# **Advancing Discovery**

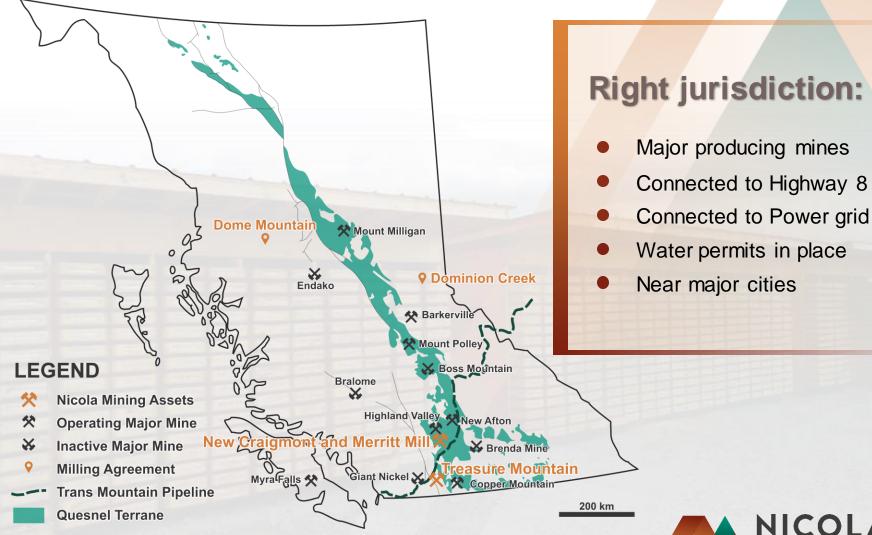
New Craigmont Project's High-grade Copper Potential

April 2024 Presentation

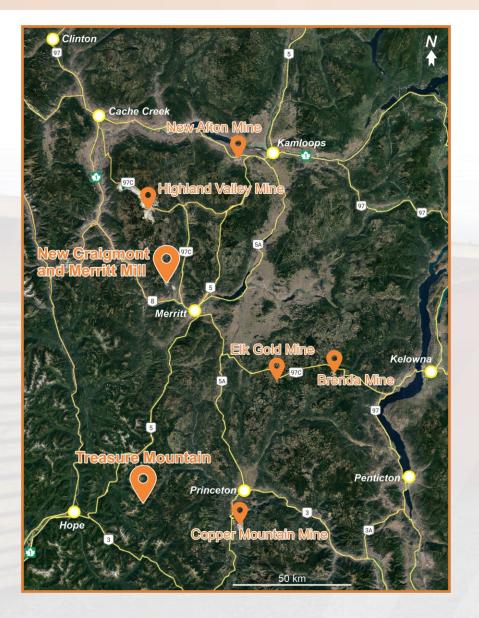


NICOLAMINING.COM

### LOCATION



### LOCATION



- Brownfield site of the former Craigmont Mine
- Located 14 kilometers northwest of Merritt, BC.
- Highway access via Highway
   8 and Aberdeen Road.
- In the heart of the Okanagan mining districts.
- Site is fully serviced by hydro power with 1.7kva available.
- Daily water permit draw of up to 1,300,000 gallons per day.
- Fully lined tailings facility.



### **THE CRAIGMONT MINE**

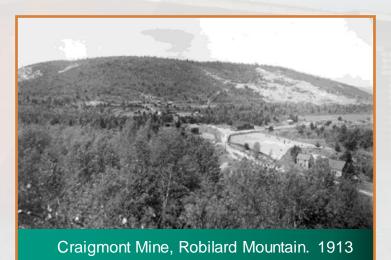
#### **Operations over numerous years**

- First Showing 1897
  - Limited shipments of copper before being abandoned.
- Reactivation in 1916
  - 1,261 tonnes (1,400 tons) @ 7% Cu
- 1928- Re-opened
  - Problems with flooding in mine.
  - 9 ounces (280 g) Au, 761 ounces (2,400 g) Ag, and over 390,000 lbs (177,000 kg) Cu.
- Early 1960's (Torwest Resources Ltd.)
  - 60 tonnes (67 tons) @ 12% Cu produced and Shipped (Ron Senshaw).

