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**Ontario Geological Survey
Open File Report 6104**

**Eagle Lake Area
High-Density Regional
Lake Sediment and Water
Geochemical Survey,
Northwestern Ontario**

2005



ONTARIO GEOLOGICAL SURVEY

Open File Report 6104

Eagle Lake Area High-Density Regional Lake Sediment and Water Geochemical Survey, Northwestern Ontario

by

V.E. Felix

2005

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Miscellaneous Release—Data 145

Lake Sediment and Water Analytical Data for the Eagle Lake Area, Northwestern Ontario
by V.E. Felix.

Lake sediment geochemical and lake water quality (limnological) data, including quality control data, collected from a survey of 932 sites in the Eagle Lake area, are being released in conjunction with Open File Report 6104. Data are available as Microsoft® Excel 97 (.xls) files on one CD-ROM.

Abstract

The Ontario Geological Survey carried out a helicopter-supported high-density lake sediment and water geochemical survey of the Eagle Lake area of northwestern Ontario during the summer of 2002. The survey area is located approximately 300 km northwest of Thunder Bay and covers an area represented on National Topographic System (NTS) 1:50 000 scale map sheets 52 F/11, 52 F/13, 52 F/14 and 52 F/15. Lake sediment and/or water samples were collected from a total of 932 lake sites and analyzed for a suite of over 50 elements. Preliminary interpretation of these analyses indicates 13 geochemically anomalous areas, including anomalous results for Au, Pd, Pt, Cu, Ni, Mo, U and Zn. As of January 2005, many of these areas were available for staking. Digital data for this report are available separately as Miscellaneous Release—Data (MRD 145).

Eagle Lake Area High-Density Regional Lake Sediment and Water Geochemical Survey, Northwestern Ontario

V.E. Felix¹
Ontario Geological Survey
Open File Report 6104
2005

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Introduction

Field work for a high-density lake sediment and water geochemical survey for the Eagle Lake area was carried out during the periods June 17 to June 29, and August 8 to August 26, 2002. The survey area is located approximately 300 km northwest of Thunder Bay (Figure 1) and covers an area of approximately 4000 km². The survey area is represented on National Topographic System (NTS) 1:50 000 scale map sheets 52 F/11, 52 F/13, 52 F/14 and 52 F/15. Lake sediment and/or water samples were collected at a total of 932 sites, providing an average density of 1 sample per 4.3 km². Glaciolacustrine sediments, prevalent in the areas represented by map sheets 52 F/14 and 52 F/15, resulted in relatively low sample densities for these map areas of 1 sample per 8.4 km² and 10.5 km², respectively. The area represented by map sheets 52 F/11 and 52 F/13 have higher densities of 1 sample per 3.88 km² and 2.16 km², respectively, due to the rugged bedrock-controlled terrain.

The Eagle Lake area was selected for this type of survey for reasons including client interest in the area, geology with favourable mineral potential and minimal geochemical exploration data for the region. The present survey lies immediately adjacent to the Sturgeon Lake–Wabigoon Lake survey area (Russell 2004) and immediately south of the Perrault Falls lake sediment survey area (Ontario Geological Survey 2002a). The National Geochemical Reconnaissance (NGR) lake sediment program carried out by the Geological Survey of Canada in 1988 covered the western portion of the current survey area at an average sample density of 1 sample per 13 km² (Hornbrook and Friske 1989). The current program provides new regional geochemical data at a relatively high resolution.

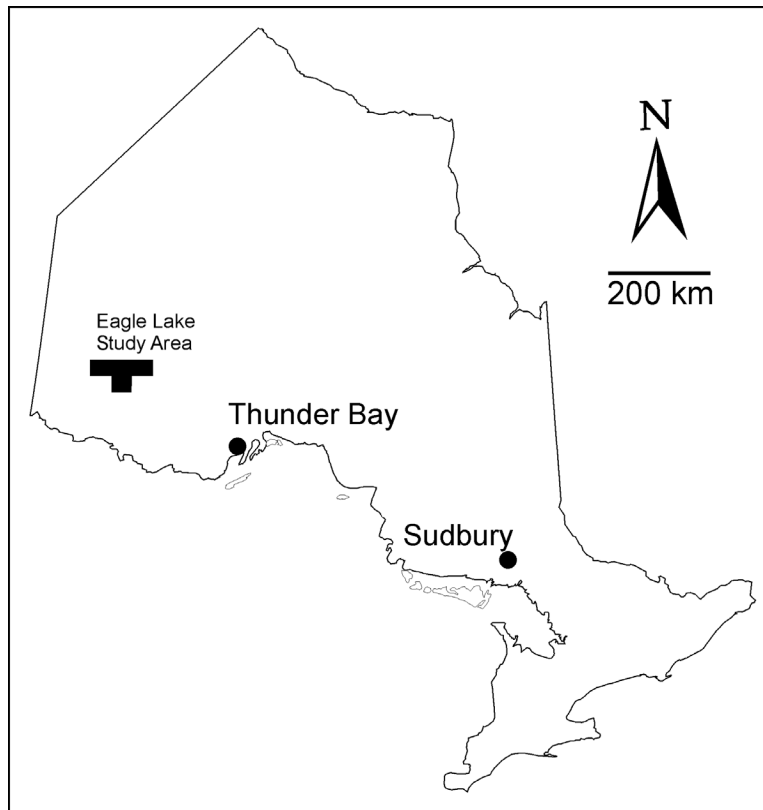


Figure 1. Location map of the Eagle Lake survey area.

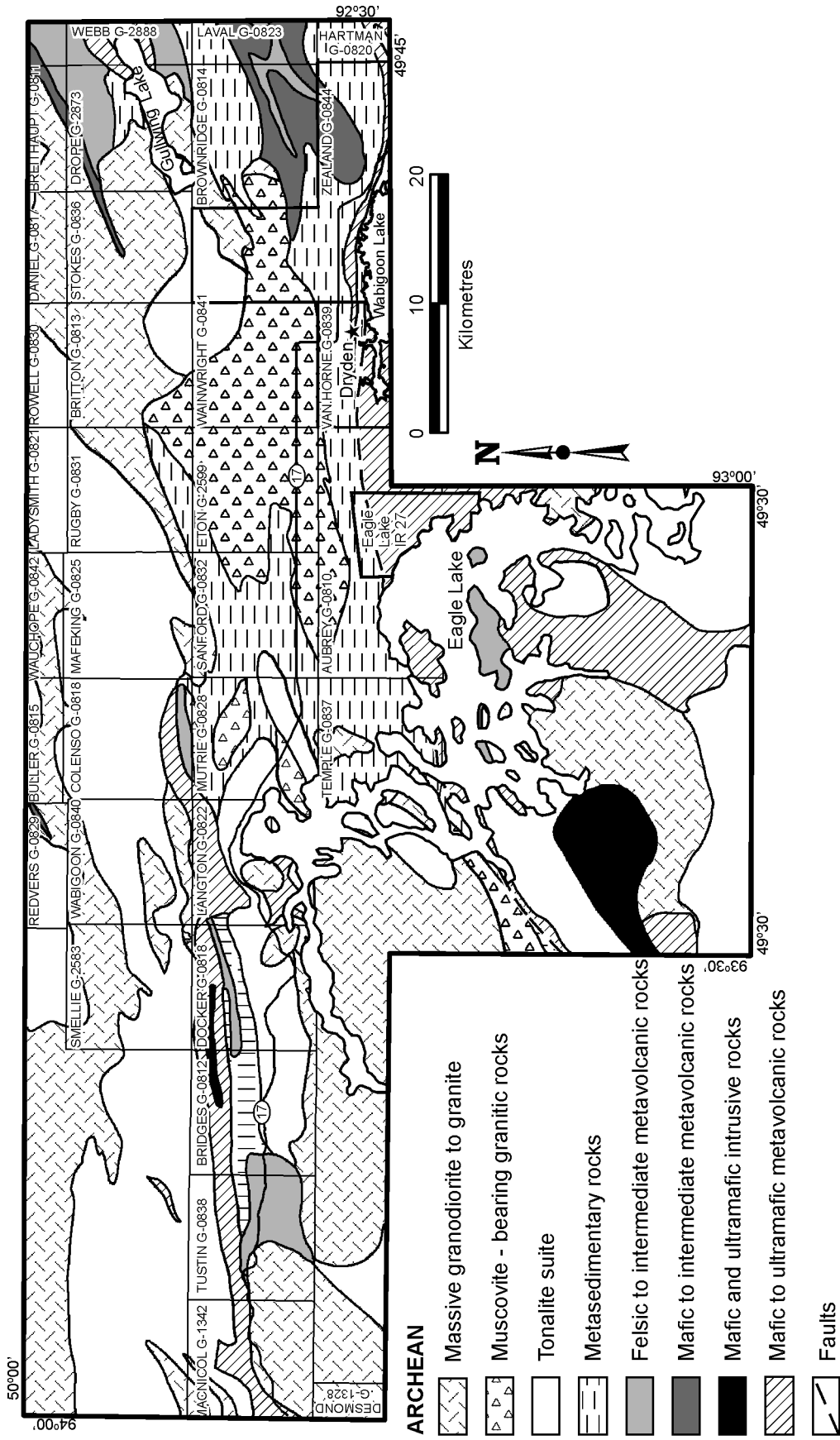


Figure 2. Generalized bedrock geology of the Eagle Lake study area (from Ontario Geological Survey 1991).

Regional Setting

BEDROCK GEOLOGY

The regional bedrock geology of the survey area is represented at a scale of 1:253 440 on an Ontario Geological Survey (OGS) Geological Compilation Series map (Blackburn 1981). In addition, a number of more detailed bedrock mapping surveys have been completed in the region. In the western part of the survey area, the townships of MacNicol, Tustin, Bridges and Docker, were mapped by Pryslak (1976) at a scale of 1:31 680. Breaks and Kuehner (1984) mapped the Eagle River–Ghost Lake area to the north and west of the town of Dryden at a scale of 1:31 680. Sutcliffe and Smith (1985) mapped the Mulcahy gabbro intrusion southwest of Eagle Lake. Berger (1990) mapped Laval and Hartman townships, located at the eastern edge of the area, at a scale of 1:20 000. More recently, Beakhouse (2000, 2001) began a multi-year mapping program to examine the geology and mineral potential of the Wabigoon Lake area, which is partially contained in the eastern portion of the survey area. Breaks, Selway and Tindle (2001) highlighted a number of regions within the present survey area with rare-element pegmatite potential.

Two distinct supracrustal belts occur in the survey area (Figure 2). In the Eagle Lake area, a belt of metavolcanic rocks form the western expression of the arcuate Eagle–Wabigoon–Manitou Lakes greenstone belt (Blackburn et al. 1991). Stratigraphy of the greenstone belt in the Eagle Lake area consists of a lower unit of Fe-Mg tholeiites (Eagle Lake volcanics), which is unconformably overlain by a mixed tholeiitic/calc-alkaline unit (Lower Wabigoon volcanics). This unit is, in turn, conformable with the overlying Upper Wabigoon volcanics, consisting of Fe-tholeiites and calc-alkaline rocks. The greenstone belt is intrusively bounded to the south by the Atikwa batholith and to the north by the Wabigoon fault. The Mulcahy Lake intrusion, a layered mafic to ultramafic intrusion, lies to the southwest of the volcanic belt. Ages obtained by Smith (1987) indicate that the Mulcahy Lake intrusion is younger than the volcanic assemblage, but predates emplacement of the Atikwa batholith.

In the western part of the survey area, the Vermilion Bay greenstone belt strikes east-northeast for approximately 58 km with a maximum width of about 6.4 km near Medicine Lake. This belt appears to be an extension of the metasedimentary and mafic to intermediate metavolcanic rocks of the Lake of the Woods greenstone belt in the Kenora area. The Vermilion Bay belt consists of mafic to intermediate metavolcanic flows and pyroclastic rocks, which are complexly interlayered with metasedimentary rocks composed of greywacke, calc-silicate gneiss, massive calc-silicate rocks and iron formation (Pryslak 1976). The metasedimentary and metavolcanic rocks are intruded by various dikes, sills and irregular bodies ranging in composition from felsic to ultramafic. The northern contact between the greenstone belt and the granitic rocks is interpreted to be the division between the Wabigoon Subprovince to the south and the Winnipeg River Subprovince to the north (Russell 2002). The southern part of the greenstone belt is intrusively bounded by the Dryberry batholith, a multi-phase granitic intrusion with ages ranging from 2716 to 2663 Ma.

The eastern part of the survey area, north of the Wabigoon fault, is characterized by alternating panels of metavolcanic and metasedimentary rocks. In the Thunder Lake area, wacke-siltstone of the Thunder Lake sediments is predominant in 2 separate areas separated along a portion of their strike length by a dominantly felsic volcanic unit (Beakhouse 2000). Thin magnetite ironstone layers are a minor component within the lower portion of the Thunder–Ghost Lake sediments. In the Ghost Lake area, the uppermost sediments are also interlayered with thin mafic metavolcanic units (Brownridge Volcanics)(Beakhouse 2001). The Ghost Lake batholith (2685 Ma) is a strongly peraluminous felsic intrusive rock associated with rare-element pegmatites.

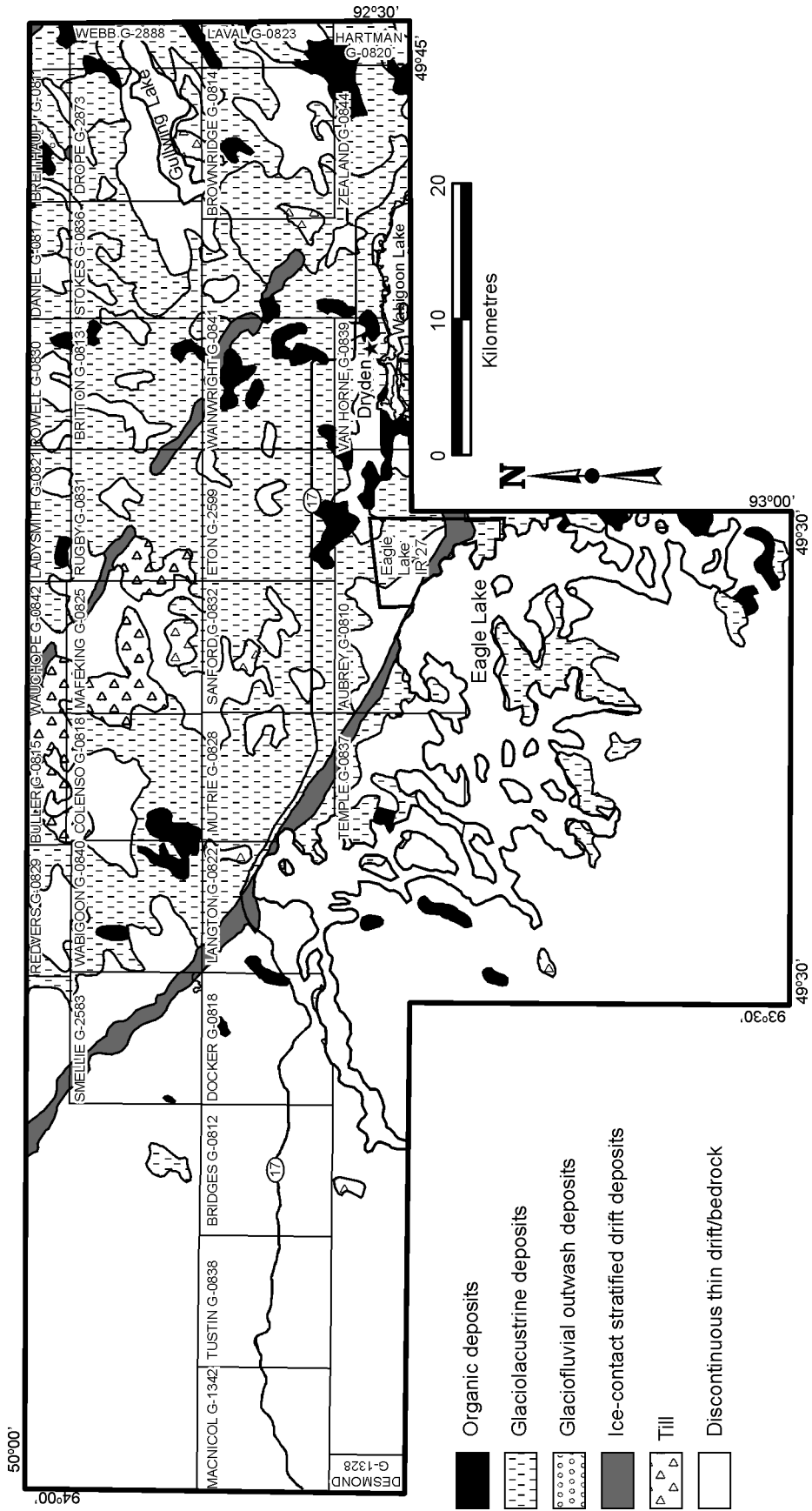


Figure 3. Generalized Quaternary geology of Eagle Lake study area (from Barnett et al. 1991).

PHYSIOGRAPHY AND QUATERNARY GEOLOGY

Engineering geology terrain maps have been produced for the area at a scale of 1:100 000 (Roed 1980a, 1980b). These maps, developed mainly from the interpretation of aerial photographs, comprise the most detailed Quaternary mapping for the area. Local relief in the survey area is variable, though generally less than 40 m. Topography in the survey area is controlled by the distribution of surficial sediments and differential erosion of the underlying bedrock.

A generalized Quaternary geology map for the survey area is shown in Figure 3. Glaciolacustrine clay, silt and sand of glacial Lake Agassiz form a major component of the Quaternary deposits in the area. Local thicknesses of these sediments produce areas of very gentle topography in the vicinity of Wabigoon and Dinorwic lakes, Minnitaki Lake and the English River. These lowland areas generally have a marked decrease in the density of lakes. The other significant surficial deposits in the area are the stratified sand and gravel deposits of the Hartmann and Lac Seul moraines, which strike southeast across the centre of the study area (Barnett 1992). Deposits of till, glaciofluvial outwash and recent organic material (peat and muck) are thin and discontinuous throughout the area and are separated by areas of knobby and ridged bedrock.

Methodology

SAMPLING METHODS

Sediment sampling was performed primarily by a two-person team from a float-equipped Bell 206B helicopter. However, where access was available and the number of samples warranted, some lakes were sampled from an aluminum boat with a 25-horsepower motor. An overall average of 13.5 lakes were sampled for each hour of helicopter time. The samples were collected using a gravity corer designed by the OGS. Samples were taken from depths >20 cm below the sediment–water interface (SWI) in order to minimize or avoid anthropogenic influences and SWI effects. These deeper sediments more accurately reflect the natural geochemical inputs, which may be traced back to local bedrock geology (Dyer 1998). The samples were extruded from the collection tube into breathable fabric bags and then placed in a sealable plastic bag until the end of the sampling run.

Lake water samples were taken simultaneously with the sediment samples. On lakes <3 m deep, water samples were collected at a depth of 0.5 m below the water surface, whereas on lakes deeper than 3 m, samples were collected at a depth of 2 m. A semi-automated water sampling apparatus, developed by the OGS, was used for the collection of samples. The apparatus consists of a submersible pump, a water quality meter (YSI) for measurement of parameters such as pH, temperature and conductivity, a sample bottle tray and a variety of hoses and valves. Water from the lake was pumped through the system in order to purge it prior to the collection of a sample and the recording of water quality data. The water samples were kept cool immediately following collection and were processed (filtered and acidified) within 24 hours of collection.

Sample site locations were recorded using a GPS receiver mounted in the cockpit of the helicopter. A customized database application operating from a pen-based computer was used to record the sediment sample information and descriptions. Water quality data were downloaded from the YSI using the program Ecowatch™.

SAMPLE PREPARATION AND ANALYTICAL METHODS

Sediment samples were allowed to partially air dry in porous collection bags in the field prior to delivery to the OGS Geoscience Laboratory (GeoLabs). A total of 877 sediment samples were submitted to the laboratory. The samples were freeze dried, partially pulverized in a ceramic ring mill and sieved to obtain the –80 mesh (<177 µm) size fraction.

Laboratory analysis by GeoLabs consisted of nitric-aqua regia digestion of 0.5 g of sample pulp followed by inductively coupled plasma mass spectrometry (ICP–MS) and inductively coupled plasma optical emission spectrometry (ICP–OES) for the determination of approximately 50 trace and major elements. Nitric-aqua regia digestion attacks all sample matrix constituents except for silicate minerals and is, therefore, considered a non-selective, relatively strong partial extractant (Dyer 1998). GeoLabs also performed determination of loss-on-ignition (LOI) at 500°C under an oxygen atmosphere using an automated gravimetric technique.

Instrumental neutron activation analysis (INAA) using epithermal irradiation was performed by an external laboratory. Approximately 10 g of each sample pulp was pressed into briquettes prior to analysis by instrumental neutron activation analysis (INAA) for gold and a suite of 26 other elements. There was sufficient material to analyze 875 samples by INAA.

An external laboratory was contracted to perform low-level Au and PGE analysis by fire assay with an ICP–MS finish. Due to budgetary constraints, only 147 out of 877 lake sediment samples or 17% of the total population were submitted for analysis. Because of the need to restrict the number of samples submitted, only those with elevated (>90th percentile) Ni and /or Cu were analyzed (i.e., >49 ppm Ni and/or >55 ppm Cu). In previous OGS lake sediment surveys, samples with anomalous levels of Pd and Pt often occur with an accompanying base metal signature (e.g., Cu, Ni). For example, the Lac des Iles–Black Sturgeon River area lake sediment survey resulted in the identification of 34 discrete anomalous areas containing Pd and/or Pt and of those, 25 also contained elevated to anomalous levels of Cu and/or Ni (Dyer and Russell 2002).

Water samples were passed through 0.45 µm syringe filters and acidified to 1% ultrapure nitric acid within 24 hours of collection. Analysis of water included direct aspiration ICP–MS to determine approximately 50 elements including major cation and anion species. A total of 914 water samples were submitted to the GeoLabs for analysis.

Quality Control (QC) Results

METHODS

Quality control was monitored through sample pulp duplicates and certified reference materials (“standards”) inserted into the sample sequence. Every 10th sediment sample submitted was a quality control (QC) sample. Each QC sediment sample consisted of either analytical (pulp) duplicates, certified reference standards (CRS) or an internal (OGS collected) bulk standard. Analytical pulp duplicates were prepared by halving 1 in 40 of the dried sample pulps and inserting them into the sample sequence. CANMET certified reference standards (LKSD-1 and LKSD-4, Lynch 1990) and 2 OGS internal standards were also inserted as dried pulps between the sample preparation and analysis stages. Every 20th sample was either a CRS or an OGS internal standard.

Analytical precision for each element was determined by plotting duplicate data on an X–Y chart and determining the variation of 95% of the data from a 1:1 ratio. Accuracy was determined by plotting the sequential values returned for certified reference standards inserted in the batch against a vertical scale of concentration and comparing this with the “provisional values” (Lynch 1990) for the standards. The mean and standard deviation of values returned for each standard were also compared with the provisional values.

Table 1 contains a summary of the lake sediment analytical data used to generate this report, including some basic statistics and estimates of precision for each element and coefficients of variation for the certified reference materials. A full listing of data used to prepare this table is contained in MRD 145 (published separately from this report).

Quality control results for lake waters are shown in Table 2. Quality of the analyses was monitored through the use of sample duplicates, certified reference standard SLRS-4 and blanks (distilled water).

GENERAL ASSESSMENT: LAKE SEDIMENTS

Inductively Coupled Plasma Mass Spectrometry and Inductively Coupled Plasma Optical Emission Spectrometry

In general, the quality of the ICP–MS and ICP–OES data sets is excellent. There are no problems worth noting other than for Hg. The sample and solution preparation (acid digest) employed by this survey were not optimal for Hg determination, however, the QC screening indicates the data set is acceptable for publication and is, therefore, included in this report and the digital data release. The estimated precision of ± 0.04 for Hg is somewhat better than in previously released lake sediment surveys.

Noise in the QC standards for the elements Hf, Nb, Sn and W can be attributed mostly to the natural low levels for these elements in lake sediment and the incomplete and varying digestion of the silicate phase within which these elements are most likely bound. This incomplete digestion is demonstrated by the low mean levels returned for many of the lithophile major and minor elements shown in the LKSD-1 and LKSD-4 results (*see* Table 1). For example, the certified level of titanium (Ti) in LKSD-1 is 3010 ppm obtained by total digestion (Lynch 1990). The mean result for Ti in LKSD-1 obtained by this study was 309 ppm via the “near total” aqua regia digestion.

The ICP–MS data for 5 lake sediment samples (Sites 632, 678, 703, 738 and 868) were removed from the data set due to laboratory QC issues. These samples do appear in the dot plots included in Appendix 2, but should be disregarded.

Instrumental Neutron Activation Analysis

Overall, the quality of the instrumental neutron activation analysis (INAA) was very good with the exception of Au. A meaningful quantitative assessment of the precision of Au was not possible due to the high number of analyses that were below the detection limit. Out of 41 duplicate pairs submitted for INAA, only 1 sample returned values above the detection limit of 2 ppb, and it was not reproduced in its associated duplicate. Significant noise in both the certified reference standards and internal OGS standards were observed and, therefore, caution should be used when interpreting the Au by INAA data. The accuracy of this data is also poor and is reflected in the high coefficients of variation as shown in Table 1.

The estimated precision of ± 1.3 ppm for Ta is elevated, but is not surprising due to the naturally low levels of this element in lake sediments and the lack of sensitivity of the INAA method.

Table 1. Eagle Lake area lake sediment data set, summary of elements analyzed by ICP, FA-ICP and INAA and quality control data, including estimates of precision.

Element	Analytical Method	Units	Lake Sediment				Estimated Precision	LKSD-1 Reference Standard			LKSD-4 Reference Standard		
			MDL	Median	RANGE			Certified Value	Mean Q.C. Result	Coefficient of variation (%)	Certified Value	Mean Q.C. Result	Coefficient of variation (%)
					Min	Max							
Ag	ICP-MS	ppm	0.04	0.11	<0.04	3.89	± 0.02	0.6	0.62	3.0	0.2	0.24	5.0
Al	ICP-OES	ppm	20	15354	255	34635	± 3500	41300	3847	12.2	31200	11453	7.0
As	INAA	ppm	0.5	2.7	0.5	105.0	± 1.4	40	38.0	2.0	16	16.5	3.1
Au	FA-ICP-MS	ppb	1	1	<1	20	n/a	5	12	133.2	2	-	-
Au	INAA	ppb	2	<2	<2	8	n/a	5	3	124.7	2	<2	93.5
Ba	ICP-MS	ppm	0.5	117.1	21.0	358.1	± 15	430	96.0	2.5	330	138.5	4.5
Be	ICP-MS	ppm	0.2	0.6	<0.2	10.0	± 0.1	1.1	0.1	0.0	1	0.5	5.9
Br	INAA	ppm	0.5	41.0	2.3	91.3	± 2	11	11.4	12.4	49	51.0	3.4
Ca	ICP-OES	ppm	500	6128	<500	25202	± 1200	77200	69934	2.5	12900	9541	4.2
Cd	ICP-MS	ppm	0.04	0.43	0.06	12.78	± 0.03	1.2	1.34	2.8	1.9	2.1	2.8
Ce	ICP-MS	ppm	0.2	77.7	9.4	300.0	± 5	27	18.1	8.2	48	40.1	3.7
Co	ICP-MS	ppm	0.04	9.28	<0.04	55.21	± 2	9	7.71	4.4	11	9.05	4.4
Cr	ICP-OES	ppm	1	29	6	110	± 9	12	13.3	11.2	21	19	6.6
Cs	ICP-MS	ppm	0.01	1.18	0.32	6.39	± 0.5	1.5	0.5	7.9	1.7	1.1	7.1
Cu	ICP-MS	ppm	0.4	32.9	<0.4	136.3	± 3	44	43.2	2.1	30	31	2.4
Dy	ICP-MS	ppm	0.02	2.67	0.37	12.01	± 0.02	-	1.72	9.5	-	2.95	2.5
Er	ICP-MS	ppm	0.02	1.36	0.16	6.72	± 0.2	-	0.97	10.0	-	1.70	2.5
Eu	ICP-MS	ppm	0.01	0.98	0.12	4.00	± 0.1	-	0.48	7.8	-	0.92	3.6
Fe	ICP-OES	ppm	20	15562	1338	135000	± 3500	18000	18574	5.4	27000	24914	4.6
Ga	ICP-MS	ppm	0.09	3.37	<0.09	10.00	± 1.4	-	2.11	8.8	-	4.18	6.6
Gd	ICP-MS	ppm	0.03	4.46	0.62	24.85	0.5	-	2.36	7.3	4.01	4.01	3.2
Hf	ICP-MS	ppm	0.02	0.03	<0.02	0.30	± 0.05	3.6	0.04	19.5	0.04	0.04	69.3
Hg	ICP-MS	ppm	0.08	0.09	<0.08	3	± 0.04	110	0.13	4.9	190	0.19	5.5
Ho	ICP-MS	ppm	0.006	0.51	0.06	2.36	± 0.05	-	0.35	9.3	0.6	0.60	2.7
K	ICP-OES	ppm	20	765	108	5457	± 600	9100	385	12.4	6600	842	10.8
La	ICP-MS	ppm	0.1	39.2	4.7	200.0	± 4	16	10.6	5.6	26	21.6	3.4
Li	ICP-OES	ppm	0.9	7.0	<0.9	135.0	± 4	7	3.6	14.4	12	7.47	11.7
LOI	Grav.	%	0.01	41.90	4.09	77.39	± 1	23.5	22.52	0.9	40.8	40.44	0.9
Lu	ICP-MS	ppm	0.005	0.17	0.02	1.00	± 0.02	0.4	0.14	8.4	0.5	0.25	3.7
Mg	ICP-OES	ppm	6	2653	<6	24772	± 750	10300	6333	5.0	5400	3841	6.1
Mn	ICP-OES	ppm	0.7	285	2	3884	± 60	460	410	4.9	430	396	3.9
Mo	ICP-MS	ppm	0.06	1.17	0.22	7.87	0.4	12	10.00	3.0	2	1.78	5.4
Na	ICP-OES	ppm	10	112	26	844	± 120	14800	272	23.1	5200	197	18.3
Nb	ICP-MS	ppm	0.04	0.91	0.13	3.40	± 0.6	7	0.62	36.9	9	1.05	12.1
Nd	ICP-MS	ppm	0.09	33.61	4.20	192.20	± 2	16	12.11	6.7	25	22.59	3.4
Ni	ICP-OES	ppm	1	26	4	150	± 4	11	15	8.8	32	34	4.7
P	ICP-OES	ppm	10	1182	79	4800	± 100	900	735	3.7	1300	1325	4.1
Pb	ICP-MS	ppm	0.3	7.1	2.0	126.2	± 1.5	84	82.9	2.6	93	94.2	2.1
Pd	FA-ICP-MS	ppb	0.1	0.7	<0.1	6.1	n/a	-	0.10	70.7	-	-	-
Pr	ICP-MS	ppm	0.03	9.23	1.13	40.00	± 1	-	2.91	6.8	-	5.75	3.4
Pt	FA-ICP-MS	ppb	0.1	0.5	<0.1	11.9	n/a	-	1.5	193.5	-	-	-
Rb	ICP-MS	ppm	0.06	11.87	<0.06	63.24	± 6	24	3.60	7.4	28	10.16	7.8
S	ICP-OES	ppm	20	2920	30	25613	± 100	15700	14936	2.3	9900	9514	3.8
Sb	ICP-MS	ppm	0.03	0.11	<0.03	6.04	± 0.02	1.2	0.63	9.7	1.5	1.17	23.4
Sc	ICP-OES	ppm	0.1	2.8	0.2	18.0	± 1.3	9	2.07	18.6	7	3.25	10.1
Sm	INAA	ppm	0.05	6.1	1.0	28.5	± 0.2	4	2.36	-	5	-	-
Sn	ICP-MS	ppm	0.7	<0.7	<0.7	20.0	± 0.75	16	3.3	3.6	5	3.2	18.7
Sr	ICP-MS	ppm	0.9	27.4	<0.9	121.2	± 7	250	67.0	2.8	110	40.5	4.0
Ta	INAA	ppm	0.5	<0.5	<0.5	1.9	± 1.3	0.3	-	-	0.4	-	-
Tb	ICP-MS	ppm	0.006	0.57	0.08	2.79	± 0.1	0.6	0.33	7.6	1.2	0.56	3.6
Th	ICP-MS	ppm	0.02	1.63	<0.02	20.05	± 1.8	2.2	1.36	13.9	5.1	1.84	7.5
Ti	ICP-OES	ppm	0.8	227	4	1808	± 260	3010	309	27.0	2270	403	14.0
Tl	ICP-MS	ppm	0.05	0.21	<0.05	1.00	± 0.03	-	0.22	6.1	-	0.44	5.8
Tm	ICP-MS	ppm	0.006	0.19	0.02	0.85	± 0.02	-	0.14	9.2	-	0.25	3.2
U	ICP-MS	ppm	0.03	3.74	0.27	90.00	± 1.0	9.7	9.08	2.4	31	30.47	1.9
V	ICP-OES	ppm	0.4	33.0	5.4	180.0	± 8	27	21	12.0	32	32	6.1
W	ICP-MS	ppm	0.2	<0.2	<0.2	16.1	± 0.12	<4	0.59	15.0	<4	0.24	21.3
Y	ICP-MS	ppm	0.05	13.49	0.59	75.47	± 1	19	10.30	8.3	23	17.13	3.2
Yb	ICP-MS	ppm	0.02	1.17	0.14	5.38	± 0.1	2	0.87	9.7	2	1.60	3.5
Zn	ICP-OES	ppm	1	74	14	730	± 8	337	315	2.3	189	183	3.5
Zr	ICP-MS	ppm	0.4	0.91	0.20	20.00	± 3	134	1.2	30.4	105	0.9	102.4

Notes:

1. ICP-MS= Inductively Coupled Plasma Mass Spectroscopy (aqua-regia digestion)
2. ICP-OES= Inductively Coupled Plasma Optical Emission Spectroscopy (aqua-regia digestion)
3. INAA= Instrumental neutron activation analysis.
4. MDL=method detection limit.
5. Estimated precision at 95% confidence level; ICP-MS, OES and INAA elements based on 41 duplicate pairs.
6. For lake sediments analysis by ICP-MS and ICP-OES n=877, FA-ICP-MS n=147, INAA n=875.
7. Only lake sediments with elevated (>90th percentile) Ni and/or Cu were analysed for Au, Pd and Pt. by FA-ICP-MS (n=147).
8. Q.C. Result = Average value obtained, Eagle Lake area survey
9. Coefficient of variation at one standard deviation (68% confidence level)
10. LKSD-1 and LKSD-4 are Canmet certified reference materials; For ICP elements, quoted reference values for Ag, As, Cd, Co, Cr, Cu, Fe, Hg, Mn, Mo, Ni, Pb, Sb, V, Zn determined by partial digestion; all other ICP elements determined with total digestion. For INAA elements, quoted reference values for LKSD-1 and LKSD-4 are from total digestion methods.
11. For analysis of LKSD-1 and LKSD-4 by ICP-MS, OES and INAA, n=18 (LKSD-1) and n=17 (LKSD-4). For analysis by FA-ICP-MS, n=4 (LKSD-1).

Table 2. Eagle Lake area lake water data set, summary of elements analyzed by ICP–MS and quality control data, including estimates of precision.

Element	Analytical Method	Units	MDL	Lake water (n=914)			Estimated Precision	SLRS-4 (n=11)		
				Median	RANGE			Certified Value	Mean Q.C. Result	Coefficient of variation (%)
					Min	Max				
Ag	ICP-MS	ppb	0.03	<0.03	<0.03	0.04	n/a	-	<0.03	0.0
Al	ICP-MS	ppb	0.1	47.7	2.8	350	±22.3	54	50.5	3.5
Ba	ICP-MS	ppb	0.03	6.61	0.57	179.38	±1.05	12.2	13.05	2.0
Be	ICP-MS	ppb	0.008	0.008	<0.008	0.246	±0.008	0.007	<0.008	53.7
Ca	ICP-MS	ppb	200	3243	386	25110	±963	6200	5513	4.5
Cd	ICP-MS	ppb	0.002	0.01	<0.002	1.29	±0.022	0.012	0.017	18.6
Ce	ICP-MS	ppb	0.0002	0.2218	0.0052	3.4294	±0.1491	0.012	0.371	1.3
Co	ICP-MS	ppb	0.006	0.022	<0.006	2.28	±0.015	0.033	0.031	5.7
Cr	ICP-MS	ppb	0.004	0.252	0.040	1.885	±0.091	0.33	0.306	6.6
Cs	ICP-MS	ppb	0.0003	0.0065	0.0013	0.6154	±0.0046	-	0.0067	7.1
Cu	ICP-MS	ppb	0.06	0.93	0.23	188.70	±3.5	1.81	2.03	7.5
Dy	ICP-MS	ppb	0.001	0.014	<0.001	0.121	±0.005	-	0.023	5.1
Er	ICP-MS	ppb	0.001	0.009	<0.001	0.07	±0.004	-	0.014	3.7
Eu	ICP-MS	ppb	0.0007	0.0041	<0.0007	0.0425	±0.0019	-	<0.0007	10.9
Fe	ICP-MS	ppb	0.4	75.6	2.8	1392.5	±24.9	103	99	3.5
Ga	ICP-MS	ppb	0.001	0.006	<0.001	0.104	±0.004	-	0.012	10.5
Gd	ICP-MS	ppb	0.001	0.019	<0.001	0.154	±0.009	-	0.033	8.5
Ho	ICP-MS	ppb	0.003	0.003	<0.003	0.03	±0.0015	-	0.005	9.9
La	ICP-MS	ppb	0.001	0.159	0.005	2.108	±0.086	-	0.298	2.4
Li	ICP-MS	ppb	0.03	0.6	0.1	2.7	±0.15	-	0.42	4.7
Lu	ICP-MS	ppb	0.0003	0.0014	<0.0003	0.0097	±0.0008	-	0.0020	12.7
Mg	ICP-MS	ppb	50	855	148	>4000	±358	1600	1464	3.1
Mn	ICP-MS	ppb	0.08	1.40	0.13	150	±2.43	3.37	3.29	4.1
Mo	ICP-MS	ppb	0.005	0.034	<0.005	0.919	±0.039	0.21	0.198	7.5
Nd	ICP-MS	ppb	0.004	0.146	<0.004	1.819	±0.057	-	0.275	2.6
Ni	ICP-MS	ppb	0.08	0.31	<0.08	5.16	±0.14	0.67	0.56	7.3
Pb	ICP-MS	ppb	0.002	0.121	0.009	14.591	±0.104	0.086	0.095	6.5
Pr	ICP-MS	ppb	0.0003	0.038	0.0009	0.4969	±0.00155	-	0.0710	2.7
Rb	ICP-MS	ppb	0.07	1.60	0.1	9.84	±0.27	-	1.50	3.7
Sb	ICP-MS	ppb	0.003	0.034	0.012	0.178	±0.008	0.23	0.259	3.0
Sc	ICP-MS	ppb	0.06	0.36	<0.06	1.95	±0.14	-	0.80	10.2
Sm	ICP-MS	ppb	0.002	0.025	<0.002	0.259	±0.009	-	0.058	3.1
Sn	ICP-MS	ppb	0.004	<0.004	<0.004	0.069	±0.011	-	0.006	19.2
Sr	ICP-MS	ppb	2	13	<2	66	±2	26.3	27.5	3.4
Tb	ICP-MS	ppb	0.0004	0.0026	<0.0004	0.022	±0.0014	-	0.0045	7.5
Th	ICP-MS	ppb	0.001	0.0245	<0.001	0.157	±0.016	-	0.010	15.7
Ti	ICP-MS	ppb	0.001	0.6715	0.076	11.721	±0.341	-	1.553	3.6
Tl	ICP-MS	ppb	0.0002	0.0044	0.0013	0.035	±0.001	-	0.0069	8.0
Tm	ICP-MS	ppb	0.0003	0.0013	<0.0003	0.0101	±0.0007	-	0.0020	11.5
U	ICP-MS	ppb	0.0007	0.048	0.0016	1.5039	±0.0103	0.050	0.0495	3.0
V	ICP-MS	ppb	0.03	0.17	<0.03	2.34	±0.06	0.32	0.33	3.8
W	ICP-MS	ppb	0.0007	0.0016	<0.0007	0.0323	±0.0014	-	0.0052	21.4
Y	ICP-MS	ppb	0.003	0.086	0.003	0.658	±0.022	-	0.135	2.2
Yb	ICP-MS	ppb	0.0008	0.009	<0.0008	0.07	±0.0038	-	0.0123	8.0
Zn	ICP-MS	ppb	0.1	0.9	0.1	142.9	±3.8	0.93	1.3	10.7
Zr	ICP-MS	ppb	0.004	0.134	0.005	6.796	±0.104	-	0.088	4.0

Notes:

1. ICP-MS= Inductively Coupled Plasma Mass Spectroscopy.
2. MDL=method detection limit.
3. Estimated precision at 95% confidence level based on results of 70 duplicate pairs.
4. SLRS-4= Natona Research Council. St. Lawrence River Standard-4; certified reference standard

Fire Assay–Inductively Coupled Plasma Mass Spectrometry

Only 147 out of 877 lake sediment samples were submitted for analysis by FA–ICP–MS for Au, Pd and Pt. This represents approximately 17% of the entire population of lake sediment samples collected in the survey area. Only samples with elevated (>90th percentile) Ni and/or Cu were analyzed (i.e., >49 ppm Ni and/or >55 ppm Cu) were analyzed by this method. This should be kept in mind when interpreting the FA–ICP–MS data set, as the statistical data (i.e., minimum, maximum and median values) of this discrete data subset may not be representative of the entire lake sediment population of the study area. Due to the smaller size of the data set (and fewer QC duplicate pairs) estimated precision at the 95% confidence level could not be reasonably calculated for Au, Pd and Pt.

