

# 36th Annual Yellowknife Geoscience Forum (2008)

TIME	November 18 (Tuesday)			November 19 (Wednesday)			November 20 (Thursday)					
	THEATRE 1	THEATRE 2	THEATRE 3	THEATRE 1	THEATRE 2	THEATRE 3	THEATRE 1	THEATRE 2	THEATRE 3			
8:40	Expl & Geoscience	Energy		Expl & Geoscience	Regulatory		Expl & Geoscience		Remote TH2			
9:00	Expl & Geoscience	Energy	Mining & Enviro Mgmt	Expl & Geoscience	Regulatory		Expl & Geoscience		Remote TH2			
9:20	Expl & Geoscience	Energy	Mining & Enviro Mgmt	Expl & Geoscience	Regulatory		Expl & Geoscience	Diamonds	Remote TH2			
9:40	Expl & Geoscience	Energy	Mining & Enviro Mgmt	Expl & Geoscience	Regulatory		Expl & Geoscience	Diamonds	Remote TH2			
10:00	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break			
10:20	Expl & Geoscience	Energy	Mining & Enviro Mgmt	Expl & Geoscience	Outreach		Expl & Geoscience	Diamonds	Remote TH2			
10:40	Expl & Geoscience	Energy	Mining & Enviro Mgmt	Expl & Geoscience	Outreach		Expl & Geoscience	Diamonds	Remote TH2			
11:00	Expl & Geoscience	Energy	Mining & Enviro Mgmt	Expl & Geoscience	Outreach		Expl & Geoscience	Diamonds	Remote TH2			
11:20	Expl & Geoscience	Energy	Mining & Enviro Mgmt	Expl & Geoscience	Outreach		Expl & Geoscience	Diamonds	Remote TH2			
11:40	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break			
12:00	Expl & Geoscience	Energy	Mining & Enviro Mgmt	Expl & Geoscience	Surficial - Pipeline		Expl & Geoscience	Diamonds	Remote TH2			
12:20	Expl & Geoscience	Energy	Mining & Enviro Mgmt	Expl & Geoscience	Surficial - Pipeline		Expl & Geoscience	Diamonds	Remote TH2			
12:40	Welcome			Expl & Geoscience	Surficial - Pipeline		Expl & Geoscience	Diamonds	Remote TH2			
13:00	Sponsored Lunch Weledeh & St. Patrick's school gym			Sponsored Lunch & Poster Session Capitol Theatre lobby			Sponsored Lunch, Sponsored Lunch, Door Prize Draws, Passport to Diamond Draw & Closing Remarks Weledeh & St. Patrick's school gym					
13:30				Posters Session & Soap Box Talks Capitol Theatre lobby								
14:00										Keynote Address (Theatre 1)		
14:30										Speaker: Dr. Mark Hannington (University of Ottawa)		
14:50	Expl & Geoscience	Energy	Mining & Enviro Mgmt	Posters Session & Soap Box Talks Capitol Theatre lobby			Expl & Geoscience	Diamonds	Remote TH2			
15:10	Expl & Geoscience	Energy	Mining & Enviro Mgmt				Expl & Geoscience	Diamonds	Remote TH2			
15:30	Expl & Geoscience	Energy	Mining & Enviro Mgmt				Expl & Geoscience	Diamonds	Remote TH2			
15:50	Expl & Geoscience	Energy	Mining & Enviro Mgmt				Expl & Geoscience	Diamonds	Remote TH2			
16:10		Energy		Reception at Weledeh & St. Patrick's school gym			Expl & Geoscience					
16:30	Reception at Weledeh & St. Patrick's school gym						Reception at Weledeh & St. Patrick's school gym			Student Awards		
19:00	Charles Camsell Talk (Open to the public)  Dr. Mark Hannington (University of Ottawa) <i>Exploring Active Volcanoes on the Ocean Floor</i> Legislative Assembly - Sponsored by NAPEG -			17:00 - NAPEG AGM (the Office Meeting Rm)			Geoscience Forum Gala (Ticket Required)  Yellowknife Inn					
				Geoscience Forum Gala (Ticket Required)  Yellowknife Inn								
Trade Show	12:30-19:00 Weledeh & St. Patrick's school gym			14:00-19:00 Weledeh & St. Patrick's school gym			10:00-15:00 Weledeh & St. Patrick's school gym					

**November 17 (Monday)**  
**Geoscience Forum**  
**Ice Breaker**  
 Black Knight Pub  
 7:00 to 10:00 pm

## **Tuesday, November 18 (morning)**

### **Theatre 1 – Exploration & Geoscience**

Chairpersons: Steve Goff, Edith Martel, Don James

- 08:40 Cairns, S. and Ketchum, J.** - The Northwest Territories Geoscience Office – 2008 Activity Overview
- 09:00 Percival, J.A.** - The Geomapping for Minerals Program
- 09:20 Goff, S.** - A Mineral Exploration overview of the Northwest Territories
- 09:40 Ham, L.** - A Mineral Exploration overview of Nunavut
- 10:00 Coffee** (sponsored by Discovery Mining Services Ltd, and Sub-Arctic Surveys Ltd.)
- 10:20 Bleeker, W.** - A Review of Mafic-Ultramafic Occurrences of the Slave Craton and Their Ni-Cu Potential, With Emphasis On The Ca. 2.8 Ga Central Slave Cover Group
- 10:40 Ernst, R.E. and Bleeker, W.** - Summary of Proterozoic Magmatic Events of The Slave Craton And Environs And Assessment Of Their Metallogenic Potential
- 11:00 Kivi, K.R., Doyle, B.J., and Senn, M.J.** - The Providence Nickel Discovery, Slave Province, NT.
- 11:20 McLean, K.** - Geological Setting and Update On Exploration Activities, Providence Greenstone Belt, NWT.
- 11:40 Coffee** (sponsored by Seabridge Gold Inc.)
- 12:00 Pratico, V.** - Tyhee Development Corp's Yellowknife Gold Project
- 12:20 Lindsay, D.** - The Hope Bay Project 2008 Update - Hope Bay, Nunavut, Canada
- 12:40 Welcome**
- 12:30-**
- 19:00 Trade Show** – Weledeh and St. Patrick's School gymnasium – Parking is available at 4503 52 Ave. (look for the Geoscience Forum signs)
- 13:00 Lunch** (sponsored by Boart Longyear Drilling Services, Diavik Diamond Mine (a Rio Tinto operation), and NWT & Nunavut Chamber of Mines) – Weledeh and St. Patrick's School gymnasium

