QUEST-WEST PROJECT GEOCHEMISTRY: FIELD SURVEYS & DATA REANALYSIS

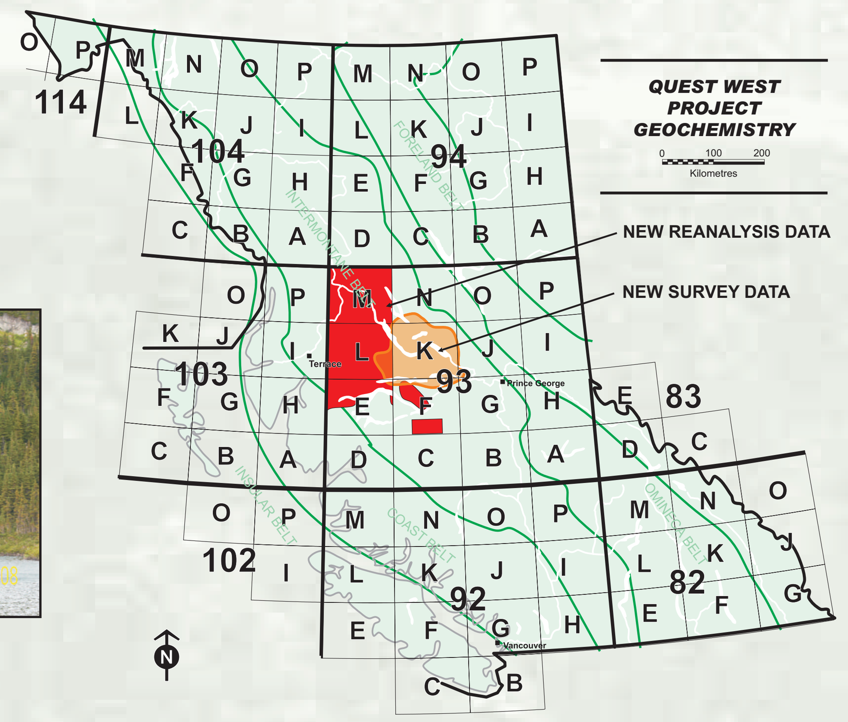
Parts of NTS 93E, F, K, L, M & N

Geoscience BC

GEOSCIENCE BC SUPPORTED EXPLORATION GEOCHEMISTRY INITIATIVES

Geoscience BC's 2008 QUEST-West Project included:

- ***NEW ICP-MS reanalysis data*** for 3479 sediment pulps from NTS map sheets 93E (Whitesail Lake), L (Smithers), M (Hazelton) and parts of 93F (Nechako).
- ***NEW survey data*** from an in-fill drainage sediment and water geochemical survey that targeted over 950 sites located in and around the 93K (Fort Fraser) map sheet area.



Lake sampling

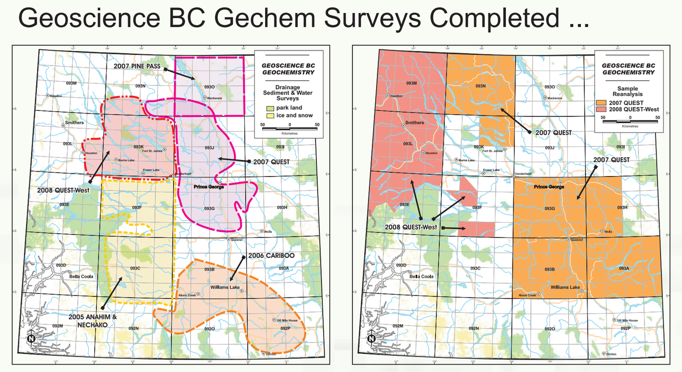
Geoscience BC initiatives have added significant value to the provincial geochemical database. This is particularly true in BC's central interior where new geochemical data has been collected for close to 17,000 samples at an average samples density of one sample every 7 km^2.

