BRITISH COLUMBIA
Ministry of Energy and Mines
Energy and Minerals Division
Geological Survey Branch

Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Wayne Jackaman, Garry Payie and Paul Wojdak

RGS
B.C. Regional Geochemical Survey

Open File 2000-14

Canadian Cataloguing in Publication Data

Jackaman, W. (Wayne)

Stream sediment and water geochemistry of the Queen Charlotte Islands, NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

(Open file, ISSN 0835-3530 ; 2000-14)

Issued by Geological Survey Branch.

"B.C. Regional Geochemical Survey."

Includes bibliographical references: p.

ISBN 0-7726-4230-3

1. Water - Composition - British Columbia - Queen Charlotte Islands. 2. Sediments (Geology) - British Columbia - Queen Charlotte Islands. 3. Geochemistry - British Columbia - Queen Charlotte Islands. 4. Geology, Economic - British Columbia - Queen Charlotte Islands. I. Payie, Garry, 1968- . II. Wojdak, Paul, 1948- . III. British Columbia. Ministry of Energy and Mines. IV. British Columbia. Geological Survey Branch. V. Title. VI. Title: B.C. Regional Geochemical Survey. VII. Series: Open file (British Columbia. Geological Survey Branch) ; 2000-14.

QE515.J32 2000 551.9’09711’12 C00-960154-6

VICTORIA
BRITISH COLUMBIA
CANADA

April 2000

STREAM SEDIMENT AND WATER GEOCHEMISTRY

OF PARTS OF THE

QUEEN CHARLOTTE ISLANDS

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

OPEN FILE 2000 - 14

TABLE OF CONTENTS

INTRODUCTION

This report presents new analytical data for 43 different elements from a regional stream sediment and water geochemistry survey (Figure 1) conducted by the British Columbia Geological Survey Branch on the Queen Charlotte Islands during 1999. The survey covers parts of seven 1:50,000 NTS map sheets in the Graham Island (NTS 103F) and the Hecate Strait (NTS 103G) areas: 103F/01 (Skidegate Channel), 103F/07E (Rennell Sound), 103F/08 (Yakoun Lake), 103F/09 (Port Clements), 103F/10E (Awun Lake), 103G/04 (Cumshewa Inlet) and 104G/05 (Lawnhill). Details on the geology and mineral potential of the Queen Charlotte Islands are described by Lefebure (1998).

Sample collection, preparation and analytical procedures conform to established standards of the National Geochemical Reconnaissance (NGR) and Regional Geochemical Survey (RGS) programs. Analytical results and field observations compiled by the RGS program in British Columbia are used in the development of a high-quality geochemical database suitable for mineral exploration, resource assessment, geological mapping and environmental studies. Funded under the government's Corporate Resource Inventory Initiative (CRII), this survey is part of the Ministry of Energy and Mines' contribution to the Queen Charlotte Islands Land Resource Planning process.

REPORT FORMAT

This report is divided into the following sections:

- Introduction and survey methodology.
- Listings of field observations and analytical data (Appendix A).
- Summary statistics (Appendix B).
- Element and sample location maps (Appendix C).
- Analytical and field data are included on diskette in comma-delimited format.

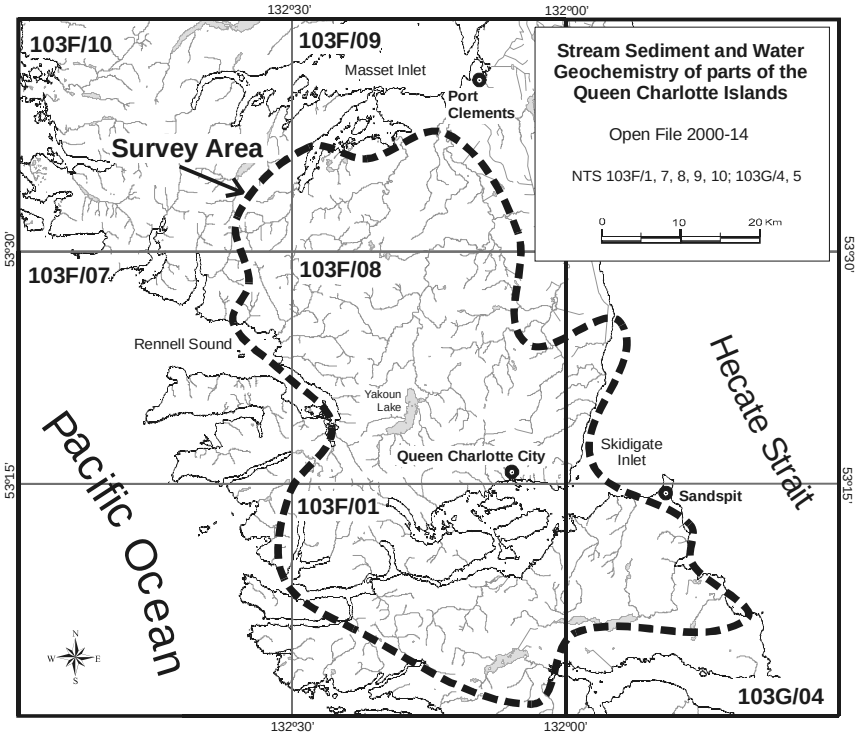


Figure 1. Location map of the Queen Charlotte Islands survey area.

SURVEY METHODOLOGY

SAMPLE COLLECTION

Truck supported sample collection was carried out during the summer of 1999. A total of 195 moss mat sediment and 193 stream water samples were systematically collected from 184 sites. Average sample site density was 1 site per 10 square kilometres over the 1,800 square kilometre survey area. Field duplicate samples (11 total pairs) were routinely collected in each analytical block of twenty samples.

Moss mat sediment samples weighing 1 to 2 kilograms were obtained from the active (subject to annual flooding) stream channel and placed in kraft paper bags. Samples were primarily composed of fine-grained material mixed with varying amounts of coarse sand, gravel and organic material. Additional information on the collection and preparation of moss mat sediment samples can be found in Gravel and Matysek (1989). Contaminated or poor-quality sample sites were avoided by choosing an alternate stream or by sampling a minimum of 60 metres upstream from the source of contamination. Surface water samples were collected in 250 millilitre bottles; precautions were taken to exclude suspended solids. Standard field observations regarding sample media, sample site and local terrain were also recorded. To assist follow-up, aluminum tags inscribed with the sample site identification number were fixed to permanent objects at each sample site.

SAMPLE PREPARATION

Sediment samples were air dried at a temperature range of 30°C to less than 50°C. Material finer than 1 millimetre was recovered by sieving each sample through a -18 mesh (<177 μm) ASTM screen. The -80 mesh fraction was obtained by dry sieving. Control reference material and analytical duplicate samples were inserted into each analytical block of twenty sediment samples. Any remaining -80 mesh sediment and a representative sample of +80 to -18 mesh fraction was archived for future analyses. Quality control reference standards and analytical blanks were inserted into each analytical block of twenty water samples.

SAMPLE ANALYSIS

Analysis of stream sediment and water samples was conducted by contract laboratories in accordance with established National Geochemical Reconnaissance (NGR) analytical methods. Analytical methods are strictly specified and carefully monitored to ensure consistent and reliable results regardless of the region, year or analytical laboratory.

TABLE 1. ANALYTICAL SUITE OF ELEMENTS

Element		Analytical Method	Reported Detection Limit	Unit
Arsenic	As	INAA	0.5	ppm
Barium	Ba	INAA	50	ppm
Bromine	Br	INAA	0.5	ppm
Calcium	Ca	INAA	1	%
Cerium	Ce	INAA	3	ppm
Cesium	Cs	INAA	1	ppm
Chromium	Cr	INAA	5	ppm
Cobalt	Co	INAA	1	ppm
Europium	Eu	INAA	0.2	ppm
Gold	Au	INAA	2	ppb
Hafnium	Hf	INAA	1	ppm
Iron	Fe	INAA	0.01	%
Lanthanum	La	INAA	0.5	ppm
Lutetium	Lu	INAA	0.05	ppm
Molybdenum	Mo	INAA	1	ppm
Neodymium	Nd	INAA	5	ppm
Rubidium	Rb	INAA	15	ppm
Samarium	Sm	INAA	0.1	ppm
Scandium	Sc	INAA	0.1	ppm
Sodium	Na	INAA	0.01	%
Tantalum	Ta	INAA	0.5	ppm
Terbium	Tb	INAA	0.5	ppm
Thorium	Th	INAA	0.2	ppm
Tungsten	W	INAA	1	ppm
Uranium	U	INAA	0.5	ppm
Ytterbium	Yb	INAA	0.2	ppm
Zinc	Zn	INAA	50	ppm
Antimony	Sb	AAS	0.2	ppm
Arsenic	As	AAS-H	0.2	ppm
Bismuth	Bi	AAS-H	0.2	ppm
Cadmium	Cd	AAS	0.2	ppm
Cobalt	Co	AAS	2	ppm
Copper	Cu	AAS	2	ppm
Iron	Fe	AAS	0.02	%
Fluorine	F	ION	40	ppm
Lead	Pb	AAS	2	ppm
Manganese	Mn	AAS	5	ppm
Mercury	Hg	AAS-F	10	ppb
Molybdenum	Mo	AAS	1	ppm
Nickel	Ni	AAS	2	ppm
Silver	Ag	AAS	0.2	ppm
Vanadium	V	AAS	5	ppm
Zinc	Zn	AAS	2	ppm
Loss on Ignition	LOI	GRAV	0.1	%
pH	pH	GCE	0.1	
Fluoride	FW	ION	20	ppb
Uranium	UW	LIF	0.05	ppb
Sulphate	SO4	TURB	1	ppm

AAS	atomic absorption spectroscopy	INAA	instrumental neutron activation analysis
AAS-H	hydride generation AAS	LIF	laser-induced fluorescence
AAS-F	flameless AAS	ION	specific ion electrode
GCE	glass combination electrode	TURB	turbidimetric

SEDIMENTS - AAS

A split of each prepared sediment sample was analyzed by CanTech Laboratories Inc., Calgary, Alberta for 16 elements: zinc, copper, lead, silver, molybdenum, cobalt, mercury, iron, manganese, nickel, fluorine, cadmium, vanadium, bismuth, antimony and arsenic. Loss on ignition (LOI) was also determined. Stated analytical detection limits for each element are listed in Table 1. Those concentrations below the stated detection limits are presented in data listings as a value equivalent to the detection limit.

For the determination of cadmium, cobalt, copper, iron, lead, manganese, nickel, silver and zinc, a 1 gram sample was reacted with 3 millilitres of concentrated HNO_3 for 30 minutes at 90ºC. Concentrated HCl (1 millilitre) was added and the digestion was continued at 90ºC for an additional 90 minutes. The sample solution was then diluted to 20 millilitres with metal-free water and mixed. Element concentrations were determined by atomic absorption spectroscopy (AAS) using an air-acetylene flame. Background corrections were made for lead, nickel, cobalt and silver.

Mercury was determined by the Hatch and Ott procedure with some modifications. A 0.5 gram sample was reacted with 20 millilitres concentrated HNO_3 and 1 millilitre concentrated HCl in a test tube for 10 minutes at room temperature and then for 2 hours in a 90ºC hot water bath. After digestion, the sample was cooled and diluted to 100 millilitres with metal-free water. The mercury present was reduced to the elemental state by the addition of 10 millilitres of 10% weight-to-volume $SnSO_4$ in H_2SO_4 The mercury vapour was then flushed by a stream of air into an absorption cell mounted in the light path of an atomic absorption spectrometer (AAS-F). Measurements were made at 253.7 nanometres. This method is described by Jonasson *et al.* (1973).

Molybdenum and vanadium were determined by aqua regia digestion - atomic absorption spectroscopy (AAS) using a nitrous oxide acetylene flame. A 0.5 gram sample was reacted with 1.5 millilitres concentrated HNO_3 at 90ºC for 30 minutes. At this point 0.5 millilitres of concentrated HCl was added and the digestion continued for an additional 90 minutes. After cooling, 8 millilitres of 1250 ppm Al solution was added and the sample solution diluted to 10 millilitres before determination by AAS.

Arsenic and bismuth were determined by aqua regia digestion - hydride generation atomic absorption spectroscopy. A 1 gram sample was reacted with 3 ml of concentrated HNO_3 for 30 minutes at 90ºC. Concentrated HCl (1 ml) was added and the digestion was continued at 90ºC for an additional 90 minutes. A 1 ml aliquot was diluted to 10 ml with 1.5M HCl in a clean test tube. The diluted sample solution was added to a sodium borohydride solution and the hydride vapour aspirated through a heated quartz tube in the light path of an atomic absorption spectrometer (AAS-H).

Antimony was determined as described by Aslin (1976). A 0.5 gram sample was placed in a test tube with 3 ml concentrated HNO_3 and 9 ml HCl. The mixture was allowed to stand overnight at room temperature prior to being heated to 90ºC and maintained at this temperature for 90 minutes. The mixture was cooled and a 1 ml aliquot was diluted to 10 ml with 1.8M HCl. This dilute solution was determined by hydride evolution-atomic absorption spectroscopy (AAS).

Fluorine was determined by specific ion electrode as described by Ficklin (1970). A 250 milligram sample was sintered with a 1-gram flux consisting of two parts by weight sodium carbonate and 1 part by weight potassium nitrate. The residue was leached with water. The sodium carbonate was neutralized with 10 millilitres 10% weight-by-volume citric acid, and the resulting solution diluted with water to 100 millilitres. Fluoride was then measured with a fluoride ion electrode (ION) and a reference electrode.

Loss on ignition was determined using a 0.5 gram sample. The sample was weighed into a 30 millilitre beaker, placed in a cold muffle furnace and heated to 500ºC over a period of 2 to 3 hours. The sample was maintained at this temperature for 4 hours, then allowed to cool to room temperature before weighing (GRAV).

SEDIMENTS - INAA

A split of each sample, which range from 11 to 31 grams (average 27 g), was analyzed for 29 elements (gold, antimony, arsenic, barium, bromine, calcium, cerium, cesium, chromium, cobalt, europium, hafnium, iron, lanthanum, lutetium, molybdenum, neodymium, nickel, rubidium, samarium, scandium, sodium, strontium, tantalum, terbium, thorium, tungsten, uranium, ytterbium and zinc) by Activation Laboratories, Ancaster, Ontario, using thermal instrumental neutron activation analysis (INAA). This technique involves irradiating the sample for 30 minutes in a neutron flux of $7x10^{11}$ neutrons/cm^2/ second. After a decay period of approximately 1 week, gamma-ray emissions for the elements were measured using a gamma-ray spectrometer with a high-resolution, coaxial germanium detector. Counting time was approximately 15 minutes per sample and the results were compiled on a computer and converted to concentrations. A complete list of elements and their stated instrumental detection limits are given in Table 1. Additional data for the seven elements selenium, silver, mercury, nickel, iridium, tin and strontium were not published because of inadequate detection limits and/or poor precision.

WATERS

Routine unfiltered lake waters were analyzed for the standard RGS water analytical suite of pH, uranium, fluoride and sulphate at CanTech Laboratories, Inc., Calgary. Stated detection limits are given in Table 2.

Hydrogen ion activity (pH) was measured, on a separate sample aliquot, with a Fisher Accumet pH meter with glass-calomel combination electrode (GCE).

Uranium was determined by laser-induced fluorescence (LIF) using a Scintrex UA-3 uranium analyzer. A complexing agent, known commercially as Fluran and composed of sodium pyrophosphate and sodium monophosphate (Hall, 1979), is added to produce a uranyl pyrophosphate species which fluoresces when exposed to the laser. As organic matter in the sample can cause unpredictable behaviour, a standard addition method is used. A total of 500 microlitres of Fluran solution was added to a 5 millilitre sample and allowed to stand for 24 hours, as the reaction of uranium with the complexing agent may be delayed or sluggish. At the end of this period fluorescence readings were made with the addition of 0.0, 0.2 and 0.4 ppb uranium. For high-concentration samples, the additions were 0.0, 2.0 and 4.0 ppb uranium. All readings are taken against a sample blank.

Fluoride was determined by ion selective electrode (ION). A 20 millilitre aliquot of the sample was mixed with 20 millilitres of TISAB II (total ionic strength adjustment buffer) buffer solution. Fluoride was determined with an Orion fluoride electrode in conjunction with a Corning ion meter.

Sulphate was determined by a turbidimetric method (TURB). A 50 millilitre aliquot was mixed with barium chloride and an isopropyl alcohol-HCl-NaCl reagent, and turbidity of the resulting barium sulphate solution measured with a spectrophotometer at 420 nanometres.

DRAINAGE BASINS

Drainage basins are defined by the topographic height of land that separates a stream from surrounding streams and includes the total area in which water drains into a stream system outlet. Drainage basins were delineated from NTS 1:50 000 maps by hand tracing the drainage basin boundaries. This line-work was digitized and each resulting drainage basin polygon was labeled with its unique sample number. On occasion, nested polygons were produced where two samples were taken from successive sites on the same stream; in these cases the downstream polygon was defined to end at the upstream sample site. Corresponding field and analytical data were joined to each digital polygon and the area and perimeter were calculated using simple GIS subroutines. When presented on a map, these polygons are assumed to depict the metal determination of a single stream sediment or water sample collected at a site near the drainage basin outlet.

ACKNOWLEDGMENTS

Survey design and implementation was by the authors. Sample preparation and geochemical analyses were conducted by the following companies:

Preparation:

Rossbacher Laboratories Ltd., Burnaby, B.C.

Sediment Analysis:

CanTech Laboratories Inc., Calgary, Alberta (AAS)
Activation Laboratories Ltd., Ancaster, Ontario (INAA)

Water Analysis:

CanTech Laboratories Inc., Calgary, Alberta

REFERENCES

Aslin, G.E.M. (1976): The Determination of Arsenic and Antimony in Geological Materials by Flameless Atomic Absorption Spectrophotometry; *Journal of Geochemical Exploration*, Volume 6, pages 321-330.

Ficklin, W.H. (1970): A Rapid Method for the Determination of Fluoride in Rocks and Soils, Using an Ion-Selective Electrode; *United States Geological Survey*, Professional Paper 700C, pages 186-188.

Gravel, J.L. and Matysek, P.F. (1989): 1988 Regional Geochemical Survey, Northern Vancouver Island and Adjacent Mainland; *B.C. Ministry of Energy, Mines and Petroleum Resources*, Geological Fieldwork 1988, paper 89-1, pages 585-591.

Hall, G.E.M. (1979): A Study of the Stability of Uranium in Waters Collected from Various Geological Environments in Canada; in Current Research, Part A, *Geological Survey of Canada*, Paper 79-1A, pages 361-365.

Jonasson, I.R., Lynch, J.J. and Trip, L.J. (1973): Field and Laboratory Methods Used by the Geological Survey of Canada in Geochemical Surveys: No. 12, Mercury in Ores, Rocks, Soils, Sediments and Water; *Geological Survey of Canada*, Paper 73-21.

Journeay, J. M. and Williams, S. P. (1995): GIS Map Library; A Window on Cordilleran Geology, *Geological Survey of Canada*, GSC Open File 2948.

Lefebure, D.V. (1998): Epithermal Gold Deposits of the Queen Charlotte Islands, *BC Ministry of Energy and Mines*, Geological Fieldwork 1997, pages 19-1 - 19-14.

STREAM SEDIMENT AND WATER GEOCHEMISTRY

OF PARTS OF THE

QUEEN CHARLOTTE ISLANDS

Open File 2000 - 14

APPENDIX A

FIELD OBSERVATIONS AND ANALYTICAL DATA

Reference Guide to Field Observations

MAP 1:50 000 NTS Map Sheet Number

ID Sample Site Number

UTMZ UTM Zone

UTME UTM East Coordinate (NAD 27/83)

UTMN UTM North Coordinate (NAD 27/83)

LAT Latitude in Decimal Degrees (NAD 83)

LONG Longitude in Decimal Degrees (NAD 83)

REP Replicate Sample Status :

Routine Sample
10 1st Field Duplicate
20 2nd Field Duplicate

MAT Sample Media Collected :

7 Moss Sediment
8 Moss Sediment and Water

ELEV Elevation of sample site above sea level (metres)

AREA Total area of drainage basin upstream from the RGS sample site. (square kilometres)

PERI Perimeter of drainage basin boundary upstream from the RGS sample site. (kilometres)

FORM Geological formation underlying sample site (after Journeay and Williams, 1995).

NTS	Skonun: sedimentary
NTP	Pemberton: volcanic
KS	Skeena: sedimentary
uKH	Honna: sedimentary
lKL	Longarm: sedimentary
JB	Bonanza: volcanic/sedimentary
TrK	Karmutsen: volcanic/sedimentary
OTg	undivided plutonic
MJgV	Vancouver Island: plutonic

WAT COL Water Colour :

0 Colourless 2 White Cloudy
1 Brown Clear 3 Brown Cloudy

FLW Water Flow Rate :

1 Slow 3 Fast
2 Moderate 4 Torrent

SED COL Sediment Colour :

R Red W White-Buff
G Grey-Blue O Olive-Green
T Tan-Brown B Black

SED PPT Sediment Precipitate :

N None

(otherwise, same as SED COL)

CON Site Contamination :

N None D Domestic
F Forestry P Possible

COMP Sediment Composition, Estimate of Sand - Fines - Organic Content :

0 Absent
1 Minor (<1/3 of total)
2 Moderate (1/3 to 2/3 of total)
3 Major (>2/3 of total)

WDTH Stream Width (metres)

DPTH Stream Depth (centimetres)

BNK Bank Composition :

U Unknown C Colluvium
A Alluvium R Rock

BNK PPT Bank Precipitate :

N None
(otherwise, same as SED COL)

CHL BED Channel Bed :

B Boulders S Coarse Sands

CHL PTN Channel Pattern :

S Shoots and Pools

PHY Physiography :

Y Youthful Mts

DRN Drainage Pattern :

D Dendritic H Herringbone

TYP Stream Type :

P Permanent S Seasonal

ODR Stream Order :

1 Primary 3 Tertiary
2 Secondary 4 Quaternary

SRC Stream Source :

M Melt Water G Groundwater

HGHT Height of moss mat above stream bed (metres)

COLR Colour of moss mat :

L Light Green D Dark Green

HLTH Health of moss mat :

A Alive D Dead

HOST Host of moss mat growth :

1 Rock, competent 2 Rock, incompetent
3 Log, competent 4 Log, incompetent

THCK Thickness of moss mat (centimetres)

DATE Sample Collection Date (day/month)

WT Weight of Sediment Sample Analyzed by INAA (grams)

Field Observations and Analytical Data

MAP	ID	UTM Zone	UTM East NAD27	UTM North NAD27	UTM East NAD83	UTM North NAD83	LAT	LONG	MAT	REP	ELEV	AREA	PERI	FORM	WTR CLR	FLW	SED CLR	SED PPT	CON	COMP	WDTH	DPTH	BNK	BNK PPT	CHL BED	CHL PTN	PHY	DRN	TYP	ODR	SRC	HGHT	COLR	HLTH	HOST	THCK	DATE
103F08	993002	8	677161	5913764	677040	5913948	53.345	132.340	8		800	3.15	8.16	JB	0	2	T	N	N	030	4.0	100	S	N	B	S	M	D	P	2	G	0.2	L	A	1	2	1407
103F08	993003	8	675961	5913412	675840	5913596	53.342	132.359	8		100	1.07	4.19	lKL	0	2	T	N	N	030	3.0	50	A	N	B	S	M	D	P	2	G	0.2	L	A	1	2	1407
103F08	993004	8	672262	5913375	672141	5913558	53.343	132.414	8		200	5.00	9.19	JB	0	2	T	N	F	130	4.0	40	A	N	S	S	M	D	P	2	G	0.3	L	A	1	1	1407
103F08	993005	8	672594	5911525	672473	5911708	53.326	132.410	8	10	100	2.93	7.87	JB	0	2	T	N	N	130	6.0	75	A	N	S	S	M	D	P	1	G	0.4	L	A	1	2	1407
103F08	993006	8	672594	5911525	672473	5911708	53.326	132.410	8	20	100	2.93	7.87	JB	0	2	T	N	N	130	6.0	75	A	N	S	S	M	D	P	1	G	0.4	L	A	1	2	1407
103F08	993008	8	672825	5910489	672704	5910672	53.317	132.407	8		200	2.26	6.32	lKL	1	2	T	N	N	130	4.0	75	A	N	S	S	M	D	P	1	G	0.5	L	A	1	3	1407
103F08	993009	8	672149	5908974	672028	5909157	53.304	132.418	8		100	12.72	17.01	OTg	0	2	T	N	F	130	10.0	100	A	N	S	S	M	D	P	1	G	0.2	L	A	1	2	1407
103F08	993010	8	670514	5914221	670393	5914404	53.351	132.440	8		100	1.03	4.21	JB	0	1	T	N	F	220	2.0	30	A	N	B	S	M	D	P	1	G	0.1	L	A	1	3	1407
103F08	993011	8	669941	5916263	669820	5916446	53.370	132.447	8		200	13.12	16.07	JB	0	2	T	N	N	220	6.0	50	R	N	B	S	M	D	P	2	G	0.2	L	A	1	1	1407
103F08	993012	8	669612	5917493	669491	5917676	53.381	132.452	8		400	3.73	9.59	OTg	0	2	T	N	N	130	4.0	70	R	N	B	S	M	D	P	1	G	0.4	L	A	1	1	1407
103F08	993013	8	672461	5919296	672340	5919479	53.396	132.408	8		700	6.62	11.31	NTP	0	2	T	N	F	220	8.0	50	A	N	S	S	M	D	P	2	G	0.2	L	A	3	2	1407
103F08	993014	8	671746	5920528	671625	5920711	53.408	132.418	8		600	4.44	8.24	NTP	0	2	T	N	N	220	5.0	40	R	N	S	S	M	D	P	1	G	0.2	L	A	3	3	1407
103F08	993015	8	670631	5920359	670510	5920542	53.406	132.435	8		500	1.63	5.01	NTP	0	2	T	N	F	220	5.0	40	R	N	B	S	M	D	P	2	G	0.2	L	A	1	2	1407
103F08	993016	8	667920	5927168	667799	5927350	53.468	132.472	8		400	2.89	7.16	NTP	0	1	T	N	F	220	4.0	40	C	N	S	S	M	D	P	2	G	0.1	L	A	3	2	1507
103F08	993017	8	666193	5928090	666072	5928272	53.477	132.497	8		400	8.22	13.82	OTg	0	2	T	N	F	220	8.0	70	R	R	S	S	M	D	P	2	G	0.5	L	A	1	2	1507
103F08	993018	8	666181	5927871	666060	5928053	53.475	132.498	8		400	5.91	9.92	OTg	0	1	T	N	N	220	8.0	70	R	N	S	S	M	D	P	2	G	0.4	L	A	2	3	1507
103F08	993019	8	668583	5925749	668462	5925931	53.455	132.463	8		200	10.14	17.90	NTP	0	2	T	N	F	220	10.0	100	R	N	S	S	M	D	P	3	G	0.2	L	A	2	1	1507
103F08	993020	8	666994	5923788	666873	5923970	53.438	132.488	8		200	1.81	6.00	NTP	0	1	T	N	F	130	4.0	40	A	N	S	S	M	D	P	2	G	0.3	L	A	4	2	1507
103F08	993022	8	666534	5922506	666413	5922689	53.427	132.495	8		200	0.58	3.43	NTP	0	1	T	N	F	220	1.5	30	A	N	S	S	M	D	P	1	G	0.1	L	A	1	2	1507
103F08	993023	8	667763	5920930	667642	5921113	53.412	132.478	8		400	0.75	3.42	NTP	0	1	T	N	N	220	1.0	20	R	R	S	S	M	D	P	1	G	0.1	L	A	1	1	1507
103F07	993024	8	663047	5925685	662926	5925867	53.457	132.546	8		600	0.40	2.98	NTP	0	2	T	N	F	310	1.5	30	R	N	S	S	M	D	P	1	G	0.2	L	A	1	2	1507
103F07	993025	8	663611	5924851	663490	5925033	53.449	132.538	8		300	10.70	16.17	NTP	0	2	T	N	F	130	6.0	100	R	N	S	S	M	D	P	2	G	0.5	L	A	1	4	1507
103F07	993026	8	664858	5922539	664737	5922722	53.428	132.520	8		300	6.64	11.82	NTP	0	1	T	N	F	130	12.0	150	A	N	S	S	M	D	P	1	G	0.3	L	A	3	6	1507
103F07	993027	8	661122	5922629	661001	5922812	53.430	132.577	8	10	300	9.83	13.34	NTP	0	2	T	N	F	220	6.0	100	R	N	S	S	M	D	P	2	G	0.3	L	A	1	1	1507
103F07	993028	8	661122	5922629	661001	5922812	53.430	132.577	8	20	300	9.83	13.34	NTP	0	2	T	N	F	220	6.0	100	R	N	S	S	M	D	P	2	G	0.3	L	A	1	1	1507
103F08	993029	8	689942	5904408	689821	5904592	53.257	132.154	8		250	0.88	3.99	uKH	0	1	T	N	F	220	2.0	20	A	N	S	S	M	D	P	1	G	0.1	L	A	1	2	1607
103F08	993030	8	689738	5904140	689617	5904324	53.254	132.157	8		200	6.95	13.01	uKH	0	2	T	N	F	130	7.0	50	A	N	S	S	M	D	P	1	G	0.2	L	A	1	2	1607
103F08	993031	8	689995	5906459	689874	5906643	53.275	132.152	8		300	4.15	9.44	KS	0	2	T	N	F	220	3.0	30	A	N	B	S	M	D	P	1	G	0.1	L	A	1	1	1607
103F08	993032	8	690804	5906501	690683	5906686	53.275	132.140	8		400	1.74	5.75	KS	0	1	T	N	F	220	2.0	40	A	N	S	S	M	D	P	1	G	0.3	L	A	1	1	1607
103F08	993033	8	690278	5908617	690157	5908802	53.294	132.147	8		400	5.91	11.68	KS	0	2	T	N	N	130	5.0	60	A	N	S	S	M	D	P	2	G	0.4	L	A	1	3	1607
103F08	993034	8	690391	5909706	690270	5909891	53.304	132.144	8		500	9.35	13.09	JB	0	2	T	N	N	130	6.0	70	A	N	S	S	M	D	P	1	G	0.4	L	A	1	1	1607
103F08	993036	8	688629	5908446	688508	5908631	53.293	132.172	8		700	10.47	13.53	KS	0	2	T	N	F	220	6.0	50	A	N	S	S	M	D	P	1	G	0.1	L	A	1	2	1607
103F08	993037	8	690226	5910902	690105	5911087	53.315	132.146	8		500	1.99	5.37	JB	1	2	T	N	F	220	5.0	50	R	N	S	S	M	D	P	1	G	0.2	L	A	1	1	1607
103F08	993038	8	688176	5911872	688055	5912057	53.324	132.176	8		600	3.52	7.93	JB	0	1	T	N	F	220	4.0	30	A	N	S	S	M	D	P	1	G	0.2	L	A	4	2	1607
103F08	993039	8	687186	5912622	687065	5912807	53.331	132.191	8		500	4.17	8.65	JB	0	1	T	N	F	130	6.0	50	A	N	S	S	M	D	P	1	G	0.3	L	A	1	4	1607
103F08	993040	8	691637	5921023	691516	5921208	53.405	132.119	8		300	19.13	19.77	JB	0	1	T	N	F	220	7.0	80	O	N	S	S	M	D	P	2	G	0.2	L	A	4	2	1607
103G04	993042	9	306321	5902224	306212	5902419	53.236	131.904	8		50	5.97	10.66	KS	0	1	T	N	N	220	4.0	30	A	N	S	S	M	D	P	2	G	0.1	L	A	1	4	1607
103G04	993043	9	314477	5896836	314369	5897032	53.190	131.779	8		50	12.20	17.05	NTS	1	1	T	N	F	030	5.0	50	A	N	S	S	H	D	P	2	G	0.3	L	A	1	1	1607
103G04	993044	9	312590	5894382	312482	5894578	53.167	131.805	8		100	8.17	12.67	JB	1	1	T	N	F	220	4.0	40	O	N	S	S	H	D	P	1	G	0.2	L	A	3	2	1607
103G04	993045	9	313805	5888189	313697	5888385	53.112	131.784	7		200	0.66	3.29	JB			T	N	N	130	2.0	20	A	N	S	S	M	D	P	2	G	0.1	L	A	1	2	1707
103G04	993046	9	319922	5887772	319814	5887969	53.111	131.692	8		50	4.04	9.18	JB	0	1	T	N	N	220	4.0	30	A	N	S	S	M	D	P	1	G	0.1	L	A	1	1	1707
103G04	993048	9	317474	5887581	317366	5887777	53.108	131.729	8		100	2.57	6.33	JB	0	1	T	N	F	030	4.0	40	R	N	S	S	M	D	P	1	G	0.3	L	A	1	2	1707
103G04	993049	9	314686	5892205	314578	5892401	53.149	131.773	8		100	2.32	6.26	JB	0	1	T	N	F	220	5.0	50	O	N	S	S	H	D	P	2	G	0.3	L	A	3	3	1707
103F01	993050	8	711976	5889533	711856	5889719	53.115	131.834	8		100	4.66	10.00	JB	0	1	T	N	F	220	3.0	40	O	N	S	S	M	D	P	1	G	0.2	L	A	4	2	1707
103G04	993051	9	308327	5888367	308218	5888562	53.112	131.865	8		200	19.12	21.97	KS	0	1	T	N	F	220	5.0	50	O	N	S	S	M	D	P	1	G	0.3	L	A	4	2	1707

Field Observations and Analytical Data

MAP	ID	UTM Zone	UTM East NAD27	UTM North NAD27	UTM East NAD83	UTM North NAD83	LAT	LONG	MAT	REP	ELEV	AREA	PERI	FORM	WTR CLR	FLW	SED CLR	SED PPT	CON	COMP	WDTH	DPTH	BNK	BNK PPT	CHL BED	CHL PTN	PHY	DRN	TYP	ODR	SRC	HGHT	COLR	HLTH	HOST	THCK	DATE
103G04	993052	9	302103	5888336	301994	5888530	53.109	131.958	8		200	3.99	9.93	KS	0	1	T	N	F	220	3.0	40	A	N	S	S	M	D	P	1	G	0.1	L	A	1	1	1707
103G04	993053	9	299697	5888822	299588	5889016	53.113	131.995	8		200	6.34	10.81	KS	0	1	T	N	F	220	6.0	50	A	N	S	S	M	D	P	1	G	0.2	L	A	1	2	1707
103G04	993054	9	295717	5893932	295608	5894126	53.157	132.057	8		300	2.63	7.49	JB	0	2	T	N	F	130	3.0	40	A	N	S	S	M	D	P	1	G	0.2	L	A	1	2	1707
103F01	993055	8	699153	5896507	699032	5896692	53.182	132.021	8	10	100	4.75	9.52	JB	0	2	T	N	N	220	6.0	70	A	N	S	S	M	D	P	1	G	0.2	L	A	1	2	1707
103F01	993056	8	699153	5896507	699032	5896692	53.182	132.021	8	20	100	4.75	9.52	JB	0	2	T	N	N	220	6.0	70	A	N	S	S	M	D	P	1	G	0.2	L	A	1	2	1707
103G04	993057	9	302296	5898537	302187	5898732	53.201	131.962	8		100	4.57	10.76	uKH	0	2	T	N	N	220	6.0	50	A	N	S	S	M	D	P	3	G	0.2	L	A	4	1	1707
103F09	993058	8	667701	5943550	667580	5943731	53.616	132.467	8		100	0.81	4.98	NTP	0	1	T	N	F	112	2.0	30	C	N	S	S	M	D	P	1	G	0.2	L	A	3	1	1807
103F09	993059	8	666910	5942262	666789	5942443	53.604	132.479	8		200	3.14	7.46	NTP	0	2	T	N	F	130	5.0	60	A	N	B	S	M	D	P	1	G	0.2	L	A	1	1	1807
103F09	993060	8	666010	5939061	665889	5939242	53.576	132.494	8		200	2.22	6.16	NTP	0	1	B	N	F	220	7.0	50	R	N	S	S	M	D	P	1	G	0.2	D	D	1	1	1807
103F10	993062	8	661742	5932953	661621	5933134	53.522	132.562	8		600	0.78	3.91	NTP	0	1	T	N	N	121	2.0	40	C	N	B	S	M	D	P	1	G	0.2	L	A	1	1	1807
103F10	993063	8	662211	5933363	662090	5933544	53.526	132.555	8	10	400	2.44	6.84	NTP	0	2	T	N	N	220	5.0	40	A	N	S	S	M	D	P	1	G	0.2	L	A	1	3	1807
103F10	993064	8	662211	5933363	662090	5933544	53.526	132.555	8	20	400	2.44	6.84	NTP	0	2	T	N	N	220	5.0	40	A	N	S	S	M	D	P	1	G	0.2	L	A	1	3	1807
103F10	993065	8	662571	5933849	662450	5934030	53.530	132.549	8		200	9.79	16.84	NTP	0	2	T	N	F	220	8.0	100	A	N	S	S	M	D	P	2	G	0.5	L	A	4	3	1807
103F10	993066	8	662532	5934027	662411	5934208	53.532	132.550	8		300	5.30	9.73	NTP	0	2	T	N	N	220	6.0	50	A	N	S	S	M	D	P	1	G	0.4	L	A	4	4	1807
103F10	993067	8	663444	5933959	663323	5934140	53.531	132.536	8		300	1.45	5.48	NTP	0	2	T	N	F	220	3.0	30	C	N	B	S	M	D	P	1	G	0.3	L	A	1	2	1807
103F10	993068	8	665217	5932636	665096	5932817	53.518	132.510	8		400	7.42	11.57	OTg	0	2	T	N	N	220	10.0	50	A	N	S	S	M	D	P	1	G	0.4	L	A	1	2	1807
103F09	993069	8	666072	5936023	665951	5936204	53.548	132.495	8		200	2.66	7.82	NTP	0	1	T	N	F	220	3.0	30	A	N	S	S	M	D	P	1	G	0.1	L	A	1	3	1807
103F09	993070	8	667796	5937477	667675	5937658	53.561	132.468	8		600	0.62	3.43	NTP	0	1	T	N	N	310	3.0	30	R	N	B	S	M	D	P	1	G	0.2	L	A	1	3	1807
103F09	993071	8	667847	5937605	667726	5937786	53.562	132.468	8		500	0.90	5.00	NTP	0	1	T	N	N	220	2.0	30	R	R	S	S	M	D	P	1	G	0.2	L	A	1	2	1807
103F09	993072	8	672197	5941161	672076	5941342	53.593	132.400	8		200	1.62	5.53	NTP	0	1	T	N	N	130	5.0	50	A	N	B	S	M	D	P	1	G	0.3	L	A	1	2	1807
103F09	993073	8	669829	5935781	669708	5935962	53.545	132.439	8		700	1.00	4.19	NTP	0	2	T	N	N	310	4.0	40	R	N	S	S	M	D	P	1	G	0.2	L	A	1	2	1807
103F09	993075	8	669715	5935891	669594	5936072	53.546	132.440	8		700	5.27	9.64	NTP	0	1	T	N	F	310	5.0	40	R	B	S	S	M	D	P	1	G	0.2	L	A	1	1	1807
103F09	993076	8	670848	5936978	670727	5937159	53.556	132.423	8		800	0.76	4.17	NTP	0	1	T	N	F	310	2.0	20	A	N	S	S	M	D	P	1	G	0.1	L	A	1	1	1807
103F09	993077	8	671840	5937149	671719	5937330	53.557	132.408	8		600	0.93	4.10	NTP	0	1	T	N	N	310	2.0	30	A	N	B	S	M	D	P	1	G	0.2	L	A	1	2	1807
103F09	993078	8	672653	5936770	672532	5936951	53.553	132.395	8		500	2.28	6.33	NTP	0	1	T	N	F	220	2.0	30	A	N	S	S	M	D	P	1	G	0.1	L	A	4	2	1807
103F08	993079	8	692789	5904373	692668	5904558	53.255	132.112	8		100	1.54	5.61	KS	0	1	T	N	D	220	4.0	50	A	N	S	S	M	D	P	1	G	0.2	L	A	1	1	1907
103F08	993080	8	685915	5915469	685794	5915654	53.357	132.208	8		400	9.37	12.62	JB	0	1	T	N	F	310	6.0	40	A	N	S	S	M	D	P	1	G	0.2	L	A	3	2	1907
103F08	993082	8	686732	5919696	686611	5919880	53.395	132.193	8		700	8.99	12.53	JB	0	2	T	N	F	121	5.0	50	A	N	B	S	M	D	P	2	G	0.2	L	A	1	2	1907
103F08	993083	8	684578	5914101	684457	5914286	53.346	132.229	8		500	3.12	8.00	KS	0	1	T	N	N	030	2.0	40	O	N	S	S	H	D	P	1	G	0.2	L	A	1	2	1907
103F08	993084	8	683678	5911429	683557	5911614	53.322	132.244	8		800	2.74	7.21	KS	0	2	T	N	F	220	4.0	60	R	N	B	S	M	D	P	1	G	0.2	L	A	1	3	1907
103F08	993085	8	678590	5914950	678469	5915134	53.355	132.318	8		1000	0.48	3.01	NTP	0	3	T	N	N	030	3.0	30	R	N	B	S	M	D	P	1	G	0.1	L	A	1	1	1907
103F08	993086	8	677151	5914770	677030	5914954	53.354	132.340	8		800	2.49	7.96	JB	0	2	T	N	F	130	7.0	50	A	N	S	S	M	D	P	2	G	0.2	L	A	3	2	1907
103F08	993087	8	677090	5914882	676969	5915066	53.355	132.341	8		800	2.02	6.27	JB	0	2	T	N	N	030	5.0	40	A	N	S	S	M	D	P	1	G	0.2	L	A	1	2	1907
103F08	993088	8	677373	5918485	677252	5918669	53.387	132.335	8		500	6.31	11.60	JB	0	2	T	N	F	220	8.0	50	A	N	S	S	M	D	P	2	G	0.2	L	A	1	2	1907
103F08	993089	8	680390	5917628	680269	5917812	53.379	132.290	8		400	8.63	13.05	JB	0	2	T	N	F	130	8.0	90	A	N	S	S	M	D	P	2	G	0.2	L	A	1	1	1907
103F08	993090	8	681361	5919292	681240	5919476	53.393	132.274	8		500	1.62	5.71	JB	0	1	T	N	F	220	2.0	50	A	N	B	S	M	D	P	1	G	0.2	L	A	1	2	1907
103F08	993091	8	682216	5921223	682095	5921407	53.410	132.260	8		400	1.96	5.74	JB	0	1	T	N	F	130	2.0	50	A	N	S	S	M	D	P	1	G	0.2	L	A	1	2	1907
103F08	993092	8	681988	5924184	681867	5924368	53.437	132.262	8	10	300	5.96	10.21	JB	0	2	T	N	F	220	6.0	70	A	N	S	S	M	D	P	1	G	0.2	L	A	1	2	1907
103F08	993093	8	681988	5924184	681867	5924368	53.437	132.262	8	20	300	5.96	10.21	JB	0	2	T	N	N	220	6.0	70	A	N	S	S	M	D	P	1	G	0.2	L	A	1	2	1907
103F08	993094	8	696980	5908736	696859	5908921	53.293	132.046	8		900	5.76	11.08	JB	0	1	T	N	F	220	5.0	40	O	N	S	S	M	D	P	2	G	0.2	L	A	1	2	1907
103F08	993095	8	691119	5916543	690998	5916728	53.365	132.129	8		400	3.19	7.46	JB	0	1	T	N	F	311	1.0	20	O	N	S	S	M	D	P	1	G	0.1	L	A	1	1	1907
103F08	993096	8	690304	5915151	690183	5915336	53.353	132.142	8		500	4.05	8.62	JB	0	1	T	N	F	130	4.0	50	O	N	S	S	M	D	P	1	G	0.2	L	A	4	1	1907
103F08	993098	8	692983	5918858	692862	5919043	53.385	132.100	8		400	1.79	5.57	JB	0	1	B	N	N	310	2.0	30	C	N	S	S	M	D	P	1	G	0.1	L	A	1	1	1907
103F08	993099	8	692871	5918812	692750	5918997	53.385	132.102	8		400	6.73	12.02	JB	0	1	T	N	F	031	6.0	50	A	N	S	S	M	D	P	1	G	0.2	L	A	1	3	1907
103F08	993100	8	675845	5921258	675724	5921442	53.413	132.356	8		500	3.21	7.20	JB	0	2	T	N	N	030	4.0	50	R	N	S	S	M	D	P	1	G	0.2	L	A	1	2	2007

Field Observations and Analytical Data

MAP	ID	UTM Zone	UTM East NAD27	UTM North NAD27	UTM East NAD83	UTM North NAD83	LAT	LONG	MAT	REP	ELEV	AREA	PERI	FORM	WTR CLR	FLW	SED CLR	SED PPT	CON	COMP	WDTH	DPTH	BNK	BNK PPT	CHL BED	CHL PTN	PHY	DRN	TYP	ODR	SRC	HGHT	COLR	HLTH	HOST	THCK	DATE
103F08	993102	8	675933	5921445	675812	5921629	53.414	132.355	8		500	15.98	17.59	JB	0	2	T	N	F	030	10.0	80	R	N	S	S	M	D	P	2	G	0.2	L	A	1	3	2007
103F08	993103	8	679262	5922631	679141	5922815	53.424	132.304	8		400	0.65	3.42	JB	0	1	T	N	F	130	2.0	30	A	N	S	S	M	D	P	1	G	0.2	L	A	1	2	2007
103F08	993104	8	679589	5925883	679468	5926066	53.453	132.297	8		300	2.21	7.33	JB	0	2	T	N	F	030	5.0	50	A	N	S	S	M	D	P	2	G	0.2	L	A	1	2	2007
103F08	993105	8	679257	5925511	679136	5925694	53.450	132.302	8		400	0.84	3.69	JB	0	1	T	N	F	130	2.0	40	A	N	S	S	M	D	P	2	G	0.2	L	A	1	2	2007
103F08	993106	8	679056	5924954	678935	5925137	53.445	132.306	8	10	400	12.77	15.63	JB	0	2	T	N	F	220	10.0	100	A	N	S	S	M	D	P	2	G	0.5	L	A	1	2	2007
103F08	993107	8	679056	5924954	678935	5925137	53.445	132.306	8	20	400	12.77	15.63	JB	0	2	T	N	F	220	10.0	100	A	N	S	S	M	D	P	2	G	0.5	L	A	1	2	2007
103G05	993108	9	304913	5920747	304803	5920942	53.401	131.936	8		100	7.02	11.09	NTS	1	1	T	N	F	220	4.0	70	O	N	S	S	L	D	P	1	G	0.3	L	A	3	3	2007
103G05	993109	9	303835	5913699	303725	5913894	53.338	131.948	8		50	8.14	11.93	JB	0	1	T	N	F	220	4.0	30	O	N	S	S	M	D	P	1	G	0.2	L	A	1	1	2007
103G05	993110	9	303110	5912250	303000	5912445	53.324	131.958	8		50	17.18	24.48	JB	0	2	T	N	F	130	8.0	50	A	N	S	S	M	D	P	2	G	0.3	L	A	1	1	2007
103G05	993111	9	300745	5906466	300636	5906661	53.272	131.990	8		200	6.03	10.48	JB	0	2	T	N	D	130	3.0	40	A	N	B	S	M	D	P	2	G	0.3	L	A	1	1	2007
103F08	993113	8	697819	5904298	697698	5904483	53.253	132.036	8		100	1.29	5.76	JB	0	1	T	N	D	220	2.0	50	R	N	B	S	M	D	P	1	G	0.2	L	A	1	1	2107
103F08	993114	8	684354	5915319	684233	5915504	53.357	132.232	8		500	0.44	2.95	JB	0	1	T	N	F	220	4.0	40	O	N	S	S	M	D	P	1	G	0.2	L	A	3	3	2107
103F08	993115	8	680194	5923165	680073	5923349	53.428	132.290	8		300	0.52	2.95	JB	0	1	T	N	F	220	1.5	30	O	N	S	S	M	D	P	1	G	0.2	L	A	3	2	2107
103F08	993116	8	682854	5927152	682733	5927335	53.463	132.247	8		200	10.27	12.38	JB	0	2	T	N	F	130	5.0	50	O	N	S	S	M	D	P	2	G	0.2	L	A	3	2	2107
103F08	993117	8	685392	5930493	685272	5930676	53.492	132.207	8		200	6.76	11.05	KS	0	1	T	N	F	030	4.0	40	R	N	S	S	H	D	P	2	G	0.2	L	A	1	1	2107
103F09	993118	8	681628	5931281	681507	5931463	53.501	132.263	8		200	21.65	26.51	KS	0	1	T	N	F	220	8.0	100	A	N	S	S	M	D	P	1	G	0.2	L	A	3	2	2107
103F09	993119	8	680626	5931329	680505	5931511	53.502	132.278	8		300	0.92	4.54	KS	0	2	T	N	F	030	1.0	30	C	N	B	S	M	D	P	1	G	0.2	L	A	1	2	2107
103F09	993120	8	677279	5933843	677158	5934024	53.525	132.327	8		200	1.25	4.51	NTP	0	1	T	N	F	220	2.0	40	O	N	S	S	M	D	P	1	G	0.2	L	A	3	1	2107
103F09	993122	8	677629	5936498	677508	5936679	53.549	132.321	8		200	1.47	5.08	NTP	0	1	T	N	F	030	1.0	20	O	N	S	S	M	D	P	1	G	0.1	L	A	3	2	2107
103F09	993123	8	675289	5934114	675168	5934295	53.528	132.357	8	10	300	3.66	7.81	NTP	0	2	T	N	N	030	4.0	60	A	N	B	S	M	D	P	2	G	0.4	L	A	1	2	2107
103F09	993124	8	675289	5934114	675168	5934295	53.528	132.357	8	20	300	3.66	7.81	NTP	0	2	T	N	N	030	4.0	60	A	N	B	S	M	D	P	2	G	0.4	L	A	1	2	2107
103F09	993125	8	676214	5934706	676093	5934887	53.533	132.343	8		300	1.61	5.84	NTP	0	2	T	N	F	030	3.0	50	A	N	B	S	M	D	P	1	G	0.3	L	A	1	2	2107
103F01	993126	8	694922	5892451	694802	5892635	53.147	132.087	8		100	5.03	9.93	KS	0	1	T	N	F	030	7.0	50	O	N	S	S	M	D	P	1	G	0.3	L	A	1	2	2207
103F01	993128	8	691379	5891547	691259	5891731	53.141	132.140	8		100	2.35	7.69	uKH	0	1	T	N	F	121	4.0	50	C	N	B	S	M	D	P	1	G	0.3	L	A	1	2	2207
103F01	993129	8	690268	5891429	690148	5891613	53.140	132.157	8		200	3.62	8.27	uKH	0	1	T	N	F	220	5.0	40	O	N	S	S	M	D	P	1	G	0.2	L	A	3	2	2207
103F01	993130	8	684551	5891303	684431	5891487	53.141	132.243	8		200	1.36	4.79	JB	0	2	T	N	F	130	6.0	50	R	N	B	S	M	D	P	2	G	0.2	L	A	1	2	2207
103F01	993131	8	686961	5891760	686841	5891944	53.144	132.206	8		100	1.66	5.35	uKH	0	2	T	N	F	130	2.0	50	S	N	S	S	M	D	P	1	G	0.2	L	A	1	3	2207
103F01	993132	8	687346	5889231	687226	5889415	53.121	132.202	8		300	0.67	3.90	JB	0	1	T	N	F	220	1.0	20	T	N	S	S	M	D	P	1	G	0.1	L	A	3	2	2207
103F01	993133	8	685262	5888608	685142	5888792	53.116	132.233	8		200	1.65	5.62	JB	0	1	T	N	F	220	2.0	30	O	N	S	S	M	D	P	1	G	0.2	L	A	3	2	2207
103F01	993134	8	684669	5888340	684549	5888524	53.114	132.242	8		300	1.57	4.97	JB	0	1	T	N	F	220	4.0	50	A	N	S	S	M	D	P	1	G	0.1	L	A	1	2	2207
103F01	993135	8	684161	5886451	684041	5886635	53.097	132.251	8		400	2.71	7.21	TrK	0	2	T	N	F	220	3.0	30	A	N	S	S	M	D	P	1	G	0.3	L	A	1	1	2207
103F01	993136	8	687144	5888921	687024	5889105	53.119	132.205	8		200	7.35	18.31	JB	0	2	T	N	F	220	12.0	70	O	N	S	S	M	D	P	2	G	0.3	L	A	3	3	2207
103F01	993137	8	684956	5887177	684836	5887361	53.104	132.239	8		300	10.24	13.60	TrK	0	1	T	N	F	220	4.0	30	A	N	S	S	M	D	P	1	G	0.2	L	A	1	3	2207
103F01	993138	8	687281	5888744	687161	5888928	53.117	132.203	8		200	1.78	5.88	JB	0	1	T	N	F	220	3.0	40	O	N	S	S	M	D	P	1	G	0.3	L	A	1	2	2207
103F01	993139	8	688880	5888003	688760	5888187	53.110	132.180	8		300	6.74	10.56	JB	0	2	T	N	F	220	6.0	80	A	N	S	S	M	D	P	2	G	0.3	L	A	1	1	2207
103F01	993140	8	690275	5889126	690155	5889310	53.119	132.158	8		200	8.69	12.90	uKH	0	2	T	N	F	220	6.0	50	O	N	S	S	M	D	P	1	G	0.2	L	A	3	2	2207
103F01	993142	8	690956	5890119	690836	5890303	53.128	132.148	8		200	2.62	7.47	uKH	0	2	T	N	F	220	3.0	30	O	N	S	S	M	D	P	1	G	0.2	L	A	1	2	2207
103F01	993143	8	697357	5890418	697237	5890602	53.128	132.052	8		500	2.40	8.01	KS	0	1	T	N	F	220	2.0	30	O	N	S	S	M	D	P	1	G	0.2	L	A	1	2	2207
103F01	993144	8	697679	5887255	697559	5887439	53.100	132.049	8		200	10.73	14.41	uKH	0	1	T	N	F	220	6.0	70	O	N	S	S	M	D	P	1	G	0.3	L	A	3	2	2207
103F01	993145	8	699323	5889048	699203	5889232	53.115	132.023	8		200	2.48	7.70	KS	0	1	T	N	F	220	6.0	50	O	N	S	S	M	D	P	1	G	0.2	L	A	3	2	2207
103G04	993146	9	308343	5901953	308234	5902148	53.234	131.873	8		50	13.08	18.37	KS	0	2	T	N	D	220	10.0	100	O	N	S	S	M	D	P	3	G	0.3	L	A	1	2	2307
103G04	993147	9	304779	5901735	304670	5901930	53.231	131.927	8		50	1.61	5.50	KS	0	1	T	N	D	220	2.0	30	O	N	S	S	M	D	P	1	G	0.2	L	A	1	2	2307
103G04	993148	9	303438	5896825	303329	5897020	53.186	131.944	8		700	8.02	13.82	uKH	0	2	T	N	F	220	5.0	80	A	N	B	S	M	D	P	1	G	0.4	L	A	1	3	2307
103G04	993149	9	306538	5896564	306429	5896759	53.185	131.897	8	10	600	15.31	17.30	uKH	0	2	T	N	F	220	4.0	50	O	N	S	S	M	D	P	3	G	0.3	L	A	1	2	2307
103G04	993150	9	306538	5896564	306429	5896759	53.185	131.897	8	20	600	15.31	17.30	uKH	0	2	T	N	F	220	4.0	50	O	N	S	S	M	D	P	3	G	0.3	L	A	1	2	2307