Source: The Craigmont Story - Murphy Shewchuk, Published 1983.



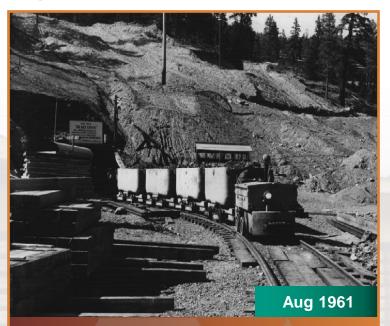
Craigmont Corundum Mill. Circa 1908



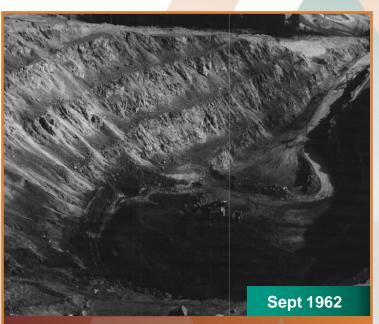


### **THE CRAIGMONT MINE**

Both open pit and underground mining was used to extract copper and magnetite from 1958-1982. Mining ceased due to copper price of ~\$0.60/lb.



- 1961-1982, Craigmont produced 34Mt ore @ 1.3% Cu both from underground and open pit.
- Historic cut-off grade is 0.7% Cu.
- Body No. 3 remains in situ.



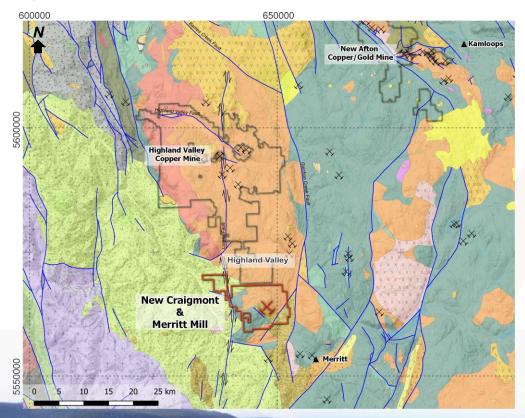
- 1993-2014, magnetite produced by re-processing of Craigmont Mine tailings.
- Canada's leading producer of high-grade magnetite.



### **REGIONAL GEOLOGY**

NICOLA

Shares the regional geologic environment with TECK's Highland Valley Copper District, the largest copper producer in Canada.



Pleistocene-Holocene volcanics Miocene volcanics Eocene sediments Eocene volcanics Eocene volcaniclastics Eocene feldspar porphyry Paleocene intrusives L. Cretaceous volcanics L.-M. Jurassic sediments U. Triassic-L. Jurassic intrusives U. Triassic-L.Jurassic ultramafics U. Triassic intrusives U. Triassic volcanics Permian-L. Jurassic intrusives • • Pennsylvanian-L. Jurassic sediments Pennsylvanian-L. Jurassic ultramafics Lopingian-M. Triassic intrusives Lopingian-M. Triassic volcanics Permian-Triassic intrusives Permian-Triassic metamorphics

Major cities

+

### **PROJECT GEOLOGY**

#### LITHOLOGY

Upper Triassic Nicola Group intruded by Late Triassic Guichon Creek batholith. The western portion is overlain by the Cretaceous Spences Bridge Group. Two plugs related to the Triassic Colyle Stock found on the southern part of the property.

#### **Guichon Creek batholith**

- Highland Valley Phase granodiorite
- Border Phase quartz diorite

#### **Coyle Stock**

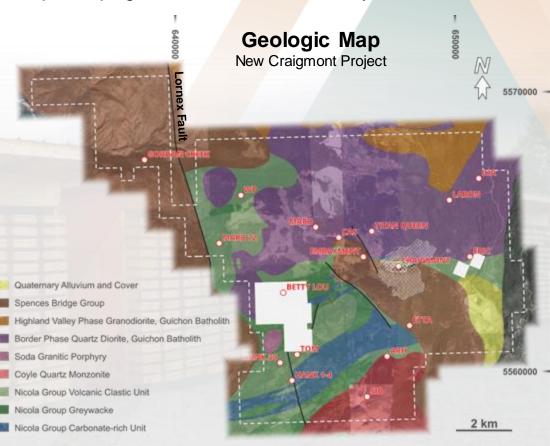
- Quartz feldspar porphyry plugs

#### **Nicola Group**

- Rhyolitic to andesitic volcaniclastic rocks
- Quartzo-Feldspathic sedimentary rocks
- Carbonate-rich sedimentary rocks (limey sandstone and mudstone, main host of skarn)
- Limestone

