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Investigations of heavy mineral concentrates from stream sediment samples collected during the period 1982 to 1986 in the Nuuk area, West Greenland

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Abstract

During the period 1982-1987 604 stream sediment samples were collected and the heavy mineral concentrates investigated for scheelite and the concentrates analysed for various elements.

The regional sediment sampling programme has shown that scheelite occurs in most of the supracrustal rocks which appear as enclaves in gneisses over an area of about 40,000 km^2.

Follow-up by ultra-violet light has revealed that scheelite occurs as stratabound mineralisation in banded amphibolite, in skarn horizons and in tourmalinite. The scheelite mineralised horizons are up to 4 m wide and can be traced with intervals for up to 3 km along strike.

Some of the heavy mineral concentrates have been analysed for gold and some anomalies have emerged. It is determined that gold and tungsten are closely correlated.

Introduction

This report presents a brief account of the stream sediment sampling programme carried out by the Geological Survey of Greenland (GGU) during the period 1982 to 1987 in the Nuuk (Godthåb) area, West Greenland.

In this report the term stream sediment denotes the heavy mineral concentrate which is obtained by panning the fines from a sample consisting of coarse gravel and sand.

The regional stream sediment sampling programme has covered all major fjords from Fiskefjord in the north to Ikåtoq in the south. Detailed stream sediment sampling has been carried out on the islands of Sermitsiaq and Storø in Godthåbsfjord, in the Ivisârtoq and Isukasia areas east and northeast of Nuuk, and in selected areas in the fjords of Sermilik and Grædefjord. A very limited follow-up programme was carried out in the Bjørnesund area. All names mentioned in this report are shown on Plate 1.

The sampling has mainly been carried out by boat, which means that the coastal areas have been fairly detailed sampled whereas the inland areas have been sampled in less detail by helicopter. In the coastal areas sampling was carried out in most of the main streams irrespective on which areas they drained. This type of sampling was carried out during the years 1982, 1983 and 1985. In 1986 only streams draining Malene supracrustal rocks were sampled.

The density of the sampling was determined by the abundance of streams in the coastal areas. Some of the areas have thus been densely sampled whereas others have been only sparcely sampled. The westernmost parts of the Nuuk area are mostly rather flat and with few and slow running streams. These areas have therefor not been sampled.

All results are available on discette on request at the current price at the Geological Survey of Greenland.

Accessability and logistics

Nuuk is one of the so-called open water towns of West Greenland, which means that ships under normal circumstances can enter the harbour all 12 months of the year. This applies to the whole coastal area shown on Plate 1. During the period 1970-1987 sea ice has not created any problems in the area around Nuuk. However, in 1983 some problems for smaller vessels were encountered due to sea ice in the Fiskenæsset - Ikatoq area.

During winter the inner parts of the fiords are covered by ice, which renders the area inaccessable for smaller boats for 3 to 4 months per year.

Nuuk, the capital of Greenland, has a population of about 10,000. Most logistic support can be obtained here. Nuuk has a small airport with flight connections to Denmark via Sdr. Strømfjord and to North America via Frobisher Bay, Canada. Helicopters are locally available. There is a small shipyard and a variety of shops. Fiskenæsset has a population of a few hundred people and virtually no logistic support can be obtained there.

Topographic maps in scales 1:250,000 and 1:20,000 as well as aerial photographs in the scale 1:40,000 are available from Geodætic Institut, Copenhagen. Furthermore hydrological maps covering the area have been published by Greenland Technical Organisation, Copenhagen.

Previous work

The Nuuk area has been mapped by the Geological Survey of Greenland (GGU), and geologic maps in the scale 1:100,000 from most of the area have been published.

GGU has reently published an open file report on gold contents in the fine fraction from stream sediments in selected areas from West Greenland including parts of the Godthåbsfjord area (Steenfelt, 1987).

The Isua iron-formation at Isukasia has been prospected by Kryolitselskabet Øresund A/S in some detail. The company has also carried out scattered exploration during the sixties and seventies in parts of the Godthåbsfjord area.

During the seventies Renzy Mines Ltd. carried out an exploration programme in the Fiskenæsset area mainly within a large stratiform anorthosite complex.

Gemco Ltd. has carried out a limited exploration programme on some molybdenum showings at Narssaq south of Nuuk.

Kidd Creek Mines Ltd. carried out a brief reconnaissance exploration programme in 1985.

GGU has carried out a small programme with one geologist and one assistant working on stratabound scheelite in the Isua and Malene supracrustal rocks during the period 1982 to 1987.

Company reports from Kryolitselskabet Øresund A/S, Gemco Ltd.,Renzy Mines Ltd. and Kidd Creek Mines Ltd. that have exceeded the period of confidentiality are placed as open file at GGU where they are available for investigation. Copies of the released company reports can be purchased at GGU.

For further information consult the reference list.

General geology

In the Nuuk area two generations of supracrustal belts are found. 1. Isua-Akilia supracrustals, 2. Malene supracrustals (Escher and Watt, 1976).

1. The Isua - Akilia supracrustals with an age of 3.8 Ga outcrop mainly in the area east and north-east of Nuuk. The largest outcrop is found at Isukasia c. 150 km north-east of Nuuk at the edge of the Inland Ice, where the supracrustals form an arcuate belt up to 4 km wide and 30 km long. The so called Akilia supracrustals form smaller outcrops throughout the Godthåbsfjord area and constitute, together with the supracrustals at Isukasia, remnants of a once much larger supracrustal belt.

The main rock types in the Isua - Akilia supracrustals are banded amphibolites and acid volcanic rocks together with minor ultramafics and minor sedimentary horizons. Interlayered in the amphibolites are horizons of banded iron-formation, stratabound copper sulphides and stratabound scheelite occurrences (Appel, 1979,1980, 1985a). In the extreme north-eastern part of the supracrustal belt at Isukasia a major prospective iron ore body occurs with $2x10^9$ tonnes of ore with an average grade of 32 % Fe. In a horizon of silicate facies iron-formation 1.02 ppm gold has been found. (Appel, 1987a).

The Isua - Akilia supracrustals were repeatedly deformed and have been metamorphosed twice under amphibolite facies conditions.

2. The Malene supracrustal rocks and presumed Malene supracrustals occur as large belts over an area of c. 40,000 km^2. These supracrustals are in the order of 2.8 to 3.1 Ga. old. The Malene supracrustals are dominated by banded amphibolites, locally with preserved pillow structures. Large lenses and bands of ultramafic rocks are mostly strongly altered but locally spinifex texture has been recognised. Extensive metasedimentary sequences occur in the Malene supracrustals comprising quartzites, Mg-rich metapelites and tourmalinites (Appel, 1985b, 1986, in press; Beech & Chadwick, 1980; Chadwick, 1981,1986; Chadwick & Coe, 1983, Escher & Watt, 1976; Appel & Garde, 1987).

In the Malene supracrustals minor horizons of iron-formation are found together with layers up to 1.5 m wide and traceable intermittantly for several hundreds of metres along strike of massive to semimassive sulphides mainly pyrrhotite with small amounts of chalcopyrite, both of which locally contain gahnite. In the banded amphibolites extensive scheelite occurrences are seen. The scheelite has been found as stratabound low grade mineralisation in amphibolite and in tourmalinite. Scheelite-bearing banded amphibolite can be traced for kilometres along strike and the individual mineralised horizons are up to 4 m wide. In the Ivisârtoq area an about 3 km long scheelite-rich skarn horizon has been found (Appel, in press). The scheelite-bearing supracrustal sequences have been traced for tens of kilometres along strike.

The Isua and the Malene supracrustal rocks are enclosed in the Amîtsoq and Nûk gneisses respectively. A large stratiform anorthosite complex is seen intrusive in the Malene supracrustals. This anorthosite complex is named the Fiskenæsset complex from the village Fiskenæsset south of Nuuk, where the largest outcrops occur. The Fiskenæsset complex has a strike length of more than 200 km. In the anorthosites extensive bands of chromitite are found. These bands, which can be traced intermittantly for several kilometres, are generally low grade with 15-30% CrO_2 and a Cr/Fe ratio of 1:1. In the anorthosites minor ultramafics occur of which some contain thin bands of chromitite and/or small amounts of sulphides. Platinum group elements in amounts of up to 5 ppm have been found in the ultramafics (Ghisler, 1976).

The Malene supracrustals have been repeatedly deformed and metamorphosed under amphibolite facies conditions. Locally Malene supracrustals have been metamorphosed under granulite facies conditions e.g. in the Sermilik area south of Nuuk. This granulite facies metamorphism has apparently not affected the stratabound scheelite mineralisations (Appel, 1987b).

The last major rock forming event in the Nuuk area was the intrusion of the Qôrqut granite about 2550 m.y. ago. No mineral occurrences have been found associated with the Qôrqut granite.

Sampling programme

The stream sediment sampling was carried out during the period 1982 until 1987 with the exception of 1984. During the years the sampling programme and the analytical programme has been changed. It is thus appropriate to present a description of the sampling procedure and the analytical programme for each year.

1982. Most of the sampling was carried out on a semi-regional scale covering most of the Godthåbsfjord area. The density of the sampling was determined by the abundancy of streams, and all major streams were sampled regardless of which area they drained.

The sampling was carried out as follows: 4 litres of coarse gravel and sand were collected. The material was sieved through a 6 mesh brass sieve. The fines, usually amounting to about 10 percent were panned and inspected under ultraviolet light and the number of scheelite grains were counted. In the laboratory the samples were dried and separated in bromoform. The heavy material was weighed and the number of scheelite grains were counted again, and the number of scheelite grains pr 4 litres of sample was calculated. Thereafter c. 0.5 gramme of sample was taken by a small sample splitter, and the samples were analysed by spectrographic methods for the following elements: W, Mo, Pb, Cu, Cr, Co, V, Mn, Zr, Ni and Fe. The analyses were carried out by H. Bollingberg, Geological Institute, Copenhagen.

1983. Most of the stream sediment sampling was carried out in the Godthåbsfjord and Ameralik areas from a boat. The Isukasia area was sampled by helicopter. The density of the regional sampling was determined by the streams available. All streams were sampled irrespective of whether they drained areas with supracrustal or gneis.

The sampling was carried out as follows: 5 litres of coarse gravel and sand was sieved through a plastic sieve with 1 mm holes. Thereafter the same procedure as 1982. The samples were also analysed by spectrographic methods for boron and tin in addition to the elements mentioned above.

1985. During this field season the southern part of the Nuuk area was sampled, and most of the sampling was carried out by boat. A little follow-up sampling was done by helicopter in the Ameralik area.

The sampling was carried out as follows: about 10 kg or 5 - 6 litres of coarse gravel and sand was sieved through a plastic sieve with 1 mm holes. Thereafter the same procedure as 1982.

1986. Sampling was carried out in the Sermilik and Grædefjord area south of Nuuk by boat. Furthermore the inland area was sampled from a helicopter. This year only streams draining supracrustals were sampled. A large part of the sampling in the Sermilik, Grædefjord and Ivisårtoq area was follow-up sampling from either boat or helicopter.

The sampling was carried out as follows. Coarse gravel and sand filling 3 sieves (c. 5-8 kg) was sieved through a plastic sieve with 1 mm holes. The volume of fines was measured, and after panning the number of scheelite grains were counted. In addition 3 "bulk" samples were collected where about 50 kg of gravel and sand was sieved and panned. After drying the number of scheelite grains were recounted, and the number of scheelite grains pr. one litre of fines calculated. Thereafter some of the collected samples were chosen for analyses. C. 10 grammes from each of these samples was crushed and analysed by neutron activation by Bondar Clegg, Canada, for the following elements: Sc, Cr, Fe, Co, Ni, As, Se, Rb, Mo, Ag, Cd, Sb, Cs, Ba, La, Eu, Tb, Yb, Hf, Ta, W, Ir, Au, Th and U. It should be emphasized that these samples were not separated in heavy liquids before analyses.

In the Fiskefjord area north of Nuuk a small stream sediment sampling programme was carried out. These samples have not been analysed but were investigated for scheelite (Table 6 and Plate 36).

Discussion of sampling problems

The most frequent problem is the scarcity of suitable sample material. Quite a few streams are very fast running and there is virtually nothing but large boulders in the stream bed which renders them impossible to sample. Another problem is posed by streams draining glaciers or traversing areas with major moraine deposits. These streams carry large quantities of gravel and sand, but the origin of the sediment is uncertain. Very few streams are really slow running. These streams occur in the flat coastal areas. Some of the streams carry fine sand whereas others carry no sediment at all.

Distance of sediment transport is obviously very important, and several test samplings have been carried out in order to evaluate how far scheelite anomalies can be traced before the scheelite grains are disintegrated. The transport distance is surprisingly short rarely amounting to more than five hundred metres.

On Storø in Godthåbsfjord a stream was investigated from a place where an approximately one metre wide scheelite mineralized hornblendite with well over 2 % WO_3 occur in the riverbed. The stream was sampled downstream from the scheelite occurrence at intervals of about 20 m. The first samples below the scheelite occurrence contained 10 to 15 three to four millimetre big grains of scheelite, further down for the next 40 m the number of scheelite grains increased and the size decreased. However, at a distance of 100 m there were less than 5 grains of scheelite pr. 5 litres of gravel and sand. This indicates that the fragile scheelite grains disintegrate very quickly and that stream sediment samples with less than 5 grains of scheelite pr. 5 litres of samples are worth while to do detailed investigation.

Several tests have been carried out in order to evalue the reproduceability of this sampling programme. In most of the tests the number of scheelite grains found one year was very close to the number found one or two years later. However, one remarkable exception was found. In 1983 a stream on the southern shore of Kobbefjord next to Nuuk was sampled and the yield was 15 grains of scheelite pr. 5 litres of sediment. Next year the stream was resampled, but without finding any scheelite whatsoever. A tentative explanation is that there had been a moraine transported scheelite-bearing boulder in the stream, which gradually was worn down, to finally disappear.

Tests were carried out evaluate the importance of sample material in the streams. In a stream a sample consisting of coarse gravel and sand was collected and found to contain more than 20 grains of scheelite pr. 5 litres of sediment. On the other bank of this stream was a sandbar which was sampled. This latter sample was found to contain only one grain of scheelite pr. 5 litres of sediment.

Tests were also carried out in order to see whether sampling by different people had any marked influence on the result. Three persons sampled a particular stream on more or less the same spot, and the results were agreed within 10 percent. It should be emphasised that most of the samples mentioned in this report have been sampled by the author only. The samples in the Fiskefjord area have been sampled by several geologists mainly from the mapping department of the GGU.

Contamination has also to be considered. Greenland is generally considered virgin with virtually no pollution. Only one example of contamination was found. That was in stream sediment 263689 from one of the islands in Godthåbsfjord where the sample contained a single piece of lead shot.

RESULTS

The samples were listed in tables 1-5 according to the year in which they were sampled. In these tables the geographical coordinates as well as weight of the heavy fractions are presented. For the samples collected in 1986 and 1987 the tables also gives the altitude at which the samples were collected as well as the volume of the fines.

Plates 2 and 18 show all stream sediment sampling sites except follow-up samples.

In tables 7-8 the analyses on samples collected during 1982, 1983 and 1985 are listed. These samples were analysed by spectrographic methods. The analytical results as well as the scheelite contents in these samples are also plotted on plates 3-17.

In tables 9-10 are listed the neutron analyses of some of the samples collected in 1986 listed. The results as well as the scheelite contents are plotted on plates 19-35. Since not all samples have been analysed the sample sites where no analyses have been carried out are marked with: +.

The samples collected in the Fiskefjord area have not been analysed but only checked for scheelite. These samples are thus listed separately (table 6) and are plotted on a separate map (Plate 36).

In the following a brief evaluation of the analytical data as shown on the plates is presented.

1982-1985

Scheelite. Scheelite displays a very good correlation with the supracrustal belts, and virtually all scheelite-bearing samples can be correlated with major or minor outcrops of Isua or Malene supracrustal rocks.(Plate 3).

Tungsten. Only few samples contain more than about 50 ppm W, which is the detection limit by spectrographic methods. All the anomalous samples found in the area can be correlated with the supracrustal belts. (Plate 4)

Boron. Only a fraction of the samples have been analysed for boron, and high boron contents can be directly related to supracrustal rocks, where the boron presumably originates from stratiform tourmalinites.(Plate 5)

Chromium. Most of the chromium anomalies in the area can be ascribed to ultramafic rocks e.g. at Isukasia or to chromitites in the Fiskenæsset anorthosites. (Plate 6).

Tin. Only few samples have been analysed for tin and no prominent anomalies have been discovered. (Plate 7).

Molybdenum. Only one of the molybdenum anomalies (Kobbefjord south of Nuuk) can be ascribed to Malene supracrustals, the remaining anomalies are enigmatic. (Plate 8).

Manganese. This element is uniformly distributed with slightly elevated contents in streams draining Malene supracrustal rocks in Godthåbsfjord. Some of the manganese anomalies south of Ameralik are unaccounted for since no supracrustal are found in that area. (Plate 9).

Lead. Most samples contain very little lead apart from some of the samples derived from Malene supracrustals. (Plate 10)

Copper. Most of the copper anomalies can be ascribed to either Isua or Malene supracrustals. A few unexplained anomalies occur in Buksefjorden and Fiskenæsfjorden (Plate 11).

Iron. Iron is quite uniformly distributed in the stream sediment samples (Plate 12).

Cobalt. This element is uniformly distributed throughout the area with slightly elevated contents in the western Isukasia area. (Plate 13).

Vanadium. This element displays virtually the same distribution pattern as titanium, with high contents in streams draining granulite facies areas. (Plate 14).

Titanium. This element appears in quite high concentrations in stream sediments in the area between Ameralik and Fiskenæsset. The high titanium contents cannot be correlated with any particular rock type. It should, however, be noted that most of the titanium anomalies occur in areas which were metamorphosed under granulite facies conditions. (Plate 15).

Zirconium. This element displays very few anomalies and appears to be quite uniformly distributed with low contents in the supracrustal belts and higher contents in the gneisses. It should be noted that the intrusive Qôrqut granite shed surprisingly few zircon grains into the streams. (Plate 16).

Nickel. This element is uniformly distributed, and occurs in small amounts only. The few nickel anomalies can probably be explained by the presence of basic to ultrabasic rocks in some of the supracrustal rocks and the anorthosite complex. (Plate 17).

1986

Scheelite. All scheelite anomalies can be ascribed to supracrustal rocks of which the supracrustal rocks at Ivisârtoq, Sermilik and Grædefjord stands out especially (Plate 19).

Scandium. Only a couple of samples from streams draining supracrustals in Sermilik appear to be anomalous (Plate 20).

Chromium. No anomalous samples (Plate 21).

Iron. No anomalous samples (Plate 22).

Cobalt. No anomalous samples (Plate 23).

Nickel. A few slightly anomalous samples originating from supracrustal rocks (Plate 24).

Zinc. No anomalous samples (Plate 25).

Arsenic. No anomalous samples (Plate 26).

Molybdenum. No anomalous samples (Plate 27).

Barium. A few anomalous samples appear in the Ivisârtoq area, where a barium-bearing sulphide-rich zone has been found (Plate 28).

Lanthanum. Quite a few anomalous samples displaying a distinct distribution pattern with the highest lanthanum contents in supracrustals which have been metamorphosed under amphibolite facies conditions, whereas supracrustals metamorphosed under granulite facies conditions appear to be depleated in lanthanum (Plate 29).

Ytterbium. Shows the same peculiar distribution pattern as lanthanum (Plate 30).

Hafnium. This element shows approximately the same distribution pattern as lanthanum apart from remarkably low hafnium contents in the samples from Ivisârtoq (Plate 31).

Tungsten. All tungsten anomalies correlate very well with the number of scheelite grains (Plate 32).

Gold. The metal shows a perfect correlation with tungsten and outline the following areas for further investigation: Ivisârtoq, Sermilik, Grædefjord and Bjørnesund (Plate 33).

Thorium. This element is clearly depleated in the granulite facies metamorphosed area (Plate 34).

Uranium. Shows the same distribution pattern as thorium (Plate 35).

Conclusion

The main reason for launching the stream sediment sampling programme was the discovery of scheelite in a stream sediment collected on Storø in 1982. The major interest was thus to outline areas where detailed exploration for scheelite should be carried out.

The most promising areas for scheelite exploration appear to be the Malene supracrustals in the Godthåbsfjord area from Kobbefjord to Sermitsiaq, Bjørneøen, Storø and Ivisârtoq. Some detailed scheelite exploration has been carried out in parts of these areas with promising results (see below). It should, however, be borne in mind that the work essentially was carried out by one geologist and one assistant only, and that night work with ultraviolet light can only be carried out during the period from about mid-August to mid-September.

Ivisârtoq.

In view of the discoveries made during the 1987 field season, the Ivisârtoq area warrants a more detailed account.

The area is situated in the inner part of the Godthåbsfjord area (Plate 1). In the Ivisârtoq area a major outcrop of Malene supracrustal rocks mainly consist of thick piles of pillow basalts with intercalations of sulphide-rich metasediments. Two of the basaltic cycles are separated by a marker horizon comprising magnetite-rich schists, metasediments as well as an up to 20 m thick skarn horizon. The marker horizon has been traced for more than 7 km along strike, the skarn horizon, which is scheelite-bearing (see below), has so far been traced for well over 3 km along strike.

Stream sediment samples collected in 1986 yielded concentrates with up to 160 grains of scheelite per litre. In 1987 a few additional stream sediment samples were collected and these contained well over 500 grains of scheelite per litre.

Subsequent detailed work with ultraviolet light was carried out along the streams which yielded the highly anomalous stream sediments. The results, however, were somewhat discouraging. Scheelite as tiny grains appeared to be quite abundant in the mafic volcanics, but not anywhere near economic grades.

It was thus decided to traverse the whole supracrustal sequence and particularly the marker horizon by night with ultraviolet light. As a result an extensive scheelite mineralisation was discovered in the skarn horizons. The scheelite-rich skarns bands, which are frequently garnitiferous, are from 0.5 to

4 m wide and can be traced with a few intervals for more than 3 km. No systematic chip sampling has been undertaken, but large grab samples yielded interesting grades of tungsten (Table 10).

It should be noted that the regional stream sediment sampling programme pin pointed the Ivisârtoq area as an interesting area, but that the richly mineralised horizon never would have been found by stream sediment sampling also no matter how detailed is was.

A few additional areas have been outlined as interesting for scheelite exploration; these are Sermilik, Grædefjord, Bjørnesund and Ikâtoq. In the Sermilik area a few nights exploration with the ultraviolet light have been carried out revealing abundant scheelite mineralisation. No exploration with ultraviolet light has been carried out in the other areas.

Several of the collected stream sediment samples have been analysed for gold and some gold anomalies have emerged. It is furthermore obvious that gold displays a good correlation with tungsten. It should, however, be emphasized that the samples are generally too small for a reliable gold exploration programme.

Reference list

This reference list is not an exhaustive list of accounts written on the Nuuk area. The list mainly contains articles dealing with the geology of the supracrustal rocks and with the mineralisations found in the Nuuk area. Open file company reports availably for investigation at the Survey are listed at the end of this section.

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Copies of released company reports can be requested from GGU against payment of copying costs.

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Platinomino A/S. 1976. Investigations on the Platinomino A/S Concession, Fiskenæsset, Greenland during the year ending June 15, 1976. Open for investigation at GGU from 31 Dec. 1988.

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Platinomino A/S. 1978. Investigations on the Platinomino ApS exploration concession, Fiskenæsset Greenland during the year ending December 31, 1978. Open for investigation at GGU from 31 Dec. 1988.

Platinomino A/S. 1978. Current status of exploration for chromite and rubies on the concession at Fiskenæsset Greenland with schedule of proposed future investigations. Open for investigation at GGU from 31 Dec. 1988.

Platinomino A/S. 1979. Investigations on the Platinomino ApS exploration concession - Fiskenæsset region Southwest Greenland during the year ended December 31, 1979. Open for investigation at GGU from 31 Dec. 1988.

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Platinomino A/S. 1981. Investigations on the Platinomino ApS exploration concession, Fiskenæsset, Greenland during the year ending December 1981. Open for investigation at GGU from 31 Dec. 1988.

Platinomino A/S. 1982. Investigations on the Platinomino ApS exploration concession, Fiskenæsset, Greenland, during the year ending december 31, 1982. Open for investigation at GGU from 31 Dec. 1988.