Field Observations and Analytical Data

MAP	ID	UTM Zone	UTM East NAD27	UTM North NAD27	UTM East NAD83	UTM North NAD83	LAT	LONG	MAT	REP	ELEV	AREA	PERI	FORM	WTR CLR	FLW	SED CLR	SED PPT	CON	COMP	WDTH	DPTH	BNK	BNK PPT	CHL BED	CHL PTN	PHY	DRN	TYP	ODR	SRC	HGHT	COLR	HLTH	HOST	THCK	DATE
103G04	993151	9	303680	5896755	303571	5896950	53.186	131.940	8		600	2.93	7.17	uKH	0	2	T	N	F	220	3.0	20	A	N	B	S	M	D	P	2	G	0.2	L	A	1	3	2307
103G04	993152	9	300320	5897436	300211	5897630	53.190	131.991	8		500	2.23	7.21	JB	0	1	T	N	F	220	2.0	40	O	N	S	S	M	D	P	1	G	0.2	L	A	1	2	2307
103F01	993153	8	699034	5881624	698914	5881808	53.049	132.032	8		100	1.03	4.19	JB	0	1	T	N	N	220	2.0	30	A	N	S	S	M	D	P	1	G	0.2	L	A	1	2	2307
103F01	993154	8	699126	5882617	699006	5882801	53.058	132.030	8		300	0.28	1.93	JB	0	1	T	N	F	131	1.0	20	O	N	S	S	M	D	P	1	G	0.2	L	A	1	1	2307
103F01	993155	8	697660	5882381	697540	5882565	53.056	132.052	8		100	17.02	17.48	JB	0	2	T	N	N	030	8.0	60	A	N	S	S	Y	D	P	2	G	0.2	L	A	1	2	2307
103F01	993156	8	694790	5885285	694670	5885469	53.083	132.093	8		400	0.78	4.03	JB	0	2	T	N	F	220	3.0	40	C	N	B	S	M	D	P	1	G	0.3	L	A	1	2	2307
103F01	993157	8	696581	5886296	696461	5886480	53.092	132.066	7		200	1.24	4.59	uKH			T	N	F	130	2.0	20	O	N	S	S	M	D	S	1	G	0.2	L	A	1	2	2307
103F01	993158	8	699682	5890799	699562	5890984	53.131	132.017	8		600	3.41	7.18	KS	0	2	T	N	F	130	3.0	30	A	N	S	S	M	D	P	2	G	0.2	L	A	1	2	2307
103F01	993160	8	697196	5894390	697076	5894575	53.164	132.052	8		50	1.92	5.46	JB	0	1	T	N	F	220	2.0	30	O	N	S	S	M	D	P	1	G	0.2	L	A	3	2	2407
103F09	993162	8	688035	5938244	687915	5938427	53.561	132.163	8		200	4.52	8.88	NTS	1	1	T	N	F	220	1.0	50	O	N	S	S	H	D	P	1	G	0.2	L	A	1	6	2407
103F09	993164	8	683906	5943454	683786	5943636	53.609	132.222	8		100	19.88	29.90	NTS	1	1	T	N	F	220	5.0	60	O	N	S	S	H	D	P	1	G	0.2	L	A	3	2	2407
103F09	993165	8	683122	5940981	683002	5941163	53.587	132.235	8		200	4.60	8.56	NTS	1	1	T	N	F	220	1.0	30	O	N	S	S	H	D	P	1	G	0.2	L	A	1	3	2407
103F09	993166	8	682408	5935125	682287	5935307	53.535	132.249	8		800	4.30	8.86	NTP	0	2	T	N	F	220	4.0	50	R	N	S	S	M	D	P	1	G	0.2	L	A	2	2	2407
103F09	993167	8	682445	5937866	682325	5938048	53.560	132.247	8	10	400	5.66	13.64	NTP	0	1	T	N	F	220	6.0	40	A	N	S	S	M	D	S	1	G	0.2	L	A	1	3	2407
103F09	993168	8	682445	5937866	682325	5938048	53.560	132.247	8	20	400	5.66	13.64	NTP	0	1	T	N	F	220	6.0	40	A	N	S	S	M	D	S	1	G	0.2	L	A	1	3	2407
103F09	993169	8	678093	5939434	677972	5939615	53.575	132.312	8		200	2.15	6.32	NTP	1	1	T	N	F	220	3.0	70	O	N	S	S	H	D	P	1	G	0.2	L	A	3	3	2407
103F09	993170	8	674027	5938679	673906	5938860	53.570	132.374	8		200	1.51	5.38	NTP	0	1	T	R	F	220	1.0	30	O	N	S	S	M	D	P	1	G	0.2	L	A	1	2	2407
103F09	993171	8	674016	5938223	673895	5938404	53.566	132.374	8		400	4.90	8.54	NTP	0	1	T	N	F	220	1.0	30	R	N	S	S	M	D	P	1	G	0.2	L	A	1	2	2407
103F09	993172	8	671131	5932867	671010	5933048	53.519	132.421	8		700	0.63	3.77	NTP	0	1	T	N	F	220	1.0	30	O	N	S	S	M	D	P	1	G	0.2	L	A	3	2	2407
103F09	993173	8	671735	5932503	671614	5932684	53.515	132.412	8		600	2.18	7.14	NTP	0	2	T	N	F	220	3.0	40	R	N	S	S	M	D	P	1	G	0.2	L	A	1	3	2407
103F09	993174	8	669624	5933203	669503	5933384	53.522	132.443	8		700	1.08	4.06	NTP	0	1	T	N	F	220	2.0	30	O	N	S	S	M	D	P	1	G	0.2	L	A	3	1	2407
103F09	993175	8	673502	5932287	673381	5932468	53.513	132.385	8		600	0.97	3.74	NTP	0	1	T	N	F	130	2.0	30	R	N	S	S	M	D	P	1	G	0.2	L	A	1	2	2407
103F08	993176	8	670149	5928601	670028	5928783	53.481	132.438	8		700	5.54	11.23	OTg	0	2	T	N	N	220	6.0	50	R	N	S	S	M	D	P	1	G	0.2	L	A	1	3	2507
103F08	993177	8	669931	5929298	669810	5929480	53.487	132.441	8		700	3.42	8.72	OTg	0	2	T	N	N	220	4.0	60	A	N	B	S	M	D	P	2	G	0.2	L	A	1	2	2507
103F08	993178	8	670425	5930196	670304	5930377	53.495	132.433	8		700	2.00	5.46	OTg	0	1	T	N	F	220	3.0	40	R	N	B	S	M	D	P	1	G	0.2	L	A	1	2	2507
103F09	993179	8	670936	5932135	670815	5932316	53.512	132.424	8		600	0.58	3.86	NTP	0	1	T	N	N	220	2.0	30	R	N	B	S	M	D	P	1	G	0.2	L	A	1	2	2507
103F09	993180	8	668770	5932278	668649	5932459	53.514	132.456	8		800	0.84	3.62	OTg	0	1	T	N	N	220	2.0	30	R	N	B	S	M	D	P	1	G	0.2	L	A	1	3	2507
103F09	993182	8	667872	5932208	667751	5932389	53.514	132.470	8		700	2.07	7.00	OTg	0	1	T	N	F	220	3.0	60	O	N	S	S	M	D	P	2	G	0.2	L	A	3	2	2507
103F08	993183	8	674506	5930850	674385	5931031	53.499	132.371	8		600	1.35	4.88	JB	0	1	T	N	F	220	2.0	30	C	N	B	S	M	D	P	1	G	0.2	L	A	1	2	2507
103F08	993184	8	673255	5930108	673134	5930290	53.493	132.390	8	10	500	7.77	11.33	JB	0	2	T	N	N	220	8.0	30	R	N	S	S	M	D	P	2	G	0.1	L	A	1	2	2507
103F08	993185	8	673255	5930108	673134	5930290	53.493	132.390	8	20	500	7.77	11.33	JB	0	2	T	N	N	220	7.0	30	R	N	S	S	M	D	P	2	G	0.1	L	A	1	2	2507
103F08	993186	8	676872	5930440	676751	5930622	53.495	132.335	8		300	6.98	11.18	JB	0	2	T	N	F	220	5.0	40	O	N	S	S	M	D	P	1	G	0.3	L	A	4	2	2507
103F08	993187	8	691547	5928118	691427	5928302	53.469	132.116	8		300	3.66	10.28	JB	0	1	T	N	F	220	3.0	30	O	N	S	S	M	D	P	1	G	0.2	L	A	3	2	2507
103F08	993188	8	691413	5931518	691293	5931701	53.499	132.116	8		300	3.88	8.17	NTS	0	2	T	N	F	220	5.0	40	O	N	S	S	H	D	P	2	G	0.2	L	A	3	2	2507
103F08	993189	8	690080	5929101	689960	5929284	53.478	132.137	8		500	2.77	10.51	JB	0	1	T	N	N	220	1.0	30	O	N	S	S	M	D	P	1	G	0.1	L	A	3	2	2507
103F08	993190	8	688117	5930163	687997	5930346	53.488	132.166	8		200	8.05	15.65	KS	0	2	T	N	F	130	4.0	60	O	N	S	S	H	D	P	1	G	0.2	L	A	3	2	2607
103F01	993192	8	668696	5899919	668576	5900103	53.223	132.475	8		100	12.57	16.34	OTg	0	2	T	N	N	220	12.0	60	A	N	S	S	Y	D	P	2	G	0.2	L	A	1	4	2607
103F01	993193	8	668413	5899998	668293	5900182	53.224	132.479	8		100	9.05	13.29	OTg	0	2	T	N	N	310	8.0	50	A	N	S	S	Y	D	P	1	G	0.3	L	A	4	2	2607
103F01	993194	8	667892	5898757	667772	5898940	53.213	132.487	8		100	2.61	7.11	NTP	0	2	T	N	F	211	3.0	40	A	N	B	S	Y	D	P	1	G	0.2	L	A	1	2	2607
103F01	993195	8	668746	5895945	668626	5896128	53.188	132.476	8		300	2.33	6.25	NTP	0	2	T	N	N	310	2.0	30	A	N	B	S	Y	D	P	1	G	0.2	L	A	4	3	2607
103F01	993196	8	672023	5893975	671903	5894159	53.169	132.428	8		100	2.67	6.61	NTP	0	1	T	N	N	121	4.0	50	A	N	S	S	Y	D	P	1	G	0.3	L	A	3	2	2607
103F01	993197	8	671902	5894243	671782	5894427	53.171	132.430	8		100	15.99	16.29	NTP	0	2	T	N	N	310	15.0	100	A	N	S	S	Y	D	P	2	G	0.3	L	A	1	4	2607
103F01	993198	8	670278	5893120	670158	5893303	53.162	132.455	8		100	1.65	6.57	NTP	0	2	T	N	N	220	6.0	50	A	N	B	S	M	D	P	1	G	0.2	L	A	1	1	2607
103F01	993199	8	671058	5890414	670938	5890597	53.137	132.445	8		100	1.12	4.15	TrK	0	2	T	N	N	220	4.0	30	A	N	B	S	M	D	P	1	G	0.2	L	A	1	2	2607
103F01	993200	8	673336	5890700	673216	5890884	53.139	132.410	8		100	1.00	4.38	TrK	0	2	T	N	N	220	6.0	50	A	N	S	S	M	D	P	1	G	0.2	L	A	1	1	2607

Field Observations and Analytical Data

MAP	ID	UTM Zone	UTM East NAD27	UTM North NAD27	UTM East NAD83	UTM North NAD83	LAT	LONG	MAT	REP	ELEV	AREA	PERI	FORM	WTR CLR	FLW	SED CLR	SED PPT	CON	COMP	WDTH	DPTH	BNK	BNK PPT	CHL BED	CHL PTN	PHY	DRN	TYP	ODR	SRC	HGHT	COLR	HLTH	HOST	THCK	DATE
103F01	993202	8	674950	5887242	674830	5887426	53.108	132.388	8		100	3.77	8.51	TrK	0	2	T	N	N	220	6.0	50	A	N	S	S	M	D	P	2	G	0.2	L	A	1	3	2607
103F01	993203	8	677098	5892562	676978	5892746	53.155	132.353	8		100	9.85	12.74	TrK	0	2	T	N	N	220	7.0	50	A	N	S	S	Y	D	P	2	G	0.2	L	A	1	3	2607
103F01	993204	8	677934	5896205	677814	5896389	53.187	132.339	8		100	9.04	14.14	NTP	0	2	T	N	N	220	3.0	50	A	N	S	S	Y	D	P	3	G	0.2	L	A	3	2	2607
103F01	993205	8	681877	5892631	681757	5892815	53.154	132.282	8		100	2.74	8.06	TrK	0	2	T	N	F	220	3.0	40	A	N	S	S	M	D	P	1	G	0.2	L	A	1	2	2607
103F01	993206	8	688807	5894165	688687	5894349	53.165	132.177	8		50	4.26	10.38	uKH	0	2	T	N	N	220	3.0	30	A	N	S	S	M	D	P	2	G	0.2	L	A	1	2	2707
103F01	993207	8	678808	5901624	678688	5901808	53.235	132.323	8		100	5.02	10.48	KS	0	2	T	N	F	220	3.0	30	A	N	S	S	M	D	P	2	G	0.2	L	A	1	2	2707
103F01	993208	8	681651	5897362	681531	5897546	53.196	132.282	8		100	7.58	12.85	KS	0	2	T	N	F	220	3.0	60	R	N	S	S	M	D	P	2	G	0.2	L	A	1	3	2707
103F01	993209	8	685406	5896554	685286	5896738	53.188	132.227	8		50	5.49	10.05	KS	0	2	T	N	N	220	6.0	40	A	N	S	S	M	D	P	1	G	0.2	L	A	3	2	2707
103F01	993210	8	684774	5900758	684654	5900942	53.226	132.234	8	10	50	18.32	20.16	KS	0	2	T	N	F	220	6.0	50	A	N	S	S	M	D	P	2	G	0.3	L	A	3	3	2707
103F01	993212	8	684774	5900758	684654	5900942	53.226	132.234	8	20	50	18.32	20.16	KS	0	2	T	N	F	220	6.0	50	A	N	S	S	M	D	P	2	G	0.3	L	A	3	3	2707
103F08	993213	8	680487	5911156	680366	5911340	53.320	132.292	8		400	12.57	17.92	KS	0	2	T	N	N	220	6.0	80	A	N	S	S	M	D	P	2	G	0.4	L	A	4	3	2807
103F08	993214	8	678402	5909186	678282	5909370	53.303	132.324	8		400	13.14	16.15	KS	0	2	T	N	N	220	5.0	60	R	N	S	S	M	D	P	2	G	0.2	L	A	1	2	2807
103F08	993215	8	679313	5909230	679193	5909414	53.304	132.311	8		400	3.31	9.33	KS	0	2	T	N	N	220	4.0	50	A	N	S	S	M	D	P	1	G	0.2	L	A	3	2	2807
103F08	993216	8	680017	5909197	679897	5909381	53.303	132.300	8		400	12.43	16.11	KS	0	2	T	N	N	220	8.0	100	A	N	S	S	M	D	P	2	G	0.5	L	A	3	2	2807
103F08	993217	8	681930	5912462	681809	5912647	53.332	132.270	8		400	11.14	16.81	KS	0	1	T	N	N	220	8.0	100	A	N	S	S	M	D	P	2	G	0.4	L	A	4	2	2807

Field Observations and Analytical Data

						STREAM SEDIMENT																												
							Sb	As	Ba	Br	Ca	Ce	Cs	Cr	Co	Eu	Au	Hf	Fe	La	Lu	Mo	Nd	Rb	Sm	Sc	Na	Ta	Tb	Th	W	U	Yb	Zn	Wt
		UTM	UTM	UTM			0.1	0.5	50	0.5	1	3	1	5	1	0.2	2	1	0.01	0.5	0.05	1	5	15	0.1	0.1	0.01	0.5	0.5	0.2	1	0.5	0.2	50	
		Zone	East	North			ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
Map	ID		NAD83	NAD83	Rep	Form	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	GRAV
103F08	993002	8	677040	5913948		JB	1.5	18.5	510	33.0	2	34	6	62	19	1.1	2	5	5.21	16.0	0.46	4	11	41	3.7	21.1	1.58	0.5	0.7	3.9	1	3.1	3.2	137	25.06
103F08	993003	8	675840	5913596		lKL	0.5	8.6	490	31.2	2	41	2	86	19	1.0	2	12	5.44	17.7	0.45	1	12	26	3.5	20.0	1.57	0.5	0.5	3.8	1	1.5	3.1	156	28.26
103F08	993004	8	672141	5913558		JB	1.4	10.4	670	25.6	2	26	1	57	18	1.1	2	5	5.42	12.1	0.52	1	10	31	3.5	23.7	2.05	0.5	0.5	2.2	1	3.1	3.4	177	26.52
103F08	993005	8	672473	5911708	10	JB	0.7	20.2	760	25.9	2	37	2	75	19	1.1	2	10	5.64	17.1	0.45	1	13	15	3.7	21.6	2.24	0.5	0.5	4.0	1	3.2	3.0	50	21.56
103F08	993006	8	672473	5911708	20	JB	1.0	17.5	560	28.4	1	30	1	58	18	1.1	2	7	5.15	14.7	0.41	1	14	45	3.3	20.0	2.05	1.2	0.5	3.2	1	2.8	2.7	53	25.94
103F08	993008	8	672704	5910672		lKL	1.8	26.4	550	40.1	1	43	3	60	20	1.1	4	7	5.86	19.6	0.41	1	13	15	4.2	19.4	1.76	0.5	0.5	3.8	1	2.0	2.7	137	24.62
103F08	993009	8	672028	5909157		OTg	2.8	8.3	590	25.0	4	44	3	55	17	1.0	2	14	6.75	21.8	0.50	1	15	52	4.0	16.9	2.28	0.5	0.5	4.1	1	3.0	3.4	115	28.29
103F08	993010	8	670393	5914404		JB	4.6	26.3	1000	30.4	1	25	6	56	20	1.2	2	4	6.19	13.8	0.51	3	12	42	4.2	24.4	1.18	0.5	0.5	2.1	1	3.0	3.6	178	26.40
103F08	993011	8	669820	5916446		JB	5.6	159.0	470	22.7	1	28	3	101	23	0.9	4	12	7.84	12.3	0.45	1	12	40	3.0	24.5	1.74	1.7	0.5	3.1	1	2.0	3.0	140	27.84
103F08	993012	8	669491	5917676		OTg	4.8	91.7	620	18.4	1	26	5	52	22	0.8	26	7	6.93	11.0	0.37	1	12	59	3.2	22.9	1.28	0.5	0.5	2.6	1	2.0	2.5	154	28.04
103F08	993013	8	672340	5919479		NTP	1.2	21.5	540	25.5	2	28	4	116	20	0.9	3	9	6.44	12.9	0.39	1	11	48	3.3	26.2	1.84	0.9	0.7	2.8	1	2.5	2.6	141	30.06
103F08	993014	8	671625	5920711		NTP	1.5	34.7	400	14.9	2	19	3	50	16	0.8	66	4	6.35	8.9	0.28	1	5	47	2.3	20.6	1.38	0.8	0.5	1.6	1	0.8	1.9	132	31.00
103F08	993015	8	670510	5920542		NTP	0.6	14.7	510	37.8	2	27	4	32	14	0.8	2	5	4.57	11.1	0.32	1	10	45	3.3	21.0	2.49	0.5	0.5	2.5	1	2.5	2.1	50	26.91
103F08	993016	8	667799	5927350		NTP	1.1	11.1	470	25.8	1	54	3	106	18	1.2	9	14	6.35	23.5	0.47	1	16	39	4.7	22.8	1.86	2.3	0.5	4.8	1	3.2	3.2	144	28.40
103F08	993017	8	666072	5928272		OTg	1.1	8.4	500	28.6	2	54	2	68	19	1.4	2	10	6.18	22.3	0.52	1	18	15	5.3	19.0	2.11	2.0	0.5	4.3	1	2.4	3.7	194	26.04
103F08	993018	8	666060	5928053		OTg	1.3	6.8	490	24.8	2	52	3	67	16	1.2	4	14	6.10	23.6	0.70	1	19	42	5.2	17.3	1.98	1.2	0.8	5.1	1	2.9	4.9	183	28.78
103F08	993019	8	668462	5925931		NTP	1.6	21.6	460	42.0	2	45	2	40	19	1.1	3	8	5.86	19.8	0.50	2	16	32	4.5	18.5	1.86	1.6	0.7	3.7	1	2.1	3.4	110	28.86
103F08	993020	8	666873	5923970		NTP	1.8	62.9	580	11.8	3	61	2	37	16	1.2	2	10	5.99	28.6	0.51	1	24	15	5.3	18.2	2.01	0.5	0.5	3.4	1	2.5	3.5	129	30.59
103F08	993022	8	666413	5922689		NTP	3.7	105.0	510	28.2	7	34	2	35	19	1.5	2	5	6.58	17.8	0.71	9	13	15	5.0	21.6	1.32	0.5	0.9	2.4	1	3.5	4.7	338	28.32
103F08	993023	8	667642	5921113		NTP	1.4	67.5	690	15.6	4	28	2	42	21	1.3	2	3	6.15	13.7	0.46	1	14	22	3.8	24.5	2.49	0.5	0.7	1.7	1	2.3	3.1	262	25.54
103F07	993024	8	662926	5925867		NTP	1.4	6.6	730	112.0	2	58	8	15	9	1.3	2	10	3.75	30.2	0.69	1	16	57	5.2	11.0	1.90	1.0	0.8	7.3	2	3.6	4.8	127	17.95
103F07	993025	8	663490	5925033		NTP	0.5	2.8	480	31.9	4	28	2	140	28	1.2	2	5	7.08	14.1	0.36	1	9	31	3.2	23.2	2.26	1.1	0.5	2.2	1	0.7	2.3	141	26.70
103F07	993026	8	664737	5922722		NTP	0.8	14.0	500	30.9	3	30	3	70	23	1.1	2	5	5.94	15.6	0.37	1	11	34	3.5	20.4	2.00	0.5	0.5	2.8	1	1.3	2.5	141	25.17
103F07	993027	8	661001	5922812	10	NTP	1.8	29.4	970	26.5	2	49	5	56	18	1.3	2	14	6.23	24.1	0.56	1	13	57	4.2	16.5	1.94	1.6	0.5	6.4	1	4.1	3.6	168	27.39
103F07	993028	8	661001	5922812	20	NTP	1.9	28.9	820	29.0	2	47	6	45	18	1.2	2	10	5.87	23.7	0.51	1	16	61	4.3	16.0	1.98	0.5	0.5	6.2	1	3.1	3.4	131	27.37
103F08	993029	8	689821	5904592		uKH	0.9	12.9	610	36.7	1	40	3	45	20	0.9	27	7	4.54	19.0	0.27	1	10	57	3.0	12.9	1.82	1.1	0.5	4.7	1	2.9	1.8	130	22.99
103F08	993030	8	689617	5904324		uKH	1.8	14.1	940	15.5	2	43	3	72	22	1.2	6	9	5.90	23.3	0.40	1	18	41	4.1	16.7	1.75	0.5	0.5	5.8	1	3.6	2.7	143	24.53
103F08	993031	8	689874	5906643		KS	1.3	12.5	690	29.1	2	37	4	55	20	0.9	2	7	4.78	19.7	0.30	1	12	56	3.0	14.0	1.92	1.4	0.5	6.0	1	3.4	2.0	145	22.58
103F08	993032	8	690683	5906686		KS	1.4	14.2	790	31.1	1	42	3	74	23	1.0	2	8	4.71	19.7	0.33	1	15	39	3.3	14.9	1.93	0.5	0.5	5.0	1	3.2	2.2	159	23.42
103F08	993033	8	690157	5908802		KS	0.8	14.1	480	9.6	2	36	2	82	11	0.8	2	22	4.97	18.6	0.42	1	11	39	2.5	15.5	1.54	1.4	0.5	4.7	1	3.9	2.8	93	34.57
103F08	993034	8	690270	5909891		JB	1.0	13.7	560	19.8	2	37	2	92	17	1.0	5	13	4.92	17.0	0.37	1	15	22	3.3	16.1	2.11	0.5	0.5	3.8	1	2.6	2.5	101	26.45
103F08	993036	8	688508	5908631		KS	1.2	21.6	650	31.7	2	39	3	65	19	0.9	322	9	4.45	17.9	0.31	1	14	26	3.2	14.6	1.94	1.1	0.5	4.5	1	3.2	2.1	100	25.09
103F08	993037	8	690105	5911087		JB	0.9	11.7	610	24.3	1	36	2	74	20	0.8	3	7	4.37	16.1	0.34	1	12	40	3.0	13.5	2.04	1.1	0.5	4.0	1	2.3	2.2	129	25.46
103F08	993038	8	688055	5912057		JB	0.6	9.9	620	18.9	2	33	2	72	15	0.8	2	12	4.60	15.3	0.34	1	13	44	2.7	15.2	1.81	0.7	0.5	3.8	1	2.6	2.2	118	27.83
103F08	993039	8	687065	5912807		JB	0.5	10.1	510	23.1	2	33	2	61	14	0.8	5	9	4.59	14.8	0.32	2	11	44	2.9	15.7	1.98	1.1	0.5	3.7	1	2.2	2.2	91	26.71
103F08	993040	8	691516	5921208		JB	0.6	9.1	600	39.4	2	31	2	154	22	0.9	2	21	6.78	14.6	0.42	1	11	15	2.9	20.4	1.93	1.1	0.6	3.0	1	2.9	2.8	137	23.72
103G04	993042	9	306212	5902419		KS	1.1	10.9	710	11.2	1	54	1	72	14	1.1	219	34	5.00	26.0	0.52	1	19	15	4.3	14.0	2.23	0.9	0.7	6.4	1	3.8	3.4	101	27.49
103G04	993043	9	314369	5897032		NTS	1.3	10.4	620	30.2	2	36	2	51	17	0.9	2	23	4.64	17.4	0.38	1	12	32	2.8	14.0	2.06	0.5	0.5	3.6	1	2.6	2.5	90	28.76
103G04	993044	9	312482	5894578		JB	1.4	7.7	610	20.1	3	35	2	78	19	0.8	2	13	6.40	17.4	0.36	1	12	29	3.1	17.6	2.14	1.0	0.5	3.8	1	2.3	2.4	159	26.80
103G04	993045	9	313697	5888385		JB	1.5	13.1	540	27.4	1	26	2	437	30	0.9	3	7	6.48	12.3	0.36	2	10	36	3.0	24.2	1.38	0.5	0.5	2.1	1	1.5	2.4	140	25.40
103G04	993046	9	319814	5887969		JB	1.7	9.9	630	54.8	3	42	1	93	26	1.0	4	12	5.06	20.9	0.37	1	12	28	3.7	19.4	2.46	0.5	0.5	3.3	1	1.5	2.4	107	12.13
103G04	993048	9	317366	5887777		JB	2.9	30.8	440	22.4	2	33	2	99	24	0.9	17	10	5.20	16.4	0.33	1	7	30	3.4	20.5	1.86	0.5	0.5	2.8	1	1.7	2.2	117	30.00
103G04	993049	9	314578	5892401		JB	0.8	5.3	430	25.3	1	20	2	104	21	0.7	2	5	4.90	9.1	0.26	1	6	41	2.0	16.0	1.91	0.5	0.5	1.7	1	1.4	1.8	122	25.68
103F01	993050	8	711856	5889719		JB	1.4	8.8	560	30.2	1	32	2	65	20	0.6	2	10	3.71	14.5	0.28	1	8	45	2.4	12.8	2.00	0.5	0.5	3.5	1	2.3	1.9	135	23.82
103G04	993051	9	308218	5888562		KS	1.4	11.4	570	13.7	2	31	2	68	13	0.7	2	15	3.17	16.6	0.28	1	7	45	2.3	11.2	2.07	0.5	0.5	4.0	1	2.6	1.9	112	28.61

Field Observations and Analytical Data

							STREAM SEDIMENT																										
		UTM	UTM	UTM			Sb	As	Ba	Br	Ca	Ce	Cs	Cr	Co	Eu	Au	Hf	Fe	La	Lu	Mo	Nd	Rb	Sm	Sc	Na	Ta	Tb	Th	W	U	Yb	Zn	Wt
		Zone	East	North			0.1	0.5	50	0.5	1	3	1	5	1	0.2	2	1	0.01	0.5	0.05	1	5	15	0.1	0.1	0.01	0.5	0.5	0.2	1	0.5	0.2	50	
Map	ID		NAD83	NAD83	Rep	Form	ppm INAA	ppm INAA	ppm INAA	ppm INAA	% INAA	ppm INAA	ppm INAA	ppm INAA	ppm INAA	ppm INAA	ppb INAA	ppm INAA	% INAA	ppm INAA	ppm INAA	ppm INAA	ppm INAA	ppm INAA	ppm INAA	% INAA	ppm INAA	ppm INAA	ppm INAA	ppm INAA	ppm INAA	ppm INAA	ppm INAA	g GRAV
103G04	993052	9	301994	5888530		KS	2.7	24.4	570	16.5	2	32	3	133	15	0.6	2	8	3.65	15.8	0.24	1	8	53	2.4	12.2	2.26	1.0	0.5	5.4	1	3.0	1.6	119	25.26
103G04	993053	9	299588	5889016		KS	4.0	69.1	620	28.0	1	36	3	57	24	0.7	87	9	4.12	16.3	0.30	1	8	55	2.7	12.2	2.24	0.9	0.5	5.2	1	3.3	1.9	156	17.81
103G04	993054	9	295608	5894126		JB	3.2	18.0	660	8.3	1	44	2	58	16	1.0	2	14	4.65	23.9	0.39	1	13	44	3.9	13.8	2.31	0.9	0.6	5.3	1	3.0	2.5	107	30.41
103F01	993055	8	699032	5896692	10	JB	1.3	15.0	550	8.0	1	50	2	117	16	1.1	17	47	5.48	26.7	0.65	1	15	40	4.0	19.2	1.78	1.0	0.5	6.1	1	5.0	4.3	110	30.56
103F01	993056	8	699032	5896692	20	JB	1.4	15.8	560	9.1	2	50	2	104	14	1.1	2	37	5.45	25.6	0.62	1	14	30	3.6	18.9	1.85	0.5	0.7	5.9	1	5.0	4.1	125	29.76
103G04	993057	9	302187	5898732		uKH	1.0	10.1	510	14.5	2	42	2	74	14	1.0	45	36	4.96	24.3	0.58	1	13	30	3.4	14.4	2.04	1.0	0.5	5.7	1	4.0	3.6	112	28.24
103F09	993058	8	667580	5943731		NTP	0.1	0.5	360	102.0	6	20	1	294	40	1.2	2	4	7.70	9.4	0.44	1	10	20	3.5	47.9	1.32	0.5	0.5	0.8	1	0.8	2.9	178	19.65
103F09	993059	8	666789	5942443		NTP	0.3	2.7	340	30.8	6	18	3	336	45	1.1	2	3	8.45	8.2	0.44	1	7	24	3.3	55.7	1.43	0.9	0.5	1.2	1	0.5	2.9	158	27.29
103F09	993060	8	665889	5939242		NTP	0.9	5.8	760	81.0	4	38	2	71	26	1.2	2	6	5.61	16.8	0.47	1	9	32	3.5	16.8	2.37	0.5	0.6	2.6	1	1.9	3.3	209	18.83
103F10	993062	8	661621	5933134		NTP	1.5	10.1	360	165.0	2	36	1	43	25	0.9	2	5	6.36	15.4	0.36	1	10	23	3.1	16.0	1.10	1.1	0.5	3.3	1	1.6	2.3	104	16.20
103F10	993063	8	662090	5933544	10	NTP	0.9	9.1	480	21.8	2	44	2	55	23	1.2	2	5	6.35	20.1	0.42	2	15	40	4.0	20.2	1.60	1.1	0.5	4.0	1	1.9	2.8	189	25.91
103F10	993064	8	662090	5933544	20	NTP	1.5	8.4	630	21.2	3	42	2	57	25	1.3	2	5	6.59	20.7	0.45	1	17	31	4.3	20.8	1.70	1.3	0.5	3.7	1	2.2	3.0	183	24.89
103F10	993065	8	662450	5934030		NTP	0.8	6.7	450	27.0	4	38	1	75	26	1.3	2	5	7.40	17.2	0.37	1	13	32	3.6	22.2	2.05	0.8	0.6	3.0	1	1.6	2.5	188	25.69
103F10	993066	8	662411	5934208		NTP	0.8	6.9	450	46.0	4	31	1	112	28	1.3	2	7	7.52	15.2	0.41	1	12	32	3.6	23.9	2.20	1.4	0.5	2.9	1	0.8	2.8	203	23.25
103F10	993067	8	663323	5934140		NTP	0.6	7.2	340	55.3	1	47	1	72	25	1.4	2	5	7.44	17.8	0.49	1	20	15	4.5	22.3	1.58	1.5	0.5	2.8	1	2.1	3.3	182	22.00
103F10	993068	8	665096	5932817		OTg	0.9	7.0	490	67.6	3	42	2	46	16	1.3	2	6	5.04	18.7	0.50	1	16	15	4.3	17.7	1.97	0.5	0.8	3.7	1	2.3	3.4	140	21.23
103F09	993069	8	665951	5936204		NTP	1.0	8.5	520	106.0	1	55	3	19	18	1.6	2	7	5.40	21.5	0.58	2	21	52	5.8	16.1	1.08	1.7	0.5	4.2	1	1.6	3.6	128	16.73
103F09	993070	8	667675	5937658		NTP	2.7	11.5	470	95.5	1	50	2	5	9	1.4	2	10	3.04	20.5	0.71	4	15	30	4.7	7.6	1.92	1.9	0.8	4.9	1	3.1	4.8	135	16.70
103F09	993071	8	667726	5937786		NTP	1.5	9.1	600	69.8	1	46	2	8	10	1.3	3	8	3.13	20.2	0.65	4	18	42	4.4	8.0	1.78	1.6	0.7	5.3	1	2.0	4.3	67	19.09
103F09	993072	8	672076	5941342		NTP	0.8	8.7	520	35.0	3	44	1	51	18	1.4	2	5	4.92	17.1	0.49	1	13	33	4.2	14.5	2.32	0.5	0.9	3.1	1	0.9	3.2	50	21.92
103F09	993073	8	669708	5935962		NTP	8.1	168.0	400	59.3	1	48	3	11	14	1.0	5	7	3.99	17.0	0.49	3	16	15	3.6	11.7	2.10	0.5	0.5	4.3	1	3.0	3.4	80	18.93
103F09	993075	8	669594	5936072		NTP	1.5	42.9	320	42.1	1	53	1	32	18	1.3	2	7	4.94	22.4	0.48	1	19	30	5.0	13.5	1.41	1.0	0.7	3.9	1	1.5	3.3	155	20.81
103F09	993076	8	670727	5937159		NTP	1.8	43.5	490	54.3	3	49	1	58	18	1.3	2	7	5.25	18.9	0.64	1	14	15	4.6	15.4	2.00	1.2	0.9	3.8	1	2.4	4.0	91	20.03
103F09	993077	8	671719	5937330		NTP	0.9	9.4	510	55.7	2	47	1	44	19	1.4	2	5	5.10	19.0	0.51	1	14	45	4.8	16.2	1.99	0.5	0.6	3.8	1	2.1	3.4	165	21.04
103F09	993078	8	672532	5936951		NTP	1.2	5.3	580	20.2	3	52	1	58	17	1.7	2	12	6.85	23.3	0.64	3	24	28	5.1	16.4	2.68	1.0	0.5	3.8	1	2.2	4.3	217	25.70
103F08	993079	8	692668	5904558		KS	1.3	11.5	930	26.9	2	51	3	53	18	1.2	2	11	4.33	23.1	0.36	1	13	51	3.9	14.4	2.15	0.5	0.5	6.0	1	3.2	2.6	116	21.94
103F08	993080	8	685794	5915654		JB	0.8	11.7	750	30.3	1	23	2	100	17	0.9	2	6	4.62	10.8	0.38	3	8	28	2.5	17.8	2.00	0.5	0.5	2.7	1	2.7	2.3	171	23.42
103F08	993082	8	686611	5919880		JB	0.6	9.4	600	25.6	2	30	2	89	16	0.9	2	11	5.34	13.4	0.39	1	9	33	2.5	18.4	2.12	0.5	0.5	2.8	1	2.6	2.5	107	25.96
103F08	993083	8	684457	5914286		KS	1.0	10.1	650	39.3	2	27	2	48	17	0.9	2	6	4.52	10.7	0.35	3	8	28	2.5	15.6	1.70	0.5	0.5	2.9	1	1.7	2.4	114	22.60
103F08	993084	8	683557	5911614		KS	1.1	14.7	440	33.3	1	39	2	105	18	1.0	5	17	5.16	18.0	0.45	1	15	50	3.3	18.4	1.71	0.8	0.6	4.4	1	2.6	2.8	102	24.73
103F08	993085	8	678469	5915134		NTP	1.1	14.6	790	23.2	2	33	9	39	14	1.0	2	4	3.11	14.7	0.26	2	12	65	2.9	11.3	2.30	0.9	0.6	5.9	1	3.4	1.7	72	25.06
103F08	993086	8	677030	5914954		JB	1.6	16.3	580	17.5	2	42	3	171	18	1.4	45	33	6.45	21.5	0.66	1	17	53	4.5	21.6	1.61	1.0	0.7	5.2	1	4.3	4.4	171	28.97
103F08	993087	8	676969	5915066		JB	0.9	6.3	450	57.9	2	30	5	53	15	0.8	2	6	4.14	13.3	0.30	1	9	59	2.8	12.8	2.12	0.5	0.5	4.9	1	4.5	2.1	79	23.39
103F08	993088	8	677252	5918669		JB	0.8	12.8	440	23.9	1	38	2	69	11	1.0	3	12	4.68	18.0	0.38	3	10	37	3.1	15.0	1.62	1.2	0.5	4.6	1	2.5	2.4	108	30.63
103F08	993089	8	680269	5917812		JB	1.3	16.0	600	26.7	2	37	3	76	14	1.0	2	11	4.67	17.0	0.45	1	12	38	3.3	16.7	1.73	0.8	0.5	4.4	1	3.5	3.0	133	28.37
103F08	993090	8	681240	5919476		JB	0.7	13.9	490	37.2	2	29	2	52	17	1.1	2	6	5.17	10.9	0.44	2	11	15	3.1	17.2	1.86	0.5	0.7	3.2	1	2.3	2.9	144	22.51
103F08	993091	8	682095	5921407		JB	2.2	18.9	1300	56.6	2	28	2	161	21	1.1	2	5	5.58	10.3	0.62	10	8	24	3.7	25.9	2.20	0.5	0.6	2.7	1	3.8	4.0	347	19.95
103F08	993092	8	681867	5924368	10	JB	0.6	8.1	490	15.7	2	27	2	79	13	0.8	2	11	5.22	12.8	0.36	1	11	50	2.3	17.2	1.55	1.0	0.5	3.2	1	2.2	2.2	117	28.07
103F08	993093	8	681867	5924368	20	JB	0.7	8.7	510	11.6	2	29	1	90	13	0.9	2	15	5.45	14.5	0.40	1	10	44	2.5	17.9	1.61	1.2	0.5	3.4	1	2.5	2.5	95	29.11
103F08	993094	8	696859	5908921		JB	1.1	17.0	370	24.4	2	30	2	56	15	0.7	4	11	4.63	13.8	0.35	1	8	45	1.9	14.6	1.59	0.8	0.5	4.3	1	2.5	2.2	111	25.14
103F08	993095	8	690998	5916728		JB	0.6	12.3	580	54.9	2	22	2	57	20	0.8	2	3	5.45	9.0	0.30	3	8	15	2.3	14.2	1.69	0.5	0.5	2.0	1	1.5	1.9	143	15.13
103F08	993096	8	690183	5915336		JB	1.0	11.4	680	49.1	2	20	1	50	22	0.8	2	3	5.36	7.4	0.28	4	9	42	2.2	19.1	1.68	0.5	0.5	1.5	1	1.1	1.8	134	23.68
103F08	993098	8	692862	5919043		JB	0.7	16.2	760	112.0	1	28	2	305	34	0.7	2	3	6.63	11.9	0.22	1	7	15	2.4	17.4	0.98	0.5	0.5	2.7	1	1.3	1.5	152	13.50
103F08	993099	8	692750	5918997		JB	0.8	11.6	530	29.8	1	21	1	76	19	0.8	2	4	5.47	9.2	0.27	2	10	15	2.3	19.5	1.71	0.5	0.5	1.9	1	1.4	1.9	108	26.70
103F08	993100	8	675724	5921442		JB	0.5	13.4	540	32.8	2	32	2	78	14	1.1	2	14	5.30	15.3	0.42	5	10	31	2.9	16.2	1.77	0.9	0.6	3.5	1	2.9	2.7	168	25.85

Field Observations and Analytical Data

						STREAM SEDIMENT																												
		UTM	UTM	UTM			Sb	As	Ba	Br	Ca	Ce	Cs	Cr	Co	Eu	Au	Hf	Fe	La	Lu	Mo	Nd	Rb	Sm	Sc	Na	Ta	Tb	Th	W	U	Yb	Zn	Wt
		Zone	East	North			0.1	0.5	50	0.5	1	3	1	5	1	0.2	2	1	0.01	0.5	0.05	1	5	15	0.1	0.1	0.01	0.5	0.5	0.2	1	0.5	0.2	50	
							ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
Map	ID		NAD83	NAD83	Rep	Form	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	GRAV
103F08	993102	8	675812	5921629		JB	0.9	23.6	530	23.6	2	37	3	107	14	1.0	4	8	4.83	17.2	0.33	2	13	48	3.2	15.9	1.54	0.5	0.5	4.0	1	2.7	2.3	147	25.64
103F08	993103	8	679141	5922815		JB	1.7	21.9	1800	20.3	1	28	3	66	19	1.1	2	7	5.63	11.9	0.53	7	9	37	3.6	23.1	1.33	0.5	0.7	2.9	1	2.5	3.4	201	20.39
103F08	993104	8	679468	5926066		JB	0.9	15.1	640	18.0	1	30	1	71	17	1.1	2	6	6.03	13.7	0.40	1	15	25	3.8	21.0	1.83	0.5	0.5	2.7	1	1.9	2.8	127	27.35
103F08	993105	8	679136	5925694		JB	0.8	11.6	730	35.3	1	34	3	39	14	1.1	2	7	5.05	13.9	0.47	1	11	24	3.8	19.5	2.06	1.7	0.5	3.3	1	3.5	3.2	183	22.99
103F08	993106	8	678935	5925137	10	JB	1.5	64.5	560	28.8	2	38	3	51	16	1.2	2	12	6.02	17.1	0.39	4	13	34	4.2	19.9	1.96	1.5	0.6	3.6	1	2.9	3.5	183	23.28
103F08	993107	8	678935	5925137	20	JB	1.5	59.9	670	24.1	2	36	2	55	17	1.2	2	13	6.11	17.3	0.52	1	13	44	4.2	19.5	1.96	1.0	0.5	3.7	1	3.0	3.6	163	24.53
103G05	993108	9	304803	5920942		NTS	0.4	3.8	570	14.8	4	92	1	56	10	2.1	2	36	3.69	47.9	0.63	1	32	15	7.7	17.5	2.53	1.2	0.9	11.1	1	5.4	4.2	82	28.54
103G05	993109	9	303725	5913894		JB	1.1	14.3	380	37.4	3	79	1	112	21	1.6	177	69	8.33	43.8	0.73	1	27	15	5.5	23.7	2.06	0.9	0.6	9.4	1	4.5	4.7	150	25.17
103G05	993110	9	303000	5912445		JB	1.3	15.2	360	7.2	3	38	1	105	19	1.3	184	37	7.11	18.8	0.61	1	16	26	3.6	21.7	2.00	0.5	0.5	4.3	1	3.7	4.0	137	33.67
103G05	993111	9	300636	5906661		JB	2.5	64.5	750	15.9	1	39	2	48	20	1.3	116	8	6.89	17.4	0.50	2	18	71	4.8	22.5	1.82	0.7	0.7	2.8	1	1.9	3.4	172	28.63
103F08	993113	8	697698	5904483		JB	1.2	20.2	570	21.2	1	34	4	56	16	0.8	2	17	8.52	17.2	0.35	1	14	39	2.4	15.9	1.23	0.5	0.5	5.2	1	3.4	2.2	187	24.81
103F08	993114	8	684233	5915504		JB	0.4	11.0	560	20.3	1	25	1	93	16	1.0	2	8	5.79	11.7	0.40	1	9	35	2.8	20.5	1.74	0.7	0.5	2.5	1	0.5	2.6	152	24.01
103F08	993115	8	680073	5923349		JB	0.9	13.5	560	17.1	1	26	1	45	11	0.9	4	6	3.58	11.9	0.42	2	10	23	2.5	13.4	1.80	0.5	0.5	3.1	1	2.8	2.8	131	25.04
103F08	993116	8	682733	5927335		JB	0.7	9.4	700	37.1	3	30	2	131	14	1.0	2	10	4.33	13.7	0.36	2	13	24	2.9	18.5	2.16	0.5	0.5	2.7	1	2.0	2.4	119	23.69
103F08	993117	8	685272	5930676		KS	0.7	8.7	540	48.5	3	26	3	81	17	0.9	2	8	4.50	12.2	0.33	1	5	20	2.4	19.4	2.02	0.7	0.5	2.9	1	2.2	2.2	136	22.26
103F09	993118	8	681507	5931463		KS	1.1	15.7	590	19.2	2	42	2	40	14	1.2	3	9	4.71	19.2	0.51	2	18	48	3.8	14.7	2.12	1.3	0.6	4.4	1	2.7	3.3	139	23.17
103F09	993119	8	680505	5931511		KS	1.4	13.2	650	23.0	1	53	3	37	17	1.3	2	7	4.48	24.4	0.52	3	20	58	4.8	14.2	1.74	1.8	0.9	6.2	1	3.3	3.6	161	23.09
103F09	993120	8	677158	5934024		NTP	0.8	9.3	600	41.6	2	50	2	51	20	1.6	2	7	5.90	20.7	0.50	4	22	38	4.7	18.2	2.13	1.2	0.7	3.6	1	1.7	3.4	142	20.49
103F09	993122	8	677508	5936679		NTP	0.4	5.8	540	51.9	5	31	1	26	23	1.3	2	4	6.18	13.6	0.26	1	9	15	2.9	15.1	2.42	0.5	0.5	1.8	1	1.4	1.6	146	17.10
103F09	993123	8	675168	5934295	10	NTP	1.7	7.7	680	10.9	3	58	1	44	16	1.9	4	13	5.90	25.9	0.70	4	20	49	5.8	16.2	2.65	1.7	0.9	4.8	1	1.6	4.7	201	28.20
103F09	993124	8	675168	5934295	20	NTP	1.9	9.9	540	13.4	2	58	2	48	15	1.8	3	13	5.97	26.4	0.70	1	24	33	5.8	16.5	2.54	2.0	1.0	4.9	1	2.1	4.4	193	25.12
103F09	993125	8	676093	5934887		NTP	0.7	3.2	470	13.8	4	45	1	65	25	1.8	3	9	7.35	19.6	0.54	1	17	15	5.0	21.8	2.06	1.8	0.6	2.9	1	1.5	3.6	140	24.53
103F01	993126	8	694802	5892635		KS	1.5	26.0	720	14.8	2	55	3	72	15	1.3	147	15	4.61	27.5	0.48	1	19	45	4.3	14.7	2.55	1.6	0.5	6.2	1	3.3	3.1	115	24.96
103F01	993128	8	691259	5891731		uKH	1.1	43.5	650	55.7	1	38	3	55	27	1.0	2	6	4.69	17.9	0.32	5	10	50	3.2	13.4	2.05	0.5	0.5	4.6	1	1.8	2.0	139	19.80
103F01	993129	8	690148	5891613		uKH	0.5	8.1	520	43.6	2	28	2	235	19	1.1	33	5	5.34	12.8	0.45	5	10	27	3.4	22.7	1.72	0.5	0.6	2.5	1	0.5	3.0	131	23.93
103F01	993130	8	684431	5891487		JB	0.7	12.5	590	22.6	1	25	2	59	17	1.2	2	6	5.93	12.7	0.43	2	11	40	3.4	23.4	1.88	0.5	0.5	2.5	1	1.9	2.8	115	25.84
103F01	993131	8	686841	5891944		uKH	0.6	11.8	410	35.1	3	28	2	247	24	1.1	12	6	5.84	12.9	0.46	1	11	15	3.4	25.1	1.53	0.5	0.5	2.8	1	1.8	3.0	146	26.46
103F01	993132	8	687226	5889415		JB	0.5	8.4	230	70.5	5	20	1	1050	43	1.0	2	3	6.89	9.8	0.38	1	10	21	3.0	29.6	1.30	0.5	0.5	1.7	1	0.5	2.5	164	22.12
103F01	993133	8	685142	5888792		JB	0.6	10.6	540	47.1	2	21	2	76	23	0.9	2	5	5.91	11.5	0.35	1	9	15	3.3	25.0	1.65	0.6	0.5	2.7	1	1.2	2.3	149	21.60
103F01	993134	8	684549	5888524		JB	1.8	9.0	520	27.5	2	18	2	148	21	0.9	2	6	5.79	11.3	0.38	1	10	39	3.3	27.3	1.79	0.5	0.5	2.2	1	2.8	2.5	181	25.08
103F01	993135	8	684041	5886635		TrK	0.8	18.2	490	62.1	6	29	1	186	44	2.0	28	3	9.82	15.7	0.42	1	16	15	5.6	38.7	1.49	0.5	0.7	1.0	1	0.5	2.8	232	26.08
103F01	993136	8	687024	5889105		JB	1.0	8.4	330	60.9	3	17	3	153	27	0.9	48	3	6.44	8.9	0.31	1	5	15	3.0	27.7	1.61	0.5	0.5	1.4	1	1.8	2.1	160	25.87
103F01	993137	8	684836	5887361		TrK	1.5	13.7	330	66.3	3	13	1	182	35	1.0	5	3	6.63	8.3	0.33	1	7	44	2.9	29.2	1.63	0.5	0.5	1.2	1	3.8	2.2	264	19.57
103F01	993138	8	687161	5888928		JB	1.2	7.2	140	98.4	3	19	1	207	37	0.9	2	3	7.05	7.9	0.31	1	5	15	2.9	29.3	1.87	0.5	0.5	0.8	1	1.2	2.1	237	18.36
103F01	993139	8	688760	5888187		JB	2.0	14.7	650	17.3	2	17	1	571	20	0.9	252	4	5.53	10.0	0.38	5	10	27	3.3	27.2	1.66	0.5	0.6	1.7	1	2.5	2.5	222	28.13
103F01	993140	8	690155	5889310		uKH	0.8	13.0	540	17.4	2	24	1	288	15	1.0	2	5	5.20	12.4	0.40	3	11	45	3.4	22.2	1.64	0.5	0.5	2.5	1	2.1	2.6	132	25.86
103F01	993142	8	690836	5890303		uKH	1.4	18.5	470	14.8	2	35	1	98	17	1.1	62	18	5.86	20.8	0.42	2	15	15	4.3	18.9	1.98	1.2	0.6	4.3	3	2.5	2.8	167	27.54
103F01	993143	8	697237	5890602		KS	1.0	13.3	730	28.7	1	41	2	62	16	1.0	2	16	3.79	21.8	0.38	1	14	15	3.4	12.9	2.37	0.5	0.5	5.0	1	3.5	2.4	144	21.66
103F01	993144	8	697559	5887439		uKH	1.2	12.8	570	10.0	1	45	1	101	13	1.0	4	26	5.01	23.1	0.45	1	12	46	3.8	16.5	2.21	1.6	0.7	4.9	1	3.2	3.0	111	31.14
103F01	993145	8	699203	5889232		KS	3.3	23.9	590	18.8	2	40	2	50	18	0.9	2	13	4.67	19.2	0.30	1	14	68	3.3	14.0	2.14	0.5	0.5	5.3	1	3.0	2.0	133	25.02
103G04	993146	9	308234	5902148		KS	1.1	11.9	530	16.8	1	47	1	79	11	1.1	3	45	5.33	25.7	0.49	1	15	55	3.7	14.5	1.78	1.2	0.5	6.1	1	3.8	3.3	104	31.57
103G04	993147	9	304670	5901930		KS	0.9	6.6	590	10.6	1	43	1	73	10	1.1	223	38	3.72	23.4	0.42	1	11	49	3.6	12.8	2.30	1.0	0.5	5.0	1	3.4	2.8	119	28.45
103G04	993148	9	303329	5897020		uKH	1.2	11.5	550	15.9	3	43	1	62	13	0.9	3	28	4.84	23.4	0.39	1	12	48	3.4	14.2	1.97	0.5	0.5	5.5	1	3.8	2.7	94	27.31
103G04	993149	9	306429	5896759	10	uKH	1.4	14.9	580	20.1	2	45	2	73	16	1.0	139	31	5.92	25.4	0.45	1	14	53	3.7	15.1	2.29	2.0	0.6	6.7	1	4.0	3.0	140	28.81
103G04	993150	9	306429	5896759	20	uKH	1.2	14.1	540	32.9	2	39	2	72	15	0.9	2	28	5.63	23.1	0.42	1	16	44	3.5	14.7	2.13	1.3	0.5	6.0	1	3.7	2.8	142	25.81

Field Observations and Analytical Data

						STREAM SEDIMENT																											
							Sb	As	Ba	Br	Ca	Ce	Cs	Cr	Co	Eu	Au	Hf	Fe	La	Lu	Mo	Nd	Rb	Sm	Sc	Na	Ta	Tb	Th	W	U	Yb	Zn	Wt
		UTM	UTM	UTM			0.1	0.5	50	0.5	1	3	1	5	1	0.2	2	1	0.01	0.5	0.05	1	5	15	0.1	0.1	0.01	0.5	0.5	0.2	1	0.5	0.2	50	
		Zone	East	North			ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
Map	ID		NAD83	NAD83	Rep	Form	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	GRAV
103G04	993151	9	303571	5896950		uKH	1.2	12.8	510	9.0	2	47	2	60	14	1.0	4	30	6.25	27.2	0.46	1	16	36	4.0	15.2	1.92	1.3	0.5	6.1	1	4.2	3.1	116	31.86
103G04	993152	9	300211	5897630		JB	1.0	10.6	560	17.1	2	27	2	62	14	0.8	2	11	4.46	13.6	0.33	1	12	41	2.7	17.5	2.10	0.5	0.5	3.0	1	2.2	2.2	120	28.94
103F01	993153	8	698914	5881808		JB	1.0	8.0	460	82.0	4	20	1	868	41	0.9	2	3	7.38	8.9	0.33	7	9	32	3.2	37.7	1.35	0.5	0.5	1.2	1	2.0	2.2	230	16.65
103F01	993154	8	699006	5882801		JB	1.2	10.2	370	41.3	4	25	1	231	27	1.2	2	4	6.96	11.8	0.38	1	10	15	3.9	33.1	2.17	0.5	0.5	1.2	1	4.9	2.5	148	22.28
103F01	993155	8	697540	5882565		JB	1.0	9.6	380	12.0	5	21	1	317	33	1.4	19	4	7.11	10.2	0.39	1	11	33	3.9	35.9	2.15	0.5	0.5	1.2	1	0.5	2.7	163	32.22
103F01	993156	8	694670	5885469		JB	2.3	33.6	800	24.0	2	21	3	70	23	1.2	3	5	7.46	11.8	0.36	2	13	19	3.4	22.2	1.34	0.5	0.5	2.2	1	1.6	2.3	185	25.62
103F01	993157	8	696461	5886480		uKH	0.5	12.9	440	23.2	1	22	2	64	15	1.1	2	4	5.18	13.0	0.35	1	11	45	3.4	21.1	1.35	0.9	0.5	2.5	1	2.4	2.3	160	25.14
103F01	993158	8	699562	5890984		KS	4.3	27.0	590	10.7	2	47	2	67	19	1.4	46	24	6.90	24.5	0.42	1	19	37	4.2	15.3	1.97	0.5	0.5	6.9	1	4.5	3.0	135	28.77
103F01	993160	8	697076	5894575		JB	1.2	9.2	700	16.8	2	29	2	212	16	1.2	4	14	4.74	16.2	0.39	1	14	25	3.4	22.2	1.85	0.5	0.5	4.0	1	3.7	2.6	196	25.62
103F09	993162	8	687915	5938427		NTS	0.4	3.6	570	15.1	2	79	1	57	11	1.9	2	18	4.00	43.0	0.45	1	33	32	7.3	17.5	2.52	1.3	0.9	9.4	1	4.0	3.2	133	21.33
103F09	993164	8	683786	5943636		NTS	1.1	7.7	630	22.2	2	60	2	66	13	1.6	2	22	4.19	35.2	0.44	1	20	35	5.4	16.6	2.24	2.4	0.8	7.9	1	3.5	2.9	84	21.21
103F09	993165	8	683002	5941163		NTS	0.6	5.8	630	28.7	4	47	1	45	8	1.4	2	11	2.82	23.9	0.37	2	19	25	4.1	13.6	2.55	1.3	0.5	6.2	1	2.6	2.4	112	20.27
103F09	993166	8	682287	5935307		NTP	2.3	25.0	470	28.8	1	35	2	37	21	1.3	2	8	5.84	18.4	0.41	1	16	24	3.9	17.1	1.72	0.5	0.5	3.9	1	1.8	2.7	172	21.25
103F09	993167	8	682325	5938048	10	NTP	0.5	6.1	420	24.5	3	30	1	35	21	1.4	2	5	6.19	14.7	0.29	1	10	40	3.3	17.0	2.30	0.9	0.5	2.3	1	0.5	1.9	146	22.15
103F09	993168	8	682325	5938048	20	NTP	0.3	4.0	450	24.8	3	31	1	43	21	1.2	2	5	6.11	14.3	0.31	1	11	15	3.2	16.4	2.21	1.7	0.5	2.6	1	1.6	2.1	166	24.86
103F09	993169	8	677972	5939615		NTP	0.6	7.6	410	34.5	3	24	1	33	23	1.3	2	5	4.82	11.8	0.28	1	10	15	2.5	14.6	2.29	1.3	0.5	2.7	1	0.5	1.9	121	20.02
103F09	993170	8	673906	5938860		NTP	0.8	5.9	560	31.8	4	33	1	97	23	1.2	2	4	5.79	15.6	0.42	1	10	15	3.7	15.5	1.96	0.7	0.5	2.5	1	0.5	2.8	155	20.12
103F09	993171	8	673895	5938404		NTP	0.8	4.3	560	43.4	4	36	1	49	19	1.5	2	16	6.04	17.2	0.54	1	12	40	3.7	18.8	2.46	1.5	0.5	3.9	1	1.9	3.4	160	21.82
103F09	993172	8	671010	5933048		NTP	4.4	22.9	480	20.1	1	54	2	10	7	1.3	2	9	3.20	27.5	0.61	2	19	48	5.8	9.8	1.98	1.8	0.9	5.5	1	3.2	4.0	83	22.35
103F09	993173	8	671614	5932684		NTP	2.0	17.6	660	21.5	1	57	2	12	7	1.5	2	12	4.06	27.1	0.77	1	18	51	5.7	10.7	1.95	1.8	0.8	6.4	1	3.7	4.7	162	23.73
103F09	993174	8	669503	5933384		NTP	2.5	64.7	480	30.4	1	44	2	45	23	1.6	2	7	7.17	22.4	0.48	1	19	39	5.3	19.7	2.23	0.5	0.7	4.2	1	2.0	3.2	192	22.34
103F09	993175	8	673381	5932468		NTP	1.0	29.0	480	54.9	2	58	3	17	12	1.4	2	9	4.19	23.9	0.66	4	21	49	5.5	11.9	1.69	0.5	0.8	6.1	1	3.5	4.4	146	16.58
103F08	993176	8	670028	5928783		OTg	0.8	35.5	370	70.0	2	38	1	53	15	1.2	2	7	5.17	18.2	0.45	1	13	31	4.1	18.5	2.21	1.2	0.6	3.6	1	1.8	3.0	145	23.75
103F08	993177	8	669810	5929480		OTg	0.9	11.2	480	21.7	2	43	2	67	16	1.2	2	10	4.98	20.1	0.46	4	13	50	4.1	16.8	2.08	1.7	0.7	4.8	1	2.8	3.1	125	26.74
103F08	993178	8	670304	5930377		OTg	4.9	237.0	430	30.3	1	34	2	50	18	1.2	2	13	5.42	17.0	0.44	1	11	29	3.6	17.0	1.76	1.8	0.5	3.7	1	2.1	2.9	119	24.02
103F09	993179	8	670815	5932316		NTP	4.2	49.2	460	76.6	2	39	2	112	24	1.3	4	6	5.48	16.5	0.42	1	11	29	4.2	19.4	1.64	1.1	0.5	3.5	1	2.2	2.8	141	20.24
103F09	993180	8	668649	5932459		OTg	1.1	9.3	470	59.4	1	45	4	50	16	1.2	4	9	4.82	17.7	0.49	3	6	41	3.9	13.9	2.08	0.5	0.7	4.9	1	1.9	3.3	145	18.99
103F09	993182	8	667751	5932389		OTg	0.8	7.4	400	56.3	1	35	3	49	18	1.2	2	6	5.16	16.9	0.42	1	10	45	3.8	15.4	1.54	1.0	0.6	3.7	1	1.5	2.8	113	19.72
103F08	993183	8	674385	5931031		JB	7.0	59.9	440	64.1	2	58	2	26	15	1.8	2	7	4.03	30.3	0.48	1	23	32	5.8	17.4	2.20	1.5	0.7	4.6	1	2.7	3.2	79	21.41
103F08	993184	8	673134	5930290	10	JB	3.3	35.2	370	57.4	2	44	1	27	16	1.4	2	7	3.91	21.7	0.50	6	18	44	4.8	16.1	2.49	1.2	0.5	3.8	1	2.0	3.4	76	18.12
103F08	993185	8	673134	5930290	20	JB	3.1	38.6	380	61.3	3	49	1	34	17	1.4	2	7	4.16	22.5	0.45	1	14	15	5.0	16.9	2.59	0.8	0.5	3.5	1	2.2	3.0	89	18.54
103F08	993186	8	676751	5930622		JB	4.1	49.6	670	24.6	1	38	2	26	10	1.0	2	10	3.22	18.4	0.50	4	13	56	3.9	13.5	2.52	2.0	0.7	4.8	1	2.2	3.3	86	24.01
103F08	993187	8	691427	5928302		JB	1.1	13.0	440	23.6	2	20	2	86	23	0.9	6	5	6.74	10.3	0.26	1	8	15	2.6	24.7	2.11	0.5	0.5	1.5	1	0.5	1.8	189	26.47
103F08	993188	8	691293	5931701		NTS	0.9	14.2	550	36.6	2	28	2	75	22	0.9	52	9	5.21	14.4	0.33	1	11	20	3.0	21.1	2.31	0.5	0.5	3.2	1	1.0	2.2	120	23.60
103F08	993189	8	689960	5929284		JB	0.7	11.9	450	45.6	2	13	2	61	27	0.7	2	4	6.67	7.4	0.25	1	5	15	1.8	21.6	2.06	0.5	0.5	1.5	1	0.7	1.5	131	21.41
103F08	993190	8	687997	5930346		KS	0.8	13.3	560	25.8	2	17	2	78	23	0.8	2	5	6.02	8.8	0.26	1	5	31	2.3	21.6	1.92	0.5	0.5	1.6	1	0.5	1.8	171	23.64
103F01	993192	8	668576	5900103		OTg	1.6	9.8	530	40.3	2	33	3	42	15	1.1	2	9	5.94	17.8	0.46	2	11	36	3.7	16.5	2.47	1.1	0.5	3.8	1	2.9	3.1	96	25.27
103F01	993193	8	668293	5900182		OTg	1.5	5.9	520	30.6	3	38	2	43	15	1.2	4	23	7.06	20.1	0.56	1	16	15	4.1	15.3	2.56	2.5	0.5	4.1	1	3.9	3.8	124	25.71
103F01	993194	8	667772	5898940		NTP	1.1	20.0	450	132.0	2	24	3	48	19	1.0	3	3	5.12	12.2	0.33	4	6	39	3.3	18.5	1.83	0.5	0.6	2.6	1	2.0	2.2	90	17.66
103F01	993195	8	668626	5896128		NTP	1.5	6.4	470	95.7	4	34	2	44	19	1.4	3	5	5.14	18.1	0.46	1	14	32	4.2	19.0	2.09	0.5	0.6	3.5	1	2.3	2.9	62	20.78
103F01	993196	8	671903	5894159		NTP	0.8	5.9	440	193.0	2	28	2	70	21	1.0	2	4	4.29	15.2	0.30	7	5	15	3.1	16.7	1.86	0.5	0.5	3.3	1	0.5	2.0	121	17.35
103F01	993197	8	671782	5894427		NTP	1.5	35.0	580	89.4	3	36	3	62	19	1.1	2	4	4.69	15.9	0.42	3	13	40	4.0	17.3	2.20	0.5	0.6	4.0	1	2.8	2.8	119	21.06
103F01	993198	8	670158	5893303		NTP	1.5	23.2	300	83.2	2	20	7	121	25	0.8	2	3	4.67	10.1	0.24	1	5	51	2.3	19.0	1.65	0.5	0.5	3.0	1	1.7	1.6	113	22.23
103F01	993199	8	670938	5890597		TrK	0.9	6.1	330	83.7	2	17	6	100	24	0.6	2	3	5.01	8.0	0.28	1	5	40	1.9	19.7	1.75	0.5	0.5	2.9	1	1.0	1.7	101	22.57
103F01	993200	8	673216	5890884		TrK	1.0	7.8	300	70.1	3	20	4	111	23	0.7	2	3	4.80	10.6	0.27	1	5	63	2.3	18.5	1.96	1.4	0.5	3.4	1	1.5	1.7	106	23.14

