QUEST
Regional Geochemical Surveys

Burns Lake

October 9, 2009

RGS DEFINED

REGIONAL

COVER VERY LARGE AREAS,
OFTEN 1000s SQUARE KILOMETRES

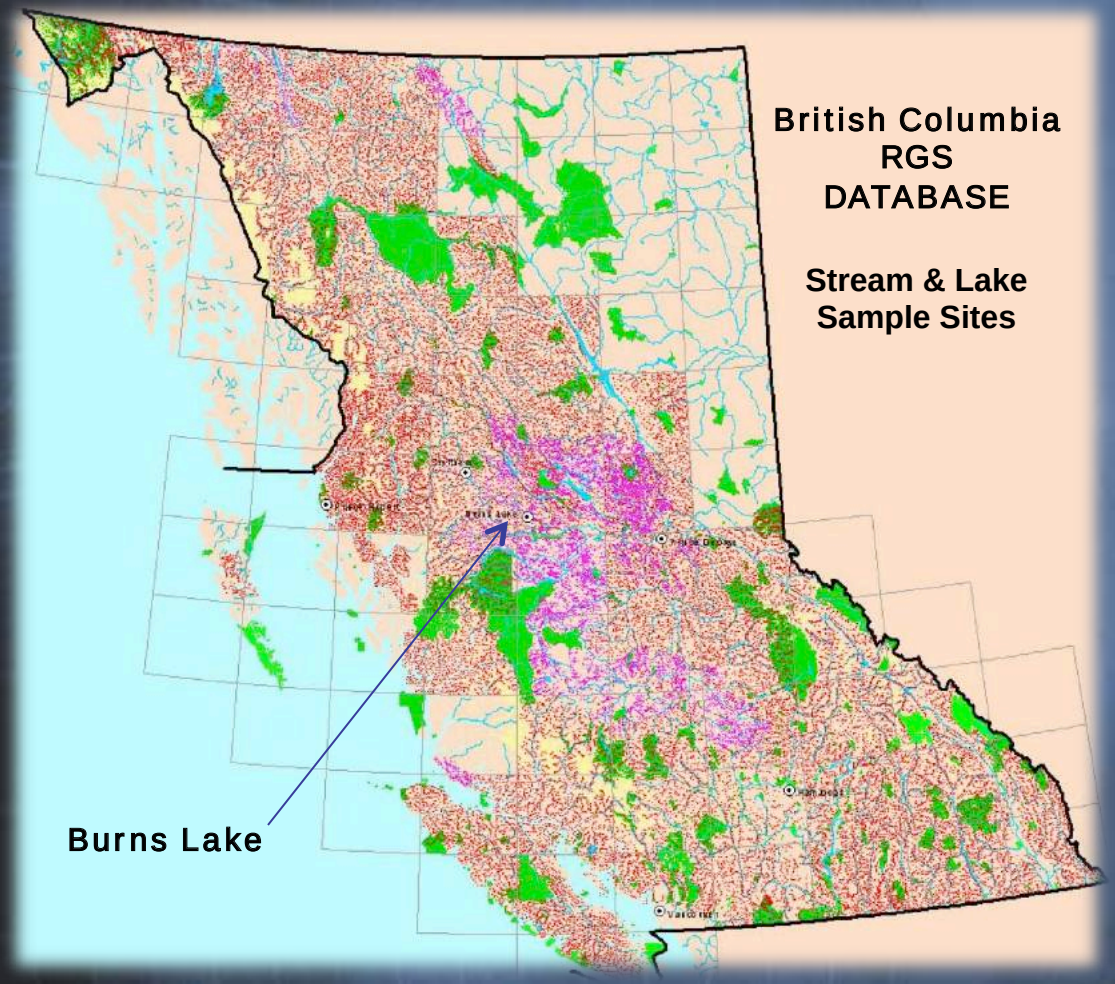
GEOCHEMICAL

STUDY OF THE DISTRIBUTION
OF METALS IN THE ENVIRONMENT

SURVEYS

COLLECTION OF INFORMATION