## Tuesday, November 18 (morning)

### Theatre 2 – Energy in Canada's North

Chairperson: Thomas Hadlari

- 08:40 Pyle, L.J., Gal, L.P., Hadlari, T., Jones, A.L., Lemieux, Y., Zantvoort, W.G., Allen, T.L., and Fraser, T.A.** - Overview Of Peel Petroleum Project Final Deliverables
- 09:00 Thomson, D., Schröder-Adams, C., Hadlari, T.** - Foraminiferal Biostratigraphic Framework For The Cretaceous Of The Peel Plateau Region
- 09:20 Davison, J.E., Chesterman, J.P., Giovanni, M.K., Hadlari, T., and Hubbard, S.M.** - Preliminary Outcrop Insights Into The Stratigraphy And Sedimentology Of The Lower Cretaceous Of The Mackenzie Plain, NWT
- 09:40 Hadlari, T., Thomson, D., Schröder-Adams, C.J., Lemieux, Y., MacLean, B., and Gabites, J.E.** - Cretaceous Evolution Of A Northern Cordilleran Foreland Basin Inferred From Stratigraphy, Seismic Sections, And Detrital Zircons, Mackenzie Mountains, Canada
- 10:00 Coffee** (sponsored by Discovery Mining Services Ltd, and Sub-Arctic Surveys Ltd.)
- 10:20 Gal, L.P.** - An assortment of observations and analyses regarding petroleum potential of Paleozoic rocks, Peel Plateau and Plain, Northwest Territories and Yukon
- 10:40 Corlett, H.J. and Jones, B.** - Middle Devonian Sea Level Rise In the Mackenzie Basin, NWT: Case Study of a Devonian Ramp Carbonate System
- 11:00 Fallas, K.M.** - Structural Style of the Fold-Belt to Thrust-Belt Transition, Central Mackenzie Mountains, NWT, And Its Implications For Structural Trap Development
- 11:20 Price, P. and Enachescu, M.** - The Nogha Gas Discovery – A Cambrian Clastic Gas Discovery within the Sahtu Settlement Region of The Central Mackenzie Valley, NWT
- 11:40 Coffee** (sponsored by Seabridge Gold Inc.)
- 12:00 Enachescu, M., Price, P., Cody, J., Dyke, A., Heim, J., Bogstie, D., Whidden, S., Vestrum, R., and Gittins, J.** - "Marine" Mackenzie River Seismic Line, NWT: Data Reprocessing And Basin Research
- 12:20 Fowler, M.G.** - Geomapping for Energy – A New Federal Geoscience Program for the North
- 12:40 Welcome**
- 12:30-**
- 19:00 Trade Show** – Weledeh and St. Patrick's School gymnasium – Parking is available at 4503 52 Ave. (look for the Geoscience Forum signs)
- 13:00 Lunch** (sponsored by Boart Longyear Drilling Services, Diavik Diamond Mine (a Rio Tinto operation), and NWT & Nunavut Chamber of Mines) – Weledeh and St. Patrick's School gymnasium

**Tuesday, November 18 (morning)**

**Theatre 3 – Mining and Environmental Management**

Chairpersons: Jennifer Galloway, Julie Ward

- 09:00** **Sego, D.C., Pham, N., Blowes, D., Smith, L.** - Heat Transfer in Waste Rock Piles At Diavik Diamond Mine
- 09:20** **Bailey, B.L., Smith, L., Neuner, M., Gupton, M., Blowes, D.W., Smith, L., Sego, D.C., and Gould, D.** - Diavik Waste Rock Project: Early Stage Geochemistry And Microbiology Of Effluent From Low Sulfide Content Waste Rock Piles
- 09:40** **Smith, L., Neuner, M., Gupton, M., Bailey, B.L., Blowes, D., Smith, L., and Sego, D.** - Diavik Test Piles Project: Design and Construction of Large-Scale Research Waste Rock Piles in the Canadian Arctic
- 10:00** **Coffee** (sponsored by Discovery Mining Services Ltd, and Sub-Arctic Surveys Ltd.)
- 10:20** **Biggar, K.W., Richardson, A., and Iwakun, I.** - Characterization of Fuel Contamination in A Fractured Bedrock Permafrost Environment At The Colomac Mine
- 10:40** **Bourke, R., Connell, R., and Galloway, J.M.** - Groundwater Monitoring At Newmont Con Mine
- 11:00** **Mace, J.** - Determining the Most Appropriate Soil Criteria for the Remediation of Northern Contaminated Sites
- 11:20** **Silcock, K.** - Developing A Remediation Plan for The North Inca Advanced Exploration Site, NWT
- 11:40** **Coffee** (sponsored by Seabridge Gold Inc.)
- 12:00** **Modeste, O. and Ward, J.** - Addressing Historic and Present Concerns About the Former Port Radium Uranium Mine
- 12:20** **Carrière, S.** - Risk Assessment of Invasive Alien Species in the NWT
- 12:40** **Welcome**
- 12:30-**
- 19:00** **Trade Show** – Weledeh and St. Patrick’s School gymnasium – Parking is available at 4503 52 Ave. (look for the Geoscience Forum signs)
- 13:00** **Lunch** (sponsored by Boart Longyear Drilling Services, Diavik Diamond Mine (a Rio Tinto operation), and NWT & Nunavut Chamber of Mines) – Weledeh and St. Patrick’s School gymnasium