Field Observations and Analytical Data

						STREAM SEDIMENT																										
						Sb	As	Ba	Br	Ca	Ce	Cs	Cr	Co	Eu	Au	Hf	Fe	La	Lu	Mo	Nd	Rb	Sm	Sc	Na	Ta	Tb	Th	W	U	Yb	Zn	Wt
		UTM	UTM	UTM		0.1	0.5	50	0.5	1	3	1	5	1	0.2	2	1	0.01	0.5	0.05	1	5	15	0.1	0.1	0.01	0.5	0.5	0.2	1	0.5	0.2	50	
		Zone	East	North		ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
Map	ID		NAD83	NAD83	Rep	Form	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	GRAV
103F01	993202	8	674830	5887426		TrK	1.3	15.7	500	29.6	3	44	1	90	25	1.3	5	8	6.42	25.0	0.50	1	18	15	5.2	28.3	2.17	0.5	0.8	3.0	1	1.5	3.4	118	26.56
103F01	993203	8	676978	5892746		TrK	0.9	13.4	380	110.0	2	23	4	100	21	0.8	2	3	4.44	12.4	0.26	2	9	47	2.5	16.1	1.81	0.5	0.5	3.5	1	2.2	1.8	116	20.38
103F01	993204	8	677814	5896389		NTP	1.2	14.6	380	70.5	2	24	3	80	20	0.8	4	4	5.00	14.1	0.31	1	8	63	2.9	17.3	2.22	0.5	0.5	4.0	1	1.3	2.0	93	23.40
103F01	993205	8	681757	5892815		TrK	0.8	12.1	500	19.0	2	22	2	75	19	0.8	10	5	5.76	13.1	0.31	1	9	39	2.6	19.0	1.47	0.5	0.5	3.5	1	1.8	2.0	137	24.72
103F01	993206	8	688687	5894349		uKH	1.6	17.9	570	18.2	2	37	2	55	12	0.9	2	14	3.95	22.1	0.37	2	13	49	3.4	13.0	1.98	1.5	0.5	5.2	1	2.9	2.3	105	29.18
103F01	993207	8	678688	5901808		KS	3.8	20.0	460	95.2	2	29	4	70	28	1.1	10	5	6.35	15.6	0.35	2	11	47	3.5	22.0	1.27	0.5	0.5	3.4	1	1.7	2.3	181	20.13
103F01	993208	8	681531	5897546		KS	1.1	13.1	420	73.5	2	24	3	124	23	0.8	2	4	5.50	13.1	0.28	1	9	48	2.6	19.2	1.48	0.9	0.5	3.4	1	1.9	1.8	125	23.06
103F01	993209	8	685286	5896738		KS	1.3	18.0	470	22.5	2	31	2	71	16	0.9	2	11	4.56	18.3	0.35	1	11	63	3.0	16.9	1.63	0.5	0.5	4.8	1	2.1	2.2	129	26.35
103F01	993210	8	684654	5900942	10	KS	3.9	40.7	500	41.5	2	36	3	67	20	1.1	57	6	5.60	18.6	0.33	2	16	38	3.6	19.1	1.63	0.5	0.5	5.1	1	2.5	2.2	50	22.90
103F01	993212	8	684654	5900942	20	KS	3.8	40.2	470	41.4	2	37	3	67	21	1.0	47	6	5.55	18.9	0.36	1	12	15	3.6	18.6	1.60	0.8	0.6	4.6	1	2.2	2.4	146	23.64
103F08	993213	8	680366	5911340		KS	1.0	20.9	430	21.1	2	46	2	107	16	1.1	2	23	5.19	23.1	0.46	2	13	40	3.8	17.4	1.66	1.4	0.7	5.4	1	3.1	2.8	117	26.78
103F08	993214	8	678282	5909370		KS	1.6	22.1	460	81.2	2	32	3	72	19	0.9	2	6	5.19	15.8	0.33	3	9	43	3.0	17.0	1.60	0.5	0.5	3.9	1	2.3	2.1	122	19.10
103F08	993215	8	679193	5909414		KS	4.3	43.6	550	69.9	2	36	4	48	17	0.9	150	8	4.95	19.5	0.36	2	13	57	3.4	14.8	1.97	1.5	0.5	4.6	1	2.0	2.4	144	20.21
103F08	993216	8	679897	5909381		KS	4.6	29.2	370	67.0	1	32	3	48	16	0.9	580	8	4.56	16.9	0.38	1	13	15	3.2	15.6	1.59	0.8	0.6	4.1	1	3.0	2.2	106	21.13
103F08	993217	8	681809	5912647		KS	3.1	14.8	370	24.1	2	27	2	63	19	0.8	5	7	4.71	13.9	0.32	1	11	23	2.9	14.9	1.85	0.5	0.5	3.8	1	2.0	2.0	131	26.74

Field Observations and Analytical Data

							STREAM SEDIMENT															STREAM WATER			
							Sb	As	Bi	Cd	Co	Cu	Fe	F	Pb	Mn	Hg	Mo	Ni	Ag	V	Zn	LOI	pH	FW	UW	SO4
		UTM	UTM	UTM			0.2	0.2	0.2	0.2	2	2	0.02	40	2	5	10	1	2	0.2	5	2	0.1	0.1	20	0.05	1
		Zone	East	North			ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%		ppb	ppb	ppm
Map	ID		NAD83	NAD83	Rep	Form	AAS	AAS-H	AAS-H	AAS	AAS	AAS	AAS	ION	AAS	AAS	AAS-F	AAS	AAS	AAS	AAS	AAS	GRAV	GCE	ION	LIF	TURB
103F08	993002	8	677040	5913948		JB	1.1	12.0	0.2	0.5	13	27	3.40	200	6	526	270	3	19	0.2	76	102	9.5	6.8	44	0.06	4
103F08	993003	8	675840	5913596		lKL	0.3	5.1	0.2	0.2	14	27	3.50	190	5	450	50	1	12	0.2	72	75	10.6	6.9	36	0.05	3
103F08	993004	8	672141	5913558		JB	1.0	8.2	0.2	0.8	13	38	4.00	190	4	663	70	3	17	0.2	123	124	8.2	7.4	48	0.05	10
103F08	993005	8	672473	5911708	10	JB	0.4	12.0	0.2	0.2	12	27	3.30	220	5	465	60	1	11	0.2	96	72	7.9	7.2	38	0.05	7
103F08	993006	8	672473	5911708	20	JB	0.5	12.0	0.2	0.2	12	28	3.40	150	4	481	60	1	12	0.2	103	73	9.4	7.3	50	0.05	6
103F08	993008	8	672704	5910672		lKL	1.0	25.0	0.2	0.2	14	30	4.00	260	7	542	60	3	16	0.2	83	85	8.6	7.2	30	0.05	4
103F08	993009	8	672028	5909157		OTg	0.8	5.7	0.2	0.2	8	21	2.30	230	6	217	20	2	11	0.2	80	46	6.4	7.1	26	0.05	2
103F08	993010	8	670393	5914404		JB	2.8	20.0	0.2	1.0	16	40	4.80	250	3	1080	250	4	23	0.2	64	133	9.8	7.9	50	0.17	21
103F08	993011	8	669820	5916446		JB	3.4	115.0	0.2	0.2	13	29	4.20	180	5	510	950	2	9	0.2	105	78	6.6	7.8	46	0.05	4
103F08	993012	8	669491	5917676		OTg	2.4	75.0	0.2	0.2	13	34	3.60	210	5	419	360	1	10	0.2	81	66	7.6	7.6	36	0.05	5
103F08	993013	8	672340	5919479		NTP	0.6	17.0	0.2	0.2	11	31	3.40	200	4	455	80	1	15	0.2	109	75	8.1	7.6	52	0.05	5
103F08	993014	8	671625	5920711		NTP	1.0	22.0	0.2	0.2	11	32	3.20	160	2	408	220	2	7	0.2	86	76	8.8	7.5	36	0.05	6
103F08	993015	8	670510	5920542		NTP	0.2	8.5	0.2	0.2	10	25	2.80	210	4	552	60	2	7	0.2	108	57	9.1	7.5	38	0.05	2
103F08	993016	8	667799	5927350		NTP	0.6	8.2	0.2	0.2	12	20	3.20	160	4	534	60	1	13	0.2	97	78	7.2	7.3	34	0.05	5
103F08	993017	8	666072	5928272		OTg	0.5	4.4	0.2	0.2	12	20	3.30	220	5	546	80	1	15	0.2	98	101	7.9	7.3	26	0.05	4
103F08	993018	8	666060	5928053		OTg	0.4	3.7	0.2	0.2	10	18	2.80	210	5	498	6720	2	12	0.2	91	100	7.1	7.2	26	0.05	2
103F08	993019	8	668462	5925931		NTP	0.6	19.0	0.2	0.2	12	29	3.50	240	4	518	26000	1	11	0.2	83	82	8.7	7.3	30	0.05	3
103F08	993020	8	666873	5923970		NTP	1.1	58.0	0.2	0.2	10	44	2.70	200	2	350	320	2	8	0.2	68	69	6.1	7.8	36	0.05	10
103F08	993022	8	666413	5922689		NTP	2.1	90.0	0.2	3.1	13	57	3.40	170	4	795	160	6	23	0.2	110	254	57.4	7.4	40	0.05	13
103F08	993023	8	667642	5921113		NTP	0.9	52.0	0.2	1.1	14	68	3.60	200	7	639	30	2	16	0.2	90	136	7.6	7.4	46	0.05	12
103F07	993024	8	662926	5925867		NTP	0.5	2.9	0.2	0.2	5	14	1.90	180	9	644	190	1	5	0.2	33	72	16.1	7.7	36	0.05	2
103F07	993025	8	663490	5925033		NTP	0.2	2.1	0.2	0.7	16	27	3.40	160	2	480	60	1	29	0.2	97	77	7.5	7.4	30	0.05	2
103F07	993026	8	664737	5922722		NTP	0.2	8.1	0.2	0.2	16	28	3.30	200	3	501	140	1	18	0.2	71	64	9.1	7.2	28	0.05	3
103F07	993027	8	661001	5922812	10	NTP	0.8	19.0	0.2	0.2	10	25	2.70	170	7	416	460	1	11	0.2	56	70	7.8	7.2	26	0.05	3
103F07	993028	8	661001	5922812	20	NTP	0.8	18.0	0.2	0.2	9	22	2.70	170	7	413	240	1	10	0.2	55	61	7.2	7.1	24	0.05	2
103F08	993029	8	689821	5904592		uKH	0.4	8.0	0.2	0.2	15	22	3.50	200	6	1800	70	2	15	0.2	46	87	11.9	7.0	26	0.05	5
103F08	993030	8	689617	5904324		uKH	1.0	8.4	0.2	0.2	17	43	3.90	180	10	564	80	1	28	0.2	53	98	8.3	7.1	28	0.05	2
103F08	993031	8	689874	5906643		KS	0.5	7.2	0.2	0.2	15	25	3.40	190	6	1020	80	1	15	0.2	50	81	10.6	7.2	34	0.05	4
103F08	993032	8	690683	5906686		KS	0.4	9.0	0.2	0.2	16	32	3.30	160	8	1000	60	1	21	0.2	54	108	10.1	6.9	48	0.05	6
103F08	993033	8	690157	5908802		KS	0.3	8.6	0.2	0.2	9	16	3.20	150	5	303	30	1	12	0.2	52	70	6.3	7.3	42	0.05	5
103F08	993034	8	690270	5909891		JB	0.4	8.1	0.2	0.2	12	23	3.10	150	4	538	60	2	14	0.2	59	68	7.0	7.9	44	0.05	4
103F08	993036	8	688508	5908631		KS	0.6	16.0	0.2	0.2	12	24	2.90	140	5	795	70	1	20	0.2	48	75	8.7	7.1	36	0.05	3
103F08	993037	8	690105	5911087		JB	0.4	5.5	0.2	0.2	14	19	3.00	170	5	1810	60	1	15	0.2	59	89	7.5	7.7	40	0.05	3
103F08	993038	8	688055	5912057		JB	0.3	5.0	0.2	0.2	9	19	2.70	160	3	367	30	1	14	0.2	55	70	6.1	7.5	34	0.05	3
103F08	993039	8	687065	5912807		JB	0.2	5.2	0.2	0.2	9	17	2.80	160	3	453	30	2	12	0.2	58	71	8.7	7.4	32	0.05	3
103F08	993040	8	691516	5921208		JB	0.3	4.4	0.2	0.3	11	14	3.20	140	2	1440	60	1	10	0.2	87	88	9.5	7.5	34	0.05	4
103G04	993042	9	306212	5902419		KS	0.4	5.6	0.2	0.3	8	21	2.50	180	4	347	50	2	11	0.2	63	61	4.6	7.4	40	0.05	6
103G04	993043	9	314369	5897032		NTS	0.2	5.2	0.2	0.2	10	14	2.50	130	3	1160	50	2	6	0.2	71	56	6.6	7.4	38	0.05	5
103G04	993044	9	312482	5894578		JB	0.2	3.8	0.2	0.3	9	19	2.70	150	2	1150	90	2	9	0.2	94	68	5.2	7.5	34	0.05	3
103G04	993045	9	313697	5888385		JB	0.8	8.5	0.2	0.2	21	39	5.10	170	4	815	150	1	32	0.2	69	81	10.8	-1.0	-1	-1.00	-1
103G04	993046	9	319814	5887969		JB	0.2	3.9	0.2	0.2	13	15	2.50	110	2	1040	40	2	11	0.2	68	53	7.9	7.3	24	0.05	3
103G04	993048	9	317366	5887777		JB	1.5	27.0	0.2	0.3	16	27	3.30	170	2	825	50	1	18	0.2	88	60	5.5	6.9	30	0.06	4
103G04	993049	9	314578	5892401		JB	0.2	2.0	0.2	0.2	14	20	3.20	160	2	1620	80	2	10	0.2	85	65	9.9	6.9	28	0.05	3
103F01	993050	8	711856	5889719		JB	0.3	4.9	0.2	0.2	13	17	2.80	130	3	1780	100	2	11	0.2	64	83	10.1	7.0	38	0.05	5
103G04	993051	9	308218	5888562		KS	0.4	6.5	0.2	0.2	8	11	2.50	110	3	676	200	1	7	0.2	59	55	7.2	7.0	34	0.05	4

Field Observations and Analytical Data

							STREAM SEDIMENT															STREAM WATER			
		UTM Zone	UTM East	UTM North			Sb 0.2 ppm	As 0.2 ppm	Bi 0.2 ppm	Cd 0.2 ppm	Co 2 ppm	Cu 2 ppm	Fe 0.02 %	F 40 ppm	Pb 2 ppm	Mn 5 ppm	Hg 10 ppb	Mo 1 ppm	Ni 2 ppm	Ag 0.2 ppm	V 5 ppm	Zn 2 ppm	LOI 0.1 %	pH 0.1	FW 20 ppb	UW 0.05 ppb	SO4 1 ppm
Map	ID		NAD83	NAD83	Rep	Form	AAS	AAS-H	AAS-H	AAS	AAS	AAS	AAS	ION	AAS	AAS	AAS-F	AAS	AAS	AAS	AAS	AAS	GRAV	GCE	ION	LIF	TURB
103G04	993052	9	301994	5888530		KS	1.1	17.0	0.2	0.3	11	17	2.70	170	4	573	390	1	14	0.2	66	64	7.1	6.9	32	0.05	3
103G04	993053	9	299588	5889016		KS	1.2	44.0	0.2	0.4	14	14	3.10	130	3	2300	8680	2	10	0.2	51	74	9.1	6.9	42	0.05	3
103G04	993054	9	295608	5894126		JB	1.4	11.0	0.2	0.2	11	30	3.00	240	6	385	390	1	14	0.2	70	69	3.9	6.9	44	0.05	9
103F01	993055	8	699032	5896692	10	JB	0.6	8.2	0.2	0.3	9	22	3.40	160	6	336	80	1	12	0.2	78	75	6.0	7.4	40	0.05	7
103F01	993056	8	699032	5896692	20	JB	0.5	8.5	0.2	0.5	9	21	3.40	180	4	351	50	2	11	0.2	77	78	5.0	7.3	48	0.05	6
103G04	993057	9	302187	5898732		uKH	0.4	5.7	0.2	0.3	8	17	2.90	150	2	342	60	1	10	0.2	69	72	5.5	7.3	44	0.05	6
103F09	993058	8	667580	5943731		NTP	0.2	1.0	0.2	0.2	21	29	3.70	100	2	1070	70	2	56	0.2	65	59	17.8	7.2	32	0.05	3
103F09	993059	8	666789	5942443		NTP	0.2	0.5	0.2	0.3	22	33	3.20	100	2	520	20	1	66	0.2	74	55	7.5	7.2	30	0.05	3
103F09	993060	8	665889	5939242		NTP	0.2	2.2	0.2	0.5	18	16	3.10	150	2	6490	40	1	16	0.2	61	142	13.4	7.1	32	0.05	3
103F10	993062	8	661621	5933134		NTP	0.2	4.3	0.2	0.2	19	18	5.20	170	2	2920	100	2	9	0.2	75	93	25.6	6.7	36	0.05	4
103F10	993063	8	662090	5933544	10	NTP	0.4	2.0	0.2	0.2	15	25	3.70	210	2	708	60	1	10	0.2	73	101	9.7	6.8	32	0.05	4
103F10	993064	8	662090	5933544	20	NTP	0.8	4.0	0.2	0.2	15	24	3.90	230	2	693	50	2	10	0.2	78	101	9.6	7.3	42	0.05	4
103F10	993065	8	662450	5934030		NTP	0.6	3.2	0.2	0.2	14	22	3.80	220	2	645	5720	1	9	0.2	112	93	8.6	7.1	36	0.05	3
103F10	993066	8	662411	5934208		NTP	0.5	1.7	0.2	0.2	14	18	3.40	200	2	748	60	4	11	0.2	110	79	10.2	7.0	34	0.05	4
103F10	993067	8	663323	5934140		NTP	0.6	3.3	0.2	0.2	19	18	4.90	230	2	1200	120	2	11	0.2	107	98	14.2	6.9	30	0.05	3
103F10	993068	8	665096	5932817		OTg	0.5	3.9	0.2	0.3	11	17	3.00	230	2	960	60	2	10	0.2	75	80	11.1	6.9	32	0.05	3
103F09	993069	8	665951	5936204		NTP	0.7	3.9	0.2	0.2	13	16	4.00	200	3	2400	500	1	6	0.2	40	91	16.4	6.8	30	0.05	7
103F09	993070	8	667675	5937658		NTP	0.8	5.1	0.2	0.3	7	8	2.50	250	5	2770	160	2	3	0.2	18	53	15.9	6.9	32	0.05	3
103F09	993071	8	667726	5937786		NTP	0.5	3.8	0.2	0.2	7	12	2.60	250	4	2150	260	3	3	0.3	17	37	16.2	6.6	34	0.05	3
103F09	993072	8	672076	5941342		NTP	0.5	4.4	0.2	0.3	14	20	3.00	210	2	950	1000	2	10	0.2	46	65	10.4	6.7	30	0.05	6
103F09	993073	8	669708	5935962		NTP	7.0	170.0	8.0	0.2	13	20	3.70	240	9	1370	180	1	7	0.2	44	62	11.0	6.8	30	0.05	3
103F09	993075	8	669594	5936072		NTP	0.8	31.0	0.2	0.2	15	19	4.10	240	6	1900	240	3	9	0.2	50	98	13.7	6.8	28	0.05	4
103F09	993076	8	670727	5937159		NTP	0.8	35.0	0.2	0.2	14	21	3.30	170	4	940	170	2	13	0.2	54	69	9.7	6.8	30	0.06	4
103F09	993077	8	671719	5937330		NTP	0.5	6.0	0.2	0.2	15	26	3.80	200	5	920	470	1	13	0.3	76	88	9.7	7.2	34	0.05	6
103F09	993078	8	672532	5936951		NTP	0.4	2.6	0.2	0.2	11	18	2.90	210	3	591	3240	2	10	0.2	74	78	6.0	7.0	34	0.05	3
103F08	993079	8	692668	5904558		KS	0.4	6.7	0.2	0.2	13	27	3.00	210	7	1080	80	2	17	0.2	47	96	8.6	7.2	40	0.05	4
103F08	993080	8	685794	5915654		JB	0.4	8.8	0.2	0.6	12	19	3.10	170	3	1660	60	6	15	0.2	66	117	9.5	7.0	34	0.05	5
103F08	993082	8	686611	5919880		JB	0.5	6.8	0.2	0.3	12	14	3.40	130	2	1190	60	4	10	0.2	96	90	8.8	6.8	36	0.05	7
103F08	993083	8	684457	5914286		KS	0.2	6.0	0.2	0.3	11	22	3.10	160	4	1120	60	3	12	0.2	57	75	12.6	6.9	38	0.05	5
103F08	993084	8	683557	5911614		KS	0.4	9.4	0.2	0.2	11	19	3.00	160	4	457	70	2	14	0.2	65	72	8.6	6.8	36	0.05	4
103F08	993085	8	678469	5915134		NTP	0.4	8.3	0.2	0.3	12	30	2.10	180	9	470	100	4	13	0.2	37	57	5.8	7.1	32	0.06	4
103F08	993086	8	677030	5914954		JB	0.8	11.0	0.2	0.3	12	29	4.30	180	6	472	910	3	12	0.2	81	99	7.1	7.1	34	0.05	5
103F08	993087	8	676969	5915066		JB	0.3	3.9	4.0	0.2	10	22	2.50	170	5	536	100	3	10	0.2	64	55	9.6	7.1	32	0.05	3
103F08	993088	8	677252	5918669		JB	0.2	9.1	0.2	0.2	8	16	3.00	160	3	328	80	2	10	0.2	63	68	8.0	6.9	36	0.05	5
103F08	993089	8	680269	5917812		JB	0.2	10.0	0.2	0.2	11	27	3.20	170	4	519	210	3	14	0.2	65	81	7.9	7.0	34	0.05	4
103F08	993090	8	681240	5919476		JB	0.6	9.5	0.2	0.3	14	26	3.30	190	4	1100	70	2	11	0.2	46	95	12.4	7.1	40	0.05	12
103F08	993091	8	682095	5921407		JB	1.9	15.0	0.2	2.7	16	28	3.80	180	2	2120	80	10	31	0.3	105	263	14.5	7.4	28	0.05	8
103F08	993092	8	681867	5924368	10	JB	0.2	5.3	0.2	0.3	9	16	2.80	130	3	392	40	2	8	0.2	59	71	8.4	7.6	26	0.05	5
103F08	993093	8	681867	5924368	20	JB	0.3	5.0	0.2	0.2	8	15	2.70	160	2	330	40	2	8	0.2	61	64	7.2	7.6	30	0.05	5
103F08	993094	8	696859	5908921		JB	0.3	9.7	0.2	0.2	11	14	3.10	130	4	691	60	1	10	0.2	56	73	7.4	7.4	22	0.05	5
103F08	993095	8	690998	5916728		JB	0.4	8.2	0.2	0.7	16	17	4.80	160	2	6230	80	4	10	0.2	63	104	18.5	7.8	24	0.05	4
103F08	993096	8	690183	5915336		JB	0.6	7.5	0.2	0.9	17	24	3.60	90	2	4100	60	3	11	0.2	102	115	13.1	7.6	26	0.05	3
103F08	993098	8	692862	5919043		JB	0.2	9.4	0.2	0.6	26	22	6.30	100	4	18620	100	4	34	0.2	94	127	28.5	7.5	22	0.05	4
103F08	993099	8	692750	5918997		JB	0.3	7.9	0.2	0.3	14	26	3.60	110	2	930	70	2	10	0.2	73	69	9.7	7.9	24	0.05	4
103F08	993100	8	675724	5921442		JB	0.2	8.0	0.2	0.2	10	15	2.90	140	3	463	130	3	7	0.2	53	71	9.4	7.3	34	0.05	5

Field Observations and Analytical Data

							STREAM SEDIMENT															STREAM WATER			
		UTM Zone	UTM East	UTM North			Sb 0.2 ppm	As 0.2 ppm	Bi 0.2 ppm	Cd 0.2 ppm	Co 2 ppm	Cu 2 ppm	Fe 0.02 %	F 40 ppm	Pb 2 ppm	Mn 5 ppm	Hg 10 ppb	Mo 1 ppm	Ni 2 ppm	Ag 0.2 ppm	V 5 ppm	Zn 2 ppm	LOI 0.1 %	pH 0.1	FW 20 ppb	UW 0.05 ppb	SO4 1 ppm
Map	ID		NAD83	NAD83	Rep	Form	AAS	AAS-H	AAS-H	AAS	AAS	AAS	AAS	ION	AAS	AAS	AAS-F	AAS	AAS	AAS	AAS	AAS	GRAV	GCE	ION	LIF	TURB
103F08	993102	8	675812	5921629		JB	0.4	16.0	0.2	0.2	11	20	3.00	170	5	466	210	4	14	0.2	53	81	8.5	7.1	34	0.05	5
103F08	993103	8	679141	5922815		JB	1.5	13.0	0.2	1.0	15	30	3.60	220	4	672	9760	3	19	0.2	47	120	11.3	8.0	38	0.08	29
103F08	993104	8	679468	5926066		JB	0.7	11.0	0.2	0.3	13	28	4.10	220	3	469	150	4	13	0.2	62	82	7.5	7.8	48	0.05	11
103F08	993105	8	679136	5925694		JB	0.6	7.3	0.2	0.7	11	21	3.50	200	3	1180	80	4	11	0.2	64	99	9.9	7.6	38	0.05	7
103F08	993106	8	678935	5925137	10	JB	5.5	51.0	0.2	0.5	12	24	3.70	240	4	782	180	5	12	0.2	71	100	9.1	7.5	36	0.05	6
103F08	993107	8	678935	5925137	20	JB	6.0	52.0	0.2	0.5	12	23	3.80	240	5	711	210	4	13	0.2	72	95	8.6	7.4	34	0.05	6
103G05	993108	9	304803	5920942		NTS	0.2	2.2	0.2	0.2	3	8	1.00	160	2	82	10	1	2	0.2	26	24	5.0	7.0	36	0.05	9
103G05	993109	9	303725	5913894		JB	0.2	5.7	0.2	0.2	11	15	3.10	110	2	673	60	1	6	0.2	100	47	8.9	6.6	26	0.05	7
103G05	993110	9	303000	5912445		JB	0.5	8.6	0.2	0.2	12	30	3.50	120	4	366	6600	3	10	0.2	133	58	4.0	7.2	24	0.05	6
103G05	993111	9	300636	5906661		JB	1.5	53.0	0.2	0.5	15	80	4.00	180	25	1260	130	2	7	0.4	65	124	6.6	7.6	24	0.05	6
103F08	993113	8	697698	5904483		JB	0.3	5.7	0.2	0.2	10	12	3.90	100	4	420	30	2	7	0.2	79	83	10.0	7.1	24	0.05	7
103F08	993114	8	684233	5915504		JB	0.2	5.3	0.2	0.4	12	21	3.30	160	2	732	20	3	12	0.2	67	101	12.1	7.4	30	0.05	8
103F08	993115	8	680073	5923349		JB	0.7	7.2	0.2	0.7	9	22	2.20	140	3	617	50	2	9	0.2	32	89	10.0	7.4	32	0.05	17
103F08	993116	8	682733	5927335		JB	0.2	3.4	0.2	0.2	10	15	2.20	110	2	614	70	2	12	0.2	65	65	9.2	7.6	28	0.05	5
103F08	993117	8	685272	5930676		KS	0.2	3.7	0.2	0.3	11	17	2.40	130	2	1210	160	2	7	0.2	62	73	12.4	7.6	28	0.05	6
103F09	993118	8	681507	5931463		KS	0.4	7.6	0.2	0.2	10	17	2.70	220	3	836	70	2	8	0.2	49	77	8.4	7.2	24	0.05	4
103F09	993119	8	680505	5931511		KS	0.4	6.0	0.2	0.3	13	25	2.20	210	7	648	70	1	10	0.2	42	72	9.8	8.0	34	0.05	5
103F09	993120	8	677158	5934024		NTP	0.2	2.1	0.2	0.2	13	18	2.90	230	2	1050	8040	1	9	0.2	60	81	11.8	7.7	28	0.05	3
103F09	993122	8	677508	5936679		NTP	0.2	0.7	0.2	0.2	14	18	3.10	170	2	2210	60	1	3	0.2	65	61	15.8	7.3	26	0.05	3
103F09	993123	8	675168	5934295	10	NTP	0.8	5.1	0.2	0.2	11	19	2.90	160	2	574	2520	1	9	0.2	63	92	5.8	7.6	26	0.05	4
103F09	993124	8	675168	5934295	20	NTP	0.7	5.0	0.2	0.2	10	19	3.00	210	2	587	220	2	8	0.2	61	86	6.0	7.6	22	0.05	4
103F09	993125	8	676093	5934887		NTP	0.2	1.1	0.2	0.2	16	26	3.40	220	2	776	210	2	14	0.2	82	79	8.4	7.9	26	0.05	3
103F01	993126	8	694802	5892635		KS	0.7	18.0	0.2	0.3	11	27	2.50	200	7	528	220	2	13	0.2	58	70	5.5	7.8	28	0.05	7
103F01	993128	8	691259	5891731		uKH	0.6	33.0	0.2	0.4	21	21	3.90	180	4	5620	250	2	13	0.2	80	98	18.6	7.5	32	0.05	3
103F01	993129	8	690148	5891613		uKH	0.4	5.7	0.2	0.3	12	27	3.40	210	2	643	100	1	21	0.2	72	77	10.8	7.7	30	0.05	12
103F01	993130	8	684431	5891487		JB	0.5	7.4	0.2	0.2	12	32	4.10	180	4	390	140	2	10	0.2	76	76	9.2	7.6	28	0.05	14
103F01	993131	8	686841	5891944		uKH	0.3	7.8	0.2	0.3	16	32	3.60	160	2	535	90	4	16	0.2	71	65	9.9	7.6	30	0.05	14
103F01	993132	8	687226	5889415		JB	0.2	4.1	0.2	0.2	24	50	3.70	140	2	477	60	2	77	0.2	80	72	13.3	7.8	26	0.05	7
103F01	993133	8	685142	5888792		JB	0.3	6.0	0.2	0.2	15	41	3.80	130	2	562	100	1	15	0.2	90	80	12.2	7.7	36	0.05	13
103F01	993134	8	684549	5888524		JB	1.6	6.9	0.2	1.0	15	52	4.00	200	2	450	180	3	25	0.2	108	105	8.4	7.9	32	0.06	9
103F01	993135	8	684041	5886635		TrK	0.5	8.1	0.2	0.6	28	187	5.70	140	7	940	470	2	47	0.2	242	114	9.9	7.5	30	0.05	4
103F01	993136	8	687024	5889105		JB	0.8	6.2	0.2	0.7	20	75	4.40	130	2	709	150	4	42	0.2	150	106	9.2	7.4	50	0.05	5
103F01	993137	8	684836	5887361		TrK	1.2	7.6	0.2	1.0	23	76	4.30	110	2	1100	70	5	67	0.2	146	125	12.8	8.1	24	0.06	5
103F01	993138	8	687161	5888928		JB	0.7	3.3	0.2	0.3	26	65	5.80	110	2	1530	170	3	44	0.2	155	90	19.7	7.5	22	0.05	4
103F01	993139	8	688760	5888187		JB	1.9	11.0	0.2	1.2	14	49	3.60	230	2	453	310	4	40	0.2	103	126	6.5	8.3	30	0.07	11
103F01	993140	8	690155	5889310		uKH	0.8	10.0	0.2	0.5	12	34	3.90	190	2	465	140	2	20	0.2	79	95	8.8	8.2	48	0.05	20
103F01	993142	8	690836	5890303		uKH	1.0	11.0	0.2	0.2	11	23	3.60	170	3	457	300	1	12	0.2	77	75	7.4	8.0	42	0.05	14
103F01	993143	8	697237	5890602		KS	0.5	7.9	0.2	0.3	13	22	2.40	140	5	1390	80	2	13	0.2	51	66	9.0	7.4	38	0.05	5
103F01	993144	8	697559	5887439		uKH	0.2	9.5	0.2	0.2	10	26	3.10	180	3	401	100	2	14	0.2	80	67	6.8	7.9	46	0.05	7
103F01	993145	8	699203	5889232		KS	2.0	19.0	0.2	0.3	13	31	3.00	160	6	763	820	1	14	0.2	59	82	7.2	7.2	44	0.05	4
103G04	993146	9	308234	5902148		KS	0.5	6.8	0.2	0.2	8	16	2.80	120	2	345	60	2	10	0.2	78	63	5.6	7.5	40	0.05	4
103G04	993147	9	304670	5901930		KS	0.4	4.0	0.2	0.3	7	15	2.20	90	2	309	50	1	9	0.2	57	61	5.0	7.6	50	0.05	7
103G04	993148	9	303329	5897020		uKH	0.6	6.9	0.2	0.2	9	19	3.00	130	4	356	90	2	10	0.2	69	68	5.9	7.7	52	0.05	6
103G04	993149	9	306429	5896759	10	uKH	0.7	7.7	0.2	0.2	10	18	2.80	120	3	433	80	2	10	0.2	82	72	7.1	7.6	42	0.05	4
103G04	993150	9	306429	5896759	20	uKH	0.8	8.1	0.2	0.2	9	19	2.80	120	4	560	90	2	9	0.2	75	70	6.9	7.7	44	0.05	3

Field Observations and Analytical Data

							STREAM SEDIMENT														STREAM WATER			
		UTM Zone	UTM East	UTM North			Sb 0.2 ppm	As 0.2 ppm	Bi 0.2 ppm	Cd 0.2 ppm	Co 2 ppm	Cu 2 ppm	Fe 0.02 %	F 40 ppm	Pb 2 ppm	Mn 5 ppm	Hg 10 ppb	Mo 1 ppm	Ni 2 ppm	Ag 0.2 ppm	V 5 ppm	Zn 2 ppm	LOI 0.1 %	pH 0.1	FW 20 ppb	UW 0.05 ppb	SO4 1 ppm
Map	ID		NAD83	NAD83	Rep	Form	AAS	AAS-H	AAS-H	AAS	AAS	AAS	AAS	ION	AAS	AAS	AAS-F	AAS	AAS	AAS	AAS	AAS	GRAV	GCE	ION	LIF	TURB
103G04	993151	9	303571	5896950		uKH	0.8	7.2	0.2	0.3	10	20	3.20	150	3	325	50	1	10	0.2	93	65	4.2	7.8	56	0.05	4
103G04	993152	9	300211	5897630		JB	0.7	6.3	0.2	0.4	10	19	3.00	130	2	716	120	3	10	0.2	70	94	6.5	7.5	42	0.05	6
103F01	993153	8	698914	5881808		JB	0.6	3.2	0.2	0.8	24	52	4.40	110	2	1300	170	4	86	0.2	137	104	15.7	7.4	28	0.05	4
103F01	993154	8	699006	5882801		JB	0.7	5.7	0.2	0.4	17	62	4.20	90	3	1120	60	3	31	0.2	147	74	12.8	7.5	82	0.29	3
103F01	993155	8	697540	5882565		JB	0.7	6.0	0.2	0.5	18	79	3.80	130	2	428	90	2	39	0.2	159	71	5.1	7.5	28	0.08	3
103F01	993156	8	694670	5885469		JB	2.5	27.0	0.2	0.3	16	32	6.20	170	3	648	740	6	13	0.2	47	120	10.4	7.8	46	0.12	22
103F01	993157	8	696461	5886480		uKH	0.6	9.2	0.2	0.2	13	32	3.50	160	2	442	140	2	12	0.2	53	87	10.9	-1.0	-1	-1.00	-1
103F01	993158	8	699562	5890984		KS	3.3	21.0	0.2	0.4	14	43	3.60	190	7	531	1980	2	17	0.2	101	80	5.3	7.7	54	0.05	6
103F01	993160	8	697076	5894575		JB	0.8	5.7	0.3	0.8	10	22	2.50	180	3	378	4160	3	27	0.2	81	116	7.8	7.8	52	0.05	18
103F09	993162	8	687915	5938427		NTS	0.2	2.1	0.2	0.3	3	9	0.90	160	2	97	30	4	4	0.2	31	27	6.3	6.6	48	0.05	12
103F09	993164	8	683786	5943636		NTS	0.4	3.7	0.2	0.2	5	7	1.60	150	3	204	80	2	6	0.2	38	34	8.4	6.8	52	0.05	8
103F09	993165	8	683002	5941163		NTS	0.2	1.8	0.2	0.2	2	5	0.85	110	2	600	30	1	3	0.2	25	15	8.4	6.4	40	0.05	12
103F09	993166	8	682287	5935307		NTP	1.3	16.0	0.8	0.2	15	15	3.70	170	2	1500	130	1	9	0.2	72	105	11.1	7.0	34	0.05	4
103F09	993167	8	682325	5938048	10	NTP	0.2	1.8	0.2	0.2	13	16	2.90	160	2	1170	190	2	8	0.2	66	69	10.2	7.1	32	0.05	3
103F09	993168	8	682325	5938048	20	NTP	0.3	1.7	0.2	0.2	12	16	3.40	170	2	1210	90	1	9	0.2	78	73	11.6	7.0	34	0.05	3
103F09	993169	8	677972	5939615		NTP	0.2	3.7	0.2	0.2	13	9	2.40	130	2	1860	90	2	4	0.2	50	54	13.2	7.0	26	0.05	6
103F09	993170	8	673906	5938860		NTP	0.5	2.2	0.2	0.2	15	21	3.30	160	2	1940	6400	1	18	0.2	71	67	11.8	7.0	26	0.07	3
103F09	993171	8	673895	5938404		NTP	0.3	1.5	0.2	0.2	8	10	2.30	120	2	795	1220	3	7	0.2	74	66	10.4	6.9	32	0.05	3
103F09	993172	8	671010	5933048		NTP	4.0	19.0	0.2	0.2	5	11	2.50	160	10	497	510	3	3	0.3	16	47	9.4	6.6	24	0.05	10
103F09	993173	8	671614	5932684		NTP	1.4	10.5	0.2	0.4	5	9	2.40	320	9	518	590	4	2	0.2	28	76	7.6	6.7	24	0.05	6
103F09	993174	8	669503	5933384		NTP	2.3	59.0	0.2	0.2	15	22	4.40	220	5	1040	190	1	12	0.2	116	91	7.6	6.9	26	0.05	9
103F09	993175	8	673381	5932468		NTP	0.5	19.0	0.2	0.2	8	11	3.00	190	6	1220	210	2	5	0.2	34	74	14.9	7.1	24	0.05	5
103F08	993176	8	670028	5928783		OTg	0.4	26.0	0.2	0.2	11	12	4.00	300	3	1380	50	1	8	0.2	63	73	11.8	7.0	26	0.05	3
103F08	993177	8	669810	5929480		OTg	0.7	7.7	0.2	0.2	12	16	3.30	220	4	641	80	3	13	0.2	75	81	6.5	6.9	22	0.05	3
103F08	993178	8	670304	5930377		OTg	3.8	200.0	20.0	0.2	13	27	3.70	240	4	594	240	2	11	0.2	78	75	9.4	7.0	20	0.05	5
103F09	993179	8	670815	5932316		NTP	3.0	40.0	0.2	0.2	17	19	4.10	180	3	1950	340	3	15	0.2	74	70	14.2	7.7	20	0.05	4
103F09	993180	8	668649	5932459		OTg	0.7	5.7	0.2	0.2	10	16	3.00	200	4	727	80	2	8	0.2	79	72	13.3	7.4	20	0.05	3
103F09	993182	8	667751	5932389		OTg	0.5	4.1	0.2	0.2	13	16	4.10	210	3	1760	130	2	12	0.2	69	83	13.7	6.8	26	0.05	3
103F08	993183	8	674385	5931031		JB	1.2	39.0	0.5	0.3	12	12	2.30	200	2	1190	90	3	6	0.2	45	36	13.4	6.6	42	0.05	2
103F08	993184	8	673134	5930290	10	JB	0.6	21.0	0.2	0.2	12	11	3.00	170	2	1010	60	3	8	0.2	47	51	12.9	7.0	38	0.05	3
103F08	993185	8	673134	5930290	20	JB	0.5	21.0	0.2	0.2	11	12	2.90	160	2	1110	60	2	7	0.2	42	46	13.7	7.1	32	0.05	3
103F08	993186	8	676751	5930622		JB	1.8	37.0	0.3	0.3	8	10	2.30	190	2	744	80	4	6	0.2	41	55	8.7	7.3	34	0.05	3
103F08	993187	8	691427	5928302		JB	0.7	7.2	0.2	0.2	15	27	3.60	90	3	1160	160	2	8	0.2	140	75	8.5	7.2	20	0.05	4
103F08	993188	8	691293	5931701		NTS	0.3	6.6	0.2	0.3	15	13	3.00	110	4	1310	70	2	7	0.2	80	66	9.3	7.1	22	0.05	7
103F08	993189	8	689960	5929284		JB	0.4	6.2	0.2	0.2	19	26	4.70	100	2	1660	110	1	8	0.2	147	63	11.7	7.0	22	0.05	4
103F08	993190	8	687997	5930346		KS	0.6	7.6	0.2	0.2	15	27	4.10	90	2	1140	140	3	9	0.2	118	72	9.4	7.0	32	0.05	5
103F01	993192	8	668576	5900103		OTg	0.5	6.3	0.2	0.2	9	21	2.40	130	3	245	20	1	9	0.2	66	48	7.4	6.7	32	0.07	3
103F01	993193	8	668293	5900182		OTg	0.5	2.2	0.2	0.2	7	16	1.70	130	4	131	10	3	7	0.2	59	33	5.9	6.9	28	0.05	3
103F01	993194	8	667772	5898940		NTP	0.4	9.3	0.2	0.2	10	29	3.00	120	5	263	40	4	11	0.2	67	45	19.3	6.8	26	0.07	3
103F01	993195	8	668626	5896128		NTP	0.4	1.3	0.2	0.2	11	17	2.60	120	5	372	2080	3	10	0.2	60	42	12.2	6.8	24	0.05	2
103F01	993196	8	671903	5894159		NTP	0.4	4.1	0.2	0.2	13	23	3.10	100	8	540	70	2	12	0.2	63	48	24.5	6.9	40	0.05	3
103F01	993197	8	671782	5894427		NTP	0.9	21.0	0.3	0.3	13	25	3.00	170	7	469	50	4	13	0.2	61	53	15.0	7.0	34	0.05	3
103F01	993198	8	670158	5893303		NTP	1.0	13.0	0.2	0.2	20	35	3.10	90	6	665	260	1	28	0.2	70	58	13.7	7.6	24	0.05	3
103F01	993199	8	670938	5890597		TrK	0.4	2.6	0.2	0.7	19	30	2.90	80	7	629	5120	1	24	0.2	67	59	13.7	7.5	24	0.05	3
103F01	993200	8	673216	5890884		TrK	0.3	6.0	0.2	0.2	17	31	3.10	80	6	497	24800	2	22	0.2	71	58	13.4	7.4	20	0.05	3

Field Observations and Analytical Data

							STREAM SEDIMENT														STREAM WATER			
		UTM	UTM	UTM			Sb	As	Bi	Cd	Co	Cu	Fe	F	Pb	Mn	Hg	Mo	Ni	Ag	V	Zn	LOI	pH	FW	UW	SO4
		Zone	East	North			0.2	0.2	0.2	0.2	2	2	0.02	40	2	5	10	1	2	0.2	5	2	0.1	0.1	20	0.05	1
							ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%		ppb	ppb	ppm
Map	ID		NAD83	NAD83	Rep	Form	AAS	AAS-H	AAS-H	AAS	AAS	AAS	AAS	ION	AAS	AAS	AAS-F	AAS	AAS	AAS	AAS	AAS	GRAV	GCE	ION	LIF	TURB
103F01	993202	8	674830	5887426		TrK	0.7	8.3	0.2	0.3	18	44	3.40	210	3	503	4720	1	20	0.2	93	55	5.8	6.9	20	0.05	3
103F01	993203	8	676978	5892746		TrK	0.6	8.4	0.2	0.2	16	30	3.40	110	8	592	90	2	23	0.2	82	58	15.8	6.9	20	0.05	3
103F01	993204	8	677814	5896389		NTP	0.6	9.0	0.2	0.3	17	24	3.80	120	7	659	50	2	18	0.2	65	71	14.0	6.9	26	0.05	2
103F01	993205	8	681757	5892815		TrK	0.8	8.0	0.2	0.3	15	37	4.00	110	6	497	60	1	16	0.2	70	74	10.4	7.3	30	0.05	5
103F01	993206	8	688687	5894349		uKH	1.1	16.0	0.2	0.2	11	31	2.90	180	7	411	440	1	14	4.0	67	76	6.7	7.6	20	0.05	10
103F01	993207	8	678688	5901808		KS	3.1	13.0	0.2	0.2	22	51	5.40	130	11	750	50	1	22	0.2	79	93	16.2	7.7	20	0.07	2
103F01	993208	8	681531	5897546		KS	0.7	9.7	0.2	0.2	19	31	3.60	120	4	600	100	1	23	0.2	71	69	13.8	7.3	20	0.05	3
103F01	993209	8	685286	5896738		KS	0.8	13.0	0.2	0.2	13	30	3.10	100	7	422	200	2	16	0.2	60	73	8.4	7.5	20	0.05	4
103F01	993210	8	684654	5900942	10	KS	2.1	30.0	0.7	0.2	15	30	3.40	120	7	346	50	1	19	0.2	64	71	10.2	7.5	20	0.05	3
103F01	993212	8	684654	5900942	20	KS	2.2	31.0	0.8	0.2	14	29	3.50	140	8	369	50	3	19	0.2	62	67	10.3	6.9	20	0.05	3
103F08	993213	8	680366	5911340		KS	0.6	13.0	0.2	0.2	11	22	3.30	220	5	415	140	1	15	0.2	63	73	9.3	7.2	24	0.06	2
103F08	993214	8	678282	5909370		KS	0.8	16.0	0.2	0.2	12	20	3.90	170	4	668	70	2	14	0.2	61	69	14.2	7.1	30	0.05	4
103F08	993215	8	679193	5909414		KS	1.8	34.0	0.5	0.2	12	21	3.10	140	9	646	50	1	12	0.2	53	63	13.3	7.0	20	0.05	4
103F08	993216	8	679897	5909381		KS	1.1	19.0	0.8	0.2	13	19	3.00	130	6	447	50	2	15	0.2	42	54	12.8	7.0	22	0.05	3
103F08	993217	8	681809	5912647		KS	1.8	8.2	0.2	0.2	15	26	3.50	80	4	508	60	1	22	0.2	58	66	7.6	7.3	24	0.05	4

STREAM SEDIMENT AND WATER GEOCHEMISTRY

OF PART OF THE

QUEEN CHARLOTTE ISLANDS

Open File 2000 - 14

APPENDIX B

SUMMARY STATISTICS

Notes:

- Calculations ignore missing values, analytical results from the second of paired field duplicate samples (REP = 20) and analytical duplicate samples.
- Using a digital geology compilation by Journeay and Williams (1995), data was subdivided on the geological formation underlying each sample site. Results are listed as FORM in the data listings. Statistics were not calculated for formations represented by less than 10 sample sites.

