from brittle deformation to ductile deformation towards the orogen (Davidson, 1998). The Grenville Front does not occur as a single fault or well-defined zone of mylonitization along its entire length, although in some areas it may. The Grenville Front is marked by the Buteux Fault.





### Known Mineralization

The area is poorly known in terms of mineralization. There is some information concerning gold (Au) in paragneiss, copper (Cu) in quartz veins cutting paragneiss and amphibolite hornblende/biotite (chalcopyrite/pyrite), silver (Ag) and iron (Fe).



### Local Geology

The prospected project is geologically very versatile and the lithology consists of: Archean gneiss, Archean orthogneiss, Archean amphibolite, Archean migmatite with paragneiss and granite, Neoproterozoic foliated tonalitic gneiss and tonalite, Archean troctolite, Neoproterozoic amphibolite, biotite and hornblende gneiss, and Proterozoic granites with large veins of pegmatite.



### Work Done

Day 1: got our gear ready, gassed up and went to our first worksite, prospected along the outcrop took some samples. Had lunch in the field, weather was nice. Good mineralization.

Day 2: gassed up and went to our second worksite, good mineralization and took a couple of samples, prospected along the outcrop. Weather was good.

Day 3: went to our third worksite, saw more rusting on an outcrop and took samples, weather was ok, rained on and off. Would be nice to have a rock saw at this site and a power broom brush.

Day 4: went a little further east from our main site, sampled a heavily magnetic rusted rock that was hard to identify, it was also extremely magnetic.

Day 5: weather was ok, rained on and off, prospected new area of interest, found good mineralization and collect some samples, had lunch in the field.

Day 6: today was raining heavily, we prospected by the road and collected good samples.

Day 7: was raining today again, stayed by the road, found some good sulphides, silver-ish and some yellow-ish colors.

Day 8: gassed up, bought lunches and drove to our destination, worked further south from the main worksite, collected samples.

Day 9: rained heavily today, worked along the roads, took samples, had lunch in the truck and moved to another spot and collected more samples.

Day 10: today we spent half a day in the field, collected some samples and headed back to store away the equipment, tagged our samples



Samples collected and sent to the Laboratory

Mist East 2022

N 50°04.9482 1 M.E 1 ✓  
W 073°31.1618  
N 50°05.2504 2 M.E 2 ✓  
W 073°31.1410  
N 50°05.4466 3 M.E 3 ✓  
W 073°30.7768  
N 50°05.4295 4 M.E 4 ✓  
W 073°30.9587  
N 50°05.5082 5 M.E 5 ✓  
W 073°30.7310  
N 50°05.9992  
W 073°30.7502 M.E 6 ✓  
N 50°06.0045  
W 073°30.7514 M.E 7 ✓  
N ~~50°06.1143~~ 50°06.1143  
W 073°30.7562 M.E 8 ✓  
~~N 50°06.2589~~  
W 073°30.7907 M.E 9 ✓  
N 50°06.6507  
W 073°30.6991 M.E 10 ✓

N 50°06.6222  
W 073°28.5313 M.E 11 ✓  
N 50°05.0201  
W 073°30.0495 M.E 12 ✓  
N 50°04.5853  
W 073°30.1969 M.E 13 ✓  
N 50°07.0298  
W 073°28.3966 M.E 14 ✓  
N 50°07.0637  
W 073°28.4658 M.E 15 ✓  
N 50°07.1278  
W 073°28.6497 M.E 16 ✓

**Assays and Mineralization**

The data from the Laboratory concerning the 15 samples taken during this project was not as expected but interesting enough to keep prospecting in this prospected area. Almost all the samples contain some traces of gold and seem to suggest a gold potential. Two samples show very promising values of chromite (M.E 14 and M.E 15). The most important is the value of 0.1% of copper that has been found in the last project, sample M.E 008, 3 S.R. The prospector tried to reproduce the same values by sampling the same area where 1% has been found. Other interesting values have been detected such as (M.E 1, M.E 11, M.E 12 and M.E 16) which are significant. Some samples show traces of chromite (M.E 15 and 16). We can focus also, on the molybdenum in the sample (M.E 11). There is only one interesting value of zinc in sample M.E 11.

PROJECT : M.E 2022 — Au- AA23/M E- ICP41											
	<b>Au</b>	<b>Be</b>	<b>Co</b>	<b>Cr</b>	<b>Cu</b>	<b>Fe</b>	<b>Mo</b>	<b>Ni</b>	<b>Ti</b>	<b>V</b>	<b>Zn</b>
	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
<b>M.E 1</b>			17	25	234	5,43		24	0,15	62	29
<b>M.E 2</b>	0,009				20	9,57		4	0,11	49	24
<b>M.E 3</b>	0,009		11		73	6,92		6	0,18	28	51
<b>M.E 4</b>			11	44		3,96		24	0,28	21	67
<b>M.E 5</b>	0,009		16	39	47	1,67		34	0,17	31	38
<b>M.E 7</b>	0,007		8	26	25	2,31		19	0,24	39	34
<b>M.E 8</b>						0,81		10	0,07	10	14
<b>M.E 9</b>	0,009			19	63	2,02		9	0,14	25	28
<b>M.E 10</b>	0,006			13		1,01		4	0,06	12	4
<b>M.E 11</b>	0,018				152	2,36	34	2	0,22	42	128
<b>M.E 12</b>	0,006		18		139	3,42		12	0,23	87	42
<b>M.E 13</b>	0,005	0,8				24,2				6	3
<b>M.E 14</b>	0,005		19	84	24	3,26		52	0,12	81	46
<b>M.E 15</b>	0,01		21	133	51	5,13		63	0,31	85	86
<b>M.E 16</b>	0,006		15	24	136	3,63		23	0,2	52	62

### Conclusion and Recommendations

As mentioned in the first phase of this project, this one is different from the projects the prospector Robert Ratt had before. It is because the geology of the prospected area is different and the mineralization is poorly known. The first data supports the choice of the prospector. The lithology of the prospected area seems to be very interesting for basic metal deposits in amphibolite (old mafic lavas).

The results of assays show interesting values of gold (Au) and copper (Cu). In this kind of project where old and young rocks are coexisting, it is usually the environment to find different mineralization. The only claims in this area are the ones of SOQUEM, which is a good reference in terms of exploration.

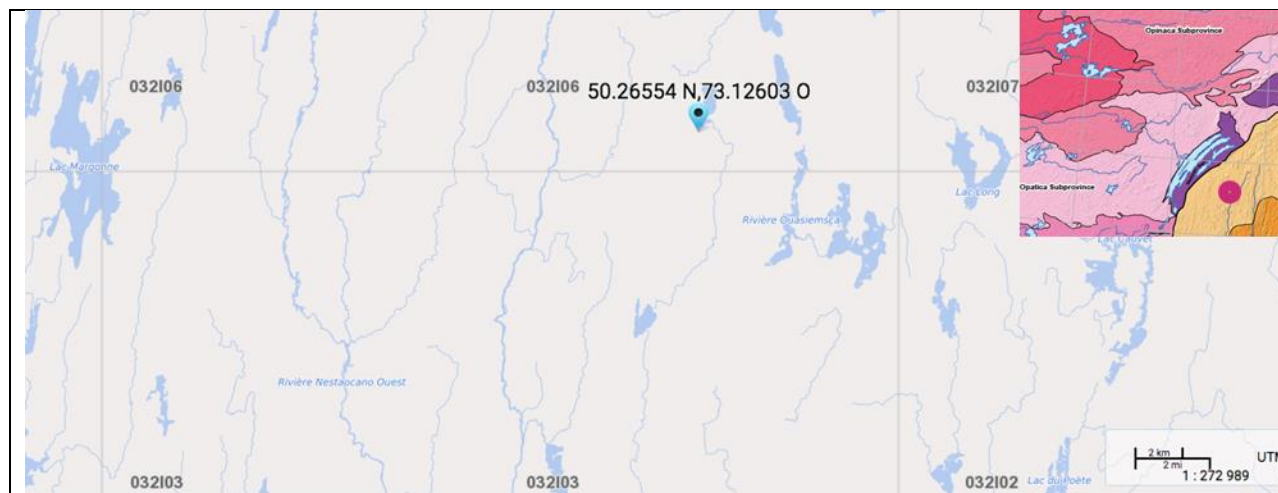
We recommend that the prospectors submit again a proposal for another project in this same area where the samples M.E 11, and from the phase 1 of this project M.E 008,3 S.R and M.E 017 were taken.

In the purpose of encouraging the prospectors to keep doing their great work, I suggest to my Board to continue funding their projects in Eeyou Istchee.

### ROBERT RATT, MIST EAST PROJECT PHASE 3, AGR 2023-24

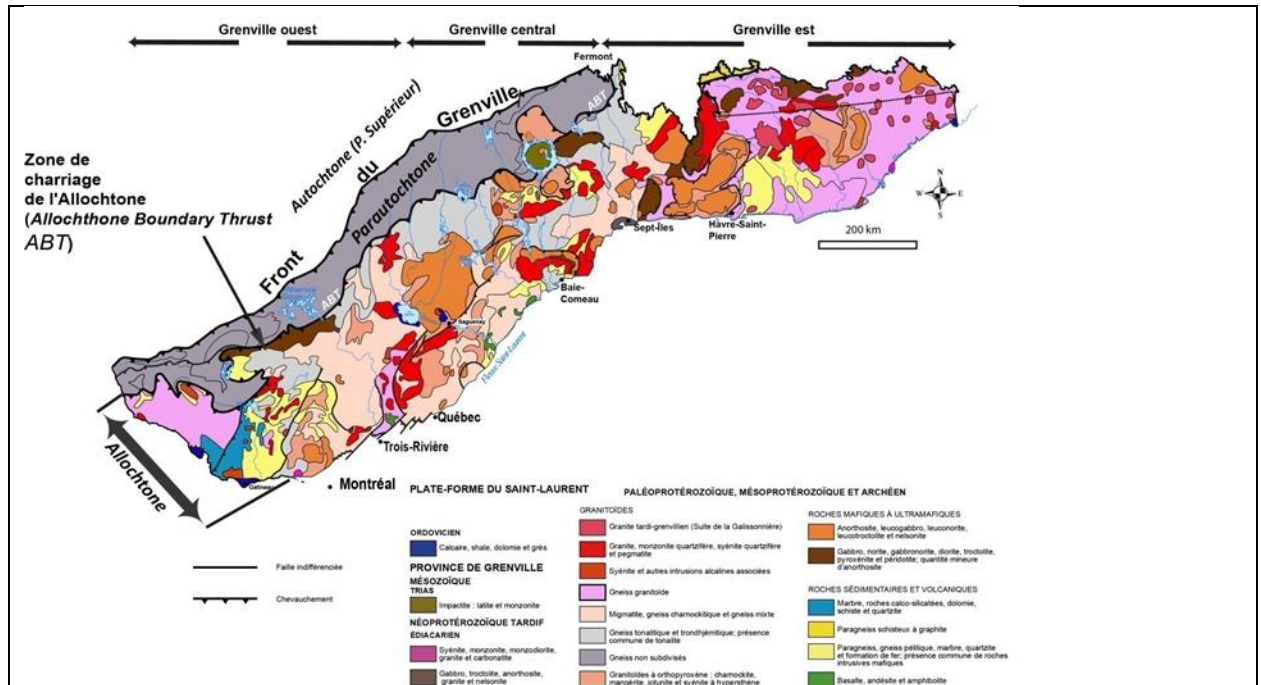
#### Location and General Geology

The Mist East Project is located the Mistissini Trapline M46A about 60 km east of the Cree Nation of Mistissini. It is accessible via the Highway 167 and the forestry roads. This is the first time that an Eeyou prospector works on the geological domain of Grenville Province.



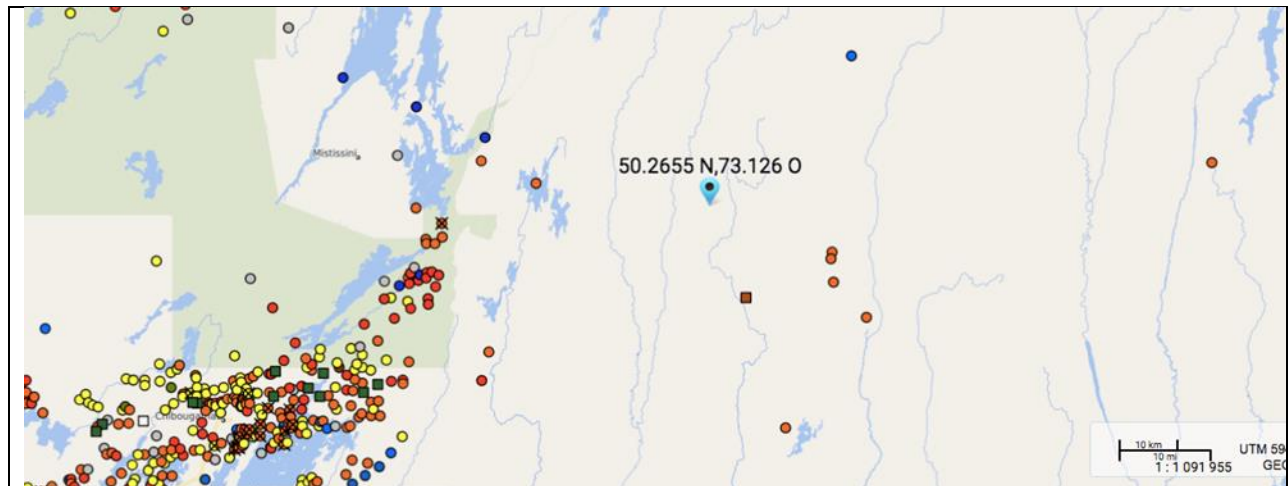
The Mist East project is located at the contact of the south-east part of the Superior Geological Province which is the Opatuca Subprovince containing Mistissini Basin, and the Parautochthonous zone of the Grenville Province, represented by a band parallel to the Grenville Front and consisting of Archean or Proterozoic rocks (lower-Aphebian or middle-Helikian) supposedly in continuity with the Autochthonous (Superior Province). The Parautochthonous is characterized by numerous terrains (terranes). The prospect-ed area has been strongly affected, both in terms of deformation and metamorphism, by the various orogenic episodes of the Grenville ( $\pm 1.1$  Ga). The effects of this tectonic polyphase are perceptible at the regional and local level as well as at the level of the outcrops. The numerous faults and folds created by the docking of two massive provinces (Superior and Grenville) and the various geological aspects characterized by different lithologies is a potential prospect for great discoveries.

Generally, the Grenville Province is divided into two parts, the Parautochthonous and the Allochthonous. The two zones are separated by a major thrust structure called the Allochthon Boundary Thrust (Rivers et al., 1989). The Parautochthon consists of rocks mainly of Archean age in contact with rocks of the Superior Province and bounded to the northwest by the Grenville Front located near the Grenvillian Range. The Allochthon is composed of rocks of Paleoproterozoic to Mesoproterozoic age. The Grenville Province is largely underlain by gneiss complexes consisting of high-grade metamorphic rocks. It also contains the largest quantity of anorthositic intrusions known in the world (Ashwal and Wooden, 1983). The Grenville Front constitutes a major discontinuity of the North American continent resulting from the collision of the Allochthonous with the rocks already in place (Autochthonous) of the southeastern part of the Superior Province. It is generally accepted that the Grenville Front is the first significant manifestation of the upwelling of deep crustal levels of Archean rocks (Rivers et al., 1989; Indares and Martignole, 1989). The Grenville Front is a zone of fracturing and mylonitization along steep to moderate dipping surfaces to the southeast and south. This zone testifies to the transition from brittle deformation to ductile deformation towards the orogen (Davidson, 1998). The Grenville Front does not occur as a single fault or well-defined zone of mylonitization along its entire length, although in some areas it may. The Grenville Front is marked by the Buteux Fault.



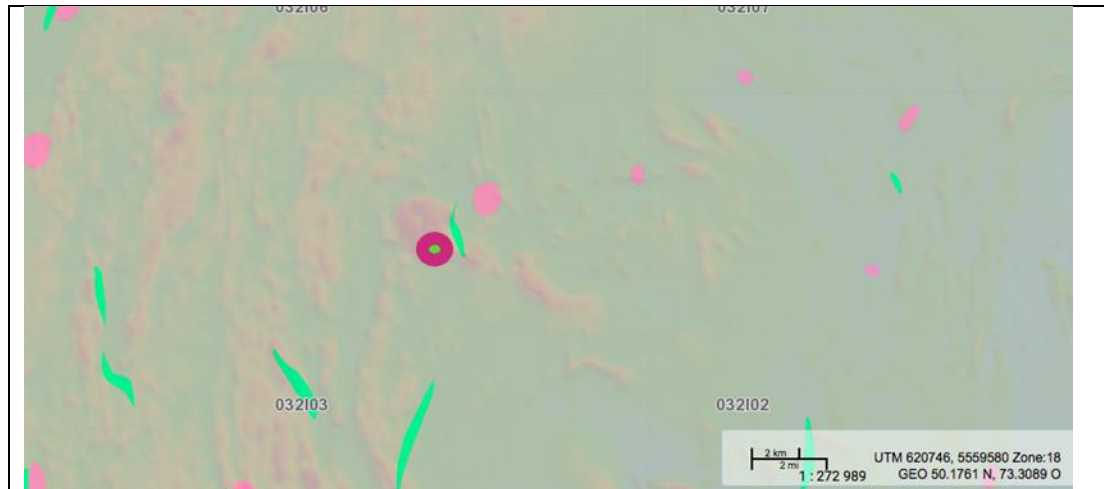
### Known mineralisation

The area is poorly known in terms of mineralisation. There are some information concerning gold (Au) in paragneiss, copper (Cu) in quartz veins cutting paragneiss and amphibolite hornblende/biotite (chalcopyrite/pyrite), silver (Ag) and iron (Fe).



### Local Geology

The prospected project is geologically very versatile and the lithology consists of: Archean gneiss, Archean orthogneiss, Archean amphibolite, Archean migmatite with paragneiss and granite, Neoproterozoic foliated tonalitic gneiss and tonalite, Archean troctolite, Neoproterozoic amphibolite, biotite and hornblende gneiss, and Proterozoic granites with veins of pegmatite.



**Work Done**

23/07/20: went to where I found high grade copper and took more samples.

23/07/21: weather was bad, rain and lightning, worked in the shed organizing and preparing equipment for the next day.

23/07/22: the weather was still bad, we went into the field, new location and collected a sample.

23/07/23: went in the field while it was raining, got a sample at a new location, barely any outcrop or mineralized boulders to sample.

23/07/24: we found a highly magnetic boulder, very mineralized and dense, took a sample and moved to a new location for more prospection.

23/07/25: drove to a new location, road was washed out, we managed to fix it with shovels, we did some channel sampling and collected samples.

23/07/26: we went to the same location as yesterday for more channel sampling, weather was good and work was good.

23/07/27: today pickup truck broke down, we'll continue once it is repaired.

23/08/22: got a sample at a very richly mineralized site. Took a sample filled with quartz, some red crystallization and a lot of rust.

23/08/23: went to the same site as yesterday and found more very good mineralization 10 meters west from the last site, and 10 more meters south of the site. Got samples and trenching, would be a good idea for channel sampling at this spot.

**Coordinates:**

**N50°07'22.75            N50°06'35.59**  
**W073°29'02.3         W073°28'17.44**

**N50°07'24.10            N50°06'36.05**  
**W073°28'59.29         W073°28'18.25**



N50'04'35.12  
W073'30'11.81

N50'06'35.81  
W073'28'18.27

N50'04'36.63  
W073'30'12.96

N50'04'38.95  
W073'30'12.03

### Assays and Mineralisation

The data from the Laboratory concerning the 10 samples taken during this project was not as expected but enough interesting to keep prospecting in this prospected area. A sample (Qu-1) contains some traces of gold and suggests gold potential. Other samples show very promising values of manganese (Mag-13). The prospector tried to reproduce the same values by sampling the same area where 1% has been found in the last phase. Other trace values have been detected such as in (Qu-2) for lithium (Li). Some samples show traces of chromium (Cr), zinc (Zn).

VO232 53450 - Au- AA23/ ME- ICP41														
# of SAM- PLES : 10														
PRO- JECT : Mist- East3														
	Au	Ag	Be	Co	Cr	Cu	Fe	Li	Mn	Ni	Ti	V	Zn	
	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	
Mag- 13			0.9		5		26.7		2900			10		
L-1					5		0.91		142		0.08	10	28	
L-2					7		0.78		105		0.04	8	25	
L-3					7		1.4		199		0.11	18	33	
Qu-1	0.039				16		1.26		172	18	0.09	16	34	
Qu-2				22	37	110	3.18	20	352	36	0.26	59	170	
C-1				18	29	72	2.53		422	25	0.14	51	26	
Qu-C1		0.9		11	12	207	2.01		112		0.1	24	23	
Qu-C2					7	19	0.95		72			9	37	
Qu-C3		0.3		25	16	235	3.21		362	26	0.14	68	34	

### Conclusion and Recommendations

As mentioned in the second phase of this project, this area is geologically different than the projects the prospector Robert Ratt had before. The mineralisation is poorly known. The first data obtained from the assays support the prospector's choice of doing more sampling in this area. The lithology of the prospected area is dominated by amphibolite (old mafic lavas) and seems to be very interesting for basic metal deposits.

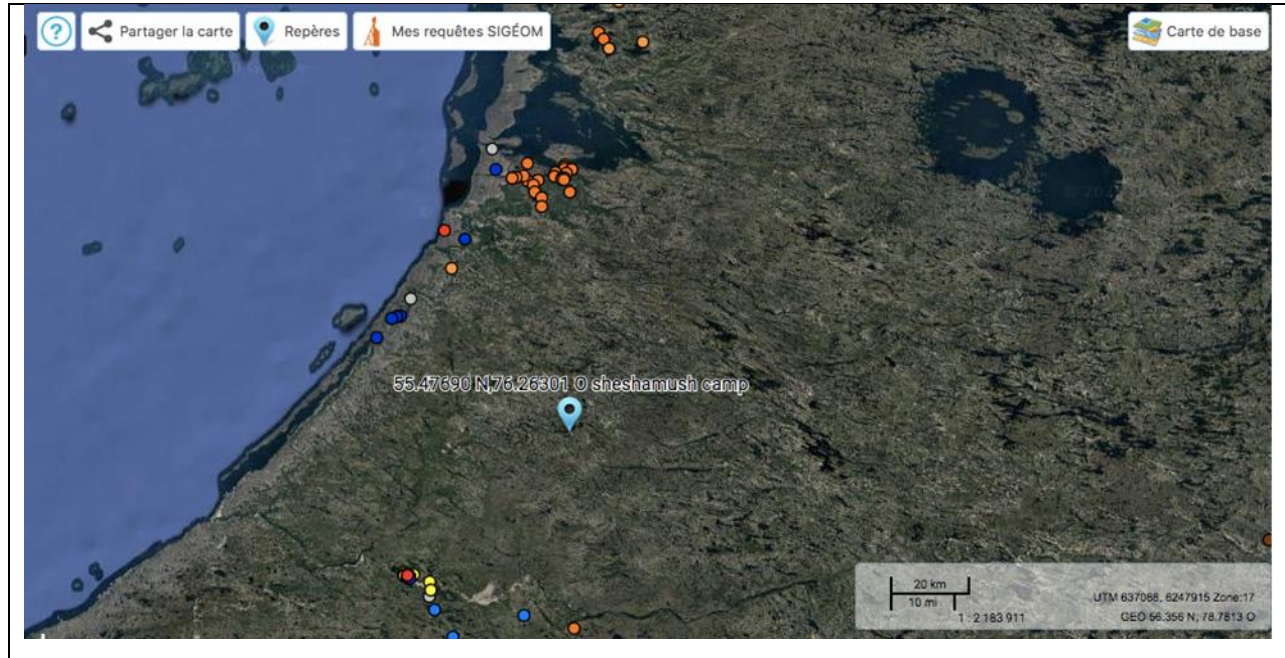
It is usually a good geological environment to discover different mineralization. The only claims in this area are the ones of SOQUEM, which is a good reference in terms of exploration.

