

Geoscience BC's

Explorer

Annual Information Update

Annual Report 2009



QUEST-South Project

New Minerals Initiatives

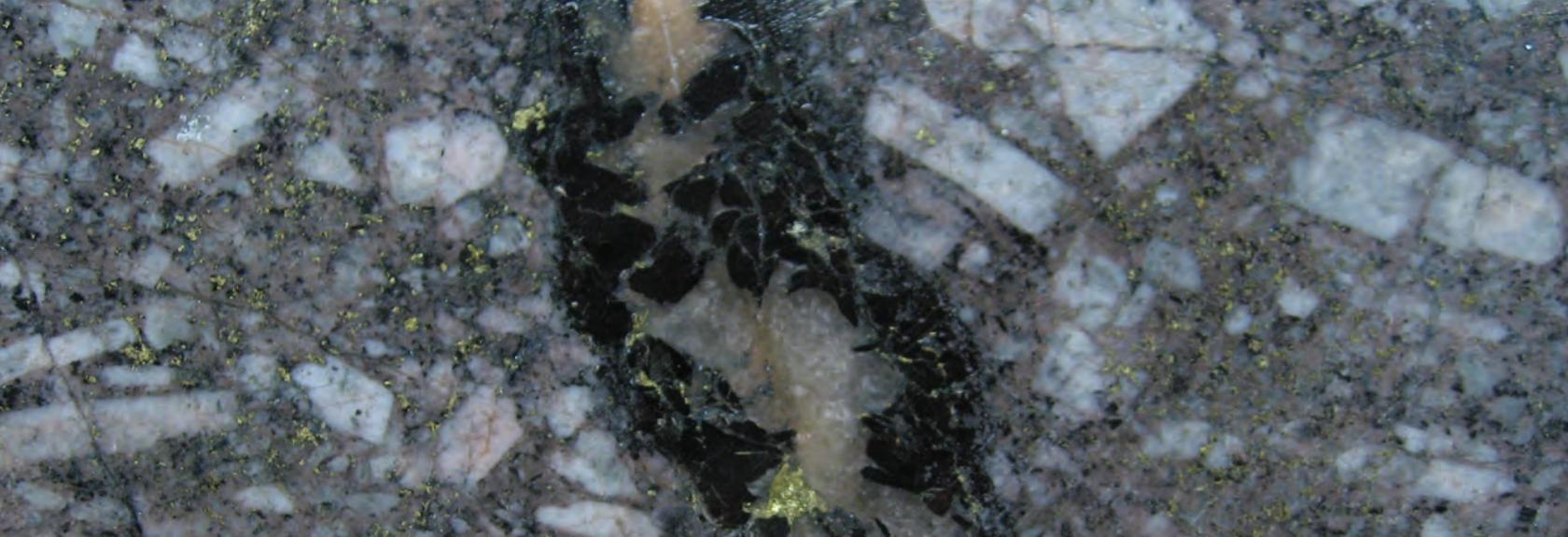
Horn River Basin Aquifer Project

New Oil & Gas Initiatives

Scholarship Winners

Financial Statements





Annual Information Update

Features



Welcome	1
The Year at Geoscience BC	2
QUEST-South Project	6
Let's Talk Geoscience	8
New Minerals Initiatives in 2009	9
Data and Publications 2009	12
Summary of Activities	13
Horn River Basin Aquifer Project	14
Nechako Basin	15
New Oil & Gas Initiatives	16
Coming in 2010...	17
Website Update	18
Project Notes	20
Scholarship Winners	22
The Geoscience BC Team	24
Financial Statements	26



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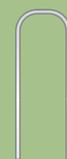
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Back cover photo courtesy of W. Jackaman





*Dr John Thompson
Chairman of the Board of Directors,
Geoscience BC*

Message from the Chair

On behalf of the Board of Directors and the staff of Geoscience BC, it gives me great pleasure to present our "Explorer" Annual Information Update and Report for 2009.

Over the past year, Geoscience BC has continued to deliver on its mandate to attract investment in exploration for both minerals and oil & gas to British Columbia through the collection and marketing of geoscience data and information. Two major new industry-driven projects were launched in 2009: QUEST-South and the Horn River Basin Aquifer Project. QUEST-South is a continuation of our successful QUEST series of regional geophysical and geochemical surveys, focused on targeting potential porphyry and related mineralization in the Quesnel and Stikine terranes. The Horn River Basin Aquifer Project is our first major collaborative project with the oil & gas industry and was announced in partnership with the Horn River Basin Producers Group in the fall of 2008. This project focuses on the characterization of subsurface aquifers in the basin that may be suitable for both supplying water and providing sites for post-production disposal of this water. The sustainable use of local subsurface water is critical to shale gas development.

Geoscience BC combines traditional, survey-style data collection with applied research, and industry-leading data interpretation and integration methodologies to maximize value for all exploration clients. Our projects complement and augment the work of other geoscience providers, particularly our partners in government geological surveys, academia and industry research groups. This innovative approach to public geoscience has increased exploration activity in British Columbia and will

contribute significantly to the discovery of the next generation of mineral deposits in the province.

A continuing priority for Geoscience BC is the education and training of the next generation of highly qualified geoscientists, and the continuing development of leading edge technologies and knowledge capacity to meet the demands of the exploration sector in British Columbia. Geoscience BC continues to support numerous graduate student projects, applied geoscience scholarships, and partnership projects with university researchers working on projects in British Columbia. In particular, we support a number of research initiatives with the Mineral Deposits Research Unit and the Geophysical Inversion Facility at UBC, and an ongoing Nechako Basin project with Simon Fraser University.

At Geoscience BC we continue to put a priority on engaging with First Nations and communities in the Province, to ensure that they are informed of our project activities and results, and that local businesses and services benefit from Geoscience BC projects when possible. Geoscience BC has a distinct role in providing open and clear explanations of the geosciences database, new ways to enhance this database, and the role that data plays in assisting exploration for minerals and oil & gas.

Delivering on the mandate for Geoscience BC requires the support and help from numerous people and organizations. I would like to take this opportunity to sincerely thank everyone who contributes significant time, knowledge, expertise and financial resources to Geoscience BC. Our Directors volunteer their time to provide us with excellent leadership and governance.

Our volunteer Technical Advisory Committees generously provide outstanding technical guidance in prioritizing our research and making funding recommendations to the Board. Our consulting team of geoscientists provides invaluable expertise in project design, implementation, and particularly delivery of results to clients and interested community groups. The dedicated and hard working staff of Geoscience BC continues to deliver substantial programs on minimal resources. Our partners in industry, government surveys, and academia all provide ideas, assistance and expertise that make Geoscience BC an innovative link between many excellent programs. The result of all this, we believe, is that Geoscience BC generates far more activity and results than through the programs alone and our reputation in other jurisdictions continues to grow.

Finally, I would like to acknowledge the leadership and innovation of the Government of British Columbia for their investment in supporting a strong and responsible exploration and development industry in British Columbia through their ongoing commitment to geosciences in general and Geoscience BC in particular.

Dr John Thompson
VP Technology and Development,
Teck Resources Limited
and Chairman of the Board of Directors,
Geoscience BC

The Year at Geoscience BC

This past year (2009) was another exciting and productive year for Geoscience BC. We continued to fund partnership projects and carry out major regional surveys to help deliver on our mandate to attract interest and investment in exploration and development of BC's mineral and oil & gas resources.

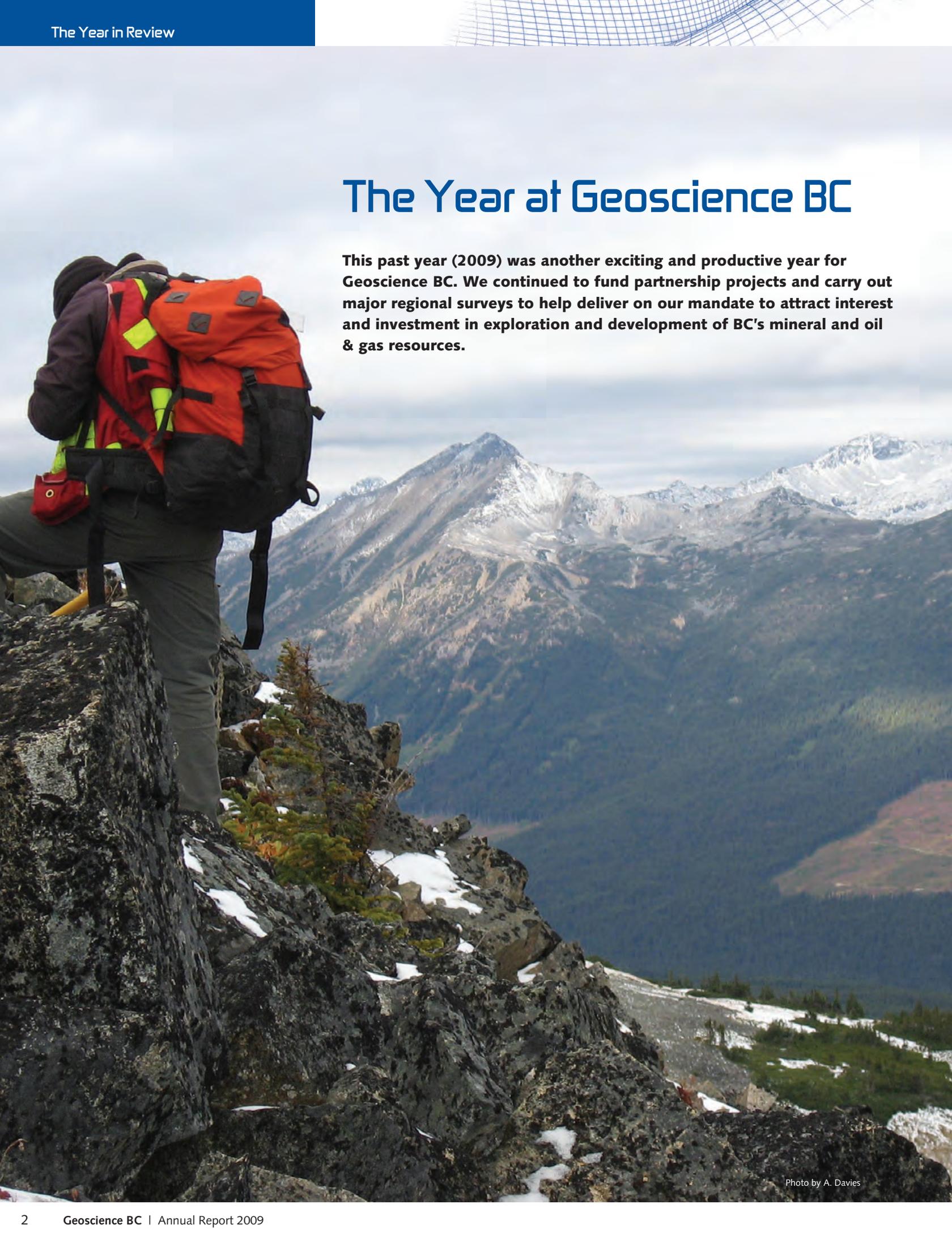
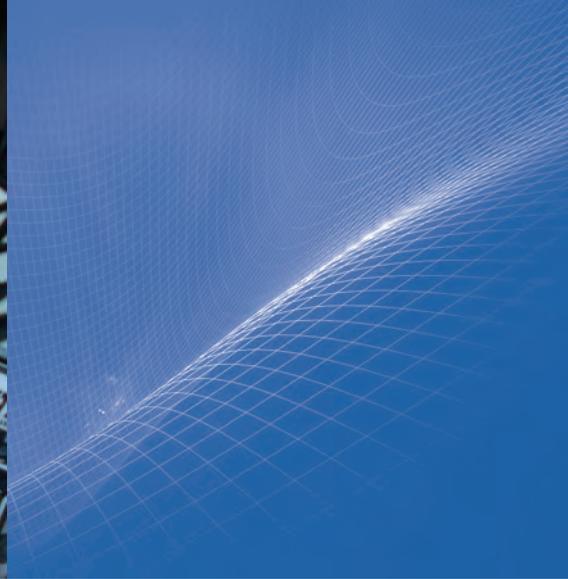


Photo by A. Davies



Gordon Loverin capturing footage of the QUEST-South geochemical survey.
Photo by W. Jackaman.

Geoscience BC continued to work with our partners in industry, communities, First Nations, academia, and government, including a number of partnership projects with the BC Geological Survey Branch (BCGS) of the Ministry of Energy, Mines and Petroleum Resources. Here are a few of our highlights:

Major Projects, Results and Data Releases – Delivering Data for Discovery!

In 2009, we released a number of major data sets and launched the QUEST-South Project, our major new regional exploration geoscience project.

The QUEST-West airborne geophysical survey and regional drainage sediment survey results were released at the AMEBC Mineral Exploration Roundup conference in Vancouver in January, and at the Kamloops Exploration Group meeting in May. The Northern Development Initiative Trust, Regional Districts of Bulkley-Nechako and Kitimat-Stikine, the Terrace and Lakes Economic Development Associations, and the Kitimat Terrace Industrial Development Society were all strong supporters of the QUEST-West Project.

In March, Geoscience BC (GBC) sponsored an intensive three-day workshop with geoscientists from GBC, the BCGS and the Geological Survey of Canada, to generate a new geological interpretation of the Quesnel terrane geology under cover using the results from the GBC QUEST Project and other publicly available geoscience data. Colin Barnett of BW Mining organized the workshop, and Jim Logan of the BCGS led the compilation work on the new QUEST area geology map, which will be published by the BCGS in early 2010.

