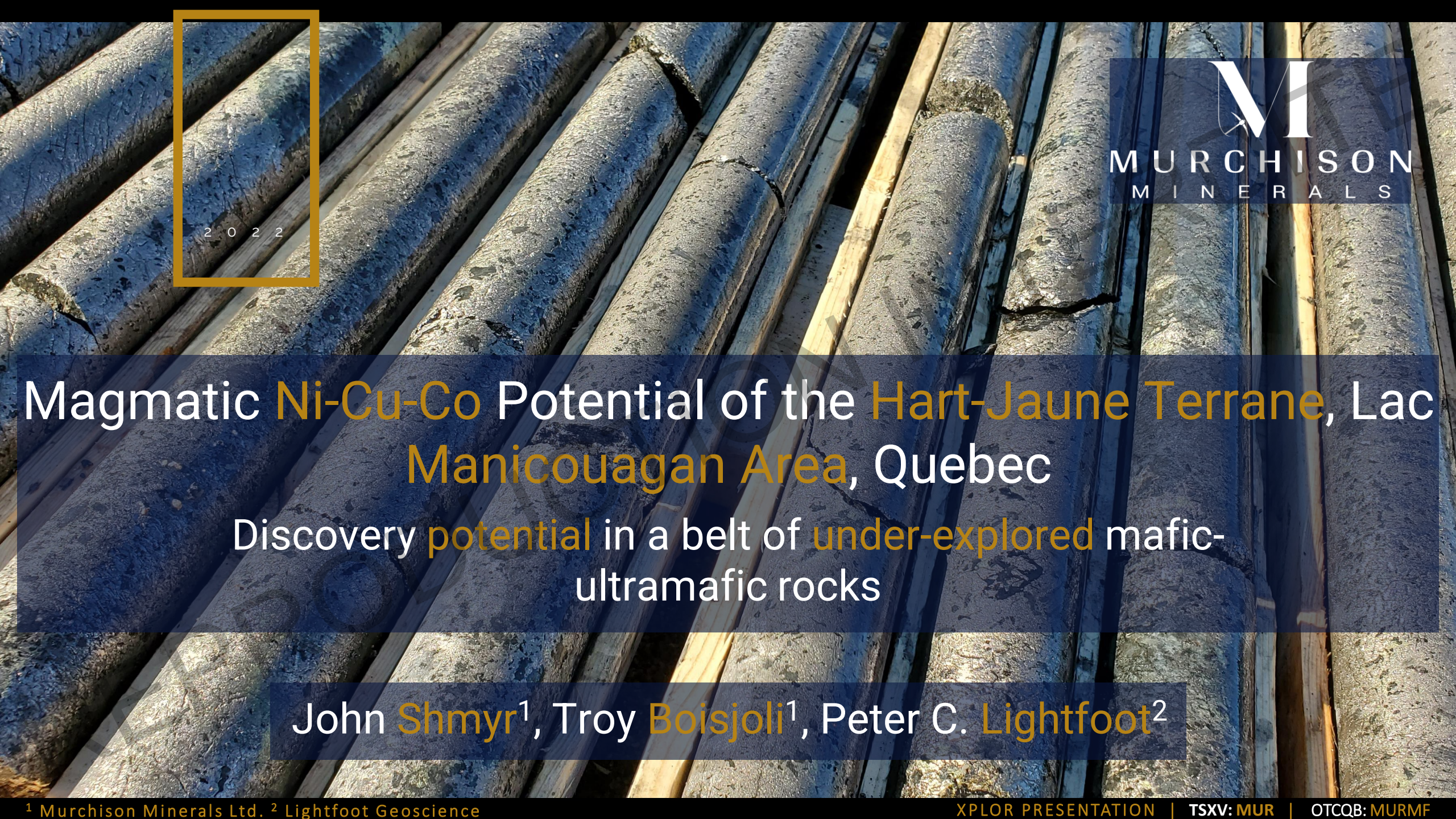

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Magmatic Ni-Cu-Co Potential of the Hart-Jaune Terrane, Lac Manicouagan Area, Quebec

Discovery potential in a belt of under-explored mafic-ultramafic rocks

John Shmyr[1], Troy Boisjoli[1], Peter C. Lightfoot[2]

[1] Murchison Minerals Ltd. [2] Lightfoot Geoscience

CAUTIONARY STATEMENT

The statements, maps and models in this presentation are based on information currently available to Murchison Minerals Ltd. (the “Company”) and the Company provides no assurance that actual results will meet management's expectations. In certain cases, forward-looking information may be identified by such terms as "anticipates", "believes", "could", "estimates", "expects", "may", “potential”, "shall", "will” or "would". Forward-looking information contained in this presentation is based on certain factors and assumptions regarding, among other things, the estimation of mineral resources and mineral reserves, the realization of resource estimates and reserve estimates, metal prices, the timing and amount of future exploration and development expenditures, the estimation of initial and sustaining capital requirements, the estimation of labour and operating costs, the availability of necessary financing and materials to continue to explore and develop the Company’s project in the short and long-term, the progress of exploration and development activities, the receipt of necessary regulatory approvals, the completion of the environmental assessment process and assumptions with respect to currency fluctuations, environmental risks, title disputes or claims and other similar matters. While the Company considers these assumptions to be reasonable based on information currently available to it, they may prove to be incorrect.

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 forward-looking 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.

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MURCHISON MINERALS' APPROACH

OUR APPROACH

2022

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.
- 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.

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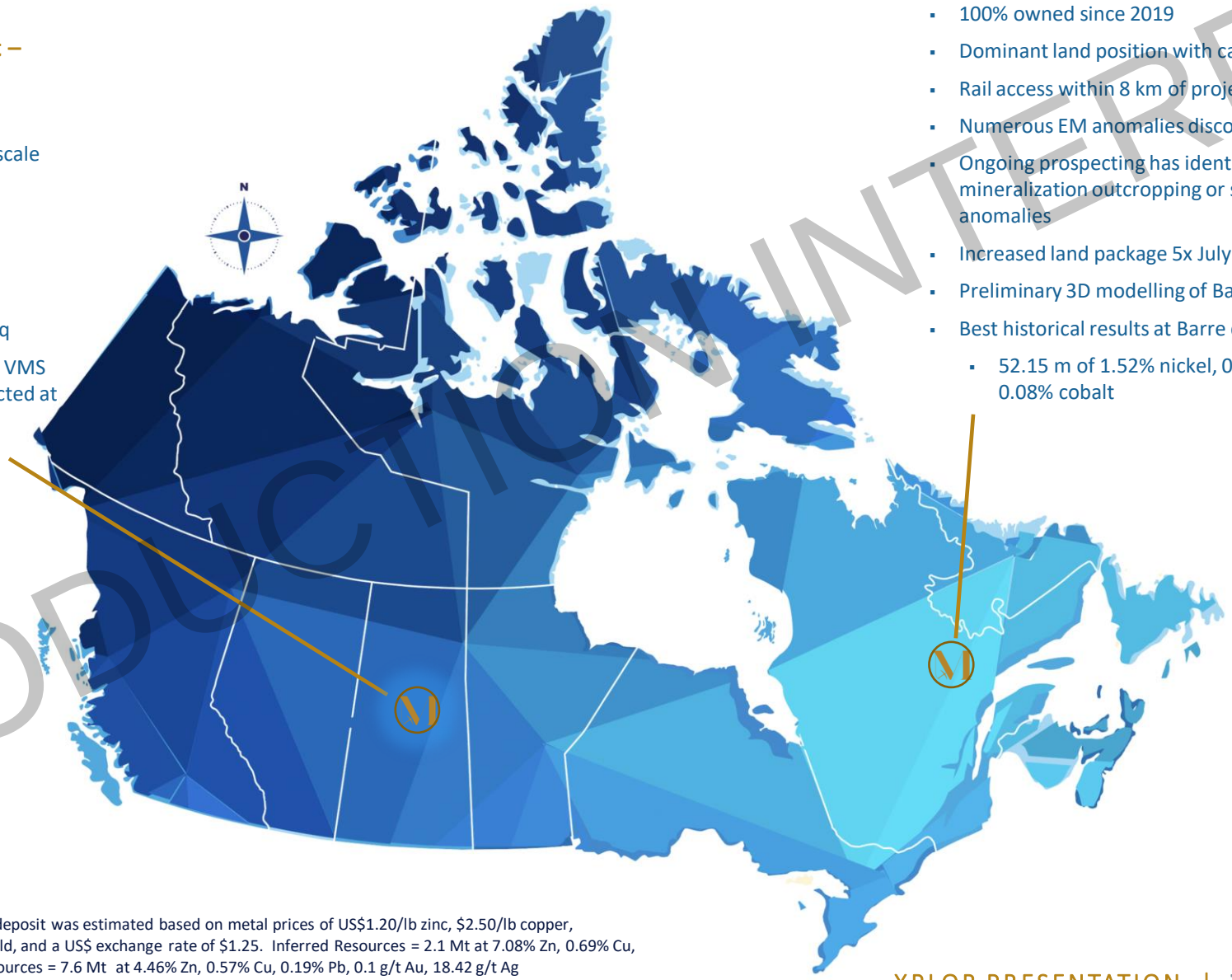
MURCHISON MINERALS' SNAPSHOT

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



HPM Ni-Cu-Co Project - Quebec

- 100% owned since 2019
- 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 historical results at Barre de Fer Zone:
  - 52.15 m of 1.52% nickel, 0.79% copper and 0.08% cobalt

(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. Inferred Resources = 2.1 Mt at 7.08% Zn, 0.69% Cu, 0.49% Pb, 0.23 g/t Au, 39.6 g/t Ag. Indicated Resources = 7.6 Mt at 4.46% Zn, 0.57% Cu, 0.19% Pb, 0.1 g/t Au, 18.42 g/t Ag

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MURCHISON MINERALS' HPM PROJECT

