



Technical Program Schedule 2007 Yellowknife Geoscience Forum

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November 16, 2007

ALL SPEAKERS, POSTER PRESENTERS, AND CHAIRS MUST REGISTER FOR THE CONFERENCE. BADGES WILL BE CHECKED AT EVERY VENUE.

Both full and single day registration passes are available.

Visit www.miningnorth.com/geoscienceforum/ for more information.

*All technical presentations are at the Capitol Theatre in the Precambrian Building
(4920 – 52nd Street) unless otherwise noted.*

Tuesday, November 20 (morning)

Theatre 1 – Northern Geoscience/Mineral Exploration

Chairpersons: Steve Goff, Edith Martel

08:20 Welcome, Opening Remarks

08:40 J. Ketchum and S. Cairns - The Northwest Territories Geoscience Office – current and future directions and evolving partnerships

09:00 S.P. Goff - A Mineral Exploration overview of the Northwest Territories

09:20 L. Ham - A Mineral Exploration overview of Nunavut

09:40 D. White, D. Bryan, L. Hulbert, and G. Vivian - The Muskox Intrusion; Silvermet Inc. adds a Chapter to the Exploration History

10:00 Coffee

10:20 D. Morgan - Update on GNME's Ni-PGE Exploration on Victoria Island, NWT

10:40 A. Taylor - Prairie Creek Mine Update

11:00 W.A. Schleiss, D. Swisher, and R. Burns - Update On the Pine Point Project

11:20 V. Pratico - Tyhee Development Corp's Yellowknife Gold Project

11:40 Coffee

12:00 R.M. Ginn - Viking Gold Exploration Inc. Activities in the Morris Lake Area, NT

12:20 R. Sherlock, D. Lindsay, J. Wakeford, and D. Smith - Miramar Hope Bay Ltd., Progress Report 2007: Development of Hope Bay Project, NU

12:40 S. Burgess - 2007 Hackett River Project Update: At the Threshold of Development

Theatre 2 – Energy in Canada's North

Chairpersons: Yvon Lemieux, Willem Zantvoort

08:40 D. Thomson, C. Schröder-Adams, and T. Hadlari - An introduction to Cretaceous clastic marine deposits in the Peel Plateau Region, NWT: Biostratigraphy and Sedimentology



- 09:00 T. Hadlari, D. Thomson, and C. Schröder-Adams** - Sedimentology of the Albian Martin House Formation, Peel Region, NT
- 09:20 T.L. Allen and T.A. Fraser** - Hydrocarbon potential of Upper Paleozoic strata, eastern Richardson Mountains, northern Mackenzie Mountains and Peel Plateau, Yukon
- 09:40 S. Tylosky, T. Hadlari, O. Catuneanu, and W.G. Zantvoort** - Turbidite facies of the Upper Devonian Imperial Formation, Northwest Territories
- 10:00 Coffee**
- 10:20 L.P. Gal** – Devonian Arnica Formation as reservoir in a petroleum systems context; Peel Plateau and Plain, NWT and Yukon
- 10:40 R.B. MacNaughton and K.M. Fallas** - On the Plateau Fault as a Conceptual Hydrocarbon Play
- 11:00 Y. Lemieux and B.C. MacLean** - Preliminary structural interpretation of seismic data in the southern Peel Plateau and Plain: linking the northern Mackenzie and Franklin mountains
- 11:20 I. Zapfe-Smith, L. Klatzel-Mudry, and K. Hansen** – Integration of Multiple Technologies in Northern Frontier Exploration
- 11:40 Coffee**
- 12:00 D.J. Scott** - Overview of the Earth Sciences Sector's Gas Hydrates Program: Facilitating the development of a secure, alternative supply of clean natural gas
- 12:20 S.E. Grasby, B. Beauchamp, and C. Harrison** - Methane seeps in the Sverdrup Basin: Evidence for historic gas generation and migration
- 12:40 S. Zhang** - New discoveries of Ordovician Oil Shale on Southampton Island, Nunavut