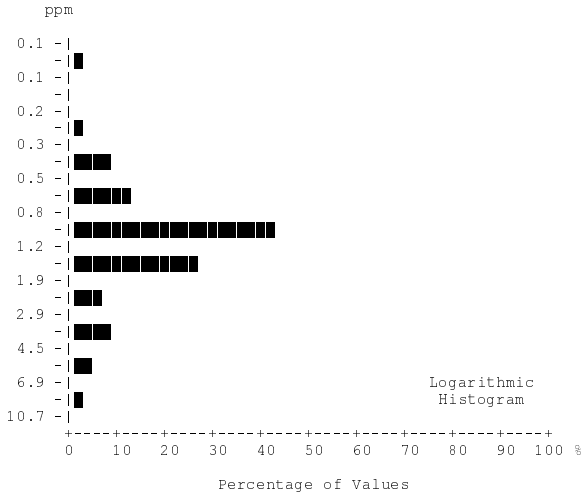
Summary Statistics

Variable	Sb	As	Ba	Br	Ca	Ce	Cs	Cr	Co	Eu	Au	Hf	Fe	La	Lu	Mo	Nd	Rb	Sm	Sc	Na	Ta	Tb	Th	W	U	Yb	Zn	wt
Units	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
D.L.	0.1	0.5	50	0.5	1	3	1	5	1	0.2	2	1	0.01	0.5	0.05	1	5	15	0.1	0.1	0.01	0.5	0.5	0.2	1	0.5	0.2	50	0.1
Anal Mth	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	
N	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184
N > DL	183	183	184	184	134	184	137	183	184	184	68	184	184	184	184	58	174	149	184	184	184	91	59	184	2	172	184	180	184
Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean	1.50	20.34	546.5	39.00	2.2	36.0	2.3	94.1	19.2	1.10	19.6	10.4	5.44	17.39	0.42	1.8	12.7	35.1	3.63	18.75	1.91	0.88	0.56	3.82	1.0	2.39	2.79	139.0	24.21
Median	1.10	12.90	530.0	28.80	2.0	35.0	2.0	67.0	18.0	1.10	2.0	7.0	5.25	17.00	0.40	1.0	12.0	36.0	3.40	17.40	1.94	0.50	0.50	3.70	1.0	2.30	2.70	135.0	24.62
Mode	0.80	10.10	470.0	14.80	2.0	28.0	2.0	72.0	19.0	0.90	2.0	5.0	6.35	17.00	0.42	1.0	11.0	15.0	3.30	18.50	1.86	0.50	0.50	3.80	1.0	0.50	2.20	119.0	21.41
Range	8.0	236.5	1660	185.8	6	79	8	1045	38	1.5	578	66	7.00	40.5	0.55	9	28	56	5.9	48.1	1.70	2.0	0.4	10.3	2	4.9	3.4	297	22.44
St Dev	1.21	27.10	169.48	28.80	1.11	12.45	1.27	116.07	6.40	0.27	62.23	9.23	1.17	6.37	0.11	1.50	4.72	14.11	0.98	6.05	0.34	0.48	0.11	1.62	0.16	1.03	0.76	43.77	3.95
Coef Var	0.809	1.332	0.310	0.739	0.516	0.346	0.559	1.234	0.333	0.248	3.178	0.885	0.215	0.366	0.268	0.856	0.372	0.402	0.271	0.323	0.178	0.545	0.197	0.424	0.162	0.431	0.272	0.315	0.163
Log Mean	0.080	1.147	2.721	1.499	0.282	1.531	0.300	1.842	1.262	0.028	0.605	0.911	0.726	1.214	-0.392	0.152	1.074	1.505	0.545	1.255	0.274	-0.113	-0.255	0.541	0.004	0.326	0.430	2.122	1.378
Geo Mean	1.20	14.04	525.4	31.54	1.9	34.0	2.0	69.4	18.3	1.07	4.0	8.1	5.32	16.38	0.41	1.4	11.9	32.0	3.51	17.99	1.88	0.77	0.56	3.47	1.0	2.12	2.69	132.6	23.87
Log StDv	0.276	0.339	0.121	0.277	0.208	0.150	0.216	0.311	0.137	0.104	0.572	0.286	0.095	0.150	0.113	0.249	0.161	0.197	0.114	0.122	0.082	0.213	0.075	0.198	0.041	0.237	0.115	0.135	0.075
Log CVar	3.498	0.295	0.044	0.185	0.738	0.980	0.720	0.169	0.108	3.721	0.948	0.314	0.130	0.124	-0.289	1.650	0.150	0.131	0.209	0.097	0.298	-1.889	-0.296	0.366	10.372	0.730	0.269	0.064	0.054
Percntls																													
Minimum	0.1	0.5	140	7.2	1	13	1	5	7	0.6	2	3	2.82	7.4	0.22	1	5	15	1.8	7.6	0.98	0.5	0.5	0.8	1	0.5	1.5	50	12.13
10th	0.6	6.3	370	14.8	1	20	1	37	13	0.8	2	4	4.00	10.2	0.28	1	7	15	2.4	13.4	1.43	0.5	0.5	1.7	1	0.9	1.9	91	18.99
20th	0.8	8.3	440	18.8	1	26	1	48	15	0.9	2	5	4.56	12.2	0.33	1	9	20	2.9	14.6	1.63	0.5	0.5	2.6	1	1.5	2.2	108	20.81
30th	0.9	9.4	470	22.5	2	28	2	53	16	0.9	2	5	4.74	13.7	0.35	1	10	26	3.1	15.5	1.74	0.5	0.5	2.9	1	1.9	2.3	117	22.15
40th	1.0	11.4	500	25.5	2	32	2	58	17	1.0	2	7	5.04	15.4	0.38	1	11	31	3.3	16.6	1.84	0.5	0.5	3.3	1	2.1	2.5	127	23.39
50th	1.1	12.9	530	28.8	2	35	2	67	18	1.1	2	7	5.25	17.0	0.40	1	12	36	3.4	17.4	1.94	0.5	0.5	3.7	1	2.3	2.7	135	24.62
60th	1.3	14.2	560	32.8	2	38	2	72	19	1.1	2	9	5.61	17.8	0.44	1	13	40	3.7	18.9	2.00	0.9	0.5	4.0	1	2.6	2.9	141	25.46
70th	1.5	17.6	590	41.6	2	42	3	80	21	1.2	3	11	5.94	19.5	0.46	2	14	44	3.9	20.2	2.10	1.1	0.6	4.4	1	2.9	3.1	152	26.45
80th	1.7	22.9	630	56.3	3	45	3	104	23	1.3	5	13	6.36	21.8	0.50	2	16	48	4.2	22.0	2.20	1.3	0.6	5.0	1	3.2	3.4	167	27.54
85th	2.2	27.0	660	66.3	3	47	3	112	24	1.3	10	14	6.63	23.3	0.51	3	18	50	4.6	22.9	2.24	1.4	0.7	5.3	1	3.5	3.4	178	28.29
90th	3.2	40.7	710	76.6	4	52	3	154	26	1.4	45	22	6.96	24.4	0.58	4	19	53	5.0	24.5	2.31	1.6	0.7	6.0	1	3.8	3.7	188	28.78
95th	4.3	64.5	760	95.7	4	57	4	247	30	1.6	139	31	7.40	27.2	0.65	5	20	57	5.5	28.3	2.49	1.8	0.8	6.4	1	4.0	4.3	209	30.56
98th	4.8	91.7	940	112.0	5	60	6	336	40	1.8	219	37	7.84	30.3	0.70	7	24	63	5.8	35.9	2.55	2.0	0.9	7.3	1	4.5	4.7	237	31.57
99th	5.6	159.0	1000	132.0	6	79	7	571	43	1.9	252	45	8.45	43.0	0.71	7	27	65	5.8	38.7	2.56	2.3	0.9	9.4	1	4.9	4.8	264	32.22
Maximum	8.1	237.0	1800	193.0	7	92	9	1050	45	2.1	580	69	9.82	47.9	0.77	10	33	71	7.7	55.7	2.68	2.5	0.9	11.1	3	5.4	4.9	347	34.57

Summary Statistics

Variable	Sb	As	Bi	Cd	Co	Cu	F	Fe	Pb	Mn	Hg	Mo	Ni	Ag	V	Zn	LOI	pH	FW	UW	SO4
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%		ppb	ppb	ppm
D.L.	0.2	0.2	0.2	0.2	2	2	40	0.02	2	5	10	1	2	0.2	5	2	0.1	0.1	20	0.05	1
Anal Mth	AAS	AAS-H	AAS-H	AAS	AAS	AAS	ION	AAS	AAS	AAS	AAS-F	AAS	AAS	AAS	AAS	AAS	GRAV	GCE	ION	LIF	TURB
N	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	182	182	182	182
N > DL	152	184	11	72	183	184	184	184	123	184	182	120	182	6	184	184	184	182	169	17	182
Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2
Mean	0.82	14.19	0.38	0.33	13.0	26.1	166.2	3.30	4.1	1009.5	828.8	2.1	15.0	0.22	73.3	78.5	10.28	7.27	32.8	0.05	5.5
Median	0.50	7.70	0.20	0.20	13.0	22.0	170.0	3.20	3.0	643.0	90.0	2.0	12.0	0.20	69.0	73.0	9.20	7.20	32.0	0.05	4.0
Mode	0.20	5.70	0.20	0.20	13.0	27.0	160.0	3.00	2.0	497.0	60.0	2.0	10.0	0.20	63.0	72.0	8.40	6.90	26.0	0.05	3.0
Range	6.8	199.5	19.8	2.9	26	182	240	5.45	23	18538	25990	9	84	3.8	226	248	53.5	1.9	62	0.24	27
St Dev	0.91	23.60	1.59	0.34	4.21	17.80	45.17	0.82	2.57	1574.58	3014.64	1.26	12.13	0.28	29.03	28.65	5.20	0.37	9.15	0.02	4.00
Coef Var	1.114	1.664	4.130	1.012	0.324	0.682	0.272	0.249	0.633	1.560	3.637	0.588	0.807	1.253	0.396	0.365	0.506	0.051	0.279	0.390	0.726
Log Mean	-0.241	0.912	-0.656	-0.563	1.088	1.358	2.204	0.504	0.547	2.858	2.158	0.268	1.090	-0.686	1.833	1.871	0.977	0.861	1.501	-1.283	0.668
Geo Mean	0.57	8.17	0.22	0.27	12.3	22.8	159.9	3.19	3.5	721.2	144.0	1.9	12.3	0.21	68.1	74.3	9.49	7.26	31.7	0.05	4.7
Log StDv	0.338	0.418	0.226	0.224	0.158	0.213	0.123	0.119	0.221	0.308	0.622	0.229	0.264	0.101	0.170	0.146	0.164	0.022	0.114	0.081	0.234
Log CVar	-1.407	0.458	-0.345	-0.397	0.145	0.157	0.056	0.236	0.404	0.108	0.288	0.854	0.243	-0.148	0.093	0.078	0.168	0.026	0.076	-0.063	0.350
Percntls																					
Minimum	0.2	0.5	0.2	0.2	2	5	80	0.85	2	82	10	1	2	0.2	16	15	3.9	6.4	20	0.05	2
10th	0.2	2.2	0.2	0.2	8	13	110	2.40	2	356	50	1	7	0.2	45	53	5.9	6.8	22	0.05	3
20th	0.3	4.0	0.2	0.2	10	16	120	2.70	2	447	60	1	8	0.2	53	61	7.1	6.9	24	0.05	3
30th	0.4	5.6	0.2	0.2	11	18	140	3.00	2	497	60	1	10	0.2	60	67	7.8	7.0	26	0.05	3
40th	0.4	6.5	0.2	0.2	12	20	160	3.10	3	540	80	2	11	0.2	64	71	8.6	7.1	30	0.05	4
50th	0.5	7.7	0.2	0.2	13	22	170	3.20	3	643	90	2	12	0.2	69	73	9.2	7.2	32	0.05	4
60th	0.6	8.4	0.2	0.2	13	25	170	3.40	4	732	130	2	13	0.2	73	77	9.9	7.4	34	0.05	5
70th	0.8	10.5	0.2	0.3	15	27	190	3.60	5	1000	180	2	15	0.2	79	83	11.0	7.5	36	0.05	6
80th	1.0	16.0	0.2	0.3	16	31	210	3.80	6	1180	260	3	18	0.2	90	94	12.9	7.6	40	0.05	7
85th	1.2	19.0	0.2	0.4	16	32	210	4.00	6	1370	440	3	21	0.2	97	99	13.7	7.7	42	0.05	8
90th	1.8	30.0	0.2	0.6	18	41	220	4.10	7	1780	950	4	25	0.2	108	105	14.9	7.8	46	0.05	10
95th	2.5	51.0	0.3	0.8	21	52	240	4.80	8	2210	5120	4	39	0.2	133	124	16.4	7.9	50	0.07	13
98th	3.4	75.0	0.8	1.0	24	75	250	5.40	9	4100	8040	5	56	0.3	147	133	19.7	8.0	52	0.08	18
99th	4.0	115.0	4.0	1.2	26	79	260	5.80	10	6230	9760	6	67	0.3	155	142	25.6	8.1	54	0.12	21
Maximum	7.0	200.0	20.0	3.1	28	187	320	6.30	25	18620	26000	10	86	4.0	242	263	57.4	8.3	82	0.29	29

Summary Statistics



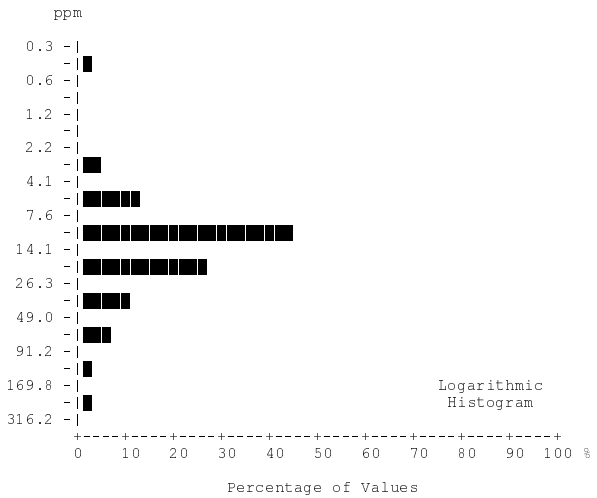
	N	%	Cum%
	1	0.5	0.5
	0	0.0	0.5
	1	0.5	1.1
	12	6.5	7.6
	19	10.3	17.9
	74	40.2	58.2
	46	25.0	83.2
	10	5.4	88.6
	14	7.6	96.2
	5	2.7	98.9
	2	1.1	100.0

	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	183	63	49	30	14	12
Missing	0	0	0	0	0	0
Mean	1.50	1.45	1.48	1.94	1.09	1.88
Median	1.10	1.00	1.10	1.30	1.10	1.10
Mode	0.80	0.60	0.80	1.10	1.20	0.80
Range	8.0	6.6	8.0	3.9	1.3	4.1
St Dev	1.21	1.23	1.31	1.29	0.40	1.49
Coef Var	0.809	0.847	0.881	0.664	0.366	0.796
Log Mean	0.080	0.066	0.061	0.207	0.005	0.176
Geo Mean	1.20	1.16	1.15	1.61	1.01	1.50
Log StDv	0.276	0.267	0.312	0.259	0.178	0.283
Log CVar	3.498	4.106	5.114	1.256	44.490	1.618
Percntls						
Minimum	0.1	0.4	0.1	0.7	0.5	0.8
10th	0.6	0.6	0.5	0.8	0.5	0.8
20th	0.8	0.7	0.8	1.0	0.6	0.8
30th	0.9	0.8	0.8	1.1	0.8	0.9
40th	1.0	0.9	0.9	1.1	1.0	1.1
50th	1.1	1.0	1.1	1.3	1.1	1.1
60th	1.3	1.2	1.4	1.4	1.2	1.3
70th	1.5	1.4	1.5	1.6	1.2	1.5
80th	1.7	1.7	1.8	3.3	1.4	2.8
85th	2.2	2.2	2.0	3.9	1.4	2.8
90th	3.2	2.9	2.5	4.0	1.6	4.8
95th	4.3	4.1	4.2	4.3	1.6	4.8
98th	4.8	5.6	4.4	4.3	1.8	4.9
99th	5.6	5.6	8.1	4.6	1.8	4.9
Maximum	8.1	7.0	8.1	4.6	1.8	4.9

Element Statistics
Variable - Antimony [Sb]
Number of Values - 184
Units - ppm
Detection Limit - 0.1
Analytical Method - INAA

Antimony by INAA

Summary Statistics

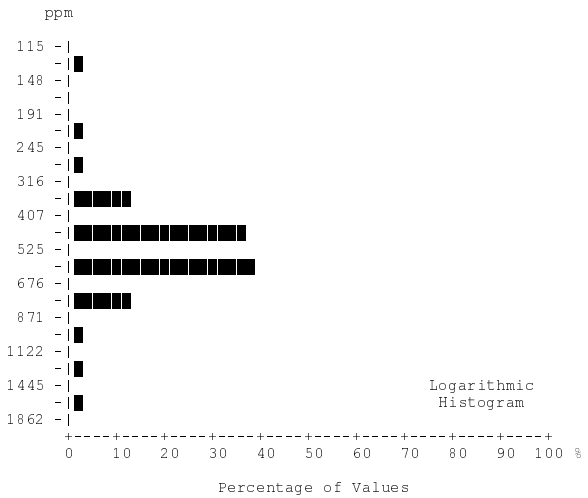


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	183	63	49	30	14	12
Missing	0	0	0	0	0	0
Mean	20.34	19.03	22.51	19.88	15.34	36.53
Median	12.90	12.80	10.10	14.70	12.90	8.40
Mode	10.10	8.40	5.80	13.30	12.80	5.90
Range	236.5	153.7	167.5	62.5	35.4	231.1
St Dev	27.10	22.05	29.45	12.72	8.54	67.73
Coef Var	1.332	1.159	1.308	0.640	0.557	1.854
Log Mean	1.147	1.165	1.114	1.238	1.148	1.171
Geo Mean	14.04	14.61	13.00	17.29	14.07	14.84
Log StDv	0.339	0.268	0.459	0.220	0.168	0.514
Log CVar	0.295	0.230	0.412	0.178	0.146	0.439
Percntls						
Minimum	0.5	5.3	0.5	6.6	8.1	5.9
10th	6.3	8.1	4.3	10.1	8.1	5.9
20th	8.3	9.4	5.9	11.5	11.5	6.8
30th	9.4	10.2	6.9	13.1	11.8	7.4
40th	11.4	11.6	8.7	13.3	12.8	8.3
50th	12.9	12.8	10.1	14.7	12.9	8.4
60th	14.2	13.9	14.6	18.0	12.9	9.3
70th	17.6	16.0	21.6	21.6	14.1	9.8
80th	22.9	18.9	29.4	24.4	14.9	35.5
85th	27.0	23.6	42.9	27.0	17.9	35.5
90th	40.7	33.6	49.2	29.2	18.5	91.7
95th	64.5	59.9	67.5	43.6	18.5	91.7
98th	91.7	64.5	105.0	43.6	43.5	237.0
99th	159.0	64.5	168.0	69.1	43.5	237.0
Maximum	237.0	159.0	168.0	69.1	43.5	237.0

Element Statistics
Variable - Arsenic [As]
Number of Values - 184
Units - ppm
Detection Limit - 0.5
Analytical Method - INAA

Arsenic by INAA

Summary Statistics

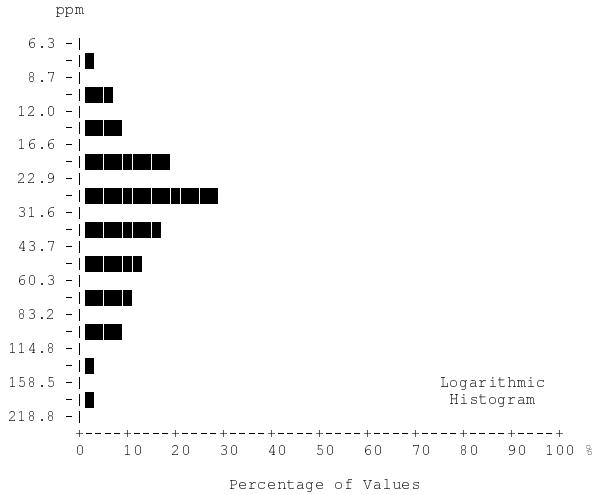


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	546.5	582.1	509.4	574.0	562.1	490.8
Median	530.0	560.0	480.0	570.0	540.0	490.0
Mode	470.0	560.0	470.0	590.0	510.0	490.0
Range	1660	1660	670	560	530	250
St Dev	169.48	230.60	127.65	127.59	126.38	71.41
Coef Var	0.310	0.396	0.251	0.222	0.225	0.145
Log Mean	2.721	2.738	2.695	2.749	2.741	2.687
Geo Mean	525.4	547.0	495.3	560.7	551.2	486.0
Log StDv	0.121	0.154	0.102	0.095	0.086	0.064
Log CVar	0.044	0.056	0.038	0.035	0.031	0.024
Percntls						
Minimum	140	140	300	370	410	370
10th	370	370	360	420	410	370
20th	440	440	410	460	470	400
30th	470	490	450	480	510	470
40th	500	530	470	540	520	480
50th	530	560	480	570	540	490
60th	560	580	510	590	550	490
70th	590	610	540	620	570	500
80th	630	670	580	650	580	530
85th	660	700	600	710	610	530
90th	710	750	680	720	650	590
95th	760	800	760	790	650	590
98th	940	1300	790	790	940	620
99th	1000	1300	970	930	940	620
Maximum	1800	1800	970	930	940	620

Element Statistics
Variable - Barium [Ba]
Number of Values - 184
Units - ppm
Detection Limit - 50
Analytical Method - INAA

Barium by INAA

Summary Statistics



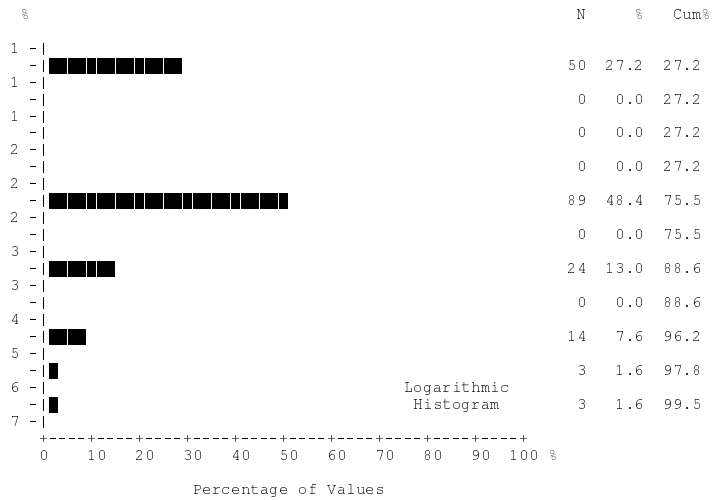
	N	%	Cum%
	3	1.6	1.6
	9	4.9	6.5
	14	7.6	14.1
	31	16.8	31.0
	49	26.6	57.6
	27	14.7	72.3
	19	10.3	82.6
	17	9.2	91.8
	12	6.5	98.4
	1	0.5	98.9
	2	1.1	100.0

	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	39.00	33.16	52.83	32.78	23.55	39.42
Median	28.80	25.60	37.80	25.80	17.40	30.30
Mode	14.80	17.10	10.90	9.60	9.00	18.40
Range	185.8	104.8	182.1	85.6	46.7	51.6
St Dev	28.80	20.62	39.51	22.70	13.86	18.76
Coef Var	0.739	0.622	0.748	0.692	0.589	0.476
Log Mean	1.499	1.452	1.620	1.429	1.310	1.552
Geo Mean	31.54	28.32	41.69	26.84	20.42	35.63
Log StDv	0.277	0.243	0.300	0.274	0.235	0.202
Log CVar	0.185	0.167	0.185	0.192	0.180	0.130
Percntls						
Minimum	7.2	7.2	10.9	9.6	9.0	18.4
10th	14.8	15.9	15.6	10.7	9.0	18.4
20th	18.8	18.9	23.2	14.8	14.5	21.7
30th	22.5	22.4	27.0	18.8	14.8	25.0
40th	25.5	23.9	30.9	22.5	15.9	28.6
50th	28.8	25.6	37.8	25.8	17.4	30.3
60th	32.8	29.8	46.0	28.7	18.2	30.6
70th	41.6	35.3	55.7	31.7	23.2	40.3
80th	56.3	45.6	81.0	41.5	35.1	59.4
85th	66.3	54.9	95.5	67.0	36.7	59.4
90th	76.6	57.9	102.0	69.9	43.6	67.6
95th	95.7	70.5	132.0	81.2	43.6	67.6
98th	112.0	98.4	165.0	81.2	55.7	70.0
99th	132.0	98.4	193.0	95.2	55.7	70.0
Maximum	193.0	112.0	193.0	95.2	55.7	70.0

Element Statistics
Variable - Bromine [Br]
Number of Values - 184
Units - ppm
Detection Limit - 0.5
Analytical Method - INAA

Bromine by INAA

Summary Statistics

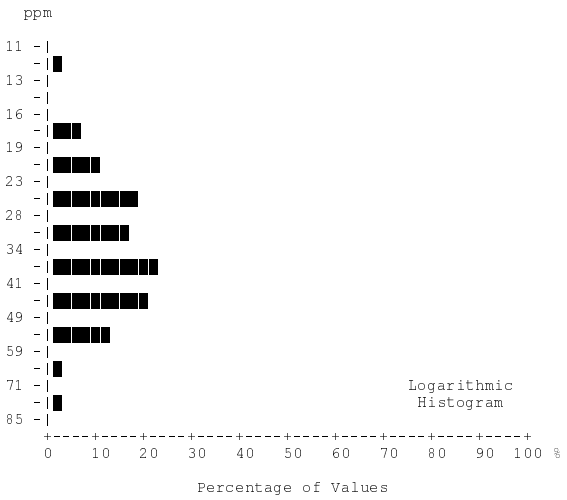


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	134	42	39	21	10	8
Missing	0	0	0	0	0	0
Mean	2.2	1.9	2.6	1.7	1.9	2.0
Median	2.0	2.0	2.0	2.0	2.0	2.0
Mode	2.0	2.0	2.0	2.0	2.0	2.0
Range	6	4	6	2	2	3
St Dev	1.11	0.93	1.44	0.52	0.66	0.95
Coef Var	0.516	0.481	0.545	0.300	0.357	0.477
Log Mean	0.282	0.242	0.359	0.217	0.240	0.255
Geo Mean	1.9	1.7	2.3	1.6	1.7	1.8
Log StDv	0.208	0.197	0.241	0.148	0.169	0.211
Log CVar	0.738	0.813	0.672	0.684	0.705	0.828
Percntls						
Minimum	1	1	1	1	1	1
10th	1	1	1	1	1	1
20th	1	1	1	1	1	1
30th	2	1	2	1	1	1
40th	2	2	2	2	2	2
50th	2	2	2	2	2	2
60th	2	2	3	2	2	2
70th	2	2	3	2	2	2
80th	3	2	4	2	2	3
85th	3	3	4	2	2	3
90th	4	3	4	2	3	3
95th	4	4	6	2	3	3
98th	5	5	6	2	3	4
99th	6	5	7	3	3	4
Maximum	7	5	7	3	3	4

Element Statistics
Variable - Calcium [Ca]
Number of Values - 184
Units - %
Detection Limit - 1
Analytical Method - INAA

Calcium by INAA

Summary Statistics

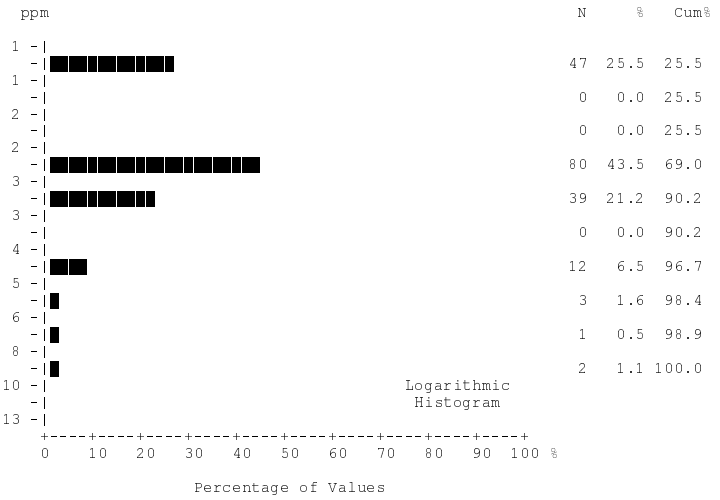


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	36.0	30.6	39.4	37.6	36.9	40.3
Median	35.0	30.0	38.0	36.0	38.0	38.0
Mode	28.0	20.0	28.0	36.0	28.0	38.0
Range	79	66	43	38	25	28
St Dev	12.45	10.57	12.06	9.39	8.30	8.02
Coef Var	0.346	0.345	0.306	0.250	0.225	0.199
Log Mean	1.531	1.464	1.574	1.561	1.556	1.598
Geo Mean	34.0	29.1	37.5	36.4	35.9	39.6
Log StDv	0.150	0.138	0.144	0.116	0.108	0.089
Log CVar	0.980	0.094	0.091	0.074	0.070	0.056
Percntls						
Minimum	13	13	18	17	22	26
10th	20	20	24	26	22	26
20th	26	21	28	29	28	33
30th	28	25	31	32	28	35
40th	32	27	34	36	37	38
50th	35	30	38	36	38	38
60th	38	32	44	39	40	42
70th	42	34	47	42	43	43
80th	45	37	50	46	43	45
85th	47	38	54	47	45	45
90th	52	42	55	51	45	52
95th	57	44	58	54	45	52
98th	60	58	58	54	47	54
99th	79	58	61	55	47	54
Maximum	92	79	61	55	47	54

Element Statistics
Variable - Cerium [Ce]
Number of Values - 184
Units - ppm
Detection Limit - 3
Analytical Method - INAA

Cerium by INAA

Summary Statistics

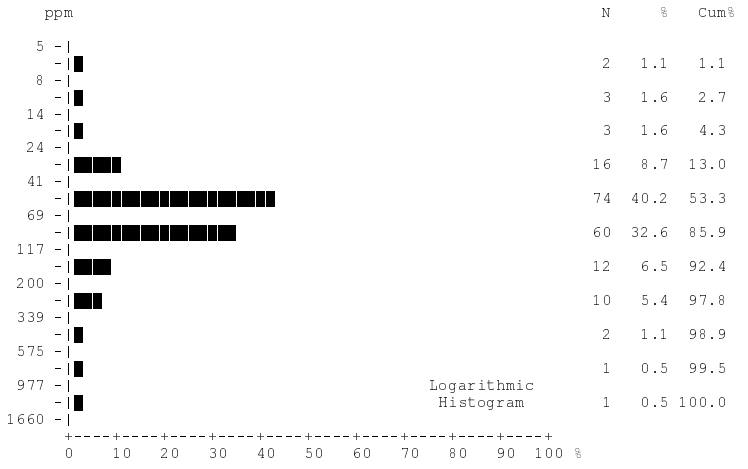


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	137	47	33	27	10	11
Missing	0	0	0	0	0	0
Mean	2.3	2.1	2.4	2.5	1.9	2.7
Median	2.0	2.0	2.0	2.0	2.0	2.0
Mode	2.0	2.0	1.0	2.0	2.0	2.0
Range	8	5	8	3	2	4
St Dev	1.27	1.06	1.74	0.82	0.73	1.07
Coef Var	0.559	0.505	0.735	0.328	0.379	0.402
Log Mean	0.300	0.276	0.290	0.371	0.253	0.393
Geo Mean	2.0	1.9	1.9	2.4	1.8	2.5
Log StDv	0.216	0.196	0.258	0.163	0.180	0.182
Log CVar	0.720	0.715	0.894	0.438	0.716	0.463
Percntls						
Minimum	1	1	1	1	1	1
10th	1	1	1	1	1	1
20th	1	1	1	2	1	2
30th	2	2	1	2	1	2
40th	2	2	2	2	2	2
50th	2	2	2	2	2	2
60th	2	2	2	3	2	3
70th	3	2	3	3	2	3
80th	3	2	3	3	2	3
85th	3	3	3	3	3	3
90th	3	3	4	3	3	4
95th	4	4	7	4	3	4
98th	6	6	8	4	3	5
99th	7	6	9	4	3	5
Maximum	9	6	9	4	3	5

Element Statistics
Variable - Cesium [Cs]
Number of Values - 184
Units - ppm
Detection Limit - 1
Analytical Method - INAA

Cesium by INAA

Summary Statistics

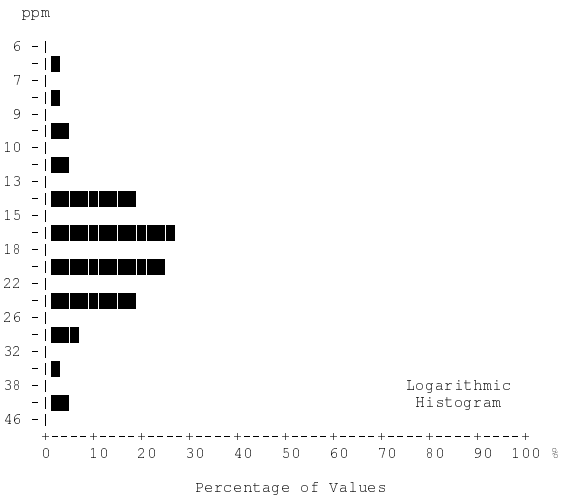


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	183	63	49	30	14	12
Missing	0	0	0	0	0	0
Mean	94.1	134.9	63.6	70.7	109.2	53.5
Median	67.0	76.0	48.0	68.0	72.0	50.0
Mode	72.0	56.0	44.0	48.0	55.0	50.0
Range	1045	1024	331	96	243	26
St Dev	116.07	177.99	60.75	22.43	82.09	9.16
Coef Var	1.234	1.319	0.955	0.317	0.752	0.171
Log Mean	1.842	1.968	1.666	1.830	1.951	1.723
Geo Mean	69.4	92.9	46.3	67.6	89.4	52.8
Log StDv	0.311	0.324	0.357	0.130	0.265	0.072
Log CVar	0.169	0.164	0.215	0.071	0.136	0.042
Percntls						
Minimum	5	26	5	37	45	42
10th	37	48	12	48	45	42
20th	48	56	32	50	55	43
30th	53	61	37	57	60	49
40th	58	70	43	65	64	50
50th	67	76	48	68	72	50
60th	72	92	55	72	73	52
70th	80	104	65	73	98	53
80th	104	148	75	79	101	67
85th	112	171	106	82	235	67
90th	154	231	112	105	247	67
95th	247	437	140	124	247	67
98th	336	868	294	124	288	68
99th	571	868	336	133	288	68
Maximum	1050	1050	336	133	288	68

Element Statistics
Variable - Chromium [Cr]
Number of Values - 184
Units - ppm
Detection Limit - 5
Analytical Method - INAA

Chromium by INAA

Summary Statistics

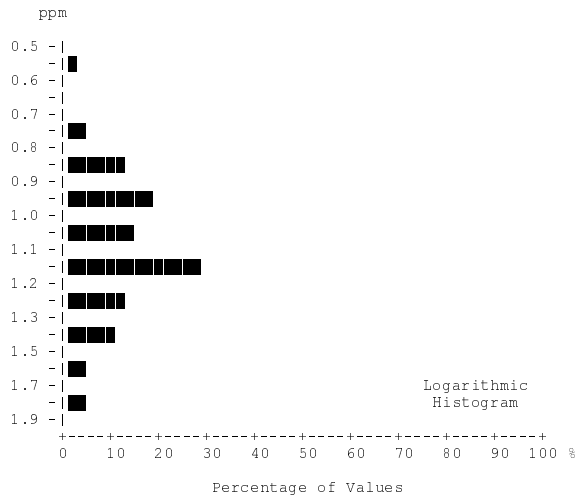


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	19.2	19.9	20.0	17.5	17.2	16.9
Median	18.0	19.0	19.0	17.0	15.0	16.0
Mode	19.0	16.0	19.0	16.0	13.0	16.0
Range	38	33	38	18	15	7
St Dev	6.40	6.74	6.91	4.04	4.56	2.07
Coef Var	0.333	0.339	0.345	0.230	0.265	0.122
Log Mean	1.262	1.279	1.275	1.232	1.223	1.226
Geo Mean	18.3	19.0	18.8	17.1	16.7	16.8
Log StDv	0.137	0.131	0.159	0.102	0.108	0.050
Log CVar	0.108	0.103	0.125	0.083	0.089	0.041
Percntls						
Minimum	7	10	7	10	12	15
10th	13	14	10	11	12	15
20th	15	15	16	14	13	15
30th	16	16	18	16	14	16
40th	17	17	19	16	15	16
50th	18	19	19	17	15	16
60th	19	20	21	18	16	16
70th	21	21	23	19	19	17
80th	23	23	24	20	20	18
85th	24	26	25	23	22	18
90th	26	27	26	23	24	19
95th	30	34	28	24	24	19
98th	40	41	40	24	27	22
99th	43	41	45	28	27	22
Maximum	45	43	45	28	27	22

Element Statistics
Variable - Cobalt [Co]
Number of Values - 184
Units - ppm
Detection Limit - 1
Analytical Method - INAA

Cobalt by INAA

Summary Statistics

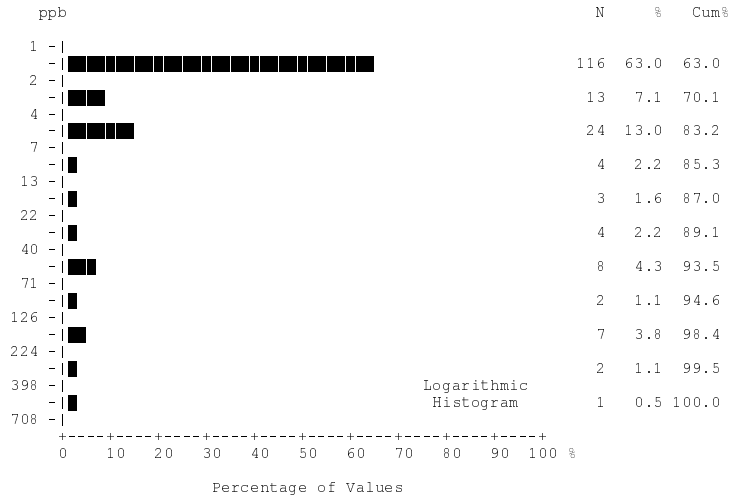


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	1.10	1.00	1.26	0.98	1.02	1.17
Median	1.10	1.00	1.30	0.90	1.00	1.20
Mode	0.90	0.90	1.30	0.90	1.00	1.20
Range	1.5	1.2	1.1	0.8	0.3	0.6
St Dev	0.27	0.22	0.25	0.19	0.09	0.15
Coef Var	0.248	0.223	0.198	0.195	0.087	0.128
Log Mean	0.028	-0.008	0.093	-0.018	0.008	0.063
Geo Mean	1.07	0.98	1.24	0.96	1.02	1.16
Log StDv	0.104	0.092	0.089	0.086	0.038	0.061
Log CVar	3.721	-11.502	0.973	-4.769	5.401	0.973
Percntls						
Minimum	0.6	0.6	0.8	0.6	0.9	0.8
10th	0.8	0.8	0.9	0.7	0.9	0.8
20th	0.9	0.8	1.0	0.8	0.9	1.0
30th	0.9	0.9	1.2	0.9	1.0	1.2
40th	1.0	0.9	1.2	0.9	1.0	1.2
50th	1.1	1.0	1.3	0.9	1.0	1.2
60th	1.1	1.0	1.3	1.0	1.0	1.2
70th	1.2	1.1	1.4	1.1	1.1	1.2
80th	1.3	1.1	1.4	1.1	1.1	1.2
85th	1.3	1.2	1.5	1.2	1.1	1.2
90th	1.4	1.3	1.6	1.2	1.1	1.3
95th	1.6	1.4	1.7	1.3	1.1	1.3
98th	1.8	1.6	1.8	1.3	1.2	1.4
99th	1.9	1.6	1.9	1.4	1.2	1.4
Maximum	2.1	1.8	1.9	1.4	1.2	1.4

Element Statistics
Variable - Europium [Eu]
Number of Values - 184
Units - ppm
Detection Limit - 0.2
Analytical Method - INAA

Europium by INAA

Summary Statistics

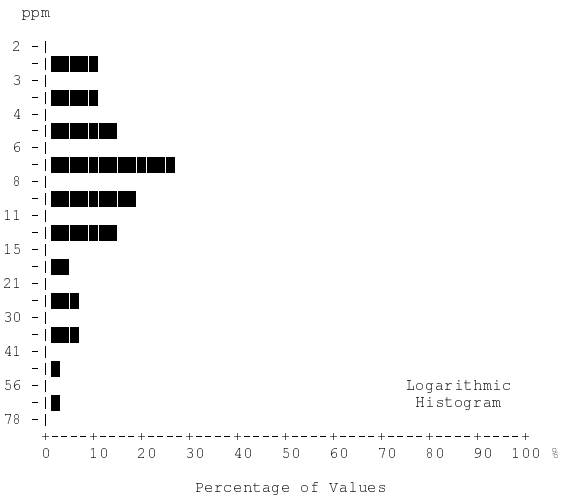


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	68	22	12	14	10	4
Missing	0	0	0	0	0	0
Mean	19.6	16.0	3.7	63.0	24.5	4.5
Median	2.0	2.0	2.0	2.0	4.0	2.0
Mode	2.0	2.0	2.0	2.0	2.0	2.0
Range	578	250	64	578	137	24
St Dev	62.23	46.08	9.06	128.13	38.07	6.83
Coef Var	3.178	2.877	2.436	2.035	1.554	1.518
Log Mean	0.605	0.573	0.392	0.928	0.949	0.469
Geo Mean	4.0	3.7	2.5	8.5	8.9	2.9
Log StDv	0.572	0.541	0.245	0.871	0.643	0.327
Log CVar	0.948	0.946	0.626	0.940	0.679	0.696
Percntls						
Minimum	2	2	2	2	2	2
10th	2	2	2	2	2	2
20th	2	2	2	2	2	2
30th	2	2	2	2	2	2
40th	2	2	2	2	4	2
50th	2	2	2	2	4	2
60th	2	2	2	3	6	2
70th	3	3	2	10	27	2
80th	5	4	3	87	33	4
85th	10	6	3	150	45	4
90th	45	19	4	219	62	4
95th	139	116	5	322	62	4
98th	219	184	9	322	139	26
99th	252	184	66	580	139	26
Maximum	580	252	66	580	139	26

Element Statistics
Variable - Gold [Au]
Number of Values - 184
Units - ppb
Detection Limit - 2
Analytical Method - INAA

Gold by INAA

Summary Statistics

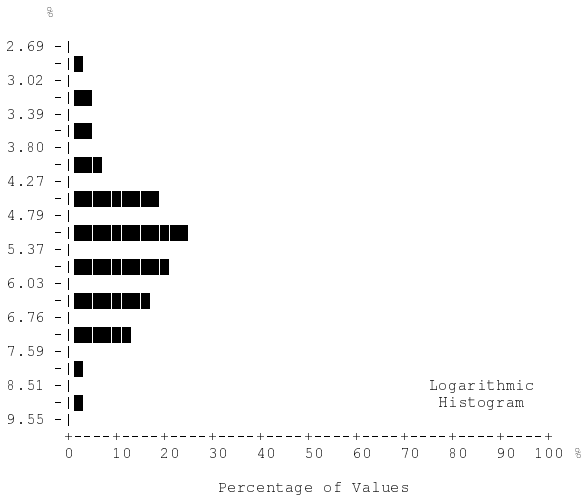


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	10.4	10.4	6.8	13.5	16.1	10.7
Median	7.0	7.0	5.0	9.0	9.0	9.0
Mode	5.0	3.0	5.0	8.0	5.0	6.0
Range	66	66	13	41	32	17
St Dev	9.23	10.83	3.19	10.28	11.73	4.83
Coef Var	0.885	1.043	0.468	0.763	0.730	0.453
Log Mean	0.911	0.896	0.792	1.036	1.082	0.994
Geo Mean	8.1	7.9	6.2	10.9	12.1	9.9
Log StDv	0.286	0.294	0.191	0.274	0.352	0.175
Log CVar	0.314	0.329	0.241	0.265	0.325	0.176
Percntls						
Minimum	3	3	3	4	4	6
10th	4	3	4	5	4	6
20th	5	4	4	6	5	6
30th	5	5	5	7	6	7
40th	7	6	5	8	7	9
50th	7	7	5	9	9	9
60th	9	10	7	11	14	10
70th	11	11	8	15	26	10
80th	13	12	9	17	28	14
85th	14	13	10	23	30	14
90th	22	14	12	24	31	14
95th	31	33	14	38	31	14
98th	37	47	14	38	36	23
99th	45	47	16	45	36	23
Maximum	69	69	16	45	36	23

Element Statistics
Variable - Hafnium [Hf]
Number of Values - 184
Units - ppm
Detection Limit - 1
Analytical Method - INAA

Hafnium by INAA

Summary Statistics



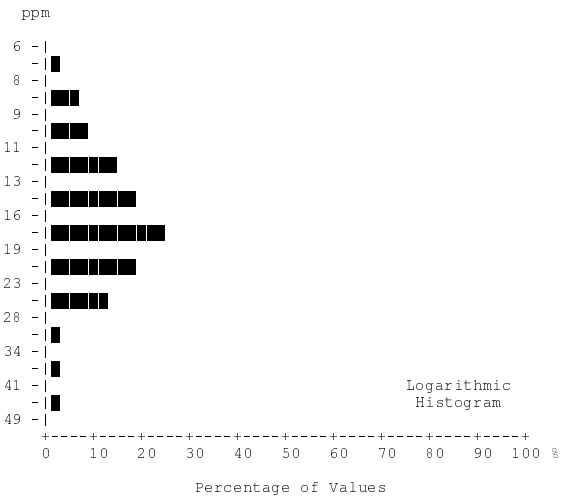
	N	%	Cum%
	1	0.5	0.5
	6	3.3	3.8
	7	3.8	7.6
	10	5.4	13.0
	32	17.4	30.4
	41	22.3	52.7
	35	19.0	71.7
	27	14.7	86.4
	19	10.3	96.7
	4	2.2	98.9
	1	0.5	99.5

	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	5.44	5.63	5.62	4.81	5.25	5.80
Median	5.25	5.47	5.84	4.71	5.18	5.42
Mode	6.35	5.79	6.35	4.71	3.95	4.82
Range	7.00	5.30	5.41	3.73	2.30	2.24
St Dev	1.17	1.16	1.28	0.78	0.65	0.81
Coef Var	0.215	0.207	0.228	0.162	0.123	0.139
Log Mean	0.726	0.741	0.737	0.676	0.717	0.759
Geo Mean	5.32	5.51	5.46	4.75	5.21	5.75
Log StDv	0.095	0.091	0.107	0.070	0.055	0.060
Log CVar	0.130	0.122	0.146	0.104	0.077	0.079
Percntls						
Minimum	2.82	3.22	3.04	3.17	3.95	4.82
10th	4.00	4.14	3.75	3.72	3.95	4.82
20th	4.56	4.63	4.57	4.33	4.69	4.98
30th	4.74	4.90	4.94	4.50	4.84	5.16
40th	5.04	5.21	5.25	4.56	5.01	5.17
50th	5.25	5.47	5.84	4.71	5.18	5.42
60th	5.61	5.79	5.99	4.78	5.20	5.94
70th	5.94	6.19	6.23	5.00	5.84	6.10
80th	6.36	6.67	6.44	5.19	5.86	6.75
85th	6.63	6.89	7.08	5.50	5.90	6.75
90th	6.96	7.11	7.35	5.60	5.92	6.93
95th	7.40	7.46	7.52	6.35	5.92	6.93
98th	7.84	8.33	7.70	6.35	6.25	7.06
99th	8.45	8.33	8.45	6.90	6.25	7.06
Maximum	9.82	8.52	8.45	6.90	6.25	7.06

Element Statistics
Variable - Iron [Fe]
Number of Values - 184
Units - %
Detection Limit - 0.01
Analytical Method - INAA

Iron by INAA

Summary Statistics

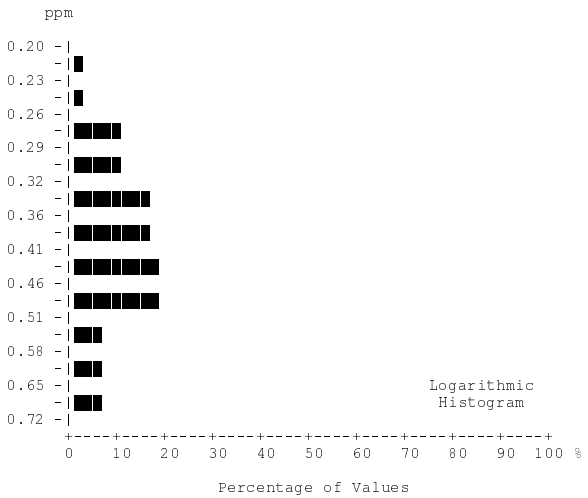


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	17.39	14.70	17.91	18.80	19.83	18.77
Median	17.00	13.70	17.20	18.60	20.80	18.20
Mode	17.00	11.90	14.10	15.80	12.40	20.10
Range	40.5	36.4	22.0	18.7	14.8	12.6
St Dev	6.37	5.83	5.16	4.62	5.19	3.27
Coef Var	0.366	0.397	0.288	0.246	0.262	0.174
Log Mean	1.214	1.141	1.235	1.260	1.282	1.266
Geo Mean	16.38	13.85	17.16	18.20	19.13	18.46
Log StDv	0.150	0.145	0.130	0.116	0.124	0.085
Log CVar	0.124	0.127	0.106	0.092	0.097	0.067
Percntls						
Minimum	7.4	7.4	8.2	8.8	12.4	11.0
10th	10.2	9.0	11.1	12.2	12.4	11.0
20th	12.2	10.3	13.7	15.6	12.9	16.9
30th	13.7	11.8	15.2	16.3	13.0	17.7
40th	15.4	12.3	15.9	17.9	19.0	17.8
50th	17.0	13.7	17.2	18.6	20.8	18.2
60th	17.8	14.6	18.4	19.2	22.1	18.7
70th	19.5	16.2	20.1	19.7	23.3	20.1
80th	21.8	17.2	22.4	23.1	23.4	21.8
85th	23.3	18.0	23.5	24.4	24.3	21.8
90th	24.4	20.9	24.1	24.5	25.4	22.3
95th	27.2	23.9	27.5	26.0	25.4	22.3
98th	30.3	30.3	28.6	26.0	27.2	23.6
99th	43.0	30.3	30.2	27.5	27.2	23.6
Maximum	47.9	43.8	30.2	27.5	27.2	23.6

Element Statistics
Variable - Lanthanum [La]
Number of Values - 184
Units - ppm
Detection Limit - 0.5
Analytical Method - INAA

Lanthanum by INAA

Summary Statistics

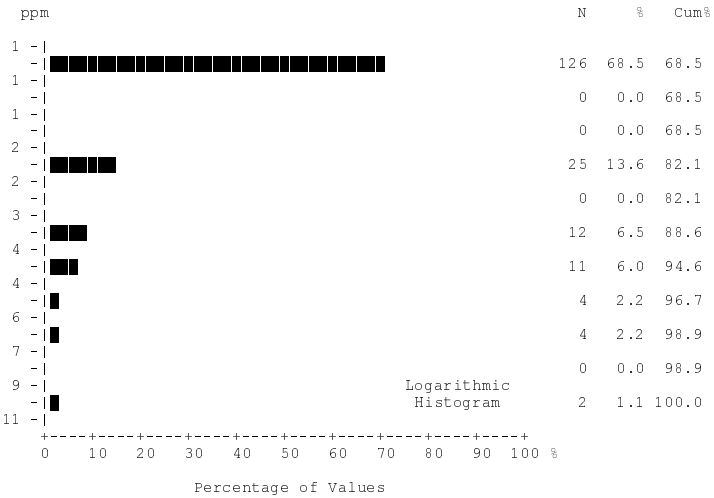


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	0.42	0.40	0.47	0.37	0.41	0.49
Median	0.40	0.38	0.46	0.35	0.40	0.46
Mode	0.42	0.38	0.42	0.33	0.45	0.46
Range	0.55	0.51	0.53	0.28	0.31	0.33
St Dev	0.11	0.10	0.14	0.08	0.07	0.08
Coef Var	0.268	0.258	0.290	0.216	0.181	0.169
Log Mean	-0.392	-0.411	-0.348	-0.440	-0.392	-0.316
Geo Mean	0.41	0.39	0.45	0.36	0.41	0.48
Log StDv	0.113	0.106	0.130	0.093	0.081	0.069
Log CVar	-0.289	-0.258	-0.372	-0.211	-0.206	-0.219
Percntls						
Minimum	0.22	0.22	0.24	0.24	0.27	0.37
10th	0.28	0.28	0.28	0.28	0.27	0.37
20th	0.33	0.33	0.33	0.30	0.35	0.42
30th	0.35	0.35	0.39	0.32	0.37	0.45
40th	0.38	0.36	0.42	0.33	0.40	0.46
50th	0.40	0.38	0.46	0.35	0.40	0.46
60th	0.44	0.39	0.49	0.36	0.42	0.49
70th	0.46	0.42	0.51	0.42	0.45	0.50
80th	0.50	0.46	0.58	0.45	0.45	0.52
85th	0.51	0.50	0.64	0.48	0.46	0.52
90th	0.58	0.52	0.66	0.49	0.46	0.56
95th	0.65	0.62	0.71	0.52	0.46	0.56
98th	0.70	0.66	0.71	0.52	0.58	0.70
99th	0.71	0.66	0.77	0.52	0.58	0.70
Maximum	0.77	0.73	0.77	0.52	0.58	0.70

Element Statistics
Variable - Lutetium [Lu]
Number of Values - 184
Units - ppm
Detection Limit - 0.05
Analytical Method - INAA

Lutetium by INAA

Summary Statistics

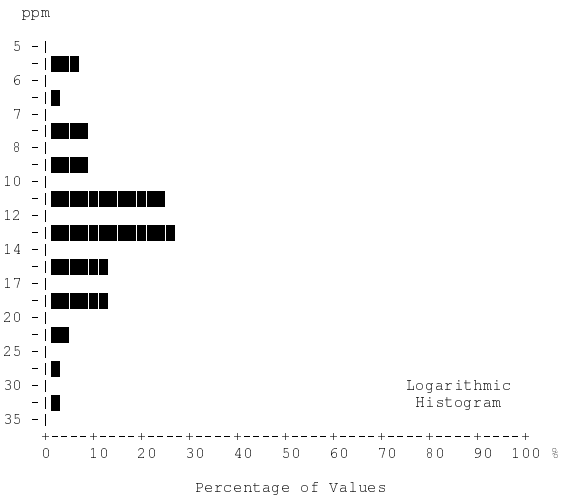


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	58	24	16	8	5	3
Missing	0	0	0	0	0	0
Mean	1.8	2.0	1.9	1.4	1.9	1.5
Median	1.0	1.0	1.0	1.0	1.0	1.0
Mode	1.0	1.0	1.0	1.0	1.0	1.0
Range	9	9	8	2	4	3
St Dev	1.50	1.83	1.65	0.67	1.46	1.00
Coef Var	0.856	0.906	0.889	0.489	0.786	0.667
Log Mean	0.152	0.194	0.167	0.980	0.177	0.115
Geo Mean	1.4	1.6	1.5	1.3	1.5	1.3
Log StDv	0.249	0.282	0.269	0.171	0.270	0.218
Log CVar	1.650	1.459	1.620	1.764	1.534	1.894
Percntls						
Minimum	1	1	1	1	1	1
10th	1	1	1	1	1	1
20th	1	1	1	1	1	1
30th	1	1	1	1	1	1
40th	1	1	1	1	1	1
50th	1	1	1	1	1	1
60th	1	1	1	1	1	1
70th	2	2	2	1	2	1
80th	2	3	3	2	2	2
85th	3	4	4	2	3	2
90th	4	4	4	2	5	3
95th	5	6	4	3	5	3
98th	7	7	7	3	5	4
99th	7	7	9	3	5	4
Maximum	10	10	9	3	5	4

Element Statistics
Variable - Molybdenum [Mo]
Number of Values - 184
Units - ppm
Detection Limit - 1
Analytical Method - INAA

Molybdenum by INAA

Summary Statistics

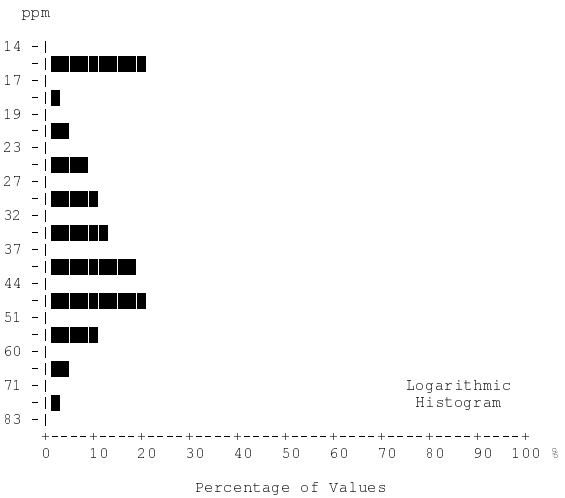


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	174	60	47	28	14	12
Missing	0	0	0	0	0	0
Mean	12.7	11.3	13.7	12.5	12.6	13.3
Median	12.0	11.0	13.0	13.0	12.0	13.0
Mode	11.0	10.0	10.0	11.0	10.0	11.0
Range	28	22	19	15	8	13
St Dev	4.72	3.84	4.90	4.12	2.44	3.68
Coef Var	0.372	0.339	0.357	0.328	0.194	0.276
Log Mean	1.074	1.032	1.106	1.072	1.092	1.107
Geo Mean	11.9	10.8	12.8	11.8	12.4	12.8
Log StDv	0.161	0.140	0.172	0.159	0.080	0.136
Log CVar	0.150	0.136	0.156	0.149	0.073	0.123
Percntls						
Minimum	5	5	5	5	10	6
10th	7	7	7	7	10	6
20th	9	9	10	8	10	10
30th	10	9	10	11	11	11
40th	11	10	12	11	11	12
50th	12	11	13	13	12	13
60th	13	12	14	13	12	13
70th	14	12	16	14	13	15
80th	16	13	18	15	14	16
85th	18	14	19	18	15	16
90th	19	15	20	19	16	18
95th	20	18	22	19	16	18
98th	24	23	24	19	18	19
99th	27	23	24	20	18	19
Maximum	33	27	24	20	18	19

Element Statistics
Variable - Neodymium [Nd]
Number of Values - 184
Units - ppm
Detection Limit - 5
Analytical Method - INAA

Neodymium by INAA

Summary Statistics

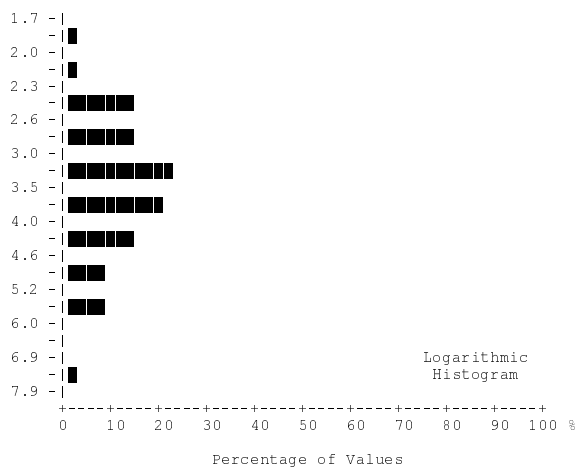


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	149	50	40	27	12	9
Missing	0	0	0	0	0	0
Mean	35.1	32.2	34.4	41.9	39.8	35.8
Median	36.0	32.0	32.0	45.0	45.0	36.0
Mode	15.0	15.0	15.0	15.0	15.0	15.0
Range	56	56	50	53	42	44
St Dev	14.11	12.89	14.07	14.66	13.37	15.13
Coef Var	0.402	0.401	0.408	0.350	0.336	0.422
Log Mean	1.505	1.470	1.496	1.588	1.568	1.509
Geo Mean	32.0	29.5	31.4	38.8	37.0	32.3
Log StDv	0.197	0.187	0.198	0.188	0.189	0.219
Log CVar	0.131	0.127	0.132	0.119	0.121	0.145
Percntls						
Minimum	15	15	15	15	15	15
10th	15	15	15	15	15	15
20th	20	15	15	26	27	15
30th	26	24	24	37	30	29
40th	31	28	31	39	41	31
50th	36	32	32	45	45	36
60th	40	37	39	48	45	41
70th	44	40	40	50	48	42
80th	48	42	48	55	49	50
85th	50	44	49	56	50	50
90th	53	45	51	57	53	52
95th	57	53	57	63	53	52
98th	63	59	63	63	57	59
99th	65	59	65	68	57	59
Maximum	71	71	65	68	57	59

Element Statistics
Variable - Rubidium [Rb]
Number of Values - 184
Units - ppm
Detection Limit - 15
Analytical Method - INAA

Rubidium by INAA

Summary Statistics



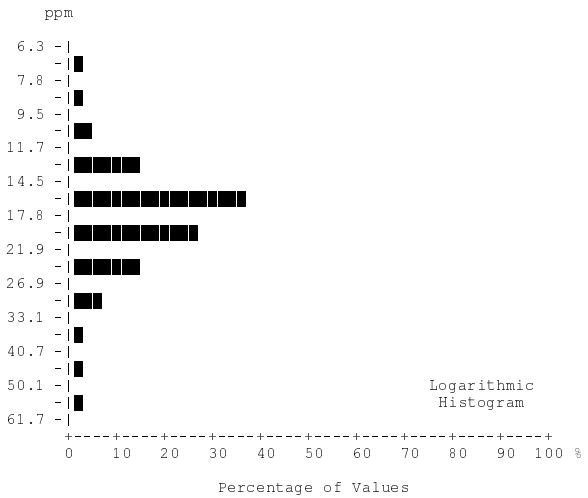
	N	%	Cum%
	3	1.6	1.6
	2	1.1	2.7
	23	12.5	15.2
	26	14.1	29.3
	38	20.7	50.0
	37	20.1	70.1
	26	14.1	84.2
	15	8.2	92.4
	12	6.5	98.9
	0	0.0	98.9
	2	1.1	100.0

