# Online databases at the British Columbia Geological Survey

British Columbia Geological Survey Mines and Mineral Resources Division Ministry of Energy and Mines

www.em.gov.bc.ca/geology





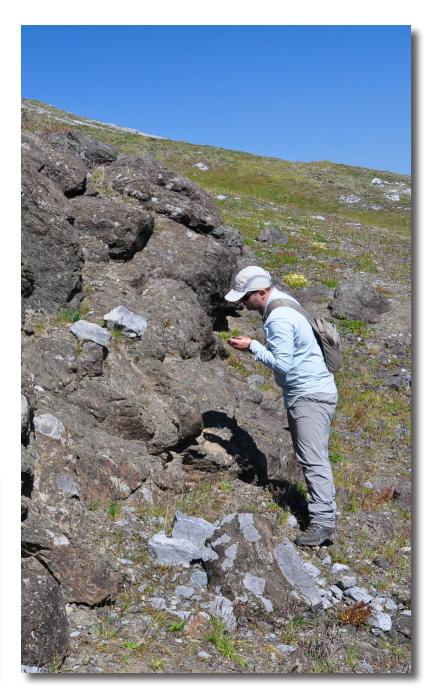
#### **Data: from the field to your computer**

Founded in 1895, the British Columbia Geological Survey integrates historical data with active research programs and, drawing on continuously advancing geoscience concepts and technologies, creates new knowledge.

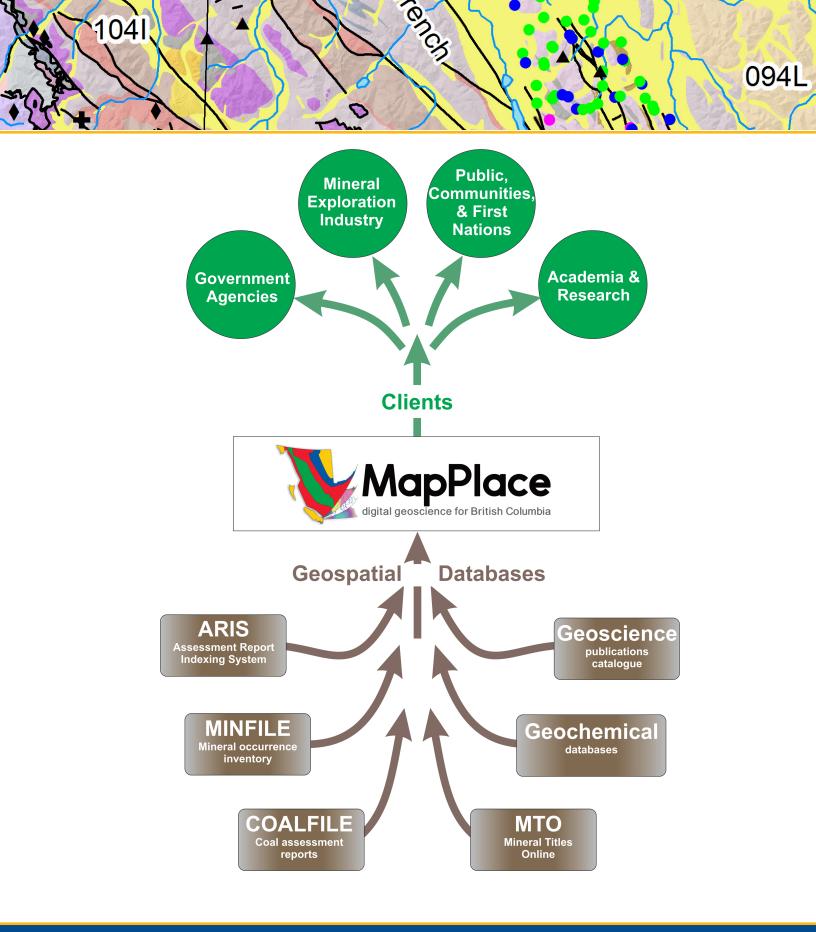
Since its inception, the Survey has provided information to help industry, government, research organizations, and the general public make decisions related to the Earth sciences.

This information resides in free web-based databases that are integrated with MapPlace, our online service that allows clients to browse, visualize, and analyze multidisciplinary geoscience data, and create custom maps.

