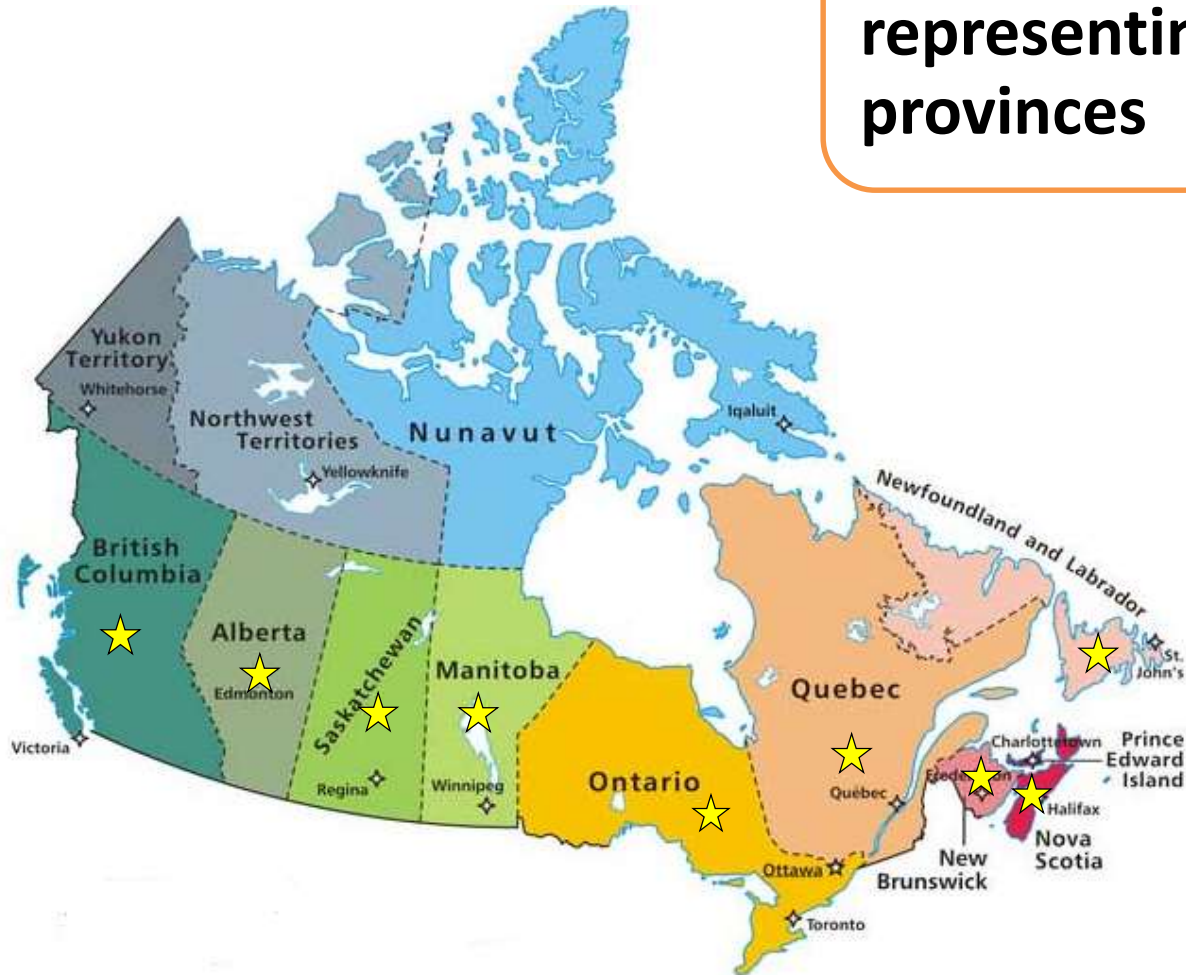




**26 students accepted,  
representing 9  
provinces**



# 2015 PARTICIPANTS



**Thomas Bagley**  
Acadia University



**Carlos Bazan**  
British Columbia Institute  
of Technology



**Lianna Vice**  
Carleton University



**Billy Garrison**  
Dalhousie University



**Percy Clark**  
Fleming College



**Christopher Beckett-  
Brown**  
Laurentian University



**Marc -Antoine Vanier**  
Laval University



**Aidan Ditchburn**  
McGill University



**Keaton Strongman**  
McMaster University



**Chris Voisey**  
Memorial University of  
Newfoundland



**Logan Behuniak**  
Mount Royal  
University



**Mackenzie McConnell**  
Northern Alberta  
Institute of Technology



**Natalie Blacklock**  
Queen's University



**Catherine Sedge**  
Saint Mary's University



**John MacFarlane**  
St. Francis Xavier  
University

# 2015 PARTICIPANTS



**Lisa Côté**  
Université du Québec à  
Chicoutimi



**Melissa Friend**  
University of British  
Columbia



**Tyler Glubrecht**  
University of Calgary



**Derek Drayson**  
University of Manitoba



**Colin Padget**  
University of New  
Brunswick



**Allan Lion**  
University of Ottawa



**Sean Hillacre**  
University of  
Saskatchewan



**Joseph Vrzovski**  
University of Toronto



**Kurtis Sanderson**  
University of Victoria



**Robin Taves**  
University of Waterloo



**Nicolas Cookson**  
Western University





# Premier Sponsor



## The calm before the storm - backpacks and binders await the arrival of the S-IMEW students





**Official welcome by Karen Rees, Scott Jobin-Bevans, and Krishana Michaud (left to right)**



**Patrick McAndless (Geodude Corner) talks about careers in the geosciences, and is thanked on behalf of the students by Percy Clark (Fleming College)**





**Aftab Khan (APGO) explains all about the importance of professional registration, and is thanked on behalf of the students by Logan Behuniak (Mount Royal University)**



**There is no shortage of student questions during the morning session of Networking and Career Development Day**





**Tony Green presents a geoscience industry overview, and is thanked on behalf of the students by Melissa Friend (University of British Columbia)**



