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Porsanger Gold Project
Norsk Hydro A/S / BP Norge A/S Minerals Joint Venture 1983

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Aggerholm, Viggo	01.03 1984	Norsk Hydro A/S BP Norge A/S

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Porsanger	Finnmark	Troms og Finnmark		

Fagområde	Dokument type	Forekomster
Geologi		Porsangerområdet
Råstofftype	**Emneord**	
Malm/metall	Au	

Sammendrag

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1. T.Vrålstad
2. BP Norge A.S
3. V.Aggerholm (etter sirk.)
4. grønn kopi
5. rød kopi

Tittel (TI)

Porsanger Gold Project
Norsk Hydro a.s/BP Norge A.S. Minerals
Joint Venture 1983

Divisjon: T&F

Avdeling/seksjon: Prospektering

Dato (BI): 1.3.1984

Forfattet av (FO): V.Aggerholm

Ref.

Godkjent av

Vedr. ordrenr. (FA): 20943

Sted/land (FA): Lakselv/Finnmark

Emneord (EO): Gull

Lithoprøver, bekkesedimenter

Resymé/konklusjon (RE)

The gold potential of the Porsanger area south of Lakselv has been investigated within the framework of the NH/BP Joint Venture agreement.

The Porsanger area has been investigated several times during the last 80 years. In this area there are two types of sulphide deposits both of which associated with Svecokarelian metamorphosed basic/ultrabasic rocks:

Type 1 Strata-bound sedimentary pyrite-pyrrhotite deposits low in copper and
Type 2 Bornite-digenite-cholcocite deposits in ?metadolerites and ultrabasic rocks. The main aims of the present investigation were to test the two types of mineralisation for gold with the aid of litho geochemistry and to test the gold potential of a larger area by stream sediment geochemistry. 147 lithosamples and 209 stream sediments were analysed for Au, Ag, Cu, Pb, Zn, Ni, Co, W, Bi and As.

49 lithosamples and 25 stream sediments returned detectable gold with a highest value of 290 ppb in lithosamples.

The sample program has been concentrated in the most promising areas and the above mentioned highest gold values may accordingly be regarded as optimal for the investigated area.

It is concluded that the precious metal potential of the Porsanger area may be concidered as negligable, and no futher action is recommended.

The J.V. claims have been abandoned.

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LIST OF CONTENT

Prospektering
V.Aggerholm:RJe
28.2.84

1. INTRODUCTION

In 1983 P.M. Ihlen carried out a comparative study between the Archean gold-bearing greenstone belts of the Abitibi-region in Canada and the Precambrian greenstone belt of Finnmarksvidda in northern Norway (Ihlen, 1983). Ihlen (op.cit.) concluded that the lithologies of the two regions do not compare easily but suggested nevertheless that the precious metal potential of known copper showings in the Porsanger area should be investigated. This suggestion was based on older reports that describe gold occurrences in the Porsanger area and the proximity of this area to the alluvial gold fields in the Karasjok region.

It was accordingly decided to investigate an area of 400 km^2 within the framework of the NH/BP JV agreement. This area was defined as a 16 km wide and 25 km long zone stretching from Lakselv in the north to Øvrevatn/ Gaggajavri in the south (Fig.1). Three areas totaling 40.5 km^2 within this zone were claimed as they contain the greatest density of known copper showings. Approximately half of the JV-area consist of a military training ground, and 24,5 km^2 of the 40,5 km^2 claimed lie within this area. A written application concerning permission to prospect the military area was sent to the Defence Command but was refused. The main effort of the planned investigation was accordingly concentrated in the area to the north of the military zone.

2. PREVIOUS WORK

The JV-area was mapped in the scale of 1:100.000 by Crowder (1959) and the area to the north of the military zone was mapped by Pharaoh (1981) in the scale of 1:50.000.

The Porsanger copper showings have been investigated intermittently since the beginning of this century but no economically interesting deposits have been defined. The first mining activity took place in 1907-08 and localized high gold values are reported from this period, including a 75,6 ppm Au-value from a 30 cm wide quartz-vein in the socalled "gold-shaft" (locality 122, Appendix 3). Later analysis from 1923 of samples from this locality returned considerably lower gold-values with a maximum of 2 ppm.

In 1931 the area was investigated again (Carlson, 1931). Rock samples from various localities including the above mentioned gold-showing were analysed and returned up to 2 ppm Au.

Assays of concentrates from flotation tests on copper ore (carried out in 1932) showed the presence of up to 0.7 ppm Au and a average of 50 ppm Ag. The waste contained no gold (i.e. less than 0.2 ppm) but average Ag-values of 2 ppm were detected. Assays of concentrates from flotation tests on pyrite mineralization from the area returned ca. 2 ppm Ag but no gold values above detection limit (i.e. 0.2 ppm).

The copper potential of the Porsanger area was reinvestigated in 1939 with the aid of geophysics and diamond drilling (Poulsen, 1939); no gold analysis are reported from this period.

In 1965-66 renewed interest in the area led to a NGU/SYDVARANGER joint venture project which included

detailed mapping and sampling of the copper- and pyrite showings (carried out by G.Juve and B.Røsholt). The results from this project, comprising field reports and sketchmaps, were obtained from G.Juve at the NGU.

An IP- and magnetometry survey was carried out in the Karenhaugen area (Fig.2) by the USB in 1979, but it failed to indicate the presence of potentially interesting copper mineralization.

3. REGIONAL GEOLOGY

The rocks of the JV area are assumed to be of early Proterozoic age. According to Crowder (1959) and Pharaoh (1981) the lithologies of the Lakselv district may be divided into three major tectonostratigraphic units:

Lower unit:	Amphibole schists with a few pyrite-bearing horizons.
Middle unit:	Micaschists with marble intercalations. Massive amphibolites, greenstones, greenschists and ultramafic rocks.
Upper unit:	Banded meta-arenites. Garnet-amphibolites and amphibole schists.

The rocks have undergone a complex structural development including at least three fold phases that give rise to a complicated outcrop pattern.

3.1 The lower unit

This unit consists of a relatively homogenous sequence of finely banded amphibolites; the banding is at the scale of 0.1 cm to 10 cm and is defined by alternating layers of garnet-amphibolite- or amphibole schists and

quartz-biotite-hornblende- and quartz-epidote schists. In some areas this banded sequence grades into grey amphibole schists, i.e. the lighter coloured quartz-bearing component of the banded sequence becomes subordinate. These amphibole schists show local intercalations of dark, massive amphibolites (? meta-dolerites) which have been trenched here and there due to the presence of malachite stained joints. The transitional areas between the banded sequence and the grey amphibole schists are characterized by cm- to several m-thick intercalations of pyritic horizons, sericite schists and actinolite-epidote schists.

3.2 The middle unit

The main lithologies of this unit are garnet-biotite-, mica-, and quartz-sericite schists showing gradations into banded amphibole schists with bodies of schistose metagabbro. Intercalations of pink calcite marble occur locally and a number of bodies of massive, dark amphibolite carrying chalcocite-bornite mineralization have been noted.

The ultramafic rocks of the Karenhaugen massif occur tectonostratigraphically within the finely banded sequence of quartz-feldspar-mica schists and above the marble-bearing zone. The chalcocite-bornite-bearing ultramafic body consists of coarse- to medium grained uralite-actinolite rocks showing features in the central parts indicative of an eruptive origin; the outer parts of the body are schistose. Similar, although smaller bodies of ultramafic rocks occur elsewhere in this district.

3.3 The upper unit

The upper tectonostratigraphic unit is predominatly present in the southwestern part of the JV-area and is bordered by a prominent WNW-SSE trending faultzone (Fig.3).

The metaarenites of this unit are laminated, reddish quartzites with varying amounts of feldspar and mica and exhibiting rare sedimentary structures. Individual layers within this unit show evidence of isoclinal folding and weakly foliated metadolerites transect these folds; these basic rocks are similar to the Cu-sulphide-bearing massive amphibolites.

To the south of the WNW-SSE trending faultzone (Fig.3) a major metagabbro intrusion and two smaller ultramafic/metagabbro bodies occur; the latter show gradations between metaperidotite-serpentinite and metagabbro. Similar ultramafic rocks occur south of the military training ground. Other mafic rocks of this area include basic metavolcanites exhibiting rare primary structures.

4. MINERALIZATION

Two types of mineralization are present in the JV-area: pyrite-pyrrhotite dominated and Cu-sulphide dominated.

4.1 Pyrite-pyrrhotite mineralization

Stratabound, sedimentary/diagenetic pyrite-pyrrhotite mineralization is associated with quartz-sericite-, and quartz-biotite schists in the transitional areas between finely banded amphibolites and amphibole schists. The rusty mineralized horizons vary in thickness from a few cm to ca. 5 m and may be traced over several hundred meters along strike. The Fe-sulphides and subordinate

chalcopyrite and arsenopyrite occur in cm-thick quartz-rich schlieren in these layers which locally are graphite-bearing.

4.2 Cu-sulphide mineralization

Two main types of lithologies host the copper mineralization of the Porsanger area:

The metadolerites are characterized by numerous small fracture-bound bornite-digenite-chalcocite showings and a number of occurrences of bornite/chalcocite with varying amounts of chalcopyrite and subordinate molybdenite that occur in 0.1-1.5 m wide shear zones. Associated with this type of mineralization are up to 0.5 m wide concordant, semiconcordant and discondant layers, schlieren and veins of quartz, frequently with noticeable bornite-chalcocite mineralization. Approximately 500 test pits have been blasted on the copper mineralizations since the beginning of this century. This work was primarily guided by malachite staining, but also the presence of native coppper, azurite and cuprite. The richest mineralization encountered occurs at Corgus, Dartijærvi and Porsvann.

The uralite-actinolite rocks of the Karenhaugen ultramafic body contain disseminations and veinlets of chalcocite and subordinate chalcopyrite; it was noted that chalcocite apparently is the predominant sulphide in near-surface areas.

5. SAMPLING

At the outset of this project the areas with known Cu-mineralization were considered to be the main target. Following reconnaissance work in the JV area and a registration of the copper-, and pyrite-pyrrhotite occurrences lithogeochemical sampling of these showings was accordingly carried out. At the same time stream

sediments were collected in the JV area in order to investigate the precious metal potential of areas remote from known mineralization.

5.1 Lithogeochemistry

A total of 253 samples were collected from the 500 old test pits mentioned above. Each sample consists of 8-10 kg of rock chips collected in one or more of the pits in such a way that the sample represents a profile of one or more specific horizons in the supracrustals. The sampling was biased with regard to visible mineralization, hydrothermal alteration in fracture zones, and late quartz enrichment with or without visible copper minerals. Localities with abundant quartz were sampled individually. A total of 147 samples out of the 253 were analysed at Mercury Analytical in Ireland; these samples are regarded as sufficient in number to give an impression of the precious metal potential of the area. The samples were treated in a jaw crusher in Karasjok, and a split of approximately 1 kg of 0.5 cm material was sent to the lab. where grinding and analysis for Au(50g), Ag, As, Bi, W, Ni, Co, Cu, Pb and Zn took place.

In the following the samples have been grouped on the basis of lithology and subareas. The latter division is solely an expression of geographical distance between clusters of samples; names of subareas are shown in Fig.2.

5.1.1 The stratabound Fe-sulphide mineralization

A total of 14 samples from this type of mineralization have been analysed (Appendix 1 p. 1-2). Gold has not been detected, silver values vary from 0.2 ppm to 2.5 ppm and copper is present in amounts of 100 ppm to 4.700 ppm.

Arsenic is present only in the northernmost showings at Fossestrand; localities 204 and 237 (appendix 3) contains 367 ppm and 118 ppm As respectively.

5.1.2 The ultramafic complexes to the south of the WNW-SSE trending border fault

Two stream sediment samples draining these ultramafic bodies returned 70 ppb and 12 ppb Au (samples 027 and 204. Appendix 4). Lithosamples from the ultramafics and gabbros returned, however, only one 12 ppb Au value (loc. 260, Appendix 3,). This sample is from a malachite stained area in the gabbro characterized by fragments of rocks from the marble-bearing zone; the Cu-value of this sample is 3000 ppm.

5.1.3 The Karenhaugen ultramafic complex

At the outset of this investigation the ultramafic complex at Karenhaugen gave rise to hopes of significant precious metal mineralization due to observations of ultramafic rocks with irregular chert/carbonate infillings. However, on closer examination the size of this complex turned out to be rather small (Fig. 3) and only 4 of the 8 samples from the complex returned detectable gold (289, 107, 63 and 29 ppb). The silver content was furthermore found to be low, i.e. maximum 1.3 ppm (Appendix 1, p.4).

5.1.4 Mineralization in metadolerites

A total of 120 samples of copper sulphide - bearing metadolerites were analysed and 45 returned detectable gold with a highest value of 290 ppb and a mean value of 28 ppb (Appendix 1 p.5-7). Silver is present in 116 samples with a highest value of 155 ppm and a mean of 8 ppm at a detection limit of 1 ppm The Cu-contents vary widely due to the sampling procedure from a few ppm to

38%; a pronounced correlation exists between Cu and Ag (see fig. 4 and 5).

An attempt was made to discriminate between the subareas on the basis of geochemistry in order to detect large scale zoning patterns. However, the detected differences between individual subareas were shown to be without significance.

The remaining elements show the following variation:

As	16 samples	> det. lim. max	18 ppm
Bi	3 "	- " -	38 ppm
W	23 "	- " -	3 ppm
Pb	with a single value of 1188 ppm excluded -		
		mean	30 ppm
Zn	max 392 ppm	"	60 ppm
Ni	" 469 "	"	60 ppm
Co	" 219 "	"	38 ppm

For the distribution of the elements Au, Ag, Cu, Pb, Zn, Ni, Co see i) histograms figs. 6 and 7, ii) all 120 samples and iii) figs. 8-11 for the subareas.

5.2 Stream sediment sampling

Stream sediment samples were collected from streams within the JV area to the north of the military training ground. At each of the 209 sample points two fractions, <0.2 mm and >0.2 mm <0.5 mm, were collected and all the <0.2 mm samples and 100 >0.2 mm <0.5 mm samples were analysed for Au, Ag, Cu, Pb, Zn, Ni, Co, As, W, Bi.

The results from the <0.2 mm samples are summarized in Appendix 2, p. 1-5. Anomaly maps in the scale of 1:50 000 for Au, Cu, Pb, Zn, Ni and Co are shown in Appendix 4. Histograms of the distribution of Au, Pb, Cu, Zn, As, Ni and Co are shown in figs. 12 and 13.

Of the 209 samples of the <0.2 mm fraction 25 returned detectable gold with a highest value of 156 ppb and with only 5 samples above 20 ppb. Silver was not detected. The lithosamples show a marked positive correlation between Cu and Ag so theoretically silver should show up in samples with high Cu values; however, the Cu-values are generally low with a mean of 60 ppm and this, in conjunction with a Ag detection limit of 0.1 ppm, probably explains the absence of Ag values. The remainder of the elements show the following distribution (see also Figs. 12 and 13 and Appendix 4).

As	106 samples	with	1 ppm	- max	5 ppm	det.lim.	1 ppm
Bi	7	- " -		1 ppm - max	1 ppm	det.lim.	1 ppm
W	< det.lim					det.lim.	1.ppm
Pb	max.	62 ppm	mean	10 ppm			
Zn	"	582 "	"	50 "			
Ni	"	253 "	"	45 "			
Co	"	42 "	"	14 "			

During the first run at the lab. 50 g of <0.2 mm material was analysed for gold. However, the majority of the <0.2 mm samples consist of more than 50 g of material and the remainder from each sample was later analysed for gold and 3 samples only returned detectable gold: Loc. 24 and 160 (20 ppb and 12 ppb; no gold in first run); Loc. 204 (4 ppb; 12 ppb in first run).

The results from the 100 samples of >0.2 mm <0.5 mm material were compared with the corresponding 100 samples of the <0.2 mm fraction. Plots of the elements Cu, Zn and Ni from the two fractions (figs. 14, 16 og 17) show good correlation, while less correlation is shown in the Pb and Co plots (Figs. 15 and 18); the latter may be caused by the overall low values of these elements.

The samples of the >0.2 mm <0.5 mm fraction returned no detectable gold.

6. CONCLUSIONS

6.1 Lithology

The described lithologies probably represent metamorphosed mafic- and acid tuffs, volcanoclastic sediments and sandstones with subordinate intercalations of limestone and argillaceous sediments and ultramafic intrusives/extrusives. These rocks were apparently laid down in a large ?shallow water basin characterized by deposition of products from bimodal volcanism and erosion products from the adjacent Archean continental crust. The entire sequence was later subjected to three phases of folding of which the most important gave rise to isoclinal recumbent folds. The massive amphibolites probably represent sills and/or dykes although their age is uncertain.

6.2 Mineralization

Stratabound, banded Fe-sulphide horizons occur in quartzitic- and schistose lithologies and consist of pyrite, pyrrhotite, chalcopyrite, arsenopyrite and graphite. They are interpreted as being related to both volcanogenic and biochemical processes. The 1983 analytical results of samples from these horizons are in accordance with the 1932 analysis of Cu-concentrates from these showings, and their precious metal potential is considered to be negligable.

The copper showings of the area characteristically occur as fracture fillings in competent mafic and ultramafic rock units. The showings exhibit many features indicative of an epigenetic origin which, in conjunction with the regional distribution, rules out a syngenetic origin. The presence of chalcocite, bornite and native copper furthermore suggests that supergene processes were active.

A characteristic feature of these deposits is their similarity to the Sjangeli Cu-showings in the Rombak area some 350 km to the south of Porsanger and to the Hovin deposits in the Telemark region (Foslie, 1933; Schønwandt, 1984). However, their content of precious metals is in general below 0.3 ppm Au and a mean of 8 ppm Ag. It should be noted that the sampling program has been concentrated in the most promising areas and that the precious metal analysis accordingly may be regarded as optimal.

Stream sediment Au-anomalies can be explained by the litho-sample results and it seems unrealistic to envisage areas with a precious-metal potential outside of the areas covered by litho-sampling.

In summary, the precious metal potential of the Porsanger area is considered negligable and no further action is recommended. In accordance with this the JV claims have been abandoned.

Oslo, 1.3.1984

Viggo Aggerholm

Viggo Aggerholm

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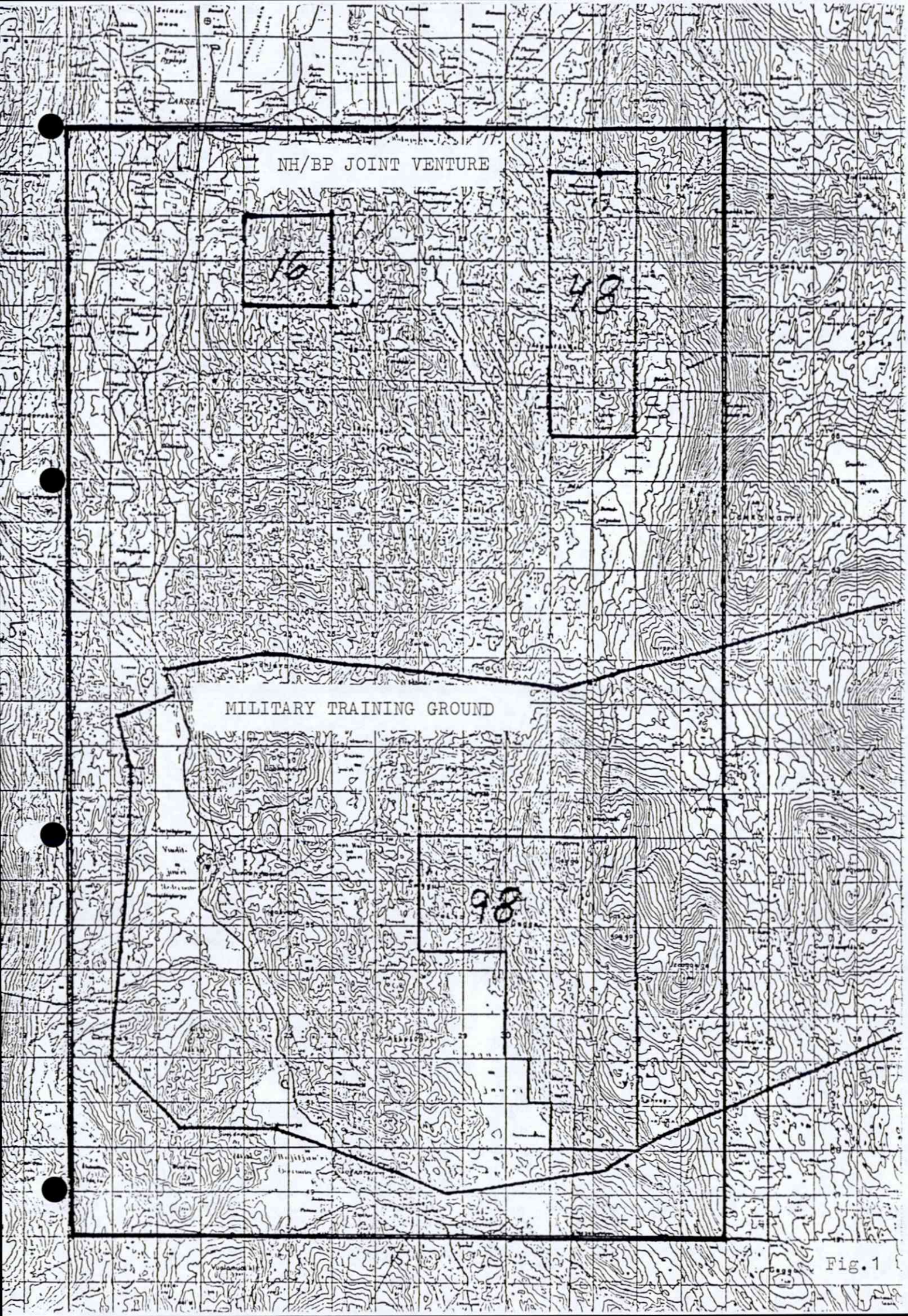
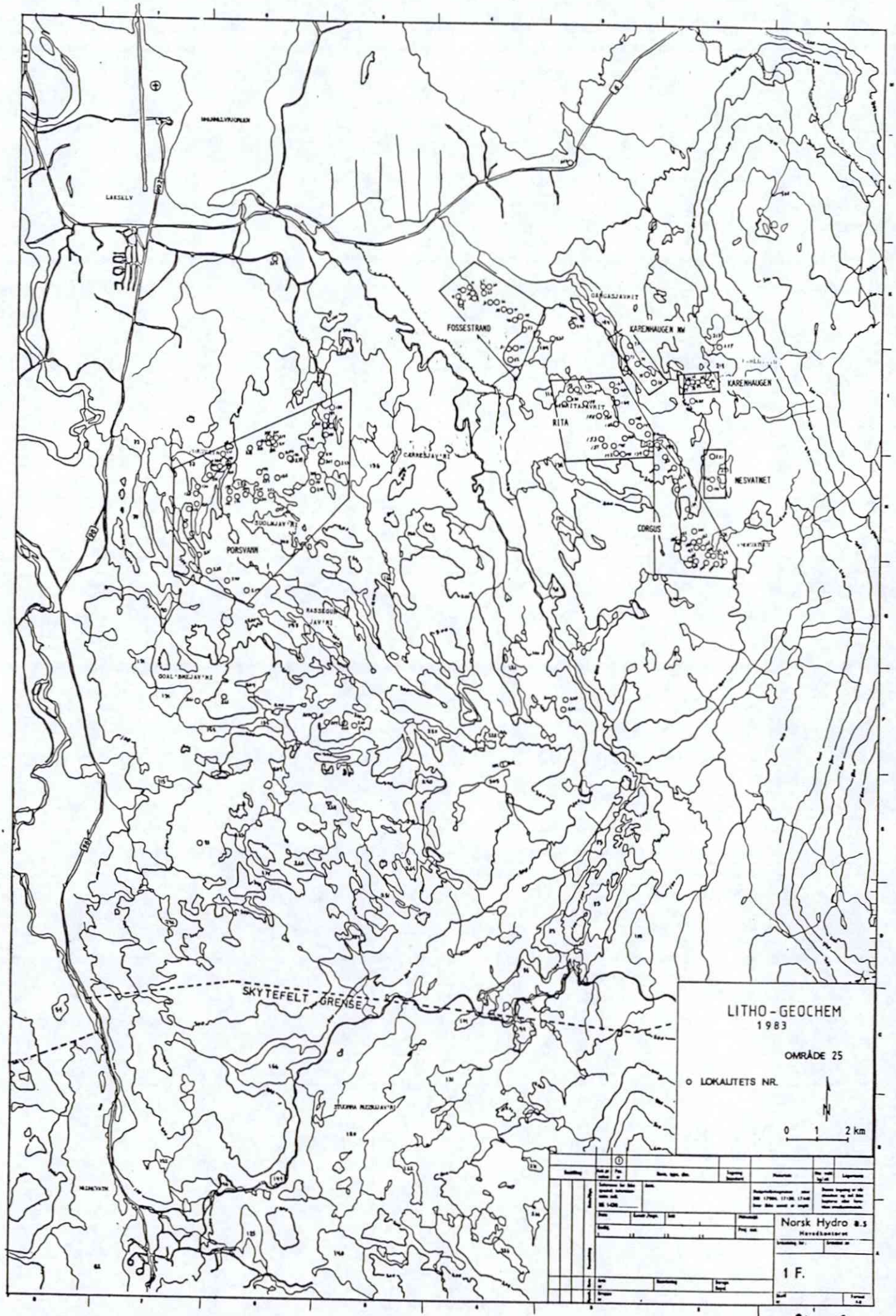


