

42 applicants from
9 provinces

25 selected, representing
9 provinces

S-IMEW 2018 Participants



Taylor McPherson
Brandon University



Sean Mundrean
Brock University



Joachim de Fourestier
Carleton University



Sarah McLeod
Dalhousie University



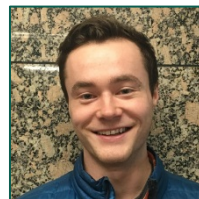
Andrew Jedemann
Lakehead University



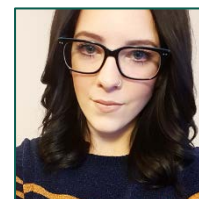
Derek Leung
Laurentian University



Jamie Frost
McGill University



Ryan Burke
Memorial University



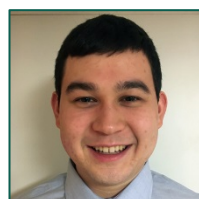
Dallas Smolski
Northern Alberta
Institute of Technology



Patrick Desrosiers
Queen's University



Mariah Williams
Saint Mary's University



Kristian Girotto
Simon Fraser
University



Shelby Park
St. Francis Xavier
University



Jordan Pearson
University of Alberta



Rhys O'Connor
University of
British Columbia

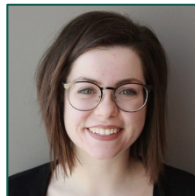
S-IMEW 2018 Participants



Tezla Hayduk
University of Calgary



Ethan Amyotte
University of Manitoba



Mylène O'Brien
University of Ottawa



Dallas Dixon
University of Regina



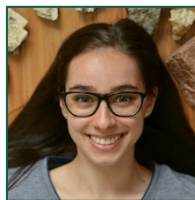
Courtney Onstad
University of Saskatchewan



Candice Ying Woei Ooi
University of Toronto



Forest Pimm
University of Victoria



Stephanie Kobylinski
University of Waterloo



Ève Cloutier
Université du Québec
à Montréal



Jordan Siewnarine
Western University



Simon Anctil-Raymond
Osisko Mining

Follow our journey on social media



facebook.com/PDACStudents



@PDAC_Students
@the_PDAC

MacBook Pro



The S-IMEW motorcade about to leave for Sudbury



Group photo at Laurentian University during Regional Mapping day



Getting their orientation set for the first traverse



“You all must have really great eyesight ... Pick up the rock and take a look!”



Sean Mundreon (BrockU) plotting the first outcrop



The first time many students see the “Super Stack”



Hello, over there! What have you found?!



Carefully taking strike and dip measurements



Seamus (OGS) helping Patrick Desrosiers (Queen's U) plot lithologies

Premier Sponsor

The logo for OSISKO features a small orange dot centered above a horizontal orange line. Below the line, the word "OSISKO" is written in a large, orange, serif typeface.

OSISKO



The field observations are collected...now to go through the interpretations



Taylor McPherson (BU) figuring out that Sudbury Breccia cannot be controlled



Thanks Ontario Geological Survey and Metal Earth!





Karen Rees (S-IMEW Co-Chair) introducing Career Day



PDAC's own Lisa McDonald explains what the association is about



Cameron Clark (Clyde Valley Media) teaching the students about networking



- ### Recognize Cues
- Body Language
 - Eye contact
 - At you or
 - not at you
 - Body positioning (closed versus open)
 - Voice Intonation
 - Pleasant vs stern;
 - Understand global differences in intonation
- Clyde Valley Media

Jordan (UofA) role playing conference etiquette with Cameron Clark



Learning the importance of good networking skills



Tony Green (Grenvyn Consulting) presents an overview of the geoscience industry

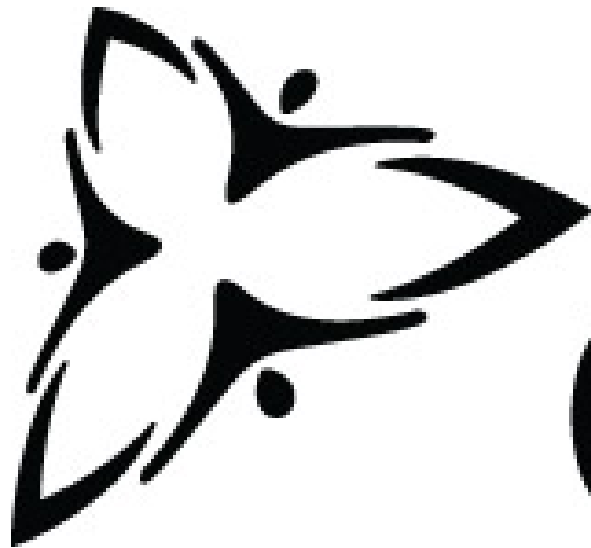


Karen Rees (S-IMEW Co-Chair) telling us why we're important!

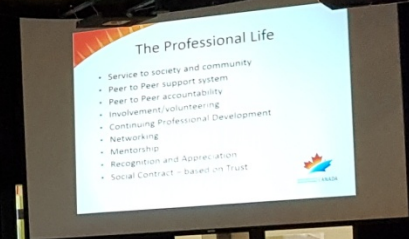
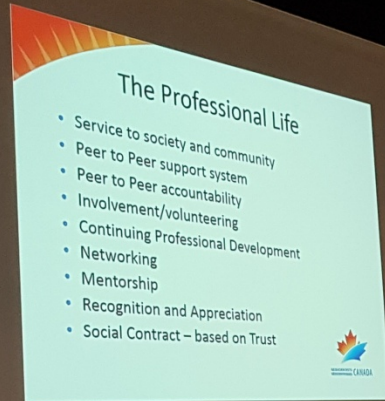


An attentive audience soaking up networking and career advice

Platinum Sponsor



Ontario



Andrea Waldie (Geoscientists Canada) explains the importance of professional registration



The Do's and Don'ts of NI 43-101 reporting with Craig Waldie (Ontario Securities Commission)



The Big Nickel!!



