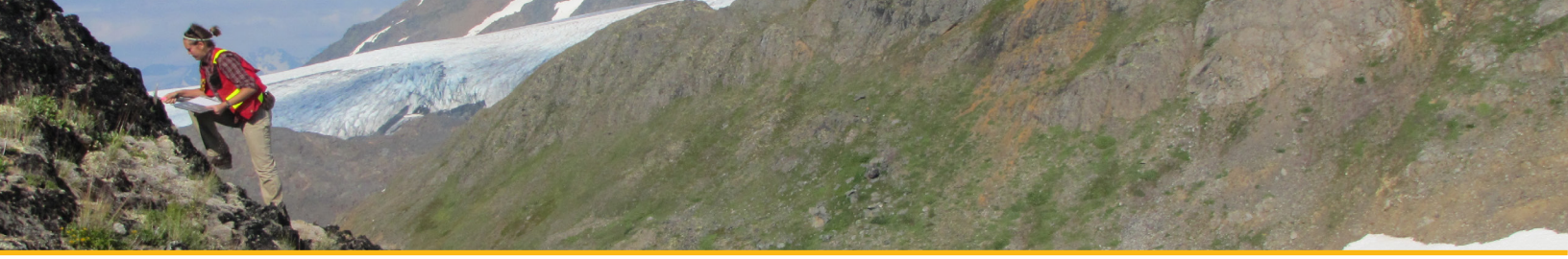
Online databases at the British Columbia Geological Survey

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



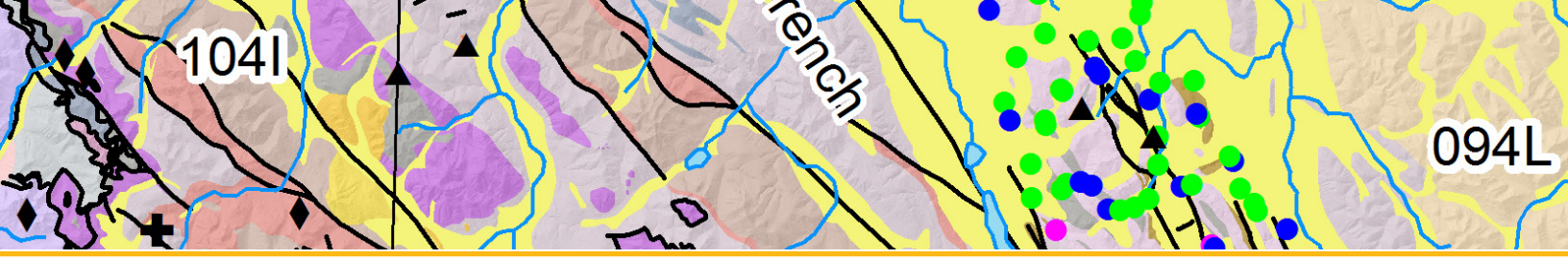
Data: from the field to your computer

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 government, the mineral exploration industry, public safety agencies, environmental scientists, communities, First Nations, 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.

MapPlace 2 allows anyone with an Internet connection to mine multiple geoscience databases that are updated continuously. With a simple interface, MapPlace 2 is easy to use, fast, handles large datasets, and provides access to third-party base maps and imagery.



