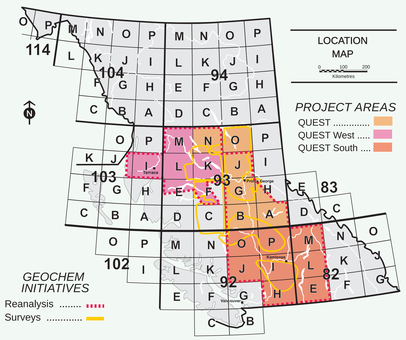
QUEST-SOUTH PROJECT: FIELD SURVEYS & SAMPLE REANALYSIS

Southern British Columbia (NTS 82E, L, M & 92H, I, J, O, P)

Project Summary

The QUEST-South project is the third of a series of large-scale regional geochemical studies that have been sponsored by Geoscience BC since 2007. Each of these projects (QUEST, QUEST-West and QUEST-South) has included a number of important initiatives such as infill sampling and the reanalysis of archived sediment pulps. To date, over 5,000 drainage sediment samples have been collected and 20,000 sediment samples from previous NGR/RGS surveys have been reanalyzed using current laboratory methods. The work has significantly improved the availability of geochemical data and also complements other geoscience initiatives, such as airborne geophysical surveys funded by Geoscience BC that are also aimed at promoting and stimulating exploration interest in the project areas.



QUEST South Geochem Surveys

>>> SURVEY RESULTS AVAILABLE SPRING 2010 <<<

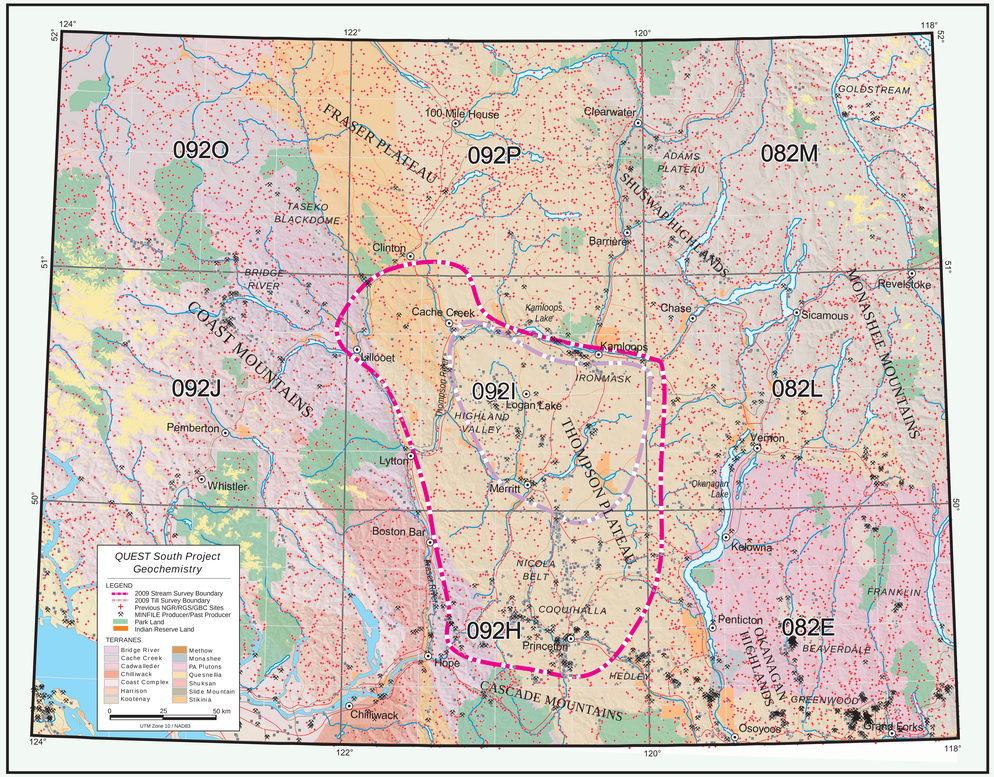
Drainage Sediment & Water Sample Collection

The QUEST-South sampling program covered approximately 14,000 km2 and was focused on a region that had received relatively limited coverage during earlier geochemical surveys. Using standards set by the NGR and RGS programs, stream-based sample collection was carried out from June to October and a total of 800 stream-sediment and water samples were systematically acquired. .

Basal Till Sample Collection

To further augment the geochemical coverage of parts of the study area, basal till samples were collected from 200 sites at an average density of one site per 4 km2 over a 1,000 km2 area. The combination of basal till availability, a relatively thin overburden cover and a uniform ice-flow direction provided for an ideal sampling environment for reconnaissance-scale till geochemistry exploration programs.

