



Geoscience BC
New Research Series
Central Interior Copper-Gold Research (CICGR)

Prince George | Dec 5, 2019

Brady Clift, Wayne Jackaman & Richard Truman

Who we are



Non-profit organization

Generate and share high quality,
unbiased earth science research
and data

Collaboration between
governments, communities,
Indigenous groups, resource
sectors, academia

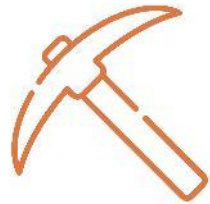
... improves our collective level of geoscience knowledge

... informs responsible natural resource decisions

.... catalyzes socio-economic opportunities

... stimulates innovation and geoscience technologies

Who we are



Minerals



Energy



Water

Identifying New Natural Resource Opportunities

Understanding Water

Advancing Science & Innovative Geoscience Technologies

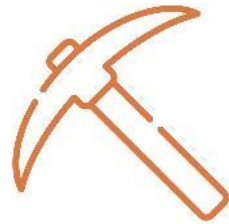
Facilitating Responsible Natural Resource Development

Enabling Clean Energy

Governance, Management
& Finance

Public Access &
Data Management

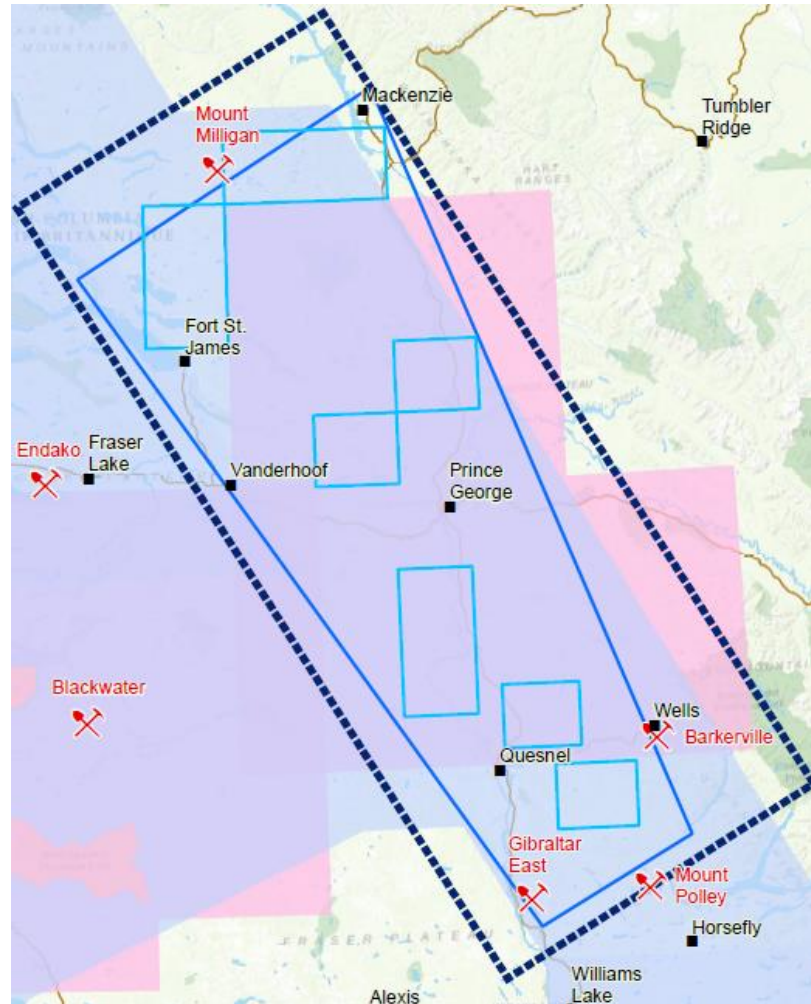
External Relations
& Communications



Minerals

Central Interior Copper-Gold Research (CICGR)

CICGR: What is it?



The question: What is beneath the till between Mount Milligan and Mount Polley?

