

The logo features the text 'PDAC S-IMEW' in orange. 'PDAC' is in a smaller font above 'S-IMEW'. Below the text is the full name 'Student-Industry Mineral Exploration Workshop' in black. The text is surrounded by four abstract geometric shapes: a grey triangle pointing left, a black triangle pointing down, an orange polygon pointing right, and a grey triangle pointing down.

**PDAC**  
**S-IMEW**

Student-Industry Mineral Exploration Workshop



ANNIVERSARY

# S-IMEW 2024 Students



François Dubois-Roy  
Osisko Mining



Jonathan Koulouras  
Acadia University



Ingrid Helmke  
Dalhousie University



Amelia GreenJohnson  
Fleming College



Mia Morson  
Lakehead University



Anyk Mainville  
Laurentian University



Amielle Lajole  
Laval University



Gemma Andersen Jones  
Memorial University of Newfoundland

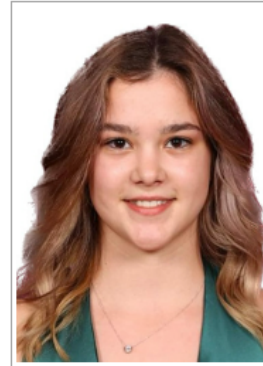
# S-IMEW 2024 Students



Emma Burnett  
Mount Royal University



Jaclyn D'Ascanio  
Queen's University



Gracie Avery  
Saint Mary's University



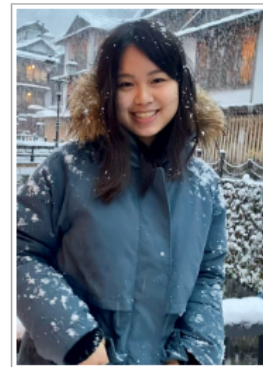
Mareen Bischof  
Simon Fraser University



Irina Malakhova  
University of Alberta



Ishtpreet Kaur  
University of British Columbia

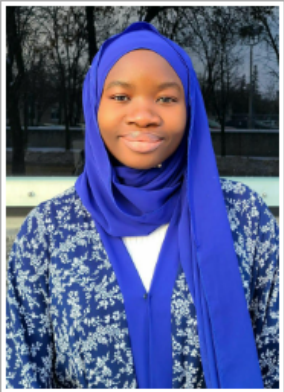


See Ching Kwong  
University of British Columbia Okanagan



Elisha Williams Whelan  
University of Calgary

# S-IMEW 2024 Students



Djelika Sogoba  
University of Manitoba



Elena Galbané  
University of New Brunswick



Jade Minty  
University of Ottawa



Louis-Phillipe Beaulieu  
University of Regina



Madison DeCorby  
University of Saskatchewan



Matthew Dunkerley  
University of Toronto



Paige Murray  
University of Victoria



Asia Maheu  
University of Waterloo



Aiden Kilcommons  
Vancouver Island University



Sarah Mills  
Western University

## Wednesday, May 1 – Arrival in Sudbury



S-IMEW 2024 Students touch down in Sudbury



Arriving at College Boreal

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Thursday, May 2 – Sudbury Basin Tour



Shirley Peloquin (OGS) explaining the geology of the Sudbury Basin



## Thursday, May 2 – Sudbury Basin Tour



Arrival at Discovery Site of Sudbury nickel deposits



S-IMEW 2024 on Discovery Outcrop

## Thursday, May 2 – Sudbury Basin Tour



Shirley Peloquin showing Chelmsford Fm sediments of Whitewater Group in the centre of the Basin



Louis-Phillipe (URegina) chasing cross-bedding

## Thursday, May 2 – Sudbury Basin Tour



François Dubois-Roy (Osisko Mining) contemplating the fault



Grant Mourre (SPC Nickel Corp) arm waving



“what a dump” of Contact Sublayer (Norite Breccia)



Looking at the face

# Diamond Sponsor



**AGNICO EAGLE**

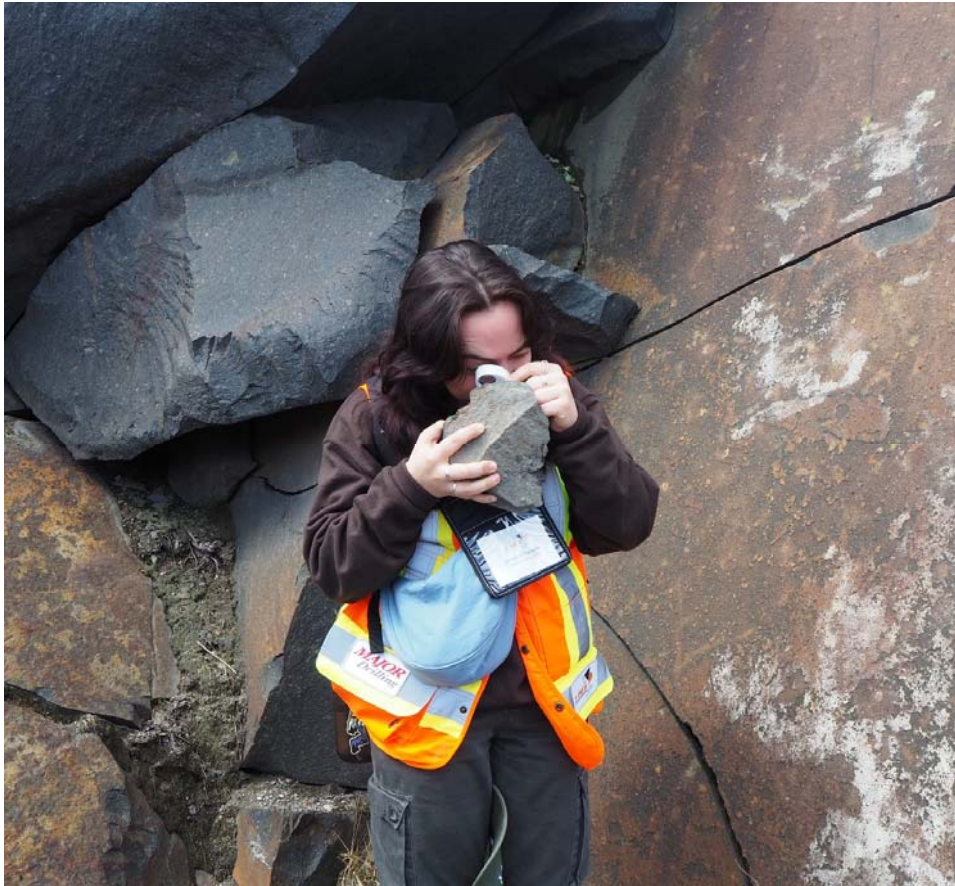
## Thursday, May 2 – Sudbury Basin Tour



Across the contact into the footwall Levack Gneiss



Use your hand lens!