## **Tuesday, November 18 (afternoon)**

### **Theatre 1 – Exploration & Geoscience**

Chairpersons: Steve Goff, Edith Martel, Don James

**12:30-**

**19:00 Trade Show** – Weledeh and St. Patrick's School gymnasium – Parking is available at 4503 52 Ave. (look for the Geoscience Forum signs)

**14:50 Burgess, S.** - 2008 Hackett River Project Update: At the Threshold of Development

**15:10 Grant, H.L.J., Layton-Matthews, D., Peter, J.M., Klatt, H., and Venance, K.E.** - The Distribution And Controls On Silver Mineralization In The Main Zone Of The 2.68 Ga Hackett River Zn-Pb-Cu-Ag Volcanogenic Massive Sulfide (VMS) Deposit, Nunavut, Canada

**15:30 Kjarsgaard, B.A. and Wright, D.** - Mineral and Energy Resource Assessment (Mera) for the Proposed East Arm National Park

**15:50 Mercer, W., Pedersen, J.C., and Trueman, D.L.** - The Lake Zone Heavy Rare Earth Deposit, NT, Canada

**16:30-**

**19:00 Reception** (sponsored by Diavik Diamond Mine (a Rio Tinto operation), First Air – The Airline of the North, Nuna Group of Companies, and NWT & Nunavut Chamber of Mines) – Weledeh and St. Patrick's School gymnasium – please don't drink and drive. Complimentary rides home are provided by St. Patrick's SADD. Pick-up is in the Weledeh parking lot.

**19:00 Charles Camsell Talk: Dr. Mark Hannington** (sponsored by NAPEG) – Great Hall, Legislative Assembly of the Northwest Territories

## **Tuesday, November 18 (afternoon)**

### **Theatre 2 – Energy in Canada’s North**

Chairperson: Thomas Hadlari

**12:30-**

**19:00 Trade Show** – Weledeh and St. Patrick’s School gymnasium – Parking is available at 4503 52 Ave. (look for the Geoscience Forum signs)

**14:50 Smith, I.R.** - Shothole Drillers’ Logs as a Regional Geoscience Resource: Project Update, Applications, and Future Directions

**15:10 Bennett, R., Blasco, S., MacKillop, K., and Kostylev, V.** - Update on Beaufort Sea Seabed Environmental and Geotechnical Research

**15:30 Whalen, D., Solomon, S.M., Forbes, D.L., Craymer, M., Lavergne, J.C., and Marsh, P.** - Coastal And Nearshore Geohazards In The Southern Beaufort Sea

**15:50 Hadlari, T. and Bedard, J.H.** - Reconnaissance Fieldwork on Cambrian Siliciclastic Rocks, Victoria Island, NT

**16:10 Drummond, K.J.** - Discovered and Undiscovered Oil and Gas Resources of the Beaufort Sea

**16:30-**

**19:00 Reception** (sponsored by Diavik Diamond Mine (a Rio Tinto operation), First Air – The Airline of the North, Nuna Group of Companies, and NWT & Nunavut Chamber of Mines) – Weledeh and St. Patrick’s School gymnasium – please don’t drink and drive. Complimentary rides home are provided by St. Patrick’s SADD. Pick-up is in the Weledeh parking lot.

**19:00 Charles Camsell Talk: Dr. Mark Hannington** (sponsored by NAPEG) – Great Hall, Legislative Assembly of the Northwest Territories

**Tuesday, November 18 (afternoon)**

**Theatre 3 – Mining and Environmental Management**

Chairpersons: Jennifer Galloway, Julie Ward

**12:30-**

**19:00 Trade Show** – Weledeh and St. Patrick's School gymnasium – Parking is available at 4503 52 Ave. (look for the Geoscience Forum signs)

**14:50 Gerein, K.M., Machtans, H., and Mitchell, W.** - Environmental Effects Monitoring At Giant Mine

**15:10 Fitzsimons, J.D., Machtans, H., Majewski, S.** - Use Of an Artificial Reef as Habitat Compensation in an Arctic Lake

**15:30 Vescei, P., Machtans, H., and Metikosh, S.** - Baker Creek: Results of Arctic Grayling Monitoring In 2008

**15:50 MacNeill, W.S, Ash G.R, and Schryer, R.** - Changes In Baseline Water Quality Characteristics Following the 2008 Forest Fire at Fortune Minerals Ltd. NICO Project

**16:30-**

**19:00 Reception** (sponsored by Diavik Diamond Mine (a Rio Tinto operation), First Air – The Airline of the North, Nuna Group of Companies, and NWT & Nunavut Chamber of Mines) – Weledeh and St. Patrick's School gymnasium – please don't drink and drive. Complimentary rides home are provided by St. Patrick's SADD. Pick-up is in the Weledeh parking lot.

