# Towards a renewal of the Normétal Mining Camp: Update of the state of knowledge on the lithogeochemistry, geology and metallogeny of the Normétal Volcanic Complex

Focus on the VMS potential

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# **Forward looking statement**



The information is given in summary form and does not intend to be complete. It is strictly for informational purposes and should not be considered as advice or a recommendation to investors or potential investors in relation to purchasing, holding or selling.

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This presentation contains "forward looking information" within the meaning of applicable Canadian securities laws, including statements regarding the future financial or operating performance of the Company, the planned exploration programs, continued positive drill results, the defining of new targets and mineralized zones, the prospective mineralization of the property, the preparation of a 43-101 compliant resources estimate on the property, the Company having the available funds and the general metals/gold market. Forward-looking information can also be identified by the words "may", "would", "could", "should", "will", "intend", "plan", "anticipate", "believe", "estimate", "expect" or similar expressions.

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In addition, readers are cautioned that exploration results that include drill results on wide spacings may not be indicative of the occurrence of a mineral deposit, such results do not provide assurance that further work will establish sufficient grade, continuity, metallurgical characteristics and economic potential to be classed as a category of mineral resource; and, the potential quantities and grades of drilling targets are conceptual in nature and, there has been insufficient exploration to define a mineral resource, and it is uncertain if further exploration will result in the targets being delineated as mineral resources.



# **Study area location**



- Abitibi subprovince
- Around Normétal town
- 80 km from Rouyn-Noranda
- Focus on Amex and Starr Peak projects

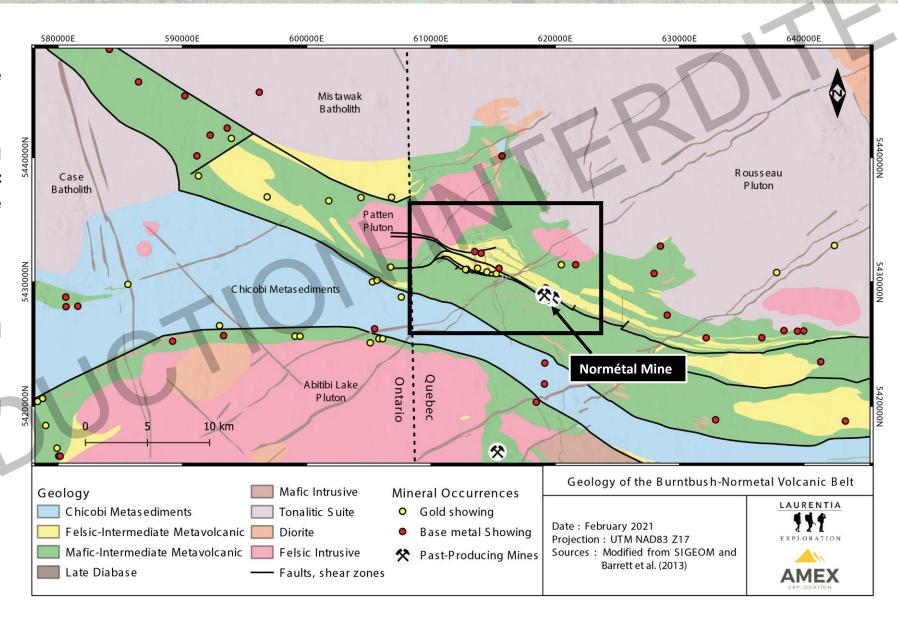




### **Burntbush-Normétal volcanic belt**



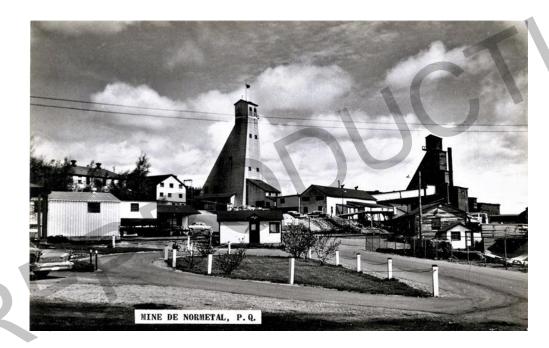
- 60 km of Archean Greenstone Belt
- Volcanic assemblage comprising basalt, andesite, rhyolite, mafic dykes and late unconformable Chicobi metasediments
- Polyphase deformation events
- Several gold and base metal occurrences
- Historical base metal Normétal Mine and Normetmar satellite

