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THE 'NORA AREA'

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CONTENTS

		page
0.	SUMMARY	1
1.	INTRODUCTION	4
1.1	Location	4
1.2	Previous work	4
1.3	Areas considered in 1985	4
2.	PURPOSE	4
3.	THE MINING CLAIMS OF FOGDHYTTEFÄLTET	4
3.1	Location	4
3.2	Purpose	4
3.3	Previous work	4
3.4	Geology	5
3.5	Geochemistry	5
3.5.1	Potassium variation in outcrops	5
3.5.2	Samples from the mine dumps	6
3.5.2.1	Sampling procedure	6
3.5.2.2	Results	6
3.6	Comments	6
3.7	Summary of activities in 1985	6
4.	THE MINING CLAIMS OF RÖDBERGSFÄLTET	6
4.1	Location	6
4.2	Purpose	6
4.3	Previous work	6
4.4	Comments	7
4.5	Summary of activities in 1985	7
5.	THE MINING CLAIM OF VIKERSFÄLTET	7
5.1	Location	7
5.2	Purpose	7
5.3	Previous work	7
5.4	Visit payed to 'Bergmästarämbetet'	7
5.5	Comments	7
5.6	Summary of activities in 1985	7
6.	THE MINING AND EXPLORATION CLAIMS OF NYBERGSFÄLTET	8
6.1	Location	8
6.2	Purpose	8
6.3	Previous work	8

Contents, contd.

		page
6.4	Drill core logs	8
6.5	Geochemistry	8
6.5.1	Results	8
6.6	Comments	9
6.7	Summary of activities in 1985	9
7.	THE EXPLORATION CLAIM OF RÖDKÄRRSMOSSEN NO 1	9
7.1	Location	9
7.2	Purpose	9
7.3	Previous work	9
7.4	Geophysics (Anders Engvall)	9
7.4.1	Fieldworks	9
7.4.2	Results	9
7.4.2.1	Magnetics	9
7.4.2.2	VLF	11
7.4.2.3	Electrical surveys	12
7.4.3	Faults	13
7.4.4	Conclusions and recommendations	14
7.5	Comments	14
7.6	Summary of activities in 1985	14
8.	THE EXPLORATION CLAIMS OF GALGBÄCKEN NO 1 & 2	14
8.1	Location	14
8.2	Purpose	14
8.3	Previous work	15
8.4	Geology	15
8.5	Geochemistry	15
8.5.1	Deep till and rock chip sampling	15
8.5.2	Scheelite grain contents in previously collected heavy mineral samples	16
8.5.3	Potassium variation in outcrops	16
8.6	Geophysics	16
8.7	Comments	17
8.8	Summary of activities in 1985	17
9.	THE EXPLORATION CLAIM OF ÅSHYTTAN	18
9.1	Location	18
9.2	Purpose	18
9.3	Previous work	18

Contents, contd.

		page
9.4	Comments	18
9.5	Summary of activities in 1985	18
10.	THE EXPLORATION CLAIM OF SKRIKARHYTTAN	18
10.1	Location	18
10.2	Purpose	18
10.3	Previous work	19
10.4	Comments	19
10.5	Summary of activities in 1985	19
11.	THE EXPLORATION CLAIM OF SKRIKARBO	19
11.1	Location	19
11.2	Purpose	19
11.3	Previous work	19
11.4	Comments	19
11.5	Summary of activities in 1985	19
12.	THE EXPLORATION CLAIMS OF GRÄNSHYTTAN NO 1 & 2	20
12.1	Location	20
12.2	Purpose	20
12.3	Previous work	20
12.4	Geology (Eva Lindberg)	20
12.4.1	Rock types	20
12.4.2	Strike and dip	21
12.5	Geophysics	22
12.6	Geochemistry	22
12.6.1	The deep till and rock chip sampling programme	22
12.6.2	Potassium radiation in outcrops (Eva Lindberg)	22
12.7	Comments	22
12.8	Summary of activities in 1985	22
13.	ECONOMY	23
14.	REFERENCES	23
15.	TABLE CAPTIONS	24
16.	FIGURE CAPTIONS	26

0. SUMMARY

The report concerns the activities in the 'Nora Area', project 38121, during the period September the 1st and December the 31st 1984. It also summarizes the work that has been performed during the previous parts of the year. The main efforts have been put into three of the individual objects; the Galgbäcken, the Rödkärrsmossen and the Gränshyttan claims.

The total costs for the exploration work in the 'Nora Area' during 1985 are 1.530.000 SEK.To cover the difference between the budget of 800.000 SEK and the actual costs money has been allocated from other projects.

Fogdhyttefältet (Fe; low priority claim)

The mining claim and nearest surroundings have been geologically mapped. Potassium variation in outcrops have been studied; mostly low K-contents. Twentynine (29) mainly dump samples have been analyzed; only low grades of metals (except for Fe) were recorded. The claims were relinquished 1985-12-31.

Rödbergsfältet (Fe, Cu; low priority claim)

Only maintenance work on old fences around mine pits and putting up of new ones have been performed.

Vikersfältet (Fe; low priority claim)

After the mapping and sampling of the Vikersfältet in 1982 and a study of old manuals at 'Bergmästarämbetet' in 1985 it was concluded that no other metals but iron were expected to be found in any greater amounts. The mining claim has been relinquished 1985-12-31.

Nybergsfältet (Fe, Cu, Au; relatively low priority claim)

Re-analyses of some selected samples from mine dumps and drill cores did not show any particularly interesting grades of the elements obtained by the NHC programme of the ICP equipment.

Rödkärrsmossen (Fe, Cu, Zn, Pb, W; priority claim)

A reconnaissance study of rocks in the area and geophysics including establishment of the eastern part of the local grid, VLF, IP, magnetics and dipole-dipole in the same part have been performed. The geophysical survey gave some rather interesting results. Among others it has been shown that the Fe-Cu deposit consist of 2 major magnetic parallels which appear to have been dislocated by 4 major almost N-S trending faults. Two areas of particular interest have been picked out.

Galgbäcken (W; priority claim)

Altogether 147 rock samples from outcrops, drill cores, bedrock in trenches, rock chips etc. have been chemically analyzed during 1985. Among those that have been analyzed with respect to possible W-content only a few showed grades of any interest.

The 1985 deep till and rock chip sampling programme has resulted in 210 till and 164 rock chip samples. Of these, 58 till fine-fraction samples and 47 rock chip samples (included in the 147 rock samples above) have been analyzed. Only low W-grades have been recorded; 0.5-5.4 ppm (peak value 10.4 ppm) W in the till and 0-16 ppm W in the rock chips. The remaining till and rock chip samples will be analyzed.

For the planning of future deep till and rock chip sampling programmes VLF E-phase and magnetics have been used along 4 and 7 profiles respectively within the area considered in this sampling programme to see if these methods could be suitable tools to estimate the thickness of the overburden which in this case sometimes exceeded 40 m. The final results are not yet ready but it appears that at least rough estimations of the thickness can be made.

In 188 heavy mineral samples from previous sampling programmes in the S part of the Galgbäcken claim, the scheelite grains have been counted. With 2 exceptions, only low scheelite grain contents were recorded.

The potassium variation in 24 outcrops have been studied with the help of a γ-ray spectrometer in the southern part of Galgbäcken No 1. The results are not evaluated yet.

Two holes have been drilled in 1985; 65.10 m and 66.20 m long respectively. Only a few skarn sections with low W grades were recorded in the cores.

The regional geological mapping of the claims and their surroundings and the detailed mapping of the southern part of Galgbäcken No 1 have been completed. The maps are in preparation.

Åshyttan (Fe, W; low priority claim)

The rights to the claim have been extended by one (1) year.

Skrikarhyttan (W; low priority claim)

During 1985 the scheelite grains have been counted in 89 heavy-mineral samples; low scheelite contents were recorded. The rights to the claim have been prolonged by 1 year.

Skrikarbo (Mo; low priority claim)

In 10 heavy-mineral samples the scheelite grains have been counted during 1985; very low scheelite contents were recorded. The claim has expired during the autumn 1985.

Gränshyttan (Pb, Ag, Zn, W; priority claim)

Gränshyttan No 2, the southern part of No 1 and the nearest surroundings have been geologically mapped in 1985. The major rock types are greyish, sometimes porphyritic leptites/leptite gneisses with varying amounts of mica, reddish leptites/leptite gneisses (minor amounts), pegmatites appearing as large or small bodies and veins, skarns which sometimes are intercalated in the leptites, carbonate rocks (marble and limestone) and amphibolites. The prevailing strikes are NNE to NNW

and dips steeply towards the E. The trend of the mineralized zone, which can be traced as a magnetic belt, approximately parallels the strike. A γ-radiation survey shows that the potassium contents in the rocks normally varies between 2.5-3.5 wt-% indicating that the area may be a suitable exploration area. Four profiles have been surveyed with max-min and will also be surveyed with magnetics. The results of the max-min survey have not been interpreted yet. Planning and setting out of sampling sites for a deep till and rock chip sampling programme has begun.

1. INTRODUCTION

1.1 Location

The 'Nora exploration area' is situated within the rural districts of Nora and Lindesberg in the county of Örebro.

The topographic map sheets 10E NO, 10F NV, 11E SO, 11F SV, and 11F NV (Fig 1:1) cover the area.

Locations of all individual objects treated in this report are given in Fig 1:2 and Table 1.

1.2 Previous work

See previous reports (Hardenby 1984 a, b, c, 1985 a, b, c; Table 32).

1.3 Areas considered in 1985

During 1985 work has to greater or lesser extent been performed on the following individual objects: Fogdhyttefältet (II), Rödbergsfältet (III), Vikersfältet (IV), Nybergsfältet (VI), Rödkärrsmossen (VII), Galgbäcken (VIII), Åshyttan (IX), Skrikarhyttan (X), Skrikarbo (XI), and Gränshyttan (XII). The roman numbers refer to Fig 1:2 which shows the mining and exploration claims in the Nora-Stråssa area. A summary of 'activities and productions' in the Nora Area is given in Table 2. Areas within the 'Nora Area' which have been geologically mapped by LKAB Prospektering are shown in Fig 1:3.

2. PURPOSE

The purposes and reasons for the presence of the LKAB/BP joint-venture in the 'Nora area' have been given in some previous reports (Hardenby 1984a, 1985a). Besides metals such as tungsten, copper and lead there are indications of the precious metals gold (e.g. Rödkärrsmossen, Nybergsfältet) and silver (Gränshyttan).

3. THE MINING CLAIMS OF FOGDHYTTEFÄLTET

3.1 Location

The mining claims (Västra Tabergsgruvan, Tabergsgruvan and Karabergsgruvan) of Fogdhyttefältet (II, in Fig 1:2; the Fogdhytte ore field, see also Table 1) are situated about 15 km W of the town of Nora. The ore field can be regarded to constitute the southernmost part of the previous Fe-ore field of Stribergsfältet.

3.2 Purpose

The purpose is to see if the claims contain other economic minerals than magnetite. If not, the claims are not worth keeping (see Hardenby 1985c).

3.3 Previous work

See the report by Hardenby (1985 c).

3.4 Geology

The geological mapping of the claims and their nearest surroundings (Fig 1:3) that started during the summer in 1985, has been completed. See the geological map (Fig 3:1). Although most of the rock types have already been presented in the previous report (Hardenby 1985c) a brief description will follow below. Seven major rock types have been distinguished. (1). Whitish grey, fine to medium grained leptite or leptite gneiss; (2). Grey to light grey,fine to medium grained leptite or leptite gneiss; (3). Reddish grey, fine grained leptite or leptite gneiss; (4). Black to greenish black, fine grained amphibolite; (5). Light to dark green or black, fine to medium grained amphibole skarn; (6). Black, medium grained biotite-chlorite-amphibole schist; (7). Whitish grey or reddish grey, medium to coarse grained pegmatites.

The difference between the whitish (1) and the greyish (2) leptite/leptite gneisses is in the biotite content. The whitish leptite/leptite gneiss (1) contains no biotite but white mica (sericite) and chlorite whereas in the greyish type (2) biotite is still preserved. The feldspar in both these types is probably mainly altite in contrast to the reddish grey leptite/leptite gneiss (3) where the feldspar appear to be K-feldspar (microcline). In addition to these siliceous rocks minor occurrences of mica schist and mica rich leptite/leptite gneiss occur. The skarns (5) and biotite-chlorite-amphibole schists (6) are associated with the magnetite deposits, sometimes traces of pyrite and scheelite may be found in these rocks.

3.5 Geochemistry

3.5.1 Potassium variation in outcrops

A γ-ray spectrometer (Exploranium, model GR410 A) was used to determine the K-radiation in the rocks directly at 26 outcrops. At the same time the U and Th-radiation was recorded. The measuring time used was 2 minutes and the same outcrop was normally measured 2-3 times. Via some minor calculations the K, Th and U-contents could be obtained. The K-contents vary between 0-4 wt-%. (See Fig 3:2 and Table 3). However, 70% of the obtained values show $\leq$0.5 wt-% potassium and the mean value is about 0.7 wt-%. The low K-content was expected in the whitish to greyish, albite (?)-quartz-sericite-chlorite $\pm$ biotite bearing leptite/leptite gneisses (1&2) which present compositions are believed to be a result of alteration.

With the exception of non-manganiferous skarn iron ores, most mineral deposites in Bergslagen appear within K-dominant leptite terrains. (Geijer & Magnusson 1944, Lagerblad & Gorbatschev 1985). As can be seen from the present study the Fogdhytte ore field appear within a low-K terrain and the iron deposits are low in Mn (Table 5 and 6). Thus, the environment do not appear to be too promising for finding new mineral deposits.

3.5.2 Samples from the mine dumps

Altogether 29 samples (sample ID numbers; 8558: 317-345) have been collected mainly from the different mine dumps. Only one sample (No 8558: 326) has been taken from outcrop. For locations see Fig 3:3 and for descriptions of the samples see Table 4. All the samples have been analyzed at LKAB Prospektering Laboratory in Stockholm.

3.5.2.1 Sampling procedure

From a sampled dump, sample material has been taken at different places. Similar rock types from one and the same dump have been put together to make up one chemical sample.

3.5.2.2 Results

The results which are presented in Tables 5 & 6 and in Fig 3:4 are not very exciting. None of the samples show grades that are of any economic interest. Some of the results have already been presented in a previous report (Hardenby 1985c).

3.6 Comments

No further work will be done on the claims which have been relinquished on the 31st of December 1985.

3.7 Summary of activities in 1985

Geological mapping of an about 800 x 1900 m large area was commenced and finished during the summer and autumn. A total of 26 outcrops were measured with a x-ray spectrometer to determine their K-content. Twenty-nine (29) samples, (No 8558: 317-345) mainly from dumps, were analyzed at the LKAB Prospektering Laboratory in Stockholm. Only uneconomic grades were recorded. The claims were relinquished 1985-12-31.

4. THE MINING CLAIMS OF RÖDBERGSFÄLTET

4.1 Location

The mining claims of Rödbergsfältet, 'The Rödberg ore field', (III in Fig 1:2) are located about 1 km W of Fogdhyttefältet and S of road No 244. For further information see Table 1.

4.2 Purpose

Known chalcopyrite mineralizations whithin the iron ore field have been regarded to be interesting enough for further exploration work even if the priority has been considered fairly low.

4.3 Previous work

See the reports by Hardenby (1984a, 1985c).

4.4 Comments

No work has been performed since the last reaport (Hardenby 1985c). Further exploration work will, if possible, start in 1986.

4.5 Summary of activities in 1985

The only work performed has been to see to the maintenance of old fences and to put up new ones around same of the mine pits.

5. THE MINING CLAIM OF VIKERSFÄLTET

5.1 Location

Vikersfältet (the Viker ore field) is an elongated, about 3 km long and NE-SW trending assemblage of previously separate mining claims. All these claims have been united into one large claim called Vikersgruvan (the Viker mine) at the SW end of Lake Vikern (see claim IV in Fig 1:2 and Table 1).

5.2 Purpose

As for other claims, earlier taken over from Fagersta AB, the intension has been to perform a survey on the claim in order to ascertain if other 'economic' minerals but magnetite are present.

5.3 Previous work

LKAB Prospektering has performed geological mapping and sampling of old mine dumps in 1982 (Hardenby 1984a).

5.4 Visit payed to 'Bergmästarämbetet'

During the autumn in 1985 a visit was payed to the authority 'Bergmästarämbetet' in Falun. The purpose was to check old manuals (Bergverks relation för västra distriktet, Del I, 1940-1946) to see if they contained any notes about other 'economic' minerals but magnetic in the previous mines of Vikersfältet. There was, however, nothing of particular interest to be found. The only elements, besides Fe, that were mentioned were P, S and Mn. Between 1940 and 1946 the ore contained as an average 38.9 wt-% Fe, 0.02 wt-% P, 0.15 wt-% S, and 3.16 wt-% Mn varying between 35-40.8 wt-% Fe, 0.02 wt-% P, 0.03-0.25 wt-% S, and 2.6-3.5 wt-% Mn.

5.5 Comments

Although traces of sulphides, for instance galena, have been recorded the mining claim Vikersgruvan has been regarded to be of no commercial interest. Therefore the claim has been relinquished on the 31st of December 1985 to avoid further cost for maintaining it.

5.6 Summary of activities in 1985

Besides evaluation of old informations and the visit to 'Bergmästarämbetet' no work has been performed on the claim.

6. THE MINING AND EXPLORATION CLAIMS OF NYBERGSFÄLTET

6.1 Location

The mining and exploration claims of Nybergsfältet (the Nyberg ore field, VI in Fig 1:2, Table 1) constitute a ca 5 km long and 1 km wide area W of Lake Bälgsjön about 10 km NW of the town of Nora.

6.2 Purpose

Known 'impurities' of chalcopyrite and pyrite in the iron ore and recorded minor amounts of Au made the former Fagersta AB mining claims of Nybergsfältet interesting. A survey has been performed with the hopes of finding new ore bodies along the ore field and to better understand the already known ones.

6.3 Previous work

LKAB Prospektering has performed geological mapping of the claim area, a geophysical survey of the central parts, sampling of the old mine dumps and diamond drilling of 6 holes (Hardenby 1984a, b, 1985a).

6.4 Drill core logs

Six diamond drill holes (DDH 001/83, 002/83, 004-007/83) have been drilled in 1983. Previous analytical results and profiles have been reported by Hardenby (1984b). The drillcore logs are now presented in Tables 7-12.

6.5 Geochemistry

Some samples that have been previously anlayzed for Cu, Co, S, Fe, Mn, Ag, and Au at the laboratory of the Swedish Mineral Processes AB, Stråssa (Hardenby 1984a,b) have been re-analyzed on the ICP equipment at the laboratory of LKAB Prospektering, Stockholm (Hardenby 1985a) in order to check the contents of additional elements. The re-analyzed samples are: 8448: 301-310, 8458: 387-400 selected samples from mine dumps (Tables 13 & 14, Fig 6:1), 8448: 311-314 samples from boulders (Table 15), 8448: 405-415 and 8458: 310-386 samples from drillcores of the holes DDH 001/83, 002/83, 004-007/83 (Tables 16-27), Figs 6:2-7). Brief descriptions of the rock types of the mine dump and boulder samples (from Hardenby 1984a) and a references to the old sample/locality numbers of these samples are given in Table 28.

6.5.1 Results

The analytical results are not very encouraging. As can be seen in Tables 13-27 and Figs 6:1-7 the grades of none of the additional elements, obtained by using the ICP equipment at the LKAB Prospektering laboratory, are particularly good.

6.6 Comments

Additional sampling of old mine dumps has been performed during the last summers to gain better control of the metal contents in the dumps. The intension is now to have these samples analyzed.

6.7 Summary of activities in 1985

The samples 8448: 301-314, 405-415 and 8558:312-400, which are presented in this report, have been re-analyzed at the LKAB Prospektering laboratory in Stockholm. Besides this, no work has been performed on the claim.

7. THE EXPLORATION CLAIM OF RÖDKÄRRSMOSSEN No 1

7.1 Location

The exploration claim of Rödkärrsmossen No 1 (claim VII in Fig 2, Table 1) is situated about 15 km NW of the town of Nora. The NW part of the claim is occupied by the SE part of Lake Färvilen (Fig 7:1).

7.2 Purpose

Besides Fe the deposit is known to contain Cu, Zn, Pb and W. Rather high Bi content has recently been reported in some mine dump samples which may be an indication of Au being present. These elements are the reason for the presence of the LKAB/BP joint venture.

7.3 Previous work

See the reports by Flood (1978) and Hardenby (1985a, b, c).

7.4 Geophysics (Anders Engvall)

The target of the area is the base metals Cu, Zn, and Pb, and the precious metals Ag and Au. Since they are found in the skarn magnetite ore, magnetics are considered to be the main geophysical method. In order to look for non magnetic mineralized parallels, electrical and EM methods were used as well.

7.4.1 Fieldworks

A local grid-system was established; lines with a total length of 8.7 km were pegged out (Fig 7:1). A line-spacing of 80 m was used during the following survey. The methods used were IP/resistivity (Wenner, a=40 m), magnetics (total field) and VLFH (GBR). Each method covered 17.3 km. Two profiles were besides the methods above surveyed with dipole-dipole (a=25 m, n= 1-7).

7.4.2 Results

7.4.2.1 Magnetics

As can be seen in Fig 7:2 three dominating magnetic features can be discerned; Area A at the old pits of Rödkärrsgruvorna, Area B that is located 200 m (towards) southwest of Area A and finally the deep anomaly (C) some 400 m west of A.

A. This area is the central part of the old Rödkärrsgruvorna iron mines. The anomaly pattern along profile 640 W indicates that there are two equal magnetite parallels some 75 m apart from each other. Within area A the old workings also form two parallels with a relative distance of approximately 75 m. Magnetic modelling along profile 400 W indicates that the southern parallel is mined out to 30 m depth (fig 7:3). It is interesting to notice that the upper surface of the main magnetite body of the northern parallel seems to be found at 60 m depth. When this parallel was worked, they probably found only weak magnetite mineralizations. The differences between the survey result and the theoretical are mainly caused by minor magnetite remainders and mine dumps. A more minute modelling, that also considers these features, will probably result only in minor changes in the position of the two main magnetite bodies. When modelling, the two bodies are identical regarding dimensions and magnetic susceptibility. It ought to be noted that no remanence determinations have been executed. The strong superficial anomaly at 480 W is probably caused by a left pillar.

B. The B anomalies that are located some 200 m south of the western end of the A anomalies consist of two dominating magnetic anomalies with a relative distance of 45 m. The B area is not mined out to the same extent as area A. According to B.Flood (1978, Report No B-9) 7 holes (the latest drilled as late as in 1971) of which 5 held Cu have been drilled in the B area. The best section gave 1.7% Cu, 4.4% Zn, 0.96% Pb, 24 ppm Ag and 0.2 ppm Au over a distance of 4 m.

The B anomalies indicate that the mineralized bodies are less than 180 m along strike and that they end abruptly just east of 640 W. It is suggested that the B anomalies are the displaced western continuation of the A anomalies. This suggestion is supported by the topography that very nicely indicates the presence of a north-south running lineament. The magnitude of the horisontal component of the displacement seems to be approximately 180 m.

C. The C anomaly (figs 7:2 and 7:4) is interpreted to be caused by a deeply located magnetite body. It ought to be noted that the northern part of the anomaly is not surveyed far enough towards north. The depth to the upper surface of the magnetite body is of the order of 150 m and the dip of the body is towards north. The used K value of 1.7 would correspond to approximately 40% Fe_3O_4. The magnetite content would cause a density contrast of 1 kg/dm^3 between the host rock and the mineralization. With a strike length of 120 m, the gravimetric response would be 1.3 gu with a maximal gradient of 5.10^{-3} Eötvös along profile 960 W. These values indicate that gravimetrics will not give any further information about the deeply located mineralization.

The body is roughly located between 940 W and 1060 W. The latter of these coordinates is doubtful. The mineralization may continue by a westward increasing plunge. Another possibility is that some kind of folding makes the the horizon to swing southward and thereby causes the magnetic deep anomaly at 1200 W. Or might it be a fault that causes the southward displacement? Hopefully the questionmarks will be straightend out by the planned westward extension of the magnetic survey.

The origin of the approximately 100 m wide anomaly in the southern end of profile 400 W is unknown. The same applies for the two relatively strong anomalies at 240W/460N and 320W/390N. The narrow negative anomaly at 320W/440N coinsides with a fenced testpit.

Within the rest of the area there are mainly minor anomalies (<250 nT) that seem to represent east-west trending horizons with limited extensions.

7.4.2.2 VLF

There are two dominating man made sources of EM-disturbances within the area (fig 7:5) and as will be seen, the location of especially one of them is very unlucky. The results may be listed and discussed as below. The discussed anomalies are marked with the corresponding figures on fig 7:6 together with the Frazer filtered values.

1. There seem to be several east-west trending weak conductors. Generally the in-phase pattern seems more persistant than the magnetical. Some of them coincide with very weak magnetic anomalies while others do not. The latter type may be caused by the topography.

   The anomaly at 240W/140N is quite distinct but it has no corresponding IP or magnetic anomalies. This anomaly ought to be tested with Max-min. The depth to the possible conductor is greater than 30 m.

2. The long-wavy anomaly in the north eastern corner of the area cannot be explained by topographical effects. Unfortunately the survey does not cover the northern flank of the anomaly. The profiles ought to be continued northward. If there remains any doubts about the nature of the origin of the anomaly after that the extension has been performed, a Max-min survey with maximal coil separation is recommended. With the present information the depth to the possible conductor might be anywhere between 80 and 250 m.

3. The mineralization that causes the magnetic deep anomaly C gives no discernible response.

4. The VLF response of the northern part of the superficial magnetic anomaly B is surprisingly weak. The VLF anomaly coincides with the northern magnetite parallel at 640W/375N. The quadrature indicates that the conductor in question is a poor one. There are two hardly discernible VLF anomalies at 310N at the profiles 640 and 720 W which is south of the southern magnetic horizon. The Frazer filtered values indicates a good deeper located conductor at 800W/320N but the pattern of the unfiltered values (fig 7:5) seems so distored, that the origin of the anomaly is uncertain. The magnetics on this profile indicates a distance of at least 30 m from the ground surface to the magnetite horizon. As indicated in fig 7:6 there are a couple of possible continuations towards the west.

5. The VLF results in the magnetic area A support the magnetic interpretation; there are two main mineralized parallels and of which the southern seems to be the dominating. All the quadrature anomalies coincide exactly with the magnetic anomalies while most of the in-phase anomalies coincide fairly well.

An interesting thing is that the in-phase seems to continue westward from magnetic area A across the suggested fault. I claim that this is just a coincidence and that it in fact is a dislocated parallel (numbered with 6 in fig 7:6) to the main magnetic horizons. A closer look on the in-phase indicates the presence of such a parallel east of the fault. It becomes even more interesting when you realize that these in-phase anomalies seem to coincide with weak magnetic anomalies. The latter seem to be too weak to let the in-phase anomalies be caused by magnetite alone. A powerline makes it impossible to follow the conductor westward. It could be worth trying to use NAA in this area in spite of its weaker signal strength. The depth to the conductor at 800W/470N is of the order of 20 m which is slightly more than incicated by the magnetics.

7.4.2.3 Electrical surveys

The results from the Wenner survey is shown in fig 7:1. Negative IP readings are excluded. In general, the IP anomalies are of low amplitude; mostly lower than 1% above the background.

The IP indicates the possibility of two weak parallels outside the two previously mentioned dominating horizons within area A. In order to get better knowledge about these features, a dipole-dipole survey was executed along profile 320 W (fig 7:8). Note that the coordinates are reversed in this figure (and in fig 7:10 as well) compared with the rest.

The magnetic anomaly at 395 N coincides nicely with a weak IP anomaly ($\sim$1%). There is no corresponding anomaly found with the dipole-dipole. The magnetic anomaly indicates a depth less than 10 m to the upper surface of a mineralized body probably consisting of magnetite, possibly with a minor sulphide content.

The strong netative magnetic anomaly at 450N coincides with a fenced pit. The magnetic anomaly pattern shows that there are no major magnetites in this horizon. That makes the dipole-dipole anomaly more interesting since it may be caused mainly by sulphides. Unfortunately the dipole-dipole indicates a shallow body. The somewhat more widespread Wenner anomaly has probably the same origin. Since there is no corresponding VLF anomaly, the mineralization is suggested to be a dissemination.

The dominating VLF anomaly of this profile is located at 580 N and it coincides with a prominent dipole-dipole anomaly. The dipole-dipole also indicates the presence of one poorer mineralized body south of this. The magnetic bodies, that previously had been used when modelling along profile 400 W, were also tried along profile 320 W (fig 7:9). The only changes that have been executed to get the surprisingly good agreement between the theoritecal and found anomalies are that the eastward extension of the bodies are limited to 300 W, that is just 20 m towards east from the profile. The southern parallel is also moved 5 m northward and 5 m downward. Otherwise the used bodies were identical at the two modelling attempts. Since the VLF-indicates a depth of 20 m to the conductor and the dipole-dipole anomaly is caused by a body that is located at less than 25 m depth, there is the possibility that the magnetite is replaced by a non-

magnetic mineralization in the upper part of the northern parallel. The same might be applicable to the southern parallel, but here the non-magnetic mineralization probably is poorer.

There are no corresponding anomalies found in the strike direction on profile 240W. There are three alternative explanations for this; I) The main mineralization pinches out. II) The eastern prolongation is dislocated by a fault. III) There is a steep northward plunge. The second alternative is supported by the result of the magnetic modelling and may be checked by a couple of east-west running profiles surveyed by either VLF (JxZ) or slingram. This alternative makes the VLF in-phase anomaly at 240W/140N interesting. Alternative III could be verified by a couple of dipole-dipole profiles east of 320W, say at 280 and 240 W.

The northern of the Wenner IP anomalies along profile 320 W is approximately located at 635N and it might have the same origin as the VLF in-phase anomaly at 650N. The latter may be caused by a shallow conductor, but the station spacing is too wide to allow any certainty about that. This is easily checked by a minor renewed survey with a station spacing of 5 m.

A dipole-dipole survey has also been performed along profile 640W (fig 7:10), remember the reversed coordinates). The survey runs over the suggested displaced western prolongation of the main iron ores of Rödkärrsmossen. The central part of the profile (320-380N) is covered with mine dumps which probably have affected the electrical surveys.

The magnetics indicate two superficial almost vertical magnetite horizons at 330 and 375 N. The dipole-dipole also indicates two anomalous bodies at approximately the same coordinates. The highest IP-values are the sum of the effects from the two bodies. There are indications that the two anomalous bodies have a finite depth extension. The northern of the bodies coincides with a VLF anomaly, that can be seen in the in-phase as well as in the quadrature. This indicates a poor conductor. The southern anomalous body is not considered as a conductor at all. It is notable that in area A, the southern parallel was found to be the dominating conductor.

The conclusion of the dipole-dipole survey along 640W is that no mineralization is found outside the two dominating horizons.

7.4.3 Faults

The interpretation of the geophysical ground survey has indicated the presence of four mainly north-south trending faults. These faults displaces the magnetite horizons at approximately 1120W, 780W, 600W and 300W. A brief interpretation of aerial photos by J. Liikanen (quaternary geologist) indicated the presence of the three latter (fig 7:11).

7.4.4 Conclusions and recommendations

The Rödkärrsmossen skarn iron ore field is found to consist of two dominating parallels. There are also indications of weakly mineralized non-magnetic parallels north and south of the main horizons. At this stage no eastern continuation is found east of 320W. The western prolongation is suggested to have been dislocated southward by a fault. It is possible that all three main magnetic domains (fig 7:2) represent the same stratigraphical level.

Especially two areas have turned out to be interesting; the eastern part of area A around 320W/580N and the area west of the fault at 500N. Besides the since earlier planned westward extension of the surveyed area additional geophysical surveys are recommended (see Table 29).

7.5 Comments

The geophysical survey was not completed during the year. The second half (i.e. the western part) of the local grid (Fig 7:1) and the rest of the geophysical survey is to be completed in 1986. Note that a magnetic survey has already been performed on parts of Lake Färvilen. The obtained data will be used together with the data from the remaining geophysical survey. Besides the already planned survey the recommended additional geophysical work (Table 29) should be carried out as soon as time and weather conditions allow it. The geological mapping will be continued and sampling of old mine dumps should be performed during next field season (1986).

7.6 Summary of activities in 1985

Geology: Reconnaissance mapping of the bedrock in the claim and the nearest surroundings has been performed during about 2 weeks of the summer.

Geophysics: Eastern part of the local grid has been established, i.e. 6x1280 m + 1x1000 m long pegged lines which all together is 8680 m. The same part has been geophysically surveyed which included VLF, IP and Magnetics. The total lenght of the surveyed lines with each method is 17.3 km. Besides the methods above Dipole-Dipole (a=25m, n = 1-7)has been used along 2 survey lines which together are 1000 m. During the winter (at the beginning of 1985) a grid was established on the ice covering Lake Färvilen and a magnetic survey was performed. The total length of these grid lines was 1180 m and the survey lines 5100 m.

8. THE EXPLORATION CLAIMS OF GALGBÄCKEN NO 1 & 2

8.1 Location

The claims are located S of Lake Fåsjön and the centre of the claims is about 5 km NW of the town of Nora (claims VIII in Fig 2, Table 1).

8.2 Purpose

During regional mapping in the area in 1983 scheelite was observed in some boulders and outcrops. These findings were found interesting enough to take out the claims for W.

8.3 Previous work

See previous reports by Hardenby (1984 a,b,c, 1985 a,b,c).

8.4 Geology

The detailed geological mapping of bedrock which started in 1984 in the southern part of the claim Galgbäcken No 1 is now completed. The total area that is covered by the mapping is about 400x700 m. Like the regional geological map (Hardenby 1985c), the detailed map is in preparation.

8.5 Geochemistry

8.5.1 Deep till and rock chip sampling

The deep till and rock chip sampling programme that commenced in June 1985 has finally been completed in December the same year. The programme had to be changed mostly due to the unexpected problems that arose with the till cover. This was found to consist of a hard, clayey, silty, and sandy variety (Hardenby 1985c) which could be penetrated by the tractor mounted air-flush drilling equipment only if water was used in combination with air. A separate water tank had to be transported which affected the passability of the equipment. As a consequence of the latter and the fact that the till cover sometimes exceeded 40 m in thickness some of the sampling profiles had to be changed and some of the sampling sites were never sampled or only till samples could be obtained.

Altogether 195 out of originally 258 sites have been samples (Figs 8:1, 8:2). At some of the sample sites more than one till sample has been collected for stratigraphical studies. As was mentioned above, rock chip samples have due to the thickness of the till not been obtained at all sampled localities. Two hundred and ten (210) till samples have been collected and together with 15 duplicate samples (altogether 225 samples) they possess the following ID numbers: 85G2P1: 001-019, 021-036, 038-054, 056-059, 061-076, 079-142, 144-158, 160, 162,, 164, 166-206, 208-210, 213-222, 229-231, 234, 241-251, 253, and 255. A somewhat smaller number of rock chip samples (totally 164 samples) have been collected and given the following ID numbers: 85G2S1: 001-012, 022-035, 038-054, 061-069, 079-134, 136-141, 169-170, 190-205, 208-209, 213-222, and 230-249.

Except for the till samples No 85G2P1: 001-19, 021, 035, 036, 110-134, 136-141, and 166-170 that already have been analyzed (Hardenby 1985c) all till samples will be analyzed using neutron activation (INA) at the VTT reactor laboratory in Finland. INA is better than ICP when low grades of W is to be detected. These samples are now being perpared for analysis. The rock chip samples No 85G2S1: 001-012, 035, 110-141, 169, and 170 have during the summer this year (1985) been analyzed at the LKAB Prospektering laboratory in Stockholm (Hardenby 1985c). The remaining samples will be analyzed at the same place.

8.5.2 Scheelite grain contents in previously collected heavy mineral samples

In totally 188 samples (No 83G2GØ: 104-152, 159-164, 169-175, 201-237 and 239-327) from previous sampling programmes (Hardenby 1984 a,b,c) scheelite grains have been counted. The samples No 83G2GØ: 104-152 have been geochemically analyzed in 1984 (Hardenby 1984b) and the scheelite grains have been counted in 1983 but the results of the latter have not been presented in any report. The scheelite grain contents in the different samples are presented in Table 30 and sample sites are shown in Fig 8:3 (from Hardenby 1984c).

The samples No 83G2GØ: 239-327 have been taken with the help of tractor mounted air-flush drilling equipment and the other ones with spade, which means that the original samples have not been equally large. As can be seen in Table 30 the number of scheelite grains in the concentrated samples is normally not great. Only in 2 samples the number exceeded 50 grains which may be regarded as high; sample No 83G2GØ: 114 with 85-90 grains (5.7-6.1 grains/g concentrated sample) and No 120 with 51 grains (3.2 grains/g concentrated sample). Sixteen of the 198 samples contained >3 grains per gram concentrated sample; samples No 83G2GØ: 114-117, 125-127, 129, 160, 163, 169, 172, 175, 303, 309, and 313 (Table 30).

The plots in Fig 8:4 A & B show rather bad correlations between number of scheelite grains and geochemically determined W content in the samples 83G2GØ: 104-152. There may be a weak tendency for some correlation in Fig 8:4 B where the number of scheelite grains per gramme concentrated sample (gr/g.c.s) has been plotted against the W-content. The reasons for the generally bad correlations may be many e.g. different sizes of the scheelite grains and samples.

It may be worth noticing, however, that among the geochemically analyzed samples, 7 of the 8 samples (No 83G2GØ: 114-117, 125-127 and 129) with >3 gr/g.c.s. have corresponding geochemically determined W contents $\geq$ the mean value and that these samples are rather well gathered (see Fig 8:3 and Hardenby 1984b Fig 15).

8.5.3 Potassium variation in outcrops

This study started in 1984 when the γ-radiation was measured with a Scintrex GAD-6 gamma ray spectrometer at 10 outcrops in the in detail geologically mapped southern part of Galgbäcken No 1 (Hardenby 1985a). The same outcrops plus 14 new ones have been tested with the same instrument and in the same way as at Fogdhyttan (paragraph 3.5.1). The 10 'old' outcrops were re-tested to see if the same results would be obtained when different instruments were used. The results will be presented in a future report.

8.6 Geophysics

When it was understood that the thickness of the overburden varied a lot and often was considerable it was decided to test geophysics to estimate the thickness. Along the profiles shown in Fig 8:5 VLF E-phase (4 profiles with a total length of about 5 km) and magnetics (7 profiles with a total length of about 7 km) were used.

The results are not quite complete yet but will later be presented in a separate report. Provisionally it may be concluded that within the test area the methods can be used for at least rough estimations of the thickness of the overburden. Probably it may be worth testing other sampling areas when future 'tractor sampling' is planned.

8.7 Comments

When the remaining 'deep till' samples (paragraph 8.5.1) have been analyzed all data from the till geochemistry will be interpreted. Lithogeochemical studies will hopefully be performed during the year (1986) when all the rock chip samples have been analyzed. Until this is done and the geological maps, the diamond drillhole sections (DDH 001/85, DDH 002/85, Hardenby 1985b) and the geological maps of the trenches (Hardenby 1984c) are ready no further field work is planned for the Galgbäcken claims.

8.8 Summary of activities in 1985

Geochemistry - analysis of bedrock: Altogether 147 samples (No 8448: 315-397, 404, 416-418; 8458: 301-314, and 85G2S1: 001-012, 110-141, 169, 170) have been chemically analyzed. Except for samples 8445: 325, 327, 328, 332, and 404 which have been analyzed at the laboratory of AB Statsgruvor (Yxsjöberg/Håksberg) all have been analyzed at the LKAB Prospektering laboratory in Stockholm. Two (2) samples (8458: 301, 302) have been analyzed at both laboratories. The samples have been taken from the diamond drill cores of DDH 001/85 and 002/85 (No 8558: 301-314), the trenches dug in 1984 (No 8448: 325-397, 404), outcrops surveyed with γ-spectrometer in 1984 (No 8445: 315-324), other outcrops and boulders (No 8448: 416-418) and from rock chips collected in 1985 (No 85G2S1: 001-012, 110-141, 169, and 170).

Geochemistry - analyses of till fine fraction): Totally 58 till fine-fraction samples (No 85G2PT: 001-019, 021, 035, 036, 110-134, 136-141, and 166-170) have been analyzed at the VTT reactor laboratory in Finland.

Geochemistry - analyses of till (heavy mineral fraction): Scheelite grains have been counted in 188 samples (No 8392GØ: 104-152, 159-164, 169-175, 201-273, and 239-327).

Geochemistry - sampling grogramme: Tractor mounted air-flush drilling equipment has been used to take 210 till samples and 164 rock chip samples at 195 out of the 258 sampling sites (see paragraph 8.5.1), which were marked out during the spring.

Geochemistry/Geophysics: A γ-ray spectrometer have been used to measure the γ-radiation at 24 outcrops in order to estimate the potassium content.

Geophysics: VLF E-phase and magnetics have been used along profiles with the total length of about 5 and 7 km respectively. Terrain corrections have been performed on the Bougner anomaly of the Born profile (see Engvall in Hardenby 1985a and c).

Geology - diamond drilling: Two holes DDH 001/85 and DDH 002/85 have been drilled in January 1985. They are 65.10 m and 66.20 m long respectively (Hardenby 1985b).

Geology - mapping: Regional mapping of the bedrock in the Galgbäcken claims and the surroundings have been completed. An area of about 3x4.5 km has been mapped; in part supplementing work that has been done in 1983. Detailed mapping covering an area of about 400x700 m (approx. 300x500 m this year) in the S-part of Galgbäcken No 1 has been completed.

9. THE EXPLORATION CLAIM OF ÅSHYTTAN

9.1 Location

The claim is located E-NNE of Lake Åsbosjön just W of the town of Nora (claim IX in Fig 2, Table 1).

9.2 Purpose

The claim has been taken out for W by its former owner who found scheelite in the mine dumps. The intentions are to find out where the mineral is present and in what amounts.

9.3 Previous work

The old mine dumps and pits of the previous Lönntorps and Skofttorps mines show that mining operations once have taken place. Between the years of 1909-1911 about 1840 metric tons of 1:st 'quality ore' and 2870 metric tons of 2:nd 'quality ore' were recovered. The ore types were hematite and calcareous magnetite (Geijer & Magnusson 1944).

Besides a brief field study of the claim in connection with the planning of the 1:st deep till and rock chip sampling programme which later (in 1983) was performed in the S part of the Galgbäcken claims, no work has been performed by LKAB Prospektering.

9.4 Comments

An inventory of the mine dumps and brief geological mapping is planned to take place during the field season in 1986. The claim is of low priority.

9.5 Summary of activities in 1985

No activities, except for an application to the 'Bergmästarämbetet' for prolongation of the rights to the claim for another year (18/10 1986).

10. THE EXPLORATION CLAIM OF SKRIKARHYTTAN

10.1 Location

The claim (X in fig 2, Table 1) is situated SE of Lake Vikern.

10.2 Purpose

Scheelite exists in same old mine dumps and the claim has been taken out for W which is the target element.

10.3 Previous work

See the reports by Hardenby (1984 b,c, 1985 a,c)

10.4 Comments

If time allows it a brief geological survey of the area is planned to take place in 1986. The rock chip samples (No 84G2SØ: 001-089) from the sampling programme in 1984 (Hardenby 1984b) will be prepared and chemically analyzed and if possible a lithochemical study will be performed. The claim has, however, rather low priority.

10.5 Summary of activities in 1985

A total of 89 heavy-mineral samples (84G2SØ: 001-089) have been illuminated by UV-light and the scheelite grains counted. The same samples have been sent to Finland for further studies on the mineral content.

The rights to the claim have been prolonged by one year (17/11 1986).

11. THE EXPLORATION CLAIM OF SKRIKARBO

11.1 Location

The claim is situated in a rather hilly terrain about 8 km SE of the southern end of Lake Vikern (claim XI in Fig 2, Table 1).

11.2 Purpose

Mo has been the target element since old mine dumps contain some molybdenite.

11.3 Previous work

See previous reports by Hardenby (1984 b,c, 1985 a,c).

11.4 Comments

Only minor work, such as analyzing the rock chip samples (No 84G2SØ: 090-100) has been planned on the claim which expired on the 18th of October 1985.

11.5 Summary of activities in 1985

Ten (10) heavy-mineral samples (No 84G2GØ: 090-099) have been illuminated with UV-light in order to study possible scheelite content. The samples have been sent to Finland for further studies on the mineral contents.

12. THE EXPLORATION CLAIMS OF GRÄNSHYTTAN No 1 & 2

12.1 Location

The claims of Gränshyttan No 1&2 (XII in Fig 2, Table 1) are situated about 5 km W of the northern end of Lake Rossvalen. Two lakes, Gränssjön and Aspen, are partially situated within the claims.

12.2 Purpose

Pyrite, chalcopyrite, molybdenite, sphalerite, galena, and scheelite have been observed e.g. in mine dumps. Good grades of Ag together with Pb are known in some selected mine dump samples. The claims are surveyed with regard to Pb, Ag, Zn and W.