HPM | Quebec

Ni-Cu-Co Project

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

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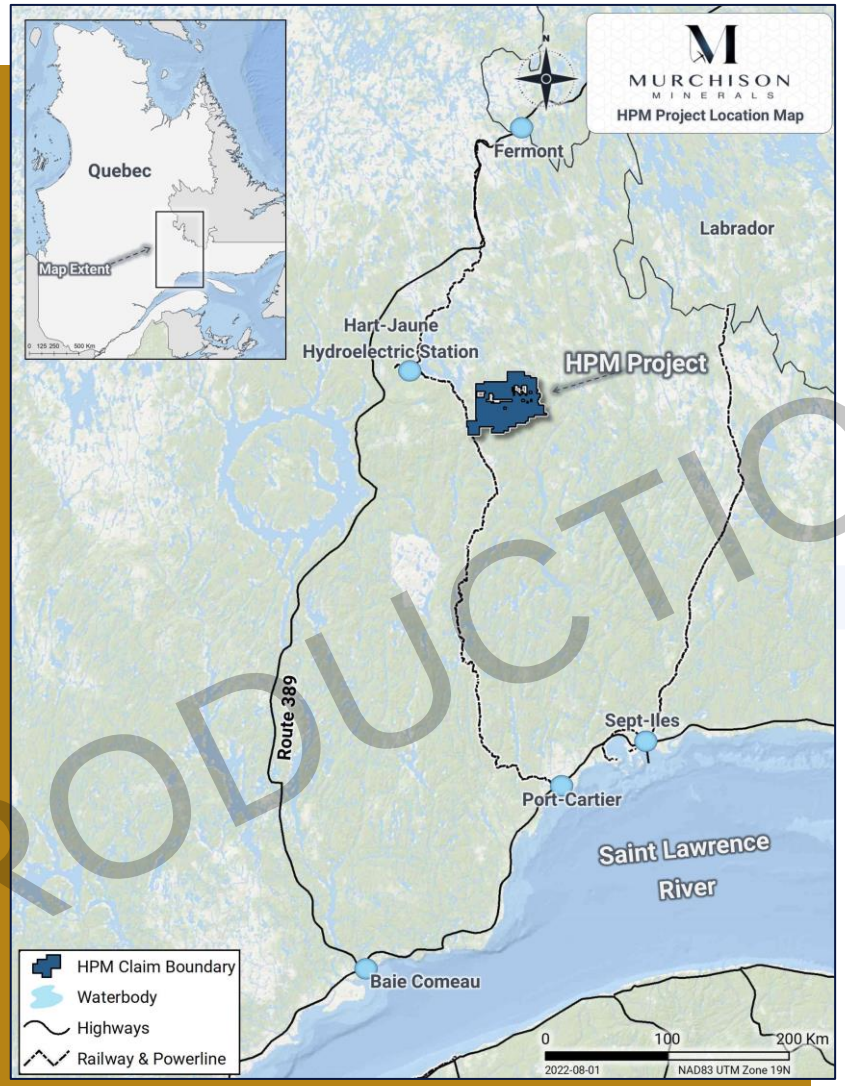
OUTLINE

- Project location, access and infrastructure
- Regional geology - supporting district scale thesis
- Project geology and potential
- Barre De Fer Zone
- Current Exploration

HPM | Location and Access



- Located in the Haut-Plateau de la Manicouagan region, adjacent to the Manicouagan Impact Structure
- 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.
- 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 (51Mwh capacity) 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^2 of mafic intrusive geology.

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

2022

MURCHISON MINERALS' HPM PROJECT

OUTLINE

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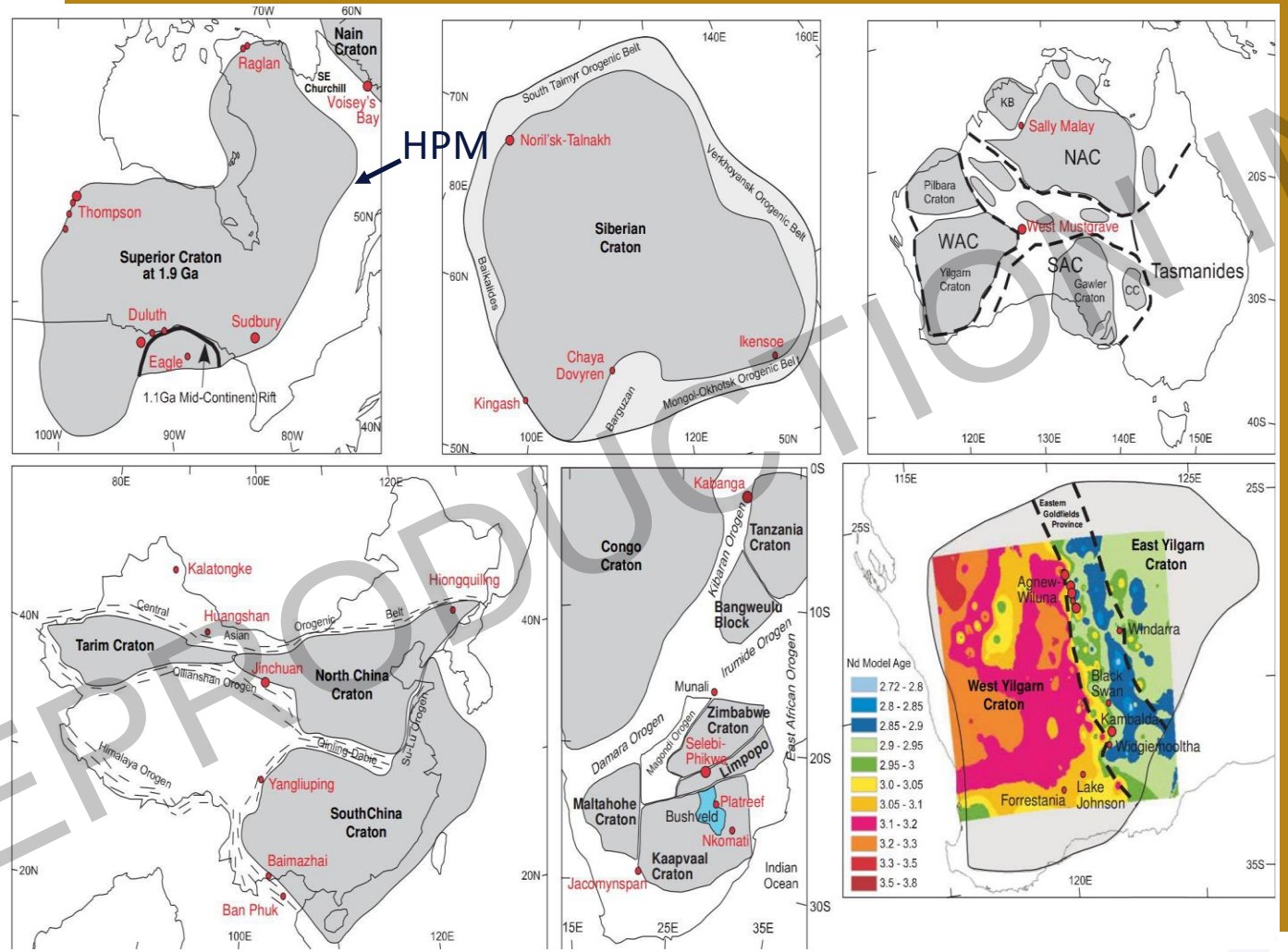
HPM | Craton Margins – Ni Camp Association

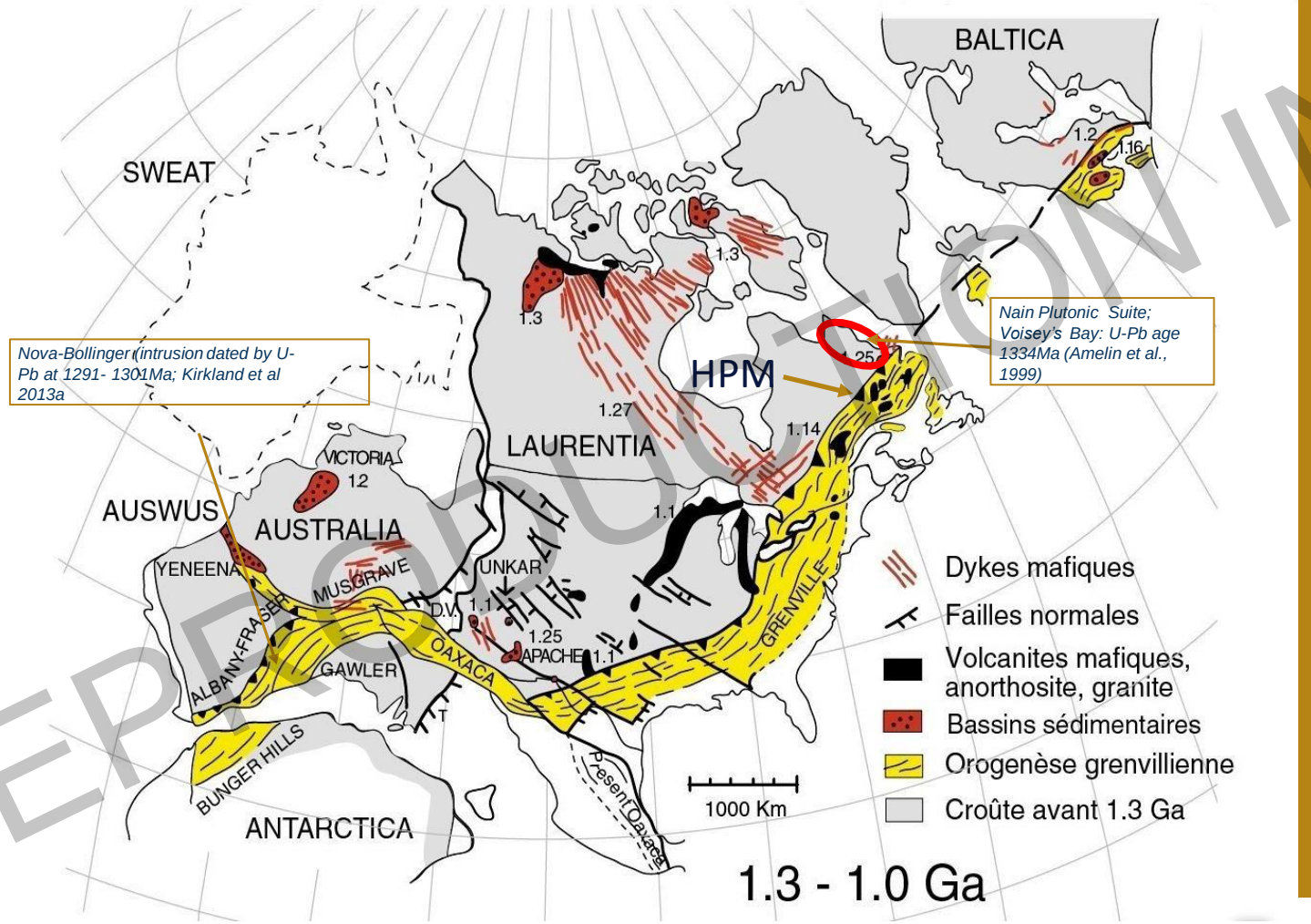


Craton Margins

World class magmatic sulfide deposits are localized around craton margins.