	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	3.63	3.25	4.09	3.27	3.56	4.11
Median	3.40	3.20	4.00	3.30	3.40	4.00
Mode	3.30	2.90	3.30	3.00	3.40	4.10
Range	5.9	4.0	3.5	2.5	1.3	2.1
St Dev	0.98	0.80	0.95	0.66	0.37	0.61
Coef Var	0.271	0.245	0.234	0.201	0.102	0.148
Log Mean	0.545	0.500	0.599	0.507	0.550	0.610
Geo Mean	3.51	3.16	3.97	3.21	3.55	4.07
Log StDv	0.114	0.104	0.105	0.088	0.043	0.062
Log CVar	0.209	0.209	0.175	0.173	0.079	0.101
Percntls						
Minimum	1.8	1.8	2.3	2.3	3.0	3.2
10th	2.4	2.3	2.9	2.4	3.0	3.2
20th	2.9	2.5	3.3	2.5	3.4	3.6
30th	3.1	2.9	3.5	2.9	3.4	3.8
40th	3.3	3.0	3.6	3.0	3.4	3.9
50th	3.4	3.2	4.0	3.3	3.4	4.0
60th	3.7	3.3	4.2	3.4	3.4	4.1
70th	3.9	3.6	4.7	3.6	3.7	4.1
80th	4.2	3.8	5.0	3.8	3.8	4.3
85th	4.6	3.9	5.2	3.9	4.0	4.3
90th	5.0	4.2	5.3	4.2	4.1	5.2
95th	5.5	4.8	5.8	4.3	4.1	5.2
98th	5.8	5.5	5.8	4.3	4.3	5.3
99th	5.8	5.5	5.8	4.8	4.3	5.3
Maximum	7.7	5.8	5.8	4.8	4.3	5.3

Element Statistics
Variable - Samarium [Sm]
Number of Values - 184
Units - ppm
Detection Limit - 0.1
Analytical Method - INAA

Samarium by INAA

Summary Statistics

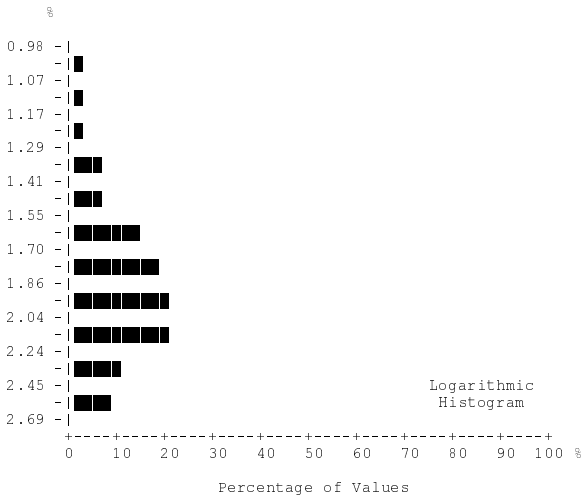


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	18.75	20.48	18.68	15.60	17.24	17.27
Median	17.40	19.50	17.30	14.80	15.20	16.90
Mode	18.50	21.60	16.20	14.00	12.90	13.90
Range	48.1	24.9	48.1	10.8	12.2	9.0
St Dev	6.05	5.45	8.05	2.66	4.04	2.26
Coef Var	0.323	0.266	0.431	0.171	0.234	0.131
Log Mean	1.255	1.297	1.243	1.187	1.226	1.234
Geo Mean	17.99	19.83	17.48	15.39	16.83	17.14
Log StDv	0.122	0.110	0.153	0.071	0.980	0.054
Log CVar	0.097	0.085	0.123	0.060	0.080	0.044
Percntls						
Minimum	7.6	12.8	7.6	11.2	12.9	13.9
10th	13.4	13.8	11.0	12.2	12.9	13.9
20th	14.6	15.9	14.5	14.0	13.4	15.3
30th	15.5	17.2	16.0	14.2	14.2	16.5
40th	16.6	17.8	16.5	14.6	15.1	16.8
50th	17.4	19.5	17.3	14.8	15.2	16.9
60th	18.9	21.1	18.5	15.3	16.5	17.0
70th	20.2	22.2	19.7	15.6	18.9	17.3
80th	22.0	24.2	21.6	17.4	21.1	18.5
85th	22.9	25.0	22.3	19.1	22.2	18.5
90th	24.5	27.3	23.2	19.2	22.7	19.0
95th	28.3	29.6	26.2	21.6	22.7	19.0
98th	35.9	35.9	47.9	21.6	25.1	22.9
99th	38.7	35.9	55.7	22.0	25.1	22.9
Maximum	55.7	37.7	55.7	22.0	25.1	22.9

Element Statistics
Variable - Scandium [Sc]
Number of Values - 184
Units - ppm
Detection Limit - 0.1
Analytical Method - INAA

Scandium by INAA

Summary Statistics



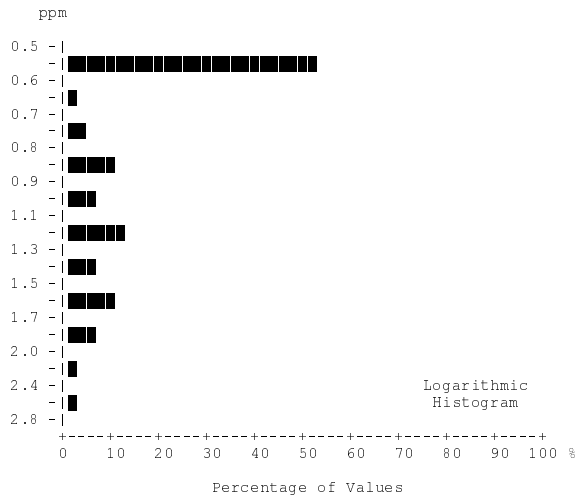
	N	%	Cum%
	1	0.5	0.5
	2	1.1	1.6
	4	2.2	3.8
	10	5.4	9.2
	8	4.3	13.6
	23	12.5	26.1
	33	17.9	44.0
	35	19.0	63.0
	37	20.1	83.2
	17	9.2	92.4
	14	7.6	100.0

	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	1.91	1.85	1.96	1.91	1.88	2.03
Median	1.94	1.86	1.98	1.92	1.92	2.08
Mode	1.86	2.00	1.86	1.63	1.98	2.08
Range	1.70	1.54	1.60	1.28	0.94	1.28
St Dev	0.34	0.32	0.38	0.30	0.26	0.36
Coef Var	0.178	0.175	0.194	0.157	0.138	0.180
Log Mean	0.274	0.259	0.283	0.276	0.269	0.300
Geo Mean	1.88	1.82	1.92	1.89	1.86	1.99
Log StDv	0.082	0.082	0.091	0.069	0.063	0.085
Log CVar	0.298	0.315	0.323	0.252	0.234	0.285
Percntls						
Minimum	0.98	0.98	1.08	1.27	1.35	1.28
10th	1.43	1.34	1.38	1.54	1.35	1.28
20th	1.63	1.61	1.64	1.63	1.64	1.54
30th	1.74	1.69	1.83	1.70	1.72	1.97
40th	1.84	1.78	1.90	1.78	1.82	1.98
50th	1.94	1.86	1.98	1.92	1.92	2.08
60th	2.00	1.96	2.05	1.97	1.97	2.08
70th	2.10	2.05	2.20	2.07	1.98	2.11
80th	2.20	2.11	2.29	2.15	2.04	2.28
85th	2.24	2.15	2.32	2.24	2.05	2.28
90th	2.31	2.20	2.42	2.26	2.21	2.47
95th	2.49	2.31	2.49	2.37	2.21	2.47
98th	2.55	2.49	2.65	2.37	2.29	2.56
99th	2.56	2.49	2.68	2.55	2.29	2.56
Maximum	2.68	2.52	2.68	2.55	2.29	2.56

Element Statistics
Variable - Sodium [Na]
Number of Values - 184
Units - %
Detection Limit - 0.01
Analytical Method - INAA

Sodium by INAA

Summary Statistics

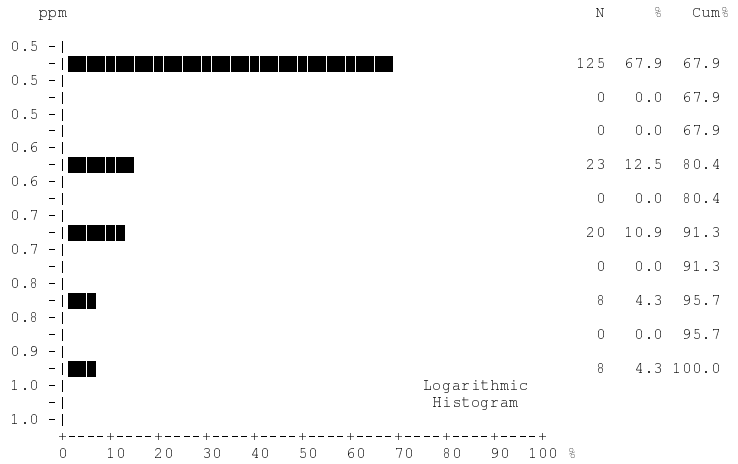


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	91	23	30	17	8	8
Missing	0	0	0	0	0	0
Mean	0.88	0.72	0.98	0.87	0.97	1.21
Median	0.50	0.50	0.90	0.80	0.90	1.10
Mode	0.50	0.50	0.50	0.50	0.50	0.50
Range	2.0	1.5	1.8	1.3	1.5	2.0
St Dev	0.48	0.36	0.51	0.41	0.50	0.67
Coef Var	0.545	0.503	0.514	0.468	0.515	0.555
Log Mean	-0.113	-0.185	-0.063	-0.103	-0.067	0.015
Geo Mean	0.77	0.65	0.87	0.79	0.86	1.04
Log StDv	0.213	0.175	0.222	0.198	0.227	0.260
Log CVar	-1.889	-0.943	-3.583	-1.918	-3.433	17.306
Percntls						
Minimum	0.5	0.5	0.5	0.5	0.5	0.5
10th	0.5	0.5	0.5	0.5	0.5	0.5
20th	0.5	0.5	0.5	0.5	0.5	0.5
30th	0.5	0.5	0.5	0.5	0.5	0.5
40th	0.5	0.5	0.5	0.5	0.5	1.0
50th	0.5	0.5	0.9	0.8	0.9	1.1
60th	0.9	0.5	1.0	0.9	1.0	1.2
70th	1.1	0.7	1.2	1.0	1.2	1.2
80th	1.3	1.0	1.5	1.3	1.3	1.8
85th	1.4	1.1	1.6	1.4	1.5	1.8
90th	1.6	1.2	1.7	1.4	1.6	2.0
95th	1.8	1.5	1.8	1.6	1.6	2.0
98th	2.0	1.7	1.9	1.6	2.0	2.5
99th	2.3	1.7	2.3	1.8	2.0	2.5
Maximum	2.5	2.0	2.3	1.8	2.0	2.5

Element Statistics
Variable - Tantalum [Ta]
Number of Values - 184
Units - ppm
Detection Limit - 0.5
Analytical Method - INAA

Tantalum by INAA

Summary Statistics

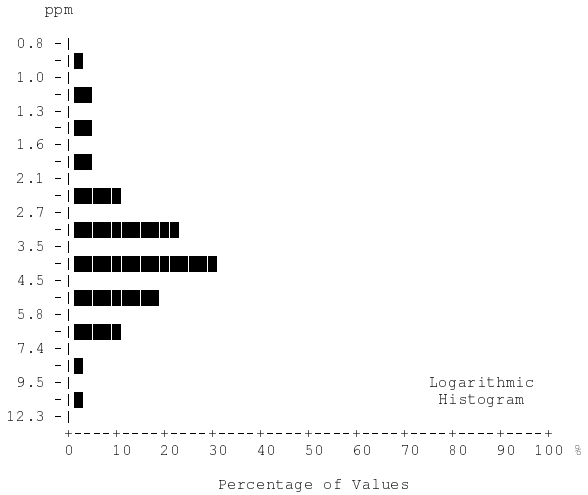


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	59	14	24	6	4	6
Missing	0	0	0	0	0	0
Mean	0.56	0.53	0.61	0.54	0.54	0.60
Median	0.50	0.50	0.50	0.50	0.50	0.50
Mode	0.50	0.50	0.50	0.50	0.50	0.50
Range	0.4	0.2	0.4	0.4	0.2	0.3
St Dev	0.11	0.07	0.14	0.09	0.06	0.12
Coef Var	0.197	0.126	0.227	0.166	0.118	0.201
Log Mean	-0.255	-0.276	-0.226	-0.275	-0.274	-0.229
Geo Mean	0.56	0.53	0.59	0.53	0.53	0.59
Log StDv	0.075	0.050	0.092	0.060	0.048	0.084
Log CVar	-0.296	-0.181	-0.405	-0.221	-0.175	-0.366
Percntls						
Minimum	0.5	0.5	0.5	0.5	0.5	0.5
10th	0.5	0.5	0.5	0.5	0.5	0.5
20th	0.5	0.5	0.5	0.5	0.5	0.5
30th	0.5	0.5	0.5	0.5	0.5	0.5
40th	0.5	0.5	0.5	0.5	0.5	0.5
50th	0.5	0.5	0.5	0.5	0.5	0.5
60th	0.5	0.5	0.6	0.5	0.5	0.6
70th	0.6	0.5	0.7	0.5	0.5	0.6
80th	0.6	0.6	0.7	0.5	0.6	0.7
85th	0.7	0.6	0.8	0.6	0.6	0.7
90th	0.7	0.7	0.8	0.6	0.6	0.8
95th	0.8	0.7	0.9	0.7	0.6	0.8
98th	0.9	0.7	0.9	0.7	0.7	0.8
99th	0.9	0.7	0.9	0.9	0.7	0.8
Maximum	0.9	0.7	0.9	0.9	0.7	0.8

Element Statistics
Variable - Terbium [Tb]
Number of Values - 184
Units - ppm
Detection Limit - 0.5
Analytical Method - INAA

Terbium by INAA

Summary Statistics



	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	3.82	3.18	3.59	4.75	4.56	4.03
Median	3.70	3.00	3.50	4.80	4.70	3.80
Mode	3.80	2.70	2.80	5.00	2.50	3.70
Range	10.3	8.6	6.5	5.3	4.2	2.5
St Dev	1.62	1.42	1.38	1.20	1.44	0.69
Coef Var	0.424	0.448	0.383	0.252	0.317	0.170
Log Mean	0.541	0.460	0.521	0.660	0.635	0.599
Geo Mean	3.47	2.88	3.32	4.58	4.31	3.98
Log StDv	0.198	0.199	0.184	0.130	0.156	0.078
Log CVar	0.366	0.432	0.354	0.198	0.246	0.131
Percntls						
Minimum	0.8	0.8	0.8	1.6	2.5	2.6
10th	1.7	1.5	1.8	2.9	2.5	2.6
20th	2.6	2.0	2.5	3.8	2.5	3.6
30th	2.9	2.5	2.8	4.1	2.8	3.7
40th	3.3	2.7	3.0	4.5	4.6	3.7
50th	3.7	3.0	3.5	4.8	4.7	3.8
60th	4.0	3.3	3.8	5.0	4.9	4.1
70th	4.4	3.8	4.0	5.3	5.5	4.1
80th	5.0	4.0	4.3	6.0	5.7	4.8
85th	5.3	4.4	4.9	6.1	5.8	4.8
90th	6.0	4.8	5.5	6.2	6.1	4.9
95th	6.4	5.2	6.4	6.4	6.1	4.9
98th	7.3	6.1	6.4	6.4	6.7	5.1
99th	9.4	6.1	7.3	6.9	6.7	5.1
Maximum	11.1	9.4	7.3	6.9	6.7	5.1

Element Statistics
Variable - Thorium [Th]
Number of Values - 184
Units - ppm
Detection Limit - 0.2
Analytical Method - INAA

Thorium by INAA

Summary Statistics

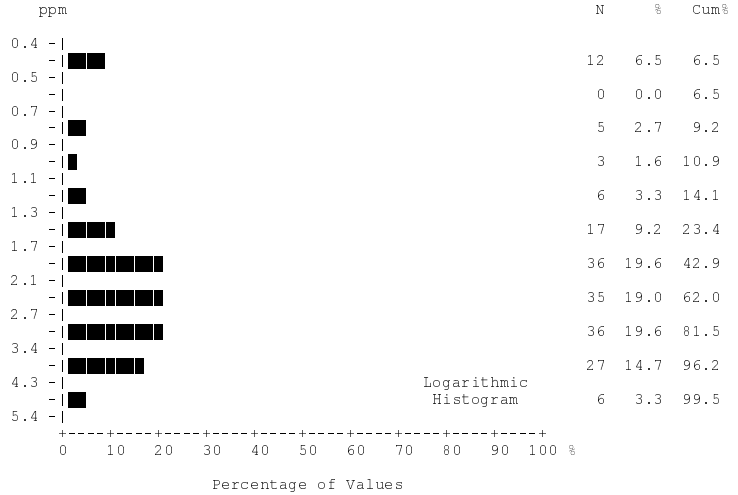
	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	2	0	1	0	1	0
Missing	0	0	0	0	0	0
Mean	1.0	1.0	1.0	1.0	1.1	1.0
Median	1.0	1.0	1.0	1.0	1.0	1.0
Mode	1.0	1.0	1.0	1.0	1.0	1.0
Range	2	0	1	0	2	0
St Dev	0.16	0.00	0.14	0.00	0.53	0.00
Coef Var	0.162	0.000	0.139	0.000	0.468	0.000
Log Mean	0.004	0.000	0.006	0.000	0.034	0.000
Geo Mean	1.0	1.0	1.0	1.0	1.1	1.0
Log StDv	0.041	0.000	0.043	0.000	0.128	0.000
Log CVar	10.372	0.000	7.095	0.000	3.750	0.000
Percntls						
Minimum	1	1	1	1	1	1
10th	1	1	1	1	1	1
20th	1	1	1	1	1	1
30th	1	1	1	1	1	1
40th	1	1	1	1	1	1
50th	1	1	1	1	1	1
60th	1	1	1	1	1	1
70th	1	1	1	1	1	1
80th	1	1	1	1	1	1
85th	1	1	1	1	1	1
90th	1	1	1	1	1	1
95th	1	1	1	1	1	1
98th	1	1	1	1	3	1
99th	1	1	2	1	3	1
Maximum	3	1	2	1	3	1

Histograms are not calculated for variables with fewer than 15 samples above the detection limit.

Element Statistics
Variable - Tungsten [W]
Number of Values - 184
Units - ppm
Detection Limit - 1
Analytical Method - INAA

Tungsten by INAA

Summary Statistics

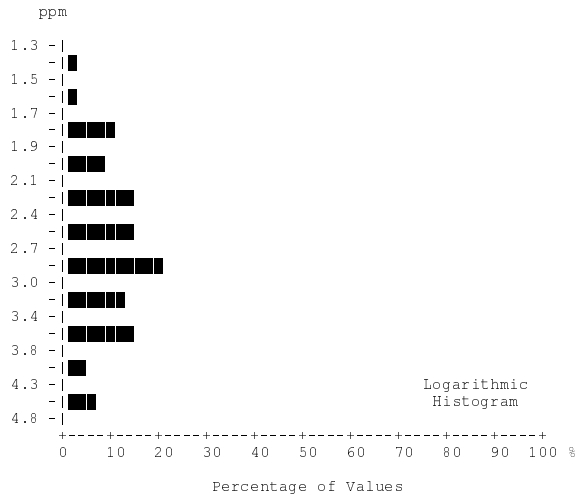


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	172	59	45	29	13	12
Missing	0	0	0	0	0	0
Mean	2.39	2.41	1.98	2.82	2.84	2.46
Median	2.30	2.30	1.90	3.00	2.90	2.30
Mode	0.50	0.50	0.50	3.00	1.80	2.90
Range	4.9	4.5	3.6	4.0	3.7	2.4
St Dev	1.03	1.05	0.95	0.83	1.06	0.67
Coef Var	0.431	0.436	0.480	0.293	0.375	0.272
Log Mean	0.326	0.331	0.235	0.424	0.407	0.376
Geo Mean	2.12	2.14	1.72	2.66	2.55	2.38
Log StDv	0.237	0.235	0.255	0.176	0.240	0.116
Log CVar	0.730	0.712	1.091	0.415	0.589	0.310
Percntls						
Minimum	0.5	0.5	0.5	0.5	0.5	1.5
10th	0.9	1.1	0.5	1.7	0.5	1.5
20th	1.5	1.5	0.9	2.0	1.8	1.8
30th	1.9	1.9	1.5	2.3	2.1	2.0
40th	2.1	2.2	1.7	2.6	2.5	2.1
50th	2.3	2.3	1.9	3.0	2.9	2.3
60th	2.6	2.6	2.1	3.2	2.9	2.4
70th	2.9	2.8	2.3	3.3	3.6	2.8
80th	3.2	3.1	2.8	3.4	3.8	2.9
85th	3.5	3.5	3.2	3.5	4.0	2.9
90th	3.8	3.7	3.4	3.8	4.0	3.0
95th	4.0	4.5	3.6	3.9	4.0	3.0
98th	4.5	4.9	3.7	3.9	4.2	3.9
99th	4.9	4.9	4.1	4.5	4.2	3.9
Maximum	5.4	5.0	4.1	4.5	4.2	3.9

Element Statistics
Variable - Uranium [U]
Number of Values - 184
Units - ppm
Detection Limit - 0.5
Analytical Method - INAA

Uranium by INAA

Summary Statistics

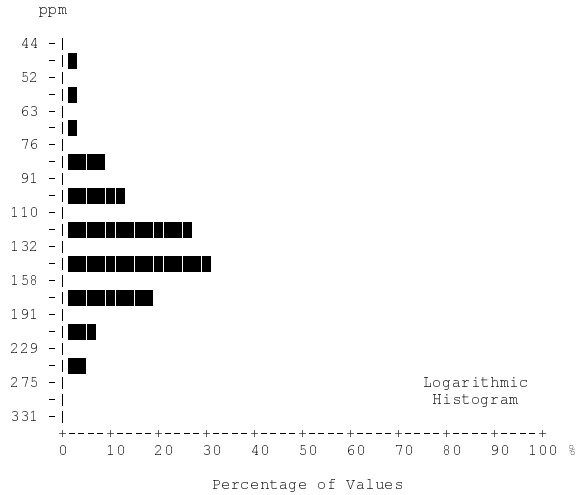


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	2.79	2.66	3.10	2.44	2.71	3.33
Median	2.70	2.50	3.10	2.20	2.70	3.10
Mode	2.20	2.20	2.80	2.20	3.00	3.10
Range	3.4	3.2	3.2	2.0	1.8	2.4
St Dev	0.76	0.69	0.89	0.53	0.48	0.62
Coef Var	0.272	0.260	0.288	0.219	0.177	0.186
Log Mean	0.430	0.412	0.473	0.378	0.426	0.516
Geo Mean	2.69	2.58	2.97	2.39	2.67	3.28
Log StDv	0.115	0.108	0.130	0.093	0.081	0.075
Log CVar	0.269	0.262	0.276	0.246	0.191	0.146
Percntls						
Minimum	1.5	1.5	1.6	1.6	1.8	2.5
10th	1.9	1.9	1.9	1.8	1.8	2.5
20th	2.2	2.2	2.2	2.0	2.3	2.8
30th	2.3	2.2	2.6	2.1	2.3	3.0
40th	2.5	2.4	2.8	2.2	2.7	3.1
50th	2.7	2.5	3.1	2.2	2.7	3.1
60th	2.9	2.6	3.3	2.4	2.8	3.3
70th	3.1	2.8	3.4	2.8	3.0	3.4
80th	3.4	3.2	3.6	2.8	3.0	3.7
85th	3.4	3.4	4.3	3.1	3.0	3.7
90th	3.7	3.5	4.4	3.3	3.1	3.8
95th	4.3	4.0	4.7	3.4	3.1	3.8
98th	4.7	4.4	4.8	3.4	3.6	4.9
99th	4.8	4.4	4.8	3.6	3.6	4.9
Maximum	4.9	4.7	4.8	3.6	3.6	4.9

Element Statistics
Variable - Ytterbium [Yb]
Number of Values - 184
Units - ppm
Detection Limit - 0.2
Analytical Method - INAA

Ytterbium by INAA

Summary Statistics

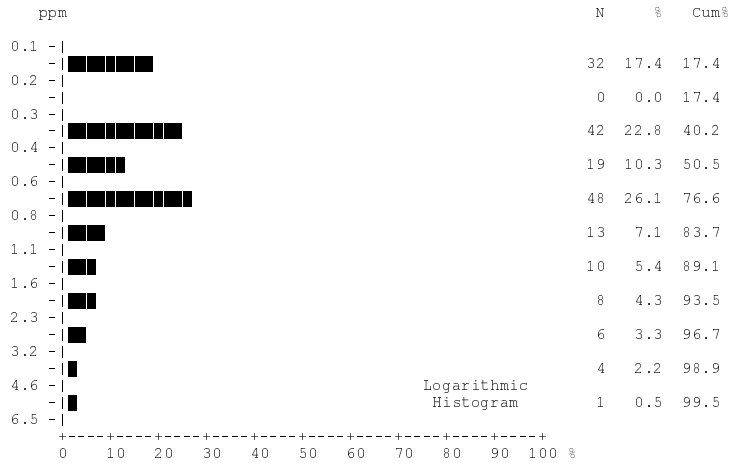


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	180	62	48	29	14	12
Missing	0	0	0	0	0	0
Mean	139.0	145.5	143.2	126.0	130.4	137.8
Median	135.0	140.0	141.0	122.0	131.0	125.0
Mode	119.0	107.0	141.0	119.0	94.0	145.0
Range	297	297	288	131	73	98
St Dev	43.77	45.88	52.99	26.32	20.90	28.86
Coef Var	0.315	0.315	0.370	0.209	0.160	0.210
Log Mean	2.122	2.143	2.126	2.090	2.110	2.131
Geo Mean	132.6	138.9	133.5	122.9	128.8	135.1
Log StDv	0.135	0.135	0.169	0.104	0.071	0.088
Log CVar	0.064	0.063	0.080	0.050	0.034	0.041
Percntls						
Minimum	50	50	50	50	94	96
10th	91	91	72	100	94	96
20th	108	110	93	104	111	113
30th	117	119	121	114	112	119
40th	127	131	132	117	130	124
50th	135	140	141	122	131	125
60th	141	149	146	131	132	140
70th	152	163	160	136	140	145
80th	167	177	178	144	143	154
85th	178	183	189	156	146	154
90th	188	189	201	159	160	183
95th	209	222	217	171	160	183
98th	237	237	262	171	167	194
99th	264	237	338	181	167	194
Maximum	347	347	338	181	167	194

Element Statistics
Variable - Zinc [Zn]
Number of Values - 184
Units - ppm
Detection Limit - 50
Analytical Method - INAA

Zinc by INAA

Summary Statistics

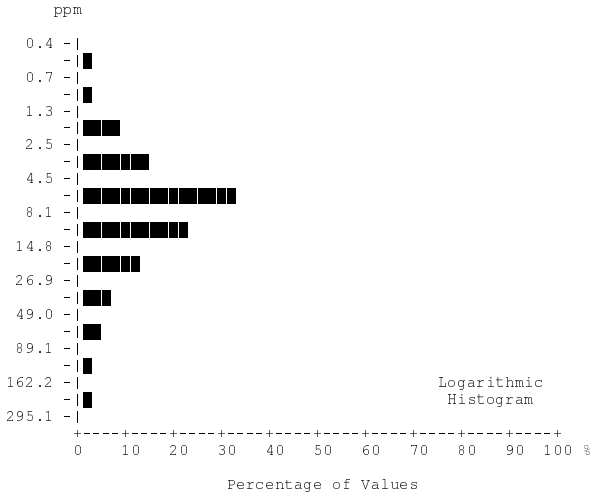


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	152	50	38	28	13	12
Missing	0	0	0	0	0	0
Mean	0.82	0.82	0.86	0.92	0.64	0.98
Median	0.50	0.60	0.50	0.60	0.60	0.50
Mode	0.20	0.20	0.20	0.40	0.40	0.50
Range	6.8	5.3	6.8	3.1	0.9	3.4
St Dev	0.91	0.90	1.15	0.81	0.28	1.04
Coef Var	1.114	1.099	1.337	0.882	0.439	1.070
Log Mean	-0.241	-0.251	-0.251	-0.162	-0.242	-0.146
Geo Mean	0.57	0.56	0.56	0.69	0.57	0.72
Log StDv	0.338	0.360	0.365	0.325	0.216	0.309
Log CVar	-1.407	-1.432	-1.452	-2.004	-0.894	-2.134
Percntls						
Minimum	0.2	0.2	0.2	0.2	0.2	0.4
10th	0.2	0.2	0.2	0.3	0.2	0.4
20th	0.3	0.2	0.2	0.4	0.4	0.4
30th	0.4	0.3	0.4	0.4	0.4	0.5
40th	0.4	0.4	0.5	0.5	0.6	0.5
50th	0.5	0.6	0.5	0.6	0.6	0.5
60th	0.6	0.7	0.6	0.7	0.6	0.5
70th	0.8	0.7	0.8	0.8	0.8	0.7
80th	1.0	1.1	0.9	1.2	0.8	0.8
85th	1.2	1.5	1.1	1.8	1.0	0.8
90th	1.8	1.8	1.4	2.0	1.0	2.4
95th	2.5	2.5	3.0	3.1	1.0	2.4
98th	3.4	3.4	4.0	3.1	1.1	3.8
99th	4.0	3.4	7.0	3.3	1.1	3.8
Maximum	7.0	5.5	7.0	3.3	1.1	3.8

Element Statistics
Variable - Antimony [Sb]
Number of Values - 184
Units - ppm
Detection Limit - 0.2
Analytical Method - AAS

Antimony by AAS

Summary Statistics



	N	%	Cum%
	2	1.1	1.1
	3	1.6	2.7
	13	7.1	9.8
	26	14.1	23.9
	57	31.0	54.9
	40	21.7	76.6
	22	12.0	88.6
	11	6.0	94.6
	6	3.3	97.8
	2	1.1	98.9
	2	1.1	100.0

	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	14.19	12.56	16.69	13.12	10.44	28.73
Median	7.70	7.90	5.10	9.00	8.00	5.70
Mode	5.70	5.70	19.00	13.00	5.70	5.70
Range	199.5	113.0	169.5	40.3	27.3	197.8
St Dev	23.60	16.73	28.68	9.33	6.99	57.71
Coef Var	1.664	1.332	1.718	0.712	0.670	2.009
Log Mean	0.912	0.940	0.835	1.033	0.966	0.962
Geo Mean	8.17	8.72	6.83	10.79	9.24	9.17
Log StDv	0.418	0.321	0.579	0.267	0.197	0.592
Log CVar	0.458	0.342	0.694	0.258	0.204	0.615
Percntls						
Minimum	0.5	2.0	0.5	3.7	5.7	2.2
10th	2.2	3.9	1.3	5.6	5.7	2.2
20th	4.0	5.3	2.1	6.5	6.9	3.7
30th	5.6	5.7	2.9	7.2	7.2	4.1
40th	6.5	6.8	3.9	7.9	7.8	4.4
50th	7.7	7.9	5.1	9.0	8.0	5.7
60th	8.4	8.5	8.5	13.0	8.4	5.7
70th	10.5	9.7	16.0	16.0	9.5	6.3
80th	16.0	12.0	19.0	18.0	10.0	26.0
85th	19.0	16.0	31.0	19.0	11.0	26.0
90th	30.0	27.0	40.0	21.0	16.0	75.0
95th	51.0	39.0	59.0	34.0	16.0	75.0
98th	75.0	53.0	90.0	34.0	33.0	200.0
99th	115.0	53.0	170.0	44.0	33.0	200.0
Maximum	200.0	115.0	170.0	44.0	33.0	200.0

Element Statistics
Variable - Arsenic [As]
Number of Values - 184
Units - ppm
Detection Limit - 0.2
Analytical Method - AAS-H

Arsenic by AAS-H

Summary Statistics

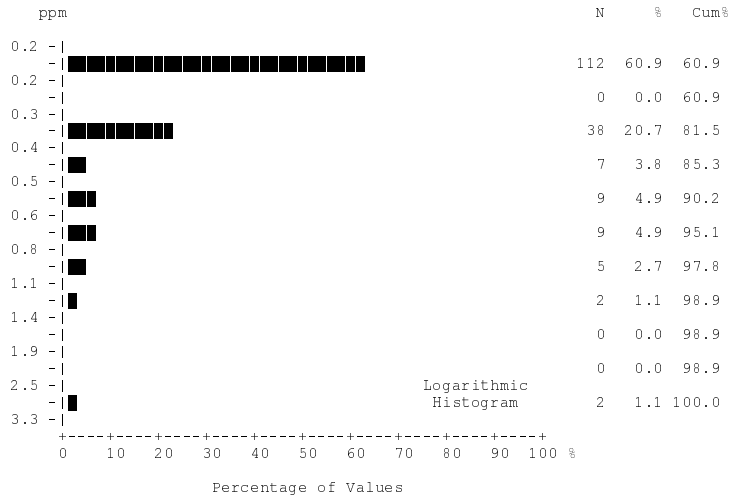
	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	11	4	3	3	0	1
Missing	0	0	0	0	0	0
Mean	0.38	0.27	0.37	0.25	0.20	1.85
Median	0.20	0.20	0.20	0.20	0.20	0.20
Mode	0.20	0.20	0.20	0.20	0.20	0.20
Range	19.8	3.8	7.8	0.6	0.0	19.8
St Dev	1.59	0.48	1.10	0.15	0.00	5.72
Coef Var	4.130	1.788	2.985	0.600	0.000	3.090
Log Mean	-0.656	-0.666	-0.651	-0.648	-0.699	-0.532
Geo Mean	0.22	0.22	0.22	0.23	0.20	0.29
Log StDv	0.226	0.173	0.241	0.159	0.000	0.577
Log CVar	-0.345	-0.259	-0.370	-0.246	0.000	-1.085
Percntls						
Minimum	0.2	0.2	0.2	0.2	0.2	0.2
10th	0.2	0.2	0.2	0.2	0.2	0.2
20th	0.2	0.2	0.2	0.2	0.2	0.2
30th	0.2	0.2	0.2	0.2	0.2	0.2
40th	0.2	0.2	0.2	0.2	0.2	0.2
50th	0.2	0.2	0.2	0.2	0.2	0.2
60th	0.2	0.2	0.2	0.2	0.2	0.2
70th	0.2	0.2	0.2	0.2	0.2	0.2
80th	0.2	0.2	0.2	0.2	0.2	0.2
85th	0.2	0.2	0.2	0.2	0.2	0.2
90th	0.2	0.2	0.2	0.2	0.2	0.2
95th	0.3	0.3	0.3	0.7	0.2	0.2
98th	0.8	0.5	0.8	0.7	0.2	20.0
99th	4.0	0.5	8.0	0.8	0.2	20.0
Maximum	20.0	4.0	8.0	0.8	0.2	20.0

Histograms are not calculated for variables with fewer than 15 samples above the detection limit.

Element Statistics
Variable - Bismuth [Bi]
Number of Values - 184
Units - ppm
Detection Limit - 0.2
Analytical Method - AAS-H

Bismuth by AAS-H

Summary Statistics

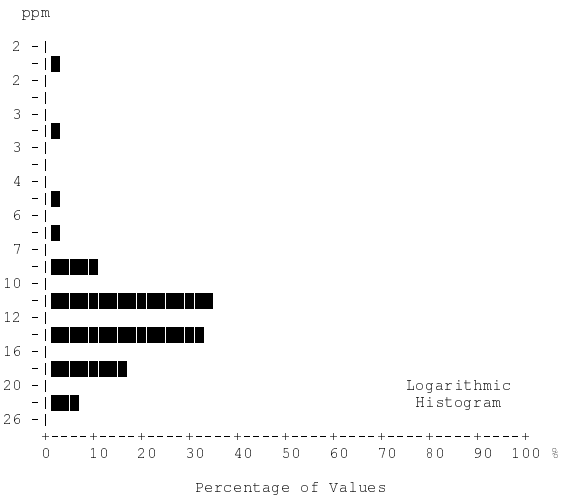


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	72	36	11	11	6	1
Missing	0	0	0	0	0	0
Mean	0.33	0.43	0.31	0.24	0.26	0.21
Median	0.20	0.30	0.20	0.20	0.20	0.20
Mode	0.20	0.20	0.20	0.20	0.20	0.20
Range	2.9	2.5	2.9	0.2	0.3	0.1
St Dev	0.34	0.39	0.43	0.06	0.09	0.03
Coef Var	1.012	0.908	1.397	0.257	0.351	0.139
Log Mean	-0.563	-0.468	-0.614	-0.626	-0.599	-0.684
Geo Mean	0.27	0.34	0.24	0.24	0.25	0.21
Log StDv	0.224	0.269	0.218	0.102	0.134	0.051
Log CVar	-0.397	-0.576	-0.356	-0.163	-0.224	-0.074
Percntls						
Minimum	0.2	0.2	0.2	0.2	0.2	0.2
10th	0.2	0.2	0.2	0.2	0.2	0.2
20th	0.2	0.2	0.2	0.2	0.2	0.2
30th	0.2	0.2	0.2	0.2	0.2	0.2
40th	0.2	0.2	0.2	0.2	0.2	0.2
50th	0.2	0.3	0.2	0.2	0.2	0.2
60th	0.2	0.3	0.2	0.2	0.2	0.2
70th	0.3	0.4	0.2	0.3	0.3	0.2
80th	0.3	0.6	0.3	0.3	0.3	0.2
85th	0.4	0.7	0.3	0.3	0.3	0.2
90th	0.6	0.8	0.3	0.3	0.4	0.2
95th	0.8	1.0	0.7	0.4	0.4	0.2
98th	1.0	1.2	1.1	0.4	0.5	0.3
99th	1.2	1.2	3.1	0.4	0.5	0.3
Maximum	3.1	2.7	3.1	0.4	0.5	0.3

Element Statistics
Variable - Cadmium [Cd]
Number of Values - 184
Units - ppm
Detection Limit - 0.2
Analytical Method - AAS

Cadmium by AAS

Summary Statistics

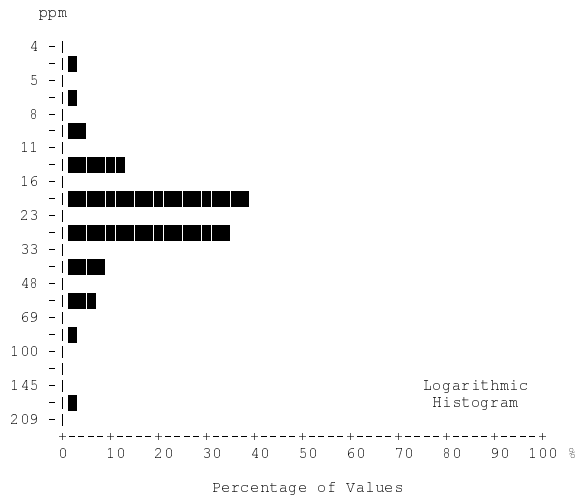


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	183	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	13.0	13.6	13.1	12.5	12.5	10.8
Median	13.0	12.0	13.0	12.0	11.0	11.0
Mode	13.0	12.0	13.0	11.0	10.0	10.0
Range	26	18	17	15	13	6
St Dev	4.21	4.17	3.92	3.21	3.59	2.01
Coef Var	0.324	0.307	0.299	0.257	0.287	0.187
Log Mean	1.088	1.115	1.095	1.083	1.082	1.024
Geo Mean	12.3	13.0	12.4	12.1	12.1	10.6
Log StDv	0.158	0.121	0.150	0.111	0.116	0.087
Log CVar	0.145	0.109	0.137	0.102	0.108	0.085
Percntls						
Minimum	2	8	5	7	8	7
10th	8	9	7	8	8	7
20th	10	10	10	10	10	8
30th	11	11	11	11	10	10
40th	12	12	13	11	11	10
50th	13	12	13	12	11	11
60th	13	13	14	13	12	11
70th	15	15	15	13	13	12
80th	16	16	16	15	15	13
85th	16	17	17	15	16	13
90th	18	19	18	15	17	13
95th	21	24	20	19	17	13
98th	24	26	21	19	21	13
99th	26	26	22	22	21	13
Maximum	28	26	22	22	21	13

Element Statistics
Variable - Cobalt [Co]
Number of Values - 184
Units - ppm
Detection Limit - 2
Analytical Method - AAS

Cobalt by AAS

Summary Statistics

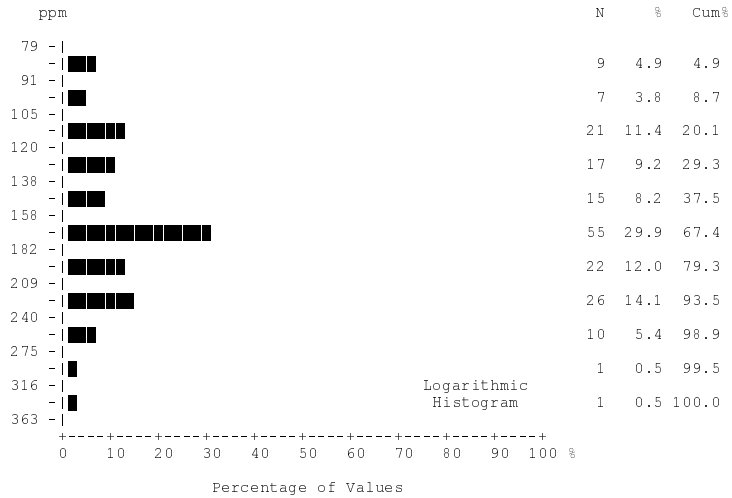


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	26.1	28.4	22.9	23.9	26.1	19.5
Median	22.0	24.0	20.0	22.0	23.0	17.0
Mode	27.0	19.0	18.0	17.0	32.0	16.0
Range	182	70	60	40	26	22
St Dev	17.80	16.37	11.07	8.46	7.50	5.92
Coef Var	0.682	0.576	0.483	0.354	0.288	0.303
Log Mean	1.358	1.398	1.319	1.355	1.400	1.274
Geo Mean	22.8	25.0	20.8	22.7	25.1	18.8
Log StDv	0.213	0.213	0.190	0.144	0.120	0.119
Log CVar	0.157	0.152	0.144	0.106	0.086	0.094
Percntls						
Minimum	5	10	8	11	17	12
10th	13	14	11	15	17	12
20th	16	16	16	17	19	16
30th	18	19	18	19	20	16
40th	20	21	19	21	22	16
50th	22	24	20	22	23	17
60th	25	27	23	25	26	18
70th	27	29	25	27	31	20
80th	31	32	29	30	32	21
85th	32	41	30	31	32	21
90th	41	52	32	31	34	27
95th	52	65	44	43	34	27
98th	75	79	57	43	43	34
99th	79	79	68	51	43	34
Maximum	187	80	68	51	43	34

Element Statistics
Variable - Copper [Cu]
Number of Values - 184
Units - ppm
Detection Limit - 2
Analytical Method - AAS

Copper by AAS

Summary Statistics

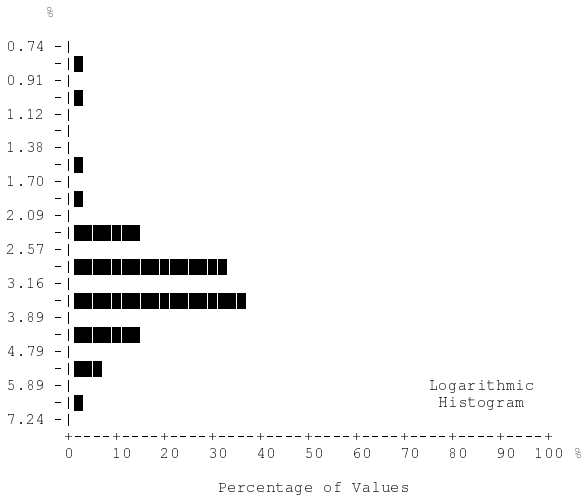


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	166.2	158.3	181.8	150.7	168.6	210.8
Median	170.0	160.0	180.0	140.0	170.0	210.0
Mode	160.0	170.0	160.0	130.0	180.0	210.0
Range	240	160	230	140	90	170
St Dev	45.17	40.14	46.28	39.65	25.38	45.62
Coef Var	0.272	0.254	0.255	0.263	0.151	0.216
Log Mean	2.204	2.185	2.245	2.163	2.222	2.313
Geo Mean	159.9	153.1	175.7	145.4	166.7	205.8
Log StDv	0.123	0.114	0.118	0.119	0.068	0.103
Log CVar	0.056	0.052	0.053	0.055	0.031	0.045
Percntls						
Minimum	80	90	90	80	120	130
10th	110	100	120	90	120	130
20th	120	120	150	120	150	130
30th	140	130	160	130	150	210
40th	160	140	170	130	160	210
50th	170	160	180	140	170	210
60th	170	170	200	160	180	220
70th	190	180	200	170	180	220
80th	210	190	220	190	180	230
85th	210	200	230	200	190	230
90th	220	220	240	210	200	240
95th	240	230	250	220	200	240
98th	250	240	250	220	210	300
99th	260	240	320	220	210	300
Maximum	320	250	320	220	210	300

Element Statistics
Variable - Fluorine [F]
Number of Values - 184
Units - ppm
Detection Limit - 40
Analytical Method - ION

Fluorine by ION

Summary Statistics



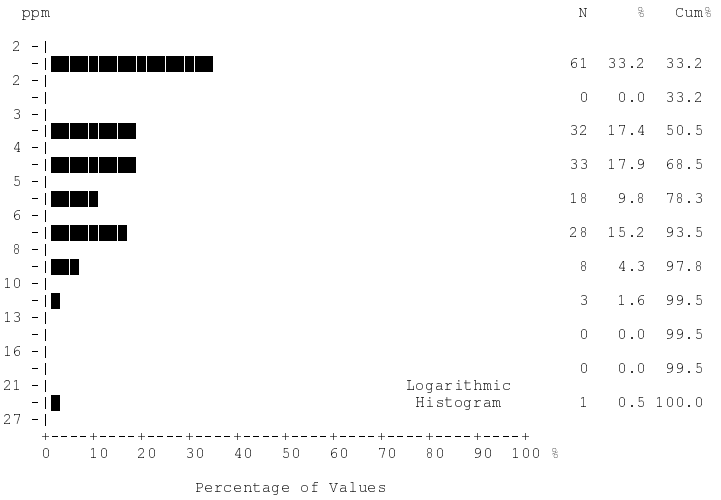
	N	%	Cum%
	2	1.1	1.1
	1	0.5	1.6
	0	0.0	1.6
	1	0.5	2.2
	2	1.1	3.3
	23	12.5	15.8
	56	30.4	46.2
	63	34.2	80.4
	26	14.1	94.6
	8	4.3	98.9
	2	1.1	100.0

	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	3.30	3.55	3.24	3.10	3.37	3.10
Median	3.20	3.40	3.20	3.00	3.40	3.00
Mode	3.00	3.00	3.40	3.00	2.90	3.00
Range	5.45	4.10	3.30	3.20	1.10	2.40
St Dev	0.82	0.88	0.65	0.64	0.39	0.72
Coef Var	0.249	0.247	0.202	0.208	0.116	0.232
Log Mean	0.504	0.538	0.502	0.483	0.525	0.479
Geo Mean	3.19	3.45	3.18	3.04	3.35	3.01
Log StDv	0.119	0.102	0.087	0.084	0.051	0.111
Log CVar	0.236	0.189	0.174	0.173	0.097	0.232
Percntls						
Minimum	0.85	2.20	1.90	2.20	2.80	1.70
10th	2.40	2.50	2.40	2.40	2.80	1.70
20th	2.70	2.90	2.70	2.50	2.90	2.30
30th	3.00	3.00	2.90	2.70	3.00	2.80
40th	3.10	3.20	3.00	3.00	3.20	3.00
50th	3.20	3.40	3.20	3.00	3.40	3.00
60th	3.40	3.60	3.30	3.10	3.50	3.30
70th	3.60	3.80	3.40	3.30	3.60	3.30
80th	3.80	4.10	3.70	3.40	3.60	3.70
85th	4.00	4.30	3.80	3.60	3.90	3.70
90th	4.10	4.70	4.00	3.60	3.90	4.00
95th	4.80	5.10	4.40	4.10	3.90	4.00
98th	5.40	6.20	4.90	4.10	3.90	4.10
99th	5.80	6.20	5.20	5.40	3.90	4.10
Maximum	6.30	6.30	5.20	5.40	3.90	4.10

Element Statistics
Variable - Iron [Fe]
Number of Values - 184
Units - %
Detection Limit - 0.02
Analytical Method - AAS

Iron by AAS

Summary Statistics

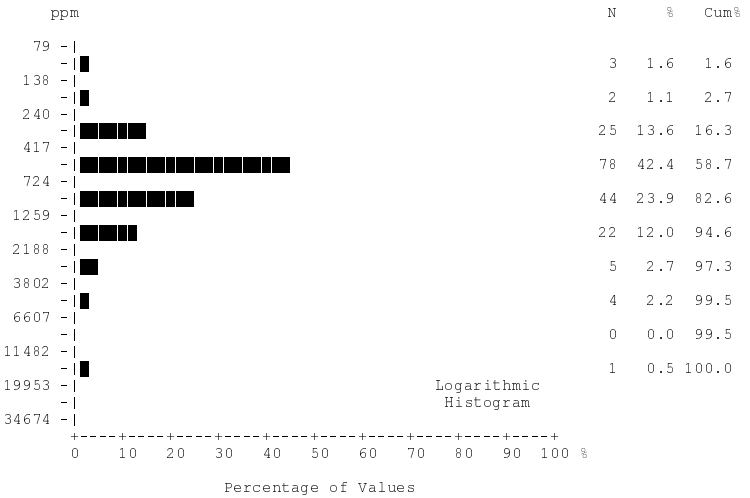


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	123	37	29	26	9	11
Missing	0	0	0	0	0	0
Mean	4.1	3.5	4.1	5.1	3.8	4.0
Median	3.0	3.0	3.0	5.0	3.0	4.0
Mode	2.0	2.0	2.0	4.0	2.0	4.0
Range	23	23	8	9	8	4
St Dev	2.57	3.02	2.44	2.22	2.36	1.13
Coef Var	0.633	0.867	0.590	0.435	0.623	0.282
Log Mean	0.547	0.480	0.547	0.665	0.517	0.585
Geo Mean	3.5	3.0	3.5	4.6	3.3	3.8
Log StDv	0.221	0.199	0.245	0.202	0.226	0.132
Log CVar	0.404	0.415	0.448	0.304	0.437	0.227
Percntls						
Minimum	2	2	2	2	2	2
10th	2	2	2	2	2	2
20th	2	2	2	3	2	3
30th	2	2	2	4	2	3
40th	3	2	2	4	3	4
50th	3	3	3	5	3	4
60th	4	3	4	5	3	4
70th	5	4	5	6	4	4
80th	6	4	6	7	4	5
85th	6	5	7	7	6	5
90th	7	5	8	7	7	5
95th	8	6	9	9	7	5
98th	9	6	9	9	10	6
99th	10	6	10	11	10	6
Maximum	25	25	10	11	10	6

Element Statistics
Variable - Lead [Pb]
Number of Values - 184
Units - ppm
Detection Limit - 2
Analytical Method - AAS

Lead by AAS

Summary Statistics

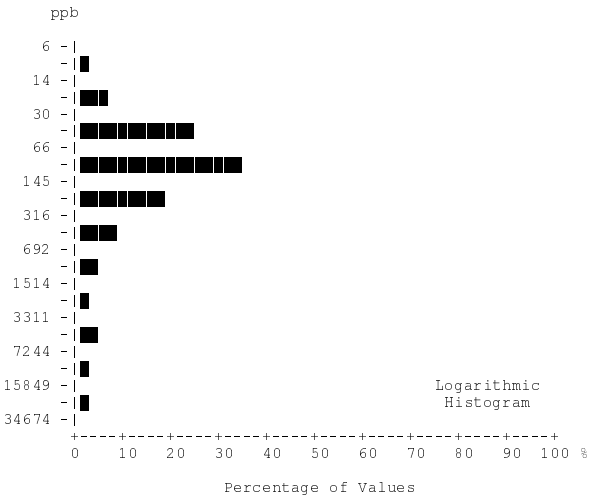


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	1009.5	1243.3	1102.4	739.1	913.9	676.5
Median	643.0	691.0	708.0	646.0	442.0	546.0
Mode	497.0	453.0	518.0	303.0	325.0	131.0
Range	18538	18292	6227	1997	5295	1629
St Dev	1574.58	2400.70	1023.14	418.84	1404.31	483.36
Coef Var	1.560	1.931	0.928	0.567	1.537	0.714
Log Mean	2.858	2.907	2.933	2.814	2.765	2.726
Geo Mean	721.2	808.0	856.3	651.9	582.7	531.8
Log StDv	0.308	0.316	0.288	0.215	0.337	0.328
Log CVar	0.108	0.109	0.980	0.076	0.122	0.120
Percntls						
Minimum	82	328	263	303	325	131
10th	356	385	416	345	325	131
20th	447	453	497	415	356	217
30th	497	477	534	457	401	419
40th	540	562	639	531	433	498
50th	643	691	708	646	442	546
60th	732	815	920	676	457	594
70th	1000	1100	1070	795	535	641
80th	1180	1190	1500	1020	564	960
85th	1370	1530	1940	1120	643	960
90th	1780	1660	2150	1140	1800	1380
95th	2210	2120	2770	1390	1800	1380
98th	4100	6230	2920	1390	5620	1760
99th	6230	6230	6490	2300	5620	1760
Maximum	18620	18620	6490	2300	5620	1760

Element Statistics
Variable - Manganese [Mn]
Number of Values - 184
Units - ppm
Detection Limit - 5
Analytical Method - AAS

Manganese by AAS

Summary Statistics

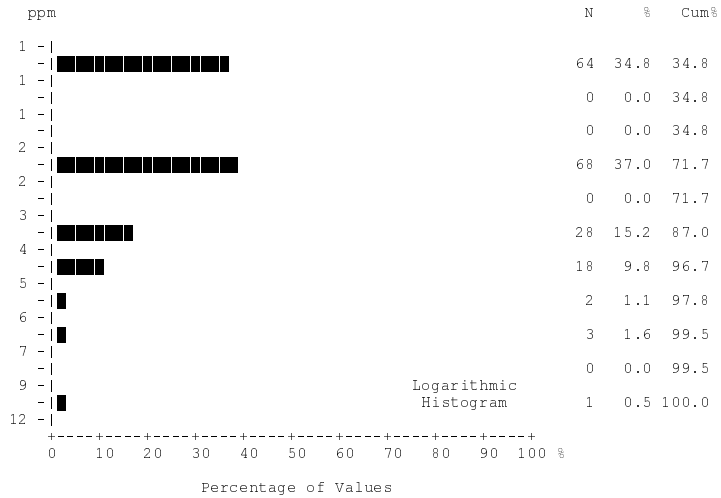


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	182	63	50	30	14	11
Missing	0	0	0	0	0	0
Mean	828.8	463.8	1270.8	473.0	142.1	654.2
Median	90.0	90.0	180.0	70.0	90.0	80.0
Mode	60.0	60.0	60.0	50.0	80.0	80.0
Range	25990	9740	25980	8650	390	6710
St Dev	3014.64	1533.49	3936.80	1593.66	111.78	1912.96
Coef Var	3.637	3.306	3.098	3.369	0.786	2.924
Log Mean	2.158	2.083	2.372	2.063	2.061	1.972
Geo Mean	144.0	121.0	235.6	115.7	115.0	93.8
Log StDv	0.622	0.512	0.685	0.527	0.274	0.735
Log CVar	0.288	0.246	0.289	0.255	0.133	0.373
Percntls						
Minimum	10	20	20	30	50	10
10th	50	40	50	50	50	10
20th	60	60	60	50	70	20
30th	60	60	80	60	80	50
40th	80	80	130	70	90	60
50th	90	90	180	70	90	80
60th	130	100	210	80	100	80
70th	180	150	320	140	140	80
80th	260	180	510	200	140	240
85th	440	250	1220	220	250	240
90th	950	390	2520	390	300	360
95th	5120	950	6400	1980	300	360
98th	8040	6600	8040	1980	440	6720
99th	9760	6600	26000	8680	440	6720
Maximum	26000	9760	26000	8680	440	6720

Element Statistics
Variable - Mercury [Hg]
Number of Values - 184
Units - ppb
Detection Limit - 10
Analytical Method - AAS-F

Mercury by AAS-F

Summary Statistics

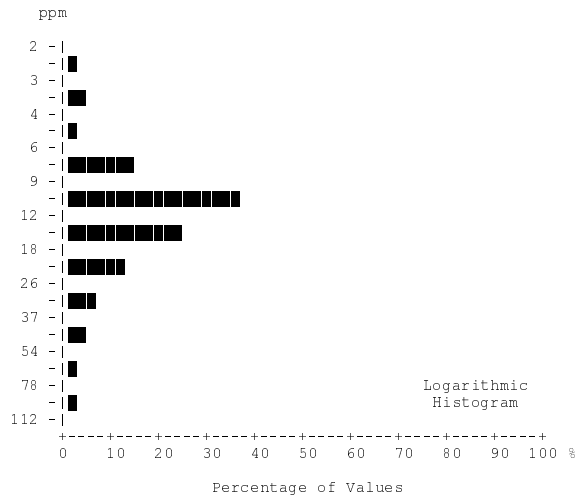


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	120	51	29	15	8	8
Missing	0	0	0	0	0	0
Mean	2.1	2.7	2.0	1.6	1.7	1.8
Median	2.0	3.0	2.0	1.0	2.0	2.0
Mode	2.0	2.0	1.0	1.0	2.0	2.0
Range	9	9	5	2	3	2
St Dev	1.26	1.53	1.13	0.63	0.83	0.72
Coef Var	0.588	0.559	0.573	0.400	0.481	0.391
Log Mean	0.268	0.376	0.235	0.162	0.194	0.230
Geo Mean	1.9	2.4	1.7	1.5	1.6	1.7
Log StDv	0.229	0.233	0.228	0.171	0.191	0.182
Log CVar	0.854	0.619	0.972	1.053	0.988	0.791
Percntls						
Minimum	1	1	1	1	1	1
10th	1	1	1	1	1	1
20th	1	2	1	1	1	1
30th	1	2	1	1	1	1
40th	2	2	1	1	1	2
50th	2	3	2	1	2	2
60th	2	3	2	2	2	2
70th	2	3	2	2	2	2
80th	3	4	3	2	2	2
85th	3	4	3	2	2	2
90th	4	4	4	2	2	3
95th	4	5	4	3	2	3
98th	5	6	4	3	4	3
99th	6	6	6	3	4	3
Maximum	10	10	6	3	4	3

Element Statistics
Variable - Molybdenum [Mo]
Number of Values - 184
Units - ppm
Detection Limit - 1
Analytical Method - AAS

Molybdenum by AAS

Summary Statistics



	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	182	63	49	30	14	12
Missing	0	0	0	0	0	0
Mean	15.0	17.3	13.0	14.0	14.6	10.5
Median	12.0	12.0	10.0	14.0	13.0	10.0
Mode	10.0	10.0	9.0	14.0	10.0	8.0
Range	84	80	64	16	18	8
St Dev	12.13	15.03	11.49	4.54	5.21	2.32
Coef Var	0.807	0.868	0.887	0.324	0.356	0.221
Log Mean	1.090	1.144	1.007	1.124	1.144	1.011
Geo Mean	12.3	13.9	10.2	13.3	13.9	10.3
Log StDv	0.264	0.259	0.297	0.145	0.137	0.097
Log CVar	0.243	0.227	0.295	0.129	0.120	0.096
Percntls						
Minimum	2	6	2	7	10	7
10th	7	7	3	8	10	7
20th	8	9	7	10	10	8
30th	10	10	8	11	10	9
40th	11	11	9	12	12	10
50th	12	12	10	14	13	10
60th	13	13	11	14	14	11
70th	15	15	13	15	15	11
80th	18	19	15	17	16	12
85th	21	31	18	20	20	12
90th	25	34	18	21	21	13
95th	39	42	29	22	21	13
98th	56	77	56	22	28	15
99th	67	77	66	23	28	15
Maximum	86	86	66	23	28	15

Element Statistics
Variable - Nickel [Ni]
Number of Values - 184
Units - ppm
Detection Limit - 2
Analytical Method - AAS

Nickel by AAS

Summary Statistics

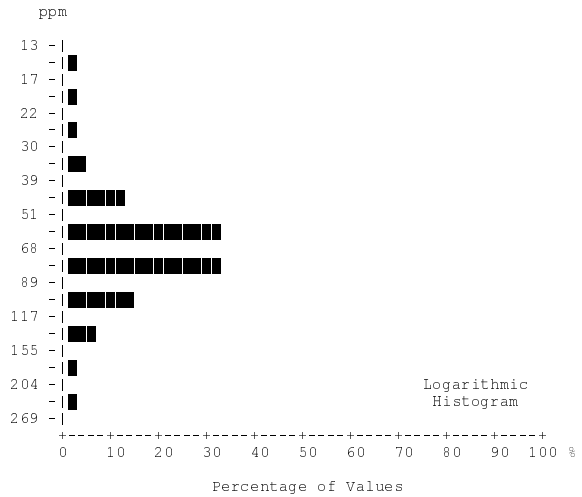
	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	6	2	3	0	1	0
Missing	0	0	0	0	0	0
Mean	0.22	0.20	0.21	0.20	0.47	0.20
Median	0.20	0.20	0.20	0.20	0.20	0.20
Mode	0.20	0.20	0.20	0.20	0.20	0.20
Range	3.8	0.2	0.1	0.0	3.8	0.0
St Dev	0.28	0.03	0.02	0.00	1.02	0.00
Coef Var	1.253	0.137	0.116	0.000	2.154	0.000
Log Mean	-0.686	-0.691	-0.688	-0.699	-0.606	-0.699
Geo Mean	0.21	0.20	0.20	0.20	0.25	0.20
Log StDv	0.101	0.044	0.042	0.000	0.348	0.000
Log CVar	-0.148	-0.063	-0.061	0.000	-0.574	0.000
Percntls						
Minimum	0.2	0.2	0.2	0.2	0.2	0.2
10th	0.2	0.2	0.2	0.2	0.2	0.2
20th	0.2	0.2	0.2	0.2	0.2	0.2
30th	0.2	0.2	0.2	0.2	0.2	0.2
40th	0.2	0.2	0.2	0.2	0.2	0.2
50th	0.2	0.2	0.2	0.2	0.2	0.2
60th	0.2	0.2	0.2	0.2	0.2	0.2
70th	0.2	0.2	0.2	0.2	0.2	0.2
80th	0.2	0.2	0.2	0.2	0.2	0.2
85th	0.2	0.2	0.2	0.2	0.2	0.2
90th	0.2	0.2	0.2	0.2	0.2	0.2
95th	0.2	0.2	0.3	0.2	0.2	0.2
98th	0.3	0.3	0.3	0.2	4.0	0.2
99th	0.3	0.3	0.3	0.2	4.0	0.2
Maximum	4.0	0.4	0.3	0.2	4.0	0.2

Histograms are not calculated for variables with fewer than 15 samples above the detection limit.