12.3 Previous work

See the previous reports (Hardenby 1985 b,c).

12.4 Geology (Eva Lindberg)

The area of the exploration claims of Gränshyttan and the surrounding area is characterized by few outcrops, particularly in the southern part where there are practically no outcrops at all. In this area information from the boulders have been used to draw the geological map. More information can be expected from the geochemical sampling programme when it has been accomplished. The landscape is rather flat and covered with quaternary deposits; mainly till and bogs. In the northern part of the mapped area, on the eastern side of the Lake Gränssjön the terrain is more hilly and the exposures of outcrops are rather good. A geological map over the area which have been 'mapped' during the autumn is presented in Fig 12:1.

12.4.1 Rock types

The dominanting rock type in the area is a grey leptite (metavolcanic!). It consists mostly of quartz, feldspar and a varying amount of mica, specially biotite with the flakes plane parallel to the foliation. Sometimes the leptite is banded and probably has a tuffitic origin. The appearance and composition of the 'bands' vary a lot and are sometimes represented only by differences in the mica composition. Skarn intercalations in the bands are also common.

A quartz-porphyritic variant of the leptite occurs in thin belts, with (quartz)-phenocrysts up to 5 mm; usually around 2 mm.

This porphyritic rock occurs in the northern part, at 'Limbergsgruvorna' (Limbergs mines) and the surrounding area.

A reddish type of leptite, with smaller amounts of mica and more K-feldspar is less common. It occurs only in some small zones in the dominating grey leptite and has not been distinguished in the geological map (Fig 12:1). Another variant is the leptite gneiss which occurs as thin belts in the leptite. A common feature in the leptite gneiss is the large amount of mica (biotite). In the western part of the wide leptite gneiss belt in the southern claim, phenocrysts of feldspar occur and the rock has a "disturbed appearance".

In the northeastern part of the area the bedrock is particularly mica rich and some small bodies of mica schist occur in the leptite (above all muscovite-sericite rock).

Dark to light green skarn occurs as small lenses, elongated bodies or horizons along the strike of the foliation. The skarn consists mainly of the usual skarn minerals such as amphiboles (actinolite, tremolite, hornblende), diopside, epidote and carbonate. Garnet is, however, less common.

Carbonates occur as a folded thin, N-S trending zone at 'Limbergsgruvorna' (fold axes plunge towards NE), in the quartz-porphyritic leptite. Between the carbonates and the leptite there is a small horizon with skarn.

Amphibolite occurs as small dikes or small bodies in the leptite. It is medium grained (less common-fine grained) and has a varying amount of biotite. The dikes, trending E-W to NW, more ore less interest the strike direction of the foliation.

The youngest bedrock in the area is pegmatite. It occurs as larger masses (the southern part of the area), small bodies or veins in the leptite. In the southern part of the claim (No 2) the few outcrops that exist consist mainly of pegmatite. The pegmatite is a potassium-poor type and is white to light pink in colour.

'Mineralization'

In the dumps at Kampagruvorna (the Kampa mines) galena, pyrite, and chalcopyrite have been observed.
Chalcopyrite has only been observed in minor amount but galena and pyrite occur rather frequently. There are naturally a lot of magnetite in the dump. The sulphides seem to occur mainly in the carbonates.
At Svartbergsgruvan (Svartbergs mine) (~500 m to the north) the amount of sulphides in the dumps is less. Minor amounts of galena, pyrite but mostly magnetite have been observed. Further to the north in the mineralized zone there are some small pits where only magnetite has been observed.

At the magnetic total intensity maps from SGU (1979, 1984) the magnetic anomaly over Kampagruvorna (the Kampa mines) and Svartbergsgruvan (Svartberg mine) can be traced further north on the east side of Svartbergstjärn and in a north-north-easterly direction to the east of the Lake Gränssjön. In that area magnetite has been observed as grains or small veins in the outcrops and the only sulphide mineral that occur is pyrite in minor amount.

In a boulder southwest from Limbergsgruvorna traces of galena has been found. At Limbergsgruvorna (Limbergs mines) only small amounts of pyrite, chalcopyrite ('traces') and magnetite occur as grains and small veins.

12.4.2 Strike and dip

The dominant strike of the foliation in the area is NNE to NNW. An exception is in the nort-eastern part where the strike is WNW-ly. The dips are steep to the east.

12.5 Geophysics

Along 4 survey lines, varying between 0.8 and 1.2 km long (total length about 4.2 km) max-min has been used in a reconnaissance study across the known magnetic zone (Fig 12.2). The same profiles will also be surveyed with magnetics. The results are not yet ready.

12.6 Geochemistry

12.6.1 The deep till and rock chip sampling programme

Due to the sampling difficulties at Galgbäcken the sampling, using the tractor mounted air-flush drilling equipment, has been delayed at Gränshyttan. The sampling will, hopefully, start during the spring in 1986. The work with marking out the sample sites has, however, started. Some changes must be made in the planned sampling profiles (Hardenby 1985b) mostly due to terrain conditions.

12.6.2 Potassium radiation in outcrops (Eva Lindberg)

For the exploration claims of Gränshyttan there has been a survey similar to the measurement of the potassium-radiation in outcrops at Fogdhyttan during the autumn. At Gränshyttan, outcrops over the entire investigated area has been 'visited' to get a view of the potassium variation in the bedrock (Fig 12:3, Table 31). The major part of the measured outcrops was leptite, only a few measurements were on outcrops consisting of pegmatite. The potassium contents seem to fluctuate between 1.0-6.4%; in general between 2.5-3.5% (average ~2.9) which is a leptite of 'K-intermediate' type.

Compared with the Fogdhyttan area which is a 'low'-K terrain (paragraph 3.5.1) the Gränshyttan area may be regarded as an 'intermediate'- to 'high'-K terrain and therefore ought to be a more promising area than the former in the search for mineral deposits; that is, if it is correct that high K-contents in the leptites are significant for the areas with major mineral deposits in Bergslagen.

From a few outcrops, samples (5) have been taken for chemical analyses. The analytical results will, when they are ready, be used for checking the K-contents obtained by the potassium radiation survey.

12.7 Comments

The major plans for the Gränshyttan claims during 1986 are to continue the mapping of the northern parts and to commence the deep till and rock chip sampling programme. It would probably be useful to get in contact with Boliden AB who was the previous owner to a small claim which included the Kampa- and Svartbergsgruvorna.

12.8 Summary of activities in 1985

An area of about 3 x 8 km has been geologically mapped. Altogether 92 outcrops in the same area have been surveyed with a γ-spectrometer in order to test the potassium variation. Five rock samples have been taken to check this survey geochemically. The setting out of sampling

sites has started in the S part of Gränshyttan No 2. Four profiles with a total length of about 4.2 km have been geophysically surveyed with max-min.

13. ECONOMY

The budget for project 38121 Nora in 1985 was 800.000 SEK. The total costs during the year was, however, 1.530.000 SEK thus exceeding the budget with 730.000 SEK. The major single reason for this overdraft was the sampling programme at Galgbäcken which ran into unexpected difficulties (paragraph 8.5.1). The work on the Gränshyttan claims started earlier than was planned which also contributet to the overdraft. Money has, however, been allocated from the 'drill pot' 3819 to enable the work to continue.

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15. TABLE CAPTIONS

Table 1 Locations of the 'Nora Area' claims, The table includes districts, counties, map sheets, R-coordinates, elements for which the claims have been taken out for and other target elements.

Table 2 The Nora Area. Summary of activities and 'productions' in 1985.

Table 3 The Fogdhyttan mining claims. K- U and Th variation in outcrops.

Table 4 The Fogdhyttan mining claims. Brief description of the samples 8558: 317-345.

Table 5 The Fogdhyttan mining claims. Chemical composition of samples mainly from mine dumps. Sample ID numbers: 8558: 317-345.

Table 6 The Fogdhyttan mining claims. Mean values, standard deviations, variation coefficients, maximum and minimum values of Table 4.

Table 7 Nybergsfältet. Drill core log of DDH 001/83

Table 8 -"- . -"- DDH 002/83

Table 9 -"- . -"- DDH 004/83

Table 10 -"- . -"- DDH 005/83

Table 11 -"- . -"- DDH 006/83

Table 12 -"- . -"- DDH 007/83

Table 13 Nybergsfältet. Analytical results of the re-analyzed selected mine dump samples 8448: 301-310 and 8458: 387-400.

Table 14 Nybergsfältet. Mean values, standard deviations, variation coefficients, maximum and minimum values of Table 13.

Table 15 Nybergsfältet. Analytical results of the re-analyzed boulder samples 8448: 311-314.

Table 16 Nybergsfältet. Analytical results of the re-analyzed drill core samples 8448: 405-411 from DDH 001/83.

Table 17 Nybergsfältet. Mean values, standard deviations, variation coefficients, maximum and minimum values of Table 16.

Table 18 Nybergsfältet. Analytical results of the re-analyzed drill core samples 8448: 412-414 from DDH 002/83.

Table 19 Nybergsfältet. Mean values, standard deviations, variation coefficients, maximum and minimum values of Table 18.

Table 20 Nybergsfältet. Analytical results of the re-analyzed drill core samples 8448: 415, 8458: 312-338 from DDH 004/83.

Table 21 Nybergsfältet. Mean values, standard deviations, variation coefficients, maximum and minimum values of Table 20.

Table 22 Nybergsfältet. Analytical results of the re-analyzed drill core samples 8458: 339-349 from DDH 005/83.

Table 23 Nybergsfältet. Mean values, standard deviations, variation coefficients, maximum and minimum values of Table 22.

Table 24 Nybergsfältet. Analytical results of the re-analyzed drill core samples 8458: 350-361 from DDH 006/83.

Table 25 Nybergsfältet. Mean values, standard deviations, variation coefficients, maximum and minimum values of Table 24.

Table 26 Nybergsfältet. Analytical results of the re-analyzed drill core samples 8458: 362-386 from DDH 007/83.

Table 27 Nybergsfältet. Mean values, standard deviations, variation coefficients, maximum and minimum values of Table 26.

Table 28 Nybergsfältet. Brief description of rock types, references to old sample/locality numbers and coordinates of the mine dump and boulder samples 8448: 301-314, 8458: 387-400.

Table 29 Rödkärrsmossen. Recommended additional geophysical surveys.

Table 30 Galgbäcken. Number of scheelite grains in the heavy mineral samples No 83G2GØ: 104-152, 159-164, 169-175, 201-237, and 239-327.

Table 31 Gränshyttan No 1 & 2. K, U, and Th variation in outcrops.

Table 32 The claims and their reports. The table shows which reports that concern a certain claim.

16. FIGURE CAPTIONS

Fig. 1:1 Topographic maps covering the 'Nora Area'

Fig. 1:2 Mining & exploration claims of the Nora-Strássa Area. Roman numbers refer to LKAB or LKAB/BP claims in the 'Nora exploration area'. I. Västra Bergs- and Linschakt-gruvan (Stribergsfältet; relinquished 851231), II. Fogd-hyttefältet (relinquished 851231), III. Rödbergsfältet, IV. Vikersfältet (relinquished 851231), V. Mossgruvan (Skärhyttefältet; relinquished 821231), VI. Nybergsfältet, VII. Rödkärrsmossen, VIII. Galgbäcken, IX, Åshyttan, X. Skrikarhyttan, XI. Skrikarbo (expired 851018), and XII. Gränshyttan.

Fig. 1:3 Geological mapping of the 'Nora Area'. Areas mapped by LKAB Prospektering between 1982 and 1985.

Fig. 3:1 Geological map of the Fogdhyttan claims.

Fig. 3:2 The Fogdhyttan mining claims. Potassium variation in out-crops.

Fig. 3:3 The Fogdhyttan mining claims. Sampling sites of samples 8558: 317-345.

Fig. 3:4 The Fogdhyttan mining claims. Histrograms showing number of analyses vs. the contents of the elements Na, Mg, K, Ca, Mn, Co, Ni, Cu, Zn, Mo, Ag, Ba, W, Pb, and Be. Sample ID numbers: 8558: 317-345.

Fig. 6:1 Nybergsfältet. Histrograms showing number of analyses vs. the same elements as in Fig. 3:4. Mine dump samples with ID numbers: 8448: 301-310, 8458: 387-400.

Fig. 6:2 Nybergsfältet. Histograms showing number of analyses vs. the same elements as in Fig. 3:4. Drill core samples (DDH 001/83) with ID numbers: 8448: 405-411.

Fig. 6:3 Nybergsfältet. Histograms showing number of analyses vs. the same elements as in Fig 3:4. Drill core samples (DDH 002/83) with ID-numbers 8448:412-414.

Fig. 6:4 Nybergsfältet. Histograms showing number of analyses vs. the same elements as in Fig. 3:4. Drill core samples (DDH 004/83) with ID numbers: 8448: 415, 8458: 312-338.

Fig. 6:5 Nybergsfältet. Histograms showing number of analyses vs. the same elements as in Fig. 3:4. Drill core samples (DDH 005/83) with ID numbers: 8458: 339-349.

Fig. 6:6 Nybergsfältet. Histograms showing numbers of analyses vs. the same elements as in Fig. 3:4. Drill core samples (DDH 006/83) with ID numbers: 8458: 350-361.

Fig. 6:7 Nybergsfältet. Histograms showing number of analyses vs. the same elements as in Fig. 3:4. Drill core samples (DDH 007/83) with ID numbers: 8458: 362-386.

Fig. 7:1 Rödkärrsmossen No 1. Local grid and geophysical survey. Scale 1:10.000.

Fig. 7:2 Rödkärrsmossen No 1 (eastern half). Magnetic total field residual (2500 nT/cm). Scale 1:5000.

Fig. 7:3 Rödkärrsmossen No 1 (eastern half). Magnetic modelling along profile 400W.

Fig. 7:4 Rödkärrsmossen No 1 (eastern half). Magnetic totalfield residual (500 nT/cm). Scale 1:5000.

Fig. 7:5 Rödkärrsmossen No 1 (eastern half). VLFH In-Phase and quadrature. Scale 1:5000.

Fig. 7:6 Rödkärrsmossen No 1 (eastern half). VLFH In-Phase Frazer filtered. Scale 1:5000.

Fig. 7:7 Rödkärrsmossen No 1 (eastern half). Induced polarisation and apparent risistivity. Scale 1:5000.

Fig. 7:8 Rödkärrsmossen No 1 (eastern half). Dipole-dipole along profile 320W. Scale 1:2000.

Fig. 7:9 Rödkärrsmossen No 1 (eastern half). Magnetic modelling along profile 320W.

Fig. 7:10 Rödkärrsmossen No 1 (eastern half). Dipole-dipole along profile 640W. Scale 1:2000.

Fig. 7:11 Rödkärrsmossen No 1 and surroundings. Interpretation of lineaments from aerial photographs. Scale 1:50.000.

Fig. 8:1 Galgbäcken. Locations of sampling sites. Till samples No 85G2P1: 001-019, 021-036, 038-054, 056-059, 061-076, 079-142, 144-158, 160, 162, 164, 166-206, 208-210, 213-222, 229-231, 234, 241-251, 253, and 255.

Fig. 8:2 Galgbäcken. Locations of sampling sites. Rock chip samples No 85G2S1: 001-012, 022-035, 038-054, 061-069, 079-134, 136-141, 169-170, 190-205, 208-209, 213-222, and 230-249.

Fig. 8:3 Galgbäcken. Sample sites of the heavy-mineral samples 83G2GØ: 104-175, 201-237, and 239-327. Circles indicate samples with >3 scheelite grains per gram concentrated sample.

Fig. 8:4 Galgbäcken. Plots showing relationships between number of scheelite grains and W contents in the heavy mineral samples 83G2GØ: 104-152. A. Number of scheelite grains vs. W content. B. number of scheelite grains per gram concentrated sample vs. W content.

Fig. 8:5 Galgbäcken (northern part). Locations of geophysical survey profiles used to estimate the thickness of overburden. Dashed line: VLF E-phase, unbroken line: magnetics.

Fig. 12:1 Gränshyttan. Geological map of the Gränshyttan exploration claims No 1 (southern part) & No 2.

Fig. 12:2 Gränshyttan. Locations of reconnaissance max-min survey profiles.

Fig. 12:3 Gränshyttan. Potassium variation in outcrops.

TABLE 1. The 'Nora Area' claims

LOCALITY/CLAIM	R-COORDINATES	COUNTY	DISTRICT	TOPOGRAPHIC MAP	ECONOMIC MAP	TARGET ELEMENT	NOTES
Stribergsfältet: Västra Bergs- and Linschakt-gruvan	(A) 6601520/1449380, (B) 6601520/1449660, (C) 6601230/1449660, (D) 6601230/1449380	Örebro	Nora	11E SO	11E Oj	Fe	Mining claim relinquished 1985-12-31
Fogdhyttefältet: Karaberget, Tabergs- and Västra Tabergsgruvan	(A) 6600550/1449900, (B) 6600580/1450170, (C) 6600280/1450210, (D) 6600210/1450130, (E) 6600000/1450140, (F) 6600040/1450430, (G) 6599720/1450470, (H) 6599650/1450390, (I) 6599630/1450180, (J) 6599590/1449890, (K) 6600050/1449840, (L) 6600060/1449900, (M) 6600180/1449930, (N) 6600180/1449940	Örebro	Nora	10E NO, 11E SO 10F NV, 11F SV	10E 9j, 11E Oj 10F 9a, 11F Oa	Fe	Mining claim relinquished 1985-12-31
Rödbergsfältet: Humlabergs-, Klintabergs-, Östra Klintabergs-, Kärnabergs-, Rödbergs-, Norra Rödbergs-, Södra Rödbergs-, and Lilla Sjögruvan	(A) 6600030/1449060, (B) 6600130/1449340, (C) 6599800/1449470, (D) 6599710/1449170, (E) 6599810/1449100, (F) 6599660/1449200, (G) 6599610/1449160, (H) 6599450/1449150, (I) 6599450/1449170, (J) 6599110/1449170, (K) 6599100/1448840, (L) 6599050/1448830, (M) 6599050/1448610, (N) 6599010/1448470, (O) 6599060/1448460, (P) 6599040/1448350, (Q) 6599480/1448300, (R) 6599530/1448850, (S) 6599680/1448860, (T) 6599720/1449040	Örebro	Nora	10E NO, 11E SO	10E 9j, 11E Oj	Fe, Cu, Au, Ag	Mining claim
Vikersfältet: Vikers gruvor	(A) 6595770/1447030, (B) 6595630/1447360, (C) 6594980/1447080, (D) 6595050/1446920, (E) 6594750/1446800, (F) 6594720/1446900, (G) 6594400/1446760, (H) 6594460/1446420, (I) 6594430/1446530, (J) 6594100/1446310, (K) 6594150/1446240, (L) 6594030/1446350, (M) 6593790/1446100, (N) 6593830/1445820, (O) 6593690/1445820, (P) 6593710/1445450, (Q) 6593600/1445440, (R) 6593610/1445210, (S) 6593960/1445220, (T) 6593950/1445460, (U) 6594060/1445470, (V) 6594050/1445850, (X) 6594260/1446090, (Y) 6594320/1446030, (Z) 6594590/1446240, (Å) 6594580/1446270, (Ä) 6594710/1446290, (Ö) 6594740/1446410, (a) 6595180/1446590, (b) 6595210/1446430, (c) 6595580/1446570, (d) 6595450/1446890	Örebro	Nora	10E NO	10E 8j, 10E 9j	Fe	Mining claim relinquished 1985-12-31
Skärhyttefältet: Mossgruvan	(A) 6602640/1432880, (B) 6602590/1433070, (C) 6602210/1432960, (D) 6602260/1432770	Örebro	Nora	11E SO	11E Oh	Fe, Mo	Mining claim relinquished 1982-12-31
Nybergsfältet/Nyberg No 1: Albert-, Anna-, Bro- or Västra Lång-, Edvin-, Eleonora-, Grind-, Hedvig-, Jürgen-, Kulter-, Nya Lång-, Lövås-, Margareta-, Matilda-, Mellan- or Kärr-, Strand-, Timmer-, Västra Asa-, Östra Asa-, and Limossegruvan	(A) 6606150/1447480, (B) 6605210/1447850, (C) 6604130/1445230, (D) 6603520/1442880, (E) 6604490/1442640, (F) 6605100/1445000	Örebro	Nora	11E SO	11E Oi, 11E 1i 11E Oj, 11E 1j	Fe, Cu, Au	Mining and exploration claims

TABLE 1 contd. The 'Nora Area' claims

LOCALITY/CLAIM	R-COORDINATES	COUNTY	DISTRICT	TOPOGRAPHIC MAP	ECONOMIC MAP	TARGET ELEMENT	NOTES
Rödkärrsfältet/Rödkärrs-mossen No 1: Västra Rödkärrs- and Östra Rödkärrsgruvan, Rödkärrs-gruvan No 1, No 2, and No 3	(A) 6612020/1448670, (B) 6611050/1448780, (C) 6610820/1446600, (D) 6611790/1446510	Örebro	Nora	11E SO	11E 2j	W, Cu, Zn, Pb, Au	Mining and exploration claims
Galgbäcken No 1	(A) 6602830/1453650, (B) 6602820/1453940, (C) 6602100/1453905, (D) 6601890/1453845, (E) 6601845/1453620	Örebro	Nora	11F SV	11F 0a	W	Exploration claim
Galgbäcken No 2	(A) 6607400/1453600, (B) 6607000/1454100, (C) 6605270/1455310, (D) 6602050/1454550, (E) 6601890/1453845, (F) 6601845/1453620, (G) 6602350/1452900, (H) 6604000/1452900	Örebro	Nora	11F SV	11F 0a, 11F 1a 11F 0b, 11F 1b	W	Exploration claim
Ashyttan	(A) 6601680/1454790, (B) 6600380/1454690, (C) 6600410/1454290, (D) 6601700/1454590	Örebro	Nora	11F SV	11F 0a	W	Exploration claim
Skrikarhyttan	(A) 6594210/1449490, (B) 6594030/1449850, (C) 6592915/1449380, (D) 6593020/1449325, (E) 6592780/1448875	Örebro	Nora	10E NO	10E 8j	W	Exploration claim
Skrikarbo	(A) 6588240/1453930, (B) 6588240/1454330, (C) 6587800/1454330, (D) 6587810/1454250, (E) 6587750/1453930	Örebro	Örebro	10F NV	10F 7a	Mo	Exploration claim; expi-red 1985-10-18
Gränshyttan No 1	(A) 6627450/1455850, (B) 6627600/1457450, (C) 6625000/1458200, (D) 6623410/1457540, (E) 6623410/1455400, (F) 6625000/1456000	Örebro	Lindesberg	11F SV, 11F NV	11F 4b, 11F 5b	W, Pb, Ag, Zn	Exploration claim
Gränshyttan No 2	(A) 6623410/1455400, (B) 6623410/1457540, (C) 6618150/1455400, (D) 6618800/1453650	Örebro	Lindesberg	11F SV	11F 3a, 11F 4a 11F 3b, 11F 4b	W, Pb, Ag, Zn	Exploration claim

TABLE 2. The Nora Area. Summary of activities and 'productions' in 1985.

	FOGDHYTTEFÄLTET	RÖDBERGSFÄLTET	VIKERSFÄLTET	NYBERGSFÄLTET	RÖDKÄRRSMOSSEN	GALGBÄCKEN	ÄSHYTTAN	SKRIKÄRHYTTAN	SKRIKÄRBO	GRÄNSHYTTAN	TOTAL
GEOLOGY											
Mapping.											
Scale:	1:10 000					a) 1:10 000, b) 1:2 000				1:10 000	
Area:	800x1900m					a) 3x4.5km, b) 300x500m				3x7 km	54.23 km^2
Map ready:	yes; in B 86-3					in prep.				in B 86-3	
Notes:					reconnaissance						
Drilling.											
No of holes:						2					2
Total length:						131.3 m					131.3 m
Logged:						2					2
No of samples:						14					14
GEOCHEMISTRY											
Till fine-fraction.											
No of samples obtained by 'tractor sampling':						210					210
No of meters drilled:						3561 m					3561 m
No of samples analyzed:						58					58
Till heavy-mineral.											
No of samples obtained by 'tractor sampling':						210					210
No of samples chem. analyzed:						0					0
No of samples tested in UV-light:						188 (from 1983)		89 (from 1984)	10 (from 1984)		287
Bedrock.											
No of samples											
a) from outcrops:	1									5	6
prepared:	1					10 (from 1984)					11
analyzed:	1					10 (from 1984)					11
re-analyzed:						2 (from 1983)					2
b) from mine dumps:	28										28
prepared:	28										28
analyzed:	28										28
re-analyzed:				24 (from 1983)							24
c) from drill cores:						14					14
prepared:						14					14
analyzed:						14					14
re-analyzed:				86 (from 1983)		2					88
d) from rock chips:						164					164
identified:						164					164
prepared:						44					44
analyzed:						44					44
re-analyzed:											
e) from boulders:											
prepared:											
analyzed:											
re-analyzed:				4 (from 1983)		1 (from 1983)					5
f) from trenches:											
prepared:						74 (from 1984)					74
analyzed:						74 (from 1984)					74
re-analyzed:											
γ-radiation survey on outcrops.											
No of outcrops surveyed:	26					14				92	132
No of outcrops re-surveyed:						10					10
GEOPHYSICS											
Local grids.											
Total length of pegged lines:					9.86 km						9.86 km
Ground surveys.											
a) Magnetics											
Total length of survey lines:					22.4 km	7 km					29.4 km
Results & interpretations:					for 17.3km in B86-3						
b) IP											
Total length of survey lines:					17.3 km						17.3 km
Results & interpretations:					in B 86-3						
c) Dipole-Dipole											
Total length of survey lines:					1,0 km						1.0 km
Results & interpretations:					in B 86-3						
d) VLF-H											
Total length of survey lines:					17.3 km						17.3 km
Results & interpretations:					in B 86-3						
e) VLF-E											
Total length of survey lines:						5 km					5 km
Results & Interpretations:											
f) Max-Min											
Total length of survey lines:										4.2 km	4.2 km
Results & interpretations:											
CLAIMS											
Approved:					1985-04-11						1 claim
Prolonged by 1 year:							1986-10-18	1986-11-17			2 claims
Expired or relinquished:	1985-12-31		1985-12-31						1985-10-18		3 claims
MISCELLANEOUS		repairing and setting up of fences around mine pits		study of the old manuals 'Bergverksrelation...'							

Table 3: K, U and Th contents in outcrops within the Fogdhyttan claims and a rockdesciption

coordinates		K (%)	U (ppm)	Th (ppm)	rocktype
6600.265	1450.181	0.7	3	17	grey leptite-gneiss
00.519	50.046	0.5	4	15	white leptite-gneiss
00.641	50.031	0.4	4	15	- " -
00.876	50.019	0.7	3	15	grey leptite-gneiss
00.772	50.036	0.1	1	14	white - " -
00.756	49.878	0.2	2	14	- " -
00.637	49.792	0.2	2	17	grey leptite-gneiss
00.923	50.048	4.0	2	15	red leptite/leptite-gneiss
00.675	50.164	0.0	2	15	white leptite-gneiss
00.711	50.268	0.3	2	14	- " -
00.643	50.283	0.0	2	13	- " -
00.524	50.280	0.1	1	12	- " -
00.491	50.182	0.3	1	10	grey leptite-gneiss
00.493	50.203	0.2	2	14	- " -
00.526	50.191	0.2	2	11	white leptite-gneiss
00.606	50.179	0.7	2	14	- " -
00.333	49.787	0.1	1	15	- " -
599.399	50.151	1.6	4	18	grey leptite-gneiss
599.715	50.412	0.4	2	18	- " -
		0.7	1	1	amphibolite
00.022	50.366	0.3	1	13	grey-dark amphib., fsp rich
00.110	50.397	0.5	4	16	grey leptite/leptite-gneiss
00.106	50.336	0.6	3	15	grey leptite-gneiss
00.058	50.332	2.8	4	16	mica schist (biotite)
00.951	50.066	1.0	4	16	red-grey leptite/leptite-gneiss

TABLE 4. The Fogdhyttan mining claims. Description of the samples
8558: 317-345

R-coordinates		Locality	Sample No	Rock type
				abbreviations: bi-biotite, chl-chlorite, qz-quartz, amph-amphibole, act-actinolite, di-diopside, py-pyrite, gt-garnet
		V.Tabergsgr.		
660030	145006	Mine dump	317	Fine grained, sometimes diffusely banded magnetite'ore' in a bi-chl-qz-rich country rock
-"-	-"-	-"-	318	Bi partially chl schist
-"-	-"-	-"-	319	Grey bi rich leptite gneiss
660023	145002--145009	-"-	320	Light green to grey green fine grained unidentified rock type, probably chl and/or amph.rich skarn?
-"-	-"-	-"-	321	Fine grained amgnetite in chl-di-act skarn with traces of py
-"-	-"-	-"-	322	Irrigularly distributed magnetite in a matrix of chl? and 'needles' of light green amph.
-"-	-"-	-"-	323	Fine grained magnetite as irregularly distributed aggregates or diffusely banded in a chl-bi-di? matrix
-"-	-"-	-"-	324	Diffusely banded fine grained magnetite in light green chl-bi-di-gt skarn
-"-	-"-	-"-	325	Fine grained irregularly distributed magnetite in light green matrix (light green amph? - chl? -qt)
660022	145011	Outcrop	326	Contact zone between pegmatite and skarn.
660019--660022	145013--145017	Mine dump	327	Magnetite in dark green chl-amph skarn; partially banded
		Tabergsgr.		
660013--660016	145010--145018	Mine dump	328	Randomly oriented 5-20 mm long dark amph? needles in grey fine grained matrix; weakly magnetic
-"-	-"-	-"-	329	Fine grained magnetite 'ore' with fine to medium grained green amph and chl?; massive texture
-"-	-"-	-"-	330	Fine grained magnetite 'ore' in a quartzitic somewhat qz-porphyritic dark grey matrix

TABLE 4. The Fogdhyttan mining claims. Description of the samples
8558: 317-345

R-coordinates		Locality	Sample No	Rock type
cont.:		Tabergsgr.		
660013-660016	145010-145018	Mine dump	331	Magnetite in grey to light grey fine grained matrix sometimes with 1-5 mm long green amph needles in elongated aggregates
-"-	-"-	-"-	332	Qz-impregnated and bi schistose (skölig) diffusely banded magnetite 'ore'
-"-	-"-	-"-	333	Fine grained magnetite in a greenish black medium to coarse grained (5-20 mm) amph. matrix with traces of py.
-"-	-"-	-"-	334	Bi + chl + amph + magnetite at the border of a quartz vein
-"-	-"-	-"-	335	Magnetite 'ore' in bi-chl schist (sköl); both schistose and massive varities
		Karabergsgr.		
659999	145019	Mine dump	336	Fine grained magnetite 'ore' in a green chl-amph. matrix
-"-	-"-	-"-	337	Green, fine to medium grained massive amph.-rich skarn; somewhat magnetite bearing
		Tabergsgr.		
660004-660014	145000-145004	Mine dump	338	Green, fine-medium grained massive to linear amph skarn; somewhat magnetite bearing
-"-	-"-	-"-	339	Green to black, fine to medium grained amph-bi-chl schist (sköl)
-"-	-"-	-"-	340	Black, medium grained amph (act?) skarn or amphibolite with a linear fabric
-"-	-"-	-"-	341	Fine grained magnetite in black medium grained amph. skarn
-"-	-"-	-"-	342	Fine grained magnetite in a fine to medium grained green to black amph-chl matrix
-"-	-"-	-"-	343	Grey quartzite and bi-schist bands
-"-	-"-	-"-	344	Black fine grained amph. skarn
660084	145031	Mine dump NNE of V.Tabergsgr.	345	Fine to medium grained magnetite 'ore' in greenish black, fine to coarse grained amph. skarn with traces of scheelite

TABLE 5. The Fogdhyttan mining claims. Chemical composition of samples mainly from mine dumps. Sample No: 8558: 317-345.

ID	8558XX-317	8558XX-318	8558XX-319	8558XX-320	8558XX-321	8558XX-322	8558XX-323	8558XX-324	8558XX-325	8558XX-326
MET	ICP,nhc	ICP,nhc	ICP,nhc	ICP,nhc	ICP,nhc	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC
DAT	850821	850821	850821	850821	850821	850821	850821	850821	850821	850821
KLO	1149	1150	1152	1153	1155	1228	1229	1230	1231	1232
					wt.-%					
LI	0.0016	0.0011	0.0007	0.0003	0.0006	0.0001	0.0003	0.0001	0.0002	0.0006
BE	0.0029	0.0004	0.0011	0.0001	0.0012	0.0001	0.0000	0.0001	0.0001	0.0011
B	0.0006	0.0001	-0.0001	-0.0002	0.0003	0.0005	0.0011	0.0009	0.0003	0.0012
NA	0.6395	0.1918	2.5060	0.2155	0.2895	0.1445	0.0740	0.1708	0.1643	1.1090
MG	4.5610	5.5250	2.1090	12.2700	5.9500	6.7080	5.6830	8.5990	9.7520	4.8560
AL	4.1930	3.4630	5.9710	0.7990	1.5070	0.8499	1.2010	1.2290	0.7800	4.2620
P	0.0005	0.0063	0.0047	-0.0008	0.0029	0.0043	0.0006	0.0018	0.0047	0.0040
K	0.7554	4.4250	1.4890	0.0772	0.0744	0.0098	0.4118	0.0181	0.0371	0.3222
CA	2.1810	0.2225	1.0820	9.1560	11.5300	5.2670	1.8910	4.7320	6.3510	7.3930
TI	0.0526	0.0775	0.0764	0.0106	0.0604	0.0134	0.0376	0.0164	0.0091	0.0420
V	0.0030	0.0025	0.0006	0.0014	0.0034	0.0018	0.0018	0.0017	0.0016	0.0020
MN	0.1146	0.0531	0.0156	0.0584	0.0979	0.0553	0.0574	0.0431	0.0365	0.0903
FE	26.1000	9.4790	1.9390	4.6690	18.7300	27.8300	38.4300	25.5000	18.5100	10.9800
CO	-0.0010	0.0001	0.0003	0.0001	0.0000	0.0005	0.0005	0.0010	0.0008	0.0002
NI	0.0005	0.0007	0.0001	0.0004	0.0006	0.0000	0.0006	-0.0001	0.0002	0.0004
CU	-0.0014	-0.0004	0.0007	0.0001	0.0022	0.0004	0.0000	0.0010	0.0010	0.0017
ZN	0.0036	0.0030	0.0011	0.0071	0.0046	0.0033	0.0041	0.0023	0.0018	0.0051
GE										
AS										
SR	0.0024	0.0012	0.0080	0.0004	0.0048	0.0004	0.0002	0.0004	0.0003	0.0152
Y	0.0154	0.0030	0.0009	0.0065	0.0071	0.0040	0.0033	0.0046	0.0052	0.0155
NB										
MO	0.0001	0.0001	0.0001	0.0001	-0.0001	0.0000	0.0000	0.0000	0.0000	0.0002
AG	0.0008	0.0004	0.0003	0.0003	0.0003	0.0001	0.0001	0.0002	0.0002	0.0003
CD	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000
SB										
BA	0.0033	0.0191	0.0166	-0.0001	-0.0002	0.0012	0.0030	0.0036	0.0010	0.0038
LA	0.2143	0.0483	0.0019	0.0002	0.0110	0.0004	0.0009	0.0000	0.0001	0.0307
CE	0.4174	0.1055	0.0058	0.0031	0.0244	0.0041	0.0039	0.0039	0.0038	0.0612
TA										
W	0.0011	0.0020	0.0066	0.0004	0.0008	0.0018	0.0003	0.0003	0.0002	0.0149
PB	0.0030	0.0021	0.0004	0.0009	0.0021	0.0018	0.0016	0.0020	-0.0001	0.0008
Au			< 0.02 ppm		< 0.02 ppm					< 0.02 ppm

TABLE 5 contd.

ID	8558XX-327	8558XX-328	8558XX-329	8558XX-330	8558XX-331	8558XX-332	8558XX-333	8558XX-334	8558XX-335	8558XX-336
MET	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC
DAT	850821	850904	850904	850904	850904	850904	850904	850904	850904	851014
KLO	1234	1248	1249	1251	1252	1253	1254	1256	1257	0854
						wt.-%				
LI	0.0006	0.0003	0.0003	0.0003	0.0003	0.0007	0.0006	0.0003	0.0007	0.0006
BE	0.0007	0.0009	0.0007	0.0003	0.0005	0.0028	0.0020	0.0005	0.0028	0.0014
B	0.0007	0.0004	0.0004	0.0010	0.0003	0.0003	0.0002	0.0001	0.0010	0.0014
NA	0.1859	0.0541	0.2354	0.0123	0.1094	0.1629	0.7358	0.2732	0.0825	0.2547
MG	5.1520	8.8060	6.6670	0.4644	6.2030	3.1370	6.1320	1.3270	3.9710	5.7360
AL	1.0860	1.0070	0.9776	0.7049	0.7829	1.6590	3.2240	0.8648	1.7290	0.6916
P	0.0032	0.0376	0.0530	0.0588	0.0575	0.0384	0.0352	0.0204	0.0631	0.0302
K	0.2462	0.0505	0.0905	0.0820	0.0734	0.8797	0.3164	0.0963	1.7890	0.0549
CA	5.9660	0.8874	4.7330	0.1684	1.7240	1.1370	5.8930	1.1250	1.0120	10.4400
TI	0.0306	0.0067	0.0286	0.0062	0.0092	0.0473	0.0699	0.0181	0.0376	0.0138
V	0.0028	0.0025	0.0037	0.0037	0.0028	0.0050	0.0038	0.0017	0.0041	0.0021
MN	0.0792	0.0674	0.0569	0.0310	0.0809	0.0348	0.0684	0.0236	0.0420	0.0895
FE	32.2400	22.8600	33.7200	41.4800	40.3700	13.7800	24.0200	12.6400	43.8200	24.8500
CO	0.0003	0.0004	0.0002	0.0003	0.0003	0.0003	0.0002	0.0000	0.0003	0.0001
NI	0.0003	0.0011	0.0007	0.0004	0.0001	0.0007	0.0005	0.0003	0.0009	0.0004
CU	0.0002	0.0002	0.0004	0.0001	0.0004	0.0001	0.0002	0.0003	0.0002	0.0023
ZN	0.0039	0.0058	0.0026	0.0027	0.0049	0.0037	0.0051	0.0019	0.0042	0.0070
GE										
AS										
SR	0.0004	0.0009	0.0004	0.0002	0.0002	0.0005	0.0011	0.0008	0.0004	0.0013
Y	0.0036	0.0059	0.0085	0.0023	0.0066	0.0215	0.0181	0.0030	0.0166	0.0068
NB										
MO	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0002
AG	0.0001	0.0005	0.0003	0.0003	0.0002	0.0002	0.0003	0.0002	0.0003	0.0005
CD	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001
SB										
BA	0.0004	0.0002	0.0005	0.0006	0.0006	0.0063	0.0020	0.0007	0.0084	0.0008
LA	0.0000	0.0960	0.0003	0.0361	0.0000	0.0212	0.0020	0.0030	0.0434	0.0022
CE	0.0048	0.1716	0.0055	0.0665	0.0048	0.0403	0.0071	0.0078	0.0778	0.0087
TA										
W	0.0009	0.0003	0.0002	0.0060	0.0001	0.0089	0.0001	0.0142	0.0004	0.0018
PB	0.0012	0.0035	0.0041	0.0045	0.0045	0.0016	0.0022	0.0012	0.0043	0.0025
Au	< 0.02 ppm			< 0.02 ppm		< 0.02 ppm	< 0.02 ppm	< 0.02 ppm		< 0.02 ppm

TABLE 5 contd.

ID	8558XX-337	8558XX-338	8558XX-339	8558XX-340	8558XX-341	8558XX-342	8558XX-343	8558XX-344	8558XX-345
MET	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC
DAT	851014	851014	851014	851014	851014	851014	851014	851014	851014
KLO	0856	0857	0859	0900	0901	0903	0904	0906	0907
					wt.-%				
LI	0.0006	0.0007	0.0012	0.0007	0.0005	0.0006	0.0003	0.0007	0.0012
BE	0.0022	0.0013	0.0009	0.0018	0.0010	0.0015	0.0142	0.0083	0.0025
B	0.0002	0.0003	0.0004	0.0009	0.0018	0.0009	0.0014	0.0006	0.0011
NA	0.3920	0.2890	0.9637	1.0240	0.5070	0.4459	0.0551	0.8794	0.3049
MG	8.0380	8.9160	9.1520	7.2360	5.9450	7.1160	2.3390	8.9750	5.0990
AL	0.8389	0.5776	5.1630	4.7430	2.6670	1.6040	0.9894	4.0510	2.9990
P	0.0098	0.0111	0.0178	0.0337	0.0358	0.0277	0.0083	0.0232	0.0249
K	0.0494	0.0631	1.6280	0.4776	0.1949	0.1180	1.0020	0.3156	0.0933
CA	15.6000	15.5700	4.9980	8.0780	6.0180	10.1600	0.7361	8.4960	8.6420
TI	0.0125	0.0178	0.0759	0.1669	0.0258	0.0295	0.0204	0.0438	0.0395
V	0.0015	0.0016	0.0019	0.0027	0.0044	0.0027	0.0012	0.0016	0.0022
MN	0.0787	0.0637	0.0838	0.0838	0.0768	0.0727	0.0157	0.0591	0.1440
FE	8.4110	6.4980	9.2270	12.0200	29.7500	19.4400	1.9700	9.6860	18.3000
CO	-0.0001	0.0001	0.0005	0.0004	0.0001	-0.0001	0.0004	0.0001	0.0006
NI	0.0002	0.0000	0.0002	-0.0002	0.0002	0.0000	0.0002	0.0006	0.0002
CU	0.0010	0.0008	0.0099	0.0053	0.0011	0.0038	0.0015	0.0011	0.0010
ZN	0.0068	0.0047	0.0143	0.0813	0.0062	0.0072	0.0085	0.0080	0.0092
GE									
AS									
SR	0.0023	0.0011	0.0029	0.0070	0.0031	0.0027	0.0003	0.0036	0.0058
Y	0.0050	0.0077	0.0130	0.0209	0.0257	0.0264	0.0851	0.0369	0.0187
NB									
MO	-0.0001	0.0000	-0.0001	0.0000	0.0001	0.0000	0.0000	0.0027	0.0017
AG	0.0005	0.0005	0.0005	0.0006	0.0007	0.0008	0.0004	0.0006	0.0005
CD	0.0000	0.0001	0.0001	0.0004	0.0000	0.0001	0.0001	0.0001	0.0001
SB									
BA	0.0004	0.0003	0.0116	0.0023	0.0011	0.0010	0.0048	0.0012	0.0028
LA	0.0077	0.0178	0.0236	0.0386	0.0919	0.1052	0.0083	0.0213	0.0073
CE	0.0149	0.0337	0.0427	0.0713	0.1666	0.1876	0.0192	0.0388	0.0126
TA									
W	0.0014	0.0013	0.0011	0.0008	0.0011	0.0025	0.0065	0.0553	0.0554
PB	0.0016	0.0017	0.0009	0.0133	0.0024	0.0045	0.0024	0.0034	0.0037
Au					< 0.02 ppm		< 0.02 ppm		< 0.02 ppm

TABLE 6. Statistical results from table 5.

ELEMENT	MEDELV	STD	VKOEFF	MAX	MIN
KL	5730.298	24.3589	0.0043	5762.380	5707.492
CU	0.0012	0.0021	1.7304	0.0099	-0.0014
NI	0.0004	0.0003	0.8684	0.0011	-0.0002
ZN	0.0077	0.0144	1.8661	0.0813	0.0011
MO	0.0002	0.0006	3.1074	0.0027	-0.0001
V	0.0025	0.0011	0.4274	0.0050	0.0006
FE	20.2500	12.2070	0.6028	43.8200	1.9390
CA	5.5583	4.4218	0.7955	15.6000	0.1684
MG	6.0836	2.6838	0.4412	12.2700	0.4644
AL	2.0902	1.6010	0.7660	5.9710	0.5776
TI	0.0378	0.0334	0.8824	0.1669	0.0062
MN	0.0646	0.0290	0.4482	0.1440	0.0156
W	0.0064	0.0141	2.1921	0.0554	0.0001
PB	0.0027	0.0024	0.8977	0.0133	-0.0001
CO	0.0002	0.0003	1.4490	0.0010	-0.0010
CE	0.0557	0.0876	1.5726	0.4174	0.0031
CD	0.0001	0.0001	1.3211	0.0004	0.0000
LA	0.0287	0.0466	1.6201	0.2143	0.0000
BE	0.0018	0.0029	1.5523	0.0142	0.0000
SR	0.0024	0.0033	1.3845	0.0152	0.0002
Y	0.0137	0.0164	1.1922	0.0851	0.0009
BA	0.0034	0.0048	1.4414	0.0191	-0.0002
LI	0.0006	0.0003	0.6022	0.0016	0.0001
B	0.0006	0.0005	0.7833	0.0018	-0.0002
P	0.0213	0.0197	0.9248	0.0631	-0.0008
NA	0.4301	0.5058	1.1761	2.5060	0.0123
K	0.5255	0.9037	1.7195	4.4250	0.0098
AG	0.0004	0.0002	0.5196	0.0008	0.0001

TABLE: 7 CORE LOG

Diamond drill hole: Nybergsfältet DDH 001/83

Location: The exploration and mining claims of Nybergsfältet

Map sheet: 11E 0j

R-coordinates: 660489/144581

Local coordinates: 1120E/331N

Azimuth: 173g (155°) Inclination: 35°

Total length: 55.10 m Drilled by: Hagby Bruk

Date commenced: Date completed: 1983-10-27

Logged by: C. Hardenby Date log completed: 1983-10-31

A. SUMMARY LOG.

Note that the word 'sköl' correspond to a metamorphically retrograde rock that consists mainly of phyllosilicates (biotite and/or chlorite) and may be either schistose or irregularly massive. Sometimes it may be equivalent to a gouge. A rock that partially consists of 'sköl' minerals or contains streaks of minor 'sköls' may sometimes be said to be 'skölig'.