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Table 1

Stream sediments collected 1982

GGU NO	LONGITUDE	LATITUDE	ALTITUDE	WEIGHT GRAM	VOLUME LITRE	SCHEELITE PR. 4L.
261601	-50.49128	64.63864		15.10		36
261602	-50.49128	64.63864		22.60		0
261603	-50.14276	64.82100		5.00		6
261604	-50.20225	64.80301		19.80		13
261605	-50.20783	64.79671		27.90		16
261606	-50.21844	64.79032		11.00		5
261607	-50.23067	64.77997		3.50		11
261608	-50.23420	64.77745		33.40		97
261613	-50.23815	64.77511		24.50		88
261615	-50.36279	64.74822		7.90		42
261617	-50.40806	64.73682		16.50		11
261618	-50.52728	64.74577		9.00		3
261621	-51.08355	64.42080				3
261622	-51.08355	64.42080				78
261623	-51.08355	64.42080				10
261624	-51.08355	64.42080				2
261625	-51.08355	64.42080				7
261626	-51.08355	64.42080				55
261633	-51.08355	64.42080				180
261634	-51.08355	64.42080				32
261635	-51.08355	64.42080				30
261644	-51.08355	64.42080				13
261645	-51.08355	64.42080				22
261646	-51.08355	64.42080				3
261647	-51.08355	64.42080				5
261648	-51.08355	64.42080				6
261665	-51.02784	64.54300		11.80		5
261666	-50.95902	64.53978		19.50		4
261667	-50.84446	64.51778		30.10		12
261668	-51.44681	64.27038		9.20		14
261669	-51.42209	64.28444		22.50		42
261670	-51.41386	64.29219		9.10		2
261671	-51.42049	64.29309		15.00		2
261672	-51.45297	64.28980		13.00		11
261673	-51.47814	64.28004		15.70		6
261674	-51.55541	64.25120		17.20		5
261675	-51.55616	64.27881		12.50		3
261676	-51.41362	64.34616				0
261677	-51.41529	64.34759		10.50		0
261678	-51.39588	64.32999		13.10		15
261679	-51.33966	64.32447		10.50		11
261680	-51.33303	64.32420		19.30		17
261681	-51.20513	64.31131		8.00		0
261682	-51.19933	64.30977		11.00		0
261683	-51.17697	64.29690		8.90		1
261684	-51.18630	64.28612		19.50		1
261685	-51.21383	64.28962		12.30		0
261686	-51.25852	64.27091		15.50		0
261687	-51.22935	64.26067		14.90		0
261688	-51.23079	64.24826		20.80		1
261689	-51.25829	64.25014		10.60		0
261690	-51.27878	64.25832		12.30		0

Stream sediments collected 1982

GGU NO	LONGITUDE	LATITUDE	ALTITUDE	WEIGHT GRAM	VOLUME LITRE	SCHEELITE PR. 4L.
261691	-51.28540	64.26074		34.40		9
261692	-51.34343	64.24154		12.90		0
261693	-51.27702	64.21264		8.80		1
261694	-50.96110	64.21592		11.80		0
261695	-51.41442	64.16746		25.80		3
261696	-51.53233	64.18523				0
261697	-51.59898	64.17239		25.20		41
261698	-51.62211	64.16091		22.40		64
261699	-51.66565	64.13820		17.10		0
261700	-51.13418	64.20462		9.30		0
263616	-50.99710	64.41267		23.70		6
263617	-51.01827	64.39004		17.90		9
263618	-51.04057	64.37990		13.00		3
263619	-50.89570	64.26346		41.00		15
263620	-51.09902	64.31512		10.90		3
263621	-51.12100	64.31154		19.80		2
263622	-51.15281	64.26749		9.30		2
263623	-51.23408	64.22289		7.20		0
263672	-51.48230	64.39039		5.50		0
263673	-51.42132	64.40604		9.00		5
263674	-51.42755	64.40468		3.20		2
263675	-51.41362	64.40479		8.20		1
263676	-51.33313	64.44751		29.70		0
263677	-51.36614	64.42977		12.50		0
263678	-51.34656	64.47115		5.20		0
263679	-51.32974	64.48618		8.40		2
263680	-51.30705	64.49825		14.80		0
263681	-51.28210	64.51086		6.10		5
263682	-51.27605	64.51364		6.40		1
263683	-51.26561	64.51956		3.50		0
263684	-51.15319	64.55114		10.60		0
263685	-51.11740	64.53816		7.50		0
263686	-51.04915	64.50390		14.90		0
263687	-51.04313	64.53774		4.80		20
263688	-51.13649	64.52660		5.60		3
263689	-51.16521	64.50528		10.50		16
263690	-51.17833	64.49531		3.30		0
263691	-51.18606	64.49072		10.10		10
263692	-51.18940	64.48640		16.70		12
263693	-51.19296	64.47372		10.00		9
263694	-51.19609	64.46644				4
263695	-51.08355	64.42080				33
263696	-51.08355	64.42080				13
263697	-51.08355	64.42080		17.00		160
263698	-51.08355	64.42080				46
263699	-51.08355	64.42080				6
263700	-51.08355	64.42080				77
293614	-51.08393	64.43454		3.40		12
293618	-51.08355	64.42080				48
293619	-51.08355	64.42080				35
293620	-51.08355	64.42080				4
293621	-51.08355	64.42080				18

Stream sediments collected 1982

GGU NO	LONGITUDE	LATITUDE	ALTITUDE	WEIGHT GRAM	VOLUME LITRE	SCHEELITE PR. 4L.
293627	-51.08622	64.43409		7.90		22
293628	-51.10894	64.42602		7.60		15
293629	-51.12019	64.42081		3.90		8
293630	-51.13228	64.41560		9.70		44
293631	-51.13686	64.41363		19.90		75
293632	-51.14310	64.41075				30
293633	-51.15560	64.40689		3.40		3
293634	-51.21298	64.44495		8.50		2
293635	-51.21610	64.43514		7.00		10
293636	-51.13762	64.36614		5.60		14
293637	-51.32903	64.36243		4.70		0
293642	-51.08355	64.42080				1
293643	-51.08355	64.42080				43
293644	-51.08355	64.42080				6
293645	-51.08355	64.42080				51
293646	-51.08355	64.42080				69
293647	-51.08355	64.42080				15
293648	-51.08355	64.42080				0
293649	-51.08355	64.42080				11
301101	-51.16268	64.19185		8.00		1
301102	-51.19735	64.18187		7.00		2
301103	-51.27632	64.17270		8.00		1
301104	-51.42695	64.21608		27.80		1
301105	-51.63209	64.12545		24.60		17
301106	-51.64494	64.14474		11.50		18
301107	-51.60194	64.16258		16.40		80
301108	-51.58781	64.13843		48.60		4
301109	-51.58639	64.13987		34.20		38
301110	-51.58579	64.14130		40.40		9

Stream sediments collected 1983

GGU NO	LONGITUDE	LATITUDE	ALTITUDE	WEIGHT GRAM	VOLUME LITRE	SCHEELITE PR. 4L.
301111	-51.58211	64.09652		19.56		0
301112	-51.55829	64.09955		8.34		6
301113	-51.29403	64.01198		25.38		0
301114	-51.29648	64.00999		22.28		0
301115	-51.33009	64.00863		18.27		0
301116	-51.36929	64.01830		18.65		10
301117	-51.33944	64.03794		8.72		0
301118	-51.43155	64.03540		29.54		3
301119	-51.29518	64.05838		15.18		0
301120	-51.04763	64.08007		11.73		0
301121	-51.02649	64.07581		22.02		0
301122	-50.99373	64.08826		14.34		2
301123	-50.88864	64.09229		14.43		0
301124	-50.85958	64.09816		12.38		2
301125	-50.77246	64.13245		17.29		1
301126	-50.76306	64.14070		20.63		8
301127	-50.61875	64.16367		18.01		2
301128	-50.44249	64.16369		22.12		0
301129	-50.50079	64.14699		23.05		0
301130	-50.47938	64.14655		30.44		0
301131	-50.35379	64.17785		14.11		0
301132	-50.37451	64.21740		12.59		0
301133	-50.30633	64.23686		17.05		0
301134	-50.51523	64.20039		10.60		0
301135	-50.45228	64.28377		11.47		1
301136	-50.50240	64.30477		15.91		0
301137	-50.42928	64.33185		11.22		4
301138	-50.37658	64.34939		8.78		3
301139	-50.43137	64.35251		23.33		1
301140	-50.46056	64.34098		12.61		3
301141	-50.48530	64.31716		22.01		27
301142	-50.59950	64.25947		19.72		18
301143	-50.58278	64.26819		27.29		0
301144	-50.59981	64.25596		18.03		1
301145	-50.61221	64.25626		20.64		10
301146	-50.61480	64.26020		23.13		9
301147	-50.70975	64.21682		20.71		0
301148	-50.79319	64.20375		26.94		0
301149	-50.90496	64.15879		21.58		0
301150	-51.08355	64.13101		10.46		0
301151	-51.22703	64.11300		11.22		0
301152	-51.35594	64.09548		12.15		0
301153	-51.49168	64.07937		12.92		0
301154	-51.43115	64.27903		3.77		0
301155	-51.42188	64.28436		11.24		14
301156	-51.46061	64.26362		4.23		26
301157	-51.61942	64.20273		10.29		2
301158	-51.62474	64.19975		10.35		0
301159	-51.67380	64.17092		9.93		6
301160	-51.66286	64.17032		10.91		1
301161	-51.66962	64.16742		16.23		3
301162	-51.55697	64.15900		30.44		4

Stream sediments collected 1983

GGU NO	LONGITUDE	LATITUDE	ALTITUDE	WEIGHT GRAM	VOLUME LITRE	SCHEELITE PR. 4L.
301163	-51.61527	64.12936		28.61		14
301164	-51.60950	64.12911		24.42		6
301165	-51.54538	64.20796		9.03		6
301166	-51.49149	64.20672		13.22		9
301167	-51.46859	64.20811		11.43		0
301168	-51.16028	64.50891		16.75		17
301169	-50.82682	64.57735		15.46		11
301170	-50.82250	64.58488		12.12		2
301171	-50.78547	64.58635		9.34		0
301172	-50.66781	64.55250		3.85		0
301173	-50.68484	64.54433		4.71		1
301174	-50.71421	64.56244		7.59		5
301175	-50.60934	64.50103		11.19		2
301176	-50.55226	64.51237		6.14		0
301177	-50.45602	64.54189		7.79		0
301178	-50.59049	64.52463		12.95		1
301179	-50.64897	64.48564		4.20		0
301180	-50.19947	64.44272		16.53		6
301181	-50.27507	64.47649		22.54		1
301182	-50.31772	64.46154		16.34		4
301183	-50.37256	64.43368		14.61		2
301184	-50.47282	64.43483		9.17		0
301185	-50.61406	64.45177		7.40		0
301186	-50.61501	64.37305		11.69		0
301187	-50.66283	64.36938		12.23		2
301188	-50.75607	64.38701		32.34		2
301189	-50.93278	64.37767		11.23		0
301190	-50.98828	64.32380		10.94		0
301191	-51.02250	64.29255		3.03		0
301192	-50.20509	65.11821		8.74		10
301193	-50.23988	65.12094		10.07		10
301194	-50.20259	65.12522		8.79		10
301195	-50.18662	65.12902		14.86		6
301196	-50.20076	65.13493		10.75		7
301197	-50.19760	65.13961		4.12		19
301198	-50.18928	65.13953		11.62		8
301199	-49.82050	65.16676		11.01		7
301200	-49.82285	65.16865		14.99		7
301201	-50.19396	65.13799		10.42		7
301202	-50.18620	65.15481		8.22		9
301203	-50.15683	65.07992		12.89		47
301204	-49.94938	65.10142		10.53		30
301205	-49.92528	65.11139		11.36		4
301206	-49.81351	65.19460		19.81		9
301207	-49.83156	65.17800		11.12		8
301208	-49.83564	65.17387		7.12		9
301209	-49.90245	65.11705		19.76		31
301210	-49.90266	65.11947		19.96		36
301211	-50.15854	65.08216		18.47		39
301212	-50.18928	65.13952		7.26		0
301213	-50.18928	65.13952		19.45		34
301214	-50.29209	64.93666		13.58		5

Stream sediments collected 1983

GGU NO	LONGITUDE	LATITUDE	ALTITUDE	WEIGHT GRAM	VOLUME LITRE	SCHEELITE PR. 4L.
301215	-50.28469	64.93650		12.20		3
301216	-50.43698	64.89816		5.45		13
301217	-50.51895	64.87805		18.19		19
301228	-51.41021	64.29202		14.20		21
301229	-51.41021	64.29202		14.43		35
301230	-51.41021	64.29202		22.32		112
301231	-51.41021	64.29202		18.29		244
301232	-51.41021	64.29202		15.90		22
301233	-51.41021	64.29202		10.98		24
301234	-51.41021	64.29202		7.66		16
301235	-51.41021	64.29202		9.03		9
301236	-51.41021	64.29202		9.53		17
301237	-51.41021	64.29202		17.69		29
301238	-51.58124	64.13979		15.87		10
301239	-51.58144	64.13979		30.78		1
301240	-51.58659	64.13987		23.24		4
301241	-51.58375	64.14266		14.90		6
301242	-51.61590	64.12954		32.92		3
301243	-51.60971	64.12892		48.01		22
301244	-51.59742	64.13373		29.42		6
301245	-50.37809	64.76608		19.50		14
301246	-50.30571	64.79146		26.90		10
301247	-50.20932	64.79814		16.77		2
301248	-50.23594	64.78094		27.55		27
301249	-50.24258	64.77608		10.83		51
301250	-50.84516	64.57985		19.54		30
301251	-50.86220	64.58529		22.77		9
301252	-51.16393	64.50940		21.37		47
301253	-51.17119	64.51452		11.24		6

Stream sediments collected 1985

GGU NO	LONGITUDE	LATITUDE	ALTITUDE	WEIGHT GRAM	VOLUME LITRE	SCHEELITE PR. 4L.
274201	-50.94979	63.61065	2	12.20		2
274202	-50.95299	63.58594	2	3.72		2
274203	-50.94719	63.57910	4	21.65		5
274204	-50.92283	63.59704	1	13.57		1
274205	-50.91317	63.61761	1	18.56		1
274206	-50.92425	63.62141	80	17.78		6
274207	-50.92405	63.62141	240	19.63		29
274208	-50.92405	63.62141	260	18.84		5
274209	-50.92405	63.62141	430	16.45		1
274210	-50.29679	62.83530	3	9.75		0
274211	-50.05521	62.86311	5	5.70		0
274212	-50.15405	62.90887	3	6.76		0
274213	-50.14893	62.90896	3	26.12		13
274214	-50.14103	62.91175	1	18.89		1
274215	-50.14280	62.91040	1	41.50		2
274216	-50.10713	62.96091	3	15.39		0
274217	-49.98352	62.98271	1	23.23		0
274218	-49.93855	62.99279	2	6.70		2
274219	-49.84895	63.01938	3	9.36		0
274220	-49.78036	63.06072		15.30		8
274221	-49.75476	63.02558		26.38		4
274222	-50.15090	62.90672	30	21.35		0
274223	-50.14774	62.90752	40	22.12		7
274224	-50.14282	62.90572	110	18.52		2
274225	-50.14518	62.90672	70	19.38		9
274226	-49.81300	62.99213	25	13.13		22
274227	-49.81300	62.99213	25	8.70		17
274228	-50.12821	62.91326	40	14.55		2
274229	-50.10690	62.91595	40	9.45		0
274230	-50.15330	62.88847		36.95		46
274231	-50.14994	62.89278		22.89		3
274232	-50.14365	62.88756	50	11.66		0
274233	-50.14622	62.88505	50	14.26		9
274234	-50.14720	62.88423	50	12.82		8
274235	-50.14720	62.88423	50	17.05		24
274236	-50.14679	62.89008	20	14.07		1
274237	-50.15191	62.89520	60	31.03		10
274238	-50.15347	62.90285	80	10.98		0
274239	-50.15840	62.90285	70	25.07		11
274240	-50.15664	62.89305	20	14.51		4
274241	-50.19902	62.86321	2	13.83		2
274242	-50.21713	62.84963		5.89		0
274243	-50.23660	62.83174	2	4.77		1
274244	-50.29579	62.75914	10	6.09		0
274245	-50.30873	62.63297	5	5.31		0
274246	-50.28237	62.71958	5	3.89		0
274247	-50.19834	62.69002	10	16.88		3
274248	-50.20968	62.72886	3	3.79		0
274249	-50.18491	62.80520		5.02		0
274250	-50.15093	62.79889		7.79		3
274251	-50.09850	62.79410		1.94		0
274252	-50.05151	62.80359		8.37		0

Stream sediments collected 1985

GGU NO	LONGITUDE	LATITUDE	ALTITUDE	WEIGHT GRAM	VOLUME LITRE	SCHEELITE PR. 4L.
274253	-50.01740	62.82054	5	3.91		2
274254	-50.00598	62.82367	10	9.61		0
274255	-49.99946	62.82869	2	15.71		0
274256	-49.98704	62.83362	1	14.06		0
274257	-49.95733	62.85650		10.35		1
274258	-49.87526	62.89086	5	15.82		9
274259	-49.93611	62.87364		6.98		12
274260	-49.94502	62.86961		5.51		0
274261	-49.87941	62.83790	2	1.86		0
274262	-49.88357	62.83431	2	3.75		0
274263	-49.89168	62.83119	3	5.59		0
274264	-49.93067	62.82489	10	1.86		0
274265	-49.95827	62.81613	5	1.09		0
274266	-49.98743	62.80700	10	20.79		0
274267	-50.01482	62.79527	30	4.56		0
274268	-50.03298	62.78037	30	11.34		2
274269	-50.03476	62.77892	30	17.22		1
274270	-50.10255	62.76128		15.09		2
274271	-50.08514	62.74885		13.93		0
274272	-50.07007	62.74219		26.66		1
274273	-50.13720	62.71346		13.76		1
274274	-50.11210	62.72163		21.74		0
274275	-50.13043	62.75491		17.19		8
274276	-50.13456	62.75051		14.77		7
274277	-50.14362	62.73325		17.50		3
274278	-50.99228	63.52358	2	66.46		42
274279	-50.94331	63.52918	2	54.78		5
274280	-50.94430	63.53108	10	113.86		5
274281	-50.94047	63.53161	10	107.64		3
274282	-50.93746	63.52945	2	41.87		0
274283	-50.92132	63.53275	2	8.81		3
274284	-50.89511	63.53541	2	31.85		58
274285	-50.86927	63.54003	2	19.11		13
274286	-50.98333	63.49318	2	27.00		1
274287	-51.00903	63.48774	2	29.49		10
274288	-51.02591	63.52712	2	46.66		8
274289	-50.54042	63.10647	20	9.10		0
274290	-50.54568	63.11969	1	17.01		0
274291	-50.44258	63.12550	2	20.50		0
274292	-50.53562	63.15985	2	8.83		0
274293	-50.56673	63.22812	5	19.17		0
274294	-50.49274	63.19410	2	10.48		0
274295	-50.37493	63.17880	2	17.38		0
274296	-50.30677	63.18651	3	27.34		0
274297	-50.21563	63.19508	2	51.78		0
274298	-50.27419	63.23987	30	7.81		0
274299	-50.30571	63.22730	1	14.69		0
274300	-50.35203	63.22045	2	10.34		0
274301	-50.35551	63.21434	2	9.83		0
274302	-50.38946	63.19233	2	28.98		0
274303	-50.72718	63.20220	10	10.18		2
274304	-50.80037	63.35284	2	13.82		6

Stream sediments collected 1985

GGU NO	LONGITUDE	LATITUDE	ALTITUDE	WEIGHT GRAM	VOLUME LITRE	SCHEELITE PR. 4L.
274305	-50.82378	63.34753	10	5.60		0
274306	-50.76335	63.35365	30	13.82		0
274307	-50.73593	63.35715	5	10.57		3
274308	-50.47682	63.36619	1	8.58		0
274309	-50.45856	63.36867	1	16.69		0
274310	-50.30811	63.38487	3	7.11		0
274311	-51.41021	64.29202	2	11.29		2
274312	-51.41995	64.28528	2	27.64		14
274313	-50.97421	64.17206	500	34.48		4
274314	-50.97253	64.17376	350	18.89		0
274315	-50.95546	64.17163	350	35.38		0
274316	-50.94906	64.17234	350	43.02		11
274317	-51.01209	64.17533	500	38.29		10
274318	-51.01642	64.17534	500	11.41		6
274319	-50.99231	64.17482	500	22.40		0
274320	-50.51430	63.36222		11.78		10
274321	-50.61721	63.35949		23.45		57
274322	-50.66744	63.36350		16.21		3
274323	-50.66184	63.36448		14.12		3
274324	-50.99645	63.53653	200	25.92		2
274325	-50.99624	63.53653	200	171.34		19
274326	-50.99624	63.53653	200	13.59		6
274327	-50.98411	63.54398	200	45.47		7
274328	-50.97420	63.54946	200	7.00		1
274329	-50.97420	63.54946	200	111.50		8
274330	-50.79546	63.59337	150	162.44		7
274331	-50.88055	63.62709	100	110.73		3
274332	-50.87581	63.63634	100	51.67		2
274333	-50.88083	63.77023		38.26		1
274334	-50.87146	63.77309		22.35		3
301254	-51.54608	64.03742	2	13.13		0
301255	-51.60223	64.02479	5	12.43		0
301256	-51.63699	64.00882	10	11.09		0
301257	-51.63205	64.00550	10	4.61		0
301258	-51.63182	64.00235	7	9.77		0
301259	-51.62077	63.99931	20	4.77		0
301260	-51.54645	63.98722	5	32.67		4
301261	-51.51726	63.96276	5	10.66		0
301262	-51.40138	63.97524	10	11.84		2
301263	-51.36010	63.95669	10	8.62		1
301264	-51.33959	63.94800	1	27.06		1
301265	-51.38056	63.93310	2	14.82		2
301266	-51.40065	63.91733	5	16.96		0
301267	-51.41080	63.80439	5	14.80		0
301268	-51.39418	63.81035	5	10.89		1
301269	-51.35307	63.80934	7	9.47		0
301270	-51.22831	63.86044	7	27.86		0
301271	-51.22078	63.86593		8.55		1
301272	-51.12168	63.89400	2	8.72		0
301273	-51.06514	63.89938		14.23		0
301274	-51.00137	63.91668	5	17.68		0
301275	-50.90491	63.92500	1	17.64		5

Table 3

Stream sediments collected 1985

GGU NO	LONGITUDE	LATITUDE	ALTITUDE	WEIGHT GRAM	VOLUME LITRE	SCHEELITE PR. 4L.
301276	-50.92080	63.92962	3	5.98		0
301277	-50.96495	63.92878	5	27.74		5
301278	-50.93287	63.90104	1	30.90		12
301279	-50.99699	63.89600	5	49.76		0
301280	-51.03837	63.90700		13.37		3
301281	-51.03539	63.88623	1	17.31		0
301282	-51.13231	63.85661		15.20		2
301283	-51.22205	63.80794	1	16.29		2
301284	-51.14413	63.62868	2	26.75		5
301285	-51.11704	63.62886	1	49.86		0
301286	-51.09864	63.63604	1	19.57		0
301287	-51.07493	63.65833	1	15.30		0
301288	-51.06279	63.65751	5	17.02		3
301289	-51.04341	63.64456	2	14.28		0
301290	-51.00422	63.63320	2	19.34		0
301291	-50.95233	63.62360	2	8.14		0
301292	-50.92125	63.61852	10	17.10		29
301293	-50.89823	63.61642	2	33.75		6
301294	-50.88731	63.61765	3	20.03		0
301295	-50.87338	63.61656	2	33.83		5
301296	-50.73058	63.63950	2	11.47		0
301297	-50.70073	63.64732	2	57.83		14
301298	-50.55390	63.65618	2	14.44		0
301299	-50.81612	63.60529	2	80.28		48
301300	-51.01298	63.62214	2	7.85		0

Table 4

Stream sediments collected 1986

GGU NO	LONGITUDE	LATITUDE	ALTITUDE	WEIGHT GRAM	VOLUME LITRE	SCHEELITE PR. 1L.
323401	-50.62398	63.35846	60	8.87	.02	38
323402	-50.62380	63.35657	120	10.21	.04	20
323403	-50.62739	63.35603	185	30.57	.05	11
323404	-50.63059	63.35595	245	8.62	.02	89
323405	-50.63439	63.35568	300	9.54	.03	72
323406	-50.62398	63.35837	90	26.52	.05	24
323407	-50.66879	63.35274	330	39.78	.03	12
323408	-50.61818	63.35917	1	212.71	.56	90
323409	-50.49738	63.36322	5	13.51	.02	0
323410	-50.51539	63.36218	1	7.64	.04	0
323411	-50.54764	63.35505	80	21.51	.03	3
323412	-50.53785	63.35314	100	34.55	.07	50
323413	-50.53465	63.35314	150	32.99	.05	10
323414	-50.34518	63.40704	1	4.30	.02	0
323415	-50.36655	63.41194	3	12.83	.03	0
323416	-50.59607	63.34388	270	23.79	.15	0
323417	-50.58827	63.34424	280	52.54	.05	0
323418	-50.70798	63.34450	200	9.26	.07	0
323419	-50.71258	63.34548	170	14.96	.03	15
323420	-50.76154	63.34477	95	13.19	.03	6
323421	-50.77792	63.34333	85	15.76	.01	0
323422	-50.77812	63.34333	85	12.38	.04	10
323423	-50.78852	63.34602	80	5.43	.01	0
323424	-50.93997	63.37159	3	15.23	.07	0
323425	-50.97331	63.52839	5	37.69	.05	6
323426	-50.97350	63.52839	5	73.21	.05	30
323427	-50.96948	63.52875	5	79.84	.05	11
323428	-50.96948	63.52866	3	49.43	.05	8
323429	-50.89536	63.53547	1	262.85	.74	50
323430	-50.87014	63.54099	30	13.19	.03	3
323431	-50.87034	63.54090	30	24.49	.04	2
323432	-50.87154	63.54225	60	13.24	.05	2
323433	-50.97290	63.52839	50	43.09	.13	15
323434	-50.97310	63.52839	100	36.67	.06	46
323435	-50.97290	63.52848	160	32.10	.05	113
323436	-50.97310	63.52848	1	239.03	.74	50
323437	-50.94371	63.52908	50	21.30	.08	2
323438	-50.94650	63.53267	200	13.85	.05	0
323439	-50.94671	63.53267	250	25.01	.05	0
323440	-50.96403	63.53161	280	17.29	.04	7
323441	-50.96383	63.53161	240	17.12	.06	9
323442	-50.99245	63.52338	5	23.46	.08	11
323443	-50.99225	63.52338	75	27.20	.07	1
323444	-50.99225	63.52338	25	36.96	.06	24
323445	-50.99486	63.52501	45	23.58	.06	8
323446	-50.99486	63.52501	95	26.43	.07	9
323447	-50.99686	63.52654	155	19.58	.08	9
323448	-50.99666	63.52654	230	37.66	.06	4
323449	-50.99666	63.52654	310	23.43	.04	47
323450	-50.99225	63.52338	3	32.02	.08	14
323451	-50.96264	63.52820	2	27.92	.08	72
323452	-50.96264	63.52811	80	77.40	.08	144

Stream sediments collected 1986

GGU NO	LONGITUDE	LATITUDE	ALTITUDE	WEIGHT GRAM	VOLUME LITRE	SCHEELITE PR. 1L.
323453	-50.99076	63.53767	250	19.39	.08	4
323454	-50.96380	63.53521	365	32.10	.04	42
323455	-50.95611	63.54122	330	16.51	.04	2
323456	-50.95611	63.54122	330	26.85	.04	0
323457	-50.96782	63.53584	375	26.81	.06	15
323458	-50.96803	63.53584	400	34.17	.03	0
323459	-50.01569	63.80846	550	26.45	.08	0
323460	-49.90347	63.82311	660	37.88	.06	5
323461	-49.68869	63.91832	900	25.74	.08	3
323462	-49.70853	63.93387	1000	23.24	.07	6
323463	-49.95271	63.94255	900	27.83	.06	2
323464	-49.96375	63.96747	860	44.20	.10	9
323465	-50.02950	63.98000	870	33.12	.11	2
323466	-50.01379	63.91697	920	22.10	.06	2
323467	-50.29813	63.93132	630	21.68	.07	0
323468	-50.46023	63.92454	880	46.47	.10	3
323469	-50.64198	63.90617	300	16.06	.06	0
323470	-50.71412	63.88386	200	28.32	.12	6
323471	-50.95788	63.54814	320	29.81	.08	7
323472	-50.65323	63.99738	770	14.84	.08	1
323473	-50.61997	64.01230	850	21.68	.07	0
323474	-50.68599	64.04968	810	35.86	.05	0
323475	-50.63169	64.05288	750	34.98	.07	1
323476	-50.57948	64.06908	850	13.57	.10	0
323477	-50.52327	64.09462	770	23.12	.04	2
323478	-50.48367	64.09836	320	16.75	.07	6
323479	-50.46058	64.12045	200	22.89	.06	0
323480	-50.54888	64.12375	600	32.65	.09	4
323481	-50.52022	64.12008	560	11.58	.08	0
323482	-50.40133	64.11953	582	18.53	.03	0
323483	-50.40998	64.12022	582	16.45	.06	0
323484	-50.31264	64.07244	500	26.41	.05	10
323485	-50.20115	63.85038	750	31.07	.07	0
323486	-50.14296	63.86760	930	25.53	.06	0
323487	-50.09196	63.87458	920	21.58	.04	6
323488	-50.13518	63.80566	850	35.90	.05	2
323489	-50.99198	63.53568	340	28.31	.07	11
323490	-50.99198	63.53568	390	31.98	.10	8
323491	-49.94861	64.73094	700	24.08	.03	179
323492	-49.94040	64.73407	700	11.95	.03	185
323493	-49.94207	64.73596	700	27.45	.03	128
323494	-49.93176	64.73864	700	30.39	.03	261
323495	-49.92550	64.73020	700	24.77	.04	143
323496	-49.93743	64.73749	700	17.85	.03	112
323497	-49.93305	64.73362	700	18.76	.01	290
323498	-50.02210	64.47797	75	13.11	.02	4
323499	-49.83422	64.35874	3	16.47	.09	5
323500	-50.06177	64.34261	650	17.71	.08	14
323501	-50.06897	64.27897	260	13.06	.12	7
323502	-50.21546	64.35222	230	17.87	.05	12
323503	-50.32701	64.34961	600	19.75	.05	8
323504	-50.47437	64.34412	230	20.30	.08	10

