



GEOLOGICAL SURVEY OF CANADA

OPEN FILE 2933

Till geochemistry in the Manitouwadge-Hornpayne region, Ontario

I.M. Kettles

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**Till Geochemistry in the Manitouwadge-Hornpayne
Region, Ontario**

This Open File publication comprises:

- 1) A report, including an 18 page manuscript, summarizing interpretations of compositional data for till samples; sample location maps for the Manitouwadge-Hornpayne region, including all or parts of NTS map areas 42F/04, 42C/13, 42E/01, 42E/02, 42F/03, 42F/05, 42E/08, 42F/06, and for the Manitouwadge district and areas near the mines, including parts of NTS map areas 42F/04 and 42E/01;
- 2) Appendices, including (i) sample description and location; (ii) geochemical data; and (iii) pebble count data (Appendix A); statistical information for samples (Appendix B); computer generated proportional symbol maps for selected Paleozoic and Precambrian lithologies in the 5.0-16.0 mm fraction and selected elements in the <0.063 mm and <0.002 mm fractions of till in the Manitouwadge-Hornpayne region (Appendix C), the Manitouwadge district (Appendix D), and the area near the mines (Appendix E); a location map and kimberlite mineral indicator data for 26 esker samples in the Manitouwadge-Hornpayne region (Appendix F); and a list of visible gold grain data and a map showing regional distribution of gold grains in till in the Manitouwadge-Hornpayne region (Appendix G).
- 3) Computer generated proportional symbol maps for selected elements in lake sediments and lake water in the Manitouwadge-Hornpayne region, based on data for samples collected by Mineral Resources Division in 1978 and 1979 and reanalyzed in 1991.
- 4) Diskettes (5 1/4 and 3 1/2 inch) of data for 1992 till and gravel samples including: sample description and location, geochemical analyses, and clast lithology analyses. Data are stored as tab delimited ASCII (text) files.

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POCKET ITEMS

Sample location map for Manitouwadge-Hornpayne region

Sample location map for the Manitouwadge district and the area near the Geco mines.

INTRODUCTION

As part of the Northern Ontario Development Agreement (NODA) during 1991 and 1992, the Geological Survey of Canada carried out till sampling in the Manitouwadge-Hornepayne area (Kettles, 1993a, 1993 b; Kettles and Murton, 1992) (Fig. 1). The purpose was to provide information about Quaternary geology (e.g. ice flow directions and lithologic and geochemical composition of glacial sediments) that would be valuable for drift prospecting. A total of 730 samples were collected; 444 till and 40 glaciofluvial sand and gravel samples were obtained in 1992. The survey included detailed sampling near the Manitouwadge greenstone belt, especially the Geco and several abandoned Cu-Zn mines (Fig. 1). Some of the detailed sampling was undertaken by Carleton University, also for mineral exploration purposes (Kettles and Murton, 1992). Samples were analyzed for selected trace, minor and major elements in the clay-sized (<0.002 mm) and silt and clay-sized (<0.063 mm) fractions of till, the pebble fraction lithology (5.6-16.0 mm), and for visible gold grains in the 2.0-0.25 mm fraction. In addition, 26 large esker samples were collected from the Manitouwadge-Hornpayne region and analyzed for kimberlite indicator minerals. In this report, analysis results of the 1992 samples are presented - data for the 286 samples from 1991 have been released as Geological Survey of Canada Open File 2274 (Kettles, 1993a). Also presented are maps showing distribution of selected elements and rock types in till at regional and detailed scales, based on all till data.

The Geological Survey of Canada previously surveyed modern lake sediments and lake waters around the north shore of Lake Superior, including the Manitouwadge area, in 1978 and 1979 (Geological Survey of Canada Open Files 506 and 555). In 1990, samples were reanalyzed for a larger suite of elements in 1990 (Friske et al., 1991a and 1991b). Included in this report are maps showing the distribution of selected elements in lake sediments, based on the data of Friske for the Manitouwadge-Hornpayne area.

Location

The study area, located north of Lake Superior, covers approximately 4500 sq. km and includes either all or parts of 1:50,000 National Topographic System (NTS) map areas - 42F/04,

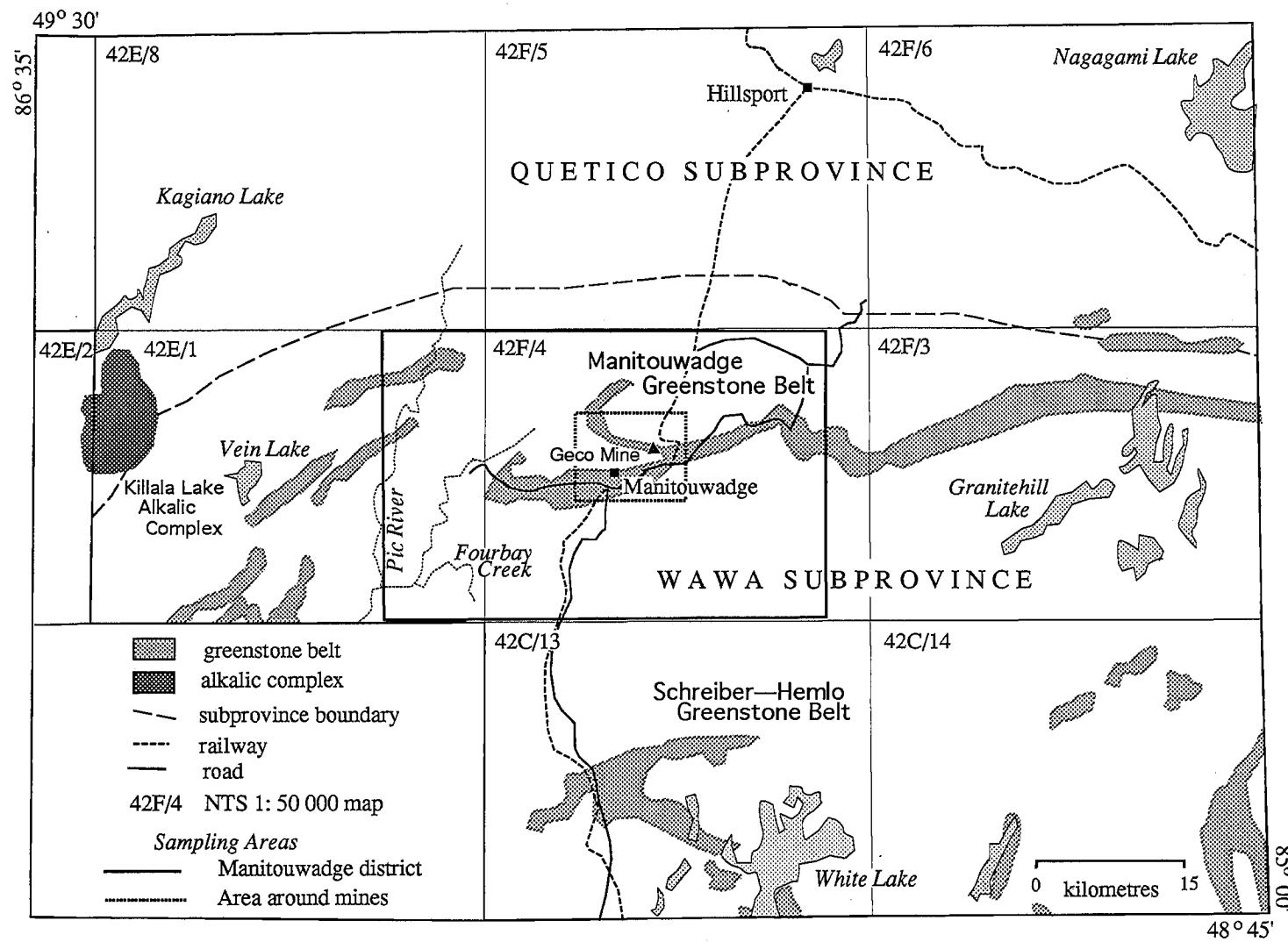


Figure 1. Regional and detailed sampling areas, Manitouwadge, Ontario.

42C/13, 42E/01, 42E/02, 42F/03, 42F/05, 42E/08, 42F/06 (Fig. 1). Except for the Vein Lake-Killala Lake area, where aircraft and boat support was necessary, the area was accessed by a well-developed network of logging roads. The town of Manitouwadge is central to the survey area, whereas Hornpayne lies east of the study area. They both exist primarily as service centres, the first for the Geco Mine, a major producer of Cu, Zn, Au, and Ag, and the second for the railway.

Acknowledgments

The author wishes to thank the following: Steven Bauke and Kathryn Laurus for their able assistance in the field; Egor Bilot and Alyre Savoie of Consorminex, Ltd. and John Lavoie for collecting samples in inhospitable terrain; Dr. Julian Murton for collecting and Dr. K. Bell, Carleton University, for permitting use of samples obtained for a project funded by an NSERC strategic grant; Manfred Hebel for assistance with data compilation; D. B. McKay for helpful advice; the staff of the geology department of Noranda Geco mine for discussions and permission to sample near the mine; Northwood Geoscience for plotting the proportional symbol maps; D. Pare, Consorminex Ltd., and K. Laurus for carrying out pebble counts; Overburden Drilling for carrying out gold grain and kimberlite indicator mineral analysis; P. Lindsay for technical assistance; and Dr. Rod Klassen for reviewing this report.

BEDROCK AND GLACIAL GEOLOGY

Most of the study area is underlain by Archean greenstone belts and granitoid plutons of the Wawa subprovince of the Canadian Shield (Williams and Breaks, 1990; Zaleski and Peterson, 1993; Ontario Geological Survey 1991; Fig. 2). The Manitouwadge greenstone belt, comprising highly deformed metavolcanic and metasedimentary rocks, hosts four known volcanogenic massive sulphide (VMS) deposits, the largest of which is the Geco Cu-Zn-Ag deposit (Friesen et al., 1982; Fig. 3). Part of the Schreiber-Hemlo greenstone belt underlies the southern part of the study region. This belt includes mafic metavolcanic rocks and intermediate to

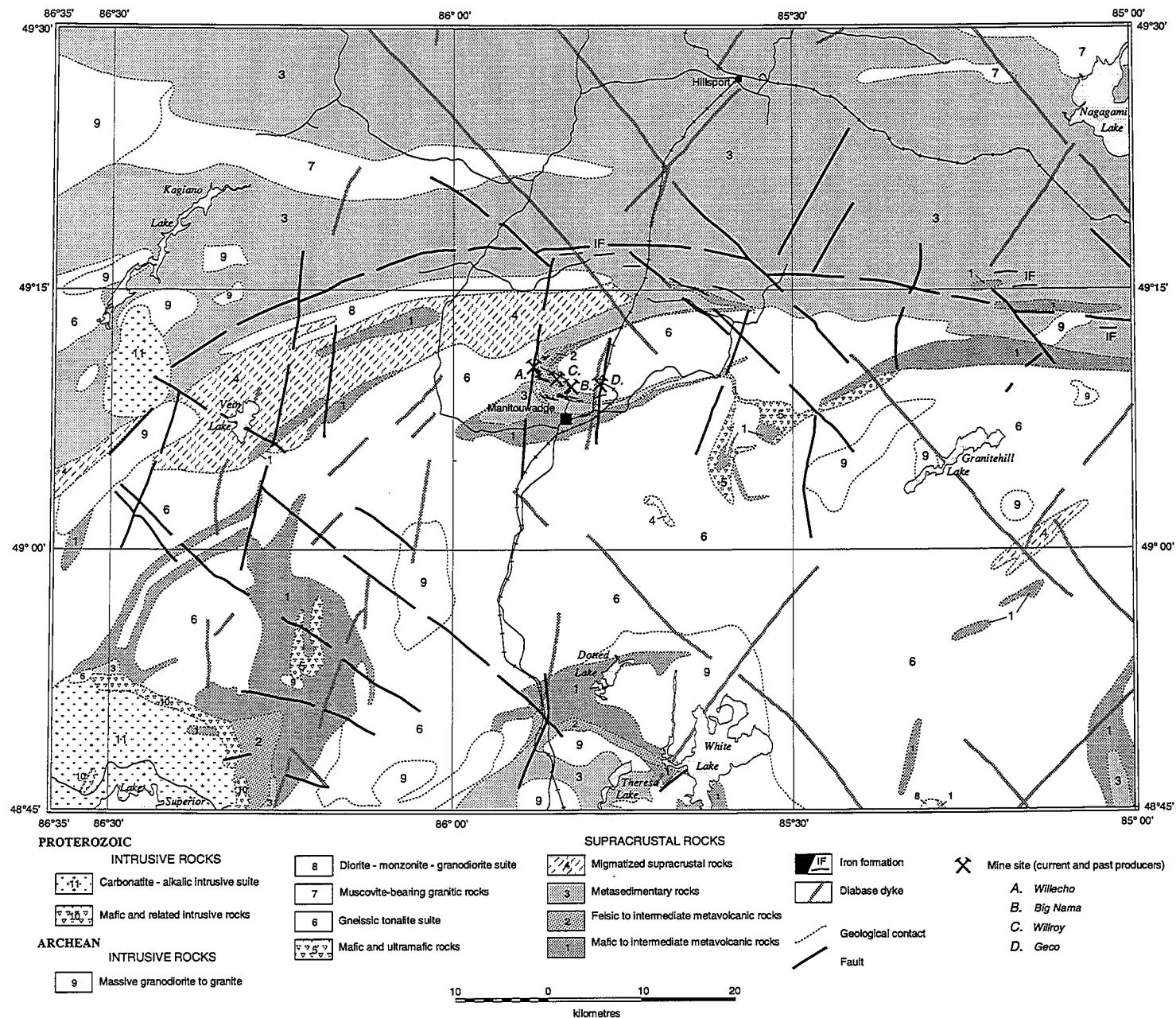


Figure 2. Bedrock geology of the Manitouwadge-Hornpayne area (after Ontario Geological Survey, 1991; Zaleski and Peterson, 1993).

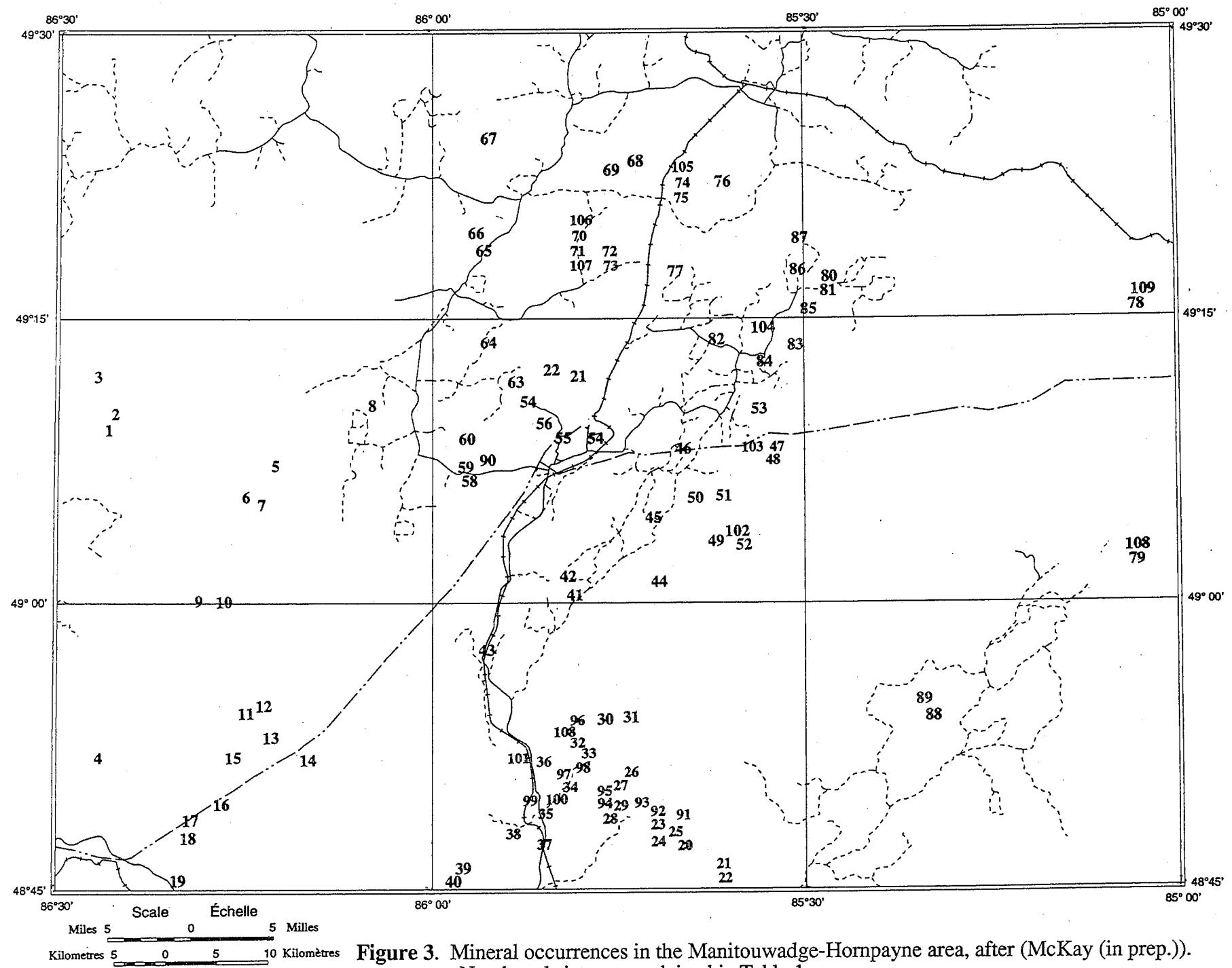


Table 1. Description of mineral occurrences; accompanies Figure 5.

No.	Occurrence	No.	Occurrence	No.	Occurrence
1	Ni	37	sulphides	73	sulphides
2	Cu, Au	38	sulphides	74	Au, base metals
3	Nb	39	Pb, Zn	75	sulphides
4	U	40	Pb, Zn	76	sulphides
5	Cu	41	sulphides, Mo	77	sulphides
6	Cu, Zn	42	Au	78	sulphides
7	sulphides	43	sulphides	79	sulphides
8	sulphides	44	sulphides	80	sulphides, Au
9	Au	45	Cu	81	sulphides
10	Cu	46	sulphides	82	Cu
11	sulphides	47	Cu, Ni, PGE	83	Cu, Zn
12	Cu, Ni, sulphides	48	sulphides	84	sulphides
13	Cu, Ni, sulphides	49	sulphides	85	sulphides
14	Cu	50	sulphides	86	sulphides
15	sulphides	51	Cu	87	sulphides
16	Au, Zn	52	sulphides, Cu	88	Cu, Ni, PGE
17	Fe, Cu	53	sulphides	89	Au, base metals
18	Cu, Fe	54	Cu, Zn, Ag, Au, Pb, Cd	*1	sulphides
19	Cu	55	Zn, Cu, Ag, Pb	*2	Zn, Cu, Au
20	Zn	56	Zn, Cu, Ag, Pb	*3	Zn, Cu, Au
21	Zn	57	Zn, Cu, Ag, Pb	*4	sulphides
22	Au, base metals	58	Cu, Zn, Au	90	Zn
23	Zn, Cu, Au	59	sulphides, Au	91	Au
24	Au	60	base metals	92	Cu, Zn
25	Cu	61	Cu, Zn	93	Pb, Zn
26	Cu	62	sulphides	94	sulphides
27	Cu	63	sulphides	95	Au, Cu, Zn
28	Au	64	sulphides	96	100 sulphides
29	Zn, Au	65	sulphides	101	Cu, Zn
30	Zn	66	sulphides	102	sulphides
31	Cu, Zn	67	Cu	103	sulphides
32	base metals	68	Cu, sulphides	104	sulphides
33	sulphides	69	U	105	sulphides
34	Cu, Ni	70	Cu, sulphides	106	sulphides
35	Au	71	Cu, sulphides	107	sulphides
36	Au, Zn	72	Au, Cu	108	Cu, Zn

1* Geco - present producer

2* Willroy - past producer

3* Big Nama - past producer

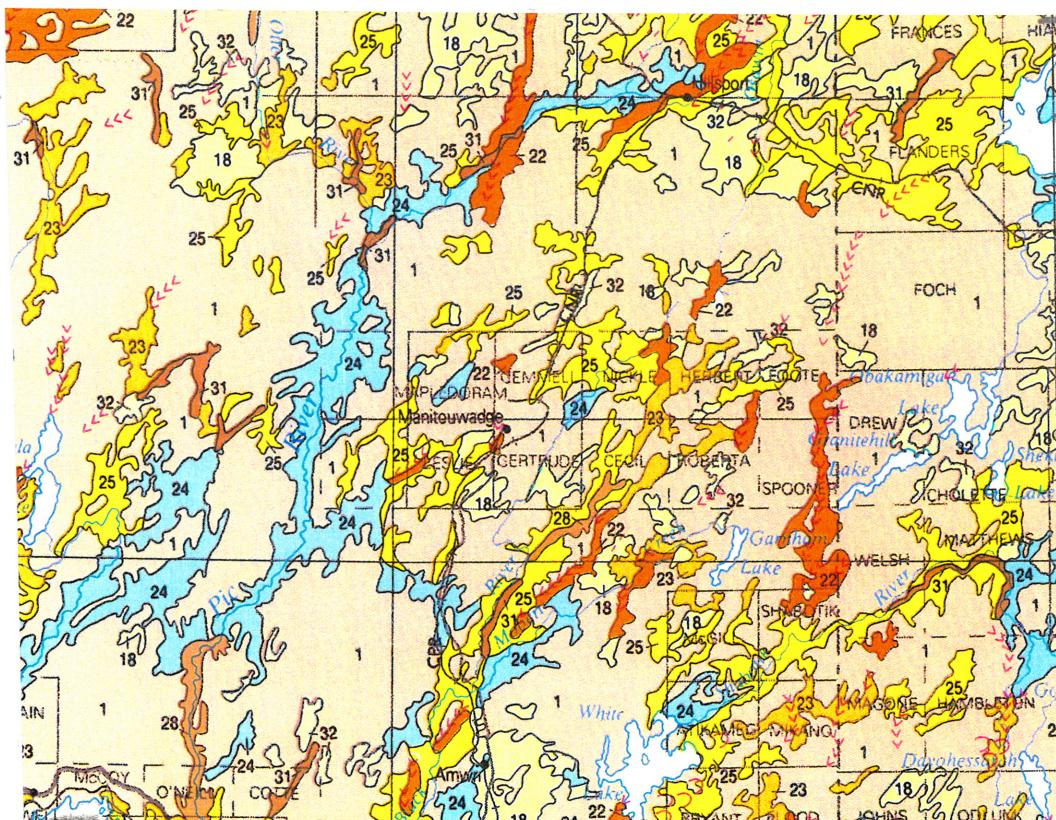
4* Willecho - past producer

felsic metavolcanic units. South of the study area, the Schreiber-Hemlo greenstone belt is host to the Hemlo gold deposits.

The northern part of the study region is underlain by bedrock of the Quetico subprovince. It is composed primarily of metamorphosed wackes and siltstones with minor amounts of iron formation, conglomerate and metasedimentary rocks of ultramafic composition (Williams, 1991). Also present is the Proterozoic-age Killala Lake carbonatite-alkalic complex which lies west of Vein Lake (Sage, 1991).

All glacial sediments in the Manitouwadge area are thought to have been deposited during the Late Wisconsinan (Kristjansson and Geddes, 1986; Geddes and Bajc, 1985; Barnett et al., 1991; Fig. 4). Striae measurements indicate that the predominant ice flow direction was 210 - 220° (Kristjansson and Geddes, 1986; Geddes and Bajc, 1985; Kettles, 1993a, 1993 b; Fig. 5). From striae on stoss and lee facets of glacially moulded bedrock and in grooves eroded during older flow events, earlier (southerly) and later (more westerly) flow events were determined.

The most widespread glacial deposits in the Manitouwadge area are diamictons likely deposited either directly from, or in close association with, glacial ice. They have the physical and chemical characteristics that closely approximate those of the debris load carried by the last glacier to cross the project area, and are, therefore, collectively referred to as till. A single stratigraphic unit has been recognized (Kristjansson and Geddes, 1986; Geddes and Bajc, 1985). Till commonly forms a thin, discontinuous veneer (up to 1.5 metres thick), but in places exceeds 10 m in thickness. On account of poor exposure it was difficult to distinguish between till facies. However, where till was better exposed three facies were observed and sampled (Kettles and Murton, 1993): 1) compact diamicton with 30-65% Paleozoic carbonate clasts. It is locally fissile, pale grey where unweathered and buff where weathered. Compact diamicton was observed on the down-ice (lee) slopes of certain hills and in some lowland sites. Thicknesses locally exceed at least a few metres. 2) loose, sandy diamicton with low to high concentrations of Paleozoic carbonate clasts (10-40%); this material is light to dark grey where unweathered, and is tan to olive coloured where weathered. It is the most widespread till, commonly forming



QUATERNARY

RECENT

- 32 **Organic deposits:** peat, muck and marl
- 31 **Fluvial deposits:** gravel, sand, silt and clay; deposited on modern flood plains
- 30 **Lacustrine deposits:** sand, gravelly sand and gravel; nearshore and beach deposits
- 29 **Lacustrine deposits:** silt and clay; basin or quiet water deposits

PLEISTOCENE

- 28 **Fluvial deposits:** gravel, sand, silt and clay; deposited on abandoned flood plains, terrace remnants
- 27 **Glaciomarine and marine deposits:** sand, gravelly sand and gravel; nearshore and beach deposits
- 26 **Glaciomarine and marine deposits:** silt and clay; basin and quiet water deposits
- 25 **Glaciolacustrine deposits:** sand, gravelly sand and gravel; nearshore and beach deposits

24 **Glaciolacustrine deposits:** silt and clay, minor sand; basin and quiet water deposits

23 **Glaciofluvial outwash deposits:** gravel and sand; includes proglacial river and deltaic deposits

22 **Glaciofluvial ice-contact deposits:** gravel and sand; minor till; includes esker, kame, end moraine, ice-marginal delta and subaqueous fan deposits

21 **Till:** undifferentiated, fine grained, predominantly silty clay to silt matrix, commonly clast poor, high matrix carbonate content

20 **Till:** undifferentiated, predominantly sand matrix, extremely stony, bouldery and high in total matrix carbonate, often associated with stratified sediments

19 **Till:** undifferentiated, predominantly sandy silt to silt matrix, commonly rich in clasts, often high in total matrix carbonate content

18 **Till:** undifferentiated, predominantly sand to silty sand matrix, high content of clasts,

PRECAMBRIAN

1 **Bedrock:** undifferentiated igneous and metamorphic rock, exposed at surface or covered by a discontinuous, thin layer of drift

20 0
Kilometres

Figure 4. Surficial deposits of the Manitouwadge-Hornpayne area (after Barnett et al., 1991).

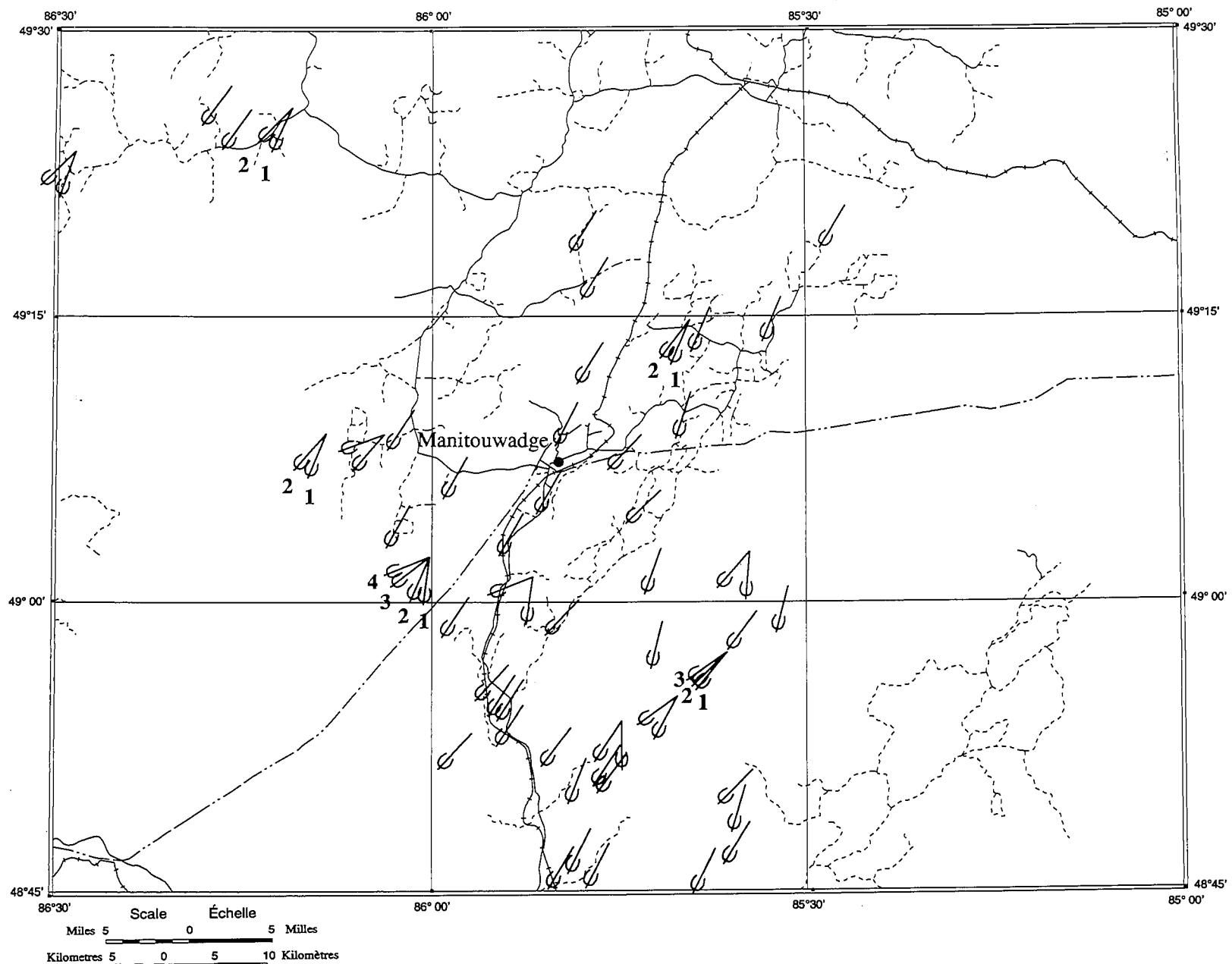


Figure 5. Glacial striation map. Striae measurements from present study and after Kristjansson and Geddes (1986) and Geddes and Bajc (1985). Where known, relative age relationships indicated: 1 = oldest; 4 = youngest.

discontinuous sheets of variable thickness (0.5-3.0 m). 3) loose, sandy to clast-rich diamicton with few Paleozoic carbonate clasts (0-8%) and high concentrations of angular, generally large (up to boulder size) clasts derived from the local Precambrian bedrock. This unit is dark grey where unweathered and olive to tan coloured where weathered. It is common in areas of exposed bedrock.

Glaciofluvial ice-contact and outwash sand and gravel are also present in the study area. Outwash deposits are common in the region east of Manitouwadge, in low-lying areas above the maximum levels of glacial lake incursion (post-Lake Minong; Kristjansson and Geddes, 1986). Elsewhere, in low-lying areas, glaciolacustrine deposits consisting of sand, silt, and clay are widespread. In the Manitouwadge area, lacustrine sediments have been observed as high as 325 m a.s.l. (R. Geddes, 1987, unpublished report). Aeolian dunes are found in some areas where outwash or glaciolacustrine sediments predominate and alluvial sands and silts are well developed along major rivers and streams. Deposits of peat and organic muck are widespread, particularly in areas underlain by glaciolacustrine sediments.

METHODOLOGY AND DATA ORGANIZATION

Samples were collected from hand-dug holes at off-road or shoreline sites or in roadside exposures. Samples from 1991 were collected by the author as were 1992 samples designated 92KFA0400-599, 0723-0806. Samples from the Vein Lake area (42E/01) were collected in 1992, under contract, by John Lavoie (92KFA0300-0320) and Consorminex, Ltd. (92KFA0600-0723). Near Manitouwadge, 91 samples (92MAN series) were obtained by Julian Murton of Carleton University. Care was taken to sample the least weathered till, and most samples were collected below the B horizon of the soil.

Pebbles (5.0-16.0 mm) were separated from most samples for lithological analysis. On average, 225 clasts were examined from each sample. The clasts were grouped into the following 6 classes and relative percentages (by number) calculated: 1) Paleozoic limestone and dolomite; (2) Paleozoic sandstone and siltstone; 3) Proterozoic greywacke and argillite (the clasts are

characteristic of the Omarolluk Formation which outcrops in the Belcher Island Fold Belt and Sutton Inlier (e.g. Ricketts and Donaldson (1981)); 4) Precambrian metasedimentary rocks of uncertain provenance; 5) Precambrian intrusive and high-grade metamorphic rock; and 6) undifferentiated Archean metavolcanic rock.

The <0.063 mm fraction of the samples was extracted by dry sieving and the <0.002 mm fractions by sieving and by centrifuging and decanting using methodology adapted from Jackson (1956). The two size fractions were analyzed at Chemex Labs, Ltd. for 27 trace, minor and major elements (Ag, Al, As, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, La, Mg, Mn, Mo, Na, Ni, Pb, Sb, Sc, Sr, Ti, Tl, V, Y, and Zn) by Inductively Coupled Plasma and Atomic Emission Spectroscopy (ICP-AES) following a nitric acid-aqua regia partial digestion. The digestion may be incomplete for Al, Ba, Ca, Cr, K, La, Mg, Na, Sc, Sr, Ti, and Tl. The <0.063 mm fraction was further analyzed for Au, Pt, and Pd by fire assay and Direct Current Plasma (DCP) spectroscopy. The two size fractions of blind duplicate samples and standard samples of Terrain Science Division were also analyzed to check analytical precision and reproducibility.

Approximately 2.5 kg of sample material was processed by Overburden Drilling Management, Nepean, Ontario, for a <2 mm concentrate using a shaker table and methylene iodide (s.g. 3.3). Visible gold obtained on the shaker table, and, for some samples by panning, were classified according to size, shape, and surface texture, all characteristics which may have significant implications for mineral exploration (McClenaghan, 1991). Ten kilograms of material from twenty-six esker sand samples was processed to produce a non-magnetic heavy mineral concentrate by Overburden Drilling Management (Averill et al., 1986). The 0.25 to 2.0 mm fraction was visually inspected under a stereoscopic binocular microscope for kimberlite indicator minerals (predominantly pyrope garnets, magnesian ilmenites, and chrome diopsides). There are more detailed discussions of methodology and the procedure rationale of visible gold grain and kimberlite indicator mineral analysis in McClenaghan (1991) and Thorleifson and Kristjansson (1990).

For samples from 1992, sample locations and descriptions and geochemical and lithological analysis results are given in Appendix A. Geochemical data for duplicate and standard samples are listed and explained in Appendix A (iv). Appendix A(iv) also contains scattergrams showing results of first run trace element data versus second run data for duplicate samples. For many elements reproducibility was good, but for some, notably Ag, As, Au, Bi, Cd, Mo, Pd, Pt, Sb and Tl, it is difficult to assess as concentrations levels for both size fractions are at or near the detection limit.

Data from 1992 were combined with similar data from 1991 and organized into three subsets, based on geographical area and the level of sampling detail (Appendix A (vi); location maps (back pocket of report)). Geochemical and pebble lithology data for till samples from 603 sites in the Manitouwadge-Hornpayne region and, from 286 sites in the Manitouwadge district were statistically analyzed using the computer software program Statview (Appendix B (i)). Data for 80 samples collected near the Manitouwadge volcanogenic massive sulphide (VMS) deposits were extracted from the Manitouwadge district database and reanalyzed statistically (Appendix B (i)). A correlation coefficient matrix, based on data for all representative samples, was also produced (Appendix B (ii))

A computer program developed by Wyatt Geoscience was used to generate proportional symbol maps showing regional distribution of selected geochemical elements and lithological categories in till. The maps also show bedrock geology, frequency histograms and normal probability curves (Appendices C, D, and E, respectively).

Analysis results for kimberlite indicator minerals and visible gold grains are shown in Appendices F and G, respectively. Appendix G also contains a map of visible gold grains in the Manitouwadge-Hornpayne area.

DRIFT COMPOSITION

Clast Lithologies

The frequency distribution and dispersal patterns of pebbles in till samples from the Manitouwadge area was studied to gain knowledge of the relationships of glacial flow to variations in composition (Appendix C). Two major bedrock terranes are represented by clasts in the tills of this region: 1) local Precambrian units and 2) Paleozoic and Proterozoic terranes of the Hudson Bay and James Bay Lowlands. Clasts derived from the Paleozoic and Proterozoic terranes were glacially transported at least 100 km and may significantly dilute the local debris.

More than 75% of the till samples collected in the Manitouwadge-Hornpayne contain at least 7% Paleozoic carbonate (Appendix C(i)) and 50% have greater than 20% Paleozoic carbonate clasts. In addition, over 75% of the samples contain more than 5% clasts of Proterozoic metasedimentary rock. Concentrations of Paleozoic carbonate clasts and Proterozoic metasediments are uniformly high in the northern part of the study area and in many areas near Manitouwadge. This local pattern of till distribution is consistent with the regional pattern (Sado and Carswell, 1987). Manitouwadge lies on the western edge of a plume of thick till extending south from the James and Hudson Bay lowlands. This is one of several plumes in northern Ontario likely formed by late glacial ice streams in the Laurentide Ice Sheet (Hicock et al., 1989). In contrast to exotic Paleozoic and Proterozoic lithologies, the highest concentrations of local Precambrian lithologies (e.g. metavolcanic rocks) occur in till overlying or within 1-2 km of their outcrops (Kettles, 1993a,b; Kettles and Murton, 1993). The distribution pattern of local lithologies reflects the effects of glacial erosion and transport at a local scale.

Geochemical Composition

High concentrations of Paleozoic carbonate in till tends to suppress the geochemical signature of the underlying bedrock in the fine fraction (See Kettles, 1993, correlation matrix; Kaszycki, 1989), because unmetamorphosed carbonate bedrock contains low trace element concentrations with some exceptions (Mason, 1966, Table 6.5). In this study only the

distribution pattern of till enriched in Sr seems to mimic the distribution of till with high levels of Paleozoic carbonate clasts.

Despite the effects of dilution related to far-travelled Paleozoic carbonate detritus, the distribution of trace and minor elements in the fine fractions of till may, in many areas, be related to local bedrock composition. As would be expected, very high concentrations of Cu, Zn, Pb, Cd and Ag characterized till overlying and within 1-2 km of the Manitouwadge VMS deposits (Appendices C, D and E).

Detailed geochemical maps of the mine areas (Appendix E), show that drift is not uniformly enriched in Cu, Pb, and Zn as some samples collected close to the mines have very low trace metal concentrations. Most samples enriched in the above elements also contain high concentrations of local Precambrian metavolcanic and metasedimentary lithologies.

Away from the main VMS deposits, Cu, Pb, Zn, Cd, Au and Ag anomalies were also noted in till overlying other parts of the Manitouwadge greenstone belt and the Schreiber-Hemlo greenstone belt. There are high levels of many elements - Co, Cr, Ni, Fe, Mn, As, Ba, and V- in till overlying and south of the southern part of the Killala Lake carbonatite-alkalic complex. Levels of Co, Cr, Ni, Fe and Mn are elevated in some areas in till overlying mafic bedrock and associated metasedimentary bedrock.

Trace element anomalies in drift elsewhere are less easily related to known mineral occurrences in bedrock. Till is enriched in As at scattered locations, and in Ba 30 km west of Hillsport and 10 km south of Manitouwadge. Almost all samples collected in an area approximately 12 km north of Vein Lake are enriched in V. There are high levels of Mo in some areas and Au at a number of locations in the Vein Lake map area. The distribution of Sb may reflect an analytical inconsistency. Antimony levels, most of which are at or near the detection limit, are uniformly slightly higher in samples collected in 1991 compared to 1992.

Another major factor which influences the geochemical signature of surficial till is weathering (Shilts and Kettles, 1990; Kaszycki and DiLabio, 1986; Klassen, 1984). In this study, the effects of weathering on composition have been minimized by sampling till below the A and

B horizons of the postglacial solum. As a result, regional patterns of trace and minor elements are believed to primarily reflect the original composition of the till.

Visible Gold Grains and Kimberlite Indicator Minerals

Few gold grains were observed in samples from the Manitouwadge-Hornpayne region and those observed had shapes indicative of some degree of reworking. Samples with the largest number of grains were associated with the Manitouwadge Greenstone belt where some gold occurrences in bedrock are known (Fig. 3). No kimberlite indicator minerals were found in the esker samples.

CONCLUSIONS

Variations in till composition are generally related to the effects of glacial transport and the composition of local bedrock. Manitouwadge tills commonly contain large percentages of Paleozoic carbonate debris, glacially transported more than 100 km from the Hudson and James Bay lowlands. They also contain local Precambrian lithologies, the highest concentrations of which were observed near their respective outcrops.

Although the geochemical signature of mineralized bedrock may be masked in some areas by dilution from Paleozoic carbonates, the signature generally does stand out in the fine fractions of till. For example, anomalously high concentrations of Cu, Pb, Ag and Zn occur near the main VMS deposits and elsewhere in the Manitouwadge and Schreiber-Hemlo greenstone belts and high levels of Co, Cr, Ni, Ba and V occur in till overlying and south of the southern part of the Killala Lake Alkaline Complex. Further exploration near these sites may prove worthwhile. Few gold grains and no kimberlite indicator minerals were observed in samples from the region.

REFERENCES

- Barnett, P.J., Henry, A.P., and Babuin, D.**
 1991: Quaternary geology of Ontario, east-central sheet; Ontario Geological Survey, Map 2555, scale 1: 1 000 000.
- Friesen, R.G., Pierce, G.A., and Weeks, R.M.**
 1982: Geology of the Geco base metal deposit; Geological Association of Canada, Special Paper 25, p. 343-363.
- Friske, P.W.B., Hornbrook, E.H.W., Lynch, J.J., McCurdy, M.W., Gross, H., Galletta, A.C., and Durham, C.C.**
 1991a: Regional lake sediment and water geochemical reconnaissance data, Northwestern Ontario, (NTS 42D, 42E South), Geological Survey of Canada Open File 2360.
 1991b: Regional lake sediment and water geochemical reconnaissance data, Northwestern Ontario, (NTS 42C, 42F South), Geological Survey of Canada Open File 2362.
- Geddes, R.S.**
 1987: Quaternary geology of the Hemlo region, Districts of Thunder Bay and Algoma; Ontario Geological Survey, unpublished report.
- Geddes, R.S. and Bajc, A.F.**
 1985: Quaternary geology of the White Lake (Hemlo area), District of Thunder Bay, Ontario Geological Survey, Map P. 2849, Scale 1: 50, 000.
- Geological Survey of Canada**
 1978: Regional lake sediment and water geochemical reconnaissance data, Ontario 1977, NTS 42D, 42E (S 1/2); Geological Survey of Canada Open File 506.
 1979: Regional lake sediment and water geochemical reconnaissance data, Ontario 1978, NTS 42C, 42F (S1/2); Geological Survey of Canada Open File 555.
- Hicock, S.R., Kristjansson, F.J., and Sharpe, D.R.**
 1989: Carbonate till as a soft bed for Pleistocene ice streams on the Canadian Shield north of Lake Superior; Canadian Journal of Earth Sciences, v. 26, p. 2249-2254.
- Jackson, M.L.**
 1956: Soil chemical analysis—advanced course—a manual of methods; University of Wisconsin, Madison, Wisconsin, 527 p.
- Kaszycki, C.A.**
 1989: Surficial geology and till composition, northwestern Manitoba; Geological Survey of Canada Open File 2118, 150 p.
- Kaszycki, C.A. and DiLabio, R.N.W.**
 1986: Surficial geology and till geochemistry, Lynn Lake-Leaf Rapids region, Manitoba; Geological Survey of Canada, Paper 86-1B, p. 245-256.
- Kettles, I.M.**
 1993a: Reconnaissance geochemical data for till samples from the Manitouwadge area, Ontario; Geological Survey of Canada, Open File 2616, 197 p.
 1993b: Till geochemistry in the Manitouwadge area, Ontario; in Current Research, Part E; Geological Survey of Canada, Paper 93-1E, p. 165-173.

Kettles, I.M., and Murton, J.B.

1993: Till composition in the vicinity of the Manitouwadge greenstone belt, Ontario; in Current Research 1993-C, Geological Survey of Canada, p. 249-257.

Klassen, R.A.

1984: A preliminary report on drift prospecting studies in Labrador: part 2; in Current Research, Part A, Geological Survey of Canada, Paper 84-1A, p. 247-254.

Kristjansson, F.J. and Geddes, R.S.

1986: Quaternary geology of the Manitouwadge area, District of Thunder Bay; Ontario Geological Survey, Map P. 3055, Scale 1: 50,000.

Mason, B.

1966: Principles of geochemistry; Wiley, New York; 329 p.

McKay, D.B.

(in prep.): Mineral occurrences prospects and mines in the Manitouwadge area, Ontario Geological Survey Open File Report.

Ontario Geological Survey

1991: Bedrock geology of Ontario, east-central sheet; Ontario Geological Survey, Map 2534.

Ricketts, B.D. and Donaldson, J.A.

1981: Sedimentary history of the Belcher Group of Hudson Bay; in Proterozoic Basins of Canada, (ed.) F.H.A. Campbell, Geological Survey of Canada, Paper 81-10, p. 235-254.

Sado, E.V., and Carswell, B.F.

1987: Surficial geology of Northern Ontario; Ontario Geological Survey, Map 2518, scale 1:1 200 000.

Sage, R.P.

1991: Alkalic rock, carbonatite and kimberlite complexes of Ontario, Superior Province. in Geology of Ontario; Ontario Geological Survey, Special Volume 4, pt 1, (ed.) Thurston, P.C., Williams, H.R., Sutcliffe, R.H., and Stott, G.M, p. 683.

Shilts, W.W. and Kettles, I.M.

1990: Geochemical-mineralogical profiles through fresh and weathered till; in Glacial Indicator Tracing, (ed.) R. Kujansuu and M. Saarntisto; A.A. Balkema, Rotterdam.

Thorleifson, H.L., and Kristjansson, F.J.

1990: Quaternary geology and drift prospecting, Beardmore-Geraldton area, Ontario; Geological Survey of Canada, Memoir 435, 145 p.

Williams, H.R.

1991: Quetico Subprovince in Geology of Ontario; (eds.) Thurston, P.C., William, H.R., Sutcliffe, R.H., and Stott, G.M., Ontario Geological Survey, Special Volume 4, Pt. 1, p. 383-404.

Williams, H.R. and Breaks, F.W.

1990: Geology of the Manitouwadge-Hornpayne area; Ontario Geological Survey, Open File Map 142, scale 1: 50,000.

Zaleski, E. and Peterson, V.L.

1993: Lithotectonic setting of mineralization in the Manitouwadge greenstone belt, Ontario: preliminary results; in Current Research, Part C; Geological Survey of Canada, Paper 93-1C, p. 307-317.

APPENDIX A

Sample Locations and Descriptions Till Geochemistry and Till Lithology For 1992 Samples

- A (i)** Sample Locations and Descriptions
- A (ii)** Trace and Minor Element Data for Clay (<0.002 mm) Fraction of 1992 Till and Gravel Samples
- A (iii)** Trace and Minor Element Data for Silt and Clay (<0.063 mm) Fraction of 1992 Till and Gravel Samples
- A (iv)** Trace and Minor Element Data for Clay- (<0.002 mm) and Silt and Clay-Sized (<0.063 mm) Fractions of Duplicate Till Samples
- A (v)** Pebble Lithology Data for 5.6-16 mm Fraction of 1992 Till and Gravel Samples
- A (vi)** Lists of 1991 and 1992 samples for Manitouwadge-Hornpayne Region, Manitouwadge District, and Area Near Mines

APPENDIX A (i)

Sample Locations and Descriptions

Key

Sample No.	Sample number
Sed. Type	Sediment type of sample
Plot	1 - sample representative of sediment at site 0 - sample less representative of sediment at site
Zone	UTM grid zone
Easting (m)	UTM easting (metres)
Northing (m)	UTM northing (metres)
Lat. (deg)	Latitude (degrees)
Long. (deg)	Longitude (degrees)
NTS Map	National Topographic System 1:50,000 map sheets
Field Colour	Sediment colour noted in field
Lab Colour	Sediment colour measured in laboratory using a Munsell colour chart
Rock type	Lithology of underlying bedrock. See rock type key next page.
Rock Refer.	Source of bedrock lithology information
Ox. State	Oxidation state of the sediment, determined by visual inspection
Depth	Depth of sample, measured from ground surface in metres.
Description	Description of sediment and/or site

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92KFAO300	till	1	16	565000	5438900	49.101482	86.109537	42E/1			6	0GS(1991)		
92KFAO301	till	1	16	565650	5439810	49.109598	86.100486	42E/1			6	0GS(1991)		
92KFAO302	till	1	16	565900	5440575	49.116452	86.096936	42E/1			6	0GS(1991)		
92KFAO303	till	1	16	565980	5441540	49.125123	86.095682	42E/1			6	0GS(1991)		
92KFAO304	till	1	16	567390	5440600	49.116516	86.076516	42E/1			6	0GS(1991)		
92KFAO305	till	1	16	567300	5439150	49.103484	86.077991	42E/1			6	0GS(1991)		
92KFAO306	till	1	16	567150	5438060	49.093696	86.080227	42E/1			6	0GS(1991)		
92KFAO307	till	1	16	563880	5449860	49.200178	86.123140	42E/1			4	0GS(1991)		
92KFAO308	till	1	16	563850	5448590	49.188758	86.123754	42E/1			4	0GS(1991)		
92KFAO309	till	1	16	562360	5449410	49.196287	86.144072	42E/1			4	0GS(1991)		
92KFAO310	till	1	16	561250	5449050	49.193161	86.159361	42E/1			4	0GS(1991)		
92KFAO311	till	1	16	560560	5448380	49.187203	86.168931	42E/1			4	0GS(1991)		
92KFAO312	till	1	16	554850	5438850	49.102022	86.248579	42E/1			4	0GS(1991)		
92KFAO313	till	1	16	555230	5438200	49.096175	86.248668	42E/1			4	0GS(1991)		
92KFAO314	till	1	16	555890	5437190	49.087056	86.243601	42E/1			6	0GS(1991)		
92KFAO315	till	1	16	555230	5436695	49.082544	86.234631	42E/1			6	0GS(1991)		
92KFAO316	till	1	16	555650	5438640	49.100101	86.243814	42E/1			6	0GS(1991)		
92KFAO317	till	1	16	556200	5435440	49.071188	86.224537	42E/1			6	0GS(1991)		
92KFAO318	till	1	16	556540	5436340	49.079292	86.225780	42E/1			6	0GS(1991)		
92KFAO319	till	1	16	557000	5437340	49.088244	86.219341	42E/1			6	0GS(1991)		
92KFAO320	till	1	16	557545	5439705	49.109466	86.211541	42E/1			1	0GS(1991)		
92KFA0400	till	1	16	569200	5434400	49.060550	86.052778	42E/1	gray		5	H&B (1990)	sl. ox.	0.75
92KFA0401	till	1	16	568900	5434210	49.058875	86.056916	42E/01	tan		5	H&B (1990)	ox.	
92KFA0402	till	1	16	568925	5433450	49.052036	86.056703	42E/01	mottled grey tan		5a, 6a, 7a	H&B (1990)	ox.	0.75
92KFA0403	till	1	16	568900	5434730	49.063552	86.056827	42E/01	tan		5	H&B (1990)	ox.	
92KFA0404	till	1	16	568480	5435000	49.066027	86.062530	42E/01	tan;		5	H&B (1990)	ox.	
92KFA0405	till	1	16	569700	5435820	49.073266	86.045690	42E/01	buff		5d	H&B (1990)		
92KFA0406	till	1	16	569800	5436075	49.075548	86.044277	42E/01	tan grey		5	H&B (1990)		
92KFA0407	till	1	16	569830	5436300	49.077568	86.043827	42E/01	grey tan		5	H&B (1990)	sl. ox.	
92KFA0408	till	1	16	570250	5437130	49.084986	86.037933	42E/01	tan grey		5	H&B (1990)		

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92KFAO300	Diamicton
92KFAO301	Diamicton
92KFAO302	Diamicton
92KFAO303	Diamicton
92KFAO304	Diamicton
92KFAO305	Diamicton
92KFAO306	Diamicton
92KFAO307	Diamicton
92KFAO308	Diamicton
92KFAO309	Diamicton
92KFAO310	Diamicton
92KFAO311	Diamicton
92KFAO312	Clay diamicton
92KFAO313	Diamicton
92KFAO314	Diamicton in vicinity of Barts Donaldson showing
92KFAO315	Diamicton
92KFAO316	Diamicton
92KFAO317	Diamicton on Lloyd-Davis occurrence
92KFAO318	Diamicton on Lloyd-Davis occurrence
92KFAO319	Diamicton
92KFAO320	Diamicton
92KFA0400	Well developed soil; 5 cm organic, 3.5 cm A horiz, 7.5 cm upper B horiz, 35 cm lower B horiz; some gneiss boulders.
92KFA0401	Sandy diamicton; thin deposit on bedrock knob.
92KFA0402	Sandy diamicton on south side of bedrock knob; no bedrock visible at site.
92KFA0403	Diamicton interlayered with sand on bedrock; bedrock scraped for road materials.
92KFA0404	Silty diamicton, Paleozoic limestone-rich; possible trench
92KFA0405	Silty clay diamicton; Paleozoic limestone-rich; no bedrock visible at site.
92KFA0406	Sandy diamicton with some Paleozoic limestone clasts; thin veneer; sediment scraped for road.
92KFA0407	Sandy diamicton with some Paleozoic limestone clasts overlying gneiss; thin veneer.
92KFA0408	Sandy diamicton; rich in Paleozoic limestone and Proterozoic metasediment clasts; sediment scraped for aggregate; likely disturbed material.

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92KFA0409	till	1	16	570850	5437000	49.083748	86.029740	42E/01	mottled	5	H&B (1990)	sl. ox.		
92KFA0410	till	1	16	570900	5437450	49.087789	86.028977	42E/01	tan grey	5				
92KFA0411	till	1	16	570250	5438250	49.095059	86.037738	42E/01	tan	5b	H&B (1990)			
92KFA0412	till	1	16	570050	5439000	49.101828	86.040347	42E/01	tan	5b,j , 6a	H&B (1990)	ox.		
92KFA0413	till	1	16	570620	5440250	49.113005	86.032321	42E/01	tan	5	H&B (1990)	ox.		
92KFA0414	till	1	16	595400	5447300	49.173061	85.691182	42F/4	tan grey	5b	H&B (1990)	ox.		
92KFA0415	till	1	16	595620	5447610	49.175815	85.688091	42F/4	buff	5b	H&B (1990)			
92KFA0416	sand/gravel	1	16	595600	5447900	49.178426	85.688297	42F/4	tan	5b	H&B (1990)	ox.		
92KFA0417	till	1	16	595650	5447420	49.174101	85.687725	42F/4	tan	5b	H&B (1990)	ox.		
92KFA0418	till	1	16	595810	5447500	49.174796	85.685511	42F/4	tan grey	5b	H&B (1990)	ox.		
92KFA0419	till	1	16	597100	5447200	49.171895	85.667890	42F/4	tan	5b	H&B (1990)	ox.	0.7	
92KFA0420	till	1	16	597370	5447400	49.173651	85.664139	42F/4	buff	5b	H&B (1990)		0.5	
92KFA0421	till	1	16	597450	5448000	49.179034	85.662896	42F/4	buff	5b	H&B (1990)			
92KFA0422	sand/gravel	1	16	597300	5448470	49.183284	85.664840	42F/4	buff	5b	H&B (1990)			
92KFA0423	till	1	16	597200	5449150	49.189415	85.666047	42F/4	tan grey	5b	H&B (1990)		1	
92KFA0424	till	1	16	597300	5449175	49.189624	85.664669	42F/4	tan grey	5b	H&B (1990)		1	
92KFA0425	sand/gravel	1	16	597720	5450320	49.199854	85.658629	42F/4	tan	5	H&B (1990)			
92KFA0426	till	1	16	597150	5449950	49.196618	85.666540	42F/4	grey tan	5	H&B (1990)	sl. ox.	0.5	
92KFA0427	till	1	16	571575	5443640	49.143385	86.018636	42E/1	tan	5	H&B (1990)	ox.	0.6	
92KFA0428	till	1	16	571330	5444215	49.148585	86.021893	42E/1	buff	5				
92KFA0429	till	1	16	570650	5444250	49.148978	86.031209	42E/1	tan	5b	H&B (1990)	ox.	0.7	
92KFA0430	till	1	16	570150	5444100	49.147686	86.038091	42E/1	buff	5b				
92KFA0431	till	1	16	569745	5444050	49.147283	86.043652	42E/1	tan	5b, 7a	H&B (1990)	ox.		
92KFA0432	till	1	16	569360	5442850	49.136533	86.049137	42E/1	tan	5b	H&B (1990)	ox.	0.4	
92KFA0433	till	1	16	568400	5443535	49.142802	86.062180	42E/1	tan grey	5b	H&B (1990)	ox.	0.6	
92KFA0434	till	1	16	568100	5443850	49.145669	86.066239	42E/1	tan grey	5b	H&B (1990)	ox.		
92KFA0435	till	1	16	570960	5446715	49.171113	86.026525	42E/1	tan	5	H&B (1990)	ox.	0.4	
92KFA0438	till	1	16	583400	5407230	48.814426	85.864001	42C/13	tan grey	3		ox.	0.7	
92KFA0439	till	1	16	583300	5407080	48.813090	85.865394	42C/13	buff	3	OGS(1991)			
											OGS(1991)			
											OGS(1991)			

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92KFA0409	Small mound of sandy gravelly diamicton.
92KFA0410	Small deposit of silty diamicton on bedrock; occassional small pebble.
92KFA0411	Small deposit of sandy silty diamicton; collected in clear cut area; many rotten clasts.; poor sample.
92KFA0412	Thin déposit of silty diamicton; few pebbles; may be disturbed.
92KFA0413	Thin deposit of silty sandy diamicton; clear cut area.
92KFA0414	Local sandy diamicton on gneiss; contains angular pebbles.
92KFA0415	Silty sandy diamicton; Paleozoic limestone and Proterozoic metasediment pebbles noted.
92KFA0416	Shallow cut of sandy diamicton
92KFA0417	Local sandy diamicton flanking a bedrock knob.
92KFA0418	Small deposit of sandy silty diamicton flanking bedrock knob; angular clasts of gneiss.
92KFA0419	Mound of sandy silty diamicton; rich in Paleozoic limestone and Proterozoic metasediment.
92KFA0420	Silty clay diamicton, rich in Paleozoic limestone and Proterozoic metasediment.
92KFA0421	Silty clay diamicton rich in Paleozoic limestone and Proterozoic metasediment.
92KFA0422	Silty sand flanking bedrock; no pebbles.
92KFA0423	Diamicton with clasts of underlying bedrock; 0.5 m of sand overlies diamicton; many granite clasts.
92KFA0424	Local diamicton in small moranic feature; 0.5 m sand over diamicton.
92KFA0425	Stratified coarse and fine grained sand.
92KFA0426	Thick deposit of local sandy diamicton; good sample.
92KFA0427	Stoney diamicton on edge of bedrock knob.
92KFA0428	Thick deposit of silty, compact diamicton rich in Paleozoic limestone; overlies gneiss; roadbank has been scraped for aggregate.
92KFA0429	Exposure has well developed soil; 10 cm A horiz, 25 cm upper B horiz, 20 cm lower B horiz; many roots.
92KFA0430	Silty diamicton; angular gneiss boulders at surface.
92KFA0431	Veneer of oxidized diamicton on bedrock; recently overcut area.
92KFA0432	Silty oxidized diamicton; thin veneer on bedrock.
92KFA0433	Deposit of thin silty sandy diamicton on gneiss; clear cut area.
92KFA0434	Deposit of thin silty diamicton on gneiss bedrock; clear cut area.
92KFA0435	Silty clay diamicton exposed in an old trench.
92KFA0438	Sandy diamicton with few pebbles; large angular boulders on the surface; 7.5cm A horiz, 20cm upper B horiz, 20 cm lower B horiz; Very weakly developed soil.
92KFA0439	Silty sandy diamicton found in 4 m high mound of drift; very angular pebbles and cobbles.

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92KFA0440	till	1	16	582900	5406350	48.806578	85.870988	42C/13	tan grey	3		OGS(1991)		
92KFA0441	till	1	16	583220	5406330	48.806355	85.866635	42C/13	tan grey	3		OGS(1991)		
92KFA0442	till	1	16	582070	5406320	48.806418	85.882296	42C/13	tan grey	3		OGS(1991)	ox.	
92KFA0443	till	1	16	582760	5406120	48.804528	85.872941	42C/13	tan grey	3		OGS(1991)	sl. ox.	
92KFA0444	till	1	16	581840	5405960	48.803211	85.885499	42C/13	tan grey	3		OGS(1991)		
92KFA0445	till	1	16	581050	5406250	48.805923	85.896198	42C/13	tan	3		OGS(1991)	ox.	
92KFA0446	till	1	16	579650	5406520	48.808532	85.915209	42C/13	tan grey	6		OGS(1991)	mod.	
92KFA0447	till	1	16	580350	5406470	48.807992	85.905686	42C/13	grey	6		OGS(1991)		
92KFA0448	till	1	16	580800	5405320	48.797591	85.899785	42C/13	grey tan	3		OGS(1991)	sl. ox.	
92KFA0449	till	1	16	581220	5411900	48.856718	85.892764	42C/13	grey tan	6		OGS(1991)	sl. ox.	
92KFA0450	sand/gravel	1	16	579480	5410350	48.843002	85.916781	42C/13	tan	1		OGS(1991)		
92KFA0451	till	1	16	578900	5412000	48.857917	85.924367	42C/13	tan	6		OGS(1991)	ox.	0.7
92KFA0452	till	1	16	579175	5411330	48.851855	85.920748	42C/13	tan	6		OGS(1991)	sl. ox.	
92KFA0453	till	1	16	579000	5411000	48.848910	85.923196	42C/13	grey tan	6		OGS(1991)		
92KFA0454	till	1	16	579180	5410830	48.847358	85.920776	42C/13	grey	6		OGS(1991)		
92KFA0455	till	1	16	581800	5409820	48.837934	85.885274	42C/13	tan grey	1		OGS(1991)		
92KFA0456	till	1	16	582100	5410270	48.841942	85.881097	42C/13	grey	9		OGS(1991)	sl. ox.	
92KFA0457	till	1	16	581800	5408950	48.830109	85.885448	42C/13	grey	9		OGS(1991)	sl. ox.	
92KFA0458	till	1	16	580250	5409000	48.830761	85.906553	42C/13	grey	6		OGS(1991)		
92KFA0459	till	1	16	580050	5407800	48.819993	85.909512	42C/13	tan grey	6		OGS(1991)	sl. ox.	
92KFA0460	sand/gravel	1	16	604775	5452325	49.216719	85.561295	42F/4	grey tan	5b		H&B (1990)	mod.	
92KFA0461	sand/gravel	1	16	604950	5452500	49.218263	85.558847	42F/4	tan	5b		H&B (1990)		
92KFA0462	sand/gravel	1	16	605350	5451880	49.212619	85.553519	42F/4	tan grey	5b		H&B (1990)		
92KFA0463	till	1	16	648770	5450320	49.189594	84.958268	42F/2	buff	5b		H&B (1990)		
92KFA0464	till	1	16	648570	5452280	49.207262	84.960287	42F/2	tan grey	5b		H&B (1990)		
92KFA0465	till	1	16	646600	5452730	49.211781	84.987151	42F/2	buff	5b, 3a		H&B (1990)		
92KFA0466	till	1	16	645700	5453580	49.219637	84.999192	42F/2	tan grey	3a, 5b, 6		H&B (1990)		
92KFA0467	till	1	16	645400	5454030	49.223754	85.003146	42F/3	buff	1c		H&B (1990)		
92KFA0468	till	1	16	644700	5455000	49.232640	85.012403	42F/3	buff	3a		H&B (1990)		

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92KFA0440	Local gravelly diamicton; very angular erratics.
92KFA0441	Local sandy diamicton; gravel pit.
92KFA0442	Local gravel diamicton ; angular clasts.
92KFA0443	Local sandy diamicton flanking bedrock knob; angular clasts.
92KFA0444	Roughly and faintly stratified gravel diamicton, rounded small boulders to large angular ones ; 5.0 m high cut.
92KFA0445	Very compact diamicton; roadbanks have been scraped for aggregate; clear cut area.
92KFA0446	Loose, sandy, silty diamicton.
92KFA0447	Compact diamicton; roadside sediment has been scraped.
92KFA0448	Sandy structureless diamicton; clear cut area.
92KFA0449	Sandy silty diamicton with a few pebbles.
92KFA0450	Interbedded bouldery and gravelly sand; ice contact material.
92KFA0451	Sandy silty diamicton flanking bedrock knob.
92KFA0452	Pockets of diamicton on bedrock; underlies sand.
92KFA0453	Deposit of sandy diamicton; 0.5 -1.5 m thick; some disintegrating amphibolites.
92KFA0454	Deposit of sandy diamicton on bedrock.
92KFA0455	Very local diamicton; mounds of sediment (likely moranic); clear cut area.
92KFA0456	Very local, loose, sandy diamicton.
92KFA0457	Sandy diamicton in area of bouldery and hummocky drift.
92KFA0458	Small pocket of diamicton.
92KFA0459	Bouldery sandy diamicton.
92KFA0460	Sand with rounded cobbles; numerous large boulders in nearby woods.
92KFA0461	Ice contact cobbley sand.
92KFA0462	Diamicton rich in Paleozoic limestone and Proterozoic metasediment erratics; some very soft fragile pieces of Paleozoic rock.
92KFA0463	Sandy diamicton; rich in Paleozoic limestone and Proterozoic metasediment.
92KFA0464	Loose sandy diamicton; few pebbles.
92KFA0465	Loose sandy silty diamicton; cleared area.
92KFA0466	Sandy diamicton rich in Paleozoic limestone.
92KFA0467	Sandy silty diamicton; Paleozoic limestone noted.
92KFA0468	Thick deposit of sandy silty diamicton rich in Paleozoic limestone.

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92KFA0469	till	1	16	643200	5456800	49.249174	85.032351	42F/3	buff		3a	H&B (1990)		
92KFA0470	till	1	16	644450	5458750	49.266411	85.014483	42F/6	tan grey		3a	H&B (1990)		
92KFA0471	till	1	16	644690	5459050	49.269051	85.011078	42F/6	buff		3a	H&B (1990)		
92KFA0472	till	1	16	645050	5459750	49.275259	85.005879	42F/6	buff		3a	H&B (1990)		
92KFA0473	till	1	16	643450	5458900	49.267995	85.028166	42F/6	buff		3a	H&B (1990)		
92KFA0474	till	1	16	643300	5458300	49.262636	85.030441	42F/6	tan grey		3a	H&B (1990)		
92KFA0475	till	1	16	641370	5457810	49.258680	85.057125	42F/6	buff		3a, 2, 4d	H&B (1990)	sl. ox.	2
92KFA0476	till	1	16	640250	5458170	49.262174	85.072382	42F/6	buff		3a,d, 6a	H&B (1990)		
92KFA0477	till	1	16	639350	5458600	49.266246	85.084595	42F/6	tan grey		3a,d, 6a	H&B (1990)		
92KFA0478	till	1	16	637550	5458240	49.263416	85.109446	42F/6	buff		3a,d	H&B (1990)		1
92KFA0479	silt/clay	1	16	638025	5459150	49.271491	85.102607	42F/6	buff		3a,d, 6a	H&B (1990)		2
92KFA0480	till	1	16	638875	5461560	49.292964	85.090092	42F/6	grey buff		3a	H&B (1990)		
92KFA0481	till	1	16	638300	5462800	49.304243	85.097566	42F/6	buff		3a	H&B (1990)		
92KFA0482	till	1	16	636730	5457125	49.253576	85.121090	42F/6	buff		3a	H&B (1990)		
92KFA0483	till	1	16	635600	5456775	49.250681	85.136728	42F/6	buff		3a, 1c, 6a	H&B (1990)		
92KFA0484	till	1	16	635050	5456200	49.245633	85.144475	42F/3	buff		3a, 1c, 6a	H&B (1990)		
92KFA0485	till	1	16	634860	5455950	49.243427	85.147169	42F/3	buff		3a, 1c, 6a	H&B (1990)		
92KFA0486	till	1	16	634470	5455250	49.237220	85.152759	42F/3	tan grey		3a	H&B (1990)		
92KFA0487	till	1	16	633290	5454650	49.232083	85.169159	42F/3	tan		5b	H&B (1990)	ox.	
92KFA0488	till	1	16	630925	5455030	49.236010	85.201503	42F/3	buff		5b	H&B (1990)		
92KFA0489	till	1	16	630100	5456350	49.248054	85.212402	42F/3	buff		3a, 5b	H&B (1990)		
92KFA0490	till	1	16	630500	5457000	49.253813	85.206697	42F/6	buff		3a	H&B (1990)		
92KFA0491	till	1	16	631380	5460200	49.282395	85.193560	42F/6	buff		3a	H&B (1990)		
92KFA0492	till	1	16	631150	5459500	49.276150	85.196951	42F/6	tan grey		3a	H&B (1990)		
92KFA0493	till	1	16	630600	5458530	49.267547	85.204825	42F/3	tan grey		3a	H&B (1990)		
92KFA0494	till	1	16	629280	5455350	49.239237	85.223986	42F/3	grey		5b	H&B (1990)		

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92KFA0469	Thick deposit of silty clay diamicton rich in Paleozoic limestone.
92KFA0470	Thin veneer of diamicton on bedrock; rusty boulders at site.
92KFA0471	Sandy silty diamicton rich in Paleozoic limestone.
92KFA0472	Thick deposit of loose sandy diamicton; Paleozoic limestone-rich.
92KFA0473	Thick deposit of sandy silty diamicton; Paleozoic limestone-rich.
92KFA0474	Sandy silty diamicton with few pebbles; area of thick drift.
92KFA0475	Paleozoic limestone-rich diamicton; 2.0 m thick.
92KFA0476	Paleozoic limestone-rich diamicton; clear cut area; rusty gneiss bedrock.
92KFA0477	Diamicton with silt lenses; Paleozoic limestone-rich; 0.5 m thick.
92KFA0478	Diamicton rich in Paleozoic limestone clasts; 1.0 m thick.
92KFA0479	Silty clay diamicton, rich in Paleozoic limestone clasts; 2.0 m thick.
92KFA0480	Thin deposit of diamicton; outcrop at sample site is grey siliceous gneiss interbedded with rusty dark unit.
92KFA0481	Thick deposit of Paleozoic limestone-rich silty clay diamicton.
92KFA0482	Very silty diamicton on gneiss; rich in Paleozoic limestone.
92KFA0483	Thick diamicton rich in Paleozoic limestone.
92KFA0484	Thick deposit of silty sandy diamicton rich in Paleozoic limestone.
92KFA0485	Sandy diamicton rich in Paleozoic limestone; 1.0m thick.
92KFA0486	Sandy silty diamiction.
92KFA0487	Sandy silty diamicton; 1.0 m thick.
92KFA0488	Sandy silty diamicton rich in Paleozoic limestone.
92KFA0489	Sandy silty diamicton rich in Paleozoic limestone; disintegrating clasts.
92KFA0490	Sandy silty diamicton up to 2.0 m thick; mix of Paleozoic limestone and local clasts.
92KFA0491	Very silty diamicton on bedrock; > 2.0 m thick.
92KFA0492	Sandy silty diamicton; rich in Paleozoic limestone and Proterozoic metasediments.
92KFA0493	Thin deposit of sandy silty diamicton; rich in Paleozoic limestone and Proterozoic metasediments; some rusty bands in bedrock.
92KFA0494	Lenses of grey sandy diamicton; well sorted sand.

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92KFA0495	till	1	16	627175	5455690	49.242734	85.252782	42F/3	buff		5b			
92KFA0496	till	1	16	624770	5455450	49.241071	85.285882	42F/3	tan grey		5b	H&B (1990)		
92KFA0497	till	1	16	625880	5455575	49.241968	85.270601	42F/3	tan grey		5b	H&B (1990)		
92KFA0498	till	1	16	634550	5454100	49.226863	85.152046	42F/3	buff		5b	H&B (1990)		
92KFA0499	till	1	16	633770	5453050	49.217594	85.163103	42F/3	buff		5b, 6b	H&B (1990)		
92KFA0500	till	1	16	632850	5452300	49.211051	85.175978	42F/3	buff		5b	H&B (1990)		
92KFA0501	till	1	16	632570	5452100	49.209313	85.179886	42F/3	grey		5b	H&B (1990)		
92KFA0502	till	1	16	631500	5451800	49.206846	85.194667	42F/3	tan grey		5b	H&B (1990)		
92KFA0503	till	1	16	630100	5451300	49.202650	85.214040	42F/3	buff		5b	H&B (1990)		
92KFA0504	till	1	16	629000	5450000	49.191194	85.229550	42F/3	buff		5b	H&B (1990)		
92KFA0505	till	1	16	627650	5449210	49.184373	85.248319	42F/3	buff		5b	H&B (1990)		
92KFA0506	till	1	16	647580	5449500	49.182510	84.974890	42F/2	buff		3a, 6a	H&B (1990)		
92KFA0507	till	1	16	647450	5449450	49.182091	84.976691	42F/2	grey tan		3a, 6a	H&B (1990)		
92KFA0508	till	1	16	646350	5447650	49.166173	84.992430	42F/2	grey tan		5b,d, 1c			
92KFA0509	till	1	16	646630	5445800	49.149475	84.989266	42F/2	buff		5	H&B (1990)		
92KFA0510	till	1	16	645850	5444690	49.139682	85.000357	42F/2	tan grey		5	H&B (1990)		
92KFA0511	till	1	16	646100	5444050	49.133869	84.997163	42F/2	tan grey		5	H&B (1990)		
92KFA0512	till	1	16	645370	5442850	49.123254	85.007597	42F/3	buff		5	H&B (1990)		
92KFA0513	till	1	16	646060	5441630	49.112123	84.998587	42F/2	buff		5	H&B (1990) ox.		
92KFA0514	till	1	16	645480	5440830	49.105069	85.006818	42F/3	buff		5	H&B (1990)		
92KFA0515	till	1	16	642760	5446520	49.156860	85.042047	42F/3	grey		5	H&B (1990)		
92KFA0516	gravel/sand	1	16	679500	5506400	49.685336	84.511521	42F/9	grey tan					
92KFA0517	gravel/sand	1	16	669600	5491800	49.556991	84.654952	42F/6	grey tan					
92KFA0518	flow till	1	16	666950	5453350	49.212149	84.707704	42F/2	grey tan		3	H&B (1990)		
92KFA0519	gravel/sand	1	16	652400	5437660	49.074896	84.913268	42F/2	tan		5		H&B (1990)	
92KFA0520	gravel/sand	1	16	661750	5437670	49.072601	84.785337	42F/2	grey tan		5	H&B (1990)		
92KFA0521	gravel/sand	1	16	663880	5429080	48.994826	84.759668	42C/15	grey tan					
92KFA0522	gravel/sand	1	16	658530	5409320	48.818593	84.840422	42C/15	grey tan					
92KFA0523	till	1	16	580650	5403800	48.783939	85.902126	42C/13	tan grey		3	OGS(1991)		

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92KFA0495	Sandy silty diamicton; Paleozoic limestone-rich; 2.0 m high thick.
92KFA0496	Silty sandy diamicton; fair component of local clasts; 1.0 m thick.
92KFA0497	Sandy diamicton; some Paleozoic limestone noted; 1.0m thick .
92KFA0498	Paleozoic and local lithologies present.
92KFA0499	Diamicton rich in Paleozoic limestone; 2.0m thick deposit on the side of a bedrock rise.
92KFA0500	Thin deposit of Paleozoic limestone-rich diamicton; roadside has been scraped for aggregate.
92KFA0501	Silty sandy diamicton; large component of both Paleozoic limestone and local rocks.
92KFA0502	Local diamicton; roadside has been scraped for aggregate.
92KFA0503	Silty sandy diamicton; Paleozoic limestone-rich; burned over area.
92KFA0504	Sandy silty diamicton; Paleozoic limestone-rich.
92KFA0505	Silty sandy diamicton; Paleozoic limestone-rich; 2.0 m thick;.
92KFA0506	Silty sandy diamicton; Paleozoic limestone and local clasts noted.
92KFA0507	Sandy diamicton; some Paleozoic limestone clasts but a strong component of local lithologies.
92KFA0508	Sandy diamicton flanking a bedrock knob.
92KFA0509	Paleozoic limestone- rich diamicton.
92KFA0510	Sandy diamicton; 4.0 m high cut; height of land.
92KFA0511	Local sandy silty diamicton.
92KFA0512	Diamicton on grey siliceous gneiss; 1.0m thick.
92KFA0513	Sandy silty diamicton; Paleozoic limestone and local Precambrian clasts.
92KFA0514	Silty sandy diamicton; many large grey gneiss boulders at surface in this area.
92KFA0515	Mound of sandy, substratified, local diamicton.
92KFA0516	Esker sample; gravel composed mainly of Paleozoic limestone and Proterozoic metasediments; pit.
92KFA0517	Esker sample; well sorted sand at base; buff diamicton in upper part of cut; almost all Paleozoic limestone and Proterozoic metasediment clasts in sediments.
92KFA0518	Esker sample; bedded sand and gravel with occasional silt layer, overlain by flow diamicton.
92KFA0519	Esker sample; pebbly sand; esker has sharp crest.
92KFA0520	Esker sample; area of sand and some gravel; no coarse facies.
92KFA0521	Esker gravel from pit.
92KFA0522	Esker sample; coarse facies with rounded cobbles and boulders; rehabilitated pit.
92KFA0523	Veneer of local, loose, structureless, sandy diamicton.

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92KFA0524	till	1	16	580640	5403175	48.778319	85.902384	42C/13 tan grey		3		OGS(1991)		
92KFA0525	till	1	16	580530	5403000	48.776759	85.903916	42C/13 tan grey		3		OGS(1991)		
92KFA0526	till	1	16	579700	5401920	48.848101	85.913672	42C/13 tan grey		3		OGS(1991)		
92KFA0527	till	1	16	579550	5401000	48.758896	85.917638	42C/13 tan grey		3		OGS(1991)		
92KFA0528	till	1	16	579460	5400600	48.755310	85.918940	42C/13 tan grey		3		OGS(1991)		
92KFA0529	till	1	16	584425	5400200	48.751059	85.851487	42C/13 tan olive		9		OGS(1991) ox.		
92KFA0531	till	1	16	585450	5400675	48.755191	85.837447	42C/13 olive grey		9		OGS(1991)		
92KFA0532	till	1	16	585320	5400825	48.756558	85.839184	42C/13 olive		9		OGS(1991)		
92KFA0533	till	1	16	585350	5400900	48.757229	85.838760	42C/13 olive		9		OGS(1991)		
92KFA0534	till	1	16	585450	5401050	48.758564	85.837369	42C/13 tan grey		9		OGS(1991)		
92KFA0535	till	1	16	593250	5407270	48.813386	85.729857	42C/13 grey tan		1		OGS(1991)		0.5
92KFA0536	till	1	16	593350	5408250	48.822185	85.728273	42C/13 tan		1		OGS(1991)		
92KFA0537	gravel/sand	1	16	584475	5440900	49.117104	85.842373	42F/4 tan		5		H&B (1990)		
92KFA0538	gravel/sand	1	16	580270	5441530	49.123333	85.899860	42F/4 tan		7a		H&B (1990)		
92KFA0539	gravel/sand	1	16	574940	5437770	49.090189	85.973596	42F/4 tan		5		H&B (1990)		
92KFA0540	till	1	16	585100	5442910	49.135094	85.833386	42F/4 buff		1a		H&B (1990)		
92KFA0541	till	1	16	585500	5444250	49.147090	85.827619	42F/4 mottled		3		H&B (1990)		
92KFA0542	till	1	16	585550	5445175	49.155402	85.826737	42F/4 buff,		3b		H&B (1990)		
92KFA0543	till	1	16	571650	5449450	49.195631	86.016573	42E/1 grey buff		5a,b		H&B (1990)		
92KFA0544	till	1	16	572490	5449450	49.195532	86.005045	42E/1 grey		5b, 6a		H&B (1990)		
92KFA0545	till	1	16	593550	5406300	48.804617	85.725993	42C/13 tan		2		OGS(1991)		
92KFA0546	till	1	16	593500	5408690	48.826119	85.726129	42C/13 grey		1		OGS(1991) sl. ox.		
92KFA0547	till	1	16	593300	5408770	48.826869	85.728835	42C/13 red brown		9		OGS(1991) ox.		
92KFA0548	till	1	16	593200	5410480	48.842263	85.729809	42C/13 grey tan		9		OGS(1991)		0.6
92KFA0549	till	1	16	593300	5411540	48.851781	85.728205	42C/13 tan grey		9		OGS(1991)		
92KFA0550	till	1	16	592220	5411100	48.847985	85.743022	42C/13 tan grey		9		OGS(1991)		1
92KFA0551	till	1	16	592470	5410000	48.838055	85.739863	42C/13 tan		1		OGS(1991) ox.		1
92KFA0552	till	1	16	592680	5409530	48.833797	85.737109	42C/13 grey		1		OGS(1991) sl. ox.		
92KFA0553	gravel/sand	1	16	593025	5408600	48.825381	85.732620	42C/13 brown		1		OGS(1991) ox.		
92KFA0554	till	1	16	593200	5406600	48.807367	85.730690	42C/13 grey		2		OGS(1991)		

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92KFA0524	Very local, sandy diamicton; angular clasts.
92KFA0525	Diamicton with very angular calsts; very few Paleozoic limestone pebbles on the face of the cut; 3.0 m high mound of sediment on height of land.
92KFA0526	Local granite-rich diamicton with very angular clasts; 3.0m high cut.
92KFA0527	Local, granite-rich, sandy diamicton; clear cut area; 2.0m high cut.
92KFA0528	Bouldery, local diamicton with very angular grey gneiss clasts; 3.0m high cut.
92KFA0529	Sample at roadside, many disintegrating amphibolites.
92KFA0531	Massive diamicton; some Paleozoic limestone and Proterozoic metasediments noted; diamicton pit is being mined.
92KFA0532	Diamicton rich in granite lithologies; good sample.
92KFA0533	Local sandy gravelly diamicton; rich in granitics and green metasediment or metavolcanic rocks.
92KFA0534	Local sandy gravelly diamicton, angular local clasts.
92KFA0535	Silty pebbly drift overlying greenstone bedrock.
92KFA0536	Sandy diamicton; claims staked in area.
92KFA0537	Esker sample; mainly coarse facies, with finer sediment at the southern end of site.
92KFA0538	Esker sample; mainly bedded sand facies; some channel fills of coarser material at top of pit.
92KFA0539	Esker sample; fine to pebbly sand.
92KFA0540	Diamicton rich in Paleozoic limestone overlying greenstone bedrock.
92KFA0541	Very weathered, mottled diamicton.
92KFA0542	Silty diamicton; site of Wilroy mine.
92KFA0543	Paleozoic limestone-rich diamicton in area of silty clay.
92KFA0544	Paleozoic limestone-rich diamicton; some disintegrating amphibolites; diamicton pit being mined.
92KFA0545	Diamicton collected from exploration trench by Doug McKay.
92KFA0546	Sandy diamicton; site of huge grey boulder; sample taken from base of an upturned tree.
92KFA0547	Very oxidized diamicton; lower B horizon; on very steep bouldery slope.
92KFA0548	Mottled silty diamicton; some pebbles.
92KFA0549	Loose sandy diamicton.
92KFA0550	Sandy diamicton with a few pebbles and some boulders.
92KFA0551	Sandy diamicton; intensely oxidized; blocky structure.
92KFA0552	Silty diamicton.
92KFA0553	Sample of fine, oxidized gravel.
92KFA0554	Diamicton collected from exploraiton trench by Doug McKay

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92KFA0555	till	1	16	593330	5406500	48.806449	85.728943	42C/13 grey		2		OGS(1991)		
92KFA0556	till	1	16	593400	5406380	48.805359	85.728017	42C/13 grey		2		OGS(1991)		
92KFA0558	gravel/sand	1	16	589050	5413200	48.867335	85.785762	42C/13 olive		9		OGS(1991)		1
92KFA0559	till	1	16	589530	5413280	48.867986	85.779201	42C/13 olive		9		OGS(1991)		1
92KFA0560	till	1	16	589650	5413100	48.866350	85.777605	42C/13 tan grey		9		OGS(1991)		1
92KFA0561	till	1	16	589420	5412600	48.861886	85.780850	42C/13 olive		9		OGS(1991)		1
92KFA0562	till	1	16	589950	5412100	48.857312	85.773735	42C/13 tan		9		OGS(1991) ox.		
92KFA0563	till	1	16	589150	5412300	48.859227	85.784595	42C/13 tan grey		9		OGS(1991)		1
92KFA0564	till	1	16	592125	5454170	49.235344	85.734525	42F/4 buff		5e		H&B (1990)		
92KFA0565	till	1	16	591490	5452850	49.223568	85.743547	42F/4 buff		5b		H&B (1990)		
92KFA0566	till	1	16	591000	5451750	49.213749	85.750524	42F/4 buff		5b		H&B (1990)		
92KFA0567	till	1	16	574050	5454950	49.244812	85.982622	42F/4 grey		1 , 5		H&B (1990)		
92KFA0568	gravel/sand	1	16	574675	5454275	49.238665	85.974163	42F/4 tan		1 , 5		H&B (1990)		
92KFA0569	gravel/sand	1	16	576750	5456670	49.259949	85.945204	42F/5 tan		5		H&B (1990)		
92KFA0570	till	1	16	577100	5457075	49.263547	85.940317	42F/5 tan		5		H&B (1990)		
92KFA0571	till	1	16	569650	5471425	49.393502	86.040190	42E/8 tan grey		3a		H&B (1990)		4.5
92KFA0572	till	1	16	569800	5472590	49.403963	86.037918	42E/8 buff		3		OGS(1991)		
92KFA0573	till	1	16	569800	5473140	49.408909	86.037822	42E/8 mottled		3		OGS(1991)		
92KFA0574	till	1	16	569700	5474480	49.420973	86.038965	42E/8 grey		3		OGS(1991)		
92KFA0575	till	1	16	571850	5480150	49.471716	86.008297	42E/8 buff		3		OGS(1991)		2.5
92KFA0576	till	1	16	571960	5478580	49.457583	86.007064	42E/8 buff		3		OGS(1991)		
92KFA0577	till	1	16	570850	5476100	49.435409	86.022821	42E/8 tan grey		3				>3.0
92KFA0578	till	1	16	612550	5409930	48.834110	85.466335	42C/14 tan		6		OGS(1991)		0.7
92KFA0579	till	1	16	613600	5410400	48.838146	85.451903	42C/14 tan grey , mottled		6				0.7
92KFA0580	till	1	16	618450	5408500	48.820154	85.386384	42C/14 tan		6		OGS(1991)		0.65
92KFA0581	till	1	16	620750	5409475	48.828479	85.354778	42C/14 dark grey		6		OGS(1991) unox,		0.7
92KFA0582	gravel/sand	1	16	621800	5410410	48.836681	85.340201	42C/14 tan		6		OGS(1991)		
92KFA0583	till	1	16	623690	5412720	48.857079	85.313759	42C/14 tan grey		6		OGS(1991) sl. ox.		
92KFA0584	till	1	16	627710	5420890	48.929726	85.256428	42C/14 dark grey		6		OGS(1991) unox.		1
92KFA0585	till	1	16	625630	5421590	48.936446	85.284596	42C/14 tan grey		6		OGS(1991) sl. ox.		0.7

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92KFA0555	Diamicton collected from exploration trench by Doug McKay
92KFA0556	Diamicton collected from exploration trench by Doug McKay
92KFA0558	Silty sand; pebble-free.
92KFA0559	Silty sandy diamicton.
92KFA0560	Sandy diamicton, some greenstone clasts.
92KFA0561	Silty sandy diamicton; very few small pebbles.
92KFA0562	Oxidized diamicton.
92KFA0563	Bouldery, sandy diamicton; little structure.
92KFA0564	Silty sandy diamicton; rich in Paleozoic limestone.
92KFA0565	Silty diamicton; Paleozoic limestone-rich; plenty of local, angular greenstone boulders.
92KFA0566	Paleozoic limestone-rich diamicton flanking bedrock knob; shallow exposure.
92KFA0567	Very loose gravelly diamicton; fair component of Paleozoic limestone clasts; abandoned pit.
92KFA0568	Large pit of glaciofluvial sediment; predominantly coarse facies; lacustrine sediments at southwest end of pit.
92KFA0569	Esker sample; coarse facies.
92KFA0570	Thin veneer of sandy silty diamicton on amphibolite rock.
92KFA0571	Sandy diamicton collected near bedrock; 4-5 metres of silty clay overlying the diamicton.
92KFA0572	Thin veneer of Paleozoic limestone-rich diamicton on pink gneiss.
92KFA0573	Small deposit of silty clay diamicton.
92KFA0574	Thin veneer of sandy diamicton.
92KFA0575	Silty sandy diamicton, rich in Paleozoic limestone clasts.
92KFA0576	Sandy diamicton with very angular clasts.
92KFA0577	Diamicton interbedded with stratified but poorly sorted pebbly sand ; top flow diamicton layer is 1.0 m thick; at the base of the diamicton there is a silt band, overlain by a sand layer which grades upward to the diamicton.
92KFA0578	Deposit of silty sand with a few pebbles; area with many boulders.
92KFA0579	Sandy, structureless diamicton
92KFA0580	Sandy diamicton; some silt lenses.
92KFA0581	Local sandy diamicton, compact, angular clasts
92KFA0582	Esker cut 6-7 metres high; primarily cobbley sand.
92KFA0583	Deposit of stoney sandy diamicton.
92KFA0584	Local stoney diamicton; angular boulders on the surface of cut.
92KFA0585	Hole dug in forest; loose stoney sandy diamicton; area is very bouldery.

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92KFA0586	gravel/sand	1 16	620590	5421400	48.935740	85.353440	42C/14 tan		6	OGS(1991)		0.7	
92KFA0587	till	1 16	619270	5420320	48.926285	85.371772	42C/14 tan grey		6	OGS(1991)		0.7	
92KFA0588	gravel/sand	1 16	624940	5422210	48.942161	85.293823	42C/14 grey tan		6	OGS(1991)			
92KFA0589	till	1 16	630550	5421425	48.933944	85.217503	42C/14 tan		6	OGS(1991)		0.6	
92KFA0590	till	1 16	631090	5422390	48.942507	85.209823	42C/14 grey		6	OGS(1991)		2.5	
92KFA0591	gravel/sand	1 16	632075	5423050	48.948231	85.196165	42C/14 tan		6	OGS(1991)			
92KFA0592	till	1 16	633475	5423950	48.956023	85.176759	42C/14 grey		1	OGS(1991)			
92KFA0593	gravel/sand	1 16	626325	5414075	48.868732	85.277435	42C/14 tan grey		6	OGS(1991)		0.7	
92KFA0594	till	1 16	628050	5414475	48.871975	85.253799	42C/14 grey		6	OGS(1991)		2.5	
92KFA0595	till	1 16	630845	5414200	48.868919	85.215791	42C/14 tan grey		6	OGS(1991)			
92KFA0596	till	1 16	629600	5414410	48.871069	85.232693	42C/14 tan grey		6	OGS(1991)		0.7	
92KFA0597	till	1 16	631400	5414150	48.868352	85.208243	42C/14 dark grey		6	OGS(1991)			
92KFA0598	till	1 16	632950	5416025	48.884880	85.186509	42C/14 tan grey		6	OGS(1991)			
92KFA0599	till	1 16	634380	5417180	48.894957	85.166634	42C/14 tan grey		6	OGS(1991)		1.5	
92KFA0600	till	1 16	631170	5413170	48.859589	85.211692	42C/14 tan		6	OGS(1991)			
92KFA0601	till	1 16	552000	5455000	49.247533	86.285532	42E/1	brown	3	OGS(1991)		0.6	
92KFA0602	till	1 16	558100	5454850	49.245635	86.201750	42E/1	olive	3	OGS(1991)	sl. ox.	0.5	
92KFA0603	till	1 16	538650	5454450	49.243574	86.469001	42E/1	yellow	3	OGS(1991)	sl. ox.	0.55	
92KFA0604	till	1 16	540100	5454900	49.247529	86.449036	42E/1	pale red	3	OGS(1991)	sl. ox.	0.4	
92KFA0605	till	1 16	551300	5454300	49.241295	86.295239	42E/1	brown	3	OGS(1991)	unox.	0.5	
92KFA0606	till	1 16	552400	5454150	49.239853	86.280148	42E/1	yellow	3	OGS(1991)	unox.	0.6	
92KFA0607	till	1 16	554000	5454000	49.238365	86.258190	42E/1	brown	3	OGS(1991)	mod.	0.6	
92KFA0608	till	1 16	555550	5454100	49.239126	86.236885	42E/1	red brown	3	OGS(1991)	sl. ox.	0.65	
92KFA0609	till	1 16	558450	5454150	49.239305	86.197043	42E/1	brown	3	OGS(1991)	sl. ox.	0.4	
92KFA0610	till	1 16	539750	5453750	49.237207	86.453959	42E/1	red gray	9	OGS(1991)	sl. ox.	0.6	
92KFA0611	till	1 16	549900	5453000	49.229718	86.314633	42E/1	red brown	3	OGS(1991)	ox	0.5	
92KFA0612	till	1 16	553050	5453000	49.229453	86.271371	42E/1	yellow to	3	OGS(1991)	sl. ox.	0.55	
92KFA0613	till	1 16	554950	5453050	49.229736	86.245271	42E/1	brown	3	OGS(1991)	unox.	0.45	
92KFA0614	till	1 16	557450	5453350	49.232205	86.210894	42E/1	red brown	3	OGS(1991)	mod.	0.5	
92KFA0615	till	1 16	557550	5453900	49.237142	86.209442	42E/1	red brown	3	OGS(1991)	sl. ox.	0.55	
92KFA0616	till	1 16	536850	5453050	49.231092	86.493859	42E/1	brown	3	OGS(1991)	ox.	0.3	

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92KFA0586	Hole dug in forest; silty sandy diamicton.
92KFA0587	Hole dug in forest; upper 0.30 m is sand with some pebbles, lower 0.40 m is pebbly silty diamicton.
92KFA0588	Esker sample; 6.0 m high cut; sand with some pebbles
92KFA0589	Silty material, some pebbles.
92KFA0590	Mound of local silty sandy diamicton 3.5 m high.
92KFA0591	Esker sample; mound of ice contact sand and gravel.
92KFA0592	Mound of local, stoney diamicton 12.0 m high.
92KFA0593	Hole in forest; pebbly silty sand overlies bedded sand.
92KFA0594	Local, stoney, sandy diamicton; 3.0 m high cut.
92KFA0595	Mound of sandy diamicton, loose but not stratified; angular local clasts on surface.
92KFA0596	Silty clay diamicton; few pebbles; bouldery surface.
92KFA0597	Shallow mound of local rubbley sandy diamicton; no Paleozoic limestone clasts.
92KFA0598	Mound of pebbly sandy diamicton 2.0 m high; fair component of Paleozoic limestone clasts.
92KFA0599	Mound of sandy diamicton 2.0 m high; fair component of Paleozoic limestone pebbles.
92KFA0600	Thick deposit of sandy, Paleozoic limestone-rich diamicton.
92KFA0601	Diamicton <1.0 m thick.
92KFA0602	Diamicton <1.0 m thick.
92KFA0603	Diamicton with a few Paleozoic limestone pebbles; 1-3 m thick .
92KFA0604	Sandy diamicton with numerous pebbles; some Paleozoic limestone pebbles; >3.0 m thick .
92KFA0605	Diamicton <1.0 m thick.
92KFA0606	Diamicton <1.0 m thick.
92KFA0607	diamicton, very loose silty matrix with numerous pebbles.
92KFA0608	Diamicton 1-3 m thick.
92KFA0609	Diamicton <1.0 m thick.
92KFA0610	Diamicton 1-3 m thick; some Paleozoic limestone pebbles.
92KFA0611	Diamicton 1-3 m thick.
92KFA0612	Silty diamicton 1-3 m thick.
92KFA0613	Diamicton 1-3 m thick.
92KFA0614	Diamicton <1.0 m thick.
92KFA0615	Diamicton <1.0 m thick.
92KFA0616	Very thin veneer of diamicton.

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92KFA0617	till	1	16	538100	5452850	49.229217	86.476709	42E/1	brown		11	OGS(1991)	ox.	0.5
92KFA0618	till	1	16	538850	5452150	49.222873	86.466477	42E/1	brown		11	OGS(1991)	unoxid	0.5
92KFA0619	till	1	16	550750	5452450	49.224701	86.303028	42E/1	red brown		3	OGS(1991)	ox.	0.5
92KFA0620	till	1	16	552000	5452950	49.229094	86.285798	42E/1	red brown		3	OGS(1991)	unox.	0.45
92KFA0621	till	1	16	554950	5452000	49.220291	86.245415	42E/1	red brown		8	OGS(1991)	ox.	0.5
92KFA0622	till	1	16	556800	5452100	49.221022	86.219998	42E/1	yellow		8	OGS(1991)	unox.	0.75
92KFA0623	till	1	16	558200	5452550	49.224938	86.200710	42E/1	yellow		8	OGS(1991)	sl. ox.	0.55
92KFA0624	till	1	16	539950	5450300	49.206162	86.451555	42E/1	yellow		11	OGS(1991)	unox.	0.3
92KFA0625	till	1	16	551250	5451500	49.216115	86.296284	42E/1	red brown		3	OGS(1991)	unox.	0.4
92KFA0626	till	1	16	552500	5451800	49.218707	86.279082	42E/1	grey brown		3	OGS(1991)	unox.	0.55
92KFA0627	till	1	16	553000	5451000	49.211469	86.272322	42E/1	yellow		8	OGS(1991)	unox.	0.5
92KFA0628	till	1	16	553750	5451850	49.219049	86.261912	42E/1	yellow		3	OGS(1991)	unox.	0.5
92KFA0629	till	1	16	559300	5451200	49.212690	86.185804	42E/1	yellow		8	OGS(1991)	unox.	0.55
92KFA0630	till	1	16	551700	5450450	49.206633	86.290240	42E/1	red brown		8	OGS(1991)	sl. ox.	0.55
92KFA0631	till	1	16	553900	5450050	49.202845	86.260094	42E/1	brown		8	OGS(1991)	sl. ox.	0.6
92KFA0632	till	1	16	554550	5450500	49.206835	86.251111	42E/1	brown		8	OGS(1991)	sl. ox.	0.65
92KFA0633	till	1	16	557850	5450400	49.205633	86.205826	42E/1	brown		8	OGS(1991)	unox.	0.65
92KFA0634	till	1	16	539100	5449650	49.200370	86.463287	42E/1	brown		11	OGS(1991)		0.55
92KFA0635	till	1	16	552550	5449950	49.202063	86.278638	42E/1	red brown		8	OGS(1991)	sl. ox.	0.65
92KFA0636	till	1	16	554700	5449600	49.198727	86.249174	42E/1	grey		8	OGS(1991)	sl. ox.	0.65
92KFA0637	till	1	16	556450	5449900	49.201267	86.225114	42E/1	brown		8	OGS(1991)	unox.	0.75
92KFA0638	gravel/sand	1	16	547600	5447700	49.182229	86.346849	42E/1	brown		8	OGS(1991)	unox.	1.1
92KFA0640	till	1	16	537100	5448850	49.193299	86.490813	42E/1	brown		11	OGS(1991)	ox.	0.35
92KFA0641	till	1	16	538000	5449000	49.194593	86.478447	42E/1	grey brown		11	OGS(1991)	unox.	0.3
92KFA0642	till	1	16	539800	5446400	49.171092	86.454001	42E/1	grey		11	OGS(1991)	unox.	0.45
92KFA0643	till	1	16	553500	5448200	49.186240	86.265831	42E/1	yellow		4	OGS(1991)	sl. ox.	0.5
92KFA0644	till	1	16	557500	5448500	49.188577	86.210902	42E/1	yellow		8	OGS(1991)	sl. ox.	0.45
92KFA0645	till	1	16	558250	5448900	49.192104	86.200553	42E/1	brown		8	OGS(1991)	unox.	0.35
92KFA0646	till	1	16	536750	5447050	49.177129	86.495781	42E/1	brown		11	OGS(1991)	ox.	0.65
92KFA0647	till	1	16	538000	5447000	49.176603	86.478636	42E/1	yellow		11	OGS(1991)	unox.	0.65
92KFA0648	till	1	16	539450	5447200	49.178310	86.458723	42E/1	yellow to		11	OGS(1991)	sl. ox.	0.35

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92KFA0617	Diamicton <1.0 m thick.
92KFA0618	Thin veneer of diamicton.
92KFA0619	Diamicton <1.0 m thick.
92KFA0620	Diamicton <1.0 m thick.
92KFA0621	Diamicton <1.0 m thick.
92KFA0622	Diamicton >3.0 m thick.
92KFA0623	Diamicton >3.0 m thick.
92KFA0624	Diamicton <1.0 m thick diamicton.
92KFA0625	Diamicton <1.0 m thick, few pebbles.
92KFA0626	Diamicton <1.0 m thick, few pebbles.
92KFA0627	Diamicton <1.0 m thick.
92KFA0628	Diamicton <1.0 m thick.
92KFA0629	Diamicton <1.0 m thick.
92KFA0630	Diamicton <1.0 m thick.
92KFA0631	Diamicton <1.0 m thick.
92KFA0632	Diamicton <1.0 m thick.
92KFA0633	Diamicton <1.0 m thick.
92KFA0634	Diamicton 1-3 m thick.
92KFA0635	Sandy silty diamicton; rare pebbles.
92KFA0636	Diamicton <1.0 m thick.
92KFA0637	Diamicton <1.0 m thick.
92KFA0638	Lacustrine deposit, no pebbles.
92KFA0640	Diamicton with some Paleozoic limestone pebbles.
92KFA0641	Diamicton with some Paleozoic limestone pebbles.
92KFA0642	Diamicton <1.0 m thick.
92KFA0643	Silty diamicton with very large granitic erratics.
92KFA0644	Diamicton 1-3 m thick, clast supported deposit.
92KFA0645	Diamicton <1.0 m thick, few pebbles.
92KFA0646	Diamicton >3.0 m thick, clast supported; granitic erratics abundant.
92KFA0647	Very loose silty diamicton >3.0 m thick; some Paleozoic limestone pebbles.
92KFA0648	Diamicton <1.0 m thick.

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92KFA0649	till	1	16	553500	5447100	49.176346	86.265977	42E/1	red brown	4	OGS(1991)	sl. ox.	0.35	
92KFA0650	till	1	16	554250	5447850	49.183026	86.255587	42E/1	red brown	4	OGS(1991)	ox.	0.6	
92KFA0652	till	1	16	558500	5447950	49.183535	86.197260	42E/1	yellow	8	OGS(1991)	sl. ox.	0.55	
92KFA0653	till	1	16	538350	5446300	49.170285	86.473901	42E/1	brown	11	OGS(1991)	sl. ox.	0.65	
92KFA0654	till	1	16	540850	5446950	49.175970	86.439541	42E/1	brown	11	OGS(1991)	unox.	0.6	
92KFA0655	till	1	16	542250	5446550	49.172277	86.420376	42E/1	brown	11	OGS(1991)	sl. ox.	0.4	
92KFA0656	till	1	16	552000	5446000	49.166581	86.286698	42E/1	yellow	4	OGS(1991)	sl. ox.	0.65	
92KFA0658	till	1	16	537000	5445000	49.158674	86.492540	42E/1	brown	11	OGS(1991)	unox.	0.6	
92KFA0659	till	1	16	537850	5445700	49.164919	86.480817	42E/1	brown	11	OGS(1991)	sl. ox.	0.55	
92KFA0660	till	1	16	539550	5445550	49.163462	86.457514	42E/1	brown grey	11	OGS(1991)	sl. ox.	0.6	
92KFA0661	till	1	16	540600	5445850	49.166092	86.443082	42E/1	brown grey	11	OGS(1991)	sl. ox.	0.35	
92KFA0662	till	1	16	541600	5445650	49.164226	86.429386	42E/1	grey	11	OGS(1991)	unox.	0.55	
92KFA0663	till	1	16	553500	5446100	49.167352	86.266110	42E/1	yellow	4	OGS(1991)	sl. ox.	0.3	
92KFA0664	till	1	16	537950	5444100	49.150520	86.479596	42E/1	brown	11	OGS(1991)	unox.	0.55	
92KFA0665	till	1	16	540850	5443800	49.147636	86.439861	42E/1	red brown	11	OGS(1991)	ox.	0.55	
92KFA0666	till	1	16	536450	5443850	49.148363	86.500187	42E/1	brown	11	OGS(1991)	unox.	0.65	
92KFA0667	till	1	16	538750	5443400	49.144174	86.468693	42E/1	red brown	11	H&B (1990)	ox.	0.4	
92KFA0668	till	1	16	539950	5443300	49.143198	86.452251	42E/1	brown	11	H&B (1990)	ox.	0.4	
92KFA0671	till	1	16	536700	5442400	49.135305	86.496891	42E/1	red brown	11	OGS(1991)	ox.	0.55	
92KFA0672	till	1	16	537800	5442750	49.138386	86.481779	42E/1	brown	11	OGS(1991)	sl. ox.	0.6	
92KFA0673	till	1	16	539000	5442100	49.132465	86.465391	42E/1	red brown	11	OGS(1991)	sl. ox.	0.5	
92KFA0674	till	1	16	548050	5442250	49.133173	86.341325	42E/1	yellow	4	OGS(1991)	sl. ox.	0.65	
92KFA0675	till	1	16	538300	5441050	49.123064	86.475086	42E/1	red brown	3	OGS(1991)	ox.	0.6	
92KFA0676	till	1	16	540450	5441950	49.131022	86.445531	42E/1	red brown	9	OGS(1991)	ox.	0.35	
92KFA0677	till	1	16	547150	5441550	49.126946	86.353743	42E/1	red brown	4	OGS(1991)	unox.	0.3	
92KFA0678	sand/gravel	1	16	553600	5441750	49.128216	86.265317	42E/1	red brown	4	OGS(1991)	ox.	0.45	
92KFA0679	till	1	16	551800	5440550	49.117577	86.290141	42E/1	yellow	4	OGS(1991)	sl. ox.	0.6	
92KFA0680	till	1	16	553000	5440750	49.119274	86.273672	42E/1	yellow	4	OGS(1991)	unox.	0.5	
92KFA0681	till	1	16	537200	5439750	49.111438	86.490281	42E/1		4	OGS(1991)	ox.	0.4	
92KFA0682	till	1	16	551450	5440000	49.112659	86.295008	42E/1	yellow	4	OGS(1991)	sl. ox.	0.6	
92KFA0683	till	1	16	536700	5438850	49.103372	86.497214	42E/1	yellow to	4	OGS(1991)	ox.	0.3	

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92KFA0649	Diamicton <1.0 m thick of diamicton, some pebbles.
92KFA0650	Diamicton <1.0 m thick.
92KFA0652	Diamicton <1.0 m thick.
92KFA0653	Diamicton <1.0 m thick, numerous Paleozoic limestone pebbles.
92KFA0654	Diamicton 1-3 m thick.
92KFA0655	Diamicton <1.0 m thick
92KFA0656	Diamicton 1-3 m thick.
92KFA0658	Diamicton <1.0 m thick.
92KFA0659	Diamicton 1-3 m thick.
92KFA0660	Diamicton 1-3 m thick.
92KFA0661	Diamicton <1.0 m thick.
92KFA0662	Diamicton <1.0 m thick.
92KFA0663	Diamicton <1.0 m thick.
92KFA0664	Diamicton <1.0 m thick.
92KFA0665	Diamicton 1-3 m thick, some Paleozoic limestone pebbles.
92KFA0666	Diamicton <1.0 m thick.
92KFA0667	Diamicton <1.0 m thick, some Paleozoic limestone pebbles.
92KFA0668	Diamicton <1.0 m thick, some Paleozoic limestone pebbles.
92KFA0671	Sandy diamicton <1.0 m thick.
92KFA0672	Diamicton 1-3 m thick.
92KFA0673	Diamicton <1.0 m thick.
92KFA0674	Diamicton 1-3 m thick.
92KFA0675	Diamicton <1.0 m thick.
92KFA0676	Diamicton <1.0 m thick, some Paleozoic limestone pebbles.
92KFA0677	Silty diamicton 1-3 m thick; large clasts, few pebbles.
92KFA0678	Diamicton <1.0 m thick, fluvioglacial deposit.
92KFA0679	Diamicton 1-3 m thick.
92KFA0680	Diamicton <1.0 m thick.
92KFA0681	Diamicton <1.0 m thick, large clasts, very few pebbles.
92KFA0682	Diamicton <1.0 m thick, few pebbles.
92KFA0683	Diamicton <1.0 m thick, few pebbles.

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92KFA0684	till	1	16	537050	5438300	49.098404	86.492469	42E/1	brown		9	OGS(1991)	sl. ox.	0.55
92KFA0685	till	1	16	537200	5437250	49.088950	86.490511	42E/1	brown		9	OGS(1991)	unox.	0.5
92KFA0686	till	1	16	538100	5437550	49.091594	86.478157	42E/1	brown		9	OGS(1991)	unox.	0.55
92KFA0687	till	1	16	537200	5436000	49.077706	86.490626	42E/1	yellow		9	OGS(1991)	unox.	0.4
92KFA0688	till	1	16	537400	5436050	49.078144	86.487883	42E/1	brown		9	OGS(1991)	unox.	0.6
92KFA0689	till	1	16	537400	5434950	49.068249	86.487985	42E/1	brown		9	OGS(1991)	unox.	0.6
92KFA0690	till	1	16	557150	5432300	49.042897	86.217999	42E/1	brown		6	OGS(1991)	sl. ox.	0.45
92KFA0691	till	1	16	557800	5432950	49.048683	86.209013	42E/1	brown		6	OGS(1991)	unox.	0.45
92KFA0693	till	1	16	556000	5431350	49.034458	86.233864	42E/1	brown		1	OGS(1991)	sl. ox.	0.55
92KFA0694	till	1	16	557100	5431250	49.033457	86.218831	42E/1	yellow		6	OGS(1991)	sl. ox.	0.4
92KFA0695	till	1	16	557900	5431650	49.036981	86.207830	42E/1	brown		6	OGS(1991)	sl. ox.	0.6
92KFA0697	till	1	16	556050	5430250	49.024559	86.233332	42E/1	brown		1	OGS(1991)	sl. ox.	0.6
92KFA0698	till	1	16	556800	5430200	49.024041	86.223082	42E/1	grey brown		6	OGS(1991)	unox.	0.5
92KFA0699	till	1	16	555100	5429950	48.659012	87.791032	42E/1	brown		1	OGS(1991)	unox.	0.45
92KFA0700	till	1	16	555950	5432300	49.043007	86.234417	42E/1	brown		1	OGS(1991)	unox.	0.5
92KFA0701	till	1	16	535650	5442600	49.137166	86.511267	42E/2	red brown		11	OGS(1991)	sl. ox.	0.55
92KFA0702	till	1	16	536250	5440500	49.118241	86.503230	42E/2	red		3	OGS(1991)	ox.	0.65
92KFA0703	till	1	16	533300	5432700	49.048245	86.544298	42E/2	brown		9	OGS(1991)	sl. ox.	0.65
92KFA0704	till	1	16	534650	5430950	49.032429	86.525974	42E/2	brown		1	OGS(1991)	sl. ox.	0.65
92KFA0705	till	1	16	535750	5445150	49.160097	86.509670	42E/2	red brown		11	OGS(1991)	ox.	0.5
92KFA0706	till	1	16	535850	5443650	49.146599	86.508432	42E/2	brown		11	OGS(1991)	unox.	0.65
92KFA0707	till	1	16	534350	5442750	49.138589	86.529075	42E/2	yellow		3	OGS(1991)	sl. ox.	0.5
92KFA0708	till	1	16	533600	5441950	49.131434	86.539424	42E/2	brown		3	OGS(1991)	ox.	0.75
92KFA0709	till	1	16	535950	5441600	49.128153	86.507243	42E/2	yellow		3	OGS(1991)	sl. ox.	0.4
92KFA0710	till	1	16	533400	5440150	49.115254	86.542314	42E/2	yellow		3	OGS(1991)	sl. ox.	0.4
92KFA0711	till	1	16	532900	5439000	49.104937	86.549259	42E/2	brown		3	OGS(1991)	unox.	0.55
92KFA0712	till	1	16	535750	5438900	49.103878	86.510224	42E/2	red			OGS(1991)	unox.	0.5
92KFA0713	till	1	16	532250	5438050	49.096426	86.558240	42E/2	brown		3	OGS(1991)	sl. ox.	0.75
92KFA0714	till	1	16	533850	5437200	49.088694	86.536395	42E/2	brown		4	OGS(1991)	sl. ox.	0.55
92KFA0715	till	1	16	534550	5437650	49.092703	86.526770	42E/2	brown		4	OGS(1991)	sl. ox.	0.6
92KFA0716	till	1	16	533200	5436600	49.083332	86.545347	42E/2	brown		4	OGS(1991)	unox.	0.5

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92KFA0684	Diamicton with large clasts.
92KFA0685	Diamicton <1.0 m thick.
92KFA0686	Diamicton <1.0 m thick.
92KFA0687	Diamicton <1.0 m thick, no pebbles, few clasts.
92KFA0688	Diamicton <1.0 m thick.
92KFA0689	Diamicton <1.0 m thick.
92KFA0690	Diamicton 1-3 m thick; clast supported diamicton with clay matrix; some Paleozoic limestone pebbles.
92KFA0691	Clay diamicton 1-3 m thick; large clasts; some Paleozoic limestone pebbles.
92KFA0693	Diamicton <1.0 m thick.
92KFA0694	Diamicton <1.0 m thick; some Paleozoic limestone pebbles.
92KFA0695	Clay-rich diamicton; few Paleozoic limestone pebbles.
92KFA0697	Diamicton <1.0 m thick, few Paleozoic limestone pebbles.
92KFA0698	Clay-rich diamicton 1-3 m thick; some Paleozoic limestone pebbles.
92KFA0699	Diamicton <1.0 m thick.
92KFA0700	Clay-rich diamicton <1.0 m thick.
92KFA0701	Diamicton <1.0 m thick.
92KFA0702	Very sandy diamicton.
92KFA0703	Silty diamicton 1-3 m thick, few Paleozoic limestone pebbles.
92KFA0704	Clay-rich diamicton <1.0 m thick; some Paleozoic limestone pebbles.
92KFA0705	Diamicton <1.0 m thick, abundant clasts.
92KFA0706	Diamicton <1.0 m thick.
92KFA0707	Diamicton <1.0 m thick.
92KFA0708	Diamicton <1.0 m thick, few Paleozoic limestone pebbles.
92KFA0709	Diamicton 1-3 m thick, few Paleozoic limestone pebbles.
92KFA0710	Diamicton <1.0 m thick.
92KFA0711	Diamicton 1-3 m thick.
92KFA0712	Clay-rich diamicton <1.0 m thick; few pebbles.
92KFA0713	Silty diamicton 1-3 m thick; some Paleozoic limestone pebbles.
92KFA0714	Diamicton 1-3 m thick.
92KFA0715	Diamicton 1-3 m thick.
92KFA0716	Diamicton <1.0 m thick; some Paleozoic limestone pebbles.

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92KFA0717	till	1	16	535550	5436950	49.086349	86.513135	42E/2	brown		9	OGS(1991)	sl. ox.	0.65
92KFA0718	till	1	16	534100	5435550	49.073838	86.533111	42E/2	brown		9	OGS(1991)	sl. ox.	0.45
92KFA0719	till	1	16	535900	5435600	49.074185	86.508462	42E/2	brown		9	OGS(1991)	sl. ox.	0.65
92KFA0720	till	1	16	536150	5434500	49.064276	86.505137	42E/2	brown		9	OGS(1991)	ox.	0.5
92KFA0721	till	1	16	535400	5431750	49.039583	86.515644	42E/2	red		6	OGS(1991)	sl. ox.	0.4
92KFA0722	till	1	16	539950	5449050	49.194918	86.451680	42E/1	brown		11	OGS(1991)	sl. ox.	0.5
92KFA0723	till	1	16	533550	5429800	49.022145	86.541117	42E/2	red brown		1	OGS(1991)	sl. ox.	0.5
92KFA0751	gravel/sand	1	16	549500	5470950	49.389530	86.317901	42E/8	tan		7	OGS(1991)		
92KFA0752		1	16	538830	5469700	49.380732	86.465045	42E/8	tan grey		7	OGS(1991)		
92KFA0753	till	1	16	536650	5466680	49.353704	86.495356	42E/8	red brown		3	OGS(1991)	ox.	
92KFA0754	till	1	16	536400	5466850	49.355248	86.498782	42E/8	grey buff		3	OGS(1991)	sl. ox.	
92KFA0755	gravel/sand	1	16	536650	5468000	49.365577	86.495234	42E/8	tan		3	OGS(1991)		
92KFA0756		1	16	541710	5473570	49.415351	86.424964	42E/8	tan grey		7	OGS(1991)		
92KFA0757	till	1	16	541450	5475320	49.431109	86.428365	42E/8	tan grey		7	OGS(1991)		
92KFA0758	till	1	16	541620	5475800	49.435415	86.425971	42E/8	buff		7	OGS(1991)		
92KFA0759	till	1	16	540790	5477400	49.449862	86.437253	42E/8	buff		3	OGS(1991)		
92KFA0760	gravel/sand	1	16	592150	5445000	49.152873	85.736285	42F/4	grey tan		1a,c, 5b			
												H&B (1990)		
92KFA0761	gravel/sand	1	16	605750	5450350	49.198792	85.548431	42F/4	tan grey		5b	H&B (1990)		
92KFA0762	till	1	16	591000	5414400	48.877845	85.758913	42C/13	tan grey				sl. ox.	1
92KFA0763	till	1	16	591150	5415080	48.883938	85.756716	42C/13	grey tan				mod.	0.75
92KFA0764	till	1	16	592667	5415950	48.891538	85.735832	42C/13	mottled tan					1
92KFA0765	till	1	16	592370	5416330	48.895000	85.739797	42C/13	tan grey					1
92KFA0766	till	1	16	591800	5416200	48.893915	85.747601	42C/13	tan grey					0.75
92KFA0767	till	1	16	631975	5428470	48.996985	85.195772	42C/14	tan		6			
92KFA0768	till	1	16	631790	5428330	48.995766	85.198345	42C/14	tan		6			
92KFA0769	till	1	16	596120	5464450	49.327176	85.677192	42F/5	buff		3a	H&B (1990)		
92KFA0770	till	1	16	597300	5464750	49.329686	85.660885	42F/5	buff		3a	H&B (1990)		
92KFA0771	till	1	16	598200	5464880	49.330711	85.648470	42F/5	buff		3a	H&B (1990)		
92KFA0772	till	1	16	598650	5464820	49.330099	85.642293	42F/5	buff		3a	H&B (1990)		

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92KFA0717	Diamicton <1.0 m thick.
92KFA0718	Diamicton <1.0 m thick, some Paleozoic limestone pebbles.
92KFA0719	Diamicton <1.0 m thick.
92KFA0720	Diamicton 1-3 m thick, clast supported deposit, numerous pebbles.
92KFA0721	Diamicton 1-3 m thick, clay matrix, few pebbles.
92KFA0722	Diamicton 1-3 m thick.
92KFA0723	Diamicton 1-3 m thick, silty sandy matrix.
92KFA0751	Esker sample; sample from gravelly coarse sand bed.
92KFA0752	Silty clay diamicton; Paleozoic limestone-rich; >2.0 m thick.
92KFA0753	Very small pocket of intensely oxidized diamicton.
92KFA0754	Silty clay diamicton; Paleozoic limestone-rich.
92KFA0755	Esker sample; 4-5 metre high mound of well sorted medium sand.
92KFA0756	Gravelly sandy diamicton with angular clasts; abandoned pit.
92KFA0757	Very fine-grained diamicton; rich in Paleozoic limestone.
92KFA0758	Small deposit of sandy silty diamicton; rich in Paleozoic limestone.
92KFA0759	Silty sandy diamicton; Paleozoic limestone-rich.
92KFA0760	Esker sample; sand facies; fine facies at pit top; large component of dark banded crystalline rock and grey gneiss over pit surface.
92KFA0761	Esker sample; gravelly diamicton.
92KFA0762	Hole 50 m from shore; silty sandy diamicton with coarse granite clasts.
92KFA0763	Boat traverse; hole in forest; silty sandy diamicton with angular granite clasts.
92KFA0764	Hole dug in forest; mottled diamicton rich in granite clasts.
92KFA0765	Hole dug in forest 50 m from shore; gravelly sandy diamicton with a sandy matrix; shore covered with dark green metavolcanic rock.
92KFA0766	Hole dug 50 m from shore; sandy diamicton; bouldery shore (mixture of granite and greenstone clasts).
92KFA0767	Small deposit of diamicton in area covered with sand; surface covered by pink angular gneiss boulders.
92KFA0768	Silty sand; no pebbles.
92KFA0769	Diamicton rich in Paleozoic limestone; roadside scraped for aggregate.
92KFA0770	Local sandy diamicton in area of Paleozoic limestone-rich till; reports of visible gold in this area.
92KFA0771	Diamicton rich in Paleozoic limestone; disintegrating large granite pebbles.
92KFA0772	Silty sandy diamicton, rich in Paleozoic limestone.

