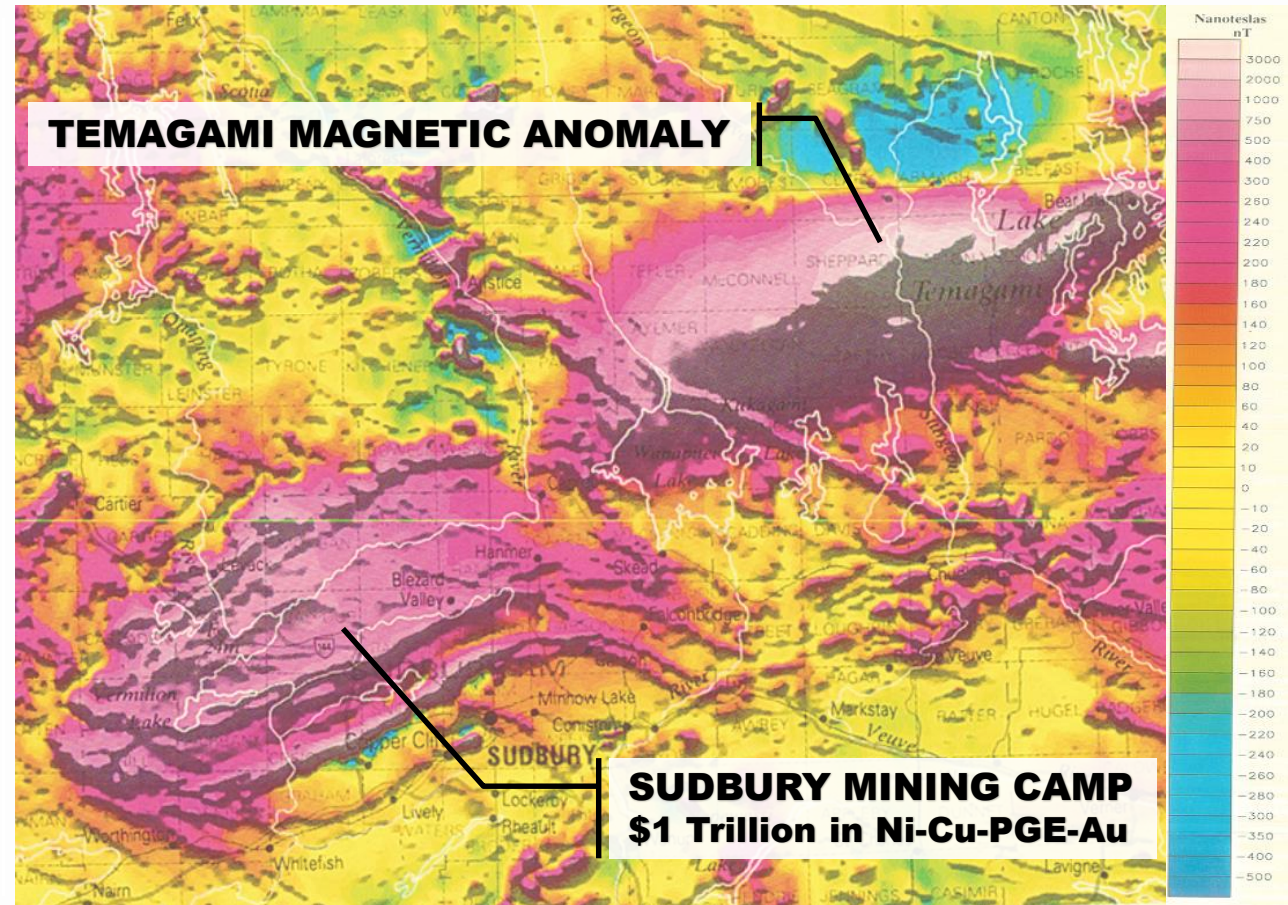




INVENTUS

Exploring the Temagami Magnetic Anomaly for World Class Ni-Cu-PGE Deposits



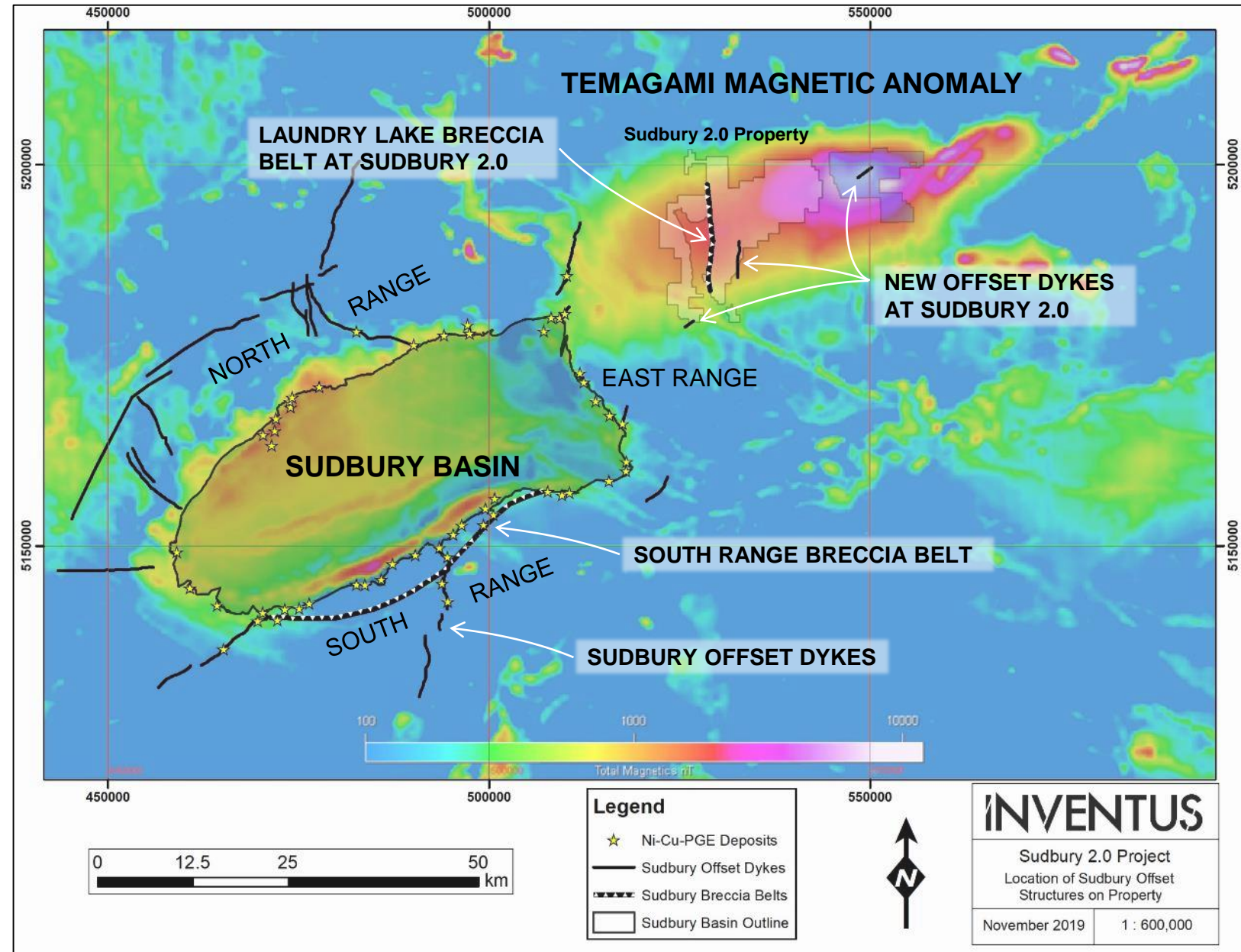
Sudbury and Sudbury 2.0

THE SUDBURY BASIN

- A World Class Ni-Cu-PGE Mining District
- **1.7 billion tonnes** of nickel, copper, platinum, palladium, gold and silver extracted
- Valued at over **1 trillion dollars** in current commodity prices