**19:00 Charles Camsell Talk: Dr. Mark Hannington** (sponsored by NAPEG) – Great Hall, Legislative Assembly of the Northwest Territories

## **Tuesday, November 18 (evening)**

### **Great Hall, Legislative Assembly of the Northwest Territories**

Charles Camsell Talk (sponsored by NAPEG) – open to the public (free)

**19:00 Dr. Mark Hannington, University of Ottawa** - Exploring Active Volcanoes on the Ocean Floor

#### **Biography**

Mark Hannington received a PhD. from the University of Toronto in 1989 and spent 15 years as a Research Scientist at the Geological Survey of Canada before joining the University of Ottawa in 2005. His research combines the study of active volcanoes on the ocean floor, and associated metal depositing hot springs (“black smoker vents”), with research on ancient volcanic environments that host many of the world’s largest and most valuable mineral deposits on land. During the last 24 years, Dr. Hannington has participated on 25 research cruises to submarine volcanoes on the East Pacific Rise, the Juan de Fuca Ridge, the Mid-Atlantic Ridge, Iceland, New Zealand, Antarctica, Tonga, and Papua New Guinea. This work has focused on understanding the origins of base and precious metal deposits at submarine volcanoes and has led to the discovery of a number of previously unknown mineral deposit types on the seafloor. Recently, Dr. Hannington’s work has made important contributions to the understanding of natural loading of metals to the oceans from volcanic and hydrothermal sources, including metals with potential far-field environmental significance. His comparisons between modern volcanoes and ancient volcanic environments in Canada are also leading to new and improved models for land-based mineral exploration.

Dr. Hannington is the chief editor of the international research journal *Economic Geology*, which deals with the geosciences applied to mineral deposits. *Economic Geology* is one of the oldest scientific publications in North America and is celebrating its 100th anniversary this year. Dr. Hannington is only the 5th editor of the journal and the first to be located outside the United States.

## **Wednesday, November 19 (morning)**

### **Theatre 1 – Exploration & Geoscience**

Chairpersons: Steve Goff, Edith Martel, Don James

- 08:40 Ootes, L., Falck, H., Gleeson, S., Turner, E., Rasmussen, K., Gordey, S., and Pierce, K.** - Metallogenic Evolution of the Mackenzie Mountains, NWT
- 09:00 Falck, H. and Day, S.** - Stream Sediment Sampling in the Mackenzie Mountains: A Status Report For 2008
- 09:20 Dunning, J.K.** - Selwyn Project: Truly Undiscovered World-Class Zinc Country
- 09:40 Taylor, A.** - Prairie Creek Mine: Application for Operations
- 10:00 Coffee** (sponsored by Hope Bay Mining - Newmont Mining)
- 10:20 Martel, E., Gordey, S., Roots, C., Fallas, K., MacNaughton, R., and Fischer, B.** - Sekwi Mountain Project Year 3: Overview of Bedrock Mapping And Collaborative Studies In Central Mackenzie Mountains, NT
- 10:40 Leslie, C.D., Sandeman, H.A., and Mortensen, J.K.** - Lower Paleozoic Rift Related Alkaline Volcanic Rocks, Mackenzie Mountains, NT
- 11:00 Mercier, M., Marshall, D., Ootes, L., Lalonde, A.E., and Martel, E.** - Geology and Mineralogy of the Mountain River Beryl (Variety Emerald) Showing, Mackenzie Mountains, NT, Canada: Insights From Preliminary Fluid Inclusion Studies
- 11:20 MacDonald, J., and Lin, S.** - The Plateau Thrust: A Detailed Investigation and Characterization of the Deformation In Its Footwall, NTS Sheet 106A, Mackenzie Mountains, NT, Canada
- 11:40 Coffee** (sponsored by Canadian Zinc Corporation)
- 12:00 Turner, E.C., Neuweiler, F., and Burdige, D.** - Evidence of Early Neoproterozoic Metazoans (Animals), Little Dal Group, NWT
- 12:20 St-Onge, M.R., Harrison, C., Strelnikov, S., Lopatin, B.G., Wilson, F., Bergman, S., Jepsen, H.S., and Solli, A.** - A New Geological Map of the Arctic – Prelude To A Geo-Mapping For Energy & Minerals (Gem) Tri-Territorial Compilation Project
- 12:40 Duke, N.A.** - Remnant Neoproterozoic Ash Flow Fields, Diagnostic of Orogenic Settings with Lode Gold Mineralization: Examples from the Canadian Shield
- 13:00 Lunch** (sponsored by Yellowknife Inn) – Capitol Theatre
- 14:00-**
- 19:00 Trade Show** – Weledeh and St. Patrick's School gymnasium – Parking is available at 4503 52 Ave. (look for the Geoscience Forum signs)

## **Wednesday, November 19 (morning)**

### **Theatre 2 – Regulatory**

Chairperson: Andy Graw, Angie Norris

- 08:40 Ellis, S.** - An Akaitcho Exploration Agreement: Securing First Nation Consent for Mineral Exploration Projects  
**09:00 Bonham, O., and Hepelle, B.** - Professional Geoscience in Canada - An Update  
**09:20 Cliffe-Phillips, M.** - Uranium Mineral Exploration Policy (Draft) – Wek’eezhii Land & Water Board  
**09:40 Hamre, K.** - NWT Protected Areas Strategy: Status Of Land Access And Information  
**10:00 Coffee** (sponsored by Hope Bay Mining - Newmont Mining)

### **Theatre 2 – Geoscience Outreach**

Chairpersons: Diane Baldwin, Louise Corriveau

- 10:20 Corriveau, L., Jackson, V.A., Mumin, H., McMartin, I., Bleeker, W.** - Reaching Out With Sciences: Why We Are So Keen On Potential Iron Oxide Copper-Gold Deposits In The Great Bear Lake Area, NT  
**10:40 Daniel, S.** - Experiential Science  
**11:00 Griller, N., Taptuna, P., and O’Neil, J.** - Collaborating To Support Community Involvement In Environmental Consulting: Golder And Angoniatit Niovikvia Ltd., Kugluktuk, Nunavut  
**11:20 Ham, L.J., Chakungal, J., and Prosh, E.C.** - Geoscience Outreach In Nunavut  
**11:40 Coffee** (sponsored by Canadian Zinc Corporation)