QUEST South Project Area

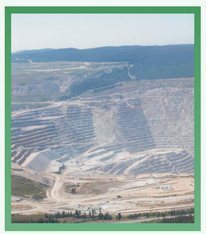


Regional geochemical surveys were first completed in the project area from 1976 to 1981 as part of the National Geochemical Reconnaissance (NGR) and BC Regional Geochemical Survey (RGS) programs. The government-funded work included the collection of stream-sediment and water samples from a total of 8071 stream-based sample sites. The original surveys only included a limited selection of analytical information. In the early 1990s, archived sediment pulps from these surveys were reanalyzed by instrumental neutron activation analysis (INAA) and results for gold and a range of pathfinder metals and rare earth elements was added to the provincial database. In 2006, a Geoscience BC supported lake sediment survey included a portion of the Fraser Plateau in the northern part of the study area.

Previous NGR/RGS Surveys:

Map Area		Samples	Year	Original AAS Analytes Reported	INAA
082E	Penticton	1631	1976	Zn, Cu, Pb, Ni, Co, Ag, Mn, Fe, Mo, U	1991
082L	Vernon	1385	1976	Zn, Cu, Pb, Ni, Co, Ag, Mn, Fe, Mo, U	1991
082M	Seymour Arm	1219	1976/77	Zn, Cu, Pb, Ni, Co, Ag, Mn, Fe, Mo, U, Hg	1991
092H	Hope	995	1981	Zn, Cu, Pb, Ni, Co, Ag, Mn, Fe, Mo, U, W, Hg, As, Sb	1994
092I	Ashcroft	606	1981	Zn, Cu, Pb, Ni, Co, Ag, Mn, Fe, Mo, U, W, Hg, As, Sb	1994
092J	Pemberton	852	1981	Zn, Cu, Pb, Ni, Co, Ag, Mn, Fe, Mo, U, W, Hg, As, Sb	1994
092O	Taseko Lakes	935	1979	Zn, Cu, Pb, Ni, Co, Ag, Mn, Fe, Mo, U, W, Hg, As	1992
092P	Bonaparte Lake	913	1979	Zn, Cu, Pb, Ni, Co, Ag, Mn, Fe, Mo, U, W, Hg, As	1992

INAA Analytes: Au, Sb, As, Ba, Br, Ce, Cs, Cr, Co, Hf, Fe, La, Lu, Mo, Ni, Rb, Sm, Sc, Na, Ta, Tb, Th, W, U, Yb, Zr



QUEST South Sample Reanalysis

>>> RESULTS AVAILABLE ROUNDUP 2010 <<<

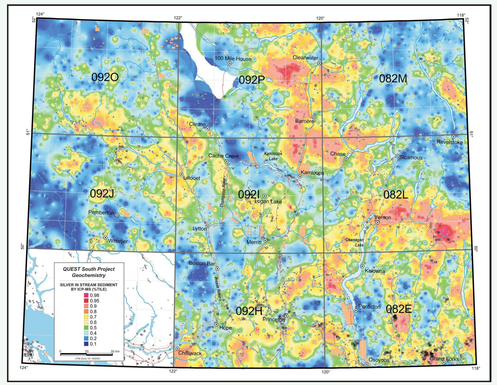
37 NEW ANALYTICAL ATTRIBUTES FOR 8256 RGS/NGR SAMPLES

A total of 8256 archived drainage sediment samples have been reanalyzed by inductively coupled plasma mass spectrometry (ICP-MS) by ALS Chemex (North Vancouver). This technique provides a wide range of new analytical information at improved detection levels plus greater data compatibility with analytical methods currently being employed.

ICP-MS Analytes and Detection Levels:

Gold	0.2 ppb	Cadmium	0.01 ppm	Lanthanum	0.2 ppm	Sulphur	0.01 %	Thallium	0.02 ppm		
Silver	2 ppb	Cobalt	0.1 ppm	Magnesium	0.01 %	Antimony	0.02 ppm	Uranium	0.05 ppm		
Aluminum	0.01 %	Chromium	0.5 ppm	Manganese	1 ppm	Scandium	0.1 ppm	Vanadium	1 ppm		
Arsenic	0.1 ppm	Copper	0.01 ppm	Molybdenum	0.01 ppm	Selenium	0.1 ppm	Tungsten	0.05 ppm		
Barium	0.5 ppm	Iron	0.01 %	Sodium	0.001 %	Strontium	0.2 ppm	Zinc	0.1 ppm		
Bismuth	0.01 ppm	Gallium	0.05 ppm	Nickel	0.1 ppm	Tellurium	0.01 ppm				
Boron	10 ppm	Mercury	5 ppb	Phosphorus	0.001 %	Thorium	0.1 ppm				
Calcium	0.01 %	Potassium	0.01 %	Lead	0.01 ppm	Titanium	0.001 %				

Gridded map produced using new silver results:



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- Becquerel Labs (Mississauga, Ont)
- Interior Helicopters (Fort St. John, BC)

Roundup 2010