'Quesnel terrane':

- Runs northwest-southeast across the province.
- Significant copper-gold deposits.
- 'Gap' between Mount Milligan and Gibraltar / Mount Polley.

CICGR: What is it?



How CICGR answers the question

- Major series of public earth science research projects
 - Strong support from
 - Geoscience BC Technical Advisory Committee and Board
 - Communities (NCLGA) and minerals sector (AME and MABC)
 - Coordination with government: BC Geological Survey
 - \$2.9 million committed to date, 50,700 km² 'area of interest'
- Improved understanding of geology
 - Focus mineral exploration and investment
 - More informed natural resource decisions

CICGR: What to Expect

For every \$1
spent on
Geoscience
BC minerals
research, there
is \$6.60
invested in
mineral
exploration*

Example: Search Phase III Project

- 2017 geophysical survey (by helicopter)
- 9,600 km² - Kemess Mine to northwest of Mackenzie
- Included and considered industry, First Nations & community input through meetings and workshops
- All data made public; announced at AME's Roundup 2018 conference
- New staking: 64 new or expanded minerals tenures acquired in six months
- New mineral exploration programs started in 2018; industry agreements with First Nations

*since 2005 to September 2018. Assessment Report Index System (ARIS) reports mentioning Geoscience BC: \$211.9 million. Geoscience BC minerals research: \$32.1 million

CICGR Development So Far



Throughout 2018

- Volunteer Geoscience BC Minerals Technical Advisory Committee (TAC)
- discusses potential regional projects; identifies need for new data in CICGR area

July to October 2018

- Request for proposals for new research projects

December 2018

- Minerals TAC recommends projects to Geoscience BC Board
- Geoscience BC Board approves \$2.9 million funding for CICGR projects

Throughout 2019

- Planning and details for initial projects. Some initial work done.
- **December 5, 2019** Initial research projects announced; open house

