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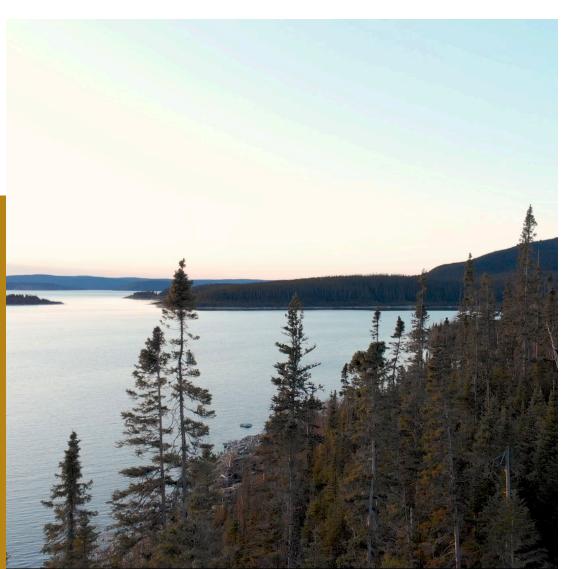
#### **Qualified Persons**

The technical information contained in this presentation has been reviewed and approved by John Shmyr, P. Geo., Murchison's VP Exploration, a Qualified Person in accordance with National Instrument NI-43-101.

Forward looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forwardlooking information. Such factors include risks inherent in the exploration and development of mineral deposits, including risks relating to changes in project parameters as plans continue to be redefined including the possibility that mining operations may not commence at the Company's project risks relating to variations in mineral resources, mineral reserves, grade or recovery rates resulting from current exploration and development activities, risks relating to changes in metal prices and the worldwide demand for and supply of base and precious metals, risks related to increased competition in the mining industry generally, risks related to current global financial conditions, uncertainties inherent in the estimation of mineral resources and mineral reserves, access and supply risks, reliance on key personnel, operational risks inherent in the conduct of mining activities, including the risk of accidents, labour disputes, increases in capital and operating costs and the risk of delays or increased costs that might be encountered during the development process, regulatory risks, including risks relating to the acquisition of the necessary licenses and permits, financing, capitalization and liquidity risks, including the risk that the financing necessary to fund the exploration and development activities at the Company's project may not be available on satisfactory terms, or at all, risks related to disputes concerning property titles and interest, and environmental risks. The Company does not undertake to update any forward-looking information that may be made from time to time by the Company or on its behalf, except in accordance with applicable securities laws.











To meet the rapidly expanding demand for energy metals, commitment, and expedited investment in exploration, mine development, and production is essential. We must look at stable jurisdictions for our future supply.

Junior mining companies such as Murchison Minerals play a significant role in the discovery of metals needed for the quickly evolving clean energy revolution. Nickel, Copper, Cobalt and Zinc

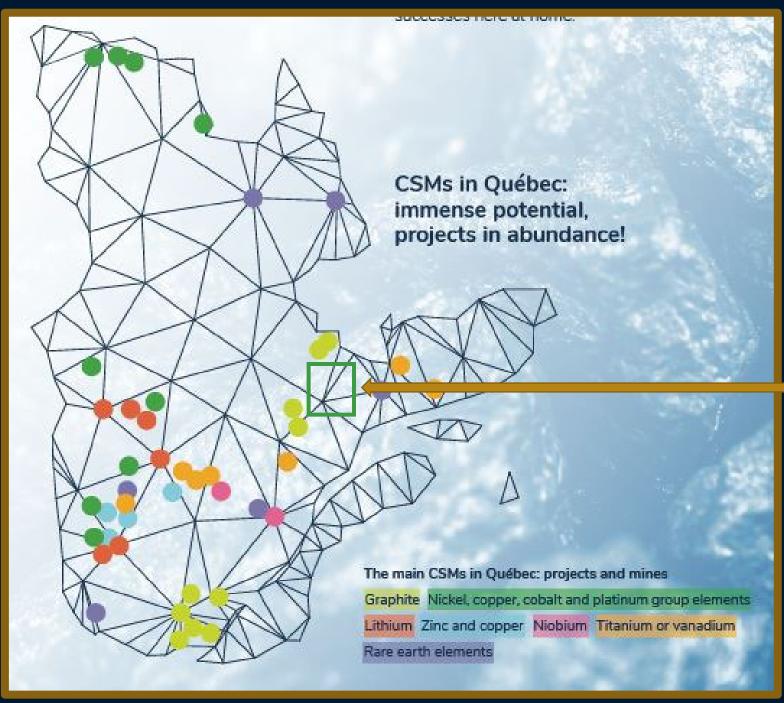


# Murchison Critical Minerals

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- Murchison Minerals 100%-owned HPM Project in the North Shore Region is currently in the exploration stage of the Critical and Strategic Minerals cycle laid out by the Government of Quebec
- The projects aligns with Quebec's Critical Minerals and Battery Strategy
- The high-grade Barre de Fer Zone is the most advanced
- Mineralization outcrops at surface, has current dimensions of: strike length 370 m, depth 475 m and width of 200 m
- The zone remains open in all directions