We recommend that the prospector again submits a proposal for another project in this same area where the samples were collected. In the perspective of encouraging the prospector to keep doing his great work, I suggest to my Board to continue funding Robert Ratt projects in Eeyou Istchee.



## ROCK and JONAS SHESHAMUSH, SHESHAMUSH CAMP EXPLORATION, AGR 2022-22 Project Location

The project is located around the Sheshamush Camp about 60 miles north east of Whapmagoostui. In the northern part of NTS 33N08. The only access is by plane that the prospectors Rock and Jonas did to access their camp. They work from their camps using the ATVs, by boat or on foot.



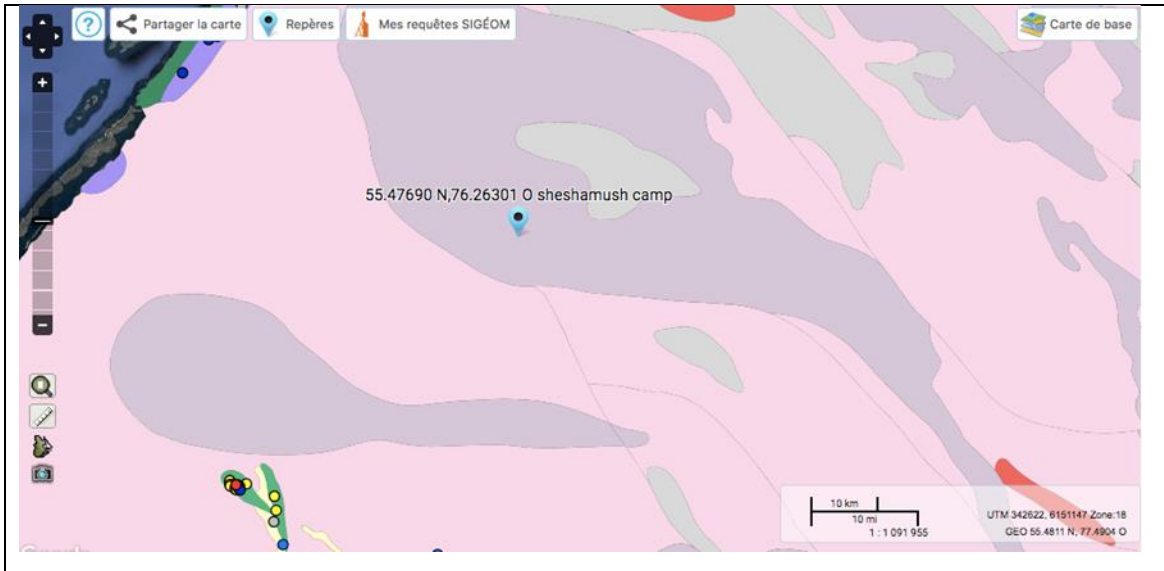
### General Geology

The Bienville Subprovince is a plutonic assemblage that lies in the southern part of the northern Superior Province. The Bienville mainly consists of variably deformed tonalitic, granodioritic, and granitic plutonic bodies, which host enclaves of supracrustal (iron formation, paragneiss, metavolcanic rock) and plutonic (ultramafic) rocks (Hocq, 1994). This subprovince also contains a few volcano-sedimentary belts, for example, the Fagnant Lake Belt, which are metamorphosed to the amphibolite facies. Some interesting targets are known in the area of Whapmagoostui for volcanogenic redbed copper deposits in basalts, and Pb-Zn-Au concentration. Some of these targets show 5.25% Pb and 0.14% Zn, and 14% Zn and 0.75% Cd.

### Regional Mineralisation

This part of Quebec is known for its several sites with anomalous base metal values described by Roy et al., 2004. The mineralized zones are all associated with lithologies of gabbroic rock distortion of the Châteauguay Suite. Other sites contain anomalous values in Cu and Ni associated with disseminated sulphides in a gabbro. The sulphides are located in a gabbro belonging to the Châteauguay Suite, in within a NW deformation zones. Mineralization is characterized by magnetite, pyrite and trace chalcopyrite. The anomalous values consist of Cu (0.12%), Ni (787 ppm) and Au (51 ppb). The analytical results have given anomalous values in Cu (0.11%), Ni (431 ppm), Ag (130 ppm) and Au (26 ppb). Other mineralisation found, is located in a rusty zone within an orthopyroxene gabbro of Châteauguay type. For this site, the analysis of a sample revealed an anomalous value in Cu (625 ppm). The gabbros are medium-grained and

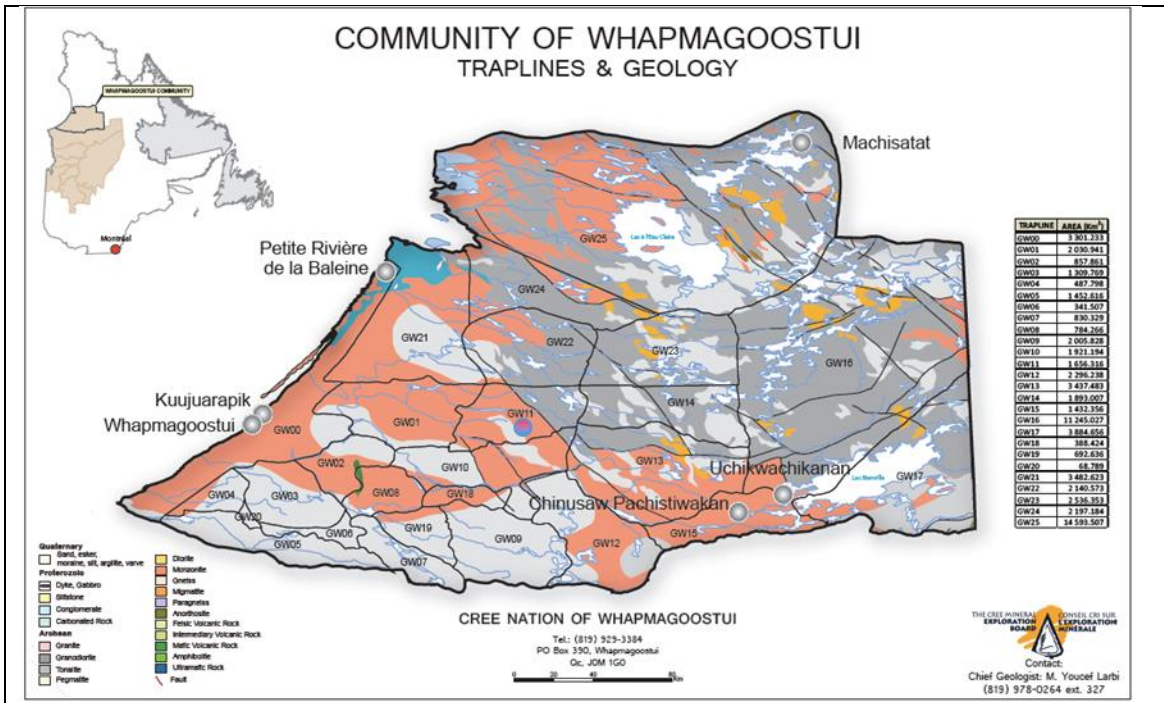
show a foliate structure. They are formed of plagioclase, altered in sericite-carbonate, clinopyroxene and hornblende. The texture of plagioclases is granoblastic and hornblende is in phenocrysts. These features suggest that gabbros have undergone regional metamorphism and deformation. This type of mafic/ultramafic intrusion is widespread throughout the region. A small proportion of mafic/ultramafic intrusions of the region are massive and associated with the Qullinaaraaluk Suite. This sequence takes its name from the showing of the same name, formed by massive sulphides associated with pyroxenite.



### Local Geology

The geology of the area consists of separate enclaves within a large series of granite and gneiss formations. These are characteristic of the Huronian arch, which stretches from Labrador to the western shores of Hudson Bay. The geology of the prospected area is more versatile than expected. The rocks are generally Archean such as the Favard Suite composed of tonalite, granodiorite and granite; tonalitic and granodioritic gneiss, and the Loups Marins Suite which consists of tonalite and orthopyroxene granodiorite; clinopyroxene, and the Desbergères Suite which contains granite and granodiorite, and the Tramont Suite which is made up of granite and granodiorite; some diatexite. We can also observe in this area (Archean), some independent rocks such as mafic and intermediate metavolcanics; amphibolite; and some metasedimentary rocks such as paragneiss, schist, BIF and marble.

The area also shows younger lithologies represented by the Proterozoic Nastapoka Group. It contains grey stromatolitic dolomite, and conglomerates.



## Work Done

**October 8, 2022**

Today, my family and I left the community of the Whapmagoostui Cree Nation for our camp, which is located 62 nautical miles to the east inland by air. We cruised low at 140 knots as it was cloudy, ceilings were low, and sometimes visibility was low.



The breathtaking land below was covered with snow in most places. Snow had arrived in the north a few days ago but had since melted away. I was anxious to arrive at camp and get to work. I have been dying for a little getaway from community life for some time now. 9 to 5 job in the community is tiring at times. Out here, in the land of the ancient Cree, 9 to 5 doesn't exist; it's 5 to 9. ironically, it's not tiring. It is not tiring because my heart and mind go together when I am at Sheshamush Camp.

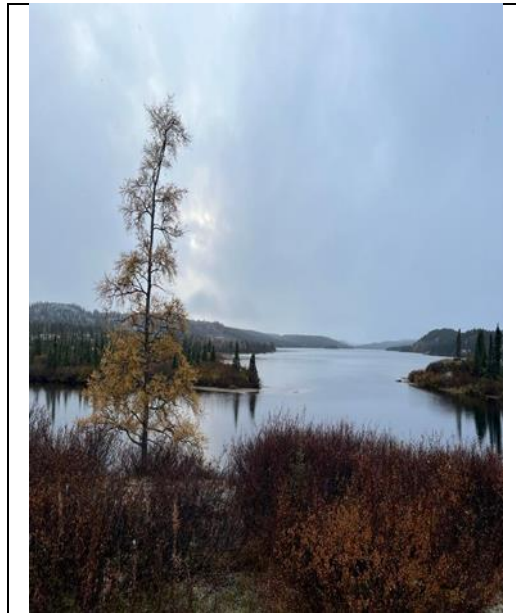
My Great Grandfather's name was David Sheshaminoskum Mackay. The fur traders later changed it to Sheshamush because it was too long to write it on paper, let alone pronounce it correctly. So, they changed many Cree names to their liking.

**October 9, 2022**

Low clouds and light winds from the northeast this morning. Jonas and I decided to work on our equipment before setting out. Our canoe needed some mending and patching on the body. Last year, we hit some rocks on shallow waters and punctured the canoe both on the stern and bow. The water levels were unusually low last fall.

The ATV needed replacements of new front and rear bearings and required an oil change. The machines take a beating out here because the terrain is rough and rugged. You must be physically fit to go ATVing to hunt and work. It is a dangerous world without well-trodden trails. We venture into unknown and unexplored places to get to the samples.

The bushes and vegetation were still wet and slippery from yesterday's snowfall. So, we agreed that it was best to wait for the sun to come out and dry the glue on the canoe and the land for us so we can walk it dry. It is not fun walking wet in the cold, especially at this time of year. It is getting cold now. We wouldn't want to risk hypothermia out here.



**October 10, 2022**

At approximately 10 am this morning, Jonas spotted caribou from his cabin window swimming across the lake from the south to the north. We frantically jumped in the canoe with our rifles and headed straight for them. We were dying for fresh caribou meat. Frankly, every Indian is tired of eating chicken and pork-chops and other store-bought food.

Jonas harvested one female caribou, my son Mark one young caribou, and I shot one. In all, we got three caribou. This was more than enough to feed the family. We delivered them to camp and started skinning and quartering them. My elderly parents Elijah and Sarah were happy to eat fresh meat.

We took the day to clean the meat and stored in the freezer. Jonas said he will we go out and work tomorrow only. It is important to take care of the meat and all parts of the caribou. This takes time.

**October 10, 2022**

I got up at dawn, jumped out of bed, and swung open the window curtains with a smile to greet the morning. It was cold and partially cloudy. I opened the woodstove door and placed dry branches for kindling and dry firewood in the firebox grate. From the home-made table, I grabbed the Red Bird Strike box

wooden matches by Eddy Match Company and lit the kindling. The sound of woodstove crackling and thundering is soothing music to those who miss life in the bush. I made coffee and breakfast: eggs and caribou steaks. It was sure delicious.

Jonas and I went out after breakfast by canoe. Before we could go, he found a stone nearby that was under the soil and it seemed interesting to sample. So, we took it as sample **Rock 01**. N 55 28' 41.8" W 76 15' 58.8"

It was a gorgeous day to travel by water. Jonas suggested that we look for more samples at the end of Big Island Lake. We landed and set on foot to the west. The going was tough as we both were out of shape. Our leg muscles were aching quickly and we were breathing heavily. It was funny and tiring to walk.

We came to an area of old growth forest. Here, there were very few rock samples with little magnetic properties. We walked in the valleys and climbed hills of granite rock for hours. Then we jumped back into the canoe and made a short stop in the narrows to tea break. Here, I took a small sample that had magnetic properties. We named it sample **Rock 02**. N 55 29' 29.3" W 76 30' 33.3"

Then we got another on **Rock 03**. N 55 29' 58.1" W 76 28' 16.3"

We got three samples from this region.



### **October 11, 2022**

Today, we went for a short canoe ride to the east. Yesterday, on our way back, we had outboard motor issues. The motor kept on shutting down. We had to paddle the 24-footer canoe a couple of times. Luckily, it wasn't that windy. So, this morning my dad, the expert on outboard motors worked on it to see the problem. He said it was the spark plugs.

At the mouth of the river called Ashachiwamskuch we picked up a sample on a sandy beach. **Rock 04** N 55 28' 52.2" W 76 13' 02.0". We went for a walk and picked up another sample **Rock 05** N 55 28' 55.2" W 76 13' 08.1".

We saw a few caribou in the area. It was good so see wildlife again. It is mating season. We heard clashes of antlers in a marsh nearby in the forest. The young males challenging the larger bulls to assert dominance. According to Cree elders, during the rut, the dominant male caribou will not eat from 7 to 10 days but will drink its own urine. Thus, the meat of the male caribou is strong and not good to eat.

### **October 12, 2023**

Today, the team and I went to the south to look for more samples on foot. Our outboard motor was not working well this morning. It kept sputtering and losing power, and it finally died on us in the middle of the lake. So, we paddled to shore to investigate the problem. With no luck in solving the problem, we called for help from camp. Luckily, the handheld bush radio signal was good to contact base. My dad came to pick us up with a smaller canoe and outboard motor.

We walked about 5 kilometers in the wilderness. There was not much to sample. The area was mainly granite rock. There was nothing interesting to sample. We went home empty.

### **October 13, 2023**

Today, we took a rest from work. Our bodies were aching from long walks in the bush.

**October 14, 2023**

This afternoon we tested the outboard motor. Dad was working on it again yesterday. It turned out it was a filter problem. We added clean gasoline and it worked perfectly. We transported a smaller canoe to the west end of Big Island Lake and explore Polar Bear Lake in the coming days. Will need to portage a canoe to get to the lake.

My nephew Nehemiah shot two more caribou today. He will freeze the meat and ship it home to store it. We should have enough meat for the winter.

**October 15, 2023**

Strong winds prevented us from canoeing today. We went to cut firewood upriver.

**October 16, 2023**

We went to the west today. There were no signs of good samples in the woods. We managed to get two.

**Rock 06** N 55 28' 24" W 76 33' 57" **Rock 07** N 55 28' 38" W 76 34' 51"

We did no more work from October 17 to October 22. We flew back to the community on October 23, 2022.







### **Assay and Mineralisation**

The analysis shows significant traces of gold (Au) 0.03 ppm. As we mentioned above, a great quality of outcrops of different lithologies have been sampled. Many granitoids are normally not compatible with

the basic metals deposits but they certainly are with rare earth elements lanthanum (La) 50 ppm and rare metals.

The assays data indicates a few Cr and Ni anomalous values in all the samples. Samples Rock 04 and 06 have good values in phosphate (P) 1060 ppm and 1080 ppm. In sample Rock 06, we also observed some iron (Fe) 6% and zinc (Zn) 208 ppm. Sample Rock-07 shows interesting values in chromite (Cr) 304 ppm and some REE (La) 50 ppm. Once again, the data are encouraging and open the door for more investigation.

VO22353096 - Au- AA23/ME- ICP41														
PROJECT : 2022-22														
	Au	Ag	Co	Cr	Cu	Fe	La	Li	Mn	Ni	Ti	V	Zn	
	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	
Rock 01	0.026	0.2	27	11	47	4.3	50	10	1030	37	0.13	38	57	
Rock 02	0.017		23	20	67	5.46	10	10	404	24	0.44	144	72	
Rock 03		0.2	16	133	31	3.91	20	20	437	47	0.29	100	52	
VO23065328 -ME- ICP41/Au- AA23														
PROJECT : Rock Sheshamush 2022-22														
	Co	Cr	Cu	Fe	La	Li	Mg	Mn	Ni	P	Ti	V	Zn	Au
	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	ppm
Rock 04	8	26	11	2.49	50	20	1.06	346	13	1060	0.18	50	49	
Rock 05	4	12	2	1.48	20	10	0.52	151	4	290	0.11	22	23	0.007
Rock 06	25	23	85	5.97	10	10	1.43	368	27	1080	0.44	208	87	0.005
Rock 07	12	304	2	3.38	50	20	2.4	538	88	610	0.37	40	82	0.006

### Recommendations

The assays data are interesting and good enough for another prospecting project. The project still has a lot of energy and will certainly produce more good values in the future. The area has great outcrops and shows great lithology (granitoids, metamorphic basalts, gabbro and ultramafics). These different lithologies could contain REE in leucogranites, (Cu, Ag, Au, Zn) in basalt and gabbro and (Co, Cu, Ni and Pt, Pd) in ultramafics rocks.

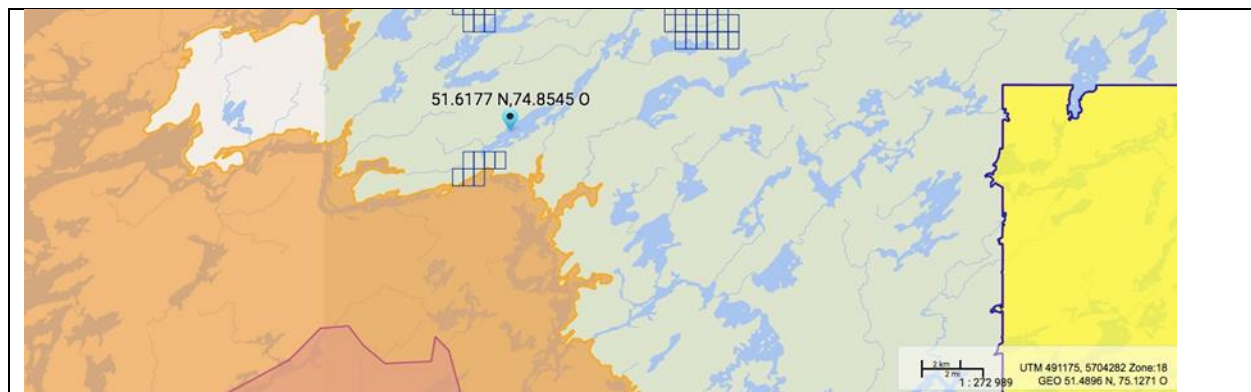
My recommendations to the Board are:

Continue helping Jonas and Rock Sheshamush, they have beautiful motivation and excitement. Adding to that, the interesting geological environment such as the presence of ultramafic rocks which are rare and good for Ni-Co, palladium and platinum mineralisation. The lack of exploration in this area make this project a first-choice target and justifies the help of CMEB to the Whapmagoostui prospectors.

## MIKE VOYAGEUR, TB LAKE M26 PROJECT, AGR 2022-20

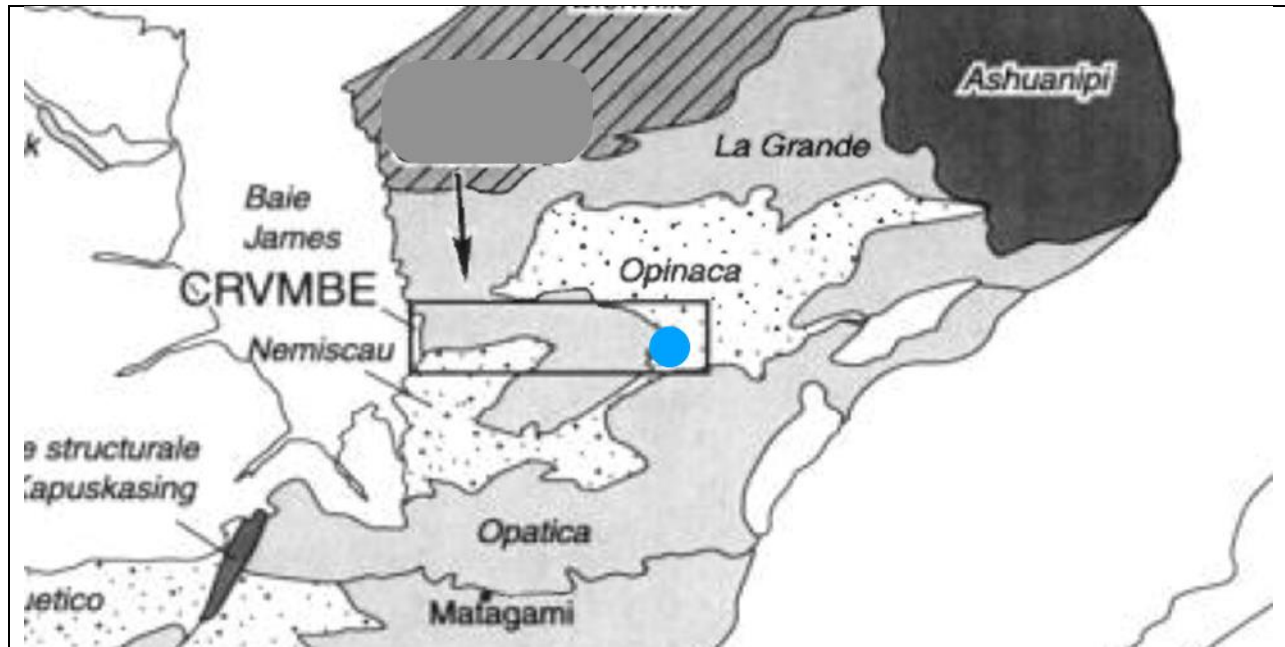
### Project Location

The prospected area is about 120 km north of the Cree Nation of Mistissini and 80 km east of the Cree nation of Nemaska. It is almost all accessible by road and about 10 km on trails using ATVs. The prospectors use their family camp which is close to the prospected site.