Stream sediments collected 1986

GGU NO	LONGITUDE	LATITUDE	ALTITUDE	WEIGHT GRAM	VOLUME LITRE	SCHEELITE PR. 1L.
323505	-50.31880	64.45920	1	24.32	.06	6
323506	-50.19002	64.44006	130	18.36	.09	18
323507	-50.21564	64.41306	40	17.28	.03	0
323508	-50.55069	64.48976	650	14.83	.03	4
328301	-51.74317	64.83150	100		.10	0
328302	-51.74756	64.82673	130		.15	7
328303	-51.75831	64.82564	110		.33	0
328304	-51.78833	64.83053	10		.19	0
328305	-51.84385	64.81343	23		.25	0
328306	-51.84349	64.81829	5		.12	6
328307	-51.85174	64.81970	8		.16	0
328308	-51.80355	64.93055	13		.12	8
328309	-51.84722	64.91527	70		.18	0
328310	-51.78180	64.93769	30		.13	0
328311	-51.84556	64.88363	4		.09	0
328312	-51.81297	64.88262	50		.02	0
328313	-51.78301	64.86793	5		.22	5
328314	-51.76858	64.86194	15		.23	0
328315	-51.88038	64.86268	15		.23	0
328316	-51.87210	64.84383	20		.14	0
328317	-51.98320	64.95320	45		.27	0
328318	-52.02603	64.91952	80		.58	4
328601	-51.41934	64.95309	5		.40	0
328602	-51.49696	64.93973	30		.30	9
328603	-51.51137	64.93928	110		.20	10
328604	-51.50247	64.94476	100		.70	2
328605	-51.54190	64.94961	60		.90	0
328606	-51.36995	64.95009			.70	3
328607	-51.43913	64.92866			.30	0
328608	-51.42196	64.99507			.50	2
328609	-51.32300	64.99327			.50	0
328610	-51.28573	64.98054	40		.30	0
328611	-51.42369	64.91912	40		.10	20
328612	-51.57062	64.99257	50		.70	0
328613	-51.57169	64.99508	3		.30	3
328614	-51.67365	65.01435			.35	6
328901	-52.05416	64.64373				9
328902	-52.05017	64.64329				0
328903	-52.09213	64.72386				18
328904	-51.87408	64.78630				0
328905	-51.66252	64.56149	25			0
328906	-51.64310	64.56762	35			6
328907	-51.87759	64.78054	50			0
328908	-51.87738	64.78072	55			3
328909	-51.87737	64.78054	65			0
328910	-51.86815	64.78407	25			0
328911	-52.19439	64.88532	15			0
328912	-52.05880	64.85387	5			0
328913	-52.04438	64.90516	2			0
328914	-51.99230	64.98777	10			0
328915	-52.00245	64.98621				21
328916	-51.96000	64.80755	30			0

Table 4

Stream sediments collected 1986

GGU NO	LONGITUDE	LATITUDE	ALTITUDE	WEIGHT GRAM	VOLUME LITRE	SCHEELITE PR. 1L.
328917	-51.93706	64.81112	25			0

Table 5

Spectrographic analyses of samples collected 1982-1985

GGU NO	W ppm	Pb ppm	Pb ppm	Cu ppm	Cr ppm	Co ppm	V ppm
261601	90	10	18	10	880	49	380
261602	30	10	16	16	590	50	310
261603	30	10	32	10	2250	56	290
261604	60	10	18	6	1230	56	245
261605	60	5	20	9	1000	59	315
261606	30	5	34	103	810	52	370
261607	30	10	23	8	1550	61	325
261608	450	10	37	32	1280	52	310
261613	215	10	85	12	720	46	152
261615	30	10	39	12	3500	52	370
261617	60	10	20	12	1280	58	340
261618	60	10	20	8	1150	56	275
261621	30	10	37	11	1420	56	300
261622	730	10	39	27	840	61	400
261623	30	10	21	19	880	64	370
261624	30	5	15	15	950	56	380
261625	30	5	37	7	2700	54	290
261626	340	5	16	9	1020	52	350
261633	150	5	23	9	1200	47	490
261634	30	10	39	16	1100	56	350
261635	30	10	37	11	1020	56	380
261644	30	10	37	132	910	54	370
261645	30	5	15	14	1000	52	300
261646	30	5	16	12	1550	59	265
261647	30	10	15	30	720	56	340
261648	30	5	16	21	680	56	420
261665	30	10	34	16	810	40	265
261666	60	5	50	80	720	62	400
261667	60	5	23	8	950	50	550
261668	30	5					530
261669	60	5	15	20	610	43	310
261670	30	10	14	16	1100	47	290
261671	60	5	18	8	1380	52	290
261672	60	10	16	78	1600	62	215
261673	60	10	19		1900	52	225
261674	30	10	16	7	840	56	370
261675	60	10	21	11	880	47	340
261677	60	10	18	16	1150	52	265
261678	30	10	18	7	1480	56	215
261679	120	10	14	7	1850	54	255
261680	60	10	22	8	2600	62	275
261681	60	10	21	21	1200	85	300
261682	60	10	15	12	1150	76	310
261683	30	10	16	8	1100	52	310
261684	60	10	15	16	1100	52	340
261685	60	10	19	9	1600	56	300
261686	60	10	15	9	1600	64	265
261687	60	10	18	155	720	62	570
261688	30	5	34	7	1320	56	245
261689	30	5	21	17	1100	54	325
261690	30	10	32	21	1380	56	400
261691	330	10	15	16	1070	58	430

Table 5

Spectrographic analyses of samples collected 1982-1985

GGU NO	W ppm	Pb ppm	Pb ppm	Cu ppm	Cr ppm	Co ppm	V ppm
261692	60	10	18	18	1150	66	310
261693	60	10	22	25	1430	78	255
261694	30	10	70	14	780	54	310
261695	30	10	35	8	1100	56	290
261697	520	10	90	11	1000	60	350
261698	87	10	16	50	910	52	290
261699	30	10	35	14	610	45	290
261700	30	5	44	14	950	52	280
263616	30	5	33	7	640	50	620
263617	30	10	37	7	810	47	470
263618	60	10	19	62	1480	64	245
263619	30	5	37	24	950	50	280
263620	60	10	24	23	1230	78	315
263621	30	10	18	7	1200	59	340
263622	60	10	54	18	2000	64	380
263623	30	5	23	26	1600	72	
263672	60	10	22	12	1270	56	275
263673	30	10	18	10	610	54	365
263674	30	10	37	9	660	47	365
263675	30	10	37	10	810	52	415
263676	60	10	18	12	1800	72	245
263677	30	5	18	6	2250	82	265
263678	60	10	24	12	2400	89	470
263679	60	10	16	37	375	70	520
263680	60	10					485
263681	60	10	18	8	2050	64	255
263682	60	10	15	16	1070	54	340
263683	60	10	15	20	780	54	340
263684	30	5	16	19	2800	152	130
263685	60	10	22	230	880	54	300
263686	30	10	37	8	1000	61	370
263687	60	10	18	11	950	54	325
263688	60	10	20	280	910	54	340
263689	60	10	15	180	500	47	340
263690	60	10	19	18	690	54	300
263691	205	10	26	12	780	54	420
263692	30	5	16	19	540	36	275
263693	30	10	15	21	810	43	290
263695	30	10	30	14	1150	64	310
263696	30	10	14	10	1150	64	290
263697	900	10	19	10	1020	52	265
263698	30	10	26	25	750	54	430
263699	260	10	16	26	810	54	370
263700	360	5	18	29	720	56	370
274201			8	15	590	64	380
274202			8	30	700	58	330
274203			8	43	750	73	450
274204			8	12	540	56	450
274205			8	150	750	61	450
274206			8	33	720	61	360
274207			8	35	880	67	420
274208		5	8	48	750	67	420

Spectrographic analyses of samples collected 1982-1985

GGU NO	W ppm	Pb ppm	Pb ppm	Cu ppm	Cr ppm	Co ppm	V ppm
274209			8	42	700	61	380
274210		5	8	22	4000	61	590
274211		5	8	16	460	30	275
274212			8	20	940	56	350
274213	60		10	20	1180	64	390
274214			8	20	940	56	360
274215		5	8	22	1850	84	275
274216		5	8	11	420	28	205
274217		5	8	61	4000	100	455
274218		5	8	110	1220	73	335
274219		6	40	93	3200	113	335
274220		13	8	19	7000	84	1000
274221		5	8	43	9999	80	740
274222		5	8	10	700	51	390
274223		5	8	36	720	56	275
274224		5	8	24	750	46	215
274225		5	8	20	780	48	260
274226		5	20	35	1750	53	440
274227		11	40	15	1700	53	475
274228		5	8	16	1200	53	350
274229		15	10	55	1150	73	380
274230		13	10	27	7000	51	350
274231		5	8	45	1000	61	295
274232		5	8	13	910	56	380
274233		5		13	910	53	335
274234		5		23	750	56	350
274235		10	8	19	640	46	390
274236		5		10	810	51	335
274237				45	610	59	265
274238		5		32	940	53	390
274239		5		23	880	48	370
274240			8	12	750	56	360
274241			8	30	330	46	335
274242		5	8	32	380	31	310
274243		5	8	150	255	18	145
274244		6	10	22	1550	51	380
274245		5	19	33	1000	61	455
274246		5	10	15	910	53	390
274247		5	10	14	780	53	310
274248		5	8	13	420	44	320
274249		5	8	22	380	38	310
274250				21	420	40	335
274251				10	570	37	310
274252			35	15	620	56	335
274253				10	460	44	310
274254		10	8	11	570	42	380
274255		10	8	17	720	53	320
274256		5	10	44	540	53	410
274257		5	10	20	590	48	350
274258		5	39	13	720	59	400
274259		10	8	43	380	48	380
274260		8	20	17	920	46	360

Spectrographic analyses of samples collected 1982-1985

GGU NO	W ppm	Pb ppm	Pb ppm	Cu ppm	Cr ppm	Co ppm	V ppm
274261		10	10	130	380	33	740
274262		10	8	10	460	37	320
274263		10	20	18	600	46	440
274264		10	8	165	700	37	470
274265		10	8	9	380	21	320
274266		10	8	8	480	112	350
274267			8	13	330	40	285
274268			8	8	420	46	360
274269		10	8	10	440	50	360
274270		10	8	91	570	56	330
274271		10	10	12	500	46	350
274272		8	8	60	880	56	300
274273			8	15	520	51	335
274274			8	12	400	40	295
274275			8	22	440	53	360
274276		12	8	33	430	48	335
274277		5	8	15	500	50	360
274278			8	64	620	64	400
274279		5	35	63	790	77	425
274280		5		71	520	85	470
274281		7	8	43	780	92	420
274282		5	8	45	700	70	460
274283			8	45	540	61	400
274284	60	5	8	85	1500	61	530
274285		22	8	45	720	58	570
274286		5		27	320	74	570
274287		13	8	24	670	58	605
274288		5	8	43	1350	61	320
274289		5	8	27	1400	80	420
274290		5	35	22	1380	85	510
274291		13	8	28	940	73	880
274292		5		23	2300	64	570
274293		20	8	24	520	56	510
274294		12		15	1250	88	1030
274295		11	8	325	1550	90	530
274296		12	10	88	780	100	680
274297		5	10	92	720	80	680
274298		8		25	2450	96	390
274299		8	25	10	1400	67	570
274300		8	15	10	1700	73	475
274301		61	15	9	1350	73	760
274302		9	15	150	2150	70	475
274303		8		23	580	62	570
274304		5	8	15	670	70	360
274305		5		15	435	47	320
274306		5	8	16	620	46	380
274309		8	15	25	700	53	425
274310		8	15	50	700	46	330
274311		8	15	12	940	53	295
274312	90	6	10	97	590	46	350
274313	60	5	10	11	680	58	350
274314		5	10	13	640	51	310

Spectrographic analyses of samples collected 1982-1985

GGU NO	W ppm	Pb ppm	Pb ppm	Cu ppm	Cr ppm	Co ppm	V ppm
274315		5	10	15	700	53	320
274316		5	10	11	640	48	295
274317		8	15	50	700	58	320
274318		21	9	12	700	58	380
274319		6	10	20	670	56	350
274320		6	9	28	600	56	295
274321		6	8	28	720	64	390
274322		6	8	46	750	51	330
274323		6	8	34	670	51	320
274324		6	8	39	700	61	380
274325			8	57	840	67	410
274326			8	25	700	51	320
274327			8	34	810	67	420
274328			8	23	520	53	330
274329	220	12	8	44	520	70	640
274330			8	50	640	76	550
274331		5	8	55	780	76	490
274332			8	40	640	67	420
274333			8	30	910	80	760
274334		7	8	105	680	73	510
293614	70	5	19	17	840	52	310
293618	205	10	35	21	950	61	470
293619	60	10	23	7	1150	52	210
293620	125	10	19	14	950	54	310
293621	30	215	15	30	690	125	340
293627	160	10	47	12	950	47	340
293628	60	5	30	9	1150	56	380
293629	125	10	16	9	1100	54	300
293630	125	10	18	29	690	45	325
293631	30	10	19	19	660	41	370
293633	30	10	15	75	1200	54	235
293634	50	5	21	14	610	50	340
293635	92	5	18	6	475	41	310
293636	60	10	19	62	410	54	550
293637	60	10	15	12	1000	54	300
293642	60	10	18	10	1700	62	255
293643	60	5	26	18	780	61	380
293644	30	5	15	12	1150	59	280
293645	105	5	19	40	750	50	325
293646	80	5	15	24	590	45	325
293647	30	5	15	8	920	47	275
293648	60	10	19	19	1050	56	255
293649	105	10	18	23	1020	47	325
301101	70	10	18	18	1100	56	340
301102	30	10	24	14	1600	64	350
301103	60	10	16	8	1230	58	265
301104	60	10	18	10	1060	54	300
301105	30	10	15	32	780	52	300
301106	30	10	16	10	610	41	290
301107	425	5	18	46	1100	52	265
301108	30	10	15	17	910	59	265
301109	60	500	16	9	610	52	290

Table 5

Spectrographic analyses of samples collected 1982-1985

GGU NO	W ppm	Pb ppm	Pb ppm	Cu ppm	Cr ppm	Co ppm	V ppm
301110	60	10	19	10	590	64	340
301111	30	10	26	11	1320	92	250
301112	30	10	98	17	1420	89	305
301113	30	10	21	19	800	52	420
301114	30	10	15	16	780	54	330
301115	30	10	23	30	1380	56	305
301116	30	10	15	8	870	66	280
301117	30	10	16	18	900	70	280
301118	30	10	18	13	900	56	230
301119	30	10	30	23	1250	72	205
301120	30	98	22	24	480	66	295
301121	30	10	22	22	430	52	305
301122	30	10	18	17	580	54	330
301123	30	10	13	16	430	52	250
301124	30	185	19	80	510	72	280
301125	30	10	16	32	800	61	305
301126	30	10	19	56	940	75	270
301127	30	10	19	24	1000	64	330
301128	30	10	12	12	560	52	270
301129	30	10	16	30	780	61	360
301130	30	10	19	22	2050	89	250
301131	30	10	19	23	800	70	345
301132	30	10	18	17	580	59	360
301133	30	10	30	15	510	54	205
301134	30	10	18	20	540	47	230
301135	30	10	18	21	580	52	240
301136	30	10	19	15	900	58	360
301137	30	10	26	13	720	56	305
301138	30	10	28	13	580	52	260
301139	30	10	42	14	720	50	330
301140	30	10	18	14	800	54	380
301141	30	28	34	54	860	105	420
301142	30	26	32	62	960	59	440
301143	30	10	33	13	1000	64	295
301144	30	10	28	12	660	59	310
301145	30	10	39	6	870	50	420
301146	30	10	26	16	900	61	345
301147	30	10	18	13	900	64	220
301149	30	10	37	15	510	59	295
301150	30	10	21	14	720	62	280
301151	30	10	32	36	1470	85	340
301152	30	10	13	12	860	62	295
301153	30	10	30	26	780	59	295
301154	30	10	26	103	750	72	305
301155	190	10	16	37	560	70	270
301156	345	10	16	33	690	54	240
301157	30	10	15	24	800	86	330
301158	30	10	12	12	960	64	195
301159	105	10	13	15	640	50	230
301160	30	10	16	17	1050	66	270
301161	30	10			1250	66	195
301162	30	10	16	10	900	64	270

Spectrographic analyses of samples collected 1982-1985

GGU NO	W ppm	Pb ppm	Pb ppm	Cu ppm	Cr ppm	Co ppm	V ppm
301163	30	10	18	32	780	66	305
301164	30	10	15	28	720	72	305
301165	30	10	22	19	870	58	345
301166	30	10	26	21	900	76	360
301167	30	10	16	50	900	72	305
301168	60	10	12	32	490	61	330
301169	60	34	30	11	900	58	740
301170	30	10	18	12	800	52	305
301171	30	10	15	17	660	56	320
301172	30	10	42	103	720	72	330
301173	30	75	85	39	640	61	345
301174	30	21	24	20	840	58	400
301175	30	10	21	20	780	66	380
301176	30	10	32	19	840	70	370
301177	30	10	18	32	780	64	360
301178	30	10	21	45	800	70	1170
301179	30	10	21	18	1220	75	280
301180	60	10	19	16	660	47	295
301181	30	10	15	10	800	22	320
301182	30	10	22	15	750	56	400
301183	30	10	13	14	720	54	320
301184	30	10	22	36	690	64	320
301185	30	10	18	32	800	66	305
301186	30	15	44	26	1900	78	640
301187	30	19	37	16	900	69	460
301188	30	5		90	810	72	305
301189	30	10	22	25	940	52	450
301190	30	5		75	1150	82	305
301191	30	10	30	21	1120	78	330
301192	30	10	26	40	2750	86	280
301193	30	10	37	50	1320	59	205
301194	30	5		75	1430	89	250
301195	30	10	22	19	1470	67	270
301196	30	10	19	33	2100	66	205
301197	30	5		220	9999	195	345
301198	30	10	37	32	2600	105	270
301199	30	10	19	21	1000	69	315
301200	30	10	28	19	900	69	295
301201	30	10	21	22	1600	64	260
301202	30	10	26	36	1150	85	230
301203	200	10	18	31	1800	64	230
301204	195	10	18	40	1000	78	260
301205	30	10	12	75	1100	70	190
301206	800	10	34	30	880	54	240
301207	30	10	32	26	880	66	260
301208	30	10	32	33	1450	96	295
301209	30	10	24	12	690	52	260
301210	250	10	30	23	840	56	220
301211	30	10	24	120	1280	70	240
301212	30	10	35	32	1450	82	280
301213	60	10	23	25	2300	100	305
301214	30	10	24	24	840	62	240

Spectrographic analyses of samples collected 1982-1985

GGU NO	W ppm	Pb ppm	Pb ppm	Cu ppm	Cr ppm	Co ppm	V ppm
301215	30	10	26	25	1150	59	240
301216	30	10	39	26	840	51	270
301217	30	10	38	18	1020	70	260
301228	350	10	30	560	601	58	300
301229	250	10	26	103	870	96	330
301230	780	10	35	37	520	56	300
301231	250	10	27	37	540	56	330
301232	270	10	14	40	580	64	320
301233	125	10	19	56	580	64	320
301234	30	10	5	15	840	78	500
301235	60	10	18	25	580	62	305
301236	180	10	5	46	560	66	150
301237	200	10	5	62	560	88	295
301238	30	10	34	15	870	78	380
301239	30	10	18	18	720	82	295
301240	30	10	11	21	600	78	305
301241	30	10	15	8	690	76	330
301242	30	10	5	13	690	66	280
301243	30	10	16	52	580	66	270
301244	30	10	5	96	600	59	230
301245	265	10	11	13	1080	62	190
301246	30	10	13	35	900	95	480
301247	60	10	18	15	660	66	330
301248	60	10	26	20	840	66	330
301249	330	10	15	13	800	64	260
301250	60	15	10	14	640	54	460
301251	60	10	28	16	780	70	380
301252	235	19	42	45	660	85	720
301253	30	16	32	30	720	82	360
301254		10	10	19	4000	73	490
301256		5	10	11	800	48	330
301257		5	10	13	800	50	350
301258		5	10	10	880	44	390
301259		5	10	11	940	48	295
301260		5	10	6	1200	48	320
301261		5	10	6	1600	61	285
301262		5	10	62	670	58	320
301263		5	10	14	840	58	320
301264		5	10	36	460	64	390
301265		5	26	15	540	61	410
301266		5	10	16	520	56	285
301267		5	10	10	440	53	320
301268		5	10	15	310	42	240
301269		5	10	10	520	58	420
301270		10	8	30	540	70	450
301271		10	8	120	380	53	390
301272		10	8	21	500	58	420
301273		11	8	105	380	48	260
301274		21	8	170	480	56	760
301275		10	8	17	620	56	390
301276		10	8	23	570	44	280
301277	160	10	8	33	500	54	340

Spectrographic analyses of samples collected 1982-1985

GGU NO	W ppm	Pb ppm	Pb ppm	Cu ppm	Cr ppm	Co ppm	V ppm
301278		18	10	15	940	67	790
301279		9	10	19	640	61	440
301280		135	10	36	1100	67	410
301281		5	10	21	540	50	490
301282		11	10	37	780	67	740
301283		12	8	14	440	56	390
301284		10	12	20	750	70	760
301285		10	10	17	730	64	410
301286		10	8	15	670	70	690
301287		10	8	20	1000	73	710
301288		10	8	22	880	58	550
301289		10	8	17	700	73	740
301290		12	8	20	670	70	790
301291		10	8	23	750	73	530
301292		10	8	50	1180	80	440
301293		10	8	60	880	70	390
301294		10	8	27	620	67	360
301295		10	8	19	500	64	200
301296		10	8	53	840	70	320
301297		25	78	53	940	105	1000
301298		10	10	55	620	61	470
301299		36	12	16	570	64	850
301300		10	8	18	700	64	490

Spectrographic analyses of samples collected 1982-1985

GGU NO	Mn ppm	Zr ppm	Ti ppm	Ni ppm	Fe %	Sn ppm	B ppm
261601	3000	3650	13200	175	14.0		
261602	2600	400	9500	138	11.0		
261603	2400	1300	6700	280	9.8		
261604	2500	105	6000	290	12.0		
261605	3900	355	8200	170	12.8		
261606	2500	200	8200	170	10.5		
261607	3600	370	8200	220	11.5		
261608	6200	1750	9100	260	14.0		
261613	7600	850	5000	110	24.0		
261615	4600	7500	11500	290	14.5		
261617	4000	1250	7800	245	13.0		
261618	5300	2000	8200	180	10.5		
261621	2700	170	7000	330	10.0		
261622	3700	750	11500	200	14.5		
261623	3300	550	11000	195	15.5		
261624	3050	910	9800	190	14.0		
261625	2600	370	7300	290	11.0		
261626	2800	530	10200	210	12.0		
261633	4000	2650	17500	175	20.0		
261634	3200	420	8800	210	12.8		
261635	3700	1500	11500	195	15.5		
261644	4400	660	11000	180	14.0		
261645	3300	170	7800	270	10.5		
261646	3050	205	6400	380	10.5		
261647	4200	400	9800	138	12.0		
261648	4000	720	10200	150	13.5		
261665	3300	1000	8500	145	10.5		
261666	3700	980	14200	118	16.5		
261667	3600	3000	15200	150	21.0		
261668		230	13400	190			
261669	4700	1600	9500	138	11.5		
261670	2800	530	7000	195	9.2		
261671	2300	170	7000	260	9.8		
261672	4000	305	5100	325	9.8		
261673	8500	430	8200	305	12.0		
261674	2600	270	8500	145	13.0		
261675	2700	500	11000	185	11.5		
261677	3700	295	6500	220			
261678	1900	670	5500	400	9.2		
261679	2300	540	7600	300	10.5		
261680	2400	670	7300	350	12.0		
261681	2400	200	6200	285	12.0		
261682	2200	185	6200	285	10.5		
261683	2500	320	6400	200	10.5		
261684	3700	1400	8800	185	17.0		
261685	2950	1000	8500	280	11.5		
261686	2050	195	5100	340	10.5		
261687	2200	370	18500	160	13.5		
261688	2200	370	6000	420	9.2		
261689	2400	500	8800	235	13.5		
261690	2400	640	8800	260	14.5		
261691	2400	1450	11500	195	18.0		

Spectrographic analyses of samples collected 1982-1985

GGU NO	Mn ppm	Zr ppm	Ti ppm	Ni ppm	Fe %	Sn ppm	B ppm
261692	2700	320	7800	275	13.0		
261693	2500	280	4300	305	12.0		
261694	4900	750	7600	170	10.5		
261695	2200	1150	5300	260	10.5		
261697	4000	780	9200	125	9.5		
261698	3200	175	8200	420	9.2		
261699	3200	1900	8800	150	11.0		
261700	2200	250	7600	255	9.8		
263616	2950	1900	20540	170	20.0		
263617	3600	2200	18200	160	20.0		
263618	2300	215	5700	340	9.8		
263619	3600	3500	12000	210	21.0		
263620	2950	750	8200	330	13.0		
263621	2350	370	6000	350	9.2		
263622	3700	1050	9900	295	23.0		
263623	2600				17.0		
263672	4000	690	7000	300	11.5		
263673	3800	3000	11000	155	17.0		
263674	3400	1900	11000	138	16.5		
263675	4200	1050	12800	150	16.5		
263676	3450	260	6000	375	11.0		
263677	2150	550	6700	650	10.0		
263678	2600	345	8500	560	23.0		
263679	3200	690	12700	145	18.0		
263680		270	23500	80			
263681	2500	550	4300	405	11.0		
263682	2400	1000	8500	235	13.0		
263683	2700	430	7600	180	13.0		
263684	1400	220	1480	630	6.3		
263685	5100	1550	9500	180	14.0		
263686	3200	1500	9500	270	12.8		
263687	4350	2900	11800	175	15.5		
263688	3900	3100	9900	170	13.5		
263689	3750	170	9500	87	11.0		
263690	2950	270	8800	118	11.0		
263691	5400	1550	12200	135	20.0		
263692	3300	1320	9200	112	11.0		
263693	4200	128	8800	138	9.2		
263695	2600	640	8500	245	13.5		
263696	2700	320	7300	325	10.0		
263697	2800	620	7600	235	10.5		
263698	3700	750	11500	155	14.0		
263699	3450	470	9500	180	14.0		
263700	3050	370	8800	170	12.7		
274201	3000	1050	14500	160	14.5	35	
274202	2750	260	8600	175	12.0	27	
274203	3900	690	12800	170	15.0	41	
274204	2650	2050	21500	150	14.5	41	
274205	2450	280	11000	160	11.5	24	
274206	2300	500	10000	175	11.5	24	
274207	3300	660	14000	175	14.0	38	8
274208	2500	465	1950	170	12.5	29	8