As a result of these efforts, central BC has ***one of the country's most comprehensive collections of drainage sediment geochemical information***. Compiled to established standards, released in a timely fashion and presented in usable formats, data from the Geoscience BC projects are making an important contribution in stimulating mineral exploration as well as complementing other geoscience research and data mining activities.

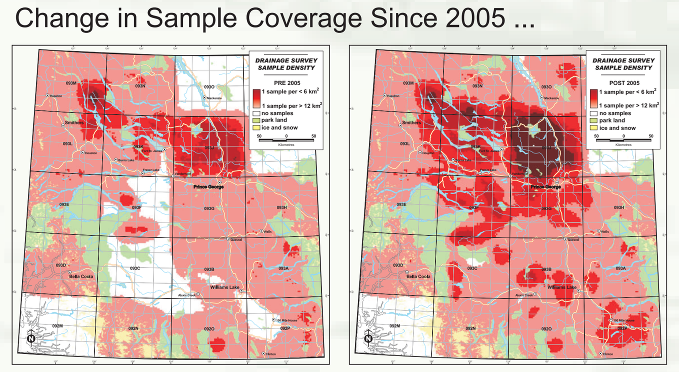
Geoscience BC Gechem Data Reports Produced Since 2005 ...

Year	Name	Type	NTS Map	Agency	Report
2005	Anahim/Nechako	lake/stream survey	093C/F	Geoscience BC	GBC Report 2006-04
2005	Mid Rockies	stream survey	082N, 083C/D/E	Geoscience BC	GBC Report 2006-05
2006	Cariboo	lake survey	093A/B/O/P	Geoscience BC	GBC Report 2007-06
2007	Pine Pass	stream survey	093O	Geoscience BC	GBC Report 2008-07
2007	QUEST	sample reanalysis	093A/B/G/H/K/N	Geoscience BC	GBC Report 2008-03
2007	QUEST	lake survey	093G/J/N/O	Geoscience BC	GBC Report 2008-05
2008	Terrace/Prince Rupert	sample reanalysis	103I/J	Geoscience BC	GBC Report 2008-11
2008	QUEST West	sample reanalysis	093F/E/L/M	Geoscience BC	GBC Report 2009-05
2008	QUEST West	lake/stream survey	093K/L/N	Geoscience BC	GBC Report 2009-??