However, review of the performance of both OGS and certified reference material indicates acceptable accuracy and no significant spikes or analytical drift is apparent for these elements. From previous OGS experience with the external lab that conducted the analyses, the precision of Au, Pd and Pt by FA–ICP–MS analysis has typically been in the range of ± 2 to 3 ppb, ± 1 to 2 ppb and ± 1.5 to 2 ppb, respectively. It is assumed that a similar level of reproducibility has been achieved and the estimated precision to be comparable to these historical values.

GENERAL ASSESSMENT: LAKE WATERS

In general, the quality of the lake water data was excellent with no significant quality control problems in the elements reported.

A meaningful quantitative assessment of the precision of Ag was not possible due to the high number of analyses that were below the detection limit. Out of 70 duplicate pairs submitted, only 1 sample returned values above the detection limit of 0.03 ppb and it was not reproduced in its associated duplicate. Performance of the certified reference standard SLRS-4 and blanks indicates, however, that the data are acceptable for release.

The full lake water data set has been included in MRD 145.

Geochemical Data Interpretation

Factors to consider when assessing the possible significance and validity of lake sediment geochemical anomalies are as follows:

1. Correlation with geology

In mineral exploration, correlation with geology is the most important factor when assessing the significance of a surficial geochemical anomaly, however, its relative importance declines as the known level of detail of the geology declines. Many of the geochemical anomalies discussed will help focus and prioritize future geological investigations.

2. Multi-site anomalies

Multi-site anomalies provide separate verification of the “anomalousness” of a given area and provide some insurance against non-systematic errors in sample quality, collection, preparation or analysis. However, as samples are collected, prepared and analyzed in sequence, a uniform and numerically sequential anomaly may be the result of a systematic analytical or sample preparation error. This may

produce an apparent geographic grouping of fairly uniform concentrations in one, or possibly several, elements. As mentioned above, every effort has been made to detect this kind of problem but the user is reminded to consider all available data when assessing the importance of an anomaly.

3. Multi-element anomalies

Multi-element anomalies with geologically reasonable elemental assemblages are useful in assessing the importance of many anomalies. For example, Pt and Pd, which are relatively immobile in the surficial environment compared to base metals such as Cu, Cr, Ni, Pb and Zn, would not be expected to be found in anomalous levels in lake sediment without an accompanying base metal signature. Gold on the other hand, can occur in quartz vein deposits with little or no associated base metals; therefore, a gold anomaly by itself can be significant. A gold anomaly with an associated base metal signature may be even more significant. However, certain multi-element anomalies (e.g., Mo + Zn) can sometimes result from limnological factors (e.g., redox conditions related to deep lakes, relative level of organic material in the sediment).

4. Magnitude of the anomaly

The magnitude of an anomaly, perhaps surprisingly, is one of the least important assessment criteria. Magnitude depends not only on the size of a deposit but on its distance from the lake, the presence and effectiveness of sinks between the source and lake, the limno-geochemical conditions in the lake, the weatherability of the deposit and the nature of the surficial deposits (i.e., level of carbonate). The weatherability depends on factors such as exposure and/or depth of burial and specific mineralogy of the source. These factors combine to make magnitude an unreliable estimate of the importance of an anomaly except in extreme cases or in cases where multiple samples and/or media corroborate its importance.

5. Correlation with surficial geology

Unconsolidated deposits can, under certain circumstances, cause a greater impact on the chemistry of lake media than can bedrock. Carbonate-rich eskers and thick ice-contact stratified drift deposits often result in nearby lakes having relatively hard, alkaline waters. This type of lake water provides a geochemical matrix for trace elements which is very different to that of most shield lakes which are mildly acidic and organic-dominated. In general, most metals are relatively immobile in such alkaline conditions, therefore geochemical anomalies might be considered more significant and possibly relatively close to source.

Dilution or addition to the trace metal signature in sediments can occur due to the presence of fine-grained unconsolidated material such as clay. Often a spatial relationship can be seen between lake sediment anomalies and glaciofluvial deposits such as eskers. In general, the sample collection and preparation protocols employed by the OGS, when properly carried out, minimize the deleterious effects of exotic inorganic materials which may be present in the survey areas.

6. Redox conditions, lake depth and organic content

Not all spatial trends in geochemistry are due to lithological or mineralogical factors. The solubility of trace metals depends to a large extent on the geochemical matrix and, in particular, on pH and oxidation–reduction (redox) conditions. Redox conditions in a lake are usually controlled by thermal conditions which, in turn, are controlled by lake morphology and lake depth. If conditions are suitable for an element to preferentially partition into the lake sediment, factors that may influence (enhance) the concentration of the element include the abundance of Fe, Mn and organic material. The mechanisms that may lead to “false anomalies” include sorption (scavenging) by hydrous oxides

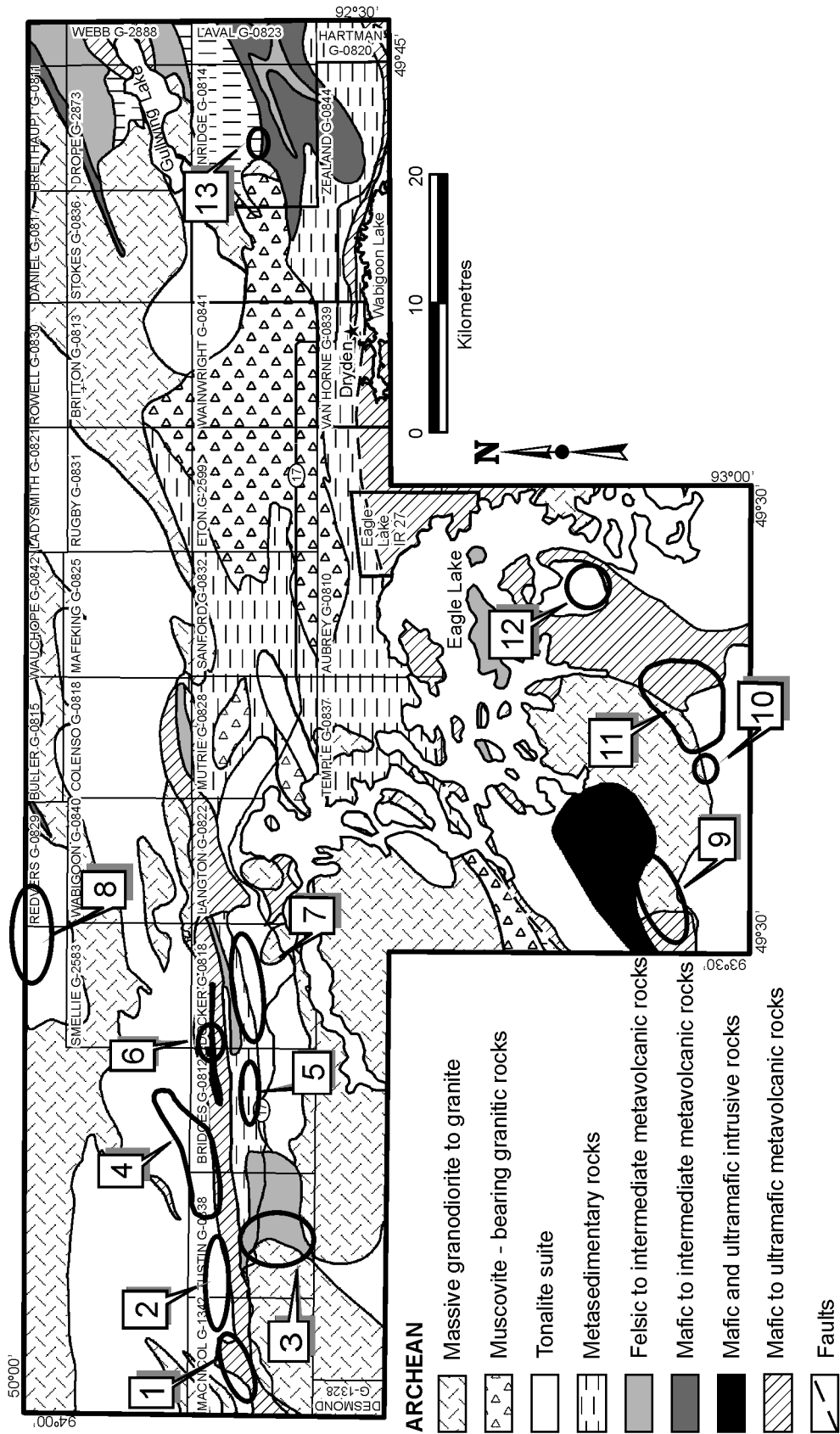


Figure 4. Location of selected geochemically anomalous lake sediment areas.

of Fe and Mn and the affinity of some elements to form organo-metallic complexes. Enrichment of some elements in the shallow (surface to 10 cm deep) sediment can occur due to the upward migration and precipitation or concentration of Fe and Mn (and other trace elements such as Co, Pb, Mo and Zn originally co-precipitated with Fe and Mn). The OGS sampling technique avoids the surface sediment and targets the deep (>20 cm) sediment thereby reducing or minimizing the effects Fe, Mn and base metal enrichment that may occur in the surface sediment, whether by redox cycling or by anthropogenic input. This assumes a similar sedimentation rate in all of the sampled lakes and that the lake sediments deposited over the past several hundred years being undisturbed. This may not always be true. Sedimentation rates can vary depending on the energy of and the input to the depositional environment. Other factors to consider are sediment slumpage and/or mudslides, the effects of wavebase and the activities of animals. Therefore, the inadvertent collection of some “mixed” (shallow and deep sediment) samples is unavoidable.

Discussion of Regional Patterns

LIMNOLOGICAL PARAMETERS

Over the entire survey area, water conductivities range from less than 20 to 210 $\mu\text{S}/\text{cm}$, with an overall average of 26 $\mu\text{S}/\text{cm}$. Values of high conductivity occur in areas underlain by bedrock mapped as either metavolcanic or metasedimentary rocks. The lower values of the data set occur in primarily granitic bedrock areas. A cluster of sample sites with high electrical conductivity values located along Highway 17 in MacNicol and Tustin townships suggest definite influence from contaminants (road salt, etc.).

Values for pH in the study area range from 4.38 to 9.00, with an average of 6.83. Elevated pH is coincident, in part, with glaciolacustrine deposits in the central and eastern portions of the survey area. In the northwest, elevated values of pH may be related to glaciofluvial deposits of the Lac Seul moraine. For the most part, the landscape of the study area is characterized by neutral to slightly acidic pH conditions, which are amenable for hydromorphic dispersion of most trace elements into the lake basins.

The average lake depth for the study area was 7.9 m. An obvious pattern of deeper lakes exists in the western and southwestern portion of the survey area where the terrain is bedrock dominated.

LAKE SEDIMENT GEOCHEMISTRY

The lake sediment anomalies shown in Figure 4 and discussed in the following section are those which are of greatest interest to exploration. The selection is based not only on the geochemical results, but also takes into account such factors as the geology and regional geophysics. In some areas of the study area, sample site density was relatively poor; therefore, this survey was not able to geochemically assess all of the drainage catchments. In addition, since only a small portion of the total number of samples were submitted for gold and PGE analysis, the results of this survey cannot be considered exhaustive in terms of outlining or identifying all gold and/or PGE prospective areas. When following up the results of this survey, the reader is encouraged to consider pathfinder elements, such as copper, which is associated with gold occurrences in the Eagle Lake survey area. The following discussion is not exhaustive and the reader is encouraged to undertake further investigation utilizing all available exploration data sets.

Proportional dot maps for LOI, lake depth, pH and electrical conductivity were plotted on a generalized bedrock geology map of the study area and are shown in Appendix 1. Proportional dot maps of analytical results for Ag, As, Au (FA-ICP-MS and INAA), Be, Ca, Cd, Co, Cr, Cs, Cu, Fe, Ga, Li,

Mn, Mo, Nb, Ni, Pb, Pd, Pt, REEs, Sb, Th, U, V, W and Zn are contained in Appendix 2. Appendix 3 contains a listing of lake sediment analytical data for these elements. In this report, samples with less than 10% LOI (approximately 2% of the data set) were not included in the data used for the production of the geochemical dot plots in Appendix 2. Samples with a low amount of organic matter tend to suppress the trace element signature due to the relative abundance of resistant quartz- and feldspar-rich material. Exceptions to this may include PGEs, which may show anomalous results in low-organic samples, especially when those samples were collected in the vicinity of mafic to ultramafic bedrock. All data, regardless of LOI value, have been included with the digital data released in conjunction with this report.

For most elements, concentrations exceeding the 90th percentile of the data set are defined as “elevated”, concentrations greater than the 95th percentile are “anomalous” and concentrations greater than the 98th percentile are “highly anomalous”. In some cases, precision estimates prohibited using these cut-off levels, so readers are encouraged to consult the legend that is included with each figure. Elemental concentrations of Au exceeding 7 ppb for the INAA and FA-ICP-MS data sets are considered to be of interest.

As of January 2005, many of the areas discussed in this report were available for staking. The approximate state of land tenure for the study area is shown in Figure 5. Readers are referred to the MNDM Provincial Recording Office for an up-to-date and precise description of the availability of land for staking. Sites referred to in the following discussion can be found on the sample location map (Figure 6, back pocket).

Description of Anomalous Areas

1. Willard Lake – Bruin Lake area (MacNicol Township)

U, ±Ag, ±Be, ±Cd, ±Co, ±Fe, ±Mo, ±Mn, ±Pb, ±REEs, ±Sb, ±V, ±W, ±Zn

Sites: 516, 518, 531, 533–535, 539, 991–993

This area is characterized by highly anomalous U at all 10 sample sites with values ranging from 29.8 to 77.6 ppm. Willard Lake was also sampled by the Geological Survey of Canada (GSC) (Hornbrook and Friske 1989) and returned a value of 39.4 ppm U. The Kenoratomic uranium occurrence lies immediately southeast of site 535. As well, the Richard Lake uranium prospect is located less than 100 m to the west of site 533 (OGS 2002b). Site 533 also returned highly anomalous levels of both Sb (0.32 ppm) and Pb (19.7 ppm). Several sites east and south of this area also had elevated levels of uranium.

Sites 991 and 992 located at the western end of Willard Lake also presented anomalous to highly anomalous levels of Be, Co, Mo, W, Fe, REEs and Mn. Other significant results include elevated to anomalous Sb at sites 516, 518 and 533 (0.20, 0.21 and 0.32 ppm, respectively) and anomalous Ag (0.22 ppm) at site 534.

Pryslak (1976) mapped the bedrock geology of this area as an east-trending metavolcanic-metasedimentary belt. The metavolcanic rocks, which form about 75 percent of this belt, vary in composition from mafic to intermediate, and consist of flows and pyroclastic deposits. Metasediments form the remaining 20%, and are mostly of clastic origin, except for minor amounts of metamorphosed iron formation.

Uranium occurrences in this area are associated with pegmatite.

As of January 2005, this area was open for staking, with the exception of the area around sites 533 to 535.

2. South of Linklater Lake (MacNicol and Tustin townships)

U, Cu, ±Au, ±Cd, ±Ni, ±Ag, ±Mo, ±Cs, ±Fe, ±Mn, ±Co, ±REEs, ±V, ±W, ±Zn, ±Pb

Sites: 515, 752–754

All 4 sites in this area returned elevated to anomalous values of U (19.1 to 63.4 ppm) and Cu (57.5 to 120.8 ppm). The copper value of 120.8 ppm at Site 754 was the 5th highest in the survey area. Three MDI uranium occurrences lie immediately south of this anomalous area (OGS 2002b).

Site 515 returned anomalous Au (11.9 ppb) by fire assay, the second highest gold value in the survey area.

Site 753 also returned elevated Cu and anomalous values of Ag, Cs, Cd, Co, Mn, Fe, W, Mo, REEs, V and Zn. Site 515 had a similar signature and returned anomalous values of Ag, Co, Mn, Fe, W, Pb, Mo, REEs, V and Zn.

The bedrock geology underlying this area was mapped by Pryslak (1976) as mafic to intermediate metavolcanic rocks. This anomalous area lies just south of the contact between the Wabigoon Subprovince and the granitic rocks of the Winnipeg River Subprovince to the north.

Enrichment of the lithophile elements in this area may be explained by the presence of rare-element pegmatite types and uranium- and thorium-enriched pegmatites that are associated with Late Archean granitic plutonism in the Dryden area.

This area was available for staking as of January 2005.

3. Windermere Lake area (Tustin Township)

±U, ±Ni, ±Cu, ±Zn, ±Cr, ±Ag, ±Au

Sites: 766–769, 771–773, 775, 777, 782

This area was identified primarily due to the presence of several lakes with anomalous uranium values, but also features 3 sites with anomalous Ni values. Sites 771 and 782 were single-site uranium anomalies with values of 50.2 and 36.3 ppm U, respectively. Uranium at the remaining sites ranged from 21.9 to 59.9 ppm U.

Anomalous values of Ni were returned from sites 766, 769 and 777 with values of 150, 57 and 70 ppm, respectively. The Ni value of 150 ppm at Site 766 was the highest in the survey area. Site 766 also contained the 5th highest value of Cr in the survey area (85 ppm), as well as being anomalous in Ag, Cu and Zn. Elevated to anomalous Ag was also found at sites 775 (0.19 ppm) and 772 (0.26 ppm).

Also of interest is the presence of Au by fire assay (9.8 ppb) at site 772.

The general bedrock geology underlying this area consists of felsic to intermediate metavolcanic rocks. The Dryberry granitic batholith occurs just south of this area. The presence of uranium anomalies suggests that uranium-bearing pegmatites may occur within the drainage catchments of this anomalous area. The Ni-Cu-Cr signature suggests that mafic to ultramafic rocks (gabbro and peridotite) are present within the intermediate to felsic metavolcanic rock package.

This area was available for staking as of January 2005.

4. Balmain Lake area (Tustin and Bridges Townships) U, Mo, ±Be, ±REEs, ±W, ±Co, ±Mn, ±Ag, ±Fe
Sites: 844–845, 847–848, 856

All 5 sites in this area returned both anomalous U (41.1 to 90 ppm) and Mo (2.9 to 5.7 ppm). The highlight of this area is site 845, which has the highest U value in the survey area (90 ppm) accompanied by a strong Mo anomaly (3.5 ppm).

Other interesting results include elevated to anomalous Be at all sites in this area, with the exception of 845 and elevated Fe at sites 847-848.

This area overlies the northern contact between the Vermilion Bay greenstone belt and granitic rocks to the north. This area is interpreted to be the division between the Wabigoon Subprovince to the south and the Winnipeg River Subprovince to the north (Russell 2002).

This area was open for staking as of January 2005.

5. Game Lake area (Bridges Township) Zn, Ag, Cd, ±Au, ±Cu, ±Pb, ±Ni, ±W, ±Sb
Sites: 817, 837–839, 861

This area consists of a fairly tight cluster of highly anomalous zinc and silver results. Anomalous zinc values ranged from 198 ppm Zn at Site 861 to 730 ppm Zn at Site 837. The highest Ag value came from Site 817 (0.69 ppm). Exploration activity by Rio Algom confirmed the presence of Ag in 3 drill holes surrounding this site (OGS 2002b). As well, the Crabclaw Lake Southwest Zinc occurrence is located west of this area. Two silver occurrences and a silver-copper occurrence are also located north of Site 817.

Site 817 also features a modest Au anomaly (8 ppb by INAA), not reproduced by FA analysis. A sample from a drill hole located approximately 1 km northeast of this site and within the same drainage catchment returned between 500 to 3000 ppb Au (OGS 2002b). This suggests that the result of 8 ppb Au is valid and may be related to the occurrence of Au in bedrock.

Site 838 has an anomalous Ni value of 83 ppm and Cu value of 121 ppm. Sites 861 and 837 also returned anomalous values of copper 63 and 67 ppm, respectively.

This area was mapped by Pryslak (1976) as fine- to coarse-grained metasediments with the grain size generally increasing toward the granitic Dryberry batholith that underlies the area to the south.

As of January 2005, this area was unavailable for staking.

6. East of Cobble Lake area (Bridges and Docker townships) Cu, ±Au, ±Cs, ±Cd, ±As
Sites: 863, 865–866

In this anomalous area, located east of Cobble Lake, copper is elevated to anomalous at all 3 sites. Copper values were strongly anomalous (above the 98th percentile) at sites 863 and 866 (95 and 107 ppm Cu, respectively). Also of interest is a Au value of 7 ppb (FA-ICP-MS) returned from site 863.

The bedrock geology, which underlies sites 863 and 866, is mapped as mafic and ultramafic intrusive rocks that have intruded the surrounding metavolcanic-metasedimentary belt (Pryslak 1976). Early felsic intrusive rocks underlie site 865.

The area surrounding sites 865 and 866 were available for staking as of January 2005.

7. Kimber Lake area (Docker Township) U, ±Mo, ±Be, ±Cd, ±Li

Sites: 873, 875–879

These 6 sites, located on Kimber Lake and lakes farther east, all returned elevated to anomalous values of U in the range of 23.5 to 65.2 ppm. Sites 875 and 876 also contained elevated and anomalous Mo (2.4 ppm and 3.4 ppm, respectively). Beryllium was elevated at sites 875 and 877. The Kimber Lake uranium occurrence is located east of site 873.

The bedrock geology in this area was mapped by Pryslak (1976) as felsic intrusive rocks of the Dryberry batholith. Migmatite is common along the contacts with the metavolcanic-metasedimentary belt to the north.

As of January 2005, the area north of site 873 was unavailable for staking. The remainder of this anomalous area, however, was open for claim staking.

8. Bowden Lake area (Redvers Township) Ni, Th, Cr, ±Ag, ±Zn, ±Li, ±REEs

Sites: 191–199, 201

All 10 sites located on Bowden and Yellow lakes in Redvers Township returned elevated to anomalous levels of Ni, Th and Cr. Sites 191, 193, 195, 196 and 201 also presented elevated Ag.

The bedrock was mapped by Blackburn (1981) as felsic and intermediate intrusive rocks. An east-trending fault structure cuts through this area.

The area west of site 195 was available for staking as of January 2005.

9. Northwest of Line Lake area ±Cu, ±Mn, ±V

Sites: 676, 677, 679, 681, 684, 917

This area is characterized by elevated to anomalous levels of Cu at all sites. Sites 676, 677, 679, 684 and 917 were single element anomalies with Cu values of 78, 67, 54, 59 and 60 ppm, respectively. Site 681 returned the highest value of Cu (95 ppm) in this area as well as elevated Mn (643 ppm) and V (64 ppm). Sites 676 and 681 were also sampled by the GSC (Hornbrook and Friske 1989), with reported results of 92 and 100 ppm Cu, respectively.

Site 678, located southwest of Site 681 returned anomalous values of Ag, W, Sb, Mo, Cd and Be. These high values were found to be related to an isolated QC issue at the laboratory and should be disregarded. The ICP–MS data for this sample was removed from Appendix 3 and the MRD, but is shown on the dot plots included in Appendix 2. Other methods of analysis (ICP–OES, INAA and FA–ICP–MS) were not affected.

The general bedrock geology underlying this area consists of mafic metavolcanic rocks of the Kagaki–Rowan greenstone belt, in contact with granitic rocks of the Atikwa batholith to the west. The Mulcahy Lake gabbro intrusion lies to the north just outside of this anomalous area.

Atikwa Minerals Limited is currently carrying out exploration work for Cu, Ni and PGMs at the Mulcahy property in the Line Lake area (Lichtblau et al. 2004). Emerald Fields Resource Corporation also holds active claims in the area. Previous work in the area includes 9 DDHs drilled by Falconbridge Nickel Mines Ltd. near the contact between the Mulcahy gabbro and metavolcanic contact.

The presence of elevated to anomalous Cu over the metavolcanic rocks may indicate the presence of additional gabbro lenses or could be related to shearing and/or alteration of the metavolcanic rocks.

As of January 2005, this area was available for staking.

10. East of Oldcamp Lake

Au

Site: 601

This is a single-site, single-element gold anomaly. Site 601 returned 8 ppb Au by INAA. Gold analysis by FA-ICP-MS was not carried out on this sample. Blackburn (1981) mapped this area as felsic to intermediate intrusive rocks of the Atikwa batholith.

This area was available for staking as of January 2005.

11. Passover Lake area ±Cu, ±Ag, ±Pd, ±Au, ±Zn, ±Ni, ±Co, ±Cd, ±Sb, ±REEs, ±W, ±Mo

Sites: 435, 443, 447, 448, 451–455, 571, 573–575, 577, 578, 582, 585, 586, 591, 592, 594, 596, 597, 603, 604

Twenty-five sites make up this broad copper anomaly, which extends for approximately 10 km from Robbins Lake in the north to Canal Bay (Atikwa Lake) in the south. Copper was elevated to highly anomalous at 19 of the sites. In general, Cu values increased from south to north with the highest value of Cu in the Eagle Lake survey area occurring at site 571 (136 ppm). Site 571 also returned anomalous Ag (0.37 ppm), W (0.27 ppm) and elevated Mo (2.8 ppm).

Silver was also widespread throughout the area. Elevated to anomalous values were returned from 11 sites with values in the range of (0.19 to 0.37 ppm Ag). Nickel was elevated (52 ppm Ni) at a single site (Site 447). Zinc and cobalt were also anomalous (151 and 22 ppm, respectively) at a single site (Site 592).

Of special interest is site 578 on Chancellor Lake, which returned 6.1 ppb Pd, the highest Pd value in the survey. Copper was also elevated (59 ppm Cu) at this site. Site 577, located immediately southeast of Chancellor Lake, returned 10.3 ppb Au by FA-ICP-MS.

This anomalous area is situated over the dioritic rocks of the Atikwa batholith and its contact with mafic metavolcanic rocks of the western expression of the Eagle-Wabigoon-Manitou lakes greenstone belt. A number of fractures and lineaments strike northeast throughout this area.

The Macfie nickel-silver occurrence is located north of Chancellor Lake (OGS 2002b). The Meridian Bay gold occurrence is located on Meridian Bay of Eagle Lake between Chancellor Lake and the Macfie occurrence. Grab samples of sulphide-rich material from the Meridian Bay occurrence have been reported to assay between 0.20 and 0.45 ounce gold per ton (6220–13 996 ppb Au), 3.9 ounces silver per ton (93 ppm Ag), 0.9 to 4.22% Cu (9000–42 200 ppm) and 0.5 to 1.0% Ni (5000–10 000 ppm) (Parker 1989).

This area was available for staking as of January 2005.

12. South of Froghead Bay (Eagle Lake) area Cu, ±Ag, ±REEs
Sites: 406, 459, 461, 569

This anomalous area located northwest of Osbourne Bay (Eagle Lake) presented elevated to anomalous Cu (55 to 89 ppm) at all 4 sites. Silver was anomalous at sites 459 (0.26 ppm Ag) and 461 (0.2 ppm Ag) located on the same lake.

The area is underlain by felsic intrusive rocks of the Froghead Bay stock.

As of January 2005, this area was available for staking.

13. East of Ghost Lake area (Brownridge Township) ±Pd, ±Au, Cu, Cd
Sites: 57, 58

Site 58 features both the highest Pd (11.9 ppb) and Au (20.2 ppb by FA-ICP-MS) in the survey. Both sites 57 and 58 returned anomalous Cu (77 ppm and 97 ppm, respectively).

The bedrock in this area is composed of pillowed and massive mafic metavolcanic rocks together with medium-grained basalt and/or gabbro (Beakhouse 2001). This area has the potential for diverse mineral deposit types including gold hosted in felsic-volcanic-sediment assemblages, veins and shear zones and base metal volcanogenic massive sulphide (VMS)-type mineralization (Beakhouse 2000).

This area was not available for staking as of January 2005.

Summary and Conclusions

Preliminary interpretation of the lake sediment analytical results for the Eagle Lake area indicates the presence of 13 anomalous areas. Most of the anomalous areas are multi-element, multi-site anomalies, many of which are considered significant targets for further exploration activities. Some single-element and/or single-site anomalies may also warrant further investigation, particularly if they are located in regions of favourable geology or known mineral occurrences. The treatment of available data in this report is not considered to be exhaustive and the reader is encouraged to carry out further investigations.

Acknowledgments

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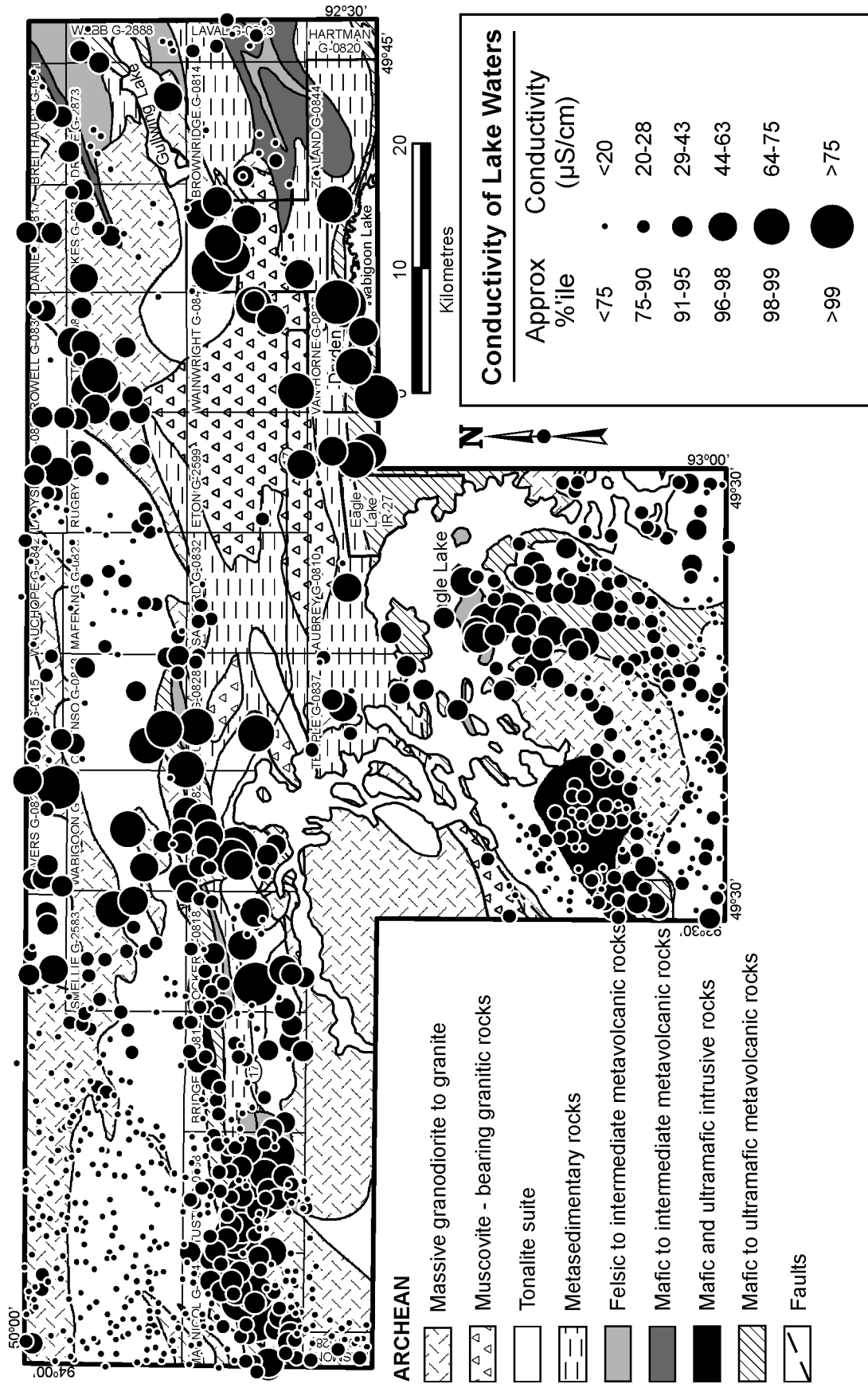
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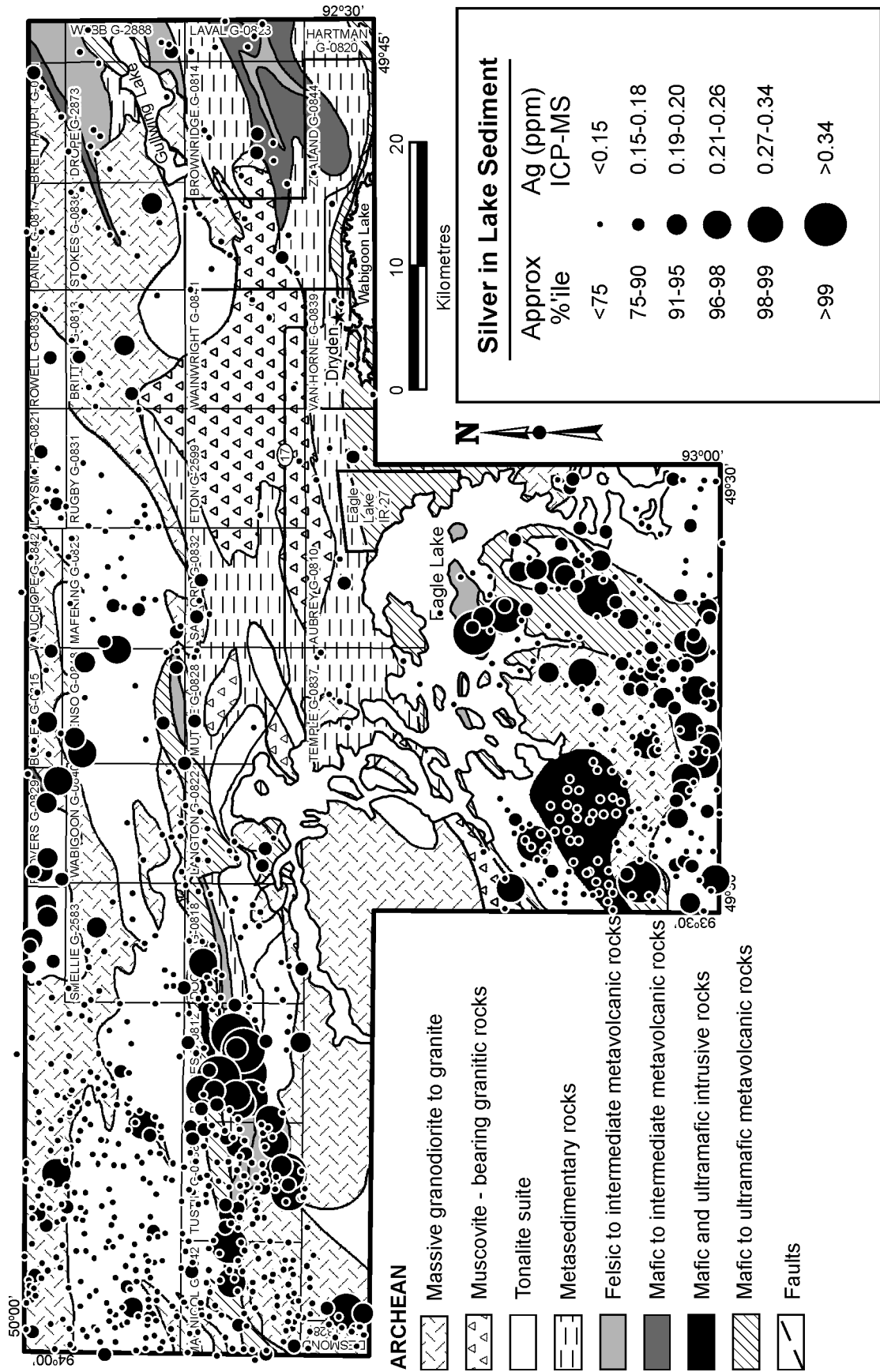
Appendix 1

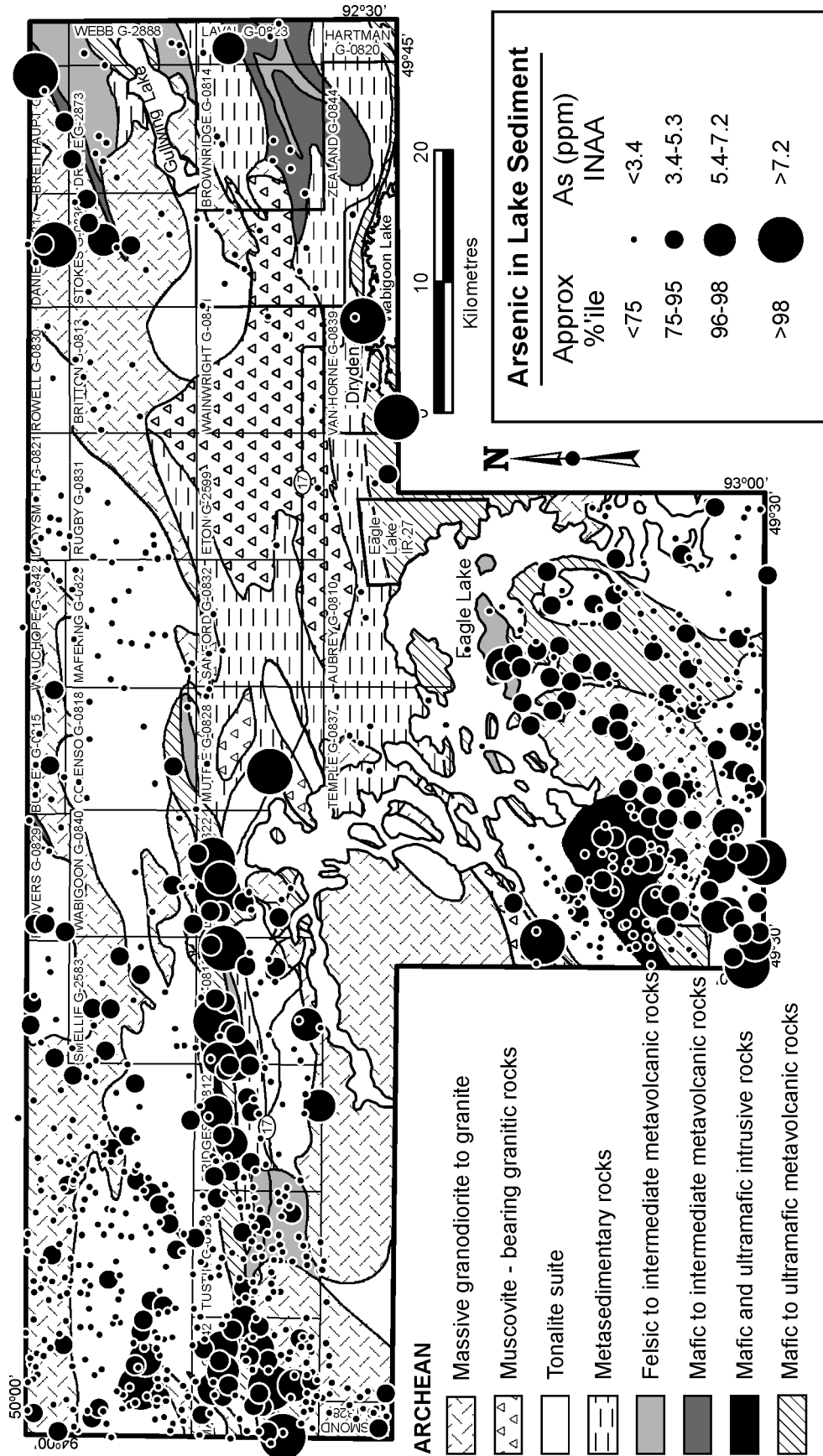
Proportional Dot Maps of Loss-on-Ignition, Lake Depth, pH and Conductivity