0.00- 07.10	Overburden
07.10- 15.75	Leptite/leptite gneiss
15.75 18.75	Magnetite mineralization with varying contents of chalcopyrite and pyrite
18.75- 19.05	Loss of core
19.05- 22.65	Biotite 'schist' (sköl) or biotite 'schistose' (skölig) leptite gneiss alternating with 'quartzitic' variants
22.65- 37.60	Leptite/leptite gneiss
37.60- 39.88	Biotite 'schistose' (skölig) leptite or biotite schist. Minor amounts of magnetite, chalcopyrite and pyrite
39.88- 49.00	Leptite
49.00- 53.02	Biotite-chlorite 'schist' (sköl). Sometimes with minor amounts of magnetite and pyrite
53.02- 55.10	Leptite/leptite gneiss; somewhat biotite 'schistose' (skölig).

B. CORE LOG

0.00-07.10	Overburden	
07.10-15.75	Leptite/leptite gneiss	
	7.10-11.65	grey leptite, diffusely banded with a reddish tint. Angle between schistosity/ banding and the core axis: $65^{g} \approx 58.5^{o}$ (∢65)
	11.65-12.95	Dark grey leptite/leptite gneiss irregularly banded, biotite rich
	12.95-14.20	Dark grey, biotite 'schistose' (skölig) somewhat magnetite bearing leptite/leptite gneiss
	14.20-14.60	Dark grey, mica rich leptite gneiss
	14.60-15.75	-"- with specks of magnetite
15.75-18.75	Magnetite mineralization	
	15.75-17.45	Irregular magnetite mineralization with varying contents of chalcopyrite and pyrite
	17.45-18.75	Magnetite mineralization, relatively rich in chalcopyrite and pyrite.
18.75-19.05	Loss of core	
19.05-22.65	Biotite 'schists' (sköl) or biotite 'schistose' (skölig) leptite gneiss alternating with 'quartzitic' variants	
	19.95-20.20	Minor amounts of chalcopyrite and pyrite
22.65-37.60	Grey, mica rich leptite/leptite gneiss	
	23.00-23.25	Quartz impregnated
	23.45-23.65	Biotite 'schistose' (skölig)
	23.90-24.10	Quartz impregnated
	24.15-24.35	Specks of magnetite
	25.20-25.30	Biotite 'schistose' (skölig)
	25.70-26.00	-"-
	27.90-28.05	-"-
	30.15-30.35	-"-
	31.35-33.55	Specks of magnetite
	36.80-36.95	-"-
37.60-39.88	Biotite 'schistose' (skölig) leptite or biotite schist	
	38.08-38.40	Biotite schist (sköl) with magnetite, chalcopyrite and pyrite
	38.40-39.88	∢ 80-100
	38.69-38.72	Magnetite, chalcopyrite and pyrite mineralization
	38.83-38.86	Weak - " -
	39.26-39.35	Magnetite, chalcopyrite and pyrite mineralization

39.88-49.00	Light grey-grey leptite with varying mica content	
	39.88-42.50	Relatively mica rich, occasionally chlorite rich and with specks of magnetite
	42.50-44.42	Quartzitic leptite with light specks of ??. ∧ 100.
	44.42-44.97	Mainly biotite-chlorite 'schist' (sköl)
	46.30-46.70	Dark grey relatively biotite rich leptite
	46.70-48.35	Grey, irregularly banded leptite; the bands are pinkish in colour. ∧ 80.
	48.35-49.00	Biotite-chlorite rich (skölig) leptite, diffusely banded. ∧ 20.
49.00-53.02	Biotite-chlorite 'schist' (sköl)	
	49.00-49.66	Magnetite with some pyrite
	49.66-51.25	Some mica rich leptite
	51.25-52.45	Crenulated, sometimes with magnetite and pyrite
	52.45-53.02	Minor amounts of leptite and magnetite
53.02-55.10	Biotite rich somewhat 'schistose' (skölig) leptite-leptite-gneiss	
	53.37-53.95	Grey leptite
	53.95-54.35	Biotite-chlorite 'schist' (sköl). Somewhat magnetite bearing
	54.35-55.10	Occasionally some magnetite.

END

C. SAMPLED SECTIONS

Section	Sample ID-No	Description
	8448:	
15.75-16.52	405	Magnetite with irregularly distributed chalcopyrite
16.52-16.75	406	Silica rich part of core with magnetie and chalcopyrite
16.75-17.45	407	Magnetite with irregularly distributed chalcopyrite
17.45-18.69	408	Magnetite with chalcopyrite
18.69-18.73	409	Quartz impregnation with chalcopyrite and/or pyrite
38.08-38.40	410	Biotite 'schist' (sköl) with magnetite and chalcopyrite and/or pyrite
49.00-49.35 49.45-49.62	411	Biotite-chlorite 'schist' (sköl) with magnetite and some chalcopyrite and/or pyrite
43.34-43.42	-	- thin section -

TABLE: 8 CORE LOG

Diamond drill hole: Nybergsfältet DDH 002/83

Location: The exploration and mining claims of Nybergsfältet

Map sheet: 11E Oj

R-coordinates: 660478/144533

Local coordinates: 640E/420N

Azimuth: 173^g (155°) Inclination: 40°

Total length: 153.17 m Drilled by: Hagby Bruk

Date commenced: 1983-10-27 Date completed: 1983-11-08

Logged by: C. Hardenby Date log completed: 1984-04-03

A. SUMMARY LOG.

Note that the word 'sköl' correspond to a metamorphically retrograde rock that consists mainly of phyllosilicates (biotite and/or chlorite) and may be either schistose or irregularly massive. Sometimes it may be equivalent to a gouge. A rock that partially consists of 'sköl' minerals or contains streaks of minor 'sköls' may sometimes be said to be 'skölig'.

0.00- 8,15	Overburden
8.15- 33.45	Grey leptite/leptite gneiss, rich in muscovite and often somewhat pyrite bearing
33.45- 42.00	Metabasite (diabase ?)
42.00- 42.35	Loss of core
42.35- 48.30	Dark grey leptite/leptite gneiss, mobile quartz, biotite-chlorite 'schists' (sköl) which sometimes are irregularly magnetite, chalcopyrite and pyrite mineralized
48.30- 69.00	Grey sometimes slightly pinkish leptite/leptite gneiss with exceptional biotite-chlorite 'schists' (sköl)
69.00- 77.00	Mainly recrystallized (due to pegmatitization?) coarsened grey or greyish pink leptite/leptite gneiss with exceptional traces of magnetite, chalcopyrite and pyrite
77.00- 89.50	Grey-greyish black leptite/leptite gneiss; occasionally slightly magnetite and/or pyrite bearing
89.50- 91.30	Coarsened leptite/leptite gneiss
91.30- 96.35	Biotite-chlorite 'schist' (sköl)
96.35-113.08	Grey often quartzitic leptite
113.08-117.90	Biotite-chlorite 'schistose' (skölig) leptite
117.90-146.50	Grey often quartzitic leptite or 'hälleflinta', occasionally with biotite-chlorite 'schists' (sköl)
146.50-148.40	Biotite-chlorite 'schistose' (skölig) leptite
148.40-152.38	Grey-dark grey leptite
152.38-153.45	Quartzitic leptite or hälleflinta

B. CORE LOG

0.00- 8.15	Overburden	
8.15- 33.45	Grey leptite/leptite gneiss	
	8.15-12.75	with biotite-chlorite 'schist' (skölar); somewhat weathered and partly tattered core; mica rich (muscovite). Angle between schistosity/ banding and core axis: $40^g \approx 36^o$ (∡ 40)
	10.90-22.23	Light grey to greyish white muscovite rich leptite; partially quartz-feldspar-mica schist; more or less pyrite bearing. The pyrite 'follows' the schistosity. ∡ 20.
	22.23-23.55	Grey to greyish red somewhat mottled leptite. ∡ 20.
	24.53-24.58	Weakly pyrite bearing
	25.05-25.50	-"-
	27.27-27.47	-"-
	27.47-27.58	-"- plus slightly magnetic. At 27.47 a ca 2 cm wide fine-grained fissure filling (metabasite?). ∡ 20.
33.45- 42.00	Metabasite (diabase?), dense to fine-grained, sometimes slightly magnetic; lots of 'rost' weathered fractures	
42.00- 42.35	Loss of core	
42.35- 48.30	Dark grey leptite/leptite gneiss, mobile quartz, biotite-chlorite 'schists' (sköl) which sometimes are irregularly mineralized. Sometimes fractured core.	
	42.45-42.50	Chalcopyrite and pyrite in mobile quartz within leptite and chlorite
	42.50-43.28	Grey leptite, slightly magnetite bearing
	43.28-44.00	Magnetite with chalcopyrite and pyrite in quartz-biotite-chlorite matrix
	44.00-44.92	Grey chlorite rich leptite/leptite gneiss; irregularly, slightly magnetic
	44.92-45.65	Biotite-chlorite 'schist' (sköl) with mobile quartz. Irregularly magnetite, chalcopyrite and pyrite mineralized. Note: Somewhere in this section there is a 30 cm loss of core.
	45.65-45.98	Chlorite-biotite 'schist' (sköl) with magnetite.
	47.40-47.90	Chlorite-biotite 'schist' (sköl) irregularly mineralized with magnetite, chalcopyrite and pyrite.

48.30- 69.00	Grey sometimes slightly pinkish leptite and leptite gneiss with exceptional biotite-chlorite 'schists' (skölar)	
	48.30-50.20	relatively mica rich leptite/leptite gneiss, slightly magnetic and sometimes with magnetite specks. A 65.
	51.33-51.50	Mica rich section somewhat mineralized with sulphides (chalcopyrite? and/or pyrite?)
	52.35-52.55	Fractured core, biotite-chlorite schistose (skölig) section. A 70.
	54.27-54.45	Slightly sulphide (pyrite) bearing
	57.60-57.85	Fractured core, mainly chlorite 'schist' (sköl)
	59.70-59.87	-"- , mainly mica 'schistose' (skölig)
	63.20-63.55	-"- , mainly mica 'schistose' (skölig) with about 10 cm loss of core. A 65.
69.00- 77.00	Mainly recrystallized (due to pegmatitization?) coarsened leptite/leptite gneiss; sometimes mica rich; the colour varies between grey and greyish pink depending on the degree of'recrystallization'.	
	69.53-69.69	slightly magnetite bearing
	70.78-70.84	-"- pyrite -"-
	71.40-71.45	-"- magnetite -"-
	72.35-72.38	-"- chalcopyrite and pyrite bearing. A 30.
	72.53-72.56	-"- chalcopyrite and pyrite bearing
	75.07-75.09	-"- pyrite bearing
	76.04-76.09	-"- -"-
	Note: between 74.25-77.20 there is 30 cm too much of core.	
77.00- 89.50	Grey-greyish black leptite/leptite gneiss	
	80.27-81.28	slightly magnetic, irregularly
	81.65-81.85	-"- pyrite bearing. A 15
	83.79-84.20	-"- magnetic, irregularly
	84.60-89.50	minor parts of coarsened leptite-leptite gneiss, slightly magnetic; increasing magnetite content is accompanied by increasing chlorite content.
	87.97-88.11	Somewhat pyrite and chalcopyrite bearing. A 15.
89.50- 91.30	Coarsened (due to pegmatitization?) leptite/leptite gneiss. Colour varies between grey and pink depending on degree of 'pegmatitization'.	
91.30- 96.35	Biotite-chlorite 'schist' (sköl), irregularly slightly magnetite mineralized. Minor lumps och veins of quartz occur.	
	91.30-94.05	fractured core with 20 cm loss of core
	94.21-94.22	traces of chalcopyrite
	94.50-94.51	-"- . A 65.

96.35-113.08	Grey often quartzitic leptite with minor sections of biotite-chlorite 'schists' (sköl). The rock is sometimes diffusely banded with colours varying between grey and whitish pink.	
	96.70- 96.95	Relatively fractured core. ∠ 65
	109.40-110.65	-"-
113.08-117.90	Grey-dark grey green biotite-chlorite 'schistose' (skölig) 'leptite' with minor lumps and veins of mobile quartz. ∠60.	
117.90-146.50	Grey often quartzitic leptite or 'hälleflinta' (extremely fine grained leptite)	
	127.50-127.83	Biotite-chlorite 'schistose' (skölig) leptite. ∠ 65.
	129.00-133.75	Rather fractured core
	137.80-139.61	Section with many biotite-chlorite 'schistose' (sköliga) parts. 60. At 142 m ∠70.
146.50-148.40	Grey biotite-chlorite 'schistose' (skölig) leptite with varying portions of biotite-chlorite 'schists' (sköl)	
148.40-152.38	Grey-dark grey leptite with minor biotite-chlorite 'schist' (sköl) sections. ∠ 70.	
	159.93-151.70	slightly magnetic
152.38-153.45	Grey often quartzitic leptite or hälleflinta (Rather fractured core)	
	152.80-153.17	fine grained or dense, dark green metabasite (diabase?). Angle between metabasite/leptite boundary and core axis: 35g

END

C. SAMPLED SECTIONS

Section	Sample ID-No 8448:	Description
11.70-12.70	412	Muscovite rich leptite with pyrite
12.75-13.75	413	-"-
43.28-44.00	414	Magnetite with chalcopyrite and pyrite in quartz-biotite-chlorite matrix

TABLE: 9 CORE LOG

Diamond drill hole: Nybergsfältet DDH 004/83

Location: The exploration and mining claims of Nybergsfältet

Map sheet: 11E 1j

R-coordinates: 660504/144599

Local coordinates: 1350E/390N

Azimuth: 173^g (155°) Inclination: 40°

Total length: 116.35 Drilled by: Hagby Bruk

Date commenced: 1983-11-10 Date completed: 1983-11-16

Logged by: C. Hardenby Date log completed: 1983-12-19

A. SUMMARY LOG.

Note that the word 'sköl' correspond to a metamorphically retrograde rock that consists mainly of phyllosilicates (biotite and/or chlorite) and may be either schistose or irregularly massive. Sometimes it may be equivalent to a gouge. A rock that partially consists of 'sköl' minerals or contains streaks of minor 'sköls' may sometimes be said to be 'skölig'.

0.00- 2.75	Overburden
2.75- 17.20	Grey leptite and leptite gneiss
17.20- 24.35	Grey - dark grey partially 'skölig' leptite/leptite gneiss
24.35- 29.78	Grey leptite/leptite gneiss, partially quartzitic and partially mica rich
29.78- 30.15	Biotite-chlorite 'sköl'
30.15- 36.45	Grey quartzitic leptite
36.45- 46.20	Magnetite mineralized zone, somewhat chalcopyrite and pyrite bearing, includes often 'skölig' leptites
46.20- 55.55	Grey micaceous leptite/leptite gneiss
55.55- 57.75	Grey leptite gneiss; in part suffering from pegmatitization
57.75- 59.75	Dark grey leptite/leptite gneiss
59.75- 63.93	Magnetite mineralized zone; some dark grey leptite, chalcopyrite and pyrite
63.93- 80.90	Grey mica rich leptite
80.90- 81.75	Magnetite mineralized zone, somewhat chalcopyrite and pyrite bearing
81.75- 84.70	Grey leptite
84.70- 85.65	Chlorite-biotite 'sköl'
85.65- 95.15	Grey leptite with minor 'sköls'
95.15- 96.40	Magnetite mineralized zone
96.40- 96.83	'skölig' leptite
96.83-102.75	Grey leptite
102.75-104.35	Amphibolite
104.35-106.19	Magnetite mineralized zone
106.19-115.85	Mica rich grey leptite/leptite gneiss
115.85-116.35	Pinkish 'quartzite'

B. CORE LOG

0.00- 2.75	Overburden
2.75-17.20	Grey leptite and leptite gneiss
5.15-15.55	partially altered to mica schist. Angle between schistosity and core axis = 20^g (∢ 20) at 8 m and 60^g (∢ 60) at 9 m.
12.85-17.20	Partially fractured core
15.55-16.70	-"- quartzitic
16.10-16.70	Traces of chalcopyrite and pyrite
16.70-17.20	Partially altered into mica schist
17.20-24.35	Grey - dark grey partially 'skölig' leptite/leptite gneiss
17.20-20.35	Partially altered to mica schist and slightly magnetite bearing
19.67-19.72	Chalcopyrite in 'sköl'
19.93-20.13	Traces of chalcopyrite and pyrite in a partially biotite and chlorite rich zone
20.35-20.50	'Skölig' zone with chalcopyrite and pyrite
21.95-22.61	'Skölig' leptite with mobile quartz
21.95-22.23	Slightly magnetic
22.80-23.00	Biotite-chlorite 'skölig' section, slightly magnetic with traces of chalcopyrite and pyrite
23.63-24.35	Biotite-chlorite 'skölig' section with chalcopyrite and pyrite, slightly magnetic
24.35-29.78	Grey leptite/leptite gneiss, partially quartzitic, partially altered into a mica rich variant. Minor parts are richer in chlorite and biotite. The section may sometimes be coarsened and somewhat banded.
25.70-26.55	Slightly magnetic
25.94-26.03	Mobile quartz with pyrite and possibly some chalcopyrite
27.23-27.44	Chalcopyrite and pyrite
27.74-28.10	Traces of chalcopyrite and pyrite in a somewhat coarsened and diffusely banded leptite
28.10-29.78	Grey quartzitic leptite, chalcopyrite and pyrite bearing; often 'pure' quartz with chlorite and biotite occur
28.10-28.30	Slightly magnetic
28.89-29.30	-"-
29.55-29.65	Magnetic, magnetite bearing
29.78-30.15	Biotite-chlorite 'sköl'. ∢ 65.

30.15-36.45	Grey somewhat quartzitic leptite; sometimes diffusely banded	
	30.15-31.68	Traces of sulphides
	31.04-31.15	Slightly magnetic biotite 'sköl'.
36.45-46.20	Magnetite mineralized zone; sometimes somewhat pyrite and/or chalcopyrite bearing, dark grey micaceous leptite and biotite-chlorite 'sköls'	
	36.45-39.50	Magnetite mineralization varying between an irregularly quartz impregnated and a granular, porous massive iron 'ore', chalcopyrite and pyrite bearing. 0.65 m loss of core between 38.00-39.10 (stated to be a 'sköl')
	39.50-39.65	Grey - dark grey leptite with specks of magnetite
	39.65-39.95	Grey - dark grey leptite
	39.95-40.75	-"- , biotite rich, partially with specks of magnetite
	40.75-41.67	Massive magnetite and quartz
		41.44-41.48 pyrite mineralization
	41.67-41.88	Dark grey biotite rich 'leptite gneiss' slightly magnetic and pyrite bearing
	41.88-42.08	Magnetite mineralization in a quartz-biotite-chlorite mainly massive matrix
	42.08-42.68	Biotite-chlorite 'skölig' leptite, slightly magnetic and somewhat pyrite bearing
	42.68-43.25	Magnetite mineralization in quartz-biotite, somewhat schistose matrix.
	43.25-44.14	Grey leptite; sometimes 'skölig' and sometimes with quartz impregnations, slightly magnetic, partially with magnetite specks and somewhat pyrite and chalcopyrite bearing
	44.14-44.76	Magnetite in quartz-biotite-chlorite matrix; slightly pyrite and chalcopyrite bearing
	44.76-45.36	Grey - dark grey rather mica rich leptite/ leptite gneiss; slightly magnetic and somewhat pyrite and chalcopyrite bearing
	45.36-45.68	Magnetite in quartz-chlorite-biotite matrix; rather massive texture.
	45.68-45.96	Grey slightly magnetic leptite/leptite gneiss
	45.96-46.20	Magnetite mineralization in quartz-biotite matrix, relatively massive texture
46.20-55.55	Grey mostly altered into micaceous leptite/leptite gneiss	
	46.20-46.90	Slightly magnetic
	47.18-47.68	-"- . A 65.
	48.20-48.30	-"- with magnetite specks

	48.90-51.30 Slightly magnetic
	51.30-52.32 -"- , partially with more magnetite rich 'veins'
	52.32-52.63 Magnetite in grey leptite; with some chalcopyrite
	52.63-54.50 Slightly magnetic
55.55-57.75	Grey leptite gneiss; in part suffering from pegmatitization
	57.45-57.60 Loss of core
57.75-59.75	Dark grey leptite/leptite gneiss
	58.40-58.92 Slightly magnetic
	59.53-59.75 -"-
59.75-63.93	Magnetite mineralized zone with some dark grey leptite, chalcopyrite and pyrite.
	59.75-60.32 Magnetite mineralization, chalcopyrite and pyrite bearing
	59.75-59.92 with mobile quartz
	60.32-60.63 Grey - dark grey leptite, with magnetite specks. ∧ 75.
	60.63-60.91 Magnetite mineralization; chalcopyrite and pyrite bearing, lower part quartz banded
	60.91-61.47 Grey - dark grey leptite, with magnetite specks
	61.47-63.93 Magnetite mineralization; chalcopyrite and pyrite bearing
63.93-80.90	Grey, often mica rich leptite
	66.95-67.25 Slightly magnetic
	68.27-68.35 Biotite chlorite 'sköl'
	68.47-68.57 -"-
	69.28-69.62 Slightly magnetic; further on to 80.90 m, in part slightly magnetic
	76.40-78.80 With magnetite specks
	80.05-80.47 Weak 'sulphide' impregnation
80.90-81.75	Magnetite mineralized zone; chlorite-biotite-quartz 'banded', somewhat chalcopyrite and pyrite bearing
	81.50-81.65 Grey leptite with magnetite specks
81.75-84.70	Grey leptite
	83.00-84.24 Somewhat 'skölig'
	84.24-84-70 -"- quartzitic
84.70-85.65	Chlorite-biotite 'sköl' with mobile quartz.
	84.70-84.93 Magnetite bearing with some chalcopyrite and pyrite

85.65-95.15	Grey leptite with minor biotite-chlorite 'sköls'
	85.65-89.45 Partially slightly magnetic
	87.50-87.85 Magnetite mineralization. The first 30 mm chalcopyrite bearing, thereafter only traces. At 88.50 m: A 50.
	89.45-92.80 Grey leptite; in part diffusely banded.
	92.80-93.42 Mica 'skölig' leptite
	93.42-95.15 Grey leptite
95.15-96.40	Magnetite mineralized zone. The magnetite is irregularly distributed, traces of 'sulphides', biotite rich.
	96.20-96.40 Compact magnetite mineralization
	96.30-96.40 Rich in 'sulphides'
96.40- 96.83	'Skölig leptite'
96.83-102.75	Grey leptite; partially somewhat quartzitic and partially somewhat irregularly banded with ligth-pink bands
102.75-104.35	Biotite rich 'amphibolite'; slightly magnetic, traces of sulphides (pyrite?)
104.35-106.19	Magnetite mineralized zone
	104.35-104.50 Chlorite 'sköl'
	105.05-105.35 Grey leptite with chlorite streaks and sulphides (pyrite?)
106.19-115.85	Grey, mostly mica rich leptite/leptite gneiss
	106.19-106.90 Slightly magnetic, slightly sulphide (pyrite?) bearing.
	106.90-115.85 Sometimes somewhat coarsened and suffering from pegmatitization, sometimes diffusely banded. At 108.50 m: A 85.
115.85-116.35	Pinkish 'quartzite'

END

C. SAMPLED SECTIONS

Section	Sample ID No	Description
16.10-16.70	8448: 415	Grey leptite, traces of chalcopyrite and pyrite
	8458:	
19.67-20.50	312	Grey leptite with biotite-chlorite zones, traces of chalcopyrite and pyrite
23.63-24.25	313	Biotite-chlorite 'sköl' with chalcopyrite and pyrite
25.94-26.03	314	Mobile quartz with pyrite and possibly some chalcopyrite
27.23-28.10	315	Chalcopyrite and pyrite in leptite
28.10-29.78	316	Quartzitic leptite with chalcopyrite and pyrite
30.15-31.68	317	Quartzitic leptite with biotite sköls; traces of sulphides
36.45-38.00	318	Magnetite mineralization with chalcopyrite and pyrite
38.00-39.50	319	-"-
40.75-41.67	320	Magnetite mineralization with quartz, in part with pyrite
41.67-42.68	321	Biotite-chlorite 'skölig' leptite with magnetite plus some pyrite
42.68-43.25	322	Magnetite mineralization in quartz-biotite matrix
43.25-44.14	323	Grey biotite-chlorite 'skölig' leptite with some magnetite, pyrite and chalcopyrite
44.14-44.76	324	Magnetite mineralization in quartz-biotite-chlorite matrix, some chalcopyrite and pyrite
44.76-45.36	325	Grey mica rich leptite/leptite gneiss with some pyrite and chalcopyrite
45.36-46.20	326	Magnetite mineralization in quartz-chlorite-biotite matrix plus some leptite
52.32-52.63	327	Magnetite and some chalcopyrite in leptite
59.92-60.91	328	Magnetite mineralization with some chalcopyrite and pyrite, plus some grey leptite
61.47-62.60	329	Magnetite mineralization with some chalcopyrite and pyrite
62.60-63.93	330	-"-
80.04-80.90	331	Grey leptite, partially slightly sulphide impregnated
80.90-81.75	332	Magnetite mineralization banded with chlorite-biotite-quartz; somewhat chalcopyrite and pyrite bearing

87.47- 87.85	8458: 333	Magnetite mineralization with some chalcopyrite
95.15- 96.40	334	Magnetite mineralization, biotite rich; traces of sulphides
102.80-104.35	335	Biotite rich amphibolite with traces of sulphides
104.35-105.20	336	Magnetite mineralization with chlorite 'sköls', leptite and some sulphides
105.20-106.19	337	Magnetite mineralization
106.19-106.90	338	Mica rich leptite gneiss, slightly magnetic and sulphide bearing

TABLE: 10 CORE LOG

Diamond drill hole: Nybergsfältet DDH 005/83

Location: The exploration and mining claims of Nybergsfältet

Map sheet: 11E 0j

R-coordinates: 660498/144602

Local coordinates: 1350E/330N

Azimuth: 173^g (155°) Inclination: 40°

Total length: 122.00 m Drilled by: Hagby Bruk

Date commenced: 1983-11-17 Date completed: 1983-11-22

Logged by: C. Hardenby Date log completed: 1984-03-09

A. SUMMARY LOG.

Note that the word 'sköl' correspond to a metamorphically retrograde rock that consists mainly of phyllosilicates (biotite and/or chlorite) and may be either schistose or irregularly massive. Sometimes it may be equivalent to a gouge. A rock that partially consists of 'sköl' minerals or contains streaks of minor 'sköls' may sometimes be said to be 'skölig'.

0.00- 2.40	Overburden
2.40- 5.74	Magnetite mineralized zone; magnetite with some pyrite and chalcopyrite
5.74- 23.06	Greyish pink leptite/leptite gneiss
23.06- 24.77	Mineralized zone; magnetite, with some chalcopyrite and pyrite
24.77- 61.43	Grey leptite/leptite gneiss with 'sköliga' units
61.43- 65.75	Grey leptite/leptite gneiss
65.75- 74.55	Grey micaceous leptite gneiss
74.55- 84.85	Grey leptite/leptite gneiss
84.85- 86.45	Pegmatite
86.45- 87.20	Grey micaceous leptite gneiss
87.20- 95.75	Grey-greyish pinkish partially 'skölig' and partially banded leptite/leptite gneiss
95.75- 97.83	Mineralized unit; magnetite with some pyrite and chalcopyrite
97.83-101.40	Grey leptite/leptite gneiss
101.40-102.67	Irregularly mineralized zone, magnetite and minor amounts of pyrite and chalcopyrite
102.67-122.00	Grey irregularly banded leptite/leptite gneiss

B. CORE LOG

0.00- 2.40	Overburden
2.40 5.74	Magnetite minralized zone; with biotite rich leptite, biotite-chlorite 'sköls' and quartzitic units. Pyrite and chalcopyrite are present. Angle between schistosity/ banding and core axis: 65^{g} (∡ 65).
2.40- 4.50	Magnetite rich unit with some chalcopyrite
4.50- 4.65	Quartzitic leptite with some magnetite, pyrite and chalcopyrite
4.65- 5.00	Magnetite rich unit with pyrite and chalcopyrite in the upper parts
5.00- 5.50	Varying amount of magnetite and small 'pellets' of pyrite and chalcopyrite
5.50- 5.74	Magnetite rich unit
5.74-23.06	Grey sometimes greyish pink leptite/leptite gneiss; partially slightly magnetic.
6.40- 6.60	Loss of core, somewhat weathered rock
6.93- 7.50	Slightly sulphide (probably pyrite)bearing
10.10-10.53	-"-
12.37-12.72	-"-
17.07-17.90	-"-
18.80-18.90	-"-
18.90-23.06	Irregularly magnetite 'spotted'. ∡ 30.
23.06-24.77	Mineralized zone.
23.06-23.80	Magnetite with some chalcopyrite and pyrite in quartzitic matrix
23.80-24.64	Chalcopyrite, pyrite and minor amounts of magnetite in light coloured 'mica quartzite' and mobile quartz.
24.64-24.77	Magnetite and some chalcopyrite in a chlorite 'sköl'.
24.77-61.43	Grey leptite and leptite gneiss with many biotite-chlorite 'sköliga' units often with mobile quartz. Partially the rock is altered into a mica rich variant, often with minor amounts of sulphides (probably pyrite) and magnetite.
26.32-26.52	Slightly sulphide bearing
26.73-26.87	-"- . ∡ 95, partially irregularly folded.
27.40-27.70	Biotite-chlorite 'sköl'
28.00-28.32	Slightly sulphide bearing
28.52-29.97	-"- . ∡ 0, isoclinal folds.

30.20-30.75	Fractured core, chloritic rock
31.33-31.70	Chlorite-biotite 'sköl' with mobile quartz with pyrite (possibly also chalcopyrite)
32.71-32.90	Biotite-chlorite 'sköl' with some leptite. Magnetite, pyrite and chalcopyrite mineralized
34.95-35.21	Pyrite and chalcopyrite in leptite, quartzitic leptite and a fine grained mafic rock (diabase?) ∡60.
40.70-41.88	Muscovite-biotite-chlorite altered unit with mobile quartz. ∡10.
44.30-44.45	Mobile quartz with biotite and chlorite. ∡60.
45.25-47.95	Unit with many minor biotite-chlorite 'sköls' often with mobile quartz
48.40-49.25	Leptite; partially suffered from pegmatitization
50.13-50.55	Biotite-chlorite 'sköl' with a 'contorted' fabric and mobile quartz
50.90-52.25	Leptite/leptite gneiss with magnetite specks. ∡80-85.
52.45-54.97	Biotite-chlorite 'skölig' leptite gneiss; lower part with magnetite specks
54.97-58.80	Irregularly mineralized zone with magnetite, pyrite and chalcopyrite alternating with biotite-chlorite 'sköls', 'skölig' leptite and quartzitic leptite.
61.43-65.75	Grey leptite/leptite gneiss. ∡30-85-35.
65.75-74.55	Grey micaceous leptite gneiss; often somewhat 'skölig', partially somewhat weathered.
65.75-67.30	Irregularly magnetite 'spotted'; decreasing downwards.
67.33-67.45	Unit suffering from pegmatitization
71.65-71.80	Rather strongly weathered unit. ∡0-10.
73.17-73.35	Unit suffering from pegmatitization
73.58-73.65	-"- . Chalcopyrite and pyrite mineralized. Folded section.
73.65-73.90	Weathered unit suffering from chloritization
74.30-74.55	Partially biotite-chlorite 'skölig' unit with chalcopyrite and pyrite, in part with a 'contorted' fabric
74.55-84.85	Grey leptite/leptite gneiss. ∡80-90 at 76 m, folded section at 79.5 m and 83 m.
83.22-84.85	Partially altered into a micaceous and 'skölig' variant, lower parts are somewhat magnetite 'spotted'.
84.85-86.45	Pegmatite (-intruded?) unit.
85.37-85.53	Somewhat magnetite 'spotted' leptite gneiss
85.60-86.45	Pegmatite with chlorite bearing units

86.45- 87.20	Grey, somewhat altered into a micaceous leptite gneiss; partially with magnetite specks
87.20- 95.75	Grey to greyish pinkish leptite/leptite gneiss
	87.20-95.27 With minor 'sköliga', slightly magnetic units. ∡ 90.
	95.27-95.35 Biotite-chlorite 'sköl' with quartz, pyrite mineralized
	95.35-95.75 Banded unit. ∡ 40.
95.75- 97.83	Mineralized unit
	95.75-95.97 Chlorite-biotite 'sköl' with mobile quartz 'fragments'. Magnetite, pyrite and chalcopyrite mineralized
	95.97-96.68 Grey somewhat 'skölig' leptite/leptite gneiss, slightly magnetite bearing
	96.68-97.83 Magnetite with some chalcopyrite and pyrite in biotite-chlorite matrix alternating with somewhat banded leptite/leptite gneiss.
97.83-101.40	Grey leptite/leptite gneiss. ∡ 90.
101.40-102.67	Irregularly mineralized zone; minor units with magnetite and minor amounts of pyrite and chalcopyrite in biotite-chlorite matrix
	102.13-102.17 magnetite and garnet
102.67-122.00	Grey, partially irregularly banded leptite/leptite gneiss. ∡ 90 at 115.5 m.
	108.10-108.40 Chlorite-biotite 'skölig' unit; 1 dm 'sköl'
	111.55-111.70 Chlorite-biotite 'sköl'.

END

C. SAMPLED SECTIONS

Section	Sample ID No	Description
	8458:	
2.40- 4.40	339	Magnetite with some chalcopyrite and pyrite
4.40- 5.74	340	-"-
6.95- 7.45	341	Leptite, slightly sulphide (probably pyrite) bearing
17.40-17.90	342	-"-
23.06-23.80	343	Magnetite with some chalcopyrite and pyrite in quartzitic matrix
23.80-24.64	344	Chalcopyrite, pyrite and some magnetite in mica-quartzite

28.52-29.97	8458:345	Leptite, slightly sulphide bearing
32.90-34.25	346	Biotite-chlorite 'skölig' unit with magnetite, pyrite and chalcopyrite
54.97-55.92	347	Magnetite, pyrite and chalcopyrite in 'sköl', skölig leptite, quartzitic leptite
57.84-58.84	348	-"-
97.70-98.60	349	Leptite/leptite gneiss

TABLE: 11 CORE LOG

Diamond drill hole: Nybergsfältet DDH 006/83

Location: The exploration and mining claims of Nybergsfältet

Map sheet: 11E 0j

R-coordinates: 660497/144593

Local coordinates: 1260E/350N

Azimuth: 173^g (155°) Inclination: 45°

Total length: 111.80 m Drilled by: Hagby Bruk

Date commenced: 1983-11-22 Date completed: 1983-11-24

Logged by: C. Hardenby Date log completed:

A. SUMMARY LOG.

Note that the word 'sköl' correspond to a metamorphically retrograde rock that consists mainly of phyllosilicates (biotite and/or chlorite) and may be either schistose or irregularly massive. Sometimes it may be equivalent to a gouge. A rock that partially consists of 'sköl' minerals or contains streaks of minor 'sköls' may sometimes be said to be 'skölig'.

0.00- 6.00	Overburden
6.40- 12.55	Irregularly mineralized zone; magnetite, minor amounts of pyrite, traces of chalcopyrite
12.55- 26.36	Grey leptite/leptite gneiss; partly weakly magnetic and pyrite bearing
26.36- 29.70	Irregularly mineralized zone; magnetite, pyrite, some chalcopyrite plus leptite
29.70- 43.20	Grey leptite/leptite gneiss
43.20- 45.97	'Sköl'
45.97- 57.60	Grey leptite/leptite gneiss, in part with magnetite specks and minor 'sköl' units
57.60- 58.75	'Sköls'
58.75- 65.10	Grey rather biotite rich leptite/leptite gneiss
65.10- 74.75	Grey often quartzitic leptite
74.75- 75.95	Grey biotite rich leptite gneiss
75.95- 78.93	Magnetite mineralized zone
78.93- 82.25	Mobile quartz
82.25- 83.38	Grey leptite/leptite gneiss; partially suffering from pegmatitization
83.38- 87.51	'Skölig' leptite, biotite schists, 'sköls'; partly magnetite mineralized, sometimes with pyrite and chalcopyrite
87.51- 95.37	Somewhat quartzitic leptite
95.37-100.10	Grey leptite/leptite gneiss with 'sköliga' units
100.10-103.50	Magnetite mineralized zone; traces of pyrite and possibly chalcopyrite
103.50-107.30	Grey micaceous leptite gneiss
107.30-111.80	Grey leptite

B. CORE LOG

0.00- 6.00	Overburden
6.00- 6.40	Grey leptite/leptite gneiss. Angle between schistosity and core axis: 80° (∡ 80).
6.40-12.55	Irregularly mineralized zone; magnetite and minor amounts of pyrite, traces of chalcopyrite in grey-greyish black 'skölig' leptite/leptite gneiss and schist.
6.62- 6.87	Magnetite rich unit
7.68- 8.92	-"-
8.60- 9.15	-"- and minor amounts of pyrite and traces of chalcopyrite
9.52-10.27	Magnetite rich unit
11.52-12.55	-"-
12.55-26.36	Grey leptite/leptite gneiss; partially weakly magnetic and pyrite bearing
12.55-13.05	Slightly pyrite bearing
17.20-20.75	Rather fractured rock. Between 19.90-20.40 m strongly fractured and partially weathered rock
20.75-23.37	Somewhat more mica and chlorite bearing unit, slightly pyrite, perhaps also chalcopyrite bearing
24.30-25.32	Partially with magnetite specks
26.36-29.70	Irregularly mineralized zone; magnetite, pyrite and some chalcopyrite alternating with leptite/leptite gneiss. ∡ 80.
26.36-26.46	Magnetite
26.46-26.88	Biotite-chlorite 'sköl' with some leptite and in part magnetite bearing
26.88-27.08	Magnetite
27.08-27.67	'Quartzite' with pyrite, chalcopyrite and some magnetite
27.67-28.55	Grey leptite/leptite gneiss; partially magnetic
28.55-28.93	Partially banded biotite rich leptite gneiss; magnetite mineralized
28.93-29.29	Grey leptite/leptite gneiss; partially magnetic, somewhat pyrite bearing
29.29-29.70	Massive magnetite mineralization; traces of pyrite and chalcopyrite
29.70-43.20	Grey leptite/leptite gneiss
29.70-34.95	Partially slightly magnetic and sometimes with sparce magnetite specks
34.95-35.27	Magnetite mineralization with some pyrite and chalcopyrite in a biotite, somewhat quartz and chlorite bearing 'matrix'
34.95-39.05	As 29.70-34.95
39.05-43.20	With biotite-chlorite 'sköliga' units. ∡ 80.

43.20-45.97	Biotite-chlorite 'sköls' with some grey leptite/leptite gneiss
45.97-57.60	Grey leptite/leptite gneiss, in part with magnetite specks and minor 'sköliga' units
	46.40-46.50 Magnetite mineralization, massive, slightly chalcopyrite bearing
	46.50-46.60 Fractured core
	46.75-47.90 Irregularly magnetite spotted; between
	47.25-47.50 rather large 5-10 mm long and 5 mm wide magnetite crystals.
	49.22-49.35 Small fractures with chalcopyrite
	49.38-50.00 Irregularly mineralized section; magnetite with minor amounts of pyrite and chalcopyrite in biotite-chlorite 'skölig' rock. ∠ 60.
	52.04-52.11 Biotite-chlorite 'sköl' with magnetite, pyrite and chalcopyrite
	52.75-52.92 -"-
	54.97-55.20 -"-
	56.20-57.60 Grey leptite with minor 'sköliga' units.
57.60-58.75	Chlorite-biotite 'sköls' and some grey leptite/leptite gneiss
58.75-65.10	Grey leptite/leptite gneiss, rather biotite rich and sometimes 'skölig', ∠ 0-25, open folds.
	59.51-59.61 Magnetite in biotite-chlorite sköl
	60.50-61.13 Biotite-chlorite 'sköl' with magnetite
	64.15-65.10 Somewhat weathered rock
65.10-74.75	Grey leptite, often somewhat quartzitic, exceptional units somewhat richer in mica. ∠ 0-80, open folds.
74.75-75.95	Grey biotite rich leptite gneiss, partially mica schist, slightly magnetic, traces of pyrite. ∠ 75.
75.95-78.93	Mineralized zone with magnetite occasionally traces of sulphides in biotite rich leptite and biotite-chlorite 'sköl' with quartz
78.93-82.25	Mobile quartz with units of grey leptite. Partially pyrite and chalcopyrite bearing, particularly in fractures.
	80.12-80.60 grey leptite
	(Note that in the core box 79 m has been marked out twice with 1 m spacing, therefore, in the log, 1 m has been added to all depth measurements from the 'second 79 m' and onwards)
82.25-83.38	Grey leptite/leptite gneiss; partially suffering from pegmatitization.
83.38-87.51	Grey biotite-chlorite 'skölig' leptite, biotite schist and biotite-chlorite 'sköls' with quartz. Partially magnetite, sometimes with pyrite and chalcopyrite mineralized zone.

	83.73-84.50 Rather massive magnetite mineralization with pyrite and perhaps chalcopyrite in the upper parts
	84.50-85.60 Somewhat magnetite bearing biotite schist or biotite rich leptite
	85.60-87.00 Biotite-chlorite 'sköl' with some magnetite
87.51- 95.37	Grey sometimes somewhat quartzitic leptite.
	89.84-90.17 Magnetite in biotite-chlorite 'skölig' unit. ∠ 90.
95.37-100.10	Grey leptite/leptite gneiss with chlorite-biotite 'sköliga' units of which some are slightly magnetite bearing
100.10-103.50	Mineralized zone, with magnetite, traces of pyrite and possibly chalcopyrite in a biotite rich leptite gneiss or biotite schist
	100.75-101.87 Rather massive magnetite mineralization
	102.35-103.44 -"-
103.50-107.30	Grey micaceous leptite gneiss; partially suffering from pegmatitization. ∠ 80.
107.30-111.80	Grey leptite with exceptional biotite-chlorite 'sköls'.

END

C. SAMPLED SECTIONS

Section	Sample ID No	Description
	8458:	
8.50- 10.50	350	'Skölig' leptite gneiss with magnetite and traces of pyrite and chalcopyrite
10.50- 12.55	351	'Skölig' leptite gneiss with magnetite
21.35- 23.37	352	Mica and chlorite bearing leptite gneiss with minor amounts of pyrite (perhaps also chalcopyrite)
26.36- 27.08	353	Magnetite with leptite/leptite gneiss and 'sköls'
27.08- 27.67	354	Quartzite with pyrite, chalcopyrite and some magnetite
28.55- 28.93	355	Leptite gneiss with magnetite.
29.30- 29.70		Massive magnetite mineralization with traces of pyrite and chalcopyrite
52.04- 52.11		Biotite-chlorite 'sköl' with magnetite,
52.75- 52.92	356	pyrite and chalcopyrite
54.97- 55.20		
77.38- 78.35	357	Magnetite in 'skölig' leptite
78.93- 79.76	358	Mobile quartz with leptite; partially pyrite and chalcopyrite bearing
83.69- 84.70	359	Rather massive magnetite mineralization; in part with pyrite (perhaps also chalcopyrite)
100.31-100.75		Biotite rich leptite gneiss or biotite schist
101.87-102.35	360	with some magnetite and traces of pyrite,
103.44-103.50		possibly also chalcopyrite

TABLE: 12 CORE LOG

Diamond drill hole: Nybergsfältet DDH 007/83

Location: The exploration and mining claims of Nybergsfältet

Map sheet: 11E 0j

R-coordinates: 660494/144583

Local coordinates: 1160E/380N

Azimuth: 173^g (155°) Inclination: 40°

Total length: 121.30 m Drilled by: Hagby Bruk

Date commenced: 1983-11-28 Date completed: 1983-12-01

Logged by: C. Hardenby Date log completed: 1984-02-28

A. SUMMARY LOG.

Note that the word 'sköl' correspond to a metamorphically retrograde rock that consists mainly of phyllosilicates (biotite and/or chlorite) and may be either schistose or irregularly massive. Sometimes it may be equivalent to a gouge. A rock that partially consists of 'sköl' minerals or contains streaks of minor 'sköls' may sometimes be said to be 'skölig'.