Jamie (McGill U) and Jordan (Western U) ready for a night of networking



Kristian (SFU), Sean (BrockU), and Andrew (LakeheadU) checking out sulfides



Current and former S-IMEW Coordinators – Linette and Taus



Jordan (UofA) likes his cheese.



Karen Rees (S-IMEW Co-Chair) and Taylor (BU) at the welcome reception



Checking out the rock wall at Dynamic Earth



PROSPECTORS &
DEVELOPERS
ASSOCIATION
OF CANADA



Overview of S-IMEW

- Two week, all-expenses paid workshop
- Students stay on campus in Sudbury
- Classroom and field components
- Visit surface and underground mines
- 4-day field trip to world class mining camps
- Mapping exercises, sampling and surveying techniques
- Experience first-hand:
 - Various facets of mineral exploration industry
 - Networking with industry professionals
 - Diversity of career opportunities in industry



Forest (UVic) and Kristian (SFU) connecting with industry members



Ian Campbell explaining joint ventures



Michael Durose (Mining Research Group) teaching the students how to calculate metal content



Michael Doggett explaining the ups and downs of the mining cycle

Gold Sponsors

ABITIBI
ROYALTIES INC.



TSXV:RZZ



BARRICK



Taking in all the information with keen interest



Brian Buss giving an overview of mining methods



Inspecting digitized drill logs for errors with Shastri Ramnath (Orix)



It's never too early to start learning about geology (Maya Michaud)



Look at those mag maps!



Ève (UQAM) creatively using the window as a light table



Get out those coloured pencils!



Gen Krasowski (KGHM; S-IMEW 2012) giving us an overview of her career

Introduction Sudbury Basin Geology and Ore Deposits



DISCOVERY OF THE SUDBURY NICKEL DEPOSITS

The significance of Sudbury's mineral deposits became apparent during construction of the Canadian Pacific Railway through the area in the 1880s. Blacksmith Tom Flanagan, and others, took samples from some reddish rock nearby in 1883. Analysis of the rock revealed copper-nickel sulphide and the Murray Mine was subsequently established at the site. Ore bodies were soon discovered in abundance throughout the Sudbury area. Entrepreneur Samuel J. Roche founded the Canadian Copper Company at Copper Cliff in 1886. Capitalizing on breakthroughs in metal-refining, Roche opened up an industrial and military market for nickel-steel alloys. With the establishment of corporations like International Nickel in 1902 and Falconbridge Nickel Mines in 1923, Sudbury became the nickel capital of the world.

Ontario Heritage Trust, an agency of the Government of Ontario



Jason Letto (Vale) presents an overview of the Sudbury Basin geology



Simon (Osisko) taking a closer look at that Quartz Diorite

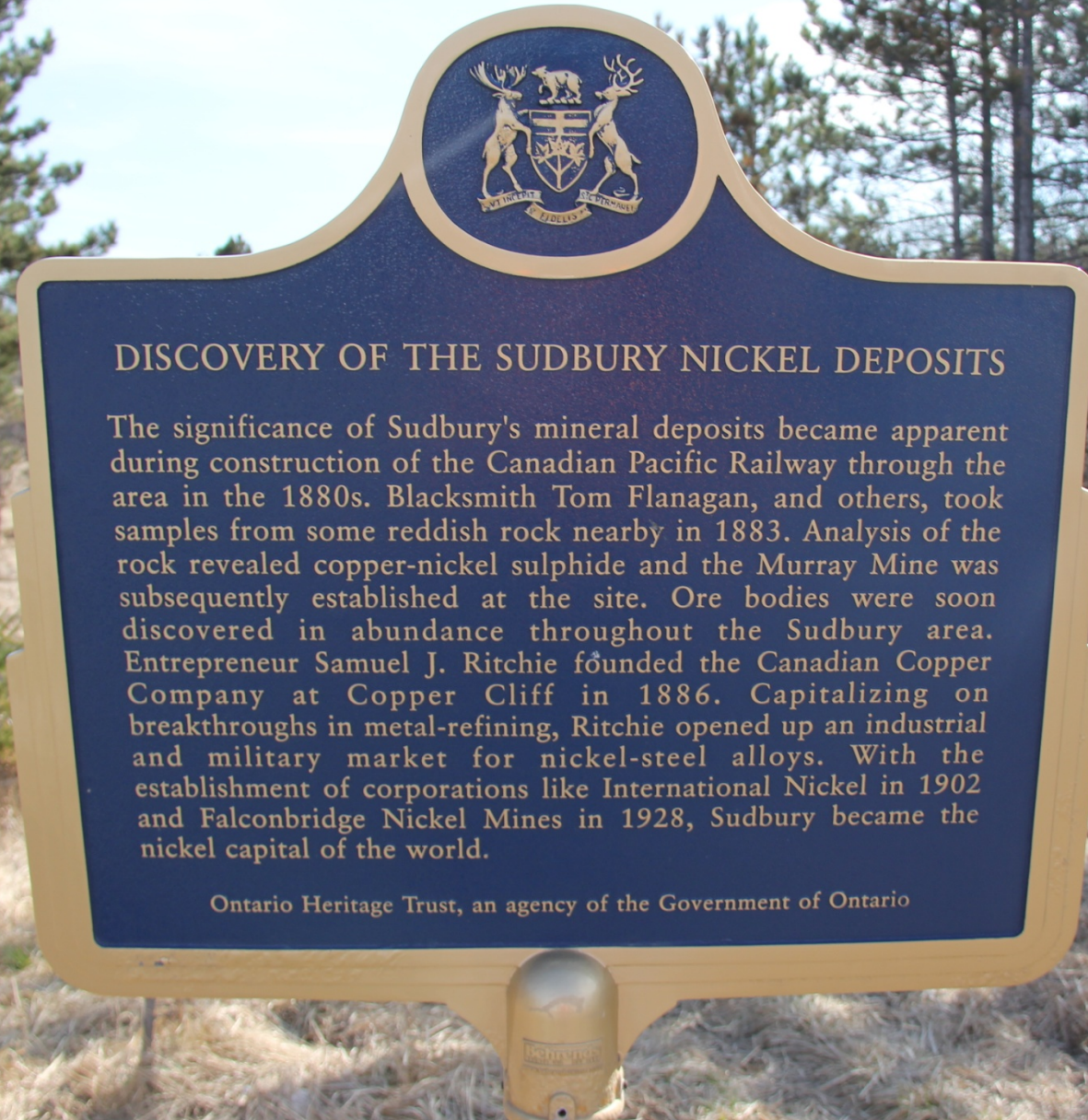
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Ève (UQAM) checking out sulphides