**Dave Thomas (Resource Capital Funds) introduces the students to the capital markets, and is thanked on behalf of the students by Nicolas Cookson (Western University)**









**Dr. Scott Jobin-Bevans (Caracle Creek) speaks about flow through shares, joint ventures, and option agreements. Sean Hillacre (University of Saskatchewan) extends an acknowledgement of gratitude on behalf of the S-IMEW students**



**Group photo at Dynamic Earth in front of the “Big Nickel” prior to the welcome reception**

# Platinum Sponsors









**Opening keynote speaker David Harquail (Franco-Nevada) with his wife Birgitta Harquail, and S-IMEW students Natalie Blacklock and Colin Padget (left to right) at the Welcome Reception**





**Opening keynote speaker David Harquail (Franco-Nevada) talks about his career, and the Franco-Nevada business model that allowed the company stock to outperform other gold companies and even gold itself**



**Opening keynote speaker David Harquail (Franco-Nevada) speaks to a full Atlas Copco Theatre at Dynamic Earth, and is thanked on behalf of the students by Robin Taves (University of Waterloo)**





**From left – Sean MacLean (MNDM), David Harquail (Franco-Nevada), and Scott Jobin-Bevans (Caracle Creek) at the Welcome Reception**





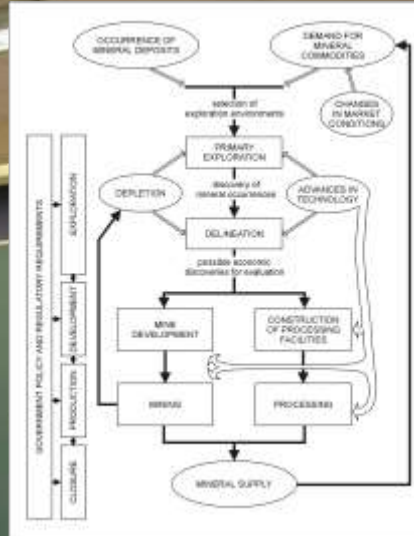








## The Mineral Supply Process



***“You can’t make a silk purse out of a sow’s ear” - Dr. Michael Doggett emphasizes the importance of understanding both geological quality and economic quality***





**S-IMEW participants are tested on their skills to identify geological quality during Dr. Michael Doggett's lecture**



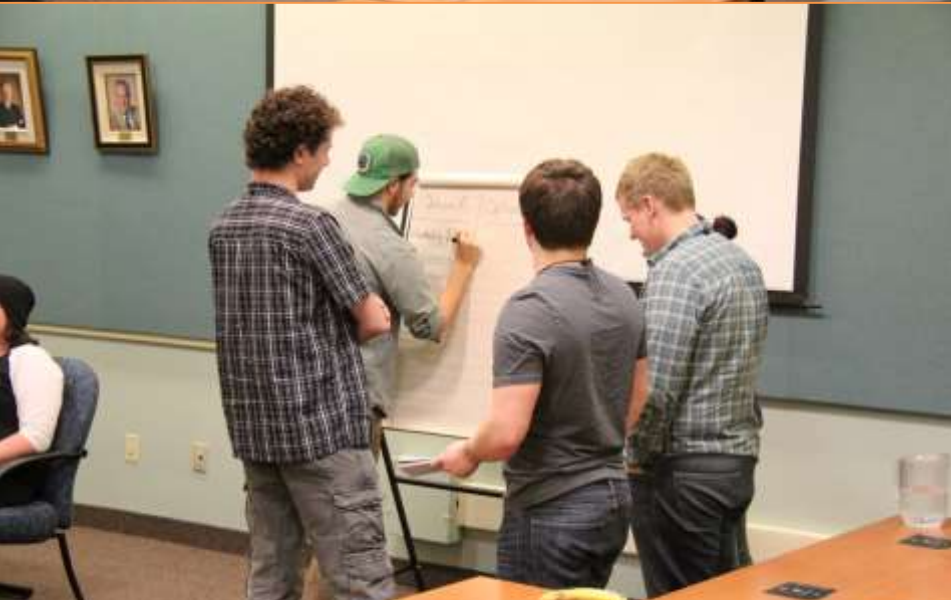
# Gold Sponsors

**ABITIBI**  
**ROYALTIES INC.**





**Michael Durose (Mining Research Group) talks to S-IMEW students on the topic of company evaluation before challenging them to evaluate two fictitious gold companies, and ultimately decide which company to invest in**

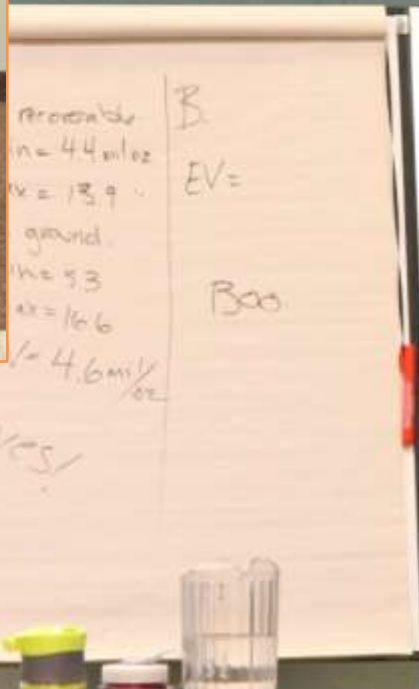


**High-risk, high-reward investments appear to be the popular strategy among the S-IMEW participants (preferably with a quick cash out), during Michael Durose's company evaluation exercise**





**Dr. Michael Doggett (Michael Doggett & Associates) and Michael Durose (Mining Research Group) are thanked on behalf of the S-IMEW students by Chris Beckett-Brown (Laurentian University) and Natalie Blacklock (Queen's University)**



NI 43-101 is explained in detail by James Whyte (Ontario Securities Commission) who is thanked on behalf of the S-IMEW students by Derek Drayson (University of Manitoba)





