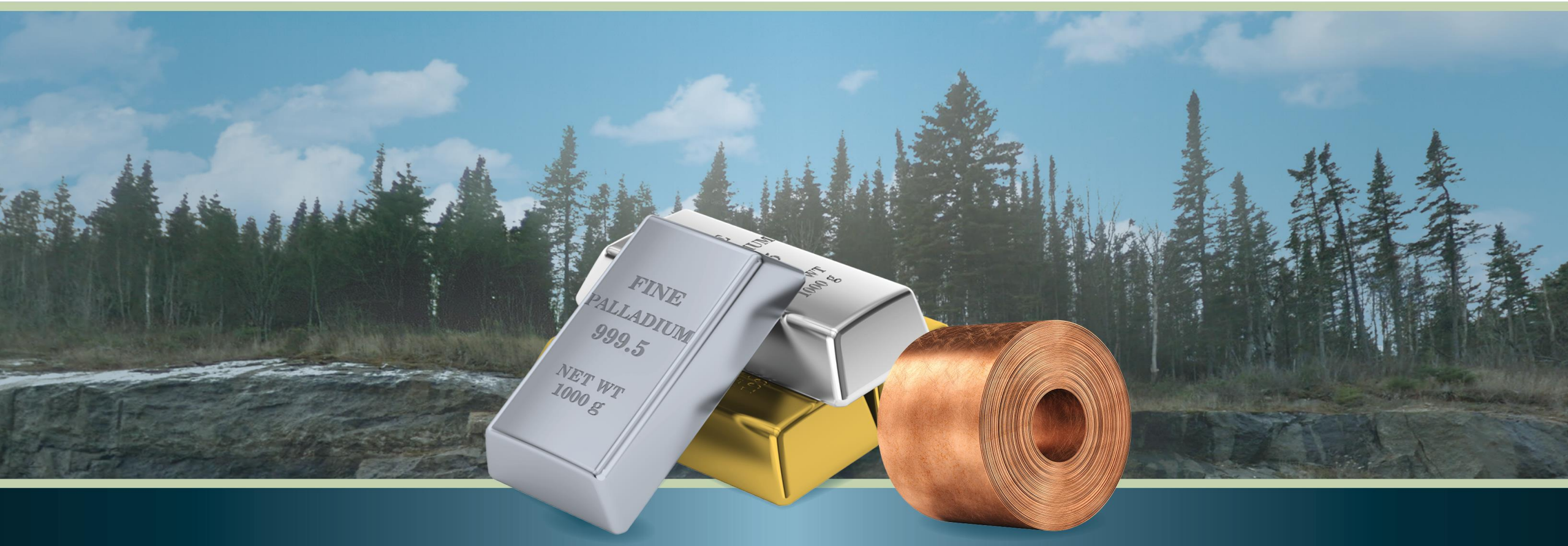
# GENERATIONMINING




## MARATHON PALLADIUM – COPPER MINE

## Expanding the Footprint of the Coldwell Complex

June 15, 2022

# FORWARD-LOOKING INFORMATION



This presentation contains certain forward-looking information and forward-looking statements, as defined in applicable securities laws (collectively referred to herein as "forward-looking statements"). Forward-looking statements reflect current expectations or beliefs regarding future events or the Company's future performance. All statements other than statements of historical fact are forward-looking statements. Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "continues", "forecasts", "projects", "predicts", "intends", "anticipates", "targets" or "believes", or variations of, or the negatives of, such words and phrases or state that certain actions, events or results "may", "could", "would", "should", "might" or "will" be taken, occur or be achieved, including statements relating to the Company's Feasibility Study and results therefrom (including NPV, IRR, capital and operating costs and other financial metrics), Mineral Resource and Mineral Reserve potential, exploration plans, or the ability of the Company and Sibanye Stillwater to vary their respective participating interests in the Marathon Property. All forward-looking statements, including those herein are qualified by this cautionary statement.

Although the Company believes that the expectations expressed in such statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the statements. There are certain factors that could cause actual results to differ materially from those in the forward-looking information. These include commodity price volatility, continued availability of capital and financing, uncertainties involved in interpreting geological data, increases in costs, environmental compliance and changes in environmental legislation and regulation, the Company's relationships with First Nations communities, exploration successes, and general economic, market or business conditions, as well as those risk factors set out in the Company's annual information form, the Technical Report that the Company will file in connection with the Feasibility Study and in the continuous disclosure documents filed by the Company on SEDAR at www.sedar.com. Readers are cautioned that the foregoing list of factors is not exhaustive of the factors that may affect forward-looking statements. Accordingly, readers should not place undue reliance on forward-looking statements. The forward-looking statements in this news release speak only as of the date of this news release or as of the date or dates specified in such statements.

Forward-looking statements are based on a number of assumptions which may prove to be incorrect, including, but not limited to, assumptions relating to: the availability of financing for the Company's operations; operating and capital costs; results of operations; the mine development and production schedule and related costs; the supply and demand for, and the level and volatility of commodity prices; timing of the receipt of regulatory and governmental approvals for development projects and other operations; the accuracy of Mineral Reserve and Mineral Resource Estimates, production estimates and capital and operating cost estimates; and general business and economic conditions.

Investors are cautioned that any such statements are not guarantees of future performance and actual results or developments may differ materially from those projected in the forward-looking information. For more information on the Company, investors are encouraged to review the Company's public filings on SEDAR at www.sedar.com. The Company disclaims any intention or obligation to update or revise any forward- looking information, whether as a result of new information, future events or otherwise, other than as required by law.

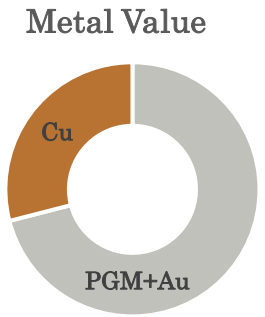
# LOCATION

GENERATIONPGM


- Northwestern Ontario, just off the TransCanada Highway #1, roughly 300 kms or 3.5 hours east of Thunder Bay international airport.
- Access to the project site is available year round.
- Full services provided by the Town of Marathon (pop'n ~3200), including emergency response and medical support with regional hospital and Ontario Provincial Police.
- Existing railway and rail sidings, 10 km South of Project site in Marathon and two other sidings approx. 90 km West. Deep water port and loading facilities 20 km east of the Project site.

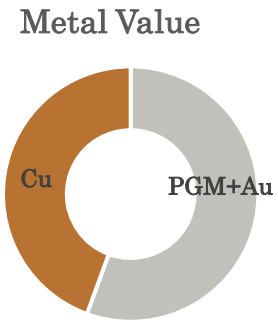
## Marathon Palladium Copper Deposit:

- 202 Mt Measured + Indicated open pit resource, 6.9 Mt Inferred
  - 3,599 Koz Pd, 1,211 Koz Pt, 875 Mlb Cu, 444 Koz Au, and 10,544 Koz Ag
  - 0.55 g/t Pd, 0.19 g/t Pt, 0.20 % Cu, 0.07 g/t Au and 1.62 g/t Ag