Mineral Exploration Industry

Public, Communities, & First Nations

Government Agencies

Academia & Research

Clients

MapPlace

digital geoscience for British Columbia

Geospatial Databases

ARIS
Assessment Report Indexing System

Geoscience
publications catalogue

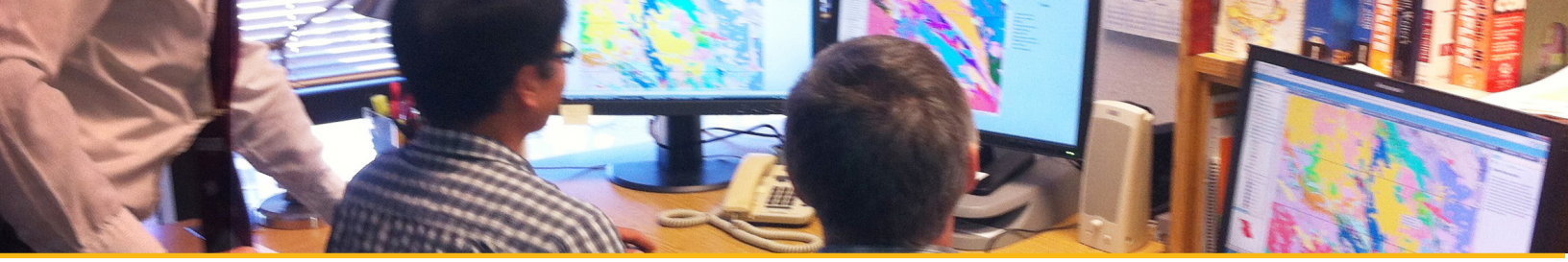
MINFILE
Mineral occurrence inventory

Geochemical
databases

COALFILE
Coal assessment reports

MTO
Mineral Titles Online

BRITISH COLUMBIA GEOLOGICAL SURVEY

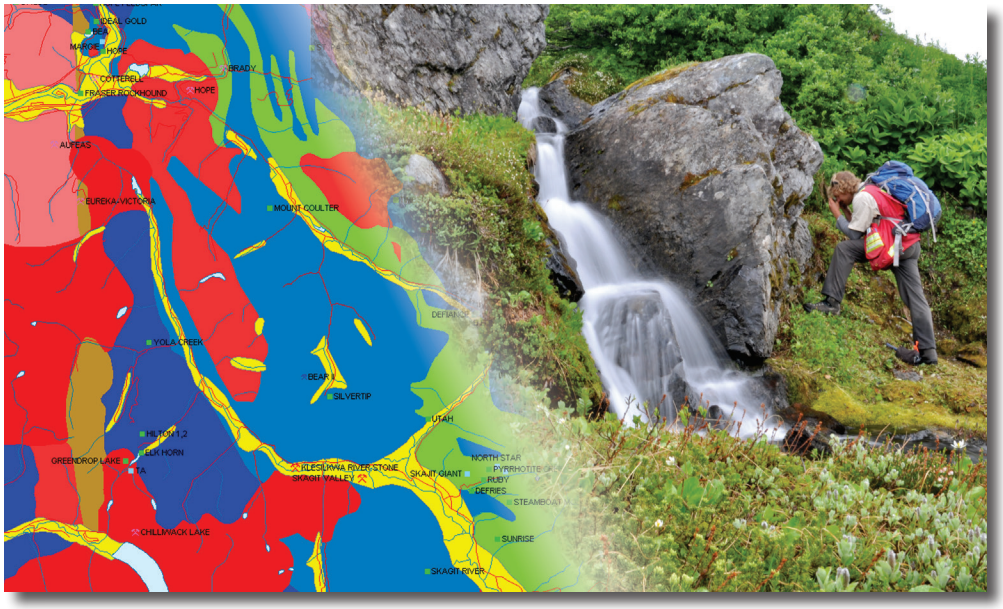


MapPlace 2

MapPlace is more than just a viewing platform

MapPlace
digital geoscience for British Columbia

Since 1995, MapPlace, our database-driven geospatial web service, has provided public geoscience data and custom map-making tools to help decision makers from diverse disciplines reduce the costs of accessing and analyzing information about the British Columbia land base. MapPlace 2 goes beyond simply displaying information. Databases are updated regularly 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) Workshop

Yao Cui, Gabe Fortin, Sarah Meredith-Jones, Steven Zhao, and Larry Jones

BRITISH COLUMBIA | Ministry of Energy, Mines and Petroleum Resources

British Columbia Geological Survey Information Circular 2017-3

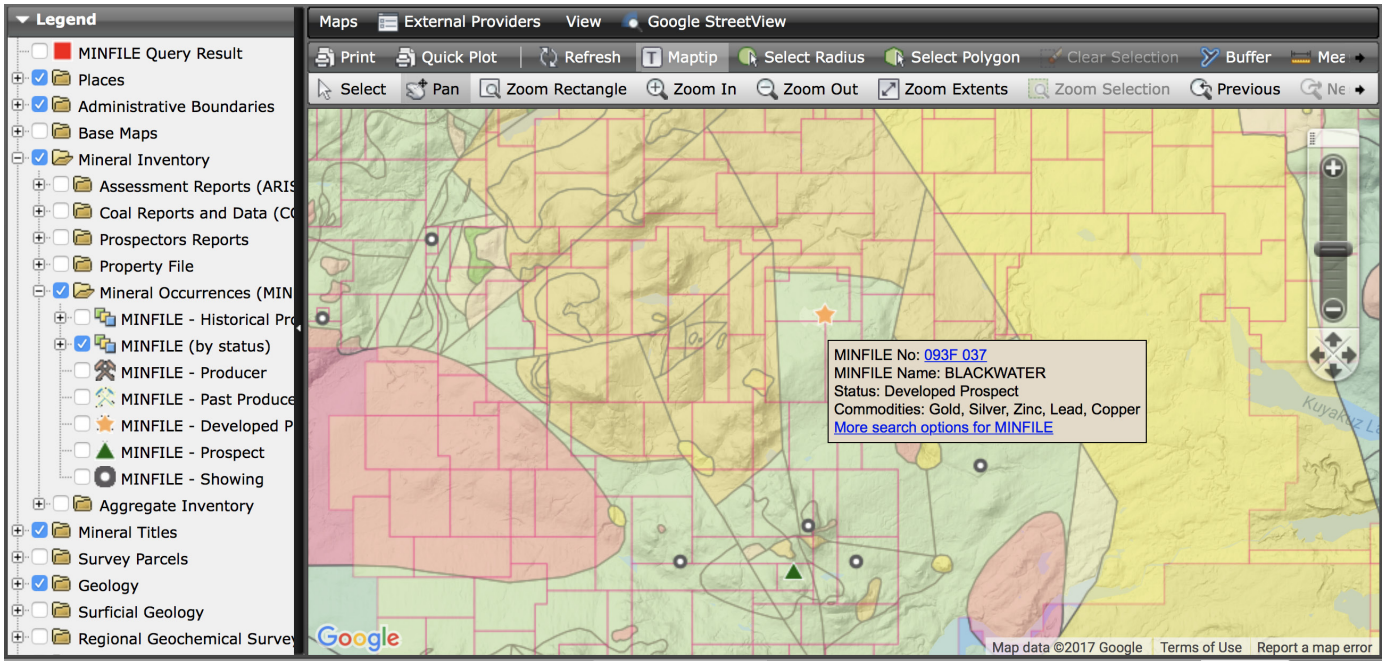
The British Columbia Geological Survey offers workshops that use scenario-based exercises to help people get the most out of MapPlace 2.

