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## **QUEST South REGIONAL GEOCHEMICAL DATA**

**SOUTHERN BRITISH COLUMBIA**  
(NTS 082E, L, M; 092H, I, J, O AND P)

### **Geoscience BC Report 2010-13 DIGITAL DATA FILES**

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#### **File: README.PDF**

Digital data files containing recorded field observations and analytical data are provided in Excel (XLS). Refer to survey PDF files for project methods and explanation of codes for field and analytical variables. Additional information on field data codes has also been provided in this document.

Analytical data reported at levels below detection limit have been set to the detection limit. Missing and/or not determined analytical data are listed as '-1'. Missing field data and/or field data not collected as part of a survey are listed as a blank.

#### **QS 2009 STREAM DATA.xls**

2009 Stream Sample Data: field observations; sediment by ICPMS and INAA; fluorine (F) and loss on ignition (LOI) in sediments; and pH, fluoride and conductivity in waters. (785 records)

#### **QS 2009 TILL DATA.xls**

2009 Basal Till Sample Data: field observations; sediment by ICPMS and INAA; fluorine (F) and loss on ignition (LOI) in sediments. (200 records)

#### **OTHER STREAM DATA.xls**

Results from stream surveys completed from 1977 to 1981, INAA data published in the 1990s and ICPMS data published in January 2010. (8536 records)

#### **OTHER LAKE DATA.xls**

Results from a 2006 regional lake survey. (1451 records)

## EXPLANATION OF CODES FOR FIELD OBSERVATIONS - Stream Sites

MASTERID: Unique id number. Consists of NTS map sheet designation, year, and sample id number.

MAP250: 1:250,000 National Topographic System (NTS).

MAP50: 1:50,000 NTS map sheet

MAP20: 1:20,000 TRIM map

COLLECTION YEAR: Year survey was conducted.

SAMPLE ID NUMBER: Unique id number for survey (i.e. 1002).

SAMPLE SITE LOCATION:

UTM Coordinates (NAD83)

Latitude and Longitude (decimal degrees)

ELEVATION: Elevation at the sample site (metres).

SAMPLE MATERIAL: Nature of media sampled.

1 - Stream Sediment          6 - Water and Sediment

REPLICATE STATUS: Relationship of current sample to others.

- Routine sample site  
10 - First of a field duplicate pair  
20 - Second of a field duplicate pair

FORM/TERRANE: Geology underlying the site from Massey (2005).

STREAM SOURCE:

0 - Unknown                      2 - Spring Run-off  
1 - Groundwater                3 - Glacier Melt Water

STREAM ORDER:

0 - Undefined                    3 - Tertiary  
1 - Primary                      4 - Quaternary  
2 - Secondary

STREAM TYPE:

0 - Undefined                    2 - Seasonal  
1 - Permanent                  3 - Re-emergent

PHYSIOGRAPHY: General topography of sampled catchment area.

0 - Lowland Plain                3 - Hilly, Undulating  
1 - Muskeg, Swamp               4 - Mountains, Mature  
2 - Peneplain, Plateau          5 - Mountains, Youthful

DRAINAGE PATTERN:

- |                    |                        |
|--------------------|------------------------|
| 0 - Poorly Defined | 4 - Interrupted        |
| 1 - Dendritic      | 5 - Glacially Deranged |
| 2 - Herringbone    | 6 - Basinal            |
| 3 - Rectangular    | 7 - Other              |

CONTAMINATION: Degree or type of human contamination.

- |              |                 |
|--------------|-----------------|
| 0 - None     | 5 - Industrial  |
| 1 - Possible | 6 - Agriculture |
| 2 - Probable | 7 - Domestic    |
| 3 - Definite | 8 - Forestry    |
| 4 - Mining   | 9 - Burned      |

STREAM WIDTH: Width of the stream at the sample site in metres.

STREAM DEPTH: Depth of the stream at the sample site in centimetres.

STREAM FLOW RATE: Visual estimate of stream flow velocity.

- |              |              |             |
|--------------|--------------|-------------|
| 0 - Stagnant | 2 - Moderate | 4 - Torrent |
| 1 - Slow     | 3 - Fast     |             |

STREAM WATER COLOUR:

- |                  |                  |
|------------------|------------------|
| 0 - Colourless   | 2 - White Cloudy |
| 1 - Brown, Clear | 3 - Brown Cloudy |

BANK TYPE: General Nature of the bank material.

- |               |                     |
|---------------|---------------------|
| 0 - Unknown   | 4 - Glacial Outwash |
| 1 - Alluvial  | 5 - Bare Rock       |
| 2 - Colluvial | 6 - Talus, Scree    |
| 3 - Till      | 7 - Organic         |

BANK PRECIPITATE: Presence of stain, weathering on rocks in the area surrounding the sample site.