AND VARIOUS SAMPLE MEDIA

BC RGS STATUS



PUBLICALLY FUNDED

RECONNAISSANCE-SCALE

MULTI-ELEMENT

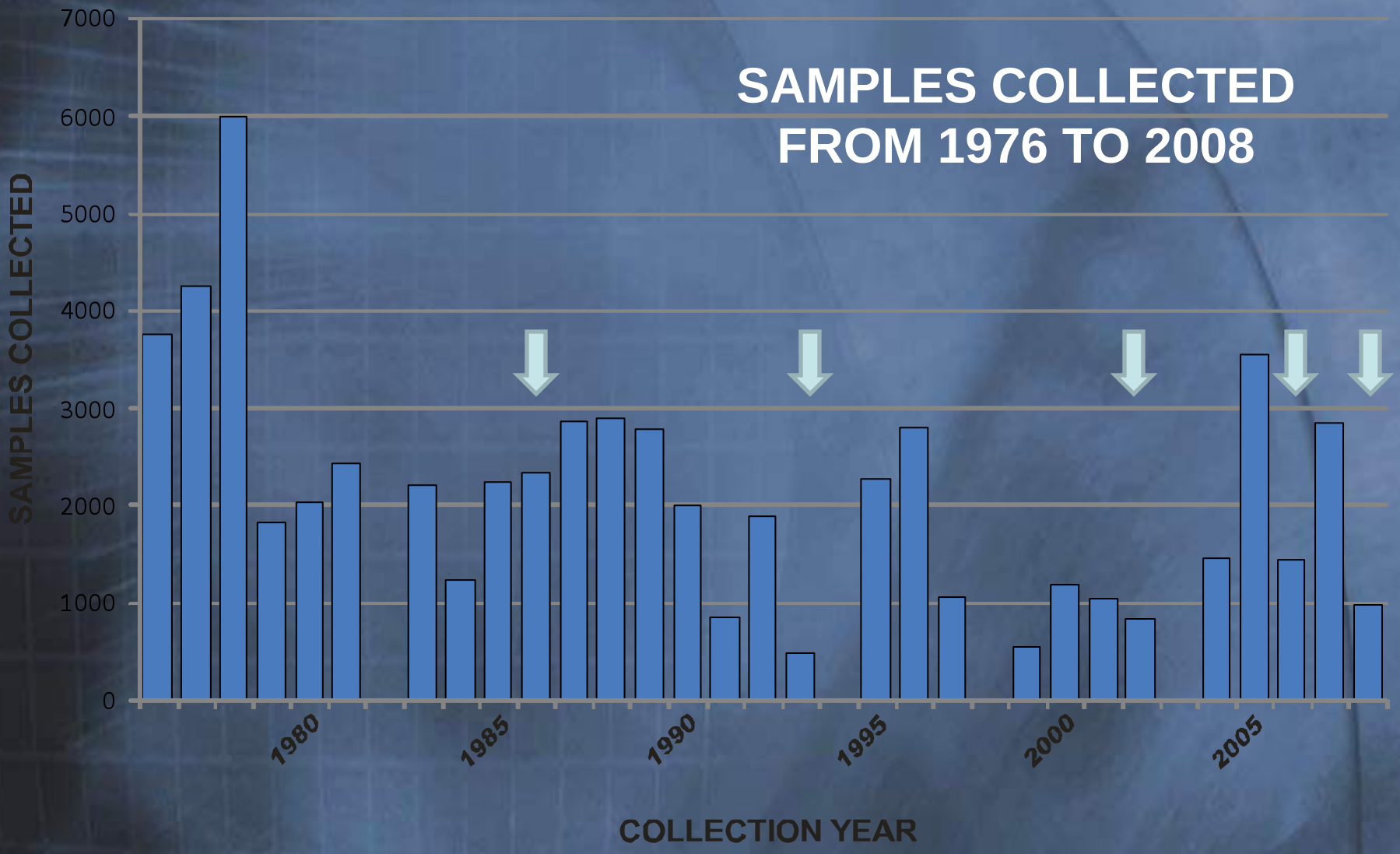
ONGOING SINCE 1970s

65,000 SITES / 70% COVER

NATIONAL STANDARDS

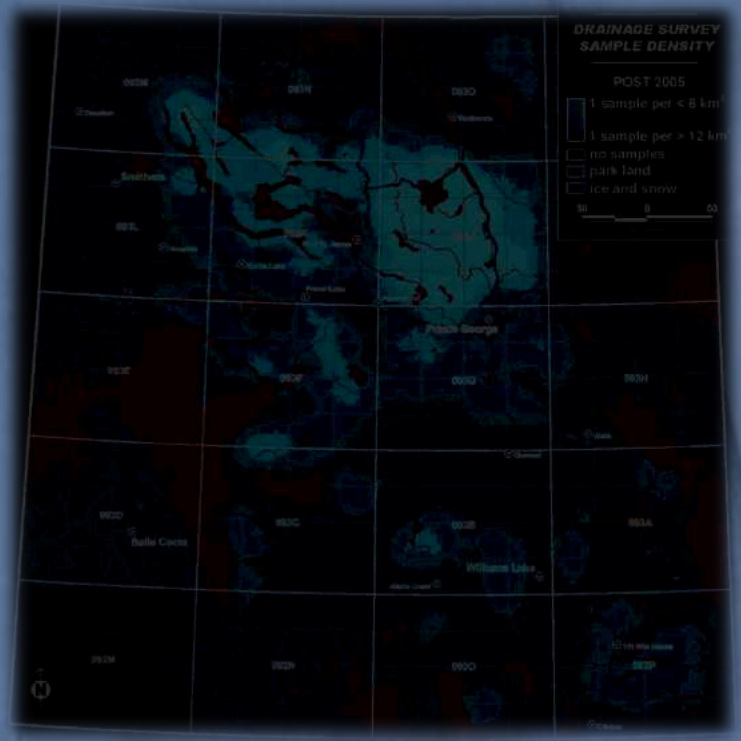
UPGRADES INCLUDE NEW SURVEYS AND DATA REANALYSIS