Mantle derived magmatism can ascend through the crust resulting in the development of world class Ni sulfide deposits.

HPM | Grenville Province – Ni Deposit Association

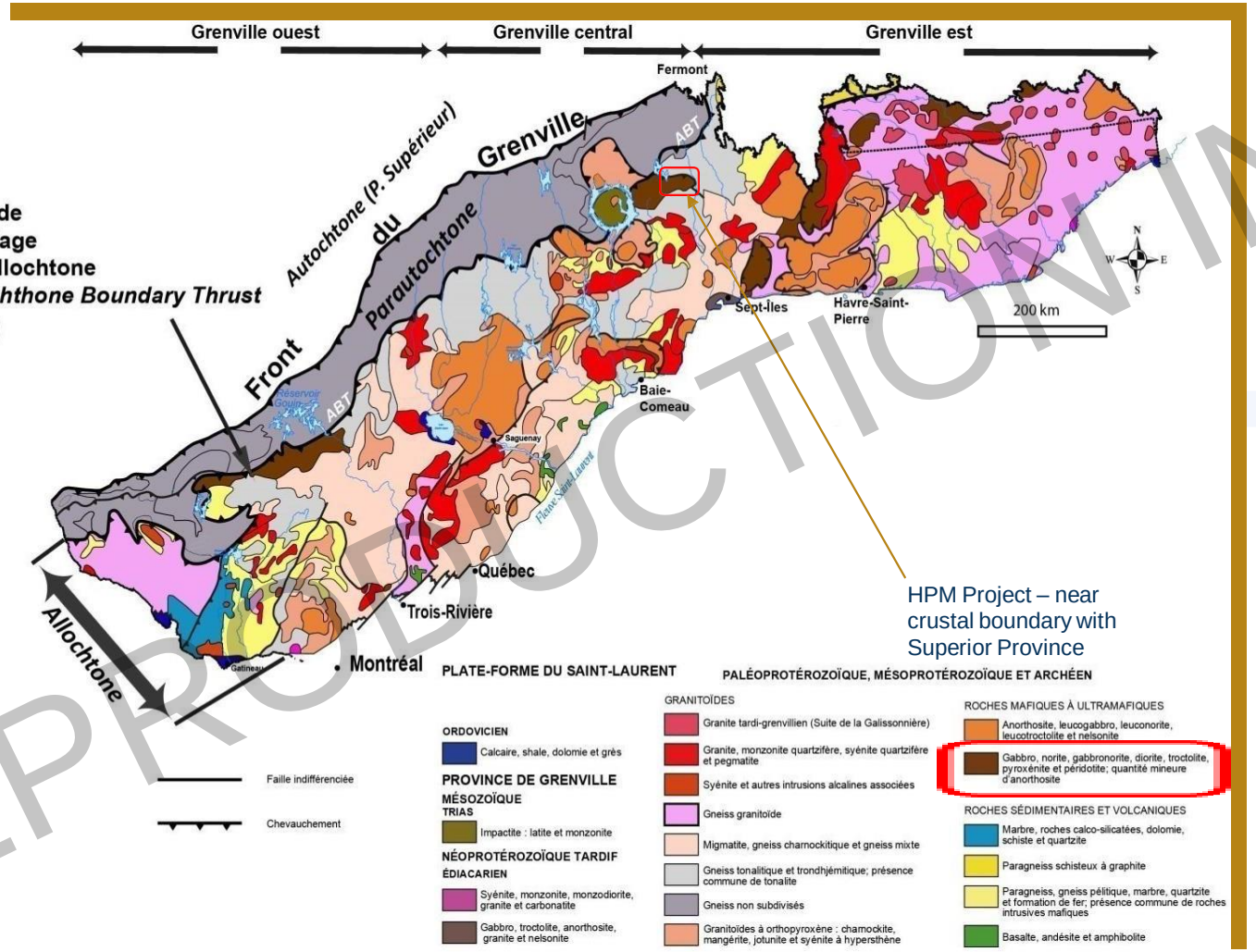


Grenville Province

- Prior to the Grenvillian continent-continent collision at about 1.0 Ga, the southern margin of Laurentia was a long-lived convergent margin that extended from Greenland to southern California.
- The truncation of these 1.8–1.0 Ga orogenic belts in southwestern and northeastern Laurentia suggests that they once extended farther.
- Australia contains the continuation of these belts to the southwest and that Baltica was the continuation to the northeast.
- Nova-Bollinger area in Western Australia and the Nain Pluton (Voisey's Bay) provide analogues for the Ni potential in the HPM region of the Grenville Province

HPM | Grenville Province – Geology

2022



Grenville Province

The Grenville Province is divided into two parts, the Parautochton and the Allochton, separated by a major thrust structure called the Allochton Boundary Thrust (ABT).

The Grenville Province largely lies on gneiss complexes of high-grade metamorphic rocks with polyphase ductile deformation and significant partial melting.

The Grenville Front is a major discontinuity of the North American continent resulting from the collision of the Allochton with the existing rocks (Autochton) in southeastern Superior Province

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

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MURCHISON MINERALS' HPM PROJECT

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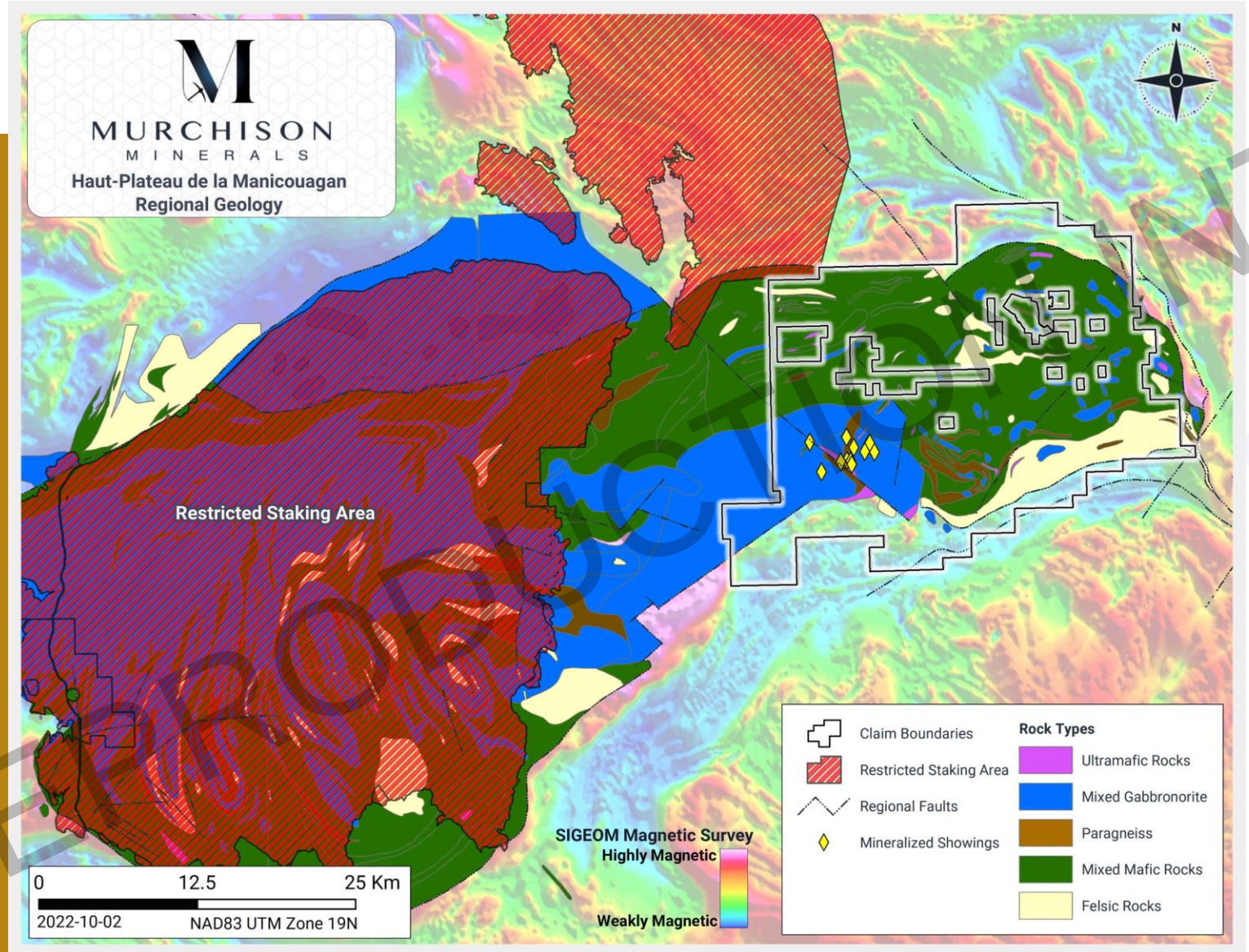
HPM | Project Geology



HPM Geology

Geology is comprised of the Manicouagan metamorphic complex composed of granulitic gabbro, orthogneiss and paragneiss intruded by gabbroic, ultramafic and anorthositic bodies

The paragneiss assemblages are sulphide rich and are inferred to be the potential sulphide source for the nickel sulphide mineralization

Regional metamorphism is in the granulitic facies with local retrogression to the upper amphibolite facies

Mineralization found on the property to date is associated with Gabbro East intrusion composed of coronitic gabbronorite