Fig.1


LAKSELV
FOSSESTRAND
KARENHAUGEN NW
KARENHAUGEN
RITA
MESVATNET
CORGUS
PORSVANN
SKYTEFELT GRENSE
LITHO-GEOCHEM
1983
OMRÅDE 25
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0 1 2 km
Norsk Hydro a.s
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fig. 2

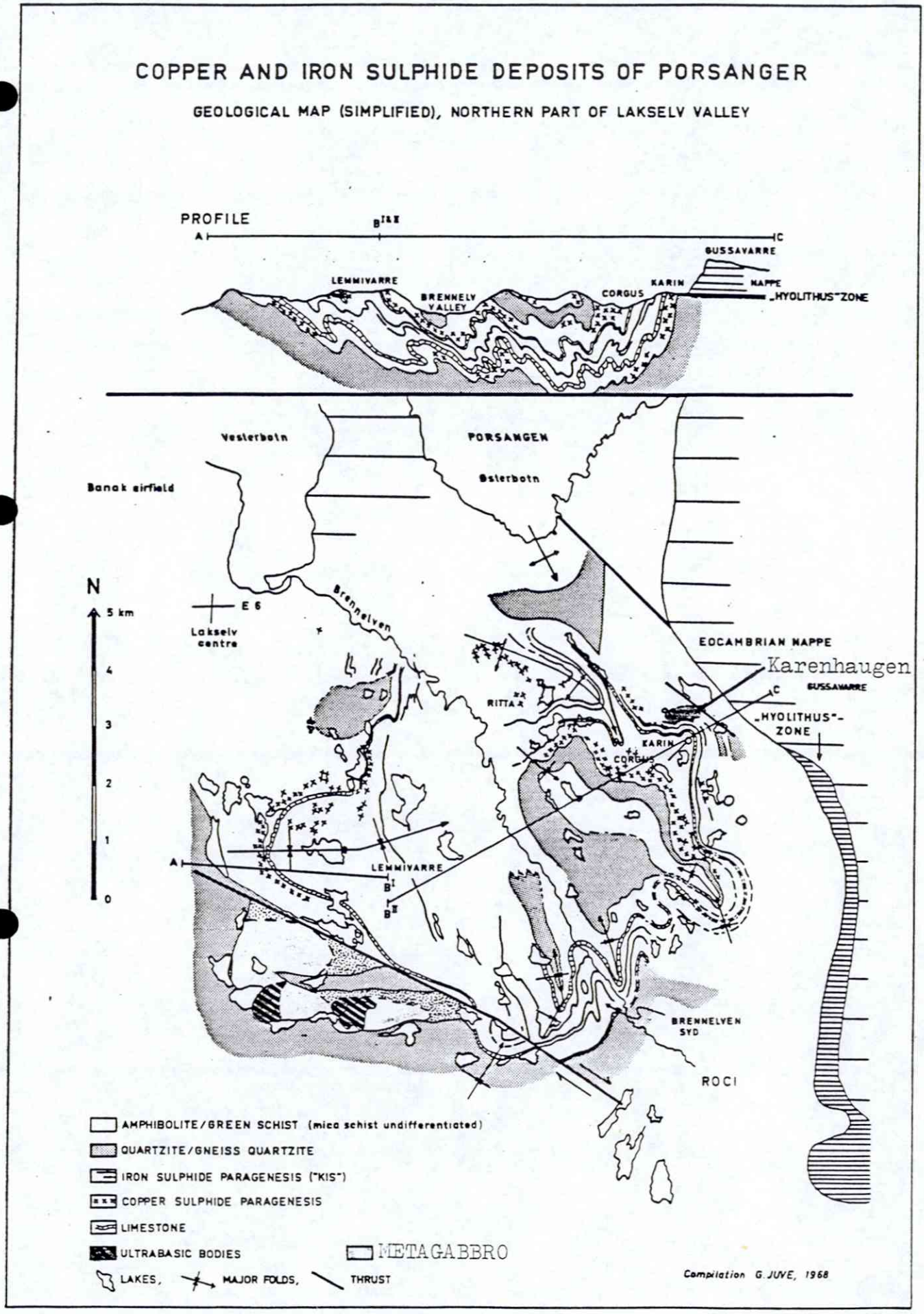
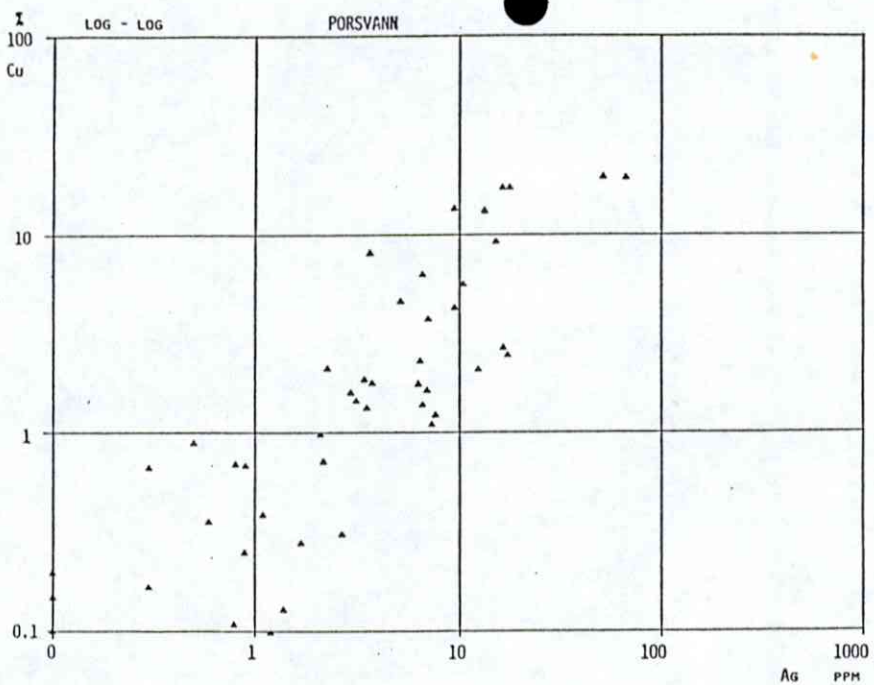
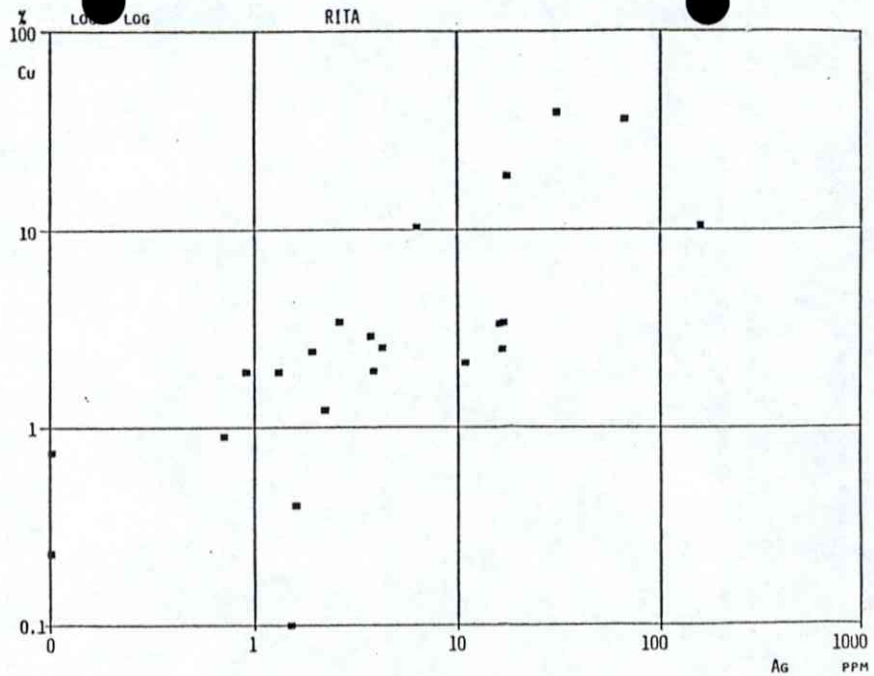
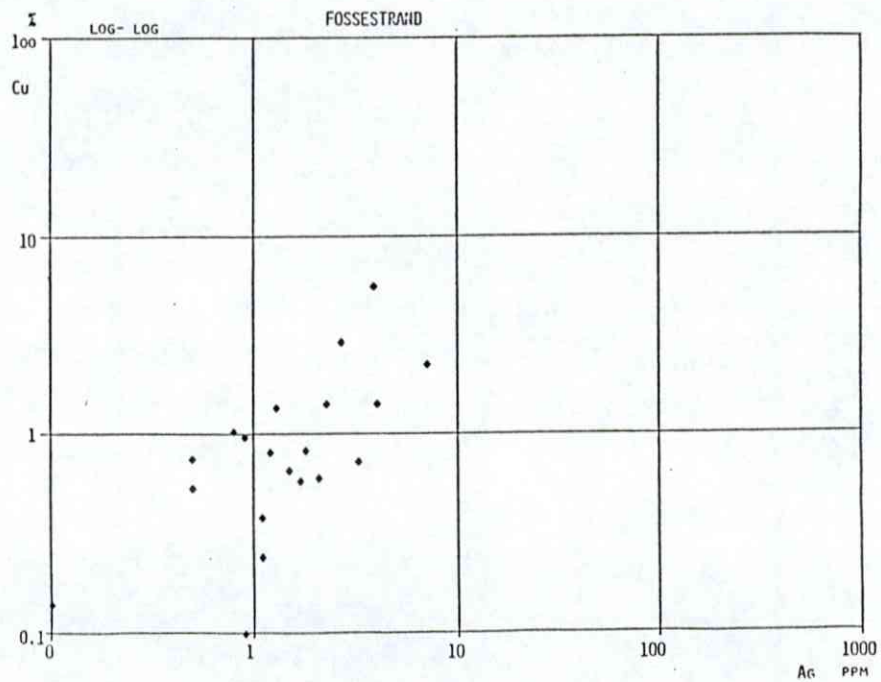
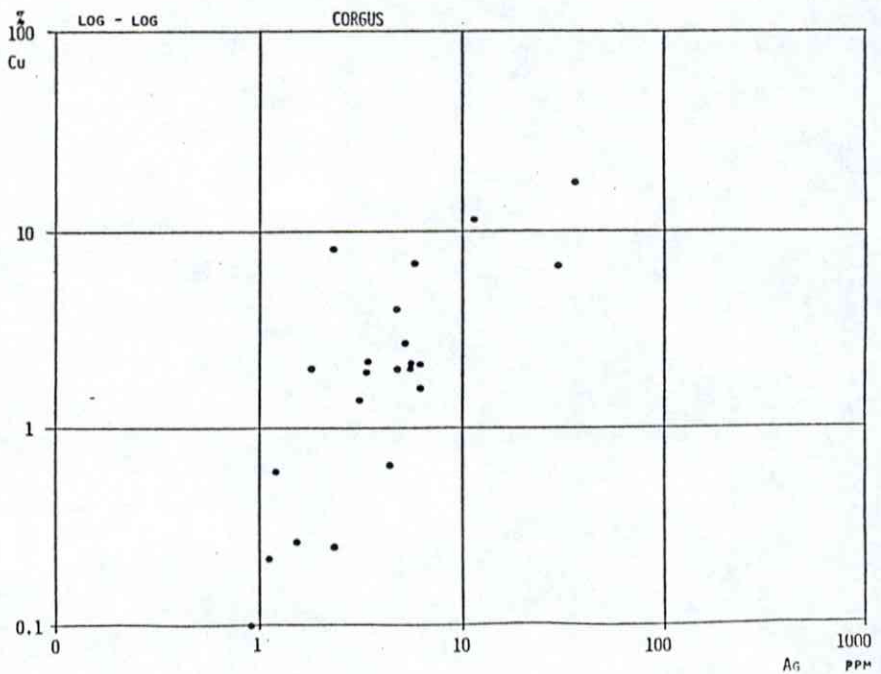


Fig.3 Simplified geological map based on Juve(1968) with additionel data on copper sulphide showings and U.M.- metagabbro bodies from the 1983 JV project.



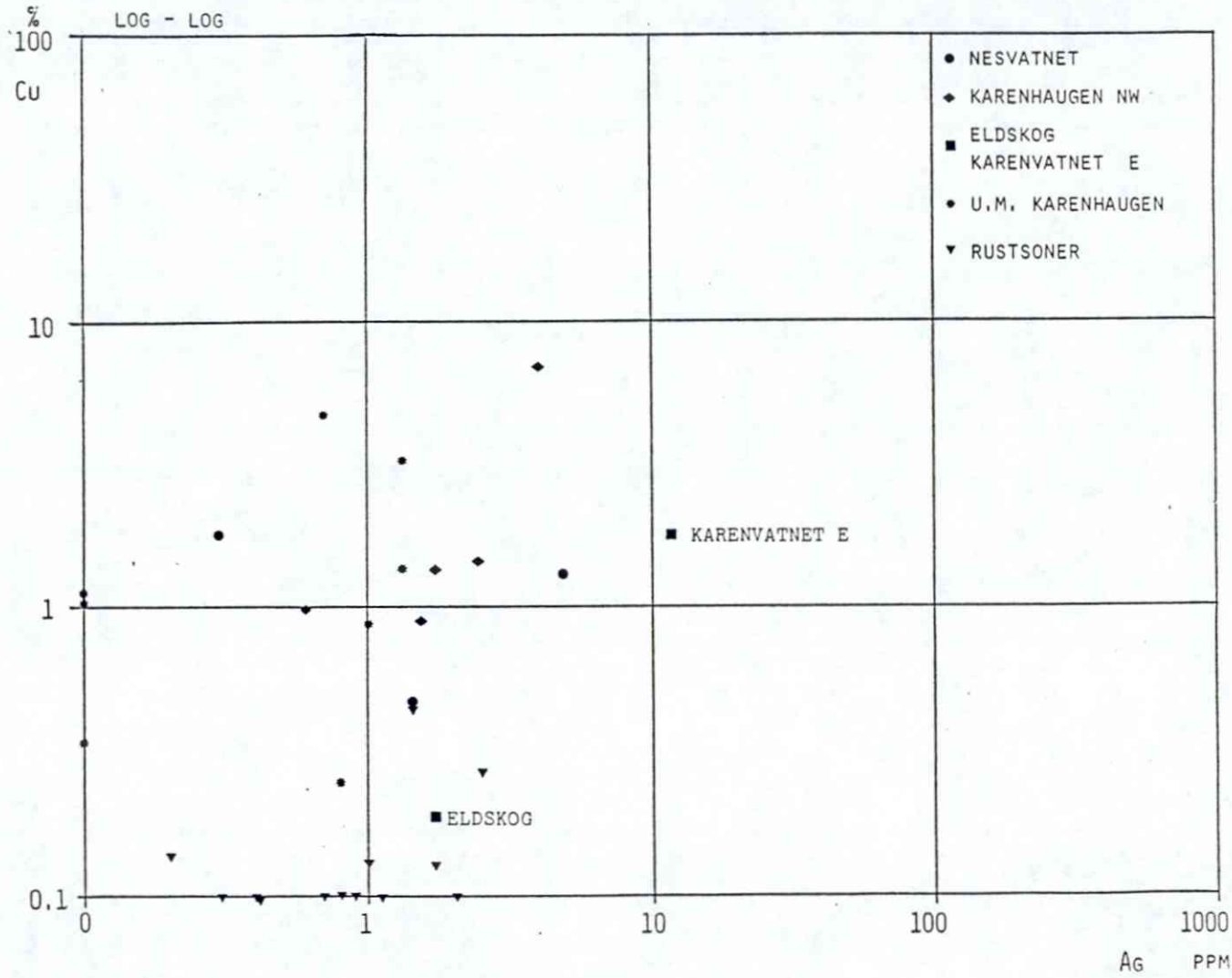






Scatterdiagram for lithosamples from 4 subareas Log Ag- Log Cu

Fig. 4



Scatterdiagram for lithosamples Log Ag - Log Cu

Fig.5

A.

GEOKEMISK

OMR DE: PORSANGER
BAS: UTM

ANTAL OBSERVATIONER : 120

KORRELATIONSMATRIS

	CU	PB	ZN	NI	CO	AG	U	AU	AS	BI
CU	1.000	-.013	-.085	.285	.042	.581	-.173	.176	-.077	-.039
PB	-.013	1.000	.137	-.036	-.026	.037	-.043	-.036	-.010	-.006
ZN	-.085	.137	1.000	.487	.070	-.045	.196	-.118	.589	-.011
NI	.285	-.036	.487	1.000	.194	.150	.099	.106	.505	.032
CO	.042	-.026	.070	.194	1.000	-.013	-.219	-.104	.041	-.022
AG	.581	.037	-.045	.150	-.013	1.000	-.123	.091	-.053	.106
U	-.173	-.043	.196	.099	-.219	-.123	1.000	-.081	.279	-.050
AU	.176	-.036	-.118	.106	-.104	.091	-.081	1.000	-.074	.007
AS	-.077	-.010	.589	.505	.041	-.053	.279	-.074	1.000	-.024
BI	-.039	-.006	-.011	.032	-.022	.106	-.050	.007	-.024	1.000

KORRELATIONSMATRIS

	CU	PB	ZN	NI	CO	AG	U	AU	AS	BI
M	37809.17	39.73	68.23	59.11	38.66	7.77	.23	10.81	.43	.40
S	64862.49	108.27	44.75	57.98	26.65	17.34	.53	29.92	2.03	3.52
V	1.72	2.72	.74	.98	.69	2.23	2.26	2.77	4.68	8.79
MAX	********	1188.00	392.00	469.00	219.00	154.90	3.00	290.00	18.00	38.00
MIN	100.00	9.00	6.00	2.00	3.00	.00	.00	.00	.00	.00

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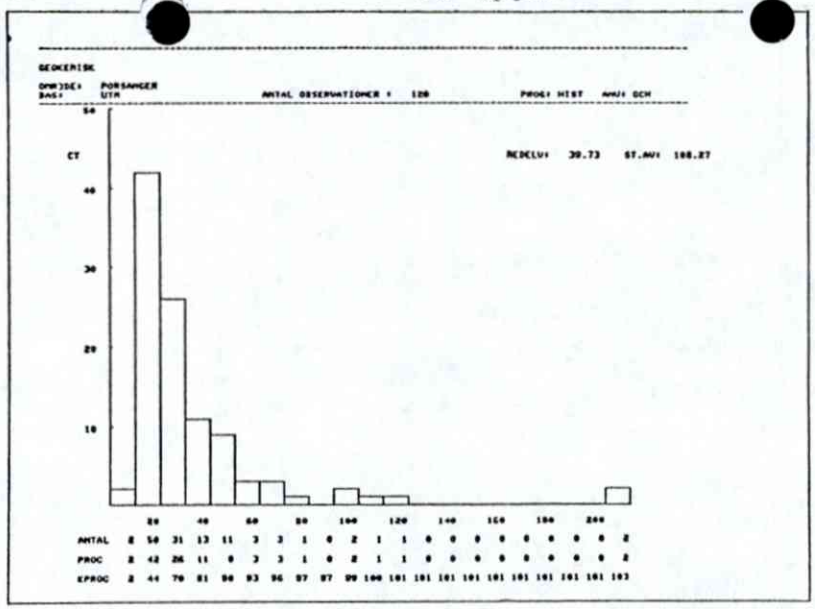
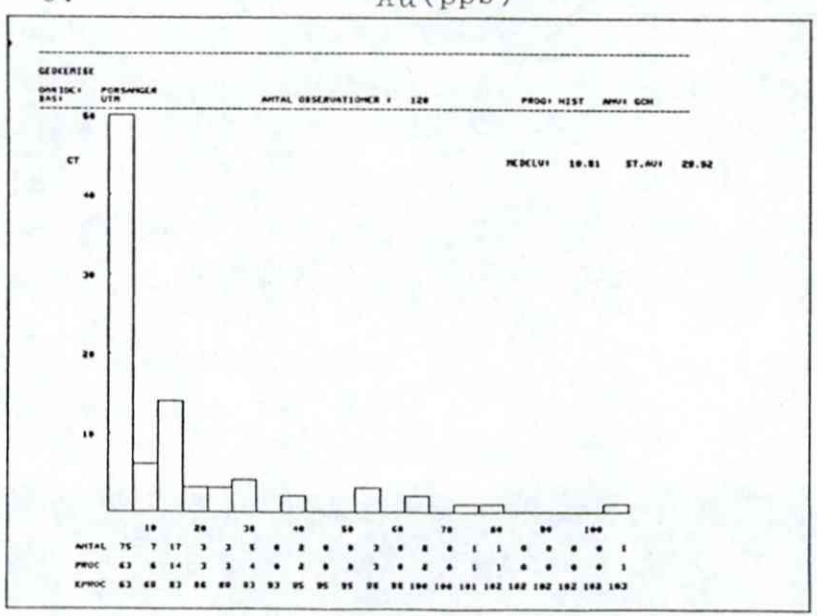
Fig.6A- Correlationcoefficient for all elements for 120 ? Metadoleritesamples

B. Pb (ppm)



C. Au(ppb)



D. Zn (ppm)

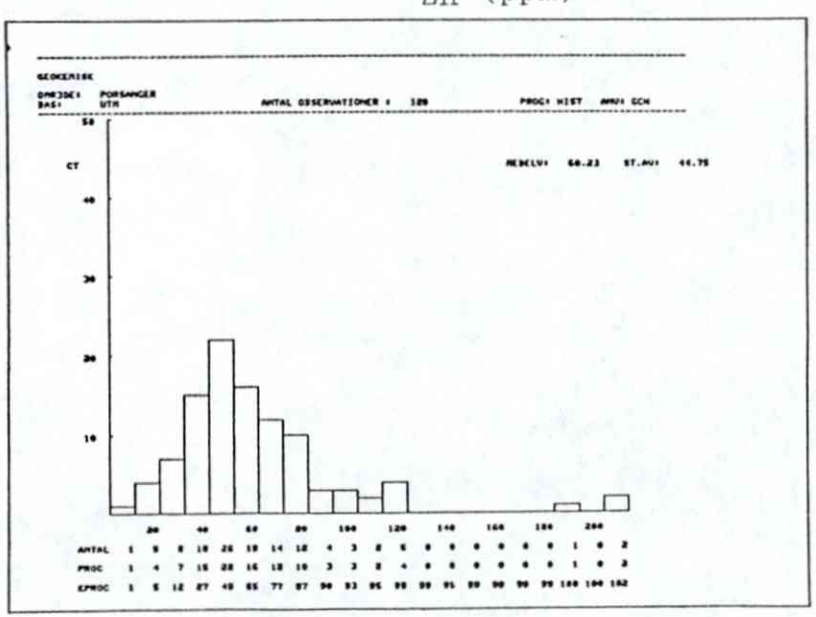
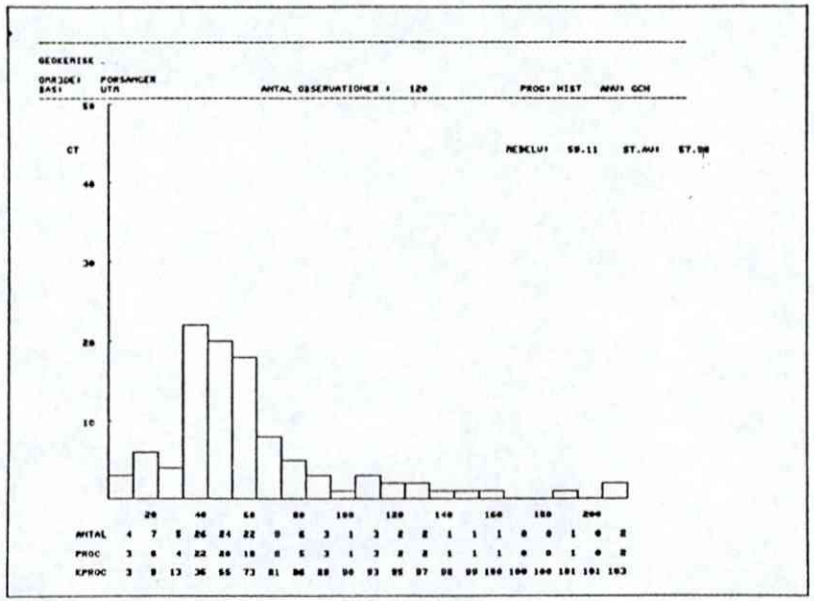
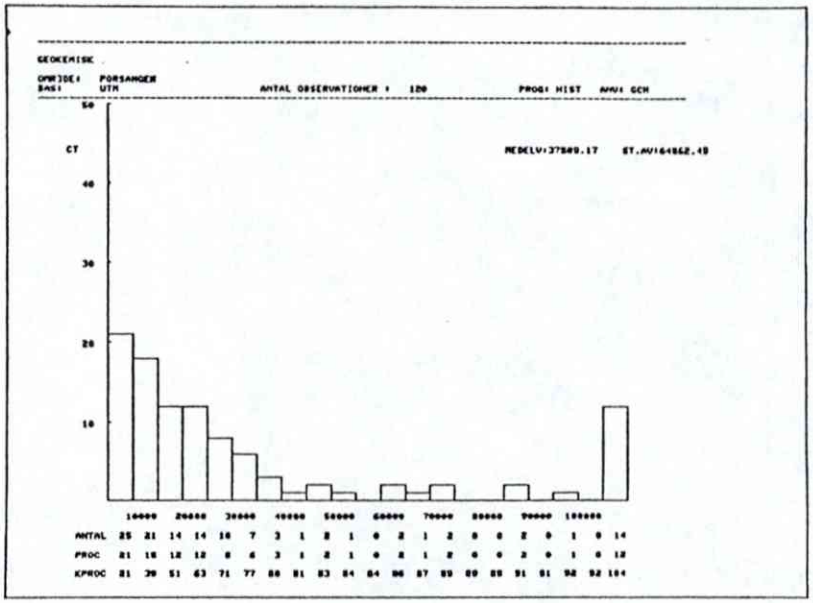