Element Statistics
Variable - Silver [Ag]
Number of Values - 184
Units - ppm
Detection Limit - 0.2
Analytical Method - AAS

Silver by AAS

Summary Statistics

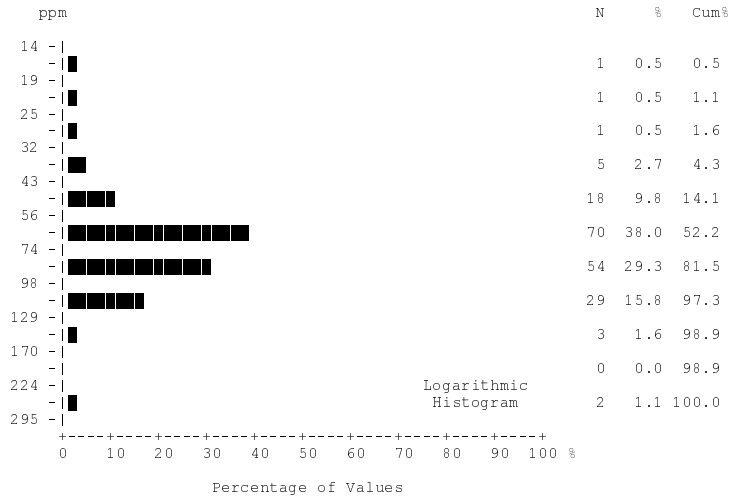


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	73.3	81.7	68.0	61.3	70.8	76.2
Median	69.0	71.0	67.0	58.0	71.0	75.0
Mode	63.0	64.0	74.0	42.0	53.0	75.0
Range	226	127	100	76	47	39
St Dev	29.03	30.90	25.43	16.00	12.90	11.17
Coef Var	0.396	0.378	0.374	0.261	0.182	0.147
Log Mean	1.833	1.884	1.794	1.776	1.843	1.878
Geo Mean	68.1	76.5	62.2	59.6	69.6	75.4
Log StDv	0.170	0.156	0.203	0.980	0.085	0.063
Log CVar	0.093	0.083	0.113	0.055	0.046	0.034
Percntls						
Minimum	16	32	16	42	46	59
10th	45	47	33	47	46	59
20th	53	59	46	50	53	63
30th	60	64	60	52	67	69
40th	64	65	63	57	69	75
50th	69	71	67	58	71	75
60th	73	80	72	60	72	78
70th	79	90	74	63	79	79
80th	90	102	86	65	80	81
85th	97	108	97	71	80	81
90th	108	137	108	78	82	91
95th	133	147	110	101	82	91
98th	147	155	112	101	93	98
99th	155	155	116	118	93	98
Maximum	242	159	116	118	93	98

Element Statistics
Variable - Vanadium [V]
Number of Values - 184
Units - ppm
Detection Limit - 5
Analytical Method - AAS

Vanadium by AAS

Summary Statistics

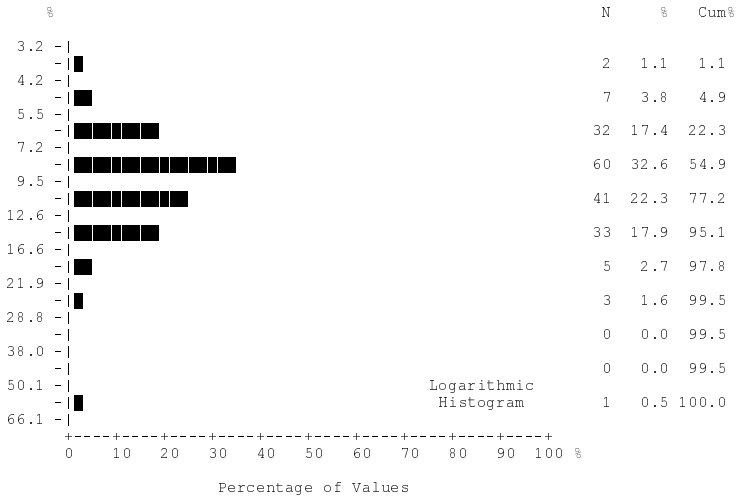


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	78.5	87.5	77.5	72.6	78.7	71.5
Median	73.0	81.0	71.0	72.0	75.0	73.0
Mode	72.0	71.0	69.0	72.0	65.0	33.0
Range	248	227	217	54	33	68
St Dev	28.65	31.70	32.95	11.41	12.05	20.69
Coef Var	0.365	0.362	0.425	0.157	0.153	0.289
Log Mean	1.871	1.920	1.864	1.856	1.891	1.834
Geo Mean	74.3	83.2	73.0	71.8	77.9	68.3
Log StDv	0.146	0.134	0.142	0.065	0.065	0.144
Log CVar	0.078	0.070	0.076	0.035	0.034	0.079
Percntls						
Minimum	15	36	37	54	65	33
10th	53	55	48	61	65	33
20th	61	68	57	63	67	46
30th	67	71	62	66	68	66
40th	71	74	69	70	72	72
50th	73	81	71	72	75	73
60th	77	89	76	73	76	75
70th	83	99	79	74	87	80
80th	94	104	91	77	87	83
85th	99	116	93	81	95	83
90th	105	120	98	82	98	100
95th	124	126	136	96	98	100
98th	133	133	142	96	98	101
99th	142	133	254	108	98	101
Maximum	263	263	254	108	98	101

Element Statistics
Variable - Zinc [Zn]
Number of Values - 184
Units - ppm
Detection Limit - 2
Analytical Method - AAS

Zinc by AAS

Summary Statistics

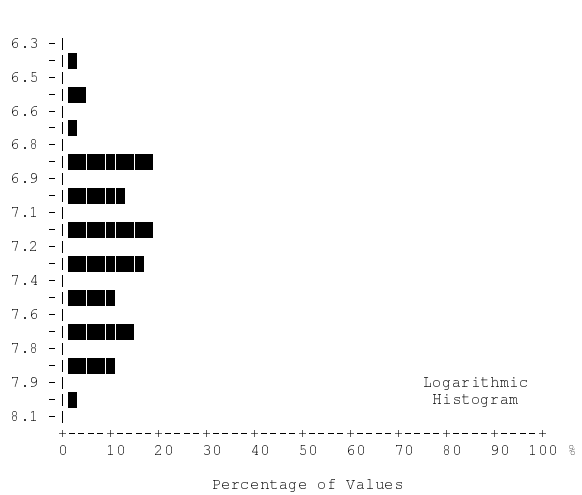


	All	JB	NTP	KS	uKH	OTg
N	184	63	50	30	14	12
N > DL	184	63	50	30	14	12
Missing	0	0	0	0	0	0
Mean	10.28	9.71	12.52	9.23	8.77	9.01
Median	9.20	9.20	10.40	8.70	7.40	7.60
Mode	8.40	7.90	7.60	7.20	4.20	5.90
Range	53.5	24.6	51.6	11.6	14.4	7.8
St Dev	5.20	3.86	7.82	2.98	3.61	2.78
Coef Var	0.506	0.398	0.625	0.323	0.411	0.308
Log Mean	0.977	0.960	1.051	0.943	0.913	0.937
Geo Mean	9.49	9.12	11.24	8.77	8.19	8.64
Log StDv	0.164	0.151	0.185	0.143	0.163	0.129
Log CVar	0.168	0.157	0.177	0.152	0.178	0.138
Percntls						
Minimum	3.9	3.9	5.8	4.6	4.2	5.9
10th	5.9	6.0	7.2	5.3	4.2	5.9
20th	7.1	7.1	7.6	6.3	5.9	6.4
30th	7.8	7.9	8.7	7.2	6.7	7.1
40th	8.6	8.5	9.7	8.4	7.1	7.4
50th	9.2	9.2	10.4	8.7	7.4	7.6
60th	9.9	9.5	11.8	9.3	8.3	7.9
70th	11.0	10.0	13.7	10.1	9.9	9.4
80th	12.9	11.7	15.0	12.4	10.8	11.8
85th	13.7	12.8	16.1	12.8	10.9	11.8
90th	14.9	13.3	16.4	13.3	11.9	13.3
95th	16.4	15.7	24.5	14.2	11.9	13.3
98th	19.7	19.7	25.6	14.2	18.6	13.7
99th	25.6	19.7	57.4	16.2	18.6	13.7
Maximum	57.4	28.5	57.4	16.2	18.6	13.7

Element Statistics
Variable - Loss on Ignition [LOI]
Number of Values - 184
Units - %
Detection Limit - 0.1
Analytical Method - GRAV

Loss on Ignition by GRAV

Summary Statistics

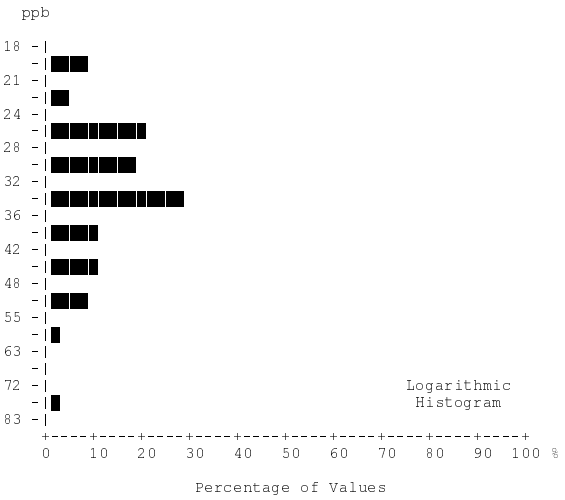


	All	JB	NTP	KS	uKH	OTg
N	182	62	50	30	13	12
N > DL	182	62	50	30	13	12
Missing	2	1	0	0	1	0
Mean	7.27	7.39	7.13	7.27	7.62	7.07
Median	7.20	7.40	7.10	7.20	7.60	7.00
Mode	6.90	7.40	6.80	7.20	7.60	6.90
Range	1.9	1.7	1.3	1.2	1.2	0.9
St Dev	0.37	0.36	0.34	0.31	0.34	0.26
Coef Var	0.051	0.049	0.047	0.042	0.044	0.037
Log Mean	0.861	0.868	0.853	0.861	0.881	0.849
Geo Mean	7.26	7.38	7.12	7.27	7.61	7.06
Log StDv	0.022	0.021	0.020	0.018	0.019	0.016
Log CVar	0.026	0.025	0.024	0.021	0.022	0.019
Percntls						
Minimum	6.4	6.6	6.6	6.8	7.0	6.7
10th	6.8	6.9	6.7	6.9	7.0	6.7
20th	6.9	7.0	6.8	7.0	7.3	6.8
30th	7.0	7.2	6.9	7.0	7.5	6.9
40th	7.1	7.4	7.0	7.2	7.6	6.9
50th	7.2	7.4	7.1	7.2	7.6	7.0
60th	7.4	7.5	7.2	7.3	7.7	7.0
70th	7.5	7.6	7.3	7.4	7.7	7.1
80th	7.6	7.7	7.4	7.5	7.8	7.3
85th	7.7	7.8	7.6	7.6	7.9	7.3
90th	7.8	7.8	7.6	7.7	8.0	7.4
95th	7.9	7.9	7.7	7.8	8.0	7.4
98th	8.0	8.0	7.8	7.8	8.2	7.6
99th	8.1	8.0	7.9	8.0	8.2	7.6
Maximum	8.3	8.3	7.9	8.0	8.2	7.6

Element Statistics
Variable - pH [pH]
Number of Values - 182
Units -
Detection Limit - 0.1
Analytical Method - GCE

pH by GCE

Summary Statistics

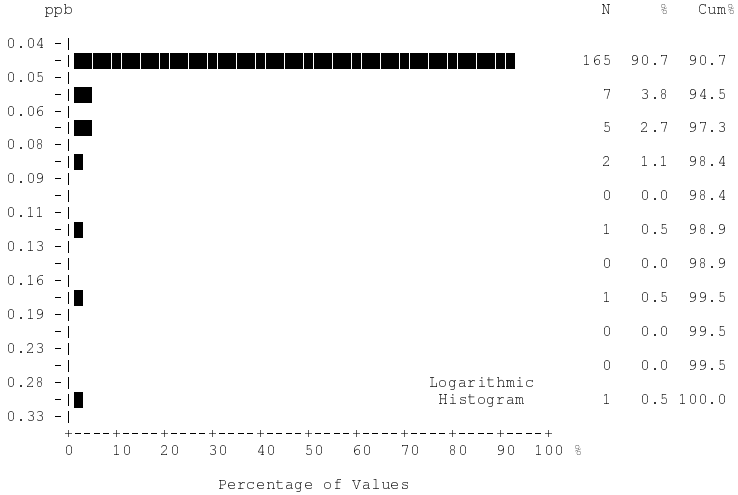


	All	JB	NTP	KS	uKH	OTg
N	182	62	50	30	13	12
N > DL	169	61	49	25	12	10
Missing	2	1	0	0	1	0
Mean	32.8	34.5	31.1	33.1	38.2	26.7
Median	32.0	34.0	30.0	34.0	42.0	26.0
Mode	26.0	34.0	26.0	20.0	30.0	26.0
Range	62	62	32	34	36	16
St Dev	9.15	10.20	5.89	9.69	11.12	4.85
Coef Var	0.279	0.295	0.189	0.293	0.291	0.182
Log Mean	1.501	1.522	1.486	1.502	1.563	1.419
Geo Mean	31.7	33.3	30.6	31.7	36.6	26.3
Log StDv	0.114	0.117	0.079	0.132	0.135	0.079
Log CVar	0.076	0.077	0.053	0.088	0.086	0.056
Percntls						
Minimum	20	20	20	20	20	20
10th	22	24	24	20	20	20
20th	24	26	26	22	28	20
30th	26	28	26	24	30	26
40th	30	32	30	30	30	26
50th	32	34	30	34	42	26
60th	34	34	32	36	42	26
70th	36	38	34	38	44	26
80th	40	42	34	40	46	32
85th	42	44	36	42	48	32
90th	46	46	36	44	52	32
95th	50	50	40	50	52	32
98th	52	52	46	50	56	36
99th	54	52	52	54	56	36
Maximum	82	82	52	54	56	36

Element Statistics
Variable - Fluoride (waters) [FW]
Number of Values - 182
Units - ppb
Detection Limit - 20
Analytical Method - ION

Fluoride by ION

Summary Statistics

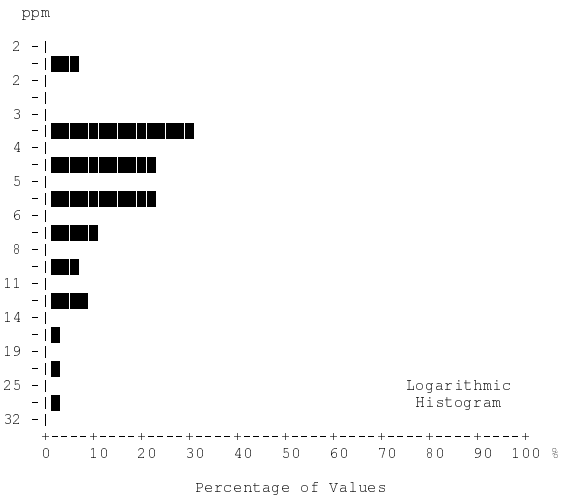


	All	JB	NTP	KS	uKH	OTg
N	182	62	50	30	13	12
N > DL	17	9	4	2	0	1
Missing	2	1	0	0	1	0
Mean	0.05	0.06	0.05	0.05	0.05	0.05
Median	0.05	0.05	0.05	0.05	0.05	0.05
Mode	0.05	0.05	0.05	0.05	0.05	0.05
Range	0.24	0.24	0.02	0.02	0.00	0.02
St Dev	0.02	0.03	0.00	0.00	0.00	0.01
Coef Var	0.390	0.596	0.085	0.079	0.000	0.112
Log Mean	-1.283	-1.261	-1.292	-1.294	-1.301	-1.289
Geo Mean	0.05	0.05	0.05	0.05	0.05	0.05
Log StDv	0.081	0.130	0.032	0.030	0.000	0.042
Log CVar	-0.063	-0.103	-0.025	-0.023	0.000	-0.033
Percntls						
Minimum	0.05	0.05	0.05	0.05	0.05	0.05
10th	0.05	0.05	0.05	0.05	0.05	0.05
20th	0.05	0.05	0.05	0.05	0.05	0.05
30th	0.05	0.05	0.05	0.05	0.05	0.05
40th	0.05	0.05	0.05	0.05	0.05	0.05
50th	0.05	0.05	0.05	0.05	0.05	0.05
60th	0.05	0.05	0.05	0.05	0.05	0.05
70th	0.05	0.05	0.05	0.05	0.05	0.05
80th	0.05	0.05	0.05	0.05	0.05	0.05
85th	0.05	0.05	0.05	0.05	0.05	0.05
90th	0.05	0.06	0.05	0.05	0.05	0.05
95th	0.07	0.08	0.06	0.06	0.05	0.05
98th	0.08	0.17	0.07	0.06	0.05	0.07
99th	0.12	0.17	0.07	0.07	0.05	0.07
Maximum	0.29	0.29	0.07	0.07	0.05	0.07

Element Statistics
Variable - Uranium (waters) [UW]
Number of Values - 182
Units - ppb
Detection Limit - 0.05
Analytical Method - LIF

Uranium by LIF

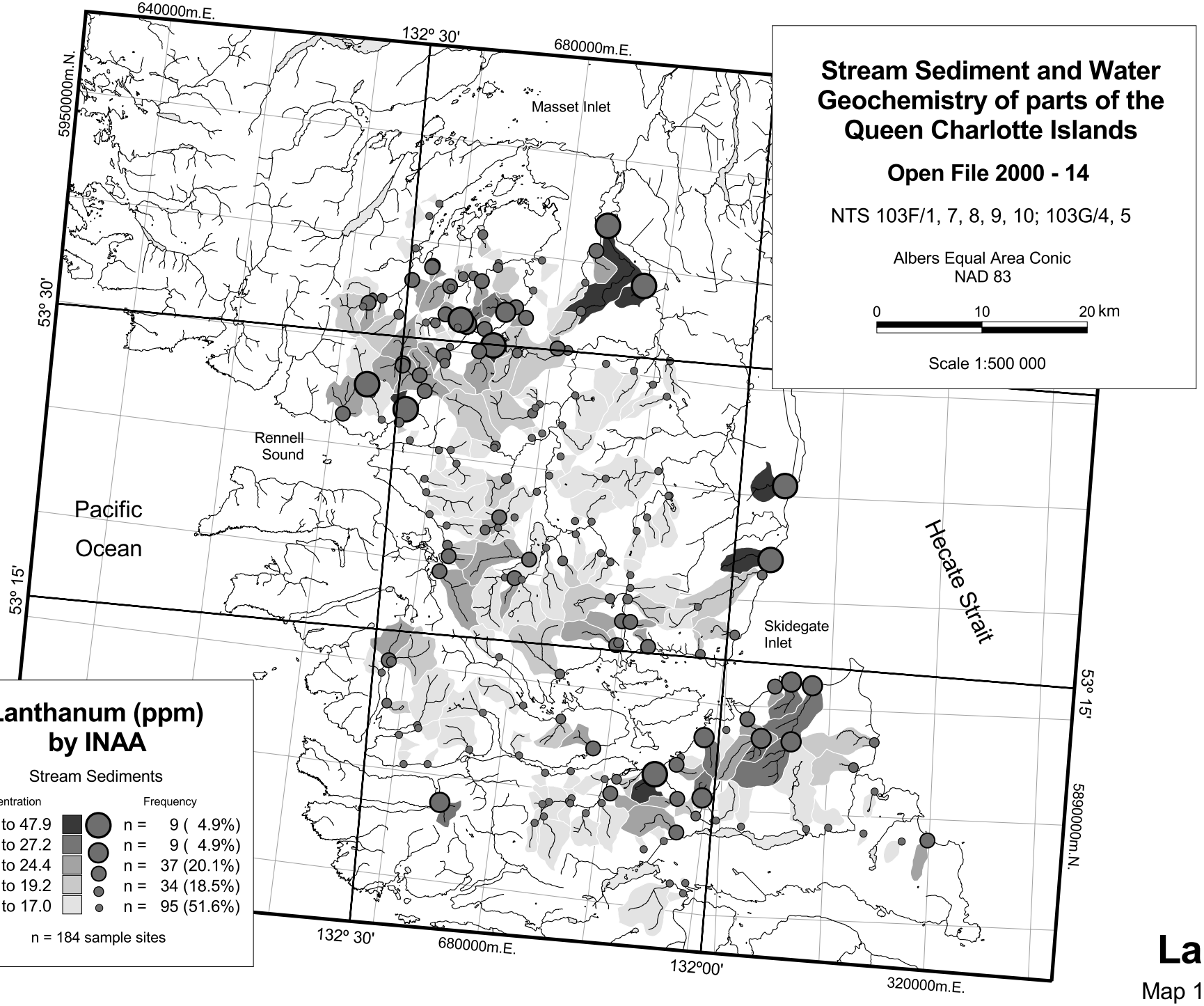
Summary Statistics



	All	JB	NTP	KS	uKH	OTg
N	182	62	50	30	13	12
N > DL	182	62	50	30	13	12
Missing	2	1	0	0	1	0
Mean	5.5	6.9	4.4	4.3	8.2	3.3
Median	4.0	5.0	3.0	4.0	6.0	3.0
Mode	3.0	4.0	3.0	4.0	4.0	3.0
Range	27	27	11	5	18	3
St Dev	4.00	5.22	2.51	1.32	5.37	0.97
Coef Var	0.726	0.762	0.576	0.306	0.653	0.297
Log Mean	0.668	0.752	0.588	0.613	0.827	0.495
Geo Mean	4.7	5.6	3.9	4.1	6.7	3.1
Log StDv	0.234	0.253	0.200	0.139	0.295	0.125
Log CVar	0.350	0.337	0.340	0.227	0.357	0.253
Percntls						
Minimum	2	2	2	2	2	2
10th	3	3	2	3	2	2
20th	3	3	3	3	4	2
30th	3	4	3	4	4	3
40th	4	4	3	4	5	3
50th	4	5	3	4	6	3
60th	5	6	4	4	7	3
70th	6	7	4	5	10	3
80th	7	9	6	5	12	4
85th	8	11	6	6	14	4
90th	10	13	7	6	14	5
95th	13	18	10	7	14	5
98th	18	22	12	7	20	5
99th	21	22	13	7	20	5
Maximum	29	29	13	7	20	5

Element Statistics
Variable - Sulphate (waters) [SO4]
Number of Values - 182
Units - ppm
Detection Limit - 1
Analytical Method - TURB

Sulphate by TURB



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Lanthanum (ppm) by INAA

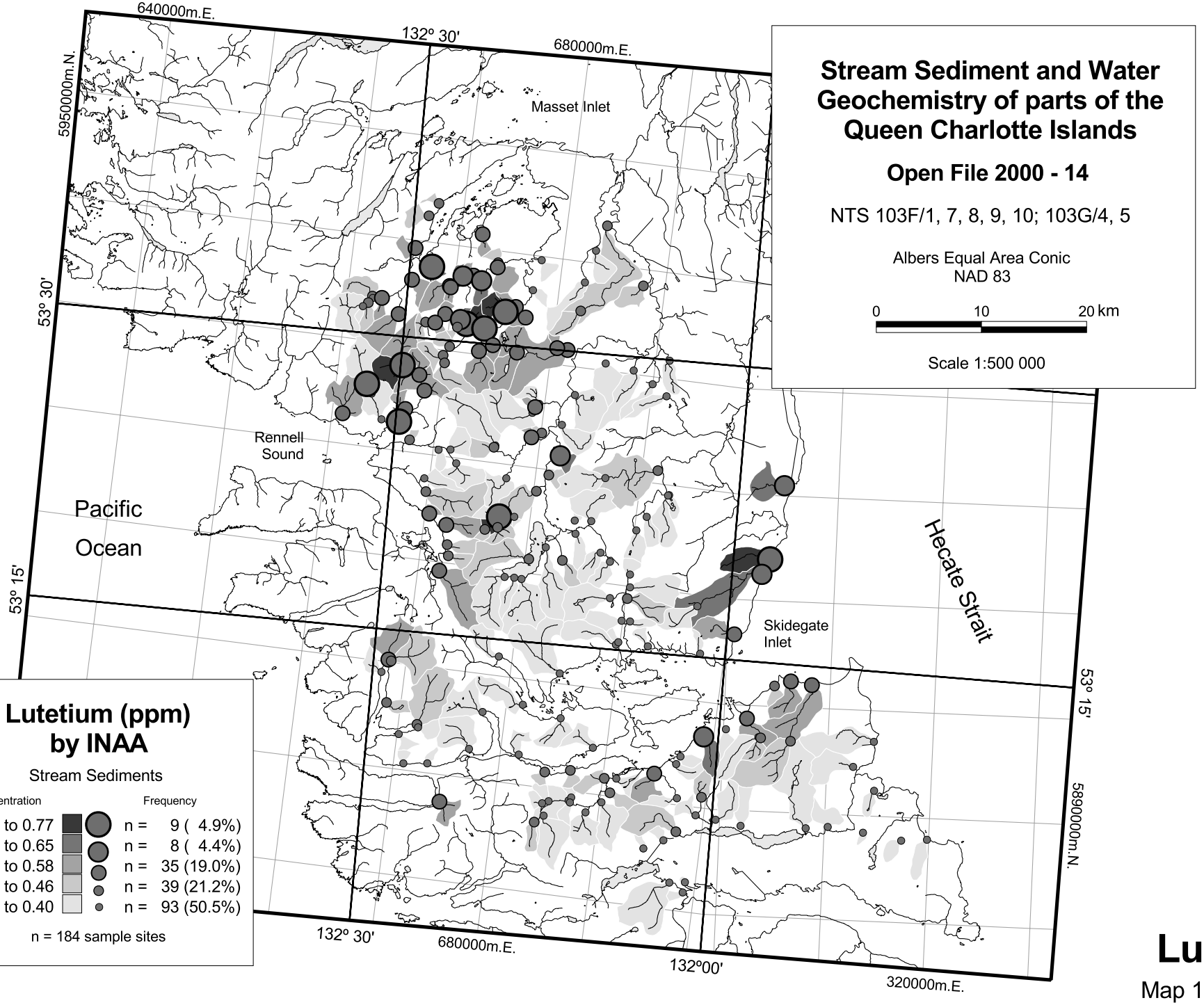
Stream Sediments

Concentration	Frequency
27.3 to 47.9	n = 9 (4.9%)
24.5 to 27.2	n = 9 (4.9%)
19.3 to 24.4	n = 37 (20.1%)
17.1 to 19.2	n = 34 (18.5%)
7.4 to 17.0	n = 95 (51.6%)

n = 184 sample sites

La

Map 16



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Lutetium (ppm) by INAA

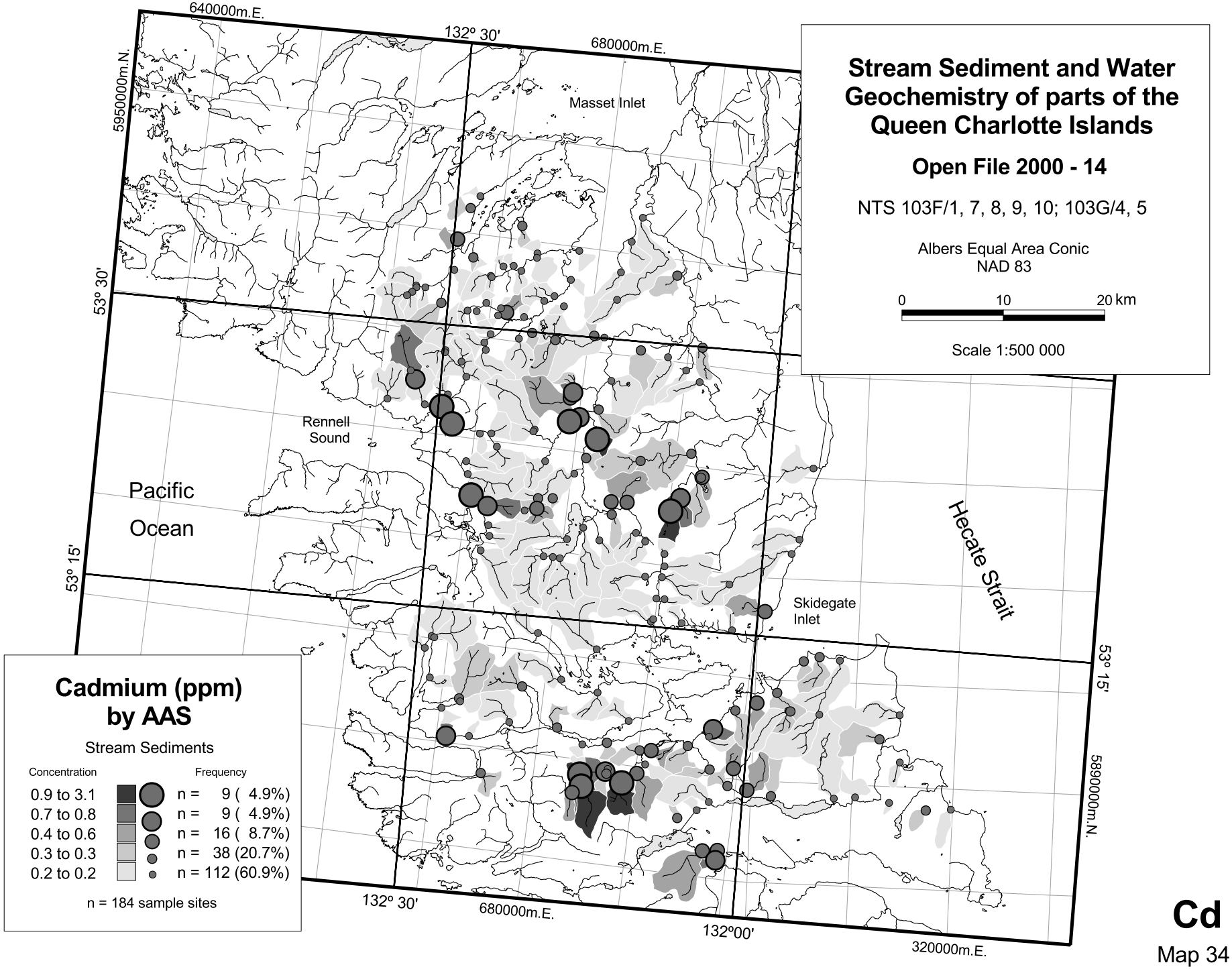
Stream Sediments

Concentration	Frequency
0.66 to 0.77	n = 9 (4.9%)
0.59 to 0.65	n = 8 (4.4%)
0.47 to 0.58	n = 35 (19.0%)
0.41 to 0.46	n = 39 (21.2%)
0.22 to 0.40	n = 93 (50.5%)

n = 184 sample sites

Lu

Map 17



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Cadmium (ppm) by AAS

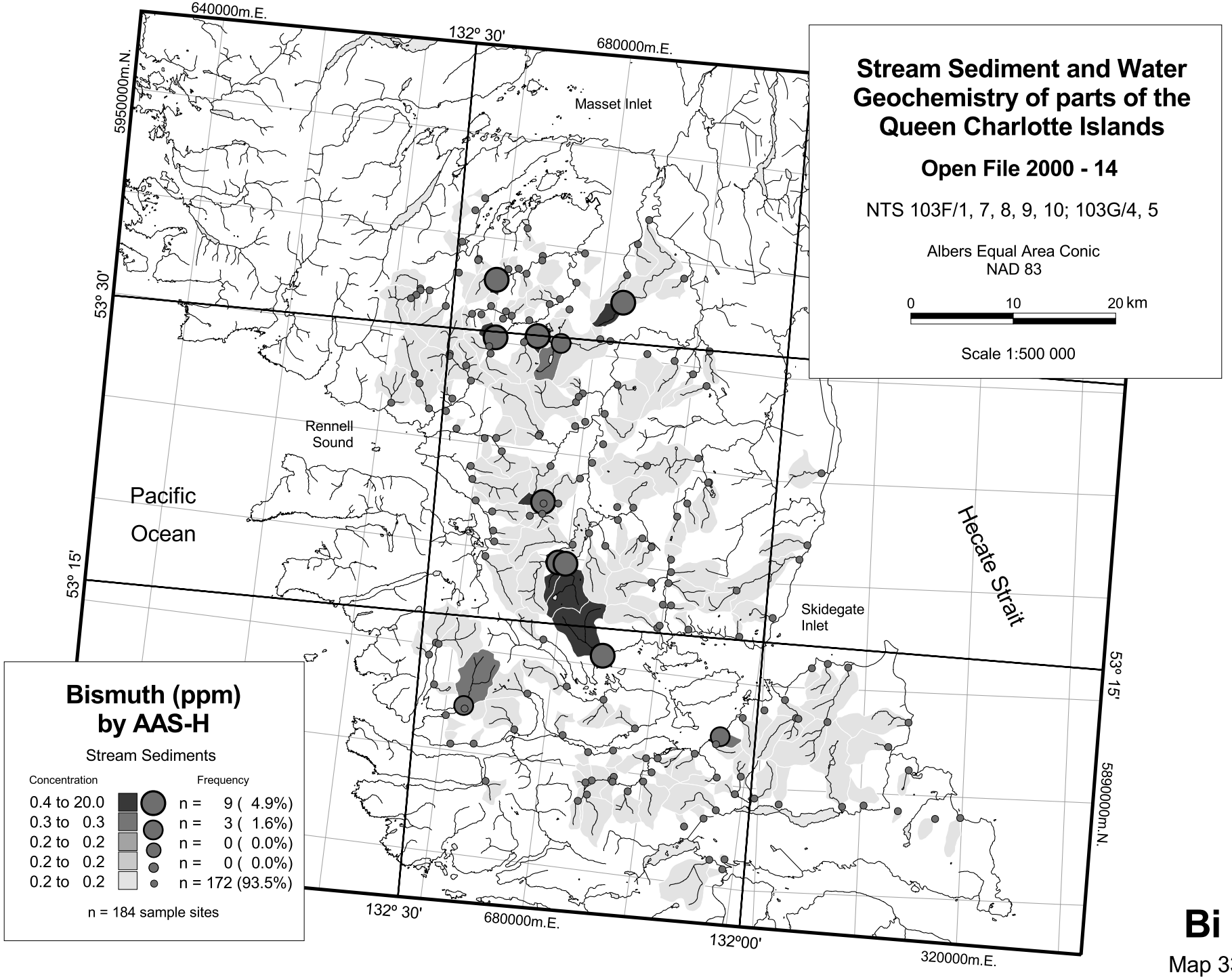
Stream Sediments

Concentration	Frequency
0.9 to 3.1	n = 9 (4.9%)
0.7 to 0.8	n = 9 (4.9%)
0.4 to 0.6	n = 16 (8.7%)
0.3 to 0.3	n = 38 (20.7%)
0.2 to 0.2	n = 112 (60.9%)

n = 184 sample sites

Cd

Map 34



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Bismuth (ppm) by AAS-H

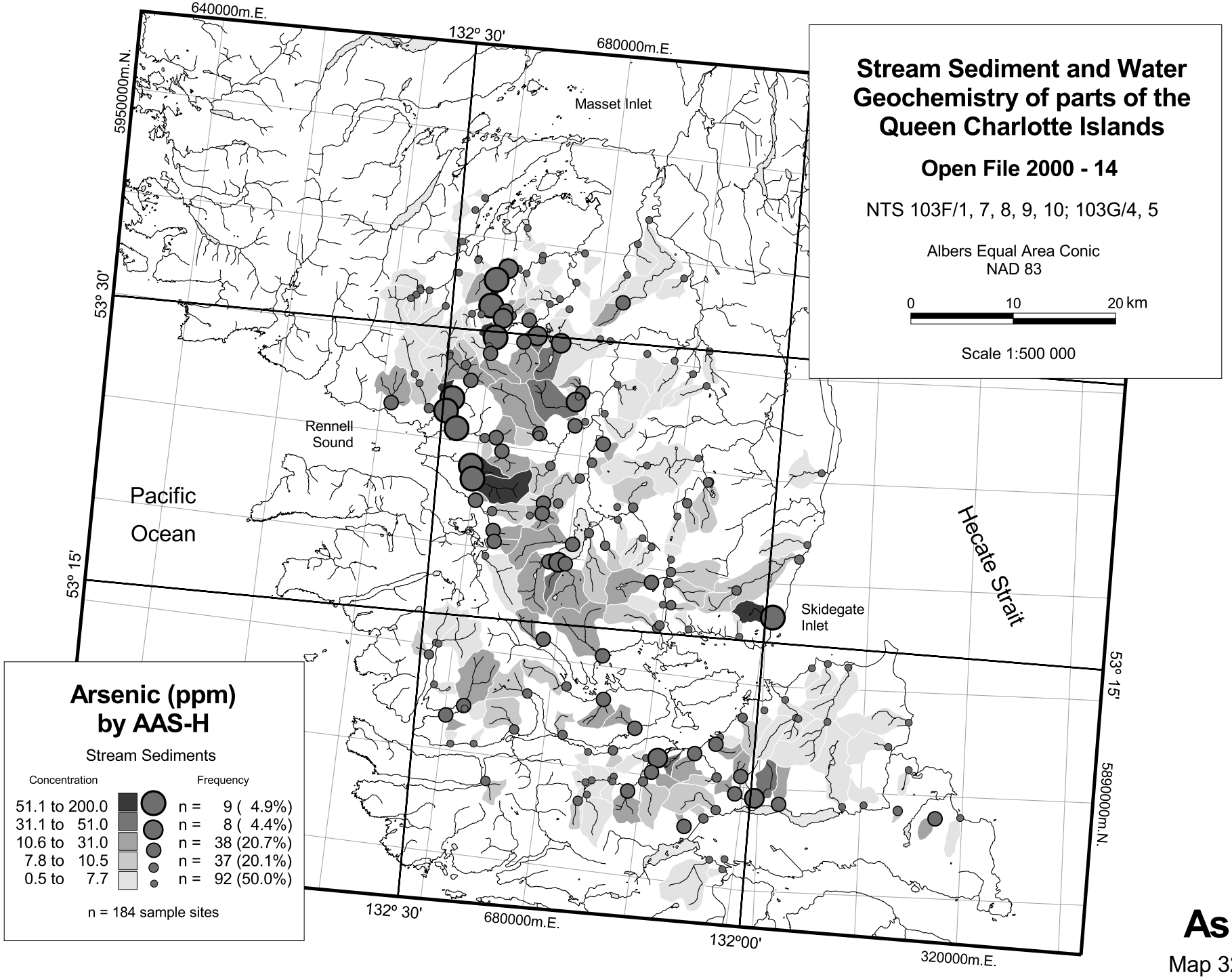
Stream Sediments

Concentration	Frequency
0.4 to 20.0	n = 9 (4.9%)
0.3 to 0.3	n = 3 (1.6%)
0.2 to 0.2	n = 0 (0.0%)
0.2 to 0.2	n = 0 (0.0%)
0.2 to 0.2	n = 172 (93.5%)

n = 184 sample sites

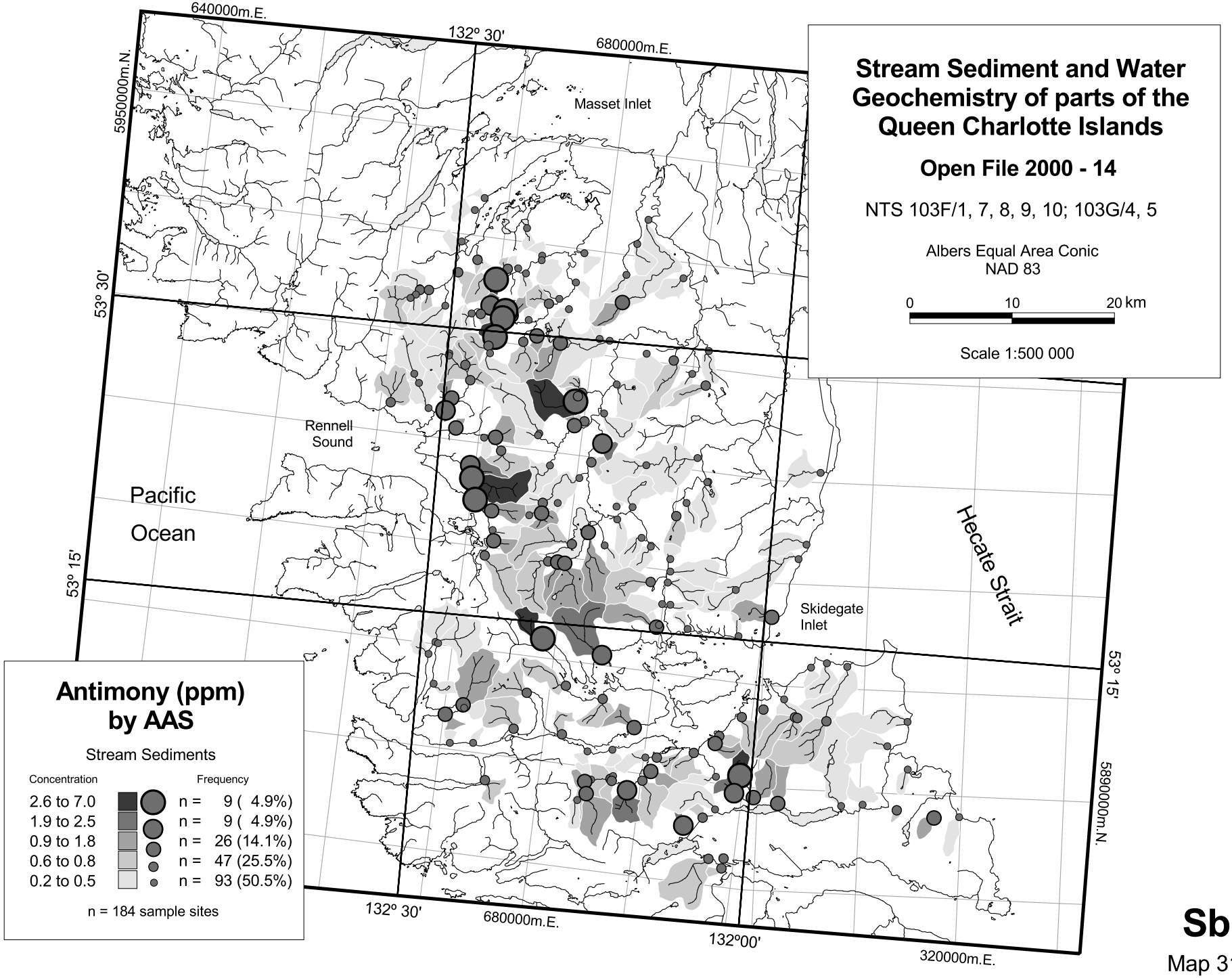
Bi

Map 33


640000m.E.
132º 30'
680000m.E.
5950000m.N.
53º 30'
53º 15'
Masset Inlet
Rennell Sound
Pacific Ocean
Hecate Strait
Skidegate Inlet
132º 30'
680000m.E.
132º00'
320000m.E.
589000m.N.
Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands
Open File 2000 - 14
NTS 103F/1, 7, 8, 9, 10; 103G/4, 5
Albers Equal Area Conic
NAD 83
0 10 20 km
Scale 1:500 000
Arsenic (ppm) by AAS-H
Stream Sediments
Concentration
Frequency
51.1 to 200.0 n = 9 (4.9%)
31.1 to 51.0 n = 8 (4.4%)
10.6 to 31.0 n = 38 (20.7%)
7.8 to 10.5 n = 37 (20.1%)
0.5 to 7.7 n = 92 (50.0%)
n = 184 sample sites

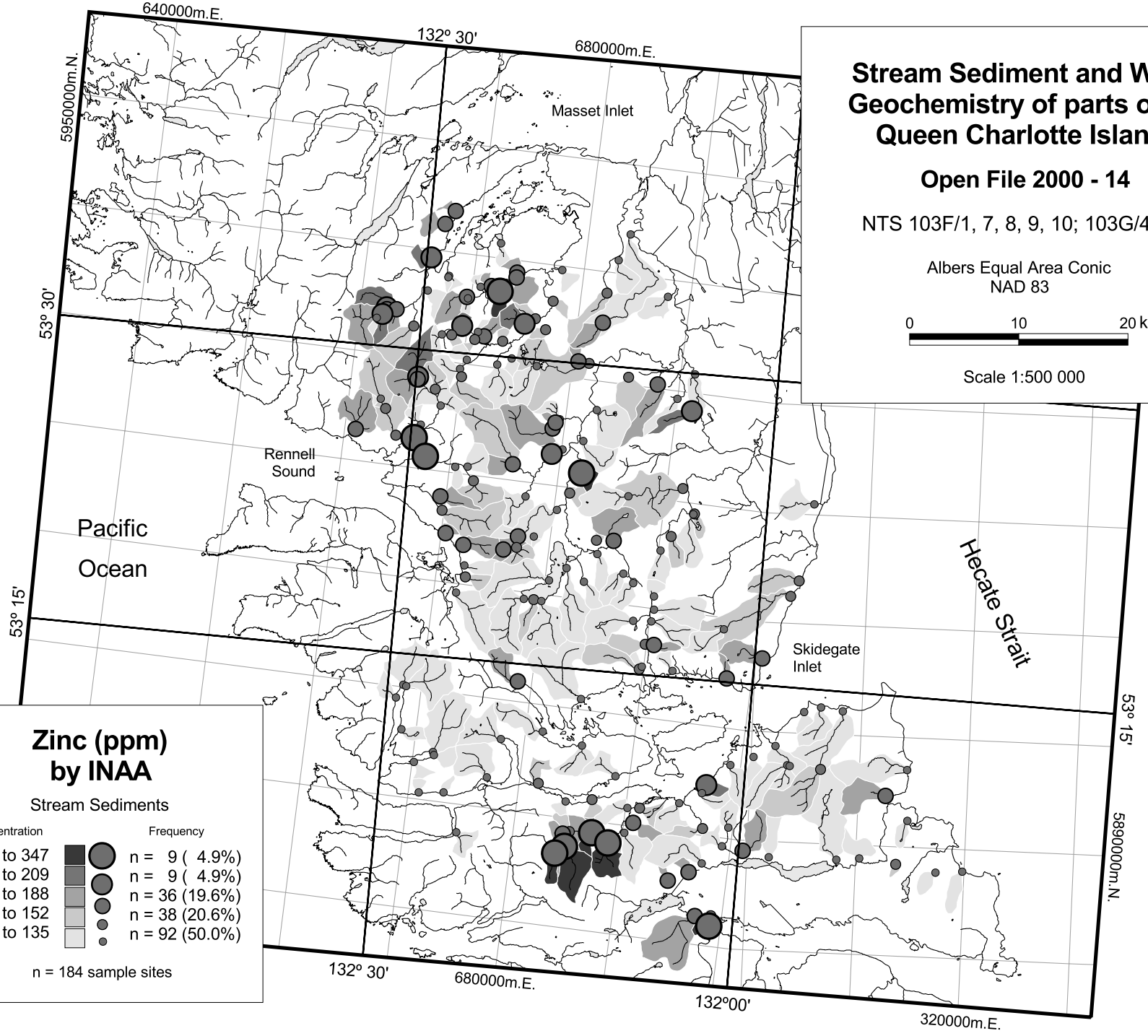
As

Map 32


640000m.E.
132º 30'
680000m.E.
5950000m.N.
53º 30'
Masset Inlet
Rennell
Sound
Pacific
Ocean
Hecate Strait
Skidegate
Inlet
53º 15'
589000m.N.
132º 30'
680000m.E.
132º00'
320000m.E.
Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands
Open File 2000 - 14
NTS 103F/1, 7, 8, 9, 10; 103G/4, 5
Albers Equal Area Conic
NAD 83
0
10
20 km
Scale 1:500 000
Antimony (ppm) by AAS
Stream Sediments
Concentration
Frequency
2.6 to 7.0 n = 9 (4.9%)
1.9 to 2.5 n = 9 (4.9%)
0.9 to 1.8 n = 26 (14.1%)
0.6 to 0.8 n = 47 (25.5%)
0.2 to 0.5 n = 93 (50.5%)
n = 184 sample sites