Jaclyn D'Ascanio (Queen'sU) taking a closer look at Sandcherry Member of the Onaping Formation,



A "fall-back breccia" from the settling of the impact debris

Thursday, May 2 – Sudbury Basin Tour



Jade, Ingrid, and Mia



So smooth



Thursday, May 2 – Sudbury Basin Tour



Lunch at Onaping Falls

Thursday, May 2 – Sudbury Basin Tour



Irina (UofA) Jade (UOttawa) & Mia (LakeheadU) with some massive sulphides at Copper Cliff Offset Dyke



Jonathan (AcadiaU) about to shot put

Thursday, May 2 – Sudbury Basin Tour



Anyk (LaurentianU) & Aiden (VIU) at Vale's Copper Cliff Offset Dyke



Sulphides in Felix Lee's wake

Thursday, May 2 – Sudbury Basin Tour



S-IMEW 2024 at Copper Cliff – the end of a great Sudbury Basin Tour

# Silver Sponsors

IAMGOLD<sup>®</sup>  
CORPORATION

***MAJOR***  
***Drilling***

## Friday, May 3 – Regional Mapping



S-IMEW 2024 about to start regional mapping with the OGS at Laurentian U



Spotting Shatter Cones!

## Friday, May 3 – Regional Mapping



Ingrid (DalhousieU) with a Mesa



Ishtpreet (UBC) loves GPS



## Friday, May 3 – Regional Mapping



Past PDAC President Felix Lee showing the way



Eyes down on the Sudbury breccia

## Friday, May 3 – Regional Mapping



What's that rock over there? Go find out – regional mapping

## Friday, May 3 – Regional Mapping



Amielle (Laval U) taking the plunge



Aggie (UBCO), Amielle (LavalU) & Asia (UWaterloo) orienting themselves with Lianna Vice (OGS)

# Gold Sponsor

**FORACO**

Friday, May 3 – Welcome Reception



S-IMEW 2024 at Dynamic Earth's Big Nickel for the Welcome Reception

## Friday, May 3 – Welcome Reception



Gracie, Ingrid & Gemma – cheers!



Jonathan (AcadiaU), Irina (UofA) & Mia (LakeheadU)  
at the mineral wall

Friday, May 3 – Welcome Reception



Anyk, Mia, Jade, Elisha, Gemma, Amielle & Gracie

## Friday, May 3 – Welcome Reception



Sarah (WesternU) & Amelia (Fleming College)  
networking



More networking



## Friday, May 3 – Welcome Reception



Making new connections



Making new connections

# Friday, May 3 – Welcome Reception



Alex Christopher, PDAC Past President had great advice in his opening keynote presentation

Thanks for an insightful talk and great advice Alex!

## Friday, May 3 – Welcome Reception



Karen Rees, PDAC 1<sup>st</sup> VP gives a great big thank you to Felix Lee, for 15 years as S-IMEW Co-Chair.



Ride home through the clouds

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SGS

## Saturday, May 4 – Exploration Mapping



S-IMEW 2024 ready to explore NorthX Nickel's Parkin project at a larger scale

## Saturday, May 4 – Exploration Mapping



Standing on the mineralized Parkin Offset Dyke



Preparing to break out into small groups

## Saturday, May 4 – Exploration Mapping



Raymond Goldie, PDAC President, takes a closer look



“Alright, what are we on?”

## Saturday, May 4 – Exploration Mapping



Stay on target...



Madison (UofS) happily crossing the swamp



## Saturday, May 4 – Exploration Mapping



No moss to clear on this one



Is it outcrop or is it not?

## Saturday, May 4 – Exploration Mapping



Lunch after the swamp



The end of an exhilarating field day

## Saturday, May 4 – Exploration Mapping



Jade, Sarah, Matthew & Elisha putting their maps together



Louis-Philippe, Elena & Jonathon with Phil Trudel (Glencore)

## Saturday, May 4 – Exploration Mapping



Showing off their map



That *don't* look at our map smile

## Saturday, May 4 – Exploration Mapping



Cam Green (Evolution Mining) provides guidance on the map



Is it mylar or vellum?

## Saturday, May 4 – Exploration Mapping



François, Mia, Gracie and Emma are pretty happy with their map



If we all do a map it's faster

# In-Kind Contributors



Beach Meadows  
Resources

BWB Consulting Services



ExMin



GLENCORE

Gneiss to Know

## Sunday, May 5 – Exploration Industry – Key Drivers



Michael Doggett (Beach Meadow Resources) talks about the “rocky road” to an economic mine



## Sunday, May 5 – Exploration Industry – Key Drivers



Mineralogy 101



“Why isn’t my magnet working?”

## Sunday, May 5 – Exploration Industry – Key Drivers



Elena (UNB) & Mia (Lakehead U) with cuprite which has the most copper



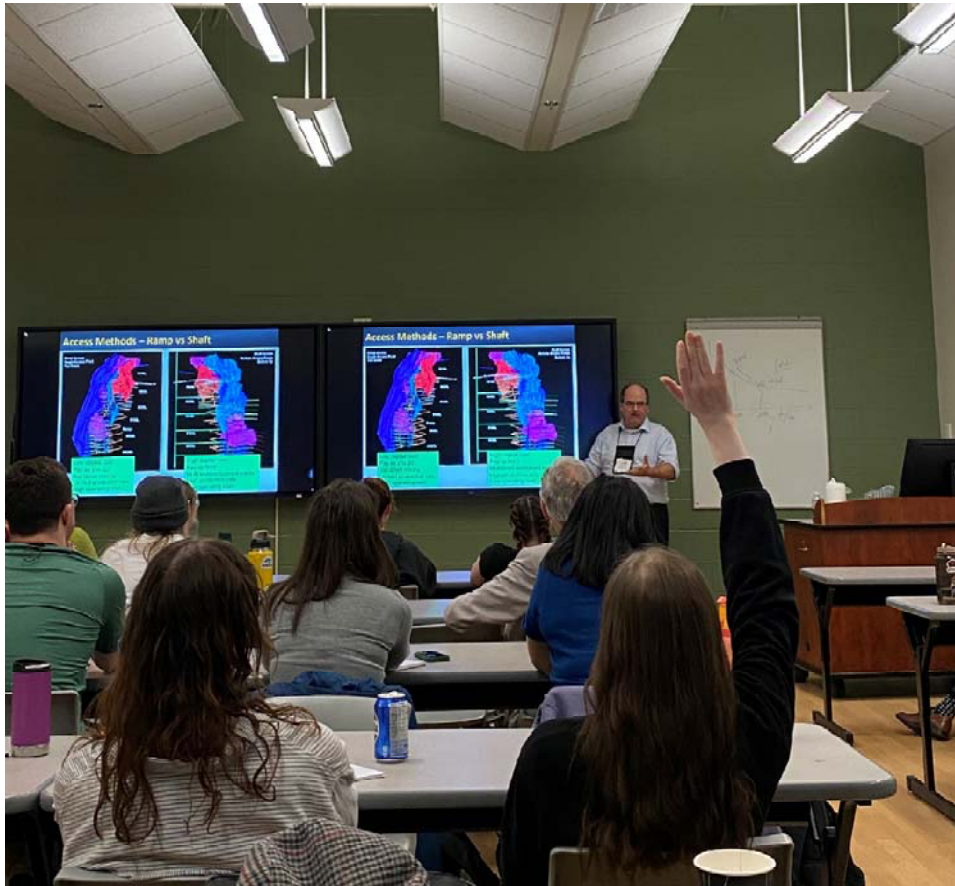
Paige (UVictoria) & Louis-Philippe (URegina) look at some green nickel laterite