### General Geology

The Archean Superior Province forms the core of the North American continent and is surrounded and truncated on all sides by Proterozoic orogens: the collisional zones along which elements of the Precambrian Canadian Shield were amalgamated (Hoffman, 1988, 1989). The Superior Province represents two million square kilometres free of significant post-Archean cover rocks and deformation (Card and Poulsen, 1998). Tectonic stability has prevailed since ca. 2.6 Ga in large parts of the Superior Province (Percival, 2007). The rocks of the Superior Province are mainly Mesoarchean and Neoproterozoic in age and have been significantly affected by post-Archean deformation only along boundaries with Proterozoic orogens, such as the Trans-Hudson and Grenville orogens, or along major internal fault zones, such as the Kapuskasing Structural Zone. The rest of the Superior Province has remained stable since the end of the Archean (Goodwin et al., 1972).



Proterozoic and younger activity is limited to rifting along the margins, emplacement of numerous mafic dyke swarms (Buchan and Ernst, 2004), compressional re-activation, large scale rotation at ca. 1.9 Ga, and failed rifting at ca 1.1 Ga. With the exception of the northwest and northeast Superior margins that were pervasively deformed and metamorphosed at 1.9 to 1.8 Ga, the craton is managed by a ductile deformation. A first-order feature of the Superior Province is its linear subprovinces of distinctive lithological and structural character, accentuated by subparallel boundary faults (e.g., Card and Ciesielski, 1986). Trends in the Superior Province are generally easterly in the south, westerly to northwesterly in the northwest, and northwesterly in the northeast. The southern Superior Province (to latitude 52°N) is a major source of mineral wealth. Owing to its potential for base metals, gold and other commodities, the Superior Province continues to attract mineral exploration in both established and frontier regions.

The project is located in the Middle and Middle Greenstone Belt Basse-Eastmain which is in the center of the territory of James Bay, approximately 420 km north of Matagami. This belt is roughly oriented E-W and extends over approximately 300 km in length and a width which varies from 10 to 70 km. The CRVMBE consists of sequences of volcano-sedimentary rocks which were released in an oceanic environment (i.e. ridges, oceanic plateaus and volcanic arcs) and which are injected by calc-alkaline intrusions from gabbroic to monzogranitic compositions.

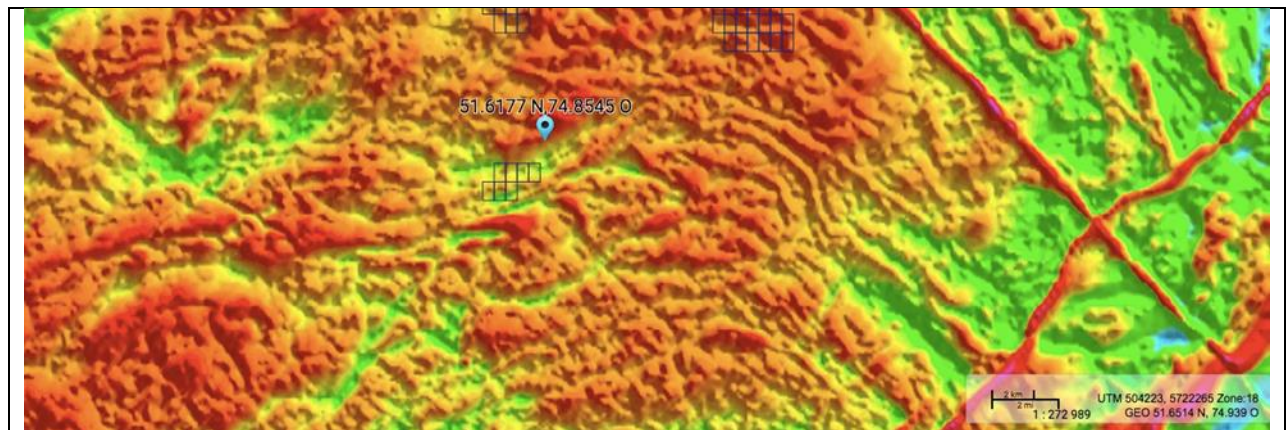
The tectonic framework is the same as the metasedimentary subprovinces; the Opinaca and Nemiscau in Quebec and the Quetico in Ontario.

### Local Geology

The local lithology is complex but the granitoids are the most represented in the area which opens the opportunity for the rare metals exploration such as Li, Mo and F. The following rocks represent the geology in this area:



- Granite biotite, granodiorite, quartzic diorite, tonalite and trondhjemite
- Porphyric granodiorite, tonalitic gneiss
- Granodiorite
- Tonalite and pyroxene and hornblende granodiorite
- Monzodiorite and quartzic monzodiorite
- Pink granitic pegmatite
- Diorite and quartzic diorite
- Wacke with conglomerate
- Amphibolized basalt and amphibolite
- Diatexite protolith paragneiss, containing granite biotite ± garnet



**Known Mineralisation**

Gold mineralizations of the orogenic type are associated with these two episodes of deformation. However, the most important such as the Eau Claire deposit and the mineralization of the Auclair property, are linked to event D2. Tectonic activity culminates with the formation of the Nemiscau basins and of Opinaca (less than 2700 Ma), associated with periods of arc relaxation.



### Results and Interpretation

We believe the project did not show great potential because the sampling was not aimed properly. The assay shows hints and traces of certain interesting elements. We observe some values in chromite (Cr) 633 ppm (traces), in manganese (Mn) 880ppm (traces) and an impressive value of phosphorus (P) 1500 ppm. There are other trace elements such as: zinc (Zn) 149 ppm , copper (Cu) 50 ppm, But the most important value is for lithium (Li) 160 ppm even some REE lanthanum (La) 20 ppm. Sample-5 assay shows many interesting data.

VO23012733 - Agr2022-20												
Au- AA23/ME- ICP41												
	Co	Cr	Cu	Fe	La	Li	Mn	Ni	P	V	Zn	
	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
SAMPLE 1		19		0.67			128		90		16	
SAMPLE 2			9	0.39			59		80			
SAMPLE 3			9	0.5			206		40		12	
SAMPLE 4			20	0.31			31		10			
SAMPLE 5	19	633		5.32	20	160	880	145	1520	46	149	
SAMPLE 6		13	46	3		40	371		190	43	70	
SAMPLE 7		16		1.63		20	293		300		53	
SAMPLE 8		9		0.44			40		20			
SAMPLE 9	14	30	46	2.91	20	50	519	23	480	60	63	
SAMPLE 10	12	22	35	2.83	20	50	445	14	380	62	51	

### Conclusion and Recommendation

The project has showed few promising values of mineral resources in this area. The geology of the area is poorly studied, and needs more geological and geophysics data. This will help to find new targets. The assays produced in this project, create some doubt concerning the economic potential. But some values suggest that there is a real potential.

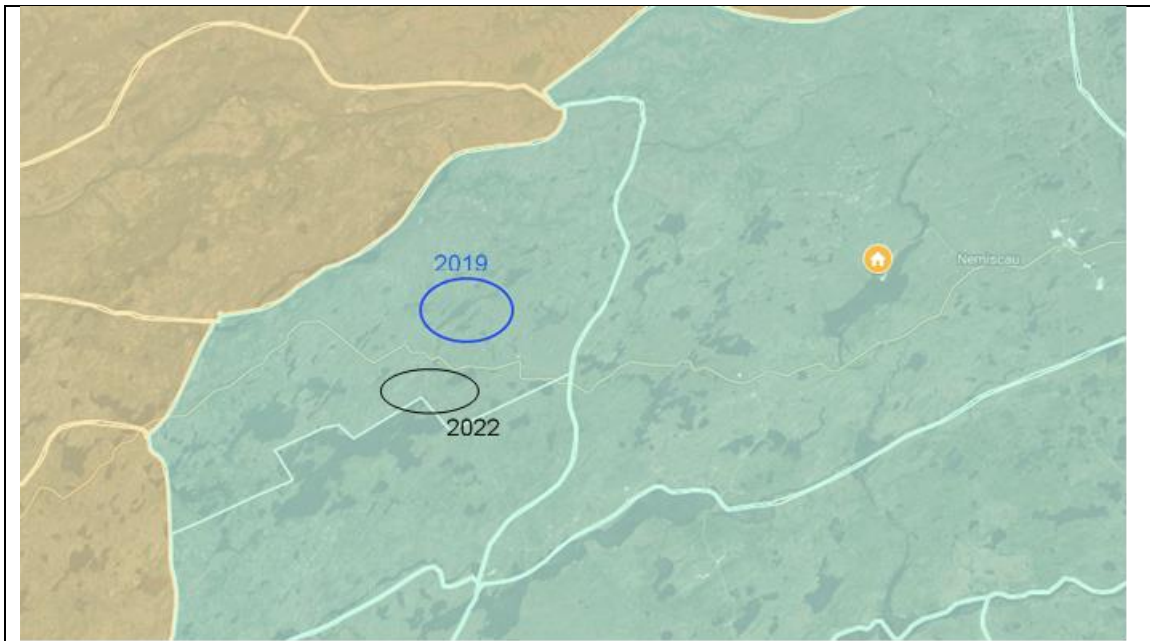
We recommend that the prospector prospect in around this area. He should focus on the area where the sample 5 has been taken. His trapline is large with a large surface area to cover by sampling. Choosing

the area to prospect needs more knowledge about the work that has been done in recent years and bibliographic data.

### NEIL WAPACHEE, KANEMGSKASHIT PHASE IV PROJECT, AGR 2022-12

#### Location

The project is located about 40 km west of Cree Nation of Nemaska. The site is accessible using the Route-Du-Nord to the west, and using an ATV or on foot for about 10 km to the south from the Route-Du-Nord.

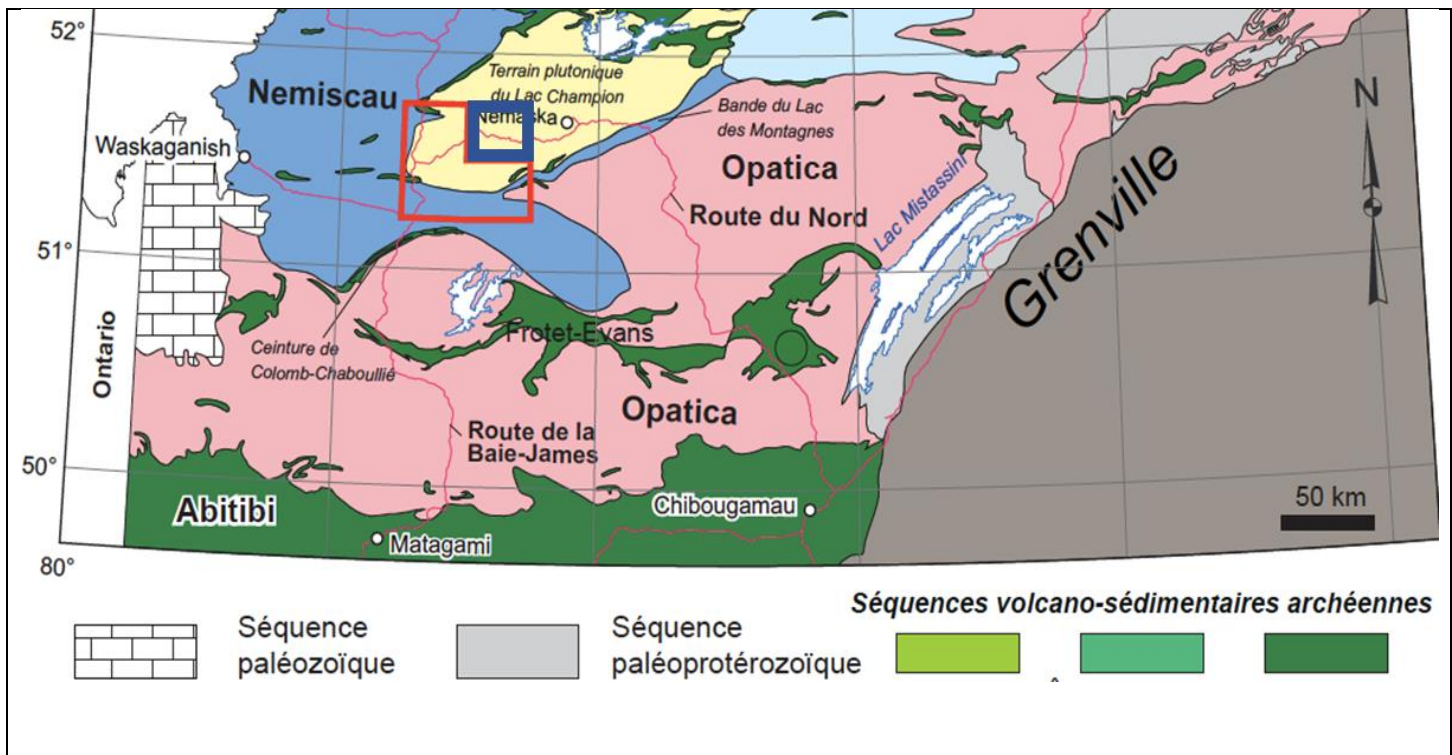


#### Regional Geology

Geologically the prospected area is located between three Archean subprovinces of the Superior. From north to south, they are the La Grande Subprovince, the Nemiscau and Opatoca subprovinces, separated from each other by shear zones. The Nemiscau Subprovince is connected with the metasedimentary subprovince of Opinaca by a narrow band of volcanic and sedimentary rocks of Lac des Montagnes (Valiquette, 1975).

In the region where the work related to the project is supervised, the heart of the Nemiscau Subprovince is mainly made up of metasedimentary rocks and variably distorted and migmatized felsic intrusive rocks. Along the northern and southern Nemiscau Subprovince, kilometer-long extension strips mainly composed of assemblages of volcanic rocks and intrusive mafic to ultramafic rocks are present. These bands of green rocks are regularly arranged along the tectonic contacts between the Nemiscau Subprovince and the neighbouring La Grande and Opatoca subprovinces. Locally, the contact between the subprovinces is masked by the presence of late intrusions.

The Nemiscau Subprovince constitutes a narrow band, E-W direction, at the heart of which metasedimentary rocks and felsic plutonic rocks outcrop in the form of structural domes and show a mineralogical assemblage characteristic of the granulites metamorphic facies. Towards the borders of Nemiscau, the metasedimentary and metavolcanic units present a mineralogical assemblage typical of the amphibolite facies.



### Local Geology

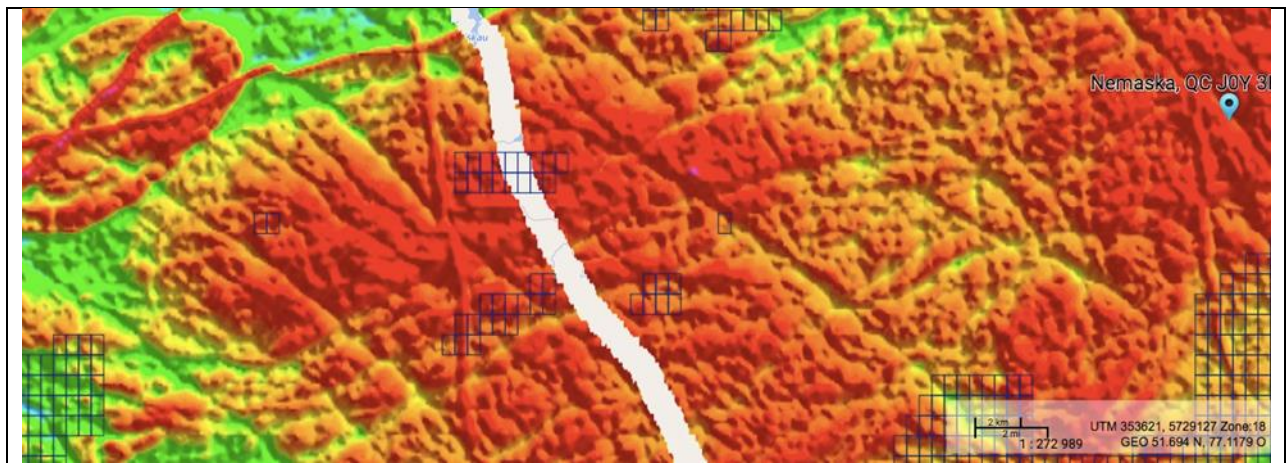
Some lithologies consist entirely of biotite gneissic rocks and are so flaky that the rock resembles a shale. A coarser biotite shale outcrops in places same as in the northern edge of the area on the Broadback River in contact with the granite. Chlorite and sericite schists also occurred.

The lithology defined by Dube (1974) and observed on the field is as follow:

Kilometres long diabase and gabbro dikes and satellites of pegmatite and aplite in a wide unit of pink or white granite and foliated granite. There is gray hornblende granite; foliated gray granite, granodiorite, foliated and sometimes massive quartz-diorite. it also consists of paragneiss, migmatized paragneiss bedded with amphibolites. In the mafic rocks, we find foliated diorite, amphibolites, metavolcanics, associat-



ed tuffs and paragneiss. Finally, some ultramafic rocks: peridotites, serpentinites, actinote rocks and tremolite occur.



### Work Done

#### Day 1 - July 21/22

Day one was our travel to the camp on kilometre 353km on the Route Du Nord.

#### Day 2 - July 22/22

We did some scouting of potential areas of interest using vehicle to start planning our work.

**Day 3**-July 23/22 We did more scouting in different areas equipped with ATV using maps of other potential areas of interest.

**Day 4 - July 24/22** Collected 2 samples.

NJ001- Rock Description: Mixture of fine quartz, feldspar with slight potassic alteration.  
51°36.766'N76°42.773'W

NJ002- Rock Description: Quartz, feldspar with potassic alteration 51°36.813'N76° 42.767'W

**Day 5 - Jul 25/22** Collected 2 samples.

NJ003- Rock Description: Mixture of fine quartz, granite, feldspar with slight potassic alteration.  
51°36.835'N76°42.803'W

NJ004- Rock Description: Mixture of fine quartz, granite, feldspar with slight potassic alteration.  
51°36.834'N76°42.838'W

**Day 6 - Jul 26/22** Collected 5 samples.

NJ005- Rock Description: Mixture of fine quartz, fine feldspar and granite with slight potassic alteration  
51°36.833'N76°42.869'W.

NJ006- Rock Description: Mixture of fine quartz, fine feldspar and granite with potassic alteration  
51°36.705N76°43.022W.

NJ007- Rock Description: Mixture of fine quartz, fine feldspar and granite with potassic alteration  
51°36.715N76°43.030W.

NJ008- Rock Description: Mixture of fine quartz, fine feldspar and granite with potassic alteration  
51°36.745N76°43.040W.

NJ009- Rock Description: Quartz, feldspar, basalt and granite with potassic alteration  
51°36.760N76°43.033W

**Day 7 - Jul 27/22** Collected 1 sample on several different sites.

NJ010- Rock Description: Quartz, feldspar, basalt and granite with potassic alteration  
51°36.742N76°43.017W

**Day 8 - Jul 28/22** Rock and mineral description of all samples. Prepare and number samples for sending to lab. Return travel day

**Day 9 - Jul 29/22** Preparation of report.

**Day 10 - Jul 30/22** Preparation of samples and shipping to the Laboratory.

### Known mineralisation



The knowledge of mineralisation was defined during recent years as follows:

- (1) Valiquette Lake serpentinite mineralized in chalcopyrite, pyrrhotite, pentlandite;
- (2) The Des Montagnes Lake amphibolite mineralized in chalcopyrite, pyrrhotite, pyrite and sphalerite (arsenopyrite);
- (3) Rusty pyrite zone of Indian Lake;
- (4) Cordierite and anthophyllite metasomatic rocks from Lac Senay mineralized in chalcopyrite and pyrrhotite. In addition to sulphides, Valiquette mentions magnetite lenses in paragneiss, chromite bands in serpentinite, chrome mica, fuchsite, in biotite paragneiss and spodumene in white pegmatite north-east of Lac des Montagnes. J. Wallach (1977) mentions, south of Lac Caumont, ultrabasic rocks and magnetite paragneiss responsible for a major magnetite anomaly. The Lac Fed and Lac Chambois volcano-sedimentary bands show rusty sulphide zones and lenses of ultrabasic rocks. Their economic importance is marginal with regard to the outcrops visited.
- (5) Concerning mineralization related to large masses of granitoids, it is very interesting to focus on rare earths and rare metals (Li).

### Mineralisation and Assays

In total, 10 samples were collected and sent to the laboratory for assays. The results are very modest and do not show the real potential of the prospected area. The values are very weak as was always expected during the first grassroot work.

We had no anomalies but some interesting values such as a trace of gold (Au) 0.01ppm and silver (Ag) 2.8 ppm, traces of chromite (Cr) 380ppm, zinc (Zn), vanadium (V) and titanium (Ti), some nickel (Ni), copper (Cu). Added to these metallic minerals, some rare earth element values such as Lanthanum (La) 210ppm have been detected.

PROJECT : 2022-12 Neil Au- AA23/ME- ICP41													
	Ag	Co	Cr	Cu	Fe	La	Mn	Ni	P	Ti	V	Zn	Au
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
NJ001		1	9	4	0.81		80		20	0.01		8	
NJ002	2.8	12	31	74	2.63	40	357	22	900	0.2	41	52	0.005
NJ003	0.2	1	9	3	0.86	20	77		30	0.02		10	0.009
NJ004	0.3	20	253	21	6.29	210	776	70	1100	0.34	90	151	
NJ005					0.53		53			0.01			0.007
NJ006	0.3	25	386	88	4.35	40	584	125	1020	0.24	72	108	
NJ007		3	14	4	1.47		173		250	0.08		30	
NJ008		2	13	8	1.13		123		150	0.06		19	
NJ009	0.2	8	105	3	1.74	20	351	57	510	0.13	25	56	
NJ010		5	17	1	1.66		211		320	0.1		42	0.009

### Conclusion and Recommendation

Geologically, the area seems to show some interesting aspects for possible mineralisation especially for REE and rare metals (Li). It is possible to better characterize the prospected area and define targets and conductors.

Mister Neil Wapachee is still a new prospector who tries to manage his family traplines. We recommend to the Board to encourage the prospector; he has a good area for prospecting and a potential for discoveries. After this first year of grassroots, we recommend to keep doing grassroots sampling projects. We need to see new targets and new conductors.

### NEIL WAPACHEE JEENAWMII PROJECT, AGR 2022-14

#### Location

The project is located about 40 km west of Cree Nation of Nemaska. The site is accessible using the Route-Du-Nord to the west, and using an ATV or on foot about 10 km to the south from the Route-Du-Nord.