Theatre 3 – Environmental Sciences

Chairpersons: David Livingstone, Hugh Wilson

- 08:40 R. Reid** - DIAND Water Monitoring in the NWT and Nunavut
- 09:00 G. Groskopf** - Metal Mining Effluent Regulations: an update
- 09:20 L. Wan** - Assessment of Water Management at Mining Sites in Nunavut
- 09:40 D. Faria** - Hydrological Monitoring at Colomac Mine Site for Remediation Planning
- 10:00 Coffee**
- 10:20 P. Vescei** - The Fish Fauna of Great Bear Lake: Expedition on a Freshwater Inland Sea
- 10:40 W.S. MacNeill** - Walleye Movements and Life History in Two Interconnected lakes in the NWT - NICO Project, Fortune Minerals Ltd.
- 11:00 H. Machtans** - Use of Ninespine Stickleback for Ecotoxicology Studies in Yellowknife
- 11:20 P. Vescei** - Baker Creek Survey: Spring Spawning Fishes in a Remodeled Stream Channel
- 11:40 Coffee**
- 12:00 K. Hamre** - NWT Protected Areas Strategy and non-renewable Resource Assessments
- 12:20 R. Gau and S. Carriere** - Rare and Lesser-known Species of the NWT - Update on Surveys and Proposed Best Practices for Assessments



12:40 R. Mulders - Estimating Wolverine Abundance on the Barrens using DNA Mark-Recapture Methods

Tuesday, November 20 (afternoon)

Theatre 1 – Northern Geoscience/Mineral Exploration

Chairpersons: Steve Goff, Edith Martel

14:50 V.A Jackson - The South Wopmay Bedrock Mapping Project: A summary of field and integrated laboratory studies

15:10 L. Corriveau and H. Mumin - Geoscience and Exploration Tools for Multiple Discoveries within the Extraordinary Range of IOCG (U) Polymetallic Mineral Deposits

15:30 R.E. Goad, K.L. Neale, M.T. Samuels, J.P. Mucklow, and R.P. Schryer - Development of the NICO Cobalt-Gold-Bismuth Project Northwest Territories, Canada

15:50 E.C. Walker and L. Rajnovich - Cooper Minerals Exploration for IOCG-type Deposits within the Terra Property, Great Bear Magmatic Zone, NWT

16:10 L. Ootes, S. Goff, L. Corriveau, J. Harris, and V. Jackson - Uranium Metallogeny in the Great Bear Magmatic Zone (Wopmay Orogen) and Adjacent Terranes

Theatre 2 – Energy in Canada’s North

Chairpersons: Yvon Lemieux, Willem Zantvoort

14:50 R. Bennett, S. Blasco, V. Kostylev, K. MacKillop, J. Beaudoin, and P. Travaglini - Beaufort Sea Offshore Geohazard Research

15:10 D. Huntley, A. Duk-Rodkin, I.R. Smith, L. Macdonald, and L. Koszarycz - Terrain Geodatabase and Landslide Hazards: Southern Mackenzie Valley Region, Northwest Territories

15:30 A. Duk-Rodkin and D. Huntley - Surficial geology research program in the southern Mackenzie valley, Chapter III: geology highlights

15:50 I.R. Smith - Application and benefits of a seismic shothole litholog database and GIS for the Northwest Territories and northern Yukon

16:10 B. Wang, B. Paudel, H. Li, and K. Lesage - Recent geotechnical studies of landslides in the Mackenzie valley

Theatre 3 – Environmental Sciences

Chairpersons: David Livingstone, Hugh Wilson

14:50 B. Arquilla - Monitoring the Effects of Mines on Songbirds

15:10 D. Whalen - Frequency and Distribution of Shallow Hazards that Effect the Beaufort Sea Potential Pipeline Area

15:30 J. Kanigan - Permafrost Response to Climate Warming South of Treeline, Mackenzie Delta, NWT

15:50 R. Jenkins - Environmental Studies Research Funds online sumps database

16:10 S. Kokelj - Massive environmental change in the outer Mackenzie Delta: A template for detecting ecosystem change



Tuesday, November 20 (evening)



Charles Camsell Talk

Tuesday November 20, 2007; 7 pm

Prince of Wales Northern Heritage Centre

Sponsored by NAPEGG, open to the public (free)

Dr. Tim Patterson, Carleton University

Cosmoclimatology: A possible paradigm shift in our understanding of the drivers of climate change

Talk Abstract

During its history our planet has been subject to dramatic climate shifts that have ranged from near global glaciations, to planetary greenhouse conditions. Although this extreme climate variability can be linked to a variety of factors (e.g. plate tectonics, changes in paleoceanographic circulation) the strongest influence on climate change at decadal to millennial and longer timescales has probably been the result of variations in the cosmic-ray flux due to solar magnetic activity.

