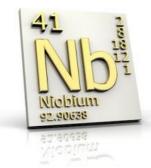
# CORPORATION

# The Bandito Intrusive Related Rare Earth-Niobium (Nickel-Copper) Project, Yukon January 2024





TSX.V: EDG



#### **CORPORATE DISCLOSURE**

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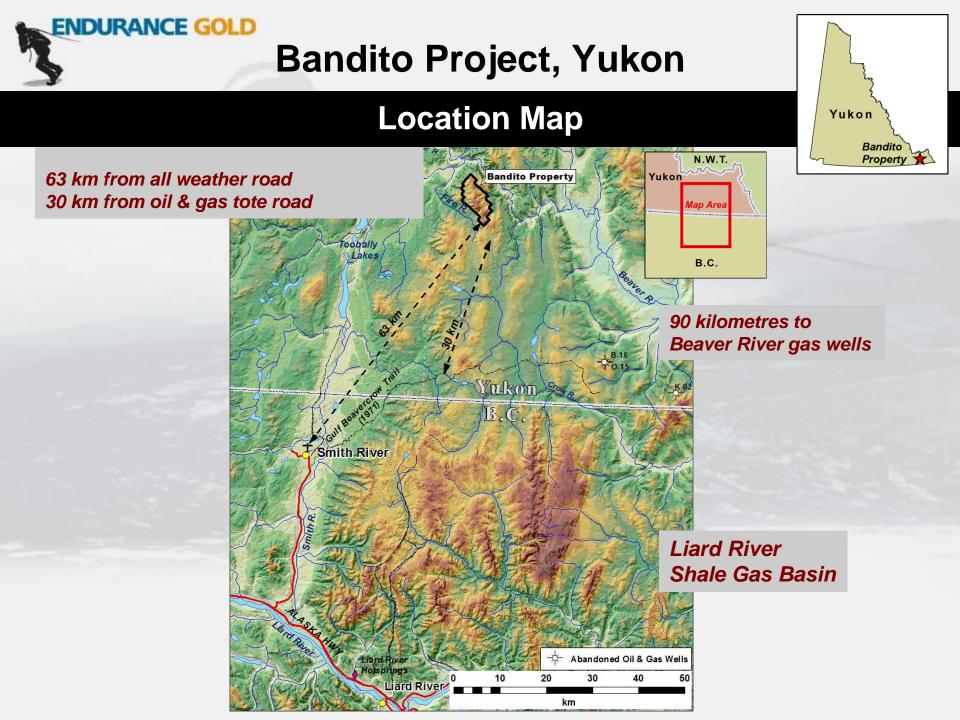
#### Forward-looking Statements

This presentation contains "forward-looking information" within the meaning of applicable Canadian securities regulations. All statements other than statements of historical fact herein, including, without limitation, statements regarding the company's plans, goals or objectives and future exploration, development, potential mineralization, exploration results and future plans are forward-looking statements that involve various risks and uncertainties. There can be no assurance that such statements will prove to be accurate, and actual results and future events could differ materially from those anticipated in such statements. Readers are advised not to place an undue reliance on forward-looking statements.

# BANDITO REE-Nb PROJECT Yukon

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#### 100% Endurance Owned Rare Earth-Niobium-(Nickel-Copper) Target

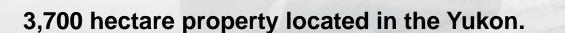




#### **Deal Terms**

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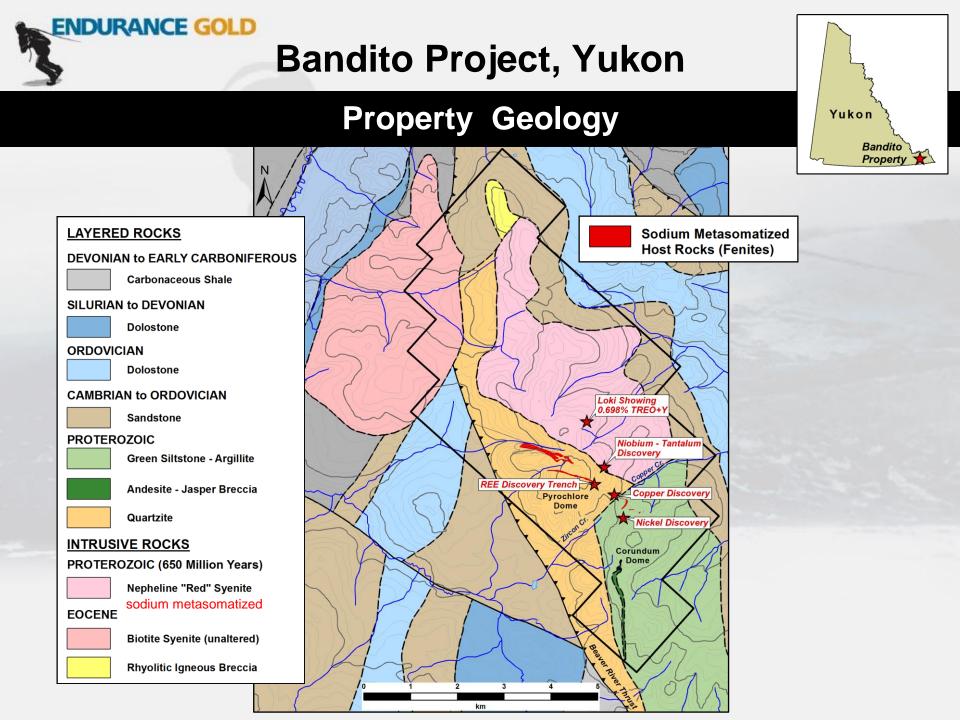
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Endurance acquired 100% interest in the Bandito Property in 2013