SUDBURY 2.0 - THE TEMAGAMI MAGNETIC ANOMALY

- Largest unexplained magnetic anomaly in North America
- Similar magnetic size, shape and intensity to the Sudbury Basin
- Geophysical exploration by Falconbridge in the 1990's
- **Inventus 2018-2019 discoveries:** First Sudbury ore-hosting geology discovered on surface over the Temagami Anomaly



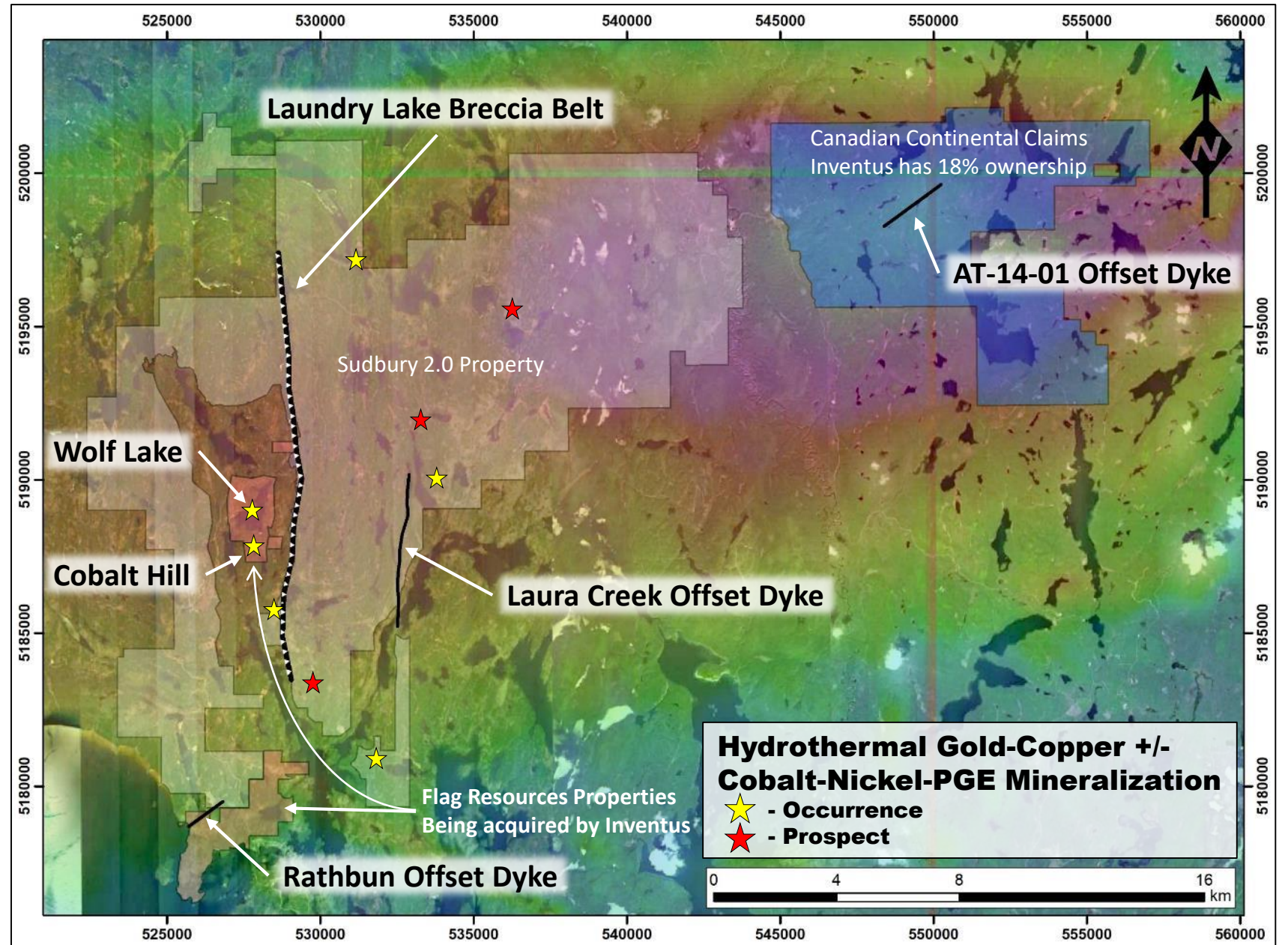
Sudbury 2.0 Exploration Targets INVENTUS

SUDBURY OFFSET DYKES FOUND ON SURFACE

- **The Rathbun offset dyke**
 - Recognized as an Sudbury offset dyke in summer 2019
 - Assays of up to **62.5 g/t Pd**, **33 g/t Pt**, **22.8% Cu** and **13 g/t Au**
- **The Laura Creek offset dyke**
 - Discovered in Fall 2019
- **The Laundry Lake Breccia Belt a 14 km belt of Sudbury Breccia**
 - Discovered in 2018
- **The AT-14-01 offset dyke**
 - Discovered in 2017

HYDROTHERMAL Cu-Au +/- Co, Ni, PGE BRECCIA

- **Wolf Lake Cu-Au occurrence**
 - Historic drilling of **16.6 g/t Au** over 22.4 metres and **2.5% Cu** over 22.7 metres
- **Cobalt Hill Au-Co occurrence**
 - Historic drilling of **9.5 g/t Au** over 8.4 metres
 - Cobalt and Nickel values up to 0.25% and 0.34%