During the past few years members of my research group have carried out detailed analysis of marine-laminated sediments from oxygen starved basins in several fjords along the British Columbia, which we have found to archive Holocene records of climate variability and marine productivity at annual to millennial scales. Our multi-proxy analysis results indicate that the marine productivity and sedimentary record of the NE Pacific responded to abrupt changes and long-term variability in climate that can clearly be linked to external forcing (e.g. solar and cosmic irradiance).

Using my own research results as an example I will explain why I am now convinced that celestial drivers are the primary control over climate change and why I now reject the 'consensus' view that variations in atmospheric CO₂ concentrations are the primary influence over climate change.

Speaker Biography

Dr. Tim Patterson is Professor of Geology at Carleton University in Ottawa as well as a Senior Visiting Fellow in the School of Geography at the Queen's University of Belfast.

Professor Patterson's research emphasizes the dynamics of climate and sea level change through the last few thousand years. In this capacity he also serves as Canadian leader of UNESCO International Geological Correlation Program (IGCP) Project 495 "Quaternary Land-Ocean interactions", which is mandated to study the record of sea level change past and future and has been Principal Investigator of large Natural Science and Engineering Research Council of Canada (NSERC) and Canadian Foundation For Climate and Atmospheric Sciences (CFCAS) projects, examining high-resolution climate records from marine basins off the west coast of Canada.



He was a founding editor of the journal *Palaeontologia Electronica* and is presently Associate Editor for the *Journal of Foraminiferal Research*. He has to-date published 125 articles in peer-reviewed journals and was the recipient of a 2002-2003 Carleton University Research Achievement Award. He has also presented professional briefings to Canadian government staff and the Parliamentary Standing Committee on the Environment and Sustainability and is a frequent contributor in the popular media, primarily on the topic of climate change.



Wednesday, November 21 (morning)

Theatre 1 – Northern Geoscience/Mineral Exploration

Chairpersons: Steve Goff, Edith Martel

- 08:40 E. Martel, C. Roots, S. Gordey, L. Ootes, B. Fischer, C. Leslie, J. Macdonald, and M. Mercier** - Sekwi Mountain Project year 2: Overview of bedrock mapping and collaborative studies in central Mackenzie Mountains, NWT
- 09:00 S. Gordey, C. Roots, E. Martel, K. Fallas, E. Fisher, C. Leslie, J. Macdonald, R. MacNaughton, and M. Mercier** - Bedrock transect across the Mackenzie Mountains at 64.5°N: A new look at crumpled old platform strata
- 09:20 C.D. Leslie, H.A. Sandeman, and J.K. Mortensen** - Diatremes and related volcanic rocks of the Lower Paleozoic Misty Creek Embayment, Mackenzie Mountains, NT
- 09:40 E.C. Turner and D.G.F. Long** - Displacement History of Syndepositional Faults in the Mackenzie Mountains Supergroup
- 10:00 Coffee**
- 10:20 H. Falck, S. Day, and J. Lariviere** - Stream Sediment Sampling in the Mackenzie Mountains: A Status Report
- 10:40 R. Cameron and L. Stokes** - Sediment-Hosted Copper Mineralization, Keele River, Mackenzie Mountains, NWT
- 11:00 J.J. Ryan, L. Nadeau, M.D. Young, V. Bennett, T. Tremblay, J. Brown, D.T. James, R.G. Berman, and W.J. Davis** - 2007 mapping in the Boothia mainland area (NTS 57C and 57D), Kitikmeot region, Nunavut
- 11:20 R. Rainbird, W. Davis, P. Ramaekers, L. Heaman, A. Armitage, and W. Bleeker** - U-Pb zircon geochronology and provenance of the Hornby Bay and Dismal Lakes groups Hornby Bay Basin, Northwest Territories and Nunavut
- 11:40 Coffee**
- 12:00 J. Chakungal, M. Sanborn-Barrie, and D. James** - Southampton Island: an updated geosciences database
- 12:20 M. Ross, D.J. Utting, D.A. Hodgson, and D.T. James** - Ice flow and dispersal patterns on Southampton Island, Nunavut: A preliminary assessment
- 12:40 E.C. Turner** - Tectonostratigraphic Dynamics of the Society Cliffs Dolostone, Mesoproterozoic Borden Basin, NU