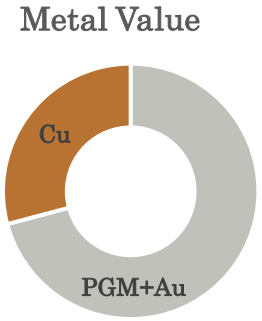

## Geordie Deposit:

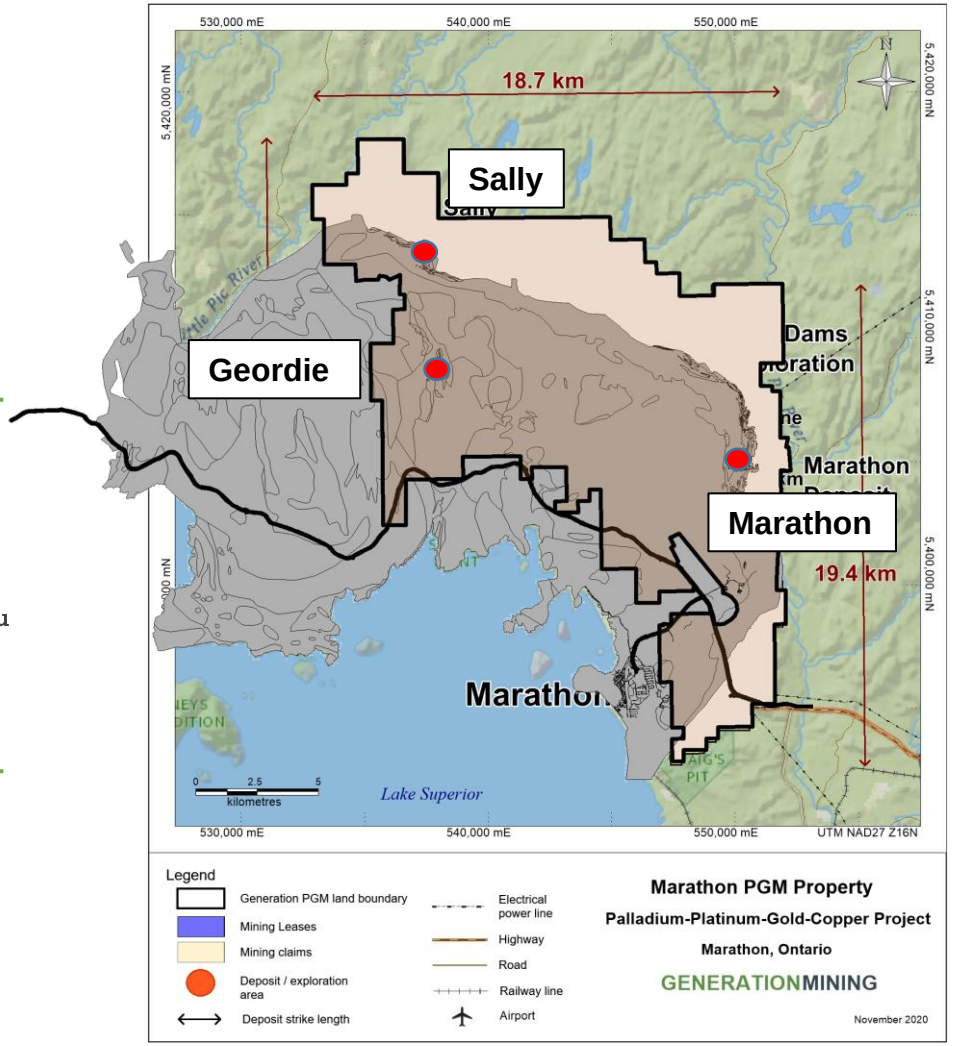
- 17.3 Mt Indicated open pit resource
  - 312 Koz Pd, 20 Koz Pt, 25 Koz Au and 133 Mlb Cu




## Sally Deposit:

- 24.8 Mt Indicated open pit resource
  - 278 Koz Pd, 160 Koz Pt, 56 Koz Au and 93 Mlb Cu



# REGIONAL GEOLOGY

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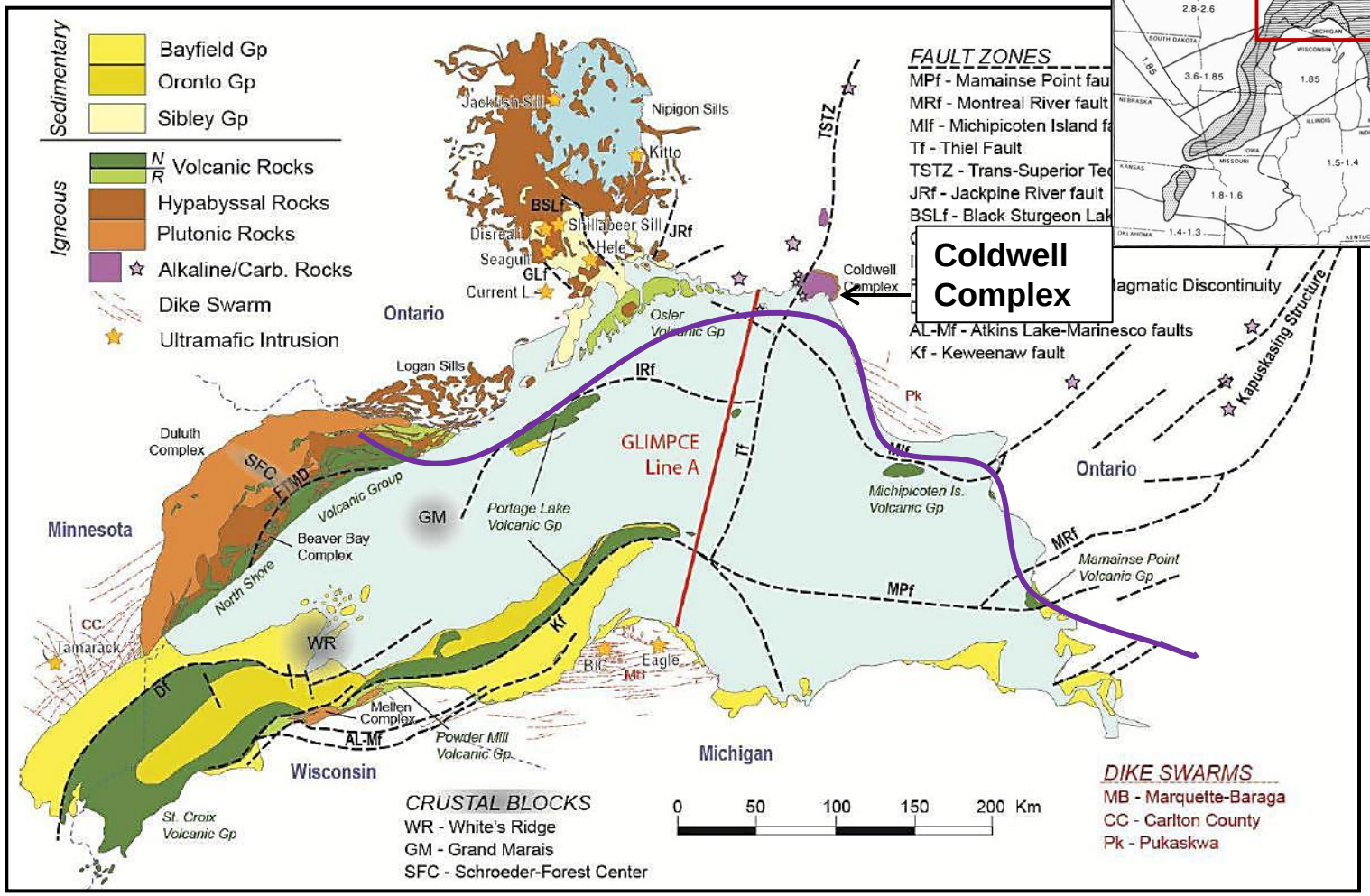
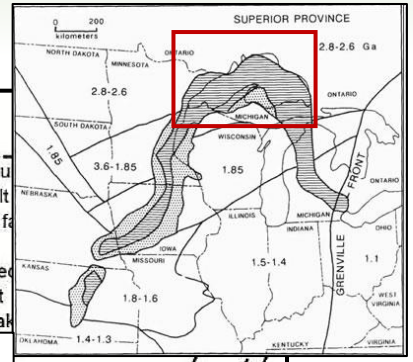
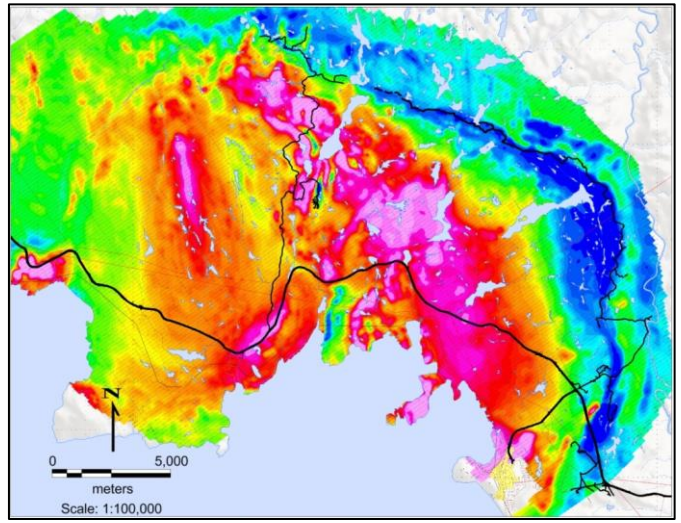