BC RGS STATUS



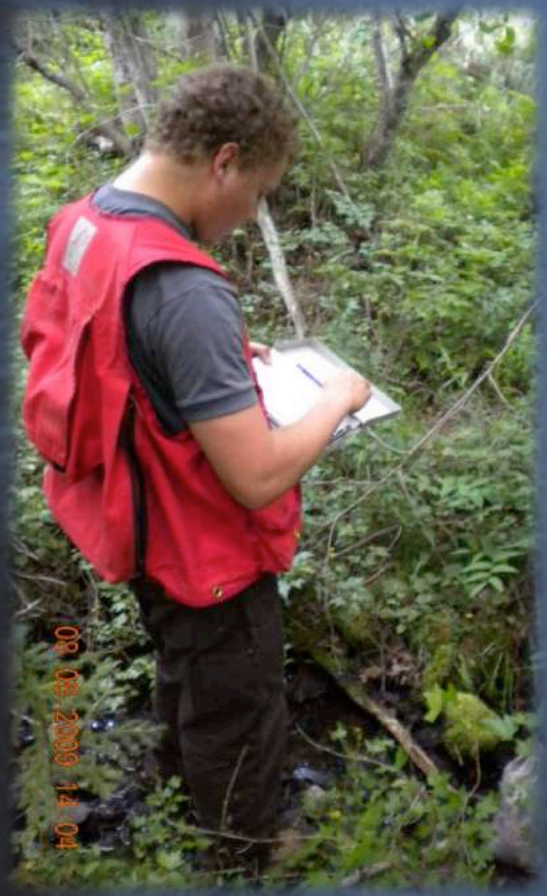
BC RGS STATUS

GEOSCIENCE BC CONTRIBUTIONS



Over 19,000 new and updated samples
Most comprehensive collection in Canada

RGS PROGRAMS



PROGRAM COMPONENTS

- SURVEY DESIGN
- SAMPLE & DATA COLLECTION
- SAMPLE ANALYSIS
- DATABASE COMPILATION
- PUBLICATION

RGS DESIGN

KEY CONSIDERATIONS

FAST PACED AND COST EFFECTIVE

COMPLETED IN A TIMELY FASHION

NATIONAL STANDARDS

APPROPRIATE MEDIA TYPE

ACCESS AND LAND-USE ISSUES

STATE OF EXISTING GEOSCIENCE DATA

RGS DESIGN

SAMPLE COLLECTED PROVIDE AN ACCURATE REPRESENTATION OF THE LOCAL GEOCHEMISTRY

SEARCHING FOR HIDDEN SOURCES OF MINERALS THAT MAY BE ASSOCIATED WITH REGIONAL TRENDS AND SITE ANOMALIES

RGS COLLECTION

STREAM SEDIMENT & WATER

SECOND ORDER STREAMS DRAINING AREAS OF 6 TO 10 SQUARE KILOMETRES

2 KG OF FINE-GRAINED MATERIAL AND 250 ML CLEAR WATER

COLLECTED FROM ACTIVE CHANNEL REMOVED FROM POSSIBLE SOURCES OF CONTAMINATION

RGS COLLECTION

LAKE SEDIMENT & WATER

SMALL LAKES/PONDS AND SINGLE BASINS IN LARGER LAKES

2 KG OF CENTRE BASIN SEDIMENTS AND CLEAR NEAR SURFACE WATER

ORGANIC GEL SAMPLES COLLECTED REPRESENT A 35 CM SECTION BELOW SEDIMENT-WATER INTERFACE

RGS COLLECTION

TILL and Other

BASAL TILL

BIOGEOCHEMISTRY - BARK

RGS COLLECTION

FIELD OBSERVATIONS

SITE LOCATION DATA

SAMPLE MEDIA DESCRIPTIONS

SAMPLE SITE INFORMATION

RGS SAMPLE ANALYSIS

SAMPLES ARE CAREFULLY PROCESSED FOR MULTI-ELEMENT ANALYTICAL WORK

EARLY SURVEYS ONLY INCLUDED A VERY LIMITED NUMBER OF ANALYSIS

MODERN PROGRAMS INCLUDE A FULL RANGE OF PRECIOUS METALS, BASE METALS, PATHFINDER ELEMENTS AND MORE

ICPMS AND INAA METHODS CAN PROVIDE OVER 70 ELEMENT DETERMINATIONS

RGS DATABASE

	F	G	H	I	J	K	L	M	N	O	AB	AC	AD
1	MASTERID	MAP50	YEAR	ID	STA	UTMZ	UTME83	UTMN83	LAT	LONG	CO_ICP_PPM	CR_ICP_PPM	CU_ICP_PPM
2	82E761002	082E/04	1976	1002	0	11	316052	5434832	49.03890	-119.51700	-1.0	-1.0	-1.00
3	82E761003	082E/04	1976	1003	0	11	314612	5435177	49.04157	-119.53684	-1.0	-1.0	-1.00
4	82E761004	082E/04	1976	1004	0	11	313348	5431809	49.01092	-119.55257	-1.0	-1.0	-1.00
5	82E761005	082E/04	1976	1005	0	11	311321	5431088	49.00382	-119.57993	-1.0	-1.0	-1.00
6	82E761006	082E/04	1976	1006	0	11	310301	5431686	49.00888	-119.59414	-1.0	-1.0	-1.00
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53010	93K087068	093K/16	2008	7068	0	10	411592	6079467	54.85448	-124.37713	8.7	35.0	30.27
53011	93K087069	093K/16	2008	7069	0	10	411678	6074795	54.81252	-124.37435	16.7	38.5	49.54
53012	93K087070	093K/16	2008	7070	10	10	408555	6072360	54.79009	-124.42217	10.2	39.5	37.66
53013	93K087071	093K/16	2008	7071	20	10	408555	6072360	54.79009	-124.42217	12.3	44.0	44.10
53014	93K087073	093K/16	2008	7073	0	10	411314	6071233	54.78045	-124.37893	10.6	42.5	27.40
53015	93K087074	093K/09	2008	7074	0	10	414212	6064404	54.71960	-124.33186	11.3	57.0	28.90
53016	93K087075	093K/16	2008	7075	0	10	408995	6068742	54.75766	-124.41420	14.1	54.0	42.40
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53019	93K087078	093K/10	2008	7078	0	10	380701	6063362	54.70341	-124.85145	12.3	37.5	25.87
53020	93K087079	093K/10	2008	7079	0	10	400476	6048188	54.57139	-124.53953	18.4	45.5	35.70
53021	93K087080	093K/09	2008	7080	0	10	412494	6043983	54.53584	-124.35242	10.6	58.5	16.30
53022	93K087082	093K/09	2008	7082	0	10	432601	6056909	54.65506	-124.04471	17.4	60.5	22.79
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53024	93F087084	093F/13	2008	7084	0	10	322613	5975477	53.89734	-125.69982	6.8	11.5	26.60
53025	93F087085	093F/13	2008	7085	10	10	327369	5976104	53.90457	-125.62787	6.1	14.0	23.90
53026	93F087086	093F/13	2008	7086	20	10	327369	5976104	53.90457	-125.62787	5.1	11.0	11.02
53027	93F087087	093F/14	2008	7087	0	10	336895	5970819	53.86020	-125.48020	3.3	8.5	8.95
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53029	93F087090	093F/14	2008	7090	0	10	346506	5963682	53.79903	-125.33063	4.1	10.5	8.09
53030	93F087091	093F/14	2008	7091	0	10	353952	5961195	53.77884	-125.21649	6.0	20.0	14.83
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53040	93K087102	093K/15	2008	7102	10	10	396339	6085386	54.90473	-124.61675	10.0	29.5	16.60
53041	93K087103	093K/15	2008	7103	20	10	396339	6085386	54.90473	-124.61675	9.7	30.0	14.60
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53052													
53053													