Theatre 2 – Environmental Sciences

Chairperson: David Livingstone

- 08:40 M. Palmer** - Snow conditions in the Mackenzie Delta area, 2004 – 2007
- 09:00 R. Barry** - Recommended mitigation measures for marine seismic programs in Nunavut
- 09:20 Y.T.J. Kwong, K. Pelletier, K. Costello, V. Sterenberg, and C. Jefferson** - Environmental Ore Deposit Models for the Canadian North - Progress Report
- 09:40 A. Ehrlich** - The Use of Thresholds in Environmental Impact Assessment: Where to draw the line
- 10:00 Coffee**



Theatre 2 – Geoscience Outreach

Chairpersons: Diane Baldwin, Donna Schreiner

10:20 S. Daniel and K. Bruce - Experiential Science 10-20-30: The Final Frontier

10:40 B. Friesen-Pankratz and G. Lafferty - Aquatic Science Education in the NWT:
Challenges and Opportunities

11:00 D. Dowe - Introduction to Mine Training: Program Description

11:20 K. Bruce - Tuning-in and Turning on to a Career in Mining

11:40 Coffee

12:20 R. Montpellier and M. Sturk - Mining Industry Attraction, Retention and
Recruitment Strategy (MARS): Collaborative Action to Ensure the Vitality of
Canadian Mining

12:40 as above (double length talk)

Theatre 3 – Remote link to Theatre 1 (Northern Geoscience/Mineral Exploration)



Wednesday, November 21 (afternoon)

Keynote Address

Wednesday, November 21, 2007; (14:30 to 15:10)

Capitol Theatre 1, open to delegates

Dr. Steve Grasby, Geological Survey of Canada-Calgary
Geothermal Resource Potential in Canada

Talk Abstract

Rising energy prices, declining conventional oil reserves, and increased concern over greenhouse gas emission has combined to enhance interest in alternative renewable energy supply. Although used extensively throughout the world geothermal energy has not been significantly developed to date in Canada. This presentation will examine the various types of geothermal energy resources, potential uses in Canada, and provide preliminary estimates on resource potential.