Good et al., 2015 (after Miller and Nicholson 2013)



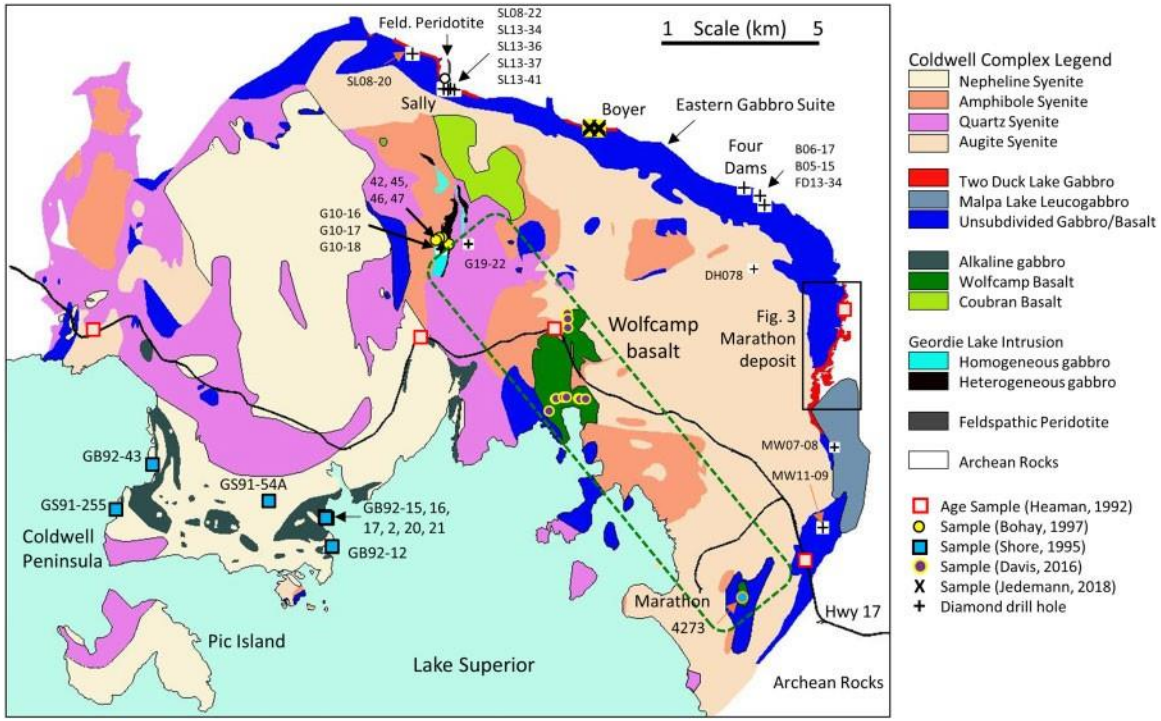

Nicholson et al., 1992

**Coldwell Complex**



GENERATIONPGM

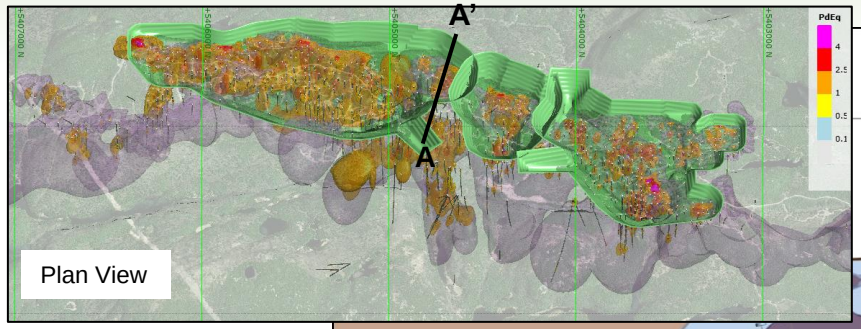
- Subcircular with a diameter of 25km and surface area of 580 km$^2$
- U-Pb age dating of the intrusive events from 1107.7 to 1105.3 Ma
- Genetic models proposed
  - Puskas (1967) lopolith-shaped single differentiated intrusion
  - Mitchell & Platt (1978) three distinct magmatic events, identified at Centre I, II and III
  - Currie (1980) three separated interlocking systems of ring dykes and cone sheets
- New model proposing a caldera setting with intrusions into a volcanic pile and late intrusions utilizing chamber uplift and decompression fault structures




Good et al., 2021

# EASTERN GABBRO CROSS SECTION

GENERATIONPGM




GENERATION MINING

Marathon Main Zone
Section 5200N
Looking North

A'

**M-05-092**
**36 m @ 1.07 g/t PdEq**
0.07 g/t Au, 0.28 g/t Pt
0.59 g/t Pd, 0.204% Cu

**M-06-198**
**82 m @ 1.32 g/t PdEq**
0.11 g/t Au, 0.24 g/t Pt
0.74 g/t Pd, 0.275% Cu

**M-06-202**
**120 m @ 1.23 g/t PdEq**
0.07 g/t Au, 0.18 g/t Pt
0.67 g/t Pd, 0.312% Cu

**M-06-225**
**122 m @ 1.14 g/t PdEq**
0.07 g/t Au, 0.18 g/t Pt
0.54 g/t Pd, 0.344% Cu

**M-07-514**
**26 m @ 1.23 g/t PdEq**
0.13 g/t Au, 0.20 g/t Pt
0.72 g/t Pd, 0.231% Cu
***Including***
**6m @ 3.46 g/t PdEq**
0.35 g/t Au, 0.65 g/t Pt
2.26 g/t Pd, 0.427% Cu

**M-07-405**
**166 m @ 0.91 g/t PdEq**
0.07 g/t Au, 0.15 g/t Pt
0.45 g/t Pd, 0.249% Cu
***Including***
**38m @ 1.78 g/t PdEq**
0.11 g/t Au, 0.21 g/t Pt
0.84 g/t Pd, 0.569% Cu

200
0
-200

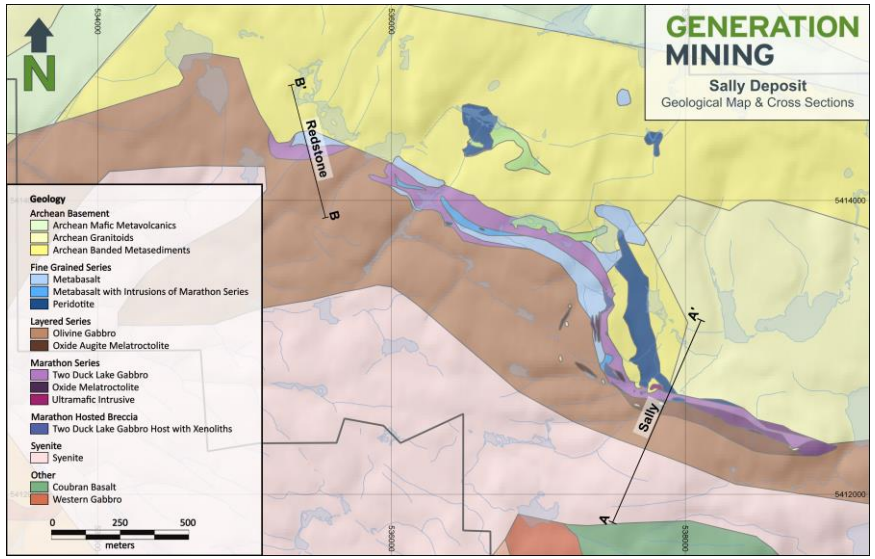
PdEq (g/t)
>4.0
2.5 - 4.0
1.0 - 2.5
0.5 - 1.0
0.1 - 0.5