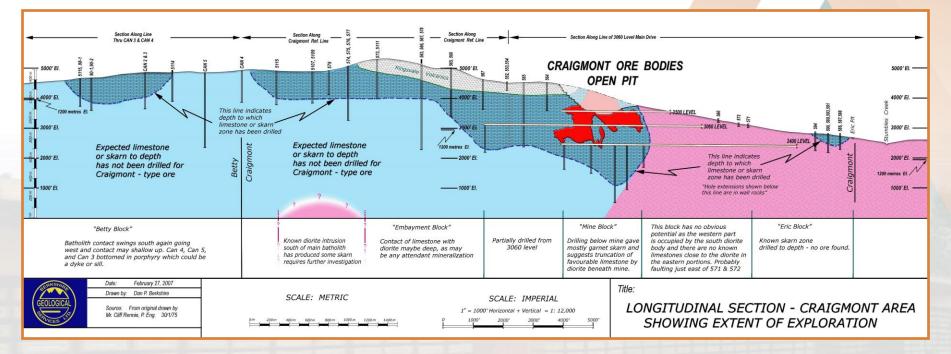
#### **Spences Bridge Group**

- Basaltic and andesitic volcanic flows
- Basal sandstone
- Conglomerate and agglomerate





### **PROJECT GEOLOGY**



- Guichon Pluton intruded the Nicola Group rocks and the contact is near vertical and steeply south dipping within the property. The property is partially overlain by Spences Bridge Group rocks.
- Approximately two-thirds of the Craigmont ore body occurs within skarn, hosted by limey sandstone, limey siltstone, and quartz-feldspathic siltstone of the Nicola Group. This skarn is confined to a narrow, steeply south-dipping zone, inferred to parallel the contact between the Nicola Group and the Guichon Pluton.



### **PROJECT GEOLOGY**

#### **MINERALIZATION**

Porphyry and skarn mineralization occurring on the property.

# **CU-FE SKARN**



Hole CC-18-02 (298m)



Hole CC-19-71 (616m)

Epidote (Replacement of garnet)

Actinolite & chlorite

Chalcopyrite

Magnetite

Chalcopyrite (Vein-controlled)

Remnants of potassic alteration (K-feldspar)

Pervasive sericitechlorite alteration

#### **Cu-Fe Skarn**

Stratigraphic-hosted malachite, chalcopyrite, chalcocite, azurite and bornite along fractures or stratigraphically hosted within Nicola Group rocks.

Iron ore minerals consist of specular hematite and magnetite.

#### **Porphyry Mineralization**

Disseminated and vein/fracture/faultcontrolled chalcopyrite, bornite and chalcocite hosted in the quartz diorite.

Commonly associated with pervasive sericite-chlorite alteration and potassic alteration.





#### HISTORIC EXPLORATION INSIGHTS

Focused on targeting limy\* units for additional skarn (stratabound). Geophysical methods struggled with thick overburden and Kingsvale Group. Largely unsuccessful in adding new resources. Suppressed copper prices caused the eventual closure of the Craigmont Mine.



#### CURRENT EXPLORATION INSIGHTS

Compared to copper skarns worldwide, the historic production grade and tonnage of Craigmont suggests it is like that of Cu porphyry-related skarns than non-porphyry related skarns. Additional skarn mineralization was obscured to historic geophysical techniques by thick overburden. Copper mineralization is not controlled by lithology but is related with alteration. Land package currently held is larger than that held by Craigmont Mines.

The combination of ownership consolidation (Nov. 2015) and receipt of the MYAB Permit (Nov. 2022) allows Nicola to conduct extensive exploration on never-before-drilled high priority targets.