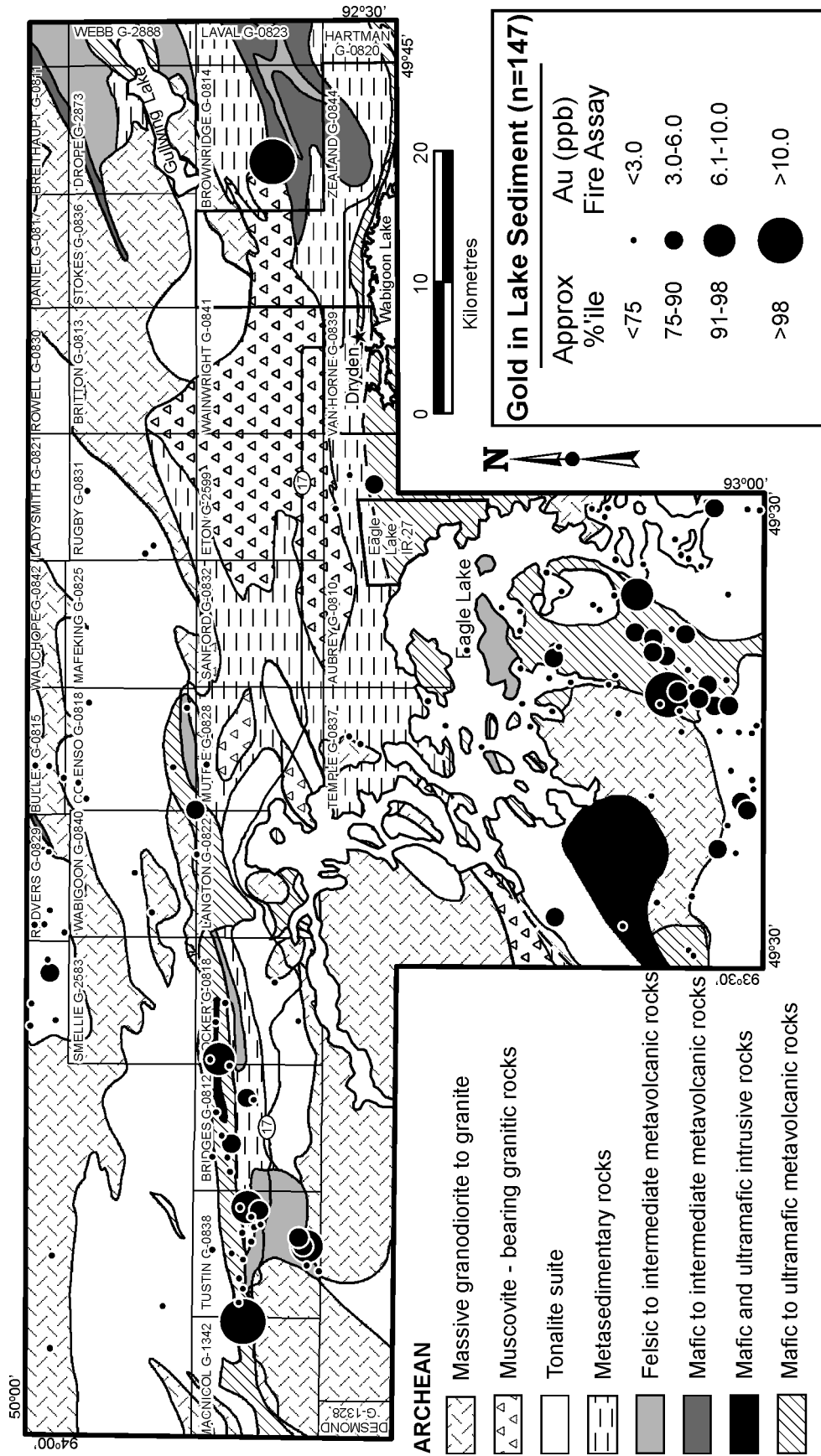


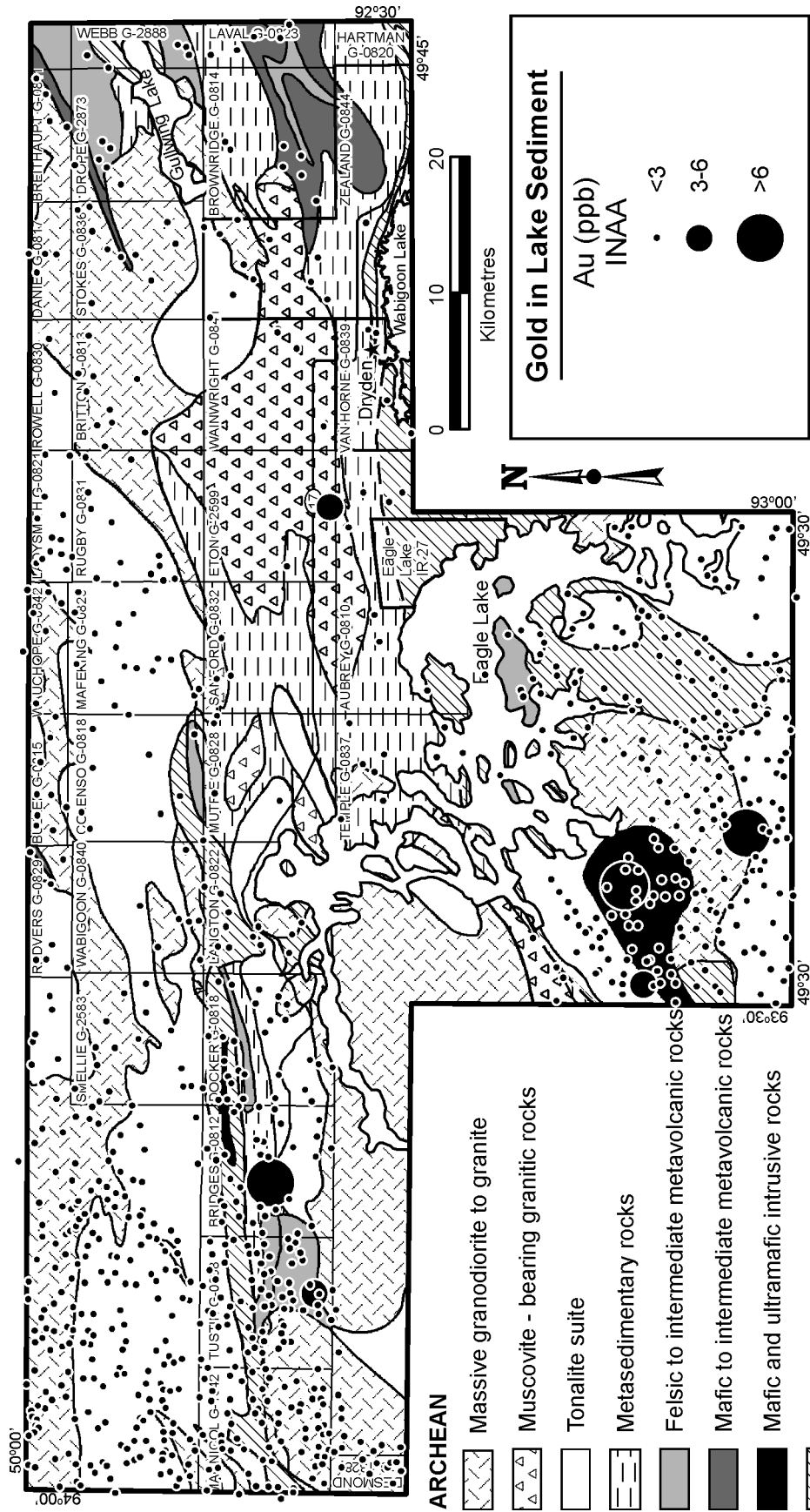
Appendix 2

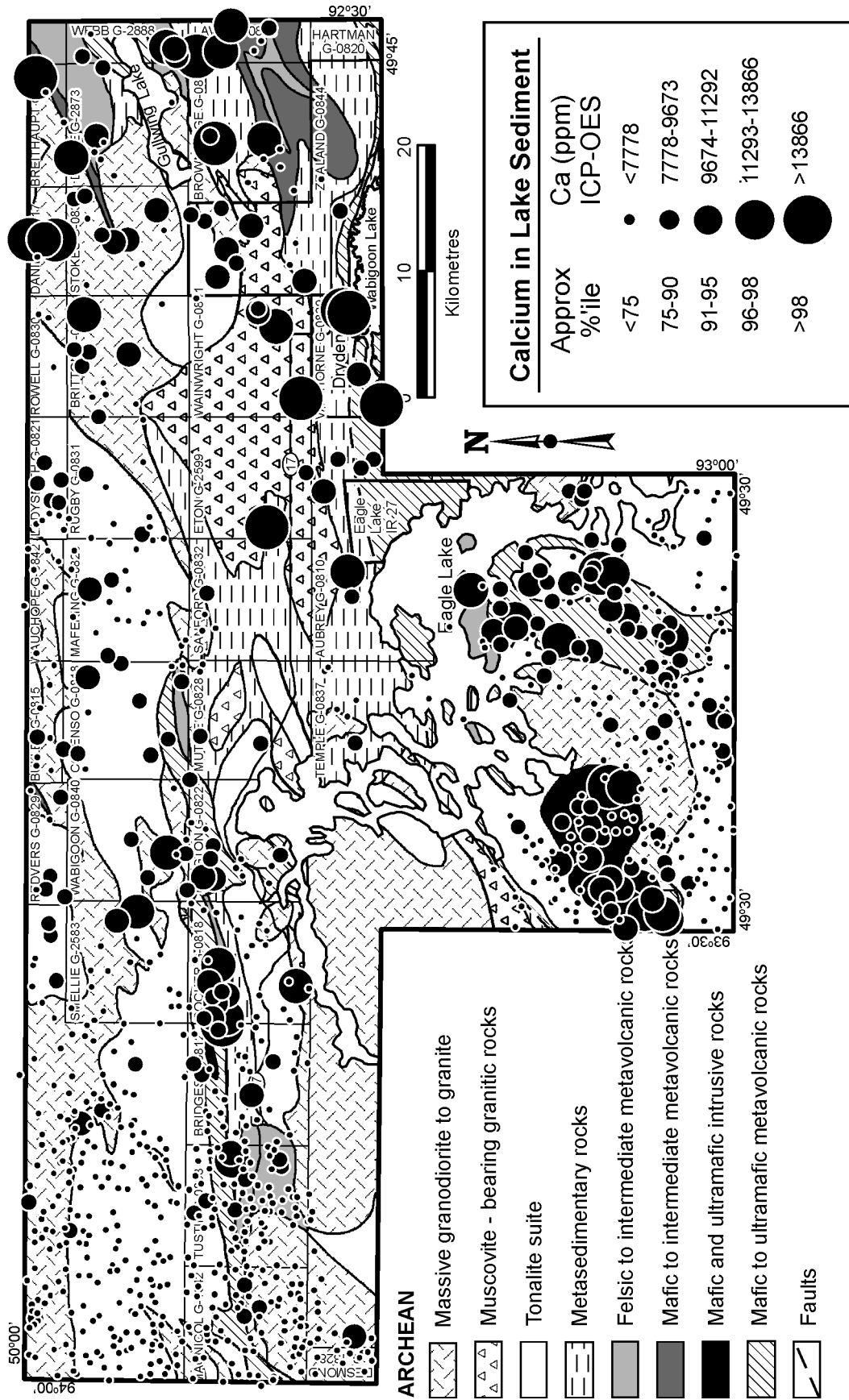
**Proportional Dot Maps of Lake Sediment Geochemistry
for
Ag, As, Au (FA-ICP-MS and INAA), Be, Ca, Cd, Co, Cr, Cs, Cu,
Fe, Ga, Li, Mn, Mo, Nb, Ni, Pb, Pd, Pt, REEs, Sb, Th, U, V, W and Zn**

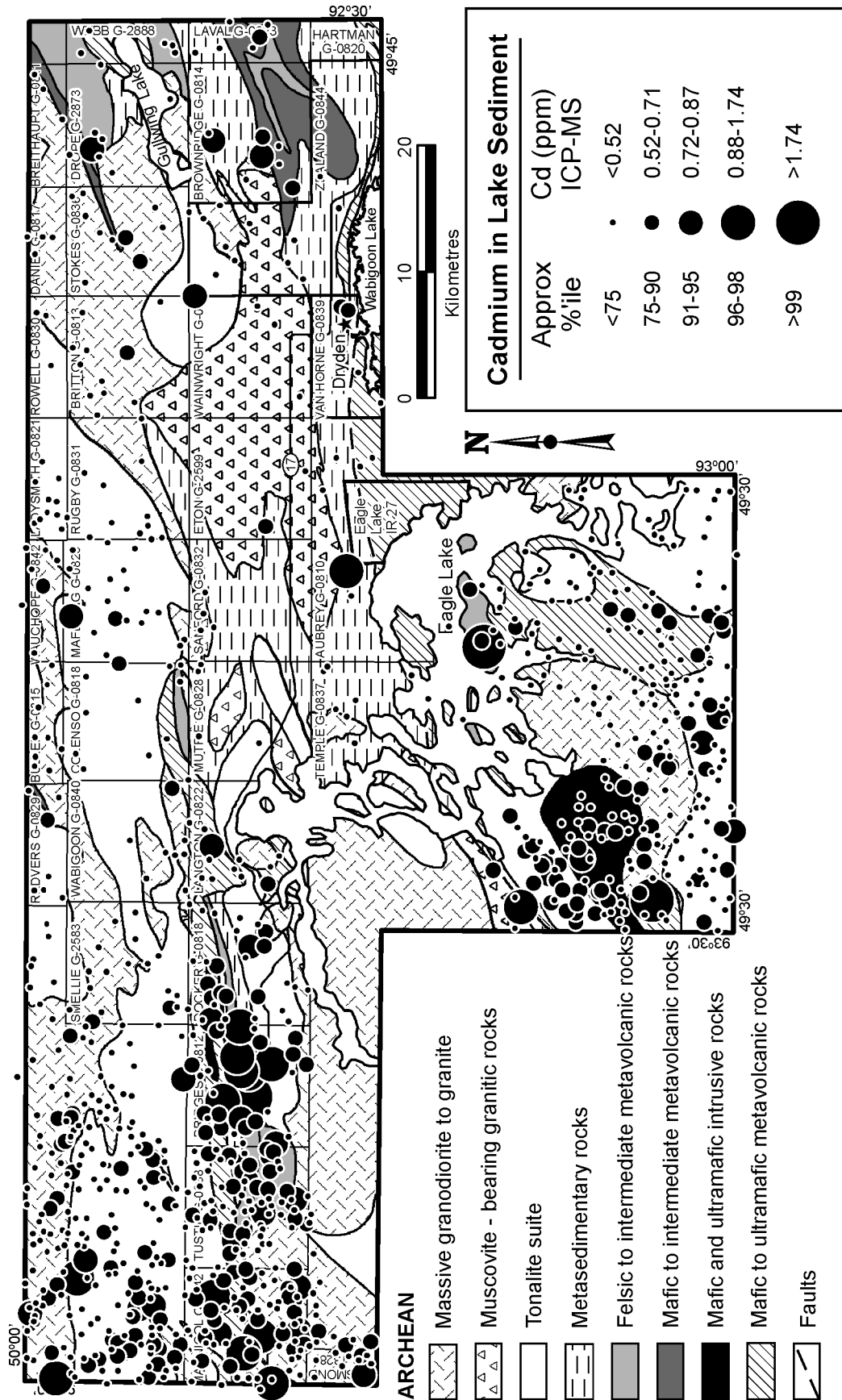


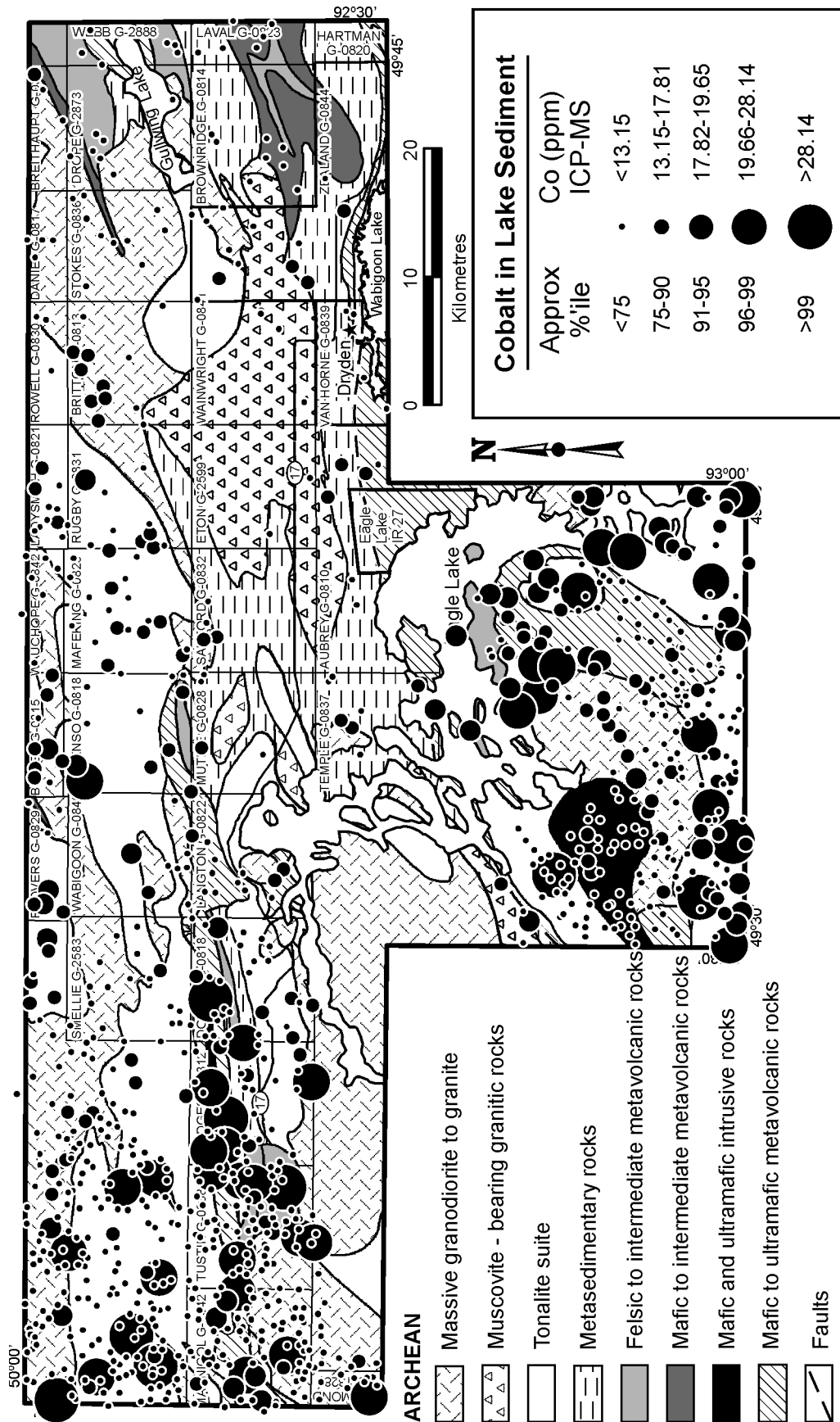


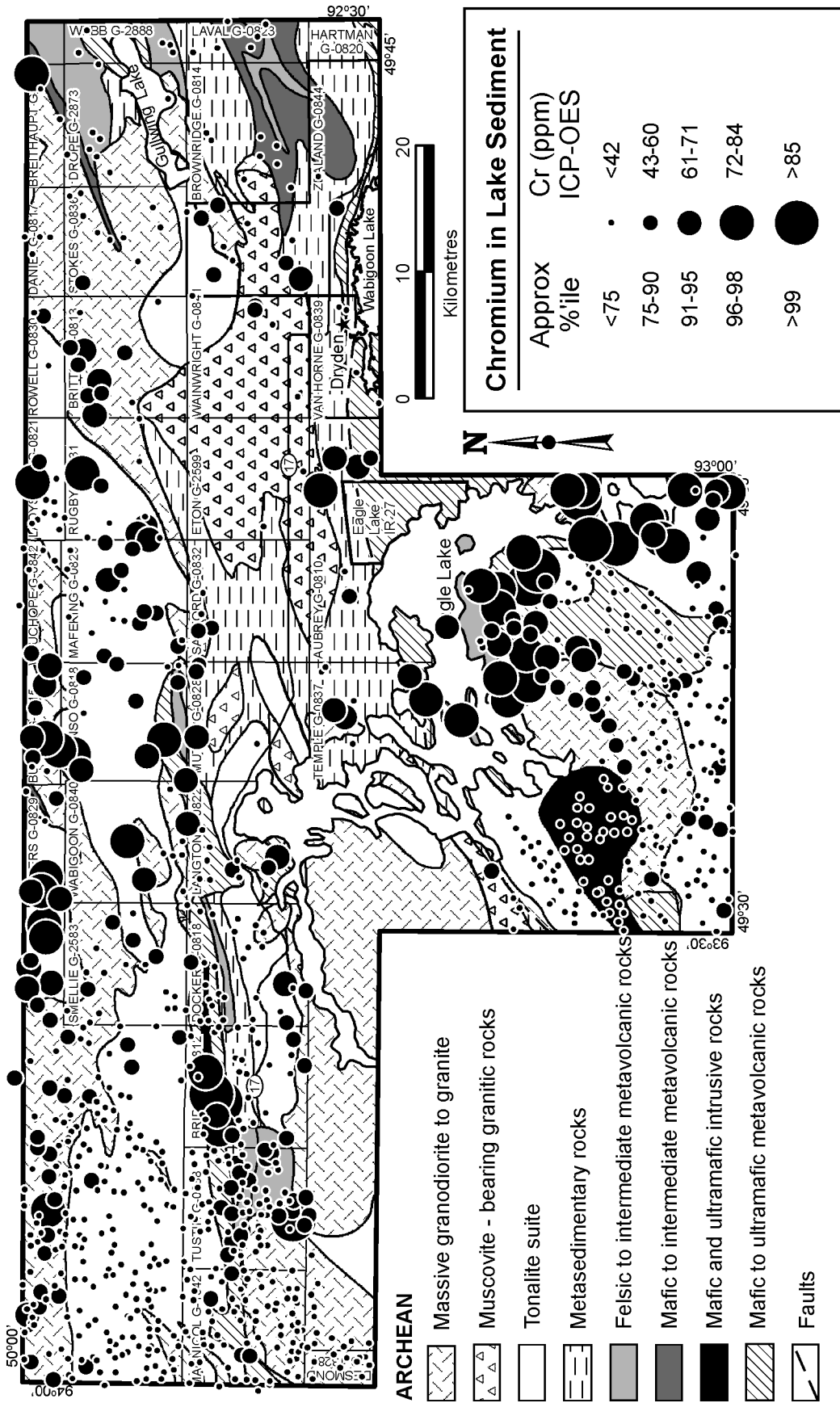










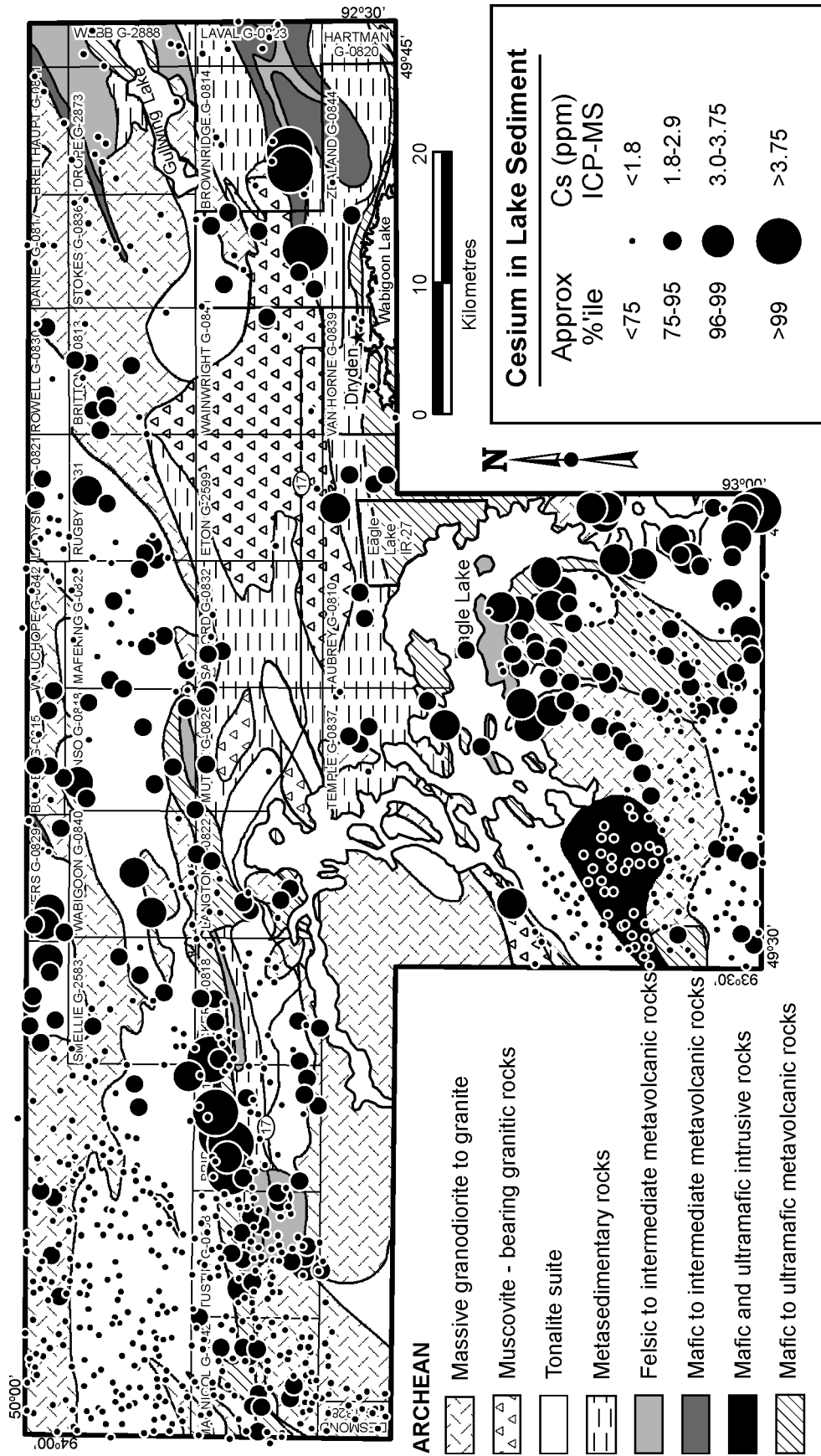


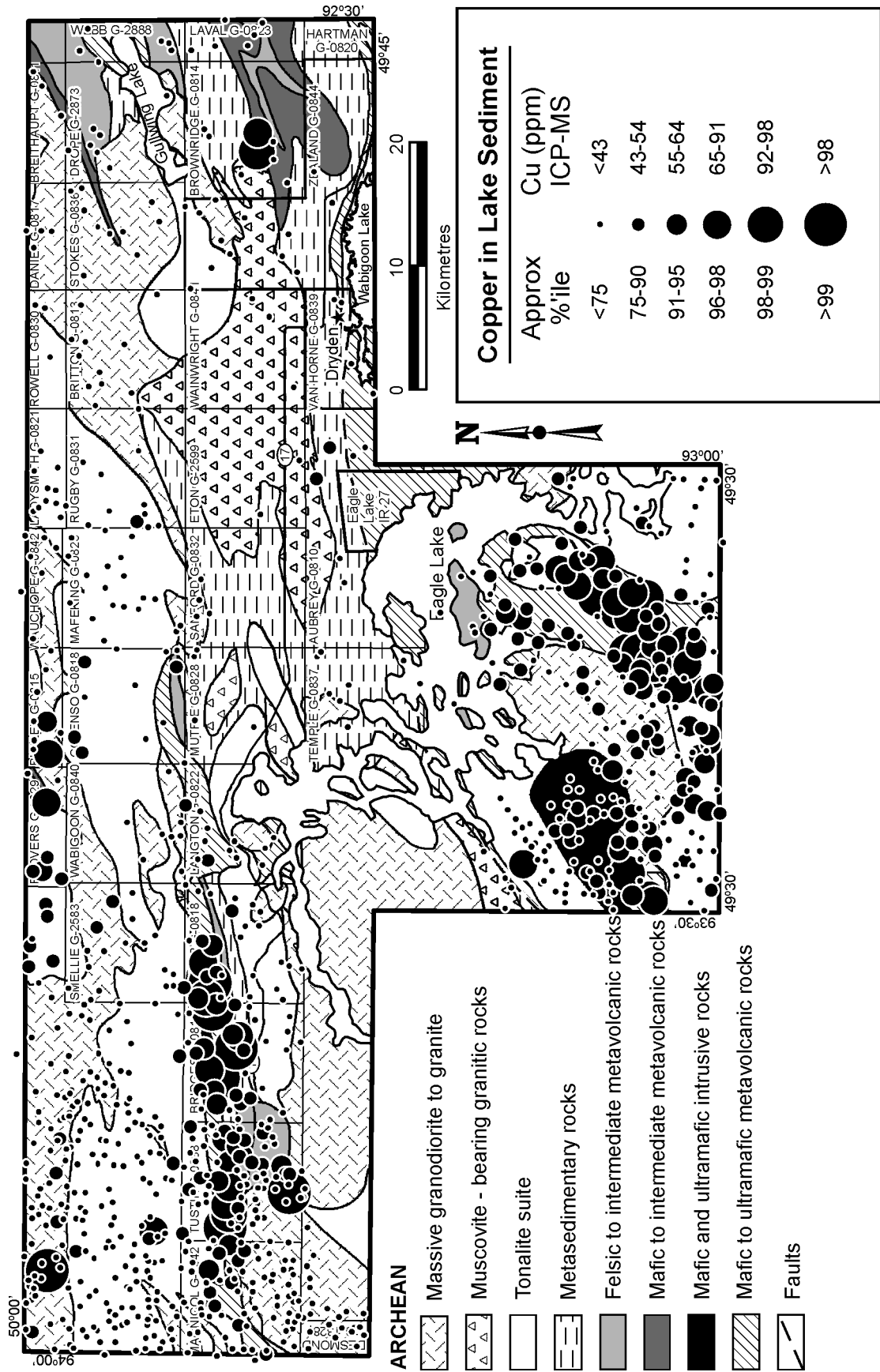
ARCHEAN

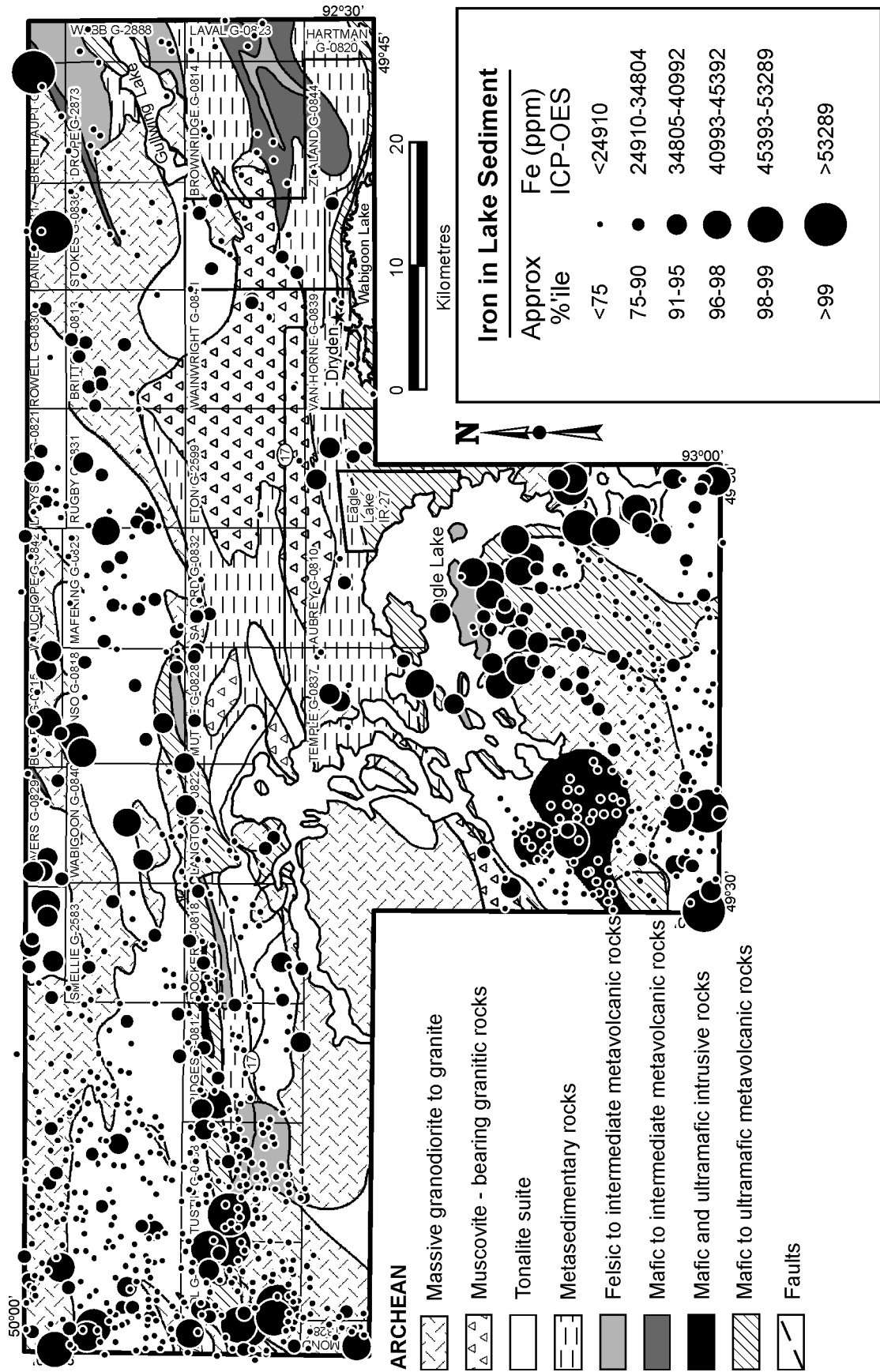
- Massive granodiorite to granite
- Muscovite - bearing granitic rocks
- Tonalite suite
- Metasedimentary rocks
- Felsic to intermediate metavolcanic rocks
- Mafic to intermediate metavolcanic rocks
- Mafic and ultramafic intrusive rocks
- Mafic to ultramafic metavolcanic rocks
- Faults

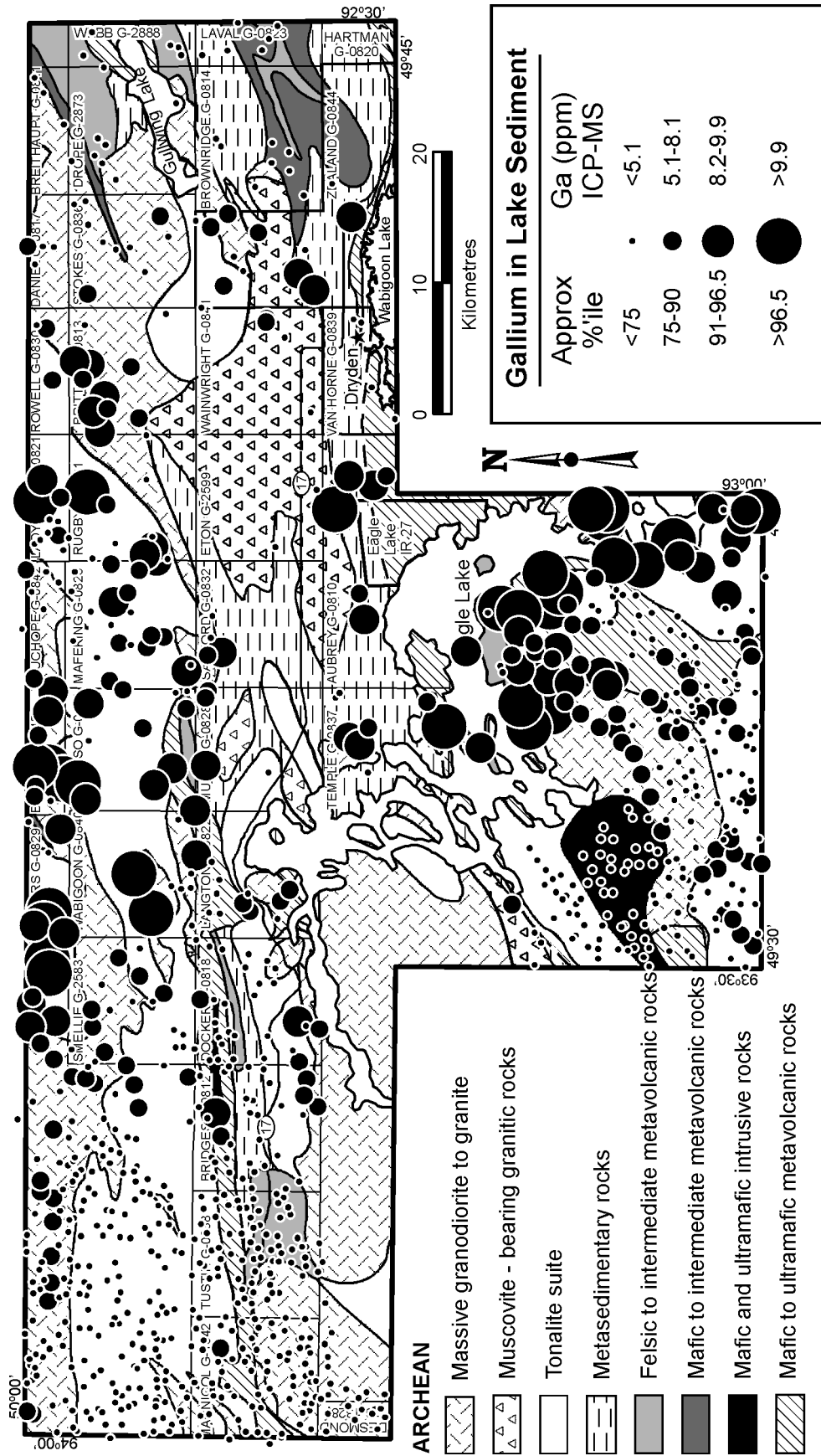
Chromium in Lake Sediment

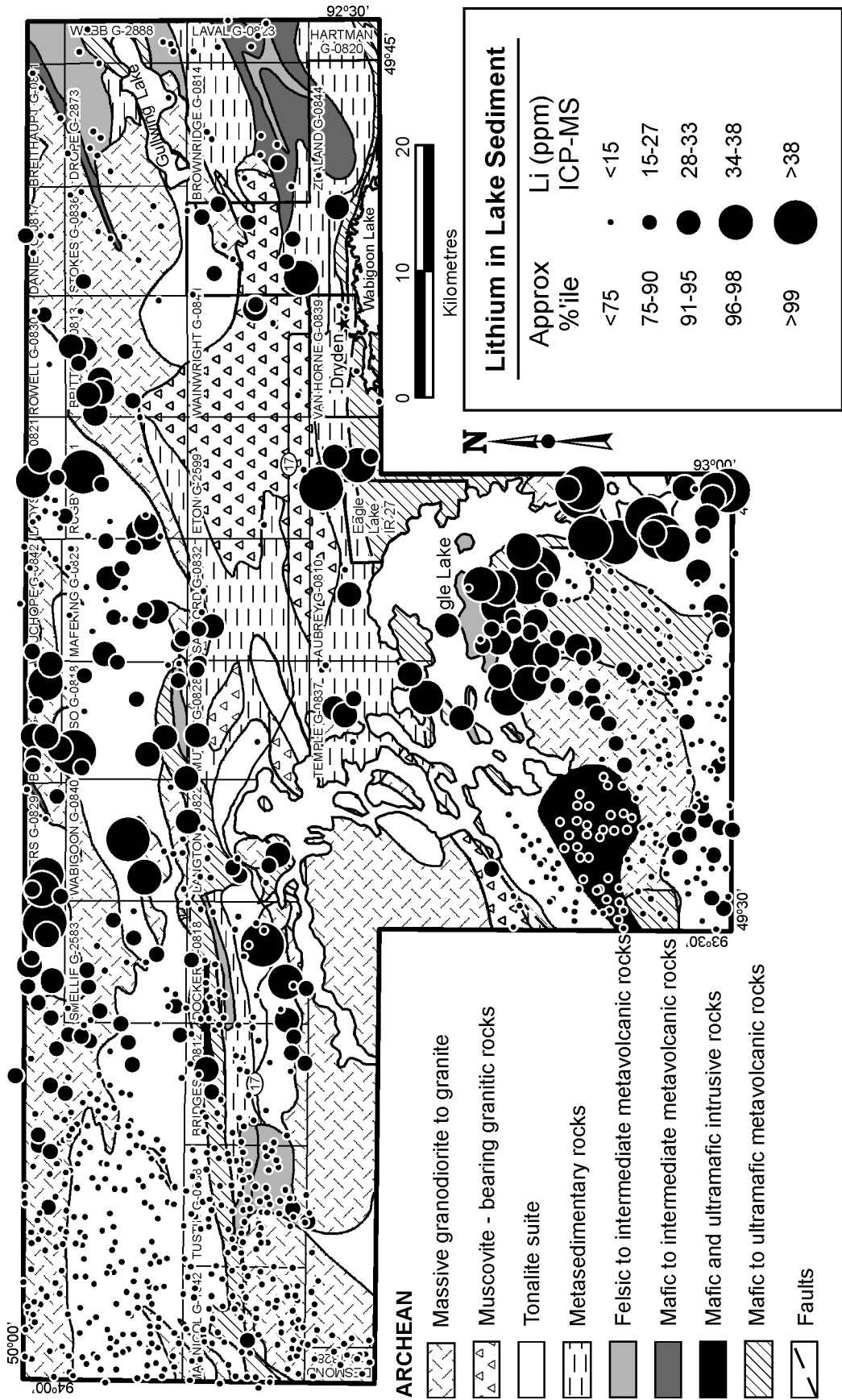
Approx %ile	Cr (ppm) ICP-OES
<75	<42
75-90	43-60
91-95	61-71
96-98	72-84
>99	>85