Sb

Map 31



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Zinc (ppm) by INAA

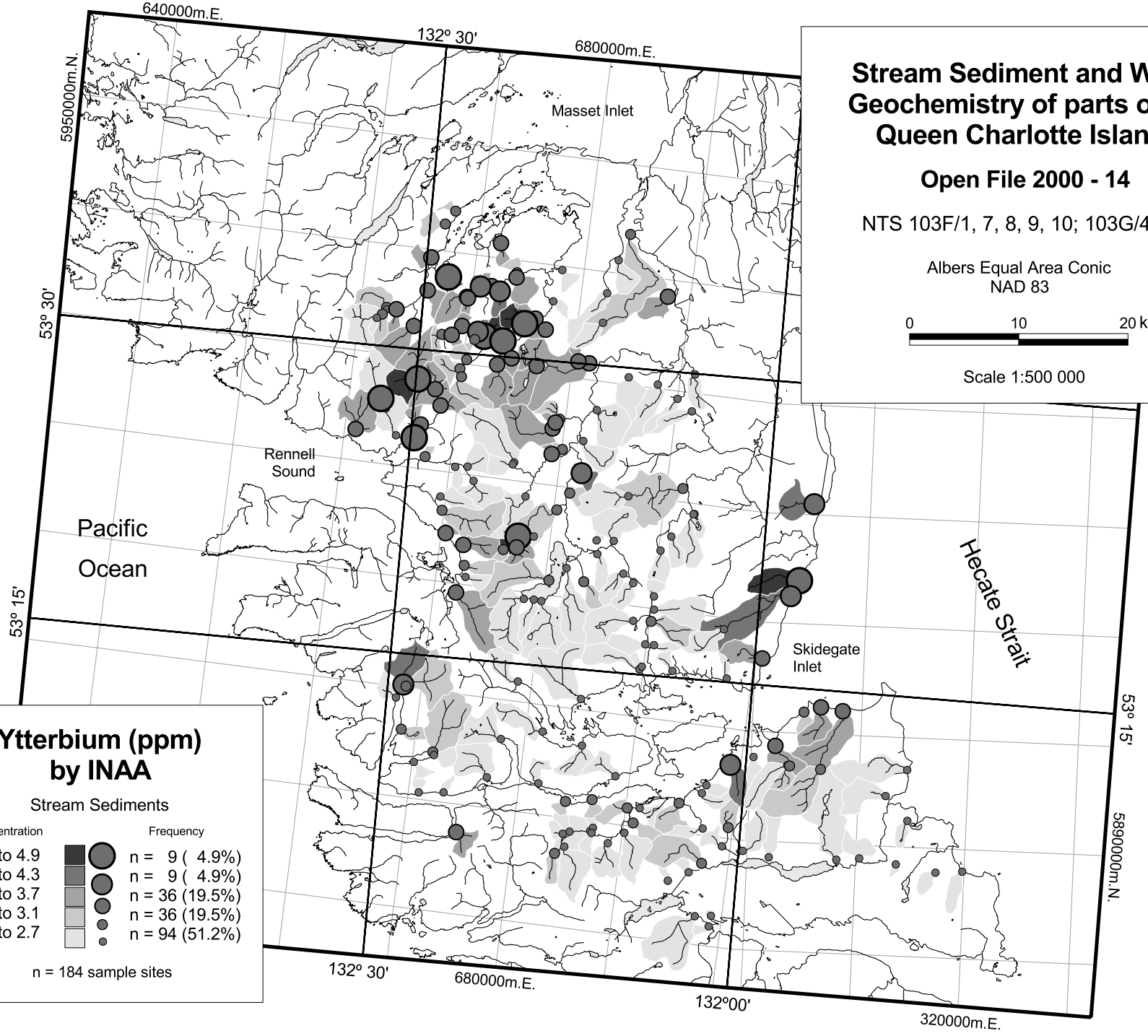
Stream Sediments

Concentration	Frequency
210 to 347	n = 9 (4.9%)
189 to 209	n = 9 (4.9%)
153 to 188	n = 36 (19.6%)
136 to 152	n = 38 (20.6%)
50 to 135	n = 92 (50.0%)

n = 184 sample sites

Zn

Map 30



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Ytterbium (ppm) by INAA

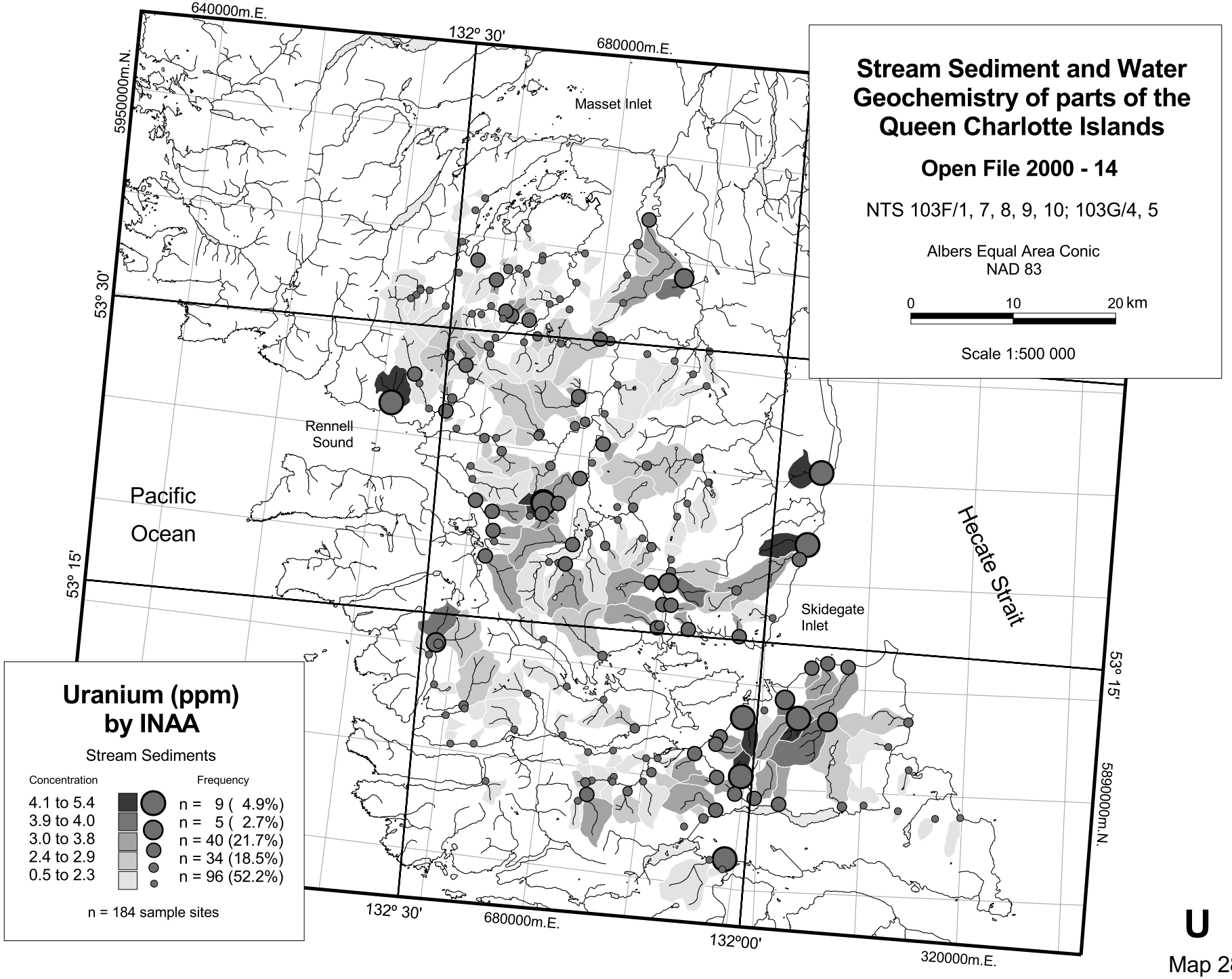
Stream Sediments

Concentration	Frequency
4.4 to 4.9	n = 9 (4.9%)
3.8 to 4.3	n = 9 (4.9%)
3.2 to 3.7	n = 36 (19.5%)
2.8 to 3.1	n = 36 (19.5%)
1.5 to 2.7	n = 94 (51.2%)

n = 184 sample sites

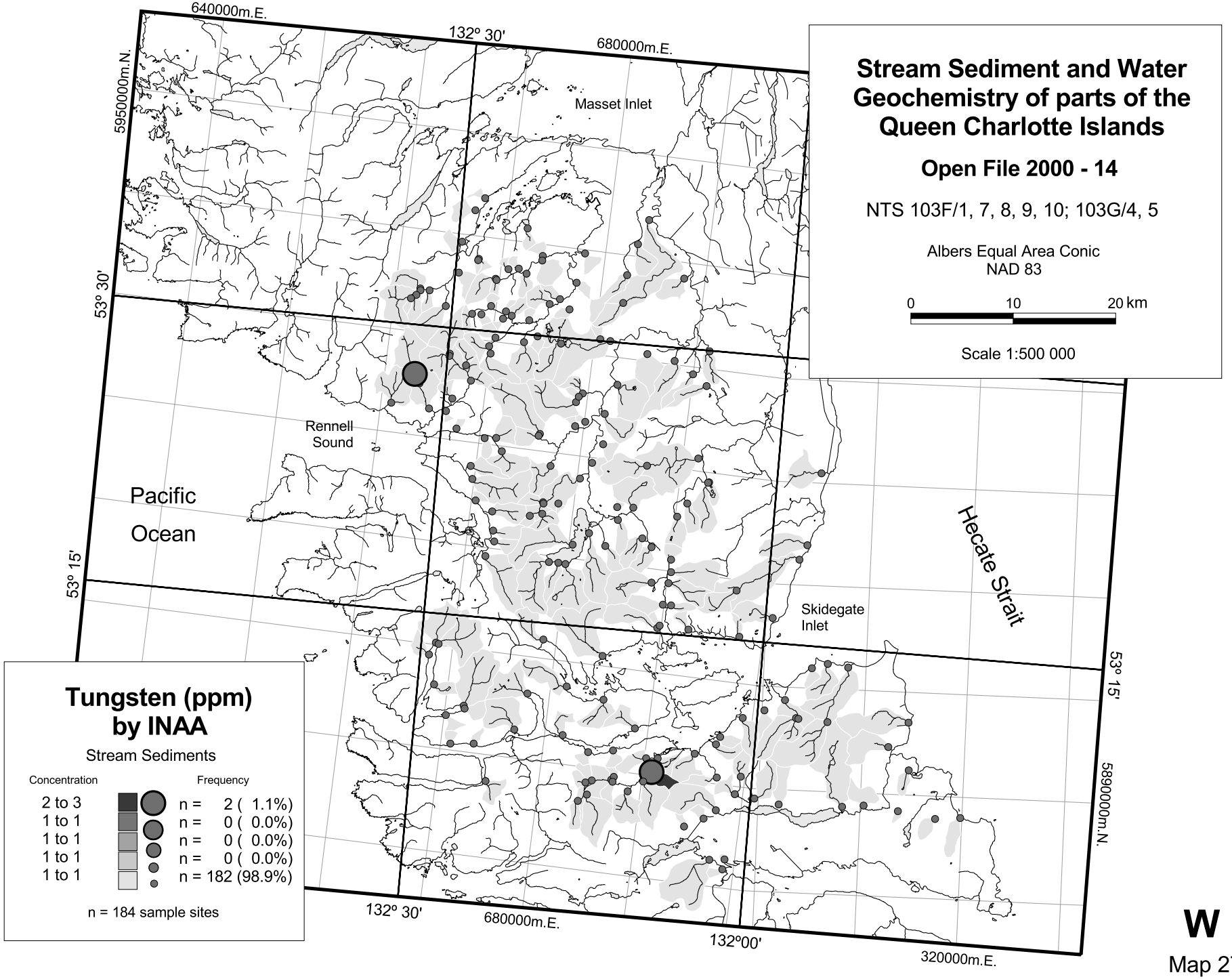
Yb

Map 29


640000m.E.
132º 30'
680000m.E.
5950000m.N.
53º 30'
Masset Inlet
Rennell
Sound
Pacific
Ocean
53º 15'
Hecate Strait
Skidegate
Inlet
589000m.N.
132º 30'
680000m.E.
132º00'
320000m.E.
Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands
Open File 2000 - 14
NTS 103F/1, 7, 8, 9, 10; 103G/4, 5
Albers Equal Area Conic
NAD 83
0
10
20 km
Scale 1:500 000
Uranium (ppm) by INAA
Stream Sediments
Concentration
Frequency
4.1 to 5.4
3.9 to 4.0
3.0 to 3.8
2.4 to 2.9
0.5 to 2.3
n = 9 (4.9%)
n = 5 (2.7%)
n = 40 (21.7%)
n = 34 (18.5%)
n = 96 (52.2%)
n = 184 sample sites

U

Map 28



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Tungsten (ppm) by INAA

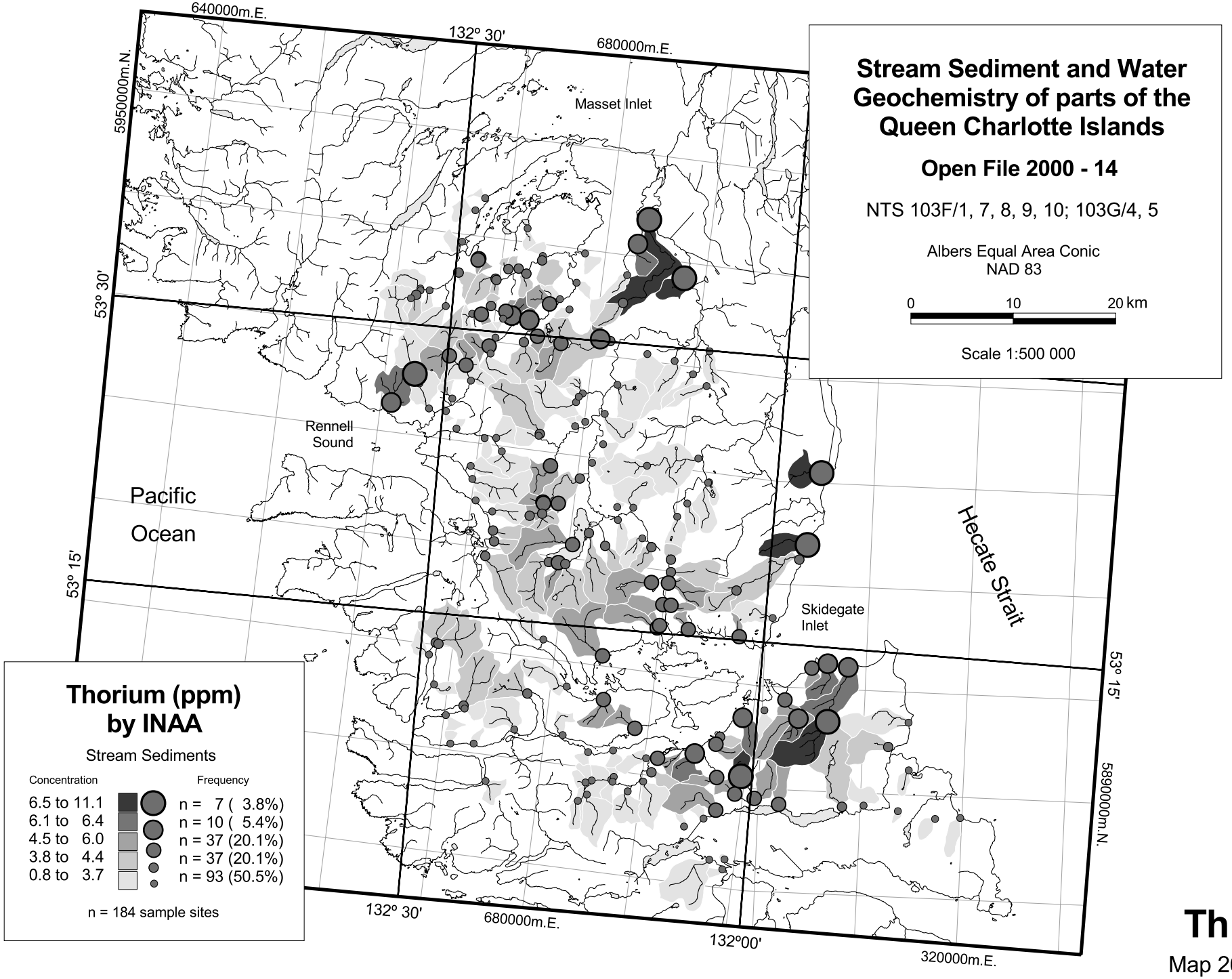
Stream Sediments

Concentration	Frequency
2 to 3	n = 2 (1.1%)
1 to 1	n = 0 (0.0%)
1 to 1	n = 0 (0.0%)
1 to 1	n = 0 (0.0%)
1 to 1	n = 182 (98.9%)

n = 184 sample sites

W

Map 27



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Thorium (ppm) by INAA

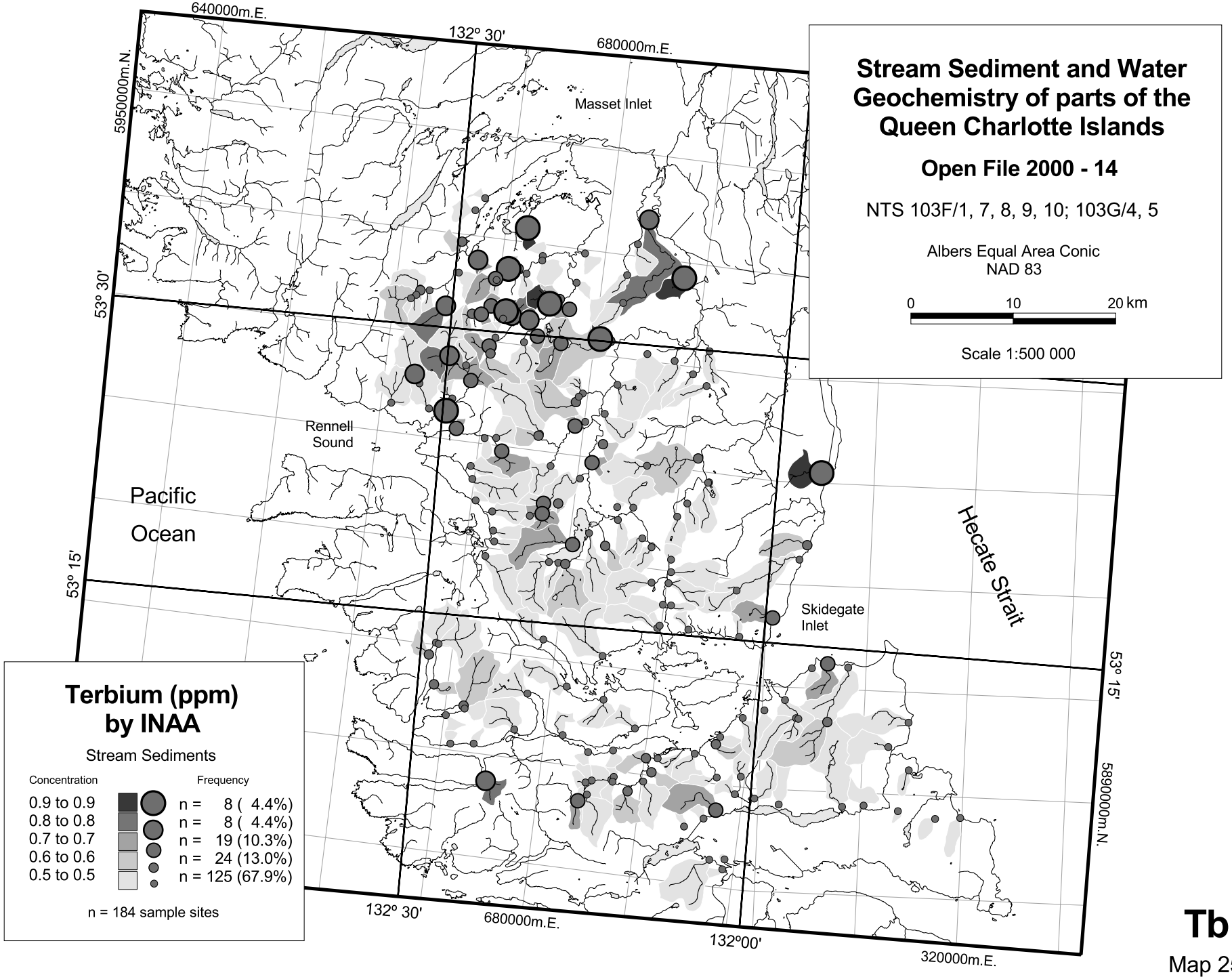
Stream Sediments

Concentration	Frequency
6.5 to 11.1	n = 7 (3.8%)
6.1 to 6.4	n = 10 (5.4%)
4.5 to 6.0	n = 37 (20.1%)
3.8 to 4.4	n = 37 (20.1%)
0.8 to 3.7	n = 93 (50.5%)

n = 184 sample sites

Th

Map 26



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Terbium (ppm) by INAA

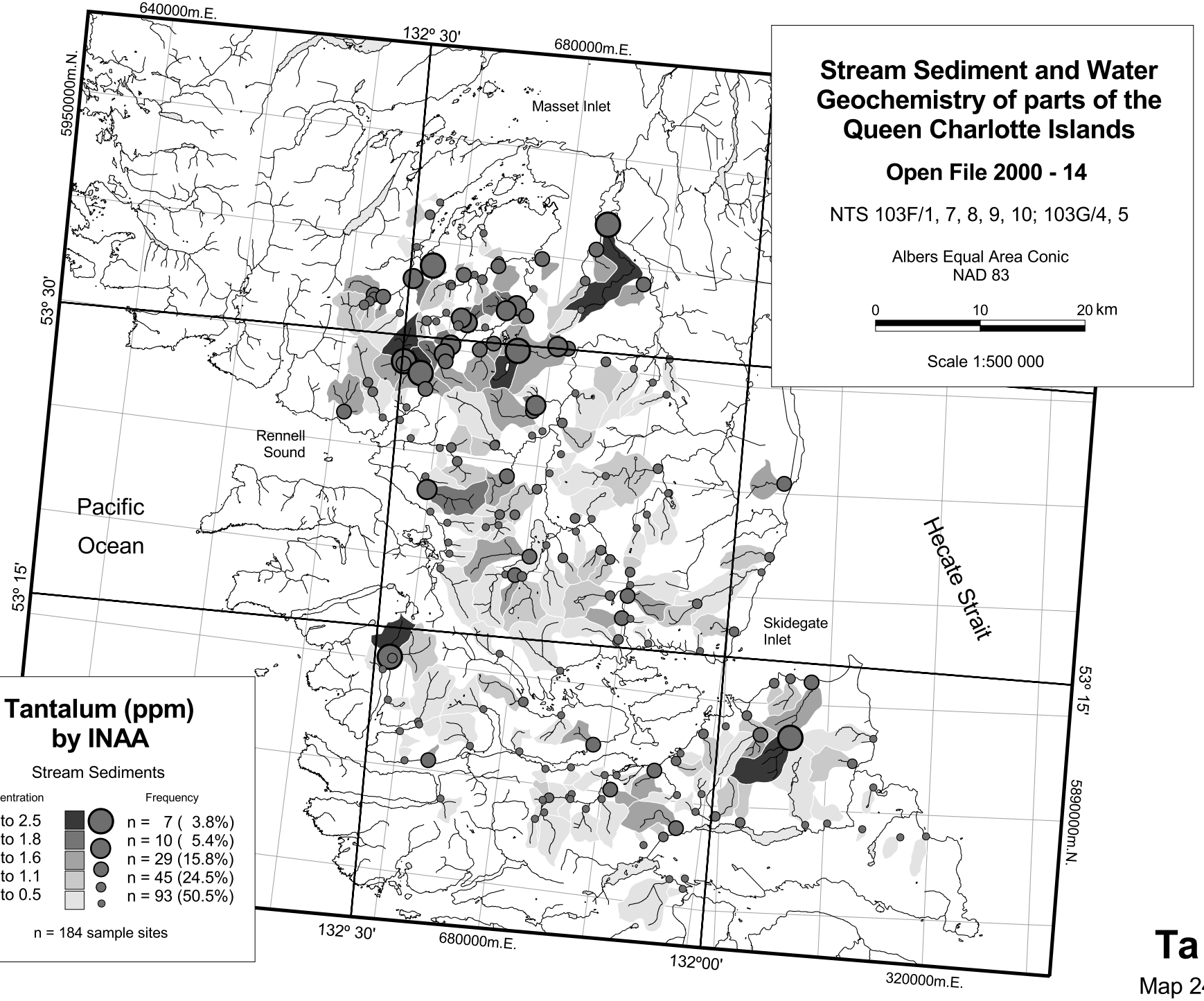
Stream Sediments

Concentration	Frequency
0.9 to 0.9	n = 8 (4.4%)
0.8 to 0.8	n = 8 (4.4%)
0.7 to 0.7	n = 19 (10.3%)
0.6 to 0.6	n = 24 (13.0%)
0.5 to 0.5	n = 125 (67.9%)

n = 184 sample sites

Tb

Map 25



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Tantalum (ppm) by INAA

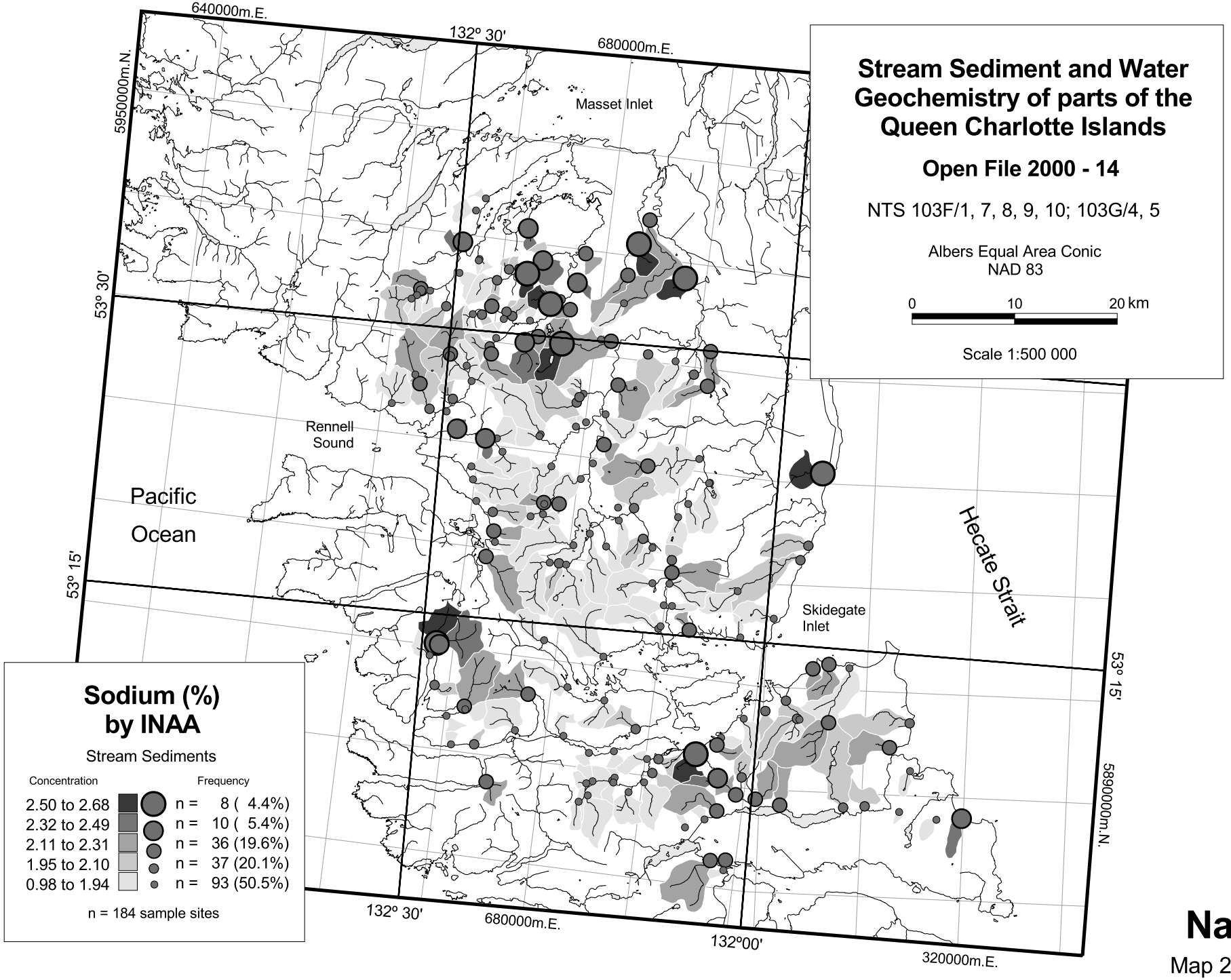
Stream Sediments

Concentration	Frequency
1.9 to 2.5	n = 7 (3.8%)
1.7 to 1.8	n = 10 (5.4%)
1.2 to 1.6	n = 29 (15.8%)
0.6 to 1.1	n = 45 (24.5%)
0.5 to 0.5	n = 93 (50.5%)

n = 184 sample sites

Ta

Map 24



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Sodium (%) by INAA

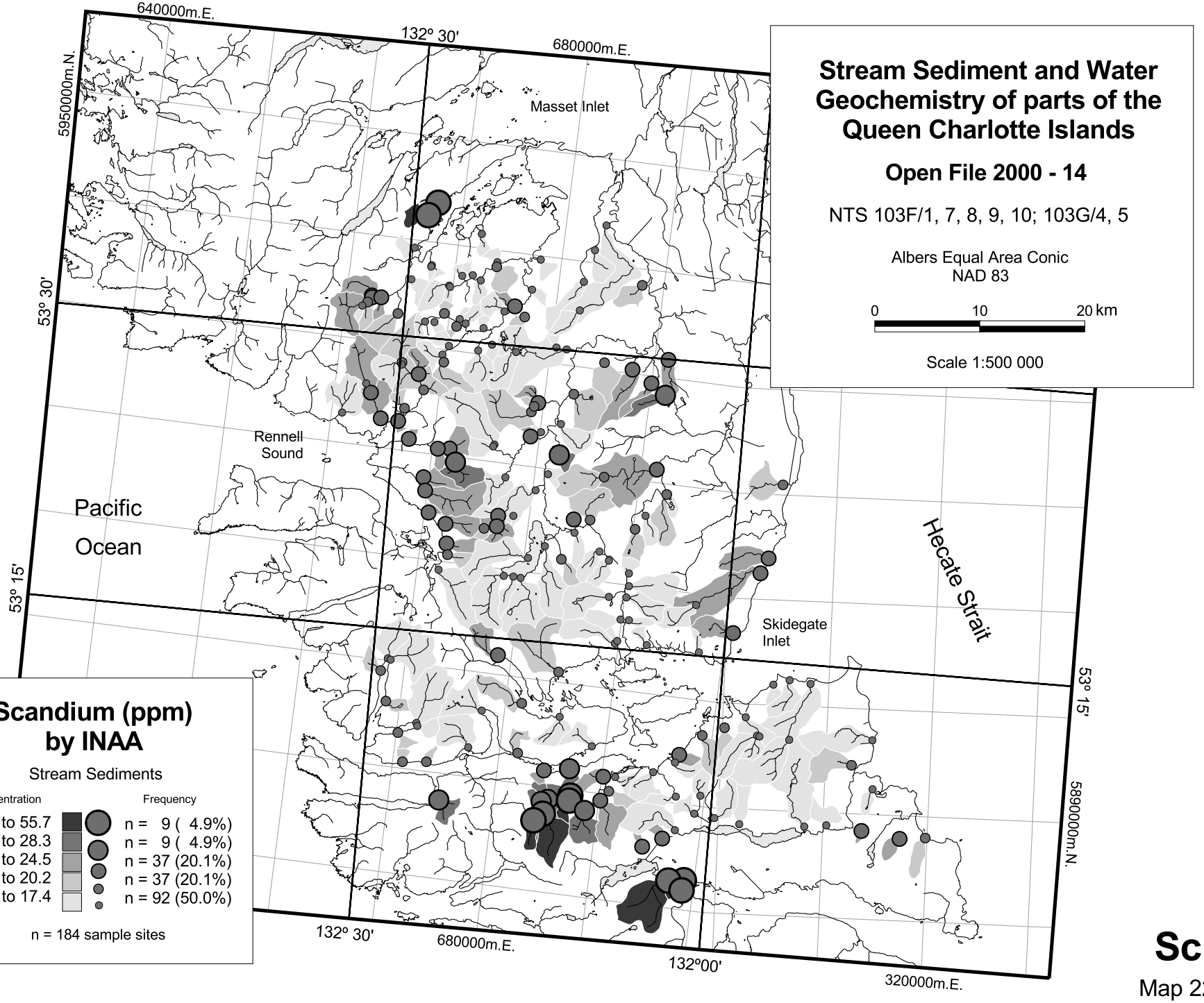
Stream Sediments

Concentration	Frequency
2.50 to 2.68	n = 8 (4.4%)
2.32 to 2.49	n = 10 (5.4%)
2.11 to 2.31	n = 36 (19.6%)
1.95 to 2.10	n = 37 (20.1%)
0.98 to 1.94	n = 93 (50.5%)

n = 184 sample sites

Na

Map 23



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Scandium (ppm) by INAA

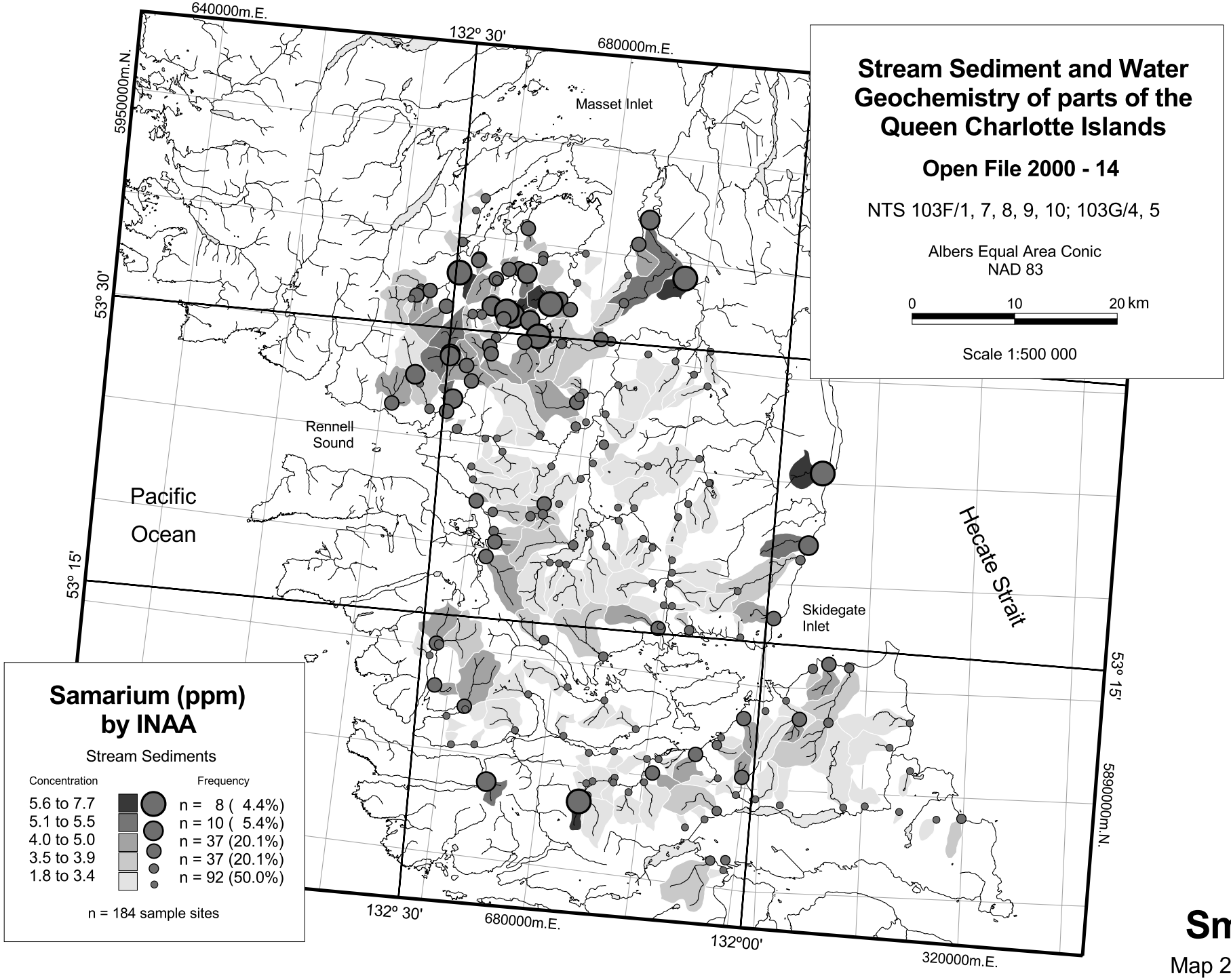
Stream Sediments

Concentration	Frequency
28.4 to 55.7	n = 9 (4.9%)
24.6 to 28.3	n = 9 (4.9%)
20.1 to 24.5	n = 37 (20.1%)
17.5 to 20.2	n = 37 (20.1%)
7.6 to 17.4	n = 92 (50.0%)

n = 184 sample sites

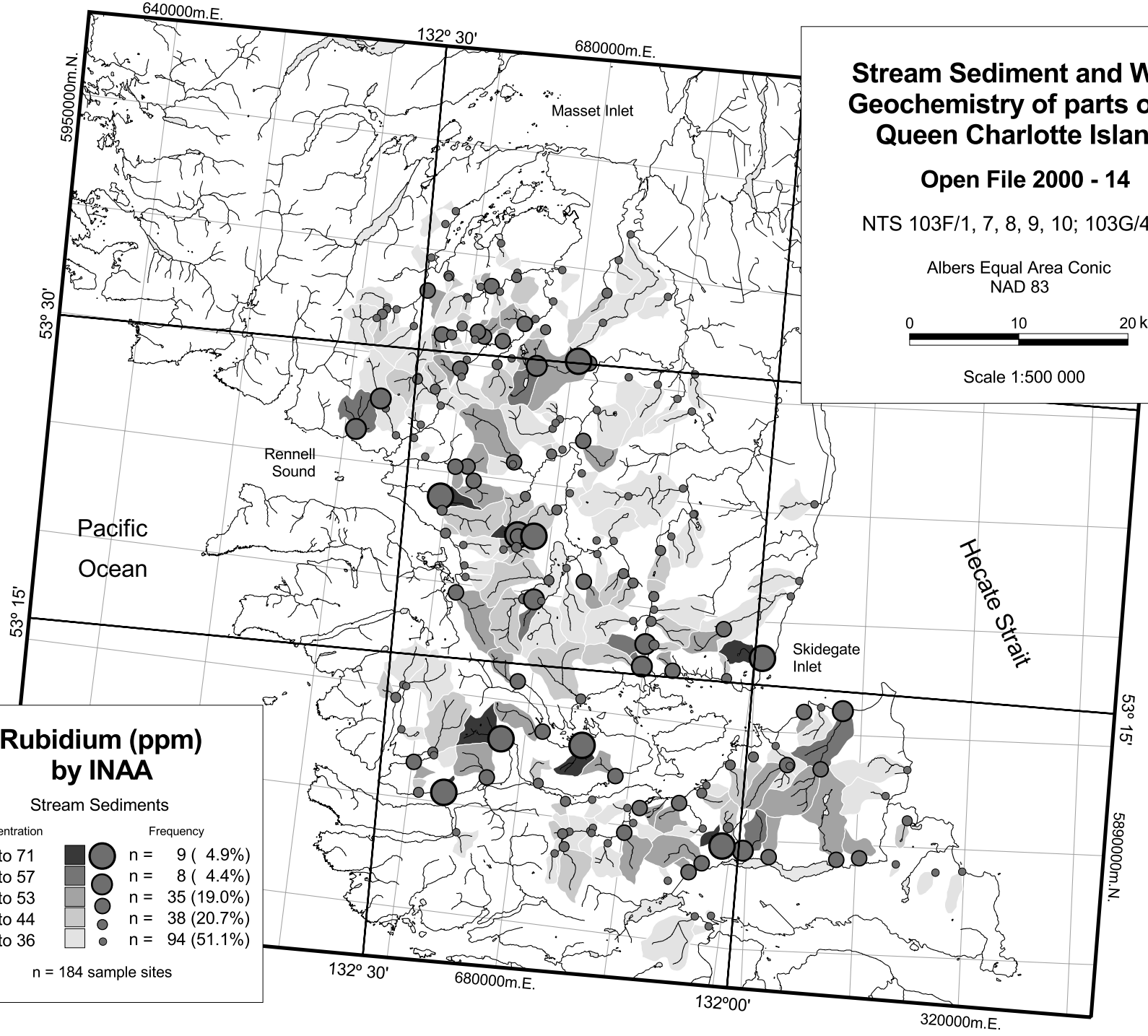
Sc

Map 22


640000m.E.
132º 30'
680000m.E.
5950000m.N.
53º 30'
53º 15'
Masset Inlet
Rennell Sound
Pacific Ocean
Hecate Strait
Skidegate Inlet
132º 30'
680000m.E.
132º00'
320000m.E.
589000m.N.
53º 15'
Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands
Open File 2000 - 14
NTS 103F/1, 7, 8, 9, 10; 103G/4, 5
Albers Equal Area Conic
NAD 83
0
10
20 km
Scale 1:500 000
Samarium (ppm) by INAA
Stream Sediments
Concentration
Frequency
5.6 to 7.7
5.1 to 5.5
4.0 to 5.0
3.5 to 3.9
1.8 to 3.4
n = 8 (4.4%)
n = 10 (5.4%)
n = 37 (20.1%)
n = 37 (20.1%)
n = 92 (50.0%)
n = 184 sample sites

Sm

Map 21



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Rubidium (ppm) by INAA

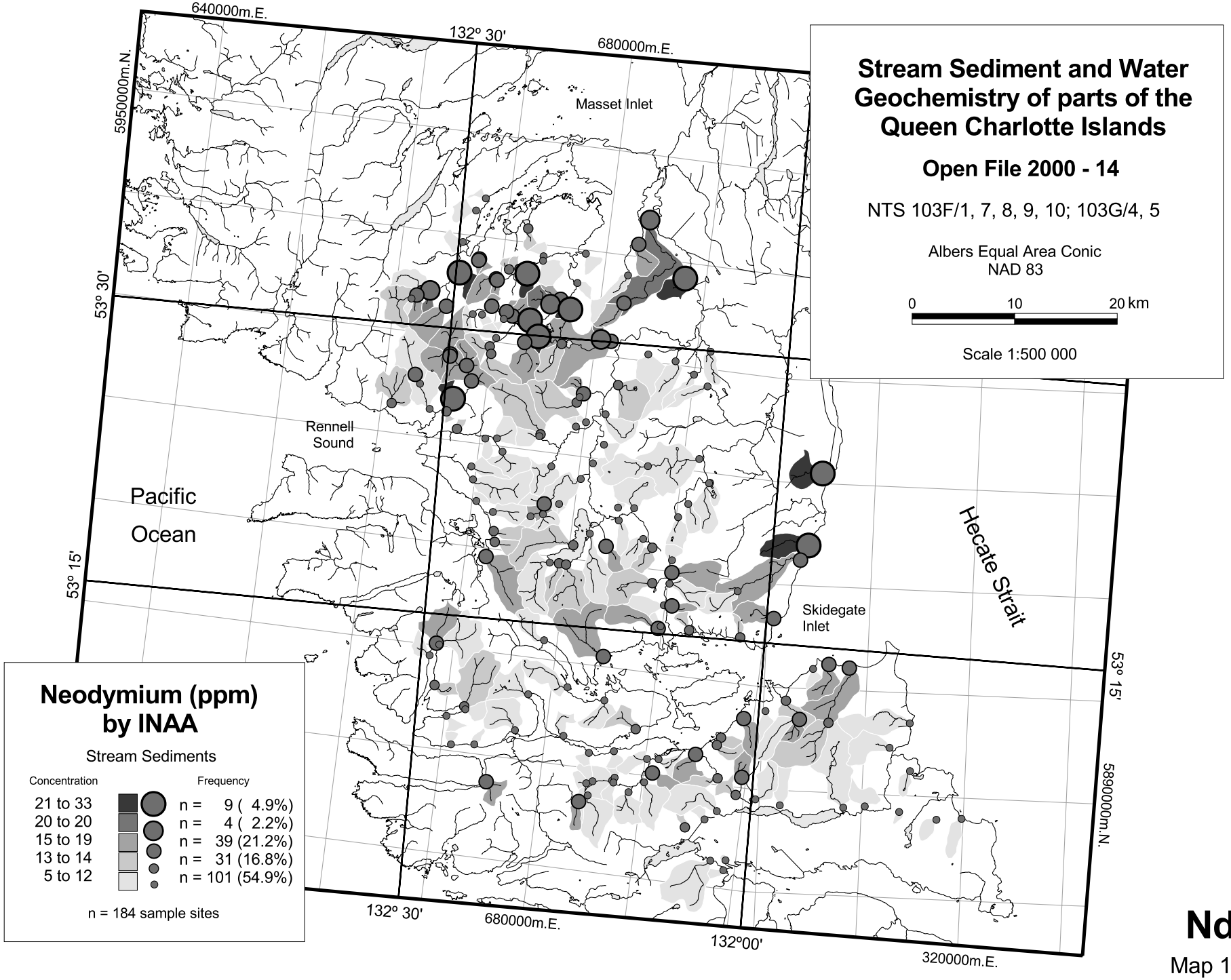
Stream Sediments

Concentration	Frequency
58 to 71	n = 9 (4.9%)
54 to 57	n = 8 (4.4%)
45 to 53	n = 35 (19.0%)
37 to 44	n = 38 (20.7%)
15 to 36	n = 94 (51.1%)

n = 184 sample sites

Rb

Map 20



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Neodymium (ppm) by INAA

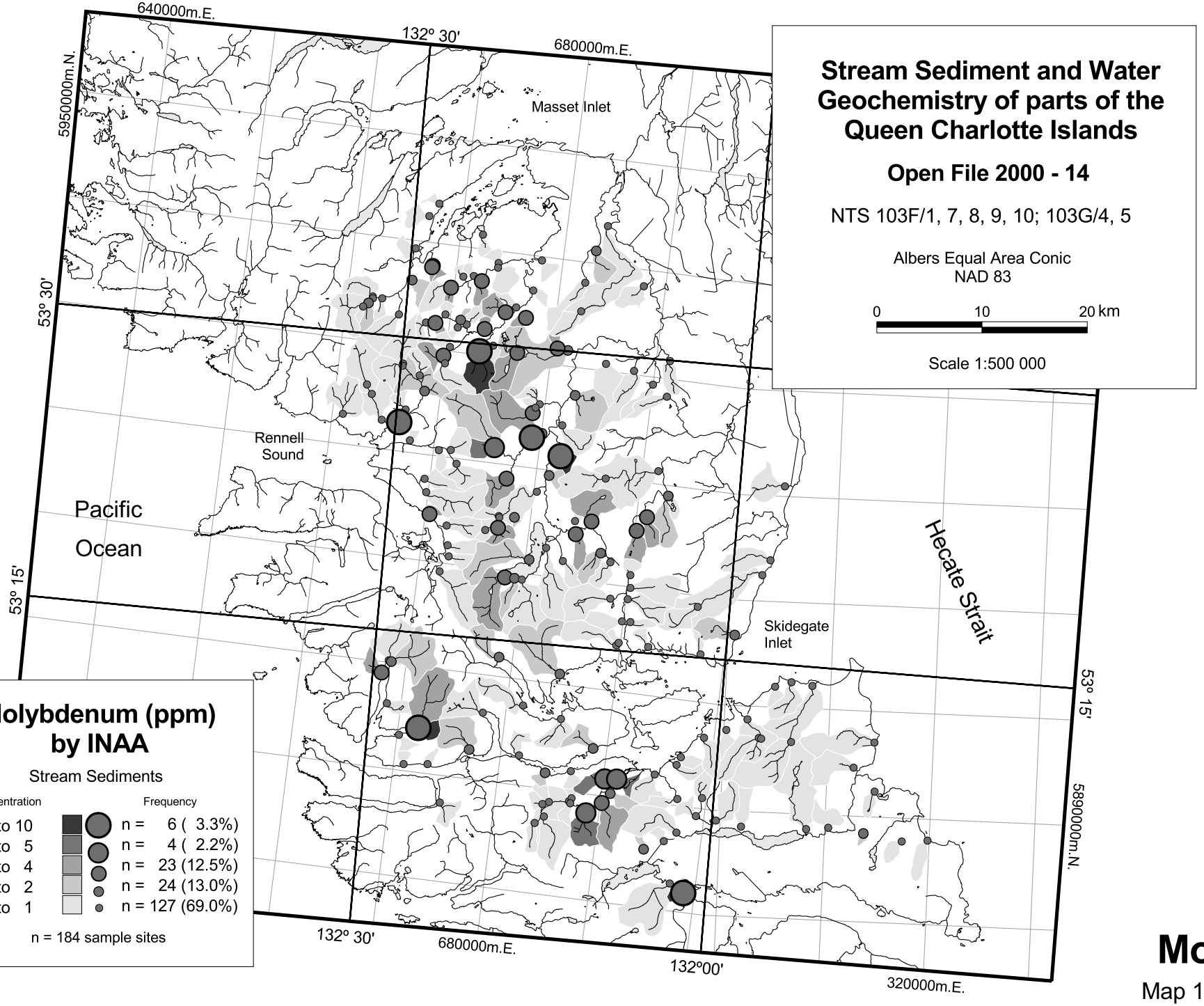
Stream Sediments

Concentration	Frequency
21 to 33	n = 9 (4.9%)
20 to 20	n = 4 (2.2%)
15 to 19	n = 39 (21.2%)
13 to 14	n = 31 (16.8%)
5 to 12	n = 101 (54.9%)

n = 184 sample sites

Nd

Map 19



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Molybdenum (ppm) by INAA

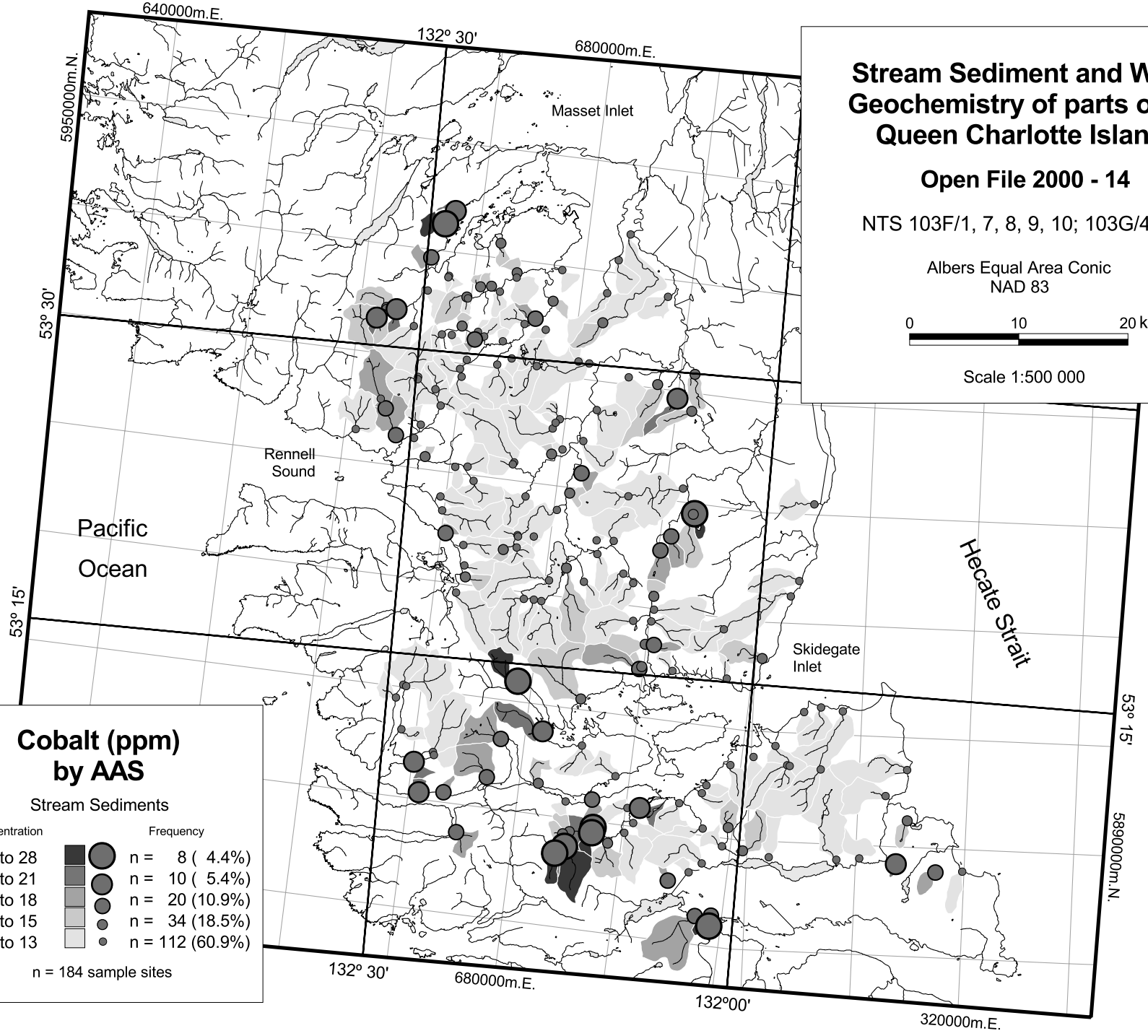
Stream Sediments

Concentration	Frequency
6 to 10	n = 6 (3.3%)
5 to 5	n = 4 (2.2%)
3 to 4	n = 23 (12.5%)
2 to 2	n = 24 (13.0%)
1 to 1	n = 127 (69.0%)

n = 184 sample sites

Mo

Map 18



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Cobalt (ppm) by AAS

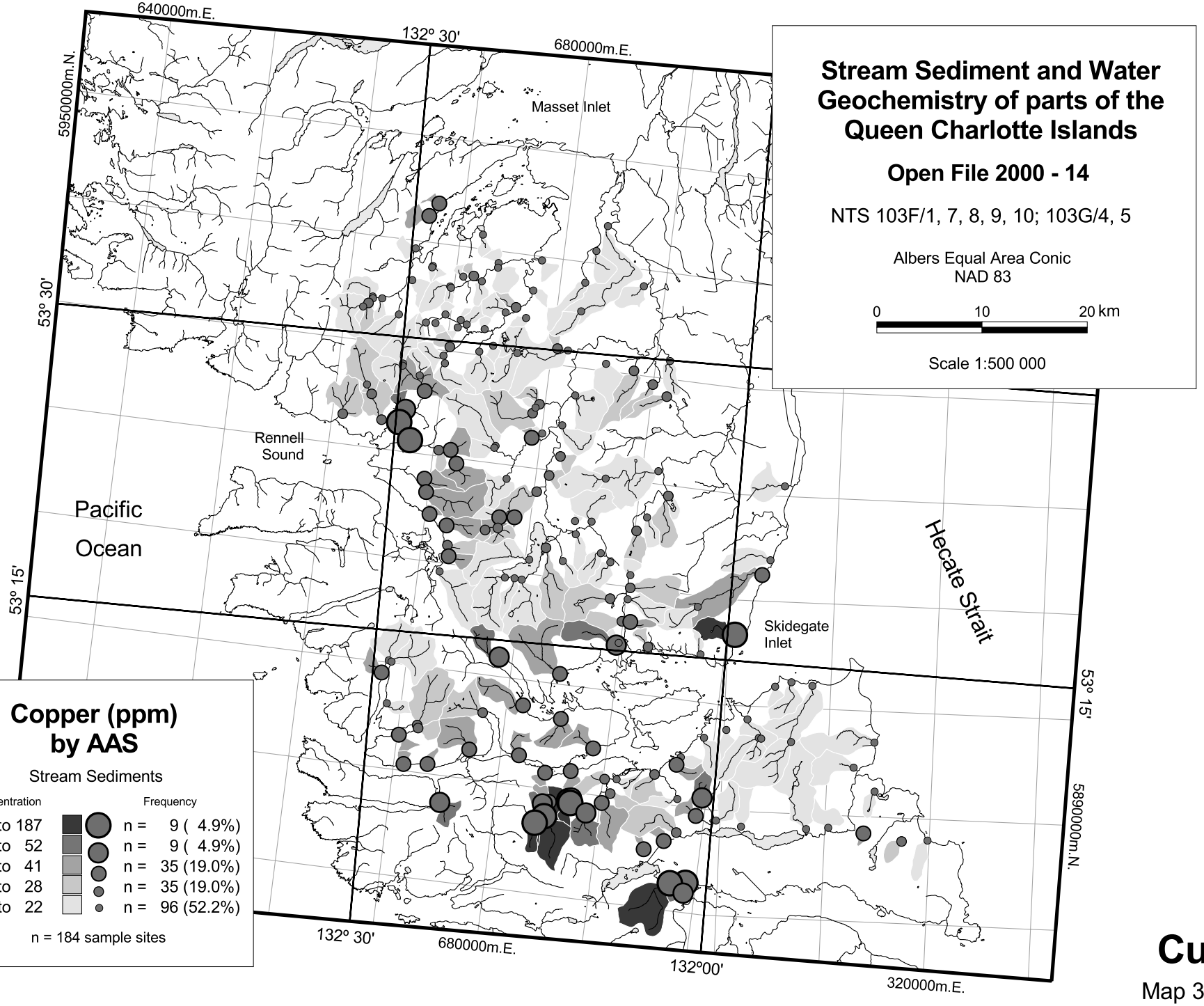
Stream Sediments

Concentration	Frequency
22 to 28	n = 8 (4.4%)
19 to 21	n = 10 (5.4%)
16 to 18	n = 20 (10.9%)
14 to 15	n = 34 (18.5%)
2 to 13	n = 112 (60.9%)

n = 184 sample sites

Co

Map 35



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Copper (ppm) by AAS

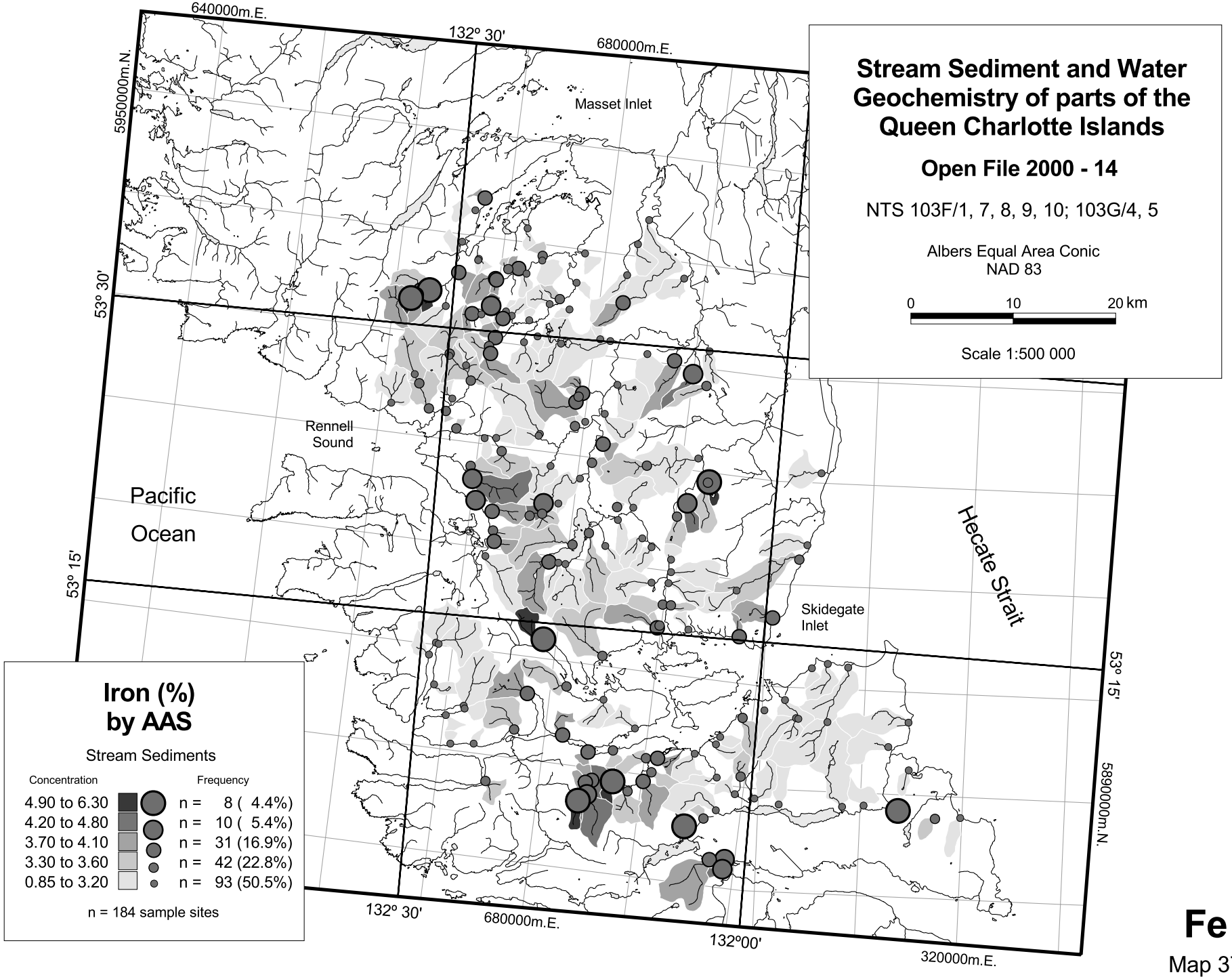
Stream Sediments

Concentration	Frequency
53 to 187	n = 9 (4.9%)
42 to 52	n = 9 (4.9%)
29 to 41	n = 35 (19.0%)
23 to 28	n = 35 (19.0%)
5 to 22	n = 96 (52.2%)

n = 184 sample sites

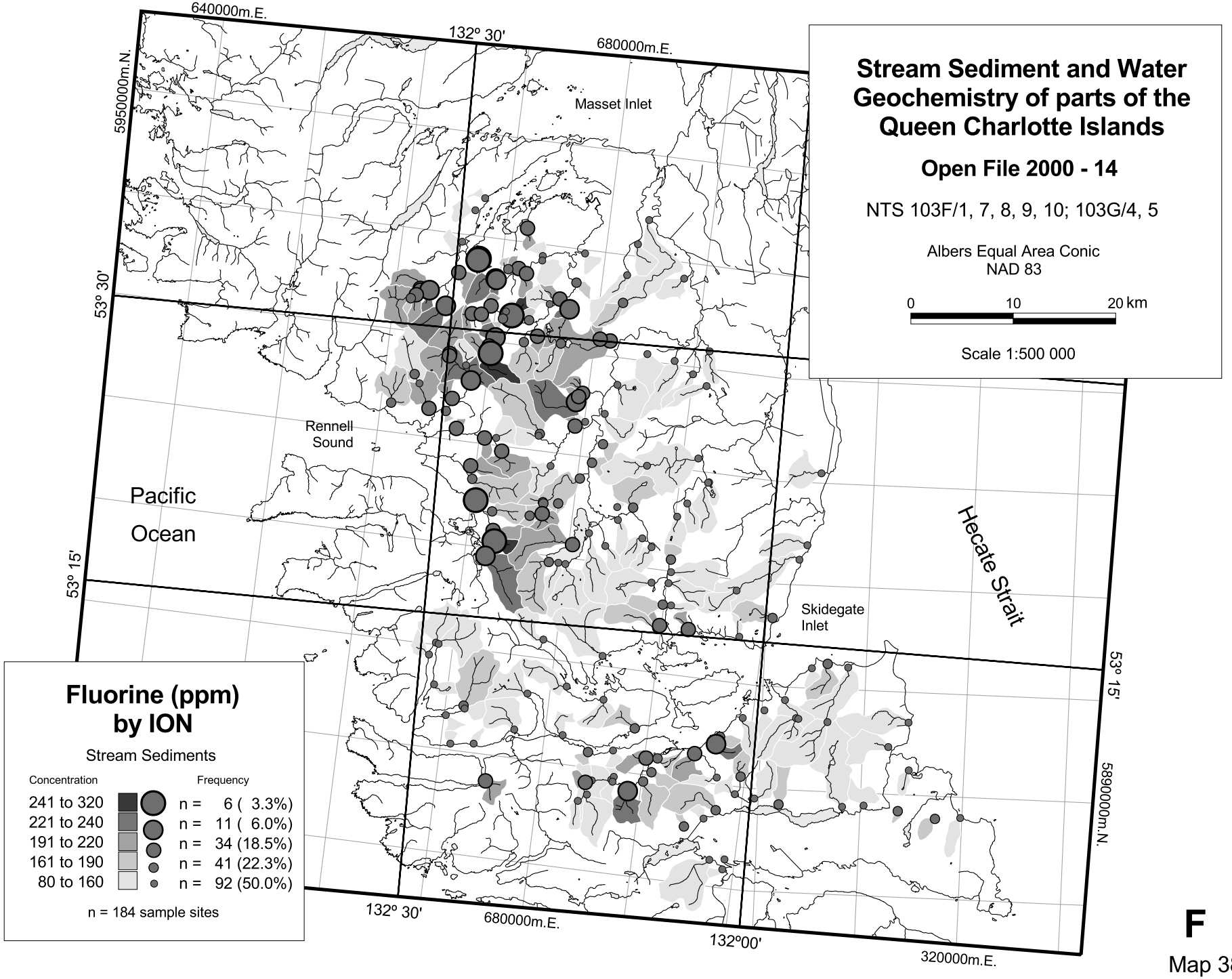
Cu

Map 36


640000m.E.
132º 30'
680000m.E.
5950000m.N.
53º 30'
53º 15'
Masset Inlet
Rennell Sound
Pacific Ocean
Hecate Strait
Skidegate Inlet
132º 30'
680000m.E.
132º00'
320000m.E.
589000m.N.
Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands
Open File 2000 - 14
NTS 103F/1, 7, 8, 9, 10; 103G/4, 5
Albers Equal Area Conic
NAD 83
0 10 20 km
Scale 1:500 000
Iron (%) by AAS
Stream Sediments
Concentration
Frequency
4.90 to 6.30 n = 8 (4.4%)
4.20 to 4.80 n = 10 (5.4%)
3.70 to 4.10 n = 31 (16.9%)
3.30 to 3.60 n = 42 (22.8%)
0.85 to 3.20 n = 93 (50.5%)
n = 184 sample sites