## Sunday, May 5 – Exploration Industry – Key Drivers



“Photosynthesizing” on lunch

## Sunday, May 5 – Exploration Industry – Key Drivers



*What's mine is yours* with Brian Buss, BWB Consulting



Matthew asks an “incredible question”

# In-Kind Contributors



## Monday, May 6 - Geophysics



S-IMEW 2024 heading to a Geophysics demos with Vale

## Monday, May 6 - Geophysics



Irina (UofA) on Gravity with Court (Vale)



Asia (UWaterloo) comprehending gravity

## Monday, May 6 - Geophysics



IP is ImPressive stuff with Pam Coles, Abitibi Geophysics



Pam & Cherif Diallo (Abitibi Geophysics) going through the steps



## Monday, May 6 - Geophysics



Louis-Philippe (UofR), Jaclyn (Queen'sU), Gracie (SMU), and Djelika (UofM) ponder [out of frame]

Monday, May 6 - Geophysics



Paige (UVictoria) EMbracing EM



Elena (UNB) EMpowered

## Monday, May 6 - Geophysics



EMgage



Sean Dickie and Krystal Kant, Vale

## Monday, May 6 - Geophysics



Krystal explains EM to top young geoscientists

# In-Kind Contributors



## Tuesday May 7 – Field Trip, Sudbury – Val-d’Or



The trusty vans!



First stop on the field trip – Algoma-type banded iron formation (BIF) at Temagami



Crouching on a Banded Iron Formation (BIF)



Clambering on BIF

Tuesday May 7 – Field Trip, Sudbury – Val-d’Or



Elisha (UofCalgary) needs more sample bags!



Paige (UVic) and Ishtpreet (UBC) love the BIF



Tuesday May 7 – Field Trip, Sudbury – Val-d’Or



Can't spell truth without Ruth – the Timiskaming graben overlook

Tuesday May 7 – Field Trip, Sudbury – Val-d’Or



All tuckered out

# Diamond Sponsor



ALAMOS GOLD INC.

Tuesday May 7 – Field Trip, Sudbury – Val-d’Or



Bonjour! S-IMEW 2024 has entered Quebec en route to Val-d’Or

Tuesday May 7 – Field Trip, Sudbury – Val-d’Or



A big THANK YOU to Jackie Koh and Glenn Mullan for an amazing dinner!



Amielle mixing noodles

Wednesday, May 8 – Regional Geology of Val-d'Or



Pierre Pilote explaining spinifex texture in komatiites



Beautiful komatiite flow



More furious notes

# Premier Sponsor





Wednesday, May 8 – Regional Geology of Val-d'Or



Finding the flow top



Ian Trinder, Willeson Metals, explaining the flow to Aggie (UBC-O)



Komatiites are so amazing!



Spinifex texture, 1200°C

Wednesday, May 8 – Regional Geology of Val-d'Or



A significant regional outcrop, one of the few places to see the Timiskaming-Cadillac metasedimentary contact



Looking at quartz veins



All the best stuff is on the ground

**Gold Sponsor**

**Teck**



Flat-lying quartz-tourmaline vein at Probe Gold's Novador Project – Pascalis trend – New Béliveau zone



FeAsS at Probe Gold's New Béliveau zone

## Wednesday, May 8 – Regional Geology of Val-d'Or



Marco Gagnon (Probe Gold) points out geological features on the New Béliveau zone outcrop



Dylan Jamison (O3 Mining) explains highly deformed Héva Fm volcanics at the Tex-Sol G outcrop

Wednesday, May 8 – Regional Geology of Val-d'Or



On the auriferous quartz-tourmaline vein outcrop at Probe Gold's New Béliveau zone



Thursday, May 9 – Eldorado Gold Lamaque Mine & Winsome/Wesdome Site Visits



Group A ready to go underground at the Lamaque Mine Triangle deposit

Thursday, May 9 – Eldorado Gold Lamaque Mine & Winsome/Wesdome Site Visits



On the way to the underground

# Diamond Sponsor



**AGNICO EAGLE**



Looking for VG



No shotcrete!



Waiting for a haul truck



Underground drill-visit

Thursday, May 9 – Eldorado Gold Lamaque Mine & Winsome/Wesdome Site Visits



EV charging station, 8T Li-battery

Thursday, May 9 – Eldorado Gold Lamaque Mine & Winsome/Wesdome Site Visits



Amelia (Fleming College), Sarah (WesternU) and Emma (MtRoyalU) looking at Winsome Resources' pegmatite core

Thursday, May 9 – Eldorado Gold Lamaque Mine & Winsome/Wesdome Site Visits



Antoine Fournier, Winsome Resources, explaining the geology of the Adina pegmatite deposit



Denys Vermette, Wesdome Mines, explains the geology and mineralization of the Wesdome properties!



Thursday, May 9 – Eldorado Gold Lamaque Mine & Winsome/Wesdome Site Visits



Elena (UNB) & Irina (UofA) found VG at Wesdome Mines' core shack!



Jade (UOttawa) & Ingrid (Dal) spot the gold



SO MUCH VG!



Thank you Wesdome for a great afternoon!



Exploring la Cite de l'Or!



So much history in Val-d'Or

# Diamond Sponsor



ALAMOS GOLD INC.

Thursday, May 9 – Eldorado Gold Lamaque Mine & Winsome/Wesdome Site Visits



BEEP BEEP!

Friday, May 10 – Agnico Eagle Goldex Mine Visit



Group B facing the face 1.4 km underground at Goldex

Friday, May 10 – Agnico Eagle Goldex Mine Visit



Exiting the cage!



Mareen on her way to the railveyor

Friday, May 10 – Agnico Eagle Goldex Mine Visit



Look at this rock



Look. At. It.





Maxime (Agnico Eagle) explains the railveyor system



Taking a look at the railveyor system

Friday, May 10 – Agnico Eagle Goldex Mine Visit



Group A on surface at Goldex

Friday, May 10 – Agnico Eagle Goldex Mine Visit



Pedro (Agnico Eagle) shows Group A the AI



Pierre Grondin LeBlanc (AE & S-IMEW2012 Alum)  
talking about the core scanner

Friday, May 10 – Agnico Eagle Goldex Mine Visit



Hyper-spectral-x-ray-lidar-watergun-super-trailer

Friday, May 10 – Agnico Eagle Goldex Mine Visit



Thanks for setting up our Val d'Or trip, Michael Rosatelli (Val-d'Or Mining Corp)!