0.00- 7.83	Overburden
7.83- 11.23	In part 'skölig', micaceous leptite/leptite gneiss
11.23- 13.14	Biotite rich leptite gneiss and biotite schist
13.14- 24.45	Grey leptite/leptite gneiss, with minor 'sköls'
24.45- 25.52	Grey, quartzitic leptite
25.52- 32.30	Sometimes diffusely banded leptite/leptite gneiss, often with grains of sulphides (pyrite?)
32.30- 39.65	Slightly magnetic, grey leptite/leptite gneiss
39.65- 43.07	Magnetite mineralization, slightly chalcopyrite and pyrite bearing
43.07- 45.00	Grey, often 'skölig' leptite/leptite gneiss
45.00- 57.45	Grey, sometimes magnetite spotted leptite/leptite gneiss
57.45- 60.50	Irregularly magnetite mineralized zone, partially chalcopyrite and pyrite bearing
60.50- 66.30	Grey leptite
66.30- 67.47	Irregularly magnetite and sulphide mineralized zone
67.47- 77.00	Grey 'skölig' leptite/leptite gneiss, partially with magnetite specks
77.00- 89.95	Grey leptite
89.95- 96.85	Irregularly mineralized zone; magnetite with some chalcopyrite and pyrite
96.85-103.80	Grey leptite/leptite gneiss
103.80-110.60	Irregularly mineralized zone. Magnetite, partially some chalcopyrite and pyrite
110.60-117.25	Irregularly banded leptite
117.25-119.39	Magnetite, pyrite and chalcopyrite mineralized zone
119.39-121.30	Diffusely banded leptite/leptite gneiss

B. CORE LOG

0.00- 7.83	Overburden
7.83-11.23	Grey leptite/leptite gneiss, altered into a micaceous variety, in part biotite-chlorite 'skölig'
11.23-13.14	Biotite rich leptite gneiss and biotite schist with some magnetite and sulphides (mostly pyrite)
	13.02-13.14 Chlorite 'sköl'
13.14-24.45	Grey leptite/leptite gneiss
	16.18-16.28 Biotite-chlorite 'sköl'
	16.68-16.76 -"-
	At 17.5 m the angle between schistosity and core axis is 90^{g} ($\measuredangle$90).
	19.60-19.68 Slightly pyrite bearing
	20.20-21.58 Mica (biotite) rich leptite/leptite gneiss. Between 20.35-20.50 slightly pyrite bearing
	21.60-22.20 Slightly magnetic rock with specks of magnetite
24.45-25.52	Grey quartzitic leptite
25.52-32.30	Grey - light grey - light pinkish sometimes diffusely banded leptite/leptite gneiss, often impregnated with grains of sulphides (probably pyrite). The schistosity is only weakly developed.
	27.25-28.88 Light pinkish leptite (or aplite?) with fine grained muscovite and pyrite evenly distributed
	29.16-29.40 Grey mica rich leptite gneiss, slightly magnetic At 31.5 m $\measuredangle$ 100.
32.30-39.65	Grey-dark grey leptite/leptite gneiss,
	32.30-33.60 Slightly magnetic core sometimes with specks of magnetite and hematite
	34.44-35.65 Slightly magnetic core with a couple of ca 5 cm thick biotite-chlorite 'sköls'
	35.50-36.50 Slightly porphyritic core
	36.30-37.58 -"- magnetic core
	38.90-39.65 -"- -"- -"-
39.65-43.07	Magnetite mineralization, often biotite 'skölig', chalcopyrite and pyrite occur. The core is rather fractured.
	39.80-40.28 Slightly magnetic grey leptite/leptite gneiss
43.07-45.00	Grey, often biotite-chlorite 'skölig' leptite/leptite gneiss
	43.07-44.05 Slightly magnetic core
	44.47-45.00 -"- -"-

45.00-57.45	Grey, sometimes slightly magnetic and magnetite spotted leptite/leptite gneiss.
45.80-47.00	Partially somewhat coarsened reddish leptite gneiss. At 49.5 m ⍺ 80.
57.45-60.50	Irregularly magnetite mineralized zone; Partially with chalcopyrite and pyrite. Sometimes grey leptite occurs.
57.45-57.83	Unit somewhat richer in chalcopyrite and pyrite, in part mobile quartz. Between 57.73-57.83 magnetite rich unit.
58.18-58.48	Magnetite rich unit with some pyrite
58.77-59.07	Magnetite rich unit
59.52-59.60	-"- -"- -"-
60.28-60.50	Sulphide (pyrite) impregnated unit. Between 60.28-60.43 magnetite rich section
60.50-66.30	Grey leptite
60.50-66.03	Sometimes slightly magnetic leptite. At 65.5 m ⍺ 55.
66.03-66.30	'Skölig' leptite
66.30-67.47	Irregularly magnetite and sulphide (mostly pyrite) mineralized zone; less mineralized units consist of biotite rich leptite gneiss
66.30-66.56	Magnetite rich unit
66.30-66.91	Streaks of pyrite
67.32-67.47	-"- -"-
67.47-77.00	Grey biotite-chlorite 'skölig' leptite/leptite gneiss. Partially with magnetite specks and partially slightly magnetic.
69.33-69.68	'Skölig' unit
69.44-69.48	Magnetite mineralization
69.60-69.63	-"-
70.10-70.90	'Skölig' unit
74.25-75.50	-"-
76.18-76.48	-"- . At 77 m ⍺ 70.
77.00-89.95	Grey leptite
83.80-84.80	Homogeneous section of leptite
88.35-89.95	Partially biotite richer often 'sköliga' units, traces of chalcopyrite. At 88 m ⍺ 20.
89.95-96.85	Irregularly mineralized zone; Magnetite with some chalcopyrite, pyrite and possibly pyrrhotite in biotite rich schistose leptite gneiss or biotite-chlorite 'skölig' schist.
89.95-90.40	Rather magnetite rich unit
91.22-93.00	-"- strongly magnetic magnetite rich unit

	93.00-93.20	Chlorite-biotite 'sköl' with sulphides. Irregular schistosity and diffuse banding. ∧ 0.
	93.20-93.30	Magnetite rich unit
	93.30-93.46	Mobile quartz
	93.46-94.75	Magnetite rich unit with veins of sulphides (pyrite)
	94.82-95.17	Biotite-chlorite 'sköl'
	95.17-95.72	Magnetite and sulphide (chalcopyrite)rich unit
	96.24-96.85	Magnetite rich unit
96.85-103.80	Grey leptite/leptite gneiss with streaks of lighter grey varieties.	
	99.25- 99.54	Biotite-chlorite 'skölig' unit
	102.40-103.80	The rock has partially suffered from pegmatitization
103.80-110.60	Irregularly mineralized zone	
	103.80-105.30	Biotite-chlorite 'skölig' leptite/leptite gneiss. Irregularly banded, partially suffering from pegmatitization. At 104 m ∧ 45.
	105.30-106.08	Black biotite rich leptite gneiss, irregularly magnetite mineralized with traces of sulphides (pyrite?)
	106.08-110.60	'Skölig' biotite-chlorite schist, sometimes quartz rich
	106.08-106.45	Some pyrite and chalcopyrite, slightly magnetic unit.
	106.45-107.00	Magnetite mineralization
	107.00-107.54	Massive magnetite mineralization with chalcopyrite and pyrite
	107.54-108.00	Slightly magnetite bearing unit
	108.00-108.65	Grey leptite gneiss with minor biotite-chlorite 'sköls'
	108.65-109.64	Irregularly rather weakly magnetite mineralized unit, partially with pyrite and chalcopyrite
	109.64-110.44	Magnetite, partially with chalcopyrite and pyrite
	110.44-110.60	Chlorite 'sköl'
110.60-117.25	Grey, partially irregularly banded leptite; The'bands' are pink-light red in colour. Sometimes somewhat 'sköliga' zones occur.	
	115.15-115.33	Chlorite-biotite 'sköl'
	115.75-119.90	Biotite-chlorite 'skölig' leptite

117.25-119.39	Magnetite, pyrite and chalcopyrite mineralized zone.	
	117.25-117.92	Biotite-chlorite 'skölig' schist. Slightly magnetite mineralized. Between 117.67-117.92 streaks of pyrite and chalcopyrite.
	117.92-118.34	Quartz banded magnetite mineralization. At 18 m ∠ 90.
	118.34-119.06	Massive magnetite mineralization with streaks of chalcopyrite and pyrite
	119.06-119.39	'Skölig' biotite-chlorite schist or leptite with magnetite, chalcopyrite and pyrite
119.39-121.30	Grey, sometimes somewhat reddish and diffusely banded leptite/leptite gneiss; partially somewhat coarsened due to pegmatitization.	

END

C. SAMPLED SECTIONS

Section	Sample ID No	Description
	8458:	
11.23-12.24	362	Biotite rich leptite gneiss and biotite schist with some magnetite and pyrite
12.24-13.14	363	-"-
27.35-28.35	364	Leptite (or aplite?) with fine grained muscovite and pyrite
40.28-41.80	365	Magnetite with some chalcopyrite and pyrite, often biotite 'skölig' matrix
41.80-43.07	366	-"-
57.45-58.45	367	Magnetite with chalcopyrite and pyrite
58.45-59.45	368	-"-
59.45-60.50	369	-"-
66.30-67.47	370	Magnetite rich core
89.95-90.95	371	Biotite rich leptite gneiss or 'skölig' schist with magnetite mineralization
90.95-91.95	372	-"-
91.95-93.00	373	-"-
93.00-93.95	374	-"- with some sulphides
93.95-94.95	375	As 374
94.95-95.95	376	-"-
95.95-96.85	377	As 371-373
105.30-106.08	378	Biotite rich leptite gneiss with some magnetite and traces of sulphides (pyrite?).
106.08-107.00	379	'Skölig', sometimes quartz rich schist
107.00-107.54	380	Massive magnetite mineralization with chalcopyrite and pyrite
107.54-109.64	381	Biotite rich leptite gneiss, leptite gneiss with 'sköls', partially somewhat magnetite, pyrite and chalcopyrite bearing
109.64-110.60	382	Biotite rich leptite and'sköl'with magnetite and partially chalcopyrite and pyrite
117.25-117.92	383	'Skölig' schist with minor amounts of magnetite, chalcopyrite and pyrite
117.92-118.34	384	Quartz banded magnetite mineralization
118.35-119.06	385	Massive magnetite mineralization with streaks of chalcopyrite and pyrite
119.06-119.39	386	'Skölig' schist or leptite with magnetite, chalcopyrite and pyrite

TABLE 13. NYBERGSFÄLTET. Analytical results of the re-analyzed selected mine dump samples No 8448: 301-310 and 8458: 387-400.

ID	8448XX-301	8448XX-302	8448XX-303	8448XX-304	8448XX-305	8448XX-306	8448XX-307	8448XX-308	8448XX-309	8448XX-310
MET	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC
DAT	850108	850108	850108	850108	850108	850108	850108	850108	850108	850108
KLO	1007	1008	1009	1010	1011	1012	1014	1015	1016	1017
						wt.-%				
LI	0.0003	0.0007	0.0008	0.0022	0.0008	0.0013	0.0005	0.0009	0.0002	0.0008
BE	0.0001	0.0011	0.0008	0.0008	0.0018	0.0011	0.0007	0.0001	0.0000	0.0008
B	0.0005	0.0003	0.0003	0.0021	0.0000	0.0001	-0.0001	0.0005	0.0001	-0.0001
NA	0.0267	3.2600	3.3240	0.0777	0.9936	0.5946	1.1560	0.0456	0.0100	0.3907
MG	0.8365	2.5260	2.4290	3.0410	2.4400	1.2490	0.7011	1.2890	0.0108	1.5510
AL	2.2320	7.3870	6.8780	6.7310	5.7700	4.6390	3.9400	1.8780	0.0386	3.7750
P	0.0240	0.0127	0.0098	0.0257	0.0176	0.0208	0.0182	0.0220	0.0018	0.0339
K	0.6143	1.7470	1.5400	1.8160	1.8470	1.8420	1.1090	1.5880	0.0812	2.1780
CA	0.0556	0.7247	0.5076	0.2915	1.1670	0.3461	0.4232	0.0288	0.0099	0.2855
TI	0.0253	0.0886	0.0981	0.1118	0.0682	0.0778	0.0580	0.0348	0.0008	0.0639
V	0.0021	0.0011	0.0010	0.0014	0.0019	0.0021	0.0014	0.0008	0.0008	0.0017
MN	0.0671	0.0245	0.0238	0.0513	0.0488	0.0594	0.0309	0.0241	0.0032	0.0469
FE	46.0000	15.7400	14.3100	34.9700	29.2000	28.0000	27.3900	9.9680	2.0660	36.4800
CO	0.0001	0.0059	0.0022	0.0182	0.0001	0.0125	0.0003	0.0012	0.0031	0.0008
NI	0.0001	0.0005	0.0007	0.0013	0.0000	0.0003	0.0006	0.0005	0.0017	0.0001
CU	0.0657	0.2383	0.1183	0.8165	0.4882	0.1710	1.1600	1.6680	0.0283	2.4020
ZN	0.0018	0.0022	0.0018	0.0113	0.0038	0.0016	0.0036	0.0060	0.0009	0.0074
SR	0.0001	0.0058	0.0042	0.0022	0.0059	0.0016	0.0025	0.0001	0.0000	0.0012
Y	0.0032	0.0017	0.0033	0.0034	0.0129	0.0028	0.0008	0.0009	0.0000	0.0018
MO	0.0006	0.0002	0.0004	0.0027	0.0050	0.0009	0.0005	0.0010	0.0006	0.0007
AG	0.0000	0.0002	0.0002	0.0002	0.0001	0.0000	0.0001	0.0002	0.0000	0.0004
CD	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002
BA	0.0049	0.0148	0.0105	0.0385	0.0235	0.0233	0.0136	0.0148	0.0000	0.0256
LA	0.0345	0.0036	0.0107	0.0167	0.0684	0.0145	0.0035	0.0018	0.0000	0.0065
CE	0.0647	0.0086	0.0195	0.0324	0.1282	0.0298	0.0099	0.0053	0.0020	0.0173
W	0.0014	0.0006	0.0008	0.0012	0.0011	0.0012	0.0012	0.0010	0.0004	0.0020
PB	0.0028	0.0011	0.0006	0.0019	0.0019	0.0027	0.0015	0.0009	-0.0003	0.0025

TABLE 13 contd.

ID	8458XX-387	8458XX-388	8458XX-389	8458XX-390	8458XX-391	8458XX-392	8458XX-393	8458XX-394	8458XX-395	8458XX-396
MET	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC
DAT	850124	850124	850124	850124	850124	850124	850124	850124	850124	850124
KLO	1328	1330	1331	1354	1355	1356	1357	1358	1400	1401
					wt.-%					
LI	0.0000	0.0002	0.0003	0.0004	0.0004	0.0001	0.0006	0.0005	-0.0003	0.0000
BE	0.0023	0.0041	0.0005	0.0001	0.0012	0.0004	0.0009	0.0003	0.0003	0.0006
B	0.0008	0.0002	0.0001	0.0005	0.0009	0.0009	0.0012	0.0011	0.0010	0.0013
NA	0.0176	0.0025	0.0279	0.0115	0.0055	0.0040	0.3700	0.1462	0.0062	0.0448
MG	0.5746	0.1893	1.3280	0.1461	0.1626	1.6560	1.0850	0.5935	1.8020	7.0560
AL	1.1130	0.2185	2.7510	0.4636	0.6493	4.2840	4.0060	4.1190	2.1000	1.9360
P	0.0285	0.0205	0.0079	0.0087	0.0038	0.0438	0.0121	0.0166	0.0125	0.0036
K	0.6171	0.1571	2.0870	0.1607	0.0813	-0.0208	1.5220	1.6980	1.0000	1.6750
CA	2.6050	0.1109	0.1060	0.0235	0.4305	1.8660	0.2712	0.1617	0.0268	0.9153
TI	0.0107	0.0012	0.0526	0.0108	0.0017	0.0173	0.0771	0.0860	0.0309	0.0272
V	0.0004	0.0007	0.0011	0.0010	0.0002	0.0055	0.0001	0.0006	0.0001	0.0005
MN	0.0411	0.0217	0.0404	0.0187	0.0431	0.0468	0.0563	0.1094	0.0519	0.0915
FE	31.4500	10.2100	11.7300	13.6800	47.0600	57.1800	49.2000	39.7300	53.4200	23.7900
CO	0.0016	0.0012	0.0007	0.0005	0.0003	0.0003	0.0255	0.0002	0.0010	0.0002
NI	0.0001	0.0002	0.0002	0.0026	0.0003	0.0001	0.0001	0.0003	0.0000	-0.0002
CU	7.3000	4.2460	0.0099	0.0156	1.8340	0.4243	0.0467	0.0333	0.1728	2.4610
ZN	0.0136	0.0092	0.0028	0.0015	0.0030	0.0009	0.0043	0.0011	0.0015	0.0208
SR	0.0001	0.0000	0.0003	0.0000	0.0000	0.0139	0.0011	0.0010	0.0000	0.0000
Y	0.0248	0.0128	0.0173	0.0011	0.0056	0.0127	0.0021	0.0038	0.0012	0.0038
MO	0.0275	0.0009	0.0638	0.0027	0.0006	0.0002	0.0004	0.0002	0.0000	0.0002
AG	0.0004	0.0004	0.0001	0.0001	0.0005	0.0003	0.0004	0.0002	0.0006	0.0005
CD	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001
BA	0.0055	0.0007	0.0314	0.0014	0.0027	-0.0037	0.0195	0.0166	0.0046	0.0068
LA	0.0207	0.0222	0.0858	0.0034	0.0058	0.0217	0.0119	0.0144	0.0011	0.0005
CE	0.0550	0.0702	0.1547	0.0060	0.0151	0.0389	0.0214	0.0259	0.0023	0.0015
W	0.0227	0.0401	0.0002	0.0119	0.0151	0.0003	0.0007	0.0005	0.0067	0.0037
PB	0.0014	0.0014	0.0013	0.0011	0.0027	0.0021	0.0055	0.0020	0.0015	0.0029

TABLE 13 contd.

ID	8458XX-397	8458XX-398	8458XX-399	8458XX-400
MET	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC
DAT	850124	850124	850124	850124
KLO	1402	1403	1405	1406
		wt.-%		
LI	0.0003	0.0011	0.0000	0.0003
BE	0.0003	0.0011	0.0002	0.0005
B	0.0005	0.0011	0.0003	0.0005
NA	0.0042	0.5457	0.2948	0.0159
MG	0.5193	1.5710	0.8744	0.2382
AL	0.3989	5.3500	1.9930	1.9170
P	0.0145	0.0089	0.0042	0.0019
K	0.3253	1.6410	0.9266	0.0246
CA	0.0755	0.3147	0.0858	0.9957
TI	0.0051	0.0631	0.0352	0.0070
V	0.0003	0.0005	0.0007	0.0012
MN	0.0062	0.0515	0.0158	0.0319
FE	5.6100	29.2800	5.7160	12.8500
CO	0.0050	0.0037	0.0005	0.0014
NI	0.0010	0.0003	0.0007	0.0002
CU	0.3758	1.5460	0.0506	0.3905
ZN	0.0033	0.0013	0.0010	0.0011
SR	0.0002	0.0021	0.0007	0.0005
Y	0.0017	0.0168	0.0012	0.0636
MO	0.0012	0.0009	0.0003	0.0022
AG	0.0001	0.0002	0.0001	0.0003
CD	0.0001	0.0000	0.0000	0.0000
BA	0.0024	0.0433	0.0162	0.0001
LA	0.0011	0.1241	0.0067	0.6397
CE	0.0024	0.1996	0.0110	1.0420
W	0.0816	0.0004	0.0002	0.0000
PB	0.0010	0.0013	0.0023	0.0029

TABLE 14. NYBERGSFÄLTET. Mean values, standard deviations, variation coefficients, maximum and minimum values of Table 13.

ELEMENT	MEDELV	STD	VKOEFF	MAX	MIN
KL	5491.848	8.1387	0.0015	5498.587	5482.422
CU	1.0859	1.6971	1.5628	7.3000	0.0099
NI	0.0005	0.0006	1.2865	0.0026	-0.0002
ZN	0.0044	0.0049	1.1123	0.0208	0.0009
MO	0.0047	0.0137	2.8995	0.0638	0.0000
V	0.0011	0.0011	0.9727	0.0055	0.0001
FE	26.4596	16.4419	0.6214	57.1800	2.0660
CA	0.4929	0.6360	1.2904	2.6050	0.0099
MG	1.4112	1.4677	1.0400	7.0560	0.0108
AL	3.1070	2.2267	0.7167	7.3870	0.0386
TI	0.0439	0.0345	0.7864	0.1118	0.0008
MN	0.0419	0.0248	0.5908	0.1094	0.0032
W	0.0081	0.0182	2.2432	0.0816	0.0000
PB	0.0019	0.0011	0.5964	0.0055	-0.0003
CO	0.0036	0.0063	1.7589	0.0255	0.0001
CE	0.0818	0.2109	2.5779	1.0420	0.0015
CD	0.0000	0.0001	1.4006	0.0002	0.0000
LA	0.0466	0.1299	2.7855	0.6397	0.0000
BE	0.0008	0.0009	1.0609	0.0041	0.0000
SR	0.0018	0.0031	1.7182	0.0139	0.0000
Y	0.0083	0.0135	1.6269	0.0636	0.0000
BA	0.0132	0.0127	0.9614	0.0433	-0.0037
LI	0.0005	0.0005	1.0108	0.0022	-0.0003
B	0.0006	0.0005	0.9081	0.0021	-0.0001
P	0.0156	0.0106	0.6798	0.0438	0.0018
NA	0.4740	0.9248	1.9511	3.3240	0.0025
K	1.0941	0.7557	0.6907	2.1780	-0.0208
AG	0.0002	0.0002	0.7333	0.0006	0.0000

TABLE 15. NYBERGSFÄLTET. Analytical results of the re-analyzed boulder samples No 8448: 311-314.

ID	8448XX-311	8448XX-312	8448XX-313	8448XX-314
MET	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC
DAT	850108	850108	850108	850108
KLO	1019	1020	1021	1022
		wt.-%		
LI	0.0003	0.0005	0.0003	0.0004
BE	0.0019	0.0002	0.0003	0.0004
B	0.0002	0.0003	0.0007	0.0005
NA	0.2538	3.8990	2.2030	0.4164
MG	2.5980	2.0950	3.8190	5.8250
AL	1.9800	5.1060	5.8030	2.0640
P	0.0165	0.0123	0.0474	0.0168
K	0.3862	0.2093	1.4760	0.3093
CA	2.8610	9.3510	6.8260	6.2400
TI	0.0189	0.0741	0.2394	0.0336
V	0.0023	0.0011	0.0016	0.0021
MN	0.0809	0.4256	0.1209	0.2102
FE	26.8000	10.1400	15.4600	33.6700
CO	0.0001	0.0004	0.0117	0.0005
NI	0.0011	0.0003	0.0001	0.0008
CU	0.4785	0.0025	0.1132	0.0430
ZN	0.0031	0.0039	0.0194	0.0690
SR	0.0001	0.0017	0.0026	0.0004
Y	0.0028	0.0037	0.0069	0.0012
MO	0.0002	0.0001	0.0001	0.0001
AG	0.0001	0.0002	0.0002	0.0000
CD	0.0000	0.0000	0.0000	0.0000
BA	0.0006	0.0039	0.0361	0.0304
LA	0.0003	0.0007	0.0085	-0.0002
CE	0.0064	0.0055	0.0184	0.0055
W	0.0010	0.0005	0.0003	0.0006
PB	0.0243	0.0009	0.0026	0.0021

TABLE 16: NYBERGSFÄLTET. Analytical results of the re-analyzed drill core samples No 8448: 405--411 from DDH 001/83.

ID	8448XX-405	8448XX-406	8448XX-407	8448XX-408	8448XX-409	8448XX-410	8448XX-411
MET	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC	ICP,NHC
DAT	850108	850108	850108	850108	850108	850108	850108
KLO	1032	1033	1035	1036	1038	1039	1041
				wt.-%			
LI	0.0003	0.0003	0.0004	0.0003	0.0004	0.0013	0.0007
BE	0.0002	0.0004	0.0001	0.0001	0.0001	0.0004	0.0008
B	0.0003	0.0003	0.0009	0.0003	0.0008	0.0001	0.0004
NA	0.0217	0.0138	0.0212	0.0251	0.0172	0.0674	0.4019
MG	0.3362	0.0680	0.4757	0.4045	0.3300	3.5310	1.2590
AL	1.0950	0.6028	1.3400	1.3520	0.4962	7.5410	3.1770
P	0.0175	0.0258	0.0156	0.0270	0.0117	0.0293	0.0181
K	0.3759	0.1171	0.5861	0.4708	0.4221	5.8770	1.3120
CA	0.1600	0.0558	0.0444	0.6963	0.0660	0.0605	0.3612
TI	0.0139	0.0033	0.0172	0.0133	0.0054	0.2257	0.0540
V	0.0019	0.0018	0.0022	0.0020	0.0010	0.0038	0.0046
MN	0.0646	0.0415	0.0700	0.0672	0.0285	0.0655	0.0601
FE	36.0000	24.4000	45.2000	44.8000	7.3950	34.0200	45.2000
CO	0.0009	0.0008	0.0011	0.0000	0.0005	0.0004	0.0009
NI	0.0001	0.0001	0.0000	0.0000	0.0014	0.0000	0.0003
CU	0.3233	1.7420	0.1909	1.4940	0.3572	0.5453	0.0109
ZN	0.0016	0.0074	0.0002	0.0085	0.0018	0.0018	-0.0001
SR	0.0000	0.0000	0.0000	0.0000	0.0001	0.0003	0.0027
Y	0.0033	0.0042	0.0027	0.0068	0.0033	0.0027	0.0106
MO	0.0009	0.0012	0.0007	0.0033	0.0018	0.0010	0.0004
AG	0.0000	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000
CD	0.0001	0.0000	0.0001	0.0002	0.0000	0.0000	0.0001
BA	0.0099	0.0211	0.0007	0.0094	0.0043	0.0607	0.0082
LA	0.0068	0.0091	0.0086	0.0173	0.0066	0.0142	0.0498
CE	0.0213	0.0280	0.0256	0.0508	0.0160	0.0269	0.0976
W	0.0515	0.0772	0.0041	0.0627	0.0010	0.0012	0.0087
PB	0.0022	0.0013	0.0002	0.0011	0.0005	0.0032	0.0020

TABLE 17. NYBERGSFÄLTET. Mean values, standard deviations, variation coefficients, maximum and minimum values of Table 16.

ELEMENT	MEDELV	STD	VKOEFF	MAX	MIN
KL	5482.442	0.2041	0.0000	5482.445	5482.439
CU	0.6662	0.6740	1.0117	1.7420	0.0109
NI	0.0003	0.0005	1.8751	0.0014	0.0000
ZN	0.0030	0.0035	1.1430	0.0085	-0.0001
MO	0.0013	0.0010	0.7320	0.0033	0.0004
V	0.0025	0.0013	0.5101	0.0046	0.0010
FE	33.8593	13.9724	0.4127	45.2000	7.3950
CA	0.2063	0.2436	1.1807	0.6963	0.0444
MG	0.9149	1.2118	1.3244	3.5310	0.0680
AL	2.2291	2.5036	1.1231	7.5410	0.4962
TI	0.0475	0.0804	1.6901	0.2257	0.0033
MN	0.0568	0.0156	0.2752	0.0700	0.0285
W	0.0295	0.0330	1.1208	0.0772	0.0010
PB	0.0015	0.0010	0.6950	0.0032	0.0002
CO	0.0007	0.0004	0.5752	0.0011	0.0000
CE	0.0380	0.0284	0.7481	0.0976	0.0160
CD	0.0001	0.0001	1.0583	0.0002	0.0000
LA	0.0161	0.0154	0.9590	0.0498	0.0066
BE	0.0003	0.0003	0.8607	0.0008	0.0001
SR	0.0004	0.0010	2.2613	0.0027	0.0000
Y	0.0048	0.0029	0.6093	0.0106	0.0027
BA	0.0163	0.0206	1.2591	0.0607	0.0007
LI	0.0005	0.0004	0.6970	0.0013	0.0003
B	0.0004	0.0003	0.6629	0.0009	0.0001
P	0.0207	0.0066	0.3200	0.0293	0.0117
NA	0.0812	0.1426	1.7562	0.4019	0.0138
K	1.3087	2.0482	1.5650	5.8770	0.1171
AG	0.0001	0.0001	1.3769	0.0002	0.0000

TABLE 18. NYBERGSFÄLTET. Analytical results of the re-analyzed drill core samples No 8448: 412-414 from DDH 002/83.

ID	8448XX-412	8448XX-413	8448XX-414
MET	ICP,NHC	ICP,NHC	ICP,NHC
DAT	850108	850108	850108
KLO	1042	1043	1045
		wt.-%	
LI	0.0009	0.0006	0.0008
BE	0.0002	0.0001	0.0004
B	0.0004	0.0003	0.0009
NA	0.9895	0.1647	0.6594
MG	1.1280	0.4627	1.3110
AL	6.4450	5.2650	4.2560
P	0.0084	0.0034	0.0277
K	2.9490	2.9190	1.0960
CA	0.2207	0.0281	0.4553
TI	0.0798	0.0652	0.1066
V	0.0007	0.0005	0.0022
MN	0.0084	0.0035	0.0543
FE	6.0180	3.2930	34.2000
CO	0.0003	0.0002	0.0004
NI	0.0002	0.0004	0.0000
CU	0.0201	0.0004	0.2750
ZN	0.0023	0.0013	0.0036
SR	0.0016	0.0003	0.0033
Y	0.0019	0.0012	0.0035
MO	0.0006	0.0007	0.0003
AG	0.0002	0.0001	0.0000
CD	0.0000	0.0000	0.0000
BA	0.0611	0.0378	0.0199
LA	0.0012	0.0008	0.0093
CE	0.0045	0.0035	0.0225
W	0.0010	0.0011	0.0012
PB	0.0008	0.0005	0.0009

TABLE 19. NYBERGSFÄLTET. Mean values, standard deviations, variation coefficients, maximum and minimum values of Table 18.

ELEMENT	MEDELV	STD	VKOEFF	MAX	MIN
KL	5482.447	0.2500	0.0000	5482.448	5482.446
CU	0.0985	0.1532	1.5550	0.2750	0.0004
NI	0.0002	0.0002	1.0000	0.0004	0.0000
ZN	0.0024	0.0012	0.4805	0.0036	0.0013
MO	0.0005	0.0002	0.3903	0.0007	0.0003
V	0.0011	0.0009	0.8198	0.0022	0.0005
FE	14.5037	17.1119	1.1798	34.2000	3.2930
CA	0.2347	0.2139	0.9116	0.4553	0.0281
MG	0.9672	0.4464	0.4615	1.3110	0.4627
AL	5.3220	1.0956	0.2059	6.4450	4.2560
TI	0.0839	0.0210	0.2504	0.1066	0.0652
MN	0.0221	0.0280	1.2699	0.0543	0.0035
W	0.0011	0.0001	0.0909	0.0012	0.0010
PB	0.0007	0.0002	0.2839	0.0009	0.0005
CO	0.0003	0.0001	0.3333	0.0004	0.0002
CE	0.0102	0.0107	1.0517	0.0225	0.0035
CD	0.0000	0.0032		0.0000	0.0000
LA	0.0038	0.0048	1.2733	0.0093	0.0008
BE	0.0002	0.0002	0.6547	0.0004	0.0001
SR	0.0017	0.0015	0.8679	0.0033	0.0003
Y	0.0022	0.0012	0.5359	0.0035	0.0012
BA	0.0396	0.0207	0.5217	0.0611	0.0199
LI	0.0008	0.0002	0.1992	0.0009	0.0006
B	0.0005	0.0003	0.6027	0.0009	0.0003
P	0.0132	0.0128	0.9746	0.0277	0.0034
NA	0.6045	0.4151	0.6867	0.9895	0.1647
K	2.3213	1.0613	0.4572	2.9490	1.0960
AG	0.0001	0.0001	1.0000	0.0002	0.0000

TABLE 20. NYBERGSFÄLTET. Analytical results of the re-analyzed drill core samlples No 8448: 415 and 8458: 312-338 from DDH 004/83

ID	8448XX-415	8458XX-312	8458XX-313	8458XX-314	8458XX-315	8458XX-316	8458XX-317	8458XX-318	8458XX-319	8458XX-320
MET	ICP,NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC
DAT	850108	850124	850124	850124	850124	850124	850124	850124	850124	850124
KLO	1046	1100	1101	1103	1111	1113	1114	1115	1116	1117
					wt.-%					
LI	0.0008	0.0008	0.0010	0.0007	0.0010	0.0001	0.0003	0.0002	0.0001	0.0003
BE	0.0003	0.0005	0.0001	0.0001	0.0003	0.0015	0.0004	0.0023	0.0022	0.0004
B	0.0002	0.0000	-0.0001	0.0003	0.0004	0.0031	0.0004	-0.0001	-0.0002	0.0004
NA	0.5742	0.6296	0.0503	0.0256	1.3030	0.0436	1.9390	0.0195	0.0105	0.0916
MG	0.9071	0.5914	1.9180	0.5233	0.6244	0.9105	0.9425	0.8359	0.4282	0.5440
AL	3.9300	5.5920	6.2980	2.7120	5.4800	1.1510	5.8520	1.5870	1.0170	2.0020
P	0.0058	0.0005	0.0006	0.0003	0.0016	0.0007	0.0117	0.0021	0.0028	0.0127
K	2.0550	2.5230	4.5270	1.5720	1.7190	0.8011	3.1590	0.7786	0.3734	0.8687
CA	0.3535	0.6239	0.0262	0.0642	1.5410	0.0611	0.5496	0.0853	0.0359	0.1563
TI	0.0414	0.0668	0.0747	0.0338	0.0638	0.0154	0.1507	0.0170	0.0080	0.0360
V	0.0007	0.0003	0.0005	0.0005	0.0003	0.0008	0.0032	0.0005	0.0004	0.0008
MN	0.0219	0.0440	0.0840	0.0397	0.0269	0.0269	0.0150	0.0755	0.0591	0.0823
FE	6.1080	11.4200	23.7000	13.7400	9.6700	14.4300	3.4530	49.8500	43.0500	40.5100
CO	0.0005	0.0000	0.0004	0.0204	0.0003	0.0000	0.0005	0.0002	0.0002	0.0004
NI	0.0010	0.0002	-0.0003	-0.0002	0.0001	0.0001	0.0005	0.0000	0.0004	0.0008
CU	0.2617	0.2699	0.2333	0.1155	0.0772	1.9470	0.0590	1.2530	2.3530	0.0364
ZN	0.0013	0.0000	0.0002	0.0004	0.0005	0.0027	0.0002	0.0012	0.0000	0.0005
SR	0.0022	0.0028	0.0002	0.0001	0.0045	0.0001	0.0068	0.0000	0.0000	0.0004
Y	0.0019	0.0018	0.0023	0.0015	0.0042	0.0117	0.0020	0.0178	0.0142	0.0029
MO	0.0006	0.0001	0.0003	0.0005	0.0004	0.0006	0.0004	0.0005	0.0024	0.0004
AG	0.0001	0.0001	0.0001	0.0001	0.0000	0.0003	0.0001	0.0003	0.0005	0.0001
CD	0.0000	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0000	0.0002	0.0001
BA	0.0327	0.0552	0.0584	0.0229	0.0588	0.0088	0.0756	0.0052	0.0011	0.0079
LA	0.0027	0.0031	0.0091	0.0035	0.0034	0.0052	0.0028	0.0163	0.0049	0.0063
CE	0.0087	0.0083	0.0194	0.0073	0.0066	0.0122	0.0057	0.0343	0.0109	0.0098
W	0.0006	0.0009	0.0004	0.0006	0.0009	0.0022	0.0009	0.0042	0.0047	0.0084
PB	0.0014	0.0008	0.0015	0.0027	0.0008	0.0021	0.0004	0.0025	0.0011	0.0020

TABLE 20 contd.

ID	8458XX-321	8458XX-322	8458XX-323	8458XX-324	8458XX-325	8458XX-326	8458XX-327	8458XX-328	8458XX-329	8458XX-330
MET	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC
DAT	850124	850124	850124	850124	850124	850124	850124	850124	850124	850124
KLO	1128	1129	1131	1132	1133	1135	1136	1137	1139	1140
					wt.-%					
LI	0.0007	0.0002	0.0009	0.0004	0.0004	0.0002	0.0003	0.0004	0.0000	0.0001
BE	0.0034	0.0006	0.0020	0.0002	0.0013	0.0008	0.0002	0.0005	0.0001	0.0001
B	0.0002	0.0004	-0.0001	0.0009	0.0001	0.0000	0.0007	0.0000	0.0011	0.0012
NA	0.2260	0.0226	0.4308	0.0191	0.6017	0.2792	0.0069	0.1604	0.0105	0.0602
MG	1.8380	0.7677	0.9737	0.6314	0.8275	0.4198	0.4277	0.6234	0.1909	0.2644
AL	4.8040	1.7010	4.0700	2.2370	4.4990	1.9220	1.3220	2.3130	0.9375	1.1750
P	0.0180	0.0167	0.0072	0.0184	0.0078	0.0138	0.0184	0.0087	0.0074	0.0121
K	3.0530	0.9306	1.9440	1.1330	2.2590	0.8011	0.6379	1.0660	0.1426	0.2946
CA	0.3090	0.0569	0.5396	0.0799	0.5813	0.2962	0.0925	0.1436	0.0096	0.0556
TI	0.1037	0.0286	0.0532	0.0395	0.0626	0.0407	0.0230	0.0290	0.0041	0.0107
V	0.0006	0.0006	0.0005	0.0008	0.0006	0.0004	0.0011	0.0003	0.0001	0.0002
MN	0.0767	0.0604	0.0586	0.0813	0.0435	0.0386	0.0467	0.0477	0.0642	0.0584
FE	24.9700	37.7100	16.3300	44.8600	11.7200	19.0700	33.7100	41.9600	55.4600	49.6900
CO	0.0011	0.0017	0.0010	0.0031	0.0008	0.0000	0.0002	0.0027	0.0003	0.0013
NI	0.0005	0.0001	0.0002	0.0008	0.0002	0.0001	0.0006	0.0003	0.0010	0.0009
CU	0.0561	0.0628	0.0833	0.0351	0.0554	0.0208	0.3588	0.0703	0.1671	0.3041
ZN	0.0010	0.0005	0.0010	0.0004	0.0005	0.0002	0.0022	0.0001	0.0004	0.0018
SR	0.0009	0.0001	0.0013	0.0001	0.0019	0.0008	0.0002	0.0004	-0.0001	0.0002
Y	0.0048	0.0064	0.0104	0.0035	0.0022	0.0016	0.0042	0.0019	0.0004	0.0007
MO	0.0011	0.0005	0.0007	0.0007	0.0003	0.0001	0.0010	0.0003	0.0007	0.0001
AG	0.0001	0.0002	0.0001	0.0001	0.0001	0.0000	0.0001	0.0002	0.0001	0.0003
CD	0.0001	0.0000	0.0000	0.0000	0.0001	0.0000	0.0001	0.0001	0.0001	0.0001
BA	0.0409	0.0077	0.0269	0.0124	0.0394	0.0092	0.0059	0.0128	0.0002	0.0022
LA	0.0089	0.0128	0.0211	0.0152	0.0083	0.0077	0.0190	0.0064	0.0007	0.0038
CE	0.0119	0.0214	0.0433	0.0240	0.0159	0.0126	0.0357	0.0146	0.0018	0.0080
W	0.0004	0.0010	0.0011	0.0011	0.0006	0.0023	0.0004	0.0004	0.0004	0.0005
PB	-0.0002	0.0018	0.0002	0.0050	0.0000	0.0005	0.0017	0.0032	0.0032	0.0012

TABLE 20 contd.

ID	8458XX-331	8458XX-332	8458XX-333	8458XX-334	8458XX-335	8458XX-336	8458XX-337	8458XX-338
MET	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC
DAT	850124	850124	850124	850124	850124	850124	850124	850124
KLO	1141	1143	1144	1145	1147	1148	1150	1151
				wt.-%				
LI	0.0002	0.0008	0.0002	0.0003	0.0005	0.0004	0.0007	0.0006
BE	0.0003	0.0006	0.0011	0.0003	0.0006	0.0002	0.0005	0.0004
B	0.0003	0.0005	0.0008	0.0008	0.0006	0.0013	0.0006	0.0005
NA	0.2869	0.5674	0.2515	0.6218	0.9269	0.0981	0.3841	0.6609
MG	0.5700	0.9988	0.7179	1.0660	1.3540	1.2460	2.9930	0.6337
AL	3.8320	3.6810	1.9870	2.7170	3.7500	1.9420	4.0940	4.2320
P	0.0015	0.0026	0.0049	0.0194	0.0168	0.0197	0.0260	0.0041
K	2.4000	1.6170	0.8630	0.9925	1.6570	1.1110	2.6750	2.5120
CA	0.0857	0.2792	0.1225	0.1586	0.4000	0.0745	0.3813	0.4625
TI	0.0420	0.0586	0.0405	0.0587	0.0863	0.0434	0.0941	0.0638
V	0.0006	0.0012	0.0011	0.0010	0.0007	0.0058	0.0136	0.0004
MN	0.0139	0.0277	0.0363	0.0252	0.0217	0.0435	0.0491	0.0149
FE	9.0900	20.2800	35.4900	24.1700	15.6900	41.6400	37.3900	9.0000
CO	0.0004	0.0000	0.0009	0.0003	0.0001	0.0002	0.0006	0.0004
NI	0.0001	0.0002	0.0005	0.0025	0.0001	0.0010	0.0019	0.0004
CU	0.1109	0.0657	0.5443	0.0453	0.0093	0.0032	0.0166	0.1350
ZN	0.0002	0.0003	0.0004	0.0002	0.0003	0.0004	0.0005	0.0006
SR	0.0010	0.0015	0.0006	0.0012	0.0023	0.0003	0.0017	0.0017
Y	0.0006	0.0012	0.0017	0.0013	0.0007	0.0013	0.0029	0.0016
MO	0.0008	0.0006	0.0003	0.0007	0.0005	0.0001	0.0004	0.0012
AG	0.0000	0.0001	0.0003	0.0001	0.0001	0.0001	0.0000	0.0000
CD	0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0000
BA	0.0434	0.0259	0.0133	0.0099	0.0168	0.0060	0.0160	0.0464
LA	0.0023	0.0068	0.0086	0.0048	0.0021	0.0105	0.0246	0.0056
CE	0.0040	0.0125	0.0182	0.0083	0.0040	0.0199	0.0473	0.0111
W	0.0015	0.0004	0.0002	0.0022	0.0001	0.0007	0.0002	0.0013
PB	0.0001	0.0018	0.0013	0.0005	0.0007	0.0015	0.0027	0.0006

TABLE 21. NYBERGSFÄLTET. Mean values, standard deviations, variation coefficients, maximum and minimum values of Table 20.

ELEMENT	MEDELV	STD	VKOEFF	MAX	MIN
KL	5497.906	3.0277	0.0006	5498.494	5482.449
CU	0.3125	0.5770	1.8464	2.3530	0.0032
NI	0.0005	0.0006	1.2062	0.0025	-0.0003
ZN	0.0006	0.0007	1.0252	0.0027	0.0000
MO	0.0006	0.0005	0.7852	0.0024	0.0001
V	0.0013	0.0026	1.9721	0.0136	0.0001
FE	26.5772	15.5132	0.5837	55.4600	3.4530
CA	0.2723	0.3139	1.1526	1.5410	0.0096
MG	0.8846	0.5797	0.6553	2.9930	0.1909
AL	3.1013	1.6158	0.5210	6.2980	0.9375
TI	0.0496	0.0323	0.6502	0.1507	0.0041
MN	0.0458	0.0217	0.4728	0.0840	0.0139
W	0.0014	0.0018	1.2848	0.0084	0.0001
PB	0.0015	0.0012	0.8022	0.0050	-0.0002
CO	0.0014	0.0038	2.8064	0.0204	0.0000
CE	0.0156	0.0117	0.7499	0.0473	0.0018
CD	0.0001	0.0001	0.8691	0.0002	0.0000
LA	0.0081	0.0061	0.7597	0.0246	0.0007
BE	0.0008	0.0008	1.0765	0.0034	0.0001
SR	0.0012	0.0015	1.2909	0.0068	-0.0001
Y	0.0038	0.0044	1.1396	0.0178	0.0004
BA	0.0236	0.0209	0.8825	0.0756	0.0002
LI	0.0004	0.0003	0.6584	0.0010	0.0000
B	0.0005	0.0007	1.2738	0.0031	-0.0002
P	0.0094	0.0075	0.8018	0.0260	0.0003
NA	0.3679	0.4481	1.2179	1.9390	0.0069
K	1.5881	1.0222	0.6436	4.5270	0.1426
AG	0.0001	0.0001	0.8751	0.0005	0.0000

TABLE 22. NYBERGSFÄLTET. Analytical results of the re-analyzed drill core samples No 8458: 339-349 from DDH 005/83.