all strm icp v1

DIGITAL COLLECTION OF FIELD OBSERVATIONS AND RAW ANALTYICAL DATA

EACH SAMPLE SITE IDENTIFIED WITH A UNIQUE ID NUMBER

EACH SAMPLE NUMBER IS ATTRIBUTED WITH LOCATION INFORMATION, FIELD DATA AND ANALYTICAL RESULTS

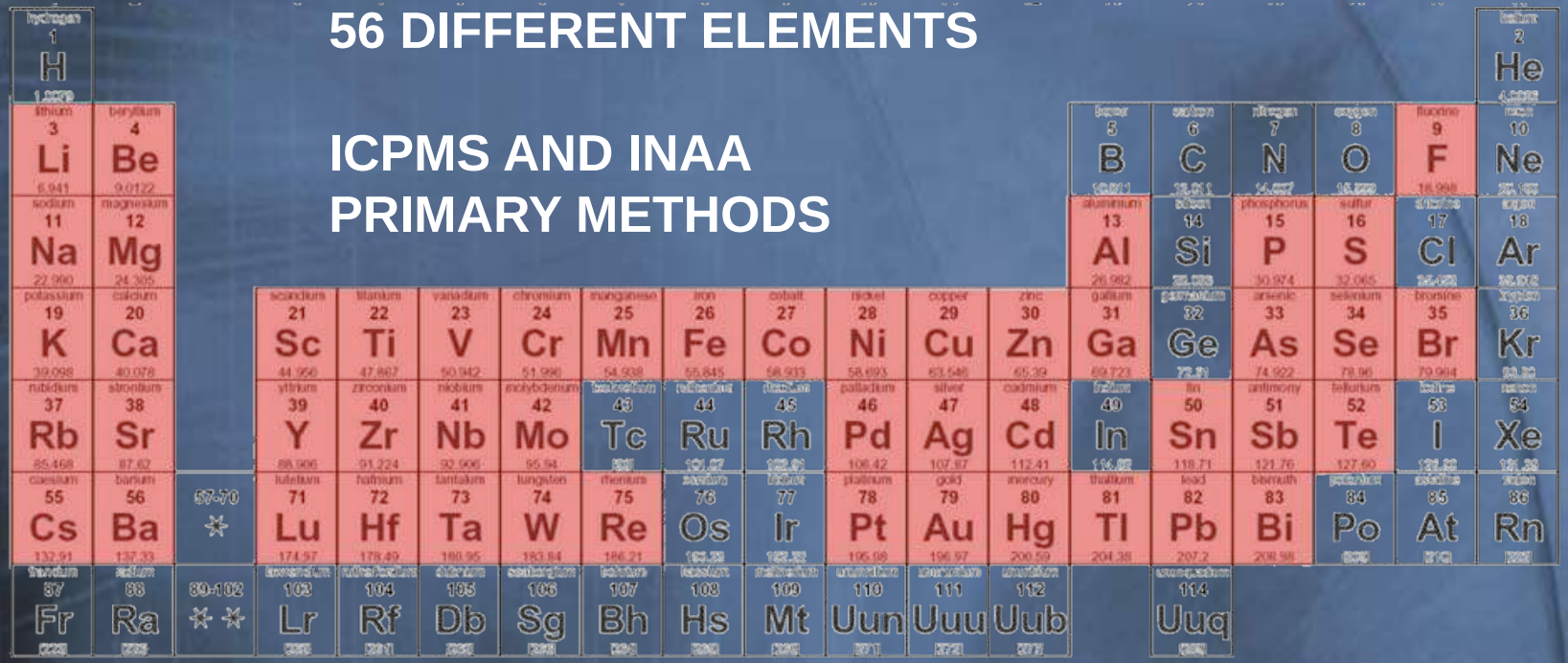
EASILY LOADED INTO ANY DATABASE MANAGEMENT PROGRAM, SPREADSHEET AND/OR GIS

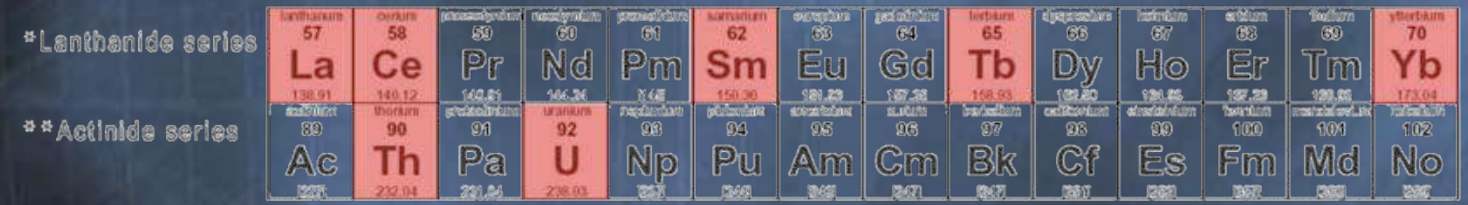
RGS DATABASE

ANALYTICAL SUITE

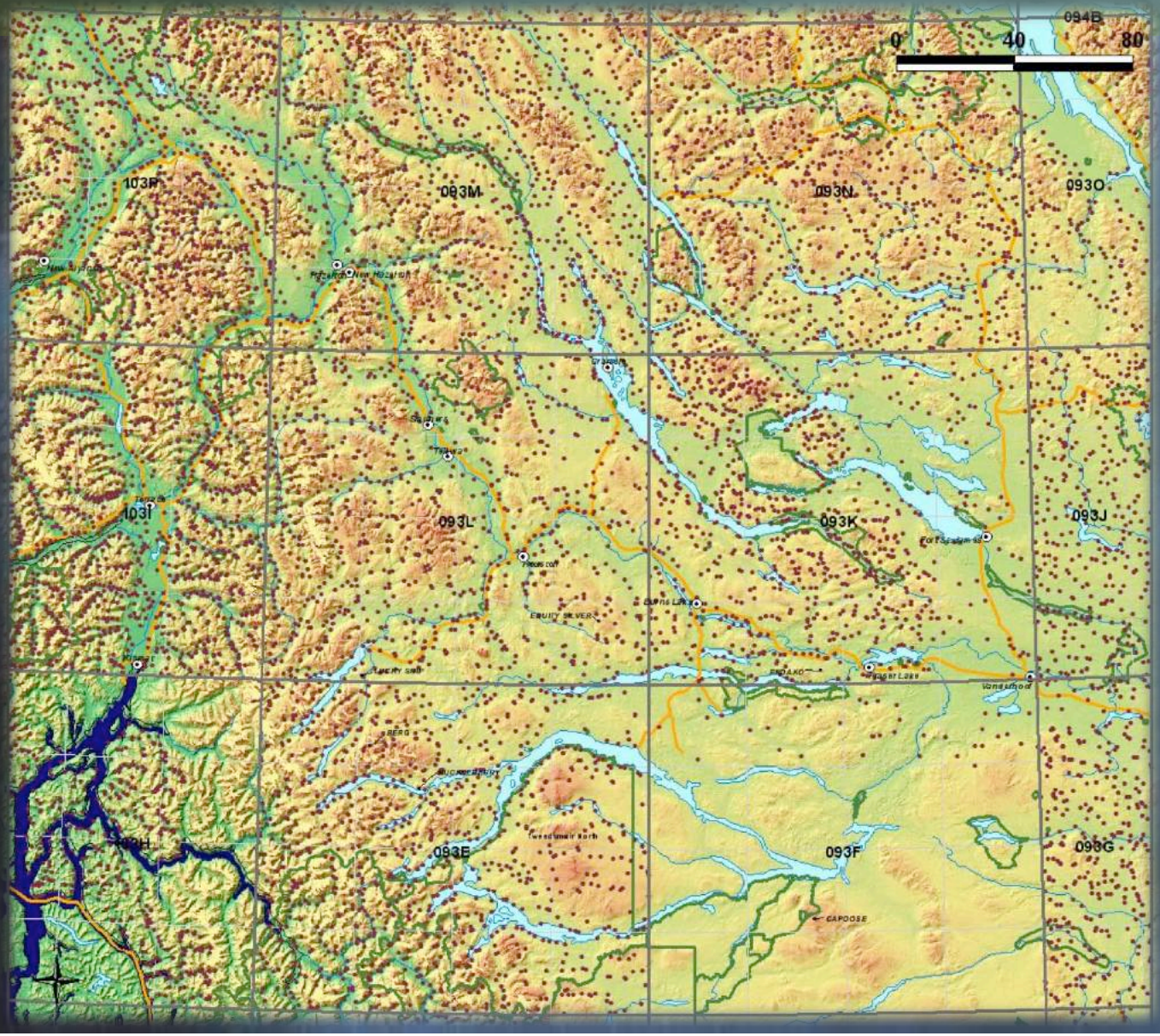