Spectrographic analyses of samples collected 1982-1985

GGU NO	Mn ppm	Zr ppm	Ti ppm	Ni ppm	Fe %	Sn ppm	B ppm
274209	2500	690	11000	170	11.5	24	8
274210	3300	640	13500	185	15.5	38	8
274211	1500	520	9000	84	8.2	24	8
274212	2200	390	6800	220	10.5	15	8
274213	3400	520	7400	270	12.5	19	10
274214	3900	660	6800	215	12.5	22	8
274215	2050	290	4500	355	10.0	15	8
274216	1250	1150	6000	107	6.8	10	8
274217	2100	1700	6800	400	17.0	40	8
274218	1900	360	4900	270	13.0	22	8
274219	2500	1080	3800	1550	16.0	32	8
274220	2050	3050	16500	260	23.0	90	
274221	2800	590	27000	230	17.0	50	11
274222	3000	220	6200	160	9.8	13	110
274223	5200	177	5300	155	12.5	24	21
274224	6100	185	4500	115	14.5	22	52
274225	6900	180	5800	145	14.0	22	120
274226	4200	4500	11000	195	18.0	50	36
274227	3700	3500	12000	210	16.5	47	8
274228	3900	520	7400	220	12.5	27	11
274229	2450	615	6800	170	11.5	17	8
274230	7200	1500	18500	145	18.5	50	8
274231	3900	160	6800	230	14.0	24	16
274232	4050	480	10500	180	13.0	32	28
274233	4500	900	16500	145	14.0	38	8
274234	3600	2200	20000	200	13.0	44	15
274235	5900	1080	16000	120	17.0	54	8
274236	3600	550	8700	180	12.0	27	11
274237	2000	170	7200	195	9.8	13	68
274238	3300	180	6500	195	10.0	22	150
274239	3600	430	6000	175	12.0	17	140
274240	3150	360	8000	215	11.5	20	8
274241	2300	570	7700	115	11.0	35	8
274242	1300	1350	7400	120	11.0	22	8
274243	1050	320	2850	62	5.8	10	8
274244	2550	830	8300	170	12.0	20	8
274245	6700	2300	13500	145	13.5	22	10
274246	2300	5400	7400	270	12.0	24	8
274247	2650	200	7400	210	9.8	15	8
274248	2200	1080	6200	140	9.8	24	11
274249	3000	720	6800	102	10.5	29	12
274250	5000	570	8000	85	11.5	32	11
274251	2200	1200	7400	115	11.5	35	12
274252	2800	1800	6800	188	11.0	29	15
274253	1950	485	5800	140	9.2	22	8
274254	4800	1120	8700	155	13.0	29	12
274255	2650	145	5100	250	11.0	27	15
274256	2400	1300	6000	150	10.5	15	8
274257	2900	740	8700	145	11.5	22	8
274258	3750	4500	23000	185	17.0	40	8
274259	2800	520	6800	92	11.0	32	15
274260	4400	1100	9000	175	15.0	32	30

Spectrographic analyses of samples collected 1982-1985

GGU NO	Mn ppm	Zr ppm	Ti ppm	Ni ppm	Fe %	Sn ppm	B ppm
274261	2400	3950	3400	120	18.0	44	8
274262	4400	1950	3800	105	16.5	41	19
274263	4400	3800	4900	155	21.0	50	8
274264	2050	2400	4500	125	19.5	55	8
274265	1750	8700	2850	150	15.5	44	12
274266	2300	350	6800	135	9.8	27	8
274267	2100	320	6500	115	9.7	13	10
274268	2200	500	13500	130	10.5	23	8
274269	2400	210	16000	135	11.0	24	8
274270	2300	120	8400	150	9.8	15	8
274271	4200	1050	14500	120	14.5	37	8
274272	1950	1100	6500	250	9.4	13	8
274273	4050	250	9800	145	12.0	26	8
274274	3150	200	18500	92	10.5	23	8
274275	5900	485	10500	115	11.5	22	8
274276	3150	250	8000	125	10.5	13	8
274277	2900	1600	13500	130	11.5	29	21
274278	5200	350	17500	135	14.5	37	8
274279	4200	165	13500	75	17.0	40	8
274280	3850	170	16000	97	15.0	32	8
274281	4600	220	8700	120	16.0	35	8
274282	4200	450	10000	130	16.0	20	8
274283	2650	305	9400	140	11.5	20	8
274284	3400	395	9400	150	12.5	20	8
274285	3000	830	17500	110	15.0	41	8
274286	2500	2300	40000	110	16.0	32	8
274287	3000	1350	22500	135	17.0	50	8
274288	3600	365	5800	275	11.0	15	8
274289	1700	930	12000	330	14.0	35	8
274290	2600	1050	23000	280	16.0	41	8
274291	1800	1400	18500	320	18.0	61	8
274292	2150	1900	14000	300	15.0	24	8
274293	3300	1200	35000	110	18.5	69	8
274294	1650	1700	60000	400	24.0	90	8
274295	2450	3200	10500	340	18.0	41	8
274296	2450	720	20000	285	17.0	44	8
274297	2900	430	18500	210	18.0	50	8
274298	2700	420	55000	600	16.0	29	10
274299	2450	500	8500	380	17.0	37	10
274300	2800	115	8700	500	15.5	44	10
274301	2300	1200	22500	380	21.0	82	10
274302	1850	335	8700	380	15.0	37	10
274303	2100	1400	33000	195	15.0	29	8
274304	2100	590	6000	155	10.0	22	23
274305	1750	275	5700	125	10.5	11	8
274306	2350	410	8300	170	11.5	15	8
274309	1850	500	8500	195	11.5	22	10
274310	1950	930	11000	195	10.5	26	10
274311	2500	190	5300	240	10.2	20	19
274312	4200	200	7000	155	11.5	20	195
274313	4600	1120	10000	210	14.0	37	42
274314	4400	1900	9400	210	12.5	24	8

Spectrographic analyses of samples collected 1982-1985

GGU NO	Mn ppm	Zr ppm	Ti ppm	Ni ppm	Fe %	Sn ppm	B ppm
274315	3900	360	7700	200	11.0	22	10
274316	4600	1750	8000	180	11.5	22	11
274317	5600	2400	12000	180	16.5	50	15
274318	4400	800	10500	220	14.0	37	19
274319	3700	450	8000	195	12.5	22	39
274320	1800	470	6000	195	8.2	4	8
274321	2500	540	6200	195	10.0	12	8
274322	2050	270	5300	185	9.8	13	8
274323	1850	230	6200	185	9.2	13	8
274324	3600	740	9800	170	13.5	20	8
274325	4100	155	7700	195	13.5	20	60
274326	3600	860	6800	150	11.5	24	8
274327	4200	260	9000	155	15.0	24	8
274328	3000	1300	13800	140	13.5	26	8
274329	3600	2600	37000	155	18.5	73	8
274330	3400	720	19000	150	16.5	44	8
274331	3150	1300	9400	170	15.0	27	10
274332	2800	640	12000	155	11.5	22	8
274333	3300	1120	25000	160	16.0	29	8
274334	3300	330	10500	175	14.0	22	8
293614	7900	740	9200	128	17.0		
293618	3450	600	13800	170	14.0		
293619	3450	880	12000	390	10.5		
293620	3750	1100	12300	195	13.0		
293621	3300	215	9500	245	11.0		
293627	7300	910	12800	120	18.0		
293628	4400	1950	12000	235	16.5		
293629	3900	940	8200	230	13.0		
293630	11000	2800	14800	118	24.0		
293631	6500	540	14300	71	17.0		
293633	2200	170	5700	305	8.8		
293634	3700	1250	10000	128	12.0		
293635	4900	1350	9500	100	13.0		
293636	3200	4100	19700	113	13.5		
293637	4000	1500	10800	205	11.5		
293642	2800	185	5700	380	9.8		
293643	3900	550	10200	160	15.5		
293644	2700	320	6000	270	9.8		
293645	5500	1450	22000	155	15.5		
293646	4200	910	21000	132	14.8		
293647	2600	415	9200	225	10.5		
293648	2600	340	6400	260	9.8		
293649	4500	470	12200	170	16.5		
301101	2950	700	7600	210	20.0		
301102	1850	1050	4900	245	24.0		
301103	2300	420	6200	280	10.5		
301104	2950	640	7800	235	11.5		
301105	4200	4400	9500	230	15.5		
301106	3900	600	8800	138	10.5		
301107	2600	260	8200	200	8.4		
301108	2950	1750	8200	245	13.5		
301109	2700	2400	12200	170	14.0		

Spectrographic analyses of samples collected 1982-1985

GGU NO	Mn ppm	Zr ppm	Ti ppm	Ni ppm	Fe %	Sn ppm	B ppm
301110	2700	325	11000	128	12.8		
301111	2800	295	6700	360	16.0	30	
301112	3600	4100	13200	315	19.0	40	
301113	6700	3800	30000	135	24.5	62	
301114	11000	2200	19000	160	19.0	37	
301115	3050	700	11500	260	16.8	25	
301116	2700	1800	12000	280	16.0	30	
301117	2400	620	6600	240	16.0	24	
301118	5500	1550	6200	225	18.5	30	
301119	2700	2706	6400	450	18.5	35	
301120	3900	1180	12800	170	15.0	38	
301121	3600	3250	26000	145	17.5	47	
301122	2700	720	16500	145	16.0	33	
301123	3300	1650	12200	140	14.5	30	
301124	3600	2200	14000	162	17.5	33	
301125	2150	3250	10500	260	14.5	29	
301126	2050	8500	9500	350	14.5	30	
301127	3600	1800	12000	235	17.5	33	
301128	3200	1300	11000	170	14.5	36	
301129	3600	2000	13000	195	18.5	33	
301130	2000	670	7800	485	13.8	14	
301131	3500	670	10500	200	17.5	28	
301132	2800	1450	14000	155	21.0	47	
301133	4400	750	7000	125	16.5	23	
301134	2800	2200	10200	155	13.5	45	
301135	3700	1800	8800	155	18.5	47	
301136	3300	1450	12000	210	18.5	42	
301137	3600	1150	11000	155	24.5	30	
301138	3050	460	8000	145	19.0	20	
301139	4900	2400	13800	145	24.5	37	
301140	3700	1600	15000	140	24.5	58	
301141	3600	3800	20000	188	28.5	80	
301142	3600	5300	17000	215	35.0	85	
301143	2950	1200	10000	260	21.0	25	
301144	4250	1420	11000	180	27.0	28	
301145	3700	3650	16500	175	31.0	62	
301146	3300	3300	13000	260	20.0	39	
301147	4900	4600	10000	360	17.0	35	
301149	2400	700	8200	188	14.5	28	
301150	3050	2050	10000	210	21.0	42	
301151	2600	1600	9500	235	27.0	56	
301152	3200	3500	9200	270	17.5	25	
301153	2400	900	7000	210	14.5	28	
301154	1900	390	7500	230	13.0	23	
301155	4900	640	10000	135	19.0	30	
301156	6200	1400	10300	140	21.0	37	
301157	2150	1420	8800	235	16.8	93	
301158	1850	280	4300	325	12.5	10	
301159	4900	1370	7800	155	16.0	25	
301160	2950	185	6700	235	15.2	20	
301161	2800	720	5000			6	
301162	4900	2450	10000	240	22.5	39	

Spectrographic analyses of samples collected 1982-1985

GGU NO	Mn ppm	Zr ppm	Ti ppm	Ni ppm	Fe %	Sn ppm	B ppm
301163	3700	1700	12000	210	16.8	37	
301164	2300	840	8800	180	14.5	23	
301165	4400	1650	9800	175	22.5	39	
301166	4400	4800	13000	225	28.5	55	
301167	2950	1480	8800	270	19.0	33	
301168	5360	580	8200	108	16.8	28	
301169	2350	4100	20000	145	42.0	115	
301170	3050	1520	10000	195	18.5	37	
301171	2250	700	8800	162	13.8	35	
301172	1900	620	9200	170	16.8	30	
301173	3500	2000	8800	170	17.5	35	
301174	2400	1750	11000	150	37.0	80	
301175	2350	1600	12000	180	20.0	44	
301176	2800	3100	11000	220	19.0	44	
301177	2200	3500	12000	225	21.0	47	
301178	1600	2300	18000	180	32.0	72	
301179	2800	430	7000	350	16.8	33	
301180	3900	2450	14000	155	19.0	37	
301181	2400	1750	9500	195	19.0	39	
301182	3600	2400	14000	175	23.5	50	
301183	2500	500	9500	155	15.2	20	
301184	4500	1880	8800	188	20.0	37	
301185	2600	620	8800	240	18.5	33	
301186	3100	1300	12200	225	26.0	62	
301187	4200	1400	15200	170	28.0	62	
301188	2800	1450	10500	188	19.0	42	
301189	2300	1600	12000	175	27.0	64	
301190	1900	800	7600	290	16.0	33	
301191	2000	470	7300	300	23.5	40	
301192	1900	220	6000	420	16.0	18	
301193	1800	135	4700	360	10.0	16	
301194	2700	170	6200	300	14.5	23	
301195	3300	600	7000	350	18.5	32	
301196	2800	290	8500	270	30.0	42	
301197	3450	240	7600	600	30.0	44	
301198	2700	555	7000	380	19.0	38	
301199	2950	570	7800	218	21.0	37	
301200	2400	1800	7600	240	19.0	29	
301201	2400	185	5500	270	14.5	22	
301202	1650	215	7000	225	12.0	12	
301203	6000	380	7300	225	20.0	36	
301204	2600	670	8200	225	22.0	36	
301205	2500	185	4500	325	14.5	16	
301206	2700	1330	8200	170	35.0	47	
301207	2800	2300	6200	225	23.5	33	
301208	2150	670	7300	350	17.5	30	
301209	2400	1800	9200	185	18.5	28	
301210	2800	1600	6700	175	28.5	40	
301211	4200	640	6400	225	24.5	37	
301212	1900	230	7000	335	11.0	23	
301213	2300	1000	8800	350	14.5	28	
301214	1900	260	6700	280	14.5	16	

Table 6

Spectrographic analyses of samples collected 1982-1985

GGU NO	Mn ppm	Zr ppm	Ti ppm	Ni ppm	Fe %	Sn ppm	B ppm
301215	2150	370	6200	210	16.0	16	
301216	2050	1250	6400	250	12.0	23	
301217	5050	3950	7400	290	20.0	37	
301228	2700	210	900	170	14.5	30	
301229	3600	500	10500	200	18.5	33	
301230	5600	840	11000	125	19.0	35	
301231	6000	450	15000	140	19.0	40	
301232	3200	220	9200	170	16.0	20	
301233	3200	330	10000	162	16.5	28	
301234	5800	480	10500	250	13.0	34	
301235	2200	450	12800	260	13.0	28	
301236	2400	640	8500	192	13.0	30	
301237	2500	360	8000	155	13.0	10	
301238	3100	1900	17000	225	21.0	38	
301239	2750	450	10000	225	16.5	32	
301240	2000	1450	7600	235	14.5	32	
301241	2700	1500	10200	215	17.5	36	
301242	2800	295	7600	215	14.5	25	
301243	3600	880	11000	210	16.0	28	
301244	4400	1950	8500	188	17.0	23	
301245	2300	3950	4500	470	11.5	10	
301246	2500	1320	8500	260	20.0	36	
301247	2300	118	7000	188	13.0	23	
301248	2800	670	6700	280	13.0	20	
301249	3200	670	7600	200	14.5	20	
301250	2300	2900	12000	155	27.0	56	
301251	2800	3100	11500	195	22.0	42	
301252	6200	320	11000	145	24.5	72	
301253	3600	1650	12000	162	28.5	56	
301254	3100	960	18500	510	18.0	37	8
301256	3900	1300	9400	210	12.5	24	8
301257	3700	250	7400	195	13.0	24	8
301258	4400	2100	8500	160	14.0	24	8
301259	3900	3750	9400	270	14.0	32	8
301260	4800	6200	13500	100	14.0	32	8
301261	4200	2300	10000	370	14.5	32	8
301262	3150	4300	8500	240	13.0	27	8
301263	2900	1600	8500	285	12.5	27	8
301264	5800	5400	22500	195	17.0	54	8
301265	8500	9999	59000	215	16.5	82	8
301266	4600	3500	30000	160	17.0	58	8
301267	5400	770	11500	135	13.0	37	8
301268	7200	1550	17500	100	14.0	44	8
301269	4400	8500	52000	210	14.5	65	8
301270	3600	1200	21000	170	15.0	37	8
301271	3150	5400	37500	175	13.0	54	8
301272	3300	3500	44000	170	15.0	58	8
301273	1950	2200	25000	125	13.0	44	8
301274	2700	3800	40000	155	15.0	58	8
301275	3900	4700	17500	210	14.0	35	8
301276	1900	485	8000	150	9.8	15	8
301277	3600	4500	19500	160	14.0	37	8

Spectrographic analyses of samples collected 1982-1985

GGU NO	Mn ppm	Zr ppm	Ti ppm	Ni ppm	Fe %	Sn ppm	B ppm
301278	2400	6200	33500	185	22.0	96	8
301279	2400	1900	17500	200	12.5	32	8
301280	3000	860	12000	270	11.5	24	8
301281	2200	2600	38500	160	16.5	54	8
301282	2800	4700	35000	215	18.5	69	10
301283	3300	1400	42000	160	14.5	58	8
301284	3300	4700	30000	185	20.0	78	8
301285	3000	1450	18500	185	14.5	40	8
301286	3450	2500	40000	155	19.5	73	8
301287	3450	2600	23500	190	26.0	86	8
301288	2350	1450	16000	230	19.5	50	8
301289	3000	2050	35000	155	20.0	78	10
301290	3150	2400	38500	150	20.0	78	10
301291	2800	860	15000	240	16.5	40	10
301292	3000	380	13500	210	15.0	32	10
301293	2400	210	8700	175	11.5	17	10
301294	2900	250	10000	145	14.0	27	10
301295	2900	2100	35000	140	16.5	50	10
301296	3150	550	9400	210	14.5	29	10
301297	5400	1600	23500	195	28.0	115	21
301298	2500	1500	12500	170	16.0	35	8
301299	2800	3300	60000	125	23.0	105	8
301300	2800	680	13500	195	16.0	37	8

Bondar-Clegg analyses of samples collected 1982-1986

GGU NO	Sc ppm	Cr ppm	Fe %	Co ppm	Ni ppm	Zn ppm	As PPM	Se ppm	Rb ppm
261608	31.0	770	6.5	41	280	0	9	0	19
261697	37.0	380	7.6	39	130	440	0	0	0
263697	41.0	890	8.6	55	320	0	0	0	32
274213	43.0	820	11.0	48	190	0	0	0	0
274223	69.5	450	12.0	43	100	0	0	0	15
274226	50.0	1800	23.0	53	140	0	3	0	16
274227	39.0	1500	18.0	43	130	0	0	0	0
274231	55.2	570	13.0	45	140	0	3	0	0
274235	50.0	370	21.0	41	71	0	0	0	12
274237	36.0	410	9.2	41	160	0	3	0	0
274258	52.1	500	23.0	40	100	0	0	0	19
274275	39.0	180	10.0	37	69	0	0	0	0
274312	42.0	300	11.0	38	110	0	0	0	19
293631	41.0	440	9.1	25	68	0	23	0	28
301107	33.0	910	7.5	46	240	0	0	0	23
323404	46.0	620	11.0	53	280	0	0	0	30
323406	37.0	270	7.7	33	100	0	0	0	28
323408	39.0	270	8.1	34	79	0	0	0	17
323412	49.0	300	10.0	43	110	0	3	0	20
323419	32.0	260	9.3	37	110	0	0	0	23
323427	57.3	330	17.0	49	91	0	3	0	0
323429	52.1	1800	18.0	61	120	210	2	0	12
323436	64.6	390	22.0	60	61	0	21	0	14
323444	44.0	340	13.0	56	160	0	0	0	0
323449	94.1	520	21.0	53	63	0	0	0	15
323450	50.0	320	15.0	48	77	0	2	0	0
323451	59.4	470	20.0	49	98	0	0	0	0
323452	57.9	450	19.0	51	100	0	0	0	0
323454	74.1	1100	20.0	62	110	0	0	0	0
323464	50.0	660	16.0	58	170	0	0	0	12
323484	29.0	380	8.5	32	100	0	0	0	17
323489	69.9	900	18.0	64	150	0	0	0	12
323491	36.0	380	14.0	76	130	0	3	0	28
323492	41.0	830	12.0	72	310	0	6	0	28
323493	35.0	450	12.0	61	130	0	3	0	40
323494	39.0	1700	10.0	88	230	0	0	0	16
323495	48.0	290	13.0	48	85	0	0	0	17
323500	35.0	350	10.0	31	63	0	0	0	19
323502	33.0	230	8.9	30	100	0	0	0	14
323504	47.0	320	20.0	38	78	0	0	0	0
323506	40.0	350	13.0	28	99	0	0	0	23

Table 8

Bondar-Clegg analyses of samples collected 1982-1986

GGU NO	Mo ppm	Ag ppm	Cd ppm	Sb ppm	Cs ppm	Ba ppm	La ppm	Eu ppm	Tb ppm
261608	6	0	0	0.0	0	0	68	0	4
261697	0	0	0	0.0	0	0	634	0	13
263697	16	0	26	0.4	2	0	260	0	7
274213	0	0	0	0.0	0	0	41	0	2
274223	0	0	0	0.0	0	0	13	0	1
274226	0	0	0	0.0	0	0	360	2	5
274227	5	0	0	0.0	0	0	370	0	5
274231	0	0	0	0.0	0	0	14	0	1
274235	0	0	0	0.0	0	0	99	2	3
274237	0	0	0	0.3	0	0	8	0	0
274258	0	0	0	0.0	0	0	280	4	5
274275	0	0	0	0.0	0	0	6	0	1
274312	2	0	0	0.0	0	0	100	0	5
293631	7	0	0	0.0	0	0	290	5	5
301107	3	0	0	0.8	4	0	44	0	2
323404	0	0	0	0.0	3	150	21	0	1
323406	0	0	0	0.0	0	100	12	0	0
323408	3	0	0	0.0	0	120	17	0	0
323412	0	0	0	0.0	0	0	13	0	1
323419	2	0	0	0.0	2	0	27	0	1
323427	0	0	0	0.0	0	0	21	0	2
323429	0	0	0	0.0	0	0	30	0	1
323436	0	0	0	0.0	0	0	22	0	2
323444	0	0	0	0.0	0	0	0	0	1
323449	0	0	0	0.0	0	0	5	0	3
323450	12	0	0	0.0	0	0	5	0	1
323451	0	0	0	0.0	0	0	11	0	1
323452	0	0	0	0.0	0	0	14	0	1
323454	0	0	0	0.0	0	0	17	0	2
323464	3	0	0	0.0	1	0	16	0	1
323484	0	0	0	0.0	0	160	25	0	1
323489	0	0	0	0.0	0	0	19	0	2
323491	4	0	0	0.3	3	210	24	0	2
323492	0	0	0	0.2	3	0	25	0	0
323493	0	0	0	0.3	3	140	42	2	1
323494	6	0	0	0.0	2	0	160	0	4
323495	0	0	0	0.3	2	0	9	0	2
323500	23	0	0	0.0	0	150	33	2	2
323502	0	0	0	0.0	0	160	37	0	2
323504	0	0	0	0.0	0	0	140	3	5
323506	0	0	0	0.0	0	140	130	3	5

Bondar-Clegg analyses of samples collected 1982-1986

GGU NO	Yb ppm	Hf PPM	Ta PPM	W PPM	Ir PPB	Au PPB	Th PPM	U PPM
261608	16	140	2	431	0	0	41.0	14.0
261697	19	160	6	511	0	0	614.0	51.5
263697	21	100	8	2400	0	0	158.0	25.0
274213	6	21	1	5	0	0	15.0	1.8
274223	9	5	0	0	0	0	3.6	1.3
274226	15	140	1	0	0	0	156.0	16.0
274227	10	120	1	20	0	300	182.0	16.0
274231	7	6	0	12	0	88	3.0	0.6
274235	16	39	4	8	0	430	50.5	7.4
274237	0	5	0	5	0	0	1.5	0.6
274258	21	160	2	0	0	0	131.0	15.0
274275	8	8	0	0	0	0	1.1	0.6
274312	20	11	22	68	0	19	41.0	5.4
293631	34	299	15	263	0	0	150.0	60.3
301107	0	15	8	317	0	0	12.0	5.5
323404	6	13	2	34	0	0	11.0	2.7
323406	5	7	0	0	0	0	2.4	1.4
323408	6	16	0	190	0	340	6.6	2.5
323412	9	11	1	20	0	0	5.1	4.7
323419	7	61	0	41	0	6	37.0	6.9
323427	11	5	0	0	0	0	1.9	0.0
323429	7	32	2	55	0	11	55.3	2.5
323436	13	9	2	24	0	0	8.4	0.7
323444	0	10	0	0	0	0	2.4	0.0
323449	15	7	0	20	0	0	7.7	0.0
323450	8	6	0	7	0	0	1.1	0.0
323451	7	11	1	24	0	0	5.9	0.8
323452	8	5	0	19	0	12	4.1	0.5
323454	10	4	1	37	0	0	7.4	0.0
323464	6	24	3	0	0	0	3.9	1.9
323484	6	41	2	0	0	0	6.3	1.5
323489	10	12	1	0	0	0	7.9	1.0
323491	13	4	3	100	0	9	11.0	6.9
323492	5	3	2	82	0	19	4.1	3.9
323493	0	4	5	36	0	8	10.0	3.9
323494	24	6	6	300	0	0	32.0	5.9
323495	22	3	5	32	0	0	4.7	8.3
323500	9	50	1	24	0	0	11.0	4.6
323502	12	24	0	0	0	0	15.0	3.9
323504	25	64	3	0	0	0	35.0	10.0
323506	29	218	3	13	0	0	48.0	12.0

Table 10

Neutronactivation analyses of grab samples from scheelite-bearing units in Ivisârtoq, Nuuk area.