Underlying 1% Net Smelter Returns Royalty ("NSR"). Endurance has the option to purchase 1/2 of the NSR at any time.

A payment of \$150,000 to original vendor is required on completion of a Bankable Feasibility Study and a further \$350,000 on securing mine production financing.





#### **Geological Setting**



Represents a Proterozoic aged alkaline intrusive related REE-Niobium system – whole rock indicates both *agpaite & miaskite* affinity.

- Analogies to other large intrusive related REE and Niobium systems (i.e. Thor Lake, NWT and Strange Lake, Quebec) or possibly carbonatite hosted systems.
- The Proterozoic-aged sandstone, argillite, carbonates, and breccia sequence is intruded by Proterozoic-aged (650 Ma) sericite-altered metasomatized nepheline syenite about three kilometres across.
- Wall rock alteration extends for multiple kilometres in the "Red Syenite" and for about 500 metres ("m") outwards from the intrusive contact.
- The nickel and copper association with an alkalic related system is atypical and studies are required to determine the genetic relationship.



#### **Historic Rare Earth Exploration Activity**



Original exploration based on radiometric anomalies commencing in the mid-1970s. The nepheline syenite and altered host rocks have been previously explored for uranium, thorium, niobium and rare earth elements (and possibly copper).

Consolidated Silver Standard Mines (CSSM) and E&B Exploration explored parts of the property for rare earth elements and niobium in 1980 and 1986. Some pack-sack drilling.

Unocal-Molycorp evaluated the project for acquisition in 1987 and completed a confirmatory sampling program and report.

The 1980's programs mapped large areas of "fenitized" host rocks and returned grab sample values estimated to exceed 3% TREO + Y, based on the x-ray fluorescence analysis.

Exploration prior to Endurance focused on confirmation of nickel mineralization. No rare earth or niobium evaluation.



#### Rare Earth & Niobium Results, Syenite Host Highlights

Studies indicate REE are associated with fluorine-associated sodium metasomatized nepheline syenite with fine-grained hematite alteration, hydrothermal zircon, monazite and bastnasite.

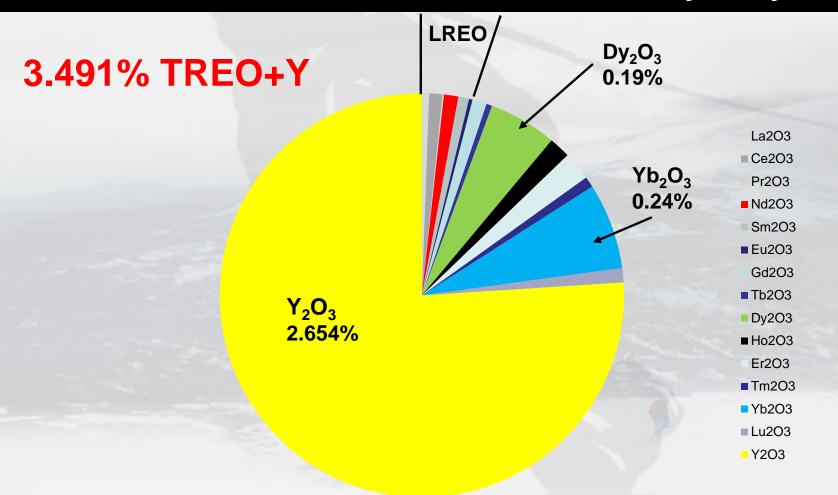
The altered syenite covers at least a 4 square kilometer ("km") area.

Prospecting of the kilometre scale soil anomaly returned grab samples over a 3 square km area:

- highly metasomatized syenite 3.491% TREO+Y with 76.7% HREO ratio, 0.887% Nb<sub>2</sub>O<sub>5</sub>, including 43.2% ZrO<sub>2</sub>.
- highly metasomatized syenite 1.978% TREO+Y with 74.9% HREO ratio, 0.958% Nb<sub>2</sub>O<sub>5</sub>, including 43.6% ZrO<sub>2</sub>.
- hematite altered syenite 0.698% TREO+Y with 46% HREO ratio.
- altered syenite with fluorite 0.323% Nb<sub>2</sub>O<sub>5</sub>.
- hematite and fluorite altered and fractured syenite 0.316% Nb<sub>2</sub>O<sub>5</sub>.