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92KFA0773	till	1	16	598800	5464700	49.328996	85.640259	42F/5	buff		3a	H&B (1990)		
92KFA0774	till	1	16	599050	5464500	49.327157	85.636869	42F/5	buff		3a	H&B (1990)		
92KFA0775	till	1	16	598000	5464840	49.330384	85.651231	42F/5	buff grey		3a	H&B (1990)		2.5
92KFA0776	till	1	16	598080	5466300	49.343500	85.649772	42F/5	buff grey		3a	H&B (1990)		
92KFA0777	till	1	16	598250	5466530	49.345541	85.647375	42F/5	tan grey		3a	H&B (1990)		
92KFA0778	till	1	16	598400	5466825	49.348170	85.645238	42F/5	buff grey		3a	H&B (1990)		
92KFA0779	gravel/sand	1	16	606670	5456575	49.254609	85.534152	42F/5	grey tan		3a,c	H&B (1990) ox.		
92KFA0780	gravel/sand	1	16	606700	5481980	49.483048	85.526929	42F/5	grey tan		3	OGS(1991)		
92KFA0781	gravel/sand	1	16	605000	5476700	49.435866	85.551791	42F/5	grey tan		3	OGS(1991)		
92KFA0782	gravel/sand	1	16	586200	5476950	49.441071	85.810970	42F/5	grey tan		3	OGS(1991)		
92KFA0783	till	1	16	567950	5442730	49.135612	86.068484	42E/1	tan		5b	H&B (1990)		0.7
92KFA0784	till	1	16	570570	5444230	49.148692	86.018599	42E/1	grey tan		5b	H&B (1990)		0.75
92KFA0785	till	1	16	551290	5476280	49.438993	86.292548	42E/8	buff		3	OGS(1991)		
92KFA0786	till	1	16	550750	5478370	49.457836	86.299728	42E/8	buff		3	OGS(1991)		
92KFA0787	till	1	16	551500	5480125	49.473558	86.289152	42E/8	grey		3	OGS(1991)		
92KFA0788	till	1	16	551700	5481530	49.486178	86.286208	42E/8	grey buff		3			
92KFA0789	till	1	16	552450	5482440	49.494298	86.275733	42E/8	grey		3	OGS(1991)		
92KFA0790	till	1	16	560250	5480430	49.475496	86.168342	42E/8	buff		3			
92KFA0791	till	1	16	560970	5482420	49.493322	86.158098	42E/8	buff		3	OGS(1991)		
92KFA0792	gravel/sand	1	16	561900	5492800	49.586583	86.143628	42E/9	grey tan					
92KFA0793	till	1	16	584150	5467900	49.359970	85.841158	42F/5	buff		3a	H&B (1990)		
92KFA0794	gravel/sand	1	16	581200	5467400	49.355874	85.881876	42F/5	grey tan		3a	H&B (1990)		
92KFA0795	till	1	16	587150	5468125	49.361572	85.799804	42F/5	tan		3a,d	H&B (1990)		0.4 m
92KFA0796	till	1	16	587700	5467200	49.353175	85.792435	42F/5	tan grey		3a,d	H&B (1990)		
92KFA0797	till	1	16	587775	5467050	49.351815	85.791436	42F/5	buff		3a,d	H&B (1990)		0.5
92KFA0798	till	1	16	587950	5468100	49.361232	85.788795	42F/5	tan grey		3a	H&B (1990)		0.5
92KFA0799	till	1	16	589850	5468200	49.361855	85.762613	42F/5	tan grey		3a	H&B (1990)		
92KFA0800	till	1	16	562520	5443075	49.139291	86.142861	42E/1	tan grey		6		mod.	0.6
92KFA0801	till	1	16	561530	5442875	49.137592	86.156462	42E/1			6	OGS(1991) ox.		
											6	OGS(1991) sl. ox.		0.7

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92KFA0773	Silty clay diamicton, rich in Paleozoic limestone.
92KFA0774	Silty sandy diamicton, rich in Paleozoic limestone; >1.0 m thick.
92KFA0775	Silty sandy diamicton, rich in Paleozoic limestone; > 3.0 m.
92KFA0776	Sandy diamicton, rich in Paleozoic limestone; very fragile pieces of Paleozoic rock and a Paleozoic boulder; >2.0 m thick.
92KFA0777	Area of staked graphite prospect; sandy diamicton, rich in Paleozoic limestone; sand lenses.
92KFA0778	Silty sandy diamicton; >2.5 m thick.
92KFA0779	Esker sample; coarse facies; clasts rounded.
92KFA0780	Esker sample; fine gravel facies.
92KFA0781	Esker sample; interbedded sand and gravel.
92KFA0782	Esker sample; pebbly sand.
92KFA0783	Sandy diamicton with angular clasts.
92KFA0784	Silty clay diamicton; rich in Paleozoic limestone.
92KFA0785	Silty diamicton; rich in Paleozoic limestone; beneath top 40 cm sediment becomes compact.
92KFA0786	Silty diamicton; rich in Paleozoic limestone.
92KFA0787	Silty diamicton; rich in Paleozoic limestone; area of thick drift.
92KFA0788	Thick deposit of silty diamicton; rich in Paleozoic limestone; many large dark fine-grained erratics on the surface of the cut.
92KFA0789	Thick deposit of silty clay diamicton; rich in Paleozoic limestone.
92KFA0790	Thick deposit of sandy diamicton; rich in Paleozoic limestone.
92KFA0791	Thick deposit of cobbley gravelly diamicton; rich in Paleozoic limestone.
92KFA0792	Esker sample; sand with some silty sand lenses and large pebbles.
92KFA0793	Silty clay diamicton; rich in Paleozoic limestone; >1.0m thick.
92KFA0794	Esker sample; sand interbedded pebbly sand; 5.0m high cut.
92KFA0795	Diamicton; rich in Paleozoic limestone.
92KFA0796	Silty diamicton; rich in Paleozoic limestone; angular clasts of dark banded rock on surface of cut.
92KFA0797	Silty clay diamicton; rich in Paleozoic limestone; compact.
92KFA0798	Silty clay diamicton; rich in Paleozoic limestone.
92KFA0799	Sandy diamicton; rich Paleozoic limestone; cut has possibly been prospected.
92KFA0800	Bouldery sandy diamicton; some Paleozoic limestone and Proterozoic metasediment noted; 7.5 cm humus, 7.5 cm A-horizon, 15 cm upper B-horizon, 10 cm lower B-horizon.
92KFA0801	Silty clay diamicton with some Paleozoic limestone noted.

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92KFA0802	gravel/sand	1	16	580775	5411450	48.852728	85.898918	42C/13		6		OGS(1991)		
92KFA0803	till	1	16	582980	5413490	48.870785	85.868453	42C/13		1		OGS(1991) mod.	1	
92KFA0804	till	1	16	583150	5412190	48.859070	85.866400	42C/13		2		OGS(1991)		
92KFA0805	gravel	1	16	583420	5409660	48.836279	85.863235	42C/13 tan		2		OGS(1991)		
92KFA0806	gravel/sand	1	16	591800	5427200	48.992844	85.745122	42C/13 tan		6		OGS(1991)		
92MAN0107	till	1	16	588180	5444700	49.150758	85.790781	42F/4		6		OGS(1991)		
92MAN0108	till	1	16	588180	5444920	49.152737	85.790733	42F/4		6		OGS(1991)		
92MAN0109	till	1	16	588220	5444320	49.147335	85.790316	42F/4		2		OGS(1991)		
92MAN0110	till	1	16	588025	5444000	49.144485	85.793059	42F/4		2		OGS(1991)		
92MAN0111	till	1	16	588150	5444100	49.145367	85.791323	42F/4		2		OGS(1991)		
92MAN0112	till	1	16	588520	5444300	49.147112	85.786207	42F/4		2		OGS(1991)		
92MAN0113	till	1	16	588950	5444450	49.148399	85.780279	42F/4	gray	6		OGS(1991)		
92MAN0115	till	1	16	588000	5443630	49.141161	85.793482	42F/4	pale grey	3		OGS(1991)		
92MAN0116	till	1	16	587930	5443080	49.136225	85.794562	42F/4	rusty dk	3		OGS(1991)		
92MAN0117	till	1	16	587960	5442850	49.134152	85.794201	42F/4	brown grey	3		OGS(1991)		
92MAN0118	till	1	16	588500	5442850	49.134075	85.786800	42F/4		3		OGS(1991)		
92MAN0119	till	1	16	589250	5442610	49.131808	85.776574	42F/4		1		OGS(1991)		
92MAN0121	till	1	16	590200	5442600	49.131579	85.763557	42F/4	rusty brown	1		OGS(1991)		
92MAN0122	till	1	16	591640	5442750	49.132715	85.743789	42F/4	grey	6		OGS(1991)		
92MAN0123	till	1	16	592740	5442620	49.131381	85.728744	42F/4	grey	6		OGS(1991)		
92MAN0124	till	1	16	591850	5444150	49.145274	85.740592	42F/4	rusty brown	3		OGS(1991)		
92MAN0125	till	1	16	586150	5442130	49.127933	85.819161	42F/4	brown grey	1		OGS(1991)		
92MAN0126	till	1	16	587800	5444820	49.151892	85.795964	42F/4	rusty brown	6		OGS(1991)		
92MAN0127	till	1	16	587800	5444650	49.150363	85.796001	42F/4	rust brown	2		OGS(1991)		
92MAN0128	till	1	16	587820	5444500	49.149011	85.795760	42F/4	grey to rust	2		OGS(1991)		
92MAN0129	till	1	16	586075	5442900	49.134869	85.820025	42F/4	rusty, dark	3		OGS(1991)		
92MAN0133	till	1	16	586350	5442950	49.13528	85.816245	42F/4	grey	3		OGS(1991)		
92MAN0135	till	1	16	584030	5442510	49.131507	85.834429	42F/4	white grey	1		OGS(1991)		
92MAN0140	till	1	16	584550	5442925	49.135305	85.840921	42F/4	white grey	3		OGS(1991)		
92MAN0141	till	1	16	584850	5442700	49.13324	85.836856	42F/4		3		OGS(1991)		
92MAN0144	till	1	16	585530	5442800	49.134045	85.827516	42F/4	rusty grey	3		OGS(1991)		

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92KFA0802	Esker sample; interbedded sand and gravel.
92KFA0803	Deposit of very thin drift; 10 cm A-horizon, 45 cm B-horizon; low to medium oxidation.
92KFA0804	Interbedded laminated silt and pebbly diamicton; abandoned pit.
92KFA0805	Ice contact deposit; cobbley gravel.
92KFA0806	Esker sample; interbedded gravelly sand and gravel.
92MAN0107	Diamicton
92MAN0108	Diamicton
92MAN0109	Diamicton
92MAN0110	Diamicton
92MAN0111	Diamicton
92MAN0112	Diamicton
92MAN0113	Very pebbly diamicton; Paleozoic carbonate-rich
92MAN0115	Diamicton
92MAN0116	Moderately pebbly diamicton; local Precambrian and Paleozoic clasts.
92MAN0117	Diamicton with few pebbles
92MAN0118	Very sandy diamicton; local Precambrian clasts
92MAN0119	Diamicton
92MAN0121	Very sandy diamicton, structureless
92MAN0122	Very sandy diamicton; Paleozoic and local Precambrian clasts
92MAN0123	Very compact diamicton, rich in Paleozoic clasts
92MAN0124	Local diamicton; B horizon
92MAN0125	Silty diamicton; few pebbles; structureless
92MAN0126	Pebbley, sandy diamicton; numerous Paleozoic clasts noted
92MAN0127	Very sandy and granular diamicton; Paleozoic and local Precambrian clasts
92MAN0128	Silty clay diamicton; structureless
92MAN0129	Pebbley, sandy diamicton; abundant Paleozoic clasts
92MAN0133	Diamicton with abundant local Precambrian clasts; structureless
92MAN0135	Pebbley sandy diamicton; Paleozoic and local Precambrian clasts,
92MAN0140	Diamicton with abundant Paleozoic and local Precambrian clasts; structureless
92MAN0141	Very sandy, loose, stoney diamicton; local Precambrian clasts.
92MAN0144	Diamicton with predominantly local Precambrian clasts; structureless; few pebbles

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92MAN0147C	till	1	16	585130	5443200	49.137698	85.832913	42F/4	red		3	OGS(1991)		
92MAN0149	till	1	16	585400	5443690	49.142068	85.829109	42F/4	brown grey,		3	OGS(1991)		
92MAN0151	till	1	16	585500	5444000	49.144842	85.827672	42F/4	grey brown		3	OGS(1991)		
92MAN0152	till	1	16	585275	5444200	49.146672	85.830714	42F/4	med grey		2	OGS(1991)		
92MAN0154	till	1	16	584600	5445360	49.157198	85.839724	42F/4	rusty grey		2	OGS(1991)		
92MAN0155	till	1	16	584460	5445150	49.155328	85.841688	42F/4	olive grey		2	OGS(1991)		
92MAN0157	till	1	16	584400	5443300	49.138699	85.842898	42F/4	brown grey		3	OGS(1991)		
92MAN0158	till	1	16	584580	5443560	49.141012	85.840376	42F/4	med grey		2	OGS(1991)		
92MAN0159	till	1	16	584700	5443740	49.142614	85.838694	42F/4	grey		2	OGS(1991)		
92MAN0160	till	1	16	585150	5443300	49.138595	85.832618	42F/4			2	OGS(1991)		
92MAN0161	till	1	16	584560	5445000	49.153966	85.840348	42F/4	grey rusty		2	OGS(1991)		
92MAN0162	till	1	16	584900	5445000	49.153919	85.835687	42F/4	dk rusty		2	OGS(1991)		
92MAN0164	till	1	16	585400	5444850	49.1525	85.828863	42F/4	medium		2	OGS(1991)		
92MAN0164	till	1	16	585400	5444880	49.15277	85.828857	42F/4	medium		2	OGS(1991)		
92MAN0165	till	1	16	585600	5445000	49.153821	85.826089	42F/4	medium		2	OGS(1991)		
92MAN0169	till	1	16	581400	5447250	49.174628	85.883221	42F/4			2	OGS(1991)		
92MAN0171	till	1	16	585650	5444500	49.149318	85.825510	42F/4	medium		2	OGS(1991)		
92MAN0172	till	1	16	585720	5444690	49.151017	85.824510	42F/4	creamy		2	OGS(1991)		
92MAN0173	till	1	16	585750	5444930	49.153171	85.824047	42F/4			2	OGS(1991)		
92MAN0174	till	1	16	585825	5445160	49.155229	85.822970	42F/4	rusty brown		2	OGS(1991)		
92MAN0175	till	1	16	586040	5444900	49.152861	85.820077	42F/4			2	OGS(1991)		
92MAN0178	till	1	16	580800	5441700	49.153261	85.824045	42F/4	rusty brown		1	OGS(1991)		
92MAN0179	till	1	16	580850	5441350	49.121638	85.891949	42F/4	grey		1	OGS(1991)		
92MAN0180	till	1	16	580800	5440850	49.117148	85.892734	42F/4	white grey		1	OGS(1991)		
92MAN0181	till	1	16	582175	5439740	49.106983	85.874121	42F/4			1	OGS(1991)		
92MAN0182	till	1	16	580750	5439000	49.100516	85.893789	42F/4	light grey		6	OGS(1991)		
92MAN0183Ca	till	0	16	581270	5440450	49.113488	85.886375	42F/4	medium		1	OGS(1991)		
92MAN0183	till	1	16	581270	5440450	49.113488	85.886375	42F/4			1	OGS(1991)		
92MAN0187	till	1	16	578850	5438000	49.091769	85.920008	42F/4	rusty, dark		6	OGS(1991)		
92MAN0190	till	1	16	584000	5442850	49.134706	85.848475	42F/4			3	OGS(1991)		
92MAN0193	till	1	16	583675	5442480	49.131423	85.853006	42F/4	rusty		1	OGS(1991)		

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92MAN0147C	Local sandy diamicton; lodgement facies
92MAN0149	Silty sandy diamicton with more local Precambrian than Paleozoic clasts.
92MAN0151	Loose, structureless diamicton with abundant local Precambrian clasts.
92MAN0152	Silty diamicton with local Precambrian and Paleozoic clasts
92MAN0154	Silty, stoney diamicton with local Precambrian clasts.
92MAN0155	Silty-compact diamicton with Paleozoic and local Precambrian clasts
92MAN0157	Structureless diamicton with Paleozoic and local Precambrian clasts
92MAN0158	Compact diamicton with Paleozoic and local Precambrian clasts
92MAN0159	Loose, structureless diamicton
92MAN0160	Diamicton
92MAN0161	Loose structureless diamicton with local Precambrian clasts
92MAN0162	Sandy diamicton with local Precambrian clasts.
92MAN0164	Loose, stoney diamicton with local Precambrian clasts
92MAN0164	Loose, stoney diamicton with local Precambrian clasts.
92MAN0165	Loose, structureless diamicton with local Precambrian and Paleozoic clasts
92MAN0169	Loose, structureless diamicton; local Precambrian clasts
92MAN0171	Structureless diamicton; local clasts predominant
92MAN0172	Diamicton with Paleozoic and local clasts; leeside deposit
92MAN0173	Diamicton
92MAN0174	Structureless diamiction; local Precambrian clasts predominant.
92MAN0175	Diamicton with Paleozoic and local Precambrian clasts
92MAN0178	Diamicton; Paleozoic clasts noted.
92MAN0179	Loose diamicton; local Precambrian and Paleozoic clasts.
92MAN0180	Very loose diamicton; abundant Paleozoic clasts
92MAN0181	Diamicton
92MAN0182	Moderately loose diamicton; rich in Paleozoic limestone.
92MAN0183Cal	Moderately loose diamicton; rich in Paleozoic limestone.
92MAN0183	Stoney diamicton with local Precambrian clasts
92MAN0187	Structureless, loose diamicton; local Precambrian clasts dominant
92MAN0190	Diamicton
92MAN0193	Stoney diamicton; local Precambrian clasts predominant

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92MAN0194	till	1	16	584320	5440880	49.116945	85.844501	42F/4	grey	1	OGS(1991)			
92MAN0195	till	1	16	583050	5440700	49.115499	85.861938	42F/4	olive	1	OGS(1991)			
92MAN0196	till	1	16	583320	5440230	49.111236	85.858336	42F/4	light olive	1	OGS(1991)			
92MAN0198	till	1	16	585620	5441570	49.122971	85.826543	42F/4	olive grey	1	OGS(1991)			
92MAN0199	till	1	16	585900	5441200	49.119604	85.822785	42F/4	olive grey	1	OGS(1991)			
92MAN0200	till	1	16	585520	5440850	49.116509	85.828066	42F/4	olive grey	1	OGS(1991)			
92MAN0201	till	1	16	586370	5441400	49.121337	85.816303	42F/4	dk olive	1	OGS(1991)			
92MAN0202	till	1	16	587800	5443925	49.143843	85.796159	42F/4		2	OGS(1991)			
92MAN0203	till	1	16	587800	5443850	49.143168	85.796176	42F/4	very dk	2	OGS(1991)			
92MAN0204	till	1	16	587725	5443360	49.138772	85.797311	42F/4	olive grey	3	OGS(1991)			
92MAN0206	till	1	16	587200	5442930	49.13498	85.804600	42F/4	olive	3	OGS(1991)			
92MAN0207	till	1	16	586880	5442900	49.134755	85.808992	42F/4		3	OGS(1991)			
92MAN0212	till	1	16	579750	5428740	49.008369	85.909506	42F/4	olive grey	6	OGS(1991)			
92MAN0213	till	1	16	580750	5430600	49.024968	85.895465	42F/4	medium	6	OGS(1991)			
92MAN0214	till	1	16	580550	5431420	49.032369	85.898037	42F/4	light grey	6	OGS(1991)			
92MAN0215	till	1	16	579000	5430200	49.021597	85.919476	42F/4	light olive	6	OGS(1991)			
92MAN0215B	till	0	16	579000	5430200	49.021597	85.919476	42F/4	rusty olive	6	OGS(1991)			
92MAN0216	till	1	16	580050	5434480	49.059955	85.904271	42F/4	olive buff	6	OGS(1991)			
92MAN0217	till	1	16	581700	5435050	49.064865	85.881576	42F/4	light grey	6	OGS(1991)			
92MAN0218	till	1	16	583370	5436320	49.076063	85.858457	42F/4	light grey	6	OGS(1991)			
92MAN0219	till	1	16	583900	5438320	49.093979	85.850787	42F/4	light grey	6	OGS(1991)			
92MAN0224	till	1	16	601130	5453230	49.22547	85.611102	42F/4	olive grey	6	OGS(1991)			
92MAN0226	till	1	16	594000	5454650	49.239376	85.708664	42F/4	olive grey	3	OGS(1991)			
92MAN0227	till	1	16	588070	5441860	49.125233	85.792909	42F/4	olive grey	1	OGS(1991)			
92MAN0228	till	1	16	588070	5441840	49.125053	85.792914	42F/4	light grey	1	OGS(1991)			
92MAN0230	till	1	16	587225	5440850	49.11627	85.804707	42F/4	creamy,	1	OGS(1991)			
92MAN0232	till	1	16	585870	5440240	49.110975	85.823401	42F/4	rusty olive	1	OGS(1991)			
92MAN0245	till	1	16	585150	5438900	49.099023	85.833546	42F/4	rusty brown	6	OGS(1991)			
92MAN0246	till	1	16	584825	5437960	49.090614	85.838195	42F/4	white grey	6	OGS(1991)			
92MAN0247	till	1	16	584900	5436950	49.08152	85.837380	42F/4	light grey	6	OGS(1991)			
92MAN0249	till	1	16	584400	5433650	49.05191	85.844914	42F/4	rusty,	6	OGS(1991)			

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92MAN0194	Moderately compact diamicton; local Precambrian and Paleozoic clasts
92MAN0195	Gritty, loose, structureless diamicton
92MAN0196	Very stoney, loose diamicton; abundant local Precambrian clasts
92MAN0198	Very stoney, loose, structureless diamicton; local Precambrian clasts
92MAN0199	Very stoney diamicton; local Precambrian clasts
92MAN0200	Very stoney, loose, structureless diamicton.
92MAN0201	Very stoney, local diamicton
92MAN0202	Diamicton
92MAN0203	Loose diamicton with local Precambrian clasts.
92MAN0204	Loose diamicton; local Precambrian and Paleozoic clasts
92MAN0206	Diamicton with local Precambrian clasts
92MAN0207	Diamicton
92MAN0212	Diamicton
92MAN0213	Diamicton with local Precambrian clasts
92MAN0214	Loose diamicton with abundant Paleozoic clasts
92MAN0215	Loose diamicton with abundant Paleozoic clasts
92MAN0215B	Loose diamicton; abundant local and Paleozoic clasts;
92MAN0216	Silty diamicton; deep B horizon
92MAN0217	Clayey diamicton; rich in Paleozoic clasts
92MAN0218	Moderately compact diamicton; Paleozoic clasts predominant
92MAN0219	Moderately compact diamicton; Paleozoic clasts predominant; local Precambrian clasts concentrated at surface
92MAN0224	Loose diamicton; abundant angular local Precambrian clasts
92MAN0226	Loose diamicton; hummocky
92MAN0227	Loose diamicton; local Precambrian clasts abundant
92MAN0228	Compact diamicton; abundant Paleozoic clasts.
92MAN0230	Very compact diamicton; abundant dark fine grained Precambrian clasts
92MAN0232	Loose diamicton; local Precambrian clasts predominant
92MAN0245	Sandy diamicton; local Precambrian clasts predominant
92MAN0246	Very loose diamicton; highly calcareous matrix
92MAN0247	Loose diamicton; abundant Paleozoic clasts;
92MAN0249	Sandy diamicton; local Precambrian clasts

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Lat. deg	Long. deg	NTS Map	Field Colour	Lab. Colour	Rock Type	Rock Ref.	Ox. State	Depth m
92MAN0253	till	1	16	582400	5434450	49.059376	85.872117	42F/4	light grey		6	OGS(1991)		
92MAN0254	till	1	16	582300	5434600	49.060738	85.873455	42F/4	light grey		6	OGS(1991)		
92MAN0256	till	1	16	583960	5432900	49.045225	85.851090	42F/4	rusty brown		6	OGS(1991)		
92MAN0258	till	1	16	584175	5430600	49.02451	85.848626	42F/4			6	OGS(1991)		

Manitouwadge - 1992 Samples - Locations and Descriptions

Sample No.	Description
92MAN0253	Loose diamicton; sand lenses; calcareous matrix
92MAN0254	Loose diamicton; flow till
92MAN0256	Loose, very sandy diamicton;
92MAN0258	Sandy diamicton with local Precambrian clasts

APPENDIX A (ii)

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Trace, Minor, and Major Element Data For Clay-Sized (<0.002 mm) Fraction of 1992 Till Samples

Key

Sample No.	Sample number
Sed. Type	Sediment type of sample
Plot	1 - sample representative of sediment at site 0 - sample less representative of sediment at site
Zone	UTM grid zone
Easting (m)	UTM easting (metres)
Northing (m)	UTM northing (metres)
Lat. (deg)	Latitude (degrees)
Long. (deg)	Longitude (degrees)

Element		Unit of Measure	Detection Limit	Analytical Method
Ag	Silver	ppm	0.2 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Al	Aluminium	per cent	0.01%	HCl-HNO ₃ , (3:1) ICP-AES
As	Arsenic	ppm	5 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Ba	Barium	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Bi	Bismuth	ppm	5 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Ca	Calcium	per cent	0.01%	HCl-HNO ₃ , (3:1) ICP-AES
Cd	Cadmium	ppm	0.2 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Co	Cobalt	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Cr	Chromium	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Cu	Copper	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Fe	Iron	per cent	0.01%	HCl-HNO ₃ , (3:1) ICP-AES
K	Potassium	per cent	0.01%	HCl-HNO ₃ , (3:1) ICP-AES
La	Lanthanum	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Mg	Magnesium	per cent	0.01%	HCl-HNO ₃ , (3:1) ICP-AES
Mn	Manganese	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Mo	Molybdenum	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Na	Sodium	per cent	0.01%	HCl-HNO ₃ , (3:1) ICP-AES
Ni	Nickel	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Pb	Lead	ppm	2 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Sb	Antimony	ppm	5 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Sc	Scandium	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Sr	Strontium	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Ti	Titanium	per cent	0.01%	HCl-HNO ₃ , (3:1) ICP-AES
Tl	Thallium	ppm	10 ppm	HCl-HNO ₃ , (3:1) ICP-AES
V	Vanadium	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Zn	Zinc	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0300	till	1	16	565000	5438900	<0.2	5.78	4	200	<2	0.35	<0.5	21	104	40	4.63	0.47	20
92KFA0301	till	1	16	565650	5439810	<0.2	4.91	6	140	<2	0.29	<0.5	29	112	69	5.28	0.42	60
92KFA0302	till	1	16	565900	5440575	<0.2	6.35	4	130	<2	0.18	<0.5	26	103	75	5.58	0.23	20
92KFA0303	till	1	16	565980	5441540	<0.2	5.16	14	170	<2	0.89	<0.5	23	129	64	5.67	0.33	150
92KFA0304	till	1	16	567390	5440600	<0.2	4.13	4	200	<2	1.7	<0.5	18	116	85	4.3	0.43	60
92KFA0305	till	1	16	567300	5439150	<0.2	4.75	2	190	<2	1.04	<0.5	16	130	56	4.77	0.45	50
92KFA0306	till	1	16	567150	5438060	<0.2	7.73	10	70	<2	0.11	<0.5	20	104	21	4.74	0.13	20
92KFA0307	till	1	16	563880	5449860	<0.2	5.34	2	310	<2	0.39	<0.5	20	136	50	5.19	0.42	30
92KFA0308	till	1	16	563850	5448590	<0.2	5.69	6	350	<2	0.46	<0.5	22	142	77	5.72	0.28	40
92KFA0312	till	1	16	554850	5438850	<0.2	3.09	4	150	<2	2.78	<0.5	13	98	44	3.42	0.29	30
92KFA0313	till	1	16	554850	5438200	0.2	6.59	6	130	<2	0.11	<0.5	18	120	230	6.19	0.19	20
92KFA0314	till	1	16	555230	5437190	0.2	5.62	8	150	<2	0.12	<0.5	18	110	57	7.54	0.2	20
92KFA0315	till	1	16	555890	5436695	0.2	4.8	4	200	<2	1.18	<0.5	17	145	73	5.01	0.26	70
92KFA0316	till	1	16	555200	5438640	<0.2	7.13	10	100	<2	0.14	0.5	15	109	44	4.85	0.15	30
92KFA0317	till	1	16	556640	5435440	0.4	6.34	6	90	<2	0.09	0.5	14	104	106	7.2	0.21	30
92KFA0318	till	1	16	556540	5436340	0.2	4.02	4	60	<2	0.09	<0.5	12	99	65	4.28	0.14	20
92KFA0319	till	1	16	557000	5437340	<0.2	5.71	10	180	<2	0.18	0.5	21	168	80	5.09	0.23	50
92KFA0320	till	1	16	557545	5439705	<0.2	5.96	4	210	<2	0.17	<0.5	22	149	80	5.52	0.24	40
92KFA0400	till	1	16	569200	5434400	0.2	4.12	4	80	<2	0.19	<0.5	15	79	22	3.8	0.17	20
92KFA0401	till	1	16	568900	5434210	0.4	3.65	2	60	<2	0.25	0.5	11	58	35	4.22	0.11	10
92KFA0402	till	1	16	568925	5433450	0.2	4.71	4	60	2	0.1	<0.5	14	75	25	5.06	0.15	20
92KFA0403	till	1	16	568900	5434730	<0.2	4.52	6	30	4	0.07	<0.5	27	58	21	4.38	0.1	110
92KFA0404	till	1	16	568480	5435000	<0.2	3.02	6	70	<2	0.17	<0.5	15	71	17	3.49	0.24	20
92KFA0405	till	1	16	569700	5435820	0.2	4.66	6	160	2	0.4	<0.5	16	117	27	4.3	0.25	50
92KFA0406	till	1	16	569800	5436075	0.4	3.95	2	80	2	0.29	<0.5	26	66	41	4.9	0.32	40
92KFA0408	till	1	16	570250	5437130	0.2	3.27	4	100	<2	0.37	<0.5	14	92	23	3.79	0.25	30
92KFA0409	till	1	16	570850	5437000	0.2	5.98	10	70	<2	0.14	<0.5	16	99	40	3.09	0.24	30
92KFA0410	till	1	16	570900	5437450	0.2	5.56	4	50	2	0.07	<0.5	17	85	27	3.1	0.15	20
92KFA0411	till	1	16	570250	5438250	<0.2	1.47	4	40	<2	0.03	<0.5	2	20	7	1.08	0.11	<10
92KFA0412	till	1	16	570050	5439000	<0.2	4.51	6	80	<2	0.19	<0.5	15	79	20	4.11	0.21	20
92KFA0413	till	1	16	570620	5440250	0.2	4.39	4	110	<2	0.17	<0.5	17	91	23	4.87	0.31	10
92KFA0414	till	1	16	595400	5447300	0.2	3.52	4	130	<2	0.38	<0.5	16	113	49	3.78	0.33	60
92KFA0415	till	1	16	595620	5447610	0.2	4	8	90	2	0.6	<0.5	16	110	63	4.42	0.22	60
92KFA0416	till	1	16	595600	5447900	0.2	6.58	8	100	<2	0.06	<0.5	12	85	8	4.74	0.09	20
92KFA0417	till	1	16	595650	5447420	<0.2	5.15	10	140	<2	0.67	<0.5	19	88	30	6.5	0.21	40
92KFA0418	till	1	16	595810	5447500	<0.2	5.24	20	110	2	0.2	<0.5	25	112	72	5.39	0.25	40
92KFA0419	till	1	16	597100	5447200	0.2	4.86	12	80	2	0.21	<0.5	20	103	33	4.37	0.3	30

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	Tl ppm	V ppm	Zn ppm
92KFA0300	16	565000	5438900	1.25	385	1	2.15	50	8	<2	8	32	0.15	<10	68	104
92KFA0301	16	565650	5439810	1.49	1095	<1	2.3	57	18	<2	14	25	0.1	<10	71	114
92KFA0302	16	565900	5440575	0.99	345	1	3.51	71	8	<2	8	18	0.08	<10	78	92
92KFA0303	16	565980	5441540	1.17	800	<1	2.05	54	16	<2	29	29	0.13	<10	82	94
92KFA0304	16	567390	5440600	1.75	530	<1	2.66	53	8	<2	13	35	0.12	<10	63	150
92KFA0305	16	567300	5439150	1.72	415	<1	1.16	53	6	<2	15	37	0.16	<10	68	106
92KFA0306	16	567150	5438060	0.5	185	<1	4.18	44	<2	<2	5	11	0.12	<10	55	46
92KFA0307	16	563880	5449860	1.58	420	<1	0.83	60	6	<2	12	36	0.15	<10	77	114
92KFA0308	16	563850	5448590	1.5	420	<1	1.61	61	4	<2	13	31	0.15	<10	95	96
92KFA0312	16	554850	5438850	1.94	410	<1	1.42	38	6	<2	9	36	0.11	<10	55	74
92KFA0313	16	554850	5438200	0.8	280	3	2.56	50	18	<2	7	11	0.08	<10	93	74
92KFA0314	16	555230	5437190	0.79	280	3	3.64	42	18	<2	7	12	0.04	<10	104	80
92KFA0315	16	555890	5436695	1.6	505	<1	2.41	51	8	<2	16	27	0.13	<10	80	98
92KFA0316	16	555200	5438640	0.72	210	<1	1.69	38	14	<2	8	13	0.1	<10	87	58
92KFA0317	16	556640	5435440	0.81	385	3	3.31	68	36	<2	9	10	0.04	<10	85	262
92KFA0318	16	556540	5436340	0.77	195	10	3.87	90	80	<2	5	8	0.09	<10	48	342
92KFA0319	16	557000	5437340	1.53	590	1	1.68	75	12	<2	14	19	0.16	<10	82	98
92KFA0320	16	557545	5439705	1.18	475	<1	1.67	70	12	<2	14	18	0.13	<10	90	80
92KFA0400	16	569200	5434400	1.19	280	<1	1.36	36	6	<2	6	14	0.11	<10	61	78
92KFA0401	16	568900	5434210	0.44	270	2	<0.01	23	10	<2	4	15	0.08	<10	84	220
92KFA0402	16	568925	5433450	0.6	195	3	5	36	10	<2	4	8	0.09	<10	60	60
92KFA0403	16	568900	5434730	0.28	615	4	5	39	14	2	10	6	0.16	<10	61	42
92KFA0404	16	568480	5435000	1.09	475	<1	0.81	40	10	<2	5	12	0.11	<10	54	70
92KFA0405	16	569700	5435820	1.43	370	<1	1.36	53	6	<2	11	18	0.12	<10	63	86
92KFA0406	16	569800	5436075	0.97	675	1	4.63	37	38	<2	6	12	0.06	<10	61	444
92KFA0408	16	570250	5437130	1.34	420	<1	1.42	42	4	<2	9	19	0.1	<10	60	86
92KFA0409	16	570850	5437000	0.92	210	1	2.7	52	8	<2	6	11	0.07	<10	48	68
92KFA0410	16	570900	5437450	0.75	175	2	4.14	41	10	<2	6	7	0.04	<10	45	54
92KFA0411	16	570250	5438250	0.13	45	<1	4.05	6	30	<2	1	8	0.03	<10	61	30
92KFA0412	16	570050	5439000	1.04	335	<1	0.89	37	16	<2	6	13	0.14	<10	60	78
92KFA0413	16	570620	5440250	1.16	545	1	1.51	44	16	<2	6	14	0.13	<10	68	100
92KFA0414	16	595400	5447300	1.46	415	<1	3.07	50	12	<2	11	21	0.1	<10	57	116
92KFA0415	16	595620	5447610	1.32	450	<1	4.33	45	16	<2	14	15	0.1	<10	67	146
92KFA0416	16	595600	5447900	0.66	160	1	1.9	31	24	2	9	7	0.14	<10	77	64
92KFA0417	16	595650	5447420	0.99	790	1	2.96	39	30	<2	8	13	0.07	<10	68	130
92KFA0418	16	595810	5447500	1.11	755	1	2.78	60	30	<2	12	12	0.07	<10	71	116
92KFA0419	16	597100	5447200	1.14	760	1	1.57	47	22	2	13	18	0.12	<10	60	80

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0420	till	1	16	597370	5447400	<0.2	3.8	6	130	<2	1.69	<0.5	15	106	40	4.25	0.48	50
92KFA0421	till	1	16	597450	5448000	0.4	5.3	10	140	4	0.96	<0.5	23	106	42	5.13	0.34	70
92KFA0422	sand	1	16	597300	5448470	0.2	6.15	8	80	4	0.12	<0.5	21	109	17	5.83	0.26	40
92KFA0423	till	1	16	597200	5449150	0.2	4.75	12	70	4	0.19	<0.5	23	121	41	5.03	0.38	30
92KFA0424	till	1	16	597300	5449175	0.2	3.96	10	140	2	1.75	<0.5	23	110	52	4.67	0.48	80
92KFA0425	sand	1	16	597720	5450320	0.4	5.35	20	120	4	1.15	<0.5	34	119	42	5.11	0.29	220
92KFA0426	till	1	16	597150	5449950	0.4	2.99	14	80	4	0.41	<0.5	26	92	63	4.85	0.39	230
92KFA0427	till	1	16	571575	5443640	<0.2	5.74	8	80	4	0.16	<0.5	21	104	60	4.84	0.16	30
92KFA0428	till	1	16	571330	5444215	<0.2	2.53	10	110	<2	8.31	<0.5	11	76	40	2.97	0.46	<10
92KFA0429	till	1	16	570650	5444250	<0.2	4.54	12	140	2	0.83	<0.5	17	74	23	4.58	0.28	30
92KFA0430	till	1	16	570150	5444100	0.2	4.15	2	100	2	0.8	<0.5	23	92	53	4.75	0.34	60
92KFA0431	till	1	16	569745	5444050	<0.2	2.03	4	60	2	0.07	<0.5	2	31	11	1.91	0.12	<10
92KFA0432	till	1	16	569360	5442850	<0.2	5.06	10	130	2	0.28	<0.5	20	102	20	5.03	0.19	20
92KFA0433	till	1	16	568400	5443535	<0.2	6.01	12	80	4	0.22	<0.5	24	85	50	5.02	0.27	100
92KFA0434	till	1	16	568100	5443850	0.2	4.5	4	70	2	0.21	<0.5	20	102	47	4.44	0.25	40
92KFA0435	till	1	16	570960	5446715	<0.2	5.14	4	90	2	0.21	<0.5	20	111	96	4.37	0.19	30
92KFA0438	till	1	16	583400	5407230	<0.2	6.52	8	120	4	0.19	<0.5	23	136	52	5.36	0.29	40
92KFA0439	till	1	16	583300	5407080	<0.2	4.71	8	90	4	0.54	<0.5	44	111	253	4.66	0.38	50
92KFA0440	till	1	16	582900	5406350	<0.2	3.09	2	100	2	0.35	<0.5	25	85	101	4.07	0.37	60
92KFA0441	till	1	16	583220	5406330	0.2	3.49	4	180	<2	3.33	<0.5	22	86	147	4.08	0.47	120
92KFA0442	till	1	16	582070	5406320	<0.2	4.81	4	80	2	0.21	<0.5	24	112	81	4.79	0.28	40
92KFA0443	till	1	16	582760	5406120	0.2	4.94	8	70	4	0.19	<0.5	20	89	35	3.86	0.24	20
92KFA0444	till	1	16	581840	5405960	<0.2	1.81	4	120	<2	9.2	<0.5	20	60	91	2.39	0.33	20
92KFA0445	till	1	16	581050	5406250	0.6	5.38	4	150	<2	0.24	<0.5	42	197	80	5.92	0.5	20
92KFA0446	till	1	16	579650	5406520	<0.2	4.89	10	100	2	0.3	<0.5	21	110	61	3.84	0.3	40
92KFA0447	till	1	16	580350	5406470	<0.2	4.63	<2	110	<2	0.41	<0.5	29	132	80	4.3	0.62	60
92KFA0448	till	1	16	580800	5405320	<0.2	5.35	4	90	4	0.32	<0.5	31	135	83	4.86	0.46	60
92KFA0449	till	1	16	581220	5411900	<0.2	6.22	10	90	4	0.19	<0.5	27	111	122	4.6	0.25	40
92KFA0450	till	1	16	579480	5410350	0.2	2.42	16	80	<2	4.64	<0.5	43	89	83	3.44	0.3	30
92KFA0451	till	1	16	578900	5412000	0.2	3.48	6	80	2	0.27	<0.5	40	284	108	4.75	0.19	20
92KFA0452	till	1	16	579175	5411330	<0.2	4.63	6	60	2	0.23	<0.5	17	105	47	4.49	0.24	30
92KFA0453	gravel	1	16	579000	5411000	<0.2	4.48	6	80	2	0.34	<0.5	26	181	68	4.51	0.36	50
92KFA0454	till	1	16	579180	5410830	<0.2	4.24	4	140	2	0.61	<0.5	24	125	90	5.41	0.61	120
92KFA0455	till	1	16	581800	5409820	<0.2	4.71	4	70	2	0.46	<0.5	21	104	88	4.38	0.45	70
92KFA0456	till	1	16	582100	5410270	<0.2	4.56	4	70	4	0.37	<0.5	21	115	83	4.69	0.36	90
92KFA0457	till	1	16	581800	5408950	<0.2	5.1	<2	90	<2	0.63	<0.5	24	136	158	5.27	0.68	70
92KFA0458	till	1	16	580250	5409000	<0.2	3.84	2	90	2	0.64	<0.5	34	154	87	4.61	0.54	40

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	Tl ppm	V ppm	Zn ppm
92KFA0420	16	597370	5447400	2.06	540	<1	1.04	51	18	<2	12	29	0.12	<10	58	98
92KFA0421	16	597450	5448000	1.17	725	<1	2.44	47	26	<2	14	18	0.13	<10	76	96
92KFA0422	16	597300	5448470	0.8	610	2	4.43	54	22	<2	16	12	0.04	<10	93	100
92KFA0423	16	597200	5449150	1.37	840	<1	3.72	57	22	<2	14	17	0.05	<10	75	84
92KFA0424	16	597300	5449175	1.81	870	<1	1.64	56	18	<2	12	32	0.07	<10	66	128
92KFA0425	16	597720	5450320	0.87	2065	<1	4.15	53	32	<2	30	13	0.09	<10	63	76
92KFA0426	16	597150	5449950	1.25	1390	1	3.66	49	30	<2	27	19	0.04	<10	61	114
92KFA0427	16	571575	5443640	1.04	285	1	2.45	48	18	<2	8	12	0.06	<10	98	76
92KFA0428	16	571330	5444215	1.76	450	<1	0.88	32	12	<2	7	69	0.09	<10	44	84
92KFA0429	16	570650	5444250	0.94	685	<1	2.91	40	16	<2	6	18	0.09	<10	66	98
92KFA0430	16	570150	5444100	1.39	915	<1	3.77	51	18	2	11	17	0.09	<10	70	110
92KFA0431	16	569745	5444050	0.2	60	2	3.87	8	34	<2	2	7	0.04	<10	88	40
92KFA0432	16	569360	5442850	1.14	335	1	2.14	47	12	<2	6	14	0.1	<10	94	92
92KFA0433	16	568400	5443535	1.18	660	1	2.98	45	20	2	14	15	0.07	<10	67	98
92KFA0434	16	568100	5443850	1.42	810	1	2.79	45	2	<2	8	13	0.09	<10	69	102
92KFA0435	16	570960	5446715	1.21	345	<1	1.45	67	6	<2	8	12	0.12	<10	66	84
92KFA0438	16	583400	5407230	1.06	505	1	1.94	57	16	<2	15	16	0.05	<10	83	80
92KFA0439	16	583300	5407080	1.71	780	<1	3.13	75	42	<2	13	46	0.08	<10	68	90
92KFA0440	16	582900	5406350	1.22	945	<1	2.61	63	24	<2	8	17	0.04	<10	73	86
92KFA0441	16	583220	5406330	1.83	855	<1	2.63	46	16	2	10	41	0.08	<10	67	110
92KFA0442	16	582070	5406320	1.13	840	1	3.23	52	20	<2	10	15	0.09	<10	80	82
92KFA0443	16	582760	5406120	0.87	625	1	3.67	48	22	<2	7	12	0.1	<10	57	64
92KFA0444	16	581840	5405960	1.68	460	<1	3.11	31	12	<2	6	51	0.04	<10	44	94
92KFA0445	16	581050	5406250	1.5	550	2	3.83	168	8	<2	7	18	0.06	<10	106	120
92KFA0446	16	579650	5406520	1.02	625	1	4.63	48	22	<2	8	17	0.07	<10	68	70
92KFA0447	16	580350	5406470	1.84	850	1	2.78	225	20	<2	10	24	0.04	<10	79	116
92KFA0448	16	580800	5405320	1.21	780	2	4.44	65	12	<2	8	24	0.09	<10	93	82
92KFA0449	16	581220	5411900	0.91	465	1	2.06	91	28	<2	10	14	0.07	<10	66	68
92KFA0450	16	579480	5410350	1.78	955	<1	4.74	44	24	<2	11	35	0.06	<10	47	108
92KFA0451	16	578900	5412000	1.4	425	1	3.91	259	32	<2	4	17	0.04	<10	53	72
92KFA0452	16	579175	5411330	0.95	335	1	4.12	48	22	2	7	15	0.1	<10	74	62
92KFA0453	16	579000	5411000	1.46	1030	<1	4.04	67	26	<2	9	20	0.06	<10	73	96
92KFA0454	16	579180	5410830	2.11	945	1	2.41	52	24	<2	16	35	0.05	<10	93	144
92KFA0455	16	581800	5409820	1.62	775	1	3.3	50	18	<2	8	31	0.03	<10	88	102
92KFA0456	16	582100	5410270	1.31	960	<1	3.32	56	18	<2	15	22	0.05	<10	74	98
92KFA0457	16	581800	5408950	2.66	805	<1	2.4	64	12	<2	8	40	0.04	<10	93	164
92KFA0458	16	580250	5409000	2.59	795	<1	2.9	244	8	<2	7	32	0.04	<10	92	106

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0459	till	1	16	580050	5407800	<0.2	5.76	<2	110	6	0.25	<0.5	23	99	114	4.56	0.51	60
92KFA0460	till	1	16	604775	5452325	<0.2	3.16	16	70	6	0.41	<0.5	38	105	87	4.93	0.36	120
92KFA0461	till	1	16	604950	5452500	<0.2	2.24	16	100	2	6.27	<0.5	66	81	128	3.62	0.32	<10
92KFA0462	till	1	16	605350	5451880	<0.2	5.4	16	90	4	0.17	<0.5	31	117	60	5.83	0.29	40
92KFA0463	till	1	16	648770	5450320	<0.2	3.45	10	200	4	1.93	<0.5	28	88	123	5	0.55	60
92KFA0464	till	1	16	648570	5452280	<0.2	3.52	12	100	2	2.92	<0.5	26	95	61	4.09	0.49	30
92KFA0465	till	1	16	646600	5452730	<0.2	2.69	6	140	<2	7.95	<0.5	13	77	69	3.35	0.52	<10
92KFA0466	till	1	16	645700	5453580	<0.2	3.24	4	160	<2	2.12	<0.5	18	98	62	4.37	0.53	30
92KFA0467	till	1	16	645400	5454030	<0.2	3.28	2	170	<2	3.11	<0.5	15	99	54	4	0.44	30
92KFA0468	till	1	16	644700	5455000	<0.2	2.78	6	130	<2	3	<0.5	21	87	80	3.73	0.37	30
92KFA0469	till	1	16	643200	5456800	<0.2	3.51	4	120	<2	1.68	<0.5	18	112	49	4.39	0.35	40
92KFA0470	till	1	16	644450	5458750	<0.2	4.97	6	90	2	0.17	<0.5	26	143	52	5.48	0.26	20
92KFA0471	till	1	16	644690	5459050	<0.2	2.81	6	100	<2	6.66	<0.5	16	79	49	3.34	0.33	<10
92KFA0472	till	1	16	645050	5459750	<0.2	2.33	6	100	<2	9.96	<0.5	22	76	76	3.19	0.38	<10
92KFA0473	till	1	16	643450	5458900	<0.2	2.81	8	110	<2	9.37	<0.5	13	80	50	3.29	0.53	<10
92KFA0474	till	1	16	643300	5458300	0.2	4.36	6	120	2	0.8	<0.5	21	129	56	5.31	0.71	110
92KFA0475	till	1	16	641370	5457810	<0.2	3.61	6	120	<2	2.9	<0.5	18	91	57	4.42	0.39	30
92KFA0476	till	1	16	640250	5458170	<0.2	2.38	2	100	<2	7.59	<0.5	13	70	46	3.12	0.41	<10
92KFA0477	till	1	16	639350	5458600	<0.2	2.71	6	110	<2	7.05	<0.5	19	73	73	3.56	0.46	<10
92KFA0478	till	1	16	637550	5458240	<0.2	3.16	2	100	<2	4.1	<0.5	18	86	41	4.01	0.46	30
92KFA0479	till	1	16	638025	5459150	<0.2	3.36	6	110	<2	3.53	<0.5	18	92	47	4.13	0.55	30
92KFA0480	till	1	16	638875	5461560	<0.2	2.84	10	100	<2	2.72	<0.5	24	94	65	4.19	0.39	30
92KFA0481	till	1	16	638300	5462800	<0.2	2.56	4	90	<2	9.19	<0.5	14	72	51	3.14	0.27	<10
92KFA0482	till	1	16	636730	5457125	<0.2	3.23	6	120	<2	3.47	<0.5	15	89	49	4.08	0.4	30
92KFA0483	till	1	16	635600	5456775	<0.2	3.09	8	180	<2	7.32	<0.5	15	92	75	3.93	0.59	<10
92KFA0484	till	1	16	635050	5456200	<0.2	3.13	4	110	<2	3.51	<0.5	16	87	51	4.09	0.44	20
92KFA0485	till	1	16	634860	5455950	<0.2	3.51	8	200	<2	3.65	<0.5	20	131	65	4.71	0.68	20
92KFA0486	till	1	16	634470	5455250	<0.2	2.67	10	130	<2	4.48	<0.5	22	87	49	3.74	0.45	20
92KFA0487	till	1	16	633290	5454650	<0.2	2.88	6	130	<2	7.49	<0.5	15	87	46	3.5	0.42	<10
92KFA0488	till	1	16	630925	5455030	<0.2	3.23	4	140	<2	5.92	<0.5	16	91	49	3.92	0.47	20
92KFA0489	till	1	16	630100	5456350	<0.2	3.53	8	130	<2	1.51	<0.5	20	124	86	4.42	0.46	80
92KFA0490	till	1	16	630500	5457000	<0.2	3.58	2	150	<2	2.24	<0.5	16	109	80	4.25	0.62	30
92KFA0491	till	1	16	631380	5460200	<0.2	3.25	2	120	<2	5.1	<0.5	15	93	46	4.07	0.5	20
92KFA0492	till	1	16	631150	5459500	<0.2	2.93	2	90	<2	6.06	<0.5	14	79	46	3.57	0.46	10
92KFA0493	till	1	16	630600	5458530	<0.2	3.42	2	180	<2	4.72	<0.5	17	98	74	4.31	0.58	20
92KFA0494	till	1	16	629280	5455350	<0.2	2.85	4	180	<2	3.64	<0.5	21	90	123	4.04	0.55	20
92KFA0495	till	1	16	627175	5455690	<0.2	2.85	6	140	<2	6.54	<0.5	13	83	61	3.45	0.53	<10

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	Tl ppm	V ppm	Zn ppm
92KFA0459	16	580050	5407800	1.18	880	<1	3.92	64	24	<2	13	16	0.08	<10	76	94
92KFA0460	16	604775	5452325	1.09	1515	<1	5	71	34	<2	26	11	0.07	<10	68	104
92KFA0461	16	604950	5452500	1.87	1485	<1	5	65	46	2	7	40	0.04	<10	52	158
92KFA0462	16	605350	5451880	1.01	790	<1	2.98	65	34	<2	15	13	0.06	<10	82	106
92KFA0463	16	648770	5450320	1.71	925	<1	2.87	59	28	<2	14	24	0.07	<10	66	162
92KFA0464	16	648570	5452280	1.57	705	<1	3.51	56	20	<2	9	32	0.06	10	61	114
92KFA0465	16	646600	5452730	1.91	470	<1	1.89	43	12	2	7	58	0.04	<10	52	94
92KFA0466	16	645700	5453580	2.17	665	<1	2.53	59	20	<2	11	24	0.07	10	61	110
92KFA0467	16	645400	5454030	2.39	435	<1	1.5	54	10	<2	10	28	0.09	10	56	98
92KFA0468	16	644700	5455000	2.07	820	<1	3.62	53	16	<2	10	24	0.09	10	60	84
92KFA0469	16	643200	5456800	2.01	620	<1	1.4	58	10	<2	12	22	0.1	10	65	98
92KFA0470	16	644450	5458750	1.12	675	1	1.6	82	18	<2	12	10	0.14	<10	86	100
92KFA0471	16	644690	5459050	2.02	615	<1	1.84	45	8	<2	8	47	0.08	<10	46	84
92KFA0472	16	645050	5459750	2.09	790	<1	1.97	45	16	<2	7	63	0.04	<10	47	102
92KFA0473	16	643450	5458900	1.86	420	<1	1.47	36	12	2	7	70	0.06	<10	48	92
92KFA0474	16	643300	5458300	1.78	830	<1	2.08	67	18	<2	25	24	0.09	40	76	116
92KFA0475	16	641370	5457810	1.82	815	<1	2.75	49	16	<2	12	31	0.08	10	62	100
92KFA0476	16	640250	5458170	1.89	490	<1	1.41	42	14	<2	7	56	0.06	<10	46	84
92KFA0477	16	639350	5458600	1.78	645	<1	1.7	43	16	<2	7	55	0.06	<10	48	104
92KFA0478	16	637550	5458240	1.88	525	<1	1.66	48	14	<2	10	39	0.08	10	54	98
92KFA0479	16	638025	5459150	1.85	715	<1	1.98	48	20	<2	11	37	0.07	10	57	100
92KFA0480	16	638875	5461560	2	780	<1	3.72	54	20	<2	10	26	0.05	10	69	118
92KFA0481	16	638300	5462800	1.73	525	<1	1.44	34	12	2	7	58	0.07	<10	46	74
92KFA0482	16	636730	5457125	2.02	580	<1	1.01	45	16	<2	10	36	0.11	<10	58	94
92KFA0483	16	635600	5456775	2	575	<1	1.07	50	16	<2	9	54	0.09	<10	59	110
92KFA0484	16	635050	5456200	1.75	640	<1	1.22	44	14	2	9	37	0.09	10	57	98
92KFA0485	16	634860	5455950	2.24	610	<1	2.14	63	18	<2	10	30	0.07	10	77	110
92KFA0486	16	634470	5455250	2.01	810	<1	3.61	54	20	<2	10	33	0.06	10	57	92
92KFA0487	16	633290	5454650	2.13	575	<1	1.19	40	12	<2	8	53	0.11	<10	52	84
92KFA0488	16	630925	5455030	1.91	580	<1	2.43	49	14	2	10	44	0.08	10	56	90
92KFA0489	16	630100	5456350	1.76	640	<1	3.49	67	14	<2	24	22	0.07	30	70	102
92KFA0490	16	630500	5457000	1.93	460	<1	1.61	75	12	<2	12	32	0.09	10	68	112
92KFA0491	16	631380	5460200	2.04	515	<1	1.16	44	10	<2	9	46	0.1	<10	61	96
92KFA0492	16	631150	5459500	1.57	465	<1	0.95	38	10	<2	8	53	0.09	<10	52	90
92KFA0493	16	630600	5458530	2.17	615	<1	1.56	66	16	2	10	43	0.07	<10	68	108
92KFA0494	16	629280	5455350	1.85	650	1	4.42	74	22	2	10	32	0.03	10	66	106
92KFA0495	16	627175	5455690	1.91	475	<1	1.53	46	12	2	8	50	0.06	<10	54	90

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0496	itll	1	16	624770	5455450	<0.2	3.07	8	140	<2	3.73	<0.5	22	77	99	3.95	0.46	20
92KFA0497	till	1	16	625880	5455575	<0.2	2.92	10	120	<2	4.65	<0.5	20	80	71	3.87	0.44	10
92KFA0498	till	1	16	634550	5454100	<0.2	2.8	4	140	<2	6.66	<0.5	15	80	54	3.7	0.52	10
92KFA0499	till	1	16	633770	5453050	<0.2	3.09	8	150	2	4.5	<0.5	16	86	62	4.08	0.48	20
92KFA0500	till	1	16	632850	5452300	<0.2	2.71	<2	120	<2	5.77	<0.5	12	80	46	3.23	0.37	10
92KFA0501	till	1	16	632570	5452100	<0.2	2.67	4	100	2	6.07	<0.5	17	74	56	3.45	0.44	30
92KFA0502	till	1	16	631500	5451800	<0.2	3.21	<2	160	<2	4.4	<0.5	17	81	54	3.98	0.59	110
92KFA0503	till	1	16	630100	5451300	<0.2	3.86	<2	160	<2	1.5	<0.5	18	117	42	4.43	0.49	40
92KFA0504	till	1	16	629000	5450000	<0.2	3.46	4	140	<2	3.73	<0.5	18	96	55	4.32	0.51	20
92KFA0505	till	1	16	627650	5449210	<0.2	3.29	2	140	<2	5.44	<0.5	13	94	47	3.8	0.61	10
92KFA0506	till	1	16	647580	5449500	<0.2	3.42	2	140	<2	2.87	<0.5	17	93	65	4.32	0.56	30
92KFA0507	till	1	16	647450	5449450	<0.2	3.29	6	200	<2	4.02	<0.5	20	88	82	4.37	0.8	60
92KFA0508	till	1	16	646350	5447650	<0.2	3.61	6	160	<2	1.73	<0.5	19	92	74	4.64	0.52	70
92KFA0509	till	1	16	646630	5445800	<0.2	3.08	8	130	<2	5.36	<0.5	15	86	54	3.97	0.46	10
92KFA0510	till	1	16	645850	5444690	<0.2	2.63	2	140	<2	8.06	<0.5	15	77	55	3.26	0.51	10
92KFA0511	till	1	16	646100	5444050	<0.2	2.81	8	140	<2	5.12	<0.5	19	78	65	4.13	0.57	90
92KFA0512	till	1	16	645370	5442850	<0.2	3.9	10	140	<2	1.84	<0.5	18	104	69	4.62	0.39	40
92KFA0513	till	1	16	646060	5441630	<0.2	3.95	2	140	<2	1.54	<0.5	17	112	58	4.61	0.45	50
92KFA0514	till	1	16	645480	5440830	<0.2	3.56	6	120	<2	2.39	<0.5	18	104	61	4.66	0.58	50
92KFA0515	till	1	16	642760	5446520	<0.2	3.5	6	180	<2	2.83	<0.5	24	80	101	4.71	0.89	70
92KFA0523	till	1	16	580650	5403800	0.2	3.8	2	100	4	0.25	<0.5	26	102	119	4.48	0.4	40
92KFA0524	till	1	16	580640	5403175	<0.2	3.57	<2	50	8	0.23	<0.5	38	69	67	5.01	0.22	100
92KFA0525	till	1	16	580530	5403000	<0.2	4.17	2	100	2	0.53	<0.5	45	107	441	6.64	0.5	50
92KFA0526	till	1	16	579700	5401900	<0.2	4.06	4	80	4	0.31	<0.5	28	90	97	4.63	0.3	140
92KFA0527	till	1	16	579550	5401000	<0.2	5.07	2	170	<2	0.59	<0.5	26	109	81	5.36	0.84	100
92KFA0528	till	1	16	579460	5400600	<0.2	4.83	<2	190	<2	0.57	<0.5	26	102	68	4.81	0.99	80
92KFA0529	till	1	16	584425	5400200	<0.2	6.38	6	100	2	0.25	<0.5	23	106	68	4.7	0.37	70
92KFA0531	till	1	16	585450	5400675	<0.2	2.62	8	160	2	12.97	<0.5	11	72	59	3.3	0.47	60
92KFA0532	till	1	16	585320	5400825	<0.2	4.72	2	400	<2	0.6	<0.5	24	115	43	6.34	1.47	140
92KFA0533	till	1	16	585350	5400900	<0.2	5.31	2	590	<2	0.7	<0.5	26	121	66	6.94	1.67	190
92KFA0534	till	1	16	585450	5401050	<0.2	5.02	6	240	<2	0.46	<0.5	29	107	129	6.06	0.99	100
92KFA0535	till	1	16	593250	5407270	0.4	5.85	10	150	<2	0.33	<0.5	20	148	82	5.85	0.36	110
92KFA0536	till	1	16	593250	5408250	0.2	6.79	8	80	<2	0.15	<0.5	28	99	150	5.37	0.19	20
92KFA0540	till	1	16	585100	5442910	<0.2	3.19	14	120	<2	3.27	<0.5	24	94	112	4.16	0.5	30
92KFA0541	till	1	16	585500	5444250	<0.2	5.56	12	60	4	0.15	<0.5	24	130	50	5.11	0.27	100
92KFA0542	till	1	16	585550	5445175	<0.2	4.49	10	230	4	0.3	7	17	124	301	4.97	0.41	120
92KFA0543	till	1	16	571650	5449450	<0.2	3.44	4	240	<2	2.63	<0.5	24	111	168	4.34	0.8	40

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	Tl ppm	V ppm	Zn ppm
92KFA0496	16	624770	5455450	1.83	815	<1	5	64	32	<2	9	32	0.04	10	57	116
92KFA0497	16	625880	5455575	1.88	805	<1	2.6	55	20	2	8	38	0.06	10	54	104
92KFA0498	16	634550	5454100	1.87	555	<1	1.31	44	14	<2	8	53	0.07	10	51	94
92KFA0499	16	633770	5453050	1.86	595	<1	1.4	50	16	2	9	38	0.07	10	57	100
92KFA0500	16	632850	5452300	1.63	455	<1	0.82	36	10	2	8	50	0.09	<10	44	82
92KFA0501	16	632570	5452100	1.84	720	<1	3.46	41	20	2	8	42	0.04	20	46	120
92KFA0502	16	631500	5451800	1.91	675	<1	1.85	41	22	<2	10	41	0.06	40	56	124
92KFA0503	16	630100	5451300	2.01	480	<1	2.82	60	8	<2	11	25	0.07	10	67	110
92KFA0504	16	629000	5450000	1.87	755	<1	1.53	50	16	<2	9	41	0.08	10	61	100
92KFA0505	16	627650	5449210	1.83	460	<1	1.08	41	12	<2	9	51	0.09	10	56	96
92KFA0506	16	647580	5449500	1.82	710	<1	1.87	49	16	<2	9	32	0.06	10	60	108
92KFA0507	16	647450	5449450	2.31	660	<1	1.89	58	14	<2	9	34	0.05	30	55	296
92KFA0508	16	646350	5447650	1.6	715	<1	4.18	60	20	<2	12	21	0.08	30	62	136
92KFA0509	16	646630	5445800	1.77	565	<1	1.64	43	14	<2	8	45	0.06	<10	52	100
92KFA0510	16	645850	5444690	2	540	<1	2.37	45	16	<2	7	52	0.04	10	44	106
92KFA0511	16	646100	5444050	2.23	730	<1	3.01	39	24	<2	9	41	0.04	30	62	124
92KFA0512	16	645370	5442850	1.9	510	<1	2.28	53	14	<2	12	26	0.09	10	59	124
92KFA0513	16	646060	5441630	1.99	500	<1	2.24	56	6	<2	13	24	0.09	10	64	108
92KFA0514	16	645480	5440830	2.1	715	<1	2.62	51	18	<2	14	28	0.07	20	67	108
92KFA0515	16	642760	5446520	2.43	710	<1	2.79	48	16	<2	9	29	0.03	20	70	152
92KFA0523	16	580650	5403800	0.98	835	2	5	83	32	<2	20	13	0.08	20	69	80
92KFA0524	16	580640	5403175	0.64	995	4	5	46	18	<2	10	17	0.13	80	61	92
92KFA0525	16	580530	5403000	1.95	840	2	2.25	162	18	<2	18	27	0.06	10	98	874
92KFA0526	16	579700	5401900	1.27	1050	2	5	49	52	<2	13	40	0.07	60	65	300
92KFA0527	16	579550	5401000	2.41	970	1	2.66	62	22	2	9	49	0.04	20	99	200
92KFA0528	16	579460	5400600	2.32	740	<1	2.66	78	12	<2	7	46	0.04	20	87	166
92KFA0529	16	584425	5400200	1.35	660	1	3.36	50	24	2	10	18	0.06	30	70	1180
92KFA0531	16	585450	5400675	2.26	460	<1	1.01	44	16	8	7	86	0.11	<10	45	104
92KFA0532	16	585320	5400825	2.89	765	1	1.43	64	14	<2	11	37	0.17	20	116	228
92KFA0533	16	585350	5400900	3.11	960	<1	1.1	67	4	<2	15	41	0.24	40	130	230
92KFA0534	16	585450	5401050	2.6	1115	<1	2.49	67	18	<2	12	37	0.06	20	105	208
92KFA0535	16	593250	5407270	1.49	715	3	1.65	54	20	<2	33	21	0.15	60	86	114
92KFA0536	16	593350	5408250	0.94	285	2	2.5	54	8	<2	9	12	0.08	<10	72	66
92KFA0540	16	585100	5442910	2.12	845	<1	2.87	62	18	<2	9	31	0.04	10	63	220
92KFA0541	16	585500	5444250	0.72	1485	1	4.02	61	26	<2	20	10	0.1	80	58	64
92KFA0542	16	585550	5445175	1.21	810	1	1.9	55	14	<2	20	19	0.1	70	67	1644
92KFA0543	16	571650	5449450	2.53	680	<1	1.99	72	18	2	9	29	0.06	10	71	262

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0544	till	1	16	572490	5449450	<0.2	3.01	8	160	<2	6.24	<0.5	19	102	95	3.63	0.64	30
92KFA0545	till	1	16	593550	5406300	<0.2	3.14	10	150	2	0.64	<0.5	99	111	658	5.93	0.37	60
92KFA0546	till	1	16	593500	5408690	<0.2	5.82	8	70	2	0.21	<0.5	25	94	155	3.66	0.29	20
92KFA0547	till	1	16	593300	5408770	0.4	5.23	8	110	2	0.15	<0.5	13	68	35	5.42	0.11	10
92KFA0548	till	1	16	593200	5410480	<0.2	5.97	8	130	<2	0.25	<0.5	14	134	139	3.72	0.18	50
92KFA0549	till	1	16	593300	5411540	<0.2	4.39	10	140	2	0.38	<0.5	25	107	70	5.15	0.39	40
92KFA0550	till	1	16	592220	5411100	<0.2	7.27	14	50	2	0.06	<0.5	19	83	20	3.93	0.12	20
92KFA0551	till	1	16	592470	5410000	<0.2	4.61	8	90	<2	0.13	<0.5	25	125	38	6.4	0.11	10
92KFA0552	till	1	16	592680	5409530	<0.2	4.77	4	90	2	0.19	<0.5	25	165	191	4.64	0.13	20
92KFA0553	gravel	1	16	593025	5408600	0.2	7.06	10	30	2	0.13	<0.5	20	72	28	5.11	0.06	10
92KFA0554	till	1	16	593200	5406600	0.6	4.8	8	90	<2	0.52	<0.5	66	392	781	5.79	0.4	70
92KFA0555	till	1	16	593330	5406500	1	5.3	10	90	<2	0.25	<0.5	33	104	236	5.42	0.24	40
92KFA0556	till	1	16	593400	5406380	1.2	4.3	8	60	<2	0.24	<0.5	128	122	473	8.08	0.25	60
92KFA0558	sand	1	16	589050	5413200	0.8	5.51	10	80	<2	0.18	<0.5	22	142	47	4.26	0.23	30
92KFA0559	till	1	16	589530	5413280	0.2	6.17	8	60	<2	0.11	<0.5	14	102	29	3.27	0.12	20
92KFA0560	till	1	16	589650	5413100	1	4.84	10	40	<2	0.14	0.5	24	156	56	5.67	0.16	60
92KFA0561	till	1	16	589420	5412600	0.4	6.44	12	70	<2	0.12	<0.5	23	147	38	4.78	0.18	20
92KFA0562	till	1	16	589950	5412100	1	6.39	10	120	<2	0.37	<0.5	20	162	88	4.4	0.36	40
92KFA0563DU	till	1	16	589150	5412300	0.4	5.9	10	60	<2	0.2	<0.5	28	171	68	5.14	0.15	30
92KFA0564	till	1	16	592125	5454170	0.4	4.62	4	240	<2	1.02	<0.5	23	140	96	4.91	0.48	70
92KFA0565	till	1	16	591490	5452850	<0.2	3.29	8	170	<2	3.38	<0.5	20	97	87	4.38	0.54	<10
92KFA0566	till	1	16	591000	5451750	1	5.39	18	180	<2	0.23	<0.5	19	119	33	5.56	0.23	90
92KFA0568	till	1	16	574675	5454275	0.4	4.59	14	130	<2	1.45	<0.5	32	104	53	5.09	0.22	40
92KFA0570	till	1	16	577100	5457075	0.4	5.55	8	200	<2	0.19	<0.5	25	162	96	5.93	0.27	30
92KFA0571	till	1	16	569650	5471425	<0.2	3.15	4	260	<2	7.88	<0.5	16	132	98	4.27	1.11	<10
92KFA0572	till	1	16	569800	5472590	<0.2	3.54	8	180	<2	4.15	<0.5	20	121	69	4.02	0.48	<10
92KFA0573	till	1	16	569800	5473140	<0.2	4.44	4	270	<2	0.85	<0.5	22	146	81	5.12	0.68	70
92KFA0574	till	1	16	569700	5474480	<0.2	4.62	4	100	<2	0.09	<0.5	10	93	19	3.97	0.19	10
92KFA0575	till	1	16	571850	5480150	<0.2	3.59	6	200	<2	4.08	<0.5	18	104	74	4.35	0.64	<10
92KFA0576	till	1	16	571960	5478580	0.2	3.98	6	180	<2	1.09	<0.5	31	190	169	5.49	0.73	50
92KFA0576A	till	0	16	571960	5478580	0.8	3.74	6	110	<2	0.35	<0.5	34	204	162	5.66	0.36	110
92KFA0577	till	1	16	570850	5476100	<0.2	4.03	8	170	<2	1.26	<0.5	20	135	74	5.13	0.55	30
92KFA0578	till	1	16	612550	5409930	0.6	5.97	12	70	<2	0.08	<0.5	21	109	24	4.84	0.2	20
92KFA0579	till	1	16	613600	5410400	0.4	5.15	6	80	<2	0.15	<0.5	17	90	29	4.98	0.15	20
92KFA0580	till	1	16	618450	5408500	0.4	5.94	6	110	<2	0.11	<0.5	19	102	25	4.66	0.13	20
92KFA0581	till	1	16	620750	5409475	0.4	6	6	340	<2	0.38	<0.5	31	90	76	5.48	1.05	40
92KFA0583	till	1	16	623690	5412720	1	4.97	4	330	<2	0.43	<0.5	22	126	81	5.7	0.55	130

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	Tl ppm	V ppm	Zn ppm
92KFA0544	16	572490	5449450	2.28	545	<1	1.5	58	16	<2	8	51	0.08	10	59	124
92KFA0545	16	593550	5406300	1.18	670	1	3.13	430	18	<2	18	15	0.08	10	62	218
92KFA0546	16	593500	5408690	0.91	485	2	3.5	57	14	<2	7	11	0.08	10	54	60
92KFA0547	16	593300	5408770	0.38	275	4	3.39	31	24	<2	4	10	0.14	<10	78	210
92KFA0548	16	593200	5410480	1.01	460	1	2.6	42	16	2	14	17	0.09	10	66	78
92KFA0549	16	593300	5411540	1.43	950	1	2.16	67	16	<2	10	16	0.11	10	75	100
92KFA0550	16	592220	5411100	0.45	160	2	4.87	40	20	4	8	5	0.1	<10	59	38
92KFA0551	16	592470	5410000	0.41	410	3	3.73	112	14	2	5	9	0.15	<10	84	52
92KFA0552	16	592680	5409530	1.27	460	1	2.44	171	12	2	7	10	0.11	<10	76	102
92KFA0553	16	593025	5408600	0.25	325	3	4.05	31	12	4	5	8	0.08	<10	72	38
92KFA0554	16	593200	5406600	2.17	920	1	3.45	968	34	2	37	19	0.07	<10	84	248
92KFA0555	16	593330	5406500	0.83	1010	<1	3.33	146	18	<2	10	12	0.12	<10	77	88
92KFA0556	16	593400	5406380	0.97	1125	<1	3.59	392	58	<2	24	11	0.08	<10	62	294
92KFA0558	16	589050	5413200	0.99	480	<1	3.23	70	20	<2	12	11	0.07	<10	71	60
92KFA0559	16	589530	5413280	0.71	160	<1	3.58	43	4	<2	9	8	0.06	<10	49	44
92KFA0560	16	589650	5413100	0.69	480	<1	4.02	111	22	<2	19	10	0.04	<10	94	52
92KFA0561	16	589420	5412600	0.77	200	<1	4.73	56	16	<2	16	9	0.03	<10	94	50
92KFA0562	16	589950	5412100	1.11	500	<1	3.29	64	14	2	14	18	0.07	<10	68	56
92KFA0563DL	16	589150	5412300	0.7	350	<1	3.86	74	10	4	13	10	0.08	<10	80	50
92KFA0564	16	592125	5454170	1.81	805	<1	1.9	69	8	<2	17	24	0.12	<10	73	128
92KFA0565	16	591490	5452850	1.83	715	<1	2.69	53	10	<2	10	33	0.07	<10	63	106
92KFA0566	16	591000	5451750	1.22	515	<1	1.99	55	18	<2	29	18	0.11	<10	83	76
92KFA0568	16	574675	5454275	1.1	915	<1	4.37	49	22	4	13	20	0.09	<10	77	90
92KFA0570	16	577100	5457075	1.23	520	<1	1.78	82	8	<2	22	18	0.13	<10	90	92
92KFA0571	16	569650	5471425	2.04	560	<1	1.9	71	8	<2	11	55	0.04	<10	80	132
92KFA0572	16	569800	5472590	1.85	625	<1	2.25	58	12	<2	11	33	0.08	<10	66	110
92KFA0573	16	569800	5473140	1.75	750	<1	1.93	81	14	<2	17	24	0.09	<10	86	108
92KFA0574	16	569700	5474480	0.46	125	<1	2.72	28	28	<2	7	10	0.08	<10	94	44
92KFA0575	16	571850	5480150	1.83	740	<1	3.12	60	14	<2	10	37	0.06	<10	71	112
92KFA0576	16	571960	5478580	2.23	875	<1	4.1	115	26	<2	15	16	0.06	<10	110	152
92KFA0576A	16	571960	5478580	1.68	770	<1	3.6	113	28	<2	15	10	0.04	<10	96	96
92KFA0577	16	570850	5476100	2.14	710	<1	2.74	69	16	<2	14	23	0.1	<10	81	120
92KFA0578	16	612550	5409930	0.66	420	<1	4.82	44	16	<2	11	8	0.04	<10	88	52
92KFA0579	16	613600	5410400	0.87	300	<1	4.2	43	8	<2	6	11	0.03	<10	87	64
92KFA0580	16	618450	5408500	0.81	290	<1	4.72	44	18	<2	10	10	0.04	<10	89	82
92KFA0581	16	620750	5409475	2.03	735	<1	2.91	59	12	<2	8	39	0.19	<10	95	132
92KFA0583	16	623690	5412720	1.64	805	<1	2.59	59	18	<2	32	23	0.13	<10	83	116

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0584	till	1	16	627710	5420890	1.6	3.13	4	120	<2	0.34	<0.5	21	94	98	4.08	0.56	210
92KFA0585	till	1	16	625630	5421590	0.4	6.35	12	120	<2	0.2	<0.5	27	96	49	5.72	0.3	30
92KFA0586	till	1	16	620590	5421400	1.2	5.05	18	120	<2	0.16	<0.5	19	121	92	8.33	0.29	110
92KFA0587	till	1	16	619270	5420320	0.8	6.52	16	130	<2	0.13	<0.5	29	117	38	5.47	0.3	30
92KFA0589	till	1	16	630550	5421425	0.6	4.05	2	100	<2	0.16	<0.5	20	96	48	5.66	0.19	10
92KFA0590	till	1	16	631090	5422390	<0.2	2.99	4	170	<2	6.4	<0.5	12	98	105	3.59	0.67	<10
92KFA0592	till	1	16	633475	5423950	0.2	2.67	4	140	<2	2.64	<0.5	34	76	225	3.82	0.47	30
92KFA0593	till	1	16	626325	5414075	0.8	5.55	14	60	<2	0.1	<0.5	26	91	31	4.47	0.15	20
92KFA0594	till	1	16	628050	5414475	0.2	2.88	8	170	<2	3.13	<0.5	24	83	100	3.9	0.45	60
92KFA0595	till	1	16	630845	5414200	<0.2	2.61	12	110	<2	4.23	<0.5	29	81	132	4	0.4	<10
92KFA0596	till	1	16	629600	5414410	0.8	6.69	4	160	<2	0.25	<0.5	17	116	34	4.36	0.17	40
92KFA0597	till	1	16	631400	5414150	0.2	4.05	4	360	<2	1.39	<0.5	20	102	161	5.25	1.05	70
92KFA0598	till	1	16	632950	5416025	<0.2	2.87	14	110	<2	4.17	<0.5	37	86	120	3.65	0.42	60
92KFA0599	till	1	16	634380	5417180	0.2	4.53	26	160	2	0.45	<0.5	28	157	83	5.09	0.55	500
92KFA0600	till	1	16	631170	5413170	<0.2	2.88	8	120	4	4.4	<0.5	20	82	70	3.8	0.46	40
92KFA0601	till	1	16	552000	5455000	<0.2	3.77	6	110	2	0.08	<0.5	11	119	29	3.4	0.2	10
92KFA0602	till	1	16	558100	5454850	<0.2	4.54	16	100	<2	0.13	<0.5	17	112	51	3.48	0.2	10
92KFA0603	till	1	16	538650	5454450	0.6	3.57	18	130	<2	1.31	<0.5	33	110	60	4.22	0.25	90
92KFA0604	till	1	16	540100	5454900	0.6	3.87	20	190	<2	1.59	<0.5	48	174	81	5.69	0.35	180
92KFA0605	till	1	16	551300	5454300	<0.2	2.69	8	110	<2	0.05	<0.5	6	57	26	1.76	0.16	10
92KFA0606	till	1	16	552400	5454150	<0.2	3.49	14	100	<2	0.07	<0.5	9	108	27	3.11	0.17	10
92KFA0607	till	1	16	554000	5454000	<0.2	4.89	18	30	<2	0.06	<0.5	8	143	26	3.56	0.05	10
92KFA0608	till	1	16	555550	5454100	0.2	5.5	28	70	2	0.2	<0.5	23	99	28	4.74	0.2	20
92KFA0609	till	1	16	558450	5454150	<0.2	6.89	24	90	<2	0.14	<0.5	25	158	91	5.52	0.27	30
92KFA0610	till	1	16	539750	5453750	<0.2	4.21	40	190	<2	0.29	<0.5	36	133	26	7.97	0.27	20
92KFA0611	till	1	16	549900	5453000	0.2	5.42	32	80	<2	0.07	<0.5	19	124	43	5.98	0.13	10
92KFA0612	till	1	16	553050	5453000	<0.2	6.32	20	70	<2	0.07	<0.5	14	125	36	5.44	0.13	20
92KFA0613	till	1	16	554950	5453050	<0.2	4.54	18	100	2	0.07	<0.5	12	85	34	3.87	0.24	10
92KFA0614	till	1	16	557450	5453350	0.2	4.83	6	50	<2	0.09	<0.5	12	112	36	3.39	0.15	20
92KFA0615	till	1	16	557550	5453900	0.2	5.36	32	170	<2	0.25	<0.5	21	129	38	5.97	0.37	10
92KFA0616	till	1	16	536850	5453050	<0.2	5.6	24	100	<2	0.09	<0.5	17	154	44	6.25	0.19	30
92KFA0617	till	1	16	538100	5452850	<0.2	5.45	28	100	<2	0.07	<0.5	11	106	21	5.88	0.17	30
92KFA0618	till	1	16	538850	5452150	<0.2	5.72	6	120	<2	0.14	<0.5	23	109	54	5.94	0.23	30
92KFA0619	till	1	16	550750	5452450	<0.2	4.04	16	90	<2	0.09	<0.5	10	83	24	4.53	0.08	<10
92KFA0620	till	1	16	552000	5452950	0.6	2.77	26	70	<2	0.06	<0.5	11	95	18	7.2	0.17	10
92KFA0621	till	1	16	554950	5452000	<0.2	6.17	12	60	<2	0.06	<0.5	16	144	61	6.06	0.13	20
92KFA0622	till	1	16	556800	5452100	<0.2	5.76	26	130	<2	0.21	<0.5	26	148	42	6.24	0.33	60

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	Tl ppm	V ppm	Zn ppm
92KFA0584	16	627710	5420890	1.12	980	<1	5	47	26	<2	16	16	0.09	<10	59	112
92KFA0585	16	625630	5421590	1.07	905	1	4.15	53	22	2	9	12	0.08	<10	83	88
92KFA0586	16	620590	5421400	1.14	1180	3	3.08	64	20	<2	32	15	0.11	<10	104	126
92KFA0587	16	619270	5420320	0.99	720	<1	3.15	60	24	<2	15	13	0.12	<10	73	74
92KFA0589	16	630550	5421425	0.66	340	1	5	55	14	<2	5	10	0.09	<10	86	60
92KFA0590	16	631090	5422390	1.88	410	<1	1.49	52	6	<2	8	53	0.08	<10	55	106
92KFA0592	16	633475	5423950	1.91	740	<1	4.76	61	24	<2	8	29	0.07	<10	58	140
92KFA0593	16	626325	5414075	0.55	640	<1	>5	39	22	<2	8	9	0.15	<10	63	42
92KFA0594	16	628050	5414475	1.93	800	<1	4.39	50	18	<2	12	31	0.08	<10	61	128
92KFA0595	16	630845	5414200	1.83	755	<1	4.87	60	18	<2	8	36	0.05	<10	63	132
92KFA0596	16	629600	5414410	1.05	455	<1	3.39	51	8	<2	12	13	0.11	<10	67	84
92KFA0597	16	631400	5414150	2.4	650	<1	3.74	57	8	<2	10	34	0.05	<10	88	160
92KFA0598	16	632950	5416025	1.86	1025	<1	5	60	24	<2	11	38	0.03	<10	54	128
92KFA0599	16	634380	5417180	1.4	1070	2	4.07	67	26	<2	36	22	0.03	<10	71	118
92KFA0600	16	631170	5413170	1.8	600	<1	5	58	16	<2	8	40	0.04	<10	60	120
92KFA0601	16	552000	5455000	0.66	140	9	4.6	45	34	<2	6	10	0.03	<10	142	56
92KFA0602	16	558100	5454850	0.83	185	2	4.25	60	14	<2	6	11	0.03	<10	67	62
92KFA0603	16	538650	5454450	0.82	730	1	5	49	18	<2	24	20	0.07	<10	70	70
92KFA0604	16	540100	5454900	1.48	1480	<1	5	74	20	<2	42	35	0.08	<10	87	90
92KFA0605	16	551300	5454300	0.3	65	2	4.89	23	58	<2	3	10	0.04	<10	122	40
92KFA0606	16	552400	5454150	0.56	125	8	4.84	39	36	<2	4	9	0.03	<10	137	54
92KFA0607	16	554000	5454000	0.27	85	2	5	30	4	<2	7	4	0.08	<10	61	22
92KFA0608	16	555550	5454100	0.62	535	2	5	53	20	<2	7	11	0.04	<10	68	46
92KFA0609	16	558450	5454150	1.26	310	<1	3.43	83	18	<2	13	14	0.04	<10	106	88
92KFA0610	16	539750	5453750	0.73	830	3	5	48	30	<2	8	15	0.03	<10	141	72
92KFA0611	16	549900	5453000	0.49	240	5	5	55	14	2	7	7	0.06	<10	102	68
92KFA0612	16	553050	5453000	0.55	210	3	5	41	8	<2	10	6	0.05	<10	96	42
92KFA0613	16	554950	5453050	0.7	160	4	5	32	44	<2	7	11	0.03	<10	166	96
92KFA0614	16	557450	5453350	0.63	195	3	5	44	10	<2	8	8	0.04	<10	49	46
92KFA0615	16	557550	5453900	1.39	460	1	3.38	71	16	<2	8	18	0.03	<10	122	118
92KFA0616	16	536850	5453050	0.77	225	8	4.8	78	22	<2	7	11	0.03	<10	113	80
92KFA0617	16	538100	5452850	0.62	180	8	4.31	37	28	6	7	11	0.03	<10	144	72
92KFA0618	16	538850	5452150	0.86	480	1	3.39	65	8	<2	9	10	0.09	<10	75	74
92KFA0619	16	550750	5452450	0.3	125	4	5	43	16	<2	4	8	0.06	<10	55	30
92KFA0620	16	552000	5452950	0.43	205	4	5	30	28	<2	4	9	0.04	<10	161	52
92KFA0621	16	554950	5452000	0.54	185	6	4.53	56	16	<2	10	5	0.04	<10	110	42
92KFA0622	16	556800	5452100	1.5	850	1	2.08	63	24	<2	25	19	0.06	20	112	92

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm	
92KFA0623	till	1	16	558200	5452550	<0.2	6.35	24	120	2	0.13	<0.5	23	130	19	7.03	0.28	20	
92KFA0624	till	1	16	539950	5450300	<0.2	6.7	28	110	<2	0.17	<0.5	25	125	38	5.37	0.2	20	
92KFA0625	till	1	16	551250	5451500	0.2	4.55	22	70	<2	0.09	<0.5	7	103	30	5.84	0.08	<10	
92KFA0626	till	1	16	552500	5451800	<0.2	3.13	24	90	<2	0.07	<0.5	9	81	20	5.41	0.17	10	
92KFA0627	till	1	16	553000	5451000	<0.2	4.73	8	80	<2	0.2	<0.5	19	114	30	4.76	0.17	20	
92KFA0629	till	1	16	559300	5451200	<0.2	4.79	30	70	<2	0.1	<0.5	12	110	21	7.19	0.17	10	
92KFA0630	till	1	16	551700	5450450	<0.2	7.2	24	60	2	0.06	<0.5	12	160	70	4.11	0.12	20	
92KFA0631	till	1	16	553900	5450050	<0.2	2.76	16	80	4	0.66	<0.5	22	120	32	5	0.28	20	
92KFA0632	till	1	16	554550	5450500	<0.2	2.72	14	110	<2	4.7	<0.5	19	87	28	3.83	0.46	20	
92KFA0633	till	1	16	557850	5450400	<0.2	4.43	14	80	<2	0.28	<0.5	18	95	20	4.38	0.18	20	
92KFA0634	till	1	16	539100	5449650	<0.2	6.88	38	80	2	0.17	<0.5	24	86	45	3.9	0.22	30	
92KFA0635	till	1	16	552550	5449950	<0.2	5.85	22	130	<2	0.14	<0.5	34	172	62	4.81	0.34	20	
92KFA0636	till	1	16	554700	5449600	<0.2	2.42	18	120	<2	6.26	<0.5	17	84	27	3.66	0.43	20	
92KFA0637	till	1	16	556450	5449900	<0.2	4.21	18	80	2	0.38	<0.5	20	110	29	4.66	0.21	30	
92KFA0638	gravel/sand	1	16	547600	5447700	0.2	3.76	18	170	<2	0.66	<0.5	19	111	40	4.71	0.46	40	
92KFA0640		till	1	16	537100	5448850	<0.2	5.34	36	170	<2	0.62	<0.5	24	124	25	6.32	0.28	30
92KFA0641		till	1	16	538000	5449000	0.2	5.03	16	180	<2	1.11	<0.5	15	117	53	4.15	0.17	90
92KFA0642		till	1	16	539800	5446400	<0.2	7.92	30	110	<2	0.12	<0.5	23	120	26	4.5	0.17	30
92KFA0643		till	1	16	553500	5448200	<0.2	5.9	18	110	<2	0.06	<0.5	11	78	25	6.76	0.15	10
92KFA0644		till	1	16	557500	5448500	0.2	4.58	16	120	<2	0.19	<0.5	13	76	15	4.56	0.24	10
92KFA0645		till	1	16	558250	5448900	<0.2	1.96	4	80	<2	0.05	<0.5	2	60	20	1.25	0.13	10
92KFA0646		till	1	16	536750	5447050	0.6	5.42	24	120	<2	0.21	<0.5	12	59	15	4.01	0.18	20
92KFA0647		till	1	16	538000	5447000	<0.2	4.88	22	130	<2	0.45	<0.5	21	124	50	4.94	0.41	110
92KFA0648		till	1	16	539450	5447200	<0.2	4.52	18	40	<2	0.07	<0.5	9	60	12	4.96	0.06	10
92KFA0649		till	1	16	553500	5447100	0.2	5.21	18	110	<2	0.18	<0.5	33	209	87	6.14	0.11	10
92KFA0650		till	1	16	554250	5447850	<0.2	7.15	32	70	<2	0.08	<0.5	13	68	25	4.67	0.1	20
92KFA0652		till	1	16	558500	5447950	<0.2	7.37	16	40	<2	0.09	<0.5	12	94	29	2.98	0.07	20
92KFA0653		till	1	16	538350	5446300	<0.2	7.65	12	70	<2	0.1	<0.5	15	112	21	4.98	0.21	10
92KFA0654		till	1	16	540850	5446950	0.2	6.77	40	70	<2	0.07	<0.5	19	83	25	5	0.1	20
92KFA0655		till	1	16	542250	5446550	<0.2	5.39	16	70	<2	0.07	<0.5	13	104	21	4.68	0.09	20
92KFA0656		till	1	16	552000	5446000	<0.2	6.17	22	180	<2	0.33	<0.5	23	154	63	6.08	0.36	40
92KFA0658		till	1	16	537000	5445000	<0.2	4.72	38	130	<2	0.1	<0.5	23	96	14	7.44	0.2	10
92KFA0659		till	1	16	537850	5445700	<0.2	4.88	20	150	<2	0.24	<0.5	26	148	60	5.75	0.25	30
92KFA0660		till	1	16	539550	5445550	<0.2	5.43	18	100	<2	0.1	<0.5	12	82	10	3.32	0.15	20
92KFA0661		till	1	16	540600	5445850	<0.2	5.57	12	90	<2	0.14	<0.5	15	85	10	3.71	0.19	20
92KFA0662		till	1	16	541600	5445650	<0.2	5.3	24	80	<2	0.1	<0.5	11	70	12	3.79	0.14	20
92KFA0663		till	1	16	553500	5446100	<0.2	5.98	30	60	<2	0.06	<0.5	11	80	17	5.4	0.07	10

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	Tl ppm	V ppm	Zn ppm
92KFA0623	16	558200	5452550	0.75	1350	1	5	46	30	<2	14	13	0.03	10	127	62
92KFA0624	16	539950	5450300	0.84	240	1	4.05	59	14	2	9	12	0.04	<10	91	60
92KFA0625	16	551250	5451500	0.16	275	4	5	27	24	2	6	8	0.04	<10	120	52
92KFA0626	16	552500	5451800	0.52	150	4	2.43	24	40	2	4	9	0.06	<10	212	70
92KFA0627	16	553000	5451000	1.05	320	2	1.7	55	16	<2	8	13	0.09	<10	82	60
92KFA0629	16	559300	5451200	0.76	210	3	3.45	36	22	<2	6	10	0.03	<10	137	66
92KFA0630	16	551700	5450450	0.58	165	6	3.89	52	14	<2	11	6	0.08	<10	86	72
92KFA0631	16	553900	5450050	1.14	850	<1	6.22	54	24	2	8	14	0.08	<10	62	124
92KFA0632	16	554550	5450500	2.05	590	<1	1.71	45	18	2	8	41	0.06	<10	60	102
92KFA0633	16	557850	5450400	1.23	355	<1	1.27	45	16	2	8	15	0.11	<10	68	80
92KFA0634	16	539100	5449650	0.92	295	1	2.6	51	28	8	11	10	0.1	10	61	58
92KFA0635	16	552550	5449950	1.32	455	1	1.93	114	16	2	15	11	0.07	<10	96	98
92KFA0636	16	554700	5449600	2.12	530	<1	0.64	44	16	2	8	52	0.09	<10	58	94
92KFA0637	16	556450	5449900	1.46	415	<1	1.04	50	14	2	10	20	0.13	<10	78	84
92KFA0638	16	547600	5447700	1.72	530	<1	0.99	59	16	4	12	31	0.14	10	79	104
92KFA0640	16	537100	5448850	1.29	935	1	1.38	60	26	4	9	24	0.14	<10	115	94
92KFA0641	16	538000	5449000	1.14	335	1	1.77	48	14	4	15	24	0.05	20	63	98
92KFA0642	16	539800	5446400	1.01	235	<1	1.67	54	14	2	11	11	0.17	<10	65	72
92KFA0643	16	553500	5448200	0.55	160	2	1.71	30	22	<2	4	10	0.09	<10	125	66
92KFA0644	16	557500	5448500	0.9	295	1	1.34	34	18	6	6	17	0.15	<10	70	88
92KFA0645	16	558250	5448900	0.2	60	1	2.84	10	40	<2	2	9	0.05	<10	53	56
92KFA0646	16	536750	5447050	0.65	235	2	2.21	30	22	4	6	17	0.11	<10	65	160
92KFA0647	16	538000	5447000	1.41	820	<1	1.39	63	14	<2	24	22	0.15	30	66	94
92KFA0648	16	539450	5447200	0.19	125	4	3.66	18	14	<2	4	6	0.07	<10	73	28
92KFA0649	16	553500	5447100	1.63	315	3	2.67	110	30	<2	5	10	0.07	<10	133	104
92KFA0650	16	554250	5447850	0.38	180	3	2.59	29	4	2	5	7	0.12	<10	53	46
92KFA0652	16	558500	5447950	0.69	160	3	2.76	44	4	<2	5	8	0.12	<10	44	46
92KFA0653	16	538350	5446300	0.89	220	1	2.01	44	14	<2	9	9	0.05	<10	76	62
92KFA0654	16	540850	5446950	0.34	245	5	3.81	36	16	6	7	6	0.09	<10	58	38
92KFA0655	16	542250	5446550	0.41	170	3	3.18	35	8	<2	6	6	0.07	<10	68	38
92KFA0656	16	552000	5446000	1.58	565	<1	1.38	73	12	<2	18	23	0.14	10	110	108
92KFA0658	16	537000	5445000	0.58	1590	4	3.19	35	30	<2	5	8	0.07	<10	131	174
92KFA0659	16	537850	5445700	1.18	435	<1	1.49	63	14	<2	21	17	0.17	<10	87	66
92KFA0660	16	539550	5445550	0.76	185	3	2.08	35	18	<2	6	9	0.11	<10	49	52
92KFA0661	16	540600	5445850	0.95	235	3	2.13	42	18	<2	6	10	0.07	<10	52	56
92KFA0662	16	541600	5445650	0.71	200	6	2.19	31	14	<2	5	8	0.09	<10	58	60
92KFA0663	16	553500	5446100	0.42	135	2	2.28	28	16	<2	6	6	0.1	<10	84	74

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0664	till	1	16	537950	5444100	0.2	4.66	34	210	<2	0.16	<0.5	21	97	14	7	0.18	10
92KFA0665	till	1	16	540850	5443800	0.2	4.73	24	100	<2	0.19	0.5	16	79	45	3.54	0.16	20
92KFA0666	till	1	16	536450	5443850	0.2	4.77	20	100	<2	0.11	<0.5	10	67	10	4.93	0.12	10
92KFA0667	till	1	16	538750	5443400	<0.2	3.84	20	100	<2	0.13	<0.5	12	76	14	5.81	0.14	20
92KFA0668	till	1	16	539950	5443300	<0.2	5.88	28	90	<2	0.09	<0.5	31	46	87	6.95	0.08	60
92KFA0671	till	1	16	536700	5442400	0.2	7.85	26	50	<2	0.11	<0.5	28	105	42	6.61	0.09	20
92KFA0672	till	1	16	537800	5442750	0.2	8.32	40	100	<2	0.16	<0.5	26	75	27	5.23	0.19	30
92KFA0673	till	1	16	539000	5442100	0.2	8.72	20	40	<2	0.07	<0.5	13	77	75	4.36	0.07	50
92KFA0674	till	1	16	548050	5442250	<0.2	7.79	26	110	<2	0.12	<0.5	21	117	36	4.14	0.18	20
92KFA0675	till	1	16	538300	5441050	0.6	8.05	28	130	<2	0.11	<0.5	48	140	50	7.12	0.28	20
92KFA0676	till	1	16	540450	5441950	<0.2	5.93	26	210	<2	0.4	<0.5	32	155	46	8.35	0.29	20
92KFA0677	till	1	16	547150	5441550	0.2	7.6	20	250	<2	0.23	<0.5	26	103	29	3.4	0.22	30
92KFA0678	till	1	16	553600	5441750	0.2	6.04	30	240	<2	0.67	<0.5	21	125	46	5.15	0.52	100
92KFA0679	till	1	16	551800	5440550	<0.2	7.25	20	140	<2	0.18	<0.5	23	123	34	5.98	0.16	40
92KFA0680	till	1	16	553000	5440750	<0.2	1.44	8	90	<2	0.06	<0.5	1	21	7	0.49	0.19	10
92KFA0681	till	1	16	537200	5439750	0.4	6.29	20	150	<2	0.09	<0.5	22	148	41	6.96	0.2	10
92KFA0682	till	1	16	551450	5440000	0.2	4.89	12	170	<2	0.41	<0.5	19	104	25	4.85	0.36	20
92KFA0683	till	1	16	536700	5438850	0.4	5.65	20	90	<2	0.06	<0.5	7	89	23	5.82	0.09	10
92KFA0685	till	1	16	537200	5437250	0.2	5.15	22	220	<2	0.41	<0.5	22	114	41	5.36	0.33	20
92KFA0686	till	1	16	538100	5437550	0.2	4.96	24	270	<2	0.43	<0.5	21	107	41	5.1	0.36	10
92KFA0687	till	1	16	537200	5436000	0.2	6.63	6	50	<2	0.09	<0.5	19	145	173	2.74	0.14	40
92KFA0687A	till	0	16	537200	5436000	<0.2	5.09	20	190	<2	0.2	<0.5	22	91	46	3.91	0.2	20
92KFA0688	till	1	16	537400	5436050	<0.2	3.09	22	180	<2	0.29	<0.5	9	77	18	6.8	0.19	10
92KFA0689	till	1	16	537400	5434950	0.4	5.82	30	260	<2	0.21	<0.5	20	96	32	6.68	0.23	10
92KFA0690	till	1	16	557150	5432300	0.4	5.61	22	190	<2	0.25	<0.5	15	84	14	4.87	0.17	20
92KFA0691	till	1	16	557800	5432950	<0.2	5.64	22	100	<2	0.31	<0.5	23	125	32	4.61	0.21	40
92KFA0693	till	1	16	556000	5431350	0.2	4.6	20	90	<2	0.14	<0.5	17	73	22	5.14	0.2	20
92KFA0694	till	1	16	557100	5431250	<0.2	6.57	14	110	<2	0.15	<0.5	28	134	53	5.52	0.26	50
92KFA0695	till	1	16	557900	5431650	<0.2	4.18	14	180	<2	1.73	<0.5	16	119	77	4.67	0.33	70
92KFA0697	till	1	16	556050	5430250	<0.2	5.97	24	100	<2	0.09	<0.5	12	86	18	4.52	0.13	20
92KFA0698	till	1	16	556800	5430200	<0.2	4.08	8	70	<2	0.17	<0.5	18	100	36	4.03	0.15	10
92KFA0699	till	1	16	555100	5429950	<0.2	3.78	18	140	<2	0.28	<0.5	12	72	12	4.8	0.15	10
92KFA0700	till	1	16	555950	5432300	<0.2	6.99	22	130	<2	0.26	<0.5	22	106	21	4.36	0.19	30
92KFA0701	till	1	16	535650	5442600	<0.2	5.24	26	60	<2	0.11	<0.5	18	124	32	10.3	0.12	10
92KFA0703	till	1	16	533300	5432700	<0.2	8.39	28	70	<2	0.06	<0.5	15	105	32	4.63	0.07	10
92KFA0704	till	1	16	534650	5430950	<0.2	7.12	8	100	<2	0.19	<0.5	16	120	38	3.75	0.19	30
92KFA0705	till	1	16	535750	5445150	<0.2	6.42	6	60	<2	0.11	<0.5	6	43	17	3.87	0.03	20

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	Tl ppm	V ppm	Zn ppm
92KFA0664	16	537950	5444100	0.55	1810	3	2.17	33	30	<2	5	10	0.12	<10	121	174
92KFA0665	16	540850	5443800	0.46	325	2	5	37	42	2	8	10	0.04	10	61	102
92KFA0666	16	536450	5443850	0.32	205	3	4.28	23	20	<2	4	8	0.08	<10	70	58
92KFA0667	16	538750	5443400	0.53	170	13	2.49	31	18	<2	4	14	0.08	<10	93	48
92KFA0668	16	539950	5443300	0.39	610	6	3.73	31	24	<2	11	8	0.07	10	113	74
92KFA0671	16	536700	5442400	0.45	515	1	2.53	51	14	<2	8	8	0.13	<10	77	44
92KFA0672	16	537800	5442750	0.49	525	4	2.95	41	24	2	8	9	0.11	20	52	50
92KFA0673	16	539000	5442100	0.2	175	5	3.02	67	10	<2	10	5	0.09	10	41	24
92KFA0674	16	548050	5442250	1.01	230	<1	1.64	55	8	<2	9	11	0.07	<10	68	60
92KFA0675	16	538300	5441050	0.75	985	5	2.53	103	20	2	10	9	0.06	<10	126	92
92KFA0676	16	540450	5441950	1.1	355	2	1.42	102	24	<2	10	18	0.07	<10	180	80
92KFA0677	16	547150	5441550	0.92	240	<1	1.5	70	8	<2	9	19	0.1	10	46	82
92KFA0678	16	553600	5441750	1.72	500	1	1.33	61	8	4	17	35	0.16	30	83	106
92KFA0679	16	551800	5440550	0.93	545	2	1.29	55	22	2	20	15	0.19	20	105	78
92KFA0680	16	553000	5440750	0.12	30	<1	2.4	6	12	<2	1	13	0.02	<10	22	44
92KFA0681	16	537200	5439750	0.82	450	3	2.59	71	20	<2	9	9	0.05	<10	126	128
92KFA0682	16	551450	5440000	1.46	625	<1	0.62	55	12	<2	9	26	0.15	<10	73	110
92KFA0683	16	536700	5438850	0.24	140	5	2.93	21	22	2	6	7	0.12	<10	97	44
92KFA0685	16	537200	5437250	1.52	520	3	0.9	56	20	<2	9	25	0.2	<10	90	110
92KFA0686	16	538100	5437550	1.44	560	2	1.99	56	22	2	8	27	0.04	<10	84	120
92KFA0687	16	537200	5436000	0.61	150	1	2.56	90	8	<2	8	7	0.1	<10	35	42
92KFA0687A	16	537200	5436000	1.16	285	2	3.51	59	14	<2	6	18	0.04	<10	65	94
92KFA0688	16	537400	5436050	0.61	190	2	3.05	25	42	2	3	40	0.04	<10	170	56
92KFA0689	16	537400	5434950	0.82	370	3	2.34	51	18	<2	6	21	0.04	<10	110	78
92KFA0690	16	557150	5432300	1.05	755	2	1.48	36	16	2	6	17	0.14	<10	87	148
92KFA0691	16	557800	5432950	1.32	535	1	1.49	60	6	<2	9	18	0.09	<10	77	92
92KFA0693	16	556000	5431350	0.6	545	4	2.6	36	18	<2	4	14	0.07	<10	80	106
92KFA0694	16	557100	5431250	1.18	480	1	2.26	61	16	<2	15	14	0.06	20	94	86
92KFA0695	16	557900	5431650	1.82	480	<1	1.13	49	12	2	15	28	0.14	20	69	96
92KFA0697	16	556050	5430250	0.58	165	1	2.07	35	8	4	7	7	0.12	<10	60	52
92KFA0698	16	556800	5430200	1.17	675	1	3.2	44	12	<2	6	10	0.05	<10	67	108
92KFA0699	16	555100	5429950	0.39	155	2	4.09	28	24	<2	4	22	0.04	<10	90	66
92KFA0700	16	555950	5432300	1.17	325	1	4.26	46	18	2	9	16	0.07	10	78	132
92KFA0701	16	535650	5442600	0.74	315	4	2.19	45	18	<2	6	9	0.04	<10	159	70
92KFA0703	16	533300	5432700	0.46	155	3	4.76	33	12	<2	10	4	0.04	<10	65	42
92KFA0704	16	534650	5430950	0.94	230	<1	2.41	50	18	<2	9	14	0.15	<10	54	70
92KFA0705	16	535750	5445150	0.12	65	6	3.05	13	6	<2	2	16	0.08	<10	41	18

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0706	till	1	16	535850	5443650	0.2	4.61	24	90	<2	0.09	<0.5	12	64	12	4.03	0.12	10
92KFA0707	till	1	16	534350	5442750	<0.2	8.06	16	110	<2	0.14	<0.5	40	123	137	5.14	0.25	20
92KFA0708	till	1	16	533600	5441950	<0.2	4.27	30	160	<2	0.2	<0.5	19	113	48	7.55	0.15	30
92KFA0709	till	1	16	535950	5441600	0.2	4.64	36	260	<2	0.21	<0.5	17	104	17	7.87	0.27	10
92KFA0710	till	1	16	533400	5440150	<0.2	5.6	28	180	<2	0.2	<0.5	24	139	77	4.86	0.24	30
92KFA0711	till	1	16	532900	5439000	<0.2	4.47	8	180	2	0.09	<0.5	16	151	37	2.96	0.23	10
92KFA0712	till	1	16	535750	5438900	<0.2	5.51	14	410	<2	0.81	<0.5	27	193	81	5.17	0.62	130
92KFA0712DU	till	1	16	535750	5438900	0.4	5.71	24	390	<2	0.73	<0.5	28	211	71	5.36	0.68	110
92KFA0713	till	1	16	532250	5438050	0.2	6.75	24	90	<2	0.13	<0.5	26	127	51	4.97	0.17	20
92KFA0714	till	1	16	533850	5437200	0.2	7.87	40	110	<2	0.1	<0.5	20	119	54	7.48	0.14	30
92KFA0715	till	1	16	534550	5437650	0.2	6.97	26	300	<2	0.4	<0.5	39	145	65	6.38	0.26	20
92KFA0716	till	1	16	533200	5436600	<0.2	7.01	14	80	<2	0.1	<0.5	18	145	63	6.33	0.1	20
92KFA0717	till	1	16	535550	5436950	0.8	5.59	20	270	<2	0.24	<0.5	20	106	48	5.82	0.23	10
92KFA0718	till	1	16	534100	5435550	<0.2	7.34	16	210	<2	0.13	<0.5	35	158	76	5.13	0.15	30
92KFA0722	till	1	16	539950	5449050	<0.2	5.87	18	230	<2	0.23	<0.5	19	94	19	6.41	0.19	20
92KFA0723	till	1	16	533550	5429800	<0.2	7.21	26	80	<2	0.16	<0.5	19	125	66	4.21	0.16	10
92KFA0752	till	1	16	538830	5469700	<0.2	2.77	12	160	<2	5.56	<0.5	13	90	54	3.48	0.44	10
92KFA0753	till	1	16	536650	5466680	<0.2	6.79	10	60	<2	0.04	<0.5	6	80	20	4.79	0.04	20
92KFA0754	till	1	16	536400	5466850	<0.2	3.04	8	160	<2	4.97	<0.5	16	98	68	3.86	0.35	20
92KFA0756	till	1	16	541710	5473570	<0.2	2.87	8	110	<2	2.69	<0.5	23	110	118	4.27	0.72	30
92KFA0757	till	1	16	541450	5475320	<0.2	3.09	<2	150	<2	5.48	<0.5	17	101	49	3.88	0.53	20
92KFA0758	till	1	16	541620	5475800	<0.2	3.07	6	170	<2	7.48	<0.5	18	96	80	3.75	0.5	10
92KFA0759	till	1	16	540790	5477400	<0.2	3.91	6	140	<2	2.22	<0.5	19	105	64	4.55	0.52	30
92KFA0762	till	1	16	591000	5414400	<0.2	6.17	18	140	<2	0.27	<0.5	24	163	47	5.58	0.36	60
92KFA0763	till	1	16	591150	5415080	<0.2	6.36	6	90	<2	0.11	<0.5	21	77	31	4.48	0.14	20
92KFA0764	till	1	16	592667	5415950	<0.2	6	30	110	<2	0.15	<0.5	32	236	54	4.82	0.13	30
92KFA0765	till	1	16	592370	5416330	0.6	5.99	30	60	<2	0.2	<0.5	115	302	536	7.19	0.13	40
92KFA0766	till	1	16	591800	5416200	<0.2	6.72	22	90	<2	0.17	<0.5	35	115	65	5.29	0.2	20
92KFA0767	till	1	16	631975	5428470	<0.2	5.65	16	160	<2	0.37	<0.5	19	132	36	5.74	0.22	60
92KFA0768	till	1	16	631790	5428330	<0.2	4.92	26	150	<2	0.78	<0.5	22	115	76	6.44	0.42	90
92KFA0769	till	1	16	596120	5464450	<0.2	3.75	28	220	<2	3.28	<0.5	22	105	85	4.74	0.47	30
92KFA0770	till	1	16	597300	5464750	<0.2	2.85	8	160	<2	3.79	<0.5	22	86	92	3.94	0.45	20
92KFA0771	till	1	16	598200	5464880	<0.2	3.41	14	130	<2	2.28	<0.5	25	102	84	4.66	0.47	40
92KFA0772	till	1	16	598650	5464820	<0.2	3.96	8	200	<2	2.68	<0.5	19	109	80	4.93	0.5	30
92KFA0773	till	1	16	598800	5464700	<0.2	3.78	14	190	<2	4.05	<0.5	18	101	74	4.77	0.64	20
92KFA0774	till	1	16	599050	5464500	<0.2	3.6	6	150	<2	4.13	<0.5	16	105	55	4.32	0.58	30
92KFA0775	till	1	16	598000	5464840	<0.2	3.57	18	150	<2	5.84	<0.5	15	96	62	3.97	0.54	20

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	TI ppm	V ppm	Zn ppm
92KFA0706	16	535850	5443650	0.32	195	3	5	23	20	2	4	8	0.06	<10	64	58
92KFA0707	16	534350	5442750	0.94	410	6	3.93	219	<2	<2	11	9	0.1	<10	76	62
92KFA0708	16	533600	5441950	0.47	220	4	2.93	51	22	4	7	18	0.07	<10	139	66
92KFA0709	16	535950	5441600	0.65	745	2	2.44	40	26	4	5	16	0.04	<10	125	144
92KFA0710	16	533400	5440150	1.25	300	2	2.44	134	12	<2	8	17	0.09	<10	77	122
92KFA0711	16	532900	5439000	0.74	170	9	3.86	75	42	<2	6	13	0.06	<10	62	108
92KFA0712	16	535750	5438900	1.82	490	<1	1.7	119	14	2	23	29	0.17	40	84	122
92KFA0712DL	16	535750	5438900	1.97	545	1	1.79	110	12	8	23	27	0.14	30	87	134
92KFA0713	16	532250	5438050	0.71	250	2	3.69	76	22	<2	7	9	0.06	<10	69	60
92KFA0714	16	533850	5437200	0.56	260	4	2.74	45	22	2	8	12	0.06	<10	115	86
92KFA0715	16	534550	5437650	0.98	520	3	2.17	113	20	2	9	24	0.08	<10	79	104
92KFA0716	16	533200	5436600	0.55	190	3	3.3	59	2	<2	10	7	0.06	<10	65	40
92KFA0717	16	535550	5436950	0.97	325	2	1.71	59	16	2	7	19	0.08	<10	87	110
92KFA0718	16	534100	5435550	1.18	430	1	2.41	71	6	<2	11	12	0.09	<10	60	70
92KFA0722	16	539950	5449050	0.84	580	2	2.35	47	16	<2	7	18	0.11	<10	54	62
92KFA0723	16	533550	5429800	0.79	230	2	2.61	64	14	4	8	7	0.12	<10	61	50
92KFA0752	16	538830	5469700	1.58	475	<1	0.71	39	12	2	8	48	0.08	<10	48	92
92KFA0753	16	536650	5466680	0.24	110	3	5	17	4	<2	7	3	0.15	<10	51	32
92KFA0754	16	536400	5466850	2.17	530	<1	2.04	46	14	<2	9	39	0.09	10	56	100
92KFA0756	16	541710	5473570	2.11	705	1	3.61	78	58	<2	13	27	0.03	20	63	150
92KFA0757	16	541450	5475320	1.89	575	<1	1.21	43	10	<2	9	51	0.06	<10	57	110
92KFA0758	16	541620	5475800	1.76	655	<1	1.47	48	14	2	9	56	0.04	<10	57	102
92KFA0759	16	540790	5477400	1.96	615	<1	2.73	62	16	<2	11	29	0.06	10	58	148
92KFA0762	16	591000	5414400	1.21	995	1	2.35	61	26	<2	17	18	0.09	30	73	92
92KFA0763	16	591150	5415080	0.64	300	2	3.64	49	22	<2	7	10	0.05	<10	48	74
92KFA0764	16	592667	5415950	0.76	285	2	3.71	121	8	2	10	12	0.1	<10	64	56
92KFA0765	16	592370	5416330	0.88	1600	4	5	516	22	<2	13	11	0.07	10	63	62
92KFA0766	16	591800	5416200	0.73	655	2	4.03	61	32	<2	11	13	0.05	10	61	56
92KFA0767	16	631975	5428470	1.31	430	1	2.81	54	16	<2	14	17	0.12	10	92	96
92KFA0768	16	631790	5428330	1.45	1165	1	2.84	56	22	<2	24	25	0.09	30	87	110
92KFA0769	16	596120	5464450	2.16	715	<1	2.11	64	14	6	10	32	0.09	<10	67	110
92KFA0770	16	597300	5464750	1.99	745	<1	3.47	89	16	<2	11	32	0.04	10	59	90
92KFA0771	16	598200	5464880	2	900	<1	4.36	65	22	<2	13	27	0.06	10	62	116
92KFA0772	16	598650	5464820	2.2	805	<1	2.33	58	20	<2	10	31	0.06	10	68	114
92KFA0773	16	598800	5464700	1.94	685	<1	1.72	56	20	2	10	41	0.06	<10	65	122
92KFA0774	16	599050	5464500	2.44	620	<1	1.95	55	20	<2	10	38	0.07	10	63	116
92KFA0775	16	598000	5464840	1.78	505	<1	1.39	49	16	<2	9	56	0.07	<10	59	100

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0776	till	1	16	598080	5466300	<0.2	2.98	20	130	<2	4.19	<0.5	24	101	70	4	0.44	30
92KFA0777	till	1	16	598250	5466530	<0.2	3.67	16	140	<2	2.71	<0.5	22	104	58	4.32	0.55	30
92KFA0778	till	1	16	598400	5466825	<0.2	2.84	6	110	<2	7.74	<0.5	14	83	55	3.5	0.45	<10
92KFA0783	till	1	16	567950	5442730	<0.2	6.1	32	90	<2	0.22	<0.5	26	99	47	5.03	0.21	30
92KFA0784	till	1	16	570550	5444200	<0.2	2.18	8	110	<2	10.88	<0.5	9	61	37	2.53	0.27	<10
92KFA0785	till	1	16	551290	5476280	<0.2	2.98	4	120	<2	5.51	<0.5	14	79	48	3.4	0.39	10
92KFA0786	till	1	16	550750	5478370	<0.2	3.39	10	140	<2	3.54	<0.5	14	93	55	3.98	0.45	20
92KFA0787	till	1	16	551500	5480125	<0.2	2.14	2	110	<2	8.79	<0.5	9	59	39	2.52	0.29	<10
92KFA0788	till	1	16	551700	5481530	<0.2	5.3	10	180	<2	0.42	<0.5	23	122	67	5.45	0.56	90
92KFA0789	till	1	16	552450	5482440	<0.2	2.46	16	140	<2	10.54	<0.5	11	70	57	2.87	0.36	<10
92KFA0790	till	1	16	560250	5480430	0.2	5.21	28	180	<2	0.67	<0.5	34	133	44	5.54	0.34	190
92KFA0791	till	1	16	560970	5482420	<0.2	2.49	10	140	<2	5.15	<0.5	20	81	75	3.33	0.4	10
92KFA0793	till	1	16	584150	5467900	0.2	3.86	14	190	<2	3.41	<0.5	19	108	72	4.9	0.56	40
92KFA0795	till	1	16	587150	5468125	0.2	4.08	20	160	<2	1.46	<0.5	23	111	71	5.13	0.53	60
92KFA0796	till	1	16	587700	5467200	<0.2	3.54	8	180	<2	5.74	<0.5	16	94	65	4.41	0.54	20
92KFA0797	till	1	16	587775	5467050	0.2	4.07	16	220	<2	2.54	<0.5	21	111	75	5.42	0.56	40
92KFA0798	till	1	16	587950	5468100	<0.2	3.38	18	180	<2	6	<0.5	18	98	65	4.29	0.39	20
92KFA0799	till	1	16	589850	5468200	0.2	3.82	18	150	<2	2.02	<0.5	26	104	71	4.85	0.4	50
92MAN0107	till	1	16	588180	5444700	0.2	5.38	<2	130	<2	0.25	0.5	24	131	86	6.23	0.16	20
92MAN0108	till	1	16	588180	5444920	0.2	4.15	8	90	2	0.24	<0.5	17	115	94	5.33	0.25	20
92MAN0109	till	1	16	588220	5444320	1.0	6.02	30	140	2	0.37	<0.5	28	141	79	5.76	0.51	190
92MAN0110	till	1	16	588025	5444000	0.6	4.56	18	160	<2	0.97	<0.5	22	106	80	4.84	0.44	110
92MAN0111	till	1	16	588150	5444100	<0.2	7.99	32	90	4	0.15	<0.5	27	121	42	6.17	0.27	20
92MAN0112	till	1	16	588520	5444300	0.4	4.91	18	100	<2	0.26	<0.5	33	129	71	6.89	0.39	60
92MAN0113	till	1	16	588950	5444450	0.2	2.35	8	80	<2	11.21	<0.5	11	67	35	2.37	0.33	30
92MAN0115	till	1	16	588000	5444050	<0.2	2.53	18	90	2	7.09	<0.5	15	74	88	3.28	0.40	20
92MAN0116	till	1	16	587930	5443080	<0.2	5.08	20	110	4	0.55	<0.5	22	108	45	5.06	0.56	20
92MAN0117	till	1	16	587960	5442850	0.2	7.04	14	130	4	0.37	<0.5	30	111	29	5.53	0.45	20
92MAN0118	till	1	16	588500	5442850	<0.2	5.66	32	70	2	0.26	<0.5	25	140	78	7.45	0.23	30
92MAN0119	till	1	16	589250	5442610	0.2	3.37	22	80	<2	2.25	<0.5	14	112	57	3.92	0.32	60
92MAN0121	till	1	16	590200	5442600	<0.2	5.74	20	90	<2	0.26	<0.5	22	121	36	6.61	0.31	20
92MAN0122	till	1	16	591640	5442750	0.8	5.38	16	150	2	1.34	<0.5	21	161	48	5.43	0.57	240
92MAN0123	till	1	16	592740	5442620	<0.2	3.53	8	150	8	7.37	<0.5	13	98	49	3.67	0.67	30
92MAN0124	till	1	16	591850	5444150	<0.2	7.32	26	100	<2	0.19	<0.5	27	115	93	7.80	0.24	30
92MAN0125	till	1	16	586150	5442130	0.2	4.76	18	140	2	0.98	<0.5	17	125	85	4.88	0.62	40
92MAN0126	till	1	16	587800	5444820	<0.2	4.55	<2	70	4	0.24	1.5	14	101	415	4.82	0.22	30
92MAN0127	till	1	16	587800	5444650	0.4	3.62	<2	60	6	0.11	1	14	152	106	9.64	0.14	10