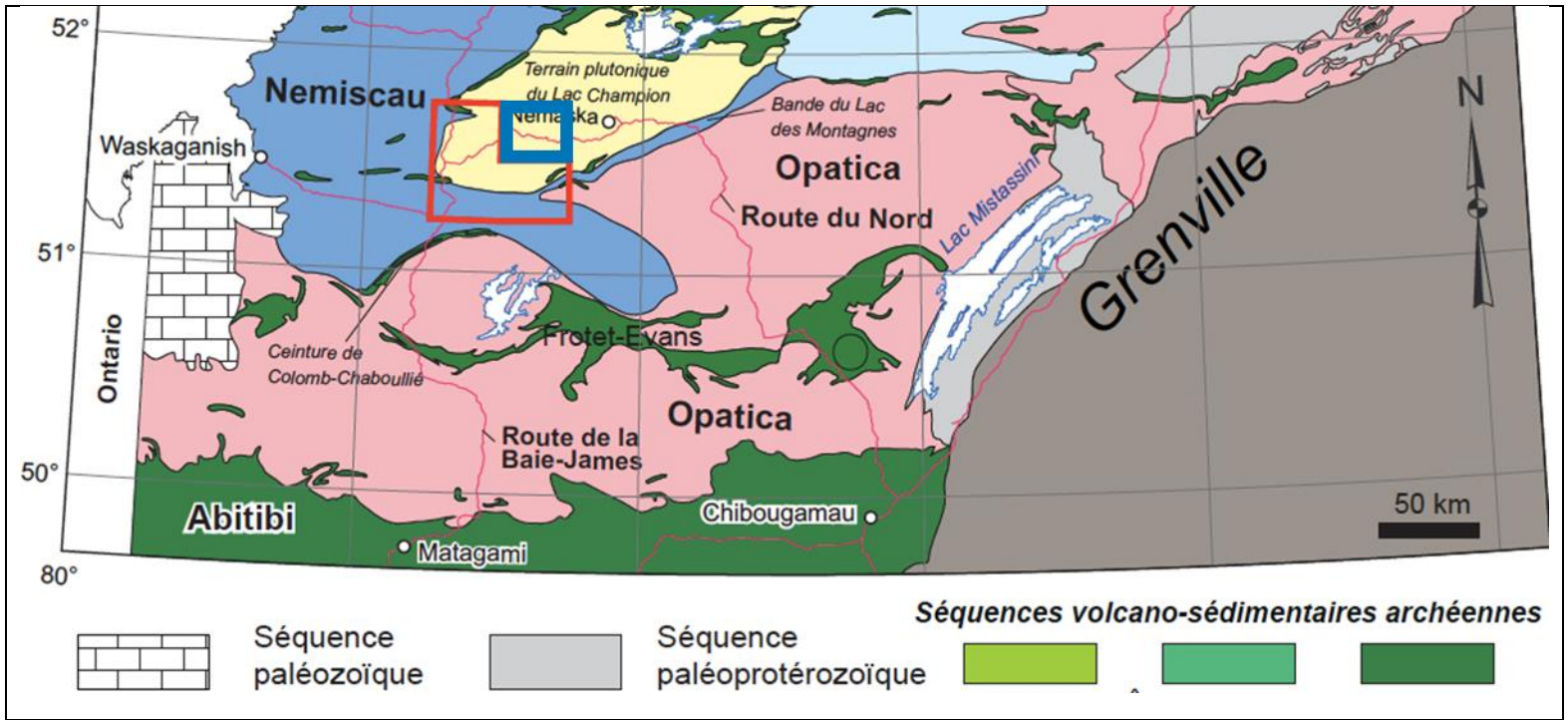


### **Regional Geology**

Geologically the prospected area is located between three Archean subprovinces of the Superior. From north to south, they are the La Grande Subprovince, the Nemiscau and Opatoca subprovinces, separated from each other by shear zones. The Nemiscau Subprovince is connected with the metasedimentary subprovince of Opinaca by a narrow band of volcanic and sedimentary rocks of Lac des Montagnes (Valiquette, 1975).

In the region where the work related to the project is supervised, the heart of the Nemiscau Subprovince is mainly made up of metasedimentary rocks and variably distorted and migmatized felsic intrusive rocks. Along the northern and southern Nemiscau Subprovince, kilometer-long extension strips mainly composed of assemblages of volcanic rocks and intrusive mafic to ultramafic rocks are present. These bands of green rocks are regularly arranged along the tectonic contacts between the Nemiscau Subprovince and the neighbouring La Grande and Opatoca subprovinces. Locally, the contact between the subprovinces is masked by the presence of late intrusions.

The Nemiscau Subprovince constitutes a narrow band, E-W direction, at the heart of which metasedimentary rocks and felsic plutonic rocks outcrop in the form of structural domes and show a mineralogical assemblage characteristic of the granulites metamorphic facies. Towards the borders of Nemiscau, the metasedimentary and metavolcanic units present a mineralogical assemblage typical of the amphibolite facies.

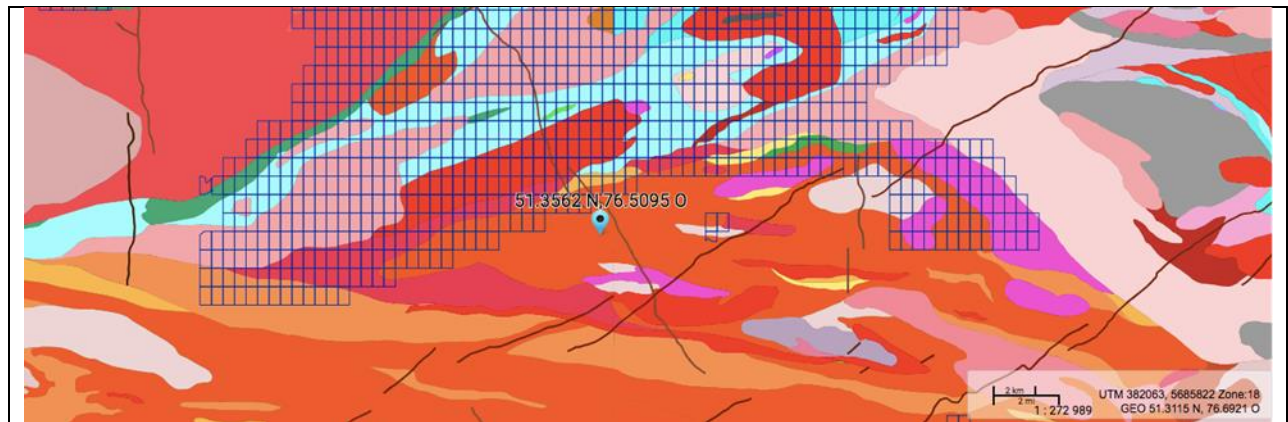


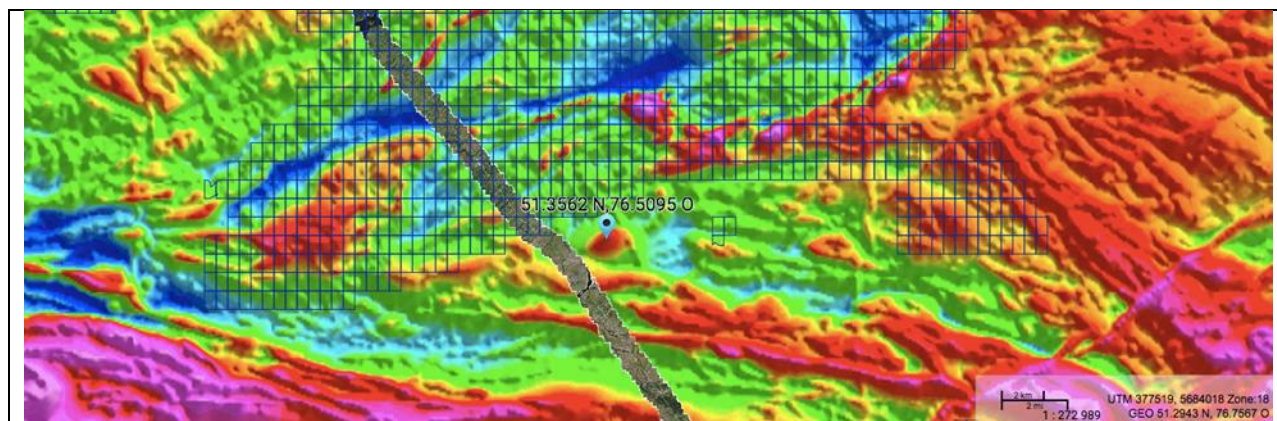
**Local Geology**

Some lithologies consist entirely of biotite gneissic rocks and are so flaky that the rock resembles a shale. A coarser biotite shale outcrops in places same as in the northern edge of the area on the Broadback River in contact with the granite. Chlorite and sericite schists also occurred.

The lithology defined by Dube (1974) and observed on the field is as follow:

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### Work Done

**Day 1** - Aug 20/22 Day one was our travel to the camp on kilometre 353km of the Route Du Nord.

**Day 2** - Aug 21/22 We scouted potential areas of interest using vehicle o start planning our work.

**Day 3** - Aug 22/22 We scouted in different areas equipped with ATV using maps of other potential areas of interest.

**Day 4** - Aug 24/22 Collected 2 samples.

**NJE001** Rock Description: Mixture of basalt, granite, some feldspar with slight potassic alteration.  
51°41.177'N76°15.163'W

**NJE002** Rock Description: Mixture of basalt, granite, some feldspar with slight potassic alteration.  
51°22.818'N76°25.857'W

**Day 5** - Aug 24/22 Collected 2 samples.

**NJE003** Rock Description: Mixture of basalt, granite, some feldspar with slight potassic alteration.  
51°22.807'N 76°25.828'W

**NJE004** Rock Description: Mixture of fine quartz, granite, muscovite, feldspar with potassic alteration.  
51°22.989'N76°25.857'W

**Day 6** - Aug 25/22 Collected 5 samples.

**NJE005** Rock Description: Mixture of fine quartz, granite, muscovite, feldspar with potassic alteration.  
51°22.996'N76°25.848'W

**NJE006** Rock Description: Mixture of fine quartz, granite, muscovite, feldspar with potassic alteration.  
51°22.989'N76°25.835'W

**NJE007** Rock Description: Mixture of basalt, granite, some feldspar with slight potassic alteration.  
51°22.974'N76°25.848'W

**NJE008** Rock Description: Mixture of basalt, granite, some feldspar with slight potassic alteration.  
51°22.974'N76°25.849'W

**NJE009** Rock Description: Mixture of basalt, granite, muscovite with some feldspar with slight potassic alteration. 51°23.894'N76°25.780'W

**Day 7** - Aug 26/22 Collected 1 sample on several different sites.

**NJE010** Rock Description: Mixture of basalt, granite, muscovite with some feldspar with slight potassic alteration. 51°24.392'N76°26.077'W

**Day 8** - Aug 27/22 Rock and Mineral description of all samples. Prepare and number samples for sending to lab. Return travel day.

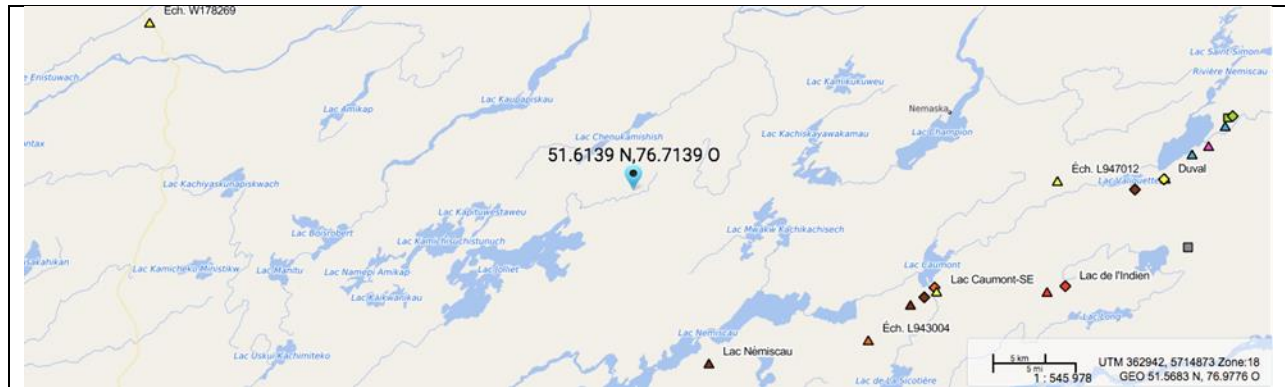
**Day 9** - Aug 28/22 Preparation of report.

**Day 10** - Aug 29/22 Preparation of samples and shipping to the Laboratory.

**Known mineralisation**

The knowledge of mineralization was defined during recent years as follows:

- (1) Valiquette Lake serpentinite mineralized in chalcopyrite, pyrrhotite, pentlandite;
- (2) The Des Montagnes Lake amphibolite mineralized in chalcopyrite, pyrrhotite, pyrite and sphalerite (arsenopyrite);
- (3) Rusty pyrite zone of Indian Lake;
- (4) Cordierite and anthophyllite metasomatic rocks from Lac Senay mineralized in chalcopyrite and pyrrhotite. In addition to sulphides, Valiquette mentions magnetite lenses in paragneiss, chromite bands in serpentinite, chrome mica, fuchsite, in biotite paragneiss and spodumene in white pegmatite north-east of Lac des Montagnes. J. Wallach (1977) mentions, south of Lac Caumont, ultrabasic rocks and magnetite paragneiss responsible for a major magnetite anomaly. The Lac Fed and Lac Chambois volcano-sedimentary bands show rusty outcrops, sulphide zones and lenses of ultrabasic rocks. Their economic importance is marginal with regard to the outcrops visited.
- (5) Concerning mineralization related to large masses of granitoids, it is very interesting to focus on rare earths and rare metals (Li).



**Mineralisation and Assays**

In total, 10 samples were collected and sent to the laboratory for assays. The results are very modest and do not show the real potential of the prospected area. The values are generally modest but the assay still show good values.

We had no anomalic values but some interesting values as a trace of chromite (Cr) 2270 ppm and cobalt (Co) NJE006 = 104 ppm, traces of chromite (Cr) NJE008 = 577 ppm, zinc (Zn) NJE007 = 125 ppm, vanadium (V) NJE003 = 338 ppm and nickel (Ni) NJE006 = 493 ppm. Added to these metallic minerals, the assays show some rare earth element values such as lanthanum (La) NJE010 90 ppm and lithium (Li) NJE003 = 57 ppm.

PROJECT : 2022-14 Neil Au-AA23/ME-ICP41													
<b>SAMPLE</b>	Ag	Co	Cr	Cu	Fe	La	Li	Mo	Ni	P	Ti	V	Zn

	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
<b>NJE001</b>	0.12	2.5	7	13.8	36,5	3.4	0.8	2.08	1.9	990	0.005	7	81
<b>NJE002</b>	0.11	3.9	36	75.5	13,25	9	2.3	0.6	14.6	720	0.042	21	28
<b>NJE003</b>	0.08	52.5	116	54.7	10,9	16.4	56.5	0.46	81.4	950	0.998	338	118
<b>NJE004</b>	0.07	45.2	306	10.6	6,41	3.3	17.4	0.58	208	150	0.312	192	76
<b>NJE005</b>	0.01	60.3	2270	1.5	5,91	5.5	11.8	0.18	371	130	0.083	106	57
<b>NJE006</b>		104	26	23	11,8	10	10		175	540	0.11	84	101
<b>NJE007</b>		36	50	30	8,46	20	10		28	3060	0.27	247	125
<b>NJE008</b>	0.2	64	577	37	4,27	20	10	148	493	890	0.23	74	69
<b>NJE009</b>	0.2	18	144	61	29	20	10		50	320	0.02	195	25
<b>NJE010</b>		19	43	42	32,7	90	10		28	6220	0.17	88	110

### **Conclusion and Recommendation**

Geologically, the area seems to show some interesting aspects for possible mineralisation especially for REE and rare metals (Li). It is possible to better characterize this large prospected area and define targets and conductors.

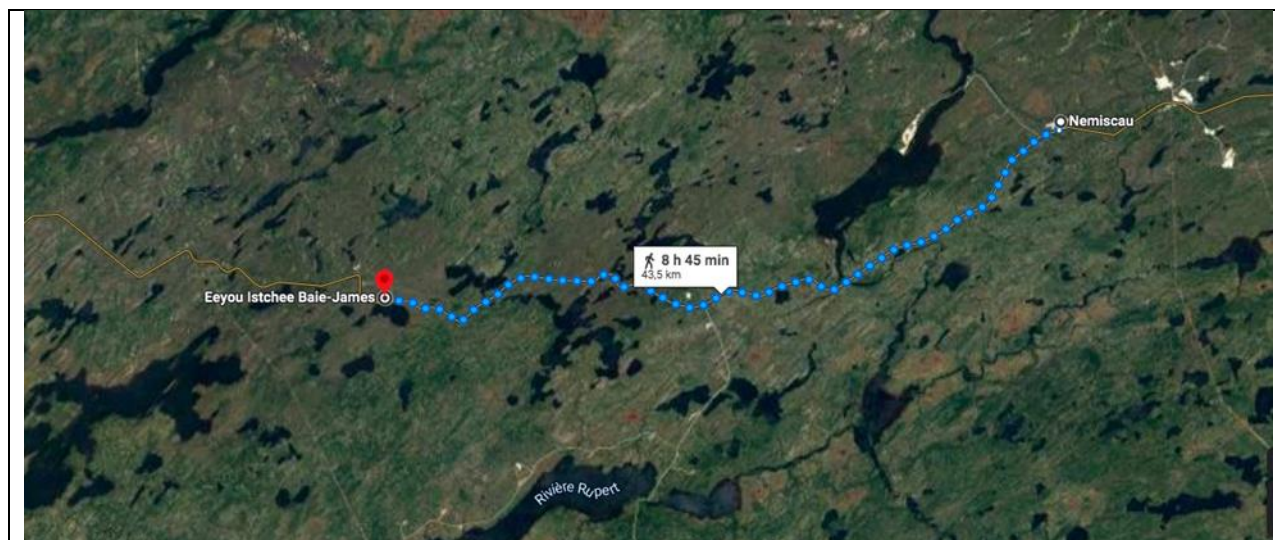
The prospector, Neil Wapachee, is working on family traplines. We recommend to the Board to encourage the prospector, he has a good area for prospecting with potential for a discovery. After this first year of grassroots, we recommend to keep doing grassroots sampling projects. We need to see new targets and new conductors.

### **NEIL WAPACHEE KAMIKUKUMEU PROJECT, AGR 2022-29**

#### **Location**

The project is located about 140 km west of Cree Nation of Nemaska. The site is accessible using the Route-Du-Nord to the west, and using an ATV or on foot. All the sampling has been done along the road about 10 km south of the Route-Du-Nord.



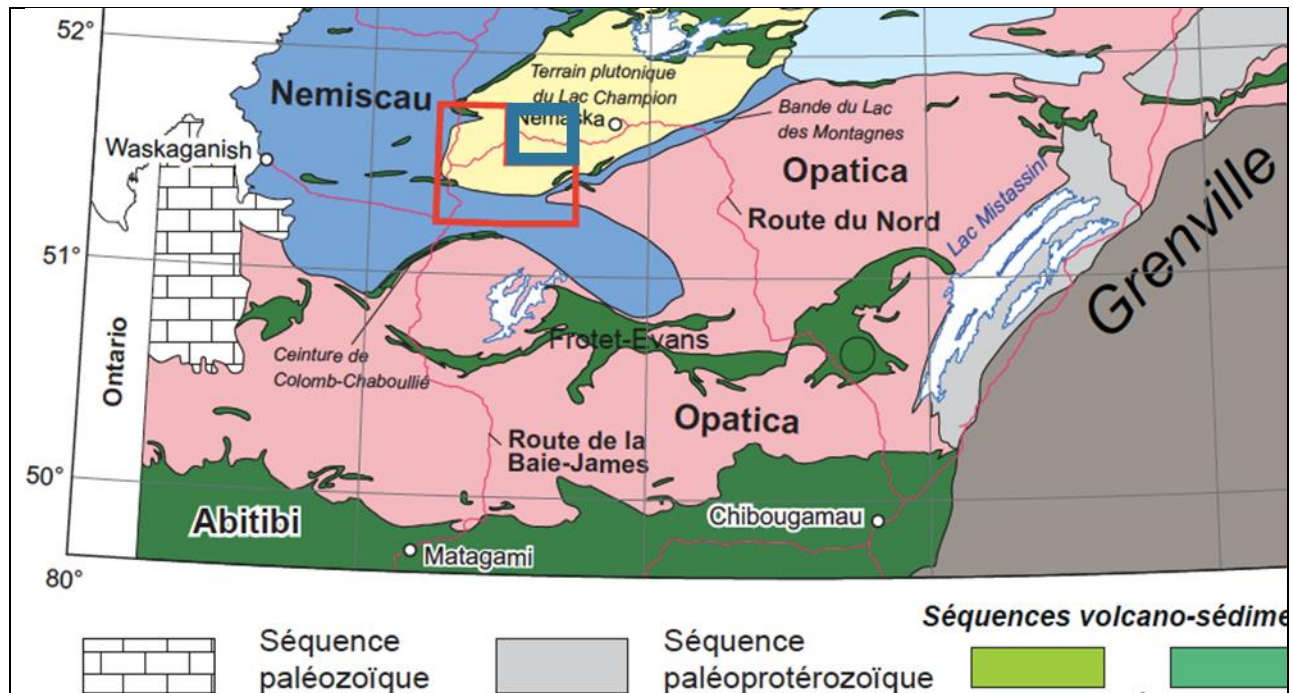


### Regional Geology

Geologically the prospected area is located between three Archean subprovinces of the Superior. From north to south, they are the La Grande Subprovince, the Nemiscau and Opatoca subprovinces, separated from each other by shear zones. The Nemiscau Subprovince is connected with the metasedimentary subprovince of Opinaca by a narrow band of volcanic and sedimentary rocks of Lac des Montagnes (Valiquette, 1975).

In the region where the work related to the project is supervised, the heart of the Nemiscau Subprovince is mainly made up of metasedimentary rocks and variably distorted and migmatized felsic intrusive rocks. Along the northern and southern Nemiscau Subprovince, kilometer-long extension strips mainly composed of assemblages of volcanic rocks and intrusive mafic to ultramafic rocks are present. These bands of green rocks are regularly arranged along the tectonic contacts between the Nemiscau Subprovince and the neighbouring La Grande and Opatoca subprovinces. Locally, the contact between the subprovinces is masked by the presence of late intrusions.

The Nemiscau Subprovince constitutes a narrow band, E-W direction, at the heart of which metasedimentary rocks and felsic plutonic rocks outcrop in the form of structural domes and show a mineralogical assemblage characteristic of the granulites metamorphic facies. Towards the borders of Nemiscau, the metasedimentary and metavolcanic units present a mineralogical assemblage typical of the amphibolite facies.