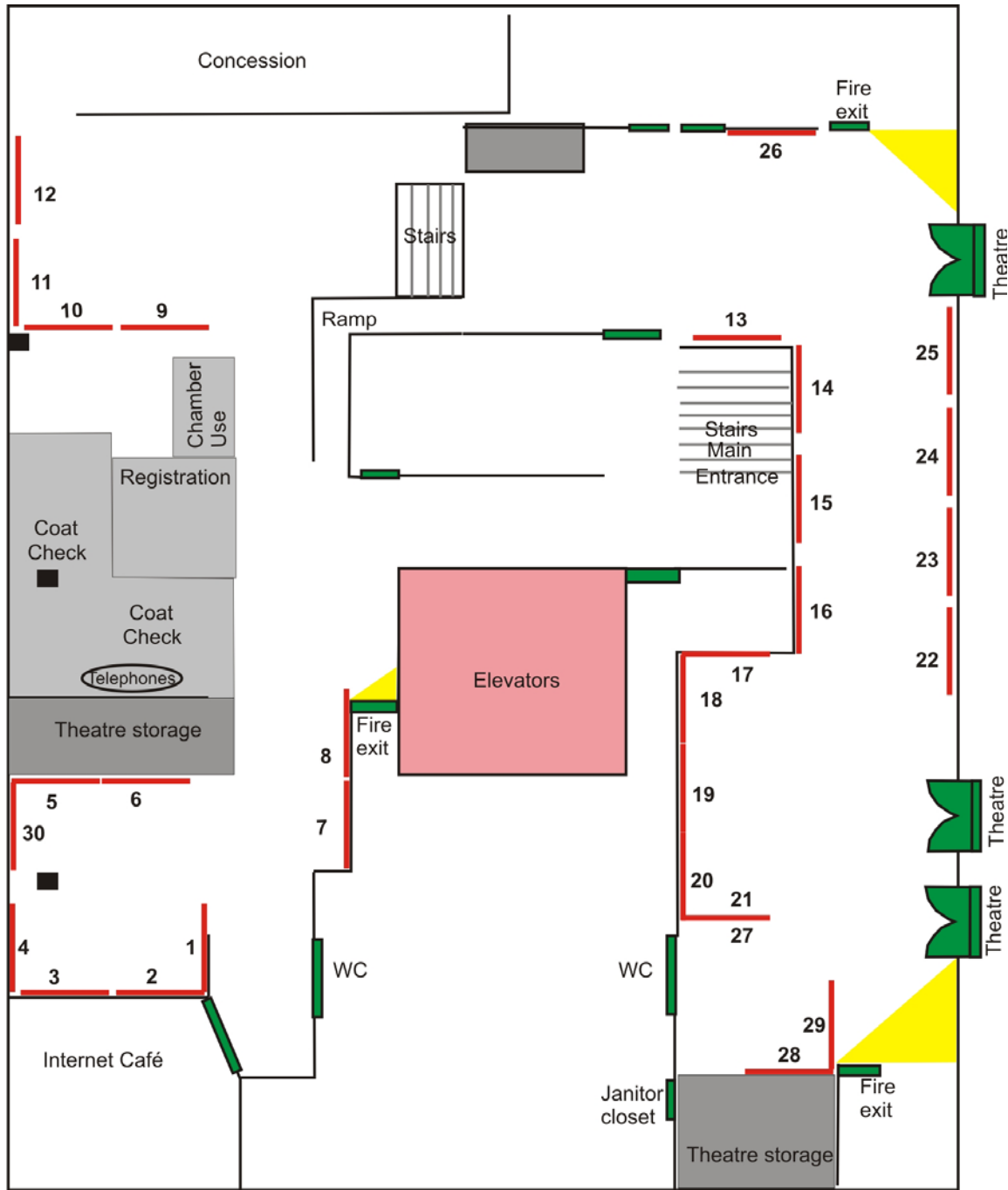
Speaker Biography

Dr. Grasby completed a B.Sc in Geology at University of Calgary, a Master's degree at McGill University then a Ph.D. degree back at University of Calgary, completed in 1997. Since 1997 he has worked as a Research Scientist at the Geological Survey of Canada, working on groundwater studies of western Canada, and regional chemostratigraphy in the High Arctic. He has conducted extensive research on geothermal springs in western Canada and is currently involved with a national geothermal energy assessment of Canada.



Capitol Theatre Lobby - Posters Session (15:10 to 16:30)
 Chairpersons: Hendrik Falck, Thomas Hadlari

Posters Floor Plan



Pillar
 Fire exit
 Poster board = 87" long
 Falck, Hadlari, and Jones 2007



Posters List and Locations (Alphabetical)