#### **Rare Earth Oxide Distribution – Discovery in Syenite**



76% Heavy REO ratio

43.3% Zirconium Oxide



#### **Rare Earth Results – Wall Rock Alteration**



Studies indicate REE are associated with fenite-hosted fine-grained hematite, hydrothermal zircon, monazite and bastnasite *Within 1 square km area* 

#### South Fenite Trend

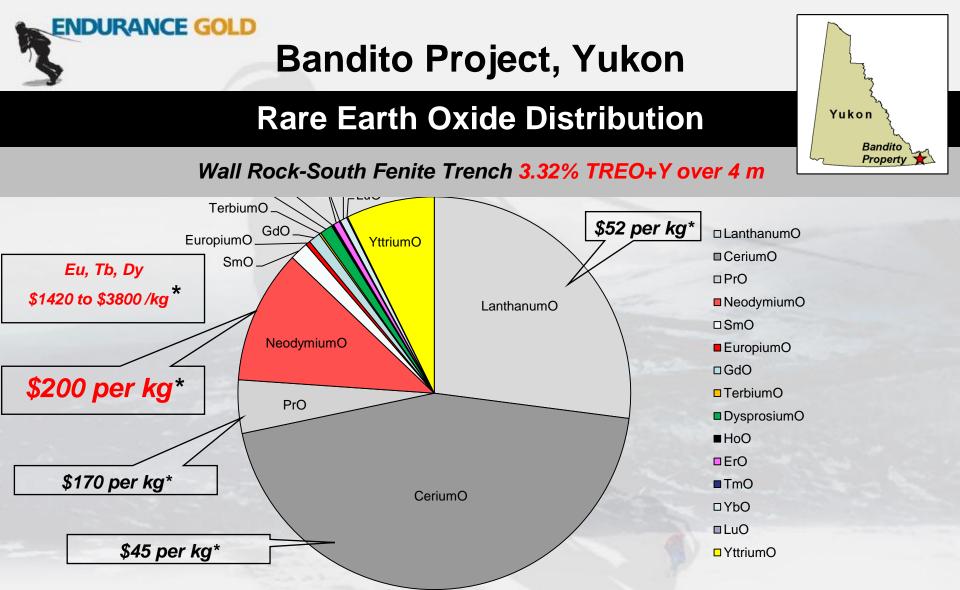
Trench - 2.65% TREO+Y over 6 m including 3.85% over 4 m\* \* 10.3% HREO – as percentage of total rare earth oxides \* 9.8% Nd<sub>2</sub>O<sub>3</sub> – as percentage of total rare earth oxides

Trench - 1.38% TREO+Y over 8 m including 2.08% over 5 m

#### North Fenite Trend

Trench – 2.56% TREO+Y over 0.5 m Grab Samples (areas of poor exposure)