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

2022

MURCHISON MINERALS' HPM PROJECT

OUTLINE

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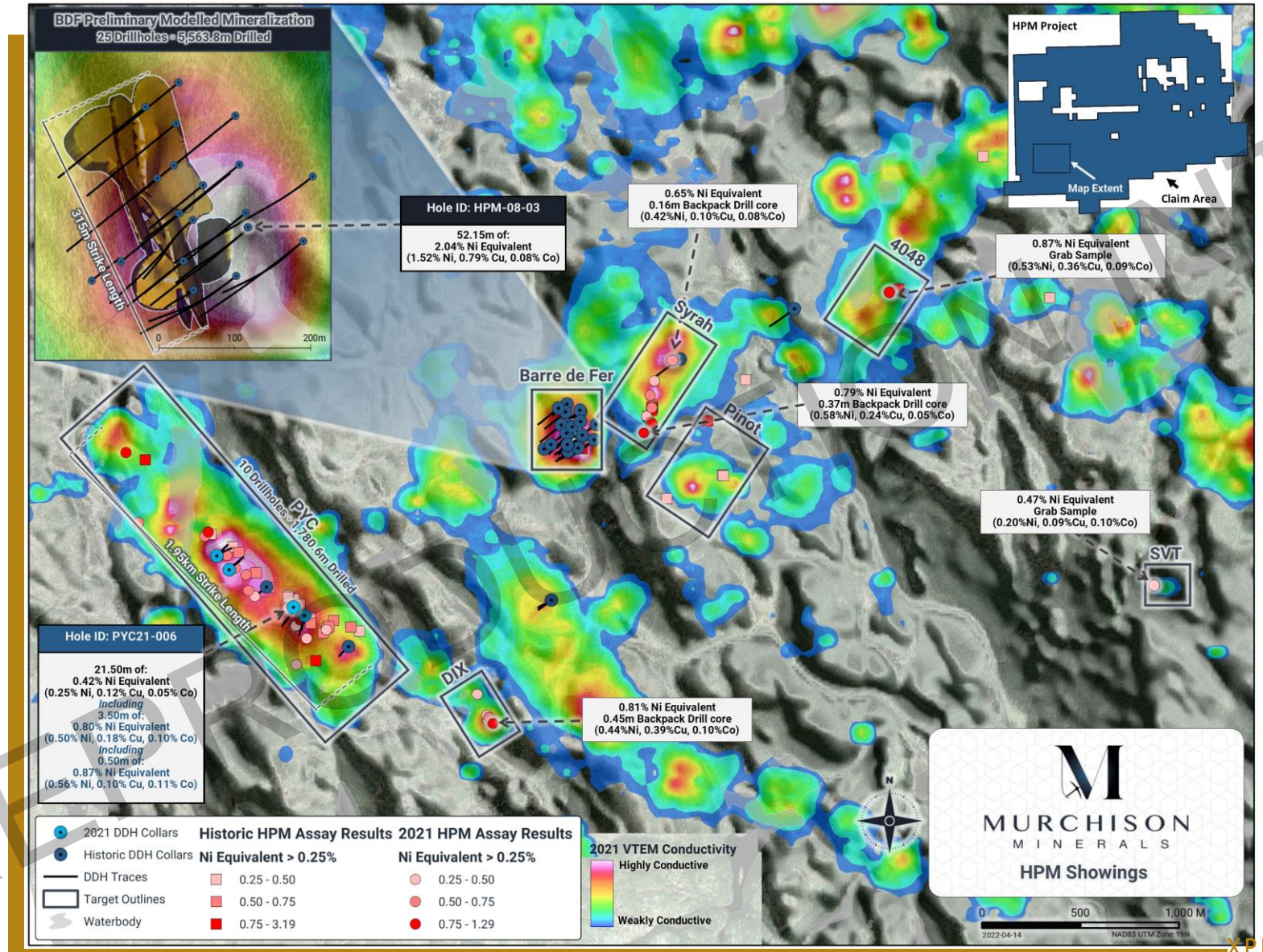
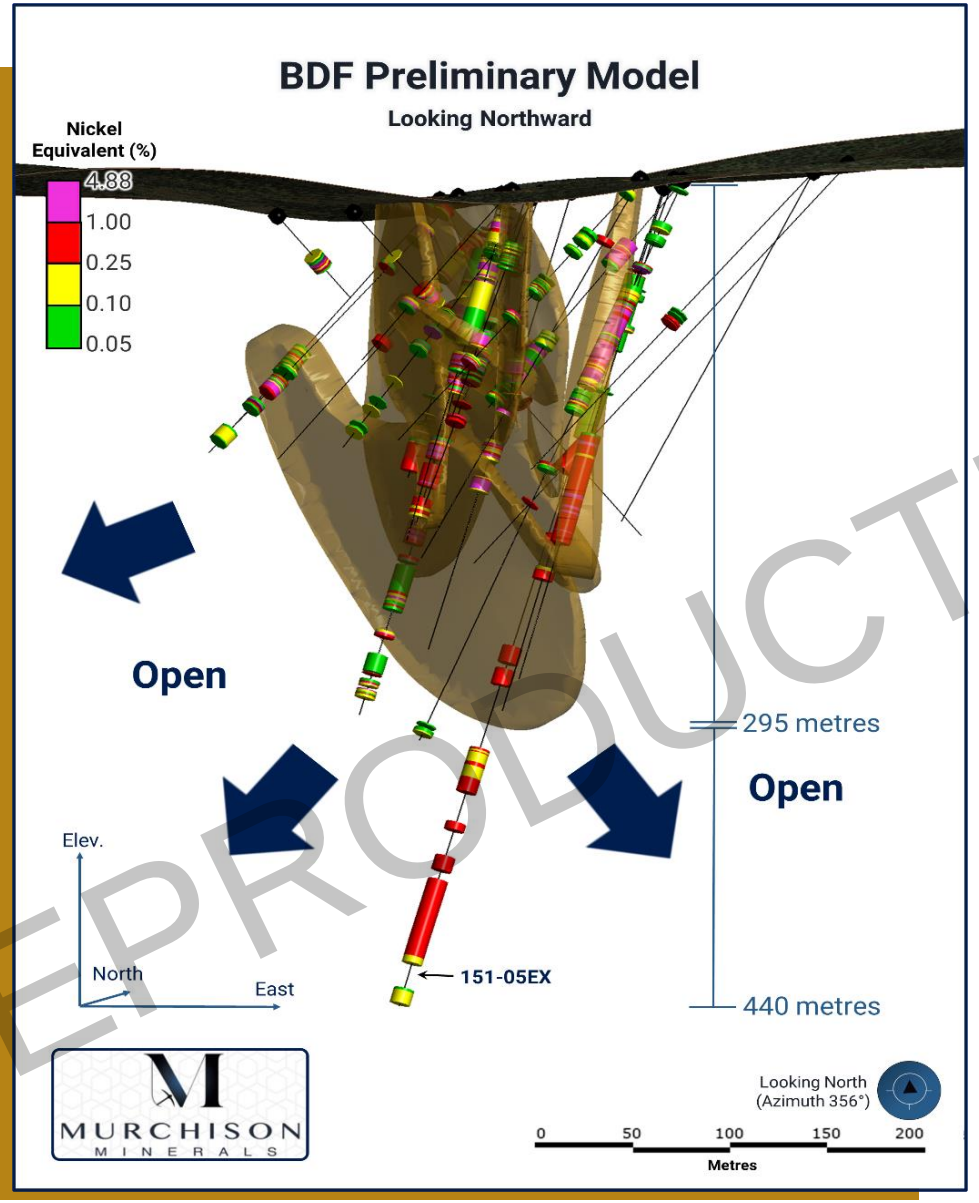
HPM | Target Areas



High Priority Targets

- **Barre de Fer (BDF)**
  - High grade nickel, copper, cobalt mineralization
  - Mineralization currently has a strike length of 315 m and has been intersected to a vertical depth of 440 m
  - Mineralization is open at depth and along strike
- **Syrah**
  - Adjacent to Barre de Fer with a similar geophysical signature
  - Ni-Cu-Co outcropping on surface up to 0.79% Ni Eq
- **PYC**
  - 1.95 km long geophysical anomaly
  - Nickel, copper, cobalt mineralization mapped on surface over a strike length of 1.7 km

HPM | Barre de Fer



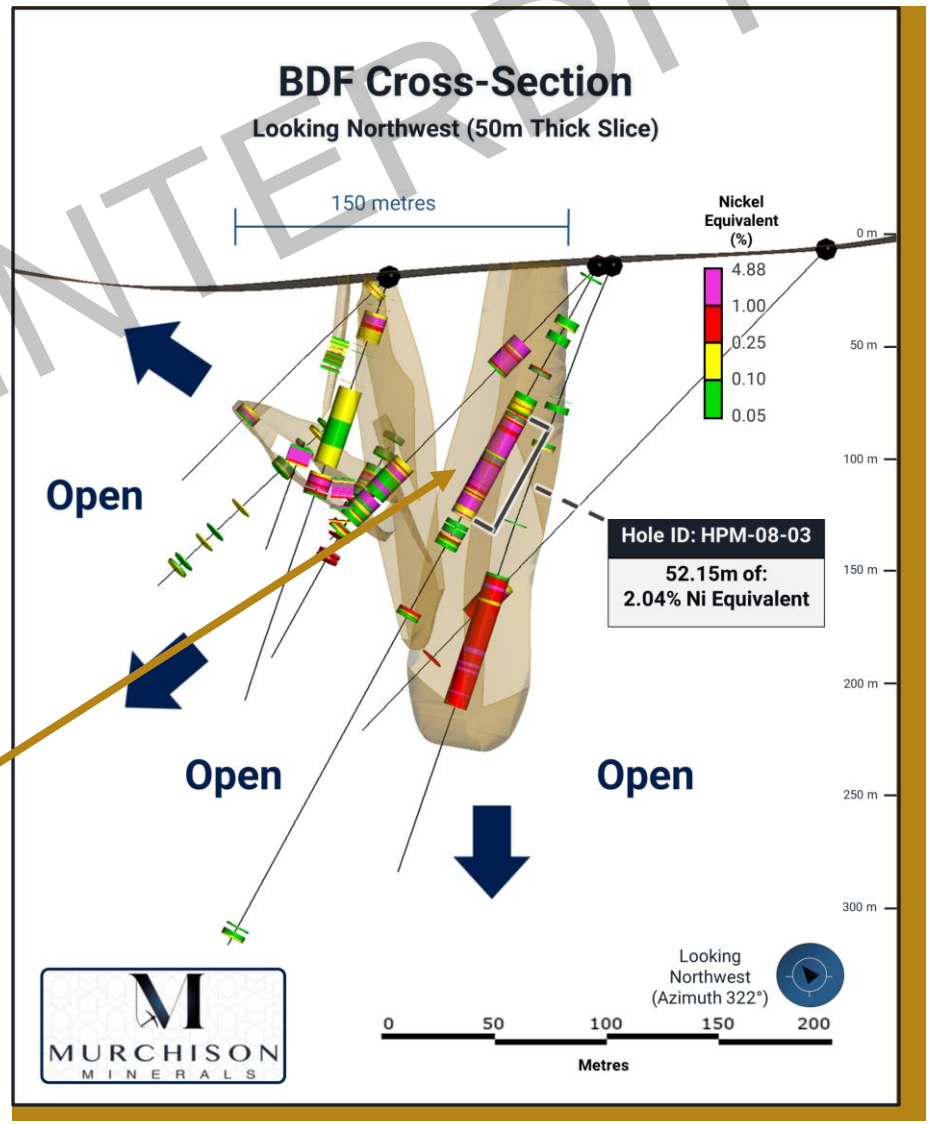
- Discovered in 1999 by prospecting
- 2001 to 2008: 25 drill holes completed (5,564 metres)
- Scale: Crops out, 315m strike; multiple stacked lenses with combined thickness up to 150m; model base at 295m, but mineralized to 440m depth
- Mineralization is open in multiple directions; with significant potential to build resource