28	Bleeker and LeCheminant	The "Dessert Lake" Red-Bed Basin: a newly recognized Proterozoic basin (outlier) overlying the southern extension of the Slave and Bear provinces
8	Byron et al.	Giant Quartz Veins within the Great Bear Magmatic Zone: an example from NICO, Northwest Territories
7	Corriveau et al.	Alteration vectoring to IOCG(U) deposits: the project
23	Czarnecki	Peel River Watershed Sampling Program: Water and Suspended Sediment
11	Fischer and Turner	Stratigraphy and Mineralization at the AB-C Carbonate-Hosted Zinc(-Lead) Showing, Mackenzie Mountains: Preliminary Observation
20	Fraser and Allen	Hydrocarbon potential of Upper Paleozoic and Cretaceous strata, eastern Richardson Mountains and Peel Plateau, Yukon
15	Gordey et al.	Bedrock transect across the Mackenzie Mountains at 64.5°N: A new look at crumpled old platform
9	Grant et al.	Silver enrichment in the 2.68Ga Hackett River volcanogenic massive sulphide (VMS) deposits, Hackett River Greenstone Belt, Nunavut
26	Griller et al.	Environmental Science and Traditional Inuit Knowledge Collaboration: Developing the Groundwork for Community Involvement in Environmental Consulting
27	Harris et al.	Remote Predictive Mapping (RPM): Experiences from Baffin Island, Nunavut
3	Hunt et al.	A Study on Diamonds and their Mineral Inclusions from the Renard Kimberlites, Quebec
13	Huntley et al.	Reconnaissance Drift Sample Survey and Glacial History of the Trout Lake 95A NTS Map Sheet, NWT
2	Janson et al.	Cyclic growth conditions for Diavik diamonds? Insights from carbon isotopes
1	Johnson et al.	Peridotite Xenoliths from the Monument Property, Slave Craton, NWT, Canada
17	Long and Gordey	Cretaceous coal in the Sekwi Range, Mackenzie Mountains, NWT (105P/12).
16	MacDonald and Lin	The Plateau Thrust: A detailed investigation and characterization of the deformation in its footwall, NTS sheet 106A, Mackenzie Mountains, NWT, Canada.
30	Malyshev et al.	U-Pb isotopic system of zircons of the lower Riphean sandstones from the east Anabar shield: provenance and local sedimentary basins reconstruction
29	Malysheva	The Novaya Zemlya archipelago and the oil bearing potential of Middle-Upper Paleozoic carbonate and terrigenous-carbonate strata of Barents - North Kara region, Russia
24	McKnight and T'Seleie	Draft Sahtu Land Use Plan: Ongoing Progress
12	Mercier et al.	Geology and Mineralogy of the Mountain River Beryl (Emerald) Showing, Mackenzie Mountains, Northern Canadian Cordillera, NWT, Canada
22	Mulders and Boulanger	Estimating wolverine abundance on the barrens using DNA Mark-Recapture methods
10	Ootes et al.	The Giant Crest Iron Deposit – Yukon and Northwest Territories
18	Pyle et al.	Regional Geoscience Studies and Petroleum Potential, Peel Plateau and Plain, NWT and Yukon
5	Rayner et al.	New U-Pb geochronological constraints on the timing of deformation and the nature of basement of SW Baffin Island, Nunavut
6	Sanborn-Barrie et al.	The geology of Southampton Island, Nunavut, within a NE Laurentia context



4	Sandeman et al.	Whither the Kimberlite Indicator and Diamond Database (KIDD) and Kimberlite Indicator Mineral Chemistry Database (KIMc): integration into GoMap for on-line queries
25	Schreiner et al.	Community Mapping Project 2007: Lutsel K'e, NWT
14	Turner	Lithostratigraphy of the early Neoproterozoic Gypsum formation (Little Dal Group; Mackenzie Mountains Supergroup), NWT
21	Whalen et al.	Frequency and distribution of shallow hazards that affect the Beaufort Sea potential pipeline area
19	Zantvoort et al.	Reservoir and Source Rock Potential of late Devonian Imperial Formation, southern Peel Plateau and Plain, NWT

Soapbox Talks Schedule (15:20 to 16:20)