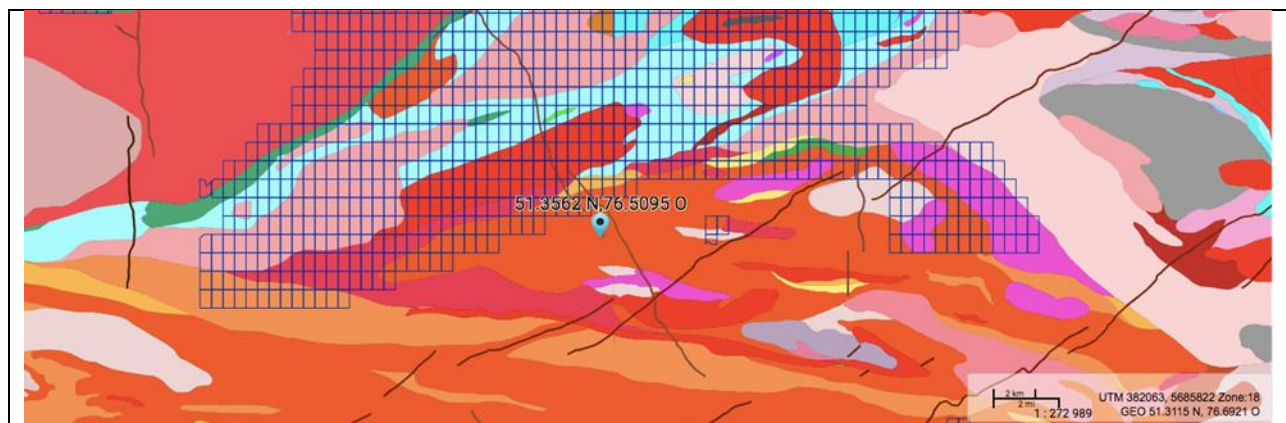


### Local Geology

Some lithology consists entirely of biotite gneissic rocks and are so flaky that the rock resembles a shale. A coarser biotite shale outcrops in places same as on the northern edge of the area on the Broadback River in contact with the granite. Chlorite and sericite schists also occurred.

The lithology defined by Dube (1974) and observed on the field is as follows:

Kilometres long diabase and gabbro dikes and satellites of pegmatite and aplite in a wide unit of pink or white granite and foliated granite. There is gray hornblende granite; foliated gray granite, granodiorite, foliated and sometimes massive quartz-diorite. It also consists of paragneiss, migmatized paragneiss bedded with amphibolites. In the mafic rocks, we find foliated diorite, amphibolites, metavolcanics, associated tuffs and paragneiss. Finally, some ultramafic rocks: peridotites, serpentinites, actinote rocks and tremolite occur.



### Work Done

**Day 1** - Dec 29/22 Day one was our travel to the camp on kilometre 140km of the Route Du Nord.

**Day 2** Dec 30/22 We did some scouting of potential areas of interest using a vehicle to start planning our work.

**Day 3** Jan 2/23 We did more scouting in different areas equipped with snowmobile using maps of other potential areas of interest.

**Day 4** Jan 3/23 Collected 2 samples.

**NJ001-** Rock Description: Mixture of fine quartz, feldspar with slight potassic alteration and a bit of granite. 51°36.139'N76°40.393'W

**NJ002-** Rock Description: Mixture of fine quartz, feldspar with slight potassic alteration and a bit of granite. 51°36.239'N76°40.404'W

**Day 5** Jan 4/23 Collected 2 samples.

**NJ003-** Rock Description: Mixture of fine quartz, feldspar with slight potassic alteration and a bit of granite. 51°36.244'N76°40.399'W

**NJ004-** Rock Description: Mixture of fine quartz, feldspar with slight potassic alteration and a bit of granite. 51°36.908'N76°41.352'W

**Day 6** - Jan 5/23 Collected 5 samples.

**NJ005-** Rock Description: Mixture of fine quartz, feldspar with slight potassic alteration and a bit of granite. 51°36.277'N76°40.428'W

**NJ006-** Rock Description: Mixture of fine quartz, feldspar with slight potassic alteration and a bit of granite. 51°36.2321'N76°40.414'W

**NJ007-** Rock Description: Mixture of fine quartz, feldspar with slight potassic alteration and a bit of granite. 51°36.309'N76°40.371'W

**NJ008-** Rock Description: Mixture of fine quartz, feldspar with slight potassic alteration and a bit of granite. 51°36.305'N76°40.378'W

**NJ009-** Rock Description: Mixture of fine quartz, feldspar with slight potassic alteration and a bit of granite. 51°36.353'N76°40.417'W

**Day 7** - Jan 6/23 Collected 1 sample on several different sites.

**NJ010-** Rock Description: Mixture of fine quartz, feldspar with slight potassic alteration and a bit of granite. 51°36.359'N76°40.415'W

**Day 8** - Jan 7/23 Rock and mineral description of all samples. Prepare and number samples for sending to lab. Return travel day

**Day 9** - Jan 8/23 Preparation of report.

**Day 10** - Jan 9/23 Preparation of samples and shipping to the Laboratory.

### **Known mineralisation**

The knowledge of mineralization was defined during recent years as follows:

- (1) Valiquette Lake serpentinite mineralized in chalcopyrite, pyrrhotite, pentlandite;
- (2) The Des Montagnes Lake amphibolite mineralized in chalcopyrite, pyrrhotite, pyrite and sphalerite (arsenopyrite);
- (3) Rusty pyrite zone of Indian Lake;
- (4) Cordierite and anthophyllite metasomatic rocks from Lac Senay mineralized in chalcopyrite and pyrrhotite. In addition to sulphides, Valiquette mentions magnetite lenses in paragneiss, chromite bands in serpentinite, chrome mica, fuchsite, in biotite paragneiss and spodumene in white pegmatite north-east of Lac des Montagnes. J. Wallach (1977) mentions, south of Lac Caumont, ultrabasic rocks and

magnetite paragneiss responsible for a major magnetite anomaly. The Lac Fed and Lac Chambois volcano-sedimentary bands show rusty outcrops, sulphide zones and lenses of ultrabasic rocks. Their economic importance is marginal with regard to the outcrops visited.

(5) Concerning mineralization related to large masses of granitoids, it is very interesting to focus on rare earths and rare metals (Li).



### Mineralisation and Assays

Ten samples were collected and sent to the laboratory for assays. The results are very modest and do not show the real potential of the prospected area. The values are generally modest but the assay still show good values.

We had no anomalous values but some interesting values of silver (Ag) NJ008 = 1.7 ppm, cobalt (Co) NJ009 = 1460 ppm, molybdenum (Mo) NJ010 = 3.2 ppm, nickel (Ni) NJE006 = 493 ppm and the most important value is the one concerning copper NJ006, 07, 08 = 2600 ppm. Added to these metallic minerals the assays show some rare earth element values such as lanthanum (La) NJE010 90 ppm and lithium (Li) NJ009 = 23 ppm.

2022-29 Neil Wapachee Kamikukumeu	Ag	Co	Cr	Cu	Fe	La	Li	Mn	Mo	Ni	P	Pb	Ti	V	Zn	Zr
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
NJ001	0.2	0.5	0.5	0.5	0.01	1	1	1	0.5	0.5	10	0.5	0.01	0.5	0.5	5
NJ002		11.1	34.9	57.6	3.15	12	7	957	2.9	39.7	790	3.7	0.01	14.8	64.3	14
NJ003	1.2	17.9	4.4	742	2.98	13	1	494	3.6	38.4	945	7.9		9.4	14.7	16
NJ004		31.9	31.2	350	5.98	12	9	425	1.4	51.1	794	2.5		18.2	62.1	15
NJ005		35.3	32.4	3.3	5.88	8	7	233		49.7	922	0.9		17.1	51.4	17
NJ006	1.6	628	31.7	2600	9.66	6	9	676	0.8	84.6	726	10.8		35	66.5	20
NJ007	1.1	66.9	37.8	2570	6.15	7	11	249		53.9	828	5.1		20.3	57.9	21
NJ008	1.7	26.2	61.3	2350	6.3	9	14	215	2	76.2	848	3.6	0.03	34.8	43.9	18
NJ009		1460	81.3	575	7.87	9	23	310	0.6	74.7	828	3.1	0.02	49.9	53	17
NJ010		77.4	60.2	445	4.69	15	13	320	3.2	61.8	835	2.3	0.01	25.2	32	16

### Conclusion and Recommendation

Geologically, the area seems to show some interesting aspects for possible mineralisation in basic metals and especially for REE and rare metals (Li). It is possible to better characterize this large prospected area and define targets and conductors.

It is important to note that the prospector is working on family traplines. We recommend to the Board to encourage the prospector, he has a good area for prospecting and a potential for a discovery. We recommend to keep doing grassroots sampling projects till we hit new targets that can confirm the good geological data.

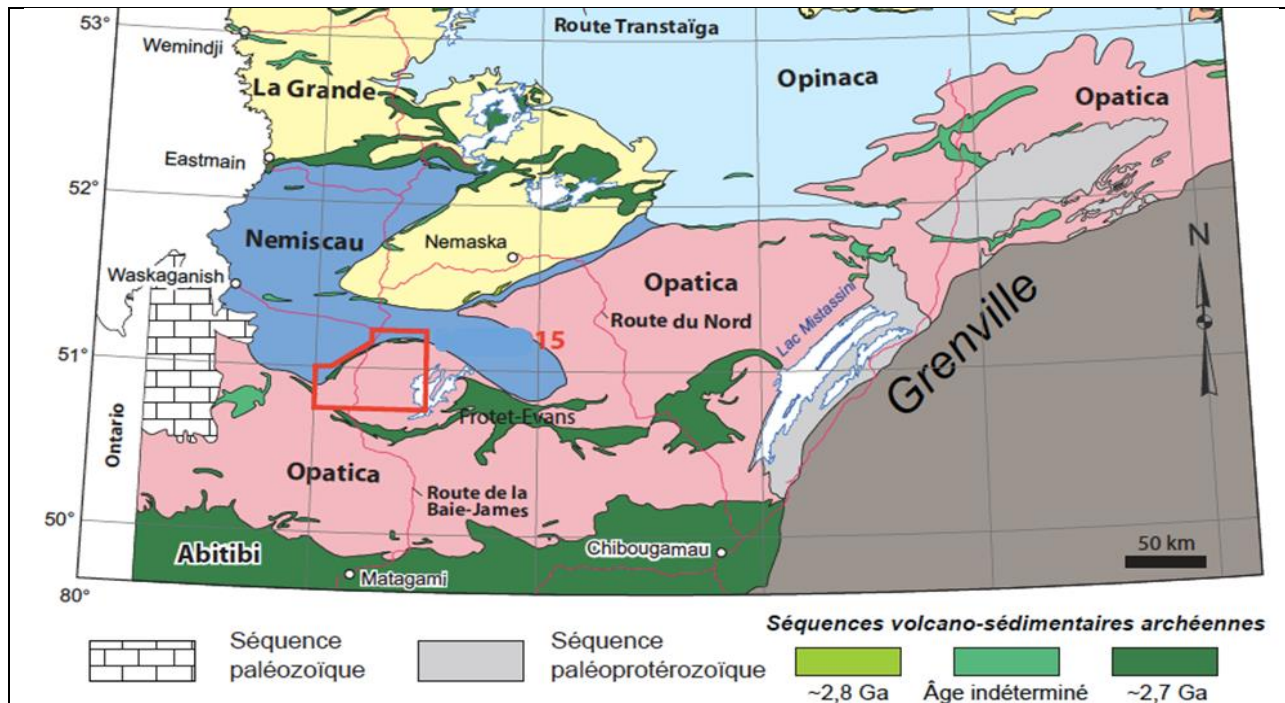
**THOMAS WAPACHEE, R-17 PROJECT, AGR 2022-09**

**Location**



The project is located about 45 km east of the Nemaska Cree Nation. The prospected area is accessible by car using the Route Du Nord and then by ATV on some trails. Most of the area is claimed by junior companies.

**General Geology**



The Archean Superior Province forms the core of the North American continent and is surrounded and truncated on all sides by Proterozoic orogens: the collisional zones along which elements of the Precambrian Canadian Shield were amalgamated (Hoffman, 1988, 1989). The Superior Province represents two million square kilometres free of significant post-Archean cover rocks and deformation (Card and Poulsen, 1998). Tectonic stability has prevailed since ca. 2.6 Ga in large parts of the Superior Province (Percival, 2007). The rocks of the Superior Province are mainly Mesoproterozoic and Neoproterozoic in age and have been significantly affected by post-Archean deformation only along boundaries with Proterozoic orogens, such as the Trans-Hudson and Grenville orogens, or along major internal fault zones, such as the Kapuskasing Structural Zone. The rest of the Superior Province has remained stable since the end of the Archean (Goodwin et al., 1972).

Proterozoic and younger activity is limited to rifting along the margins, emplacement of numerous mafic dyke swarms (Buchan and Ernst, 2004), compressional re-activation, large scale rotation at ca. 1.9 Ga, and failed rifting at ca 1.1 Ga. With the exception of the northwest and northeast Superior margins that were pervasively deformed and metamorphosed at 1.9 to 1.8 Ga, the craton is managed by a ductile deformation. A first-order feature of the Superior Province is its linear subprovinces of distinctive lithological and structural character, accentuated by subparallel boundary faults (e.g., Card and Ciesielski, 1986). Trends in the Superior Province are generally easterly in the south, westerly to northwesterly in the northwest, and northwesterly in the northeast. The southern Superior Province (to latitude 52°N) is a major source of mineral wealth. Owing to its potential for base metals, gold and other commodities, the Superior Province continues to attract mineral exploration in both established and frontier regions.

The project is in the Nemiscau subprovince. It is a metasedimentary rocks-dominated sequence of the Archean eastern Superior Province. It is bound by the gneissic and tonalite-trondhjemite-granodiorite (TTG) rocks-dominated La Grande and Opatoca subprovinces. The Nemiscau consists of variably migmatized metasedimentary rocks and felsic to intermediate gneisses and plutonic suites. Mafic-to-ultramafic metavolcanic rocks occur along its northern and southern boundaries. Previous structural and metamorphic studies suggested that it was the result of subduction-related, accretionary and collisional tectonics with adjacent plutonic terranes during the Kenoran Orogeny.

### **Local Geology**

The local lithology is complex but the granitoids are the most represented rocks in the area which open the opportunity for the rare metal exploration such as Li, Mo and F. The following rocks represent the geology in this area:

Biotite granite

Granodiorite, quartzic diorite, tonalite and trondhjemite

Porphyric granodiorite

Tonalitic gneiss

Granodiorite

Tonalite and pyroxene and hornblende granodiorite

Monzodiorite and quartzic monzodiorite

Pink granitic pegmatite

Diorite and quartzic diorite

Wacke with conglomerate

Amphibolized basalt and amphibolite

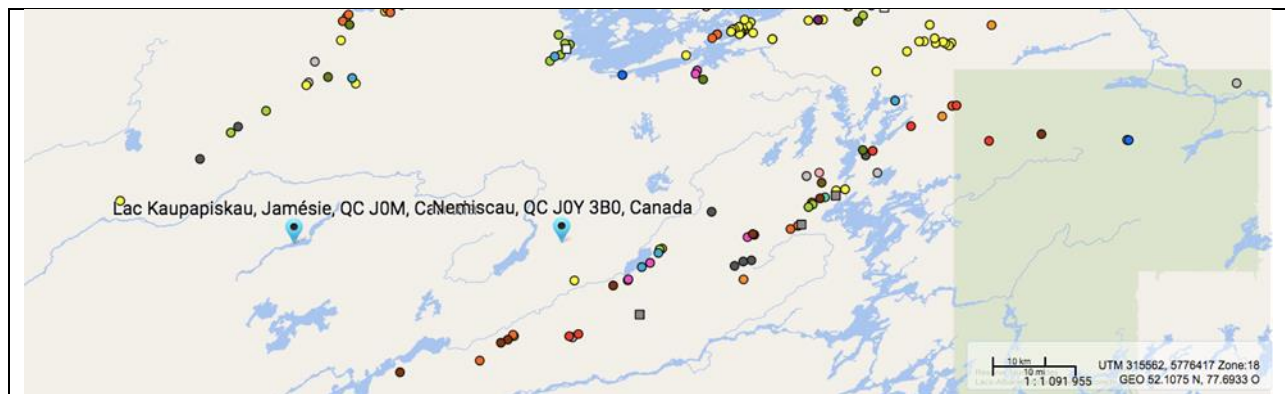
Diatexite protolith paragneiss, containing biotite ± garnet granite



### Known Mineralization

The mineralization is defined by The MENR as follow in the region:

The first type of elements As, Cd, Co, Fe, Mn, Mo, Sb, W, Zn in association with low levels of Al, Ba, Cr, Cu, P, Sr, Ti group elements. This multi-element signal suggests the presence of zinc sulphides and/or gold or silver and cobalt associated with pyrite and/or arsenopyrite. The low levels of Ba, P and Sr indicate that the anomalies arise from volcanic rocks rather than from sedimentary rocks.



Moreover, the low Cu and Cr contents suggest a felsic lithology;

The second type presents a very different group of elements, namely the Ba, Ca, Cr, Cu, Fe, Mg, Ni, Sc, Ti, V, Zn group associated with low levels of rare earths, uranium and lead. The opposition of elements generally indicative of acid intrusion is very clear whereas the association of Cu, Zn, Cr, Ni suggests the presence of mineralization.

The third type is the association of a mafic unit (suggested by Cr and Ni) with a sedimentary unit (platform sequence).

The literature also mentions Ni-Cu-PGE mineralization associated with mafic and ultramafic intrusions; polymetallic volcanogenic Au-Cu-Ag mineralization; gold mineralization associated with deformation zones; rare earth mineralization associated with alkaline intrusions; iron formations; and beryl pegmatites, in the area.

### Work Done

Day 1 Travel day for Norman from Waswanipi, meeting him here in Nemaska.

Day 2 Arranging of material, discussions and planning where we begin our project.

Day 3 Today we begin our project; we had to begin toward the afternoon due to rain in the morning. We managed to pick up 2 samples, very swampy area.

**Sample 1** – TN001 coordinates: N51° 36'.921" W076° 41'.574" Description: Gabbro some mineralization of biotite and quartz.

**Sample 2** – TN002 coordinates: N51° 36'.874" W076° 41'.535" Description: Granite some mineralization of muscovite and biotite.

Day 4 Today we managed to pick up another 3 samples, was a long walk in the heat, swamp and a very bushy area.

**Sample 3** – TN003 coordinates: N51° 36'.861" W076° 41'.430" Description: Granite mixed with quartz and some biotite.

**Sample 4** – TN004 coordinates: N51° 36'.890" W076° 41'.380" Description: Very similar to sample 3, it's in the same area.

**Sample 5** – TN005 coordinates: N51° 36'.883" W076° 41'.388" Description: Granite mixed with quartz, some mineralization of biotite and muscovite.

Day 5 Today was very cloudy but we still managed to pick up 2 samples in the morning, we had to go back early do to a thunderstorm.

**Sample 6** – TN006 coordinates: N51° 36'.904" W076° 41'.355 Description: Granite mixed with basalt, mineralization of muscovite, biotite, quartz and some pyrite. Ended up losing the basalt towards the end of the bedrock.

**Sample 7** – TN007 coordinates: N51° 36'.935" W076° 41'.296" Description: Granite mixed with quartz, some biotite.

Day 6

Today we were not able to go out; there was a huge thunderstorm all day.

Day 7

Today we tried going to the same area but we had a hard time getting there from the bush and swamp, it was very wet from the thunderstorm and there was not much bedrock, but we still managed to get 2 samples.

**Sample 8** – TN008 coordinates: N51° 36'.939" W076° 41'.284" Description: Quartz vein at the end of the bedrock.

**Sample 9** – TN009 coordinates N51° 36'.996" W076° 41'.380" Description: Granite mixed with quartz, some mineralization of biotite and muscovite.

Day 8

Today we made our way to a new section, it was a rough patch but we managed to get 4 samples.

**Sample 10** - TN010 coordinates: 51° 37'.413" W076° 41'.484 Description: Gabbro mixed with granite some mineralization of biotite and muscovite.

**Sample 11** - TN011 coordinates: N51° 37'.430" W076° 41'.438" Description: Similar to Sample 10 just more granite.

**Sample 12** - TN012 coordinates: N51° 37'.457" W076° 41'.418" Description: Quartz vein

**Sample 13** - TN013 coordinates: N51° 37'.514" W076° 41'.339 Description: Granite mixed with quartz.

Day 9

Today was our last day in the field, we only did half a day because the truck was needed for Old Nemaska days so we managed to get 2 samples to close off our project.

**Sample 14** - TN014 coordinates: N51° 37'.586" W076° 41'.337" Description: Granite mixed with quartz and specs of pegmatite and biotite.

**Sample 15** - TN015 coordinates: N51° 37'.612" W076° 41'.326" Description: Same sample 14.

Day 10

Today we worked on the report together, travelling day for Norman.

## **Results and Interpretation**

This prospecting campaign has more chance to lead us to discover rare metals minerals. The assay shows that there is a potential in lithium; best value (TN004 = 140 ppm).



We also observe some significant values in vanadium (TN004 = 117 ppm, and TN010 = 138 ppm). There are trace values of gold (Au, TN006 = 0,07 ppm).

Other elements are detected by this assay, even weak values. It is important to note the mineralization of zinc (Zn), iron (Fe), copper (Cu), chromite (Cr) and titanium (Ti).

PROJECT : THOMAS WAPACHEE Au-AA23/ME-ICP41										
	Au	Co	Cr	Cu	Fe	Li	Ni	Ti	V	Zn
	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
TN001	0,012	24	66	94	3,64	30	51	0,21	75	56
TN002			10		1,47			0,05		31
TN003	0,049				0,95			0,03		
TN004	0,017	40	55		12,6	140	53	0,28	117	171
TN005					1,75	20				41
TN006	0,071	14	52	74	1,81	20	46	0,07	49	
TN007	0,006	6	19		1,64	20	12	0,13	30	32
TN008	0,007		11		0,81					
TN009					0,92			0,03		
TN010	0,01	15	38	85	3,13		29	0,18	138	37
TN011	0,005				1,44			0,05	16	
TN012	0,006		10		0,4					
TN013					1,28			0,05	15	
TN014					0,89			0,02		
TN015	0,008				0,7			0,02		

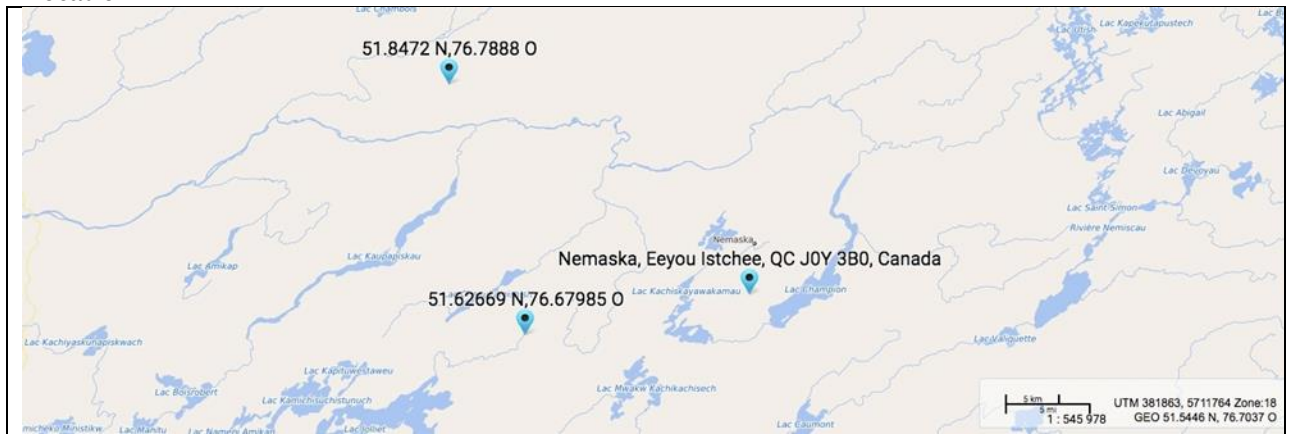
### Conclusion and Recommendations

This project deserves more attention. The geology of the area is poorly studied, we need more information about its geology and geophysics. Regarding the assays produced by this project, we believe in the economic potential of the projected area. More data has to be collected.