March also saw the announcement of a partnership project between GBC and the Horn River Basin Producers Group, a consortium of industry operators working on shale gas plays in the Horn River Basin (northeast BC). The project aims to determine whether subsurface aquifers have sufficient water volumes and flow capacities to support long-term development in the Horn River Basin. The results of this study, which is managed by Dr. Brad Hayes of Petrel Robertson Consulting Ltd in Calgary, will be available in 2010 (see page 14).

In April, GBC announced the first phase of activities in our QUEST-South Project. These activities included the reanalysis of over 9,000 stream sediment samples in southern BC, as well as a new stream and soil geochemical survey in the Merritt area. The work was managed by Noble Exploration Services Ltd (see pages 6 & 7). Results are expected in early 2010.

In June, we released 330 line kilometres of new vibroseis seismic data in the Nechako Basin collected by CGG Veritas of Calgary on behalf of GBC and the Northern Development Initiative Trust. Several presentations on the seismic and associated magentotellurics work were presented at the CSPG conference in Calgary in May (see page 15).

In August, GBC was joined at the Kamloops airport by the Minister of State for Mining the Honorable Randy Hawes, Mike Cathro of the Kamloops Exploration Group (KEG), Luise Sander of Sander Geophysics Ltd, Richard LeBourdais of Black Bear Developments, Dave Lefebure of the BCGS and Bruce Madu, Regional Geologist with MEMPR, as well as a number of KEG Directors, and municipal and regional district Councillors, to launch the QUEST-South airborne gravity survey. This survey was flown by Sander Geophysics Ltd (see pages 6 & 7) and results are expected in early 2010.

In September, GBC released three major new value-added geophysical and geochemical data sets produced through integration and interpretation of QUEST and QUEST-West project data. This was coordinated with GBC's Research Review Day/Open House held in mid-September, which featured talks on several of GBC's ongoing and completed projects.

In total, GBC launched 14 new projects in 2009, including a partnership project with Travis Ferbey of the BCGS that created



QUEST area bedrock geology under cover workshop participants, from L to R: Peter Kowalczyk (GBC), Ray Lett (BCGS), Paul Schiarizza (BCGS), Mike Thomas (GSC), Fil Ferri (MEMPR), JoAnne Nelson (BCGS), Paul Gammon (GSC) and Mitch Mihalyuk (BCGS). Missing from the photo: Colin Barnett (GBC), Travis Ferbey (BCGS), Wayne Jackaman (GBC), Jim Logan (BCGS) Bert Struik (GSC).

Photo by B. Struik.

employment for an aboriginal student who had graduated from the Northwest Community College's School of Exploration and Mining. More details are presented on pages 9-11 and page 16.

Transferring Information and Technology to the Users

A focus at GBC in 2009 was transferring information and technology to our clients. The GBC Research Review Day/Open House provided one of the many opportunities for GBC to showcase some of our more recent projects.

A half-day short course titled "Reading Geophysical Maps" at the Minerals South Conference in Cranbrook was also sponsored by GBC. This well-received presentation was designed and led by Peter Kowalczyk of PK Geophysics, and was attended by over 25 people. GBC also presented or exhibited at various conferences and regional events, including Mineral Exploration Roundup (Vancouver), Rock Talks (Smithers), PDAC (Toronto), KEG (Kamloops), Minerals North (Fort St. James), CSPG (Calgary), Minerals South (Cranbrook), Northeast BC Natural Gas

Summit (Calgary) and the Vancouver Island Exploration Group talk series (Nanaimo).

In October, GBC and the Mineral Deposit Research Unit (MDRU) at UBC launched a speaker series. This series hosted four speakers in 2009, including SEG Distinguished Lecturer Dr. Graham Begg, SEG Distinguished Lecturer Dr. Jon Hronsky, Dr. Claire Chamberlain, Teck Resources and Dr. John Thompson, Teck Resources. Attendance for the talks was high, with over 100 people attending the final talk of the year.

GBC continued to publish project results in 2009, releasing new data and reports through our website. GBC's Summary of Activities 2009 volume, our annual technical volume reporting on project activities in 2009, will be released in January 2010.

The geoscience message was also passed along to groups outside of the mineral and hydrocarbon industries. GBC gave presentations to the Southern Interior Local Government Association, the North Central Local Government Association, and the Fort Nelson First Nation Water Workshop.

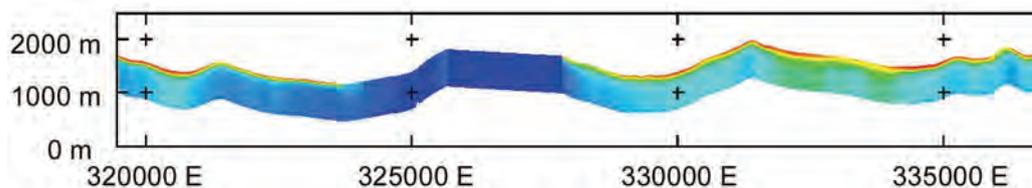
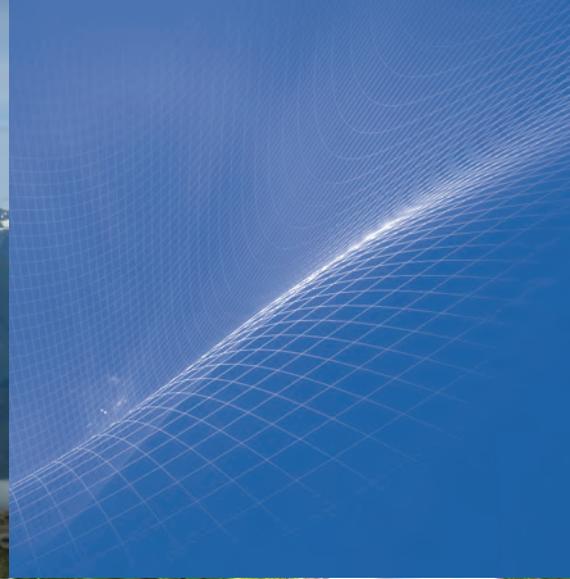




Photo by G. Pignotta.



Finally, GBC launched a new website in September 2009, with new search tools to enable users to quickly find a project or data set of interest. The website also includes video vignettes from GBC projects, showing what geoscience is all about. This video series, produced by Gordon Loverin of T'Senaglobe Communications, will be added to in the near future.

Coming in 2010

"Marketing the BC Exploration Advantage" will be GBC's focus in 2010. In an effort to attract even more investment to BC, GBC is putting a major effort into ensuring that exploration companies are aware of the public geoscience information that is being generated in BC.

GBC will have a significant presence at the PDAC conference in Toronto in March 2010, and will be hosting a half-day presentation room titled "Data for discovery: An innovative approach for increased exploration success in British Columbia." GBC will also continue to exhibit and deliver talks and workshops at regional exploration conferences throughout BC.

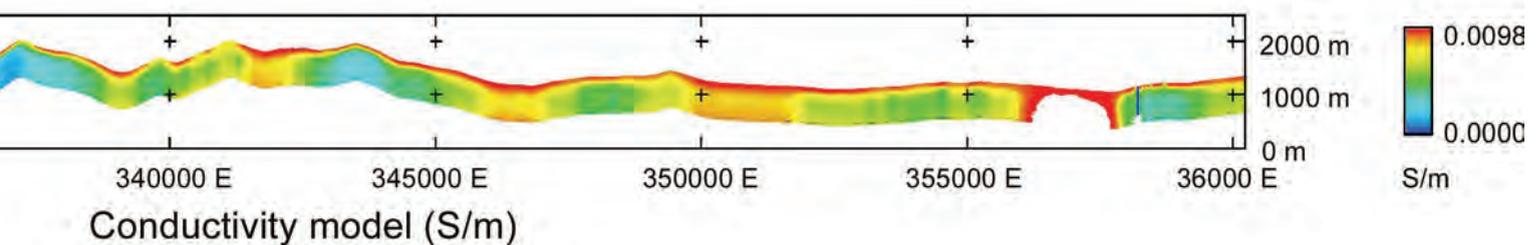
Upcoming short courses include a session at the 2010 Minerals North conference in Prince George focusing on the QUEST and QUEST-West data sets. GBC is also supporting the development of a technical workshop on exploration for porphyries under cover, using the QUEST data sets. This workshop, which is being developed by the Society of Exploration Geophysicists, will be presented at the October 2010 Society of Economic Geologists conference in Keystone, Colorado.

Finally, GBC and MDRU will be continuing our speaker series in the new year – stay tuned to GBC's website for more details on the speakers, as well as other news, projects and data in 2010!

C.D. ('Lyn) Anglin
President and CEO
Geoscience BC



Collecting samples.
 Photo courtesy of T. Bissig.



QUEST Project geophysical inversion results produced by Mira Geoscience Ltd.



Southern Explorers: Geoscience BC's QUEST-South Project

The QUEST-South Project, Geoscience BC's third QUEST initiative, applies the combined regional geochemistry and geophysics approach successfully used in the QUEST and QUEST-West projects to BC's south-central interior. The project is creating new geoscience information over an area of 130,000 square kilometres and is aiding mineral exploration companies in their quest to make new discoveries.

The QUEST-South area has a long history of mineral exploration and mining, including the Highland Valley Copper mine, the Gold Bridge gold-quartz vein camp, Taseko Mines Ltd's Prosperity deposit and Copper Mountain (Copper Mountain Mining Corp).

The project was officially announced in April 2009, and commenced in June 2009 with the launch of the geochemical portion of the project. Over 9,000 archived stream sediment samples (collected in previous initiatives by the Geological Survey of Canada and the British Columbia Geological Survey) were reanalyzed using modern (ICP-MS) techniques. These reanalyzed samples will provide new geochemical information over an area extending south from Williams Lake to the BC-USA border, and west from Revelstoke to Pemberton (eight 1:250,000 NTS map sheets).

Summer 2009 also saw the collection of

over 1,000 new stream and soil geochemical samples in an area centered on Merritt. These new samples complement the reanalyzed sample suite, bringing the combined total to over 10,000 new geochemical analyses in the QUEST-South area, the largest single infusion of geochemical data to the provincial database since its inception in the 1970s (Jackaman and Reichheld, 2010). Noble Exploration Services Ltd is managing the QUEST-South geochemical program.

The geophysical component of the QUEST-South project, an airborne gravity survey focused on the Quesnel Terrane south of Williams Lake, was flown by Sander Geophysics Ltd during Fall 2009. The survey was flown on a 2 km line spacing, designed to tie in seamlessly with the QUEST and Natural Resources Canada Nechako gravity surveys.

All QUEST-South datasets will be released in early 2010.

FOR MORE INFORMATION ON THE QUEST-SOUTH PROJECT, PLEASE CONTACT:

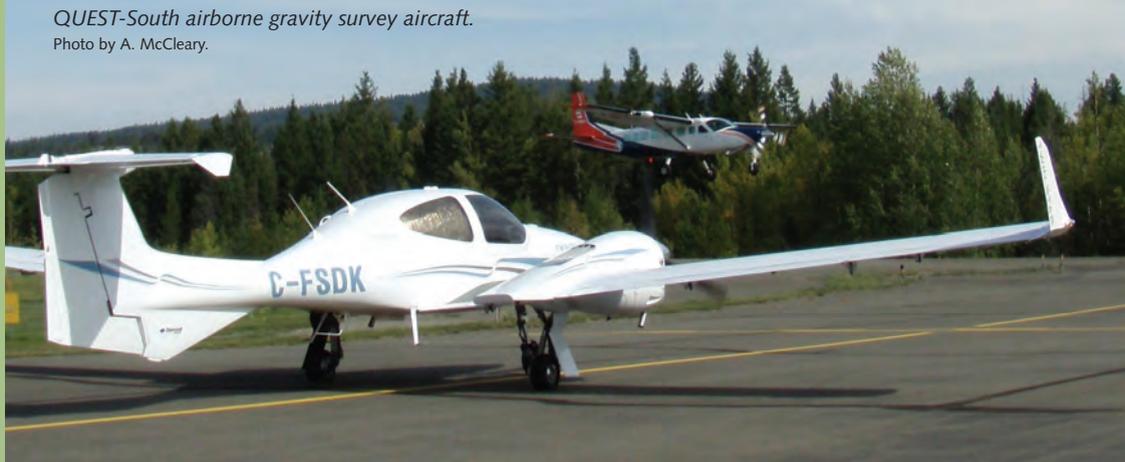
Geoscience BC

info@geosciencebc.com

www.geosciencebc.com/s/QUESTSouth.asp



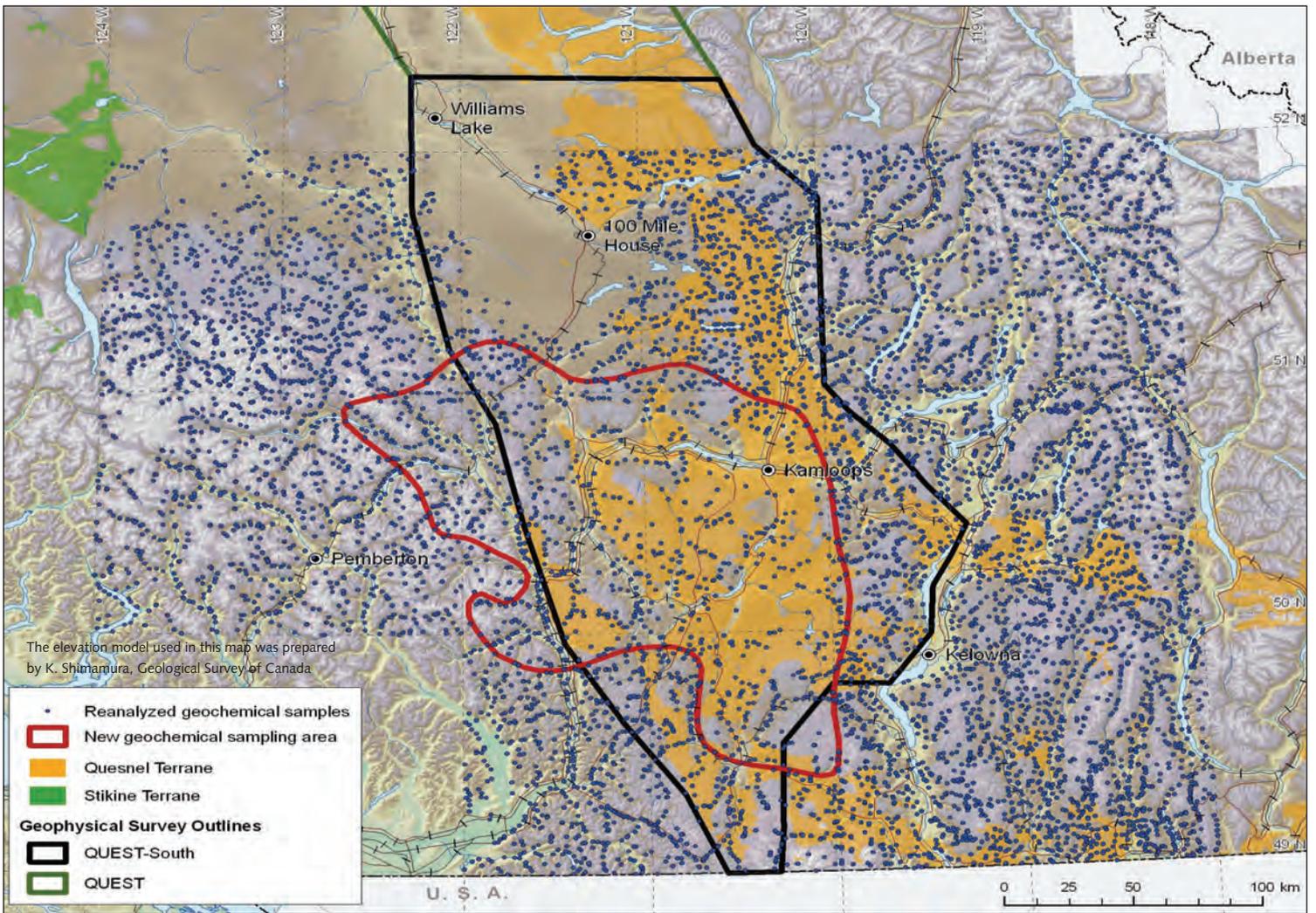
QUEST-South Project stream sediment sampling.
Photo by W. Jackaman.



QUEST-South airborne gravity survey aircraft.
Photo by A. McCleary.

Did you know?

Geoscience BC's three QUEST program (QUEST, QUEST-West and QUEST-South) airborne gravity surveys have flown 77,989 line-kilometres (including both traverse and tie lines).



QUEST-South project area.





Wayne Jackaman presenting at "Terrace and Beyond – Filling the Geoscience Gaps."

Photo by S. Harling.

Let's Talk Geoscience

Geoscience BC is committed to educating the exploration community and general public about the value of geoscience, and this past year presented numerous opportunities to spread the word.

In February, Geoscience BC (represented by Wayne Jackaman, Gordon Loverin and Christa Sluggett) along with Ray Lett and Joanne Nelson of the BCGS, took a trip to Terrace to present a workshop titled "Terrace and Beyond – Filling the Geoscience Gaps." This well-attended workshop focused on comprehensive new geoscience datasets in the Terrace area, highlighting recent mapping by the BCGS and new geochemical data funded by Geoscience BC. The workshop was organized in partnership with the Terrace Economic Development Authority and Northwest Community College.

A similar workshop was held in Burns Lake in October. Geoscience BC representatives ('Lyn Anglin, Garth Kirkham, Don MacIntyre and Wayne Jackaman) joined Travis Ferbey (BCGS) to present results of Geoscience BC's QUEST-West Project and ongoing till geochemistry work in the region. This workshop was coordinated by Geoscience BC and the Regional District of Bulkley-Nechako, who are QUEST-West Project funding partners.

Geoscience BC also hosted a Research Review Day/Open House in September, where several Geoscience BC-funded proponents presented the results of their ongoing or recently completed projects. Highlights included an extended presentation on the QUEST Project

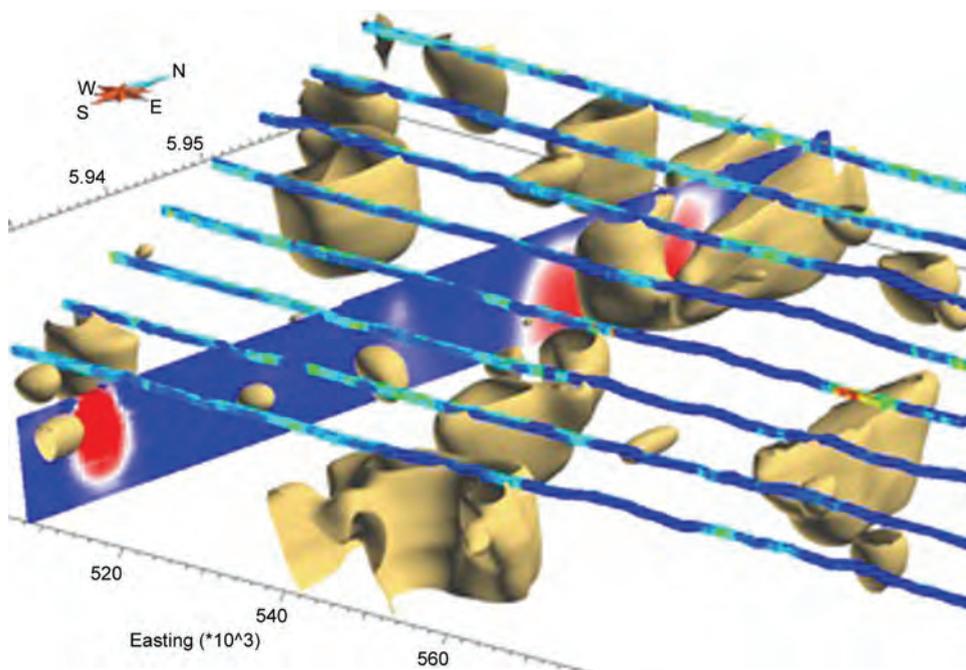
geophysical inversion results, new information on target generation using the QUEST geochemical data CSIRO SOM analysis results, and project updates on work on Vancouver Island, in the Bralorne-Bridge River district and in the Cariboo (orogenic gold and drift prospecting projects).

FOR MORE INFORMATION ON GEOSCIENCE BC'S WORKSHOP ACTIVITIES, INCLUDING PDF PRESENTATIONS FROM THE ABOVE WORKSHOPS, PLEASE CONTACT:

Geoscience BC
 info@geosciencebc.com
 www.geosciencebc.com/s/workshops.asp

Did you know?

Geoscience BC has supported the reanalysis of over 20,000 archived sediment pulps, and the collection and analysis of 8,800 new drainage sediment and water samples.



Perspective view of inversion modeling results for block C of the QUEST area. The conductivity model is shown as East-West cross-sections, the density contrast model is represented as iso-surfaces at a value of 0.05 g/cm³, and a North-South cross-section displays the magnetic susceptibility values.

From Geoscience BC Report 2009-15 (Mira Geoscience).



New Minerals Initiatives in 2009

Ten new Geoscience BC minerals projects commenced in 2009. These projects were funded through Geoscience BC's Request for Proposals (RFP) in late 2008, as well as a QUEST-West Project follow-up RFP in early 2009.

FOR MORE INFORMATION ON THESE PROJECTS, go to www.geosciencebc.com/s/projects.asp.

FOR INFORMATION ON PROJECTS FUNDED BY GEOSCIENCE BC IN THE FALL 2009 RFP, turn to page 17.

Surficial Geochemistry and Lithology of the Bulkley River Valley, Central BC – Andrew Stumpf, Illinois State Geological Survey, Institute of Natural Resources Sustainability

This project will publish 135 archived till geochemical and clast lithology data for samples of glacial sediment collected in the Bulkley River valley in 1996. The original data was collected for the British Columbia Geological Survey (BCGS) as part of till geochemistry and Quaternary geology studies in the Babine porphyry copper district in support of the Nechako NATMAP project in central BC.

Geochemistry, Volcanology and Physical Properties of the Late Triassic Nicola Arc and its Metallogenic Implications – Thomas Bissig, Mineral Deposit Research Unit (MDRU), UBC

This project will investigate along-strike variations in the physical volcanology, geochemistry and related changes in physical properties of the Nicola Group and parts of the Takla Group. The goals are to identify characteristics indicative of proximity to known porphyry ore deposits and tectonomagmatic processes that led to porphyry ore formation. It will concentrate on five key areas including: Mount Milligan; Mount Polley; Afton/Ajax; Canim Lake area; and exposures 50-100 km south of Kamloops.

Defining the Upper Parts of an Alkalic Porphyry Copper-Gold Deposit: The Evolution of the Porphyry Copper-Gold Deposit at Red Chris, Northern BC – Craig Hart, Mineral Deposit Research Unit (MDRU), UBC

This collaborative MDRU-Imperial Metals-Geoscience BC project will examine the preserved upper parts of the Red Chris alkalic porphyry Cu-Au deposit, which extends to as much as 1 kilometre below the

present surface. A major goal of this project is to understand the distribution of the alteration assemblages, their relationship to veins and rock types, origin and timing. Graduate student research will characterize the Main and East Zones by reconstructing the evolution and development of the hydrothermal system and evaluating the structural setting. An evaluation of the down-hole multi-element geochemistry in the context of SWIR mineral chemistry will also be undertaken.

Geological Mapping, Compilation and Mineral Evaluation, Deer Park Map Sheet (082E/08), Christina Range, Southern BC – Trygve Höy, consultant and Wayne Jackaman, Noble Exploration Services Ltd

This project focuses on geological mapping and compilation of the 1:50,000 Deer Park map sheet 082E/08, located within the Christina Range of southern BC. The goal of this project is to evaluate the potential for Tertiary-age precious metal mineralization as well as base metal mineralization. In addition to new mapping, the project will include compilation of all geological data, (assessment report, government maps and unpublished industry maps and reports) and integrate these data with stream geochemical data and published regional geophysical surveys. New geological maps (1:20,000; 1:50,000) will be produced. Mineral deposit site visits, and an update of occurrences for BC MINFILE will provide a framework and impetus for renewed and continued exploration.

Characterization of Placer and Lode Gold Grains as an Exploration Tool in East-central BC – Jim Mortensen, Mineral Deposit Research Unit (MDRU), UBC

The main goals of the project are to develop more unique micro-geochemical "fingerprints" for the different known lode



gold occurrences in east-central BC based on major and trace element geochemistry and mineral micro-inclusion suites, and evaluate the distribution and likely source(s) of gold with these signatures in as many placer deposits in the region as possible. The main outcomes of the proposed work will be a validation of this approach to studying placer/lode gold relationships in east-central BC, and a preliminary assessment of the nature of and potential for undiscovered lode sources in the study area.

Relationship Between

Magmatism/Volcanism, Deformation and Economic Mineralization within Paleozoic Strata in the Terrace-Kitimat Area, BC –

Geoffrey Pignotta, University of Wisconsin

The project aims to evaluate the regional economic mineral potential of the Zymoetz Group rocks in the Terrace-Kitimat area. The project will include detailed mapping (1:20,000 or greater), comprehensive stratigraphic and geochemical analysis of the volcanic strata, mineral assays of VHMS deposits and intrusion related deposits, geochronologic analysis of the volcanic and cross-cutting intrusive rocks and detailed structural analysis.

Till Geochemistry of Tahtsa Lake District North and Adjacent Areas, West-Central BC - A Key Ingredient for the Discovery of New Porphyry, VMS, and Polymetallic Vein Mineralization – Travis Ferbey, BC Geological Survey

This project, located within Geoscience BC's QUEST-West study area, will provide to the mineral exploration community new, high-quality, regional-scale, geochemical data that will help guide exploration efforts in an area with high mineral potential and an extensive cover of glacial drift. Integrating interpretations of these data with other geochemical and geophysical data being collected by Geoscience BC in the QUEST-West study area, and historic data that have been collected by the British Columbia Geological Survey and the Geological Survey of Canada, will provide a powerful tool for mineral exploration companies.

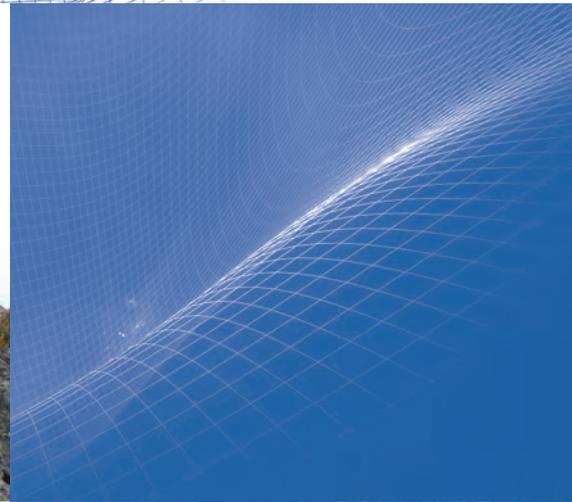
Integrated Geological & Geophysical Porphyry Models: Adding Value to Geoscience BC Geophysical Data – Dianne Mitchinson, Mineral Deposit Research Unit (MDRU), UBC

This project will integrate geophysics and geology to better interpret detailed magnetic and EM geophysical data in the QUEST and QUEST-West areas. The aims are to compile existing physical property

*Stream cut bedrock exposure near Prince George.
Photo by D. Sacco*



Measuring bedding in fragmental volcanic rock near Terrace, BC.
Photo by G. Pignotta



data and collect new data from several known porphyry deposits, as well as from rock samples collected from outlying areas. These data will be used to constrain geophysical inversions.