- 3.36% TREO+Y
- 2.23% TREO+Y
- 1.34% TREO+Y
- 1.26% TREO+Y



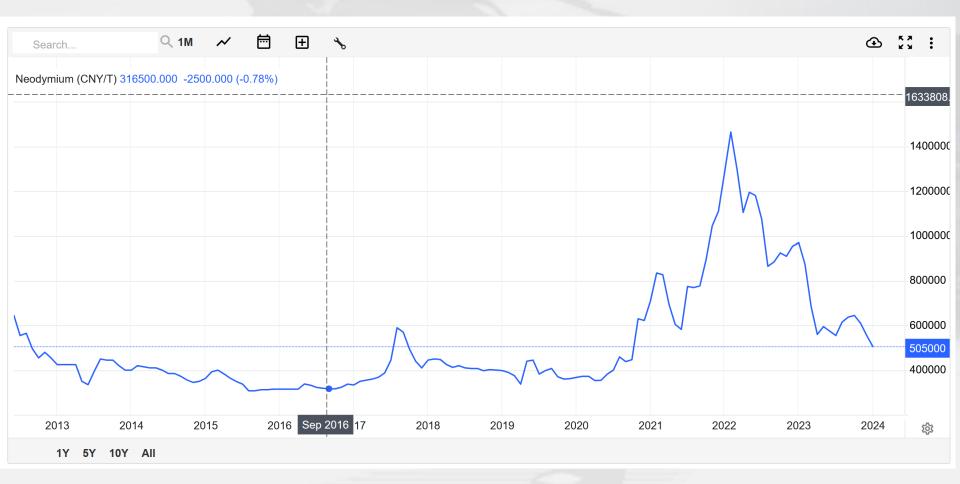
#### 10.8% Heavy REO

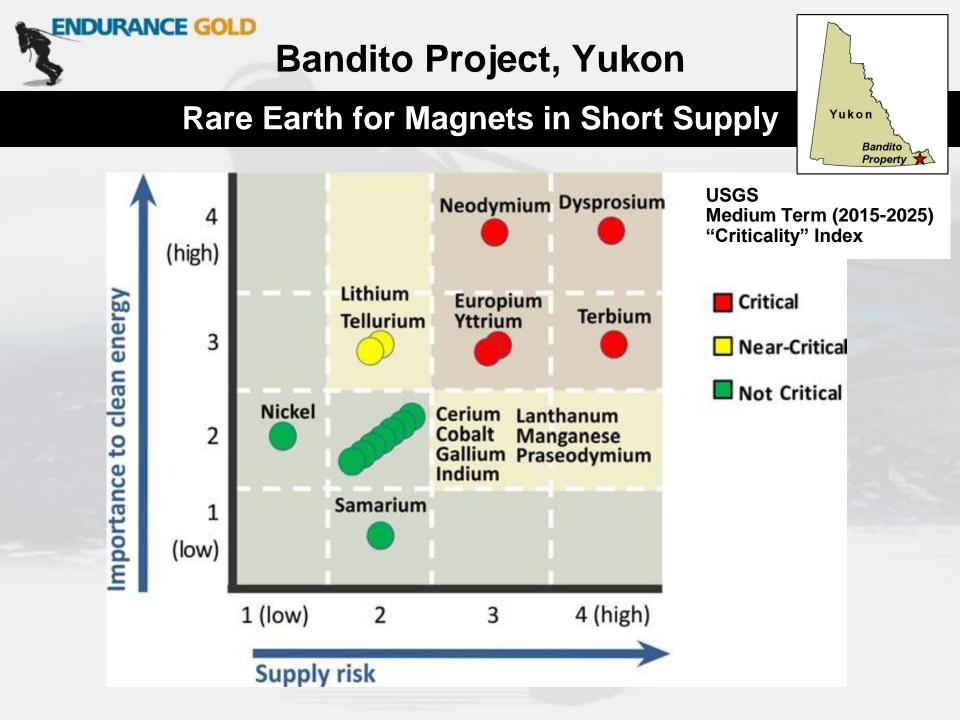
#### 10.8% Neodymium Oxide

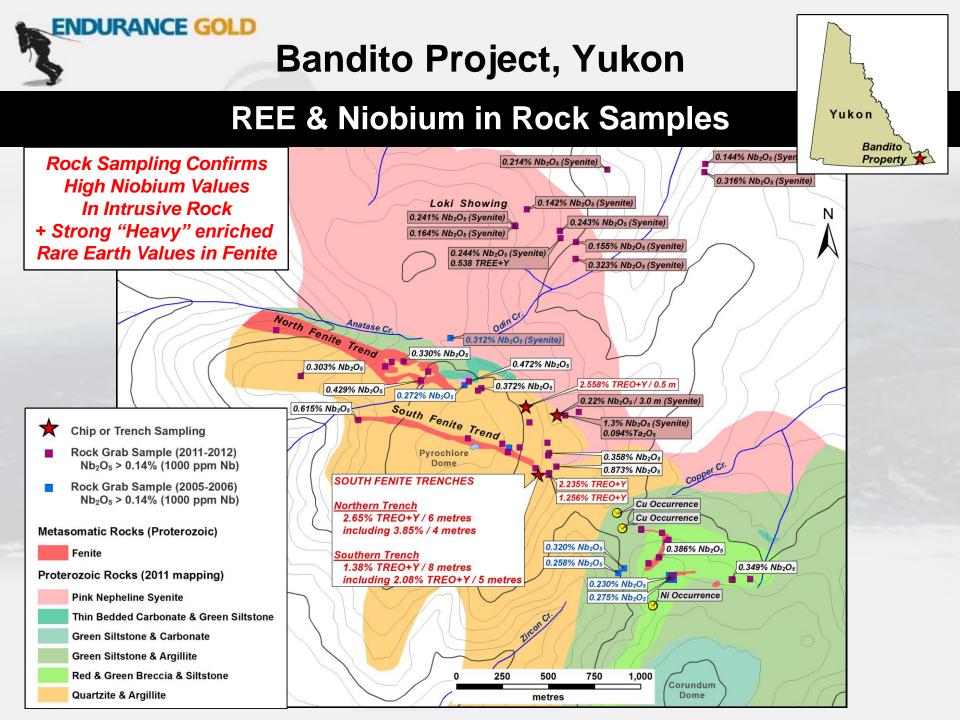
\* Price Sources (Jan 2012): Metal Pages, Asian Metals and Technology Metals Research

