

NGU Report 96.142
Geochemistry of topsoil
in Vaggatem - Skogfoss

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Title: Geochemistry of topsoil in Vaggatem - Skogfoss			
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Summary: The total area of Kenor's claim (approximately 200 km ²) is mapped by sampling mineral topsoil (1,000mx1,000m grid) and the determination of hot aqua regia extracts of 31 elements, as well as cold aqua regia extracts of Au, Bi, Sb, Se and Te, as well as Au determined by cyanidation. In addition, an area surrounding the drill site at Pike Lake (Gjeddevann) is sampled in a much denser grid. Results are displayed in maps at scale 1:100,000 and 1:50,000 and interpreted along with modern bedrock maps, Em maps and Quaternary deposits map.			
A number of areas are outlined and evaluated for future prospecting, and parts of the claim is suggested to be abandoned.			
Keywords: geochemistry	gold	topsoil	
arsenic	antimony	bismuth	

CONTENTS

INTRODUCTION	4
METHODS	4
RESULTS	7
CONCLUSION	11
REFERENCES	11

FIGURES

Figure 1.	Approximate outline of anomaly areas.	8
Figure 2.	(10xAu)+Sb draped on ppb Au surface.	10
Figure 3.	Au in 1056 samples of till from all Finnmark.	11

APPENDIX

Appendix 1	Scatter plots of analysis on field duplicates
Appendix 2	Table of analysis on field duplicates
Appendix 3	Table of analysis of regional and detail samples
Appendix 4	Diagram explaining the use of box-plot levels
Appendix 5	Sample site number map and point maps showing analytical results of hot aqua regia extracts of Al, As, B, Ba, Be, Ca, Co, Cr, Cu, Fe, K, La, Li, Mg, Mn, Mo, Ni, P, Pb, S, Sc, Sr, Th, Ti, V, Y, Zn, cold aqua regia extracts of Au, Bi, Sb, Se, Te, and Au by cyanidation
Appendix 6	Transparent topographical map for overlay on point maps

INTRODUCTION

A claim of approximately 200 km² is held by Kenor a.s. in Pasvik. The claim was based on the discovery of gold in bedrock and on the extent of the Petsamo supergroup, which is known for hosting gold mineralisations both in Russia and Finland. In order to reduce the area of the claim in time for the next claimholder's fee, a very strict time limit was the major obstacle when the Geological Survey of Norway was asked to perform a geochemical assessment of the area. At the time plans and budgets were approved, arrival of the winter season with its implications on field work efficiency was the critical factor.

A strategy of detailed sampling around the drilling site was adopted, but the initial idea of a long profile across the entire Petsamo supergroup passing the occurrence, was abandoned in favour of the idea of a quick and immediate mapping of the entire area prior to the winter season. The occurrence of elevated gold values in the C-horizon (9 and 12 pbb) also in the southern end of the claim, found during the Nordkalott project by NGU in 1986, supported this strategy. Financial restrictions limited the number of samples to be taken and analyzed to a maximum of 300.

METHODS

Choice of sample site.

When prospecting for low grade/expectedly small area outcrop ores, the representativity of the samples collected is more important than ever. Generally, when sampling Quaternary deposits in a glaciated terrain, the closer to the bedrock surface the samples are taken, the denser they need to be taken in order to pick up the geochemical signatures of the bedrock. Hence, with an area of approximately 200 km² to investigate, and with a maximum of 300 samples for analysis, the samples had to be collected high up in the profile. A regular 1,000x1,000 m grid coinciding with the UTM (WGS84) grid on the map sheets of scale 1:50,000 was used as the initial sampling site grid. Areas of other Quaternary deposits than till were not sampled. The Quaternary deposits map of Carlson et al (1983) was used for planning, the exact nature of the surficial deposit being checked in field. To improve on the sample medium's chance of containing gold or its pathfinder elements, the final sample site was positioned down a local slope rather than on local tops.

Sampling.

Furthermore, to improve on representativity of the sampling, a number of subsamples at each sampling site was considered necessary. To reduce on time spent for collecting samples, composite samples of minerogenic topsoil were collected at each site. Five subsamples were cut by a 10 cmØ steel cylinder. From the «core» extracted, the organic part of the profile was

discarded, and the topmost 5 cm collected. This 5 cm mostly consisted of the bleached layer of a podzol; the thickness of this horizon as well as of the organic horizon was recorded as an average over the 5 (or more) samples constituting the composite sample for one site. Pebbles and roots were removed from the sample as it was put in its wrapping - a white paper bag of approximately 2 l volume, tested for contaminants by the same laboratory that conducted the analysis.

Field notes.

Upon arrival at sample site, position was determined by use of a map in the scale 1:50,000, compass and/or GPS receiver. All coordinates were recorded on paper, with reference to UTM zone 35 and WGS84 datum (Illustrated on recent maps from Statens Kartverk with blue grid and coordinates along the map's edge). When sampling was completed, notes were taken on number of subsamples, depth of humus layer and depth of bleached layer, along with remarks as found necessary by the field crew. All observations were marked with the initials of the person sampling.

Logistics.

Given the shape of the area to be sampled, the road network and the low feasibility of using 4-wheel vehicles due to boulder fields and legal restrictions on their use, travelling on foot from the roads was chosen as the most cost effective means of transportation. A boat was hired for some long stretches on the lake st Spurvatnet, and a 6-wheel drive vehicle was rented to bring the large volumes of samples from the detailed grid down to the road. The field work was carried out in the period 30.09.96 - 19.10.96 by Tor Erik Finne, NGU, (30.09- 06.10), Rolf Lynum, NGU, (30.09 - 13.10) and Harald Aasen, Geocare, (02.10 - 19.10).

Preparation and analysis.

At the end of the field campaign, all 244 samples previously wrapped in paper bags with additional individual plastic bag covers were wrapped in large fiberglass bags for protection and shipped in one lot to the laboratory of the Finnish Geological Survey's (GTK) regional office in Rovaniemi. This laboratory has on previous occasions proved to the Geological Survey of Norway that they are reliable with regards to quality and time, and are experienced in handling the type of samples used in this campaign. The Finnish lab is accredited according to EN standard 45001 and ISO Guide 25, and their analytical procedures reporting 31 elements after a digestion of the samples in hot aqua regia is certificated. The preparation and analytical procedures are described as follows:

1. Drying and sieving to < 0.063 mm.
2. Cold aqua regia digestion of 20 g subsample and determination of Au (det. limit 0,1 ppb) and Bi, Sb, Se and Te with GFAAS (GTK method 522U).
3. Hot aqua regia digestion and determination of 31 elements with ICP-AES (GTK method 511P).

Results were reported from the laboratory on Nov 21st, 1996, as Excel files with sample number and analytical data for 36 elements. Whenever a sample's concentration was recorded as less than the given detection limit for a certain element, this was included in the report.

Computing and mapping.

Analytical results and recorded coordinates were linked, and data reported less than detection limit were given new values equal to 0.5·detection limit (in order to distinguish them from the values that were reported equal to the detection limit), and to give more accurate estimates of population means. Samples were coded to create three subsets; (i) a regional subset consisting of all samples in the 1,000m x 1,000 m grid, (ii) a detail subset consisting of all samples from the detailed sample grid around the drill site at «Gjeddevann» (originally named «Pikes Lake» by gold discoverer Victor Melezhik, but named «Støvelvann» on the detailed orienteering map scale 1:15,000 issued by the local sports clubs) and (iii) a field duplicates subset from the entire area. A sample site number map is shown as Appendix 5.

A total of 21 field duplicate pairs were sampled and analyzed to allow for evaluation of data quality. The results were plotted in scatter plots (Appendix 1), and extreme outliers identified by site number in the scatter plot. The results are also reported as a table in Appendix 2. All other analytical results are shown in the tables of Appendix 3.

Maps were made employing robust statistics to distinguish between anomalies and background. For this purpose, all samples, both regional and detail, were used. An illustration explaining the rules for setting the variable's class limits is shown in Appendix 4. Hence, the maps presented in the scale 1:100,000 for the regional data, and in 1:50,000 for the detail area, both use the same symbol legend. For each element, these maps are plotted on one page, along with a cumulative frequency distribution diagram showing the regional (Reg) and the detail (Det) subsets with different line types. These maps are shown together with the sample site number map as Appendix 5. All maps have the bounding line of the claim included, as well as coarse representation of the major waterbodies of the area. The bounding line is also found on the included transparent copy of the topographical map 1:50,000 reduced to fit the 1:100,000 maps of this report.

RESULTS AND DISCUSSION

The chosen extraction method (aqua regia) is well suited to bring sulfides and gold into solution, but attacks rock-forming minerals with varying success. The analytical results of the major elements are more an indication of the sample's mineral composition than its total element content.

Some of the elements were ruled out before mapping due to their low levels compared to detection limit (Ag, Cd and Na), or due to solution equilibrium considerations in the analytical extract (Si). Furthermore, from the scatter plots of Appendix 1, it is clear that As, Au, B, Be and Mo all show poor or relatively poor reproducibility in the concentration area covered by the field duplicates. For gold, this problem is not caused by too high detection limit (0.1 ppb - on the contrary), but most likely by the «nuggets effect» introduced at sampling or weighing. For As, the poor reproducibility in the low concentration range does not necessarily affect the anomaly picture in the map, as concentrations in the anomalous areas are at higher concentration levels. For B, Be and Mo, the poor reproducibility combined with the overall concentration range of the regional data set, suggests that single point anomalies of these elements should not be given excessive attention.

The anomaly pictures of a number of elements coincide to a great extent. Rather than describing the anomaly picture element by element, the anomalous areas will receive individual attention. But first of all, the results from the detail sampled area are discussed.

It appears quite clearly that Au is not «stable» in the sense that it does not have high reproducibility neither on 10 m distance level (field duplicates) nor on the 200 m level (the minimum distance between samples near the drillsite). The median value of the detail subset is even equal to that of the regional subset, but the 95 percentile of the detail subset is higher than for the regional. This suggests that pathfinder elements can be vital in the assessment of gold potential. From the detail study, Sb appears to be the best pathfinder, and not As as might be expected from observations from the drill cores. In cores, gold is hitherto only found on joints in arsenopyrite.

The question of transport distance of the Quaternary material is important when interpreting data like this. Judging from findings in area 3 and 7 (see below), it appears that transport distance is low; rarely more than 2000m, and most likely in the m and 10m range. This is in agreement with findings of the NGU project «Kola Ecgeochemistry» (Lars Olsen, NGU, personal communication). A number of areas of interest have been identified as illustrated in the figure:

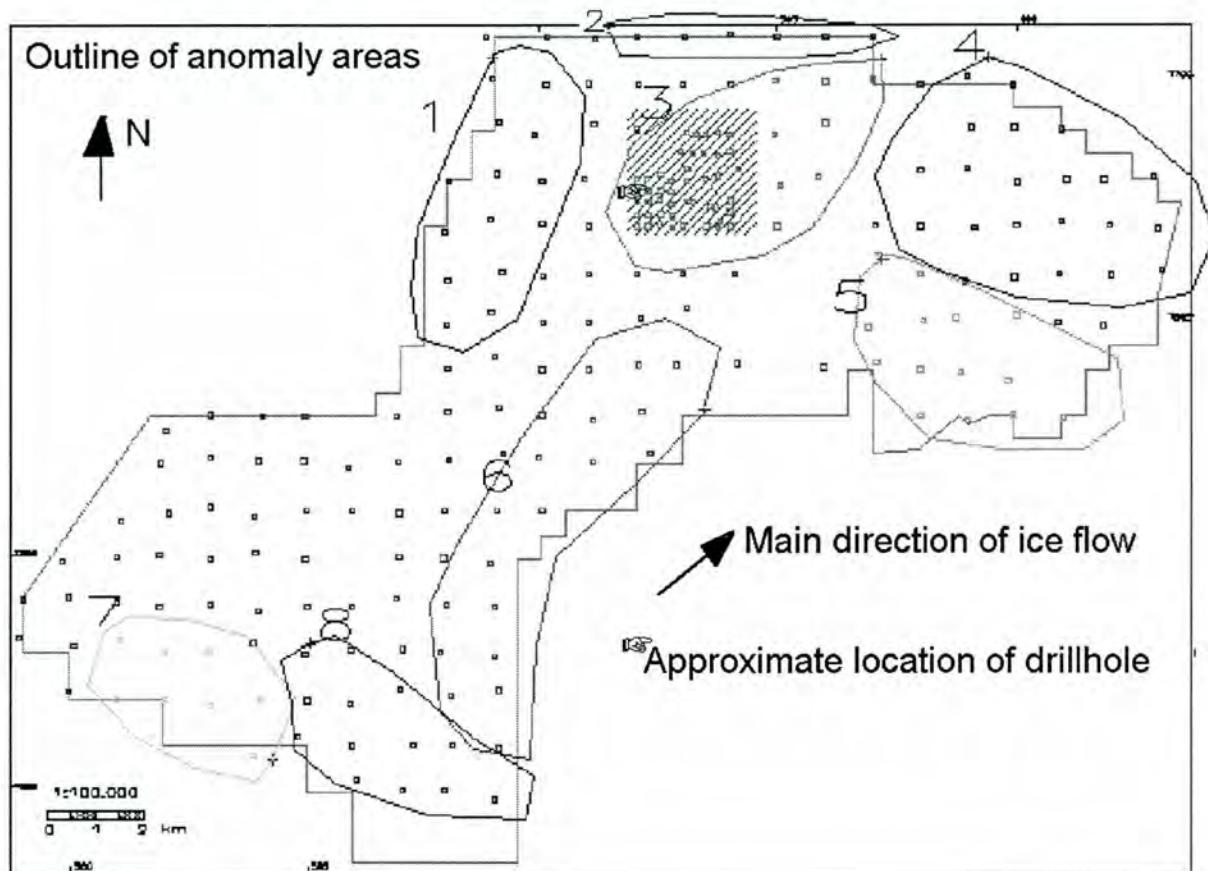


Figure 1
Approximate outline of anomaly areas.

Area 1

An area northwest of lake st Spurvatnet, particularly the samples from sites 1161 and 1368, has very high values for a number of elements, including As, Sb, Se, Te. According to the bedrock map Kirkenes scale 1:250,000, this area is located mainly on top of rocks belonging to the Skogfoss Formation or the Skjellvannet Formation. These units are, according to Siedlecka and Nordgulen (1996), composed of alkaline and subalkaline basalts locally with amygdaloid structures and breccia, and of basalts, in places with pillow structures, respectively. The unit dubbed «ore phyllite», containing graphitic phyllite, tuffs and tuffites, is always more than one km upstream along the main ice movement from the sites defining this anomaly.

Area 2

Oksfjellet in the northernmost part of the claim, is another multielement anomaly. In contrast to area 1, there is also Ni in area 2, but neither Au nor its pathfinders are present to any extent. This area is situated on the same lithological units as area 1, but considering the ice movement, it is likely that these samples also contain material of the «ore phyllite» as well as from the small pyroxenites, peridotites and gabbros found within the area.

Area 3

This includes the area sampled in detail at Pike Lake and continues in a northeasterly direction to the west of Triangelen. Together with Au, Sb and Te, this area is enriched in Sc, Co and B. The area falls almost completely within the andesitic volcanoclastic sandstone of the Kobbfoss Group. As is the case of the highest Au anomaly, the proximity of these samples to (inferred) faults or joints is a prominent feature of the area.

Area 4

A large part of the easternmost areas of the claim show elevated values of almost all the elements investigated (except for K, La, P, Pb, and Bi), even if adjusted for content of Mn in the samples. Although the content of Au in the samples from this area is only moderately anomalous, this area should be considered for further investigations. The results from the detail area indicate that pathfinder elements are of great importance in this terrain/medium, and Sb has its most pronounced anomaly right here. The lithology of the area is the same as for area 3; the andesitic volcanoclastic sandstone of the Kobbfoss Group. The area is cut by two faults that cross each other almost perpendicularly in the area's center.

Area 5

Immediately SW of area 4 is an area that contains approximately the same low values of Se and Te as in area 4, but with virtually no Sb. The numerous elements that showed high values in area 4 also have lower values in area 5, but As has its highest values in area 5, even when high Mn-values are taken into consideration. The bedrock of this area consists of units of sandstone with thin layers of phyllite in the Kobbfoss Group. A thrust fault borders the area to the SW.

Area 6

The mica schists and gneisses of the Revsaksfjellet Group are clearly shown by anomalous values of Al, Ca, Mg, K, Li, and Sr along the western and northwestern shores of the Vaggatem Lake of the Pasvik River. Au shows a line of N-S anomalous values along UTM grid line 591 E, and there are some Se anomalies. The Se values occur 1-2 km «ice downstream» of the Au anomaly at 591 E, and at a similar distance from a Au anomaly at the southwestern end of this area. The prospecting potential of this area, judging from the geochemical data alone, is quite good.

Area 7

Along the SW border of the claim is a small area showing high levels of Ba, Cr, Cu, Mo, Pb and Zn; even when adjusted for Mn content. Amphibolite with beds of graphite-mica schists of the Revsaksfjellet Group, together with the mentioned schists of area 6, as well as the tonalitic gneisses of the same stratigraphic group comprise the bedrock of this area, (in order of increasing subcrop area). The area contains no important Au-values, and the pathfinder elements are also low. If the metal content of the topsoil is reflecting that of the underlying

amphibolites and graphite mica schists, then this area indicates the influence distance from the glacial movement in this part of Pasvik.

Area 8

Directly ESE of area 7 is an area that contains two (small) Au-anomalies as well as high Bi, Se and P values. This area covers the border zone between the tonalitic gneisses of the Revsaksfjellet Group and the sandstones with thin layers of phyllite in the Kobbfoss Group. A thrust fault constitutes the border between these two rock types.

By creating a hybrid variable of Au and Sb, the map of figure 2 is created as the Au-Sb factor draped on a surface of Au concentration. This illustrates an alternative way of selecting areas for further prospecting, given that Au and Sb are the best indicators.

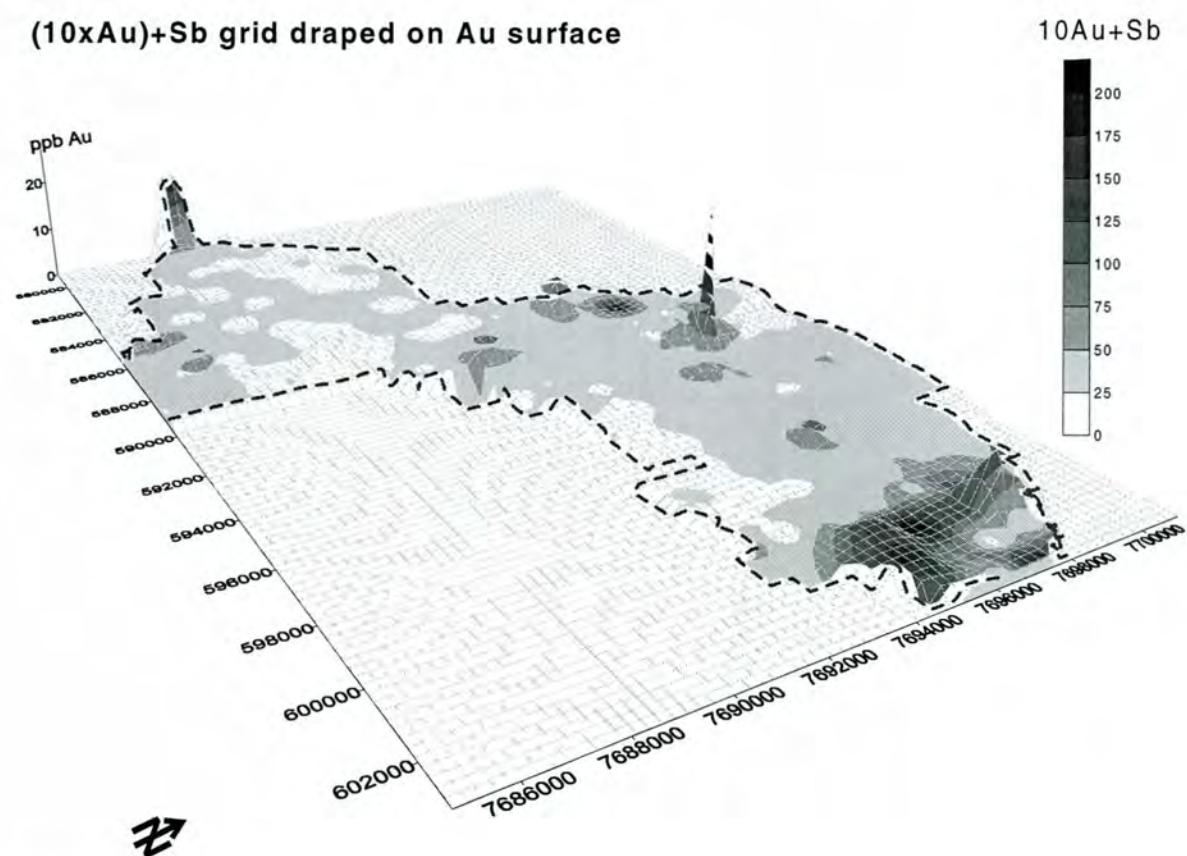


Figure 2
(10xAu)+Sb draped on ppb Au surface.

A second set of gold analysis.

Following the first version of this report, it was decided to obtain repeated gold analysis by using the remainder of the material of all samples, applying a cyanidation technique. The same laboratory that conducted the other analysis conducted this second gold analyses, but not quite without difficulties. The technique of cyanidation (of maximum 100g sample weight) was originally adapted for coarser till material, and during the preparation of this batch of <0.06mm material, a score of difficulties was encountered. For a number of samples, flocculation or gel-formation occurred, and there is a possibility that Au may have been held back from the analytical solution in a «random» fashion. According to the laboratory's manager Heikki Niskavaara, the difficulties may relate to the high proportion of fines in the samples, or even a small content of organic material. However, gold figures given in the report from the lab are in the worst case conservative in the way that some gold values may have been reported lower than the correct values.

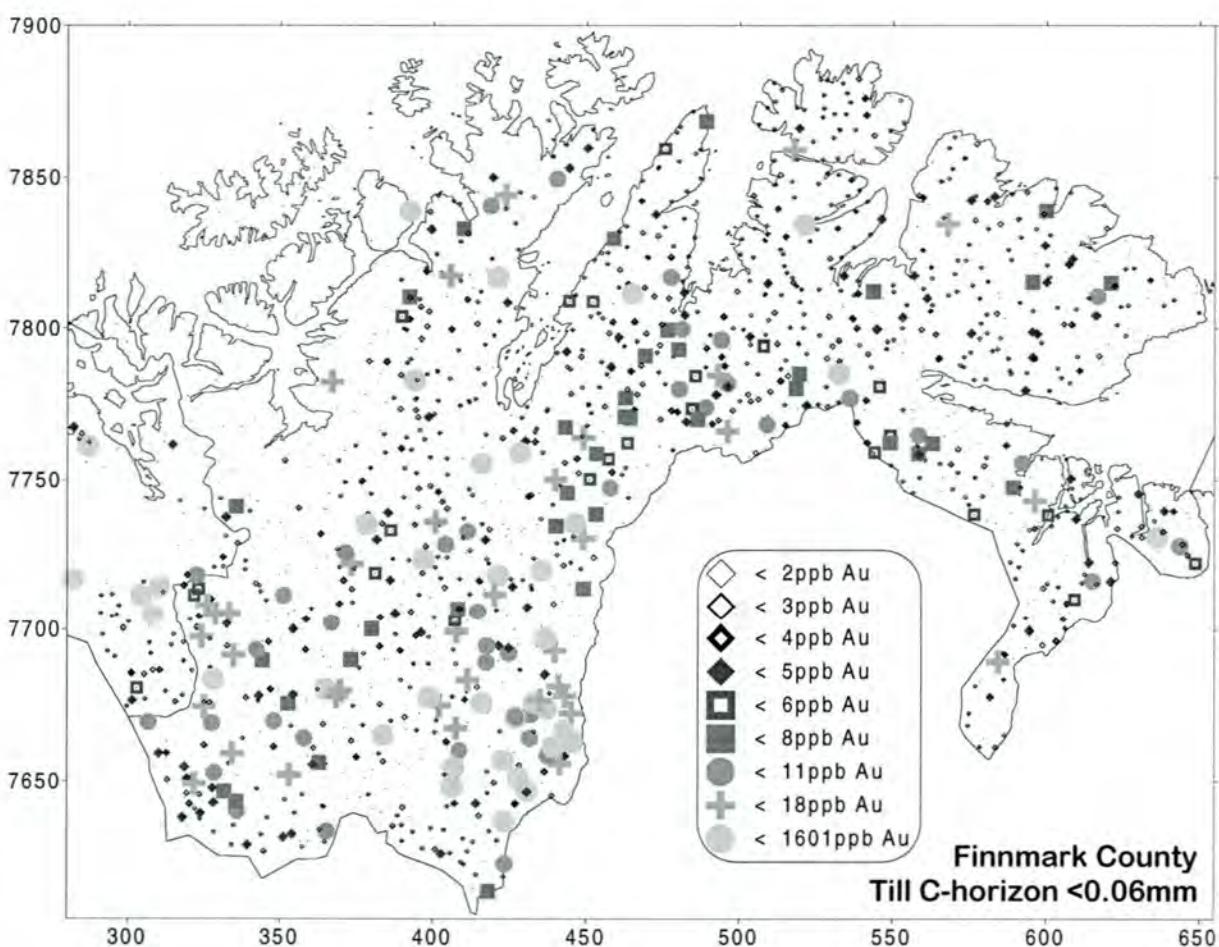


Figure 3.

Concentration of gold in 1056 till samples collected from 60cm depth (C-horizon) during Nordkalottprosjektet 1980-83. Analysis done by Fire Assay at ACME Lab. Inc. in Canada.

Gold value levels relative to other regional surveys.

Neither of the sets of gold analyses show exciting maximum values of Au (36 and 11 ppb Au for the Aqua regia and the Cyanidation method, respectively). The all county survey mentioned in the introduction had as its maximum value 1600 ppb Au, whereas a 1000m x 1000m survey carried out upstreams of the Sargejok alluvial gold works, found only 91 ppb as its richest sample. These two mentioned surveys were done by sampling C-horizon of till material, and applying fire assay or Meyer's method (H-Br solution and MIBK extraction). Figure 3 shows the results of the all county survey based on 1056 samples of C-horizon of till. According to this figure, the area of the Pasvik claim does not belong to a region of anomalous values of Au in the till. This should be interpreted as an indication that in Pasvik, the regional background is not as elevated as in the Karasjok greenstone. However, the occurrence of Au values above 10ppb does indicate that sufficient gold was present in bedrock outcrops at time of glaciation that its traces are found in the till.

If gold in the Petsamo supergroup of Pasvik is associated with both major and minor shear zones, a number of small mineralisations may be present. These are likely to express themselves in the till as gold anomalies downwards the ice flow direction.

CONCLUSION

The following areas are considered of little or no interest for further Au prospecting:

Area 2 - It contains no interesting associations of Au or pathfinders.

Area 7 - Even if there are some weak As-anomalies in this area, they are not supported by accompanying Au-values or any of the other pathfinders.

The entire area to the north of area 7 and west of 587 km E (South of area 1), is also considered of little value, judging from the obtained data.

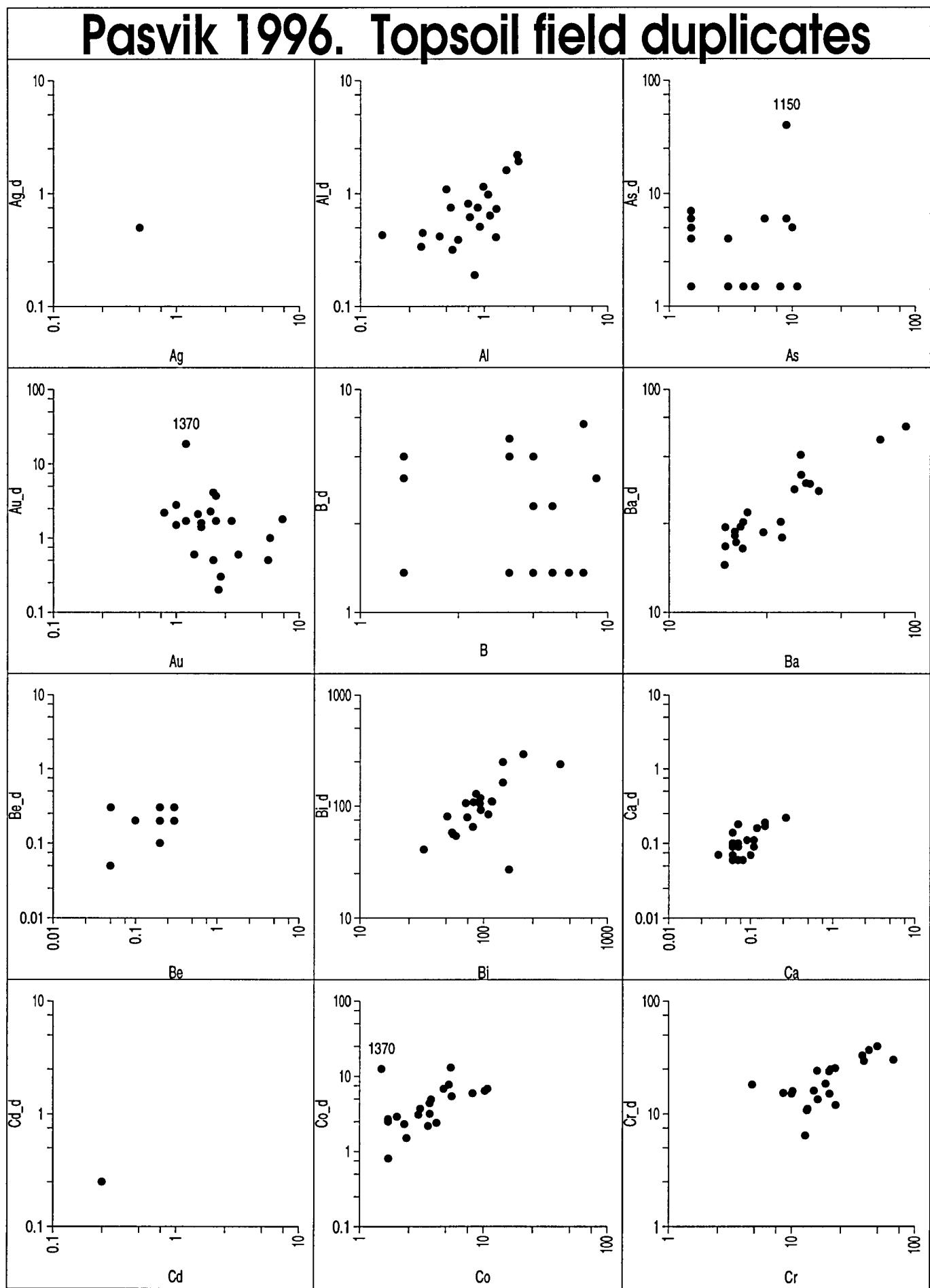
Areas 1, 3, 4, 5, 6 & 8 are considered of interest for future prospecting work. The geochemical data themselves do not allow for prioritizing between these areas.