Fig.6B-C-D Histogram for 120 metadolerite-samples Pb, Au, Zn

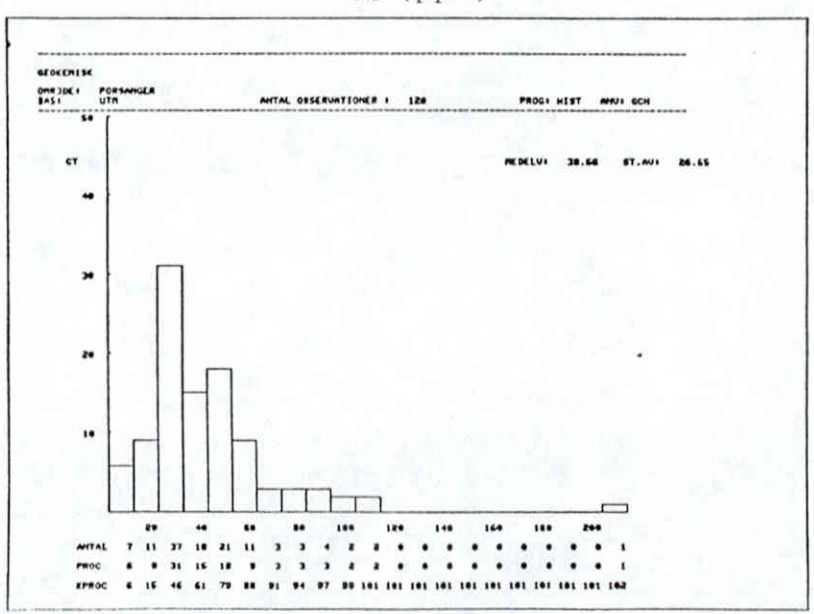
Ni (ppm)



Cu (ppm)



Co (ppm)



Ag (ppm)

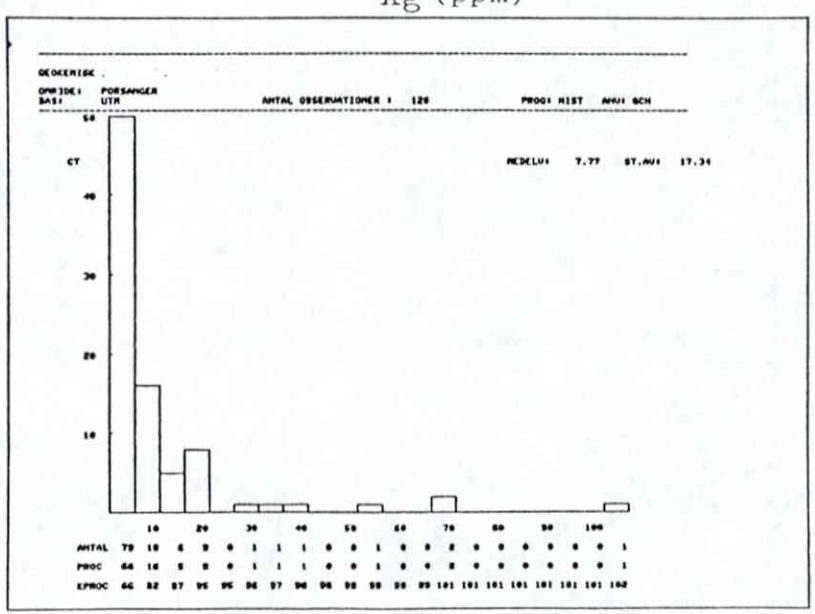
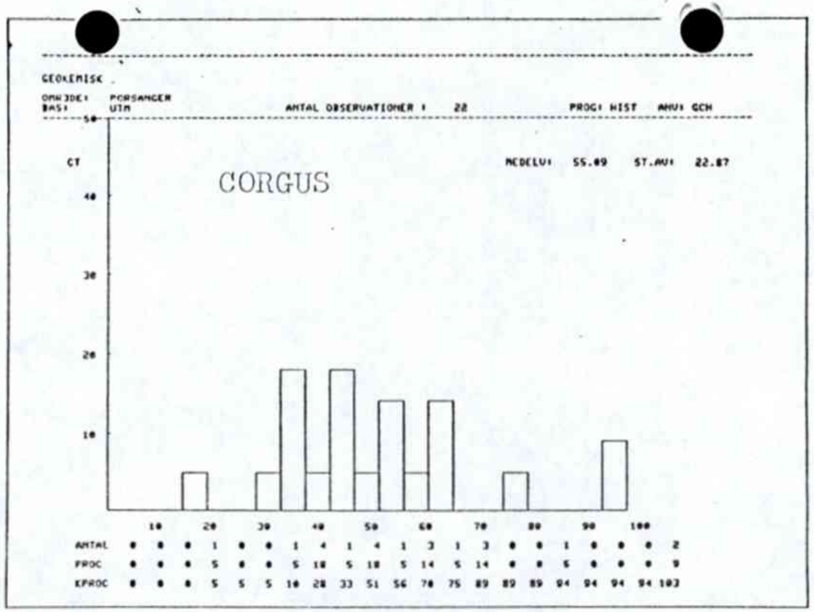
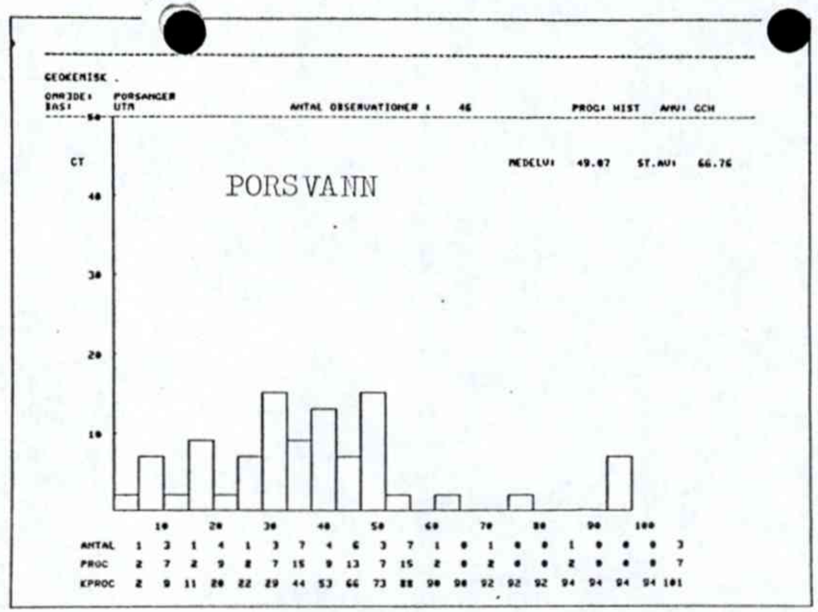
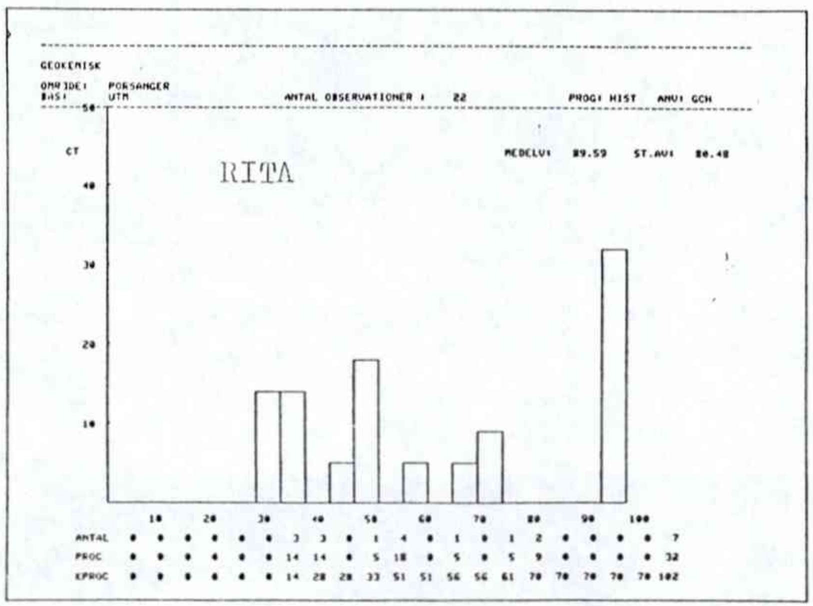


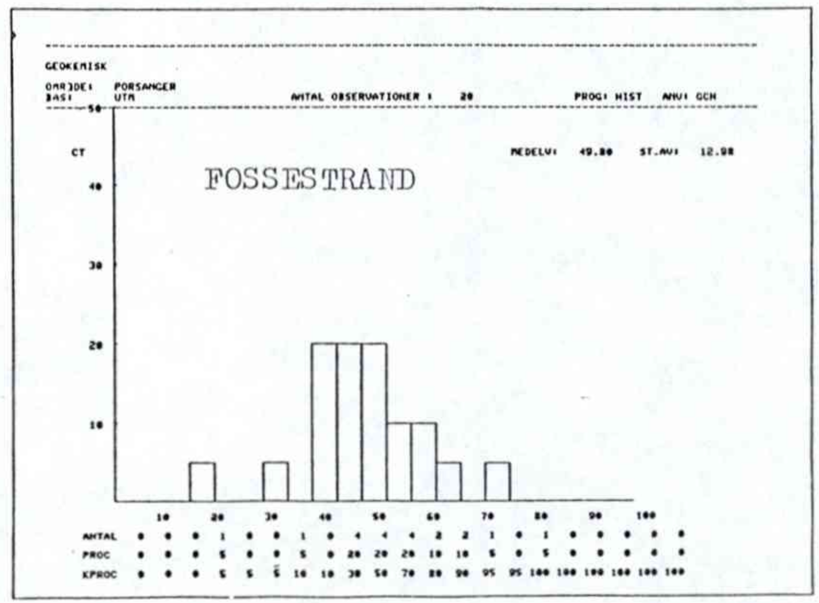
Fig. 7 Histograms for 120 metadoleritesamples. Ni, Co, Cu, Ag.





Ni (ppm)

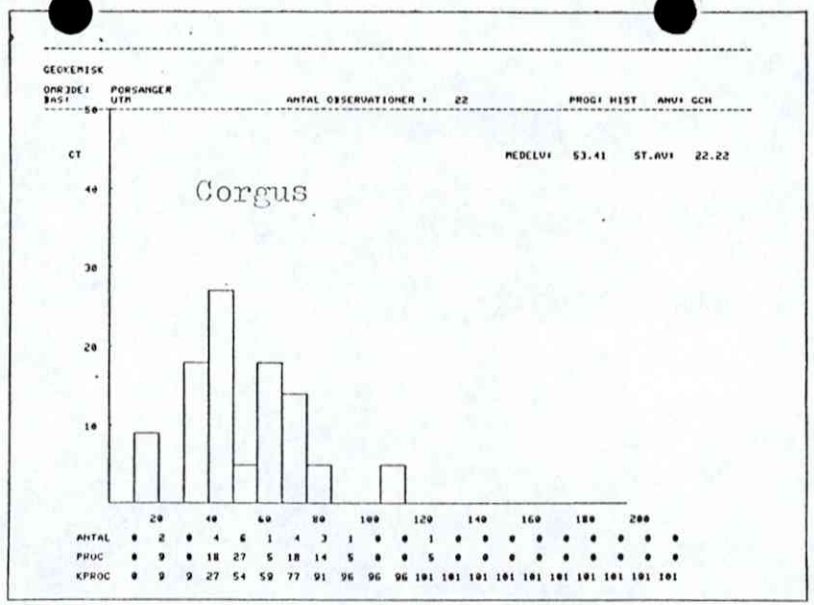


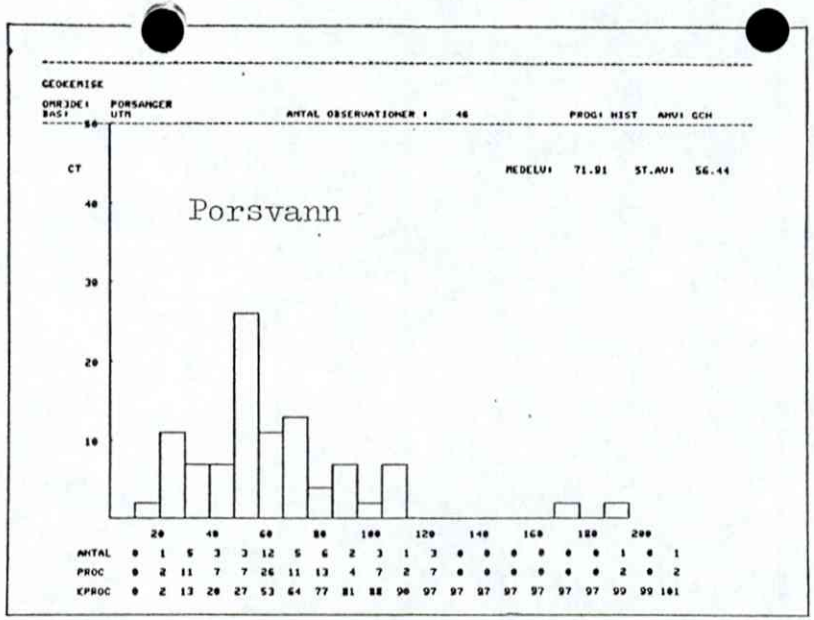


HISTOGRAMS FOR Ni IN METADOLERITES IN 4 SUBAREAS

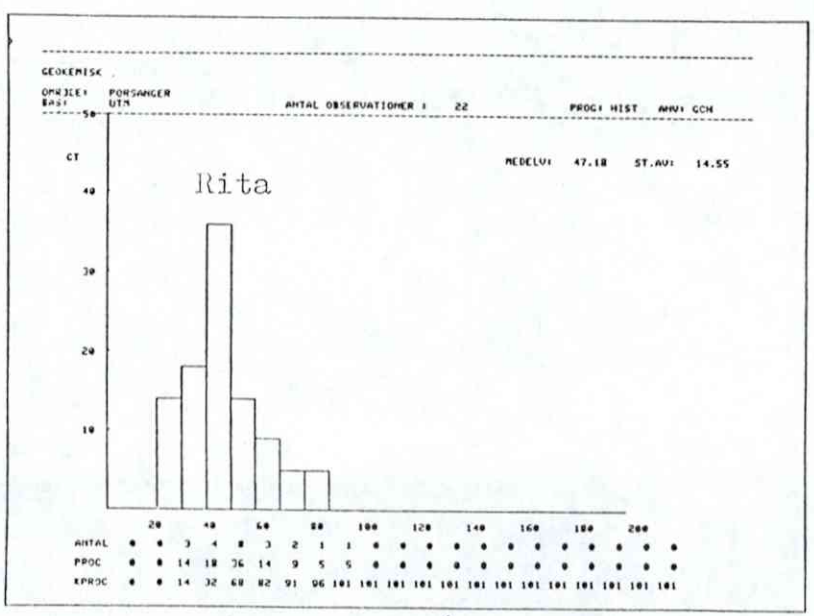
Fig. 8

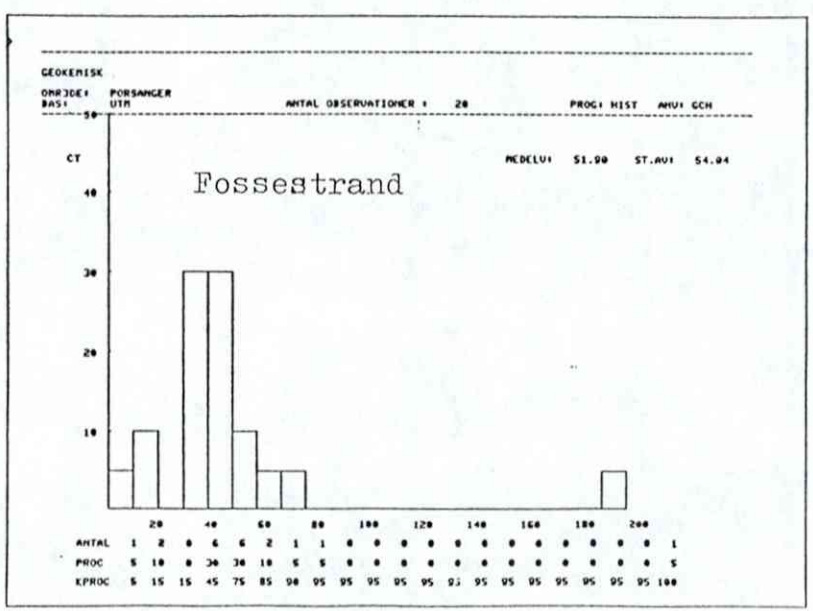
HISTOGRAMS FOR ZN IN METADOLERITES IN 4 SUBAREAS



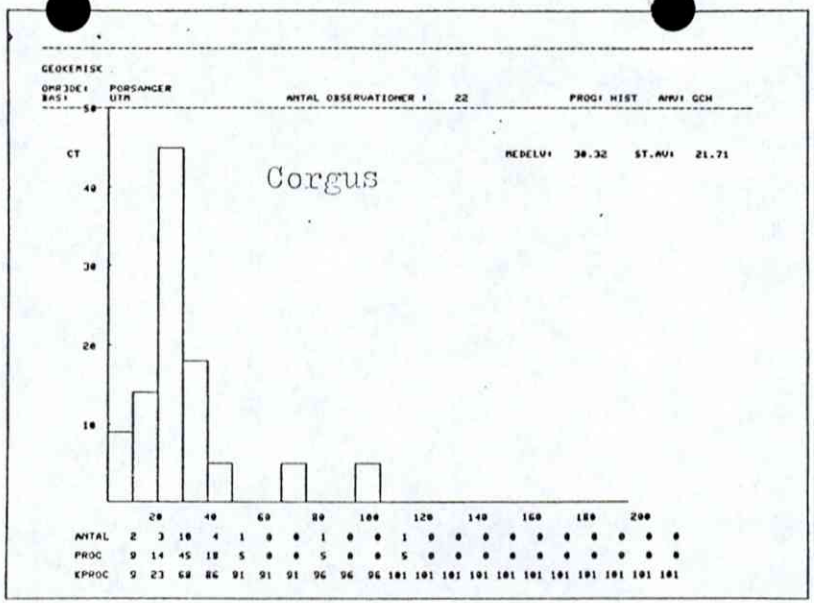


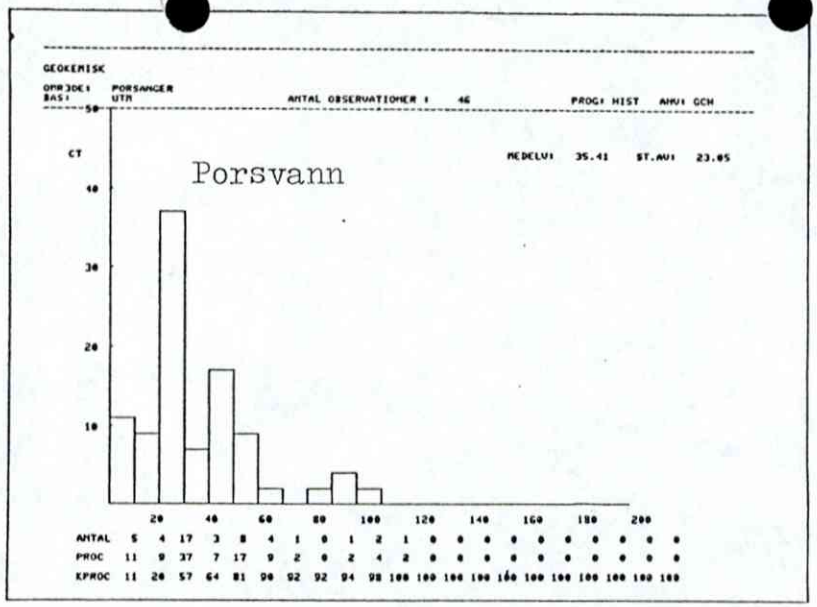
Zn (ppm)



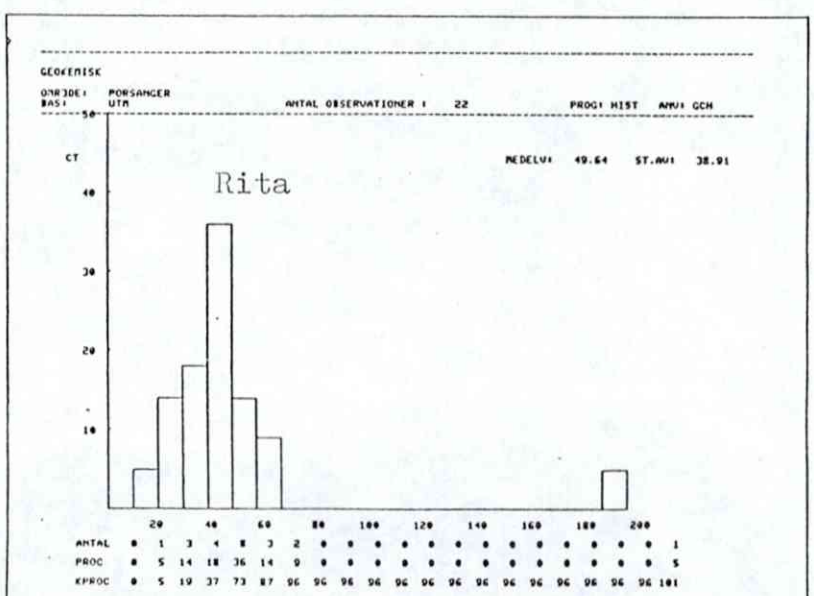


HISTOGRAMS FOR Co IN METADOLERITES IN 4 SUBAREAS





Co (ppm)



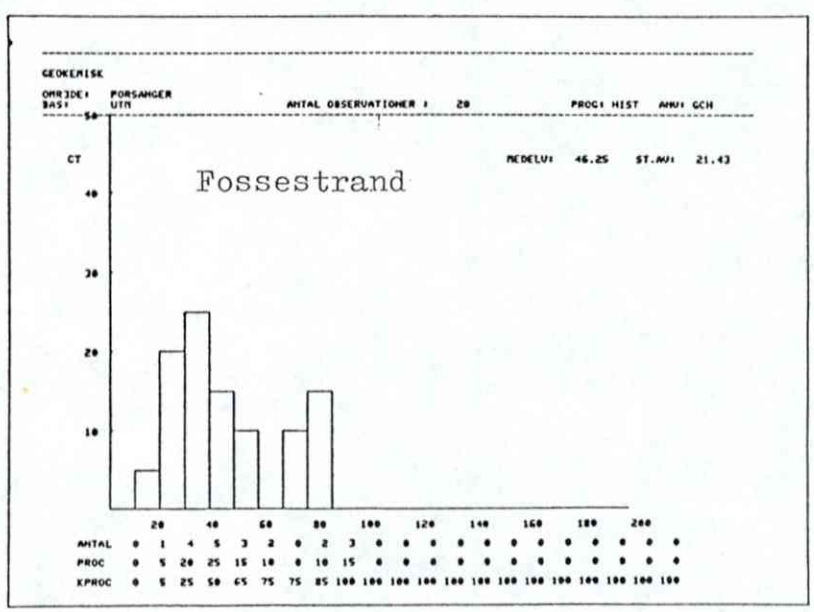
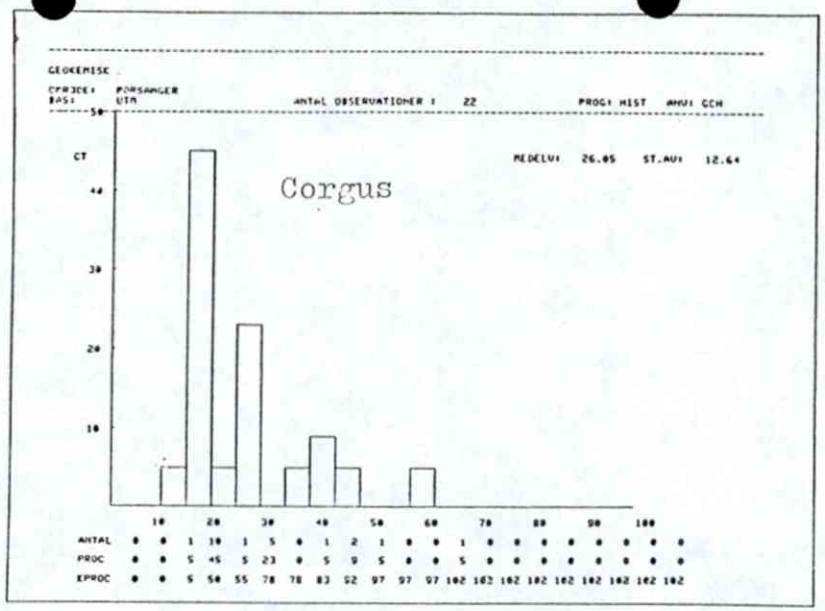
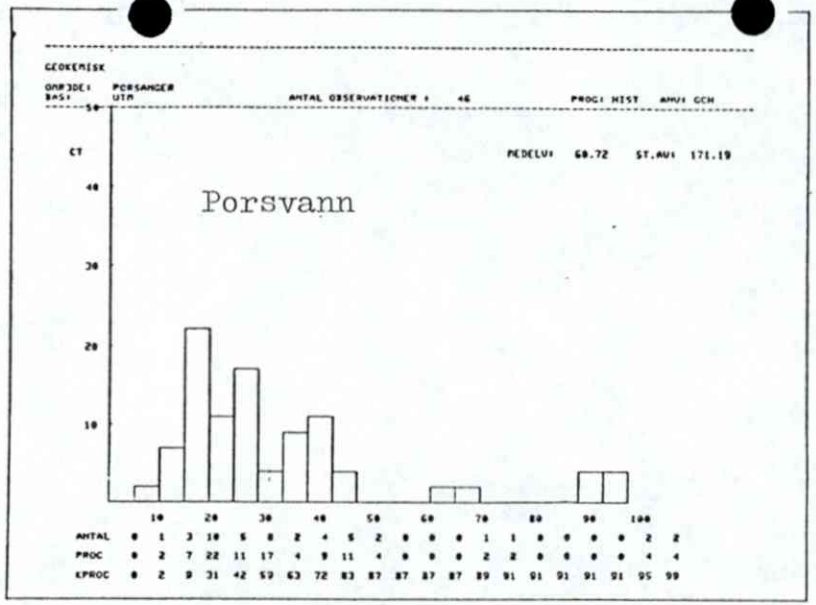