ORILL

\* Limy units are rocks containing significant proportions of carbonate minerals such as limestones

High-grade copper mineralization has been found near the historic Craigmont Mine and in the new-discovered Embayment Zone.





### RECENT DRILLING HIGHLIGHTS

DDH-THU-002: 85.6m @ 1.11% Cu Sep 7, 2016, news release (SEDAR Oct. 4, 2016)

S-100: 116.7m @ 0.54% Cu (re-sampling) Jan 23, 2017, news release (SEDAR Apr. 7, 2017)

NC-2018-03: 100.6m @ 1.30% Cu Apr 2, 2018, news release (SEDAR Apr. 2, 2018)

NC-2018-01: 71.4m @ 0.60% Cu Feb 28, 2018, news release (SEDAR Feb. 28, 2018)

CC-18-02: 73.6m @ 1.05% Cu Sept 25, 2018, news release (SEDAR Sept. 25, 2018)

CC-19-72: 34.0m @ 0.40% CuEq and 44.0m @ 0.56% CuEq July 24, 2019, news release (SEDAR Jul. 24, 2019)



### **2023 DRILLING SUMMARY**

- Six holes were drilled north and east of the historic Craigmont pit<sup>1</sup>.
- NC23-001 interacted with exoskarn in the Nicola Group's limey sedimentary rocks east of the historic pit.
- NC23-005 and NC23-006 revealed extensive potassic and propylitic alterations, along with chalcopyrite veinlets in the Guichon Quartz Diorite.
- Never-before observed molybdenite coinciding with chalcopyrite was observed in Guichon diorite along with potassic alteration, indicating the presence of a porphyry system, which is currently being studied by the Mineral Deposit Research Unit at the University of British Columbia<sup>2</sup>.



<sup>1</sup>See the Company's news release dated <u>December 21<sup>st</sup> 2023</u>. <sup>2</sup>See the BC Porphy ry Research Project website: <u>https://www.mdru.ubc.ca/projects/bc-porphy ry-project/</u>



## Look into the Guichon Quartz Diorite: breccia pipes, endoskarns and porphyry targets.

### 3D IP Survey followed by drilling!

#### MARB

- A breccia zone of quartz diorite

- Chalcopyrite, pyrite and pyrrhotite occurs as fine disseminations and veins hosted in the epidote-chloriteactinolite altered quartz diorite.

- Hydrothermal breccia pipe target.

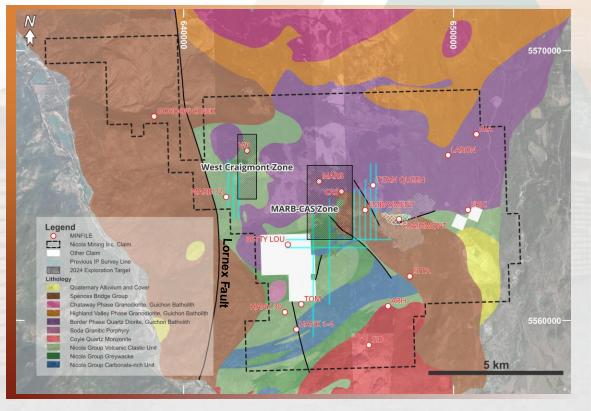
#### CAS

Magnetite breccia and magnetitechalcopyrite mineralization associated with garnet-epidote skarn hosted in calc-silicate altered quartz diorite.
Skarn target.

#### WP

- Copper oxide minerals observed along some fractures in quartz diorite.

- Quartz veins with K-feldsparhalo.
- Porphyry target.