Contact: Gabe Fortin, gabe.fortin@gov.bc.ca

BRITISH COLUMBIA GEOLOGICAL SURVEY

Through MapPlace 2, Survey databases talk to each other.

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



MINFILE Home page | ARIS Home page | MINFILE Search page | Property File Search

MINFILE Record Summary

MINFILE No 093F 037

XML Extract/Inventory Report

Print Preview | PDF | -- SELECT REPORT -- | New Window

File Created: 31-Aug-89 by George Owsiacki(GO)
Last Edit: 14-Dec-15 by Garry J. Payie(GJP)

SUMMARY — Summary Help

Name	BLACKWATER, BLACKWATER-DAVIDSON, PEM, SILVER, GOLD, MT. DAVIDSON	**NMI**	
		Mining Division	Omineca
		BCGS Map	093F016
Status	Developed Prospect	**NTS Map**	093F02W
Latitude	53° 10' 22" N	**UTM**	10 (NAD 83)
Longitude	124° 51' 29" W	**Northing**	5893103
		Easting	375810
Commodities	Gold, Silver, Zinc, Lead, Copper	**Deposit Types**	H05 : Epithermal Au-Ag: low sulphidation
Tectonic Belt	Intermontane	**Terrane**	Overlap Assemblage

Capsule Geology

The Blackwater property is located about 7 kilometres northeast of Mount Davidson, about 160 kilometres south of Vanderhoof.

Topographically, the Blackwater deposit forms an S-shape due to resistive silicification and inferred glacial scour within a cirque valley on the north side of Mt. Davidson. The Blackwater wedge occupies a roughly 5 kilometre square area and is juxtaposed against Ootsa Lake Group rocks across steeply dipping normal faults on the west and north, implying the Blackwater block is a high-standing remnant or horst in the region, preserving a Late Cretaceous volcanic edifice

In the Blackwater region, Hazelton Group consists of a lower unit of felsic tuffs and sediments, named the Entiako Formation and an upper unit of felsic to mafic volcanic flows and volcaniclastic and sedimentary rocks, termed the Naglico Formation. Hazelton Group rocks are overlain by post-accretion Upper Jurassic volcaniclastic, sedimentary and mafic to felsic volcanic rocks of the Bower Lake Group. The Hazelton and Bowser Lake groups in the area are collectively intruded by Late Cretaceous granitic to granodioritic plutons exposed within the Nechako uplift. Rocks of the Hazelton and Bowser Lake groups are overlain by Upper Cretaceous and Paleocene continental volcanic arc intermediate volcanic rocks and related sedimentary rocks of the Kasalka Group. Widespread Eocene volcanic arc related extensional felsic volcanic rocks and minor sedimentary rocks of the Eocene to Oligocene Ootsa Lake Group overlie the older rocks and are themselves overlain on higher ridges by basalt and andesite of the Eocene Endako Group

The Blackwater project area is underlain by intercalated volcanic and volcaniclastic felsic to intermediate lapilli and ash tuff, volcanic breccia and andesitic flows. These strata form a local wedge of laterally discontinuous strata. The Blackwater wedge is thought to dip generally northwest and is of limited aerial extent. On the west the Blackwater wedge is faulted against younger massive felsic volcanic rocks of the Ootsa Lake Group. The fault is a north trending, presumed steep dipping structure. A similar relationship exists on the north side where Blackwater host rocks are also juxtaposed next to Ootsa Lake Group strata across an east- northeast trending fault. Although displacement across the faults is not known, the relative age of rocks across the two faults implies that the Blackwater block is a horst or high standing remnant west and north of which the Ootsa Lake Group dropped to the west and north. East and south of the Blackwater block the relationship to the country rocks is unknown but presumed stratigraphic. Likely the Blackwater strata are underlain by Bowser Lake Group beds as at Capoose Lake.

The Blackwater wedge consists of a sequence of felsic to intermediate composition volcanic rocks. Individual mappable lithologies include felsic tuffs and lapilli tuffs, volcaniclasitic and epiclastic heterolithic breccias, and massive to layered andesites. Dark reddish-brown anhedral equant, garnet crystal fragments up to a centimetre in diameter are common as an accessory in the heterolithic breccia and locally make up 1 to 2 per cent of the rock.

British Columbia bedrock geology

The British Columbia Geological Survey maintains and delivers province-wide digital coverage of bedrock geology. In contrast to traditional or electronic (pdf) compilations, the digital coverage is neither static nor at a single scale.