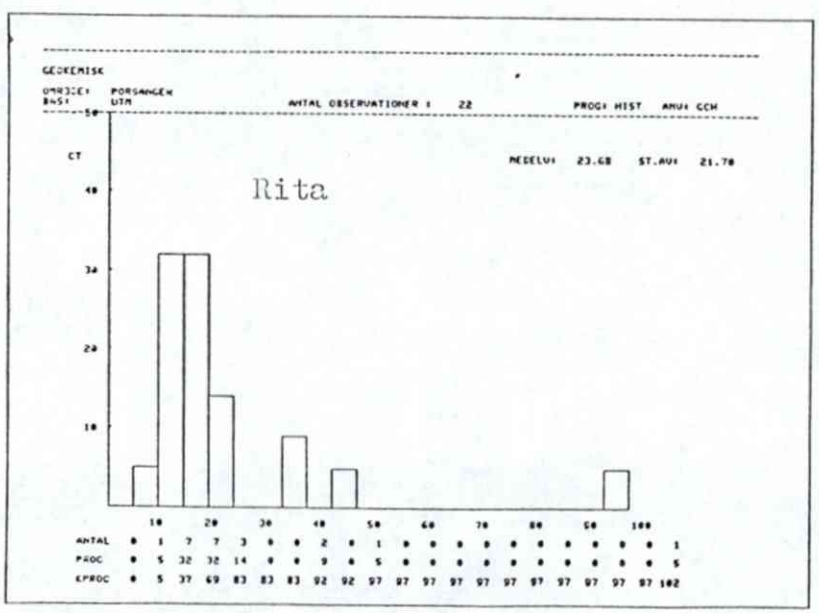
Fig. 10

HISTOGRAMS FOR PB IN METADOLERITES IN 4 SUBAREAS





Pb (ppm)



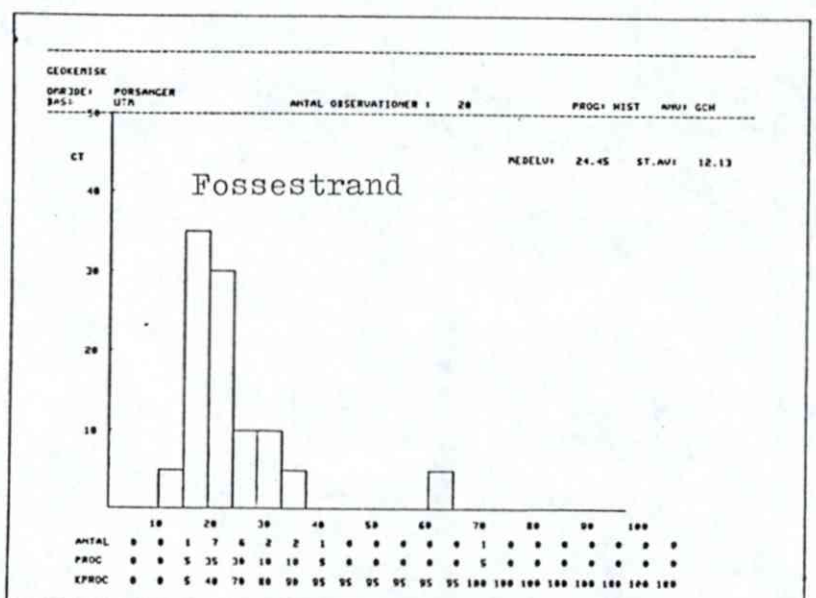


Fig. 11

GEOKEMISK SEDIMENTPROVTAGNING

OMR DE:
BAS:

ANTAL OBSERVATIONER : 209

KORRELATIONSMATRIS

	CU	PB	ZN	NI	CO	AS	AU	BI	AG	U
CU	1.000	.280	.341	.341	.383	.236	.006	.023	.000	.000
PB	.280	1.000	.221	.205	.325	.148	-.010	-.040	.000	.000
ZN	.341	.221	1.000	.587	.518	.263	-.059	.031	.000	.000
NI	.341	.205	.587	1.000	.603	.224	-.017	.048	.000	.000
CO	.383	.325	.518	.603	1.000	.135	-.036	.115	.000	.000
AS	.236	.148	.263	.224	.135	1.000	-.074	-.115	.000	.000
AU	.006	-.010	-.059	-.017	-.036	-.074	1.000	.130	.000	.000
BI	.023	-.040	.031	.048	.115	-.115	.130	1.000	.000	.000
AG	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
U	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

KORRELATIONSMATRIS

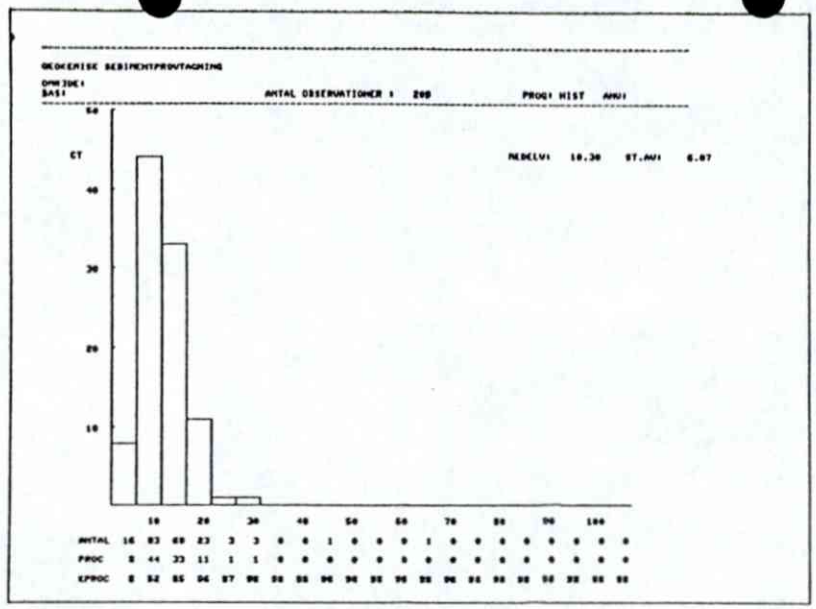
	CU	PB	ZN	NI	CO	AS	AU	BI	AG	U
M	59.89	10.30	50.64	44.24	14.27	.75	2.63	.03	.00	.00
S	75.52	6.07	53.99	41.43	7.17	.98	13.05	.18	.00	.00
V	1.26	.59	1.07	.94	.50	1.31	4.96	5.37	.00	.00
MAX	669.00	62.00	582.00	253.00	42.00	5.00	156.00	1.00	.00	.00
MIN	5.00	2.00	4.00	5.00	2.00	.00	.00	.00	.00	.00

END OF FILE

Fig.12 A. Correlationcoefficient for 10 elements in 209 stream sediments

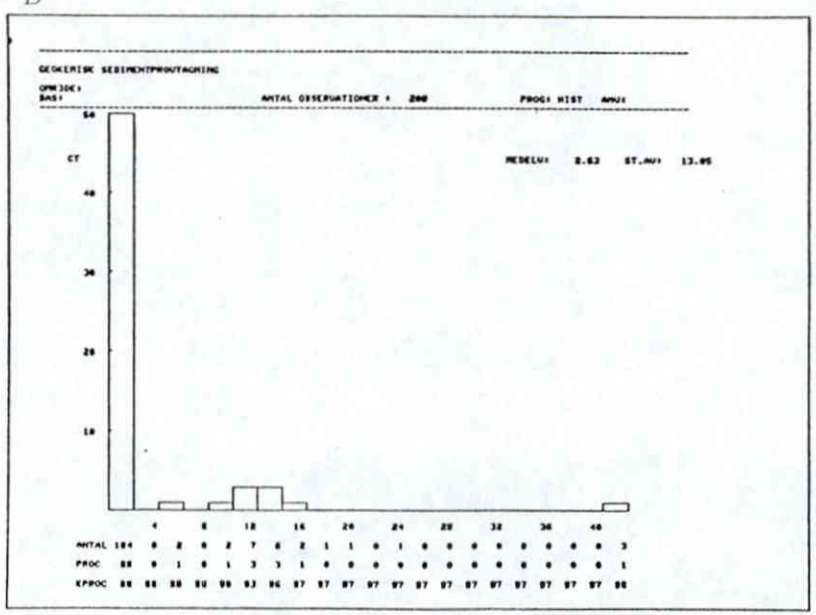
C

Pb (ppm)



B

Au (ppb)



D

Zn (ppm)

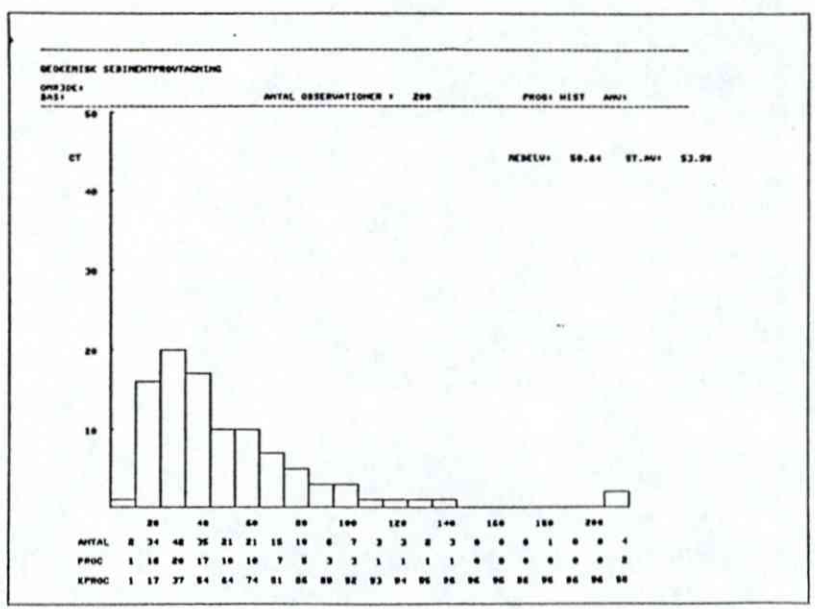
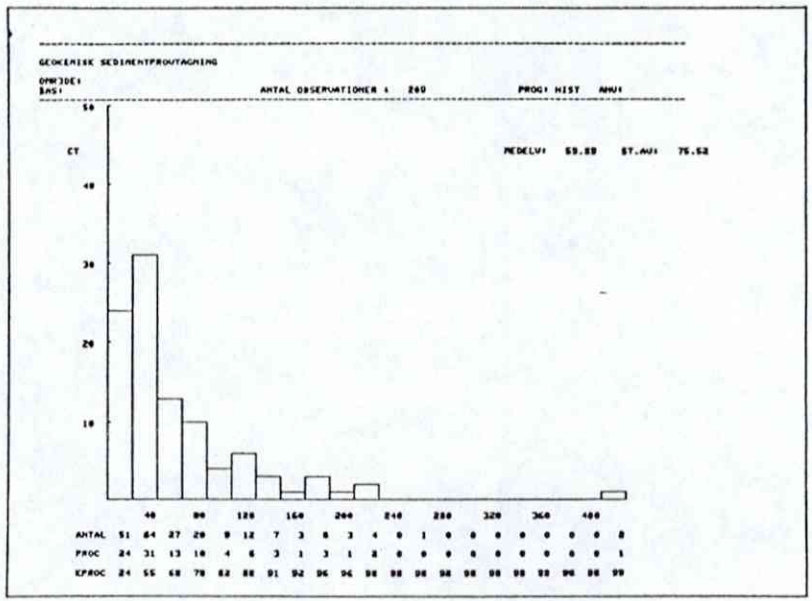


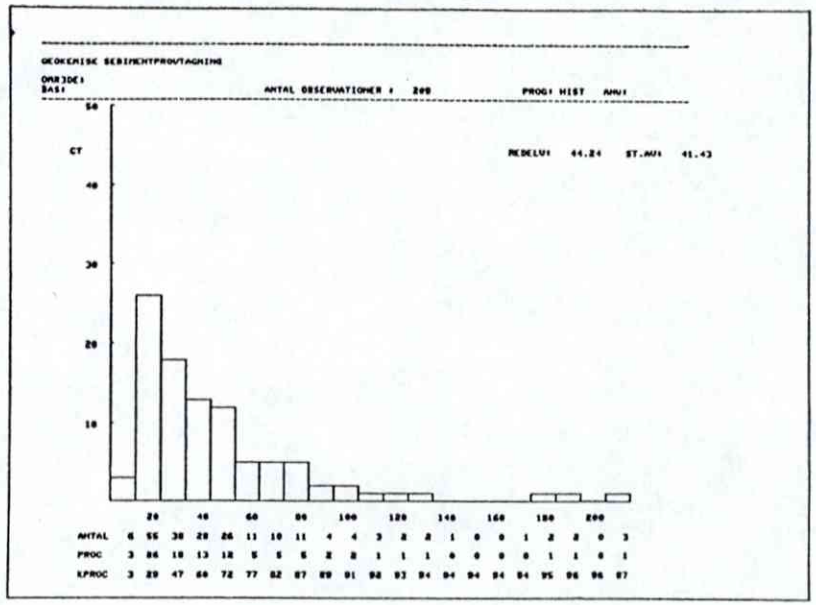
Fig.12 B-C-D.Histograms for 209 Streamsediments Au,Pb,Zn.

HISTOGRAMS FOR 209 STREAMSEDIMENTS, Cu, As, Ni, Co.

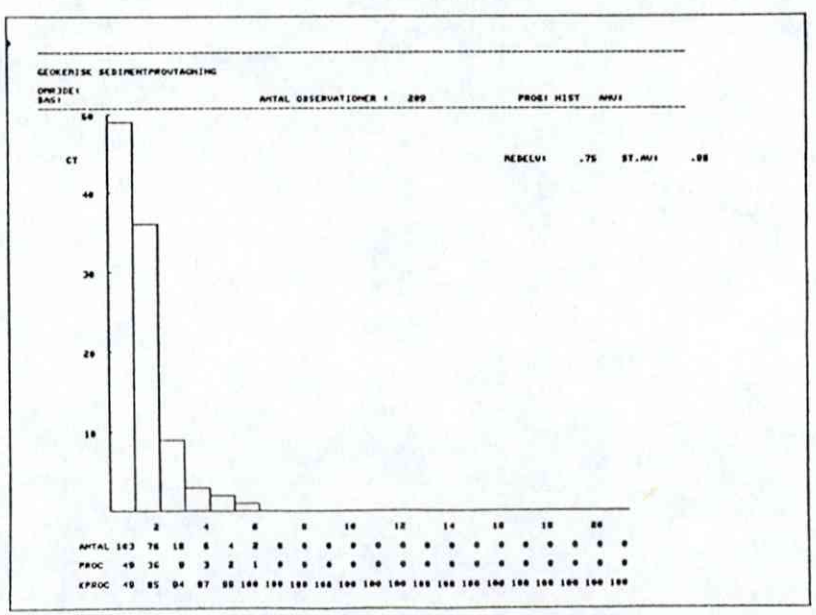
Cu (ppm)



Ni (ppm)



As (ppm)



Co (ppm)

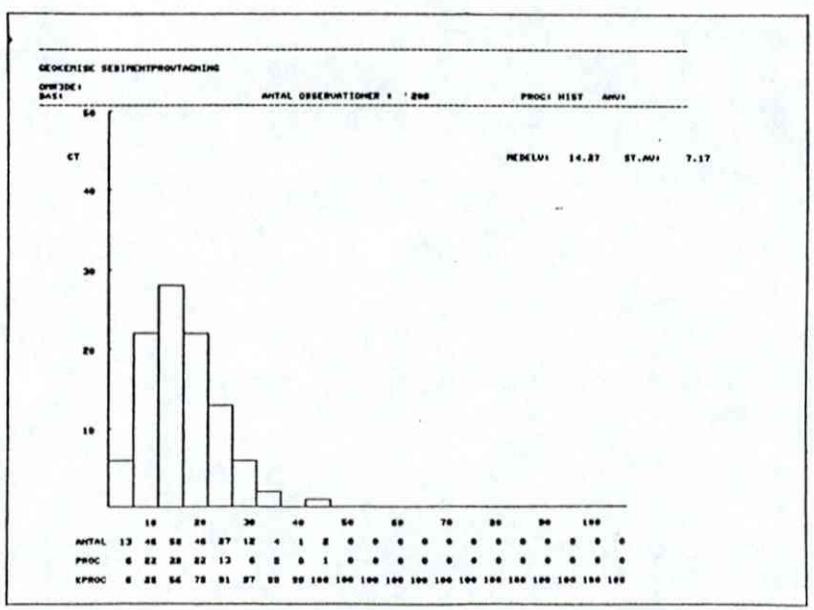


Fig. 13

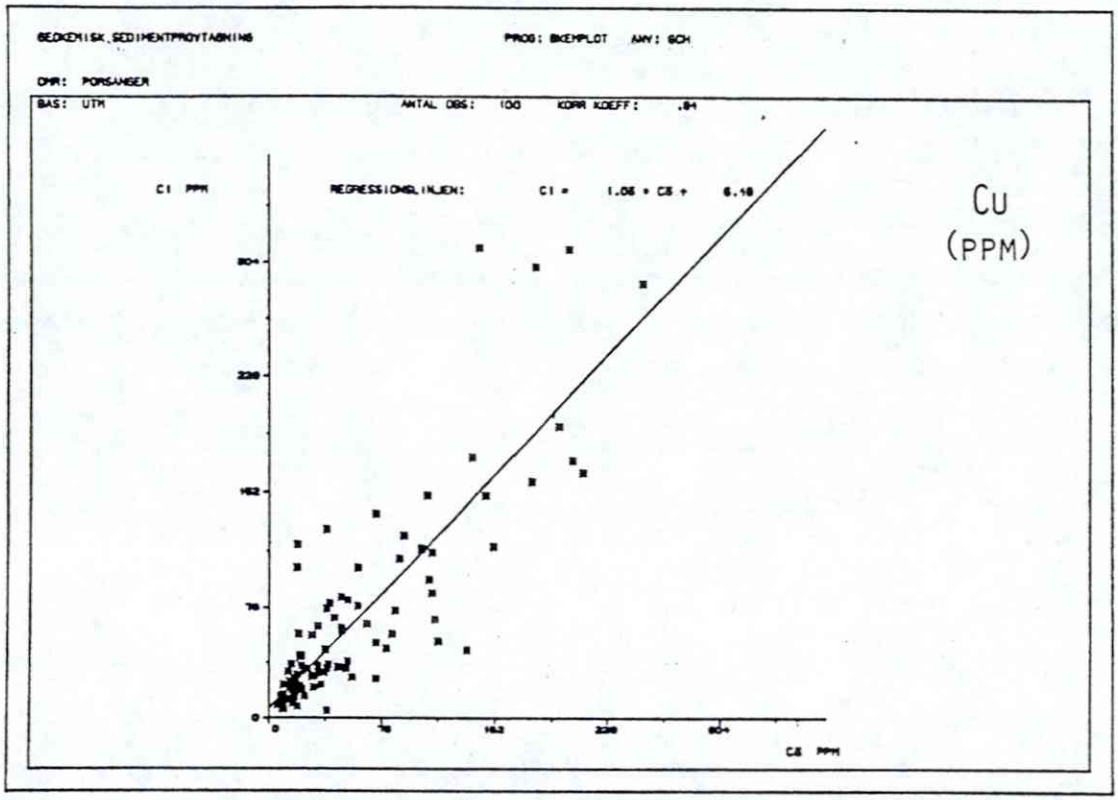


Fig.14. Scatterdiagram for Cu in 2 fractions:
C1 - Cu in 0.2mm 0.5mm
C3 - Cu in 0.2mm

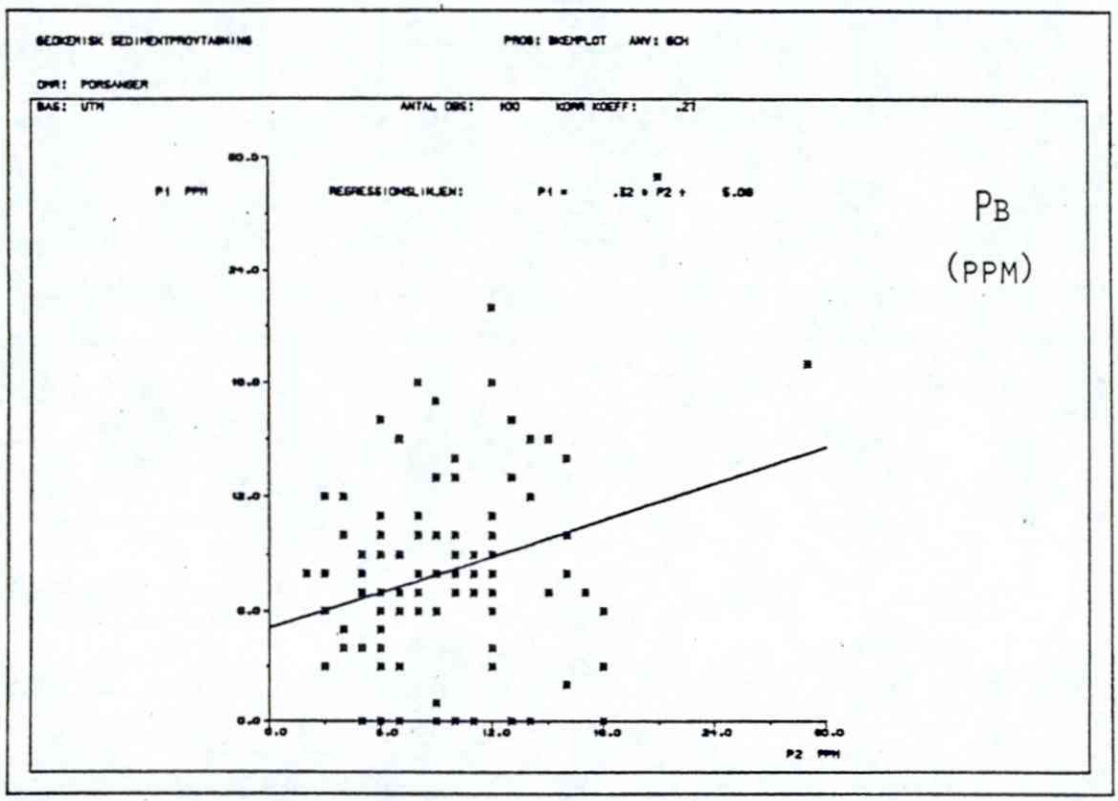
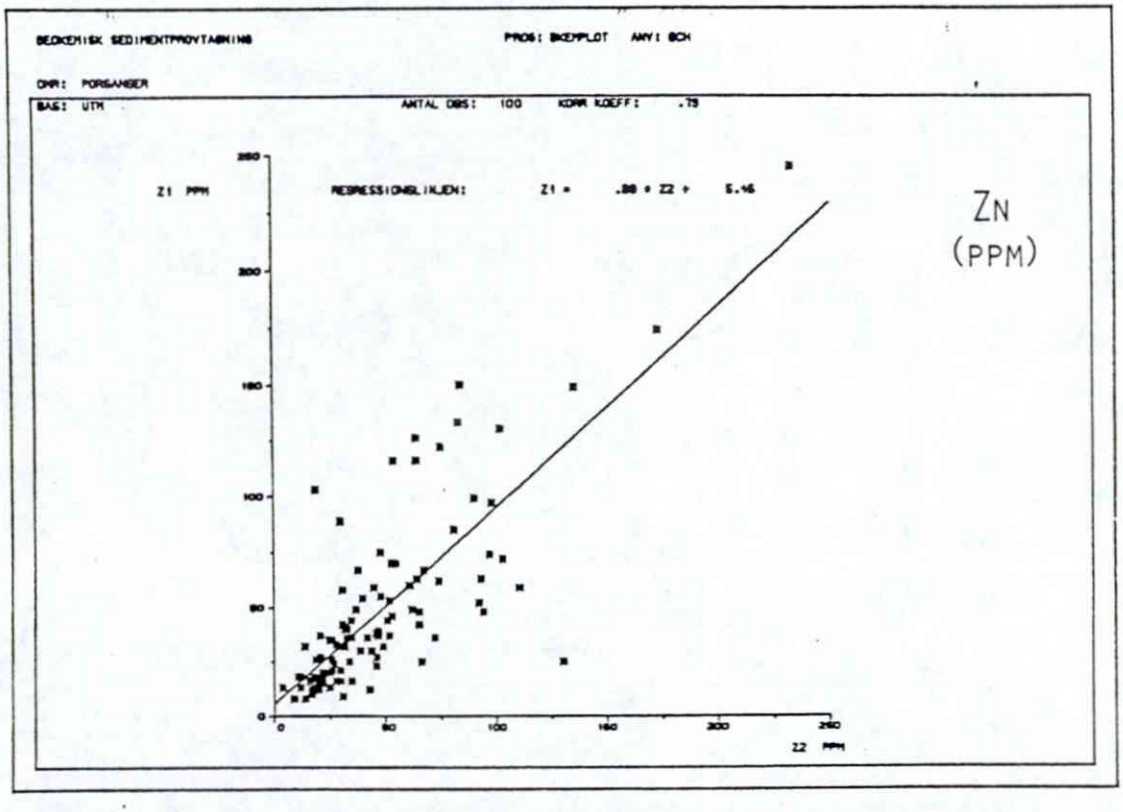