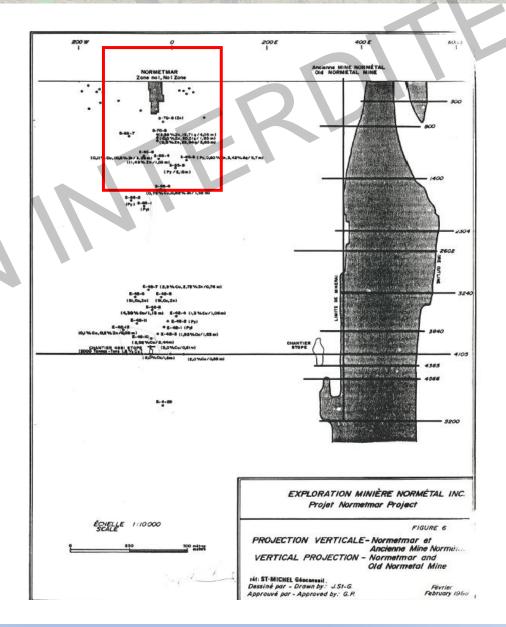


# 1925 : Normétal Mine discovery



- 10.1 Mt @ 2.15% Cu, 5.12% Zn, 0.55 g/t Au et 45.25 g/t Ag (18 Mt with barren pyrite)
- **1926-1975**
- 2.4 km vertical depth
- Normetmar satellite deposit (1927)
  - 306 000 t @ 10.94% Zn (MB98-06)



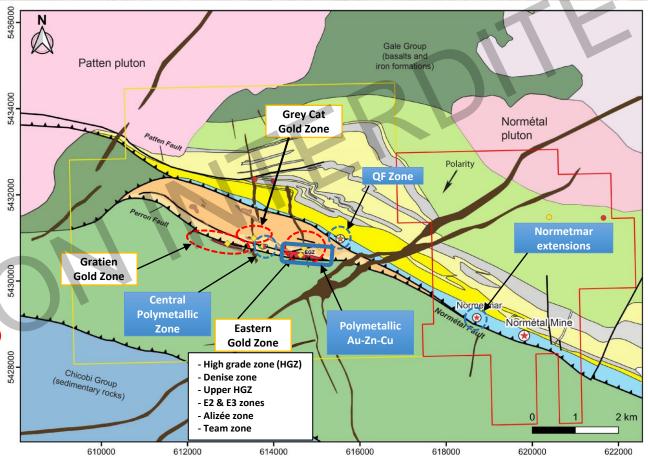




### History of major works and discoveries



- ❖ 1923-2001 : Several companies (VMS focus)
  - 1996 : Gratien Gold Zone (Falconbridge Perron deposit)
- ❖ 2001-2013 : AMEX Exploration Inc.
  - 2009 : Gratien resource estimates 1.2 Mt @ 1.86 g/t Au
  - 2013 : Central Polymetallic Zone (SMV-Au type)
    3.84 g/t Au, 23 g/t Ag, 1.4% Zn, 0.10% Cu over 15,20 m (core length)
- ❖ 2013-2017 : AMEX Exploration & AEM joint venture
  - 2013-2014 : Polymetallic Zone follow-up drilling
  - 2015-2017 : Drilling program focused on Mine Sequence
- ❖ 2017- : AMEX Exploration Inc.
  - 2017 : Eastern Gold Zone 12.22 g/t Au over 4.65 m (core length)
  - 2019 : Grey Cat Zone 3.42 g/t Au over 26.90 m (core length)
  - 2018-2022: ~300 000 m drilled and several others gold zones
- 2021 : Renewal of the VMS interest
- 2021-2022 : Starr Peak Normetmar extensions
  - Shallow zone (Zn-rich VMS type)
  - Deep zones (Zn-(Cu) VMS type)



- 2021-2022 : AMEX Exploration
  - QF Zone (Cu-rich VMS type)
  - Several polymetallic Au-Cu-Zn stringer zones