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Ontario Heritage Trust, an agency of the Government of Ontario

Where it all began...



Choo Choo! At the discovery site



Look at that Bouma Sequence!

Gold Sponsors



LaurentianUniversity
Université**Laurentienne**

GOODMAN SCHOOL OF MINES
ÉCOLE DES MINES

MAJOR
Drilling



Lunch Break at Onaping Falls. What a view!



Let's draw this out...



Ryan (MUN) getting up close and personal with a sandstone



Smiles with the Shatter Cones!



The Shatter Cones are definitely intriguing



Hunting for sulphides



Great day touring the basin with Attila Pentek (Wallbridge Mining) and Grant Mourre (Transition Metals)



Taylor (BU), Joe (Carleton), Shelby (StFX), and Ève (UQAM) looking classy for dinner

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SGS





David Pearson (Laurentian University) explaining the changes in our environment



David entertaining the students



Ben Graham (Major Drilling) giving the safety talk on drilling

MAJOR
Drilling

Geologists: Stereotypes



From a driller's perspective, geologists are often viewed as a necessary evil.

I'M AN
EXPLORATION
GEOLOGIST
TO SAVE TIME
LET'S JUST ASSUME
I'M ALWAYS RIGHT



Here is an overpaid, know-it-all, four-eyed oddball who gets their kicks licking rocks all day. They're never happy, they get stuck on mundane details and make a complete fuss about something as trivial as forgetting a hardhat, mud on the ground (yes, where else would you like it sir?), or, God forbid, broken core bits – as if somehow the core magically comes out of the ground in lengths that perfectly fit those little boxes you gave us.

majordrilling.com

QUALITY • SAFETY • RESULTS

Apparently what drillers think of us...



Students getting an overview of an underground percussive drill



Students getting an overview of various drill tools



Ethan (UofM) having too much fun playing with the remote



Dallas (NAIT) learning the ropes on controlling the drill



Krishana practicing her social media skills



Thanks Major Drilling for an amazing tour - we learned a lot!



Ian Trinder (CSA Global) helping Forest (UVic) put the puzzle pieces (core) back together



Ève (UQAM) measuring the length of recovered core



Ian Trinder demonstrating how to measure RQD



Karen Rees giving details of core logging



Time to log Sudbury Breccia!

Silver Sponsors



AGNICO EAGLE

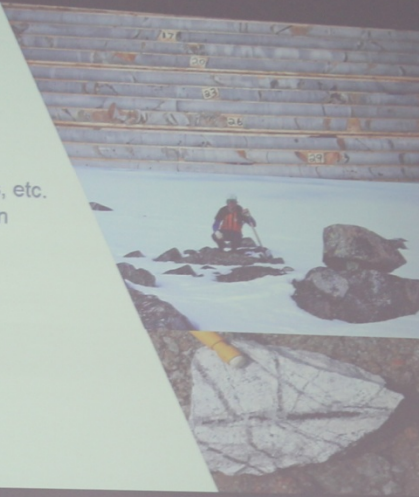


IAMGOLD

What is an Exploration 3D Model?

Modelling starts with a data compilation:

- Tenure information: claims, dispositions, etc.
- Geographic data: rivers, digital elevation model ("DEM")
- Cultural data: roads, power lines, etc.



Elisabeth Ronacher (Ronacher McKenzie Geoscience) explaining the complexity of 3D modelling



Robert Patterson (Minalytix) tells us about his path through the industry

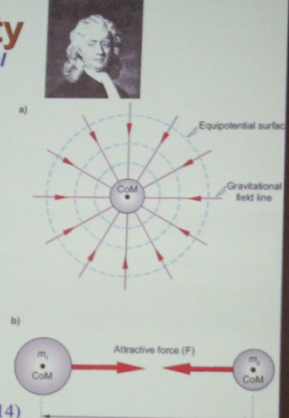
Force of Gravity

Isaac Newton's 1666 *Universal Law of Gravitation* states that the force F [N] between two objects of mass m_1 and m_2 [kg] separated by distance r is

$$F = Gm_1m_2 / r^2$$

where G is the universal gravitational constant, which has a value of $6.67 \times 10^{-11} \text{ m}^3 \text{ kg}^{-2} \text{ s}^{-2} = 6.67 \times 10^{-11} \text{ N m}^2 \text{ kg}^{-2}$. Force is a vector, the direction is towards the other object.