**Andrew Cheattle (PDAC) takes the students on an emotional roller coaster ride during a role-playing exercise that introduces the importance of Corporate Social Responsibility (CSR)**

**BOARD OF DIRECTORS**



**Pressure builds as Bonanza Gold Mines Inc.'s board of directors impatiently demands success, and S-IMEW participants are faced with an ethical dilemma as Andrew Cheatle's role-playing scenario plays out. Andrew is thanked on behalf of the S-IMEW students by Allan Lion (University of Ottawa)**





**The Goodman School of Mines' Executive Director Bruce Jago talks about a career in exploration and mining at Au Pied du Rocher, and is thanked on behalf of the students by Kurtis Sanderson (UVic)**



**Jason Letto (Vale) introduces the Sudbury geology to S-IMEW participants, and is thanked on behalf of the students by Lisa Côté (University du Quebec a Chicoutimi)**





**Attila Pentek (Wallbridge Mining Ltd.) and Lindsay Hall (MNDM) introduce the first stop on the Sudbury Basin field trip**





**S-IMEW poses at the Sudbury nickel deposits discovery – Finally, first day in the field! Welcome to Sudbury!!**



# Gold Sponsors



**AGNICO EAGLE**



**Keaton Strongman (McMaster University) inspects sulfide mineralization in the sublayer norite at the base of the Sudbury Igneous Complex.**





**Da Da Da DAAAA, Da Da DAA....**





**Chris Beckett-Brown (Laurentian University) points to a carbonate concretion in sandstone of the Chelmsford Formation during the Sudbury Basin field trip**





**A rare example of non-mineralized sublayer norite is inspected during the Sudbury Basin field trip**





**Lunch time followed by a group photo session at the Onaping Falls**





**S-IMEW students inspect the Onaping Formation during Sudbury Basin field trip. Are these cool textures consistent with a fallback breccia model, or is it more complicated than that?**





**Chris Beckett-Brown (Laurentian University) and Keaton Strongman (McMaster University) inspect a road cut, exposing crosscutting relationships between the Creighton granite and Sudbury Breccia**





**Dr. David Pearson (Laurentian University) ushers his audience to the windows of *Bryston's on the Park* to look down on what used to be a roast bed, before his talk on Sudbury's environmental history**



**Attila Pentek (Wallbridge Mining Ltd.), Lindsay Hall (MNDM), and Dave Pearson (Laurentian University) thanked by students Billy Garrison (Dalhousie University), Joseph Vrzovski (University of Toronto), and Catherine Sedge (Saint Mary's University) (left to right, respectively)**





# Gold Sponsors



**Golden Valley Mines Ltd.**  
**Mines de la Vallée de l'Or ltée**





**Ben Berger (MNDM – retired) introduces the first outcrop at Laurentian University during OGS mapping day**





**Group photo at Laurentian University during OGS mapping day**





**Robin Taves (University of Waterloo) on her mapping traverse in the Laurentian University conservation area during OGS mapping day**





**John MacFarlane (St. Francis Xavier University) and Laura Ratcliffe (MNDM) measuring bedding orientation in the Mississagi sandstone on their traverse during Government Mapping Day**





**A group of silly geo's imitate Sudbury Breccia during OGS mapping day**



**S-IMEW students acknowledge MNDM (OGS staff) for a wonderful day in the field**





**Mike Fox (Fox High Impact Consulting) speaks on aboriginal participation and partnership in the mining industry, and is thanked on behalf of the S-IMEW participants by Tyler Glubrecht (University of Calgary)**



**Heading to the Glencore Strathcona Mill early in the AM**





**Sam McGarry (Glencore) guides the S-IMEW students around the sophisticated tailings facility near Glencore's Strathcona Mill and Fraser Mine**





**S-IMEW students are invited for BBQ lunch at Glencore, where Chef Jim is grilling burgers and sausages - mmmMMMmmm**



# Gold Sponsors



**Laurentian**University  
Université**Laurentienne**

---

**GOODMAN** SCHOOL OF MINES  
ÉCOLE DES MINES

---



**Melissa Friend (UBC) goes for a rip in the VD8000**



**Glencore drill site visit with Foraco International SA drillers and Glencore geologist explaining the intricacies of diamond drilling**





**Three deposits in 1 day....Derek Drayson (University of Manitoba) doesn't mess around!**







**King Kurtis Sanderson (U Vic) of the core pile!**





**Glencore and Foraco International SA drill visit**





**Foraco International SA drillers thanked on behalf of the S-IMEW participants by Thomas Bagley (Acadia University), Marc-Antoine Vanier (Laval University), and Keaton Strongman (McMaster University)**



**Chief mine geologist Dave Richardson (Glencore) talks about his experience at the Fraser mine in Sudbury**

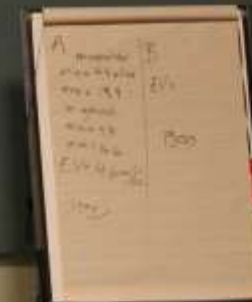




**Brad Lazich, Guido Serafini, and Dave Richardson of Glencore are thanked for their contribution to S-IMEW by Sean Hillacre (U. of Saskatchewan), Colin Padgett (U. of New Brunswick), and Keaton Strongman (McMaster U)**

2003 – Looper/Operator with  
Crone Geophysics

NEWMONT



Co-Chair Tim Dohey (Newmont Mining) gives a picturesque introduction to Geophysics Day by showing the places around the world where he has conducted geophysical surveys