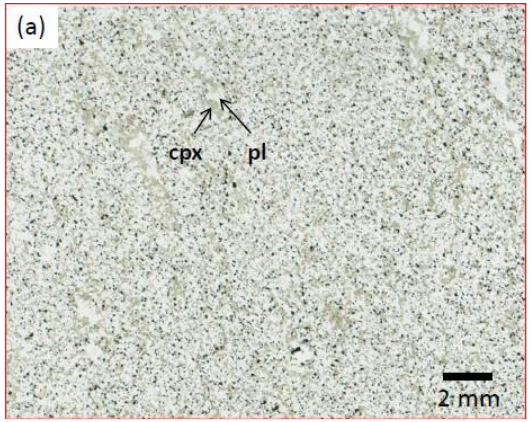
Geology
Oxide Melatroctolite
Marathon Series
Troctolite Sill
Layered Series
Fine Grained Series
Archean Basement

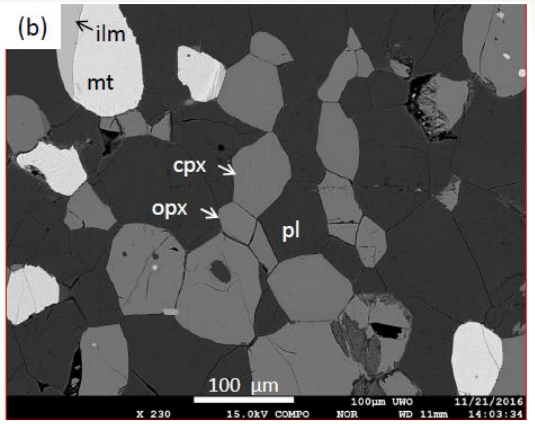
0 100 200
meters

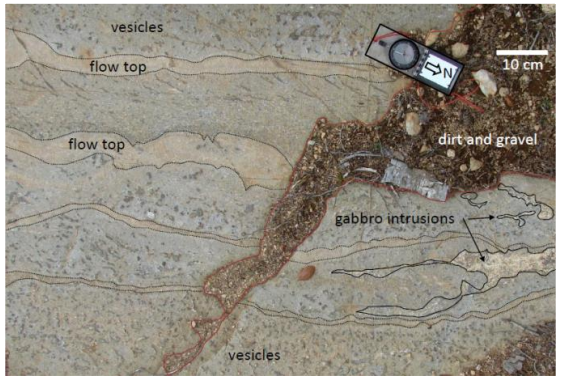
# FINE GRAINED SERIES

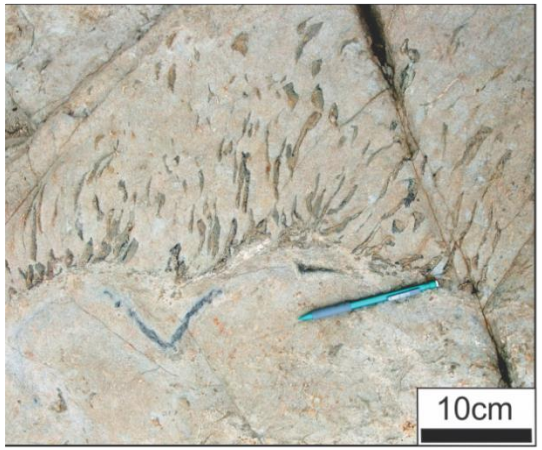
- Early volcanic activity overlying Archean intermediate volcanics
- Low grade hornfels alteration 120 degree recrystallization grain contacts
- Vesicle flute textures and flow top bedding are rare
- Feldspathic peridotite intrusive equivalent



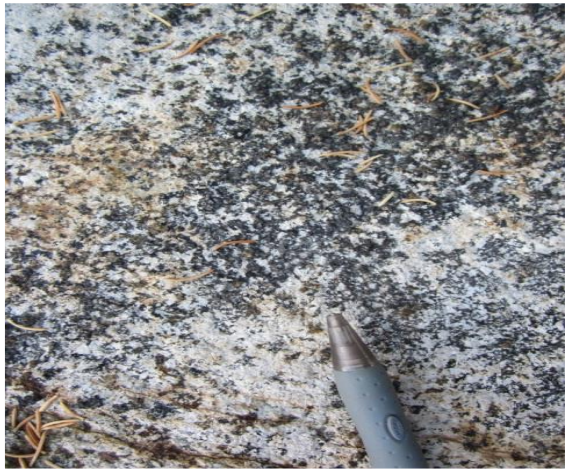



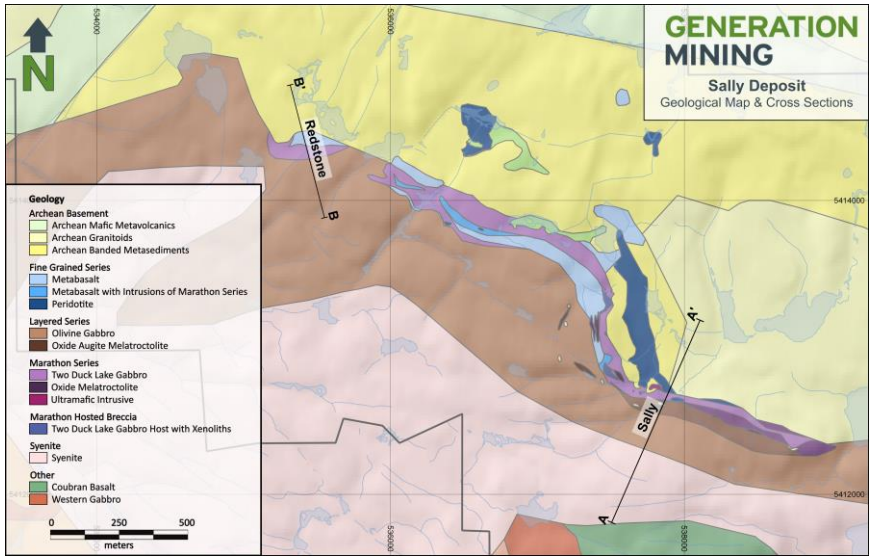



# LAYERED SERIES

GENERATIONPGM

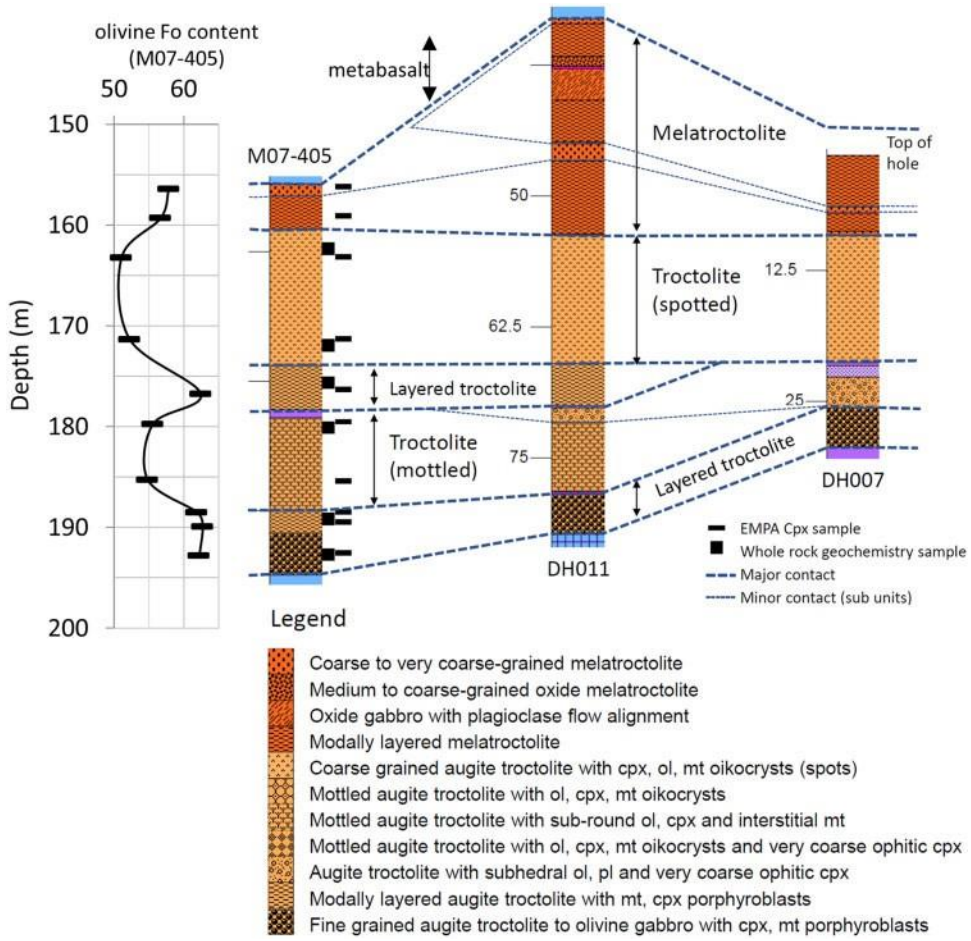
- Continuous intrusion along the outer eastern and northern margin of the Coldwell Complex
- Compositionally and texturally similar around the margin of the Coldwell Complex
- Makes up the majority of the Eastern Gabbro
- Distinct modal layering, melanocratic to leucocratic layering
  - With cross bedding and magnetic horizons