Porphyry Indicator Minerals (PIMs): Exploration for Concealed Deposits in QUEST, Central BC – Craig Hart, Mineral Deposit Research Unit (MDRU), UBC

The aim of this project is to establish a methodology that can effectively evaluate existing geochemical and geophysical targets, identify new targets, and define vectors to source in highly prospective but till-covered areas of BC. Specifically, the project aims to identify the occurrence, types, relative amounts, character and compositions of porphyry indicator minerals in at least two well-known porphyry deposits, and determine their signatures in adjacent sedimentary materials (tills and stream sediments).

A Test of Deep Penetrating Geochemical Techniques on Covered and Blind Porphyry Deposits in the QUEST Project Area – Dave Heberlein, Heberlein Geoconsulting

This project consists of two orientation surveys to test a range of commercially available partial leach methods on blind porphyry copper targets with the objective of optimizing sampling and analytical methods for two contrasting environments (i.e. logged vs unlogged, glacial outwash vs. till cover). The two study sites are: the Central Zone at Serengeti's Kwanika project and the MBX and 66 Zone at Terrane Metal's Mt Milligan project.



Dianne Mitchinson measuring magnetic susceptibility at Mt. Milligan.
Photo by T. Bissig.

Did you know?

Geoscience BC is digitizing mapping from the early 90s by Peter Lewis in the Iskut region of BC.

Geoscience BC Data and Publications 2009

All Geoscience BC data and publications can be found on our website at www.geosciencebc.com

Geoscience BC Report 2009-1

Geoscience BC Summary of Activities 2008 (contains 21 papers on Geoscience BC project activities in 2008, *various authors*)

Geoscience BC Report 2009-2 (GSC Open File 6311)

Indicator Mineral Content and Geochemistry of Stream Sediments and Waters from Northeast BC (NTS 94A, 94B, 94G, 94H, 94I, 94K, 94N, 94O, 94P), *by M.W. McCurdy, I.M. Kjarsgaard, S.J.A. Day, R.J. McNeil, P.W.B. Friske and A. Plouffe*

Geoscience BC Report 2009-3

Using Geochemistry and Neural Networks to Map Geology under Glacial Cover, *by C.T. Barnett and P.M. Williams (BW Mining)*

Geoscience BC Report 2009-4

QUEST Project Compilation Maps, *by Geoscience BC*

Geoscience BC Report 2009-5

QUEST-West Project Sample Reanalysis, *by W. Jackaman (Noble Exploration Services Ltd)*

Geoscience BC Report 2009-6

Report on a helicopter-borne AeroTEM system electromagnetic & magnetic survey, *by Aeroquest Surveys*

Geoscience BC Report 2009-7

Helicopter-borne Z-Axis Tipper Electromagnetic (ZTEM) and Aeromagnetic Survey, Mt. Milligan Test Block, *by Geotech Ltd.*

Geoscience BC Report 2009-8

Google Earth Data Explorer, *by W. Cadell (Timberline Natural Resources Group) and G. Mulligan (Golder Associates)*

Geoscience BC Report 2009-9

Nechako 2008 Seismic Survey Data, *survey conducted by CCGVeritas*

Geoscience BC Report 2009-10 (BCGS Open File 2009-4)

Till Geochemical Exploration Targets, Babine Porphyry Copper Belt, Central BC, *by T. Ferbey, V.M. Levson and R.E. Lett*

Geoscience BC Report 2009-11

Regional Drainage Sediment and Water Geochemical Data, Central BC (parts of NTS 93E, F, G, J, K, L, M, N & O), *by W. Jackaman (Noble Exploration Services Ltd)*

Geoscience BC Report 2009-13 (GSC Open File 5988)

Nechako Basin magnetotelluric data release: a geoscience for Mountain Pine Beetle response product, *by J.A. Craven*

Geoscience BC Report 2009-14

An Investigation using SiroSOM for the Analysis of QUEST Stream-Sediment and Lake-Sediment Geochemical Data, *by S.J. Fraser and J.H. Hodgkinson (CSIRO Exploration & Mining)*

Geoscience BC Report 2009-15

QUEST Project: 3D Inversion Modeling, Integration, and Visualization of Airborne Gravity, Magnetic, and Electromagnetic Data, BC, Canada, *by N. Phillips, T.N.H. Nguyen and V. Thompson (Mira Geoscience Advanced Geophysical Interpretation Centre)*

Geoscience BC Map 2009-16-1

Geology, Chasm Provincial Park and vicinity, BC, *by R.E. Farrell, R.G. Anderson, K.A. Simpson, G.D.M. Andrews and J.K. Russell*

Geoscience BC Report 2009-17

QUEST Project Property File Update, *by N. Barlow (Purple Rock Editing)*

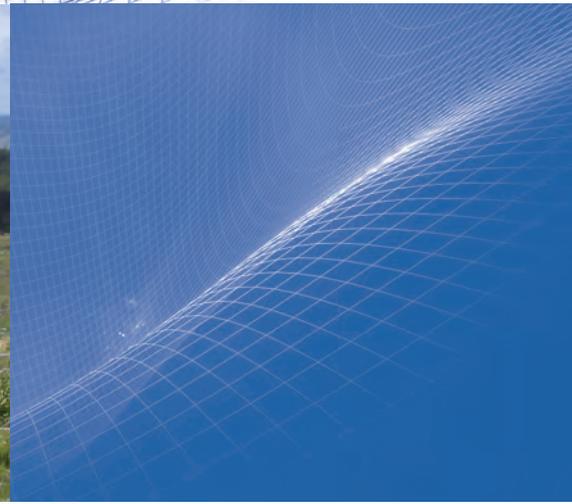
Geoscience BC Report 2009-18

Report of 1D Inversion Modeling of the QUEST-West Helicopter-borne AeroTEM System Electromagnetic Data, *by Aeroquest Surveys*

Geoscience BC Report 2009-19

Apatite Fission Track Data for Seventeen Rock Samples from the Bowser and Sustut Basins, BC, *by P.B. O'Sullivan, C.A. Evenchick, K.G. Osadetz, F. Ferri and R.A. Donelick*

Photo by W. Jackaman.



Summary of Activities

Looking for a more technical point of view of Geoscience BC's projects? Wondering about final project results, or what types of projects Geoscience BC funds? Check out Geoscience BC's annual Summary of Activities volume!

Released each January at Roundup, Geoscience BC's Summary of Activities volume is our annual scientific report, composed of technical papers from our ongoing and recently completed projects.

Geoscience BC Summary of Activities 2009 is the third in the series (Geoscience BC technical papers were originally published in the BC Ministry of Energy, Mines and Petroleum Resources Fieldwork 2005 and 2006 volumes). Printed in full colour, and available digitally through Geoscience BC's website and in CD format, the Summary of Activities 2009 contains 270 pages of new information on BC geology.

The volume is split into three sections, focusing on our QUEST-South initiative, minerals projects and oil and gas projects respectively.

Highlights of the volume include:

- 2 papers describing surveys undertaken as part of Geoscience BC's QUEST-South Project
- 4 papers detailing current geochemical initiatives
- 3 deposit-specific papers on Red Chris, Galore Creek and Adanac
- 6 regional geology papers, highlighting ongoing work throughout the province
- 1 paper focused on enhancing geophysical interpretation through rock property data
- 2 papers describing recent updates to the provincial MINFILE and Property File databases
- 1 paper on using Google Earth to view QUEST Project geochemical data
- 3 papers highlighting ongoing work in the Nechako Basin
- 3 papers focused on new Geoscience BC hydrocarbon initiatives in northeastern BC

FOR MORE INFORMATION ON GEOSCIENCE BC'S SUMMARY OF ACTIVITIES VOLUMES, PLEASE CONTACT:

Geoscience BC

info@geosciencebc.com

www.geosciencebc.com/s/Publications.asp





Horn River Basin Aquifer Project

The Devonian shales of the Horn River Basin in northeast BC are one of the leading shale gas plays in North America.

Production of gas from these rocks will require injection of significant quantities of water to fracture the reservoir shale and release the gas. Identification and characterization of subsurface aquifers suitable for water supply and disposal is a priority for research in support of responsible development of the basin.

The Horn River Basin Aquifer Project is a collaborative research initiative of Geoscience BC and the Horn River Basin Producers Group (HRBPG). The project aims to identify, map and characterize the deep, non-potable, subsurface aquifers in the basin. The ultimate goal of the project is to provide information to the industry and the public that will help limit the surface footprint of development in the basin. This will be achieved by identifying alternate sources of water reducing the use of surface water, minimizing the impact on potable water, and facilitating orderly development through collaborative research and knowledge sharing among geoscience researchers and the members of the Producers Group.

Consultation undertaken by Geoscience BC with industry representatives during the summer and fall of 2008, prioritized the identification and characterization of subsurface water supplies and sites for safe water disposal, as key areas for collaborative geoscience research.

In spring 2009, Geoscience BC and the HRBPG launched a number of geoscience studies as part of the Horn River Basin Aquifer Project, including:

- Petrel Robertson Consulting Ltd was retained to manage the overall project, and to undertake the stratigraphic mapping and characterization of potential deep subsurface aquifers,
- JC Consulting was engaged to provide petrographic descriptions and estimates of reservoir porosity and permeability from detailed examination of drill cuttings, and
- Canadian Discovery Ltd was engaged to compile and interpret regional hydrostratigraphic and flow characteristics of key aquifer units.

To date, Geoscience BC has committed over \$3.5 million to this project, which has been matched by over \$6 million of in-kind contributions of data and knowledge from many of the HRBPG companies. The companies' contributions included well logs, cores, sample cuttings, and operational knowledge. Geoscience BC also funded a series of well tests on a number of new water-source wells in the basin that had been drilled by HRBPG companies.

The results of the study indicate that there is good subsurface aquifer potential in many areas of the Horn River Basin, and there are clear stratigraphic controls on the distribution of these rocks.

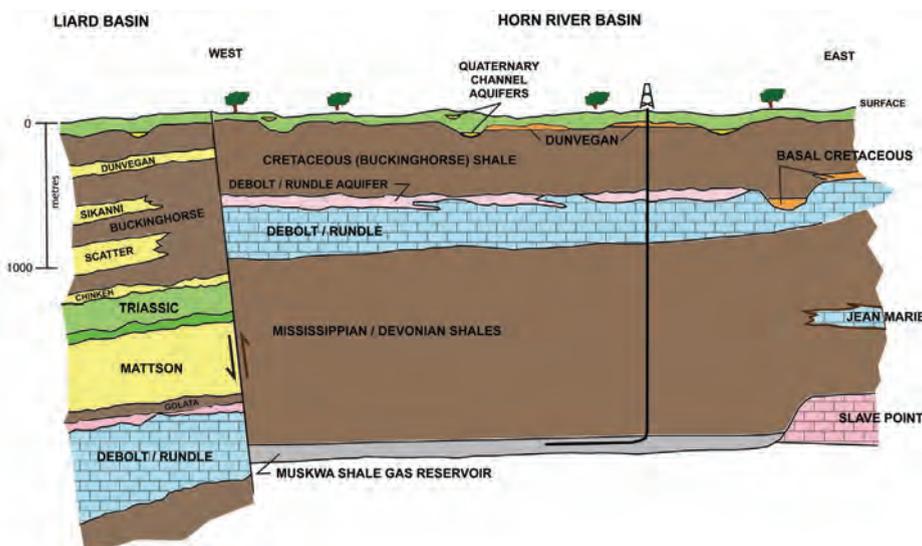
Detailed project results have been delivered to the HRBPG members, and will remain confidential for up to 6 months, after which time they will be made publicly available through Geoscience BC.

The Horn River Basin Producers Group

The Horn River Basin Producers Group (HRBPG) is a collaborative industry organization, with involvement of the BC government and First Nations. The Group is led by a Steering Committee with 11 industry members (representing 13 companies) active in the basin, including:

- Apache Canada Ltd
- EnCana
- Devon Canada Corp
- ExxonMobil Canada/Imperial Oil Resources
- Nexen Inc
- EOG Resources Canada
- Quicksilver
- Stone Mountain Resources/Ramshorn
- ConocoPhillips
- Pengrowth/Result
- Suncor

The HRBPG was established to facilitate cooperation and communication between major industry players, key stakeholders and First Nations in the area.



Schematic stratigraphic cross-section, Horn River Basin and adjacent Liard Basin, northeastern BC. Reproduced from Hayes, 2010 (Geoscience BC Summary of Activities 2009).



Nechako Basin.
Photo by A. Calvert

Nechako Basin Project Update

In June 2009 Geoscience BC was pleased to announce the release of new seismic reflection data for the northern Nechako Basin west of Quesnel, BC. This \$2.5 million survey, completed in 2008, acquired 330 line-kilometres of new seismic reflection data that is assisting in determining the hydrocarbon potential of central BC.

The survey, funded with \$2 million from Geoscience BC and \$0.5 million from the Northern Development Initiative Trust, was the first seismic work to be carried out in the area since Canadian Hunter collected approximately 1,300 km in the early 1980s. Although 5 wells were drilled in the Nechako Basin to follow-up on the Canadian Hunter seismic program, hydrocarbon exploration in the region ceased soon after.