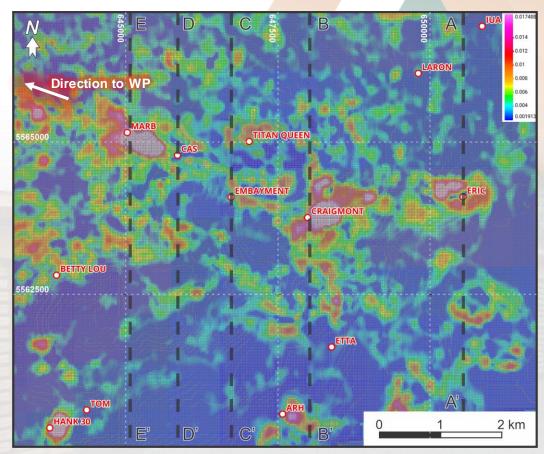
### **MARB-CAS ZONE**

#### **AEROMAGNETIC ANOMALIES**

There appears to be an EW striking magnetic anomaly trend that includes known mineralization found in the Embayment, Craigmont, and Eric zones. However, the MARB-CAS Zone remains largely unexplored and lacks drill data.

The Craigmont anomaly is the host of the historic mine, while the Eric Zone hosts high grade mineralization, but on smaller scale. The Company has successfully drilled the Embayment Zone, with multiple intercepts grading greater than 1% copper.





MAG-MVI MODEL SURFACE VIEW

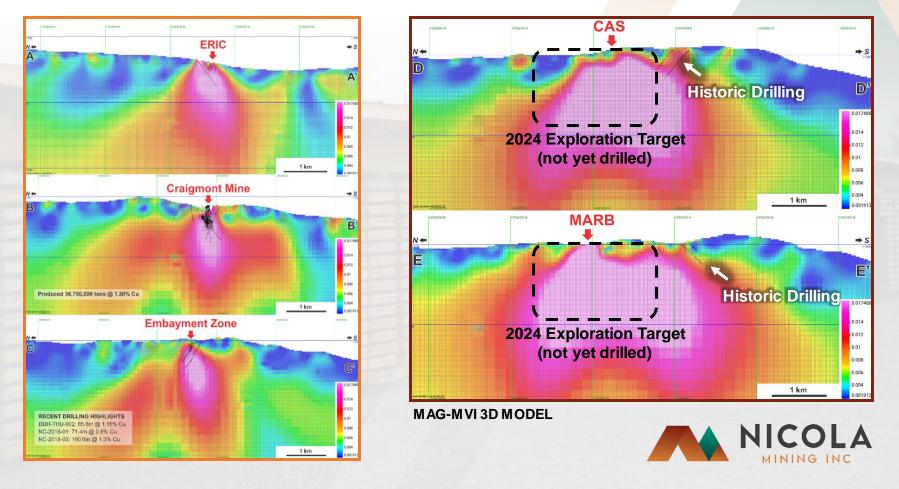
New-discovered mineralized outcrop at CAS.



### **MARB-CAS ZONE**

#### **AEROMAGNETIC ANOMALIES**

Aeromagnetic MVI cross-sections illustrating proven mineralization at Eric (A-A), Craigmont (B-B') and Embayment (C-C') corresponding with high magnetic anomalies and observed mineralization on surface at CAS (D-D') and MARB (E-E') also corresponding with high magnetic anomalies.



### WEST CRAIGMONT ZONE

### WEST CRAIGMONT ZONE - A PORPHYRY TARGET -

Porphyry-style mineralization and alteration has recently been found in Guichon Quartz Diorite outcrop at WP.



Copper oxide minerals observed along some fractures in quartz diorite.



Quartz veins with potassic alteration halo.

West Grafemont Zone

nex Fault

MARB-CAS Zone

HANK 1-4

O BETTY LOU



DAR

N

5570000

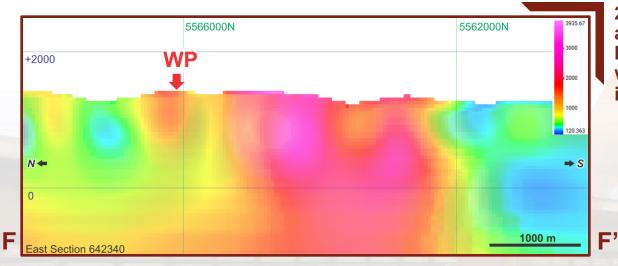
5560000

2 km

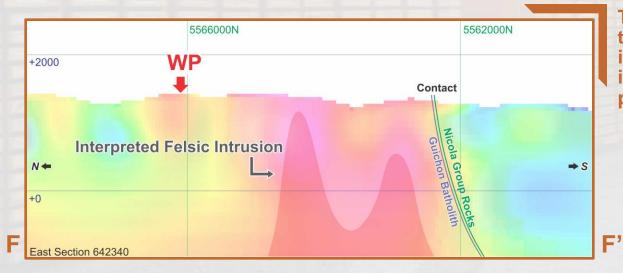
650000

### WEST CRAIGMONT ZONE

### **ZTEM SURVEY - RESISTIVITY ANOMALIES**



2022 ZTEM survey detected an oval-shaped resistivity high feature that coincides with magnetic high anomaly in the West Craigmont Zone.