ID	8458XX-339	8458XX-340	8458XX-341	8458XX-342	8458XX-343	8458XX-344	8458XX-345	8458XX-346	8458XX-347	8458XX-348	8458XX-349
MET	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC
DAT	850124	850124	850124	850124	850124	850124	850124	850124	850124	850124	850124
KLO	1153	1154	1156	1157	1159	1200	1202	1203	1205	1207	1208
X											
Y											
Z											
DJUP						wt.-%					
GLD											
KOM											
LI	0.0002	0.0004	0.0005	0.0002	0.0003	0.0004	0.0005	0.0012	0.0014	0.0007	0.0005
BE	0.0038	0.0036	0.0003	0.0004	0.0001	0.0002	0.0001	0.0005	0.0009	0.0003	0.0006
B	0.0011	0.0010	0.0004	0.0006	0.0018	0.0007	0.0006	0.0005	0.0008	0.0014	0.0012
NA	0.0156	0.0446	1.1160	0.8125	0.0164	0.0130	0.9944	0.2721	1.0640	0.0580	0.3885
MG	0.7213	1.0680	0.6052	0.2952	0.5239	1.2550	1.1570	1.5750	2.6670	2.3090	1.5550
AL	1.7490	2.3010	5.1570	5.8200	1.3510	0.8366	4.1720	4.7860	6.1970	3.3240	3.8840
P	0.0113	0.0119	0.0010	0.0006	0.0112	0.0048	0.0036	0.0108	0.0102	0.0291	0.0181
K	0.8687	1.4260	2.7600	5.8890	0.5253	0.9756	1.7860	2.5800	3.0080	2.3710	1.9320
CA	0.0576	0.0682	0.5809	0.1965	0.0299	0.0307	0.4804	0.2852	0.8223	0.0913	0.3847
TI	0.0278	0.0531	0.0599	0.0581	0.0142	0.0036	0.0568	0.0792	0.0977	0.0683	0.0845
V	0.0006	0.0008	0.0003	0.0002	0.0003	0.0003	0.0007	0.0007	0.0023	0.0052	0.0009
MN	0.0728	0.0704	0.0221	0.0083	0.0617	0.0127	0.0128	0.0600	0.0440	0.0576	0.0476
FE	42.7800	30.3600	6.4300	3.2860	56.8200	4.6750	5.5180	37.1300	28.4200	47.9100	39.3000
CO	0.0022	0.0014	0.0010	0.0008	0.0005	0.0006	0.0008	0.0014	0.0010	0.0004	0.0002
NI	0.0002	0.0002	0.0006	0.0006	0.0006	0.0006	0.0006	0.0004	0.0013	0.0006	0.0009
CU	0.1327	0.0822	0.0815	0.0202	0.1182	0.3210	0.0681	1.1780	1.2000	0.0316	0.4632
ZN	0.0005	0.0008	0.0014	0.0003	0.0001	0.0019	0.0009	0.0006	0.0004	0.0006	0.0003
SR	0.0001	0.0002	0.0042	0.0047	0.0001	0.0001	0.0026	0.0008	0.0038	0.0002	0.0014
Y	0.0063	0.0054	0.0012	0.0015	0.0011	0.0018	0.0013	0.0033	0.0116	0.0035	0.0054
MO	0.0003	0.0004	0.0004	0.0004	0.0012	0.0002	0.0034	0.0021	0.0098	0.0157	0.0003
AG	0.0001	0.0001	0.0000	0.0000	-0.0001	0.0000	0.0001	0.0002	0.0002	0.0002	0.0001
CD	0.0001	0.0000	-0.0001	0.0000	0.0001	0.0000	0.0000	0.0002	0.0001	0.0000	0.0000
BA	0.0043	0.0119	0.0526	0.1809	0.0030	0.0093	0.0222	0.0396	0.0449	0.0219	0.0289
LA	0.0215	0.0177	0.0030	0.0026	0.0064	0.0049	0.0054	0.0122	0.0347	0.0386	0.0151
CE	0.0428	0.0315	0.0070	0.0060	0.0109	0.0108	0.0118	0.0230	0.0664	0.0737	0.0286
W	0.0016	0.0013	0.0003	0.0001	0.0005	0.0005	0.0008	0.0004	0.0013	0.0006	0.0003
PB	0.0022	0.0025	0.0025	0.0022	0.0016	0.0013	0.0024	0.0011	0.0011	0.0037	0.0028

TABLE 23. NYBERGSFÄLTET. Mean values, standard deviations, variation coefficients, maximum and minimum values of Table 22.

ELEMENT	MEDELV	STD	VKOEFF	MAX	MIN
KL	5498.500	0.0032	0.0000	5498.506	5498.495
CU	0.3361	0.4420	1.3153	1.2000	0.0202
NI	0.0006	0.0003	0.5110	0.0013	0.0002
ZN	0.0007	0.0005	0.7474	0.0019	0.0001
MO	0.0031	0.0050	1.6220	0.0157	0.0002
V	0.0011	0.0015	1.3167	0.0052	0.0002
FE	27.5117	19.4555	0.7072	56.8200	3.2860
CA	0.2752	0.2640	0.9593	0.8223	0.0299
MG	1.2483	0.7419	0.5943	2.6670	0.2952
AL	3.5980	1.8384	0.5109	6.1970	0.8366
TI	0.0548	0.0292	0.5330	0.0977	0.0036
MN	0.0427	0.0245	0.5725	0.0728	0.0083
W	0.0007	0.0005	0.6999	0.0016	0.0001
PB	0.0021	0.0008	0.3749	0.0037	0.0011
CO	0.0009	0.0006	0.6046	0.0022	0.0002
CE	0.0284	0.0237	0.8325	0.0737	0.0060
CD	0.0000	0.0001	2.2249	0.0002	-0.0001
LA	0.0147	0.0125	0.8496	0.0386	0.0026
BE	0.0010	0.0014	1.3897	0.0038	0.0001
SR	0.0017	0.0018	1.1067	0.0047	0.0001
Y	0.0039	0.0032	0.8290	0.0116	0.0011
BA	0.0381	0.0501	1.3148	0.1809	0.0030
LI	0.0006	0.0004	0.6811	0.0014	0.0002
B	0.0009	0.0004	0.4667	0.0018	0.0004
P	0.0102	0.0082	0.8024	0.0291	0.0006
NA	0.4359	0.4655	1.0680	1.1160	0.0130
K	2.1929	1.4720	0.6712	5.8890	0.5253
AG	0.0001	0.0001	1.1998	0.0002	-0.0001

TABLE 24. NYBERGSFÄLTET. Analytical results of the re-analyzed drill core samples No 8458: 350-361 from DDH 006/83.

ID	8458XX-350	8458XX-351	8458XX-352	8458XX-353	8458XX-354	8458XX-355	8458XX-356	8458XX-357	8458XX-358	8458XX-359
MET	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC
DAT	850124	850124	850124	850124	850124	850124	850124	850124	850124	850124
KLO	1210	1238	1239	1241	1242	1243	1244	1246	1247	1248
					wt.-%					
LI	0.0005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003	0.0003	-0.0001	0.0009
BE	0.0003	0.0013	0.0005	0.0008	0.0019	0.0002	0.0004	0.0003	0.0005	0.0004
B	0.0012	0.0011	0.0005	0.0010	0.0007	0.0011	0.0009	0.0010	0.0005	0.0011
NA	0.0256	0.1587	0.7606	0.1212	0.0091	0.0364	0.2121	0.0976	1.1150	0.1565
MG	1.5040	1.6980	0.8493	1.9200	0.6333	0.9693	0.7932	1.5990	0.3807	1.7830
AL	2.5350	3.3010	4.0980	2.9390	0.6972	2.0350	4.0980	2.7740	2.6770	3.2560
P	0.0208	0.0183	0.0016	0.0145	0.0012	0.0225	0.0058	0.0198	0.0018	0.0278
K	1.5610	1.3860	2.3780	1.5930	0.5049	1.1160	1.9630	1.7050	0.5329	1.8010
CA	0.1925	1.4120	0.2451	0.9185	4.8920	0.0723	0.2540	0.0537	0.3097	0.1266
TI	0.0420	0.0609	0.0486	0.0491	0.0053	0.0277	0.0813	0.1581	0.0247	0.0993
V	0.0007	0.0006	0.0004	0.0005	0.0006	0.0004	0.0007	0.0088	0.0006	0.0046
MN	0.1026	0.1419	0.0207	0.0618	0.0188	0.0550	0.0492	0.0612	0.0099	0.0530
FE	31.1800	30.7600	7.6540	42.1300	13.0600	49.3700	42.0000	50.7400	3.7730	43.1300
CO	0.0008	0.0000	0.0014	0.0000	0.0004	0.0002	0.0003	0.0003	0.0017	-0.0001
NI	0.0002	0.0006	0.0003	0.0003	0.0001	0.0002	0.0000	0.0004	0.0011	0.0001
CU	0.0394	0.0221	0.0450	0.2763	1.0960	0.0805	1.3880	0.0637	0.1586	0.0297
ZN	0.0001	0.0000	0.0019	0.0015	0.0013	0.0000	0.0006	0.0004	0.0006	0.0003
SR	0.0001	0.0004	0.0021	0.0004	0.0005	0.0001	0.0008	0.0002	0.0020	0.0006
Y	0.0036	0.0045	0.0015	0.0050	0.0186	0.0035	0.0028	0.0011	0.0005	0.0018
MO	0.0002	0.0003	0.0004	0.0001	0.0003	0.0006	0.0011	0.0000	0.0010	0.0010
AG	0.0001	0.0002	0.0001	0.0004	0.0003	0.0003	0.0004	0.0002	0.0000	0.0004
CD	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
BA	0.0115	0.0100	0.0525	0.0114	0.0041	0.0075	0.0320	0.0156	0.0133	0.0176
LA	0.0083	0.0064	0.0033	0.0354	0.1127	0.0104	0.0132	0.0068	0.0020	0.0118
CE	0.0130	0.0116	0.0073	0.0587	0.1919	0.0181	0.0252	0.0139	0.0058	0.0242
W	0.0094	0.0052	0.0003	0.0041	0.0029	0.0131	0.0009	0.0001	0.0001	0.0001
PB	0.0024	0.0020	0.0027	0.0004	0.0001	0.0022	0.0004	0.0011	0.0005	0.0020

TABLE 24 contd.

ID	8458XX-360	8458XX-361
MET	ICP,S-NHC	ICP,S-NHC
DAT	850124	850124
KLO	1249	1251
	wt.-%	
LI	0.0004	0.0000
BE	0.0011	0.0003
B	0.0010	0.0009
NA	0.4559	0.0128
MG	1.8900	0.7562
AL	3.5350	1.4370
P	0.0206	0.0157
K	2.1040	0.6339
CA	0.2506	0.0296
TI	0.0795	0.0188
V	0.0011	0.0045
MN	0.0293	0.0500
FE	21.8300	59.3700
CO	0.0002	0.0003
NI	0.0027	0.0002
CU	0.0199	0.0137
ZN	0.0001	0.0003
SR	0.0014	0.0000
Y	0.0011	0.0007
MO	0.0007	0.0002
AG	0.0002	0.0005
CD	0.0001	0.0001
BA	0.0214	-0.0001
LA	0.0035	0.0017
CE	0.0084	0.0053
W	0.0010	0.0002
PB	0.0013	0.0019

TABLE 25. NYBERGSFÄLTET. Mean values, standard deviations, variation coefficients, maximum and minimum values of Table 24.

ELEMENT	MEDELV	STD	VKOEFF	MAX	MIN
KL	5498.529	0.0032	0.0000	5498.535	5498.507
CU	0.2694	0.4646	1.7245	1.3880	0.0137
NI	0.0005	0.0007	1.4456	0.0027	0.0000
ZN	0.0006	0.0006	1.0725	0.0019	0.0000
MO	0.0005	0.0004	0.7731	0.0011	0.0000
V	0.0020	0.0026	1.3481	0.0088	0.0004
FE	32.9164	18.0209	0.5475	59.3700	3.7730
CA	0.7297	1.3726	1.8810	4.8920	0.0296
MG	1.2313	0.5521	0.4484	1.9200	0.3807
AL	2.7819	1.0151	0.3649	4.0980	0.6972
TI	0.0579	0.0421	0.7267	0.1581	0.0053
MN	0.0544	0.0371	0.6814	0.1419	0.0099
W	0.0031	0.0042	1.3600	0.0131	0.0001
PB	0.0014	0.0009	0.6348	0.0027	0.0001
CO	0.0005	0.0006	1.2288	0.0017	-0.0001
CE	0.0320	0.0524	1.6414	0.1919	0.0053
CD	0.0000	0.0001	1.2358	0.0001	0.0000
LA	0.0180	0.0312	1.7361	0.1127	0.0017
BE	0.0007	0.0005	0.7764	0.0019	0.0002
SR	0.0007	0.0007	1.0164	0.0021	0.0000
Y	0.0037	0.0049	1.3211	0.0186	0.0005
BA	0.0164	0.0141	0.8576	0.0525	-0.0001
LI	0.0003	0.0003	0.9190	0.0009	-0.0001
B	0.0009	0.0002	0.2541	0.0012	0.0005
P	0.0142	0.0092	0.6513	0.0278	0.0012
NA	0.2635	0.3461	1.3137	1.1150	0.0091
K	1.4399	0.6243	0.4336	2.3780	0.5049
AG	0.0003	0.0002	0.5826	0.0005	0.0000

TABLE 26. NYBERGSFÄLTET. Analytical results of the re-analyzed drill core samples 8458: 362-386 from DDH 007/83.

ID	8458XX-362	8458XX-363	8458XX-364	8458XX-365	8458XX-366	8458XX-367	8458XX-368	8458XX-369	8458XX-370	8458XX-371
MET	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC
DAT	850124	850124	850124	850124	850124	850124	850124	850124	850124	850124
KLO	1252	1253	1254	1256	1257	1258	1300	1301	1303	1304
						wt.-%				
LI	0.0002	0.0005	0.0000	0.0006	0.0002	0.0004	0.0002	0.0003	0.0006	0.0006
BE	0.0005	0.0011	0.0001	0.0005	0.0003	0.0005	0.0003	0.0004	0.0013	0.0017
B	0.0006	0.0009	0.0002	0.0007	0.0009	0.0007	0.0005	0.0005	0.0009	0.0007
NA	0.2408	0.5970	0.5773	0.1157	0.0288	0.3427	0.3087	0.3880	0.6364	1.4100
MG	0.8582	1.4100	0.1836	2.0400	1.2100	0.7093	0.7824	0.9703	0.8070	2.2730
AL	2.3320	3.7570	4.8740	3.3860	1.9920	4.6250	3.4950	4.6360	5.2160	5.7850
P	0.0201	0.0178	0.0027	0.0168	0.0136	-0.0003	0.0105	0.0034	0.0069	0.0220
K	1.1220	1.6600	5.1940	2.3280	1.2230	2.6200	1.9350	2.8720	2.4400	2.7820
CA	0.2184	0.5066	0.0426	0.1184	0.0357	0.1361	0.2076	0.1430	0.4902	0.5455
TI	0.0487	0.0662	0.0437	0.0661	0.0252	0.0549	0.0583	0.0610	0.0569	0.0942
V	0.0008	0.0005	0.0002	0.0005	0.0002	0.0003	0.0003	0.0007	0.0003	0.0011
MN	0.0670	0.0751	0.0022	0.0496	0.0563	0.0330	0.0388	0.0208	0.0384	0.0287
FE	25.4000	23.8900	1.7660	31.7600	48.8500	20.7200	29.0700	13.4800	28.6500	18.6100
CO	0.0015	0.0000	0.0002	-0.0001	0.0004	0.0000	0.0003	0.0003	0.0027	0.0003
NI	0.0000	0.0002	0.0006	0.0004	0.0000	0.0001	0.0002	0.0001	0.0000	0.0026
CU	0.0796	0.0093	0.0024	0.1464	0.3050	0.5304	0.0639	0.0566	0.1090	0.2089
ZN	0.0003	0.0006	0.0000	0.0011	0.0006	0.0009	0.0001	0.0007	0.0435	0.0007
SR	0.0011	0.0029	0.0035	0.0004	0.0002	0.0014	0.0011	0.0016	0.0024	0.0041
Y	0.0032	0.0027	0.0013	0.0038	0.0064	0.0026	0.0016	0.0014	0.0027	0.0015
MO	0.0003	0.0001	0.0004	0.0006	0.0017	0.0017	0.0005	0.0011	0.0019	0.0004
AG	0.0003	0.0002	0.0000	0.0003	0.0004	0.0002	0.0003	0.0001	0.0004	0.0002
CD	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0002	0.0000
BA	0.0116	0.0168	0.1323	0.0247	0.0101	0.0721	0.0272	0.0652	0.0395	0.0313
LA	0.0115	0.0044	0.0016	0.0096	0.0125	0.0069	0.0058	0.0058	0.0030	0.0072
CE	0.0199	0.0097	0.0042	0.0173	0.0264	0.0149	0.0123	0.0130	0.0082	0.0157
W	0.0009	0.0002	0.0000	0.0063	0.0003	0.0004	0.0005	0.0006	0.0007	0.0002
PB	0.0003	0.0008	0.0009	0.0018	0.0016	0.0023	0.0020	0.0004	0.0057	0.0010

TABLE 26 contd.

ID	8458XX-372	8458XX-373	8458XX-374	8458XX-375	8458XX-376	8458XX-377	8458XX-378	8458XX-379	8458XX-380	8458XX-381
MET	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC
DAT	850124	850124	850124	850124	850124	850124	850124	850124	850124	850124
KLO	1305	1307	1308	1310	1311	1313	1314	1316	1317	1319
						wt.-%				
LI	0.0004	0.0004	0.0002	0.0004	0.0004	0.0006	0.0002	0.0007	0.0001	0.0006
BE	0.0006	0.0002	0.0002	0.0002	0.0003	0.0004	0.0009	0.0019	0.0027	0.0008
B	0.0006	0.0007	0.0005	0.0009	0.0009	0.0009	0.0005	0.0006	0.0009	0.0004
NA	0.3933	0.0268	0.0459	0.0378	0.2855	0.3997	0.7429	0.4711	0.0042	0.9942
MG	1.6710	2.6590	2.8210	2.9540	3.0280	2.4420	1.4680	2.4580	0.4461	2.3720
AL	3.0030	2.9850	2.9890	3.2170	3.8520	3.8170	3.3510	3.8980	1.0980	4.4830
P	0.0139	0.0077	0.0140	0.0155	0.0217	0.0145	0.0182	0.0297	0.0050	0.0157
K	1.9020	2.5190	2.5360	2.8050	2.7260	2.4630	1.5650	2.5300	0.3310	2.2890
CA	0.1750	0.0159	0.0311	0.0130	0.2136	0.1498	0.2538	0.3275	0.0962	0.4154
TI	0.0748	0.0602	0.0492	0.0544	0.0563	0.0718	0.0728	0.1849	0.0071	0.1133
V	0.0010	0.0061	0.0070	0.0072	0.0047	0.0059	0.0006	0.0036	0.0003	0.0009
MN	0.0301	0.0436	0.0409	0.0491	0.0409	0.0445	0.0330	0.0406	0.0492	0.0295
FE	21.6000	31.4700	33.0600	37.8600	28.6200	31.1400	26.7000	25.0300	53.5300	15.6400
CO	0.0001	0.0001	0.0005	0.0008	0.0001	0.0003	0.0003	0.0009	0.0023	0.0002
NI	0.0003	0.0004	0.0001	0.0000	0.0010	0.0011	0.0002	0.0004	0.0002	0.0001
CU	0.0604	0.1968	0.1110	0.1020	2.3330	0.0445	0.0296	0.0862	1.4880	0.0230
ZN	0.0008	0.0014	0.0007	0.0009	0.0029	0.0010	0.0001	0.0003	0.0009	0.0001
SR	0.0013	0.0002	0.0002	0.0002	0.0007	0.0007	0.0019	0.0013	0.0001	0.0019
Y	0.0007	0.0011	0.0009	0.0009	0.0037	0.0033	0.0015	0.0028	0.0148	0.0018
MO	0.0002	0.0067	0.0025	0.0020	0.0611	0.0005	0.0003	0.0000	0.0001	0.0003
AG	0.0002	0.0004	0.0003	0.0003	0.0004	0.0003	0.0003	0.0003	0.0002	0.0002
CD	0.0000	0.0002	0.0001	0.0000	0.0001	0.0000	0.0001	0.0000	0.0002	0.0000
BA	0.0213	0.0212	0.0222	0.0263	0.0243	0.0265	0.0135	0.0313	0.0004	0.0177
LA	0.0020	0.0056	0.0041	0.0026	0.0456	0.0307	0.0057	0.0093	0.0065	0.0023
CE	0.0059	0.0124	0.0094	0.0060	0.0905	0.0566	0.0127	0.0187	0.0161	0.0062
W	0.0005	0.0004	0.0003	0.0002	0.0005	0.0002	0.0008	0.0001	0.0000	0.0004
PB	0.0002	0.0001	0.0012	0.0010	0.0006	0.0011	0.0003	0.0009	0.0022	0.0005

TABLE 26 contd.

ID	8458XX-382	8458XX-383	8458XX-384	8458XX-385	8458XX-386
MET	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC	ICP,S-NHC
DAT	850124	850124	850124	850124	850124
KLO	1320	1322	1323	1325	1326
			wt.-%		
LI	0.0003	0.0006	0.0001	0.0002	0.0011
BE	0.0002	0.0015	0.0003	0.0008	0.0006
B	0.0007	0.0006	0.0005	0.0008	0.0003
NA	0.2321	0.5127	0.1078	0.0375	0.7641
MG	1.0780	2.3460	0.1833	1.2590	1.2290
AL	1.8580	4.1140	0.9510	1.9510	3.6620
P	0.0237	0.0213	0.0193	0.0333	0.0187
K	0.9480	2.5240	0.2188	1.0550	1.6600
CA	0.2389	0.3734	0.0989	0.1903	0.4350
TI	0.0286	0.1093	0.0092	0.0228	0.0425
V	0.0008	0.0005	0.0002	0.0026	0.0009
MN	0.0428	0.0300	0.0425	0.0541	0.0232
FE	39.8300	22.7000	46.7900	56.2800	17.2700
CO	0.0002	0.0003	0.0004	0.0007	0.0016
NI	0.0002	0.0000	0.0008	0.0000	0.0023
CU	0.0611	0.0846	0.0231	0.1964	0.1271
ZN	0.0013	0.0001	0.0012	0.0010	0.0000
SR	0.0009	0.0023	0.0004	0.0003	0.0020
Y	0.0040	0.0020	0.0017	0.0064	0.0018
MO	0.0000	0.0001	0.0002	0.0005	0.0018
AG	0.0002	0.0003	0.0004	0.0001	0.0001
CD	0.0001	0.0000	0.0001	0.0001	0.0000
BA	0.0113	0.0267	0.0016	0.0040	0.0259
LA	0.0066	0.0058	0.0016	0.0242	0.0090
CE	0.0131	0.0113	0.0048	0.0440	0.0180
W	0.0178	0.0005	0.0378	0.0163	0.0003
PB	0.0016	0.0017	0.0026	0.0030	0.0019

TABLE 27. NYBERGSFÄLTET. Mean values, standard deviations, variation coefficients, maximum and minimum values of Table 26.

ELEMENT	MEDELV	STD	VKOEFF	MAX	MIN
KL	5498.548	0.1443	0.0000	5498.560	5498.536
CU	0.2591	0.5238	2.0215	2.3330	0.0024
NI	0.0005	0.0007	1.4952	0.0026	0.0000
ZN	0.0024	0.0086	3.5027	0.0435	0.0000
MO	0.0034	0.0121	3.5594	0.0611	0.0000
V	0.0019	0.0024	1.2457	0.0072	0.0002
FE	29.1886	12.7738	0.4376	56.2800	1.7660
CA	0.2189	0.1619	0.7396	0.5455	0.0130
MG	1.5863	0.8861	0.5586	3.0280	0.1833
AL	3.4131	1.2269	0.3595	5.7850	0.9510
TI	0.0613	0.0368	0.6000	0.1849	0.0071
MN	0.0402	0.0149	0.3719	0.0751	0.0022
W	0.0034	0.0086	2.4822	0.0378	0.0000
PB	0.0014	0.0012	0.8356	0.0057	0.0001
CO	0.0006	0.0007	1.2431	0.0027	-0.0001
CE	0.0187	0.0191	1.0199	0.0905	0.0042
CD	0.0001	0.0001	1.0153	0.0002	0.0000
LA	0.0092	0.0101	1.1005	0.0456	0.0016
BE	0.0007	0.0006	0.8798	0.0027	0.0001
SR	0.0013	0.0011	0.8246	0.0041	0.0001
Y	0.0030	0.0029	0.9679	0.0148	0.0007
BA	0.0282	0.0273	0.9675	0.1323	0.0004
LI	0.0004	0.0002	0.6163	0.0011	0.0000
B	0.0007	0.0002	0.3083	0.0009	0.0002
P	0.0154	0.0082	0.5291	0.0333	-0.0003
NA	0.3880	0.3434	0.8849	1.4100	0.0042
K	2.0899	1.0085	0.4825	5.1940	0.2188
AG	0.0003	0.0001	0.4231	0.0004	0.0000

TABLE 28. Nybergsfältet. Description and sampling sites of the re-analyzed samples
8448: 301-314, 8458: 387-400

Present sample No	Previous sample or locality No	R-coordinates (approximate)		Type of locality and/or sample	Rock type
8448:					
301	11E0i-118d	660447	144487	Kultergruvan; mine dump	'Fe-ore'
302	11E0i-121a	660418	144346	Limossegruvan W-part: mine dump	'Schistose' (skölig) grey leptite
303	-"- -121b	-"-	-"-	-"-	Quartzitic grey leptite
304	-"- -121c	-"-	-"-	-"-	Biotite-chlorite 'schistose' (skölig) rock sample
305	-"- -121d	-"-	-"-	-"-	Biotite-chlorite 'schistose' Fe 'ore'
306	11E0j-54a	660494	144598	Grindgruvan; central eastern part of Nybergsfältet: mine dump	Dark Fe & sulphide mineralization
307	-"- -54b	-"-	-"-	-"-	Biotite bearing quartzite
308	-"- -54c	-"-	-"-	-"-	Biotite-quartzite 'schist' (sköl)
309	-"- -54d	-"-	-"-	-"-	Quartz vein
310	-"- -54e	-"-	-"-	-"-	Biotite rich 'quartzite'
311	11E0i-122	660487	144354	Boulder; NW part of Nybergsfältet	Massive magnetite and sulphide mineralized skarn
312	-"- -123	660485	144369	-"-	Skarn banded leptite with magnetite and traces of sulphides
313	11E1i-125b	660563	144431	-"-	Fe in skarn with sulphides; mostly pyrite
314	-"- -125c	660555	144433	-"-	Magnetite with sulphides; mostly pyrite

TABLE 28. Nybergsfältet. Description and sampling sites of the re-analyzed samples
8448: 301-314, 8458: 387-400

Present sample No	Previous sample or locality No	R-coordinates (approximate)		Type of locality and/or sample	Rock type
cont.:					
8458:					
387	Nybergsfältet -1	660486	144567	Timmergruvan: mine dump	Sulphide mineralized (chalcopyrite & pyrite) sample
388	-"- -2	-"-	-"-	-"-	-"-
389	11E0j-34	660469	144592	Edvingruvan: mine dump	Biotite-chlorite schistose (skölig) 'quartzite'
390	-"- -"-	-"-	-"-	-"-	'Quartzite'
391	-"- -40	660469	144538	Bro- or Långgruvan: mine dump	Biotite-chlorite (skölig) bearing magnetite 'ore'
392	-"- -"-	-"-	-"-	-"-	'Quartzite'
393	-"- -54	660494	144598	Grindgruvan; central eastern part of Nybergsfältet: mine dump	Magnetite rich sample
394	11E 1j-19a	660560	144756	Strandgruvan: mine dump	Biotite-quartzite skarn
395	11E0i-114a	660410	144378	W part of Nybergsfältet but E of Limossegruvan	Fe-mineralized chlorite rich sample
396	-"- -114b	-"-	-"-	-"-	Biotite-chlorite 'schist' (sköl)
397	-"- -114c	-"-	-"-	-"-	Quartz vein
398	-"- -118a	660447	144487	Kultergruvan: mine dump	Biotite 'schist' (sköl)
399	-"- -118b	-"-	-"-	-"-	Biotite rich 'quartzite'
400	-"- -118c	-"-	-"-	-"-	Quartz vein

TABLE 29. RÖDKÄRRSMOSSEN. Recommended additional geophysical survey

Method	Profiles	Coordinates	Line-/station spacing	Priority	Miscellaneous
VLF-H	380N, 740N	80W- 560W	-/ 10m	High	JXZ
	720W-960W	200N- 740N	80m / 10m	High	NAA
	320W	600N- 700N	-/ 5m	Low	GBR
	240W, 400W	920N-1400N	-/ 20m	Low	GBR
Max-min	720 -800W	340N- 640N	40m /	High	c-c 50m/10m
	240W	0 - 300N	-	Low	c-c 100m/20m
	400W	600N- 900N	-	Low	c-c 50m/10m c-c 200m/20m
Dipole-dipole	800W	350N- 650N		High	a=25m, n=1-7
	720W	350N- 650N		?	
	280W	450N- 750N		Medium	
	240W	450N- 750N		?	
	240W	0 - 300N		Low	
Magnetic	640W-880W	380N- 560N	20/5m	High	2300m
	940W	920N-1400N	-/5m	Low	

TABLE 30. Galgbäcken. No of scheelite grains in the heavy-mineral samples 83 G2 GØ: 104-152, 159-164, 169-175, 201-237, and 239-327

Sample No	Weight (g) of concentrated sample	No of scheelite grains					No of scheelite grains/g conc. sample	W content in ppm	Notes
		Total	Blue		Yellow				
			'large'	'small'	'large'	'small'			
104	22.7	6					0.3	9	
105	3.6	1					0.3	17	
106	4.1	4					1	13	
107	28.0	5					0.2	5	
108	13.7	8					0.6	17	
109	25.3	1					0.0	9	
110	18.4	6					0.3	15	
111	13.4	28					2.1	110	
112	16.5	11					0.7	11	
113	2.4	1					0.4	49	
114	14.8	90					6.1	115	
115	7.2	42					5.8	20	
116	2.9	10					3.5	69	
117	8.8	46					5.2	71	
118	19.4	2					0.1	12	
119	4.2	6					1.4	48	
120	10.3	10					1	55	
121	13.6	4					0.3	31	
122	9.1	10					1.1	37	
123	2.8	8					2.9	56	
124	7.5	4					0.5	17	
125	1.5	12					8.0	55	
126	0.9	6					6.7	537	
127	10.4	47					4.5	53	
128	5.1	0					0.0	14	
129	15.8	51					3.2	36	
130	5.3	1					0.2	16	
131	15.7	8					0.5	9	
132	9.6	16					1.7	20	
133	20.3	17					0.8	10	
134	11.2	5					0.5	28	
135	14.9	4					0.3	13	
136	12.7	19					1.5	47	
137	38.0	21					0.6	11	
138	6.8	10					1.5	21	
139	1.1	1					0.9	30	

TABLE 30 contd.

Sample No	Weight (g) of concentrated sample	No of scheelite grains					No of scheelite grains/g conc. sample	W content in ppm	Notes
		Total	Blue		Yellow				
			'large'	'small'	'large'	'small'			
140	5.1	0					0.0	10	
141	18.2	3					0.2	7	
142	8.6	11					1.3	16	
143	8.8	9					1.0	29	
144	3.7	3					0.8	19	
145	4.4	3					0.7	21	
146	1.4	1					0.7	55	
147	14.3	5					0.4	12	
148	10.1	0					0.0	5	
149	8.8	1					0.1	10	
150	5.9	13					2.2	94	
151	11.3	12					1.1	33	
152	14.2	6					0.4	12	
159	7.8	3					0.4		A few weakly yellow/orange fluorescent grains (A) also occur.
160	0.7	4					5.7		
161	9.4	5					0.5		
162	12.2	6					0.5		A few (A)
163	2.3	9					3.9		Some (A)
164	14.6	1					0.1		A few (A)
169	0.7	5					7.1		Some (A)
170	9.6	3					0.3		" "
171	5.9	2					0.3		A few (A)
172	1.6	11					6.9		
173	7.6	0					0.0		
174	13.1	5					0.4		
175	1.4	20					14.3		A few (A)
201	10.2	7					0.7		
202	19.3	2					0.1		A few (A)
203	1.6	4					2.5		
204	7.4	1					0.1		

TABLE 30 contd.

Sample No	Weight (g) of concentrated sample	No of scheelite grains					No of scheelite grains/g conc. sample	W content in ppm	Notes
		Total	Blue		Yellow				
			'large'	'small'	'large'	'small'			
205	22.7	3					0.1		
206	1.5	2					1.3		
207	11.3	2					0.2		
208	10.7	2					0.2		
209	2.0	4					2.0		
210	19.6	4					0.2		A few (A)
211	11.9	0					0.0		" " "
212	1.8	2			yellow		1.1		
213	17.3	3			2	1	0.2		
214	13.0	5					0.4		A few (A)
215	1.0	1		blue			1.0		
216	9.2	0					0.0		
217	9.9	7			4	3	0.7		
218	1.3	2		blue			1.5		Some (A)
219	19.7	6					0.3		
220	18.9	3		3			0.2		A few (A)
221	1.2	2		2			1.7		" " "
222	19.8	5					0.3		" " "
223	9.9	4					0.4		
224	1.5	1			yellow		0.7		
225	9.1	3			2	1	0.3		
226	16.6	7					0.4		A few (A)
227	3.2	1			yellow		0.3		
228	16.1	7					0.4		
229	14.0	7					0.5		
230	3.9	4					1.0		
231	15.4	4	4				0.3		A few (A)
232	7.3	2	2				0.3		" " "
233	3.1	0					0.0		
234	18.2	3	1	1	1		0.2		Some (A)
235	7.7	3			3		0.4		
236	5.4	9	3	4	1	1	1.7		A few (A)
237	12.8	1		1			0.1		
239	3.8	6		3	2	1	1.6		

TABLE 30 contd.

Sample No	Weight (g) of concentrated sample	No of scheelite grains					No of scheelite grains/g conc. sample	W content in ppm	Notes
		Total	Blue		Yellow				
			'large'	'small'	'large'	'small'			
240	16.2	9		5		4	0.6		A few (A)
241	18.8	11	2	4	3	2	0.6		" " "
242	4.0	8			5	3	2.0		
243	23.6	12	1	5	3	3	0.5		A few (A)
244	15.3	2	2				0.1		" " "
245	3.5	2	1	1			0.6		
246	24.6	19		2	13	4	0.8		A few (A)
247	16.6	15		3	9	3	0.9		" " "
248	2.6	0					0.0		" " "
249	21.4	9		1	5	3	0.4		" " "
250	13.3	4		4			0.3		Some (A)
251	2.0	0					0.0		
252	16.0	2	1	1			0.1		Some (A)
253	14.1	4			2	2	0.3		A few (A)
254	2.2	3		3			1.4		" " "
255	20.6	5		1	1	3	0.2		" " "
256	13.8	6		2		4	0.4		" " "
257	3.5	3		3			0.9		" " "
258	22.3	7			5	2	0.3		" " "
259	4.4	3		3			0.7		Some (A)
260	1.5	0					0.0		
261	1.2	1		1			0.8		
262	15.9	3			3		0.2		A few (A)
263	1.0	1			1		1.0		
264	10.8	8			6	2	0.7		A few (A)
265	10.9	3			2	1	0.3		" " "
266	2.3	6		5	1		2.6		
267	9.2	6		5	1		0.7		A few (A)
268	13.1	8			6	2	0.6		" " "
269	3.4	1		1			0.3		" " "
270	18.2	4	1	3			0.2		" " "
271	21.2	4		1	3		0.2		" " "
272	3.6	1			1		0.3		" " " and many dull blue (B) fluorescent grains
273	9.9	10	1	8	1		1.0		

TABLE 30 contd.

Sample No	Weight (g) of concentrated sample	No of scheelite grains					No of scheelite grains/g conc. sample	W content in ppm	Notes
		Total	Blue		Yellow				
			'large'	'small'	'large'	'small'			
274	5.9	4		2	2		0.7		Some (A)
275	1.8	4	1	2	1		2.2		A few (A)
276	8.5	6		5		1	0.7		" " "
277	3.9	3	2	1			0.8		" " "
278	2.1	3		1	1	1	1.4		" " " and some (B)
279	10.8	3	1	2			0.3		A few (A)
280	4.5	4		2		2	0.9		
281	2.8	5	2	3			1.8		A few (A)
282	17.2	5	2	3			0.3		" " " and some (B)
283	10.4	13		13			1.3		A few (A)
284	1.9	5		4		1	2.6		" " "
285	6.3	3				3	0.5		" " "
286	10.2	10		5	3	2	1.0		" " "
287	0.8	1		1			1.3		
288	5.0	2			2		0.4		A few (A)
289	22.2	3	1		2		0.1		
290	2.0	2	1	1			1.0		
291	16.4	4	1	3			0.2		A few (A)
292	22.0	7	2	3	2		0.3		" " "
293	2.7	2			2		0.7		" " "
294	10.3	2			2		0.2		
295	18.6	9		7	2		0.5		" " " and 1 stronly read fluorescent grain
296	4.5	2					0.4		A few (A)
297	17.5	11		8	2	1	0.6		" " "
298	19.7	7		4	2	1	0.4		" " "
299	3.9	3	1		1	1	0.8		
300	10.0	11	3	5	1	2	1.1		
301	13.5	12		12			0.9		A few (A)
302	2.1	6		4	2		2.9		" " "
303	11.4	45	9	28	3	5	4.0		" " "
304	12.8	16		7	1	8	1.3		" " "
305	2.6	7	2	2		3	2.7		
306	5.6	9	1	3		5	1.6		

TABLE 30 contd.

Sample No	Weight (g) of concentrated sample	No of scheelite grains					No of scheelite grains/g conc. sample	W content in ppm	Notes
		Total	Blue		Yellow				
			'large'	'small'	'large'	'small'			
307	2.0	2	1	1			1.0		
308	6.1	8		5	1	2	1.3		A few (A)
309	2.2	13	1	4	3	5	5.9		" " "
310	7.1	9	2	3	1	3	1.3		" " "
311	2.3	5		3		2	2.2		" " "
312	12.3	6		3	1	2	0.5		" " "
313	2.4	11	1	5		5	4.6		
314	10.6	6		6			0.6		A few (A)
315	3.2	5		2		3	1.6		
316	7.8	14	3	9	1	1	1.8		A few (A)
317	1.9	4	1	2		1	2.1		" " "
318	8.9	10	3	5	2		1.1		" " "
319	2.7	7	1	4		2	2.6		" " "
320	6.3	9	2	5	1	1	1.4		Some (A)
321	3.3	8	2	3	1	2	2.4		A few (A)
322	6.5	7	1	5	1		1.1		" " "
323	3.7	3	2	1			0.8		" " "
324a	10.1	1	1				0.1		0.2-0.5 mm fraction
324b	6.3	2			2		0.3		0.5-1.0 mm "
325	10.3	2	1	1			0.2		A few (A)
326	4.6	1				1	0.2		A large amount of (B)
327	12.9	0					0.0		Some (A) and (B)

Table 31: K, U and Th contents in outcrops within the Gränshyttan exploration claims and a rockdescription.

coordinates		K (%)	U (ppm)	Th (ppm)	rocktype
6620.358	1454.954	6.4	5	21	grey leptite with skarn-intercalations
		1.9	4	12	- " -
6620.488	1454.959	4.7	3	19	grey leptite
6620.751	54.987	2.5	2	16	- " -
20.726	55.058	4.9	3	19	red - light leptite
		2.7	2	14	- " - to the W
19.966	54.755	2.4	3	12	grey leptite
		2.7	4	5	pegmatite
20.014	54.761	2.1	4	12	grey leptite
21.594	54.874	4.3	5	18	- " - , qz-porphyritic
21.547	54.856	2.9	3	16	- " -
21.364	55.902	3.6	3	12	- " -
21.311	55.788	2.5	3	11	grey leptite-gneiss, qz-porph.
21.232	55.672	2.4	2	14	- " - - " -
20.951	55.652	2.6	2	16	grey leptite / leptite-gneiss
19.903	56.217	2.2	4	13	- " -
19.924	56.124	3.4	3	13	- " - , qz-porphyritic
19.001	56.768	3.3	4	1	pegmatite
19.058	56.683	2.3	3	17	grey leptite/leptite-gneiss, mica rich
19.040	56.625	2.3	3	13	grey leptite, mica rich and qz-porphyritic
19.715	55.880	2.6	3	14	grey leptite
19.604	56.266	2.3	2	12	- " -
18.938	55.905	1.3	3	13	grey leptite-gneiss
18.564	55.780	2.8	2	14	- " - " -
18.581	56.448	2.0	5	19	- " - " -, mica rich
18.374	56.462	3.1	5	20	- " - " - - " -
		1.6	6	1	pegmatite
22.550	54.225	4.7	4	7	- " -
		4.6	12	9	grey leptite, mica rich
21.901	54.236	3.2	3	14	- " - with skarninter-calations
23.097	54.471	4.1	4	1	pegmatite
		3.0	3	13	grey leptite
22.995	54.425	2.0	2	13	red leptite
22.892	54.367	2.7	3	12	grey leptite
23.003	56.218	5.6	5	18	- " - , mica rich
22.915	56.216	3.6	2	17	- " - - " -
22.689	56.230	3.0	4	13	- " -
22.610	56.235	3.5	2	10	- " -
19.796	57.425	3.0	4	16	- " - / leptite-gneiss, mica rich and diffusely banded
19.887	57.540	1.7	4	14	red-grey leptite, diffusely banded
19.327	56.913	3.2	5	13	grey leptite
21.963	57.738	3.2	3	16	- " - , mica rich
22.124	57.694	5.7	4	17	- " -
22.204	57.477	4.4	4	18	- " - , mica rich
22.329	56.532	4.2	3	15	- " - , qz-porphyritic (geochemical sample)
22.767	56.500	2.6	4	16	banded grey leptite with skarn and magnetite

Table 31: (contd.)

coordinates		K (%)	U (ppm)	Th (ppm)	rocktype
6622.074	1457.451	3.7	4	15	grey leptite
22.132	57.447	2.1	2	12	- " - /leptite-gneiss
22.204	57.717	3.4	5	17	- " - , mica rich
22.263	57.637	4.3	2	12	- " -
22.819	57.739	2.1	0	1	amphibolite
		3.2	2	13	grey leptite, mica rich
22.635	57.871	3.2	3	14	- " - - " -
23.618	58.216	2.2	3	16	- " - - " -
23.568	58.177	2.9	3	15	mica schist
23 473	58.075	3.2	5	16	grey leptite, mica rich and qz-porphyritic
23.549	57.865	4.5	4	15	grey leptite, qz-porphyritic (geochemical sample)
23.633	57.764	3.5	2	11	grey leptite, qz-porphyritic
23.747	58.120	4.1	4	14	- " - , mica rich
24.031	57.777	4.6	5	14	- " - , - " - and diffusely banded with skarn
23.607	57.643	3.9	3	15	grey leptite
23.616	57.276	2.2	4	13	- " - , qz-porphyritic (geochemical sample)
23.591	57.193	2.2	4	15	grey leptite, qz-porphyritic
23.657	57.151	2.9	4	15	- " - with skarn
23.974	57.442	2.0	3	11	- " - , qz-porphyritic
24.067	57.413	2.1	3	12	- " - - " -
23.528	57.357	2.2	3	14	- " -
23.455	57.317	4.6	4	14	- " - , mica rich
23.362	57.297	2.4	2	14	- " -
23.403	57.401	3.5	2	14	- " - , mica rich (geochemical sample)
23.343	57.391	4.5	3	14	grey leptite
23.423	57.021	2.7	2	15	- " - , banded
23.368	57.027	2.8	2	15	- " - , diffusely banded with skarn, mica rich and qz-porphyritic
23.354	57.186	3.1	3	14	grey leptite with skarn and carbonates
23.295	57.126	1.1	2	12	grey leptite with skarn
23.315	57.097	2.3	6	18	- " - - " -
24.001	56.988	1.5	3	12	- " - , qz-porphyritic
24.048	57.026	1.8	4	12	- " - - " - , skarn
23.970	57.081	3.0	4	13	banded grey leptite with skarn
23.833	57.111	3.2	3	13	grey leptite, mica rich and qz-porphyritic
23.696	57.031	4.3	4	13	grey leptite, diffusely banded
		2.2	5	3	pegmatite
24.458	56.516	1.6	3	14	grey leptite, diffusely banded, mica rich and qz-porphyritic
24.272	56.457	2.0	3	15	banded grey leptite with skarn
24.048	56.738	4.0	3	11	grey leptite, qz-porphyritic
23.818	56.961	2.7	2	13	- " - - " -
23.665	56.961	2.2	3	11	- " - - " -
23.923	56.249	1.9	4	14	- " -
23.979	56.333	1.5	4	12	- " -
24.058	56.512	1.6	3	12	- " - , qz-porphyritic (geochemical sample)

Table 31: (contd.)

coordinates		K (%)	U (ppm)	Th (ppm)	rocktype
6624.037	1456.470	2.0	2	12	grey leptite, qz-porphyritic
24.115	56.193	5.5	3	15	- " -
24.123	56.004	3.3	2	15	- " -
24.086	55.881	3.2	2	15	- " - , qz-porphyritic
24.196	55.872	3.3	2	17	- " - with skarn
24.259	56.286	3.1	3	16	banded grey leptite with skarn
24.274	56.142	4.2	5	16	- " - with hematite-bands
24.255	56.091	5.4	5	15	grey leptite, diffusely banded
24.431	56.038	1.4	2	14	- " -
24.401	55.845	3.3	3	13	- " - , banded with skarn

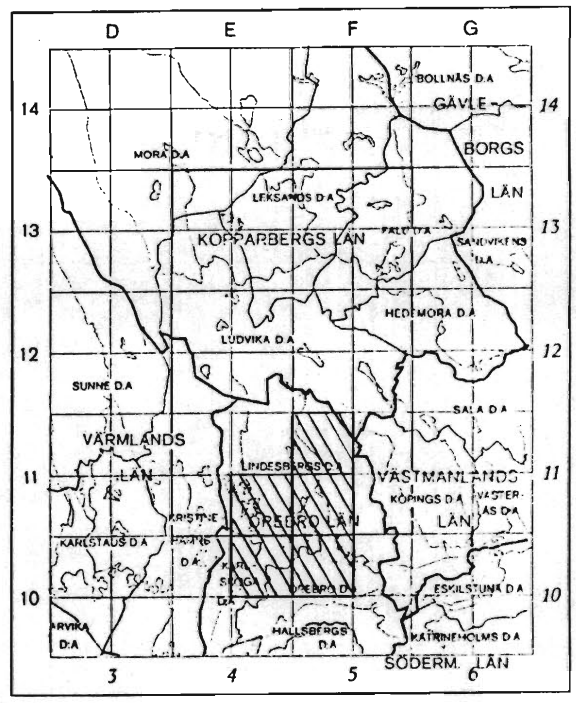
TABLE 32. The claims and their reports.