The Geoscience BC survey was designed to improve upon and add to the Canadian Hunter survey, particularly to see through the young volcanic rocks that cover much of the Nechako Basin. The work was supported by the Nazko First Nation and involved some short-term training and employment opportunities for Nazko band members, significant economic benefits to

local hotel operators, restaurants, and a contract for a road flagging crew based out of Prince George. The seismic survey was conducted by CGG Veritas of Calgary.

Results from all seven lines are now available from Geoscience BC's website as Geoscience BC Report 2009-9, and include both data (structure stack and migration files in SEG Y format) and images. Three presentations on the seismic data and associated magnetotellurics work were given at the CSPG conference in Calgary in May 2009.

The seismic survey is a major component of Geoscience BC's interior basins oil and gas geoscience program. The survey complements ongoing seismic monitoring, geophysical and geological studies of the Nechako Basin being supported by Geoscience BC in partnership with Simon Fraser University, University of British Columbia, BC Ministry of Energy Mines and Petroleum Resources, and Natural Resources Canada.

For more information on Geoscience BC's projects in the Nechako Basin, please go to www.geosciencebc.com/s/NechakoSeismic.asp

Investigation of Geothermal Resources at Canim Lake

Geoscience BC has awarded a \$5,000 scholarship to University of Northern British Columbia Ph.D. candidate Titi Kunkel, to support her work on a project investigating the geothermal resources at Canim Lake, BC.

The objectives of this project are to characterize the geothermal resources in the Canim Lake area, determine the reservoir temperature and capacity, assess the commercial and non-commercial classes of resource, and evaluate the viability of different development options. This is a collaborative project between the Canim Lake First Nation people, Dr Mory Ghomshei (Adjunct Professor at UBC), and Titi Kunkel (Lead investigator).

This project forms part of Titi's PhD research, which is required to fulfill the Natural Resources and Environmental Studies degree requirements at the University of Northern British Columbia under the supervision of Dr Bob Ellis.



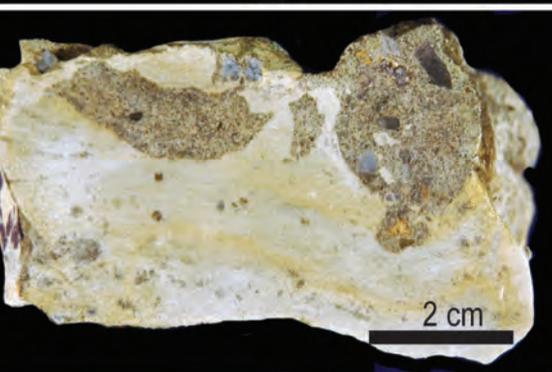
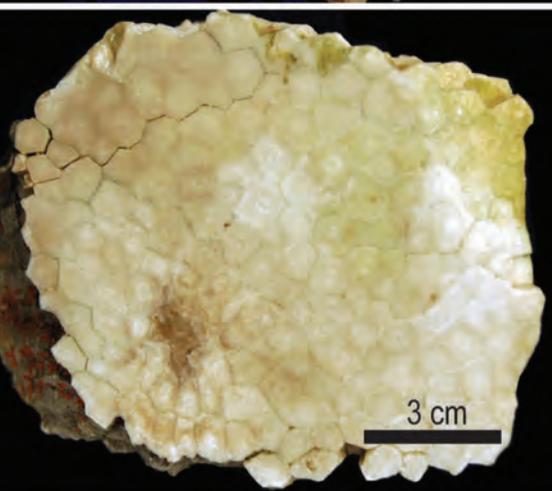
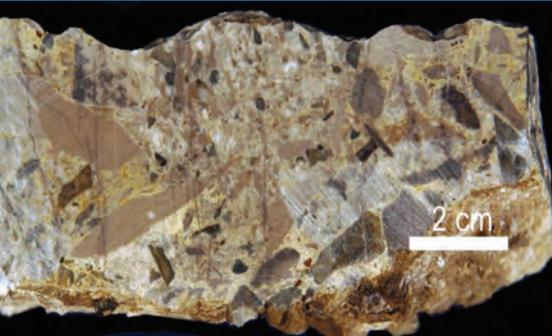
Nechako Basin seismic survey.
Photo by A. Calvert



Chilcotin Group volcanic rocks in the Nechako Basin region, central BC.
Photo by K. Simpson.



New Oil & Gas Initiatives in 2009



Three new Geoscience BC oil & gas initiatives commenced in 2009. These projects were funded through Geoscience BC's Request for Proposals (RFP) in late 2007 and 2008.

Upper Paleozoic to Lowest Triassic Succession, Sukunka-Kakwa Area, BC – Charles Henderson, University of Calgary

This project will develop detailed predictive sedimentary facies and diagenetic models within an integrated sequence biostratigraphic framework for known and potential reservoir intervals in Upper Paleozoic strata within the Sukunka-Kakwa region of northeastern BC (NTS 1:250,000 map sheets 931, O and P). Despite strong industry interest in Permo-Pennsylvanian (Ksituan and Belloy formations) strata no detailed stratigraphic and sedimentologic studies of Upper Paleozoic strata have previously been conducted in the Sukunka-Kakwa area. The lowest parts of the Triassic succession will also be investigated to help understand the tectonic controls on deposition and preservation of this succession.

Biostratigraphic and Sedimentological Studies of Natural Gas-Bearing Triassic Strata in the Halfway River Map Area, NE BC – J.K. Mortensen, University of British Columbia, and J.P. Zonneveld, University of Alberta

This project is undertaking a one-year biostratigraphic and provenance study of the Triassic section in the Halfway River map area in northeastern BC. This work will be done in conjunction with the Oil and Gas

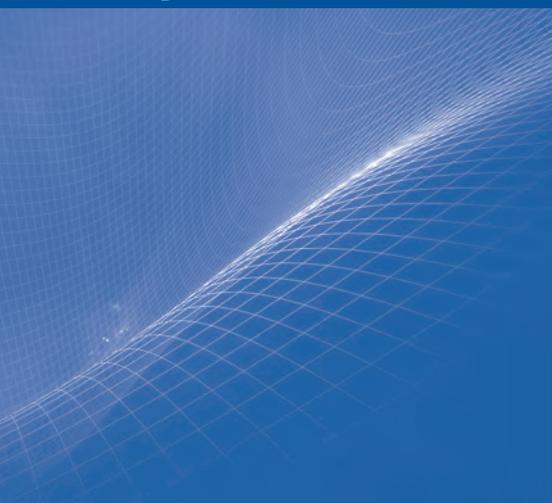
Division of the BC Ministry of Energy, Mines and Petroleum Resources geological mapping project that is currently underway in the area. The main objectives of the study will be to provide a much-improved biochronology for the Triassic section in this area, and to evaluate the proposed two-stage depositional model for the deposition of this package.

Rock Physical Property Measurements for Modeling Geophysical Datasets – Kelly Russell, University of British Columbia

Geophysical surveys (both seismic reflection and magnetotellurics), funded by Geoscience BC and the Geological Survey of Canada, have recently examined portions of the Nechako Basin in order to determine the hydrocarbon potential of its Jurassic and Cretaceous sedimentary rocks. Previous work by these project proponents has focused on the measurement of geophysical properties (density, porosity, magnetic susceptibility and seismic velocity) of the Miocene Chilcotin Group volcanic rocks to help interpret variations in the Nechako Basin geophysical signals. This project expands that work to include geophysical property measurements of key lithologies within the Nechako Basin, including magnetic properties, density, porosity, electrical conductivity and compression and shear wave velocity.

For more information on these projects, go to www.geosciencebc.com/s/projects.asp. For information on projects funded by Geoscience BC in the fall 2009 RFP, turn to page 17.

Selected rocks from Sukunka-Kakwa study area, east-central BC. Reproduced from Henderson et al. (Geoscience BC Summary of Activities 2009).



Taking notes at a till sample site north of Tahtsa Reach, west-central BC.

Photo by T. Ferbey.

Coming in 2010...

Geoscience BC issues an open Request for Proposals (RFP) each fall, looking for new mineral and hydrocarbon projects that will attract investment to British Columbia. All proposals are evaluated by one of Geoscience BC's two Technical Advisory Committees (TACs), and final funding decisions are made by Geoscience BC's Board of Directors.

In 2009 Geoscience BC received 28 proposals in response to this open RFP. The following proposals were approved for funding:

- **Vancouver Island Data Reanalysis Project** – *Wayne Jackaman, Noble Exploration Services Ltd.*
- **Regional 3D Inversion Modeling of Airborne Gravity, Magnetic, and Electromagnetic Data for Central and South-central BC** – *Nigel Phillips, Mira Geoscience*
- **Carbonate Alteration as an Indicator of Proximity to Eskay Creek-Type Deposits** – *Thomas Monecke, Colorado School of Mines*
- **Geological, Mineralogical and Geochemical Characterization of Carbonate-hosted Nonsulphide Zn-Pb Mineralization in Southern BC** – *George Simandl, BC Geological Survey and Suzanne Paradis, Geological Survey of Canada*
- **Implications for Geology, Metallogeny and Mineral Potential of the Basement of Quesnellia in Southern BC** – *Jim Mortensen, Mineral Deposit Research Unit (MDRU), UBC*
- **Geochemical Models for BC Porphyry Deposits: Outcropping, Blind and Buried Examples** – *Craig Hart, Mineral Deposit Research Unit (MDRU), UBC*
- **Quantification of the Gas in Place and Flow Characteristics of Tight Gas Charged Rocks and Gas Shale Potential in BC** – *Marc Bustin, University of British Columbia*
- **Gravity and Magnetic Inversion Modeling: Nechako Basin, BC** – *Nigel Phillips, Mira Geoscience*
- **Modeling and Investigation of Airborne Electromagnetic Data, and Reprocessing of Vibroseis Data, from Nechako Basin, BC, Guided by Magnetotelluric Results** – *Colin Farquharson, Memorial University of Newfoundland*
- **2D Land Joint Inversion of seismic, magnetotelluric and gravity for Pre-Stack DEPTH Migration Imaging, Nechako Basin, BC** – *Maurizio Sfolciaghi, WesternGeco SDI*
- **Helicopter-borne Time-domain Electromagnetic Data to Map and Characterize the Ootsa, Chilcotin and Endako Formation Basalts** – *Jonathan Rudd, Aeroquest Surveys*
- **Nature, Distribution, Thickness and Regional Structural Framework of Eocene Volcanic Centres in Nechako Basin, South-central BC** – *Craig Hart, MDRU, University of British Columbia*

More information on all of these projects will be posted to Geoscience BC's website in the near future. Stay tuned to www.geosciencebc.com/s/projects.asp.

Did you know?

All Geoscience BC RFPs are released through our website at www.geosciencebc.com/s/RequestsforProposals.asp.





UNLOCKING BC'S POTENTIAL THROUGH GEOSCIENCE

Geoscience BC is an industry-led, not-for-profit, applied geoscience organisation. Geoscience BC works in partnership with industry, academia, government, First Nations, and communities to fund applied geoscience projects with the objective to attract mineral and oil & gas exploration to British Columbia.

Geoscience BC's mandate includes the collection, interpretation, and delivery of geoscience data and expertise, to promote investment in resource exploration and development in British Columbia.



SCHOLARSHIP WINNERS



REQUEST FOR PROPOSALS



DATA RELEASES

QUEST-South

The QUEST-South Project builds on Geoscience BC's successful QUEST and QUEST-West exploration geoscience projects. It includes regional geochemical surveys and regional airborne gravity over an area extending south from Williams Lake to the BC-USA border and west from Revelstoke to Pemberton.

[Learn More ▶](#)

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- ### Recent News
- Dec 18, 2009
Geoscience BC Releases Report 2009-17: QUEST Project Property File Update H... [\(more...\)](#)
 - Dec 03, 2009
Exploration Success in the Next Five Years - A Copper Perspective [\(more...\)](#)
 - Nov 30, 2009
Geoscience BC Announces Release of Report 2009-19 and highlights GeoGRAFX S... [\(more...\)](#)

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Geoscience BC's New Look

If you've explored Geoscience BC's website recently, you may have noticed a significant change in September 2009. That's when Geoscience BC launched our redesigned website, which, besides displaying a new-look homepage, has many new features to help users quickly access information on Geoscience BC's projects, data, publications and news.

Projects

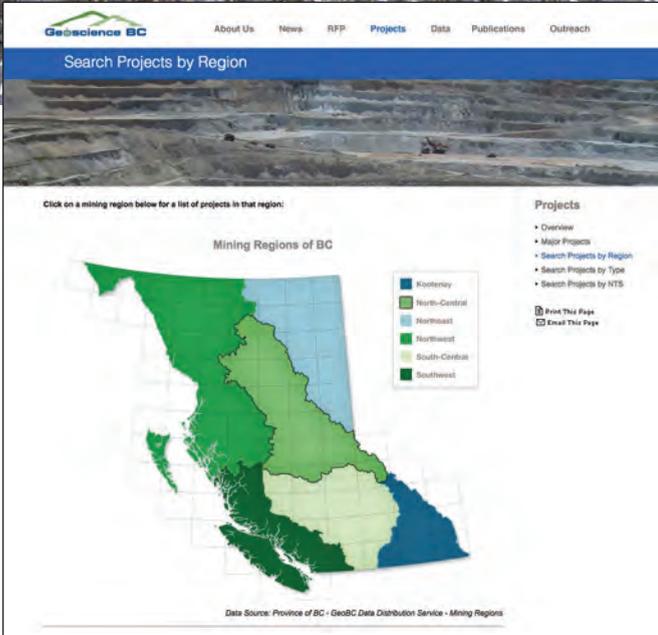
Perhaps the biggest change is to the "Projects" section of the website, which now features quick links to Geoscience BC's major initiatives (QUEST, QUEST-West, QUEST-South, Nechako Seismic and Horn River Basin), as well as three ways to search through Geoscience BC's projects: "Search by Region" (e.g. Northwest BC), "Search by Project Type" (e.g. Geophysics) or "Search by NTS Sheet". These options allow users to quickly narrow down their search, or expose users to other Geoscience BC projects in their area of interest.