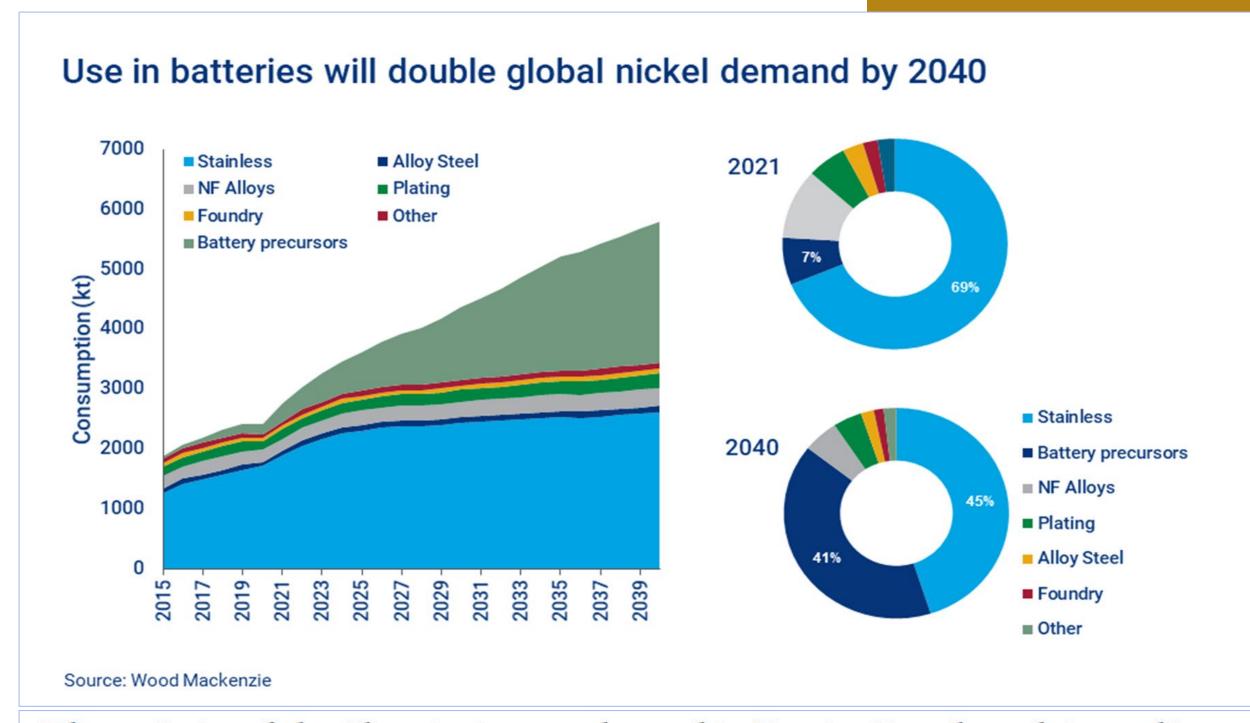




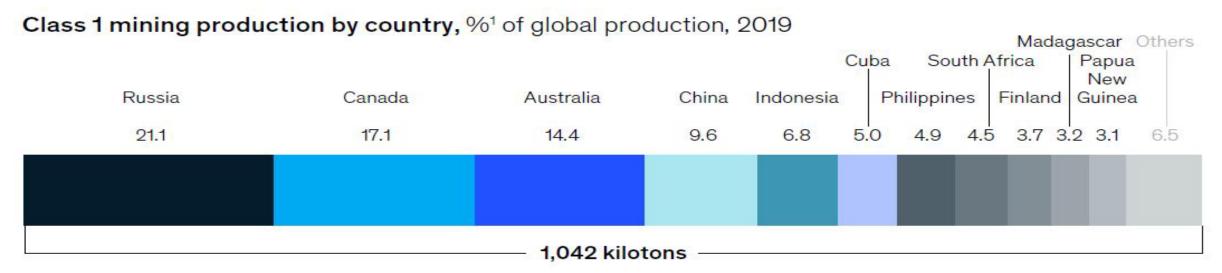
- HPM Project is 648 km<sup>2</sup> represents an emerging Nickel-Sulphide district
- Pre-existing advanced infrastructure within kilometres of the project area
- Available hydro-power capacity within kilometres of the HPM property, indicating any future production could be done with netzero emissions
- In addition to Barre de Fer the Company has 12 de-risked nickelbearing sulphide showings outcropping or subcropping on surface
- Furthermore, the Company has identified over 75 EM anomalies which are indicative of nickel-bearing sulphide mineralization



### Nickel Demand



The majority of the Class 1 mines are located in Russia, Canada and Australia; nickel is being refined in China, Russia and Japan.

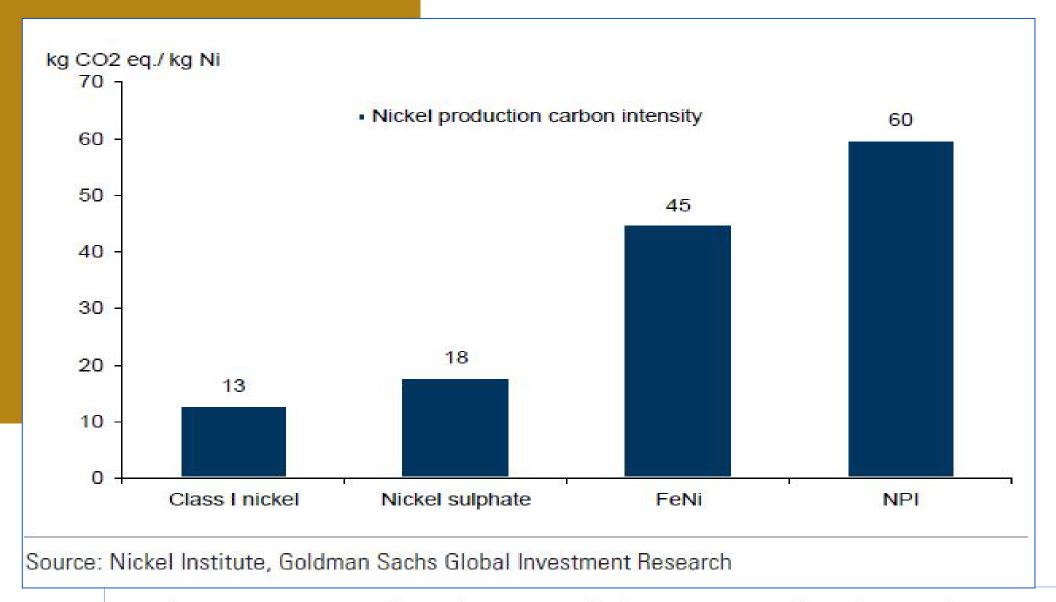


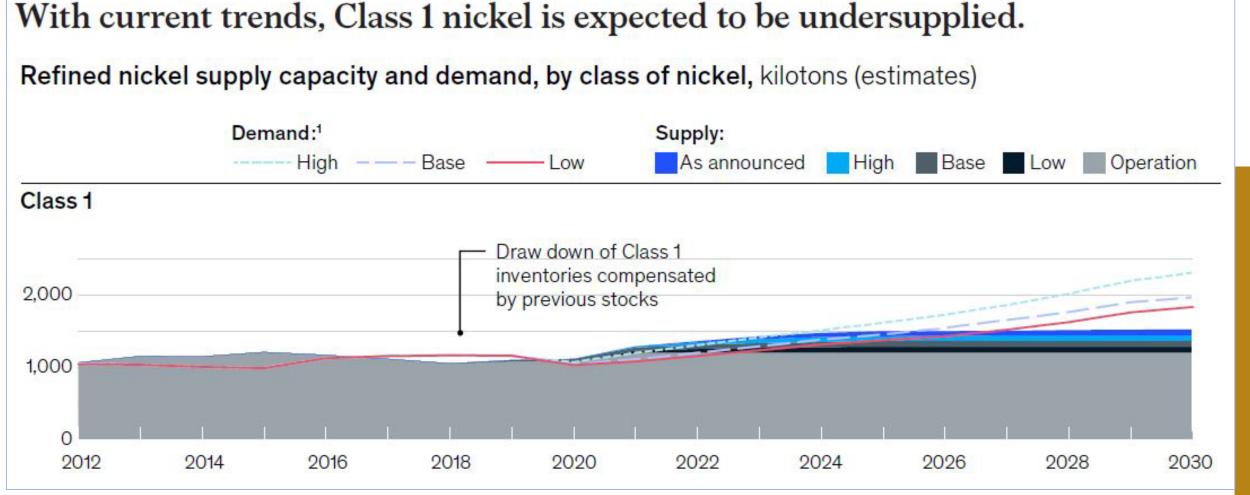
<sup>1</sup>Figures may not sum to 100%, because of rounding. Source: MineSpans by McKinsey

- Nickel is the #1 metal used in modern EV batteries
- Nickel demand is projected to increase ~100% by 2040 (Source: Wood MacKenzie)
- Class 1 nickel (battery grade Ni) is projected to increase ~600% by
  2040 (Source: Wood MacKenzie)
- Class 1 nickel is in a structural supply deficit
- More than 40 new mines required to meet forecasted demand by 2030 (Source: IEA July 2022 Report )
- Of the top 11 producing nations, only 3 are members of the OECD
- Under-investment in exploration of Nickel-bearing sulphide deposits over the last decade has exasperated the need for new discoveries. ~USD \$128M was spent on grassroots nickel exploration globally in 2021 (Source: S&P Capital IQ Pro ) with the majority being spent outside of OECD countries.



# Class I Nickel





<sup>1</sup>Class demand based on the current demand profile. Shifts in demand are likely to happen with evolving technology and price dynamics. Source: Nickel Demand Model, MineSpans by McKinsey

- Class 1 nickel (majority derived from sulphides) have an average footprint of 13kg CO2/kg nickel whereas Class 2 Nickel is extremely energy intensive, resulting in a footprint of up to 60kg CO2/kg Nickel
- Production of Class 1 Nickel Ore has been under supply pressure for some time and is projected to be in deficit by 2025. With demand base case scenario showing a need for ~50% increase in supply by the early 2030s
- With the advent of the world economies transitioning from fossil fuels to renewable energies like wind and solar the need for increased energy storage capacity from batteries is becoming ever more important. Utilities need to be able to store energy when the wind is blowing and the sun is shinning, to support their grid's energy needs when those inputs aren't available. The same is true for EV revolution, where the transition away from combustion engines towards electric vehicles powered by batteries is becoming the norm.
- It is for these reasons at our 100%-owned HPM 648 km² Property, situated in the Haut Plateau de la Manicouagan Region of Quebec, we are focused on the discovery and development of high-grade Nickel sulphide deposits, in an emerging new nickel district



# OUR APPROACH

#### OUR PROCESS

- Discovery of energy metals in underexplored areas with camp scale potential – within the best mining jurisdictions in the world.
- Establishing a dominant land position.
- Systematically testing targets with the latest technologies, with an eye to advancing projects in the most efficient and cost-effective manner.