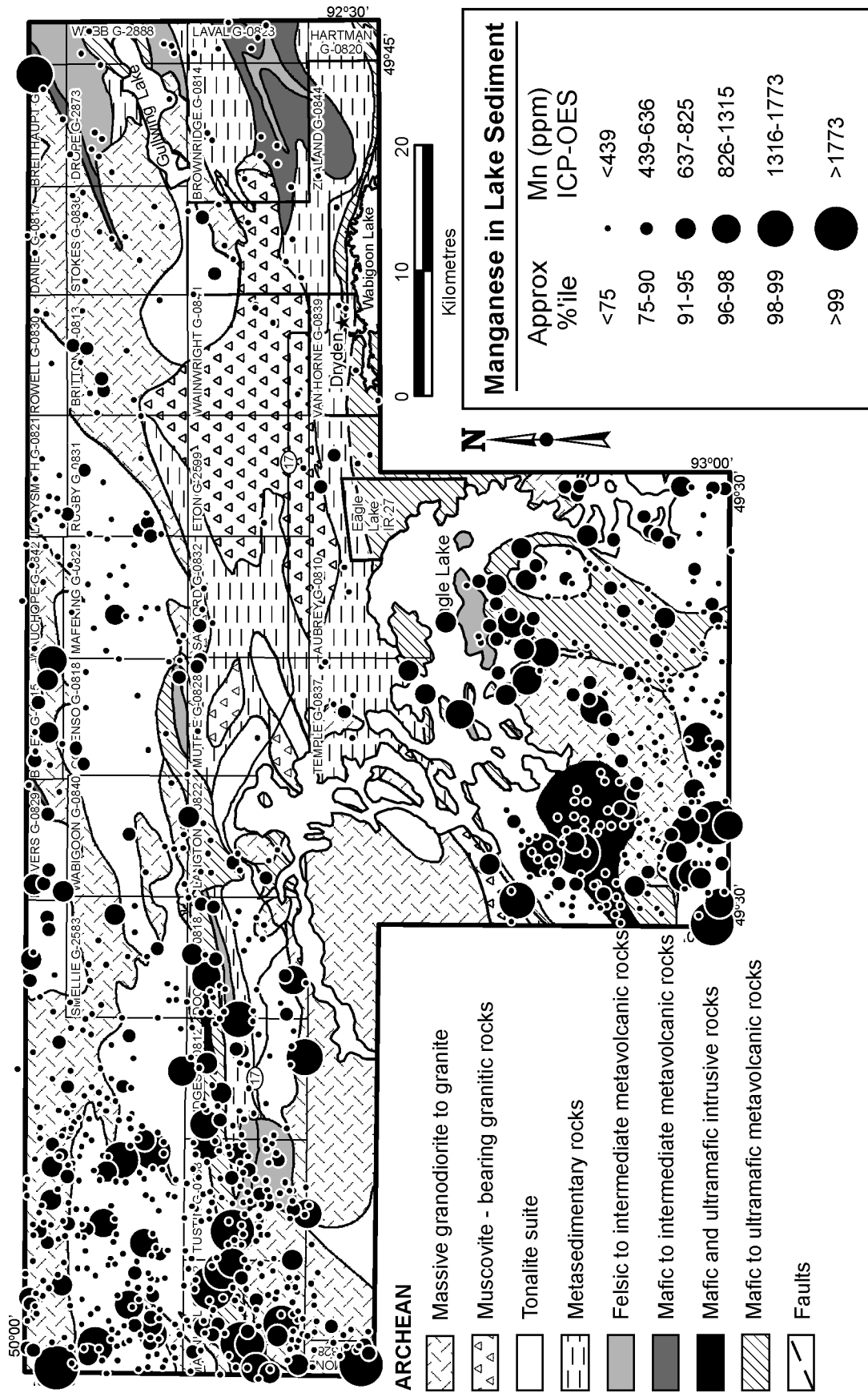


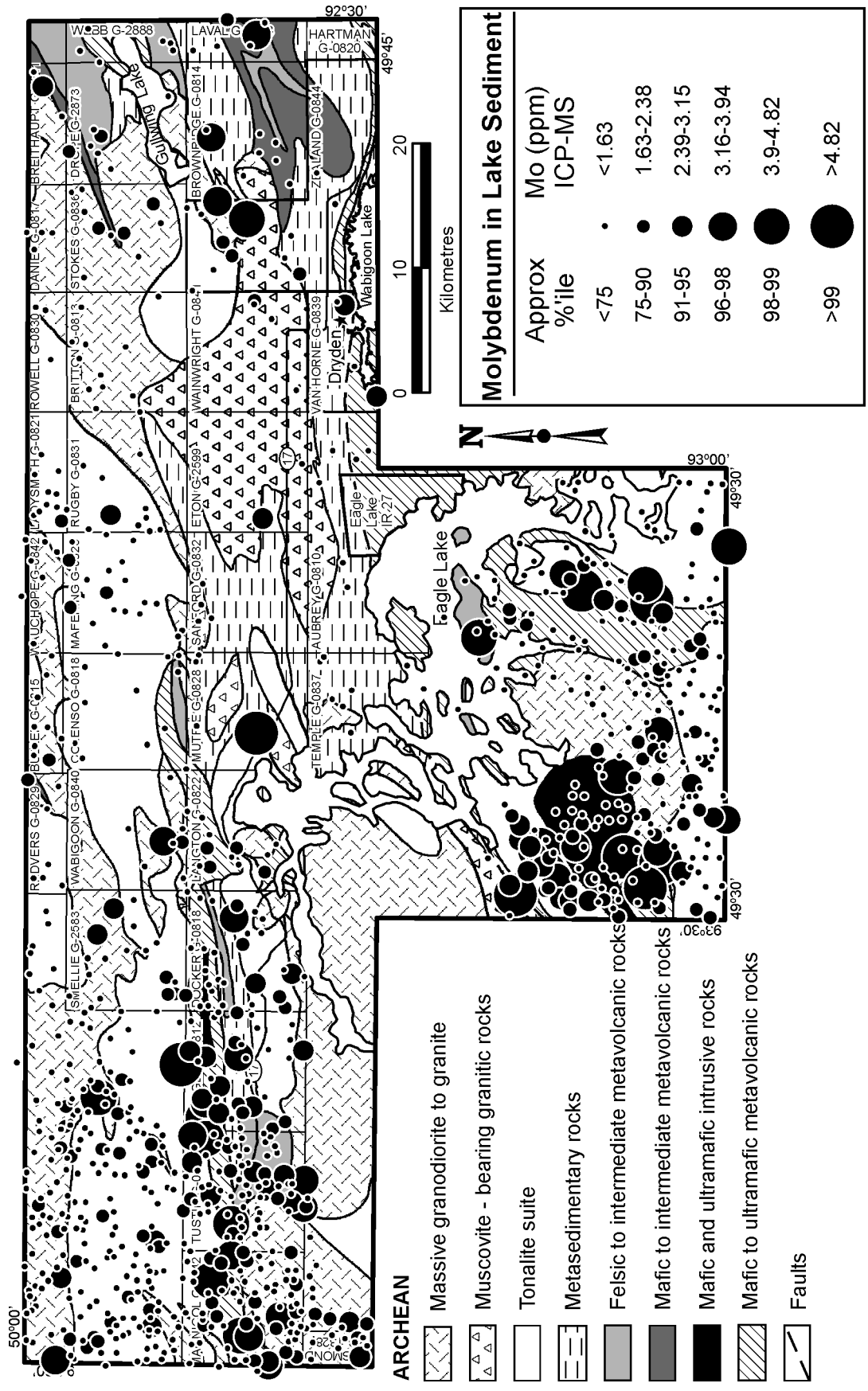


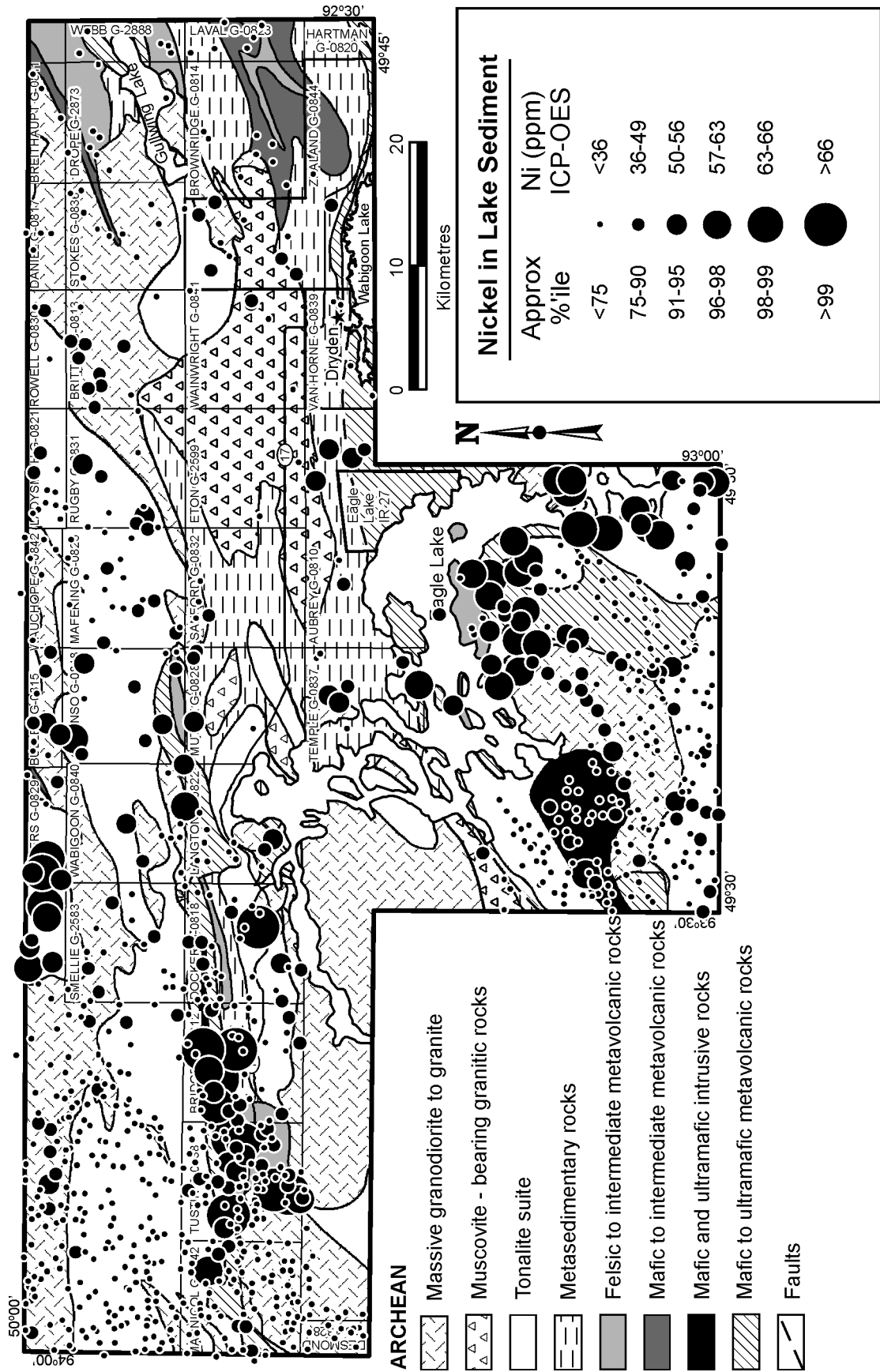


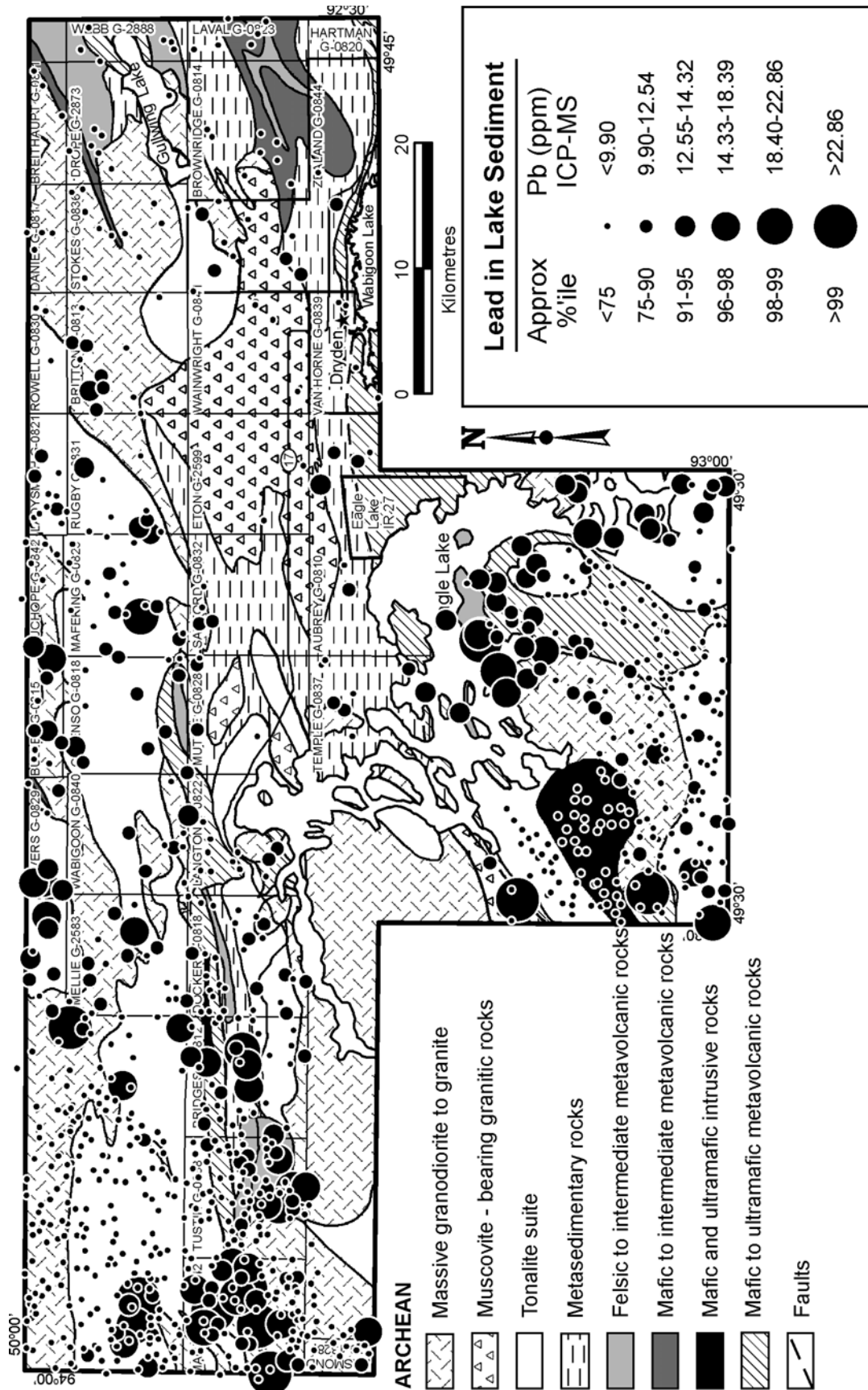


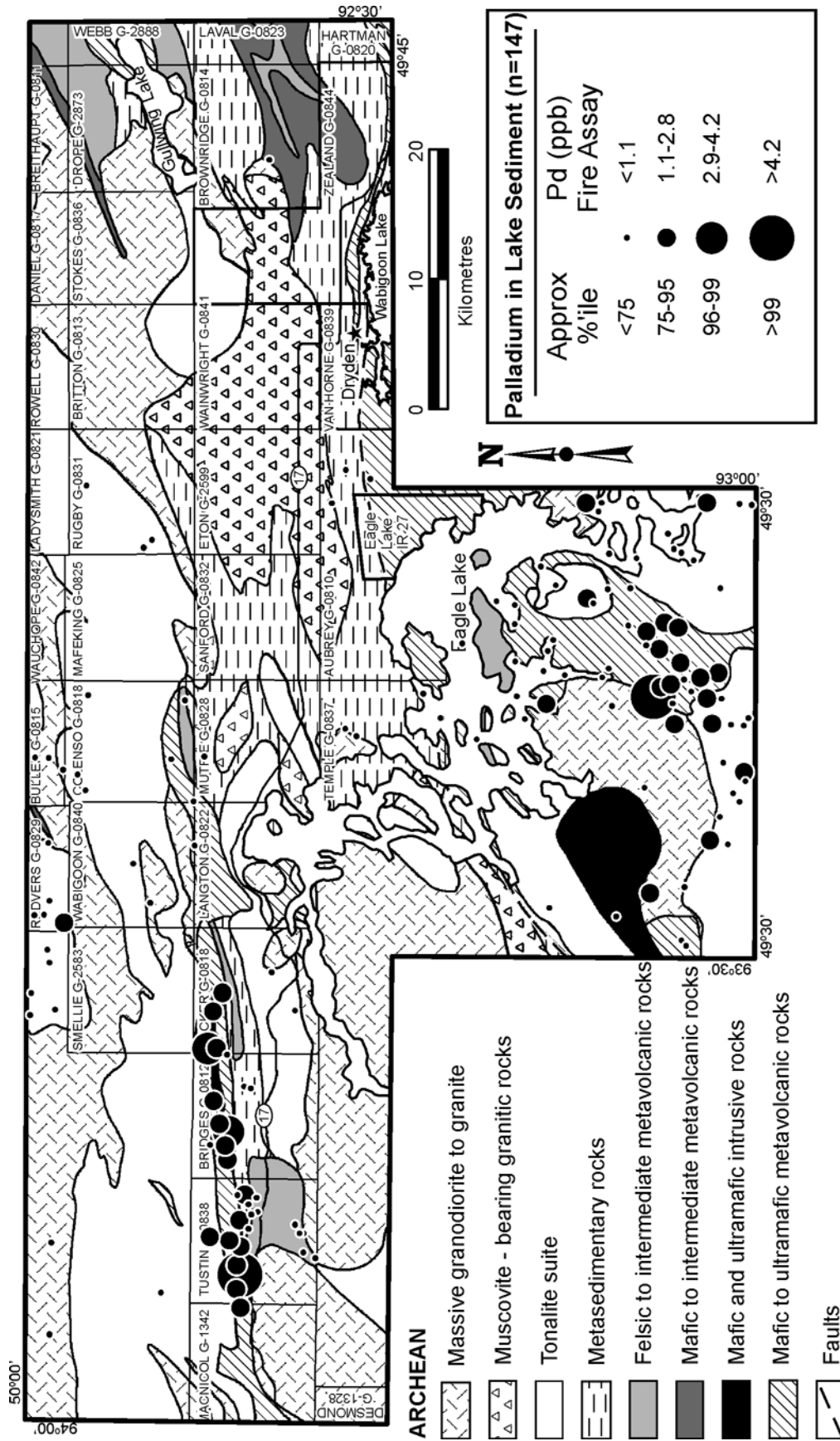


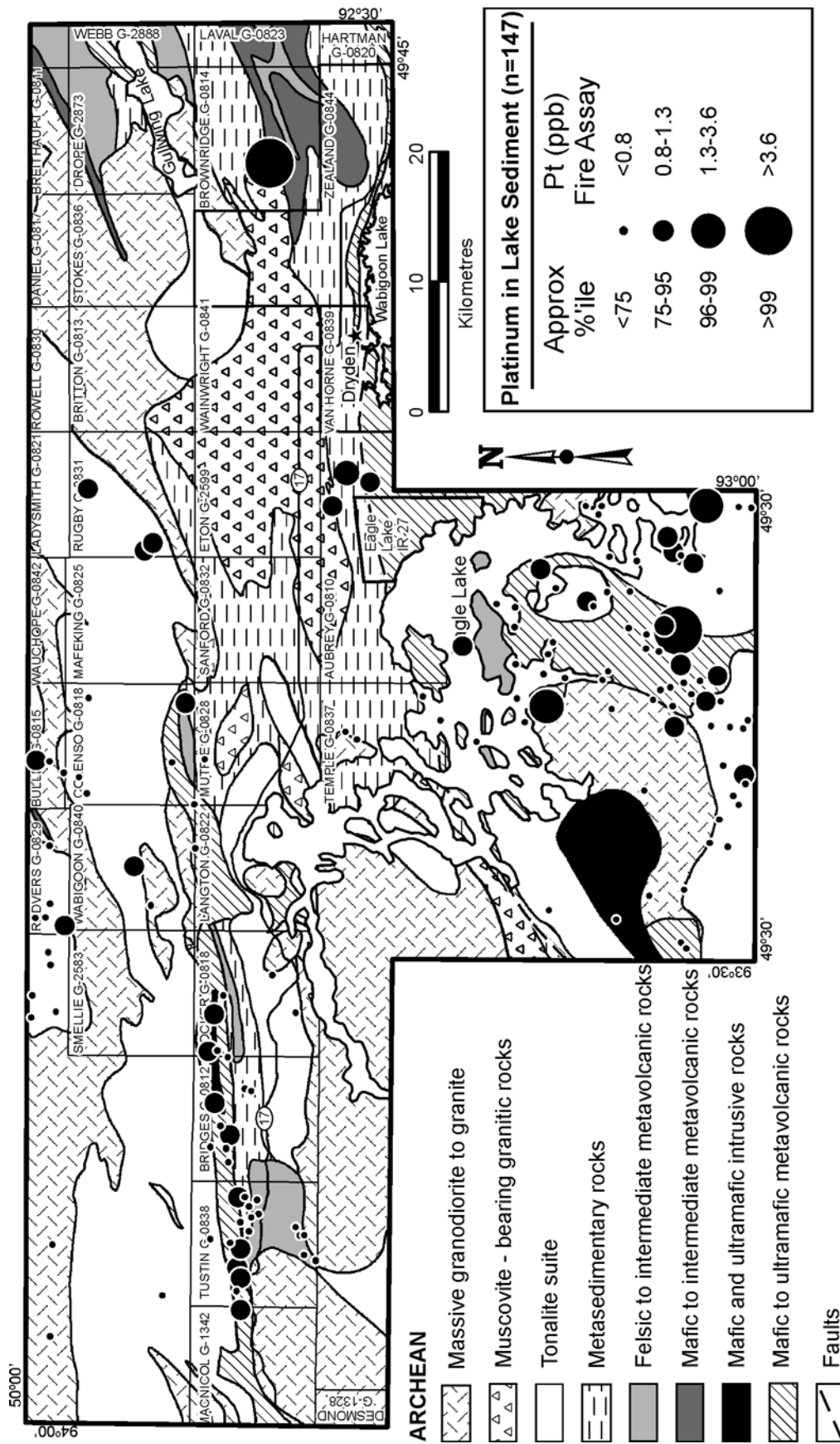


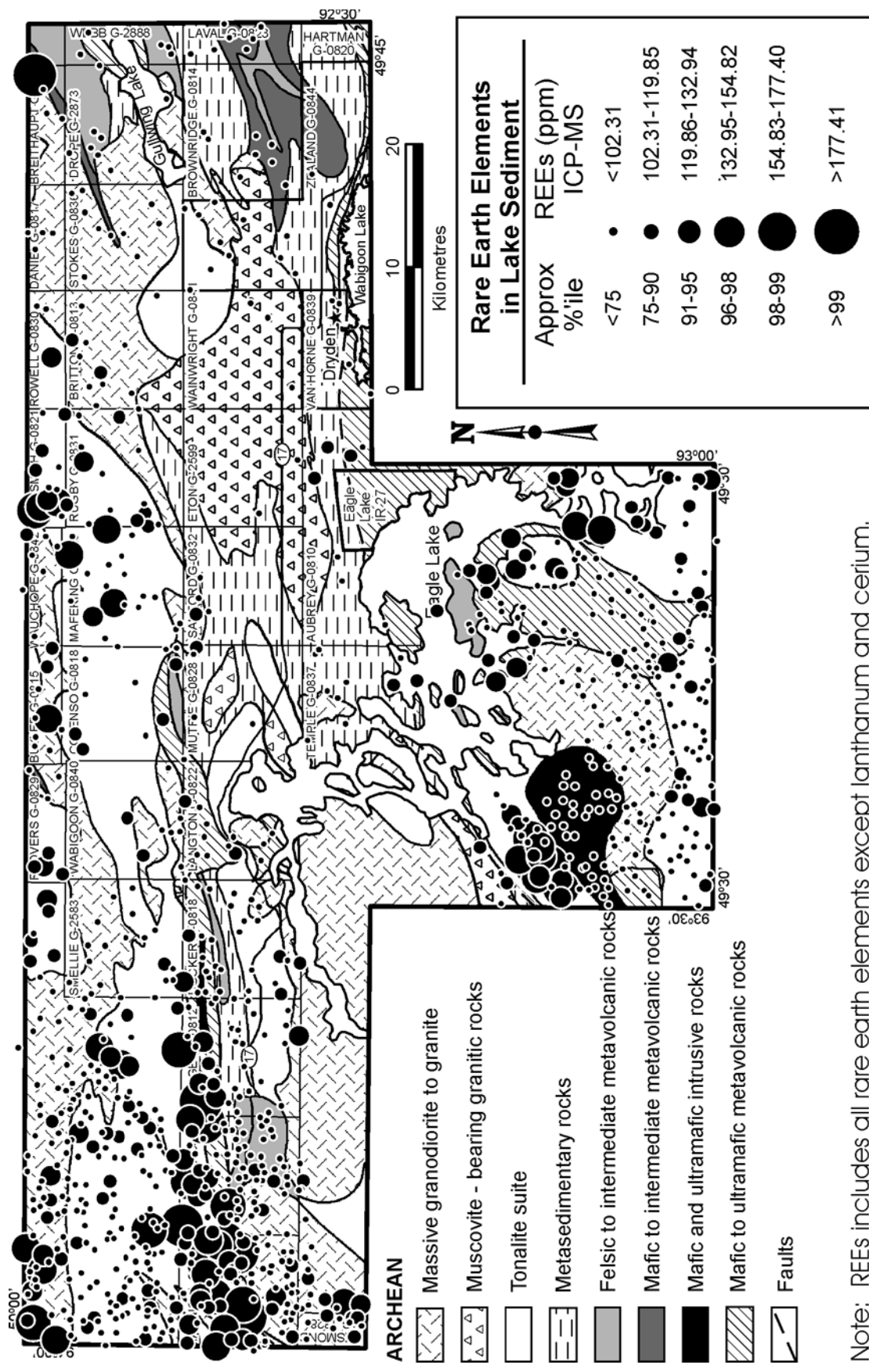




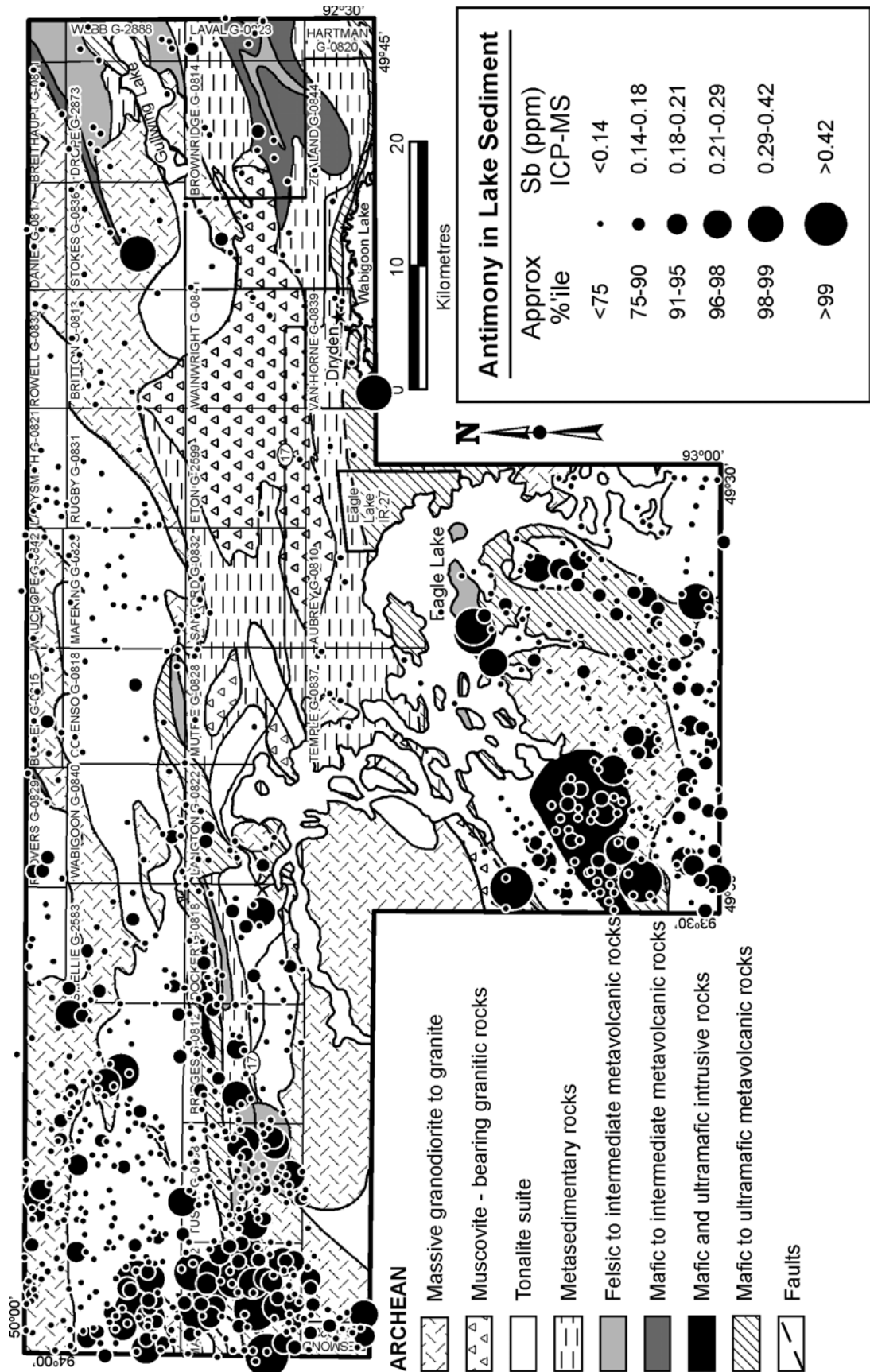


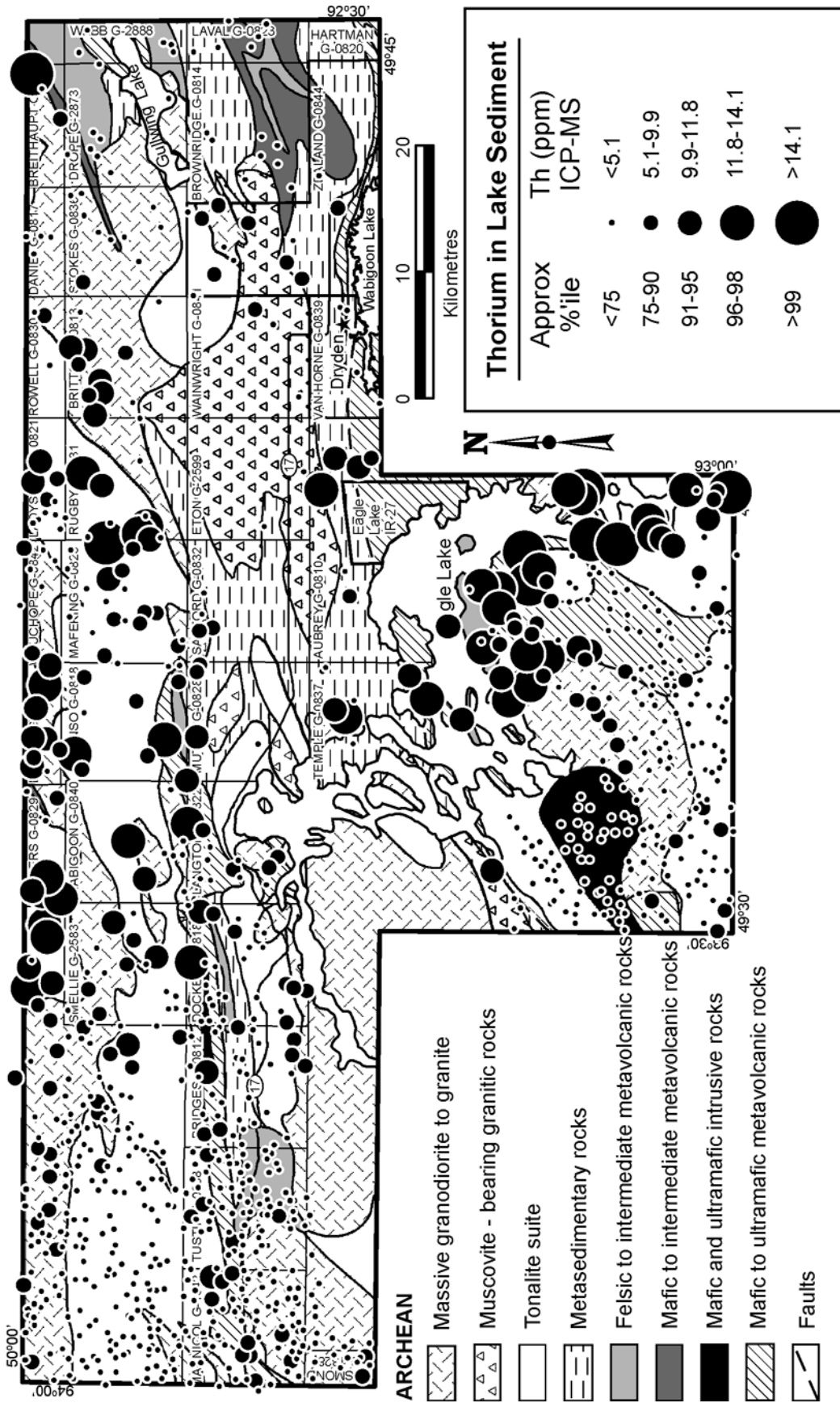


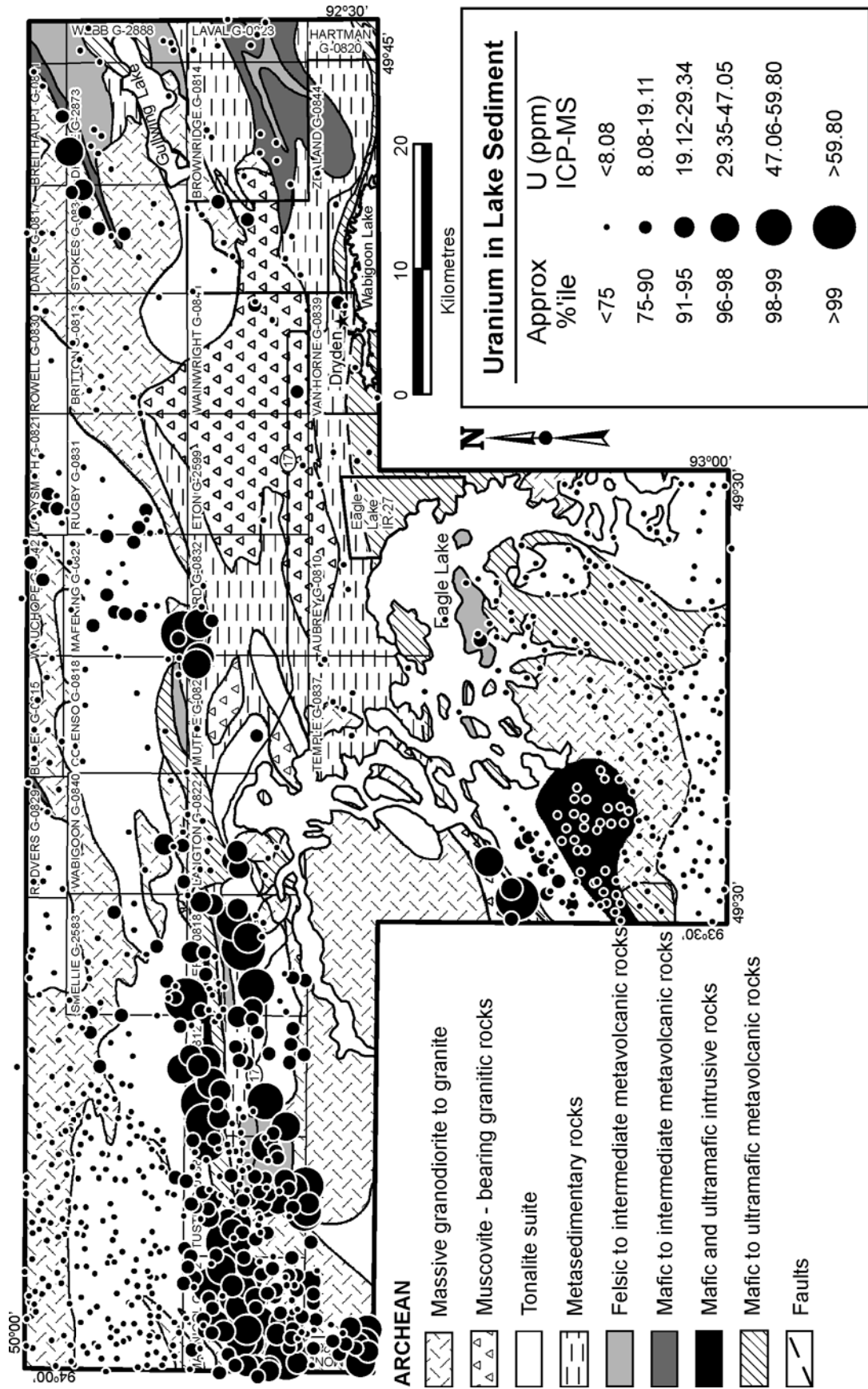


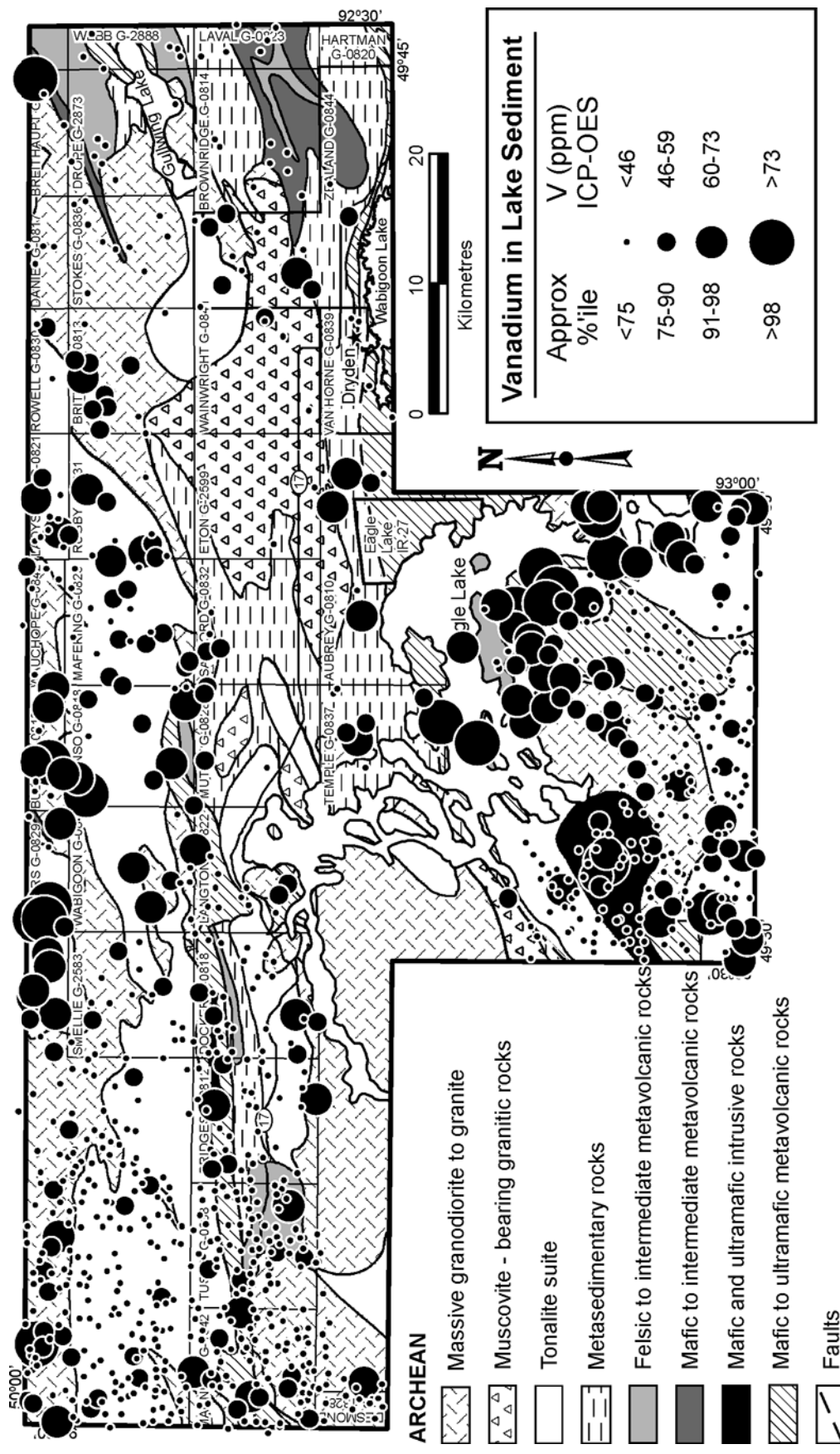


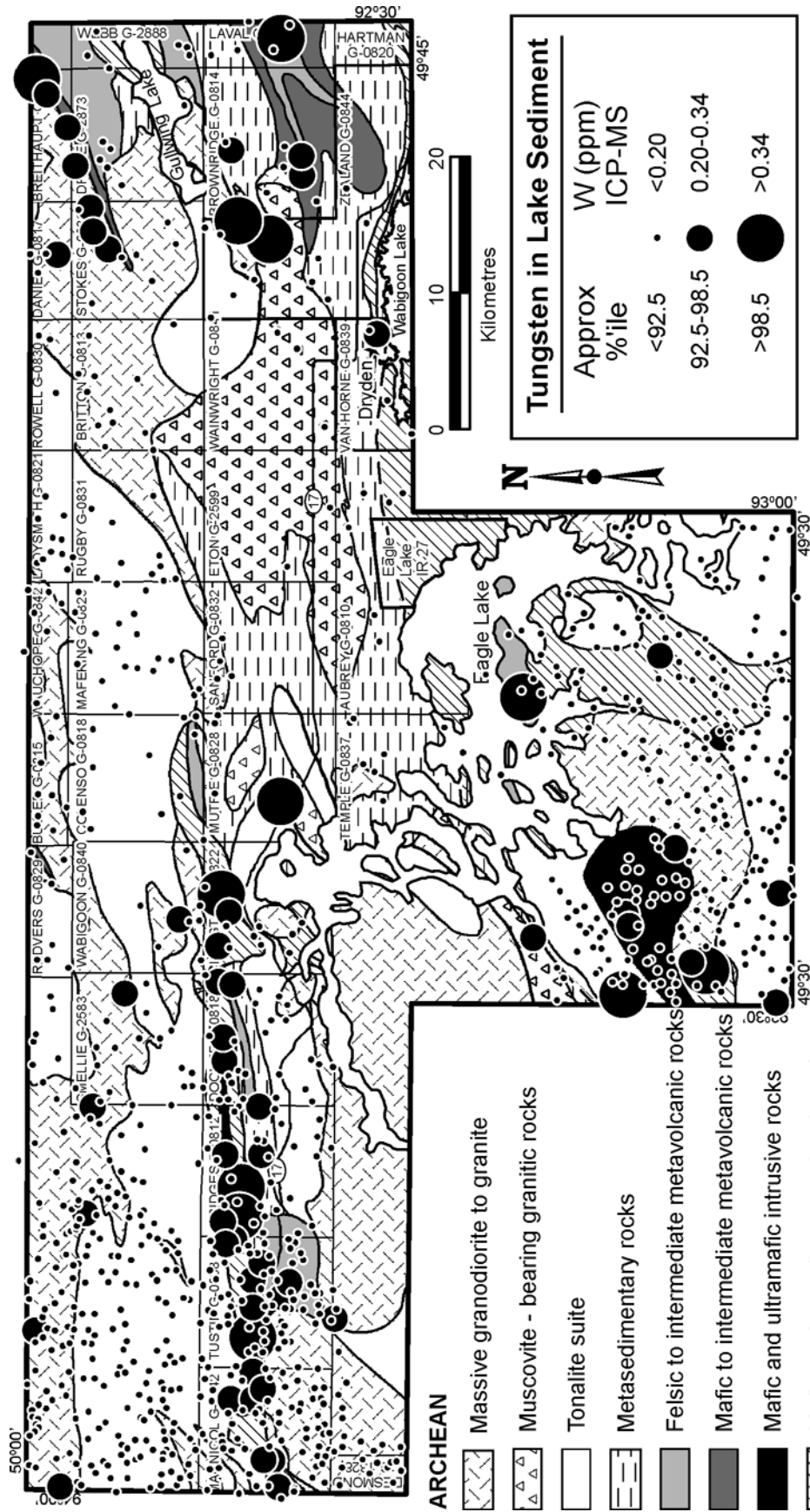
Note: REEs includes all rare earth elements except lanthanum and cerium.