Thanks for the Goldex mine tour, Jean-François!

Friday, May 10 – Back in Sudbury



Aurora at Boréal[is] in Sudbury!

Friday, May 10 – Back in Sudbury



Divine inspiration

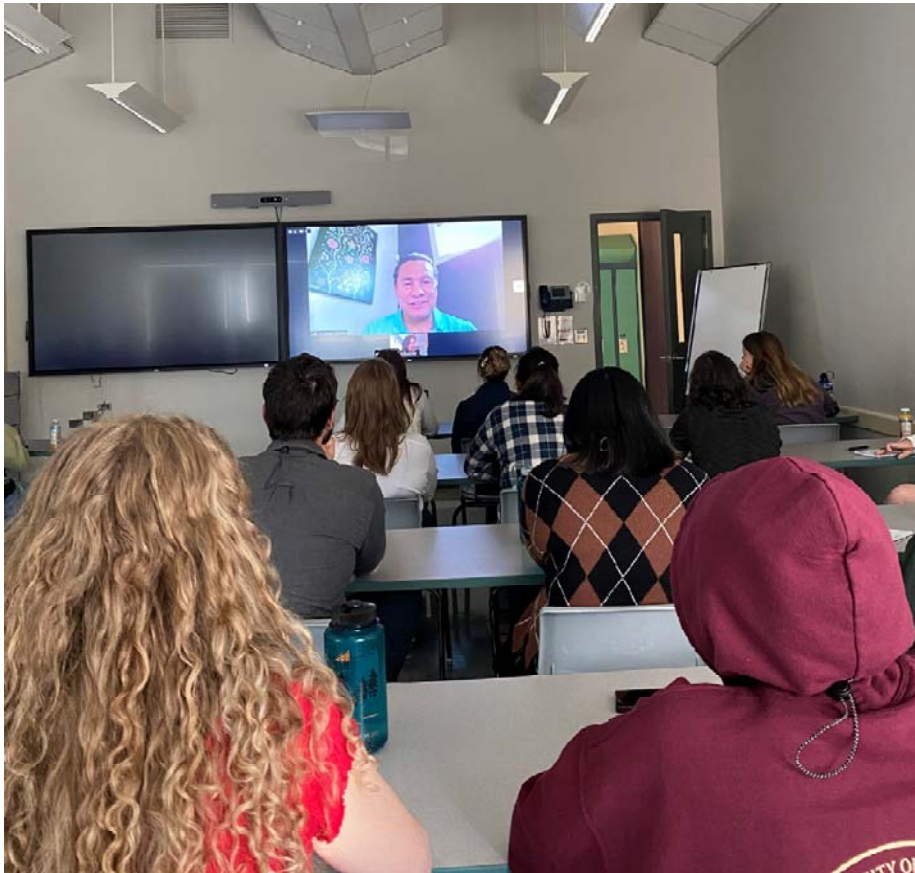
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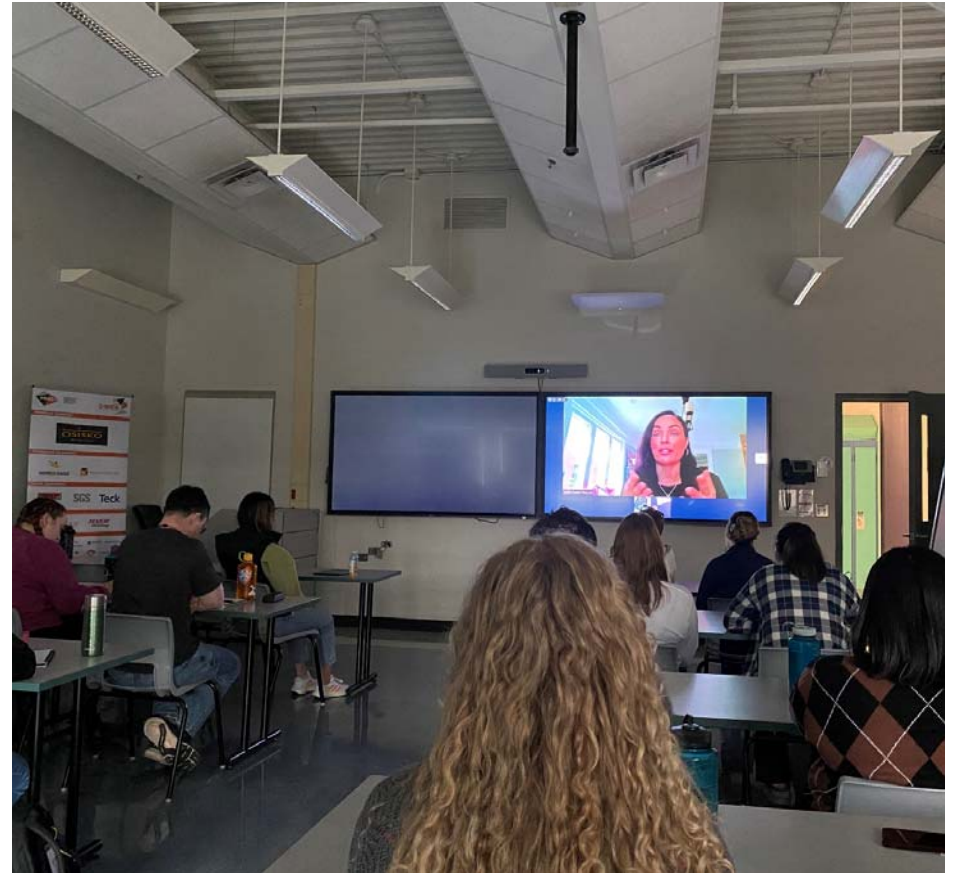




## Saturday, May 11 – Responsible Exploration



Christian Sinclair, Opaskwayak Cree Nation, zoomed in to share on community engagement in exploration