- 0 - None, otherwise same codes as sediment colour.

SEDIMENT COMPOSITION: Bulk sand, fines and organics composition of the collected sample.

- |                 |                   |
|-----------------|-------------------|
| 0 - Absent      | 2 - Medium 33-67% |
| 1 - Minor < 33% | 3 - Major >67%    |

SEDIMENT COLOUR: General colour of collected sediment.

- |                 |                |
|-----------------|----------------|
| 1 - Red         | 5 - Green      |
| 2 - White, Buff | 6 - Gray, Blue |
| 3 - Black       | 7 - Pink       |
| 4 - Yellow      | 8 - Tan, Brown |

SEDIMENT PRECIPITATE OR STAIN: Presence of any coatings on gravels, pebbles, boulders within the sample, or on stream bottoms at the sample site.

- 0 - None, otherwise same codes as sediment colour.

CHANNEL BED: Texture of channel bed.

- |                       |                      |
|-----------------------|----------------------|
| 1 - Boulders          | 3 - Sand and Gravels |
| 2 - Fine Sand to Clay | 4 - Organics         |

CHANNEL PATTERN:

- |                      |                |
|----------------------|----------------|
| 1 - Shoots and Pools | 3 - Meandering |
| 2 - Braided          | 4 - Disturbed  |

#### **EXPLANATION OF CODES FOR FIELD OBSERVATIONS - Lake Sites**

MASTERID: Unique id number for total RGS data set. Consists of NTS map sheet designation, year, and sample id number.

MAP250: 1:250,000 National Topographic System (NTS).

MAP50: 1:50,000 NTS map sheet

MAP20: 1:20,000 TRIM map

COLLECTION YEAR: Year survey was conducted.

SAMPLE ID NUMBER: Unique id number for survey (i.e. 1002).

SAMPLE SITE LOCATION:

UTM (NAD83)

Latitude and Longitude (decimal degrees)

ELEVATION: Elevation at the sample site (metres).

SAMPLE MATERIAL: Nature of media sampled.

- 9 - Lake water and Sediment

REPLICATE STATUS: Relationship of current sample to others.

- Routine sample site
- 10 - First of a field duplicate pair
- 20 - Second of a field duplicate pair

FORM/TERRANE: Geology underlying the site from Massey (2005).

LAKE AREA: Square kilometres.

LAKE Perimeter: Square kilometres.

SAMPLE DEPTH: Lake depth at sample site to nearest metre.

RELIEF: Relief of the surrounding lake catchment basin.

- |            |          |
|------------|----------|
| 1 - Low    | 3 - High |
| 2 - Medium |          |

SEDIMENT COLOUR: General colour of collected sediment.

- |            |           |
|------------|-----------|
| 1 - Tan    | 4 - Grey  |
| 2 - Yellow | 5 - Brown |
| 3 - Green  | 6 - Black |
| 7 - Orange | 8 - Red   |

SEDIMENT COMPOSITION:

- |             |          |
|-------------|----------|
| 1 - Gel     | 3 - Fine |
| 2 - Organic | 4 - Sand |

CONTAMINATION: Degree or type of human contamination.

- |              |                 |
|--------------|-----------------|
| 0 - None     | 5 - Industrial  |
| 1 - Possible | 6 - Agriculture |
| 2 - Probable | 7 - Domestic    |
| 3 - Definite | 8 - Forestry    |
| 4 - Mining   | 9 - Burned      |

SUSPENDED MATTER: Amount of suspended material in water sample.

- |           |           |
|-----------|-----------|
| 0 - None  | 2 - Heavy |
| 1 - Light |           |

**ABBREVIATIONS:**

AAS.....atomic absorption spectrometry  
AASH.....hydride evolution atomic absorption spectrometry  
CLR.....colorimetry  
NADNC.....neutron activation, delayed neutron counting  
FA.....fire assay, neutron activation  
ISE.....ion selective electrode  
LIF.....laser-induced fluorescence  
GCM.....glass Calomel electrode and pH meter  
GRAV.....gravimetry  
INAA.....instrumental neutron activation analysis  
ICPMS.....inductively coupled plasma mass spectrometry  
PPM.....part per million  
PPB.....parts per billion  
PCT.....percent

***Disclaimer:*** While every effort has been taken to ensure the accuracy of the information in this release package, the data is provided in 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.

Considerable effort has been taken to ensure that the data files are free of error.  
Please contact Geoscience BC if any discrepancies arise.

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