GEOL 4956 (after Dentith and Mudge, 2014)



Richard Smith (Laurentian U) talking about gravity



Students soaking up geophysics



Such a beautiful morning for field work - time for geophysical field demos!



Sean Dickie (Vale) explaining downhole EM surveys



Getting a tripod leveled for an EM survey



Sean (Vale) not taking a selfie, but collecting geophys data with new technology



Taking a step back while the instrument collects data



Setting up the loop for an EM survey



Taylor (BU) getting her balance back after putting the cable backpack on



Mylène (UofO) reviewing the results from the EM survey



Alan King (Geoscience North) explains the use of drones and other emerging technology



Students going through the steps of performing a gravity survey



Krystal Kant (Vale) reviewing data from the gravity survey

Silver Sponsors



PearTree





Networking with Industry representatives on Geophysics night



Students discussing the day with Andrew Davies (Teck)



Brian Bengert (B-Field Geophysics) gave a humorous talk about his career



Thanks Andrew Davies (Teck) and Al Smith (IAMGOLD) for sponsoring and participating in Geophys day!



Off to Nickel Rim for the morning!



Three little pumpkins



Into the depths we go...



Guiding the students underground



The JUMBO



15 pumpkins



This tire is worth more than my car!



Stephanie (UWaterloo) attempting to control a scoop



Brad Lazich (Glencore) introducing the Norman West Project



Leigh (Glencore) teaches the students how to estimate Ni-Cu grades

Silver Sponsors

Teck



Brad watering the core for the students to see the shiny stuff



Checking out the diamond drill setup with Foraco



So this is how you wedge...



Thanks Glencore and Foraco for the drill visit!



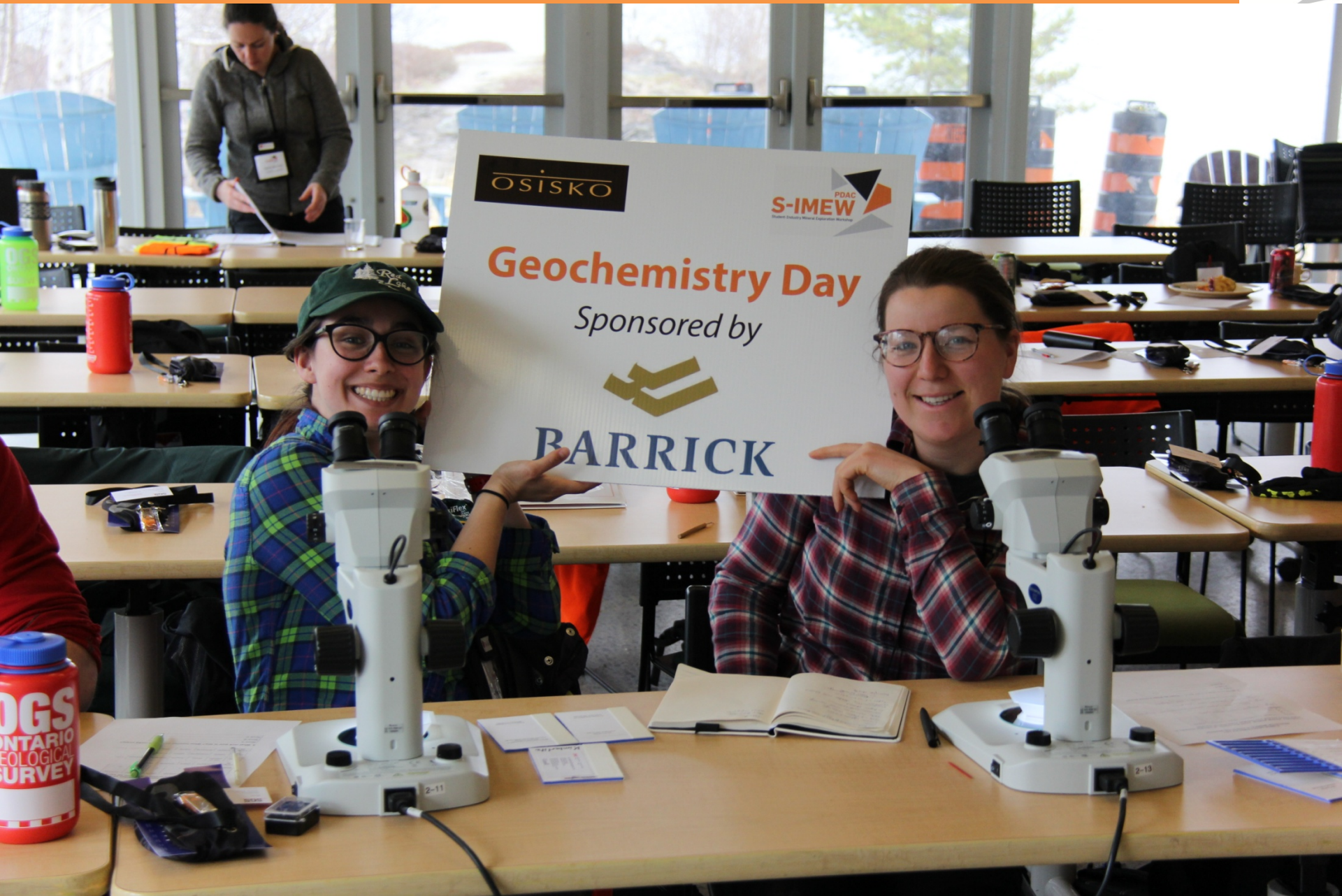
Beth McClenaghan (GSC) getting students to pick out diamond indicator minerals



Rhys (UBC) trying to find chrome diopsides



Racing on the water



Our proud sponsor of the day!