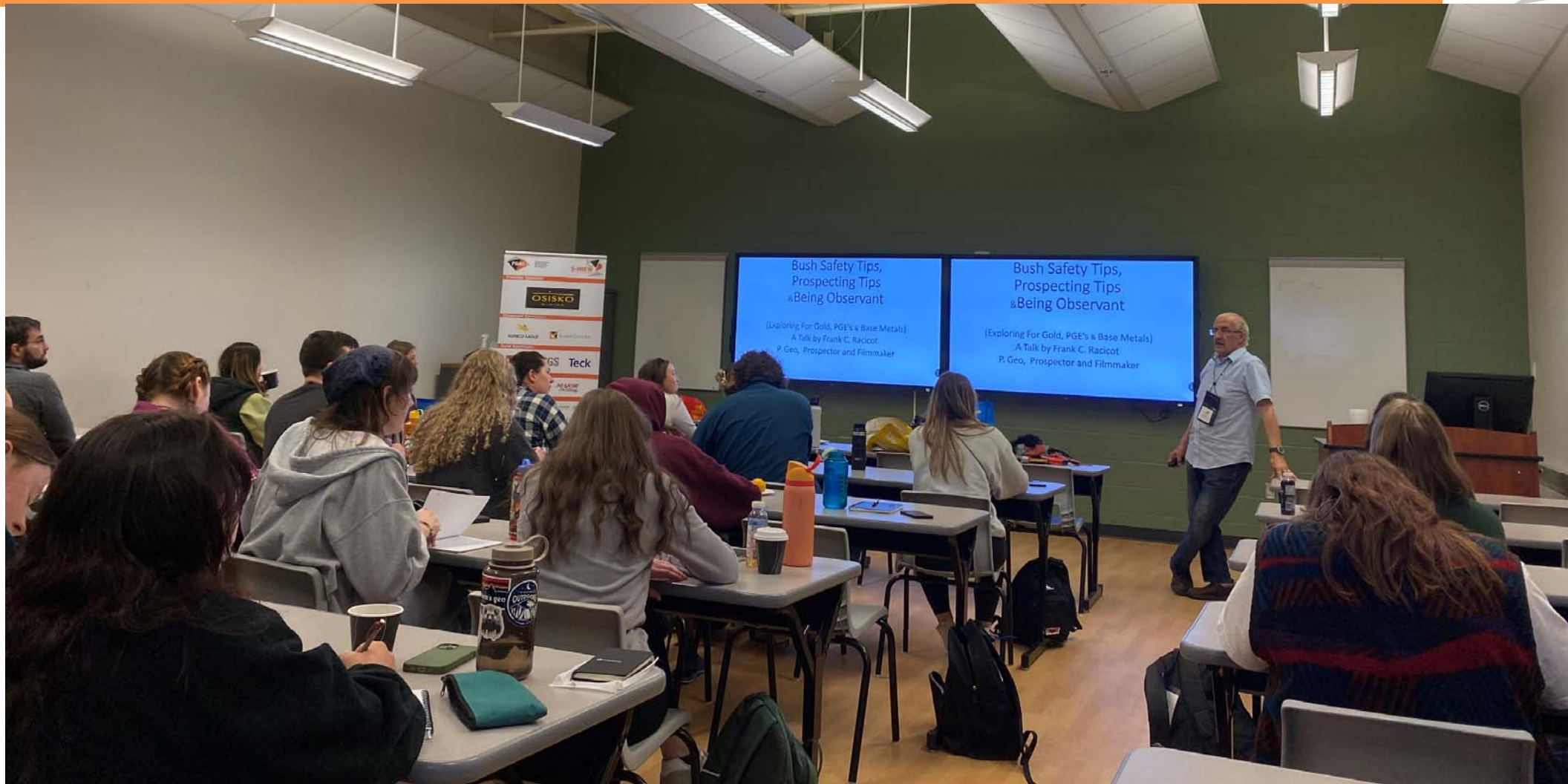
Valerie Pascale, Modern Core, had a great dialogue with Christian on ESG in exploration

## Saturday, May 11 – Responsible Exploration



Amber Blackwell, Knight Piesold, talked about permitting and environmental assessments

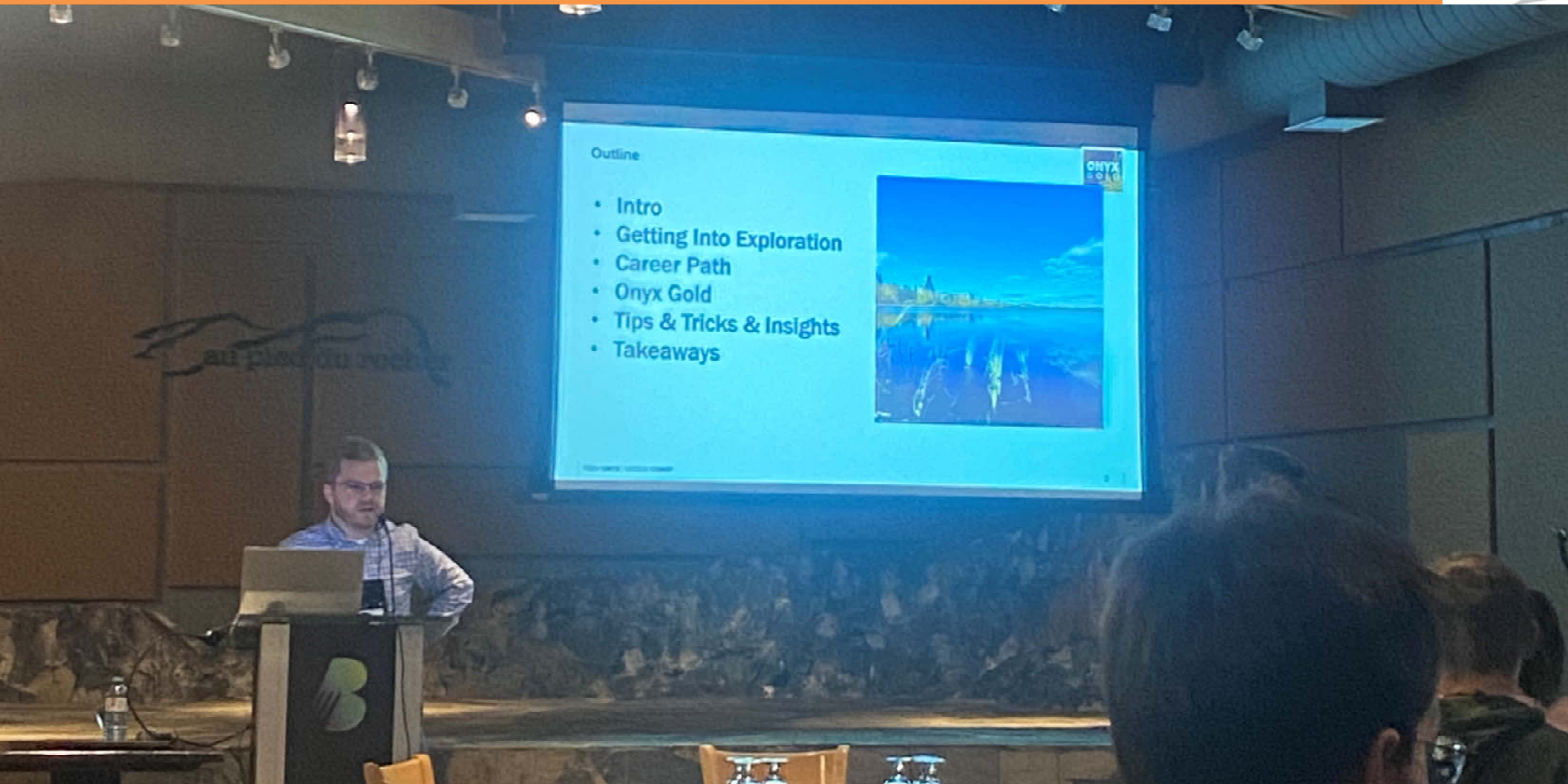
## Saturday, May 11 – Responsible Exploration



Frank Racicot, Racicot Prospecting, shows us that everything is connected



Making time for some movement



Conor McKinley, Onyx Exploration, S-IMEW2010 Alum, talks about his experiences post-S-IMEW

Sunday, May 12 – Happy Birthday Aiden!