Fig. 15. Scatterdiagram for Pb in 2 fractions:
P1 - Pb in 0.2mm . 0.5mm
P2 - Pb in 0.2mm

Fig. 16. Scatterdiagram for Zn in 2 fractions:
Z1 - Zn in 0.2mm 0.5mm
Z2 - Zn in 0.2mm



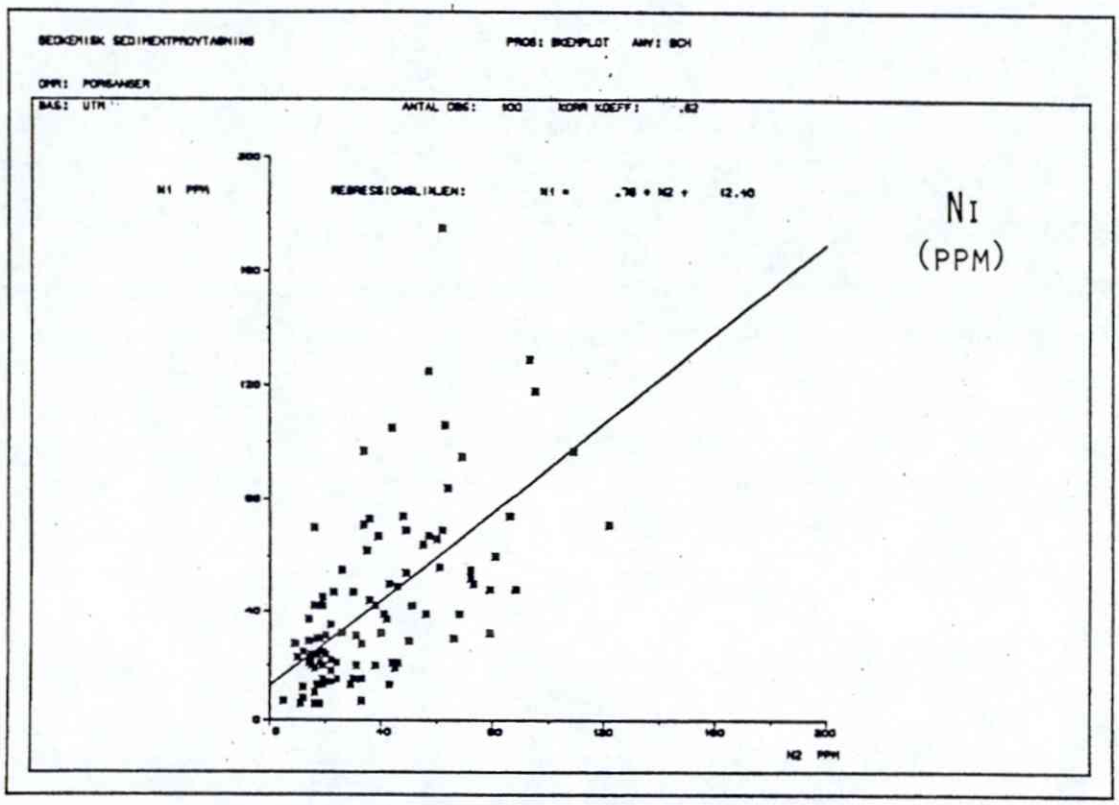
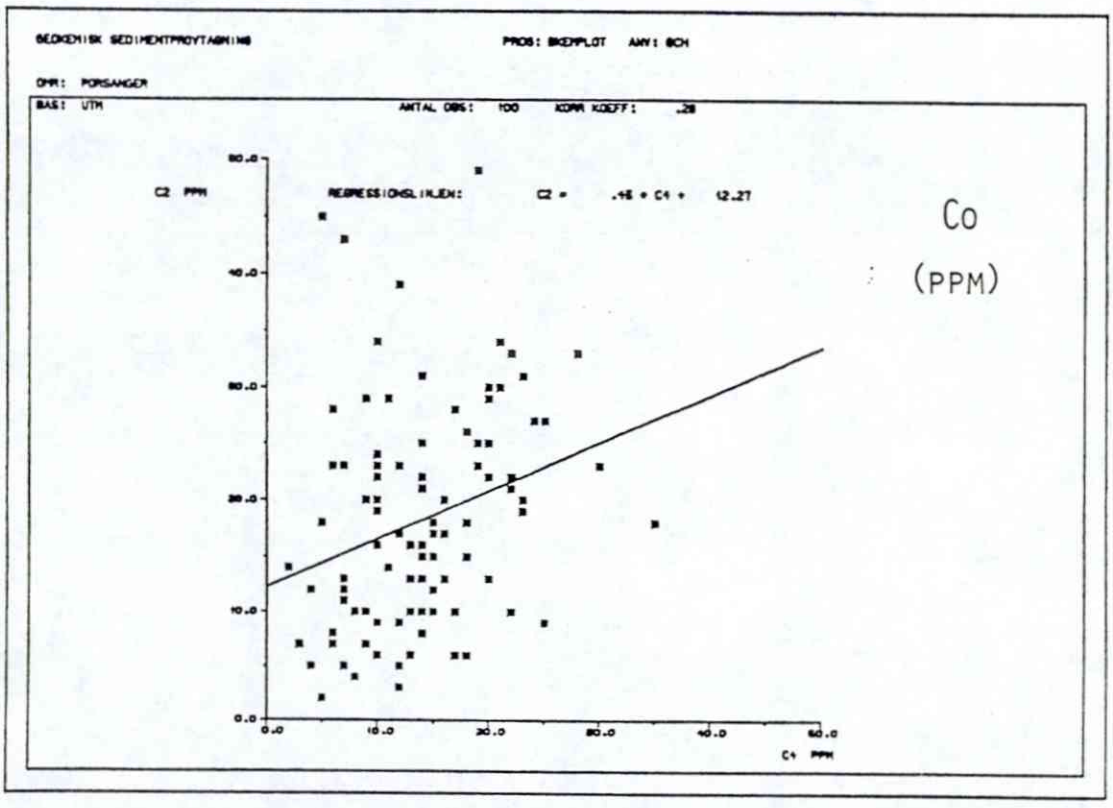


Fig. 17. Scatterdiagram for Ni in 2 fractions:
N1 - Ni in 0.2mm 0.5mm
N2 - Ni in 0.2mm

Fig. 18. Scatterdiagram for Co in 2 fractions:
C2 - Co in 0.2mm 0.5mm
C4 - Co in 0.2mm



RUSTHORISONTER

DATE 012384 PAGE 1

PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO
DELFIL AV PORSLIT

FILNAVN : PORSL11 ANTALL PRØVER : 7

LITHO PRØVER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AG PPM	W PPM	AU PPB	AS PPM	BI PPM
250182	0	0	600.0	31.0	42.0	35.0	51.0	.8	.0	.0	1.0	.0
250183	0	0	1300.0	20.0	87.0	55.0	34.0	1.7	.0	.0	4.0	.0
250200	0	0	100.0	25.0	75.0	129.0	42.0	.9	.0	.0	1.0	.0
250202	0	0	200.0	59.0	154.0	154.0	62.0	2.0	.0	.0	.0	.0
250228	0	0	400.0	44.0	126.0	114.0	54.0	.4	.0	.0	.0	.0
250238	0	0	200.0	32.0	134.0	165.0	57.0	.4	.0	.0	.0	.0
250239	0	0	100.0	37.0	112.0	112.0	42.0	.7	.0	.0	.0	.0

RUSTHORISONTER

DATE 012384 PAGE 1

PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO

DELFIL AV PORSLIT

FILNAVN : PORSL1D ANTALL PRØVER : 7

LITHO PRØVER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AG PPM	W PPM	AU PPB	AS PPM	BI PPM
250093	0	0	2700.0	12.0	39.0	53.0	66.0	2.5	1.0	.0	4.0	.0
250099	0	0	300.0	21.0	59.0	27.0	19.0	1.3	.0	.0	4.0	.0
250204	0	0	1400.0	69.0	412.0	1059.0	128.0	.2	.0	.0	367.0	.0
250237	0	0	1300.0	45.0	406.0	769.0	96.0	1.0	.0	.0	118.0	.0
250244	0	0	300.0	28.0	162.0	107.0	27.0	.3	1.0	.0	.0	.0
250251	0	0	4700.0	18.0	32.0	86.0	34.0	1.4	.0	.0	5.0	.0
250255	0	0	400.0	371.0	176.0	47.0	25.0	1.1	2.0	.0	6.0	.0

U.M.-Gabbro

DATE 012384 PAGE 1

PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO
DELFIL AV PORSLIT

FILNAVN : PORSLOB ANTALL PRØVER : 6

LITHO PRØVER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AG PPM	W PPM	AU PPB	AS PPM	BI PPM
250258	0	0	100.0	27.0	47.0	1925.0	147.0	.0	.0	.0	.0	.0
250259	0	0	100.0	9.0	31.0	56.0	17.0	.2	.0	.0	.0	.0
250260	0	0	3000.0	21.0	59.0	1408.0	137.0	.0	.0	12.0	.0	.0
250261	0	0	100.0	30.0	48.0	1323.0	125.0	.0	.0	.0	.0	.0
250262	0	0	100.0	22.0	43.0	45.0	17.0	.0	.0	.0	.0	.0
250263	0	0	100.0	21.0	30.0	46.0	16.0	.0	.0	.0	.0	.0

KARENHAUGEN U.M. KOMPLEKS

DATE 012384 PAGE 1

PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO

DELFIL TIL PORSLIT

FILNAVN : PORSL02 ANTALL PRØVER : 8

LITHO PRØVER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AG PPM	W PPM	AU PPB	AS PPM	BI PPM
250055	0	0	8700.0	23.0	106.0	107.0	66.0	1.0	.0	.0	.0	.0
250056	0	0	48700.0	14.0	9.0	40.0	48.0	.7	1.0	289.0	.0	.0
250057	0	0	11000.0	52.0	14.0	37.0	30.0	.0	.0	.0	.0	.0
250058	0	0	13300.0	10.0	13.0	382.0	20.0	1.3	1.0	.0	.0	.0
250062	0	0	3400.0	17.0	20.0	58.0	28.0	.0	.0	29.0	.0	.0
250064	0	0	10700.0	13.0	15.0	55.0	45.0	.0	1.0	107.0	.0	.0
250066	0	0	32600.0	21.0	17.0	54.0	25.0	1.3	1.0	63.0	.0	.0
250082	0	0	2500.0	15.0	39.0	42.0	21.0	.8	.0	.0	.0	.0

METADOLERITTES ALL SAMPLES

DATE 021484 PAGE 1

PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO
LITHOPPØVER PORSANGER, MINUS FORVITREDE PRØVER.

FILNAVN : PORSLI2 ANTALL PRØVER : 121

LITHO PPØVER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AG PPM	W PPM	AU PPB	AS PPM	BI PPM
250006	0	0	1400.0	22.0	6.0	55.0	44.0	.0	1.0	.0	.0	.0
250007	0	0	14200.0	39.0	61.0	46.0	42.0	2.3	.0	.0	.0	.0
250009	0	0	9600.0	15.0	36.0	54.0	27.0	.9	.0	.0	.0	.0
250011	0	0	13600.0	23.0	53.0	64.0	86.0	1.3	.0	.0	.0	.0
250014	0	0	8100.0	69.0	33.0	69.0	30.0	1.8	.0	.0	.0	.0
250017	0	0	8000.0	24.0	33.0	61.0	50.0	1.2	.0	.0	.0	.0
250018	0	0	1000.0	11.0	15.0	47.0	18.0	.9	1.0	.0	.0	.0
250023	0	0	6400.0	31.0	49.0	40.0	25.0	1.5	.0	.0	.0	.0
250027	0	0	22100.0	32.0	48.0	45.0	79.0	7.1	1.0	.0	.0	.0
250030	0	0	5700.0	17.0	32.0	47.0	34.0	1.7	.0	.0	.0	.0
250031	0	0	7200.0	25.0	43.0	54.0	20.0	3.3	.0	.0	.0	.0
250036	0	0	7400.0	22.0	33.0	32.0	27.0	.5	.0	.0	.0	.0
250038	0	0	3800.0	17.0	19.0	54.0	80.0	1.1	.0	.0	.0	.0
250041	0	0	28000.0	17.0	33.0	40.0	39.0	2.7	.0	.0	.0	.0
250046	0	0	5900.0	19.0	278.0	56.0	37.0	2.1	.0	.0	.0	.0
250048	0	0	2400.0	29.0	49.0	79.0	32.0	1.1	.0	.0	.0	.0
250050	0	0	14000.0	18.0	49.0	40.0	82.0	4.1	.0	.0	.0	.0
250051	0	0	55000.0	15.0	72.0	18.0	55.0	3.9	.0	13.0	.0	.0
250052	0	0	5300.0	23.0	45.0	51.0	48.0	.5	.0	.0	.0	.0
250053	0	0	10400.0	21.0	51.0	44.0	70.0	.8	.0	8.0	.0	.0
250073	0	0	9700.0	17.0	44.0	37.0	26.0	.6	.0	13.0	.0	.0
250074	0	0	14300.0	14.0	37.0	39.0	23.0	2.4	.0	8.0	.0	.0
250075	0	0	8800.0	18.0	55.0	79.0	25.0	1.5	.0	13.0	.0	.0
250077	0	0	13300.0	24.0	69.0	35.0	32.0	1.7	.0	13.0	.0	.0
250078	0	0	69900.0	15.0	46.0	74.0	39.0	3.8	.0	.0	.0	.0
250095	0	0	2200.0	27.0	74.0	84.0	76.0	1.1	.0	.0	.0	3.0
250097	0	0	19800.0	16.0	67.0	48.0	31.0	5.5	.0	.0	.0	.0
250098	0	0	700.0	19.0	45.0	49.0	29.0	.9	1.0	.0	.0	.0
250100	0	0	13600.0	45.0	74.0	35.0	39.0	3.1	.0	.0	.0	.0
250101	0	0	6100.0	28.0	77.0	57.0	24.0	1.2	.0	.0	.0	.0
250102	0	0	21700.0	18.0	48.0	58.0	16.0	3.4	1.0	.0	.0	.0
250103	0	0	22100.0	23.0	87.0	37.0	22.0	6.2	3.0	.0	.0	.0
250104	0	0	20800.0	43.0	58.0	15.0	3.0	5.6	.0	.0	.0	.0
250107	0	0	2500.0	39.0	110.0	66.0	27.0	2.3	1.0	.0	.0	.0
250109	0	0	6500.0	63.0	19.0	35.0	16.0	4.4	.0	.0	.0	.0
250110	0	0	117600.0	28.0	43.0	45.0	106.0	11.4	.0	13.0	.0	.0
250111	0	0	40500.0	27.0	68.0	104.0	55.0	4.7	.0	29.0	.0	.0
250115	0	0	26700.0	17.0	32.0	55.0	25.0	5.2	1.0	71.0	.0	.0
250120	0	0	17900.0	29.0	32.0	37.0	26.0	3.4	1.0	29.0	.0	.0
250121	0	0	15800.0	15.0	18.0	32.0	20.0	6.2	.0	8.0	.0	.0
250122	0	0	19700.0	41.0	31.0	49.0	8.0	4.8	.0	290.0	.0	.0
250123	0	0	69000.0	17.0	60.0	117.0	41.0	5.8	1.0	25.0	.0	.0
250124	0	0	20500.0	16.0	40.0	53.0	21.0	1.8	1.0	13.0	.0	.0
250125	0	0	166900.0	17.0	48.0	69.0	34.0	29.4	.0	13.0	.0	.0
250127	0	0	81700.0	11.0	37.0	65.0	28.0	2.3	.0	25.0	.0	.0
250128	0	0	176300.0	19.0	48.0	60.0	27.0	35.6	.0	62.0	.0	.0
250129	0	0	2600.0	15.0	60.0	42.0	13.0	1.5	1.0	12.0	.0	.0
250130	0	0	3900.0	18.0	54.0	32.0	28.0	1.1	.0	8.0	.0	.0
250131	0	0	138100.0	33.0	59.0	40.0	51.0	9.6	.0	12.0	.0	.0
250132	0	0	7000.0	19.0	56.0	45.0	26.0	.8	.0	12.0	.0	.0
250134	0	0	1500.0	26.0	80.0	51.0	29.0	.0	.0	25.0	.0	.0

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PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO

LITHOPRØVER PORSANGER, MINUS FORVITREDE PRØVER.

FILNAVN : PORSLIZ ANTALL PRØVER : 121

LITHO PRØVER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AG PPM	W PPM	AU PPB	AS PPM	BI PPM
250135	0	0	136000.0	12.0	26.0	28.0	28.0	13.4	.0	18.0	.0	.0
250136	0	0	18300.0	18.0	63.0	51.0	19.0	3.8	.0	12.0	.0	.0
250135	0	0	33700.0	18.0	39.0	50.0	31.0	16.8	.0	12.0	.0	.0
250139	0	0	103300.0	24.0	42.0	51.0	23.0	154.9	.0	16.0	.0	7.0
250141	0	0	600.0	37.0	57.0	79.0	32.0	1.5	.0	13.0	.0	38.0
250142	0	0	32600.0	22.0	52.0	110.0	33.0	16.4	.0	50.0	.0	.0
250145	0	0	187500.0	18.0	41.0	104.0	47.0	17.5	.0	38.0	.0	.0
250147	0	0	4300.0	12.0	37.0	47.0	37.0	1.6	.0	12.0	.0	.0
250148	0	0	9900.0	24.0	29.0	39.0	48.0	.7	.0	38.0	.0	.0
250150	0	0	369000.0	14.0	47.0	123.0	40.0	30.5	.0	20.0	.0	.0
250151	0	0	20900.0	19.0	49.0	33.0	56.0	10.6	.0	8.0	.0	.0
250153	0	0	25100.0	49.0	42.0	31.0	53.0	16.1	.0	10.0	.0	.0
250155	0	0	386000.0	113.0	74.0	401.0	47.0	66.7	.0	50.0	.0	.0
250158	0	0	28800.0	12.0	40.0	61.0	45.0	3.7	.0	.0	.0	.0
250160	0	0	24300.0	10.0	33.0	52.0	46.0	1.9	.0	60.0	.0	.0
250162	0	0	19400.0	9.0	57.0	53.0	60.0	.9	.0	.0	.0	.0
250163	0	0	7400.0	11.0	36.0	138.0	49.0	.0	.0	.0	.0	.0
250164	0	0	106300.0	16.0	29.0	36.0	27.0	6.4	.0	.0	.0	.0
250166	0	0	17900.0	13.0	27.0	78.0	42.0	3.8	.0	.0	.0	.0
250167	0	0	18600.0	15.0	67.0	30.0	65.0	1.3	.0	12.0	1.0	.0
250168	0	0	33800.0	19.0	46.0	72.0	50.0	2.6	.0	20.0	.0	.0
250170	0	0	2300.0	18.0	46.0	38.0	15.0	.0	.0	24.0	.0	.0
250172	0	0	12200.0	35.0	81.0	158.0	219.0	2.2	.0	16.0	.0	.0
250174	0	0	25200.0	13.0	68.0	187.0	27.0	4.2	.0	50.0	.0	.0
250175	0	0	2800.0	17.0	97.0	50.0	42.0	1.7	.0	8.0	.0	.0
250176	0	0	16300.0	16.0	41.0	44.0	23.0	7.0	1.0	.0	.0	.0
250181	0	0	1300.0	213.0	54.0	19.0	44.0	1.4	.0	.0	.0	.0
250186	0	0	63600.0	16.0	56.0	52.0	36.0	6.7	.0	.0	.0	.0
250187	0	0	22700.0	43.0	56.0	29.0	50.0	6.5	.0	.0	.0	.0
250188	0	0	199000.0	19.0	49.0	7.0	49.0	52.2	.0	.0	.0	.0
250189	0	0	27200.0	22.0	63.0	69.0	59.0	16.7	.0	.0	.0	.0
250191	0	0	14100.0	29.0	19.0	31.0	105.0	6.7	.0	.0	.0	.0
250192	0	0	2000.0	27.0	34.0	44.0	45.0	.0	.0	.0	1.0	.0
250194	0	0	43500.0	29.0	95.0	104.0	24.0	9.6	.0	.0	.0	.0
250196	0	0	57100.0	73.0	50.0	49.0	92.0	10.6	.0	.0	.0	.0
250197	0	0	196600.0	22.0	39.0	33.0	21.0	66.6	.0	.0	.0	.0
250198	0	0	7200.0	9.0	26.0	128.0	14.0	2.2	.0	.0	1.0	.0
250199	0	0	18800.0	34.0	79.0	81.0	51.0	.3	.0	.0	.0	.0
250206	0	0	9400.0	20.0	72.0	33.0	18.0	.5	.0	.0	1.0	.0
250207	0	0	6800.0	44.0	55.0	16.0	19.0	.3	.0	.0	.0	.0
250210	0	0	1700.0	17.0	28.0	8.0	7.0	.3	1.0	.0	.0	.0
250211	0	0	500.0	28.0	23.0	2.0	5.0	.1	1.0	.0	.0	.0
250214	0	0	13200.0	35.0	52.0	14.0	7.0	3.5	2.0	.0	.0	.0
250216	0	0	2500.0	26.0	59.0	39.0	29.0	.9	1.0	.0	.0	.0
250218	0	0	6900.0	25.0	50.0	42.0	27.0	.9	1.0	.0	1.0	.0
250222	0	0	3600.0	12.0	27.0	9.0	4.0	.6	1.0	.0	.0	.0
250223	0	0	17400.0	15.0	65.0	49.0	24.0	6.3	1.0	.0	9.0	.0
250225	0	0	14300.0	96.0	67.0	41.0	40.0	3.2	1.0	.0	.0	.0
250226	0	0	16300.0	45.0	59.0	30.0	86.0	3.0	.0	.0	6.0	.0
250227	0	0	38200.0	98.0	74.0	32.0	21.0	7.2	.0	.0	.0	.0
250229	0	0	173900.0	36.0	48.0	38.0	20.0	16.2	.0	75.0	.0	.0

PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO

LITHOPRØVER PORSANGER, MINUS FORVITREDE PRØVER.

FILNAVN : PORSLIZ

ANTALL PRØVER : 121

LITHO PRØVER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AG PPM	W PPM	AU PPB	AS PPM	BI PPM
250231	0	0	18500.0	37.0	94.0	43.0	43.0	3.5	.0	.0	.0	.0
250232	0	0	9800.0	42.0	112.0	51.0	55.0	2.2	.0	.0	.0	.0
250233	0	0	91300.0	45.0	67.0	53.0	25.0	15.1	.0	.0	.0	.0
250234	0	0	47300.0	23.0	89.0	59.0	36.0	5.2	.0	.0	8.0	.0
250235	0	0	20900.0	1188.0	114.0	16.0	26.0	12.6	.0	.0	.0	.0
250236	0	0	13100.0	54.0	65.0	149.0	41.0	4.7	.0	.0	1.0	.0
250240	0	0	25000.0	65.0	108.0	83.0	92.0	17.6	.0	.0	1.0	.0
250241	0	0	1100.0	33.0	118.0	20.0	22.0	.8	.0	.0	.0	.0
250242	0	0	12200.0	27.0	133.0	37.0	23.0	7.7	.0	.0	1.0	.0
250243	0	0	1000.0	44.0	392.0	469.0	48.0	1.2	2.0	.0	18.0	.0
250245	0	0	3300.0	11.0	79.0	25.0	21.0	2.7	.0	.0	.0	.0
250246	0	0	172500.0	19.0	71.0	30.0	62.0	17.8	.0	.0	.0	.0
250247	0	0	82300.0	39.0	38.0	19.0	7.0	3.7	.0	.0	.0	.0
250249	0	0	20900.0	41.0	74.0	39.0	45.0	2.3	.0	12.0	.0	.0
250251	0	0	4700.0	18.0	32.0	86.0	34.0	1.4	.0	.0	5.0	.0
250253	0	0	11000.0	21.0	73.0	54.0	32.0	7.4	.0	8.0	1.0	.0
250254	0	0	17400.0	56.0	109.0	99.0	56.0	11.6	.0	.0	.0	.0
250256	0	0	1900.0	59.0	118.0	41.0	19.0	1.7	2.0	.0	1.0	.0
250257	0	0	100.0	101.0	47.0	23.0	14.0	.0	.0	.0	1.0	.0

FOSSESTRAND

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PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO

DELFIL TIL PORSLIT

FILNAVN : PORSL01 ANTALL PRØVEP : 20

LITHO PRØVER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AG PPM	W PPM	AU PPB	AS PPM	BI PPM
250006	0	0	1400.0	22.0	6.0	55.0	44.0	.0	1.0	.0	.0	.0
250007	0	0	14200.0	39.0	61.0	46.0	42.0	2.3	.0	.0	.0	.0
250009	0	0	9600.0	15.0	36.0	54.0	27.0	.9	.0	.0	.0	.0
250011	0	0	13600.0	23.0	53.0	64.0	86.0	1.3	.0	.0	.0	.0
250014	0	0	8100.0	69.0	33.0	69.0	30.0	1.8	.0	.0	.0	.0
250017	0	0	8000.0	24.0	33.0	61.0	50.0	1.2	.0	.0	.0	.0
250018	0	0	1000.0	11.0	15.0	47.0	18.0	.9	1.0	.0	.0	.0
250023	0	0	6400.0	31.0	49.0	40.0	25.0	1.5	.0	.0	.0	.0
250027	0	0	22100.0	32.0	48.0	45.0	79.0	7.1	1.0	.0	.0	.0
250030	0	0	5700.0	17.0	32.0	47.0	34.0	1.7	.0	.0	.0	.0
250031	0	0	7200.0	25.0	43.0	54.0	20.0	3.3	.0	.0	.0	.0
250036	0	0	7400.0	22.0	33.0	32.0	27.0	.5	.0	.0	.0	.0
250035	0	0	3800.0	17.0	19.0	54.0	80.0	1.1	.0	.0	.0	.0
250041	0	0	28000.0	17.0	33.0	40.0	39.0	2.7	.0	.0	.0	.0
250046	0	0	5900.0	19.0	278.0	56.0	37.0	2.1	.0	.0	.0	.0
250048	0	0	2400.0	29.0	49.0	79.0	32.0	1.1	.0	.0	.0	.0
250050	0	0	14000.0	18.0	49.0	40.0	82.0	4.1	.0	.0	.0	.0
250051	0	0	55000.0	15.0	72.0	18.0	55.0	3.9	.0	13.0	.0	.0
250052	0	0	5300.0	23.0	45.0	51.0	48.0	.5	.0	.0	.0	.0
250053	0	0	10400.0	21.0	51.0	44.0	70.0	.8	.0	8.0	.0	.0

KARENHAUGEN N.W.