All Geoscience BC projects have been updated to include a short project description and links to all posters, presentations, papers, theses and Geoscience BC Reports generated as part of the project.

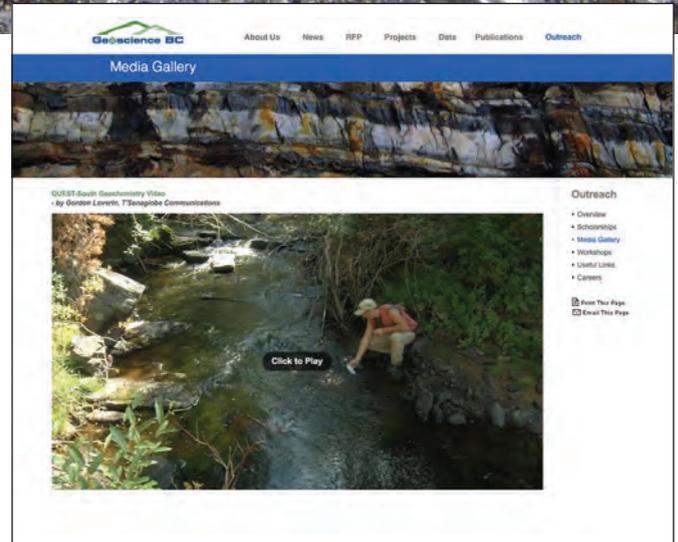
Data

The "Data" section has been redesigned to allow users to browse data releases by year and report number, or by data type. When searching by data type, the user can identify data releases that contain raw data (e.g. spreadsheets with geochemical data, or geophysical grid files), PDF maps or viewing and data analysis tools (e.g. links to ASTER imagery on Map Place).

All data releases are referenced by their title and Geoscience BC Report number. Each report now has its own web page with links to all report components, a description of the report contents, the suggested report reference, and additional useful links to other web pages such as the associated project page or other projects that are related to the data.



Search projects by Mining Region on Geoscience BC's website.



Geoscience BC's media gallery features video clips from project activities.

Publications and Outreach

The new "Publications" section of the website provides links to the digital versions of Geoscience BC's Explorer Magazine, as well as our Summary of Activities volumes and brochures.

The "Outreach" section now includes links to all our scholarship winners, and an updated "Workshops" section. A new "Media Gallery" will soon be providing links to video vignettes of selected Geoscience BC projects.

In addition to these changes Geoscience BC's website still has up-to-date information on our Board of Directors, Technical Advisory Committees, staff and associates, our Request for Proposals process, and all Geoscience BC news releases. So if you haven't checked out our new website, go to www.geosciencebc.com and find out what's new at Geoscience BC.

Did you know?

You can subscribe to Geoscience BC's e-mail list to get information on our data releases and upcoming events.

Go to www.geosciencebc.com and click on "Subscribe for Updates."





Galore Creek, BC.
Photo by K. Simpson.

Project Notes

The Geoscience BC-funded project “Shallow and Deep-level Porphyry Deposits” was a collaborative project between MDRU (University of BC) and CODES (University of Tasmania). The project is now complete and graduate student theses are being linked to the project page on Geoscience BC’s website (www.geosciencebc.com/s/2005-053.asp). All project results will soon be available through MDRU’s website.

“Stratigraphic and Paleotectonic Studies of the Middle Paleozoic Sicker Group and Contained VMS Occurrences, Vancouver Island, BC,” a project led by Dr. Jim Mortensen and Ph.D. candidate Tyler Ruks of UBC, has been extended until the end of 2010. Tyler was also a Geoscience BC Scholarship winner in 2009. (www.geosciencebc.com/s/2005-030.asp)

The Geoscience BC co-sponsored project “Mapping the Resource Potential Beneath the Chilcotin Flood Basalts: Volcanic lithofacies constraints on geophysical surveys” led by Dr. Kelly Russell of UBC has produced two new maps, both of which will be released in early 2010. (www.geosciencebc.com/s/2006-003.asp)

“Glacial Geologic Framework and Drift Prospecting for a Portion of the QUEST Project Area” completed its second of three field seasons in 2009. Till geochemical data for part of the QUEST Project area will be available from Geoscience BC in the near future. (www.geosciencebc.com/s/2007-026.asp)

A number of Geoscience BC Projects funded in 2008 completed their first field season in 2009. Field activities included work at the Red Chris deposit, mapping in the Deer Park Map Sheet and in the Terrace-Kitimat area, till geochemical sampling in the Tats Lake District and a preliminary examination of the Nicola Arc in south-

central BC. A data compilation project is also underway for Northern Vancouver Island.

Numerous Geoscience BC Projects were completed in 2009. For information on these projects, including technical papers, posters, theses and final reports, go to the project’s webpage listed below:

- “Geological Mapping & Mineral Potential for Ultramafic Rock Occurrences, Port Renfrew Area, Southwestern Vancouver Island” (www.geosciencebc.com/s/2005-052.asp). The final report for this project is included in Geoscience BC’s Summary of Activities 2009, and an MSc thesis is linked to the project webpage.
- “New Models for Mineral Exploration in BC: Is there a Continuum Between Porphyry Molybdenum Deposits and Intrusion-hosted Gold Deposits?” (www.geosciencebc.com/s/2005-054.asp). The final report for this project is included in Geoscience BC’s Summary of Activities 2009.
- “Stratigraphic Analysis of Cretaceous Strata Flanking the Southern Nechako Basin: Constraining Basin Architecture and Reservoir Potential” (www.geosciencebc.com/s/2006-014.asp). Final student theses are linked to the project webpage.
- “Trace Element Analysis of the Clay-sized Fraction of Archived Till Samples, Babine Porphyry Copper District, Central BC” (www.geosciencebc.com/s/2007-027.asp). The final report for this project was released as Geoscience BC Report 2009-10 and BCGS Open File 2009-4.
- “Analysis of QUEST Project Geochemical Data (www.geosciencebc.com/s/2008-003.asp).” The final report for this project was released as Geoscience BC Report 2009-3.
- “An Investigation using SiroSOM for the Analysis of QUEST Stream-Sediment, Lake-Sediment and Water Assay Data (www.geosciencebc.com/s/2008-005.asp).” The final report for this project was released as Geoscience BC Report 2009-14.
- “3D Inversion Modeling, Integration, and Visualization of Airborne Gravity, Magnetic, and Electromagnetic Data (www.geosciencebc.com/s/2008-009.asp).” The final report and data for this project was released as Geoscience BC Report 2009-15 and is available through Geoscience BC’s website and on a 32 Gb USB drive (for purchase at Geoscience BC’s offices).
- “Google Earth Data Explorer” (www.geosciencebc.com/s/2008-004.asp).
- “QUEST Property File Update” (www.geosciencebc.com/s/2008-007.asp). The results of the project were released as Geoscience BC Report 2009-17, and contain KML files for viewing the updates in Google Earth, as well a database showing all updated files. These updates have been included in both MINFILE and the Property File.
- “MINFILE Update in the QUEST Project Area” (www.geosciencebc.com/s/2008-009.asp). The results of this project (updated MINFILE occurrences) were incorporated into MINFILE as the project went along. A list of all updated occurrences is available in Geoscience BC’s Summary of Activities 2009.

Scholarship Winners

Exploration Geoscience Graduate Students Working in BC

Geoscience BC awarded nine graduate scholarships of \$5,000 each to students working on a mineral or oil and gas exploration project in BC in 2009.

The scholarships were open to students registered in a Masters (MSc) or Doctorate (PhD) program working on an exploration-related topic in BC. Applicants were scored based on their education and work experience, thesis projects, career goals and aspirations, as well as the remarks from their references. Applications were reviewed by a panel of geoscientists from industry and academia. Preference was given to applicants whose projects were deemed to have the greatest potential benefit to exploration in BC and whose research and career interests are primarily directed towards the exploration sector, either mineral or oil and gas.

For more information about the Geoscience BC scholarship, and information on past scholarship winners and their respective projects, please visit www.geosciencebc.com/s/Scholarships.asp.



Robin Buckley
MSc student, University of Western Ontario

Robin's project focuses on the Boulder Creek Formation in the B.C. foothills, from the vicinity of Mount Reesor northward to the Peace River Valley. Mapped sections will be correlated to nearby well logs and to a regional grid of well logs to delineate the distribution of the Boulder Creek and Paddy formations. The results of Robin's study will provide an improved regional stratigraphic and paleogeographic framework for known hydrocarbon-bearing reservoir units in northeastern BC.



Thomas Chudy
PhD student, University of British Columbia

Thomas' Ph.D. study aims to explain the origin and magmatic evolution of the Blue River Carbonatites (Omineca Belt, southeastern BC). Carbonatites are typically enriched in rare earth elements (among others), and although considered the major deposit-type for such commodities their origin remains poorly understood. Thomas is examining the processes that lead to tantalum enrichment in the Blue River Carbonatites, with particular focus on the Upper Fir occurrence, in order to develop a successful exploration strategy.



Joel Cubley
PhD student, University of Calgary

Joel's project focuses on the Grand Forks Complex, a fault-bounded metamorphic core complex situated in the Omineca Crystalline Belt in southeastern BC. Joel is analyzing the structure and petrology of the area, focusing on constraining the metamorphic and exhumation history. Investigations into contact aureoles within the hanging-wall to the Kettle River Fault will help further area-specific deposit models for carbonate replacement/skarn Pb-Zn-Fe mineralization, and determine the potential of Ag-Pb-Zn-Au mineralization along the fault. This is the second year Joel has received this award.



Chelsea Fefchak
MSc student, University of Alberta

Chelsea's thesis examines the Charlie Lake Formation, a relatively understudied formation with significant hydrocarbon potential in northeastern BC. Although several reservoir types exist within the Charlie Lake, the unique aeolian sand bodies make for a particularly interesting petroleum reservoir. Chelsea's project will use detailed facies analyses to better constrain the stratigraphy and sedimentology of the Charlie Lake Formation, and evaluate the exploration implications for petroleum.

Did you know?

Geoscience BC has awarded 30 graduate scholarships in the last three years.



Elliot Holtham
PhD student, University of British Columbia

As drilling is often prohibitively expensive for deep targets, it is crucial that geophysical techniques are developed to accurately image the earth. Elliot's PhD research is focused on improving the inversion algorithm to invert ZTEM and magnetotelluric data, natural source electromagnetic techniques which can be used to recover a 3D conductivity model that can be linked to rock properties of economic interest.



Tyler Ruks
PhD student, University of British Columbia

Tyler's project combines geological mapping with geochronological, biostratigraphic, isotopic and lithogeochemical studies of the Middle Paleozoic Sicker Group, which is exposed in several structural uplifts on Vancouver Island. These strata host the Myra Falls and other VMS deposits on Vancouver Island, and results of the study will enhance our knowledge of the tectonic history and metallogeny of the Sicker Group. This is the second time Tyler has received this award.



Dikun Yang
PhD student, University of British Columbia

Common time domain electromagnetic methods for exploration employ coil or loop as the receiver measuring magnetic field-related B-field or dB/dt. Electric and magnetic fields are physically symmetric in Maxwell's Equations and thus must be equally informative. Dikun is developing a new exploration technique called the "E-field Time Domain Electromagnetic Method." This method will work in time domain with transient waveforms in inductive transmitter loops and measure the electric field by grounded electrodes. Preliminary studies show that E-field measurements are sensitive to alteration and have deep penetration into the earth.



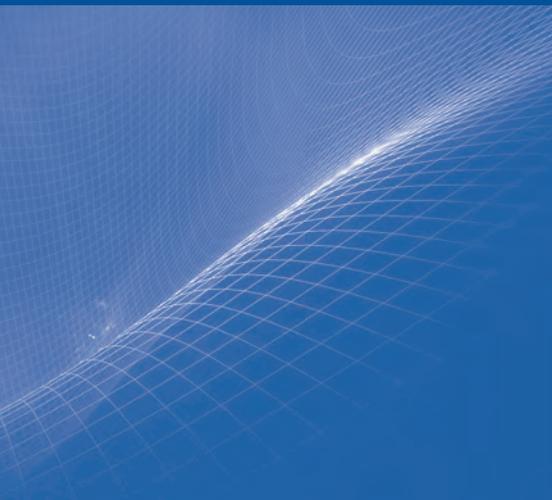
Tom Meuzelaar
PhD student, Colorado School of Mines

Tom's project uses textural evidence and geochemical modeling to define the nature and origin of carbonate alteration at the Eskay Creek Massive Sulfide deposit, located in the Iskut River area of northwestern BC. Preliminary investigations show that the carbonaceous mudstone hosting the stratiform sulfide mineralization has been affected by widespread carbonate alteration. A set of guidelines will be formulated that will permit interpretation of carbonate alteration halos recognizable in the field by simple and readily applicable exploration techniques.



Chad Sisulak
MSc, Simon Fraser University

Chad's research is focused on investigating the modern day deposition in the Fraser River, in order to develop process-response models for inclined heterolithic stratification developed in tidally influenced rivers. This will provide a valuable analog to ancient deposits of inclined heterolithic strata in tidally influenced successions in the Western Canada Sedimentary Basin (e.g. McMurray Formation), as well as occurrences in other Canadian basins, such as the Nechako Basin.