56 DIFFERENT ELEMENTS

ICPMS AND INAA PRIMARY METHODS





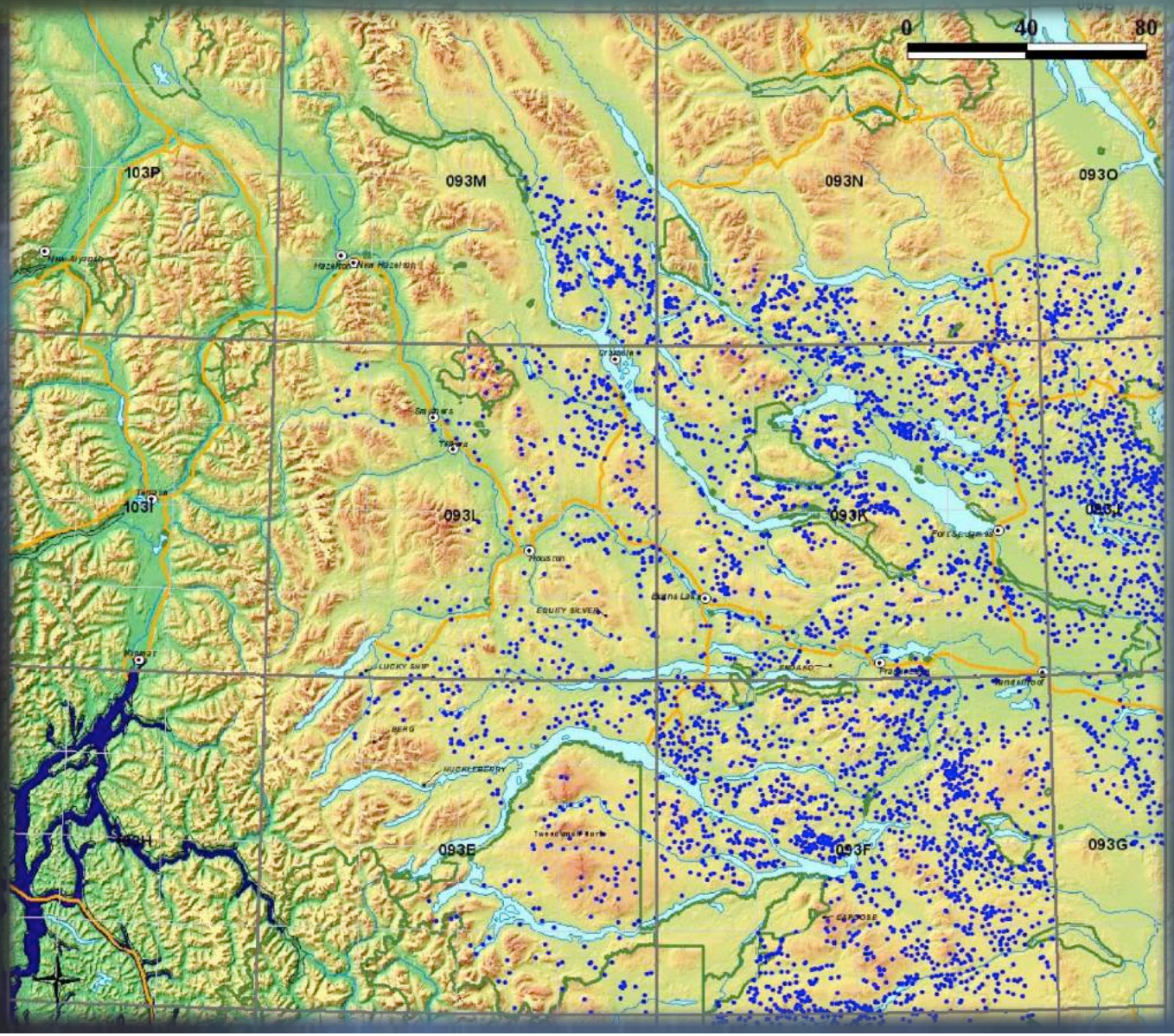
QUEST RGS- STREAM



STREAM BASED SITES

9014 SITES

QUEST RGS- LAKE



LAKE BASED SITES

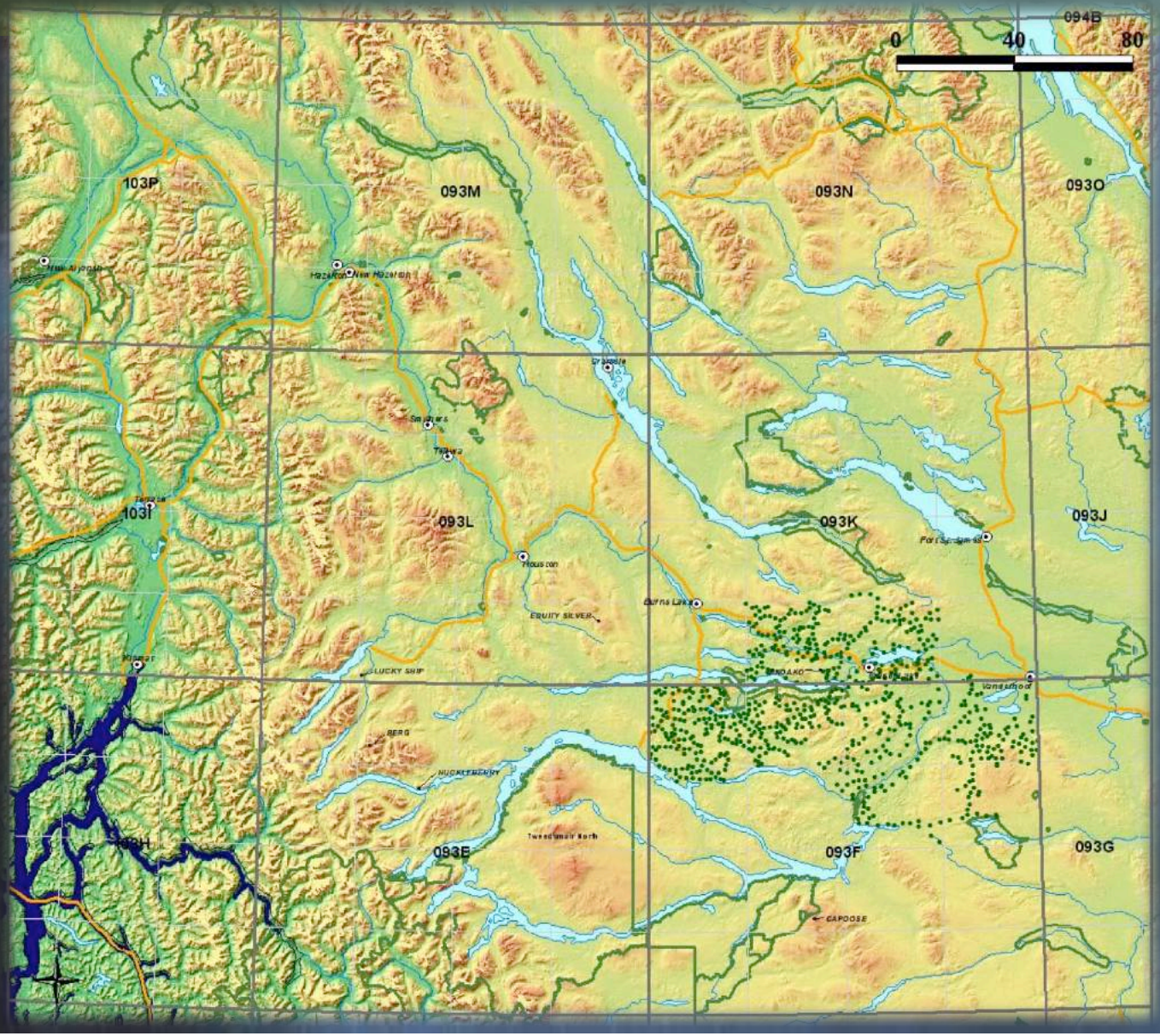
4660 SITES

QUEST RGS- TILL

TILL SITES

3223 SITES

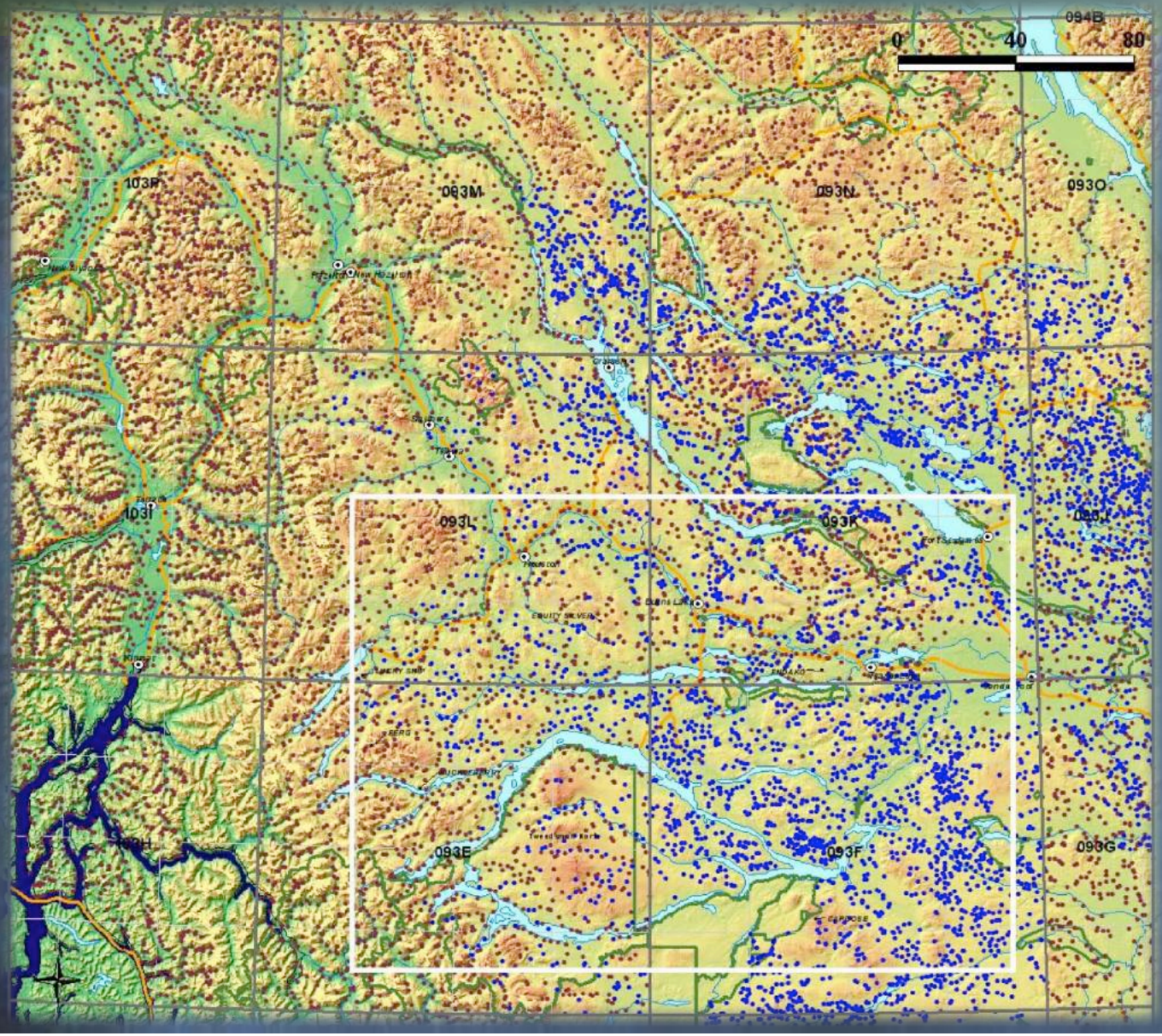
QUEST RGS- BARK



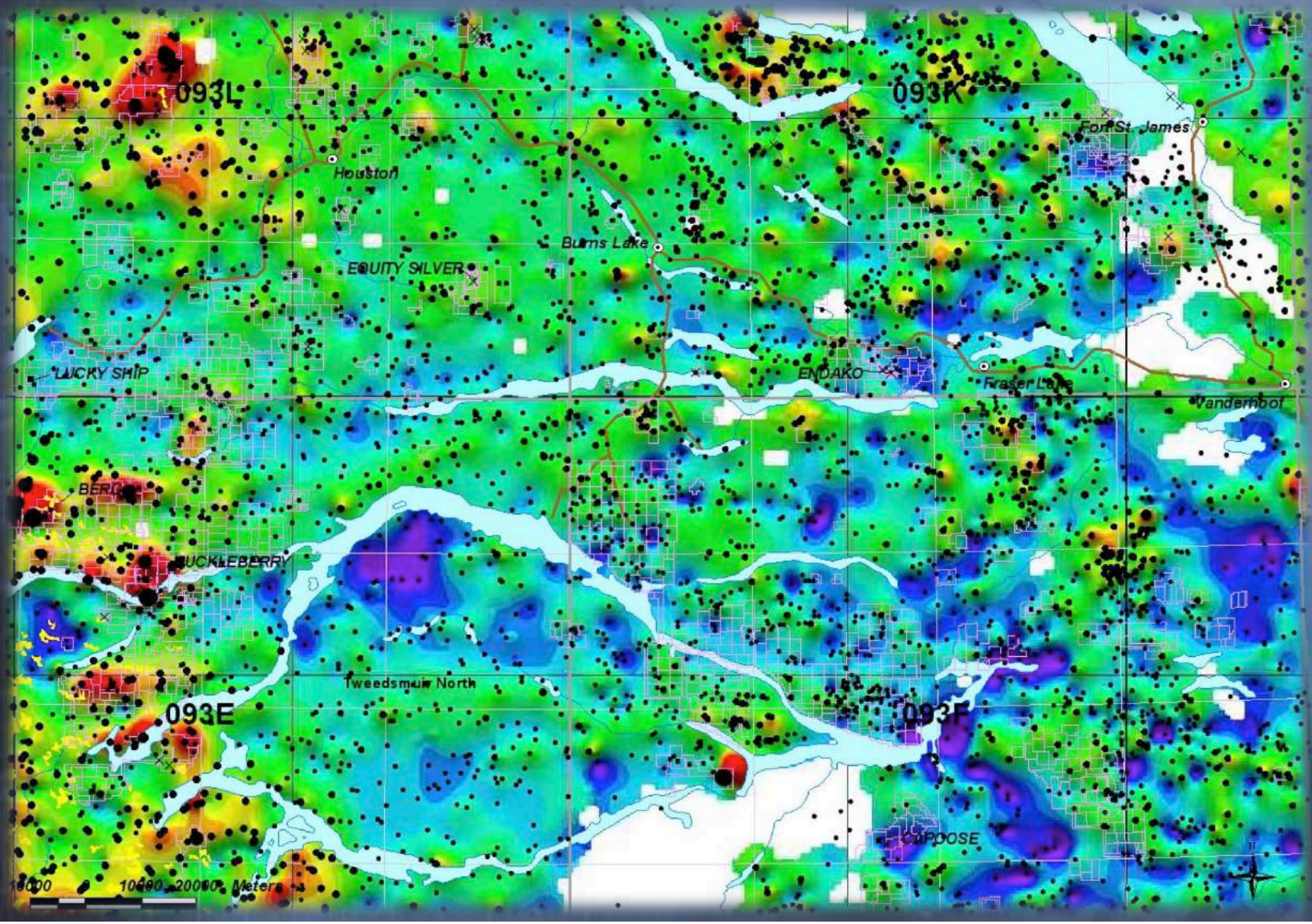
BARK SITES

715 SITES

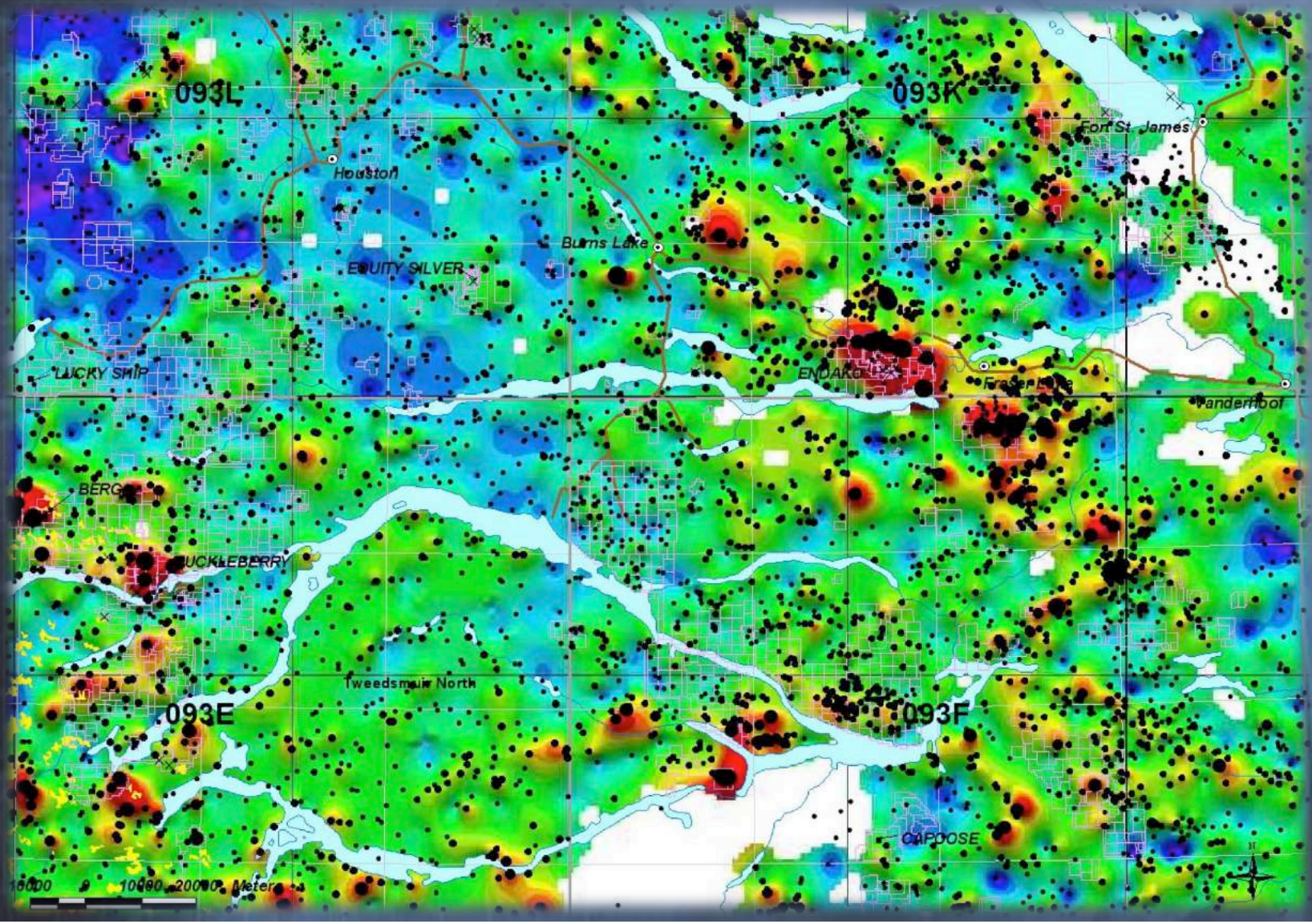
QUEST RGS - STREAM + LAKE