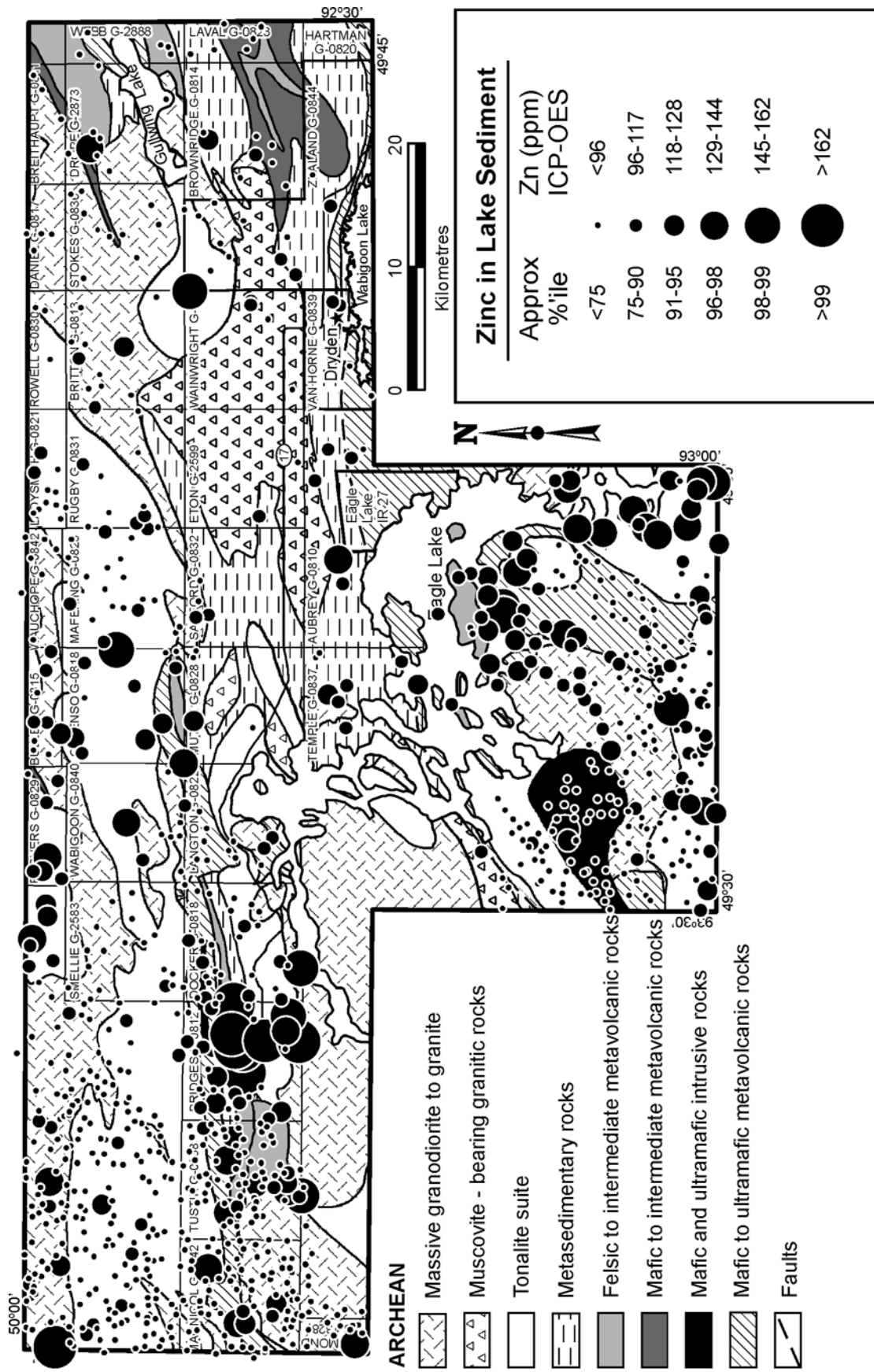












Appendix 3

Lake Sediment Analytical Data for LOI, Ag, As, Au (FA-ICP-MS), Au (INAA), Cr, Cu, Fe, Mo, Ni, Pb, Pd, Pt, REEs, Sb, U, V and Zn

Notes

Universal Transverse Mercator (metres easting and northing) co-ordinates are provided in North American Datum 1983 (NAD83), Zone 15.

FA = Fire assay – inductively coupled plasma mass spectrometry

Grav = Automated gravimetric method

INAA = Instrumental neutron activation analysis

INF = Insufficient sample for analysis

MS = [Inductively coupled plasma] mass spectrometry

N/A = Not available

NM = Not measured

NS = No sample

OES = [Inductively coupled plasma] optical emission spectrometry

Sample	Easting Method	Northing	LOI		Ag	As	Au	Au	Au	Cr	Cu		Fe	Mo	Ni	Pb	Pd	Pt	REEs		Sb	U	V	Zn
			Grav	%							MS	OES							MS	MS				
	Units				ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm
	Det Limit																							
1	510974	5511994	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
2	513310	5514047	55.24	0.08	2.6	<2	NM	24	19.6	15094	1.6	21	7	NM	NM	NM	NM	NM	NM	36.9	0.07	8.35	25.2	108
3	513053	5513481	54.99	0.11	8.3	<2	NM	21	24.1	15177	2.4	20	7	NM	NM	NM	NM	NM	NM	34.7	0.10	5.40	33.6	117
4	515555	5517073	22	0.12	2.5	<2	NM	61	33.1	32160	1.7	46	10	NM	NM	NM	NM	NM	NM	90.7	0.10	4.14	56.0	109
5	516829	5518238	15.54	0.17	2.0	<2	NM	57	32.3	29704	0.5	39	11	NM	NM	NM	NM	NM	NM	82.2	0.09	1.73	61.2	102
6	518590	5517765	21.9	0.10	1.5	<2	NM	32	20.8	16504	0.7	24	5	NM	NM	NM	NM	NM	NM	51.8	0.06	2.90	30.5	81
7	521142	5514226	18.82	0.15	2.3	<2	NM	56	34.3	29130	0.5	44	11	NM	NM	NM	NM	NM	NM	84.3	0.07	2.97	48.6	103
8	523676	5515697	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
9	535681	5519854	45.95	0.07	1.9	<2	NM	15	25.1	4962	0.8	15	3	NM	NM	NM	NM	NM	NM	37.2	0.06	0.53	16.2	45
11	534689	5520491	36.18	0.10	2.9	<2	NM	27	21.6	21222	3.2	16	6	NM	NM	NM	NM	NM	NM	60.0	0.08	4.66	36.6	88
12	533868	5521040	NM	<0.04	INF	INF	INF	NM	3.7	NM	0.3	NM	4	NM	NM	NM	NM	NM	NM	10.4	<0.03	0.27	NM	NM
13	534780	5522434	8.55	0.05	0.5	<2	NM	8	26.0	2198	4.8	5	4	NM	NM	NM	NM	NM	NM	24.6	0.10	1.43	6.1	14
14	535923	5522871	64.63	<0.04	INF	INF	INF	NM	15	150	19408	1.9	18	3	NM	NM	NM	NM	NM	14.9	0.06	0.59	15.7	53
15	533821	5523654	53.93	NM	5.4	<2	NM	10	NM	7712	NM	23	NM	3	NM	NM	NM	NM	NM	NM	NM	NM	6.3	65
16	533449	5525595	63.81	0.11	2.8	<2	NM	16	22.9	7651	1.2	19	9	NM	NM	NM	NM	NM	NM	30.1	0.16	0.82	15.1	55
17	534218	5527982	70.23	0.09	2.6	<2	NM	12	27.2	3994	1.4	20	5	NM	NM	NM	NM	NM	NM	25.6	0.13	0.64	9.9	68
18	534052	5527374	58.44	0.10	2.4	<2	NM	16	24.7	5919	1.1	17	7	NM	NM	NM	NM	NM	NM	33.4	0.09	0.88	15.6	70
19	533466	5527187	47.04	0.16	2.1	<2	NM	16	41.5	6807	1.1	21	5	NM	NM	NM	NM	NM	NM	47.5	0.09	1.05	14.1	76
21	529768	5527571	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
22	532520	5533050	47.89	0.06	2.6	<2	NM	12	26.8	4798	1.5	14	3	NM	NM	NM	NM	NM	NM	23.6	0.08	1.52	13.0	52
23	533417	5534640	31.55	0.05	1.6	<2	NM	26	15.0	12443	0.5	20	5	NM	NM	NM	NM	NM	NM	37.5	0.05	1.04	19.4	70
24	535211	5533971	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
25	531753	5538350	36.92	0.16	105.0	3	NM	80	25.6	135000	1.0	35	4	NM	NM	NM	NM	NM	NM	324.7	0.14	1.12	180.0	71
26	530594	5537639	25.87	0.08	2.3	<2	NM	26	17.7	13992	2.7	18	5	NM	NM	NM	NM	NM	NM	45.9	0.07	4.35	27.9	71
27	528617	5537359	4.09	<0.04	3.1	<2	NM	21	12.6	13524	0.8	14	4	NM	NM	NM	NM	NM	NM	43.0	0.09	5.31	23.8	29
28	528181	5536127	15.47	0.08	3.6	<2	NM	31	18.0	15136	1.6	19	6	NM	NM	NM	NM	NM	NM	47.0	0.09	12.75	44.6	44
29	525371	5535544	46.93	<0.04	4.5	<2	NM	22	13.7	8335	1.7	12	6	NM	NM	NM	NM	NM	NM	26.2	0.12	29.82	26.1	40
31	525815	5533742	61.42	0.10	3.4	<2	NM	23	18.8	10663	1.5	13	5	NM	NM	NM	NM	NM	NM	30.1	0.10	1.54	29.5	137
32	527131	5533536	43.63	0.12	1.3	<2	NM	23	27.2	16523	1.2	20	6	NM	NM	NM	NM	NM	NM	71.6	0.08	3.53	39.0	63
33	526608	5532959	45.18	0.08	3.2	<2	NM	19	22.8	10456	1.8	15	5	NM	NM	NM	NM	NM	NM	45.9	0.10	7.41	28.2	55
34	525226	5533199	38.02	0.05	1.5	<2	NM	9	7.4	1338	0.5	4	6	NM	NM	NM	NM	NM	NM	11.8	0.05	0.37	6.9	15
35	523939	5532143	21.9	0.05	1.9	<2	NM	11	8.8	2195	0.5	7	7	NM	NM	NM	NM	NM	NM	15.6	0.07	0.42	8.9	29
36	522104	5535301	36.03	0.05	2.9	<2	NM	16	12.7	8216	0.9	14	4	NM	NM	NM	NM	NM	NM	33.1	0.06	12.37	18.2	55
37	522309	5534441	27.75	0.06	4.5	<2	NM	30	16.9	19025	0.9	19	5	NM	NM	NM	NM	NM	NM	53.8	0.07	19.15	42.3	59
38	520537	5534242	23.01	0.05	4.8	<2	NM	27	13.8	19598	0.7	16	4	NM	NM	NM	NM	NM	NM	48.9	0.05	15.77	35.4	58
39	519236	5533144	46.85	0.04	5.9	<2	NM	17	10.4	8056	1.9	12	4	NM	NM	NM	NM	NM	NM	23.0	0.10	9.81	30.0	73
41	518876	5538872	43.73	0.09	1.6	<2	NM	33	18.8	16856	0.5	22	6	NM	NM	NM	NM	NM	NM	58.1	0.07	4.16	29.6	46
42	518895	5537712	43.92	0.05	4.4	<2	NM	17	11.2	13484	1.3	12	3	NM	NM	NM	NM	NM	NM	32.0	0.05	4.80	23.3	51
43	518851	5536872	41.37	<0.04	9.1	<2	NM	21	8.3	73696	1.4	15	3	NM	NM	NM	NM	NM	NM	21.7	0.04	1.84	34.1	50
44	517507	5538285	15.79	0.07	1.6	<2	NM	33	22.7	17592	0.6	23	7	NM	NM	NM	NM	NM	NM	67.8	0.08	1.75	34.6	55
45	518653	5532155	68.82	0.07	3.0	<2	NM	13	12.8	4626	1.2	9	4	NM	NM	NM	NM	NM	NM	19.2	0.09	2.81	16.2	40
46	518826	5531076	53.13	0.05	4.0	<2	NM	8	12.8	3073	2.0	12	4	NM	NM	NM	NM	NM	NM	15.6	0.07	9.20	9.3	67
47	516917	5529944	66.88	0.08	1.8	<2	NM	10	12.0	3605	1.2	7	5	NM	NM	NM	NM	NM	NM	18.0	0.30	0.53	11.1	63
48	519622	5528191	52.43	<0.04	1.5	<2	NM	7	12.5	2223	0.9	11	2	NM	NM	NM	NM	NM	NM	29.8	0.06	4.15	7.8	26
49	521197	5528770	43.28	0.19	2.1	<2	NM	28	38.3	15825	2.0	20	7	NM	NM	NM	NM	NM	NM	76.5	0.11	4.65	41.2	85
51	520854	5526081	43.28	0.08	2.6	<2	NM	19	20.0	7831	1.0	24	7	NM	NM	NM	NM	NM	NM	50.5	0.11	3.84	17.7	51

Sample	Easting Method	Northing	LOI		Ag MS	As INAA	Au INAA	Au FA	Cr OES	Cu		Fe OES	Mo MS	Ni OES	Pb MS	Pd FA	Pt FA	REEs		Sb MS	U MS	V OES	Zn OES
			Grav	%						ppm	ppm							ppm	ppm				
			0.01	0.04	0.05	2	0.1	1	1	0.4	20	0.06	1	0.3	1	0.1	0.1	n/a	0.03	0.03	0.4	0.4	
52	520335	5524935	20.39	0.11	2.4	<2	NM	56	33.7	30228	0.9	39	10	NM	NM	NM	88.1	0.10	5.33	57.5	87		
53	521369	5523620	28.28	0.10	3.3	<2	NM	50	29.8	26950	3.7	37	9	NM	NM	NM	78.9	0.08	11.90	49.3	90		
54	522748	5517881	57.94	0.14	2.0	<2	NM	23	33.1	8326	1.4	18	5	NM	NM	NM	81.0	0.11	2.82	45.4	77		
55	524649	5518941	23.19	0.09	1.6	<2	NM	36	37.3	18585	0.9	29	7	NM	NM	NM	61.4	0.09	1.38	32.9	66		
56	526077	5518976	33.31	0.08	1.2	<2	NM	22	27.7	6730	0.6	16	5	NM	NM	NM	25.4	0.05	1.01	15.3	54		
57	526791	5520245	71.2	0.16	2.7	<2	NM	16	76.6	4316	1.4	14	9	NM	NM	NM	49.0	0.16	1.73	12.7	27		
58	525259	5520314	66.74	0.17	1.4	<2	NM	18	97.3	5831	1.2	23	5	0.4	11.9	30.8	0.11	1.17	19.5	103			
59	527071	5524548	37.55	0.13	2.0	<2	NM	32	22.9	14391	0.7	26	6	NM	NM	NM	53.1	0.08	1.91	28.8	84		
61	526505	5524125	42.18	0.11	2.2	<2	NM	30	25.9	17284	3.5	25	7	NM	NM	NM	64.0	0.09	4.39	30.7	120		
62	523406	5521552	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
63	519960	5521293	35.49	0.09	3.0	<2	NM	41	22.8	21566	4.0	30	7	NM	NM	NM	68.7	0.07	11.32	40.2	81		
64	518089	5523203	60.92	0.08	3.0	<2	NM	17	19.7	8822	1.9	15	7	NM	NM	NM	31.7	0.15	5.99	20.0	49		
65	516998	5522450	49.51	0.08	2.6	<2	NM	28	22.9	14521	1.6	23	6	NM	NM	NM	46.1	0.10	5.42	31.2	62		
66	515889	5523962	15.17	0.09	3.0	<2	NM	57	36.6	31962	0.8	43	11	NM	NM	NM	81.5	0.08	3.81	54.6	88		
67	514189	5525638	59.83	0.09	2.3	<2	NM	21	14.0	7122	1.0	14	6	NM	NM	NM	31.2	0.05	0.48	20.3	144		
68	513734	5528367	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
69	515247	5534304	18.75	0.11	2.5	<2	NM	47	29.8	23381	0.6	35	9	NM	NM	NM	70.4	0.08	3.22	41.1	81		
71	512886	5534527	57.83	0.06	2.1	<2	NM	16	17.6	6729	0.9	19	5	NM	NM	NM	22.7	0.06	0.56	11.3	60		
72	512898	5538192	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
73	512645	5537415	15.08	0.10	1.7	<2	NM	56	29.7	28978	0.4	41	9	NM	NM	NM	84.6	0.08	1.77	51.4	89		
74	508693	5536974	36.87	0.16	1.7	<2	NM	32	28.7	18005	1.0	26	8	NM	NM	NM	130.8	0.09	3.35	44.6	73		
75	510114	5535288	11.39	0.11	2.4	<2	NM	58	31.1	31338	0.5	41	11	NM	NM	NM	102.6	0.09	3.21	56.6	85		
76	509922	5534133	11.64	0.11	2.1	<2	NM	62	32.5	31436	0.5	44	11	NM	NM	NM	102.3	0.09	3.65	57.6	90		
77	508771	5534661	28.12	0.17	1.7	<2	NM	50	39.1	30288	0.9	37	9	NM	NM	NM	97.5	0.09	2.33	60.0	97		
78	509711	5530983	30.37	0.19	2.4	<2	NM	51	41.2	28027	1.6	41	9	NM	NM	NM	88.6	0.11	7.51	52.3	122		
79	507460	5532985	10.7	0.12	2.9	<2	NM	66	36.9	33965	0.3	48	12	NM	NM	NM	102.9	0.08	3.66	55.2	96		
81	506529	5532799	11.12	0.11	2.2	<2	NM	59	42.6	30376	0.5	45	12	NM	NM	NM	98.3	0.12	3.53	54.4	86		
82	506319	5533881	11.16	0.11	3.2	<2	NM	59	35.6	31259	0.4	45	13	NM	NM	NM	98.0	0.09	2.97	50.3	91		
83	504763	5533343	18.6	0.11	2.6	<2	NM	64	37.7	32659	0.6	47	11	NM	NM	NM	92.1	0.11	3.90	57.5	98		
84	503981	5534749	7.22	0.09	2.5	<2	NM	57	26.7	30692	0.4	38	10	NM	NM	NM	91.6	0.08	2.06	54.2	73		
85	504071	5535879	9.08	0.11	2.6	<2	NM	79	28.1	41938	0.3	52	12	0.6	0.6	112.2	0.09	2.32	69.0	108			
86	504147	5537664	5.84	0.06	1.3	<2	NM	41	16.2	20656	0.2	26	7	NM	NM	NM	68.5	0.06	1.66	37.3	51		
87	501109	5537746	27.47	0.16	2.6	<2	NM	57	36.2	28299	0.6	42	12	NM	NM	NM	103.0	0.12	6.93	48.8	101		
88	499737	5536365	45.74	0.12	3.2	<2	NM	40	31.3	22140	1.4	32	8	NM	NM	NM	73.2	0.11	6.49	43.4	83		
89	500202	5534335	11.15	0.14	2.9	<2	NM	76	35.3	39634	1.1	53	14	0.7	0.9	128.2	0.11	6.91	67.5	111			
91	501381	5534562	9.78	0.11	3.4	<2	NM	61	30.3	33535	0.4	45	11	NM	NM	NM	92.7	0.06	2.84	53.6	87		
92	503839	5531426	9.69	0.14	2.1	<2	NM	66	33.0	35573	0.4	46	13	NM	NM	NM	117.9	0.07	3.27	59.2	93		
93	501141	5529810	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
94	504494	5529825	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
95	505793	5530398	37.68	0.18	2.7	<2	NM	37	38.5	24592	1.2	31	7	NM	NM	NM	84.5	0.10	4.64	43.2	96		
96	513381	5520688	19.03	0.08	1.9	<2	NM	55	26.5	27491	1.7	39	9	NM	NM	NM	79.3	0.07	6.68	48.3	98		
97	513121	5520727	24.22	0.09	2.0	<2	NM	54	26.8	26823	1.6	40	9	NM	NM	NM	73.0	0.09	9.20	46.3	98		
98	511952	5519300	62.83	0.07	2.7	<2	NM	17	17.1	7911	0.8	19	5	NM	NM	NM	24.4	0.08	0.72	14.1	86		
99	506213	5517318	65.9	0.08	2.3	<2	NM	18	16.4	9958	1.0	22	5	NM	NM	NM	23.1	0.08	11.02	14.5	75		
101	500327	5516913	41.9	0.08	2.5	3	NM	22	21.2	10880	1.3	25	5	NM	NM	NM	36.9	0.07	4.73	20.2	85		
102	501382	5514412	13.04	0.13	3.1	<2	2.7	65	44.6	35024	0.7	51	12	0.8	1.0	106.0	0.11	1.97	60.1	97			

Sample	Easting Method	Northing	LOI	Ag	As	Au	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs		Sb	U	V	Zn	
																	MS	MS					MS
			%	ppm	ppm	ppb	ppb	ppb	ppm	ppm	OES	ppm	OES	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm
	Units	----->															n/a						
	Det Limit	----->	0.01	0.04	0.5	2	0.1	1	0.4	20	20	0.06	1	0.3	1	0.1	0.1	0.03	0.03	0.03	0.4	0.4	
103	500682	5512583	17.35	0.16	3.4	<2	3.7	66	39.7	33638	0.5	52	12	12	0.8	1.0	104.0	0.11	2.26	53.8	108		
104	501376	5511601	28.79	0.14	3.6	<2	NM	50	35.4	25942	0.8	40	10	NM	NM	NM	76.8	0.10	1.99	43.1	90		
105	505711	5510921	54.44	0.11	9.4	<2	NM	23	21.4	10484	2.5	21	5	NM	NM	NM	38.0	0.42	5.80	16.2	72		
106	508154	5512720	34.78	0.08	2.3	<2	NM	31	23.3	13619	0.6	26	6	NM	NM	NM	48.1	0.06	1.41	23.0	69		
108	490456	5513258	28.12	0.18	2.4	<2	NM	57	39.0	31258	1.0	42	11	NM	NM	NM	93.9	0.13	1.96	59.9	99		
109	492424	5513630	48.76	0.13	2.0	<2	NM	32	30.6	14033	1.4	29	8	NM	NM	NM	46.3	0.11	3.18	29.2	130		
111	498836	5515512	17.14	0.13	2.9	<2	0.5	73	48.4	39036	1.0	54	13	0.8	1.0	108.7	0.12	7.12	70.6	105			
112	495973	5520019	76.07	0.09	3.0	<2	NM	12	22.9	4825	2.6	22	5	NM	NM	NM	15.8	0.14	0.78	10.6	98		
113	490725	5524781	47.12	0.18	2.6	<2	NM	28	32.4	12325	1.1	28	8	NM	NM	NM	50.2	0.11	4.27	26.1	89		
114	487725	5525145	26.16	0.16	2.7	<2	NM	44	35.1	27498	1.3	32	11	NM	NM	NM	103.0	0.10	30.17	55.3	104		
115	487949	5524091	19.49	0.15	2.5	<2	NM	57	29.9	29563	0.6	43	11	NM	NM	NM	85.3	0.08	9.11	48.1	115		
116	489055	5524932	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
117	489109	5528518	20.79	0.13	1.9	<2	NM	52	30.8	29408	0.5	38	10	NM	NM	NM	92.8	0.07	6.82	48.8	92		
118	489243	5529471	18.5	0.07	2.1	<2	NM	42	22.6	22233	0.5	30	9	NM	NM	NM	67.6	0.08	5.29	38.1	68		
119	488320	5529802	26.52	0.16	2.1	<2	NM	51	35.0	27530	0.6	39	19	NM	NM	NM	87.9	0.08	11.58	53.1	99		
121	491025	5531008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
122	491797	5532347	17.08	0.11	2.2	<2	NM	61	28.6	33107	0.6	42	10	NM	NM	NM	98.4	0.08	4.73	55.9	92		
123	492505	5531252	25.91	0.11	2.4	<2	NM	45	26.4	25329	0.9	32	8	NM	NM	NM	94.5	0.08	7.52	47.4	74		
124	494208	5530368	18.05	0.10	2.5	<2	NM	44	35.7	22735	1.1	33	10	NM	NM	NM	90.1	0.12	11.53	45.0	84		
125	495427	5529946	31.42	0.09	1.8	<2	0.5	68	54.0	34128	0.8	49	13	0.9	1.0	103.6	0.12	8.19	63.0	99			
126	494949	5529070	15.68	0.13	2.6	<2	NM	66	37.1	33938	0.5	47	14	NM	NM	NM	104.9	0.13	7.87	58.1	100		
127	495108	5528209	26.3	0.06	1.0	<2	NM	7	10.9	1534	0.4	4	7	NM	NM	NM	20.3	0.07	3.22	5.4	26		
128	496017	5529307	13.2	0.12	2.2	<2	0.5	71	42.2	35059	0.5	51	12	0.8	1.0	105.6	0.07	7.09	59.2	99			
129	496763	5529366	36.36	0.08	3.2	<2	NM	39	32.5	17228	0.7	32	9	NM	NM	NM	74.9	0.08	9.80	32.1	69		
131	496243	5532186	40.1	0.10	2.0	<2	NM	32	25.1	15374	2.8	26	7	NM	NM	NM	59.4	0.08	5.45	32.3	68		
132	494698	5532521	26.78	0.12	2.5	<2	NM	47	30.7	41124	0.9	30	8	NM	NM	NM	146.0	0.07	13.83	60.2	97		
133	495127	5533930	42.01	0.13	1.0	<2	NM	12	17.8	3132	0.8	7	9	NM	NM	NM	45.3	0.06	7.60	14.8	57		
134	499200	5532831	13.17	0.08	2.5	<2	NM	53	33.0	26590	0.7	38	9	NM	NM	NM	85.8	0.08	5.89	48.4	72		
135	499483	5538266	15.23	0.14	2.2	<2	NM	71	32.6	37367	1.4	48	11	NM	NM	NM	107.9	0.09	4.35	63.6	116		
136	496230	5538351	45.66	0.10	2.2	<2	NM	18	20.6	12018	0.7	13	8	NM	NM	NM	165.1	0.10	4.96	34.7	55		
137	496515	5537901	33.5	0.10	1.7	<2	NM	27	20.1	13808	0.6	20	6	NM	NM	NM	138.4	0.07	5.47	33.9	79		
138	497054	5537319	46.44	0.11	2.1	<2	NM	26	27.2	28941	1.1	20	6	NM	NM	NM	127.3	0.11	17.53	37.6	76		
139	498078	5537198	46.84	0.11	2.7	<2	NM	34	31.4	13602	1.2	32	7	NM	NM	NM	87.7	0.09	11.54	28.0	68		
141	497931	5536536	50.11	0.13	2.7	<2	NM	30	29.6	12055	1.3	29	6	NM	NM	NM	67.8	0.08	3.78	28.5	78		
142	496889	5536500	35.53	0.18	2.8	<2	NM	40	35.8	21950	1.0	26	11	NM	NM	NM	134.6	0.10	15.00	63.0	95		
143	496674	5535729	23.29	0.10	2.0	<2	NM	38	24.8	23006	0.6	27	9	NM	NM	NM	114.3	0.07	5.89	46.9	76		
144	495746	5536144	67.24	0.07	2.2	<2	NM	15	28.0	11235	2.3	13	6	NM	NM	NM	65.7	0.14	5.78	16.4	55		
145	494260	5539000	20.46	0.08	2.5	<2	NM	39	22.6	27194	0.7	26	8	NM	NM	NM	103.2	0.10	4.89	47.2	72		
146	494119	5537462	26.7	0.06	1.3	<2	NM	30	19.9	19562	0.9	21	7	NM	NM	NM	85.3	0.09	4.32	32.9	68		
147	493258	5536524	27.18	0.07	1.7	<2	NM	29	20.6	18180	0.9	20	6	NM	NM	NM	88.5	0.10	4.33	32.2	63		
148	494115	5535287	32.43	0.09	2.8	<2	NM	22	22.3	17177	0.8	17	8	NM	NM	NM	78.7	0.09	4.33	37.0	57		
149	492619	5535528	53.57	0.13	1.9	<2	NM	9	29.1	5294	1.7	8	5	NM	NM	NM	148.0	0.07	2.41	23.0	65		
151	492595	5538539	44.67	0.09	1.9	<2	NM	16	25.0	9261	1.2	14	5	NM	NM	NM	98.3	0.08	12.84	22.2	52		
152	491220	5537637	64.47	0.08	2.9	<2	NM	14	32.8	4015	1.0	15	5	NM	NM	NM	70.9	0.11	11.29	22.3	76		
153	489728	5539311	29	0.11	2.8	<2	NM	33	33.5	21020	0.9	26	9	NM	NM	NM	96.9	0.10	5.11	40.5	75		
154	488820	5535387	77.39	0.10	2.6	<2	NM	9	24.7	15530	1.7	14	5	NM	NM	NM	51.6	0.06	4.03	22.1	115		

Sample	Easting Method	Northing	LOI		Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs		Sb	U	V	Zn
			Grav	%													MS	MS				
	Units				ppm	ppm	ppb	ppb	ppm	ppm	OES	ppm	OES	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm
	Det Limit																					
206	452397	5539685	15.08	0.08	0.08	2.3	<2	NM	43	24.1	22407	0.6	34	9	NM	NM	88.6	0.08	3.80	37.3	86	
207	454499	5536398	13.09	0.08	0.08	2.2	<2	NM	41	25.0	24252	0.6	32	8	NM	NM	90.2	0.06	4.21	41.7	77	
208	455642	5535472	20.83	0.13	0.13	4.7	<2	NM	45	3<0.44	24430	0.6	35	24	NM	NM	92.4	0.29	4.80	42.5	103	
209	455478	5534447	25.83	0.10	0.10	3.2	<2	NM	40	33.2	20498	0.9	32	11	NM	NM	92.9	0.16	6.94	43.7	78	
211	456377	5534275	12.67	0.07	0.07	2.0	<2	NM	31	19.7	16916	0.5	24	9	NM	NM	71.2	0.07	4.33	28.0	64	
212	456754	5533715	53.32	0.15	0.15	1.8	<2	NM	17	27.8	7515	1.0	15	6	NM	NM	89.1	0.09	13.83	22.8	71	
213	45726	5535526	54.42	0.11	0.11	2.2	<2	NM	29	34.4	12864	1.5	27	6	NM	NM	63.3	0.15	2.08	29.8	67	
214	457480	5533011	35.31	0.07	0.07	4.0	<2	NM	39	36.2	19487	1.3	39	11	NM	NM	82.2	0.17	6.37	42.4	73	
215	459414	5533898	25.33	0.09	0.09	2.5	<2	NM	51	35.9	25120	0.8	44	11	NM	NM	97.7	0.13	7.67	46.9	92	
216	459415	5533898	8.56	0.04	0.04	3.9	<2	NM	26	20.7	13721	0.6	21	7	NM	NM	53.2	0.08	1.99	26.5	38	
217	460745	5533988	27.54	0.09	0.09	3.7	<2	NM	39	36.9	20042	1.1	34	11	NM	NM	74.3	0.15	6.73	40.4	78	
218	460691	5532616	22.25	0.08	0.08	3.6	<2	NM	33	30.7	18232	1.0	30	9	NM	NM	64.4	0.12	5.58	32.5	70	
219	462624	5533229	54.81	0.19	0.19	2.4	<2	NM	27	46.3	4109	2.8	29	4	NM	NM	77.5	0.12	2.67	43.5	66	
221	461357	5530870	23.18	0.10	0.10	3.3	<2	NM	37	33.0	19445	0.9	32	10	NM	NM	75.9	0.13	7.68	37.6	68	
222	461366	5529329	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
223	463274	5530324	18.33	0.10	0.10	4.0	<2	NM	46	33.5	24780	0.7	36	15	NM	NM	91.9	0.17	7.47	46.2	82	
224	461965	5528491	21.88	0.10	0.10	3.3	<2	NM	53	34.6	28698	0.6	41	12	NM	NM	102.0	0.12	11.44	48.5	92	
225	459202	5527751	41.03	0.11	0.11	2.3	<2	NM	28	38.0	14608	1.8	25	6	NM	NM	107.5	0.13	12.64	30.8	81	
226	458836	5527004	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
227	457907	5527016	49.14	0.12	0.12	3.1	<2	NM	34	40.2	23008	2.0	29	10	NM	NM	96.4	0.18	12.98	39.5	76	
228	457862	5527588	64.66	0.10	0.10	2.2	<2	NM	16	31.3	9369	2.0	16	4	NM	NM	69.6	0.10	5.99	24.6	100	
229	456493	5528522	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
231	455595	5526666	17.14	0.11	0.11	2.1	<2	NM	55	40.8	26569	0.6	47	14	NM	NM	111.4	0.15	12.05	45.5	93	
232	455671	5525758	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
233	457769	5526184	49.1	0.16	0.16	2.1	<2	NM	25	42.9	13486	1.9	21	12	NM	NM	126.8	0.10	69.26	39.8	67	
234	478771	5520534	42.07	0.05	0.05	9.2	<2	NM	12	12.5	4887	5.1	12	3	NM	NM	19.9	0.07	12.35	22.4	48	
235	475204	5527399	55.34	0.09	0.09	2.2	<2	NM	22	16.7	14146	1.1	23	4	NM	NM	37.9	0.08	0.60	23.6	61	
236	464698	5531923	18.18	0.12	0.12	4.6	<2	NM	52	44.9	29364	2.7	41	11	NM	NM	94.4	0.13	11.05	55.1	85	
237	456485	5531355	28.98	0.11	0.11	2.9	<2	NM	39	35.2	19551	1.0	36	8	NM	NM	91.0	0.08	8.84	38.4	79	
238	455122	5533791	29.48	0.12	0.12	3.3	<2	NM	42	41.5	21087	1.1	40	8	NM	NM	105.1	0.12	10.50	39.9	92	
239	450979	5535722	25.26	0.13	0.13	2.3	<2	NM	45	27.2	23913	0.8	31	8	NM	NM	100.1	0.08	3.85	46.7	96	
241	452268	5535481	33.32	0.11	0.11	1.8	<2	NM	33	37.4	14008	1.4	32	6	NM	NM	70.6	0.09	3.20	30.2	60	
242	451592	5536921	15.3	0.10	0.10	2.1	<2	NM	44	27.2	22097	0.6	34	8	NM	NM	89.0	0.06	3.75	38.5	83	
243	449345	5538158	44.5	0.11	0.11	3.1	<2	NM	24	23.9	10674	1.5	17	7	NM	NM	77.7	0.13	1.98	21.7	58	
244	446856	5537910	20.42	0.12	0.12	2.4	<2	NM	50	31.3	24126	0.7	40	9	NM	NM	100.6	0.06	3.78	40.8	106	
245	447693	5537892	23.27	0.12	0.12	1.9	<2	NM	47	28.1	21618	0.6	34	9	NM	NM	90.9	0.08	3.11	39.4	88	
246	446369	5536926	22.03	0.13	0.13	2.9	<2	NM	58	32.3	30756	0.9	47	8	NM	NM	112.4	0.09	4.52	54.7	111	
247	447061	5536195	53.57	0.10	0.10	2.0	<2	NM	30	37.0	19382	1.4	27	7	NM	NM	59.4	0.15	2.17	27.8	81	
248	447259	5535855	53.47	0.12	0.12	3.9	<2	NM	33	31.0	21154	1.7	24	7	NM	NM	69.1	0.18	2.14	39.9	80	
249	447388	5535460	63.5	0.08	0.08	1.6	<2	NM	19	25.1	4677	1.1	23	4	NM	NM	30.9	0.11	2.67	14.3	46	
251	447637	5535432	57.62	0.08	0.08	1.5	<2	NM	20	30.1	4216	1.1	29	4	NM	NM	39.5	0.10	3.75	13.3	39	
252	448153	5535215	54.43	0.10	0.10	2.3	<2	NM	29	31.5	13395	1.6	22	6	NM	NM	48.9	0.13	3.83	28.9	54	
253	448552	5534803	46.31	0.09	0.09	2.3	<2	NM	37	26.4	16252	1.4	26	5	NM	NM	69.0	0.10	4.64	31.5	59	
254	448405	5533969	53.97	0.08	0.08	1.5	<2	NM	10	21.1	4083	1.2	13	2	NM	NM	29.8	0.09	2.24	10.3	39	
255	448856	5535798	51.55	0.10	0.10	2.2	<2	NM	26	3<0.43	12386	1.8	20	6	NM	NM	54.8	0.11	2.78	30.7	49	
256	449202	5535373	55.69	0.08	0.08	1.9	<2	NM	30	22.5	9544	1.2	33	5	NM	NM	74.6	0.10	4.52	16.5	57	