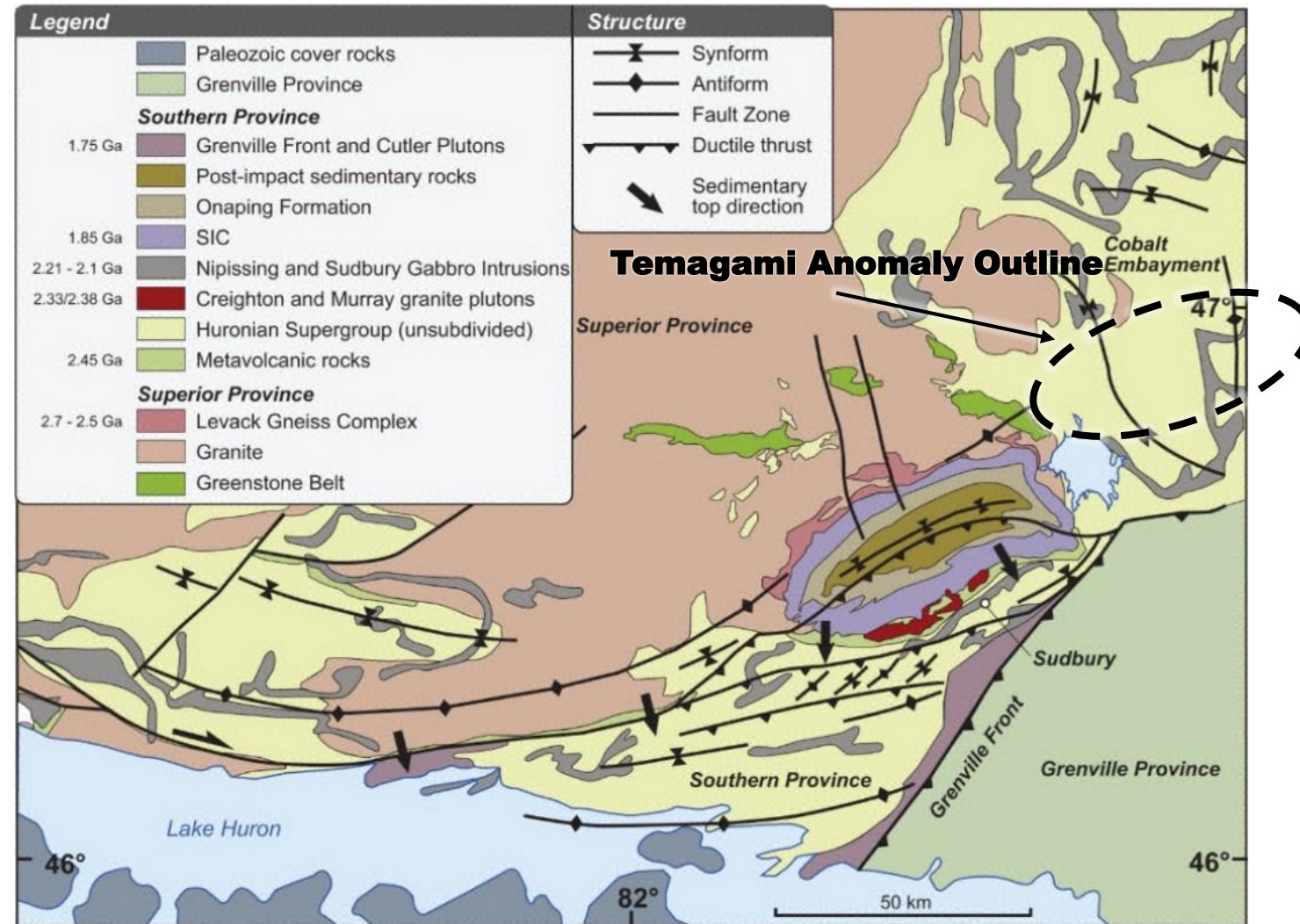
Regional Geology

The Temagami Anomaly is situated below rocks of the Huronian Supergroup, a sedimentary basin that deposited between 2.45 to 2.2 billion years ago.

The Huronian Sediments rest on Archean rocks that are likely an extension of the ~2.7 Ga Temagami greenstone belt to the east.

Situated to the west of the Temagami Anomaly is the Sudbury basin, a 1.85 Ga suite of mafic rocks recognized as the remnant of an impact crater melt sheet.

The source of the Temagami Anomaly is likely an intrusion but remains unknown



Exploration History

Falconbridge

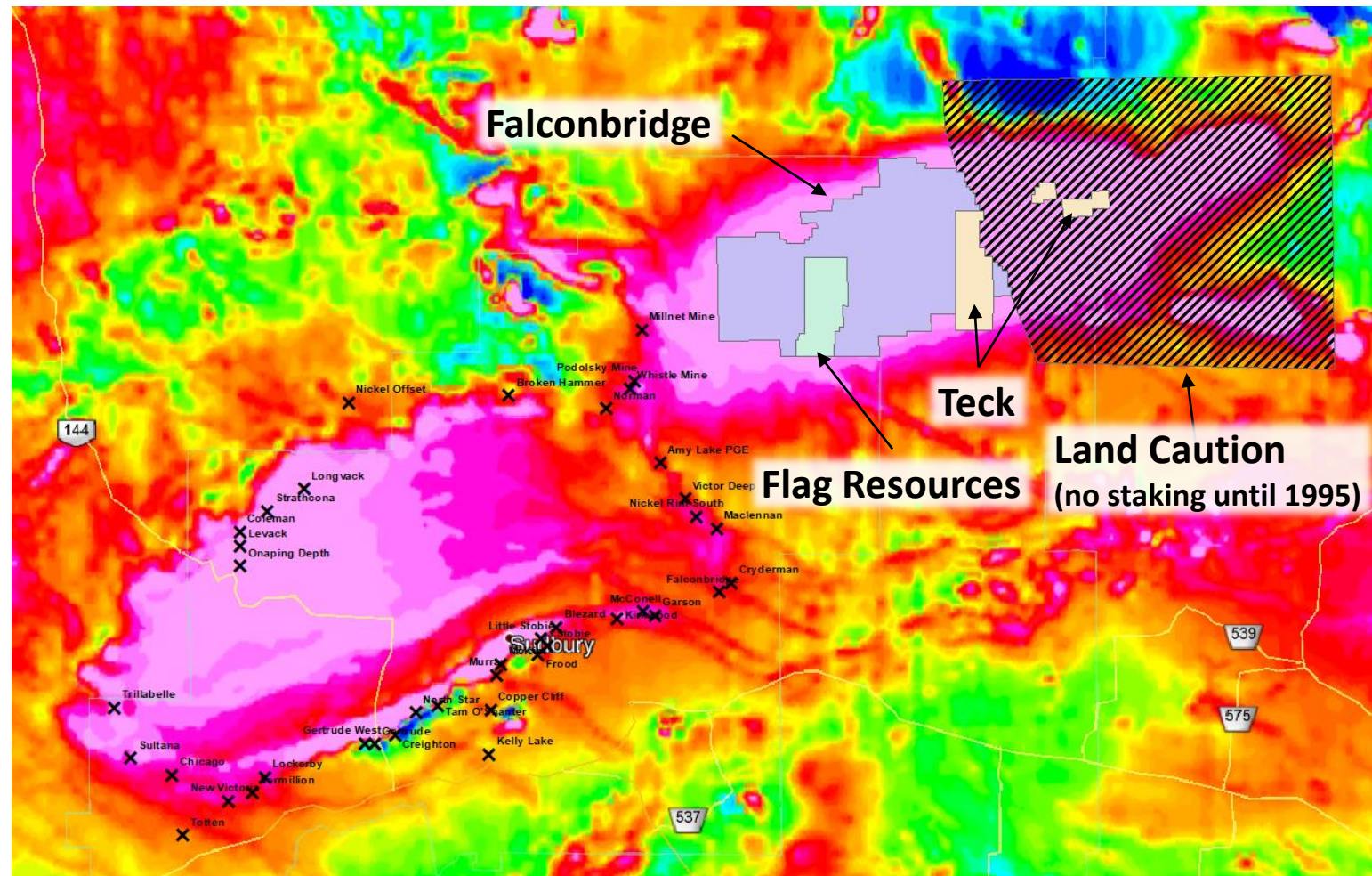
- Falconbridge staked the entire Anomaly in the 1990's.
- Conducted geophysical surveys including a seismic, airborne magnetic and MT
- Falconbridge's seismic survey illustrated a mafic intrusive at depth.
- Drilled one hole to 2,200 metres that deviated 800 metres laterally.
- The Anomaly was never explained
- **Inventus' 3D inversion of the magnetic data indicates they missed the anomaly**

Teck

- Conducted geological mapping

Flag Resources

- Targeted mineralized hydrothermal breccia now believed to be from an intrusive (Temagami Magnetic Anomaly)