- digital data can be accessed, queried, downloaded in shapefile format, and used to create customized products
- as Survey geologists carry out new field mapping, their new data are integrated

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

MINFILE

MINFILE is an inventory documenting about 14,800 metallic mineral, industrial mineral, and coal occurrences in British Columbia.

MINFILE can be queried by

- location
- identification number
- mineralogy
- commodity
- host rock
- deposit type
- geological setting
- age
- production
- references

Contact: Sarah Meredith-Jones, sarah.meredithjones@gov.bc.ca

Assessment Report Indexing System (ARIS)

ARIS is the searchable database of 36,400 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 2017, about $2.6 billion of exploration expenditures has been reported in ARIS.

Retrieve data about

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

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

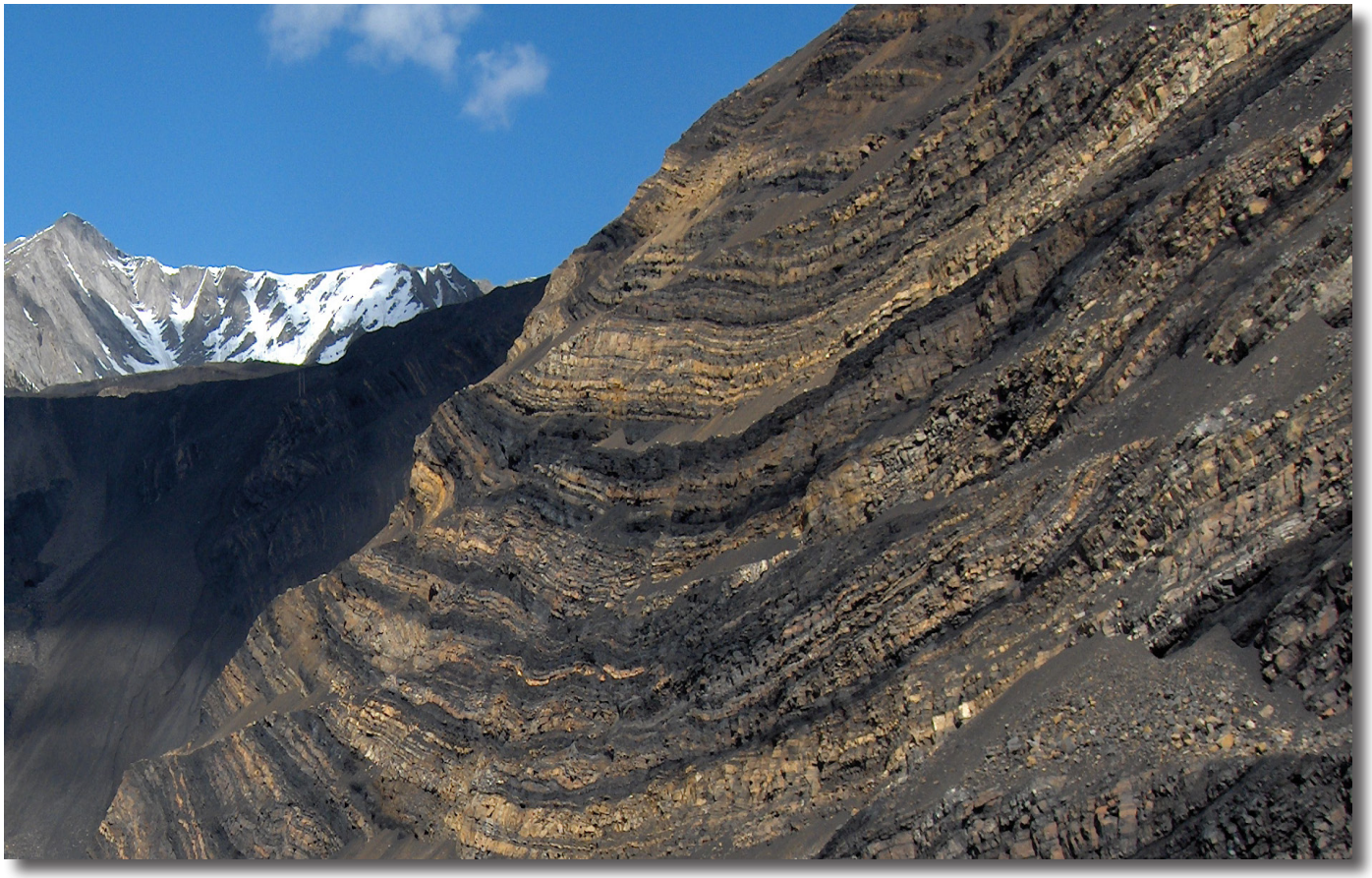
BRITISH COLUMBIA GEOLOGICAL SURVEY

COALFILE

COALFILE is a collection of assessment reports, maps, and data from boreholes, trenching, and sampling dating from 1900. These data are available for download and viewing through MapPlace 2.