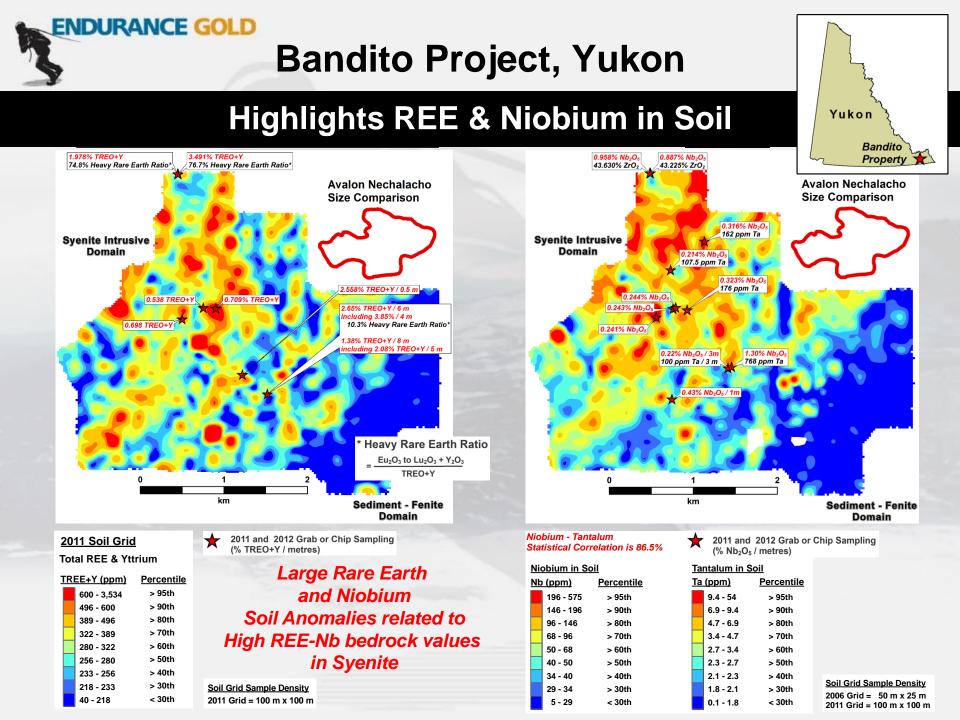


#### 2023 Neodymium Oxide











#### Niobium – Tantalum Primer

Niobium Prices - US\$40 to US\$56 per kilogram Nb<sub>2</sub>O<sub>5</sub> \*

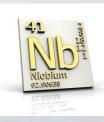
Primarily used in high strength low alloy steels

Tantalum Prices - US\$110 to US\$256 per kilogram Ta<sub>2</sub>O<sub>5</sub>\*

Primarily used in the electronics industry











#### **Niobium Results Highlights**



Intrusive "Pink Syenite" Hosted (over 4 square km area)

Trench - 0.22% Nb<sub>2</sub>O<sub>5</sub> over 3 m – metasomatized "mafic" syenite

Chip – 0.43% Nb<sub>2</sub>O<sub>5</sub> over 1 m – potassium feldspar intrusive/fenite

#### **Grab Samples**

- 1.30% and 0.90% Nb<sub>2</sub>O<sub>5</sub> altered specular hematite-rich syenite
- 0.98% Nb<sub>2</sub>O<sub>5</sub> altered zircon rich syenite
- 0.47% Nb<sub>2</sub>O<sub>5</sub> altered potassium feldspar syenite
- 0.33% Nb<sub>2</sub>O<sub>5</sub> altered potassium feldspar syenite
- 0.24% Nb<sub>2</sub>O<sub>5</sub> altered banded specular hematite-rich syenite

#### Best Fenite Hosted (within one square km area)

- Chip 0.24% Nb<sub>2</sub>O<sub>5</sub> over 6 m pink albite-zircon fenite
- 0.87% and 0.61% Nb<sub>2</sub>O<sub>5</sub> chlorite-albite and zircon-albite fenite
- 0.39%, 0.27%, 0.35%, 0.30%, 0.29%, 0.28%, 0.27% Nb<sub>2</sub>O<sub>5</sub>- albite fenite



#### **Alkaline Alteration**



Sericite alteration and fluorite is pervasive throughout the nepheline syenite intrusive which has been mapped as "red syenite". The syenite is interpreted as the source of alteration fluids.

Host rock and syenite has been intensely sodium and potassium metasomatized and hydrothermally altered over a 9 square km area as mapped by the government.