### OUR **PROJECTS**

- HPM (Haut-Plateau de la Manicouagan) Ni-Cu-Co project in Quebec
- BMK (Brabant-McKenzie) VMS Zn-Cu-Ag Project in Saskatchewan

### OUR **PEOPLE**

 Highly experienced board with the likes of JC Potvin and Don Johnson.

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- Strong shareholder base, where Michael Gentile took the lead on our last financing this past October, where insiders and strategic investors hold approximately 50% of outstanding shares.
- Solid management team with Troy Boisjoli joining the company as CEO-President last fall, John Shmyr being appointed VP of exploration last spring., and Dr. Peter Lightfoot coming on as lead technical advisor for our HPM project.







#### **Brabant-McKenzie VMS Deposit –** Saskatchewan

100% owned

Dominant land position with camp scale VMS potential

Year-round road and power access

Resource (1)

Inferred: 7.6 Mt @ 6.29% ZnEq

Indicated: 2.1 Mt @ 9.98% ZnEq

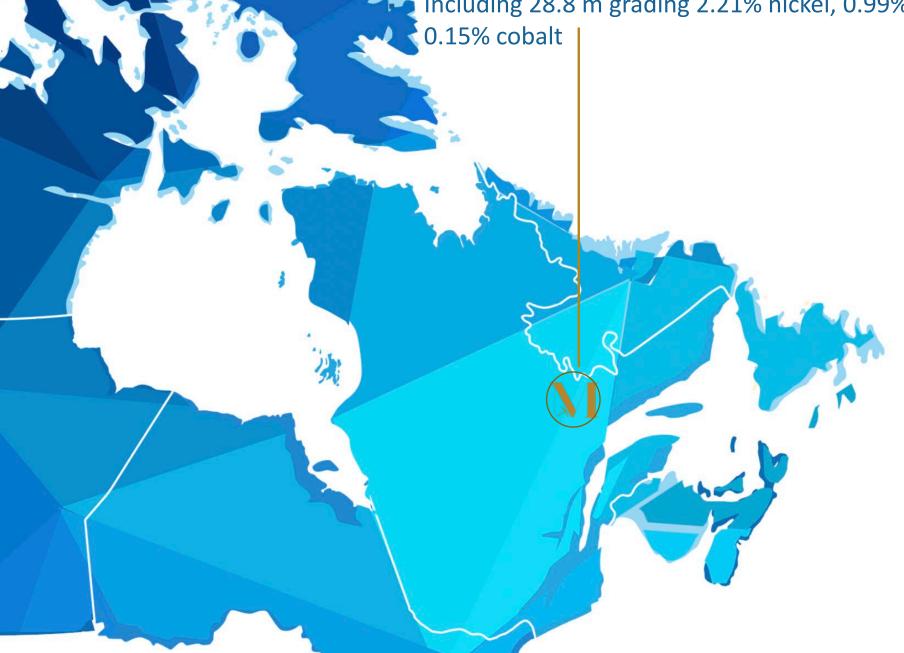
 10 highly prospective VMS targets - VMS style mineralization already intersected at Main Lake and Betty target areas



- 100% owned since 2019
- Comprising 648 km<sup>2</sup> of continuous mineral claims
- Dominant land position with camp scale Ni-Cu-Co potential
- Rail access within 8 km of project area, ~225 km to Port of Sept Iles
- Numerous EM anomalies discovered since spring of 2021
- Ongoing prospecting has identified nickel-bearing sulphide mineralization outcropping or sub-cropping at many of the EM anomalies
- Increased land package 5x July 2022
- Preliminary 3D modelling of Barre de Fer Zone
- Best drillhole intersection at Barre de Fer Zone:
  - 121.2 m grading 1.02% nickel, 0.56% copper and 0.07% cobalt

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Including 28.8 m grading 2.21% nickel, 0.99% copper, and



(1) The resource for the Brabant-McKenzie zinc deposit was estimated based on metal prices of US\$1.20/lb zinc, \$2.50/lb copper, \$1.00/lb lead, \$16.00/oz silver and \$1200/oz/gold, and a US\$ exchange rate of \$1.25. Indicated Resources = 2.1 Mt at 7.08% Zn, 0.69% Cu, 0.49% Pb, 0.23 g/t Au, 39.6 g/t Ag. Inferred Resources = 7.6 Mt at 4.46% Zn, 0.57% Cu, 0.19% Pb, 0.1 g/t Au, 18.42 g/t Ag

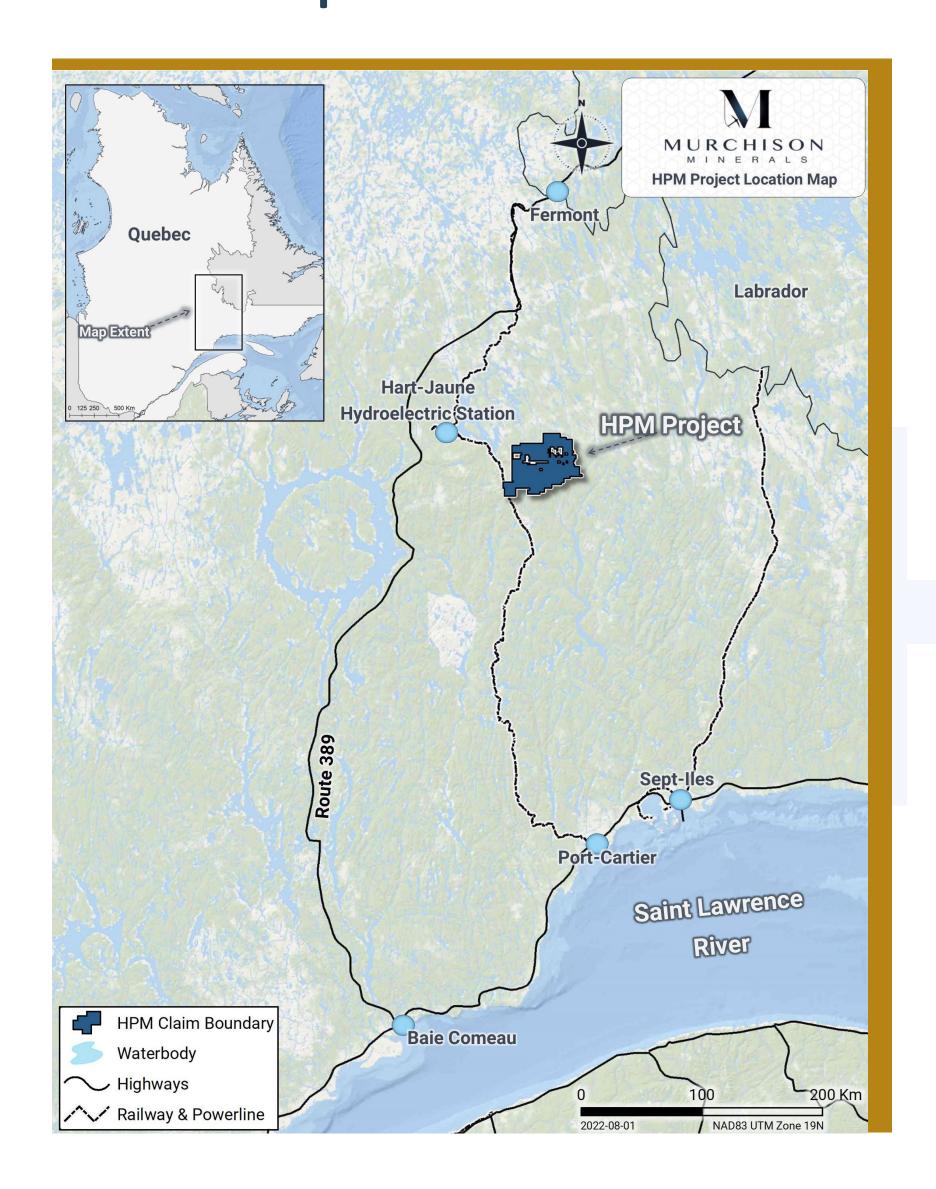


# HPM Quebec Ni-Cu-Co Project





# HPM | 100% Owned | Ni-Cu-Co Project



#### **Project Area**

- Located in the Haut-Plateau de la Manicouagan region of Quebec,
  adjacent to the Manicouagan Impact Structure
- Excellent infrastructure with existing and maintained rail line within 8
  km of the project site direct access to two deep water ports
- Hart-Jaune Hydroelectric Station approximately 30 km from site
- Maintained road west of site Quebec Route 389
- Project area adjacent to prolific iron mining jurisdiction
- Murchison's claims cover 648 km<sup>2</sup> of highly-prospective geology.
- Project area is currently accessed via helicopter, however, road access is currently being evaluated



# HPM Project History

#### 1. HISTORY:

In 1999 Falconbridge discovers Ni-Cu-Co mineralization. Falconbridge's interest acquired by Pure Nickel who partnered with Murchison's predecessor in 2007, drilling the Barre de Fer deposit in 2008. Murchison acquires 100% interest in 2019

#### 2. GEOLOGICAL SETTING:

Manicouagan Metamorphic Complex is comprised of extensive areas of mafic and ultramafic rock displaying repeated pulses of mafic magma that have intruded sulphide-bearing metasedimentary rocks.