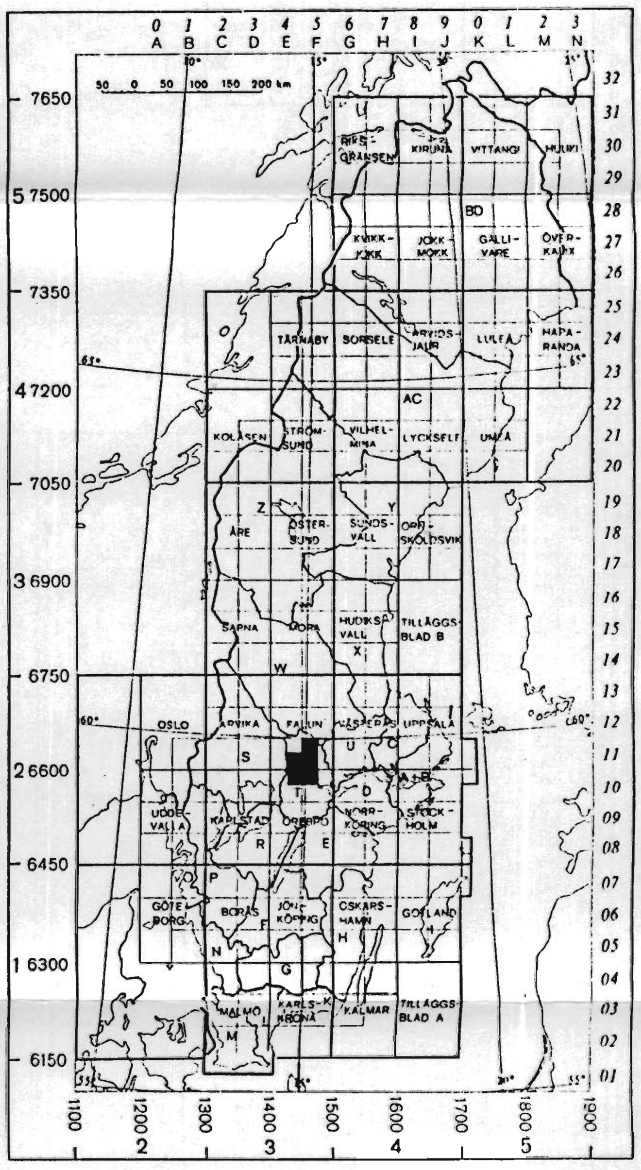
Report	Claims											
	Västra Bergs- and Linschakt-gruvan (Stribergsfältet)	Fogdhyttefältet	Rödbergsfältet	Vikers gruvor (Vikersfältet)	Mossgruvan (Skärhyttefältet)	Nyberg No 1 (Nybergsfältet)	Rödkärrsmossen No 1 (Röd-kärrsfältet)	Galgbäcken No 1 & No 2	Åshyttan	Skrikarhyttan	Skrikarbo	Gränshyttan No 1 & No 2
Grb. 9							X					
Bsg 84-345	X		X	X	X	X		X				
Bsg 84-361						X		X		X	X	
Bsg 84-376								X		X	X	
B 85-6						X	X	X		X	X	
B 85-22							X	X				X
B 85-29		X	X				X	X		X	X	X
B 86-3		X	X	X		X	X	X	X	X	X	X

N

S

10 km





TOPOGRAPHIC MAPS

covering the NORA AREA

Map sheet(s): HUV 232 & HUV 234	Author(s): C. Hardenby
Scale:	Drawn by:
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 1985-07-10
	Project: 38121
	Report: B 86-3
	Fig.: 1:1

S/U

XII

VII

VI

VIII

IX

II

III

IV

X

V

XI

Gällivaare

Grecken

Sjödra

Fäsjön

Nora sjön

Vikern

Skirjen

Malmlängen

Aivilängen

Älgsimmen

ASSI

Ö

UTMÅL - MINING CLAIMS

LKAB / Statsgruvor

Avesta AB

SSAB

Boliden AB

Stora Kopparberg AB

NSG

Övrigt

INMUTNINGAR - EXPLORATION CLAIMS

LKAB / Statsgruvor

Avesta AB

SSAB

Boliden AB

Stora Kopparberg AB

SGU / NSG

Övriga

Koncession

ASSI gammal beteckning

ASSI Ö-övrigt

S/U = ansökade/utgångna utmål/inmutningar
relinquished / expired claims

0km 5km

MINING & EXPLORATION CLAIMS

NORA-STRÅSSA AREA

Map sheet: 11E SO, 11F SV 10E NO, 10F NV	Author: G. Hardenby
Scale:	Drawn by:
LKAB Prospektering Håkeberg S-771 00 Ludvika, Sweden	Date: 1986-02-25
	Project nr.: 38121
	Report nr.: B 86-3 Fig.: 1:2

1435 1445 1455 1465

6630

6620

6610

6600

6590

Gräns-
sjön

1985

Aspen

Rossvalen
Råsvalen

Sången

Lundsfjärden

Halvar-
snoren

1985

Usken

1983

Fåsjön

1983

Grecken

Bälg-
sjön

82

1983

1985

1983

1985

1982

1984-85

Skärjen

Nora-
sjön

-82

-85

Saxen

Vikern

-82

1982

Malm-
lången

Alvlången

1435 1445 1455

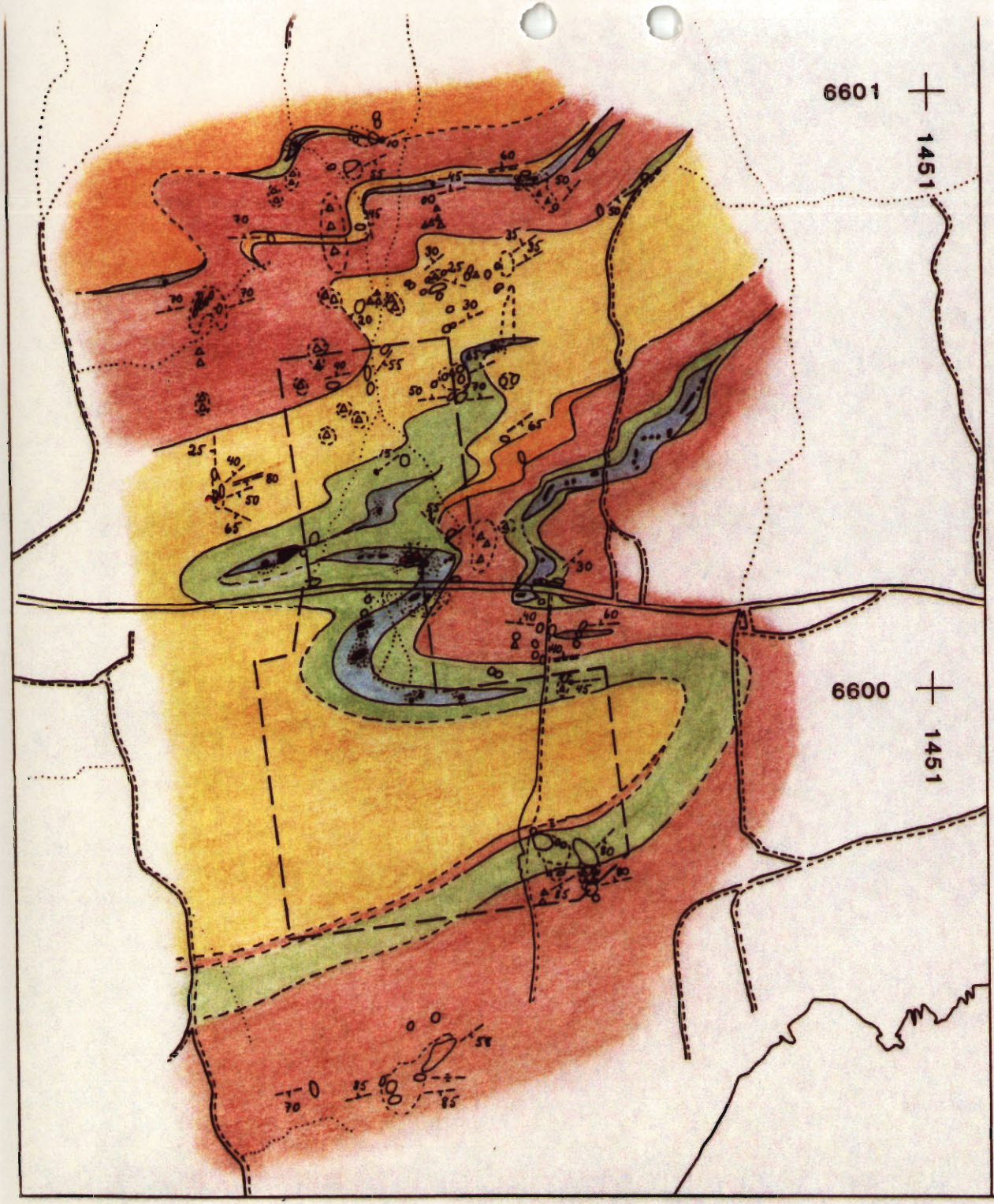
Areas geologically mapped in 1982–1984

Areas geologically mapped in 1985

0 km 5 km

GEOLOGICAL MAPPING of the 'NORA AREA'

Map sheet(s): 10E NO, 10F NV, 11E SO, 11E NO, 11F SV, 11F NV.	Author(s): C. Hardenby
Scale:	Drawn by: C. Hardenby
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 1986-01-22
	Project: 38121
	Report: B 86-3
	Fig.: 1:3



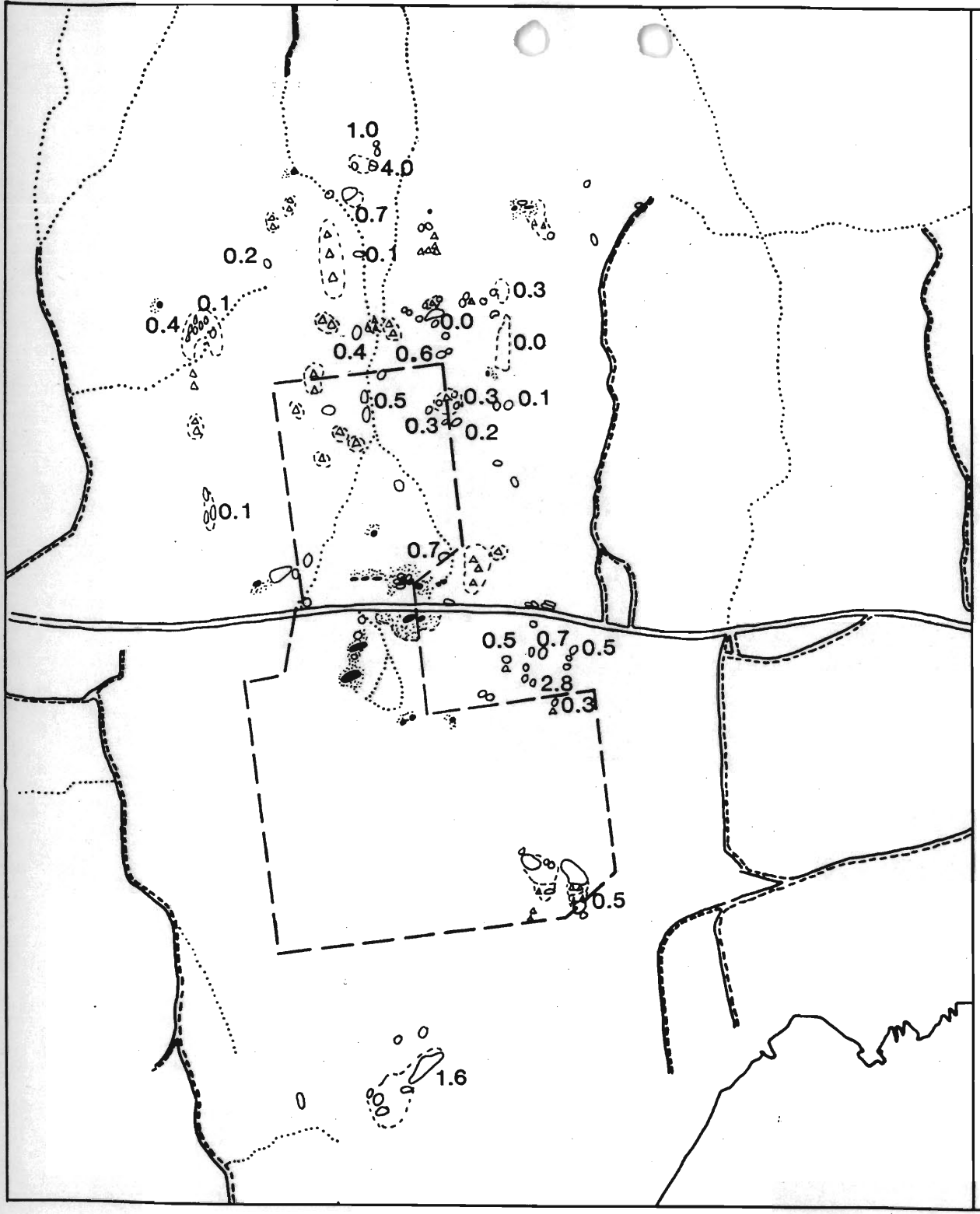
LEGEND

- Diabase
- Pegmatite
- Amphibolite
- Reddish leptite & leptite gneiss
- Grey " " " (+ biotite)
- Whitish grey " " " (+ sericite + chlorite)
- Mineralized zone: magnetite 'ore', amphibole skarn, biotite-chlorite-amphibole schist

- Outcrop
- Area with outcrops
- Boulder
- " " boulders
- Mine pit
- Mine dump
- Strike & dip of schistosity (30)
- Boudary of the Fogdhyttan claims

GEOLOGICAL MAP OF THE FOGDHYTTAN CLAIMS

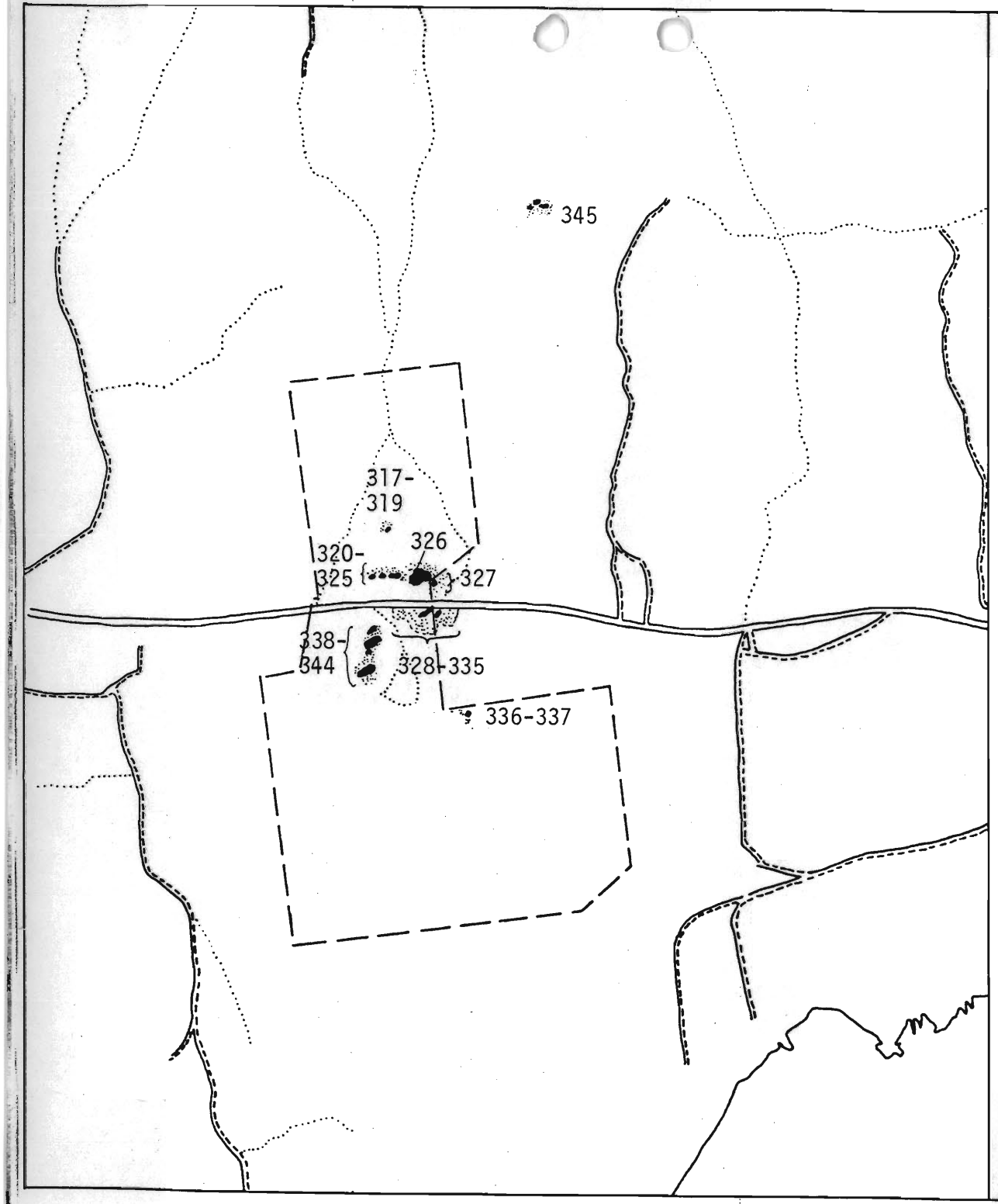
Map sheet(s): 10E 9j, 11E 0j, 10F 9a, 11F 0a	Author(s): C. Hardenby
Scale: 1:10 000	Drawn by: C.H
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 860220
	Project: 38121
	Report: B 86-3
	Fig.: 3:1



POTASSIUM VARIATION IN OUTCROPS WITHIN THE FOGDHYTTAN CLAIMS

K in wt%

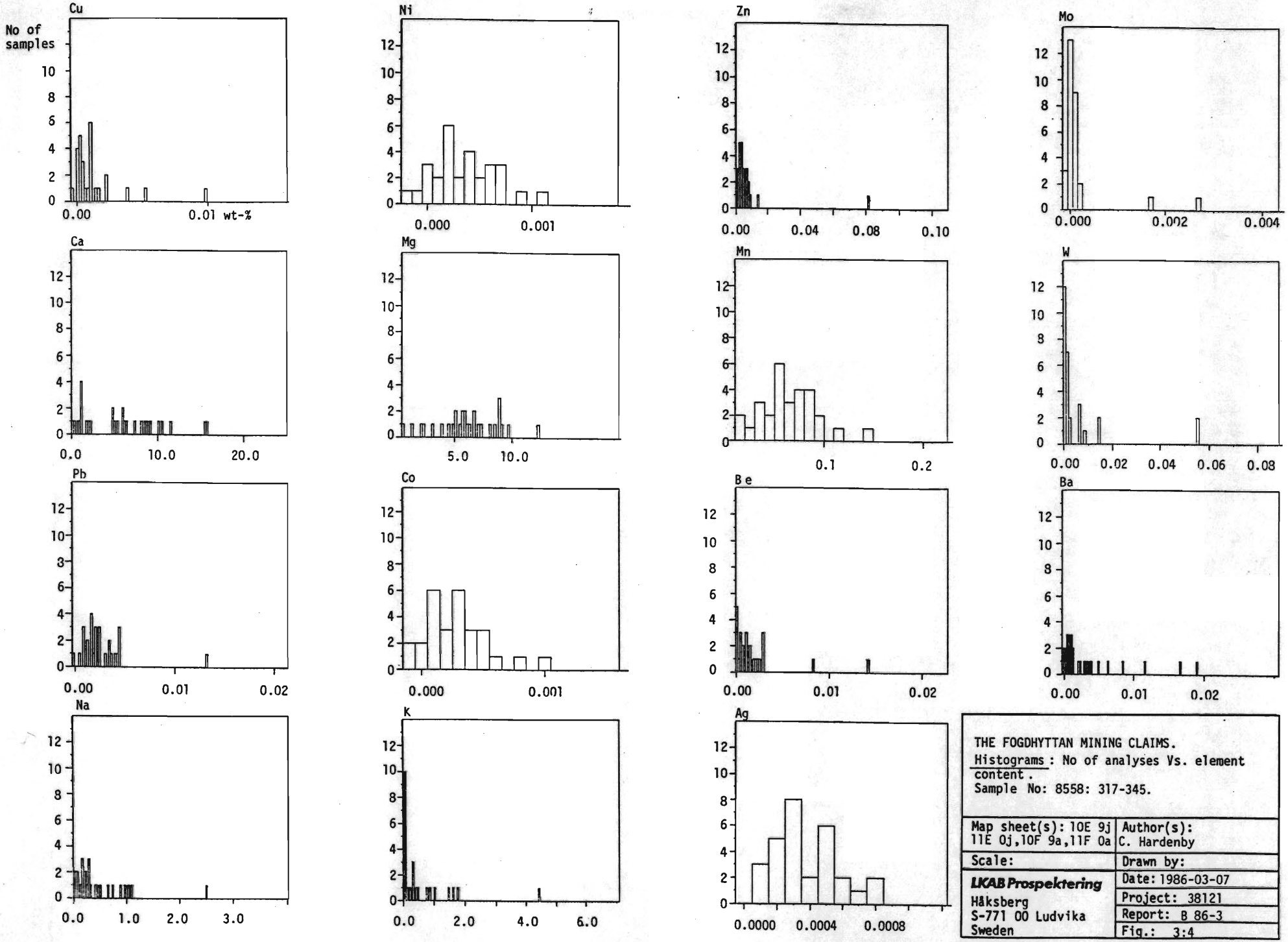
Map sheet(s): 10E 9j, 11E 0j, 10F 9a, 11F 0a	Author(s): C. Hardenby
Scale: 1:10 000	Drawn by: C.H / E.L
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 860220 Project: 38121 Report: B 86-3 Fig.: 3:2



THE FOGDHYTTAN CLAIMS

Sampling sites of samples 8558: 317-345

Map sheet(s): 10E 9j, 11E 0j, 10F 9a, 11F 0a	Author(s): C. Hardenby
Scale: 1:10 000	Drawn by: C.H / E.L
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 860220 Project: 38121 Report: B 86-3 Fig.: 3:3

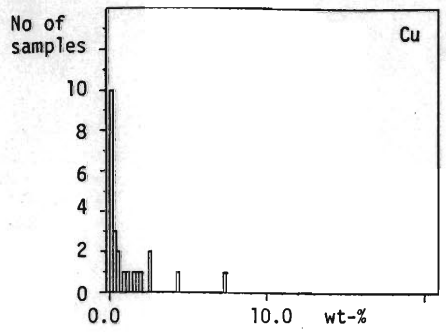


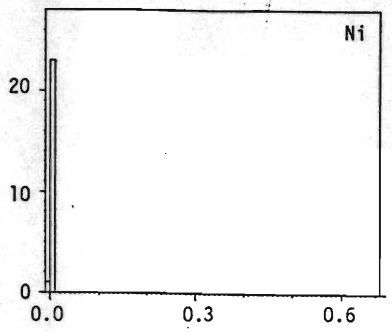
THE FOGDHYTTAN MINING CLAIMS.

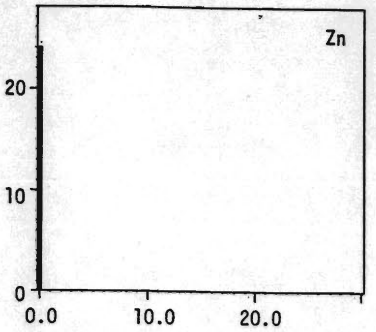
Histograms: No of analyses Vs. element content.

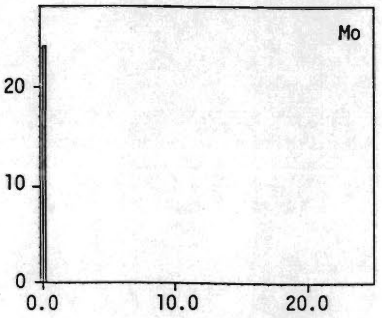
Sample No: 8558: 317-345.

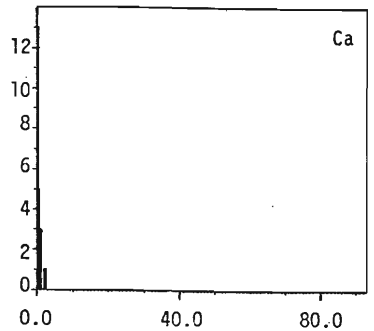
Map sheet(s): 10E 9j 11E 0j,10F 9a,11F 0a	Author(s): C. Hardenby
Scale:	Drawn by:
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 1986-03-07 Project: 38121 Report: B 86-3 Fig.: 3:4

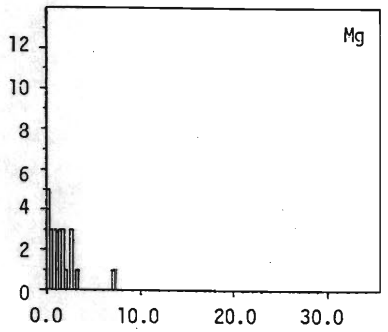


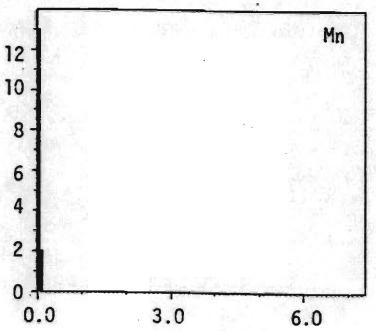


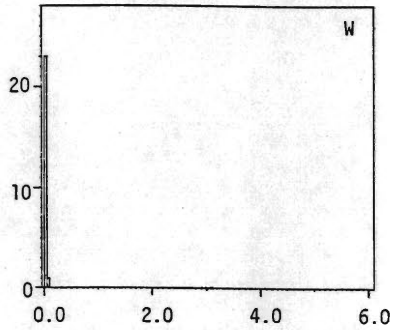


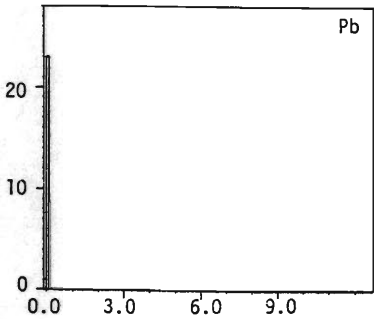


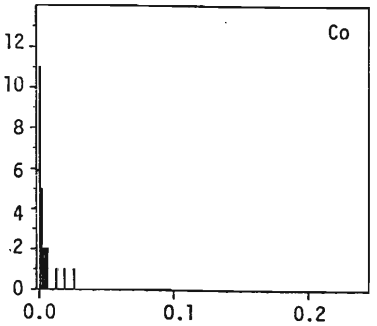


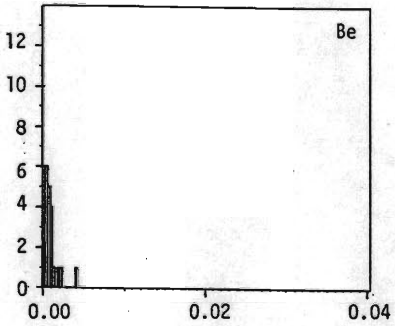


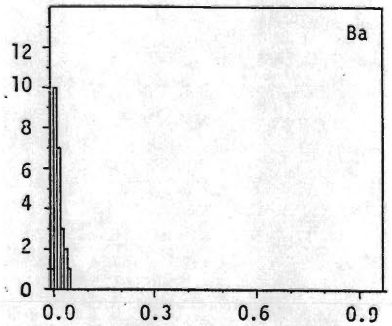


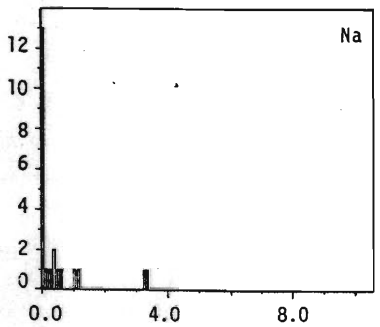


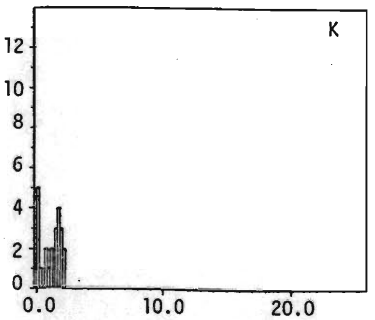


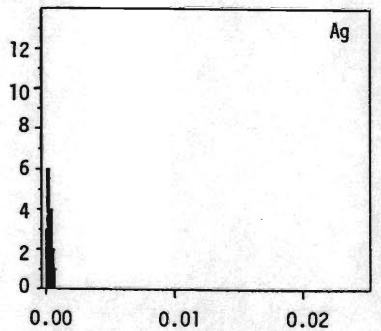










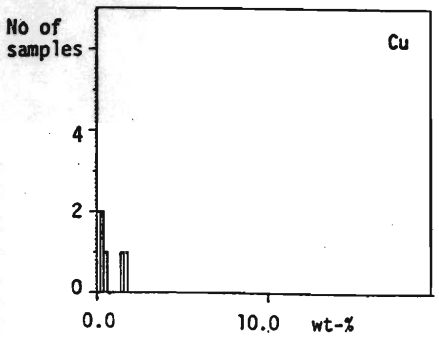


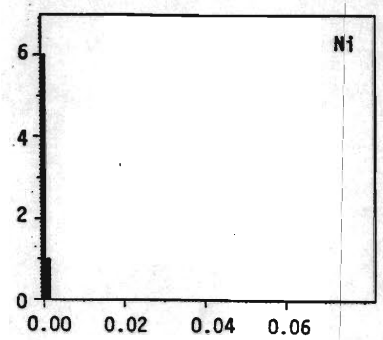
NYBERGSFÄLTET: MINING & EXPLORATION CLAIMS

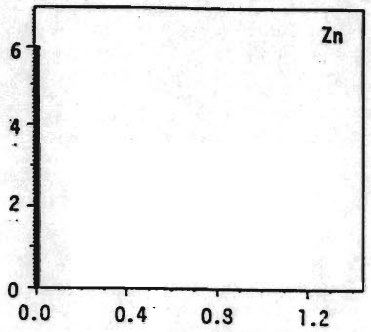
Histograms: No of analyses Vs. element content.

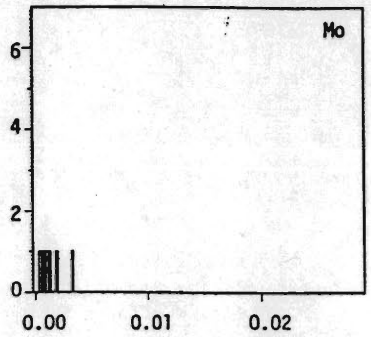
Mine dump samples with numbers:
8448: 301-310, 8458: 387-400.

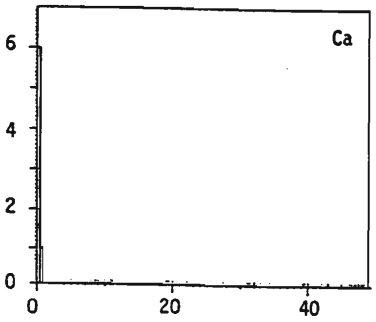
Map sheet(s): 11E 0i-j, 11E 1i-j	Author(s): C. Hardenby
Scale:	Drawn by:
LKAB Prospektering	Date: 1986-03-10
Håksberg	Project: 38121
S-771 00 Ludvika	Report: B 86-3
Sweden	Fig.: 6:1

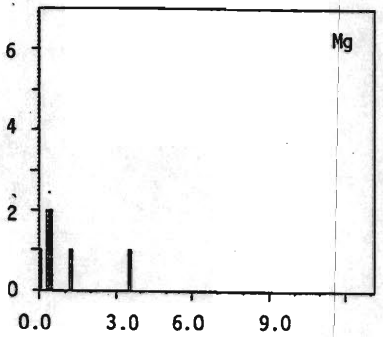


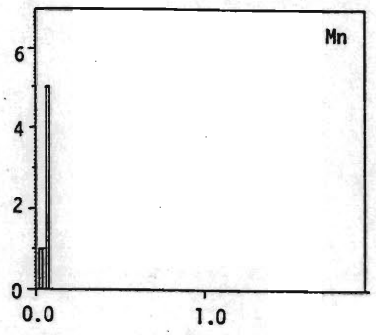


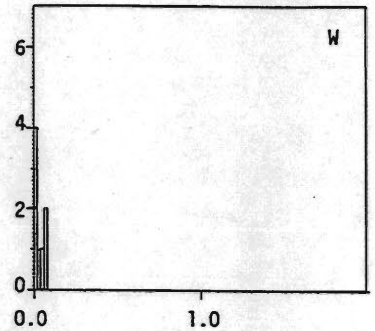


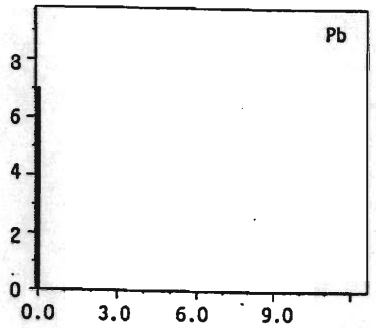


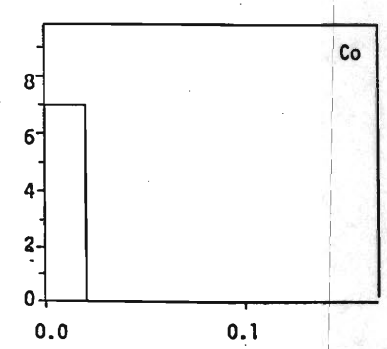


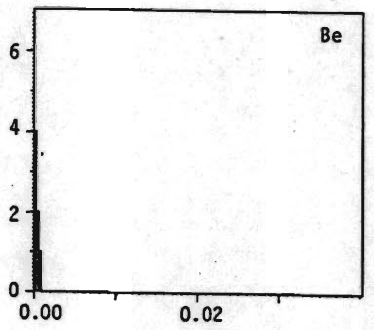


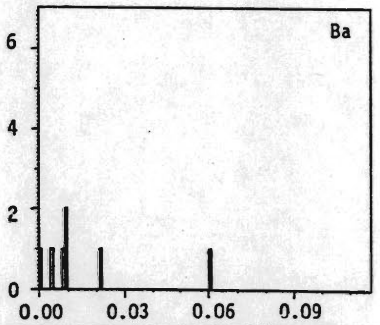


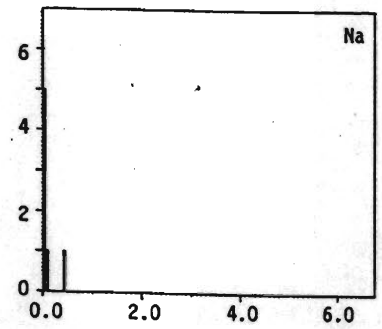


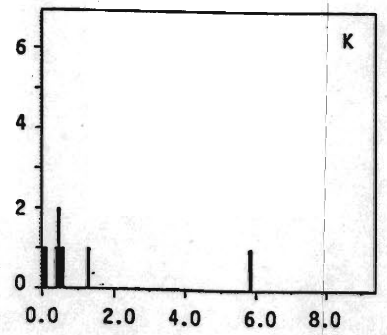


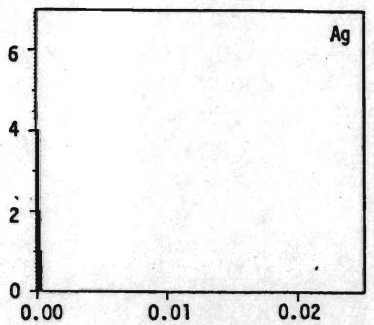










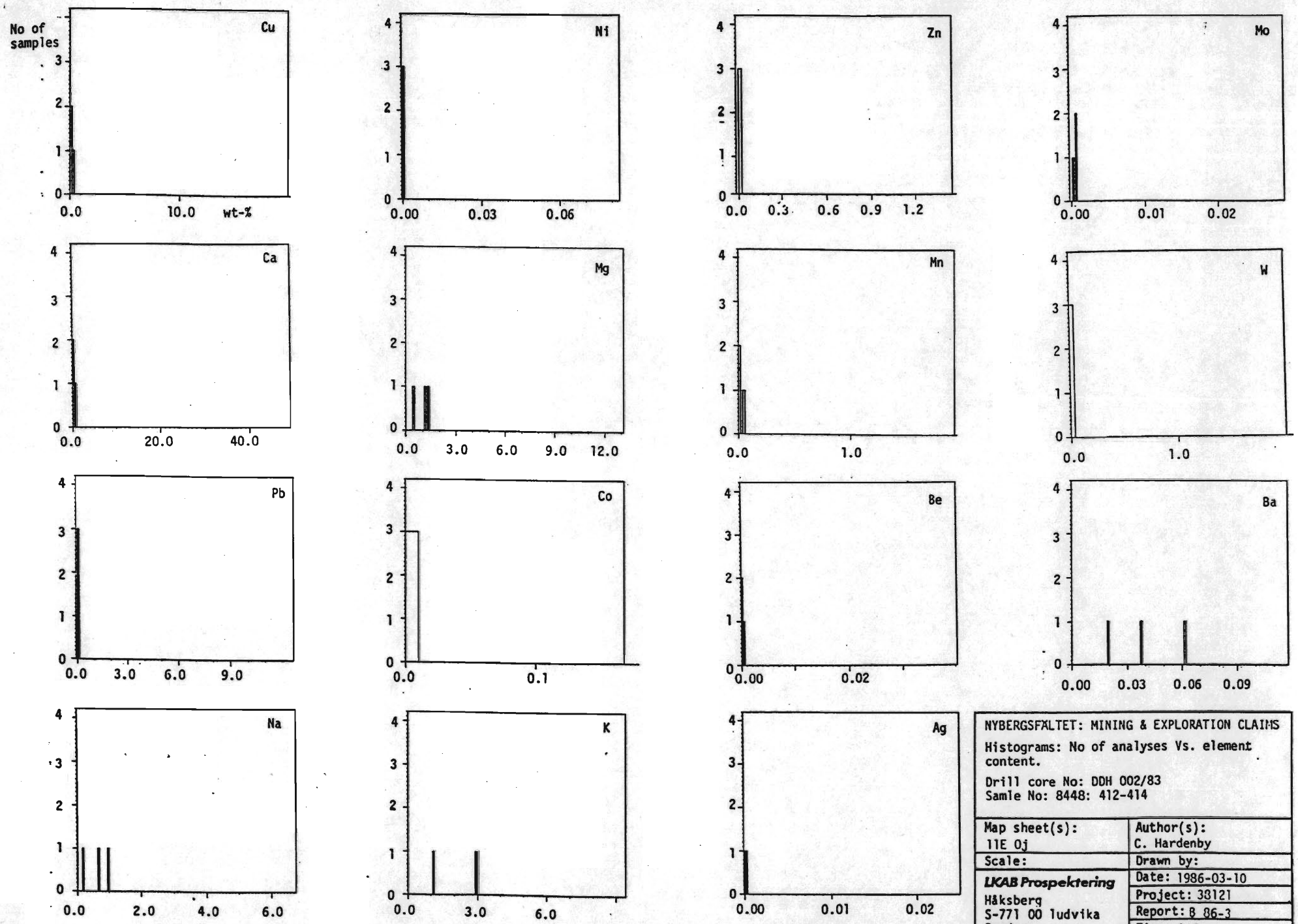


NYBERGSFÄLTET: MINING & EXPLORATION CLAIMS

Histograms: No of analyses Vs. element content.

Drill core No: DDH 001/83
Sample No: 8448:405-411

Map sheet(s): 11E 0j	Author(s): C. Hardenby
Scale:	Drawn by:
LKAB Prospektering	Date: 1986-03-10
	Project: 38121
Håksberg S-771 00 Ludvika Sweden	Report: B 86-3
	Fig.: 6:2

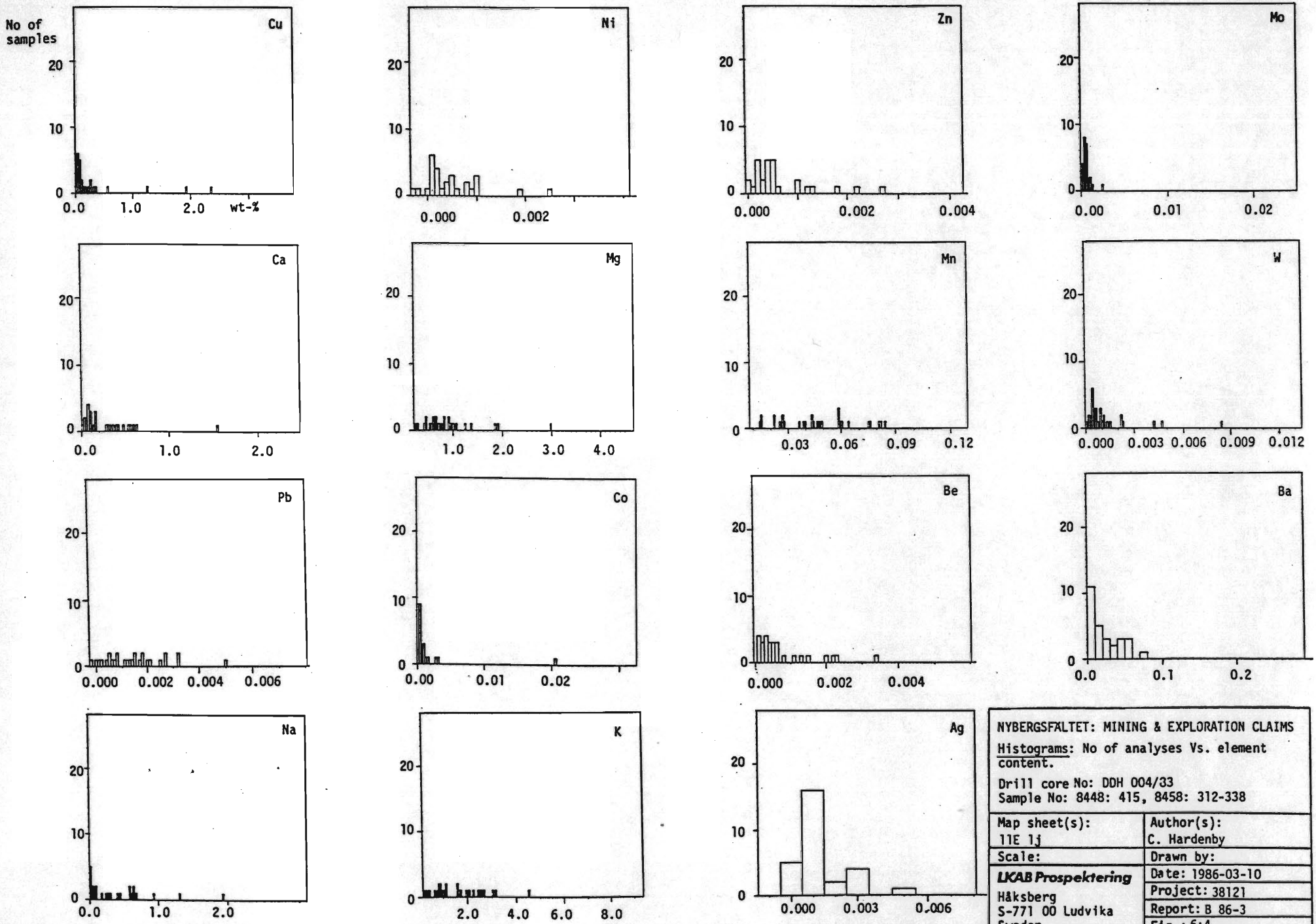


NYBERGSFÄLTET: MINING & EXPLORATION CLAIMS

Histograms: No of analyses Vs. element content.

