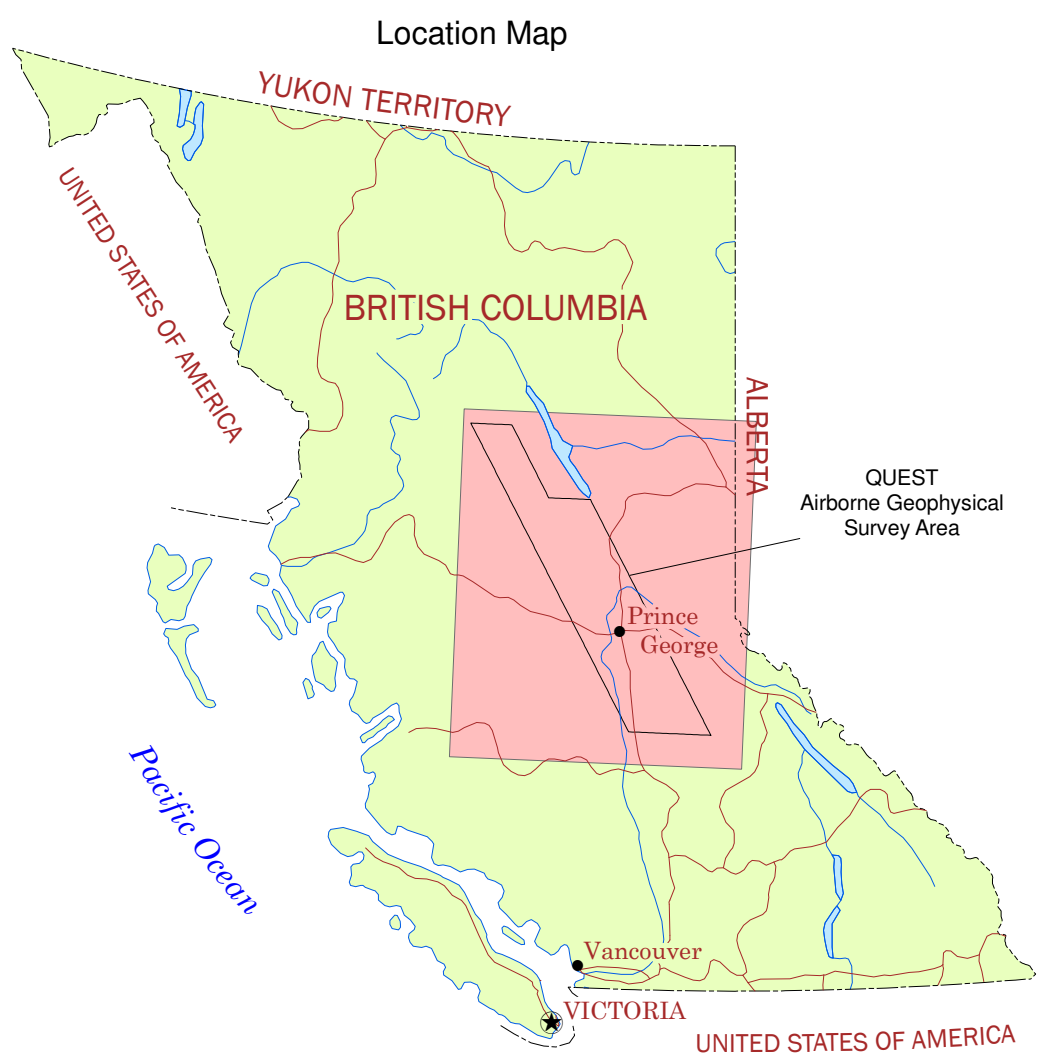


Disclaimer: While every effort has been taken to ensure the accuracy of the information in this map, the data are provided on an "as-is" basis, without any warranty, guarantee or representation of any kind, whether expressed or implied. It is the responsibility of the user to check the facts before entering any financial or other commitment based upon this information.