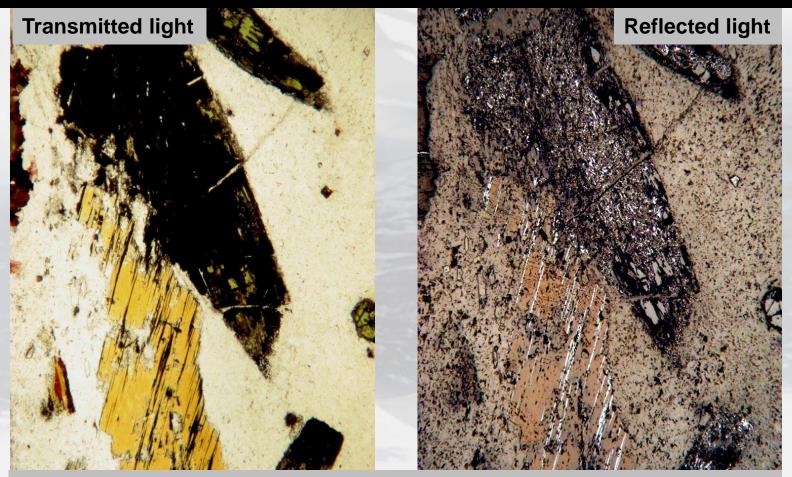
Iron Oxide is pervasive in the form of coarse crystalline to fine grained hematite and is an intrusive related alteration.

The altered wall rocks include "fenites". The fenites are characterized by replacement of host rocks and high-level fine grained intrusives by albite, kspar, aegirine, riebeckite, with replacement of mafics by FeOx, and REE & niobium minerals.

Cross-cutting the larger REE-Niobium alteration system, a latter Quartz Sericite Pyrite (QSP) alteration forms a sulphide gossan and is host to elevated nickel, copper and zinc mineralization.



#### **Sodium Metasomatized Sediments + REE**



Albite(85%) - biotite-aegirine(?) fenite with aegirine altered & replaced by hematite magnetite and rutile 0.56% TREO+Y 1925 ppm niobium



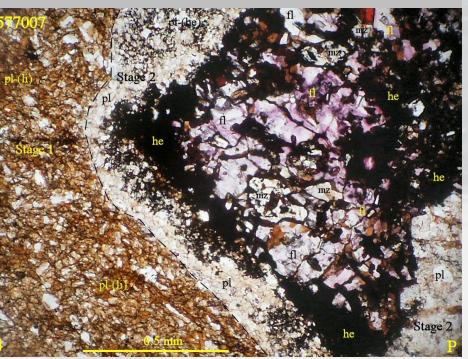
#### Sodium and Potassium Metasomatism

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Albite – potassium feldspar Fenite or fenitized intrusive dykes



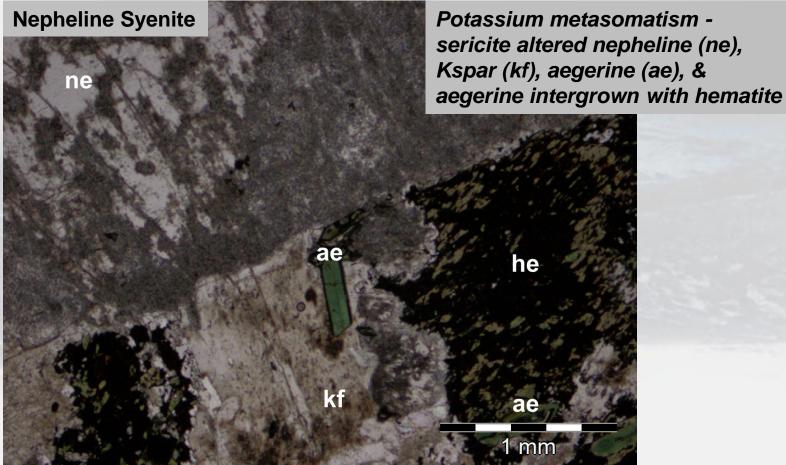
Multistage fluorite hematite monazite plagioclase Fenite





#### **Potassium Metasomatism**







#### **Mineral Bastnasite**



#### Bastnasite (a REE carbonate-fluoride )

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#### **Rare Earth Niobium Preliminary Studies**

Petrographic studies of fenite have observed that:

• REE bearing minerals bastnasite(Ce), monazite(Ce), xenotime, and zircon with associated minerals fluorite and fluorapatite.

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- Niobium is contained in ferrocolumbite and niobian rutile and possible pyrochlore.
- Bastnasite replaces, or is associated with, zircon aggregates, rutile, and possibly monazite.
- Monazite is intimately associated with hydrothermal hematite
- The rutile is interpreted to replace titanite, ilmenite, Ti-rich mica, or Ti-rich ferromagnesian minerals.

Further Petrographic studies required on syenite-hosted mineralization.



#### **Nickel and Copper Results**



No documented exploration for copper or nickel prior to 2004.

Grab samples up to 11.35% nickel, 2.07% copper, 27.1% bismuth, and 1.88% lead at the Gossan Target. One sample returned 1,125 ppm Cobalt

Endurance field work has identified 7 nickel and copper prospects over a 580 by 200 metre area hosted within a quartz-sericite-pyrite (QSP) alteration.