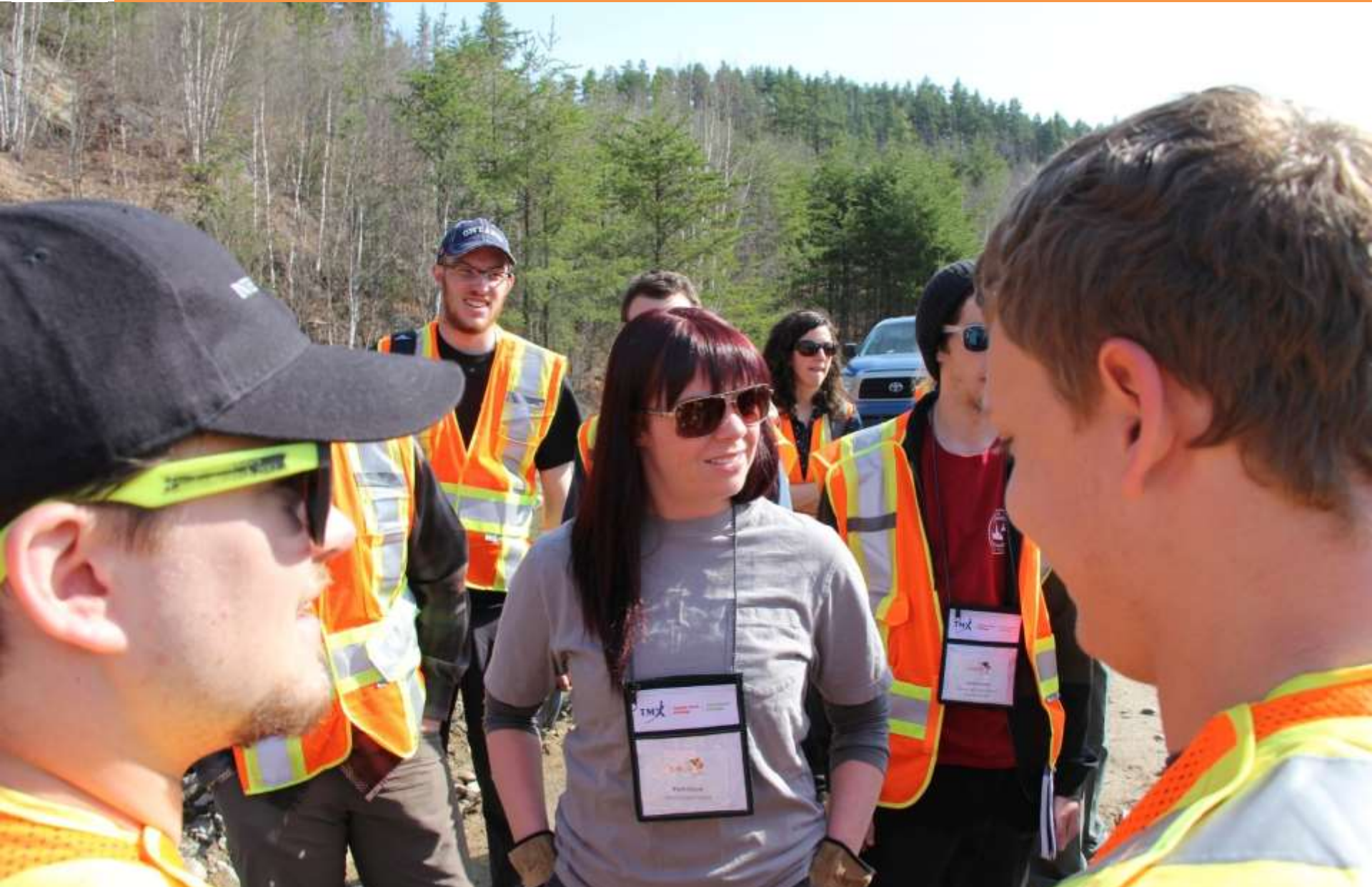
**Sean Dickie (Vale) gets the geophysical surveying demonstrations underway**

# Silver Sponsors



**BARRICK**





**S-IMEW participants huddle around Pam Coles (Abitibi Geophysics) as she explains how to conduct an IP survey**





**Scott Jobin-Bevans (CEO, Caracle Creek) and S-IMEW coordinator Linette MacInnis enjoying Geophysics day**









**Lianna Vice (Carleton University) and Mackenzie McConnell (Northern Alberta Institute of Technology) realize it is no simple task to carry geophysical equipment through the bush**





**Co-Chairs Brian Bengert (Vale) and Tim Dohey (Newmont Mining) in the middle of an aspiring group of S-IMEW students**





**NSERC Chair and Laurentian professor Richard Smith (Laurentian University) is having fun with Brian Bengert (Vale) and S-IMEW participant Aidan Ditchburn-Trout (McGill) as they test geophysical field equipment**





**Pam Coles (Abitibi Geophysics) presents her talk after the morning field demonstration, and is thanked on behalf of S-IMEW by Lianna Vice (Carleton University)**



**Dr. Richard Smith (Laurentian University) answers a question after his talk on airborne geophysical methods, and is thanked on behalf of the S-IMEW students by Robin Taves (University of Waterloo)**





**Krystal O'Neil (Vale) explains how to orient your EM survey to get the best coupling with the target during her afternoon talk, and is thanked on behalf of S-IMEW by Derek Drayson (University of Manitoba)**



**Richard Lachapelle (Scintrex) brings students outside for a demonstration during his gravity talk, and is thanked on behalf of the S-IMEW students by Mackenzie McConnell (Northern Alberta Institute of Technology)**



# Silver Sponsors





Chris Drielsma (DGI Geoscience) talks about borehole geophysics, and is thanked on behalf of the students by Chris Beckett-Brown (Laurentian University)