National Topographic System Index

15M SPATCO BURN LAKE	05M DOUGLASS LAKE	04M MCCONNELL CREEK	03M MCCONNELL RIVER	02M BURN RIVER	01M BURN RIVER	00M CHANDLER LAKE
14M BURN LAKE	04M MCCONNELL CREEK	03M MCCONNELL RIVER	02M BURN RIVER	01M BURN RIVER	00M CHANDLER LAKE	00M CHANDLER LAKE
13M BURN LAKE	03M MCCONNELL RIVER	02M BURN RIVER	01M BURN RIVER	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE
12M BURN LAKE	02M BURN RIVER	01M BURN RIVER	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE
11M BURN LAKE	01M BURN RIVER	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE
10M BURN LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE
09M BURN LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE
08M BURN LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE
07M BURN LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE
06M BURN LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE
05M BURN LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE
04M BURN LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE
03M BURN LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE
02M BURN LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE
01M BURN LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE
00M BURN LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE	00M CHANDLER LAKE

Legend

- Airborne Geophysical Survey Area
- Provincial boundary
- Railroad (undclassified)
- Road (undclassified)
- Mineral deposit (selected)
- Populated place (undclassified)

Density Susceptibility Domains

1	4	7
2	5	8
3	6	9

QUEST Geophysics 3D Inversion Analysis - Surface Density and Magnetic Susceptibility Domains

The QUEST Airborne Gravity and Aeromagnetic data were inverted by Mira Geoscience for Geoscience BC using the USC MAC3D and GRAB3D smooth model inversion algorithms. 3D density and magnetic susceptibility block models were made.

This map presents the surface layer of the 3D models, dividing the results into 9 different domains of similar rock properties.

A matrix of low, medium, and high susceptibilities and low, medium, and high density rocks has been used to define domains. Note that the domain number does not define any sorting or favourability of the rock properties, rather the map can be used to recognize areas of similar rocks and to follow a geological unit under covered areas.

The domain numbers relate to the input classes of Low (L), Medium (M) and High (H) density and susceptibility values according to the following table:

domain	Density	Susceptibility
1	L	L
2	M	L
3	H	L
4	L	M
5	M	M
6	H	M
7	L	H
8	M	H
9	H	H

	Density, g/cm ³	Susceptibility, S.I.
Low (L)	< -0.05	< 0.01
Medium (M)	-0.05 to 0.05	0.01 to 0.05
High (H)	> 0.05	> 0.05

A full 3D block model of these domains is available on the Geoscience BC website. From this a user can extract any depth slice or vertical section of interest directly from the block model.

Data Analysis

Mira Geoscience Ltd (2009), QUEST Project: 3D inversion modelling, integration, and visualization of airborne gravity, magnetic, and electromagnetic data, BC, Canada; Geoscience BC Report 2009-15, 87 p.

Airborne Gravity Data
GBC QUEST Project Team (2008): QUEST Project Gravity Data and Report, Geoscience BC, 2008-8

VTM Data
GBC QUEST Project Team (2008): QUEST Project VTM Data and Report, Geoscience BC, 2008-4

Aeromagnetic Data
Canadian Aeromagnetic Data Base, Regional Geophysics Section, GSC - Central Canada Division, Geological Survey of Canada, Earth Sciences Sector, Natural Resources Canada, 2005

Topographic Data
Massey, N.W.D., Mackenzie, D.G., Desjardins, P.J., and Cronley, R.T. (2005): Digital Geology Map of British Columbia: Whole Province. B.C. Ministry of Energy and Mines, Geofile 2005-1.

Data Sources
Geoscience BC
www.geosciencebc.com
Ministry of Energy, Mines and Petroleum Resources
www.enr.gov.bc.ca/mining/geoscience

Natural Resources Canada
geosoft.agg.nrcan.gc.ca

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Image processing by Peter Kowalczyk, Geoscience BC

Geophysical 3D inversion analysis by Mira Geophysics Ltd. - www.mirageophysics.com

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QUEST is funded in partnership with the Northern Development Initiative Trust - www.nditrust.ca



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.

www.geosciencebc.com

MAP 2009-15-4

GEOPHYSICS - 3D INVERSION ANALYSIS

Surface Density and Magnetic Susceptibility Domains

QUEST PROJECT

1:250 000 NTS SHEETS 93A,B,C,F,G,H,I,J,K,N,O,P

PART OF 1:250 000 NTS SHEETS 82M; 83D,E,L,M; 84D; 92M,N,O,P; 93D,E,L,M AND 94A,B,C,D

scale 1:500,000

1:500,000

Universal Transverse Mercator Projection, Zone 10
Horizontal Datum: North American Datum 1983

Mean magnetic declination 2009: 10°15' E, decreasing 14.6' annually. Readings vary from 17°42' E in the southeast corner to 20°17' E in the northwest corner of the map.

September 16, 2009

Citation:
Geoscience BC (2009): QUEST Project - Geophysics - 3D Inversion Analysis: Surface Density and Magnetic Susceptibility Domains, Geoscience BC, Map 2009-15-4, scale 1:500,000.