Sample	Easting Method	Northing	LOI		Ag MS	As INAA	Au INAA	Au FA	Cr OES	Cu		Fe OES	Mo MS	Ni OES	Pb MS	Pd FA	Pt FA	REEs		Sb MS	U MS	V OES	Zn OES
			Grav	%						ppm	ppm							ppm	ppm				
	Units																						
	Det Limit																						
257	449498	535272	57.48	0.08	0.08	2.7	<2	NM	28	23.5	8955	1.2	28	8	NM	NM	NM	69.7	0.16	4.15	16.9	57	
258	449108	536436	58.01	0.09	0.09	2.6	<2	NM	21	27.3	9077	1.3	18	5	NM	NM	NM	45.8	0.12	1.39	22.2	64	
259	445424	536410	57.09	0.08	0.08	2.4	<2	NM	24	30.8	10604	1.1	22	5	NM	NM	NM	49.5	0.11	1.77	27.6	59	
261	445556	536211	41.76	0.10	0.10	3.3	<2	NM	41	52.3	19515	1.7	33	8	NM	NM	NM	63.8	0.18	1.74	42.7	76	
262	444576	536963	24.26	0.09	0.09	1.7	<2	NM	45	31.1	21423	1.1	39	7	NM	NM	NM	96.8	0.08	4.00	39.0	80	
263	445198	538284	35.28	0.06	0.06	1.4	<2	NM	17	10.2	5181	0.5	16	5	NM	NM	NM	42.3	0.06	1.39	13.9	56	
264	443597	538862	37.3	0.05	0.05	1.5	<2	NM	12	11.8	3880	0.5	11	4	NM	NM	NM	36.8	0.08	1.39	6.8	32	
265	442291	538929	35.9	<0.04	0.04	2.7	<2	NM	17	9.1	7482	0.4	15	4	NM	NM	NM	35.0	0.05	0.92	10.1	39	
266	439106	538454	65.78	0.11	0.11	1.6	<2	NM	25	23.9	9391	1.2	18	3	NM	NM	NM	84.7	0.11	2.32	16.8	60	
267	439434	537910	48.16	0.16	0.16	3.1	<2	NM	29	30.8	15519	1.3	19	6	NM	NM	NM	94.9	0.17	2.50	35.6	67	
268	440143	537594	61.58	0.15	0.15	2.5	<2	NM	25	30.1	20457	1.5	18	5	NM	NM	NM	72.7	0.10	1.80	51.9	66	
269	439961	537049	30.45	0.15	0.15	2.2	<2	NM	57	36.2	22470	1.0	43	8	NM	NM	NM	114.8	0.09	4.01	39.7	109	
271	439988	538478	24.8	0.09	0.09	1.4	<2	NM	31	20.1	15468	0.7	21	5	NM	NM	NM	100.7	0.08	2.84	25.1	59	
272	440936	537962	38.45	0.09	0.09	2.6	<2	NM	24	29.1	11452	1.8	20	6	NM	NM	NM	82.0	0.22	3.51	22.9	54	
273	441529	537784	51.39	0.09	0.09	2.5	<2	NM	24	20.7	11804	1.2	16	5	NM	NM	NM	63.9	0.21	1.88	22.1	64	
274	441975	537048	28.04	0.14	0.14	4.3	<2	NM	72	38.6	33080	1.1	55	8	NM	NM	NM	132.8	0.09	4.93	57.0	135	
275	442796	536523	57.28	0.23	0.23	1.9	<2	NM	52	48.1	25874	1.5	38	6	NM	NM	NM	79.0	0.12	1.87	61.3	77	
276	443805	535742	40.53	0.13	0.13	2.4	<2	NM	34	25.0	12833	1.4	23	7	NM	NM	NM	90.0	0.14	4.86	38.5	68	
277	444736	535692	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
278	444857	535312	44.13	0.12	0.12	2.0	<2	NM	34	29.1	20484	1.8	28	5	NM	NM	NM	85.5	0.12	4.21	40.4	87	
279	445417	534730	55.93	0.13	0.13	2.6	<2	NM	27	36.5	9966	1.4	28	5	NM	NM	NM	121.3	0.14	6.53	19.8	61	
281	446186	534589	40.01	0.09	0.09	2.4	<2	NM	36	23.9	15454	1.0	29	8	NM	NM	NM	75.3	0.14	5.06	32.8	59	
282	447143	534226	50.29	0.09	0.09	1.8	<2	NM	31	27.8	12280	1.2	27	5	NM	NM	NM	83.2	0.11	6.72	26.6	50	
283	446703	533742	55.05	0.10	0.10	1.7	<2	NM	30	30.7	10956	1.6	28	4	NM	NM	NM	88.8	0.09	7.29	24.3	55	
284	443492	534808	43	0.08	0.08	2.1	<2	NM	32	20.7	15078	1.1	23	8	NM	NM	NM	77.0	0.19	2.57	27.9	55	
285	438547	537298	32.71	0.18	0.18	3.3	<2	NM	46	31.6	24658	1.1	30	10	NM	NM	NM	103.7	0.14	3.31	50.7	85	
286	438819	536451	37.25	0.10	0.10	2.2	<2	NM	35	48.7	18530	1.9	33	9	NM	NM	NM	76.6	0.14	2.57	30.5	71	
287	439063	535932	16.96	0.05	0.05	1.4	<2	NM	23	17.6	10580	0.7	20	4	NM	NM	NM	59.8	0.07	2.59	18.3	53	
288	440249	536074	53.08	0.11	0.11	2.0	<2	NM	28	27.5	9894	1.1	23	6	NM	NM	NM	57.5	0.13	1.85	24.3	58	
289	440018	535630	45.59	0.16	0.16	2.7	<2	NM	27	38.0	21012	1.5	25	6	NM	NM	NM	69.2	0.14	5.96	42.6	59	
291	441711	535629	10.65	0.04	0.04	1.3	<2	NM	16	8.2	11457	0.5	10	3	NM	NM	NM	37.8	0.04	2.03	15.2	37	
292	441211	535023	31.6	0.09	0.09	1.5	<2	NM	31	23.0	15051	0.9	20	6	NM	NM	NM	83.3	0.12	4.50	26.4	61	
293	441208	534138	43.04	0.09	0.09	2.1	<2	NM	17	15.8	5736	0.6	11	5	NM	NM	NM	36.8	0.12	3.64	14.3	36	
294	443516	533140	26.44	0.07	0.07	3.0	<2	NM	33	19.2	18717	0.9	24	7	NM	NM	NM	101.2	0.09	4.52	28.5	68	
295	444278	533604	29.68	0.10	0.10	2.6	<2	NM	42	25.6	25677	1.1	24	6	NM	NM	NM	112.6	0.09	4.91	44.5	78	
296	445443	532883	31.9	0.08	0.08	2.4	<2	NM	25	38.9	13978	1.9	25	5	NM	NM	NM	58.8	0.18	3.35	27.6	56	
297	450258	534321	35.49	0.11	0.11	2.4	<2	NM	41	25.8	19592	0.8	28	8	NM	NM	NM	92.3	0.13	3.03	44.7	79	
298	450934	533765	33.17	0.12	0.12	2.2	<2	NM	45	26.0	19103	0.7	31	8	NM	NM	NM	95.1	0.11	3.11	45.8	83	
299	461492	524704	39.29	0.14	0.14	3.7	<2	NM	35	49.0	15519	1.1	37	8	NM	NM	NM	76.1	0.12	13.64	32.8	75	
301	477461	5516053	6.94	0.06	0.06	2.1	<2	NM	46	33.8	23290	0.6	35	10	NM	NM	NM	82.4	0.09	1.93	44.1	62	
302	481487	5514477	13.78	0.14	0.14	2.1	<2	NM	67	31.5	34806	0.4	51	12	NM	NM	NM	96.8	0.07	3.55	55.2	118	
303	461533	525735	20.46	0.13	0.13	3.2	<2	NM	51	38.8	32839	0.9	40	10	NM	NM	NM	117.2	0.08	27.47	47.1	98	
304	455029	530762	19.29	0.11	0.11	3.6	<2	NM	51	28.7	28088	0.6	38	9	NM	NM	NM	113.0	0.07	7.18	47.8	103	
305	453251	530429	25.94	0.11	0.11	1.8	<2	NM	47	25.3	23264	0.6	33	8	NM	NM	NM	95.9	0.06	6.23	40.3	93	
306	454278	532173	19.26	0.05	0.05	3.3	<2	NM	32	19.4	16882	0.6	25	6	NM	NM	NM	73.6	0.08	2.29	30.0	89	
307	453069	532720	9.03	<0.04	<0.04	1.0	<2	NM	21	9.8	11668	0.4	13	3	NM	NM	NM	59.9	0.04	2.10	20.1	38	

Sample	Easting Method	Northing	LOI		Ag MS	As INAA	Au INAA	Au FA	Cr OES	Cu		Fe OES	Mo MS	Ni OES	Pb MS	Pd FA	Pt FA	REEs		Sb MS	U MS	V OES	Zn OES
			Grav	%						ppm	ppm							ppm	ppm				
	Units		0.01	0.04	0.05	2	2	1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.4	0.4	0.4	
	Det Limit																						
308	452433	5533044	45.98	0.15	3.1	<2	NM	36	36	35.0	10274	1.6	36	5	NM	NM	NM	151.0	0.10	13.67	25.1	66	
309	450525	5533190	53.38	0.05	2.1	<2	NM	29	29	29.7	12916	2.2	36	5	NM	NM	NM	78.3	0.11	3.63	24.4	60	
311	449605	5533135	67.38	0.07	2.9	<2	NM	24	24	42.1	12937	4.1	37	4	NM	NM	NM	101.8	0.11	5.50	18.9	81	
312	437884	5534271	65.22	0.08	2.1	<2	NM	15	15	24.4	5862	1.1	18	4	NM	NM	NM	35.5	0.10	2.37	15.5	63	
313	436467	5534105	24.48	0.08	2.0	<2	NM	30	30	23.4	12959	0.6	25	6	NM	NM	NM	76.2	0.07	3.02	28.5	54	
314	436444	5534918	62.73	0.08	3.4	<2	NM	26	26	47.2	7511	1.9	44	8	NM	NM	NM	106.2	0.19	4.89	11.2	84	
315	436942	5536004	37.48	0.12	2.4	<2	NM	39	39	33.6	16902	1.0	25	7	NM	NM	NM	91.4	0.12	4.08	31.5	70	
316	435964	5536531	59.03	0.08	2.3	<2	NM	27	27	28.6	11207	1.1	18	5	NM	NM	NM	48.5	0.13	1.39	22.5	66	
317	435166	5536186	34.35	0.13	3.9	<2	NM	48	48	38.8	44686	2.5	32	7	NM	NM	NM	113.5	0.10	6.04	51.6	118	
318	437030	5538476	54.26	0.11	2.5	<2	NM	29	29	23.5	16223	1.2	19	6	NM	NM	NM	101.8	0.15	1.99	31.3	70	
319	436039	5539055	28.13	0.11	2.8	2	NM	40	40	23.9	32886	0.9	25	6	NM	NM	NM	138.8	0.08	2.24	43.9	88	
321	435493	5537659	30.47	0.15	2.0	<2	NM	44	44	33.3	23933	0.9	34	7	NM	NM	NM	130.0	0.08	3.24	48.6	95	
322	434894	5537224	56.71	0.14	1.7	<2	NM	19	19	128.0	19373	1.3	22	4	0.1	0.1	0.1	53.5	0.10	1.26	24.2	85	
323	434262	5537698	34.97	0.15	1.8	<2	NM	47	47	37.3	24014	0.9	35	7	NM	NM	NM	133.5	0.11	3.26	48.2	94	
324	434510	5538231	53.5	0.17	2.2	<2	NM	29	29	31.6	18650	1.5	17	7	NM	NM	NM	99.8	0.14	1.47	77.4	67	
325	434138	5538719	53.22	0.15	2.2	<2	NM	22	22	27.8	26406	1.3	16	4	NM	NM	NM	70.3	0.08	1.56	29.7	53	
326	433656	5538668	48.93	0.15	2.7	<2	NM	61	61	32.6	14948	1.0	35	6	NM	NM	NM	95.2	0.15	2.31	41.0	103	
327	433465	5538280	61.74	0.07	2.1	<2	NM	25	25	15.6	3826	1.1	19	4	NM	NM	NM	52.1	0.14	1.62	16.8	63	
328	433053	5538423	48.33	0.16	2.8	<2	NM	29	29	33.4	17149	1.5	21	6	NM	NM	NM	92.6	0.15	2.13	41.7	55	
329	432843	5538196	59.06	0.10	2.5	<2	NM	19	19	25.1	12857	1.4	19	5	NM	NM	NM	56.8	0.13	1.79	29.1	56	
331	432548	5538506	44.61	0.13	2.3	<2	NM	33	33	31.9	15909	1.3	25	5	NM	NM	NM	124.0	0.13	2.54	36.6	75	
332	432280	5538888	47.66	0.08	1.3	<2	NM	11	11	11.5	4165	0.7	13	4	NM	NM	NM	79.6	0.09	2.47	12.8	35	
333	430124	5538927	32.88	0.14	2.5	<2	NM	36	36	24.0	22222	1.1	25	8	NM	NM	NM	110.3	0.10	2.03	50.0	85	
334	429947	5538434	24.25	0.17	3.8	<2	NM	52	52	48.1	27481	1.4	39	8	NM	NM	NM	161.2	0.14	4.04	49.1	85	
335	430583	5536942	47.53	0.12	2.0	<2	NM	25	25	20.5	7664	0.9	16	6	NM	NM	NM	64.0	0.13	1.94	33.3	57	
336	428513	5536639	33.2	0.12	4.7	<2	NM	50	50	29.2	53281	3.4	36	8	NM	NM	NM	137.8	0.12	4.27	63.4	165	
337	428877	5535381	41.17	0.09	1.3	<2	NM	19	19	24.0	4797	0.8	14	4	NM	NM	NM	35.6	0.06	1.56	11.6	36	
338	428620	5535099	50.79	0.11	1.9	<2	NM	19	19	23.4	9701	0.8	15	7	NM	NM	NM	50.4	0.09	3.69	22.0	46	
339	430981	5535955	46.14	0.14	2.2	<2	NM	20	20	25.6	13569	1.0	15	5	NM	NM	NM	90.8	0.11	1.76	40.8	50	
341	430188	5535472	57.59	0.09	2.0	<2	NM	30	30	28.7	26078	1.8	24	3	NM	NM	NM	68.2	0.13	2.54	31.2	64	
342	430094	5534364	23.39	0.07	1.8	<2	NM	31	31	18.9	13507	0.7	24	6	NM	NM	NM	81.3	0.08	2.57	22.8	61	
343	429530	5534055	31.94	0.14	5.3	<2	NM	42	42	29.9	45191	2.1	27	11	NM	NM	NM	108.1	0.20	5.11	56.6	100	
344	434024	5534549	31.16	0.10	2.3	<2	NM	40	40	29.6	15686	0.7	30	8	NM	NM	NM	90.7	0.13	2.83	36.3	67	
345	433503	5535521	38.03	0.15	3.0	<2	NM	42	42	38.1	25288	1.3	26	7	NM	NM	NM	100.0	0.12	4.08	47.9	72	
346	432015	5534595	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
347	432822	5533827	36.17	0.10	2.0	<2	NM	33	33	29.8	14092	0.9	30	6	NM	NM	NM	94.0	0.08	4.05	23.2	68	
348	432262	5533326	59.51	0.07	1.2	<2	NM	17	17	25.6	3838	0.7	17	2	NM	NM	NM	40.5	0.08	2.79	9.3	37	
349	435897	5533463	32.47	0.09	1.9	<2	NM	35	35	22.1	11754	0.8	22	5	NM	NM	NM	80.2	0.06	3.02	30.4	68	
351	437259	5532251	42.02	0.07	1.4	<2	NM	25	25	17.4	6781	0.6	16	5	NM	NM	NM	52.5	0.04	1.87	14.3	63	
352	436766	5532438	41.46	0.09	1.6	<2	NM	18	18	16.1	6805	1.0	11	5	NM	NM	NM	39.3	0.06	1.48	16.9	43	
353	436842	5531895	33.19	0.05	1.9	<2	NM	17	17	12.9	6664	0.5	19	5	NM	NM	NM	39.2	0.08	1.27	12.7	58	
354	437644	5531260	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
355	438098	5528608	53.96	0.18	3.5	<2	NM	23	23	70.4	37432	2.5	22	6	0.2	0.3	0.3	91.3	0.11	4.19	57.7	64	
356	437479	5528975	53.07	0.11	2.8	<2	NM	22	22	48.1	11719	1.2	33	5	NM	NM	NM	156.4	0.10	3.42	33.3	77	
357	437611	5528272	54.24	0.12	2.9	<2	NM	20	20	37.2	15382	1.9	18	6	NM	NM	NM	81.8	0.15	4.08	32.8	77	
358	434876	5529141	45.7	0.11	2.8	<2	NM	26	26	35.0	17786	1.0	26	10	NM	NM	NM	100.9	0.17	3.05	41.6	66	

Sample	Easting Method	Northing	LOI		Ag	As	Au	Au	Au	Cr	Cu		Fe	Mo	Ni	Pb	Pd	Pt	REEs		Sb	U	V	Zn
			Grav	%							MS	OES							MS	OES				
	Units				ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm
	Det Limit																		n/a					
411	498808	5485948	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
412	498755	5484261	19.1	0.13	2.3	<2	1.4	64	31.2	34636	0.7	51	11	11	0.3	0.7	103.8	0.08	1.98	52.4	133			
413	498678	5483296	16.03	0.13	2.6	<2	0.5	77	39.3	41793	0.9	58	14	14	0.6	0.8	97.2	0.10	2.49	65.8	145			
414	498074	5484547	19.68	0.13	2.4	<2	NM	60	31.8	32462	0.7	48	11	11	NM	NM	97.3	0.09	1.68	51.8	118			
415	496571	5485022	19	0.15	2.0	<2	NM	62	37.5	32502	1.0	47	14	14	NM	NM	102.6	0.13	1.93	57.6	120			
416	495120	5485345	37.99	0.16	2.3	<2	NM	41	33.2	23466	1.8	35	8	8	NM	NM	65.5	0.10	1.32	39.0	141			
417	492295	5485715	17.27	0.15	2.2	<2	0.5	60	35.3	33301	0.7	50	11	11	0.7	0.7	105.4	0.08	1.51	52.5	116			
418	491313	5485832	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
419	493715	5482757	43.46	0.13	3.8	<2	NM	34	41.5	17044	4.5	38	6	6	NM	NM	86.9	0.15	2.29	34.6	118			
421	491134	5483777	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
422	489473	5486179	54.55	0.16	2.8	<2	NM	16	51.3	5674	1.5	21	4	4	NM	NM	77.0	0.13	2.97	14.5	43			
423	488851	5484975	72.31	0.10	4.3	<2	NM	12	30.4	12140	1.5	15	11	11	NM	NM	35.0	0.30	0.88	17.9	62			
424	489498	5484320	21.22	0.14	2.8	<2	NM	53	37.7	28473	1.1	45	9	9	NM	NM	106.4	0.07	2.38	43.5	124			
425	488354	5484016	31.26	0.20	2.3	<2	NM	44	45.5	22776	1.3	36	9	9	NM	NM	102.8	0.10	2.29	44.8	115			
426	487663	5483834	32.15	0.18	2.6	<2	NM	41	42.7	20943	1.2	34	8	8	NM	NM	93.8	0.08	2.34	38.6	104			
427	484886	5483526	42.58	0.08	2.5	<2	NM	24	36.8	8622	0.8	27	5	5	NM	NM	91.7	0.11	3.59	16.6	49			
428	483999	5483182	9.14	0.05	2.0	<2	NM	20	20.6	11502	3.4	17	4	4	NM	NM	45.9	0.09	1.67	21.1	49			
429	486318	5485085	41.22	0.16	2.4	<2	NM	24	42.7	13277	1.8	19	6	6	NM	NM	53.7	0.09	1.46	30.8	61			
431	485530	5484876	58.66	0.19	2.6	<2	NM	19	61.1	19683	1.9	21	6	6	NM	NM	76.4	0.16	2.66	33.8	73			
432	485161	5484949	50.58	0.26	1.8	<2	NM	19	57.7	14246	1.9	18	5	5	NM	NM	62.2	0.12	1.91	36.8	53			
433	485792	5485870	40.37	0.20	3.2	<2	1.8	33	90.5	13666	1.9	35	6	6	1.4	1.0	105.4	0.15	3.28	32.8	90			
434	488348	5488061	59.1	0.14	2.5	<2	NM	19	52.3	12860	3.1	19	7	7	NM	NM	52.1	0.16	1.11	35.8	69			
435	487203	5488198	73.01	0.08	1.6	<2	NM	9	76.2	9720	1.2	17	4	4	NM	NM	40.0	0.15	0.86	18.8	46			
436	487107	5487925	76.6	0.07	1.4	<2	NM	6	42.8	5583	1.1	13	3	3	NM	NM	24.1	0.13	0.59	15.9	41			
437	489635	5490009	32.68	0.15	3.0	<2	2.3	35	64.1	18033	1.5	30	10	10	2.5	1.3	71.5	0.16	1.75	33.8	75			
438	490688	5489455	65.01	0.13	1.7	<2	NM	6	32.6	4512	4.4	11	3	3	NM	NM	32.9	0.11	1.35	10.0	52			
439	489281	5488957	43.15	0.14	4.2	<2	4.1	31	97.4	11996	6.4	31	6	6	2.1	4.0	60.3	0.19	1.68	28.2	70			
441	487740	5488939	42.34	0.09	2.3	<2	NM	17	43.3	9071	0.8	21	5	5	NM	NM	43.7	0.09	1.39	15.3	44			
442	486593	5488750	22.47	0.14	4.2	<2	2.0	39	60.8	23589	1.4	36	6	6	1.1	1.0	82.3	0.11	1.91	43.5	100			
443	484886	5489547	56.95	0.15	3.3	<2	4.3	19	94.4	9725	1.7	30	4	4	1.2	0.5	56.8	0.14	1.68	20.4	65			
444	485249	5488508	28.62	0.16	2.7	<2	1.6	34	63.6	18363	1.3	31	7	7	1.0	0.6	82.9	0.12	1.84	38.8	84			
445	485404	5487247	39.92	0.15	2.5	<2	5.8	34	58.6	17860	0.8	34	7	7	1.1	0.7	68.9	0.11	1.49	41.0	79			
446	484365	5487924	69.68	0.14	2.0	<2	3.1	14	52.8	12656	1.4	20	5	5	0.7	0.1	43.4	0.13	0.98	33.9	72			
447	483826	5486775	29.02	0.16	3.0	<2	4.0	50	96.5	24925	1.4	52	8	8	1.5	1.0	131.6	0.15	5.16	47.9	107			
448	483821	5485644	36.02	0.18	2.9	<2	3.5	36	65.9	17100	0.9	34	9	9	0.3	0.4	92.9	0.12	1.95	36.8	90			
449	482732	5485929	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
451	481892	5486377	62.5	0.15	3.3	<2	1.6	24	68.4	12197	1.5	33	5	5	1.1	0.3	70.7	0.18	2.34	29.6	76			
452	481820	5484924	39.54	0.25	3.7	<2	1.3	37	74.1	20614	1.6	32	11	11	0.9	0.4	104.4	0.16	2.19	54.4	95			
453	482326	5483554	47.83	0.14	2.9	<2	0.5	28	60.8	15964	0.9	32	6	6	1.0	0.3	89.8	0.10	2.38	27.9	66			
454	481727	5483917	42.64	0.17	4.5	<2	1.3	32	65.2	20619	1.0	34	7	7	1.0	0.4	101.6	0.11	2.31	40.2	87			
455	480828	5484204	60.2	0.13	1.9	<2	NM	16	53.2	8108	1.1	18	4	4	NM	NM	40.2	0.13	1.17	14.9	98			
456	480556	5483691	44.51	0.16	2.9	<2	NM	30	53.0	15386	0.8	35	5	5	NM	NM	80.4	0.08	1.68	27.8	92			
457	490744	5492420	45.16	0.15	2.8	<2	NM	21	55.0	14445	1.1	21	6	6	NM	NM	67.3	0.14	1.68	35.8	60			
458	490987	5491409	36.84	0.14	2.8	<2	NM	28	50.0	15412	0.7	23	7	7	NM	NM	63.8	0.09	1.26	33.8	79			
459	491528	5495970	46.02	0.26	4.2	<2	0.5	32	66.2	29105	3.6	29	8	8	2.9	1.3	124.3	0.21	3.57	63.2	73			
461	491119	5495450	48.79	0.20	3.1	<2	0.5	32	61.2	12744	2.3	31	6	6	0.5	0.7	104.0	0.17	4.09	29.1	71			

Sample	Easting Method	Northing	LOI		Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs		Sb	U	V	Zn	
			Grav	%													MS	MS					MS
	Units				ppm	ppm	ppb	ppb	ppm	ppm	OES	ppm	OES	ppm	OES	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm
	Det Limit				ppm	ppm	ppb	ppb	ppm	ppm	OES	ppm	OES	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	
462	489985	5495994	36.04	0.11	2.1	<2	NM	35	35.1	18403	1.3	32	7	NM	NM	NM	61.9	0.10	1.37	33.7	65		
463	490052	5497395	29.44	0.17	2.2	<2	NM	50	35.7	27475	0.8	41	9	NM	NM	NM	73.8	0.11	1.30	46.5	113		
464	487955	5500277	42.77	0.28	4.1	<2	NM	47	55.3	37693	1.8	47	10	NM	NM	NM	86.7	0.14	1.71	62.0	145		
465	487663	5519860	42.99	0.18	3.7	<2	NM	29	33.8	19761	2.3	29	9	NM	NM	NM	72.7	0.18	5.45	37.0	89		
466	455119	5520460	39.65	0.10	3.0	<2	NM	24	25.3	13968	1.1	22	7	NM	NM	NM	62.4	0.11	14.61	29.0	87		
467	441462	5525795	57.18	0.06	2.7	<2	NM	20	47.0	12369	2.1	45	7	NM	NM	NM	170.4	0.12	9.10	17.3	68		
468	441245	5525414	38.1	0.11	2.9	<2	NM	26	41.1	15345	1.2	24	7	NM	NM	NM	122.4	0.13	10.19	30.3	68		
469	440504	5526374	73.13	0.09	3.2	<2	NM	14	4<0.44	6699	2.3	21	6	NM	NM	NM	92.6	0.28	6.29	16.5	68		
471	437871	5526282	42.23	0.15	2.1	2	NM	25	49.4	14599	1.4	23	8	NM	NM	NM	184.0	0.16	17.06	30.9	63		
472	436432	5526047	38.93	0.10	2.0	<2	NM	26	30.2	13794	1.1	21	7	NM	NM	NM	112.0	0.14	13.25	27.5	61		
473	435567	5525496	56.22	0.08	1.7	<2	NM	12	23.5	4203	0.8	18	5	NM	NM	NM	81.8	0.08	14.50	9.1	44		
474	435110	5526399	26.15	0.11	2.1	<2	NM	27	32.9	17064	0.8	19	9	NM	NM	NM	102.6	0.14	8.12	30.4	66		
475	434807	5525545	34.21	0.16	3.6	<2	NM	24	32.3	12530	0.8	18	16	NM	NM	NM	93.1	0.32	7.00	29.8	62		
476	432357	5526195	55.92	0.06	2.6	<2	NM	28	14.1	20348	1.0	12	7	NM	NM	NM	84.7	0.16	2.70	73.0	46		
477	432031	5527126	32.73	0.08	2.8	<2	NM	27	22.2	15521	0.9	18	6	NM	NM	NM	97.6	0.11	3.90	30.8	60		
478	431199	5526767	34.79	0.09	2.1	<2	NM	29	26.1	14435	0.9	20	6	NM	NM	NM	112.0	0.09	4.50	28.4	66		
479	430165	5527249	42.17	0.07	1.4	<2	NM	20	20.9	12156	0.9	18	4	NM	NM	NM	99.0	0.06	3.41	22.5	70		
481	429315	5527107	48.3	0.07	2.4	<2	NM	17	21.0	8809	1.2	18	5	NM	NM	NM	96.2	0.10	3.46	24.1	50		
482	428259	5525882	30.79	0.07	2.0	<2	NM	23	19.1	14122	0.8	18	5	NM	NM	NM	108.6	0.06	4.47	27.5	73		
483	429798	5525706	32.02	0.11	3.6	<2	NM	36	25.8	42084	1.6	26	10	NM	NM	NM	120.7	0.16	9.08	44.5	82		
484	429904	5525042	45.05	0.08	1.0	<2	NM	23	22.2	12127	0.7	19	5	NM	NM	NM	90.4	0.07	3.43	30.5	72		
485	427980	5523530	35.88	0.09	1.9	<2	NM	31	23.8	21432	0.9	29	6	NM	NM	NM	135.2	0.09	8.25	35.8	86		
486	429462	5522813	36.85	0.14	2.6	<2	NM	32	32.4	19833	1.0	23	8	NM	NM	NM	153.6	0.12	13.44	49.7	89		
487	428555	5522268	25.4	0.09	2.2	<2	NM	26	30.2	15172	0.7	22	8	NM	NM	NM	105.1	0.13	12.78	27.6	61		
488	428414	5519508	75.02	0.07	1.9	<2	NM	22	37.6	9076	3.1	26	4	NM	NM	NM	73.0	0.09	25.04	14.1	58		
489	428128	5519543	53.66	0.18	11.0	<2	NM	24	50.1	20305	3.5	21	40	NM	NM	NM	78.7	0.63	23.15	36.6	78		
491	429162	5518182	55.48	0.10	2.4	<2	NM	14	25.0	8172	1.8	14	14	NM	NM	NM	90.4	0.19	72.09	17.6	81		
492	431476	5517716	35.51	0.10	2.3	<2	NM	28	20.9	13876	0.8	19	8	NM	NM	NM	86.0	0.11	11.76	30.9	61		
493	430775	5517820	44.29	0.06	2.0	<2	NM	19	18.6	8217	1.0	19	6	NM	NM	NM	82.2	0.13	11.73	16.9	69		
494	431215	5516983	57.5	0.05	1.9	<2	NM	11	11.7	7493	0.6	11	7	NM	NM	NM	48.4	0.11	6.15	10.8	38		
495	431083	5516566	59.96	0.06	2.0	<2	NM	11	14.3	4565	1.0	16	4	NM	NM	NM	57.7	0.08	7.24	7.8	28		
496	430733	5517251	61.32	0.07	2.9	<2	NM	16	17.4	8897	0.8	13	8	NM	NM	NM	58.1	0.17	6.91	16.5	51		
497	430017	5517945	20.79	0.08	2.6	<2	NM	30	20.6	18370	1.2	22	6	NM	NM	NM	97.6	0.08	12.44	33.0	82		
498	430200	5517446	34.98	0.09	3.1	<2	NM	30	24.1	20170	1.1	19	8	NM	NM	NM	100.7	0.12	12.93	39.2	73		
499	428798	5517306	38.74	0.16	3.4	<2	NM	28	25.8	27827	2.2	20	13	NM	NM	NM	111.5	0.16	21.48	58.1	73		
501	429946	5516035	41.44	0.10	2.3	<2	NM	24	20.5	15416	1.0	20	8	NM	NM	NM	83.7	0.15	9.15	37.9	59		
502	428605	5516181	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
503	430520	5514485	41.33	0.11	3.0	<2	NM	21	25.4	10481	1.5	17	7	NM	NM	NM	117.4	0.16	10.12	29.8	63		
504	431157	5513711	44.7	0.09	2.3	<2	NM	19	19.5	12625	1.5	14	5	NM	NM	NM	72.2	0.14	5.84	22.4	59		
505	430260	5513428	28.96	0.09	2.0	<2	NM	24	19.3	12582	1.1	17	6	NM	NM	NM	87.4	0.08	10.99	24.7	73		
506	429492	5513995	32	0.10	2.2	<2	NM	28	3<0.43	10850	0.9	18	7	NM	NM	NM	84.8	0.11	19.01	19.9	62		
507	429930	5512662	42.85	0.10	2.0	<2	NM	20	21.9	12769	1.3	15	6	NM	NM	NM	95.7	0.12	15.04	30.1	63		
508	430299	5512448	41.77	0.14	2.3	<2	NM	28	26.4	14554	1.8	20	8	NM	NM	NM	116.4	0.14	25.82	35.0	71		
509	430356	5512027	13.99	0.07	2.6	<2	NM	29	15.0	18069	1.2	23	5	NM	NM	NM	103.4	0.07	29.39	28.4	82		
511	429682	5511682	41.2	0.09	2.9	<2	NM	24	22.8	14023	1.6	18	9	NM	NM	NM	81.2	0.19	20.75	30.9	64		
512	428787	5512274	23.03	0.10	5.3	<2	NM	28	28.4	44147	2.5	30	10	NM	NM	NM	119.8	0.13	39.38	46.0	131		

Sample	Easting Method	Northing	LOI	Ag	As	Au	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs		Sb	U	V	Zn	
																	MS	MS					MS
	Units		%	ppm	ppm	ppb	ppb	ppb	ppm	ppm	OES	ppm	OES	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm
	Det Limit																n/a						
513	431411	5515994	51.88	0.09	2.2	<2	NM	13	18.9	6941	1.2	13	7	NM	NM	NM	63.4	0.12	6.02	19.4	47		
514	431075	5518920	27.39	0.10	2.8	<2	NM	35	24.3	51116	2.1	24	8	NM	NM	NM	115.5	0.11	22.68	49.5	101		
515	436937	5522546	40.28	0.28	6.4	<2	11.9	58	57.5	61839	3.3	41	18	1.4	NM	NM	154.8	0.17	44.89	69.9	85		
516	436276	5523332	20.94	0.10	6.7	<2	NM	33	43.3	30718	1.8	40	13	NM	NM	NM	148.4	0.20	33.67	43.1	85		
517	436681	5524174	47.89	0.08	1.7	<2	NM	32	30.5	52337	2.0	21	6	NM	NM	NM	136.5	0.11	6.83	42.3	57		
518	434945	5524169	24.56	0.14	5.8	<2	NM	45	63.3	37008	4.2	61	10	NM	NM	NM	181.2	0.21	47.29	58.6	132		
519	433912	5524353	38.35	0.13	3.5	<2	NM	32	40.5	12989	1.1	24	10	NM	NM	NM	150.5	0.19	18.56	33.1	78		
521	433158	5524065	61.33	0.14	5.7	<2	NM	19	50.9	11237	2.1	29	24	NM	NM	NM	80.1	0.38	15.63	33.1	90		
522	432282	5524840	55.95	0.11	2.5	<2	NM	19	36.0	8436	1.0	24	8	NM	NM	NM	122.9	0.15	13.56	25.3	54		
523	431774	5524794	51.31	0.13	7.2	<2	NM	24	32.4	37672	1.0	20	21	NM	NM	NM	120.4	0.46	7.86	53.7	77		
524	431324	5524710	65.55	0.08	3.1	<2	NM	16	23.2	13539	1.8	16	6	NM	NM	NM	79.6	0.12	9.75	20.7	59		
525	431185	5524103	41.77	0.15	4.3	<2	NM	26	29.1	27172	1.1	21	11	NM	NM	NM	103.5	0.19	8.20	42.1	67		
526	432063	5523651	40.47	0.15	4.0	<2	NM	38	46.7	15532	1.7	27	12	NM	NM	NM	165.0	0.21	26.88	45.3	92		
527	434136	5523286	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
528	437162	5521602	56.52	0.10	3.1	<2	NM	22	26.6	16218	1.7	18	6	NM	NM	NM	98.6	0.18	16.10	22.2	69		
529	436510	5521290	49.09	0.11	4.2	<2	NM	24	45.1	16438	2.0	30	15	NM	NM	NM	112.8	0.34	20.02	23.7	89		
531	435693	5521808	42.87	0.14	3.0	2	NM	27	47.8	15237	1.3	24	12	NM	NM	NM	200.1	0.16	77.60	34.0	61		
532	434923	5522508	23.19	0.08	3.1	<2	NM	41	38.3	22487	1.5	30	8	NM	NM	NM	126.2	0.09	23.30	37.8	76		
533	434249	5522086	44.64	0.11	3.5	<2	NM	30	36.8	13769	1.6	27	20	NM	NM	NM	115.5	0.32	34.91	28.6	80		
534	433897	5522341	56.56	0.22	2.1	<2	NM	27	45.0	13271	1.4	30	9	NM	NM	NM	112.3	0.12	34.13	38.1	57		
535	433218	5521836	65.67	0.08	2.6	<2	NM	19	38.3	8087	1.4	29	7	NM	NM	NM	91.0	0.13	31.76	12.2	53		
536	434825	5521460	43.58	0.12	5.6	<2	NM	30	33.0	15102	1.3	24	25	NM	NM	NM	109.5	0.55	25.51	30.5	69		
537	433949	5520642	51.21	0.11	3.8	<2	NM	23	32.5	17642	1.5	23	14	NM	NM	NM	98.6	0.24	23.20	29.5	60		
538	433199	5520634	55.2	0.08	2.5	<2	NM	19	21.7	14210	1.7	18	6	NM	NM	NM	75.4	0.14	14.17	25.1	84		
539	431894	5520465	53.22	0.12	7.3	<2	NM	21	26.0	13690	1.6	22	37	NM	NM	NM	62.2	1.04	54.63	21.2	87		
541	436869	5520334	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
542	435841	5520185	35.42	0.08	2.2	<2	NM	31	20.5	15054	1.0	21	8	NM	NM	NM	86.4	0.18	15.26	29.2	68		
543	434361	5519691	45.78	0.12	3.3	<2	NM	22	25.5	8464	1.2	20	9	NM	NM	NM	84.0	0.21	9.22	25.1	50		
544	434604	5519020	53.51	0.07	1.8	<2	NM	16	21.1	6847	1.2	15	6	NM	NM	NM	75.4	0.14	11.69	20.8	52		
545	434048	5519124	41.36	0.09	3.0	<2	NM	26	23.0	15341	1.2	22	9	NM	NM	NM	91.8	0.20	13.24	29.2	56		
546	432792	5518628	45.54	0.09	2.1	<2	NM	25	22.9	11991	1.2	19	7	NM	NM	NM	88.5	0.15	14.08	28.1	56		
547	432071	5518631	28.16	0.11	6.4	<2	NM	37	26.3	76131	3.3	27	18	NM	NM	NM	131.0	0.29	24.63	57.8	118		
548	435624	5518252	51.03	0.11	4.2	<2	NM	22	22.7	11807	1.2	19	13	NM	NM	NM	84.1	0.28	8.08	22.6	68		
549	435740	5518038	52.25	0.08	3.0	<2	NM	18	18.8	14671	1.2	19	8	NM	NM	NM	68.6	0.17	11.78	24.8	56		
551	435752	5517362	39.65	0.10	2.8	<2	NM	28	23.4	9671	1.1	23	11	NM	NM	NM	73.0	0.21	13.57	18.8	63		
552	434972	5518157	68.67	0.07	2.1	<2	NM	12	14.1	3170	0.8	13	7	NM	NM	NM	34.7	0.12	2.97	11.2	79		
553	434986	5517557	53.62	0.13	2.3	<2	NM	15	24.9	11588	1.3	14	7	NM	NM	NM	78.9	0.12	5.95	37.7	59		
554	434601	5517377	60.36	0.07	2.5	<2	NM	21	23.8	17254	2.0	22	4	NM	NM	NM	104.3	0.11	17.82	18.2	72		
555	433767	5517779	43.16	0.07	2.7	<2	NM	12	14.2	6152	0.7	14	8	NM	NM	NM	55.9	0.14	6.76	13.0	45		
556	433090	5517300	44.02	0.07	2.7	<2	NM	12	15.3	5365	0.6	13	8	NM	NM	NM	54.8	0.13	7.76	12.9	43		
557	432818	5517745	36.2	0.08	2.6	<2	NM	28	19.4	15252	0.9	20	8	NM	NM	NM	92.3	0.14	8.04	36.0	77		
558	432389	5517381	47.27	0.10	3.8	<2	NM	17	36.3	12206	1.9	19	6	NM	NM	NM	61.0	0.21	20.36	25.4	61		
559	432451	5516948	59.78	0.08	2.0	<2	NM	18	19.9	13580	1.3	15	5	NM	NM	NM	87.1	0.09	8.35	20.9	56		
561	434289	5516013	44.1	0.11	3.3	<2	NM	27	25.9	11885	1.2	19	9	NM	NM	NM	96.0	0.21	11.50	29.4	64		
562	433555	5516015	45.29	0.12	2.8	<2	NM	26	26.1	13422	1.5	18	8	NM	NM	NM	102.4	0.18	13.28	30.6	57		
563	432235	5515837	58.88	0.08	2.7	<2	NM	17	21.5	9265	1.9	20	7	NM	NM	NM	86.2	0.18	8.69	15.1	69		