We recommend that the prospector will do more bibliographic research concerning any geological or exploration data that can give him more information. Choosing the area to prospect needs more knowledge than what the prospector collected to determine the best area for exploring. We recommend that the prospector should cover all the rare and basic metals instead of focusing just on gold.



**THOMAS WAPACHEE, R-17 PROJECT PHASE 2, AGR 2022-21**  
**Location**



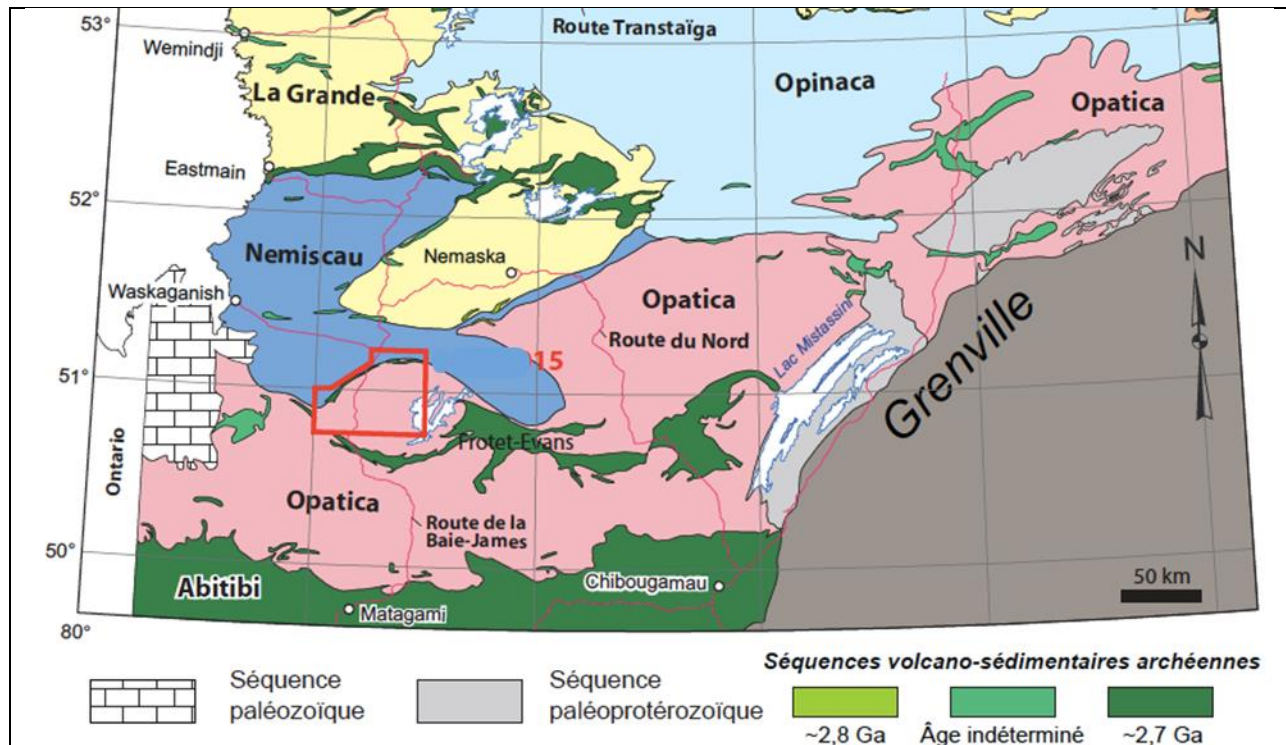


The project is located about 245 km on the Route Du Nord. The area prospected is accessible by car using la the Route Du Nord and by ATV on some trails. Most of the area is claimed by junior companies. There are more trails than there used to be. This shows that more companies are working in Eeyou Istchee.

### General Geology

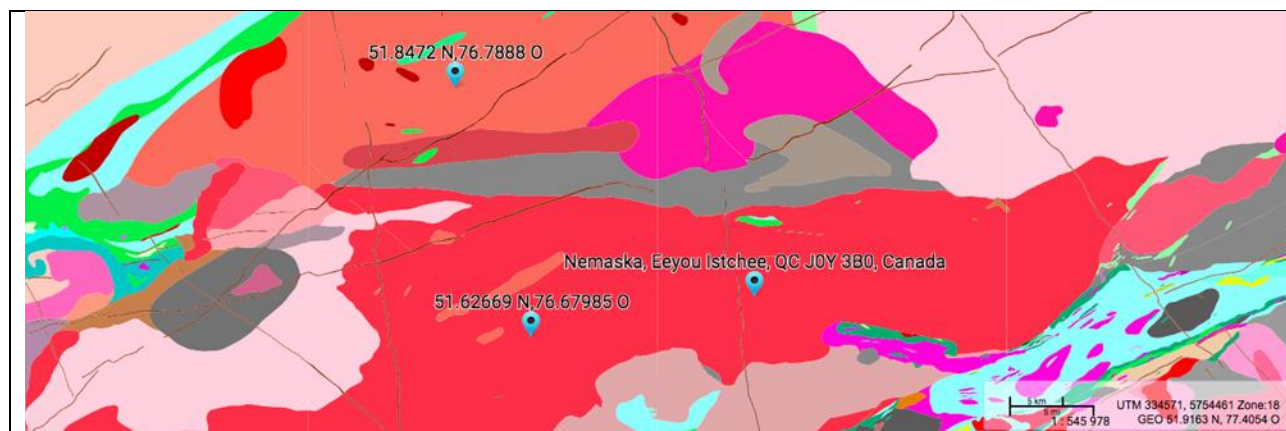
The Archean Superior Province forms the core of the North American continent and is surrounded and truncated on all sides by Proterozoic orogens: the collisional zones along which elements of the Precambrian Canadian Shield were amalgamated (Hoffman, 1988, 1989). The Superior Province represents two million square kilometres free of significant post-Archean cover rocks and deformation (Card and Poulsen, 1998). Tectonic stability has prevailed since ca. 2.6 Ga in large parts of the Superior Province (Percival, 2007). The rocks of the Superior Province are mainly Mesoarchean and Neoproterozoic in age and have been significantly affected by post-Archean deformation only along boundaries with Proterozoic orogens, such as the Trans-Hudson and Grenville orogens, or along major internal fault zones, such as the Kapuskasing Structural Zone. The rest of the Superior Province has remained stable since the end of the Archean (Goodwin et al., 1972).

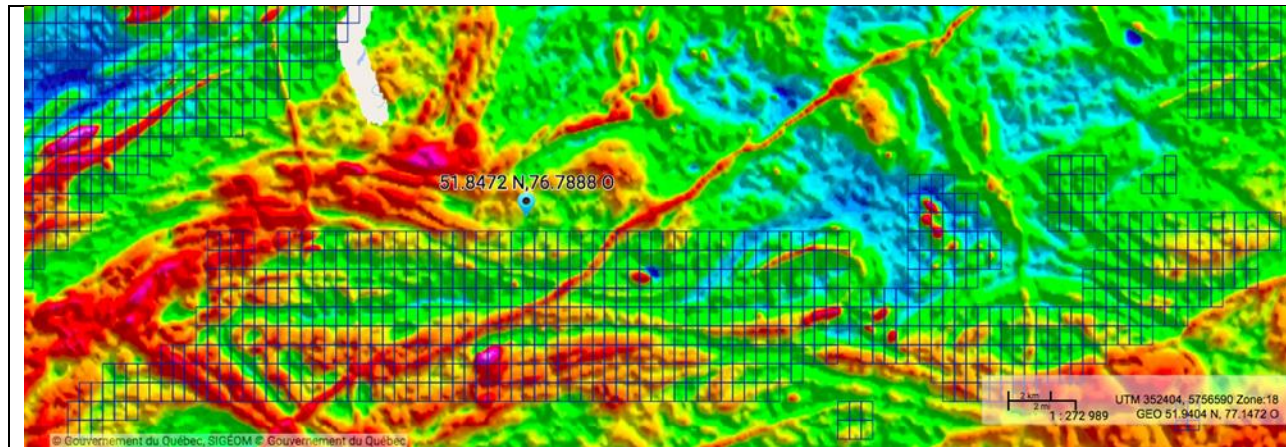
Proterozoic and younger activity is limited to rifting along the margins, emplacement of numerous mafic dyke swarms (Buchan and Ernst, 2004), compressional re-activation, large scale rotation at ca. 1.9 Ga, and failed rifting at ca 1.1 Ga. With the exception of the northwest and northeast Superior margins that were pervasively deformed and metamorphosed at 1.9 to 1.8 Ga, the craton is managed by a ductile deformation. A first-order feature of the Superior Province is its linear subprovinces of distinctive lithological and structural character, accentuated by subparallel boundary faults (e.g., Card and Ciesielski, 1986). Trends in the Superior Province are generally easterly in the south, westerly to northwesterly in the northwest, and northwesterly in the northeast. The southern Superior Province (to latitude 52°N) is a major source of mineral wealth. Owing to its potential for base metals, gold and other commodities, the Superior Province continues to attract mineral exploration in both established and frontier regions.



The project is in the Nemiscau subprovince. It is a metasedimentary rocks-dominated sequence of the Archaean eastern Superior Province. It is bound by the gneissic and tonalite-trondhjemite-granodiorite (TTG) rocks-dominated La Grande and Opatica subprovinces. The Nemiscau consists of variably migmatized metasedimentary rocks and felsic to intermediate gneisses and plutonic suites. Mafic-to-ultramafic metavolcanic rocks occur along its northern and southern boundaries. Previous structural and metamorphic studies suggest that it was the result of subduction-related, accretionary and collisional tectonics with adjacent plutonic terranes during the Kenoran orogeny.

### Local Geology

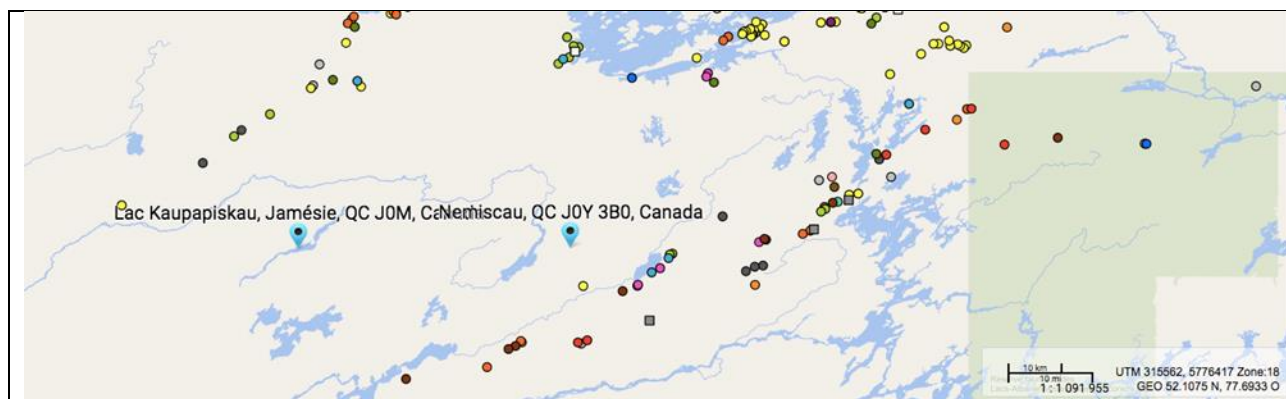




The local lithology is complex, but the granitoids are the most represented rocks in the area which open the opportunity for the exploration of rare metals such as Li, Mo and F. The following rocks represent the geology in this area:

- Biotite granite, granodiorite, quartzic-diorite, tonalite and trondhjemite
- Porphyric granodiorite, tonalitic gneiss
- Granodiorite
- Tonalite and pyroxene and hornblende granodiorite
- Monzodiorite and quartzic monzodiorite
- Pink granitic pegmatite
- Diorite and quartzic diorite
- Wacke with conglomerate
- Amphibolized basalt and amphibolite
- Diatexite protolith paragneiss, containing biotite ± garnet granite

### Known Mineralization



The mineralization in the region is defined by the MENR as follows:

The first type of elements As, Cd, Co, Fe, Mn, Mo, Sb, W, Zn in association with low levels of Al, Ba, Cr, Cu, P, Sr, Ti group elements. This multi-element signal suggests the presence of zinc sulphides and/or gold or silver and cobalt associated with pyrite and/or arsenopyrite. The low levels of Ba, P and Sr indicate that the anomalies arise from volcanic rocks rather than from sedimentary rocks. Moreover, the low Cu and Cr contents suggest a felsic lithology;

The second type presents a very different group of elements, namely the Ba, Ca, Cr, Cu, Fe, Mg, Ni, Sc, Ti, V, Zn group associated with low levels of rare earths, uranium and lead. The opposition of el-

ements generally indicative of acid intrusion is very clear whereas the association of Cu, Zn, Cr, Ni suggests the presence of mineralization.

The third type is from the association of a mafic unit (suggested by Cr and Ni) with a sedimentary unit (platform sequence).

The literature also mentions Ni-Cu-PGE mineralization associated with mafic and ultramafic intrusions; polymetallic volcanogenic Au-Cu-Ag mineralization; gold mineralization associated with deformation zones; rare earth mineralization associated with alkaline intrusions; Banded Iron Formations; and beryl pegmatites in the area.

### **Work Done**

**Day 1 - Sept 25/22:** Day one was our travel to the camp on kilometre 245 of the Route Du Nord.

**Day 2 Sept 26/22:** We did some scouting of potential areas of interest using a vehicle to start planning our work.

**Day 3 Sept 27/22:** We did more scouting using maps in different areas of potential interest equipped with an ATV.

**Day 4 Sept 28/22:** Collected 2 samples.

TJ001: Fine granite, feldspar and quartz. 51°36.908'N 76°41.352'W

TJ002: Fine granite, feldspar and quartz. 51°36.905'N 76°41.354'W

**Day 5 Sept 29/22:** Collected 2 samples.

TJ003: Schist, fine granite, feldspar and quartz. 51°36.917'N 76°41.326'W

TJ004: Quartz, granite, feldspar with potassic alteration and some metallic substance. 51°36.924'N 76°41.317'W

**Day 6 - Sept 30/22:** Collected 5 samples.

TJ005: Quartz, smoky quartz, granite, feldspar with potassic alteration. 51°36.936'N 76°41.299'W

TJ006: Quartz, granite, gneiss, schist, feldspar with potassic alteration. 51°36.933'N 76°41.300'W

TJ007: Granite, feldspar, schist and quartz. 51°37.005'N 76°41.975'W

TJ008: Mixture of basalt, and schist. 51°37.022'N 76°41.992'W

TJ009: Mixture of granite, quartz with some feldspar with slight potassic alteration. 51°37.030'N 76°41.992'W

**Day 7 - Oct 1/22:** Collected 2 samples on different sites.

TJ010: Mixture of quartz, granite, feldspar with potassic alteration and slightly metallic substance. 51°37.053'N 76°41.971'W

TJ011: Quartz and some schist 51°37.007'N 76°41.739'W

**Day 8 - Oct 2/22:** Rock and mineral description of all samples. Prepared and numbered samples for sending to lab. Return travel day.

**Day 9 - Oct 3/22:** Preparation of report.

**Day 10 - Oct 4/22** Finalized report.

### **Results and Interpretation**

We believe the project did not show great potential because the sampling was not aimed properly. The assay shows traces of certain interesting elements. We observe some values in gold (Au, TJ-002/TJ-004/TJ-008 traces); in lithium, weak but existent value (Li, TJ-006 = 30 ppm). There are other traces of elements such as: zinc (Zn), copper (Cu), chromite (Cr) and even some lanthanum (La).

AGR. Thomas W.2022-21 Au-AA23/ME-ICP41												
	Au	Cr	Cu	Fe	La	Li	Mn	Ni	P	Ti	V	Zn
	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
TJ-001		9		0,6	40		76		180	0,04		
TJ-002	0,007	7		0,53			94			0,02		
TJ-003		26	5	1,16			169		370	0,12	23	
TJ-004	0,006	7		0,16			24					
TJ-005		8		0,34			46					
TJ-006		65	5	1,65		30	265	53	230	0,14	33	
TJ-007		9		0,99	20		126		170	0,06		
TJ-008	0,006	3	133	4,03		20	759		770	0,25	72	93
TJ-009		8		0,19			29					
TJ-010		9		0,41			43					
TJ-011		6		0,18			20					

### Conclusion and Recommendations

The project has shown the limits of mineral resources in this area. The geology of the area is poorly studied, and needs more geological and geophysical data. This will help to find new targets. The assays produced in this project create some doubt concerning the economic potential.

We recommend that the prospector prospect in another area. His trapline is large with a wide surface area to sample. Choosing the area to prospect requires more knowledge about the past work bibliographic data.



**4.7 NEW COLLABORATION AND JOINT VENTURE PROJECTS**

The Cree Mineral Exploration Board received several proposals from Cree and non-Cree companies for the fiscal year 2021-2022.

In order to satisfy the Board’s concerns for economic development, the CMEB is willing to evaluate projects from any serious company. The Board receives proposals from several companies such as Geomega Resources Inc., NIOGOLD Inc., Nemaska Exploration Inc., Eagle Hill Exploration Corp., SIRIOS Resources Inc., Ressources D’Arianne Inc. and Metanor Resources Incorporated.

These proposals are discussed and decided upon at the Board meeting following their reception. The companies are seeking joint ventures, shares holders or investments. They support hiring Cree employees from proximal communities and contract Cree services companies.



#### **4.8 GEOSCIENCES**

The interactive Geo-Economic Map on the CMEB website at [www.cmeb.org](http://www.cmeb.org) now has the traplines for each of the nine Cree communities in Eeyou Istchee. Each trapline has the information related to community, tallyman, contact person and mineral potential. The map is accompanied by a report on mining activity in Eeyou Istchee.

The interactive geo-economic map has multiple uses. Cree prospectors, tallymen and the public in general can consult the geological base map for information on the geology of an area of interest. Mining companies can consult the communities and trapline overlay for the names of tallymen impacted by company projects and other contact persons. This information is important for establishing and maintaining proper relations between tallymen, communities and exploration companies on land use. This overlay also highlights the geology and mineral occurrences within the trapline boundary. The guideline for exploration companies is published on the website but, as it is a work in progress, there is room for improvement. The active mine overlay will be developed further to include historical and statistical information on the mines.

The CMEB performs several geo-scientific activities beginning with academic activities with children during summer, regular school scientific events, and the evaluation of the Cree Territory mineral potential via the production of an Eeyou Istchee geological map and geological impact studies. The Board produces compact discs containing presentations on the Earth sciences which will be distributed in all the CSB schools. A CMEB executive conducted a geology activity including both theory and a field trip for the youth. The CMEB also gave a presentation on the mining industry and job opportunities to secondary students in the communities of Chisasibi, Wemindji and Mistissini.

The CMEB is collaborating in several scientific studies with the INRS institute, École Polytechnique de Montréal, Geological Survey of Canada (GSC) and University of Quebec in Montreal (UQAM).

The collection of geophysical data from the seismic station set up by Dr. Fiona Ann Darbyshire from GEOTOP-UQAM was done with the collaboration of the Cree Mineral Exploration Board. This station supplies continuous information on the seismic activity of the Earth and its composition.

#### **4.9 COLLABORATIONS**

The CMEB objectives in this area of activity are described in the Training and Job Assistance section. The CMEB has examined various ways and proposals to further the development of its program on Training and Job Assistance. It is examining ways of developing on-the-job training through a joint action committee with the Government of Quebec and the mining industry.

Finally, it is examining ways of collaborating with the Cree Human Resources Department in these matters. The CMEB continues working on long term training in prospecting and continues collaborating (through expertise and promotion) in several training programs related to mineral exploration in Eeyou Istchee. The CMEB is a partner in the CHRD Eeyou Mining Skills Enhancement Program (EMSEP) designed to create a workforce with the fundamental skills to embark upon any career in the mining sector.

#### **Ministry of Energy and Natural Resources (Ministère de L'Énergie et des Ressources naturelles)**

The Board continues the development of collaborative and mutually productive relationships with the mining department of the Ministry of Energy and Natural Resources (MERN). Among other initiatives, the MERN has agreed to promote the CMEB mission and purposes by informing all companies holding mining titles in the Territory and by including the CMEB on its web site. Furthermore, the MERN has set up an internal monitoring program of Cree employment in the mining sector, is planning to set up a joint

action committee between the government, the industry and the CMEB, and has put in place a consultation mechanism with the CMEB on its own mapping programs in the Territory.

As discussed in the section on Awareness and Promotion, the MERN promotes mineral development and Cree involvement in the Territory. This promotional representation is in evidence at the Quebec Annual Symposium on Exploration and the Prospectors and Developers Association of Canada meetings.

### **Cree Trappers Association**

The CMEB formally invited representatives of the Cree Trappers Association (CTA) to establish direct links and communication channels between the two organizations. It was agreed to continue to further develop these links in the near future. The board attends CTA annual meeting events to present a conference concerning the CMEB and mining activities in Eeyou Istchee.

The CMEB is establishing a solid working relationship with the CTA; a direct result of information exchange and CMEB interventions in the field. The members of CTA believe that CMEB should play the role of liaison between the mining industry and the trappers. The Board facilitates communication and offers a source of information for Cree trappers and prospectors. This establishes harmony between hunting and fishing activities and exploration activities. The trapper is a good prospector who can conduct fieldwork in unexplored territories and can find mineralized rocks that could lead to future world class ore deposits.

### **Cree School Board**

The CMEB hopes to participate in scientific education in all Cree communities by establishing a dynamic link with the Cree School Board. The objective of this kind of venture is to promote the geosciences to our younger generation. Presentations are given by the CMEB geologists in various CSB primary, secondary, and continuing education schools. The topics presented include the Earth Sciences, the environment, mineralogy, and mining. The purpose of the presentations is to popularize the sciences and to facilitate access to both the geological and mining domains.