Students learning about sample processing at the OGS Labs



Hot Stuff!



Learning about the XRF



Tezla (UofC), Mylène (UofO), and Ève (UQAM) ready for the boat



Lake sediment sampling in progress...



Ève (UQAM) bagging some lake sediment

Contributing Sponsors

Dan Brisbin

Felix Lee

Karen Rees

PDAC
S-IMEW
Student-Industry Mineral Exploration Workshop



Patrick (Queen's) reliving childhood memories



Noelle Shriver (Vale) stressing the importance of soil sampling



Ève (UQAM) working hard to get a soil sample



Kayla Dell (OGS) points out glacial striations



Budding Friendships



Hugh de Souza (SGS) taking us through his career journey



Thank you SGS and Barrick for sponsoring Geochemistry Day!



HOW DO YOU FIND A DIAMOND MINE?
PROSPECTING/MAPPING

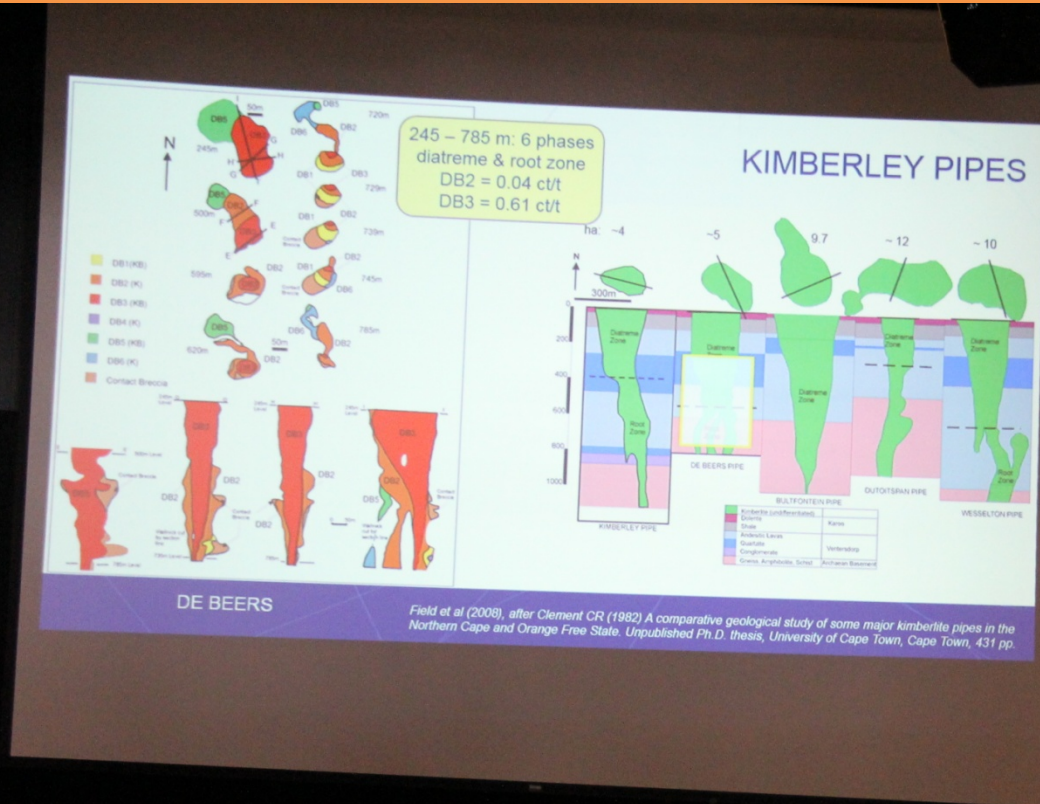


The De Beers Group of Companies

12



Leyla Lavenir (De Beers) imitating glacial striations with hand motions





Alexandrina Fulop (De Beers) talking about kimberlite core



Dan Schulze (University of Toronto) talks about olivine and other xenocrysts



Mariah (SMU) and Shelby (StFX) getting deep into some kimberlites



Clast-ception



Forest (UVic) likes her serpentine



Sean (BrockU) and Jordan (Western), where's your handlens' at?