Two initial projects

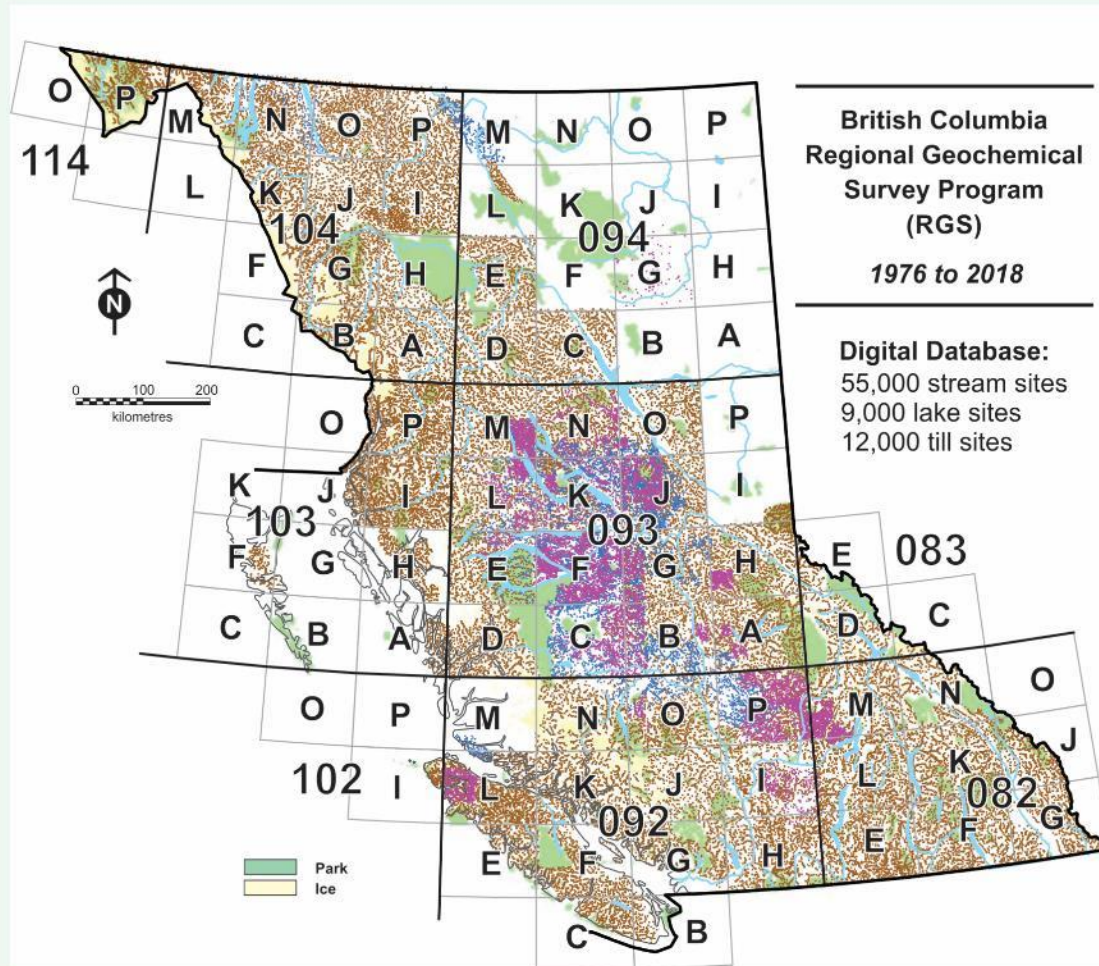
1. Surficial Exploration Project

Wayne Jackaman and Dave Sacco