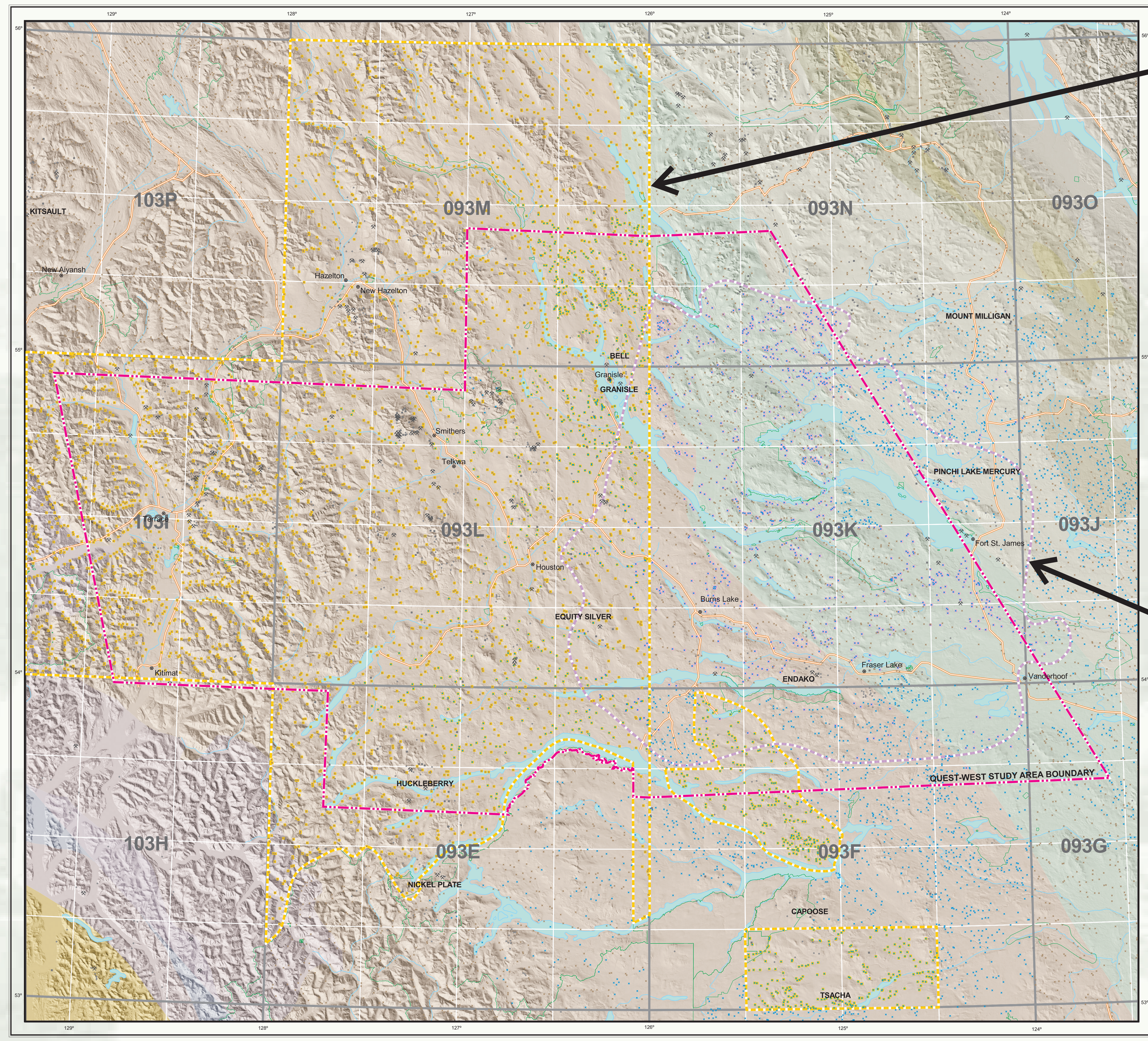
Geoscience BC Gechem Surveys Completed ...



Change in Sample Coverage Since 2005 ...



Central British Columbia



QUEST-WEST PROJECT AREA

CENTRAL BRITISH COLUMBIA (NTS 93E, F, G, K, L, M & N; 103I)

0 50

Kilometres

SAMPLE SITE LEGEND

- NEW STREAM SAMPLE REANALYSIS
- NEW LAKE SAMPLE REANALYSIS
- NEW STREAM SURVEY SITES
- NEW LAKE SURVEY SITES
- PREVIOUS STREAM SITES
- PREVIOUS LAKE SITES
- PROVINCIAL PARK BOUNDARY

GEOLOGY AND MINFILE LEGEND

- ALEXANDER
- COAST COMPLEX
- NISLING
- STIKINIA
- CACHE CREEK
- QUESNELLIA
- SLIDE MOUNTAIN
- CASSIAR
- PRODUCER/PAST PRODUCER
- PROSPECT/DEVELOPED PROSPECT
- SHOWING

17,604 TOTAL SAMPLES COVERING 120,000 KM^2

NEW ICP-MS DRAINAGE SEDIMENT DATA

AVAILABLE NOW: Geoscience BC Report 2009-05

FUNDED by GEOSCIENCE BC

MANAGED by W. Jackaman with cooperation from Natural Resources Canada & BC Geological Survey

Archived stream sediment samples have been reanalyzed by ICP-MS, a technique that has been found to be a cost-effective means of obtaining a wide range of new analytical information at improved detection limits.