The Geoscience BC Team in 2009

Board of Directors

John Thompson, Chairman of the Board
VP Technology, Teck Resources Limited

C.D. ('Lyn) Anglin
President and CEO, Geoscience BC

David Caulfield
Chairman and Director of Business Development,
Kiska Metals Corporation

Tony Fogarassy
Director of Corporate Projects and General
Counsel, Naikun Wind Energy Group

Byng Giraud
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James Gray
Partner, De Visser Gray LLP
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Calvin Helin⁺
President and CEO of Eagle Group of Companies,
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Independent Consultant

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VP Industry Liaison

Kirstie Simpson⁺
VP Minerals Research

Christa Sluggett
Project Geologist and Communications
Coordinator

Fion Ma⁺
GIS Specialist

Rhonda Schultz
Accountant and Corporate Secretary

Angel Bouwsema
Office Manager and Executive Assistant

Diane Hanano⁺
Office Manager and Executive Assistant

Erin Merkl^{*,+}
Office Manager and Executive Assistant

⁺ joined GBC in 2009
^{*} left GBC in 2009

Technical Consultants and Research Associates

Colin Barnett
BW Mining

Andy Calvert
Simon Fraser University

Bob Cathro
Consultant (retired)

Brad Hayes
Petrel Robertson Consulting Ltd.

Mark Hayes
Consultant

Dave Heberlein
Heberlein Geoconsulting

Wayne Jackaman
Noble Exploration Services

Peter Kowalczyk
PK Geophysics

Stephen Williams
Natural Resources Canada

Thomas Bissig
UBC – MDRU

Don MacIntyre
D.G. MacIntyre & Associates Ltd.

Dianne Mitchinson
UBC – MDRU

Gordon Loverin
T'senaglobe Communications

⁺ Appointed in 2009

^{*} Term completed in 2009



Chilcotin Group.
Photo by K. Simpson.

Technical Advisory Committees

Geoscience BC has two Technical Advisory Committees (TACs), a Minerals TAC and an Oil & Gas TAC. Individuals on these committees represent a range of expertise in industry, academia and government. The TACs are tasked with reviewing and recommending proposals under consideration by Geoscience BC. The TAC's recommendations are presented to Geoscience BC's Board of Directors for final funding approvals.

Minerals Technical Advisory Committee

Henry Awmack
Equity Engineering Ltd.

Bob Carmichael*
Lundin Mining Corporation

Lindsay Bottomer
Entrée Gold Ltd.

Peter Bradshaw
First Point Minerals Corporation

Andrew Calvert
Simon Fraser University

Rob Cameron
Valley High Ventures Ltd.

Stephen Cook
Teck Resources Ltd.

Andrew Davies
Teck Resources Ltd.

Rob Duncan⁺
Kiska Metals Corporation

Carl Edmunds
Northgate Minerals Corporation

Craig Hart⁺
UBC – MDRU

Jacques Houle
Consultant

Ward Kilby
Cal Data Ltd.

Jules Lajoie
Consultant

Bob Lane
Plateau Minerals Corporation

Ian Paterson*
Consultant

Rob Pease
Terrane Metals Corporation

Mark Rebagliati⁺
Hunter Dickinson Inc.

Wayne Roberts
Manex Resource Group/Rockex Consulting

Steve Robertson
Imperial Metals Corporation

Hans Smit*
Grayd Resource Corporation

Rob Stevens*
BCIT

Dick Tosdal*
MDRU

H. Paul Wilton
Chamber of Mines of Eastern BC

Non Voting Members

Steve Gordey
Natural Resources Canada

Garth Kirkam, Past-Chair
GBC

Dave Lefebure*
BCGS

Carmel Lowe
Natural Resources Canada

Bruce Northcote⁺
MEMPR, Mineral Development Office

Steve Rowins⁺
BCGS

Kirstie Simpson, Chair
GBC

Christa Sluggett, Co-Chair
GBC

⁺ joined TAC in 2009

*resigned from TAC in 2009

Oil & Gas Technical Advisory Committee

Andrew Calvert, Chair
Simon Fraser University

Brad Hayes
Petrel Robertson Consulting Ltd.

John Hogg
MGM Energy Corporation

Richard Kellett
Sherritt International Corporation

Grant Knowles
EnCana Corporation

Don Lawton
University of Calgary

Lavern Stasiuk
Shell Canada Ltd.

Non Voting Members

Christa Sluggett, Co-Chair
GBC

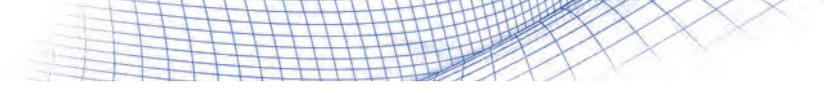
Fil Ferri
BC MEMPR - Oil and Gas Division

David James
Independent Consultant

Peter Kowalczyk
PK Geophysics Inc.

Carmel Lowe
Natural Resources Canada

David Taylor
Petro Andina Resources Inc.



Auditors' Report

To the Members of Geoscience BC Society

We have audited the statement of financial position of Geoscience BC Society as at March 31, 2009 and the statements of revenues and expenditures, cash flows, and changes in net assets for the year then ended. These financial statements are the responsibility of the society's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the society as at March 31, 2009 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles. As required by the Society Act (British Columbia), we report that, in our opinion, these principles have been applied on a basis consistent with that of the preceding year.

Vancouver, British Columbia
August 26, 2009

"Beauchamp & Company"
Chartered Accountants

Geoscience BC Society

Statements of Financial Position

As at March 31, 2009 and 2008

	2009	(Note 11) 2008
ASSETS		
Current Assets		
Cash and cash equivalents (Note 2)	\$ 554,786	\$ 227,475
Temporary investments (Note 4)	16,991,131	15,628,317
Accrued interest receivable	202,990	119,270
Amounts receivable	1,695,182	11,944,605
Prepaid expenses and deposits	13,500	10,134
	19,457,589	27,929,801
Equipment (Note 7)	30,787	32,277
	\$ 19,488,376	\$ 27,962,078
LIABILITIES		
Current Liabilities		
Accounts payable and accrued liabilities	\$ 115,638	\$ 178,672
NET ASSETS		
Net Assets Invested In Equipment	30,787	32,277
Net Assets Restricted For Approved Programs (Note 3)	4,142,621	2,207,675
Unrestricted Net Assets	15,199,330	25,543,454
	19,372,738	27,783,406
	\$ 19,488,376	\$ 27,962,078

Nature Of Operations And Going Concern (Note 1)
Subsequent Events (Note 10)

Approved By The Board:

"James D. Gray"
Director

"C.D. ('Lyn) Anglin"
Director

See accompanying notes.



Geoscience BC Society

Statements of Revenues and Expenditures

For the years ended March 31, 2009 and 2008

	2009	(Note 11) 2008
Revenues		
Grants – BC Ministry of Energy, Mines and Petroleum Resources	\$ –	\$ 11,700,000
Grants – other, and program reimbursements	1,680,580	669,888
Investment income (Note 4)	527,685	800,563
Funding recoveries (Note 3)	12,053	14,605
Sublease rent and administrative fee	8,400	–
	<u>2,228,718</u>	<u>13,185,056</u>
Expenditures - Program Costs		
Program costs incurred	8,327,397	4,546,701
Program costs incurred, approved in principal only	31,471	115,756
Project GST, non-refundable portion	168,365	94,893
Publishing costs	25,224	20,417
	<u>8,552,457</u>	<u>4,777,767</u>
Expenditures - Administrative Costs		
Amortization of equipment	16,486	15,003
Communications and marketing	64,061	61,918
Consulting	154,859	62,792
Gifts and promotion	5,365	1,302
Dues and memberships	6,490	2,574
Equipment lease (Note 8)	3,226	3,181
Executive recruitment	–	8,219
First Nations and community engagement	4,301	–
GST, non-refundable portion	12,800	11,449
Insurance	5,388	5,385
Investment management fees	56,699	55,391
Office and sundry	23,658	21,090
Professional fees	51,014	49,068
Rent and utilities (Note 8)	100,877	45,487
Salaries and benefits	374,445	324,734
Scholarship awards	55,000	50,000
Sponsorship	17,653	–
Travel, conferences and meetings	119,345	72,250
Website, internet and e-mail	5,772	5,394
Workshop expenses	4,965	675
	<u>1,082,404</u>	<u>795,912</u>
(Deficiency) Excess Of Revenues Over Expenditures	\$ (7,406,143)	\$ 7,611,377

See accompanying notes.

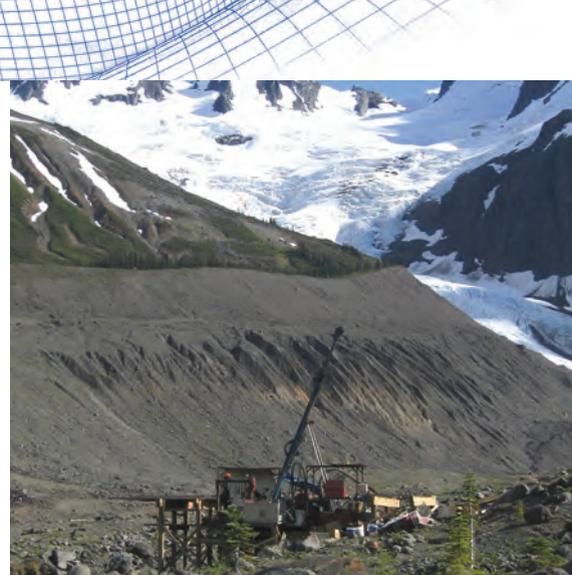
Geoscience BC Society

Statements of Cash Flows

For the years ended March 31, 2009 and 2008

	2009	2008
Cash Provided By (Used For):		
Operating Activities		
Grants	\$ 12,015,320	\$ 531,625
Workshops and recoveries	3,227	45,347
Investment income	673,776	930,627
Sublease income	8,400	—
Payments for program expenditures	(8,675,351)	(4,654,873)
Payments for administrative expenditures	(1,006,004)	(777,530)
Payments of refundable portion of GST	(182,564)	(102,653)
Receipt of refundable GST	102,653	23,971
Cash provided by (used for) operating activities	2,939,457	(4,003,486)
Investing Activities		
Acquisition of equipment	(14,996)	(18,828)
Purchase of temporary investments	(11,000,000)	—
Redemptions of temporary investments	9,006,977	2,993,880
Reinvestment of investment income, net	(604,127)	(758,940)
Cash (used for) provided by investing activities	(2,612,146)	2,216,112
Increase (Decrease) In Cash And Cash Equivalents	327,311	(1,787,374)
Cash And Cash Equivalents, Beginning Of Year	227,475	2,014,849
Cash And Cash Equivalents, End Of Year	\$ 554,786	\$ 227,475
Cash And Cash Equivalents		
Funds held in treasury account	\$ 4,786	\$ 77,475
GIC investments due within one year	550,000	150,000
	\$ 554,786	\$ 227,475

See accompanying notes.





Geoscience BC Society

Statements of Changes in Net Assets

For the years ended March 31, 2009 and 2008

	Investment In Equipment	Restricted For Approved Programs	Unrestricted	Total
Balance, March 31, 2007	\$ 28,452	\$ 929,988	\$ 19,727,934	\$ 20,686,374
(Deficiency) Excess of revenues over expenditures	(15,003)	(4,807,350)	12,433,730	7,611,377
Unrealized loss on investments	–	–	(514,345)	(514,345)
Investment in equipment	18,828	–	(18,828)	–
Internally imposed restrictions	–	6,085,037	(6,085,037)	–
Balance, March 31, 2008	32,277	2,207,675	25,543,454	27,783,406
(Deficiency) Excess of revenues over expenditures	(16,486)	(8,550,762)	1,161,105	(7,406,143)
Unrealized loss on investments	–	–	(1,004,525)	(1,004,525)
Investment in equipment	14,996	–	(14,996)	–
Internally imposed restrictions	–	10,485,708	(10,485,708)	–
Balance, March 31, 2009	\$ 30,787	\$ 4,142,621	\$ 15,199,330	\$ 19,372,738

See accompanying notes.

Notes

to Financial Statements March 31, 2009 and 2008

1. Nature Of Operations And Going Concern

Geoscience BC Society ("Geoscience BC" or "the Society") was incorporated under the Society Act (British Columbia) on April 26, 2005 as a not for profit organization. The Society is exempt from taxation under Section 149(1) of the *Income Tax Act* (Canada). The purpose of the Society is to promote, fund and otherwise support applied geoscience research in British Columbia. The Society had its genesis in the \$25 million funding commitment announced by the government of British Columbia in January 2005, which unrestricted funding was subsequently received and the Society incorporated. The Society has had certain members and directors in common with, and its creation was promoted by, both the Association for Mineral Exploration British Columbia and the Mining Association of British Columbia. However, the Society operates independently of both organizations and is controlled by a separate board of up to 13 directors, which also comprises the Society's membership. Although it functions to complement the efforts of pre-existing provincial and federal agencies, Geoscience BC also operates on an arms-length basis from the governments of both British Columbia and Canada.

The Society has no source of operating revenue and its future operations are therefore dependent upon the receipt of continued unrestricted and non-repayable funding, anticipated to be from government sources. In the event such funding is not received, the Society would in due course deplete its cash reserves and be required to cease operations. At March 31, 2009 the Society expects to maintain operations for a minimum period of two years based on its existing commitments to fund projects and its related liquid asset balances on hand. Refer to note 5.