#### 3. PROPERTY SCALE EXPLORATION:

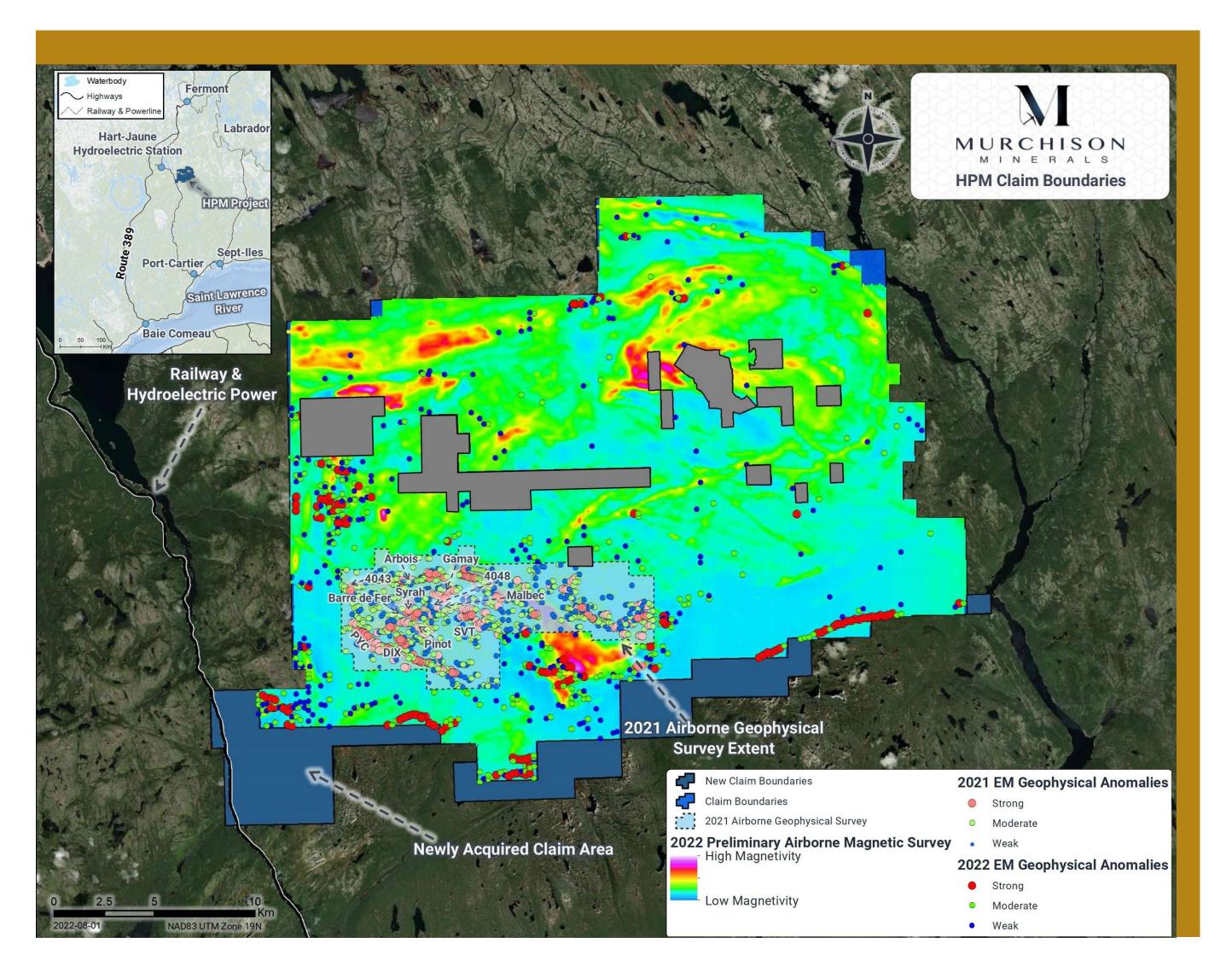
VTEM surveys completed in 2021 and 2022 have covered ~648 km<sup>2</sup> of the property extents, and have identified numerous EM anomalies.

### 4. PROSPECTIVITY:

Numerous Ni-Cu-Co occurrences identified by mineralized grab samples during previous prospecting field programs.

### 5. **DRILLING:**

Drilling has proved that the conductive anomalies first identified by VTEM, and confirmed to be sulphide mineralization via prospecting, extend at depth.

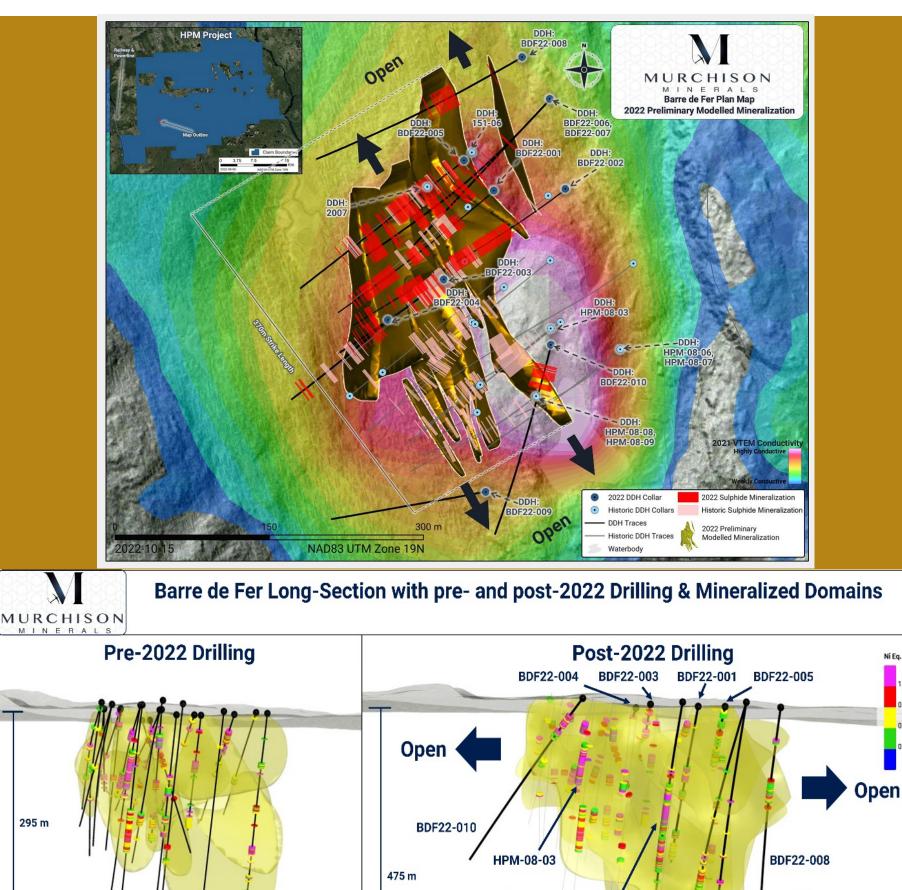




# Highlights Barre de Fer

### 2022 Diamond Drilling Barre de Fer

- The Barre de Fer Zone is currently defined with 35 diamond drillholes comprising 8,919 m
- During the 2022 Summer Exploration program the Company successfully expanded the footprint of BDF:
  - Mineralization at depth has now been extended down to 475 m, versus the preliminary model at 295 m
  - Along strike, the zone of mineralization has been extended from 315 m to 370 m
  - Mineralization was expanded along the width of the mineralized zone from 150 m to 200 m, with individual lenses now modelled up to 48 m in thickness, compared to the 28 m in the preliminary version
- Additionally, during the prospecting phase of the 2022 Summer Exploration Program the Company discovered nickel-bearing sulphide mineralization outcropping and subcropping along strike to the north and south of the main zone. Geophysical surveys now indicate the prospective strike length of BDF to be ~600 m