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	Tl ppm	V ppm	Zn ppm
92KFA0776	16	598080	5466300	2.25	780	<1	3.74	64	20	<2	11	35	0.06	20	57	110
92KFA0777	16	598250	5466530	2.16	660	<1	2.31	58	20	<2	12	32	0.08	10	59	126
92KFA0778	16	598400	5466825	2.1	520	<1	2.09	39	16	<2	7	57	0.08	<10	49	102
92KFA0783	16	567950	5442730	1.05	695	1	2.56	48	22	<2	8	15	0.12	10	66	76
92KFA0784	16	570550	5444200	1.67	375	<1	1.08	26	10	<2	6	71	0.06	<10	34	72
92KFA0785	16	551290	5476280	1.75	465	<1	1.15	38	12	<2	8	44	0.08	<10	44	92
92KFA0786	16	550750	5478370	1.85	465	<1	1.37	45	8	2	9	38	0.07	<10	53	108
92KFA0787	16	551500	5480125	2.08	355	<1	0.95	28	8	<2	6	62	0.04	<10	33	66
92KFA0788	16	551700	5481530	1.66	815	<1	1.31	62	14	<2	23	27	0.12	50	71	118
92KFA0789	16	552450	5482440	1.9	445	<1	0.96	33	12	2	7	73	0.07	<10	40	94
92KFA0790	16	560250	5480430	1.16	2070	1	3.6	56	32	2	38	18	0.08	90	65	88
92KFA0791	16	560970	5482420	2.15	690	<1	4.03	57	18	<2	8	40	0.03	10	46	110
92KFA0793	16	584150	5467900	2.1	810	<1	1.29	54	16	2	11	40	0.12	10	71	108
92KFA0795	16	587150	5468125	2.05	810	<1	1.71	68	20	2	17	30	0.11	20	72	182
92KFA0796	16	587700	5467200	1.92	650	<1	1.41	48	12	<2	10	51	0.06	<10	64	100
92KFA0797	16	587775	5467050	2.09	1025	1	1.16	59	18	2	12	36	0.11	<10	73	118
92KFA0798	16	587950	5468100	1.89	755	<1	1.66	48	16	2	9	46	0.08	<10	56	98
92KFA0799	16	589850	5468200	1.75	1085	<1	3.53	62	24	<2	12	25	0.08	10	65	118
92MAN0107	16	588180	5444700	1.21	310	4	1.35	124	34	<2	7	12	0.17	<10	119	118
92MAN0108	16	588180	5444920	1.49	385	3	1.72	71	26	2	7	14	0.14	<10	78	290
92MAN0109	16	588220	5444320	1.42	1320	<1	1.14	83	28	<2	40	20	0.16	<10	92	102
92MAN0110	16	588025	5444000	1.23	1665	1	1.68	61	24	2	18	29	0.10	<10	79	106
92MAN0111	16	588150	5444100	0.89	640	2	0.91	62	32	<2	11	12	0.21	<10	100	102
92MAN0112	16	588520	5444300	1.19	1120	3	1.39	98	32	2	10	17	0.13	<10	124	94
92MAN0113	16	588950	5444450	1.76	370	<1	0.65	31	6	<2	8	65	0.10	<10	41	58
92MAN0115	16	588000	5444050	2.80	660	<1	0.82	47	24	<2	9	57	0.11	<10	54	124
92MAN0116	16	587930	5443080	1.64	650	<1	0.68	61	18	<2	11	26	0.19	<10	87	96
92MAN0117	16	587960	5442850	1.13	860	<1	1.20	81	18	2	11	22	0.09	<10	90	98
92MAN0118	16	588500	5442850	0.73	295	3	1.69	57	20	<2	8	14	0.06	<10	133	58
92MAN0119	16	589250	5442610	2.38	615	<1	0.99	41	16	<2	15	31	0.15	<10	82	72
92MAN0121	16	590200	5442600	1.18	305	1	0.97	52	28	<2	8	16	0.30	<10	120	68
92MAN0122	16	591640	5442750	1.94	800	<1	1.13	57	32	<2	35	31	0.20	<10	100	156
92MAN0123	16	592740	5442620	1.91	485	<1	0.54	43	12	<2	10	70	0.17	<10	70	88
92MAN0124	16	591850	5444150	0.69	255	3	2.62	41	24	<2	9	12	0.07	<10	120	52
92MAN0125	16	586150	5442130	1.95	460	<1	0.79	59	12	<2	17	36	0.21	<10	92	108
92MAN0126	16	587800	5444820	1.12	275	3	1.14	65	70	<2	6	12	0.19	<10	69	1064
92MAN0127	16	587800	5444650	1.11	300	10	1.35	50	52	<2	6	8	0.22	<10	224	418

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Sed. Type	Plot	Zone	Easting	Northing	Ag	Al	As	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	K	La
			m	m	ppm	pct	ppm	ppm	ppm	pct	ppm	ppm	ppm	ppm	ppm	pct	ppm	
92MAN0128	till	1	16	587820	5444500	<0.2	6.07	12	70	2	0.17	<0.5	9	111	161	4.76	0.22	40
92MAN0129	till	1	16	586075	5442900	0.2	6.08	14	130	<2	0.40	<0.5	27	128	52	5.36	0.57	70
92MAN0133	till	1	16	586350	5442950	0.6	7.20	28	70	<2	0.25	<0.5	41	119	61	6.32	0.45	70
92MAN0135	till	1	16	584030	5442510	<0.2	1.81	<2	80	4	8.16	0.5	15	75	59	2.47	0.35	10
92MAN0140	till	1	16	584550	5442925	0.2	2.52	16	80	4	10.42	<0.5	16	80	62	3.03	0.40	20
92MAN0141	till	1	16	584850	5442700	1.2	4.45	18	130	6	0.59	<0.5	26	131	183	5.50	0.62	260
92MAN0144	till	1	16	585530	5442800	0.2	6.54	16	100	<2	0.35	<0.5	25	115	53	5.07	0.44	40
92MAN0149	till	1	16	585400	5443690	1.0	4.10	26	140	2	1.97	0.5	33	139	75	5.19	0.35	260
92MAN0151	till	1	16	585500	5444000	0.2	5.45	20	100	<2	0.36	<0.5	27	166	121	6.27	0.49	70
92MAN0152	till	1	16	585275	5444200	<0.2	4.53	16	120	4	1.95	<0.5	19	115	63	4.80	0.64	50
92MAN0154	till	1	16	584600	5445360	0.4	7.82	26	50	2	0.15	<0.5	25	106	76	7.30	0.24	30
92MAN0155	till	1	16	584460	5445150	<0.2	3.70	12	130	2	5.31	<0.5	12	96	47	3.76	0.68	20
92MAN0157	till	1	16	584400	5443300	0.8	5.73	26	100	<2	0.98	<0.5	24	130	49	4.52	0.47	130
92MAN0158	till	1	16	584580	5443560	<0.2	3.85	12	130	6	2.35	<0.5	26	112	139	4.57	0.59	30
92MAN0159	till	1	16	584700	5443740	0.0	4.28	4	110	2	0.33	<0.5	17	100	79	3.84	0.21	20
92MAN0160	till	1	16	585150	5443300	0.2	4.99	16	160	2	0.60	<0.5	21	120	48	5.27	0.62	60
92MAN0161	till	1	16	584560	5445000	0.2	4.97	26	110	<2	0.30	<0.5	37	205	107	8.17	0.52	90
92MAN0162	till	1	16	584900	5445000	0.2	5.52	16	110	<2	0.21	<0.5	42	176	91	9.61	0.37	30
92MAN0164	till	1	16	585400	5444880	0.2	2.87	18	150	<2	6.66	<0.5	40	104	126	4.33	0.52	60
92MAN0165	till	1	16	585600	5445000	1.6	4.91	16	290	2	1.64	<0.5	33	193	138	6.83	0.55	290
92MAN0169	till	1	16	581400	5447250	2.0	5.72	20	130	<2	0.41	<0.5	23	105	93	6.53	0.45	30
92MAN0171	till	1	16	585650	5444500	0.2	5.15	16	130	4	0.69	<0.5	17	120	42	5.14	0.67	70
92MAN0172	till	1	16	585720	5444690	<0.2	4.59	18	160	2	1.63	<0.5	20	117	71	4.86	0.65	60
92MAN0173	till	1	16	585750	5444930	2.0	4.63	2	240	12	2.89	2	25	213	226	6.48	0.46	200
92MAN0174	till	1	16	585825	5445160	0.4	5.51	12	260	2	0.35	1.5	16	105	503	5.95	0.43	20
92MAN0175	till	1	16	586040	5444900	0.4	5.15	18	110	<2	0.40	<0.5	18	121	67	4.94	0.50	90
92MAN0178	till	1	16	580800	5441700	0.2	4.82	18	140	2	0.60	<0.5	18	122	77	4.88	0.71	70
92MAN0179	till	1	16	580850	5441350	0.2	5.36	12	120	2	0.49	<0.5	19	142	54	5.36	0.60	90
92MAN0180	till	1	16	580800	5440850	0.2	3.08	18	90	4	7.10	<0.5	22	95	68	3.46	0.45	60
92MAN0181	till	1	16	582175	5439740	<0.2	7.07	24	100	4	0.18	<0.5	18	116	14	7.02	0.20	20
92MAN0182	till	1	16	580750	5439000	<0.2	3.70	14	110	<2	3.50	<0.5	20	100	51	4.24	0.53	30
92MAN0183	till	1	16	581270	5440450	<0.2	7.19	18	120	<2	0.39	<0.5	32	142	41	6.09	0.49	70
92MAN0183Ca	till	0	16	581270	5440440	<0.2	3.61	<2	130	2	2.93	0.5	16	113	46	4.26	0.59	30
92MAN0190	till	1	16	584000	5442850	0.2	5.06	34	70	<2	0.25	<0.5	45	112	104	7.32	0.29	100
92MAN0193	till	1	16	583675	5442480	0.2	5.59	8	120	2	0.28	<0.5	32	125	81	5.40	0.41	20
92MAN0194	till	1	16	584320	5440880	0.2	6.44	16	140	<2	0.68	<0.5	20	172	123	5.00	0.44	110
92MAN0195	till	1	16	583050	5440700	0.2	4.65	30	100	4	0.22	<0.5	25	115	54	4.55	0.32	30

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	Tl ppm	V ppm	Zn ppm
92MAN0128	16	587820	5444500	0.83	180	4	1.99	46	70	<2	8	14	0.09	<10	66	1120
92MAN0129	16	586075	5442900	1.60	1000	<1	0.73	65	34	<2	17	22	0.15	<10	82	114
92MAN0133	16	586350	5442950	1.00	1695	2	2.19	72	34	<2	19	17	0.16	<10	79	74
92MAN0135	16	584030	5442510	2.91	470	<1	0.59	38	14	<2	5	54	0.08	<10	44	90
92MAN0140	16	584550	5442925	2.39	520	<1	0.71	43	18	<2	10	73	0.12	<10	54	110
92MAN0141	16	584850	5442700	1.64	1095	<1	1.61	69	32	2	23	49	0.11	<10	90	106
92MAN0144	16	585530	5442800	1.21	820	<1	0.88	60	32	<2	14	22	0.20	<10	86	70
92MAN0149	16	585400	5443690	1.69	1580	1	0.76	65	44	<2	32	31	0.10	<10	77	94
92MAN0151	16	585500	5444000	1.19	1000	1	1.17	170	18	<2	17	22	0.13	<10	100	82
92MAN0152	16	585275	5444200	2.06	605	<1	1.02	59	22	<2	17	38	0.18	<10	81	118
92MAN0154	16	584600	5445360	0.78	295	2	1.41	55	30	<2	9	10	0.17	<10	90	82
92MAN0155	16	584460	5445150	1.62	365	<1	0.57	41	14	<2	10	55	0.16	<10	72	86
92MAN0157	16	584400	5443300	1.16	1370	<1	1.81	61	28	<2	28	25	0.10	<10	67	70
92MAN0158	16	584580	5443560	2.38	535	<1	1.02	59	18	4	15	36	0.15	<10	82	102
92MAN0159	16	584700	5443740	1.08	245	1	1.52	57	14	<2	6	15	0.12	<10	60	68
92MAN0160	16	585150	5443300	1.58	710	<1	1.00	68	18	<2	14	30	0.17	<10	102	92
92MAN0161	16	584560	5445000	1.34	1425	2	1.31	127	28	<2	18	18	0.18	<10	158	92
92MAN0162	16	584900	5445000	1.09	625	3	1.37	143	40	<2	11	14	0.13	<10	181	70
92MAN0164	16	585400	5444880	2.38	1080	1	1.43	102	30	2	11	58	0.09	<10	75	138
92MAN0165	16	585600	5445000	1.82	1020	1	1.06	127	32	<2	26	27	0.14	<10	152	550
92MAN0169	16	581400	5447250	1.31	1085	1	1.08	56	244	<2	11	19	0.17	<10	100	886
92MAN0171	16	585650	5444500	1.80	745	<1	1.04	62	26	<2	19	32	0.18	<10	89	98
92MAN0172	16	585720	5444690	2.22	655	<1	0.95	68	20	4	17	37	0.20	<10	93	100
92MAN0173	16	585750	5444930	1.89	430	1	1.81	187	2	2	26	38	0.19	<10	135	952
92MAN0174	16	585825	5445160	1.15	530	2	1.13	49	28	<2	8	23	0.18	<10	99	338
92MAN0175	16	586040	5444900	1.39	755	<1	0.66	80	22	<2	25	26	0.19	<10	89	84
92MAN0178	16	580800	5441700	1.74	540	<1	0.74	69	14	<2	20	32	0.19	<10	90	96
92MAN0179	16	580850	5441350	1.66	655	<1	0.85	71	28	<2	36	32	0.22	<10	92	92
92MAN0180	16	580800	5440850	1.82	635	<1	1.26	49	20	2	19	49	0.10	<10	57	104
92MAN0181	16	582175	5439740	0.82	180	<1	1.12	44	20	<2	9	12	0.23	<10	129	58
92MAN0182	16	580750	5439000	1.98	730	<1	1.39	50	24	2	14	42	0.10	<10	69	104
92MAN0183	16	581270	5440450	1.25	1150	<1	1.15	70	38	4	22	21	0.15	<10	90	80
92MAN0183C _z	16	581270	5440440	1.99	470	<1	0.66	59	14	<2	13	36	0.17	<10	67	98
92MAN0190	16	584000	5442850	0.76	1595	1	2.05	44	34	<2	12	12	0.09	<10	71	70
92MAN0193	16	583675	5442480	1.32	700	<1	2.36	84	22	<2	12	16	0.09	<10	86	104
92MAN0194	16	584320	5440880	1.74	470	<1	1.38	73	14	<2	29	24	0.15	<10	99	100
92MAN0195	16	583050	5440700	1.10	835	1	2.13	59	28	<2	10	14	0.10	<10	67	84

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Sed. Type	Plot	Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92MAN0196	till	1	16	583320	5440250	0.4	3.40	8	180	<2	1.32	0.5	25	138	59	5.66	0.32	180
92MAN0198	till	1	16	585620	5441570	0.2	5.91	16	80	<2	0.38	<0.5	34	114	58	5.22	0.45	50
92MAN0199	till	1	16	585900	5441200	0.2	7.02	28	80	<2	0.33	<0.5	29	107	26	5.05	0.47	30
92MAN0200	till	1	16	585520	5440850	<0.2	6.48	18	80	<2	0.30	<0.5	35	141	68	6.88	0.37	60
92MAN0201	till	1	16	586370	5441400	<0.2	6.88	16	200	<2	0.57	<0.5	41	496	137	6.24	0.83	30
92MAN0202	till	1	16	587800	5443925	<0.2	5.75	22	30	4	0.07	<0.5	3	88	7	5.41	0.06	30
92MAN0203	till	1	16	587800	5443850	<0.2	6.38	14	30	<2	0.06	<0.5	6	86	110	7.75	0.08	10
92MAN0204	till	1	16	587725	5443460	<0.2	5.94	28	70	<2	0.20	<0.5	37	116	215	5.90	0.31	20
92MAN0206	till	1	16	587200	5442930	<0.2	7.24	16	140	2	0.35	<0.5	34	113	124	7.61	0.48	40
92MAN0212	till	1	16	579750	5428740	<0.2	9.04	40	50	12	0.16	<0.5	19	124	62	4.87	0.22	30
92MAN0213	till	1	16	580750	5430600	<0.2	4.83	18	120	<2	0.62	<0.5	23	112	24	6.40	0.39	20
92MAN0214	till	1	16	580550	5431420	<0.2	3.40	28	110	<2	3.35	<0.5	21	98	68	4.27	0.49	40
92MAN0215	till	1	16	579000	5430200	<0.2	2.47	16	80	6	6.47	<0.5	22	82	47	3.50	0.39	30
92MAN0215B	till	0	16	579000	5430200	<0.2	5.55	18	60	<2	0.27	0.5	27	108	38	4.70	0.22	30
92MAN0216	till	1	16	580050	5434480	<0.2	5.65	18	80	<2	0.49	<0.5	23	139	37	5.75	0.51	60
92MAN0217	till	1	16	581700	5435050	<0.2	3.47	10	100	2	3.39	<0.5	14	89	38	3.53	0.45	40
92MAN0218	till	1	16	583370	5436320	<0.2	4.49	12	150	<2	2.66	<0.5	18	112	40	4.58	0.66	30
92MAN0219	till	1	16	583900	5438320	<0.2	3.79	16	130	<2	3.99	<0.5	18	104	37	3.90	0.43	40
92MAN0224	till	1	16	601130	5453230	0.2	5.37	30	80	<2	0.27	<0.5	41	153	54	6.94	0.34	70
92MAN0226	till	1	16	594000	5454650	0.6	5.00	6	180	<2	0.66	<0.5	35	130	255	6.10	0.66	150
92MAN0227	till	1	16	588070	5441860	<0.2	8.20	14	140	4	0.25	<0.5	28	130	23	5.70	0.30	20
92MAN0228	till	1	16	588070	5441840	<0.2	3.15	18	120	<2	5.27	<0.5	19	98	78	3.80	0.26	30
92MAN0230	till	1	16	587225	5440850	<0.2	5.67	10	150	4	0.52	<0.5	20	129	25	5.23	0.36	30
92MAN0232	till	1	16	585870	5440240	<0.2	6.20	18	80	6	0.29	<0.5	22	129	22	5.66	0.39	20
92MAN0245	till	1	16	585150	5438900	<0.2	7.17	30	80	<2	0.18	<0.5	24	94	18	6.46	0.24	80
92MAN0246	till	1	16	584825	5437960	<0.2	1.82	10	80	<2	8.05	<0.5	17	68	37	2.49	0.29	30
92MAN0247	till	1	16	584900	5436950	<0.2	2.43	4	90	2	11.12	<0.5	11	69	29	2.65	0.44	20
92MAN0249	till	1	16	584400	5433650	<0.2	6.95	22	140	4	0.52	<0.5	18	115	59	4.17	0.22	80
92MAN0250	till	1	16	584470	5439050	<0.2	3.62	22	130	2	3.62	<0.5	16	92	45	3.77	0.49	30
92MAN0251	till	1	16	581470	5432970	<0.2	4.76	14	160	4	1.86	<0.5	18	120	42	4.78	0.70	40
92MAN0253	till	1	16	582400	5434450	<0.2	1.26	18	70	<2	11.84	<0.5	13	50	41	1.95	0.25	30
92MAN0254	till	1	16	582300	5434600	0.2	2.83	6	120	4	9.54	0.5	21	84	96	3.27	0.37	30
92MAN0256	till	1	16	583960	5432900	0.2	4.63	12	110	6	0.51	<0.5	23	116	39	3.73	0.38	70
92MAN0258	till	1	16	584175	5430600	0.2	9.85	44	40	4	0.12	<0.5	33	94	42	5.78	0.19	30

Manitouwadge 1992 - Trace, Minor, and Major Elements (<0.002 mm fraction)

Sample No.	Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	Tl ppm	V ppm	Zn ppm
92MAN0196	16	583320	5440250	1.41	1205	2	0.75	61	40	<2	26	26	0.15	<10	97	94
92MAN0198	16	585620	5441570	1.19	1025	2	1.18	58	22	2	10	23	0.07	<10	100	74
92MAN0199	16	585900	5441200	1.19	1250	2	1.30	65	28	2	9	26	0.07	<10	88	72
92MAN0200	16	585520	5440850	1.47	710	1	0.90	75	36	4	17	20	0.08	<10	115	100
92MAN0201	16	586370	5441400	3.81	965	<1	0.82	212	24	<2	12	31	0.10	<10	136	120
92MAN0202	16	587800	5443925	0.13	35	3	2.12	12	8	<2	4	4	0.09	<10	42	58
92MAN0203	16	587800	5443850	0.25	130	6	1.74	19	24	<2	7	3	0.15	<10	100	92
92MAN0204	16	587725	5443460	1.00	300	4	1.10	91	26	<2	10	14	0.06	<10	107	116
92MAN0206	16	587200	5442930	1.37	755	1	1.14	79	36	2	13	19	0.08	<10	113	180
92MAN0212	16	579750	5428740	0.73	180	3	0.93	51	8	<2	12	11	0.16	<10	82	50
92MAN0213	16	580750	5430600	1.55	1025	1	1.15	45	18	<2	9	26	0.21	<10	124	100
92MAN0214	16	580550	5431420	2.52	695	<1	0.93	52	20	<2	14	37	0.15	<10	73	118
92MAN0215	16	579000	5430200	2.60	645	<1	0.76	38	22	<2	13	58	0.13	<10	59	104
92MAN0215B	16	579000	5430200	0.89	1025	1	0.97	55	42	<2	11	14	0.14	<10	65	66
92MAN0216	16	580050	5434480	1.61	880	<1	0.67	61	24	<2	22	32	0.23	<10	99	84
92MAN0217	16	581700	5435050	2.54	510	<1	0.78	43	12	<2	15	41	0.15	<10	60	82
92MAN0218	16	583370	5436320	2.38	625	<1	0.68	53	16	<2	15	43	0.19	<10	78	98
92MAN0219	16	583900	5438320	2.78	555	<1	0.73	47	12	<2	13	46	0.17	<10	69	84
92MAN0224	16	601130	5453230	1.21	1535	2	0.96	79	48	<2	25	14	0.16	<10	93	84
92MAN0226	16	594000	5454650	1.49	935	<1	1.19	111	24	<2	18	26	0.13	<10	112	90
92MAN0227	16	588070	5441860	1.18	320	1	1.02	80	22	<2	10	17	0.21	<10	99	84
92MAN0228	16	588070	5441840	2.46	660	<1	1.07	43	16	<2	10	46	0.12	<10	73	80
92MAN0230	16	587225	5440850	1.87	480	<1	0.83	61	14	2	15	29	0.21	<10	98	116
92MAN0232	16	585870	5440240	1.27	420	1	1.04	60	14	<2	8	18	0.16	<10	91	90
92MAN0245	16	585150	5438900	0.78	525	1	1.58	39	40	2	13	13	0.08	<10	114	50
92MAN0246	16	584825	5437960	2.80	670	<1	0.85	28	14	2	8	59	0.08	<10	51	64
92MAN0247	16	584900	5436950	2.45	400	<1	0.58	31	6	<2	9	82	0.13	<10	47	72
92MAN0249	16	584400	5433650	1.07	225	2	1.47	60	20	<2	11	22	0.19	<10	78	58
92MAN0250	16	584470	5439050	2.63	545	<1	0.78	51	6	<2	13	41	0.17	<10	64	100
92MAN0251	16	581470	5432970	2.41	600	<1	0.77	57	16	<2	17	39	0.20	<10	81	100
92MAN0253	16	582400	5434450	3.16	405	<1	0.82	23	14	2	4	84	0.01	<10	41	64
92MAN0254	16	582300	5434600	1.89	475	<1	1.02	53	18	2	8	53	0.09	<10	51	78
92MAN0256	16	583960	5432900	1.16	350	<1	0.87	63	8	<2	11	28	0.14	<10	63	68
92MAN0258	16	584175	5430600	0.61	525	3	1.15	41	34	<2	12	11	0.19	<10	74	38

APPENDIX A (iii)

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**Trace, Minor, and Major Element Data
For Silt and Clay-Sized (<0.063 mm) Fraction
of 1992 Till and Gravel Samples**

Key

Sample No.	Sample number
Sed. Type	Sediment type of sample
Plot	1 - sample representative of sediment at site 0 - sample less representative of sediment at site
Zone	UTM grid zone
Easting (m)	UTM easting (metres)
Northing (m)	UTM northing (metres)
Lat. (deg)	Latitude (degrees)
Long. (deg)	Longitude (degrees)
NTS Map	National Topographic System 1:50,000 map sheet

Element		Unit of Measure	Detection Limit	Analytical Method
Ag	Silver	ppm	0.2 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Al	Aluminium	per cent	0.01%	HCl-HNO ₃ , (3:1) ICP-AES
As	Arsenic	ppm	5 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Ba	Barium	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Bi	Bismuth	ppm	5 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Ca	Calcium	per cent	0.01%	HCl-HNO ₃ , (3:1) ICP-AES
Cd	Cadmium	ppm	0.2 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Co	Cobalt	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Cr	Chromium	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Cu	Copper	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Fe	Iron	per cent	0.01%	HCl-HNO ₃ , (3:1) ICP-AES
K	Potassium	per cent	0.01%	HCl-HNO ₃ , (3:1) ICP-AES
La	Lanthanum	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Mg	Magnesium	per cent	0.01%	HCl-HNO ₃ , (3:1) ICP-AES
Mn	Manganese	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Mo	Molybdenum	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Na	Sodium	per cent	0.01%	HCl-HNO ₃ , (3:1) ICP-AES
Ni	Nickel	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Pb	Lead	ppm	2 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Sb	Antimony	ppm	5 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Sc	Scandium	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Sr	Strontium	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Ti	Titanium	per cent	0.01%	HCl-HNO ₃ , (3:1) ICP-AES
Tl	Thallium	ppm	10 ppm	HCl-HNO ₃ , (3:1) ICP-AES
V	Vanadium	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Zn	Zinc	ppm	1 ppm	HCl-HNO ₃ , (3:1) ICP-AES
Au	Gold	ppb	1 ppm	Aqua Regia Fire Assay/DCP
Pd	Palladium	ppb	1 ppm	Aqua Regia Fire Assay/DCP
Pt	Platinum	ppb	3 ppm	Aqua Regia Fire Assay/DCP

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	Sediment Type	Rep	UTM Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Be ppm	Bi ppm	Ca ppm	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0300	till	1	16	565000	5438900	<0.2	2.14	4	60	0.5	<2	0.37	<0.5	10	47	20	2.14	0.13	10
92KFA0303	till	1	16	565980	5441540	<0.2	0.89	2	20	<0.5	<2	2.62	<0.5	4	30	13	1.24	0.05	40
92KFA0304	till	1	16	567390	5440600	<0.2	0.68	<2	20	<0.5	<2	6.64	<0.5	3	28	13	0.88	0.06	10
92KFA0305	till	1	16	567300	5439150	<0.2	1.22	<2	40	<0.5	<2	4.96	<0.5	3	38	15	1.29	0.11	20
92KFA0306	till	1	16	567150	5438060	<0.2	1.73	<2	20	<0.5	<2	0.25	<0.5	7	27	8	1.34	0.03	10
92KFA0307	till	1	16	563880	5449860	<0.2	2.73	4	130	0.5	<2	0.37	<0.5	13	70	27	2.74	0.19	30
92KFA0308	till	1	16	563850	5448590	<0.2	1.15	<2	60	<0.5	<2	0.3	<0.5	5	33	17	1.36	0.04	20
92KFA0312	till	1	16	554850	5438850	<0.2	0.62	<2	30	<0.5	<2	8.26	<0.5	1	25	9	0.77	0.05	10
92KFA0313	till	1	16	554850	5438200	<0.2	1.32	<2	40	<0.5	<2	0.18	<0.5	5	32	47	1.56	0.04	10
92KFA0314	till	1	16	555230	5437190	<0.2	1.44	<2	40	0.5	<2	0.21	<0.5	6	33	18	2.03	0.06	10
92KFA0315	till	1	16	555890	5436695	<0.2	0.71	<2	30	<0.5	<2	5.56	<0.5	2	26	11	0.88	0.03	10
92KFA0316	till	1	16	555200	5438640	<0.2	1.63	2	20	<0.5	<2	0.18	<0.5	5	29	13	1.41	0.03	20
92KFA0317	till	1	16	556640	5435440	<0.2	1.42	<2	30	0.5	<2	0.12	<0.5	4	26	27	1.86	0.04	10
92KFA0318	till	1	16	556540	5436340	<0.2	1.05	2	10	<0.5	<2	0.12	<0.5	3	26	17	1.27	0.03	10
92KFA0319	till	1	16	557000	5437340	<0.2	1.17	<2	60	0.5	<2	0.22	<0.5	6	34	18	1.34	0.03	30
92KFA0320	till	1	16	557545	5439705	<0.2	1.45	<2	70	0.5	<2	0.2	<0.5	8	41	22	1.6	0.05	30
92KFA0400	till	1	16	569200	5434400	<0.2	1.16	<2	30	<0.5	<2	0.24	<0.5	6	22	10	1.45	0.04	10
92KFA0401	till	1	16	568900	5434210	<0.2	1.66	<2	30	0.5	<2	0.38	<0.5	7	31	15	2.14	0.03	10
92KFA0402	till	1	16	568925	5433450	<0.2	1.43	<2	30	0.5	<2	0.26	<0.5	6	28	10	1.8	0.06	10
92KFA0403	till	1	16	568900	5434730	<0.2	0.82	<2	10	<0.5	<2	0.27	<0.5	6	18	6	1.19	0.03	30
92KFA0404	till	1	16	568480	5435000	<0.2	1.78	<2	70	0.5	<2	0.34	<0.5	10	44	13	2.14	0.15	10
92KFA0405	till	1	16	569700	5435820	<0.2	1.42	2	60	0.5	<2	0.44	<0.5	5	34	9	1.44	0.07	20
92KFA0406	till	1	16	569800	5436075	<0.2	0.72	<2	40	<0.5	<2	0.46	<0.5	4	24	11	1	0.06	20
92KFA0407	till	1	16	569830	5436300	<0.2	0.79	4	20	<0.5	<2	0.29	<0.5	4	22	12	1.17	0.05	10
92KFA0408	till	1	16	570250	5437130	<0.2	0.86	<2	30	<0.5	<2	0.44	<0.5	3	28	8	1.29	0.07	20
92KFA0409	till	1	16	570850	5437000	<0.2	0.91	<2	30	<0.5	<2	0.28	<0.5	2	21	9	0.81	0.05	10
92KFA0410	till	1	16	570900	5437450	<0.2	1.15	<2	30	<0.5	<2	0.13	<0.5	4	23	9	1.06	0.03	10
92KFA0411	till	1	16	570250	5438250	<0.2	0.23	<2	10	<0.5	<2	0.04	<0.5	0.5	5	1	0.21	0.01	<10
92KFA0412	till	1	16	570050	5439000	<0.2	2.22	<2	70	0.5	<2	0.25	<0.5	8	41	12	2.17	0.1	10
92KFA0413	till	1	16	570620	5440250	<0.2	1.96	4	70	0.5	<2	0.27	<0.5	8	50	13	2.28	0.14	10
92KFA0414	till	1	16	595400	5447300	<0.2	1.21	<2	40	0.5	<2	0.53	<0.5	10	32	18	2.27	0.17	20

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	UTM Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	V ppm	Zn ppm	Au ppb	Pd ppb	Pt ppb
92KFA0300	16	565000	5438900	0.66	215	1	0.010	28	6	<2	3	16	0.12	39	42	na	na	na
92KFA0303	16	565980	5441540	1.13	215	<1	0.010	10	2	<2	5	22	0.07	26	16	na	na	na
92KFA0304	16	567390	5440600	2.9	140	<1	0.010	10	2	2	2	39	0.06	21	16	na	na	na
92KFA0305	16	567300	5439150	2.87	170	<1	0.020	15	4	<2	3	31	0.08	26	22	na	na	na
92KFA0306	16	567150	5438060	0.29	85	<1	0.010	16	2	<2	1	10	0.08	22	18	na	na	na
92KFA0307	16	563880	5449860	0.8	270	<1	0.010	33	8	<2	7	23	0.13	52	44	na	na	na
92KFA0308	16	563850	5448590	0.38	110	<1	0.010	17	4	<2	3	12	0.1	28	20	na	na	na
92KFA0312	16	554850	5438850	3.24	150	<1	0.020	9	2	<2	2	49	0.06	20	12	na	na	na
92KFA0313	16	554850	5438200	0.28	90	1	<0.01	15	4	<2	2	8	0.09	30	16	na	na	na
92KFA0314	16	555230	5437190	0.31	100	<1	0.010	15	4	<2	2	10	0.11	37	22	na	na	na
92KFA0315	16	555890	5436695	2.4	135	<1	0.010	9	2	<2	2	34	0.07	21	12	na	na	na
92KFA0316	16	555200	5438640	0.27	80	<1	<0.01	13	4	<2	2	9	0.09	28	14	na	na	na
92KFA0317	16	556640	5435440	0.28	120	<1	<0.01	21	8	<2	2	6	0.1	27	64	na	na	na
92KFA0318	16	556540	5436340	0.26	75	3	<0.01	30	22	<2	1	5	0.08	20	106	na	na	na
92KFA0319	16	557000	5437340	0.37	185	<1	<0.01	20	2	<2	3	11	0.08	26	20	na	na	na
92KFA0320	16	557545	5439705	0.4	145	<1	0.010	25	4	<2	4	11	0.09	29	22	na	na	na
92KFA0400	16	569200	5434400	0.46	120	<1	0.010	15	4	<2	2	16	0.11	29	28	na	na	na
92KFA0401	16	568900	5434210	0.39	180	<1	<0.01	13	4	<2	2	18	0.1	41	54	na	na	na
92KFA0402	16	568925	5433450	0.31	100	<1	0.010	16	4	<2	2	11	0.11	29	20	na	na	na
92KFA0403	16	568900	5434730	0.16	185	<1	<0.01	14	4	2	1	11	0.06	24	10	na	na	na
92KFA0404	16	568480	5435000	0.63	405	1	0.010	24	12	<2	4	21	0.13	42	36	na	na	na
92KFA0405	16	569700	5435820	0.44	150	<1	0.010	17	4	<2	3	16	0.1	28	24	na	na	na
92KFA0406	16	569800	5436075	0.35	100	<1	0.010	12	<2	<2	3	15	0.08	20	22	na	na	na
92KFA0407	16	569830	5436300	0.24	125	<1	0.010	13	2	<2	1	11	0.07	23	14	na	na	na
92KFA0408	16	570250	5437130	0.39	160	<1	0.010	12	<2	<2	2	18	0.1	28	22	na	na	na
92KFA0409	16	570850	5437000	0.25	70	<1	<0.01	12	4	<2	1	12	0.08	18	14	na	na	na
92KFA0410	16	570900	5437450	0.23	65	<1	<0.01	12	2	<2	1	6	0.07	21	12	na	na	na
92KFA0411	16	570250	5438250	0.01	15	<1	<0.01	1	4	<2	0	5	0.05	10	2	na	na	na
92KFA0412	16	570050	5439000	0.56	220	<1	0.010	23	4	<2	3	12	0.11	36	38	na	na	na
92KFA0413	16	570620	5440250	0.56	225	1	0.010	25	6	<2	3	16	0.12	38	46	na	na	na
92KFA0414	16	595400	5447300	0.53	250	1	0.010	19	14	<2	2	14	0.1	37	118	na	na	na

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	Sediment Type	Rep	UTM Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Be ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0415	till	1	16	595620	5447610	<0.2	0.5	<2	10	<0.5	<2	4.01	<0.5	2	18	7	0.71	0.03	10
92KFA0416	gravel/sand	1	16	595600	5447900	<0.2	1.13	<2	30	<0.5	<2	0.11	<0.5	2	17	2	0.98	0.02	10
92KFA0417	till	1	16	595650	5447420	<0.2	1.38	6	40	0.5	<2	0.99	<0.5	6	29	11	2.12	0.07	10
92KFA0418	till	1	16	595810	5447500	<0.2	1.11	<2	40	0.5	<2	0.34	<0.5	7	34	16	1.72	0.07	20
92KFA0419	till	1	16	597100	5447200	<0.2	1.21	2	40	0.5	<2	0.29	<0.5	5	29	8	1.41	0.07	10
92KFA0420	till	1	16	597370	5447400	<0.2	1.06	<2	30	0.5	<2	7.02	<0.5	4	36	12	1.28	0.13	20
92KFA0421	till	1	16	597450	5448000	0.2	0.98	2	30	0.5	<2	1.98	<0.5	4	25	8	1.15	0.05	20
92KFA0422	gravel/sand	1	16	597300	5448470	<0.2	0.91	<2	20	0.5	<2	0.2	<0.5	3	23	4	1.23	0.04	20
92KFA0423	till	1	16	597200	5449150	<0.2	1.06	<2	30	0.5	<2	0.31	<0.5	7	35	11	1.68	0.09	30
92KFA0424	till	1	16	597300	5449175	<0.2	0.65	2	20	<0.5	<2	3.82	<0.5	4	26	9	1.07	0.08	10
92KFA0425	gravel/sand	1	16	597720	5450320	<0.2	1.65	<2	40	0.5	<2	1.37	<0.5	9	35	12	1.9	0.06	40
92KFA0426	till	1	16	597150	5449950	0.2	0.6	<2	20	<0.5	<2	1.1	<0.5	6	32	12	1.34	0.07	40
92KFA0427	till	1	16	571575	5443640	<0.2	1.57	4	30	<0.5	<2	0.17	<0.5	6	30	19	1.51	0.04	10
92KFA0428	till	1	16	571330	5444215	<0.2	0.64	<2	30	<0.5	6	9.7	<0.5	4	27	11	0.91	0.12	10
92KFA0429	till	1	16	570650	5444250	<0.2	0.88	2	30	<0.5	4	0.53	<0.5	3	19	5	1.11	0.06	10
92KFA0430	till	1	16	570150	5444100	<0.2	0.37	<2	10	<0.5	<2	6.14	<0.5	1	16	4	0.6	0.03	10
92KFA0431	till	1	16	569745	5444050	<0.2	0.34	<2	10	<0.5	<2	0.07	<0.5	0.5	8	2	0.45	0.02	<10
92KFA0432	till	1	16	569360	5442850	<0.2	0.95	<2	30	<0.5	<2	0.26	<0.5	4	22	4	1.11	0.03	10
92KFA0433	till	1	16	568400	5443535	<0.2	1.39	4	30	<0.5	2	0.34	<0.5	7	25	12	1.72	0.07	30
92KFA0434	till	1	16	568100	5443850	<0.2	0.72	2	10	<0.5	4	0.31	<0.5	3	20	9	1.09	0.03	10
92KFA0435	till	1	16	570960	5446715	<0.2	1.22	4	40	<0.5	2	0.26	<0.5	6	30	23	1.4	0.05	20
92KFA0438	till	1	16	583400	5407230	<0.2	0.95	4	40	<0.5	<2	0.18	<0.5	3	26	10	1.1	0.04	10
92KFA0439	till	1	16	583300	5407080	<0.2	0.99	<2	20	<0.5	2	0.43	<0.5	11	37	47	1.75	0.07	20
92KFA0440	till	1	16	582900	5406350	<0.2	1.08	8	70	<0.5	<2	0.43	<0.5	10	44	31	1.85	0.17	30
92KFA0441	till	1	16	583220	5406330	<0.2	0.65	<2	40	<0.5	2	5.01	<0.5	5	29	25	1.12	0.12	20
92KFA0442	till	1	16	582070	5406320	<0.2	1.3	4	40	<0.5	2	0.41	<0.5	9	44	24	1.78	0.12	20
92KFA0443	till	1	16	582760	5406120	<0.2	1	6	20	<0.5	4	0.31	<0.5	5	24	9	1.15	0.06	10
92KFA0444	till	1	16	581840	5405960	<0.2	0.5	6	40	<0.5	2	7.32	<0.5	5	28	29	1.1	0.1	20
92KFA0445	till	1	16	581050	5406250	<0.2	1.75	8	70	<0.5	<2	0.33	<0.5	14	83	29	2.41	0.26	10
92KFA0446	till	1	16	579650	5406520	<0.2	0.93	<2	30	<0.5	4	0.34	<0.5	4	29	12	1.17	0.06	10
92KFA0447	till	1	16	580350	5406470	<0.2	0.81	<2	30	<0.5	<2	0.42	<0.5	7	38	13	1.31	0.13	20

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	UTM Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	V ppm	Zn ppm	Au ppb	Pd ppb	Pt ppb
92KFA0415	16	595620	5447610	2.27	100	<1	0.010	6	<2	<2	2	22	0.05	17	16	na	na	na
92KFA0416	16	595600	5447900	0.15	45	<1	<0.01	8	2	<2	1	6	0.07	22	10	na	na	na
92KFA0417	16	595650	5447420	0.54	295	<1	0.010	14	6	<2	3	13	0.08	27	38	na	na	na
92KFA0418	16	595810	5447500	0.33	255	1	0.010	19	6	2	3	13	0.08	32	26	na	na	na
92KFA0419	16	597100	5447200	0.31	230	1	0.010	13	2	<2	3	17	0.09	27	18	na	na	na
92KFA0420	16	597370	5447400	3.58	265	<1	0.020	16	2	<2	4	43	0.08	28	22	na	na	na
92KFA0421	16	597450	5448000	0.97	170	<1	0.010	11	2	<2	2	16	0.07	23	16	na	na	na
92KFA0422	16	597300	5448470	0.17	105	<1	<0.01	11	4	<2	2	10	0.07	25	14	na	na	na
92KFA0423	16	597200	5449150	0.51	230	<1	<0.01	18	<2	<2	3	18	0.09	31	28	na	na	na
92KFA0424	16	597300	5449175	1.5	210	<1	0.010	11	4	<2	2	28	0.05	21	20	na	na	na
92KFA0425	16	597720	5450320	0.72	505	<1	<0.01	17	14	<2	4	11	0.06	31	20	na	na	na
92KFA0426	16	597150	5449950	0.58	295	<1	0.010	13	<2	<2	4	17	0.07	25	22	na	na	na
92KFA0427	16	571575	5443640	0.38	105	<1	0.010	16	4	<2	3	11	0.13	34	22	na	na	na
92KFA0428	16	571330	5444215	3.11	215	<1	0.020	10	6	<2	2	62	0.06	21	18	na	na	na
92KFA0429	16	570650	5444250	0.28	145	<1	<0.01	10	4	<2	1	11	0.08	23	18	na	na	na
92KFA0430	16	570150	5444100	2.33	140	<1	0.010	5	<2	<2	1	34	0.04	14	8	na	na	na
92KFA0431	16	569745	5444050	0.03	20	<1	<0.01	1	4	<2	0	4	0.09	19	6	na	na	na
92KFA0432	16	569360	5442850	0.3	105	<1	<0.01	11	4	<2	2	11	0.09	26	16	na	na	na
92KFA0433	16	568400	5443535	0.38	205	<1	0.010	13	2	<2	3	15	0.11	32	24	na	na	na
92KFA0434	16	568100	5443850	0.29	180	<1	<0.01	8	<2	<2	2	11	0.08	23	16	na	na	na
92KFA0435	16	570960	5446715	0.35	130	<1	0.010	17	<2	<2	2	11	0.1	29	20	na	na	na
92KFA0438	16	583400	5407230	0.28	115	<1	<0.01	13	<2	<2	2	8	0.06	21	16	na	na	na
92KFA0439	16	583300	5407080	0.52	190	<1	0.010	23	18	<2	2	19	0.08	33	24	na	na	na
92KFA0440	16	582900	5406350	0.6	340	<1	0.010	26	6	<2	2	17	0.1	40	34	na	na	na
92KFA0441	16	583220	5406330	1.86	200	<1	0.010	13	8	<2	2	38	0.06	25	22	na	na	na
92KFA0442	16	582070	5406320	0.57	245	1	0.010	23	4	<2	2	18	0.12	37	38	na	na	na
92KFA0443	16	582760	5406120	0.3	125	<1	0.010	12	6	<2	1	12	0.07	23	16	na	na	na
92KFA0444	16	581840	5405960	2.36	160	<1	0.010	11	<2	<2	2	46	0.05	25	22	na	na	na
92KFA0445	16	581050	5406250	0.86	220	<1	0.010	57	<2	<2	3	17	0.15	55	48	na	na	na
92KFA0446	16	579650	5406520	0.29	140	<1	0.010	13	2	<2	2	13	0.08	25	16	na	na	na
92KFA0447	16	580350	5406470	0.46	200	<1	0.010	38	10	<2	2	18	0.09	30	24	na	na	na

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	Sediment Type	Rep	UTM Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Be ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0448	till	1	16	580800	5405320	<0.2	1.19	<2	40	<0.5	4	0.46	<0.5	9	48	20	1.65	0.19	20
92KFA0449	till	1	16	581220	5411900	<0.2	0.98	<2	20	<0.5	<2	0.29	<0.5	5	32	17	1.35	0.04	20
92KFA0451	till	1	16	578900	5412000	<0.2	0.99	<2	20	<0.5	4	0.24	<0.5	13	91	31	1.5	0.04	10
92KFA0452	till	1	16	579175	5411330	<0.2	0.74	4	20	<0.5	2	0.25	<0.5	3	22	8	0.96	0.03	10
92KFA0453	till	1	16	579000	5411000	<0.2	1.05	4	20	<0.5	4	0.42	<0.5	8	61	13	1.53	0.09	20
92KFA0454	till	1	16	579180	5410830	<0.2	0.81	<2	30	<0.5	<2	0.46	<0.5	6	30	13	1.43	0.09	30
92KFA0455	till	1	16	581800	5409820	0.2	1.16	2	30	<0.5	6	0.49	<0.5	7	49	20	1.74	0.18	30
92KFA0456	till	1	16	582100	5410270	<0.2	0.76	4	20	<0.5	<2	0.38	<0.5	4	30	13	1.3	0.06	20
92KFA0457	till	1	16	581800	5408950	<0.2	1.23	<2	40	<0.5	4	0.59	<0.5	6	46	29	1.79	0.16	20
92KFA0458	till	1	16	580250	5409000	<0.2	0.97	4	20	<0.5	4	0.57	<0.5	11	68	20	1.73	0.15	20
92KFA0459	till	1	16	580050	5407800	0.2	0.77	2	20	<0.5	2	0.32	<0.5	2	24	13	1.12	0.08	20
92KFA0460	gravel/sand	1	16	604775	5452325	0.2	1.24	10	50	0.5	<2	2.76	<0.5	17	62	44	2.61	0.15	80
92KFA0461	gravel/sand	1	16	604950	5452500	<0.2	0.94	2	30	<0.5	<2	10.59	<0.5	17	74	42	1.82	0.13	10
92KFA0462	gravel/sand	1	16	605350	5451880	<0.2	0.79	8	20	<0.5	<2	0.25	<0.5	6	22	9	1.1	0.06	10
92KFA0463	till	1	16	648770	5450320	<0.2	0.39	<2	20	<0.5	<2	9.97	<0.5	2	20	10	0.68	0.07	10
92KFA0463	till	1	16	648770	5450320	<0.2	0.41	<2	20	<0.5	6	5.9	<0.5	3	20	13	0.9	0.06	10
92KFA0464	till	1	16	648570	5452280	0.2	0.56	<2	20	<0.5	2	7.26	<0.5	6	27	13	1.05	0.07	10
92KFA0466	till	1	16	645700	5453580	<0.2	0.41	<2	20	<0.5	<2	7.25	<0.5	2	21	8	0.71	0.06	10
92KFA0467	till	1	16	645400	5454030	<0.2	0.67	<2	30	<0.5	2	8.12	<0.5	3	28	11	0.92	0.09	10
92KFA0468	till	1	16	644700	5455000	<0.2	0.32	<2	10	<0.5	4	8.4	<0.5	2	17	7	0.57	0.04	10
92KFA0469	till	1	16	643200	5456800	<0.2	1.25	8	50	<0.5	2	10.57	<0.5	7	58	21	1.67	0.12	20
92KFA0470	till	1	16	644450	5458750	<0.2	1.64	16	60	0.5	2	0.26	<0.5	8	45	17	1.84	0.09	10
92KFA0471	till	1	16	644690	5459050	<0.2	0.47	4	20	<0.5	<2	10.32	<0.5	3	21	10	0.71	0.04	10
92KFA0472	till	1	16	645050	5459750	<0.2	0.52	4	30	<0.5	4	11.6	<0.5	6	32	18	0.93	0.08	10
92KFA0473	till	1	16	643450	5458900	<0.2	0.33	<2	10	<0.5	2	9.85	<0.5	1	19	7	0.61	0.05	<10
92KFA0474	till	1	16	643300	5458300	0.2	0.48	2	10	<0.5	2	4.56	<0.5	2	21	6	0.79	0.08	10
92KFA0475	till	1	16	641370	5457810	<0.2	0.37	<2	10	<0.5	<2	9.69	<0.5	1	18	6	0.63	0.04	10
92KFA0476	till	1	16	640250	5458170	<0.2	0.42	<2	20	<0.5	4	10.81	<0.5	2	20	8	0.73	0.07	10
92KFA0477	till	1	16	639350	5458600	0.2	0.33	<2	10	<0.5	4	11.06	<0.5	2	17	8	0.58	0.06	10
92KFA0478	till	1	16	637550	5458240	<0.2	0.81	<2	20	<0.5	<2	9.83	<0.5	6	33	11	1.21	0.12	20
92KFA0479	silt/clay	1	16	638025	5459150	<0.2	0.67	<2	20	<0.5	<2	9.46	<0.5	3	26	10	0.93	0.11	10

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	UTM Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	V ppm	Zn ppm	Au ppb	Pd ppb	Pt ppb
92KFA0448	16	580800	5405320	0.57	225	1	0.010	26	<2	<2	2	20	0.12	41	30	na	na	na
92KFA0449	16	581220	5411900	0.26	120	<1	0.010	18	4	<2	2	13	0.08	27	14	na	na	na
92KFA0451	16	578900	5412000	0.61	105	<1	<0.01	81	8	<2	1	12	0.07	23	16	na	na	na
92KFA0452	16	579175	5411330	0.24	90	<1	<0.01	10	4	<2	1	9	0.07	19	12	na	na	na
92KFA0453	16	579000	5411000	0.51	250	<1	0.010	21	4	<2	2	16	0.09	32	24	na	na	na
92KFA0454	16	579180	5410830	0.42	215	<1	0.010	12	<2	<2	3	17	0.08	30	24	na	na	na
92KFA0455	16	581800	5409820	0.67	245	<1	0.010	20	6	<2	2	24	0.12	39	38	na	na	na
92KFA0456	16	582100	5410270	0.32	210	<1	0.010	13	6	<2	2	17	0.07	27	20	na	na	na
92KFA0457	16	581800	5408950	0.74	250	<1	0.020	19	<2	<2	2	29	0.13	40	40	na	na	na
92KFA0458	16	580250	5409000	1.15	250	<1	0.020	79	<2	<2	2	25	0.11	39	30	na	na	na
92KFA0459	16	580050	5407800	0.3	155	<1	0.010	11	<2	<2	2	13	0.08	24	18	na	na	na
92KFA0460	16	604775	5452325	1.86	685	<1	0.01	40	12	<2	10	21	0.09	49	40	<4	<4	<10
92KFA0461	16	604950	5452500	3.94	395	<1	0.01	53	4	<2	3	63	0.09	38	50	24	6	15
92KFA0462	16	605350	5451880	0.23	140	<1	<0.01	11	2	<2	2	11	0.07	22	16	8	<2	<5
92KFA0463	16	648770	5450320	3.58	170	<1	0.010	7	2	2	1	58	0.04	17	12	na	na	na
92KFA0463	16	648770	5450320	2.69	170	<1	0.010	8	4	<2	2	33	0.04	18	18	na	na	na
92KFA0464	16	648570	5452280	2.38	195	<1	0.010	12	6	<2	2	46	0.04	22	18	na	na	na
92KFA0466	16	645700	5453580	3.57	155	<1	0.010	7	4	<2	2	38	0.04	17	10	na	na	na
92KFA0467	16	645400	5454030	3.67	165	<1	0.010	10	<2	<2	2	45	0.06	21	16	na	na	na
92KFA0468	16	644700	5455000	3.64	140	<1	0.010	6	2	<2	1	45	0.04	15	6	na	na	na
92KFA0469	16	643200	5456800	5.72	320	<1	0.020	23	10	<2	4	58	0.08	36	30	na	na	na
92KFA0470	16	644450	5458750	0.44	280	<1	0.010	24	6	<2	4	9	0.07	30	24	na	na	na
92KFA0471	16	644690	5459050	3.77	205	<1	0.010	8	4	<2	1	58	0.03	15	14	na	na	na
92KFA0472	16	645050	5459750	3.53	235	<1	0.010	13	4	<2	2	67	0.04	20	22	na	na	na
92KFA0473	16	643450	5458900	3.49	145	<1	0.010	6	2	<2	1	56	0.03	14	10	na	na	na
92KFA0474	16	643300	5458300	2.32	165	<1	0.010	7	<2	<2	2	26	0.04	18	12	na	na	na
92KFA0475	16	641370	5457810	3.8	170	<1	0.010	6	<2	<2	1	53	0.04	15	8	na	na	na
92KFA0476	16	640250	5458170	3.86	185	<1	0.010	8	4	<2	2	63	0.04	18	12	na	na	na
92KFA0477	16	639350	5458600	4	160	<1	0.010	6	2	2	1	63	0.04	14	10	na	na	na
92KFA0478	16	637550	5458240	3.8	270	<1	0.010	12	6	<2	3	58	0.07	26	20	na	na	na
92KFA0479	16	638025	5459150	3.81	230	<1	0.010	9	4	2	2	55	0.05	20	16	na	na	na

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	Sediment Type	Rep	UTM Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Be ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0480	till	1	16	638875	5461560	<0.2	0.26	<2	10	<0.5	6	6.83	<0.5	2	17	6	0.58	0.03	10
92KFA0481	till	1	16	638300	5462800	<0.2	0.5	<2	20	<0.5	<2	11.53	<0.5	2	22	9	0.73	0.05	10
92KFA0482	till	1	16	636730	5457125	<0.2	0.68	<2	20	<0.5	<2	10.28	<0.5	3	26	12	0.95	0.09	10
92KFA0483	till	1	16	635600	5456775	<0.2	0.5	<2	30	<0.5	<2	10.2	<0.5	3	24	11	0.8	0.1	10
92KFA0484	till	1	16	635050	5456200	<0.2	0.73	<2	20	<0.5	4	9.86	<0.5	4	27	13	1.03	0.1	10
92KFA0485	till	1	16	634860	5455950	<0.2	0.43	<2	20	<0.5	2	7.96	<0.5	3	26	7	0.79	0.07	10
92KFA0486	till	1	16	634470	5455250	<0.2	0.32	4	10	<0.5	2	8.76	<0.5	3	23	6	0.7	0.06	10
92KFA0487	till	1	16	633290	5454650	<0.2	0.57	<2	30	<0.5	<2	10.94	<0.5	2	25	10	0.84	0.08	10
92KFA0488	till	1	16	630925	5455030	<0.2	0.4	<2	20	<0.5	2	9.44	<0.5	2	23	6	0.73	0.05	10
92KFA0489	till	1	16	630100	5456350	<0.2	0.46	<2	20	<0.5	<2	6.72	<0.5	3	27	14	0.88	0.04	10
92KFA0490	till	1	16	630500	5457000	<0.2	0.66	<2	30	<0.5	2	8.89	<0.5	5	32	18	1	0.1	10
92KFA0491	till	1	16	631380	5460200	<0.2	0.74	<2	20	<0.5	2	10.22	<0.5	2	30	12	1	0.11	10
92KFA0492	till	1	16	631150	5459500	<0.2	0.68	<2	20	<0.5	4	10.49	<0.5	4	27	12	1.04	0.1	10
92KFA0493	till	1	16	630600	5458530	<0.2	0.48	<2	30	<0.5	<2	10.44	<0.5	3	22	11	0.76	0.07	10
92KFA0494	till	1	16	629280	5455350	<0.2	0.34	<2	20	<0.5	<2	8.97	<0.5	3	23	13	0.77	0.07	10
92KFA0495	till	1	16	627175	5455690	<0.2	0.51	<2	30	<0.5	<2	10.11	<0.5	3	24	12	0.82	0.09	10
92KFA0497	till	1	16	625880	5455575	<0.2	0.3	<2	10	<0.5	4	9.59	<0.5	2	19	7	0.64	0.04	10
92KFA0498	till	1	16	634550	5454100	<0.2	0.52	<2	30	<0.5	2	9.76	<0.5	3	25	11	0.86	0.1	10
92KFA0499	till	1	16	633770	5453050	0.2	0.49	<2	20	<0.5	<2	9.13	<0.5	3	23	11	0.82	0.07	10
92KFA0500	till	1	16	632850	5452300	0.2	0.63	4	20	<0.5	<2	9.06	<0.5	4	26	12	0.87	0.08	10
92KFA0501	till	1	16	632570	5452100	0.2	0.34	<2	10	<0.5	6	8.97	<0.5	2	18	7	0.7	0.06	10
92KFA0502	till	1	16	631500	5451800	<0.2	0.64	2	40	<0.5	4	7.61	<0.5	4	28	10	1.11	0.15	30
92KFA0503	till	1	16	630100	5451300	<0.2	0.45	<2	20	<0.5	4	7.12	<0.5	2	19	6	0.65	0.04	10
92KFA0504	till	1	16	629000	5450000	<0.2	0.74	<2	30	<0.5	<2	10.12	<0.5	3	28	13	1.03	0.1	10
92KFA0505	till	1	16	627650	5449210	<0.2	0.79	2	30	<0.5	<2	9.19	<0.5	4	30	12	1.03	0.14	10
92KFA0506	till	1	16	647580	5449500	<0.2	0.53	<2	20	<0.5	4	9.89	<0.5	3	21	10	0.8	0.08	10
92KFA0507	till	1	16	647450	5449450	<0.2	0.6	8	40	<0.5	<2	7.58	<0.5	4	26	15	1.16	0.14	20
92KFA0508	till	1	16	646350	5447650	<0.2	0.43	2	20	<0.5	<2	7.35	<0.5	3	21	8	0.8	0.06	10
92KFA0509	till	1	16	646630	5445800	0.2	0.55	4	20	<0.5	2	10.3	<0.5	3	23	11	0.85	0.08	10
92KFA0510	till	1	16	645850	5444690	<0.2	0.32	<2	20	<0.5	4	8.65	<0.5	2	17	7	0.69	0.05	10
92KFA0511	till	1	16	646100	5444050	<0.2	0.34	<2	20	<0.5	6	8.5	<0.5	3	19	7	0.68	0.08	10

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	UTM Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	V ppm	Zn ppm	Au ppb	Pd ppb	Pt ppb
92KFA0480	16	638875	5461560	2.98	125	<1	0.010	5	2	<2	1	36	0.03	15	8	na	na	na
92KFA0481	16	638300	5462800	3.83	185	<1	0.010	7	2	<2	2	66	0.04	17	14	na	na	na
92KFA0482	16	636730	5457125	3.97	215	<1	0.010	9	6	<2	2	60	0.05	20	18	na	na	na
92KFA0483	16	635600	5456775	3.78	195	<1	0.010	9	<2	<2	2	59	0.05	19	14	na	na	na
92KFA0484	16	635050	5456200	3.6	245	<1	0.010	10	10	<2	2	59	0.06	22	18	na	na	na
92KFA0485	16	634860	5455950	3.3	170	<1	0.010	9	<2	<2	1	44	0.04	20	12	na	na	na
92KFA0486	16	634470	5455250	3.58	150	<1	0.010	7	2	<2	1	48	0.04	18	8	na	na	na
92KFA0487	16	633290	5454650	3.96	205	<1	0.010	9	6	<2	2	64	0.05	19	16	na	na	na
92KFA0488	16	630925	5455030	3.69	170	<1	0.010	7	<2	<2	2	53	0.04	18	10	na	na	na
92KFA0489	16	630100	5456350	3.62	190	<1	0.010	10	2	<2	3	34	0.04	21	12	na	na	na
92KFA0490	16	630500	5457000	3.39	195	<1	0.010	16	2	<2	2	53	0.06	24	18	na	na	na
92KFA0491	16	631380	5460200	3.76	230	<1	0.010	9	4	<2	2	61	0.06	22	18	na	na	na
92KFA0492	16	631150	5459500	3.1	230	<1	0.010	8	4	<2	2	66	0.06	23	18	na	na	na
92KFA0493	16	630600	5458530	3.93	185	<1	0.010	9	<2	<2	2	60	0.04	19	14	na	na	na
92KFA0494	16	629280	5455350	3.47	165	<1	0.010	9	4	<2	1	51	0.04	20	12	na	na	na
92KFA0495	16	627175	5455690	3.64	190	<1	0.010	9	2	<2	2	59	0.05	19	14	na	na	na
92KFA0497	16	625880	5455575	3.72	165	<1	0.010	6	2	<2	1	53	0.03	16	8	na	na	na
92KFA0498	16	634550	5454100	3.59	205	<1	0.010	10	4	<2	2	57	0.04	19	16	na	na	na
92KFA0499	16	633770	5453050	3.51	200	<1	0.010	8	4	<2	2	51	0.04	18	16	na	na	na
92KFA0500	16	632850	5452300	2.97	205	<1	0.010	9	4	<2	2	56	0.05	19	18	na	na	na
92KFA0501	16	632570	5452100	3.35	170	<1	0.010	6	<2	<2	1	51	0.04	15	14	na	na	na
92KFA0502	16	631500	5451800	3.08	220	1	0.010	11	6	<2	2	49	0.07	23	26	na	na	na
92KFA0503	16	630100	5451300	3.42	130	<1	0.010	6	<2	<2	1	37	0.04	16	10	na	na	na
92KFA0504	16	629000	5450000	3.67	240	<1	0.010	10	4	<2	2	61	0.06	22	18	na	na	na
92KFA0505	16	627650	5449210	3.31	225	<1	0.010	10	2	<2	2	57	0.06	22	20	na	na	na
92KFA0506	16	647580	5449500	3.72	195	<1	0.010	8	2	2	2	57	0.05	19	14	na	na	na
92KFA0507	16	647450	5449450	2.89	210	<1	0.010	12	6	<2	2	47	0.08	22	46	na	na	na
92KFA0508	16	646350	5447650	3.3	180	<1	0.010	7	<2	<2	2	40	0.04	18	16	na	na	na
92KFA0509	16	646630	5445800	3.72	205	<1	0.010	8	4	<2	2	59	0.04	18	16	na	na	na
92KFA0510	16	645850	5444690	3.18	145	<1	0.010	6	2	<2	1	48	0.03	15	12	na	na	na
92KFA0511	16	646100	5444050	3.26	160	<1	0.010	7	<2	<2	1	48	0.04	16	14	na	na	na

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	Sediment Type	Rep	UTM Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Be ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0512	till	1	16	645370	5442850	<0.2	0.63	<2	30	<0.5	4	8.96	<0.5	3	26	13	1.01	0.06	10
92KFA0513	till	1	16	646060	5441630	<0.2	0.58	<2	20	<0.5	2	7.18	<0.5	2	23	10	0.81	0.06	10
92KFA0514	till	1	16	645480	5440830	<0.2	0.41	<2	10	<0.5	<2	7.62	<0.5	2	22	7	0.72	0.06	10
92KFA0523	till	1	16	580650	5403800	0.2	0.6	<2	30	<0.5	<2	0.41	<0.5	5	25	14	1.17	0.09	20
92KFA0524	till	1	16	580640	5403175	<0.2	0.65	4	20	<0.5	<2	0.51	<0.5	7	21	12	1.31	0.13	20
92KFA0525	till	1	16	580530	5403000	0.2	1.06	2	40	<0.5	<2	0.62	<0.5	19	35	84	2.46	0.16	30
92KFA0526	till	1	16	579700	5401900	<0.2	0.81	8	20	0.5	<2	0.65	<0.5	7	28	14	1.58	0.08	40
92KFA0527	till	1	16	579550	5401000	<0.2	1.14	2	50	0.5	2	0.77	<0.5	9	42	16	1.86	0.22	40
92KFA0528	till	1	16	579460	5400600	0.2	1.23	4	70	0.5	<2	0.83	<0.5	10	43	17	1.94	0.34	40
92KFA0529	till	1	16	584425	5400200	<0.2	0.95	6	20	<0.5	<2	0.42	<0.5	3	24	7	1.17	0.07	20
92KFA0531	till	1	16	585450	5400675	0.2	0.52	<2	30	<0.5	<2	8.81	<0.5	2	20	10	0.71	0.09	10
92KFA0532	till	1	16	585320	5400825	0.2	1.15	<2	100	<0.5	<2	0.76	<0.5	7	32	11	1.81	0.29	40
92KFA0533	till	1	16	585350	5400900	0.2	1.49	<2	170	<0.5	<2	0.84	<0.5	10	37	19	2.28	0.41	70
92KFA0534	till	1	16	585450	5401050	<0.2	1.11	<2	80	0.5	<2	0.74	<0.5	10	33	21	1.93	0.23	40
92KFA0535	till	1	16	593250	5407270	0.2	1.23	8	30	0.5	<2	0.37	<0.5	4	29	16	1.33	0.08	40
92KFA0536	till	1	16	593350	5408250	0.2	1.78	<2	60	0.5	<2	0.23	<0.5	10	30	40	1.59	0.07	10
92KFA0540	till	1	16	585100	5442910	0.2	0.42	<2	20	<0.5	<2	8.59	<0.5	4	19	15	0.8	0.06	10
92KFA0541	till	1	16	585500	5444250	0.2	1.25	<2	30	0.5	<2	0.33	<0.5	7	36	12	1.74	0.07	40
92KFA0542	till	1	16	585550	5445175	0.2	0.96	<2	30	0.5	<2	0.32	1	4	26	49	1.26	0.1	30
92KFA0543	till	1	16	571650	5449450	0.2	0.55	<2	30	<0.5	<2	6.78	<0.5	4	22	23	0.96	0.11	10
92KFA0544	till	1	16	572490	5449450	0.2	0.47	<2	20	<0.5	<2	7.86	<0.5	4	21	14	0.8	0.09	10
92KFA0545	till	1	16	593550	5406300	<0.2	0.68	4	60	<0.5	<2	1.88	<0.5	21	39	122	1.77	0.11	10
92KFA0546	till	1	16	593500	5408690	<0.2	1.69	<2	50	0.5	<2	0.32	<0.5	8	33	41	1.45	0.1	10
92KFA0547	till	1	16	593300	5408770	0.2	2.4	4	60	0.5	<2	0.23	<0.5	8	34	14	2.32	0.08	10
92KFA0548	till	1	16	593200	5410480	<0.2	0.95	<2	20	<0.5	<2	0.3	<0.5	3	22	19	0.88	0.04	10
92KFA0549	till	1	16	593300	5411540	<0.2	1.04	2	50	<0.5	<2	0.47	<0.5	7	29	15	1.47	0.1	20
92KFA0550	till	1	16	592220	5411100	0.2	1.19	6	20	<0.5	<2	0.14	<0.5	4	19	4	0.97	0.04	10
92KFA0551	till	1	16	592470	5410000	<0.2	1	<2	20	<0.5	<2	0.2	<0.5	7	24	8	1.3	0.03	10
92KFA0552	till	1	16	592680	5409530	<0.2	0.72	<2	20	<0.5	<2	0.21	<0.5	5	24	26	0.91	0.02	10
92KFA0553	gravel/sand	1	16	593025	5408600	<0.2	4.07	2	30	1	<2	0.37	<0.5	18	48	33	3.35	0.07	10
92KFA0554	till	1	16	593200	5406600	<0.2	0.77	6	20	<0.5	<2	0.35	<0.5	14	93	64	1.38	0.06	20

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	UTM Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	V ppm	Zn ppm	Au ppb	Pd ppb	Pt ppb
92KFA0512	16	645370	5442850	3.98	180	<1	0.010	10	4	<2	2	48	0.04	21	18	na	na	na
92KFA0513	16	646060	5441630	3.59	150	<1	0.010	9	2	2	2	37	0.04	18	16	na	na	na
92KFA0514	16	645480	5440830	3.48	165	<1	0.010	8	4	2	2	40	0.04	17	12	na	na	na
92KFA0523	16	580650	5403800	0.3	160	<1	0.01	15	4	<2	3	19	0.08	29	16	2	<2	<5
92KFA0524	16	580640	5403175	0.34	150	<1	0.01	13	<2	<2	2	27	0.11	33	26	2	4	<5
92KFA0525	16	580530	5403000	0.63	310	<1	0.03	36	2	<2	6	29	0.14	56	60	<2	4	<5
92KFA0526	16	579700	5401900	0.5	235	<1	0.01	12	6	<2	3	58	0.12	38	50	2	4	<5
92KFA0527	16	579550	5401000	0.79	265	<1	0.03	20	<2	<2	3	46	0.15	49	58	<2	2	<5
92KFA0528	16	579460	5400600	0.88	275	<1	0.03	24	<2	2	3	53	0.16	52	56	<2	4	<5
92KFA0529	16	584425	5400200	0.3	155	<1	0.01	10	2	<2	2	23	0.1	27	18	<2	10	5
92KFA0531	16	585450	5400675	3.12	135	<1	0.01	7	2	2	2	58	0.06	20	14	<2	<2	5
92KFA0532	16	585320	5400825	0.71	230	<1	0.03	17	<2	<2	4	40	0.12	44	52	<2	2	5
92KFA0533	16	585350	5400900	0.9	355	<1	0.03	21	<2	<2	6	44	0.14	55	62	<2	4	5
92KFA0534	16	585450	5401050	0.7	310	<1	0.03	16	4	<2	4	49	0.11	50	50	8	8	5
92KFA0535	16	593250	5407270	0.36	230	<1	0.01	13	<2	<2	7	19	0.1	28	20	<2	2	<5
92KFA0536	16	593350	5408250	0.35	110	<1	0.01	19	4	<2	3	14	0.1	31	20	<2	6	5
92KFA0540	16	585100	5442910	3.26	165	<1	0.01	6	4	<2	2	52	0.05	20	18	<2	6	5
92KFA0541	16	585500	5444250	0.28	615	<1	<0.01	16	2	<2	6	13	0.09	33	20	<2	10	5
92KFA0542	16	585550	5445175	0.3	295	<1	0.01	11	2	<2	4	15	0.08	25	396	<2	6	5
92KFA0543	16	571650	5449450	2.78	160	<1	0.02	9	2	<2	2	45	0.08	26	18	<2	<2	<5
92KFA0544	16	572490	5449450	2.78	145	<1	0.01	8	<2	<2	2	52	0.07	22	14	2	2	<5
92KFA0545	16	593550	5406300	1.01	135	<1	0.01	70	<2	<2	2	14	0.08	28	46	<2	8	5
92KFA0546	16	593500	5408690	0.4	155	<1	0.01	19	<2	<2	3	15	0.1	29	18	<2	2	<5
92KFA0547	16	593300	5408770	0.32	115	<1	<0.01	19	<2	<2	3	14	0.11	43	34	2	2	5
92KFA0548	16	593200	5410480	0.24	120	<1	<0.01	9	<2	<2	2	16	0.09	23	14	<2	<2	<5
92KFA0549	16	593300	5411540	0.4	285	<1	0.02	17	2	<2	3	19	0.1	31	22	10	2	<5
92KFA0550	16	592220	5411100	0.15	60	<1	<0.01	9	4	<2	2	9	0.08	20	8	2	2	5
92KFA0551	16	592470	5410000	0.17	100	<1	<0.01	28	4	<2	1	10	0.07	21	12	<2	10	5
92KFA0552	16	592680	5409530	0.25	90	<1	<0.01	23	2	<2	1	10	0.09	20	14	<2	<2	<5
92KFA0553	16	593025	5408600	0.5	240	<1	<0.01	30	6	<2	4	19	0.09	57	36	<2	6	15
92KFA0554	16	593200	5406600	0.5	215	<1	0.01	86	<2	<2	4	12	0.07	29	28	<2	2	<5

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	Sediment Type	Rep	UTM Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Be ppm	Bi ppm	Ca ppm	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0555	till	1	16	593330	5406500	<0.2	0.98	6	20	<0.5	<2	0.26	<0.5	7	27	45	1.2	0.05	10
92KFA0556	till	1	16	593400	5406380	<0.2	0.65	6	10	<0.5	<2	0.31	<0.5	20	30	75	1.83	0.05	20
92KFA0558	sand	1	16	589050	5413200	0.2	0.95	<2	20	<0.5	<2	0.26	<0.5	5	35	9	1.13	0.05	10
92KFA0559	till	1	16	589530	5413280	<0.2	1.16	2	20	<0.5	<2	0.15	<0.5	4	22	7	0.93	0.03	10
92KFA0560	till	1	16	589650	5413100	0.2	0.89	<2	20	0.5	<2	0.22	<0.5	5	32	11	1.25	0.03	20
92KFA0561	till	1	16	589420	5412600	0.2	1.31	4	20	<0.5	<2	0.13	<0.5	5	28	8	1.07	0.03	10
92KFA0562	till	1	16	589950	5412100	0.2	1.39	8	40	0.5	2	0.35	<0.5	6	36	19	1.27	0.09	20
92KFA0563	till	1	16	589150	5412300	0.2	1.31	<2	30	0.5	<2	0.24	<0.5	9	35	15	1.31	0.04	20
92KFA0564	till	1	16	592125	5454170	<0.2	0.72	<2	30	<0.5	<2	3.92	<0.5	3	22	14	0.86	0.09	20
92KFA0565	till	1	16	591490	5452850	<0.2	0.54	4	20	<0.5	<2	8.53	<0.5	3	20	12	0.76	0.08	10
92KFA0566	till	1	16	591000	5451750	0.2	1.35	6	40	1	<2	0.3	<0.5	6	32	8	1.6	0.09	40
92KFA0568	gravel/sand	1	16	574675	5454275	0.2	1.15	<2	30	0.5	<2	0.95	<0.5	7	26	11	1.34	0.07	20
92KFA0570	till	1	16	577100	5457075	<0.2	1.4	<2	60	0.5	<2	0.28	<0.5	8	38	22	1.63	0.09	30
92KFA0571	till	1	16	569650	5471425	0.2	0.64	<2	50	<0.5	<2	8.5	<0.5	7	33	19	1.05	0.21	20
92KFA0572	till	1	16	569800	5472590	0.2	0.59	<2	30	<0.5	<2	6.86	<0.5	3	26	12	0.89	0.07	10
92KFA0573	till	1	16	569800	5473140	<0.2	1.16	<2	60	0.5	<2	1.71	<0.5	7	39	19	1.47	0.15	30
92KFA0574	till	1	16	569700	5474480	<0.2	0.65	<2	20	<0.5	<2	0.1	<0.5	2	17	3	0.68	0.03	10
92KFA0575	till	1	16	571850	5480150	0.2	0.49	2	20	<0.5	<2	8	<0.5	2	20	9	0.75	0.07	10
92KFA0576	till	1	16	571960	5478580	<0.2	0.84	2	30	0.5	<2	5.17	<0.5	7	44	26	1.36	0.14	20
92KFA0576A	till	0	16	571960	5478580	0.2	1.31	16	30	0.5	<2	2.48	<0.5	13	76	33	2.1	0.14	30
92KFA0577	till	1	16	570850	5476100	<0.2	0.81	<2	30	<0.5	2	6.49	<0.5	5	29	13	1.07	0.11	10
92KFA0578	till	1	16	612550	5409930	<0.2	0.91	<2	30	<0.5	<2	0.21	<0.5	4	22	5	1.1	0.05	10
92KFA0579	till	1	16	613600	5410400	<0.2	1.04	<2	30	0.5	<2	0.27	<0.5	4	19	6	1.14	0.04	10
92KFA0580	till	1	16	618450	5408500	<0.2	0.95	4	30	<0.5	<2	0.19	<0.5	3	16	4	0.93	0.02	20
92KFA0581	till	1	16	620750	5409475	<0.2	1.43	<2	80	<0.5	<2	0.5	<0.5	9	25	16	1.87	0.23	20
92KFA0583	till	1	16	623690	5412720	<0.2	0.78	2	40	<0.5	<2	0.62	<0.5	4	22	11	1.17	0.08	30
92KFA0584	till	1	16	627710	5420890	0.2	0.69	8	40	<0.5	<2	0.54	<0.5	7	23	17	1.38	0.19	60
92KFA0585	till	1	16	625630	5421590	<0.2	1.41	4	50	0.5	<2	0.31	<0.5	8	25	11	1.74	0.09	10
92KFA0586	gravel/sand	1	16	620590	5421400	<0.2	0.91	2	20	0.5	<2	0.22	<0.5	4	20	12	1.37	0.07	30
92KFA0587	till	1	16	619270	5420320	<0.2	1.36	6	50	0.5	<2	0.21	<0.5	6	26	7	1.47	0.07	20
92KFA0589	till	1	16	630550	5421425	<0.2	0.86	<2	20	<0.5	<2	0.3	<0.5	4	20	9	1.19	0.05	10

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	UTM Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	V ppm	Zn ppm	Au ppb	Pd ppb	Pt ppb
92KFA0555	16	593330	5406500	0.25	205	<1	<0.01	27	4	<2	2	10	0.07	25	18	<2	4	<5
92KFA0556	16	593400	5406380	0.26	210	<1	0.01	60	2	<2	4	9	0.06	27	42	<2	8	<5
92KFA0558	16	589050	5413200	0.33	125	<1	0.01	15	2	<2	2	12	0.08	24	14	4	2	<5
92KFA0559	16	589530	5413280	0.23	70	<1	<0.01	11	<2	<2	2	9	0.08	20	12	2	<2	<5
92KFA0560	16	589650	5413100	0.26	135	<1	0.01	20	2	<2	3	11	0.09	26	14	6	12	5
92KFA0561	16	589420	5412600	0.24	80	<1	0.01	12	<2	<2	3	10	0.1	24	12	<2	4	<5
92KFA0562	16	589950	5412100	0.33	155	<1	0.01	14	<2	<2	3	19	0.11	27	16	<2	12	5
92KFA0563	16	589150	5412300	0.25	160	<1	0.01	18	<2	<2	3	13	0.12	28	14	<12	<12	<30
92KFA0564	16	592125	5454170	2.3	175	<1	0.01	10	2	<2	2	26	0.07	22	18	<2	<2	<5
92KFA0565	16	591490	5452850	3.2	150	<1	0.01	6	2	<2	2	54	0.06	20	12	<2	<2	<5
92KFA0566	16	591000	5451750	0.4	195	<1	0.01	13	<2	<2	6	19	0.11	34	18	<2	<2	<5
92KFA0568	16	574675	5454275	0.5	165	<1	<0.01	12	6	<2	3	17	0.09	28	18	<2	<2	<5
92KFA0570	16	577100	5457075	0.38	145	<1	0.01	21	4	<2	6	18	0.1	34	24	<2	<2	<5
92KFA0571	16	569650	5471425	2.68	200	<1	0.01	14	<2	2	3	55	0.08	28	22	<2	<2	<5
92KFA0572	16	569800	5472590	2.5	150	<1	0.01	11	<2	<2	2	43	0.06	23	18	<2	<2	<5
92KFA0573	16	569800	5473140	1.11	205	<1	0.01	18	2	<2	4	18	0.1	34	22	<2	<2	<5
92KFA0574	16	569700	5474480	0.12	40	<1	<0.01	5	2	<2	1	6	0.08	20	6	<2	<2	<5
92KFA0575	16	571850	5480150	2.95	155	<1	0.01	4	4	<2	2	49	0.06	20	12	<2	<2	<5
92KFA0576	16	571960	5478580	3.02	230	<1	0.01	20	2	2	3	30	0.08	36	24	<2	<2	<5
92KFA0576A	16	571960	5478580	1.85	275	<1	0.01	35	<2	<2	4	19	0.08	45	30	2	2	<5
92KFA0577	16	570850	5476100	3.13	215	<1	0.01	12	2	<2	3	41	0.08	26	18	<2	<2	<5
92KFA0578	16	612550	5409930	0.2	100	<1	<0.01	9	4	<2	2	12	0.09	25	10	<2	2	<5
92KFA0579	16	613600	5410400	0.27	95	<1	0.01	9	2	<2	2	14	0.1	25	16	<2	<2	<5
92KFA0580	16	618450	5408500	0.18	70	<1	<0.01	8	8	<2	2	12	0.08	22	14	<12	<12	<30
92KFA0581	16	620750	5409475	0.63	210	<1	0.03	15	6	<2	3	23	0.15	40	36	<2	<2	<5
92KFA0583	16	623690	5412720	0.4	160	<1	0.01	9	4	<2	4	14	0.08	25	16	<2	<2	<5
92KFA0584	16	627710	5420890	0.4	205	<1	0.01	11	6	<2	3	14	0.08	28	28	<2	<2	<5
92KFA0585	16	625630	5421590	0.42	210	<1	0.01	13	8	<2	2	12	0.11	34	26	4	2	<5
92KFA0586	16	620590	5421400	0.26	220	1	<0.01	11	2	<2	4	12	0.07	24	20	6	2	<5
92KFA0587	16	619270	5420320	0.26	150	<1	<0.01	13	8	<2	3	11	0.08	28	16	2	<2	<5
92KFA0589	16	630550	5421425	0.22	95	<1	<0.01	12	2	<2	2	15	0.08	25	14	4	<2	<5

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	Sediment Type	Rep	UTM Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Be ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0590	till	1	16	631090	5422390	0.2	0.91	<2	60	<0.5	<2	7.69	<0.5	4	30	25	1.14	0.2	10
92KFA0592	till	1	16	633475	5423950	<0.2	0.41	<2	20	<0.5	<2	6.76	<0.5	5	17	25	0.86	0.07	10
92KFA0593	gravel/sand	1	16	626325	5414075	<0.2	0.96	<2	20	<0.5	<2	0.26	<0.5	5	20	6	1.12	0.04	10
92KFA0594	till	1	16	628050	5414475	<0.2	0.5	<2	30	<0.5	<2	6	<0.5	4	19	16	0.99	0.09	20
92KFA0595	till	1	16	630845	5414200	<0.2	0.33	<2	10	<0.5	<2	7.4	<0.5	2	17	12	0.76	0.04	10
92KFA0596	till	1	16	629600	5414410	<0.2	0.79	4	30	<0.5	<2	0.26	<0.5	2	17	5	0.84	0.03	10
92KFA0597	till	1	16	631400	5414150	<0.2	0.48	<2	70	<0.5	<2	5.2	<0.5	3	15	14	0.82	0.15	20
92KFA0598	till	1	16	632950	5416025	<0.2	0.3	<2	10	<0.5	<2	6.55	<0.5	3	16	14	0.77	0.04	10
92KFA0599	till	1	16	634380	5417180	<0.2	0.4	2	10	<0.5	<2	0.53	<0.5	3	18	8	0.85	0.04	40
92KFA0600	till	1	16	631170	5413170	<0.2	0.25	<2	10	<0.5	<2	6.9	<0.5	1	13	6	0.54	0.02	10
92KFA0601	till	1	16	552000	5455000	<0.2	1.14	6	20	<0.5	2	0.17	<0.5	4	37	11	1.34	0.06	10
92KFA0602	till	1	16	558100	5454850	<0.2	1.34	6	30	<0.5	<2	0.27	<0.5	6	35	17	1.5	0.06	20
92KFA0603	till	1	16	538650	5454450	<0.2	0.48	<2	20	<0.5	<2	5.78	<0.5	4	30	12	1.2	0.05	20
92KFA0604	till	1	16	540100	5454900	0.2	1.3	<2	70	<0.5	<2	3.74	<0.5	15	72	29	2.69	0.16	70
92KFA0605	till	1	16	551300	5454300	<0.2	0.67	<2	20	<0.5	<2	0.09	<0.5	1	17	8	0.74	0.03	10
92KFA0606	till	1	16	552400	5454150	<0.2	1.06	4	20	<0.5	<2	0.12	<0.5	3	34	10	1.28	0.04	10
92KFA0607	till	1	16	554000	5454000	<0.2	1.7	8	20	0.5	<2	0.17	<0.5	6	47	14	1.62	0.03	20
92KFA0608	till	1	16	555550	5454100	<0.2	1.12	4	20	0.5	<2	0.32	<0.5	7	32	8	1.49	0.07	20
92KFA0609	till	1	16	558450	5454150	<0.2	1.39	4	30	<0.5	<2	0.2	<0.5	6	39	23	1.54	0.05	20
92KFA0610	till	1	16	539750	5453750	<0.2	1.74	10	90	<0.5	<2	0.45	<0.5	15	56	12	2.95	0.11	20
92KFA0611	till	1	16	549900	5453000	<0.2	1.99	<2	30	0.5	<2	0.19	<0.5	9	54	20	2.08	0.06	20
92KFA0612	till	1	16	553050	5453000	<0.2	1.45	<2	20	<0.5	<2	0.13	<0.5	6	34	11	1.5	0.04	10
92KFA0613	till	1	16	554950	5453050	<0.2	1.27	4	20	<0.5	<2	0.07	<0.5	4	35	9	1.7	0.04	10
92KFA0614	till	1	16	557450	5453350	<0.2	1.13	<2	20	<0.5	2	0.12	<0.5	4	27	15	1.18	0.03	10
92KFA0615	till	1	16	557550	5453900	<0.2	1.43	2	40	<0.5	<2	0.23	<0.5	6	36	13	1.88	0.08	10
92KFA0616	till	1	16	536850	5453050	<0.2	1.21	<2	30	<0.5	<2	0.16	<0.5	6	37	12	1.68	0.04	10
92KFA0617	till	1	16	538100	5452850	<0.2	0.89	6	10	<0.5	<2	0.11	<0.5	2	19	4	1.16	0.02	20
92KFA0618	till	1	16	538850	5452150	<0.2	1.91	8	100	0.5	<2	0.29	<0.5	9	38	19	2.24	0.1	20
92KFA0619	till	1	16	550750	5452450	<0.2	2.58	12	40	0.5	<2	0.17	<0.5	8	63	19	2.63	0.07	10
92KFA0620	till	1	16	552000	5452950	<0.2	0.8	<2	10	<0.5	<2	0.09	<0.5	3	25	7	1.86	0.05	10
92KFA0621	till	1	16	554950	5452000	<0.2	2.06	8	30	<0.5	<2	0.14	<0.5	9	51	25	2.14	0.08	20

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	UTM Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	V ppm	Zn ppm	Au ppb	Pd ppb	Pt ppb
92KFA0590	16	631090	5422390	2.69	180	<1	0.02	13	6	2	3	56	0.09	29	24	4	<2	<5
92KFA0592	16	633475	5423950	2.61	135	<1	0.01	7	2	<2	2	44	0.07	22	16	6	<2	5
92KFA0593	16	626325	5414075	0.22	110	<1	0.01	9	4	<2	2	13	0.09	24	12	2	<2	<5
92KFA0594	16	628050	5414475	2.26	145	<1	0.01	7	<2	<2	2	40	0.07	24	20	4	<2	<5
92KFA0595	16	630845	5414200	2.56	115	<1	0.01	6	2	2	1	46	0.05	21	12	2	<2	<5
92KFA0596	16	629600	5414410	0.22	90	<1	<0.01	8	4	<2	2	10	0.07	19	12	2	2	<5
92KFA0597	16	631400	5414150	2.36	120	<1	0.01	8	<2	2	1	34	0.07	21	18	2	2	<5
92KFA0598	16	632950	5416025	2.49	120	<1	0.01	6	2	<2	1	40	0.04	19	12	2	2	<5
92KFA0599	16	634380	5417180	0.26	130	<1	<0.01	7	4	<2	3	12	0.05	19	8	<2	2	<5
92KFA0600	16	631170	5413170	2.57	90	<1	0.01	3	2	2	1	41	0.04	15	6	2	<2	<5
92KFA0601	16	552000	5455000	0.36	80	1	<0.01	17	8	2	2	11	0.17	49	18	<2	2	<5
92KFA0602	16	558100	5454850	0.38	95	<1	<0.01	19	4	<2	3	13	0.13	36	20	6	<2	<5
92KFA0603	16	538650	5454450	2.23	135	<1	0.01	11	2	2	3	37	0.06	28	12	<2	<2	<5
92KFA0604	16	540100	5454900	2.39	340	<1	0.01	37	12	2	11	38	0.12	54	36	<2	<2	<5
92KFA0605	16	551300	5454300	0.12	40	1	<0.01	7	8	<2	1	9	0.16	37	8	<2	2	5
92KFA0606	16	552400	5454150	0.3	70	1	<0.01	15	6	<2	2	9	0.15	48	16	<2	2	5
92KFA0607	16	554000	5454000	0.35	90	1	<0.01	20	2	<2	3	10	0.12	38	16	<2	<2	<5
92KFA0608	16	555550	5454100	0.28	120	<1	<0.01	16	6	<2	2	14	0.1	31	14	2	<2	<5
92KFA0609	16	558450	5454150	0.43	115	<1	<0.01	17	10	<2	4	13	0.14	37	20	2	<2	<5
92KFA0610	16	539750	5453750	0.47	280	<1	<0.01	23	8	<2	4	17	0.13	54	26	20	<4	<10
92KFA0611	16	549900	5453000	0.42	125	1	<0.01	27	<2	<2	4	10	0.12	42	32	22	<2	5
92KFA0612	16	553050	5453000	0.33	100	<1	<0.01	15	2	<2	3	8	0.11	32	18	<2	<2	<5
92KFA0613	16	554950	5453050	0.38	80	<1	<0.01	14	12	<2	2	6	0.15	56	30	2	2	<5
92KFA0614	16	557450	5453350	0.3	80	<1	<0.01	14	8	<2	2	6	0.09	26	16	2	<2	<5
92KFA0615	16	557550	5453900	0.46	150	<1	<0.01	21	6	<2	3	10	0.11	39	30	4	<2	<5
92KFA0616	16	536850	5453050	0.33	90	1	<0.01	22	10	<2	2	11	0.1	34	22	2	<2	<5
92KFA0617	16	538100	5452850	0.21	60	1	<0.01	8	6	<2	1	7	0.09	30	14	2	<2	<5
92KFA0618	16	538850	5452150	0.42	200	<1	0.01	23	6	2	3	13	0.11	36	26	<2	2	<5
92KFA0619	16	550750	5452450	0.41	105	1	<0.01	36	8	<2	4	11	0.13	43	20	<2	<2	<5
92KFA0620	16	552000	5452950	0.19	65	<1	<0.01	9	6	<2	1	9	0.14	44	14	<2	<2	<5
92KFA0621	16	554950	5452000	0.44	120	<1	<0.01	27	6	<2	4	9	0.14	46	20	<2	4	<5

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	Sediment Type	Rep	UTM Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Be ppm	Bi ppm	Ca ppm	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0622	till	1	16	556800	5452100	<0.2	0.92	10	30	<0.5	<2	0.21	<0.5	4	26	7	1.29	0.04	20
92KFA0623	till	1	16	558200	5452550	<0.2	0.74	4	20	<0.5	<2	0.21	<0.5	3	16	3	1.04	0.03	10
92KFA0624	till	1	16	539950	5450300	<0.2	1.27	2	40	0.5	<2	0.17	<0.5	4	24	9	1.25	0.03	10
92KFA0625	till	1	16	551250	5451500	<0.2	2.55	<2	30	0.5	<2	0.09	<0.5	7	57	21	3.04	0.04	10
92KFA0626	till	1	16	552500	5451800	<0.2	1	2	20	<0.5	<2	0.08	<0.5	3	27	8	1.7	0.04	10
92KFA0627	till	1	16	553000	5451000	<0.2	1.42	12	30	<0.5	<2	0.2	<0.5	7	36	12	1.53	0.06	10
92KFA0629	till	1	16	553750	5451850	<0.2	1.5	6	20	<0.5	<2	0.18	<0.5	6	39	11	2.12	0.06	10
92KFA0630	till	1	16	551700	5450450	<0.2	1.89	6	20	<0.5	<2	0.16	<0.5	6	52	21	1.7	0.06	20
92KFA0631	till	1	16	553900	5450050	0.2	0.36	<2	10	<0.5	<2	2.14	<0.5	0.5	19	3	0.71	0.02	60
92KFA0632	till	1	16	554550	5450500	<0.2	0.33	6	10	<0.5	<2	4.48	<0.5	2	17	3	0.61	0.03	30
92KFA0633	till	1	16	557850	5450400	<0.2	0.88	8	20	<0.5	<2	0.24	<0.5	3	19	5	1.05	0.04	10
92KFA0634	till	1	16	539100	5449650	<0.2	2.09	4	50	<0.5	<2	0.17	<0.5	7	30	13	1.47	0.08	10
92KFA0635	till	1	16	552550	5449950	<0.2	1.32	4	40	<0.5	2	0.25	<0.5	8	49	16	1.54	0.09	20
92KFA0636	till	1	16	554700	5449600	0.2	0.78	<2	30	<0.5	2	9.08	<0.5	3	25	10	0.98	0.13	10
92KFA0637	till	1	16	556450	5449900	<0.2	1.29	8	40	<0.5	<2	0.41	<0.5	6	32	11	1.55	0.09	30
92KFA0638	gravel/sand	1	16	547600	5447700	<0.2	2.88	<2	130	0.5	<2	0.75	<0.5	13	68	33	3.25	0.36	40
92KFA0640	till	1	16	537100	5448850	<0.2	1.38	12	40	<0.5	<2	0.43	<0.5	7	33	9	1.75	0.09	20
92KFA0641	till	1	16	538000	5449000	<0.2	1.34	4	40	<0.5	<2	0.58	<0.5	4	32	15	1.55	0.07	30
92KFA0642	till	1	16	539800	5446400	<0.2	1.56	6	30	<0.5	<2	0.16	<0.5	5	27	7	1.33	0.04	10
92KFA0643	till	1	16	553500	5448200	<0.2	1.58	4	40	<0.5	<2	0.1	<0.5	4	21	8	1.86	0.05	10
92KFA0644	till	1	16	557500	5448500	<0.2	1.38	<2	60	<0.5	<2	0.18	<0.5	4	23	6	1.49	0.08	10
92KFA0645	till	1	16	558250	5448900	<0.2	0.38	<2	20	<0.5	<2	0.04	<0.5	<1	15	4	0.38	0.02	10
92KFA0646	till	1	16	536750	5447050	<0.2	0.82	4	20	<0.5	<2	0.16	<0.5	2	11	3	0.84	0.03	10
92KFA0647	till	1	16	538000	5447000	<0.2	1.17	4	40	<0.5	<2	0.36	<0.5	7	33	13	1.57	0.1	50
92KFA0648	till	1	16	539450	5447200	<0.2	1.5	6	10	<0.5	<2	0.22	<0.5	5	28	7	1.82	0.04	20
92KFA0649	till	1	16	553500	5447100	<0.2	2.08	<2	60	<0.5	2	0.32	<0.5	15	96	37	2.63	0.05	10
92KFA0650	till	1	16	554250	5447850	<0.2	3.92	<2	70	<0.5	<2	0.16	<0.5	8	37	16	2.43	0.08	20
92KFA0652	till	1	16	558500	5447950	<0.2	2.05	<2	30	<0.5	2	0.21	<0.5	5	30	11	1.19	0.03	10
92KFA0653	till	1	16	538350	5446300	<0.2	1.48	<2	20	<0.5	2	0.14	<0.5	3	25	6	1.29	0.05	10
92KFA0654	till	1	16	540850	5446950	<0.2	1.76	4	30	<0.5	2	0.26	<0.5	7	40	12	2.07	0.08	20
92KFA0655	till	1	16	542250	5446550	<0.2	1.77	2	30	<0.5	<2	0.2	<0.5	6	38	10	1.85	0.05	20

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	UTM Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	V ppm	Zn ppm	Au ppb	Pd ppb	Pt ppb
92KFA0622	16	556800	5452100	0.28	145	<1	<0.01	11	4	<2	4	12	0.09	28	14	<2	4	<5
92KFA0623	16	558200	5452550	0.16	130	<1	<0.01	7	6	<2	2	11	0.08	23	8	<2	2	<5
92KFA0624	16	539950	5450300	0.22	70	1	<0.01	12	4	2	2	8	0.08	25	12	8	6	5
92KFA0625	16	551250	5451500	0.27	110	<1	<0.01	27	10	<2	4	6	0.14	61	34	4	2	5
92KFA0626	16	552500	5451800	0.28	75	1	<0.01	11	12	<2	2	6	0.14	58	22	2	2	<5
92KFA0627	16	553000	5451000	0.41	115	<1	<0.01	19	2	2	3	10	0.11	33	18	6	<2	<5
92KFA0629	16	553750	5451850	0.44	115	<1	<0.01	17	<2	<2	3	11	0.15	46	26	2	2	<5
92KFA0630	16	551700	5450450	0.46	115	<1	<0.01	27	<2	<2	4	8	0.12	42	34	<2	2	<5
92KFA0631	16	553900	5450050	1.13	95	<1	<0.01	4	<2	<2	2	20	0.07	19	10	24	<4	<10
92KFA0632	16	554550	5450500	2.16	110	<1	<0.01	4	<2	<2	1	29	0.06	17	8	<2	<2	5
92KFA0633	16	557850	5450400	0.26	85	<1	<0.01	9	<2	<2	2	10	0.08	23	14	<2	2	<5
92KFA0634	16	539100	5449650	0.34	105	<1	0.01	16	2	<2	4	10	0.11	29	18	2	4	5
92KFA0635	16	552550	5449950	0.5	150	<1	<0.01	26	<2	<2	4	11	0.14	39	26	<2	<2	<5
92KFA0636	16	554700	5449600	3.05	190	<1	0.01	10	<2	2	3	58	0.07	24	20	2	<2	<5
92KFA0637	16	556450	5449900	0.45	165	<1	0.01	14	4	<2	4	20	0.11	34	22	2	8	5
92KFA0638	16	547600	5447700	1.13	500	<1	0.03	37	14	2	9	34	0.16	63	60	<2	6	<5
92KFA0640	16	537100	5448850	0.43	225	<1	0.01	17	<2	2	3	17	0.11	38	26	<2	4	<5
92KFA0641	16	538000	5449000	0.4	125	<1	0.01	12	4	<2	4	17	0.09	31	30	<2	2	5
92KFA0642	16	539800	5446400	0.3	85	<1	<0.01	12	4	<2	3	10	0.1	27	16	<2	<2	<5
92KFA0643	16	553500	5448200	0.22	65	<1	<0.01	9	4	<2	2	10	0.12	41	16	<2	4	5
92KFA0644	16	557500	5448500	0.31	120	<1	<0.01	9	4	<2	2	14	0.1	30	28	<2	<2	<5
92KFA0645	16	558250	5448900	0.04	30	<1	<0.01	1	4	<2	0.5	6	0.09	18	8	<2	<2	<5
92KFA0646	16	536750	5447050	0.16	75	<1	<0.01	6	<2	<2	1	9	0.06	18	22	<2	<2	<5
92KFA0647	16	538000	5447000	0.37	300	<1	0.01	15	2	<2	7	15	0.09	30	22	4	<2	<5
92KFA0648	16	539450	5447200	0.25	110	<1	0.01	13	2	<2	2	8	0.09	29	16	2	4	<5
92KFA0649	16	553500	5447100	1.03	185	<1	0.01	48	6	2	3	18	0.22	66	42	4	2	<5
92KFA0650	16	554250	5447850	0.34	100	<1	<0.01	19	6	<2	4	11	0.1	38	28	40	72	60
92KFA0652	16	558500	5447950	0.37	85	<1	<0.01	16	2	<2	2	13	0.11	26	20	<2	<2	<5
92KFA0653	16	538350	5446300	0.29	80	<1	<0.01	11	4	<2	2	9	0.1	26	14	2	4	10
92KFA0654	16	540850	5446950	0.36	160	<1	0.01	18	4	<2	3	9	0.11	35	22	2	12	25
92KFA0655	16	542250	5446550	0.34	125	<1	0.01	18	2	<2	3	9	0.11	33	18	4	4	5

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	UTM Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	V ppm	Zn ppm	Au ppb	Pd ppb	Pt ppb
92KFA0656	16	552000	5446000	0.43	180	<1	0.01	15	2	<2	5	18	0.1	35	24	4	<2	5
92KFA0658	16	537000	5445000	0.35	380	1	<0.01	16	12	<2	3	11	0.11	49	64	<2	2	<5
92KFA0659	16	537850	5445700	0.47	145	<1	0.01	18	6	<2	7	17	0.14	38	20	<2	4	5
92KFA0660	16	539550	5445550	0.3	80	<1	<0.01	11	8	<2	2	11	0.1	23	16	2	2	<5
92KFA0661	16	540600	5445850	0.39	105	<1	0.01	15	8	2	3	10	0.11	26	18	<2	<2	<5
92KFA0662	16	541600	5445650	0.29	85	<1	<0.01	9	6	2	2	11	0.08	26	16	<2	2	5
92KFA0663	16	553500	5446100	0.22	60	<1	<0.01	9	4	<2	2	7	0.09	30	24	<2	<2	<5
92KFA0664	16	537950	5444100	0.29	605	<1	<0.01	15	10	<2	2	9	0.08	40	58	<2	<2	5
92KFA0665	16	540850	5443800	0.2	165	<1	<0.01	12	8	<2	2	8	0.07	25	26	2	4	5
92KFA0666	16	536450	5443850	0.2	85	<1	<0.01	9	6	<2	1	7	0.07	27	18	<2	<2	<5
92KFA0667	16	538750	5443400	0.27	85	2	<0.01	12	4	<2	2	12	0.1	34	16	<2	2	5
92KFA0668	16	539950	5443300	0.89	225	<1	0.02	34	14	2	5	15	0.18	97	50	<2	8	5
92KFA0671	16	536700	5442400	0.82	375	1	0.01	48	16	<2	9	20	0.14	76	38	<6	<2	<5
92KFA0672	16	537800	5442750	0.34	235	<1	0.04	17	8	2	3	16	0.11	34	26	<2	<2	<5
92KFA0673	16	539000	5442100	0.24	155	1	0.02	46	12	2	6	11	0.08	22	20	<2	2	<5
92KFA0674	16	548050	5442250	0.37	90	<1	0.01	15	6	<2	3	12	0.11	24	20	2	<2	<5
92KFA0675	16	538300	5441050	0.93	420	3	0.02	61	18	4	7	20	0.2	72	66	na	na	na
92KFA0676	16	540450	5441950	0.87	195	2	0.01	53	16	<2	7	15	0.18	78	46	<2	<2	<5
92KFA0677	16	547150	5441550	0.53	150	<1	0.01	36	14	<2	4	14	0.08	28	44	<2	4	5
92KFA0678	16	553600	5441750	0.56	130	<1	0.01	15	4	2	4	20	0.07	24	24	<2	<2	<5
92KFA0679	16	551800	5440550	0.24	110	<1	<0.01	9	6	<2	3	8	0.07	21	18	<2	<2	<5
92KFA0680	16	553000	5440750	0.01	10	<1	<0.01	<1	2	<2	0.5	4	0.01	4	4	2	<2	<5
92KFA0681	16	537200	5439750	0.64	215	1	0.01	31	8	<2	4	10	0.15	53	52	<2	<2	<5
92KFA0682	16	551450	5440000	0.78	305	2	0.01	24	12	<2	5	23	0.14	44	56	<2	<2	<5
92KFA0683	16	536700	5438850	0.31	100	2	<0.01	15	12	<2	3	10	0.14	49	34	<2	<2	<5
92KFA0685	16	537200	5437250	0.55	180	1	0.01	17	6	<2	3	18	0.14	35	36	<2	<2	<5
92KFA0686	16	538100	5437550	0.5	205	1	0.01	18	6	<2	3	19	0.14	34	38	<2	<2	<5
92KFA0687	16	537200	5436000	0.29	80	<1	0.01	23	4	<2	2	9	0.09	21	14	<2	2	<5
92KFA0687A	16	537200	5436000	0.32	90	<1	0.01	12	4	<2	2	12	0.11	23	22	<2	<2	<5
92KFA0688	16	537400	5436050	0.21	65	1	0.01	7	8	<2	1	13	0.19	45	18	2	<2	<5
92KFA0689	16	537400	5434950	0.33	125	1	<0.01	16	8	<2	2	10	0.11	34	28	<2	<2	<5

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	Sediment Type	Rep	UTM Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Be ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0656	till	1	16	552000	5446000	<0.2	1.31	<2	40	<0.5	<2	0.38	<0.5	5	35	14	1.53	0.08	20
92KFA0658	till	1	16	537000	5445000	<0.2	1.71	<2	90	<0.5	2	0.21	<0.5	7	38	7	2.39	0.08	10
92KFA0659	till	1	16	537850	5445700	<0.2	1.47	<2	60	<0.5	4	0.35	<0.5	8	43	17	1.72	0.09	30
92KFA0660	till	1	16	539550	5445550	<0.2	1.4	<2	30	<0.5	<2	0.19	<0.5	4	22	3	1.06	0.06	10
92KFA0661	till	1	16	540600	5445850	<0.2	1.86	<2	50	<0.5	2	0.21	<0.5	5	28	4	1.38	0.08	10
92KFA0662	till	1	16	541600	5445650	<0.2	1.35	<2	20	<0.5	2	0.21	<0.5	3	21	3	1.24	0.05	10
92KFA0663	till	1	16	553500	5446100	<0.2	1.61	<2	20	<0.5	<2	0.12	<0.5	4	23	6	1.44	0.03	10
92KFA0664	till	1	16	537950	5444100	<0.2	1.75	<2	100	<0.5	<2	0.17	<0.5	8	35	8	2.08	0.06	10
92KFA0665	till	1	16	540850	5443800	<0.2	1.29	<2	30	<0.5	<2	0.21	<0.5	4	24	9	1.33	0.04	10
92KFA0666	till	1	16	536450	5443850	<0.2	1.41	<2	30	<0.5	<2	0.15	<0.5	4	23	4	1.56	0.03	10
92KFA0667	till	1	16	538750	5443400	<0.2	1.29	<2	30	<0.5	<2	0.17	<0.5	3	25	6	1.84	0.04	20
92KFA0668	till	1	16	539950	5443300	<0.2	2.77	<2	80	<0.5	<2	0.36	<0.5	23	28	55	3.98	0.06	40
92KFA0671	till	1	16	536700	5442400	<0.2	6.29	8	70	<0.5	<2	0.35	<0.5	22	87	47	4.87	0.09	30
92KFA0672	till	1	16	537800	5442750	<0.2	2.14	<2	50	<0.5	<2	0.43	<0.5	9	31	11	2.12	0.11	30
92KFA0673	till	1	16	539000	5442100	<0.2	4.03	12	30	0.5	<2	0.25	<0.5	9	34	33	2.08	0.07	30
92KFA0674	till	1	16	548050	5442250	<0.2	1.88	<2	60	<0.5	<2	0.17	<0.5	6	28	9	1.31	0.05	10
92KFA0675	till	1	16	538300	5441050	<0.2	3.16	10	120	<0.5	<2	0.4	<0.5	23	86	35	3.71	0.25	30
92KFA0676	till	1	16	540450	5441950	<0.2	2.61	8	90	<0.5	<2	0.4	<0.5	17	87	24	3.66	0.13	10
92KFA0677	till	1	16	547150	5441550	<0.2	3.56	4	150	0.5	<2	0.22	<0.5	14	50	14	1.95	0.08	20
92KFA0678	sand/gravel	1	16	553600	5441750	<0.2	1.34	<2	60	<0.5	<2	0.64	<0.5	6	28	11	1.37	0.1	30
92KFA0679	till	1	16	551800	5440550	<0.2	0.96	<2	30	<0.5	<2	0.16	<0.5	3	19	4	1	0.02	20
92KFA0680	till	1	16	553000	5440750	<0.2	0.18	2	10	<0.5	<2	0.03	<0.5	<1	1	1	0.14	0.01	10
92KFA0681	till	1	16	537200	5439750	<0.2	2.15	6	70	<0.5	<2	0.17	<0.5	9	68	16	2.54	0.08	20
92KFA0682	till	1	16	551450	5440000	<0.2	2.29	6	80	<0.5	<2	0.41	<0.5	8	49	10	2.42	0.17	20
92KFA0683	till	1	16	536700	5438850	<0.2	2.28	<2	40	<0.5	<2	0.15	<0.5	4	43	9	2.46	0.05	10
92KFA0685	till	1	16	537200	5437250	<0.2	1.56	<2	70	<0.5	<2	0.34	<0.5	6	38	12	1.82	0.1	10
92KFA0686	till	1	16	538100	5437550	<0.2	1.56	<2	80	<0.5	<2	0.34	<0.5	6	36	12	1.74	0.11	10
92KFA0687	till	1	16	537200	5436000	<0.2	1.1	6	10	<0.5	<2	0.25	<0.5	4	32	33	1.04	0.03	20
92KFA0687A	till	0	16	537200	5436000	<0.2	1.03	2	30	<0.5	<2	0.26	<0.5	4	20	9	1.11	0.04	20
92KFA0688	till	1	16	537400	5436050	<0.2	0.82	2	30	<0.5	<2	0.15	<0.5	1	18	6	1.61	0.04	10
92KFA0689	till	1	16	537400	5434950	<0.2	1.57	<2	50	<0.5	<2	0.19	<0.5	6	29	10	1.84	0.07	10

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	Sediment Type	Rep	UTM Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Be ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0690	till	1	16	557150	5432300	<0.2	0.82	<2	30	<0.5	<2	0.18	<0.5	3	16	1	0.96	0.02	10
92KFA0691	till	1	16	557800	5432950	<0.2	0.94	<2	40	<0.5	<2	0.28	<0.5	4	21	5	1.11	0.03	10
92KFA0693	till	1	16	556000	5431350	<0.2	0.88	4	20	<0.5	<2	0.15	<0.5	3	14	4	1.01	0.03	10
92KFA0694	till	1	16	557100	5431250	<0.2	1.57	2	50	<0.5	<2	0.28	<0.5	7	31	12	1.66	0.07	30
92KFA0695	till	1	16	557900	5431650	<0.2	1.12	<2	40	<0.5	<2	5.78	<0.5	3	31	18	1.24	0.1	<10
92KFA0697	till	1	16	556050	5430250	<0.2	1.52	4	40	<0.5	<2	0.2	<0.5	3	24	4	1.29	0.06	20
92KFA0698	till	1	16	556800	5430200	<0.2	0.83	<2	20	<0.5	<2	0.31	<0.5	3	22	2	1.03	0.04	10
92KFA0699	till	1	16	555100	5429950	<0.2	1.21	4	30	<0.5	<2	0.22	<0.5	4	20	3	1.52	0.05	10
92KFA0700	till	1	16	555950	5432300	<0.2	1.16	<2	20	<0.5	<2	0.28	<0.5	4	23	3	1.17	0.03	20
92KFA0701	till	1	16	535650	5442600	<0.2	3.78	10	70	<0.5	<2	0.36	<0.5	16	84	33	6.05	0.09	20
92KFA0703	till	1	16	533300	5432700	<0.2	1.75	2	20	<0.5	<2	0.11	<0.5	4	29	10	1.33	0.02	10
92KFA0704	till	1	16	534650	5430950	<0.2	1.32	<2	30	<0.5	<2	0.24	<0.5	3	26	7	1.05	0.03	10
92KFA0705	till	1	16	535750	5445150	<0.2	2.63	<2	30	<0.5	<2	0.23	<0.5	6	26	11	1.95	0.02	20
92KFA0706	till	1	16	535850	5443650	<0.2	1.34	2	30	<0.5	<2	0.17	<0.5	4	24	3	1.5	0.04	10
92KFA0707	till	1	16	534350	5442750	<0.2	4.34	12	100	<0.5	<2	0.64	<0.5	25	108	91	3.61	0.14	30
92KFA0708	till	1	16	533600	5441950	<0.2	1.42	2	50	<0.5	<2	0.23	<0.5	8	41	15	2.3	0.06	20
92KFA0709	till	1	16	535950	5441600	<0.2	1.79	2	80	<0.5	<2	0.21	<0.5	7	38	6	2.48	0.11	10
92KFA0710	till	1	16	533400	5440150	<0.2	1.06	6	40	<0.5	<2	0.29	<0.5	4	28	14	1.18	0.06	20
92KFA0711	till	1	16	532900	5439000	<0.2	0.96	<2	50	<0.5	<2	0.14	<0.5	3	30	6	0.87	0.06	10
92KFA0712	till	1	16	535750	5438900	<0.2	0.79	<2	60	<0.5	<2	1.33	<0.5	3	29	13	1.02	0.09	20
92KFA0713	till	1	16	532250	5438050	<0.2	1.46	4	20	<0.5	<2	0.17	<0.5	6	32	11	1.39	0.03	10
92KFA0714	till	1	16	533850	5437200	<0.2	1.96	4	40	<0.5	<2	0.22	<0.5	7	32	16	1.99	0.06	20
92KFA0715	till	1	16	534550	5437650	<0.2	2.21	2	90	<0.5	<2	0.32	<0.5	12	48	20	2.29	0.1	20
92KFA0716	till	1	16	533200	5436600	<0.2	1.6	6	30	<0.5	<2	0.15	<0.5	6	40	18	1.66	0.03	20
92KFA0717	till	1	16	535550	5436950	<0.2	1.72	<2	70	<0.5	<2	0.21	<0.5	7	34	15	1.77	0.07	10
92KFA0718	till	1	16	534100	5435550	<0.2	1.41	2	110	<0.5	<2	0.23	<0.5	7	33	16	1.38	0.04	20
92KFA0722	till	1	16	539950	5449050	<0.2	1.92	4	60	<0.5	<2	0.3	<0.5	7	37	8	2.23	0.09	20
92KFA0723	till	1	16	533550	5429800	<0.2	1.74	8	40	<0.5	<2	0.2	<0.5	6	34	17	1.27	0.04	10
92KFA0752	till	1	16	538830	5469700	<0.2	0.79	2	30	<0.5	<2	9.21	<0.5	3	26	14	1.05	0.13	<10
92KFA0753	till	1	16	536650	5466680	<0.2	3.26	14	30	<0.5	<2	0.15	<0.5	4	41	10	2.19	0.05	20
92KFA0754	till	1	16	536400	5466850	<0.2	0.5	<2	20	<0.5	<2	8.55	<0.5	2	20	9	0.87	0.05	<10

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	UTM Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	V ppm	Zn ppm	Au ppb	Pd ppb	Pt ppb
92KFA0690	16	557150	5432300	0.27	125	<1	<0.01	7	6	<2	1	9	0.08	19	26	<2	<2	<5
92KFA0691	16	557800	5432950	0.32	135	<1	0.01	11	4	<2	2	11	0.09	21	22	<2	<2	<5
92KFA0693	16	556000	5431350	0.17	115	<1	<0.01	7	6	<2	1	8	0.06	19	20	<2	6	<5
92KFA0694	16	557100	5431250	0.44	180	1	0.01	14	8	<2	4	15	0.13	33	30	<2	<2	<5
92KFA0695	16	557900	5431650	2.38	170	<1	0.01	11	4	2	4	34	0.09	24	30	<2	<2	<5
92KFA0697	16	556050	5430250	0.25	75	<1	<0.01	11	8	<2	2	10	0.09	24	20	6	<2	<5
92KFA0698	16	556800	5430200	0.33	140	<1	0.01	9	4	<2	2	14	0.11	23	22	<2	<2	<5
92KFA0699	16	555100	5429950	0.21	80	1	<0.01	7	6	<2	2	13	0.11	32	24	<2	<2	<5
92KFA0700	16	555950	5432300	0.31	110	1	0.01	9	8	<2	2	13	0.11	27	26	<2	<2	<5
92KFA0701	16	535650	5442600	1.04	335	5	0.02	39	22	2	6	21	0.23	106	74	<12	<2	<5
92KFA0703	16	533300	5432700	0.25	75	<1	<0.01	12	8	<2	2	5	0.08	23	18	<2	<2	<5
92KFA0704	16	534650	5430950	0.28	80	<1	0.01	11	6	<2	2	10	0.08	20	18	2	<2	<5
92KFA0705	16	535750	5445150	0.25	80	1	0.01	12	12	<2	2	14	0.07	30	20	2	<2	<5
92KFA0706	16	535850	5443650	0.19	100	1	<0.01	10	8	<2	1	8	0.07	27	20	<2	<2	<5
92KFA0707	16	534350	5442750	1.21	355	5	0.03	115	14	2	10	24	0.17	71	52	4	4	5
92KFA0708	16	533600	5441950	0.34	130	2	<0.01	21	12	<2	3	13	0.12	49	26	<2	2	5
92KFA0709	16	535950	5441600	0.32	265	1	0.01	17	12	<2	3	12	0.12	43	46	<2	<2	<5
92KFA0710	16	533400	5440150	0.34	95	<1	0.01	22	6	<2	3	15	0.1	27	26	<2	<2	<5
92KFA0711	16	532900	5439000	0.28	75	1	<0.01	16	12	<2	2	10	0.11	21	24	2	<2	<5
92KFA0712	16	535750	5438900	0.88	110	<1	0.01	15	4	<2	3	15	0.08	21	20	<2	<2	<5
92KFA0713	16	532250	5438050	0.25	85	1	<0.01	19	10	<2	2	7	0.09	25	18	2	<2	<5
92KFA0714	16	533850	5437200	0.33	115	1	0.01	17	8	<2	3	13	0.13	39	32	<2	<2	<5
92KFA0715	16	534550	5437650	0.41	175	2	0.01	41	14	2	4	15	0.12	34	38	<2	<2	<5
92KFA0716	16	533200	5436600	0.32	100	1	<0.01	22	6	<2	3	6	0.09	26	18	<2	20	10
92KFA0717	16	535550	5436950	0.39	125	1	0.01	20	8	<2	3	10	0.09	31	34	2	<2	<5
92KFA0718	16	534100	5435550	0.39	130	<1	0.01	16	6	<2	3	11	0.09	24	20	<2	<2	<5
92KFA0722	16	539950	5449050	0.42	215	1	0.01	17	10	2	3	14	0.12	32	28	2	<2	<5
92KFA0723	16	533550	5429800	0.3	95	<1	0.01	19	6	<2	3	8	0.11	24	16	6	<2	<5
92KFA0752	16	538830	5469700	2.77	220	<1	0.01	9	4	<2	3	49	0.07	22	22	2	4	<5
92KFA0753	16	536650	5466680	0.27	85	1	<0.01	12	12	<2	4	8	0.1	32	22	2	<2	<5
92KFA0754	16	536400	5466850	3.05	160	<1	0.01	6	4	2	2	44	0.07	19	14	<2	<2	<5

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	Sediment Type	Rep	UTM Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Be ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0756	till	1	16	541710	5473570	<0.2	0.39	2	10	<0.5	<2	6.68	<0.5	2	20	11	0.89	0.11	<10
92KFA0757	till	1	16	541450	5475320	<0.2	0.83	<2	30	<0.5	<2	9.85	<0.5	3	28	13	1.13	0.13	<10
92KFA0758	till	1	16	541620	5475800	<0.2	0.39	<2	20	<0.5	<2	8.38	<0.5	2	16	9	0.72	0.06	<10
92KFA0759	till	1	16	540790	5477400	<0.2	0.36	<2	10	<0.5	<2	7.55	<0.5	2	15	6	0.74	0.04	<10
92KFA0762	till	1	16	591000	5414400	<0.2	0.83	<2	20	<0.5	<2	0.31	<0.5	3	27	6	1.06	0.06	20
92KFA0763	till	1	16	591150	5415080	<0.2	1.41	<2	30	<0.5	<2	0.22	<0.5	5	27	6	1.4	0.06	10
92KFA0764	till	1	16	592667	5415950	<0.2	1	<2	20	<0.5	<2	0.29	<0.5	6	42	8	1.09	0.03	20
92KFA0765	till	1	16	592370	5416330	<0.2	1.31	<2	10	<0.5	2	0.41	<0.5	23	112	127	2.31	0.04	30
92KFA0766	till	1	16	591800	5416200	<0.2	1.15	4	20	<0.5	<2	0.27	<0.5	7	29	13	1.39	0.05	20
92KFA0767	till	1	16	631975	5428470	<0.2	0.9	4	20	<0.5	<2	0.29	<0.5	3	21	5	1.15	0.04	20
92KFA0768	till	1	16	631790	5428330	<0.2	0.46	<2	10	<0.5	<2	4.03	<0.5	1	13	4	0.7	0.04	<10
92KFA0769	till	1	16	596120	5464450	<0.2	0.43	<2	20	<0.5	<2	9.46	<0.5	2	15	9	0.71	0.05	<10
92KFA0770	till	1	16	597300	5464750	<0.2	0.26	<2	10	<0.5	<2	8.74	<0.5	1	15	7	0.56	0.04	10
92KFA0771	till	1	16	598200	5464880	<0.2	0.35	<2	10	<0.5	<2	7.94	<0.5	2	18	8	0.71	0.04	10
92KFA0772	till	1	16	598650	5464820	<0.2	0.44	<2	10	<0.5	<2	9.03	<0.5	2	18	9	0.65	0.06	10
92KFA0773	till	1	16	598800	5464700	<0.2	0.63	<2	20	<0.5	<2	10.06	<0.5	3	21	12	0.81	0.11	10
92KFA0774	till	1	16	599050	5464500	<0.2	0.47	<2	10	<0.5	2	9.33	<0.5	1	18	8	0.66	0.07	10
92KFA0775	till	1	16	598000	5464840	<0.2	0.94	<2	30	<0.5	2	10.32	<0.5	5	28	18	1.07	0.15	10
92KFA0776	till	1	16	598080	5466300	<0.2	0.36	<2	10	<0.5	2	8.56	<0.5	2	18	7	0.67	0.06	10
92KFA0777	till	1	16	598250	5466530	<0.2	0.45	<2	10	<0.5	<2	8.03	<0.5	3	20	7	0.72	0.07	10
92KFA0778	till	1	16	598400	5466825	<0.2	0.37	<2	10	<0.5	4	9.82	<0.5	1	16	7	0.59	0.06	10
92KFA0783	till	1	16	567950	5442730	<0.2	1.71	<2	30	0.5	<2	0.46	<0.5	8	36	14	1.86	0.09	20
92KFA0784	till	1	16	570550	5444200	<0.2	1.4	<2	40	0.5	2	0.46	<0.5	7	35	17	1.76	0.16	60
92KFA0785	till	1	16	551290	5476280	<0.2	0.73	<2	20	<0.5	2	8.94	<0.5	3	23	11	0.89	0.1	10
92KFA0786	till	1	16	550750	5478370	<0.2	0.8	<2	30	<0.5	2	8.69	<0.5	3	23	13	0.94	0.11	10
92KFA0787	till	1	16	551500	5480125	<0.2	0.52	<2	20	<0.5	<2	9.26	<0.5	2	19	10	0.73	0.07	10
92KFA0788	till	1	16	551700	5481530	<0.2	0.47	<2	20	<0.5	<2	10.25	<0.5	2	18	8	0.7	0.06	10
92KFA0789	till	1	16	552450	5482440	<0.2	0.58	<2	30	<0.5	2	10.53	<0.5	2	20	15	0.83	0.08	10
92KFA0790	till	1	16	560250	5480430	<0.2	0.5	4	10	<0.5	<2	0.71	<0.5	3	18	4	0.91	0.03	20
92KFA0791	till	1	16	560970	5482420	<0.2	0.31	4	20	<0.5	2	8.54	<0.5	2	17	9	0.69	0.04	10
92KFA0793	till	1	16	584150	5467900	<0.2	0.71	<2	30	<0.5	2	9.7	<0.5	3	24	13	0.92	0.11	10