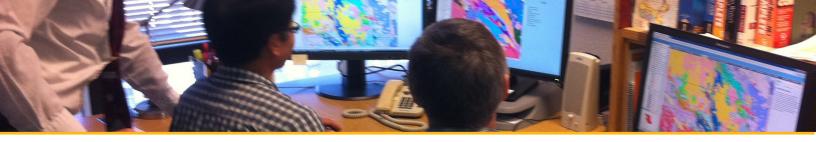
Building on MapPlace, MapPlace 2 allows anyone with an Internet connection to mine multiple geoscience databases that are updated continuously. With a simpler interface, MapPlace 2 is easier to use, faster, handles larger datasets, and provides access to third-party base maps and imagery.











#### MapPlace 2

MapPlace is more than just a viewing platform



Upgrades to MapPlace in 2016 led to MapPlace 2. In contrast to other map services on the web, MapPlace 2 goes beyond simply displaying information. Databases are continuously updated and talk to each other, enabling users to conduct queries and generate custom results by connecting to current data from many sources.



MapPlace 2 beta is now available at www.MapPlace.ca

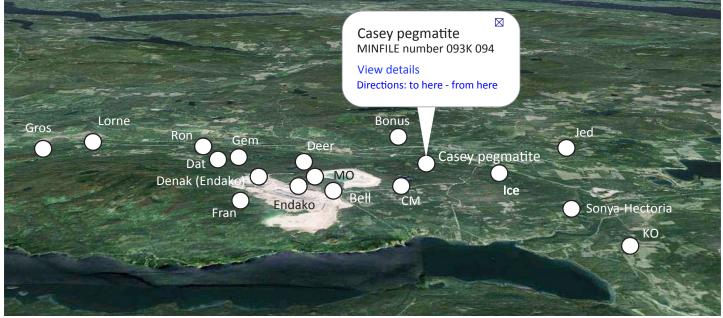
Contact: Kirk Hancock, kirk.hancock@gov.bc.ca





#### Through MapPlace, Survey databases talk to each other.

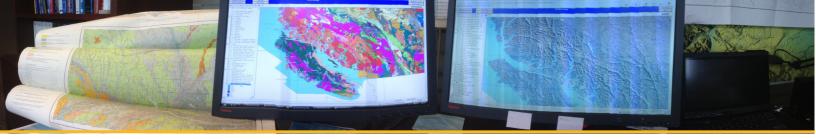
ARIS, MINFILE, COALFILE, Property File, geochemical surveys, mineral titles, geological and topographic maps, and the British Columbia Geological Survey publication catalogue can be queried simultaneously, and the output projected onto base imagery of choice.



MapPlace queries MINFILE database, displays results on oblique aerial photograph, and links back to database.

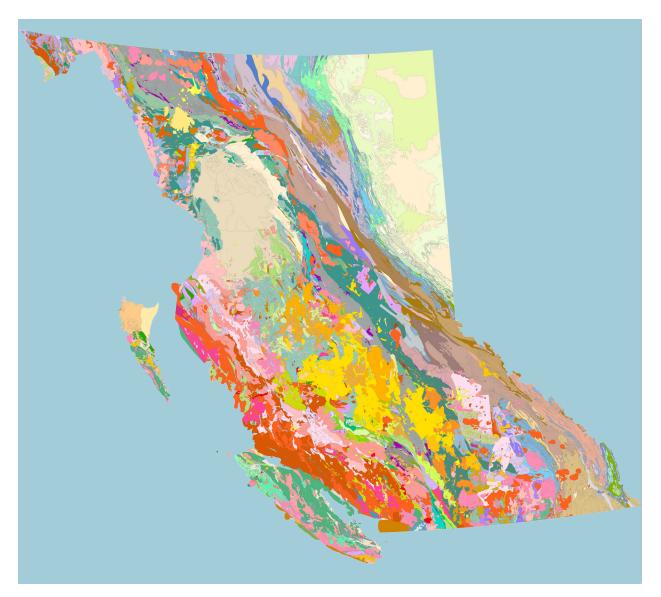
MINFILE Record Summary MINFILE No 093K 094		Print	Print Preview PDF V File Created: 24-Jul-85 Last Edit: 14-Mar-95		✓	' SELECT REPORT by BC Geological by David G.
XML Extrac	<u>t</u>					
SUMMARY						
		NMI				
Name	CASEY PEGMATITE	Mining Division	Omineo			
Status	Showing	BCGS Map NTS Map	093K00 093K03			
Latitude	54° 03' 30" N	UTM	10 (NA	,		
Longitude	<u>125° 02' 16" W</u>	Northing Easting	599193 366620			
Commodities	Feldspar, Mica, Silica	Deposit Types				
Tectonic Belt	Intermontane	Terrane	Cache (	Creek		
Capsule Geology	Several pegmatite dikes occur in a batholith of the Upper Jurassi an aplite dike approximately 1.2 kilometres northeast of Casey L biotite. Crystal size ranges up to about 2.5 centimetres.					
Bibliography	EMPR AR 1965-126 EMPR PF (See 093K General file, Endako Area Maps)					