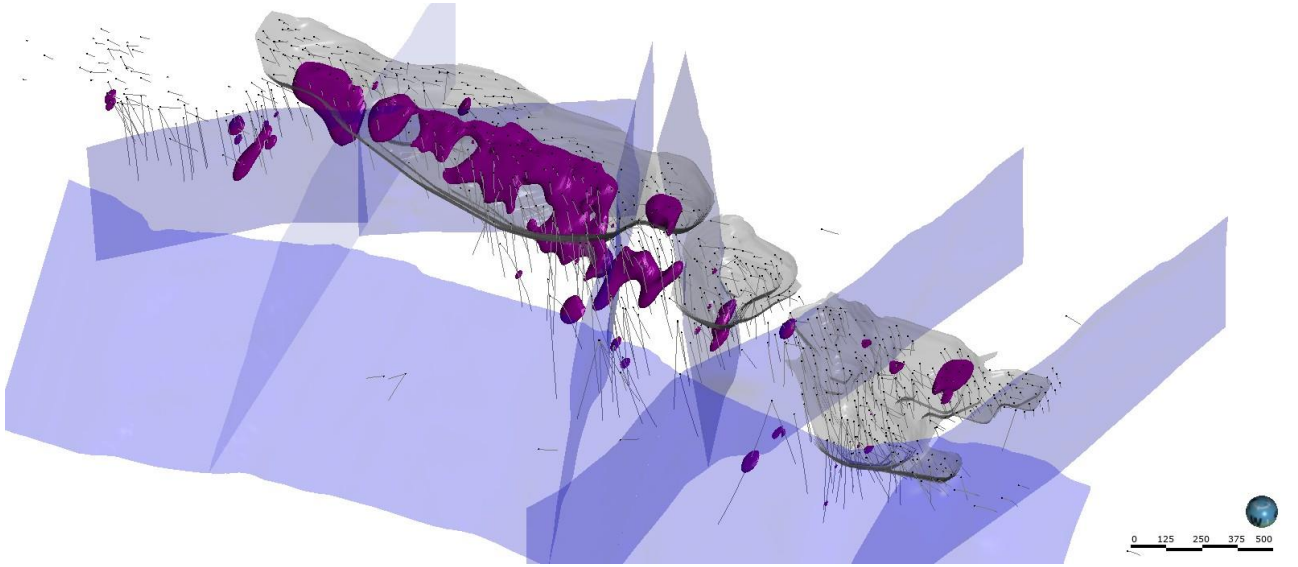




# MARATHON SERIES – TROCTOLITE SILL

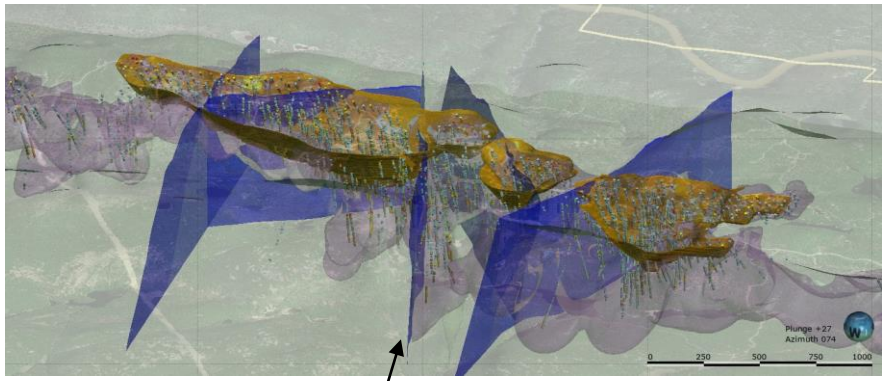
GENERATIONPGM



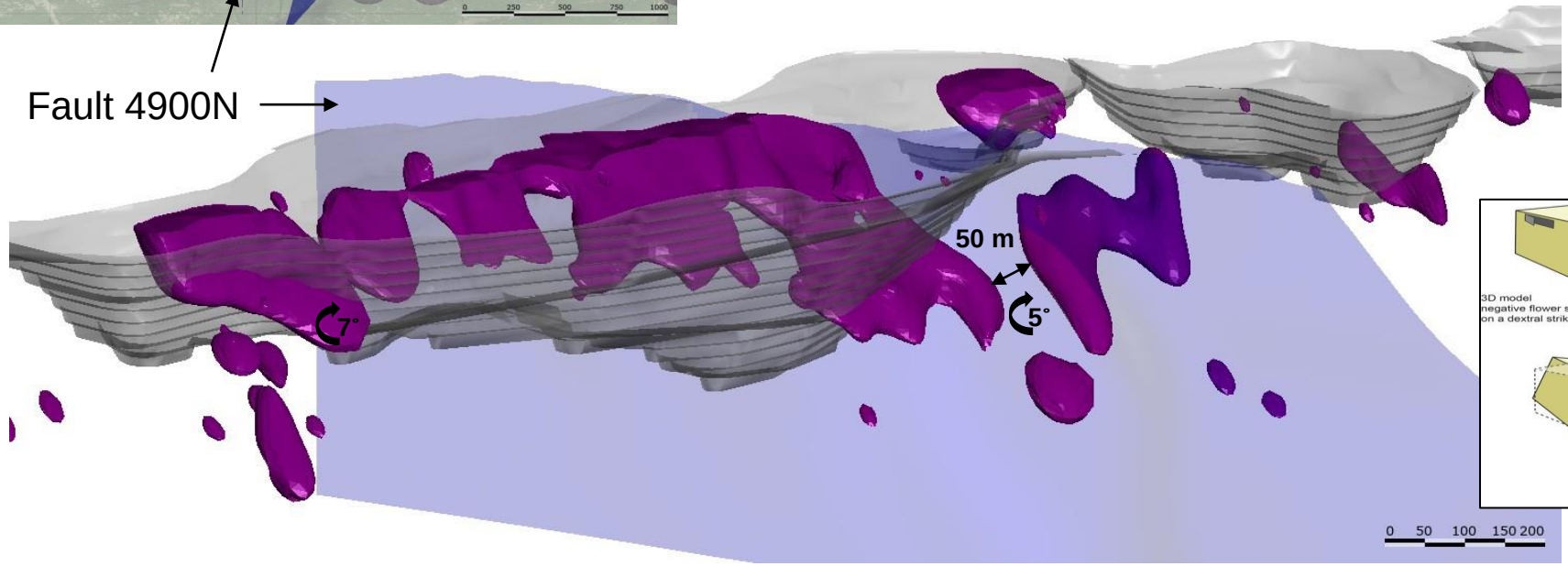



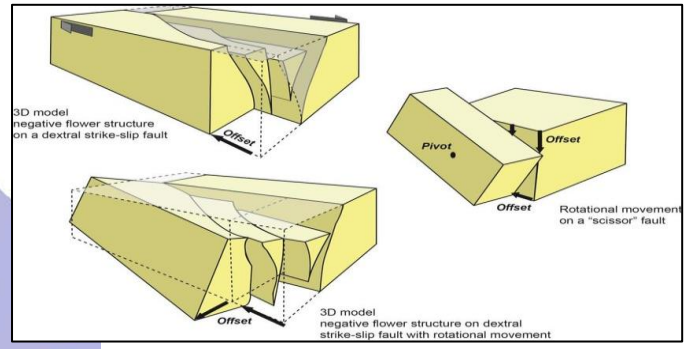

# MARATHON SERIES – TROCTOLITE SILL

GENERATIONPGM




- Differentiated troctolite sill allows for correlation across fault boundaries
- Subvertical normal faults, up to 50 m offset and 3-7deg block rotation