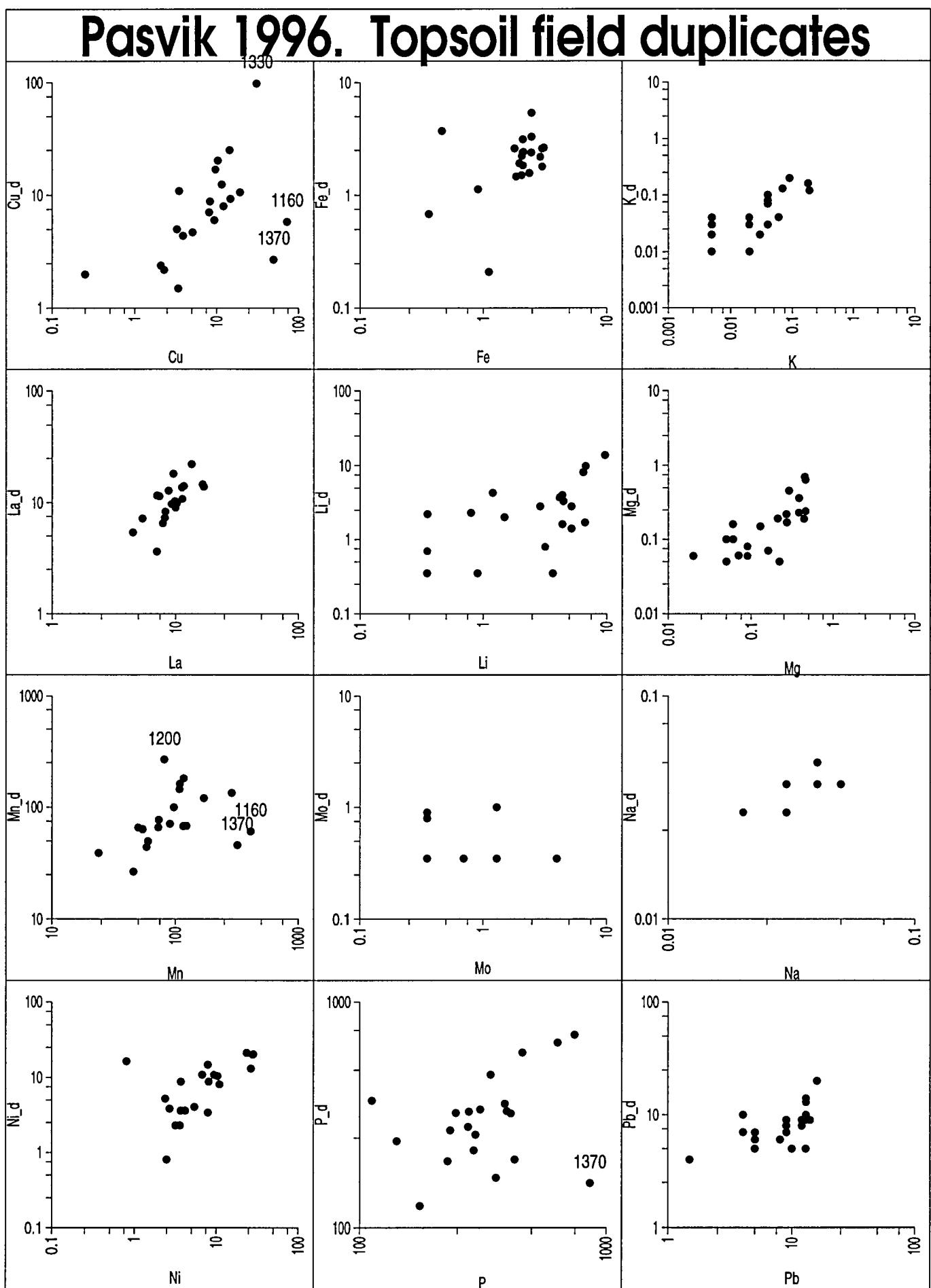
REFERENCES

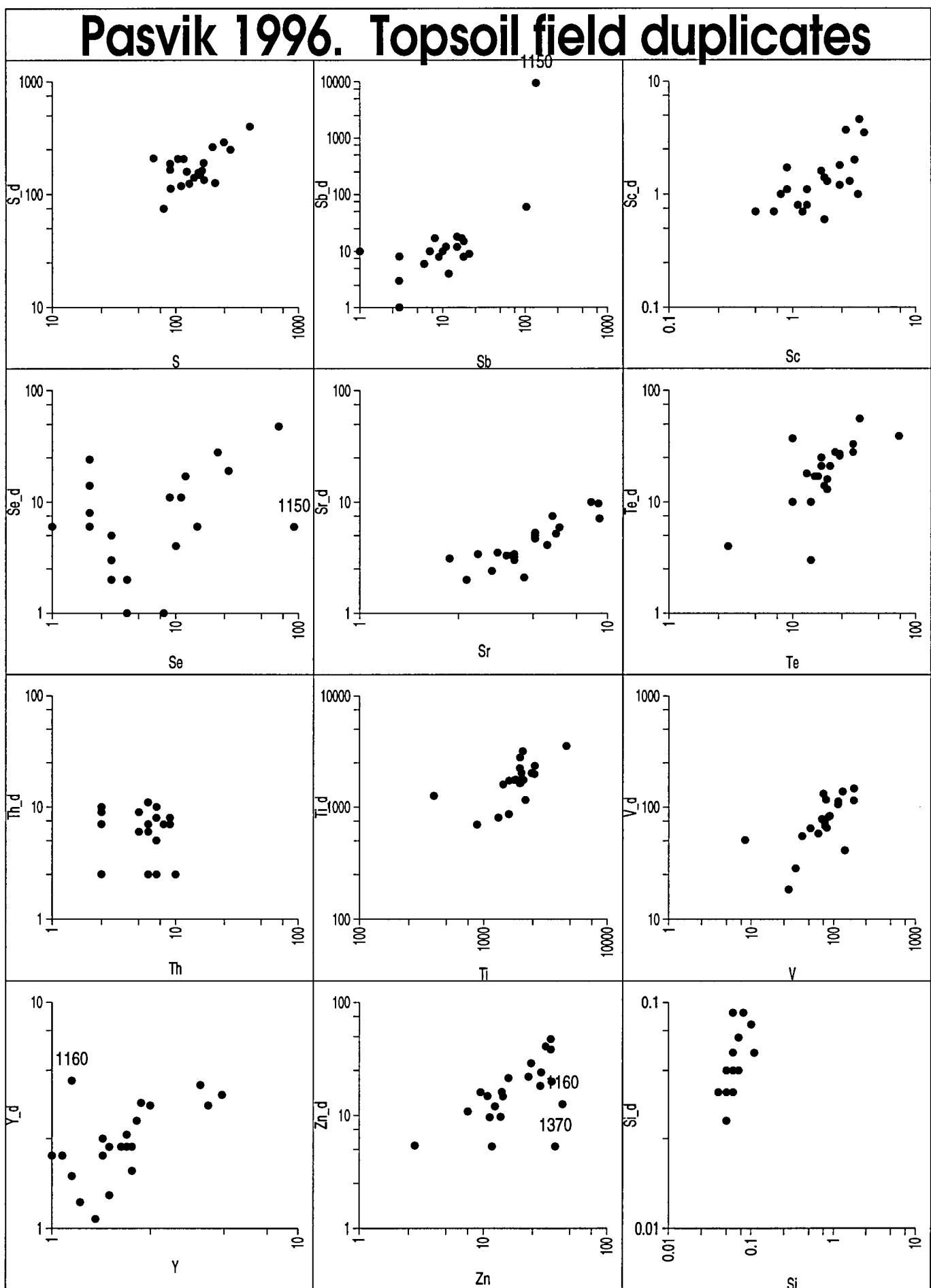
Carlson, A.B., Sollid, J.L. and Watterdal, T. 1983. Pasvik, kvartærgeologiske kart 1:75,000. Geografisk institutt, Universitetet i Oslo.

NGU, 1996. Geophysical data from airborne cross-border surveys between Norway and Russia.

Siedlecka, A. and Nordgulen, Ø. 1996. Geologisk kart over Norge, berggrunnskart KIRKENES M 1:250,000. NGU.







*Site	F	Ty	Ag	ppmAg	ppmAl	ppmAs	ppmB	ppmBa	ppmBe	%Ca	ppmCd	ppmCo	ppmCr	ppmCu	%Fe	%K	ppmLa	ppmLi	%Mg	ppmMn	ppmMo	%Na	ppmNi	%P	ppmPb	ppmS	ppmSc	ppmSi	ppmSr	ppmTh	ppmTi	ppmV	ppmY	ppmZn	ppbAu	ppbBi	ppbSb	ppbSe	ppbTe	ppbAuCY	
1046	0	1	598000	7698170	1	0.44	4.0	6.0	23.0	0.20	0.07	0.25	2.7	16.0	2.3	2.38	0.02	18.2	0.4	0.07	72.9	0.4	0.04	2.3	638	13	118	1.1	0.07	4.1	10.0	2440	114.0	2.5	7.5	1.7	79	18	11	17	0.5
1046	1	4	598000	7698170	1	0.42	1.5	3.0	18.5	0.20	0.06	0.25	1.7	15.2	2.2	2.46	0.01	9.6	0.4	0.06	66.3	0.4	0.03	3.6	660	5	110	0.8	0.05	3.3	2.5	2030	113.0	1.6	10.8	1.2	74	15	9	16	0.5
1050	0	1	598000	7694000	1	1.26	11.0	8.0	41.5	0.20	0.17	0.25	5.4	30.1	19.5	2.40	0.07	9.7	5.2	0.38	97.5	1.0	0.04	13.0	228	5	165	3.2	0.06	6.4	7.0	1820	77.9	2.6	29.4	2.2	54	8	8	27	2.0
1050	1	4	598000	7694000	1	0.73	1.5	7.0	34.4	0.10	0.15	0.25	5.6	67.4	10.6	2.13	0.04	9.3	2.8	0.36	100.0	1.3	0.04	26.8	197	7	90	2.0	0.05	5.9	8.0	1770	73.7	2.0	23.9	0.8	60	17	2	24	1.0
1060	0	1	603130	7696100	1	0.89	6.0	4.0	38.0	0.20	0.19	0.25	3.7	23.8	8.1	1.13	0.08	12.8	4.2	0.21	60.2	0.8	0.04	10.8	412	9	291	1.9	0.06	9.3	7.0	888	34.7	3.6	14.4	2.8	41	3	4	10	2.0
1060	1	4	603130	7696100	1	0.75	6.0	6.0	36.0	0.10	0.15	0.25	3.1	20.2	7.1	0.91	0.04	8.8	3.7	0.19	49.8	0.4	0.03	9.4	321	7	246	1.3	0.05	7.1	2.5	698	28.4	2.3	14.7	1.0	33	3	10	10	0.5
1070	0	1	588000	7689010	1	0.15	1.5	5.0	16.3	0.05	0.06	0.25	0.8	6.4	0.3	0.21	0.02	22.1	0.4	0.02	23.8	0.4	0.04	0.8	112	2	75	0.5	0.05	3.9	7.0	396	8.4	3.0	2.8	2.1	27	3	3	3	0.5
1070	1	4	588000	7689010	1	0.43	1.5	5.0	16.8	0.05	0.06	0.25	1.7	12.9	2.0	1.11	0.01	13.5	0.7	0.06	39.2	0.4	0.03	2.5	366	4	80	0.7	0.05	3.3	9.0	1260	50.7	2.2	5.4	1.5	160	8	3	14	0.5
1080	0	1	589000	7689000	1	1.52	3.0	4.0	59.5	0.20	0.22	0.25	5.9	36.8	9.7	1.50	0.16	13.9	6.8	0.46	108.0	0.8	0.04	21.2	341	8	158	2.7	0.06	9.2	2.5	1440	41.6	3.5	32.0	0.2	56	3	19	10	0.5
1080	1	4	589000	7689000	1	1.59	4.0	5.0	72.0	0.30	0.27	0.25	8.2	42.7	16.9	2.06	0.18	17.0	9.8	0.64	145.0	0.4	0.05	23.8	476	6	123	3.7	0.04	9.7	7.0	1600	55.1	4.3	40.9	2.2	57	8	27	14	3.0
1090	0	1	588067	7687090	1	0.56	1.5	1.5	28.1	0.05	0.10	0.25	2.5	15.3	3.4	0.68	0.04	10.8	3.2	0.16	45.5	0.4	0.04	5.2	175	10	112	1.3	0.04	5.7	2.5	1320	28.4	2.1	11.7	0.3	81	3	6	4	0.5
1090	1	4	588067	7687090	1	0.32	4.0	5.0	20.8	0.05	0.06	0.25	1.7	8.6	1.5	0.36	0.02	11.4	0.8	0.07	26.5	0.4	0.03	2.4	125	5	91	0.8	0.04	4.1	2.5	805	18.4	1.6	5.3	2.3	51	1	2	3	0.5
1110	0	1	583940	7690110	1	0.31	1.5	4.0	19.3	0.10	0.06	0.25	1.5	10.8	3.9	1.46	0.01	9.0	0.4	0.05	54.3	0.4	0.03	2.3	246	16	124	0.7	0.04	3.0	2.5	1970	80.8	1.3	14.1	1.6	92	11	6	16	0.5
1110	1	4	583940	7690110	1	0.34	6.0	1.5	19.9	0.20	0.07	0.25	2.4	13.3	4.4	1.86	0.02	10.0	0.4	0.05	63.9	0.4	0.03	3.2	322	20	129	0.7	0.04	3.4	6.0	2800	117.0	1.3	16.1	1.6	95	12	1	19	0.5
1120	0	1	595850	7698050	1	0.77	1.5	7.0	37.7	0.20	0.11	0.25	4.9	24.0	14.8	3.13	0.13	8.3	4.5	0.27	116.0	0.4	0.03	10.8	427	13	189	1.8	0.04	5.1	8.0	2590	86.3	2.3	35.8	3.7	293	21	8	56	0.5
1120	1	4	595850	7698050	1	0.62	1.5	1.5	37.4	0.20	0.11	0.25	3.8	16.1	9.3	2.11	0.07	8.3	3.3	0.17	67.9	0.4	0.03	6.8	200	13	169	1.4	0.04	5.3	7.0	2350	81.7	2.1	19.9	2.1	209	9	2	35	0.5
1130	0	1	590900	7698000	1	0.32	1.5	6.0	22.9	0.30	0.06	0.25	3.1	11.1	9.4	2.39	0.02	6.5	0.8	0.05	73.5	0.4	0.03	4.0	276	9	148	0.8	0.05	2.3	6.0	1990	177.0	1.1	12.4	1.5	109	21	2	25	0.5
1130	1	4	590900	7698000	1	0.45	1.5	1.5	24.2	0.20	0.08	0.25	3.0	13.5	6.0	2.10	0.03	7.9	2.3	0.10	77.0	0.4	0.03	5.4	280	8	158	1.0	0.04	3.1	5.0	1650	115.0	1.5	12.0	1.0	117	9	3	17	0.5
1141	0	1	600920	7695000	1	1.12	10.0	6.0	22.1	0.20	0.09	0.25	6.8	15.1	12.1	3.30	0.03	7.2	5.2	0.38	170.0	0.4	0.03	8.7	291	4	205	2.9	0.11	4.2	9.0	2020	130.0	2.1	28.8	1.0	65	104	14	33	0.5
1141	1	4	600920	7695000	1	0.64	5.0	1.5	18.5	0.20	0.06	0.25	4.8	10.0	8.0	2.48	0.02	5.4	1.4	0.23	120.0	0.4	0.03	3.7	220	10	104	1.3	0.06	3.4	2.5	2030	138.0	1.1	18.2	5.8	82	60	2	31	0.5
1150	0	1	601880	7694920	1	0.93	9.0	4.0	24.2	0.20	0.10	0.25	7.7	13.5	10.4	2.58	0.03	7.3	4.4	0.44	288.0	0.4	0.03	8.1	390	5	140	2.4	0.07	3.6	6.0	2180	113.0	2.3	35.1	0.5	105	137	6	39	0.5
1150	1	4	601880	7694920	1	0.51	40.0	6.0	19.5	0.20	0.07	0.25	5.3	16.3	20.1	3.02	0.01	8.2	1.6	0.19	134.0	4.0	0.02	11.0	354	6	141	1.2	0.05	3.5	6.0	1160	106.0	2.0	38.4	5.6	93	9400	92	73	1.0
1160	0	1	590090	7700000	1	1.25	3.0	5.0	51.0	0.30	0.18	0.25	13.0	24.9	73.2	5.37	0.20	5.4	6.7	0.46	412.0	0.9	0.04	14.7	358	9	186	3.4	0.05	4.6	10.0	4690	179.0	4.5	43.7	0.6	108	10	6	18	0.5
1160	1	4	590090	7700000	1	0.41	1.5	3.0	34.3	0.20	0.07	0.25	5.5	20.8	5.8	2.49	0.09	4.5	1.7	0.24	61.1	0.4	0.03	7.9	166	9	90	1.0	0.03	2.1	2.5	3550	147.0	1.2	12.6	3.2	83	10	15	13	1.0
1170	0	1	588900	7689920	1	1.86	1.5	5.0	68.4	0.20	0.22	0.25	6.4	39.5	14.4	2.18	0.12	14.6	9.7	0.45	117.0	0.4	0.05	20.1	459	5	264	3.5	0.05	8.6	5.0	1610	51.9	3.9	35.2	1.7	58	1	48	14	0.5
1170	1	4	588900	7689920	1	2.18	5.0	5.0	91.8	0.30	0.27	0.25	10.3	49.8	25.1	2.92	0.19	16.6	13.7	0.70	181.0	0.4	0.04	28.1	597	5	199	4.6	0.04	10.0	7.0	1730	64.7	4.9	47.2	2.1	56	10	69	18	0.5
1180	0	1	585980	7688060	1	0.75	1.5	1.5	19.8	0.20	0.09	0.25	2.3	18.5	5.1	1.91	0.02	13.7	1.5	0.09	58.6	0.4	0.04	3.6	397	13	162	1.3	0.10	4.2	8.0	1960	77.1	2.3	11.3	0.6	162	17	11	26	0.5
1180	1	4	585980	7688060	1	0.81	1.5	1.5	16.9	0.20	0.07	0.25	2.3	19.0	4.7	1.98	0.01	11.3	2.0	0.08	44.3	0.4	0.03	3.7	329	10	164	1.1	0.08	3.0	9.0	1640	74.8	1.9	9.6	1.4	143	17	11	24	1.0
1200	0	1	587010	7687223	1	0.54	1.5	1.5	25.5	0.20	0.09	0.25	2.4	15.1	3.3	1.57	0.03	9.9	0.4	0.06	81.4	0.4	0.03	3.6	141	13	134	0.9	0.07	6.0	2.5	1960	7								

Pasvik Claim
Mineral topsoil <0.063mm

Hot aqua regia/CP-AES (Ag-Zn)
Cold aqua regia/GF-AAS (Au-Te)
Cyanidation/GF-AAS (AuCY)

REGIONAL AND DETAIL SUBSETS

*Site	Type	mEast	mNorth	ppm Ag	% Al	ppm As	ppm Ba	ppm Be	% Ca	ppm Cd	ppm Co	ppm Cr	ppm Cu	% Fe	% K	ppm La	ppm U	% Mg	ppm Mn	ppm Mo	% Na	ppm Ni	ppm Pb	ppm S	ppm Se	ppm Si	ppm Sr	ppm Th	ppm Ti	ppm V	ppm Y	ppm Zn	ppb Au	ppb Bi	ppb Sb	ppb Se	ppb Te	ppb U		
1031	1	595000	7697000	0.5	0.44	4.0	5.0	31.3	0.10	0.13	0.25	4.6	13.8	24.7	2.51	0.03	6.2	1.0	0.11	105.0	0.4	0.04	6.3	652	8	157	1.4	0.06	3.9	7.0	1560	112.0	1.4	21.8	0.1	78	24	19	38	0.5
1032	2	594000	7697000	0.5	0.21	1.5	6.0	23.4	0.05	0.03	0.25	1.0	4.1	0.6	0.36	0.04	10.6	0.4	0.03	27.8	0.4	0.04	1.6	173	10	79	0.4	0.05	2.6	2.5	1030	22.3	1.1	4.7	1.3	101	7	3	10	0.5
1033	2	593000	7697000	0.5	0.30	1.5	6.0	24.6	0.05	0.04	0.25	1.6	6.8	2.6	0.92	0.06	9.9	0.4	0.04	44.5	0.4	0.03	2.3	245	14	143	0.6	0.05	2.6	7.0	1320	36.2	1.3	5.4	1.0	145	8	3	19	6.0
1034	2	592000	7697000	0.5	0.32	1.5	4.0	26.0	0.20	0.06	0.25	2.2	10.8	2.8	1.56	0.05	8.9	0.7	0.06	47.9	0.4	0.03	3.4	269	13	163	1.0	0.06	3.2	6.0	2210	133.0	1.4	11.3	9.6	167	22	2	29	0.5
1035	1	592000	7696000	0.5	0.41	1.5	6.0	25.6	0.10	0.07	0.25	2.2	13.2	1.7	1.60	0.05	12.7	0.4	0.08	55.1	0.4	0.04	3.5	407	14	87	1.0	0.06	4.8	8.0	2030	59.2	2.0	10.5	2.2	161	20	3	26	0.5
1036	1	593000	7696000	0.5	0.53	1.5	6.0	29.1	0.10	0.05	0.25	1.8	13.6	2.4	2.25	0.04	13.6	0.4	0.06	49.4	0.4	0.04	2.7	239	13	162	0.9	0.07	3.4	8.0	2180	76.1	1.9	10.9	0.5	184	19	7	30	0.5
1037	1	594080	7696000	0.5	0.28	1.5	6.0	26.3	0.05	0.05	0.25	1.6	9.5	1.2	0.76	0.04	11.8	0.4	0.06	44.6	0.4	0.04	2.5	138	11	102	0.8	0.06	3.8	8.0	2140	54.7	1.6	6.3	6.7	184	10	6	23	3.0
1038	1	591100	7699143	0.5	0.99	1.5	4.0	28.5	0.30	0.11	0.25	3.6	25.8	5.2	4.22	0.03	8.0	1.8	0.12	58.5	0.4	0.04	7.0	231	11	249	1.8	0.08	3.7	8.0	2620	163.0	1.8	31.0	0.6	67	12	6	18	0.5
1039	1	590000	7697950	0.5	0.55	3.0	6.0	29.7	0.10	0.14	0.25	5.7	14.6	4.7	1.43	0.04	5.3	2.2	0.28	152.0	1.1	0.03	5.9	139	12	140	1.9	0.05	2.9	2.5	1790	74.5	1.7	23.4	1.4	50	4	9	12	0.5
1040	1	590000	7697060	0.5	0.30	1.5	8.0	23.7	0.10	0.08	0.25	3.4	8.8	5.0	1.30	0.02	9.3	0.8	0.10	107.0	0.4	0.04	3.7	242	10	138	1.1	0.05	3.1	7.0	1810	81.3	1.5	14.6	0.8	52	13	10	13	0.5
1041	1	590020	7695950	0.5	0.57	7.0	8.0	25.7	0.20	0.06	0.25	2.1	15.7	2.5	2.30	0.05	9.6	1.1	0.06	34.7	0.9	0.03	3.0	166	15	204	1.0	0.07	3.0	11.0	3160	116.0	1.6	10.9	1.6	220	11	7	30	0.5
1042	1	590030	7695000	0.5	0.29	1.5	7.0	19.8	0.05	0.05	0.25	1.1	8.4	0.9	0.78	0.02	10.9	0.4	0.04	35.8	0.4	0.03	1.2	196	12	93	0.6	0.06	3.2	6.0	1960	54.7	1.5	4.8	3.3	186	16	4	18	0.5
1043	1	590000	7694000	0.5	0.87	1.5	6.0	30.4	0.20	0.11	0.25	3.8	20.5	11.0	2.12	0.07	13.2	3.3	0.20	72.0	0.4	0.04	7.8	329	12	212	1.7	0.06	4.5	8.0	2010	65.8	3.0	15.1	2.0	148	11	11	33	0.5
1044	1	590000	7693030	0.5	0.55	6.0	7.0	40.6	0.20	0.06	0.25	3.8	10.4	11.0	2.47	0.06	52.7	1.5	0.13	68.9	1.0	0.03	4.8	410	16	234	1.4	0.05	3.6	22.0	2910	109.0	7.7	11.3	0.8	174	13	11	35	0.5
1045	1	589950	7692100	0.5	0.82	1.5	6.0	38.1	0.20	0.14	0.25	4.4	22.2	8.4	1.80	0.05	12.4	4.7	0.27	99.5	0.7	0.04	9.8	340	11	98	2.2	0.05	5.5	6.0	2540	83.5	2.6	20.5	3.3	93	14	10	16	0.5
1046	1	598000	7698170	0.5	0.44	4.0	6.0	23.0	0.20	0.07	0.25	2.7	16.0	2.3	2.38	0.02	18.2	0.4	0.07	72.9	0.4	0.04	2.3	638	13	118	1.1	0.07	4.1	10.0	2440	114.0	2.5	7.5	1.7	79	18	11	17	0.5
1047	1	598000	7697000	0.5	0.47	16.0	6.0	19.3	0.10	0.11	0.25	2.7	21.9	2.8	2.32	0.02	19.2	1.1	0.12	79.3	0.4	0.04	3.8	401	10	95	1.5	0.06	4.6	13.0	2280	93.6	3.5	10.9	1.5	71	19	12	17	0.5
1048	1	598000	7696000	0.5	0.34	171.0	6.0	32.0	0.05	0.03	0.25	1.9	5.3	7.9	1.23	0.06	5.3	0.4	0.13	16.8	1.6	0.03	2.3	204	7	186	1.5	0.04	1.9	2.5	1190	56.8	1.2	12.0	8.3	137	16	23	42	4.0
1049	1	598000	7693000	0.5	0.40	9.0	6.0	18.8	0.05	0.07	0.25	2.0	8.0	5.3	1.19	0.04	8.7	0.8	0.13	45.0	0.9	0.03	2.6	322	11	103	1.1	0.05	3.4	2.5	832	39.0	1.4	30.1	1.5	61	11	9	20	7.0
1050	1	598000	7694000	0.5	1.26	11.0	8.0	41.5	0.20	0.17	0.25	5.4	30.1	19.5	2.40	0.07	9.7	5.2	0.38	97.5	1.0	0.04	13.0	228	5	165	3.2	0.06	6.4	7.0	1820	77.9	2.6	29.4	2.2	54	8	8	27	2.0
1051	1	600000	7699070	0.5	1.37	1.5	5.0	23.9	0.20	0.12	0.25	4.1	22.2	9.3	2.47	0.04	8.8	2.5	0.18	87.9	0.4	0.04	6.7	427	9	262	2.2	0.14	6.8	7.0	2120	114.0	2.2	15.5	2.7	130	21	10	34	0.5
1052	1	600070	7697930	0.5	1.10	34.0	6.0	22.2	0.30	0.12	0.25	10.6	14.7	14.4	4.71	0.02	9.2	3.0	0.50	213.0	1.4	0.03	9.8	270	6	185	2.7	0.11	6.5	9.0	5460	254.0	2.1	36.7	0.3	78	106	4	50	2.0
1053	1	600040	7697010	0.5	0.75	10.0	6.0	26.0	0.30	0.08	0.25	7.8	13.5	5.5	3.75	0.05	12.1	1.6	0.35	176.0	1.7	0.03	4.9	377	9	119	2.8	0.07	4.2	9.0	3250	203.0	2.4	30.8	1.7	56	22	2	29	0.5
1054	1	600000	7695930	0.5	1.34	9.0	1.5	29.8	0.20	0.12	0.25	6.9	35.2	13.0	3.10	0.05	9.2	6.1	0.38	98.1	1.1	0.03	12.2	282	8	369	4.1	0.09	5.1	9.0	1650	102.0	3.1	29.5	1.1	60	17	4	15	1.0
1055	1	600040	7695150	0.5	0.89	1.5	4.0	33.4	0.20	0.16	0.25	4.9	22.9	7.0	2.73	0.07	11.5	3.9	0.28	103.0	0.9	0.04	9.2	406	6	222	2.6	0.05	6.0	10.0	1690	97.8	3.1	19.7	0.5	73	24	7	22	0.5
1056	1	598070	7695030	0.5	0.33	1.5	5.0	19.5	0.05	0.06	0.25	1.4	7.9	2.5	1.29	0.03	11.8	0.4	0.08	44.0	0.4	0.03	2.0	462	8	104	0.9	0.06	3.7	2.5	1400	55.9	1.7	9.4	1.7	79	9	2	22	2.0
1057	1	599860	7693750	0.5	0.44	1.5	5.0	30.8	0.05	0.11	0.25	2.5	13.0	6.2	0.79	0.06	6.5	2.2	0.16	59.1	0.4	0.03	6.6	246	3	109	1.3	0.05	4.6	2.5	634	22.7	2.0	12.8	0.4	104	5	11	15	0.5
1058	1	603040	7696950	0.5	2.01	16.0	7.0	83.4	0.40	0.24	0.25	28.8	285.0	49.1	7.86	0.10	3.9	9.9	1.33	732.0	1.0	0.03	103.0	597	2	187	4.2	0.07	8.3	12.0	10000	275.0	3.6	58.8	2.2	42	136	7	29	0.5
1059	1	602930	7698050	0.5	0.65	10.0	7.0	24.0	0.30	0.06	0.25	6.7	28.1	9.4	4.18	0.03	8.9	1.1	0.24	114.0	0.8	0.03	9.9	327	10	162	2.3	0.06	3.3	10.0	4490	242.0	1.7	25.7	3.9	52	40	1	37	3.0
1060	1	603130	7696100	0.5	0.89	6.0	4.0																																	

Pasvik Claim
Mineral topsoil <0.063mm

Hot aqua regia/CP-AES (Ag-Zn)
Cold aqua regia/GF-AAS (Au-Te)
Cyanidation/GF-AAS (AuCY)