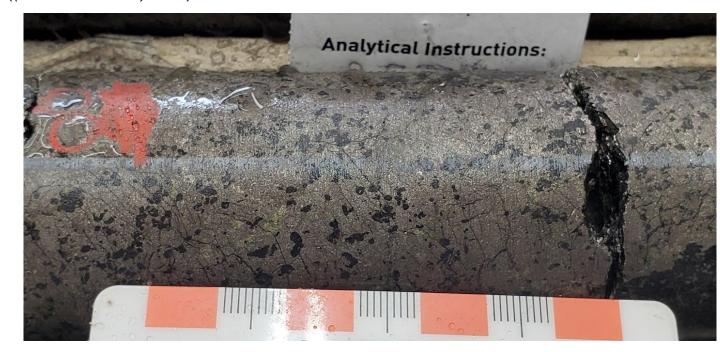




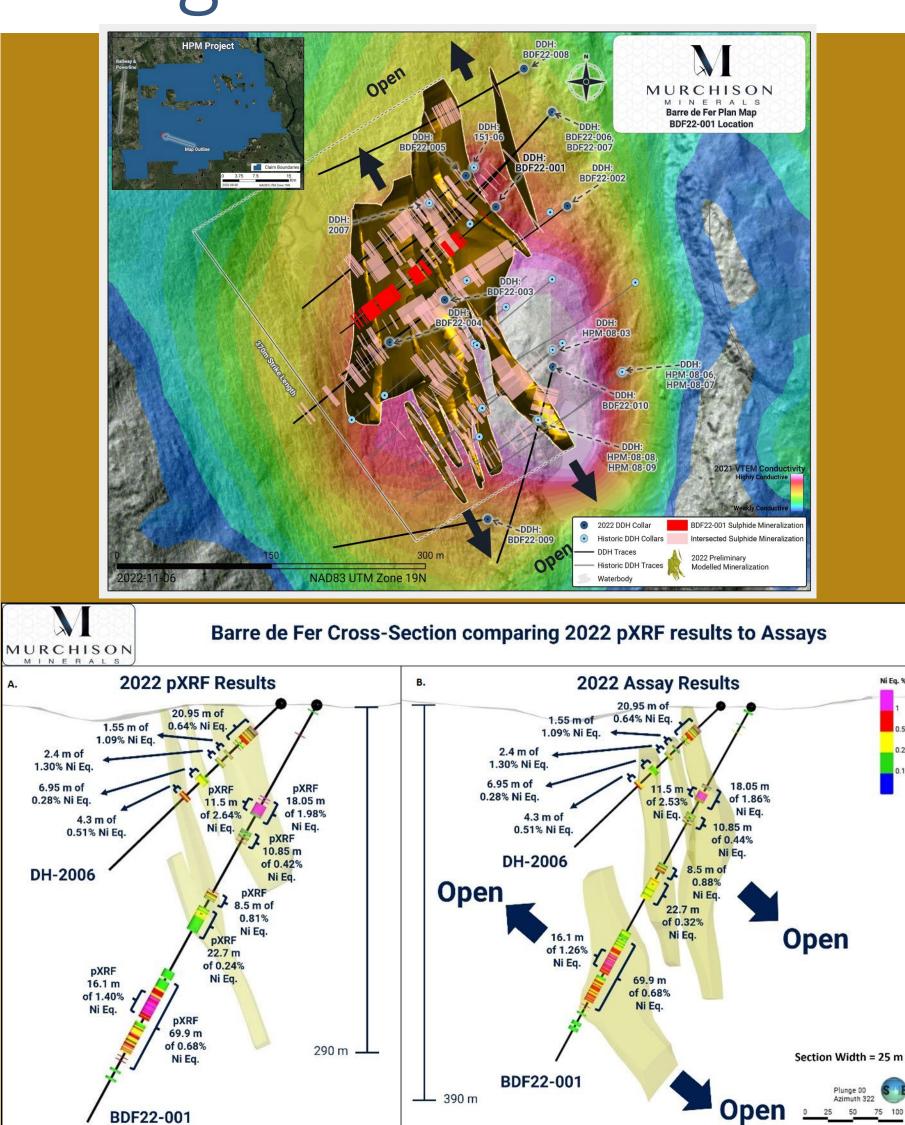
# HIGHLIGHTS | 2022 Drilling BDF

Hole		From (m)	To (m)	Interval (m)*	Ni %	Cu %	Co %	NiEq. %**	CuEq. %**
		89.95	108	18.05	1.44	0.44	0.1	1.86	5
	Includes	96.5	108	11.5	1.98	0.56	0.13	2.53	6.8
	Includes	97.8	105.9	8.1	2.69	0.69	0.18	3.41	9.16
PDE22 001		122	132.85	10.85	0.29	0.24	0.03	0.44	1.18
BDF22-001		180.5	189	8.5	0.62	0.37	0.05	0.88	2.36
		196.5	219.2	22.7	0.23	0.11	0.02	0.32	0.85
		267	336.93	69.93	0.5	0.23	0.04	0.68	1.83
	Includes	283.4	299.5	16.1	0.92	0.43	0.07	1.26	3.38

<sup>\*</sup> Reported as core length, true thickness is not known. \*\*Nickel Equivalent (Ni Eq) & Copper Equivalent (Cu Eq) values were calculated using the following USD metal prices from Sept 12, 2022: \$10.84/lb Nickel, \$3.63/lb Copper, and \$23.56/lb Cobalt. Ni Eq.% was calculated using Ni%+((Cu Price/Ni Price) \*Cu %)+((Co Price/Ni Price) \*Co %). Cu Eq.% was calculated using Cu%+((Ni Price/Cu Price)\* Ni %)+((Co Price/Cu Price)\*Co %).