### **Theatre 2 – Surficial Geology – Pipeline**

Chairperson: Thomas Hadlari

- 12:00 Duk-Rodkin, A., Huntley, D., Smith, I.R., Singhroy, V., and MacDonald, L.** - Surficial Geologic Research Program In The Southern Mackenzie Valley, Northwest Territories, Canada: Its Significance And Use In Planning Pipeline Construction And Resource Development  
**12:20 Lemay, D.A., MacDonald, L.E., Davenport, P.H., and Duk-Rodkin, A.** - Towards An Integrated Work Flow For Surficial Geological Maps Of The Southern Mackenzie Corridor In GIS And Printed Formats  
**12:40 - Wang, B., Paudel, B., and Li. H.** - An Update on Landslide Retrogression Rate and Its Implication to Design of Cut Slopes in Ice-Rich Permafrost  
**13:00 Lunch** (sponsored by Yellowknife Inn) – Capitol Theatre

**14:00-**

**19:00 Trade Show** – Weledeh and St. Patrick’s School gymnasium – Parking is available at 4503 52 Ave. (look for the Geoscience Forum signs)

## **Wednesday, November 19 (afternoon)**

### **Theatre 1 – Keynote Address**

**14:00-**

**14:50 Keynote Presentation** (open to delegates)

**Dr. Mark Hannington, University of Ottawa** - The Metallogeny of Modern Submarine Volcanic Arcs and Implications for Ancient Greenstone Belts

#### **Talk Abstract**

Exploration of submarine hydrothermal systems in the western Pacific region and elsewhere is leading to enhanced models of arc metallogeny, with implications for understanding the origin and distribution of ancient ore deposits. An analysis of the formation conditions, tectonic settings, and likelihood of preservation of submarine hydrothermal systems in the western Pacific sheds light on the observed time-space relationships of diverse mineral deposit types in ancient greenstone belts. Microplate tectonics that characterize the western Pacific today also were likely important in Archean and Paleoproterozoic volcanic belts. In such complex settings, oblique collisions, opposing subduction zones, and rapid changes in stress regimes (e.g., from compressional to tensional and back to compressional) are common, causing juxtaposition of diverse styles of mineralization. Similar factors are considered to have been important for the metallogenic evolution of volcanic arcs of the Superior province. Major ore deposits of the southern Abitibi belt, for example, were formed within a span of ~50 m.y., in response to successive arc rifting, back-arc basin development, and exhumation of the adjoining accretionary complexes along major arc-parallel crustal-scale faults. Active marginal basins of similar size and representing similar stages of this evolution are well represented in the western Pacific and contain a similar suite of mineral deposit types. Examples from the eastern Manus Basin and adjoining New Ireland Basin (PNG) and in the Lau-Tonga-Kermadec arc-backarc system illustrate these similarities. However, much greater spatial and temporal resolution of magmatic and structural events will be needed to recognize these relationships in ancient greenstone belts and thereby achieve the same level of confidence in prediction of ore deposit locations that is presently possible in modern submarine volcanic arcs.

**14:00-**

**19:00 Trade Show** – Weledeh and St. Patrick's School gymnasium – Parking is available at 4503 52 Ave. (look for the Geoscience Forum signs)

**14:50-**

**16:30 Poster Session** – Capitol Theatre Lobby

**17:00 NAPEG Annual General Meeting**

The Office Meeting Room (upstairs from Fuego Restaurant)

**Wednesday, November 19 (afternoon)**

**Capitol Theatre Lobby - Posters Session (14:50 to 16:30)**

Chairpersons: Beth Fisher, Hendrik Falck

**13:00-14:00 Lunch** (sponsored by Yellowknife Inn) – Capitol Theatre

**14:00-19:00 Trade Show** – Weledeh and St. Patrick School gymnasium. Parking is available at 4503 52 Ave. (look for the Geoscience Forum signs)

**14:00-14:50 Keynote Address – Dr. Mark Hannington** – Capitol Theatre 1

**14:50-16:30 Posters Session** – Capitol Theatre Lobby

**16:30- 19:00 Reception** (sponsored by ALS Laboratory Group, and NWT & Nunavut Chamber of Mines) – Weledeh and St. Patrick's School gymnasium – please don't drink and drive. Complimentary rides home are provided by St. Patrick's SADD. Pick-up is in the Weledeh parking lot.