REGIONAL AND DETAIL SUBSETS

Type	Site	mEast	mNorth	ppm Ag	% Al	ppm As	ppm B	ppm Ba	ppm Be	% Ca	ppm Cd	ppm Co	ppm Cr	ppm Cu	% Fe	% K	ppm La	ppm Li	% Mg	ppm Mn	ppm Mo	% Na	ppm Ni	% P	ppm Pb	ppm S	ppm Se	ppm Si	ppm Sr	ppm Th	ppm Ti	ppm V	ppm Y	ppm Zn	ppb Au	ppb Bi	ppb Sb	ppb Se	ppb Te	ppb U
1077	1	584043	7687000	0.5	0.55	3.0	5.0	32.0	0.20	0.07	0.25	2.9	13.8	6.8	1.37	0.07	23.1	1.7	0.10	49.1	0.9	0.03	4.6	202	27	190	1.4	0.05	4.0	14.0	2960	94.5	4.0	17.2	0.5	127	7	3	27	0.5
1078	1	592289	7692120	0.5	0.30	1.5	4.0	19.1	0.05	0.08	0.25	1.1	8.9	1.3	0.65	0.01	14.2	0.4	0.10	44.8	0.4	0.03	2.1	220	3	73	0.9	0.06	4.5	8.0	1140	29.4	1.8	6.6	1.5	52	4	2	8	0.5
1079	1	594114	7694130	0.5	0.46	1.5	4.0	25.5	0.10	0.10	0.25	2.0	14.3	3.8	1.28	0.02	14.2	0.4	0.10	53.5	0.4	0.03	4.6	330	8	106	1.3	0.06	5.9	7.0	1850	68.2	2.3	6.7	0.8	107	6	2	17	0.5
1080	1	589000	7689000	0.5	1.52	3.0	4.0	59.5	0.20	0.22	0.25	5.9	36.8	9.7	1.50	0.16	13.9	6.8	0.46	108.0	0.8	0.04	21.2	341	8	158	2.7	0.06	9.2	2.5	1440	41.6	3.5	32.0	0.2	56	3	19	10	0.5
1081	3	592250	7697750	0.5	0.27	1.5	4.0	20.4	0.20	0.09	0.25	3.7	10.0	6.3	1.49	0.04	6.8	0.4	0.08	64.1	0.4	0.03	4.1	200	12	101	1.0	0.05	2.7	5.0	3840	184.0	1.6	7.3	3.2	153	50	4	34	1.0
1082	3	592250	7697500	0.5	0.21	1.5	3.0	17.1	0.10	0.06	0.25	2.4	8.9	3.5	0.87	0.04	5.9	0.4	0.07	63.2	0.4	0.03	3.1	166	7	70	0.8	0.04	2.0	2.5	1160	73.7	1.0	6.7	0.9	91	32	2	19	0.5
1083	3	592250	7697250	0.5	0.45	3.0	1.5	20.4	0.20	0.05	0.25	3.3	16.0	6.5	3.06	0.05	5.1	0.4	0.08	66.4	0.8	0.03	4.8	361	11	158	1.0	0.05	2.3	6.0	2470	172.0	1.1	14.9	0.7	189	43	3	44	0.5
1084	3	592250	7697000	0.5	0.55	1.5	5.0	40.2	0.10	0.07	0.25	5.3	34.6	10.1	2.05	0.08	5.8	1.6	0.22	143.0	0.4	0.03	10.1	234	15	125	1.2	0.04	6.2	5.0	2100	93.7	1.2	16.5	0.8	166	27	4	37	0.5
1085	3	592000	7697250	0.5	0.17	1.5	4.0	21.9	0.10	0.07	0.25	2.0	6.0	4.5	0.82	0.02	5.3	0.4	0.07	98.5	0.4	0.03	3.1	139	7	69	0.8	0.04	2.0	2.5	1320	90.7	0.8	10.7	1.2	78	28	1	26	0.5
1086	3	592000	7697500	0.5	0.61	1.5	4.0	32.4	0.20	0.09	0.25	3.4	24.4	6.8	2.64	0.06	4.8	1.9	0.22	116.0	0.4	0.03	6.7	336	9	154	1.3	0.03	6.3	6.0	1730	133.0	1.2	14.3	0.5	77	23	3	27	0.5
1087	3	592000	7697750	0.5	0.30	1.5	1.5	22.8	0.10	0.06	0.25	1.8	10.3	3.7	1.55	0.02	5.0	0.4	0.10	85.9	0.4	0.03	2.7	504	7	123	0.9	0.04	2.3	2.5	1460	94.7	0.9	11.7	36.2	117	20	8	25	0.5
1088	1	588120	7686030	0.5	0.47	1.5	1.5	17.6	0.10	0.04	0.25	1.3	11.8	2.7	1.61	0.01	11.6	0.4	0.05	25.1	0.4	0.03	1.5	129	9	106	0.6	0.06	2.8	7.0	2000	69.5	1.3	7.3	8.3	100	6	1	21	3.0
1089	1	587295	7686010	0.5	0.64	1.5	1.5	30.1	0.05	0.09	0.25	3.0	11.0	4.6	1.15	0.14	11.5	6.3	0.35	99.1	0.4	0.03	5.9	176	11	128	1.4	0.04	6.6	5.0	1950	41.7	1.8	20.4	0.9	100	5	3	13	0.5
1090	1	588067	7687090	0.5	0.56	1.5	1.5	28.1	0.05	0.10	0.25	2.5	15.3	3.4	0.68	0.04	10.8	3.2	0.16	45.5	0.4	0.04	5.2	175	10	112	1.3	0.04	5.7	2.5	1320	28.4	2.1	11.7	0.3	81	3	6	4	0.5
1091	3	593730	7696980	0.5	0.17	1.5	4.0	21.2	0.05	0.02	0.25	0.3	4.7	0.5	0.61	0.01	11.1	0.4	0.02	19.7	0.4	0.03	0.8	123	11	81	0.2	0.04	1.7	2.5	1470	33.5	0.9	3.9	14.1	174	16	5	18	0.5
1092	3	593493	7697000	0.5	0.26	1.5	4.0	24.6	0.10	0.03	0.25	1.5	9.4	2.0	1.49	0.05	7.9	0.4	0.04	29.3	0.4	0.03	1.1	156	18	117	0.5	0.04	2.1	6.0	2960	96.2	1.0	8.1	2.3	274	30	7	33	3.0
1093	3	593796	7697110	0.5	0.23	1.5	1.5	22.8	0.10	0.02	0.25	1.6	9.4	2.1	1.42	0.04	8.5	0.4	0.03	31.9	0.4	0.03	2.0	224	12	113	0.5	0.04	1.9	5.0	2680	98.2	1.1	7.7	0.9	311	25	3	42	0.5
1094	3	593982	7697310	0.5	0.63	1.5	6.0	50.5	0.20	0.06	0.25	4.7	24.7	9.4	3.02	0.13	6.8	1.9	0.23	127.0	0.4	0.03	8.0	286	13	152	1.4	0.04	5.1	7.0	3010	139.0	1.6	17.8	2.0	214	44	9	37	0.5
1095	3	593988	7697530	0.5	0.33	1.5	5.0	20.2	0.05	0.02	0.25	1.2	8.5	1.5	1.57	0.04	6.7	0.4	0.05	49.0	0.4	0.02	2.4	259	9	106	0.4	0.04	2.0	2.5	1530	56.7	0.9	7.4	1.5	170	26	6	28	0.5
1096	3	593697	7697400	0.5	0.48	4.0	4.0	23.9	0.10	0.04	0.25	1.7	11.1	4.2	1.75	0.04	8.8	1.4	0.10	65.1	0.4	0.03	3.6	315	11	112	0.7	0.04	2.6	6.0	1480	50.3	1.3	10.7	1.1	164	30	10	25	0.5
1097	3	592245	7698000	0.5	0.57	1.5	1.5	22.2	0.10	0.06	0.25	5.6	11.5	45.0	2.04	0.02	6.8	1.1	0.09	158.0	0.4	0.03	4.0	339	9	145	1.0	0.05	2.4	2.5	1150	70.6	1.2	11.0	3.3	72	19	16	26	0.5
1098	3	592517	7698070	0.5	0.45	4.0	4.0	22.3	0.20	0.06	0.25	3.0	13.2	11.5	2.64	0.04	5.4	0.9	0.08	97.5	0.4	0.03	5.3	566	11	144	0.9	0.04	2.3	6.0	1610	115.0	1.0	13.6	3.5	112	29	11	25	0.5
1099	1	583898	7685790	0.5	0.59	4.0	4.0	18.5	0.10	0.04	0.25	1.6	14.6	4.1	1.62	0.01	9.8	0.9	0.05	28.5	0.4	0.03	3.2	227	10	191	0.8	0.05	3.3	6.0	2190	89.5	1.0	6.2	1.8	118	9	5	21	0.5
1101	1	583000	7686850	0.5	0.83	11.0	3.0	72.7	0.20	0.14	0.25	17.4	71.2	34.3	5.56	0.03	7.5	4.5	0.15	288.0	0.4	0.03	41.7	798	13	269	1.7	0.07	5.4	9.0	5680	188.0	2.1	36.4	1.8	154	30	7	68	0.5
1102	1	582000	7687000	0.5	0.60	1.5	1.5	37.2	0.20	0.07	0.25	20.3	317.0	4.9	3.60	0.01	11.0	3.2	0.60	674.0	0.4	0.03	156.0	205	8	158	1.1	0.05	4.1	7.0	1880	68.4	1.6	31.8	0.5	84	13	9	19	0.5
1103	1	582000	7688000	0.5	0.65	1.5	3.0	18.5	0.20	0.05	0.25	1.9	30.5	5.3	2.26	0.01	10.8	1.5	0.07	38.6	0.4	0.03	5.6	300	11	170	0.9	0.07	3.0	5.0	2160	89.2	1.4	6.6	1.0	115	15	4	17	0.5
1104	1	581000	7687000	0.5	0.35	1.5	4.0	20.2	0.10	0.06	0.25	2.8	55.6	5.5	1.65	0.01	11.0	0.4	0.07	62.5	0.4	0.03	18.2	221	12	109	0.7	0.05	4.1	7.0	1880	79.9	1.2	12.0	0.9	58	12	5	18	0.5
1105	1	581100	7690800	0.5	0.31	1.5	4.0	18.6	0.05	0.04	0.25	0.9	7.5	1.7	0.92	0.01	12.9	0.4	0.03	19.0	0.4	0.03	2.1	127	12	120	0.6	0.05	3.0	5.0	1420	50.3	1.1	6.8	1.3	42	6	6	8	0.5
1106	1	5811950	7692000	0.5	0.39	4.0	1.5	21.6	0.10	0.10	0.25	1.6	10.5	3.3	0.84	0.02	6.6	2.2	0.08	35.1	1.3	0.03	3.2	103	14	131	1.1	0.04	4.7	2.5	1790	46.8	1.6	17.6	0.6	71	4	4	4	0.5
1107	1	582120	7690950	0.5	0.42	1.5	1.5	19.4</																																

Type	Site	mEast	mNorth	ppm Ag	% Al	ppm B	ppm Ba	ppm Be	ppm Ca	ppm Cd	ppm Co	ppm Cr	ppm Cu	% Fe	% K	ppm La	ppm Li	ppm Mg	ppm Mn	ppm Mo	ppm Na	ppm Ni	% P	ppm Pb	ppm S	ppm Sc	ppm Si	ppm Sr	ppm Th	ppm Ti	ppm V	ppm Zn	ppb Au	ppb Bi	ppb Sb	ppb Se	ppb Te	ppb Au/C		
1124	2	593070	7698980	0.5	0.21	1.5	5.0	19.3	0.10	0.06	0.25	1.8	6.0	1.7	0.93	0.04	8.3	0.9	0.05	40.3	0.4	0.03	2.6	177	8	87	0.7	0.05	2.9	7.0	1250	72.1	1.3	12.3	1.2	80	9	3	13	0.5
1125	2	593970	7698940	0.5	1.47	1.5	1.5	28.6	0.30	0.14	0.25	11.3	27.8	47.8	3.18	0.04	6.4	6.4	0.52	142.0	0.4	0.04	19.7	255	3	207	3.7	0.09	4.2	8.0	1360	107.0	3.8	29.0	0.4	48	9	11	16	0.5
1126	1	594930	7698940	0.5	1.09	5.0	6.0	31.8	0.20	0.11	0.25	8.2	31.1	11.8	2.45	0.05	5.3	5.0	0.66	152.0	0.4	0.03	13.4	273	5	217	3.9	0.07	4.3	6.0	1200	109.0	2.1	33.1	5.2	224	9	10	17	1.0
1127	1	596020	7699160	0.5	0.40	4.0	5.0	18.1	0.20	0.07	0.25	2.7	15.2	3.0	2.32	0.03	14.1	1.0	0.11	79.9	0.4	0.03	3.7	256	9	103	1.2	0.06	3.5	10.0	2250	110.0	2.2	12.5	3.3	78	16	4	19	0.5
1128	2	592010	7699030	0.5	0.29	1.5	5.0	23.1	0.05	0.05	0.25	2.1	22.1	3.0	1.06	0.05	6.6	1.1	0.08	31.9	0.8	0.03	5.2	182	12	127	0.9	0.05	2.7	7.0	1020	50.1	1.3	10.2	0.2	80	13	4	15	0.5
1129	2	592000	7698000	0.5	0.36	5.0	6.0	20.6	0.20	0.07	0.25	5.3	13.8	12.7	2.02	0.04	4.9	1.1	0.13	147.0	0.4	0.03	8.1	467	8	113	0.9	0.04	2.3	5.0	1070	98.5	1.2	16.9	0.2	81	17	7	24	1.0
1130	1	590900	7698000	0.5	0.32	1.5	6.0	22.9	0.30	0.06	0.25	3.1	11.1	9.4	2.39	0.02	6.5	0.8	0.05	73.5	0.4	0.03	4.0	276	9	148	0.8	0.05	2.3	6.0	1990	177.0	1.1	12.4	1.5	109	21	2	25	0.5
1131	1	591000	7697000	0.5	0.32	1.5	7.0	24.6	0.05	0.06	0.25	1.5	10.5	1.9	0.54	0.03	8.3	1.0	0.06	29.3	0.8	0.03	3.5	132	13	185	1.1	0.05	3.8	6.0	1680	44.4	1.7	7.4	0.3	111	2	5	12	0.5
1132	1	591000	7696000	0.5	0.38	1.5	6.0	24.5	0.10	0.05	0.25	2.0	15.1	2.0	1.75	0.06	8.7	1.0	0.07	47.8	0.4	0.03	3.4	223	14	150	0.8	0.05	3.1	8.0	1710	63.1	1.4	9.2	2.7	130	12	3	21	0.5
1133	1	591000	7695000	0.5	0.33	1.5	5.0	22.7	0.10	0.05	0.25	1.9	10.2	1.7	1.21	0.06	9.7	0.9	0.06	33.8	1.8	0.03	2.5	253	16	112	0.8	0.05	3.0	7.0	2710	69.3	1.5	7.5	2.6	163	10	2	13	0.5
1134	1	591000	7694000	0.5	0.19	1.5	5.0	21.3	0.05	0.03	0.25	0.7	6.8	0.3	0.16	0.02	13.9	0.4	0.02	26.7	0.4	0.03	1.1	124	14	151	0.6	0.06	2.8	6.0	1690	16.8	1.7	3.6	4.5	94	2	1	9	2.0
1135	1	599000	7698210	0.5	1.30	6.0	7.0	26.0	0.30	0.14	0.25	10.5	24.0	41.2	4.03	0.05	8.9	5.6	0.66	265.0	3.6	0.03	16.1	163	11	175	3.8	0.08	6.0	13.0	2700	155.0	2.9	52.8	0.9	88	37	7	60	11.0
1136	1	599150	7696970	0.5	0.25	4.0	5.0	17.9	0.05	0.06	0.25	1.7	9.3	2.3	1.02	0.04	15.6	0.4	0.05	50.4	0.4	0.03	2.5	186	6	63	0.9	0.06	3.1	10.0	1160	56.4	2.2	8.1	1.2	112	27	3	23	1.0
1137	1	598950	7695850	0.5	0.56	1.5	5.0	19.7	0.10	0.08	0.25	1.8	11.3	3.1	0.92	0.04	10.6	2.1	0.10	38.8	0.4	0.03	4.1	196	10	182	1.4	0.06	4.3	7.0	1030	38.3	2.1	7.9	3.2	59	4	2	13	0.5
1138	1	598750	7695100	0.5	1.42	6.0	4.0	48.5	0.20	0.23	0.25	6.3	30.0	14.1	1.99	0.10	11.6	9.0	0.40	109.0	0.4	0.04	14.6	527	4	243	3.1	0.06	7.4	7.0	1150	45.9	3.8	28.8	1.4	40	4	16	13	1.0
1139	1	599000	7692910	0.5	0.49	6.0	4.0	24.7	0.10	0.11	0.25	2.9	10.8	7.4	1.65	0.03	6.5	1.3	0.16	122.0	0.4	0.03	5.2	621	6	124	1.6	0.05	4.6	2.5	1240	63.0	1.5	19.8	0.8	78	10	15	23	2.0
1140	1	598850	7693930	0.5	0.91	5.0	7.0	34.2	0.20	0.17	0.25	4.8	18.6	16.7	2.49	0.05	11.2	4.9	0.33	123.0	0.9	0.04	8.9	856	8	217	2.8	0.05	5.8	10.0	1700	69.3	2.6	31.8	1.1	68	12	13	35	0.5
1141	1	600920	7695000	0.5	1.12	10.0	6.0	22.1	0.20	0.09	0.25	6.8	15.1	12.1	3.30	0.03	7.2	5.2	0.38	170.0	0.4	0.03	8.7	291	4	205	2.9	0.11	4.2	9.0	2020	130.0	2.1	28.8	1.0	65	104	14	33	0.5
1142	1	600950	7696000	0.5	1.00	5.0	5.0	22.3	0.30	0.06	0.25	7.8	21.2	9.8	5.18	0.03	10.5	2.8	0.41	191.0	1.9	0.03	9.0	237	8	167	3.0	0.09	3.6	13.0	3120	233.0	1.9	38.3	0.7	52	209	7	38	0.5
1143	1	601010	7697100	0.5	1.53	7.0	4.0	25.7	0.40	0.11	0.25	14.8	88.2	29.9	6.43	0.03	6.1	6.2	0.88	244.0	1.7	0.03	29.8	186	5	228	5.4	0.10	4.3	11.0	8250	293.0	2.2	47.8	1.8	53	104	8	40	3.0
1144	1	601100	7697980	0.5	1.42	26.0	7.0	43.2	0.30	0.20	0.25	9.7	30.7	21.4	3.68	0.04	11.7	7.2	0.71	191.0	3.4	0.04	19.4	361	5	215	5.3	0.07	7.5	10.0	3320	172.0	3.2	56.9	12.0	53	31	14	36	4.0
1145	1	600990	7699030	0.5	0.86	7.0	7.0	35.0	0.30	0.12	0.25	7.6	22.0	9.8	3.46	0.06	11.3	2.9	0.35	275.0	1.5	0.04	8.5	212	9	146	2.2	0.06	8.0	9.0	3500	178.0	2.2	24.4	0.5	87	36	10	99	1.0
1146	1	599990	7699960	0.5	0.66	7.0	6.0	29.1	0.20	0.14	0.25	4.9	20.4	10.0	1.59	0.05	6.7	2.4	0.30	89.0	1.3	0.04	9.7	173	11	173	2.5	0.06	5.5	5.0	1590	92.4	2.0	19.8	1.3	45	10	10	20	2.0
1147	1	601900	7697980	0.5	0.41	5.0	6.0	44.4	0.30	0.08	0.25	4.3	19.4	3.9	2.01	0.03	7.8	0.8	0.17	84.4	1.0	0.03	6.2	120	10	158	1.4	0.05	5.6	8.0	6210	206.0	1.4	20.6	0.6	58	16	9	16	0.5
1148	1	601990	7697030	1	1.11	1.5	6.0	49.8	0.20	0.26	0.25	11.8	36.2	28.5	2.43	0.07	8.9	5.5	0.58	455.0	1.8	0.04	18.4	330	6	249	3.6	0.06	12.5	9.0	4080	90.2	3.8	29.8	0.5	64	5	6	48	1.0
1149	1	602040	7695980	0.5	1.26	5.0	5.0	18.7	0.40	0.10	0.25	12.5	28.3	15.7	5.53	0.03	3.4	4.4	0.78	363.0	0.4	0.03	14.5	260	4	128	5.1	0.08	4.3	9.0	8440	337.0	2.6	32.4	0.6	50	63	2	67	2.0
1150	1	601880	7694920	0.5	0.93	9.0	4.0	24.2	0.20	0.10	0.25	7.7	13.5	10.4	2.58	0.03	7.3	4.4	0.44	288.0	0.4	0.03	8.1	390	5	140	2.4	0.07	3.6	6.0	2180	113.0	2.3	35.1	0.5	105	137	6	39	0.5
1151	1	599970	7693030	0.5	1.06	109.0	4.0	61.6	0.20	0.08	0.25	4.9	16.3	11.7	3.12	0.17	5.6	4.2	0.45	101.0	0.4	0.04	6.8	655	6	114	3.5	0.05	3.9	7.0	1820	107.0	2.0	31.1	0.9	144	46	34	60	0.5
1152	1	601020	7692950	0.5	0.31	5.0	7.0	24.2	0.05	0.05	0.25	1.2	8.8	4.4	0.93	0.06	4.7	0.9	0.08	45.9	0.4	0.03	3.6	218	4	106	0.9	0.06	3.3	2.5	1100	48.3	1.5	10.5	0.7	150	16	4	27	0.5
1153	1	599080	7699070	0.5	0.4																																			

Pasvik Claim
Mineral topsoil <0.063mm

Hot aqua regia/ICP-AES (Ag-Zn)
Cold aqua regia/GF-AAS (Au-Te)
Cyanidation/GF-AAS (AuCY)

REGIONAL AND DETAIL SUBSETS

Type	Site	mEast	mNorth	ppm Ag	% Al	ppm As	ppm Ba	ppm Be	ppm Ca	ppm Cd	ppm Co	ppm Cr	ppm Cu	% Fe	% K	ppm La	ppm Li	ppm Mg	ppm Mn	ppm Mo	% Na	ppm Ni	ppm P	ppm Pb	ppm S	ppm Sc	ppm Si	ppm Sr	ppm Th	ppm Ti	ppm V	ppm Y	ppm Zn	ppb Au	ppb Bi	ppb Sb	ppb Se	ppb Te	ppb U	ppb AuC
1170	1	589900	7689920	0.5	1.86	1.5	5.0	68.4	0.20	0.22	0.25	6.4	39.5	14.4	2.18	0.12	14.6	9.7	0.45	117.0	0.4	0.05	20.1	459	5	264	3.5	0.05	8.6	5.0	1610	51.9	3.9	35.2	1.7	58	1	48	14	0.5
1171	3	592740	7697960	0.5	0.32	5.0	1.5	30.2	0.10	0.09	0.25	2.5	10.9	4.6	1.43	0.04	7.8	0.4	0.09	84.0	0.4	0.04	4.1	302	9	97	1.1	0.06	4.0	2.5	1740	81.9	1.5	7.7	2.2	206	19	8	34	0.5
1172	3	592750	7697730	0.5	0.26	1.5	1.5	24.8	0.10	0.06	0.25	1.7	8.8	4.2	0.99	0.05	10.3	0.4	0.06	53.0	0.4	0.04	2.3	283	10	109	1.0	0.06	3.2	8.0	1300	57.3	1.5	10.0	0.6	116	16	3	23	0.5
1173	3	592740	7697480	0.5	0.42	4.0	1.5	23.5	0.20	0.06	0.25	2.5	14.6	13.5	3.20	0.04	6.9	0.4	0.11	80.9	0.9	0.03	3.9	448	13	230	1.2	0.06	2.4	7.0	1930	116.0	1.6	19.8	1.7	225	44	13	26	0.5
1174	3	592770	7697220	0.5	0.41	1.5	1.5	22.2	0.30	0.09	0.25	5.4	12.0	14.3	2.23	0.02	5.7	0.4	0.14	70.9	0.4	0.03	8.8	183	10	175	1.1	0.05	2.5	2.5	1580	190.0	1.2	15.6	1.9	79	16	4	35	1.0
1175	3	592770	7696980	0.5	0.19	1.5	1.5	23.2	0.05	0.04	0.25	0.6	4.3	0.9	0.17	0.03	11.7	0.4	0.03	17.5	0.4	0.03	0.6	115	9	137	0.5	0.05	2.6	2.5	1180	13.6	1.4	3.2	1.8	111	3	7	7	4.0
1176	3	592490	7697040	0.5	0.30	4.0	4.0	21.8	0.05	0.04	0.25	1.6	8.5	2.6	1.32	0.05	7.0	0.4	0.04	43.6	0.4	0.03	3.2	393	15	116	0.8	0.06	2.7	2.5	1670	54.3	1.2	8.3	4.2	245	18	1	29	0.5
1177	3	592520	7697270	0.5	0.22	1.5	1.5	21.9	0.05	0.04	0.25	1.3	5.9	2.3	0.68	0.04	8.6	0.4	0.04	36.8	0.4	0.03	2.2	175	11	93	0.7	0.05	2.3	6.0	1340	47.5	1.1	6.1	0.2	139	21	1	20	0.5
1178	3	592510	7697560	0.5	0.20	1.5	1.5	22.1	0.20	0.05	0.25	1.9	8.0	2.9	0.77	0.04	4.9	0.4	0.05	40.9	0.4	0.04	2.2	132	17	128	0.9	0.05	2.4	2.5	2570	121.0	1.0	5.6	0.6	146	18	6	11	0.5
1179	3	592520	7697740	0.5	0.92	5.0	1.5	25.8	0.40	0.11	0.25	11.5	24.4	39.5	6.25	0.05	4.7	2.1	0.40	245.0	0.4	0.04	12.8	627	9	204	2.2	0.07	3.8	10.0	2630	238.0	1.6	28.1	3.3	128	53	17	50	5.0
1180	1	585980	7688060	0.5	0.75	1.5	1.5	19.8	0.20	0.09	0.25	2.3	18.5	5.1	1.91	0.02	13.7	1.5	0.09	58.6	0.4	0.04	3.6	397	13	162	1.3	0.10	4.2	8.0	1960	77.1	2.3	11.3	0.6	162	17	11	26	0.5
1181	1	587050	7688080	0.5	0.62	4.0	4.0	22.7	0.20	0.06	0.25	1.7	15.2	3.7	2.36	0.02	15.3	0.4	0.06	39.3	0.4	0.04	3.5	317	10	232	1.1	0.08	3.5	9.0	2090	79.7	2.5	5.9	0.7	149	44	4	25	0.5
1182	1	587860	7688010	0.5	1.17	1.5	1.5	31.6	0.20	0.14	0.25	3.6	25.0	7.9	2.23	0.04	11.9	4.9	0.19	84.4	0.4	0.04	10.2	157	8	171	2.2	0.10	5.5	8.0	2130	71.1	3.0	24.7	0.7	107	12	2	22	3.0
1183	1	589020	7687940	0.5	1.38	1.5	1.5	75.4	0.30	0.35	0.25	8.3	36.3	28.8	2.23	0.17	18.5	8.3	0.56	200.0	0.4	0.06	22.6	557	10	102	4.4	0.05	12.0	9.0	1990	60.9	5.9	62.1	1.9	95	7	13	19	1.0
1200	1	587010	7687223	0.5	0.54	1.5	1.5	25.5	0.20	0.09	0.25	2.4	15.1	3.3	1.57	0.03	9.9	0.4	0.06	81.4	0.4	0.03	3.6	141	13	134	0.9	0.07	6.0	2.5	1960	72.2	1.8	16.0	0.5	84	6	2	13	1.0
1201	1	586940	7689164	0.5	0.36	1.5	1.5	17.9	0.10	0.06	0.25	1.4	9.0	2.2	1.10	0.02	9.0	0.4	0.04	30.6	0.4	0.03	2.3	135	7	86	0.7	0.05	3.3	6.0	1640	58.2	1.6	6.1	0.8	103	5	1	12	0.5
1202	1	593060	7695285	0.5	0.24	1.5	5.0	23.1	0.05	0.05	0.25	1.3	7.8	1.6	1.10	0.03	10.4	0.4	0.04	43.0	0.4	0.03	2.2	180	8	60	0.6	0.06	3.0	7.0	1500	50.8	1.3	7.3	3.1	106	9	6	21	0.5
1203	1	592100	7695092	0.5	0.53	4.0	1.5	22.0	0.10	0.05	0.25	2.4	12.8	4.7	2.13	0.04	12.3	1.6	0.09	70.5	0.4	0.03	4.7	290	14	118	1.0	0.05	2.7	8.0	2290	72.2	1.9	13.0	1.0	228	33	3	40	0.5
1204	1	592050	7694083	0.5	0.35	1.5	1.5	25.8	0.05	0.05	0.25	1.7	8.1	2.2	0.98	0.06	10.2	0.4	0.06	48.7	0.4	0.04	3.2	356	11	72	0.7	0.06	3.6	8.0	1670	39.6	1.6	7.7	3.1	249	17	1	25	0.5
1205	1	589080	7687186	0.5	1.33	1.5	1.5	60.7	0.20	0.34	0.25	7.5	33.6	22.0	2.01	0.10	17.3	8.8	0.53	184.0	0.4	0.06	19.0	490	5	113	3.9	0.05	9.7	8.0	1620	51.4	5.1	37.0	1.5	58	7	7	15	0.5
1206	1	589090	7685960	0.5	0.58	3.0	1.5	28.2	0.10	0.12	0.25	2.9	15.3	6.3	1.33	0.06	13.9	2.4	0.15	79.9	0.4	0.04	5.1	582	17	105	1.5	0.05	6.4	8.0	1680	39.5	2.8	21.6	1.8	181	7	4	19	0.5
1207	3	593550	7697440	0.5	0.54	4.0	4.0	37.0	0.20	0.07	0.25	3.2	18.4	5.6	2.62	0.09	8.7	0.9	0.13	97.6	0.4	0.04	5.5	269	15	151	1.2	0.05	5.2	8.0	2430	111.0	1.5	15.5	1.2	177	32	1	37	0.5
1208	3	593220	7697500	0.5	0.34	4.0	3.0	21.8	0.20	0.09	0.25	2.6	13.2	3.9	1.56	0.05	9.3	0.4	0.09	112.0	0.4	0.04	4.0	329	13	109	1.2	0.06	3.0	6.0	1600	109.0	1.4	11.5	0.7	108	18	1	24	0.5
1209	3	593100	7697510	0.5	0.68	1.5	5.0	26.6	0.30	0.12	0.25	9.4	23.9	35.1	4.43	0.04	6.0	1.5	0.17	241.0	0.4	0.04	12.4	723	9	164	2.0	0.05	3.2	8.0	2220	188.0	1.7	23.8	0.9	114	52	17	56	0.5
1210	3	593730	7698060	0.5	0.62	1.5	5.0	20.6	0.20	0.07	0.25	2.9	15.9	2.1	2.59	0.04	9.7	0.9	0.09	123.0	0.4	0.03	3.8	296	13	205	1.2	0.06	3.4	9.0	2050	89.6	1.7	13.7	2.3	110	15	5	21	0.5
1211	3	593470	7697990	0.5	0.71	9.0	4.0	26.6	0.20	0.09	0.25	3.2	17.8	5.8	3.15	0.03	8.3	1.2	0.15	74.7	0.4	0.04	3.1	253	10	190	1.6	0.06	2.8	7.0	2130	125.0	1.7	14.3	2.2	100	18	5	29	0.5
1212	3	593080	7697960	0.5	0.48	7.0	4.0	21.5	0.20	0.09	0.25	6.0	15.0	11.3	2.34	0.05	5.9	0.9	0.23	196.0	0.4	0.04	6.9	172	11	137	1.6	0.07	2.5	7.0	1880	176.0	1.2	18.6	1.0	87	28	2	44	0.5
1213	3	593980	7698580	0.5	0.64	6.0	4.0	24.5	0.20	0.08	0.25	5.3	19.9	7.0	3.45	0.04	9.3	1.5	0.21	130.0	0.4	0.04	6.7	231	12	170	1.8	0.06	3.2	10.0	2570	173.0	1.7	19.1	1.2	120	26	5	34	0.5
1214	3	593730	7698500	0.5	0.72	1.5	4.0	20.5	0.20	0.11	0.25	6.2	20.8	9.4	3.33	0.03	6.5	1.6	0.31	160.0	0.4	0.04	7.5	221	8	145	1.7	0.07	2.8	6.0	1900	153.0	1.3	21.7	0.3	65	25	4	32	0.5
1215	3	593420	7698520	0																																				