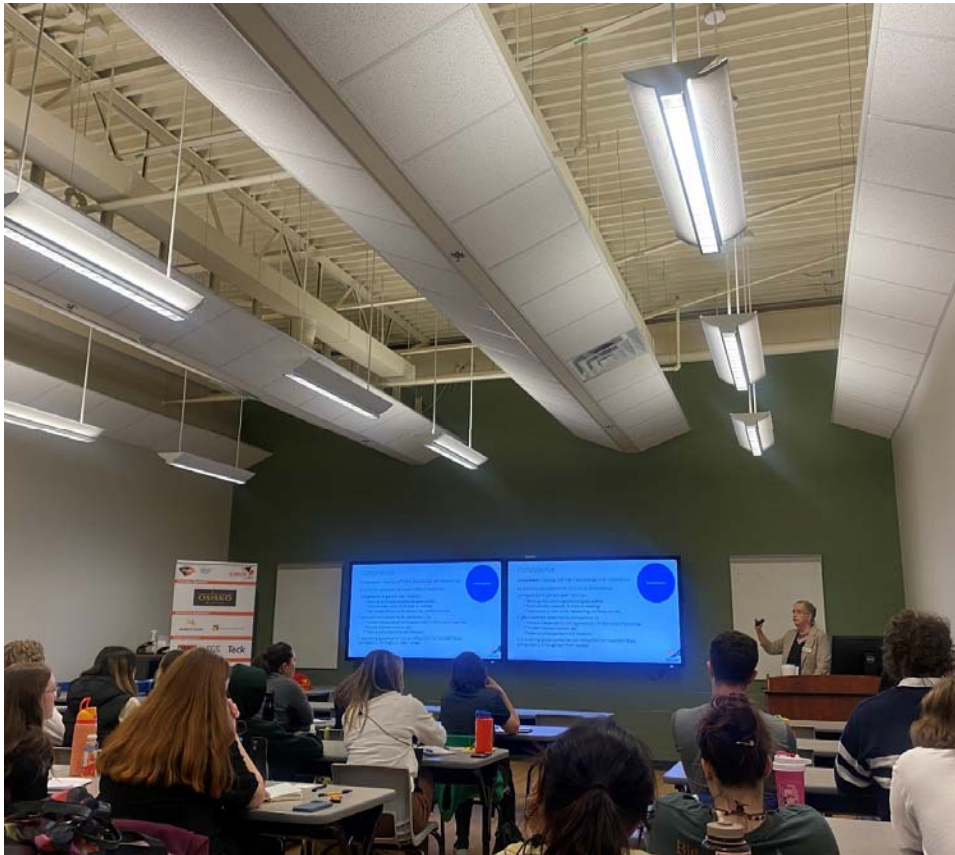
HAPPY

BIRTHDAY!

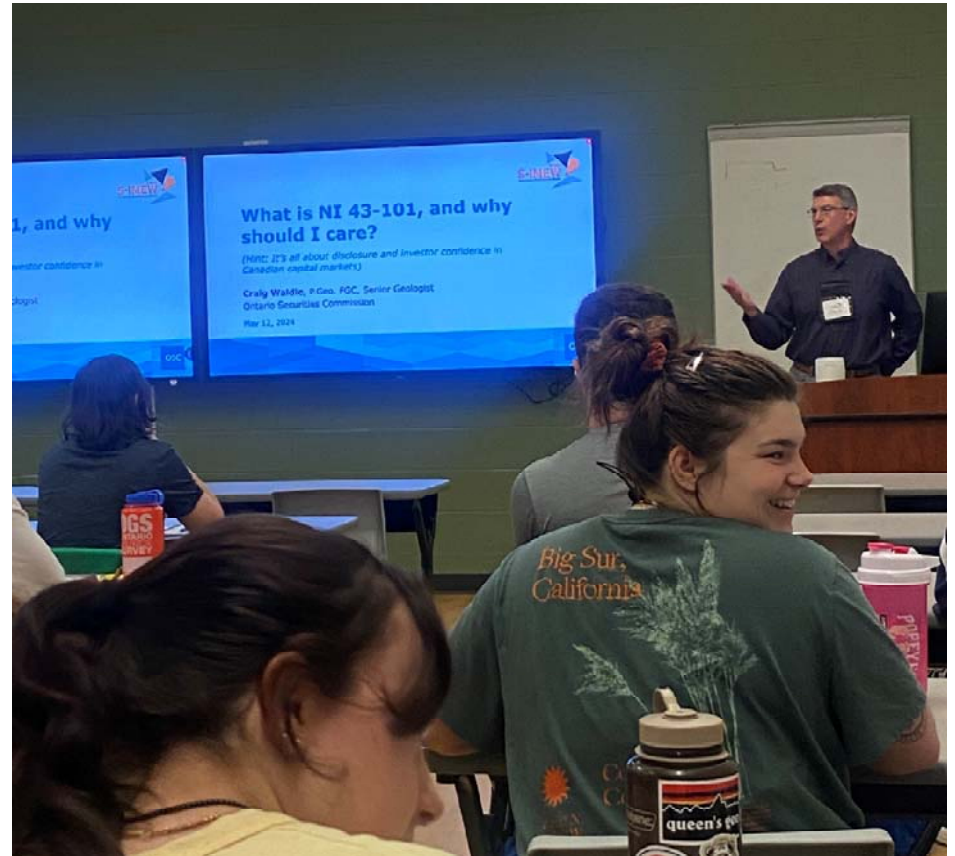


We love a S-IMEW birthday! Happy Birthday Aiden (VIU)!