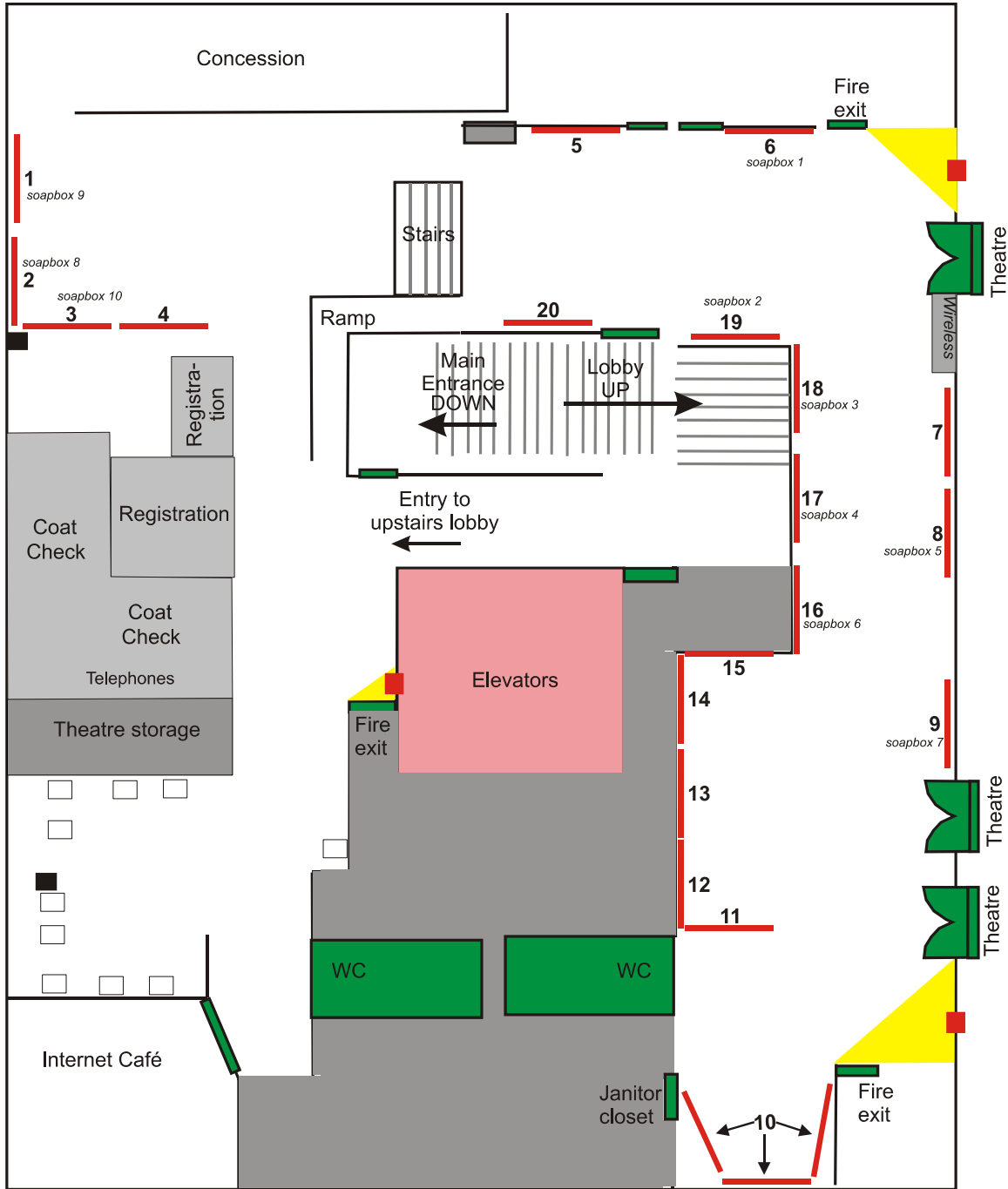
**17:00 NAPEG Annual General Meeting**  
The Office Meeting Room (upstairs from Fuego Restaurant)

**18:00 NWT & Nunavut Chamber of Mines AGM** – Yellowknife Inn, Copper Room

**19:00 NWT & Nunavut Chamber of Mines Gala** (sponsored by First Air – The Airline of the North, Northwestel Inc., and Yellowknife Inn) – Yellowknife Inn (ticket required)

**Capitol Theatre Lobby - Poster Session (14:50 to 16:30)**  
 Chairpersons: Beth Fischer, Hendrik Falck

**Posters Floor Plan**



- Poster board location
- Pillar
- Fire exit
- Fire extinguisher
- Game machine

### Poster Locations (Alphabetically by First Author)

Location	Author(s)	Title	Category
20	<b>Allen and Fraser</b>	Upper Devonian to Lower Carboniferous Tuttle Formation, Northeastern Yukon: Potential Source, Reservoir and Trap	Energy
4	<b>Baldwin</b>	Community Mapping Program: Deline, NWT	Outreach
7	<b>Bédard <i>et al.</i></b>	The Plumbing System of the Franklin Magmatic Event on Victoria Island, NWT, Preliminary Results	Expl & Geosc
8	<b>* Bleeker and LeCheminant</b>	The Proterozoic Dessert Lake Red-Bed Basin, a Target for Uranium Exploration — An Update	Expl & Geosc
12	<b>Chakungal <i>et al.</i></b>	Natural Resource Potential – Yes or No? The Southampton Island Integrated Project: A Summary of 2007 & 2008 Results and Investigations	Expl & Geosc
19	<b>* Dickson <i>et al.</i></b>	A New Geological Model for Oil Prospectivity in the Great Bear Plains, NWT	Energy
14	<b>Gordey <i>et al.</i></b>	Sekwi Project: Revision Maps for the Central Mackenzie Mountains, NWT	Expl & Geosc
15	<b>Harris <i>et al.</i></b>	Remote Predictive Mapping: Phase II with Emphasis on Recent Activities in the Wopmay Orogen	Expl & Geosc
6	<b>* Heppelle</b>	Professional Geoscience: New Legislation in the Northwest Territories and Nunavut	Regulatory
11	<b>Kerr <i>et al.</i></b>	Tri-Territorial Surficial Geoscience Compilation	Expl & Geosc
5	<b>McKnight and Wiebe</b>	Draft Sahtu Land Use Plan: Ongoing Progress	Regulatory
1	<b>* Mercer <i>et al.</i></b>	Effective Groundwater Monitoring for Mining Projects in Permafrost Environments	Enviro Mgmt
13	<b>Okulich <i>et al.</i></b>	An Update: Geological Compilation Of The Mackenzie Mountains, NWT	Expl & Geosc
16	<b>* Ootes <i>et al.</i></b>	A Conceptual Ni (Cu-Co-PGE) Play in the Archean Central Slave Cover Group	Expl & Geosc
18	<b>* Podolsky <i>et al.</i></b>	Whole Rock Chemistry Investigations of the 5034 and Tuzo Kimberlites and Potential Applications to Improving Geology and Resource Models, Gahcho Kué Project, Northwest Territories	Expl & Geosc
9	<b>* Rasmussen and Mortensen</b>	Using Fluorine and Chlorine Contents of Magmatic Fluids to Target Undiscovered Tungsten Mineralization in the Selwyn-Mackenzie Mountains, NWT	Expl & Geosc
2	<b>* Snidjers and Cameron</b>	Advanced Research Initiatives Using the Mackenzie Delta Air Photo Project Spatial Data	Enviro Mgmt