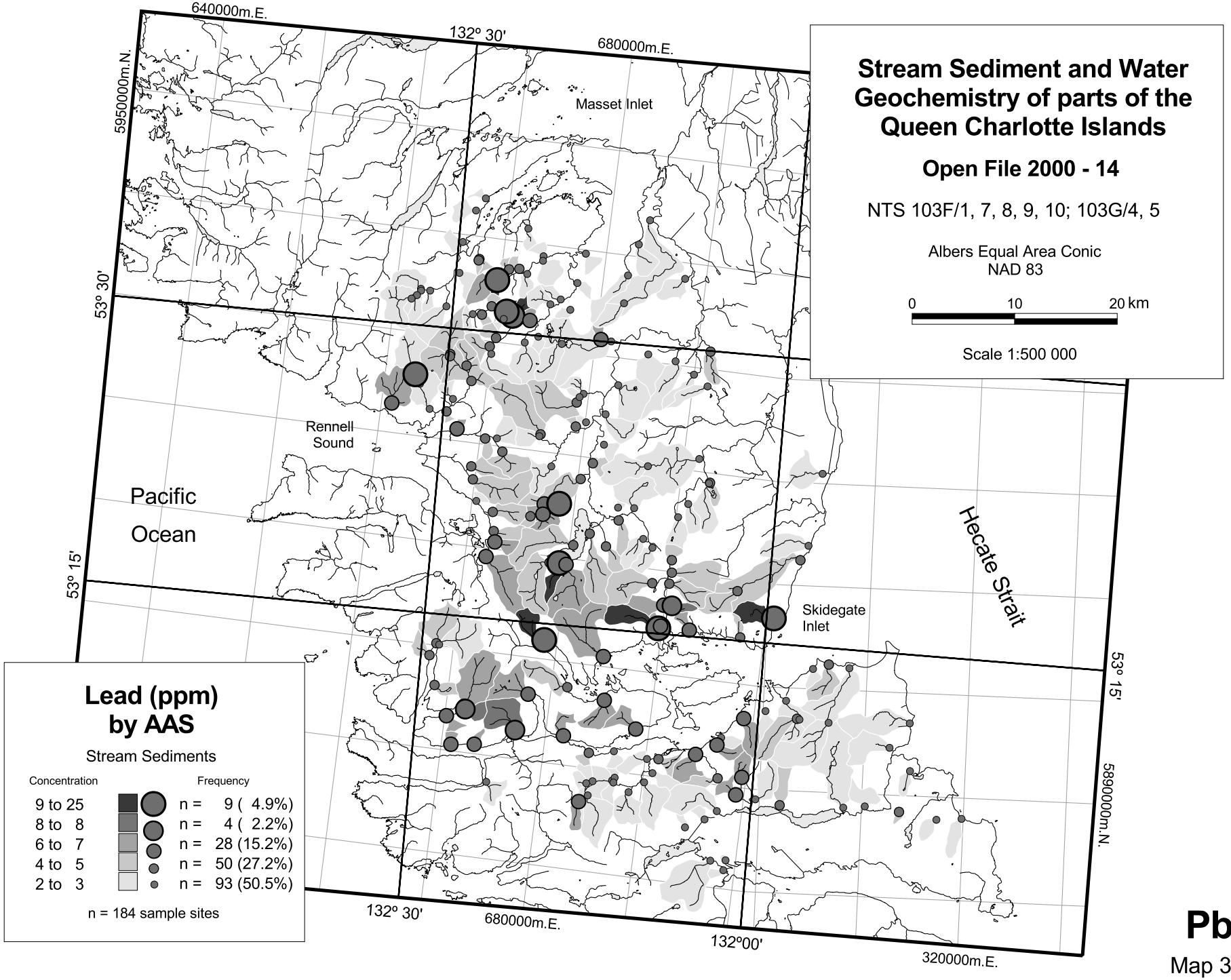
Fe

Map 37


640000m.E.
132º 30'
680000m.E.
5950000m.N.
53º 30'
Masset Inlet
Rennell
Sound
Pacific
Ocean
53º 15'
Hecate Strait
Skidegate
Inlet
53º 15'
5890000m.N.
132º 30'
680000m.E.
132º00'
320000m.E.
Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands
Open File 2000 - 14
NTS 103F/1, 7, 8, 9, 10; 103G/4, 5
Albers Equal Area Conic
NAD 83
0
10
20 km
Scale 1:500 000
Fluorine (ppm) by ION
Stream Sediments
Concentration
Frequency
241 to 320 n = 6 (3.3%)
221 to 240 n = 11 (6.0%)
191 to 220 n = 34 (18.5%)
161 to 190 n = 41 (22.3%)
80 to 160 n = 92 (50.0%)
n = 184 sample sites

F

Map 38



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Lead (ppm) by AAS

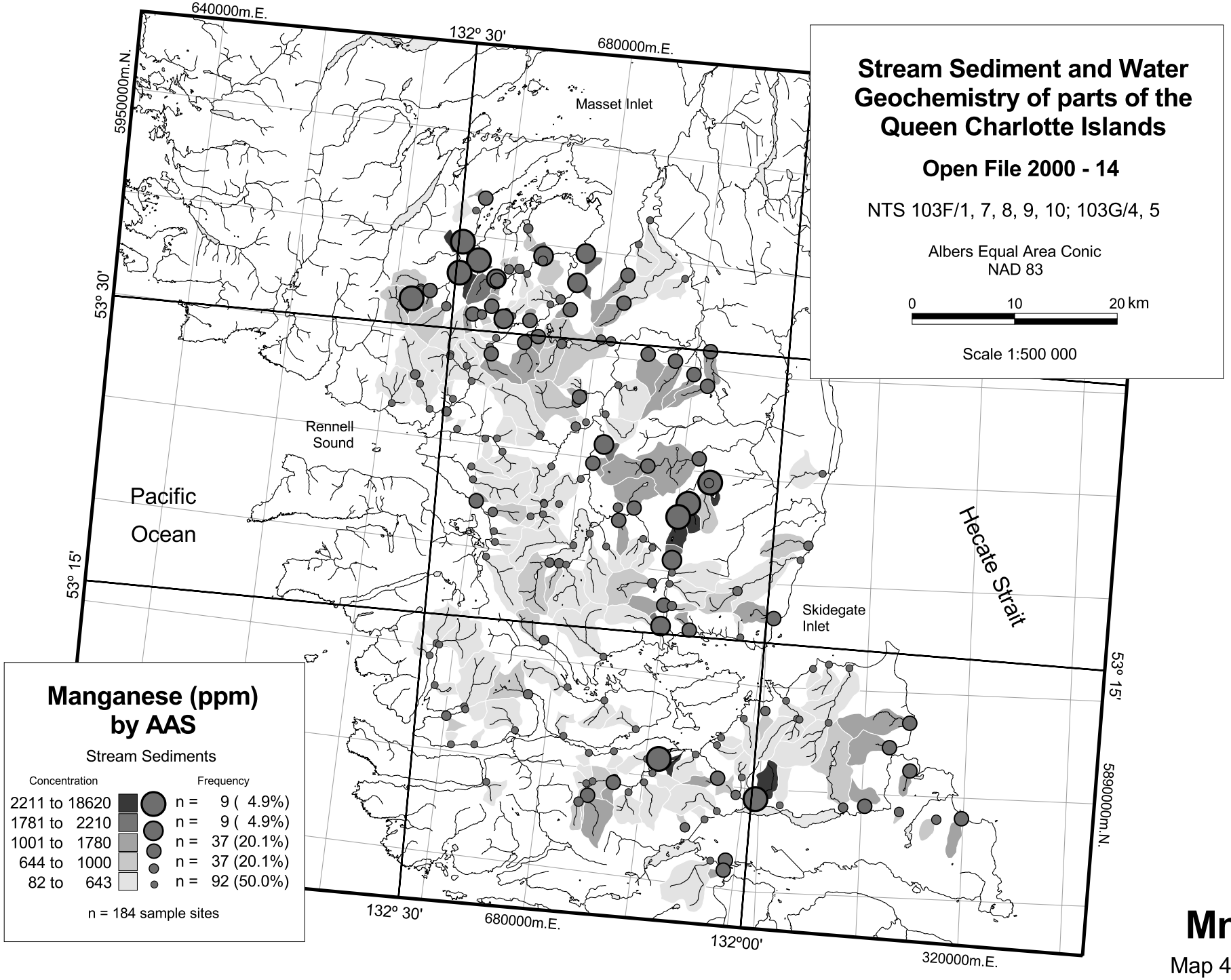
Stream Sediments

Concentration	Frequency
9 to 25	n = 9 (4.9%)
8 to 8	n = 4 (2.2%)
6 to 7	n = 28 (15.2%)
4 to 5	n = 50 (27.2%)
2 to 3	n = 93 (50.5%)

n = 184 sample sites

Pb

Map 39



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Manganese (ppm) by AAS

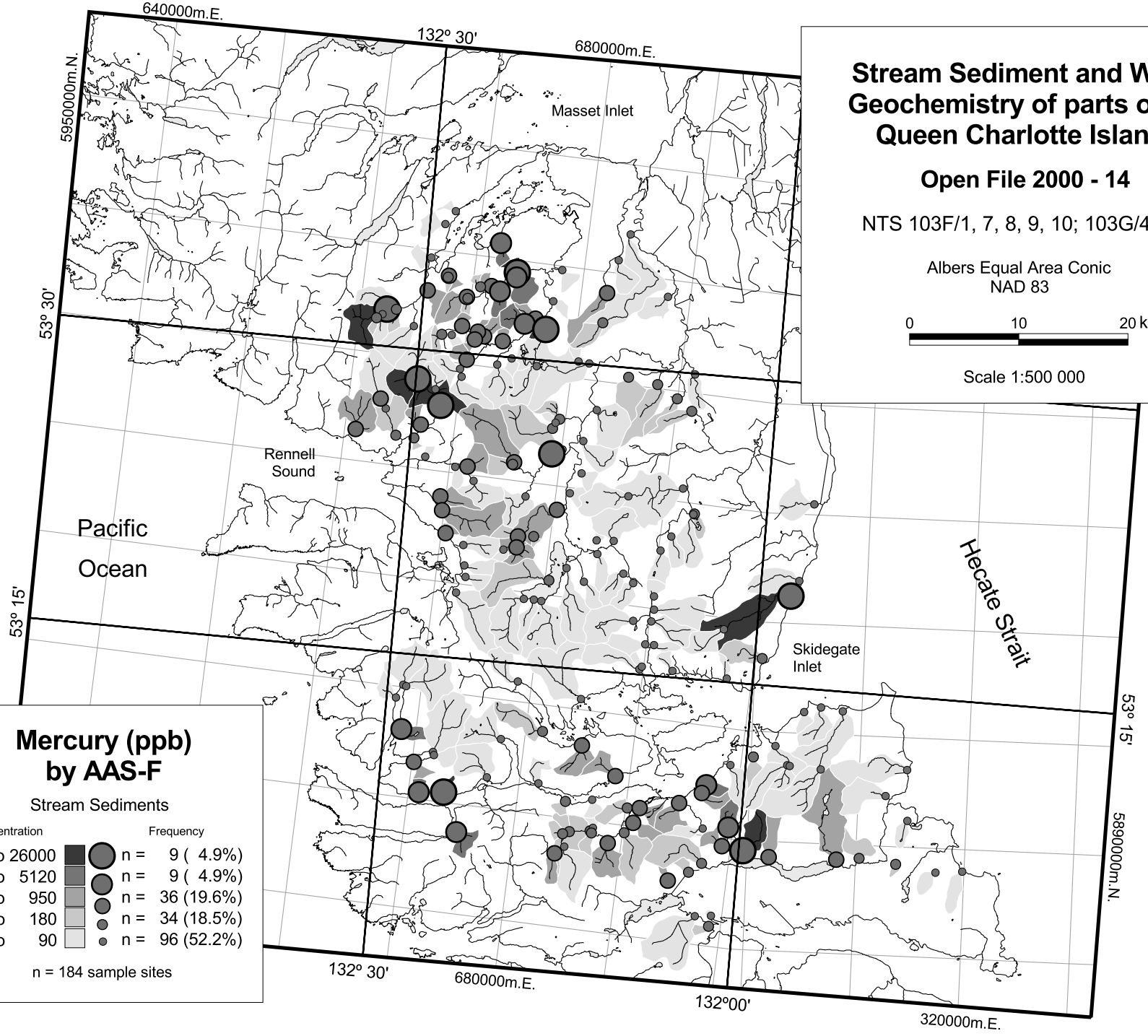
Stream Sediments

Concentration	Frequency
2211 to 18620	n = 9 (4.9%)
1781 to 2210	n = 9 (4.9%)
1001 to 1780	n = 37 (20.1%)
644 to 1000	n = 37 (20.1%)
82 to 643	n = 92 (50.0%)

n = 184 sample sites

Mn

Map 40



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Mercury (ppb) by AAS-F

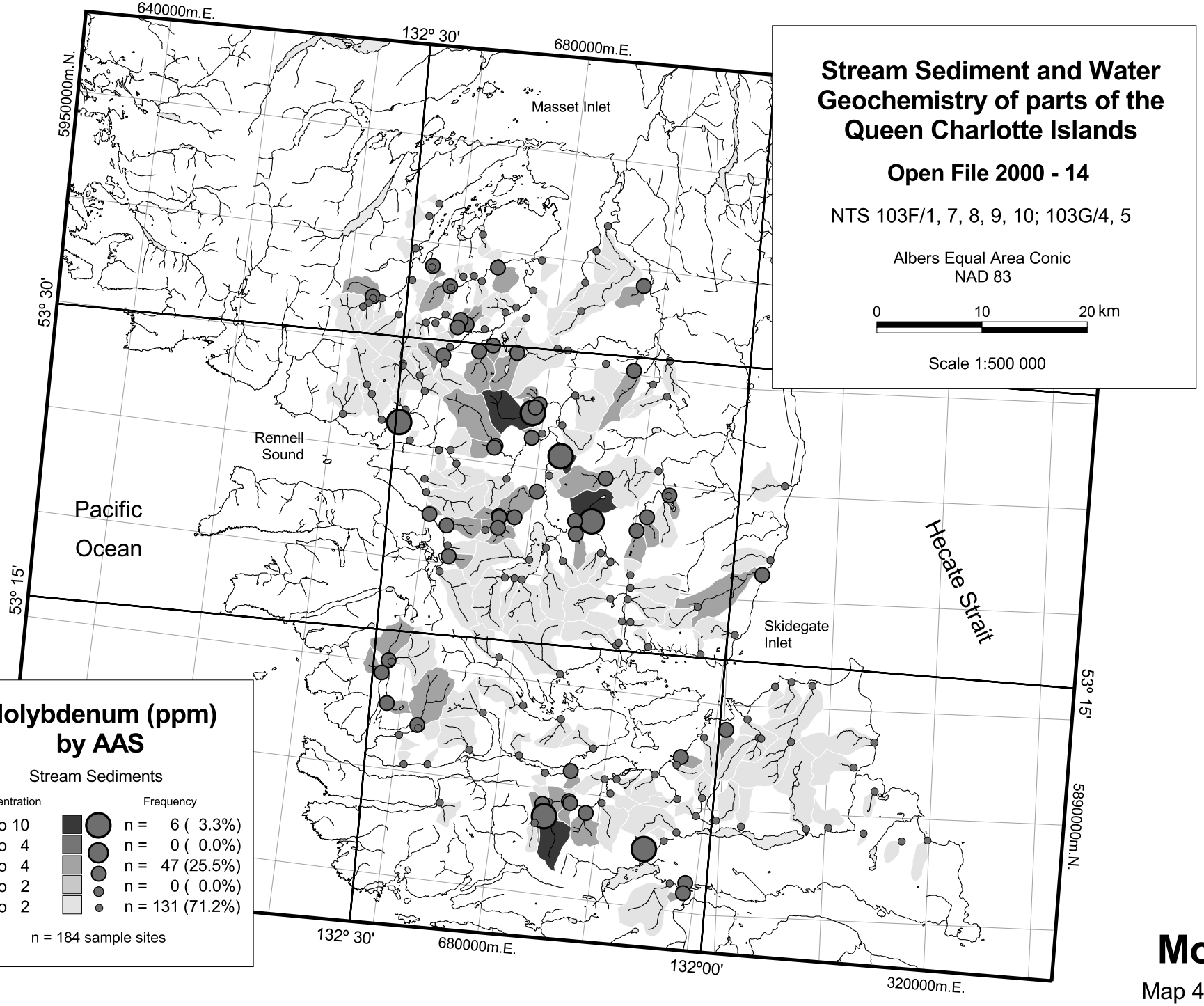
Stream Sediments

Concentration	Frequency
5121 to 26000	n = 9 (4.9%)
951 to 5120	n = 9 (4.9%)
181 to 950	n = 36 (19.6%)
91 to 180	n = 34 (18.5%)
10 to 90	n = 96 (52.2%)

n = 184 sample sites

Hg

Map 41



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Molybdenum (ppm) by AAS

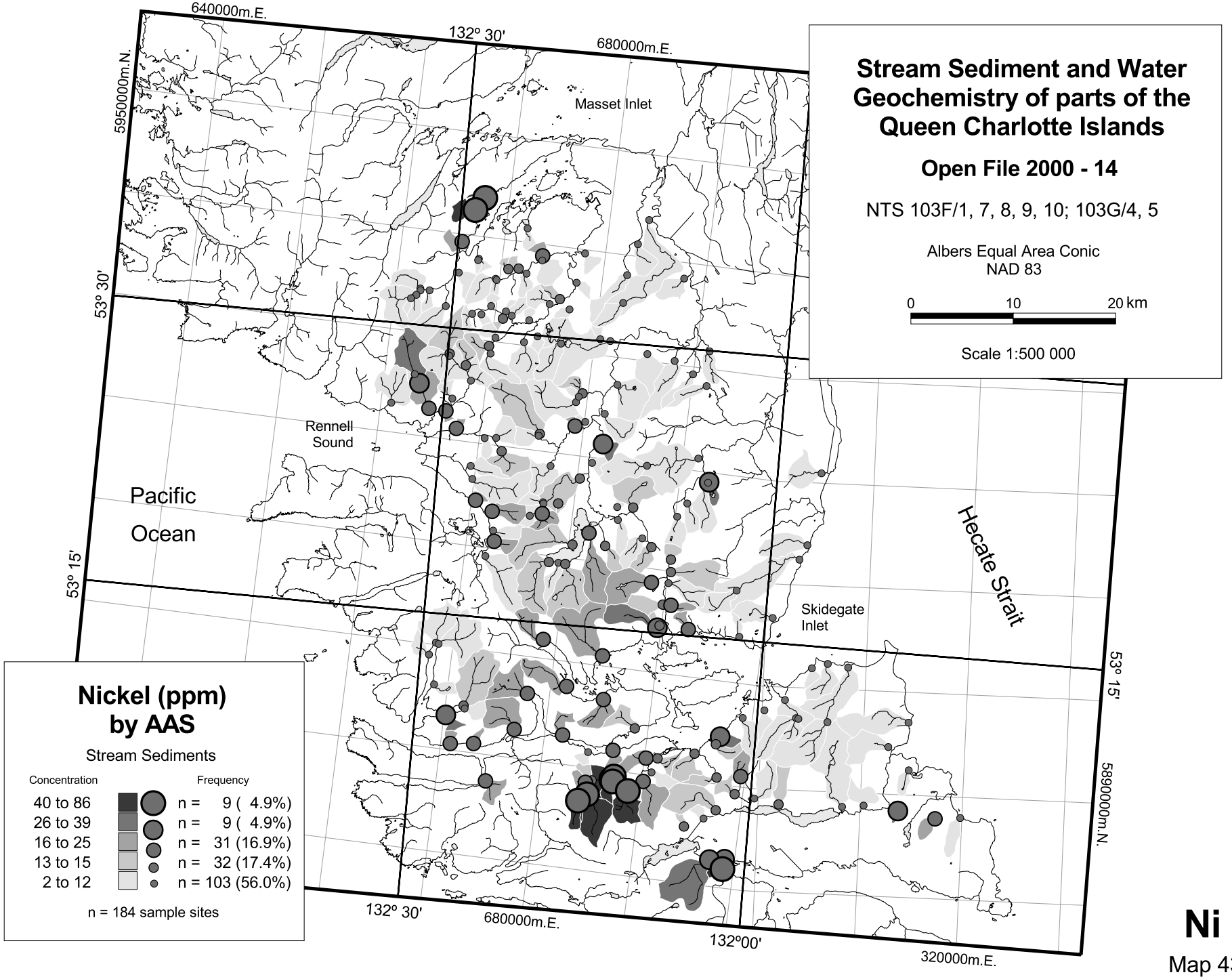
Stream Sediments

Concentration	Frequency
5 to 10	n = 6 (3.3%)
4 to 4	n = 0 (0.0%)
3 to 4	n = 47 (25.5%)
2 to 2	n = 0 (0.0%)
1 to 2	n = 131 (71.2%)

n = 184 sample sites

Mo

Map 42



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Nickel (ppm) by AAS

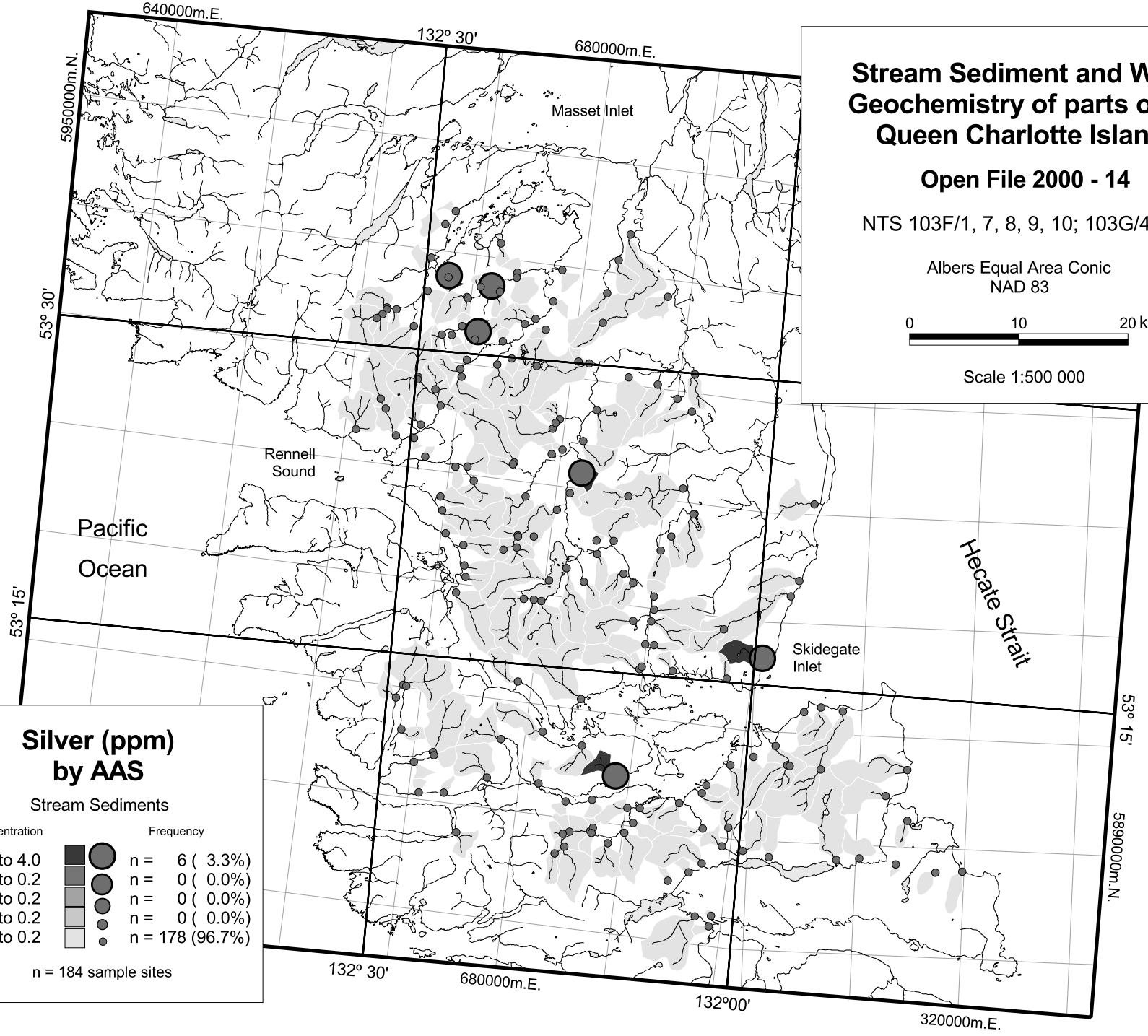
Stream Sediments

Concentration	Frequency
40 to 86	n = 9 (4.9%)
26 to 39	n = 9 (4.9%)
16 to 25	n = 31 (16.9%)
13 to 15	n = 32 (17.4%)
2 to 12	n = 103 (56.0%)

n = 184 sample sites

Ni

Map 43



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Silver (ppm) by AAS

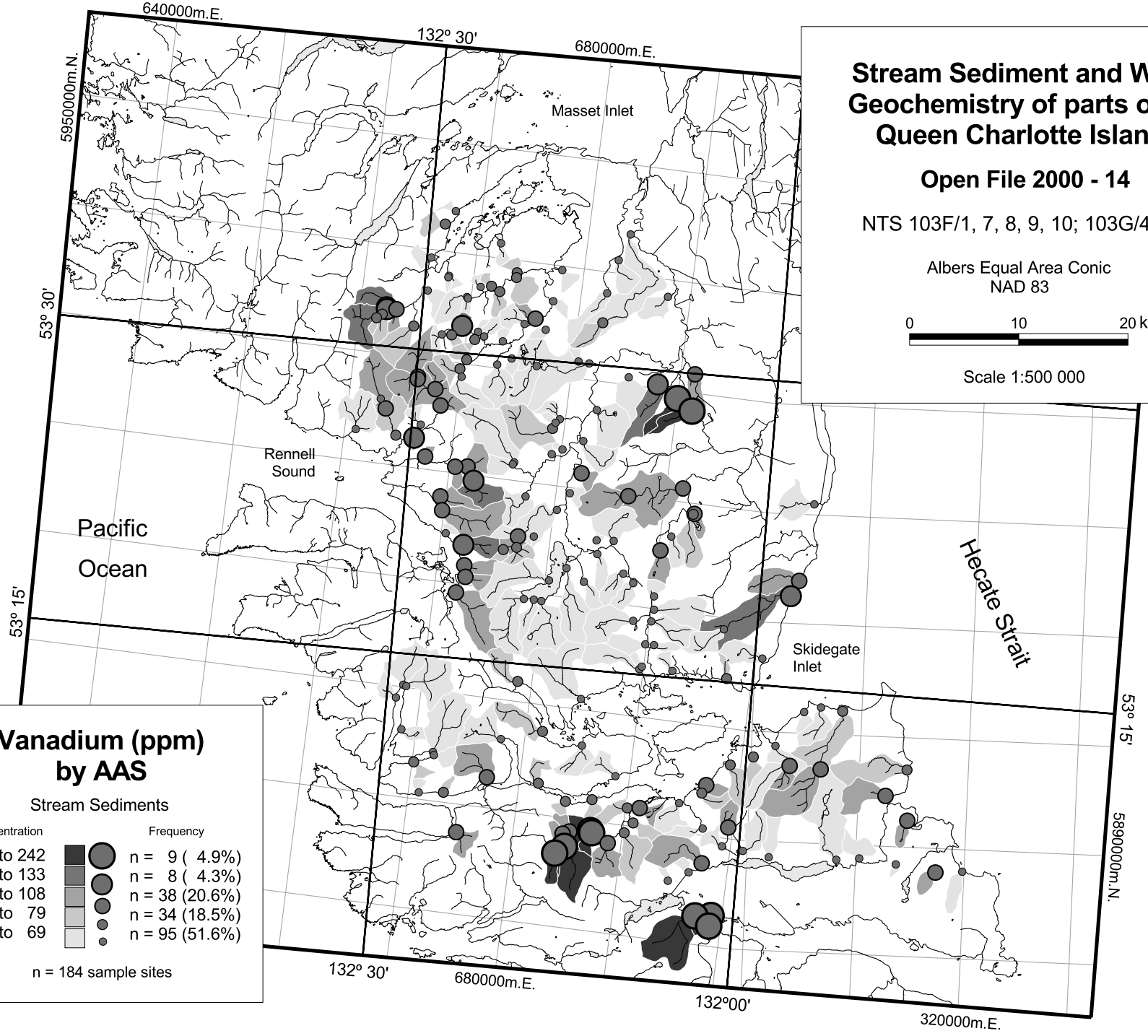
Stream Sediments

Concentration	Frequency
0.3 to 4.0	n = 6 (3.3%)
0.2 to 0.2	n = 0 (0.0%)
0.2 to 0.2	n = 0 (0.0%)
0.2 to 0.2	n = 0 (0.0%)
0.2 to 0.2	n = 178 (96.7%)

n = 184 sample sites

Ag

Map 44



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Vanadium (ppm) by AAS

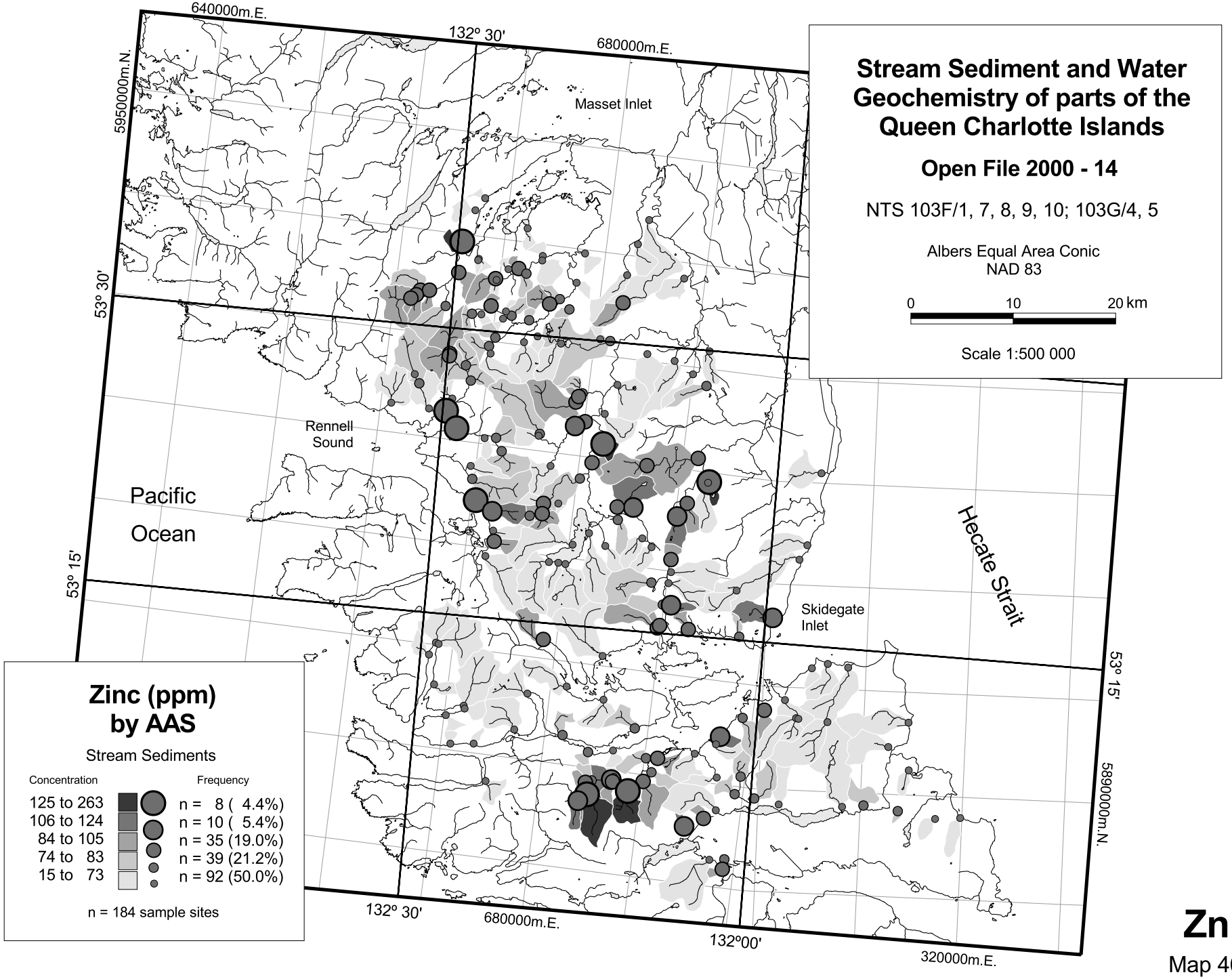
Stream Sediments

Concentration	Frequency
134 to 242	n = 9 (4.9%)
109 to 133	n = 8 (4.3%)
80 to 108	n = 38 (20.6%)
70 to 79	n = 34 (18.5%)
16 to 69	n = 95 (51.6%)

n = 184 sample sites

V

Map 45



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Zinc (ppm) by AAS

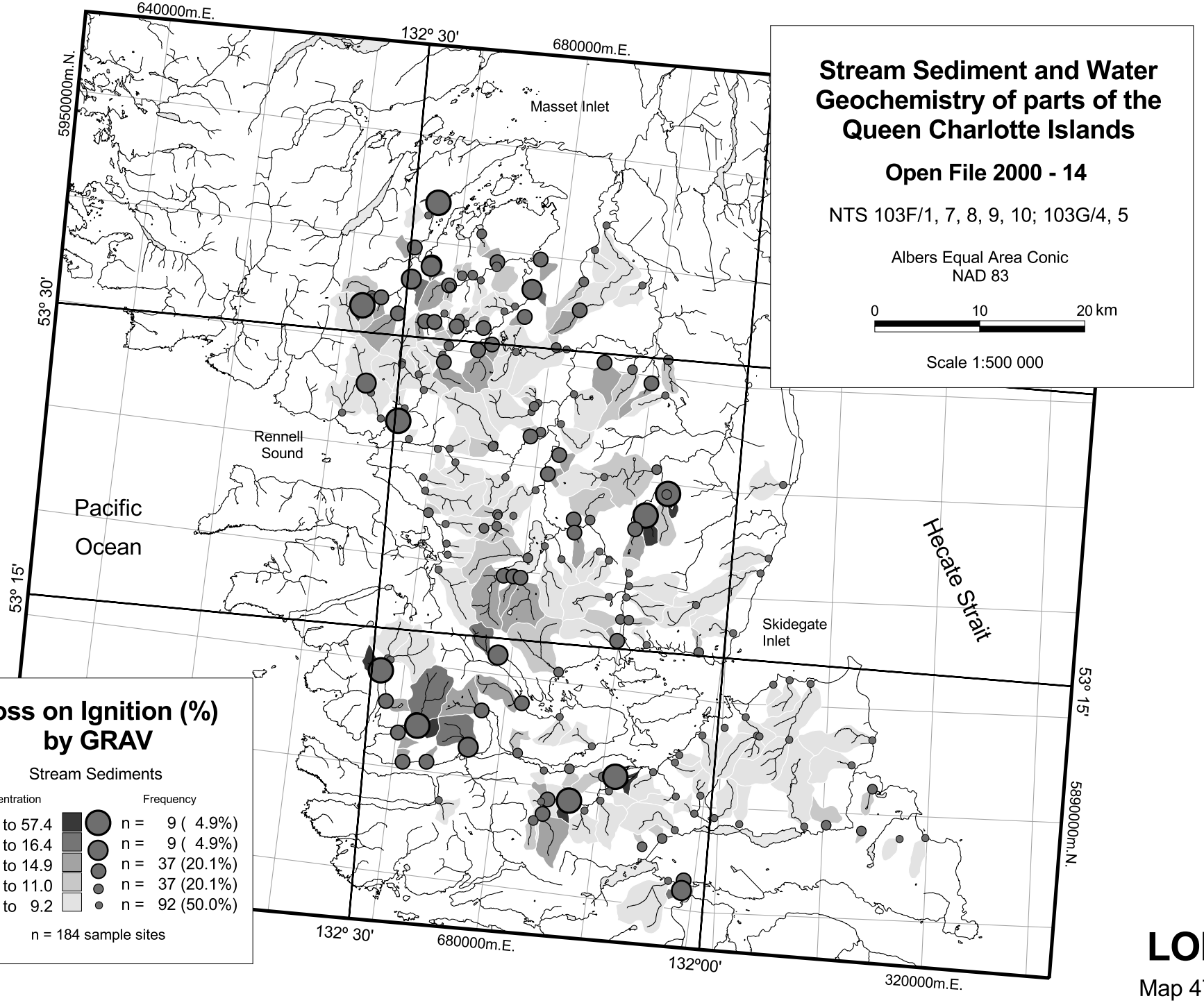
Stream Sediments

Concentration	Frequency
125 to 263	n = 8 (4.4%)
106 to 124	n = 10 (5.4%)
84 to 105	n = 35 (19.0%)
74 to 83	n = 39 (21.2%)
15 to 73	n = 92 (50.0%)

n = 184 sample sites

Zn

Map 46



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Loss on Ignition (%) by GRAV

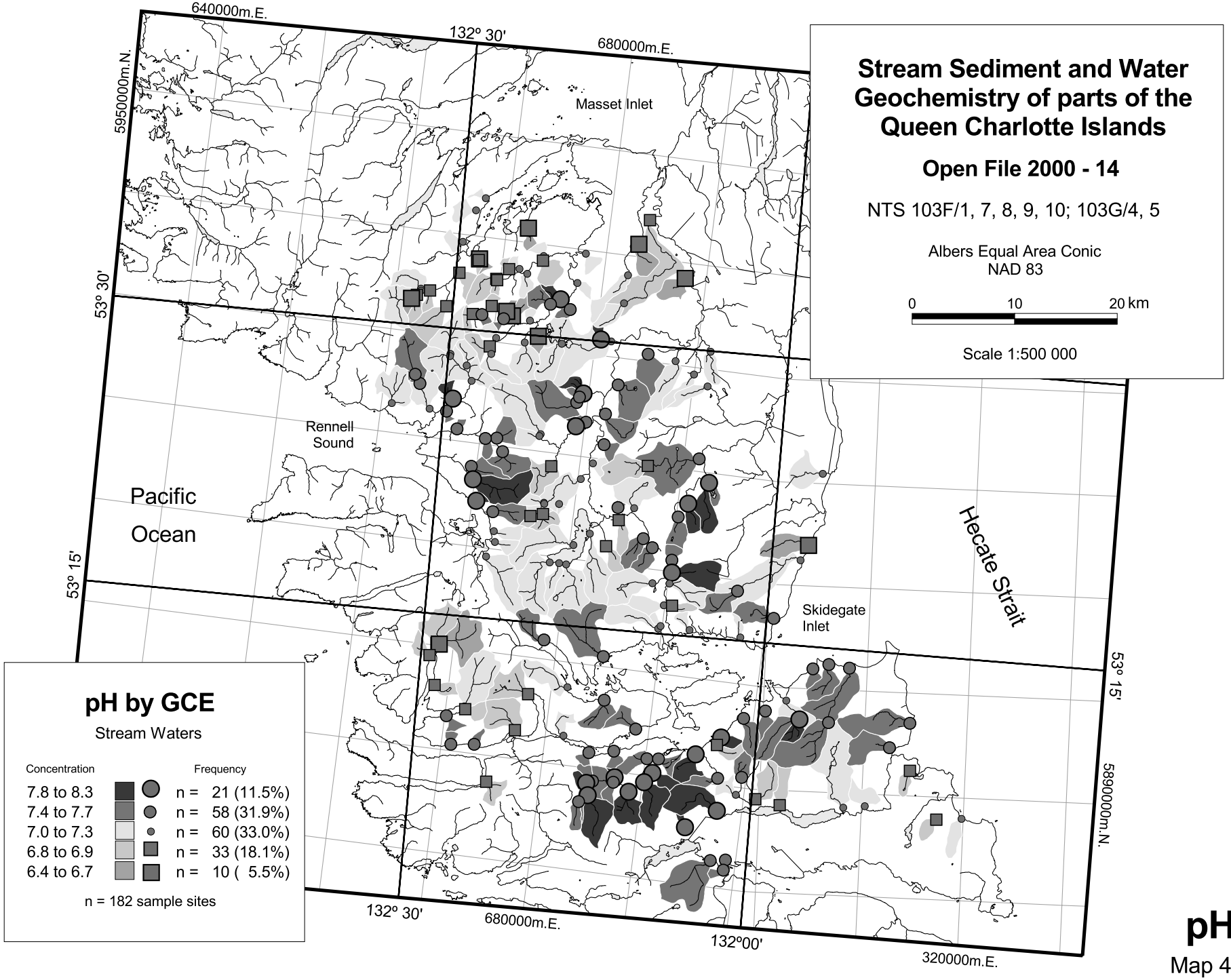
Stream Sediments

Concentration	Frequency
16.5 to 57.4	n = 9 (4.9%)
15.0 to 16.4	n = 9 (4.9%)
11.1 to 14.9	n = 37 (20.1%)
9.3 to 11.0	n = 37 (20.1%)
3.9 to 9.2	n = 92 (50.0%)

n = 184 sample sites

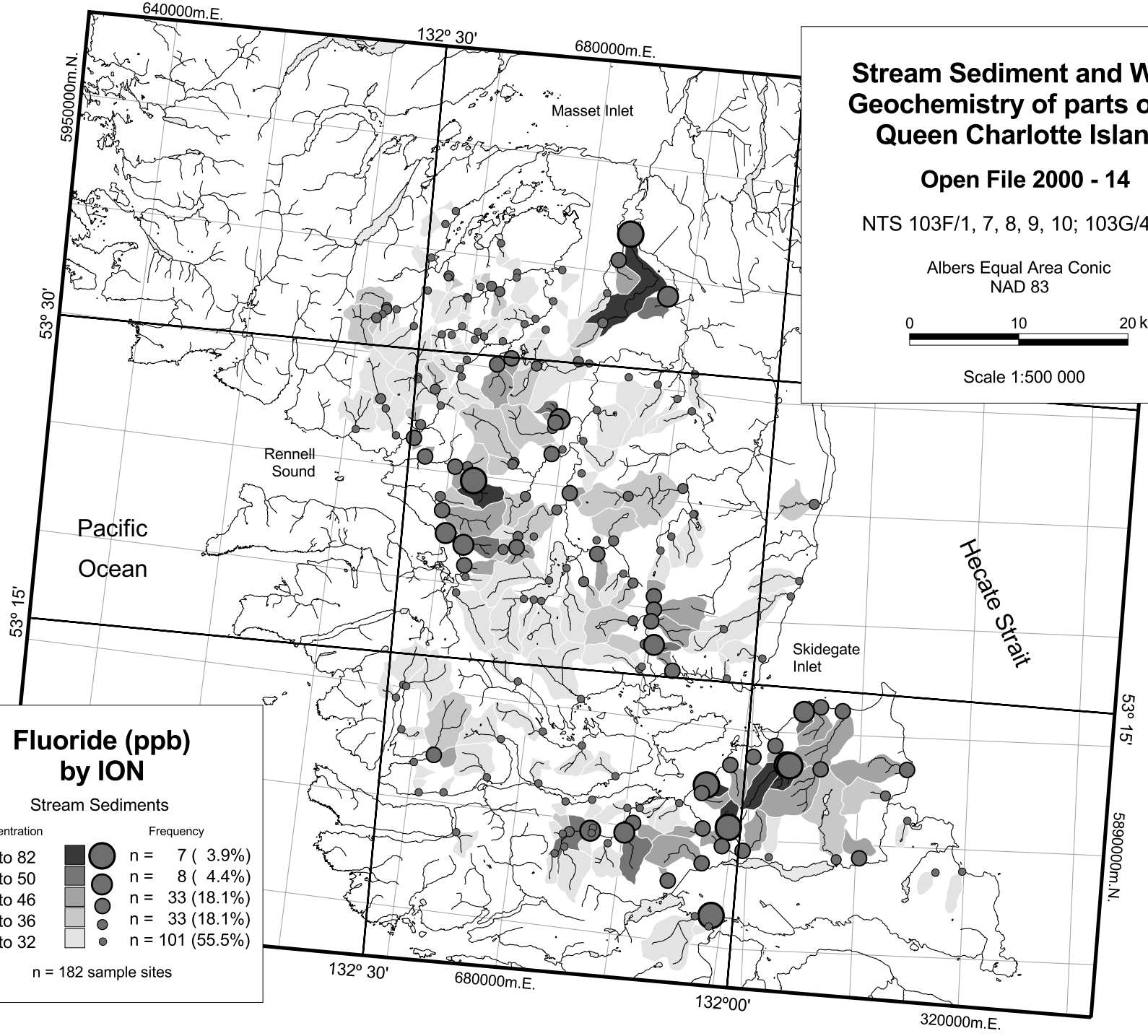
LOI

Map 47


640000m.E.
132º 30'
680000m.E.
5950000m.N.
53º 30'
53º 15'
Masset Inlet
Rennell Sound
Pacific Ocean
Hecate Strait
Skidegate Inlet
132º 30'
680000m.E.
132º00'
320000m.E.
589000m.N.
53º 15'
Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands
Open File 2000 - 14
NTS 103F/1, 7, 8, 9, 10; 103G/4, 5
Albers Equal Area Conic
NAD 83
0
10
20 km
Scale 1:500 000
pH by GCE
Stream Waters
Concentration
Frequency
7.8 to 8.3 n = 21 (11.5%)
7.4 to 7.7 n = 58 (31.9%)
7.0 to 7.3 n = 60 (33.0%)
6.8 to 6.9 n = 33 (18.1%)
6.4 to 6.7 n = 10 (5.5%)
n = 182 sample sites

pH

Map 48



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Fluoride (ppb) by ION

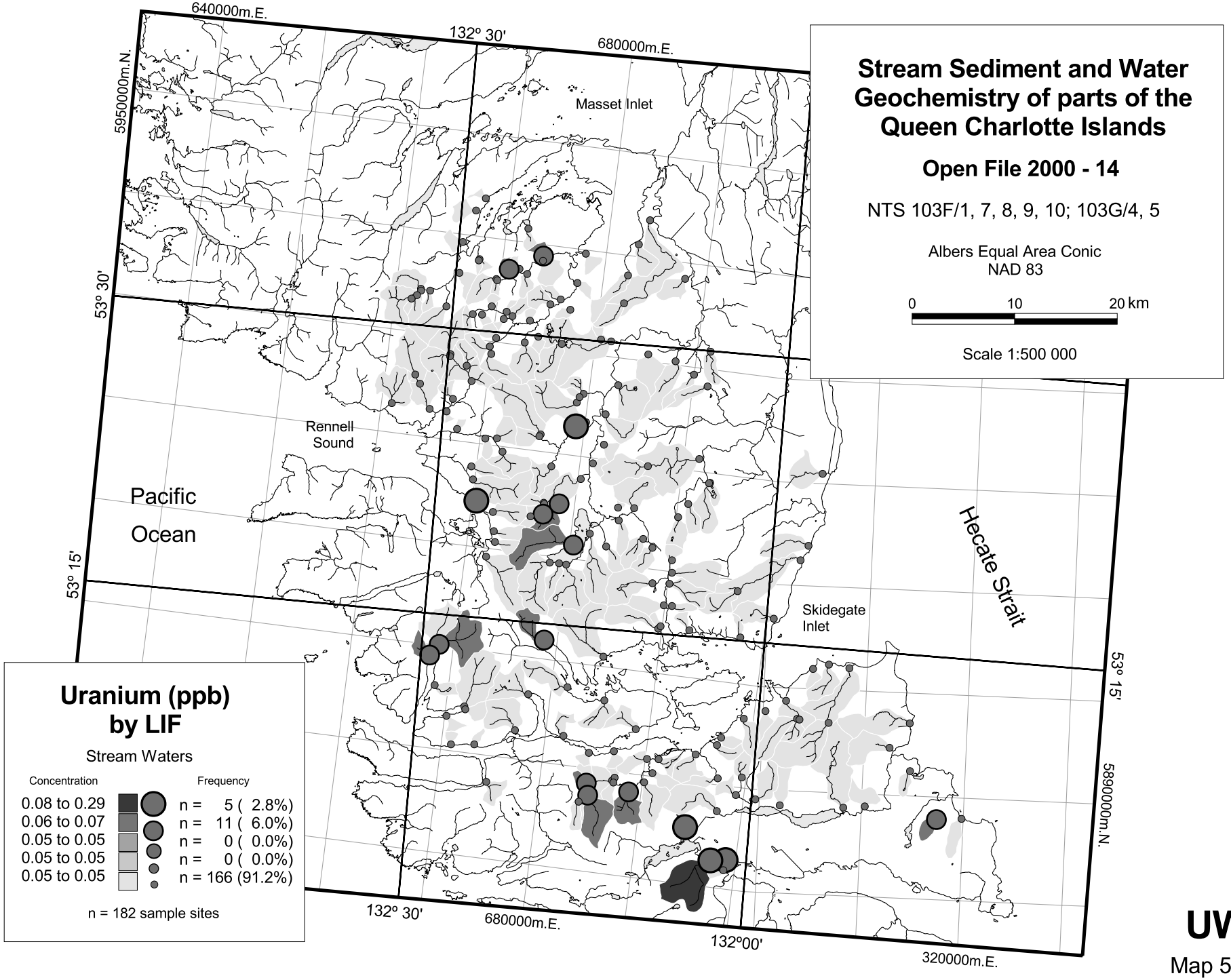
Stream Sediments

Concentration	Frequency
51 to 82	n = 7 (3.9%)
47 to 50	n = 8 (4.4%)
37 to 46	n = 33 (18.1%)
33 to 36	n = 33 (18.1%)
20 to 32	n = 101 (55.5%)

n = 182 sample sites

FW

Map 49



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Uranium (ppb) by LIF

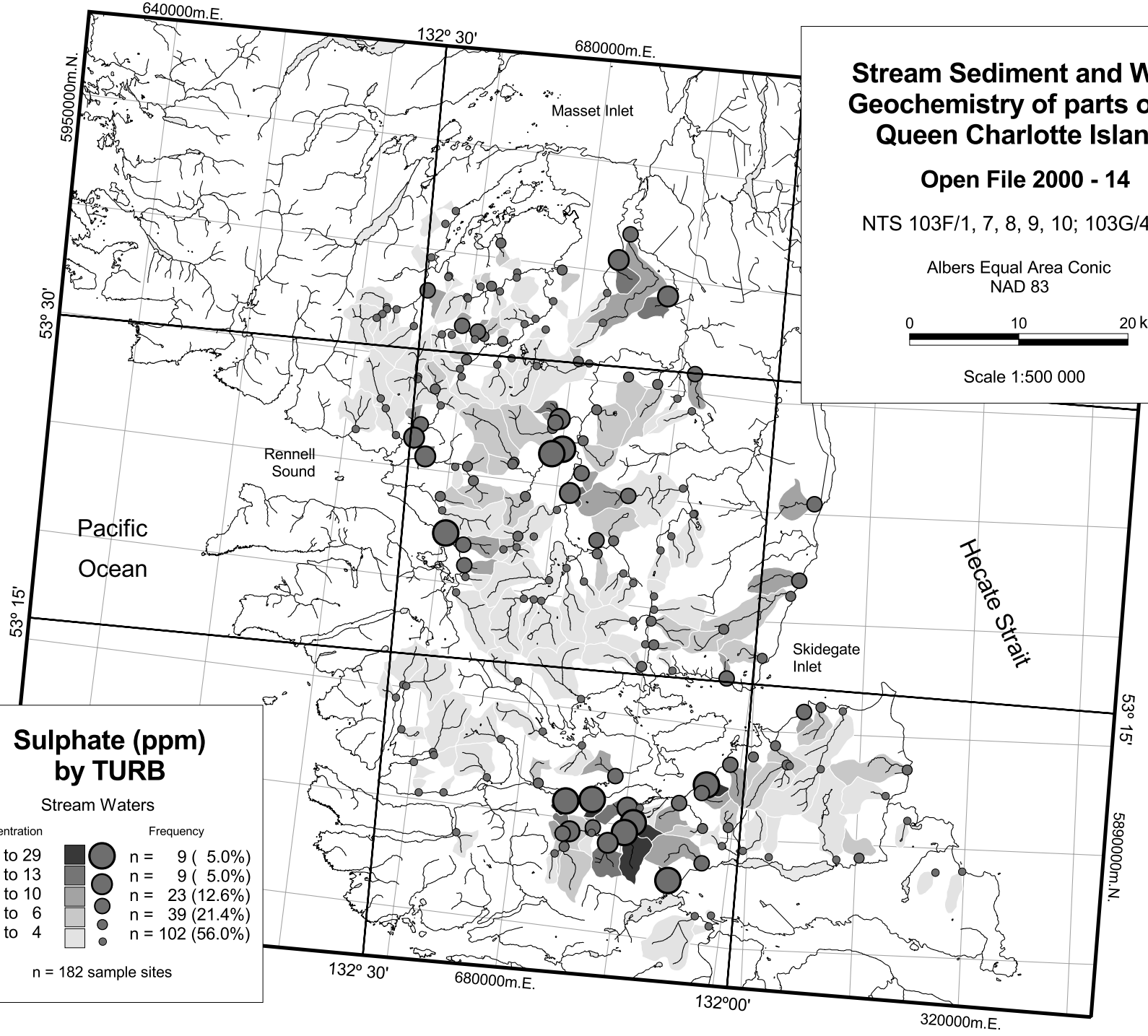
Stream Waters

Concentration	Frequency
0.08 to 0.29	n = 5 (2.8%)
0.06 to 0.07	n = 11 (6.0%)
0.05 to 0.05	n = 0 (0.0%)
0.05 to 0.05	n = 0 (0.0%)
0.05 to 0.05	n = 166 (91.2%)

n = 182 sample sites

UW

Map 50



Stream Sediment and Water Geochemistry of parts of the Queen Charlotte Islands

Open File 2000 - 14

NTS 103F/1, 7, 8, 9, 10; 103G/4, 5

Albers Equal Area Conic
NAD 83

0 10 20 km

Scale 1:500 000

Sulphate (ppm) by TURB

Stream Waters

Concentration	Frequency
14 to 29	n = 9 (5.0%)
11 to 13	n = 9 (5.0%)
7 to 10	n = 23 (12.6%)
5 to 6	n = 39 (21.4%)
2 to 4	n = 102 (56.0%)

n = 182 sample sites

SO4

Map 51