### 2021 new VMS discoveries



### **Normetmar Shallow and Deep zones:**

■ Shallow Zone (< 400m):

**STE-21-08**: **20.94% Zn**, **0.43% Cu**, 39.58 g/t Ag and 0.21 g/t Au over **12.10 m** (core length)





Deep Zone (> 400m) :

**STE-21-43 : 5.27% Zn**, **1.19% Cu**, 30.98 g/t Ag and 0.32 g/t Au over **13.30 m** (core length)

### **QF Zone:**

PEX-21-076 :

**2.40% Cu**, 0.72% Zn, 0.27 g/t Au and 22.15 g/t Ag over **7.80 m** Including **3.92% Cu**, **1.22% Zn over 4.40 m** (core length)

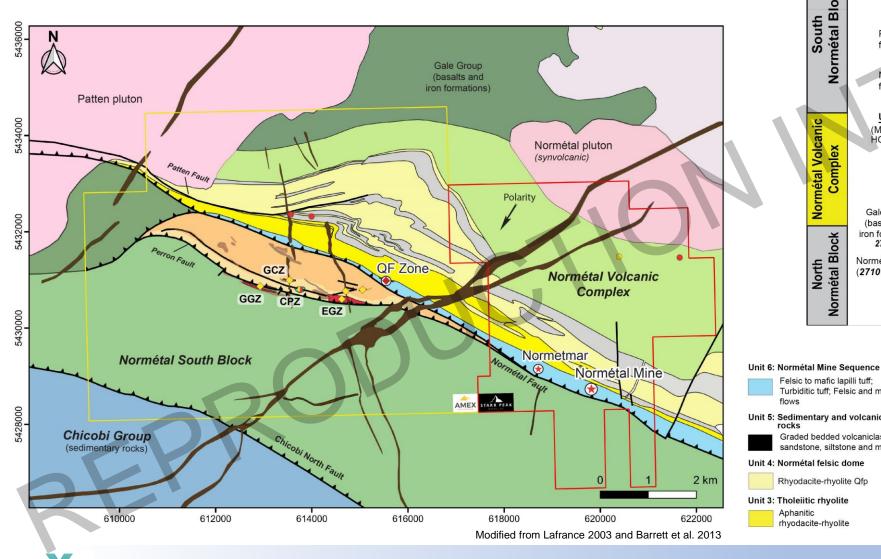


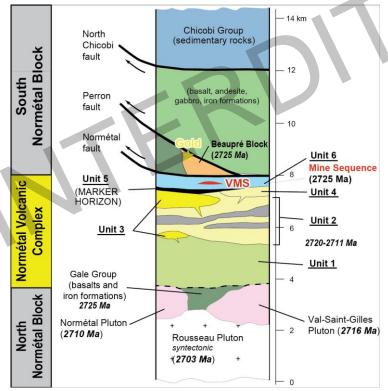


# **Geological setting**

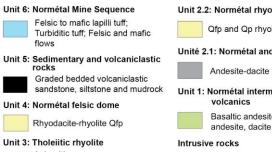


Volcanic pile is younging southward





Modified from Lafrance 2003 and Barrett et al. 2013



Felsic to mafic lapilli tuff;

Rhyodacite-rhyolite Qfp

rhyodacite-rhyolite

Graded bedded volcaniclastic



Tonalite-Granodiorite

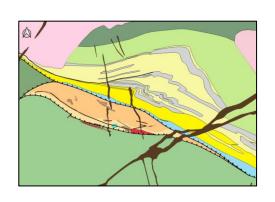
(synvolcanic)