Sample nr.	Rock type	W %	Au ppb	Cr ppm	Co ppm	Ni ppm
353135	Amphibolite + skarn	3.23	<13	170	61	110
353155	Amphibolite	1.14	<21	67	17	<50
353156	Amphibolite	1.72	<16	92	22	<50
353173	Skarn	1.36	<20	170	28	57
353203	Skarn	1.08	<22	1300	140	1300
353204	Skarn	1.00	<22	1500	140	1200
353205	Skarn	0.56	<15	1300	140	1100
353233	0.3 m wide shearzone	1.56	100	100	42	64
353256	Skarn	0.38	<13	1200	83	490
353264	Skarn	1.91	<21	1200	110	670
353268	Skarn	0.15	<5	1000	150	830
353269	Skarn	1.09	<10	970	110	680
353271	Skarn	1.20	<18	970	110	910
353286	Skarn	0.63	17	1000	120	800
353290	Skarn	1.69	<19	1100	84	460
353291	Skarn	0.64	<16	1400	91	560

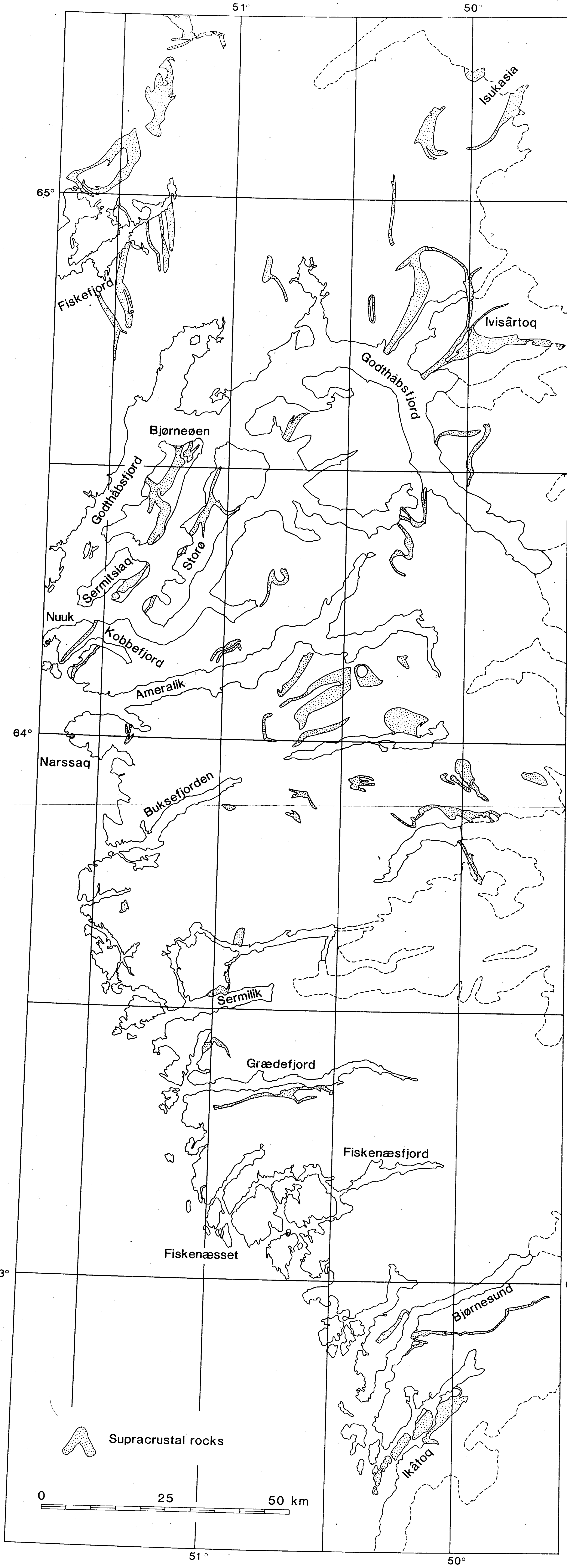
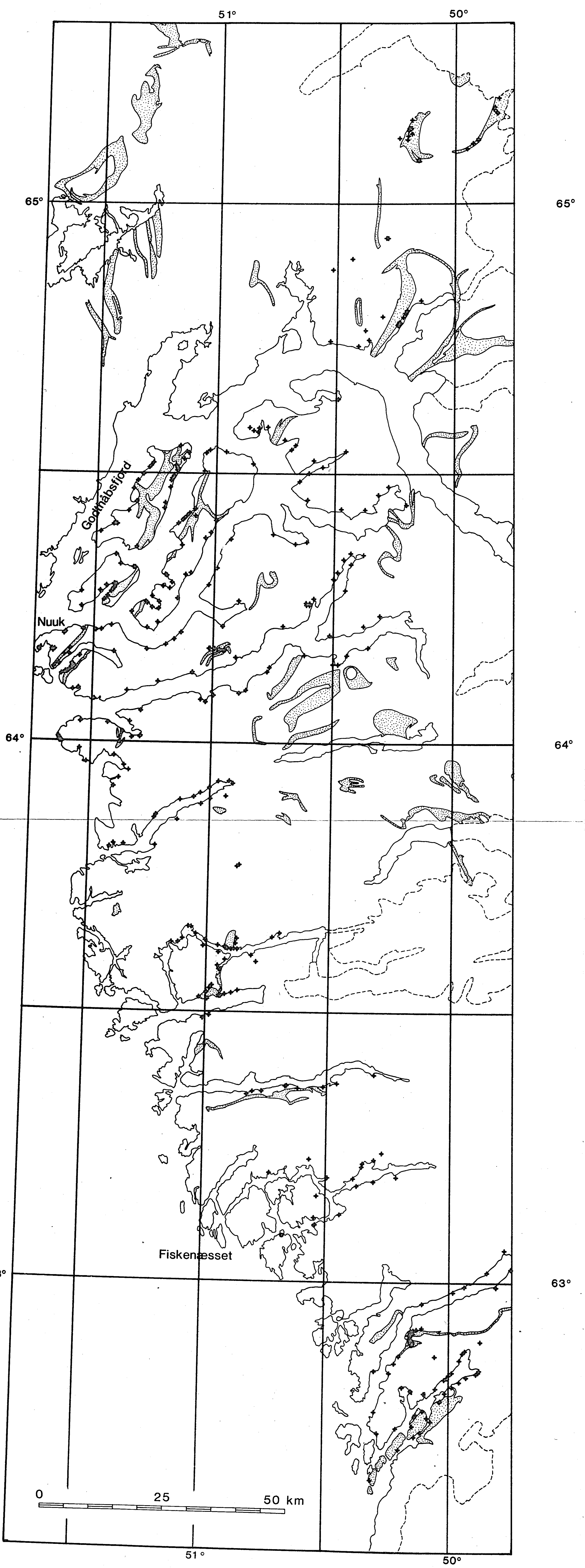

51°
50°
65°
65°
Isukasia
Fiskefjord
Ivisârtoq
Godthåbsfjord
Bjørneøen
Godthåbsfjord
Storø
Sermitsiaq
Nuuk
Kobbefjord
Ameralik
64°
64°
Narssaq
Buksefjorden
Sermilik
Grædefjord
Fiskenæsfjord
Fiskenæsset
63°
63°
Bjørnesund
Ikâtoq
Supracrustal rocks
0
25
50 km
51°
50°

Plate 1



HEAVY MINERAL CONCENTRATES FROM STREAM SEDIMENTS.
SAMPLED 1982-1985.
SAMPLE SITES.

Plate 2

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64G 30' 00' N

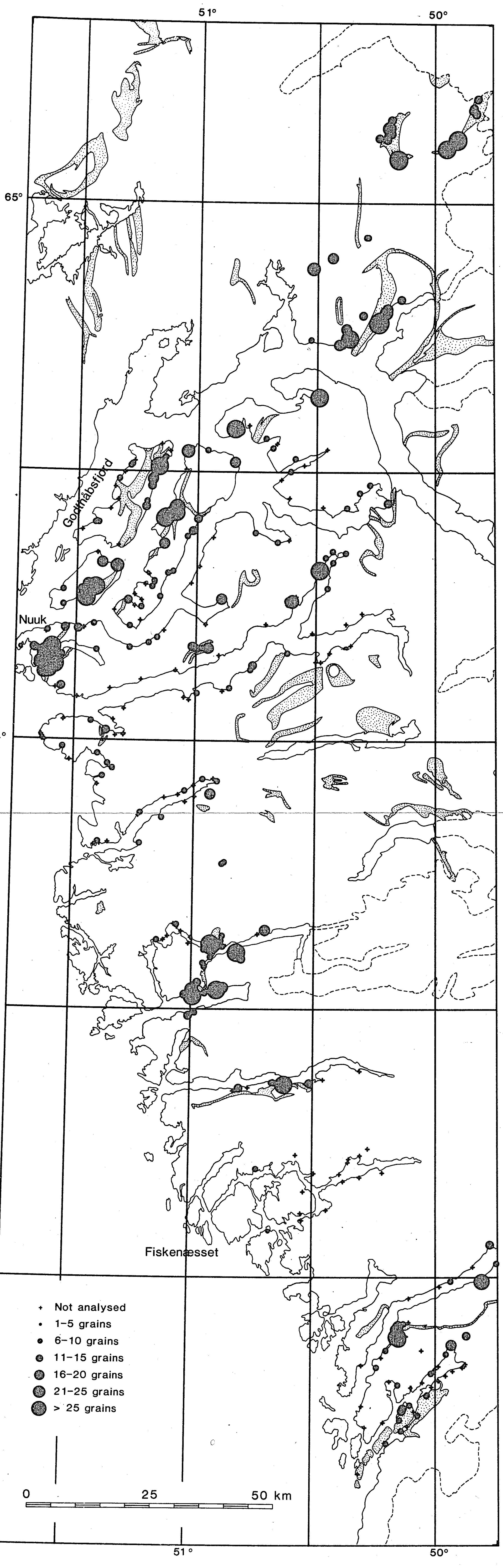


Plate 3

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1985.
SCHEELITE GRAINS PR. 4 LITRES.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64б 30' 00" N

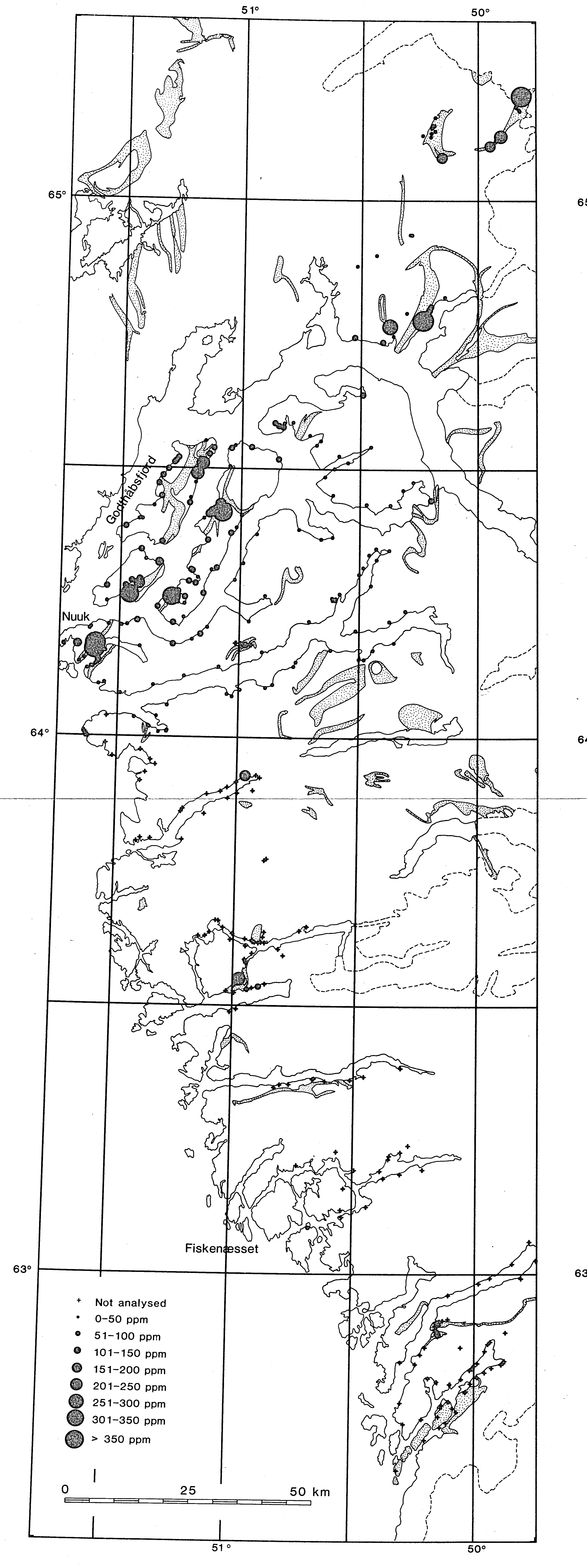


Plate 4

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1985.
ANALYSED FOR TUNGSTEN.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64° 30' 00" N

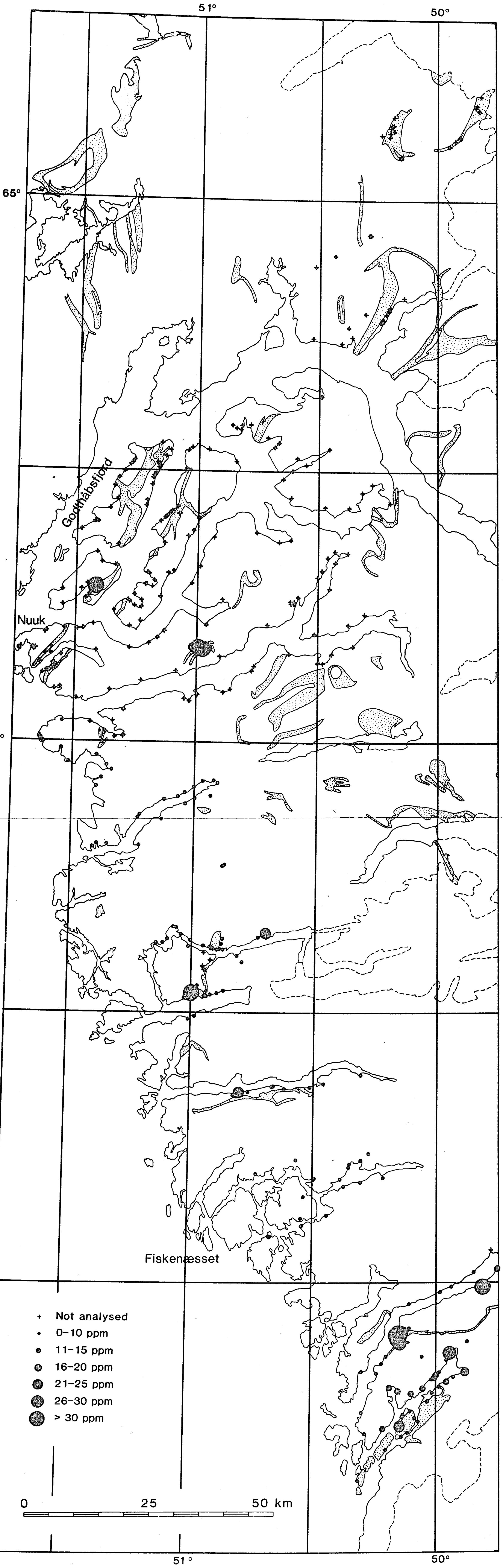


Plate 5

HEAVY MINERAL CONCENTRATES FROM STREAM SEDIMENTS.
SAMPLED 1983.
ANALYSED FOR BORON.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64° 30' 00' N

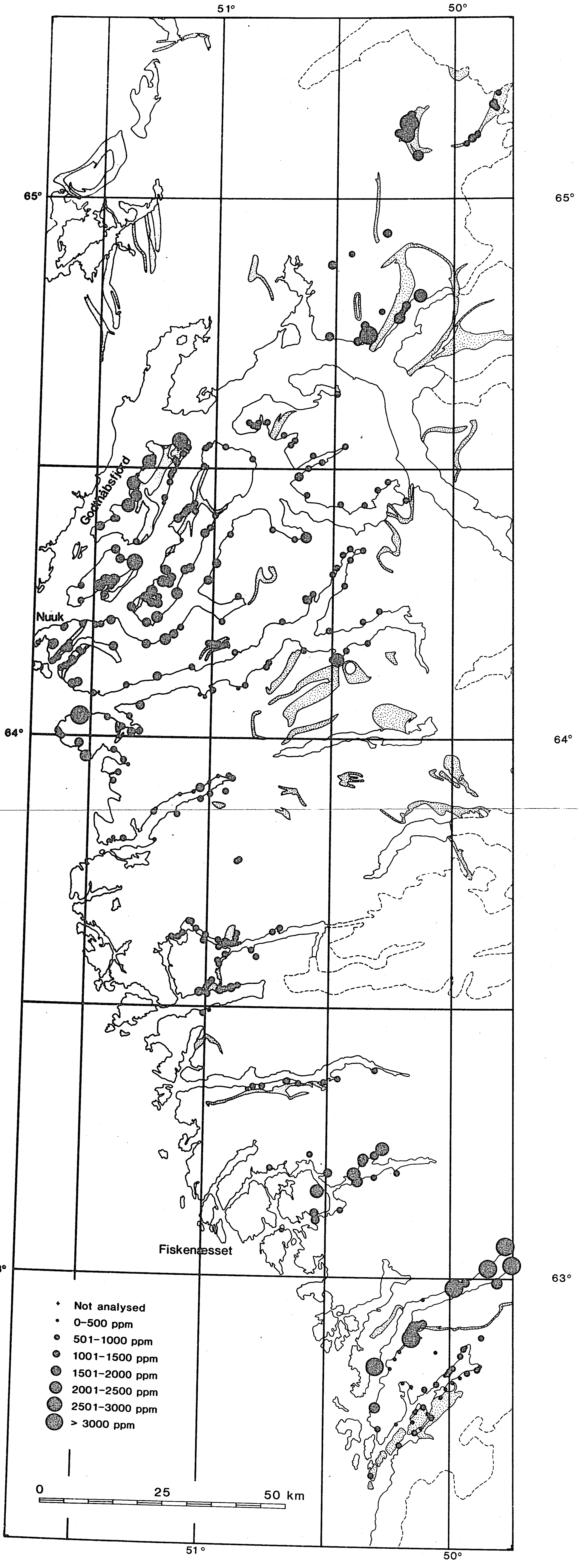


Plate 6

HEAVY MINERAL CONCENTRATES FROM STREAM SEDIMENTS.
SAMPLED 1982-1985.
ANALYSED FOR CHROMIUM.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64G 30' 00' N

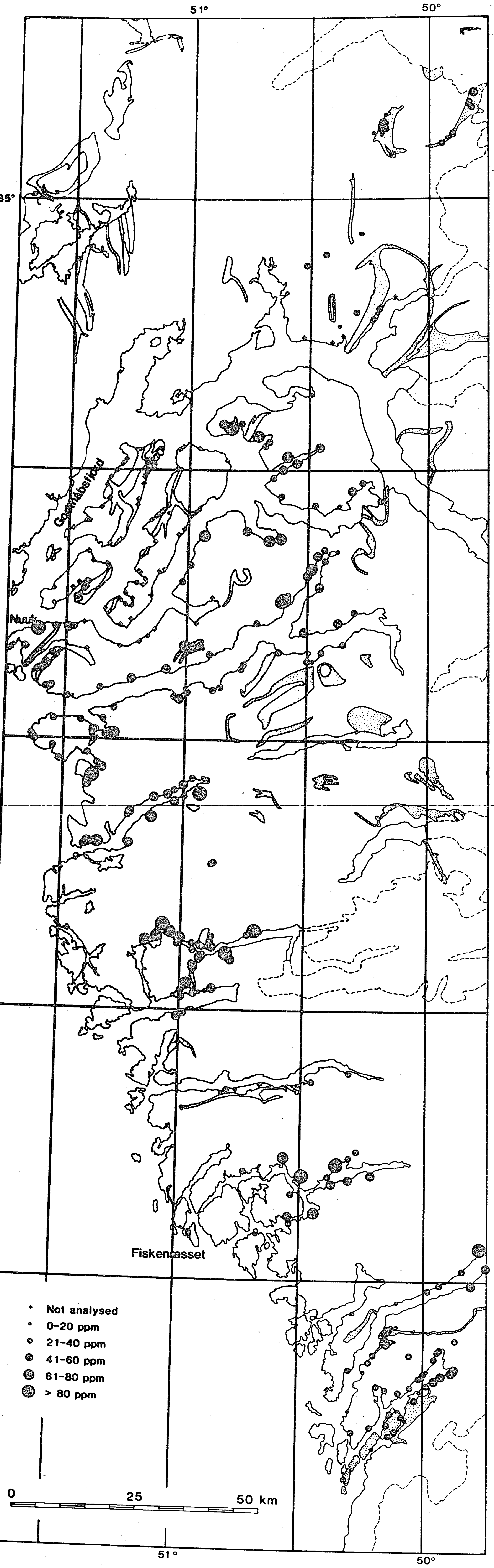


Plate 7

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1983.
ANALYSED FOR TIN.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 646 30' 00' N

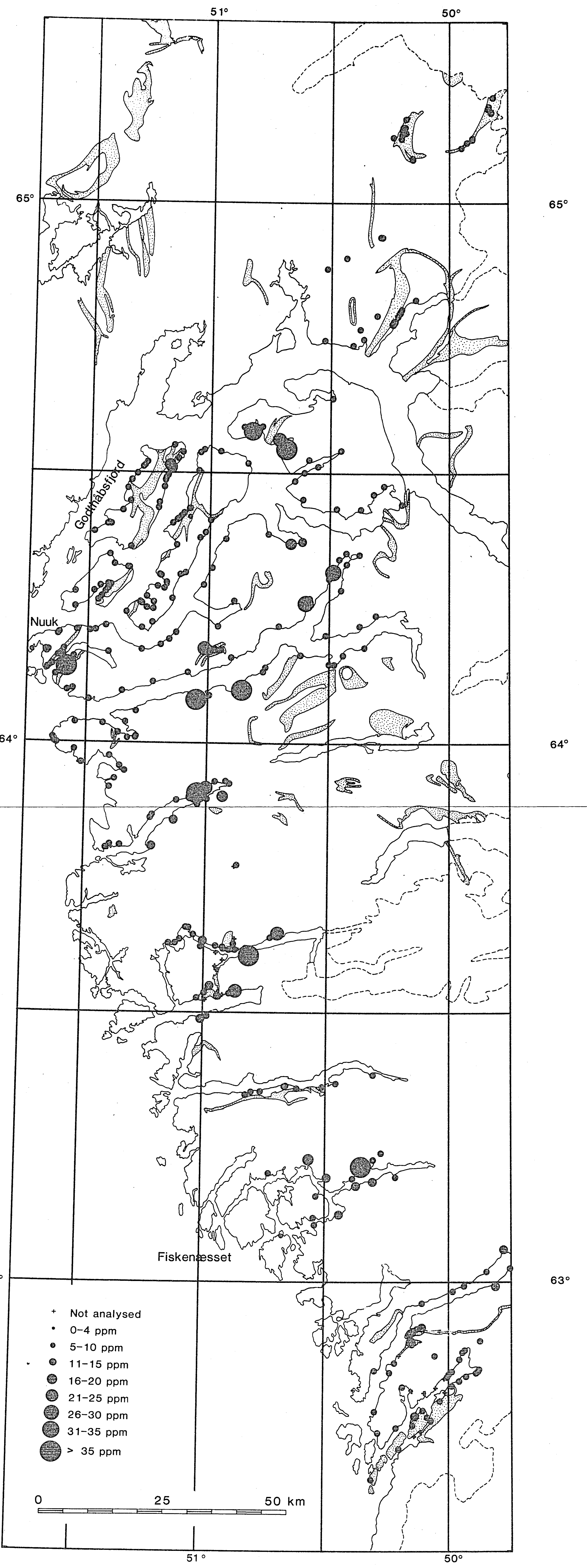


Plate 8

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1985.
ANALYSED FOR MOLYBDENUM.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64 30' 00" N

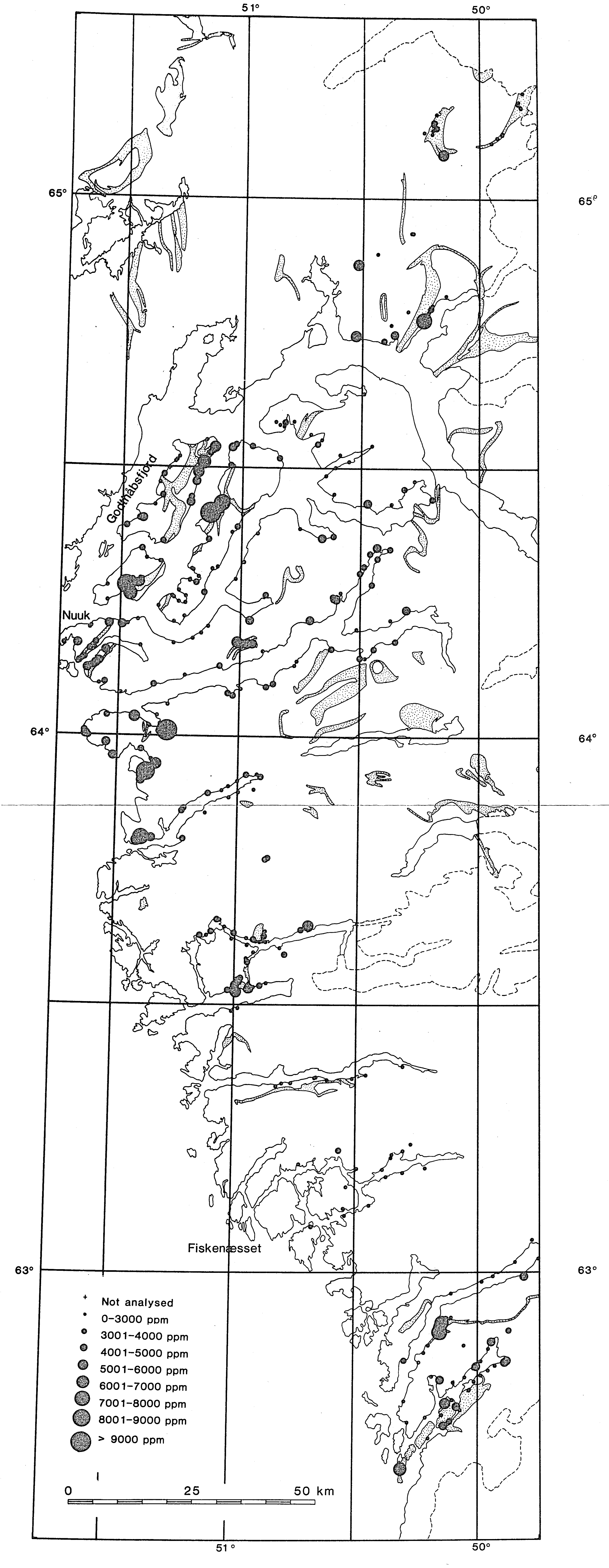


Plate 9

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1985.
ANALYSED FOR MANGANESE.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64° 30' 00" N