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	UTM Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	V ppm	Zn ppm	Au ppb	Pd ppb	Pt ppb
92KFA0756	16	541710	5473570	2.53	135	<1	0.01	8	10	2	2	33	0.06	19	18	2	<2	<5
92KFA0757	16	541450	5475320	2.91	245	<1	0.01	10	6	2	3	53	0.07	23	26	<2	4	<5
92KFA0758	16	541620	5475800	2.73	140	<1	0.01	5	4	2	2	41	0.05	15	12	<2	<2	<5
92KFA0759	16	540790	5477400	2.92	165	<1	0.01	4	4	2	2	37	0.06	16	12	<2	<2	<5
92KFA0762	16	591000	5414400	0.25	185	<1	0.01	9	2	<2	3	14	0.08	21	16	<2	<2	<5
92KFA0763	16	591150	5415080	0.3	130	<1	0.01	14	4	<2	2	13	0.1	23	28	<2	<2	<5
92KFA0764	16	592667	5415950	0.28	115	<1	0.01	22	<2	<2	3	14	0.08	21	16	10	2	5
92KFA0765	16	592370	5416330	0.57	315	1	0.01	128	6	<2	4	13	0.1	38	26	<2	2	<5
92KFA0766	16	591800	5416200	0.31	145	1	0.01	13	6	<2	2	11	0.1	25	18	10	2	5
92KFA0767	16	631975	5428470	0.29	95	<1	<0.01	9	4	<2	2	10	0.09	23	18	<2	<2	<5
92KFA0768	16	631790	5428330	2.43	145	<1	0.01	6	<2	<2	2	18	0.04	13	10	<2	<2	<5
92KFA0769	16	596120	5464450	3.39	165	<1	0.01	7	2	2	2	44	0.04	14	12	<2	<2	<5
92KFA0770	16	597300	5464750	3.33	120	<1	0.01	6	<2	<2	1	47	0.03	16	6	<2	<2	<5
92KFA0771	16	598200	5464880	3.43	140	<1	0.01	5	<2	<2	2	42	0.04	19	10	2	<2	<5
92KFA0772	16	598650	5464820	3.48	150	<1	0.01	4	<2	<2	2	50	0.04	18	10	<2	<2	<5
92KFA0773	16	598800	5464700	3.64	185	<1	0.01	7	<2	<2	2	59	0.06	21	16	<2	<2	<5
92KFA0774	16	599050	5464500	3.67	160	<1	0.01	5	<2	<2	2	52	0.05	18	10	<2	<2	<5
92KFA0775	16	598000	5464840	3.28	225	<1	0.02	11	4	2	3	68	0.08	27	20	<2	<2	<5
92KFA0776	16	598080	5466300	3.39	140	<1	0.01	6	<2	2	2	48	0.05	19	10	<2	<2	<5
92KFA0777	16	598250	5466530	3.24	160	<1	0.01	7	2	<2	2	46	0.05	19	12	2	<2	<5
92KFA0778	16	598400	5466825	3.57	135	<1	0.01	3	<2	2	2	56	0.04	17	8	<2	<2	<5
92KFA0783	16	567950	5442730	0.48	220	<1	0.01	17	2	<2	3	24	0.12	37	26	2	<2	<5
92KFA0784	16	570550	5444200	0.45	305	<1	0.02	16	6	<2	7	22	0.12	37	26	<2	<2	<5
92KFA0785	16	551290	5476280	3.01	180	<1	0.01	8	2	2	3	55	0.07	22	16	<2	<2	<5
92KFA0786	16	550750	5478370	3	170	<1	0.01	8	8	<2	3	54	0.07	23	18	<2	<2	<5
92KFA0787	16	551500	5480125	3.17	145	<1	0.01	4	6	2	2	55	0.06	19	12	2	<2	<5
92KFA0788	16	551700	5481530	3.22	140	<1	0.01	6	<2	<2	2	60	0.06	19	14	<2	<2	<5
92KFA0789	16	552450	5482440	3.14	160	<1	0.01	7	2	<2	2	63	0.06	21	18	<2	<2	<5
92KFA0790	16	560250	5480430	0.31	195	<1	<0.01	7	<2	<2	3	11	0.05	19	8	<2	<2	<5
92KFA0791	16	560970	5482420	3.05	130	<1	0.01	7	<2	<2	1	47	0.04	19	12	2	<2	<5
92KFA0793	16	584150	5467900	3.4	200	<1	0.01	8	2	2	3	58	0.06	23	14	<2	<2	<5

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	Sediment Type	Rep	UTM Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Be ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92KFA0795	till	1	16	587150	5468125	<0.2	0.88	<2	30	<0.5	<2	6.43	<0.5	4	28	15	1.14	0.12	20
92KFA0796	till	1	16	587700	5467200	<0.2	0.65	<2	30	<0.5	2	10.4	<0.5	3	23	11	0.85	0.1	10
92KFA0797	till	1	16	587775	5467050	<0.2	0.71	<2	30	<0.5	<2	9.64	<0.5	3	23	13	0.91	0.1	10
92KFA0798	till	1	16	587950	5468100	<0.2	0.53	<2	20	<0.5	2	10.09	<0.5	2	20	9	0.73	0.07	10
92KFA0799	till	1	16	589850	5468200	<0.2	0.47	<2	10	<0.5	<2	8.62	<0.5	2	20	9	0.74	0.06	10
92MAN0107	till	1	16	588180	5444700	0.2	1.05	4	30	<0.5	2	0.22	<0.5	5	27	15	1.2	0.04	10
92MAN0108	till	1	16	588180	5444920	<0.2	0.7	<2	20	<0.5	2	0.26	<0.5	2	21	17	1.03	0.05	10
92MAN0109	till	1	16	588220	5444320	<0.2	0.63	<2	20	<0.5	<2	0.79	<0.5	5	23	6	1.28	0.06	60
92MAN0110	till	1	16	588025	5444000	<0.2	0.71	4	20	<0.5	<2	0.53	<0.5	4	22	9	1.26	0.06	30
92MAN0111	till	1	16	588150	5444100	<0.2	1.56	4	40	<0.5	<2	0.23	<0.5	6	27	4	1.46	0.07	10
92MAN0112	till	1	16	588520	5444300	<0.2	1.09	<2	20	<0.5	<2	0.34	<0.5	8	41	12	1.7	0.08	20
92MAN0113	till	1	16	588950	5444450	<0.2	0.47	2	10	<0.5	<2	11.02	<0.5	2	18	7	0.68	0.06	<10
92MAN0115	till	1	16	588000	5443630	<0.2	0.22	<2	10	<0.5	4	9.48	<0.5	<1	16	6	0.44	0.03	10
92MAN0116	till	1	16	587930	5443080	<0.2	1.87	<2	60	<0.5	<2	0.57	<0.5	10	47	16	2.26	0.2	20
92MAN0117	till	1	16	587960	5442850	<0.2	1.06	2	30	<0.5	<2	0.35	<0.5	6	27	3	1.31	0.07	20
92MAN0118	till	1	16	588500	5442850	<0.2	1.1	<2	20	<0.5	<2	0.41	<0.5	7	33	15	1.68	0.07	20
92MAN0119	till	1	16	589250	5442610	<0.2	0.7	<2	20	<0.5	<2	4.33	<0.5	3	25	9	0.87	0.06	<10
92MAN0121	till	1	16	590200	5442600	<0.2	1.19	<2	30	<0.5	<2	0.3	<0.5	6	28	5	1.46	0.06	10
92MAN0122	till	1	16	591640	5442750	<0.2	0.54	<2	20	<0.5	<2	4.23	<0.5	2	21	3	0.82	0.06	<10
92MAN0123	till	1	16	592740	5442620	<0.2	1.14	<2	50	<0.5	<2	9.7	<0.5	6	31	15	1.31	0.21	<10
92MAN0125	till	1	16	586150	5442130	<0.2	1.06	<2	30	<0.5	<2	3.63	<0.5	4	31	18	1.23	0.14	<10
92MAN0126	till	1	16	587800	5444820	<0.2	1.02	<2	20	<0.5	4	0.21	<0.5	3	24	94	1.23	0.05	10
92MAN0127	till	1	16	587800	5444650	<0.2	1.32	2	20	<0.5	2	0.13	<0.5	7	46	31	2.29	0.05	<10
92MAN0128	till	1	16	587820	5444500	<0.2	1.51	<2	20	<0.5	<2	0.19	<0.5	4	29	39	1.46	0.06	10
92MAN0133	till	1	16	586350	5442950	<0.2	1.07	6	10	<0.5	<2	0.34	<0.5	6	27	7	1.5	0.08	20
92MAN0135	till	1	16	584030	5442510	<0.2	0.28	<2	10	<0.5	<2	8.06	<0.5	2	22	8	0.7	0.04	10
92MAN0140	till	1	16	584550	5442925	<0.2	0.34	<2	10	<0.5	<2	10.63	<0.5	2	15	6	0.62	0.05	<10
92MAN0141	till	1	16	584850	5442700	<0.2	0.81	2	30	<0.5	<2	0.57	<0.5	9	31	30	1.72	0.09	80
92MAN0144	till	1	16	585530	5442800	<0.2	1.21	4	30	<0.5	<2	0.34	<0.5	5	29	8	1.35	0.09	20
92MAN0147C	till	1	16	585130	5443200	<0.2	2.32	6	10	<0.5	2	0.3	<0.5	6	45	24	4.93	0.04	10
92MAN0149	till	1	16	585400	5443690	<0.2	0.58	<2	20	<0.5	8	5.19	<0.5	5	36	11	1.17	0.05	40

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	UTM Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	V ppm	Zn ppm	Au ppb	Pd ppb	Pt ppb
92KFA0795	16	587150	5468125	3.49	240	<1	0.01	13	10	<2	4	38	0.08	28	20	2	<2	<5
92KFA0796	16	587700	5467200	3.45	190	<1	0.01	7	<2	2	2	64	0.07	23	14	<2	<2	<5
92KFA0797	16	587775	5467050	3.35	215	<1	0.01	8	<2	<2	2	57	0.07	23	14	2	<2	<5
92KFA0798	16	587950	5468100	3.41	175	<1	0.01	7	2	2	2	58	0.06	19	12	<2	<2	<5
92KFA0799	16	589850	5468200	3.64	175	<1	0.01	5	<2	<2	2	45	0.04	20	10	<2	<2	<5
92MAN0107	16	588180	5444700	0.25	80	<1	<0.01	24	4	<2	2	10	0.09	27	22	na	na	na
92MAN0108	16	588180	5444920	0.24	80	<1	<0.01	12	4	<2	1	11	0.07	19	44	na	na	na
92MAN0109	16	588220	5444320	0.31	305	<1	<0.01	8	12	<2	6	14	0.07	21	20	<2	<2	<5
92MAN0110	16	588025	5444000	0.27	270	<1	<0.01	10	4	<2	3	17	0.08	21	22	2	2	<5
92MAN0111	16	588150	5444100	0.27	135	<1	<0.01	15	10	<2	3	13	0.09	25	28	<2	<2	<5
92MAN0112	16	588520	5444300	0.46	240	<1	<0.01	21	8	<2	3	14	0.12	35	28	<2	2	<5
92MAN0113	16	588950	5444450	3.21	150	<1	0.01	7	4	2	2	56	0.04	13	10	2	2	<5
92MAN0115	16	588000	5444050	3.55	105	<1	0.01	3	8	<2	1	51	0.03	13	8	na	na	na
92MAN0116	16	587930	5443080	0.65	340	<1	0.01	25	8	<2	4	22	0.12	40	40	<2	<2	<5
92MAN0117	16	587960	5442850	0.27	155	<1	0.01	17	36	<2	2	14	0.07	24	54	2	4	5
92MAN0118	16	588500	5442850	0.31	115	<1	0.01	16	18	<2	2	16	0.1	33	28	16	<4	<10
92MAN0119	16	589250	5442610	2.37	155	<1	0.01	8	4	<2	3	27	0.08	18	16	2	<2	<5
92MAN0121	16	590200	5442600	0.34	100	<1	<0.01	13	8	<2	2	13	0.11	26	20	4	<4	<10
92MAN0122	16	591640	5442750	2.18	125	<1	0.01	7	2	<2	3	25	0.06	16	18	6	<2	<5
92MAN0123	16	592740	5442620	2.77	290	<1	0.01	14	6	2	3	59	0.08	25	28	<2	<2	<5
92MAN0125	16	586150	5442130	2.15	185	<1	0.01	12	8	<2	4	26	0.09	26	24	<4	<4	<10
92MAN0126	16	587800	5444820	0.32	90	1	<0.01	17	18	<2	2	8	0.09	22	294	na	na	na
92MAN0127	16	587800	5444650	0.68	140	1	<0.01	26	18	<2	2	6	0.18	58	196	na	na	na
92MAN0128	16	587820	5444500	0.32	95	<1	<0.01	14	24	<2	2	12	0.11	25	340	<2	<2	<5
92MAN0133	16	586350	5442950	0.26	250	<1	0.01	12	8	<2	3	16	0.09	24	22	<2	<2	<5
92MAN0135	16	584030	5442510	2.58	110	<1	0.01	6	6	<2	1	47	0.04	18	10	na	na	na
92MAN0140	16	584550	5442925	3.05	130	<1	0.01	5	4	2	2	56	0.05	13	14	<4	<4	10
92MAN0141	16	584850	5442700	0.37	380	<1	0.01	14	12	<2	4	22	0.09	31	24	2	<2	<5
92MAN0144	16	585530	5442800	0.29	190	<1	0.01	13	8	<2	3	17	0.09	24	18	16	<2	<10
92MAN0147C	16	585130	5443200	0.22	130	2	<0.01	13	10	<2	3	11	0.14	62	66	na	na	na
92MAN0149	16	585400	5443690	2.72	265	<1	0.01	12	6	2	4	28	0.04	24	16	na	na	na

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	Sediment Type	Rep	UTM Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Be ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92MAN0151	till	1	16	585500	5444000	<0.2	0.71	2	20	<0.5	<2	0.31	<0.5	4	25	12	1.12	0.05	20
92MAN0152	till	1	16	585275	5444200	<0.2	0.73	<2	20	<0.5	<2	7.42	<0.5	3	26	9	0.99	0.09	<10
92MAN0154	till	1	16	584600	5445360	<0.2	1.72	4	10	<0.5	<2	0.21	<0.5	8	31	16	2.18	0.05	20
92MAN0155	till	1	16	584460	5445150	<0.2	1.37	<2	60	<0.5	<2	9.21	<0.5	7	38	18	1.56	0.24	<10
92MAN0157	till	1	16	584400	5443300	<0.2	0.87	6	10	<0.5	<2	1.53	<0.5	4	26	6	1.08	0.06	20
92MAN0158	till	1	16	584580	5443560	<0.2	0.45	2	10	<0.5	<2	6.45	<0.5	2	18	12	0.71	0.06	<10
92MAN0159	till	1	16	584700	5443740	<0.2	0.73	2	20	<0.5	4	0.2	<0.5	2	18	15	0.84	0.03	10
92MAN0160	till	1	16	585150	5443300	<0.2	1.09	4	50	<0.5	<2	0.5	<0.5	6	32	9	1.47	0.13	30
92MAN0161	till	1	16	584560	5445000	<0.2	1.16	6	30	<0.5	<2	0.4	<0.5	10	50	21	2.12	0.11	30
92MAN0162	till	1	16	584900	5445000	<0.2	1.68	6	80	<0.5	<2	0.36	<0.5	17	76	34	2.69	0.19	20
92MAN0163	till	1	16	585200	5444600	<0.2	0.4	4	20	<0.5	<2	10.83	<0.5	4	19	14	0.98	0.07	<10
92MAN0164	till	1	16	585400	5444850	<0.2	0.33	<2	20	<0.5	<2	10.85	<0.5	4	21	17	0.88	0.06	10
92MAN0165	till	1	16	585600	5445000	0.2	1.41	2	100	<0.5	<2	1.04	<0.5	13	94	27	2.65	0.21	70
92MAN0169	till	1	16	581400	5447250	<0.2	0.91	6	30	<0.5	<2	0.39	<0.5	4	25	12	1.45	0.08	20
92MAN0171	till	1	16	585650	5444500	<0.2	1.57	<2	60	<0.5	<2	0.64	<0.5	8	38	10	1.88	0.18	30
92MAN0172	till	1	16	585720	5444690	<0.2	0.87	2	30	<0.5	<2	6.15	<0.5	3	27	11	1.04	0.12	<10
92MAN0173	till	1	16	585750	5444930	<0.2	2.61	<2	240	<0.5	<2	1.6	1	20	200	55	4.39	0.63	40
92MAN0174	till	1	16	585825	5445160	<0.2	1.29	6	50	<0.5	<2	0.35	0.5	6	34	96	1.6	0.09	10
92MAN0175	till	1	16	586040	5444900	<0.2	0.98	<2	40	<0.5	<2	0.3	<0.5	4	26	11	1.22	0.09	50
92MAN0178	till	1	16	580800	5441700	<0.2	2.12	4	70	<0.5	<2	0.91	<0.5	12	56	33	2.39	0.28	60
92MAN0179	till	1	16	580850	5441350	<0.2	0.91	4	20	<0.5	<2	0.36	<0.5	4	29	7	1.28	0.09	40
92MAN0180	till	1	16	580800	5440850	<0.2	0.4	<2	10	<0.5	<2	8.43	<0.5	3	20	8	0.82	0.05	<10
92MAN0181	till	1	16	582175	5439740	<0.2	1.07	<2	30	<0.5	<2	0.24	<0.5	3	19	1	1.18	0.03	10
92MAN0182	till	1	16	580750	5439000	<0.2	0.32	<2	<10	<0.5	<2	7.94	<0.5	1	15	2	0.66	0.03	<10
92MAN0183	till	0	16	581270	5440450	<0.2	1.42	4	30	<0.5	<2	0.6	<0.5	8	35	6	1.6	0.09	30
92MAN0183C	till	1	16	581270	5440450	<0.2	0.44	<2	10	<0.5	6	7.59	<0.5	3	24	7	0.75	0.06	10
92MAN0183C						<0.2	1.18	<2	20	<0.5	<2	0.39	<0.5	4	30	7	1.35	0.04	10
92MAN0190	till	1	16	584000	5442850	<0.2	1.13	2	10	<0.5	<2	0.39	<0.5	10	30	19	2.1	0.06	30
92MAN0193	till	1	16	583675	5442480	<0.2	1.52	4	50	<0.5	4	0.31	<0.5	9	38	22	1.89	0.1	10
92MAN0194	till	1	16	584320	5440880	<0.2	0.86	<2	20	<0.5	<2	0.47	<0.5	3	28	16	1.16	0.06	20
92MAN0195	till	1	16	583050	5440700	<0.2	1.04	<2	30	<0.5	2	0.24	<0.5	6	34	12	1.49	0.07	20

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	UTM Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	V ppm	Zn ppm	Au ppb	Pd ppb	Pt ppb
92MAN0151	16	585500	5444000	0.2	230	<1	<0.01	20	4	<2	3	13	0.07	20	14	2	<2	<5
92MAN0152	16	585275	5444200	2.93	200	<1	0.01	10	6	<2	3	41	0.07	18	20	<4	<2	<10
92MAN0154	16	584600	5445360	0.32	145	<1	<0.01	17	12	<2	2	9	0.09	29	30	4	<4	<5
92MAN0155	16	584460	5445150	2.86	315	<1	0.01	16	8	<2	4	57	0.09	30	32	2	<2	<5
92MAN0157	16	584400	5443300	0.82	245	<1	<0.01	10	4	2	4	17	0.07	19	14	4	<4	<10
92MAN0158	16	584580	5443560	3	125	<1	0.01	6	2	<2	2	33	0.06	14	10	2	<2	<5
92MAN0159	16	584700	5443740	0.21	55	<1	<0.01	11	4	<2	1	6	0.04	14	12	na	na	na
92MAN0160	16	585150	5443300	0.4	245	<1	0.01	16	8	<2	3	20	0.11	31	24	<2	<2	<5
92MAN0161	16	584560	5445000	0.56	330	<1	<0.01	31	10	<2	4	16	0.12	41	32	<4	<4	<10
92MAN0162	16	584900	5445000	0.72	230	<1	0.01	58	12	<2	6	15	0.16	58	38	<4	<4	<10
92MAN0163	16	585200	5444600	3.33	185	<1	0.01	11	6	<2	2	58	0.06	20	18	<6	<6	<15
92MAN0164	16	585400	5444880	3.81	185	<1	0.01	12	6	<2	1	60	0.02	20	18	na	na	na
92MAN0165	16	585600	5445000	1.08	305	<1	0.01	43	12	<2	7	16	0.16	59	188	<4	<4	<10
92MAN0169	16	581400	5447250	0.28	250	<1	<0.01	10	48	<2	2	16	0.1	25	142	<2	<2	<5
92MAN0171	16	585650	5444500	0.58	415	<1	0.01	20	12	<2	6	19	0.1	31	32	<2	2	<5
92MAN0172	16	585720	5444690	2.99	195	<1	0.01	12	2	2	3	34	0.07	21	20	<2	<2	<5
92MAN0173	16	585750	5444930	2.2	460	<1	0.01	92	12	<2	10	20	0.17	93	408	<12	<12	<30
92MAN0174	16	585825	5445160	0.39	175	<1	<0.01	16	8	2	2	16	0.1	28	112	<2	<2	<5
92MAN0175	16	586040	5444900	0.29	220	<1	<0.01	17	6	<2	5	16	0.09	23	18	2	8	5
92MAN0178	16	580800	5441700	0.85	430	<1	0.03	31	14	2	9	25	0.13	43	42	2	2	<5
92MAN0179	16	580850	5441350	0.3	205	<1	0.01	13	8	<2	7	18	0.1	24	18	2	<2	<5
92MAN0180	16	580800	5440850	2.56	140	<1	0.01	8	2	2	2	46	0.06	16	14	18	<2	<5
92MAN0181	16	582175	5439740	0.21	70	<1	<0.01	9	4	<2	2	11	0.11	23	14	2	<2	<5
92MAN0182	16	580750	5439000	2.79	115	<1	0.01	4	2	2	1	42	0.04	14	8	2	<2	<5
92MAN0183	16	581270	5440450	0.45	305	<1	0.01	15	8	<2	4	16	0.09	25	22	<4	<4	<10
92MAN0183C	16	581270	5440440	2.84	190	<1	0.01	13	8	<2	2	41	0.03	16	14	na	na	na
92MAN0183Ca	16	581270	5440440	0.28	200	<1	<0.01	9	4	<2	2	8	0.04	22	12	na	na	na
92MAN0190	16	584000	5442850	0.29	355	<1	0.01	12	8	<2	3	13	0.09	36	22	<12	<12	<30
92MAN0193	16	583675	5442480	0.41	225	<1	<0.01	25	4	<2	3	10	0.07	35	30	na	na	na
92MAN0194	16	584320	5440880	0.36	110	<1	0.01	13	6	<2	4	17	0.09	23	18	2	<2	<5
92MAN0195	16	583050	5440700	0.29	250	<1	<0.01	17	8	<2	2	9	0.07	27	20	na	na	na

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	Sediment Type	Rep	UTM Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Be ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92MAN0196	till	1	16	583320	5440230	<0.2	0.59	<2	20	<0.5	<2	3.67	<0.5	4	24	5	1.02	0.05	<10
92MAN0198	till	1	16	585620	5441570	<0.2	1.07	<2	20	<0.5	<2	0.44	<0.5	7	31	10	1.43	0.13	20
92MAN0199	till	1	16	585900	5441200	<0.2	1.36	2	20	<0.5	<2	0.4	<0.5	7	36	4	1.62	0.13	20
92MAN0200	till	1	16	585520	5440850	<0.2	1.58	2	30	<0.5	<2	0.34	<0.5	10	42	14	2.24	0.09	30
92MAN0201	till	1	16	586370	5441400	<0.2	2.34	6	90	<0.5	<2	0.6	<0.5	16	205	37	2.53	0.27	20
92MAN0202	till	1	16	587800	5443925	<0.2	1.67	8	20	<0.5	<2	0.24	<0.5	3	27	7	1.56	0.04	20
92MAN0203	till	1	16	587800	5443850	<0.2	2.26	8	20	<0.5	<2	0.15	<0.5	4	35	36	2.66	0.04	10
92MAN0204	till	1	16	587725	5443360	<0.2	1.02	4	20	<0.5	<2	0.27	<0.5	7	23	33	1.19	0.06	10
92MAN0206	till	1	16	587200	5442930	<0.2	1.51	8	60	<0.5	2	0.46	<0.5	10	30	23	2.02	0.11	20
92MAN0212	till	1	16	579750	5428740	<0.2	1.36	<2	10	<0.5	<2	0.26	<0.5	4	22	13	1.24	0.04	20
92MAN0213	till	1	16	580750	5430600	<0.2	1.39	2	40	<0.5	<2	0.71	<0.5	9	37	7	2.14	0.13	20
92MAN0214	till	1	16	580550	5431420	<0.2	0.48	<2	20	<0.5	<2	8.31	<0.5	2	18	7	0.8	0.06	<10
92MAN0215	till	1	16	579000	5430200	<0.2	0.31	2	10	<0.5	<2	8.61	<0.5	2	14	6	0.65	0.04	<10
92MAN0215B	till	0	16	579000	5430200	<0.2	0.84	<2	10	<0.5	2	0.28	<0.5	3	24	3	1.13	0.04	10
92MAN0216	till	1	16	580050	5434480	<0.2	0.98	4	20	<0.5	<2	0.35	<0.5	5	29	6	1.28	0.08	20
92MAN0217	till	1	16	581700	5435050	<0.2	0.6	<2	20	<0.5	<2	8.39	<0.5	2	18	6	0.79	0.07	<10
92MAN0218	till	1	16	583370	5436320	<0.2	0.89	<2	30	<0.5	<2	7.27	<0.5	4	24	7	1.04	0.12	<10
92MAN0219	till	1	16	583900	5438320	<0.2	0.56	<2	20	<0.5	<2	8.46	<0.5	2	17	3	0.72	0.06	<10
92MAN0224	till	1	16	601130	5453230	<0.2	0.7	2	10	<0.5	<2	0.39	<0.5	6	25	4	1.23	0.07	30
92MAN0226	till	1	16	594000	5454650	<0.2	0.53	2	20	<0.5	<2	0.41	<0.5	4	17	21	0.93	0.06	30
92MAN0227	till	1	16	588070	5441860	<0.2	1.35	2	50	<0.5	<2	0.25	<0.5	6	26	3	1.29	0.05	10
92MAN0228	till	1	16	588070	5441840	<0.2	0.39	<2	20	<0.5	<2	9.21	<0.5	2	14	6	0.57	0.03	<10
92MAN0230	till	1	16	587225	5440850	<0.2	1.72	<2	70	<0.5	<2	0.47	<0.5	7	37	7	1.78	0.13	20
92MAN0232	till	1	16	585870	5440240	<0.2	1.19	<2	30	<0.5	<2	0.37	<0.5	6	28	3	1.46	0.15	20
92MAN0245	till	1	16	585150	5438900	<0.2	0.88	6	20	<0.5	<2	0.29	<0.5	4	21	1	1.21	0.04	30
92MAN0246	till	1	16	584825	5437960	<0.2	0.24	<2	<10	<0.5	<2	7.98	<0.5	1	13	2	0.53	0.03	<10
92MAN0247	till	1	16	584900	5436950	<0.2	0.34	<2	10	<0.5	<2	9.41	<0.5	1	15	2	0.59	0.05	<10
92MAN0249	till	1	16	584400	5433650	<0.2	1.18	<2	30	<0.5	<2	0.36	<0.5	4	21	6	1.04	0.04	20
92MAN0250	till	1	16	584470	5439050	<0.2	0.47	2	10	<0.5	<2	7.71	<0.5	2	15	5	0.77	0.06	<10
92MAN0251	till	1	16	581470	5432970	<0.2	1.18	2	40	<0.5	<2	5.97	<0.5	5	32	9	1.31	0.17	<10
92MAN0254	till	1	16	582300	5434600	<0.2	0.19	<2	10	<0.5	<2	7.76	<0.5	<1	15	5	0.46	0.02	<10

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	UTM Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	V ppm	Zn ppm	Au ppb	Pd ppb	Pt ppb
92MAN0196	16	583320	5440250	1.59	240	<1	0.01	9	4	<2	4	26	0.07	20	14	<2	<2	<5
92MAN0198	16	585620	5441570	0.43	210	<1	0.01	16	8	<2	2	19	0.13	29	26	<4	4	<10
92MAN0199	16	585900	5441200	0.42	270	<1	0.01	18	8	<2	3	25	0.12	31	26	<2	<2	<5
92MAN0200	16	585520	5440850	0.54	285	<1	0.01	23	16	<2	5	18	0.14	38	38	12	<4	<10
92MAN0201	16	586370	5441400	1.61	355	<1	0.02	90	8	2	4	37	0.22	56	52	<4	<4	<10
92MAN0202	16	587800	5443925	0.2	75	<1	<0.01	9	8	2	2	10	0.08	21	40	4	<2	<5
92MAN0203	16	587800	5443850	0.25	90	1	<0.01	14	12	<2	3	8	0.11	42	64	<2	<2	<5
92MAN0204	16	587725	5443460	0.25	95	<1	<0.01	19	4	<2	2	13	0.09	24	28	<2	<2	<5
92MAN0206	16	587200	5442930	0.43	235	<1	0.02	18	12	<2	4	17	0.12	36	48	<2	<2	<5
92MAN0212	16	579750	5428740	0.36	115	<1	0.01	10	6	<2	3	11	0.1	24	20	<2	<2	<5
92MAN0213	16	580750	5430600	0.65	325	<1	0.02	16	10	<2	4	29	0.19	45	42	<2	<2	<5
92MAN0214	16	580550	5431420	2.88	165	<1	0.01	6	2	<2	2	43	0.07	18	14	<2	<2	<5
92MAN0215	16	579000	5430200	2.79	125	<1	0.01	11	6	<2	2	44	0.05	14	12	<2	<2	<5
92MAN0215B	16	579000	5430200	0.2	135	<1	<0.01	4	2	<2	2	10	0.05	21	12	na	na	na
92MAN0216	16	580050	5434480	0.34	210	<1	0.01	12	4	<2	4	19	0.1	25	20	<2	<2	<5
92MAN0217	16	581700	5435050	3.4	175	<1	0.01	6	4	2	3	41	0.06	15	14	<2	2	<5
92MAN0218	16	583370	5436320	2.73	215	<1	0.01	10	8	2	3	39	0.07	19	18	<2	<2	<5
92MAN0219	16	583900	5438320	3.35	145	<1	0.01	7	6	<2	2	40	0.06	14	12	2	<2	<5
92MAN0224	16	601130	5453230	0.25	210	<1	<0.01	12	12	<2	4	14	0.07	22	14	2	<2	<5
92MAN0226	16	594000	5454650	0.2	155	<1	<0.01	12	4	<2	2	14	0.07	20	12	<2	<2	<5
92MAN0227	16	588070	5441860	0.29	110	<1	<0.01	17	8	<2	2	13	0.1	24	18	2	<2	<5
92MAN0228	16	588070	5441840	3.09	120	<1	0.01	4	2	2	2	45	0.05	12	8	2	<2	<5
92MAN0230	16	587225	5440850	0.53	215	<1	0.01	16	12	<2	4	20	0.13	35	34	2	<2	<5
92MAN0232	16	585870	5440240	0.47	160	<1	0.01	15	8	<2	2	15	0.13	26	30	2	<2	<5
92MAN0245	16	585150	5438900	0.2	135	<1	<0.01	7	6	<2	2	13	0.09	24	14	<2	<2	<5
92MAN0246	16	584825	5437960	2.58	95	<1	0.01	2	2	2	1	39	0.04	12	6	2	<2	<5
92MAN0247	16	584900	5436950	2.95	125	<1	0.01	3	6	2	2	46	0.05	12	8	2	<2	<5
92MAN0249	16	584400	5433650	0.29	75	<1	<0.01	12	4	<2	2	13	0.11	20	14	<2	<2	<5
92MAN0250	16	584470	5439050	3.06	180	<1	0.01	6	4	<2	2	38	0.06	15	12	6	<2	<5
92MAN0251	16	581470	5432970	2.67	260	<1	0.01	14	8	2	4	36	0.08	25	24	<2	<2	<5
92MAN0254	16	582300	5434600	2.66	85	<1	0.01	4	6	<2	1	43	0.02	12	4	na	na	na

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	Sediment Type	Rep	UTM Zone	Easting m	Northing m	Ag ppm	Al pct	As ppm	Ba ppm	Be ppm	Bi ppm	Ca ppm	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm
92MAN0256	till	1	16	583960	5432900	<0.2	0.61	4	30	<0.5	<2	0.4	<0.5	3	15	3	0.69	0.05	20
92MAN0258	till	1	16	584175	5430600	<0.2	2.73	14	20	<0.5	2	0.22	<0.5	12	35	12	2.1	0.06	20

Manitouwadge - 1992 - Trace, Minor, and Major Elements (<0.063 mm fraction)

Sample No.	UTM Zone	Easting m	Northing m	Mg pct	Mn ppm	Mo ppm	Na pct	Ni ppm	Pb ppm	Sb ppm	Sc ppm	Sr ppm	Ti pct	V ppm	Zn ppm	Au ppb	Pd ppb	Pt ppb
92MAN0256	16	583960	5432900	0.21	85	<1	<0.01	7	2	<2	2	16	0.09	15	12	2	<2	<5
92MAN0258	16	584175	5430600	0.33	170	<1	<0.01	15	14	2	3	13	0.09	33	24	<2	<2	<5

APPENDIX A (iv)

**Trace, Minor, and Major Element Data for
Clay- (<0.002 mm) and Silt and Clay-
Sized (<0.063 mm) Fractions of Duplicate
Till Samples and Standard Samples**

**Scattergrams of First Run
and Blind Duplicate Analytical Data**

For explanation of data, see Appendix A (ii) and A (iii).

SBA and TCA are Terrain Sciences Division standard samples.

Duplicate Samples and Standard Samples - <0.002 mm fraction

Sample No.	Lab No.	Ag ppm	Al pct	As ppm	Ba ppm	Bi ppm	Ca pct	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe pct	K pct	La ppm	Mg pct
92KFA0404	93PL0171	<0.2	3.04	2	60	<2	0.18	<0.5	15	77	17	3.63	0.24	10	1.15
92KFA0408	93PL0172	<0.2	3.21	12	100	<2	0.34	<0.5	15	95	24	3.9	0.22	30	1.38
92KFA0427	93PL0173	<0.2	6.17	22	80	<2	0.16	<0.5	22	112	66	5.36	0.16	30	1.13
92KFA0428	93PL0174	<0.2	2.41	12	110	<2	8.2	<0.5	10	75	40	2.99	0.43	10	1.76
92KFA0432	93PL0176	<0.2	5.19	6	120	<2	0.28	<0.5	21	105	20	5.15	0.2	20	1.19
92KFA0435	93PL0177	<0.2	5.74	<2	100	<2	0.24	<0.5	21	123	111	4.71	0.24	30	1.36
92KFA0457	93PL0178	<0.2	4.84	<2	90	<2	0.66	<0.5	21	128	152	4.93	0.7	60	2.69
92KFA0467	93PL0179	<0.2	3.68	4	180	<2	3.33	<0.5	14	104	57	4.35	0.53	<10	2.57
92KFA0476	93PL0180	<0.2	2.65	6	110	<2	8.94	<0.5	13	71	49	3.43	0.48	<10	1.99
92KFA0490	93PL0181	<0.2	3.55	10	160	<2	2.38	<0.5	15	107	84	4.35	0.61	10	2.02
92KFA0504	93PL0183	<0.2	3.45	10	140	<2	4.04	<0.5	17	93	58	4.46	0.51	<10	1.91
92KFA0513	93PL0184	<0.2	4.28	8	160	<2	1.7	<0.5	17	121	67	5.1	0.51	30	2.17
92KFA0531	93PL0185	<0.2	2.41	<2	150	<2	14.63	<0.5	8	66	50	2.74	0.48	<10	1.96
92KFA0557	93PL0186	<0.2	4.96	2	270	<2	0.43	<0.5	35	209	228	6.53	1.05	130	2.92
92KFA0566	93PL0187	0.6	5.47	14	180	<2	0.23	<0.5	18	116	32	5.67	0.23	90	1.24
92KFA0577	93PL0188	<0.2	4	6	170	<2	1.2	<0.5	19	131	71	5.17	0.56	20	2.09
92KFA0590	93PL0190	0.2	3.17	<2	180	<2	6.66	<0.5	12	101	101	3.76	0.72	<10	1.93
92KFA0633	93PL0191	<0.2	4.14	<2	70	<2	0.25	<0.5	15	90	20	4.24	0.16	10	1.2
92KFA0656	93PL0193	<0.2	5.98	<2	180	<2	0.32	<0.5	20	156	65	6.13	0.33	30	1.6
92KFA0675	93PL0194	0.6	8.22	<2	130	<2	0.11	<0.5	48	142	53	7.25	0.29	20	0.78
92KFA0685	93PL0195	0.2	4.86	<2	220	<2	0.35	<0.5	20	108	41	5.28	0.29	10	1.48
92KFA0695	93PL0196	0.2	3.95	<2	180	<2	1.68	<0.5	14	115	77	4.53	0.32	40	1.78
92MAN0113	92PH0445	<0.2	3.24	4	140	<2	7.28	<0.5	14	94	46	3.55	0.6	20	1.85
92MAN0123	92PH0444	0.2	2.46	14	90	<2	11.72	<0.5	11	69	34	2.46	0.35	30	1.85
92MAN0155	92PH0447	<0.2	3.62	6	130	<2	5.54	<0.5	12	97	45	3.86	0.66	30	1.67
92MAN0185	92PH0448	0.4	5.6	16	210	<2	0.63	<0.5	19	129	58	5.58	0.56	80	1.88
92MAN0218	92PH0450	0.2	4.03	14	140	6	2.52	<0.5	18	102	38	4.29	0.56	30	2.22
92MAN0251	92PH0451	<0.2	4.5	12	150	4	1.9	<0.5	18	116	42	4.64	0.64	40	2.34
SBA	93PL0175	<0.2	2.86	36	90	<2	0.07	<0.5	15	39	65	3.7	0.28	30	0.81
SBA	93PL0182	<0.2	2.88	26	90	<2	0.07	<0.5	14	37	67	3.55	0.3	30	0.79
SBA	93PL0189	0.2	2.67	18	90	<2	0.07	<0.5	14	37	65	3.48	0.27	20	0.77
SBA	93PL0192	<0.2	3.01	24	90	<2	0.07	<0.5	14	39	71	3.73	0.31	30	0.83
SBA	92PH0446	0.2	3.05	36	100	<2	0.09	<0.5	14	38	69	3.63	0.32	30	0.82
SBA	92PH0449	<0.2	3.16	32	100	4	0.08	<0.5	15	39	70	3.61	0.34	30	0.82

Duplicate Samples and Standard Samples - <0.002 mm fraction

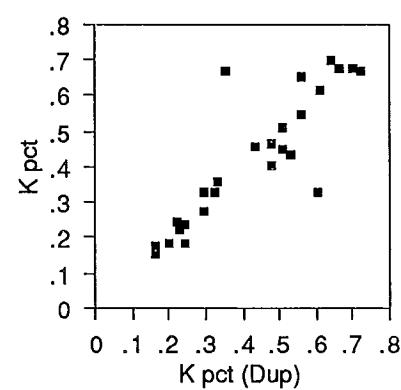
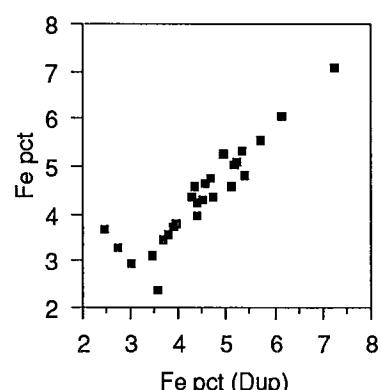
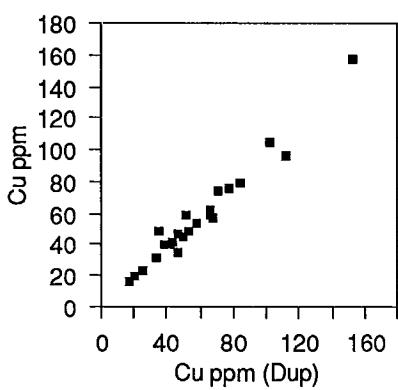
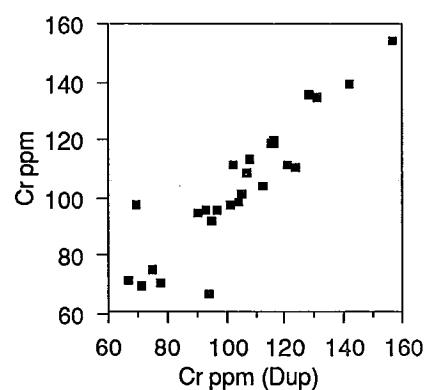
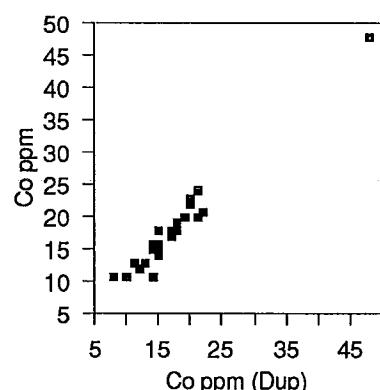
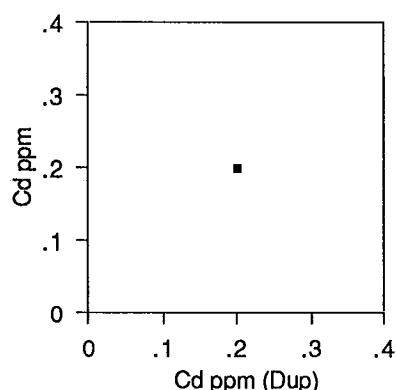
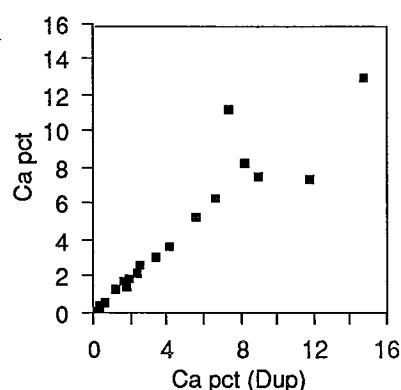
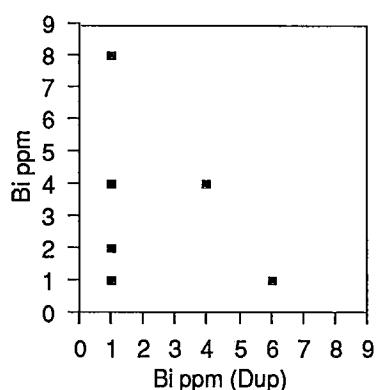
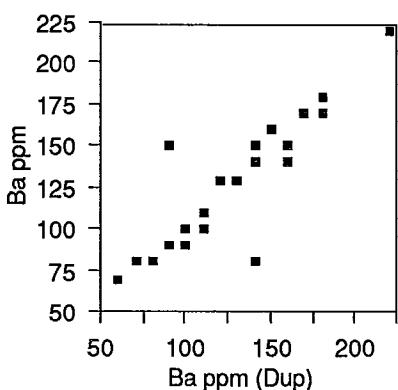
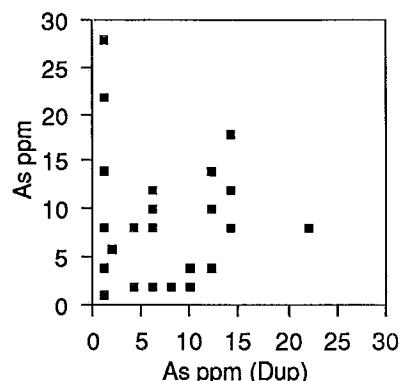
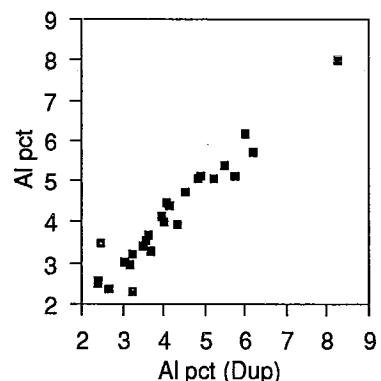
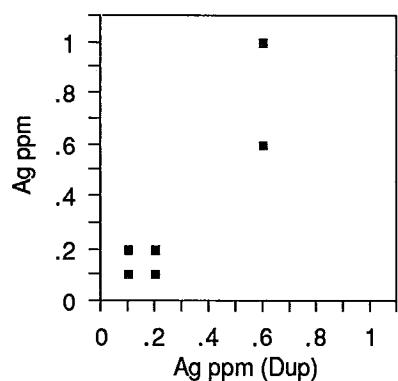
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92KFA0408	93PL0172	430	<1	1.54	43	4	<2	8	16	0.09	10	59	84
92KFA0427	93PL0173	300	2	2.68	52	18	2	9	11	0.09	<10	109	80
92KFA0428	93PL0174	450	<1	0.9	33	10	2	7	69	0.09	<10	43	82
92KFA0432	93PL0176	345	1	2.15	48	14	<2	6	15	0.09	<10	98	92
92KFA0435	93PL0177	355	<1	1.64	76	8	<2	9	15	0.11	<10	79	90
92KFA0457	93PL0178	760	<1	2.47	65	8	<2	8	42	0.03	<10	86	158
92KFA0467	93PL0179	445	<1	1.6	57	6	<2	11	34	0.09	<10	65	102
92KFA0476	93PL0180	505	<1	1.49	47	8	<2	8	62	0.06	<10	53	90
92KFA0490	93PL0181	460	<1	1.75	78	12	<2	12	33	0.06	<10	67	116
92KFA0504	93PL0183	780	<1	1.63	52	14	<2	10	43	0.07	<10	65	102
92KFA0513	93PL0184	550	<1	2.59	63	8	<2	14	27	0.08	<10	76	118
92KFA0531	93PL0185	370	<1	0.95	35	4	<2	7	82	0.08	<10	41	86
92KFA0557	93PL0186	1050	1	2.31	175	20	<2	26	26	0.07	<10	105	208
92KFA0566	93PL0187	505	1	1.94	56	24	<2	28	18	0.1	<10	87	78
92KFA0577	93PL0188	665	<1	2.8	69	14	<2	14	22	0.07	<10	74	120
92KFA0590	93PL0190	405	<1	1.5	55	8	<2	9	56	0.07	<10	58	108
92KFA0633	93PL0191	305	<1	1.3	42	10	<2	7	12	0.09	<10	60	76
92KFA0656	93PL0193	535	<1	1.4	70	8	<2	18	21	0.14	<10	103	106
92KFA0675	93PL0194	970	3	2.56	105	18	<2	10	10	0.07	<10	126	98
92KFA0685	93PL0195	485	2	0.98	56	14	<2	8	21	0.17	<10	82	106
92KFA0695	93PL0196	450	<1	1.12	49	2	<2	14	26	0.12	<10	66	94
92MAN0113	92PH 0445	470	<1	0.5	40	12	<2	9	68	0.15	<10	66	84
92MAN0123	92PH0444	385	<1	0.65	32	8	<2	8	69	0.11	<10	43	60
92MAN0155	92PH0447	380	<1	0.58	42	10	<2	10	58	0.16	<10	72	88
92MAN0185	92PH0448	685	<1	0.78	61	24	<2	20	33	0.2	<10	96	102
92MAN0218	92PH0450	585	<1	0.64	50	18	<2	13	38	0.18	<10	72	90
92MAN0251	92PH0451	585	<1	0.75	58	22	<2	16	37	0.19	<10	78	96
SBA	93PL0175	810	1	0.01	33	18	<2	7	7	0.1	10	42	106
SBA	93PL0182	785	<1	0.01	34	20	<2	8	8	0.08	<10	41	104
SBA	93PL0189	765	<1	0.01	33	18	<2	7	7	0.07	<10	40	102
SBA	93PL0192	820	<1	0.01	35	22	<2	8	8	0.08	<10	43	108
SBA	92PH0446	815	<1	0.01	34	20	<2	8	9	0.1	<10	47	100
SBA	92PH0449	805	<1	0.01	34	24	<2	8	9	0.11	<10	48	102

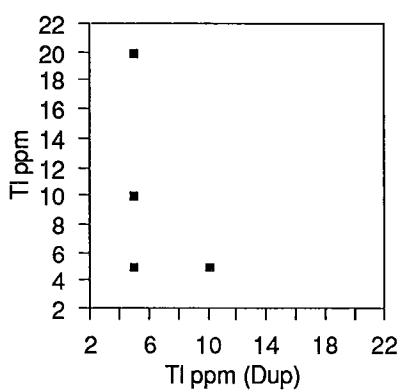
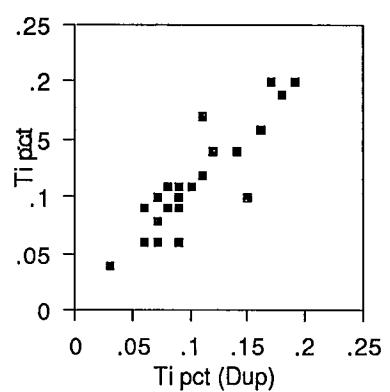
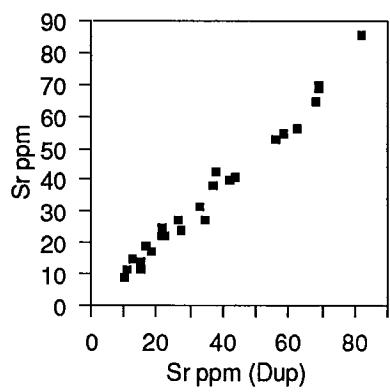
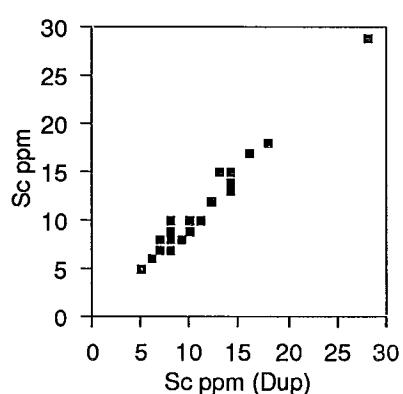
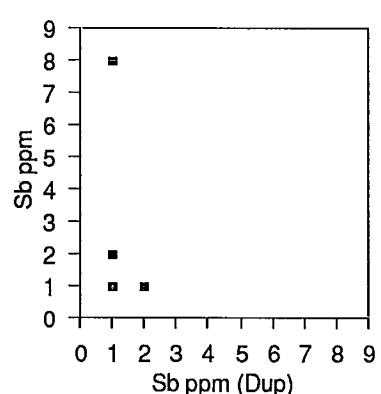
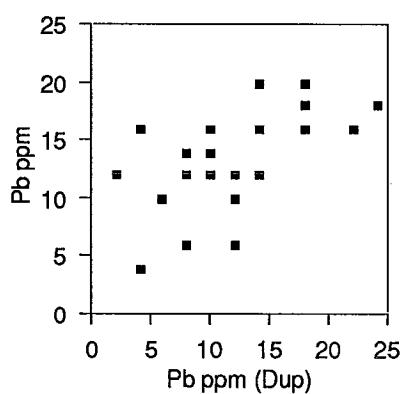
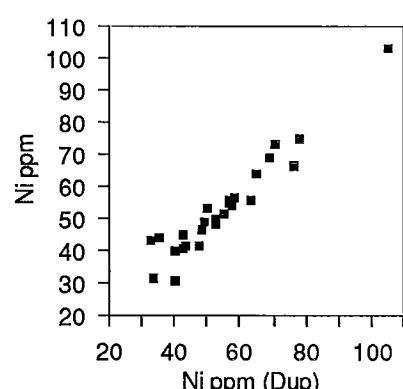
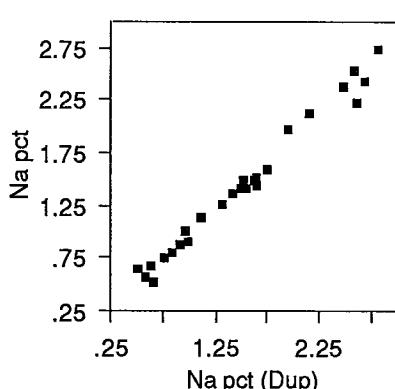
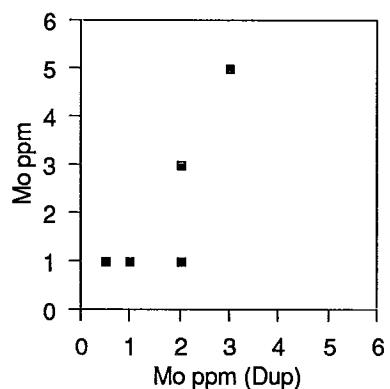
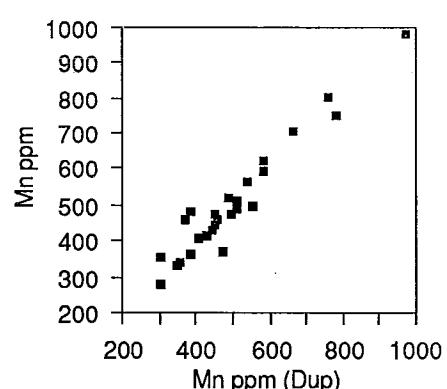
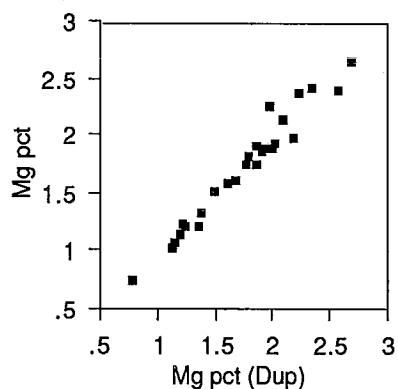
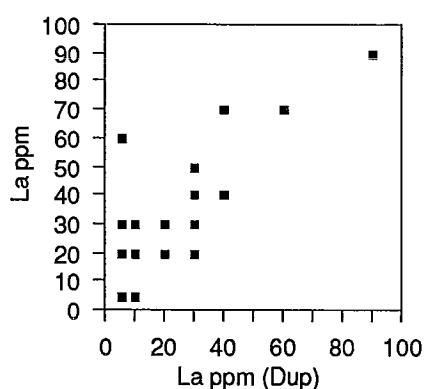
Duplicate Samples and Standard Samples - <0.063 mm fraction

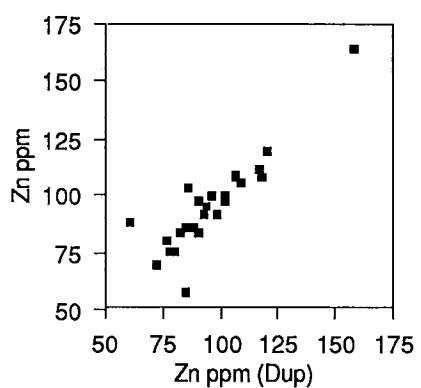
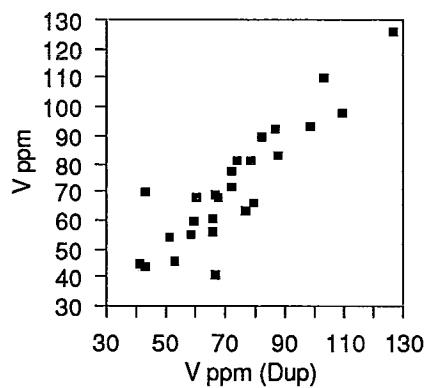
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92KFA0529	92PH0320	<0.2	0.93	<2	<2	20	2	0.44	<0.5	4	23	7	1.14	0.07	20	0.3
92KFA0548	92PH0321	<0.2	0.95	<2	<2	40	2	0.32	<0.5	3	22	18	0.89	0.04	10	0.24
92KFA0561	92PH0322	<0.2	1.32	<2	<2	30	<2	0.16	<0.5	4	27	8	1.08	0.04	10	0.24
92KFA0578	92PH0323	<0.2	0.92	<2	2	30	<2	0.2	<0.5	3	22	5	1.11	0.04	10	0.19
92KFA0580	92PH0325	<0.2	1.01	<2	<2	40	<2	0.22	<0.5	3	18	4	0.96	0.03	20	0.19
92KFA0600	92PH0326	<0.2	0.27	<2	<2	20	<2	7.4	<0.5	1	14	6	0.55	0.03	10	2.64
92KFA0622	92PH0327	<0.2	0.97	<2	<2	80	2	0.24	<0.5	4	28	7	1.32	0.06	30	0.3
92KFA0633	92PH0328	<0.2	1.01	<2	2	30	<2	0.29	<0.5	3	21	5	1.09	0.06	10	0.27
92KFA0648	92PH0330	<0.2	1.64	4	<2	20	<2	0.28	<0.5	5	31	7	1.91	0.06	20	0.28
92KFA0666	92PH0331	<0.2	1.75	4	<2	40	6	0.23	<0.5	6	29	5	1.86	0.06	10	0.24
92KFA0681	92PH0332	<0.2	2.18	<2	<2	70	<2	0.18	<0.5	10	64	19	2.48	0.09	10	0.6
92KFA0699	92PH0334	<0.2	1.15	<2	<2	30	<2	0.19	<0.5	4	18	4	1.49	0.04	10	0.19
92KFA0756	92PH0335	<0.2	0.41	<2	<2	10	2	6.89	<0.5	2	22	13	0.89	0.12	10	2.63
92KFA0758	92PH0336	<0.2	0.48	<2	<2	20	6	8.97	<0.5	2	20	12	0.8	0.07	10	3
92KFA0774	92PH0337	<0.2	0.47	<2	<2	10	<2	9.67	<0.5	2	18	8	0.68	0.07	10	3.78
92KFA0791	92PH0338	<0.2	0.33	<2	<2	20	<2	8.8	<0.5	2	17	9	0.72	0.05	10	3.12
TCA	92PH0324	<0.2	1.06	<2	156	90	<2	0.5	<0.5	7	29	38	1.85	0.07	20	0.46
TCA	92PH0329	<0.2	1.11	4	172	40	2	0.52	<0.5	9	29	39	1.88	0.07	20	0.48
TCA	92PH0333	<0.2	0.98	<2	154	30	<2	0.43	<0.5	7	26	36	1.78	0.05	20	0.44
TCA	92PH0339	<0.2	1.04	4	158	30	2	0.5	<0.5	8	29	38	1.86	0.06	20	0.47

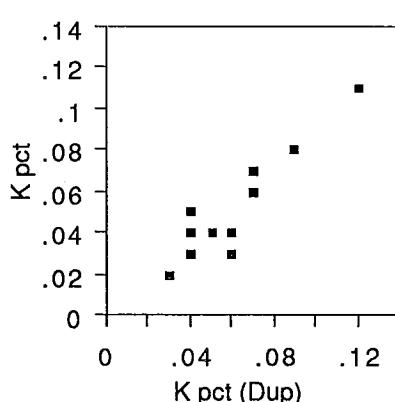
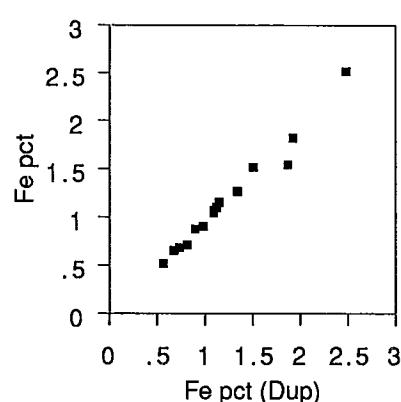
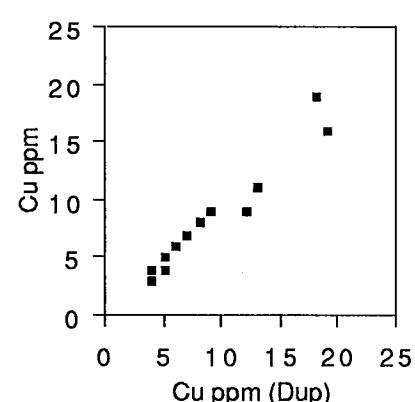
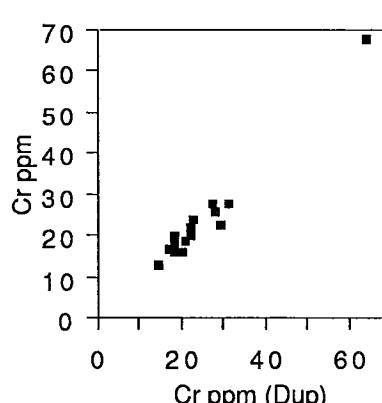
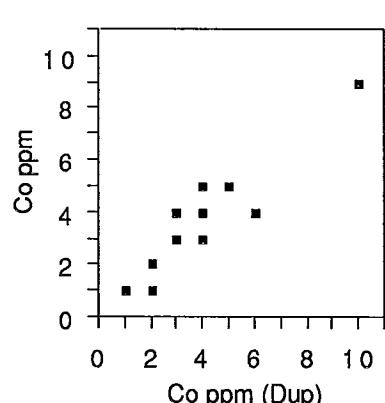
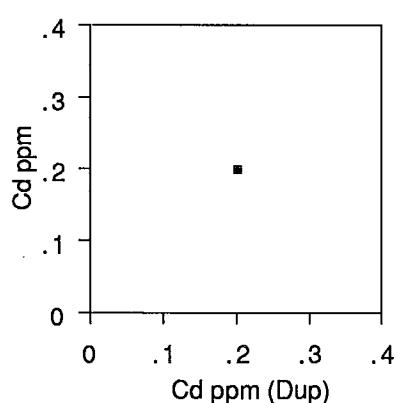
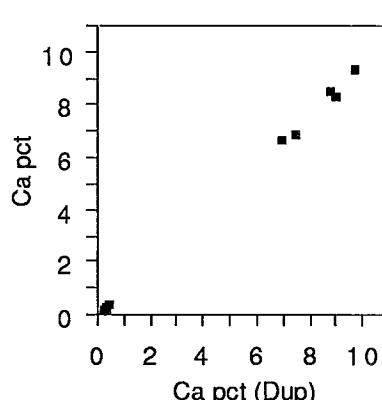
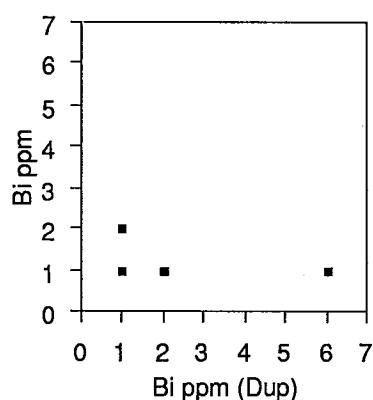
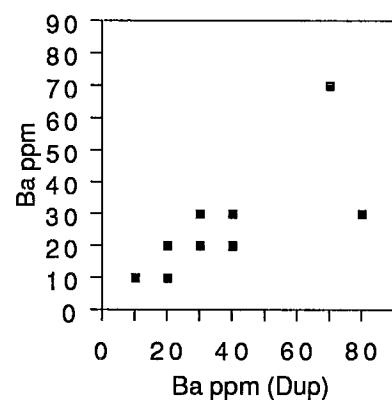
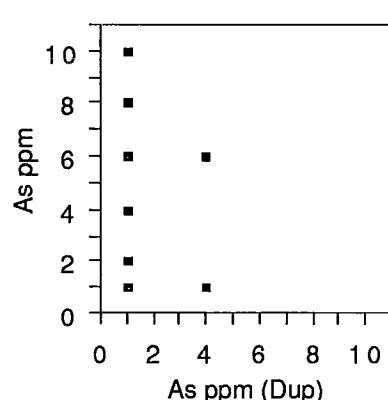
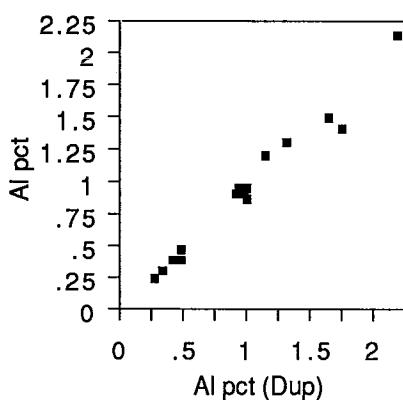
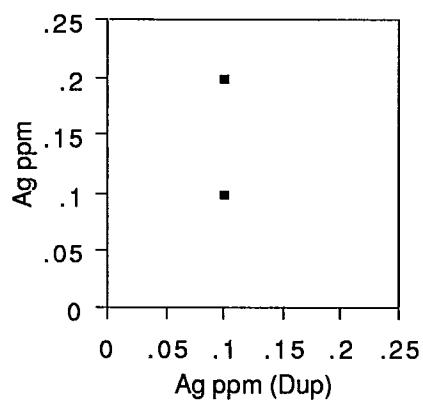
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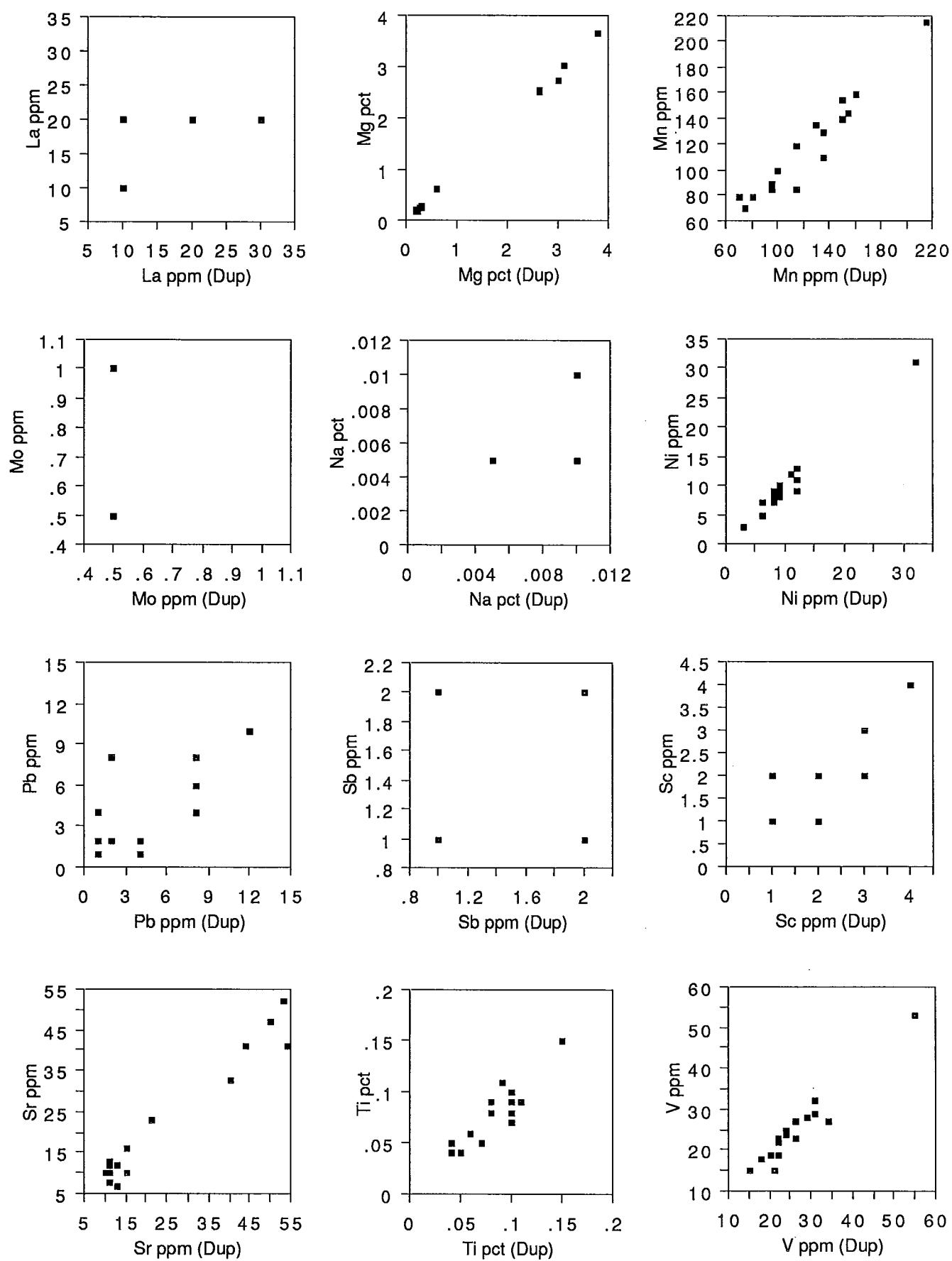
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92KFA0529	92PH0320	150	<1	0.01	9	2	<2	<5	<2	2	21	0.1	<10	26	18
92KFA0548	92PH0321	115	<1	<0.01	8	1	2	<5	<2	2	15	0.08	<10	22	14
92KFA0561	92PH0322	80	<1	0.01	11	4	<2	<5	<2	3	11	0.1	<10	24	12
92KFA0578	92PH0323	100	<1	<0.01	8	8	<2	<5	2	2	11	0.08	<10	24	10
92KFA0580	92PH0325	75	<1	<0.01	8	2	<2	<5	2	2	13	0.08	<10	22	14
92KFA0600	92PH0326	95	<1	0.01	3	1	<2	<5	<2	1	44	0.04	<10	15	8
92KFA0622	92PH0327	155	<1	<0.01	12	1	<2	<5	<2	4	13	0.1	<10	29	14
92KFA0633	92PH0328	95	<1	<0.01	9	4	<2	<5	<2	2	15	0.1	<10	26	14
92KFA0648	92PH0330	135	<1	0.01	12	4	<2	<5	<2	3	11	0.11	<10	31	18
92KFA0666	92PH0331	115	<1	0.01	12	8	<2	<5	<2	2	13	0.1	<10	34	22
92KFA0681	92PH0332	215	<1	0.01	32	8	<4	<10	<2	4	10	0.15	<10	55	44
92KFA0699	92PH0334	70	<1	<0.01	8	8	<2	<5	<2	1	11	0.09	<10	31	20
92KFA0756	92PH0335	130	<1	0.01	9	12	<2	<5	2	2	40	0.06	<10	22	16
92KFA0758	92PH0336	150	<1	0.01	6	1	<2	<5	2	2	54	0.07	<10	21	12
92KFA0774	92PH0337	160	<1	0.01	6	1	<2	<5	<2	2	53	0.04	<10	18	10
92KFA0791	92PH0338	135	<1	0.01	6	1	<2	<5	2	2	50	0.05	<10	20	12
TCA	92PH0324	270	<1	0.01	17	2	<2	<5	<2	7	25	0.1	<10	34	30
TCA	92PH0329	275	<1	0.01	18	6	<2	<5	2	7	27	0.1	<10	35	30
TCA	92PH0333	260	<1	0.01	17	8	<2	<5	2	6	20	0.08	<10	31	28
TCA	92PH0339	270	<1	0.01	17	6	<2	<5	<2	7	24	0.09	<10	34	28

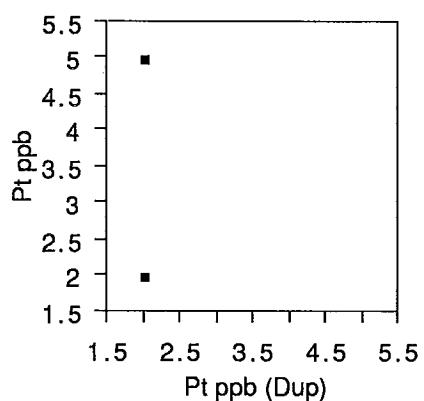
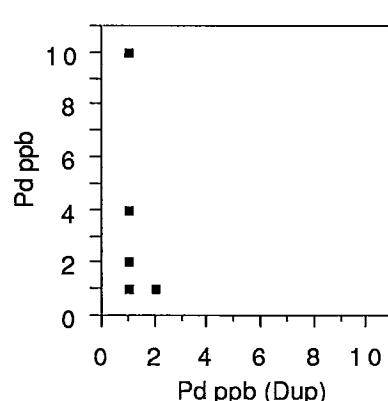
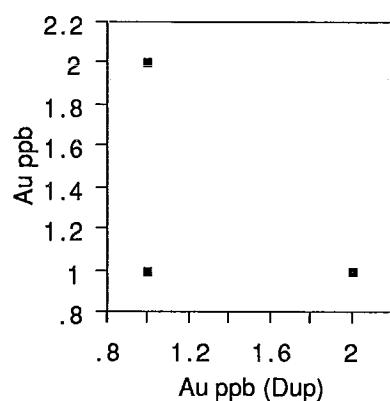
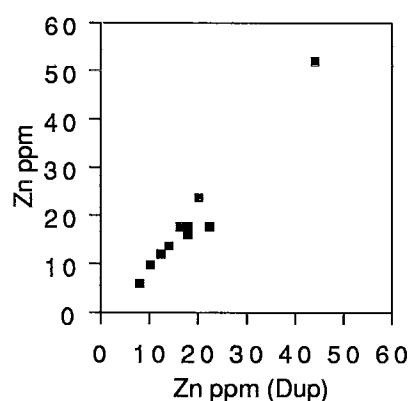












APPENDIX A (v)

Pebble Lithology Data for 5.6-16.0 mm Fraction of 1992 Till and Gravel Samples

Key

Pz Carb No. %	Per cent Paleozoic carbonate clasts
Pz Sst No. %	Per cent Paleozoic sandstone clasts
Prot. Mtsm No. %	Per cent Proterozoic metasedimentary clasts
Prec Mvcc No. %	Per cent Precambrian metavolcanic clasts
Other Prec Mtsm No. %	Per cent Other Precambrian metasedimentary clasts
Prec Gran No. %	Per cent Other Precambrian granitic clasts

Manitouwadge 1992 Pebble Counts - 5.6-16 mm fraction

Sample No.	Sed. Type	Plot	UTM Zone	Easting m	Northing m	Pz. Carb. No. %	Pz. Sdst. No. %	Prec. Mvcc No. %	Prot. Mtsdm No. %	Other Prec. Mtsdm No. %	Prec. Granit. No. %	Total Count
92KFA0300	till	1	16	565000	5438900	10.14	0.00	5.80	4.35	13.77	65.94	138
92KFA0301	till	1	16	565650	5439810	13.66	0.00	2.93	8.78	16.59	58.05	205
92KFA0302	till	1	16	565900	5440575	32.35	0.00	0.00	2.94	38.24	26.47	34
92KFA0303	till	1	16	565980	5441540	27.16	0.00	3.02	4.74	23.71	41.38	232
92KFA0304	till	1	16	567390	5440600	55.73	0.00	3.56	3.56	10.28	26.88	253
92KFA0305	till	1	16	567300	5439150	33.33	0.00	9.80	3.92	7.84	45.10	51
92KFA0306	till	1	16	567150	5438060	4.80	0.00	2.80	2.00	7.60	82.80	250
92KFA0307	till	1	16	563880	5449860	12.31	0.00	6.15	5.38	20.00	56.15	130
92KFA0308	till	1	16	563850	5448590	3.14	0.00	2.24	0.90	2.69	91.03	223
92KFA0312	till	1	16	554850	5438850	18.18	0.00	2.60	2.60	7.79	68.83	77
92KFA0313	till	1	16	554850	5438200	10.11	0.00	22.02	1.81	11.91	54.15	277
92KFA0314	till	1	16	555230	5437190	9.26	0.00	1.85	3.70	15.74	69.44	108
92KFA0315	till	1	16	555890	5436695	36.23	0.00	4.35	1.45	13.04	44.93	69
92KFA0316	till	1	16	555200	5438640	15.38	0.00	2.56	1.28	16.67	64.10	78
92KFA0317	till	1	16	556640	5435440	7.03	0.00	2.16	2.16	6.49	82.16	185
92KFA0318	till	1	16	556540	5436340	15.73	0.00	2.25	3.37	21.34	57.30	89
92KFA0319	till	1	16	557000	5437340	55.00	0.00	0.00	5.00	5.00	35.00	20
92KFA0320	till	1	16	557545	5439705	13.10	0.00	3.57	2.38	13.10	67.86	84
92KFA0400	till	1	16	569200	5434400	0.00	2.27	2.27	2.27	0.00	93.18	88
92KFA0401	till	1	16	568900	5434210	0.00	0.00	0.00	5.08	0.00	94.92	59
92KFA0402	till	1	16	568925	5433450	0.00	0.00	2.01	6.04	1.34	90.60	149
92KFA0403	till	1	16	568900	5434730	0.00	0.00	2.07	9.09	7.44	81.40	242
92KFA0404	till	1	16	568480	5435000	0.00	1.79	5.36	8.93	11.61	72.32	112
92KFA0405	till	1	16	569700	5435820	0.00	0.00	6.02	9.64	24.10	60.24	83
92KFA0406	till	1	16	569800	5436075	1.20	0.00	8.80	6.80	13.60	69.60	250
92KFA0407	till	1	16	569830	5436300	0.40	1.60	8.00	11.60	16.80	61.60	250
92KFA0408	till	1	16	570250	5437130	7.81	0.00	7.81	9.38	34.38	40.63	64
92KFA0409	till	1	16	570850	5437000	0.00	2.30	8.05	11.49	33.33	44.83	87
92KFA0412	till	1	16	570050	5439000	0.00	0.00	6.67	3.33	13.33	76.67	30
92KFA0413	till	1	16	570620	5440250	0.00	0.00	3.60	4.80	0.80	90.80	250
92KFA0414	till	1	16	595400	5447300	0.00	0.00	0.00	0.00	0.80	99.20	250
92KFA0417	till	1	16	595650	5447420	0.00	0.00	0.80	2.80	1.20	95.20	250
92KFA0418	till	1	16	595810	5447500	2.00	0.00	0.00	6.00	10.67	81.33	150
92KFA0419	till	1	16	597100	5447200	34.00	1.20	9.20	18.80	8.40	28.40	250
92KFA0420	till	1	16	597370	5447400	65.60	1.20	1.20	11.20	3.60	17.20	250
92KFA0421	till	1	16	597450	5448000	31.20	2.40	6.40	11.60	2.40	46.00	250
92KFA0423	till	1	16	597200	5449150	0.00	0.00	1.20	0.80	0.80	97.20	250

Manitouwadge 1992 Pebble Counts - 5.6-16 mm fraction

Sample No.	Sed. Type	Plot	UTM Zone	Easting m	Northing m	Pz. Carb. No. %	Pz. Sdst. No. %	Prec. Mvcc No. %	Prot. Mtsdm No. %	Other Prec. Mtsdm No. %	Prec. Granit. No. %	Total Count
92KFA0424	till	1	16	597300	5449175	20.00	0.40	0.00	6.00	2.00	71.60	250
92KFA0425	sand	1	16	597720	5450320	52.00	3.20	0.40	18.00	3.60	22.80	250
92KFA0426	till	1	16	597150	5449950	16.80	0.00	1.20	7.60	6.00	68.40	250
92KFA0427	till	1	16	571575	5443640	8.00	0.00	3.20	6.80	6.80	75.20	250
92KFA0428	till	1	16	571330	5444215	60.22	0.00	4.97	12.71	7.73	14.36	181
92KFA0429	till	1	16	570650	5444250	17.20	1.20	2.00	19.60	14.80	45.20	250
92KFA0430	till	1	16	570150	5444100	29.20	1.60	2.00	25.20	6.80	35.20	250
92KFA0431	till	1	16	569745	5444050	7.05	27.56	0.00	0.00	0.64	64.74	156
92KFA0432	till	1	16	569360	5442850	20.57	0.00	1.44	37.32	3.35	37.32	209
92KFA0433	till	1	16	568400	5443535	3.20	0.00	0.00	9.20	2.40	85.20	250
92KFA0434	till	1	16	568100	5443850	24.80	3.60	4.80	21.60	8.80	36.40	250
92KFA0435	till	1	16	570960	5446715	28.46	0.00	1.63	29.27	0.00	40.65	123
92KFA0438	till	1	16	583400	5407230	1.01	0.00	0.00	2.02	31.31	65.66	99
92KFA0439	till	1	16	583300	5407080	0.00	0.00	0.00	0.00	0.00	100.00	250
92KFA0440	till	1	16	582900	5406350	0.40	0.00	2.80	1.20	4.40	91.20	250
92KFA0441	till	1	16	583220	5406330	4.80	0.00	2.80	2.00	2.40	88.00	250
92KFA0442	till	1	16	582070	5406320	1.60	0.00	2.40	0.40	1.60	94.00	250
92KFA0443	till	1	16	582760	5406120	5.60	0.00	6.80	0.80	6.80	80.00	250
92KFA0444	till	1	16	581840	5405960	22.80	0.00	6.40	4.00	3.20	63.60	250
92KFA0445	till	1	16	581050	5406250	0.00	0.00	1.60	0.40	72.40	25.60	250
92KFA0446	till	1	16	579650	5406520	18.80	0.00	2.00	17.20	62.00	0.00	250
92KFA0447	till	1	16	580350	5406470	2.00	0.00	4.80	3.60	2.40	87.20	250
92KFA0448	till	1	16	580800	5405320	0.00	0.00	5.20	1.60	18.40	74.80	250
92KFA0449	till	1	16	581220	5411900	1.60	0.00	7.20	1.60	6.40	83.20	250
92KFA0450	gravel	1	16	579480	5410350	33.60	0.00	4.40	8.00	2.80	51.20	250
92KFA0451	till	1	16	578900	5412000	0.00	0.00	18.00	1.20	1.20	79.60	250
92KFA0452	till	1	16	579175	5411330	6.76	0.68	0.00	4.05	4.73	83.78	148
92KFA0453	till	1	16	579000	5411000	6.00	0.00	2.80	6.80	2.80	81.60	250
92KFA0454	till	1	16	579180	5410830	8.40	0.00	0.00	7.60	4.00	80.00	250
92KFA0455	till	1	16	581800	5409820	0.80	0.00	0.40	1.60	0.80	96.40	250
92KFA0456	till	1	16	582100	5410270	7.60	0.80	0.00	5.20	20.80	65.60	250
92KFA0457	till	1	16	581800	5408950	1.60	0.00	10.00	2.80	2.40	83.20	250
92KFA0458	till	1	16	580250	5409000	0.80	0.00	0.80	0.80	6.80	90.80	250
92KFA0459	till	1	16	580050	5407800	14.00	0.00	9.20	9.60	10.00	57.20	250
92KFA0460	till	1	16	604775	5452325	40.00	1.20	5.20	20.80	6.40	26.40	250
92KFA0461	till	1	16	604950	5452500	64.40	0.00	0.80	16.40	4.80	13.60	250
92KFA0463	till	1	16	648770	5450320	35.60	0.80	2.00	10.40	3.20	48.00	250

Manitouwadge 1992 Pebble Counts - 5.6-16 mm fraction

Sample No.	Sed. Type	Plot	UTM Zone	Easting m	Northing m	Pz. Carb. No. %	Pz. Sdst. No. %	Prec. Mvcc No. %	Prot. Mtsdm No. %	Other Prec. Mtsdm No. %	Prec. Granit. No. %	Total Count
92KFA0464	till	1	16	648570	5452280	61.68	0.60	0.00	11.98	2.99	22.75	167
92KFA0465	till	1	16	646600	5452730	52.80	0.40	0.80	18.80	3.60	23.60	250
92KFA0466	till	1	16	645700	5453580	58.00	0.00	2.00	11.20	5.60	23.20	250
92KFA0467	till	1	16	645400	5454030	60.40	1.20	2.80	8.00	6.00	21.60	250
92KFA0468	till	1	16	644700	5455000	53.20	0.00	0.00	12.00	3.60	31.20	250
92KFA0469	till	1	16	643200	5456800	60.80	0.40	0.00	14.00	3.20	21.60	250
92KFA0470	till	1	16	644450	5458750	20.40	2.00	2.80	25.20	12.40	37.20	250
92KFA0471	till	1	16	644690	5459050	66.00	0.40	1.20	9.60	3.20	19.60	250
92KFA0472	till	1	16	645050	5459750	60.40	0.00	1.20	13.20	6.80	18.40	250
92KFA0473	till	1	16	643450	5458900	45.18	0.00	1.81	9.64	4.82	38.55	166
92KFA0474	till	1	16	643300	5458300	44.78	2.24	4.48	14.18	11.94	22.39	134
92KFA0475	till	1	16	641370	5457810	64.20	0.62	0.00	12.96	9.26	12.96	162
92KFA0476	till	1	16	640250	5458170	64.80	1.20	0.40	10.80	11.20	11.60	250
92KFA0477	till	1	16	639350	5458600	59.60	2.00	0.80	10.80	4.40	22.40	250
92KFA0478	till	1	16	637550	5458240	76.80	1.60	1.60	11.20	4.40	4.40	250
92KFA0479	till	1	16	638025	5459150	66.00	5.20	1.60	12.80	5.60	8.80	250
92KFA0480	till	1	16	638875	5461560	50.80	0.40	2.40	8.40	7.20	30.80	250
92KFA0481	till	1	16	638300	5462800	60.00	3.85	1.54	16.92	6.15	11.54	130
92KFA0482	till	1	16	636730	5457125	67.58	0.55	1.10	9.34	8.79	12.64	182
92KFA0483	till	1	16	635600	5456775	38.00	0.40	1.20	4.80	9.60	46.00	250
92KFA0484	till	1	16	635050	5456200	69.51	0.00	0.00	10.37	8.54	11.59	164
92KFA0485	till	1	16	634860	5455950	52.80	0.00	1.20	8.80	4.80	32.40	250
92KFA0486	till	1	16	634470	5455250	52.40	0.00	0.00	12.40	9.20	26.00	250
92KFA0487	till	1	16	633290	5454650	58.00	1.50	1.00	20.50	6.50	12.50	200
92KFA0488	till	1	16	630925	5455030	53.60	3.60	1.20	8.00	5.20	28.40	250
92KFA0489	till	1	16	630100	5456350	44.40	2.40	6.40	8.80	8.40	29.60	250
92KFA0490	till	1	16	630500	5457000	53.60	1.60	3.60	5.20	10.80	25.20	250
92KFA0491	till	1	16	631380	5460200	69.35	2.42	2.42	10.48	4.03	11.29	124
92KFA0492	till	1	16	631150	5459500	78.00	0.80	3.20	8.00	3.60	6.40	250
92KFA0493	itill	1	16	630600	5458530	55.00	0.00	0.00	19.29	4.29	21.43	140
92KFA0494	till	1	16	629280	5455350	45.60	0.80	4.80	6.00	6.00	36.80	250
92KFA0495	till	1	16	627175	5455690	56.80	0.00	4.00	10.80	7.20	21.20	250
92KFA0496	till	1	16	624770	5455450	35.83	0.83	1.25	7.08	16.67	38.33	240
92KFA0497	till	1	16	625880	5455575	57.50	0.83	5.00	9.17	5.83	21.67	240
92KFA0498	till	1	16	634550	5454100	47.20	0.40	0.40	11.60	1.60	38.80	250
92KFA0499	till	1	16	633770	5453050	63.20	0.00	0.80	10.40	2.00	23.60	250
92KFA0500	till	1	16	632850	5452300	76.80	0.00	0.80	10.40	4.40	7.60	250

Manitouwadge 1992 Pebble Counts - 5.6-16 mm fraction

Sample No.	Sed. Type	Plot	UTM Zone	Easting m	Northing m	Pz. Carb. No. %	Pz. Sdst. No. %	Prec. Mvcc No. %	Prot. Mtsdm No. %	Other Prec. Mtsdm No. %	Prec. Granit. No. %	Total Count
92KFA0501	till	1	16	632570	5452100	51.20	0.00	0.40	3.60	2.80	42.00	250
92KFA0502	till	1	16	631500	5451800	2.40	0.40	0.00	0.80	0.80	95.60	250
92KFA0503	till	1	16	630100	5451300	53.60	0.80	0.40	12.80	5.20	27.20	250
92KFA0504	till	1	16	629000	5450000	73.94	0.00	0.00	12.73	4.85	8.48	165
92KFA0505	till	1	16	627650	5449210	66.85	0.00	0.56	8.43	3.37	20.79	178
92KFA0506	till	1	16	647580	5449500	57.20	0.00	1.20	12.00	4.00	25.60	250
92KFA0507	till	1	16	647450	5449450	15.60	0.00	0.00	4.00	2.00	78.40	250
92KFA0508	till	1	16	646350	5447650	25.60	0.00	2.40	7.20	5.20	59.60	250
92KFA0509	till	1	16	646630	5445800	69.20	0.00	10.40	9.60	3.20	7.60	250
92KFA0510	till	1	16	645850	5444690	31.20	0.80	2.00	6.40	8.80	50.80	250
92KFA0511	till	1	16	646100	5444050	19.60	0.40	2.80	3.60	2.80	70.80	250
92KFA0512	till	1	16	645370	5442850	67.73	0.45	5.91	10.91	10.00	5.00	220
92KFA0513	till	1	16	646060	5441630	44.80	0.80	6.40	5.60	8.00	34.40	250
92KFA0514	till	1	16	645480	5440830	40.00	0.40	1.60	12.00	6.80	39.20	250
92KFA0515	till	1	16	642760	5446520	14.81	0.00	1.65	7.00	4.12	72.43	243
92KFA0523	till	1	16	580650	5403800	0.00	0.00	7.20	0.00	13.60	79.20	250
92KFA0524	till	1	16	580640	5403175	0.00	0.00	0.00	0.00	97.60	2.40	250
92KFA0525	till	1	16	580530	5403000	1.60	0.00	34.00	0.00	44.00	20.40	250
92KFA0526	till	1	16	579700	5401900	0.40	0.00	2.40	1.60	1.60	94.00	250
92KFA0527	till	1	16	579550	5401000	0.40	0.00	0.00	0.00	0.00	99.60	250
92KFA0528	till	1	16	579460	5400600	0.00	0.00	2.40	0.00	0.40	97.20	250
92KFA0529	till	1	16	584425	5400200	0.82	0.82	2.46	12.30	0.00	83.61	122
92KFA0531	till	1	16	585450	5400675	46.04	0.00	0.00	7.19	12.23	34.53	139
92KFA0532	till	1	16	585320	5400825	4.11	0.68	0.00	0.68	1.37	93.15	146
92KFA0533	till	1	16	585350	5400900	0.00	0.00	0.00	4.03	4.03	91.94	124
92KFA0534	till	1	16	585450	5401050	0.40	0.00	0.80	1.20	0.80	96.80	250
92KFA0535	till	1	16	593250	5407270	13.33	0.00	30.00	0.00	20.00	36.67	30
92KFA0536	till	1	16	593350	5408250	0.00	0.00	67.20	1.60	4.80	26.40	250
92KFA0537	gravel/sand	1	16	584475	5440900	50.00	0.00	9.20	6.00	8.80	26.00	250
92KFA0538	gravel/sand	1	16	580270	5441530	46.40	0.00	3.20	12.80	12.00	25.60	250
92KFA0539	gravel/sand	1	16	574940	5437770	55.60	0.40	4.00	8.40	14.40	17.20	250
92KFA0540	till	1	16	585100	5442910	67.60	0.00	6.80	6.80	8.80	10.00	250
92KFA0541	till	1	16	585500	5444250	24.24	1.82	10.91	14.55	22.42	26.06	165
92KFA0542	till	1	16	585550	5445175	0.00	60.98	2.44	7.32	9.76	19.51	123
92KFA0543	till	1	16	571650	5449450	35.83	0.00	0.83	7.50	5.00	50.83	240
92KFA0544	till	1	16	572490	5449450	18.40	0.40	1.20	7.20	4.00	68.80	250
92KFA0546	till	1	16	593500	5408690	1.20	0.40	36.80	0.80	6.40	54.40	250

Manitouwadge 1992 Pebble Counts - 5.6-16 mm fraction

Sample No.	Sed. Type	Plot	UTM Zone	Easting m	Northing m	Pz. Carb. No. %	Pz. Sdst. No. %	Prec. Mvcc No. %	Prot. Mtsdm No. %	Other Prec. Mtsdm No. %	Prec. Granit. No. %	Total Count
92KFA0547	till	1	16	593300	5408770	1.60	0.00	10.00	0.80	4.80	82.80	250
92KFA0548	till	1	16	593200	5410480	0.00	36.05	7.48	11.56	13.61	31.29	147
92KFA0549	till	1	16	593300	5411540	8.40	0.00	29.60	12.80	5.60	43.60	250
92KFA0550	till	1	16	592220	5411100	32.00	0.00	0.00	24.00	8.00	36.00	25
92KFA0551	till	1	16	592470	5410000	12.80	2.00	15.60	0.80	6.00	62.80	250
92KFA0552	till	1	16	592680	5409530	3.96	0.44	33.04	3.08	9.25	50.22	227
92KFA0553	gravel	1	16	593025	5408600	8.00	0.00	36.00	3.20	6.00	46.80	250
92KFA0559	till	1	16	589530	5413280	2.70	0.00	5.41	0.00	0.00	91.89	37
92KFA0560	till	1	16	589650	5413100	6.80	0.40	2.40	2.80	12.80	74.80	250
92KFA0561	till	1	16	589420	5412600	13.95	0.00	2.33	6.98	4.65	72.09	43
92KFA0562	till	1	16	589950	5412100	1.20	0.00	0.80	1.60	2.00	94.40	250
92KFA0563	till	1	16	589150	5412300	5.20	0.00	3.60	0.00	4.80	86.40	250
92KFA0564	till	1	16	592125	5454170	29.60	0.80	3.20	10.80	7.20	48.40	250
92KFA0565	till	1	16	591490	5452850	52.68	0.00	4.39	7.80	3.41	31.71	205
92KFA0566	till	1	16	591000	5451750	14.00	2.40	2.80	28.40	6.80	45.60	250
92KFA0568	gravel/sand	1	16	574675	5454275	52.00	0.00	2.80	10.80	7.20	27.20	250
92KFA0569	gravel/sand	1	16	576750	5456670	45.20	0.40	2.00	9.60	11.20	31.60	250
92KFA0570	till	1	16	577100	5457075	19.89	0.00	4.55	7.95	13.07	54.55	176
92KFA0571	till	1	16	569650	5471425	24.00	0.00	0.40	1.60	12.80	61.20	250
92KFA0572	till	1	16	569800	5472590	42.80	0.00	0.40	12.00	15.60	29.20	250
92KFA0573	till	1	16	569800	5473140	19.60	1.20	4.00	18.00	10.80	46.40	250
92KFA0574	till	1	16	569700	5474480	3.20	0.00	2.00	5.60	2.40	86.80	250
92KFA0575	till	1	16	571850	5480150	53.20	0.80	2.00	18.80	6.40	18.80	250
92KFA0576	till	1	16	571960	5478580	5.60	0.00	0.00	4.40	73.60	16.40	250
92KFA0577	till	1	16	570850	5476100	48.40	0.40	4.00	14.80	8.40	24.00	250
92KFA0578	till	1	16	612550	5409930	1.69	0.00	93.22	0.00	0.00	5.08	59
92KFA0579	till	1	16	613600	5410400	4.40	0.00	0.40	0.80	3.60	90.80	250
92KFA0580	till	1	16	618450	5408500	8.00	0.00	2.00	8.00	2.00	80.00	250
92KFA0581	till	1	16	620750	5409475	2.00	0.40	2.80	3.20	2.80	88.80	250
92KFA0582	gravel/sand	1	16	621800	5410410	41.20	0.40	0.80	4.80	10.80	42.00	250
92KFA0583	till	1	16	623690	5412720	13.60	0.40	1.60	9.20	6.80	68.40	250
92KFA0584	till	1	16	627710	5420890	4.00	0.00	0.00	2.40	1.60	92.00	250
92KFA0585	till	1	16	625630	5421590	12.40	0.80	4.80	9.20	6.80	66.00	250
92KFA0587	till	1	16	619270	5420320	23.20	2.40	3.20	17.60	12.40	41.20	250
92KFA0588	gravel/sand	1	16	624940	5422210	46.00	0.00	2.40	13.20	5.20	33.20	250
92KFA0589	till	1	16	630550	5421425	5.48	2.74	0.00	8.22	12.33	71.23	73
92KFA0590	till	1	16	631090	5422390	15.20	0.00	0.40	3.60	4.40	76.40	250

Manitouwadge 1992 Pebble Counts - 5.6-16 mm fraction

Sample No.	Sed. Type	Plot Zone	UTM m	Easting m	Northing m	Pz. Carb. No. %	Pz. Sdst. No. %	Prec. Mvcc No. %	Prot. Mtsdm No. %	Other Prec. Mtsdm No. %	Prec. Granit. No. %	Total Count
92KFA0591	gravel/sand	1 16	632075	5423050	32.40	0.00	6.40	4.00	8.40	48.80	250	
92KFA0592	till	1 16	633475	5423950	12.80	0.00	2.00	6.00	4.40	74.80	250	
92KFA0593	till	1 16	626325	5414075	6.45	0.00	2.69	6.99	13.98	69.89	186	
92KFA0594	till	1 16	628050	5414475	31.20	0.00	1.60	9.20	18.80	39.20	250	
92KFA0595	till	1 16	630845	5414200	44.00	0.00	3.60	9.20	6.40	36.80	250	
92KFA0596	till	1 16	629600	5414410	8.66	0.00	0.00	9.09	7.79	74.46	231	
92KFA0597	till	1 16	631400	5414150	1.20	0.40	1.20	0.40	0.40	96.40	250	
92KFA0598	till	1 16	632950	5416025	40.80	0.80	7.20	7.20	4.40	39.60	250	
92KFA0599	till	1 16	634380	5417180	24.00	0.00	4.40	9.60	8.00	54.00	250	
92KFA0600	till	1 16	631170	5413170	47.60	0.00	5.60	6.80	4.80	35.20	250	
92KFA0601	till	1 16	552000	5455000	8.28	0.69	12.41	9.66	19.31	49.66	145	
92KFA0602	till	1 16	558100	5454850	8.40	3.20	10.40	14.80	15.20	48.00	250	
92KFA0603	till	1 16	538650	5454450	22.03	0.00	9.32	10.17	14.41	44.07	118	
92KFA0604	till	1 16	540100	5454900	16.00	0.00	6.00	2.80	16.40	58.80	250	
92KFA0605	till	1 16	551300	5454300	2.56	10.26	5.13	0.00	12.82	69.23	39	
92KFA0606	till	1 16	552400	5454150	2.80	0.93	7.48	4.67	4.67	79.44	214	
92KFA0607	till	1 16	554000	5454000	2.65	0.00	5.31	2.65	9.29	80.09	226	
92KFA0608	till	1 16	555550	5454100	10.30	0.61	3.64	7.27	34.55	43.64	165	
92KFA0609	till	1 16	558450	5454150	14.81	0.93	6.48	7.87	23.61	46.30	216	
92KFA0610	till	1 16	539750	5453750	8.40	1.20	11.20	7.20	19.20	52.80	250	
92KFA0611	till	1 16	549900	5453000	5.84	0.00	1.95	14.94	11.69	65.58	154	
92KFA0612	till	1 16	553050	5453000	0.00	0.00	5.71	5.71	0.00	88.57	35	
92KFA0613	till	1 16	554950	5453050	14.86	2.03	4.05	0.00	25.00	54.05	148	
92KFA0614	till	1 16	557450	5453350	5.97	0.75	11.19	15.67	16.42	50.00	134	
92KFA0615	till	1 16	557550	5453900	4.82	0.00	12.05	24.10	14.46	44.58	83	
92KFA0616	till	1 16	536850	5453050	11.66	1.84	4.91	8.59	5.52	67.48	163	
92KFA0617	till	1 16	538100	5452850	2.88	1.92	18.27	5.77	4.81	66.35	104	
92KFA0618	till	1 16	538850	5452150	10.40	0.80	2.00	15.60	10.80	60.40	250	
92KFA0619	till	1 16	550750	5452450	9.23	0.00	9.23	9.23	18.46	53.85	65	
92KFA0620	till	1 16	552000	5452950	8.52	0.00	14.77	2.27	6.82	67.61	176	
92KFA0621	till	1 16	554950	5452000	9.82	0.00	0.89	0.89	20.54	67.86	112	
92KFA0624	till	1 16	539950	5450300	18.84	2.17	8.70	15.94	21.01	33.33	138	
92KFA0625	till	1 16	551250	5451500	12.50	0.00	12.50	0.00	12.50	62.50	8	
92KFA0626	till	1 16	552500	5451800	6.90	0.00	3.45	6.90	3.45	79.31	29	
92KFA0627	till	1 16	553000	5451000	10.00	0.00	10.00	10.00	10.00	60.00	20	
92KFA0628	till	1 16	553750	5451850	10.00	0.00	10.00	10.00	10.00	60.00	20	
92KFA0630	till	1 16	551700	5450450	5.36	0.00	6.55	8.33	9.52	70.24	168	

Manitouwadge 1992 Pebble Counts - 5.6-16 mm fraction

Sample No.	Sed. Type	Plot	UTM Zone	Easting m	Northing m	Pz. Carb. No. %	Pz. Sdst. No. %	Prec. Mvcc No. %	Prot. Mtsdm No. %	Other Prec. Mtsdm No. %	Prec. Granit. No. %	Total Count
92KFA0631	till	1	16	553900	5450050	52.90	0.00	0.65	0.00	9.68	36.77	155
92KFA0632	till	1	16	554550	5450500	35.65	0.00	6.09	0.00	13.91	44.35	115
92KFA0633	till	1	16	557850	5450400	0.00	0.00	12.50	6.25	25.00	56.25	16
92KFA0634	till	1	16	539100	5449650	25.49	0.00	7.84	24.51	9.80	32.35	102
92KFA0635	till	1	16	552550	5449950	5.00	0.00	1.67	11.67	5.00	76.67	120
92KFA0636	till	1	16	554700	5449600	35.47	0.00	3.94	0.99	14.78	44.83	203
92KFA0637	till	1	16	556450	5449900	8.96	0.00	8.96	13.43	4.48	64.18	67
92KFA0640	till	1	16	537100	5448850	8.85	3.13	3.13	38.54	13.02	33.33	192
92KFA0641	till	1	16	538000	5449000	23.20	0.00	2.40	20.80	9.60	44.00	250
92KFA0642	till	1	16	539800	5446400	2.56	0.00	1.03	5.64	3.59	87.18	195
92KFA0644	till	1	16	557500	5448500	0.68	0.00	0.68	1.35	2.03	95.27	148
92KFA0645	till	1	16	558250	5448900	0.00	0.00	0.00	0.00	9.09	90.91	22
92KFA0646	till	1	16	536750	5447050	0.00	0.00	0.00	1.93	1.45	96.62	207
92KFA0647	till	1	16	538000	5447000	23.66	5.80	0.45	29.91	10.71	29.46	224
92KFA0648	till	1	16	539450	5447200	14.29	3.30	2.20	9.89	10.99	59.34	91
92KFA0649	till	1	16	553500	5447100	0.00	0.00	0.00	0.50	0.00	99.50	199
92KFA0650	till	1	16	554250	5447850	3.57	0.00	2.38	4.17	2.38	87.50	168
92KFA0652	till	1	16	558500	5447950	2.40	0.00	9.60	4.80	4.40	78.80	250
92KFA0653	till	1	16	538350	5446300	34.40	5.20	1.20	20.00	7.60	31.60	250
92KFA0654	till	1	16	540850	5446950	13.11	0.00	2.43	4.85	12.14	67.48	206
92KFA0655	till	1	16	542250	5446550	8.59	0.78	2.34	7.03	13.28	67.97	128
92KFA0656	till	1	16	552000	5446000	27.31	0.00	3.52	13.22	10.13	45.81	227
92KFA0658	till	1	16	537000	5445000	5.92	0.00	5.92	12.50	14.47	61.18	152
92KFA0659	till	1	16	537850	5445700	15.34	5.68	2.27	26.70	13.07	36.93	176
92KFA0660	till	1	16	539550	5445550	28.67	0.00	13.29	20.98	13.99	23.08	143
92KFA0661	till	1	16	540600	5445850	18.36	0.00	8.21	16.91	16.43	40.10	207
92KFA0662	till	1	16	541600	5445650	3.57	0.00	3.57	9.82	4.46	78.57	112
92KFA0663	till	1	16	553500	5446100	19.79	0.53	3.21	16.04	21.93	38.50	187
92KFA0664	till	1	16	537950	5444100	14.71	0.42	9.24	12.18	26.05	37.39	238
92KFA0665	till	1	16	540850	5443800	16.27	0.00	11.45	5.42	7.83	59.04	166
92KFA0667	till	1	16	538750	5443400	22.80	0.40	8.40	16.00	12.00	40.40	250
92KFA0668	till	1	16	539950	5443300	1.76	0.00	1.18	3.53	1.76	91.76	170
92KFA0671	till	1	16	536700	5442400	12.80	0.00	11.60	18.40	8.00	49.20	250
92KFA0672	till	1	16	537800	5442750	0.40	0.00	3.20	5.20	7.60	83.60	250
92KFA0673	till	1	16	539000	5442100	0.00	0.00	1.20	1.20	0.00	97.60	250
92KFA0674	till	1	16	548050	5442250	5.05	0.00	4.59	9.63	11.93	68.81	218
92KFA0675	till	1	16	538300	5441050	0.48	0.00	21.15	3.85	32.69	41.83	208

Manitouwadge 1992 Pebble Counts - 5.6-16 mm fraction

Sample No.	Sed. Type	Plot Zone	UTM m	Easting m	Northing m	Pz. Carb. No. %	Pz. Sdst. No. %	Prec. Mvcc No. %	Prot. Mtsdm No. %	Other Prec. Mtsdm No. %	Prec. Granit. No. %	Total Count
92KFA0676	till	1 16	540450	5441950	11.31	0.00	7.74	15.48	8.93	56.55	168	
92KFA0677	till	1 16	547150	5441550	0.00	0.00	5.37	4.03	87.25	3.36	149	
92KFA0678	sand/gravel	1 16	553600	5441750	0.00	0.00	0.00	0.40	0.00	99.60	250	
92KFA0679	till	1 16	551800	5440550	12.29	1.68	11.73	10.61	7.82	55.87	179	
92KFA0680	till	1 16	553000	5440750	0.00	3.23	0.00	0.00	0.00	96.77	62	
92KFA0681	till	1 16	537200	5439750	0.00	0.00	20.83	8.33	0.00	70.83	48	
92KFA0682	till	1 16	551450	5440000	2.22	0.00	4.44	4.44	15.56	73.33	45	
92KFA0683	till	1 16	536700	5438850	20.69	0.00	17.24	3.45	20.69	37.93	29	
92KFA0685	till	1 16	537200	5437250	10.45	0.00	5.97	5.97	11.94	65.67	67	
92KFA0686	till	1 16	538100	5437550	12.20	0.00	4.88	4.88	6.10	71.95	82	
92KFA0687	till	1 16	537200	5436000	0.00	0.00	25.00	0.00	37.50	37.50	8	
92KFA0688	till	1 16	537400	5436050	3.00	0.00	12.00	1.00	7.00	77.00	100	
92KFA0689	till	1 16	537400	5434950	13.86	0.00	4.95	10.89	11.88	58.42	101	
92KFA0690	till	1 16	557150	5432300	14.69	0.00	9.79	2.10	11.19	62.24	143	
92KFA0691	till	1 16	557800	5432950	5.46	0.00	9.24	5.04	4.62	75.63	238	
92KFA0693	till	1 16	556000	5431350	7.87	0.00	6.74	10.11	15.73	59.55	89	
92KFA0694	till	1 16	557100	5431250	14.02	0.00	9.35	9.35	11.21	56.07	107	
92KFA0695	till	1 16	557900	5431650	12.96	0.62	6.17	16.67	9.26	54.32	162	
92KFA0697	till	1 16	556050	5430250	9.68	0.00	12.90	41.94	16.13	19.35	31	
92KFA0698	till	1 16	556800	5430200	13.27	0.00	7.52	18.58	11.50	49.12	226	
92KFA0699	till	1 16	555100	54299500	14.29	0.00	12.99	9.09	7.79	55.84	77	
92KFA0700	till	1 16	555950	5432300	6.00	0.00	5.60	8.80	8.40	71.20	250	
92KFA0701	till	1 16	535650	5442600	14.87	0.00	18.46	9.23	7.69	49.74	195	
92KFA0702	till	1 16	536250	5440500	5.95	0.00	10.81	17.84	10.27	55.14	185	
92KFA0703	till	1 16	533300	5432700	2.70	0.54	11.89	4.32	7.57	72.97	185	
92KFA0704	till	1 16	534650	5430950	12.68	1.41	6.10	18.78	17.84	43.19	213	
92KFA0705	till	1 16	535750	5445150	6.29	0.00	9.79	5.59	11.19	67.13	143	
92KFA0712	till	1 16	535750	5438900	9.90	0.99	4.95	11.88	3.96	68.32	101	
92KFA0713	till	1 16	532250	5438050	18.40	0.40	3.20	21.20	12.40	44.40	250	
92KFA0714	till	1 16	533850	5437200	3.05	0.00	6.71	3.05	20.12	67.07	164	
92KFA0715	till	1 16	534550	5437650	9.20	0.00	18.00	20.80	10.00	42.00	250	
92KFA0716	till	1 16	533200	5436600	24.56	0.00	5.26	10.53	8.77	50.88	57	
92KFA0717	till	1 16	535550	5436950	2.78	0.00	38.89	0.00	11.11	47.22	72	
92KFA0718	till	1 16	534100	5435550	8.40	0.40	4.80	8.40	9.20	68.80	250	
92KFA0719	till	1 16	535900	5435600	1.60	0.00	15.60	3.20	19.20	60.40	250	
92KFA0720	till	1 16	536150	5434500	3.60	0.40	48.40	4.80	11.20	31.60	250	
92KFA0721	till	1 16	535400	5431750	5.45	0.00	4.24	9.09	13.33	67.88	165	

Manitouwadge 1992 Pebble Counts - 5.6-16 mm fraction

Sample No.	Sed. Type	Plot Zone	UTM m	Easting m	Northing m	Pz. Carb. No. %	Pz. Sdst. No. %	Prec. Mvcc No. %	Prot. Mtsdm No. %	Other Prec. Mtsdm No. %	Prec. Granit. No. %	Total Count
92KFA0722	till	1 16	539950	5449050	15.87	0.00	30.16	11.11	9.52	33.33	63	
92KFA0723	till	1 16	533550	5429800	0.00	0.00	14.35	0.00	0.00	85.65	209	
92KFA0751	gravel/sand	1 16	549500	5470950	48.80	0.00	2.80	17.20	12.40	18.80	250	
92KFA0752	till	1 16	538830	5469700	48.40	0.00	5.60	20.80	13.60	11.60	250	
92KFA0753	till	1 16	536650	5466680	17.65	0.00	0.00	0.00	58.82	23.53	34	
92KFA0754	till	1 16	536400	5466850	55.28	0.62	4.97	11.80	7.45	19.88	161	
92KFA0756	till	1 16	541710	5473570	20.80	0.00	5.20	4.40	4.40	65.20	250	
92KFA0758	till	1 16	541620	5475800	45.20	0.00	2.80	12.00	15.20	24.80	250	
92KFA0759	till	1 16	540790	5477400	62.00	0.00	3.60	17.60	7.60	9.20	250	
92KFA0760	gravel/sand	1 16	592150	5445000	50.00	0.00	0.00	10.00	3.20	36.80	250	
92KFA0761	gravel/sand	1 16	605750	5450350	60.00	0.40	2.80	8.80	8.00	20.00	250	
92KFA0763	till	1 16	591150	5415080	0.40	0.00	0.00	77.20	1.20	21.20	250	
92KFA0764	till	1 16	592667	5415950	10.00	0.00	18.80	2.80	7.60	60.80	250	
92KFA0765	till	1 16	592370	5416330	12.00	0.40	37.60	12.40	11.20	26.40	250	
92KFA0766	till	1 16	591800	5416200	12.00	0.00	30.00	5.60	8.80	43.60	250	
92KFA0767	till	1 16	631975	5428470	12.20	3.25	2.44	12.20	10.57	59.35	123	
92KFA0770	till	1 16	597300	5464750	22.40	0.00	0.80	4.00	1.60	71.20	250	
92KFA0771	till	1 16	598200	5464880	64.80	0.00	2.40	11.60	8.00	13.20	250	
92KFA0772	till	1 16	598650	5464820	64.35	0.43	3.04	10.87	10.00	11.30	230	
92KFA0774	till	1 16	599050	5464500	70.00	0.00	0.00	10.00	7.20	12.80	250	
92KFA0775	till	1 16	598000	5464840	69.20	0.00	2.40	10.40	5.20	12.80	250	
92KFA0776	till	1 16	598080	5466300	52.00	0.00	0.00	12.00	12.80	23.20	250	
92KFA0777	till	1 16	598250	5466530	76.00	0.00	0.40	10.00	5.20	8.40	250	
92KFA0778	till	1 16	598400	5466825	67.60	0.00	0.80	13.60	5.60	12.40	250	
92KFA0779	gravel/sand	1 16	606670	5456575	58.80	0.00	1.20	10.40	9.60	20.00	250	
92KFA0780	gravel/sand	1 16	606700	5481980	55.20	0.00	1.20	14.00	4.00	25.60	250	
92KFA0781	gravel/sand	1 16	605000	5476700	70.80	0.00	0.00	12.40	8.00	8.80	250	
92KFA0782	gravel/sand	1 16	586200	5476950	54.80	0.00	4.00	19.20	6.40	15.60	250	
92KFA0783	till	1 16	567950	5442730	12.80	1.60	0.80	58.00	8.40	18.40	250	
92KFA0784	till	1 16	570550	5444200	24.80	48.00	1.20	16.80	9.20	0.00	250	
92KFA0785	till	1 16	551290	5476280	66.67	0.00	2.56	15.38	11.97	3.42	117	
92KFA0786	till	1 16	550750	5478370	65.07	0.48	6.70	11.96	5.74	10.05	209	
92KFA0787	till	1 16	551500	5480125	65.49	0.00	0.00	12.68	14.08	7.75	142	
92KFA0788	till	1 16	551700	5481530	58.45	0.00	5.63	16.20	14.79	4.93	142	
92KFA0789	till	1 16	552450	5482440	55.45	0.00	7.27	16.82	10.00	10.45	220	
92KFA0791	till	1 16	560970	5482420	63.60	0.00	0.40	10.40	7.20	18.40	250	
92KFA0793	till	1 16	584150	5467900	61.84	0.00	10.53	9.21	13.16	5.26	76	

Manitouwadge 1992 Pebble Counts - 5.6-16 mm fraction

Sample No.	Sed. Type	Plot Zone	UTM	Easting m	Northing m	Pz. Carb. No. %	Pz. Sdst. No. %	Prec. Mvcc No. %	Prot. Mtsdm No. %	Other Prec. Mtsdm No. %	Prec. Granit. No. %	Total Count
92KFA0794	gravel/sand	1 16		581200	5467400	67.60	0.00	0.80	7.60	7.20	16.80	250
92KFA0795	till	1 16		587150	5468125	69.12	0.00	1.47	7.35	8.82	13.24	68
92KFA0796	till	1 16		587700	5467200	72.07	0.90	8.11	5.41	2.70	10.81	111
92KFA0797	till	1 16		587775	5467050	72.00	0.00	12.00	0.00	4.00	12.00	25
92KFA0800	till	1 16		562520	5443075	6.72	0.75	7.46	13.43	3.73	67.91	134
92KFA0801	till	1 16		561530	5442875	5.61	0.00	5.61	6.54	9.35	72.90	107
92KFA0802	gravel/sand	1 16		580775	5411450	48.00	0.00	2.80	6.80	5.60	36.80	250
92KFA0803	till	1 16		582980	5413490	1.20	0.40	2.40	4.00	2.00	90.00	250
92KFA0804	till	1 16		583150	5412190	48.40	0.00	19.20	9.60	4.40	18.40	250
92KFA0805	gravel	1 16		583420	5409660	25.20	0.00	49.20	5.60	8.80	11.20	250
92KFA0806	gravel/sand	1 16		591800	5427200	40.80	0.00	5.20	17.20	5.60	31.20	250
92MAN0107	till	1 16		588180	5444700	18.18	4.55	3.03	18.18	0.00	56.06	66
92MAN0108	till	1 16		588180	5444920	8.33	1.39	3.47	16.67	7.64	62.50	144
92MAN0109	till	1 16		588220	5444320	38.46	0.00	7.69	23.08	10.26	20.51	39
92MAN0110	till	1 16		588025	5444000	21.43	0.00	14.29	21.43	14.29	28.57	14
92MAN0111	till	1 16		588150	5444100	28.26	0.00	0.00	19.57	17.39	34.78	46
92MAN0112	till	1 16		588520	5444300	25.93	0.00	0.00	0.00	33.33	40.74	27
92MAN0113	till	1 16		588950	5444450	77.59	0.00	1.72	3.45	8.62	8.62	58
92MAN0115	till	1 16		588000	5444050	64.71	0.00	0.00	5.88	0.00	29.41	17
92MAN0116	till	1 16		587930	5443080	19.57	0.00	28.26	4.35	23.91	23.91	46
92MAN0117	till	1 16		587960	5442850	21.43	0.00	28.57	7.14	7.14	35.71	14
92MAN0118	till	1 16		588500	5442850	6.02	0.00	25.30	1.20	1.20	66.27	83
92MAN0121	till	1 16		590200	5442600	11.54	0.00	7.69	5.77	19.23	55.77	52
92MAN0122	till	1 16		591640	5442750	39.13	1.45	5.80	10.15	2.90	40.58	69
92MAN0123	till	1 16		592740	5442620	65.52	0.00	13.79	6.90	3.45	10.35	29
92MAN0124	till	1 16		591850	5444150	11.11	0.00	27.78	11.11	5.56	44.44	18
92MAN0125	till	1 16		586150	5442130	36.36	0.00	0.00	4.55	0.00	59.09	22
92MAN0126	till	1 16		587800	5444820	11.39	0.63	5.70	10.13	3.80	68.35	158
92MAN0127	till	1 16		587800	5444650	11.83	2.15	1.08	6.45	3.23	75.27	93
92MAN0128	till	1 16		587820	5444500	13.89	0.00	2.78	2.78	0.00	80.56	36
92MAN0129	till	1 16		586075	5442900	19.36	0.00	7.53	9.68	15.05	48.39	93
92MAN0133	till	1 16		586350	5442950	13.64	0.00	0.00	0.00	27.27	59.09	22
92MAN0135	till	1 16		584030	5442510	57.73	0.00	2.58	12.37	10.31	17.01	194
92MAN0140	till	1 16		584550	5442925	62.71	0.00	2.54	8.47	16.10	10.17	118
92MAN0141	till	1 16		584850	5442700	16.07	0.00	51.79	3.57	1.79	26.79	56
92MAN0144	till	1 16		585530	5442800	53.57	0.00	7.14	3.57	21.43	14.29	28
92MAN0147C	till	1 16		585130	5443200	15.34	1.84	1.84	15.34	43.56	22.09	163

Manitouwadge 1992 Pebble Counts - 5.6-16 mm fraction

Sample No.	Sed. Type	Plot	UTM Zone	Easting m	Northing m	Pz. Carb. No. %	Pz. Sdst. No. %	Prec. Mvcc No. %	Prot. Mtsdm No. %	Other Prec. Mtsdm No. %	Prec. Granit. No. %	Total Count
92MAN0149	till	1	16	585400	5443690	58.82	0.65	1.31	13.07	12.42	13.73	153
92MAN0151	till	1	16	585500	5444000	40.00	0.00	6.67	20.00	6.67	26.67	15
92MAN0152	till	1	16	585275	5444200	56.58	0.00	7.89	7.89	14.47	13.16	76
92MAN0154	till	1	16	584600	5445360	27.47	0.00	5.49	13.19	23.08	30.77	91
92MAN0155	till	1	16	584460	5445150	43.59	0.00	12.82	5.13	20.51	17.95	39
92MAN0157	till	1	16	584400	5443300	42.11	0.00	10.53	10.53	15.79	21.05	19
92MAN0158	till	1	16	584580	5443560	42.11	0.00	10.53	5.26	21.05	21.05	19
92MAN0159	till	1	16	584700	5443740	33.33	1.75	5.26	21.05	8.77	29.83	57
92MAN0161	till	1	16	584560	5445000	18.57	0.00	2.86	2.86	12.86	62.86	70
92MAN0162	till	1	16	584900	5445000	6.98	0.00	2.33	0.00	67.44	23.26	43
92MAN0164	till	1	16	585400	5444850	66.28	0.00	0.00	8.14	10.47	15.12	86
92MAN0165	till	1	16	585600	5445000	61.54	0.00	0.00	7.69	15.39	15.39	13
92MAN0169	till	1	16	581400	5447250	27.03	0.00	5.41	8.11	18.92	40.54	37
92MAN0171	till	1	16	585650	5444500	21.05	0.00	10.53	10.53	36.84	21.05	19
92MAN0172	till	1	16	585720	5444690	58.82	0.00	0.00	11.77	20.59	8.82	34
92MAN0174	till	1	16	585825	5445160	20.00	0.00	0.00	13.33	40.00	26.67	15
92MAN0175	till	1	16	586040	5444900	60.71	0.00	7.14	3.57	25.00	3.57	28
92MAN0178	till	1	16	580800	5441700	42.11	0.00	5.26	10.53	5.26	36.84	19
92MAN0179	till	1	16	580850	5441350	28.57	0.00	19.05	4.76	19.05	28.57	21
92MAN0180	till	1	16	580800	5440850	60.19	0.00	7.41	6.48	8.33	17.59	108
92MAN0182	till	1	16	580750	5439000	55.44	0.00	3.26	4.35	13.04	23.91	92
92MAN0183	till	1	16	581270	5440450	13.73	0.00	3.92	11.76	37.25	33.33	51
92MAN0185	till	1	16	581270	5440450	43.14	0.00	5.88	11.76	17.64	21.57	51
92MAN0190	till	1	16	584000	5442850	28.13	0.00	17.19	9.38	25.00	20.31	64
92MAN0193	till	1	16	583675	5442480	10.44	0.87	2.61	11.30	26.09	48.70	115
92MAN0194	till	1	16	584320	5440880	22.58	0.00	6.45	6.45	19.36	45.16	31
92MAN0195	till	1	16	583050	5440700	16.39	3.28	3.28	18.03	18.03	40.98	61
92MAN0196	till	1	16	583320	5440230	3.33	0.00	6.67	6.67	20.00	63.33	30
92MAN0198	till	1	16	585620	5441570	0.00	0.00	0.00	0.00	0.00	100.00	214
92MAN0199	till	1	16	585900	5441200	13.04	0.00	1.09	6.52	25.00	54.35	92
92MAN0200	till	1	16	585520	5440850	21.13	0.00	5.63	0.00	22.54	50.70	71
92MAN0201	till	1	16	586370	5441400	12.50	0.00	0.00	0.00	14.58	72.92	48
92MAN0203	till	1	16	587800	5443850	18.75	0.00	12.50	0.00	31.25	37.50	16
92MAN0204	till	1	16	587725	5443360	41.38	0.00	3.45	13.79	27.59	13.79	29
92MAN0206	till	1	16	587200	5442930	9.78	0.00	43.48	7.61	9.78	29.35	92
92MAN0212	till	1	16	579750	5428740	31.11	0.00	4.44	11.11	26.67	26.67	45
92MAN0213	till	1	16	580750	5430600	16.25	0.00	7.50	5.00	17.50	53.75	80

Manitouwadge 1992 Pebble Counts - 5.6-16 mm fraction

Sample No.	Sed. Type	Plot	UTM Zone	Easting m	Northing m	Pz. Carb. No. %	Pz. Sdst. No. %	Prec. Mvcc No. %	Prot. Mtsdm No. %	Other Prec. Mtsdm No. %	Prec. Granit. No. %	Total Count
92MAN0214	till	1	16	580550	5431420	67.42	0.00	0.00	7.87	12.36	12.36	89
92MAN0215	till	1	16	579000	5430200	32.65	0.00	9.18	8.16	14.29	35.71	98
92MAN0215B	till	0	16	579000	5430200	36.80	0.40	0.00	0.00	2.80	60.00	250
92MAN0216	till	1	16	580050	5434480	26.83	0.00	12.20	12.20	24.39	24.39	41
92MAN0217	till	1	16	581700	5435050	70.83	0.00	1.04	6.25	8.33	13.54	96
92MAN0218	till	1	16	583370	5436320	64.62	0.00	3.08	7.69	15.39	9.23	65
92MAN0219	till	1	16	583900	5438320	68.00	0.00	0.00	10.00	12.00	10.00	50
92MAN0224	till	1	16	601130	5453230	11.63	0.00	1.16	5.81	23.26	58.14	86
92MAN0226	till	1	16	594000	5454650	23.53	0.00	0.00	11.77	23.53	41.18	17
92MAN0227	till	1	16	588070	5441860	16.95	0.00	5.08	5.08	28.81	44.07	59
92MAN0228	till	1	16	588070	5441840	57.69	0.00	1.92	5.77	19.23	15.39	52
92MAN0230	till	1	16	587225	5440850	24.32	0.00	10.81	5.41	37.84	21.62	37
92MAN0232	till	1	16	585870	5440240	10.64	0.00	2.13	8.51	12.77	65.96	47
92MAN0245	till	1	16	585150	5438900	13.33	0.00	0.00	6.67	6.67	73.33	15
92MAN0246	till	1	16	584825	5437960	62.65	0.00	4.82	3.61	9.64	19.28	83
92MAN0247	till	1	16	584900	5436950	69.81	0.00	3.77	3.77	11.32	11.32	53
92MAN0249	till	1	16	584400	5433650	0.00	0.00	3.70	0.00	0.00	96.30	27
92MAN0250	till	1	16	584470	5439050	67.86	0.00	3.57	5.36	14.29	8.93	56
92MAN0251	till	1	16	581470	5432970	65.39	0.00	3.85	3.85	7.69	19.23	26
92MAN0253	till	1	16	582400	5434450	40.70	0.00	5.81	6.98	10.47	36.05	86
92MAN0254	till	1	16	582300	5434600	45.20	0.00	2.80	10.80	5.20	36.00	250
92MAN0256	till	1	16	583960	5432900	13.33	0.00	0.00	6.67	13.33	66.67	15
92MAN0258	till	1	16	584175	5430600	23.03	0.00	2.63	5.26	21.71	47.37	152

APPENDIX A (vi)

***Sample Lists
Manitowadge-Hornpayne Region
Manitowadge District
Area Near Mines**

* Data for 91KFA samples is listed in Geological Survey of Canada Open File 2616.
Data for samples on list are used as the basis of maps in Appendices C and D.