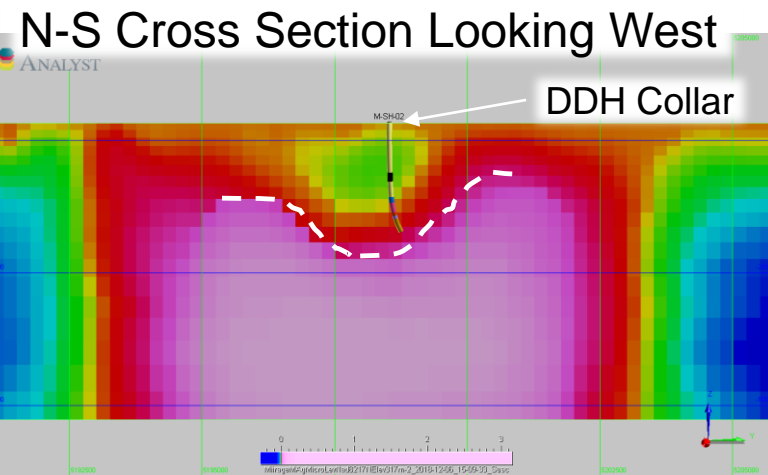
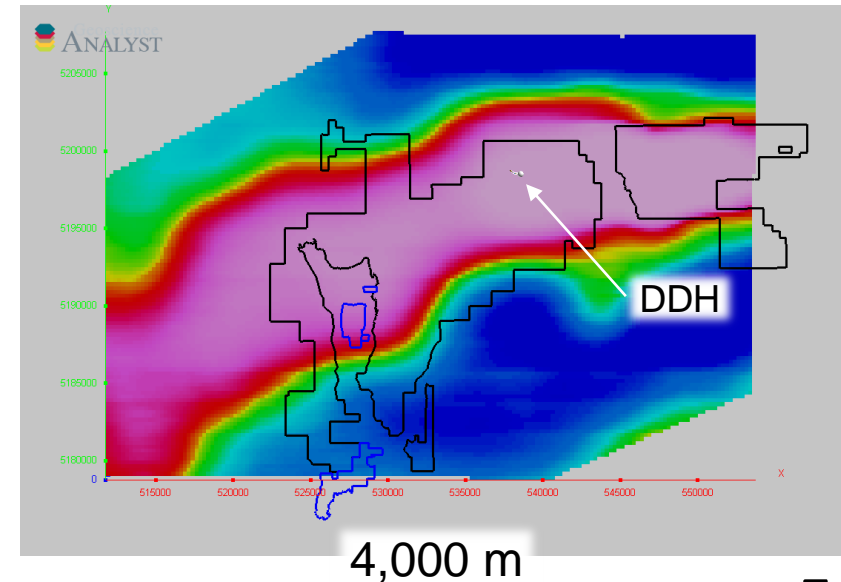
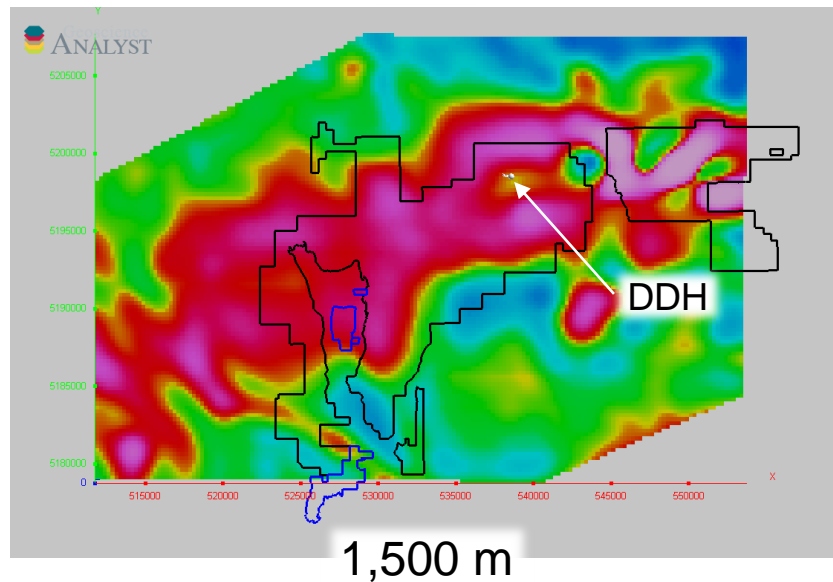
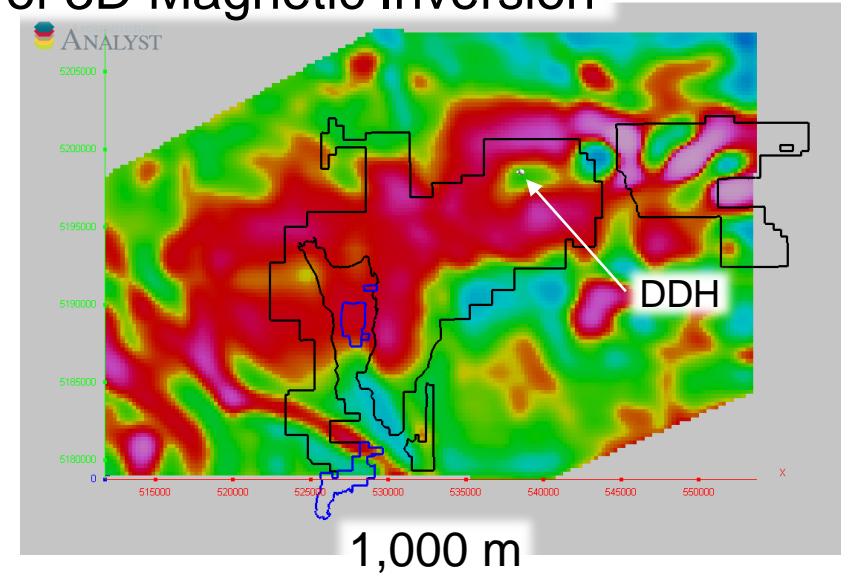
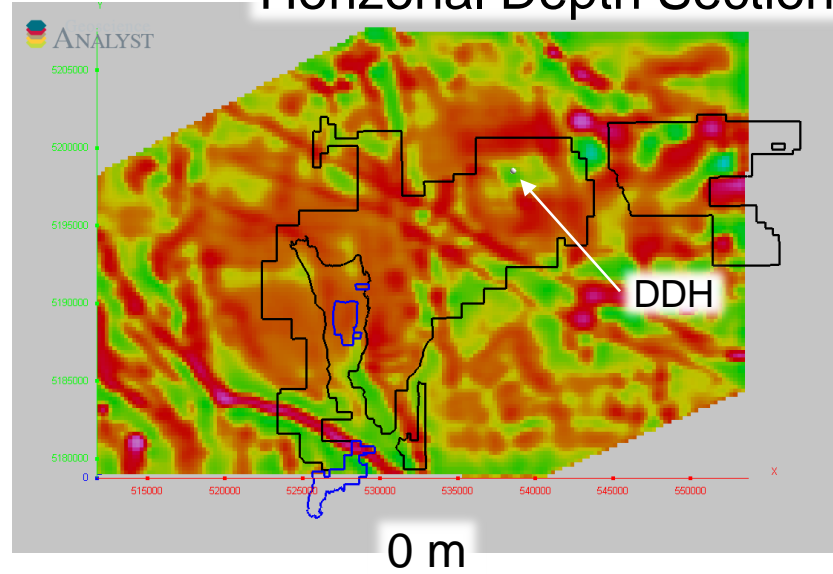
Falconbridge Drill Hole M-SH-02 INVENTUS

The Falconbridge drill hole M-SH-02 was drilled into the center of the anomaly

Our 3D inversion of the magnetic data illustrates the magnetic body occurs closer to surface around the edges of the anomaly

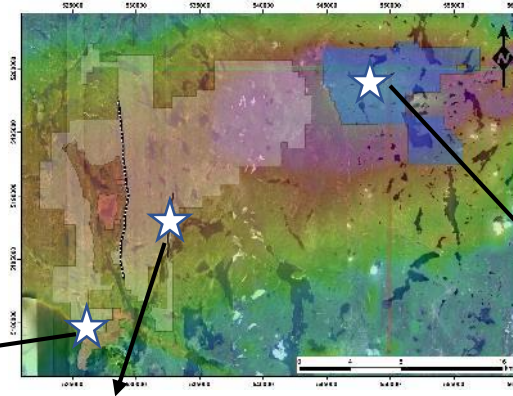
The Falconbridge drill hole therefore missed the anomaly