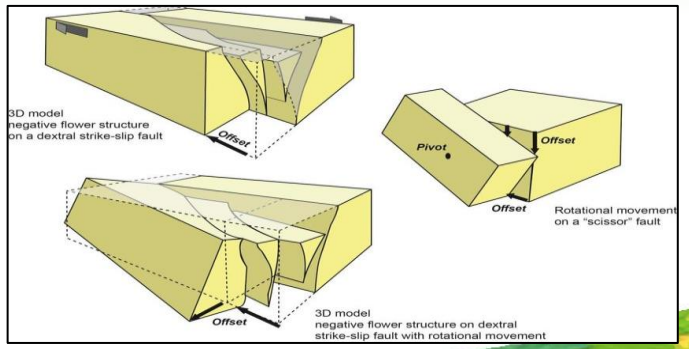



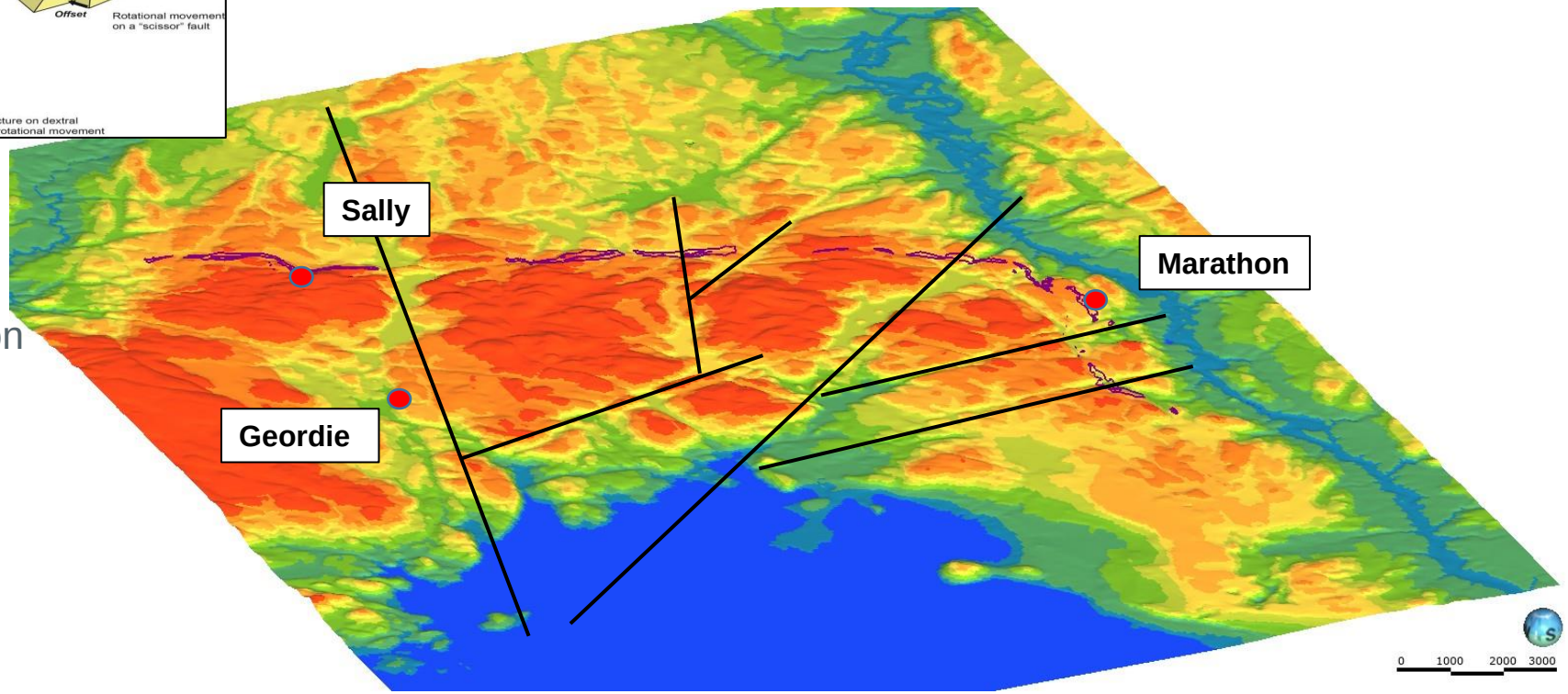
# MARATHON SERIES – TWO DUCK LAKE GABBRO

GENERATIONPGM

- Intrudes along the metabasalt and Archean basement contact
- Is not continuous along the outer margin of the Coldwell Complex but rather as a network of intrusions along existing fault structures
- Compositional similar between various intrusions
- Heterogenous grain size, brecciated intrusion with clasts of Archean basement and metabasalt

# EMPLACEMENT MODEL




Topographic Heat Map

- Multiple intrusive pathways for Marathon Series Gabbro
- Primary large radial faulting extending beyond the outer margins of the Coldwell Complex
- Faulting and blocking of the Complex are primarily visible on the eastern and northern side