QUEST RGS- CU


093L
093K
Houston
Burns Lake
EQUITY SILVER
LUCKY SHIP
ENDAKO
Fraser Lake
Vanderhoof
Fort St. James
BERG
TUCKLEBERRY
Tweedsmuir North
093E
093F
CAPOOSE
10000 20000 Meters

QUEST RGS- MO


093L
093K
Houston
Fort St. James
Burns Lake
EQUITY SILVER
LUCKY SHIP
ENDAKO
Fraser Lake
Vanderhoof
BERG
BUCKLEBERRY
Tweedsmuir North
093E
093F
CAPOOSE
10000 0 10000 20000 Meters

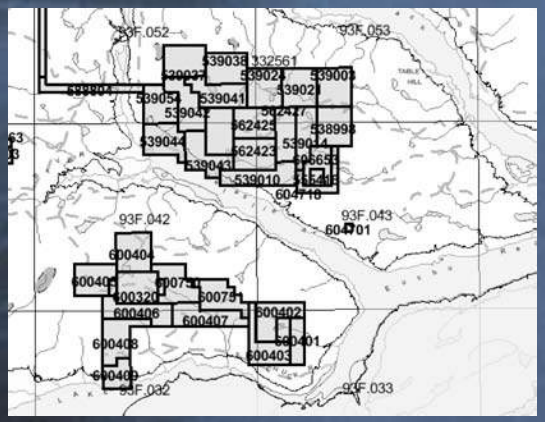
RGS OBJECTIVES