**Representative chip and pit sampling:** 

- 0.8% nickel over 13 m hosted in polymict breccia
- 2,460 ppm copper over 10 m.
- 1,251 ppm copper over 5 m.
- 1,294 ppm copper (0.21% Nb<sub>2</sub>O<sub>5</sub>, 0.28% TREO+Y) over 6 m.

Alteration mapping and soil sampling indicate potential to expand QSP Alteration and base metal target to 1 km by 600 m width. *Two large Cu-Ni soil anomalies suggest new zones.* 

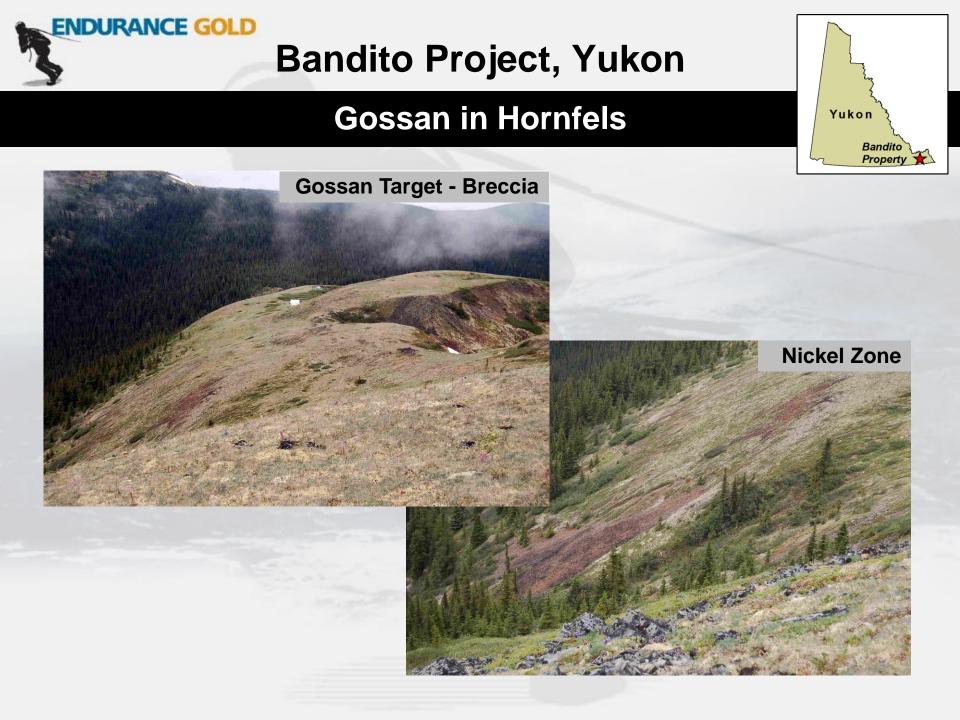


#### **Gossan Target**



Soil anomaly (in the trees) Up to 2860 ppm nickel, 4740 ppm copper

Gossan Target – Breccia Up to 11% nickel, 2% copper







#### **Breccia in Hornfelsed Sediments**

Manganese Iron Oxide and Nickel Stained Breccia in Hornfelsed Sediments



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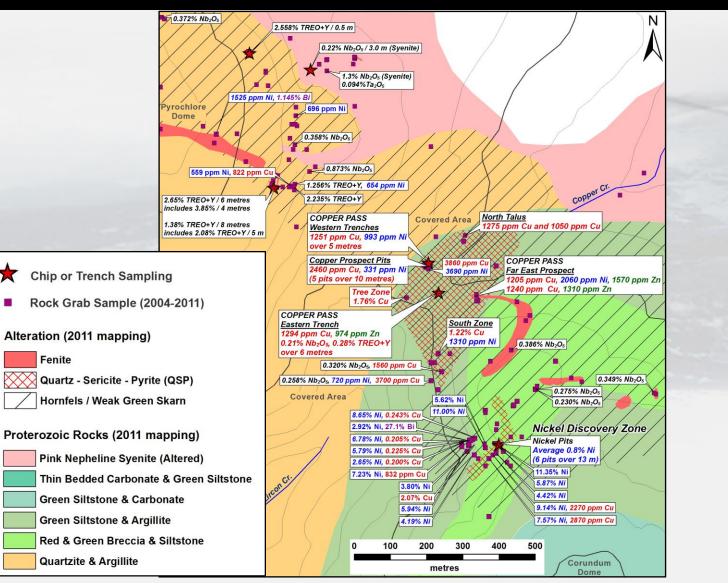
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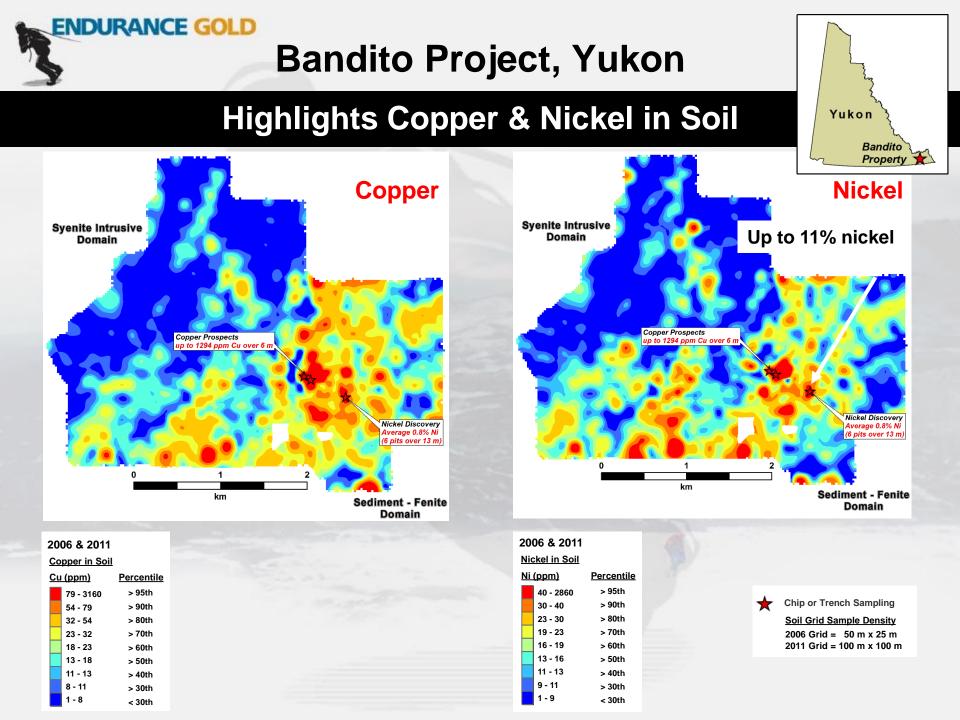
#### Nickel – Copper – Niobium in Rocks

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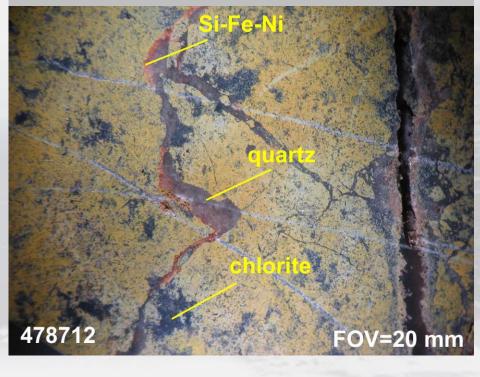




#### **Nickel – Copper Mineralization**

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#### **Crackle breccia - QSP alteration and nickel**



#### **Silicified Nickel Stained Breccia**





#### **Project Highlights**

- Yukon Bandito Property
- Drill Ready REE target 3.0 by 0.5 Km Rare Earth System in Fenite 2.3% TREO+Y over 6 m with 10.8% Heavy Rare Earths in Fenite - plus consistently high niobium values in Fenite.