Sample	Easting Method	Northing	LOI		Ag	As	Au	Au	Au	Cr	Cu		Fe	Mo	Ni	Pb	Pd	Pt	REEs		Sb	U	V	Zn
			Grav	%							MS	OES							MS	OES				
	Units				ppm	ppm	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	
	Det Limit																							
564	431841	5514651	46.3	0.18	1.9	<2	NM	18	18	29.9	23850	2.1	15	15	5	NM	NM	NM	112.8	0.11	6.92	33.0	50	
565	431600	5513095	55.19	0.27	2.6	<2	NM	27	27	38.2	28262	2.5	19	19	9	NM	NM	NM	136.1	0.13	23.34	67.6	73	
566	431438	5511734	37.92	0.20	4.0	<2	NM	39	39	25.5	20314	2.0	20	20	15	NM	NM	NM	122.0	0.25	34.26	37.1	73	
567	487723	5502064	46.65	0.20	3.7	<2	NM	44	44	42.4	27437	1.5	35	35	9	NM	NM	NM	70.7	0.16	1.44	45.9	105	
568	488647	5500336	41.24	0.17	2.8	<2	NM	51	51	47.8	33571	1.8	44	44	10	NM	NM	NM	80.3	0.15	1.66	62.8	147	
569	490223	5494536	59.35	0.17	4.3	<2	NM	19	19	89.2	8764	6.4	23	23	4	NM	NM	NM	57.1	0.18	2.03	22.0	59	
571	489432	5492755	52.85	0.37	3.3	<2	NM	15	15	136.3	13153	2.8	24	24	5	0.8	0.4	0.4	83.4	0.15	1.68	28.2	63	
572	487736	5492876	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
573	488956	5491378	52.67	0.18	2.6	<2	NM	25	25	64.9	11842	1.7	25	25	8	1.3	0.6	0.6	52.8	0.12	1.57	35.9	63	
574	487882	5491415	53.46	0.15	3.7	<2	NM	22	22	74.2	12712	1.4	26	26	5	0.8	0.3	0.3	55.5	0.16	1.50	24.8	74	
575	487613	5490413	38.9	0.19	3.1	<2	NM	4	4	65.7	17497	1.2	35	35	6	1.2	0.5	0.5	79.4	0.10	1.90	33.5	93	
576	484530	5491568	21.29	0.15	2.2	<2	NM	54	54	51.1	28126	0.7	46	46	9	NM	NM	NM	98.9	0.10	1.81	48.6	113	
577	484699	5490295	54.01	0.15	3.8	<2	NM	24	24	104.5	13182	1.7	34	34	5	1.3	0.5	0.5	69.8	0.16	1.79	24.4	69	
578	483939	5490860	24.52	0.17	3.2	<2	NM	55	55	58.8	28281	0.9	46	46	10	6.1	0.8	0.8	103.5	0.14	1.79	55.6	112	
579	482871	5490823	42.32	0.11	2.1	<2	NM	19	19	40.7	7458	0.9	23	23	3	NM	NM	NM	49.8	0.09	1.28	16.1	59	
581	481906	5490244	38.71	0.18	1.7	<2	NM	31	31	44.4	15471	0.8	28	28	6	NM	NM	NM	68.1	0.10	1.42	32.2	75	
582	482678	5489541	48.38	0.20	2.2	<2	NM	24	24	55.8	10060	1.0	24	24	5	NM	NM	NM	70.0	0.10	1.74	24.4	73	
583	483433	5489378	43.2	0.12	2.7	<2	NM	28	28	56.7	12109	1.0	32	32	5	0.3	0.1	0.1	63.7	0.11	1.91	20.6	63	
584	481830	5489225	36.91	0.18	2.9	<2	NM	40	40	57.9	19032	1.1	34	34	9	1.1	1.3	1.3	83.9	0.14	1.81	46.2	92	
585	483888	5488370	59.65	0.18	3.4	<2	NM	25	25	92.1	9370	1.9	36	36	4	NM	NM	NM	82.1	0.18	2.66	25.4	71	
586	483417	5488297	55.37	0.20	3.6	<2	NM	26	26	94.4	15740	1.9	37	37	5	NM	NM	NM	76.8	0.20	2.42	28.4	70	
587	483365	5487685	22.52	0.11	2.7	<2	NM	46	46	44.8	22322	0.7	44	44	6	NM	NM	NM	85.7	0.09	1.86	38.4	111	
588	482644	5487559	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
589	480575	5488439	57.13	0.11	2.6	<2	NM	14	14	38.9	8358	1.2	18	18	4	NM	NM	NM	39.0	0.10	0.85	22.0	62	
591	481217	5487512	48.74	0.20	3.2	<2	NM	20	20	45.5	6635	0.6	18	18	8	NM	NM	NM	41.5	0.14	3.32	12.1	25	
592	480381	5486615	29.78	0.16	3.5	<2	NM	37	37	41.1	19835	1.4	40	40	7	NM	NM	NM	84.1	0.10	1.94	41.2	151	
593	478619	5486218	56.04	0.09	1.8	<2	NM	10	10	35.8	4322	1.1	14	14	2	NM	NM	NM	29.4	0.06	1.19	8.9	51	
594	478854	5485500	35.64	0.23	4.4	<2	NM	36	36	58.0	18228	1.9	28	28	10	1.0	0.8	0.8	89.3	0.20	2.29	58.5	117	
595	478661	5484497	57.91	0.12	3.9	<2	NM	21	21	49.4	7757	1.3	30	30	5	NM	NM	NM	65.3	0.15	1.82	21.0	49	
596	478180	5483879	45.9	0.19	2.9	<2	NM	34	34	59.4	15297	0.8	35	35	5	1.1	1.1	1.1	83.6	0.13	2.01	32.5	97	
597	477475	5483767	45.67	0.19	4.2	<2	NM	33	33	60.5	16133	0.8	34	34	6	0.8	0.6	0.6	86.2	0.15	1.70	40.0	105	
598	476908	5484109	24.73	0.12	2.8	<2	NM	47	47	36.7	26004	0.6	41	41	7	NM	NM	NM	82.0	0.10	2.30	45.8	108	
599	476051	5483464	6.6	0.06	2.8	<2	NM	27	27	19.6	17340	0.7	24	24	5	NM	NM	NM	54.4	0.07	1.66	32.2	62	
601	476452	5486428	38.72	0.07	1.9	8	NM	10	10	21.4	4100	0.8	12	12	3	NM	NM	NM	25.4	0.08	1.34	8.7	35	
602	476759	5485222	39.52	0.12	2.2	<2	NM	31	31	41.0	15562	0.8	35	35	6	NM	NM	NM	72.3	0.08	2.43	30.0	97	
603	476538	5484716	60.65	0.19	2.3	<2	NM	14	14	62.1	14797	2.0	17	17	5	0.6	0.4	0.4	61.3	0.13	1.53	33.8	85	
604	475868	5484257	44.46	0.25	1.7	<2	NM	26	26	6.042	15775	1.5	22	22	7	0.9	0.9	0.9	68.7	0.15	2.18	46.0	74	
605	474718	5485752	34.84	0.24	5.8	<2	NM	40	40	56.3	32009	2.7	34	34	12	1.0	0.7	0.7	105.4	0.19	3.45	63.4	104	
606	474382	5485105	24.58	0.13	2.5	<2	NM	34	34	43.6	18775	0.8	35	35	7	NM	NM	NM	88.7	0.09	2.70	30.2	94	
607	473778	5483232	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
608	472905	5486498	25.53	0.16	3.6	<2	NM	51	51	50.6	27236	1.1	51	51	9	1.1	0.5	0.5	102.5	0.12	4.28	55.9	123	
609	473686	5485978	48.56	0.19	3.4	<2	NM	28	28	50.0	14044	1.2	28	28	6	NM	NM	NM	66.2	0.15	3.91	36.0	75	
611	473725	5485435	12.62	0.08	2.4	<2	NM	38	38	29.7	22578	0.8	34	34	6	NM	NM	NM	70.8	0.08	2.49	38.3	88	
612	472595	5485141	27.85	0.15	4.7	<2	NM	48	48	58.0	26021	2.1	43	43	8	0.8	0.4	0.4	107.0	0.15	3.94	55.2	122	
613	472005	5484007	26.34	0.18	7.2	<2	NM	48	48	54.1	57818	3.0	46	46	12	NM	NM	NM	124.5	0.18	4.57	71.0	140	
614	471851	5483017	27.85	0.15	7.9	<2	NM	37	37	52.5	29080	3.5	38	38	10	NM	NM	NM	108.7	0.18	7.56	49.9	126	

Sample	Easting Method	Northing	LOI	Ag		As		Au		Cr		Cu		Fe		Mo		Ni		Pb		Pd		Pt		REEs		Sb		U		V		Zn				
				MS	ppm	INAA	ppb	FA	OES	MS	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	Units		%																																			
	Det Limit		0.01	0.04	0.5	2	0.1	1	1	1	1	0.4	20	20	0.06	1	0.3	1	0.3	1	0.3	1	0.1	0.1	n/a	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
615	471467	5486386	31.46	0.20	6.0	<2	NM	40	48.7	41423	1.8	38	12	NM	NM	86.3	0.18	3.96	57.0	83																		
616	473064	5488047	58.82	0.12	3.1	<2	NM	20	37.8	14232	1.2	24	5	NM	NM	50.3	0.10	1.80	24.5	62																		
617	475066	5488448	72.95	0.10	3.6	<2	NM	10	34.4	16186	2.3	13	4	NM	NM	29.8	0.08	0.91	21.8	74																		
618	479623	5489362	66.92	0.12	2.6	<2	NM	12	37.6	11807	1.6	17	4	NM	NM	36.2	0.10	0.89	30.1	71																		
619	478447	5488868	49	0.14	2.3	<2	NM	22	44.1	9140	1.2	23	4	NM	NM	51.4	0.10	1.25	28.5	68																		
621	478882	5488341	66.83	0.15	2.5	<2	NM	17	52.3	14476	3.8	21	4	NM	NM	57.4	0.14	1.21	43.7	73																		
622	477431	5488792	48.36	0.22	4.6	<2	NM	31	48.6	19667	2.2	26	13	NM	NM	87.2	0.26	1.84	61.3	89																		
623	476876	5488169	44.71	0.16	3.4	<2	NM	23	47.2	10389	1.8	27	5	NM	NM	70.5	0.08	1.97	26.0	78																		
624	477756	5488030	62.84	0.10	3.0	<2	NM	17	45.4	11027	1.6	24	4	NM	NM	47.7	0.11	1.64	22.6	61																		
625	477041	5487917	62.32	0.11	2.9	<2	NM	19	45.7	12160	1.2	22	4	NM	NM	53.2	0.09	1.60	25.6	69																		
626	482405	5492827	48.17	0.12	2.6	<2	NM	17	42.1	9139	0.9	20	4	NM	NM	54.2	0.09	1.29	26.2	59																		
627	486388	5495264	21.51	0.15	3.7	<2	NM	63	44.3	33554	0.4	54	12	NM	NM	96.9	0.09	1.84	55.2	137																		
628	486130	5494301	20.07	0.14	1.8	<2	NM	64	41.9	34549	0.4	51	12	NM	NM	96.3	0.09	1.66	60.4	127																		
629	487000	5496841	43.68	0.14	3.8	<2	NM	38	43.5	22355	0.9	35	8	NM	NM	68.7	0.13	1.19	43.2	108																		
631	486890	5502913	58.06	0.16	5.8	<2	NM	29	28.1	16764	0.8	26	18	NM	NM	48.7	0.42	1.01	30.3	86																		
632	486423	5502750	56.47	N/A	4.7	<2	NM	37	N/A	21131	N/A	31	N/A	NM	NM	N/A	N/A	N/A	36.4	82																		
633	484174	5498028	39.64	0.15	5.0	<2	NM	49	38.7	26957	1.0	47	10	NM	NM	87.5	0.15	1.65	54.1	107																		
634	483266	5496819	38.12	0.20	3.3	<2	NM	43	42.7	25477	1.2	39	10	NM	NM	80.2	0.13	1.45	56.3	107																		
635	482255	5495382	24.94	0.13	3.6	<2	NM	52	42.2	29700	0.8	46	11	NM	NM	88.8	0.13	1.81	55.3	104																		
636	483231	5494050	37.39	0.22	3.8	<2	NM	42	53.8	24941	1.3	38	9	NM	NM	96.4	0.15	1.79	58.6	103																		
637	481921	5494078	21.5	0.13	3.5	<2	NM	54	43.1	31733	0.8	46	12	NM	NM	93.9	0.12	1.71	60.2	105																		
638	481080	5493663	20.17	0.11	3.7	<2	NM	55	39.0	32720	0.8	47	11	NM	NM	92.2	0.09	1.86	55.1	109																		
639	480245	5492765	27.92	0.16	4.7	<2	NM	51	44.1	27586	0.6	46	10	NM	NM	92.7	0.09	1.94	48.9	108																		
641	478694	5492193	21.6	0.14	4.5	<2	NM	54	41.9	30587	0.7	47	10	NM	NM	94.5	0.07	1.75	50.6	106																		
642	476967	5491548	23.46	0.15	3.8	<2	NM	29	43.2	34124	1.1	53	11	NM	NM	99.3	0.09	1.80	56.5	126																		
643	479200	5490788	47.17	0.13	3.1	<2	NM	19	35.2	9535	1.1	19	6	NM	NM	44.3	0.14	1.22	33.9	61																		
644	478053	5490031	56.45	0.14	4.6	<2	NM	23	49.5	12027	2.4	28	6	NM	NM	71.9	0.20	2.00	31.2	69																		
645	476709	5489658	62.74	0.13	4.0	<2	NM	19	49.7	10014	2.3	24	5	NM	NM	60.5	0.18	1.97	22.0	58																		
646	475199	5490321	41.62	0.12	3.6	<2	NM	29	39.0	16293	1.9	26	6	NM	NM	68.3	0.11	1.44	39.6	94																		
647	474356	5490639	33.56	0.14	4.5	<2	NM	42	42.1	24047	0.9	41	9	NM	NM	70.8	0.10	1.78	39.9	89																		
648	477441	5493315	57.49	0.13	4.4	<2	NM	19	36.4	14424	1.7	22	6	NM	NM	54.1	0.14	1.74	23.4	67																		
649	476032	5493186	66.52	0.14	2.8	<2	NM	15	4<0.48	16049	1.4	23	4	NM	NM	39.6	0.14	1.45	35.2	78																		
651	475372	5492827	63.31	0.10	2.0	<2	NM	6	38.2	7711	1.2	16	2	NM	NM	17.5	0.07	0.69	13.6	63																		
652	475337	5491681	66.64	0.15	4.5	<2	NM	18	58.7	10956	4.6	26	11	NM	NM	61.6	0.24	3.66	25.4	83																		
653	473143	5491619	43.77	0.08	3.3	<2	NM	33	35.9	15396	0.9	33	5	NM	NM	52.6	0.11	1.46	39.0	89																		
654	472781	5490941	45.39	0.11	3.1	<2	NM	30	37.1	15631	0.9	30	7	NM	NM	52.7	0.12	1.26	49.0	86																		
655	472022	5490147	33.18	0.11	3.1	<2	NM	34	42.7	20310	1.1	34	8	NM	NM	60.7	0.12	1.68	42.6	76																		
656	472231	5489515	40.43	0.11	3.9	<2	NM	27	39.0	13211	1.7	33	5	NM	NM	59.3	0.11	1.85	32.7	103																		
657	471525	5489012	50.69	0.10	3.3	<2	NM	22	39.1	11930	1.3	25	5	NM	NM	53.8	0.08	1.61	27.8	72																		
658	471089	5487552	25.72	0.09	3.1	<2	NM	37	35.5	19459	0.8	35	8	NM	NM	68.0	0.10	3.35	39.9	96																		
659	469702	5487164	16.68	0.13	4.8	<2	NM	36	41.4	24910	0.9	35	8	NM	NM	77.9	0.09	2.98	42.2	76																		
661	470269	5485300	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS																	
662	469818	5484478	21.58	0.12	2.8	<2	NM	39	36.4	22373	0.7	37	7	NM	NM	76.8	0.10	2.76	35.5	95																		
663	468772	5483542	29.31	0.14	3.7	<2	NM	35	32.3	23752	0.7	33	9	NM	NM	86.4	0.15	3.00	42.4	112																		
664	468793	5484642	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS																	
665	468772	5485658	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS																	

Sample	Easting Method	Northing	LOI		Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs		Sb	U	V	Zn	
			Grav	%													MS	MS					MS
	Units				ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm
	Det Limit																						
666	468014	5485867	36.62	0.17	6.1	<2	NM	39	45.9	29951	1.5	34	16	NM	NM	NM	86.3	0.29	4.41	63.6	87		
667	467632	5485253	36.43	0.16	4.7	<2	NM	35	42.2	28108	1.3	33	11	NM	NM	NM	81.3	0.19	4.01	56.0	85		
668	466445	5484652	33.34	0.15	4.4	<2	NM	40	37.0	22332	0.7	35	10	NM	NM	NM	79.4	0.15	3.44	50.4	81		
669	465622	5483702	18.72	0.12	6.1	<2	NM	48	46.1	36473	1.5	45	10	NM	NM	NM	111.2	0.14	4.68	64.5	123		
671	466507	5483332	39.66	0.24	5.3	<2	NM	32	41.6	18110	1.1	28	10	NM	NM	NM	96.5	0.25	3.91	53.2	90		
672	467683	5486595	37.55	0.18	5.5	<2	NM	31	29.8	39533	3.1	25	9	NM	NM	NM	63.1	0.12	1.83	95.2	86		
673	466795	5486515	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
674	464626	5485376	68.69	0.20	4.9	<2	NM	15	37.2	15426	1.7	16	5	NM	NM	NM	50.7	0.13	2.09	41.0	95		
675	463990	5484279	17.46	0.11	12.0	<2	NM	38	35.6	66550	2.0	39	19	NM	NM	NM	91.0	0.18	3.66	70.3	116		
676	465224	5488687	55.84	0.11	2.7	<2	1.3	12	78.2	7671	1.6	26	3	0.7	0.3	0.3	26.2	0.10	0.84	19.8	56		
677	464785	5488313	51.86	0.07	2.5	<2	0.5	7	67.2	2814	1.7	19	4	0.5	0.3	0.3	19.7	0.11	0.62	5.8	32		
678	466378	5489450	76.75	N/A	2.2	<2	NM	9	N/A	6539	N/A	12	N/A	NM	NM	NM	N/A	N/A	N/A	10.5	43		
679	465231	5490060	55.48	0.09	2.6	<2	NM	15	54.4	15704	1.0	17	4	NM	NM	NM	30.1	0.09	0.79	34.8	52		
681	466963	5490488	52.81	0.16	3.5	<2	NM	34	95.3	24691	1.2	30	6	NM	NM	NM	80.9	0.10	2.89	63.5	77		
682	468140	5489431	23.55	0.09	3.5	<2	NM	42	34.5	27305	1.0	37	5	NM	NM	NM	64.6	0.07	1.87	51.4	99		
683	468363	5488208	60.57	0.14	2.4	<2	NM	14	47.8	9563	7.3	17	4	NM	NM	NM	62.0	0.11	2.10	32.8	49		
684	469329	5488467	63.7	0.15	2.5	<2	0.5	8	58.9	9239	3.8	14	3	0.2	0.1	0.1	26.0	0.11	0.83	22.7	80		
685	470797	5489067	35.57	0.07	2.1	<2	NM	25	24.8	14593	0.8	23	5	NM	NM	NM	45.8	0.07	1.09	34.6	77		
686	470605	5488629	58.29	0.14	3.0	<2	NM	21	45.0	11939	1.9	19	6	NM	NM	NM	55.9	0.14	1.55	45.9	67		
687	470775	5490103	33.66	0.12	3.3	<2	NM	32	49.2	19035	1.2	31	7	NM	NM	NM	67.1	0.10	1.81	44.9	86		
688	469418	5490107	32.54	0.13	4.3	<2	NM	33	48.3	19739	1.4	30	12	NM	NM	NM	64.7	0.17	1.75	55.4	84		
689	471485	5494532	63.11	0.09	2.0	<2	NM	12	59.0	13431	1.7	22	4	NM	NM	NM	25.9	0.09	0.79	76.2	86		
691	472469	5496621	55	0.09	3.0	<2	NM	23	42.6	13766	1.3	41	4	NM	NM	NM	47.0	0.12	1.87	27.0	63		
692	468240	5521960	27.73	0.12	2.7	<2	NM	42	42.4	20070	1.1	44	9	NM	NM	NM	108.6	0.10	22.14	44.0	79		
693	468866	5522491	21.97	0.10	4.4	<2	NM	43	42.7	22110	1.4	36	8	NM	NM	NM	101.0	0.09	23.70	44.1	88		
694	461173	5523888	55.26	0.15	4.7	<2	2.1	35	62.4	13086	1.0	31	5	1.5	0.4	0.4	71.2	0.13	6.80	33.2	72		
695	459740	5524613	49.28	0.23	7.8	<2	2.0	34	76.0	30871	1.6	44	10	2.9	1.0	1.0	100.7	0.15	15.49	55.3	115		
696	450870	5530601	39.7	0.13	3.1	<2	NM	34	33.5	15971	1.2	24	8	NM	NM	NM	130.6	0.14	6.28	38.1	59		
697	451032	5531285	45.76	0.17	5.0	<2	NM	34	41.3	20176	1.8	24	16	NM	NM	NM	137.6	0.33	7.00	45.2	63		
698	451641	5532184	45.68	0.11	2.4	<2	NM	39	33.8	12961	1.3	26	5	NM	NM	NM	121.9	0.13	4.97	23.7	72		
699	449810	5531848	42.13	0.07	1.3	<2	NM	12	16.2	3484	0.6	11	3	NM	NM	NM	41.2	0.07	3.00	9.8	25		
701	450073	5532499	42.22	0.12	3.5	<2	NM	37	33.4	14172	1.1	26	10	NM	NM	NM	92.7	0.22	4.09	34.2	69		
702	449058	5532606	39.4	0.10	1.6	<2	NM	31	21.9	15330	0.7	22	6	NM	NM	NM	89.0	0.09	2.75	38.9	68		
703	448277	5531600	55.75	N/A	1.2	<2	NM	10	N/A	5596	N/A	12	N/A	NM	NM	NM	N/A	N/A	N/A	14.6	48		
704	448802	5530535	38.2	0.08	2.3	<2	NM	26	21.0	9480	0.7	17	4	NM	NM	NM	77.7	0.08	2.63	27.4	55		
705	448407	5530766	49.39	0.09	2.4	<2	NM	28	28.4	11107	0.9	24	6	NM	NM	NM	93.9	0.10	3.07	29.0	56		
706	447829	5529739	66.92	0.10	3.0	<2	NM	22	28.4	14198	1.2	18	6	NM	NM	NM	63.4	0.17	2.09	23.0	62		
707	446697	5529528	45.31	0.22	3.5	<2	NM	30	37.0	20573	1.5	21	11	NM	NM	NM	103.1	0.13	4.04	57.6	66		
708	446870	5530111	41.26	0.08	2.7	<2	NM	24	22.4	11894	0.9	20	6	NM	NM	NM	69.9	0.12	3.03	26.9	56		
709	447617	5530644	40.9	0.15	3.7	<2	NM	32	36.3	18124	1.1	21	7	NM	NM	NM	111.0	0.11	4.00	37.2	66		
711	446243	5530689	57.27	0.09	2.8	<2	NM	16	20.8	12228	1.0	13	5	NM	NM	NM	51.7	0.12	2.35	28.7	56		
712	445130	5531458	28.47	0.09	3.3	<2	NM	36	26.3	40258	2.0	27	7	NM	NM	NM	109.8	0.09	4.60	55.9	116		
713	445382	5532422	40.2	0.10	2.3	<2	NM	37	31.8	11667	0.9	22	6	NM	NM	NM	104.8	0.12	4.65	32.1	69		
714	444230	5532602	22.24	0.09	2.0	<2	NM	39	26.0	19057	1.2	28	7	NM	NM	NM	87.3	0.10	4.50	35.2	85		
715	443427	5531830	47.45	0.09	2.5	<2	NM	13	23.8	3118	0.9	15	3	NM	NM	NM	47.2	0.10	2.49	14.0	30		
716	441490	5532222	37.16	0.10	2.1	<2	NM	36	25.7	24866	1.3	23	4	NM	NM	NM	106.2	0.09	4.64	38.3	88		

Sample	Easting Method	Northing	LOI		Ag	As	Au	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs		Sb	U	V	Zn
			Grav	%														MS	MS				
	Units				ppm	ppm	ppb	ppb	ppm	ppm	ppm	OES	ppm	OES	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm
	Det Limit																						
717	443356	5531049	46.09	0.11	0.11	2.5	<2	NM	26	28.3	12519	1.6	18	6	NM	NM	NM	78.2	0.17	2.91	41.9	62	
718	444096	5529924	47.01	0.09	0.09	3.0	<2	NM	16	18.1	7265	0.8	17	6	NM	NM	NM	105.2	0.08	3.60	16.5	52	
719	443632	5529558	52.87	0.10	0.10	2.8	<2	NM	23	25.2	13883	1.7	19	4	NM	NM	NM	92.0	0.13	4.39	27.9	71	
721	444419	5528876	58.31	0.15	0.15	2.2	<2	NM	9	28.0	7575	1.7	9	4	NM	NM	NM	44.5	0.07	3.07	24.9	57	
722	445813	5528892	52.98	0.17	0.17	3.5	2	NM	26	26.8	19698	2.3	15	8	NM	NM	NM	104.1	0.14	5.98	45.1	90	
723	447304	5528509	56.37	0.14	0.14	1.7	<2	NM	12	37.1	7815	1.4	12	3	NM	NM	NM	63.7	0.09	2.60	34.2	55	
724	446528	5528022	62.02	0.10	0.10	2.8	<2	NM	21	34.4	12668	1.4	21	4	NM	NM	NM	89.3	0.12	4.75	23.8	64	
725	445643	5528043	58.64	0.10	0.10	1.9	<2	NM	21	36.2	9636	1.4	25	4	NM	NM	NM	94.3	0.14	6.26	21.7	70	
726	444376	5528148	46.32	0.11	0.11	4.7	<2	NM	21	22.1	12245	1.1	16	6	NM	NM	NM	96.3	0.12	6.80	32.7	72	
727	442210	5527160	12.97	<0.04	<0.04	1.3	<2	NM	13	11.3	11430	0.6	9	3	NM	NM	NM	47.8	0.04	2.90	15.7	35	
728	442359	5527619	36.17	0.14	0.14	3.8	<2	NM	29	31.1	15523	0.9	21	8	NM	NM	NM	92.7	0.13	5.61	33.6	71	
729	441996	5528904	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
731	443280	5526176	42.34	0.12	0.12	3.7	<2	NM	26	41.9	13442	1.4	25	10	NM	NM	NM	129.4	0.14	8.26	31.7	68	
732	443575	5527034	33.79	0.14	0.14	3.0	<2	NM	29	46.4	12605	1.5	22	8	NM	NM	NM	117.8	0.12	10.03	39.0	57	
733	443733	5525239	52.97	0.10	0.10	2.7	<2	NM	20	27.5	13015	1.4	18	7	NM	NM	NM	77.6	0.13	5.32	27.6	55	
734	443695	5522607	31.43	0.12	0.12	3.9	<2	NM	60	63.4	26668	1.7	55	9	2.1	0.8	0.8	93.1	0.14	8.23	44.2	129	
735	443673	5523494	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
736	442628	5524315	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
737	442403	5524857	50.73	0.06	0.06	2.8	<2	NM	25	48.9	8994	1.1	49	7	1.2	0.4	0.4	115.6	0.13	12.10	16.2	63	
738	441741	5524182	54.92	N/A	N/A	3.2	<2	NM	21	N/A	14256	N/A	24	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	23.8	63
739	441040	5524381	65.74	0.07	0.07	2.1	<2	NM	15	19.8	12580	1.5	15	4	NM	NM	NM	77.0	0.12	12.83	19.9	81	
741	440432	5524341	62.63	0.09	0.09	2.7	<2	NM	16	23.8	12542	1.3	13	5	NM	NM	NM	104.8	0.14	21.44	17.7	64	
742	440246	5525003	42.52	0.15	0.15	2.3	<2	NM	25	29.6	19628	1.0	17	7	NM	NM	NM	126.4	0.09	7.11	53.5	60	
743	441662	5522555	39.71	0.12	0.12	1.9	<2	NM	48	77.4	9264	0.9	42	5	2.8	1.0	1.0	95.8	0.10	7.08	17.6	73	
744	442138	5523375	29.79	0.12	0.12	2.6	<2	NM	50	55.2	12245	0.6	37	7	1.8	0.5	0.5	69.8	0.10	6.13	21.7	64	
745	442575	5521338	60.95	0.09	0.09	2.5	<2	NM	23	27.6	10222	1.2	21	5	NM	NM	NM	65.2	0.08	3.87	27.3	65	
746	443011	5521933	61.17	0.08	0.08	2.5	<2	NM	25	28.0	12028	1.2	52	5	0.3	0.1	0.1	63.4	0.11	3.03	19.5	67	
747	441834	5521126	58.33	0.12	0.12	2.1	<2	NM	23	34.1	10026	1.3	22	5	NM	NM	NM	78.4	0.10	11.90	25.7	53	
748	441741	5521656	51.58	0.11	0.11	2.4	<2	NM	26	29.6	11854	1.3	22	8	NM	NM	NM	76.8	0.11	9.55	34.1	59	
749	440775	5521563	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
751	439902	5521814	45.66	0.16	0.16	2.8	<2	NM	44	51.4	11383	1.3	34	12	NM	NM	NM	95.2	0.13	19.87	38.8	98	
752	440207	5522833	52.66	0.16	0.16	2.8	<2	NM	27	84.8	18050	1.5	31	5	3.0	1.2	1.2	72.2	0.14	22.42	22.7	77	
753	439439	5522542	34.96	0.19	0.19	4.2	<2	NM	60	91.4	59330	4.0	91	7	4.3	1.2	1.2	168.6	0.12	19.14	59.2	138	
754	438407	5522859	45.31	0.16	0.16	2.4	<2	NM	46	120.8	12286	1.5	50	5	2.6	0.7	0.7	111.4	0.14	63.44	36.6	54	
755	438719	5522410	42.12	0.09	0.09	1.8	<2	NM	12	36.5	3317	2.1	33	3	NM	NM	NM	61.7	0.09	6.31	14.2	38	
756	439176	5521693	64.64	0.07	0.07	2.0	<2	NM	17	17.6	8445	1.3	15	5	NM	NM	NM	47.2	0.11	14.48	15.9	61	
757	438343	5521821	44.35	0.12	0.12	2.8	<2	NM	38	40.1	14610	1.4	29	10	NM	NM	NM	96.2	0.13	29.33	46.3	81	
758	436287	5519290	45.43	0.09	0.09	2.4	<2	NM	30	26.5	11067	1.2	28	7	NM	NM	NM	99.3	0.12	11.90	27.2	60	
759	437262	5519239	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
761	437167	5517773	23.2	0.09	0.09	3.0	<2	NM	35	24.5	21729	1.8	27	8	NM	NM	NM	92.3	0.12	17.20	37.5	95	
762	436145	5515716	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
763	435266	5516292	36.92	0.08	0.08	2.0	<2	NM	33	21.4	12447	1.1	24	8	NM	NM	NM	89.8	0.12	23.27	27.9	69	
764	438385	5516261	50.85	0.10	0.10	2.3	<2	NM	17	18.1	9506	1.0	15	6	NM	NM	NM	65.5	0.10	9.61	31.6	53	
765	440474	5517955	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
766	441205	5517689	53.11	0.27	0.27	2.5	<2	NM	85	116.6	21336	2.5	150	12	1.0	0.4	0.4	75.3	0.13	14.34	49.4	135	
767	441510	5516438	49.36	0.12	0.12	2.8	<2	NM	46	38.6	11733	1.2	35	7	NM	NM	NM	105.2	0.11	21.85	26.7	69	

Sample	Easting Method	Northing	LOI		Ag	As	Au	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs		Sb	U	V	Zn
			Grav	%														MS	MS				
	Units				ppm	ppm	ppb	ppb	ppm	ppm	ppm	OES	ppm	OES	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm
	Det Limit																	n/a	ppm	ppm	ppm	ppm	ppm
768	440845	5516561	14.31	2.1	0.12	2.1	<2	NM	47	33.1	29320	1.9	45	8	NM	NM	NM	72.3	0.06	31.16	36.8	160	
769	440740	5516794	62.37	3.1	0.13	3.1	<2	1.5	42	31.6	16078	3.5	57	7	0.8	0.4	0.4	60.6	0.17	58.99	22.0	98	
771	442951	5516693	49.2	2.4	0.14	2.4	<2	NM	45	27.4	13573	3.3	34	17	NM	NM	NM	65.6	0.10	50.23	38.5	58	
772	442703	5517646	40.32	3.3	0.26	3.3	<2	9.8	50	50.8	12995	1.3	40	21	0.7	0.4	0.4	95.1	0.27	32.73	38.2	104	
773	441853	5517765	28.66	2.5	0.16	2.5	<2	NM	54	40.2	20521	1.2	45	10	NM	NM	NM	98.6	0.10	34.96	35.1	118	
774	442678	5518004	66.94	2.0	0.35	2.0	5	5.3	19	54.1	8046	1.4	24	4	0.4	0.4	0.4	38.9	0.08	13.35	21.1	67	
775	443339	5518330	51.21	2.5	0.19	2.5	<2	3.1	41	57.9	13302	2.8	35	8	0.4	0.6	0.6	75.5	0.12	24.56	27.6	71	
776	442477	5518764	NM	2.1	NM	2.1	<2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
777	441475	5518831	61.39	INF	0.05	INF	INF	INF	45	38.8	11696	2.3	70	19	NM	NM	NM	111.1	0.09	22.74	14.6	108	
778	443483	5519864	60.58	2.5	0.11	2.5	<2	NM	29	43.2	9918	2.2	41	6	NM	NM	NM	99.8	0.12	16.23	23.0	93	
779	442754	5519757	46.3	2.9	0.13	2.9	<2	NM	24	28.1	14814	1.0	22	10	NM	NM	NM	69.3	0.13	7.69	37.9	64	
781	442218	5519557	59.66	2.0	0.10	2.0	<2	NM	20	33.4	12096	2.8	18	4	NM	NM	NM	57.4	0.14	10.51	24.4	69	
782	441548	5519770	42.44	3.0	0.18	3.0	<2	NM	29	35.2	19118	1.4	25	15	NM	NM	NM	93.5	0.17	36.34	47.3	92	
783	441594	5520201	34.74	1.6	0.11	1.6	<2	NM	24	30.7	6337	0.7	18	7	NM	NM	NM	51.4	0.08	19.13	16.4	124	
784	440660	5520435	71.64	2.1	0.08	2.1	<2	NM	18	18.0	13627	1.3	16	4	NM	NM	NM	47.0	0.13	5.43	18.5	74	
785	440319	5520234	62.7	2.7	0.05	2.7	<2	NM	15	21.9	16027	1.2	16	8	NM	NM	NM	48.6	0.14	2.85	35.5	65	
786	439782	5520446	50.63	1.9	0.05	1.9	<2	NM	13	15.8	3911	0.8	13	3	NM	NM	NM	33.7	0.06	7.20	9.1	32	
787	439163	5519740	65.58	2.5	0.10	2.5	<2	NM	30	30.7	8924	1.4	27	5	NM	NM	NM	119.8	0.16	17.59	21.7	61	
788	439168	5520230	52.77	2.2	0.07	2.2	<2	NM	17	16.9	8269	0.7	16	5	NM	NM	NM	57.3	0.09	6.44	17.6	46	
789	438652	5520665	46.52	3.2	0.13	3.2	<2	NM	31	3<0.46	16827	1.4	22	9	NM	NM	NM	94.1	0.25	9.01	44.8	66	
791	442430	5520367	46.52	2.5	0.14	2.5	<2	NM	29	34.3	18190	1.5	25	10	NM	NM	NM	108.5	0.12	9.75	38.2	66	
792	443635	5520735	63.21	2.0	0.12	2.0	<2	NM	13	42.8	6216	2.9	17	4	NM	NM	NM	37.5	0.10	10.38	21.7	83	
793	444907	5519655	40.74	1.8	0.12	1.8	<2	NM	39	27.4	10201	0.8	35	9	NM	NM	NM	58.5	0.11	8.01	24.9	70	
794	445131	5518855	47.57	3.9	0.22	3.9	<2	NM	38	32.2	23960	1.5	38	16	NM	NM	NM	64.1	0.24	8.47	60.6	60	
795	447653	5518207	22.04	2.8	0.11	2.8	<2	NM	46	26.2	23323	1.9	40	8	NM	NM	NM	91.1	0.11	37.77	38.8	123	
796	447089	5519243	59.2	2.1	0.21	2.1	<2	NM	34	36.3	10269	2.3	23	14	NM	NM	NM	49.6	0.11	9.99	41.1	98	
797	446429	5519424	51.21	2.4	0.13	2.4	<2	NM	58	35.4	11503	1.3	42	8	NM	NM	NM	73.6	0.12	19.09	29.7	74	
798	445659	5519037	59.84	2.9	0.12	2.9	<2	NM	38	28.7	13688	1.1	32	12	NM	NM	NM	50.2	0.21	19.09	33.2	55	
799	446683	5519925	53.19	1.7	0.13	1.7	<2	NM	51	36.2	10266	1.1	32	5	NM	NM	NM	70.7	0.09	5.84	29.6	73	
801	445980	5519798	54.88	2.3	0.15	2.3	<2	NM	59	45.9	11193	1.6	47	7	NM	NM	NM	87.0	0.11	31.48	25.2	88	
802	449654	5519832	42.29	2.1	0.12	2.1	<2	NM	27	22.6	11058	1.0	25	7	NM	NM	NM	60.7	0.09	58.30	25.6	58	
803	448837	5520823	58.47	1.8	0.34	1.8	<2	NM	24	47.1	9350	2.5	31	6	NM	NM	NM	48.3	0.11	5.58	25.1	93	
804	449072	5521977	54.39	3.6	0.24	3.6	<2	NM	35	44.4	11150	2.3	32	8	NM	NM	NM	91.4	0.24	6.59	28.3	112	
805	448361	5521644	66.84	3.0	0.26	3.0	<2	NM	30	5<0.49	15546	1.7	40	6	NM	NM	NM	96.5	0.13	4.19	29.7	104	
806	447842	5522497	44.48	2.0	0.13	2.0	<2	NM	46	41.1	10666	1.4	41	5	NM	NM	NM	61.3	0.10	2.54	30.8	58	
807	447134	5521802	47.77	2.5	0.10	2.5	<2	NM	42	30.7	11104	1.1	45	6	NM	NM	NM	73.6	0.10	4.94	28.1	67	
808	446330	5521694	66.5	1.7	0.08	1.7	<2	NM	15	21.7	4718	1.1	40	4	NM	NM	NM	34.3	0.10	4.85	11.5	50	
809	446196	5522888	51.88	1.4	0.14	1.4	<2	NM	32	48.0	10220	1.1	36	5	NM	NM	NM	61.1	0.08	2.68	27.8	84	
811	445605	5522769	59.59	1.3	0.18	1.3	<2	2.4	15	76.2	10149	1.9	24	4	0.9	1.0	1.0	45.6	0.12	2.73	29.0	81	
812	445641	5522226	50	1.8	0.13	1.8	<2	7.8	59	46.9	27317	1.3	121	4	1.1	0.6	0.6	68.8	0.10	3.87	27.8	126	
813	445432	5521320	47.71	2.6	0.15	2.6	<2	3.4	32	51.0	18962	1.1	66	13	0.6	0.3	0.3	76.2	0.25	4.34	29.2	84	
814	444908	5521911	40.11	3.0	0.20	3.0	<2	2.3	44	55.5	13893	1.1	41	12	0.7	0.7	0.7	90.8	0.19	5.08	28.9	80	
815	444314	5521189	43.53	4.0	0.17	4.0	<2	1.0	55	53.3	29243	1.6	50	11	0.7	0.2	0.2	90.6	0.18	6.53	44.0	89	
816	444087	5521714	50.7	0.9	0.15	0.9	<2	1.7	18	52.6	3796	0.9	20	3	0.7	0.1	0.1	35.4	0.06	2.05	11.3	54	
817	450825	5521238	53.89	2.0	0.69	2.0	8	NM	30	34.7	8947	0.9	26	18	NM	NM	NM	54.9	0.12	7.00	21.0	655	
818	453439	5519547	41.9	2.1	0.17	2.1	<2	NM	30	28.3	12262	0.6	31	7	NM	NM	NM	54.9	0.08	13.80	19.4	177	