COALFILE contains

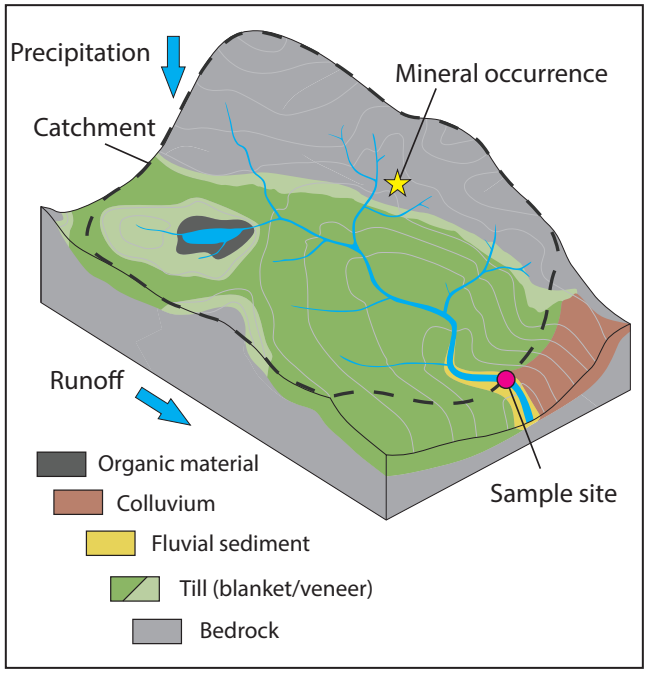
- 1000 reports
- 5600 maps
- 15,700 boreholes
- 3650 trenches
- information about 550 bulk samples
- 480 coal ash analyses



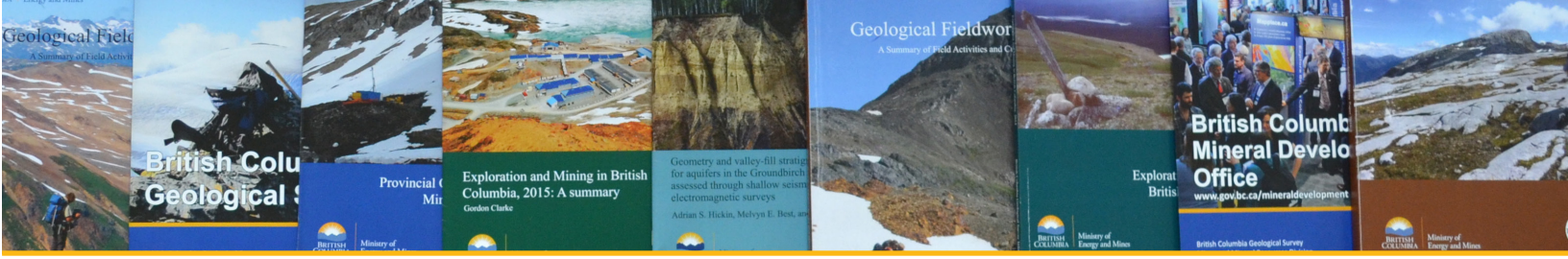
Contact: Jessica Norris, jessica.norris@gov.bc.ca

Geochemical databases

The British Columbia Geological Survey maintains geochemical databases that contain multi-element analyses from rock, till, stream- and lake-sediment, water, and coal ash samples. These databases include over 5 million determinations from more than 85,000 samples. Regularly updated, the databases are integrated with, and can be accessed through, MapPlace 2, the Survey's geospatial web service.

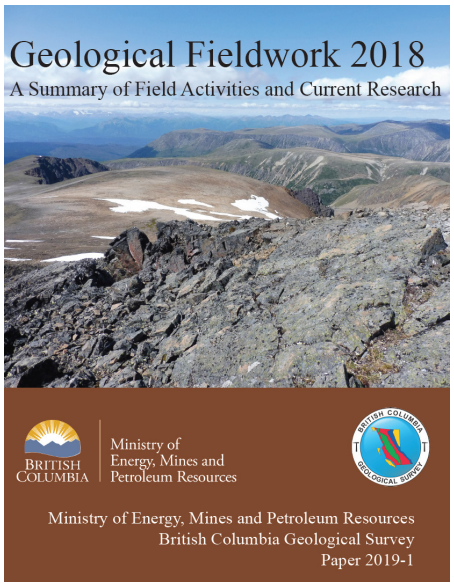


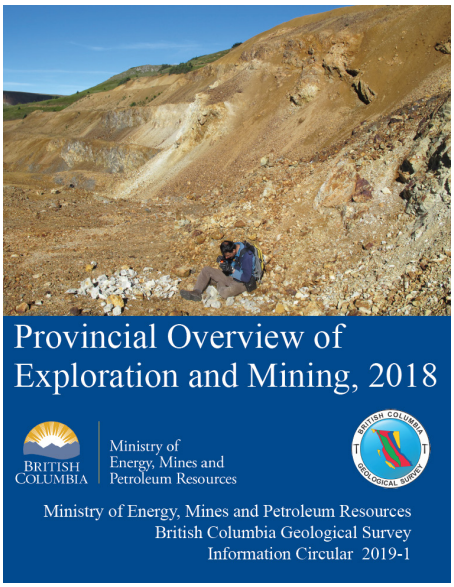
Contact: Alexei Rukhlov, alexei.rukhlov@gov.bc.ca