2. Significant Accounting Policies

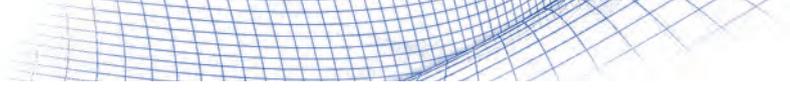
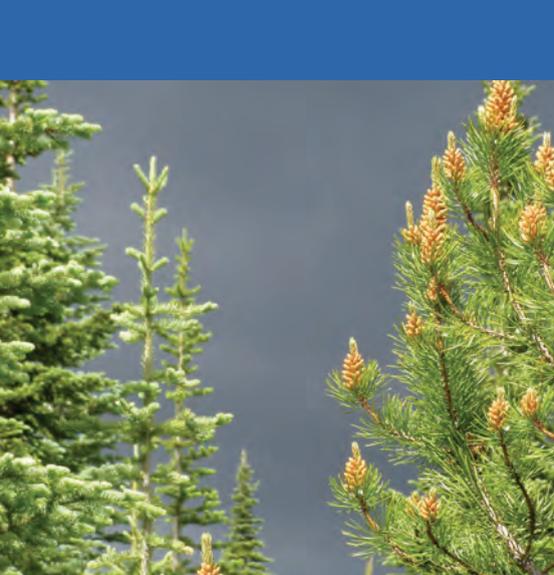
Basis of presentation

These financial statements have been prepared in accordance with Canadian generally accepted accounting principles which necessarily involves the use of estimates. The preparation of financial statements requires management to make estimates and assumptions which affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the revenues and expenditures for the year reported. Actual results could differ from those estimates. The financial statements of the Society have, in management's opinion, been properly prepared within reasonable limits of materiality, and within the framework of the significant accounting policies disclosed below.

Financial instruments

The Society's financial instruments consist of cash and cash equivalents, temporary investments, amounts receivable, and accounts payable and accrued liabilities. Unless otherwise noted, it is management's opinion that the Society is not exposed to significant interest, currency or credit risks arising from its financial instruments. The Society records its financial instruments at their current fair values. Pursuant to these standards the Society's temporary investments have been classified as available for sale and have been reported at fair value. Unrealized gains or losses involving instruments other than banker's acceptances are recorded directly in the Society's statements of changes in net assets for the two years ended March 31, 2009 and 2008. The Society classifies its accounts payable and accrued liabilities as other financial liabilities and accounts for them at amortized cost. The Society's receivable balances have been classified and reported on the same basis.





Geoscience BC Society

Notes

to Financial Statements March 31, 2009 and 2008 (cont'd)

2. Significant Accounting Policies (cont'd)

Revenue recognition

The Society follows the deferral method of accounting for contributions. Restricted contributions are recognized as revenue in the year in which the related expenditures are incurred. Unrestricted contributions are recognized as revenue when received or receivable if the amount to be received can be reasonably estimated and collection is reasonably assured. Endowment contributions are recognized as direct increases in net assets. Restricted investment income is recognized as revenue in the year in which the related expenditures are incurred. Unrestricted investment income is recognized as revenue when earned.

Donated materials and services

Donated materials and services are recorded only when a fair value can be reasonably estimated and when they would be paid for by the Society if they had not been donated.

Contributed services

Significant volunteer labour is contributed to assist the Society in carrying out its activities, but is not recorded in the Society's financial statements due to the difficulty of determining the fair value of those services.

Cash and cash equivalents

Cash and cash equivalents consist of cash on deposit with banks and other financial institutions, and highly liquid short-term interest bearing securities that are readily convertible to known amounts of cash. As at March 31, 2009, the Society had a \$550,000 GIC investment included within cash and cash equivalents bearing an effective annual interest rate of 0.95%, and due February 15, 2010.

Equipment

Equipment purchases made by the Society are capitalized and are recorded at cost less accumulated amortization. Amortization is recorded as disclosed in note 7 on a straight-line basis, commencing in the quarter of acquisition, as follows:

Computer equipment	3 years
Furniture and office equipment	5 years

New Accounting Policies

These financial statements include expanded disclosures relative to the previous years statements, pursuant to Recommendations issued by the Canadian Institute of Chartered Accountants (the "CICA"), as follows:

Section 1535 - Capital Disclosures

This standard requires disclosure of the Society's objectives, policies and processes for managing capital, quantitative data about what the Society regards as capital and whether the Society has complied with any capital requirements and, if it has not complied, the consequences of such non-compliance. Refer to note 6.

Financial instruments - Disclosure (Section 3862) and Presentation (Section 3863)

These standards replace CICA 3861, Financial Instruments – Disclosure and Presentation. They increase the disclosures currently required, which will enable users to evaluate the significance of financial instruments for the Society's financial position and performance, including disclosures about fair value. In addition, disclosure is required of qualitative and quantitative information about exposure to risks arising from financial instruments, including specified minimum disclosures about credit risk, liquidity risk, currency risk, interest rate risk and market risk. The quantitative disclosures must provide information about the extent to which the entity is exposed to risk, based on information provided internally to the entity's key management personnel. Refer to note 5.

Notes

to Financial Statements March 31, 2009 and 2008

(cont'd)

2. Significant Accounting Policies (cont'd)

Amendments to section 1400 – Going Concern

CICA Handbook Section 1400, General Standards of Financial Statement Presentation, was amended to include requirements to assess and disclose the Society's ability to continue as a going concern. Refer to note 1.

3. Restricted Net Assets

At March 31, 2009, the Society's net assets are subject to future obligations aggregating \$4,142,621 (2008 – \$2,207,675), representative of undisbursed but approved funding commitments, payment of which is contingent upon the Society receiving acceptable deliverables from these programs in accordance with executed agreements. These internally restricted amounts are not available for other purposes without the approval of the Society's Board of Directors.

Recipients of funding from Geoscience BC are required to account for the expenditure of all monies received, and Geoscience BC reserves the right to request documentation to support the reported expenditure breakdowns. Unspent funds, including GST input tax credits subsequently recovered by recipients but based on the expenditure of Geoscience BC grants, are to be returned to the Society. During the fiscal year ended March 31, 2009, the Society received an aggregate of \$12,053 (2008 – \$14,605) of such recoveries, which are included within the Society's unrestricted net assets. No predictions of future recoveries can be accurately made at this time and therefore funding recoveries are recorded at the earlier of the date of receipt and the date that a recovered amount becomes determinable.

During the year ended March 31, 2009, Geoscience BC recovered an aggregate of \$96,945 (2008 – nil) from third parties in connection with the partial reimbursement of program expenditures incurred by the Society.

Refer to Note 10.

4. Temporary Investments

During the year ended March 31, 2007, the Society's Board elected to invest an aggregate of \$18.0 million in temporary investments other than cash. A further \$11.0 million was invested during the year ended March 31, 2009.

Accordingly, during the year ended March 31, 2009, \$6.0 million (2007 – \$8.0 million) was invested in either banker's acceptances or guaranteed income certificates issued by Canadian financial institutions which are readily convertible to cash at any time at market values. A further \$5.0 million (2007 – \$10 million) was invested in various pooled funds under the discretionary management of Connor, Clark and Lunn Private Capital Ltd. ("CC&L"), and subject to a Statement of Investment policy between the Society and CC&L. These monies are also readily convertible to cash at any time without penalty.





Geoscience BC Society

Notes

to Financial Statements March 31, 2009 and 2008

(cont'd)

4. Temporary Investments (cont'd)

During the year ended March 31, 2009, the Society drew \$4.007 million (2008 – \$1.994 million) from amounts invested in banker's acceptances, and an additional \$5.0 million (2008 – \$1.0 million) from amounts invested under CC&L's management.

	March 31, 2009 Market value	March 31, 2009 Cost
3.4% GIC, TD Mortgage Corp., due April 27, 2009	\$ 6,001,063	\$ 6,001,063
2.9% GIC, Advisor's Advantage Trust, due December 1, 2009	557,000	557,000
1.4% GIC, Montreal Trust, due January 5, 2010	2,040,000	2,040,000
	8,598,063	8,598,063
CC&L aggregate portfolio	8,393,068	9,793,093
	<u>\$ 16,991,131</u>	<u>\$ 18,391,156</u>

Investment income is comprised as follows:

	2009	2008
Interest earned on GIC's/banker's acceptances	\$ 345,134	\$ 380,837
Reinvested income distributions	533,382	479,798
Realized investment losses	(350,831)	(60,072)
Unrealized investment losses	(1,004,525)	(514,345)
Aggregate investment (loss) income	(476,840)	286,218
Add: unrealized losses reported in Statements of Changes in Net Assets	1,004,525	514,345
Income reported in Statements of Revenues and Expenditures	<u>\$ 527,685</u>	<u>\$ 800,563</u>

5. Financial Instrument Risk

The Society's financial instruments are exposed to market price volatility, particularly in respect to the value of the \$8.4 million currently invested in the CC&L portfolio of pooled private equity funds. During the year ended March 31, 2009 the Society recorded a realized loss of \$350,831 (2008 – \$60,072) and an unrealized loss of \$1,004,525 (2008 – \$514,345) in respect of its aggregate investment in the CC&L portfolio. As at March 31, 2009 the Society has invested a net amount of \$9.0 million in this portfolio and the portfolio's current carrying value represents a decline of \$607,000 relative to this net cash investment. Although the portfolio is intended to expose the Society to limited risk and volatility, recent market conditions have resulted in significant elements of both, and there can be no assurance that further declines will not occur in the future. However, at August 31, 2009 the CC&L portfolio had recovered to an aggregate value of approximately \$9.4 million, an increase of over \$1.0 million relative to its March 31, 2009 value.

Related to the general price risk discussed above, a small portion of the underlying assets comprising the CC&L portfolio are denominated in foreign currencies and accordingly the portfolio is exposed to foreign exchange fluctuations to this extent.

Notes

to Financial Statements March 31, 2009 and 2008

(cont'd)

5. Financial Instrument Risk (cont'd)

The Society's investments in highly liquid near cash instruments, excluding the CC&L portfolio, currently consist of Guaranteed Investment Certificates issued by Canadian commercial banks. The Society considers the credit risk associated with such investments to be minimal.

6. Capital Management

The Society's objectives for the management of capital are to safeguard its ability to continue as a going concern, specifically the preservation of capital, and to achieve reasonable returns on invested cash after satisfying this first objective. The Society's CC&L portfolio is subject to a Statement of Investment Policy which prescribes an overall fixed income weighting of 75% relative to an equity weighting of 25%. In addition, the Society does not own investments in specific entities directly but rather owns units of CC&L Funds which themselves hold widely diversified positions and which are managed on a pooled basis generally with a view to limiting the overall volatility of a given Fund.

To date the Society has generated cash to meet its expenditure requirements by liquidating funds from its various investments on a discretionary basis. During the recent severe downturn in financial markets, the Society has generally elected to avoid crystallizing losses by obtaining cash from the liquidation of the cash equivalent elements of its investment assets. However, there can be no assurance that the crystallization of such losses will be avoided in the future as the Society expects to ultimately be required to draw on all of its investment assets to fund its ongoing expenditures.

The Society currently has no externally-imposed capital requirements.

7. Equipment

	Cost	Accumulated Amortization	Net Book Value at March 31,	
			2009	2008
Computer equipment	\$ 35,575	\$ 13,727	\$ 21,848	\$ 20,416
Furniture and office equipment	21,111	12,172	8,939	11,861
	\$ 56,686	\$ 25,899	\$ 30,787	\$ 32,277

8. Contractual Obligations

As at March 31, 2009 the Society has a base rental commitment relating to the lease of its office premises, inclusive of monthly charges in respect to operating and common area costs and property taxes, totalling approximately \$378,000 (2008 – \$100,000) to July 31, 2012. The Society also has a commitment relating to the lease of its photocopy equipment totalling \$5,023 (2008 – \$7,712) to February 5, 2011.

Pursuant to a contract of employment with its President and Chief Executive Officer, the Society would be committed, in the event that it terminates its employment of this individual without cause, to pay \$164,000 in termination benefits. In addition, the President and Chief Executive Officer may terminate employment with the Society at any time by providing three months written notice.





Geoscience BC Society

Notes

to Financial Statements March 31, 2009 and 2008

(cont'd)

9. Related Party Transactions

These related party transactions were in the normal course of operations and are measured at fair value as determined by management.

During the year ended March 31, 2009, the Society paid or accrued an aggregate of \$24,280 (2008 – \$nil) to an entity controlled by a Director of the Society for community engagement, communications and administrative services.

10. Subsequent Events

In addition to items mentioned elsewhere in these notes, during the period subsequent to March 31, 2009:

- The Society announced the QUEST (“Quesnellia Exploration Strategy”)-South program, pursuant to which its Board of Directors has approved up to \$2.0 million to be spent directly by the Society on a regional airborne gravity survey in the QUEST-South area.
- The Board of Directors of the Society approved an additional \$5,455,377 in project funding, comprised as to \$2,328,570 for minerals projects and \$3,126,807 for oil & gas projects, including \$3,046,900 for aquifer studies and well data purchases in the Horn River Basin.
- The Society approved and disbursed 9 scholarships of \$5,000 each.

11. Comparative Figures

Certain of the amounts disclosed as at and for the year ended March 31, 2008 have been reclassified to conform with the financial statement presentation adopted for the Society's March 31, 2009 year.



Geoscience BC is an industry-led, industry-focused not for profit society that works to attract mineral and oil and gas investment to British Columbia through collection and marketing of geoscience data.



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www.geosciencebc.com



Geoscience BC is funded through grants from the Provincial Government of British Columbia.