## Sunday, May 12 – Professional Responsibility

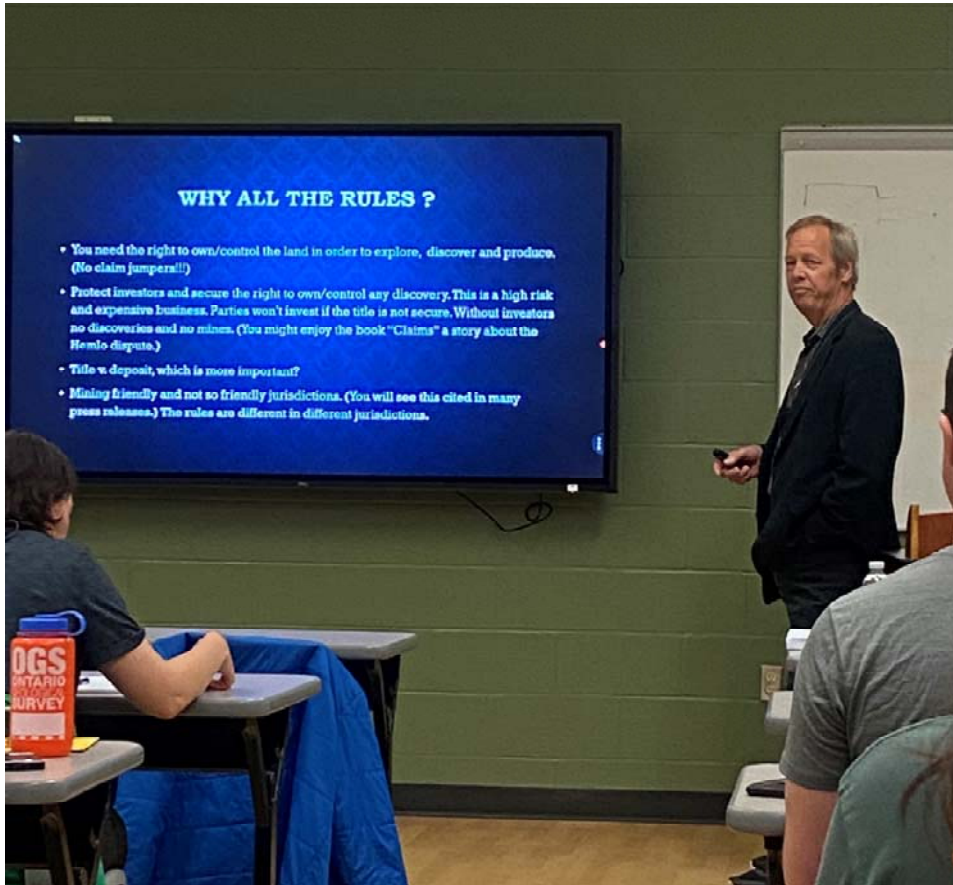


Andrea Waldie, Geoscientists Canada, on ethics

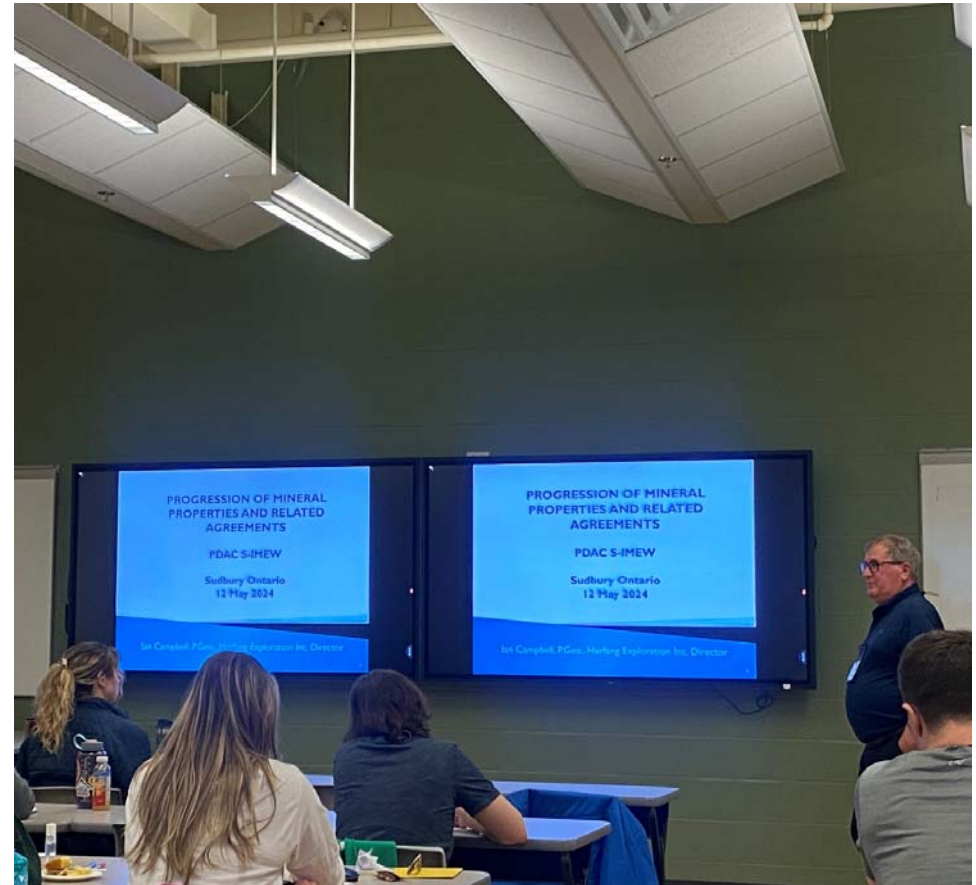


Craig Waldie, Ontario Securities Commission, explains why NI 43-101 is important

## Sunday, May 12 – Professional Responsibility



Mark Hall on land management rules



Ian Campbell, Harfang Exploration, teaches about mineral properties and agreements



Sunday, May 12 – Professional Responsibility



Glad to have you join us John Stringer, Major Drilling – geos & drillers do need to learn how to work together!

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## Sunday, May 12 – Professional Responsibility



Organized sporting activities!



Elena (UNB) & Maren (SFU) having a ball!

Sunday, May 12 – Professional Responsibility



This soccer game looks intense!



Asia (UWaterloo) is on the ball!

## Sunday, May 12 – Professional Responsibility



Ladder Ball was a blast!



Taking a minute on the sidelines

## Sunday, May 12 – Professional Responsibility



Gemma Andersen Jones (MUN) & Grant Hagedorn, S-IMEW 2016 Alum after his Alumni Reflections presentation

## Monday, May 13 – Geochemistry Day



A gorgeous day at Living with Lakes @ Laurentian for till sampling talks with Grant Hagedorn, OGS



Chris Beckett-Brown, OGS & S-IMEW 2015 Alum kicking off the day with intro to Surficial Geochemistry

Monday, May 13 – Geochemistry Day



Indicator mineral exercises with Beth McClenaghan  
(Geological Survey of Canada)



Grant Hagedorn, OGS & S-IMEW 2016 Alum  
demonstrating till sampling techniques



## Monday, May 13 – Geochemistry Day



Marcus Burnham, OGS, explaining sample prep for XRF pellets



Tom Gore, OGS & S-IMEW 2016 Alum leading part of the Geolabs Tour



Alexandre Voinot, GSC, explains water sampling for trace element chemistry & environmental testing



Asia (UWaterloo), Madison (UofS) and Sarah (WesternU) getting hands on with water sampling



Chris Beckett-Brown, OGS, setting the rules of the Exploration Game



Pondering the exploration target

**Gold Sponsor**

**Teck**

Monday, May 13 – Geochemistry Day



Thanks for an awesome tour of the GEOlabs!