**Future S-IMEW presenter Kurtis Sanderson (University of Victoria) takes the podium at Restaurant Verdicchio**



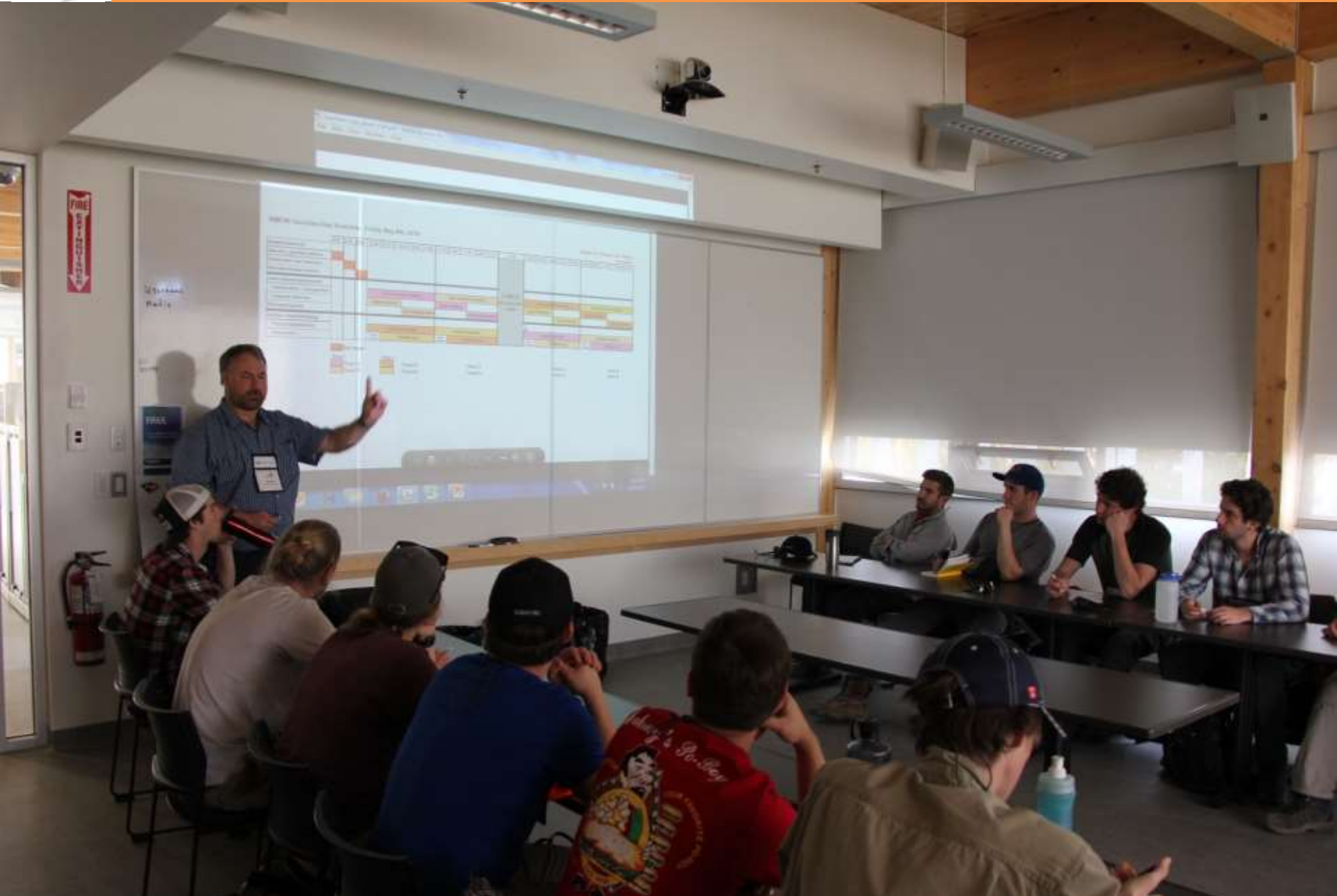


**Vale's Brian Bengert (Vale) receives a standing ovation after his passionate and inspiring talk on how he became a happy geophysicist after an initial Star Wars induced childhood dream of becoming an astronaut**



Co-chairs Brian Bengert (right, Vale) and Tim Dohey (left, Newmont Mining) are thanked on behalf of the S-IMEW students by Marc-Antoine Vanier (Laval University) and Logan Behuniak (Mount Royal University), respectively





**Stewart Hamilton (MNDM) welcomes the S-IMEW students to Geochemistry Day**



Beth McClenaghan (GSC) talks about drift prospecting and indicator minerals





Richard Dyer (MNDM) talks about regional-scale geochemical mapping in Ontario, and cool helicopter action!



**Heading out to do some lake sediment sampling.....**





**Carlos Bazan (British Columbia Institute of Technology) sampling lake sediments during Geochemistry Day**

# Bronze Sponsors







**Kurtis Sanderson (University of Victoria) catches a lake sediment sample as it is coming out of the sampling device during Geochemistry Day**



Fire assay! Yeeeeeah!