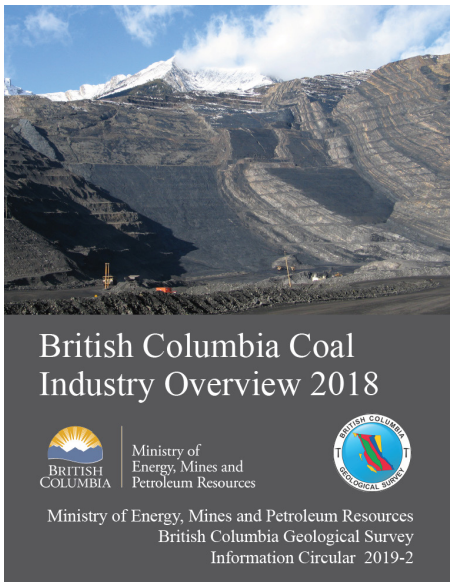


Publications catalogue

Reports, maps, and databases produced by the British Columbia Geological Survey since 1895 can be searched for, and downloaded from, our publications catalogue at no cost. The Survey publishes geological Papers, Open Files, GeoFiles, Geoscience Maps, and Information Circulars.







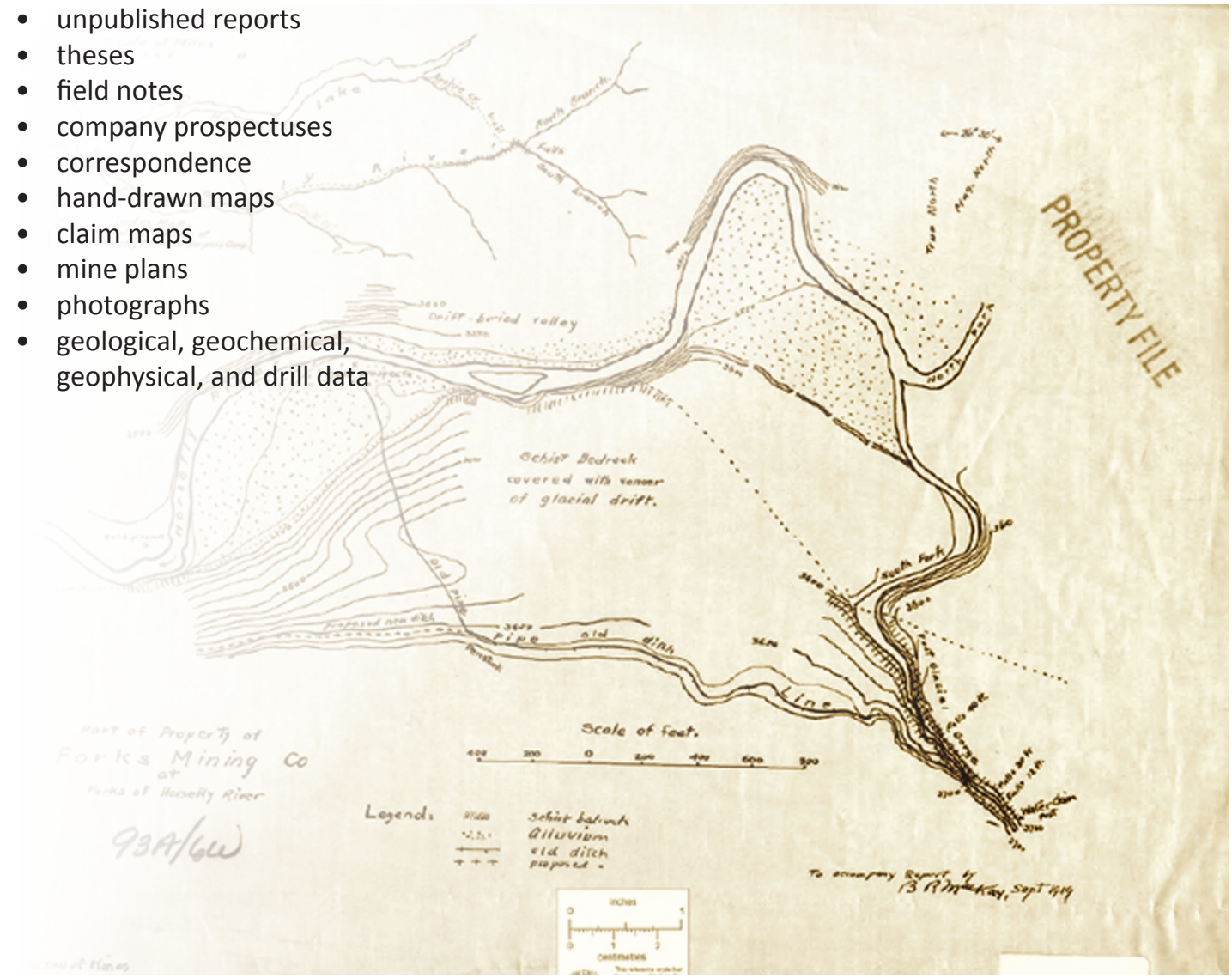
Each year in January, the British Columbia Geological Survey releases its Geological Fieldwork volume, highlighting field activities and current research. Other annual publications include the Provincial Overview of Exploration and Mining in British Columbia, and the British Columbia Coal Industry Overview.