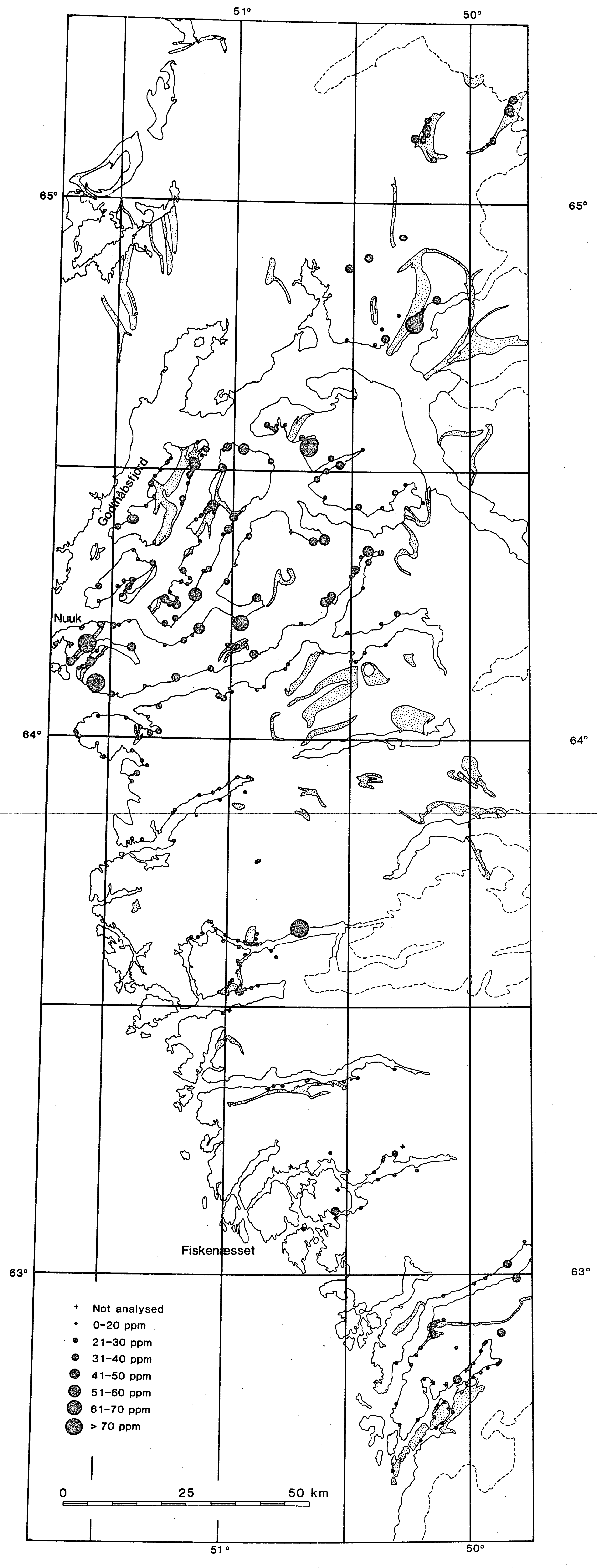


Plate 10

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1985.
ANALYSED FOR LEAD.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 646 30' 00' N

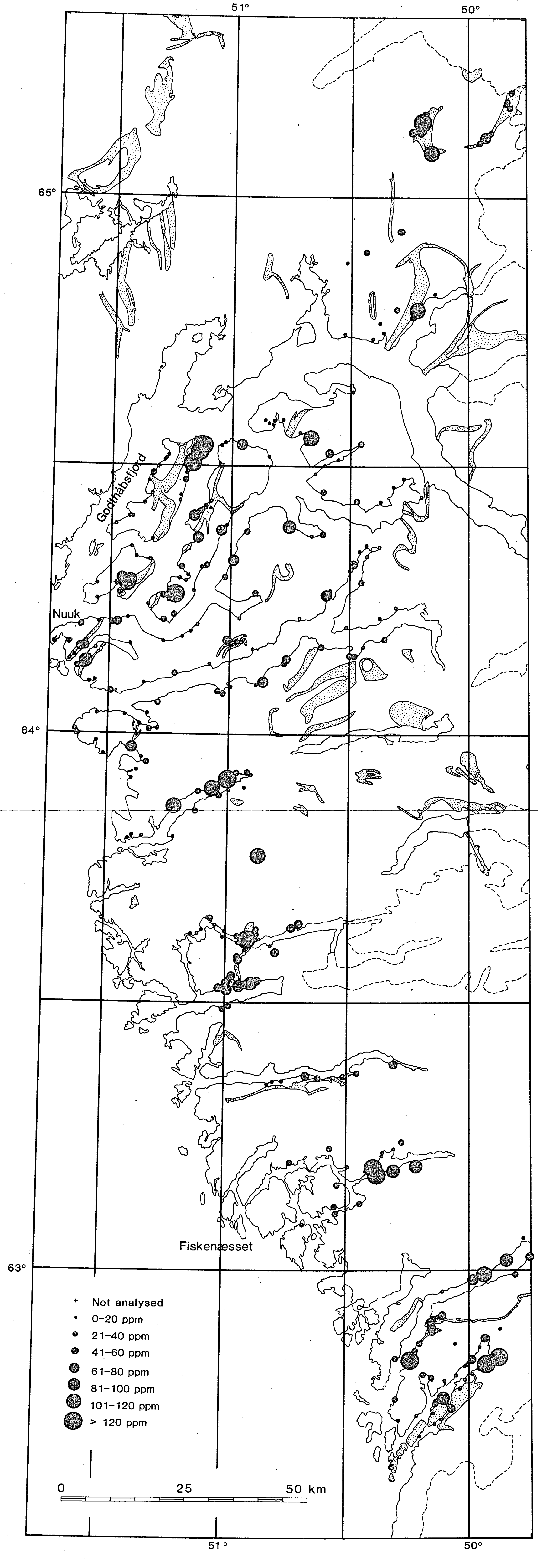


Plate 11

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982–1985.
ANALYSED FOR COPPER.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64° 30' 00' N

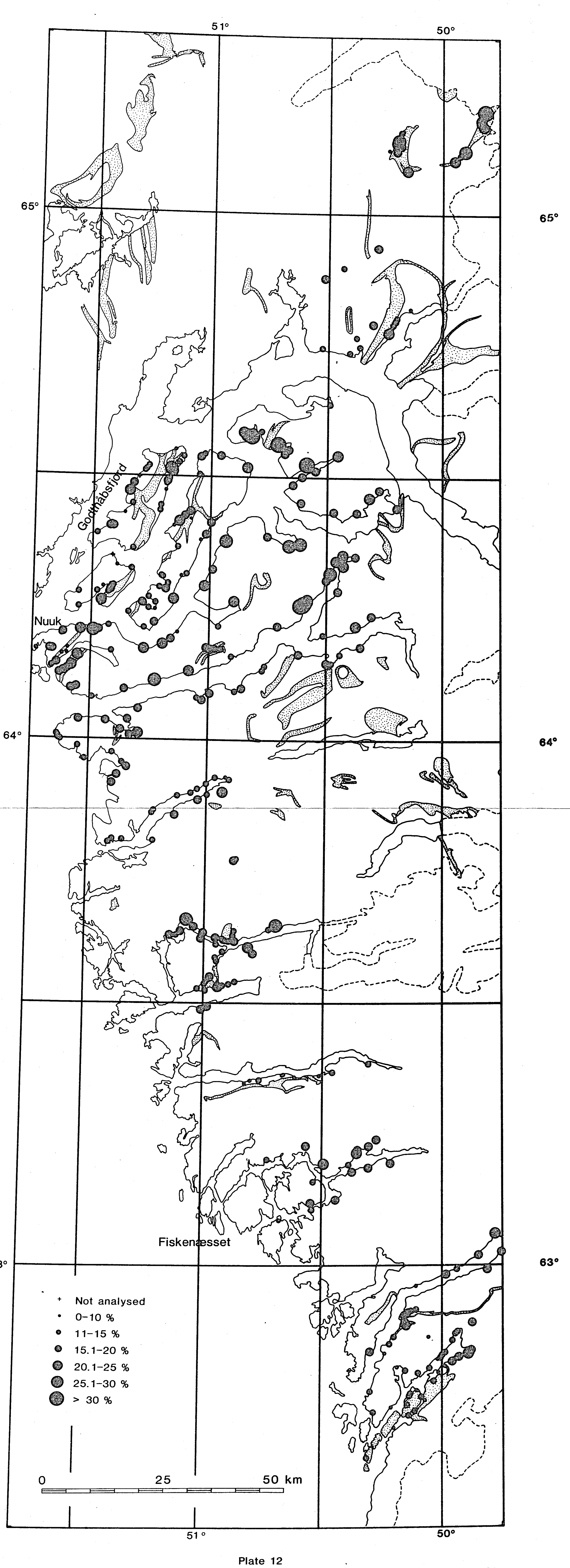


Plate 12

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1985.
ANALYSED FOR IRON.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64 30' 00" N

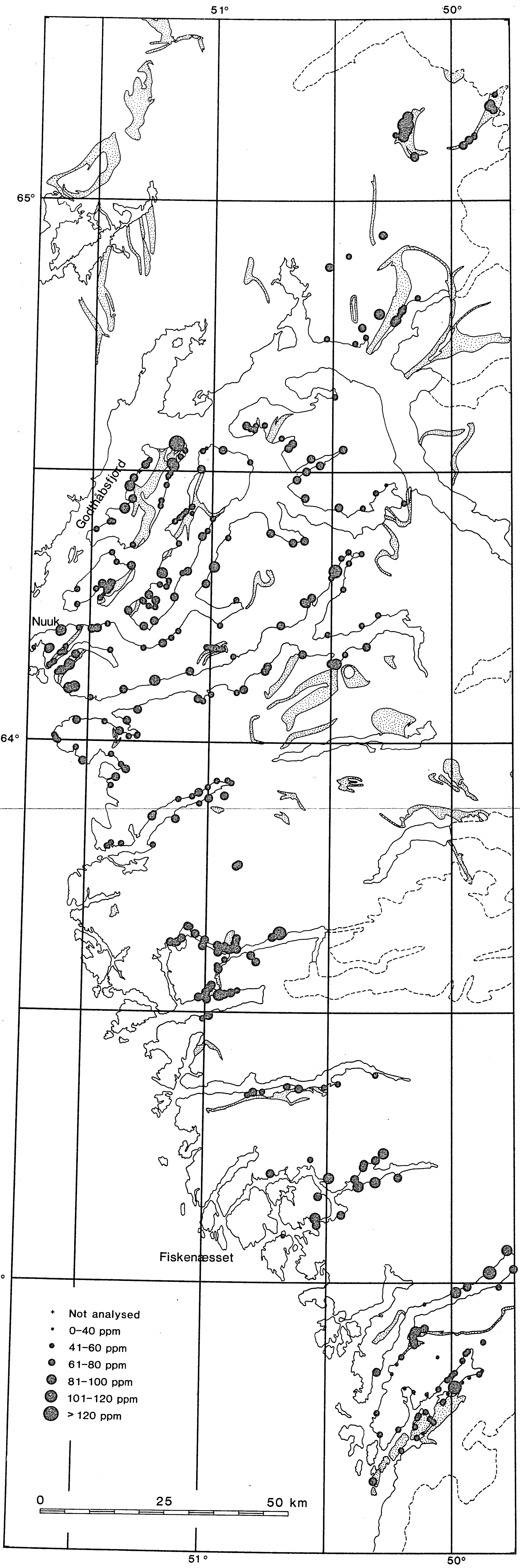


Plate 13

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1985.
ANALYSED FOR COBALT.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64G 30' 00' N

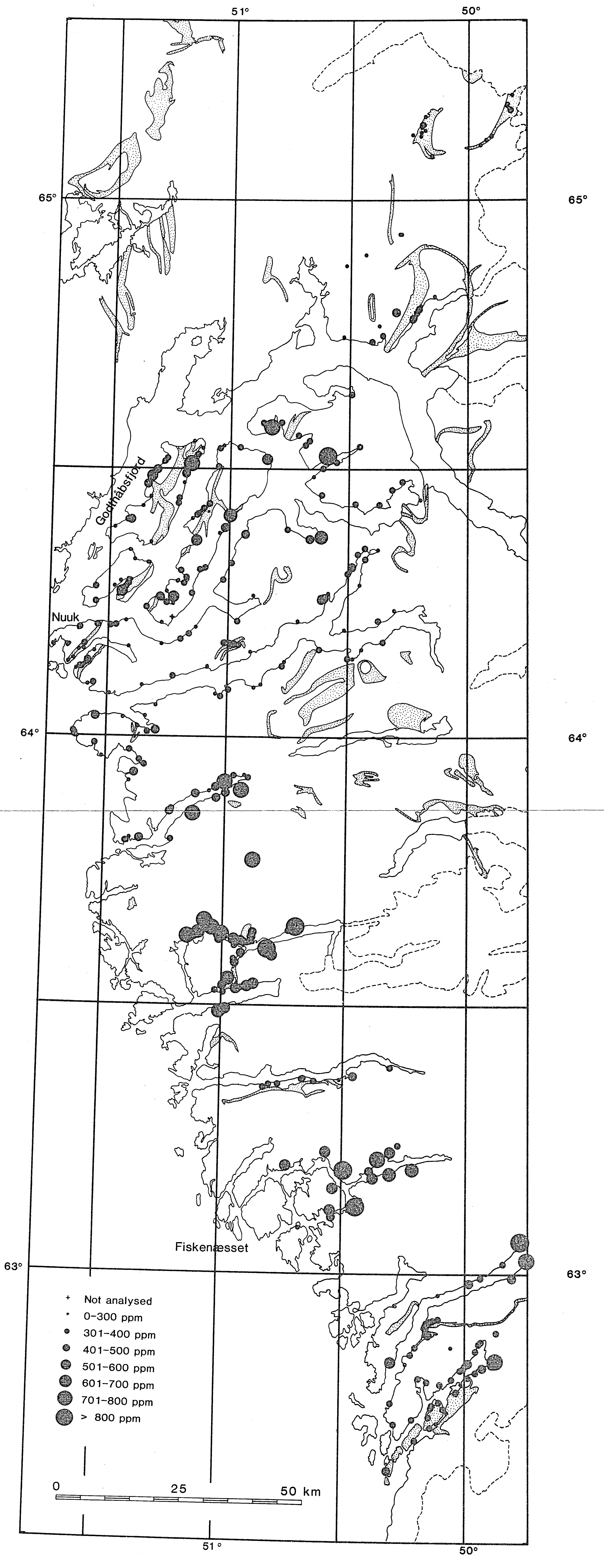


Plate 14

HEAVY MINERAL CONCENTRATES FROM STREAM SEDIMENTS.
SAMPLED 1982-1985.
ANALYSED FOR VANADIUM.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64 30' 00' N

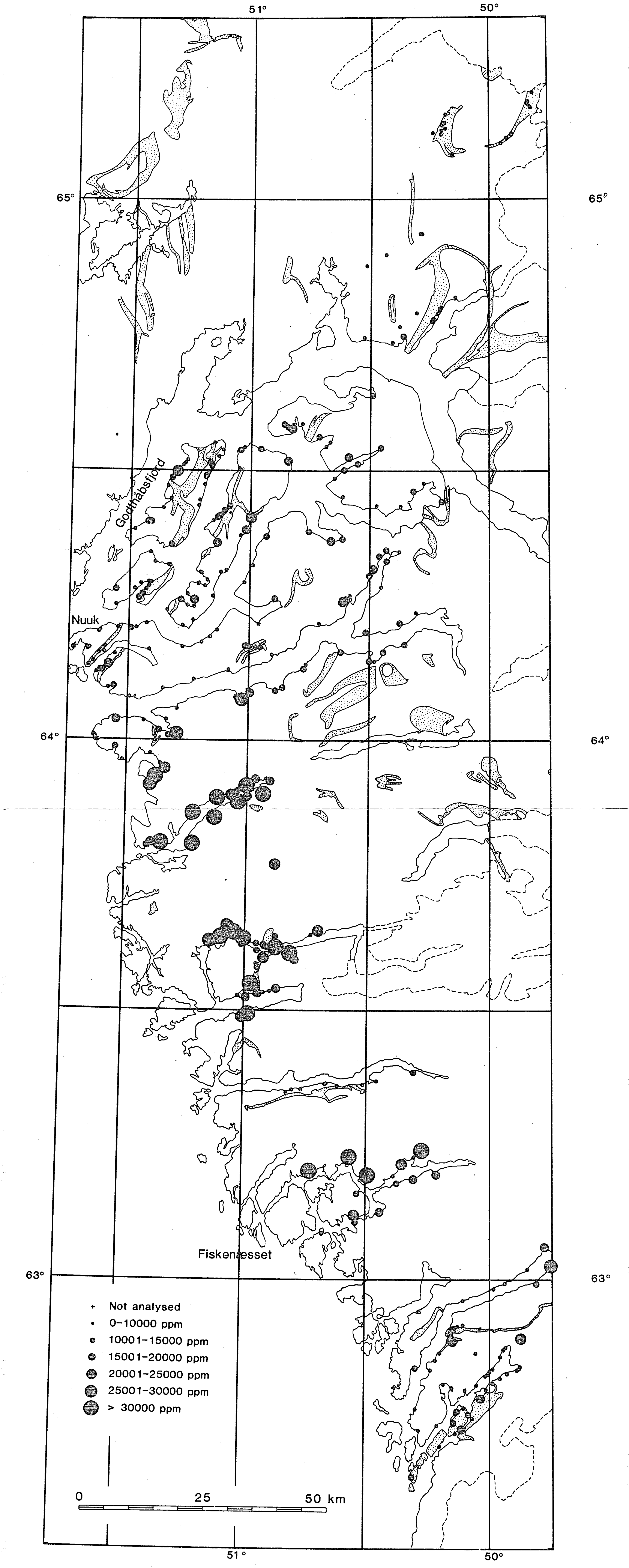


Plate 15

HEAVY MINERAL CONCENTRATES FROM STREAM SEDIMENTS.
SAMPLED 1982-1985.
ANALYSED FOR TITANEUM.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64S 30' 00' N

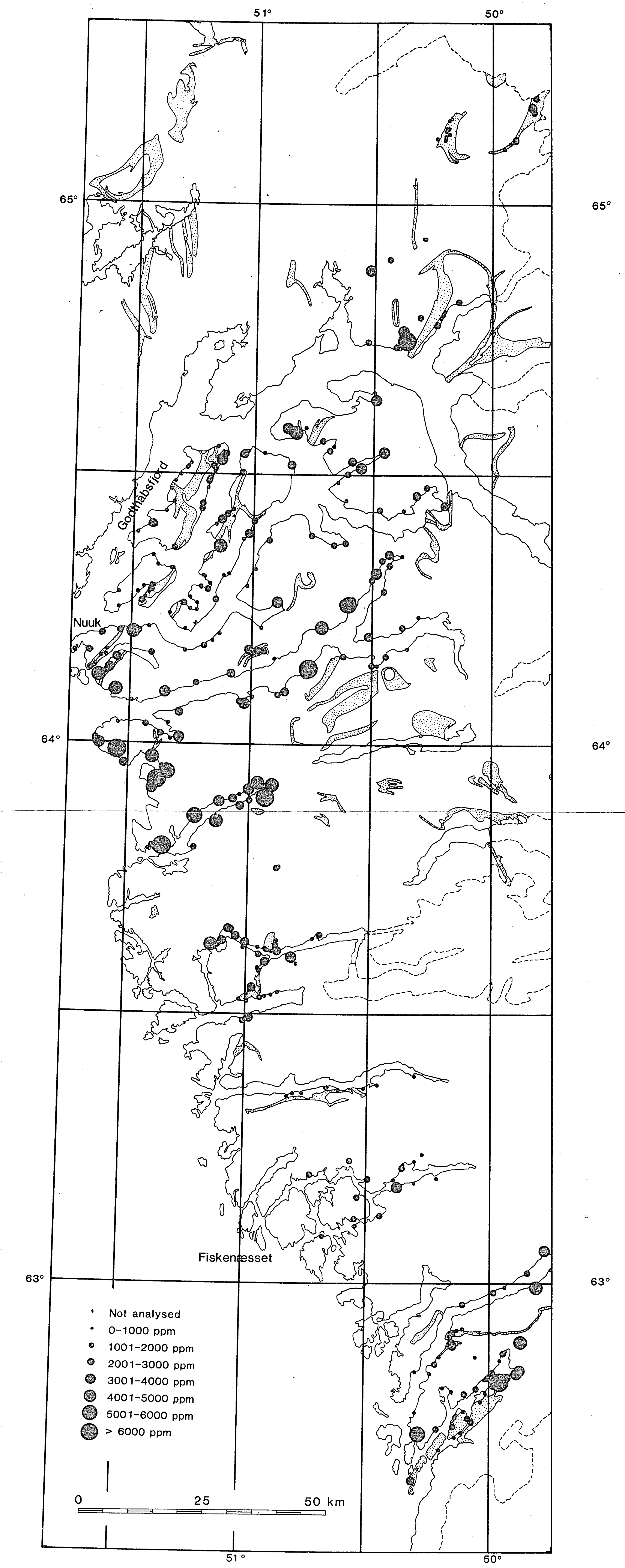


Plate 16

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1985.
ANALYSED FOR ZIRCONIUM.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64 30' 00' N

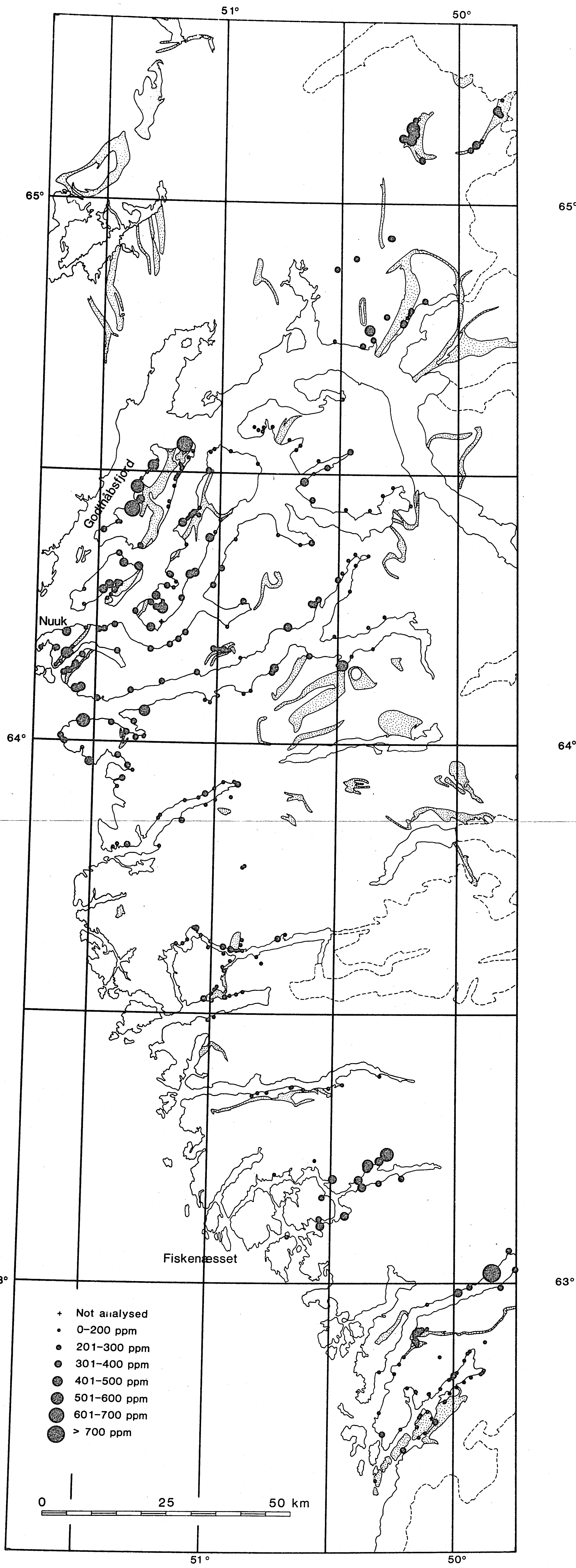


Plate 17

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1985.
ANALYSED FOR NICKEL.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64б 30' 00" N

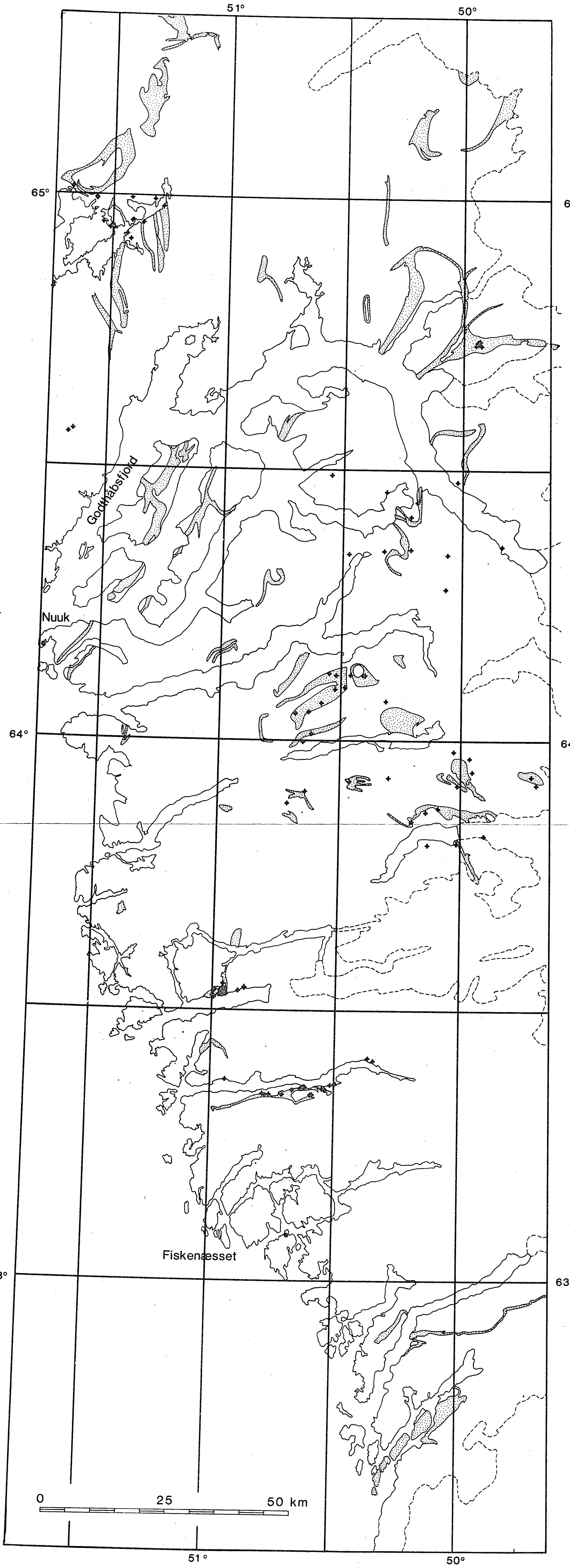


Plate 18

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1986.
SAMPLE SITES.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64 30' 00' N