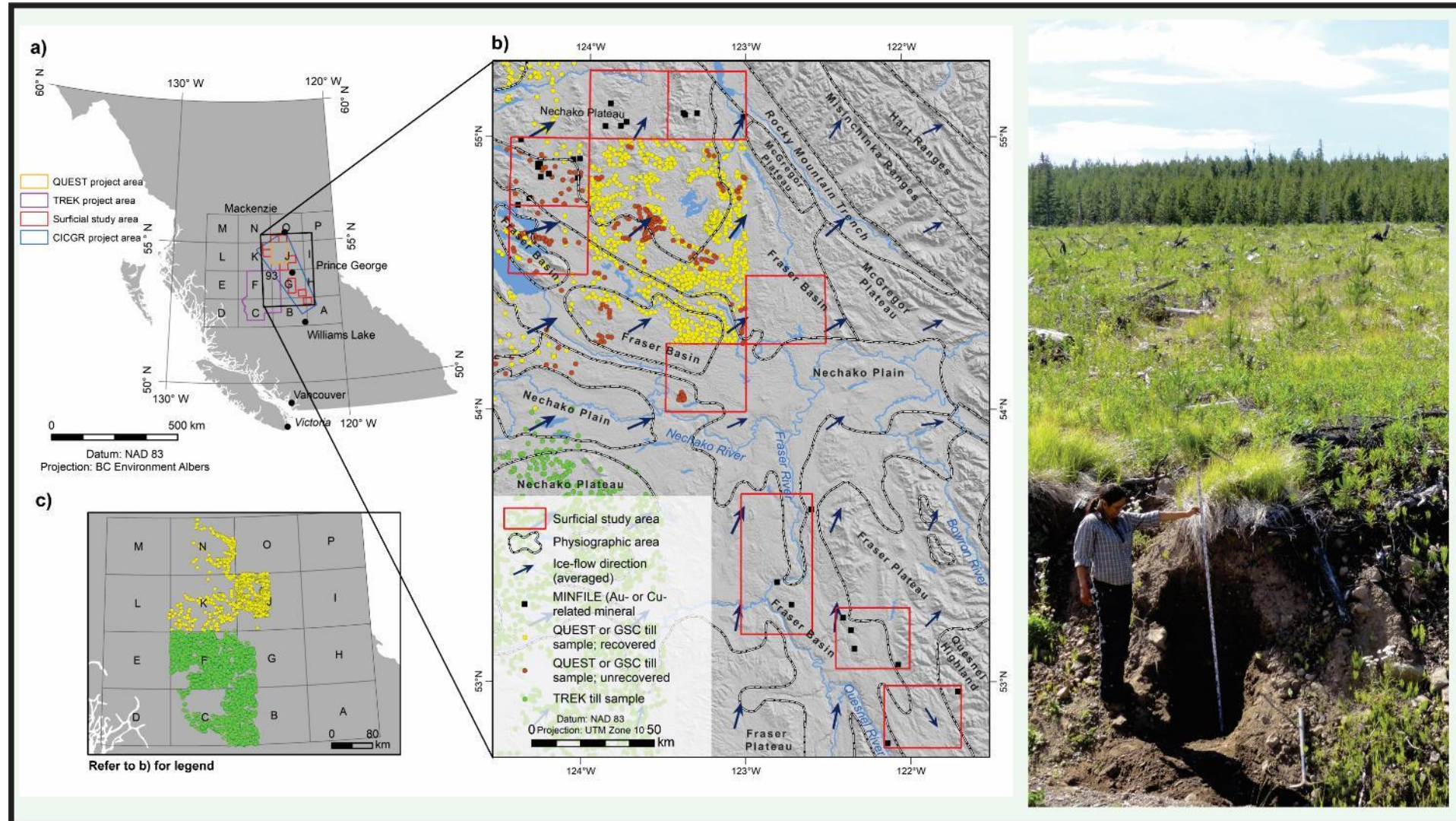
2. Identification of New Porphyry Potential Under Cover in Central BC