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

Property File

Property File is a collection of more than 73,000 documents donated to the Survey in 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.

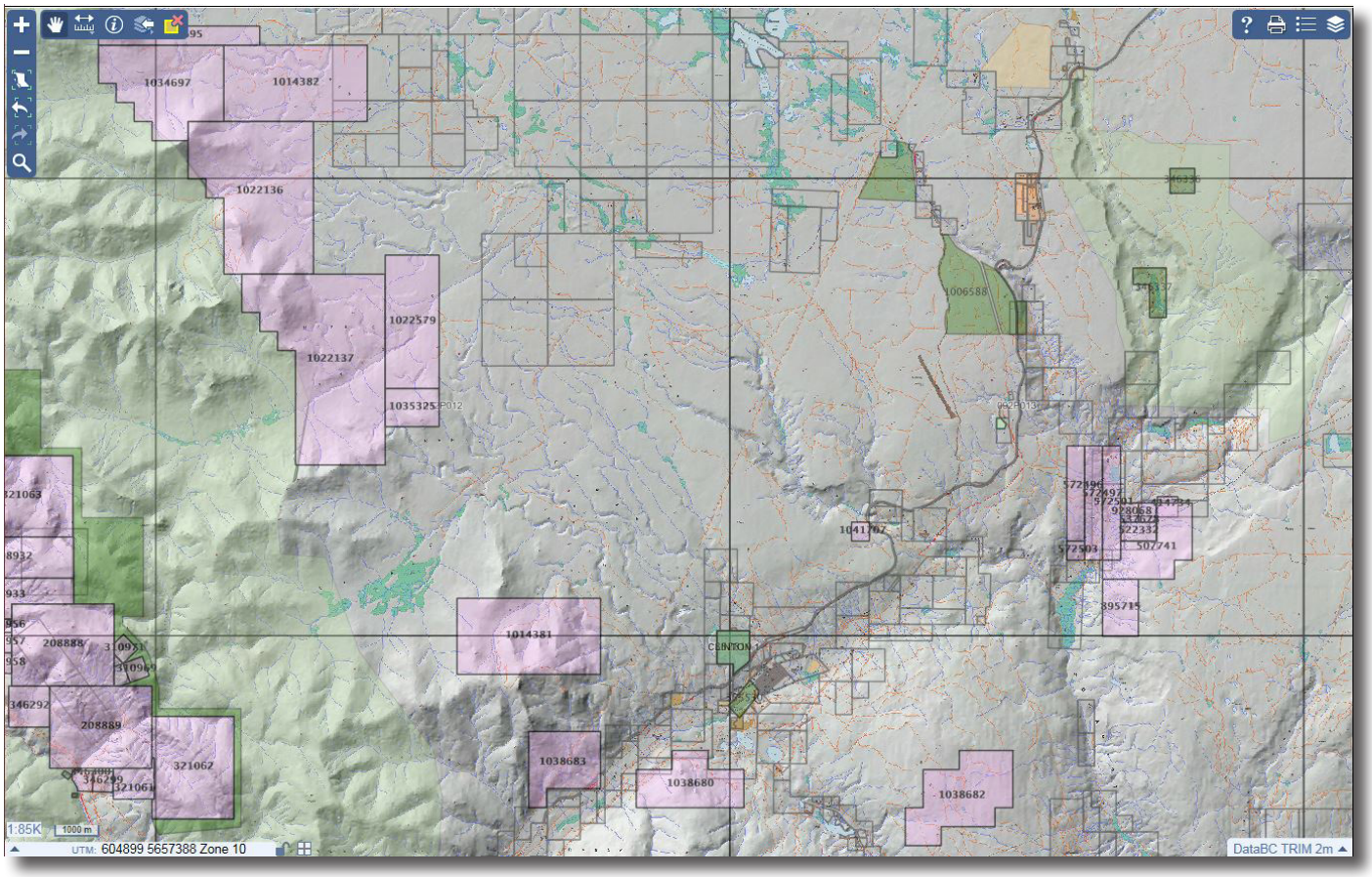
- unpublished reports
- theses
- field notes
- company prospectuses
- correspondence
- hand-drawn maps
- claim maps
- mine plans
- photographs
- geological, geochemical, geophysical, and drill data



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 managed at MTO and can be viewed and queried at MapPlace.