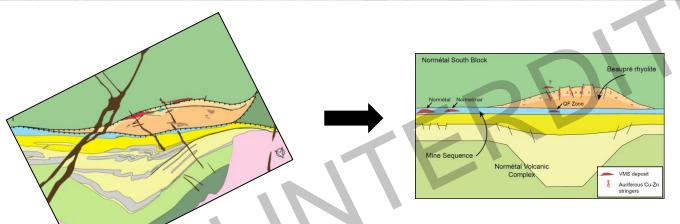


# **New exploration model for VMS deposit**

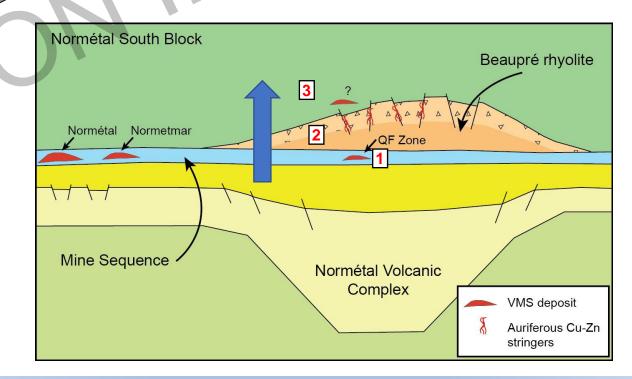








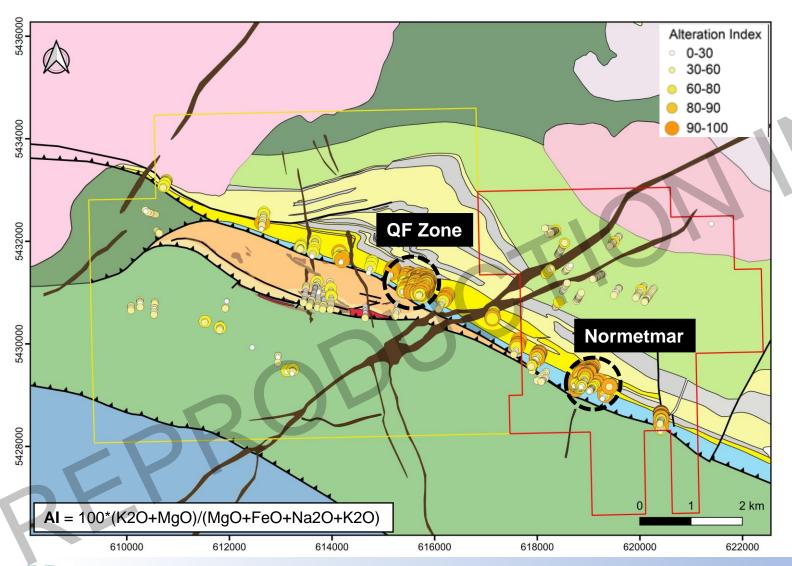
- 1 VMS deposit within Mine Sequence
- Polymetallic auriferous sulphides stringers within Beaupré Rhyolite
- 3 VMS deposit within Normétal South Block
- Vertical fertile continuum for volcanogenic mineralization



# VMS potential of the area - Mine Sequence



### Spatial correlation between hydrothermal alteration footwall and VMS lens



 Strong sericite alteration within tholeiitic Normétal rhyolite



- More subtle chlorite-sericitecarbonate alteration within Mine Sequence
- Proximal (meters) alteration = chloritized pipe and +/- garnets