List of samples from the Manitouwadge-Hornpayne Region

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91KFA0001	91KFA0047	91KFA0092	91KFA0138	91KFA0188GF	91KFA0234
91KFA0002	91KFA0048	91KFA0093	91KFA0139	91KFA0189	91KFA0235
91KFA0003	91KFA0049	91KFA0094	91KFA0140	91KFA0190	91KFA0236GF
91KFA0004	91KFA0050	91KFA0095	91KFA0141	91KFA0191	91KFA0237
91KFA0005	91KFA0051	91KFA0096	91KFA0142	91KFA0192	91KFA0238GF
91KFA0006	91KFA0052	91KFA0097	91KFA0143	91KFA0193GF	91KFA0239
91KFA0007	91KFA0053	91KFA0098	91KFA0144	91KFA0194	91KFA0240
91KFA0008	91KFA0054	91KFA0099	91KFA0145	91KFA0195GF	91KFA0241
91KFA0009	91KFA0055	91KFA0100	91KFA0146	91KFA0196	91KFA0242
91KFA0010	91KFA0056	91KFA0101	91KFA0147	91KFA0197	91KFA0243
91KFA0011	91KFA0057	91KFA0102	91KFA0148	91KFA0198	91KFA0244
91KFA0012	91KFA0058	91KFA0103	91KFA0149	91KFA0199	91KFA0245
91KFA0013	91KFA0059	91KFA0104	91KFA0150	91KFA0200	91KFA0246
91KFA0014	91KFA0060	91KFA0105	91KFA0151	91KFA0201	91KFA0247
91KFA0015	91KFA0061	91KFA0106	91KFA0152	91KFA0202GF	91KFA0248
91KFA0016	91KFA0062	91KFA0107	91KFA0153	91KFA0203	91KFA0249
91KFA0017	91KFA0063	91KFA0108	91KFA0154	91KFA0204	91KFA0250
91KFA0018	91KFA0064	91KFA0109	91KFA0155	91KFA0205	91KFA0251
91KFA0019	91KFA0065	91KFA0110	91KFA0156	91KFA0206	91KFA0252
91KFA0020	91KFA0066	91KFA0111	91KFA0157	91KFA0207	91KFA0253
91KFA0021GF	91KFA0067	91KFA0112	91KFA0158	91KFA0208	91KFA0254
91KFA0022GF	91KFA0068	91KFA0113	91KFA0159	91KFA0209	91KFA0255
91KFA0023	91KFA0069	91KFA0114	91KFA0160	91KFA0210	91KFA0256
91KFA0024	91KFA0070	91KFA0115	91KFA0161	91KFA0211	91KFA0257
91KFA0025	91KFA0071	91KFA0116	91KFA0166	91KFA0212	91KFA0258
91KFA0026	91KFA0072	91KFA0117	91KFA0167	91KFA0213	91KFA0259
91KFA0027	91KFA0073	91KFA0118	91KFA0168	91KFA0214	91KFA0260
91KFA0028	91KFA0074	91KFA0119	91KFA0169	91KFA0215	91KFA0261
91KFA0029	91KFA0075	91KFA0120	91KFA0170	91KFA0216	91KFA0262
91KFA0030	91KFA0076	91KFA0121	91KFA0171	91KFA0217	91KFA0263
91KFA0031	91KFA0077	91KFA0122	91KFA0172	91KFA0218	91KFA0264
91KFA0032	91KFA0078	91KFA0123	91KFA0173	91KFA0219	91KFA0265
91KFA0033	91KFA0079	91KFA0124	91KFA0174	91KFA0220	91KFA0266
91KFA0034	91KFA0080GF	91KFA0125	91KFA0175	91KFA0221	91KFA0267
91KFA0035	91KFA0081	91KFA0126	91KFA0176	91KFA0222	91KFA0268
91KFA0036	91KFA0082	91KFA0127	91KFA0177	91KFA0223	91KFA0269
91KFA0037	91KFA0083	91KFA0128	91KFA0178	91KFA0224GF	91KFA0270
91KFA0038	91KFA0083A	91KFA0129	91KFA0179	91KFA0225	91KFA0271
91KFA0039	91KFA0084GFA	91KFA0130	91KFA0180	91KFA0226	91KFA0272
91KFA0040	91KFA0085	91KFA0131	91KFA0181	91KFA0227	91KFA0273
91KFA0041	91KFA0086	91KFA0132	91KFA0182	91KFA0228	91KFA0274
91KFA0042	91KFA0087	91KFA0133	91KFA0183	91KFA0229	91KFA0275
91KFA0043	91KFA0088	91KFA0134	91KFA0184	91KFA0230	91KFA0276
91KFA0044	91KFA0089	91KFA0135	91KFA0185	91KFA0231	91KFA0277
91KFA0045	91KFA0090	91KFA0136	91KFA0186GF	91KFA0232	91KFA0278
91KFA0046	91KFA0091	91KFA0137	91KFA0187	91KFA0233	91KFA0279

List of samples from the Manitouwadge-Hornpayne Region

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91KFA0280GF	92KFA0300	92KFA0429	92KFA0477	92KFA0531	92KFA0583
91KFA0281	92KFA0301	92KFA0430	92KFA0478	92KFA0532	92KFA0584
91KFA0282	92KFA0302	92KFA0431	92KFA0479	92KFA0533	92KFA0585
91KFA0283	92KFA0303	92KFA0432	92KFA0480	92KFA0534	92KFA0586
91KFA0284	92KFA0304	92KFA0433	92KFA0481	92KFA0535	92KFA0587
91KFA0284A	92KFA0305	92KFA0434	92KFA0482	92KFA0536	92KFA0589
91KFA0284B	92KFA0306	92KFA0435	92KFA0483	92KFA0540	92KFA0590
91KFA0285	92KFA0307	92KFA0438	92KFA0484	92KFA0541	92KFA0592
91KFA0286	92KFA0308	92KFA0439	92KFA0485	92KFA0542	92KFA0593
	92KFA0312	92KFA0440	92KFA0486	92KFA0543	92KFA0594
	92KFA0313	92KFA0441	92KFA0487	92KFA0544	92KFA0595
	92KFA0314	92KFA0442	92KFA0488	92KFA0545	92KFA0596
	92KFA0315	92KFA0443	92KFA0489	92KFA0546	92KFA0597
	92KFA0316	92KFA0444	92KFA0490	92KFA0547	92KFA0598
	92KFA0317	92KFA0445	92KFA0491	92KFA0548	92KFA0599
	92KFA0318	92KFA0446	92KFA0492	92KFA0549	92KFA0600
	92KFA0319	92KFA0447	92KFA0493	92KFA0550	92KFA0601
	92KFA0320	92KFA0448	92KFA0494	92KFA0551	92KFA0602
	92KFA0400	92KFA0449	92KFA0495	92KFA0552	92KFA0603
	92KFA0401	92KFA0450	92KFA0496	92KFA0553	92KFA0604
	92KFA0402	92KFA0451	92KFA0497	92KFA0554	92KFA0605
	92KFA0403	92KFA0452	92KFA0498	92KFA0555	92KFA0606
	92KFA0404	92KFA0453	92KFA0499	92KFA0556	92KFA0607
	92KFA0405	92KFA0454	92KFA0500	92KFA0558	92KFA0608
	92KFA0406	92KFA0455	92KFA0501	92KFA0559	92KFA0609
	92KFA0408	92KFA0456	92KFA0502	92KFA0560	92KFA0610
	92KFA0409	92KFA0457	92KFA0503	92KFA0561	92KFA0611
	92KFA0410	92KFA0458	92KFA0504	92KFA0562	92KFA0612
	92KFA0411	92KFA0459	92KFA0505	92KFA0563	92KFA0613
	92KFA0412	92KFA0460	92KFA0506	92KFA0564	92KFA0614
	92KFA0413	92KFA0461	92KFA0507	92KFA0565	92KFA0615
	92KFA0414	92KFA0462	92KFA0508	92KFA0566	92KFA0616
	92KFA0415	92KFA0463	92KFA0509	92KFA0568	92KFA0617
	92KFA0416	92KFA0464	92KFA0510	92KFA0570	92KFA0618
	92KFA0417	92KFA0465	92KFA0511	92KFA0571	92KFA0619
	92KFA0418	92KFA0466	92KFA0512	92KFA0572	92KFA0620
	92KFA0419	92KFA0467	92KFA0513	92KFA0573	92KFA0621
	92KFA0420	92KFA0468	92KFA0514	92KFA0574	92KFA0622
	92KFA0421	92KFA0469	92KFA0515	92KFA0575	92KFA0623
	92KFA0422	92KFA0470	92KFA0523	92KFA0576	92KFA0624
	92KFA0423	92KFA0471	92KFA0524	92KFA0576A	92KFA0625
	92KFA0424	92KFA0472	92KFA0525	92KFA0577	92KFA0626
	92KFA0425	92KFA0473	92KFA0526	92KFA0578	92KFA0627
	92KFA0426	92KFA0474	92KFA0527	92KFA0579	92KFA0629
	92KFA0427	92KFA0475	92KFA0528	92KFA0580	92KFA0630
	92KFA0428	92KFA0476	92KFA0529	92KFA0581	92KFA0631

92KFA0632	92KFA0683	92KFA0766
92KFA0633	92KFA0685	92KFA0767
92KFA0634	92KFA0686	92KFA0768
92KFA0635	92KFA0687	92KFA0769
92KFA0636	92KFA0687A	92KFA0770
92KFA0637	92KFA0688	92KFA0771
92KFA0638	92KFA0689	92KFA0772
92KFA0640	92KFA0690	92KFA0773
92KFA0641	92KFA0691	92KFA0774
92KFA0642	92KFA0693	92KFA0775
92KFA0643	92KFA0694	92KFA0776
92KFA0644	92KFA0695	92KFA0777
92KFA0645	92KFA0697	92KFA0778
92KFA0646	92KFA0698	92KFA0783
92KFA0647	92KFA0699	92KFA0784
92KFA0648	92KFA0700	92KFA0785
92KFA0649	92KFA0701	92KFA0786
92KFA0650	92KFA0703	92KFA0787
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92KFA0653	92KFA0705	92KFA0789
92KFA0654	92KFA0706	92KFA0790
92KFA0655	92KFA0707	92KFA0791
92KFA0656	92KFA0708	92KFA0793
92KFA0658	92KFA0709	92KFA0795
92KFA0659	92KFA0710	92KFA0796
92KFA0660	92KFA0711	92KFA0797
92KFA0661	92KFA0712	92KFA0798
92KFA0662	92KFA0713	92KFA0799
92KFA0663	92KFA0714	
92KFA0664	92KFA0715	
92KFA0665	92KFA0716	
92KFA0666	92KFA0717	
92KFA0667	92KFA0718	
92KFA0668	92KFA0722	
92KFA0671	92KFA0723	
92KFA0672	92KFA0752	
92KFA0673	92KFA0753	
92KFA0674	92KFA0754	
92KFA0675	92KFA0756	
92KFA0676	92KFA0757	
92KFA0677	92KFA0758	
92KFA0678	92KFA0759	
92KFA0679	92KFA0762	
92KFA0680	92KFA0763	
92KFA0681	92KFA0764	
92KFA0682	92KFA0765	

List of Samples from Manitouwadge District

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91KFA0001	91KFA0055	91KFA0148	92KFA0303	92KFA0568	92MAN0175
91KFA0002	91KFA0056	91KFA0149	92KFA0304	92KFA0783	92MAN0178
91KFA0003	91KFA0067	91KFA0150	92KFA0305	92KFA0784	92MAN0179
91KFA0009	91KFA0068	91KFA0154	92KFA0306	92MAN0107	92MAN0180
91KFA0010	91KFA0069	91KFA0155	92KFA0307	92MAN0108	92MAN0181
91KFA0011	91KFA0070	91KFA0156	92KFA0308	92MAN0109	92MAN0182
91KFA0012	91KFA0075	91KFA0157	92KFA0400	92MAN0110	92MAN0183
91KFA0013	91KFA0076	91KFA0158	92KFA0401	92MAN0111	92MAN0190
91KFA0014	91KFA0077	91KFA0159	92KFA0402	92MAN0112	92MAN0193
91KFA0015	91KFA0078	91KFA0172	92KFA0403	92MAN0113	92MAN0194
91KFA0016	91KFA0079	91KFA0173	92KFA0404	92MAN0115	92MAN0195
91KFA0017	91KFA0081	91KFA0174	92KFA0405	92MAN0116	92MAN0196
91KFA0018	91KFA0082	91KFA0175	92KFA0406	92MAN0117	92MAN0198
91KFA0019	91KFA0083	91KFA0176	92KFA0408	92MAN0118	92MAN0199
91KFA0020	91KFA0085	91KFA0177	92KFA0409	92MAN0119	92MAN0200
91KFA0023	91KFA0086	91KFA0178	92KFA0410	92MAN0121	92MAN0201
91KFA0024	91KFA0087	91KFA0179	92KFA0411	92MAN0122	92MAN0202
91KFA0025	91KFA0092	91KFA0181	92KFA0412	92MAN0123	92MAN0203
91KFA0026	91KFA0094	91KFA0182	92KFA0413	92MAN0124	92MAN0204
91KFA0027	91KFA0098	91KFA0183	92KFA0414	92MAN0125	92MAN0206
91KFA0028	91KFA0099	91KFA0184	92KFA0415	92MAN0126	92MAN0212
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91KFA0031	91KFA0102	91KFA0189	92KFA0418	92MAN0129	92MAN0215
91KFA0032	91KFA0103	91KFA0190	92KFA0419	92MAN0133	92MAN0216
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91KFA0036	91KFA0107	91KFA0197	92KFA0424	92MAN0144	92MAN0224
91KFA0037	91KFA0108	91KFA0198	92KFA0426	92MAN0149	92MAN0226
91KFA0038	91KFA0109	91KFA0199	92KFA0427	92MAN0151	92MAN0227
91KFA0039	91KFA0113	91KFA0200	92KFA0428	92MAN0152	92MAN0228
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91KFA0048	91KFA0141	91KFA0251	92KFA0541	92MAN0164	92MAN0253
91KFA0049	91KFA0142	91KFA0252	92KFA0542	92MAN0165	92MAN0254
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91KFA0054	91KFA0147	92KFA0302	92KFA0566	92MAN0174	

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91KFA0009	92MAN0149
91KFA0016	92MAN0151
91KFA0017	92MAN0152
91KFA0018	92MAN0154
91KFA0019	92MAN0155
91KFA0020	92MAN0157
91KFA0028	92MAN0158
91KFA0179	92MAN0159
91KFA0181	92MAN0160
91KFA0182	92MAN0161
91KFA0183	92MAN0162
91KFA0184	92MAN0164
91KFA0185	92MAN0164
91KFA0187	92MAN0165
91KFA0189	92MAN0169
91KFA0190	92MAN0171
91KFA0192	92MAN0172
91KFA0194	92MAN0173
91KFA0284	92MAN0174
92KFA0540	92MAN0175
92KFA0541	92MAN0178
92KFA0542	92MAN0190
92MAN0107	92MAN0193
92MAN0108	92MAN0194
92MAN0109	92MAN0198
92MAN0110	92MAN0199
92MAN0111	92MAN0201
92MAN0112	92MAN0202
92MAN0113	92MAN0203
92MAN0115	92MAN0204
92MAN0115	92MAN0206
92MAN0116	92MAN0227
92MAN0117	92MAN0228
92MAN0118	Sample No.
92MAN0119	
92MAN0121	
92MAN0125	
92MAN0126	
92MAN0127	
92MAN0128	
92MAN0129	
92MAN0133	
92MAN0135	
92MAN0140	
92MAN0141	

APPENDIX B

- B (i)** Summary Statistics for Geochemical and Pebble Count Data for Representative Till and Gravel Samples from the Manitouwadge-Hornpayne Region, the Manitouwadge District, and the Area Near Mines.
- B (ii)** Correlation Matrix for Geochemical and Pebble Count Data for Representative Till and Gravel Samples

APPENDIX B (i)

**Summary Statistics for Geochemical and Pebble Count Data for
Till and Gravel Samples from the Manitouwadge-Hornpayne
Region, the Manitouwadge District, and the Area Near Mines.**

Key

Pz Carb No. %	Per cent Paleozoic carbonate clasts
Pz Sst No. %	Per cent Paleozoic sandstone clasts
Prot. Mtsm No. %	Per cent Proterozoic metasedimentary clasts
Prec Mvcc No. %	Per cent Precambrian metavolcanic clasts
Other Prec Mtsm No. %	Per cent Other Precambrian metasedimentary clasts
Prec Gran. No. %	Per cent Precambrian granitic clasts
Std. Dev.	Standard deviation
Std. Error	Standard error
Coef. Var.	Coefficient of variance
Sum of Sqr.	Sum of squares

Summary Statistics - Manitouwadge-Hornpayne Region - <0.002 mm fraction

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	Ag ppm <2 µm	Al pct <2 µm	As ppm <2 µm	Ba ppm <2 µm	Bi ppm <2 µm	Ca pct <2 µm	Cd ppm <2 µm	Co ppm <2 µm	Cr ppm <2 µm
Mean	0.23	4.152	9.562	131.589	1.633	2.883	0.345	24.322	98.177
Std. Dev.	0.541	1.506	9.891	71.602	0.725	3.379	1.461	14.966	39.498
Std. Error	0.022	0.061	0.403	2.916	0.03	0.138	0.059	0.609	1.608
Variance	0.292	2.267	97.828	5126.81	0.525	11.418	2.135	223.976	1560.12
Coef. Var.	235.383	36.265	103.437	54.413	44.354	117.221	423.962	61.533	40.232
Count	603	603	603	603	603	603	603	603	603
Minimum	0.1	0.84	1	30	1	0.03	0.1	1	20
Maximum	10.9	8.72	61	788	8	12.97	34.6	128	392
Range	10.8	7.88	60	758	7	12.94	34.5	127	372
Sum	138.5	2503.73	5766	79348	985	1738.21	207.8	146666	59201
Sum of Sqr.	207.77	11760.7	114028	1.4E+07	1925	11884.057	1356.62	491536	6751395
Mode	0.1	3.09	2	100	2	10	0.2	18	104
5th %	0.1	2.09	2	60		0.08	0.1	11	51
10th %	0.1	2.408	2	70	1	0.11	0.1	13	57.8
25th %	0.1	2.923	2	90	1	0.24	0.1	16	74.25
50th %	0.1	3.95	6	116	2	0.84	0.2	21	93
75th %	0.2	5.255	14	153.75	2	5.142	0.2	27	114
90th %	0.4	6.29	.24	207.6	2	9.19	0.6	39	140
95th %	0.635	6.883	30	246.35	2	10	1	48	157
96th %	0.8	7.124	30.76	260.76	2	10	1.1	52.38	162
97th %	0.941	7.258	34	270	4	10	1.3	65.41	172.82
98th %	1.044	7.622	39.44	302.76	4	10	1.444	72.88	196.44
99th %	1.294	7.893	42	378.8	4	10	2	97.94	263.28
	Cu ppm <2 µm	Fe pct <2 µm	K pct <2 µm	La ppm <2 µm	Mg pct <2 µm	Mn ppm <2 µm	Mo ppm <2 µm	Na pct <2 µm	Ni ppm <2 µm
Mean	84.036	4.622	0.399	44.206	1.673	705.763	1.822	1.893	65.154
Std. Dev.	112.483	1.338	0.263	44.021	0.804	400.183	2.03	1.387	57.758
Std. Error	4.581	0.054	0.011	1.793	0.033	16.297	0.083	0.056	2.352
Variance	12652.5	1.79	0.069	1937.85	0.646	160146.74	4.119	1.925	3336
Coef. Var.	133.851	28.944	65.933	99.582	48.057	56.702	111.406	73.298	88.648
Count	603	603	603	603	603	603	603	603	603
Minimum	7	0.49	0.03	5	0.12	30	0.5	0.005	6
Maximum	1345	10.3	3.3	500	7.33	2592	13	6.22	968
Range	1338	9.81	3.27	495	7.21	2562	12.5	6.215	962
Sum	50674	2787.13	240.66	26656	1008.59	425575	1098.5	1141.32	39288
Sum of Sqr.	1.2E+07	13959.8	137.734	2344928	2075.95	396763361	4480.75	3318.85	4568054
Mode	.	.	0.36	20	1.91	460	0.5	5	55
5th %	20	2.85	0.12	10	0.437	170	0.5	0.37	30
10th %	25	3.108	0.15	10	0.64	235	0.5	0.47	36
25th %	39	3.703	0.24	20	1.05	460	0.5	0.71	44
50th %	58	4.45	0.36	30	1.76	629	0.5	1.42	54
75th %	85	5.36	0.49	52	2.227	853.75	3	2.78	67
90th %	137.2	6.382	0.63	90	2.58	1226.4	5	4.054	95
95th %	232.35	7.01	0.79	120	2.86	1481.75	6	4.87	123.8
96th %	280.52	7.194	0.834	131.52	2.935	1603.8	6	5	144.76
97th %	326.41	7.51	0.9	151.64	3.11	1689.4	7	5	169.23
98th %	385.6	7.964	1.068	178.88	3.284	1840.28	8	5	221.64
99th %	567.49	8.397	1.428	212.47	3.695	1998.86	9	5	257.94

	Pb ppm <2 µm	Sb ppm <2 µm	Sc ppm <2 µm	Sr ppm <2 µm	Ti pct <2 µm	Tl ppm <2 µm	V ppm <2 µm	Zn ppm <2 µm
Mean	24.539	5.806	9.549	32.769	0.081	8.958	72.408	127.57
Std. Dev.	39.945	6.93	5.591	21.252	0.036	11.014	28.706	331.365
Std. Error	1.627	0.282	0.228	0.865	0.002	0.601	1.169	13.494
Variance	1595.6	48.02	31.258	451.649	0.001	121.3	824.063	109803
Coef. Var.	162.782	119.354	58.55	64.853	44.6	122.943	39.645	259.751
Count	603	603	603	603	349	336	603	603
Minimum	1	1	1	3	0.02	5	22	18
Maximum	772	38	42	105	0.24	90	374	7563
Range	771	37	41	102	0.22	85	352	7545
Sum	14797	3501	5758	19760	28.39	3010	43662	76925
Sum of Sqr.	1323655	49235	73800	919418	2.768	67600	3657562	7.6E+07
Mode	16	1	6	10	0.04	5	61	74
5th %	8	1	2	8	0.03	5	44	46
10th %	10	1	5	10	0.04	5	47.8	56
25th %	16	1	6	15	0.06	5	55	74
50th %	21	2	8	29	0.08	5	66	94
75th %	28	10	11	46	0.1	10	84	116
90th %	34	16.2	16	63.2	0.13	20	104	153.6
95th %	40.7	20	20.35	73.35	0.15	30	122.35	223.45
96th %	42.38	21	23	76.38	0.15	30	127.38	250.28
97th %	47	22	24	79.82	0.16	40	137.82	294.82
98th %	54.44	24	27	84.88	0.17	47.8	150.6	385.32
99th %	82.35	28.94	32	90.47	0.19	71.4	170.47	861.11

	Ag ppm <63 µm	Al pct <63 µm	As ppm <63 µm	Au ppb <63 µm	Ba ppm <63 µm	Bi ppm <63 µm	Ca pct <63 µm	Cd ppm <63 µm
Mean	0.213	0.969	3.02	3.086	34.785	1.954	4.217	0.303
Std. Dev.	2.033	0.64	3.084	6.535	25.982	1.295	4.261	0.825
Std. Error	0.082	0.026	0.125	0.296	1.049	0.052	0.172	0.033
Variance	4.132	0.41	9.513	42.707	675.071	1.678	18.155	0.681
Coef. Var.	954.087	66.039	102.142	211.761	74.694	66.276	101.037	272.345
Count	613	613	613	488	613	613	613	613
Minimum	0.1	0.18	1	0.5	9	1	0.03	0.1
Maximum	50	6.29	27	123	298	9	11.6	19.4
Range	49.9	6.11	26	122.5	289	8	11.57	19.3
Sum	130.6	594.08	1851	1506	21323	1198	2585.11	185.7
Sum of Sqr.	2556.5	826.423	11411	25446	1154857	3368	22012.7	472.83
Mode	0.1	.	2	1	20	1	10	0.2
5th %	0.1	0.33	1	0.5	10	1	0.15	0.1
10th %	0.1	0.37	1	1	15	1	0.19	0.1
25th %	0.1	0.52	1	1	20	1	0.31	0.2
50th %	0.1	0.81	2	2	30	2	0.9	0.2
75th %	0.1	1.255	4	3	40	2	8.96	0.2
90th %	0.2	1.692	7	6	60	4	10	0.6
95th %	2.088	2.088	9	8.1	80	5	10	0.9
96th %	2.209	2.209	10	10	83.92	5	10	0.9
97th %	2.338	2.338	11	11	97.11	5	10.129	1
98th %	2.74	2.74	12	15.96	102.16	6	10.32	1.124
99th %	3.641	3.641	14.37	23.24	144.33	7	10.577	1.337
	Co ppm <63 µm	Cr ppm <63 µm	Cu ppm <63 µm	Fe pct <63 µm	K pct <63 µm	La ppm <63 µm	Mg pct <63 µm	Mn ppm <63 µm
Mean	5.025	29.181	30.29	1.367	0.099	18.173	1.614	201.641
Std. Dev.	4.741	21.19	284.61	0.759	0.095	10.713	1.367	97.958
Std. Error	0.191	0.856	11.495	0.031	0.004	0.433	0.055	3.956
Variance	22.474	449.028	81002.91	0.577	0.009	114.767	1.868	9595.766
Coef. Var.	94.336	72.616	939.606	55.566	95.228	58.95	84.682	48.58
Count	613	613	613	613	613	613	613	613
Minimum	0.5	1	1	0.14	0.01	5	0.01	10
Maximum	33	217	6860	10	1.3	80	5.72	829
Range	32.5	216	6859	9.86	1.29	75	5.71	819
Sum	3080.5	17888	18568	837.83	60.93	11140	989.36	123606
Sum of Sqr.	29234.25	796796	50136210	1498.115	11.539	272684	2739.98	30796660
Mode	0.5	23	10	1.07	0.07	10	0.3	160
5th %	0.5	11	4	0.69	0.03	10	0.2	80
10th %	0.5	13	6	0.748	0.04	10	0.24	95
25th %	2	18	8	0.89	0.06	10	0.317	140
50th %	4	25	11	1.17	0.08	15	0.88	186
75th %	7	33	17	1.64	0.11	20	3.003	243.25
90th %	10	45	28.2	2.14	0.17	30	3.45	323
95th %	15	62.85	44.85	2.538	0.22	40	3.667	378.55
96th %	16	69.96	49	2.689	0.24	40	3.71	396.96
97th %	18	87	58.22	3.048	0.27	43.11	3.761	420.11
98th %	19.24	96.24	85.44	3.526	0.325	50.48	3.815	443
99th %	23	117.37	131.81	4.284	0.417	60.74	3.974	501.85

Summary Statistics - Manitouwadge-Hornpayne Region - <0.063 mm fraction

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	Mo ppm	Na pct	Ni ppm	Pb ppm	Pd ppb	Pt ppb	Sb ppm	Sc ppm
	<63 µm							
Mean	3.699	0.029	17.19	13.511	2.15	1.902	7.222	2.403
Std. Dev.	5.072	0.024	14.858	54.223	3.682	3.337	10.667	1.272
Std. Error	0.205	0.001	0.6	2.19	0.167	0.151	0.431	0.051
Variance	25.728	0.001	220.763	2940.156	13.554	11.136	113.777	1.619
Coef. Var.	137.126	82,852	86.434	401.338	171.266	175.484	147.7	52.956
Count	613	613	613	613	488	488	613	613
Minimum	0.5	0.005	0.5	1	0.5	1	1	1
Maximum	40	0.13	128	1311	72	60	50	11
Range	39.5	0.125	127.5	1310	71.5	59	49	10
Sum	2267.5	17.475	10537.5	8282	1049	928	4427	1473
Sum of Sqr.	24133.25	0.84	316247.3	1911270	8855.5	7188	101603	4530.5
Mode	0.5	0.01	9	4	1	1	1	2
5th %	0.5	0.005	6	1	0.5	1	1	1
10th %	0.5	0.005	7	1	1	1	1	2
25th %	0.5	0.01	9	4	1	1	1	2
50th %	0.5	0.01	13	8	1.5	1	2	2
75th %	6.25	0.05	20	19	2	1	10	2
90th %	12	0.06	30	23	4	5	28.6	4
95th %	14	0.07	40.85	25	6	5	35	4
96th %	14	0.07	46	26	6	5	37	5
97th %	15	0.071	53.44	27	6	5	37.11	6
98th %	16.24	0.08	71.92	29.48	8	6	38	7
99th %	20	0.08	92.74	35.74	11.24	10	39	9

	Sr ppm	Ti pct	V ppm	Zn ppm
	<63 µm	<63 µm	<63 µm	<63 µm
Mean	30.48	0.086	26.737	29.398
Std. Dev.	19.679	0.034	12.774	109.064
Std. Error	0.795	0.002	0.516	4.405
Variance	387.263	0.001	163.171	11894.87
Coef. Var.	64.564	39.819	47.775	370.989
Count	613	344	613	613
Minimum	4	0.01	4	2
Maximum	165	0.23	120	2589
Range	161	0.22	116	2587
Sum	18684	29.7	16390	18021
Sum of Sqr.	806486	2.97	538086	7809445
Mode	11	0.08	19	18
5th %	8	5	15	9
10th %	10	0.04	16	11
25th %	13	0.06	19	14
50th %	24	0.08	23	18
75th %	48	0.11	31	26
90th %	57	0.13	41	42
95th %	61	0.15	49.85	58
96th %	62	0.15	54	62
97th %	63	0.16	56.11	66.11
98th %	64.48	0.17	62.24	91.68
99th %	68	0.191	76.74	138.1

	Ag ppm <2 µm	Al pct <2 µm	As ppm <2 µm	Ba ppm <2 µm	Bi ppm <2 µm	Ca pct <2 µm	Cd ppm <2 µm	Co ppm <2 µm	Cr ppm <2 µm
Mean	0.3	4.256	10.039	125.24	2.115	2.968	0.479	25.29	98.591
Std. Dev.	0.78	1.579	9.761	64.55	1.344	3.541	2.131	13.912	42.691
Std. Error	0.047	0.095	0.584	3.865	0.08	0.212	0.128	0.833	2.556
Variance	0.608	2.492	95.283	4166.73	1.807	12.536	4.54	193.531	1822.53
Coef. Var.	259.865	37.089	97.229	51.541	63.566	119.288	444.96	55.007	43.301
Count	279	279	279	279	279	279	279	279	279
Minimum	0.1	0.84	1	30	1	0.03	0.1	2	20
Maximum	10.9	9.85	56	673	12	11.84	34.6	108	496
Range	10.9	9.01	55	643	11	11.81	34.5	106	476
Sum	83.7	1187.5	2801	34942	590	828.12	133.6	7056	27507
Sum of Sqrs.	194.07	5747.1	54609	5534492	1750	5943.13	1326	232250	3218617
Mode	0.1	•	2	80	2	10	0.2	•	112
5th %	0.1	1.921	2	60	1	0.129	0.1	11	49.45
10th %	0.1	2.32	2	70	1	0.19	0.1	13	55.4
25th %	0.1	2.995	2	85.5	1.25	0.3	0.1	17	71
50th %	0.1	4.28	6	110	2	0.83	0.2	22	98
75th %	0.2	5.368	16	144	2	5.3	0.2	30	117
90th %	0.5	6.314	22	200.6	4	9.528	0.8	41	138
95th %	0.955	7.031	29.1	29.1	4	10	1.3	47	152.55
96th %	1.034	7.177	30	30	4	10	1.434	50.34	162.7
97th %	1.226	7.25	32	32	6	10	1.8	58.56	176.39
98th %	1.584	7.716	39.52	39.52	6	10	2	73.6	195.76
99th %	2.852	8.139	43.71	43.71	7.42	11.05	3.026	79.71	232.88
	Cu ppm <2 µm	Fe pct <2 µm	K pct <2 µm	La ppm <2 µm	Mg pct <2 µm	Mn ppm <2 µm	Mo ppm <2 µm	Na pct <2 µm	Ni ppm <2 µm
Mean	90.631	4.757	0.422	53.638	1.768	760.792	1.554	1.239	60.513
Std. Dev.	133.28	1.496	0.22	50.212	0.801	393.223	1.723	0.902	30.12
Std. Error	7.979	0.09	0.013	3.006	0.048	23.542	0.103	0.054	1.803
Variance	17763.6	2.237	0.049	2521.23	0.641	154624.54	2.968	0.813	907.244
Coef. Var.	147.058	31.444	52.278	93.612	45.299	51.686	110.88	72.813	49.776
Count	279	279	279	279	279	279	279	279	279
Minimum	7	1.08	0.06	5	0.13	35	0.5	0.005	6
Maximum	1345	10	2.03	350	7.33	2019	10	5	249
Range	1338	8.92	1.97	345	7.2	1984	9.5	4.995	243
Sum	25286	1327.2	117.61	14965	493.25	212261	433.5	345.545	16883
Sum of Sqrs.	7229984	6935.9	63.078	1503593	1050.3	204472117	1498.8	654.045	1273847
Mode	42	•	0.45	30	•	420	0.5	1.02	•
5th %	22	2.57	5	15	0.633	216.75	0.5	0.364	28.9
10th %	25.4	3	0.21	20	0.884	314	0.5	0.494	36
25th %	41	3.67	0.282	27.25	1.19	485.5	0.5	0.673	43
50th %	59	4.74	0.39	37	1.72	676	0.5	0.98	54
75th %	92.75	5.58	0.5	60	2.278	998	2	1.405	68.75
90th %	149	6.796	0.64	108	2.648	1314.8	4	2.416	93
95th %	245.1	7.311	0.781	164.15	2.901	1559.75	5	3.312	110.55
96th %	293.08	7.531	0.823	178.68	2.967	1615.3	6	3.737	125.02
97th %	354.08	7.765	0.883	191.3	3.117	1675.86	6	4.024	130.04
98th %	495.96	8.152	0.9	239.2	3.565	1745.2	6.92	4.177	163.24
99th %	583.57	9.631	1.312	260	3.86	1909.56	8	4.555	192.68

Summary Statistics - Manitouwadge District - <0.002 mm fraction

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	Pb ppm <2 µm	Sb ppm <2 µm	Sc ppm <2 µm	Sr ppm <2 µm	Tl pct <2 µm	Tl ppm <2 µm	V ppm <2 µm	Zn ppm <2 µm
Mean	30.14	6.491	10.624	35.993	0.127	6.135	76.33	164.369
Std. Dev.	58.762	7.477	6.679	22.064	0.051	8.353	33.14	486.697
Std. Error	3.518	0.448	0.4	1.321	0.004	0.703	1.984	29.138
Variance	3453.01	55.905	44.602	486.834	0.003	69.775	1098.3	236874
Coef. Var.	194.966	115.19	62.864	61.302	40.054	136.161	43.417	296.1
Count	279	279	279	279	141	141	279	279
Minimum	1	1	1	3	0.01	5	22	30
Maximum	772	38	40	105	0.3	80	374	7563
Range	771	37	39	102	0.29	75	352	7533
Sum	8409	1811	2964	10042	17.85	865	21296	45859
Sum of Sqrs.	1213381	27297	43888	496780	2.62	15075	2E+06	7.3E+07
Mode	28	1	6	12	0.1	5	61	•
5th %	6	1	2	10	0.056	5	42	53.45
10th %	10	1	5	12	0.07	5	46	64
25th %	17	1	6	18	0.09	5	57	76.25
50th %	24	2	9	31	0.12	5	70	94
75th %	30	11	13	51	0.16	5	89.75	117.75
90th %	37.6	18	19.6	70.6	0.194	5	109.2	174.6
95th %	48	20.55	26	79	0.21	5	124	410.35
96th %	52	22	27	82	0.21	9.3	133.68	556.8
97th %	56.95	23.13	29	84	0.22	10	140.52	743.64
98th %	83.8	25	29	87.84	0.227	10	157.52	946.72
99th %	242.26	32.13	34.13	99.13	0.236	70.9	210.82	1492.04

	Ag ppm <63µm	Al pct <63µm	As ppm <63µm	Ba ppm <63µm	Bi ppm <63µm	Ca pct <63µm	Cd ppm <63µm	Co ppm <63µm	Cr ppm <63µm
Mean	0.154	0.903	3.13	32.72	1.866	4.386	0.379	5.109	30.293
Std. Dev.	0.434	0.513	3.292	26.285	1.068	4.19	1.27	4.871	30.145
Std. Error	0.028	0.033	0.213	1.7	0.069	0.271	0.082	0.315	1.95
Variance	0.188	0.263	10.836	690.908	1.142	17.56	1.613	23.728	908.729
Coef. Var.	281.628	56.769	105.18	80.334	57.257	95.535	335.441	95.347	99.512
Count	239	239	239	239	239	239	239	239	239
Minimum	0.1	0.19	1	5	1	0.13	0.1	0.5	8
Maximum	6.6	2.83	27	240	8	11.02	19.4	33	217
Range	6.5	2.64	26	250	7	10.89	19.3	32.5	209
Sum	36.8	215.77	748	7820	446	1048.31	90.5	1221	7240
Sum of Sqr.	50.42	257.313	4920	420304	1104	8777.3	418.25	11885	435598
Mode	0.1	0.47	2	20	2	10	0.2	0.5	21
5th %	0.1	0.31	1	10	1	0.235	0.1	0.5	10.45
10th %	0.1	0.35	1	10.4	1	0.29	0.1	0.5	12
25th %	0.1	0.49	2	20	1	0.392	0.1	1	17
50th %	0.1	0.79	2	26	2	1.87	0.2	4	24
75th %	0.1	1.19	4	38.75	2	8.705	0.3	7	32
90th %	0.2	1.56	7	58.6	2	10	0.8	11	41.6
95th %	0.255	1.848	8	70.55	5	10	1	14.55	67
96th %	0.3	2.109	9.94	73.94	5	10	1	15.94	93.76
97th %	0.333	2.283	11	81.32	5	10	1.133	17.33	115.99
98th %	0.472	2.327	12.44	89.72	5	10	1.272	19	172.12
99th %	1.1	2.623	17.77	149.58	6.11	10.834	1.422	23	200.55
	Cu ppm <63µm	Fe pct <63µm	K pct <63µm	La ppm <63µm	Mg pct <63µm	Mn ppm <63µm	Mo ppm <63µm	Na pct <63µm	Ni ppm <63µm
Mean	24.674	1.393	0.111	19.393	1.556	223.285	4.592	0.035	17.561
Std. Dev.	107.255	0.714	0.08	12.354	1.24	98.066	5.765	0.025	15.778
Std. Error	6.938	0.046	0.005	0.799	0.08	6.343	0.373	0.002	1.021
Variance	11503.7	0.51	0.006	152.626	1.539	9617.02	33.231	0.001	248.936
Coef. Var.	434.695	51.276	72.463	63.703	79.729	43.92	125.535	71.064	89.847
Count	239	239	239	239	239	239	239	239	239
Minimum	1	0.44	0.02	5	0.08	43	0.5	0.005	2
Maximum	1596	4.94	0.63	80	4.17	829	40	0.13	108
Range	1595	4.5	0.61	75	4.09	786	39.5	0.125	106
Sum	5897	332.92	26.43	4635	371.83	53365	1097.5	8.4	4197
Sum of Sqr.	2883373	585.168	4.451	126213	944.672	1.4E+07	12948.8	0.444	132949
Mode	•	0.8	0.06	20	0.29	•	0.5	0.01	10
5th %	3	0.684	0.04	5	0.2	90	0.5	0.005	6
10th %	5	0.764	0.05	5	0.25	116.2	0.5	0.005	7
25th %	7.25	0.893	0.06	11	0.32	159.25	0.5	0.01	9
50th %	11	1.23	0.09	18	1.08	206	1	0.04	13
75th %	17.75	1.658	0.13	24	2.778	265	9	0.05	20
90th %	33.6	2.228	0.196	32.8	3.2	351.6	13	0.07	31
95th %	48.55	2.656	0.24	40	3.316	399.7	14	0.07	42.55
96th %	54.64	2.756	0.268	46.82	3.32	408.94	15	0.07	49.64
97th %	83.3	3.12	0.273	54.64	3.367	423.97	15.33	0.08	64.6
98th %	93.44	3.659	0.38	60	3.453	440.76	17.72	0.08	87.48
99th %	300.57	4.601	0.489	66.44	3.632	477.05	23.11	0.081	92.44

Summary statistics - Manitouwadge District - <0.063 mm fraction

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	Pb ppm <63µm	Sb ppm <63µm	Sc ppm <63µm	Sr ppm <63µm	Tl pct <63µm	Tl ppm <63µm	V ppm <63µm	Zn ppm <63µm
Mean	15.762	9.025	2.498	31.502	0.088	7.97	25.611	44.707
Std. Dev.	18.477	11.773	1.302	19.663	0.036	4.805	13.275	173.38
Std. Error	1.195	0.762	0.084	1.272	0.004	0.478	0.859	11.215
Variance	341.392	138.604	1.696	386.621	0.001	23.089	176.239	30060.7
Coef. Var.	117.227	130.448	52.142	62.417	41.239	60.288	51.835	387.813
Count	239	239	239	239	101	101	239	239
Minimum	1	1	1	6	0.02	5	12	4
Maximum	224	50	10	165	0.22	30	120	2589
Range	223	49	9	159	0.2	25	108	2585
Sum	3767	2157	597	7529	8.84	805	6121	10685
Sum of Sqr.	140625	52455	1895	329195	0.904	8725	198709	7632139
Mode	8	1	2	13	0.09	5	25	14
5th %	2	1	2	9.45	0.04	5	14	10
10th %	4	1	2	11	0.04	5	14.4	12
25th %	8	1	2	15	0.068	5	18	14
50th %	15	2	2	25	0.09	5	23	20
75th %	20	12	2	46	0.11	10	29	30
90th %	23	32.6	4	55	0.13	10	39.2	57
95th %	27	35	5.55	60	0.16	20	47.1	113.65
96th %	32.7	37	6	61.94	0.165	20	55.82	156.1
97th %	35.33	38	6.33	62.33	0.175	20	58.33	190.64
98th %	43.48	38.72	7	66.16	0.185	20	61.16	281.68
99th %	83.92	40.22	9	72.1	0.205	24.9	91.22	397.32

Summary Statistics - Samples Near Mines - <0.002 mm fraction

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	Ag ppm <2 µm	Al pct <2 µm	As ppm <2 µm	Ba ppm <2 µm	Bi ppm <2 µm	Ca pct <2 µm	Cd ppm <2 µm	Co ppm <2 µm	Cr ppm <2 µm
Mean	0.578	4.658	14.308	119.859	2.269	2.331	0.958	25.885	117.667
Std. Dev.	1.416	1.565	8.651	51.466	1.672	3.187	3.973	13.614	58.076
Std. Error	0.16	0.177	0.98	5.827	0.189	0.361	0.45	1.542	6.576
Variance	2.006	2.45	74.839	2648.75	2.797	10.157	15.788	185.35	3372.87
Coef. Var.	244.946	33.609	60.464	42.939	73.696	136.741	414.897	52.596	49.357
Count	78	78	78	78	78	78	78	78	78
Minimum	0.1	1.65	1	30	1	0.06	0.1	3	52
Maximum	10.9	8.2	34	290	12	11.21	34.6	108	496
Range	10.8	6.55	33	260	11	11.15	34.5	105	444
Sum	45.1	363.29	1116	9349	177	181.79	74.7	2019	9178
Sum of Sqr.	180.53	1880.72	21730	1324515	617	1205.745	1287.23	66533	1339656
Mode	0.1	•	•	130	2	0.25	0.2	25	•
5th %	0.1	2.344	1.4	58.8	1	0.126	0.1	9.8	58.2
10th %	0.1	2.457	2	70	1	0.179	0.13	14	65
25th %	0.1	3.37	8	80	1	0.26	0.2	17	88
50th %	0.2	4.695	16	110	2	0.6	0.2	25	112
75th %	0.4	5.73	18	140	2	2.89	0.4	32	128
90th %	1.34	6.778	26	192.2	4	7.968	1.5	40.7	170.2
95th %	2	7.22	29.2	232.4	5.2	9.84	2.36	45.6	200.2
96th %	2.456	7.46	30.76	236.28	6	10	2.828	46.38	208.04
97th %	3.536	7.847	32	243.2	6	10.067	3.808	47.32	223.08
98th %	5.174	7.98	32	258.8	6	10.395	6.772	48.88	272.22
99th %	9.332	8.141	33.44	281.6	10.32	10.989	26.872	91.48	434.4
	Cu ppm <2 µm	Fe pct <2 µm	K pct <2 µm	La ppm <2 µm	Mg pct <2 µm	Mn ppm <2 µm	Mo ppm <2 µm	Na pct <2 µm	Ni ppm <2 µm
Mean	122.833	5.294	0.422	61.064	1.636	792.295	1.814	1.18	71.462
Std. Dev.	167.84	1.498	0.158	57.856	0.681	413.865	2.039	0.602	39.134
Std. Error	19.004	0.17	0.018	6.551	0.077	46.861	0.231	0.068	4.431
Variance	28170.3	2.243	0.025	3347.28	0.463	171284	4.157	0.363	1531.5
Coef. Var.	136.641	28.291	37.531	94.746	41.615	52.236	112.384	51.051	54.763
Count	78	78	78	78	78	78	78	78	78
Minimum	7	2.37	0.06	10	0.13	35	0.5	0.19	12
Maximum	1305	9.64	0.83	290	3.81	1695	10	4.02	249
Range	1298	7.27	0.77	280	3.68	1660	9.5	3.83	237
Sum	9581	412.91	32.89	4763	127.6	61799	141.5	92.04	5574
Sum of Sqr.	3345983	2358.54	15.797	548589	244.426	62151901	576.75	136.55	516252
Mode	79	•	0.45	20	1.19	•	0.5	•	61
5th %	24.8	3.058	0.18	14	0.724	257	0.5	0.372	32.6
10th %	33.6	3.481	0.233	20	0.848	300	0.5	0.602	41
25th %	53	4.33	0.31	29	1.18	470	0.5	0.76	52
50th %	79	5.125	0.415	38.5	1.59	729	1	1.065	61
75th %	123	6.27	0.51	70	2.22	1085	3	1.41	80
90th %	230.2	7.285	0.634	117	2.481	1401.5	4.7	1.873	117.4
95th %	396.2	7.694	0.698	196	2.67	1589	6	2.162	159.2
96th %	448.44	7.91	0.721	222.8	2.744	1621.6	6.38	2.255	176.46
97th %	505.72	8.4	0.748	260	2.818	1666.28	7.32	2.442	191
98th %	518.98	9.524	0.787	260	2.903	1672.52	8.88	2.839	210.5
99th %	1085.2	9.632	0.819	281.6	3.558	1688.84	9.72	3.698	238.64

Summary Statistics - Samples Near Mines - <0.002 mm fraction

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	Pb ppm <2 µm	Sb ppm <2 µm	Sc ppm <2 µm	Sr ppm <2 µm	Ti pct <2 µm	Tl ppm <2 µm	V ppm <2 µm	Zn ppm <2 µm
Mean	44.064	3.974	12.397	30.923	0.139	7.5	85.756	323.436
Std. Dev.	91.511	5.705	7.137	19.007	0.051	12.918	31.76	899.975
Std. Error	10.362	0.646	0.808	2.152	0.007	1.696	3.596	101.902
Variance	8374.27	32.545	50.944	361.267	0.003	166.886	1008.71	809954.6
Coef. Var.	207.677	143.54	57.572	61.465	36.5	172.246	37.035	278.254
Count	78	78	78	78	58	58	78	78
Minimum	2	1	2	3	0.04	5	41	55
Maximum	772	22	40	100	0.3	80	224	7563
Range	770	21	38	97	0.26	75	183	7508
Sum	3437	310	967	2412	8.08	435	6689	25228
Sum of Sqrs.	796267	3738	15911	102404	1.273	12775	651295	70526148
Mode	18	1	7	14	0.1	5	100	•
5th %	12.8	1	5	10	0.064	5	44.8	58
10th %	14	1	6	12	0.08	5	53	68
25th %	18	1	7	17	0.1	5	62	82
50th %	26	1	10	26.5	0.14	5	82	102
75th %	34	2	17	38.	0.18	5	99	138
90th %	54.7	15.7	22.1	57.7	0.2	5	122.8	816.6
95th %	92.8	17.6	27.2	70.2	0.21	8	145.6	1097.6
96th %	151.2	18	28.38	73.38	0.212	20.8	154.28	1319.2
97th %	238.96	18.48	29.48	74.32	0.218	55.6	161.68	1682.88
98th %	243.64	20.82	31.82	75.88	0.247	73.4	179.62	1872.42
99th %	624.16	21.72	37.76	93.28	0.294	79.2	211.96	5973.72

	Ag ppm <63µm	Al pct <63µm	As ppm <63µm	Ba ppm <63µm	Bi ppm <63µm	Ca pct <63µm	Cd ppm <63µm	Co ppm <63µm	Cr ppm <63µm
Mean	0.229	1.008	3.532	34.065	1.597	3.315	0.518	5.558	32.831
Std. Dev.	0.757	0.508	3.916	30.91	1.127	4.009	2.194	4.144	30.895
Std. Error	0.086	0.058	0.446	3.523	0.128	0.457	0.25	0.472	3.521
Variance	0.573	0.258	15.331	955.456	1.27	16.068	4.812	17.171	954.484
Coef. Var.	331.208	50.448	110.84	90.74	70.548	120.937	423.321	74.549	94.102
Count	77	77	77	77	77	77	77	77	77
Minimum	0.1	0.22	1	10	1	0.13	0.1	0.5	9
Maximum	6.6	2.61	27	240	8	11.02	19.4	20	205
Range	6.5	2.39	26	230	7	10.89	19.3	19.5	196
Sum	17.6	77.59	272	2623	123	255.22	39.9	428	2528
Sum of Sqr.	47.58	97.824	2126	161967	293	2067.126	386.37	3684	155538
Mode	0.1	*	1	20	1	10	0.2	4	27
5th %	0.1	0.317	1	10	1	0.204	0.1	0.5	11.35
10th %	0.1	0.374	1	10	1	0.232	0.1	0.8	15
25th %	0.1	0.62	1	20	1	0.338	0.2	3	21
50th %	0.1	1.02	2	22	1	0.57	0.2	4	27
75th %	0.1	1.283	4.25	42.5	2	7.835	0.2	7	33
90th %	0.2	1.65	7.8	60	2	10	0.58	10	46
95th %	0.625	2.033	11	76.5	4	10	1	14.95	69
96th %	0.926	2.179	11	84.2	4	10.265	1.042	16.42	83.56
97th %	1.1	2.275	11.38	91.9	4.19	10.676	1.157	17.38	114.14
98th %	1.1	2.337	12.92	99.6	4.96	10.86	1.388	18.92	195.76
99th %	5.115	2.537	23.22	202.2	7.19	10.98	14.54	19.73	203.65
	Cu ppm <63µm	Fe pct <63µm	K pct <63µm	La ppm <63µm	Mg pct <63µm	Mn ppm <63µm	Mo ppm <63µm	Na pct <63µm	Ni ppm <63µm
Mean	40.831	1.498	0.107	20.13	1.294	218.87	2.734	0.019	17.675
Std. Dev.	180.674	0.695	0.086	15.13	1.212	106.767	5.059	0.018	14.94
Std. Error	20.59	0.079	0.01	1.724	0.138	12.167	0.576	0.002	1.703
Variance	32643.247	0.483	0.007	228.904	1.468	11399.3	25.589	3.28E-04	223.196
Coef. Var.	442.491	46.399	80.915	75.16	93.614	48.781	185.041	97.549	84.523
Count	77	77	77	77	77	77	77	77	77
Minimum	3	0.44	0.03	5	0.2	55	0.5	0.005	3
Maximum	1596	4.39	0.63	80	3.81	615	24	0.06	92
Range	1593	3.95	0.6	80	3.61	560	23.5	0.055	89
Sum	3144	115.31	8.23	1550	99.65	16853	210.5	1.43	1361
Sum of Sqr.	2609260	209.373	1.448	48598	240.51	4554965	2520.25	0.052	41019
Mode	*	1.46	0.06	*	*	110	0.5	0.01	16
5th %	4	0.687	0.04	5	0.22	83.5	0.5	0.005	6
10th %	6	0.802	0.042	5	0.25	96	0.5	0.005	8
25th %	9	1.072	0.06	10	0.29	133.75	0.5	0.005	10
50th %	13	1.33	0.08	20	0.56	205	0.5	0.01	14
75th %	24	1.725	0.13	24	2.543	270	1	0.03	19
90th %	47	2.37	0.208	39.6	3.114	364.6	9	0.05	25.8
95th %	86.5	2.68	0.26	56.5	3.242	412.9	14.65	0.06	42.65
96th %	91.68	2.879	0.27	60	3.277	421.3	15	0.06	49.3
97th %	94.38	3.258	0.272	61.9	3.348	435.7	16.52	0.06	64.08
98th %	95.92	3.735	0.28	69.6	3.54	458.8	22.68	0.06	88.72
99th %	1191	4.22	0.536	77.3	3.74	573.15	23.73	0.06	91.46

	Pb ppm <63µm	Sb ppm <63µm	Sc ppm <63µm	Sr ppm <63µm	Tl pct <63µm	Tl ppm <63µm	V ppm <63µm	Zn ppm <63µm
Mean	15.779	2.792	2.909	26.805	0.092	8.596	26.987	86.351
Std. Dev.	26.792	3.697	1.664	17.805	0.037	5.49	12.854	300.332
Std. Error	3.053	0.421	0.19	2.029	0.005	0.727	1.465	34.226
Variance	717.832	13.667	2.768	317.027	0.001	30.138	165.224	90199.204
Coef. Var.	169.795	132.399	57.19	66.425	40.662	63.861	47.63	347.805
Count	77	77	77	77	57	57	77	77
Minimum	2	1	1	6	0.02	5	12	8
Maximum	224	15	10	81	0.22	30	93	2589
Range	222	14	9	75	0.2	25	81	2581
Sum	1215	215	224	2064	5.25	490	2078	6649
Sum of Sqrs.	73727	1639	862	79420	0.562	5900	68636	7429285
Mode	8	1	2	•	0.09	5	•	18
5th %	2	1	1	8.35	0.04	5	13	10
10th %	4	1	2	10	0.042	5	14.4	12.4
25th %	6	1	2	13.75	0.07	5	19.75	18
50th %	8	1	2	17	0.09	5	24	24
75th %	18	2	3.25	41	0.11	10	31	42.5
90th %	23.8	9	4.8	55.4	0.13	20	40.8	155.6
95th %	42.5	12	6	58.3	0.167	20	57.3	323.9
96th %	46.84	12.42	6.42	59.42	0.172	20	58	363.28
97th %	53.32	13.38	7.38	62.09	0.178	20	58.19	398.28
98th %	74.88	14.92	8.92	70.56	0.194	23.6	58.96	407.52
99th %	184.04	15	9.73	78.3	0.217	29.3	83.82	2000.13

Summary statistics - Pebble Counts - 5.6-16.0 mm fraction

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Manitouwadge-Hornpayne Region

	Pz Carb No. %	Pz Sst No. %	Prot Mtsm No. %	Prec Mvcc No. %	Other Prec Mtsm No. %	Prec Gran No. %
Mean	28.939	1.01	10.243	5.692	7.374	46.744
Std. Dev.	23.928	3.903	7.755	10.124	10.604	26.951
Std. Error	0.99	0.162	0.321	0.419	0.439	1.115
Variance	572.553	15.232	60.143	102.492	112.453	726.339
Coef. Var.	82.683	386.56	75.713	177.858	143.817	57.656
Count	584	584	584	584	584	584
Minimum	0	0	0	0	0	0
Maximum	80.83	60.98	77.2	94.86	97.6	100
Range	80.83	60.98	77.2	94.86	97.6	100
Sum	16900.63	589.63	5981.83	3324.18	4306.13	27298.46
Sum of Sqrs.	822893.011	9475.797	96334.635	78674.177	97311.217	1699492.99
Mode	0	0	0	0	0	*
5th %	0	0		0	0	11.2
10th %	1.2	0	1.2	0	0.319	13.699
25th %	6.965	0	4.77	1.105	1.57	22.77
50th %	22.6	0.325	9.6	2.72	4.235	43.6
75th %	52.425	1.005	14	5.8	9.52	68.805
90th %	64.125	2.021	18.826	12	15.613	87.374
95th %	67.6	2.778	67.6	20.83	22.42	93.35
96th %	68.895	3.193	68.895	28.901	25	94.824
97th %	69.892	3.509	69.892	33.424	33.75	96.052
98th %	72.093	5.2	72.093	39.024	41.273	96.086
99th %	75.622	10.06	75.622	49.04	61.364	99.122

Manitouwadge District

	Pz Carb No. %	Pz Sst No. %	Prot Mtsm No. %	Prec Mvcc No. %	Other Prec Mtsm No. %	Prec Gran No. %
Mean	30.544	1.141	10.327	5.182	8.932	43.874
Std. Dev.	22.917	5.097	7.52	8.749	11.238	26.86
Std. Error	1.413	0.314	0.464	0.539	0.693	1.656
Variance	525.183	25.977	56.555	76.538	126.282	721.435
Coef. Var.	75.028	446.67	72.82	168.823	125.819	61.22
Count	263	263	263	263	263	263
Minimum	0	0	0	0	0	0
Maximum	77.586	60.98	58	61.26	68.02	100
Range	77.586	60.98	58	61.26	68.02	100
Sum	8033.149	300.097	2716.082	1362.892	2348.99	11538.801
Sum of Sqrs.	382964.707	7148.33	42867.351	27115.527	54065.816	695266.617
5th%	0	0	0	0	0	10.535
10th %	1.936	0	1.432	0	0	13.722
25th %	11.181	0	4.97	0.98	1.155	20.443
50th %	25.48	0	9.375	2.609	3.797	38.57
75th %	53.04	0.998	14.61	5.599	13.533	64.067
90th %	65.148	1.932	19.63	10.583	23.565	87.508
95th %	67.69	2.783	22.187	21.504	2.783	93.337
96th %	68.118	3.277	23.746	27.768	3.277	94.914
97th %	69.816	4.135	25.184	33.719	4.135	96.11
98th %	70.943	4.626	26.743	42.5	4.626	96.942
99th %	72.639	24.866	36.273	46.107	24.866	99.149

Area Near Mines

	Pz Carb No. %	Pz Sst No. %	Prot Mtsm No. %	Prec Mvcc No. %	Other Prec Mtsm No. %	Prec Gran No. %
Mean	34.019	1.151	9.272	6.313	15.594	33.651
Std. Dev.	21.335	6.906	6.091	9.065	14.424	20.193
Std. Error	2.416	0.782	0.69	1.026	1.633	2.286
Variance	455.165	47.692	37.1	82.173	208.056	407.774
Coeff. Var.	62.714	600.045	65.691	143.581	92.501	60.009
Count	78	78	78	78	78	78
Minimum	0	0	0	0	0	3.571
Maximum	77.586	60.98	26.21	51.786	68.02	100
Range	77.586	60.98	26.21	51.786	68.02	96.429
Sum	2653.484	89.771	723.231	492.45	1216.297	2624.761
Sum of Sqrs.	125316.593	3775.617	9562.677	9436.428	34986.747	119723.796
Mode	42.105	0	0	0	0	21.053
5th %	6.410	0.000	0.000	0.000	0.000	10.700
10th %	9.827	0.000	1.159	0.000	0.921	13.324
25th %	16.949	0.000	5.128	1.087	3.797	17.010
50th %	27.799	0.000	8.627	2.957	13.571	26.823
75th %	56.579	0.633	13.072	7.692	22.420	49.840
90th %	65.066	1.645	18.070	13.541	32.708	61.477
95th %	67.560	2.060	20.770	27.080	42.140	71.090
96th %	67.890	2.340	21.970	28.380	46.070	73.810
97th %	68.720	2.960	21.690	30.960	52.930	76.120
98th %	70.440	4.430	22.980	42.580	66.410	80.240
99th %	75.620	45.180	25.330	49.460	67.860	94.560

APPENDIX B (ii)

Correlation Matrix for Geochemical and Pebble Count Data for Representative Till and Gravel Samples

Key

Pz. Carb	Paleozoic carbonate clasts
Pz. Sdst	Paleozoic sandstone clasts
Prot. Mt.	Proterozoic metasediments
Prec. Gr.	Precambrian Granites
O. Prec.	Other Precambrian metasediments
Prec. M.	Precambrian metavolcanics

Cu <2	Copper in the <0.002 mm fraction
Cu <63	Copper in the <0.063 mm fraction

*r99.95%	100 samples	0.324
	250 samples	0.207
	500 samples	0.147
	1000 samples	0.104

* From Dixon, W.J., and Massey, F.J., Jr., 1969.

Introduction to statistical analysis; New York, McGraw-Hill, p. 569

Correlation Matrix - 1991 and 1992 samples

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Correlation Matrix for Variables: X₁ ... X₅₇

	Pz. Carb.	Pz. Sdst	Prot. Mt...	Prec. Gr...	O. Prec. ...	Prec. M...	Ag <2	Al <2
Pz. Carb.	1							
Pz. Sdst	-.084	1						
Prot. Mtsm	.114	.071	1					
Prec. Gra...	-.744	-.123	-.351	1				
O. Prec. ...	-.031	-.027	-.075	-.396	1			
Prec. Mvcc	-.193	-.059	-.126	-.17	-.037	1		
Ag <2	-.079	-.057	-.059	.069	-.023	.092	1	
Al <2	-.444	-.071	.072	.245	.106	.147	.075	1
As <2	-.125	-.09	.154	.024	.05	.056	-.008	.454
Ba <2	.056	.055	.009	.021	-.082	-.109	.109	-.15
Bi <2	.086	.038	-.06	-.176	.192	.072	-.046	.027
Ca <2	.649	.081	-.002	-.43	-.1	-.172	-.158	-.627
Cd <2	-.068	.682	-.008	-.071	.011	-.039	-.01	-.022
Co <2	-.042	-.098	.022	-.081	.145	.151	.16	.173
Cr <2	-.115	-.024	-.047	.047	.077	.078	.138	.289
Cu <2	.012	.154	-.077	-.146	.133	.173	.133	-.067

Note: 482 cases deleted with missing values.

Correlation Matrix for Variables: X₁ ... X₅₇

	Pz. Carb.	Pz. Sdst	Prot. Mt...	Prec. Gr...	O. Prec. ...	Prec. M...	Aq <2	Al <2
Fe <2	-.252	-.106	-.013	.092	.156	.167	.172	.41
K <2	.323	-.04	-.115	-.134	-.054	-.147	.038	-.304
La <2	.026	.046	-.017	-.01	-.011	-.026	.4	-.011
Mg <2	.574	-.026	-.046	-.341	-.076	-.177	-.079	-.456
Mn <2	.237	-.01	.03	-.242	.094	-.007	.26	-.173
Mo <2	-.351	-.046	-.086	.256	.067	.092	-.11	.214
Na <2	-.336	-.03	-.051	.315	-.073	.041	.049	-.042
Ni <2	-.042	-.057	-.009	-.066	.094	.179	.14	.131
Pb <2	-.026	-.03	-.042	.015	.066	-.012	.41	-.003
Sb <2	-.009	-.024	.041	.041	-.085	-.008	-.063	.075
Sc <2	.184	.045	.06	-.215	.068	.009	.367	.069
V <2	-.276	-.08	-.144	.217	.098	.065	.104	.152
Zn <2	-.025	.397	-.05	-.024	-.014	-.037	.145	-.049
Ag <63	-.023	.089	-.104	.081	-.08	-.022	.186	-.146
Al <63	-.41	-.027	.033	.224	.133	.11	-.056	.603
As <63	-.235	-.067	.011	.127	.158	.002	.069	.289

Correlation Matrix - 1991 and 1992 samples

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Correlation Matrix for Variables: X₁ ... X₅₇

	Pz. Carb.	Pz. Sdst	Prot. Mt...	Prec. Gr...	O. Prec. ...	Prec. M...	Aq <2	Al <2
Au <63	.027	-.042	-.037	.025	-.06	.004	-.063	-.013
Ba <63	-.296	-.028	-.018	.191	.091	.05	.038	.231
Bi <63	.154	.076	.109	-.119	-.086	-.045	-.078	-.09
Ca <63	.794	-.087	.004	-.502	-.112	-.193	-.181	-.646
Cd <63	-.064	.65	.001	-.08	.035	-.044	-.012	-.014
Co <63	-.308	-.041	-.021	.118	.164	.18	.071	.332
Cr <63	-.197	-.031	-.026	.09	.12	.075	.054	.242
Cu <63	-.136	.114	-.058	-.041	.123	.227	.064	.077
Fe <63	-.37	-.03	.001	.188	.127	.153	.044	.366
K <63	.027	.023	-.083	.008	.052	-.08	.029	-.1
La <63	-.152	.137	-.002	.077	.015	.032	.324	.104
Mg <63	.777	-.096	-.004	-.485	-.095	-.21	-.182	-.626
Mn <63	.145	.084	.073	-.229	.097	.059	.115	-.058
Mo <63	-.146	-.032	.009	.078	-.018	.134	-.052	.087
Na <63	.002	.029	-.105	.085	-.116	-.01	-.086	-.049
Ni <63	-.255	-.04	-.022	.094	.133	.169	.06	.281

Correlation Matrix for Variables: X₁ ... X₅₇

	Pz. Carb.	Pz. Sdst	Prot. Mt...	Prec. Gr...	O. Prec. ...	Prec. M...	Aq <2	Al <2
Pb <63	-.109	-.069	-.055	-.003	.145	.14	.252	.305
Pd <63	-.108	.021	-.052	.135	-.057	-.02	-.018	.121
Pt <63	-.072	.024	-.026	.11	-.071	-.037	-.056	.106
Sb <63	.297	-.074	-.006	-.162	-.035	-.117	-.117	-.23
Sc <63	-.057	.105	.098	-.089	.127	.058	.135	.19
Sr <63	.673	-.068	-.038	-.391	-.118	-.191	-.177	-.605
Ti <63	-.515	.009	-.083	.375	.07	.095	-.004	.333
V <63	-.38	-.012	-.063	.264	.071	.088	-.001	.174
Zn <63	-.13	.43	-.048	.029	.029	-.021	.143	.095

Correlation Matrix - 1991 and 1992 samples

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Correlation Matrix for Variables: X₁ ... X₅₇

	As <2	Ba <2	Bi <2	Ca <2	Cd <2	Co <2	Cr <2	Cu <2
As <2	1							
Ba <2	-.23	1						
Bi <2	.015	-.131	1					
Ca <2	-.306	.105	.04	1				
Cd <2	-.049	.11	.113	-.036	1			
Co <2	.186	.084	.065	-.147	-.035	1		
Cr <2	.115	.162	-.029	-.249	.016	.503	1	
Cu <2	-.188	.156	.068	.023	.306	.52	.315	1

Correlation Matrix for Variables: X₁ ... X₅₇

	As <2	Ba <2	Bi <2	Ca <2	Cd <2	Co <2	Cr <2	Cu <2
Fe <2	.408	.138	-.06	-.468	.007	.418	.4	.142
K <2	-.368	.668	.08	.312	.017	.161	.16	.252
La <2	-.051	.295	.15	-.104	.091	.244	.238	.202
Mg <2	-.376	.508	.056	.581	-.014	.155	.192	.232
Mn <2	.028	.245	.079	.071	.042	.613	.242	.308
Mo <2	.32	-.279	-.048	-.335	-.021	-.136	-.079	-.089
Na <2	-.041	-.255	-.109	-.277	-.034	.068	-.081	-.005
Ni <2	.031	.114	-.01	-.123	-.009	.765	.702	.615
Pb <2	.139	-.076	.015	-.137	-.011	.139	.012	.078
Sb <2	.205	-.036	-.01	.065	-.033	-.05	-.081	-.102
Sc <2	-.009	.222	.131	-.074	.078	.323	.393	.206
V <2	.287	.159	-.055	-.389	-.024	.133	.344	-.001
Zn <2	-.156	.19	.101	-.016	.607	.058	.029	.41
Ag <63	-.279	.181	.055	.115	.17	.062	.048	.175
Al <63	.375	-.142	-.076	-.413	-.023	-.001	.083	-.142
As <63	.182	-.215	-.006	-.266	-.034	.011	.067	-.063

Correlation Matrix - 1991 and 1992 samples

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Correlation Matrix for Variables: X₁ ... X₅₇

	As <2	Ba <2	Bi <2	Ca <2	Cd <2	Co <2	Cr <2	Cu <2
Au <63	.185	-.118	.027	.001	-.025	.11	-.018	-.046
Ba <63	.041	.576	-.077	-.196	-.009	.148	.185	-.02
Bi <63	-.023	-.045	-.089	.2	-.026	.01	-.002	.008
Ca <63	-.319	.175	.02	.826	-.044	-.074	-.201	.079
Cd <63	-.05	.128	.114	-.036	.983	-.039	.011	.368
Co <63	.264	.022	.025	-.29	-.03	.608	.367	.283
Cr <63	.21	.047	-.054	-.208	-.018	.422	.691	.188
Cu <63	-.016	.044	.022	-.081	.229	.51	.324	.828
Fe <63	.366	-.026	-.045	-.382	-.017	.229	.193	.015
K <63	-.212	.534	.092	.119	.018	.187	.191	.147
La <63	.038	.186	.146	-.211	.042	.292	.218	.156
Mg <63	-.311	.226	.009	.761	-.05	-.009	-.111	.11
Mn <63	.08	.217	.169	.042	.083	.417	.235	.206
Mo <63	.174	-.019	-.107	-.145	-.023	-.046	.005	-.095
Na <63	-.208	.363	-.018	.147	-.004	.191	.035	.186
Ni <63	.208	-.005	-.03	-.244	-.023	.618	.606	.372

Correlation Matrix for Variables: X₁ ... X₅₇

	As <2	Ba <2	Bi <2	Ca <2	Cd <2	Co <2	Cr <2	Cu <2
Pb <63	.28	-.092	.078	-.221	-.042	.086	.044	-.047
Pd <63	.078	-.095	-.023	-.091	.05	-.019	-.06	-.017
Pt <63	.145	-.064	-.043	-.053	.043	-.014	-.097	-.05
Sb <63	-.1	.093	-.01	.423	-.012	-.059	-.03	.044
Sc <63	.138	.134	.062	-.147	.032	.273	.314	.097
Sr <63	-.39	.3	.048	.77	-.038	.032	-.125	.144
Ti <63	.221	.01	-.049	-.456	-.033	.115	.318	-.041
V <63	.239	.055	-.078	-.327	-.029	.182	.199	.023
Zn <63	.012	.17	.103	-.13	.664	.039	.096	.327

Correlation Matrix - 1991 and 1992 samples

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Correlation Matrix for Variables: X₁ ... X₅₇

	Fe <2	K <2	La <2	Mg <2	Mn <2	Mo <2	Na <2	Ni <2
Fe <2	1							
K <2	.024	1						
La <2	.153	.38	1					
Mg <2	-.161	.791	.218	1				
Mn <2	.286	.452	.471	.39	1			
Mo <2	.245	-.449	-.174	-.561	-.309	1		
Na <2	-.069	-.354	-.089	-.451	-.12	.306	1	
Ni <2	.316	.17	.159	.181	.353	-.073	-.017	1
Pb <2	.203	.008	.091	-.074	.25	.082	.013	.026
Sb <2	-.051	-.085	-.054	-.046	-.096	.012	-.071	-.064
Sc <2	.188	.334	.724	.286	.502	-.324	-.214	.251
V <2	.707	.07	.08	-.107	.066	.309	-.03	.149
Zn <2	.08	.194	.183	.16	.175	-.07	-.087	.072
Ag <63	-.023	.265	.194	.148	.136	-.144	.107	.066
Al <63	.371	-.352	-.175	-.469	-.263	.37	.043	-.017
As <63	.226	-.224	-.019	-.294	-.076	.192	.117	-.033

Correlation Matrix for Variables: X₁ ... X₅₇

	Fe <2	K <2	La <2	Mg <2	Mn <2	Mo <2	Na <2	Ni <2
Au <63	.033	-.082	-.066	-.075	.012	.013	.151	-.033
Ba <63	.35	.259	.078	.073	.072	-.028	-.163	.093
Bi <63	-.109	-.005	-.128	.095	-.024	.011	-.048	.057
Ca <63	-.412	.415	-.075	.683	.17	-.385	-.212	-.082
Cd <63	.015	.024	.076	-.01	.036	-.018	-.047	-.013
Co <63	.544	-.017	.081	-.139	.248	.16	.061	.452
Cr <63	.424	-.009	.017	-.008	.126	.159	.033	.5
Cu <63	.271	.042	.062	-.001	.162	.125	.075	.586
Fe <63	.661	-.166	-.006	-.325	.034	.368	.07	.13
K <63	.188	.742	.245	.492	.317	-.228	-.292	.156
La <63	.267	.255	.599	.025	.395	-.077	.023	.194
Mg <63	-.339	.46	-.046	.736	.212	-.385	-.196	-.022
Mn <63	.342	.392	.31	.285	.723	-.203	-.223	.253
Mo <63	.323	-.214	-.144	-.235	-.177	.381	.067	-.003
Na <63	.085	.535	.14	.437	.205	-.187	-.177	.123
Ni <63	.428	-.069	.007	-.098	.152	.214	.084	.724

Correlation Matrix - 1991 and 1992 samples

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Correlation Matrix for Variables: $X_1 \dots X_{57}$

	Fe <2	K <2	La <2	Mg <2	Mn <2	Mo <2	Na <2	Ni <2
Pb <63	.374	-.123	-.021	-.225	.058	.194	-.14	.019
Pd <63	.012	-.094	-.012	-.139	-.06	.084	.073	-.03
Pt <63	-.024	-.103	-.05	-.14	-.08	.12	.087	-.069
Sb <63	-.158	.189	-.068	.309	.006	-.067	-.137	-.028
Sc <63	.362	.138	.338	.042	.267	-.062	-.158	.213
Sr <63	-.307	.597	.028	.774	.292	-.425	-.249	-.018
Ti <63	.499	-.127	-.074	-.265	-.136	.349	.068	.119
V <63	.574	-.066	-.006	-.224	.016	.381	.162	.109
Zn <63	.222	.075	.148	-.016	.102	.081	-.111	.055

Correlation Matrix for Variables: $X_1 \dots X_{57}$

	Pb <2	Sb <2	Sc <2	V <2	Zn <2	Ag ppm	Al <63	As <63
Pb <2	1							
Sb <2	.005	1						
Sc <2	.072	-.085	1					
V <2	.267	-.037	.065	1				
Zn <2	.348	-.047	.107	.029	1			
Ag <63	-.058	.04	.194	-.052	.215	1		
Al <63	-.074	.009	-.194	.173	-.096	-.091	1	
As <63	.116	.047	-.021	.125	-.038	-.014	.42	1

Correlation Matrix - 1991 and 1992 samples

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Correlation Matrix for Variables: X₁ ... X₅₇

	Pb <2	Sb <2	Sc <2	V <2	Zn <2	Ag ppm	Al <63	As <63
Au <63	.003	.07	-.07	-.018	-.06	-.023	.103	-.033
Ba <63	-.092	-.029	-2.62E-5	.273	.053	.153	.511	.075
Bi <63	-.055	-.018	-.081	-.126	-.048	-.058	-.027	-.068
Ca <63	-.124	-.021	.02	-.377	-.003	.074	-.497	-.315
Cd <63	-.013	-.035	.062	-.017	.597	.153	-.018	-.014
Co <63	.047	-.077	.077	.32	.03	.104	.632	.284
Cr <63	.037	-.067	.053	.368	.001	.038	.549	.283
Cu <63	.029	-.103	.067	.094	.288	.161	.289	.122
Fe <63	.068	-.057	-.051	.471	.004	-1.35E-4	.811	.386
K <63	-.029	-.067	.169	.175	.162	.295	.121	-.006
La <63	.061	-.059	.514	.124	.115	.308	.14	.173
Mg <63	-.121	-.03	.058	-.311	.01	.085	-.442	-.291
Mn <63	.144	-.095	.366	.142	.17	.193	.161	.061
Mo <63	-.003	-.03	-.191	.265	-.076	-.105	.401	.224
Na <63	-.123	-.039	.07	-.008	.133	.222	.084	-.096
Ni <63	.024	-.07	.033	.287	-.001	.026	.522	.242

Correlation Matrix for Variables: X₁ ... X₅₇

	Pb <2	Sb <2	Sc <2	V <2	Zn <2	Ag ppm	Al <63	As <63
Pb <63	.582	-.072	-.003	.309	.172	-.188	.398	.2
Pd <63	-.079	.07	-.06	-.073	.042	.067	.242	.001
Pt <63	-.056	.174	-.103	-.088	.007	.037	.247	-.051
Sb <63	-.084	-.015	-.029	-.14	-.055	-.004	-.041	.009
Sc <63	-.03	-.086	.557	.195	.045	.226	.473	.25
Sr <63	-.106	-.044	.058	-.303	.081	.181	-.423	-.279
Ti <63	.121	-.023	-.136	.635	.02	-.006	.572	.267
V <63	.093	-.069	-.091	.625	.03	.072	.629	.288
Zn <63	.297	-.065	.049	.159	.793	.161	.18	.031

Correlation Matrix - 1991 and 1992 samples

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Correlation Matrix for Variables: X₁ ... X₅₇

	Au <63	Ba <63	Bi <63	Ca <63	Cd <63	Co <63	Cr <63	Cu <63
Au <63	1							
Ba <63	.009	1						
Bi <63	-.095	-.03	1					
Ca <63	-.006	-.255	.176	1				
Cd <63	-.028	.002	-.026	-.046	1			
Co <63	.102	.565	-.005	-.346	-.025	1		
Cr <63	.074	.461	.04	-.25	-.013	.743	1	
Cu <63	4.693E-4	.223	.054	-.087	.288	.644	.51	1
Fe <63	.075	.559	-.054	-.459	-.011	.817	.685	.438
K <63	-.038	.604	.024	.107	.024	.416	.38	.24
La <63	.04	.303	-.047	-.321	.037	.424	.265	.242
Mg <63	-.011	-.181	.175	.975	-.051	-.252	-.138	-.028
Mn <63	-.011	.399	.003	.05	.079	.554	.422	.334
Mo <63	-.043	.188	-.054	-.17	-.023	.224	.28	.106
Na <63	-.058	.389	.055	.135	-.011	.332	.171	.247
Ni <63	.06	.406	.031	-.291	-.021	.827	.874	.69

Correlation Matrix for Variables: X₁ ... X₅₇

	Au <63	Ba <63	Bi <63	Ca <63	Cd <63	Co <63	Cr <63	Cu <63
Pb <63	-.024	.217	-.088	-.281	-.034	.332	.264	.122
Pd <63	.513	.106	.001	-.104	.04	.096	.035	.057
Pt <63	.565	.118	.043	-.074	.035	.091	.055	.036
Sb <63	-.061	.036	.177	.419	.014	-.001	.06	.074
Sc <63	.002	.465	.032	-.205	.024	.633	.531	.374
Sr <63	-.009	-.064	.195	.904	-.038	-.168	-.115	.005
Ti <63	-.005	.478	-.001	-.568	-.026	.606	.64	.287
V <63	.033	.535	.007	-.389	-.026	.75	.663	.419
Zn <63	-.031	.244	-.05	-.169	.663	.223	.229	.372

Correlation Matrix - 1991 and 1992 samples

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Correlation Matrix for Variables: $X_1 \dots X_{57}$

	Fe <63	K <63	La <63	Mg <63	Mn <63	Mo <63	Na <63	Ni <63
Fe <63	1							
K <63	.311	1						
La <63	.34	.416	1					
Mg <63	-.371	.176	-.265	1				
Mn <63	.435	.583	.526	.116	1			
Mo <63	.536	-.042	-.033	-.134	.027	1		
Na <63	.226	.658	.305	.187	.385	.018	1	
Ni <63	.643	.295	.267	-.199	.382	.251	.186	1

Correlation Matrix for Variables: $X_1 \dots X_{57}$

	Fe <63	K <63	La <63	Mg <63	Mn <63	Mo <63	Na <63	Ni <63
Pb <63	.465	.061	.151	-.259	.219	.303	-.034	.255
Pd <63	.12	.006	.063	-.107	-.01	-.032	-.017	.062
Pt <63	.123	-3.95E-4	.031	-.074	-.021	-.019	-.041	.063
Sb <63	-.022	.185	-.128	.427	.073	.061	.229	.016
Sc <63	.605	.474	.657	-.121	.626	.143	.304	.492
Sr <63	-.313	.391	-.119	.895	.225	-.158	.389	-.18
Ti <63	.744	.326	.236	-.486	.201	.386	.224	.534
V <63	.902	.368	.323	-.289	.371	.473	.275	.585
Zn <63	.277	.235	.185	-.14	.249	.086	.108	.187

Correlation Matrix for Variables: X₁ ... X₅₇

Pb <63	Pd <63	Pt <63	Sb <63	Sc <63	Sr <63	Ti <63	V <63
1							
-.035	1						
-.03	.909	1					
-.027	-.069	-.086	1				
.241	.06	.044	.014	1			
-.267	-.084	-.073	.402	-.059	1		
.317	.034	.025	-.093	.398	-.371	1	
.341	.078	.08	-.01	.526	-.209	.839	1
.361	.032	.033	-.047	.193	-.08	.245	.254

Correlation Matrix for Variables: X₁ ... X₅₇

Zn <63	Zn <63
	1

APPENDIX C

Manitouwadge-Hornpayne Region

C (i) Maps of Selected Paleozoic and Precambrian Lithologies
in the Pebble Fraction (5.0-16.0 mm) of Till

Maps of Selected Trace, Minor, and Major Elements in the
 <0.002 mm and <0.063 mm Fractions of Till

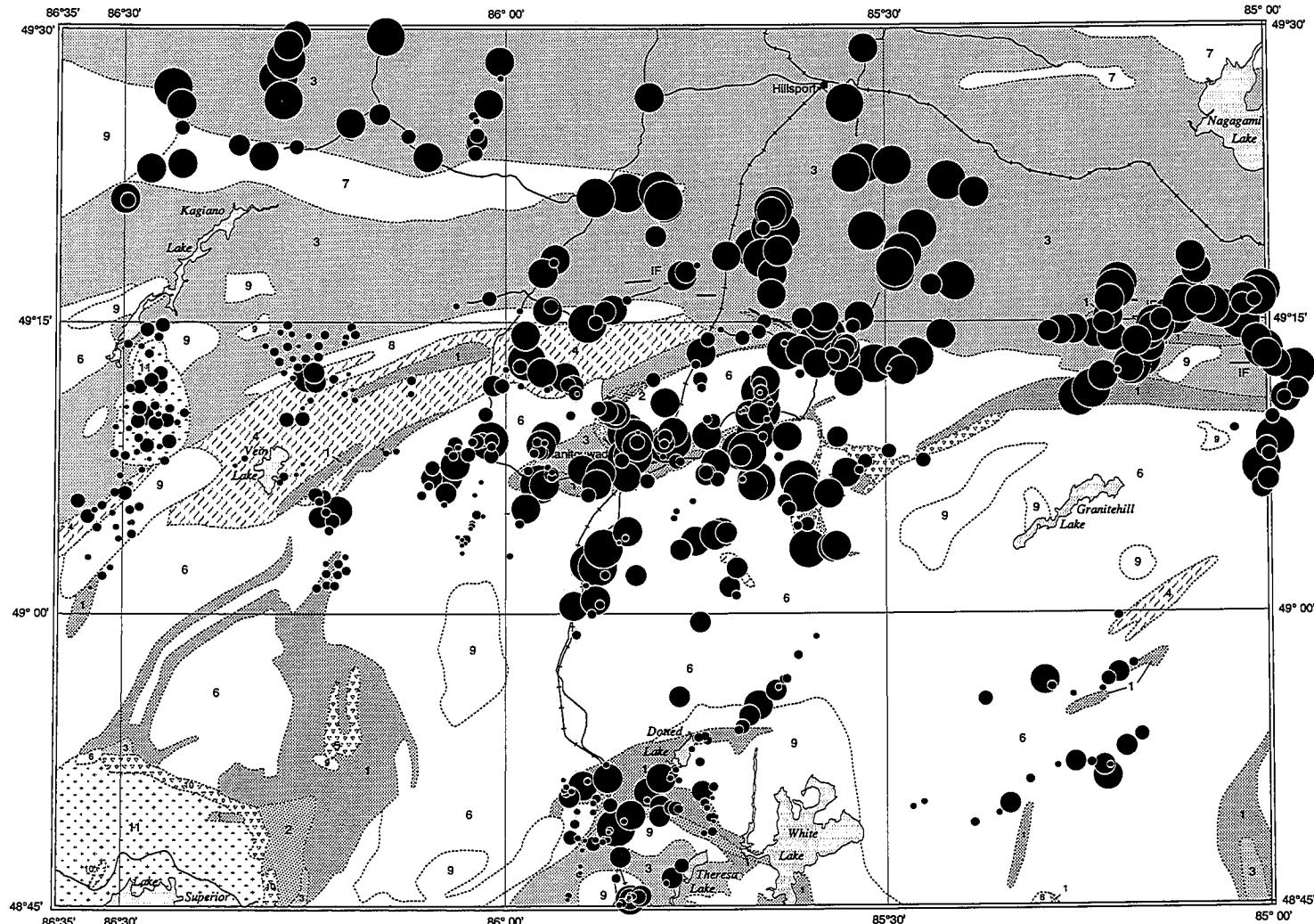
C (ii) Maps of Selected Elements in Lake Sediments and Water, Based on Data
Collected by Mineral Resources Division (Friske et al., 1992a,b).

APPENDIX C (i)

Manitouwadge-Hornpayne Region

Maps of Selected Paleozoic and Precambrian Lithologies
in the Pebble Fraction (5.0-16.0 mm) of Till

Maps of Ag, As, Ba, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, Sb,
Sr, V, and Zn in the <0.002 mm and <0.063 mm Fractions of Till
and Pd, Pt and Au in the <0.063 mm Fraction of Till



Symbol Legend
Carbonate Clasts (number %)

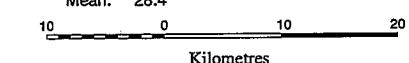
	MIN.	MAX.	#SAMP	%TILE
•	0	0	38	6.7
•	0	7	108	25.6
•	7	15	101	43.3
•	15	30	86	58.4
•	30	45	59	68.8
•	45	60	99	86.1
•	60	80.83	79	100

Paleozoic carbonate clasts in the 5.6 - 16mm fraction of till

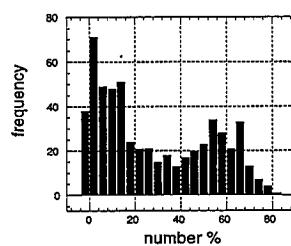
Summary Statistics

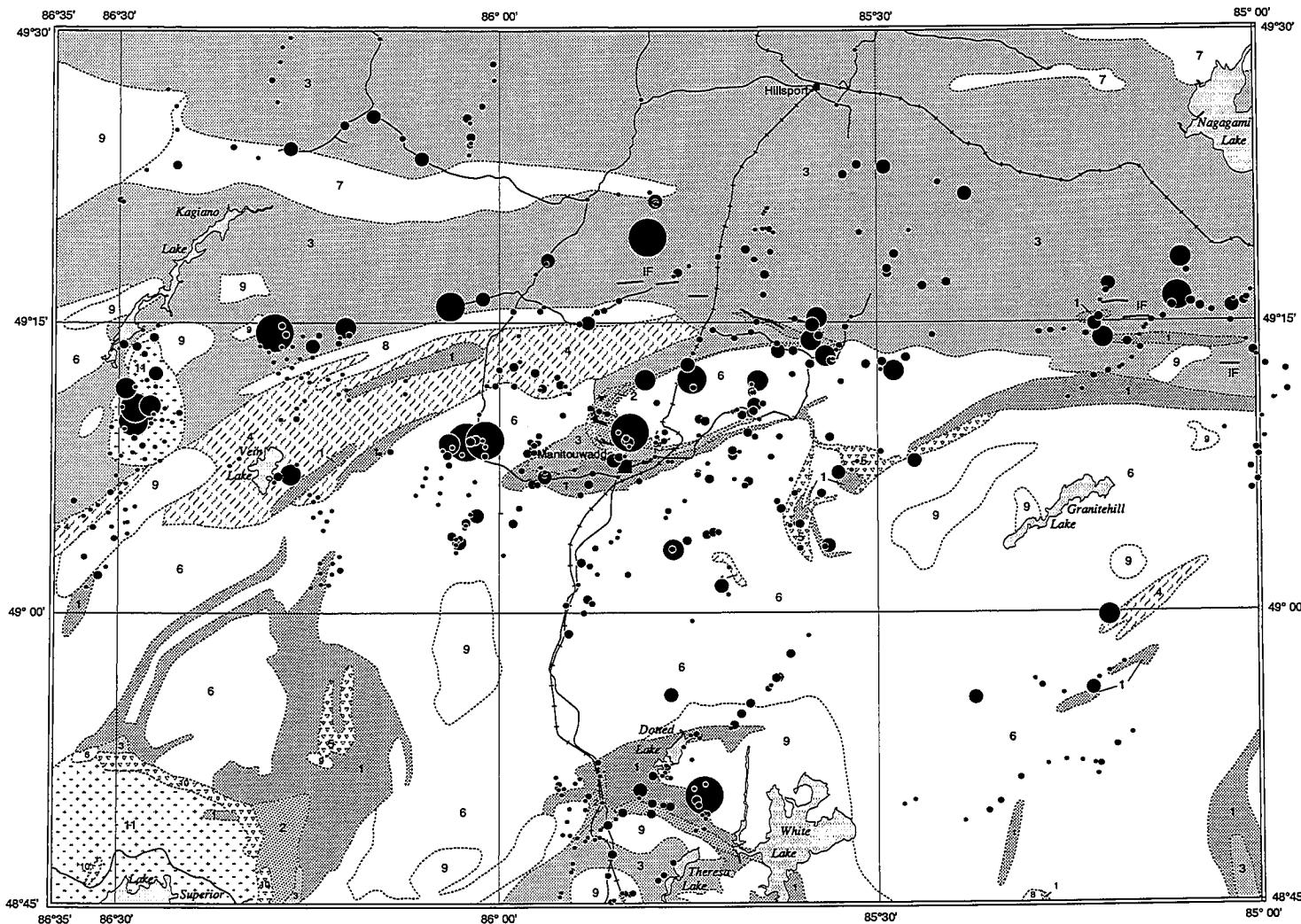
Number of Samples: 570
Minimum: 0
Maximum: 80.83
Mean: 28.4

Median: 20.6
Standard Deviation: 23.8
Coefficient of Variation: 0.8



Frequency Histogram





Symbol Legend
Paleozoic Sandstone Clasts (number %)

	MIN.	MAX.	#SAMP	%TILE
•	0	0	277	48.6
•	0	1	150	74.9
1	2	86	90	
2	3	30	95.3	
3	5	15	97.9	
5	10	6	98.9	
10	60.98	6	100	

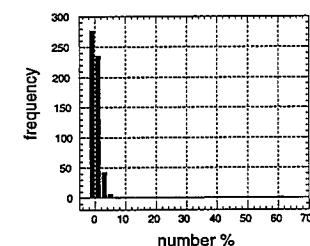
Paleozoic sandstone clasts in the 5.6 - 16mm fraction of till

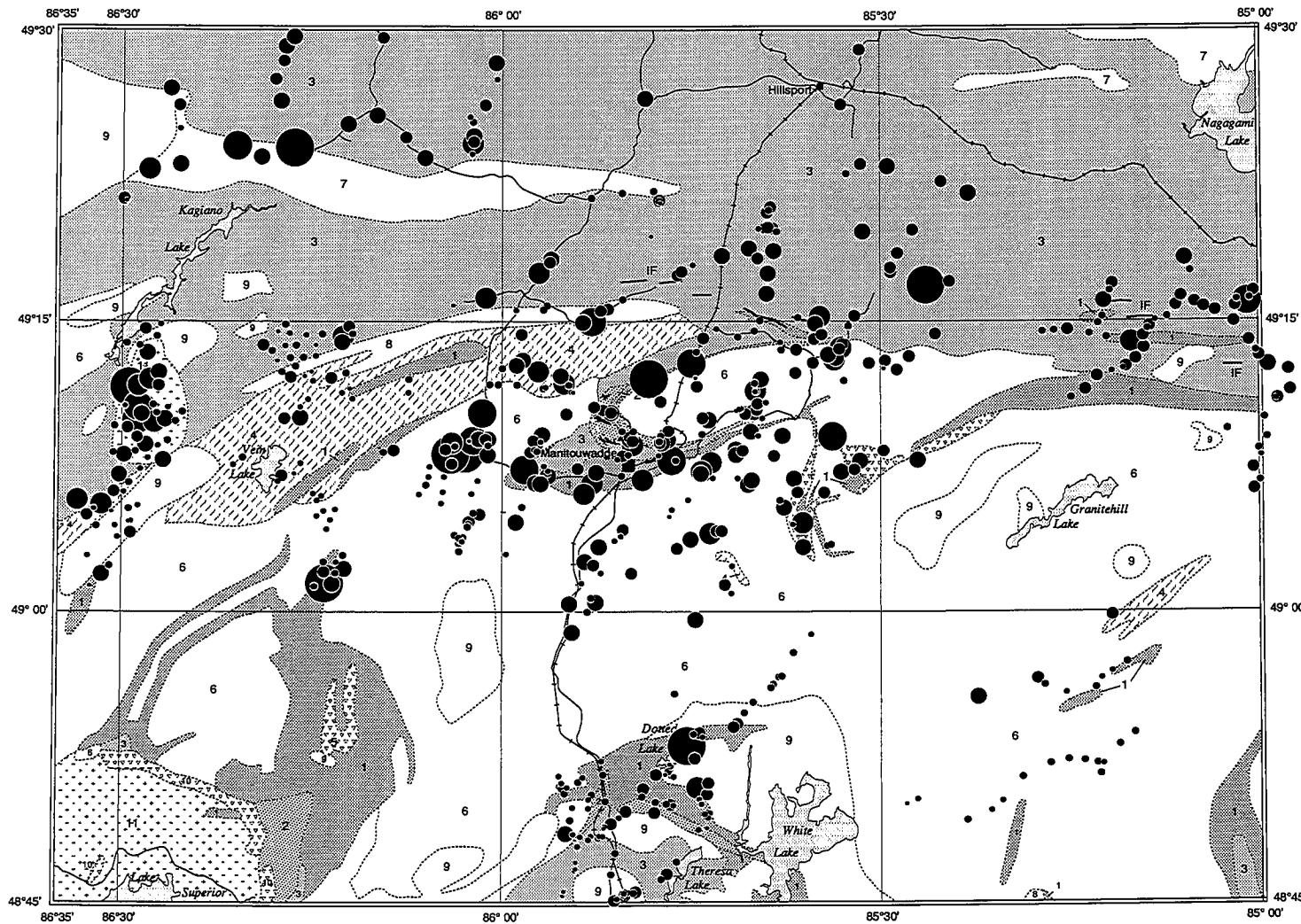
Summary Statistics

Number of Samples: 570 Median: 0.3
 Minimum: 0 Standard Deviation: 3.9
 Maximum: 60.98 Coefficient of Variation: 3.9
 Mean: 1.0



Frequency Histogram





Symbol Legend
Proterozoic Clasts (number %)

	MIN.	MAX.	#SAMP	%TILE
.	0	0	30	5.3
.	0	5	126	27.4
5	5	10	147	53.2
10	10	15	139	77.5
15	15	20	82	91.9
20	20	25	27	96.7
25	25	30	11	98.6
30	77.2	8	100	

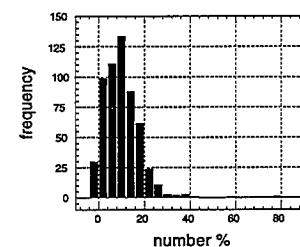
Proterozoic metasediment clasts in the 5.6 - 16mm fraction of till

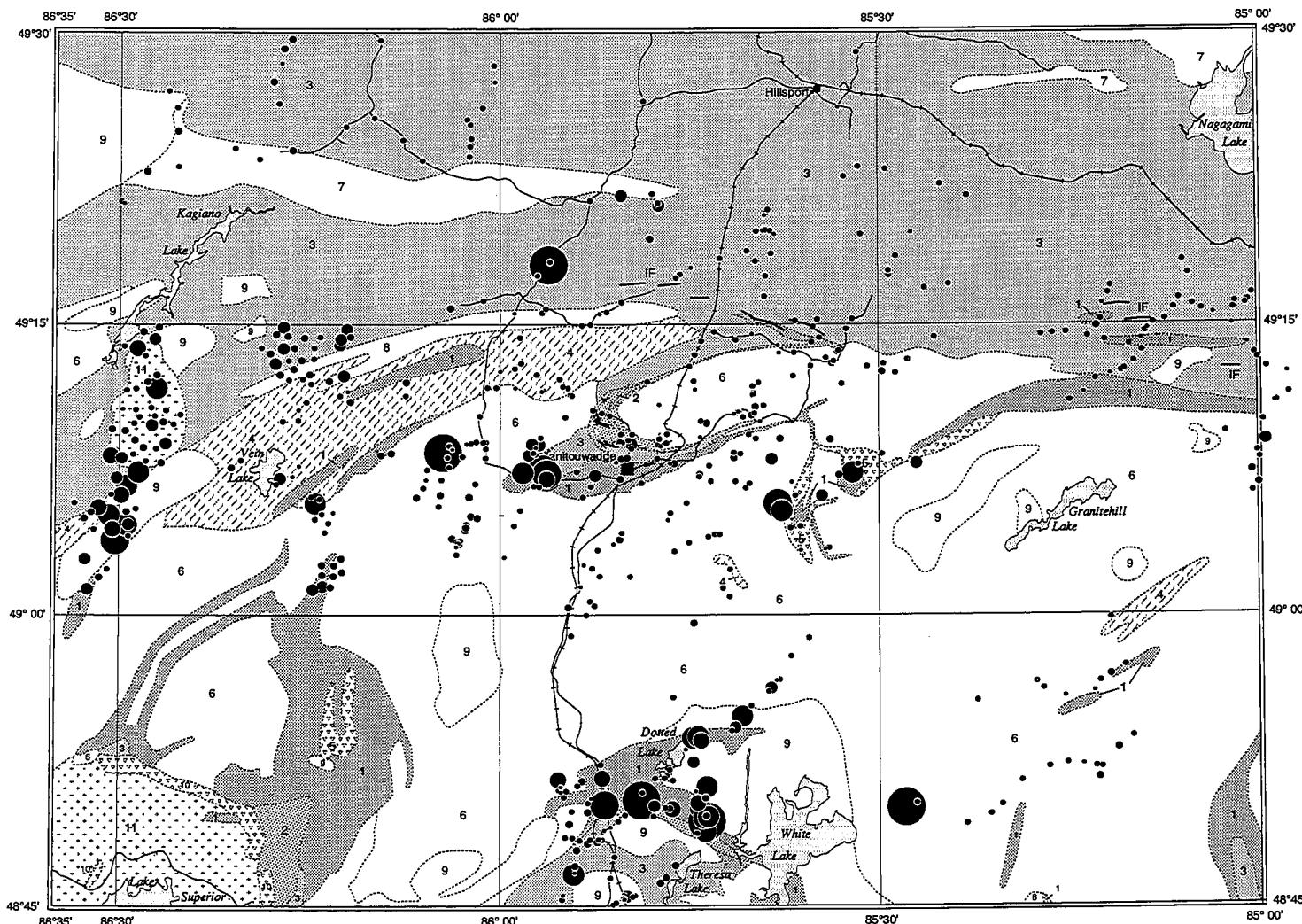
Summary Statistics

Number of Samples: 570
 Median: 9.6
 Minimum: 0
 Standard Deviation: 7.8
 Maximum: 77.2
 Coefficient of Variation: 0.8
 Mean: 10.2



Frequency Histogram





Symbol Legend
Metavolcanic Clasts (number %)

	MIN.	MAX.	#SAMP	%TILE
•	0	0	74	13
•	0	5	329	70.7
•	5	10	93	87
•	10	15	34	93
•	15	20	11	94.9
•	20	40	18	98.1
•	40	50	6	99.1
•	50	93.22	5	100

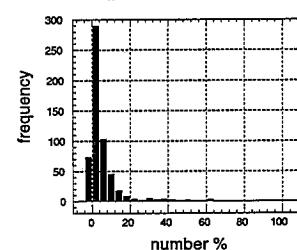
Metavolcanic clasts in the 5.6 - 16mm fraction of till

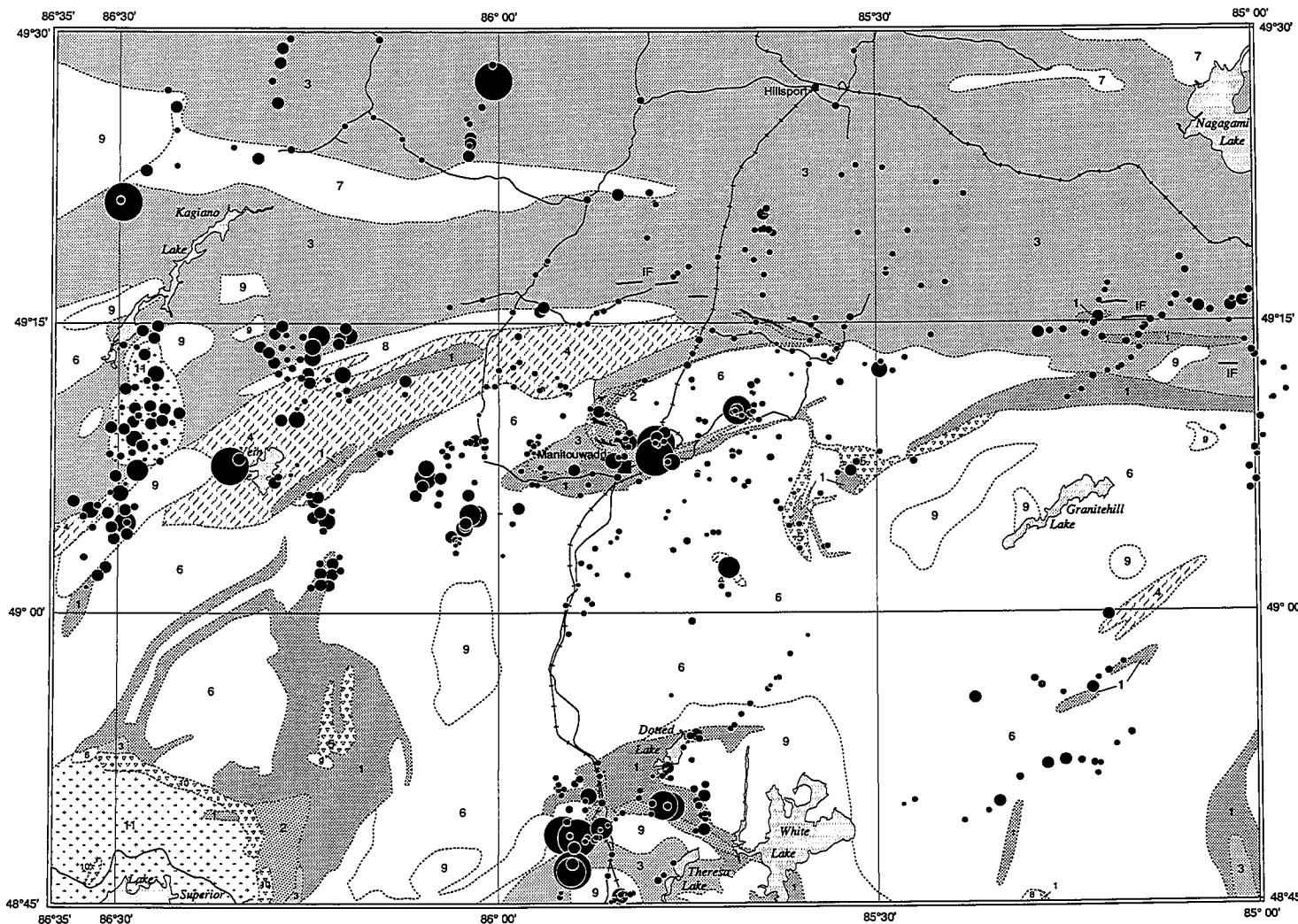
Summary Statistics

Number of Samples: 570 Median: 2.7
 Minimum: 0 Standard Deviation: 9.5
 Maximum: 93.22 Coefficient of Variation: 1.7
 Mean: 5.6



Frequency Histogram





Symbol Legend
Metasediment Clasts (number %)

MIN.	MAX.	#SAMP	%TILE
0	0	51	8.9
0	5	267	55.8
5	10	121	77
10	20	93	93.3
20	30	18	96.5
30	40	8	97.9
40	50	4	98.6
50	97.6	8	100

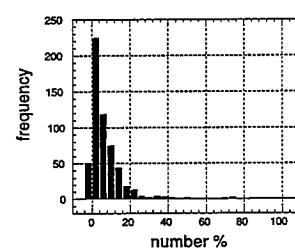
Metasediment clasts in the 5.6 - 16mm fraction of till

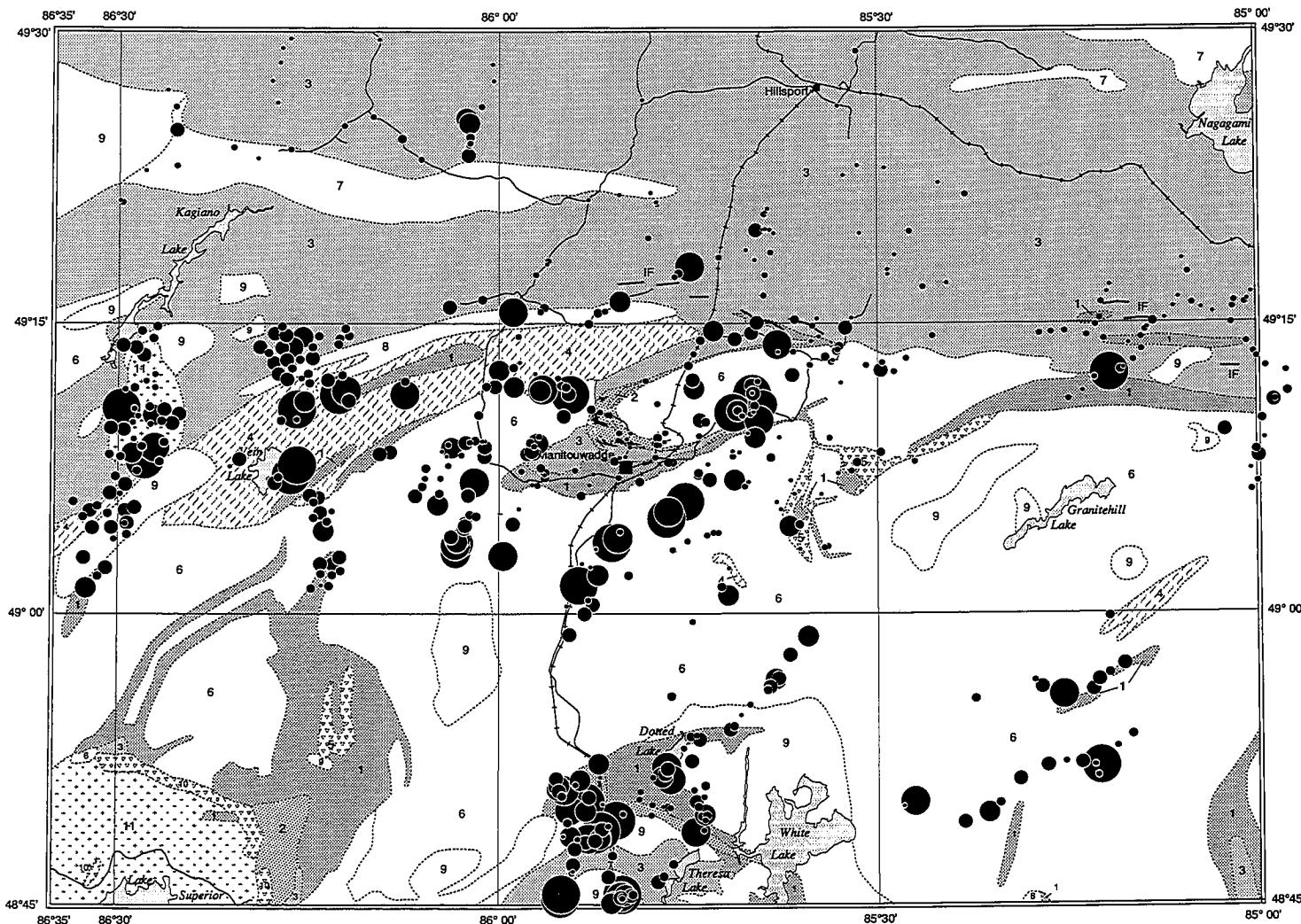
Summary Statistics

Number of Samples: 570 Median: 4.3
 Minimum: 0 Standard Deviation: 10.7
 Maximum: 97.6 Coefficient of Variation: 1.4
 Mean: 7.5



Frequency Histogram





Symbol Legend
Granite Clasts (number %)

	MIN.	MAX.	#SAMP	%TILE
•	0	20	109	19.1
•	20	40	148	45.1
•	40	60	117	65.6
•	60	80	105	84
•	80	90	42	91.4
•	90	95	27	96.1
•	95	100	22	100

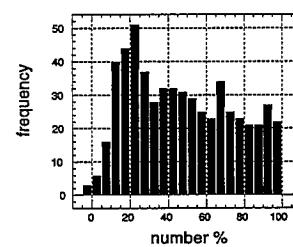
Granite clasts in the 5.6 - 16mm fraction of till

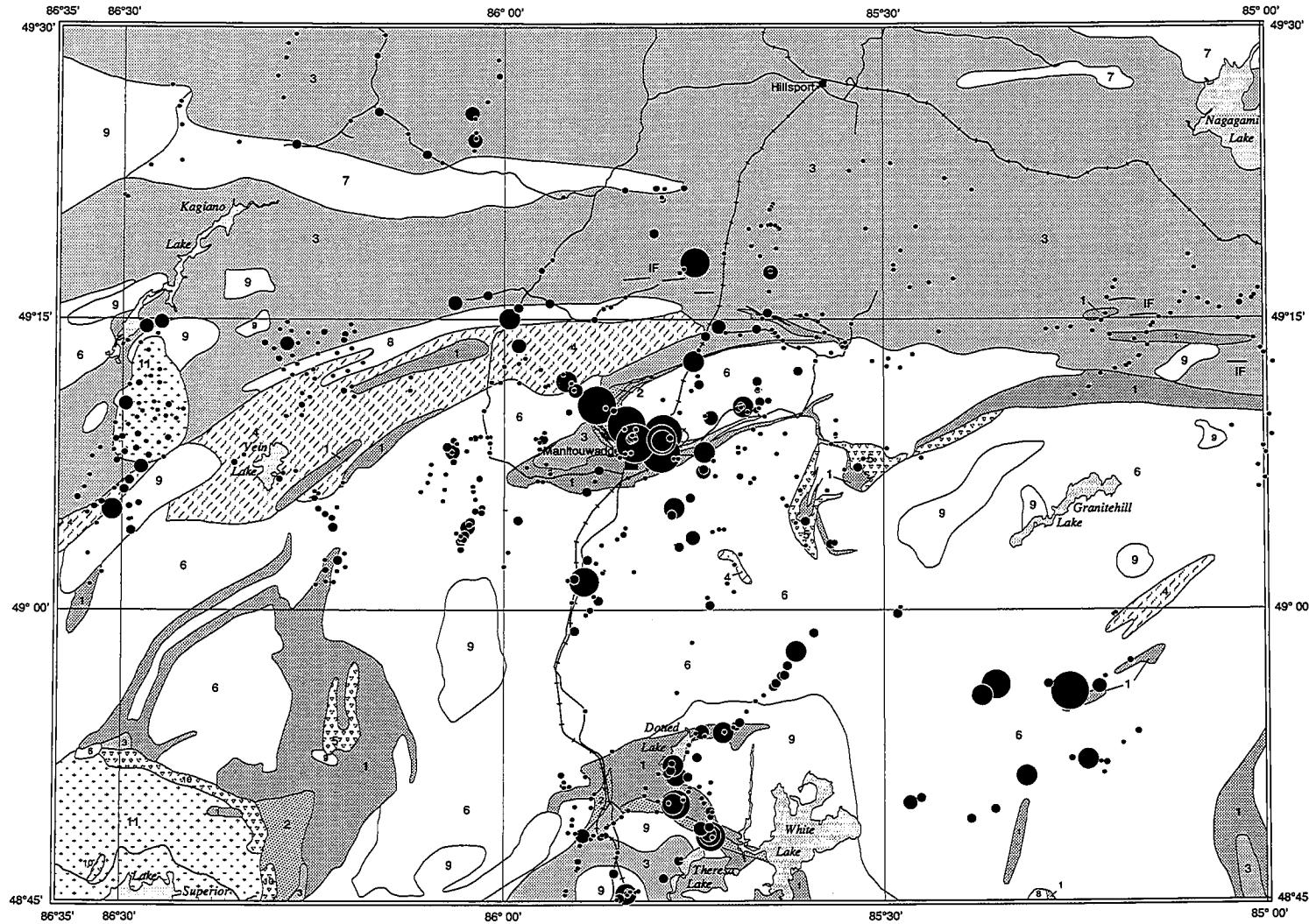
Summary Statistics

Number of Samples: 570
 Median: 44.5
 Minimum: 0
 Standard Deviation: 27.1
 Maximum: 100
 Coefficient of Variation: 0.6
 Mean: 47.4



Frequency Histogram





Symbol Legend
Silver (ppm)

	MIN.	MAX.	#SAMP	%TILE
.	0.1	0.1	410	68
•	0.1	0.2	73	80.1
●	0.2	0.4	67	91.2
●●	0.4	0.6	23	95
●●●	0.6	1.0	18	98
●●●●	1.0	1.3	6	99
●●●●●	1.3	10.9	6	100

Silver in the <0.002 mm fraction of till

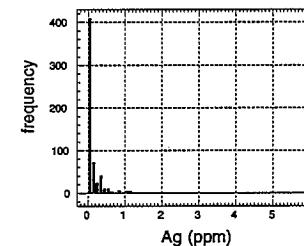
Summary Statistics

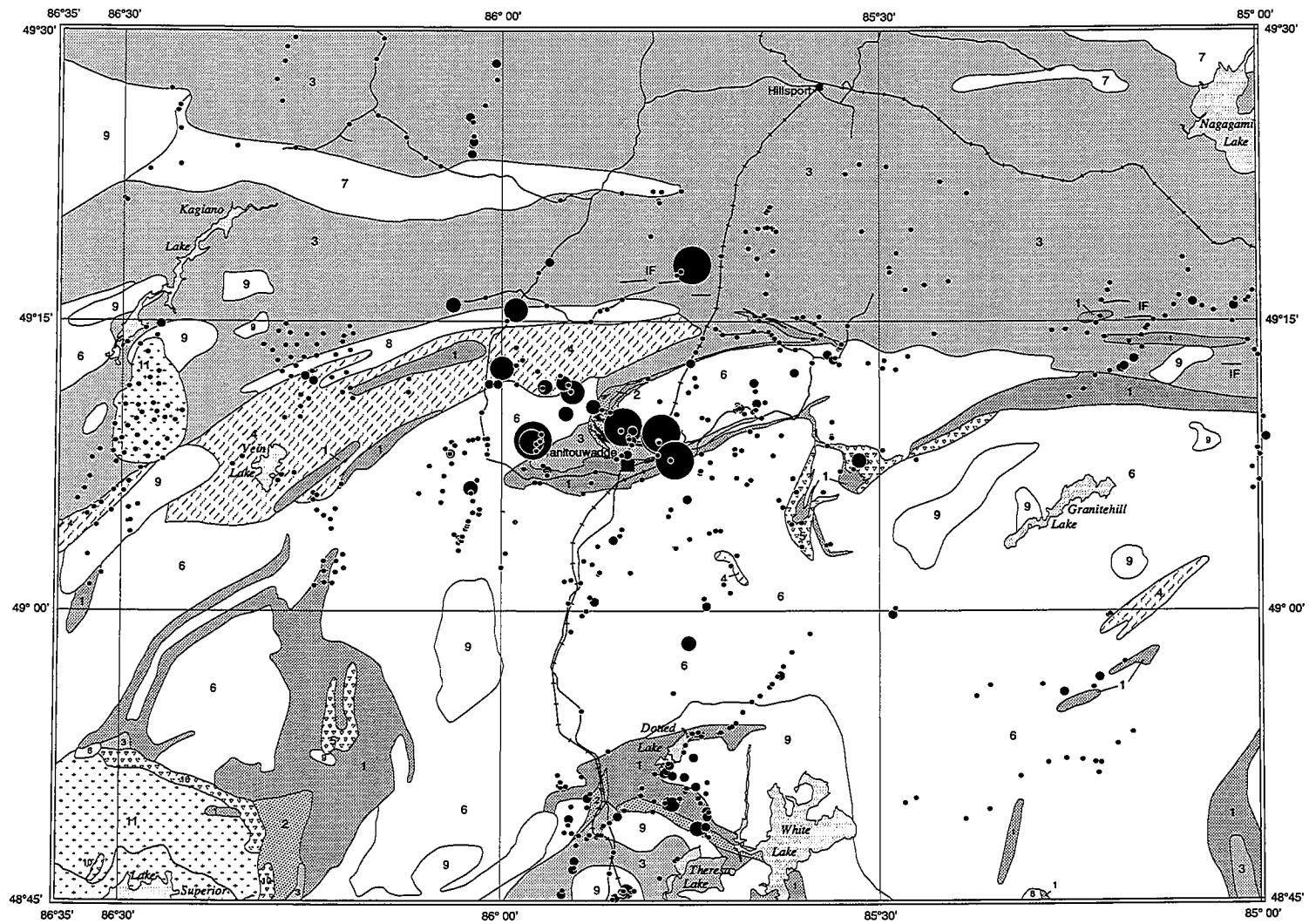
Number of Samples: 603
 Minimum: 0.1
 Maximum: 10.9
 Mean: 0.2