HIGHLIGHTS | From Barre de Fer

Hole		From (m)	To (m)	Length* (m)	Ni %	Cu %	Co %	Ni Eq. %**
HPM-08-03		52.54	54.96	2.42	0.47	0.19	0.03	0.61
		70.86	71.36	0.5	0.37	0.29	0.02	0.54
		74.45	**126.60**	**52.15**	**1.52**	**0.79**	**0.08**	**2.04**
	includes	***79.82***	***82.94***	***3.12***	***2.24***	***1.31***	***0.11***	***3.05***
	includes	***82.43***	***82.94***	***0.51***	***2.3***	***4.81***	***0.12***	***4.44***
		136.07	139.42	3.35	0.33	0.14	0.02	0.44
		174.75	176.40	1.65	0.33	0.2	0.02	0.45
HPM-08-04		**47.73**	**63.68**	**15.95**	**1.64**	**0.63**	**0.08**	**2.12**
		125.40	**130.50**	**5.1**	**1.23**	**0.47**	**0.06**	**1.59**
		136.75	**139.40**	**2.65**	**2.08**	**1.24**	**0.11**	**2.85**
		144.17	**154.92**	**10.75**	**1.05**	**0.63**	**0.06**	**1.44**
	includes	***144.17***	***148.22***	***4.05***	***2.31***	***1.35***	***0.11***	***3.15***
		162.95	164.00	1.05	0.12	0.54	0.01	0.36
2002		24.20	24.60	0.4	0.94	0.52	0.07	1.33
		35.15	**53.25**	**18.1**	**0.93**	**0.28**	**0.07**	**1.23**
		98.90	112.15	13.25	0.57	0.42	0.05	0.86
		139.6	**150.2**	**10.6**	**1.29**	**0.9**	**0.09**	**1.9**
	includes	***146.7***	***149.05***	***2.35***	***2.76***	***2.19***	***0.2***	***4.15***
		153.1	165.7	12.6	0.35	0.16	0.03	0.49
		172.55	181.45	8.9	0.25	0.1	0.02	0.35

** Reported as core length, true thickness is not known. **Nickel Equivalent (NiEq) values were calculated using the following USD metal prices from Mar 23, 2022: $12.76/lb Nickel, $4.76/lb Copper and $37.20/lb Cobalt.*

Magmatic Nickel Sulphide Mineralization from HPM-08-03



MURCHISON MINERALS' HPM PROJECT

HPM | Barre de Fer Mineralization

2022

- Upper zone: massive-semi-massive Po-Cpy-Pn
- Lower zone: disseminated Po-Cpy-Pn
- Loop textured Cpy+Pn separate large grains of Po; no flame Pn evident
- Primary magmatic sulphide textures

MURCHISON MINERALS' HPM PROJECT

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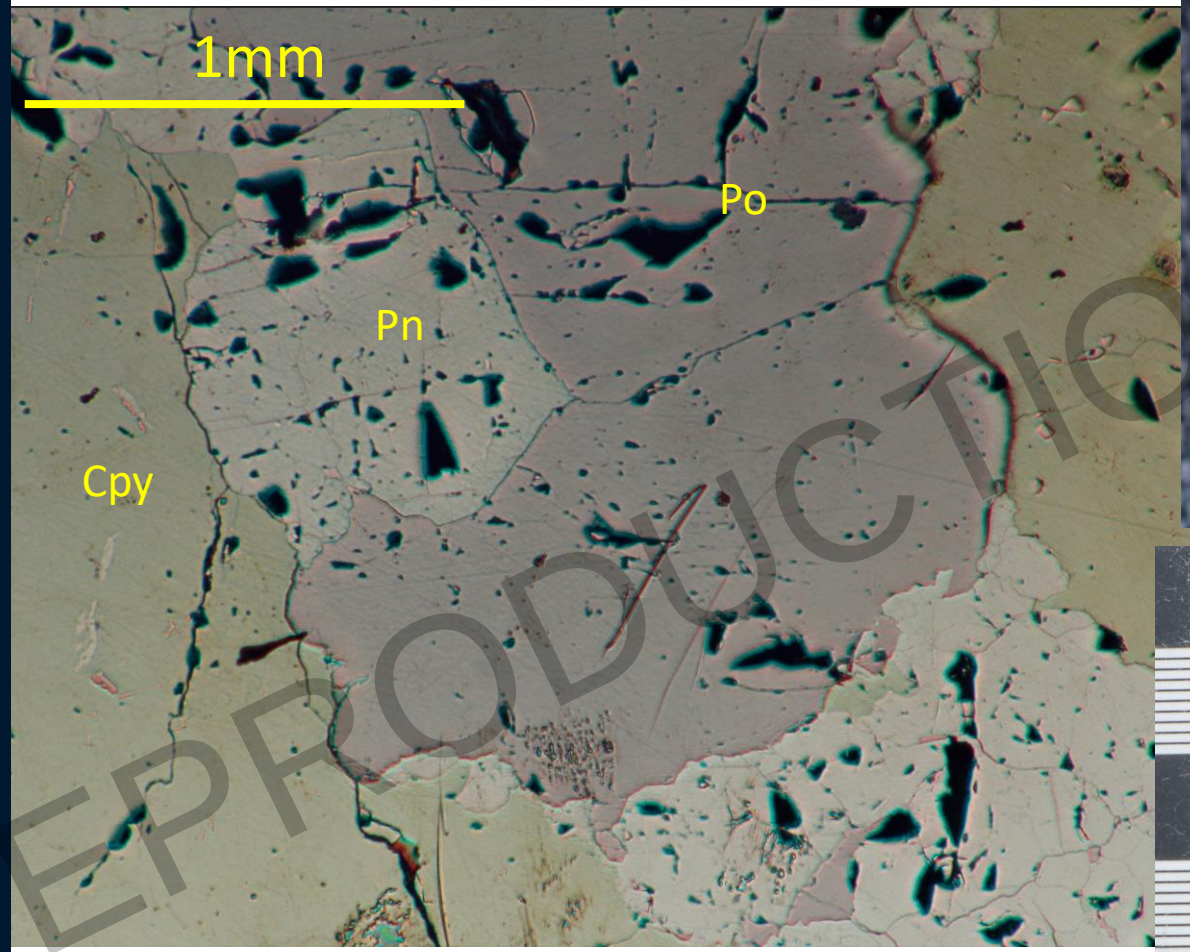
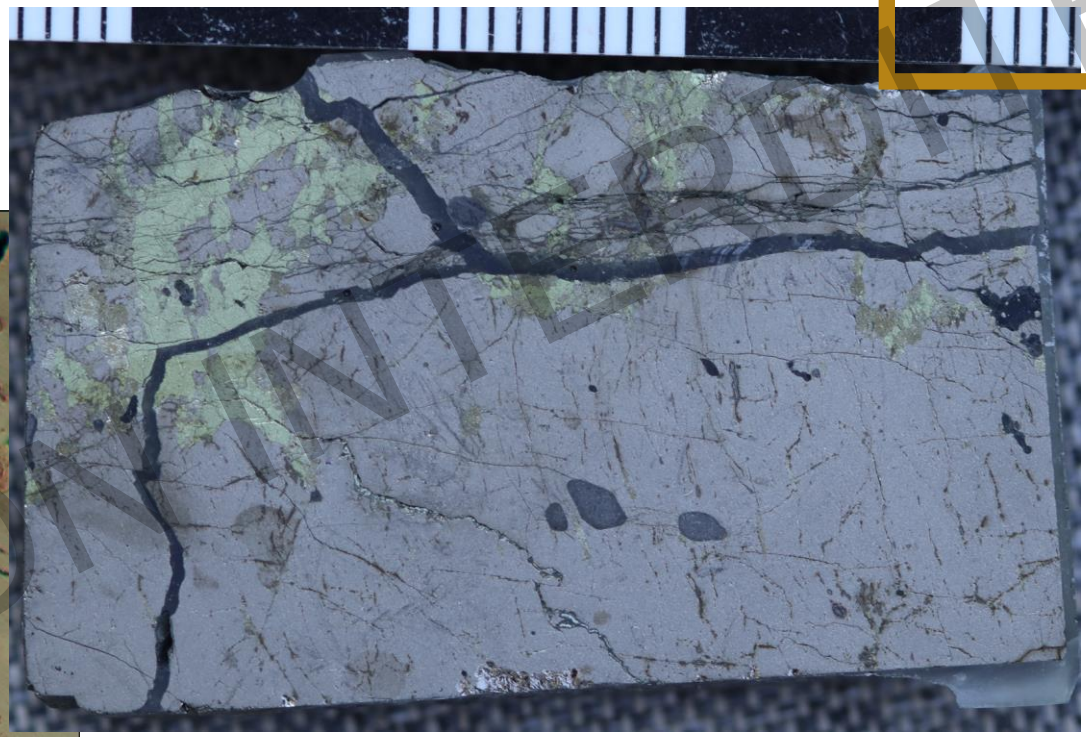
Hole number: HPM08-04
Depth interval: 144.16m
Location: BdF
Rock type name (field description): Massive sulphide