Pasvik Claim
Mineral topsoil <0.063mm

Hot aqua regia/ICP-AES (Ag-Zn)
Cold aqua regia/GF-AAS (Au-Te)
Cyanidation/GF-AAS (AuCY)

REGIONAL AND DETAIL SUBSETS

Type	mEast	mNorth	ppm Ag	% Al	ppm As	ppm Ba	ppm Be	ppm Cd	ppm Co	ppm Cr	ppm Cu	% Fe	% K	ppm La	ppm Li	% Mg	ppm Mn	ppm Mo	% Na	ppm Ni	ppm Pb	ppm S	ppm Se	ppm Si	ppm Sr	ppm Th	ppm Ti	ppm V	ppm Y	ppm Zn	ppb Au	ppb Bi	ppb Sb	ppb Se	ppb Te	ppb U				
1311	1	581100	7688270	0.5	0.30	1.5	4.0	22.3	0.10	0.07	0.25	2.1	32.9	1.4	1.40	0.01	17.6	0.4	0.06	44.9	0.4	0.03	2.1	198	6	109	0.8	0.06	4.4	7.0	3170	103.0	1.8	6.8	1.5	100	6	1	21	0.5
1312	1	581000	7680050	0.5	0.34	1.5	4.0	20.6	0.10	0.05	0.25	1.6	11.2	2.2	1.48	0.02	12.7	0.4	0.04	39.1	0.9	0.03	2.7	348	7	146	0.8	0.05	4.4	2.5	2740	94.4	1.1	7.7	0.9	151	14	5	21	0.5
1313	1	579850	7689950	0.5	0.44	3.0	8.0	23.4	0.10	0.07	0.25	1.7	13.6	3.4	1.92	0.01	7.3	0.7	0.06	36.6	0.4	0.03	2.7	348	7	155	1.3	0.05	5.9	2.5	1870	65.5	1.9	9.1	1.1	122	4	4	10	0.5
1314	1	579000	7689140	0.5	0.52	1.5	4.0	20.7	0.10	0.13	0.25	2.2	13.3	6.8	1.35	0.02	8.2	1.8	0.12	49.8	0.4	0.04	4.9	240	9	155	1.3	0.05	5.9	2.5	1870	65.5	1.9	9.1	1.1	122	4	4	10	0.5
1315	1	580000	7689180	0.5	0.62	1.5	7.0	22.6	0.10	0.05	0.25	1.8	14.8	3.6	1.66	0.01	21.8	1.2	0.06	31.6	0.4	0.03	4.4	167	12	140	1.1	0.06	4.2	11.0	1700	66.5	2.0	7.9	1.7	75	9	9	19	1.0
1316	1	581000	7689100	0.5	0.22	1.5	9.0	31.6	0.05	0.07	0.25	1.4	6.8	0.3	0.57	0.01	14.6	0.4	0.07	37.0	0.4	0.04	2.2	95	6	121	0.7	0.05	7.4	2.5	2170	32.2	1.6	4.3	1.0	36	1	1	4	0.5
1317	1	581900	7689000	0.5	0.54	1.5	5.0	16.8	0.10	0.08	0.25	2.5	40.9	4.9	1.95	0.01	9.3	0.9	0.07	60.8	0.4	0.03	11.4	274	7	155	1.0	0.06	3.8	5.0	1800	70.1	1.5	8.5	1.7	96	13	5	18	0.5
1318	1	585030	7691020	0.5	0.45	1.5	5.0	24.8	0.20	0.13	0.25	4.0	26.0	16.1	2.78	0.02	9.4	1.1	0.10	103.0	0.4	0.04	7.9	429	15	194	1.3	0.05	5.1	7.0	3360	136.0	2.1	20.2	1.8	197	23	8	47	2.0
1319	1	584000	7692050	0.5	0.38	1.5	4.0	22.7	0.10	0.09	0.25	3.5	29.0	4.8	1.99	0.03	12.1	0.4	0.08	52.2	0.4	0.04	7.8	261	12	172	1.2	0.05	4.2	7.0	3370	111.0	1.8	10.1	0.9	127	8	2	24	1.0
1320	1	584100	7693000	0.5	0.99	5.0	8.0	25.4	0.20	0.11	0.25	3.2	29.5	11.6	1.79	0.02	11.4	2.9	0.13	54.4	0.4	0.04	10.4	233	14	249	1.7	0.08	4.2	6.0	2070	75.0	2.3	10.8	1.7	238	7	1	28	0.5
1321	1	585000	7693000	0.5	0.46	1.5	7.0	21.1	0.20	0.05	0.25	2.3	27.2	4.3	2.06	0.02	19.5	0.8	0.07	41.8	0.9	0.03	6.1	222	14	152	1.0	0.06	3.2	11.0	2610	123.0	1.9	9.1	2.0	261	14	2	27	0.5
1322	1	584950	7692050	0.5	0.56	1.5	4.0	22.4	0.20	0.10	0.25	3.6	31.0	12.7	3.80	0.02	8.3	1.2	0.10	56.7	0.7	0.03	6.6	529	13	199	1.2	0.05	3.2	6.0	4000	152.0	1.9	18.2	0.8	189	17	2	34	2.0
1323	1	585900	7691900	0.5	0.60	5.0	4.0	27.8	0.20	0.09	0.25	2.9	20.9	6.8	1.90	0.05	7.0	1.8	0.10	42.5	0.4	0.03	6.5	284	14	222	1.5	0.05	3.4	5.0	3140	107.0	1.8	14.3	0.8	619	3	103	17	0.5
1324	1	586000	7691000	0.5	0.23	1.5	6.0	18.1	0.05	0.05	0.25	1.0	9.3	1.4	0.71	0.01	12.3	0.4	0.04	32.6	0.4	0.03	2.2	169	9	94	0.6	0.05	3.1	2.5	1930	52.2	1.6	7.4	1.8	83	11	4	12	1.0
1325	1	585000	7690000	0.5	0.43	1.5	5.0	21.2	0.10	0.08	0.25	2.4	18.0	5.5	2.13	0.01	12.9	0.4	0.06	59.0	0.4	0.03	5.0	330	10	140	0.9	0.05	3.6	6.0	2500	103.0	1.8	15.7	3.4	99	13	3	24	3.0
1326	1	586000	7689000	0.5	0.35	1.5	5.0	19.5	0.20	0.11	0.25	7.2	13.7	23.6	1.86	0.03	9.7	0.4	0.06	49.9	2.3	0.03	10.7	127	22	159	1.1	0.06	3.6	5.0	6070	165.0	1.9	10.8	0.7	190	10	2	31	2.0
1327	1	585040	7688990	0.5	0.22	6.0	5.0	17.5	0.05	0.05	0.25	1.1	10.1	1.4	1.06	0.01	19.4	0.4	0.03	34.8	0.4	0.03	1.6	144	9	69	0.6	0.05	2.8	10.0	2340	85.5	1.9	6.8	2.1	59	12	2	12	0.5
1328	1	585000	7687950	0.5	1.13	1.5	7.0	30.5	0.20	0.14	0.25	4.6	38.1	22.7	3.07	0.06	18.8	6.5	0.24	90.8	2.4	0.04	13.1	308	11	254	2.3	0.09	4.9	12.0	2720	102.0	3.7	25.6	0.1	651	12	5	42	5.0
1329	1	595000	7700990	0.5	1.29	6.0	3.0	33.5	0.20	0.20	0.25	9.5	60.4	18.1	2.35	0.05	10.2	9.3	0.46	134.0	0.8	0.04	35.1	143	10	250	3.2	0.05	5.8	7.0	2210	70.4	3.8	77.1	2.8	100	8	3	18	4.0
1330	1	594000	7701040	0.5	1.90	9.0	4.0	35.0	0.30	0.17	0.25	6.8	33.0	31.1	2.63	0.04	10.3	6.5	0.29	109.0	0.4	0.04	20.3	309	5	399	3.8	0.06	5.1	10.0	1770	78.3	4.3	24.3	4.1	128	12	17	17	1.0
1361	1	593050	7701000	0.5	0.83	1.5	4.0	24.0	0.20	0.09	0.25	3.2	18.5	10.2	2.24	0.04	8.2	2.5	0.14	50.1	1.0	0.03	7.8	203	12	234	1.5	0.06	3.5	6.0	2020	83.9	1.8	16.0	2.3	138	8	2	23	2.0
1362	1	592000	7701000	0.5	0.94	1.5	7.0	33.8	0.20	0.17	0.25	9.8	28.1	121.0	2.40	0.03	22.1	7.5	0.17	147.0	2.0	0.03	55.3	159	10	171	2.9	0.07	4.2	5.0	2180	114.0	14.5	42.0	1.2	98	17	13	28	2.0
1363	1	592050	7700000	0.5	0.79	4.0	4.0	32.8	0.20	0.21	0.25	6.6	24.2	16.8	2.54	0.04	7.5	4.3	0.25	94.6	0.8	0.03	12.2	161	9	194	2.1	0.04	5.6	6.0	2630	116.0	2.7	28.5	1.1	153	6	5	24	2.0
1364	1	593000	7700000	0.5	0.47	4.0	4.0	25.3	0.10	0.06	0.25	1.4	12.3	2.6	2.07	0.01	5.9	0.4	0.06	49.2	0.4	0.03	4.6	259	7	198	0.8	0.04	3.6	2.5	1760	84.4	1.0	16.0	2.8	125	11	3	18	0.5
1365	1	594000	7700000	0.5	1.34	1.5	3.0	34.3	0.30	0.13	0.25	10.7	40.9	18.4	3.48	0.02	8.6	6.2	0.43	404.0	0.4	0.03	18.3	315	4	272	4.0	0.06	4.8	6.0	1820	138.0	3.1	34.4	1.0	121	12	15	26	0.5
1366	1	594960	7700080	0.5	0.47	4.0	3.0	19.9	0.20	0.05	0.25	4.0	55.7	5.3	2.43	0.01	8.2	0.9	0.14	74.0	0.4	0.03	12.6	228	9	143	1.1	0.05	2.8	6.0	3960	155.0	1.3	12.6	2.4	94	22	4	30	3.0
1367	1	596020	7700050	1	1.05	1.5	4.0	28.8	0.20	0.10	0.25	9.7	27.5	33.0	4.12	0.08	8.7	5.3	0.44	246.0	0.8	0.03	18.1	322	13	196	2.6	0.06	3.6	10.0	3130	149.0	3.0	70.0	1.3	124	37	8	77	1.0
1368	1	588920	7697150	0.5	0.66	18.0	4.0	22.7	0.40	0.04	0.25	3.1	90.2	42.8	14.20	0.03	3.4	0.4	0.12	141.0	31.1	0.03	12.0	983	13	790	1.9	0.07	2.1	16.0	4650	340.0	1.5	60.2	0.6	242	175	66	332	0.5
1369	1	589150	7696050	0.5	0.49	6.0	1.5	20.4	0.30	0.08	0.25	4.8	23.2	16.3	3.31	0.03	5.5	1.0	0.15	109.0	1.1	0.03	8.0	325	9	188	1.3	0.05	2.9	5.0	2720	211.0	1.3	18.9	0.6	135	22	6	53	0.5
1370	1	588950	7695200	0.5	0.84	1.5	1.5	24.1																																

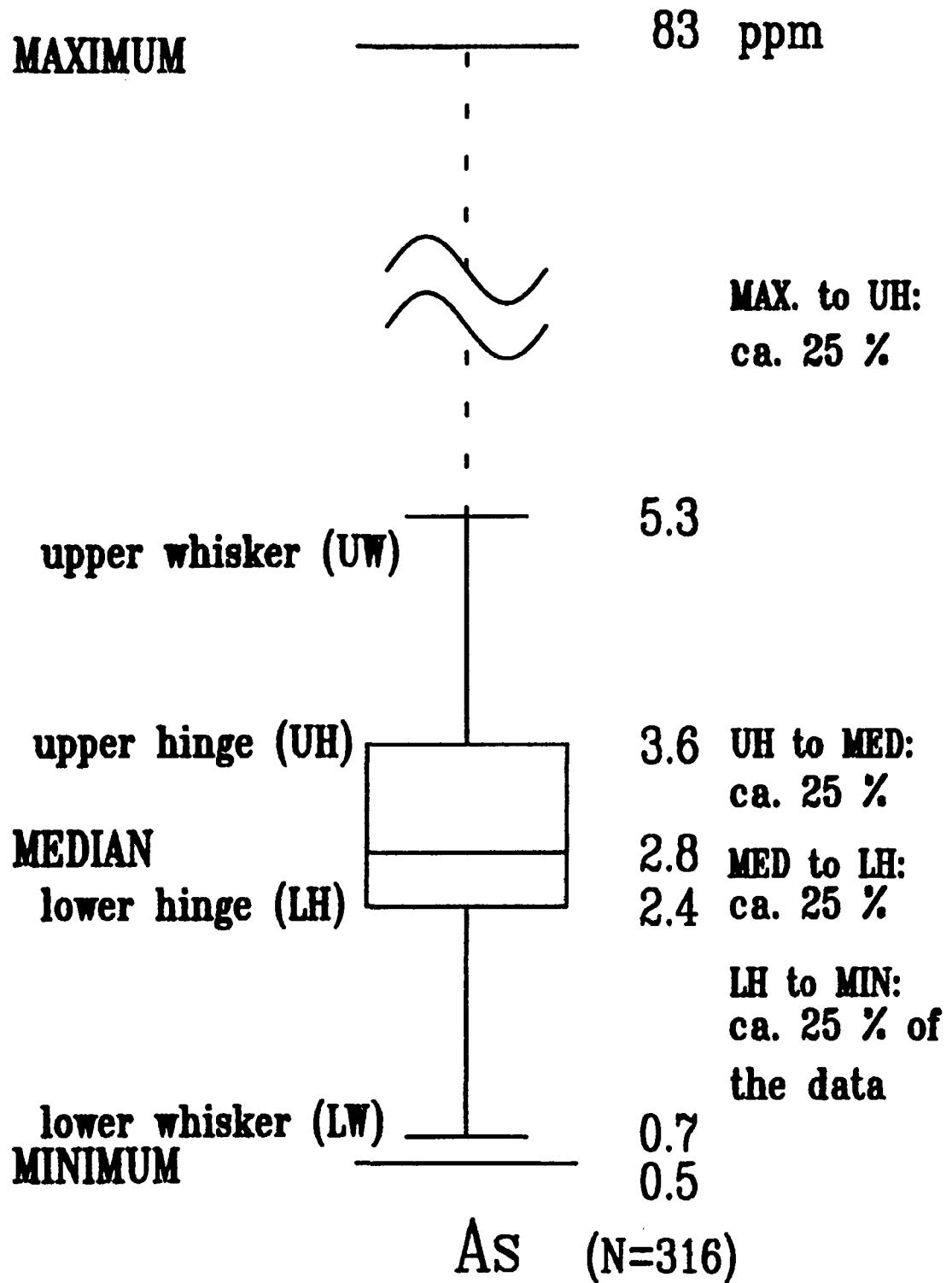
Pasvik Claim Mineral topsoil <0.063mm

Hot aqua regia/ICP-AES (Ag-Zn)
Cold aqua regia/GF-AAS (Au-Te)

REGIONAL AND DETAIL SUBSETS

*Site	mEast	mNorth	ppmAg	% Al	ppmAs	ppmBa	ppmBe	ppmCa	ppmCd	ppmCo	ppmCr	ppmCu	% Fe	% K	ppmLa	ppmLi	% Mg	ppmMn	ppmMo	% Na	ppmNi	% P	ppmPb	ppmS	ppmSc	ppmSi	ppmSr	ppmTh	ppmTi	ppmV	ppmY	ppmZn	ppbAu	ppbBi	ppbSb	ppbTe		
1367	596020	7700050	1	1.05	1.5	4.0	28.8	0.20	0.10	0.25	9.7	27.5	33.0	4.12	0.08	8.7	5.3	0.44	246.0	141.0	0.03	18.1	322	13	196	2.6	0.06	3.6	10.0	3130	149.0	3.0	70.0	1.3	124	37	8	77
1368	588920	7697150	0.5	0.66	18.0	4.0	22.7	0.40	0.04	0.25	3.1	90.2	42.8	14.20	0.03	3.4	0.4	0.12	31.1	0.8	0.03	12.0	983	13	790	1.9	0.07	2.1	16.0	4650	340.0	1.5	60.2	0.6	242	175	66	332
1369	589150	7696050	0.5	0.49	6.0	1.5	20.4	0.30	0.08	0.25	4.8	23.2	16.3	3.31	0.03	5.5	1.0	0.15	109.0	1.1	0.03	8.0	325	9	188	1.3	0.05	2.9	5.0	2720	211.0	1.3	18.9	0.6	135	22	6	53
1370	588950	7695200	0.5	0.84	1.5	1.5	24.1	0.30	0.14	0.25	12.5	18.1	50.0	3.71	0.01	3.6	3.7	0.22	319.0	0.4	0.03	16.3	860	4	208	1.8	0.05	2.7	2.5	1600	137.0	2.1	38.2	18.6	106	18	24	37
1371	589000	7694280	0.5	0.22	3.0	7.0	17.4	0.05	0.04	0.25	1.0	5.8	1.2	0.42	0.03	11.4	0.4	0.02	34.0	0.4	0.03	2.2	182	8	76	0.5	0.04	2.6	2.5	716	20.2	1.4	4.9	2.2	116	6	8	10
1372	589080	7693200	0.5	0.34	1.5	3.0	19.3	0.05	0.03	0.25	1.3	10.0	1.3	0.90	0.04	8.7	0.4	0.06	24.1	0.4	0.03	2.9	115	7	75	0.6	0.04	2.1	2.5	1950	48.7	1.2	5.7	2.2	116	10	6	13
1373	589200	7692200	0.5	0.27	1.5	7.0	25.3	0.05	0.06	0.25	1.5	7.4	2.5	0.82	0.01	10.9	0.4	0.06	42.0	0.4	0.03	3.4	280	9	91	0.7	0.04	3.6	2.5	1560	37.5	1.7	6.7	1.8	175	15	4	17
1374	589050	7691000	0.5	0.24	1.5	4.0	17.5	0.05	0.04	0.25	1.6	10.1	3.6	1.01	0.02	9.4	0.4	0.04	30.2	0.4	0.03	3.1	200	5	98	0.6	0.04	2.9	2.5	1680	56.3	1.5	6.3	1.9	187	10	8	25
1375	596020	7701000	0.5	0.32	1.5	5.0	18.8	0.20	0.04	0.25	2.7	13.5	3.3	2.05	0.01	11.9	0.4	0.06	66.3	0.4	0.02	3.8	152	11	113	0.8	0.05	2.3	7.0	3530	155.0	1.3	8.6	2.6	78	16	5	19
1376	597000	7701000	0.5	1.10	6.0	6.0	21.2	0.20	0.10	0.25	10.5	20.3	13.2	4.58	0.03	4.3	2.7	0.38	212.0	0.4	0.02	10.5	246	7	181	1.9	0.10	3.6	8.0	7630	221.0	1.5	22.6	2.1	97	28	11	25
1377	597000	7701000	0.5	0.40	4.0	6.0	18.3	0.05	0.06	0.25	1.7	10.1	5.1	1.78	0.01	9.9	0.4	0.06	53.1	0.4	0.03	2.7	472	7	118	0.9	0.04	2.8	2.5	1340	63.8	1.4	10.7	1.5	51	13	18	16
1378	598000	7699980	0.5	0.72	1.5	1.5	26.9	0.20	0.10	0.25	3.6	17.7	8.8	1.95	0.02	9.1	1.8	0.21	68.9	0.4	0.03	7.1	274	5	221	2.0	0.05	4.0	2.5	153.2	24.8	15	14	11				
1379	599000	7700150	0.5	0.47	17.0	4.0	21.4	0.20	0.06	0.25	3.8	19.1	4.5	2.89	0.01	10.0	0.4	0.14	116.0	0.4	0.03	6.3	338	5	150	1.3	0.05	3.0	7.0	3310	170.0	1.5	15.3	0.9	56	26	6	25

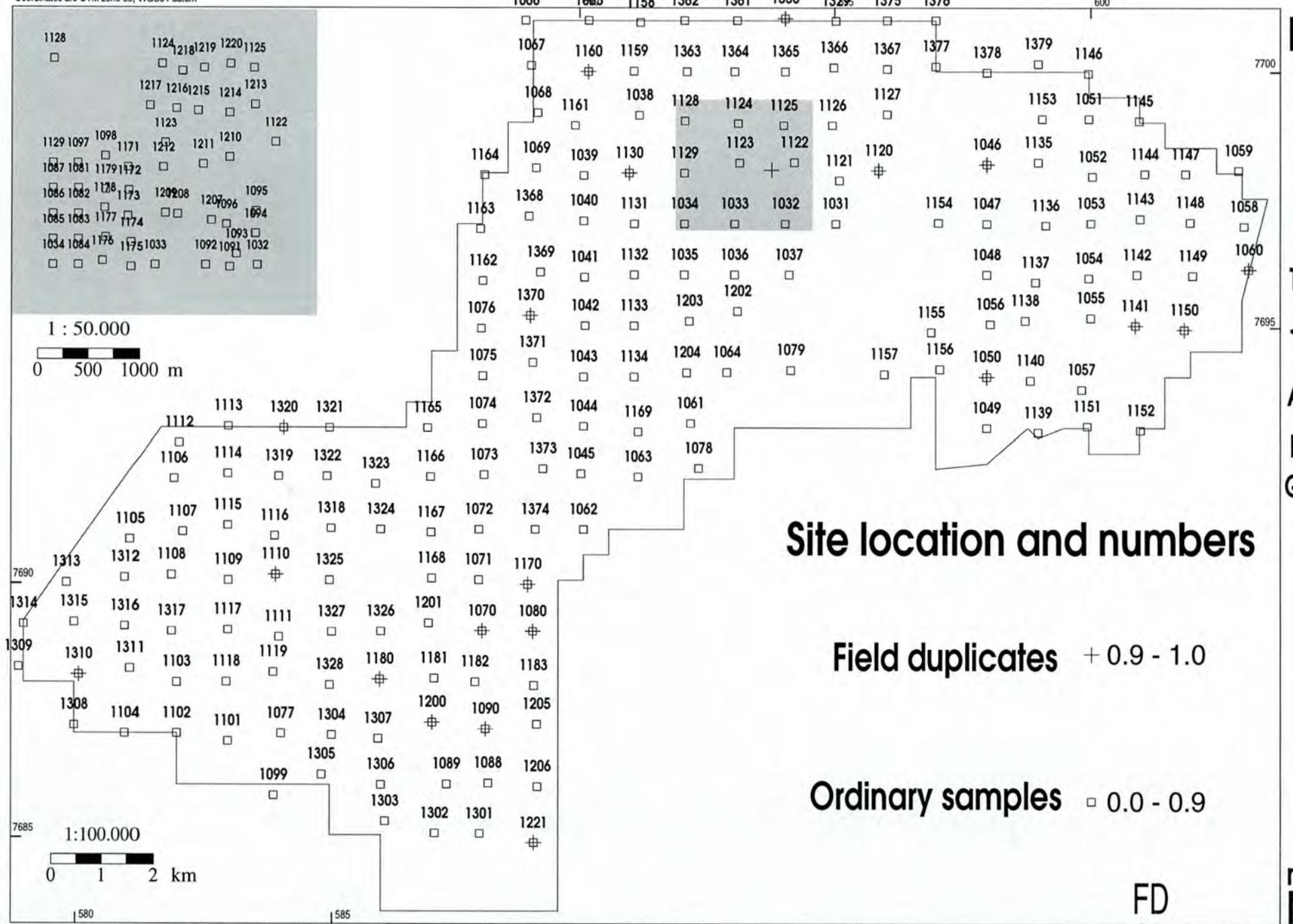
Explanation of the BOXPLOT



Definitions: hinge spread (HS) = UH - LH
upper whisker = UH + 1.5 x HS
lower whisker = LH - 1.5 x HS

the whiskers are drawn at the last actual data point

Coordinates are UTM zone 35, WGS84 datum



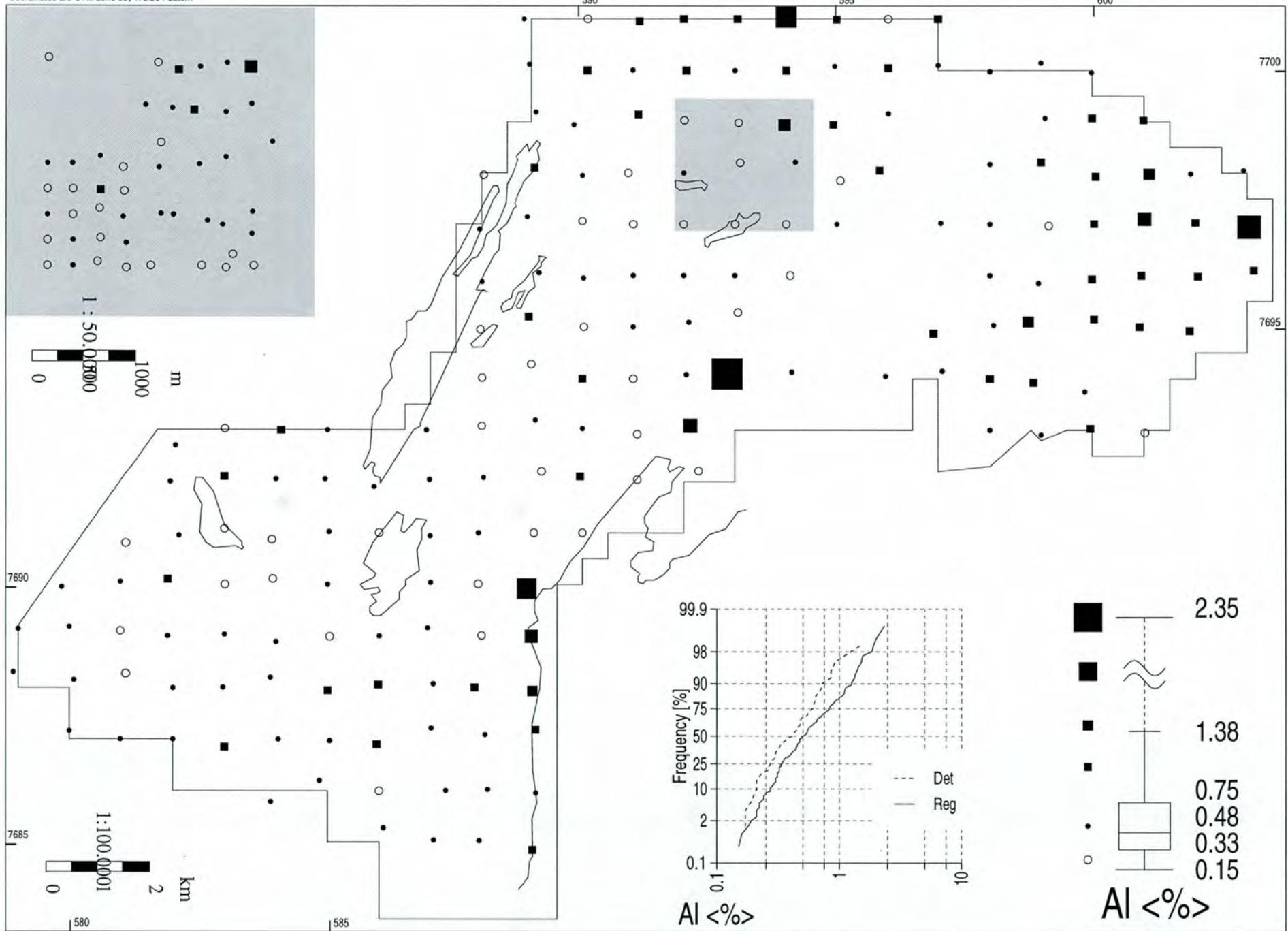
**KENOR
Pasvik
1996**

Topsoil
 $<0.06\text{mm}$
Aqua Regia
ICP-AES
GF-AAS

NGU report 96:142 Appendix 5 page 2

apr 97
NGU

Coordinates are UTM zone 35, WGS84 datum



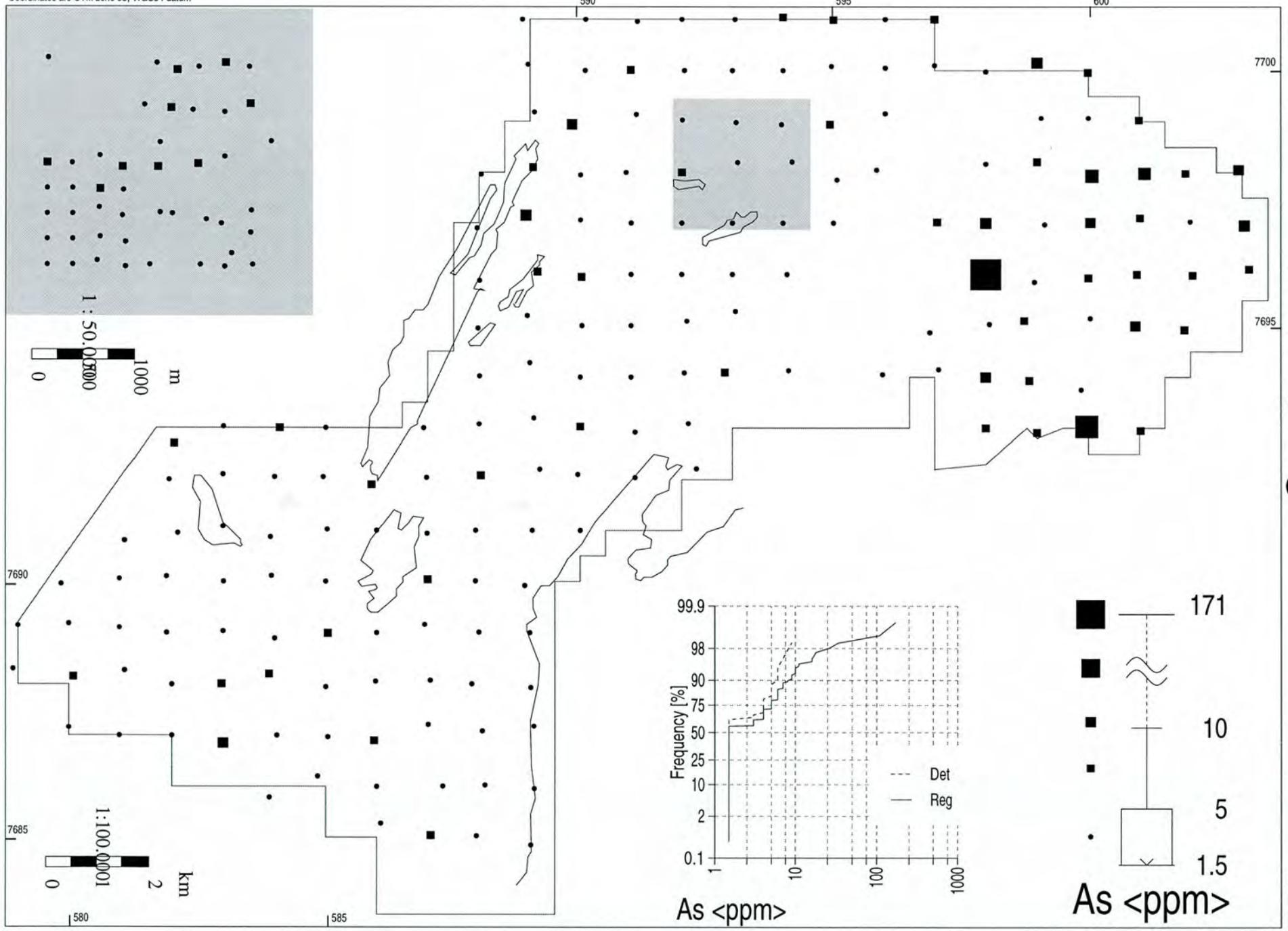
**KENOR
Pasvik
1996**

Topsoil
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Aqua Regia
ICP-AES
GF-AAS