**Andy Bajc (MNDM) performing a till sample demonstration during Geochemistry Day**





**Till....num num num**





**Glenna Keating (GeoLabs) talks about XRF and other analytical methods**



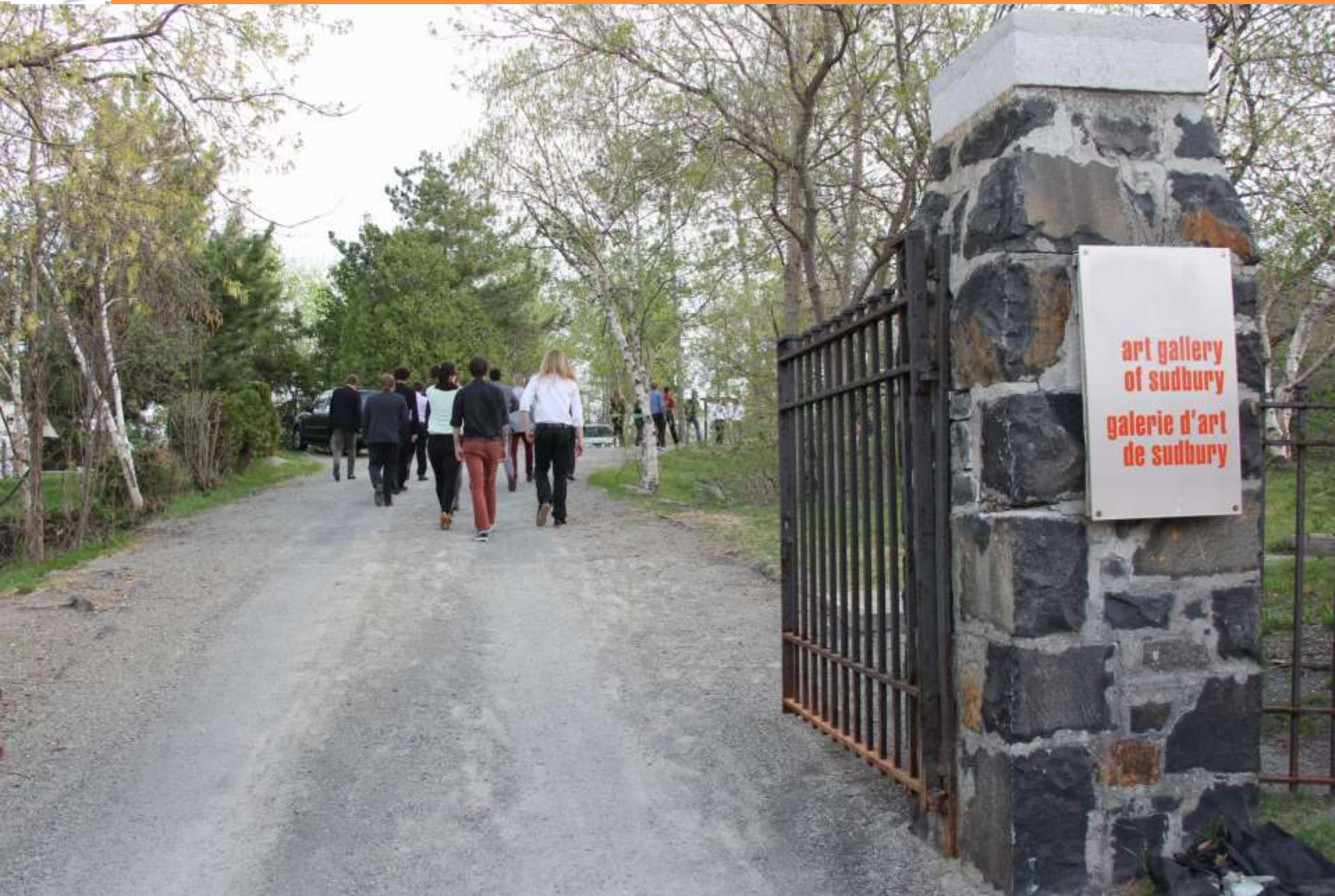
**S-IMEW students looking at diamond indicator minerals during Geochemistry Day, directed by Beth McClenaghan (GSC)**





**The beautiful Vale Living with Lakes Centre at Laurentian University, one of the most environmentally-**









**Celebrating a S-IMEW birthday - Happy Birthday Kurtis from all of us!**



**Dr. Phil Thurston (Laurentian University) speaks to the S-IMEW students (and President Lincoln) during the evening reception, and is thanked on behalf of S-IMEW by Lisa Côté (University du Quebec a Chicoutimi)**



# Bronze Sponsors





**From right- Marshall Hall (Wallbridge Mining Ltd.) with Robin Taves (UW) and Lisa Côté (UQAC) exploring for Ni-Cu-PGE mineralization in the North Range of the Sudbury Structure**





**Logan Behuniak (Mount Royal University) and his group discuss new field observations, and what their next move should be**





**Györgyi Tuba (Wallbridge Mining Ltd.) and her group of S-IMEW students appear to have found something of interest on their mapping traverse**





**Co-Chairs Ian Trinder (top right) and Scott Jobin-Bevans (back row middle) with Wallbridge Mining geologists and S-IMEW students**



**Carmen Diges (REV Law) shares her experience as a lawyer in the mining business, and is thanked on behalf of S-IMEW by John MacFarlane (St. Francis Xavier University)**





**Dr. Phil Thurston (Laurentian University) walks through the regional geology from Sudbury to Val d'Or at a pit stop in Temagami at the beginning of the Val d'Or and Noranda Field Trip**





**Hanging out with a BIF in Temagami**









**A soft landing on some pillow basalts**





**Michael Rosatelli (Golden Valley Mines) explains what it takes to be successful in the exploration business**

# Workshop Sponsors



**A.C.A. HOWE INTERNATIONAL LIMITED**  
Mining and Geological Consultants

**AGAT** Laboratories 







**Michael Rosatelli (Golden Valley Mines) welcomes S-IMEW to Val d'Or and Golden Valley Mines Ltd and is**



**Glenn Mullan (Golden Valley Mines) invites S-IMEW students for dinner and a talk at his home in Val d'Or, and is thanked by Melissa Friend (University of British Columbia)**











**Heading down to the 170 level of Agnico Eagle's LaRonde mine through the 2.2-kilometre-deep Penna Shaft (likely the deepest single-lift shaft in the Western Hemisphere)**



**John MacFarlane (St. FX, left) and Aidan Ditchburn (McGill University) 1.7 km underground in Agnico Eagle's**





**Senior Geologist David Pitre (Agnico Eagle) presents the geology of the LaRonde deposit in a refuge station 1.7 km underground – so cool! (and hot!)**



**A last look at the deposit scale geology before getting the hammers out**









# In-Kind Contributors



Golden Valley Mines Ltd.  
Mines de la Vallée de l'Or ltée





**LaRonde mine - 1700 meters underground!**





The wall rock temperatures reach 35°C at the deepest parts of the mine, but it is still pretty hot 1700 meters down!