BRITISH COLUMBIA | MineralTitles OnlineBC

www.mtonline.gov.bc.ca

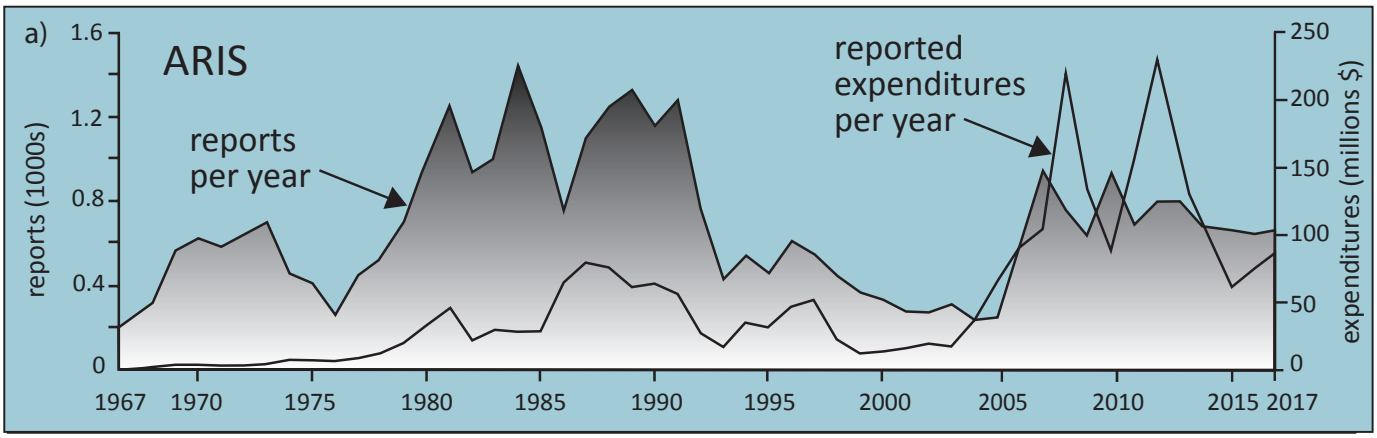
Contact: Mineral.Titles@gov.bc.ca

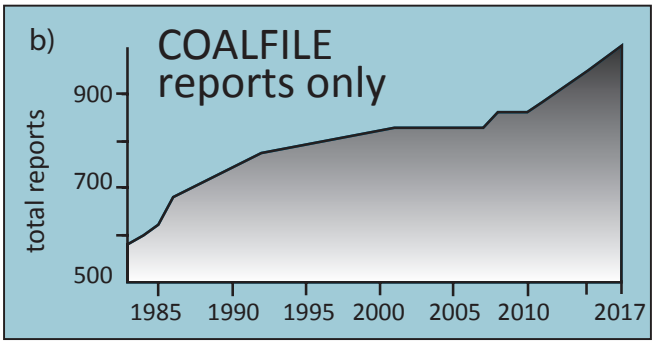
MapPlace
digital geoscience for British Columbia

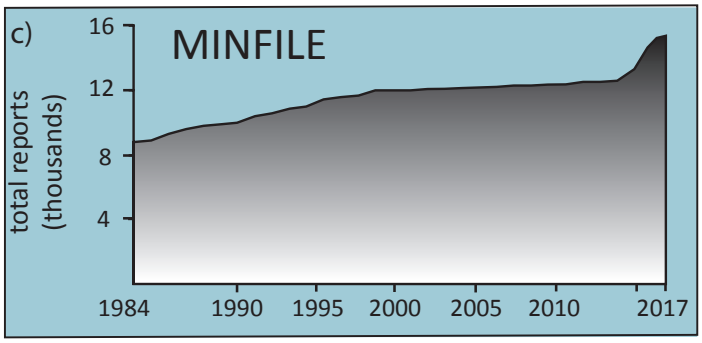
BRITISH COLUMBIA GEOLOGICAL SURVEY

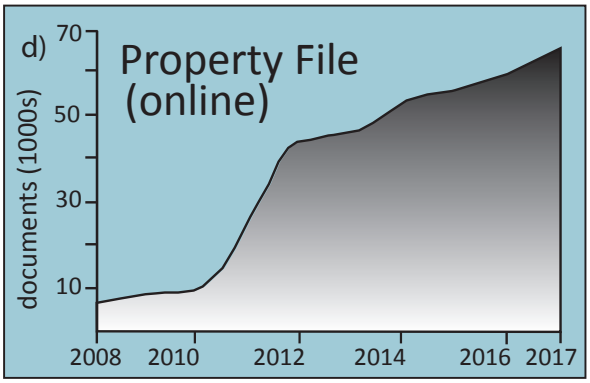
Growth of databases

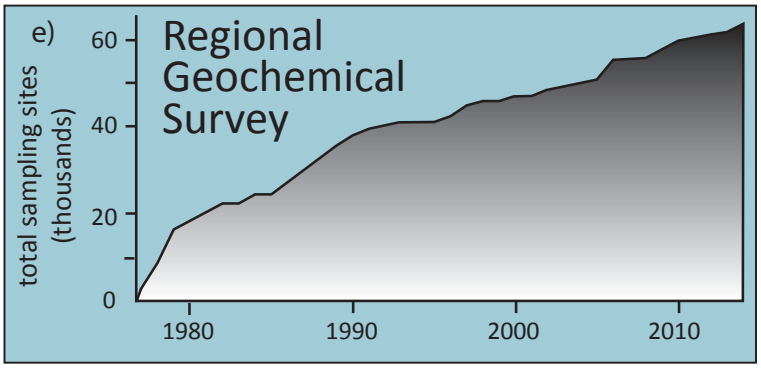
British Columbia Geological Survey databases continue to grow as new data arrive and as historical data are digitized.











All the BCGS databases are recorded in the B.C. Data Catalogue, with links to applications and downloads. https://catalogue.data.gov.bc.ca

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British Columbia Geological Survey
Ministry of Energy, Mines and Petroleum Resources

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