Location	Author(s)	Title	Category
10	<b>St-Onge <i>et al.</i></b>	A New Geological Map of the Arctic: Prelude to a GEM Tri-Territorial Compilation Project	Expl & Geosc
17	* <b>Webb <i>et al.</i></b>	Coherent Kimberlite at Ekati, Northwest Territories, Canada: Textural and Geochemical Variations and Implications for Emplacement	Expl & Geosc
3	* <b>Wilson</b>	Important Wildlife Areas in the Western Northwest Territories	Enviro Mgmt

\* soapbox talk will be given; see schedule below

### Soapbox Talks Schedule (15:15 to 16:30)

Chairperson: Beth Fischer

(s) = student

Location	Author(s)	Approx Time (PM)	Title	
6	<b>Heppelle</b>	3:15	Professional Geoscience: New Legislation in the Northwest Territories and Nunavut	Regulatory
19	<b>Dickson <i>et al.</i></b>	3:23	A New Geological Model for Oil Prospectivity in the Great Bear Plains, NWT	Energy
18	<b>Podolsky <i>et al.</i></b>	3:31	Whole Rock Chemistry Investigations of the 5034 and Tuzo Kimberlites and Potential Applications to Improving Geology and Resource Models, Gahcho Kué Project, Northwest Territories	Expl & Geosc
17	<b>Webb <i>et al.</i></b>	3:39	Coherent Kimberlite at Ekati, Northwest Territories, Canada: Textural and Geochemical Variations and Implications for Emplacement	Expl & Geosc
8	<b>Bleeker and LeCheminant</b>	3:47	The Proterozoic Dessert Lake Red-Bed Basin, a Target for Uranium Exploration — An Update	Expl & Geosc
16	<b>Ootes <i>et al.</i></b>	3:55	A Conceptual Ni (Cu-Co-PGE) Play in the Archean Central Slave Cover Group	Expl & Geosc
9	<b>Rasmussen and Mortensen</b>	4:03	Using Fluorine and Chlorine Contents of Magmatic Fluids to Target Undiscovered Tungsten Mineralization in the Selwyn-Mackenzie Mountains, NWT	Expl & Geosc
2	<b>Snidjers and Cameron</b>	4:11	Advanced Research Initiatives Using the Mackenzie Delta Air Photo Project Spatial Data	Enviro Mgmt
1	<b>Mercer <i>et al.</i></b>	4:19	Effective Groundwater Monitoring for Mining Projects in Permafrost Environments	Enviro Mgmt
3	<b>Wilson</b>	4:27	Important Wildlife Areas in the Western Northwest Territories	Enviro Mgmt

**Thursday, November 20 (morning)**

**Theatre 1 – Exploration & Geoscience**

Chairperson: Steve Goff, Edith Martel, Don James

- 08:40 Jackson, V.A., Corriveau, L., Harris, J., Ootes, L., and Bennett, V.** - South Wopmay Bedrock Mapping Project - Phase II (Parts of NTS 86B, C, and D): Status and Objectives
- 09:00 McMartin, I., Corriveau, L., Beaudoin, G., Averill, S., and Neale, K.** - Indicator Mineral And Till Geochemical Signatures Of The NICO Co-Au-Bi Deposit, Great Bear Magmatic Zone, NWT: Results And Progress Report
- 09:20 Corriveau, L., Mumin, H., Jackson, V.A., Ootes, L., McMartin, I., Bleeker, W., Pelletier, E., and Neale, K.** - Validation Of The Iron Oxide Copper-Gold Deposit Model For The Great Bear Magmatic Zone: From Known Deposits To Virgin Territories
- 09:40 Byron, S.J., Gleeson, S.A., Ootes, L., Samson, I.M., Jackson, V.A., and Goad, R.E.** - Giant Quartz Veins In The Great Bear Magmatic Zone
- 10:00 Coffee** (sponsored by Aurora Telenet (Canada) Inc.)
- 10:40 Breen, W.R. and Mumin, A.H.** - Geology Of The Port Radium Iron-Vanadium Deposits, Great Bear Magmatic Zone, Northwest Territories, Canada
- 10:40 Ootes L., Goff, S., Gleeson, S., Jackson, V., Creaser, R., Evensen, N., Samson, I., Corriveau, L., and Mumin, A.H.** - Field Relationships, Petrography, Chronology, And Fluid Character Of The Nori/RA Cu-Mo-U ( $\pm$  Ree & W) Prospect: An 'Early' IOCG Example In The Great Bear Magmatic Zone?
- 11:00 Ernst, R.E., Bleeker, W., Svensen, H., Planke, S., and Polozov, A. G.** - Formation Of Vent Complexes Above Underlying Mafic Sills Associated With Large Igneous Provinces (Lips): Implications For LIPS And IOCG Deposits Of The Slave Craton And Environs
- 11:20 Schleiss, W.A., Swisher, D.D., and Burns, R.R.** - Developing The World-Class Pine Point Property
- 11:40 Coffee** (sponsored by Saskatchewan Research Council)
- 12:00 Sanborn-Barrie, M., Chakungal, J., James, D.T., Whalen, J., Rayner, N., Berman, R.G., Craven, J., and Coyle, M.** - New Understanding Of The Geology And Diamond Prospectivity Of Southampton Island, Central Nunavut
- 12:20 Ryan, J.J., Nadeau, L., Davis, W.J., Berman, R.G., James, D.T., and Brouillette, P.** - Mineral Assay Results And Geology Of The Boothia Mainland Area, Kitikmeot Region, Nunavut
- 12:40 Ross, M., Kosar, K., Sanborn-Barrie, M., and Chakungal, J.** - Till Geochemical and Indicator Mineral Reconnaissance of Southampton Island, Nunavut
- 10:00-**
- 15:00 Trade Show** – Weledeh and St. Patrick’s School gymnasium. Parking is available at 4503 52 Ave. (look for the Geoscience Forum signs).
- 13:00 Lunch** (sponsored by De Beers Canada Inc., First Air – The Airline of the North, and Sandvik Mining and Construction) – Weledeh and St. Patrick’s School gymnasium
- 14:00 Business Card Draws, and Passport to Diamond Draw** – Weledeh and St. Patrick’s School gymnasium