# **British Columbia Digital Geology**

The British Columbia Geological Survey delivers a continuously updated, downloadable provincial bedrock geology map. The current edition operates in a spatial database, using new techniques to simplify map compilation. These techniques are transferable to the minerals industry.



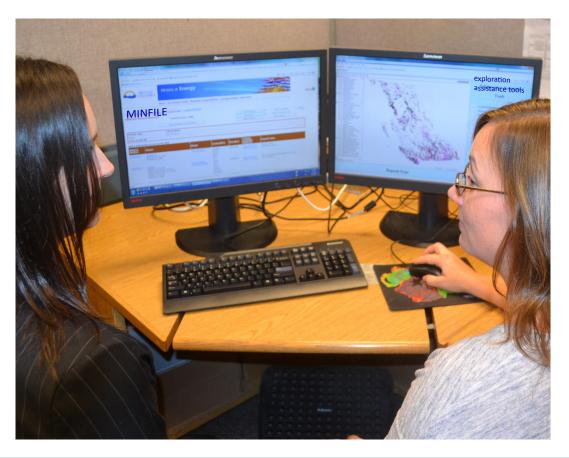
Contact: Yao Cui, yao.cui@gov.bc.ca





# MINFILE

MINFILE is an inventory documenting more than 14,000 metallic mineral, industrial mineral, and coal occurrences in British Columbia.



#### Query by

- location
- *identification number*
- mineralogy
- commodity
- host rock

- *deposit type*
- geological setting
- age
- production
- references

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# **Assessment Report Indexing System (ARIS)**

ARIS is the searchable database of over 36,000 assessment reports submitted to the Ministry. These reports summarize results from exploration programs on mineral claims. After a one-year confidentiality period, the reports become an open resource for planning mineral exploration, investment, research, land use, and resource management.

ARIS archives previous exploration results so that explorationists can advance projects without duplicating previous work. Between 1967 and 2015, about \$2.5 billion of exploration expenditures has been reported in ARIS.



Retrieve data about

- geology
- geochemistry
- geophysics
- sampling
- drilling
- prospecting
- physical work

Data in digital format from 450 Assessment Reports can be downloaded through the ARIS web application, where 'Digital Data' is a searchable keyword.

Contact: Jessica Norris, jessica.norris@gov.bc.ca or Ted Fuller, ted.fuller@gov.bc.ca





# COALFILE

COALFILE is a collection of assessment reports, maps, and data from boreholes, trenching, and sampling dating from 1900.

COALFILE contains

- 990 reports
- 5570 maps
- 16,090 boreholes
- 3640 trenches
- information about 550 bulk samples



Contact: Jessica Norris, jessica.norris@gov.bc.ca





### **Geochemical databases**

The British Columbia Geological Survey maintains geochemical databases containing multielement analyses from rock, till, stream sediment, and water samples. For example, the regional geochemical survey (RGS), includes determinations for up to 60 elements from over 64,000 sites covering about 80% of the province.

The geochemical and rock archive has been upgraded with a new storage library to accommodate over 600,000 geochemical samples collected by the Survey since the 1970s. The Survey also maintains a geochemical laboratory that includes sample preparation and mineral separation facilities, rock saws, a benchtop portable XRF, and a Linkam fluid inclusion stage.



An updated lithogeochemical database provides data collected since 1986, and includes more than 250,000 analyses from more than 11,000 rock samples.

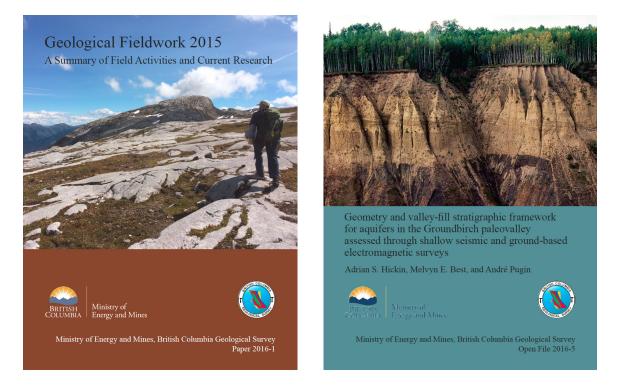
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#### **Publications** catalogue

Reports and maps produced by the British Columbia Geological Survey since 1874 can be searched for and downloaded at no cost from our publications catalogue. The Survey currently publishes geological Papers, Open Files, GeoFiles, and Information Circulars.