### HIGHLIGHTS

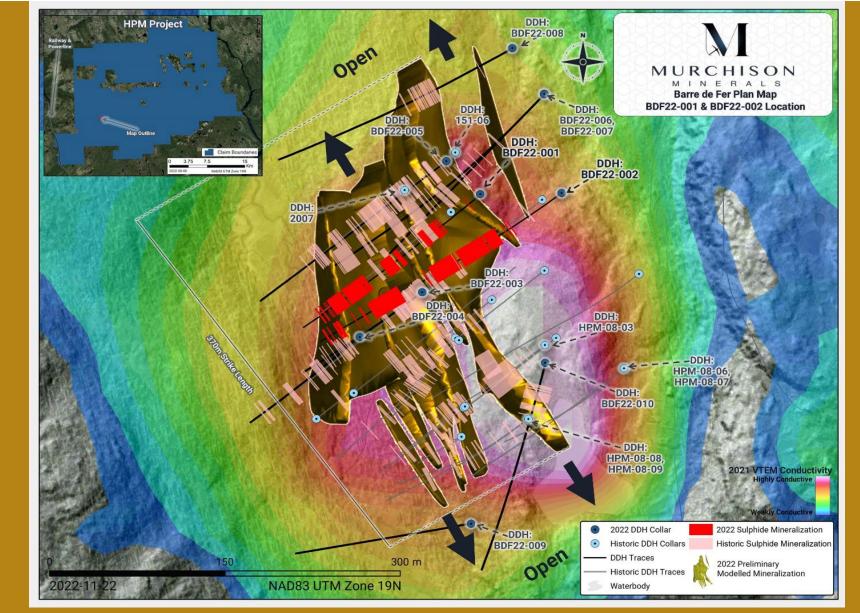
### 2022 Drilling BDF

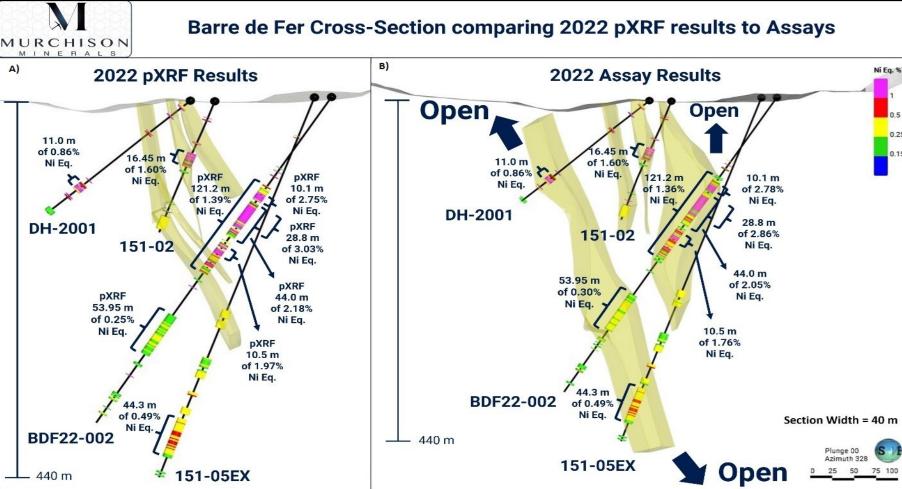
Hole		From (m)	To (m)	Length* (m)	Ni %	Cu %	Co %	NiEq. %**	CuEq. %**
		123.8	245	121.2	1.02	0.56	0.07	1.36	4.07
	Includes	134.1	144.2	10.1	2.08	1.17	0.14	2.78	8.31
	Includes	152	196	44	1.58	0.71	0.11	2.05	6.14
BDF22-	Including	152	180.8	28.8	2.21	0.99	0.15	2.86	8.55
002	Including	152.5	173.5	21	2.45	1.22	0.16	3.21	9.59
	Including	177.05	180.8	3.75	2.85	0.57	0.19	3.45	10.3
	Includes	207.5	218	10.5	1.3	0.8	0.09	1.76	5.26
		303.55	357.5	53.95	0.22	0.1	0.02	0.3	0.88

<sup>\*</sup> Reported as core length, true thickness is not known. \*\*Nickel Equivalent (Ni Eq) & Copper Equivalent (Cu Eq) values were calculated using the following USD metal prices from Sept 12, 2022: \$10.84/lb Nickel, \$3.63/lb Copper, and \$23.56/lb Cobalt. Ni Eq.% was calculated using Ni%+((Cu Price/Ni Price) \*Cu %)+((Co Price/Ni Price) \*Co %). Cu Eq.% was calculated using Cu%+((Ni Price/Cu Price)\* Ni %)+((Co Price/Cu Price)\*Co %).



Magmatic Nickel Sulphide Mineralization from BDF22-002







### HPM

### District Scale Potential

### **HPM Regional Prospecting**

- Prospecting defines de-risked targets for future testing with diamond drilling
  - Beyond BDF, Syrah and PYC regional prospecting has discovered 10 additional nickelsulphide outcropping and subcropping at surface including: Malbec, Dix, Taureau, Loup, and Orignal.
  - Mineralization at Malbec is some of the highest tenor nickel discovered to date on the HPM property
  - Intersected semi-massive nickel-sulphide mineralization at the Taureau showing

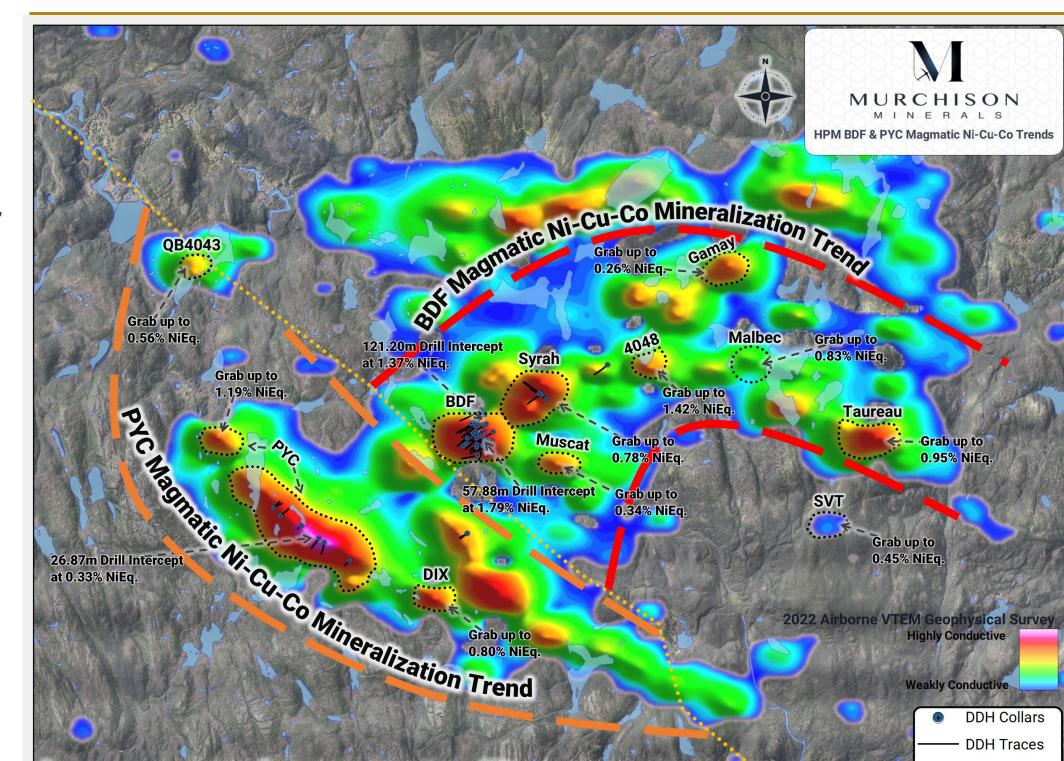
### **HPM Regional Geophysics**

- VTEM defines EM anomalies which are indicative of nickel-bearing sulphide mineralization,
  identifying prospective areas for future prospecting
  - Mineralization is following a regional fold structure
  - Over 75 EM anomalies have been identified to date



Closeup of mineralization in backpack core from the Taureau showing with semi-massive sulphide (pyrrhotite and chalcopyrite) mineralization.