NGU report 96:142 Appendix 5 page 3

apr 97
NGU

Coordinates are UTM zone 35, WGS84 datum



**KENOR
Pasvik
1996**

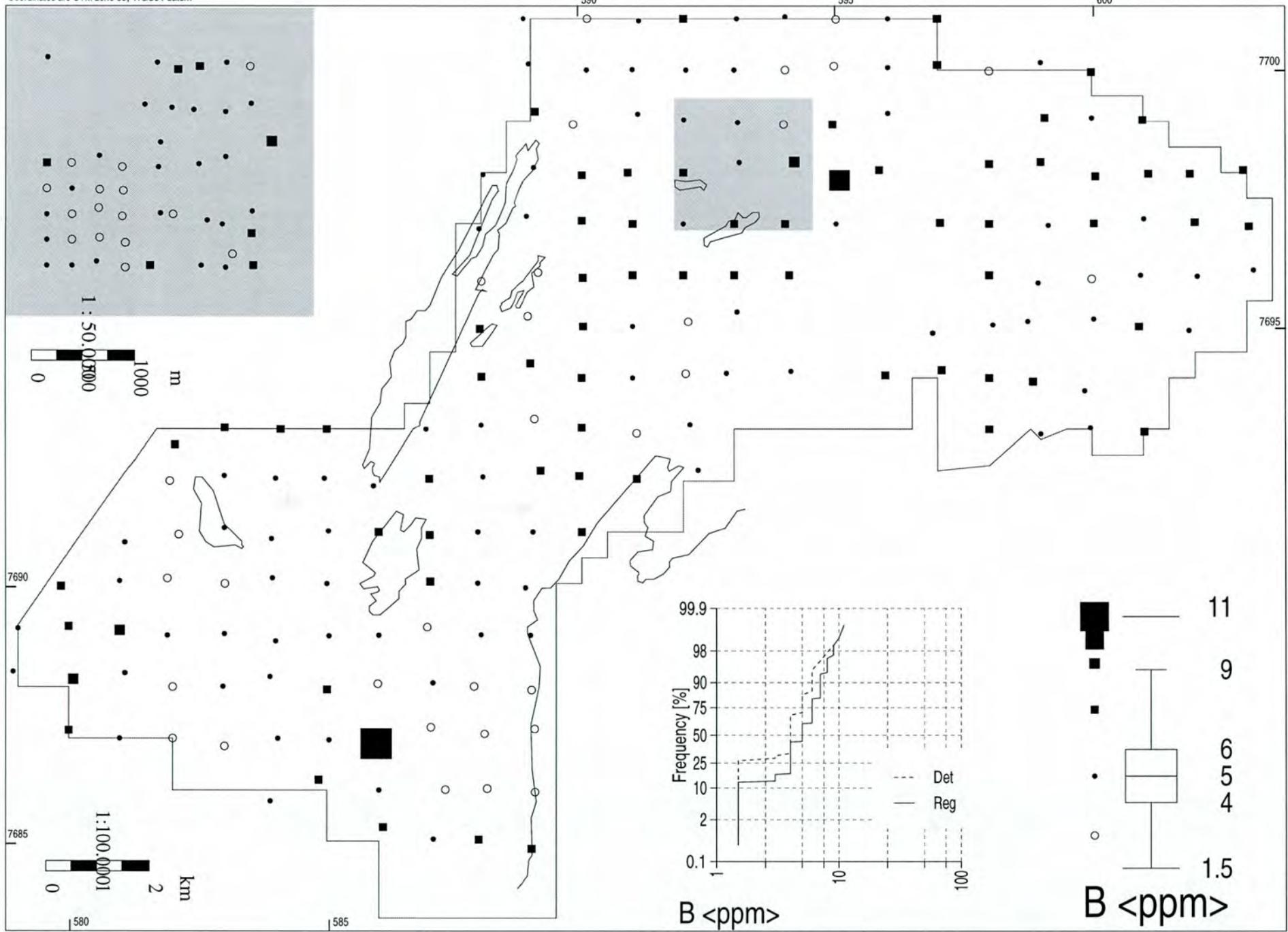
Topsoil
 $<0.06\text{mm}$

Aqua Regia
ICP-AES
GF-AAS

NGU report 96:142 Appendix 5 page 4

apr 97
NGU

Coordinates are UTM zone 35, WGS84 datum



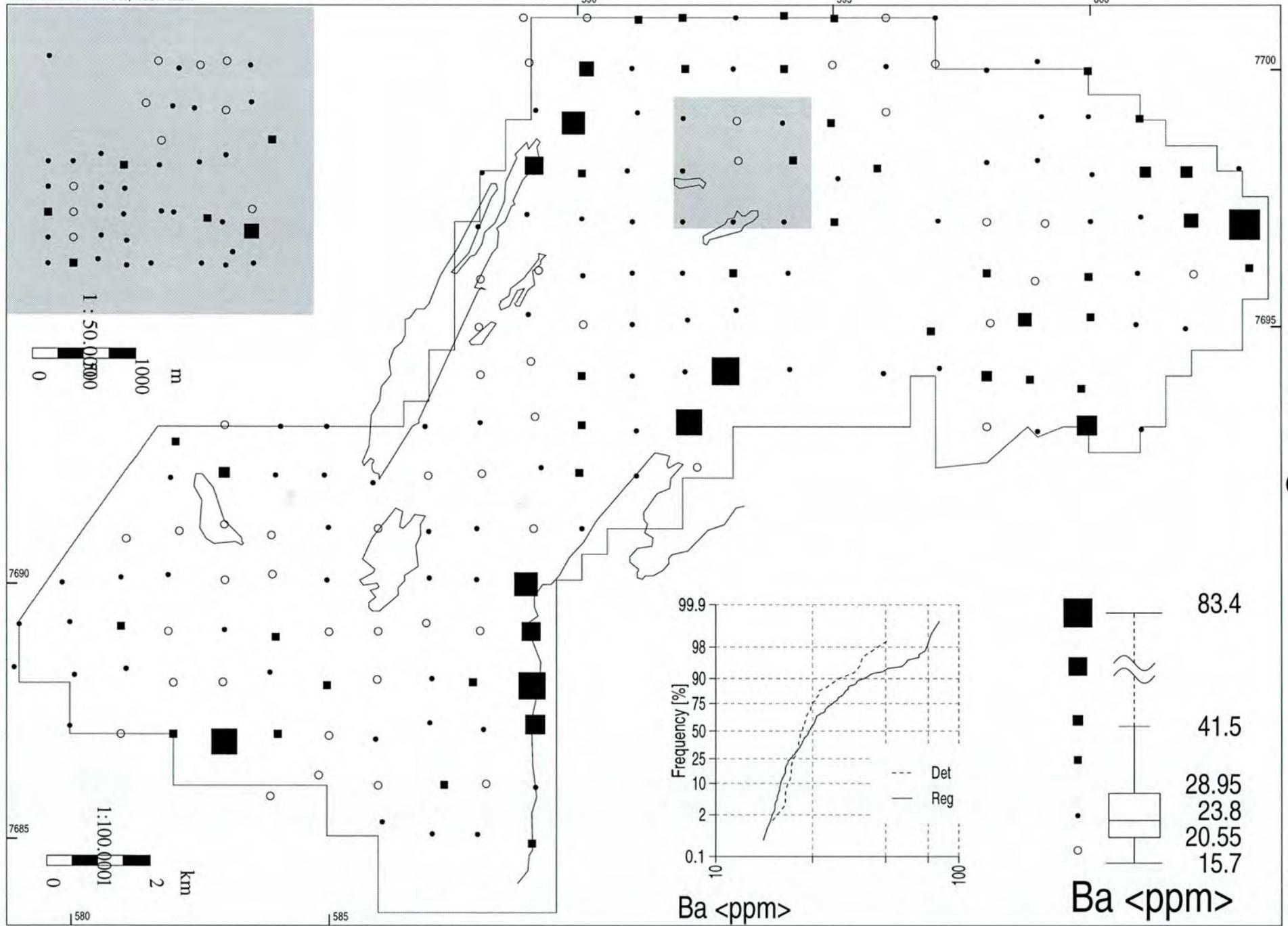
**KENOR
Pasvik
1996**

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<0.06mm
Aqua Regia
ICP-AES
GF-AAS

NGU report 96:142 Appendix 5 page 5

apr 97
NGU

Coordinates are UTM zone 35, WGS84 datum



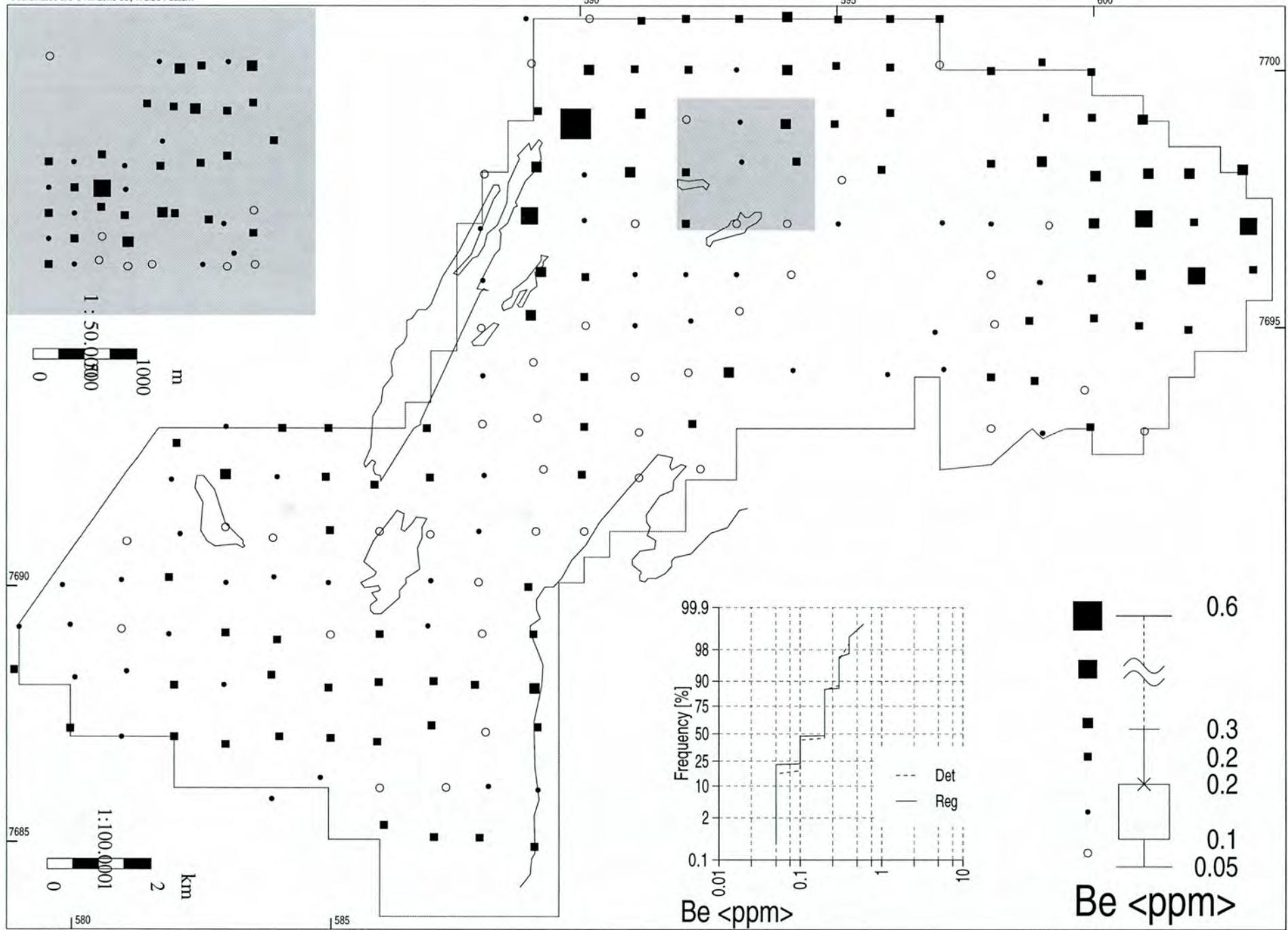
**KENOR
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1996**

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Aqua Regia
ICP-AES
GF-AAS

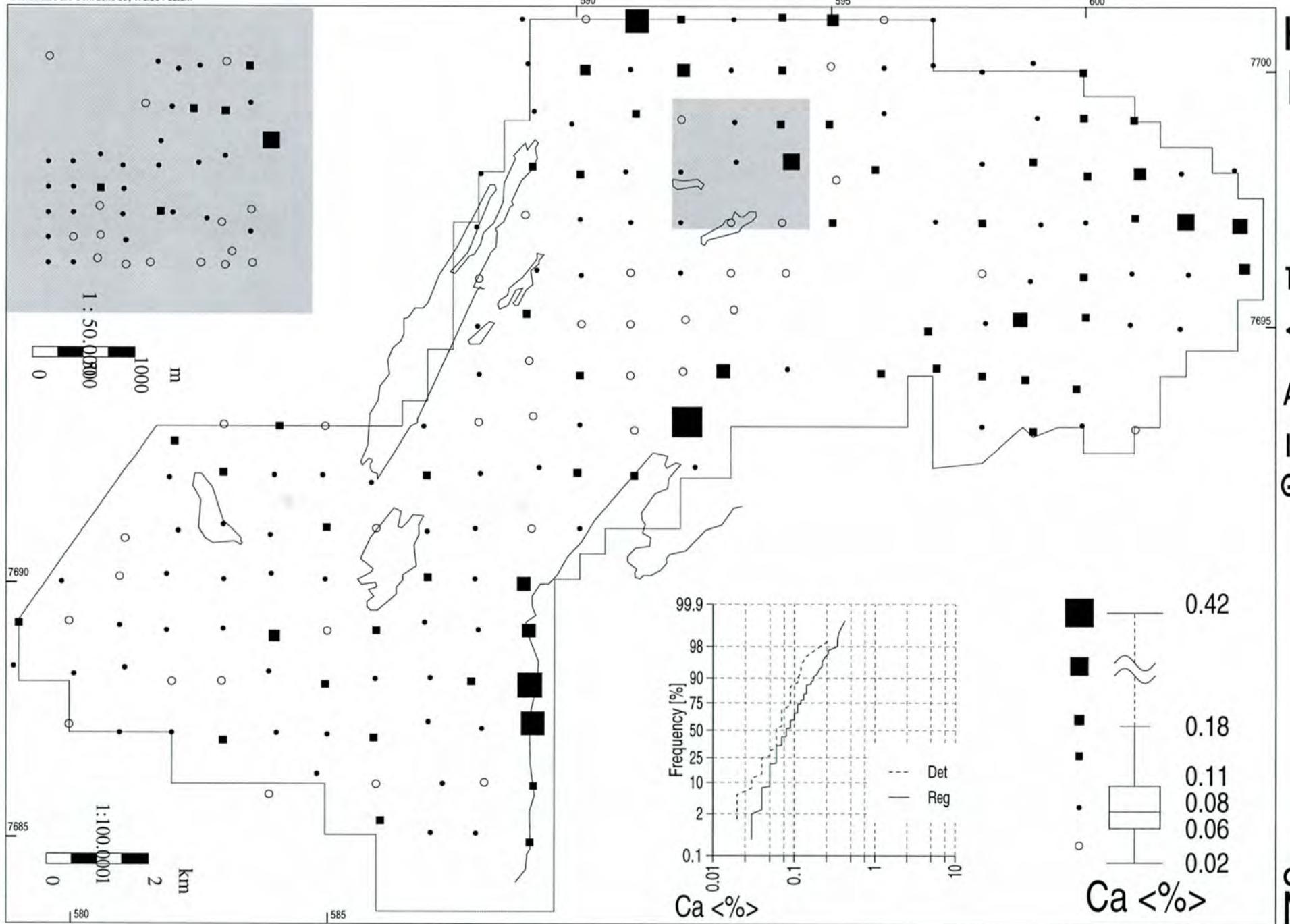
NGU report 96:142 Appendix 5 page 6

apr 97
NGU

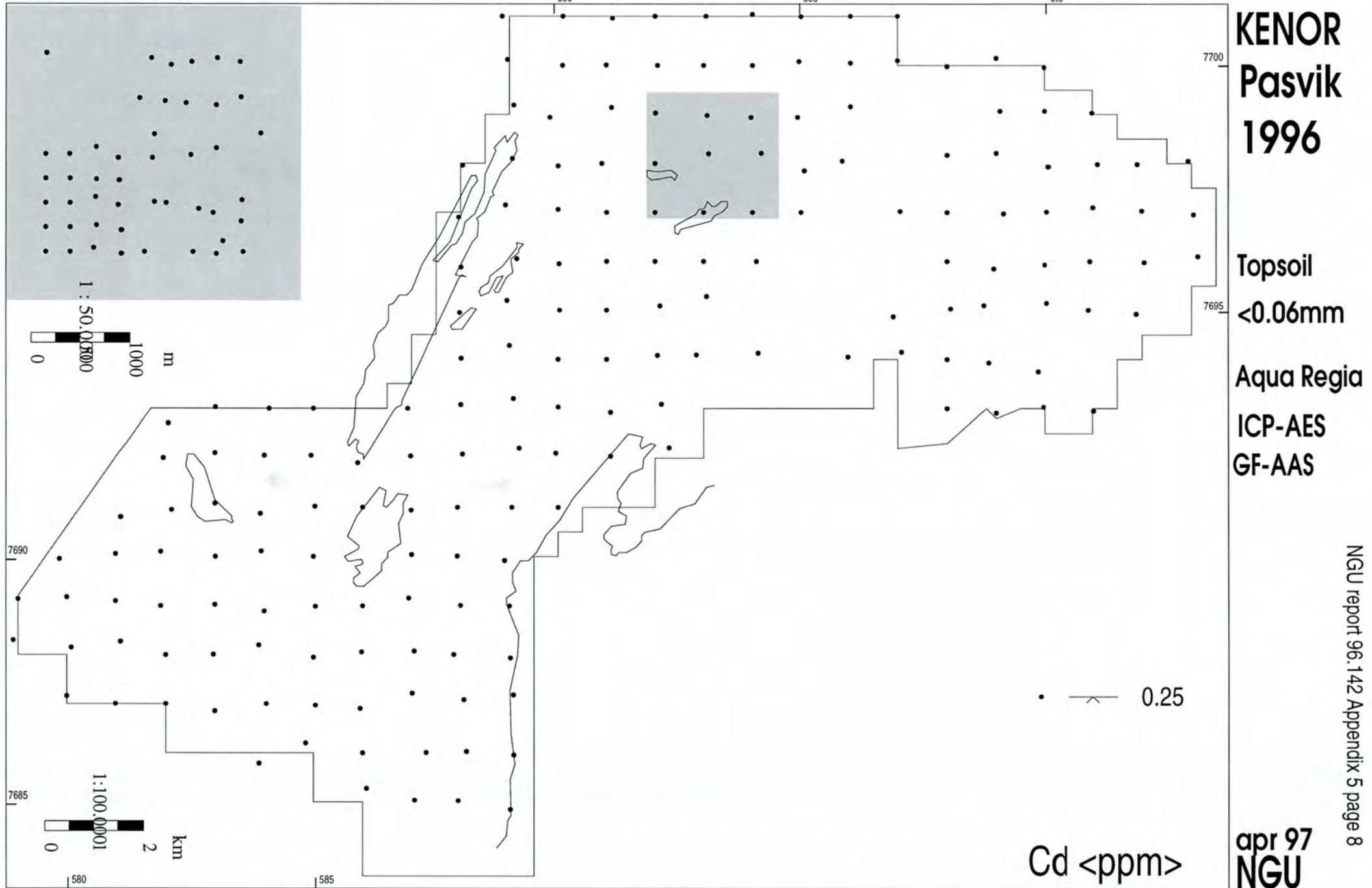
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Coordinates are UTM zone 35, WGS84 datum



Coordinates are UTM zone 35, WGS84 datum



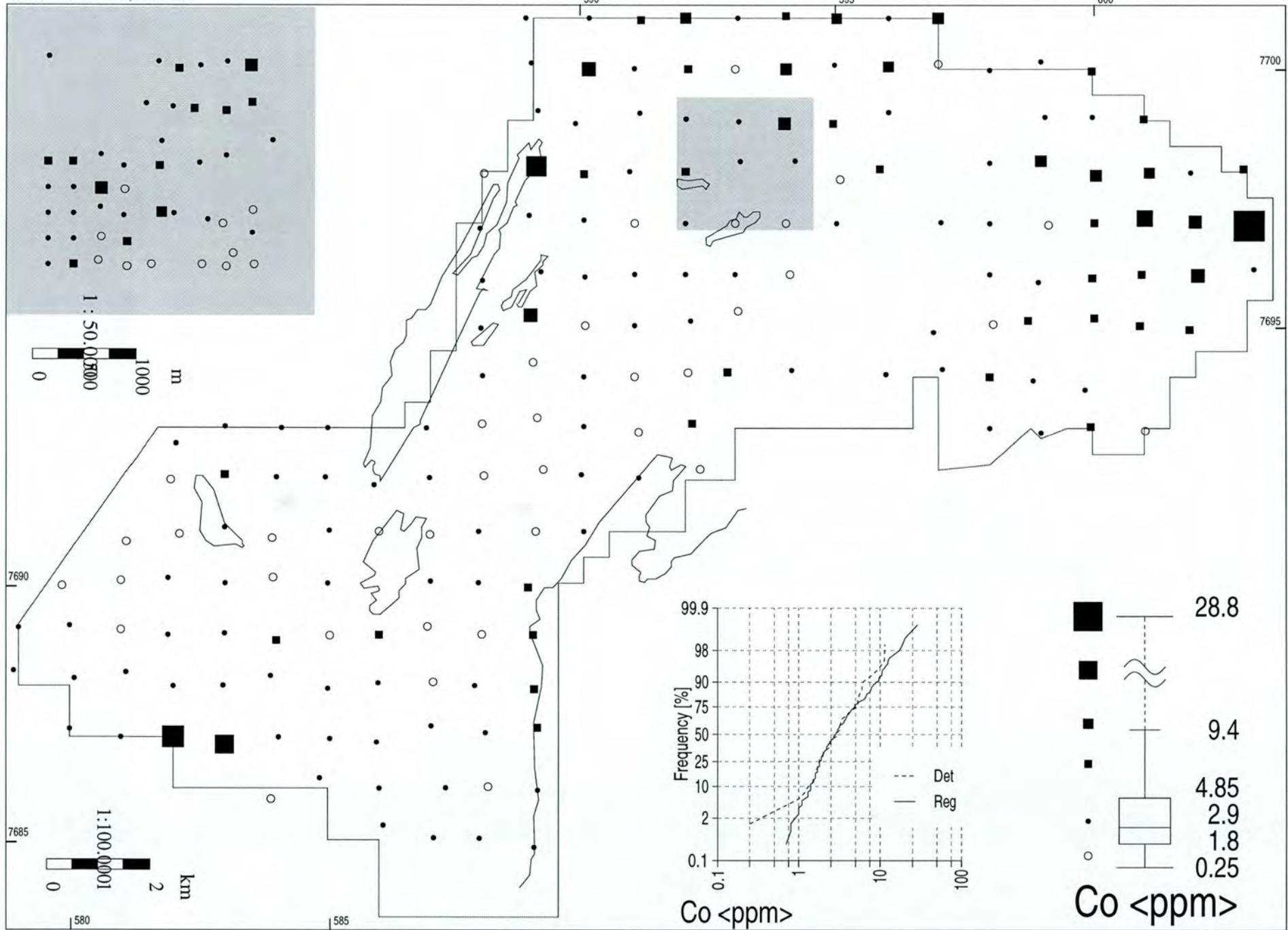
**KENOR
Pasvik
1996**

Topsoil
<0.06mm
Aqua Regia
ICP-AES
GF-AAS

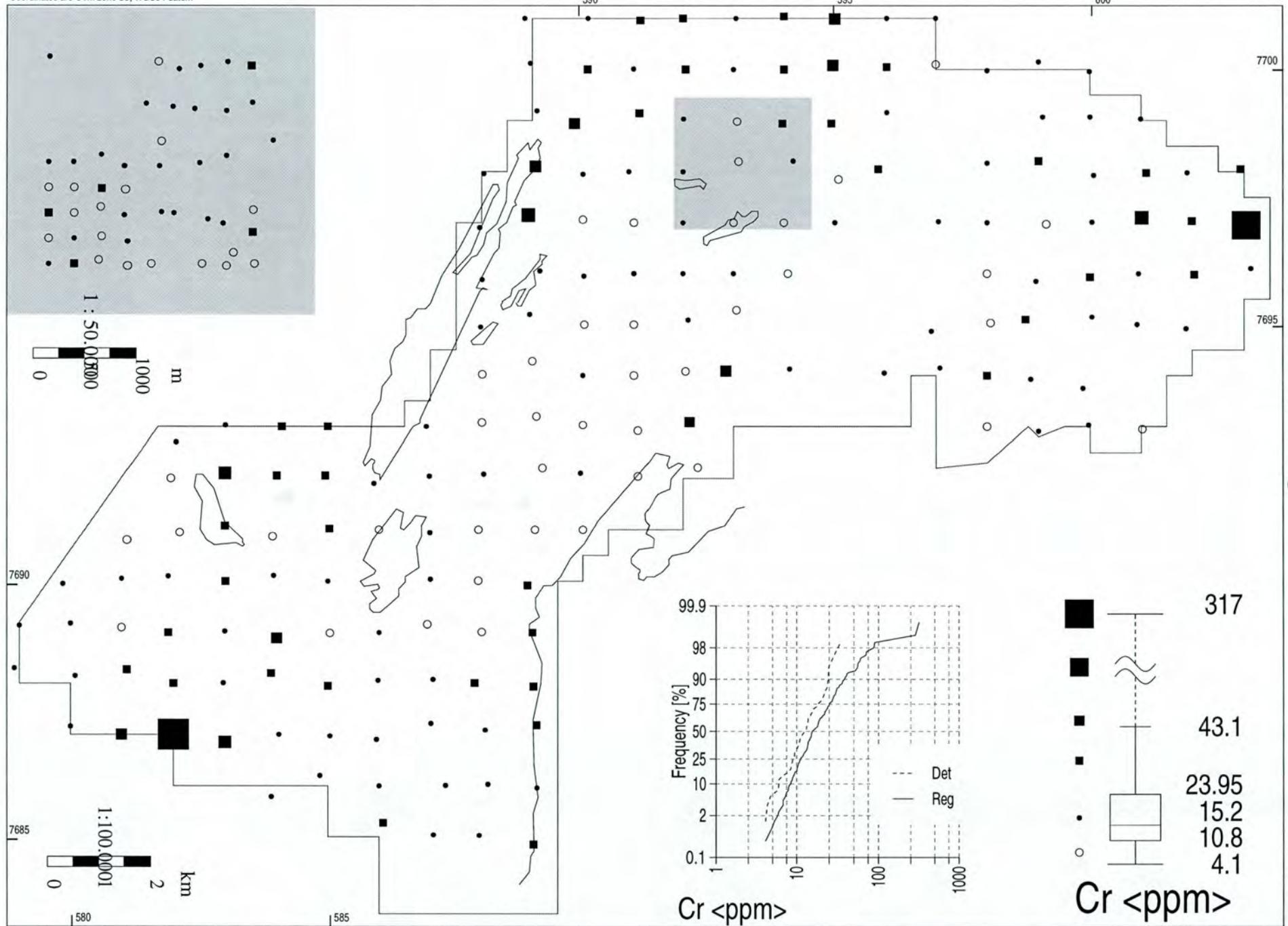
NGU report 96:142 Appendix 5 page 9

apr 97
NGU

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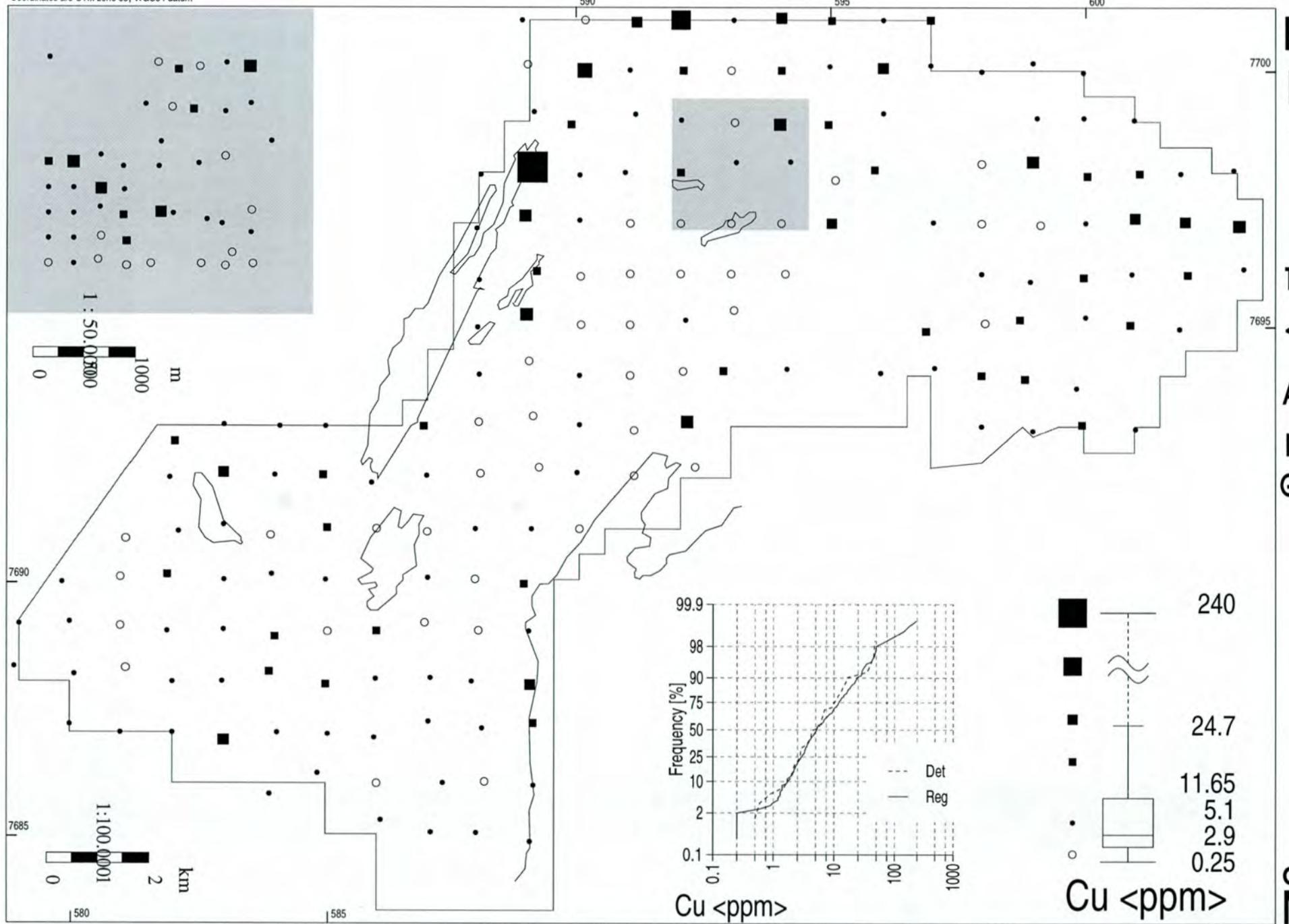