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www.caraclecreek.com



Herman Grutter (Peregrine Diamonds) pointing out cool kimberlite features



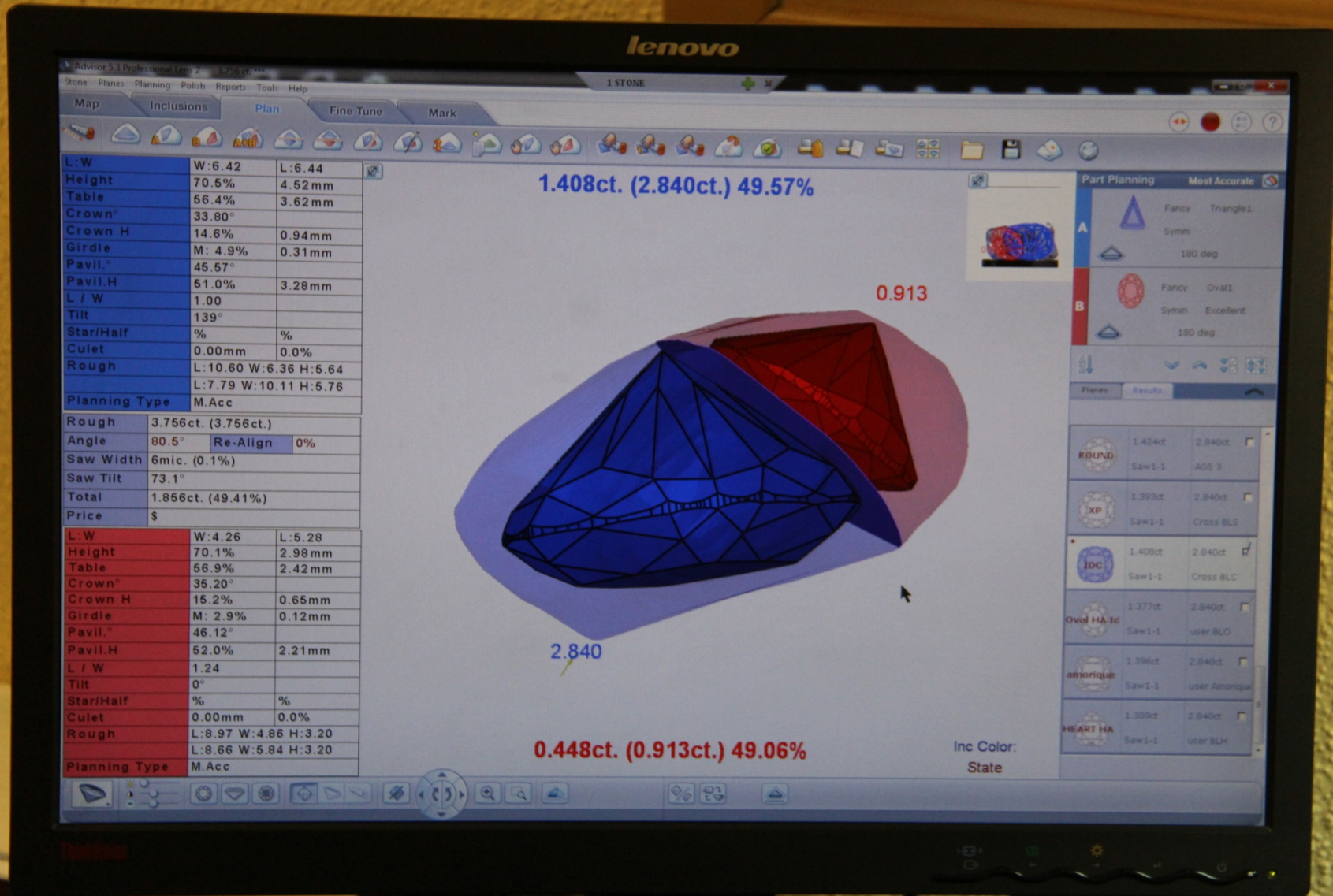
Simon (Osisko) holding a rough diamond



Shine Bright Like a Diamond



Visit to HRA's Diamond polishing and cutting facility



Making the best cut from a rough diamond



George Read (Star Diamond) telling us to buy our diamonds at Costco



Evan Slater (Wallbridge) gives an overview of exploration mapping day



Natalie (Wallbridge) helping Jordan (Western) ID some IQD



Another group shot - who knows just what might be underfoot?



Pace it out



Lick test



Two birds pecking at an outcrop



Rasmus (Metal Earth) pointing out some crossbedding



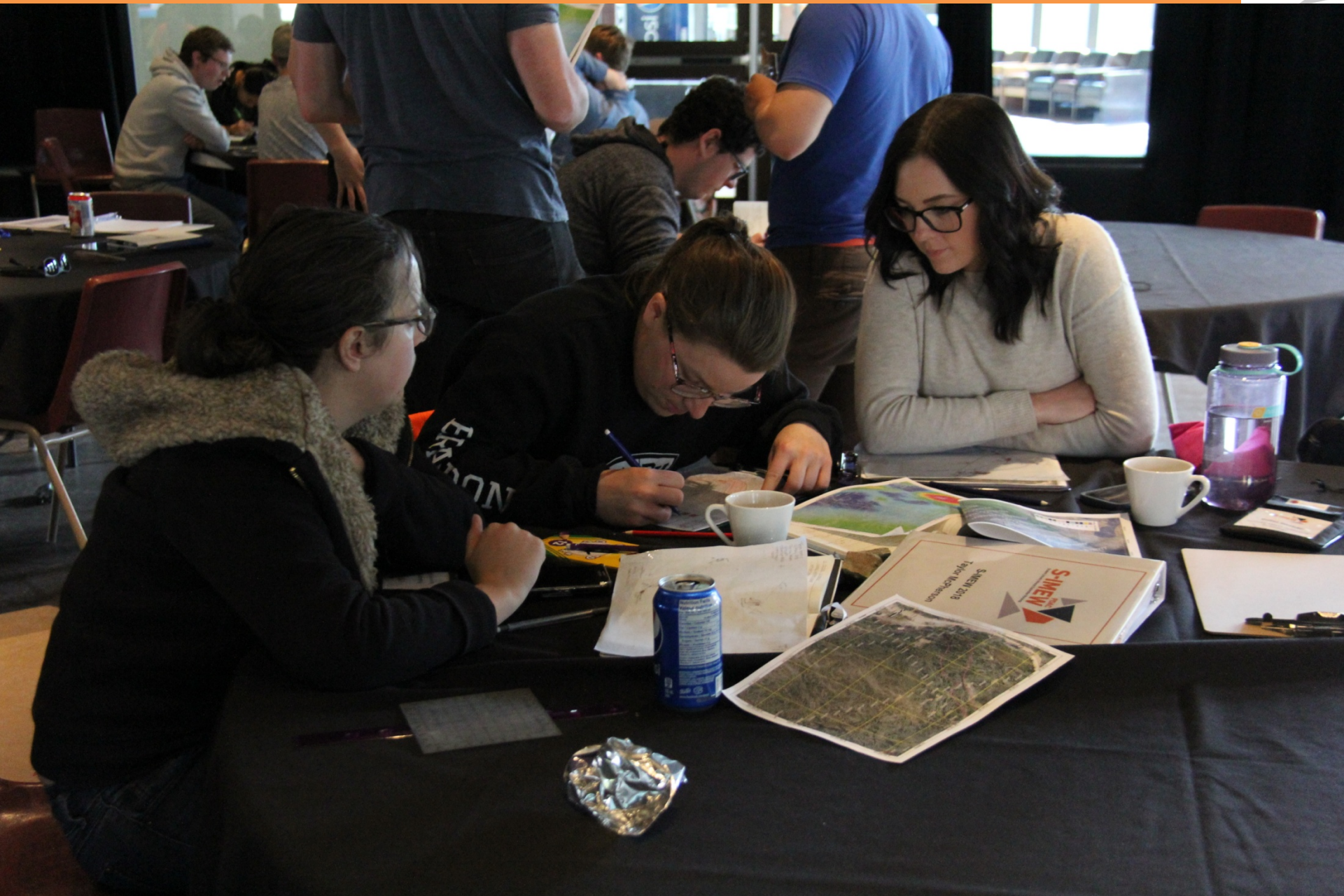
Peel that moss back, boys!