## **4.10 PUBLIC SERVICES AND INTERVENTIONS OF THE CMEB**

The CMEB made several interventions in the territory. Most of them concern requests by companies to have access to the territory, to meet tallymen, to obtain different services and to hire manpower. The CMEB is also in demand by junior companies, universities and research centers for logistics and expertise and is consulted in cases of misunderstandings between tallyman and companies. The CMEB is the first contact to guide the parties to a suitable agreement.

The CMEB is developing geological data and an information bank for the Crees and for the mining industry. All field work is systematically reported to the CMEB. The latter makes the non-confidential information available to the public.

The Cree Mineral Exploration Board is an intermediary to facilitate communication between the mining industry and the Cree and develops mineral resources training programs to build a network between trainees and training institutions.

## **5. A FIVE-YEAR BUDGET**

The accounting firm Raymond Chabot Grant Thornton LLP does the bookkeeping and produces the financial statement for each fiscal year for the CMEB. These documents are annexed to the Activity

Report. Administrative and management expenses have been broken down into six categories, namely 1) Head Office and other office expenses; 2) Communications expenses; 3) Clerical and other support; 4) Technical support and expertise; 5) Board meetings and professional fees, and finally 6) Others and miscellaneous. All the expenses are best viewed in the light of the five-year work plan adopted by the CMEB. The amount for Year 1 includes an exceptional non recurrent expense related to the requirement of a vehicle for the Board and its Chief Geologists. The amounts for years 2, 3, 4 and 5 are indexed for a slight increase (5%) as a provision for cost of living and the requested services from the Board.

*1) Office rent and expenses (\$40,000)*

These include rent and general services for a Head Office location in Wemindji, covering not less than 200 square feet, and possibly other office spaces in other communities, as possibly required such as an information center or a regional office in Mistissini. Expenses also include general office supply, and hardware and software packs for general business and possibly technical, purposes.

These services are to be provided by a Service Agreement between the Cree Nation of Wemindji and the Cree Mineral Exploration Board. This Agreement factors in administration and benefit fees for the Cree Nation of Wemindji in the amount of 15% of the value of the service offered.

*2) Costs of Communications (\$30 000)*

These include expenses related to the use of phones, faxes, photocopies, and mostly and largely internet based communications, including web-based servicing to all communities. The costs therefore include expenses related to computer hardware and software acquisition, upgrading and maintenance.

These costs are to be included partly within the Service Agreement between the Cree Nation of Wemindji and the Cree Mineral Exploration Board.

*3) Clerical and other support (\$60 000)*

These include a permanent clerical position(s) at the Head Office, and part-time and/or contracted specific support tasks at the Head Office or at a subsidiary information or regional office. They include accounting, bookkeeping and auditing fees, including the provision of a financial statement at the fiscal year.

These costs are to be included partly within the Service Agreement between the Cree Nation of Wemindji and the Cree Mineral Exploration Board.

*4) Chief geologist and technical expertise (\$140 000)*

Based on the similar and comparable Nunavik Mineral Fund which began six years before the CMEB, a critical element of success and credibility lies in the hiring of a Chief Geologists, whose functions will be to coordinate the programs and assist the Board in all technical and professional matters. In addition, the Chief geologists, or the Board, may at time request outside independent expertise either to assess, review or plan mineral exploration assistance.

The Board has proceeded to the hiring of such a Chief Geologist, following a public and open competition. The position has been offered to Dr Youcef Larbi, PhD from UQÀM. The amounts indicated include salary, premiums, benefits and lodging. A provision of 10% is internalized in that amount to request and purchase, at time, independent expert advices on a need and service basis.

Lodging costs are to be included partly within the Service Agreement between the Cree Nation of Wemindji and the Cree Mineral Exploration Board.

*5) Board Meetings and Professional Fees (\$80 000)*

The Board is expected to hold an average of four meetings per year, at its Head Office or at any location deemed convenient. The amount indicated is based on that provision and an average of \$20k per meeting, based on 2002-2003 real costs for face-to-face meetings in Wemindji.

Professional Fees are for senior consulting advices to the Board such as may provide from time to time by external experts in mineral resources development, professional training or environmental policy.

*6) Other expenses (\$150 000)*

Expenses included in this item are related to the day-to-day operations of the information offices, field and traveling expenses of the Chief Geologists and/or experts, and miscellaneous expenses not covered by specific items of the work plan.

**6. THE CREE MINERAL EXPLORATION BOARD FINANCIAL YEAR ENDING MARCH 2023**

<b>FUNDING FROM THE CNG AND MERN FOR CMEB'S OPERATION</b>	<b>CNG</b>	<b>MERN</b>
2001-2002	\$300,000	\$300,000
2002-2003	\$300,000	\$300,000
2003-2004	\$300,000	\$300,000
2004-2005	\$300,000	\$300,000
2005-2006	\$320,000	\$300,000
2006-2007	\$320,000	\$300,000
2007-2008	\$320,000	\$300,000
2008-2009	\$320,000	\$300,000
2009-2010	\$500,000	\$300,000
2010-2011	\$500,000	\$300,000
2011-2012	\$500,000	\$300,000
2012-2013	\$500,000	\$300,000
2013-2014	\$500,000	\$300,000
2014-2015	\$500,000	\$300,000
2015-2016	\$500,000	\$300,000
2016-2017	\$500,000	\$300,000
2017-2018	\$500,000	\$300,000

2018-2019	\$500,00	\$300,000
2019-2020	\$500,000	\$350,000
2020-2021	\$500,000	\$350,000
2021-2022	\$500,000	\$350,000
2022-2023	\$500,000	\$350,000

<b>ALLOCATION OF FUNDS FROM THE GOVERNMENT OF QUEBEC 2022-2023</b>	
<b>RECIPIENT/PROJECT</b>	<b>\$ ALLOCATED</b>
Agreement 2022-04 Thomas Blackned - Tartianna R08 - VC19 Project	\$9,940
Agreement 2022-05 Robert Ratt - Mist East Project Phase 2	\$9,900
Agreement 2022-06 Dennis Moar - Waapikun Project	\$8,700
Agreement 2022-07 Norman Grant - A54W01 Prospecting Project	\$6,700
Agreement 2022-08 Larry Desgagné - Gold Mountain Prospecting Project	\$9,550
Agreement 2022-09 Thomas Wapachee – R - 17 Prospecting Project	\$7,300
Agreement 2022-10 Norman Grant - FG26 Project	\$7,700
Agreement 2022-11 Thomas Blackned - Lorraine R08 - RE03 Project	\$9,940
Agreement 2022-12 Neil Wapachee - Kaanemgkashit Phase IV Project	\$6,700
Agreement 2022-13 Norman Grant - N24 Project	\$7,700
Agreement 2022-14 Neil Wapachee - Jeenawmii Project	\$7,700

Agreement 2022-15 Joshua Blacksmith - W24A Exploration Project	\$7,900
Agreement 2022-16 Robert Kitchen - Mishegamish Exploration Project	\$10,000
Agreement 2022-17 Joshua Blacksmith - W24A Exploration Project	\$9,300
Agreement 2022-18 Thomas Blackned – Jamesee - R08 - V03 Project	\$9,940
Agreement 2022-19 Larry Desgagné - Volcano Gold Prospecting Project	\$10,000
Agreement 2022-20 Mike Voyageur - TB Lake M26 Prospecting Project	\$6,700
Agreement 2022-21 Thomas Wapachee - R-17 Phase 2 Prospecting Project	\$7,800
Agreement 2022-22 Rock A Sheshamush - NE Whapmagoostui Exploration Project	\$9,918
Agreement 2022-23 Norman Grant - CH33 Exploration Project	\$7,500
Agreement 2022-24 Robert Ratt - Mist East Project Phase 3	\$10,000
Agreement 2022-29 Neil Wapachee - Kamikukumeu Project	\$9,100
Agreement 2023-01 Thomas Blackned – Jamesee K306 Project	\$8,700
Resolution 2223-06 Nimsken Corporation Inc. - Rush Lake Diamond Drilling Program	\$56,625
Resolution 2223-07 Nimsken Corporation Inc. - Rush Lake Induced Polarization and Magnetometric Survey	\$75,000
Resolution 2223-08 Nimsken Corporation Inc. – Philippon	\$43,740
Resolution 2223-09 Natives Exploration Services Reg'd - Diamond Drill Hole Program on the Mina Gold Property – NTS 32G11 Guercheville and Drouet Townships	\$46,215

**7. OVERVIEW OF THE FINANCIAL ASSISTANCE ALLOCATED TO PROJECTS SINCE 2002**

<b>FUNDS ALLOCATED FOR EXPLORATION PROJECTS SINCE 2002</b>	<b>\$ ALLOCATED</b>
2022-2023	221,580

2021-2022	408,055
2020-2021	329,467
2019-2020	445,049
2018-2019	330,744
2017-2018	501,400
2016-2017	463,626
2015-2016	437,551
2014-2015	384,451
2013-2014	232,075
2012-2013	300,544
2011-2012	265,000
2010-2011	373,670
2009-2010	425,438
2008-2009	389,100
2007-2008	193,054
2006-2007	380,360
2005-2006	216,398
2004-2005	178,220
2002-2004	468,845



WEMINDJI EXPLORATION INC.	
Agreement 2003-01 Initial Exploration Phase	113,587
Agreement 2003-02 Property Renewals	63,816
Agreement 2006-01 Lake Helen	25,000
Agreement 2006-03 Diamond Exploration Phase 2	60,000
Agreement 2006-05 Negotiations with Opinaca Mines Ltd-Goldcorp Inc.	175,000
Agreement 2006-08 Field Work including Geophysics Lake Astree	10,000
Agreement 2007-03 Complete Field Works on Wemindji Properties	25,000
Agreement 2008-01, Helen Lake Property Extensions	75,000
Agreement 2008-02 Diamond Exploration Project Phase 3	100,000
Agreement 2009-09 Wemindji Exploration 33 C, D, E, F and G	44,880
Agreement 2010-02 WEMEX Phase 2 Exploration Work	60,000
Agreement 2011-02 Wemindji Exploration Inc. JV Virginia Mines Inc.	37,500
Agreement 1112-10 Wemindji Exploration Inc. JV Virginia Mines Inc. Till and Au 2011	37,500
Agreement 2012-05 Project 3 Claims Block	50,000
Agreement 2012-06 Project JV Virginia Sampling	37,500
Resolution 1617-02 Research and Grassroots Exploration on New Targets In Eeyou Istchee	45,900
Resolution 1617-03 Summer Exploration Works on Claims, 33C07 and 33C06	47,538

CREE GOLD EXPLORATION INC.	
Agreement 2003-03 Perch River Copper	5,185
Agreement 2003-05 Mistissini Joint Venture	60,650
Agreement 2003-09 Assist in the Listing of Cree Gold	50,000
Agreement 2005-04 Mistissini JV Project 2005-2006	53,388
NIMSKEN CORPORATION INC.	
Agreement 2003-04 Nimsken Corporation Inc. - Oujé-Bougoumou NTS sheet 32J02 and 32J03	25,755
Agreement 2003-06 Nimsken Corporation Inc. - Work on the Michwacho Property	25,000
Agreement 2003-07 Nimsken Corporation Inc. - Beep Mat Surveys and Sampling	50,000
Agreement 2003-10 2003 Nimsken Corporation Inc. - Work on the Cummings Property	17,500
Agreement 2004-02 Nimsken Corporation Inc. - Beep Mat Surveys and Sampling	45,750
Agreement 2005-01 Nimsken Corporation Inc. - Work on the Michwacho Property	34,000
Agreement 2007-04 Nimsken Corporation Inc. - EX-Inc., Presentation on an Exploration Project	40,000
Agreement 2009-03 Nimsken Corporation Inc. - 32G02, 03 Project	37,500
Agreement 2009-04 Nimsken Corporation Inc. - 32G06, 07 Project	37,500
Agreement 2009-05 Nimsken Corporation Inc. 32J05, 11 & 12 Project	37,500
Agreement 2009-06 Nimsken Corporation Inc. - Nimsken/Soquem JV Cummings Properties	25,000
Agreement 2010-07 Nimsken Corporation Inc. - 32J03, 04 and 32G14, 15 Project	37,500

Agreement 2010-08 Nimsken Corporation Inc. - 32G06,07,10 and 11	37,500
Agreement 2013-01 Nimsken Corporation Inc. - 32G01, 07 and 08 Project	37,500
Agreement 2013-02 Nimsken Corporation Inc. - 32G01, 07 and 08 Project	40,500
Agreement 1415-06 Nimsken Corporation Inc. - Opawica Project	31,500
Agreement 1415-07 Nimsken Corporation Inc. - Areas 32G02, 32G07 and 32G08 Project	37,500
Agreement 1415-08 Nimsken Corporation Inc. - Areas 32I04, 32G13, 32G15 and 32J03 Project	37,500
Agreement 1415-13 Nimsken Corporation Inc. - Barlow East Project Geophysical Induced Polarization and Magnetometer Surveys, NTS Area 32G15	37,500
Agreement 2015-05 Nimsken Corporation Inc. - Opawica and Barlow East projects	31,733
Agreement 2015-12 Nimsken Corporation Inc. - Beep Mat Project	37,500
Agreement 2015-13 Nimsken Corporation Inc. - Diamond Drilling Barlow East Project	22,500
Agreement 2016-02 Nimsken Corporation Inc. - Chibougamau River Project	50,000
Agreement 2016-03 Nimsken Corporation Inc. - Barlow East DDH Project	19,500
Agreement 2016-02 Nimsken Corporation Inc. - Chibougamau River Project	50,000
Agreement 2016-03 Nimsken Corporation Inc. - Barlow East DDH Project	19,500
Resolution 1617-08 2016 Nimsken Corporation Inc. - Beep Mat Prospecting Project, Targets 32G07-A, B, C and 32G15-D and E	37,500
Resolution 1617-14 Nimsken Corporation Inc. - Barlow East Extension Project: MaxMin and Magnetometer Surveys NTS Area 32G15	12,450
Resolution 1718-02 Nimsken Corporation Inc. - 2017 Exploration Program Targets 32G07-A, B, C and 32G15A AND B	38,500
Resolution 1718-12 Nimsken Corporation Inc. - Rush Lake DDH Project	22,500

Resolution 1718-22 Nimsken Corporation Inc. - 2018 Exploration Program Electromagnetic and magnetic surveys in NTS 32G15	37,470
Resolution 1819-10 Nimsken Corporation Inc. - 2018 Barlow Lake DDH Project NTS 32G15	22,500
Resolution 1920-09 Nimsken Corporation Inc. - Line cutting, MaxMin & Magnetometer Surveys on the 2019 Barlow Extension South, NTS Area 32G15	42,375
Resolution 1920-10 Nimsken Corporation Inc. - 2019 Ground Electromagnetic Exploration Program, NTS 32G07, 32G08	37,500
Resolution 1920-18 Nimsken Corporation Inc. - Induced Polarization and Magnetometer Surveys on the 2019-2020 Barlow Cuvier – NTS Area 32G15 – Category I Land	70,000
Resolution 1920-22 Nimsken Corporation Inc. - Line Cutting, Electromagnetic & Magnetic Surveys on the 2020 Barlow Gold Project	\$25,650
Agreement 2021-20 Nimsken Corporation Inc. - Induced Polarization / Resistivity and Magnetometer Surveys on the 2020-2021 Barlow Cuvier Extension Project – NTS Area 32G15 – Category 1 Land	60,750
Agreement 2021-22 Nimsken Corporation Inc. - Induced Polarization / Resistivity and Magnetometer Surveys on the 2021 Barlow East Gold Showing Project – NTS Area 32G15	20,239
Agreement 2021-23 Nimsken Corporation Inc. - Electromagnetic and Magnetometer Surveys on the Opawica Project – NTS Area 32G07	19,200
Agreement 2021-24 Nimsken Corporation Inc. - Geological & Geophysical Compilation Centered on Barlow and Rush Lakes Are 32G15	30,000
Resolution 2122-09 Nimsken Corporation Inc. - Electromagnetic and Magnetometer Surveys on the South-West Barlow project - NTS Area 32G15 - Category 1 Land	21,218
Resolution 2122-15 Nimsken Corporation Inc. - 2022 EM and Mag Exploration Program on the Sioui Showing, NTS 32G15, Barlow Lake Property	30,240
Resolution 2122-16 Nimsken Corporation Inc. - Rush Lake DDH, NTS 32G15 Area, Barlow Lake	70,000
Resolution 2223-06 Nimsken Corporation Inc. - Rush Lake Diamond Drilling Program	\$56,625
Resolution 2223-07 Nimsken Corporation Inc. - Rush Lake Induced Polarization and Magnetometric Survey	\$75,000
Resolution 2223-08 Nimsken Corporation Inc. – Philippon	\$43,740

NATIVES EXPLORATION SERVICES REG'D.	
Agreement 1112-06 Natives Exploration Services Reg'd.	50,000
Agreement 1213-05 Natives Exploration Services Reg'd. - Arthur and Sam Bosum NTS Area 32G06	26,438
Agreement 1213-06 Natives Exploration Services Reg'd. - Arthur and Sam Bosum NTS Area 32G10	30,750
Agreement 1213-11 Natives Exploration Services Reg'd. - Reconnaissance Geological Mapping, Prospecting and Sampling on 3 claim blocks of the "New Claims" Group of Properties	50,000
Agreement 1213-12 Natives Exploration Services Reg'd. - Follow Up Sampling Program for 2012 as Part of our Joint Venture with Virginia Mines in James Bay	37,500
Agreement 1314-23 Natives Exploration Services Reg'd. - Mina Gold Project	19,575
Agreement 1415-12 Natives Exploration Services Reg'd. - Diamond Drilling Campaign NTS Area 32G11	30,000
Agreement 2015-03 Natives Exploration Services Reg'd. - Barlow North-East Project	21,090
Agreement 2015-04 Natives Exploration Services Reg'd. - Nemenjiche and Mina Gold projects	24,765
Agreement 2015-11 Natives Exploration Services Reg'd. - Mina Gold East Project	33,938
Resolution 1617-09 Natives Exploration Services Reg'd. - Prospecting and Follow-up on Targets 32G10-A, 32G11 and 32J01-C	50,000
Resolution 1617-22 Natives Exploration Services Reg'd. - Prospecting and Follow-up of the 29% Cu Atlas Showing, NTS 32G15	36,983
Resolution 1718-01 Natives Exploration Services Reg'd. - Opemiska Project, NTS 32G15	18,750
Resolution 1718-11 Natives Exploration Services Reg'd. - Mina Gold DDH Project	22,500
Resolution 1819-11 Natives Exploration Services Reg'd. - Purchase of a Beep Mat Model BM8	10,500

Resolution 1920-08 Natives Exploration Services Reg'd. - Induced Polarization Survey on 29% Cu showing, NTS 32J01	35,175
Resolution 2122-03 Natives Exploration Services Reg'd. - Drilling on the Atlas Property, 29% Cu Showing, NTS 32J01Phase 2	35,456
Resolution 2122-05 Natives Exploration Services Reg'd - Induced Polarization and Resistivity Survey on the Mina Gold Property, NTS 32G11 – Guercheville and Drouet Townships	70,000
Resolution 2223-09 Natives Exploration Services Reg'd - Diamond Drill Hole Program on the Mina Gold Property – NTS 32G11 Guercheville and Drouet Townships	\$46,215
JA MACLEOD EXPLORATION REG'D	
Resolution 1920-24 JA MacLeod Exploration Reg'd. - Joint Venture Agreement between Gespeg Resources Ltd. And JA MacLeod Reg'd.	\$3,750
Resolution 1920-25 JA MacLeod Exploration Reg'd./Gespeg Resources Ltd. JV - Davidson Project	\$34,215
SD MINES INC.	
Resolution 1819-13 SD Mines Inc. - R17 Project	50,000
Resolution 1920-02 SD Mines Inc. - 2019 Project Amendment	28,800
Resolution 1920-15 SD Mines Inc. - Phase II Kaupapiskau Project	20,684
Resolution 1920-26 SD Mines Inc. - Request for Assistance To Attend the Business Workshops	\$8,160
Agreement 2021-14 SD Mines Inc. - Phase III Kaupapiskau	30,488
Agreement 2021-15 SD Mines Inc. - Nemaska Lake	60,000
Resolution 2122-07 SD Mines - Nemaska Lake Phase III	27,330

Resolution 2122-08 SD Mines - Eastmain Project	11,325
SIINI EXPLORATION AND SERVICES	
Resolution 2122-06 Siini Exploration and Services, Robert Ratt - Application for Financial Assistance for the Amount of \$15,000 for Additional Field Equipment	11,250
ENVIROCREE LTD.	
Agreement 1415-17 Mistassini Lake Picnic Areas Clean-up Project	5,000
MCV SERVICES	
Mining 101 and Basic Mineral Exploration Session 1, Chisasibi	23,000
Mining 101 and Basic Mineral Exploration Session 1, Whapmagoostui and Waskaganish	50,000
CREE NATION OF CHISASIBI	
Agreement 1314-14 Chisasibi Prospecting Course	16,000
CREE NATION OF MISTISSINI	
Agreement 2003-11 Basin Study Research Project Phase 2	30,500
Agreement 2004-01 Diamond Exploration Field Assistant Training Course	20,000
Agreement Cree Nation of Mistissini (Line cutting Grid)	19,500
Mistissini Funding Request Uranium Consultation	10,000

Mistissini – Safety Security 11-004, Copper Boulder Tracing Phase 3 and Washaw Sibi Training	120,000
CREE NATION OF WASWANIPi	
Agreement 2011-01 Mineral Exploration and Mining Activity Eeyou Istchee	10,000
Agreement 1314-12 Waswanipi Training Workshop, Introduction to Mineral Exploration and Mining 101, August 2013	10,000
Agreement 1314-13 Waswanipi Training, Introduction to GESTIM Plus: A mining title management system, August 2013	3,000
PROSPECTORS	
Assinica Lake Project	16,072
Agreement 2004-05 Baie à la Roche Rouge	10,245
Rale Project	11,800
Agreement 2005-02 Lake à l'eau Jaune Phase 2	11,100
Agreement 2005-03 Lake Assinica Phase II	17,550
Agreement 2005-06 Lake Assinica Phase III	8,485
Agreement 2006-02 JS Stromatolite Parts A and B	20,000
Agreement 2007-01 Almungo Project Phase 1	10,300
Agreement 2007-02 Kaychikwapichu Project Phase 1	10,060
Agreement 2008-03 Projet Nicobi Exploration	12,500
Agreement 2009-01 Larry Desgagné Nicobi 2	17,940
Agreement 2009-02 Larry Desgagné Windy Lake	5,675