Diane Mitchinson, UBC

Background



GBC surface exploration project



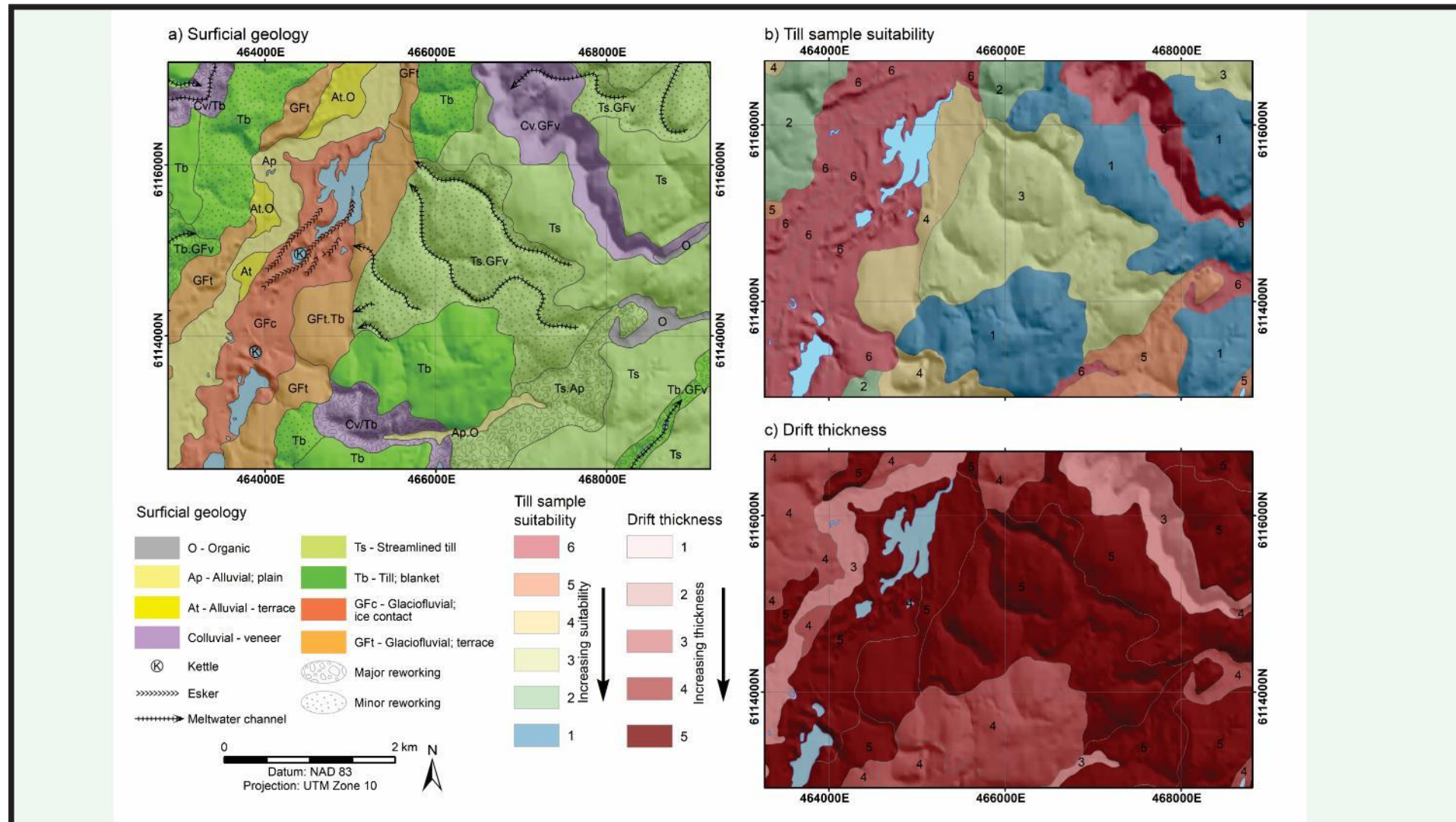
Forging opportunities through earth science partnerships