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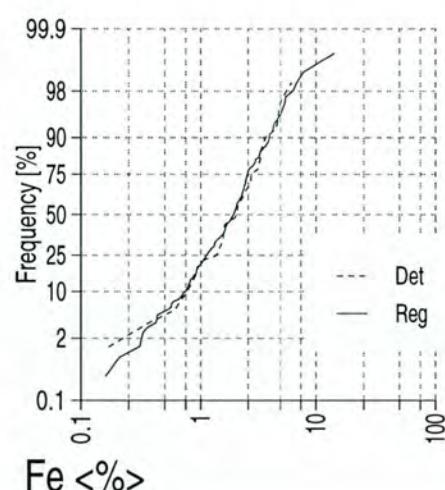
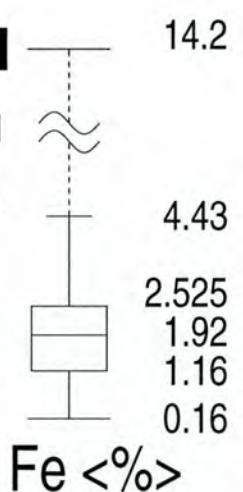
**KENOR
Pasvik
1996**

Coordinates are UTM zone 35, WGS84 datum

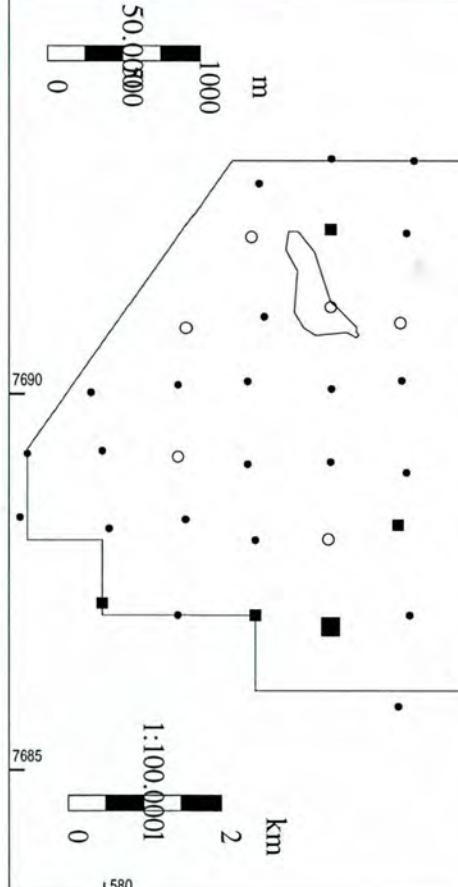
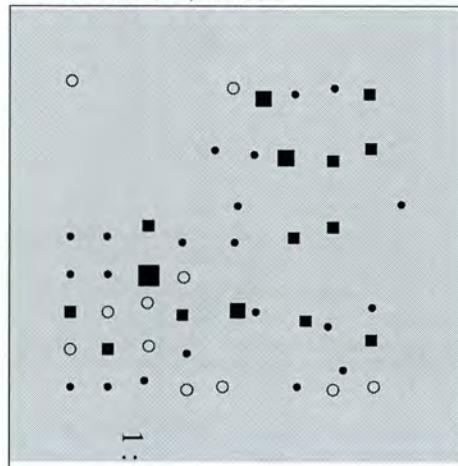


**KENOR
Pasvik
1996**

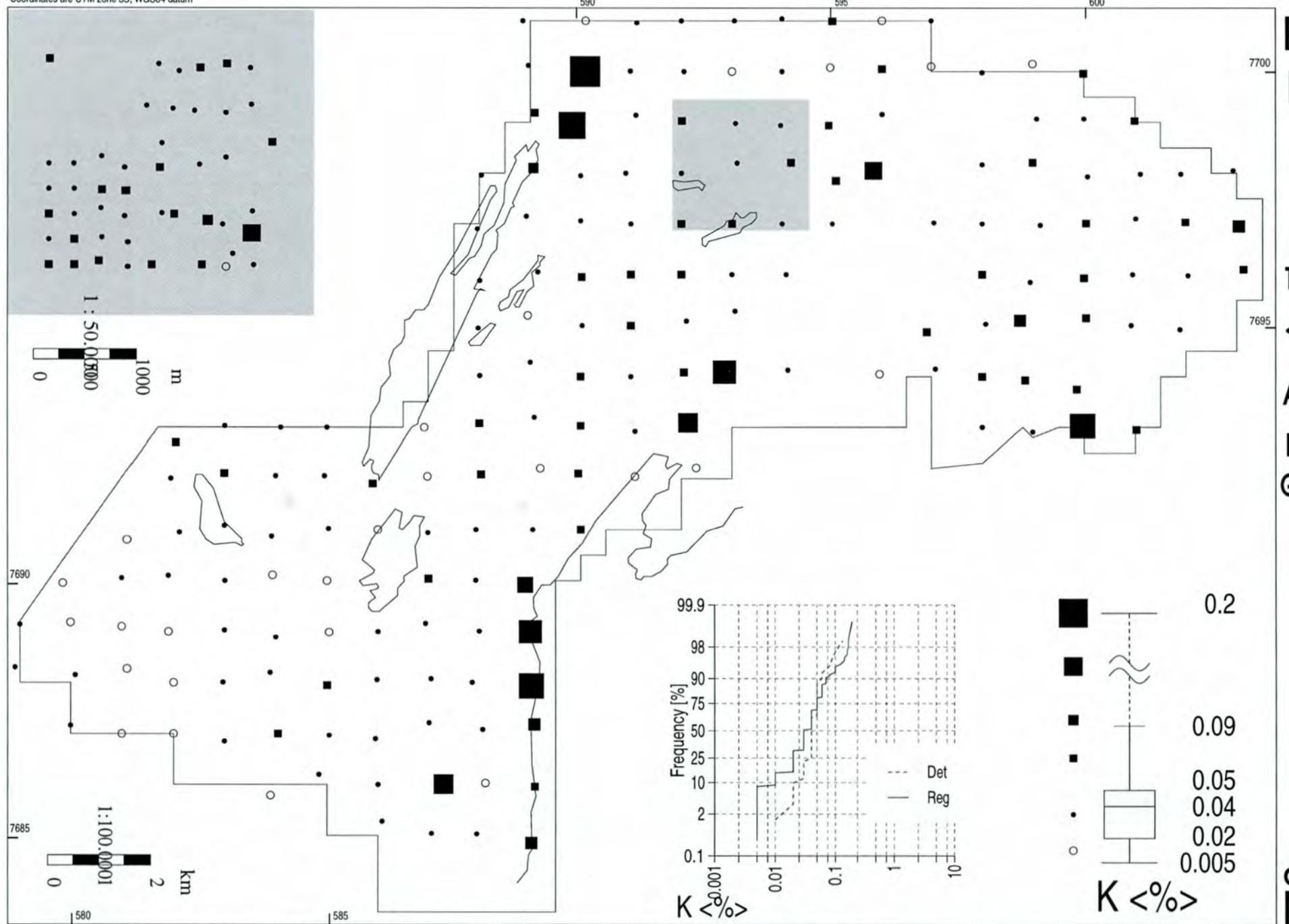
Topsoil
<0.06mm
Aqua Regia
ICP-AES
GF-AAS



Coordinates are UTM zone 35, WGS84 datum



Coordinates are UTM zone 35, WGS84 datum



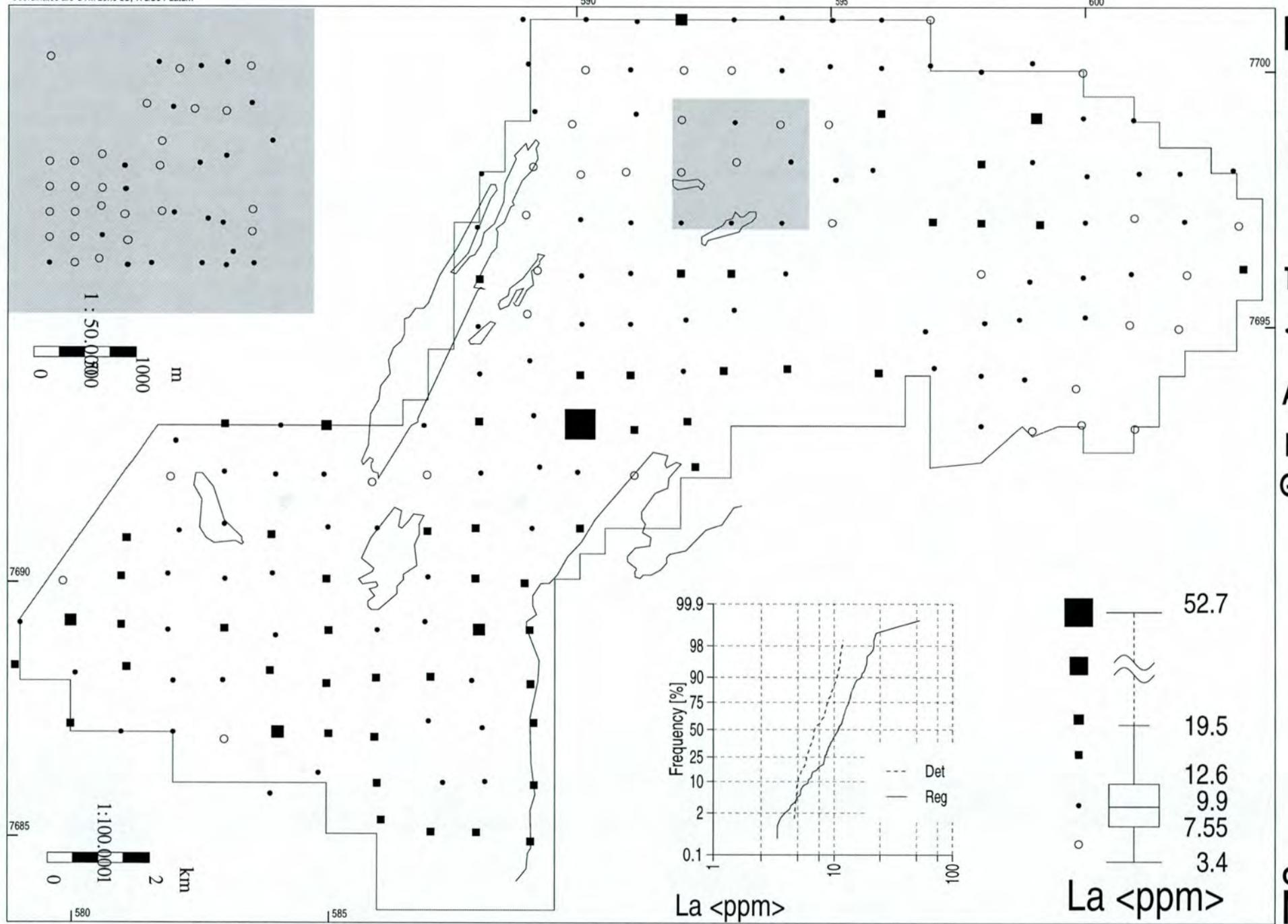
**KENOR
Pasvik
1996**

Topsoil
<0.06mm
Aqua Regia
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1996**

Topsoil
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GF-AAS

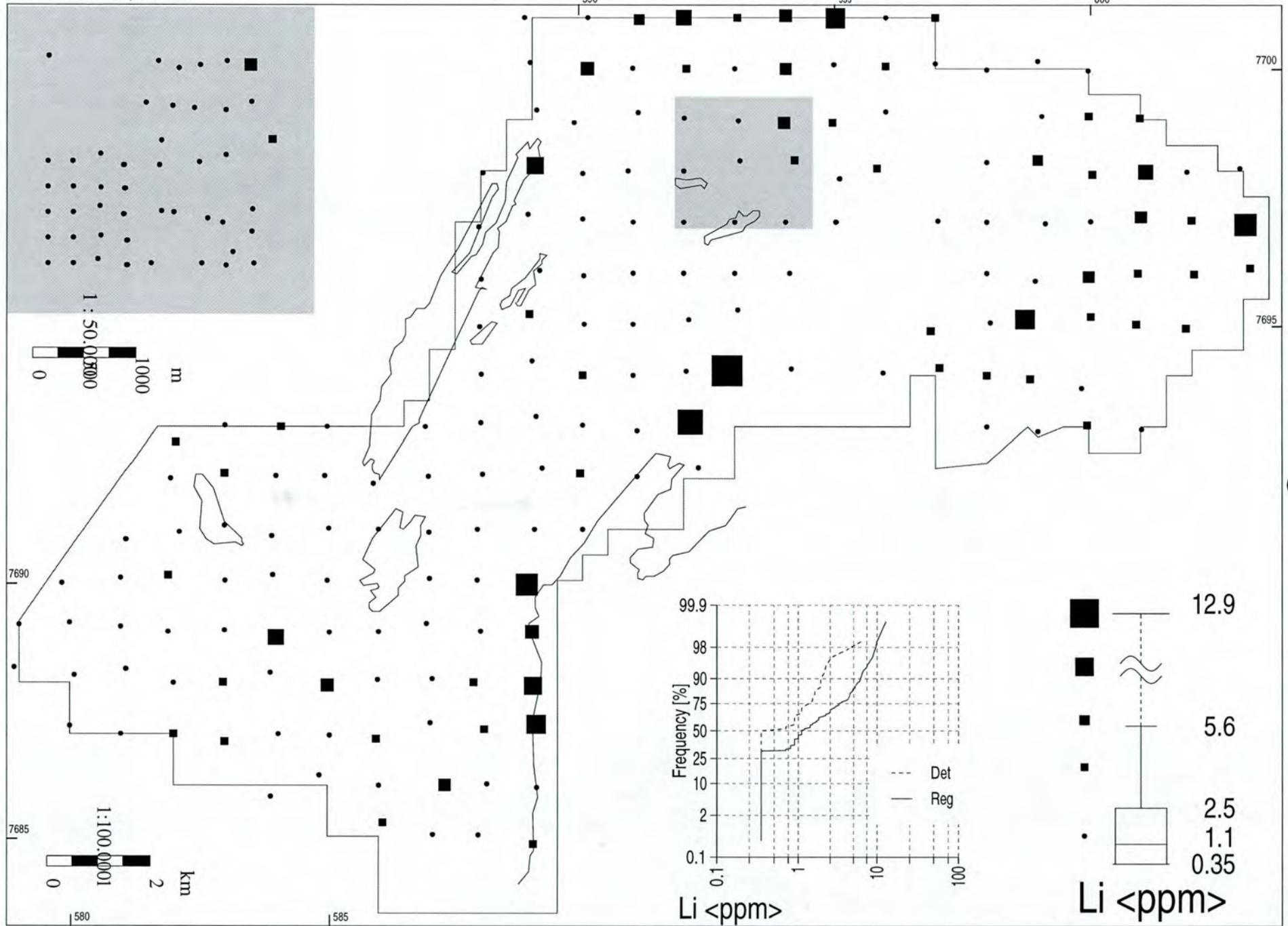
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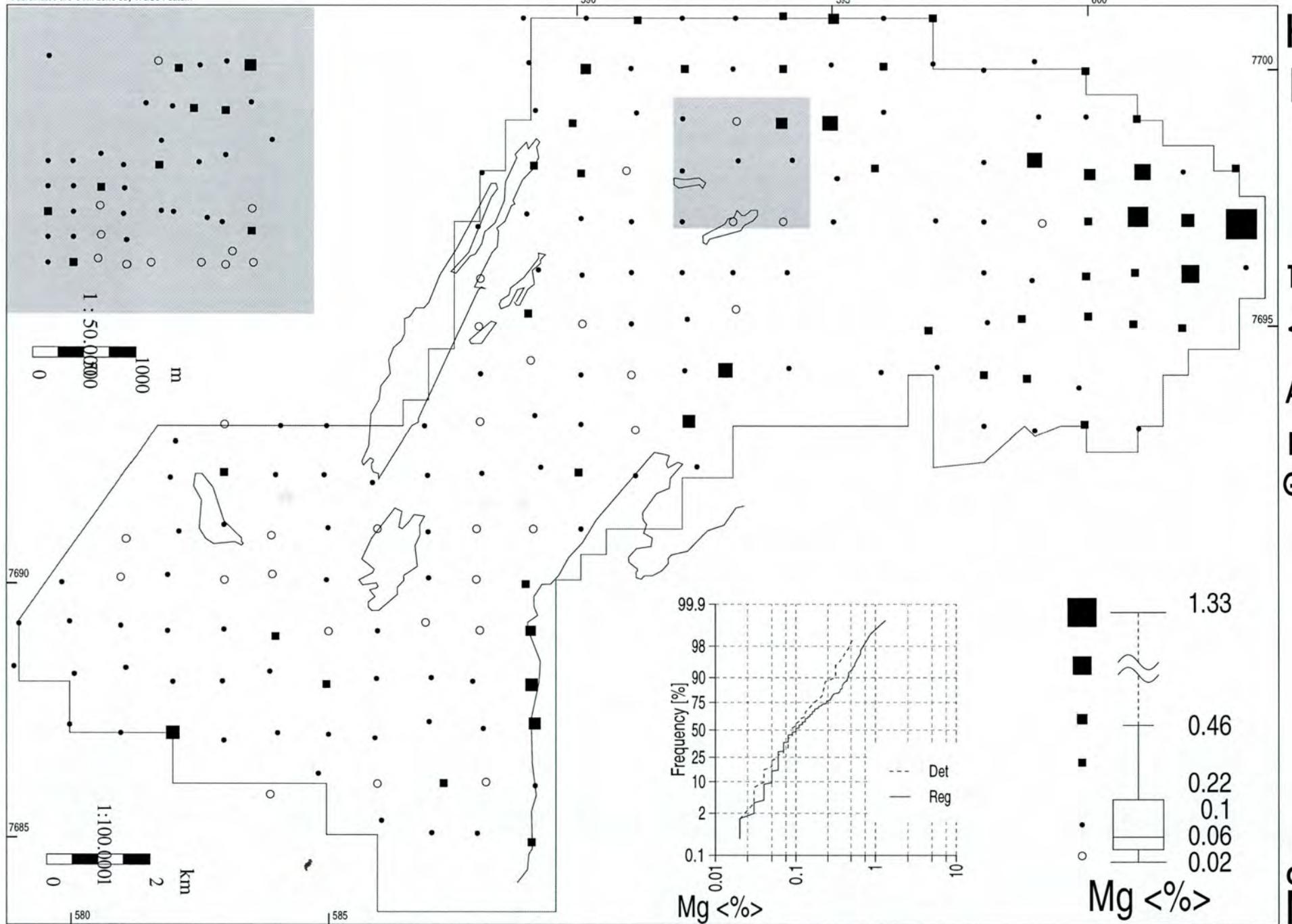
**KENOR
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1996**