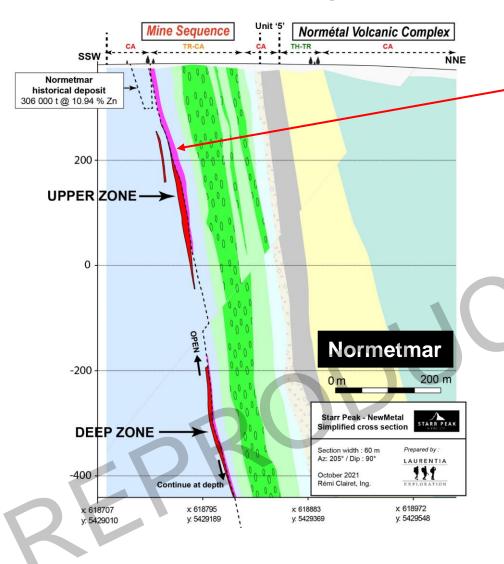




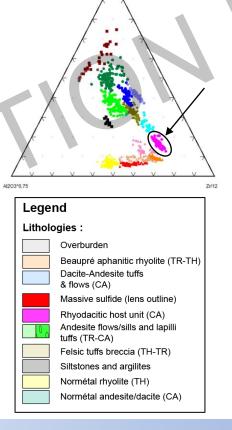
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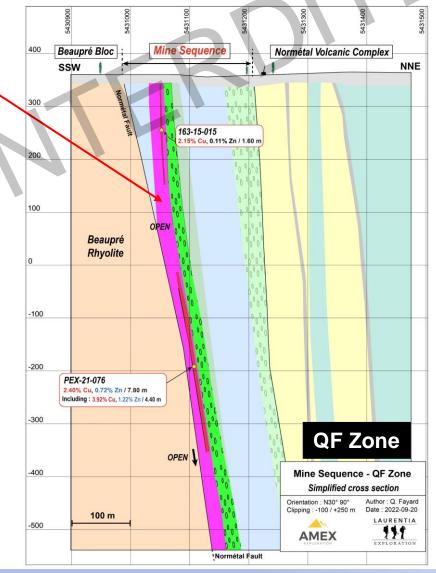


### ☐ Cross sections (looking WNW)





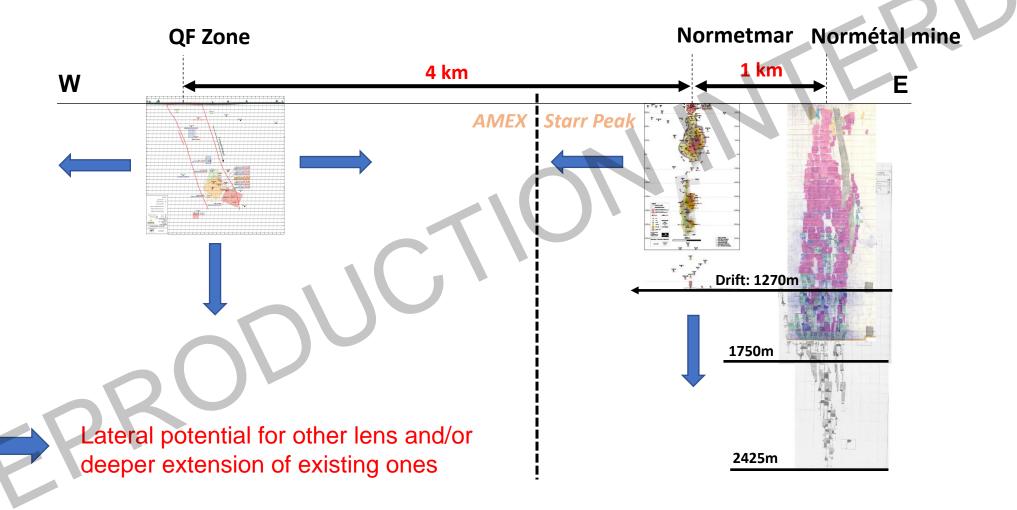




# VMS potential of the area - Mine Sequence



□ Scaled long section representation (looking north)





# VMS potential of the area - Beaupré Block

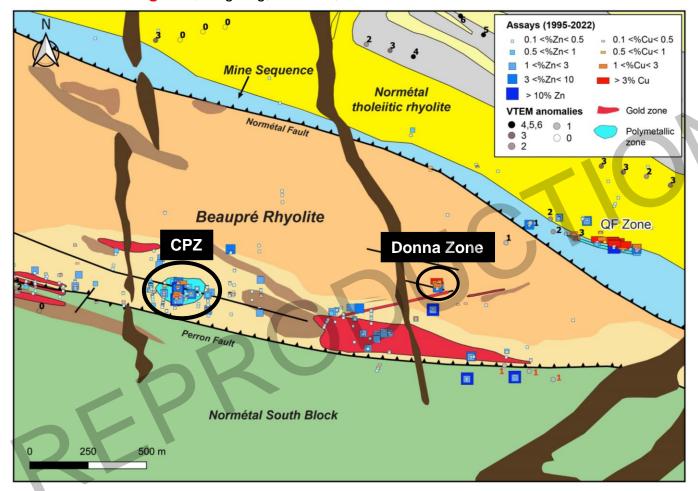


### ☐ Polymetallic Au-Zn-Cu stringer like mineralization

Central Polymetallic Zone (Au-Zn) :

