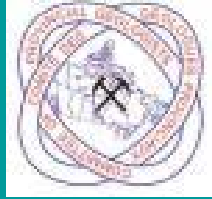


Geochemistry Data Model Working Group Progress Report

Toronto Workshop, 2003-Mar-07/08/09

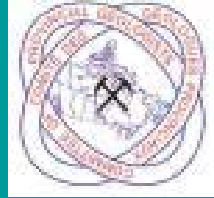
**Canadian Geoscience
Knowledge Network**





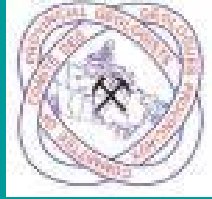
Review of Objectives

- Develop a national data model for a wide range of analytical results for a wide range of sample media and laboratory methods.
- Development of a set of tools to populate, manage and query data and to facilitate the discovery and evaluation of geochemical information through a map interface.
- Ensure an adequate archive for geochemical data.



National Geochemical Data Model

- Geochemical data model has evolved over several years. Current version 1.2.1.
- Stephen Adcock and Wendy Spirito responsible for development and maintenance for analytical content.
- Richard Laframboise responsible for sample preparation and tracking.
- Implementation in Oracle, SQL Server & MS Access.



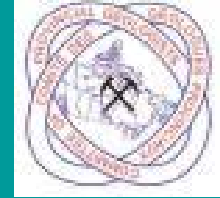
National Geochemical Data Model

<http://geochem.gsc.nrcan.gc.ca>

Password protected at present.

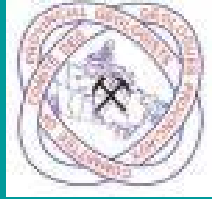
Data model comprised of

- Analytical measures, methods and ancillary data.
- Laboratory Information Management System (LIMS) which tracks sample submission, preparation and partitioning.



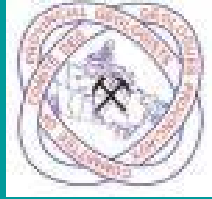
National Geochemical Data Model

- Data model also ensures data integrity by the use of **SHARED** tables that define a closed list of values which define the characteristics of the geochemical survey.
- A proposal has been put forward to adopt a stewardship policy so that the requirements of CGKN partners will be met and dealt with in a consistent manner.
- Full description of the model will be made available on the CGKN website.



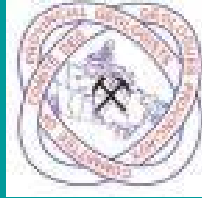
GOLDTools

- GOLDTools is a set of tools that will facilitate data loading, management and querying.
- Tools are based on XML technology and MS .net web services.
- GOLDTools will be distributed to CGKN participants.
- GOLDTools will lead to goal of interoperability.