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PROSPEKTERINGSAVDELLINGEN OMRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO

DELFIL AV PORSLIT

FILNAVN : PORSL03 ANTALL PRØVER : 5

LITHO PRØVER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AG PPM	W PPM	AU PPB	AS PPM	BI PPM
250073	0	0	9700.0	17.0	44.0	37.0	26.0	.6	.0	13.0	.0	.0
250074	0	0	14300.0	14.0	37.0	39.0	23.0	2.4	.0	8.0	.0	.0
250075	0	0	8800.0	15.0	55.0	79.0	25.0	1.5	.0	13.0	.0	.0
250077	0	0	13300.0	24.0	69.0	35.0	32.0	1.7	.0	13.0	.0	.0
250078	0	0	69900.0	15.0	46.0	74.0	39.0	3.8	.0	.0	.0	.0

PORSVANN

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PROSPEKTERINGSAVDELINGEN GNRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO
DELFIL TIL PORSLIT

FILNAVN : PORSL06 ANTALL PRØVER : 46

LITHO PRØVER

	PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AG PPM	W PPM	AU PPB	AS PPM	BI PPM
10	250130	0	0	3900.0	18.0	54.0	32.0	28.0	1.1	.0	8.0	.0	.0
11	250131	0	0	138100.0	33.0	59.0	40.0	51.0	9.6	.0	12.0	.0	.0
12	250132	0	0	7000.0	19.0	55.0	45.0	26.0	.8	.0	12.0	.0	.0
13	250134	0	0	1500.0	26.0	80.0	51.0	29.0	.0	.0	25.0	.0	.0
14	250135	0	0	136000.0	12.0	26.0	28.0	28.0	13.4	.0	18.0	.0	.0
15	250136	0	0	18300.0	18.0	63.0	51.0	19.0	3.8	.0	12.0	.0	.0
16	250175	0	0	2800.0	17.0	97.0	50.0	42.0	1.7	.0	8.0	.0	.0
17	250176	0	0	16300.0	16.0	41.0	44.0	23.0	7.0	1.0	.0	.0	.0
18	250181	0	0	1300.0	213.0	54.0	19.0	44.0	1.4	.0	.0	.0	.0
19	250186	0	0	63600.0	16.0	56.0	52.0	36.0	6.7	.0	.0	.0	.0
20	250187	0	0	22700.0	43.0	56.0	29.0	50.0	6.5	.0	.0	.0	.0
21	250188	0	0	199000.0	19.0	49.0	7.0	49.0	52.2	.0	.0	.0	.0
22	250189	0	0	27200.0	22.0	63.0	69.0	59.0	16.7	.0	.0	.0	.0
23	250191	0	0	14100.0	29.0	19.0	31.0	105.0	6.7	.0	.0	.0	.0
24	250192	0	0	2000.0	27.0	34.0	44.0	45.0	.0	.0	.0	1.0	.0
25	250194	0	0	43500.0	29.0	95.0	104.0	24.0	9.6	.0	.0	.0	.0
26	250196	0	0	57100.0	73.0	50.0	49.0	92.0	10.6	.0	.0	.0	.0
27	250197	0	0	196600.0	22.0	39.0	33.0	21.0	66.6	.0	.0	.0	.0
28	250198	0	0	7200.0	9.0	26.0	128.0	14.0	2.2	.0	.0	1.0	.0
29	250206	0	0	9400.0	20.0	72.0	33.0	16.0	.5	.0	.0	1.0	.0
30	250207	0	0	6800.0	44.0	55.0	16.0	19.0	.3	.0	.0	.0	.0
31	250210	0	0	1700.0	17.0	28.0	8.0	7.0	.3	1.0	.0	.0	.0
32	250211	0	0	500.0	28.0	23.0	2.0	5.0	.1	1.0	.0	.0	.0
33	250214	0	0	13200.0	35.0	52.0	14.0	7.0	3.5	2.0	.0	.0	.0
34	250216	0	0	2500.0	26.0	59.0	39.0	29.0	.9	1.0	.0	.0	.0
35	250218	0	0	6900.0	25.0	50.0	42.0	27.0	.9	1.0	.0	1.0	.0
36	250222	0	0	3600.0	12.0	27.0	9.0	4.0	.6	1.0	.0	.0	.0
37	250223	0	0	17400.0	15.0	65.0	49.0	24.0	6.3	1.0	.0	9.0	.0
38	250225	0	0	14300.0	96.0	67.0	41.0	40.0	3.2	1.0	.0	.0	.0
39	250226	0	0	16300.0	45.0	59.0	30.0	86.0	3.0	.0	.0	6.0	.0
40	250227	0	0	38200.0	95.0	74.0	32.0	21.0	7.2	.0	.0	.0	.0
41	250229	0	0	173900.0	36.0	48.0	38.0	20.0	16.2	.0	75.0	.0	.0
42	250231	0	0	18500.0	37.0	94.0	43.0	43.0	3.5	.0	.0	.0	.0
43	250232	0	0	9800.0	42.0	112.0	51.0	55.0	2.2	.0	.0	.0	.0
44	250233	0	0	91300.0	45.0	67.0	53.0	25.0	15.1	.0	.0	.0	.0
45	250234	0	0	47300.0	23.0	89.0	59.0	36.0	5.2	.0	.0	8.0	.0
46	250235	0	0	20900.0	1198.0	114.0	16.0	26.0	12.6	.0	.0	.0	.0
47	250240	0	0	25000.0	65.0	108.0	83.0	92.0	17.6	.0	.0	1.0	.0
48	250241	0	0	1100.0	33.0	118.0	20.0	22.0	.8	.0	.0	.0	.0
49	250242	0	0	12200.0	27.0	183.0	37.0	23.0	7.7	.0	.0	1.0	.0
50	250243	0	0	1000.0	44.0	392.0	469.0	48.0	1.2	2.0	.0	18.0	.0
51	250245	0	0	3300.0	11.0	79.0	25.0	21.0	2.7	.0	.0	.0	.0
52	250246	0	0	172500.0	19.0	71.0	30.0	62.0	17.8	.0	.0	.0	.0
53	250247	0	0	82300.0	39.0	35.0	19.0	7.0	3.7	.0	.0	.0	.0
54	250249	0	0	20900.0	41.0	74.0	39.0	45.0	2.3	.0	12.0	.0	.0
55	250253	0	0	11000.0	21.0	73.0	54.0	32.0	7.4	.0	8.0	1.0	.0

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RITA

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PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO

DELFIL TIL PORSLIT

FILNAVN : PORSL05 ANTALL PRØVER : 22

LITHO PRØVER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AG PPM	W PPM	AU PPB	AS PPM	BI PPM
250138	0	0	33700.0	18.0	39.0	50.0	31.0	16.8	.0	12.0	.0	.0
250139	0	0	103300.0	24.0	42.0	51.0	23.0	154.9	.0	16.0	.0	7.0
250141	0	0	600.0	37.0	57.0	79.0	32.0	1.5	.0	13.0	.0	38.0
250142	0	0	32600.0	22.0	52.0	110.0	33.0	16.4	.0	50.0	.0	.0
250145	0	0	187500.0	16.0	41.0	104.0	47.0	17.5	.0	38.0	.0	.0
250147	0	0	4300.0	12.0	37.0	47.0	37.0	1.6	.0	12.0	.0	.0
250148	0	0	9900.0	24.0	29.0	39.0	48.0	.7	.0	38.0	.0	.0
250150	0	0	389000.0	14.0	47.0	123.0	40.0	30.5	.0	20.0	.0	.0
250151	0	0	20900.0	19.0	49.0	33.0	56.0	10.6	.0	8.0	.0	.0
250153	0	0	25100.0	49.0	42.0	31.0	53.0	16.1	.0	10.0	.0	.0
250155	0	0	386000.0	113.0	74.0	401.0	47.0	66.7	.0	50.0	.0	.0
250158	0	0	26800.0	12.0	40.0	61.0	45.0	3.7	.0	.0	.0	.0
250160	0	0	24300.0	10.0	33.0	52.0	46.0	1.9	.0	60.0	.0	.0
250162	0	0	19400.0	9.0	57.0	53.0	60.0	.9	.0	.0	.0	.0
250163	0	0	7400.0	11.0	36.0	138.0	49.0	.0	.0	.0	.0	.0
250164	0	0	106300.0	16.0	28.0	36.0	27.0	6.4	.0	.0	.0	.0
250166	0	0	17900.0	13.0	27.0	78.0	42.0	3.8	.0	.0	.0	.0
250167	0	0	18600.0	15.0	67.0	30.0	65.0	1.3	.0	12.0	1.0	.0
250168	0	0	33800.0	19.0	46.0	72.0	50.0	2.6	.0	20.0	.0	.0
250170	0	0	2300.0	18.0	46.0	35.0	15.0	.0	.0	24.0	.0	.0
250172	0	0	12200.0	35.0	81.0	158.0	219.0	2.2	.0	16.0	.0	.0
250174	0	0	25200.0	13.0	68.0	187.0	27.0	4.2	.0	50.0	.0	.0

CORGUS

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PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO

DELFIL AV PORSLIT

FILNAVN : PORSL04

LITHO PRØVER ANTALL PRØVER : 22

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CU PPM	AG PPM	W PPM	AU PPB	AS PPM	BI PPM
250095	0	0	2200.0	27.0	74.0	64.0	76.0	1.1	.0	.0	.0	3.0
250097	0	0	19800.0	16.0	67.0	48.0	31.0	5.5	.0	.0	.0	.0
250098	0	0	700.0	19.0	45.0	49.0	29.0	.9	1.0	.0	.0	.0
250100	0	0	13600.0	45.0	74.0	35.0	39.0	3.1	.0	.0	.0	.0
250101	0	0	6100.0	28.0	77.0	57.0	24.0	1.2	.0	.0	.0	.0
250102	0	0	21700.0	18.0	48.0	58.0	16.0	3.4	1.0	.0	.0	.0
250103	0	0	22100.0	23.0	87.0	37.0	22.0	6.2	3.0	.0	.0	.0
250104	0	0	20800.0	43.0	58.0	15.0	3.0	5.6	.0	.0	.0	.0
250107	0	0	2500.0	39.0	110.0	66.0	27.0	2.3	1.0	.0	.0	.0
250109	0	0	6500.0	63.0	19.0	35.0	16.0	4.4	.0	.0	.0	.0
250110	0	0	117600.0	28.0	43.0	45.0	106.0	11.4	.0	13.0	.0	.0
250111	0	0	40500.0	27.0	68.0	104.0	35.0	4.7	.0	29.0	.0	.0
250115	0	0	26700.0	17.0	32.0	55.0	25.0	5.2	1.0	71.0	.0	.0
250120	0	0	17900.0	29.0	32.0	37.0	26.0	3.4	1.0	29.0	.0	.0
250121	0	0	15800.0	15.0	18.0	32.0	20.0	6.2	.0	8.0	.0	.0
250122	0	0	19700.0	41.0	30.0	49.0	8.0	4.8	.0	290.0	.0	.0
250123	0	0	69000.0	17.0	60.0	117.0	41.0	5.8	1.0	25.0	.0	.0
250124	0	0	20500.0	16.0	40.0	53.0	21.0	1.8	1.0	13.0	.0	.0
250125	0	0	166900.0	17.0	48.0	69.0	34.0	29.4	.0	13.0	.0	.0
250127	0	0	81700.0	11.0	37.0	65.0	28.0	2.3	.0	25.0	.0	.0
250128	0	0	176300.0	19.0	48.0	60.0	27.0	35.6	.0	62.0	.0	.0
250129	0	0	2600.0	15.0	60.0	42.0	13.0	1.5	1.0	12.0	.0	.0

NESVATNET

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PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO

DELFIL AV PORSLIT

FILNAVN : PORSL09 ANTALL PRØVER : 3

LITHO PRØVER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AG PPM	W PPM	AU PPB	AS PPM	BI PPM
10	250199	0	0	18800.0	34.0	79.0	81.0	51.0	.3	.0	.0	.0	.0
11	250236	0	0	13100.0	54.0	65.0	149.0	41.0	4.7	.0	.0	1.0	.0
12	250251	0	0	4700.0	18.0	32.0	86.0	34.0	1.4	.0	.0	5.0	.0

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PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO

DELFIL AV PORSLIT

FILNAVN : PORSL07 ANTALL PRØVER : 3

LITHO PRØVER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AG PPM	W PPM	AU PPB	AS PPM	BI PPM	
250254	0	0	17400.0	56.0	109.0	99.0	56.0	11.6	.0	.0	.0	.0	Karensvatnet
250256	0	0	1900.0	59.0	118.0	41.0	19.0	1.7	2.0	.0	1.0	.0	Eidskog
250257	0	0	100.0	101.0	47.0	23.0	14.0	.0	.0	.0	1.0	.0	Langbukt

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PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : NR : 0
NORSK HYDRO

BEKKESEDIMENTER FRA PORSANGER

FILNAVN : PORSBEK ANTALL PRØVER : 209

BEKKESEDIMENTER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AS PPM	AU PPB	BI PPM	AG PPM	W PPM
250001	0	0	29.0	17.0	72.0	79.0	20.0	1.0	10.0	.0	.0	.0
250002	0	0	26.0	15.0	58.0	16.0	12.0	.0	5.0	.0	.0	.0
250003	0	0	31.0	11.0	34.0	22.0	11.0	1.0	.0	.0	.0	.0
250004	0	0	21.0	10.0	25.0	16.0	8.0	.0	10.0	.0	.0	.0
250005	0	0	32.0	19.0	66.0	48.0	24.0	1.0	.0	.0	.0	.0
250006	0	0	14.0	9.0	17.0	17.0	11.0	1.0	.0	.0	.0	.0
250007	0	0	20.0	9.0	25.0	29.0	15.0	.0	10.0	.0	.0	.0
250008	0	0	26.0	8.0	21.0	27.0	12.0	.0	.0	.0	.0	.0
250009	0	0	6.0	8.0	10.0	14.0	10.0	.0	.0	.0	.0	.0
250010	0	0	38.0	13.0	34.0	25.0	18.0	1.0	.0	.0	.0	.0
250011	0	0	45.0	15.0	54.0	93.0	26.0	1.0	.0	.0	.0	.0
250012	0	0	39.0	11.0	53.0	82.0	22.0	1.0	23.0	.0	.0	.0
250013	0	0	60.0	13.0	82.0	176.0	42.0	1.0	.0	.0	.0	.0
250014	0	0	32.0	10.0	27.0	23.0	8.0	.0	.0	.0	.0	.0
250015	0	0	79.0	14.0	99.0	31.0	33.0	1.0	.0	1.0	.0	.0
250016	0	0	36.0	7.0	30.0	15.0	13.0	2.0	.0	.0	.0	.0
250017	0	0	26.0	7.0	17.0	18.0	6.0	.0	.0	.0	.0	.0
250018	0	0	29.0	6.0	22.0	16.0	5.0	1.0	15.0	.0	.0	.0
250019	0	0	22.0	6.0	17.0	23.0	6.0	.0	.0	.0	.0	.0
250020	0	0	66.0	8.0	21.0	30.0	5.0	1.0	10.0	.0	.0	.0
250021	0	0	166.0	8.0	41.0	77.0	18.0	1.0	10.0	.0	.0	.0
250022	0	0	57.0	8.0	19.0	20.0	9.0	1.0	15.0	.0	.0	.0
250023	0	0	68.0	9.0	62.0	51.0	16.0	3.0	5.0	.0	.0	.0
250024	0	0	17.0	6.0	25.0	20.0	7.0	.0	.0	.0	.0	.0
250025	0	0	15.0	5.0	19.0	15.0	5.0	.0	.0	.0	.0	.0
250026	0	0	36.0	4.0	18.0	19.0	6.0	.0	.0	.0	.0	.0
250027	0	0	30.0	5.0	30.0	38.0	14.0	.0	70.0	1.0	.0	.0
250028	0	0	13.0	6.0	16.0	17.0	4.0	.0	.0	.0	.0	.0
250029	0	0	15.0	6.0	17.0	13.0	9.0	.0	.0	.0	.0	.0
250030	0	0	21.0	6.0	33.0	24.0	15.0	.0	.0	.0	.0	.0
250031	0	0	33.0	6.0	35.0	109.0	18.0	.0	12.0	.0	.0	.0
250032	0	0	64.0	7.0	42.0	161.0	18.0	.0	.0	.0	.0	.0
250033	0	0	19.0	5.0	30.0	79.0	12.0	.0	12.0	.0	.0	.0
250034	0	0	39.0	9.0	65.0	88.0	22.0	.0	12.0	.0	.0	.0
250035	0	0	16.0	7.0	22.0	22.0	12.0	.0	12.0	.0	.0	.0
250036	0	0	88.0	10.0	125.0	75.0	30.0	.0	.0	.0	.0	.0
250037	0	0	28.0	12.0	39.0	26.0	13.0	.0	.0	.0	.0	.0
250038	0	0	133.0	40.0	66.0	46.0	14.0	1.0	.0	.0	.0	.0
250039	0	0	176.0	16.0	81.0	72.0	18.0	1.0	.0	.0	.0	.0
250040	0	0	252.0	29.0	90.0	55.0	19.0	.0	.0	.0	.0	.0
250041	0	0	61.0	12.0	53.0	47.0	15.0	.0	.0	.0	.0	.0
250042	0	0	76.0	13.0	50.0	43.0	13.0	.0	.0	.0	.0	.0
250043	0	0	169.0	15.0	46.0	53.0	16.0	.0	.0	.0	.0	.0
250044	0	0	10.0	5.0	19.0	16.0	8.0	.0	.0	.0	.0	.0
250045	0	0	21.0	10.0	18.0	33.0	12.0	1.0	.0	.0	.0	.0
250046	0	0	26.0	7.0	19.0	27.0	9.0	.0	.0	.0	.0	.0
250047	0	0	19.0	8.0	19.0	33.0	6.0	1.0	.0	.0	.0	.0
250048	0	0	17.0	10.0	29.0	24.0	7.0	1.0	.0	.0	.0	.0
250049	0	0	53.0	12.0	39.0	56.0	15.0	1.0	.0	.0	.0	.0
250050	0	0	37.0	10.0	47.0	33.0	14.0	1.0	.0	.0	.0	.0
250051	0	0	24.0	9.0	41.0	26.0	15.0	.0	10.0	.0	.0	.0

PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : NR : 0
NORSK HYDRO

BEKKSESEDIMENTER FRA PORSANGER

FILNAVN : PORSBEK

BEKKESEDIMENTER ANTALL PRØVER : 209

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AS PPM	AU PPB	BI PPM	AG PPM	W PPM
250052	0	0	12.0	6.0	21.0	15.0	6.0	.0	.0	1.0	.0	.0
250053	0	0	151.0	10.0	47.0	122.0	14.0	.0	10.0	.0	.0	.0
250054	0	0	29.0	7.0	32.0	45.0	20.0	.0	.0	1.0	.0	.0
250055	0	0	137.0	13.0	64.0	51.0	19.0	.0	12.0	1.0	.0	.0
250056	0	0	166.0	11.0	120.0	119.0	30.0	.0	.0	.0	.0	.0
250057	0	0	35.0	7.0	44.0	33.0	12.0	.0	.0	.0	.0	.0
250058	0	0	669.0	12.0	45.0	44.0	25.0	.0	.0	.0	.0	.0
250059	0	0	142.0	8.0	35.0	31.0	13.0	.0	.0	.0	.0	.0
250060	0	0	56.0	8.0	56.0	40.0	16.0	.0	.0	.0	.0	.0
250061	0	0	43.0	11.0	56.0	50.0	28.0	1.0	.0	.0	.0	.0
250062	0	0	20.0	9.0	45.0	36.0	20.0	.0	.0	.0	.0	.0
250063	0	0	63.0	11.0	59.0	40.0	15.0	.0	.0	.0	.0	.0
250064	0	0	13.0	3.0	12.0	12.0	4.0	.0	.0	.0	.0	.0
250065	0	0	40.0	12.0	97.0	36.0	35.0	.0	.0	.0	.0	.0
250066	0	0	21.0	11.0	36.0	23.0	16.0	.0	.0	.0	.0	.0
250067	0	0	84.0	10.0	75.0	92.0	20.0	.0	.0	.0	.0	.0
250068	0	0	37.0	17.0	111.0	45.0	19.0	.0	.0	.0	.0	.0
250069	0	0	44.0	6.0	63.0	50.0	17.0	1.0	.0	.0	.0	.0
250070	0	0	14.0	4.0	14.0	29.0	7.0	.0	.0	.0	.0	.0
250071	0	0	91.0	9.0	135.0	61.0	20.0	.0	.0	.0	.0	.0
250072	0	0	37.0	15.0	103.0	43.0	23.0	.0	.0	.0	.0	.0
250073	0	0	60.0	21.0	65.0	66.0	22.0	.0	.0	.0	.0	.0
250074	0	0	33.0	6.0	35.0	33.0	14.0	.0	.0	.0	.0	.0
250075	0	0	19.0	26.0	53.0	28.0	12.0	1.0	.0	.0	.0	.0
250076	0	0	136.0	19.0	37.0	21.0	9.0	1.0	.0	.0	.0	.0
250077	0	0	8.0	3.0	17.0	16.0	9.0	1.0	.0	.0	.0	.0
250078	0	0	85.0	12.0	25.0	24.0	7.0	.0	156.0	.0	.0	.0
250079	0	0	16.0	6.0	31.0	30.0	13.0	1.0	.0	.0	.0	.0
250080	0	0	64.0	10.0	32.0	78.0	22.0	1.0	.0	.0	.0	.0
250081	0	0	49.0	8.0	46.0	86.0	28.0	1.0	.0	.0	.0	.0
250082	0	0	110.0	12.0	28.0	50.0	23.0	1.0	.0	.0	.0	.0
250083	0	0	13.0	5.0	22.0	29.0	19.0	.0	.0	.0	.0	.0
250084	0	0	33.0	9.0	62.0	48.0	16.0	.0	.0	.0	.0	.0
250085	0	0	9.0	3.0	16.0	22.0	10.0	.0	.0	.0	.0	.0
250086	0	0	91.0	8.0	119.0	163.0	25.0	.0	.0	1.0	.0	.0
250087	0	0	17.0	19.0	38.0	64.0	18.0	.0	9.0	.0	.0	.0
250088	0	0	107.0	10.0	53.0	42.0	14.0	.0	.0	1.0	.0	.0
250089	0	0	19.0	8.0	22.0	29.0	10.0	.0	.0	.0	.0	.0
250090	0	0	19.0	6.0	18.0	20.0	9.0	1.0	.0	.0	.0	.0
250091	0	0	59.0	8.0	37.0	35.0	15.0	.0	.0	.0	.0	.0
250092	0	0	41.0	4.0	36.0	40.0	14.0	1.0	.0	.0	.0	.0
250093	0	0	39.0	3.0	30.0	44.0	11.0	.0	.0	.0	.0	.0
250094	0	0	292.0	7.0	83.0	46.0	21.0	.0	.0	.0	.0	.0
250095	0	0	33.0	5.0	28.0	27.0	12.0	1.0	.0	.0	.0	.0
250096	0	0	146.0	13.0	173.0	72.0	23.0	1.0	.0	.0	.0	.0
250097	0	0	72.0	8.0	104.0	76.0	26.0	.0	.0	.0	.0	.0
250098	0	0	61.0	4.0	38.0	44.0	20.0	2.0	.0	.0	.0	.0
250099	0	0	29.0	6.0	42.0	40.0	16.0	.0	.0	.0	.0	.0
250100	0	0	12.0	6.0	22.0	14.0	7.0	.0	.0	.0	.0	.0
250101	0	0	10.0	2.0	25.0	19.0	2.0	1.0	9.0	.0	.0	.0
250102	0	0	14.0	12.0	52.0	14.0	5.0	.0	.0	.0	.0	.0

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PROSPEKTERINGSAVDELINGEN BLADE NAVN : NR : 0