Chairperson: Doug Irwin

(s) = student

1	Johnson et al. (s)	15:20	Peridotite Xenoliths from the Monument Property, Slave Craton, NWT, Canada
9	Grant et al. (s)	15:20	Silver enrichment in the 2.68Ga Hackett River volcanogenic massive sulphide (VMS) deposits, Hackett River Greenstone Belt, Nunavut
2	Janson et al. (s)	15:30	Cyclic growth conditions for Diavik diamonds? Insights from carbon isotopes
12	Mercier et al. (s)	15:30	Geology and Mineralogy of the Mountain River Beryl (Emerald) Showing, Mackenzie Mountains, Northern Canadian Cordillera, NWT, Canada
3	Hunt et al. (s)	15:40	A Study on Diamonds and their Mineral Inclusions from the Renard Kimberlites, Quebec
14	Turner	15:40	Lithostratigraphy of the early Neoproterozoic Gypsum formation (Little Dal Group; Mackenzie Mountains Supergroup), NWT
16	MacDonald and Lin (s)	15:50	The Plateau Thrust: A detailed investigation and characterization of the deformation in its footwall, NTS sheet 106A, Mackenzie Mountains, NWT, Canada.
5	Rayner et al	15:50	New U-Pb geochronological constraints on the timing of deformation and the nature of basement of SW Baffin Island, Nunavut
6	Sanborn-Barrie et al.	16:00	The geology of Southampton Island, Nunavut, within a NE Laurentia context
23	Czarnecki	16:00	Peel River Watershed Sampling Program: Water and Suspended Sediment
8	Byron et al (s)	16:10	Giant Quartz Veins within the Great Bear Magmatic Zone: an example from NICO, Northwest Territories
25	Schreiner et al	16:10	Community Mapping Project 2007: Lutsel K'e, NWT



Thursday, November 22 (morning)

Theatre 1 – Kimberlites and Diamonds of Canada's North

Chairperson: Hamish Sandeman

- 08:40 Stornoway Diamond Corporation** - The Renard Kimberlites, Otish Mountains
Quebec: A development track project
- 09:00 D. Ritcey, F. Moul, D. Clarke, and M. Kirkley** - Diamond Exploration on
Brodeur Project, Northwest Baffin Island
- 09:20 B. Kienlen** - Pelly Bay Diamond District: Update on Discovery
- 09:40 J. Armstrong** - An Exploration Update for the Aviat and Qilalugaq Diamond
Projects, Melville Peninsula, Nunavut
- 10:00 Coffee**
- 10:20 P.K. Holmes, J. Pell, H. Grenon, M.V. Sell, and L. Tam** - An Exploration
Update for the Nanuq Diamond Project Kivalliq, Nunavut
- 10:40 P. Strand, A. Banas, and J. Burgess** - Contrasting Kimberlite Types and
Dispersion Trains at the Churchill Diamond Project, Kivalliq region, Nunavut
- 11:00 R.C. Brett and J.K. Russell** - Origin of Olivine in Kimberlite: Phenocryst or
Imposter?
- 11:20 U. Näher and K.R. Kivi** - The DogMag, a low cost alternative to airborne
magnetic surveys in diamond exploration
- 11:40 Coffee**
- 12:00 K.R. Kivi and U. Näher** - New Nadina Explorations Ltd drills and discovers
more kimberlite at Lac De Gras
- 12:20 S. Campbell** - Snap Lake Diamond Project Extraction Planning
- 12:40 J. Pell, W. Mathison, E.V. Friedland, and J. Crawford** - DO-27 and Beyond –
An update on Peregrine Diamonds Programs in the Slave Province

Theatre 2 – Consultation in the North

Chairpersons: Carolyn Relf, Denise Lockett

- 8:40 K. Bergner** - Resource Development and Consultation
- 9:00 M. Hardin** - The Duty to Consult and Its Relationship to Project Approval
Processes: Is a Clearer Picture Emerging?
- 9:20 J. Jackson** - INAC-NWT Region's Interim Approach to S.35 Crown Consultation
- 9:40 B. McCallum** - Community Involvement in the Kiggavik Project
- 10:00 Coffee**
- 10:20 S. Autut** - Consultation and Public Participation in Nunavut
- 10:40 G. Mackenzie-Scott, M. Tapsell, and M. Haefele** - The Importance of Early
Engagement
- 11:00 W. Anderson** - MVLWB's Public Involvement Guidelines
- 11:20 A. Applejohn** - Consultation requirements for Science Licences
- 11:40 Coffee**
- 12:00 S. Ellis** - Consulting with the Akaitcho Dene First Nations
- 12:20 D. Bubar** - Mineral Exploration on First Nations' Traditional Lands: Threat or
Opportunity?
- 12:40 G. Gibson** - Impact and Benefit Agreements in Canada's Diamond Mines:
Expectations of Reciprocity



