
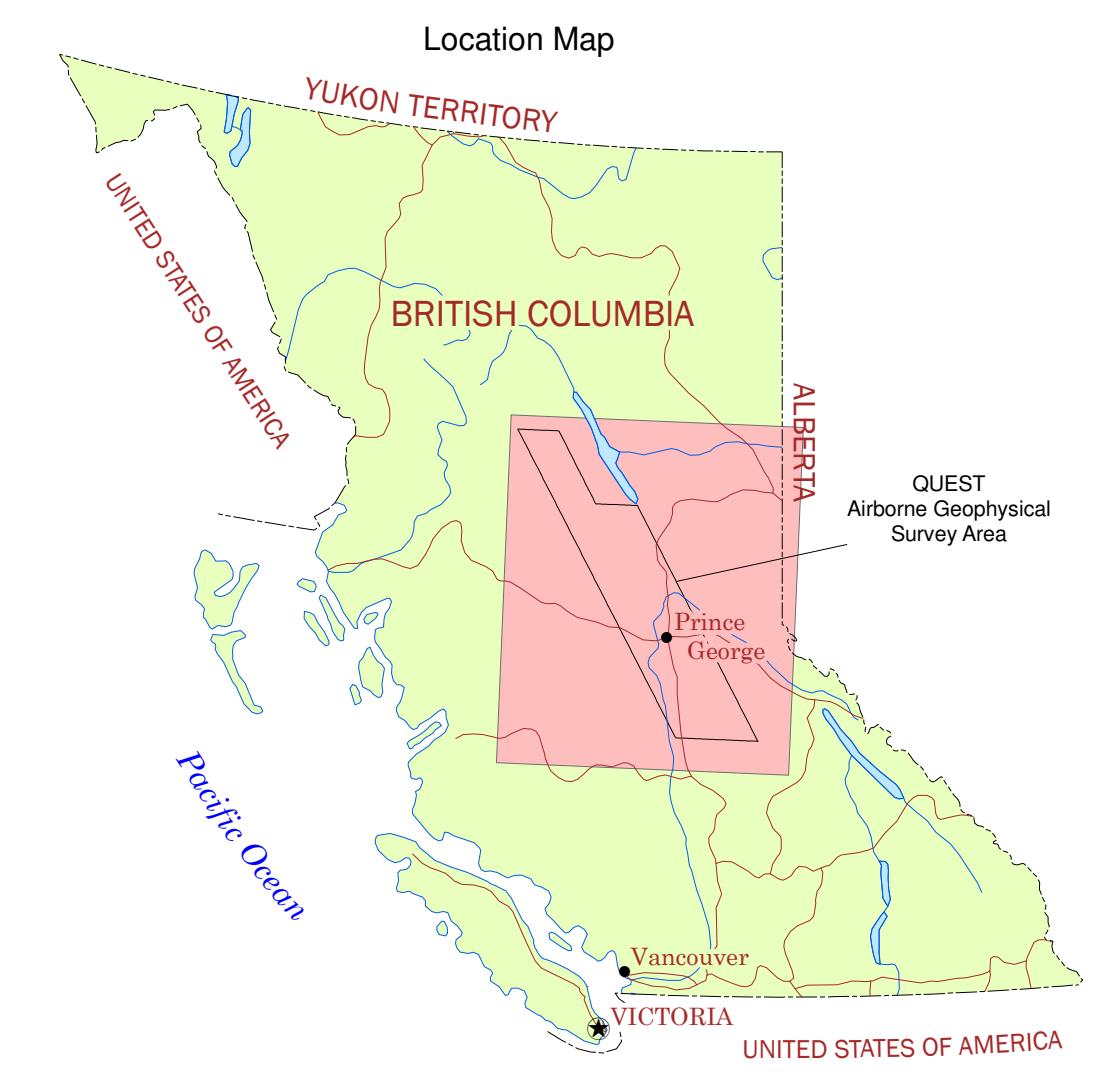


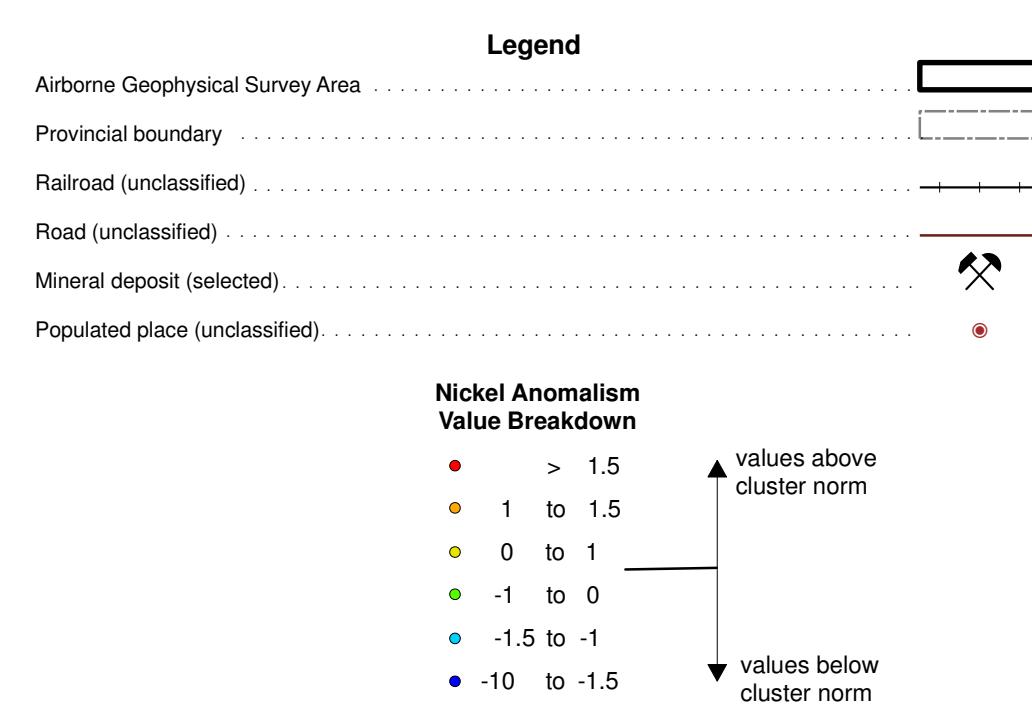
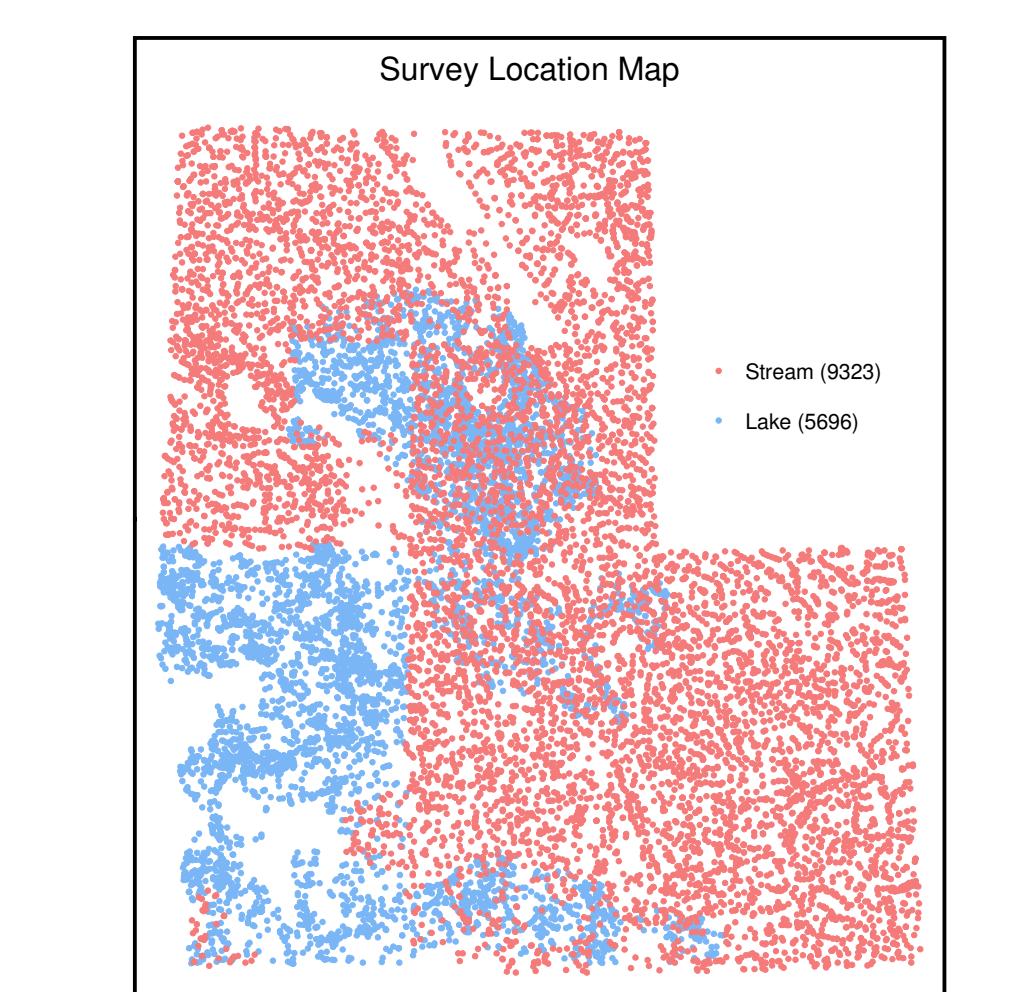
GEOSCIENCE BC - QUEST - GEOCHEMISTRY - CSIRO SOM ANALYSIS



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.