**Thursday, November 20 (morning)**

**Theatre 2 – Diamonds (remote to Theatre 3)**

Chairperson: Steve Goff, Edith Martel, Don James

**9:20 Eichenberg, D.** - The Diavik A154 Open Pit – Geology and Mining from Start to Finish

**9:40 Snyder, D.B.** - Mantle Structures in the Slave and Rae Cratons Inferred From Seismic Discontinuities

**10:00 Coffee** (sponsored by Aurora Telenet (Canada) Inc.)

**10:20 Scott Smith, B.H., Nowicki, T.E., Russell, J.K., Webb, K.J., Hetman, C.M., Harder, M., and Mitchell, R.H.** - Kimberlites: Descriptive Geological Nomenclature and Classification

**10:40 Nowicki, T., Hetman, C., Gurney, J., van Collar, B., Galloway, M., and Mukodzani, B.** - Optimising Kimberlite Evaluation Programs By Integrating Geological, Mineralogical And Geophysical Data

**11:00 Janson, G.F., Muehlenbachs, K., Stachel, T., and Eichenberg, D.** - Microscale Variations in  $\delta^{13}\text{C}$ : Evidence For Growth Of Coated Diavik Diamonds From Kimberlite-Derived Fluid

**11:20 Smart, K.A., Heaman, L.M., Chacko, T., Simonetti, A., Kopylova, M., Mah, D., and Daniels, D.** - The Origin of Diamond-Rich, High Mgo Eclogite Xenoliths from the Jericho Kimberlite, Nunavut

**11:40 Coffee** (sponsored by Saskatchewan Research Council)

**12:00 Armstrong, J.P.** - New Advances in the Geology of the Aviat Kimberlites, Aviat Project, Melville Peninsula, Nunavut

**12:20 Holmes, P.K., Grenon, H., Sell, M.V., Pell, J. and Neilson, S.** - The Chidliak Property, A New Diamond District on Baffin Island, Nunavut

**12:40 Hunt, L., Stachel, T., Simonetti, T., Armstrong, J., and McCandless, T.E.** - Microxenoliths from the Renard Kimberlites, Quebec

**10:00-**

**15:00 Trade Show** – Weledeh and St. Patrick's School gymnasium. Parking is available at 4503 52 Ave. (look for the Geoscience Forum signs).

**13:00 Lunch** (sponsored by De Beers Canada Inc., First Air – The Airline of the North, and Sandvik Mining and Construction) – Weledeh and St. Patrick's School gymnasium

**14:00 Business Card Draws, and Passport to Diamond Draw** – Weledeh and St. Patrick's School gymnasium

**Thursday, November 20 (afternoon)**

**Theatre 1 – Exploration & Geoscience**

Chairperson: Steve Goff, Edith Martel, Don James

**10:00-**

**15:00 Trade Show** – Weledeh and St. Patrick's School gymnasium. Parking is available at 4503 52 Ave. (look for the Geoscience Forum signs).

**15:10 Hunter, R., Zaluski, G., and Savinova, E.** - Turqavik & Aberdeen Projects, Nunavut: How Do We Take Uranium Exploration In The Eastern Thelon Basin To The Discovery Stage?

**15:30 Hahn, K., Rainbird, R.H., and Armitage, A.E.** - Sequence Stratigraphy of the Upper Hornby Bay Group, Hornby Bay Basin, Nunavut

**15:50 Wollenberg, P. and Morrison, D.** - Areva's Kiggavik-Sissons Project, An Exploration Update

**16:10 Mercer, B.** - Health and Safety in Mineral Exploration – What the PDAC Is Doing For You

**16:30 Student Presentation Awards – Theatre 1**

**Thursday, November 20 (afternoon)**

**Theatre 2 – Diamonds (remote to Theatre 3)**

Chairperson: Steve Goff, Edith Martel, Don James

**10:00-**

**15:00 Trade Show** – Weledeh and St. Patrick's School gymnasium. Parking is available at 4503 52 Ave. (look for the Geoscience Forum signs).

**15:10 Walker, E.C.** - MW-93 Diamond Discovery, Courageous Lake, NWT

**15:30 Doyle, B.J., Gill, T., and Thompson, V.** - The Discovery of the Dharma Kimberlite Complex: Evidence for a Previously Unknown Archean Terrain North Of Great Bear Lake?

**15:50 Reford, S.W., and La Prairie, L.L.** - Exploring For Metals and Diamonds at Darnley Bay, NT

**16:10 Mercer, B.** - Health and Safety in Mineral Exploration – What the PDAC is Doing for You (Theatre 1)

**16:30 Student Presentation Awards – Theatre 1**