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GF-AAS

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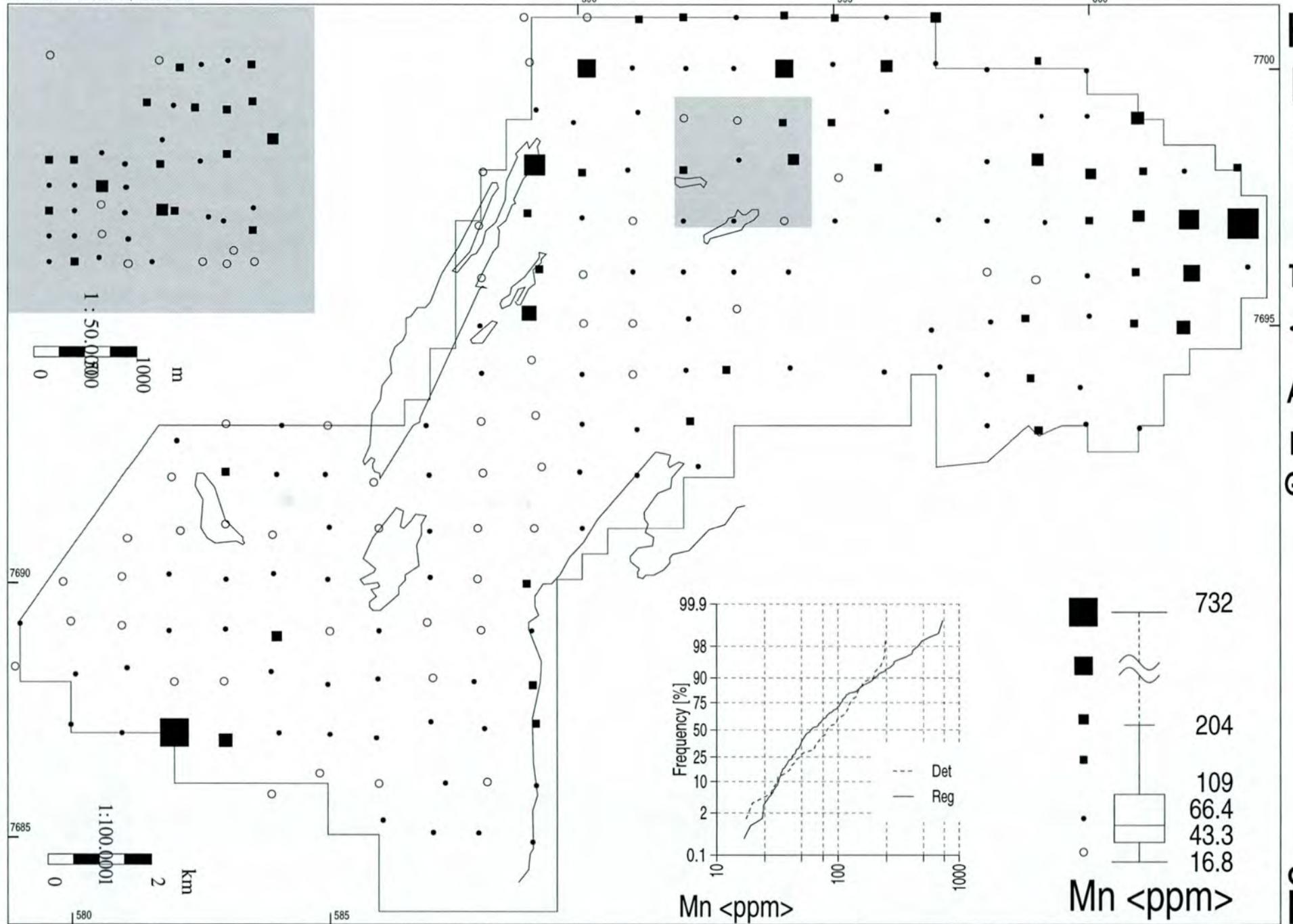
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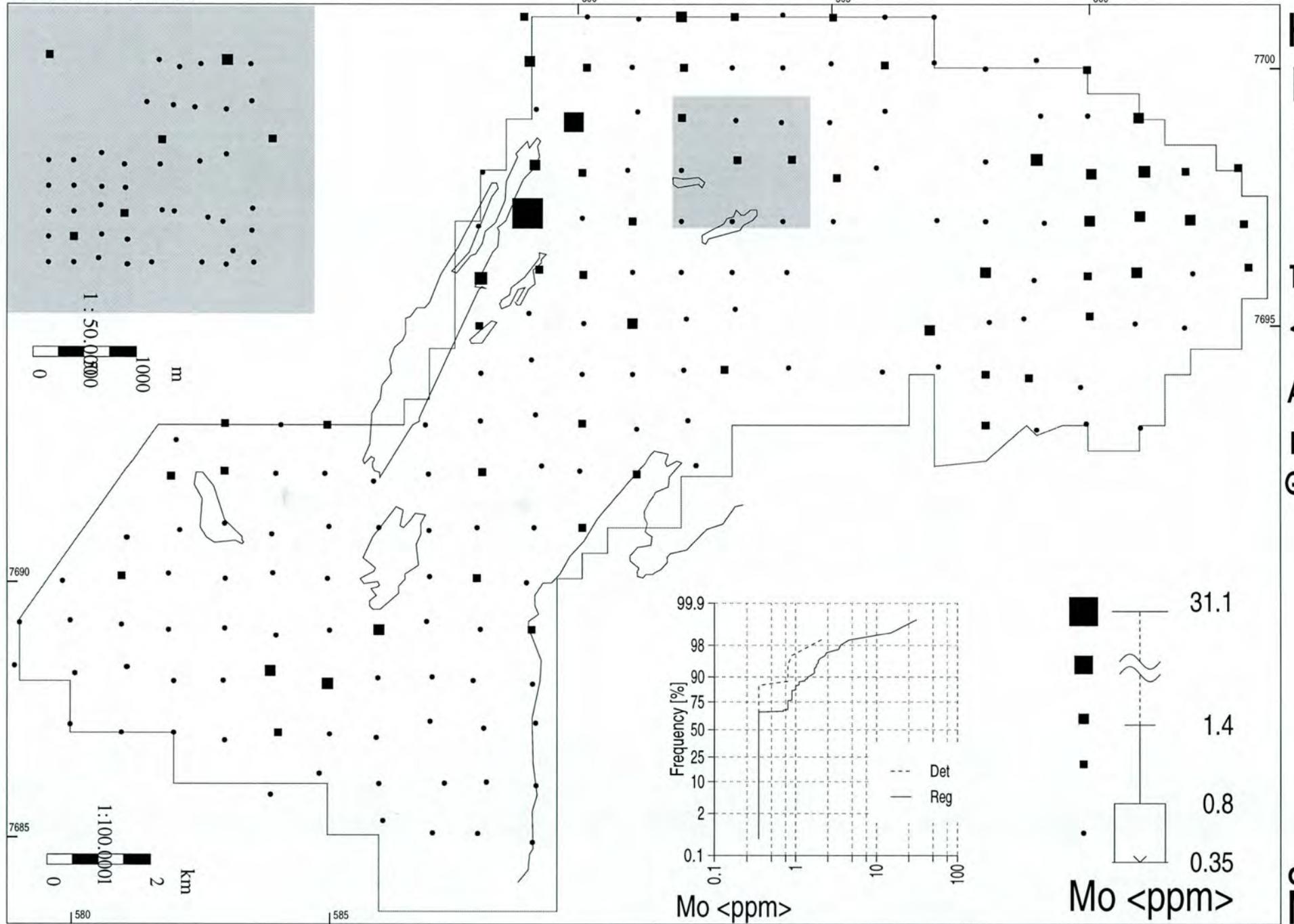
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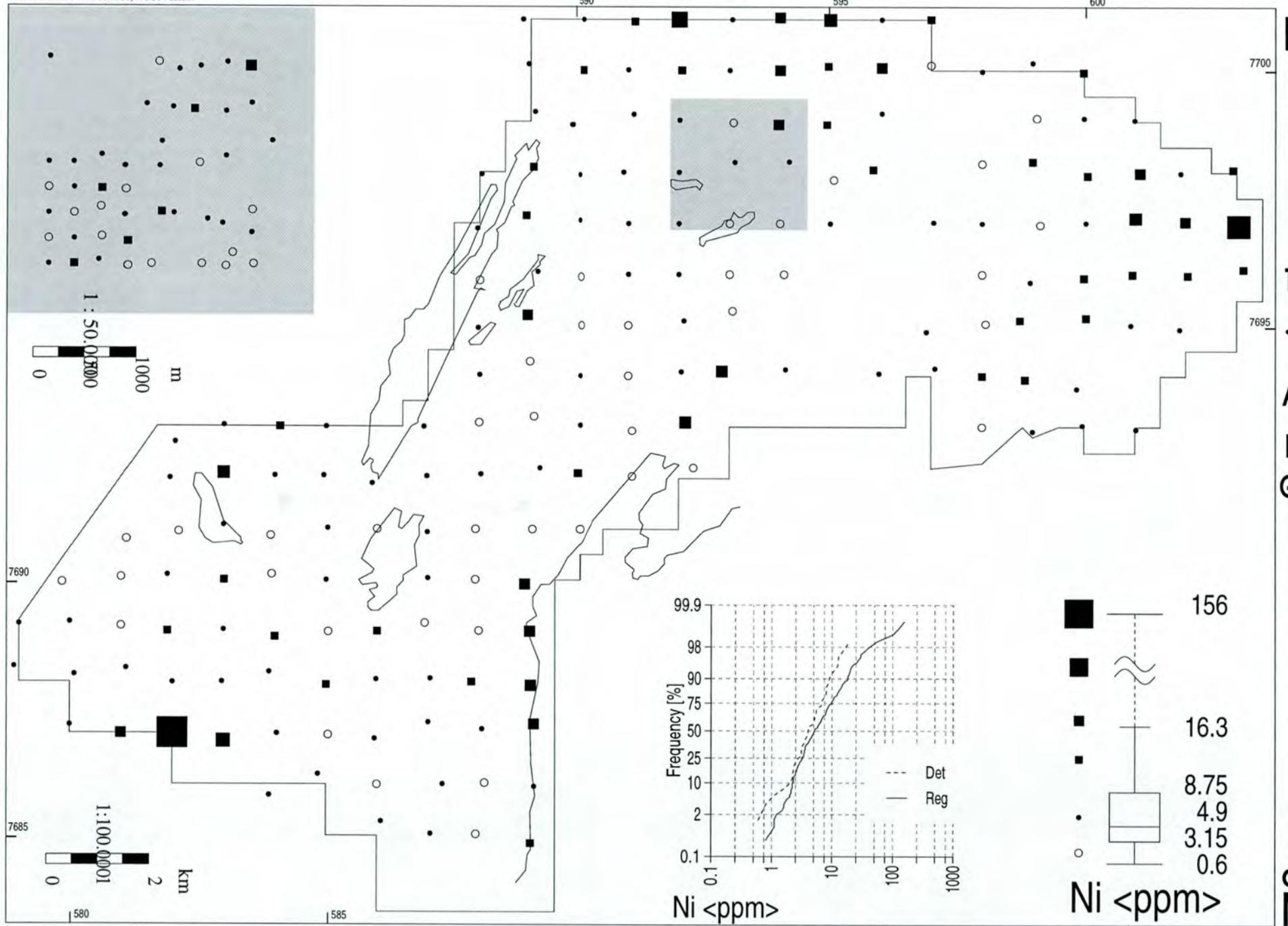
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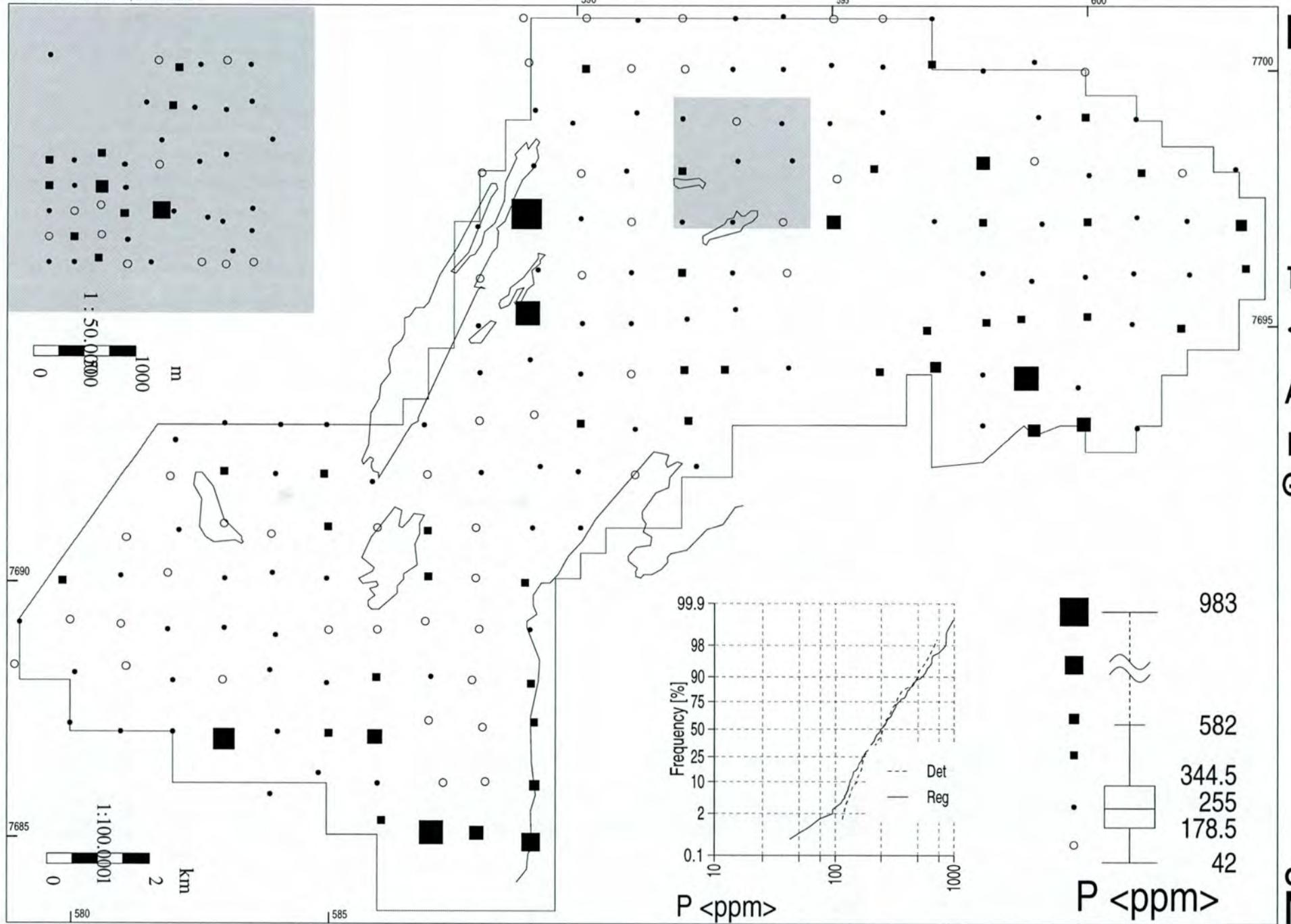
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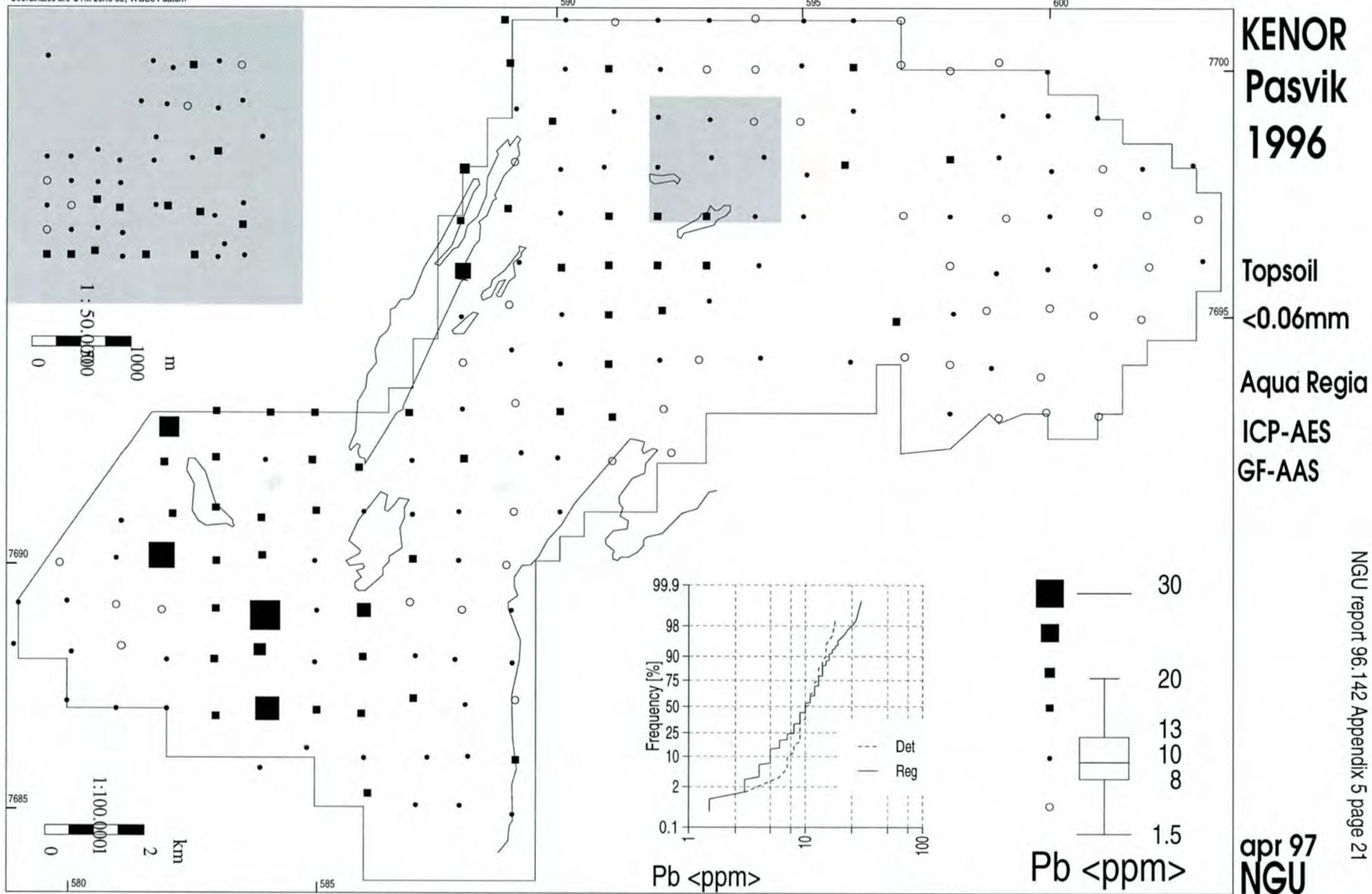
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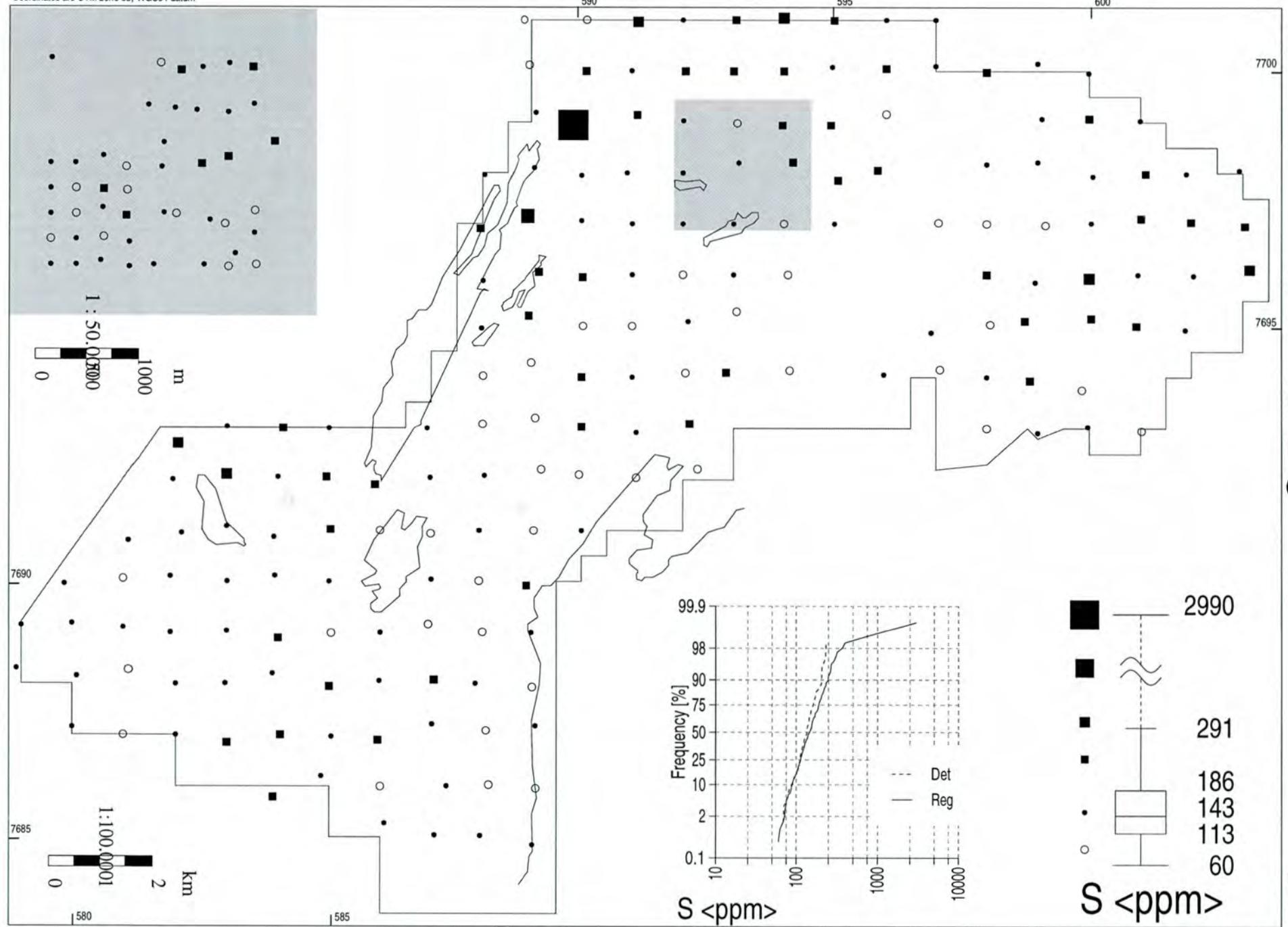
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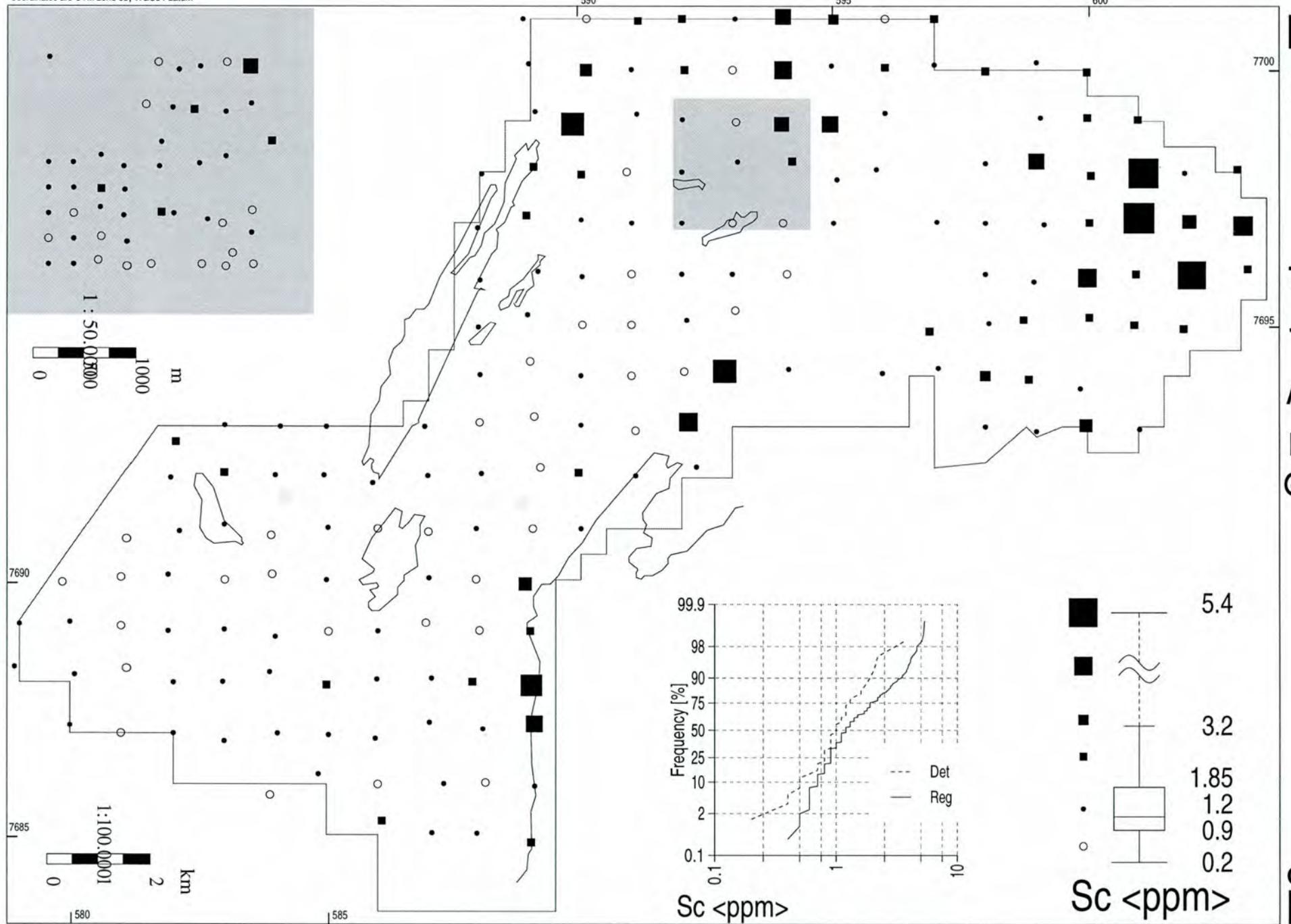
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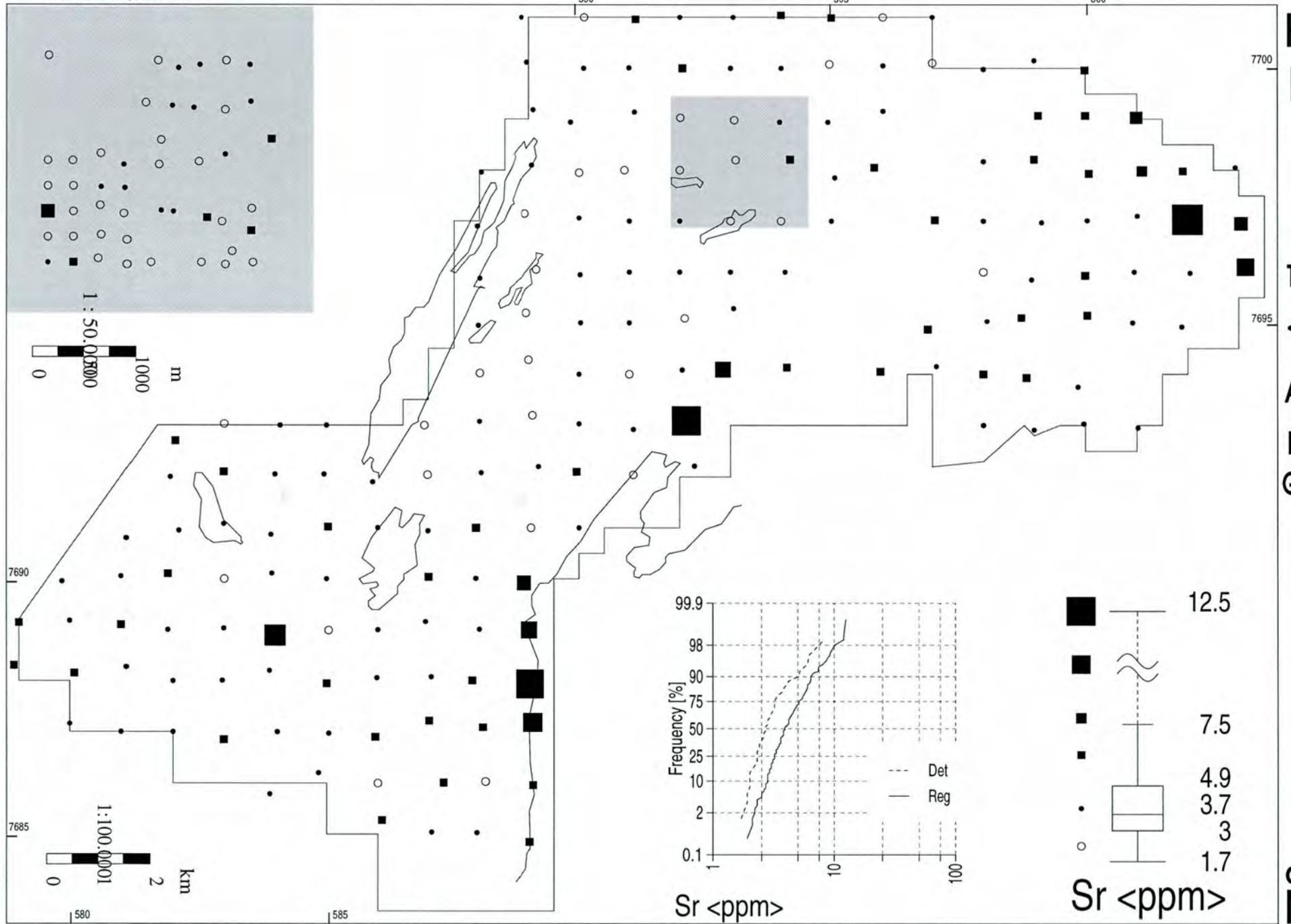
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1996**

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GF-AAS

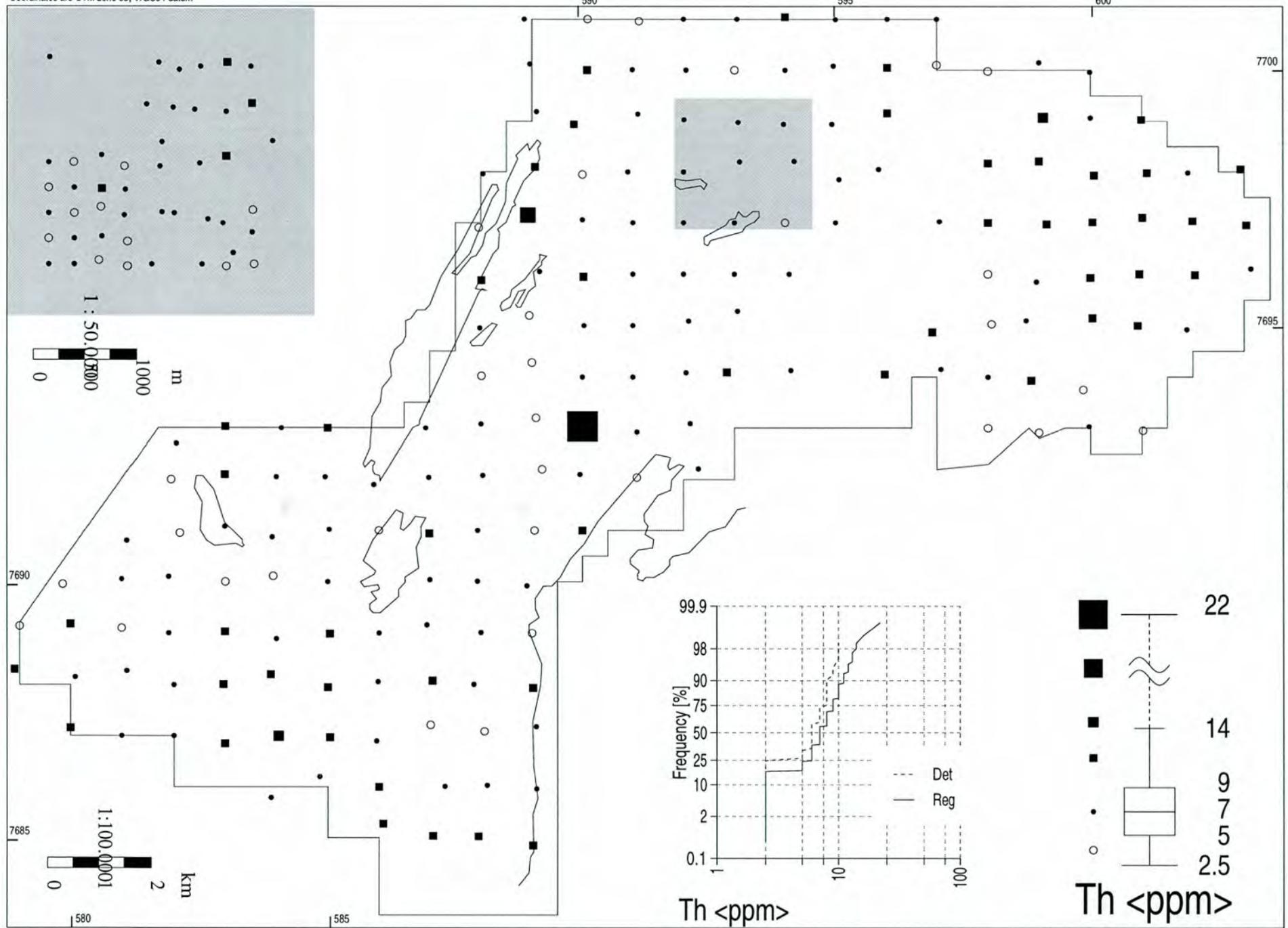
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Topsoil
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ICP-AES
GF-AAS

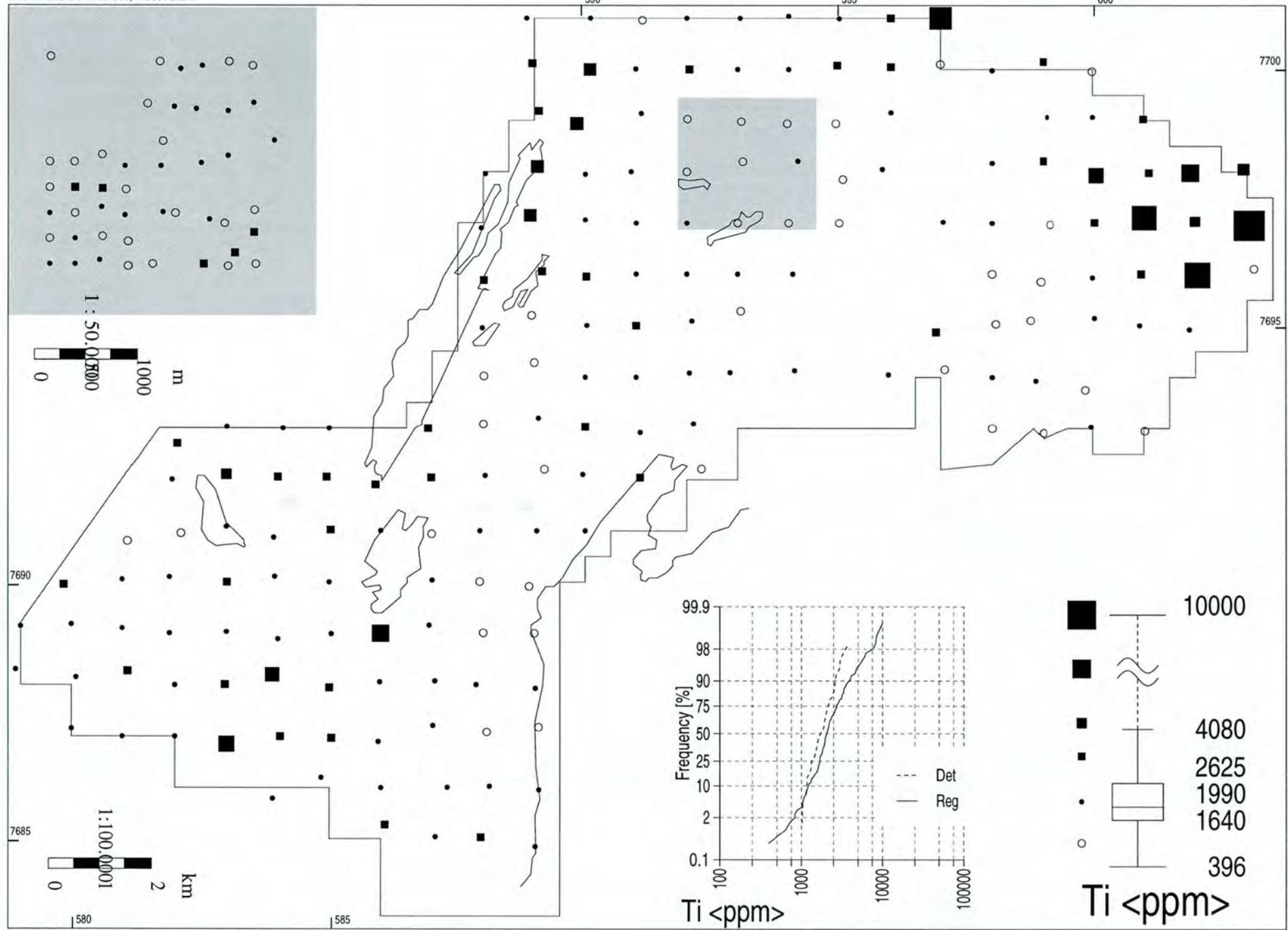
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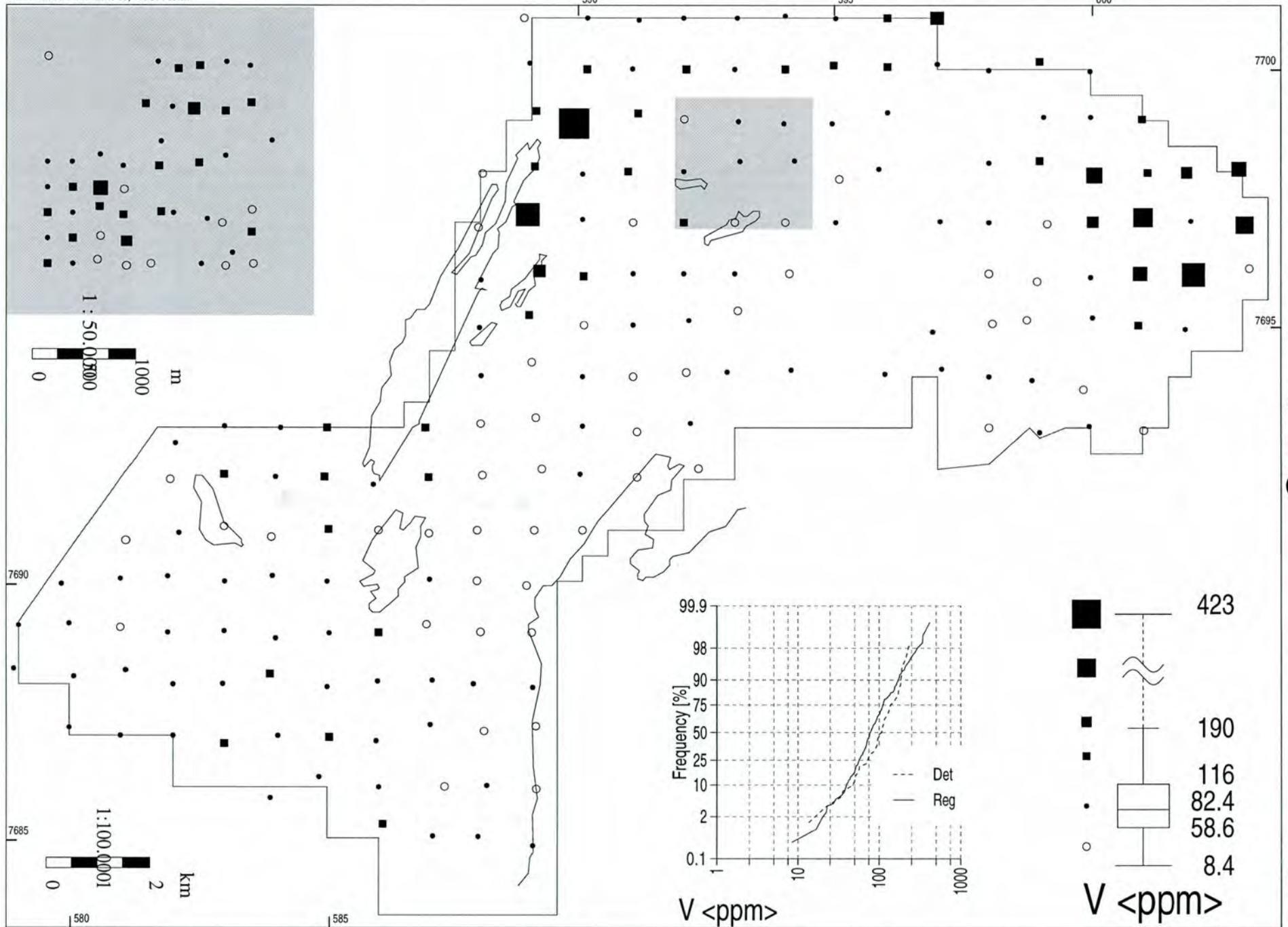
**KENOR
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Topsoil
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Coordinates are UTM zone 35, WGS84 datum