Results for a total of 3479 samples are being released to the public in January 2009 and cover parts of NTS map sheets 93E, K, L and M. These government-funded surveys were originally conducted from 1983 to 1996.

Sample Recovery

ICP-MS Data Suite ...

Element		DL	Units	Method
Aluminum	Al	0.01	%	ICP-MS
Antimony	Sb	0.02	ppm	ICP-MS
Arsenic	As	0.1	ppm	ICP-MS
Barium	Ba	0.5	ppm	ICP-MS
Bismuth	Bi	0.02	ppm	ICP-MS
Cadmium	Cd	0.01	ppm	ICP-MS
Calcium	Ca	0.01	%	ICP-MS
Chromium	Cr	0.5	ppm	ICP-MS
Cobalt	Co	0.1	ppm	ICP-MS
Copper	Cu	0.01	ppm	ICP-MS
Gallium	Ga	0.1	ppm	ICP-MS
Gold	Au	0.2	ppb	ICP-MS
Iron	Fe	0.01	%	ICP-MS
Lanthanum	La	0.5	ppm	ICP-MS
Lead	Pb	0.01	ppm	ICP-MS
Magnesium	Mg	0.01	%	ICP-MS
Manganese	Mn	1	ppm	ICP-MS
Mercury	Hg	5	ppb	ICP-MS

Element		DL	Units	Method
Molybdenum	Mo	0.01	ppm	ICP-MS
Nickel	Ni	0.1	ppm	ICP-MS
Phosphorus	P	0.001	%	ICP-MS
Potassium	K	0.01	%	ICP-MS
Scandium	Sc	0.1	ppm	ICP-MS
Selenium	Se	0.1	ppm	ICP-MS
Silver	Ag	2	ppb	ICP-MS
Sodium	Na	0.001	%	ICP-MS
Strontium	Sr	0.5	ppm	ICP-MS
Sulphur	S	0.02	%	ICP-MS
Tellurium	Te	0.02	ppm	ICP-MS
Thallium	Tl	0.02	ppm	ICP-MS
Thorium	Th	0.1	ppm	ICP-MS
Titanium	Ti	0.001	%	ICP-MS
Tungsten	W	0.1	ppm	ICP-MS
Uranium	U	0.1	ppm	ICP-MS
Vanadium	V	2	ppm	ICP-MS
Zinc	Zn	0.1	ppm	ICP-MS

ACKNOWLEDGMENTS ...

Noble Exploration Services; P. Friske and M. McCurdy of NRCan; D. Lefebure and R. Lett of the BCGS; Acme Labs.

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NEW DRAINAGE SEDIMENT/WATER SURVEY DATA

AVAILABLE SOON

Funded by Geoscience BC in partnership with the Northern Development Initiative Trust and the Regional District of Bulkley-Nechako.

FIELD SURVEY COMPLETED by NOBLE EXPLORATION SERVICES LTD: W. Jackaman, J. Balfour, E. Jackaman, S. Reichheld & S. Webb

The 2008 QUEST-West Project geochemical survey covers parts of the northern portion of the Nechako Plateau. Although much of the area was the site of previous stream and lake sediment projects, the target area included a large number of new sample sites. In addition, the lake-based work will link a number of lake surveys previously completed in surrounding areas.

Helicopter and truck-supported sample collection was carried out in August and September 2008. A total of 905 lake sediment and water samples and 100 stream sediment and water samples were systematically acquired. Combined with the previous survey work, the resulting average sample site density is one site per 7 km^2 over the 14,500 km^2 survey area.

The sediment samples are being analyzed for base and precious metals, pathfinder elements and rare earth elements by INAA and ICP-MS.

ACKNOWLEDGMENTS ...

Noble Exploration Services; pilot John Faulkner; Interior Helicopters; the many support services located in and around Fraser Lake, Burns Lake, Vanderhoof, Fort St. James and Prince George; EcoTech, Acme and Becquerel Labs.