# MINERALIZATION

GENERATIONPGM

## W-Horizon

**Bornite can indicate PGE enrichment**

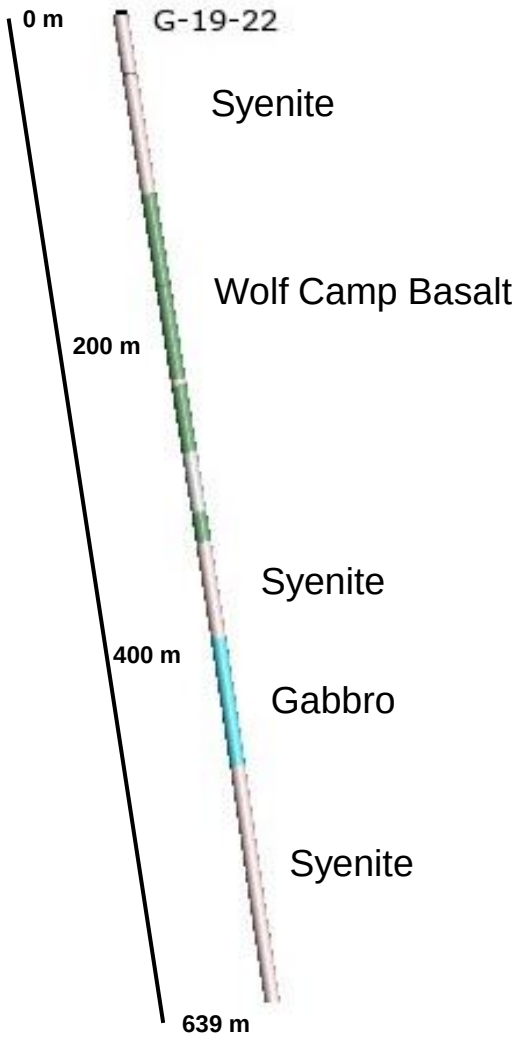
## Main Zone

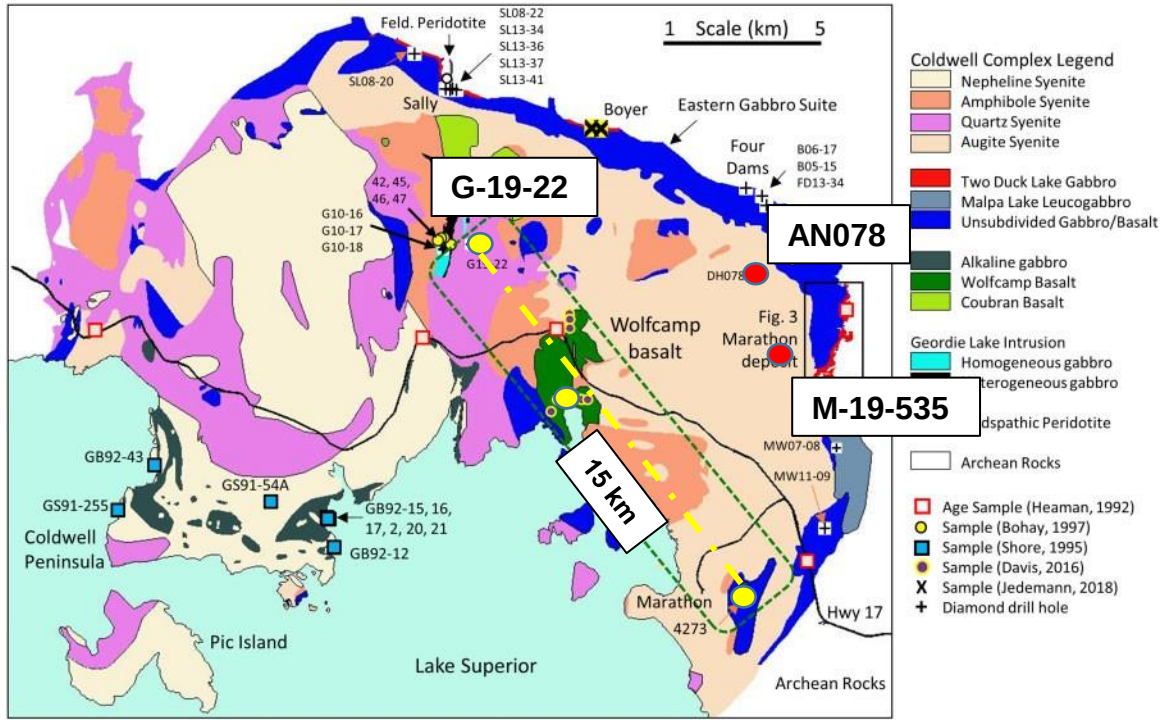
**Wide intervals of disseminated & blebby pyrrhotite + chalcopyrite**

## Massive Sulphides

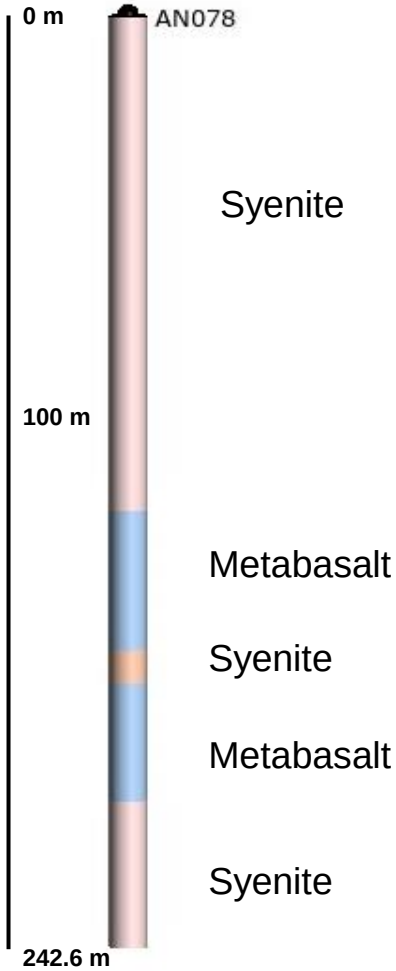
**Hosted by ultramafic units in feeder conduits**