Current Activities

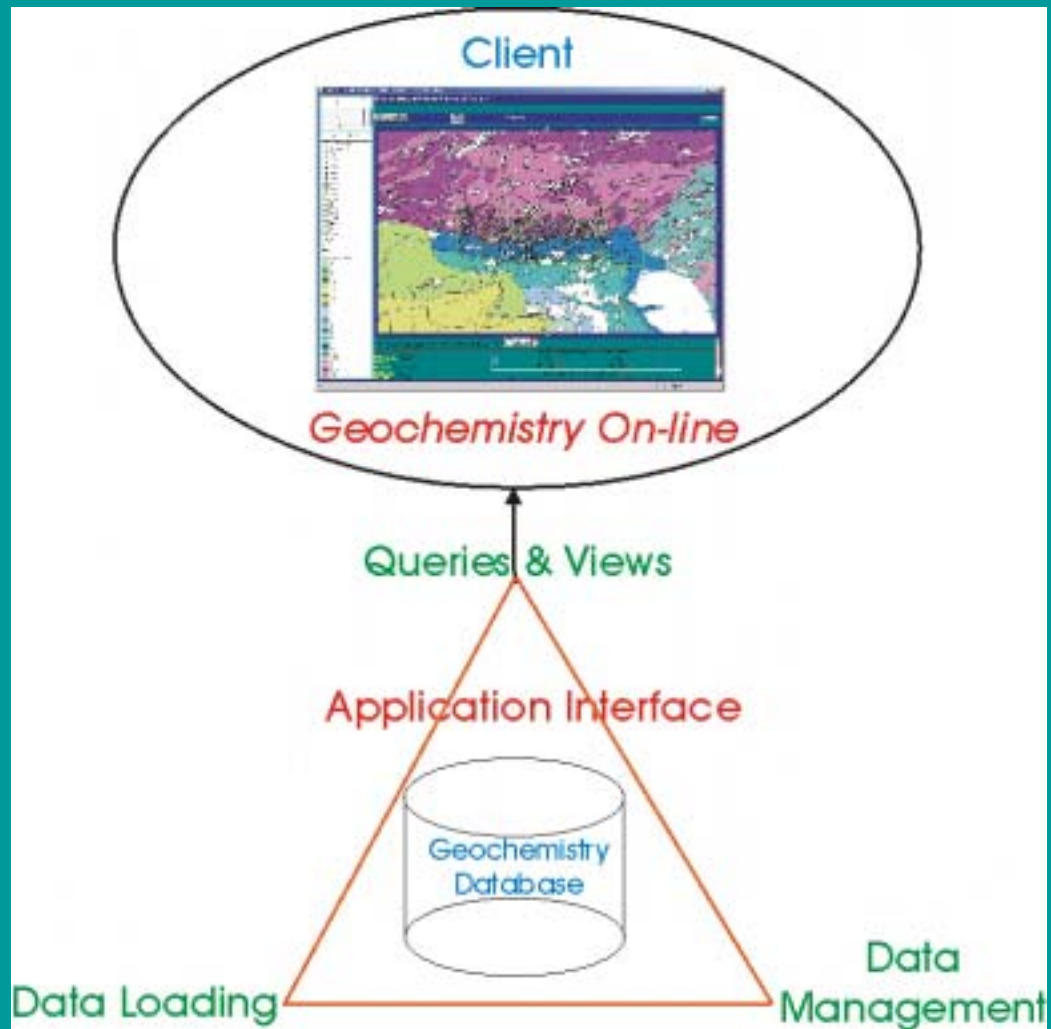
- Design and advancement of a partnered Stewardship Policy to manage the evolution of this data model
- Development of GOLDTools based on a Laboratory Information Management System (LIMS)
- Continue to work with geologists to build quality assurance and quality control (QA/QC) procedures and standards, and apply these to the input tools and LIMS