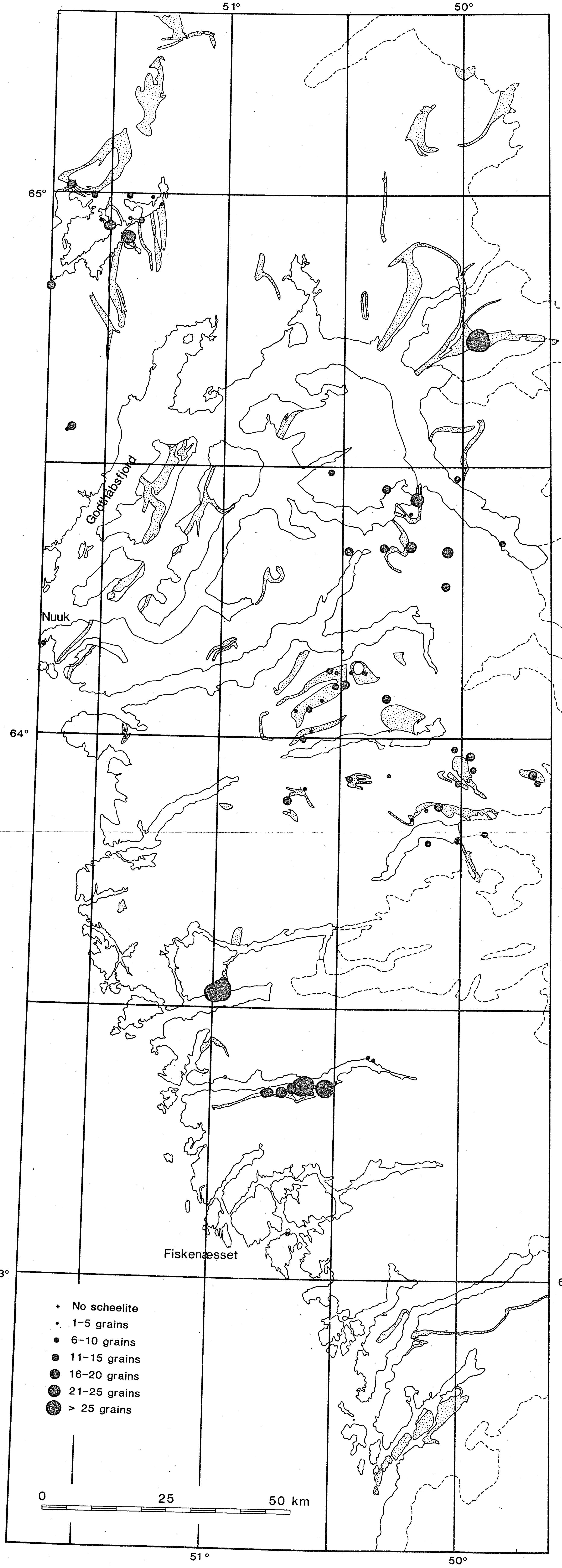


Plate 19

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1986.
SCHEELITE GRAINS PR. 1 LITRE.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64° 30' 00" N

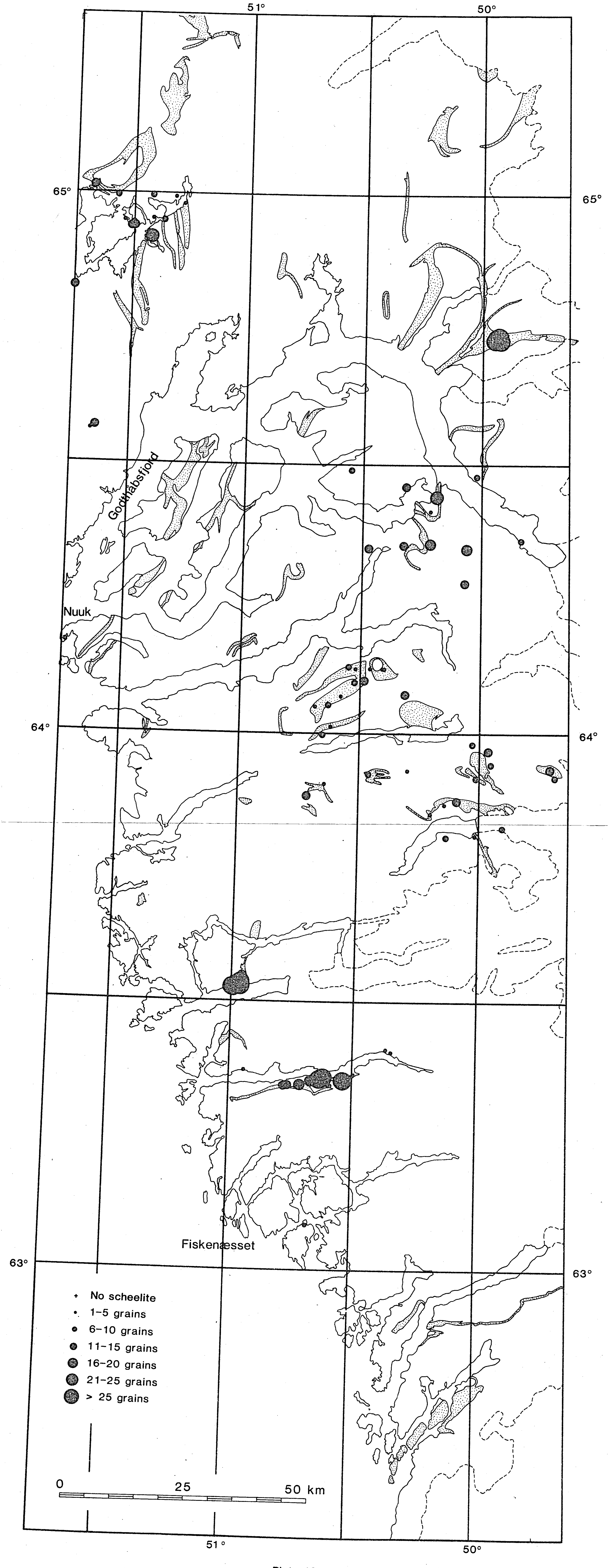


Plate 19

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1986.
SCHEELITE GRAINS PR. 1 LITRE.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64 30' 00' N

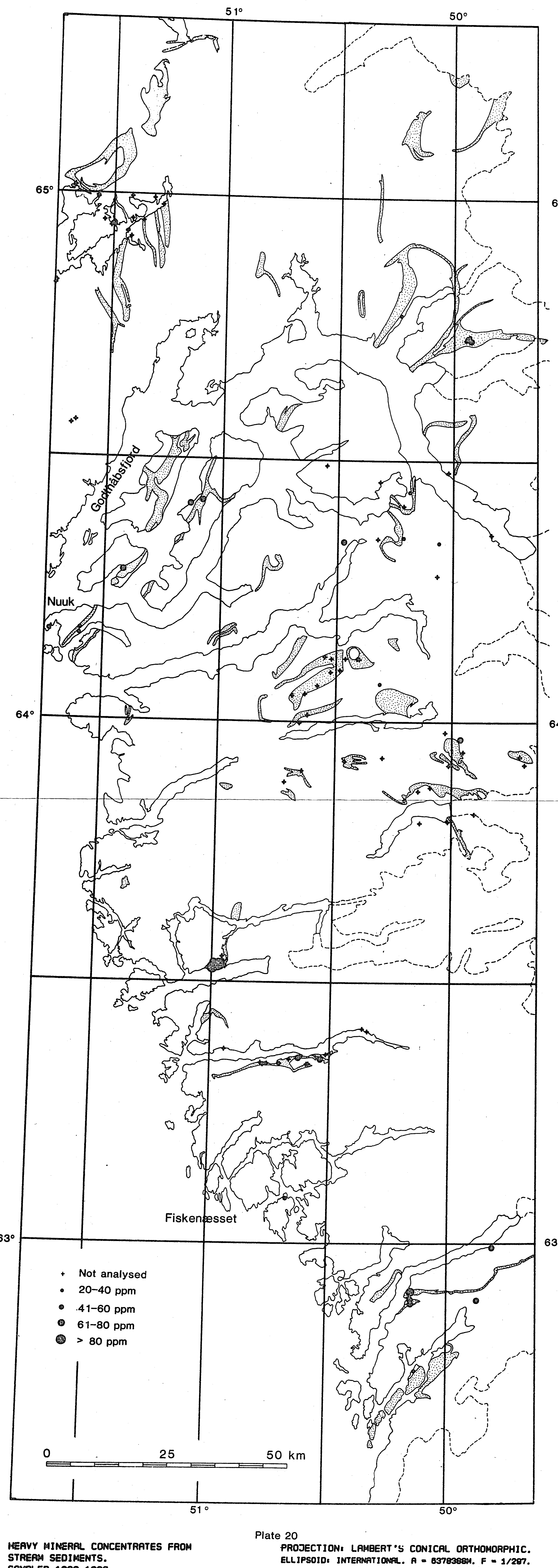


Plate 20

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1986.
ANALYSED FOR SCANDIUM.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 646 30' 00' N

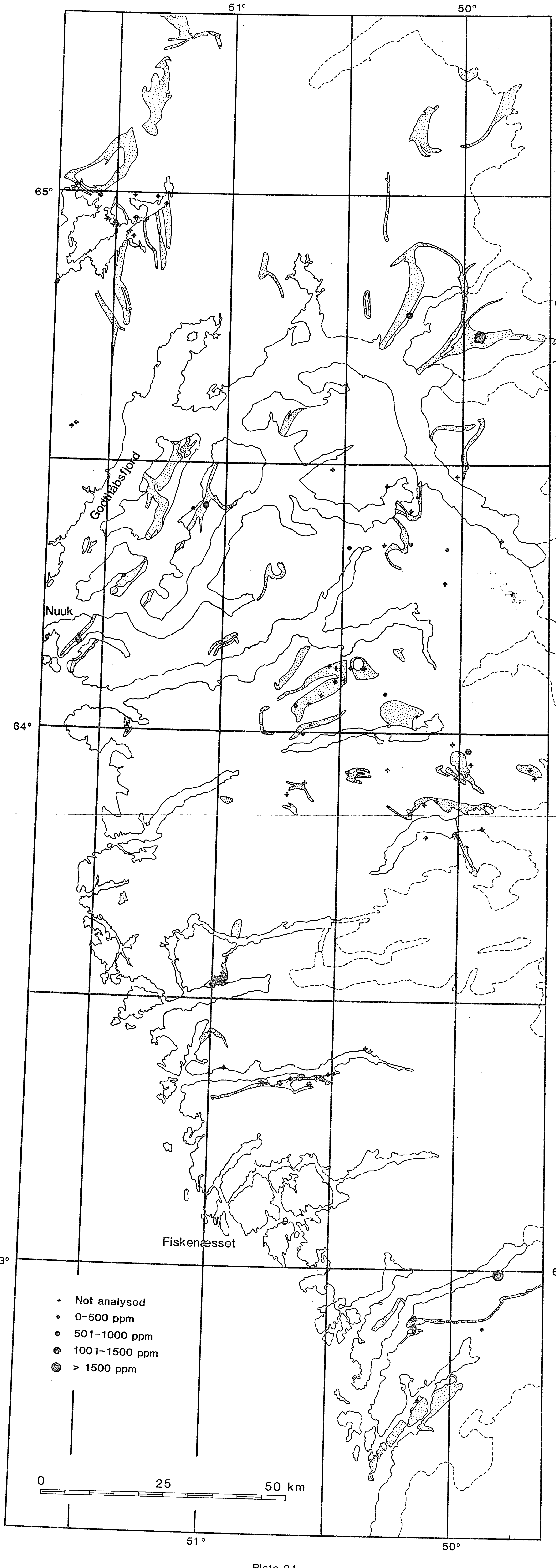


Plate 21

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982–1986.
ANALYSED FOR CHROMIUM.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64Ø 30' 00' N

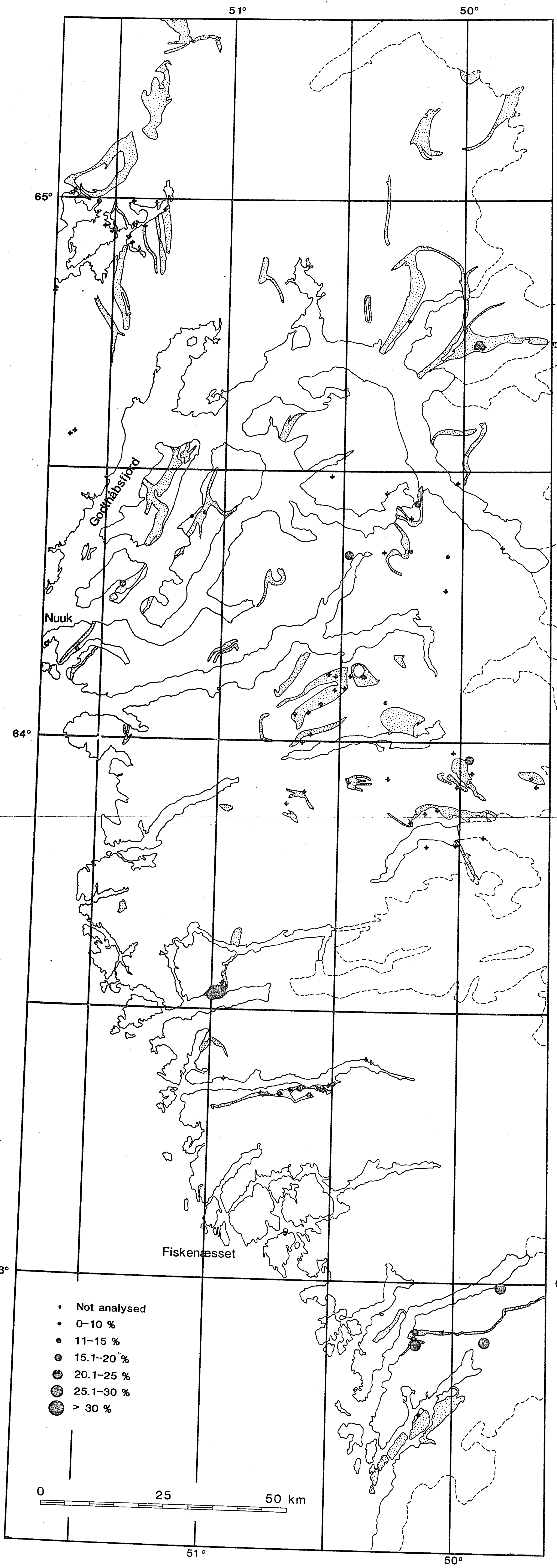


Plate 22

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1986.
ANALYSED FOR IRON.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64G 30' 00' N

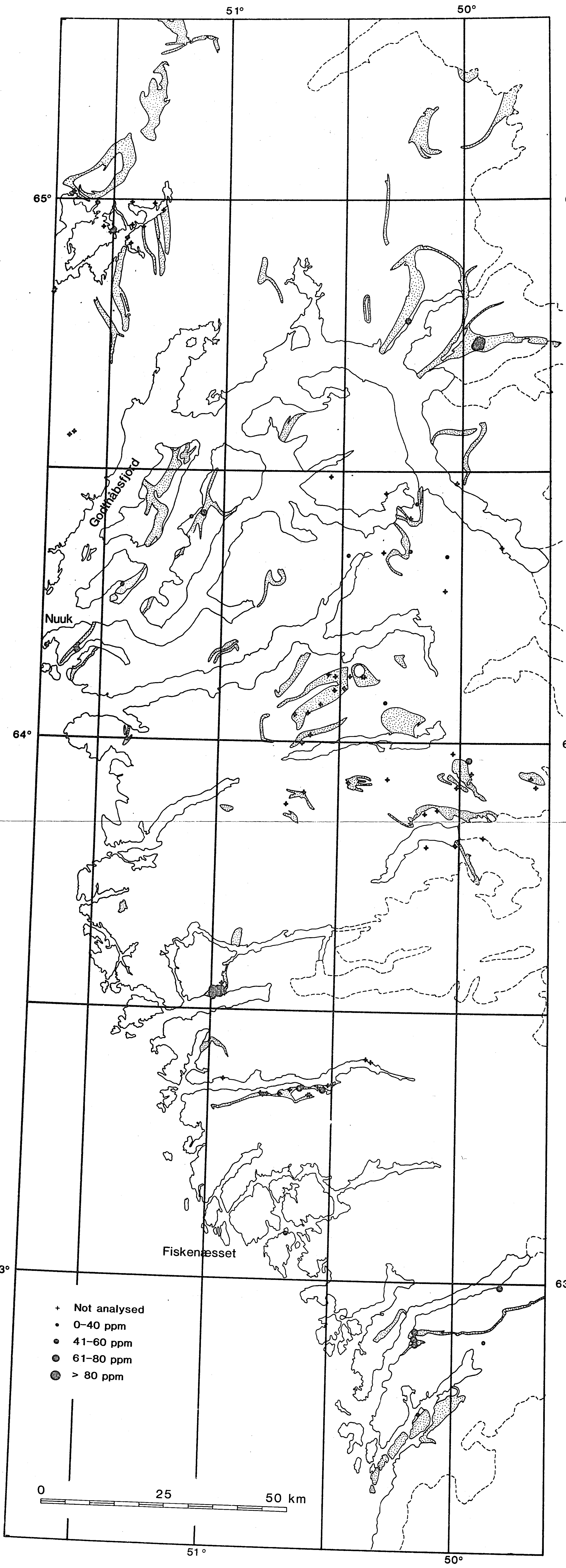


Plate 23

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1986.
ANALYSED FOR COBALT.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64 30' 00' N

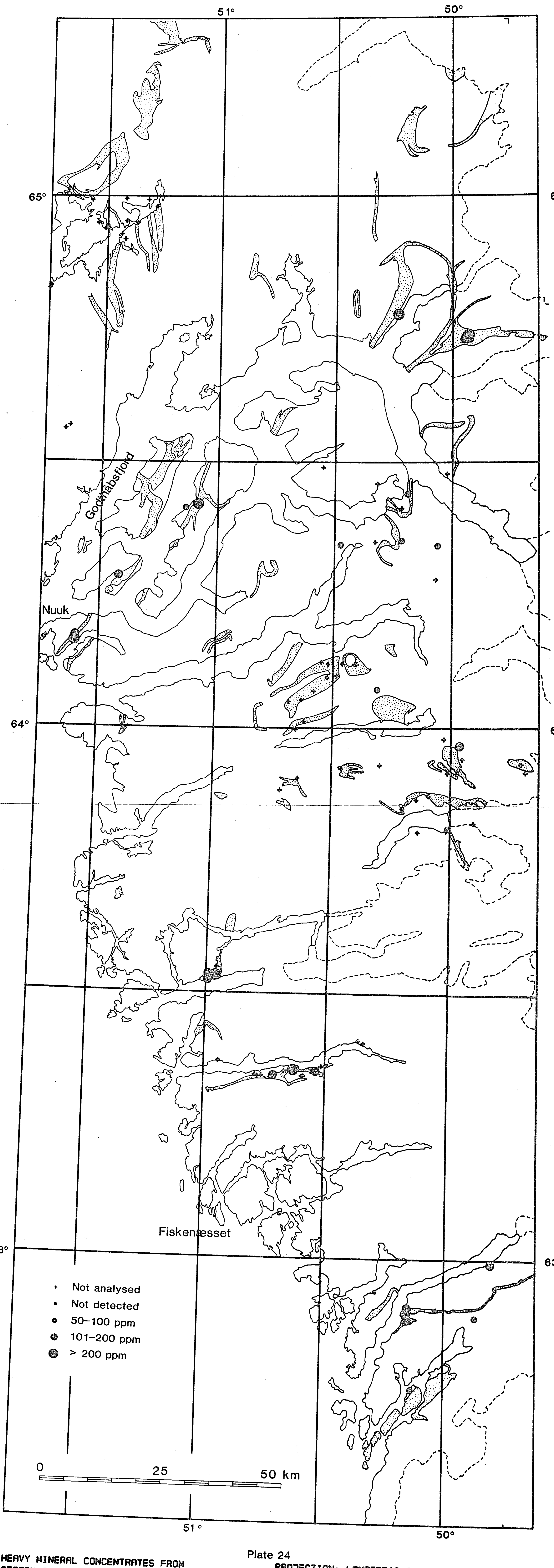


Plate 24

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1986.
ANALYSED FOR NICKEL.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64G 30' 00' N

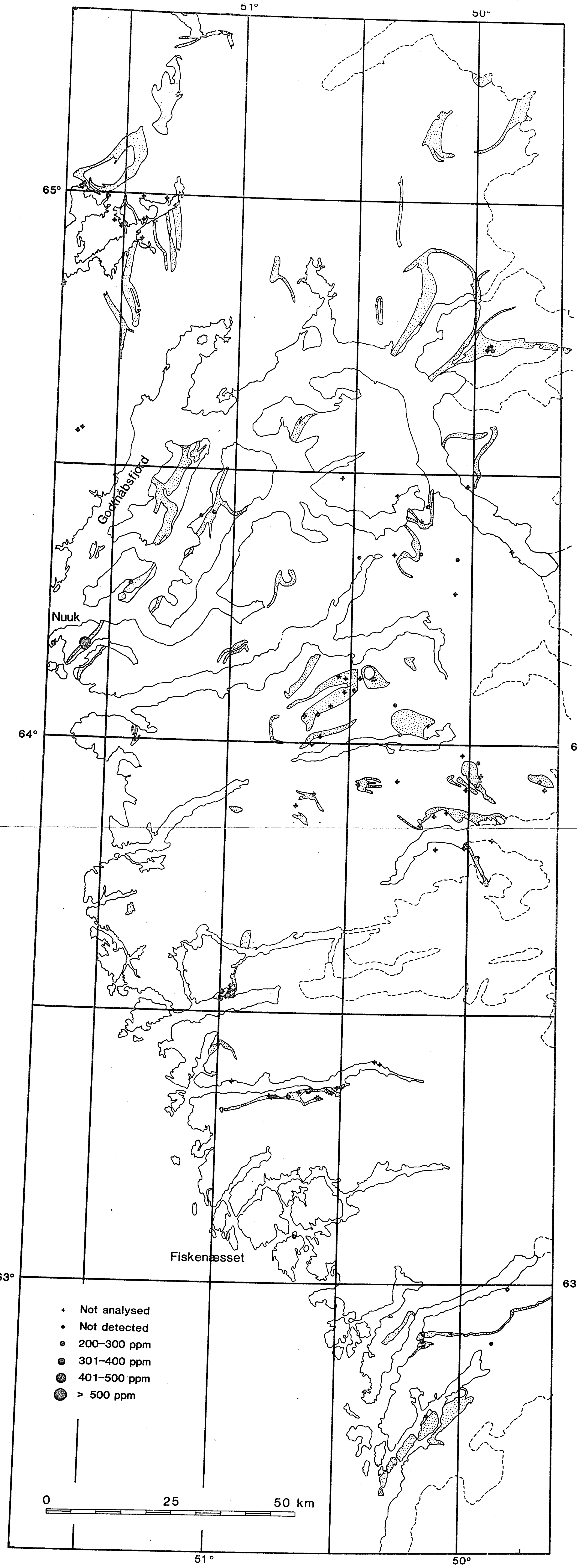


Plate 25

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1986.
ANALYSED FOR ZINC.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64° 30' 00" N

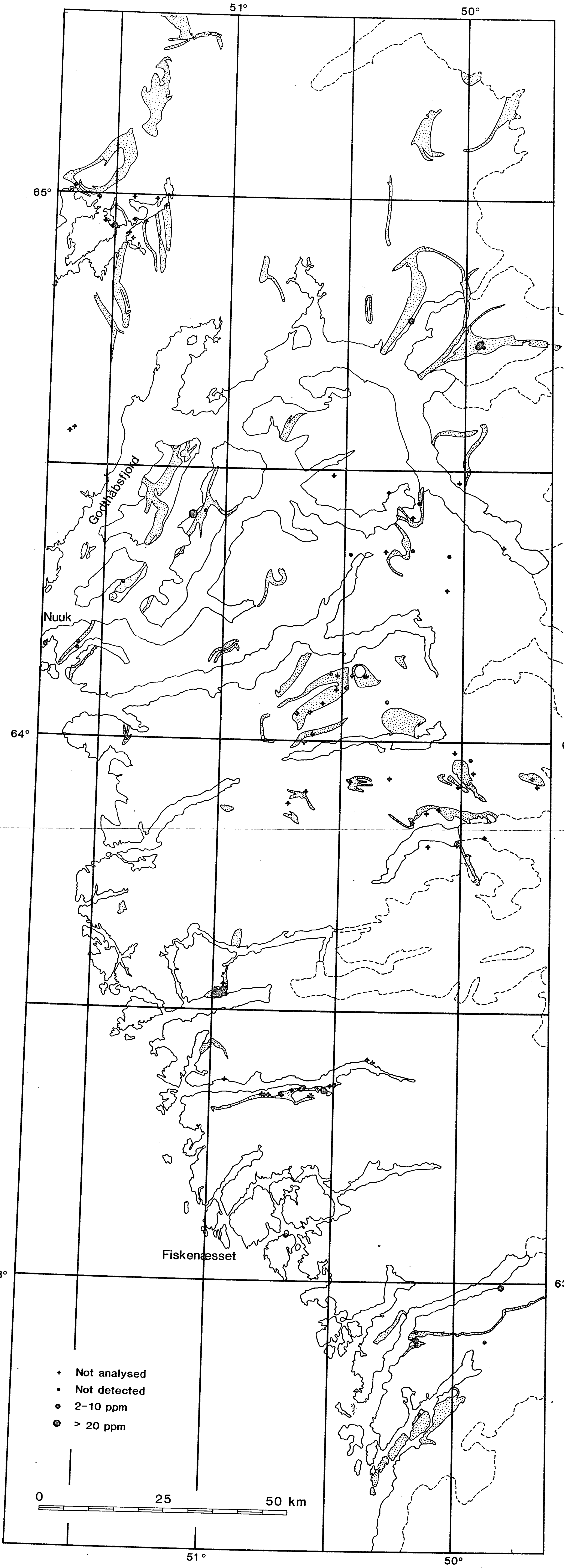


Plate 26

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1986.
ANALYSED FOR ARSENIC.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 646 30' 00' N