Sample	Easting Method	Northing	LOI	Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs		Sb	U	V	Zn	
																MS	MS					MS
			Grav	MS	INAA	INAA	FA	OES	MS	OES	MS	OES	MS	FA	FA	ppb	ppm	ppm	ppm	ppm	ppm	ppm
	Units		%	ppm	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	n/a	ppm	ppm	ppm	ppm	ppm
	Det Limit		0.01	0.04	0.5	2	0.1	1	0.4	20	0.06	1	0.3	1	0.1	0.03	0.03	0.03	0.03	0.03	0.4	0.4
819	457642	5518693	37.99	0.04	1.5	<2	NM	9	12.5	2338	1.9	9	3	NM	NM	24.6	0.09	2.69	7.9	15		
821	478781	5513020	58.88	0.07	3.2	<2	NM	24	19.0	11931	1.1	27	5	NM	NM	40.9	0.11	1.96	23.6	116		
822	469878	5518954	22.36	0.14	2.2	<2	NM	62	36.4	32084	0.6	50	11	NM	NM	100.5	0.11	3.10	58.0	109		
823	469023	5519641	18.87	0.16	1.8	<2	NM	57	30.4	30007	0.6	44	10	NM	NM	94.4	0.09	4.33	51.0	106		
824	469567	5522104	44.23	0.10	3.1	<2	NM	28	29.5	16095	1.6	26	7	NM	NM	79.7	0.10	21.85	28.9	68		
825	464454	5520630	47.36	0.12	3.3	<2	NM	26	23.8	16869	1.4	23	6	NM	NM	78.6	0.13	5.84	27.1	86		
826	463861	5520012	57.7	0.11	4.8	<2	NM	14	18.5	8456	1.4	14	12	NM	NM	41.9	0.27	2.99	17.8	78		
827	462729	5520131	51.01	0.13	3.1	<2	NM	19	25.1	2076	1.2	79	7	0.3	0.2	71.5	0.14	5.93	14.0	79		
828	459836	5518310	19.37	0.14	3.2	<2	NM	64	31.6	36961	0.5	51	12	0.4	0.3	107.3	0.10	3.50	63.8	116		
829	459508	5517717	51.63	0.07	5.7	<2	NM	31	36.7	23428	3.0	30	7	NM	NM	54.9	0.17	9.45	36.3	72		
831	459294	5516686	21.07	0.16	2.5	<2	NM	58	32.0	28800	0.9	42	11	NM	NM	108.9	0.10	9.51	54.8	152		
832	456786	5518208	27.13	0.11	2.9	<2	NM	56	34.0	31191	2.0	48	11	NM	NM	113.2	0.09	4.93	54.3	99		
833	455414	5517662	29.64	0.15	1.9	<2	NM	49	33.1	22070	0.7	41	9	NM	NM	98.3	0.07	12.18	37.2	156		
834	454192	5517829	21.55	0.14	2.3	<2	NM	39	23.9	19090	0.5	32	8	NM	NM	73.7	0.06	10.14	29.0	143		
835	453340	5516794	23.4	0.20	5.6	<2	NM	53	39.5	37160	3.1	42	12	NM	NM	123.6	0.13	17.47	70.3	177		
836	452723	5517900	55.93	0.10	1.7	<2	NM	10	18.3	3250	1.0	16	4	NM	NM	46.5	0.07	9.93	11.7	42		
837	453835	5521748	43.11	0.50	2.8	<2	NM	28	67.3	15950	1.1	26	23	0.3	0.1	70.3	0.10	16.67	31.3	730		
838	452864	5521949	53.37	0.20	4.0	<2	NM	28	121.1	12213	3.5	83	7	NM	NM	63.8	0.19	9.91	15.9	212		
839	452692	5521377	32.41	0.41	2.5	<2	NM	35	5<0.46	14348	0.8	33	15	NM	NM	85.4	0.09	13.84	31.5	326		
841	451096	5524133	24.52	0.18	3.7	<2	NM	84	65.8	23067	1.3	60	9	1.6	0.5	109.3	0.14	32.75	38.8	88		
842	450459	5523400	56.21	0.41	5.6	<2	NM	110	133.1	29096	2.5	150	11	3.7	1.2	96.1	0.16	19.52	34.3	119		
843	449404	5523700	32.62	0.19	2.6	<2	NM	71	62.0	15711	1.1	55	9	1.2	0.5	108.3	0.10	17.18	29.8	82		
844	449509	5524853	41.55	0.21	2.9	<2	NM	21	51.1	10892	3.1	21	9	0.7	0.2	123.9	0.16	60.20	26.0	64		
845	449143	5524605	61.67	0.12	2.1	<2	NM	22	38.8	16123	3.5	21	6	NM	NM	57.2	0.13	90.00	25.5	72		
846	448311	5523516	25.88	0.17	4.3	<2	NM	79	57.2	41878	2.9	64	10	1.5	0.5	125.7	0.12	24.78	54.0	119		
847	447956	5524752	24.13	0.17	3.9	<2	NM	38	38.7	38501	4.7	31	12	NM	NM	236.5	0.11	57.49	49.8	108		
848	446297	5524547	21.65	0.16	3.9	<2	NM	35	37.3	35400	4.6	30	11	NM	NM	254.5	0.10	59.68	46.3	105		
849	446616	5523923	16.1	0.08	2.2	<2	NM	30	31.7	17517	1.6	29	4	NM	NM	100.2	0.05	17.36	23.3	63		
851	445864	5523594	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
852	444960	5524588	42.02	0.08	1.4	<2	NM	15	18.1	9663	1.0	13	5	NM	NM	83.6	0.06	5.45	23.1	53		
853	446509	5525645	59.15	0.18	2.0	<2	NM	8	45.1	11485	3.5	13	5	NM	NM	135.7	0.09	9.87	29.1	63		
854	445567	5525473	48.32	0.16	1.5	<2	NM	13	31.8	6291	1.0	12	4	NM	NM	102.5	0.06	5.97	14.1	45		
855	444380	5525685	57.92	0.14	1.8	<2	NM	10	35.6	9651	3.0	14	3	NM	NM	54.1	0.07	3.74	21.1	54		
856	452229	5526551	29.12	0.13	4.4	<2	NM	33	46.9	27440	5.7	32	10	NM	NM	166.4	0.15	41.08	44.0	116		
857	453309	5525844	53.15	0.17	1.3	<2	NM	8	35.7	6061	2.8	11	13	NM	NM	55.3	0.08	26.93	14.5	102		
858	452478	5525180	55.81	0.13	3.3	<2	NM	17	53.6	11003	1.5	18	5	NM	NM	59.7	0.10	20.07	28.5	51		
859	452869	5524571	14.9	0.11	6.0	<2	NM	75	55.3	33456	2.8	71	16	2.0	1.0	130.7	0.14	35.05	66.4	114		
861	453968	5522235	33.41	0.46	4.3	<2	NM	41	63.4	20015	1.7	32	12	0.9	0.5	94.2	0.14	11.85	38.8	198		
862	456897	5525010	42.44	0.14	2.6	<2	NM	20	56.8	6097	1.2	35	6	4.1	0.9	48.2	0.12	17.43	15.3	51		
863	456911	5524354	58.42	0.14	5.5	<2	NM	23	95.3	9378	1.4	33	6	2.7	0.6	43.2	0.17	1.71	28.4	117		
864	456961	5523237	64.11	0.07	7.4	<2	NM	16	32.7	7428	1.3	19	4	NM	NM	30.9	0.10	1.54	24.6	48		
865	456390	5523553	62.54	0.07	3.6	<2	NM	9	57.2	5027	1.0	19	3	1.0	0.2	29.8	0.10	1.03	13.7	43		
866	456009	5523886	67.44	0.13	3.9	<2	NM	19	106.6	24678	1.3	40	3	NM	NM	44.6	0.17	1.33	52.2	110		
867	458637	5524317	44.56	0.11	2.3	<2	NM	12	51.4	5807	0.8	22	4	NM	NM	29.0	0.10	2.30	13.7	64		
868	458130	5524079	67.52	N/A	10.0	<2	NM	10	N/A	11693	N/A	21	N/A	NM	NM	N/A	N/A	N/A	N/A	26.1	62	
869	459024	5523571	44.58	0.15	5.0	<2	NM	40	46.0	18279	0.9	31	6	NM	NM	72.6	0.11	5.30	43.4	89		

Sample	Easting Method	Northing	LOI	Ag		As		Au		Cr		Cu		Fe		Mo		Ni		Pb		Pd		Pt		REEs		Sb		U		V		Zn						
				MS	MS	INAA	INAA	FA	FA	OES	OES	MS	MS	OES	OES	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
	Units		%	ppm	ppm	ppb	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm			
	Det Limit		0.01	0.04	0.5	2	0.1	1	0.4	1	1	0.4	20	20	20	0.6	0.6	1	1	0.3	5	1	1	0.1	0.1	n/a	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.4	0.4		
871	458783	5523125	53.83	0.10	4.5	<2	NM	17	27.7	7056	0.6	20	20	5	NM	NM	26.9	0.09	3.62	13.5	55																			
872	456385	5522075	32.25	0.14	2.9	<2	NM	34	43.5	28261	1.9	33	33	8	NM	NM	100.5	0.09	20.92	42.7	245																			
873	457018	5520853	27.93	0.12	2.7	<2	NM	32	30.1	18680	1.6	27	27	9	NM	NM	81.3	0.10	24.95	35.8	99																			
874	456181	5520916	51.12	0.15	3.2	<2	NM	26	25.1	15245	0.9	21	21	9	NM	NM	66.7	0.11	17.05	29.3	80																			
875	458733	5520625	49.54	0.12	3.1	<2	NM	27	28.0	14034	2.4	25	25	11	NM	NM	75.6	0.15	47.28	41.2	83																			
876	461817	5521625	40.4	0.15	3.4	<2	NM	28	30.0	16579	1.8	24	24	7	NM	NM	88.9	0.12	65.24	36.0	70																			
877	462709	5521230	64.55	0.08	3.8	<2	NM	40	35.7	16965	1.6	30	30	11	NM	NM	97.3	0.15	41.85	45.3	99																			
878	463945	5522334	60.89	0.09	2.7	<2	NM	23	43.0	13467	3.4	37	37	7	NM	NM	78.2	0.17	56.10	19.8	84																			
879	464972	5522059	56.79	0.10	2.0	<2	NM	17	23.4	6643	1.8	19	19	6	NM	NM	48.7	0.14	23.52	24.9	34																			
881	473034	5500699	68.26	0.07	2.7	<2	NM	18	24.8	5265	1.3	13	13	5	NM	NM	78.3	0.14	6.20	22.8	50																			
882	472142	5500104	59.53	0.16	3.4	<2	NM	11	19.2	7464	2.0	11	11	4	NM	NM	57.8	0.11	5.12	11.7	50																			
883	471368	5499458	44.48	0.11	2.9	<2	NM	17	27.0	14372	2.5	15	15	8	NM	NM	130.6	0.12	6.56	36.4	61																			
884	470686	5498914	60.89	0.09	2.7	<2	NM	21	21.8	10974	2.7	19	19	6	NM	NM	113.9	0.11	8.66	19.3	73																			
885	470242	5499542	56.92	0.30	5.0	2	NM	33	38.2	60759	5.0	23	23	7	NM	NM	157.0	0.15	5.29	66.5	105																			
886	469691	5498682	54.51	0.10	3.1	<2	NM	15	20.9	13501	3.0	13	13	8	NM	NM	88.7	0.18	8.45	20.5	68																			
887	471012	5498314	50.75	0.11	2.3	<2	NM	16	22.7	7701	3.0	17	17	9	NM	NM	116.6	0.16	8.36	17.2	60																			
888	470201	5497410	67.28	0.09	2.5	<2	NM	21	32.1	10173	1.6	29	29	5	NM	NM	74.8	0.10	3.82	16.6	78																			
889	467965	5497078	26.73	0.12	3.8	<2	NM	31	2<0.41	20008	1.7	23	23	6	NM	NM	137.1	0.07	5.98	30.6	93																			
890	467167	5496560	44.9	0.17	3.4	<2	NM	21	25.6	18674	3.8	18	18	9	NM	NM	138.4	0.19	7.44	30.5	81																			
891	463355	5495511	42.77	0.13	2.6	<2	NM	26	27.6	18797	3.7	18	18	8	NM	NM	206.2	0.13	8.70	41.6	81																			
892	466385	5497194	50.75	0.11	2.3	<2	NM	20	3<0.42	9143	2.2	14	14	6	NM	NM	123.7	0.12	6.98	17.0	61																			
893	466147	5497481	57.18	0.12	2.5	<2	NM	13	37.5	5828	2.2	15	15	6	NM	NM	148.6	0.12	10.33	10.2	73																			
894	465514	5496273	67.28	0.08	2.4	<2	NM	12	23.7	7483	3.1	12	12	5	NM	NM	72.7	0.14	5.12	16.4	89																			
895	466098	5495402	56.28	0.09	2.3	<2	NM	12	18.0	6303	2.1	14	14	6	NM	NM	132.9	0.13	5.19	15.9	68																			
900	465355	5495511	56.64	0.09	3.0	<2	NM	14	22.0	7066	3.0	14	14	8	NM	NM	176.8	0.17	10.45	16.7	53																			
901	464623	5495501	46.79	0.10	2.4	<2	NM	21	20.6	11608	2.2	15	15	6	NM	NM	130.4	0.11	5.51	22.6	80																			
902	465326	5493987	57.18	0.12	2.5	4	NM	13	24.5	9532	2.4	12	12	5	NM	NM	79.6	0.14	2.53	19.2	70																			
903	467147	5493452	55.44	0.08	1.8	<2	NM	23	25.4	14164	0.7	22	22	5	NM	NM	38.2	0.08	1.23	34.5	62																			
904	467018	5493699	64.38	60.00	3.3	<2	NM	20	48.6	9620	2.2	57	57	5	NM	NM	41.0	0.10	1.64	10.1	58																			
905	466355	5492937	44.51	0.15	3.1	<2	NM	40	46.7	23949	1.2	37	37	6	NM	NM	56.9	0.11	2.00	39.0	75																			
906	465266	5493204	61.43	0.05	2.3	<2	NM	8	21.3	4800	1.4	12	12	6	NM	NM	33.8	0.11	1.40	10.5	47																			
907	465444	5492719	49.36	0.13	2.1	<2	NM	25	49.7	8797	2.3	23	23	4	NM	NM	74.7	0.11	2.87	19.4	55																			
908	464751	5492056	NS	NS	NS	NS	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS			
909	464059	5491601	52.1	0.12	2.7	<2	NM	16	42.6	13969	2.0	18	18	6	NM	NM	40.3	0.14	1.80	28.9	57																			
910	466088	5491918	66.46	0.06	1.6	<2	NM	17	25.4	7633	0.8	19	19	3	NM	NM	24.3	0.07	0.85	13.6	54																			
911	465425	5491611	51.99	0.06	1.9	<2	NM	11	29.5	5223	1.0	19	19	4	NM	NM	22.9	0.08	0.80	10.0	51																			
912	467236	5491937	57.59	0.09	2.6	<2	NM	19	33.3	13098	1.3	20	20	5	NM	NM	42.9	0.15	1.38	35.4	50																			
913	469513	5491264	35.73	0.11	2.7	<2	NM	31	46.9	17390	1.3	27	27	6	NM	NM	62.0	0.10	1.85	39.8	73																			
914	468860	5491136	58.63	0.07	6.7	<2	NM	19	59.9	20577	7.7	35	35	5	NM	NM	37.5	0.22	3.12	20.2	63																			
915	471839	5491363	56.56	0.09	5.2	<2	NM	25	44.1	15741	1.2	37	37	5	NM	NM	41.9	0.14	1.34	41.0	73																			
916	472988	5492640	67.17	0.08	3.6	<2	NM	18	35.5	14683	1.5	21	21	6	NM	NM	36.6	0.15	1.22	25.5	57																			
917	471750	5492373	58.45	0.09	3.8	<2	NM	18	28.0	13194	1.1	18	18	8	NM	NM	32.9	0.21	1.09	29.5	56																			

Sample	Easting Method	Northing	LOI		Ag	As	Au	Au	Cr	Cu	Fe	Mo	Ni	Pb	Pd	Pt	REEs		Sb	U	V	Zn	
			Grav	%													MS	MS					MS
	Units		ppm	ppb	ppm	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm
	Det Limit		0.01	0.5	0.04	0.5	2	1	0.4	20	0.06	1	0.3	1	0.1	0.1	n/a	0.03	0.03	0.03	0.4	0.4	
922	471849	5493214	52.23	3.3	0.13	3.3	<2	NM	26	45.2	17364	1.3	32	5	NM	NM	51.8	0.14	1.87	38.9	81		
923	471245	5493472	48.62	2.6	0.08	2.6	<2	NM	18	35.4	8778	0.9	27	5	NM	NM	31.9	0.09	1.19	27.4	48		
924	474631	5495066	38.65	3.3	0.09	3.3	<2	NM	35	36.3	21597	1.0	36	6	NM	NM	60.7	0.13	1.73	48.1	82		
925	473750	5495273	42.77	4.2	0.10	4.2	<2	NM	34	37.4	18997	0.9	35	8	NM	NM	61.6	0.16	1.81	45.7	82		
926	473720	5494343	43.25	4.5	0.10	4.5	<2	NM	34	36.7	19213	0.8	36	10	NM	NM	61.9	0.18	1.64	44.8	83		
927	472572	5495333	35.81	3.1	0.08	3.1	7	NM	34	34.9	23597	0.7	34	9	NM	NM	63.7	0.16	1.38	43.7	72		
928	472245	5494491	53.12	2.2	0.10	2.2	<2	NM	22	52.0	13228	1.1	27	4	NM	NM	37.0	0.13	1.31	65.1	80		
929	471384	5495947	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
931	470483	5495273	32.82	5.1	0.10	5.1	<2	NM	39	44.1	32089	1.9	34	8	NM	NM	70.0	0.11	2.33	67.0	131		
932	470394	5496293	38.09	2.7	0.14	2.7	<2	NM	36	51.3	13278	1.1	32	6	NM	NM	59.6	0.11	2.34	25.9	79		
933	469661	5495026	37.74	6.0	0.15	6.0	<2	NM	40	51.3	51856	3.3	40	8	NM	NM	74.6	0.16	2.68	53.1	124		
934	469652	5494373	60.93	2.1	0.07	2.1	<2	NM	15	26.2	8273	0.8	17	3	NM	NM	30.6	0.11	0.81	27.6	56		
935	468028	5492799	61.3	2.0	0.07	2.0	<2	NM	13	36.6	6559	1.1	16	4	NM	NM	37.4	0.16	1.39	24.2	52		
936	467929	5494778	58.5	1.3	<0.04	1.3	<2	NM	9	19.6	4805	0.7	18	3	NM	NM	15.8	0.06	0.51	7.8	37		
937	467127	5495155	39.31	2.4	0.12	2.4	<2	NM	28	19.8	18813	1.3	21	8	NM	NM	101.1	0.12	3.71	29.9	89		
938	467731	5498847	33.87	2.3	0.13	2.3	<2	NM	25	69.7	14605	2.5	19	7	NM	NM	146.3	0.10	4.94	26.6	84		
939	466583	5500312	61.6	2.2	0.14	2.2	<2	NM	17	21.7	16212	2.5	16	7	NM	NM	55.1	0.12	28.22	25.3	63		
941	465821	5499827	45.73	14.0	0.22	14.0	<2	NM	25	36.5	37092	7.9	22	34	NM	NM	111.0	0.62	74.07	36.3	92		
942	464158	5500312	16.52	0.8	0.05	0.8	<2	NM	20	8.7	11063	0.5	12	6	NM	NM	42.0	0.05	11.24	22.4	51		
943	468751	5502054	12.01	3.5	0.10	3.5	<2	NM	49	35.5	25913	1.4	42	12	NM	NM	112.4	0.13	32.33	52.3	97		
944	468095	5513624	10.97	2.4	0.13	2.4	<2	NM	70	32.3	36995	0.4	50	12	NM	NM	100.8	0.08	3.88	62.6	108		
945	471965	5524855	33.63	8.5	0.09	8.5	<2	NM	30	36.9	21828	1.4	27	8	NM	NM	99.0	0.12	8.02	35.8	58		
946	470642	5524273	55.75	6.8	0.13	6.8	<2	NM	28	42.6	17237	1.4	23	6	NM	NM	86.2	0.16	5.58	35.8	90		
947	469597	5524485	61.41	8.7	0.08	8.7	<2	NM	26	37.7	19379	2.0	25	5	NM	NM	87.5	0.16	6.22	40.4	80		
948	468142	5525067	48.69	3.6	0.08	3.6	<2	NM	19	21.3	10646	1.1	19	6	NM	NM	45.1	0.10	4.26	26.7	67		
949	468036	5524247	65.11	4.0	0.15	4.0	<2	NM	11	45.5	15478	1.7	17	4	NM	NM	35.1	0.11	2.36	31.5	86		
951	465337	5524035	24.9	9.1	0.08	9.1	<2	NM	32	30.6	23533	1.3	34	6	NM	NM	63.9	0.11	25.37	34.3	75		
952	465535	5525027	23.94	4.2	0.09	4.2	<2	NM	39	27.7	28858	0.8	31	7	NM	NM	82.8	0.07	22.47	40.4	85		
953	466051	5526019	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
954	467136	5526363	40.94	4.2	0.04	4.2	<2	NM	20	20.4	10616	1.2	22	5	NM	NM	49.6	0.07	10.77	24.8	46		
955	472481	5526046	17.05	3.9	0.14	3.9	<2	NM	66	53.7	36949	1.1	59	13	NM	NM	116.0	0.14	6.80	62.7	99		
956	471092	5526443	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	
957	470020	5526469	36.61	1.6	0.13	1.6	<2	NM	27	29.2	17268	2.2	20	8	NM	NM	73.0	0.08	15.88	39.4	65		
958	469928	5527210	48.5	2.9	0.13	2.9	<2	NM	33	28.9	20227	1.4	26	10	NM	NM	86.7	0.17	5.60	42.6	82		
959	470113	5527938	38.63	3.5	0.09	3.5	<2	NM	27	22.0	13580	3.3	18	6	NM	NM	49.7	0.11	22.41	52.5	84		
961	468102	5529459	19.96	3.0	0.13	3.0	<2	NM	70	37.0	35135	1.2	49	1	NM	NM	107.1	0.09	5.15	65.2	103		
962	465403	5530332	51.39	2.0	0.11	2.0	<2	NM	25	25.2	12078	1.2	23	5	NM	NM	52.3	0.08	1.63	24.5	76		
963	471118	5530769	15.6	2.5	0.15	2.5	<2	NM	82	33.7	41052	0.6	55	12	NM	NM	114.7	0.09	3.41	69.4	141		
964	477852	5529247	20.31	1.9	0.12	1.9	<2	NM	66	27.7	32864	0.4	46	10	NM	NM	86.5	0.08	3.73	51.5	126		
965	479135	5527871	21.52	3.5	0.17	3.5	<2	NM	73	41.7	37436	0.7	55	11	NM	NM	105.3	0.10	5.51	59.9	119		
966	475920	5526138	20.16	3.4	0.16	3.4	<2	NM	67	34.1	35359	0.5	51	11	NM	NM	94.5	0.09	3.99	54.5	133		
967	479347	5525318	22.58	2.7	0.16	2.7	<2	NM	67	36.3	33967	0.6	52	10	NM	NM	93.0	0.09	6.35	53.9	128		
968	484519	5515436	58.11	3.1	0.14	3.1	<2	NM	19	19.5	7522	1.0	16	7	NM	NM	36.0	0.12	0.99	22.8	67		
969	484863	5515158	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
971	482217	5512949	42.75	2.3	0.12	2.3	<2	NM	40	29.5	18587	0.8	40	9	NM	NM	60.4	0.13	1.86	46.9	99		
972	498853	5496055	21.09	3.3	0.11	3.3	<2	NM	75	52.0	38196	1.6	58	13	NM	NM	109.0	0.13	3.10	72.8	104		

Sample	Easting Method	Northing	LOI		Ag MS	As INAA	Au INAA	Au FA	Cr OES	Cu		Fe OES	Mo MS	Ni OES	Pb MS	Pd FA	Pt FA	REEs		Sb MS	U MS	V OES	Zn OES
			Grav	%						ppm	ppm							ppm	ppm				
	Units																						
	Det Limit		0.01	0.04	0.5	2	0.1	1	1	0.4	20	0.06	1	0.3	1	0.1	n/a	0.03	0.03	0.03	0.4	0.4	
973	498184	5495079	16.72	0.16	2.3	<2	1.4	90	39.9	45688	0.5	66	14	0.6	0.6	126.3	0.09	2.41	76.4	135			
974	498867	5494838	14.74	0.16	3.0	<2	2.4	81	41.2	41640	0.6	58	14	0.5	0.5	124.0	0.08	2.67	71.9	121			
975	498867	5486749	19.89	0.16	4.3	<2	4.8	72	40.3	36028	1.2	55	13	1.9	3.1	110.2	0.09	2.70	59.9	126			
976	494437	5487759	19.99	0.15	2.3	<2	0.5	76	36.6	38001	0.5	58	12	0.4	0.9	111.8	0.07	2.20	57.9	130			
977	495033	5488695	17.7	0.15	2.8	<2	0.5	80	35.9	40540	0.5	59	13	0.4	0.6	111.3	0.08	1.96	60.9	133			
978	495320	5489286	18.65	0.12	4.6	<2	0.5	68	43.1	37392	1.0	54	13	0.8	1.1	105.6	0.09	2.40	64.1	104			
979	496476	5489764	15.68	0.14	3.0	<2	1.0	83	37.0	42795	0.5	62	13	0.4	1.0	119.5	0.09	2.00	63.2	141			
981	494604	5492136	15.97	0.17	3.0	<2	0.5	86	42.3	44466	0.7	64	14	0.5	0.6	133.0	0.09	2.52	73.1	141			
982	494954	5494253	17.19	0.18	4.2	<2	1.0	85	44.1	45609	0.7	63	15	0.7	0.8	140.1	0.10	2.99	78.1	134			
983	491414	5499140	19.53	0.20	3.5	<2	NM	85	46.7	43447	0.6	61	14	NM	NM	119.9	0.10	2.86	74.6	129			
984	491605	5497766	39.13	0.20	3.3	<2	NM	53	47.5	26837	0.9	46	12	NM	NM	89.2	0.22	2.56	52.2	90			
985	492546	5498348	13.88	0.15	2.9	<2	0.5	85	39.6	44207	0.4	60	13	0.2	0.3	117.3	0.09	1.88	75.3	122			
986	493973	5499515	17.7	0.18	3.5	<2	0.5	83	45.3	43531	0.8	60	14	0.8	1.1	126.5	0.09	2.89	78.2	119			
987	427650	5520478	14.28	0.06	1.7	<2	NM	31	19.1	15817	1.1	21	6	NM	NM	85.0	0.07	14.20	26.2	60			
988	428488	5520690	12.2	0.07	3.6	<2	NM	36	26.5	21939	2.0	37	9	NM	NM	102.7	0.09	23.43	42.0	94			
989	428540	5521389	24.54	0.10	3.3	<2	NM	39	31.7	26648	1.6	28	9	NM	NM	120.0	0.10	22.27	40.2	92			
991	430430	5521114	28.3	0.12	4.8	<2	NM	44	42.1	53316	3.4	37	11	NM	NM	179.2	0.12	39.42	57.9	125			
992	430488	5521759	27.13	0.16	4.5	<2	NM	46	47.1	51238	4.2	46	11	NM	NM	187.3	0.16	33.32	63.2	137			
993	431457	5521325	25.91	0.10	3.6	<2	NM	41	34.9	26629	2.1	31	9	NM	NM	157.5	0.10	29.76	42.9	101			
994	431285	5523144	24.85	0.09	2.6	<2	NM	35	32.9	17081	1.1	25	7	NM	NM	119.2	0.09	19.39	30.9	75			
995	437248	5525799	18.29	0.08	2.3	<2	NM	35	36.8	18722	1.4	25	8	NM	NM	111.6	0.10	15.76	33.3	76			
996	438519	5524211	8	0.07	3.1	<2	NM	31	34.4	13485	0.9	28	7	NM	NM	94.7	0.12	11.12	34.6	68			
997	437319	5523783	25.56	0.08	1.7	<2	NM	34	39.4	13978	0.8	26	7	NM	NM	111.5	0.10	12.58	22.8	62			
998	438966	5534354	33.82	0.10	3.1	<2	NM	34	27.4	20676	1.4	23	7	NM	NM	90.1	0.11	4.72	30.3	86			
999	439092	5534905	37.27	0.11	2.5	<2	NM	31	27.5	15525	0.9	20	7	NM	NM	83.1	0.13	4.25	24.0	72			
1001	439998	5534550	30.97	0.06	2.2	<2	NM	27	18.2	12537	0.6	19	5	NM	NM	70.0	0.08	3.10	18.3	62			
1002	439646	5534134	16.91	0.07	1.4	<2	NM	22	18.0	14105	1.0	16	5	NM	NM	58.7	0.07	3.43	26.4	64			
1003	438585	5532025	37.07	0.07	1.9	<2	NM	24	21.6	7310	0.7	20	5	NM	NM	67.1	0.09	3.20	11.8	52			
1004	440084	5532818	26.31	0.09	3.8	<2	NM	38	29.8	29910	2.0	28	7	NM	NM	103.4	0.13	5.70	42.5	118			
1005	440433	5531914	11.43	<0.04	1.0	<2	NM	19	10.5	10036	0.4	13	5	NM	NM	47.0	0.14	1.52	15.0	47			
1006	439209	5531788	19.84	0.06	1.9	<2	NM	29	21.8	16250	0.9	19	5	NM	NM	76.4	0.10	2.80	23.0	71			
1007	438508	5529556	23.3	0.09	3.7	<2	NM	30	34.4	26084	1.7	30	7	NM	NM	102.0	0.14	4.40	38.3	109			
1008	437014	5530149	28.18	0.09	3.6	<2	NM	27	28.5	15646	1.1	21	8	NM	NM	83.0	0.16	2.99	28.2	70			
1009	436099	5530324	29.31	0.09	3.7	<2	NM	29	31.8	24599	1.6	25	7	NM	NM	99.1	0.11	3.93	32.3	99			
1011	435247	5530870	32.93	0.09	1.9	<2	NM	26	29.4	12986	0.9	21	6	NM	NM	85.8	0.11	3.16	22.4	74			
1012	442316	5529453	30.33	0.07	2.3	<2	NM	23	23.4	13408	1.0	22	5	NM	NM	82.4	0.09	3.07	20.4	77			
1013	441081	5528421	24.2	0.08	3.1	<2	NM	26	25.6	17042	1.3	18	6	NM	NM	86.3	0.12	5.10	24.5	72			
1014	439230	5528862	30.41	0.07	2.2	<2	NM	23	24.5	8296	0.7	19	5	NM	NM	78.4	0.08	3.90	14.7	61			
1015	437923	5527705	41.95	0.07	1.7	<2	NM	24	31.1	9352	1.2	28	5	NM	NM	96.9	0.11	5.80	16.1	82			
1016	491321	5502894	13.66	0.13	2.3	<2	0.5	79	42.7	41130	0.6	58	14	0.4	0.4	118.3	0.09	2.36	71.3	115			
1017	489517	5501521	13.25	0.13	2.6	<2	0.5	82	39.6	42768	0.5	60	14	0.3	0.3	110.4	0.12	2.02	72.8	121			
1018	490397	5501227	6.1	0.09	2.9	<2	0.5	89	56.7	51070	0.4	66	15	0.3	0.3	122.7	0.14	1.69	79.7	118			
1019	491034	5501510	14.57	0.15	3.3	<2	0.5	84	46.3	43580	0.6	63	14	0.5	0.6	120.6	0.09	2.43	75.6	123			
1021	484008	5501345	13.73	0.14	4.8	<2	0.5	72	41.5	38417	0.6	53	21	0.3	0.4	114.4	0.27	2.58	69.4	118			
1022	486683	5501473	27.24	0.14	3.6	<2	0.5	64	53.2	32522	0.9	54	12	0.8	0.4	94.6	0.12	3.09	54.2	121			
1023	485906	5499282	13.83	0.13	4.2	<2	0.5	75	44.4	40977	0.6	60	14	0.4	0.2	119.1	0.08	2.92	66.0	124			

Metric Conversion Table

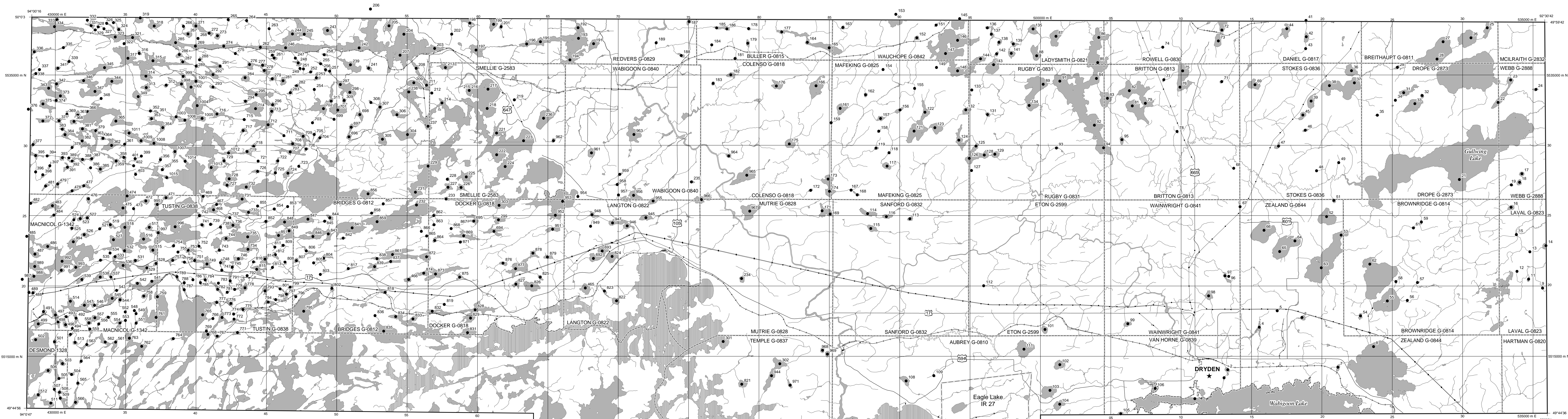
Conversion from SI to Imperial			Conversion from Imperial to SI		
<i>SI Unit</i>	<i>Multiplied by</i>	<i>Gives</i>	<i>Imperial Unit</i>	<i>Multiplied by</i>	<i>Gives</i>
LENGTH					
1 mm	0.039 37	inches	1 inch	25.4	mm
1 cm	0.393 70	inches	1 inch	2.54	cm
1 m	3.280 84	feet	1 foot	0.304 8	m
1 m	0.049 709	chains	1 chain	20.116 8	m
1 km	0.621 371	miles (statute)	1 mile (statute)	1.609 344	km
AREA					
1 cm ²	0.155 0	square inches	1 square inch	6.451 6	cm ²
1 m ²	10.763 9	square feet	1 square foot	0.092 903 04	m ²
1 km ²	0.386 10	square miles	1 square mile	2.589 988	km ²
1 ha	2.471 054	acres	1 acre	0.404 685 6	ha
VOLUME					
1 cm ³	0.061 023	cubic inches	1 cubic inch	16.387 064	cm ³
1 m ³	35.314 7	cubic feet	1 cubic foot	0.028 316 85	m ³
1 m ³	1.307 951	cubic yards	1 cubic yard	0.764 554 86	m ³
CAPACITY					
1 L	1.759 755	pints	1 pint	0.568 261	L
1 L	0.879 877	quarts	1 quart	1.136 522	L
1 L	0.219 969	gallons	1 gallon	4.546 090	L
MASS					
1 g	0.035 273 962	ounces (avdp)	1 ounce (avdp)	28.349 523	g
1 g	0.032 150 747	ounces (troy)	1 ounce (troy)	31.103 476 8	g
1 kg	2.204 622 6	pounds (avdp)	1 pound (avdp)	0.453 592 37	kg
1 kg	0.001 102 3	tons (short)	1 ton (short)	907.184 74	kg
1 t	1.102 311 3	tons (short)	1 ton (short)	0.907 184 74	t
1 kg	0.000 984 21	tons (long)	1 ton (long)	1016.046 908 8	kg
1 t	0.984 206 5	tons (long)	1 ton (long)	1.016 046 90	t
CONCENTRATION					
1 g/t	0.029 166 6	ounce (troy)/ ton (short)	1 ounce (troy)/ ton (short)	34.285 714 2	g/t
1 g/t	0.583 333 33	pennyweights/ ton (short)	1 pennyweight/ ton (short)	1.714 285 7	g/t

OTHER USEFUL CONVERSION FACTORS

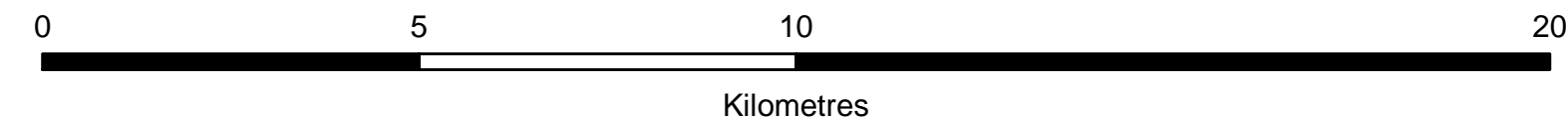
	<i>Multiplied by</i>	
1 ounce (troy) per ton (short)	31.103 477	grams per ton (short)
1 gram per ton (short)	0.032 151	ounces (troy) per ton (short)
1 ounce (troy) per ton (short)	20.0	pennyweights per ton (short)
1 pennyweight per ton (short)	0.05	ounces (troy) per ton (short)

Note: Conversion factors which are in bold type are exact. The conversion factors have been taken from or have been derived from factors given in the Metric Practice Guide for the Canadian Mining and Metallurgical Industries, published by the Mining Association of Canada in co-operation with the Coal Association of Canada.

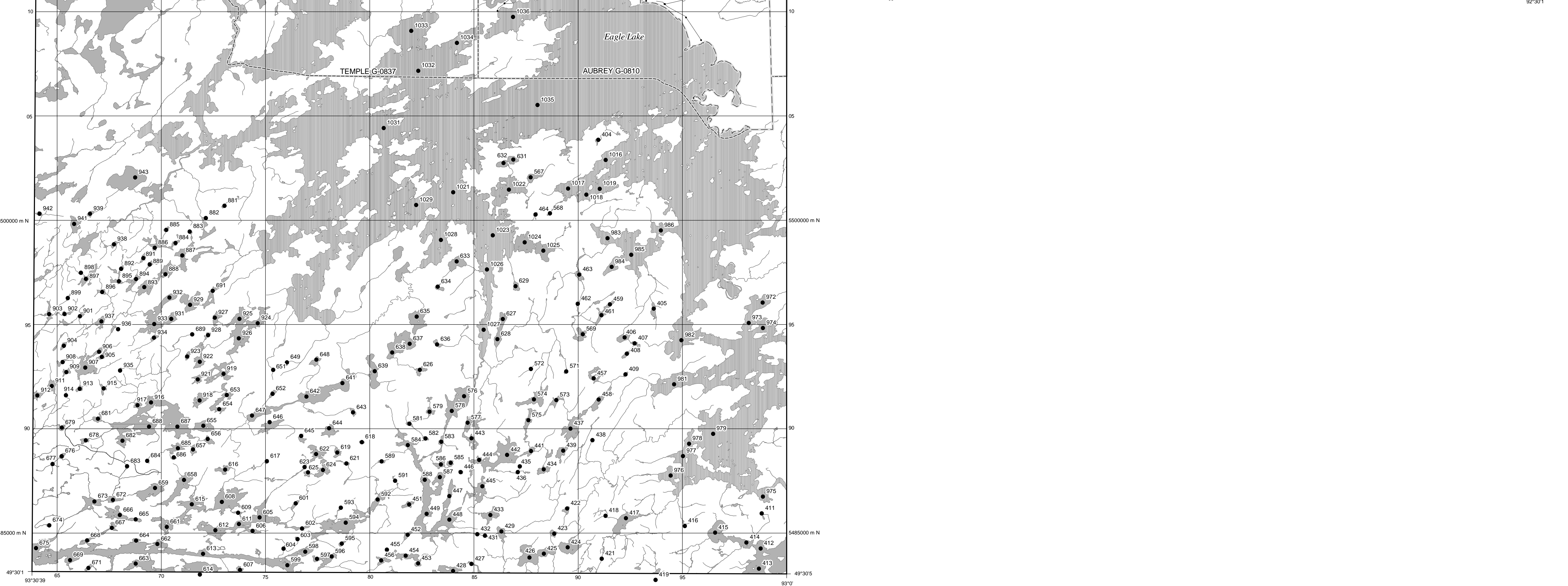
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Scale 1:100 000



NAD 83 ZONE 17



OFR 6104
Figure 6. Sample site location map of the Eagle Lake sediment survey area.