**Gold embroidered coveralls!**





**A convenient park bench 1.7 km underground to rest on while waiting for the cage to return to surface**





**Coveralls can be a great place to store samples while underground.**





**Group photo 1700 m underground in the LaRonde mine with the Penna Shaft as a backdrop**





**Agnico Eagle mine geologists/engineers thanked by S-IMEW students after a fantastic underground tour**





**Lianna Vice (Carleton University) and Joseph Vrzovski (University of Toronto) looking at production core from the LaRonde Mine**



**Bacteria are used at the biological water treatment facility at the LaRonde mine, and are capable of degrading toxic cyanide into ammonia, and further processing ammonia into nitrite and nitrate**









**Guy Gosselin (Vice President, Exploration, Agnico Eagle) presents his evening talk about the Amaruq gold discovery in Nunavut, and is thanked by Mackenzie McConnell (NAIT)**





**Field trip leaders Gérald Riverin (Yorbeau Resources) and David Comba are speaking to the S-IMEW participants before heading to the first outcrop of the day in the Noranda Camp**





**Gérald Riverin (Yorbeau Resources) and Linette MacInnis standing on what used to be the discordant alteration pipe to a VMS deposit, which subsequently was contact metamorphosed to a peculiar rock called dalmatianite because of cordierite porphyroblasts (center top)**





**Carlos Bazan (BCIT) holds a piece of breccia formed during steam generation when cold seawater comes into contact with hot solidified rock – an example of syn-volcanic fluid pathways that are important to VMS exploration**





**Marc-Antoine Vanier (Laval University) with his finger on the same horizon that hosts VMS deposits along strike**









**S-IMEW students delineating a syn-volcanic fault**









**Gerald and David finally enjoy a little break from the eager S-IMEW students during lunch**





**Subaqueous phreatomagmatic explosion breccias at Buttercup Hill that contains highly silicified andersite fragments, initially thought to be rhyolite**



**Gerald Riverin (Yorbeau Resources) is giving an evening talk about the Noranda Camp**





**Field trip leaders David Comba (middle left) and Gerald Riverin (middle right) are thanked on behalf of the S-IMEW students by Lyanna Vice (Carleton University) and Derek Drayson (University of Manitoba)**



**It's a cold but beautiful morning as the S-IMEW convoy rolls up at a well-exposed stratigraphic sequence of ancient volcanic rocks that are to be mapped under Dr. Harold Gibson's supervision**





**S-IMEW participants spends a day with Dr. Harold Gibson (Laurentian University & MERC) mapping volcanic stratigraphy in the Noranda camp**





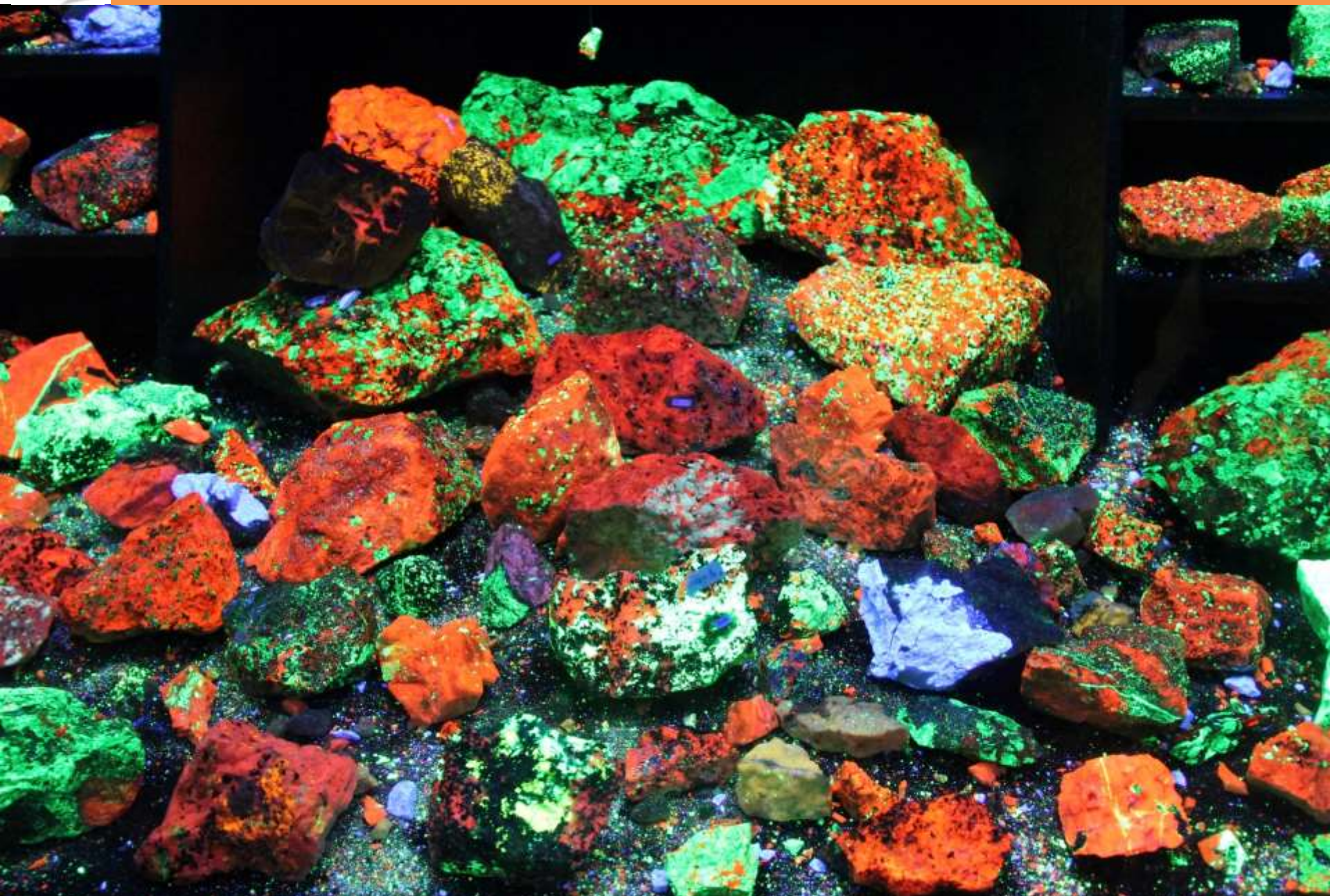
**Lisa Cote (UQAC) and Allan Lion (UO) are enjoying the morning mapping exercise exposing the S-IMEW students to a variety of volcanic features**





**Dr. Harold Gibson (Laurentian University – MERC) is thanked by Chis Voisey (Memorial University), before joining the rest of the delegation for a group photo**