Theatre 3 – Adaptive Environmental Remediation

Part 1: Current Remediation Practices

Chairperson - Bill Coedy

- 08:20 G. Lafferty** – Colomac Remediation Plan Development – Involving Traditional Knowledge Approach of the Tlicho Elders
- 08:40 B. Coedy** – Aeration of A Pit-lake to Remove Thiocyanate and Ammonia at Colomac, NT
- 09:00 A. Richardson** - Petroleum Hydrocarbon Remediation – Colomac Experience
- 09:20 E. Madsen** – Winter Road progressive Soil remediation in the Sub-Arctic, Abandonment and Reclamation Planning and the winter road Environmental Management System
- 09:40 J. Cassie** – Adaptive “Natural” Remediation Of A Fine-Grained Borrow Pit in the North – The Final Chapter

10:00 Coffee

10:20 M. Rykaart – Performance of Tailings Covers in Northern Climates

10:40 E. Madsen – Northern Ice Road Challenges and Future Options

Part 2: Closure and Rehabilitation Design – Considerations for the Permafrost Regions Subjected to Climate Warming

Chairpersons: Octavio Melo, Igor Holubec

11:00 Introduction

11:20 B. Kochtubajda - Climate Change and the Arctic

11:40 Coffee

12:00 S. Smith – Permafrost Thermal Response to Changing Air Temperatures

12:20 L. MacPhie – Practice and Performance of Reclaimed Mine Sites in Temperate Climates

12:40 I. Holubec – Required Design for Climate Warming in Permafrost

Thursday, November 22 (afternoon)

Theatre 1 – Kimberlites and Diamonds of Canada’s North

Chairperson: Hamish Sandeman

- 14:50 A.V. Wolmarans, I.M. Mason, J. Harvey, and K. Smith** - Using BHR for predictive resource evaluation models
- 15:10 B. Coutts, J. Heimbach, and D. Dyck** - Panda, from Pyrope to Production (Now you’ve found a kimberlite, the work is just starting)
- 15:30 B. Counts** - Update on Indicator Minerals Inc. Exploration in Nunavut
- 15:50 J. Tees** - Diavik Diamond Mines’ Aboriginal Leadership Development Program
- 16:10 Closing Remarks & NAPEGG Education Foundation Student Presentation Awards**

Theatre 2 – Northern Geoscience/Mineral Exploration

Chairpersons: Steve Goff, Edith Martel

- 14:50 A. Udell** - NT GoMap – Online Access to NWT Geoscience Data and Publications



- 15:10 P. Beales, J. Robinson, and D. Kleissen** - A Multidisciplinary Geodatabase Aids in the Merging of Historical Data providing a Basis for Spatial Project Development in Exploration and Mineral Development
- 15:30 J. Harris, C. Chung, J. Kerswill, P. Keating, E. Hillary, E. Grunsky, and L. Chorlton** - Mineral Resource Assessment – A GSC Perspective
- 15:50 A.J. Mills and S.J.A. Day** - Non-renewable Resource Assessment of the Edehzhie Candidate Area: results and interpretation

Theatre 3 – Adaptive Environmental Remediation

Chairpersons: Octavio Melo, Igor Holubec

14:50 to 16:30 Panel Discussion

A seven panel member discussion with participation from the audience on topics related to closure/reclamation in permafrost regions subjected to climate warming.

Climate change is impacting the common closure/rehabilitation designs in permafrost region. Present design concepts have to be adopted for the changing climate and these have to apply to long-term environmental protection that is being demanded by society. A panel with varied background related to closure and rehabilitation design for projects in permafrost will present their views on topics that are relevant to present changing environment. Audience will be encouraged to present their views and ask questions. Following this Session a report will be prepared that will present the opinions and, hopefully consensus, on how to address these topics.

The topics that will be discussed are:

- What is long-term?
- Design air temperatures and climate warming
- Longevity of liners and thermosyphons
- Dam stability in the long-term
- Stability & erosion
- Are water covers and water treatment logical for remote areas?

The panelist will consist of five speakers from Parts 1 & 2 and the following:

Bill Horne, EBA Engineering Consultants Ltd.

Dionne Filiatrault, Nunavut Water Board