PROVIDE HIGH-QUALITY RECONNAISSANCE DATA THAT ASSISTS IN THE SEARCH AND DISCOVERY OF METALS IN BC

ENSURE THAT THE RGS DATABASE IS BUILT AND MAINTAINED USING NATIONAL STANDARDS AND QC/QA MEASURES

MAINTAIN THE DATABASE AS AN UP-TO-DATE AND COMPREHENSIVE COLLECTION OF GEOCHEMICAL INFORMATION THAT WILL CONTINUE TO BE RELAVANT AND USEFULL TO MORE DETAILED GEOSCIENCE INVESTIGATIONS

RGS MEASURES OF SUCCESS



SURVEYS ARE SUCCESSFULLY COMPLETED TO NATIONAL STANDARDS AND RESULTS ARE READILY AVAILABLE TO THE PUBLIC

WORK STIMULATES CLAIM ACQUISITION

FOLLOWUP INVESTIGATIONS ENCOURAGE FURTHER EXPLORATION EXPENDITURES

DISCOVERY OF MINERALIZED SOURCES AND DEPOSITS

FOCUSED EXPLORATION IN TARGET AREAS GENERATES ECONOMIC OPPORTUNITIES

SUMMARY

THE COMPILATION OF RGS RESULTS, INCLUDING DATA GENERATED BY SEVERAL GEOSCIENCE BC INITIATIVES, HAS GENERATED A WEALTH OF HIGH-QUALITY GEOSCIENCE INFORMATION THAT WILL BE AVAILABLE TO SUPPORT CURRENT AND FUTURE EXPLORATION ACTIVITES