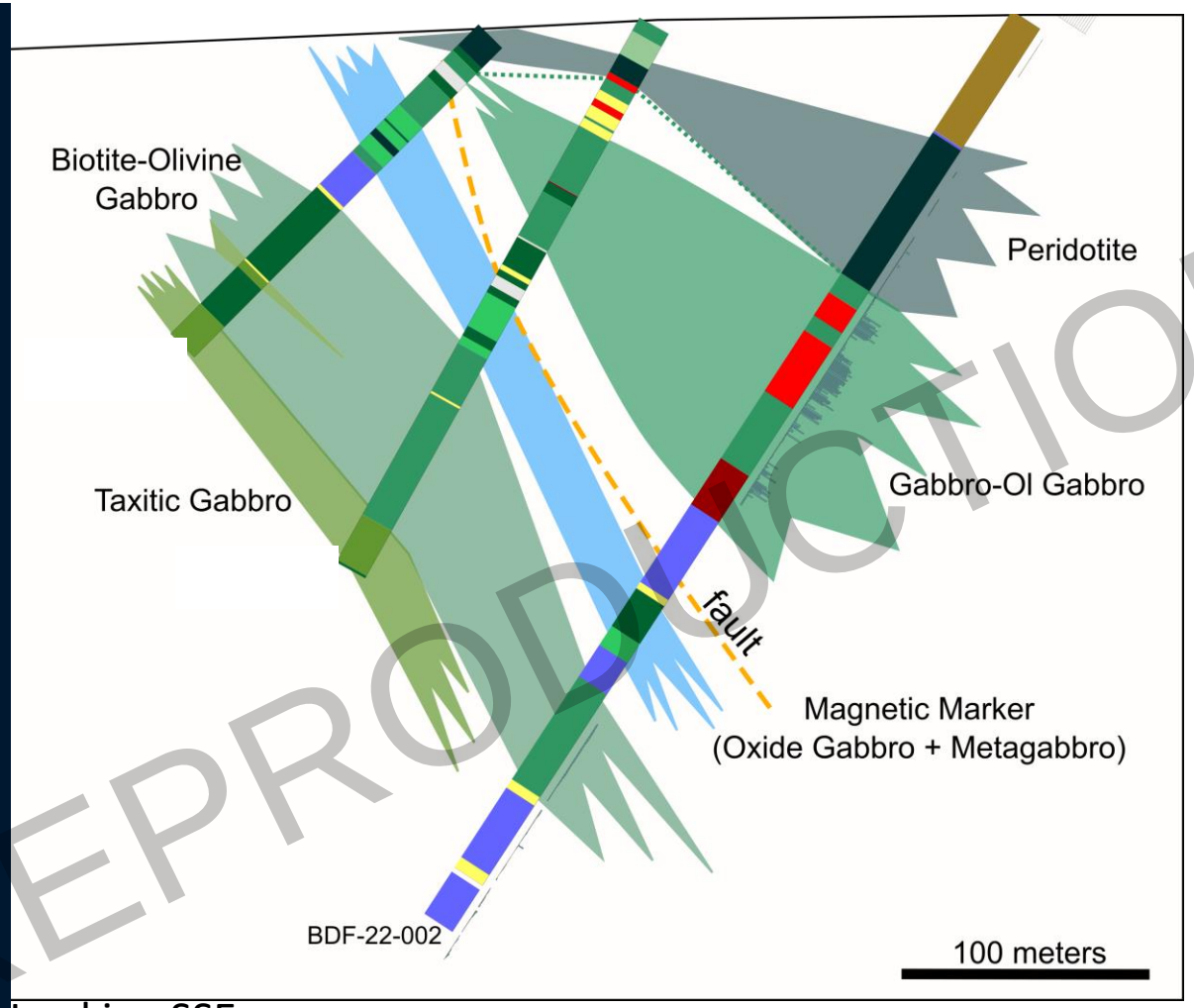




Magmatic assemblage of Po-Pn-Cpy; almost all Pn is granular; 4x, RL

MURCHISON MINERALS' HPM PROJECT

HPM | Barre De Fer Lithologies



Looking SSE

Intrusions:

1 – **Peridotite** – moderate serpentinization of cumulate olivine

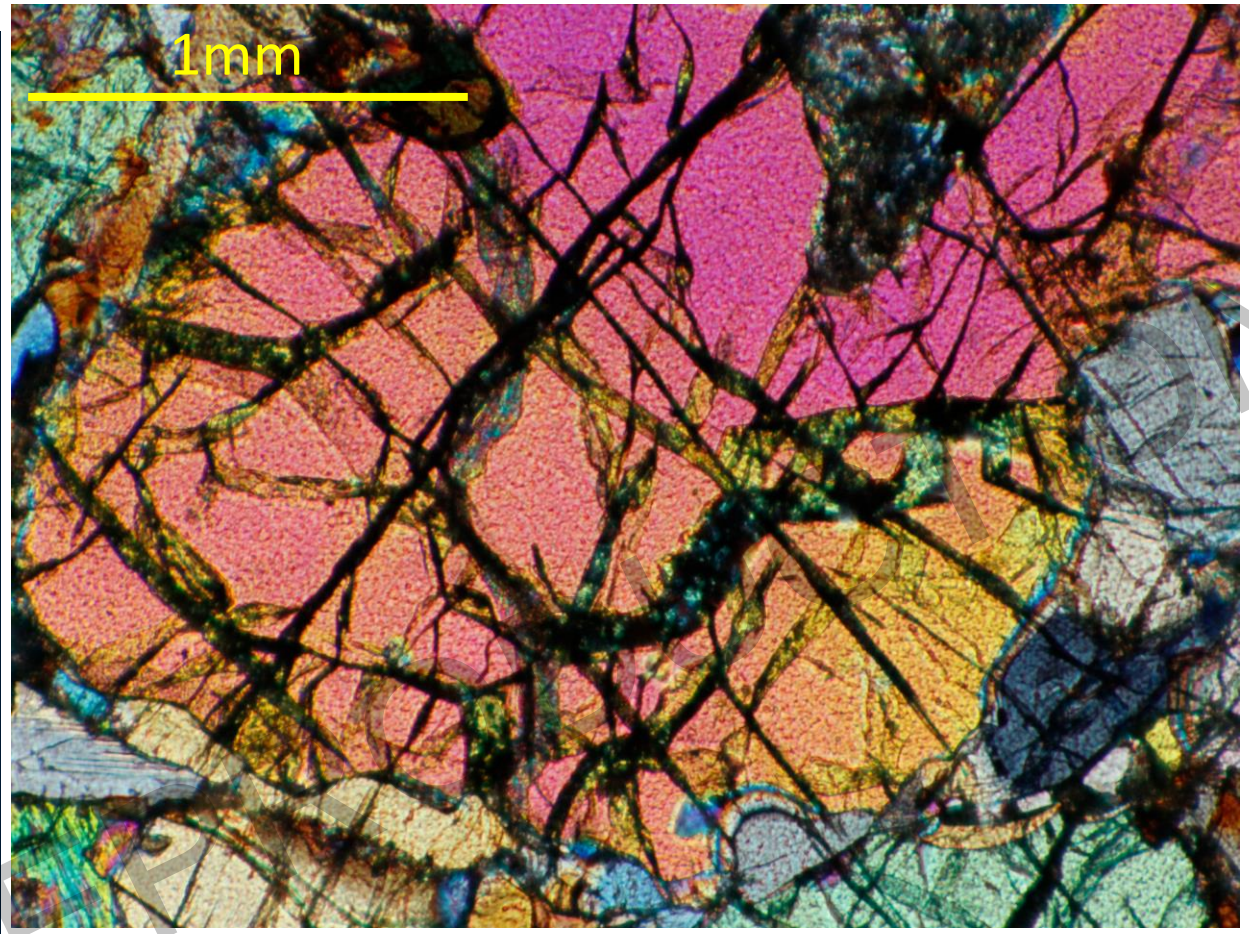
2 – **Gabbro-Olivine Gabbro** –moderate serpentinization; may be related to peridotite

3 – **Magnetic Marker** – oxide gabbro with amphibole

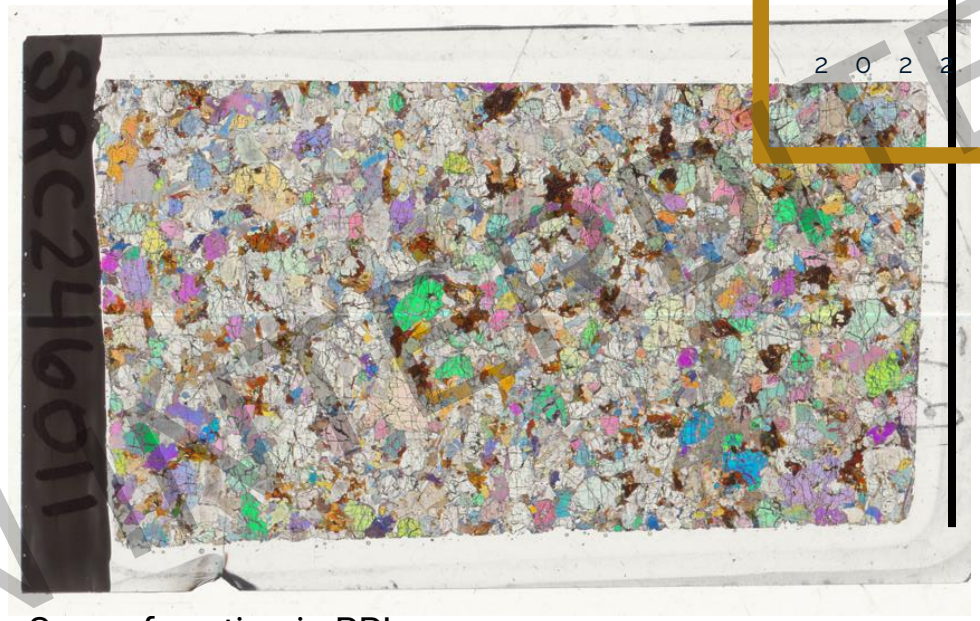
4 – **Mica Olivine Gabbro** – more micaceous than peridotite-olivine gabbro