Drill core No: DDH 002/83
Samle No: 8448: 412-414

Map sheet(s): 11E 0j	Author(s): C. Hardenby
Scale:	Drawn by:
LKAB Prospektering Håksberg S-771 00 ludvika Sweden	Date: 1986-03-10 Project: 38121 Report: B 86-3 Fig.: 6:3

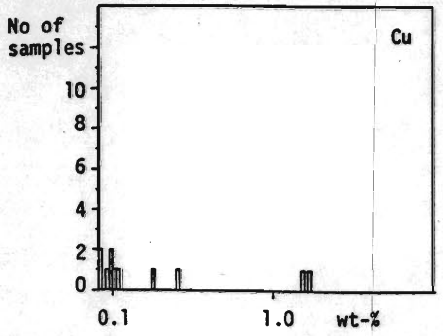


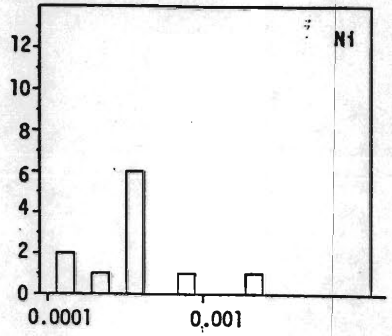
NYBERGSFÄLTET: MINING & EXPLORATION CLAIMS

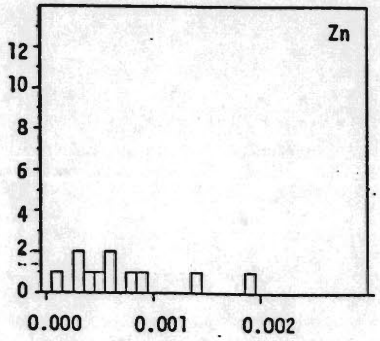
Histograms: No of analyses Vs. element content.

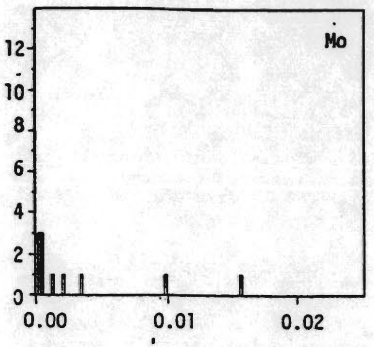
Drill core No: DDH 004/33
Sample No: 8448: 415, 8458: 312-338

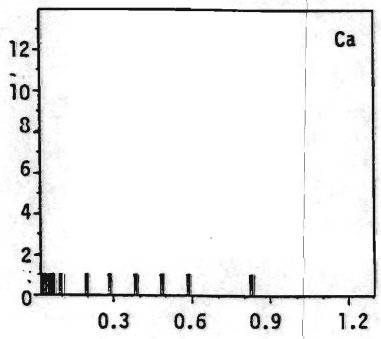
Map sheet(s): 11E 1j	Author(s): C. Hardenby
Scale:	Drawn by:
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 1986-03-10 Project: 38121 Report: B 86-3 Fig.: 6:4

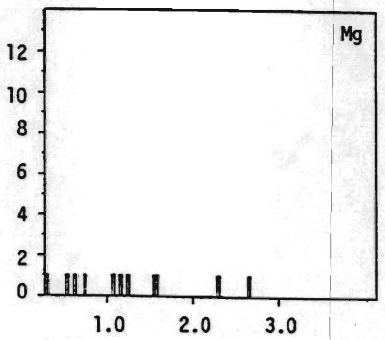


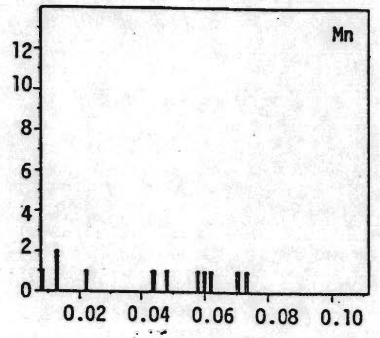


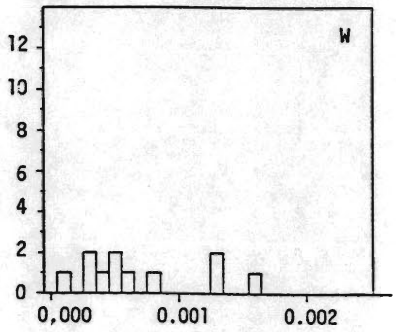


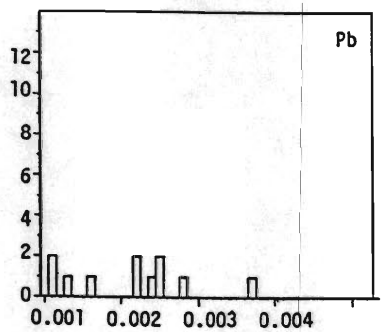


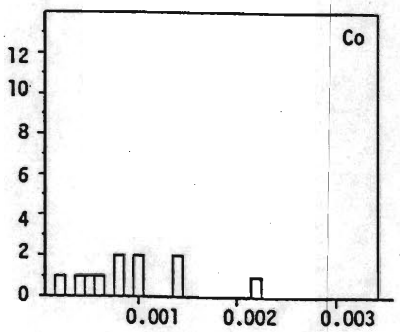


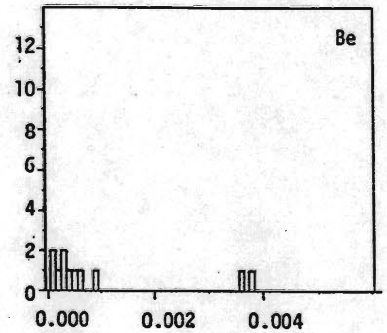


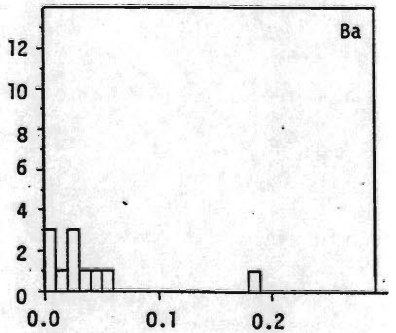


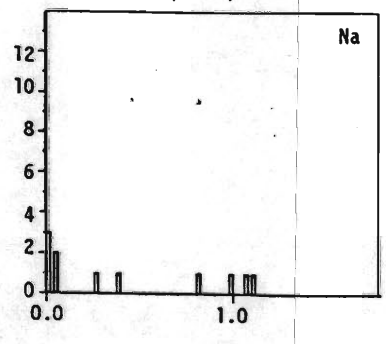


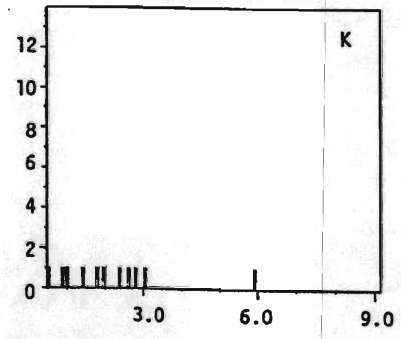


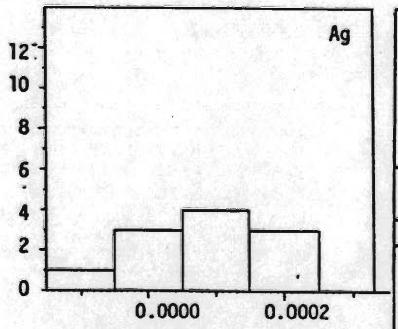










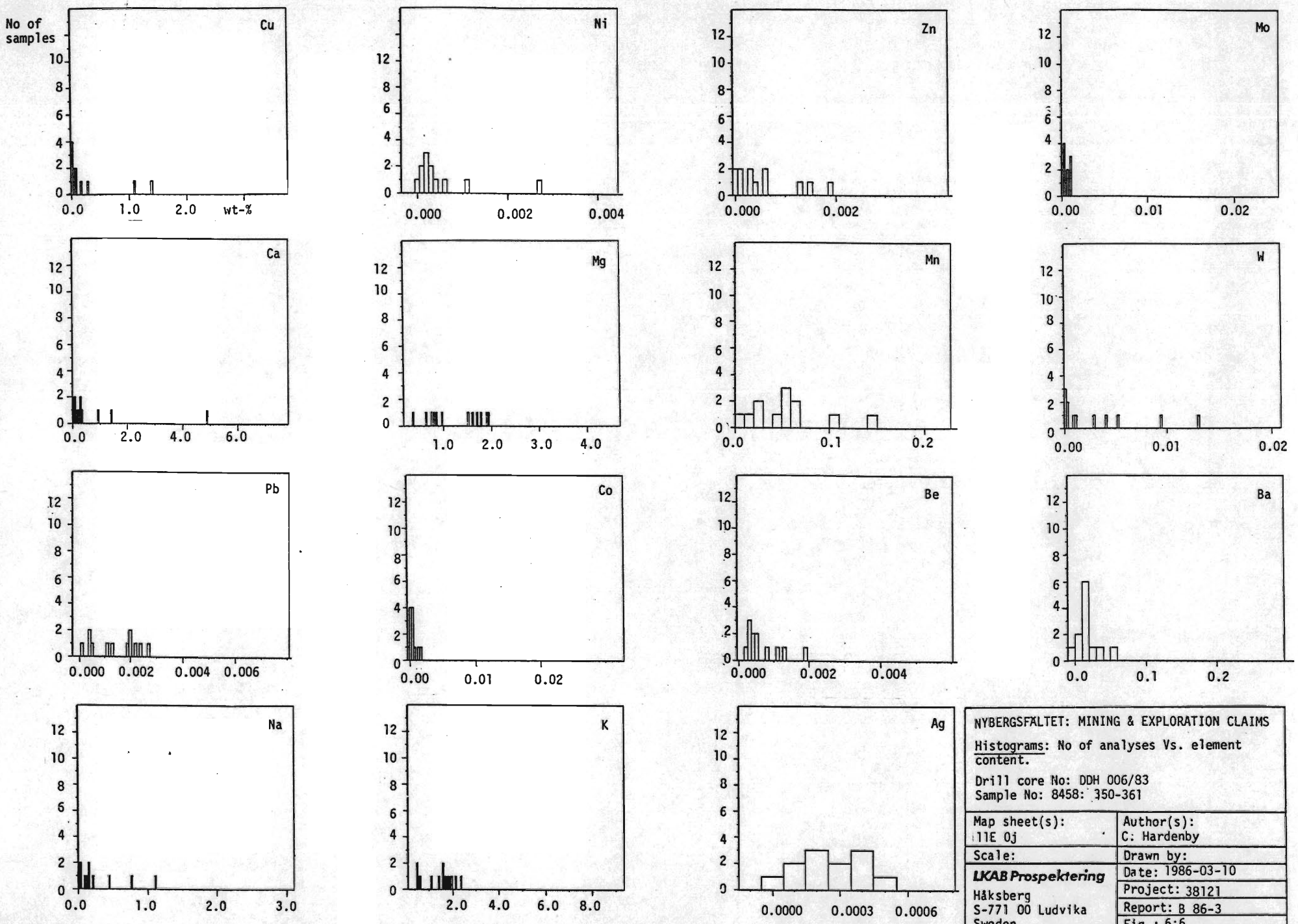


NYBERGSFÄLTET: MINING & EXPLORATION CLAIMS

Histograms: No of analyses Vs. element content.

Drill core No: DDH 005/83
Sample No: 8448: 339-349

Map sheet(s): 11E 0j	Author(s): C. Hardenby
Scale:	Drawn by:
LKAB Prospektering	Date: 1986-03-10
Håksberg	Project: 38121
S-771 00 Ludvika	Report: B 86-3
Sweden	Fig.: 6:5

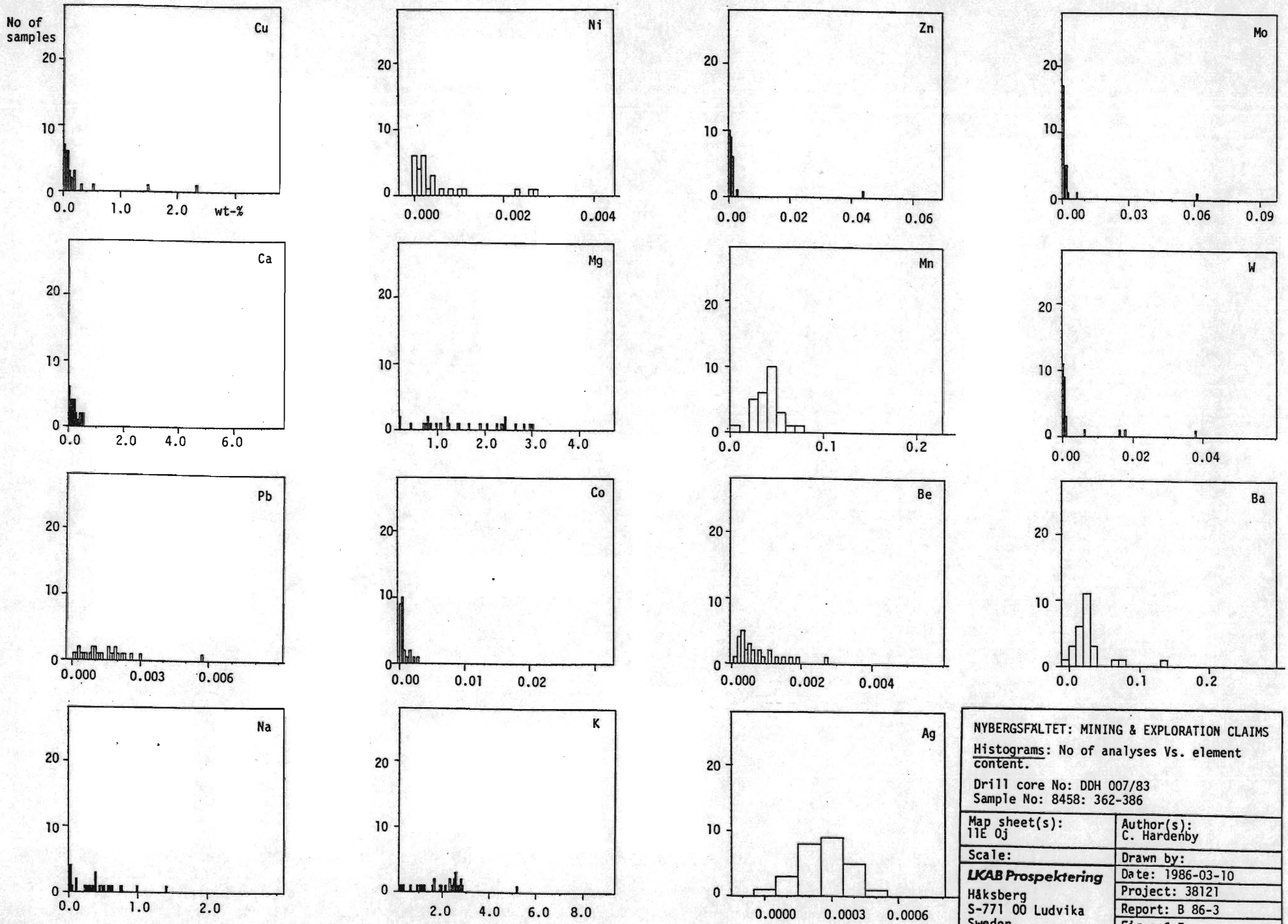


NYBERGSFÄLTET: MINING & EXPLORATION CLAIMS

Histograms: No of analyses Vs. element content.

Drill core No: DDH 006/83
Sample No: 8458: 350-361

Map sheet(s): 11E 0j	Author(s): C: Hardenby
Scale:	Drawn by:
LKAB Prospektering	Date: 1986-03-10
Håksberg	Project: 38121
S-771 00 Ludvika Sweden	Report: B 86-3
	Fig.: 6:6

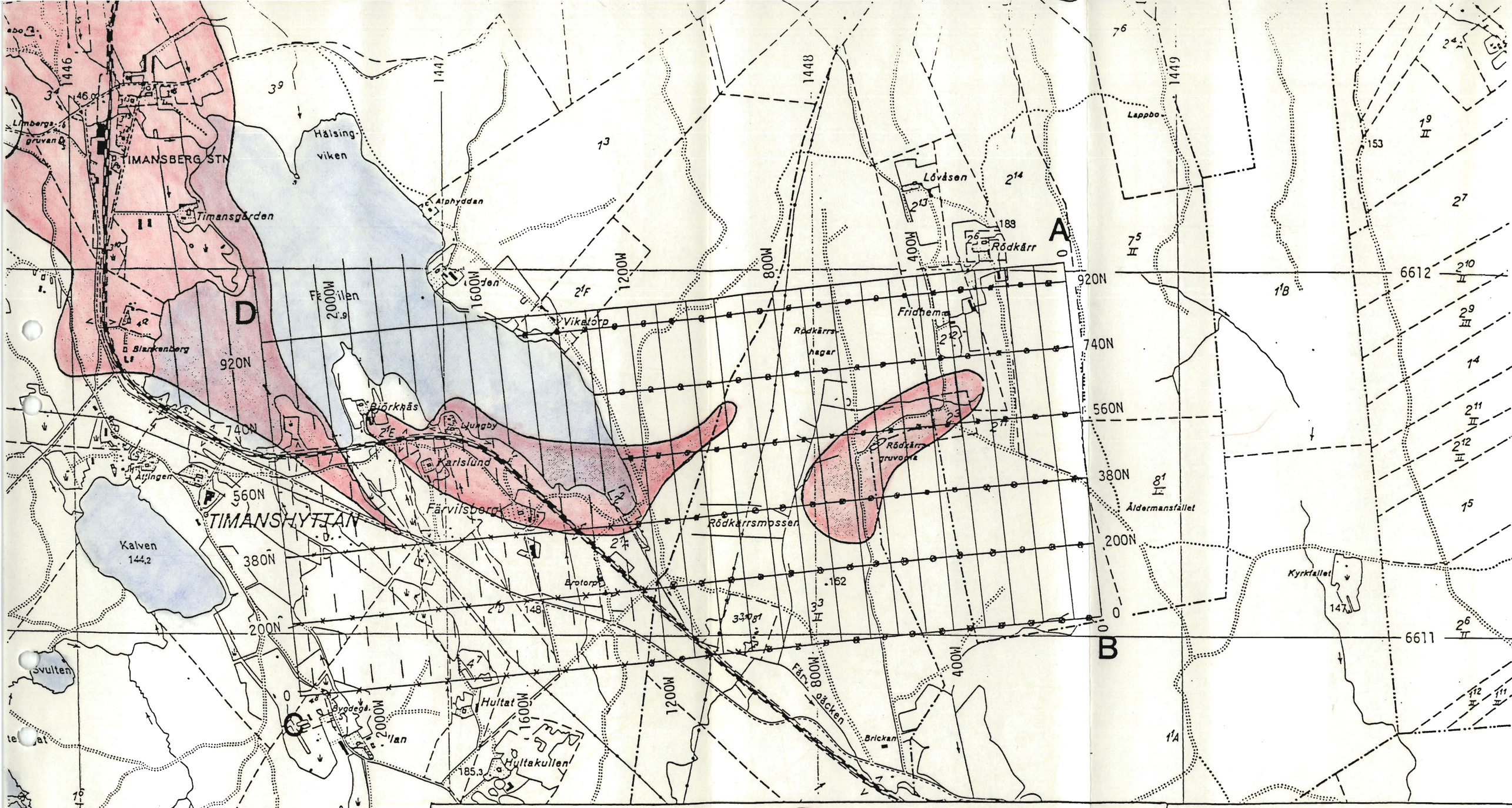


NYBERGSFÄLTET: MINING & EXPLORATION CLAIMS

Histograms: No of analyses Vs. element content.

Drill core No: DDH 007/83
Sample No: 8458: 362-386

Map sheet(s): 11E 0j	Author(s): C. Hardenby
Scale:	Drawn by:
LKAB Prospektering	Date: 1986-03-10
Håksberg	Project: 38121
S-771 00 Ludvika Sweden	Report: B 86-3
	Fig.: 6:7



Magnetic total intensity anomaly ≥ 200 γ (SGU airborne magnetic survey)

Local grid: pegged lines; planned.

Lokal grid: pegged lines; performed

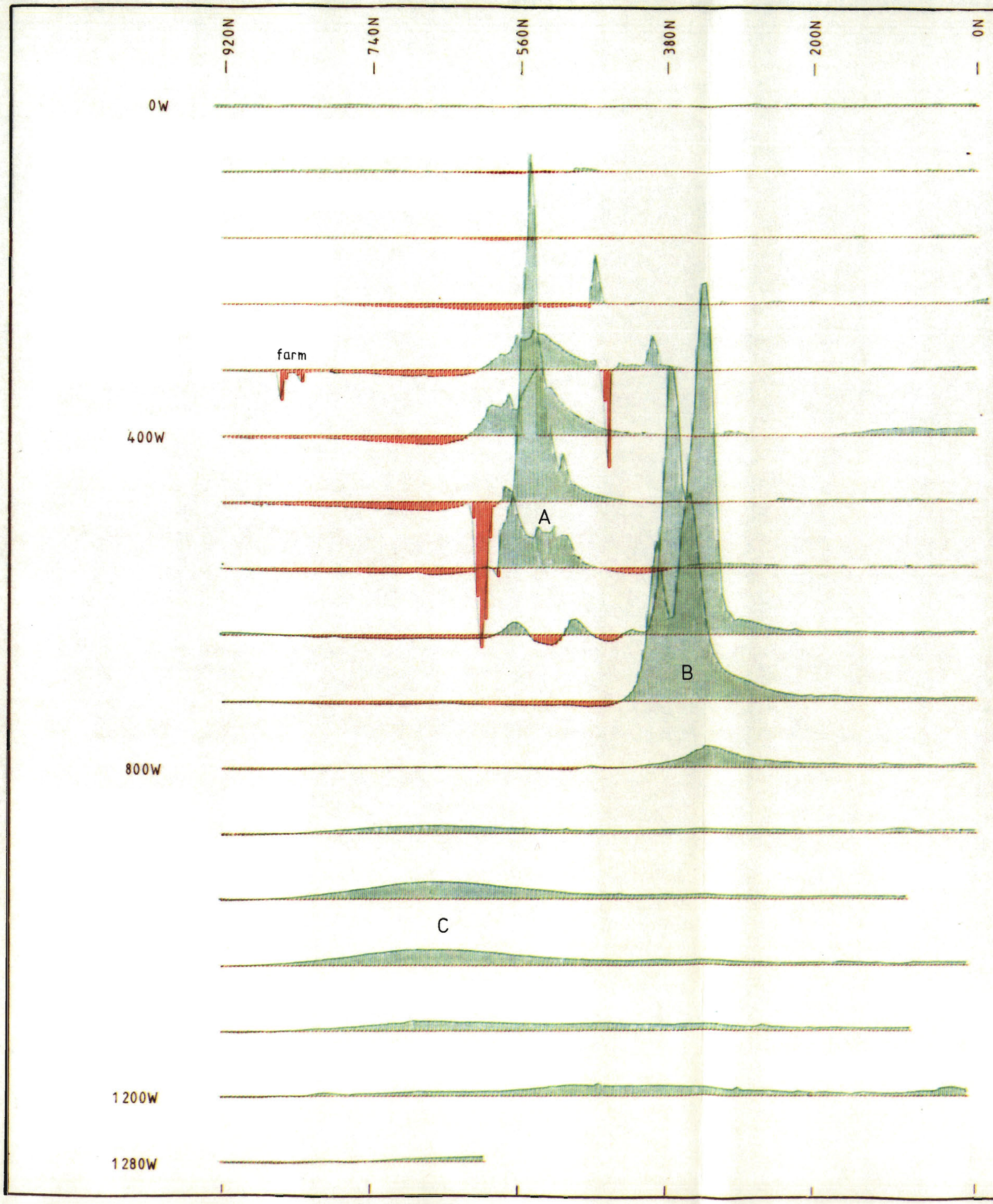
Geophysical survey lines; planned

Geophysical survey lines; performed

RÖDKÄRRSMOSSEN No. 1. (A-B-C-D)

Planned local grid & geophysical survey.

Map sheet(s): 11E 2j	Author(s): C. Hardenby
Scale:	Drawn by: C. Hardenby
LKAB Prospektering Häksberg S-771 00 Ludvika Sweden	Date: 860130
	Project: 38121
	Report: B 86-3
	Fig.: 7:1



Local 0N x = 66 11050
Local 0W y = 14 48780
Azimuth 394°

N

The RESIDUAL of the MAGNETIC TOTAL FIELD

Instrument: G S M - 8

Station spacing: 5 m

Zero level: 50 000 nT / cm

Anomaly scale: 2500 nT / cm.

0 250m

RÖDKÄRRSMOSSEN

Map sheet(s): 11E	Author(s): A Engvall
Scale: 1:5000	Drawn by: JG
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 860130 Project: 38121 Report: B86-3 Fig.: 7:2

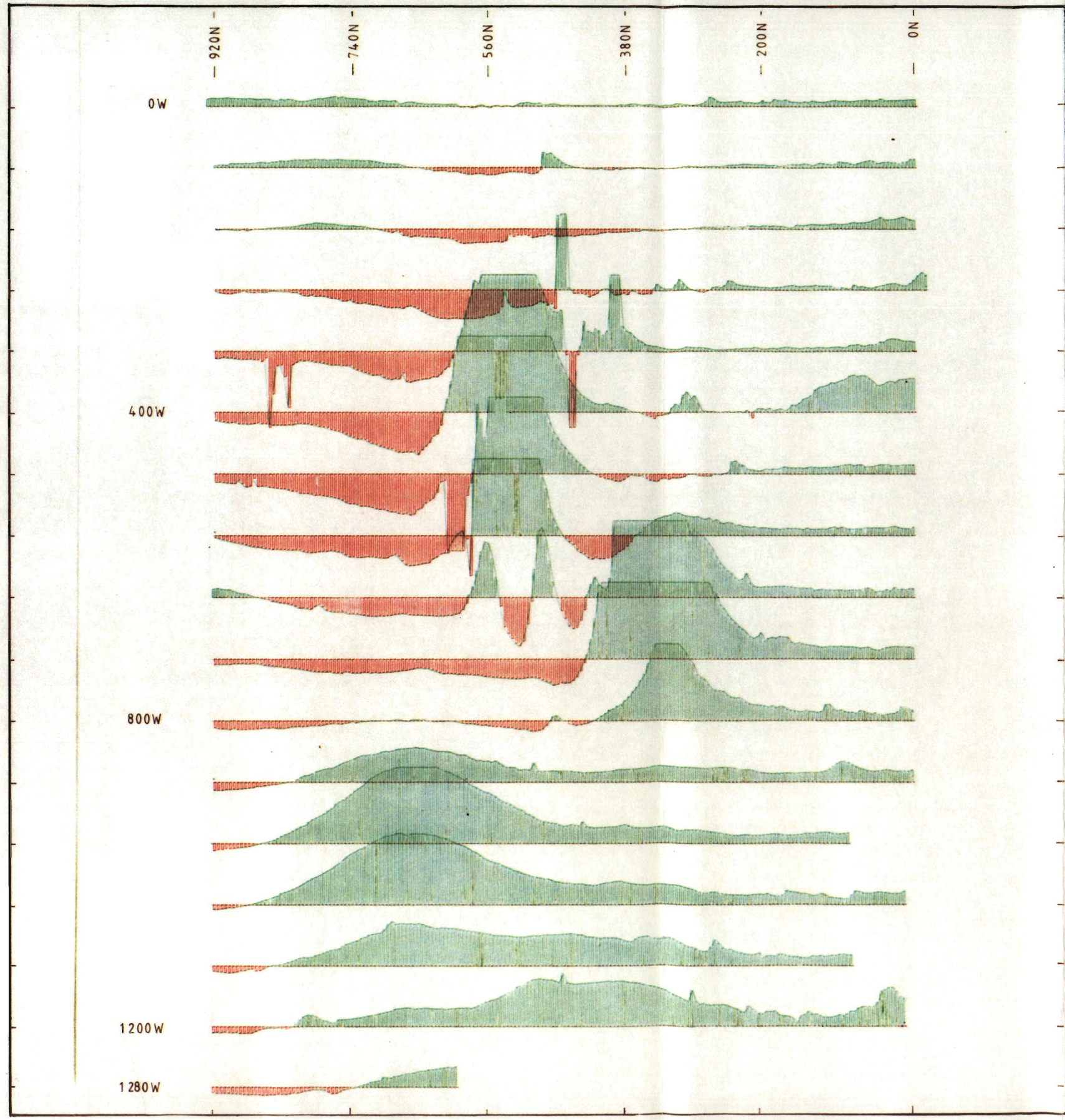
MAGNETIC MODELING
along profile 400 W.
$K_1 = K_2 = 1.4$ (SI)

Received anomaly

Calculated anomaly

1 Anomalous body

Map sheet(s):	Author(s): A. Engvall
Scale:	Drawn by: JG
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: Feb 1986 Project: 38121 Report: B 86-3 Fig.: 7 : 3



Local 0 N x = 66 11050
Local 0 W y = 14 48780
Azimuth 394g

N

The RESIDUAL of the MAGNETIC TOTAL FIELD

Instrument: G S M - 8

Station spacing: 5 m

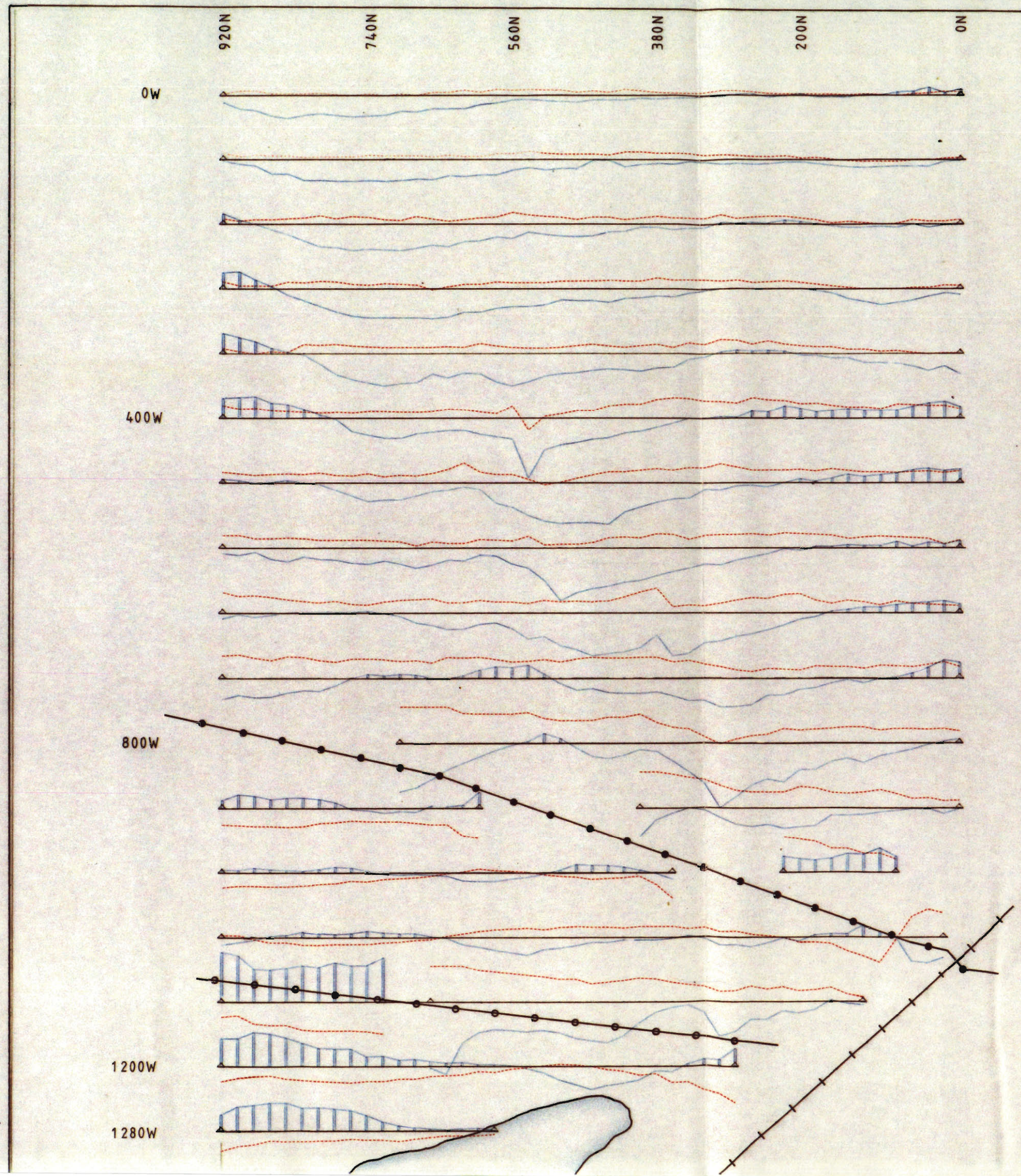
Zero level: 50 000 nT

Anomaly scale: 500 nT / cm.

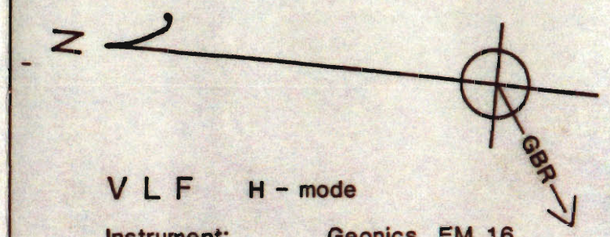
0 250 m

RÖDKÄRRSMOSSEN

Map sheet(s): 11E	Author(s): A Engvall
Scale: 1:5000	Drawn by: JG
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 860130 Project: 38121 Report: B86-3 Fig.: 7:4



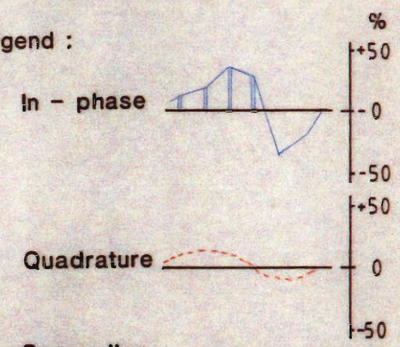
Local 0N x = 66 11050
Local 0W y = 14 48780
Azimuth 394g



V L F **H - mode**

Instrument: Geonics EM 16
Station spacing : 20 m
Transmitter GBR (Rugby)

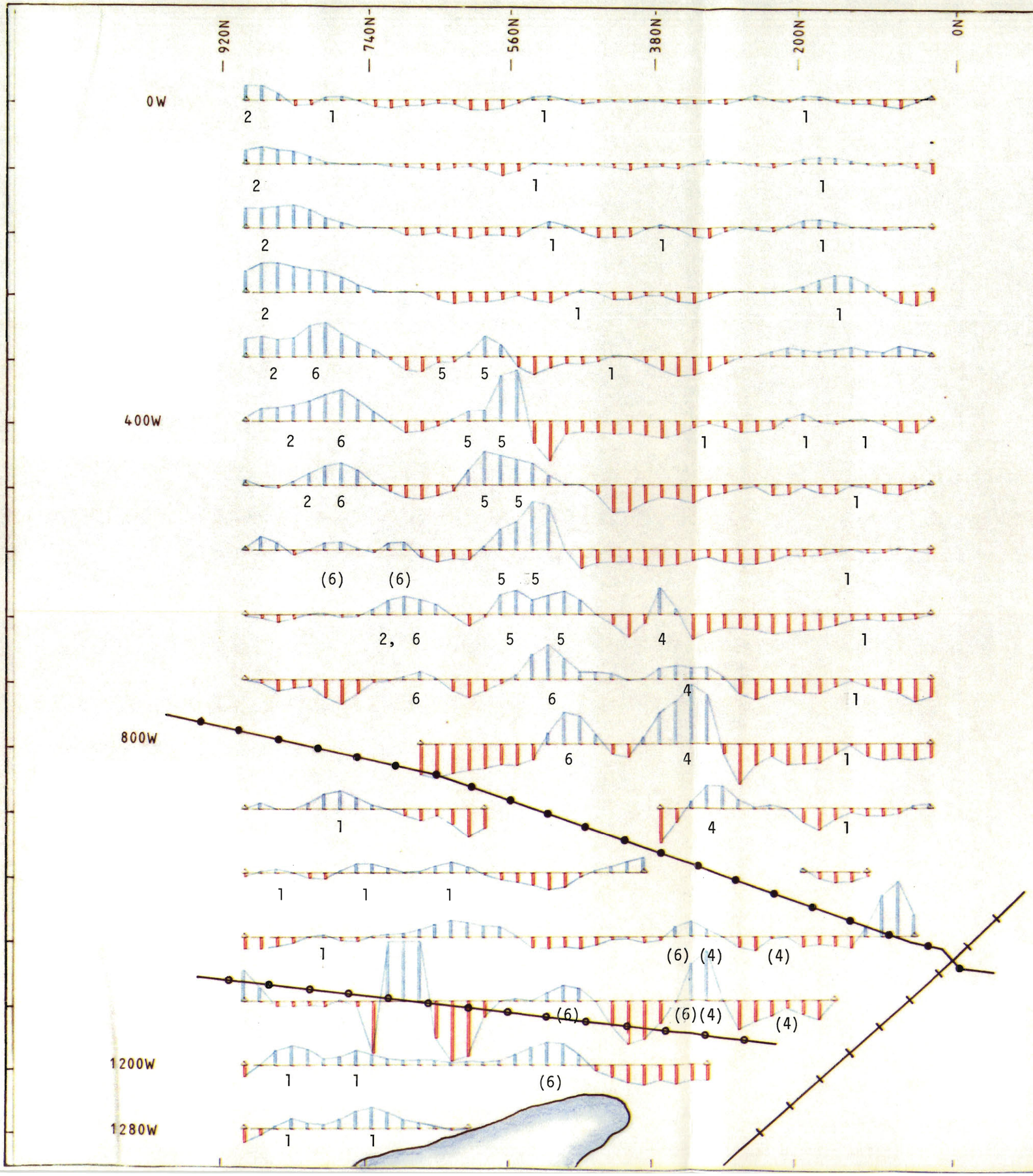
Legend :



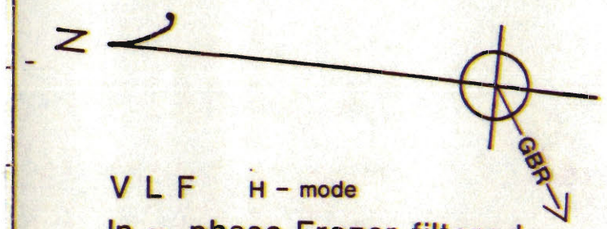


RÖDKÄRRSMOSSEN

Map sheet(s): 11E	Author(s): A Engvall
Scale: 1:5000	Drawn by: JG
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 860130 Project: 38121 Report: B86-3 Fig.: 7:5



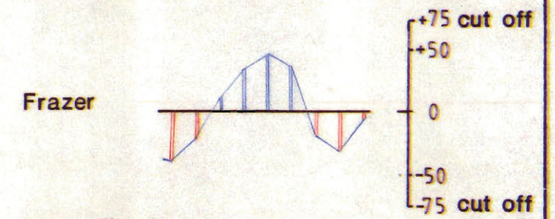
Local 0N x = 66 11050
Local 0W y = 14 48780
Azimuth 394°



V L F H – mode
In – phase Frazer filtered

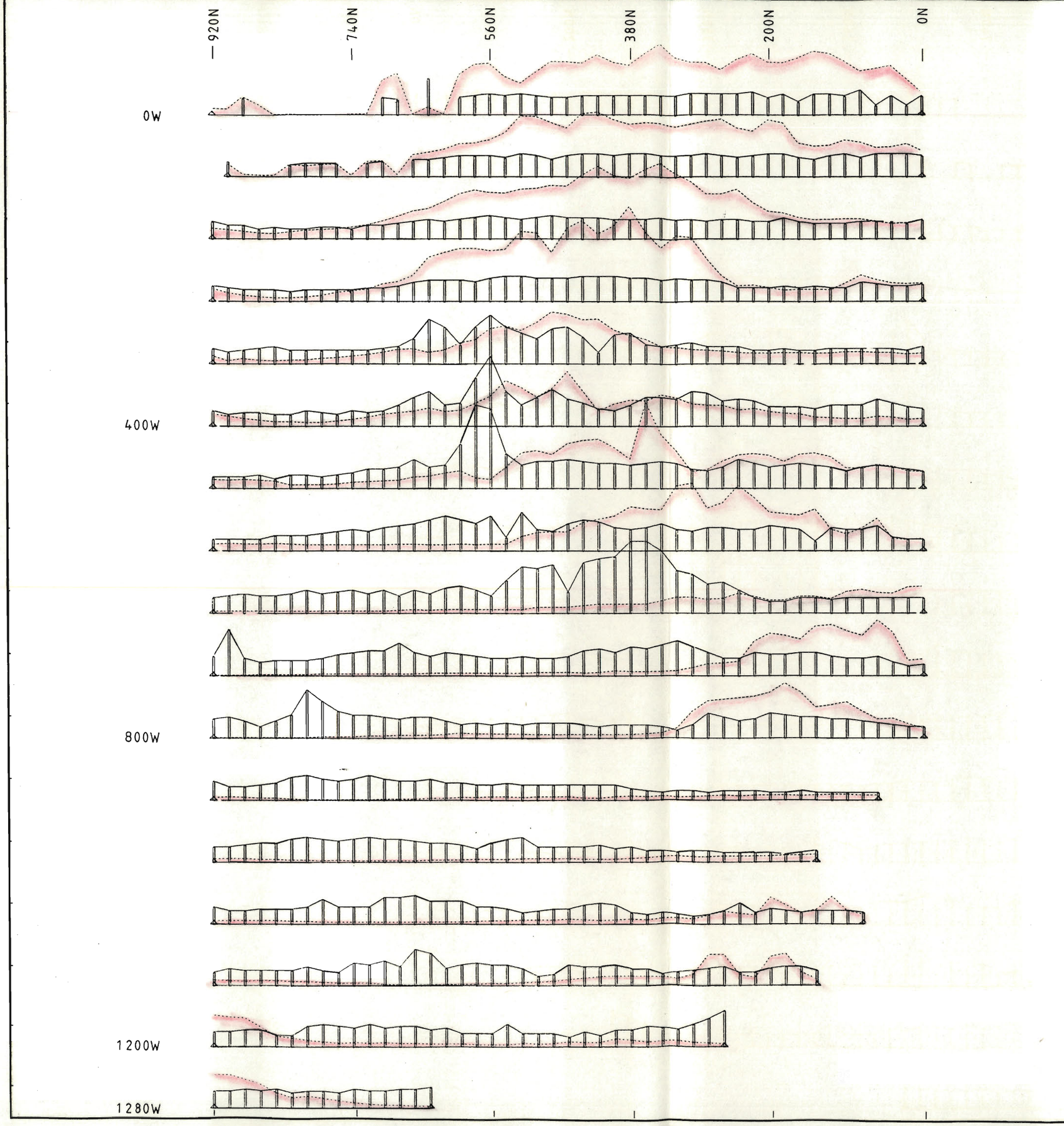
Instrument: Geonics EM 16
Station spacing : 20 m
Transmitter GBR (Rugby)

Legend :



RÖDKÄRRSMOSSEN

Map sheet(s): 11E	Author(s): A Engvall
Scale: 1:5000	Drawn by: JG
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 860130 Project: 38121 Report: B86-3 Fig.: 7:6