154H BOWSER SOUTHERN ROCKIES	154G BOODOGNE MOUNTAIN	154F WAPSI MOUNTAIN	154D TRUTH MOUNTAIN	154C BEATON MOUNTAIN	154E CHINCHADA MOUNTAIN
154B NASS RIVER	154M MACKENZIE RIVER	154C MACKENZIE RIVER	154D CLEAR WATER RIVER	154A CHARLIE WATER RIVER	154B CHINCHADA RIVER
153H TERACE	153M MACKENZIE PASS	153D FORT FRASER	153C MELLO LAKE	153A MCMAN LAKE	153B WAPSI LAKE
153M DOUGLAS CHANNEL	153E WHITE LAKE	153F NECHAKO RIVER	153G MOUNT GEORGE	153H MOUNT QUEENEL	153B MOUNT ROBINSON
153A LUDLOW LAKE	153M LAKE COOLA	153C QUINSAY SOUND	153W RIVERS INLET	153K TASO LAKE	153P BONAPARTE LAKE
153P QUINSAY SOUND	153W RIVERS INLET	153M MOUNT WADSWORTH	153N MOUNT QUEENEL	153Q TASO LAKE	153R SEYMOUR ARMY



QUEST Geochemistry CSIRO SOM Analysis - Cluster-Normalized Element Anomalism

The located and imputed element grids (Barnett and Williams, 2009) were intersected by the sample locations and the values assigned to the sample point. Note, missing element values have been imputed.

The SiroSOM procedure assigns each sample to a best-matching unit (BMU) and samples that are similar tend to be assigned to the same or nearby BMUs. These are often on self-organized maps and are interpreted as SCOMs (Self-Organizing Maps) when they are delayed using K-means to produce 20 classes. Field samples have been coloured according to the cluster they belong to.

"Cluster-Normalized" element anomaly maps have been produced with samples normalized to the mean and standard deviation of the K-means cluster to which a sample's BMU belongs. Users are cautioned that normalization by the K-means cluster mean may make intrinsically small numbers look large. Normalization by the cluster mean normally only presents a small amount in a set of samples assigned to a cluster, then the normalization process applied here will make the higher values in this well-defined group anomalous.

Data Analysis

Fraser, S.J. and Hodgkinson, J.H. (2009) An Investigation Using SiroSOM for the Analysis of QUEST Stream-Sediment and Lake-Sediment Geochemical Data. September 2009, Geoscience BC, Report 2009-14; CSIRO Exploration and Mining Report 2009/983, 64 p.

Geochimistry Data

Levelled Data

Barnett, C.T. and Williams, P.M. (2009) Using geochemistry and neural networks to map geology under glacial cover; Geoscience BC, Report 2009-3.

Original Data

Jackson, M.W. (2008) Regional Stream Sediment and Water Geochemical Data, Pine Pass, British Columbia (NTS 82D); Geoscience BC, Report 2008-7.

Jackson, M.W. (2008) Regional Lake Sediment and Water Geochemical Data, Northern Fraser River, Central British Columbia (parts of NTS 93D, H, I, K, N & O); Geoscience BC, Report 2008-8.

Jackson, M.W. (2008) QUEST Project Sample Reanalysis; Geoscience BC, Report 2008-3.

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Lett, R.E.W. and Blaauw, B. (2006) Re-analysis of regional geochemical survey stream sediment data from the Alcan River, British Columbia (NTS 82D); BC Ministry of Energy, Mines and Petroleum Resources, Geofiles 2006-09, 230p.

Jackson, M.W. (2006) Regional drainage sediment and water geochemical data, Anahim Lake and Nechako River, central British Columbia (NTS 93C & 93F); Geoscience BC, Report 2006-4, 63p.

Lett, R.E.W. (2005) Regional Geochemical Survey Database on CD; BC Ministry of Energy, Mines and Petroleum Resources, Geofiles 2005-17.

Topographic Data

Massey, N.W.D., MacIntyre, D.G., Desjardins, P.J. and Cooney, R.T. (2005) Digital Geology Map of British Columbia, Whole Province; BC Ministry of Energy and Mines, Geofiles 2005-1.

Data Sources

Geoscience BC www.geosciencebc.com

Acknowledgments

Cartography by Fiona Mees, Geoscience BC

Numerical analysis by CSIRO, Australia: www.csiro.au

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

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



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MAP 2009-14-28

GEOCHEMISTRY - CSIRO SOM ANALYSIS

Cluster-Normalized Nickel Anomalism

QUEST PROJECT

1:500 000 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

1:500,000
0 5 10 15 20 25 30 35 40 45 50 kms

Universal Transverse Mercator Projection, Zone 10

Mean magnetic declination 2008: 19.2°E, decreasing 16.6' annually. Readings vary from 17.4°E to 20.0°E in the southeast corner of the northwest corner of the map.

September 16, 2009

Citation: Geoscience BC (2009) QUEST Project - Geochemistry - CSIRO SOM Analysis: Cluster-Normalized Nickel Anomalism; Geoscience BC, Map 2009-14-28, scale 1:500,000