NORSK HYDRO

BEKKESEDIMENTER FRA POPSANGER

FILNAVN : POPSSEK ANTALL PRØVER : 209

BEKKESEDIMENTER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AS PPM	AU PPB	BI PPM	AG PPM	W PPM
250103	0	0	6.0	6.0	28.0	12.0	7.0	1.0	.0	.0	.0	.0
250104	0	0	19.0	11.0	12.0	5.0	3.0	.0	.0	.0	.0	.0
250105	0	0	8.0	6.0	16.0	17.0	4.0	.0	.0	.0	.0	.0
250106	0	0	9.0	4.0	17.0	11.0	4.0	.0	.0	.0	.0	.0
250107	0	0	49.0	5.0	55.0	189.0	17.0	1.0	.0	.0	.0	.0
250108	0	0	17.0	7.0	43.0	17.0	4.0	.0	.0	.0	.0	.0
250109	0	0	106.0	8.0	86.0	253.0	18.0	2.0	.0	.0	.0	.0
250110	0	0	23.0	9.0	21.0	16.0	7.0	.0	.0	.0	.0	.0
250111	0	0	137.0	11.0	339.0	172.0	23.0	2.0	.0	.0	.0	.0
250112	0	0	112.0	8.0	62.0	95.0	20.0	2.0	.0	.0	.0	.0
250113	0	0	41.0	6.0	48.0	26.0	7.0	3.0	.0	.0	.0	.0
250114	0	0	18.0	8.0	57.0	12.0	13.0	1.0	.0	.0	.0	.0
250115	0	0	185.0	13.0	582.0	245.0	27.0	2.0	.0	.0	.0	.0
250116	0	0	17.0	4.0	9.0	10.0	12.0	.0	.0	.0	.0	.0
250117	0	0	16.0	8.0	4.0	15.0	9.0	.0	.0	.0	.0	.0
250118	0	0	31.0	8.0	27.0	57.0	17.0	1.0	.0	.0	.0	.0
250119	0	0	211.0	10.0	51.0	36.0	16.0	4.0	.0	.0	.0	.0
250120	0	0	61.0	8.0	24.0	62.0	12.0	5.0	.0	.0	.0	.0
250121	0	0	33.0	7.0	32.0	63.0	15.0	1.0	.0	.0	.0	.0
250122	0	0	72.0	6.0	53.0	69.0	9.0	.0	.0	.0	.0	.0
250123	0	0	44.0	6.0	45.0	70.0	18.0	1.0	.0	.0	.0	.0
250124	0	0	96.0	10.0	56.0	108.0	25.0	2.0	.0	.0	.0	.0
250125	0	0	32.0	8.0	26.0	30.0	15.0	1.0	.0	.0	.0	.0
250126	0	0	21.0	6.0	22.0	17.0	14.0	.0	.0	.0	.0	.0
250127	0	0	22.0	11.0	28.0	22.0	16.0	1.0	.0	.0	.0	.0
250128	0	0	29.0	12.0	25.0	22.0	18.0	.0	.0	.0	.0	.0
250129	0	0	21.0	9.0	29.0	19.0	15.0	.0	.0	.0	.0	.0
250130	0	0	12.0	26.0	23.0	15.0	12.0	.0	.0	.0	.0	.0
250131	0	0	110.0	17.0	94.0	22.0	25.0	1.0	.0	.0	.0	.0
250132	0	0	22.0	8.0	18.0	20.0	17.0	1.0	.0	.0	.0	.0
250133	0	0	22.0	9.0	14.0	19.0	18.0	1.0	.0	.0	.0	.0
250134	0	0	45.0	15.0	56.0	25.0	20.0	.0	.0	.0	.0	.0
250135	0	0	12.0	9.0	27.0	9.0	8.0	1.0	.0	.0	.0	.0
250136	0	0	39.0	16.0	31.0	20.0	13.0	1.0	.0	.0	.0	.0
250137	0	0	11.0	9.0	25.0	15.0	7.0	1.0	.0	.0	.0	.0
250138	0	0	22.0	17.0	20.0	18.0	16.0	.0	.0	.0	.0	.0
250139	0	0	46.0	8.0	20.0	17.0	10.0	.0	18.0	.0	.0	.0
250140	0	0	195.0	6.0	17.0	15.0	10.0	.0	.0	.0	.0	.0
250141	0	0	15.0	9.0	37.0	23.0	16.0	.0	.0	.0	.0	.0
250142	0	0	21.0	10.0	26.0	14.0	11.0	.0	.0	.0	.0	.0
250143	0	0	16.0	5.0	32.0	20.0	8.0	2.0	.0	.0	.0	.0
250144	0	0	26.0	9.0	52.0	49.0	14.0	.0	.0	.0	.0	.0
250145	0	0	15.0	6.0	19.0	10.0	6.0	.0	.0	.0	.0	.0
250146	0	0	41.0	7.0	38.0	19.0	11.0	.0	.0	.0	.0	.0
250147	0	0	5.0	4.0	18.0	17.0	10.0	1.0	.0	.0	.0	.0
250148	0	0	24.0	5.0	26.0	15.0	10.0	.0	.0	.0	.0	.0
250149	0	0	43.0	4.0	35.0	50.0	9.0	1.0	.0	.0	.0	.0
250150	0	0	11.0	13.0	19.0	10.0	6.0	.0	.0	.0	.0	.0
250151	0	0	60.0	14.0	54.0	62.0	14.0	4.0	.0	.0	.0	.0
250152	0	0	13.0	15.0	24.0	12.0	8.0	.0	.0	.0	.0	.0
250153	0	0	62.0	19.0	84.0	31.0	17.0	5.0	.0	.0	.0	.0

PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : NR : 0
NORSK HYDRO

BEKKSESEDIMENTER FRA PORSANGER

FILNAVN : PORSSEK

ANTALL PRØVER : 209

BEKKESEDIMENTER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AS PPM	AU PPB	BI PPM	AG PPM	W PPM
250154	0	0	18.0	16.0	34.0	18.0	14.0	.0	.0	.0	.0	.0
250155	0	0	107.0	18.0	58.0	35.0	17.0	2.0	.0	.0	.0	.0
250156	0	0	30.0	12.0	33.0	25.0	15.0	1.0	.0	.0	.0	.0
250157	0	0	53.0	11.0	64.0	30.0	12.0	1.0	16.0	.0	.0	.0
250158	0	0	53.0	16.0	52.0	48.0	22.0	.0	.0	.0	.0	.0
250159	0	0	88.0	11.0	84.0	48.0	12.0	1.0	.0	.0	.0	.0
250160	0	0	114.0	12.0	110.0	79.0	22.0	2.0	.0	.0	.0	.0
250161	0	0	56.0	11.0	65.0	35.0	14.0	1.0	.0	.0	.0	.0
250162	0	0	83.0	15.0	49.0	41.0	24.0	1.0	67.0	.0	.0	.0
250163	0	0	103.0	14.0	64.0	31.0	20.0	1.0	.0	.0	.0	.0
250164	0	0	109.0	12.0	53.0	46.0	22.0	1.0	.0	.0	.0	.0
250165	0	0	163.0	4.0	44.0	36.0	15.0	2.0	.0	.0	.0	.0
250166	0	0	45.0	9.0	52.0	29.0	13.0	1.0	.0	.0	.0	.0
250167	0	0	215.0	12.0	227.0	93.0	40.0	2.0	.0	.0	.0	.0
250168	0	0	121.0	11.0	47.0	33.0	20.0	1.0	.0	.0	.0	.0
250169	0	0	108.0	10.0	92.0	73.0	21.0	2.0	.0	.0	.0	.0
250170	0	0	179.0	6.0	40.0	34.0	22.0	1.0	.0	.0	.0	.0
250171	0	0	19.0	4.0	19.0	16.0	7.0	.0	.0	.0	.0	.0
250172	0	0	102.0	11.0	30.0	44.0	14.0	.0	.0	.0	.0	.0
250173	0	0	23.0	13.0	28.0	14.0	7.0	1.0	.0	.0	.0	.0
250174	0	0	41.0	12.0	37.0	37.0	14.0	1.0	.0	.0	.0	.0
250175	0	0	32.0	11.0	21.0	19.0	11.0	.0	.0	.0	.0	.0
250176	0	0	66.0	16.0	74.0	49.0	14.0	.0	.0	.0	.0	.0
250177	0	0	10.0	11.0	10.0	8.0	3.0	1.0	.0	.0	.0	.0
250178	0	0	22.0	12.0	31.0	19.0	8.0	.0	.0	.0	.0	.0
250179	0	0	10.0	9.0	11.0	14.0	5.0	1.0	.0	.0	.0	.0
250180	0	0	89.0	24.0	139.0	136.0	29.0	3.0	.0	.0	.0	.0
250181	0	0	8.0	8.0	17.0	11.0	3.0	1.0	.0	.0	.0	.0
250182	0	0	56.0	18.0	72.0	247.0	30.0	1.0	.0	.0	.0	.0
250183	0	0	10.0	12.0	24.0	15.0	6.0	2.0	.0	.0	.0	.0
250184	0	0	204.0	18.0	98.0	57.0	16.0	1.0	.0	.0	.0	.0
250185	0	0	126.0	14.0	74.0	40.0	12.0	.0	.0	.0	.0	.0
250186	0	0	602.0	22.0	73.0	101.0	13.0	4.0	.0	.0	.0	.0
250187	0	0	22.0	9.0	44.0	18.0	10.0	.0	.0	.0	.0	.0
250188	0	0	47.0	18.0	93.0	43.0	10.0	2.0	.0	.0	.0	.0
250189	0	0	49.0	13.0	61.0	35.0	9.0	2.0	.0	.0	.0	.0
250190	0	0	27.0	10.0	73.0	28.0	16.0	3.0	.0	.0	.0	.0
250191	0	0	39.0	9.0	75.0	34.0	10.0	1.0	.0	.0	.0	.0
250192	0	0	22.0	4.0	22.0	18.0	9.0	.0	.0	.0	.0	.0
250193	0	0	72.0	5.0	130.0	68.0	15.0	.0	.0	.0	.0	.0
250194	0	0	44.0	12.0	102.0	39.0	12.0	1.0	.0	.0	.0	.0
250195	0	0	103.0	7.0	233.0	62.0	22.0	4.0	.0	.0	.0	.0
250196	0	0	10.0	9.0	13.0	8.0	2.0	1.0	.0	.0	.0	.0
250197	0	0	52.0	11.0	46.0	60.0	10.0	1.0	.0	.0	.0	.0
250198	0	0	72.0	10.0	31.0	17.0	19.0	.0	.0	.0	.0	.0
250199	0	0	196.0	16.0	75.0	115.0	26.0	2.0	.0	.0	.0	.0
250200	0	0	26.0	9.0	39.0	34.0	9.0	1.0	.0	.0	.0	.0
250201	0	0	19.0	12.0	21.0	9.0	5.0	.0	.0	.0	.0	.0
250202	0	0	22.0	8.0	19.0	9.0	4.0	.0	.0	.0	.0	.0
250203	0	0	22.0	10.0	25.0	20.0	4.0	1.0	.0	.0	.0	.0
250204	0	0	79.0	6.0	14.0	81.0	10.0	2.0	12.0	.0	.0	.0

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PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : NR :
NORSK HYDRO

BEKKSESEDIMENTER FRA PORSANGER

FILNAVN : PORSBEK ANTALL PRØVER : 209

BEKKESEDIMENTER

PRØVE	X-KOORD	Y-KOORD	CU PPM	PB PPM	ZN PPM	NI PPM	CO PPM	AS PPM	AU PPB	BI PPM	AG PPM	W PPM
250205	0	0	30.0	14.0	46.0	26.0	10.0	3.0	.0	.0	.0	.0
250206	0	0	128.0	62.0	73.0	122.0	26.0	1.0	.0	.0	.0	.0
250207	0	0	21.0	8.0	26.0	17.0	4.0	3.0	.0	.0	.0	.0
250208	0	0	22.0	12.0	33.0	19.0	6.0	1.0	.0	.0	.0	.0
250209	0	0	14.0	7.0	26.0	16.0	7.0	1.0	.0	.0	.0	.0

PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO

SAMMENLIKNING KORNFRAKSJONER

FILNAVN : PORSSAM

ANTALL PRØVER : 100

PRØVE	X-KOORD	Y-KOORD	Cu >0.2 C1 PPM	Cu <0.2 C3 PPM	Pb >0,2 P1 PPM	Pb <0,2 P2 PPM	Zn >0,2 Z1 PPM	Zn <0,2 Z2 PPM	Ni >0,2 N1 PPM	Ni <0.2 N2 PPM	Co >0,2 C2 PPM	Co <0,2 C4 PPM
250025	0	0	19.0	18.0	4.0	5.0	14.0	19.0	6.0	18.0	2.0	5.0
250026	0	0	47.0	38.0	10.0	4.0	18.0	18.0	13.0	19.0	7.0	6.0
250027	0	0	21.0	30.0	7.0	5.0	21.0	30.0	20.0	38.0	21.0	14.0
250030	0	0	22.0	21.0	5.0	6.0	36.0	33.0	21.0	24.0	12.0	15.0
250031	0	0	31.0	33.0	4.0	6.0	36.0	35.0	97.0	109.0	15.0	18.0
250033	0	0	8.0	19.0	9.0	5.0	16.0	30.0	32.0	79.0	3.0	12.0
250034	0	0	5.0	39.0	5.0	9.0	48.0	65.0	48.0	88.0	10.0	22.0
250035	0	0	10.0	16.0	3.0	7.0	15.0	22.0	14.0	22.0	9.0	12.0
250036	0	0	47.0	133.0	19.0	40.0	25.0	66.0	21.0	46.0	16.0	14.0
250039	0	0	159.0	176.0	14.0	16.0	85.0	81.0	55.0	72.0	18.0	18.0
250040	0	0	290.0	252.0	19.0	29.0	99.0	90.0	64.0	55.0	23.0	19.0
250044	0	0	6.0	10.0	9.0	5.0	13.0	19.0	6.0	16.0	4.0	8.0
250049	0	0	39.0	53.0	6.0	12.0	30.0	39.0	39.0	56.0	15.0	15.0
250050	0	0	31.0	37.0	8.0	10.0	37.0	47.0	28.0	33.0	8.0	14.0
250052	0	0	12.0	12.0	9.0	6.0	27.0	21.0	20.0	15.0	8.0	6.0
250053	0	0	117.0	151.0	5.0	10.0	39.0	47.0	71.0	122.0	13.0	14.0
250054	0	0	28.0	29.0	5.0	7.0	32.0	32.0	19.0	45.0	13.0	20.0
250055	0	0	175.0	137.0	13.0	13.0	116.0	64.0	42.0	51.0	25.0	19.0
250057	0	0	25.0	35.0	3.0	7.0	30.0	44.0	7.0	33.0	5.0	12.0
250058	0	0	564.0	669.0	18.0	12.0	55.0	48.0	21.0	44.0	27.0	25.0
250059	0	0	314.0	142.0	10.0	8.0	44.0	35.0	20.0	31.0	13.0	13.0
250062	0	0	58.0	20.0	13.0	9.0	59.0	45.0	73.0	36.0	22.0	20.0
250064	0	0	32.0	13.0	3.0	3.0	13.0	12.0	8.0	12.0	5.0	4.0
250065	0	0	37.0	40.0	11.0	12.0	74.0	97.0	42.0	38.0	18.0	35.0
250071	0	0	124.0	91.0	10.0	9.0	149.0	135.0	56.0	61.0	30.0	20.0
250072	0	0	32.0	37.0	15.0	15.0	72.0	103.0	13.0	43.0	20.0	23.0
250073	0	0	77.0	60.0	29.0	21.0	42.0	65.0	30.0	66.0	21.0	22.0
250074	0	0	36.0	33.0	3.0	6.0	16.0	35.0	15.0	33.0	10.0	14.0
250077	0	0	15.0	8.0	6.0	3.0	10.0	17.0	10.0	16.0	10.0	9.0
250078	0	0	74.0	85.0	7.0	12.0	13.0	25.0	15.0	24.0	12.0	7.0
250079	0	0	20.0	16.0	5.0	6.0	9.0	31.0	15.0	30.0	6.0	13.0
250081	0	0	62.0	49.0	8.0	8.0	23.0	46.0	74.0	86.0	33.0	26.0
250082	0	0	113.0	110.0	10.0	12.0	33.0	28.0	29.0	50.0	19.0	23.0
250085	0	0	10.0	9.0	8.0	3.0	16.0	16.0	18.0	22.0	16.0	10.0
250087	0	0	27.0	17.0	13.0	10.0	67.0	38.0	84.0	64.0	26.0	18.0
250088	0	0	150.0	107.0	14.0	10.0	70.0	53.0	37.0	42.0	25.0	14.0
250089	0	0	22.0	19.0	8.0	8.0	19.0	22.0	13.0	29.0	9.0	10.0
250093	0	0	125.0	39.0	12.0	3.0	89.0	30.0	105.0	44.0	29.0	11.0
250094	0	0	313.0	202.0	15.0	7.0	133.0	83.0	49.0	46.0	30.0	21.0
250096	0	0	150.0	146.0	16.0	13.0	174.0	173.0	52.0	72.0	31.0	23.0
250099	0	0	29.0	29.0	5.0	6.0	36.0	42.0	32.0	40.0	20.0	16.0
250100	0	0	13.0	12.0	5.0	6.0	20.0	22.0	21.0	14.0	5.0	7.0
250101	0	0	16.0	10.0	8.0	2.0	20.0	25.0	15.0	19.0	14.0	2.0
250102	0	0	13.0	14.0	9.0	12.0	37.0	52.0	20.0	19.0	10.0	8.0
250103	0	0	9.0	6.0	7.0	6.0	16.0	28.0	12.0	12.0	11.0	7.0
250104	0	0	30.0	19.0	7.0	11.0	18.0	12.0	7.0	5.0	7.0	3.0
250106	0	0	7.0	9.0	4.0	4.0	12.0	17.0	6.0	11.0	12.0	4.0
250107	0	0	85.0	49.0	8.0	5.0	70.0	55.0	265.0	189.0	28.0	17.0
250108	0	0	14.0	17.0	6.0	7.0	12.0	43.0	13.0	17.0	5.0	4.0
250110	0	0	32.0	23.0	6.0	9.0	17.0	21.0	19.0	16.0	13.0	7.0
250112	0	0	66.0	112.0	15.0	8.0	46.0	62.0	118.0	95.0	25.0	20.0

PROSPEKTERINGSAVDELINGEN OMRÅDE NAVN : PORSANGER NR : 25
NORSK HYDRO

SAMMENLIKNING KORNFRAKSJONER

FILNAVN : PORSSAM ANTALL PRØVER : 100

BEKKESEDIMENTER

PRØVE	X-KOORD	Y-KOORD	C1 PPM	C3 PPM	P1 PPM	P2 PPM	Z1 PPM	Z2 PPM	N1 PPM	N2 PPM	C2 PPM	C4 PPM
250113	0	0	79.0	41.0	15.0	6.0	75.0	48.0	55.0	26.0	23.0	7.0
250114	0	0	23.0	18.0	10.0	8.0	67.0	67.0	25.0	12.0	16.0	13.0
250116	0	0	16.0	17.0	12.0	4.0	8.0	9.0	23.0	10.0	5.0	12.0
250117	0	0	19.0	16.0	6.0	8.0	13.0	4.0	24.0	15.0	7.0	9.0
250118	0	0	29.0	31.0	11.0	8.0	24.0	27.0	67.0	57.0	10.0	17.0
250119	0	0	165.0	211.0	10.0	10.0	44.0	51.0	44.0	36.0	13.0	16.0
250121	0	0	63.0	33.0	7.0	7.0	40.0	32.0	106.0	63.0	10.0	15.0
250122	0	0	156.0	72.0	10.0	6.0	46.0	53.0	95.0	69.0	20.0	9.0
250128	0	0	57.0	29.0	10.0	12.0	35.0	25.0	35.0	22.0	15.0	18.0
250129	0	0	43.0	21.0	10.0	9.0	32.0	29.0	42.0	19.0	17.0	15.0
250131	0	0	86.0	110.0	7.0	17.0	48.0	94.0	22.0	22.0	9.0	25.0
250132	0	0	20.0	22.0	10.0	8.0	15.0	18.0	24.0	20.0	6.0	17.0
250133	0	0	36.0	22.0	8.0	9.0	32.0	14.0	25.0	19.0	6.0	18.0
250136	0	0	34.0	39.0	10.0	16.0	42.0	31.0	31.0	20.0	10.0	13.0
250139	0	0	35.0	46.0	7.0	8.0	12.0	20.0	24.0	17.0	6.0	10.0
250140	0	0	195.0	195.0	7.0	6.0	16.0	17.0	22.0	15.0	23.0	10.0
250141	0	0	23.0	15.0	17.0	9.0	49.0	37.0	47.0	23.0	17.0	16.0
250142	0	0	42.0	21.0	9.0	10.0	26.0	26.0	29.0	14.0	14.0	11.0
250144	0	0	34.0	26.0	8.0	9.0	53.0	52.0	54.0	49.0	16.0	14.0
250145	0	0	37.0	15.0	11.0	6.0	26.0	19.0	23.0	10.0	23.0	6.0
250148	0	0	15.0	24.0	7.0	5.0	21.0	26.0	21.0	18.0	20.0	10.0
250151	0	0	103.0	60.0	12.0	14.0	116.0	54.0	175.0	62.0	31.0	14.0
250154	0	0	16.0	18.0	6.0	16.0	25.0	34.0	30.0	18.0	15.0	14.0
250157	0	0	81.0	53.0	9.0	11.0	126.0	64.0	47.0	30.0	17.0	12.0
250159	0	0	109.0	88.0	8.0	11.0	150.0	84.0	74.0	48.0	39.0	12.0
250160	0	0	53.0	114.0	8.0	12.0	59.0	110.0	48.0	79.0	22.0	22.0
250162	0	0	56.0	83.0	7.0	15.0	32.0	49.0	39.0	41.0	27.0	24.0
250163	0	0	116.0	103.0	15.0	14.0	63.0	64.0	31.0	31.0	29.0	20.0
250167	0	0	392.0	215.0	22.0	12.0	385.0	227.0	129.0	93.0	89.0	40.0
250169	0	0	95.0	108.0	7.0	10.0	52.0	92.0	50.0	73.0	34.0	21.0
250170	0	0	301.0	179.0	.0	6.0	54.0	40.0	71.0	34.0	57.0	22.0
250171	0	0	118.0	19.0	5.0	4.0	103.0	19.0	70.0	16.0	43.0	7.0
250176	0	0	65.0	66.0	2.0	16.0	62.0	74.0	69.0	49.0	22.0	14.0
250179	0	0	23.0	10.0	.0	9.0	18.0	11.0	37.0	14.0	18.0	5.0
250182	0	0	28.0	56.0	.0	18.0	36.0	72.0	137.0	247.0	23.0	30.0
250184	0	0	173.0	204.0	6.0	18.0	97.0	98.0	125.0	57.0	53.0	16.0
250186	0	0	35.0	47.0	3.0	18.0	63.0	93.0	50.0	43.0	19.0	10.0
250189	0	0	60.0	49.0	.0	13.0	60.0	61.0	62.0	35.0	29.0	9.0
250191	0	0	75.0	39.0	1.0	9.0	122.0	75.0	97.0	34.0	34.0	10.0
250193	0	0	27.0	72.0	.0	5.0	25.0	130.0	39.0	66.0	18.0	15.0
250194	0	0	69.0	44.0	3.0	12.0	130.0	102.0	67.0	39.0	23.0	12.0
250195	0	0	115.0	103.0	9.0	7.0	245.0	233.0	69.0	62.0	33.0	22.0
250197	0	0	34.0	52.0	.0	11.0	38.0	46.0	66.0	60.0	22.0	10.0
250198	0	0	52.0	72.0	.0	10.0	58.0	31.0	30.0	17.0	49.0	19.0
250201	0	0	103.0	19.0	6.0	12.0	37.0	21.0	25.0	9.0	45.0	5.0
250204	0	0	48.0	79.0	.0	6.0	8.0	14.0	60.0	81.0	24.0	10.0
250205	0	0	21.0	30.0	.0	14.0	27.0	46.0	32.0	26.0	20.0	10.0
250208	0	0	43.0	22.0	4.0	12.0	40.0	33.0	45.0	19.0	28.0	6.0
250209	0	0	25.0	14.0	.0	7.0	35.0	26.0	42.0	16.0	23.0	7.0

LITHO-GEOCHEM
1983

OMRÅDE 25

o LOKALITETS NR.