# 1 - INTERBEDDED SEQUENCE



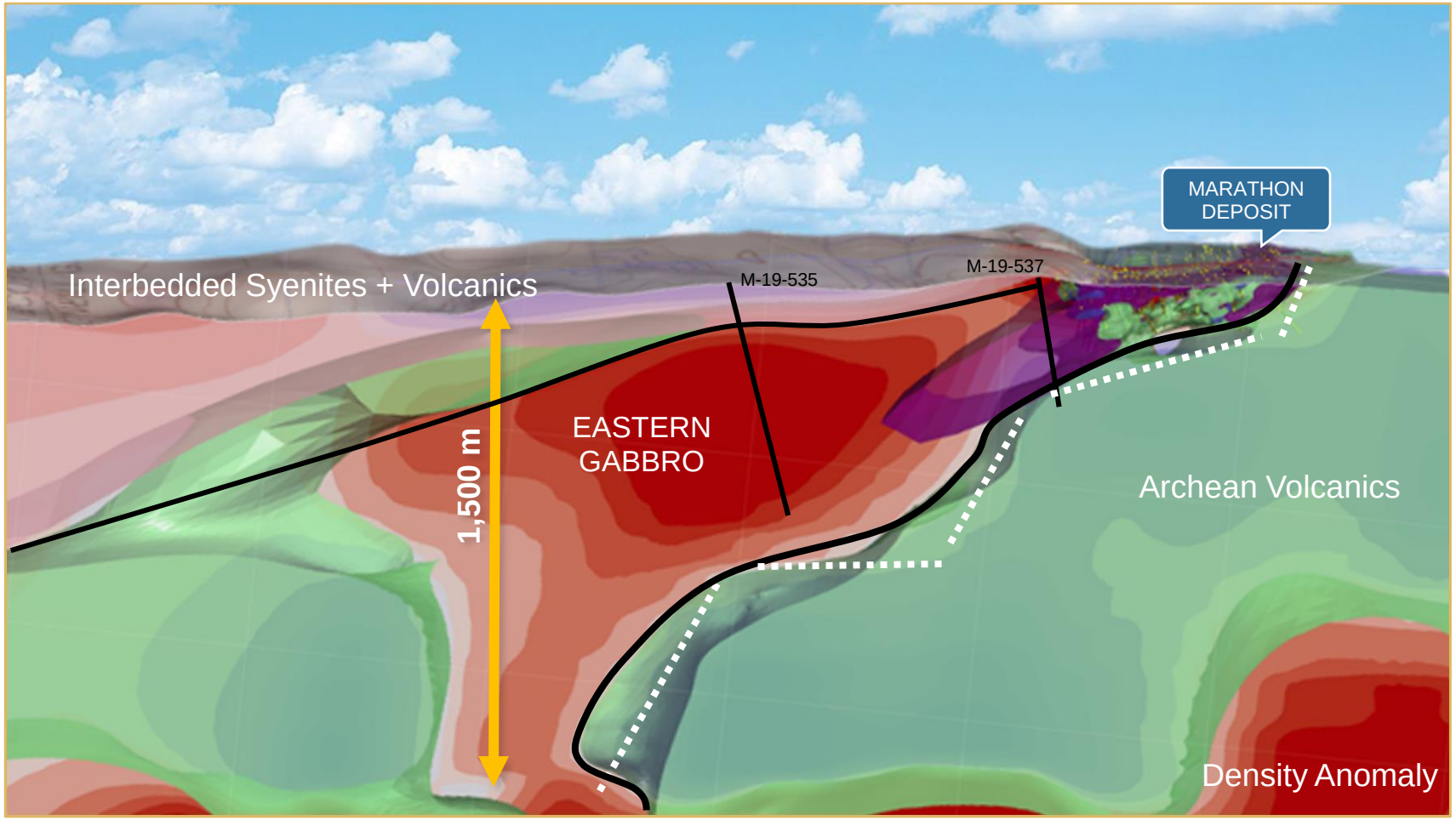



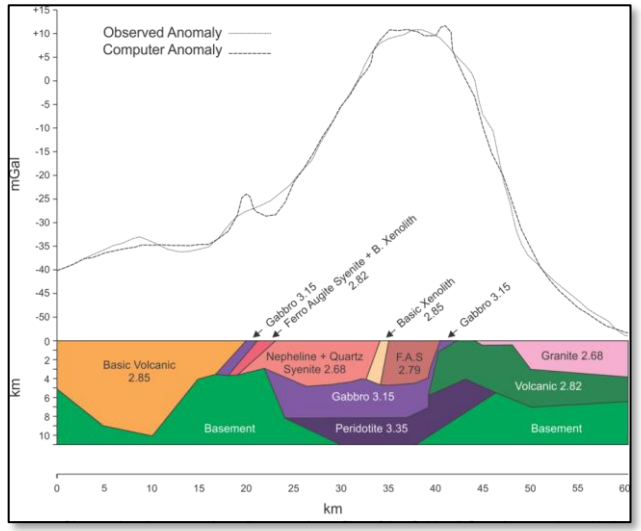

Good et al., 2021



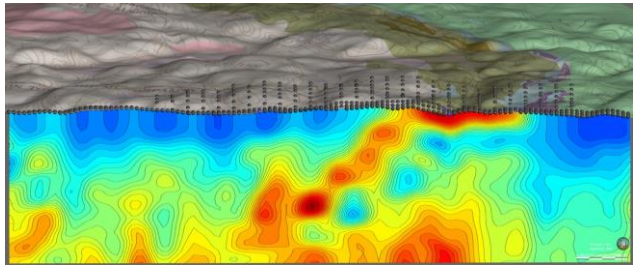
# 2- EMPLACEMENT MODEL TOMOGRAPHY

GENERATIONPGM

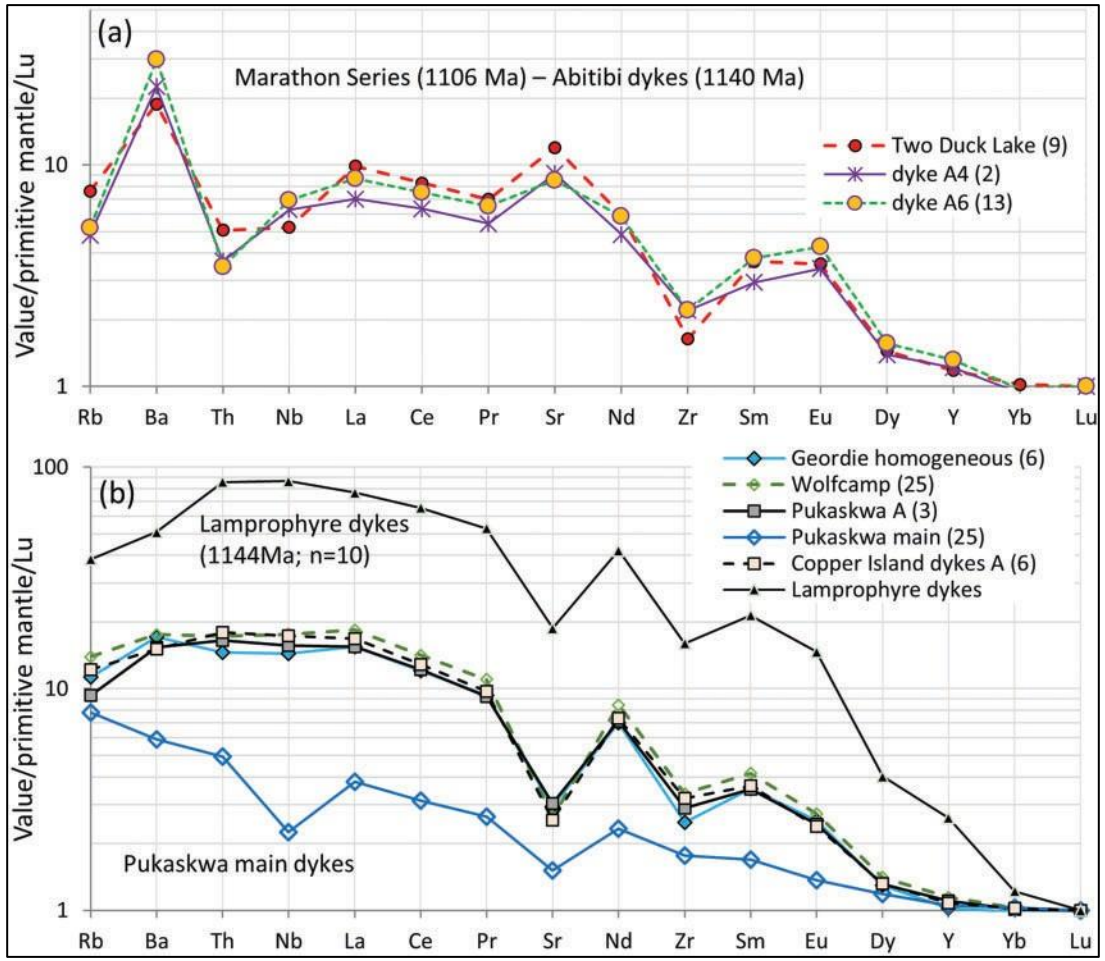


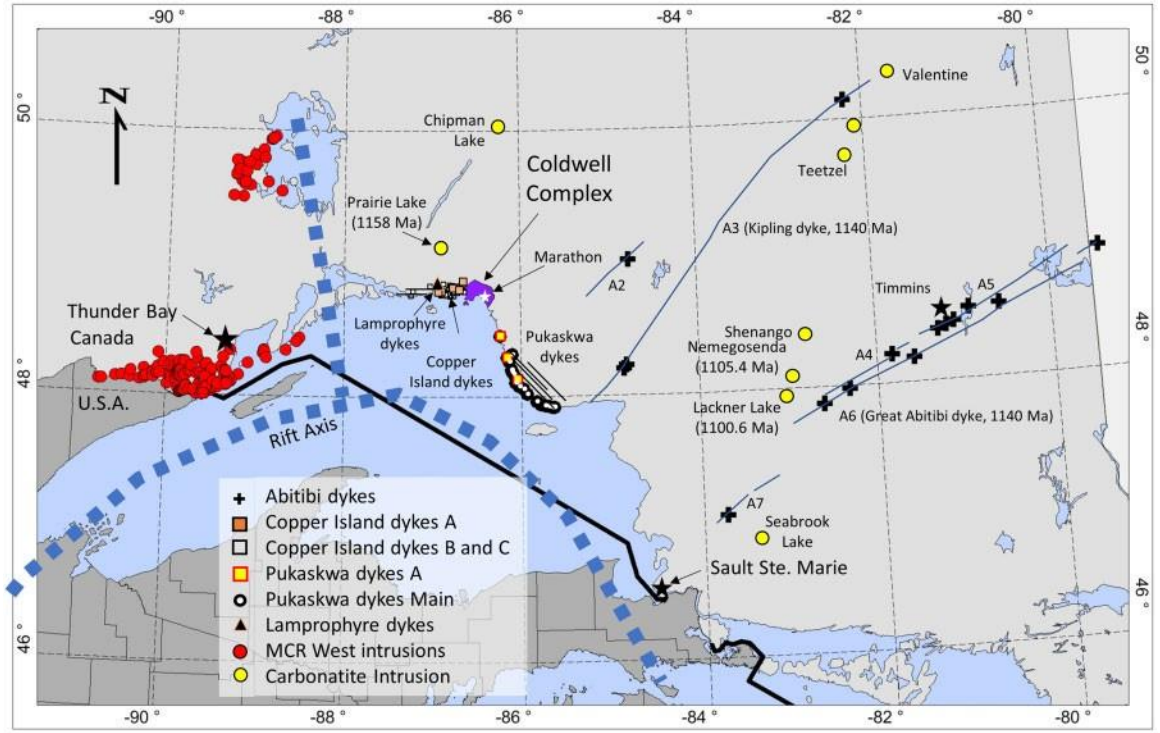

Mitchell et al., 1983



# 3 - REGIONAL DYKE ASSOCIATION




Good et al., 2021




Good et al., 2021

# CONCLUSIONS

GENERATIONPGM

- Early intrusive events and associated mineralization intrude past the Eastern Gabbro boundary into the Archean basement
- Emplacement of mineralization at the Coldwell Complex utilized existing caldera radial and concentric fault networks, while fault movement created space for deposition of mineralization
- Fault structures were active post emplacement and offset mineralization
- New geochemical characterization of regional dykes associated with the CC implies additional rift related crustal structures were important for transportation of melt through the crust

# Thank You