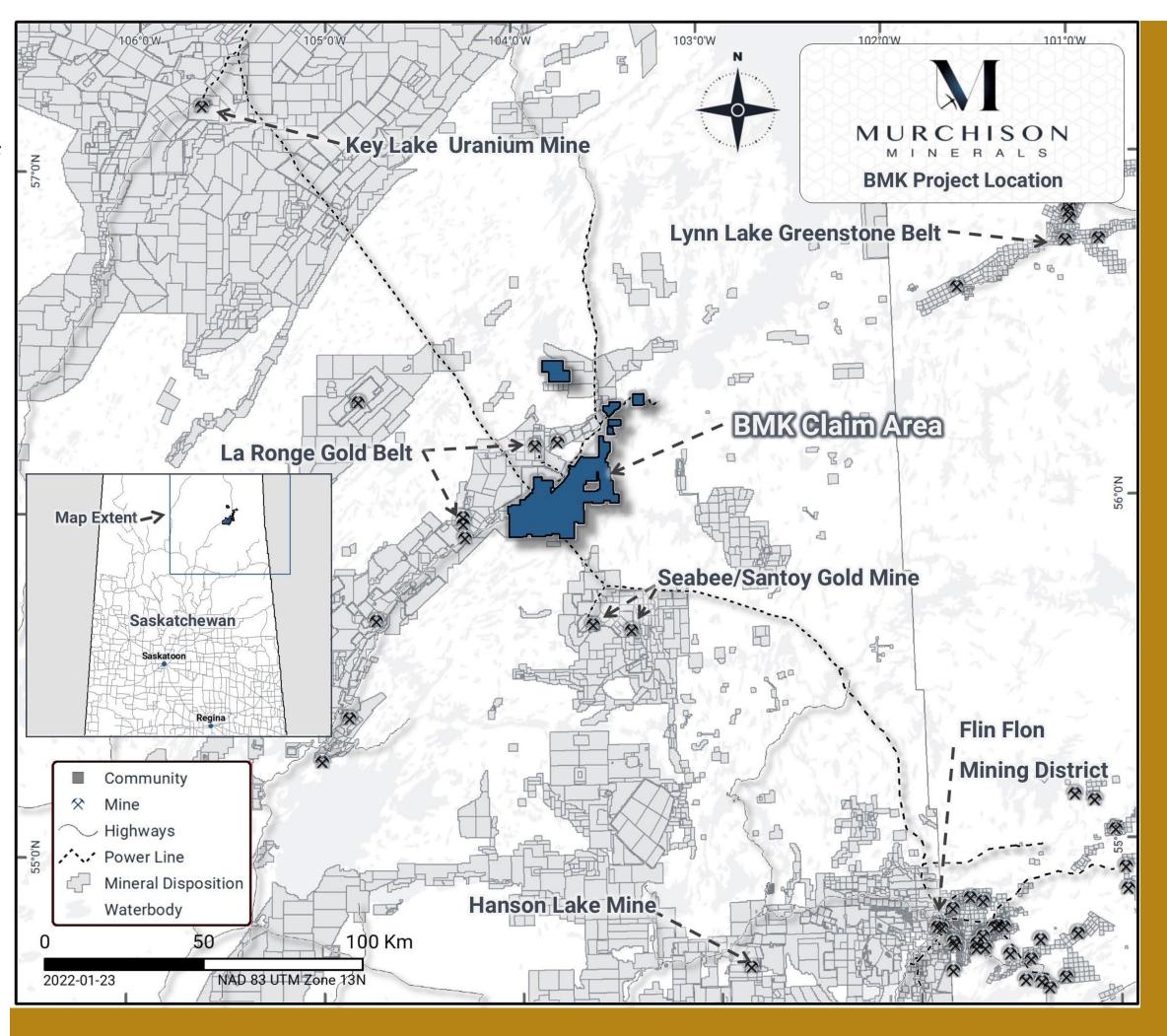
BMK Saskatchewan Zn-Cu-Ag Project





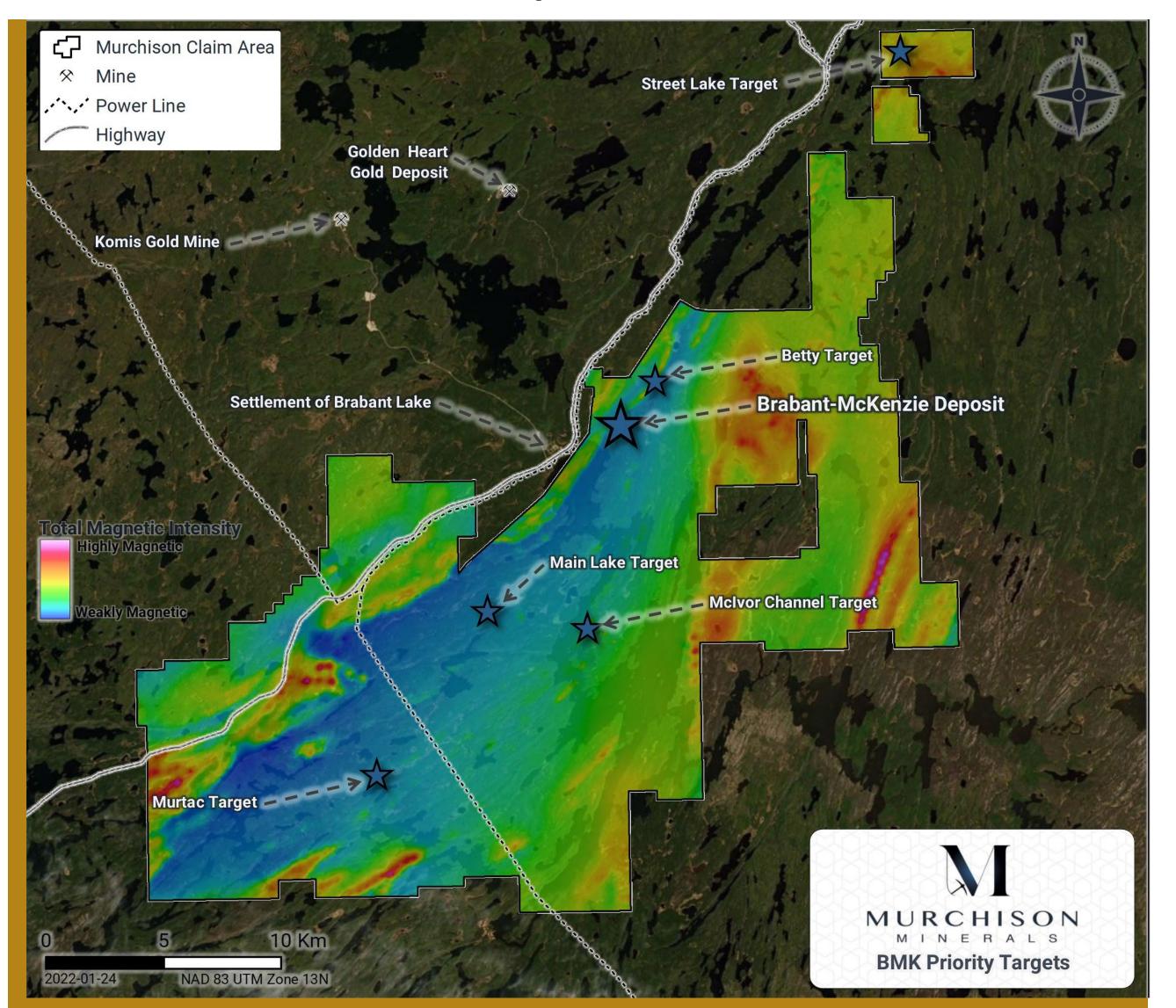
# BMK | 100% Owned | VMS Project

- Located in northeast Saskatchewan approximately 170 km north-east of La Ronge
- Excellent Infrastructure
- Maintained road on the property Saskatchewan HWY 102
- Existing power-lines running through project site
- Project area lies within an active and historic mining jurisdiction
- Community of Brabant Lake adjacent to the project area
- Entire 627 km<sup>2</sup> land package covered with modern VTEM surveys;
  highly-prospective for VMS deposits, as well as gold.





# BMK Camp Scale Potential



#### 1. GEOLOGIC SETTING:

Similar geological environment as Flin Flon, Lalor Lake, Lynn Lake and Snow Lake Deposits. Hosts BMK deposit which is metamorphosed sedimentary volcanogenic massive sulphide deposit within the underexplored Kisseynew metasedimentary belt associated with the La Ronge metavolcanics.

### 2. PROPERTY SCALE EXPLORATION:

Claims cover extensive area of similar stratigraphy that hosts the BMK deposit. Claim area has now been covered with VTEM surveys highlighting numerous prospective conductors. Project is large enough to host a VMS mining camp.