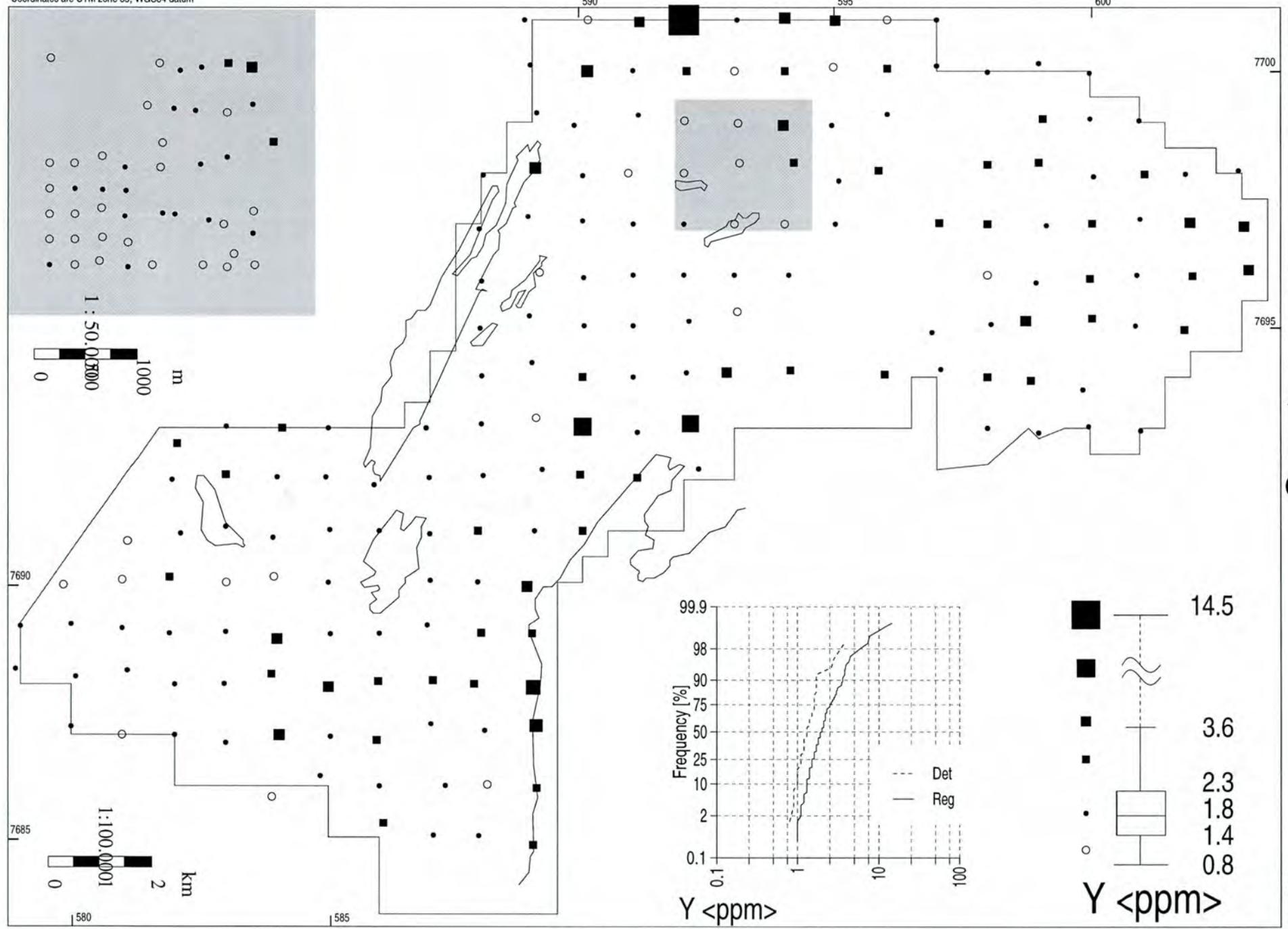
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Pasvik
1996**

Topsoil
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Aqua Regia
ICP-AES
GF-AAS

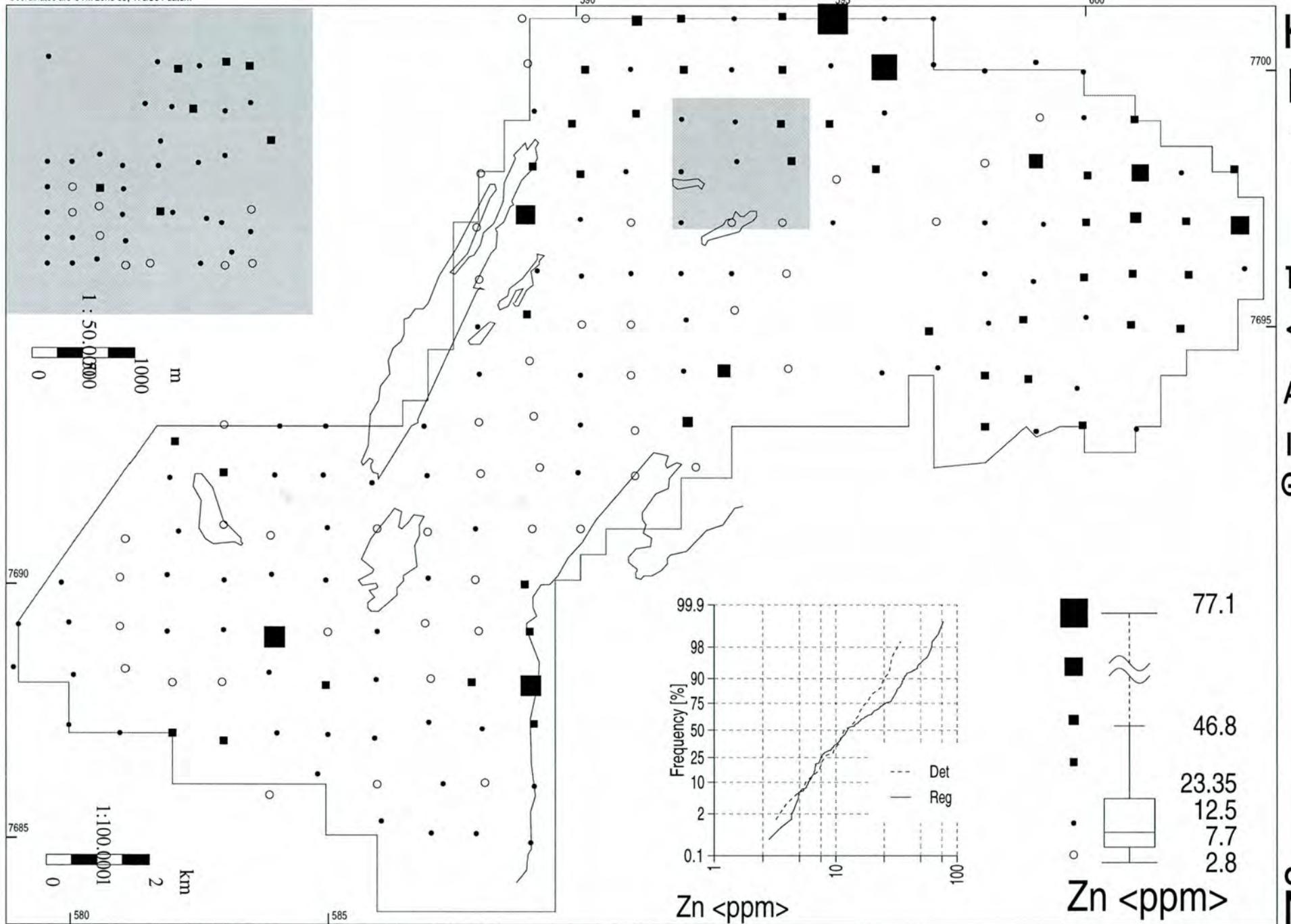
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Pasvik
1996**

Topsoil
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Aqua Regia
ICP-AES
GF-AAS

Coordinates are UTM zone 35, WGS84 datum



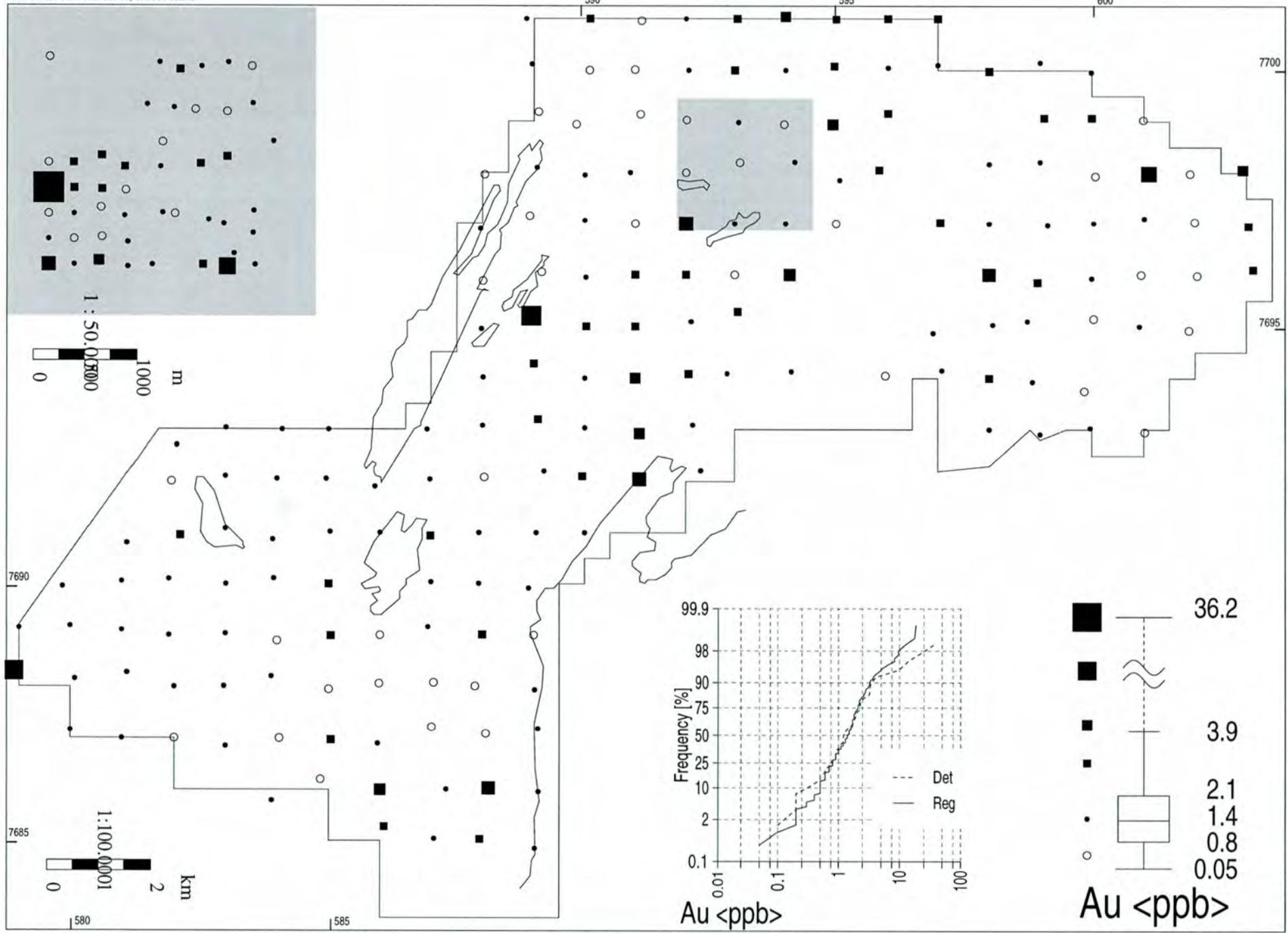
**KENOR
Pasvik
1996**

Topsoil
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Aqua Regia
ICP-AES
GF-AAS

NGU report 96:142 Appendix 5 page 30

apr 97
NGU

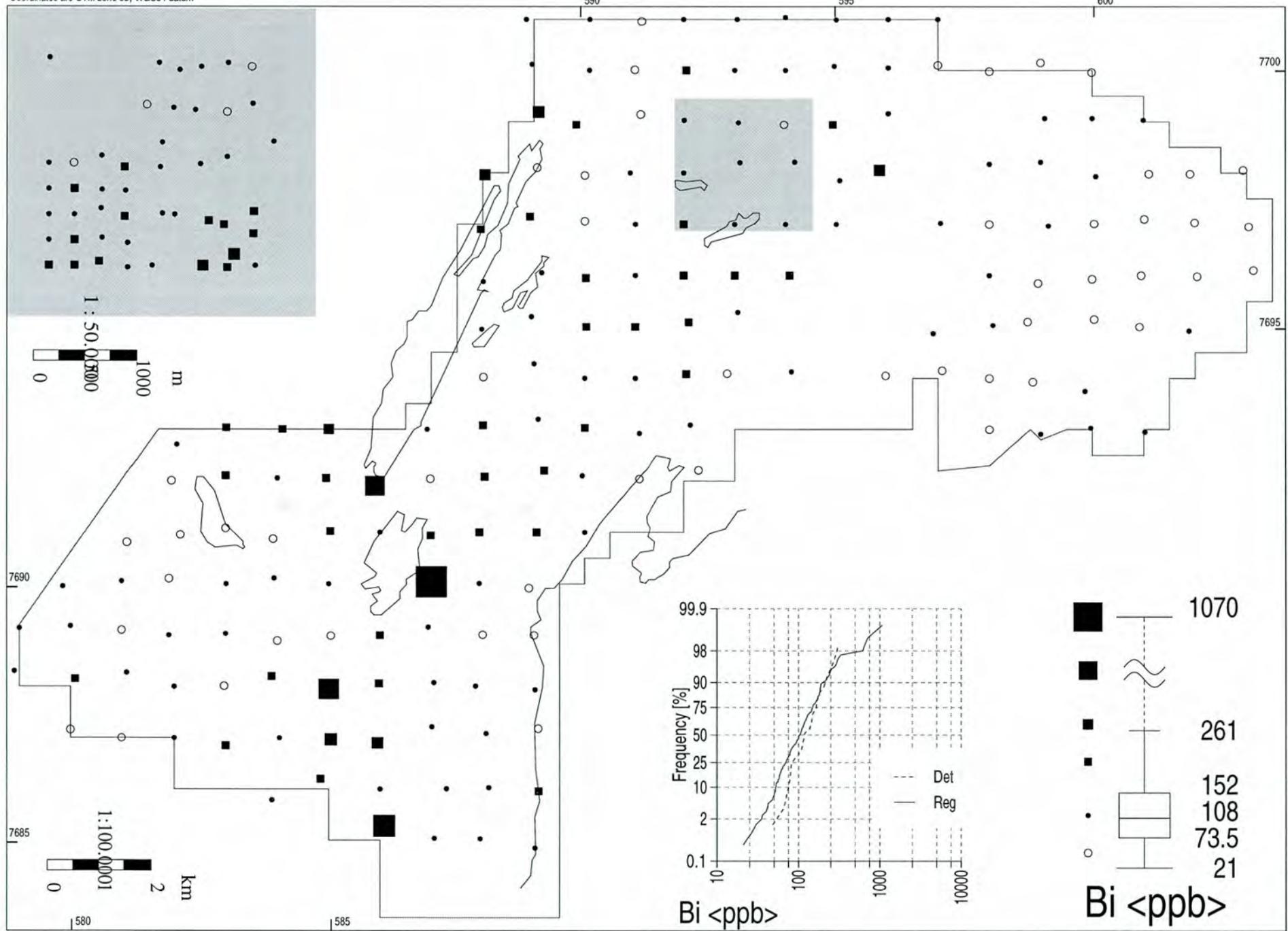
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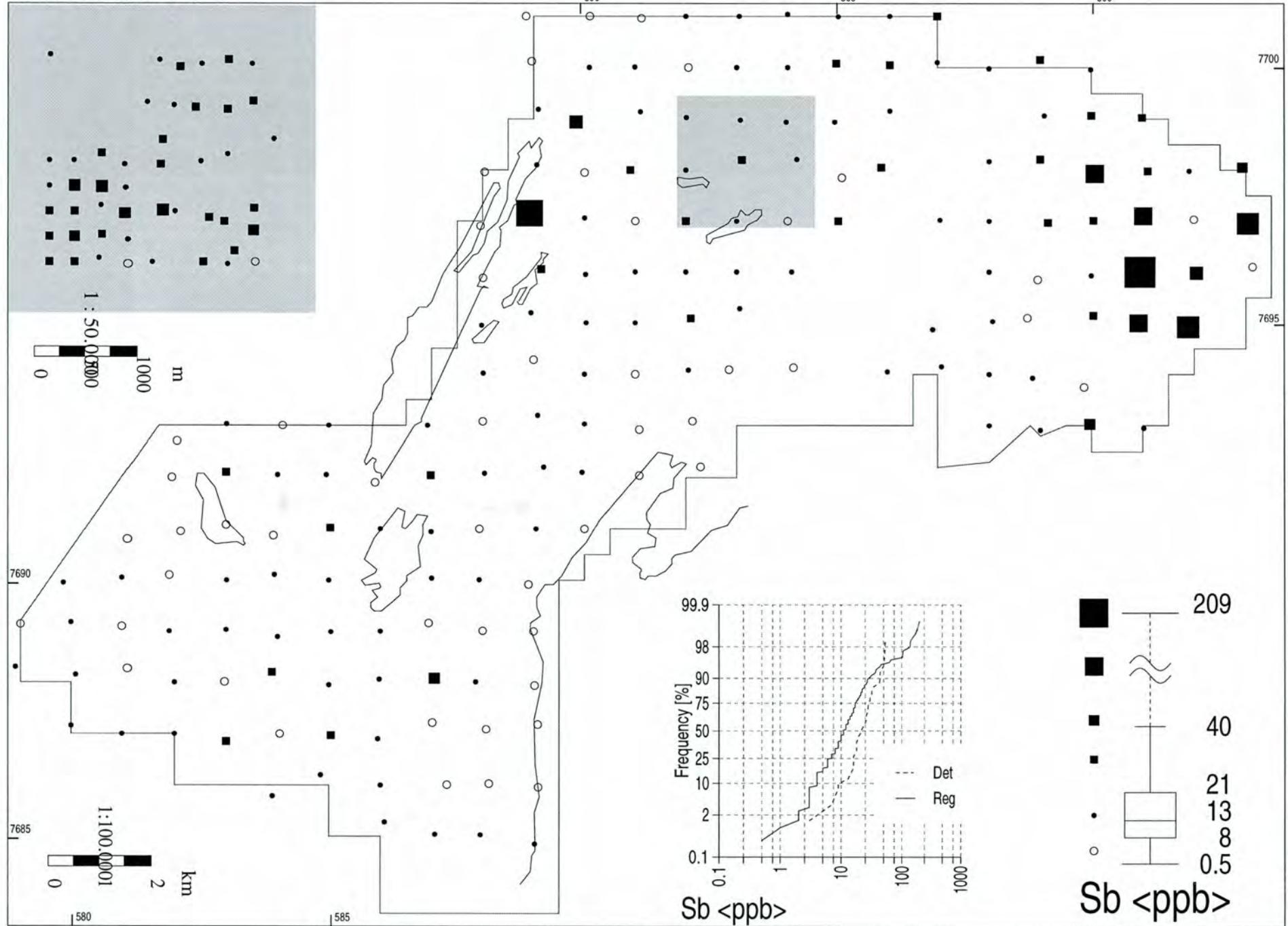
**KENOR
Pasvik
1996**

Topsoil
<0.06mm
Aqua Regia
ICP-AES
GF-AAS

Coordinates are UTM zone 35, WGS84 datum



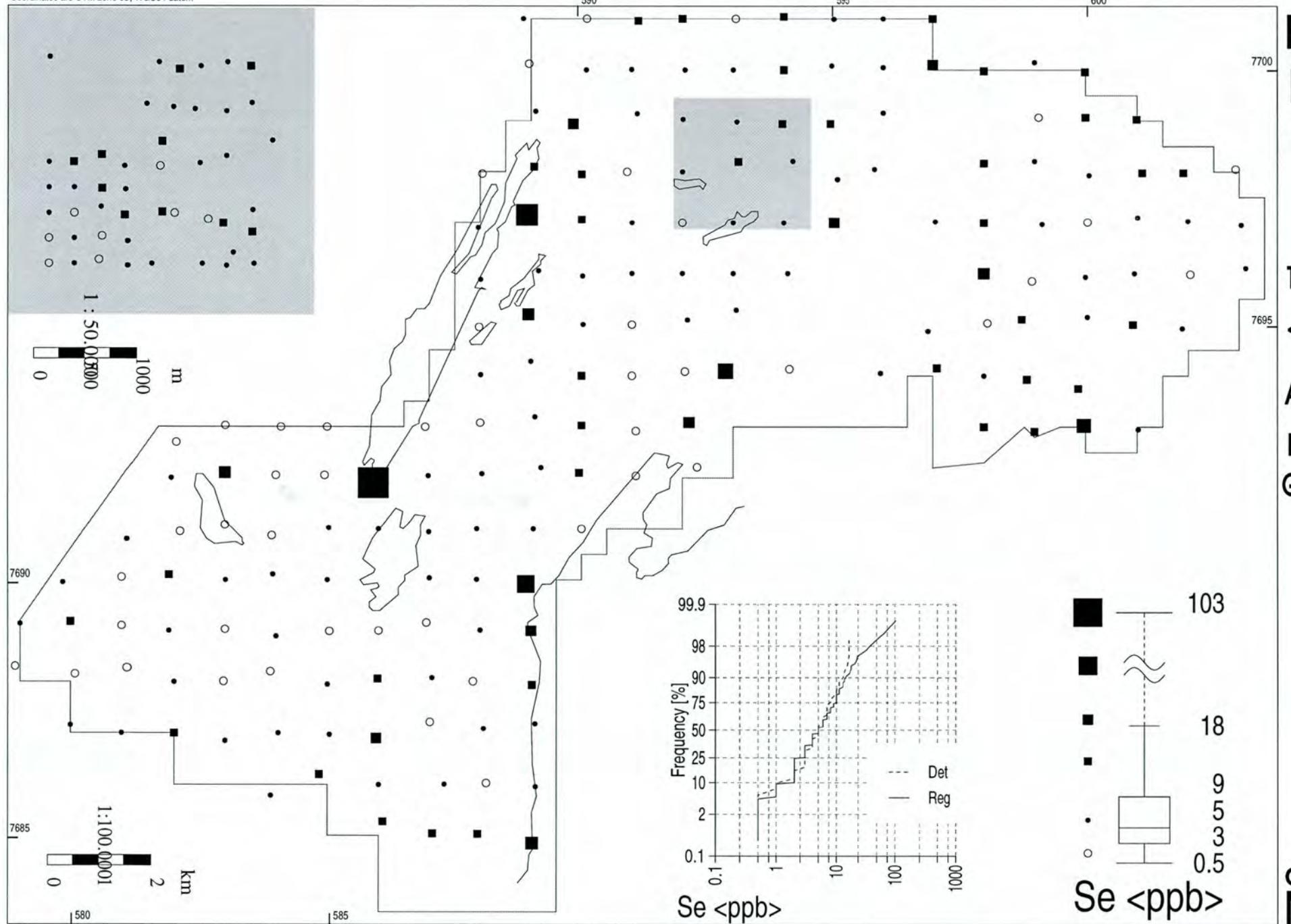
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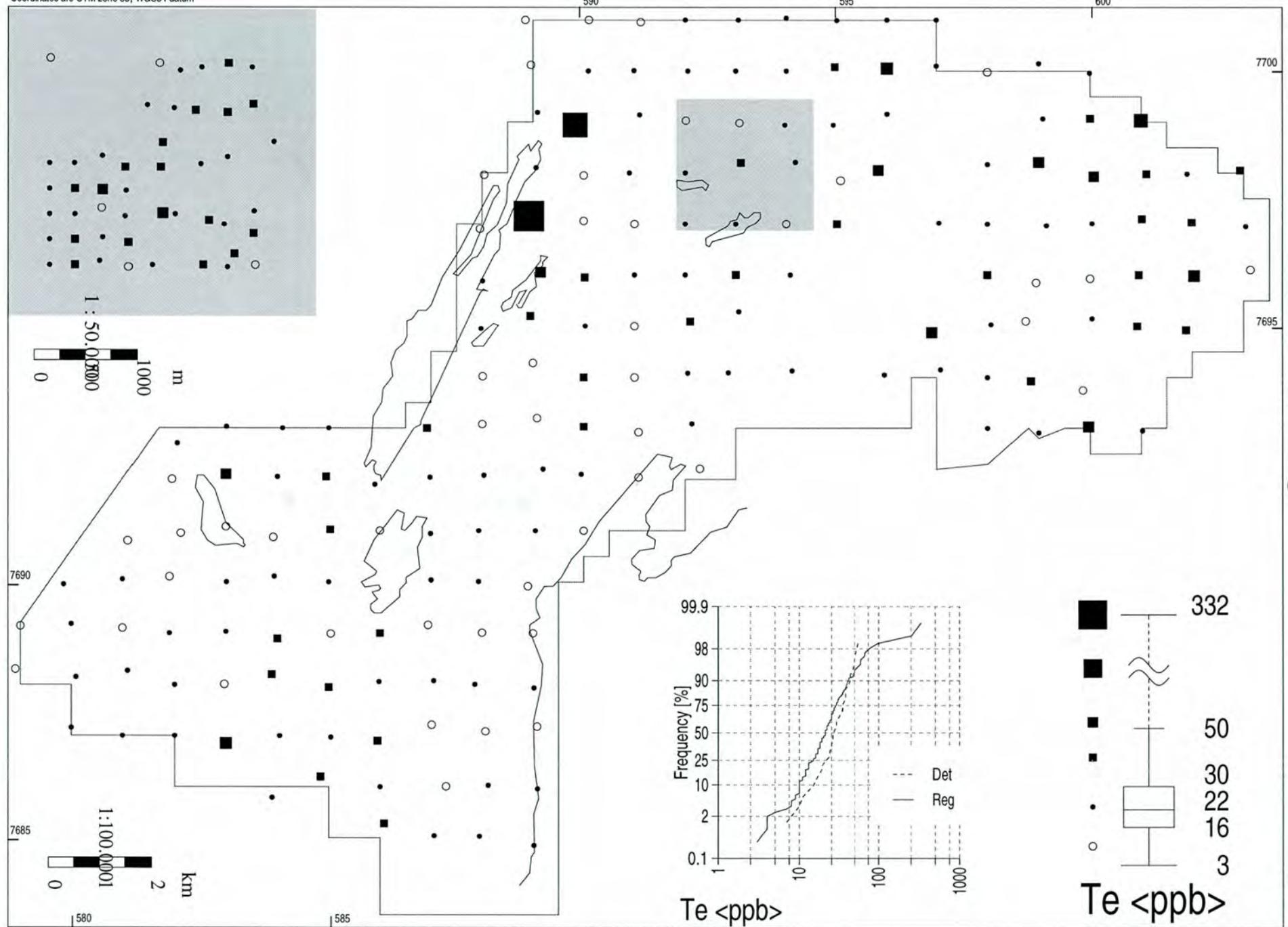
**KENOR
Pasvik
1996**

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Aqua Regia
ICP-AES
GF-AAS

Coordinates are UTM zone 35, WGS84 datum



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Pasvik
1996**

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<0.06mm
Aqua Regia
ICP-AES
GF-AAS**

Coordinates are UTM zone 35, WGS84 datum