5 – **Taxitic Gabbro –** variable grain size

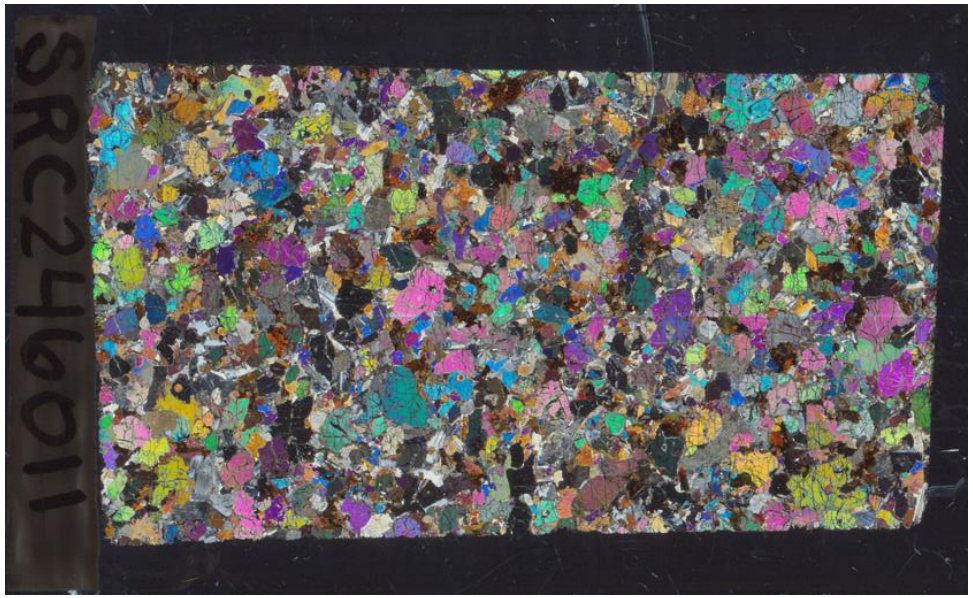
Hole number: HPM08-03
Depth interval: 16.42-16.6m
Location: BDF
Rock type name (field description): Pyroxene peridotite



Fresh high relief cumulus olivine with intercumulus pyroxene; 4x, PPL



Scan of section in PPL



Scan of section in XP

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

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OUTLINE

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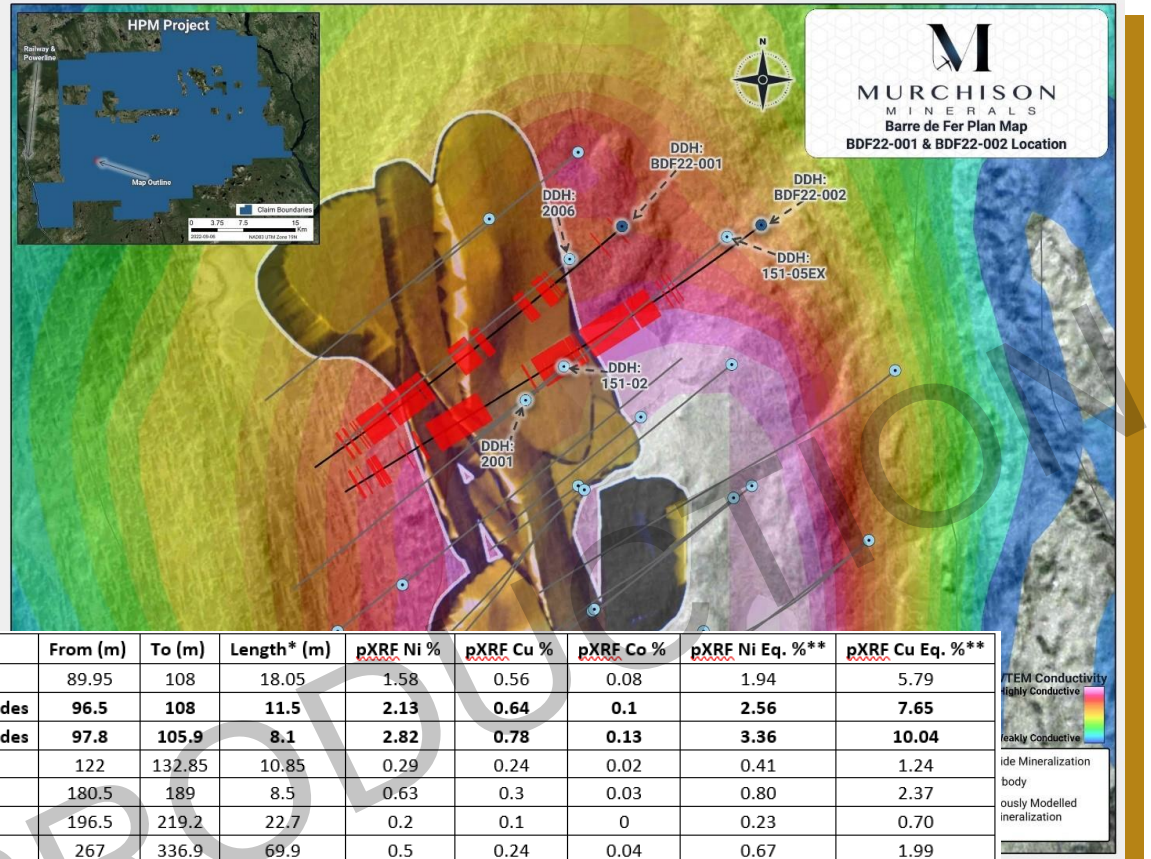
HPM | 2022 Drill Campaign

2022



Hole		From (m)	To (m)	Length* (m)	pXRF Ni %	pXRF Cu %	pXRF Co %	pXRF Ni Eq. %**	pXRF Cu Eq. %**
BDF22-001		89.95	108	18.05	1.58	0.56	0.08	1.94	5.79
	Includes	**96.5**	**108**	**11.5**	**2.13**	**0.64**	**0.1**	**2.56**	**7.65**
	Includes	**97.8**	**105.9**	**8.1**	**2.82**	**0.78**	**0.13**	**3.36**	**10.04**
		122	132.85	10.85	0.29	0.24	0.02	0.41	1.24
		180.5	189	8.5	0.63	0.3	0.03	0.80	2.37
		196.5	219.2	22.7	0.2	0.1	0	0.23	0.70
		267	336.9	69.9	0.5	0.24	0.04	0.67	1.99
	Includes	**283.4**	**299.5**	**16.1**	**1.03**	**0.48**	**0.08**	**1.36**	**4.07**
BDF22-002		123.8	245	121.2	1.08	0.59	0.05	1.39	4.14
	Includes	**134.1**	**144.2**	**10.1**	**2.19**	**1.02**	**0.10**	**2.75**	**8.22**
	Includes	**152**	**196**	**44**	**1.72**	**0.84**	**0.08**	**2.18**	**6.51**
	Including	***152***	***180.8***	***28.8***	***2.39***	***1.18***	***0.11***	***3.03***	**9.05**
	Including	***152.5***	***173.5***	***21***	***2.67***	***1.48***	***0.12***	***3.43***	**10.25**
	Including	***177.05***	***180.8***	***3.75***	***2.95***	***0.56***	***0.14***	***3.43***	**10.24**
	Includes	**207.5**	**218**	**10.5**	**1.45**	**1.05**	**0.08**	**1.97**	**5.89**
		303.55	357.50	53.95	0.20	0.13	0.00	0.25	0.74

** 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.*

- Murchison recently concluded an extensive exploration program consisting of 4285 line km VTEM survey, prospecting and diamond drilling
- 13 diamond drill holes were completed, 10 at BDF Zone and 3 at Syrah Target
- Lab assays have yet to be received
- Continuous pXRF data has been collected and released on the first 2 BDF drill cores
- BDF22-002 - 121.2 m with a pXRF Estimate of 1.39% Ni Eq, including 21.0 m at 3.43% Ni Eq