Horizontal Depth Sections of 3D Magnetic Inversion



New Offset Dykes

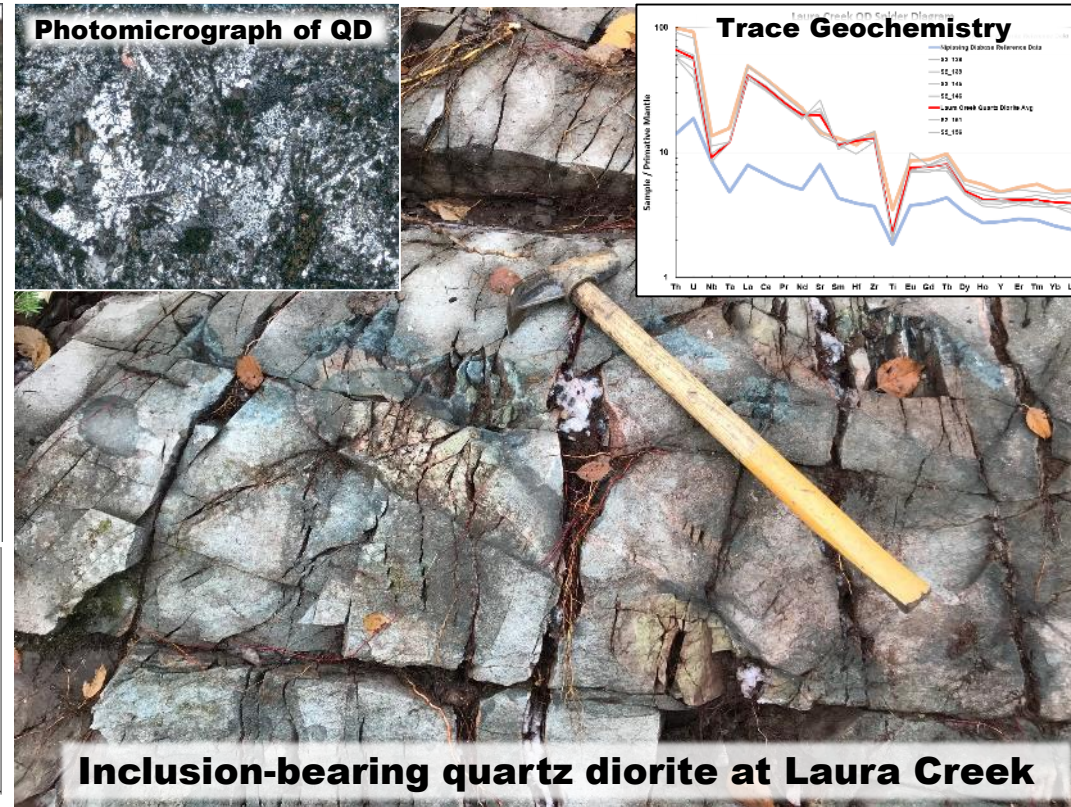
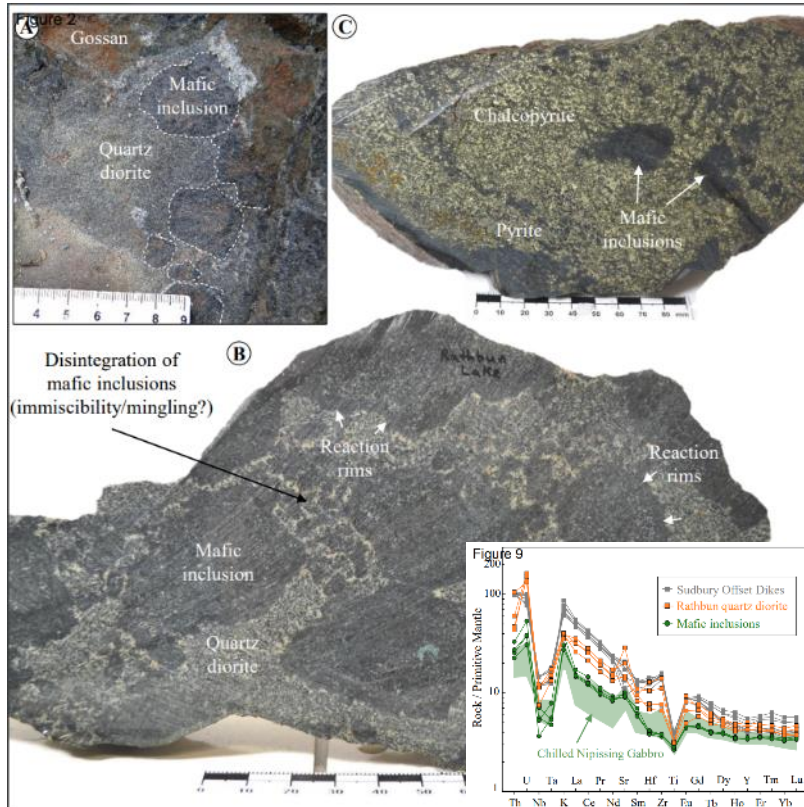
- **Sudbury Offset Dykes now found above the Temagami Anomaly**
- **Petrography and Trace geochemistry match Sudbury Offset Dykes**



Rathbun Offset Dyke

Laura Creek Offset Dyke

AT-14-01 Offset Dyke

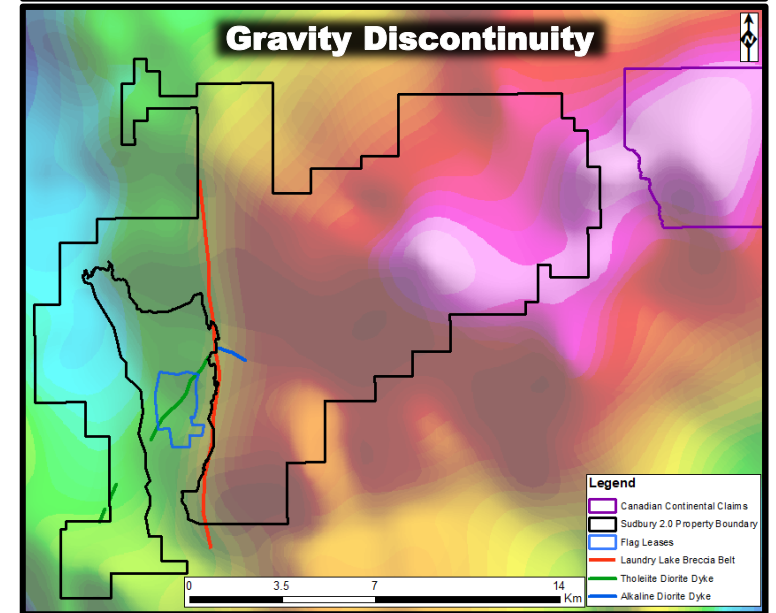
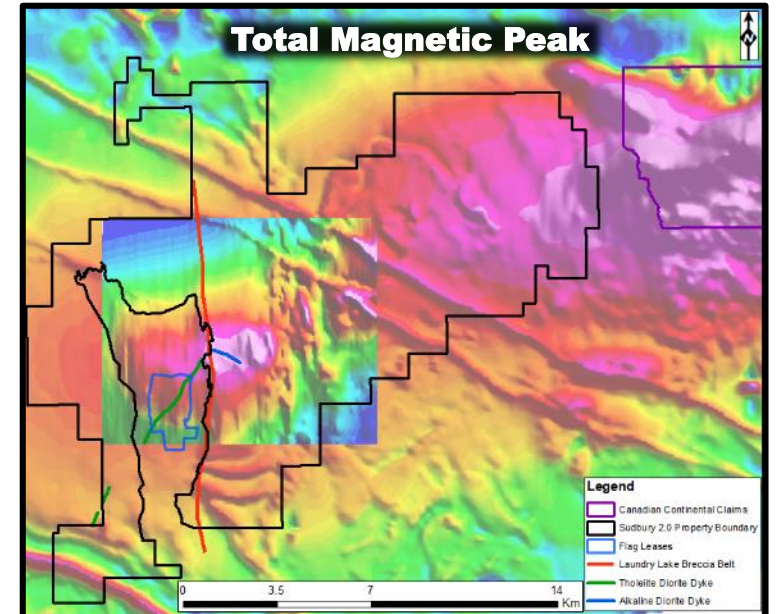
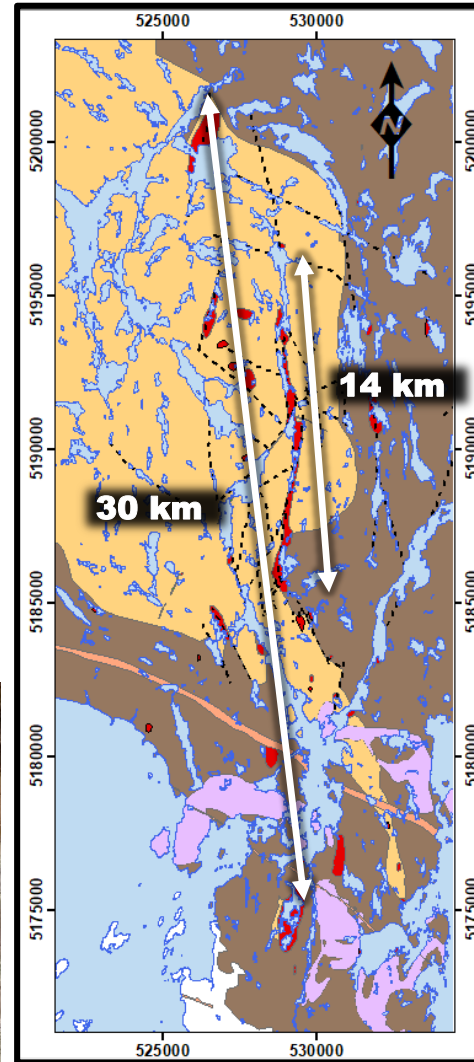
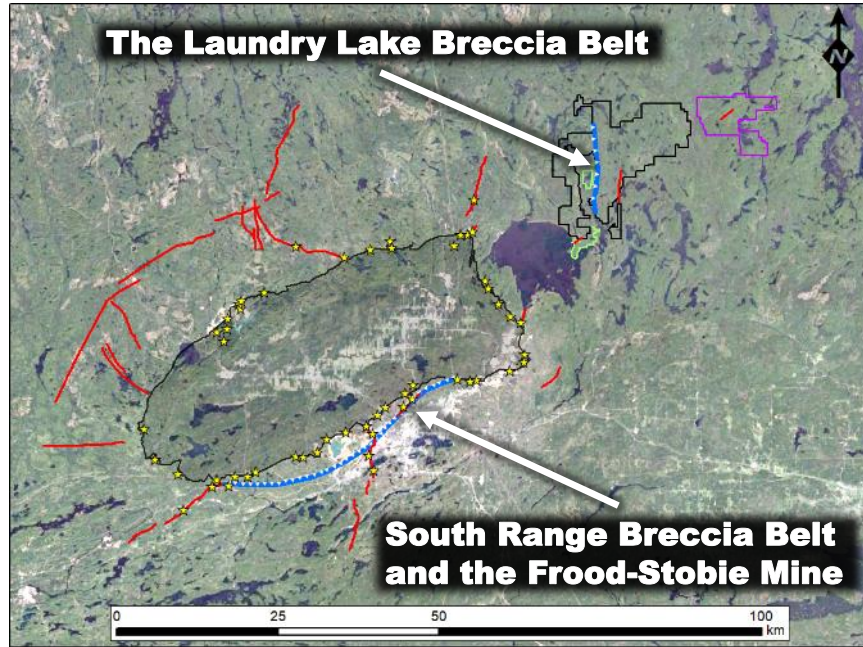