Sample reanalysis

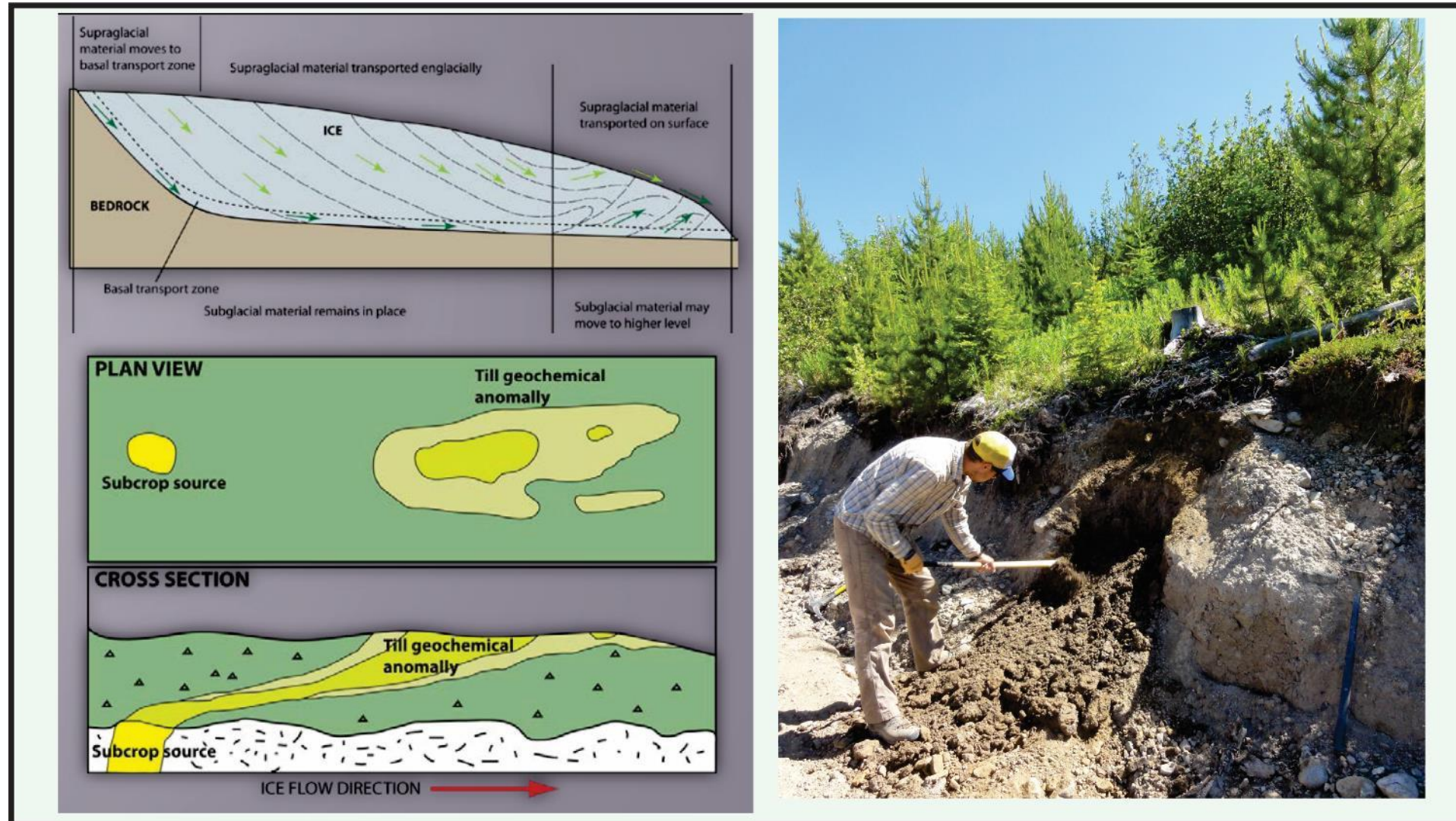


Forging opportunities through earth science partnerships

Surficial geology mapping



Sub-glacial till survey



Forging opportunities through earth science partnerships

Results

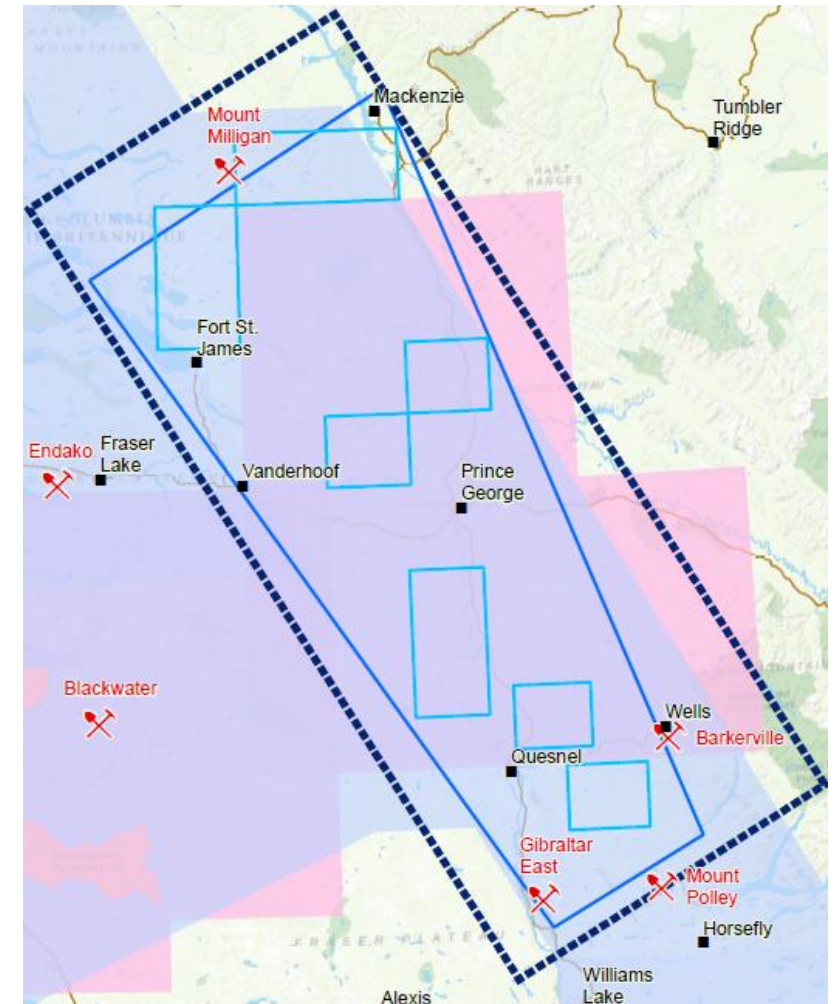


Identification of New Porphyry Potential Under Cover



Integrate all existing public geophysical data (e.g. Geoscience BC 2007 QUEST survey) to:

- Create a catalogue of physical rock-properties from 200 regional samples/data (magnetic susceptibility, remanence, density, resistivity, chargeability)
- Identify, map and model prospective copper-gold deposits and related rocks
- Generate a more robust interpretation of geology
- Rank interpreted buried porphyries



CICGR: What Next?

2020

- Initial projects really get going
- Information available at Roundup conference, Vancouver (Jan 20-23)
- Update meetings at Natural Resource Forum (Jan 30)

2021

- Results from initial projects published; inform next steps
- Drilling program planned
- Potential additional projects



Geoscience BC

Thank You

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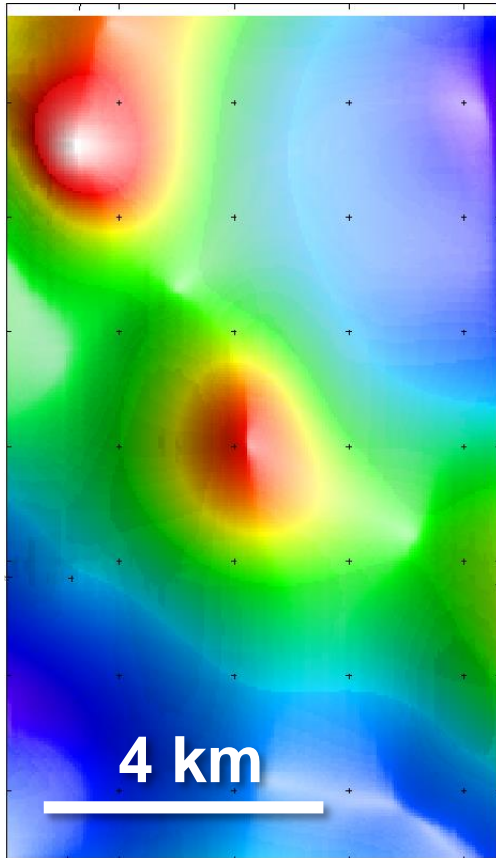
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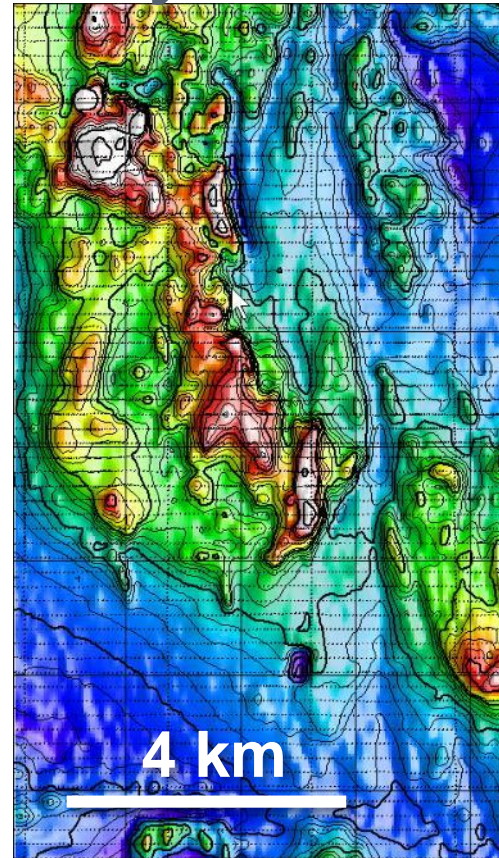
truman@geosciencebc.com

Why New Data?

1970s



Today



QUEST-Northwest

Magnetic data collected in the 1970s vs modern data

Makes more effective targeting possible for:

- Mineral exploration
- Improved understanding where mineral exploration interest may be
- Layering with information for decisions