The geophysical anomaly in the West Craigmont Zone is interpreted to be a felsic intrusion associated with porphyry mineralization.



### MYAB

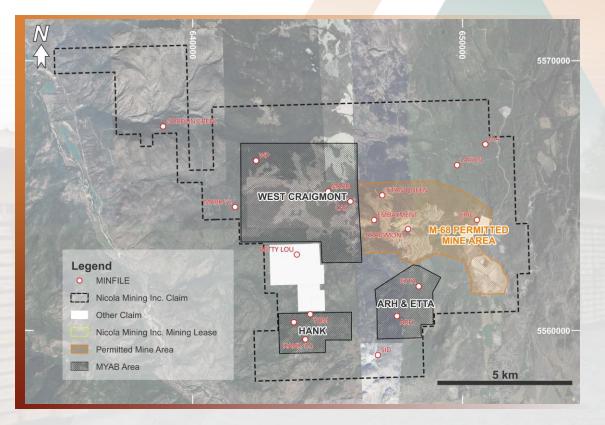
#### For the first time ever, New Craigmont Copper can benefit from propertywide exploration project over the next five years

### **MYAB**

#### Multi-year Area-based Permitting An Exploration Game Changer

The MYAB Permit allows the Company to complete the following key exploration activities:

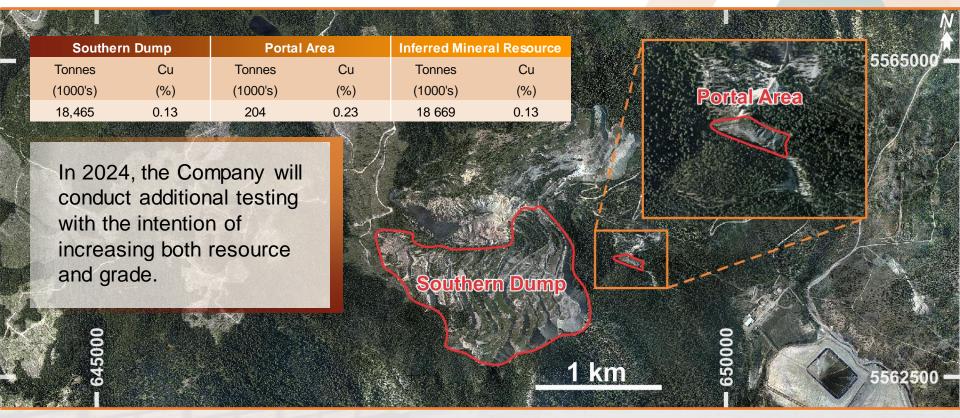
- •Geophysical survey with exposed electrodes
- •190 diamond drill holes
- •12 km of trenching/bulk sampling [6 ha disturbance]





### **DUMP RESOURCE ESTIMATION**

A Technical Report was prepared in accordance with National Instrument 43-101-Standards of Disclosure for Mineral Projects ("NI 43-101") supporting the Inferred Copper Resource for the Southern Dump and 3060 Portal Dump.



<sup>1</sup> TOMRA Sorting Mining is ow ned by Norwegian company TOMRA Systems ASA, which is listed on the Oslo Stock Exchange. Founded in 1972, TOMRA Systems ASA has a turnover around €750m and employs over 3,500 people. For more information on TOMRA Sorting Mining, visit <u>www.tomra.com/mining</u>.





To Learn More: info@nicolamining.com 778-385-1213

TSX-V: NIM OTC: HUSIF FRA: HLI

NICOLAMINING.COM