Kawohl, A., Frimmel, H.E., Bite, A., Whymark, W., Debaille, V., 2019. **Very Distant Sudbury Impact Dykes Revealed by Drilling the Temagami Geophysical Anomaly.**



New Breccia Belt

INVENTUS



Heterolithic Sudbury breccia with exotic mafic inclusions

Flow banded matrix



Hydrothermal Breccia Source

The Canadian Mineralogist
Vol. 42, pp. 1541-1562 (2004)

1541

THE ROLE OF SALINE FLUIDS BASE-METAL AND GOLD MINERALIZATION AT THE COBALT HILL PROSPECT NORTHEAST OF THE SUDBURY IGNEOUS COMPLEX, ONTARIO: A FLUID-INCLUSION AND MINERALOGICAL STUDY

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ABSTRACT

Pyrite-rich quartz veins that cut Huronian sediments at Cobalt Hill, Macklecan Township, Ontario, ca. 20 km northeast of the Sudbury Igneous Complex (SIC), crystallized from saline hydrothermal fluids. The coarse-grained pyrite in the quartz veins contains minute inclusions of millerite, gersdorffite, pentlandite, chalcocite, pyrrhotite, coloradoite and gold, and primary fluid inclusions in the veins contain halite as a daughter mineral, and inclusions of pyrite, iron carbonate and micas. The primary fluid inclusions in the quartz veins have salinities of 26–46 equiv. wt% NaCl, an entrapment temperature close to 400°C, and pressure of ca. 1.3 kbar. The presence of chromium muscovite stringers in the quartz-pyrite veins suggests that the hydrothermal fluids were in contact with Cr-rich mafic or ultramafic rocks at some depth, whereas the variety of sulfide inclusions in pyrite suggests that the source rocks were enriched in base metals and possibly gold. The mobilization of base metals, Hg telluride and gold, and their subsequent precipitation in the quartz veins at Cobalt Hill, were facilitated by saline hydrothermal fluids that postdate the Sudbury Event. The fluids probably represent heated Canadian Shield brines mixed with hydrothermal fluids that crystallized the host quartz veins. The salinity and homogenization temperature of fluid inclusions in the veins are comparable to those of fluids that mobilized base-metal sulfides and possibly PGE in the South Range deposits, and base-metal sulfides in the North Range deposits of the SIC. The relative proximity of Cobalt Hill to the SIC, the ubiquitous presence of small Sudbury-type sulfide inclusions in pyrite in the Cobalt Hill quartz veins, the comparable salinity and homogenization temperature of fluid inclusions in these veins to those of metal-rich fluids of the SIC, and the presence of chromium muscovite, imply a spatial relationship of the veins to Sudbury-type base metals and to a Cr-rich mafic or ultramafic intrusion at depth.

Keywords: base metals, gold, saline fluids, fluid inclusions, Cobalt Hill prospect, Lake Wanapitei, Ontario.

SUMMARY

Les veines de quartz riches en pyrite qui recoupent les roches métasédimentaires d'âge huronien à Cobalt Hill, canton de Macklecan, en Ontario, environ 20 km au nord-est du complexe igné de Sudbury, a cristallisé à partir de fluides hydrothermaux à salinité élevée. La pyrite à granulométrie grossière dans ces veines contient d'infimes inclusions de millérite, gersdorffite, pentlandite, chalcocoprite, chalcocite, pyrrhotite, coloradoite et or, et des inclusions fluides primaires contenant la halite précipitée à partir du fluide piégé, et des inclusions accidentelles de pyrite, carbonate de fer et de mica. Les inclusions fluides primaires ont une salinité comprise entre 26 et 46% NaCl (ou équivalents, en poids), une température de piégeage voisine de 400°C, et une pression d'environ 1,3 kbar. La présence de muscovite chromifère en lambeaux dans les veines de quartz-pyrite fait penser que la phase fluide est entrée en contact avec des roches mafiques ou ultramafiques riches en Cr à profondeur. Aussi, la variété d'inclusions de sulfures dans la pyrite indique que les roches à la source étaient enrichies en métaux de base, et peut-être en or. La mobilisation des métaux de base, du tellure de mercure, et de l'or, et leur précipitation par la suite dans des veines de quartz, ont été facilitées par les fluides hydrothermaux à salinité élevée postérieurs à l'événement d'impact à Sudbury. Ces fluides représenteraient des saumures chauffées du Bouclier Canadien mélangées aux fluides desquels ont cristallisé les veines de quartz. Leur salinité et les températures de leur homogénéisation sont comparables à celles des fluides qui ont mobilisé les sulfures de métaux de base et les éléments du groupe du platine dans les gisements du flanc sud, et les métaux de base du flanc nord, du complexe de Sudbury. La proximité de Cobalt Hill à ce complexe, la présence ubiquiste de petites inclusions de sulfures de type Sudbury dans la pyrite des veines de quartz à Cobalt Hill, la salinité et les températures d'homogénéisation comparables des inclusions fluides à celles du complexe de Sudbury, et la présence de muscovite chromifère supposent une relation spatiale des veines aux accumulations de métaux de base de type Sudbury et à des roches mafiques ou ultramafiques chromifères à profondeur. (Traduit par la Rédaction)

Mots-clés: métaux de base, or, fluides à salinité élevée, inclusions fluides, indice de Cobalt Hill, Lac Wanapitei, Ontario.