Quartzite with an egg for scale



Mariah (SMU) putting together her map



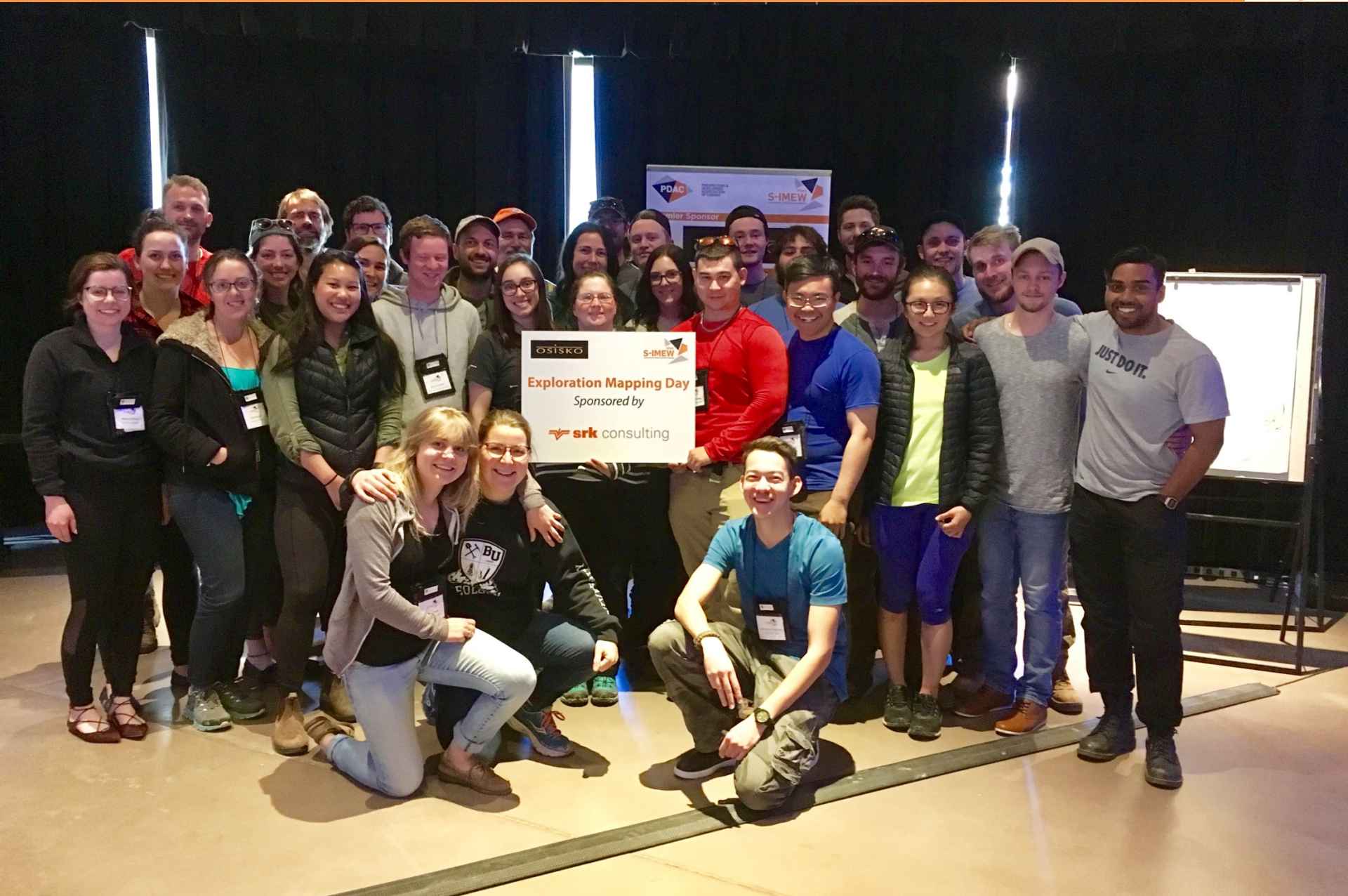
Tezla (UofC), Taylor (BU), and Dallas (NAIT) colouring in their lithologies



The boys are proud of their final maps!