PE2013s03: 2.2 g/t Au, 11.5 g/t Ag, 0.9% Zn, and 0.1% Cu over 41.4 m

Incl. 3.8 g/t Au, 23 g/t Ag, 1.4% Zn, and 0.1% Cu over 15.2 m



### Donna Zone (Au-Cu) :

PE-21-318W1 : 1.37g/t Au, 7.32g/t Ag, 0.25% Cu over 56 m Incl. 3.59 g/t Au, 21.34 g/t Ag, 0.72% Cu over 14.7 m

- Sulphides stringers
- Proximal discordant alteration
- Silica-sericite-chlorite-garnet(-Mn) -amphibole
- Controlled by NE-SW structures











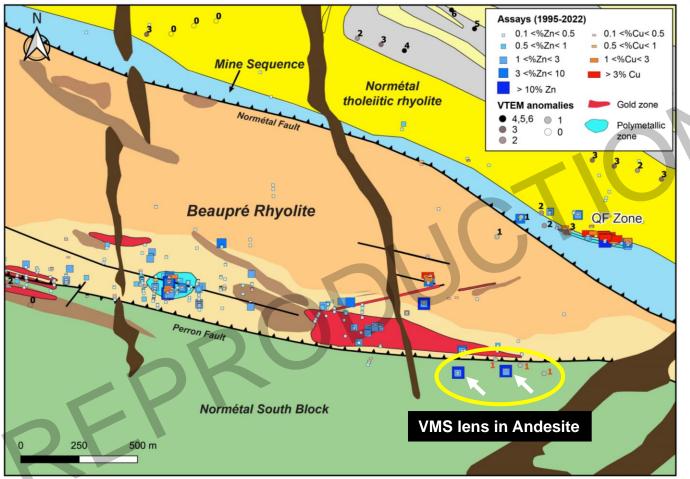
# VMS potential of the area – South Block (Andesite)

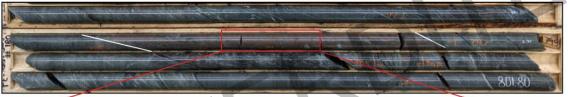




### ☐ VMS mineralization within Andesite

- Sphalerite-rich massive lens (1 meter)
- Proximal moderate-strong chlorite-(garnet) alteration







Sphalerite stringers in a strongly chlorite-garnet altered andesite :



 Weak VTEM conductors associated with the massive lens intercept

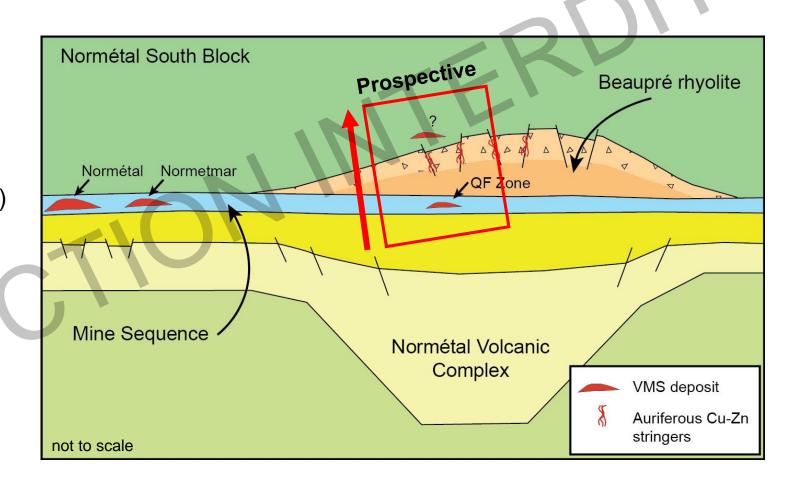




# Conclusion – New VMS exploration model in Normétal area



- Stratigraphic continuity of the volcanic assemblage
- Prospective favourable rhyodacitic host unit in the Mine Sequence for other lens (linked with altered footwall)
- Presence of discordant Au-Cu-Zn strongly altered structures in the autoclastic Beaupré rhyolite (no hiatus)
- Potential for VMS (Zn-rich) lens in the South Block andesite















For more information:

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