Agreement 2009-07 Sam R. Bosum (32G-11)	25,500
Agreement 2009-08 Arthur Bosum (32G14)	28,800
Agreement 2010-03 Larry Desgagné Buteux Gold	11,940
Agreement 2010-04 Larry Desgagné Nicobi Phase 3	14,200
Agreement 2010-05 Sam Reggie Bosum 32G11	30,000
Agreement 2010-06 Arthur Albert Bosum 32G11	30,000
Agreement 1112-05 Larry Desgagné Buteux Phase 2	18,500
Agreement 1112-11 Terry-Charles Bearskin Black Bear (46.5 km LG-4)	25,000
Agreement 1213-09 Larry Desgagné Buteux Phase III	5,600
Agreement 1213-10 Larry Desgagné Ganthier Phase 1	19,400
Agreement 1213-14 Larry Desgagné Perch River #3	2,500
Agreement 1314-04 Larry Desgagné - Buteux Gold Phase 4 Project	17,575
Agreement 1314-05 Larry Desgagné - Copper Pointe Project	9,425
Agreement 1314-08 Jim MacLeod - Copper Stromatolite Project	23,000
Agreement 1314-10 Wayne Fireman - Virginia Claims Project	15,000
Agreement 1314-16 Jonathan Gunner - Stajan Project	12,000
Agreement 1314-20 Marc Bouchard - Win-Win Project 32G10, Lac à l'Eau Jaune	14,100
Agreement 1314-22 Sam R. Bosum - Nemenjiche Project	16,400
Agreement 1415-03 Christopher Quinn - Merrill Lake Project	30,000
Agreement 1415-04 Larry Desgagné - Moly Extension 2014 Project	9,855

Agreement 1415-05 Larry Desgagné - Copper Point Project	15,525
Agreement 1415-14 Dennis Moar and Teddy Ekomiak - Rawkz TD Project	9,700
Agreement 1415-15 Nikamoon Mitchell and Robert Ratt - Mitchell Project	12,600
Agreement 1415-16 Marc Bouchard - Lac à l'Eau Jaune Win-Win Project Phase 2	7,000
Agreement 1415-20 Dennis Moar - Utahunanis Project	4,400
Agreement 1415-21 Larry Desgagné - Copper Point Phase V Project	5,000
Agreement 2015-01 Dennis Moar - Utahunanis Project	4,400
Agreement 2015-02 Larry Desgagné - Copper Point Phase V Project	5,000
Agreement 2015-06 David John Peace - Brun Lake Project	10,300
Agreement 2015-07 Larry Desgagné - Fushite Gold Project	5,450
Agreement 2015-08 Larry Desgagné - Buteux Gold Project	18,550
Agreement 2015-09 Frederick Whiskeychan - River Allard Project	10,000
Agreement 2015-10 Kenny Wapachee - Trapline M-13 Project	9,000
Agreement 2015-14 Marc Bouchard - Win-Win Project	13,150
Agreement 2016-01 Larry Desgagné - Buteux Gold Project 2016 Phase VI Project	8,100
Resolution 1617-04 Larry Desgagné - Nicobi 2016	16,900
Resolution 1617-05 Nikamoon Mitchell and Robert Ratt - Mitchell Project Phase 2	8,200
Resolution 1617-06 Dennis Moar - Rawkzt Phase 2	5,800
Resolution 1617-12 Kenny Wapachee - Trapline M13 Exploration Project	9,100
Resolution 1617-13 William Fireman - Trapline CH16 Au-Cu Exploration Project	10,300
Resolution 1617-21 Larry Desgagné - Nicobi 2017	7,945
Resolution 1617-23 Larry Desgagné - Molly Drilling Project 2017	21,175

Resolution 1617-24 Marc Bouchard - Phoenix Project	13,000
Resolution 1617-25 Jonas Sheshamush - Whapmagoostui Trapline GW-01 Exploration	15,000
Resolution 1718-03 Dennis Moar - Apimichiskutasich Lake Project	8,700
Resolution 1718-15 Larry Desgagné - Molly Final Phase	9,920
Resolution 1718-21 Jonas Sheshamush - Trapline GW-01 Phase II	15,000
Resolution 1819-01 Buckley Petawabano - M41 Exploration Project	9,925
Resolution 1819-02 Bernard Stewart - Wiyaschunis Lake Project	8,100
Resolution 1819-03 Dennis Moar - Atichikamis Lake Project	7,900
Resolution 1819-04 Larry Desgagné - Urban Barry Gold #1	28,269
Resolution 1819-07 Edward Georgekish Project	10,400
Resolution 1819-08 Jeremy Diamonds Project	9,250
Resolution 1819-09 Thomas Blackned Project	8,200
Resolution 0920-03 Larry Desgagné - Fushite Gold Project 2019	11,070
Resolution 1920-04 Larry Desgagné - Gold Molly Project 2019	9,980
Resolution 1920-05 Buckley Petawabano - M-14 Exploration Project	11,000
Resolution 1920-06 Jonas Sheshamush - Sheshamush Exploration Project	20,350
Resolution 1920-07 Dennis Moar - Kamiywakamach Lake Project	7,900
Agreement 2019-11 Norman Grant - W53-W53A Exploration Project	8,000
Agreement 2019-12 Thomas Blackned - KM317 Exploration Project	8,700
Agreement 2019-13 Neil Wapachee - Kaanemgkashist Exploration Project	9,100

Agreement 2019-14 Robert Ratt - Robert Ratt Exploration Project	8,900
Agreement 2019-15 Kenny Wapachee - Trapline M13 Exploration Project Phase 3	8,000
Agreement 2019-16 Dennis Moar - Kawiywakamach Lake Project Phase 2	7,900
Agreement 2019-17 Jordan Kitchen - W05B exploration Project	8,500
Agreement 2019-18 Simeon Wapachee - N23 Exploration Project	8,600
Agreement 2019-20 Neil Wapachee - Kaanemgkashist Exploration Project Phase 2	9,100
Agreement 2019-21 Thomas Blackned - KM312 Exploration Project	9,800
Agreement 2021-03 Larry Desgagné - Brongniart Moly Gold 2020 Exploration Project	10,870
Agreement 2021-04 Larry Desgagné - Trenholme 2020 Exploration Project	10,720
Agreement 2021-05 Marc Bouchard - Fantonest 2020 Exploration Project	8,000
Agreement 2021-09 Thomas Blackned - KM322 Prospecting Project	11,300
Agreement 2021-10 Rock A. Sheshamush - Cinii Exploration Project	12,800
Agreement 2021-11 Robert Ratt - Polaris West Lake Project	9,400
Agreement 2021-12 Neil Wapachee - Kaanemgkashist Exploration Project, Phase 3, Km 346 Route du Nord Project	6,600
Agreement 2021-13 Denis Moar - Mantuwataw Exploration Project	6,700
Agreement 2021-04 Larry Desgagné - Lac Des Trois Iles	8,821
Agreement 2021-05 Larry Desgagné - Golden Moose Project	9,950
Agreement 2021-06 Marc Bouchard - Opawica Project	6,820
Agreement 2021-07 Dennis Moar - Kauskatikakamaw Project	8,100
Agreement 2021-08 Neil Wapachee - N23 Exploration Project	7,000
Agreement 2021-09 Simeon Wapachee - N23 Nemiscau Lake – Exp Project	6,350
Agreement 2021-10 Robert Ratt - East Mistissini Project	10,000
Agreement 2021-11 Elvis Weapenicappo & Priscilla Spencer - Eastmain East Exploration Project	7,400
Agreement 2021-12 Thomas Blackned - Prospecting Billy Diamond Hwy Km 358	9,500
Agreement 2021-13 Jonas Sheshamush - Sheshamush Camp Exploration Project	9,995

Agreement 2021-14 Robert Ratt - Waconichi West Project	8,100
Agreement 2021-15 Thomas Blackned - Prospecting Km 312	9,500
Agreement 2021-16 Norman Grant - Nottaway River Phase 2	7,700
Resolution 2122 14 Marc Bouchard - Fantonest 2022 Exploration Project	22,000
Agreement 2022-04 Thomas Blackned - Tartianna R08-VC19 Project	\$9,940
Agreement 2022-05 Robert Ratt - Mist East Project Phase 2	\$9,900
Agreement 2022-06 Dennis Moar - Waapikun Project	\$8,700
Agreement 2022-07 Norman Grant - A54W01 Prospecting Project	\$6,700
Agreement 2022-08 Larry Desgagné-Gold Mountain Prospecting Project	\$9,550
Agreement 2022-09 Thomas Wapachee - R-17 Prospecting Project	\$7,300
Agreement 2022-10 Norman Grant - FG26 Project	\$7,700
Agreement 2022-11 Thomas Blackned - Lorraine R08 - RE03 Project	\$9,940
Agreement 2022-12 Neil Wapachee - Kaanemgkashit Phase IV- Project	\$6,700
Agreement 2022-13 Norman Grant - N24 Project	\$7,700
Agreement 2022-14 Neil Wapachee - Jeenawmii Project	\$7,700
Agreement 2022-15 Joshua Blacksmith - W24A Exploration Project	\$7,900
Agreement 2022-16 Robert Kitchen - Mishegamish Exploration Project	\$10,000
Agreement 2022-17 Joshua Blacksmith - W24A Exploration Project	\$9,300
Agreement 2022-18 Thomas Blackned - Jamesee- R08 - V03 Project	\$9,940
Agreement 2022-19 Larry Desgagné - Volcano Gold Prospecting Project	\$10,000
Agreement 2022-20 Mike Voyageur - TB Lake M26 Prospecting Project	\$6,700
Agreement 2022-21 Thomas Wapachee - R-17 Phase 2 Prospecting Project	\$7,800
Agreement 2022-22 Rock A Sheshamush - NE Whapmagoostui Exploration Project	\$9,918
Agreement 2022-23 Norman Grant - CH33 Exploration Project	\$7,500
Agreement 2022-24 Robert Ratt - Mist East Project Phase 3	\$10,000
Agreement 2022-29 Neil Wapachee - Kamikukumeu Project	\$9,100
Agreement 2023-01 Thomas Blackned – Jamesee K306 Project	\$8,700
SPECIAL PROJECTS	

Agreement 2004-03 Study of a Cree Mining Investment Fund	39,575
Agreement 2005-05 Cree Mining Investment Fund Phase 2	31,125
Agreement 2006-04 Creation of study program in mineral exploration	40,000
Agreement 2006-07 Identification of abandoned exploration sites Phase 1	30,000
Elders Field visit of Uranium Mines in Saskatchewan	7,000
TJCM, Glaciofluvial Sampling Survey Sakami Moraine	15,000
Purchase of one Beep Mat	14,000
Agreement 1112-08 Jeremy Brown, New CMEB Website	2,775
Agreement 1112-17 Geo-touristic Map	9,700
Agreement 1112-20 Dissemination of information on Uranium – Sydon Consulting Inc.	58,450
Agreement 1213-21 Niskamoon Corp. – Natural environment Technology	20,000
Agreement 1213-23 MCV Services - Mining 101 and Basic Mineral Exploration Session 1, Chisasibi	23,000
Agreement 1213-24 MCV Services - Mining 101 and Basic Mineral Exploration Session 1, Whapmagoostui and Waskaganish	50,000
Agreement 1213-26 UQAM – An analysis of the mining development in North Quebec	5,000
Agreement 1213-28 Purchase of a vehicle	27,000
Agreement 1314-18 James Bay Advisory Committee on the Environment Workshop on the acquisition and dissemination of environmental and social knowledge	5,000
Agreement 1314-19 Maquata Eeyou School, Wemindji	1,500
Agreement 1314-21 Purchase of second Beep Mat	14,400
Cree Nation Bears AAA U-17 Girls Hockey Team Jackets	2,500

Sponsorship to Larry Desgagné to participate in a Vintage Snowmobile Race	500
Commercial Ad for the CMEB on Eeyou TV	3,500
2015 Prospecting Courses Mistissini, Nemaska and Eastmain	121,975
Cree Nation Bears AAA Girls Hockey Team Sponsorship	1,000
Sponsorship to Marc Bouchard for the Festival Du Doré registration	650
Resolution 1617-01 Suzanne Bourdon - Communications Plan for the Cree Mineral Exploration Board	10,000
Resolution 1920-23 CMEB - Prospecting Workshop, Field Mineral Exploration, Prospectors Upgrading	\$50,000
Resolution 1920-27 CMEB - Nunavik Mining Workshop and Propair Aircraft Quote	\$15,000
Resolution 1920-28 CMEB - Proposal for the Creation of an Eeyou Controlled Junior Public Corporation	\$30,000
CONFERENCES	
Agreement 2006-06 Sponsorship of the Learning Together	15,000
Agreement 2007-05 Sponsorship of the Learning Together	15,000
CAMA-Québec Exploration	12,500
Québec Exploration	17,500
Agreement 1112-02 Sponsorship of James Bay Mining Symposium	15,000
Agreement 1112-16 Sponsorship of Learning Together	15,000
INVESTMENT IN JUNIOR EXPLORATION COMPANIES ACTIVE IN EEYOU ISTCHEE	

Niogold Inc.	35,000
Ressources d'Arianne Inc.	50,000
Nemaska Exploration Inc.	150,000
SIRIOS Resources Inc.	75,000
Eagle Hill Exploration Corp.	75,000
Geomega Resources Inc.	50,000
Metanor Resources Inc.	150,000
SIRIOS Resources Inc.	30,000
SIRIOS Resources Inc.	50,000
Azimut Exploration Inc.	\$50,000
Stornoway Diamond Corp.	\$50,000

## 8. ACTION PLAN April 2022-March 2023

Since The beginning of CMEB activities in 2003, the mining industry is on an increasing trend. This last year we observed a major decrease in investment and exploration projects. CMEB has to face the new mining situation in Eeyou Istchee. The priority is the application of the five programs of the Cree Mineral Exploration Board as submitted to the Cree Nation Government and the Ministère de l'Énergie et des Ressources naturelles (MERN). This includes the creation of projects with low expenses usually handled by prospectors, the preparation of training programs and the creation of job opportunities within the exploration companies and mines in Eeyou Istchee; to keep informing the communities about mining activities on their traplines on regular basis; establishing communication and networking between the tallyman and the local authority and the mining industry, and helping Cree prospectors and companies develop exploration projects. *The CMEB will participate in improving the environmental aspect related to mining impacts and encourage environmentally safe mining and exploration activities; and will participate actively in the North Development planning. The Crees want to develop mining in Eeyou Istchee but it has to be done appropriately to protect the environment and wildlife in a philosophy of sustainable development. By building bridges of good communication and mutual development, we will be able to count on sustainable development (The Grand Chief Abel Bosum). In the same subject the CMEB's President Reggie Mark and the Board members insist on the sustainable character of the CMEB. The Board members believe that we have to keep undertaking the best practices to succeed in exploration project realization. We are improving our communication tools and we insist that the*



*mining companies and the CMEB consult the local population at the very beginning. The process will benefit all parties concerned and a mutual understanding will lead to sustainable development.*

## **6. Awareness Activities**

- Information visits in the communities with the collaboration of the Cree School Board schools and participating in the internal events. This latest is the best domain where promoting earth sciences.
- Minerals Exploration Learning and Information adapted and organized for the Tally-Person and the trappers concerns for each community in Eeyou Istchee. We will meet and inform the Tallyman and the trappers about exploration activities on the land and within their own traplines.
- **Open door in communities Career Fairs** to keep prospectors and the interested people up-to-date on new technology in mineral resources. This will keep our people in touch with the mining activities and with the new techniques and/or equipment.
- As every year, CMEB will visit schools of Cree School Board during **la Semaine Minière**. We will do presentations about natural sciences and mineral resources.
- **Sponsoring of university graduate Cree students** in the field of mineral resources, geology and environment.
- Continue bringing out and update the **Tally-person traplines** map, **geo-touristic** maps, **geo-trapline** maps, and **Eeyou Istchee Geological** and Projects Location maps.
- The **Tally-Person Interactive Map** is specifically for the Exploration Company's needs. The map contains layers: 1. Google Map, 2. Traplines and number for each the trapline (ex. W23), 3. NTS 1/50 000 grid for better location, and The Cree Communities location. **This map** is updated continually by getting the information directly from the sources (tally-person family) or via the Cree Trappers Association, CMEB's collaborator.
- Website update and creation of **webpage for the Cree youth and for the Tally-Persons** on (cmeb.org) site. This will contain educational and entertainment materiel. Organizing social media tools for the Crees (Facebook and Twitter).
- Continue collaborating with MERN in exchanging data and **visiting the MERN mapping camps with young Crees**. This improves the youth's knowledge considerably. Many thanks to Ministère de l'Énergie et des Ressources naturelles.
- **Cree-Quebec mining table** where CMEB needs to show to the politics the reality of the field and communication. For years, CMEB has been suggesting that the MERN add Cree references when it is time to take a mining title by the mining industry. This will increase the efficiency of communication and facilitate the information to the tally-persons and the chiefs, which will avoid many misunderstandings.
- Collaborating with the CTA in Recognizing Metal Mineralization training for tally-person and trappers. **The CTA is the most important CMEB partner.**

## **7. Training and Knowledge Update Activities**

- The CMEB has as objective to teach a number of prospectors in each community, the art of prospecting. These courses will be the go-to people for the community in terms of "what is

happening in mining exploration in the territories and in other places”. We will conduct the minerals prospecting courses in the **summer 2021. We will strengthen the knowledge of the new prospectors and guide the Tallyman-Prospectors in the field.**

- **Prospectors program**, CMEB will organize four weeks **update training with our junior prospectors this summer 2021**, in the community of Mistissini or through Webinars. The latter is offered to new trainees can be from all over the Cree land. It is based on the needs of the Crees and job opportunities in Eeyou Istchee. The field work is based on technical preparation and on data from previous geological compilation and from several known targets.
- **Workshop for prospectors** who had at least one field project done (Postponed from last year due to COVID protocols). The workshop consists of one week with specialists in the domain of prospecting, legal aspects, GIS and assays.
- **Workshop (mining 101)** for entrepreneurs in mining industry. This program helps Crees seeking opportunities in the mining industry to learn about running private companies in mining services and establishing agreements.
- Creation of new college program 2021-2022 in Environment related to Mineral Resources. This will be done with the **collaboration of the CHRD, NISKAMOON, CSB and CEGEP.**
- The Cohort 2020-2021 for AEC geology college program built in **collaboration with the CHRD, CMEB and CÉGEP de St-Félicien**, will graduate the summer 2021. This is a technical program; the students are full time and are on «Stage» for the summer. The program of Geology Technician became possible because of the collaboration between the CMEB, CHRD and le CÉGEP de St-Félicien at Chibougamau.

## **8. *Prospecting and Explorations Activities***

- Repeated every year, CMEB encourage Cree and non Cree companies to start new exploration projects by suggestion certain areas in Eeyou Istchee.
- Encourage Cree prospectors and help them find new projects.
- Help new Cree prospectors trainees build their firsts prospecting projects.
- Writing geological report for each prospector. This year it will be about 15 reports and at least 5 reports from Cree companies to be verified and submitted to the Board. And update geological maps in Eeyou Istchee, fall 2021.
- **Exploration activities report** in Eeyou Istchee produced in November 2021.

## **9. *Promotion Activities***

- Participate and be a partner in different promotion and information events. The CMEB collaborate with Quebec Mine and “la Semaine Minière”, Several Comities concerning Exploration and social acceptability. **le Congrès de l'exploration minière du Québec**, and of **Cree Mining Conference** within SAENCAT annual conference (Secretariat to the Cree Nation Abitibi-Témiscamingue Economic Alliance—as major member and as a promoter).

- For the 13th year in the row, CMEB is animating the Rock competition. This last year we had 7 participants from all over Eeyou Istchee. We hope to have more than 10 people for the next deadlines October 31st, 2021.
- The CMEB continues to award academic scholarships to secondary-5 students graduating from CSB schools. We expect at least one from each of the ten community
- Update the guideline book for exploration companies already published on the CMEB website.
- Promote the CMEB via MERN, Cree Nation Government, Cree Trappers Association, Société de la Baie James, TJCM and the Secretariat to the Cree Nation Abitibi-Témiscamingue Economic Alliance.
- Promote Earth Sciences in class and in the field for youth in primary and secondary grades in April and May.
- Promoting Geology and Minerals Exploration in local Science and Career Fairs.
- Promoting Cree Exploration companies and Cree services available for mining industry in all the event such as Quebec Mine, PDAC, Xplor, Xplore Abitibi, and other local and regional events
- Provide the latest news related to the Earth Sciences and Minerals Exploration on CMEB's website.
- Compile geological data from summer mapping projects and from Minerals Exploration activities.
- CMEB continually maintains and updates a database on mining and staking activities by companies and prospectors in Eeyou Istchee. This information will be published and updated on the CMEB website to ensure that tallymen and companies are informed.

#### **10. Business creation support activities**

In the near future, we'll meet with the communities and individuals who want to create an exploration company. We are planning to create 1 company and starting getting one of them on the public market.

#### **Recommendations**

##### **1 For Training and Job Creation:**

- It is imperative that more people be trained for the various job opportunities in mineral exploration on Cree territory. Business partnerships with mining companies will be an important reality in the near future which is linked to the Nord Development. The forward progress of exploration projects, especially in the Opinaca Reservoir, the Otish Mountains areas, Nemaska-Ouje-Bougoumou- Waswanipi area and along the Trans-Taiga road, will create job opportunities for members of all Cree communities.
- Consolidate and develop prospecting, blasting and drilling courses with interested, motivated and educated young women and men;
- Encourage training in the environmental sciences;
- Organize with Cégeps and universities a program concerning mineral resources and the environment for technicians and Bachelor degrees in mineral resources and the Earth sciences.

Because of the distances between the communities, the communication is difficult. We have to establish a regional information network find new trainees, new prospectors and post-secondary students in all communities willing to study the Earth sciences away from home. *The fibre-optic telecommunications recently installed between the communities will improve communication, facilitate training and increase the flow of information in our mineral resources domain.*

## 2 For Promotion:

The Cree Mineral Exploration Board continues to successfully promote Cree land mineral resources and raises awareness in Cree communities via schools and presentations in the communities. The CMEB helps prospectors develop their expertise. Concerning the new prospectors training program; the CMEB effectively delivers this program whenever needed. With reference to awareness, it is important to inform communities and Cree organizations about mining realities and avoid false expectations. Mining companies also benefit from any information concerning the needs in the Cree Territory for environmental protection, employment, and economic development.

## 3 Finally:

It is recommended that the Cree Mineral Exploration Board:

- Develops joint ventures for Cree Exploration and Services companies with other non-Cree Exploration and Services companies on advanced projects to share exploration risks;
- Each member of Cree Mineral Exploration board will promote the services of CMEB to the Crees. The Crees need to know more about the CMEB. This will facilitate the access to all the information about mining and its related jobs in Eeyou Istchee.
- Emphasizes grassroots exploration projects from the standpoint of offering more knowledge and information about minerals potential, this will help to bring new companies to Eeyou Istchee;
- Develops partnerships with the MERN resident geologists to generate new projects and new activities such as conferences and sciences activities. «la Semaine Minière»
- With reference to the Autonomous Prospectors Program - the CMEB is working closely with the prospectors in the development of their exploration projects by supplying knowledge in geology and business and report-writing services;
- Advises the communities about different investments in Exploration Projects and be part of this big business in Eeyou Istchee;
- Maintains the North-South Mineral Exploration network; using the different tools and mechanism such as the universities and CEGEPs, and sciences activities for our youth.