Local 0N x = 66 11050
Local 0W y = 14 48780
Azimuth 394°

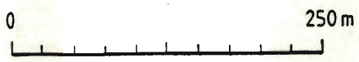
N

INDUCED POLARISATION and APPARENT RESISTIVITY

Instrument:	SGU I P
Configuration:	Wenner, a = 40m
Station spacing:	20m
Anomaly scale:	2,0 I P % / cm
	5,0 KΩm / cm

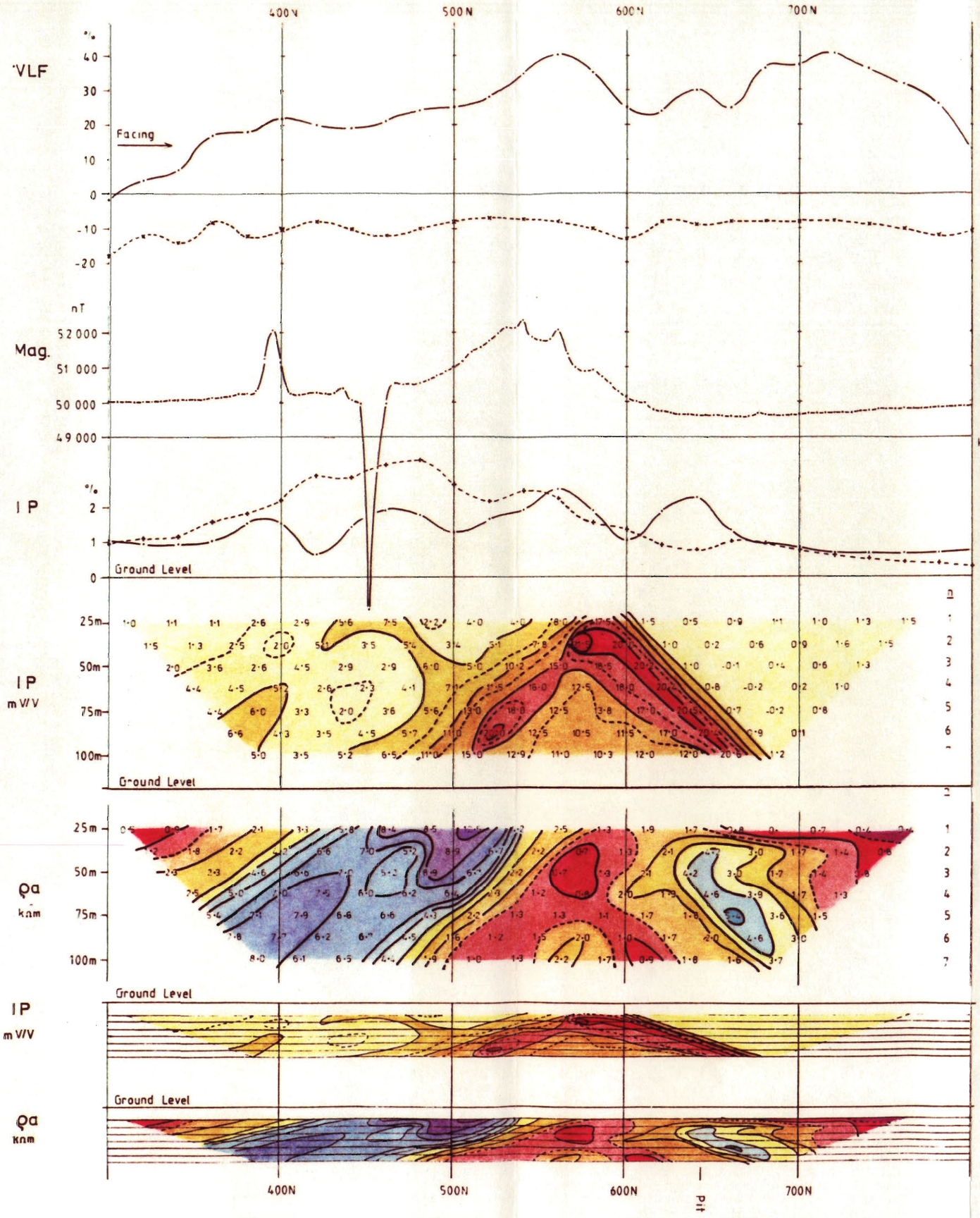
Legend:





RÖDKÄRRSMOSSEN

Map sheet(s): 11E	Author(s): A Engvall
Scale: 1:5000	Drawn by: JG
LKAB Prospektering	Date: 860130
Håksberg	Project: 38121
S-771 00 Ludvika	Report: B86-3
Sweden	Fig.: 7:7



VLF

TRANSMITTER GBR

IN PHASE

QUADRATURE

Magnetic

TOTAL FIELD 1 000nT/cm

Electrical Surveys

WENNER CONFIGURATION a = 40m

INDUCED POLARISATION

APPARENT RESISTIVITY

Dipole - dipole

a = 25m

n = 1 - 7

PLOTTING DEPTH

$d = \frac{L - \ell}{2}$

$d = \frac{L - \ell}{2}$

$d = Z\,max / L$

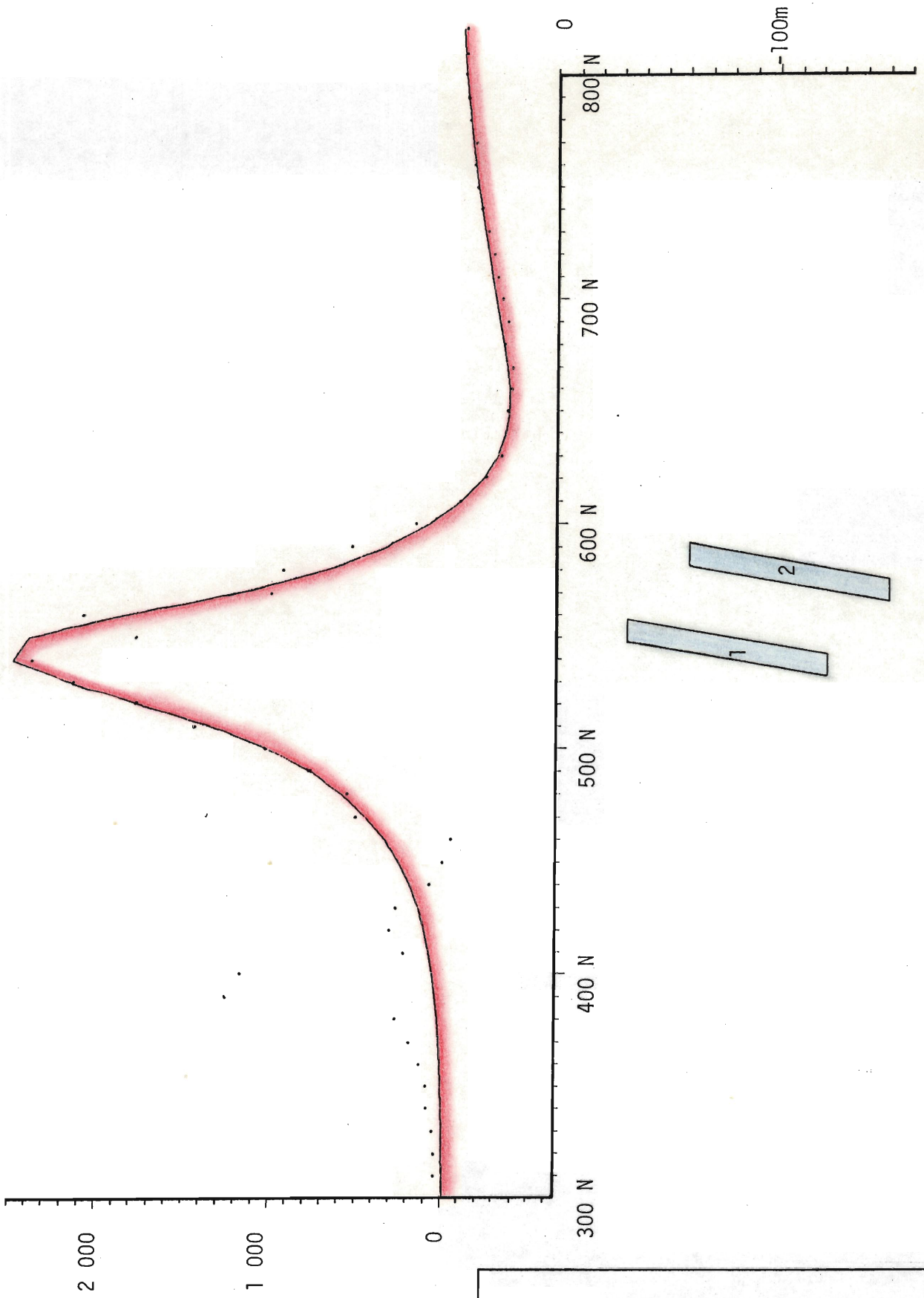
as suggested by Roy and Apparao 1971

$d = Z\,max / L$

RÖDKÄRRSMOSSEN

PROFILE 320 W

Map sheet: 11E 2j	Author: A ENGVALL
Scale: 1:2500	Drawn by: JJÖ
LKAB Prospektering Malmberget S-771 80 Ludvika Sweden	Date: 1985 11 28 Project: 38121 Report: 5863 Fig: 7 8



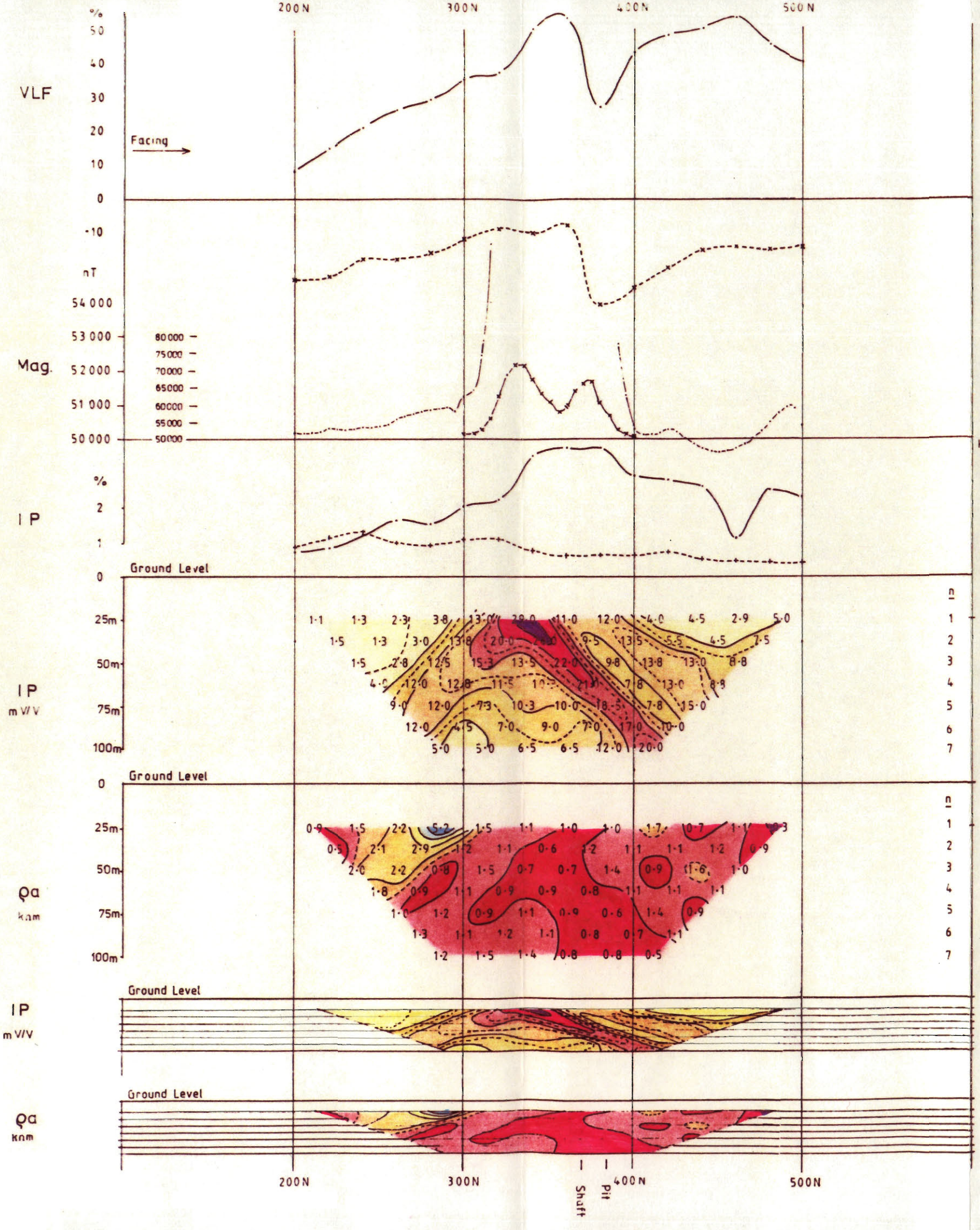
MAGNETIC MODELING
along profile 320 W
$K_1 = K_2 = 1.4$ (SI)

Received anomaly

Calculated anomaly

1 Anomalous body

Map sheet(s):	Author(s): A. Engvall
Scale:	Drawn by: JG
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: Feb 1986 Project: 38121 Report: B 86-3 Fig.: 7 : 9



VLF

TRANSMITTER GBR

——— IN PHASE

- - - - QUADRATURE

Magnetic

·—·—· TOTAL FIELD 1 000nT/cm

×—×—× " " 10 000nT/cm

Electrical Surveys

Resistivity

WENNER CONFIGURATION

·——· INDUCED POLARISATION

+- - -+ APPARENT RESISTIVITY

kΩm: 6, 4, 2, 0

Dipole - dipole

a = 25m

n = 1 - 7

PLOTTING DEPTH

$d = \frac{L - \ell}{2}$

$d = \frac{L - \ell}{2}$

$d = Z_{max} / L$

as suggested by Roy and Apparao 1971

$d = Z_{max} / L$

RÖDKÄRRSMOSSEN

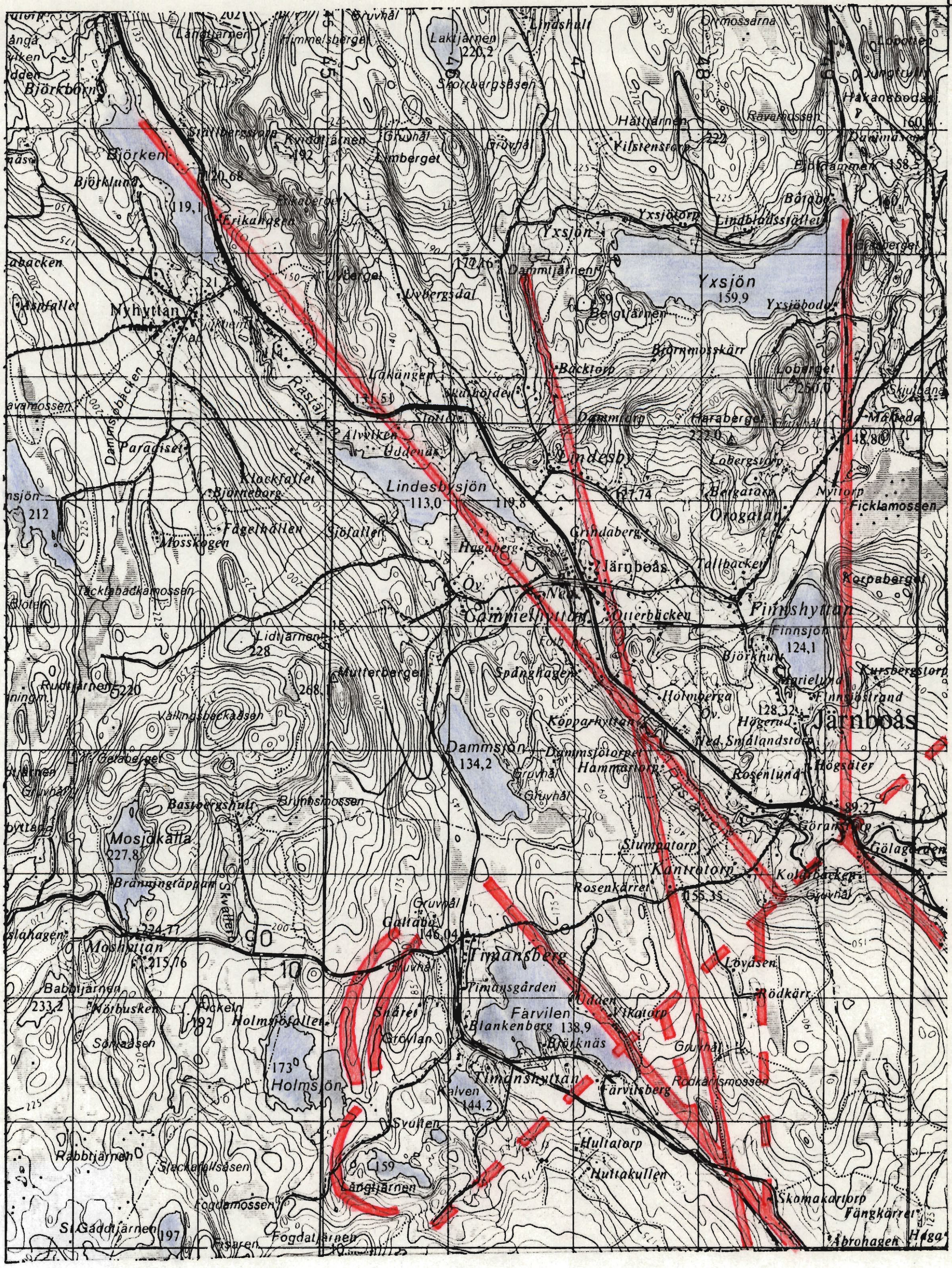
PROFILE 640 W

Map sheet: 11E, 2j	Author: A. ENGVALL
Scale :	Drawn by: " /JG
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 1985.12.04
	Project: 38121
	Report: B86-3
	Fig 7 : 10

RÖDKÄRRSMOSSEN

1450

6620



Lineaments interpretation

distinct lineament

diffuse lineament

LKAB Prospektering

Skala 1:50 000

Kartref. 11E SO

ID nr.

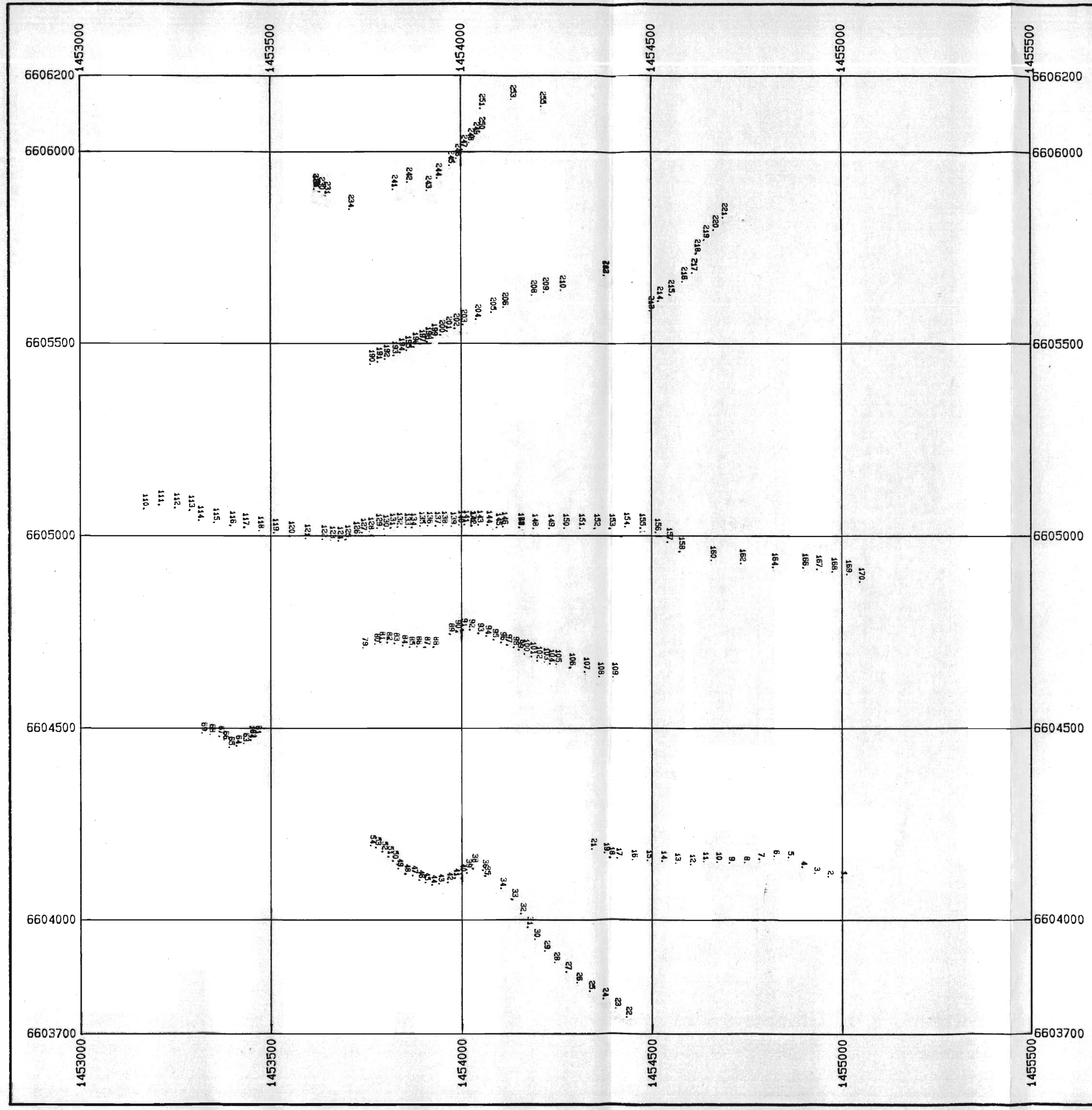
Ritad: jl

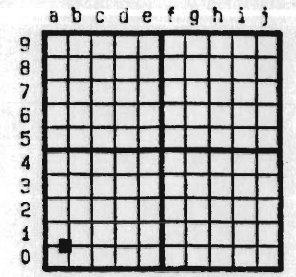
Project: 38121

Fig: 7:11

Sign. J.Liikanen

860211





11F LINDESBERG

Koordsys: LMV
Origo: X= 0 Y= 0
Azimut: -0.00 gon

Norr

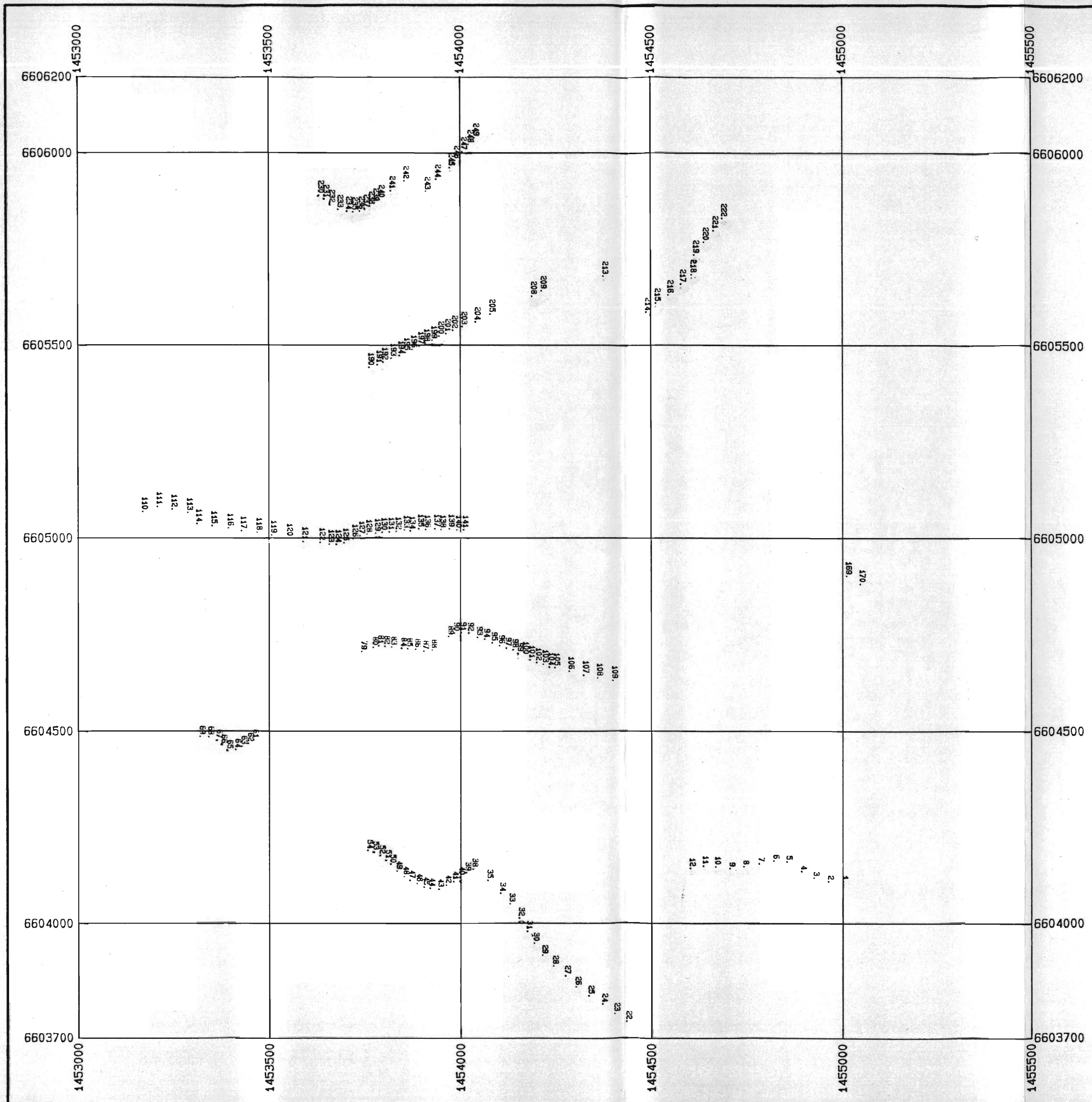
TILL SAMPLES SAMPLE SITES AND NUMBERS 85G2P1: 1-255 TOT. 210 SAMPLES

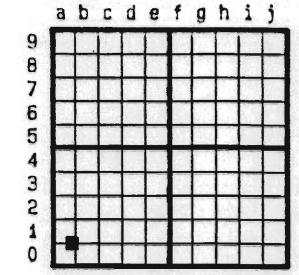
0 500m

GALGBÄCKEN

Ansv: DC	Proj.nr : 38121
Kartbl: 11F	Aktuell : 860310
LKAB prospektering	Skala 1:10000
	Fig. 8:1

pabsoft/jmb





11F LINDESBERG

Koordsys: LMV
Origo: X= 0 Y= 0
Azimut: -0.00 gon

Norr

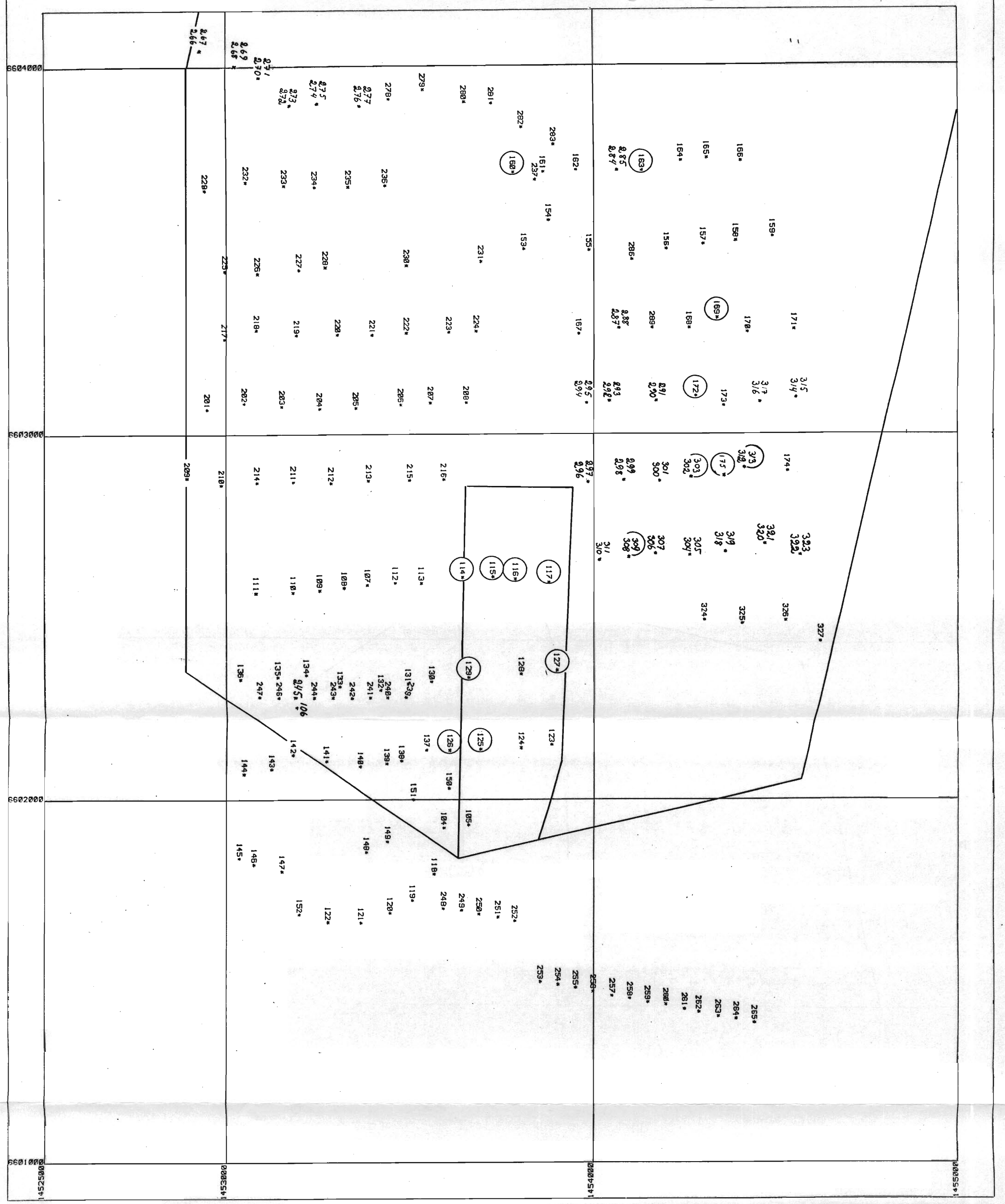
BEDROCK SAMPLES
SAMPLE SITES
AND NUMBERS
85G2S1: 1-249
TOT. 165 SAMPLES

0 500 m

GALGBÄCKEN

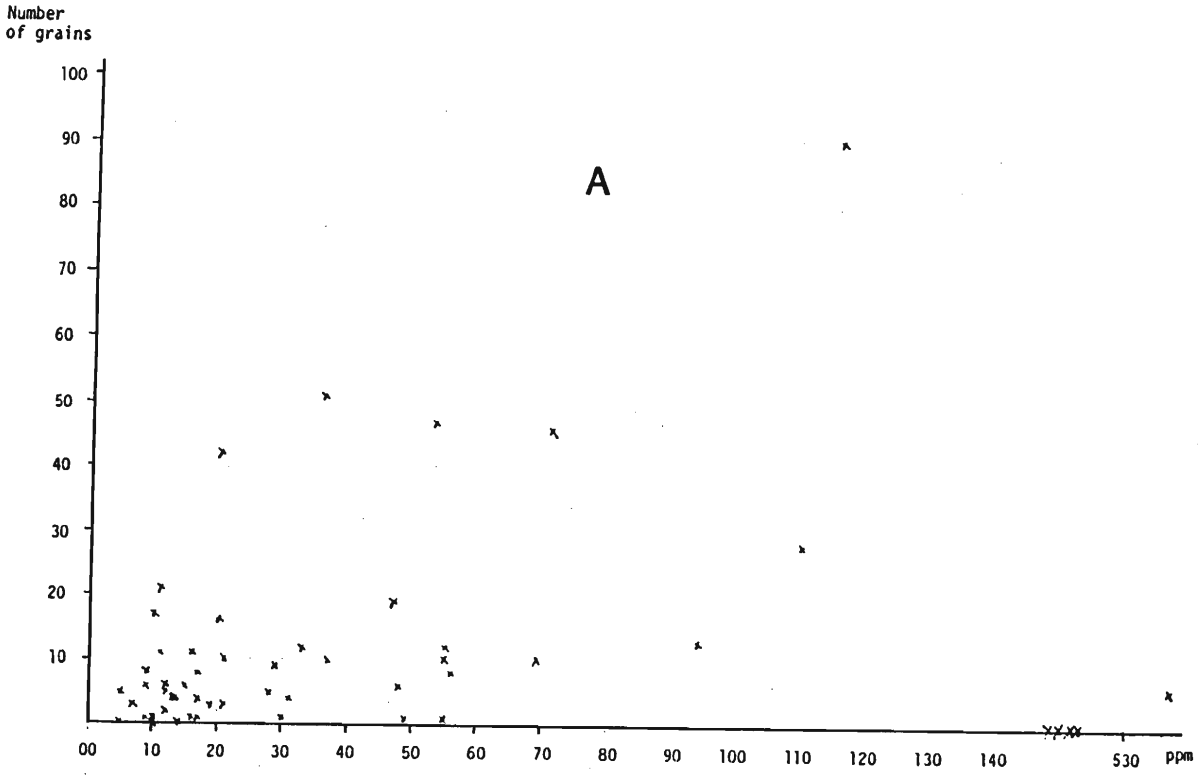
Ansv:DC	Proj.nr : 38121
Kartbl: 11F	Aktuell : 860310
LKAB prospektering	Skala 1:10000
	Fig. 8:2

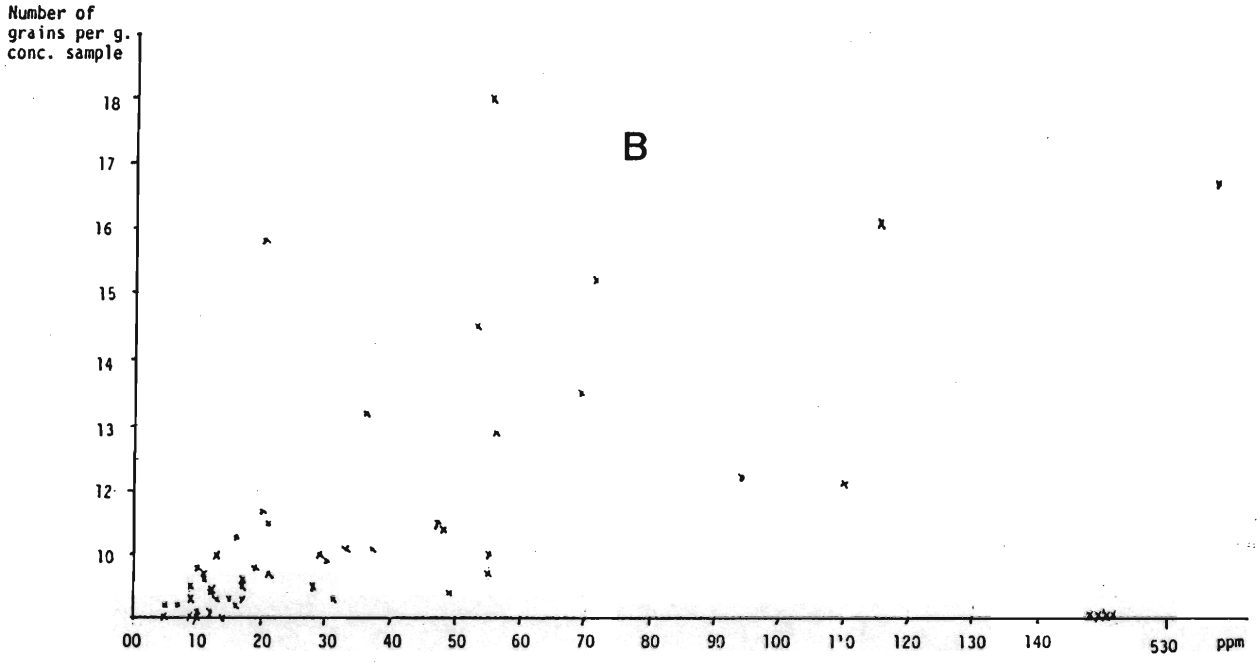
pabsoft/jmb



GALGBÄCKEN No 1 & No 2 (southern part)
Heavy-mineral samples.
No 83 G2 GØ: 104-175, 201-237 and 239-327.
Sampling sites with sample ID numbers.

Map sheet(s): 11F 0a	Author(s): C. Hardenby
Scale:	Drawn by: C. Hardenby
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 1986-02-27
	Project: 38121
	Report: B 86-3
	Fig.: 8:3





GALGBÄCKEN (S part)

NUMBER OF SCHEELITE GRAINS Vs. W CONTENT (ppm)
Sample No. 83 G 2 GO : 104 - 152

Map sheet(s): 11 F 0 a	Author(s): C. Hardenby
Scale:	Drawn by: /JG
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 85.02.13 Project: 38121 Report: B 86-3 Fig.: 8 : 4

Magnetic total intensity anomaly ⩾ 200 γ.

GEOPHYSICAL SURVEY LINES

magnetics

VLF E-phase

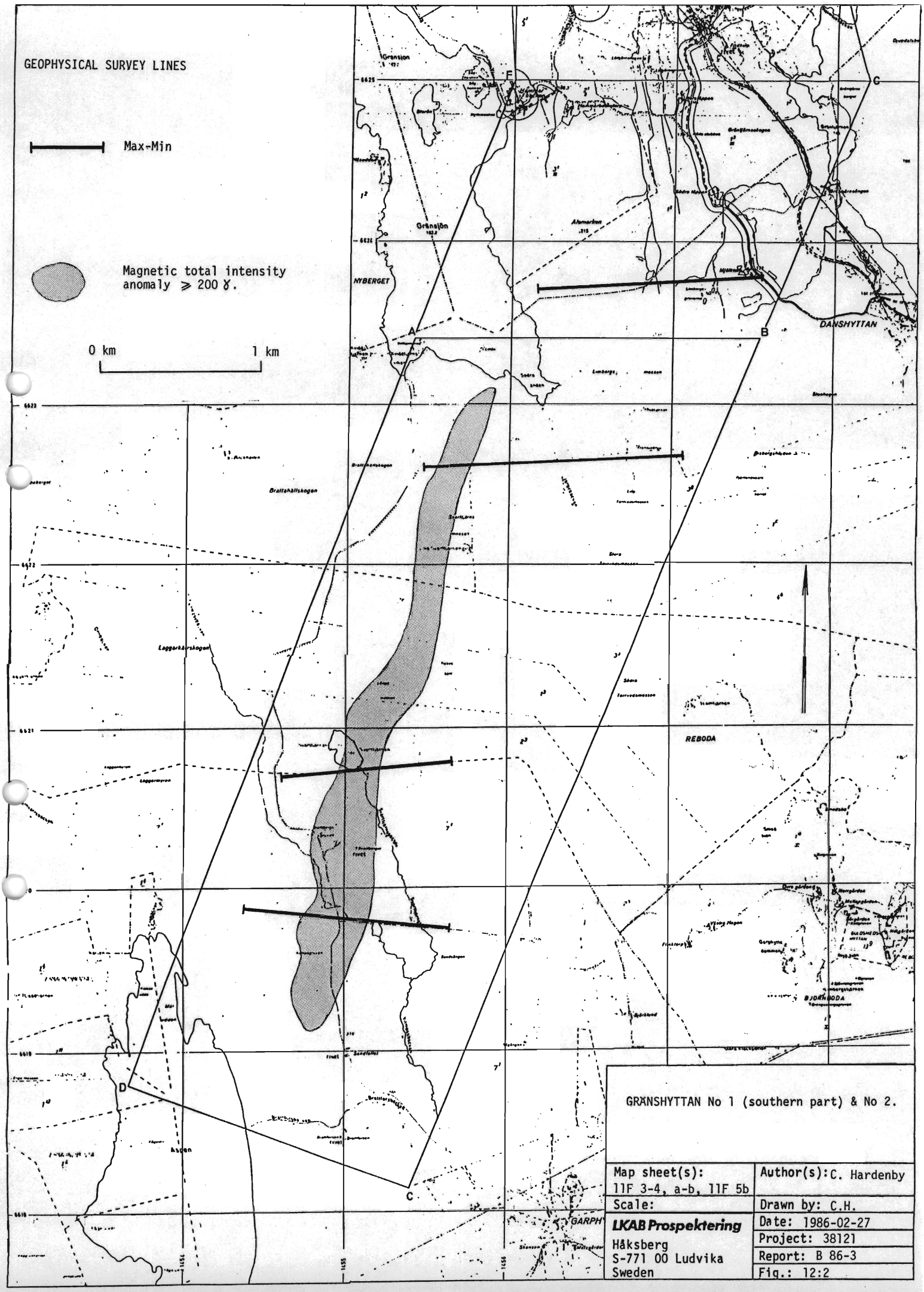
GALGBÄCKEN No. 2 (northern part)

Map sheet(s): 11F 0-1, a-b	Author(s): C. Hardenby
Scale: 1:10 000	Drawn by: C. Hardenby
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 1986-02-27
	Project: 38121
	Report: B 86-3
	Fig.: 8:5

FIG. 8:5

Fig. 12:1. See pocket inside back cover.

GEOLOGICAL MAP OF THE GRÄNSHYTTAN EXPLORATION CLAIMS NO 1 (southern part) & NO 2	
Map sheet(s): 11F 3a,3b,4a,4b	Author(s): E. Lindberg
Scale: 1:10 000	Drawn by: E. Lindberg
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 860122
	Project: 38121
	Report: B 86-3
	Fig.: 12:1



GRÄNSHYTTAN No 1 (southern part) & No 2.

Map sheet(s): 11F 3-4, a-b, 11F 5b	Author(s): C. Hardenby
Scale:	Drawn by: C.H.
LKAB Prospektering	Date: 1986-02-27
Håksberg	Project: 38121
S-771 00 Ludvika	Report: B 86-3
Sweden	Fig.: 12:2

6624 + 1454

+6624

6620 + 1454

Gränsjön

Aspen

Smedsjön

POTASSIUM VARIATION IN OUTCROPS

2.6 etc. K in wt%

- pg PEGMATITE, dikes (right)
- s SKARN, in thin layers or lenses (right)
- c CARBONATES
- m MICA SCHIST
- a AMPHIBOLITE
- fe Fe-MINERALIZED ZONE
- le GREY LEPTITE
- lg GREY LEPTITE GNEISS
- mica rich rock
- quartz porphyritic rock

- o outcrop
- ▲ boulder
- area of outcrops
- area of boulders
- open pit or shaft

- mt magnetite
- hm hematite
- py pyrite
- cp chalcopyrite
- gl galena
- ag 'silver'

- foliation
- banding
- foliation parallel to banding
- fold axes
- lineation

0 m — 500 m

GEOLOGICAL MAP OF THE GRÄNSHYTTAN EXPLORATION CLAIMS NO 1 (southern part) & NO 2

Map sheet(s): 11F 3a,3b,4a,4b	Author(s): E. Lindberg
Scale: 1:17 000	Drawn by: E. Lindberg
LKAB Prospektering Håksberg S 771 00 Ludvika Sweden	Date: 860122
	Project: 38121
	Report: 6 86 -3
	Fig.: 12 :3

SG2163

6624 + 1454

+ 1459 6624

6620 + 1454

+ 1459 6620

Gränsjön

Gråntjärnen

Limbergs-gruvorna

Svart tjärnen

Svartbergsgruvan

Kampagruvorna

Smed-sjön

Aspen

le

py

mt

hm

pg

gl

ie

Fe-MINERALIZED ZONE

mt
py
(cp)

mt
py
gl

mt
py
gl
cp
ag

mt
py
gl
ag

pg
s
c
m
a
fe
le
lg

PEGMATITE, dikes (right)
SKARN, in thin layers or lenses (right)
CARBONATES
MICA SCHIST
AMPHIBOLITE
Fe-MINERALIZED ZONE
GREY LEPTITE
GREY LEPTITE GNEISS
mica rich rock
quartz pophyritic rock

outcrop
boulder
area of outcrops
area of boulders
open pit or shaft

foliation
banding
foliation parallel to banding
fold axes
lineation

mt magnetite
hm hematite
py pyrite
cp chalcopyrite
gl galena
ag 'silver'

GEOLOGICAL MAP OF THE GRÄNSHYTTAN EXPLORATION CLAIMS NO 1 (southern part) & NO 2

Map sheet(s): 11F 3a,3b,4a,4b	Author(s): E. Lindberg
Scale: 1:10 000	Drawn by: E. Lindberg
LKAB Prospektering Håksberg S-771 00 Ludvika Sweden	Date: 860122
	Project: 38121
	Report: B 86-3
	Fig.: 12:1

SG2164