0 1 km

SKYTEFELT GRENSE

LAKSELV

BUENGELVRJORDEN

GARGASJAVRIT

LAKSEVATN

CARRESJAVRI

SUOLNJAVRI

RASSEGUR JAVRI

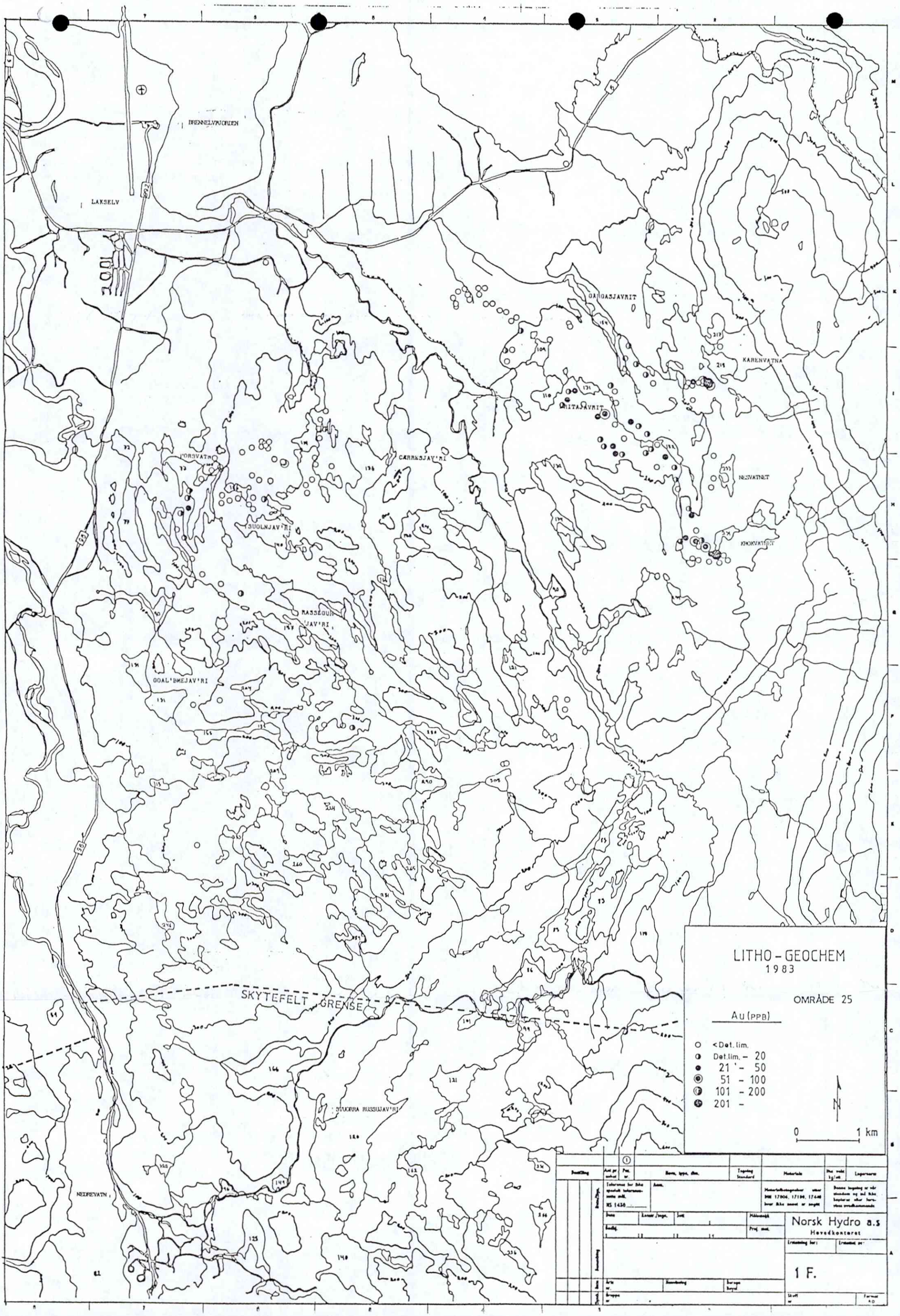
GOALMMEJAVRI

STUORRA RUSSUJAVRI

NJUORVATN

Norsk Hydro a.s
Hovedkontoret

1 F.


BRENNELVVUOPLEEN
LAKSELV
GAISSAJAVRIT
KARENVATNA
NJESVATNET
KHOKVATNET
SUOLNJAV'RI
RASSEGUR
JAV'RI
GOAL'BMEJAV'RI
SKYTEFELT GRENSE
STUGORRA RUSSUJAV'RI
NEERVATN
LITHO - GEOCHEM
1983
OMRÅDE 25
Au (PPB)
< Det. lim.
Det.lim. - 20
21 - 50
51 - 100
101 - 200
201 -
N
0
1 km
Norsk Hydro a.s
Hovedkontoret
1 F.

LITHO - GEOCHEM
1983

OMRÅDE 25

Ag (PPM)

○	0 - 5
◑	6 - 10
●	11 - 20
◎	21 - 50
◑	51 - 100
●	101 -

N

0 1 km

SKYTEFELT GRENSE

Norsk Hydro a.s
Hovedkontoret

1 F.

LITHO - GEOCHEM
1983

OMRÅDE 25

Pb (PPM)

○	- 20
◑	21 - 30
●	31 - 60
⊘	61 - 100
◐	101 -

N

0 1 km

SKYTEFELT GRENSE

LAKSELV

BYERNELVBJORGEN

GARGASJAVRIT

KARENVATNA

GARRESJAV'RI

RESVATNET

KNOKVATNET

SUOLNJAV'RI

GOAL'BMEJAV'RI

NEDREVATN

Norsk Hydro a.s
Hovedkontoret

1 F.

LITHO - GEOCHEM
1983

OMRÅDE 25

Zn (PPM)

- 0 - 30
- 31 - 60
- 61 - 120
- 121 -

N

0 1 km

SKYTEFELT GRENSE

LAKSELV

BYGNELVFJORDEN

GARGASJAVRIT

KARLSVATNA

RESVATNET

KNOKVATNET

CARRESJAV'RI

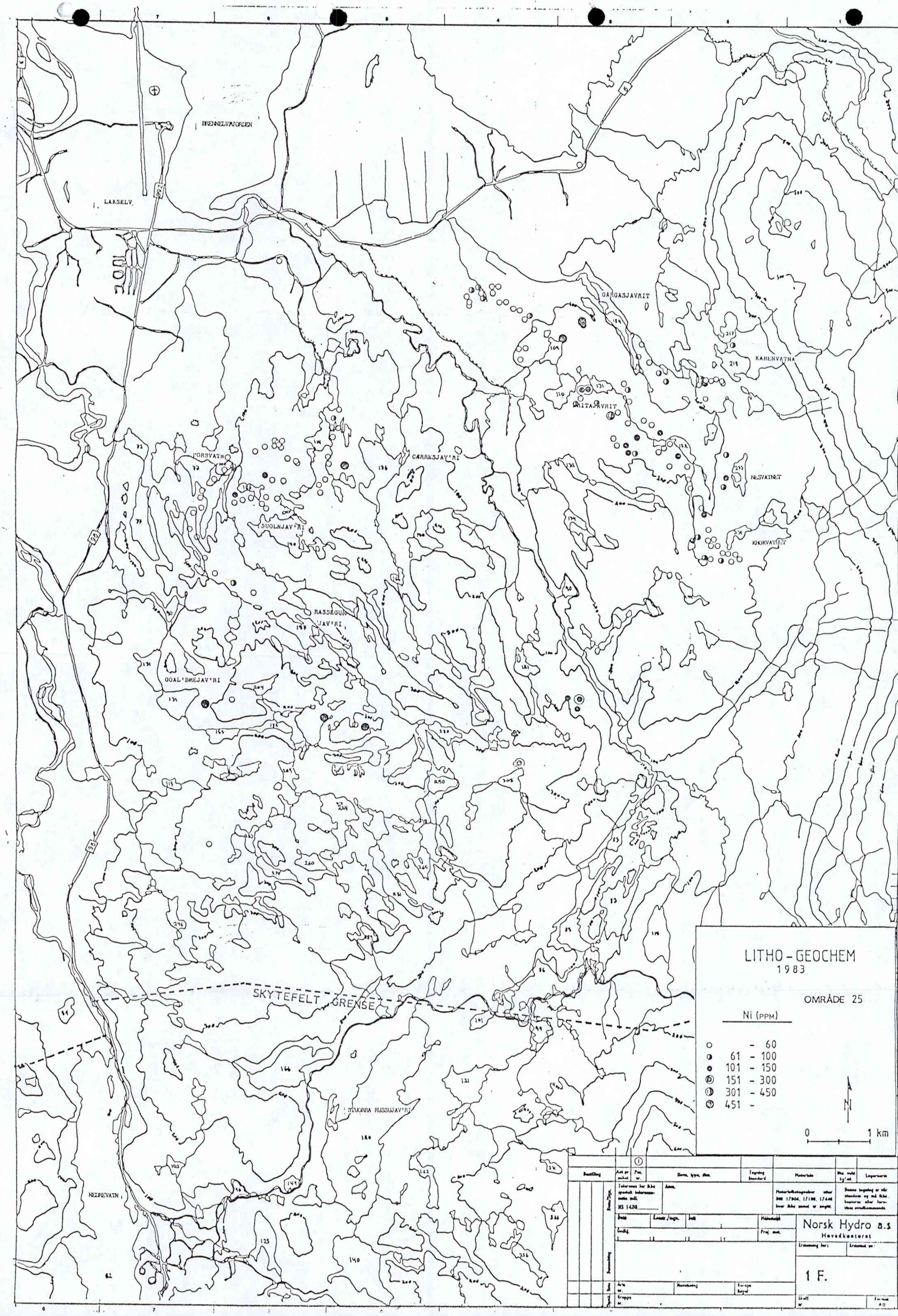
SUOLNJAV'RI

GOAL'BMEJAV'RI

NEIREVATN

Norsk Hydro a.s
Hovedkontoret

1 F.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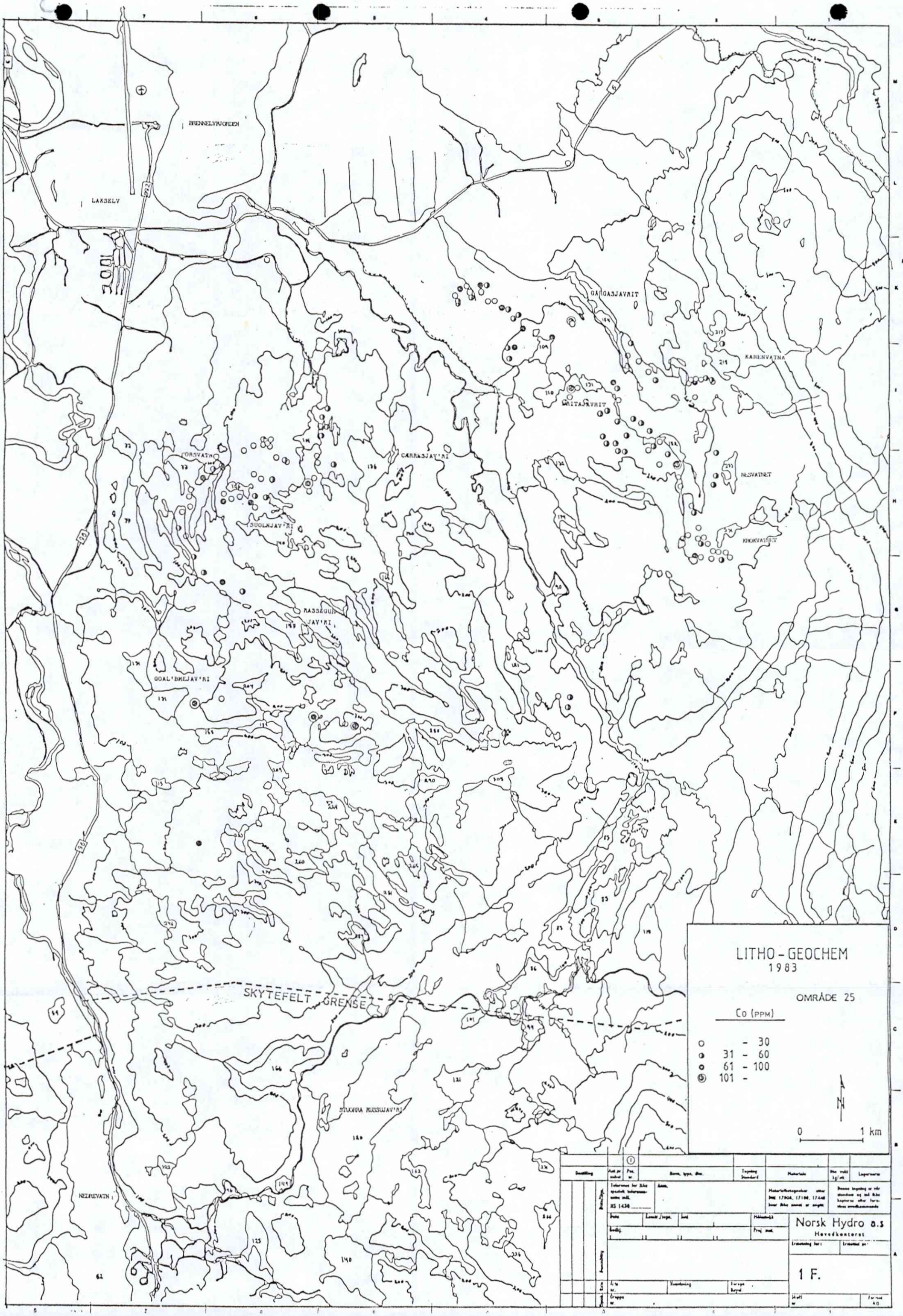
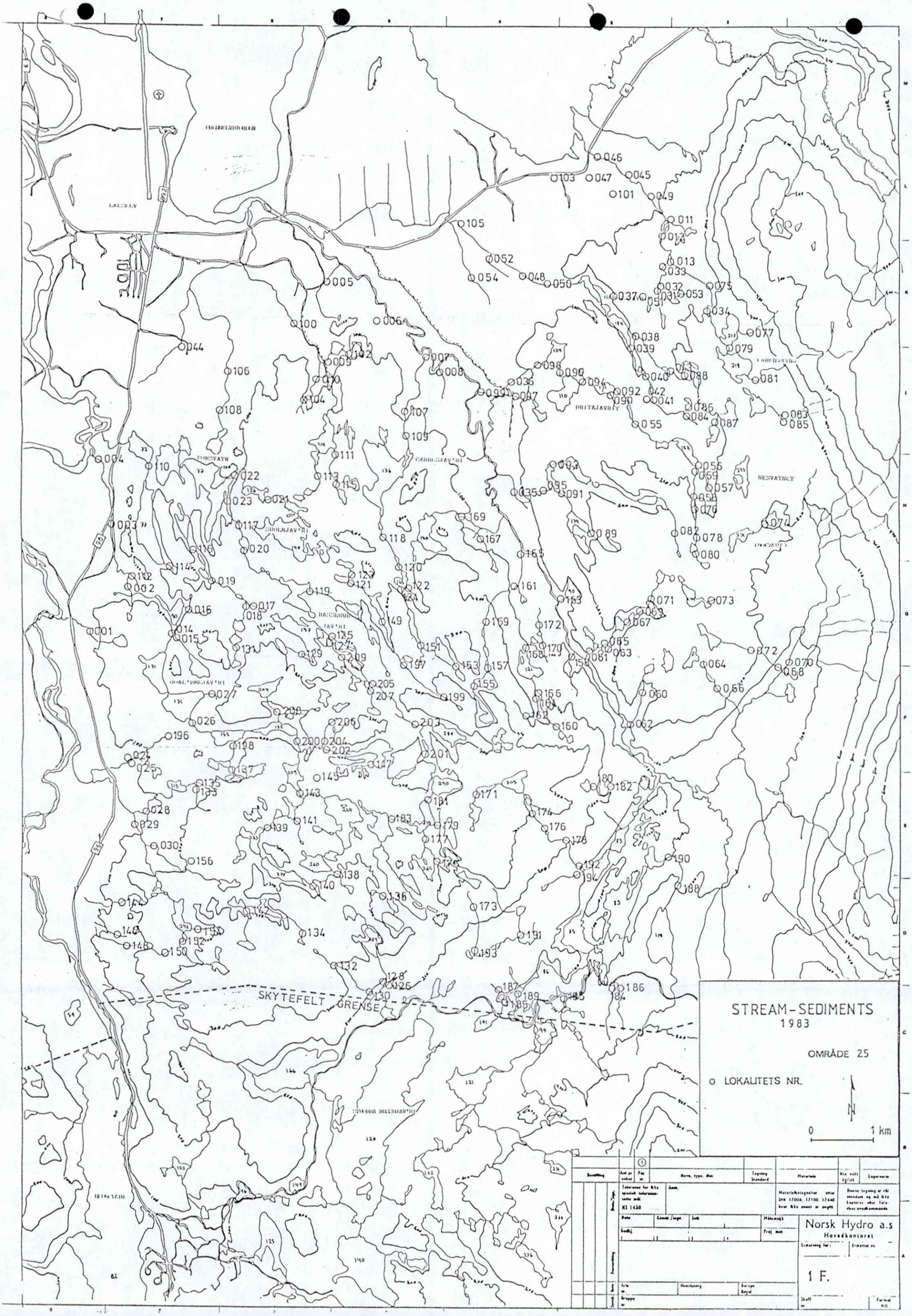
LAKSELV
GARGASJAVRIT
KAHENVATNA
RITAJAVRIT
PORSVATN
CARRESJAV'RI
NESVATNET
SUOLNJAV'RI
KHOKVATNET
RASSEGUR JAV'RI
GOAL'BMEJAV'RI
SKYTEFELT GRENSE
STUORRA RUSSUJAV'RI
NEDREVATN
LITHO-GEOCHEM
1983
OMRÅDE 25
Ni (PPM)
- 60
61 - 100
101 - 150
151 - 300
301 - 450
451 -
N
0
1 km
Norsk Hydro a.s
Hovedkontoret
1 F.


BRENNELVVATNET
LAKSELV
GAISSAJAVRIT
KARENVATNA
CARRASJAVRI
SKYTEFELT GRENSE
NEDREVATN
LITHO - GEOCHEM
1983
OMRÅDE 25
Co (PPM)
- 30
31 - 60
61 - 100
101 -
0
1 km
Norsk Hydro a.s
Hovedkontoret
1 F.


SKYTEFELT GRENSE
STREAM-SEDIMENTS
1983
OMRÅDE 25
o LOKALITETS NR.
0
1 km
Norsk Hydro a.s
Hovedkontoret
1 F.

STREAM-SEDIMENTS
1983

OMRÅDE 25

Au (PPB)

- < Det. lim.
- Det. lim. – 10
- 11 – 20
- 21 – 50
- 51 – 100
- 101 –

0 1 km

SKYTEFELT GRENSE

Norsk Hydro a.s
Hovedkontoret

1 F.

STREAM-SEDIMENTS
1983

OMRÅDE 25

Cu (PPM)

- ○ - 30
- ◔ 31 - 50
- ● 51 - 100
- ◕ 101 - 150
- ◉ 151 -

0 1 km

SKYTEFELT GRENSE

Norsk Hydro a.s
Hovedkontoret

1 F.

STREAM-SEDIMENTS
1983

OMRÅDE 25

· Zn (PPM)

- 30
31 - 60
61 - 100
101 - 150
151 -

0 1 km

SKYTEFELT GRENSE

Norsk Hydro a.s
Hovedkontoret

1 F.

STREAM-SEDIMENTS
1983

OMRÅDE 25

Ni (PPM)

	- 20
	21 - 50
	51 - 80
	81 - 140
	141 -

N

0 1 km

SKYTEFELT GRENSE

Norsk Hydro a.s
Hovedkontoret

1 F.

PORSANGER, O.nr. 2o943

KOSTNADSOVERSIKT 1983

.	Arbeidsytelser eget personell	kr. 214.24o.-
.	Reiser eget personell inkl. leiebiler	" 1o7.991.43
.	Feltassistenter, lønn,reiser, diett	" 1o4.oo1.o4
.	Div. utgifter	" 97.866.51
	SUM PORSANGER 1983	kr. 524.o98.98

FORDELING:

Norsk Hydro a.s 55%	kr. 288.254.44
BP Norge A.S Minerals, 45%	" 235.844.54

Grønn

Norsk Hydro

Postadr.: Postboks 2594, Solli
Oslo 2 - Norway
Kontoradr.: Lørenfaret 3, Økern
Telefon: (02) 15 90 10
Telegram: norskhydro
Telex: 16473 hydro n

51

☐ Rapport ☐ Notat ☐ Referat ☐ PM	Polydoc nr. (NR) 760	Arkivnr. (BI) F 17.20.00
Rapport nr.	Eksemplar nr.	Antall sider (BI)
		Arkivsted (BI) LØ

Sirkulasjon

Fordeling

Tittel (TI)

Oversikt over geofysikk utført i 1982.

Divisjon: T & F

Avdeling/seksjon: Prospektering

Dato (BI): 11.3.83

Forfattet av (FO): H. Elstad

Ref.: HE

Godkjent av

Vedr. ordrenr. (FA)

Sted/land (FA): Oslofeltet

Emneord (EO)

Geofysikk

IP - RP måling

Magnetiske bakkemålinger

VLF - målinger.

Resymé/konklusjon (RE)

Det er lagt vekt på å få frem kostnadene ved at avdelingen utfører denne type undersøkelser i egen regi, for evt. å kunne sammenligne med eksterne tilbud. Likedan vil oversikten gjøre det lettere å planlegge kostnadene ved fremtidige undersøkelser.

Anbefaling, videre arbeid

G E O F Y S I K K 1 9 8 2

Avdelingens geofysiske aktivitet i 1982 har vært som flg.

Sted	Metode
RAMNES.....	IP - RP Gradient, Dipol-dipol Magnetometri
ØDEMARK - NORDLI.....	IP - RP Gradient, Dipol-dipol Magnetometri
SILVIFUTURUM.....	IP - RP Gradient, Dipol-dipol
GLITREVANN-området.....	Magnetometri
SKYTTMYR-BØYLESTAD.....	VLF

Alle måleoppdrag er utført av NH-personell, eller innleide mannskaper.

Utstyr

IP - RP målingene er utført med flg. utstyr leid fra A/S SULFIDMALM til en pris av Kr. 1.000,- pr. uke.:

Sender:.....McPhar HPIPT$_x$
Mottager:.....McPhar P 660
Strømforsyning:.....JLO totaktsgenerator spesialutrustet av McPhar med automatisk frekvensregulator.
Effekt: 3,5 kVA
Utgangsfrekvens: 500 Hz.
Målefrekvenser benyttet: 0.3125 og 5.0 Hz.

De magnetiske målingene er utført med 2 stk. SCINTREX MP 2, og 1 stk. GEOMETRIX 816, som er avdelingens egne instrumenter.

OVERSIKT OVER DE ENKELTE PROSJEKTER

RAMNES

IP-RP målinger

Målte profilkilometer: Gradient: 10,4 Dipol-dipol: 1,5
Antall målepunkter: Gradient: 420 Dipol-dipol: 320
Antall kabelutlegg Gradient: 3
Antall medgåtte dagsverk: 45

Kostnader:

Leie av utstyr	kr. 4000
H. Elstad, 3 uker å kr. 4000	kr.12000
Hjelpemannskap: 3x2 uker àkr. 1600	kr. 9600
Forbruksartikler	kr. 500
Sum	kr.26100

Kostnad pr. profilkm. komb. gradient - dipol-dipol kr. 2150,-

Magnetiske målinger

Målte profilkilometer: 82
Antall målepunkter: 3300
Antall medgåtte dagsverk: 30

Kostnader:

Avskrivning av instrumenter	kr. 4800
P. Abildgaard og L. Kiergaard 2x3 uker à kr 3600	kr.21600
Transport	kr. 4500
Forbruksartikler	kr. 500
Sum	kr.31400

Kostnad pr. profilkilometer kr. 383.-

ØDEMARK - NORDLI

IP - RP målinger

Målte profilkilometer: Gradient: 38 Dipol-dipol: 2,0
Antall målepunkter: Gradient: 1700 Dipol-dipol: 400
Antall kabelutlegg gradient: 11
Antall medgåtte dagsverk: 124

Kostnader:

Leie av utstyr	kr.	11000
P. Abildgaard 4 uker à kr. 3600	kr.	14400
H. Elstad 4,5 uker à kr. 4000	kr.	18000
J. B. Jakobsen 2,5 uker àkr. 4000	kr.	10000
Hjelpemannskaper 2x8,5 uker à kr. 1600	kr.	27200
Forbruksartikler	kr.	1500
Sum	kr.	82100

Kostnad pr. profilkm. komb. gradient - dipol-dipol kr. 2050.-

Magnetiske målinger

Målte profilkilometer: 72,2
Antall målepunkter: 3500
Antall medgåtte dagsverk: 20

Kostnader:

Avskrivning av instrumeneter	kr.	4000
H. Elstad 5 uker à kr. 4000	kr.	20000
Forbruksartikler	kr.	200
Sum	kr.	24200

Kostnad pr. profilkm. kr. 335

SILVIFUTURUM

IP - RP måling

Målte profilkilometer: Gradient: 7,6 Dipol-dipol: 1,5
Antall målepunkter: Gradient: 304 Dipol-dipol: 300
Antall kabelutlegg gradient: 2
Antall medgåtte dagsverk: 45

Kostnader:

Leie av utstyr	kr. 4000
H. Elstad 3 uker à kr. 4000	kr. 12000
Hjelpemannskaper 2x3 uker à kr. 1600	kr. 9600
Forbruksartikler	kr. 600
Sum	kr. 26200

Kostnad pr. profilkm. komb. gradient - dipol-dipol kr. 2879.-

GLITREVANN - OMRÅDET

Magnetiske målinger

Målte profilkilometer: 88
Antall målepunkter: 3500
Antall medgåtte dagsverk: 50

Kostnader:

Avskrivning av instrumenter	kr. 5000
Transport	kr. 4500
P. Abildgaard og L. Kiergaard 5 uker à kr. 3600	kr. 18000
Hjelpere.....5 uker à kr. 2600	kr. 13000
Forbruksartikler	kr. 200
Sum	kr. 40700

Kostnad pr. profilkm. kr. 462,50

Oversikt for hele sesongen under ett

IP_-_RP målingene
Totalt antall målte profilkilometer: 61,2
Total kostnad:.....kr. 134.400,-

Gjennomsnittskostnad pr. profilkilometer komb. måling: kr. 2.203,-

Magnetiske_målinger
Totalt antall målte profilkilometer: 242,-
Total kostnad: kr. 96.300,-

Gjennomsnittskostnad pr. profilkilometer.....kr. 397,-

VLF-målingene utført ved Skyttmyr-Bøylestad er ikke tatt med, da disse ikker representative for hva en slik unders. koster.
I de nevnte kostnader er ikke medregnet timeavregningspriser for NH-personell. Heller ikke er kostnader til rapportering tatt med.

Meningen med denne oversikt er å gjøre det lettere å bedømme hva en påtenkt undersøkelse vil medføre av utgifter når vi utfører den i egen regi.

Grunnen til at IP-RP målingen i Silvifuturum er blitt vesentlig dyrere enn de andre er den større andel av Dipol-dipol målinger som der ble utført.

Kjørholt, den 11. mars 1983

Harald Elstad