Median: 0.1
 Standard Deviation: 0.54
 Coefficient of Variation: 2.3



Frequency Histogram





Symbol Legend
Silver (ppm)

MIN.	MAX.	#SAMP	%TILE
0.1	0.1	525	86.8
0.1	0.2	58	96.4
0.2	0.3	12	98.3
0.3	0.4	4	99
0.4	6.6	6	100

Silver in the <0.063 mm fraction of till

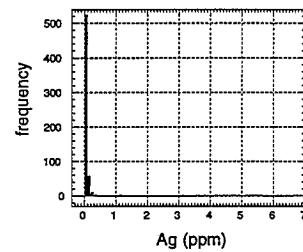
Summary Statistics

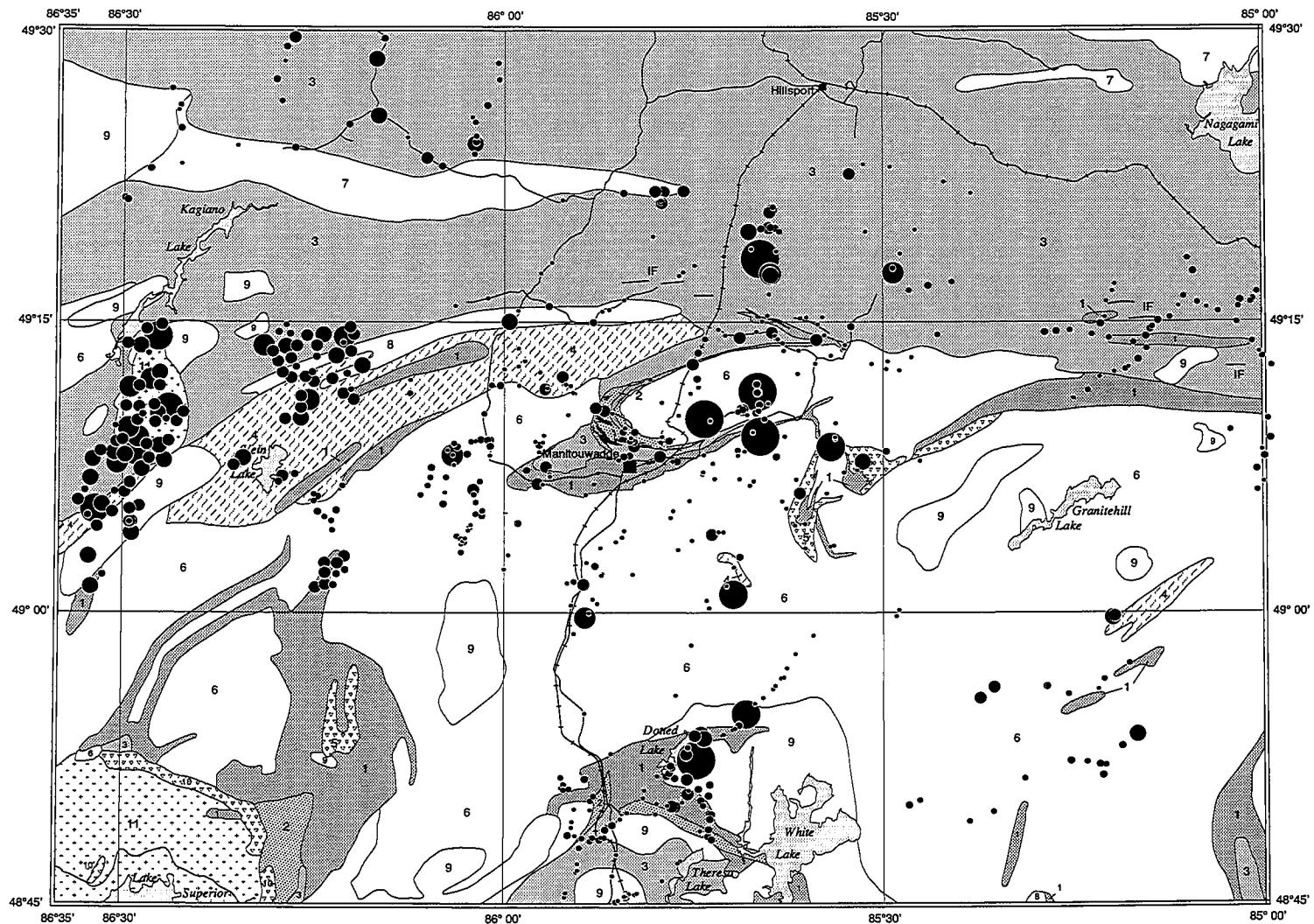
Number of Samples: 605
 Minimum: 0.1
 Maximum: 6.6
 Mean: 0.13

Median: 0.1
 Standard Deviation: 0.28
 Coefficient of Variation: 2.09



Frequency Histogram





Symbol Legend
Arsenic (ppm)

	MIN.	MAX.	#SAMP	%TILE
.	1	2	234	38.8
•	2	6	102	55.7
●	6	14	122	76
●●	14	24	90	90.9
●●●	24	30	31	96
●●●●	30	39	12	98
●●●●●	39	42	7	99.2
●●●●●●	42	61	5	100

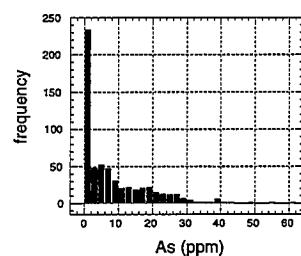
Arsenic in the <0.002 mm fraction of till

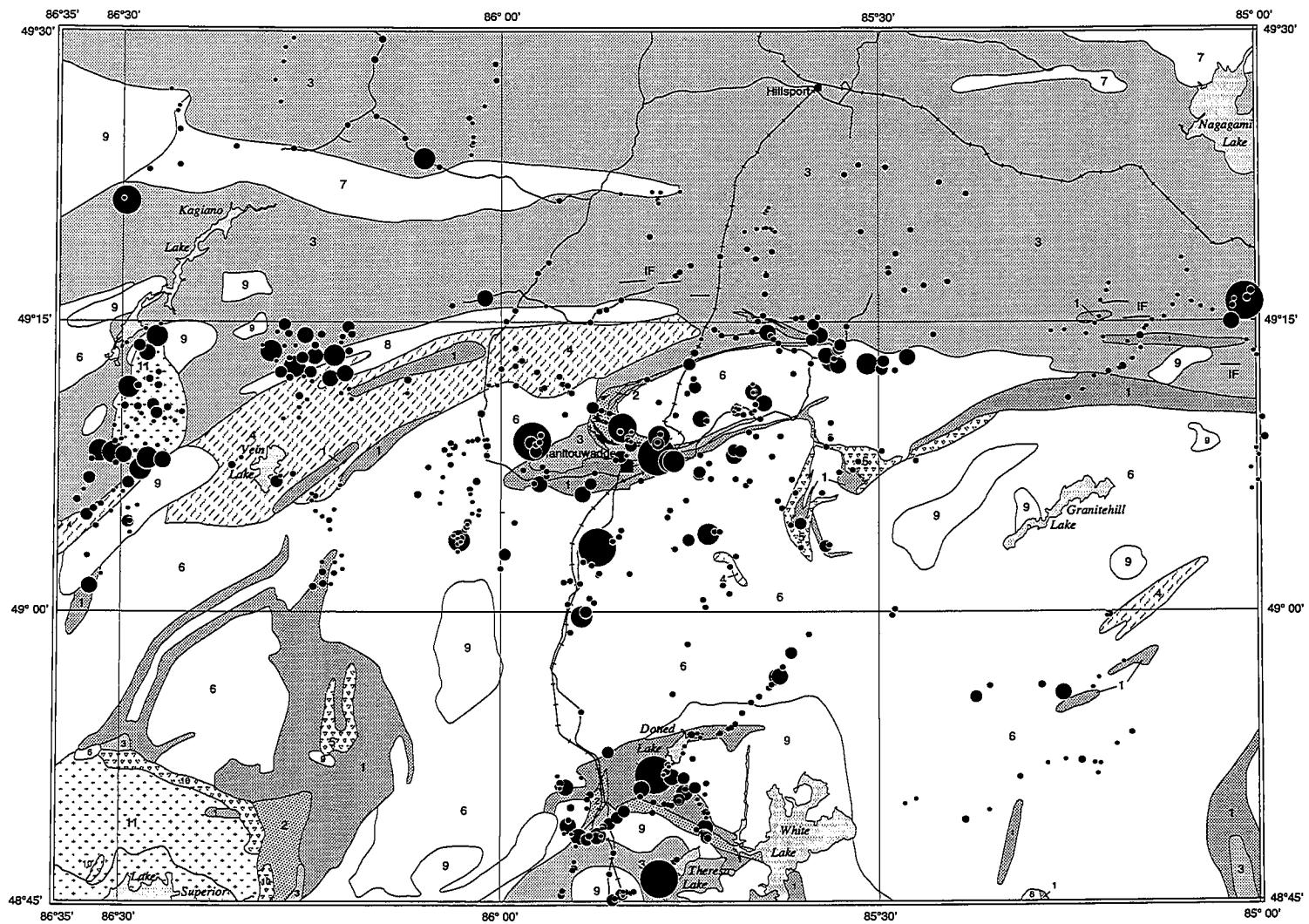
Summary Statistics

Number of Samples: 603
 Minimum: 1
 Maximum: 61
 Mean: 9.6
 Median: 6
 Standard Deviation: 9.9
 Coefficient of Variation: 1.0



Frequency Histogram





Symbol Legend
Arsenic (ppm)

	MIN.	MAX.	#SAMP	%TILE
•	1	1	195	32.2
•	1	2	246	72.9
•	2	4	50	81.2
•	4	7	55	90.2
•	7	9	33	95.7
•	9	12	18	98.7
•	12	14	2	99
•	14	27	6	100

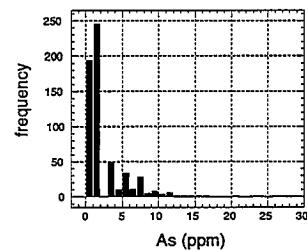
Arsenic in the <0.063 mm fraction of till

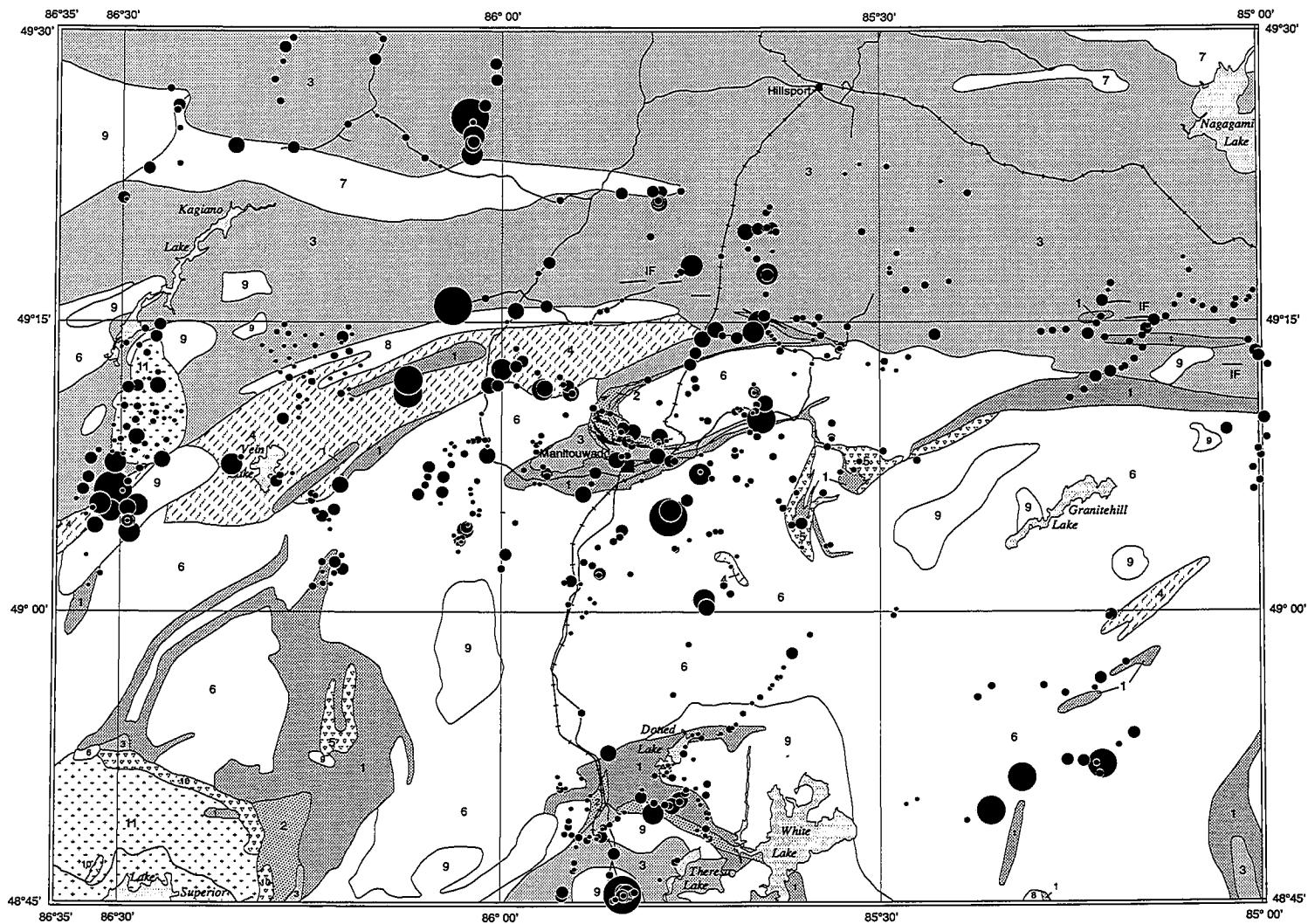
Summary Statistics

Number of Samples: 605
 Minimum: 1
 Maximum: 27
 Mean: 3.0
 Median: 2
 Standard Deviation: 3.1
 Coefficient of Variation: 1.0



Frequency Histogram





Symbol Legend
Barium (ppm)

	MIN.	MAX.	#SAMP	%TILE
.	30	90	167	27.7
•	90	116	136	50.2
●	116	154	152	75.5
●●	154	208	88	90
●●●	208	246	30	95
●●●●	246	303	18	98
●●●●●	303	379	6	99
●●●●●●	379	788	6	100

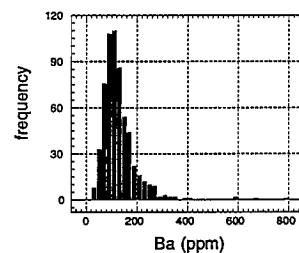
Barium in the <0.002 mm fraction of till

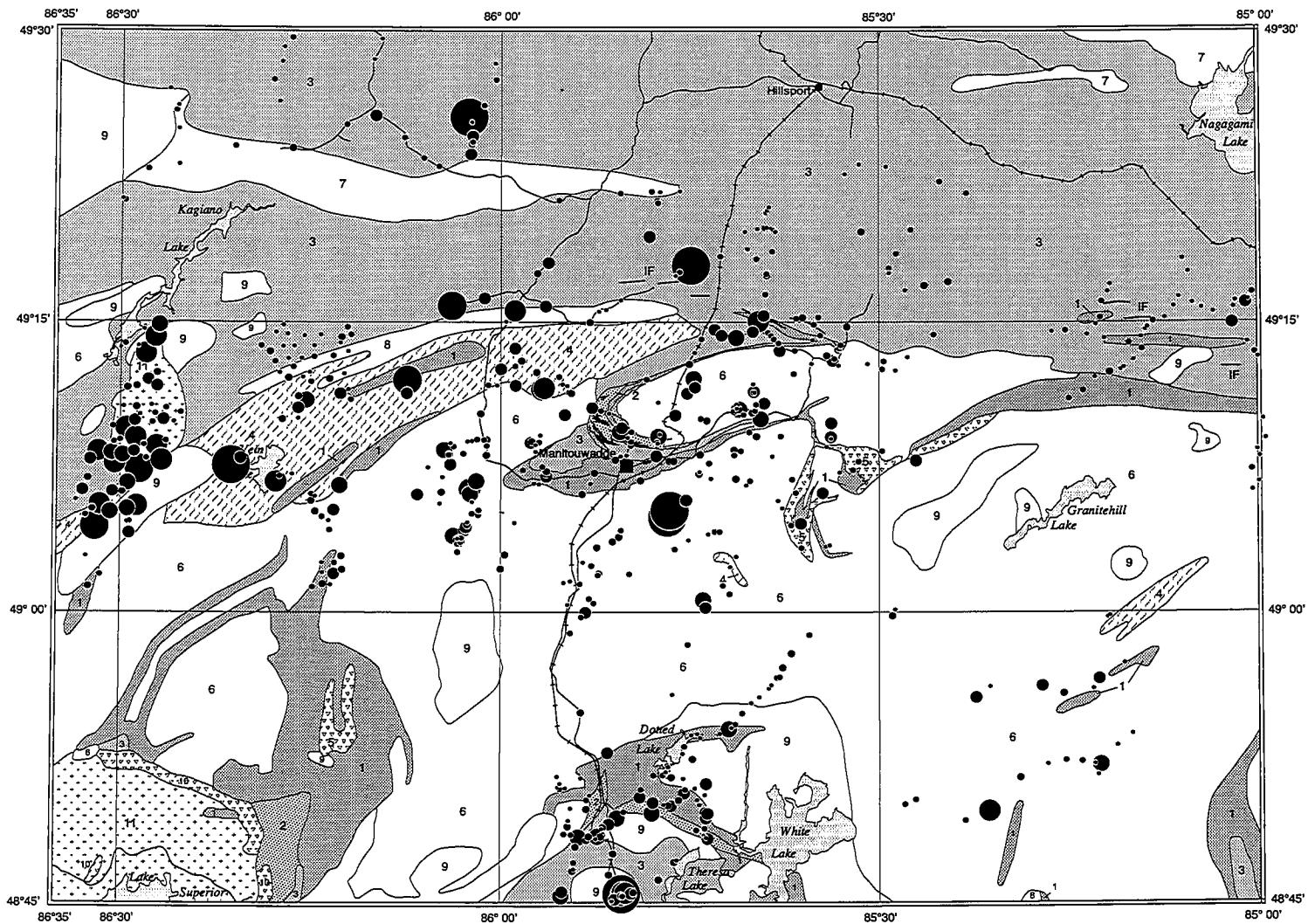
Summary Statistics

Number of Samples: 603
 Minimum: 30
 Maximum: 788
 Mean: 131.6
 Median: 116
 Standard Deviation: 71.6
 Coefficient of Variation: 0.5



Frequency Histogram





Symbol Legend
Barium (ppm)

	MIN.	MAX.	#SAMP	%TILE
•	9	20	206	34
•	20	30	175	63
•	30	40	94	78.5
•	40	60	74	90.7
•	60	78	26	95
•	78	100	20	98.3
•	100	135	4	99
•	135	298	6	100

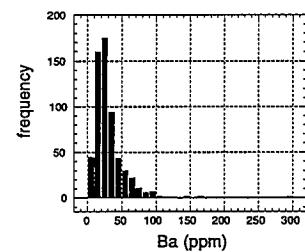
Barium in the <0.063 mm fraction of till

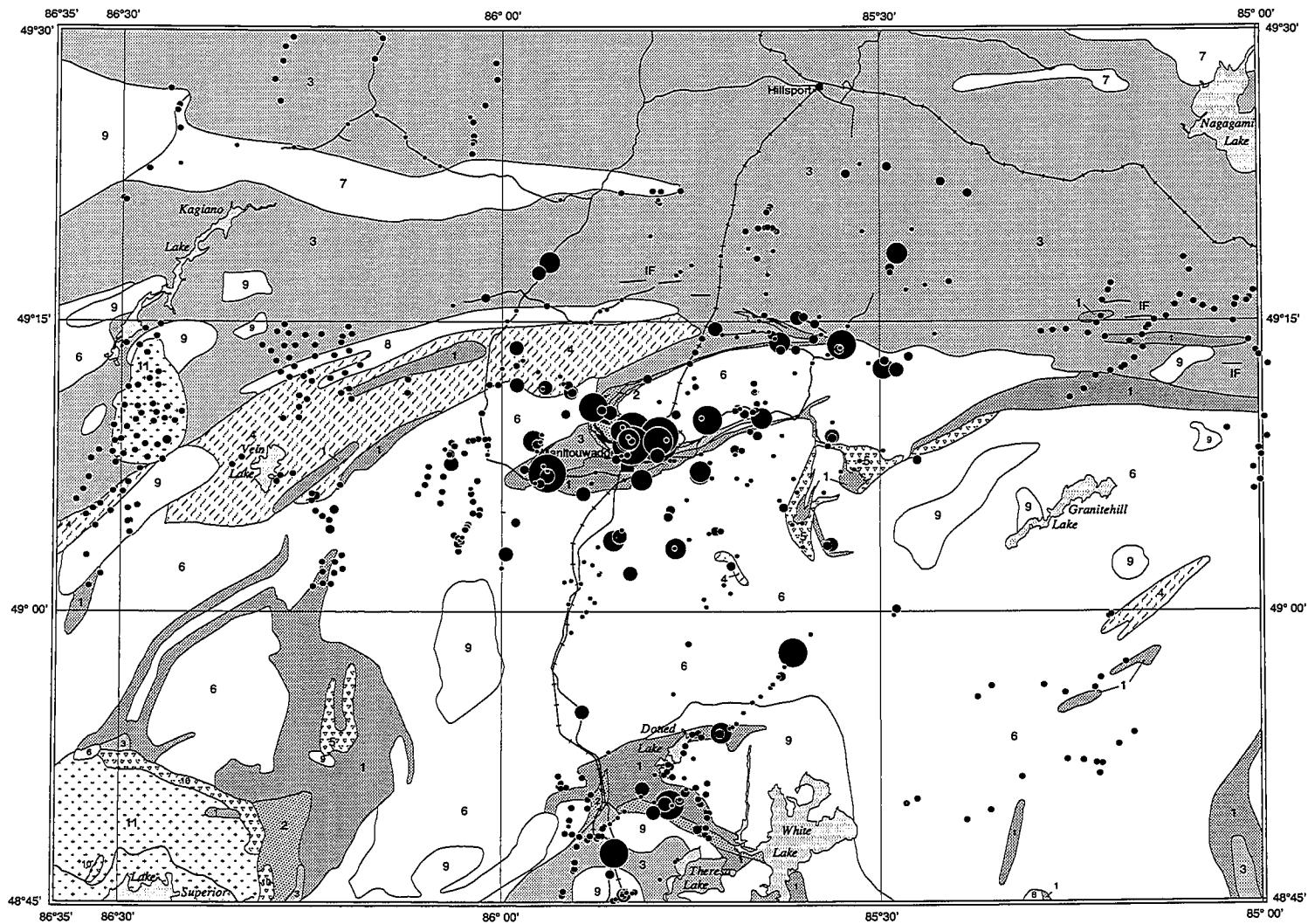
Summary Statistics

Number of Samples: 605
 Minimum: 9
 Maximum: 298
 Mean: 34.5
 Median: 30
 Standard Deviation: 25.3
 Coefficient of Variation: 0.7



Frequency Histogram





Symbol Legend
Cadmium (ppm)

MIN.	MAX.	#SAMP	%TILE
0.1	0.1	160	26.5
0.1	0.2	342	83.3
0.2	0.6	51	91.7
0.6	1.0	23	95.5
1.0	1.4	15	98
1.4	2.0	7	99.2
2.0	34.6	5	100

Cadmium in the <0.002 mm fraction of till

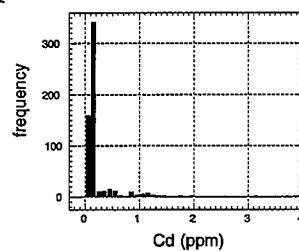
Summary Statistics

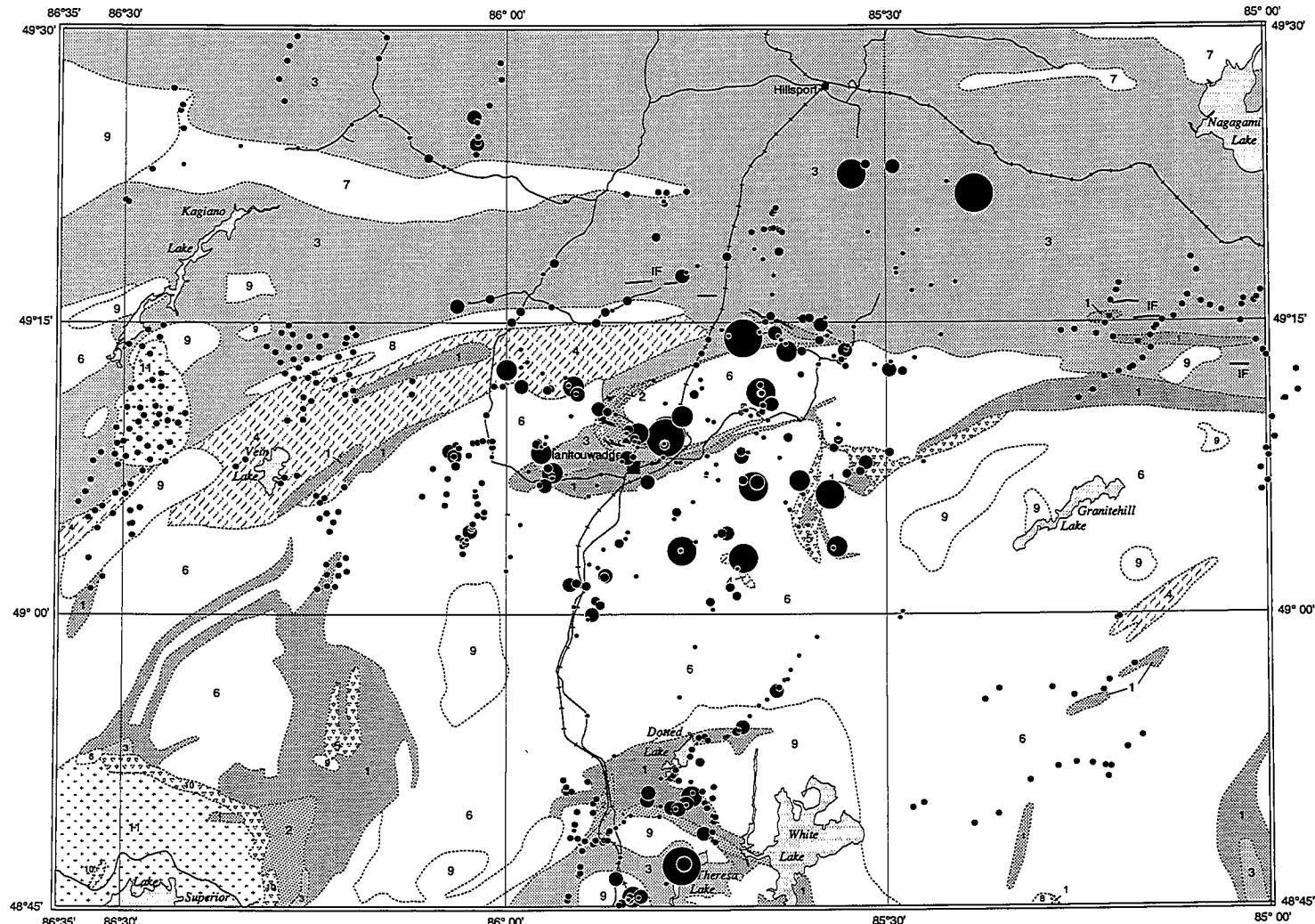
Number of Samples: 603
 Minimum: 0.1
 Maximum: 34.6
 Mean: 0.35

Median: 0.2
 Standard Deviation: 1.46
 Coefficient of Variation: 4.2



Frequency Histogram





Symbol Legend
Cadmium (ppm)

	MIN.	MAX.	#SAMP	%TILE
•	0.1	0.1	151	25
•	0.1	0.2	343	81.7
•	0.2	0.6	52	90.2
•	0.6	0.9	37	96.4
•	0.9	1.1	11	98.2
•	1.1	1.3	6	99.2
•	1.3	19.4	5	100

Cadmium in the <0.063 mm fraction of till

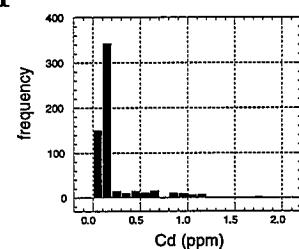
Summary Statistics

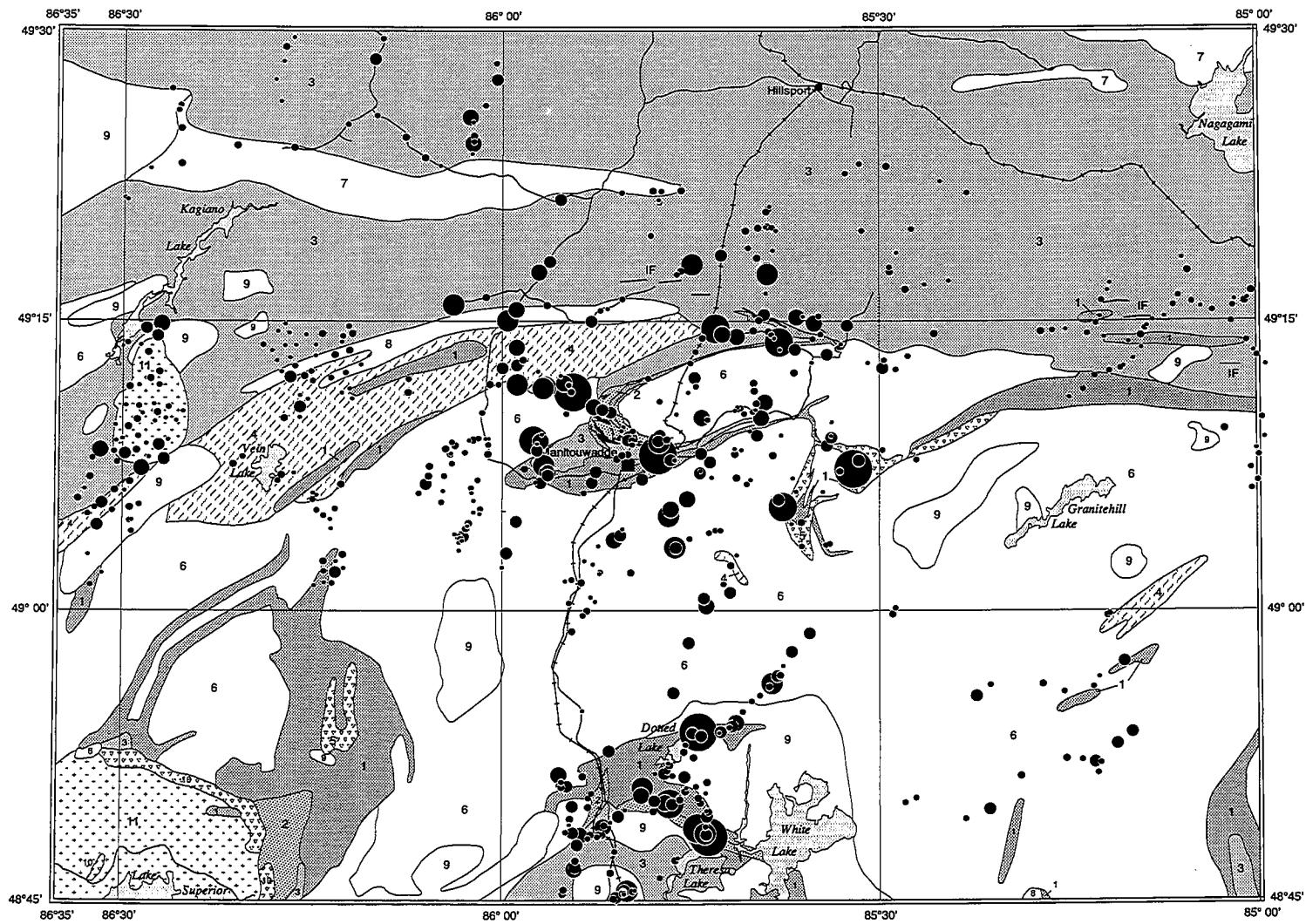
Number of Samples: 605
 Minimum: 0.1
 Maximum: 19.4
 Mean: 0.30

Median: 0.2
 Standard Deviation: 0.82
 Coefficient of Variation: 2.74



Frequency Histogram





Symbol Legend
Cobalt (ppm)

	MIN.	MAX.	#SAMP	%TILE
•	1	16	163	27
•	16	21	159	53.4
•	21	27	137	76.1
•	27	39	85	90.2
•	39	48	31	95.4
•	48	73	16	98
•	73	98	6	99
•	98	128	6	100

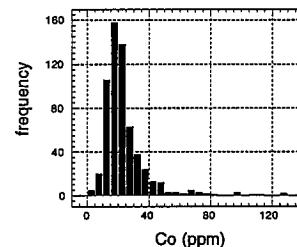
Cobalt in the <0.002 mm fraction of till

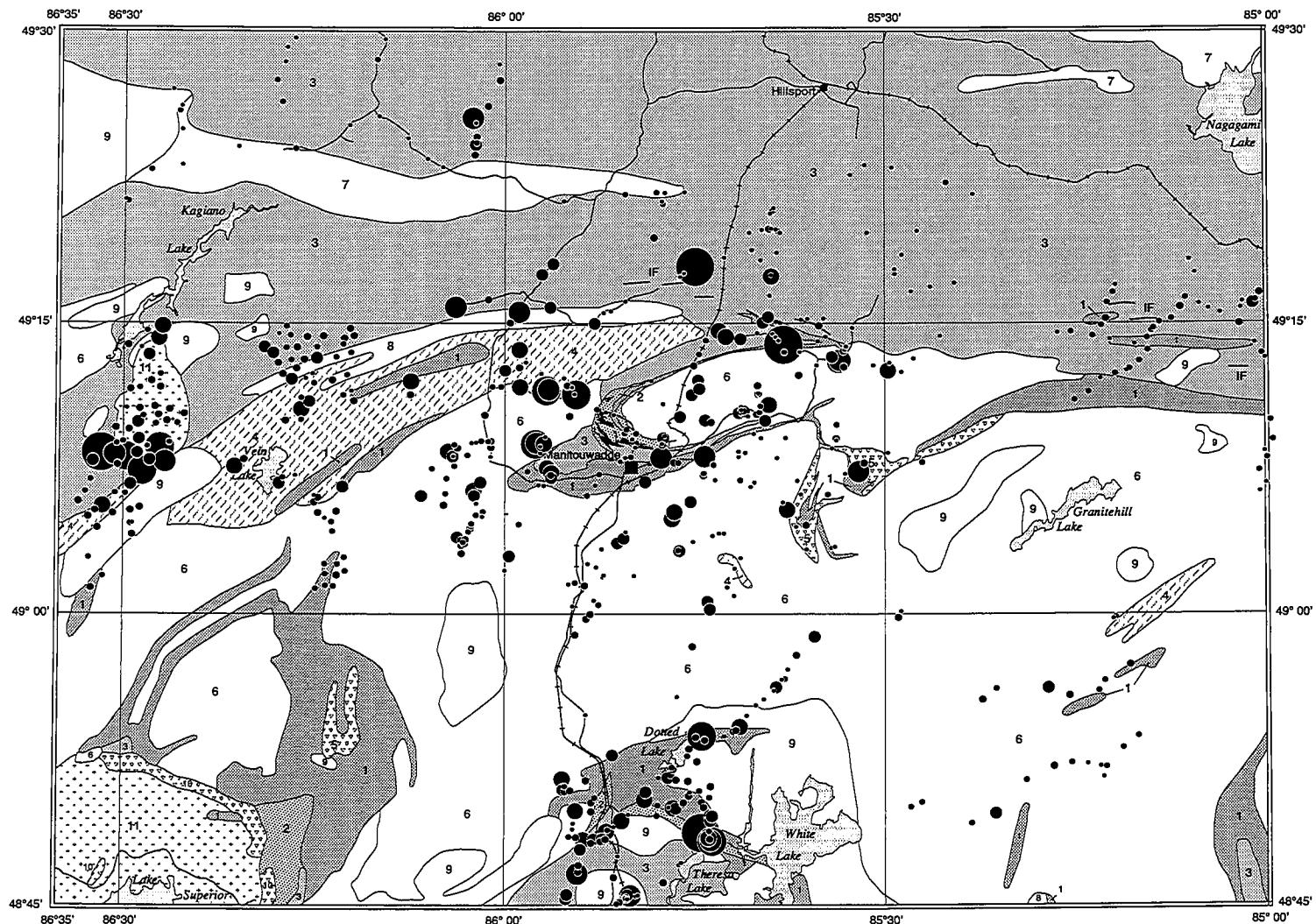
Summary Statistics

Number of Samples: 603
Minimum: 1
Maximum: 128
Mean: 24.3
Median: 21
Standard Deviation: 39.5
Coefficient of Variation: 0.4



Frequency Histogram





Symbol Legend
Cobalt (ppm)

	MIN.	MAX.	#SAMP	%TILE
•	0.5	2	199	32.9
•	2	4	151	57.9
•	4	7	131	79.5
•	7	10	67	90.6
•	10	15	30	95.5
•	15	20	15	98
•	20	23	8	99.3
•	23	33	4	100

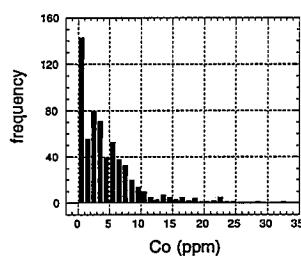
Cobalt in the <0.063 mm fraction of till

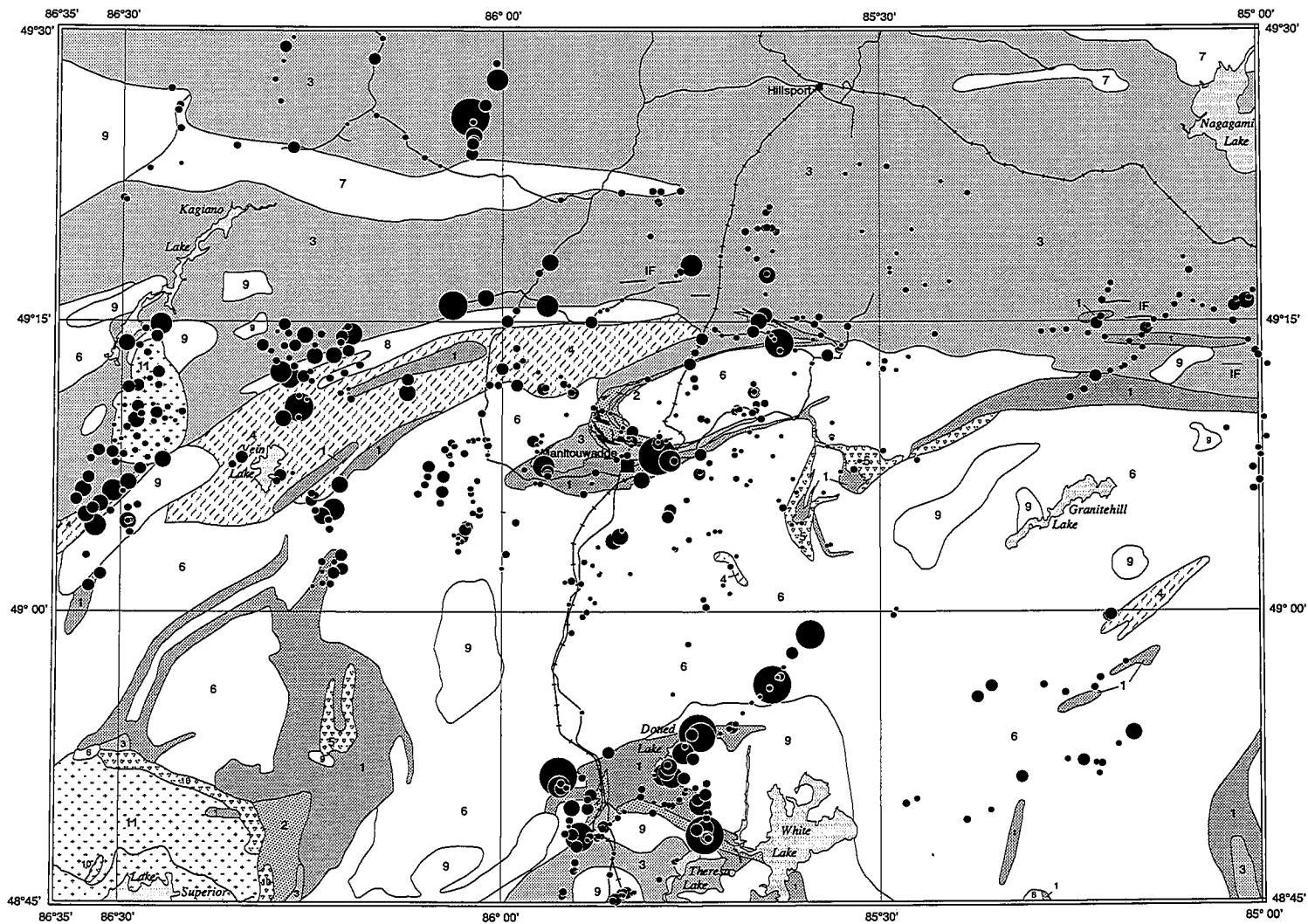
Summary Statistics

Number of Samples: 605
Minimum: 0.5
Maximum: 33
Mean: 5.0
Median: 4
Standard Deviation: 4.8
Coefficient of Variation: 0.95



Frequency Histogram





Symbol Legend
Chromium (ppm)

	MIN.	MAX.	#SAMP	%TILE
.	20	74	151	25
•	74	93	151	50.1
●	93	114	152	75.3
●	114	140	90	90.2
●	140	157	30	95.2
●	157	196	17	98
●	196	263	6	99
●	263	392	6	100

Chromium in the <0.002 mm fraction of till

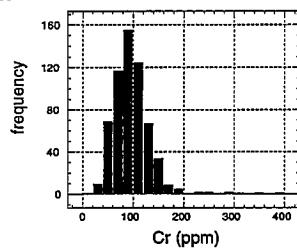
Summary Statistics

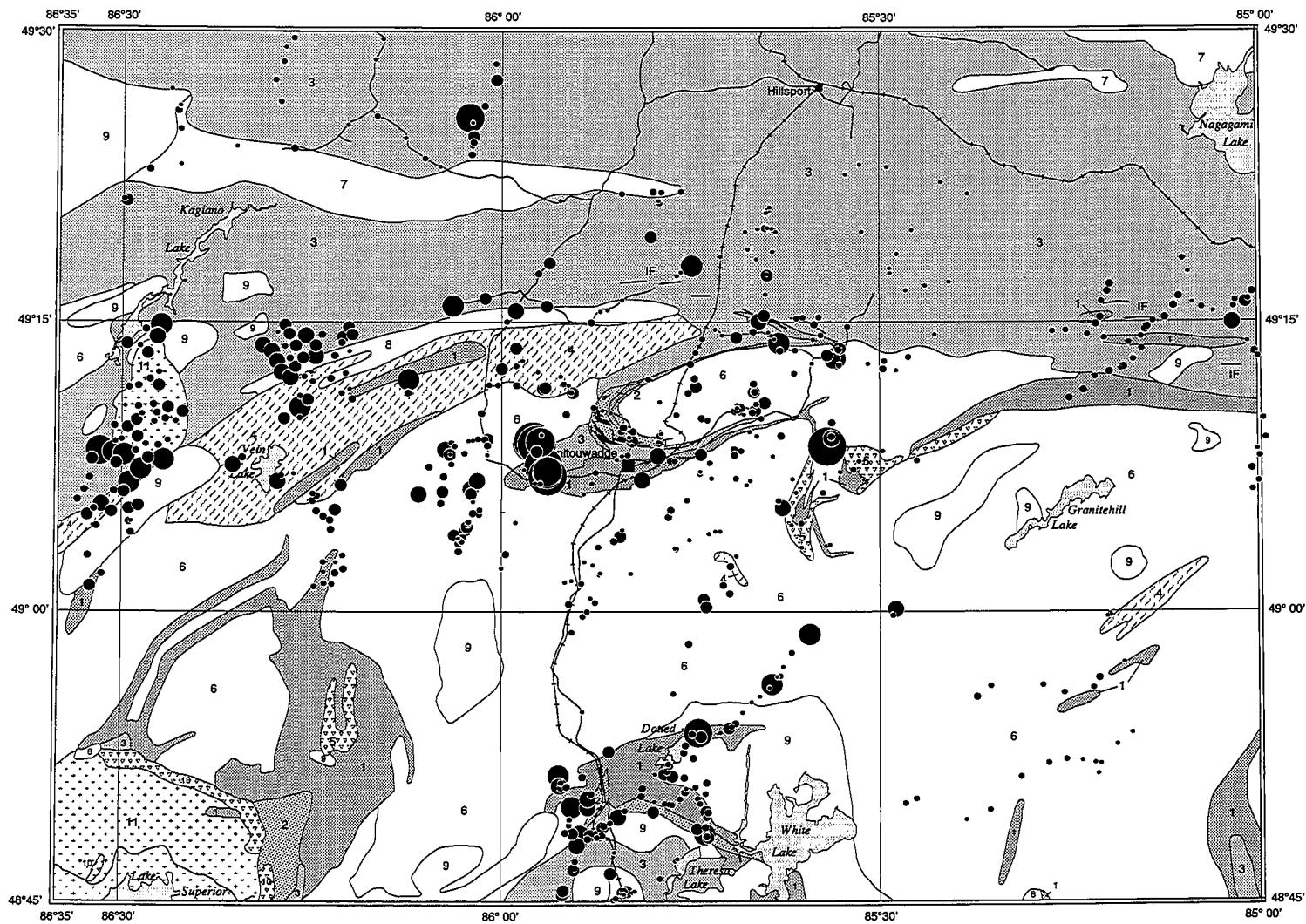
Number of Samples: 603
 Minimum: 20
 Maximum: 392
 Mean: 98.2

Median: 93
 Standard Deviation: 39.5
 Coefficient of Variation: 0.4



Frequency Histogram





Symbol Legend
Chromium (ppm)

	MIN.	MAX.	#SAMP	%TILE
•	1	18	158	26.1
•	18	25	160	52.6
•	25	33	142	76
•	33	45	86	90.2
•	45	63	29	95
•	63	100	18	98
•	100	123	6	99
•	123	217	6	100

Chromium in the <0.063 mm fraction of till

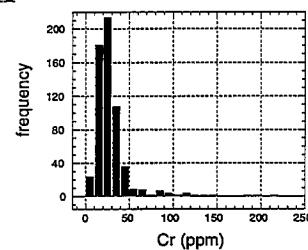
Summary Statistics

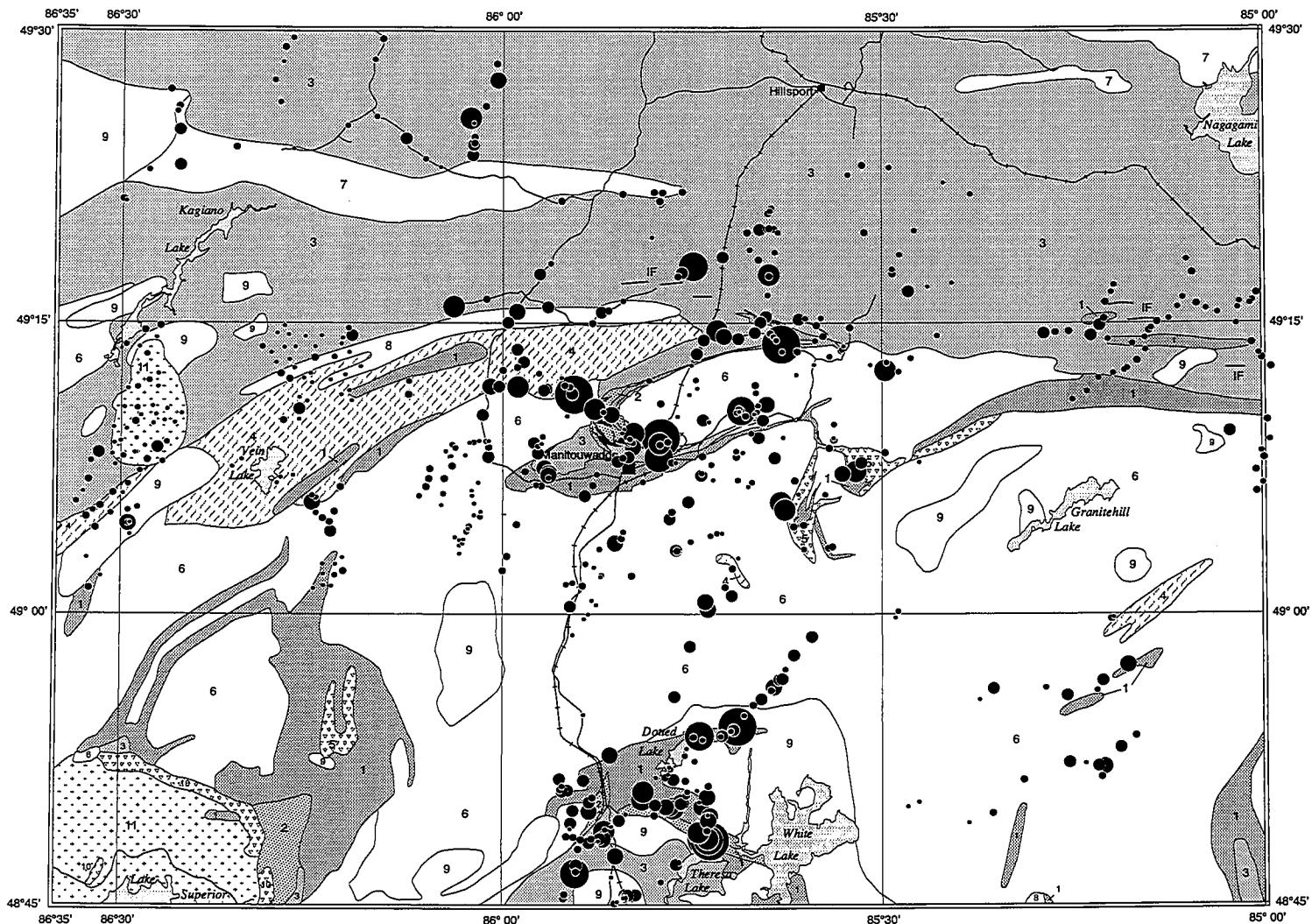
Number of Samples: 605
 Minimum: 1
 Maximum: 217
 Mean: 29.3

Median: 25
 Standard Deviation: 21.7
 Coefficient of Variation: 0.7



Frequency Histogram





Symbol Legend
Copper (ppm)

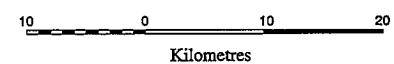
	MIN.	MAX.	#SAMP	%TILE
•	7	39	152	25.2
•	39	58	153	50.6
•	58	85	150	75.5
•	85	137	88	90
•	137	232	30	95
•	232	386	18	98
•	386	568	6	99
•	568	1345	6	100

Copper in the <0.002 mm fraction of till

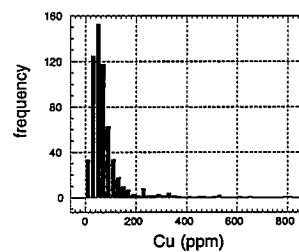
Summary Statistics

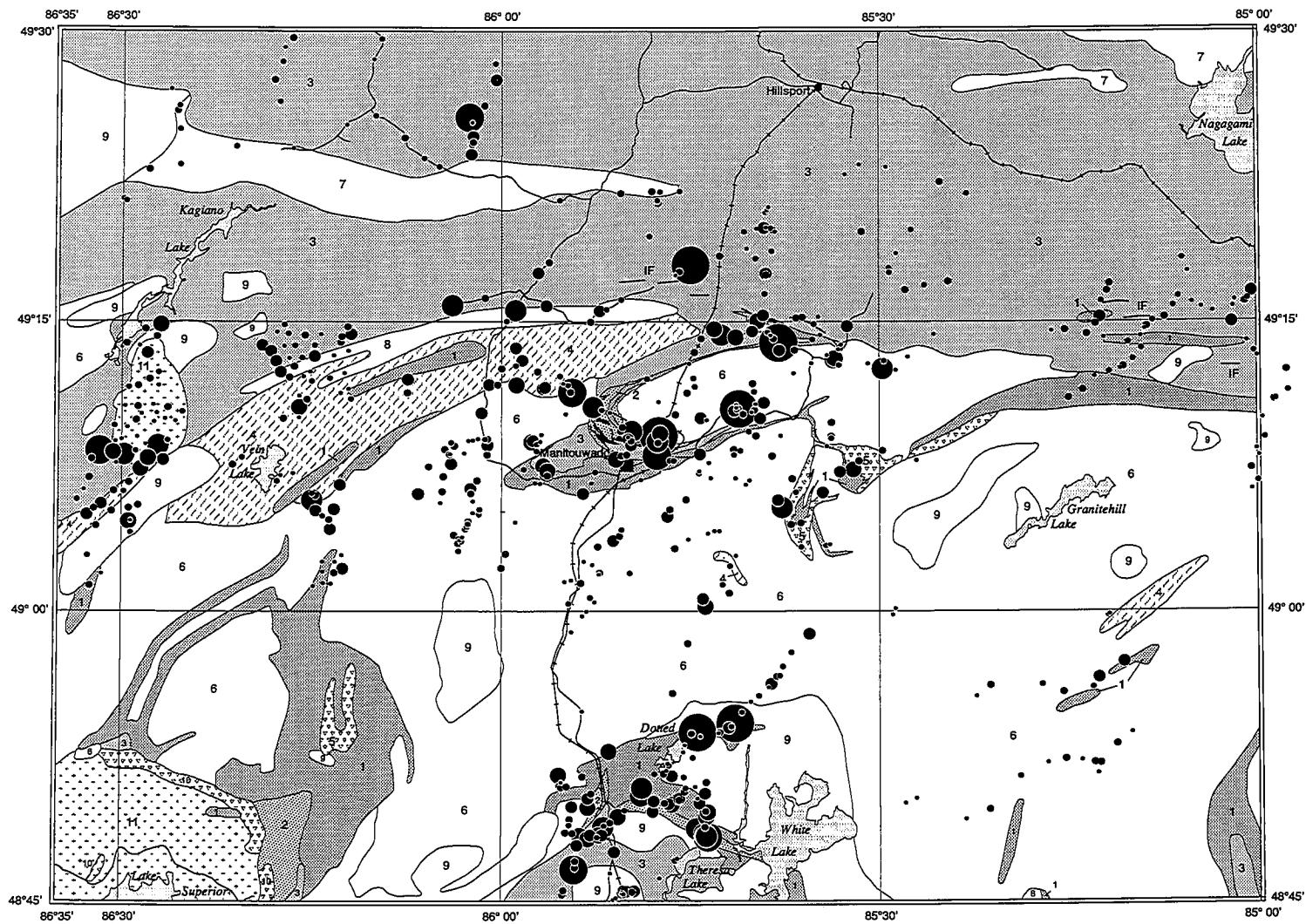
Number of Samples: 603
 Minimum: 7
 Maximum: 1345
 Mean: 84.0

Median: 58
 Standard Deviation: 112.5
 Coefficient of Variation: 1.3



Frequency Histogram





Symbol Legend
Copper (ppm)

	MIN.	MAX.	#SAMP	%TILE
•	1	8	172	28.4
•	8	11	136	50.9
•	11	17	159	77.2
•	17	27	78	90.1
•	27	44	30	95
•	44	82	18	98
•	82	124	6	99
•	124	1596	6	100

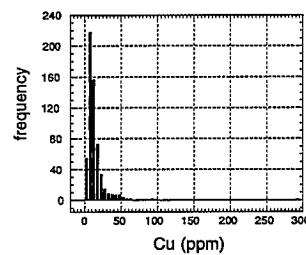
Copper in the <0.063 mm fraction of till

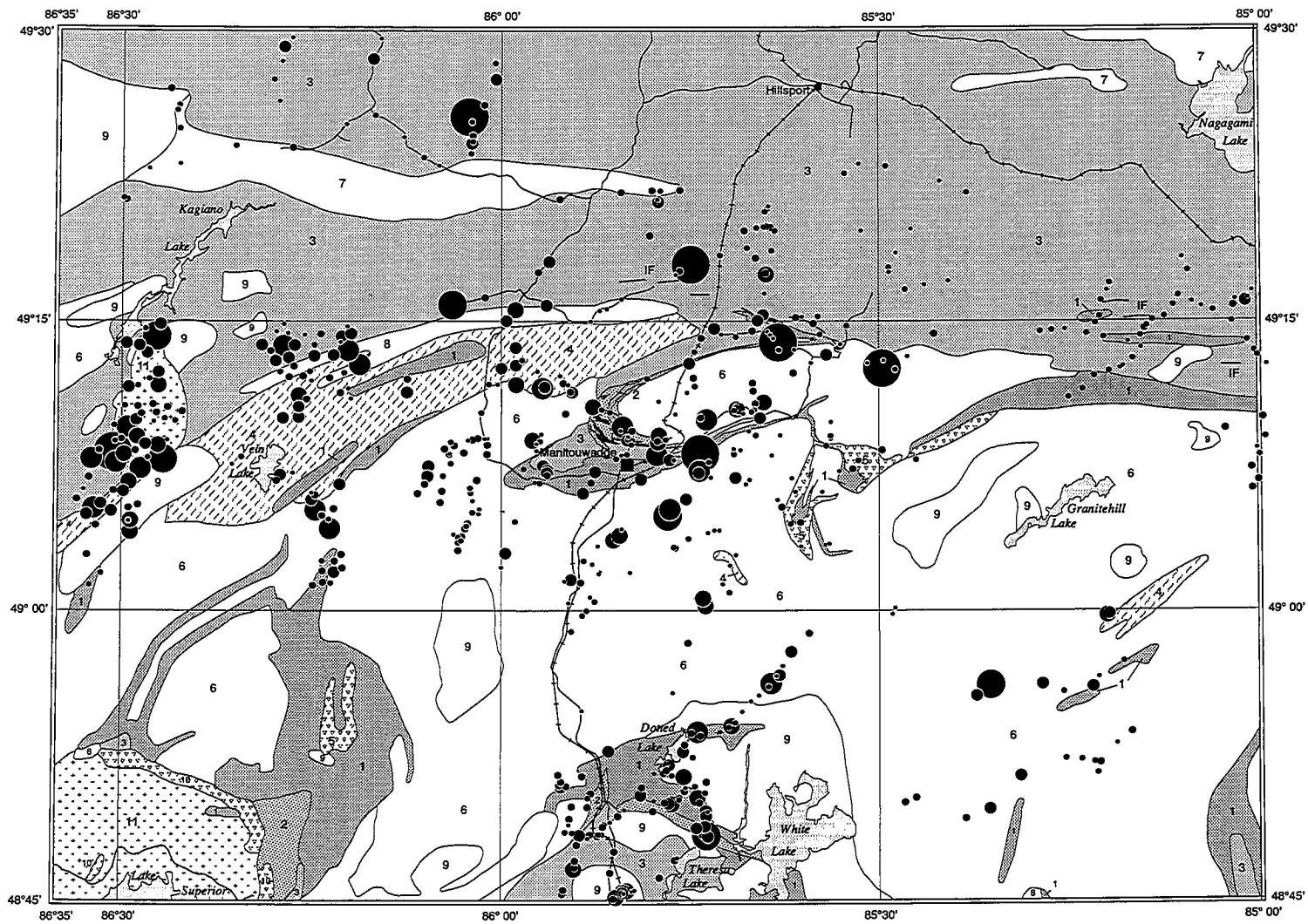
Summary Statistics

Number of Samples: xx
Minimum: xx
Maximum: xx
Mean: xx
Median: xx
Standard Deviation: xx
Coefficient of Variation: xx



Frequency Histogram





Symbol Legend
Iron (per cent)

MIN.	MAX.	#SAMP	%TILE
0.49	3.70	151	25
3.70	4.45	151	50.1
4.45	5.36	152	75.3
5.36	6.38	89	90
6.38	7.01	30	95
7.01	7.96	18	98
7.96	8.40	6	99
8.40	10.3	6	100

Iron in the <0.002 mm fraction of till

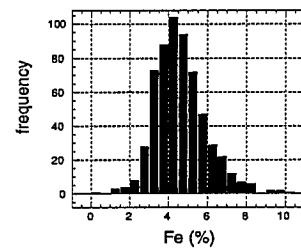
Summary Statistics

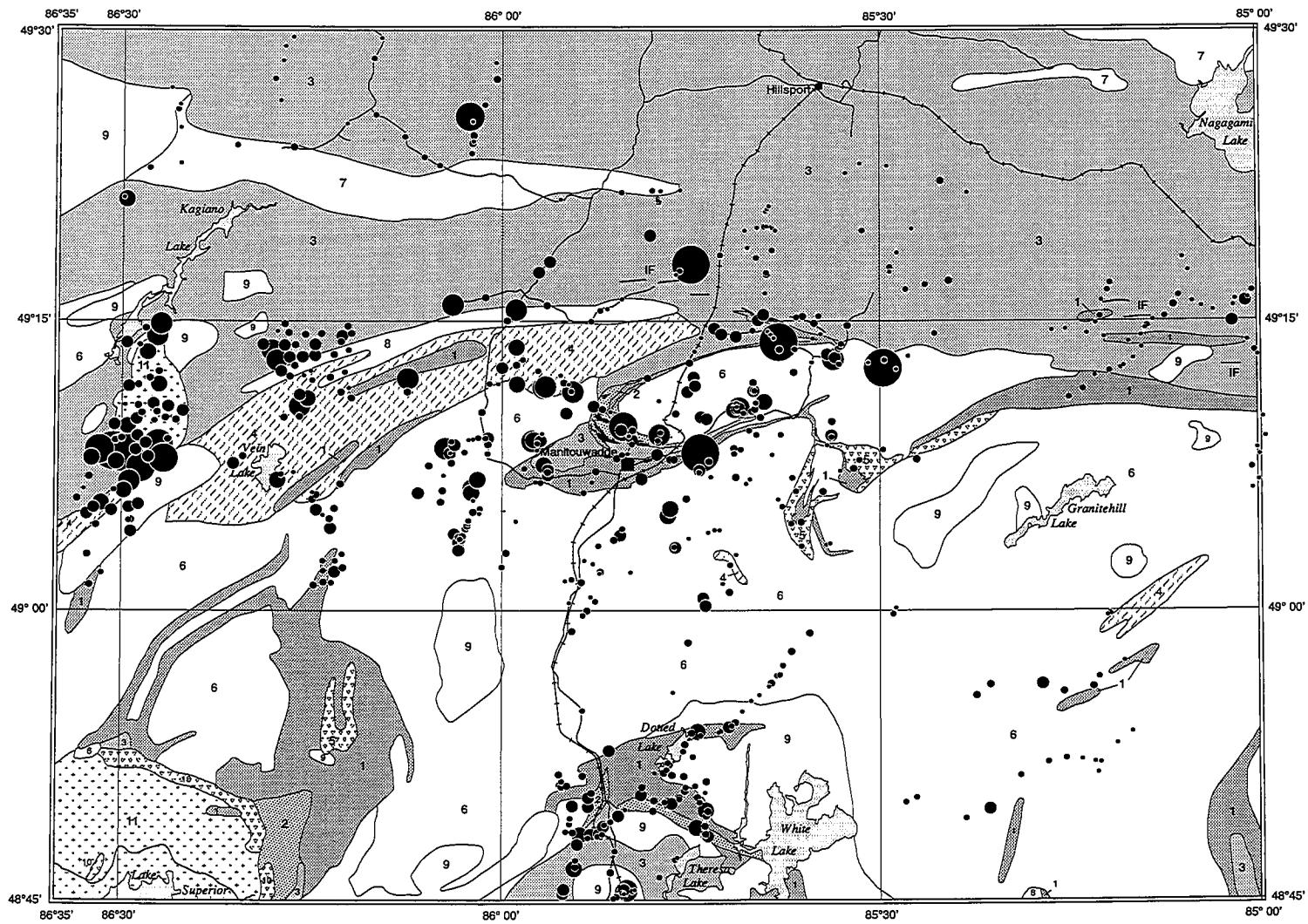
Number of Samples: 603
 Minimum: 0.49
 Maximum: 10.3
 Mean: 4.62

Median: 4.45
 Standard Deviation: 1.34
 Coefficient of Variation: 0.29

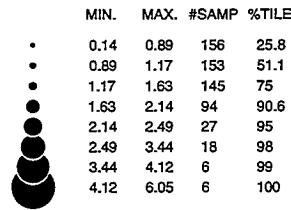


Frequency Histogram





Symbol Legend
Iron (per cent)



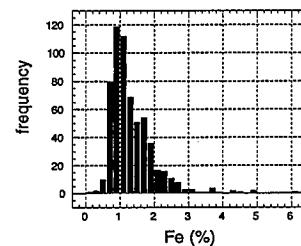
Iron in the <0.063 mm fraction of till

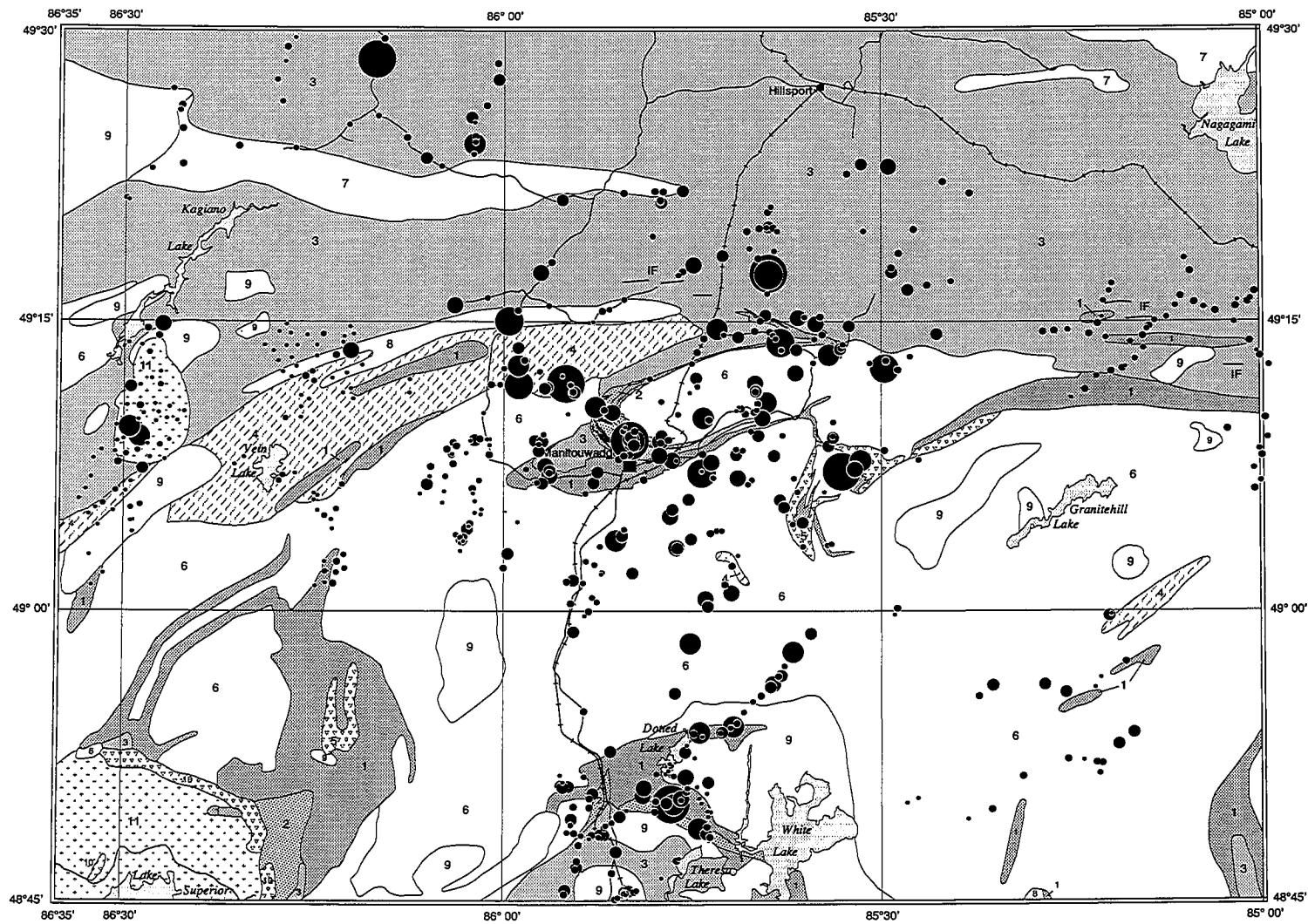
Summary Statistics

Number of Samples: 605 Median: 1.17
 Minimum: 0.14 Standard Deviation: 0.67
 Maximum: 6.05 Coefficient of Variation: 0.5
 Mean: 1.35



Frequency Histogram





Symbol Legend
Manganese (ppm)

MIN.	MAX.	#SAMP	%TILE
30	460	154	25.5
460	629	148	50.1
629	854	150	75
854	1226	91	90
1226	1482	30	95
1482	1840	18	98
1840	1999	6	99
1999	2592	6	100

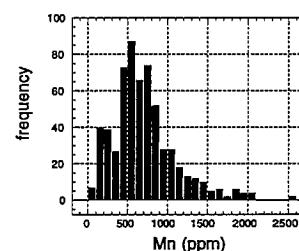
Manganese in the <0.002 mm fraction of till

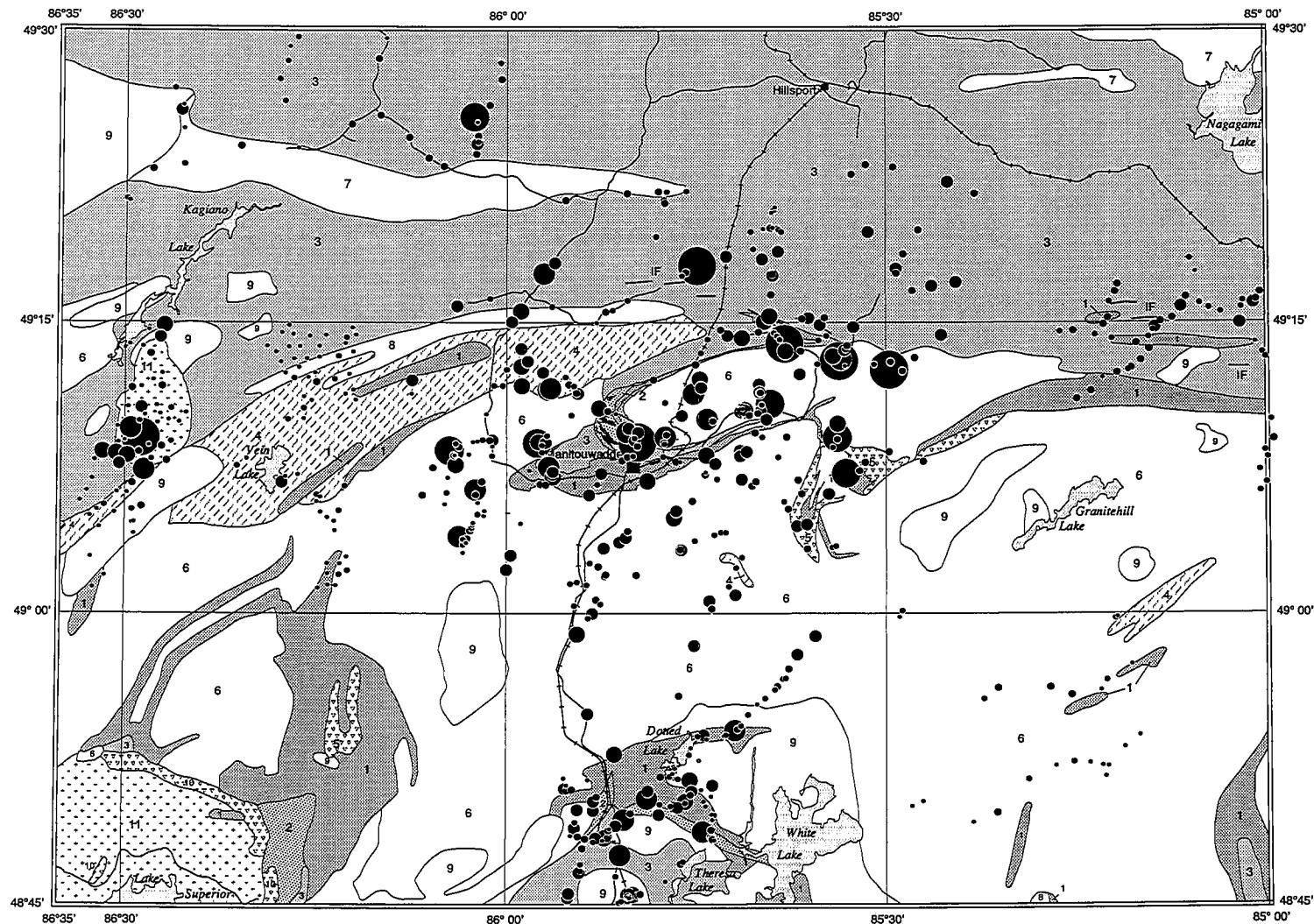
Summary Statistics

Number of Samples: 603
 Minimum: 30
 Maximum: 2592
 Mean: 705.8
 Median: 629
 Standard Deviation: 400.2
 Coefficient of Variation: 0.6



Frequency Histogram





Symbol Legend
Manganese (ppm)

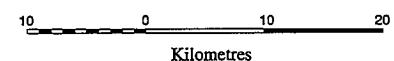
	MIN.	MAX.	#SAMP	%TILE
•	10	140	155	25.6
•	140	186	149	50.2
•	186	243	150	75
•	243	322	92	90.2
•	322	375	29	95
•	375	437	18	98
•	437	477	6	99
•	477	829	6	100

Manganese in the <0.063 mm fraction of till

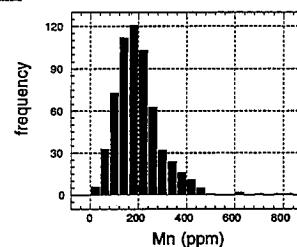
Summary Statistics

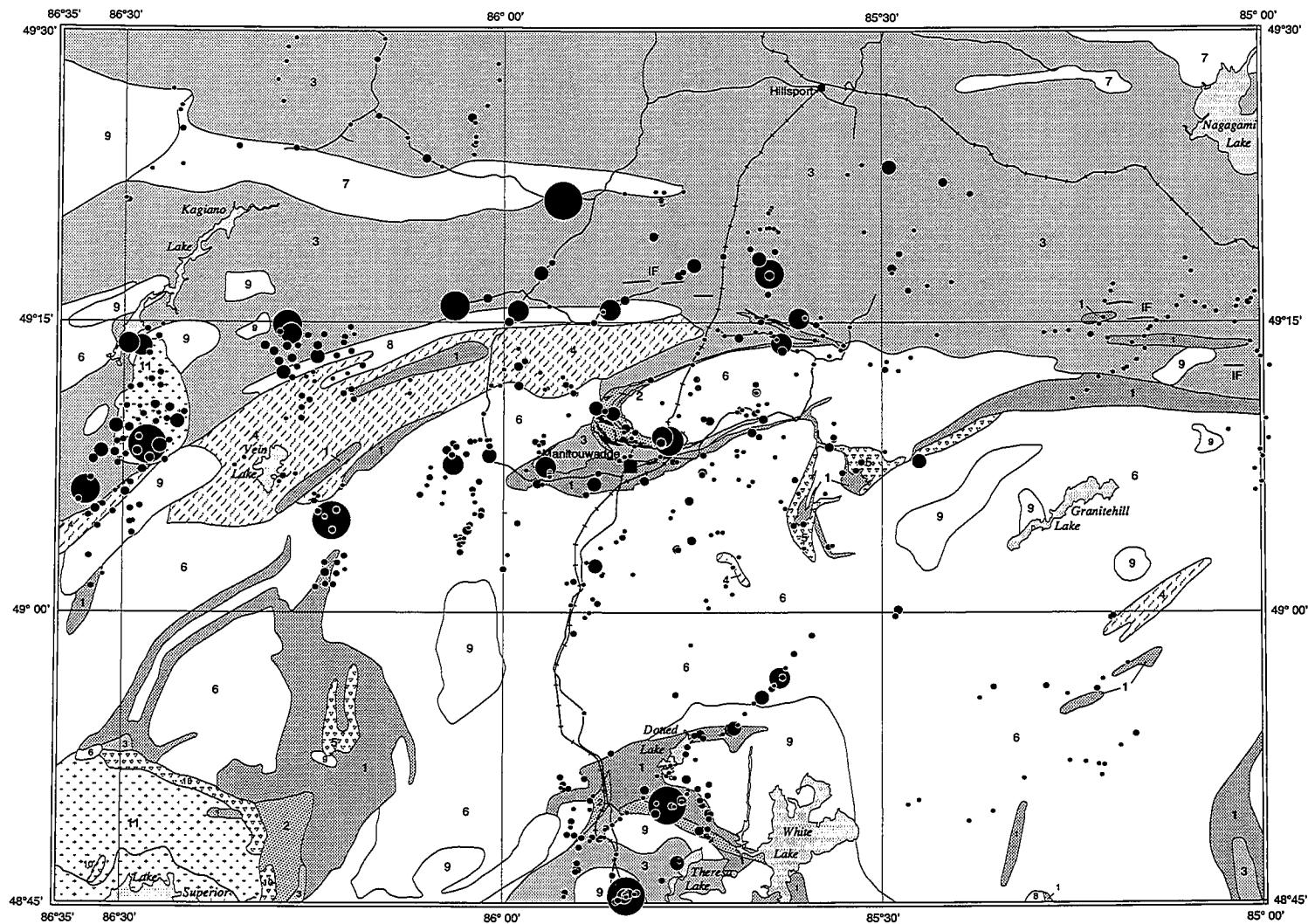
Number of Samples: 605
 Minimum: 10
 Maximum: 829
 Mean: 201.0

Median: 186
 Standard Deviation: 96.8
 Coefficient of Variation: 0.5

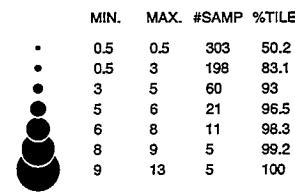


Frequency Histogram





Symbol Legend
Molybdenum (ppm)

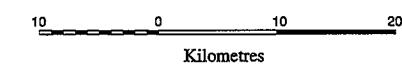


Molybdenum in the <0.002 mm fraction of till

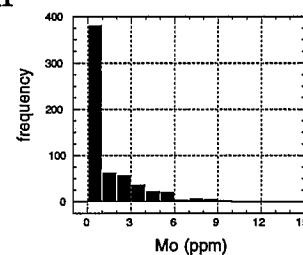
Summary Statistics

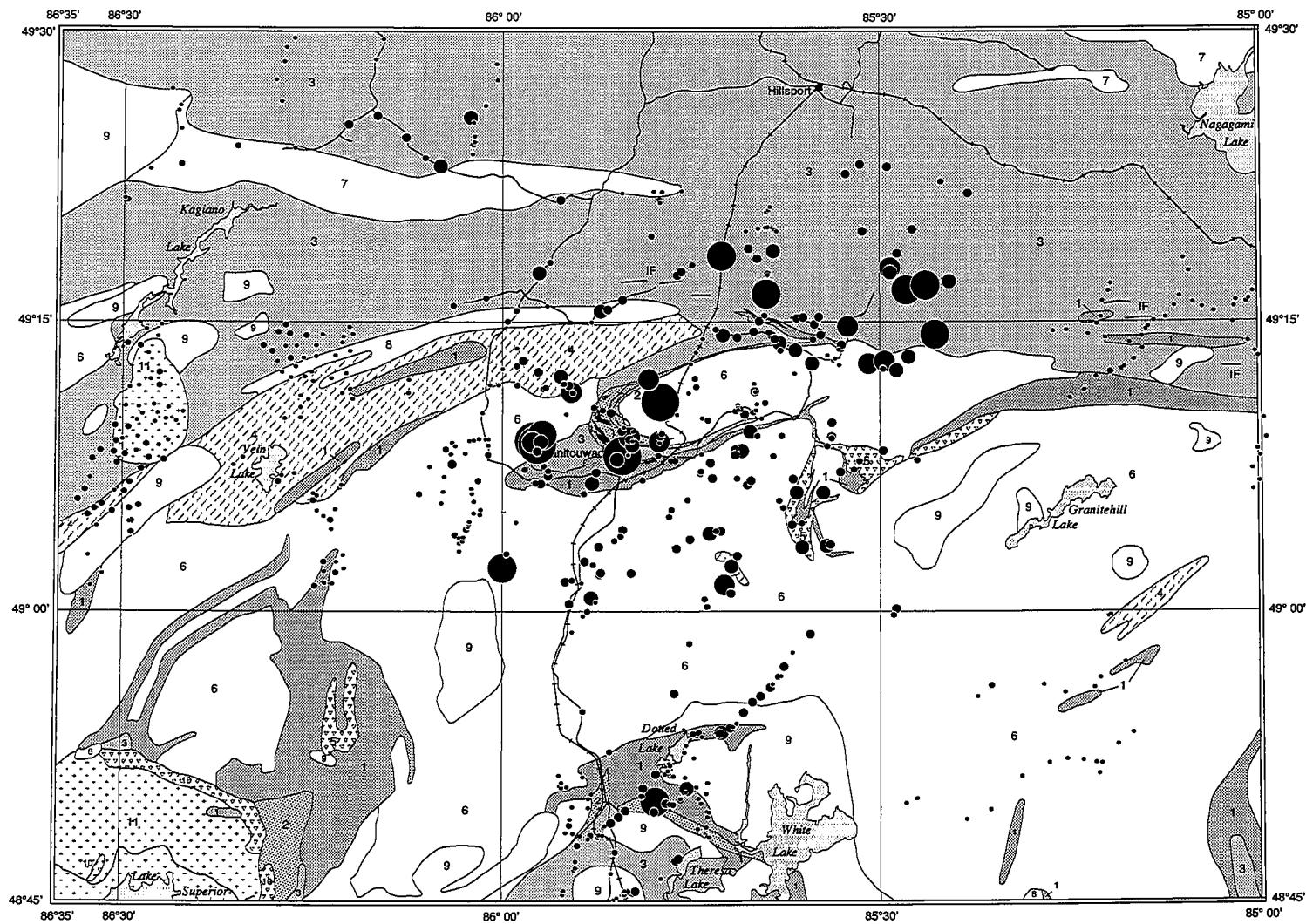
Number of Samples: 603
 Minimum: 0.5
 Maximum: 13
 Mean: 1.8

Median: 0.5
 Standard Deviation: 2.0
 Coefficient of Variation: 1.1



Frequency Histogram





Symbol Legend
Molybdenum (ppm)

MIN.	MAX.	#SAMP	%TILE
0.5	0.5	321	53.1
0.5	7	141	76.4
7	12	92	91.6
12	14	29	96.4
14	16	10	98
16	20	8	99.3
20	40	4	100

Molybdenum in the <0.063 mm fraction of till

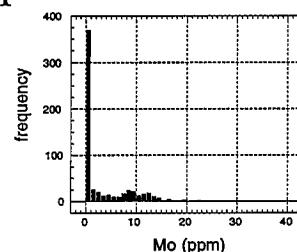
Summary Statistics

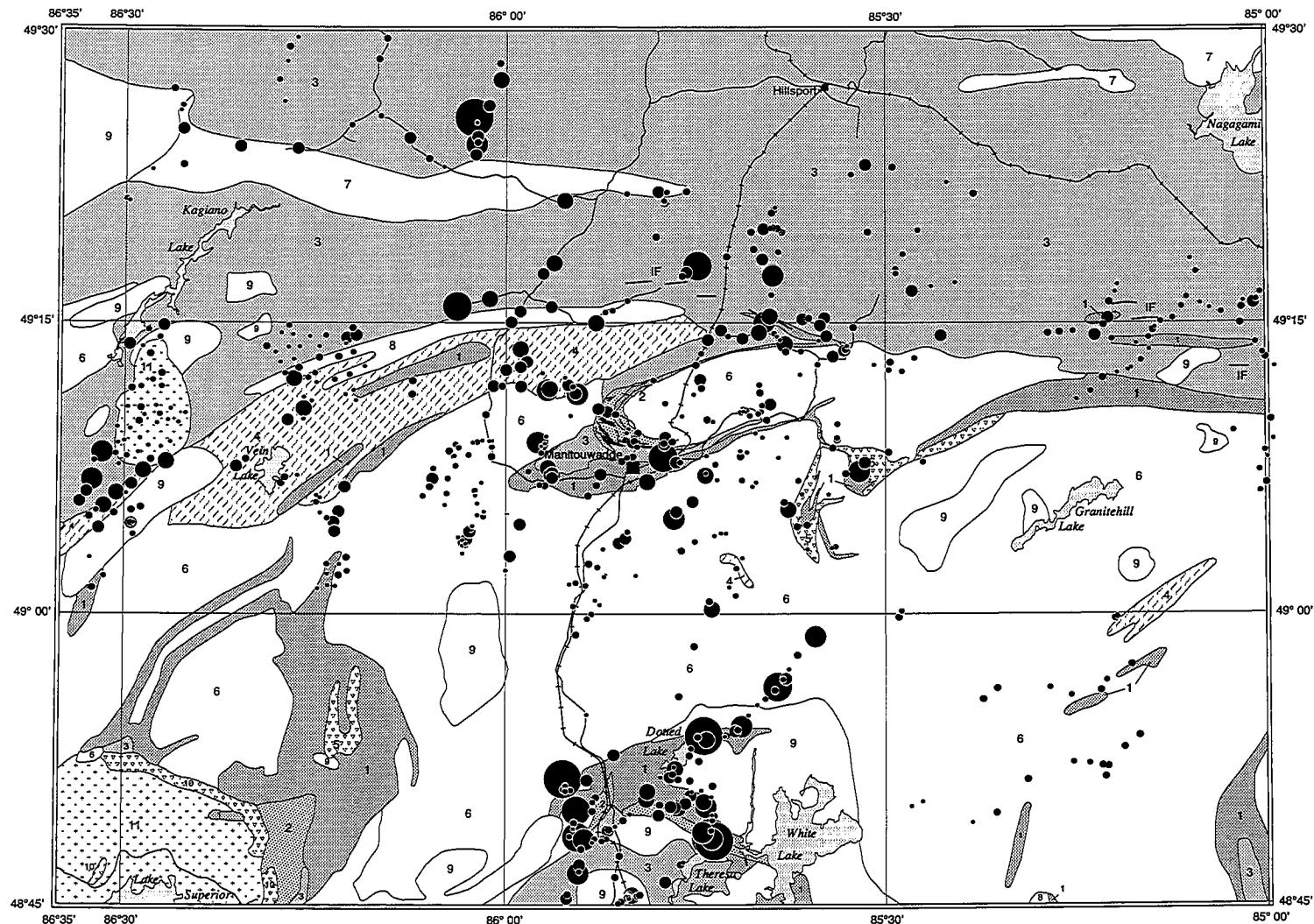
Number of Samples: 605
 Minimum: 0.5
 Maximum: 40
 Mean: 3.8

Median: 0.5
 Standard Deviation: 5.1
 Coefficient of Variation: 1.4



Frequency Histogram





Symbol Legend
Nickel (ppm)

MIN.	MAX.	#SAMP	%TILE
6	44	160	26.5
44	54	142	50.1
54	67	153	75.5
67	95	89	90.2
95	124	29	95
124	222	18	98
222	258	6	99
258	968	6	100

Nickel in the <0.002 mm fraction of till

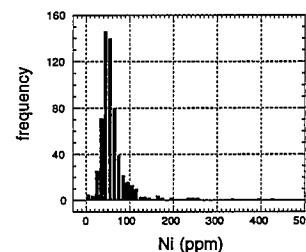
Summary Statistics

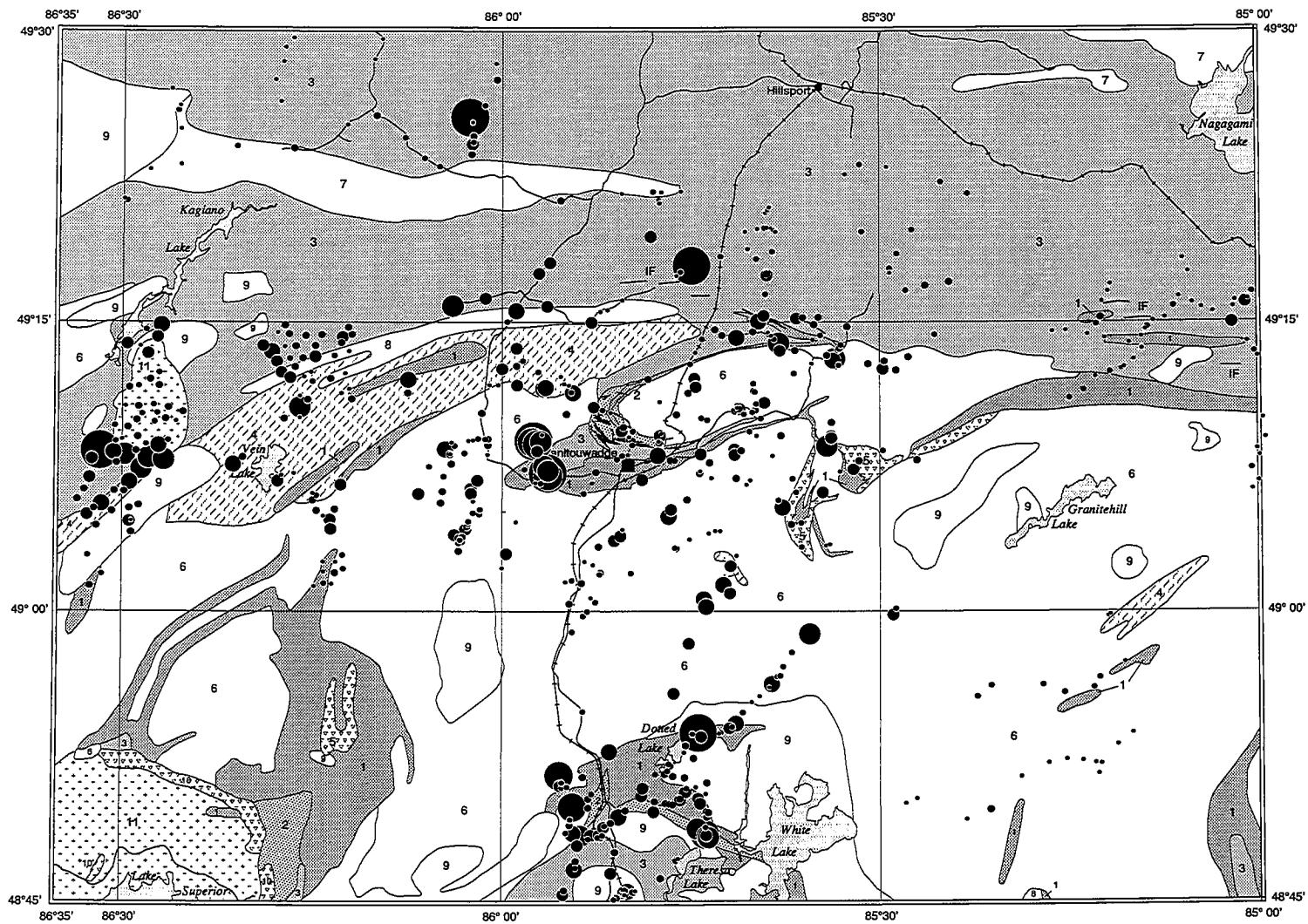
Number of Samples: 603
 Minimum: 6
 Maximum: 968
 Mean: 65.2

Median: 54
 Standard Deviation: 57.8
 Coefficient of Variation: 0.9



Frequency Histogram





Symbol Legend
Nickel (ppm)

MIN.	MAX.	#SAMP	%TILE
0.5	9	174	28.8
9	13	147	53.1
13	20	143	76.7
20	30	83	90.4
30	42	29	95.2
42	78	17	98
78	93	6	99
93	128	6	100

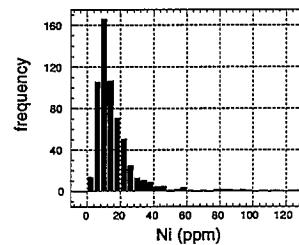
Nickel in the <0.063 mm fraction of till

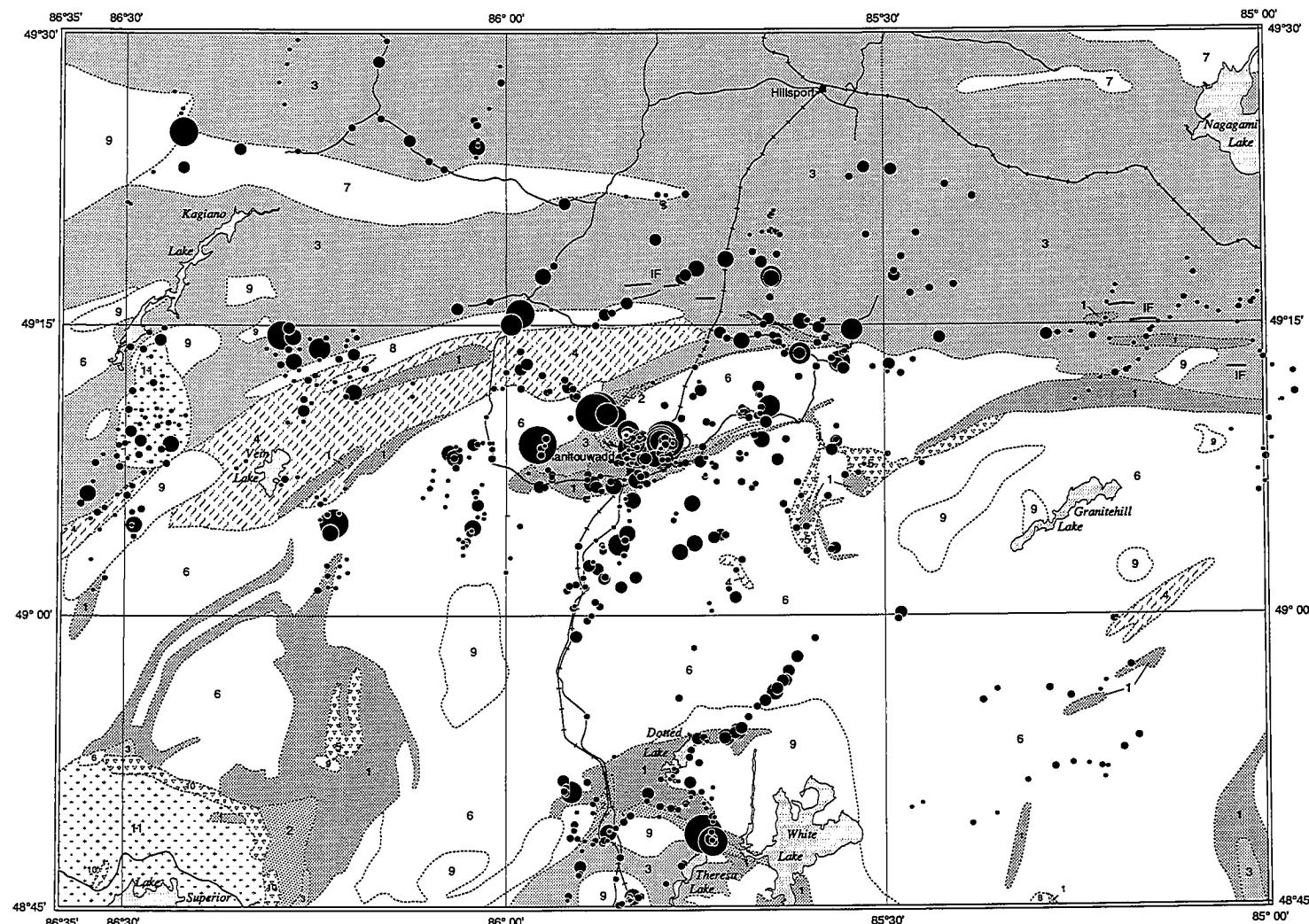
Summary Statistics

Number of Samples: 605
 Minimum: 0.5
 Maximum: 128
 Mean: 17.3
 Median: 13
 Standard Deviation: 15.2
 Coefficient of Variation: 0.9



Frequency Histogram





Symbol Legend
Lead (ppm)

MIN.	MAX.	#SAMP	%TILE
1	16	225	32.3
16	21	124	50.1
21	28	195	78
28	34	88	90.7
34	42	34	95.6
42	57	17	98
57	83	7	99
83	772	7	100

Lead in the <0.002 mm fraction of till

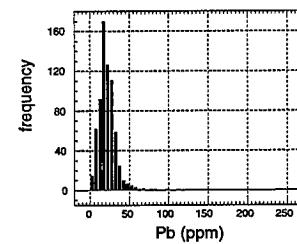
Summary Statistics

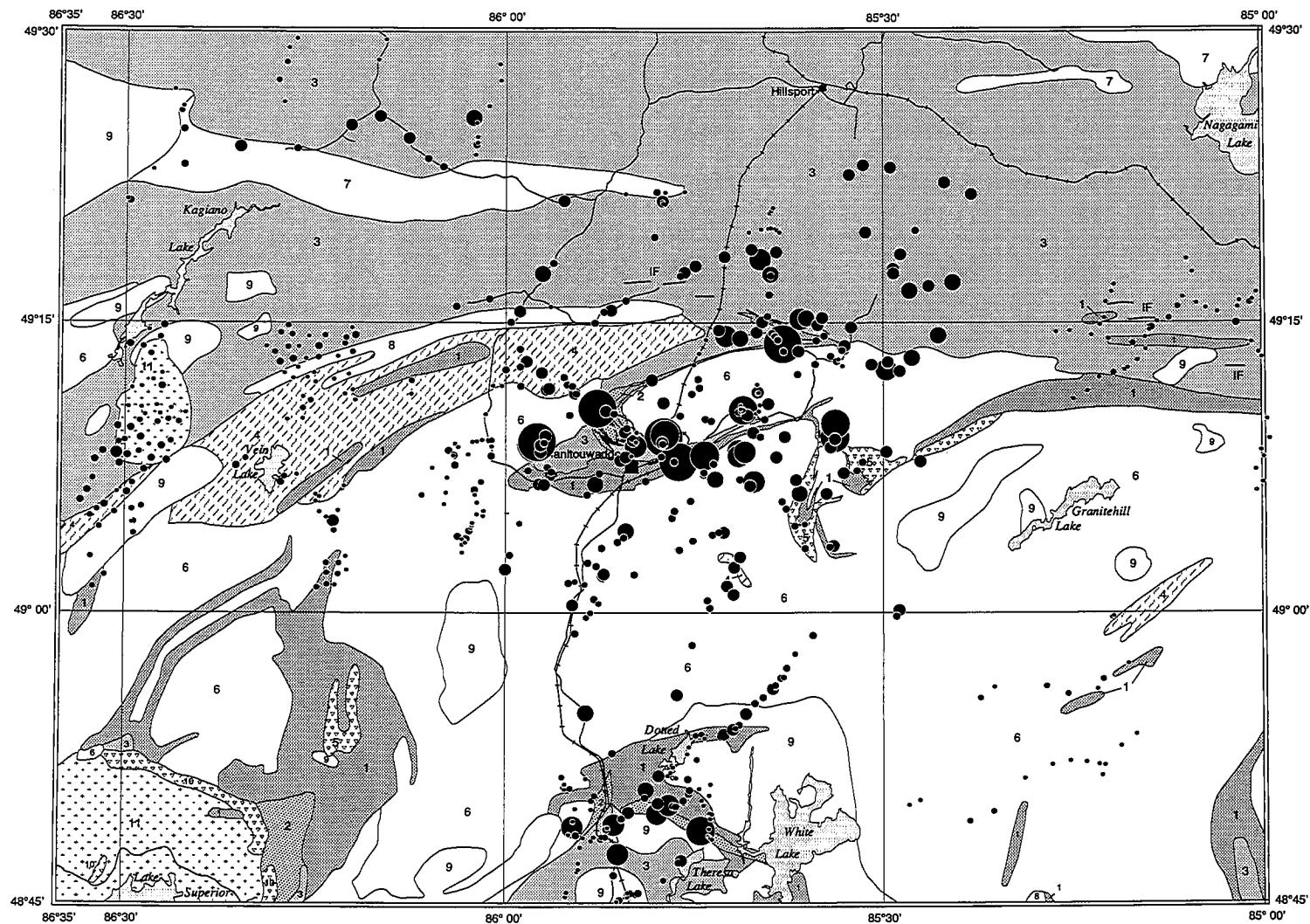
Number of Samples: 697
 Minimum: 1
 Maximum: 772
 Mean: 24.8

Median: 21
 Standard Deviation: 38.3
 Coefficient of Variation: 1.5



Frequency Histogram





Symbol Legend
Lead (ppm)

	MIN.	MAX.	#SAMP	%TILE
•	1	4	225	37.2
•	4	8	91	52.2
•	8	19	157	78.2
•	19	23	91	93.2
•	23	25	15	95.7
•	25	30	14	98
•	30	36	6	99
•	36	224	6	100

Lead in the <0.063 mm fraction of till

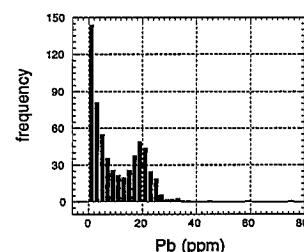
Summary Statistics

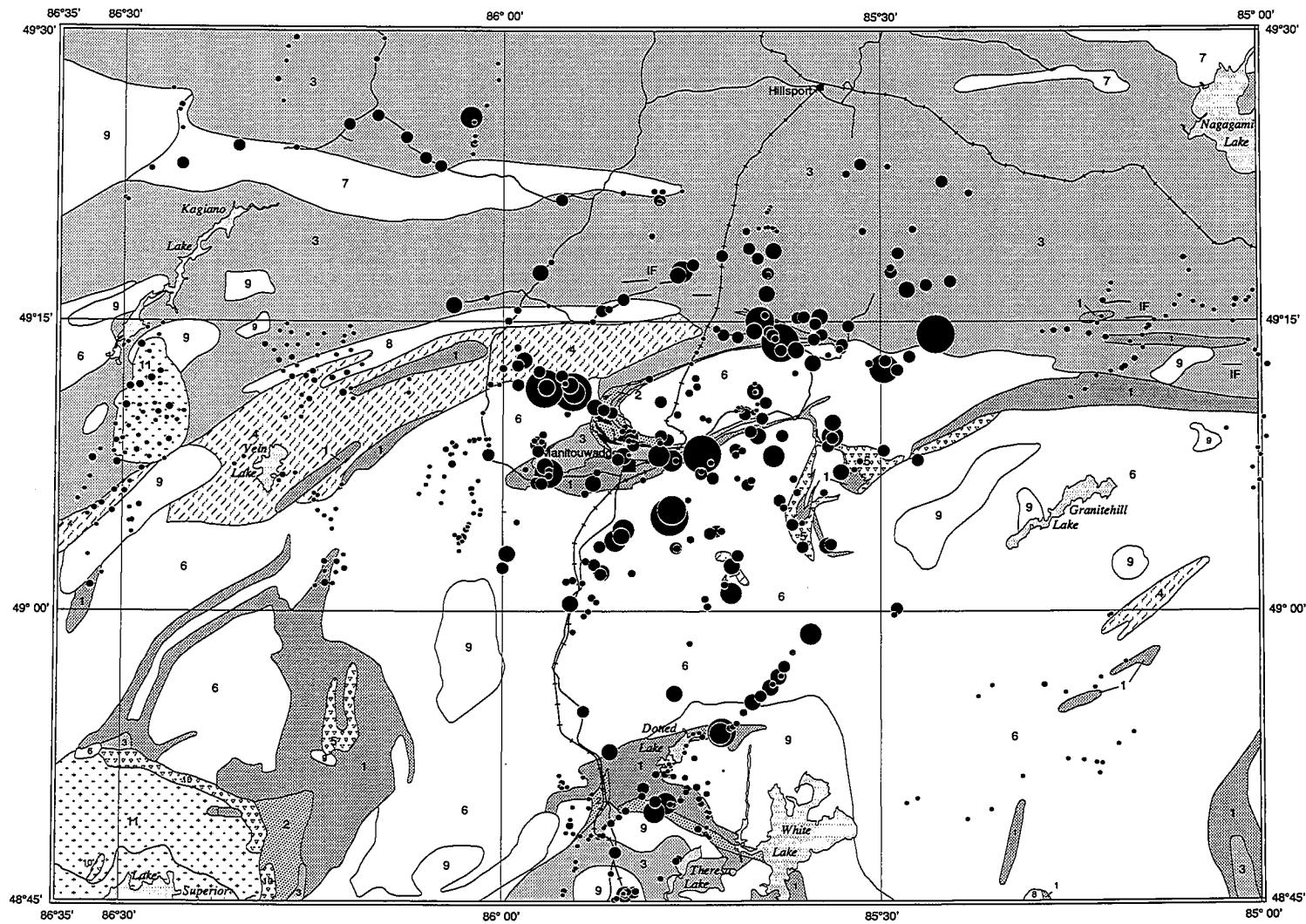
Number of Samples: 605
 Minimum: 1
 Maximum: 224
 Mean: 11.5

Median: 8
 Standard Deviation: 13.8
 Coefficient of Variation: 1.2



Frequency Histogram





Symbol Legend
Antimony (ppm)

	MIN.	MAX.	#SAMP	%TILE
.	1	1	256	42.5
•	1	2	123	62.9
●	2	10	77	75.6
●●	10	16	87	90
●●●	16	20	35	95.9
●●●●	20	24	14	98.2
●●●●●	24	29	5	99
●●●●●●	29	38	6	100

Antimony in the <0.002 mm fraction of till

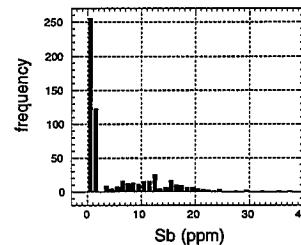
Summary Statistics

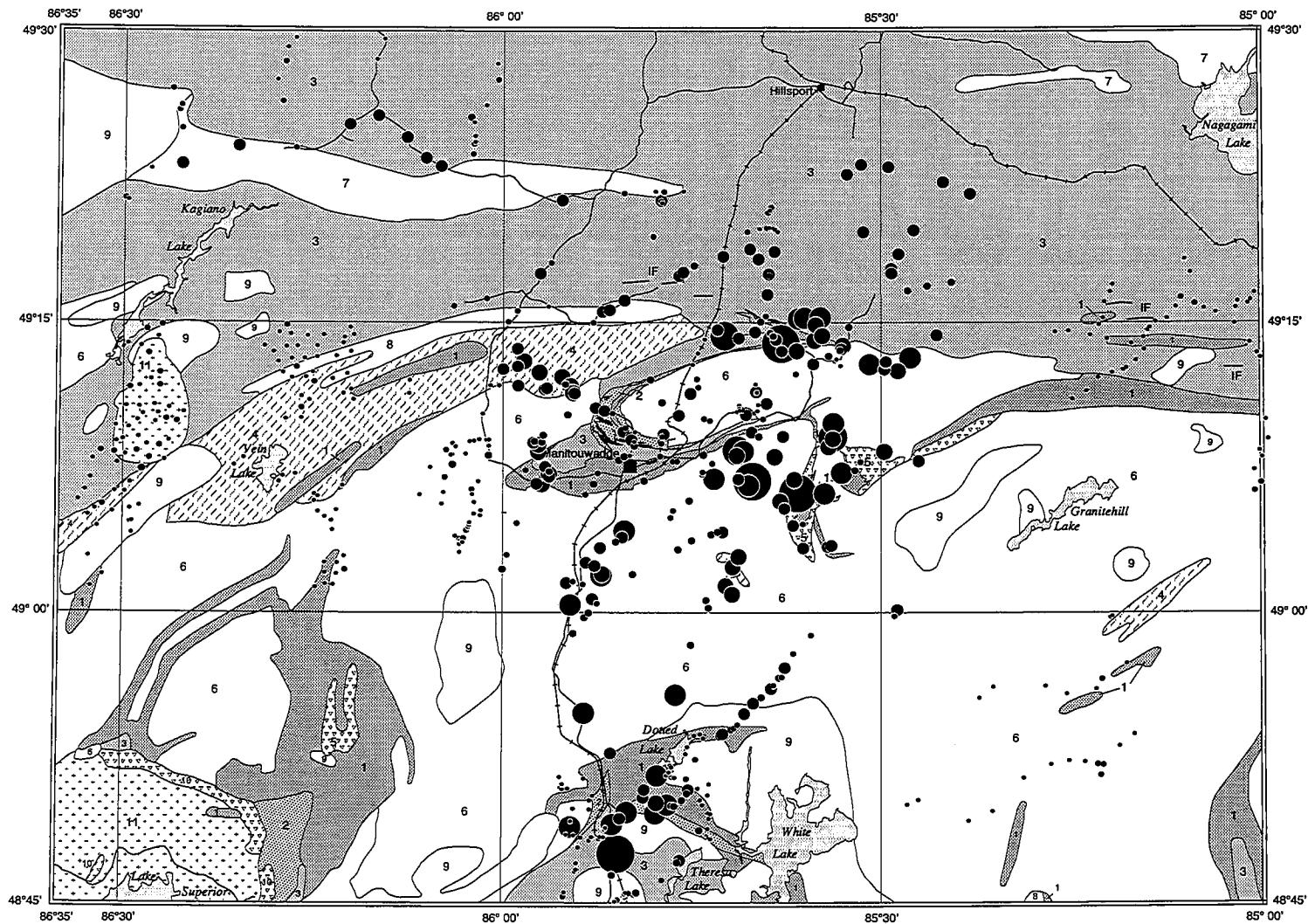
Number of Samples: 603
 Minimum: 1
 Maximum: 38
 Mean: 5.8

Median: 2
 Standard Deviation: 6.9
 Coefficient of Variation: 1.2



Frequency Histogram





Symbol Legend
Antimony (ppm)

	MIN.	MAX.	#SAMP	%TILE
•	1	1	287	47.4
•	1	2	109	65.5
•	2	10	60	75.4
•	10	31	92	90.6
•	31	35	28	95.2
•	35	38	22	98.8
•	38	39	3	99.3
•	39	50	4	100

Antimony in the <0.063 mm fraction of till

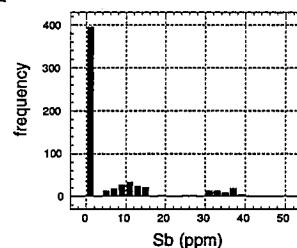
Summary Statistics

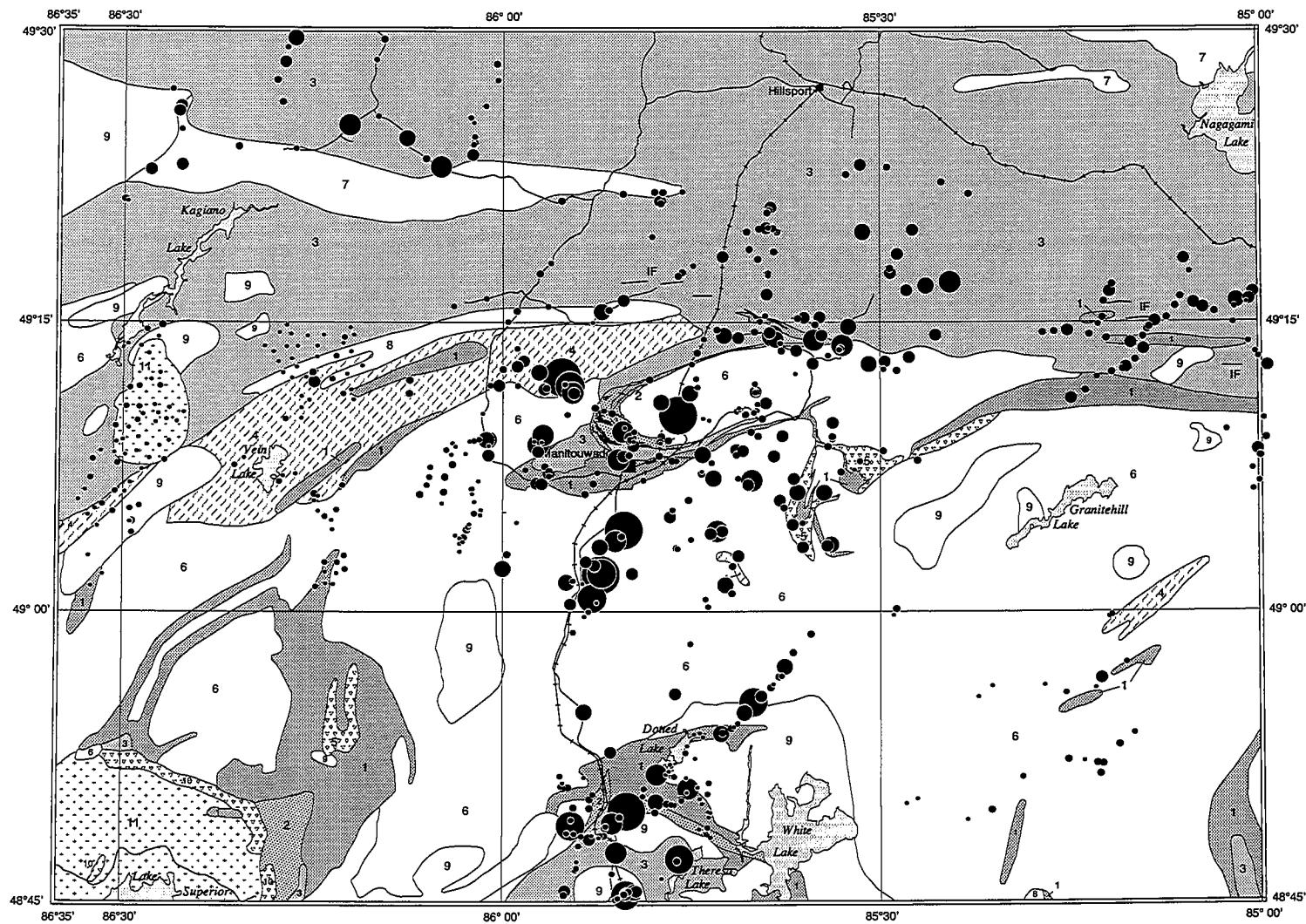
Number of Samples: 605
 Minimum: 1
 Maximum: 50
 Mean: 7.3

Median: 2
 Standard Deviation: 10.7
 Coefficient of Variation: 1.5



Frequency Histogram





Symbol Legend
Strontium (ppm)

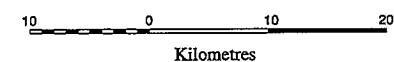
	MIN.	MAX.	#SAMP	%TILE
•	3	15	158	26.2
•	15	29	154	51.7
•	29	46	146	76
•	46	63	85	90
•	63	73	30	95
•	73	85	18	98
•	85	91	7	99.2
•	91	105	5	100

Strontium in the <0.002 mm fraction of till

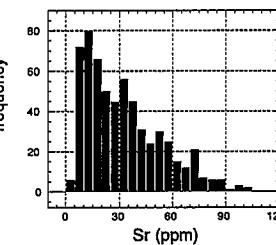
Summary Statistics

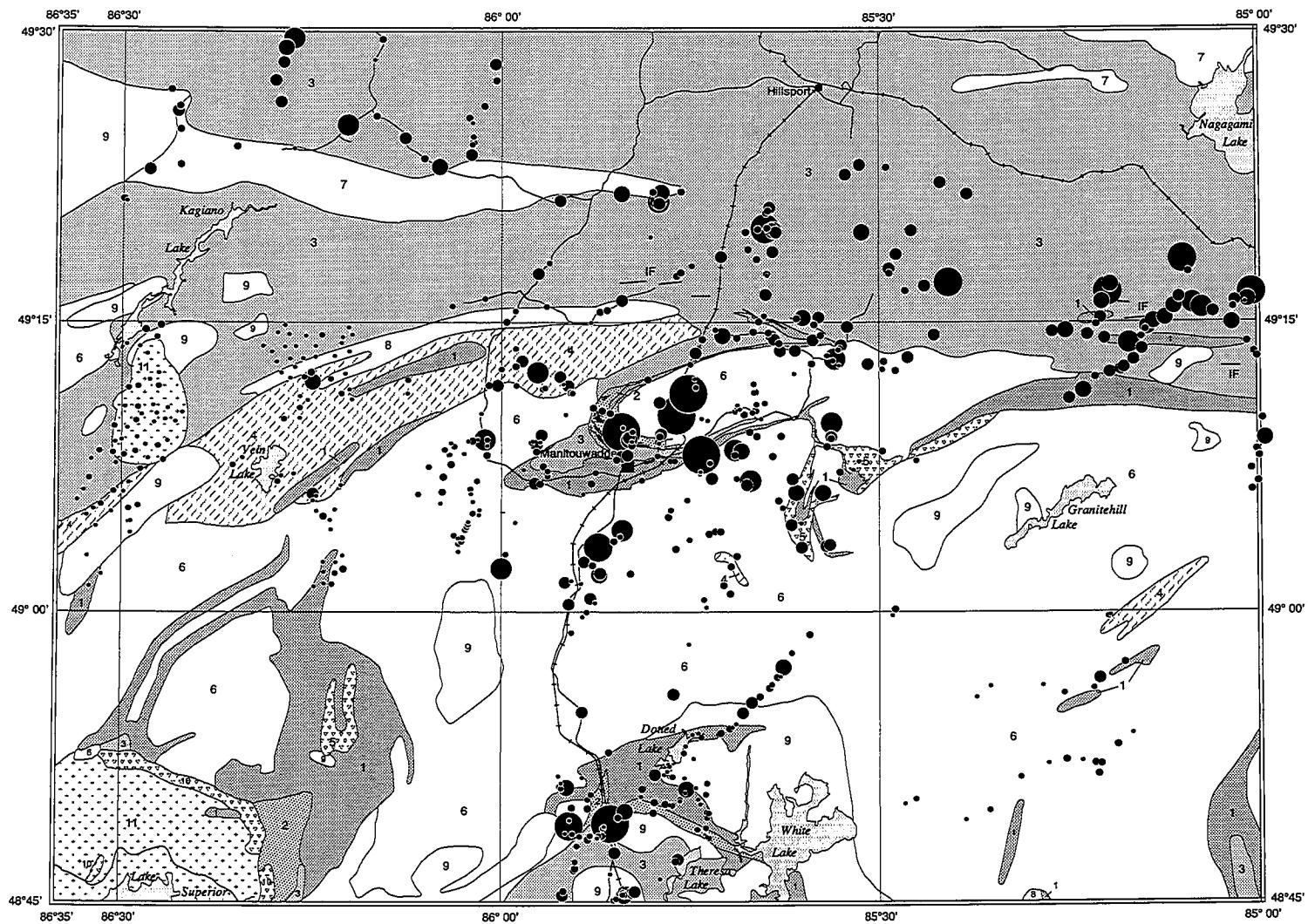
Number of Samples: 603
 Minimum: 3
 Maximum: 105
 Mean: 32.8

Median: 29
 Standard Deviation: 21.3
 Coefficient of Variation: 0.6



Frequency Histogram





Symbol Legend
Strontium (ppm)

	MIN.	MAX.	#SAMP	%TILE
.	4	13	176	29.1
•	13	24	133	51.1
●	24	48	146	75.2
●●	48	57	92	90.4
●●●	57	61	32	95.7
●●●●	61	65	14	98
●●●●●	65	68	7	99.2
●●●●●●	68	165	5	100