Group 1 going over their colourful map



Thanks Wallbridge and SRK for supporting Exploration Mapping Day!

In-Kind Contributors



08



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Mines de la Vallée de l'Or ltée
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Kristian (SFU) and Jordan (UofA) trying to find that perfect piece of BIF



Made it to Quebec!



Checking out pillows and flowtop breccia in Rouyn-Noranda



Great visit to Golden Valley Mines - thanks Michael Rosatelli and Glenn Mullan!



Glenn Mullan engaging students in geology talk



Taylor (BU) and Ève (UQAM) helping prepare dinner – La cabine à Glenn et Jackie



Jordan (UofA), Joe (Carleton) and Jordan (Western) enjoying delicious home-made Korean BBQ



Pénélope and Kayla (Probe Metals) giving an overview of their Val d'Or property



Getting organized for mapping and core logging with Probe Metals



Ian Trinder hard at work while the students watch...



Checking out quartz-carbonate-tourmaline veins in core



Kristian (SFU) carefully studying carbonate alteration



Time to map quartz veins!



Patrick (Queen's) and Taylor (BU) discussing the slickensides off the tourmaline sheets



Ethan (UofM) precisely drawing in the contacts



Dallas (NAIT) getting a closer look at the quartz-carbonate-tourmaline vein



Thank you Probe Metals and Michael Rosatelli for organizing the day

In-Kind Contributors





All set to travel 2.8 km underground!



The guys are ready!



Canadian Malartic Mine Lookout!



Learning about the Noranda caldera with Gerald Riverin (Yorbeau Resources)



Dalmationite!



Derek (LU) thoroughly enjoying the rocks



Gerald Riverin and Andrew (Lakehead) discussing the formation of VMS deposits



Ian Trinder helping Candace (UofT) identify cordierite porphyroblasts



Thanks Gerald Riverin for the tour of Noranda!



Ève (UQAM) and Sarah (Dal) are ready for dinner



Denis Vaillancourt (Agnico Eagle) talking about the Nunavut projects



Jordan (UofA) searching for BIF clasts in a conglomerate



Karen Rees modelling with the Cobalt strat section



Dallas (UofR) standing on an unconformity separating pillow basalts and conglomerate



Kristian (SFU) mesmerized by the cobalt bloom



Gary Grabowski (OGS) explaining radial fractures in a mafic dyke



Phil Thurston (Laurentian) pointing out boulder sized clasts in a conglomerate



Frank Santaguida (First Cobalt) talks about cobalt exploration in Cobalt



Examining core at First Cobalt



Sean checking out core at First Cobalt



Thanks for a great day First Cobalt!



Thank You Sabrina Dias (Sabrina Dias Consulting) and Amber Blackwell (Knight Piesold) for presenting in the eDome!

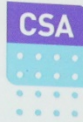


Michael Fox (Indigenous Community Engagement) describing the importance of Aboriginal participation in exploration

Drilling, Core Logging & Resource Modeling Day

S-IMEW 2018
Tezla Hayduk & Ethan Amyotte

MAJOR
Drilling





Jordan (WU) presenting while Shelby (SFXU) seems a little doubtful...



Mariah (SMU) and Simon (Osisko) presenting their day



Taylor (BU) and Derek (LU) Presenting their findings



Glenn Mullan, PDAC President, welcoming students, industry representatives, and friends, to the closing barbecue



Kevin Neyedley, Coordinator, Taus Joergensen (Metal Earth), and Karen



Shirley (OGS-RGP), Phil Thurston (U of S), and Forest (U of A)



Kristian (SFU) socialising with industry guests



Andrew (LU), Ryan (MU), and Jordan (UofA)



Ed and Ruth Debicki enthusiastically shared their extensive knowledge and experiences



Karen Rees addressing the room – preparing to introduce the students



The workshop is completed!

The 26 successful participants
receive their hard-earned certificates...

S-IMEW 2018 Successful Participants



Taylor McPherson
Brandon University



Sean Mundreon
Brock University



Joachim de Fourestier
Carleton University



Sarah McLeod
Dalhousie University



Andrew Jedemann
Lakehead University



Derek Leung
Laurentian University



Jamie Frost
McGill University



Ryan Burke
Memorial University



Dallas Smolski
Northern Alberta
Institute of Technology



Patrick Desrosiers
Queen's University



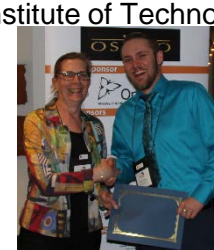
Mariah Williams
Saint Mary's University



Kristian Girotto
Simon Fraser
University



Shelby Park
St. Francis Xavier
University



Jordan Pearson
University of Alberta



Rhys O'Connor
University of
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Mylène O'Brien
University of Ottawa



Dallas Dixon
University of Regina



Courtney Onstad
University of Saskatchewan



Candice Ying Woei Ooi
University of Toronto



Forest Pimm
University of Victoria



Stephanie Kobylinski
University of Waterloo



Ève Cloutier
Université du Québec
à Montréal



Jordan Siewnarine
Western University



Simon Anctil-Raymond
Osisko Mining