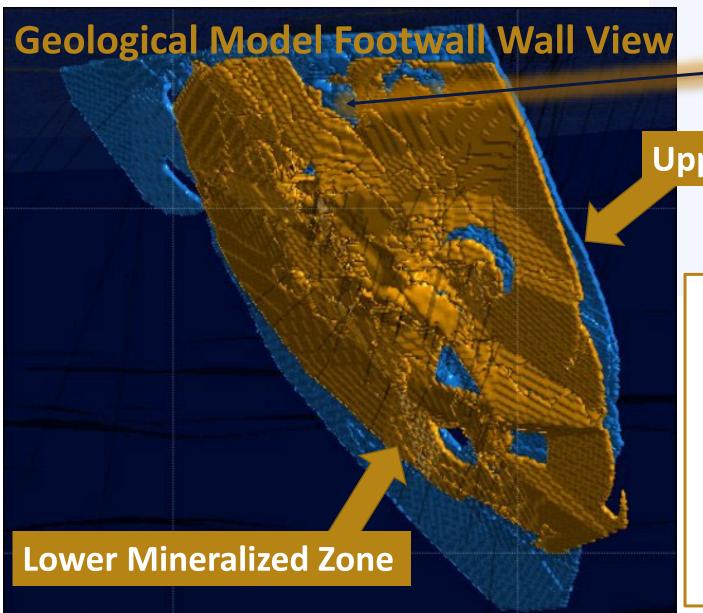
### 3. UPSIDE POTENTIAL FOR MORE VMS:

VMS deposits occur in clusters and BMK is the only known deposit in the area. VMS mineralization and alteration has now been intersected at the Betty and Main Lake targets.



# BMK Deposit Highlights

- Mineralization occurs as disseminated to massive, semi-massive and breccia-vein sulphides
- Coarse-grained (recrystallized), pyrrhotite, sphalerite, chalcopyrite and galena
- Outcrops at surface, dip averages -51 degrees NW
- Mineralization tentatively correlated over 1,100 m strike length
- 2 mineralized zones defined:
  - Upper Mineralized Zone
    - Defined over strike and dip length of 1 km at 50 m depth
    - Maximum width to 16 m, averages 5.3 m
  - Lower Mineralized Zone
    - Up to 25-30 m below upper zone
    - Defined over strike and dip length of 800 m from surface
    - Maximum width to 18 m, averaging 6.7 m







- Hole BM21-004 confirms the continuity of the high-grade mineralization within the deposit with 15.35 metres of continuous sulphide mineralization at 13.16% Zn Eq at the peripheral edge of Indicated Mineral Resources.
- The intersection consists of: 9.07% Zn, 0.81% Cu, 0.26% Pb, 0.11 g/t Au and 35.11 g/t Ag from 341.20 to 356.55 metres

Tonnes	% Zn	% Cu	% Pb	g/t Au	g/t Ag	% Zn Equiv.
1,200,000	8.13	0.75	0.67	0.28	48.00	11.53
900,000	5.7	0.6	0.24	0.17	28.52	7.93
2,100,000	7.08	0.69	0.49	0.23	39.6	9.98
						_
Tonnes	% Zn	% Cu	% Pb	g/t Au	g/t Ag	% Zn Equiv.
2,700,000	4.88	0.55	0.42	0.14	29.02	7.14
4,900,000	4.22	0.57	0.06	0.08	12.46	5.81
	1,200,000 900,000 2,100,000 Tonnes 2,700,000	1,200,000 8.13 900,000 5.7 2,100,000 7.08 Tonnes % Zn 2,700,000 4.88	1,200,000 8.13 0.75 900,000 5.7 0.6 2,100,000 7.08 0.69 Tonnes % Zn % Cu 2,700,000 4.88 0.55	1,200,000    8.13    0.75    0.67      900,000    5.7    0.6    0.24      2,100,000    7.08    0.69    0.49      Tonnes    % Zn    % Cu    % Pb      2,700,000    4.88    0.55    0.42	1,200,000    8.13    0.75    0.67    0.28      900,000    5.7    0.6    0.24    0.17      2,100,000    7.08    0.69    0.49    0.23      Tonnes    % Zn    % Cu    % Pb    g/t Au      2,700,000    4.88    0.55    0.42    0.14	1,200,000    8.13    0.75    0.67    0.28    48.00      900,000    5.7    0.6    0.24    0.17    28.52      2,100,000    7.08    0.69    0.49    0.23    39.6      Tonnes    % Zn    % Cu    % Pb    g/t Au    g/t Ag      2,700,000    4.88    0.55    0.42    0.14    29.02

CORPORATE PRESENTATION



# BIM Blue Sky Potential



#### **COMPLETED**

- ✓ 2017-2018 large in-fill drill program
- ✓ NI-43-101 report in October of 2018, resource expanded significantly
- ✓ Winter 2019 2020 completed VTEM coverage across all claims
- ✓ Summer 2019 2020 extensive prospecting program
- ✓ Winter 2020 exploration drill program, discovered VMS style mineralization at Main Lake target
- ✓ Winter 2021 exploration drill program, discovered VMS style mineralization at Betty target
- ✓ Summer 2021 completed preliminary metallurgy with exceptional results

#### **WHAT'S NEXT**

- 2022 completing comprehensive desktop study on results to date, in order to systematically optimize future drill programs
- Expanding high-grade domains and testing along strike and down dip from current deposit extents
- Continuing exploration drilling at Main Lake and Betty targets



### Executive & Board of Directors

### ■ JEAN-CHARLES (JC) POTVIN, B.Sc. (Hon), MBA

#### **Executive Chairman**

- Co-founder of the Company
- President and CEO of Pangea Goldfields Inc. acquired by Barrick Gold Corporation for CA\$204 million in 2000.
- Previously Director, Vice-President and top-ranked Equity Research Gold Analyst with Burns Fry (now BMO Nesbitt Burns).
- Currently a director of Azimut Exploration Inc., Golden Sun Resources and Murchison Minerals.

#### TROY BOISJOLI, B.Sc. Geology

#### **President & CEO**

- 15 years of cumulative exploration, project development, operations and regulatory experience.
- Formerly held positions of Vice President of Exploration and Community, and Vice President of Project Development and Operations with NexGen Energy

#### ERIK H. MARTIN CPA, CMA

#### **Chief Financial Officer and Corporate Secretary**

• 25 years of financial disclosure & management experience with publicly-listed resource companies.

#### JOHN SHMYR, B.Sc. Geology (Honours)

#### **VP Exploration**

- 10 years of experience in mineral exploration.
- Previously project geologist for BFR Copper & Gold, directly involved in the discovery of additional Cu-Zn mineralization at BFR's Flin Flon project.
- Registered member of the Professional Engineers and Geoscientists of Saskatchewan.
- Holds special authorization with the Ordre des Géologues du Québec.

#### DENIS C. ARSENAULT, B.Comm.

#### **Independent Director**

- Chair of the Audit Committee and member of the Compensation Committee.
- More than 40 years of professional experience with extensive board and governance committee experience.
- Held senior financial positions in a range of sectors including mining and resources.

### DONALD K. JOHNSON, B.Eng., MBA, O.C.

#### Director

- Serves as a member of the Advisory Board of BMO Capital Markets.
- President of Burns Fry from 1984 to 1989.
- Served as Vice Chairman of BMO Nesbitt Burns until 2004.
- Formerly a Director of the Toronto Stock Exchange and Chairman of the Investment Dealers Association of Canada.
- Currently Emeritus Chairman of Goeasy Limited.
- Officer of the Order of Canada

#### DAVID PYPER, B.Eng., MBA.

#### **Independent Director**

- Chair of the Compensation Committee and member of the Audit Committee.
- Managing Partner at Blair Franklin Capital Partners Inc. of Toronto.
- David has more than 24 years of M&A and corporate finance experience in a wide variety of industries.

### JACQUELINE LEROUX, P.Eng.

#### **Independent Director**

- 28 years of experience in the mining industry, specializing in environmental compliance.
- Director of Environment at Troilus Gold.
- Owner of JLeroux enr, a Quebec-based environmental consulting firm.

#### Cory Belyk

#### **Independent Director**

- 30 years of experience in the mining industry involved with companies at various stages from grassroot exploration to mining operations.
- Proven track record with successful discovery in the Athabasca Basin area.
- Served as a member of the board of several renowned mining firms including Cameco and CanAlaska Uranium.

#### Dr. Peter C. Lightfoot

#### **Technical Advisor**

- President and Chief Geologist of Lightfoot Geosciences
- Former Chief Geologist for Vale, Nickel: Base Metals Division
- Former Principal Geologist for Inco, Nickel Sulphide Global Porject Generation Program
- Adjunct Industry Professor in the Department of Earth Sciences at the University of Western Ontario

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