Strontium in the <0.063 mm fraction of till

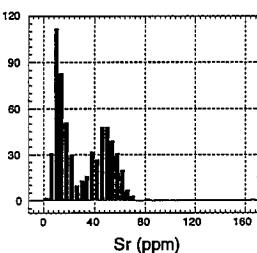
Summary Statistics

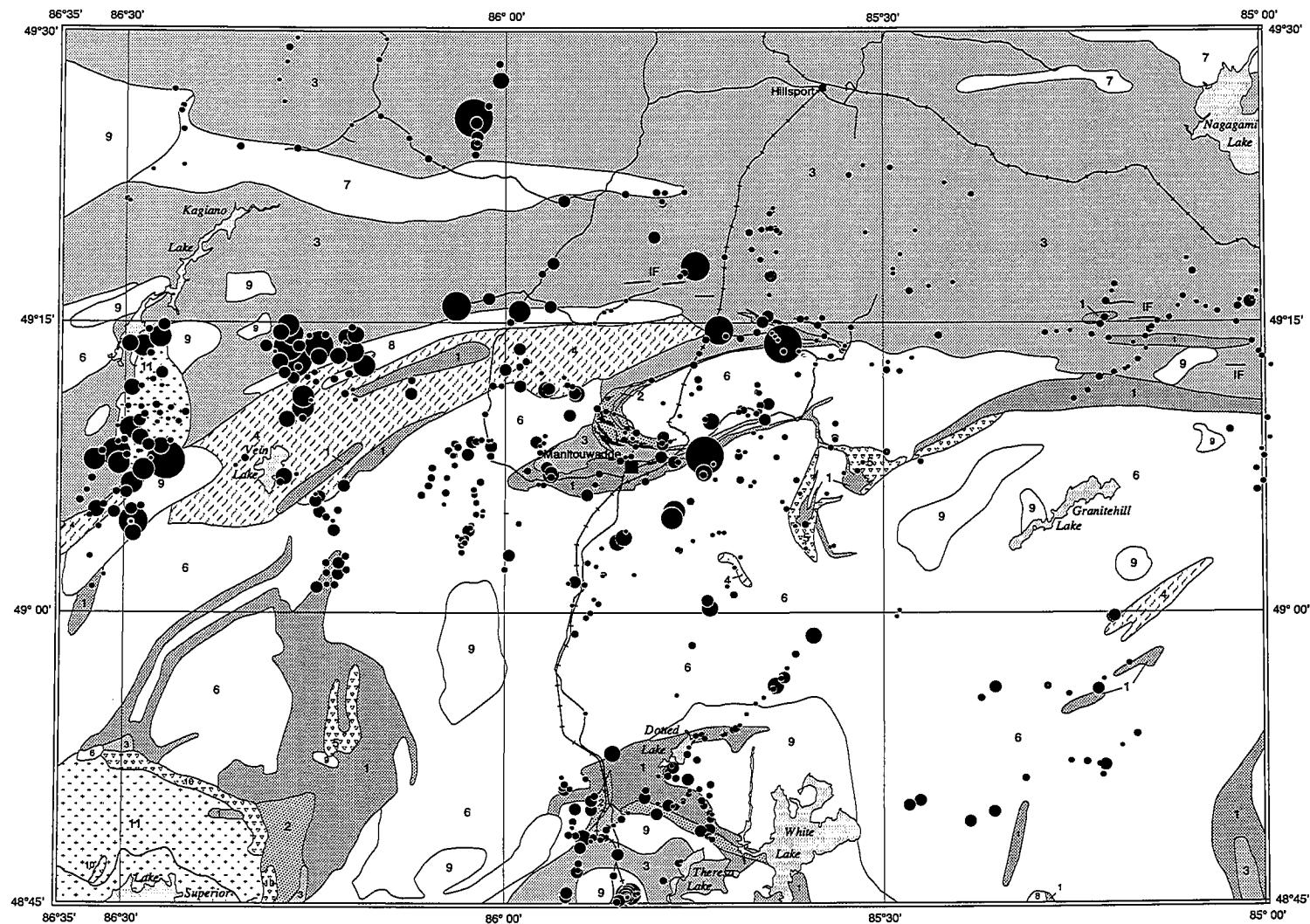
Number of Samples: 605
 Minimum: 4
 Maximum: 165
 Mean: 30.6

Median: 24
 Standard Deviation: 19.8
 Coefficient of Variation: 0.6



Frequency Histogram





Symbol Legend
Vanadium (ppm)

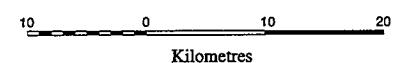
MIN.	MAX.	#SAMP	%TILE
22	55	154	25.5
55	66	159	51.9
66	84	147	76.3
84	104	84	90.2
104	122	29	95
122	151	18	98
151	171	7	99.2
171	374	5	100

Vanadium in the <0.002 mm fraction of till

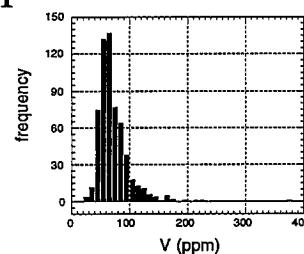
Summary Statistics

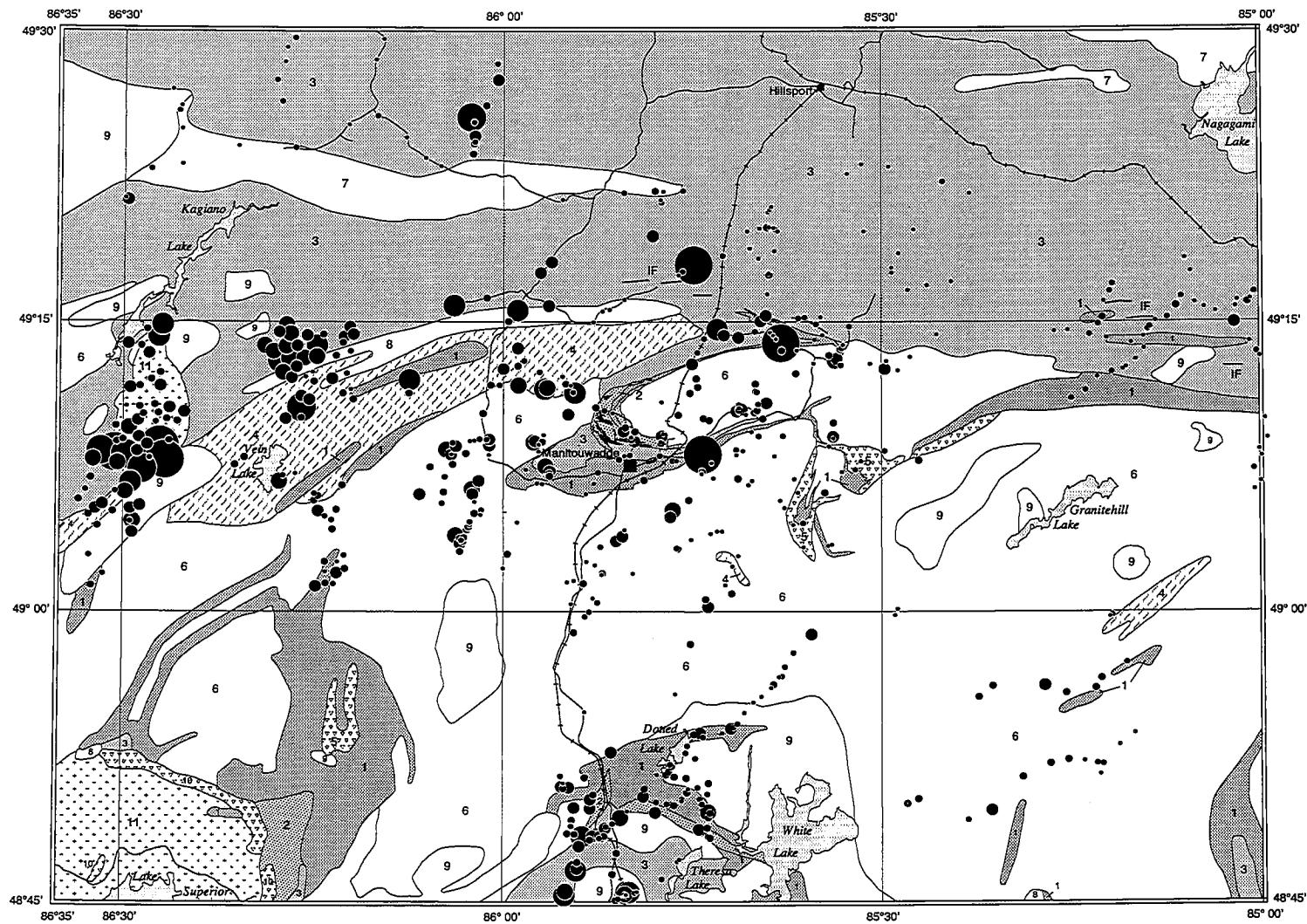
Number of Samples: 603
 Minimum: 22
 Maximum: 374
 Mean: 72.4

Median: 66
 Standard Deviation: 28.7
 Coefficient of Variation: 0.4



Frequency Histogram





Symbol Legend
Vanadium (ppm)

MIN.	MAX.	#SAMP	%TILE
4	19	191	31.6
19	23	123	51.9
23	31	146	76
31	41	89	90.7
41	49	27	95.2
49	62	18	98.2
62	77	5	99
77	120	6	100

Vanadium in the <0.063 mm fraction of till

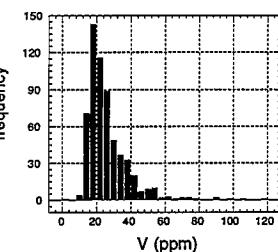
Summary Statistics

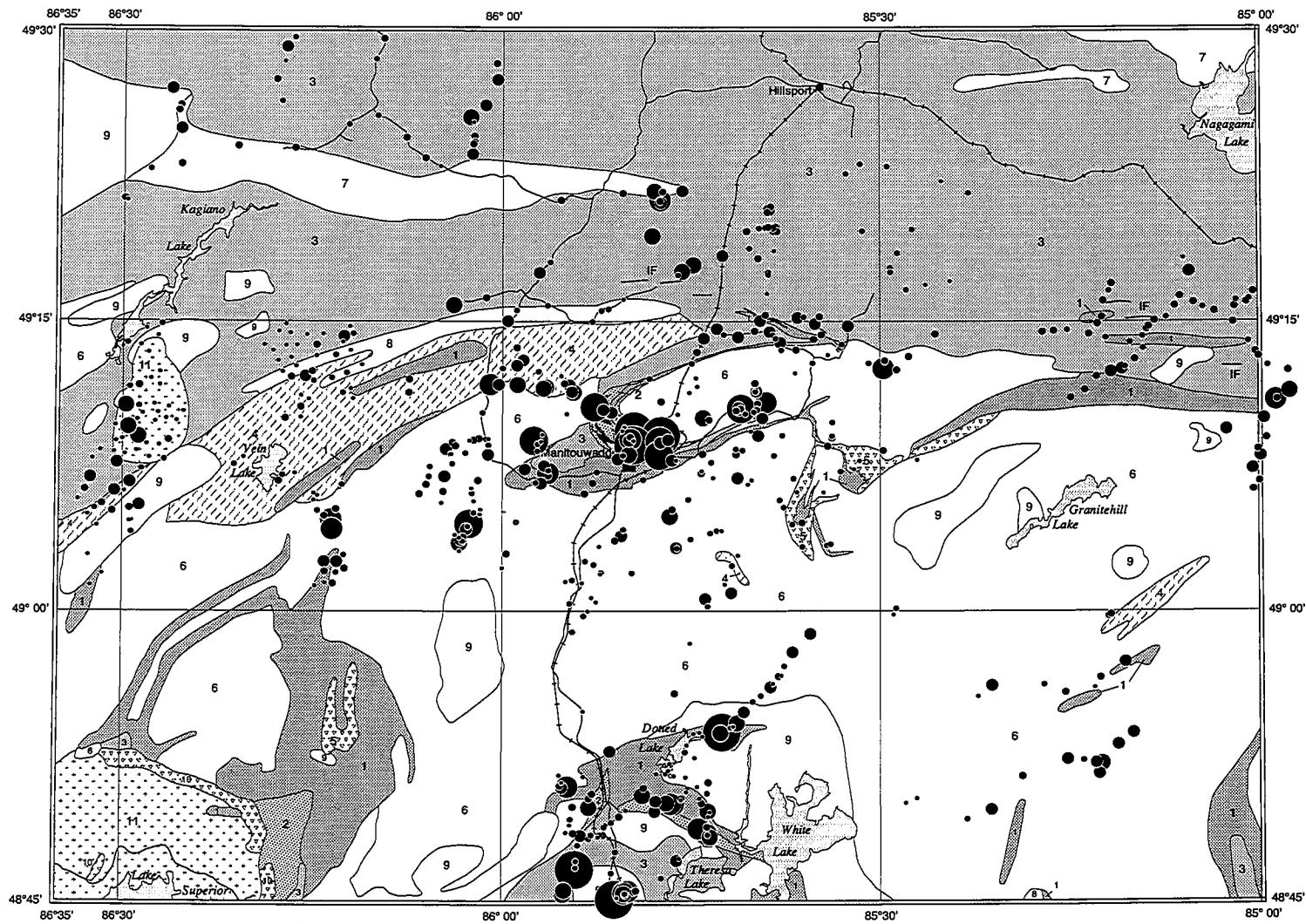
Number of Samples: 605
 Minimum: 4
 Maximum: 120
 Mean: 26.6

Median: 23
 Standard Deviation: 12.7
 Coefficient of Variation: 0.5



Frequency Histogram





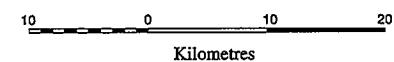
Symbol Legend
Zinc (ppm)

MIN.	MAX.	#SAMP	%TILE
18	74	161	26.7
74	94	153	52.1
94	116	143	75.8
116	154	86	90
154	224	30	95
224	385	18	98
385	861	6	99
861	7563	6	100

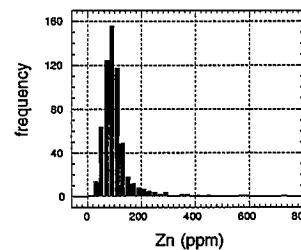
Zinc in the <0.002 mm fraction of till

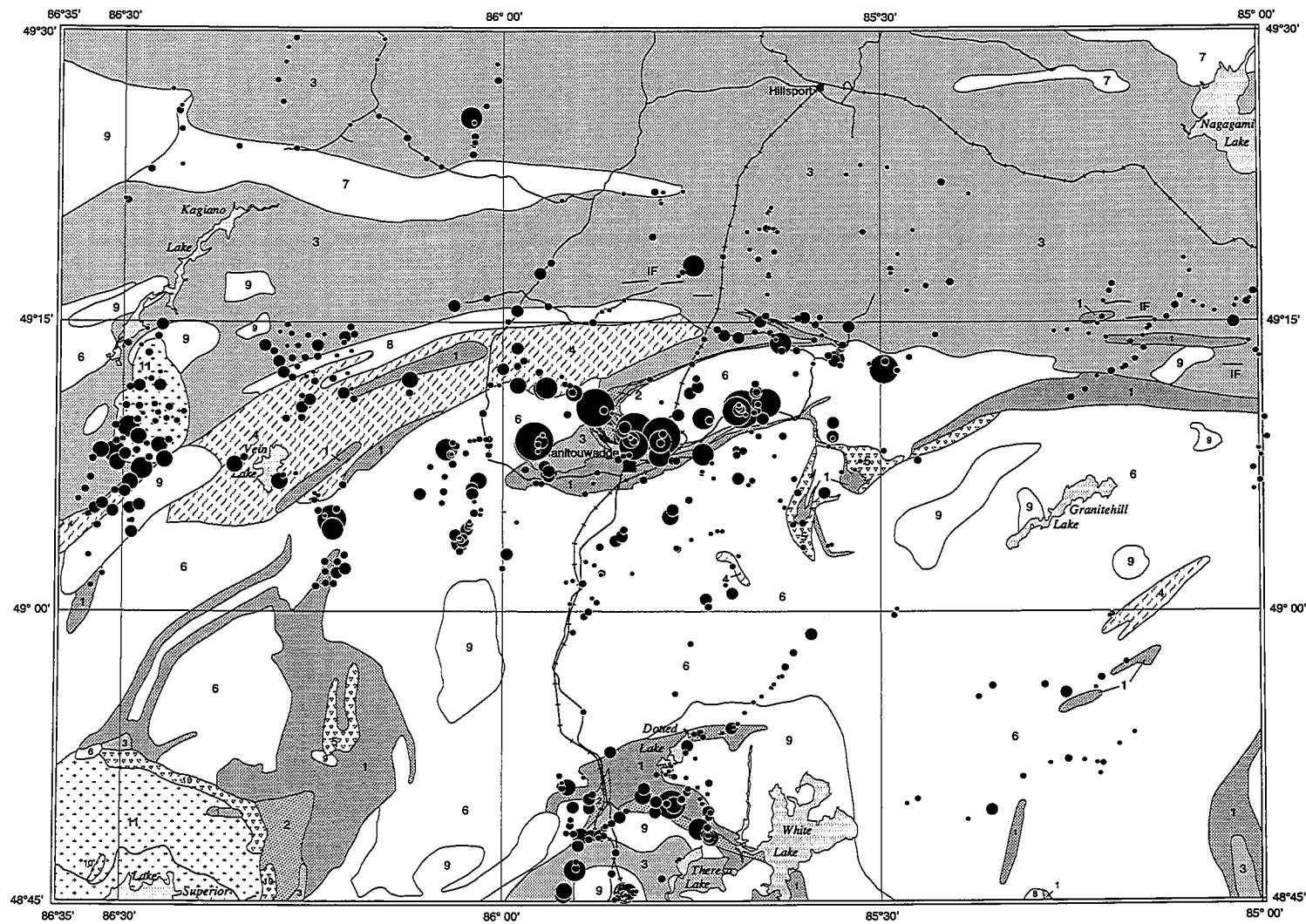
Summary Statistics

Number of Samples: 603
 Minimum: 18
 Maximum: 7563
 Mean: 127.6
 Median: 94
 Standard Deviation: 331.4
 Coefficient of Variation: 2.6



Frequency Histogram





Symbol Legend
Zinc (ppm)

	MIN.	MAX.	#SAMP	%TILE
.	2	14	179	29.6
•	14	18	136	52.1
●	18	26	152	77.2
●●	26	42	81	90.6
●●●	42	58	28	95.2
●●●●	58	93	17	98
●●●●●	93	134	6	99
●●●●●●	134	2589	6	100

Zinc in the <0.063 mm fraction of till

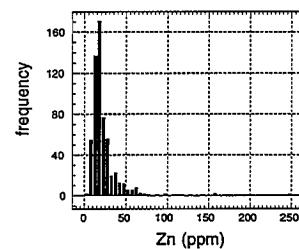
Summary Statistics

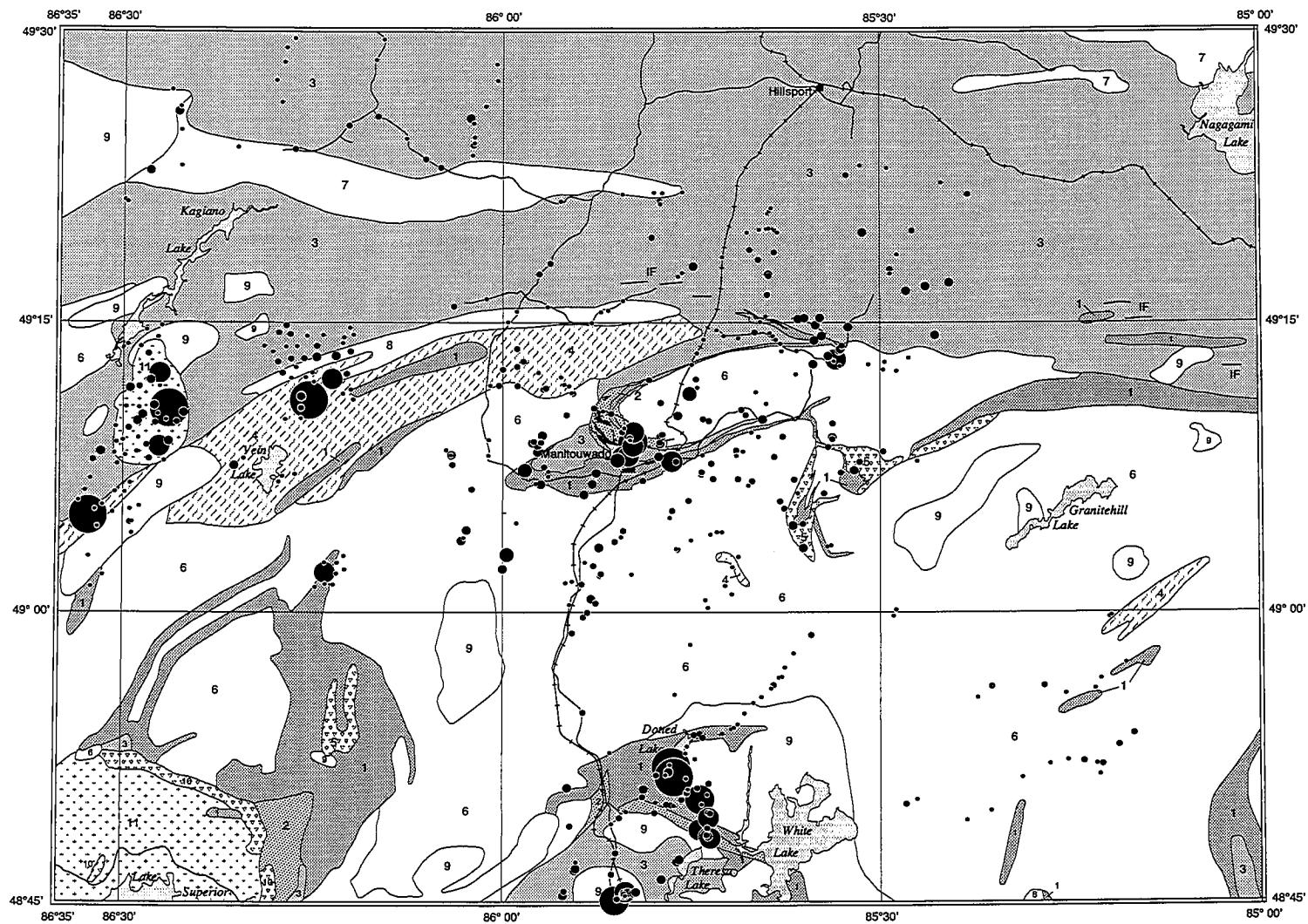
Number of Samples: 605
 Minimum: 2
 Maximum: 2589
 Mean: 28.6

Median: 18
 Standard Deviation: 107.3
 Coefficient of Variation: 3.7



Frequency Histogram





Symbol Legend

Palladium (ppb)

MIN.	MAX.	#SAMP	%TILE
0.5	1	242	50.3
1	2	140	79.4
2	4	72	94.4
4	5	4	95.2
5	8	15	98.3
8	11	3	99
11	72	5	100

Palladium in the <0.063 mm fraction of till

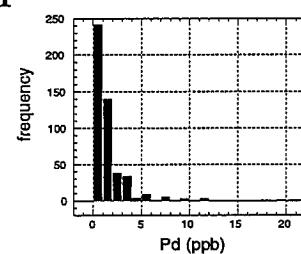
Summary Statistics

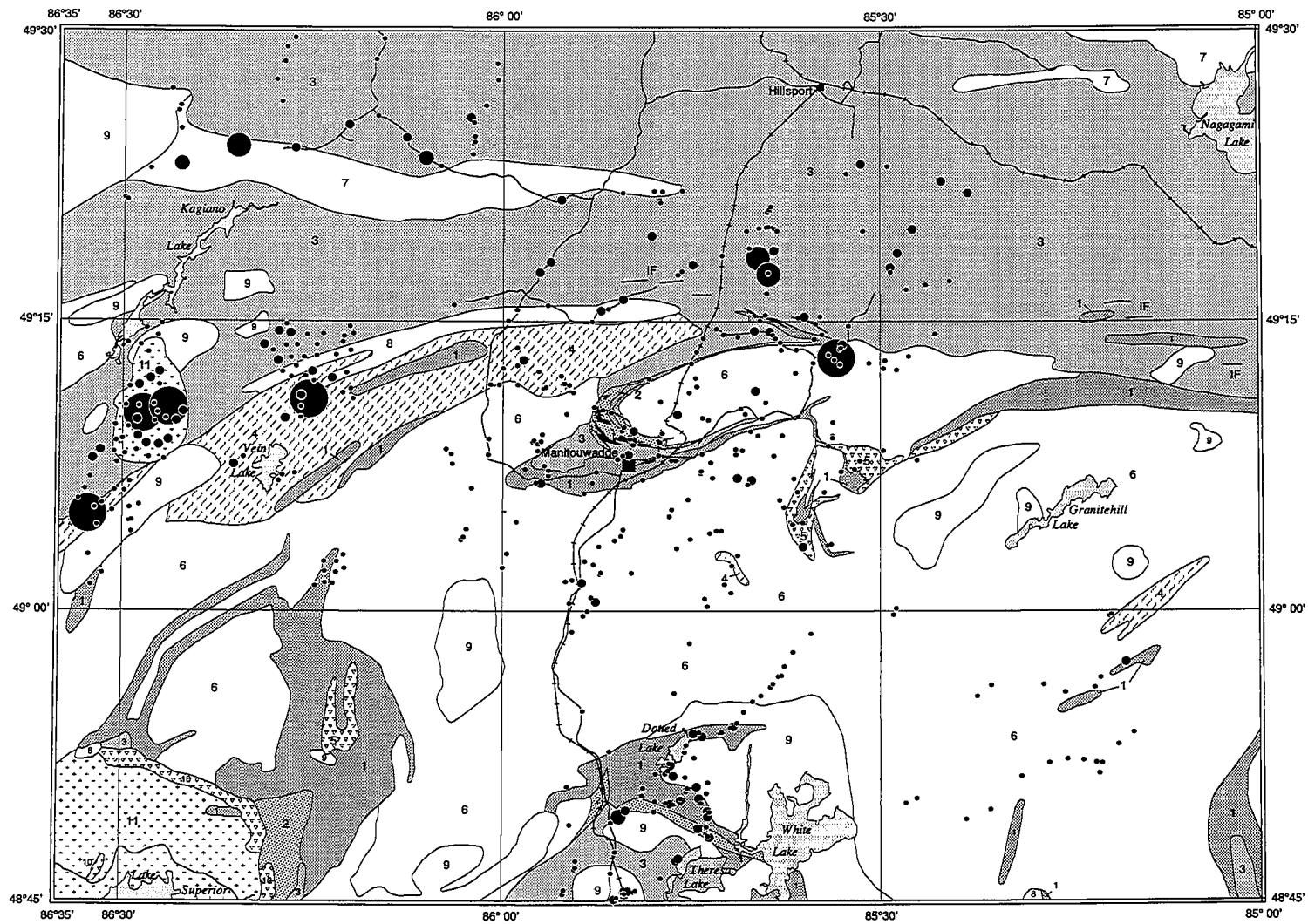
Number of Samples: 481
 Minimum: 0.5
 Maximum: 72
 Mean: 2.1

Median: 1
 Standard Deviation: 3.7
 Coefficient of Variation: 1.7



Frequency Histogram





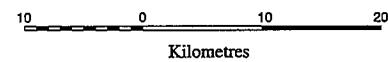
Symbol Legend
Platinum (ppb)

MIN.	MAX.	#SAMP	%TILE
1	1	392	81.5
1	5	78	97.7
5	6	3	98.3
6	9	3	99
9	60	5	100

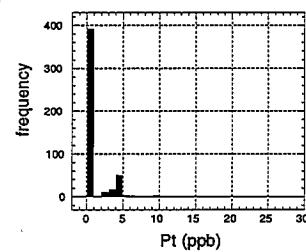
Platinum in the <0.063 mm fraction of till

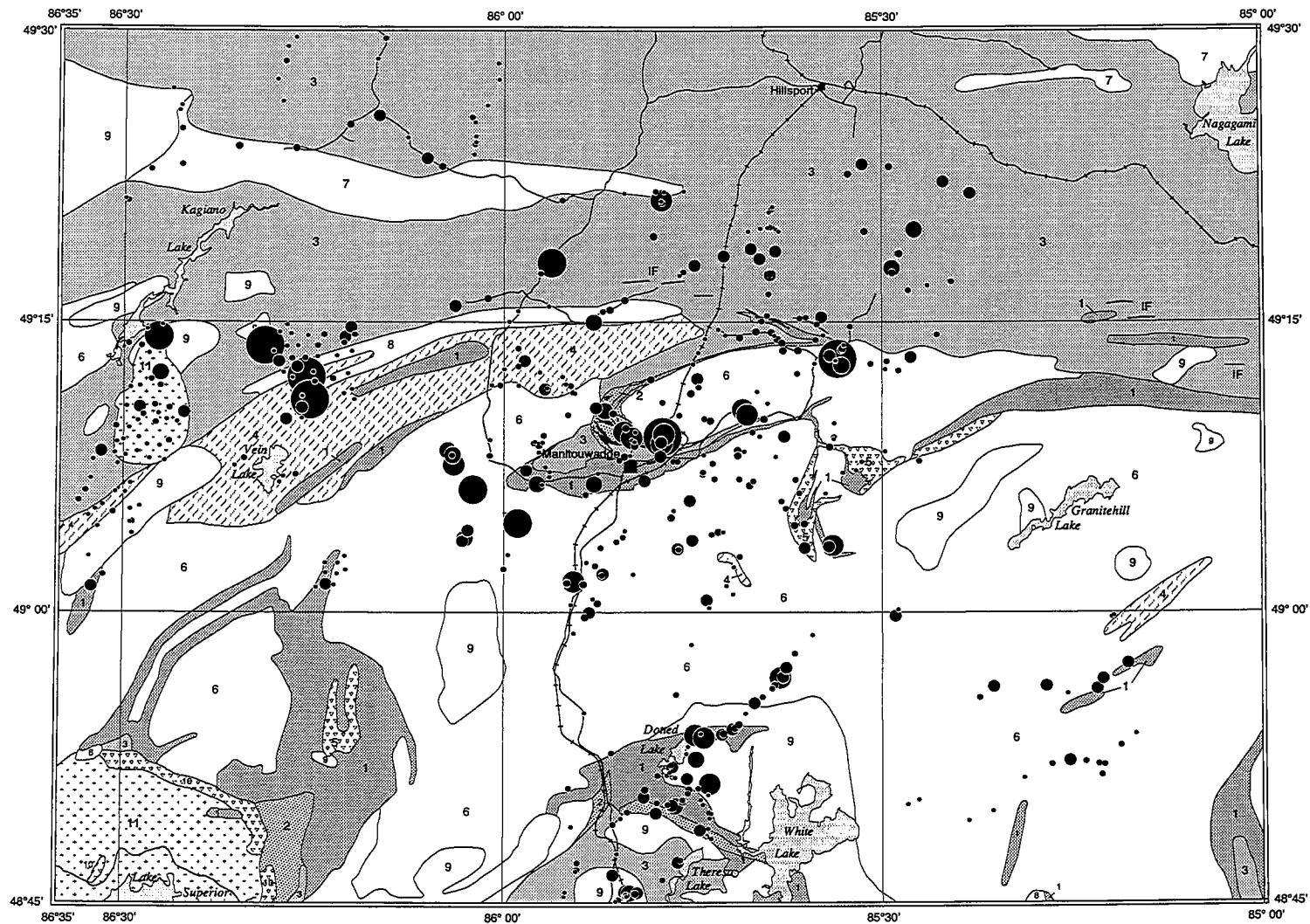
Summary Statistics

Number of Samples: 481
 Minimum: 1
 Maximum: 60
 Mean: 1.9
 Median: 1
 Standard Deviation: 3.3
 Coefficient of Variation: 1.8



Frequency Histogram





Symbol Legend
Gold (ppb)

	MIN.	MAX.	#SAMP	%TILE
.	0.5	1	199	41.4
•	1	2	125	67.4
●	2	3	53	78.4
●●	3	6	66	92.1
●●●	6	8	15	95.2
●●●●	8	13	14	98.1
●●●●●	13	21	4	99
●●●●●●	21	40	5	100

Gold in the <0.063 mm fraction of till

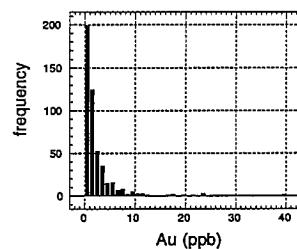
Summary Statistics

Number of Samples: 481
 Minimum: 0.5
 Maximum: 40
 Mean: 2.9

Median: 2
 Standard Deviation: 3.6
 Coefficient of Variation: 1.3



Frequency Histogram

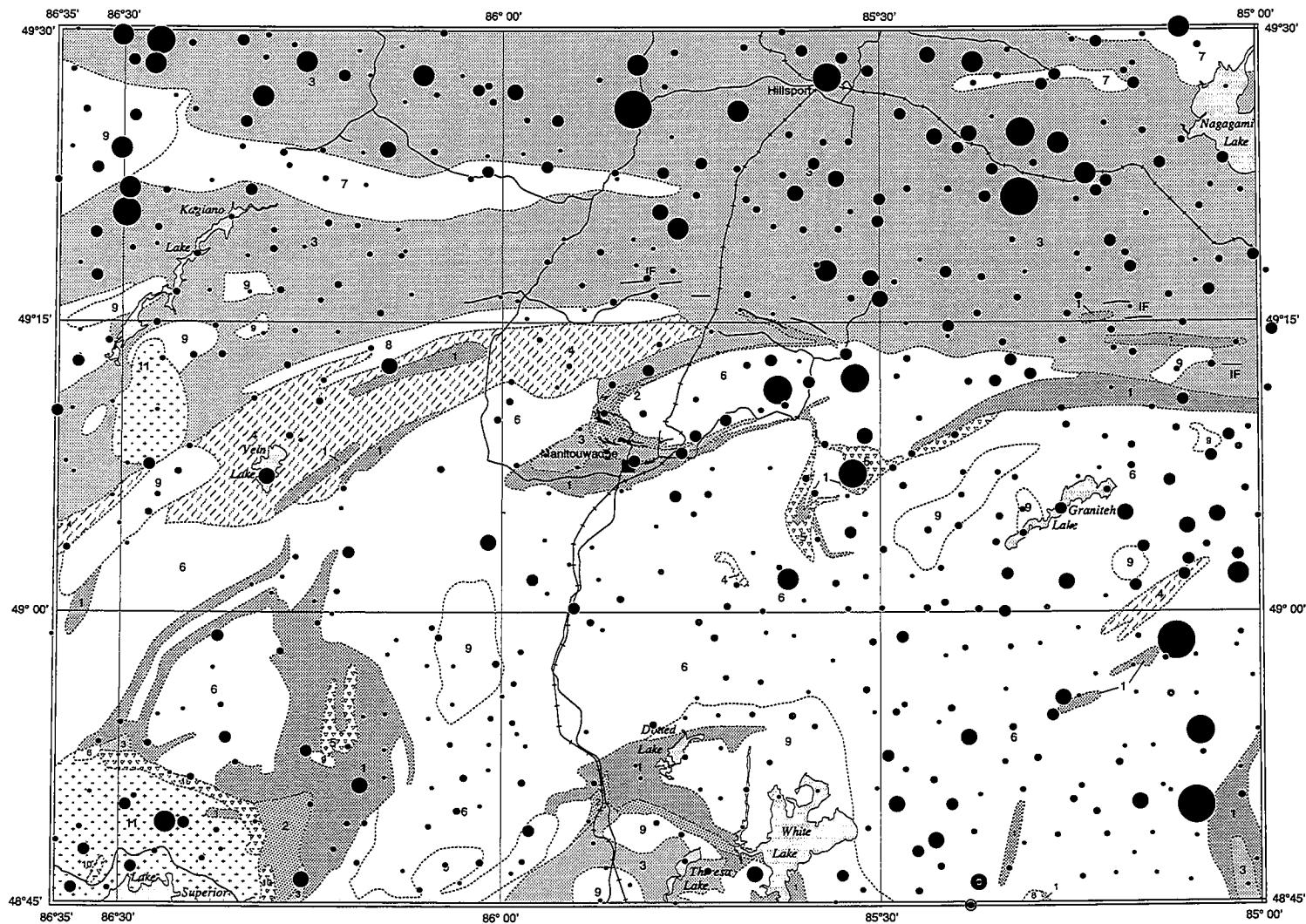


APPENDIX C (ii)

MANITOUDAGE-HORNPAYNE REGION

Maps of As, Au, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, U, and Zn
in Lake Sediments, U in Lake Waters, and pH of Lake Waters.

Plots are based on data for samples collected by Mineral Resources Division, Geological Survey of Canada, in 1978 and 1979, and reanalyzed by ICP-AES and INAA in 1992 (Geological Survey of Canada Open Files 2360 and 2362).



Symbol Legend

Arsenic (ppm)

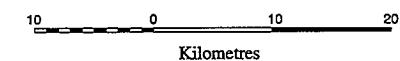
	MIN.	MAX.	#SAMP	%TILE
•	0.6	2.0	174	28.9
•	2.0	2.6	145	52.9
•	2.6	3.4	140	76.1
•	3.4	4.4	87	90.5
•	4.4	5.5	27	95
•	5.5	8.1	18	98
•	8.1	10	8	99.3
•	10	13	4	100

Arsenic in lake sediments

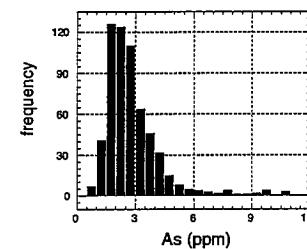
Analytical Method: Instrumental Neutron Activation
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

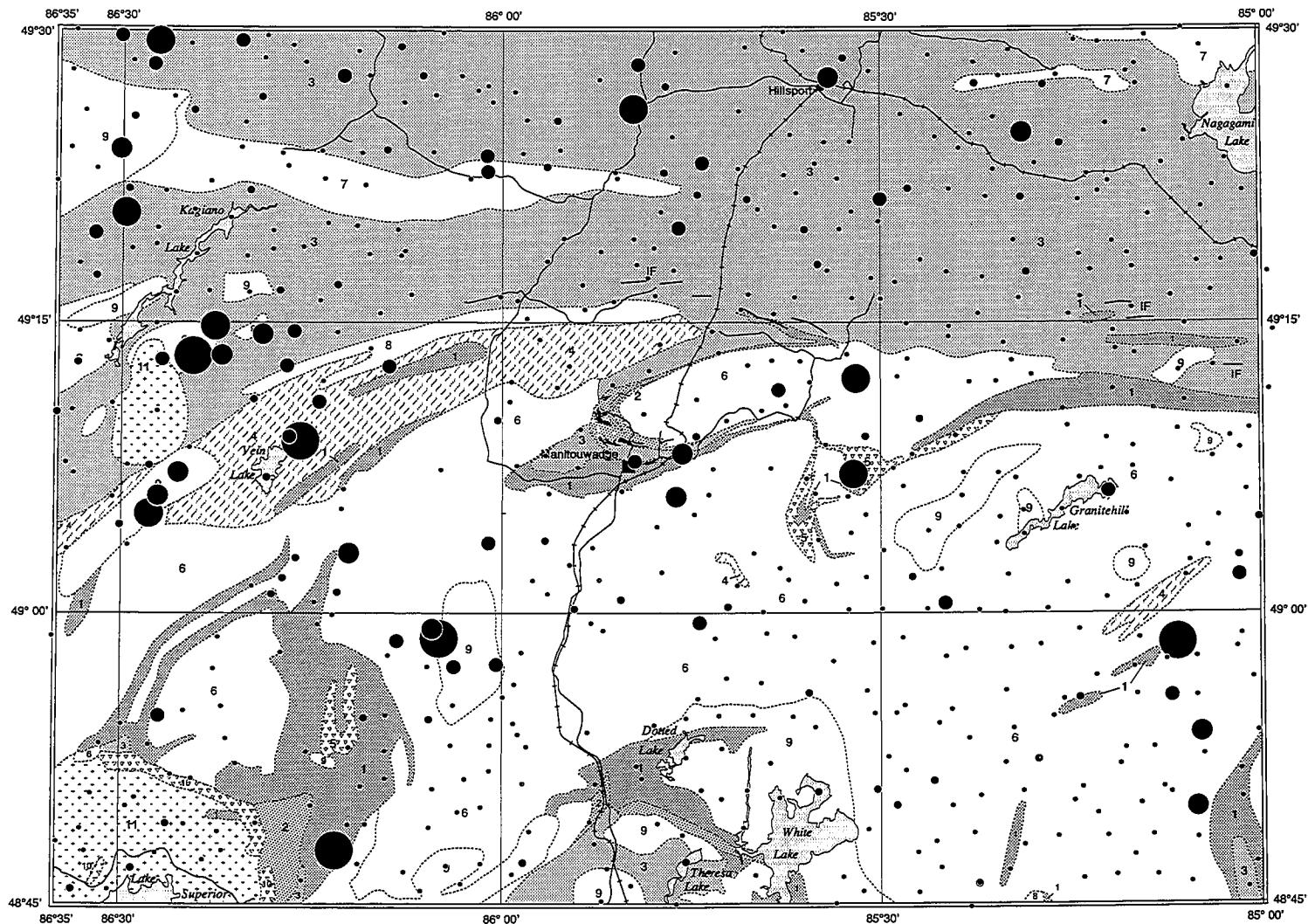
Summary Statistics

Number of Samples:	603	Median:	2.6
Minimum:	0.6	Standard Deviation:	1.55
Maximum:	13	Coefficient of Variation:	0.53
Mean:	2.9		



Frequency Histogram





Symbol Legend

Arsenic (ppm)

MIN.	MAX.	#SAMP	%TILE
0.5	0.5	486	80.6
0.5	1	63	91
1	2	29	95.9
2	3	13	98
3	5	7	99.2
5	19	5	100

Arsenic in lake sediments

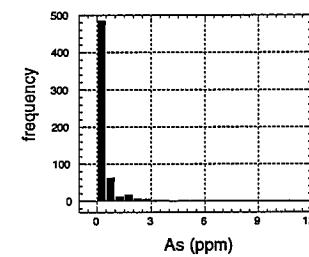
Analytical Method: Atomic Absorption using hydride evolution
 Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

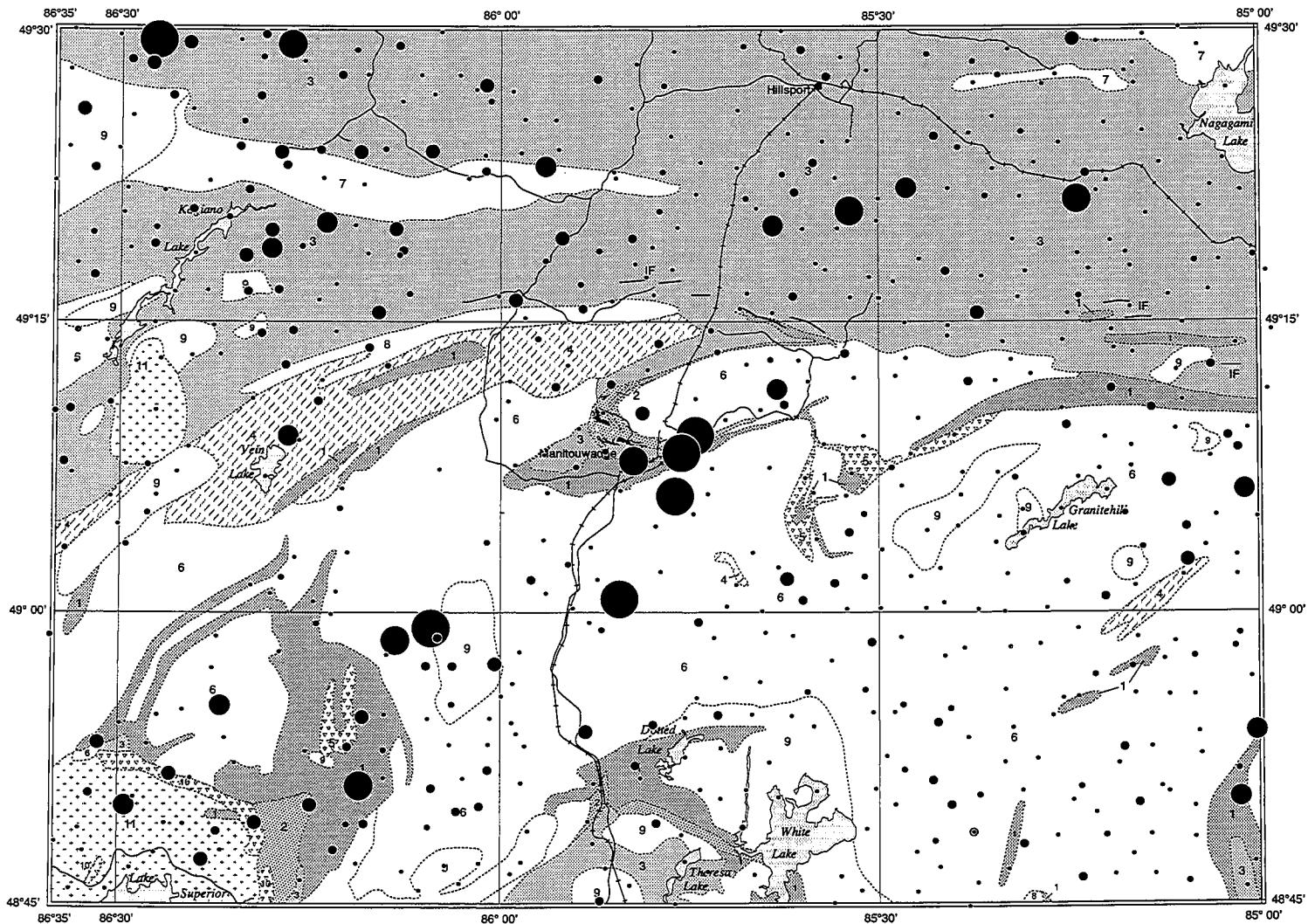
Summary Statistics

Number of Samples:	603	Median:	0.5
Minimum:	0.5	Standard Deviation:	1.1
Maximum:	19	Coefficient of Variation:	1.4
Mean:	0.8		



Frequency Histogram



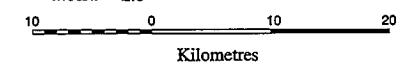


Gold in lake sediments

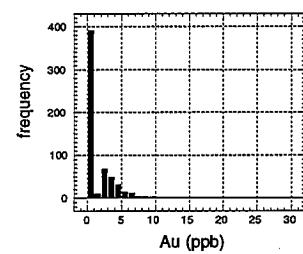
Analytical Method: Instrumental Neutron Activation
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

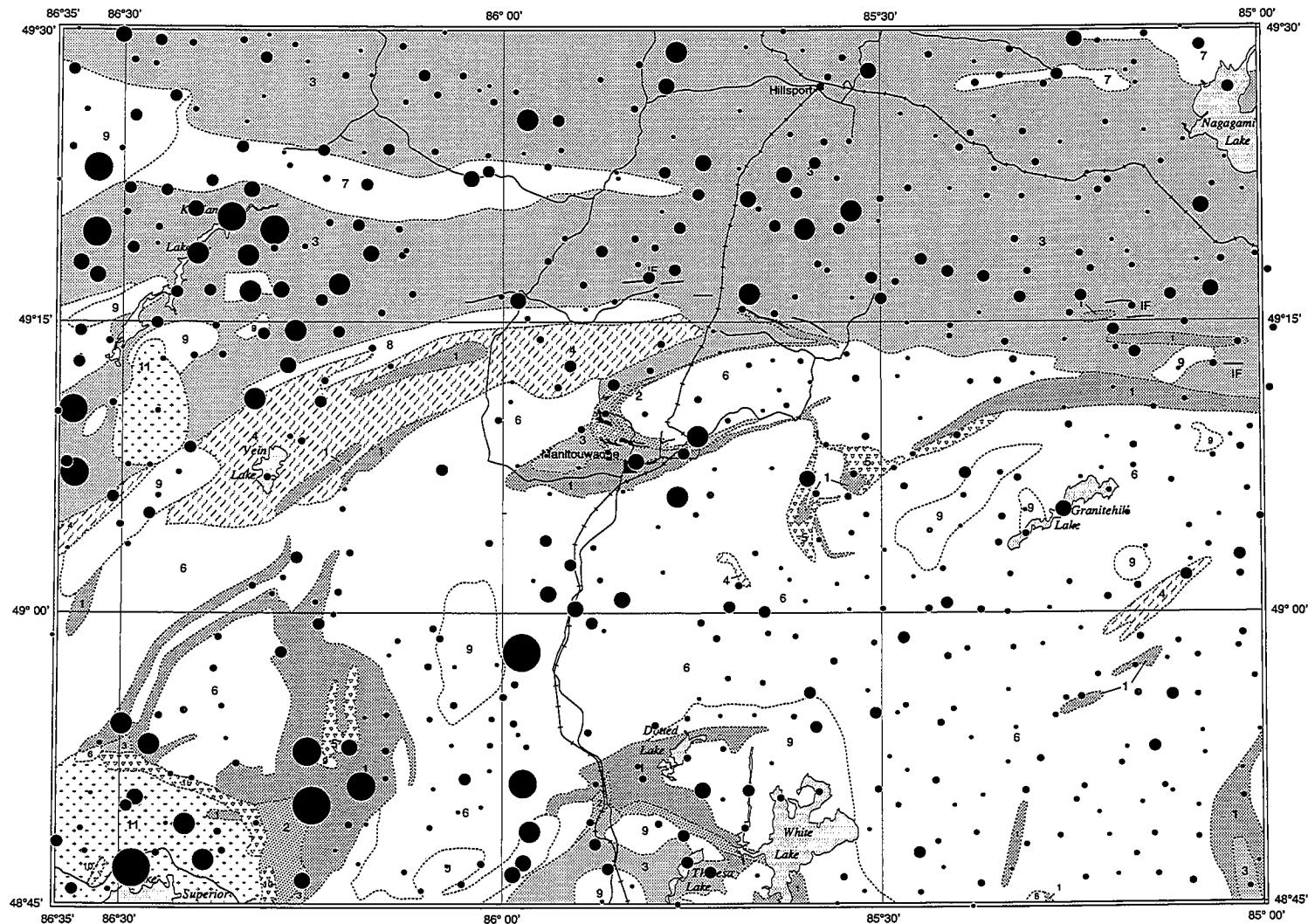
Summary Statistics

Number of Samples:	603	Median:	1
Minimum:	1	Standard Deviation:	7.8
Maximum:	130	Coefficient of Variation:	2.7
Mean:	2.8		



Frequency Histogram





Symbol Legend

Chromium (ppm)

	MIN.	MAX.	#SAMP	%TILE
•	10	26	151	25
•	26	43	153	50.4
•	43	61	153	75.8
•	61	78	86	90
•	78	92	30	95
•	92	99	18	98
•	99	110	9	99.5
•	110	160	3	100

Chromium in lake sediments

Analytical Method: Instrumental Neutron Activation

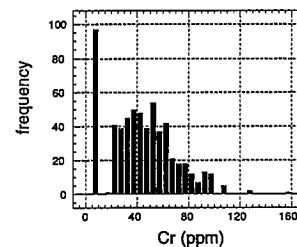
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

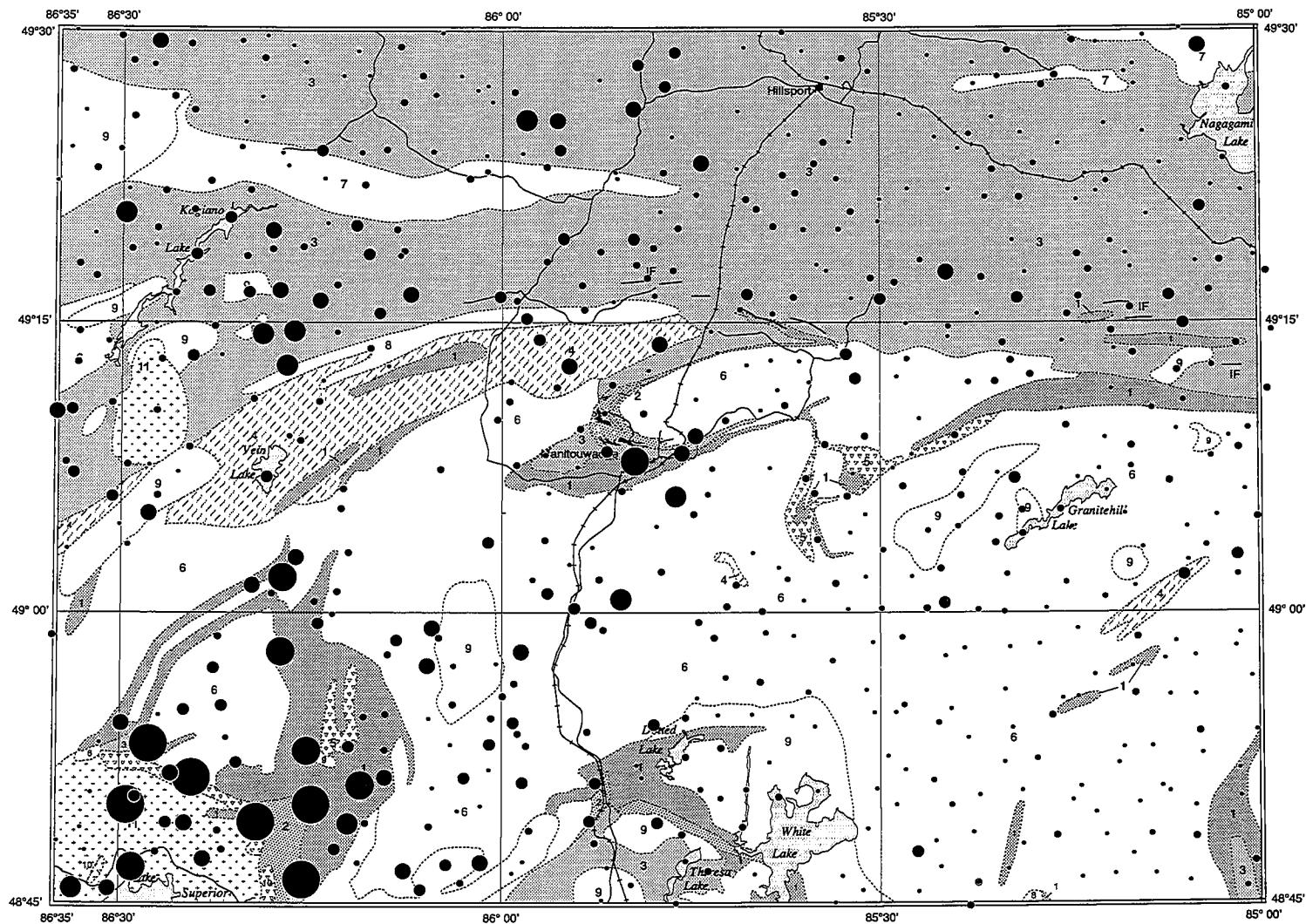
Summary Statistics

Number of Samples:	603	Median:	43
Minimum:	10	Standard Deviation:	24.95
Maximum:	160	Coefficient of Variation:	0.6
Mean:	45.0		



Frequency Histogram





Symbol Legend

Cobalt (ppm)

MIN.	MAX.	#SAMP	%TILE
1	4	228	37.8
4	5	81	51.2
5	8	184	81.8
8	10	60	91.7
10	13	29	96.5
13	15	9	98
15	18	6	99
18	32	6	100

Cobalt in lake sediments

Analytical Method: Atomic Absorption Spectrometry

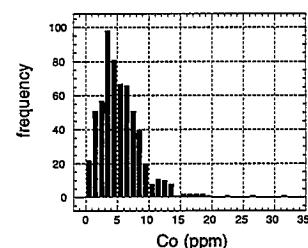
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

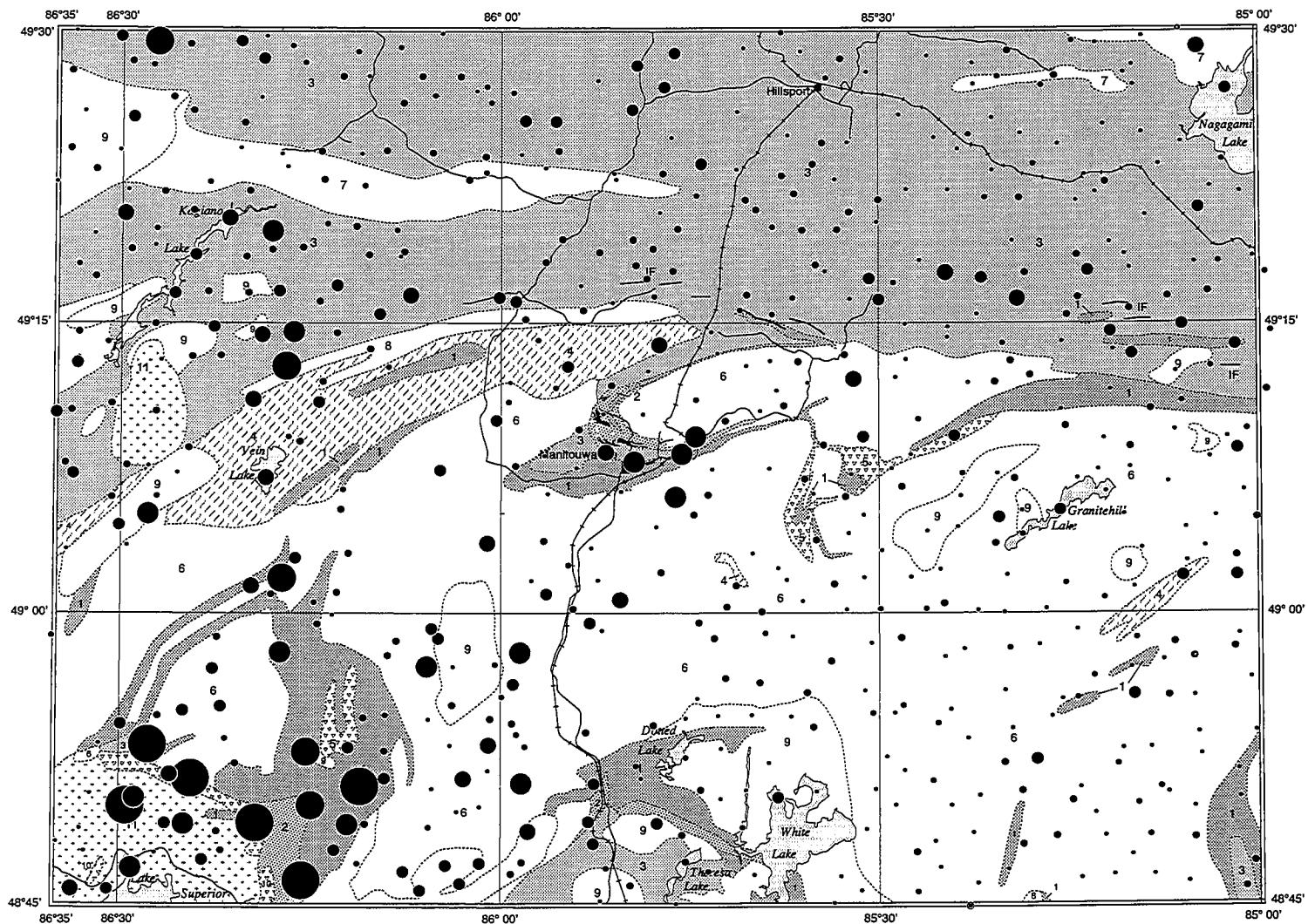
Summary Statistics

Number of Samples:	603	Median:	5
Minimum:	1	Standard Deviation:	3.6
Maximum:	32	Coefficient of Variation:	0.6
Mean:	6.0		



Frequency Histogram





Symbol Legend

Cobalt (ppm)

MIN.	MAX.	#SAMP	%TILE
2	2	232	38.5
2	6	88	53.1
6	9	165	80.4
9	12	72	92.4
12	14	20	95.7
14	18	15	98.2
18	22	5	99
22	33	6	100

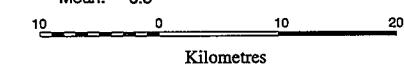
Cobalt in lake sediments

Analytical Method: Instrumental Neutron Activation

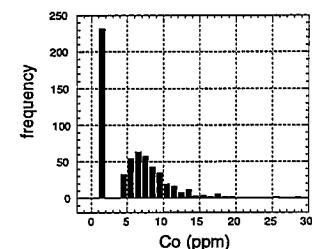
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

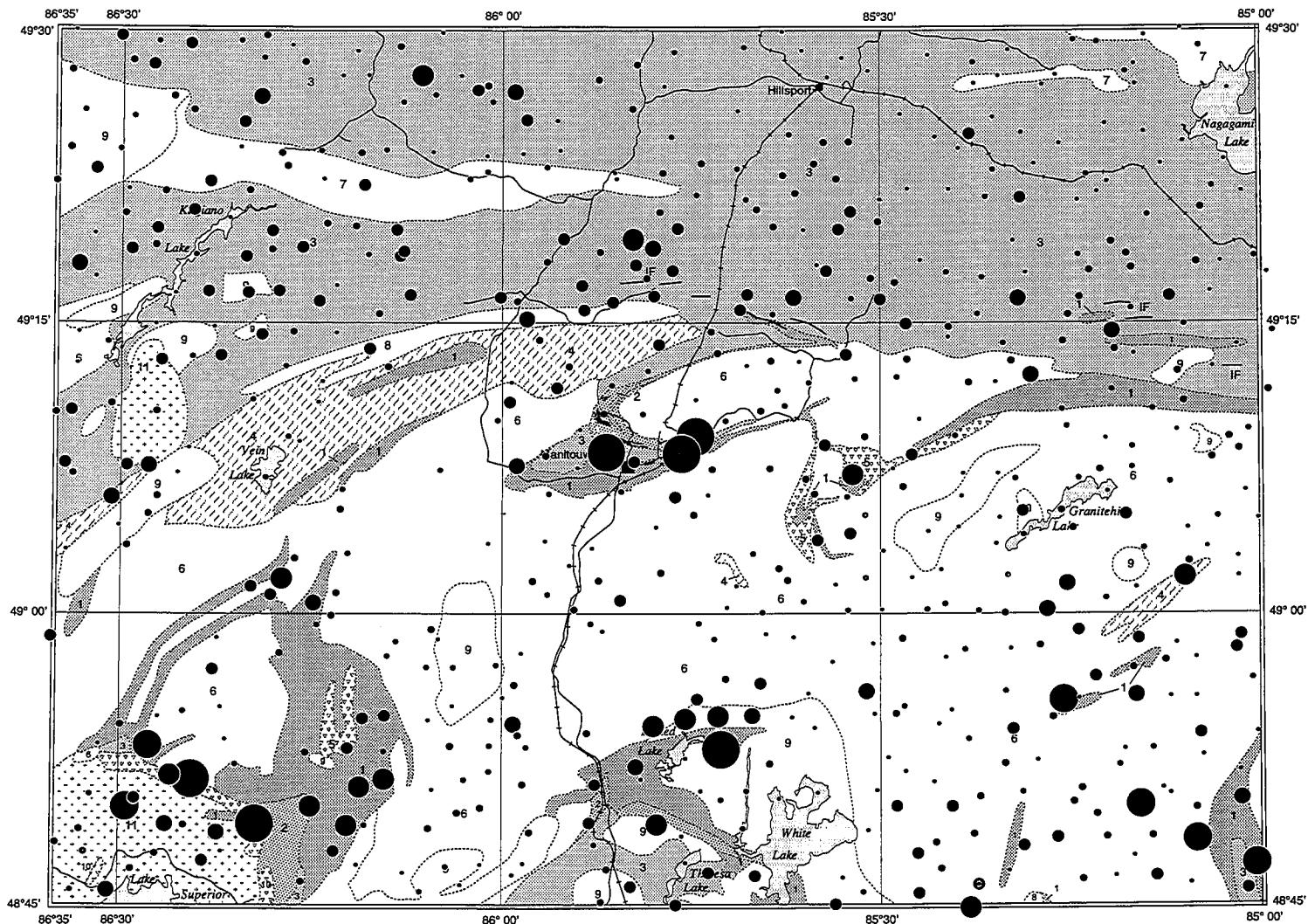
Summary Statistics

Number of Samples:	603	Median:	6
Minimum:	2	Standard Deviation:	4.6
Maximum:	33	Coefficient of Variation:	0.7
Mean:	6.3		



Frequency Histogram





Copper in lake sediments

Analytical Method: Atomic Absorption Spectrometry
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

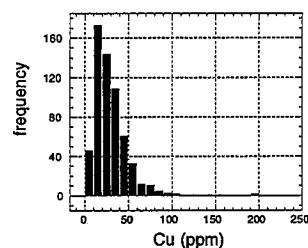
Summary Statistics

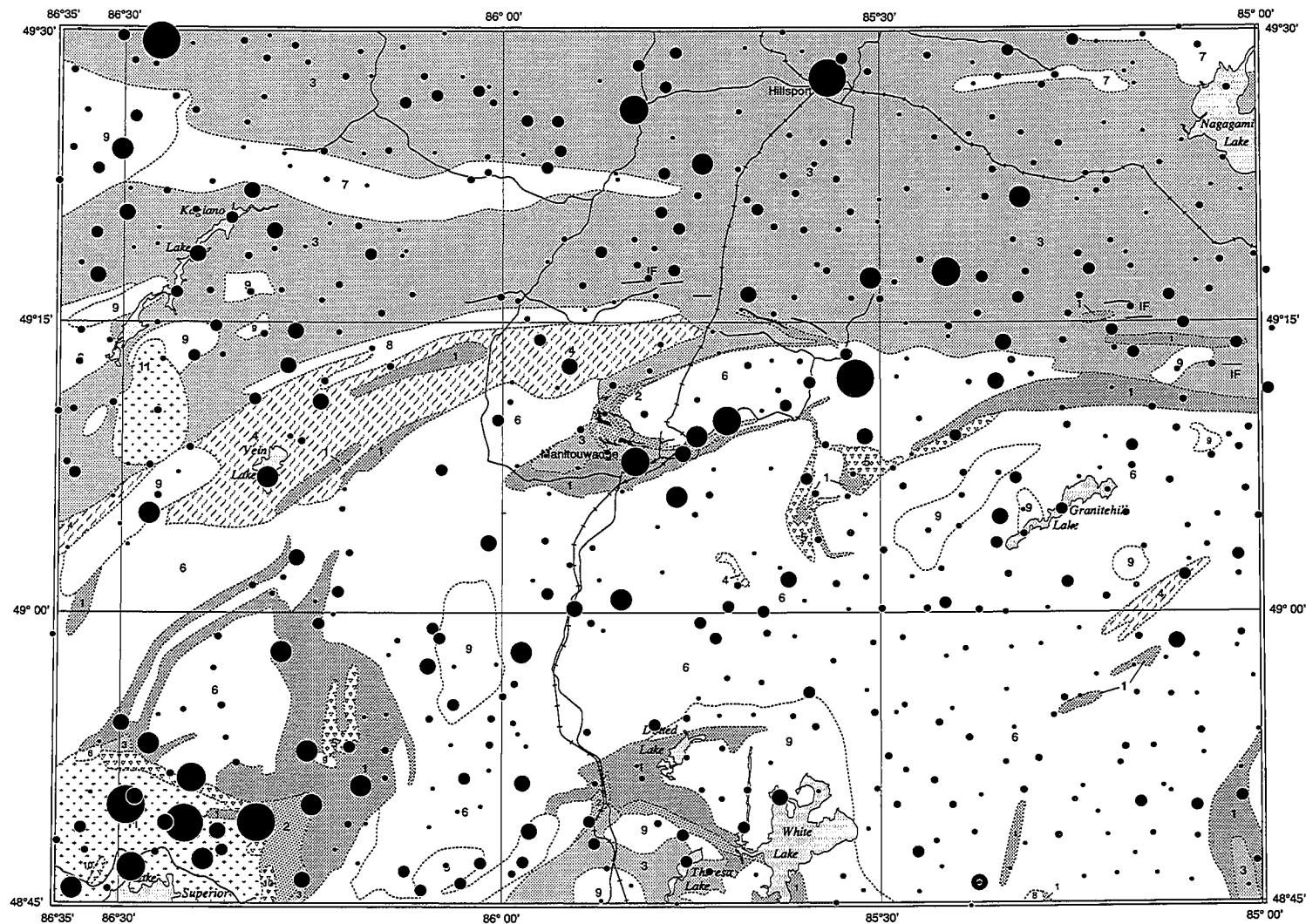
Number of Samples: 603
Minimum: 2
Maximum: 355
Mean: 32.2

Median: 26
Standard Deviation: 27.7
Coefficient of Variation: 0.9



Frequency Histogram





Symbol Legend

Iron (%)

MIN.	MAX.	#SAMP	%TILE
0.05	0.55	167	27.7
0.55	0.80	138	50.6
0.80	1.25	154	76.1
1.25	1.85	85	90.2
1.85	2.30	30	95.2
2.30	3.04	17	98
3.04	3.55	6	99
3.55	6.20	6	100

Iron in lake sediments

Analytical Method: Atomic Absorption Spectrometry

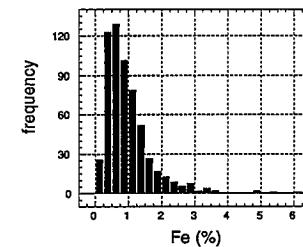
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

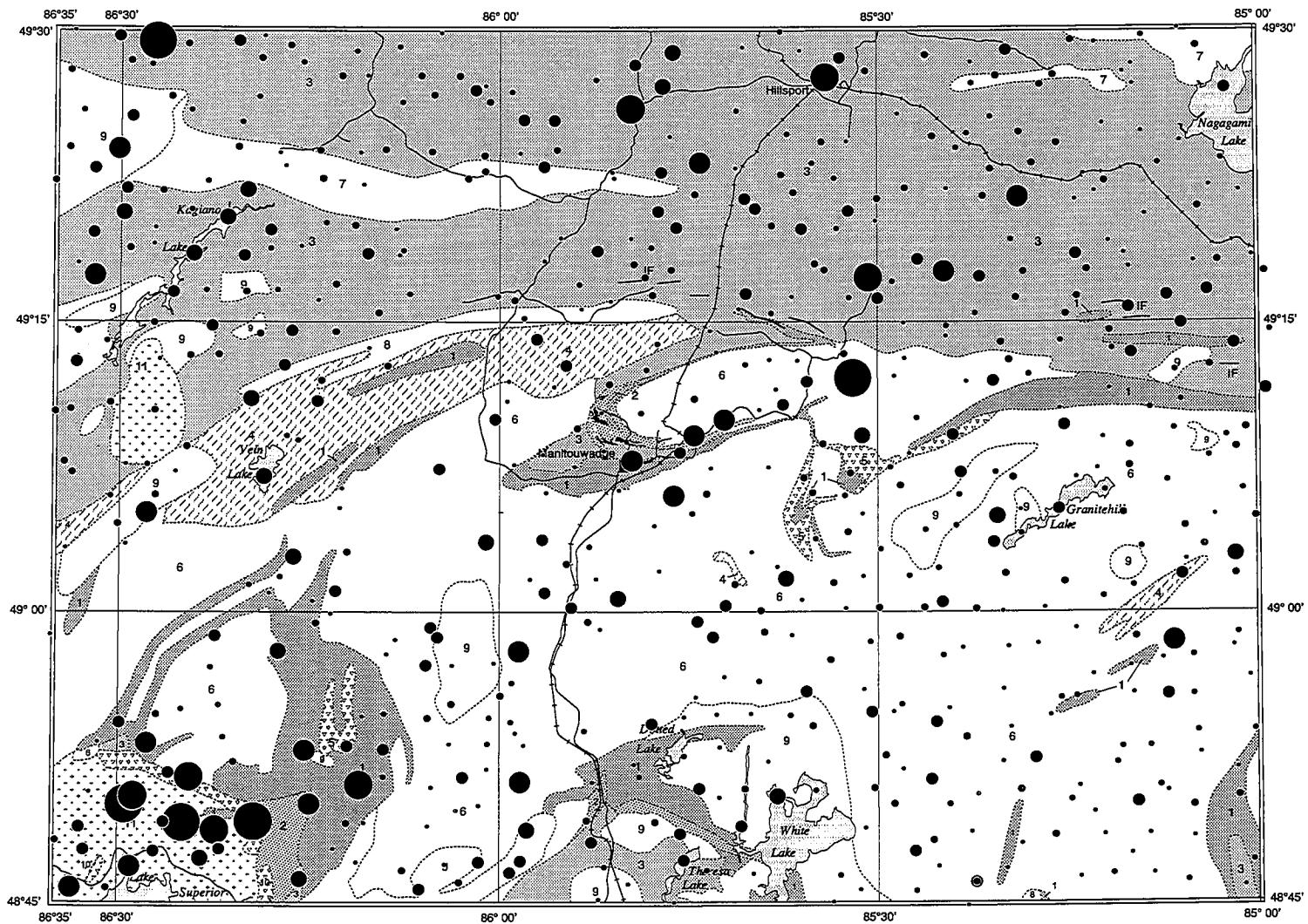
Summary Statistics

Number of Samples:	603	Median:	0.80
Minimum:	0.05	Standard Deviation:	0.72
Maximum:	6.20	Coefficient of Variation:	0.72
Mean:	1.01		



Frequency Histogram





Symbol Legend

Iron (%)

MIN.	MAX.	#SAMP	%TILE
0.1	0.8	187	31
0.8	1.2	122	51.2
1.2	1.8	146	75.5
1.8	2.5	98	91.7
2.5	3.0	20	95
3.0	4.2	18	98
4.2	5.2	7	99.2
5.2	9.0	5	100

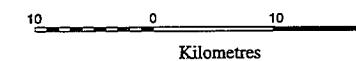
Iron in lake sediments

Analytical Method: Instrumental Neutron Activation

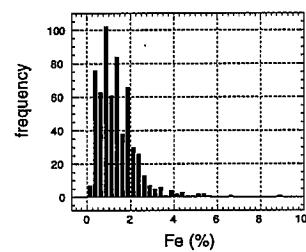
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

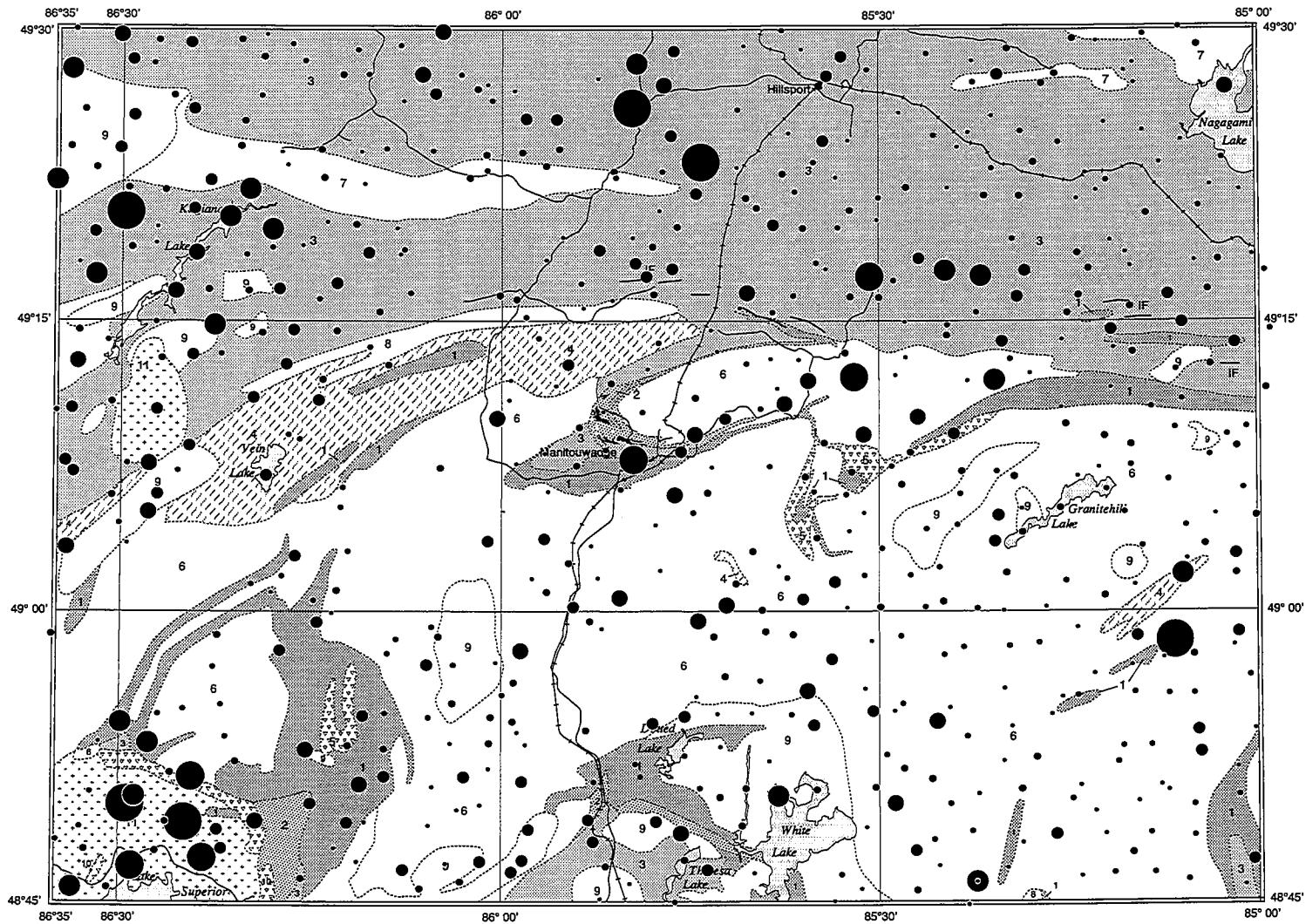
Summary Statistics

Number of Samples:	603	Median:	1.2
Minimum:	0.1	Standard Deviation:	1.0
Maximum:	9.0	Coefficient of Variation:	0.7
Mean:	1.4		



Frequency Histogram





Symbol Legend

Manganese (ppm)

	MIN.	MAX.	#SAMP	%TILE
•	30	75	155	25.7
•	75	150	157	51.7
•	150	264	140	75
•	264	472	91	90
•	472	671	30	95
•	671	997	18	98
•	997	1494	6	99
•	1494	3700	6	100

Manganese in lake sediments

Analytical Method: Atomic Absorption Spectrometry

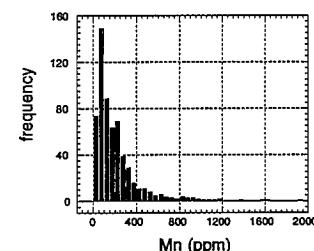
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

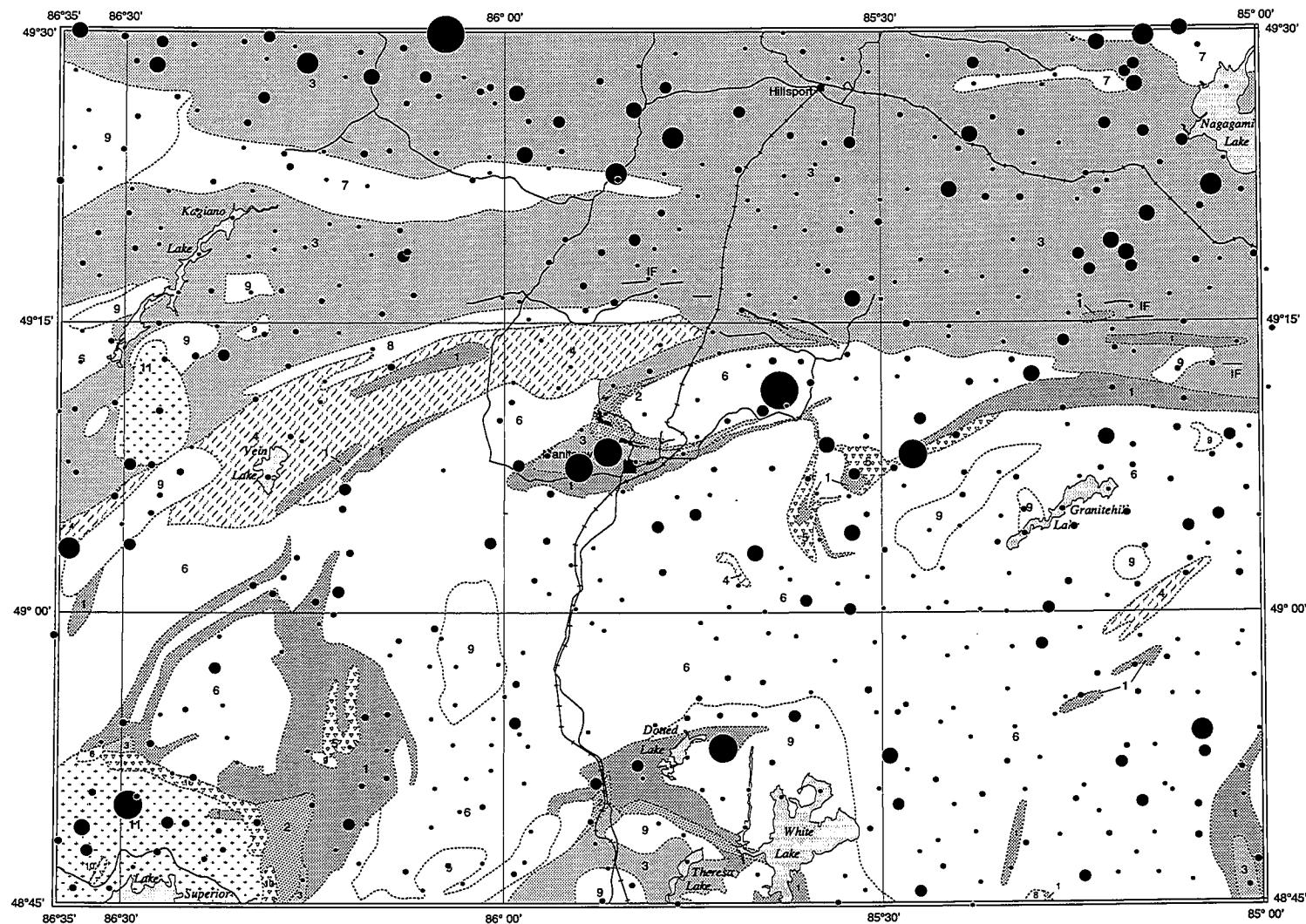
Summary Statistics

Number of Samples:	603	Median:	150
Minimum:	30	Standard Deviation:	309.8
Maximum:	3700	Coefficient of Variation:	1.3
Mean:	290.4		



Frequency Histogram





Symbol Legend

Molybdenum (ppm)

	MIN.	MAX.	#SAMP	%TILE
.	1	1	298	49.4
•	1	2	149	74.1
●	2	3	67	85.2
●●	3	4	53	94
●●●	4	5	22	97.7
●●●●	5	6	7	98.8
●●●●●	6	7	5	99.7
●●●●●●	7	8	2	100

Molybdenum in lake sediments

Analytical Method: Atomic Absorption Spectrometry

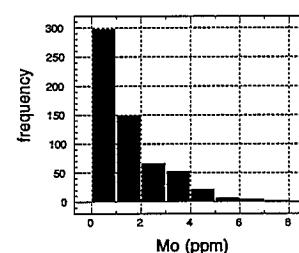
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

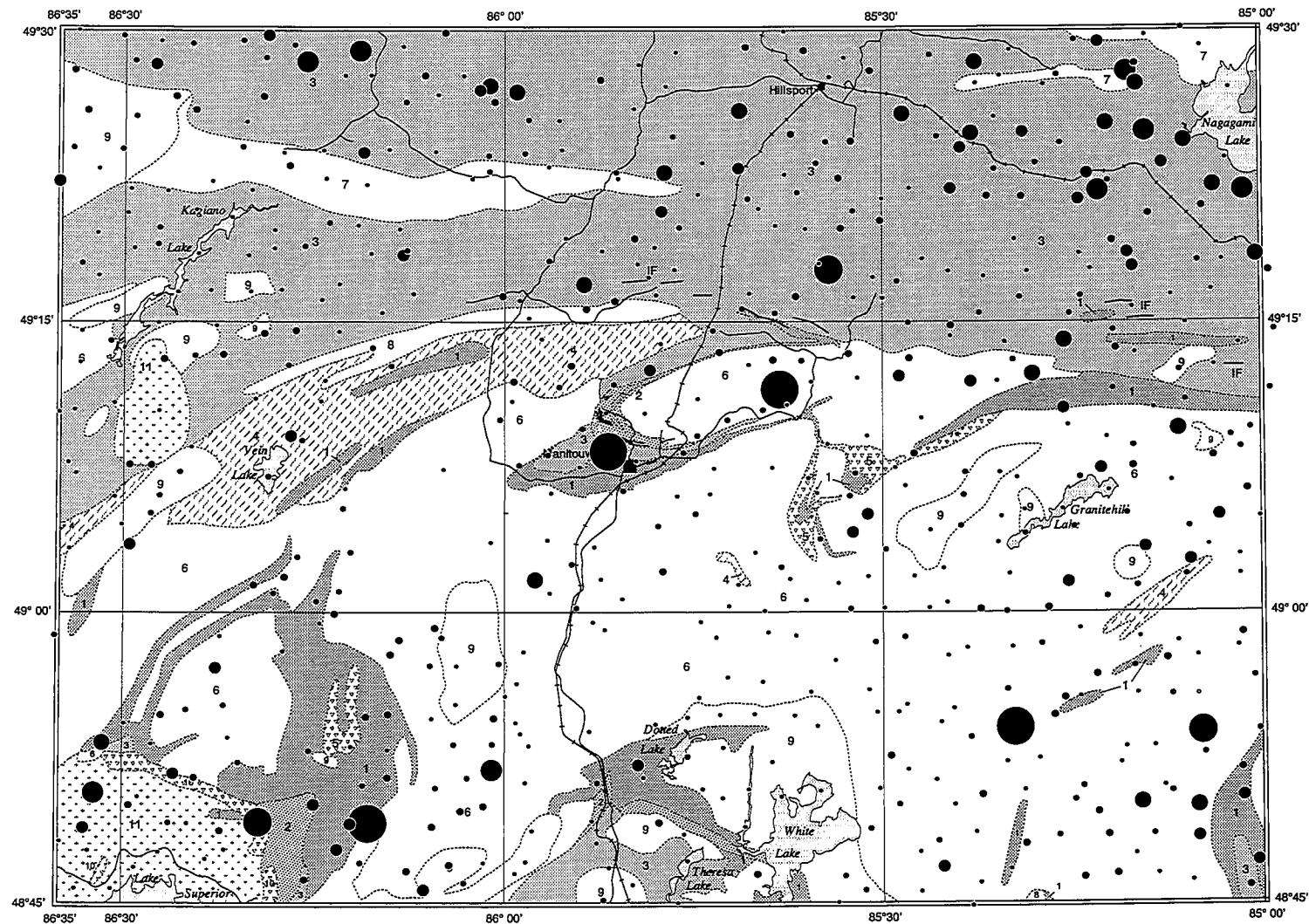
Summary Statistics

Number of Samples:	603	Median:	2
Minimum:	1	Standard Deviation:	1.3
Maximum:	8	Coefficient of Variation:	0.7
Mean:	2.0		



Frequency Histogram





Molybdenum in lake sediments

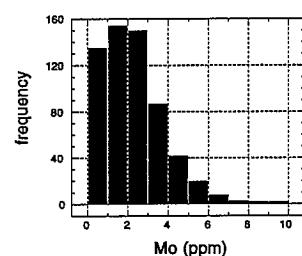
Analytical Method: Instrumental Neutron Activation
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

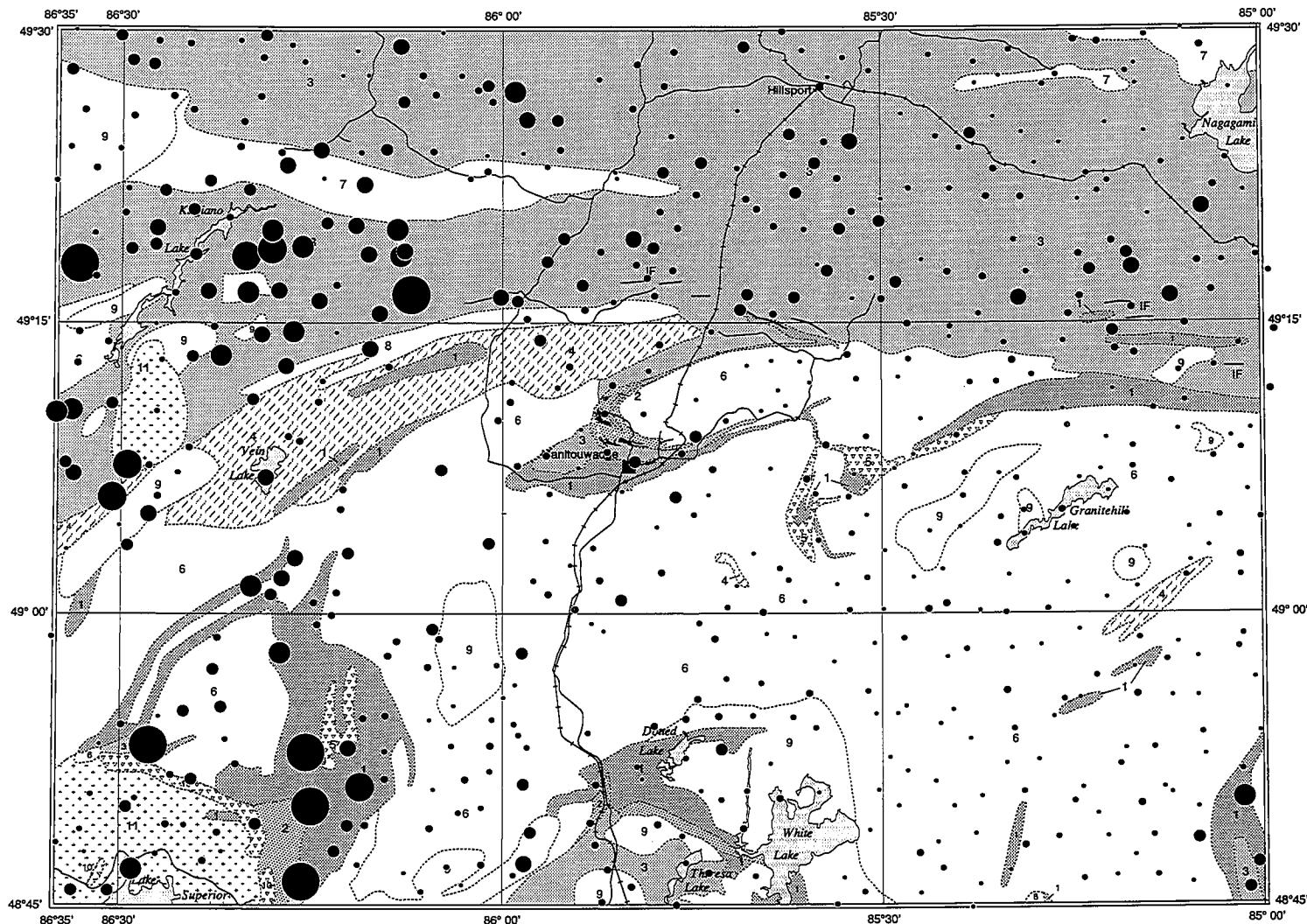
Summary Statistics

Number of Samples: 603
Minimum: 0.5
Maximum: 10
Mean: 2.7
Median: 3
Standard Deviation: 1.7
Coefficient of Variation: 0.6



Frequency Histogram





Symbol Legend

Nickel (ppm)

MIN.	MAX.	#SAMP	%TILE
1	9	160	26.5
9	13	164	53.7
13	19	153	79.1
19	26	71	90.9
26	32	30	95.9
32	37	14	98.2
37	46	5	99
46	260	6	100

Nickel in lake sediments

Analytical Method: Atomic Absorption Spectrometry

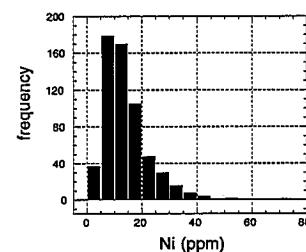
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

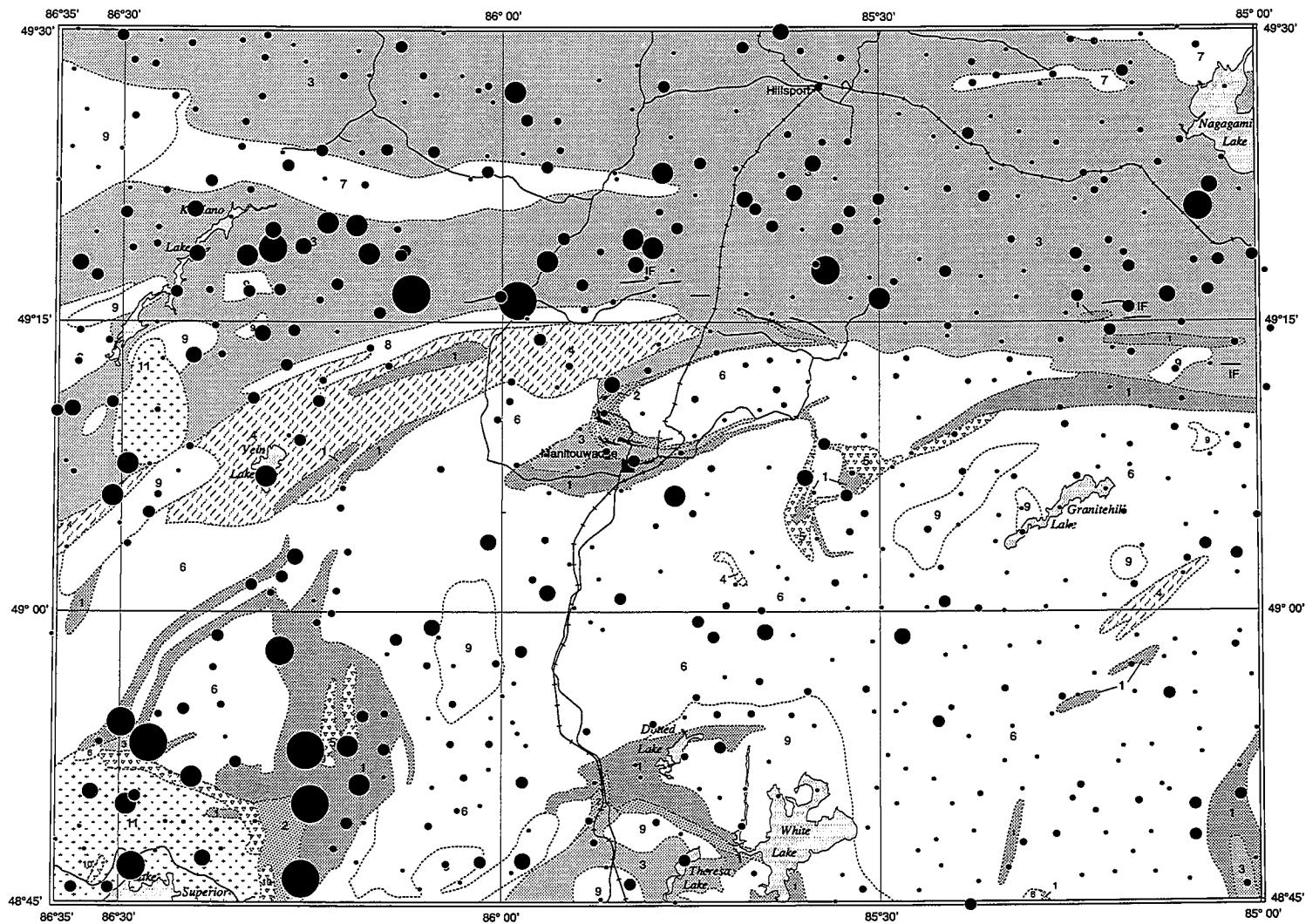
Summary Statistics

Number of Samples:	603	Median:	13
Minimum:	1	Standard Deviation:	13.1
Maximum:	260	Coefficient of Variation:	0.9
Mean:	15.2		



Frequency Histogram





Symbol Legend

Nickel (ppm)

MIN.	MAX.	#SAMP	%TILE
5	5	271	44.9
5	14	48	52.9
14	22	142	76.5
22	31	86	90.7
31	38	26	95
38	49	18	98
49	56	6	99
56	250	6	100

Nickel in lake sediments

Analytical Method: Instrumental Neutron Activation

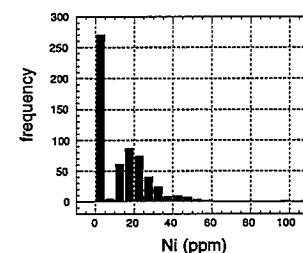
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

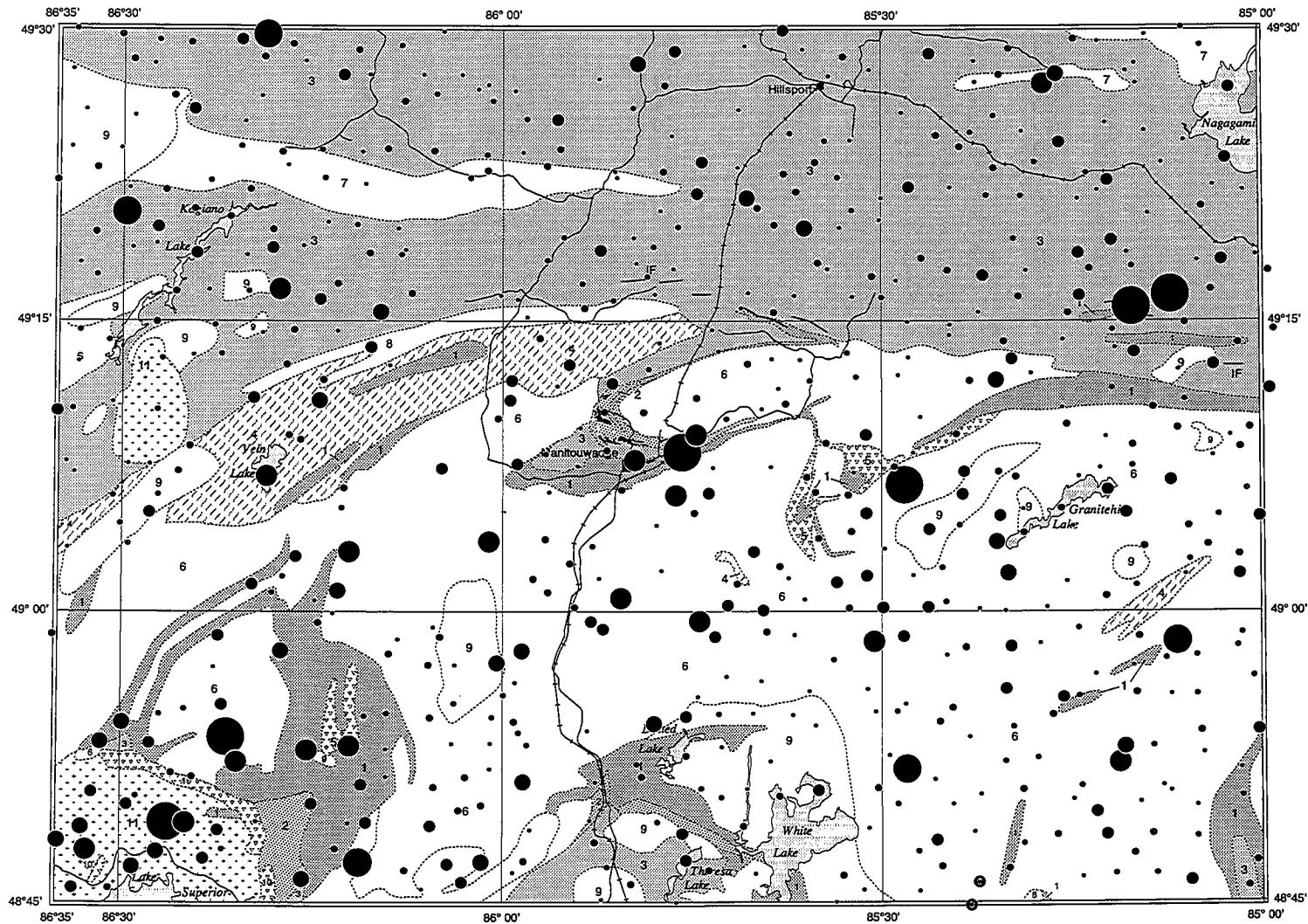
Summary Statistics

Number of Samples:	603	Median:	14
Minimum:	5	Standard Deviation:	15.5
Maximum:	250	Coefficient of Variation:	1.0
Mean:	15.6		



Frequency Histogram



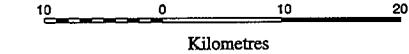


Lead in lake sediments

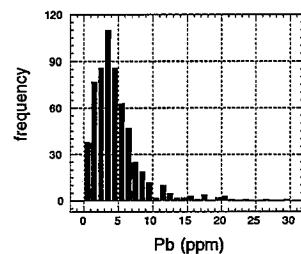
Analytical Method: Atomic Absorption Spectrometry
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

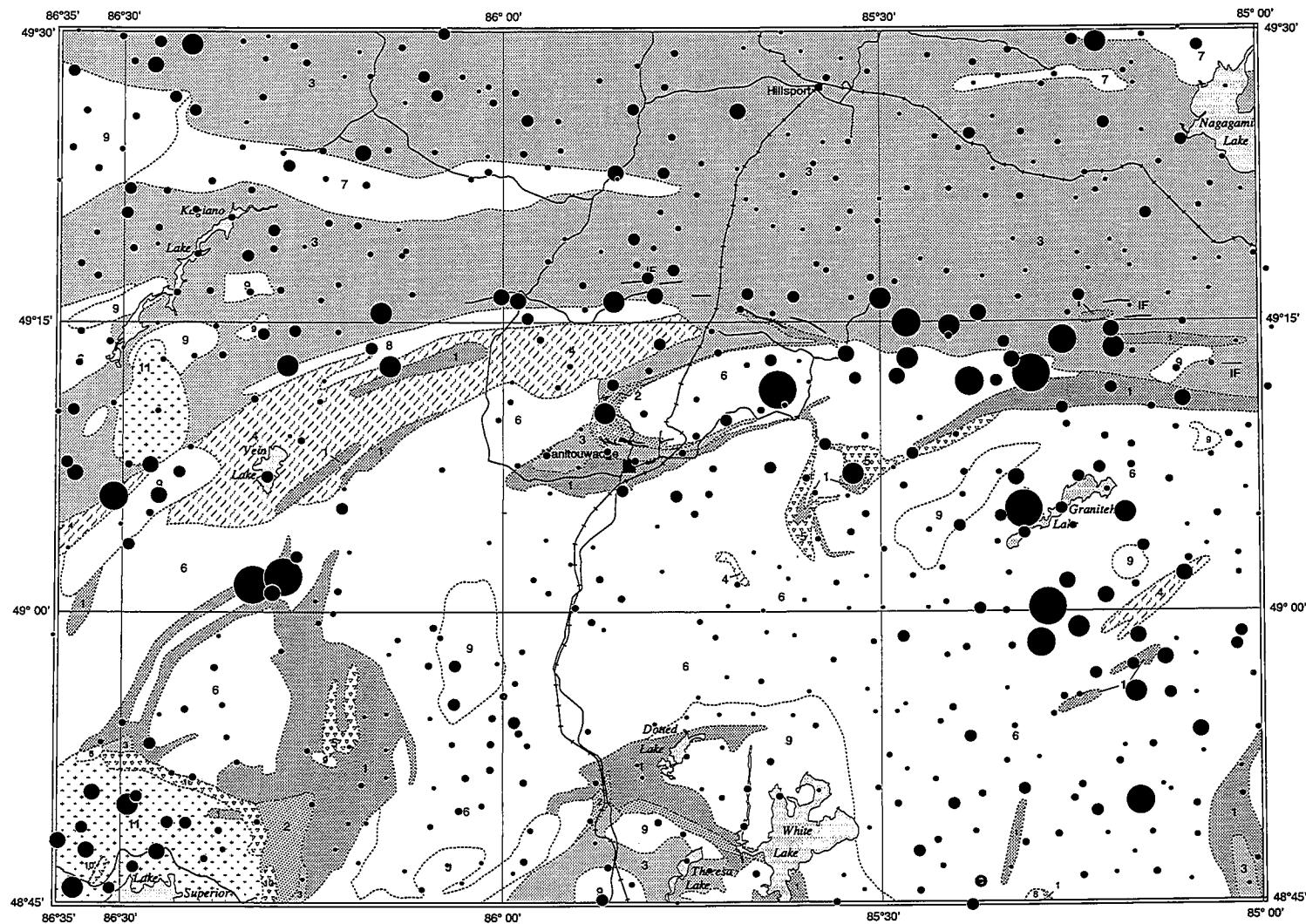
Summary Statistics

Number of Samples:	603	Median:	4
Minimum:	1	Standard Deviation:	8.2
Maximum:	150	Coefficient of Variation:	1.5
Mean:	5.6		



Frequency Histogram





Symbol Legend

Uranium (ppm)

MIN.	MAX.	#SAMP	%TILE
0.4	1.6	157	26
1.6	2.1	166	53.6
2.1	2.8	138	76.5
2.8	4.6	85	90.5
4.6	5.5	28	95.2
5.5	7.6	17	98
7.6	8.9	6	99
8.9	25	6	100

Uranium in lake sediments

Analytical Method: Instrumental Neutron Activation

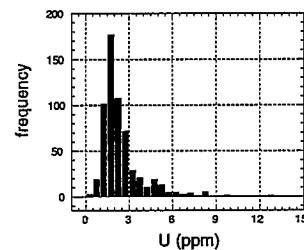
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

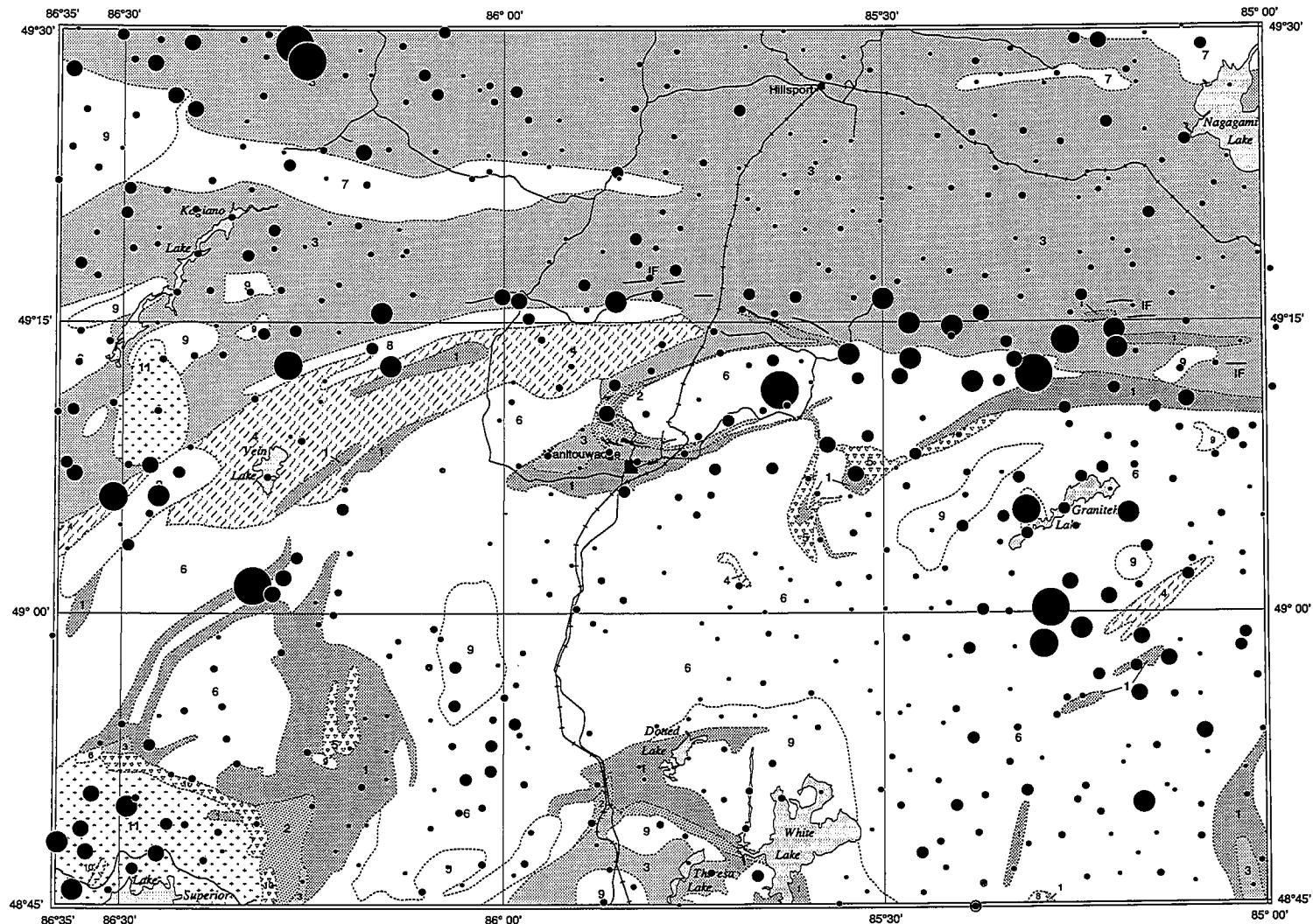
Summary Statistics

Number of Samples:	603	Median:	2.1
Minimum:	0.4	Standard Deviation:	1.8
Maximum:	25	Coefficient of Variation:	0.7
Mean:	2.6		



Frequency Histogram





Symbol Legend

Uranium (ppm)

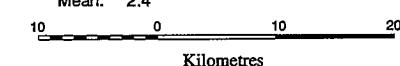
MIN.	MAX.	#SAMP	%TILE
0.1	1.5	184	30.5
1.5	1.9	125	51.2
1.9	2.7	155	76.9
2.7	4.1	80	90.2
4.1	5.4	30	95.2
5.4	7.5	18	98.2
7.5	9.6	5	99
9.6	21.2	6	100

Uranium in lake sediments

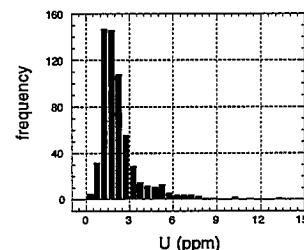
Analytical Method: Neutron Activation, Delayed Neutron Counting
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

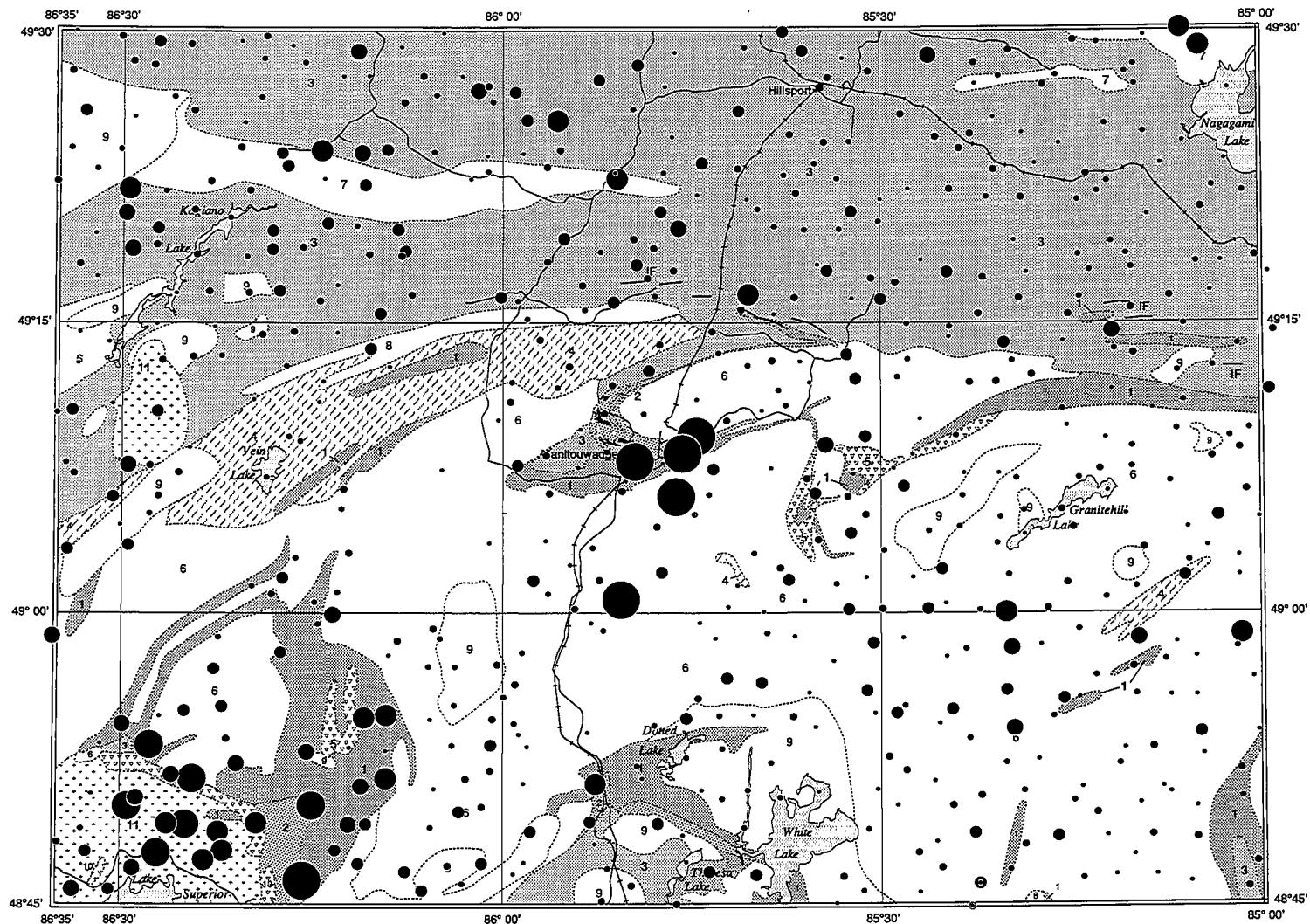
Summary Statistics

Number of Samples:	603	Median:	1.9
Minimum:	0.1	Standard Deviation:	1.8
Maximum:	21.2	Coefficient of Variation:	0.7
Mean:	2.4		



Frequency Histogram





Zinc in lake sediments

Analytical Method: Atomic Absorption Spectrometry

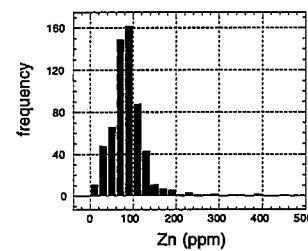
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

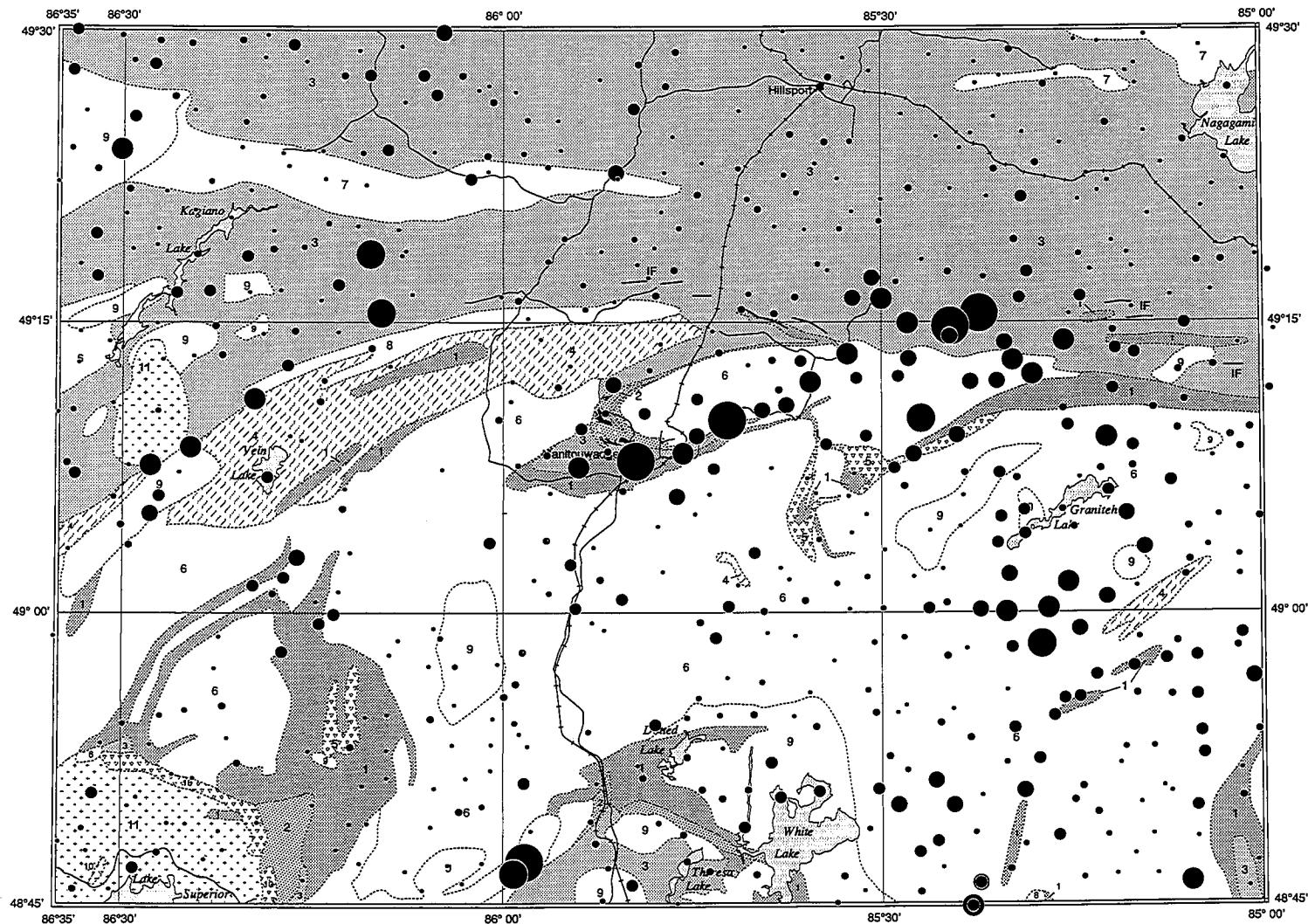
Summary Statistics

Number of Samples:	603	Median:	86
Minimum:	10	Standard Deviation:	87.3
Maximum:	1800	Coefficient of Variation:	0.9
Mean:	92.9		



Frequency Histogram





Symbol Legend

Uranium (ppb)

MIN.	MAX.	#SAMP	%TILE
0.005	0.01	249	41.3
0.01	0.03	80	54.6
0.03	0.08	124	75.1
0.08	0.20	91	90.2
0.20	0.30	30	95.2
0.30	0.45	19	98.3
0.45	0.53	5	99.2
0.53	1.00	5	100

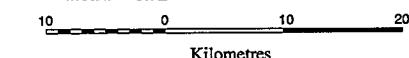
Uranium in lake waters

Analytical Method: Fission Track Analysis

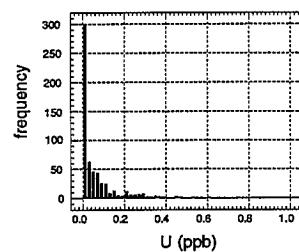
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

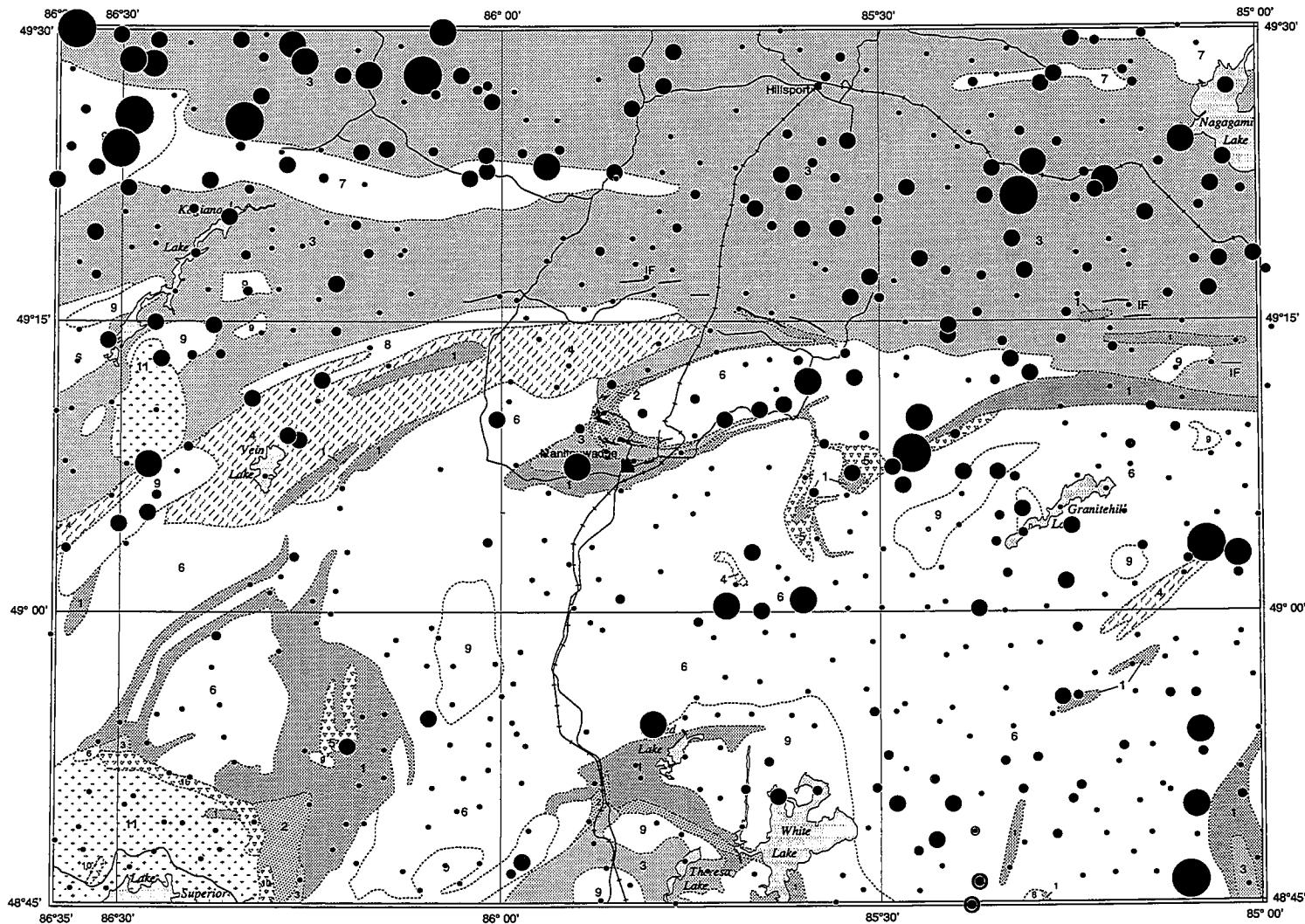
Summary Statistics

Number of Samples:	603	Median:	0.03
Minimum:	0.005	Standard Deviation:	0.11
Maximum:	1.00	Coefficient of Variation:	1.55
Mean:	0.72		