Guido Serafini (Glencore) giving an overview of the Barnett field trip



First stop on the field trip was the historical Longvac mine site

Tuesday, May 14 – Glencore Day



At our second stop the S-IMEW students mapped the Barnett outcrop



Sabrina Sterner (Glencore) answering questions about the outcrop

Tuesday, May 14 – Glencore Day



Jordan and Jacob (Glencore) giving the students the lay of the land – Strathcona and Coleman headframes in background



Tuesday, May 14 – Glencore Day



Between the Coleman (Vale) mine and Strathcona (Glencore) mill

Tuesday, May 14 – Glencore Day



S-IMEW students conducting a mineral estimation exercise, Gemma (Memorial) estimated grade exactly correct

Tuesday, May 14 – Glencore Day



Hiking up to the Moose Lake drill site

Tuesday, May 14 – Glencore Day



Thank you Glencore and Foraco for the amazing tour of the drill site!

Tuesday, May 14 – Glencore Day

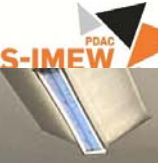


Students packing up their rock boxes to be shipped home

# Premier Sponsor



Wednesday, May 15 - QA/QC, Resource Modelling and Interpretation of Data & Finale

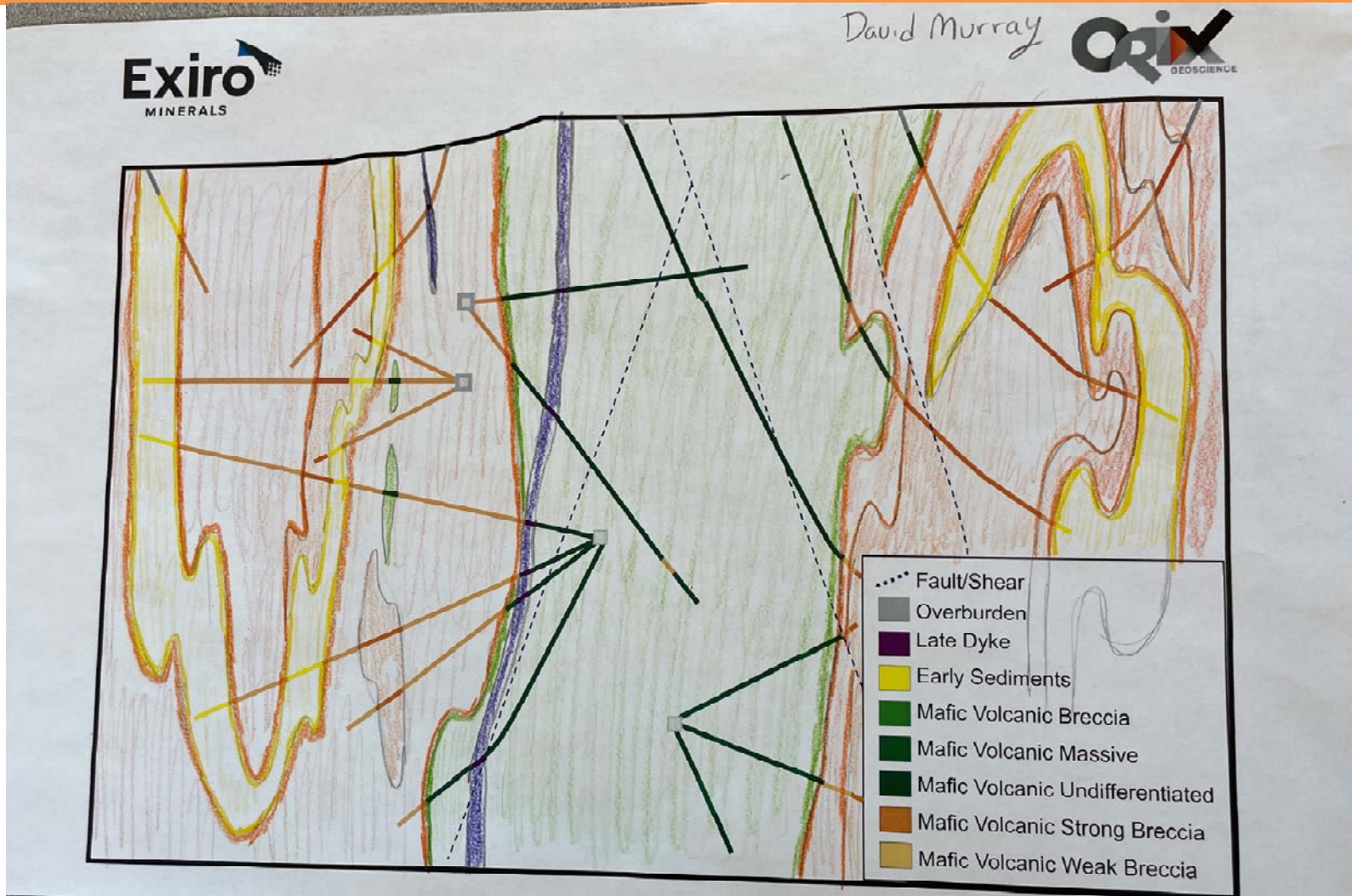


Shastri Ramnath (Expro Minerals) explaining the fundamentals of data interpretation



Gemma (MUN), Matthew (UofT), Elisha (UofC), Aggie (UBC-O) and Mia (Lakehead) enjoying the sectional interpretation activity

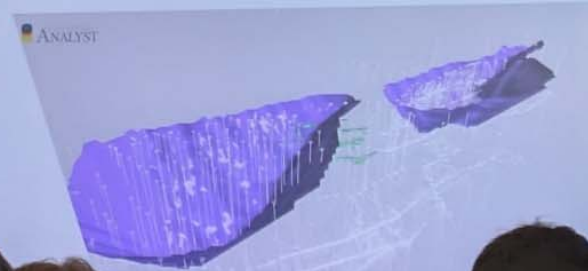




David Murry's (Resourceful Geoscience) cross-section interpretation

### What is a Mineral Resource Estimation?

- Geostatistical calculation of the tonnage and grade of an ore body that has "reasonable prospects of eventual economic extraction"
- Calculation involves significant uncertainties – therefore it is an "estimation"



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Elisabeth (Ronacher McKenzie Geoscience) demonstrating 3D modelling and resource estimation

## ACCURACY

- Accuracy is the degree to which an analysis approaches a true concentration.
- We measure the accuracy by calculating the percent of reference material failures; generally accepted <5% failure at +/- 3 standard deviations.



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Chantal Jolette (Qualitica Consulting) on QA/QC in mineral sampling



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