Spectacular fluorescent minerals at the Cobalt Mining Museum





**From left, Lianna Vice (Carleton University) and Mackenzie McConnell (NAIT) are looking for silver ore in Cobalt with the downtown as a backdrop**





**Old mine workings in Cobalt following a narrow silver vein**





**A refreshing dive into the cold waters at Temiskaming Shores was inevitable**



**The smile of a successful prospector – Colin Padget (UNB) shows off his silver ore samples collected in**



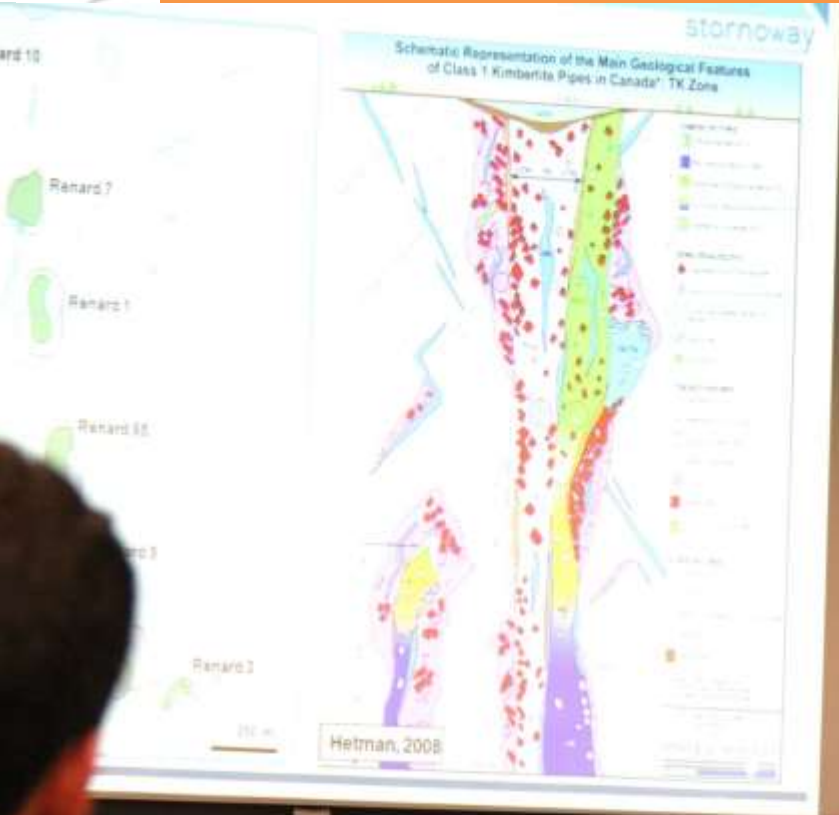


**Dan Leroux (ACA Howe International Ltd.) talks to the students during the first Diamond Day in S-IMEW history, and is thanked on behalf of S-IMEW by Christopher Beckett-Brown (Laurentian University)**



**Nicole Januszczak (De Beers) talks about exploration approaches and techniques for primary diamond deposits, and is thanked on behalf of S-IMEW by Thomas Bagley (Acadia University)**

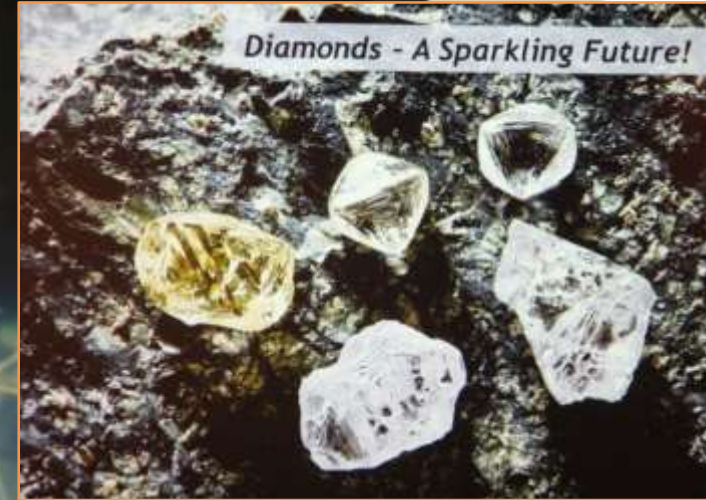




**Matt Manson (Stornoway Diamonds) talks about evaluation of diamond deposits, and is thanked on behalf of S-IMEW by Aidan Ditchburn-Trout (McGill University)**







George Read (Shore Gold Inc.) delivers his evening talk about the diamond industry and its sparkling future, and is thanked on behalf of S-IMEW by Billy Garrison (Dalhousie University)



### CORE BOX LABELING

- Once the core has been orientated and water marked, the core is ready for further processing by the geologist/technician (geological unit geotechnical logging etc)
- M&E then works from within the box to actual hole depths and may take a number of in-hole photographs to document the box contents as part of the final report/assessment

Ian Trinder (ACA Howe International Ltd.) explains the ABC's of core logging, and is thanked on behalf of S-IMEW by Tyler Glubrecht (University of Calgary)





**Students log core provided by IAMGOLD with Ian Trinder (ACA Howe International Ltd.) guiding them through the process**

## Analytical Labs

- Most Canadian labs have ISO 9000
- Few have ISO 17025
- All analytical labs have internal QC samples inserted within each assay batch
- All assays are signed and stamped by a certified assayer

Shocking truth....no lab is perfect

The World, Our Language, Our Company



**Julie Selway (Caracle Creek International Consulting) share her insights on quality assurance and quality control, and is thanked on behalf of the S-IMEW participants by Percy Clark (Fleming College)**





**Elisabeth Ronacher (Ronacher Mckenzie Geoscience) talks about resource and 3D modelling, and is thanked on behalf of the S-IMEW participants by Derek Drayson (University of Manitoba)**







**Scott Jobin-Bevans and Felix Lee with the successful S-IMEW class of 2015 – Congratulations!**