Frequency Histogram





Symbol Legend

pH

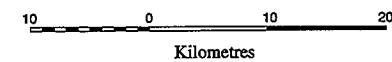
MIN.	MAX.	#SAMP	%TILE
5.0	7.5	368	61
7.5	7.7	116	80.3
7.7	7.9	90	95.2
7.9	8.0	20	98.5
8.0	8.2	9	100

pH of lake waters

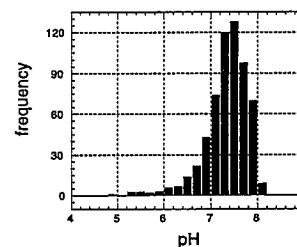
Analytical Method: glass Calomel electrode and pH meter
Data collected by Mineral Resources Division, Geological Survey of Canada, 1991

Summary Statistics

Number of Samples:	603	Median:	7.5
Minimum:	5	Standard Deviation:	0.5
Maximum:	8.2	Coefficient of Variation:	0.06
Mean:	7.4		



Frequency Histogram

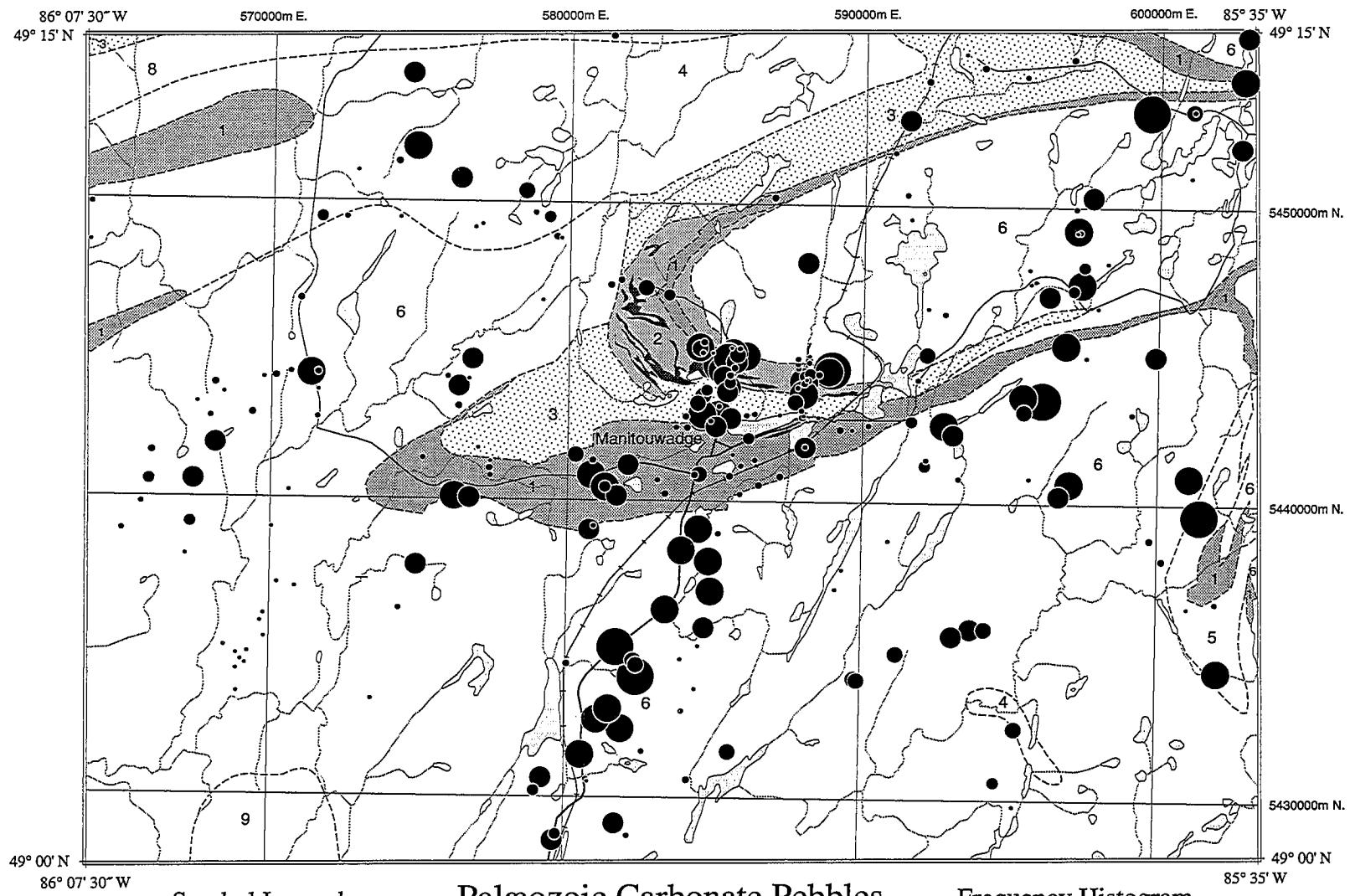


APPENDIX D

Manitouwadge District

Maps of Selected Paleozoic and Precambrian Lithologies
in the Pebble Fraction (5.0-16.0 mm) of Till

Maps of Ag, As, Cd, Cu, Ni, Pb, and Zn in the <0.002 mm
Fraction and Ni in the <0.063 mm Fraction of Till



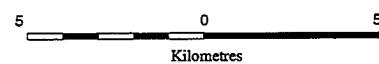
Symbol Legend

	MIN.	MAX.	#SAMP	%TITLE
•	0	10	62	23.5
••	10	20	50	42.4
•••	20	30	38	56.8
••••	30	40	19	64
•••••	40	50	20	71.6
••••••	50	60	33	84.1
•••••••	60	70	35	97.3
••••••••	70	77.6	7	100

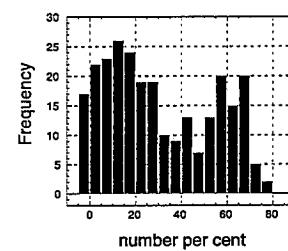
Palaeozoic Carbonate Pebbles

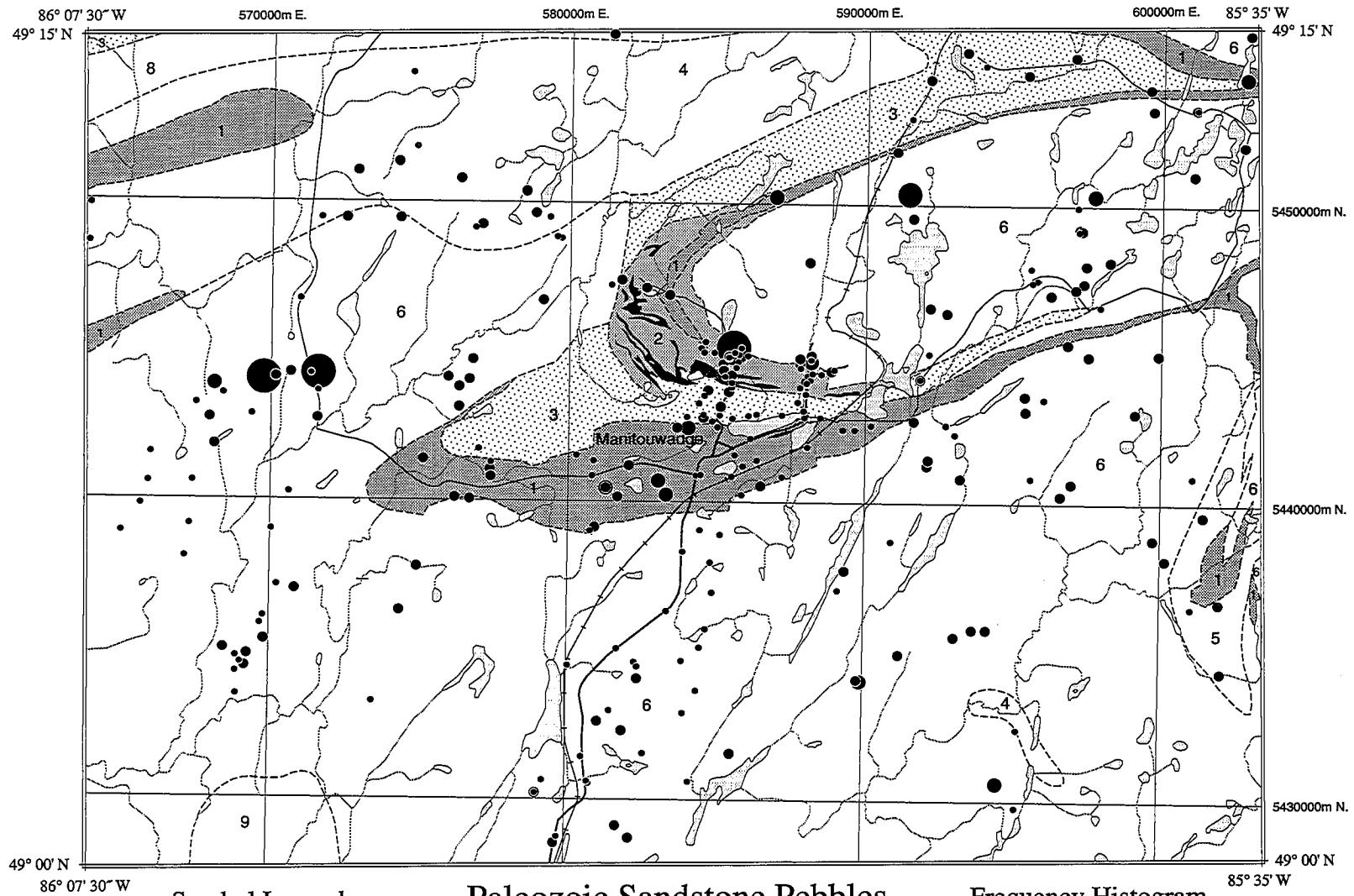
Summary Statistics

Number of Samples: 264
 Median: 25.6
 Minimum: 0
 Standard Deviation: 22.97
 Maximum: 77.6
 Coefficient of Variation: 0.7
 Mean: 30.7



Frequency Histogram





Symbol Legend

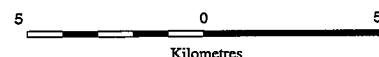


MIN.	MAX.	#SAMP	%TILE
0	0	140	53
0	2.5	109	94.3
2.5	5	11	98.5
5	10	1	98.9
10	61	3	100

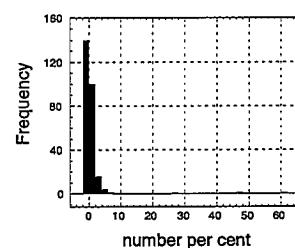
Paleozoic Sandstone Pebbles (number per cent)

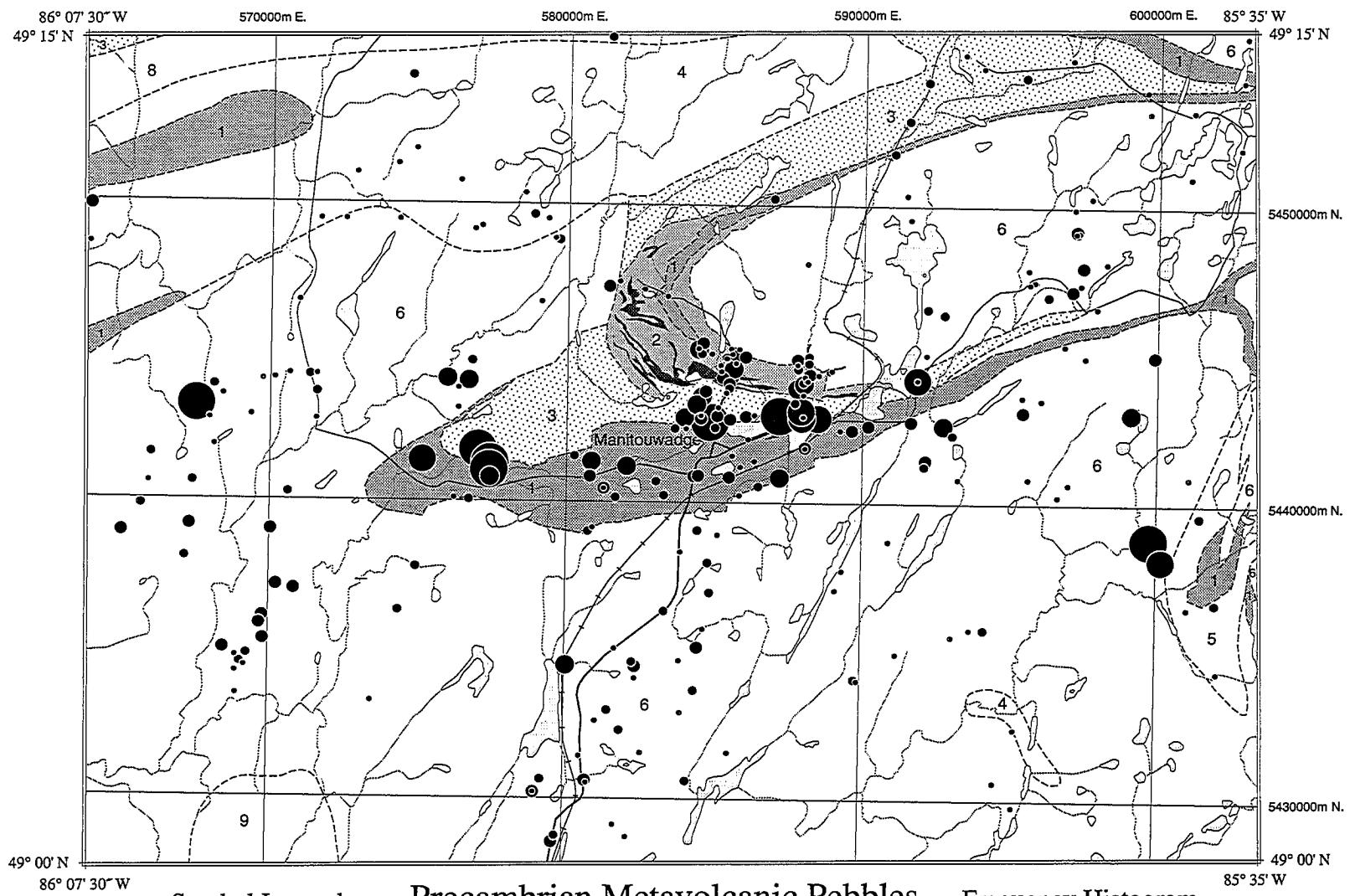
Summary Statistics

Number of Samples: 264 Median: 0
 Minimum: 0 Standard Deviation: 5.1
 Maximum: 61 Coefficient of Variation: 4.5
 Mean: 1.1



Frequency Histogram





Symbol Legend

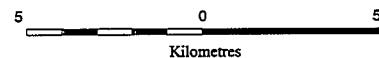


MIN.	MAX.	#SAMP	%TILE
0	2.5	131	49.6
2.5	5	60	72.3
5	10	43	88.6
10	20	17	95.1
20	40	6	97.3
40	61.3	7	100

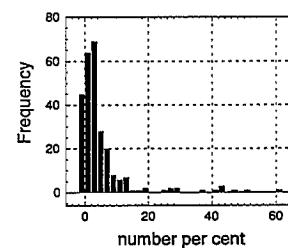
Precambrian Metavolcanic Pebbles

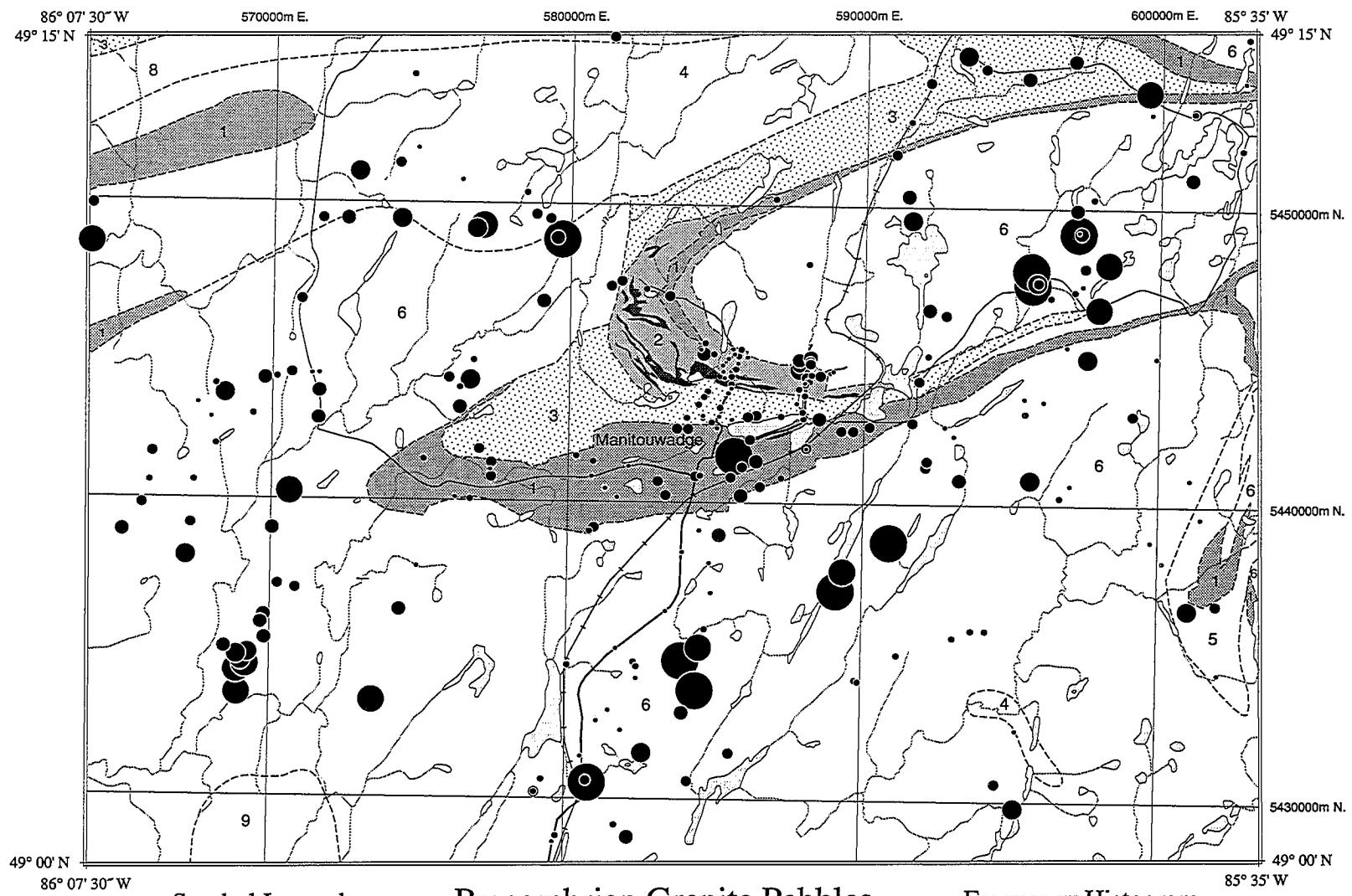
Summary Statistics

Number of Samples: 264 Median: 2.6
 Minimum: 0 Standard Deviation: 8.7
 Maximum: 61.3 Coefficient of Variation: 1.7
 Mean: 5.2



Frequency Histogram





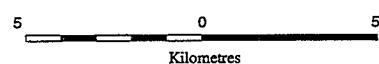
Symbol Legend

MIN.	MAX.	#SAMP	%TILE
0	20	64	24.2
20	40	69	50.4
40	60	59	72.7
60	80	32	84.8
80	90	18	91.7
90	95	12	96.2
95	100	10	100

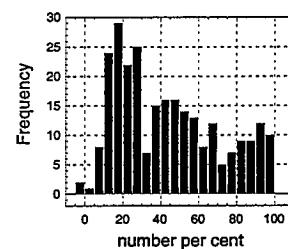
Precambrian Granite Pebbles

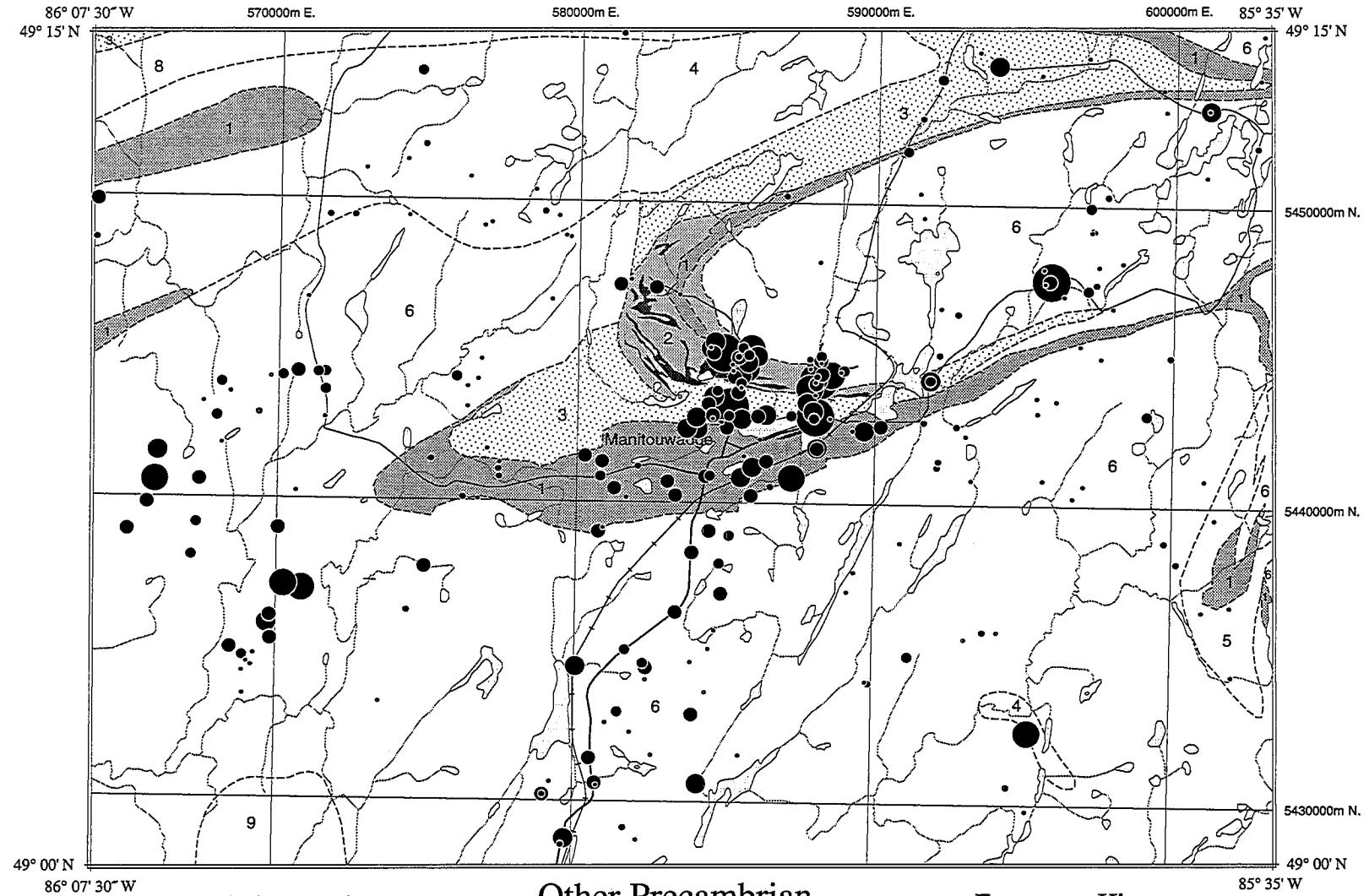
Summary Statistics

Number of Samples: 264
 Minimum: 0 Median: 38.0
 Maximum: 100 Standard Deviation: 26.8
 Mean: 43.8 Coefficient of Variation: 0.6



Frequency Histogram



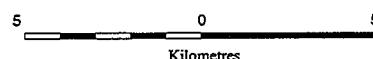


Symbol Legend

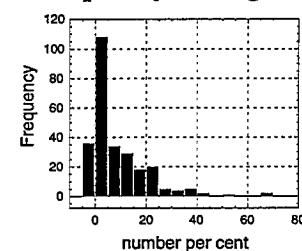
	MIN.	MAX.	#SAMP	%TILE
.	0	2.5	106	40.2
•	2.5	5	38	54.5
●	5	10	34	67.4
○	10	20	47	85.2
○	20	30	25	94.7
○	30	40	9	98.1
○	40	68	5	100

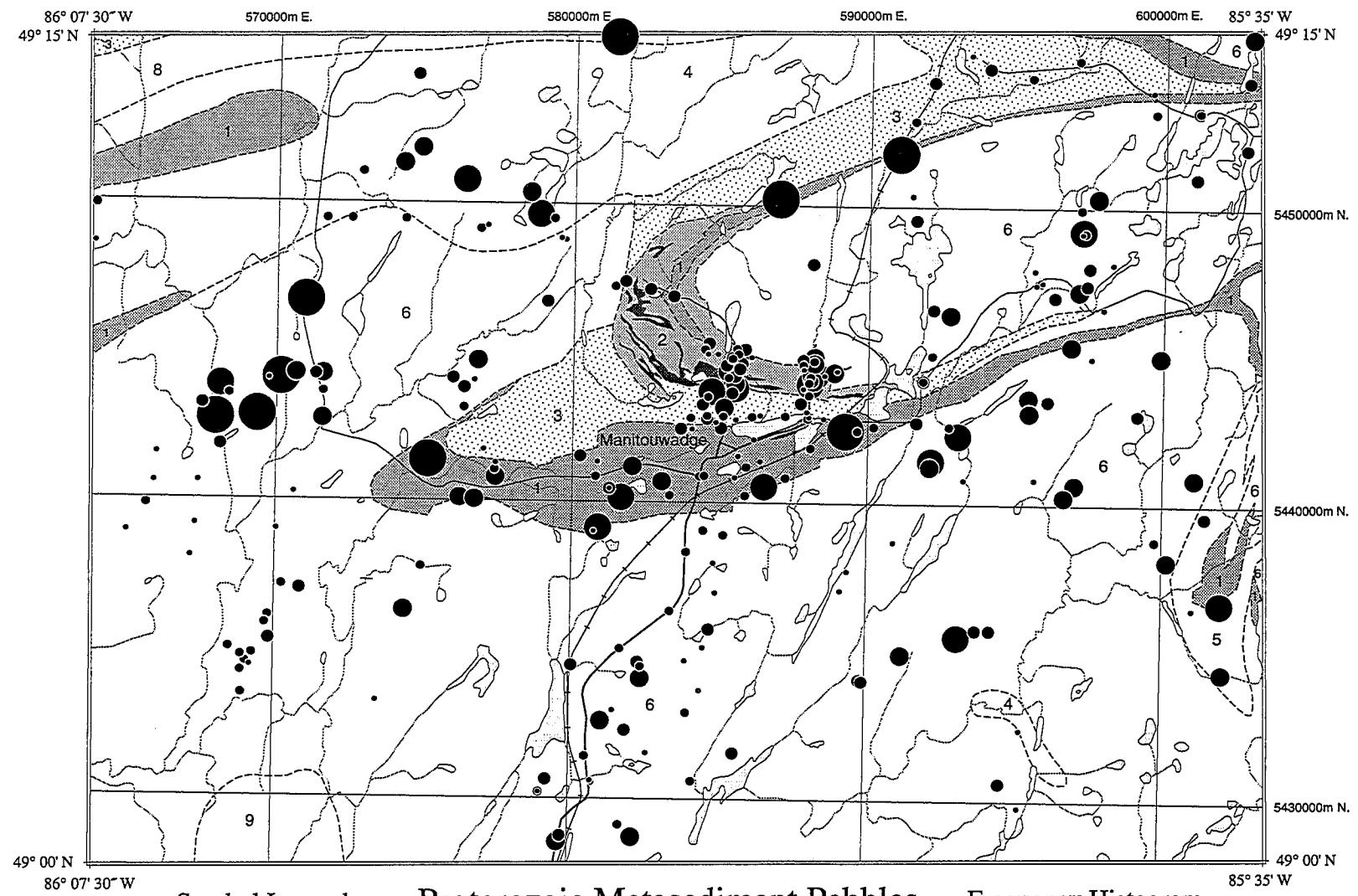
Other Precambrian Metasediment Pebbles Summary Statistics

Number of Samples: 264
 Median: 3.8
 Minimum: 0
 Standard Deviation: 11.2
 Maximum: 68.0
 Coefficient of Variation: 1.3
 Mean: 8.9



Frequency Histogram





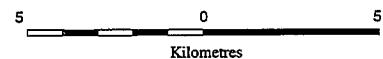
Symbol Legend

MIN.	MAX.	#SAMP	%TILE
0	5	67	25.4
5	10	75	53.8
10	15	59	76.1
15	20	39	90.9
20	25	15	96.6
25	58	9	100

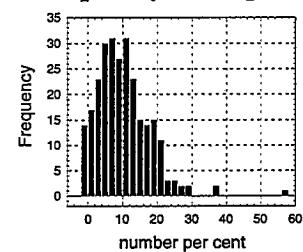
Proterozoic Metasediment Pebbles

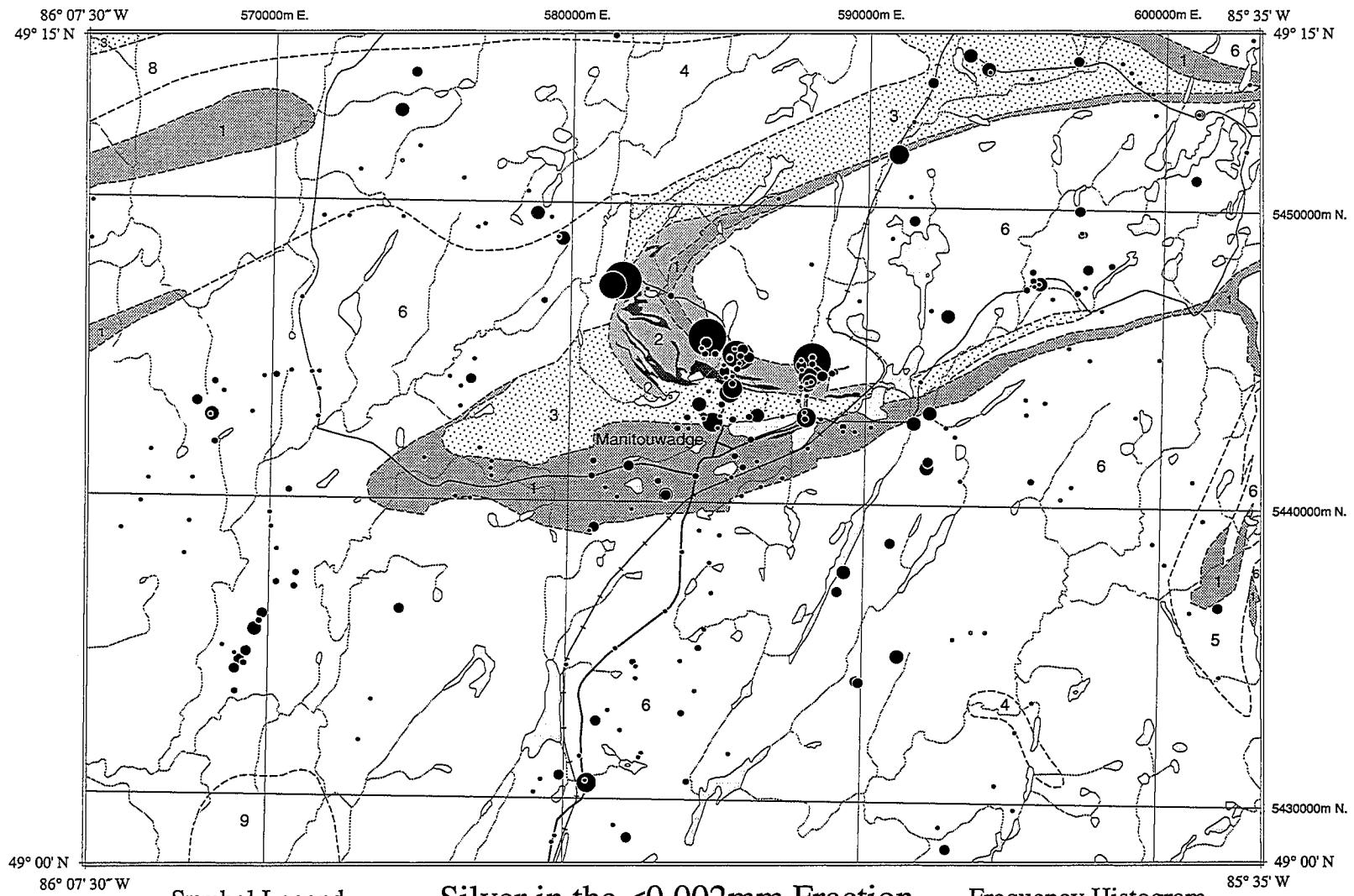
Summary Statistics

Number of Samples: 264
 Median: 9.3
 Minimum: 0
 Standard Deviation: 7.5
 Maximum: 58
 Coefficient of Variation: 0.7
 Mean: 10.3

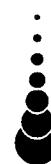


Frequency Histogram





Symbol Legend



MIN.	MAX.	#SAMP	%TILE
0.1	0.1	167	58.4
0.1	0.2	52	76.6
0.2	0.4	34	88.5
0.4	0.9	19	95.1
0.9	1.4	8	97.9
1.4	2.0	3	99
2.0	10.9	3	100

Silver in the <0.002mm Fraction (ppm)

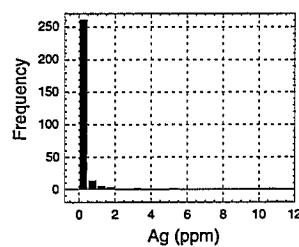
Summary Statistics

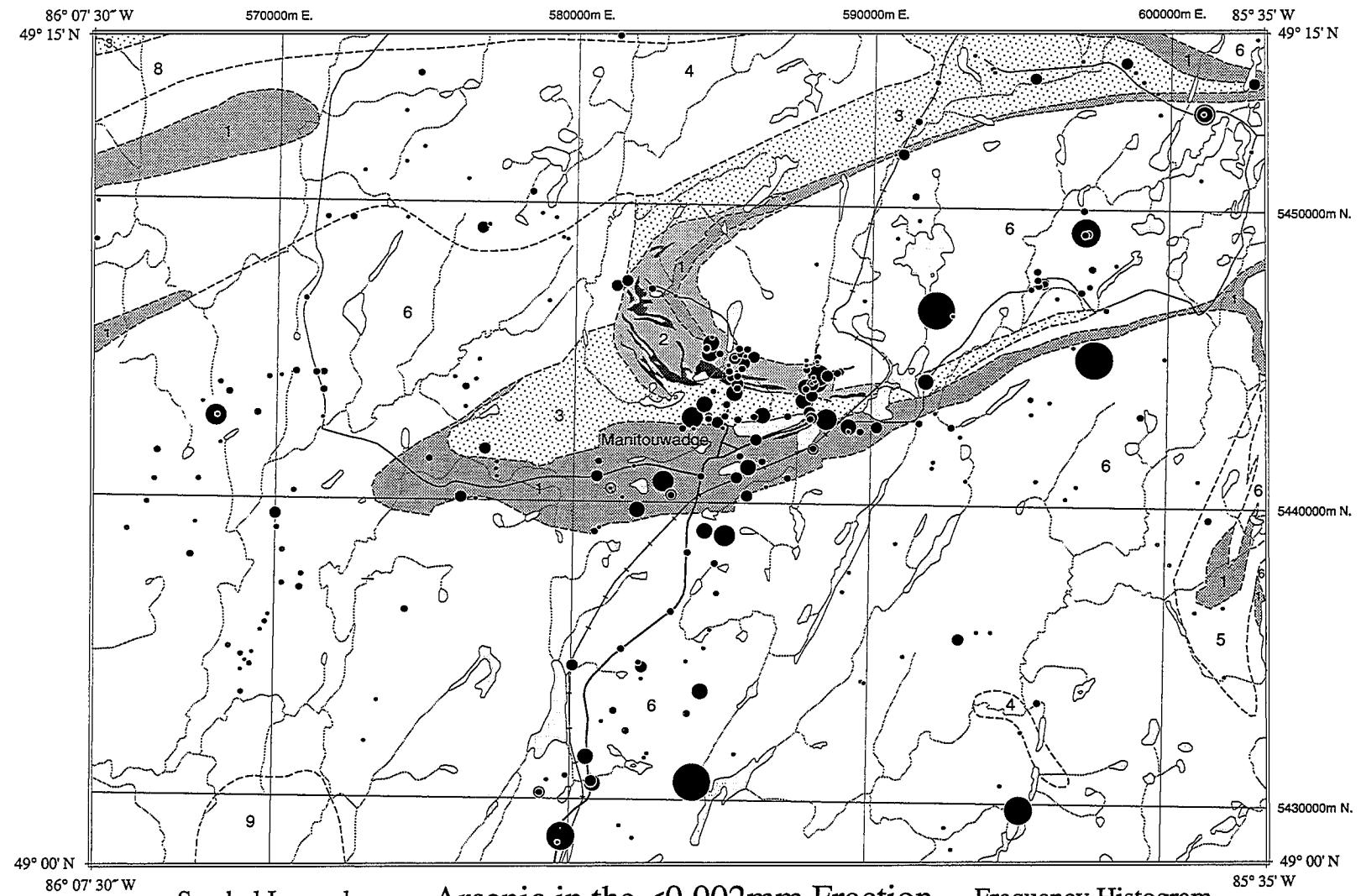
Number of Samples: 286
 Median: 0.1
 Minimum: 0.1
 Standard Deviation: 0.8
 Maximum: 10.9
 Coefficient of Variation: 2.6
 Mean: 0.3

5 0 5

Kilometres

Frequency Histogram





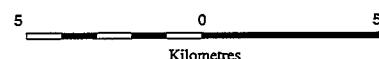
Symbol Legend

	MIN.	MAX.	#SAMP	%TILE
.	1	2	114	39.9
•	2	6	30	50.3
●	6	16	77	77.3
●●	16	21	35	89.5
●●●	21	28	16	95.1
●●●●	28	34	8	97.9
●●●●●	34	43	3	99
●●●●●●	43	56	3	100

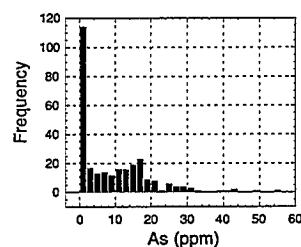
Arsenic in the <0.002mm Fraction (ppm)

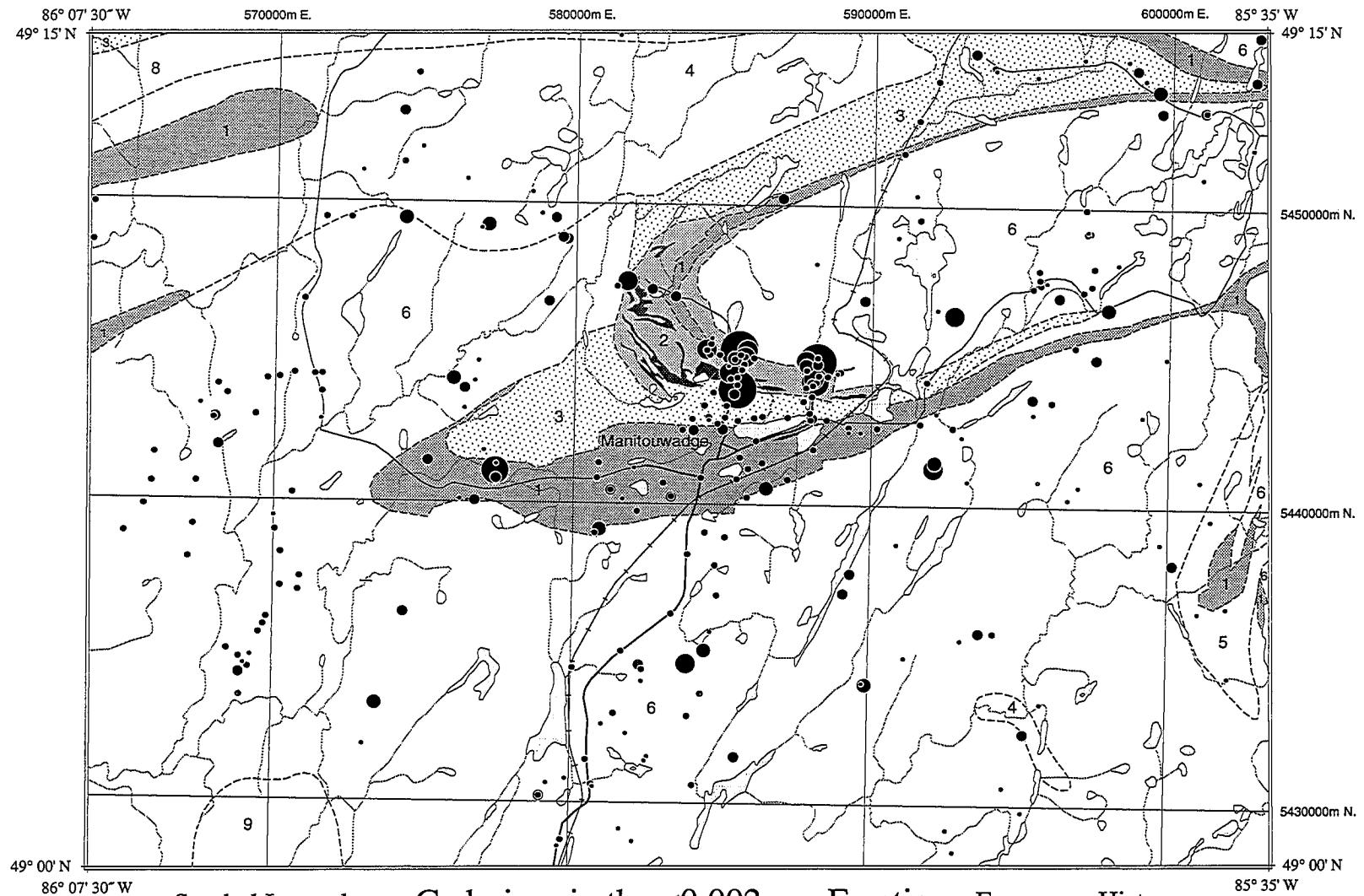
Summary Statistics

Number of Samples: 286
Median: 6
Minimum: 1
Standard Deviation: 9.7
Maximum: 56
Coefficient of Variation: 0.97
Mean: 10.1

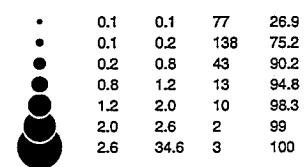


Frequency Histogram



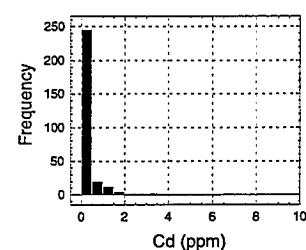


Symbol Legend



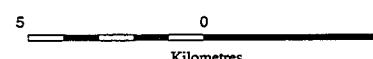
Cadmium in the <0.002mm Fraction (ppm)

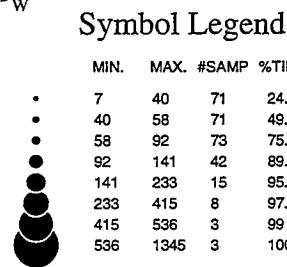
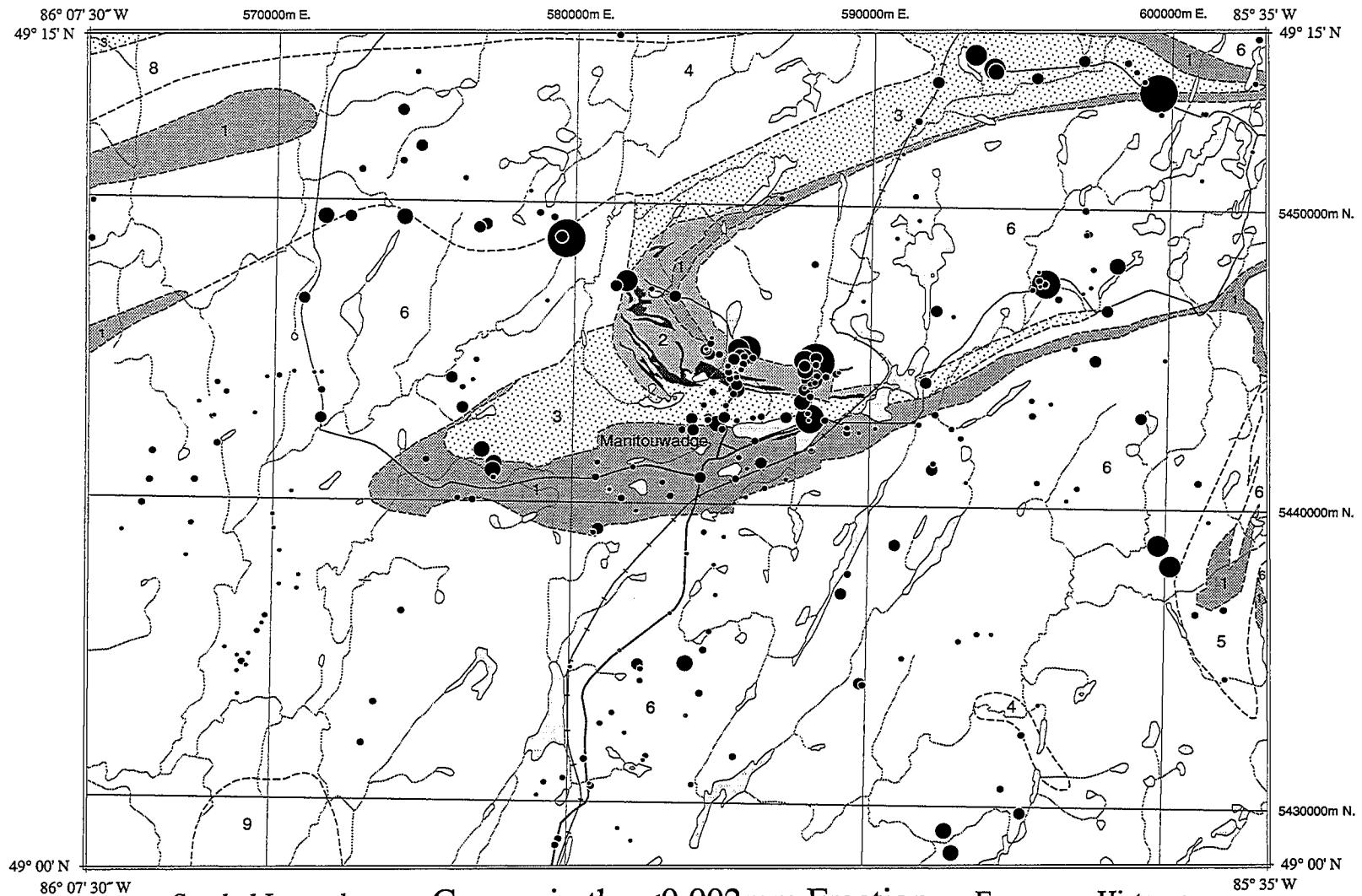
Frequency Histogram



Summary Statistics

Number of Samples: 286
 Median: 0.2
 Minimum: 0.1
 Standard Deviation: 2.1
 Maximum: 34.6
 Coefficient of Variation: 4.4
 Mean: 0.5



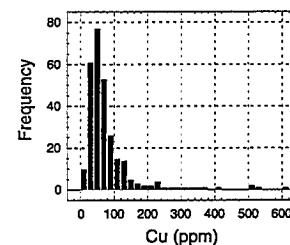
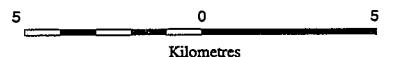


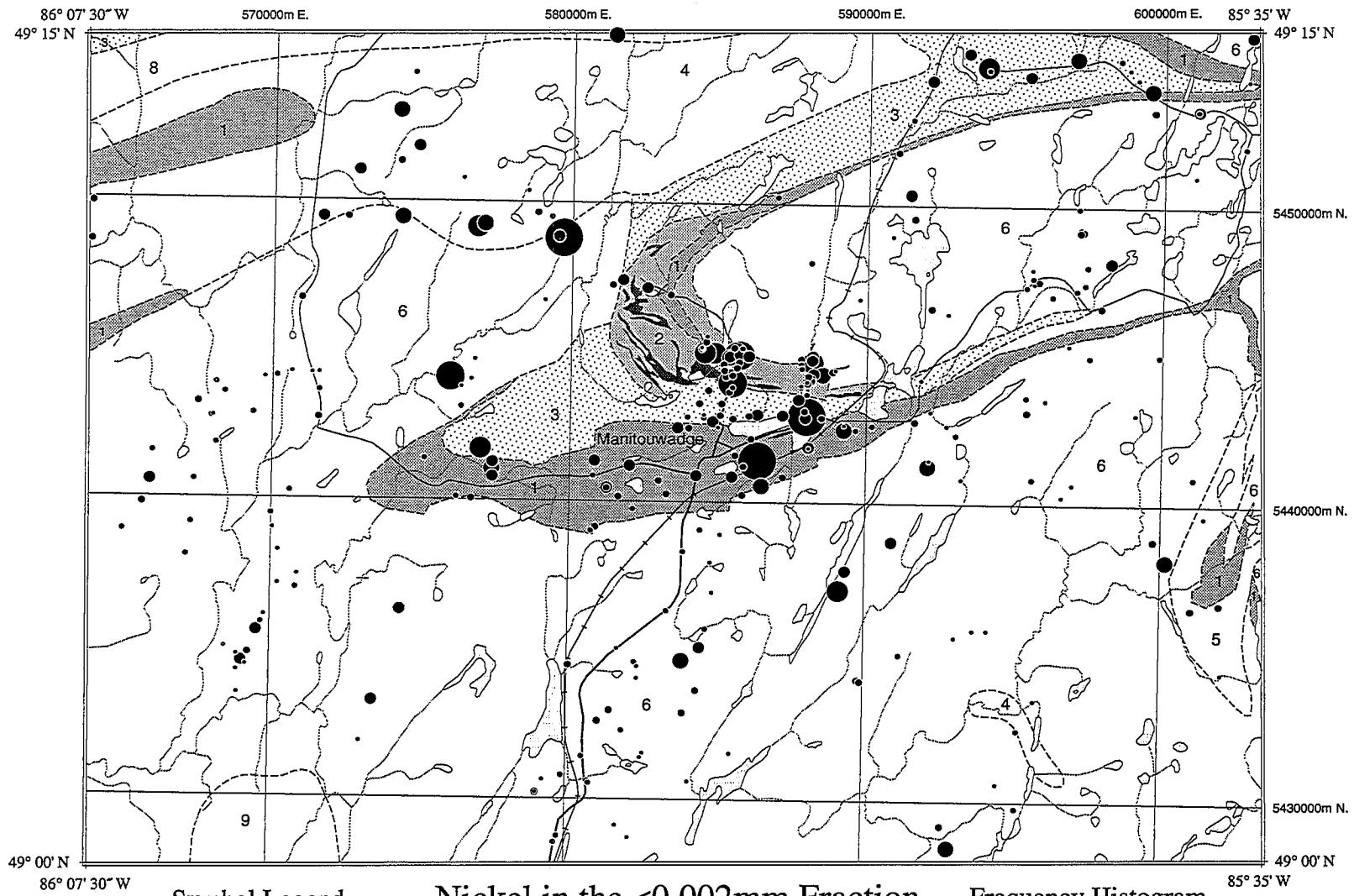
Copper in the <0.002mm Fraction
(ppm)

Frequency Histogram

Summary Statistics

Number of Samples: 286 Median: 59
 Minimum: 7 Standard Deviation: 131.8
 Maximum: 1345 Coefficient of Variation: 1.5
 Mean: 89.7





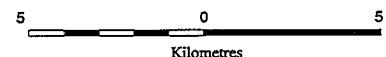
Symbol Legend

	MIN.	MAX.	#SAMP	%TILE
•	6	43	73	25.5
●	43	54	68	49.3
●●	54	68	73	74.8
●●●	68	92	43	89.9
●●●●	92	110	15	95.1
●●●●●	110	143	8	97.9
●●●●●●	143	187	3	99
●●●●●●●	187	249	3	100

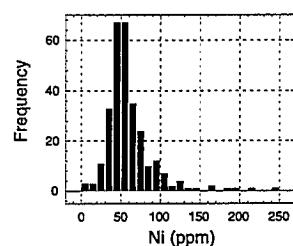
Nickel in the <0.002mm Fraction (ppm)

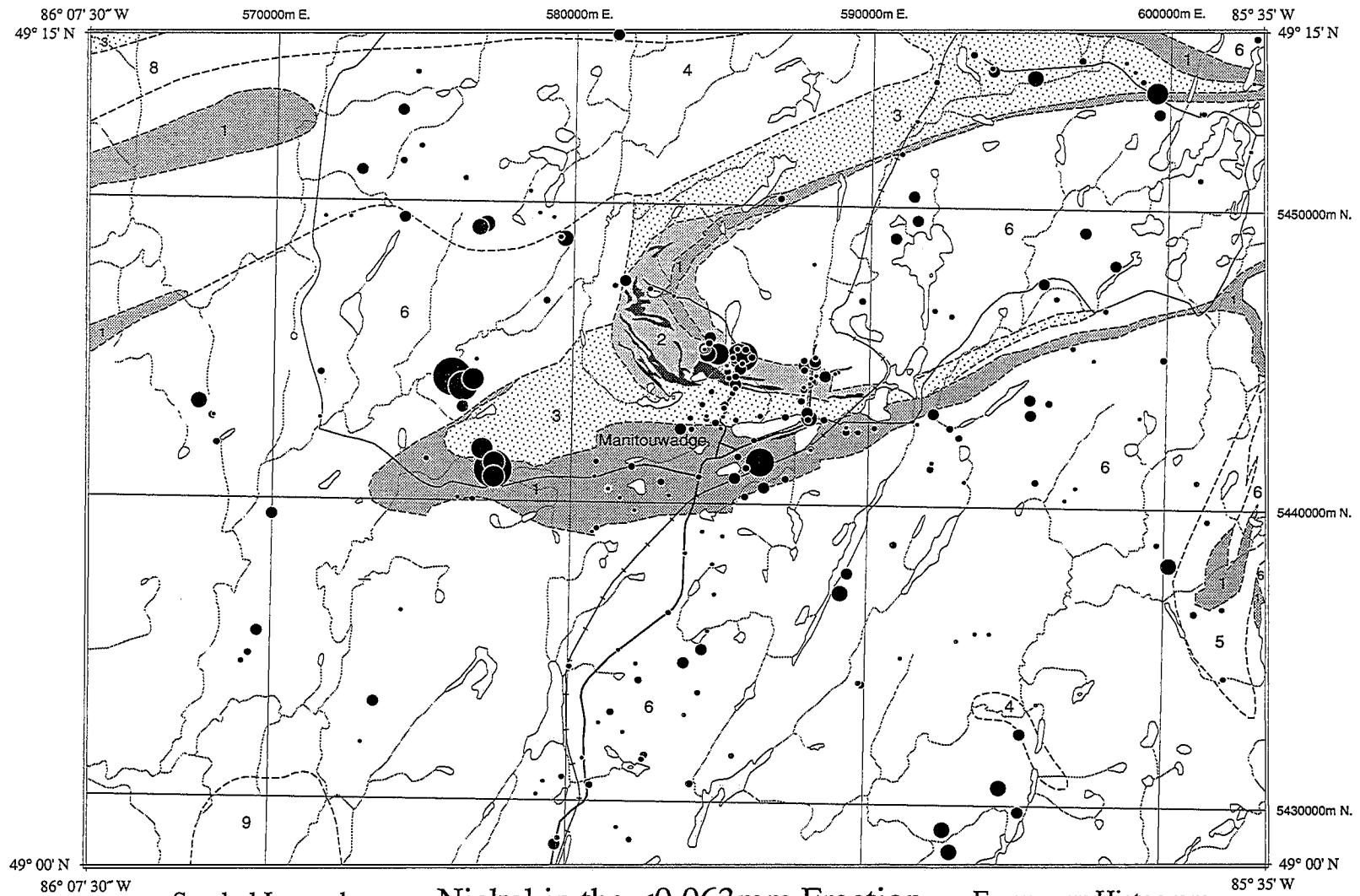
Summary Statistics

Number of Samples: 286
 Median: 55
 Minimum: 6
 Standard Deviation: 29.9
 Maximum: 249
 Coefficient of Variation: 0.5
 Mean: 60.5



Frequency Histogram





Symbol Legend

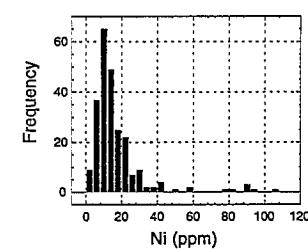
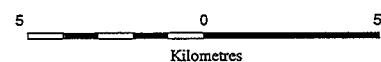
	MIN.	MAX.	#SAMP	%TILE
•	2	9	65	27
•	9	13	60	51.9
•	13	19	53	73.9
•	19	30	38	89.6
•	30	42	13	95
•	42	81	7	97.9
•	81	92	3	99.2
•	92	108	2	100

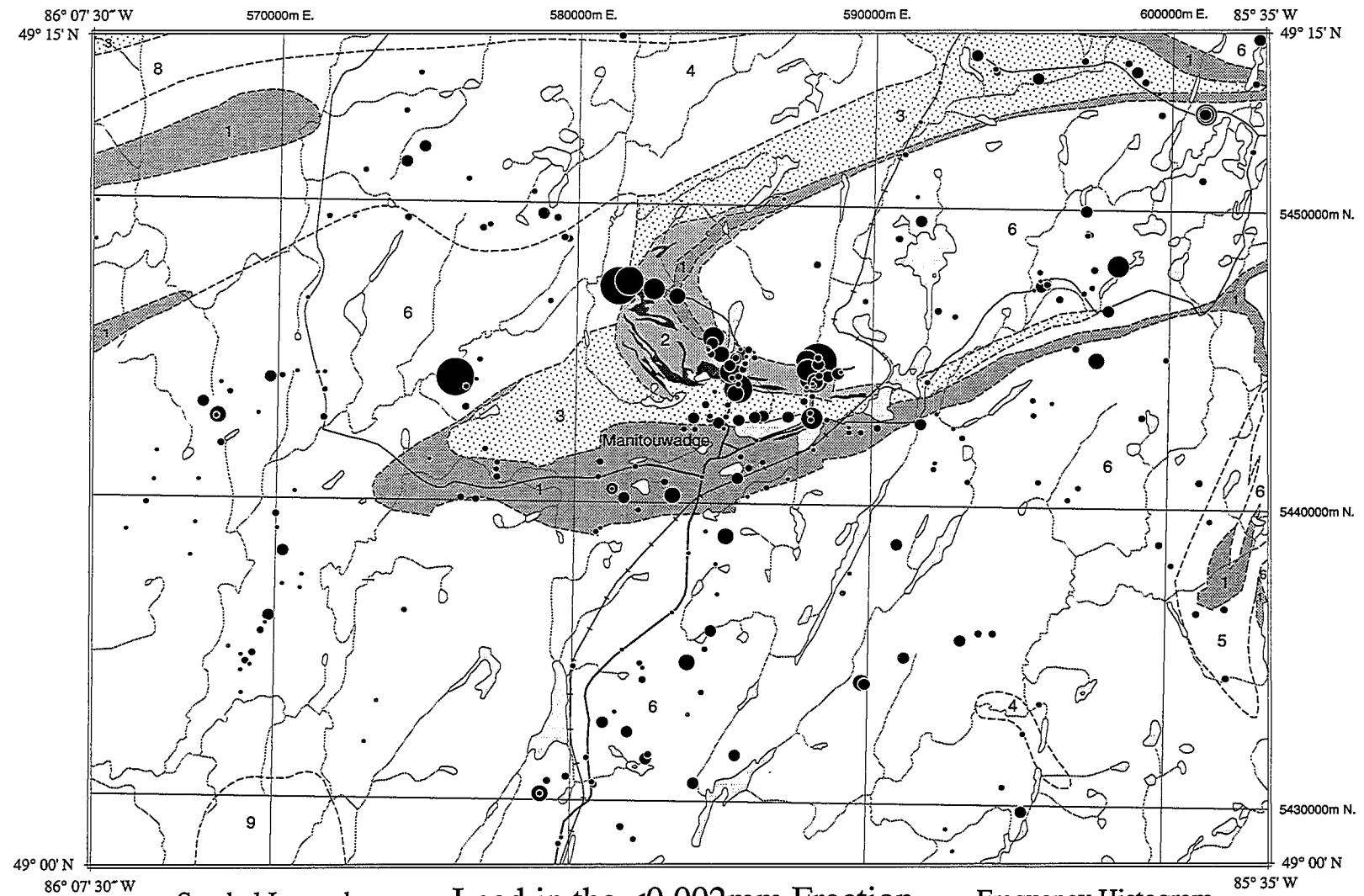
Nickel in the <0.063mm Fraction (ppm)

Frequency Histogram

Summary Statistics

Number of Samples: 241
 Median: 13
 Minimum: 2
 Standard Deviation: 15.7
 Maximum: 108
 Coefficient of Variation: 0.9
 Mean: 17.5





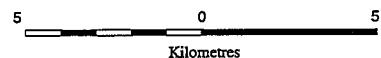
Symbol Legend

	MIN.	MAX.	#SAMP	%TILE
•	1	16	71	24.8
•	16	24	82	53.5
•	24	29	58	73.8
•	29	38	47	90.2
•	38	47	13	94.8
•	47	70	9	97.9
•	70	238	3	99
•	238	772	3	100

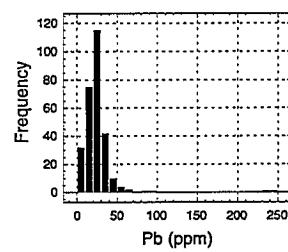
Lead in the <0.002mm Fraction (ppm)

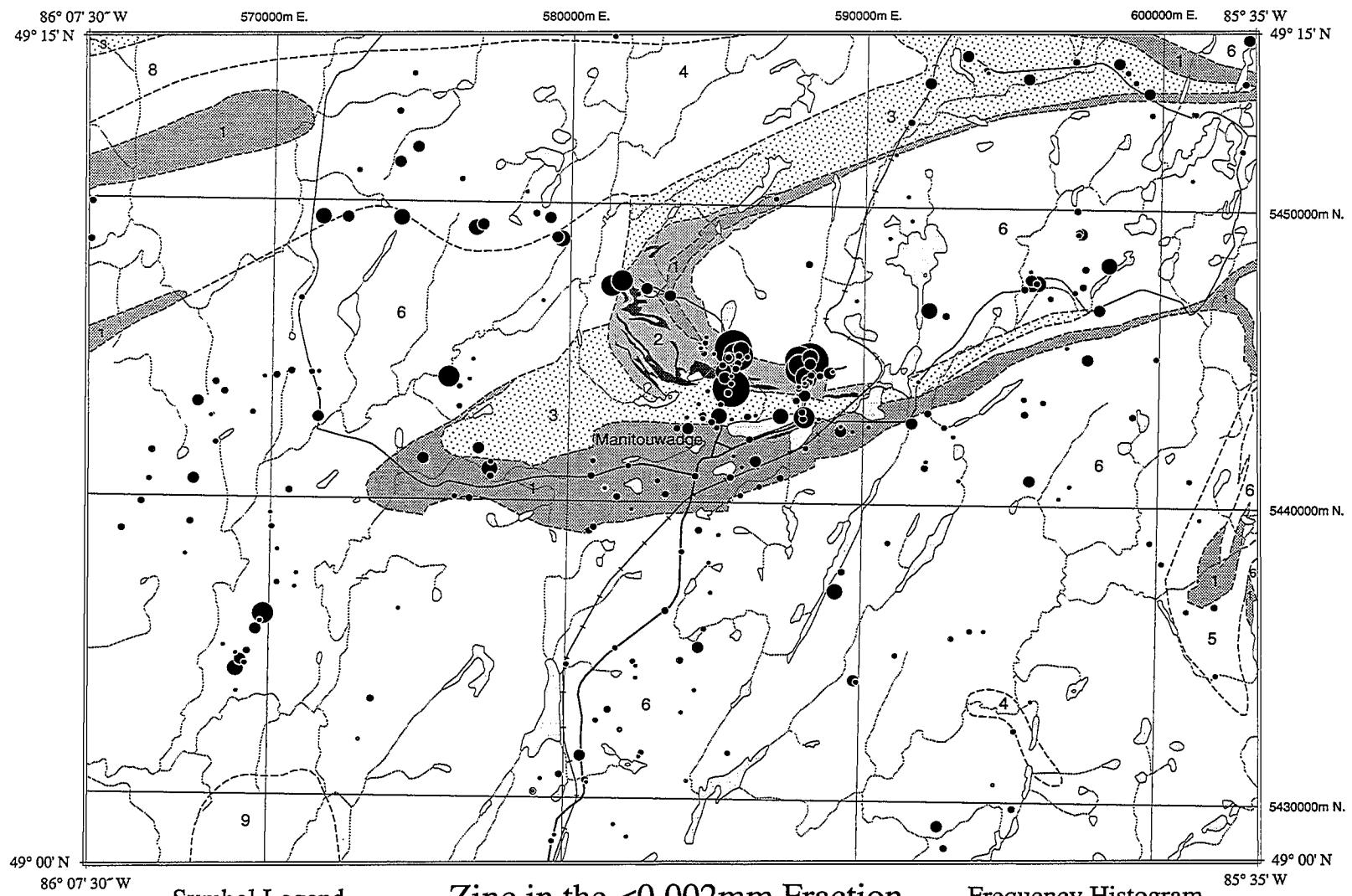
Summary Statistics

Number of Samples: 286
 Median: 24
 Minimum: 1
 Standard Deviation: 58.1
 Maximum: 772
 Coefficient of Variation: 1.9
 Mean: 30.2



Frequency Histogram





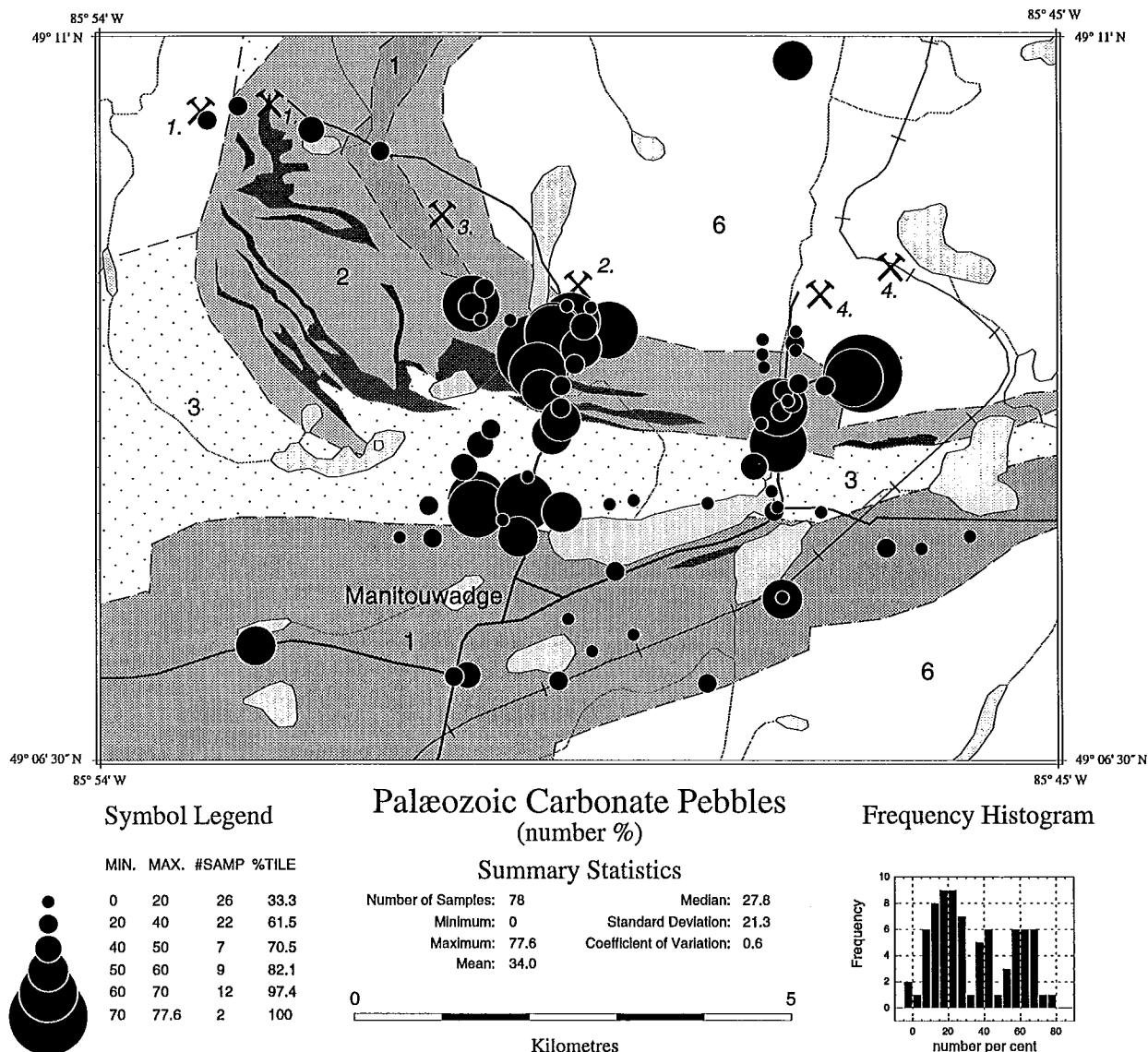
5 0 5
Kilometres

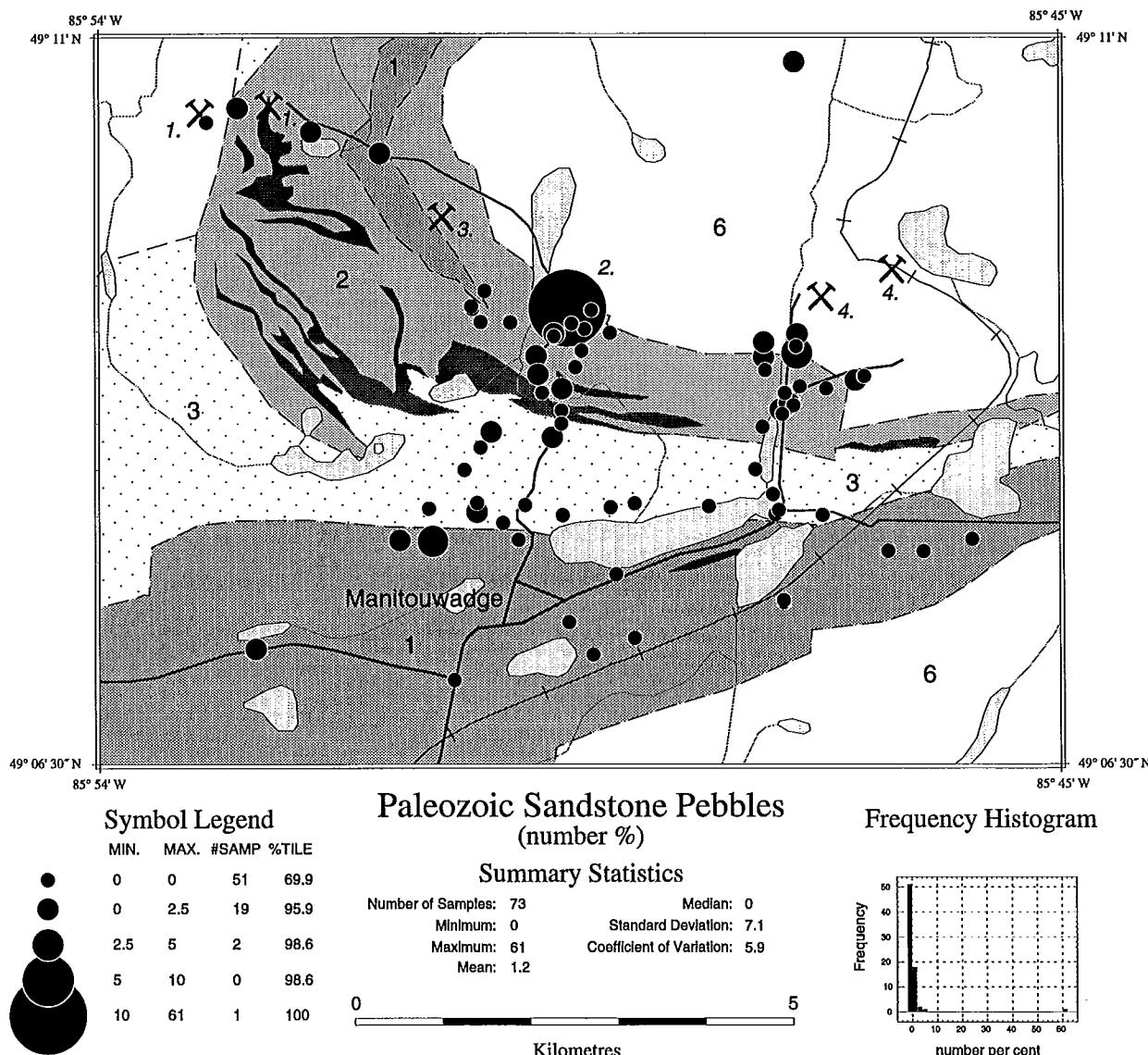
APPENDIX E

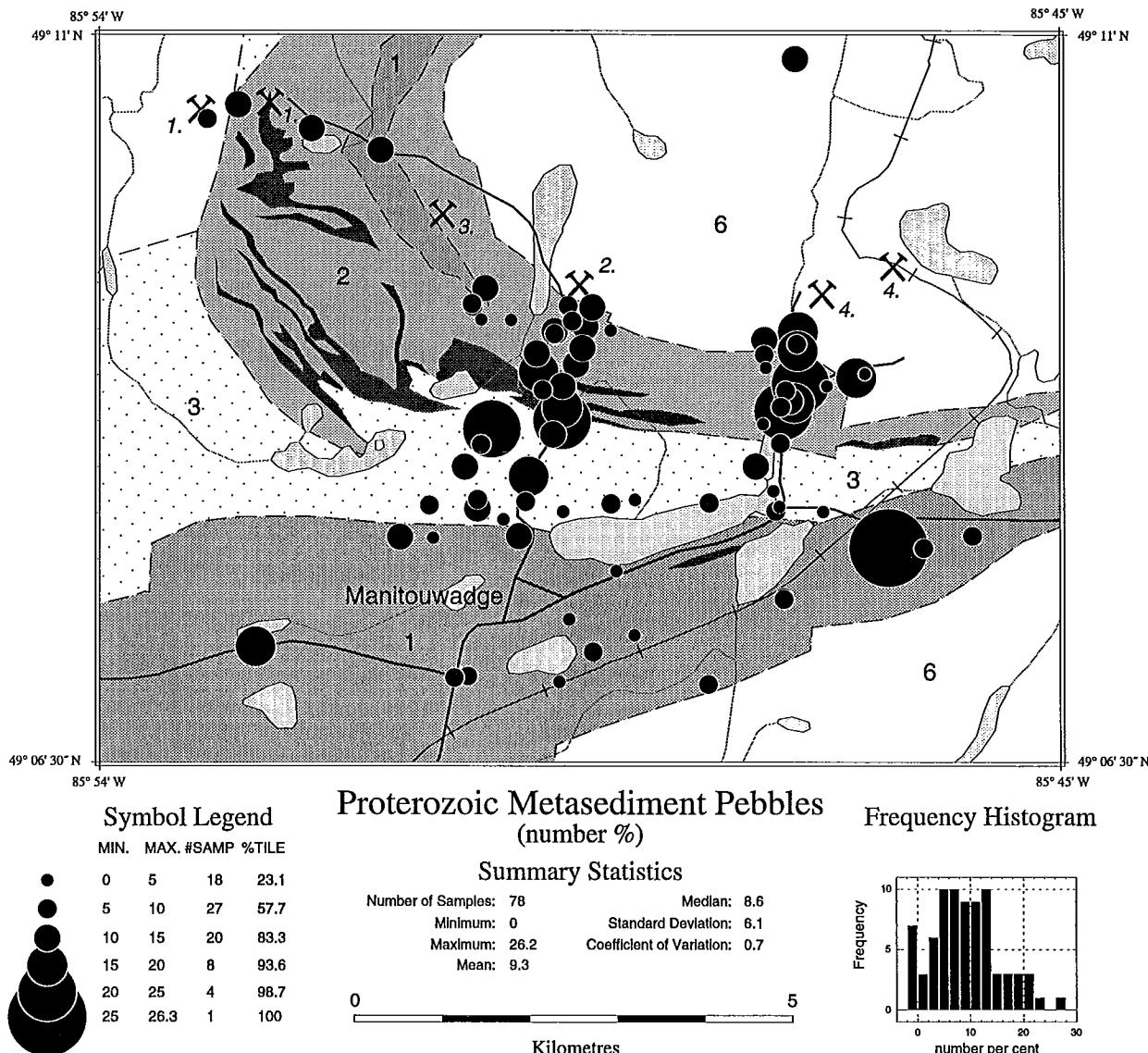
Area Near Mines

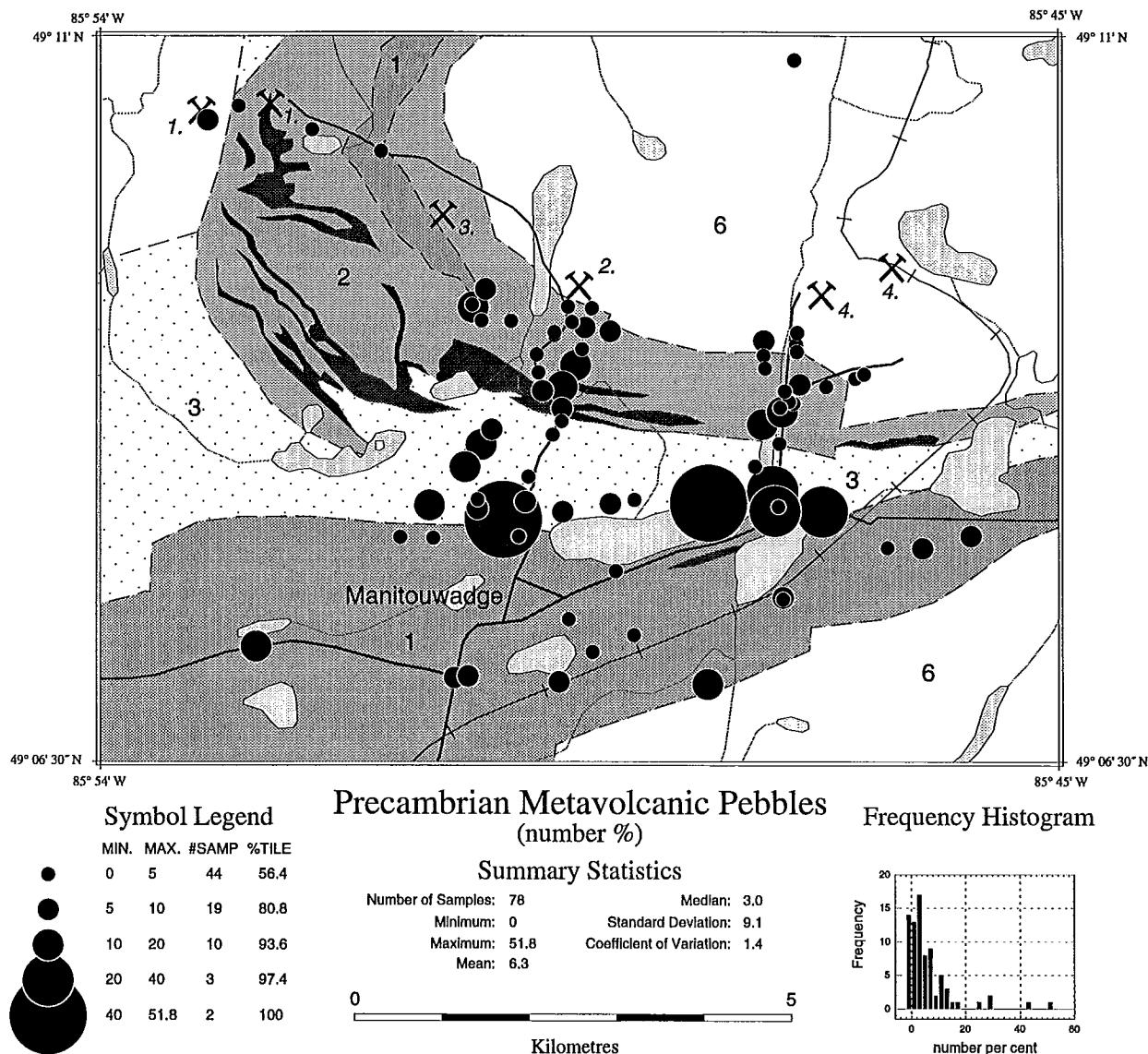
Maps of Selected Paleozoic and Precambrian Lithologies
in the Pebble Fraction (5.0-16.0 mm) of Till

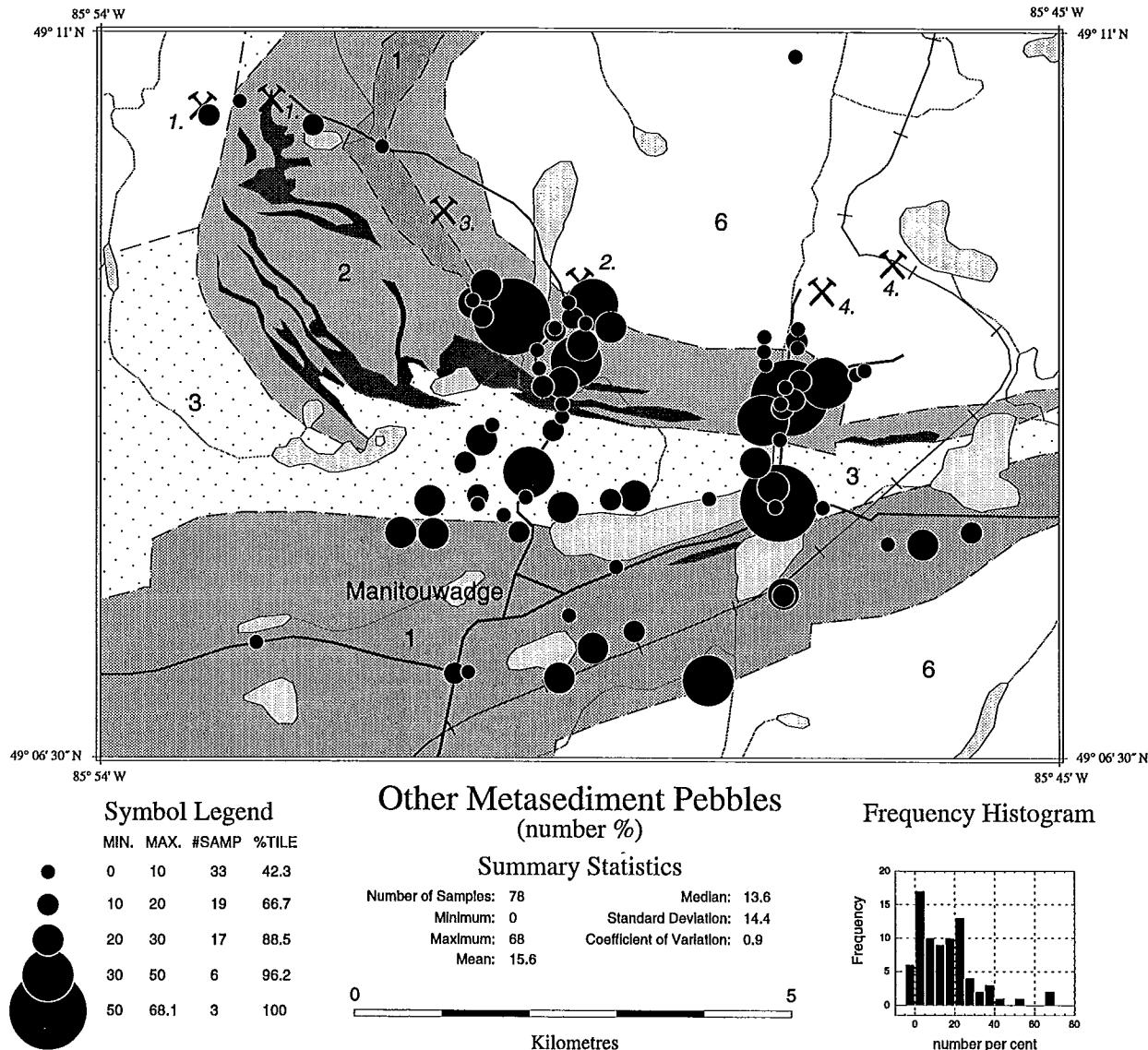
Maps of Cu, Ni, Pb, and Zn in the <0.002 mm Fraction of Till

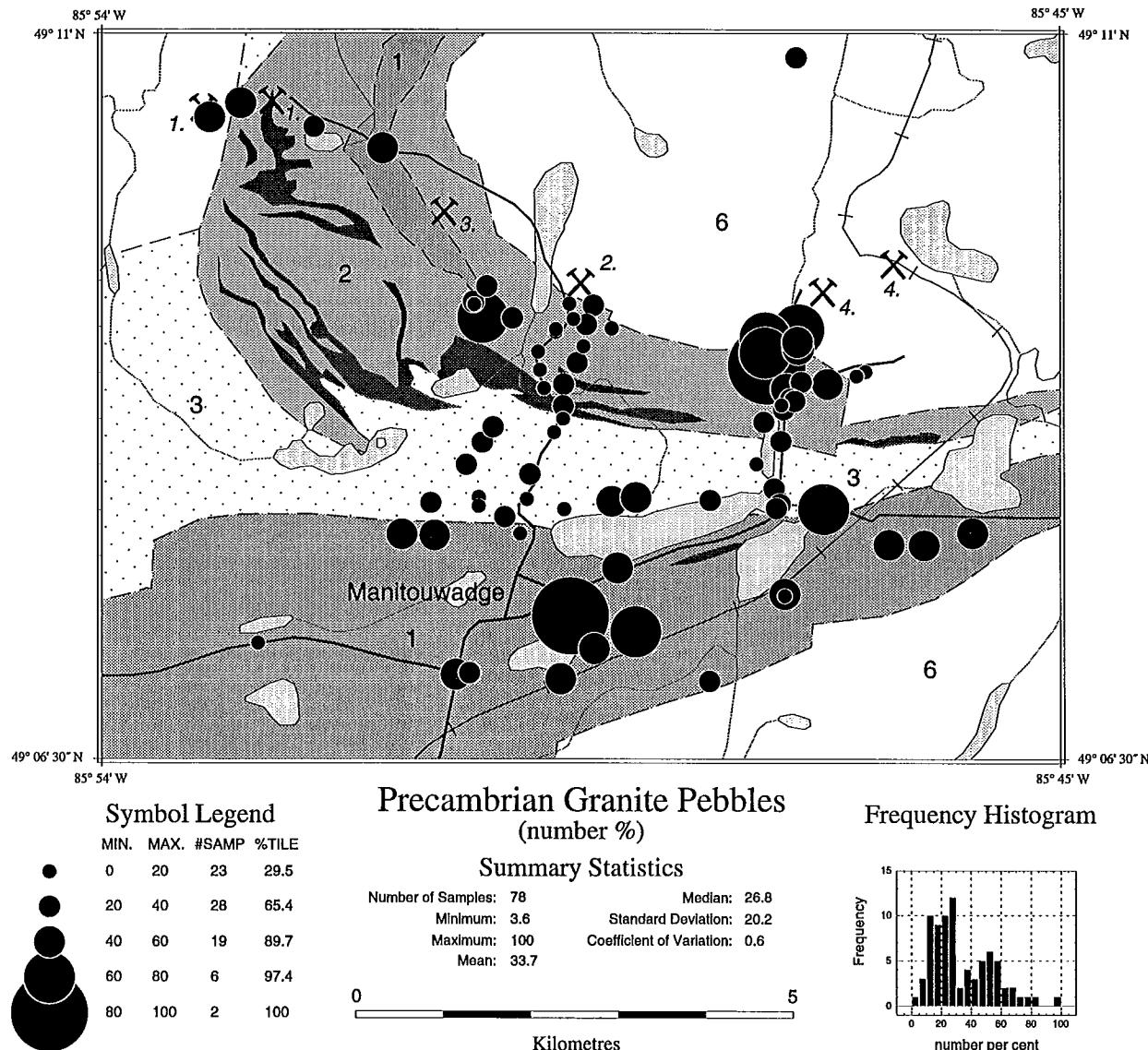


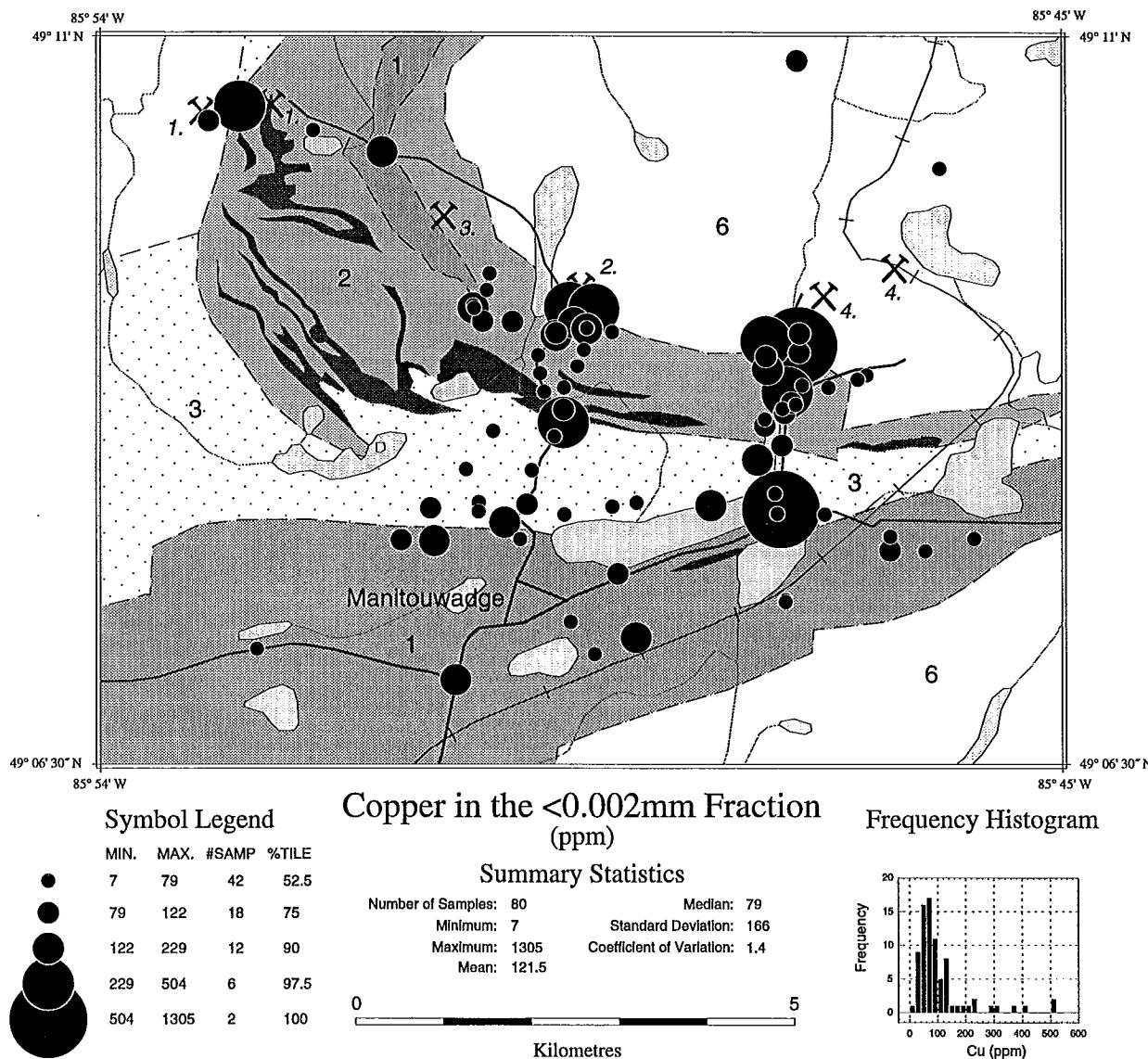


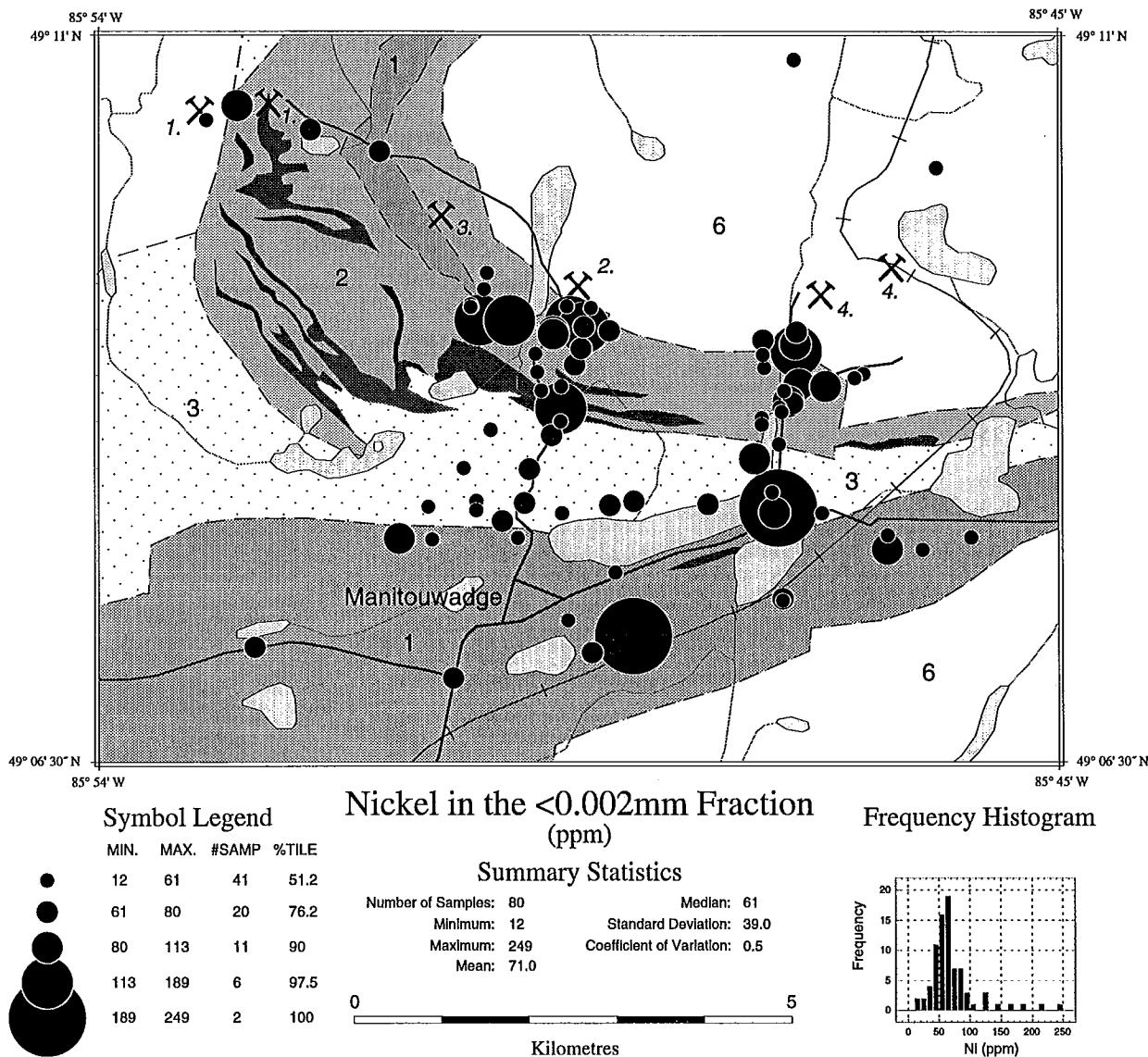


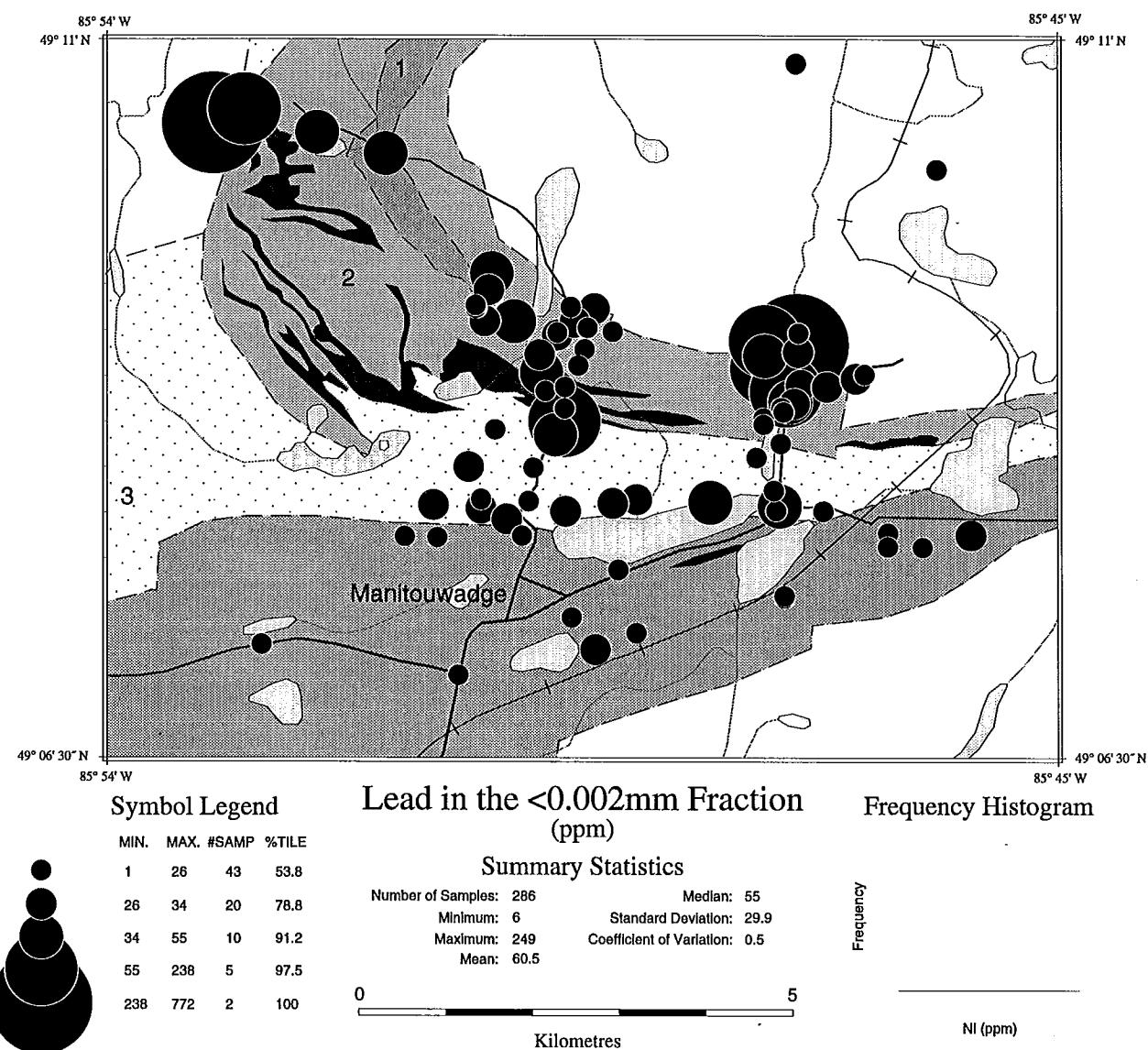


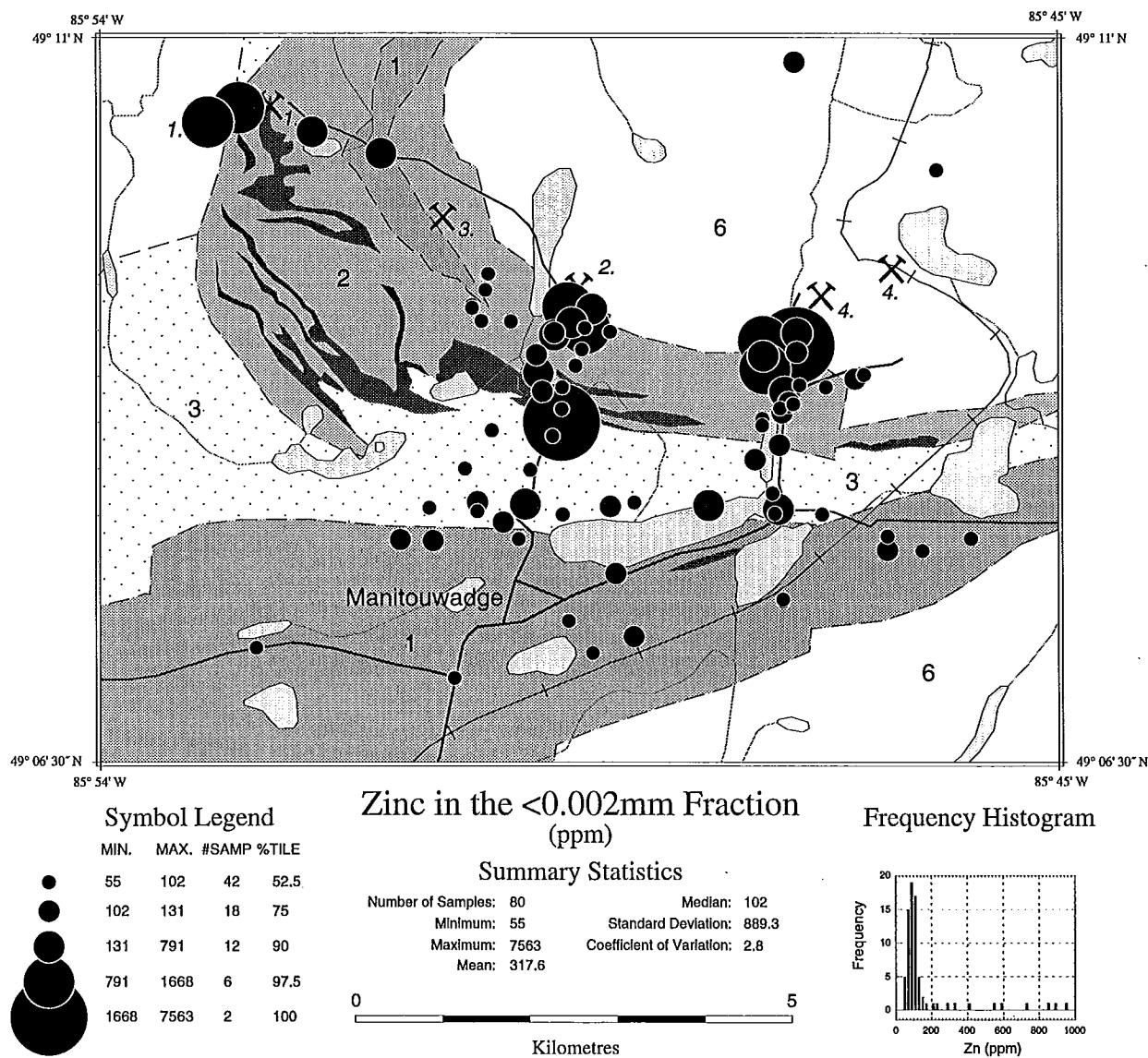










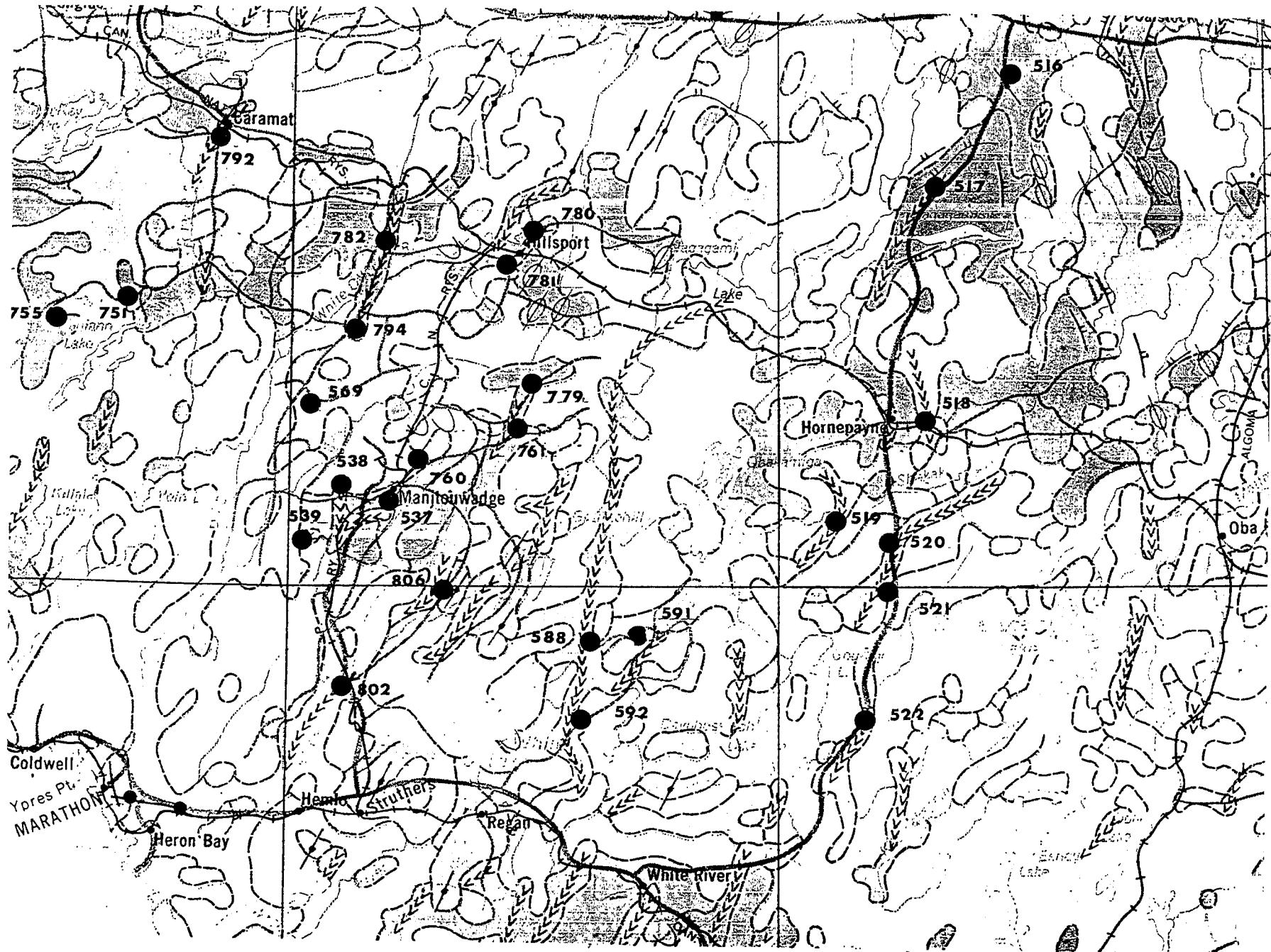


APPENDIX F

Kimberlite Indicator Mineral Analyses

Map showing locations of esker sand and gravel samples

Data for sand-sized heavy minerals concentrate from esker sand and gravel samples



ESKER SAMPLES (92KFA) ANALYZED FOR KIMBERLITE MINERAL INDICATORS

HEAVY LIQUID SAMPLE WEIGHTS (SG 3.20)

SAMPLE NUMBER	DIRECT SIEVE (1.0 TO 2.0 MM)					TABLE CONCENTRATE (<1.0 MM)					NUMBER OF INDICATOR MINERALS										REMARKS *		
	TOTAL		CONC.		NON MAG	TOTAL		CONC.		NON MAG				1 TO 2 MM		0.5 TO 1 MM		0.25- 0.5 MM					
	TOTAL	LIGHTS	TOTAL	MAG	NAG	TOTAL	LIGHTS	TOTAL	<0.25 MM	>0.25- 0.5 MM	>0.5 MM	MAG	GP	GO	DC	IM	CR	GP	GO	DC	IM	CR	
92KFA0																							
516	2442.1	2438.9	3.2	2.7	0.5	696.7	680.6	16.1	12.7	7.0	4.1	1.6	3.4	0	0	0	0	0	0	0	0	0	0
517	0.0	0.0	0.0	0.0	0.0	718.3	613.4	104.9	102.4	101.7	0.6	0.1	2.5	0	0	0	0	0	0	0	0	0	0
518	780.6	780.5	0.1	0.1	<0.1	942.3	881.8	60.5	50.2	42.4	6.9	0.9	10.3	0	0	0	0	0	0	0	0	0	0
519	3194.1	3192.4	1.7	1.1	0.6	169.9	159.2	10.7	8.8	6.4	2.0	0.4	1.9	0	0	0	0	0	0	0	0	0	0
520	767.3	767.1	0.2	0.1	0.1	329.9	264.3	65.6	49.1	45.4	3.0	0.7	16.5	0	0	0	0	0	0	0	0	0	0
521	441.2	440.7	0.5	0.3	0.2	469.5	397.7	71.8	58.3	47.7	9.5	1.1	13.5	0	0	0	0	0	0	0	0	0	0
522	1876.0	1874.6	1.4	0.7	0.7	177.4	153.8	23.6	19.6	10.9	7.9	0.8	4.0	0	0	0	0	0	0	0	0	0	0
537	301.1	301.0	0.1	0.1	<0.1	746.6	688.4	58.2	51.6	38.0	13.4	0.2	6.6	0	0	0	0	0	0	0	0	0	0
538	29.5	29.5	<0.1	<0.1	<0.1	366.8	266.9	99.9	76.7	65.0	11.6	0.1	23.2	0	0	0	0	0	0	0	0	0	0
539	788.3	787.4	0.9	0.6	0.3	777.9	719.9	58.0	47.0	34.4	11.4	1.2	11.0	0	0	0	0	0	0	0	0	0	0
569	2152.1	2150.3	1.8	1.1	0.7	418.9	366.5	52.4	42.2	27.3	12.0	2.9	10.2	0	0	0	0	0	0	0	0	0	0
582	1086.8	1086.4	0.4	0.3	0.1	508.5	471.6	36.9	31.0	8.1	22.3	0.6	5.9	0	0	0	0	0	0	0	0	0	0
588	2559.8	2558.7	1.1	0.7	0.4	687.6	657.1	30.5	25.7	15.7	7.8	2.2	4.8	0	0	0	0	0	0	0	0	0	0
591	1754.2	1752.7	1.5	1.1	0.4	303.9	265.6	38.3	32.6	22.8	7.7	2.1	5.7	0	0	0	0	0	0	0	0	0	0
751	1680.1	1678.0	2.1	1.4	0.7	197.0	167.2	29.8	21.5	10.7	9.3	1.5	8.3	0	0	0	0	0	0	0	0	0	0
755	0.0	0.0	0.0	0.0	0.0	420.1	293.2	126.9	108.3	107.7	0.6	<0.1	18.6	0	0	0	0	0	0	0	0	0	0
760	249.6	249.6	<0.1	<0.1	<0.1	436.4	367.2	69.2	55.2	46.1	8.5	0.6	14.0	0	0	0	0	0	0	0	0	0	0
761	833.0	831.7	1.3	0.9	0.4	202.9	170.8	32.1	24.0	16.4	6.4	1.2	8.1	0	0	0	0	0	0	0	0	0	0
779	1728.7	1727.0	1.7	1.0	0.7	135.4	123.6	11.8	8.7	3.4	3.9	1.4	3.1	0	0	0	0	0	0	0	0	0	0
780	1767.6	1767.2	0.4	0.3	0.1	148.5	133.7	14.8	11.2	5.2	5.7	0.3	3.6	0	0	0	0	0	0	0	0	0	0
781	801.7	801.3	0.4	0.3	0.1	255.0	242.9	12.1	10.0	4.9	4.6	0.5	2.1	0	0	0	0	0	0	0	0	0	0
782	363.2	363.0	0.2	0.1	0.1	320.4	281.5	38.9	29.4	18.1	11.0	0.3	9.5	0	0	0	0	0	0	0	0	0	0
792	993.8	993.7	0.1	<0.1	0.1	178.2	163.6	14.6	10.3	5.7	4.5	0.1	4.3	0	0	0	0	0	0	0	0	0	0
794	889.2	888.7	0.5	0.3	0.2	276.4	227.6	48.8	36.8	29.1	6.3	1.4	12.0	0	0	0	0	0	0	0	0	0	0
802	765.5	765.3	0.2	0.1	0.1	287.6	225.9	61.7	45.4	28.2	16.2	1.0	16.3	0	0	0	0	0	0	0	0	0	0
806	985.8	985.3	0.5	0.4	0.1	323.7	291.0	32.7	24.0	16.5	6.5	1.0	8.7	0	0	0	0	0	0	0	0	0	0

* NO INDICATOR MINERALS FOUND. SELECTED SOME EXAMPLES OF ORANGE AND RED GARNETS AND OF BLACK ILMENITES WHICH MOST RESEMBLE K.I.M.S BUT THE LACK OF ANY GOOD INDICATORS SUGGESTS THEY ARE NOT.

KIMBERLITE MINERAL INDICATOR ANALYSES

APPENDIX G

Visible Gold Grain Data for the 0.025-2.00 mm Fraction

Map of Gold Grains in Till in the Manitouwadge-Hornpayne Region

Key

Pan.	Panned
Y/N	Yes/No
Diam.	Diameter (microns; 1 micron = 0.001 mm)
Thick.	Thickness (microns; 1 micron = 0.001 mm)
C	Calculated thickness
M	Measured thickness
Table	Tabled
Total	Total number of grains
Non-mag	Non-magnetite
Conc.	Concentrate
Wt. (g)	Weight (grams)
Pred.	Predicted

Gold Grain Counts - 1991,1992 samples

281

Gold Grain Counts - 1991,1992 samples

282

Gold Grain Counts - 1991,1992 samples

283

Gold Grain Counts - 1991,1992 samples

284

Sample	Pan.	Diam	Thick.	Number of Grains, Table or Pan								Total	Non-mag	Pred.	Remarks		
				Reshaped		Modified		Pristine									
				T	P	T	P	T	P	Conc.	Assay						
										Wt. (g)	ppb						
92KFA 0437	Y	No visible gold														No sulphides	
92KFA 0438	Y	No visible gold														No sulphides	
92KFA 0439	Y	No visible gold														No sulphides	
92KFA 0461	N	No visible gold														No sulphides	
92KFA 0462	N	25 X 50	8 C	1								1				No sulphides	
												1					
												1					
92KFA 0516	Y	50 X 75	13 C	1												No sulphides	
												1					
												1					
92KFA 0517	Y	No visible gold														No sulphides	
92KFA 0518	Y	75 X 150	22 C	1								1				No sulphides	
												1					
												1					
92KFA 0519	Y	No visible gold														No sulphides	
92KFA 0520	Y	No visible gold														No sulphides	
92KFA 0521	Y	25 X 75	10 C					1				1				No sulphides	
		50 X 50	10 C					1				1					
		75 X 150	22 C	1								1					
												3					
												58.2					
												43					
92KFA 0522	Y	No visible gold														No sulphides	
92KFA 0534	N	No visible gold														No sulphides	
92KFA 0537	Y	No visible gold														No sulphides	
92KFA 0538	Y	25 X 75	10 C	1								1				No sulphides	
		75 X 125	20 C				2					2					
												3					
												77.4					
92KFA 0539	Y	75 X 75	15 C	1								1				No sulphides	
												1					
												47.1					
												14					
92KFA 0547	N	No visible gold														No sulphides	
92KFA 0549	N	50 X 75	13 C	1								1				No sulphides	
												1					
												9.8					
												38					
92KFA 0558	N	No visible gold														No sulphides	
92KFA 0559	N	No visible gold														No sulphides	
92KFA 0560	N	50 X 75	13 C	1								1				No sulphides	
												1					
												7.8					
												48					
92KFA 0585	N	No visible gold														No sulphides	
92KFA 0586	N	No visible gold														No sulphides	
92KFA 0587	N	No visible gold														No sulphides	

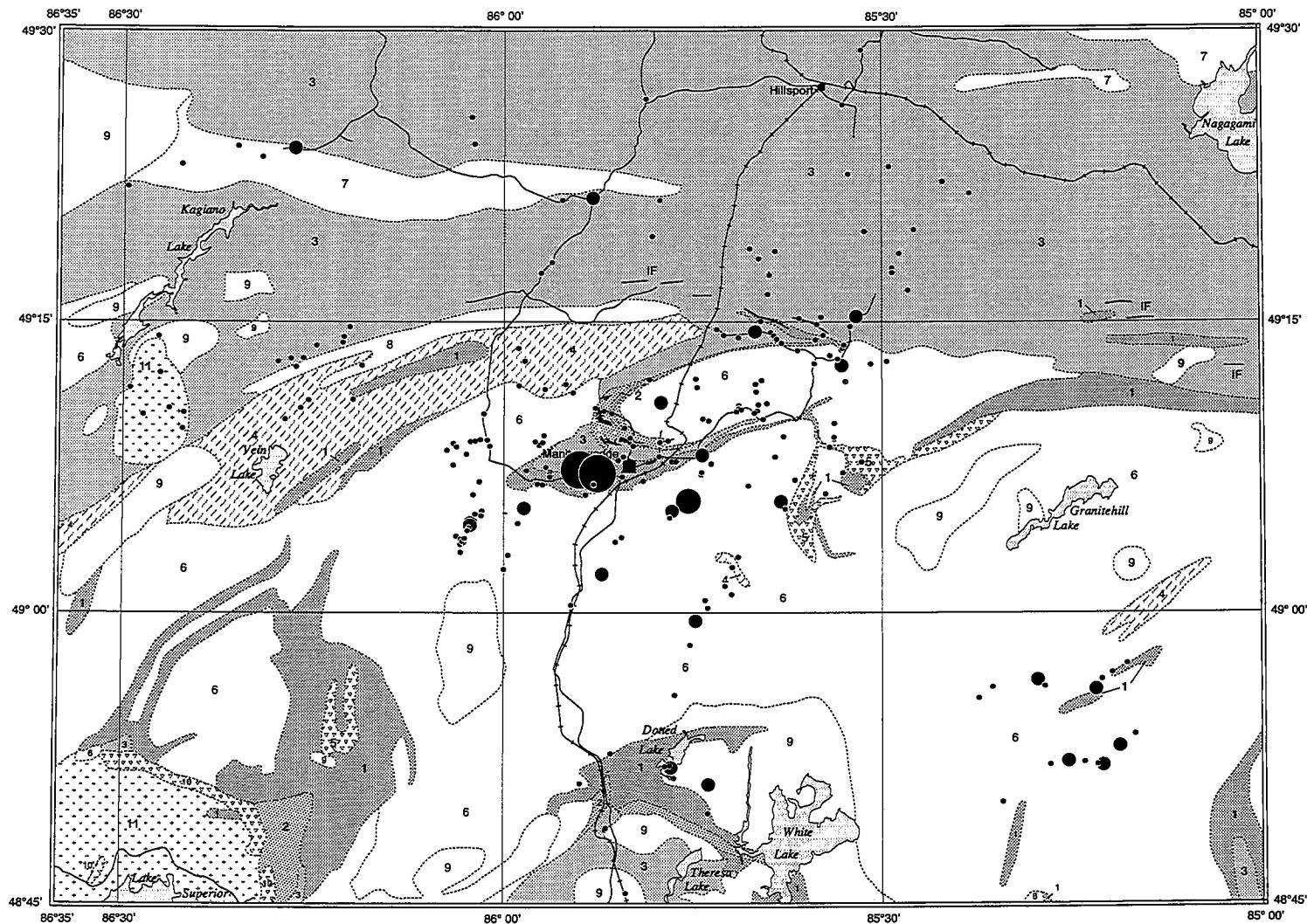
Gold Grain Counts - 1991,1992 samples

285

Gold Grain Counts - 1991,1992 samples

286

Sample	Pan. Y/N	Diam	Thick.	Number of Grains, Table or Pan						Total	Non-mag	Pred.	Remarks	
				Reshaped		Modified		Pristine				Conc. Wt. (g)	Assay ppb	
				T	P	T	P	T	P					
92KFA 0782 Y			No visible gold											No sulphides
92KFA 0792 Y			No visible gold											No sulphides
92KFA 0794 Y		50 X 75	13 C			1				1				No sulphides
										1	36.7	10		
92KFA 0802 Y			No visible gold											No sulphides
92KFA 0806 Y		100 X 17	27 C			1				1				No sulphides
										1	24	159		



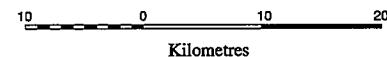
Symbol Legend
Gold Grains (number)

MIN.	MAX.	#SAMP	%TILE
0	0	206	89.6
0	1	21	98.7
1	2	1	99.1
2	5	2	100

Gold grains in till

Summary Statistics

Number of Samples: 230
 Median: 0
 Standard Deviation: 0.52
 Minimum: 0
 Maximum: 5
 Coefficient of Variation: 3.4
 Mean: .15



Frequency Histogram