Each year in January, the British Columbia Geological Survey releases its Geological Fieldwork volume, highlighting field activities and current research. Other annual publications include the Provincial Overview of Exploration and Mining in British Columbia and the British Columbia Coal Industry Overview.



To receive notice of our latest releases, email: **Geological.Survey@gov.bc.ca** 





### **Property File**

Property File is a collection of over 60,000 documents donated to the Survey over the last 150 years by government, university, industry, and individuals. Previously available only in hard copy, these documents now can be searched for, and downloaded from, the Property File database.

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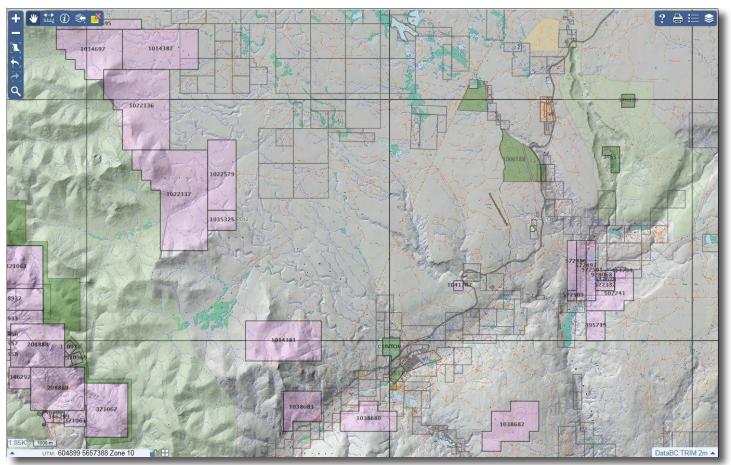
Contact: Kirk Hancock, kirk.hancock@gov.bc.ca





# **Mineral Titles Online (MTO)**

Mineral Titles Online (MTO) is a GIS-based system that enables the exploration industry to electronically acquire and maintain mineral, placer, and coal rights.



Mineral Titles data can be searched for at www.MapPlace.ca and www.mtonline.gov.bc.ca



www.mtonline.gov.bc.ca

Contact: Mineral.Titles@gov.bc.ca

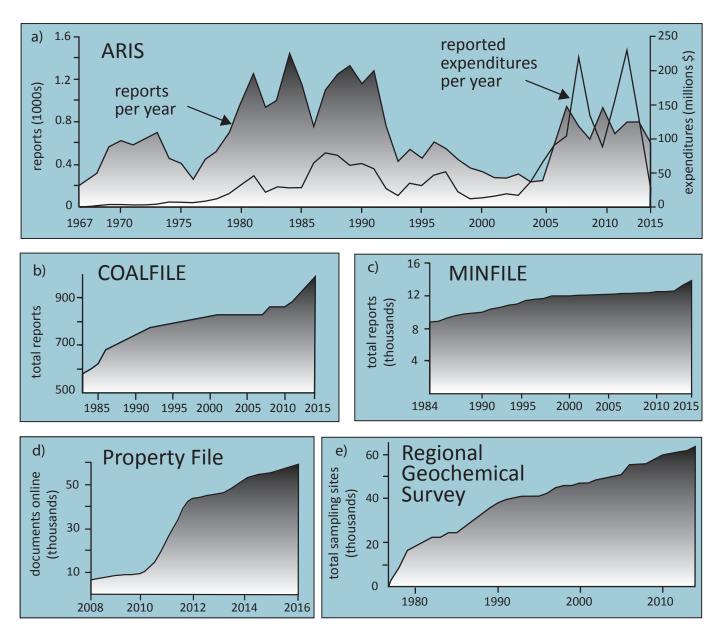






# **Growth of databases**

British Columbia Geological Survey databases continue to grow as new data arrive and as historical data are digitized.







## **British Columbia Geological Survey**

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British Columbia Geological Survey Ministry of Energy and Mines www.em.gov.bc.ca/geology



British Columbia Geological Survey Information Circular 2016-7