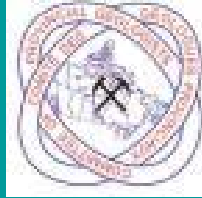


CGKN Geochemical Data Model

Progress Report

Geochemistry On-line

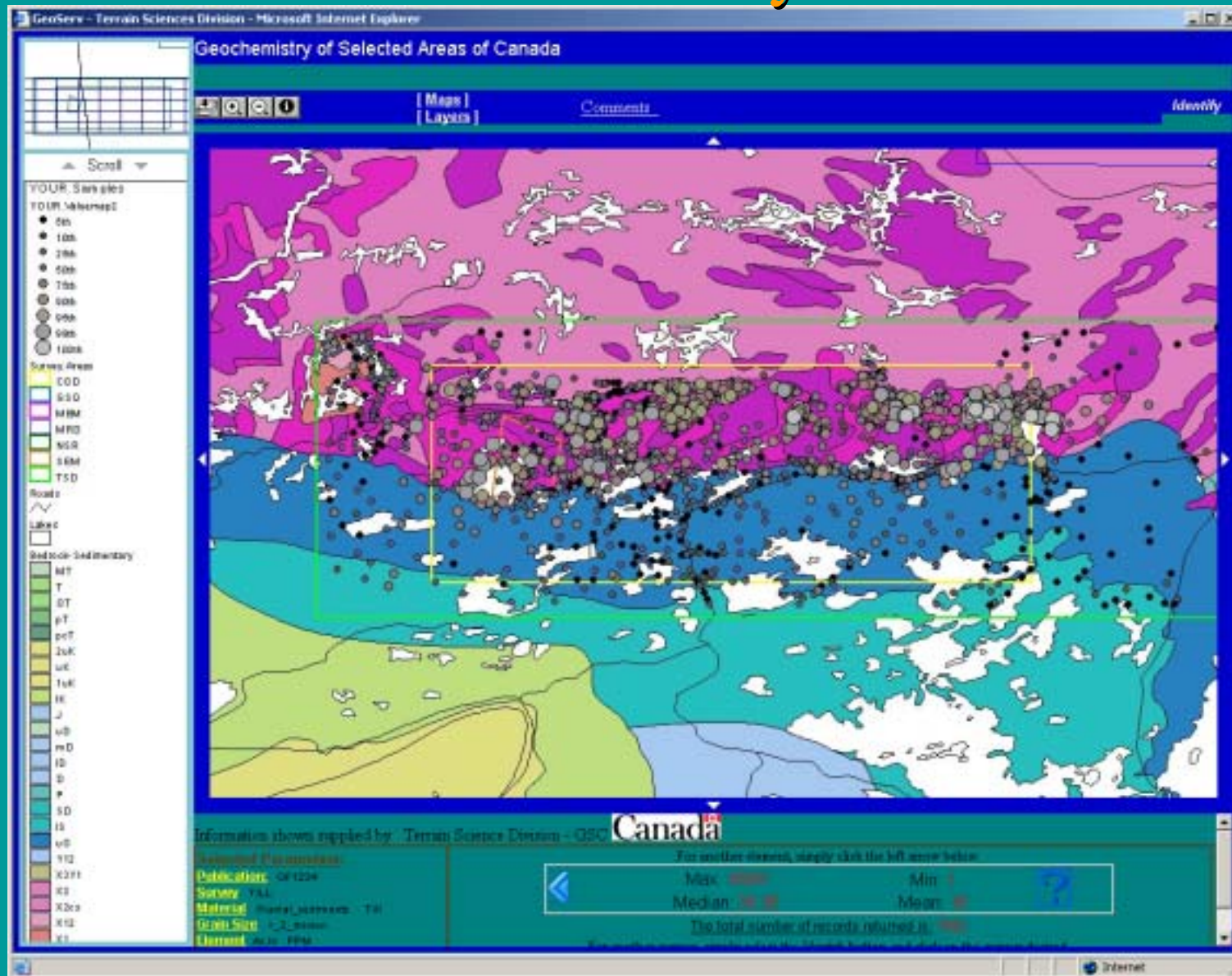


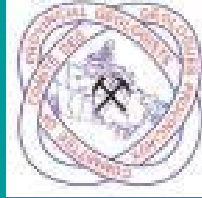


CGKN Geochemical Data Model

Progress Report

Geochemistry On-line





CGKN Geochemical Data Model Progress Report

Geochemistry Discovery Tool

Geochemical Discovery Tool - Microsoft Internet Explorer

Address: <http://hdmap1.gc.nrcan.gc.ca/webdb/geochemdata/viewer.htm>

Geochemical Discovery Tool

Refresh Map

Layers

- surveys
- ppp
- biglakes
- hydro
- roads

Information shown supplied by National Geochemical Reconnaissance

Canada

Publication:	1997 Pub
Survey:	Lake Water Acid
Material:	1997 Canada
Drain Size:	1000.0
Element:	Pb
Analysis:	AA-AAS/CET

For another element, simply click the left arrow below:

Max: 400 Min: 0.00
Median: 1.00 Mean: 0.00

The total number of records returned is: 1997

For another survey, simply select the Survey button and click on the survey.

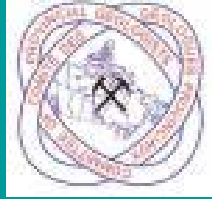
Identity

Toggle Between Legend and Layer List



Breakout Session / Workshop

- Steve Adcock will provide a summary of the history of the Geochemical Data Model development.
- Richard Laframboise will provide a summary of the LIMS project.
- A summary of SHARED tables and data loading procedures will be provided.
- Discussion and vote on Stewardship policy.
- Discussion of partner requirements and incorporation into the data model and GOLDTools.



Future

- Provincial and territorial collaboration through a single access map-based window for data discovery.
- Attain confidence in the quality and consistency of information.
- Downstream benefits to industry and other groups.
- Metadata extensions may be required to facilitate more effective data discovery.