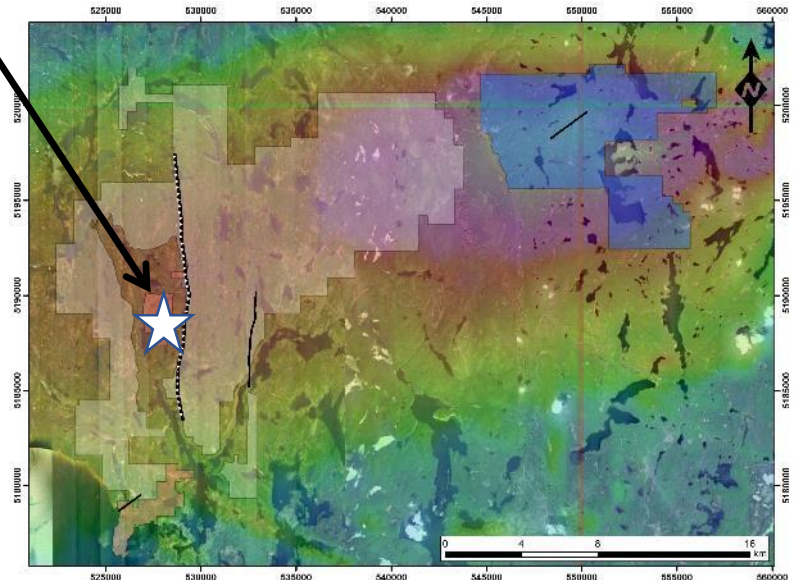
³ E-mail address: eschandl@consultgeo.com

Scientific paper by Eva Schandl in 2004 suggested a magmatic source and possible Sudbury origin for the mineralization at Cobalt Hill

“The relative proximity of Cobalt Hill to the SIC, the ubiquitous presence of small Sudbury-type sulfide inclusions in pyrite in the Cobalt Hill quartz veins, the comparable salinity and homogenization temperature of fluid inclusions in these veins to those of metal-rich fluids of the SIC, and the presence of chromium muscovite (fuchsite), imply a spatial relationship of the veins to Sudbury-type base metals and to a Cr-rich mafic or ultramafic intrusion at depth.”

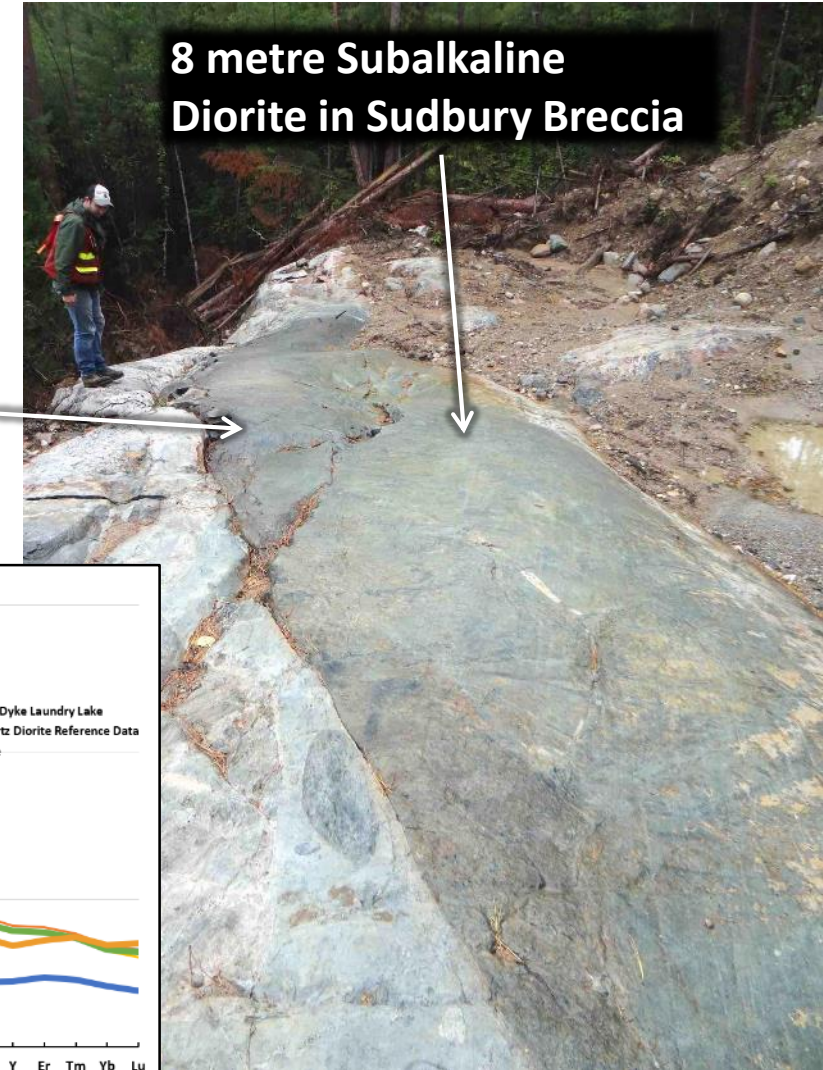
Cobalt Hill Hydrothermal Au-Co-Ni +/- Cu, PGE Mineralization

Albitized pyritic breccia with Au-Co-Ni mineralization from Cobalt Hill

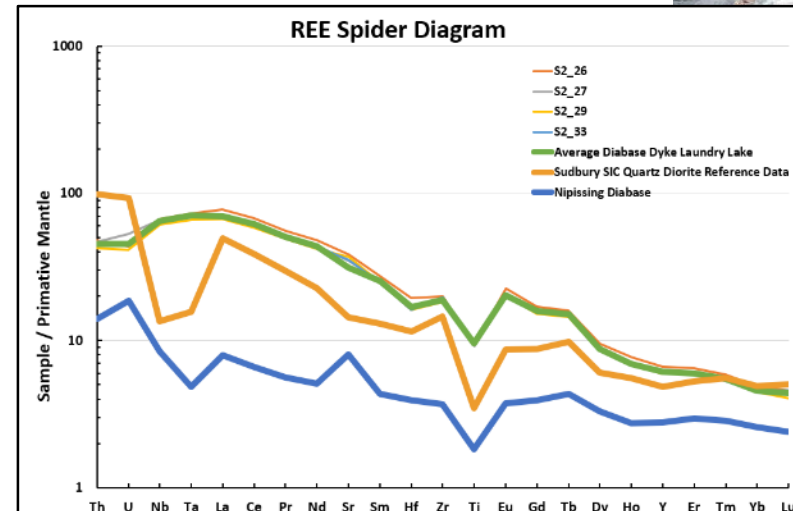
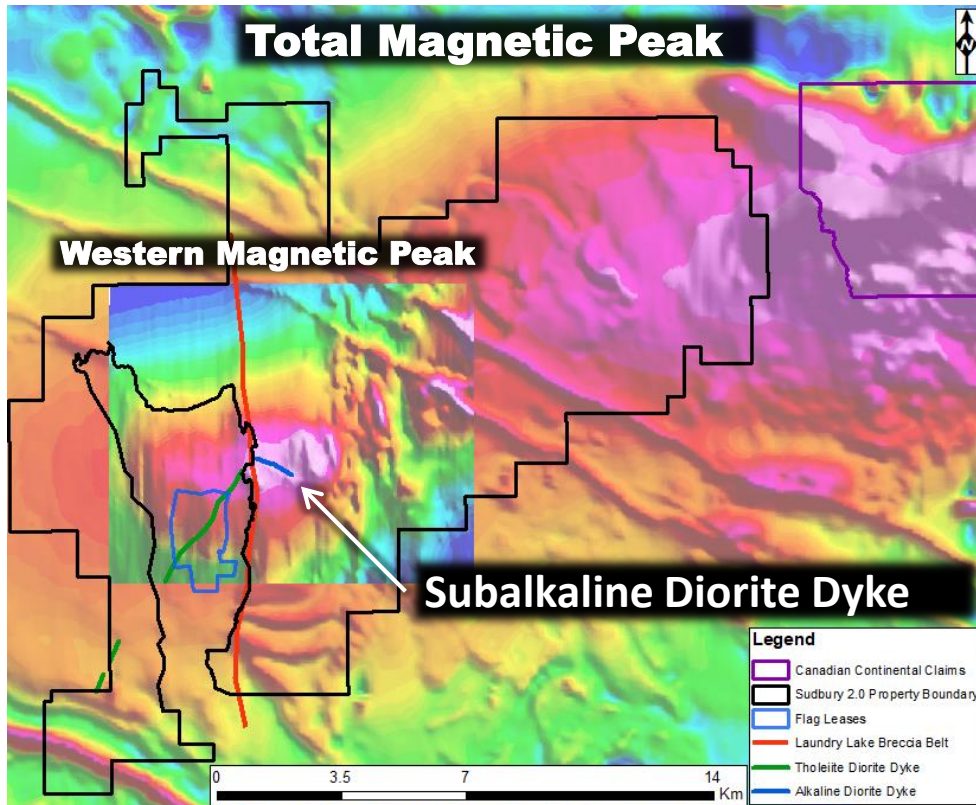


Temagami Anomaly Source?