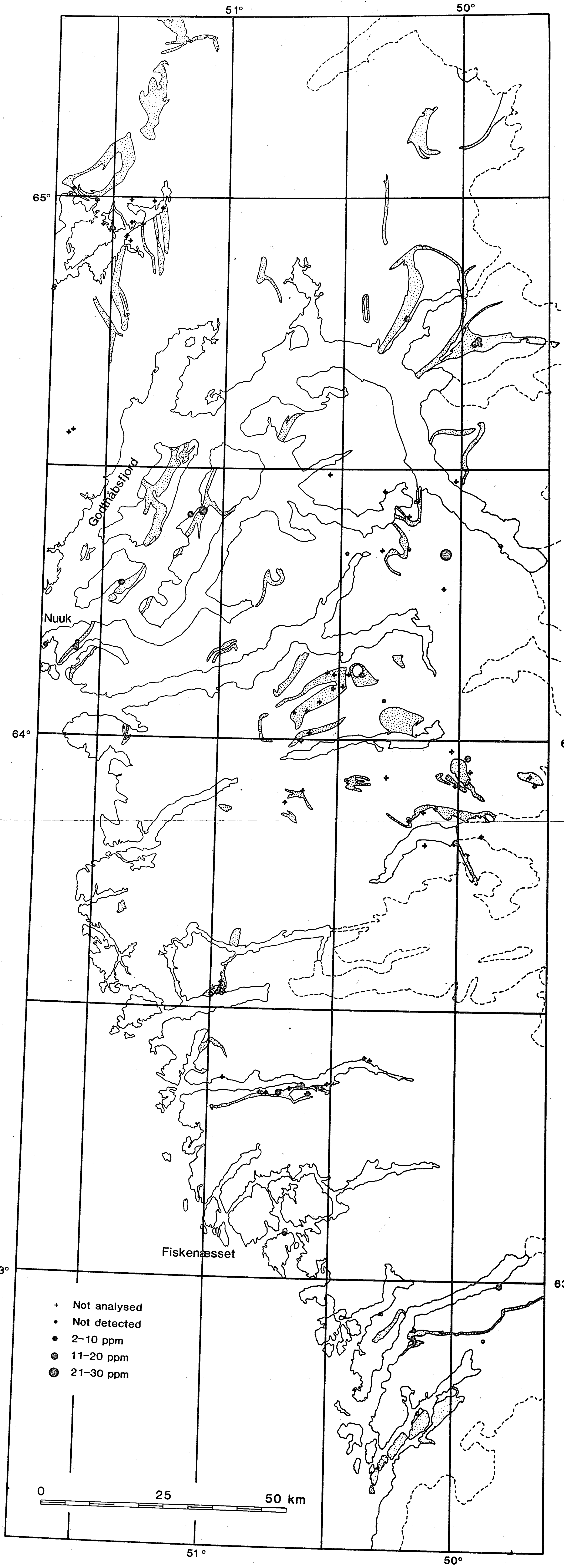
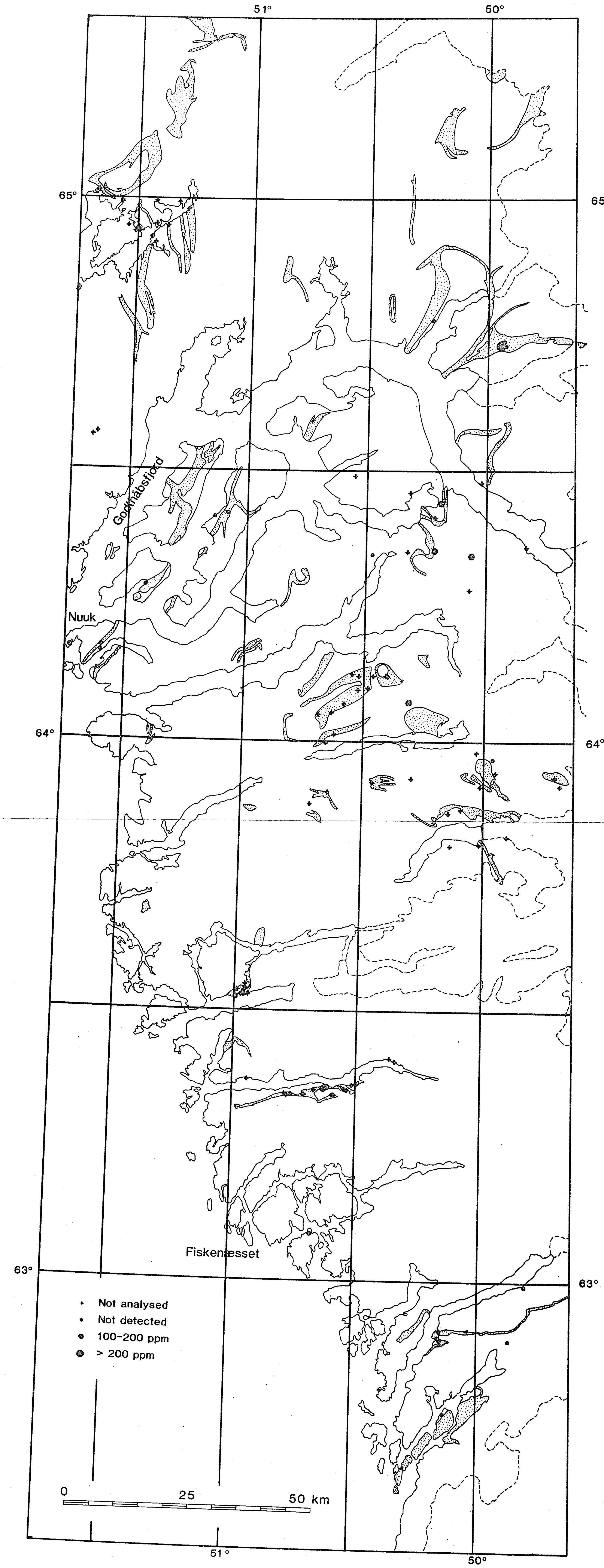


Plate 27

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1986.
ANALYSED FOR MOLYBDENUM.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64G 30' 00" N



HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1986.
ANALYSED FOR BARIUM.

Plate 28

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64Ø 30' 00" N

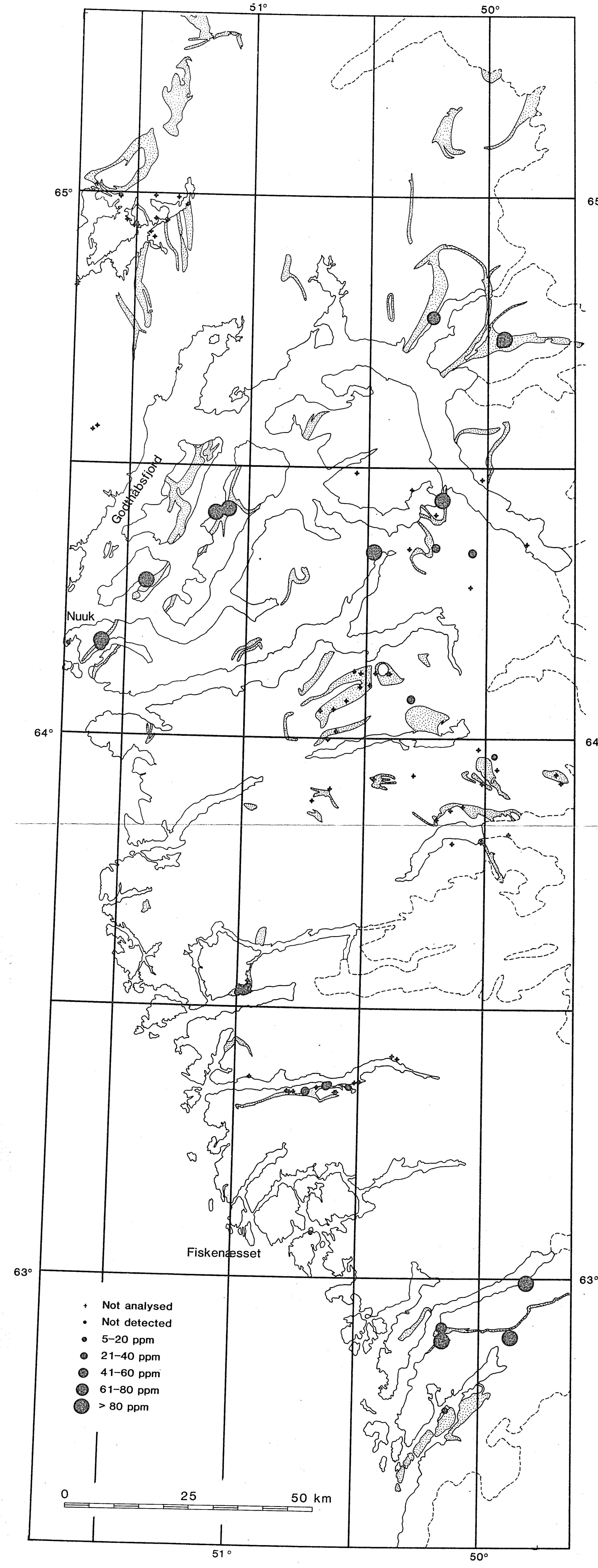


Plate 29

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1986.
ANALYSED FOR LANTHANUM.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64G 30' 00' N

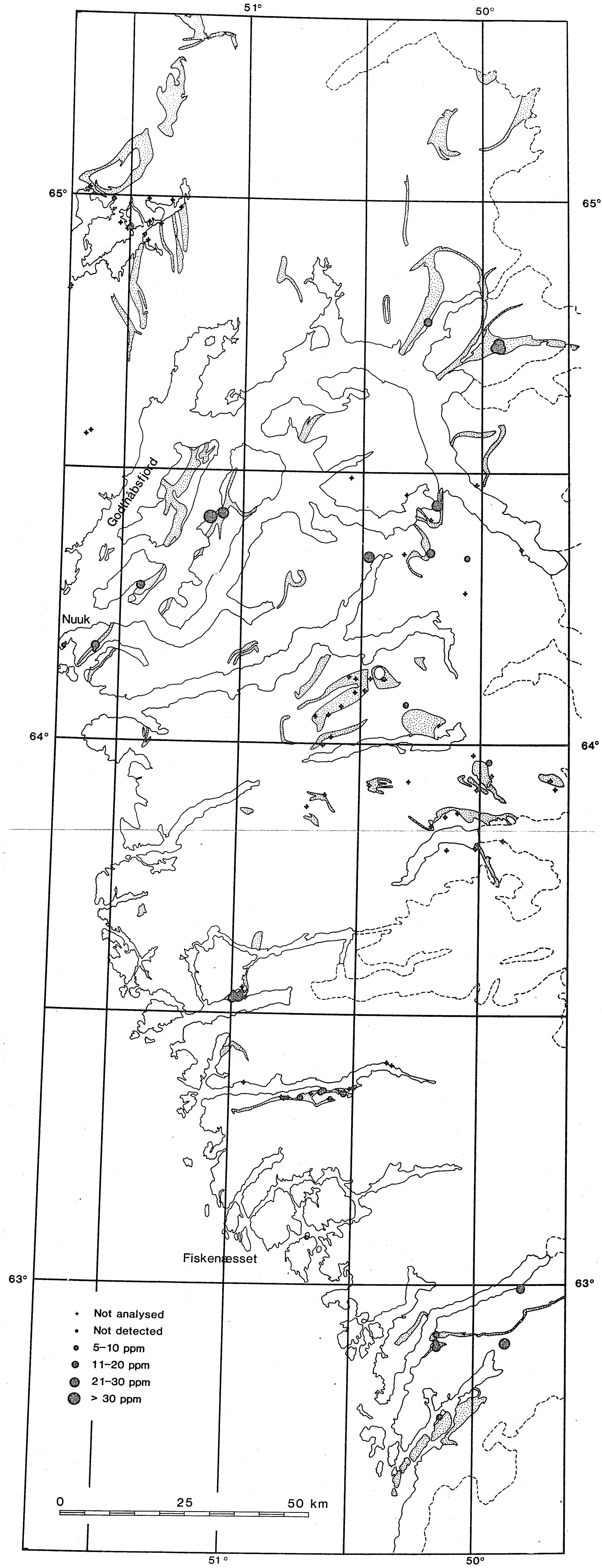


Plate 30

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1986.
ANALYSED FOR YTTERBIUM.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64° 30' 00' N

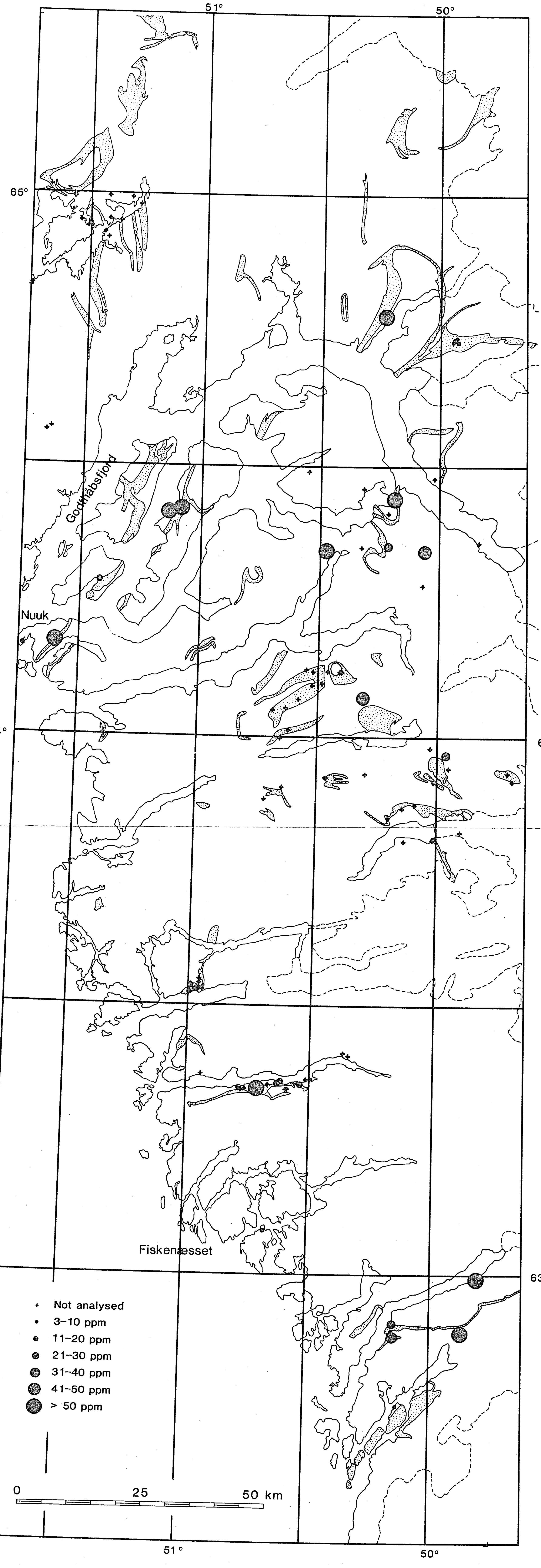


Plate 31

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1986.
ANALYSED FOR HAFNIUM.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64 30' 00" N

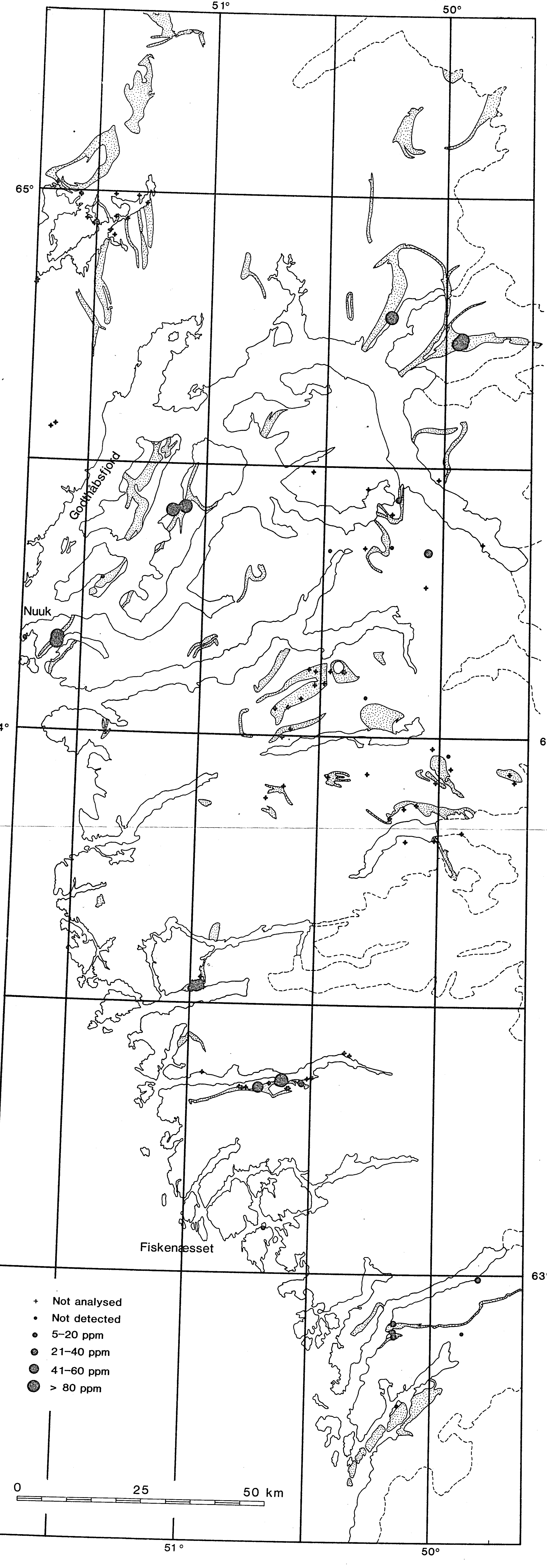


Plate 32

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1986.
ANALYSED FOR TUNGSTEN.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64 30' 00' N

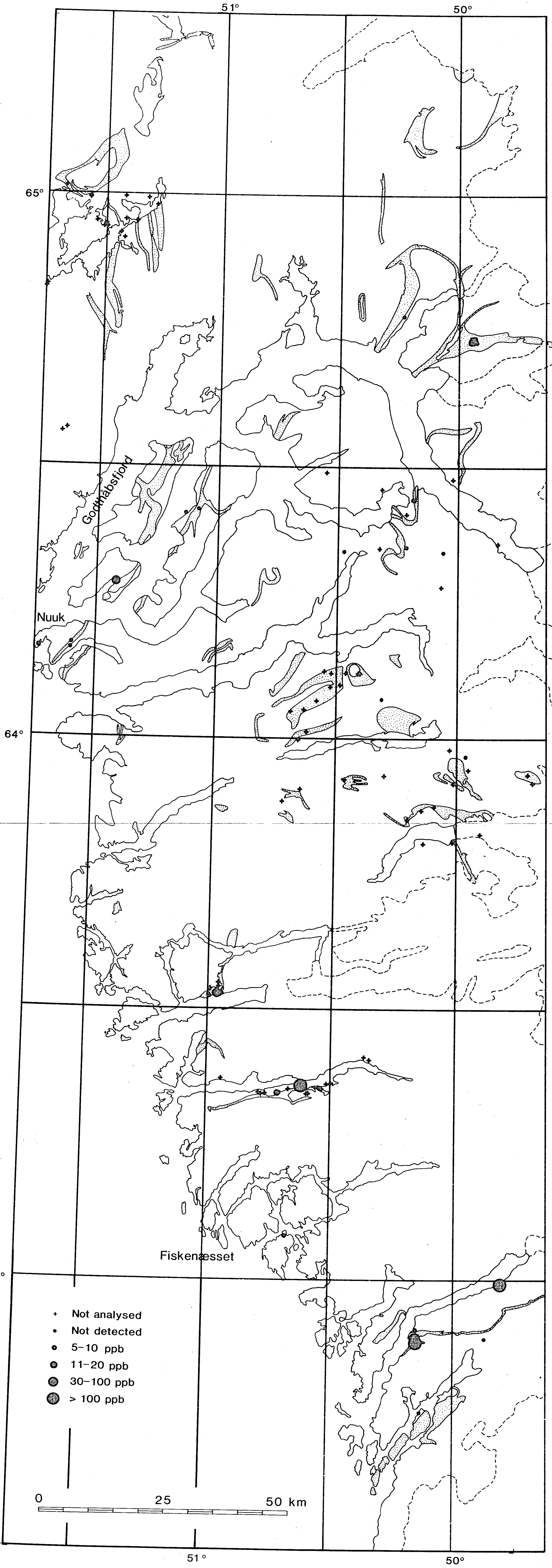


Plate 33

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1986.
ANALYSED FOR GOLD.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64 30' 00" N

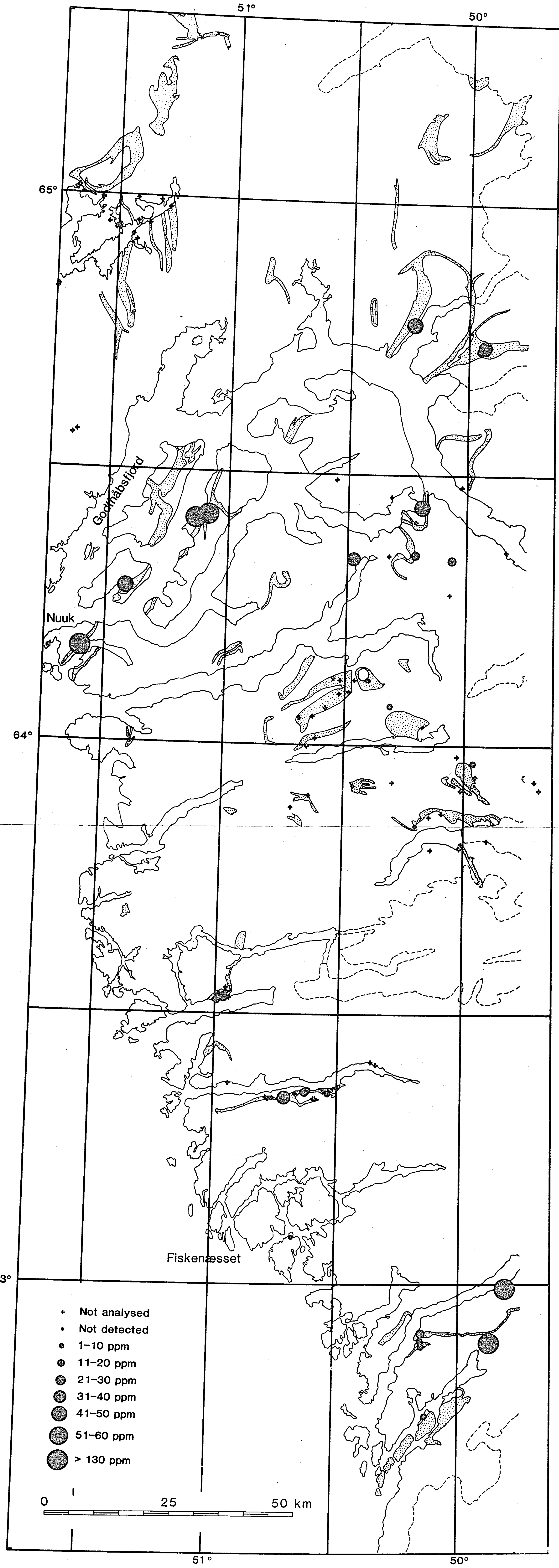


Plate 34

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982–1986.
ANALYSED FOR THORIUM.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64G 30' 00" N

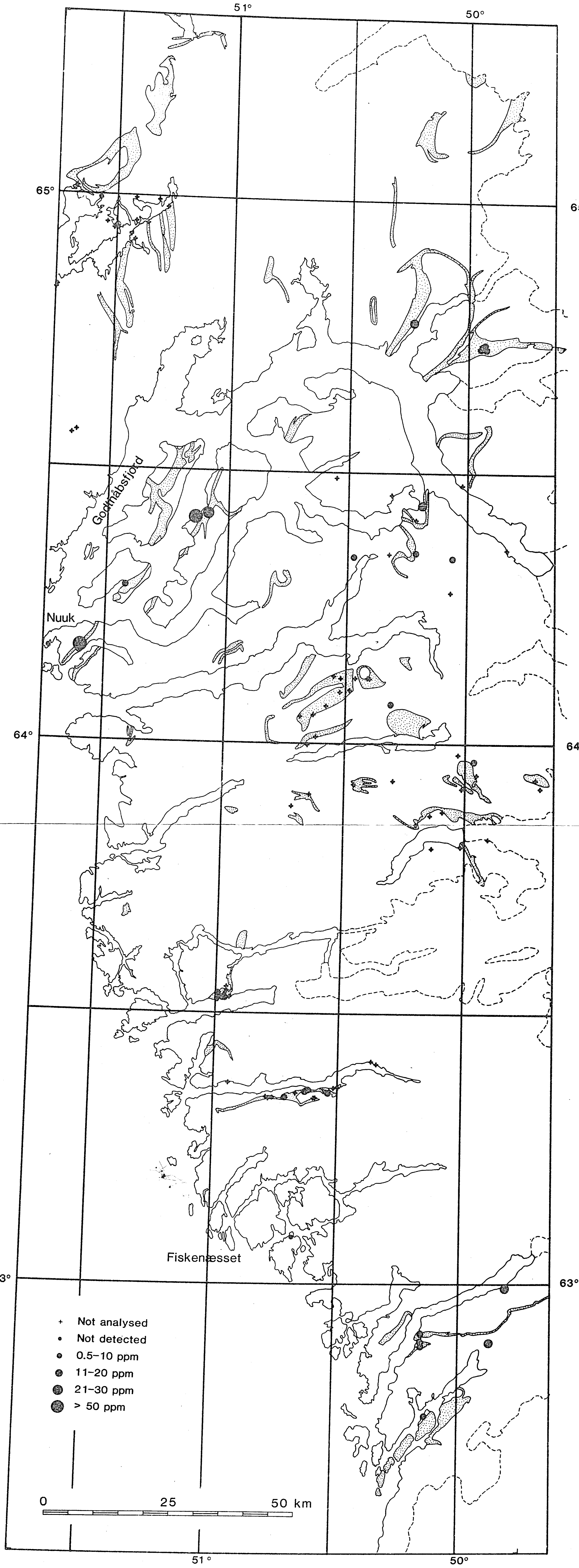


Plate 35

HEAVY MINERAL CONCENTRATES FROM
STREAM SEDIMENTS.
SAMPLED 1982-1986.
ANALYSED FOR URANIUM.

PROJECTION: LAMBERT'S CONICAL ORTHOMORPHIC.
ELLIPSOID: INTERNATIONAL. A = 6378388M. F = 1/297.
STANDARD PARALLEL: 64 30' 00' N