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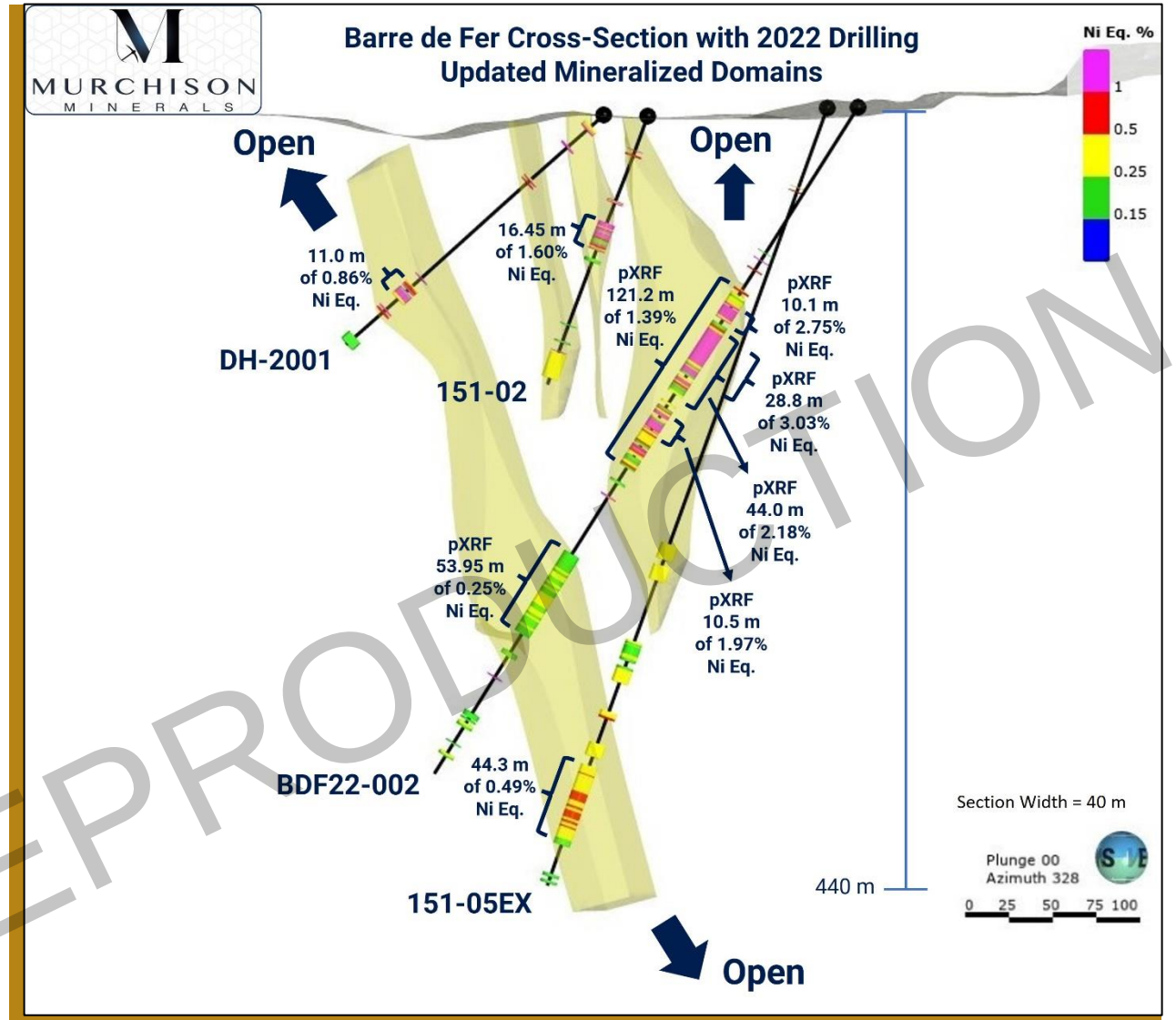
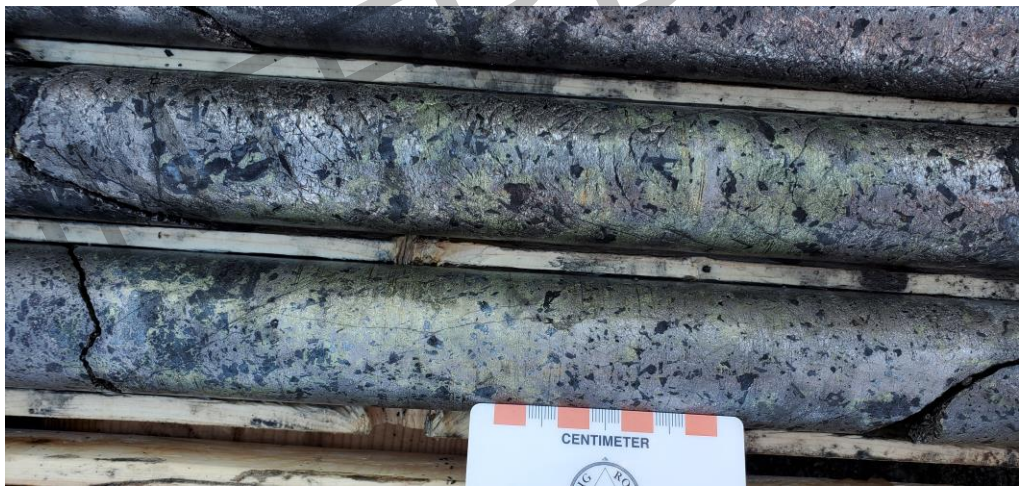
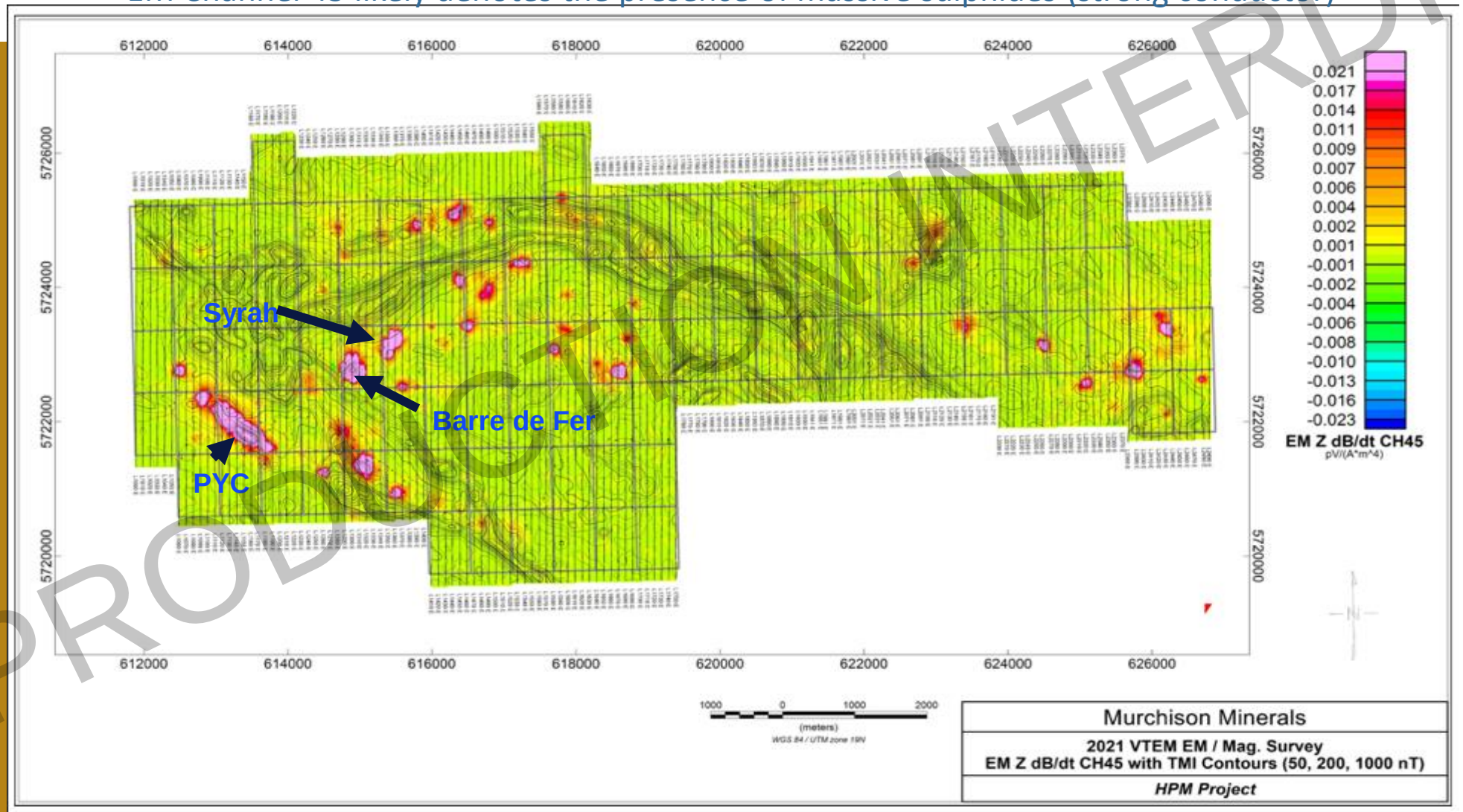
HPM | BDF22-002





HPM | 2021 VTEM Survey

EM Channel 45 likely denotes the presence of massive sulphides (strong conductor)



HPM | 2022 VTEM Survey

2022

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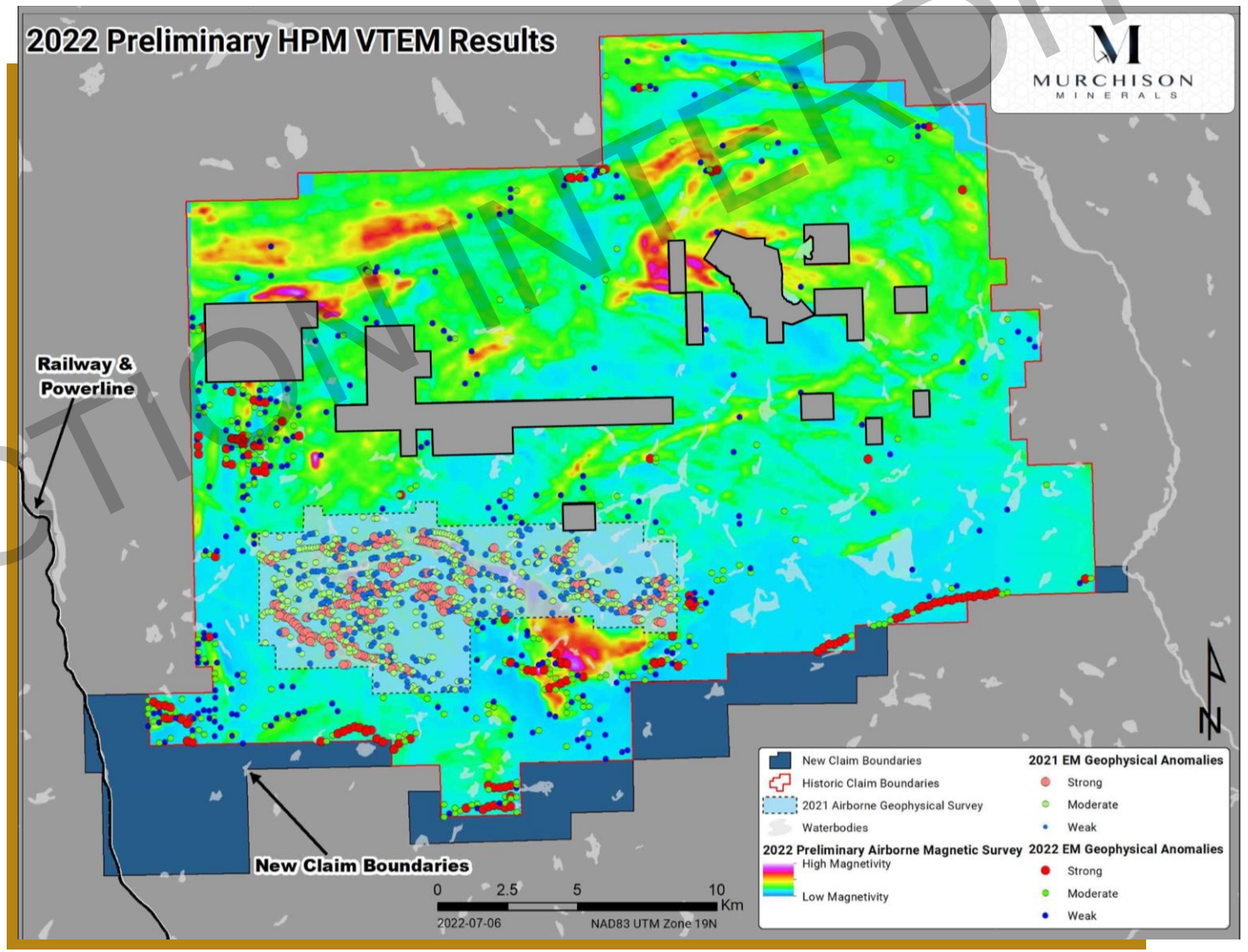
MURCHISON MINERALS' HPM PROJECT

- Preliminary results have identified a significant number of strong conductors
- 3212 line-km airborne EM survey, at 200 metre spacing has already been flown
- Additional 1073 line-km flown at 100 metre spacing near newly located anomalies
- Several Conductors have already been prospected using beep mat/ backpack drill combo and already successfully located new sulphide mineralization (assays pending)
- Final geophysical data is expected later in October



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Thank You

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MURCHISON MINERALS' HPM PROJECT

MURCHISON MINERALS

2022 XPLOR PRESENTATION

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