- **Subalkaline Diorite Dyke**
- **Occurs as clasts in Sudbury Breccia**
- **Discovered on the western peak of the Temagami Anomaly**
- **Relative age of 2.2 (post Huronian) to 1.85 Ga (pre-Sudbury)**
- **Isotopic age of 1.9 Ga**
- **Enriched in REE**
- **Fractionated melt**



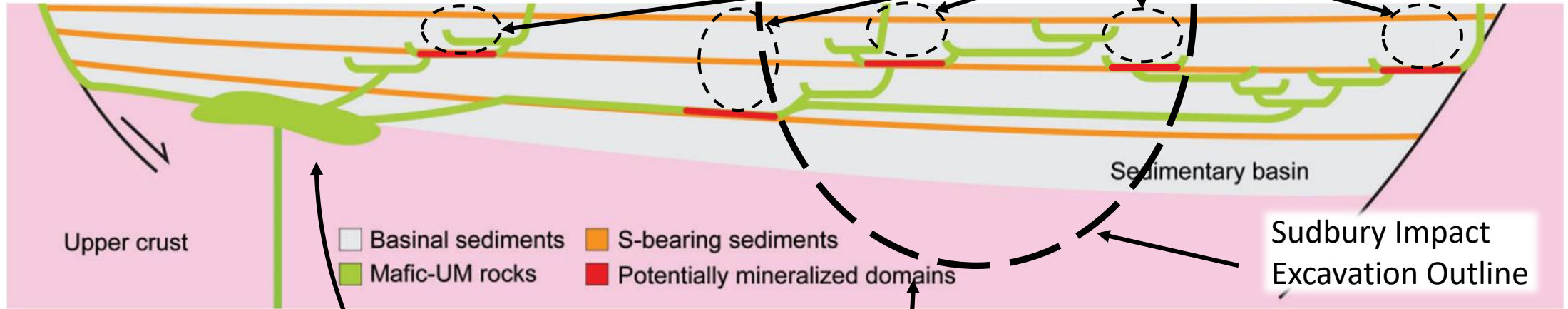
Possible Surface expression of the Temagami Anomaly?



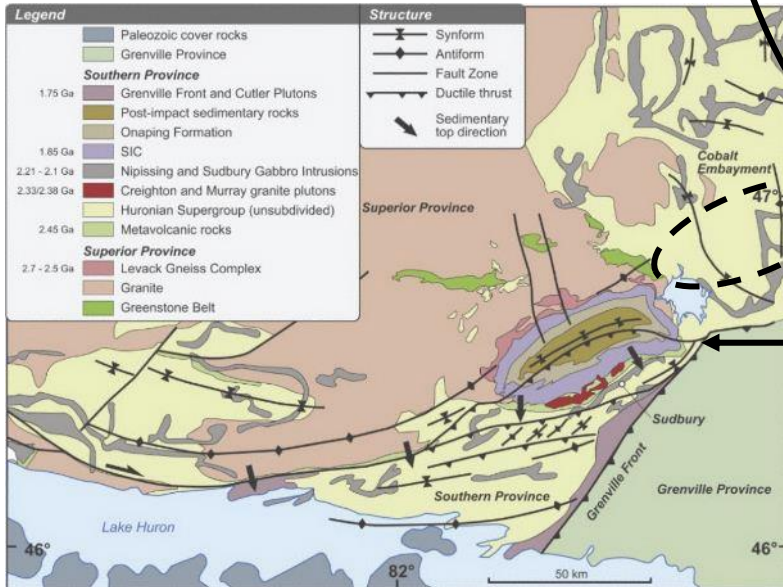
The Temagami Anomaly

Is the Temagami Anomaly a Paleoproterozoic Intrusion related to the Circum-Superior LIP?

Hydrothermal Au-Cu +/- Co, Ni, PGE



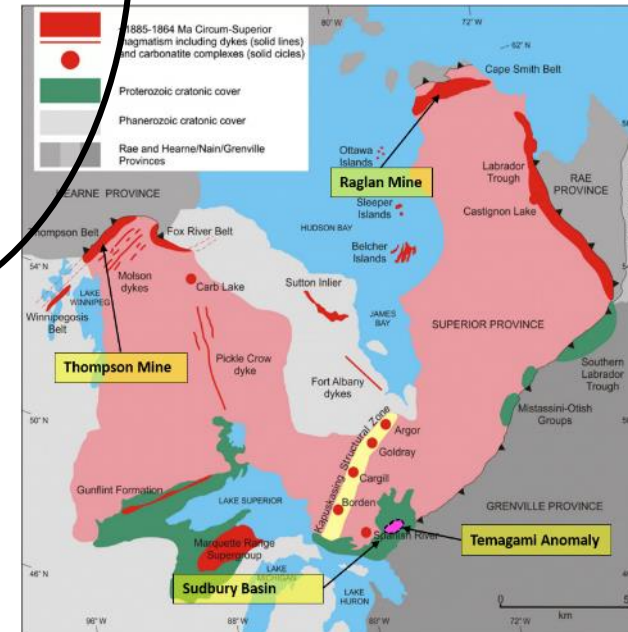
Modified from Lesher, 2019



Modified from Lightfoot, 2017

Temagami Anomaly

Sudbury Basin



Circum-Superior Large Igneous Province

Modified from Minifie et al., 2013

Ore Deposit Targets

Inventus believes three styles of mineralization occur on the Sudbury 2.0 Property:

1. Sudbury-type magmatic Ni-Cu-PGE-Co-Au mineralization hosted within offset dykes radiating from the Sudbury Igneous Complex
2. Intrusion related magmatic mineralization associated with the Temagami Anomaly
3. Hydrothermal breccia hosted Au-Cu +/- Co-Ni-PGE mineralization associated with the Temagami Anomaly

The Temagami Magnetic/Gravity/Conductive Anomaly may represent a large mineralized intrusive that has caused the extensive hydrothermal alteration and mineralization in the overlying rocks

The Temagami Anomaly could be the source for the mineralization that was redistributed during the Sudbury impact into the current ore deposits around Sudbury

Advancing the Sudbury 2.0 Project

First Sudbury offset dyke recognized over the Temagami Anomaly

2017

Inventus stakes Sudbury 2.0 Property and begins geological prospecting

2018

The Laundry Lake breccia belt discovered

Multiple occurrences of mineralized hydrothermal breccia discovered

2019

Laura Creek offset dyke discovered

Rathbun high-grade PGE showing recognized as an offset dyke

Targeted geophysics and drilling *Winter 2020

2020

Acquisition of Flag Resources Wolf Lake/Cobalt Hill and Rathbun Properties

Advance surface and shallow mineralized occurrences

Geophysical modelling of the Temagami magnetic/gravity/conductive anomaly for drill targeting

Sudbury and Sudbury 2.0

INVENTUS

Aerial Google Earth view looking down towards northwest



A New Exploration Frontier in the Sudbury Mining Camp