- 2. Drill Ready Nb-Ta targets Over 30 chip & grab samples contain in excess 0.143% Nb<sub>2</sub>O<sub>5</sub> with values up to 1.3% Nb<sub>2</sub>O<sub>5</sub> and 0.094%Ta<sub>2</sub>O<sub>5</sub> in syenite.
- 3. Up to 1.8 km by 600 m TREE+Y and Niobium-Tantalum soil anomalies in +4 square km altered "Red Syenite" together with values up to 3.49% TREO+Y with 76% Heavy Rare Earth and 0.96% Nb<sub>2</sub>O<sub>5</sub> indicate discovery potential for volumetrically large Syenite-Intrusive hosted REE-niobium-tantalum deposits. Drill Ready after intensive prospecting and trenching.
- 4. The alteration and "pregnant" rare metals system remains open to expansion within the current property.
- 5. The Copper-Nickel "Discovery" soil anomaly is 1000 by 600 m, much larger that the area of known mineralization (580 by 200 metres). Drilling warranted.



#### **Next Steps**

- Yukon Bandito Property
- 1. LiDAR Completed recently assisted with defining lithological contacts, intrusive contacts
- 2. Airborne + Ground Geophysics To define system size with radiometrics.
- 3. Additional soil & rock sampling To define limits of the large intrusivehosted rare earth, niobium, and tantalum system.
- 4. Yukon Class 1 Permit granted.
- 5. Class 3 Drill and Trench permit application under consideration.
- 6. Drilling Several rare earth, niobium/tantalum and nickel-copper targets warrant drill testing.
- 7. Trenching To identify controls and extent of rare earth and niobiumtantalum mineralization in intrusive-hosted and fenite targets.

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