

JOINT VENTURE FOLLDAL VERK A/S - NORSKE FINA A/S

Telemark region

EXPLORATION 1984

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GOLD EXPLORATION IN TELEMARK, NORWAY

Introduction

After a proposal from Folldal Verk A/S, the activities of the Join Venture - Folldal Verk A/S - Norske Fina A/S were expanded to include gold prospection by means of regional stream sediment sampling south of Rjukan in the Telemark county.

Preferently active stream sediments, free of organic material were to be sampled at a mutual distance of 250m. Samples were sieved on spot for fraction less than 180 μ m.

Three students were engaged for four weeks in July to do the sampling work.

During the first two days they were given instruction in stream sediment sampling by geologist Kraus from Folldal Verk A/S and the writer.

The first three weeks the sampling team stayed in a hired cottage in Rauland on the west side of the area to be sampled.

The last week they stayed in a cabin on the camping ground in Tuddal, on the east side of the area.

From these camps they drove by cars out in the field each day.

Geological setting.

The sampled area is situated within the precambrian Telemark ore province. It is dominated by quartzrich metasediments, with beds of calcareous schists, called the Seljord group.

Sills of amphibolites of unknown origin are found both within the Seljord group and the meta rhyolites and meta tuffs of the Rjukan group lying under the Seljord group.

Within these sills, in quartz-calcite-(turmaline) veins, gold have been found and mined.

The last gold mine in operation, the Bleka mine, was worked in two periods - 1880-1902 and 1935-1939.

Analysis from 1880 to 1902 shows 25g/tons Au, 30g/tons Ag and 0,8% Bi.

Activities

121 samples, just about 20% of the samples that were planned, were taken, due to problems of finding sample material.

During the sampling period it was realized that the area could not be covered as planned.

Movation of sampling team were accomplished as planned, however, even if they had not finished the part of the area they were removed from.

This was done to get samples from various parts of the horizons of interest, and because the last sampled area on beforehand was considered to be the most interesting after a short geological reco. in the area.

Results

Only 9 samples had a content above 0.01 (ppm Au).

Five of these samples are from Gausdal in the north east part of the area, where the largest basitic sill cross the Gausdal valley.

One sample of 0.06 ppm Au (No.623) was found in the same horizon further west.

The highest values were found in two samples from south-east of Vindsjåen. They had a content of 0.13 ppm (No. 41) and 0.12 ppm (No. 636 Au respectively.

Anomalies are spread and anomalous samples are found inbetween nonanomalous samples, except in the Gausdal area, where five samples of elevated Au-content were found in the same area.

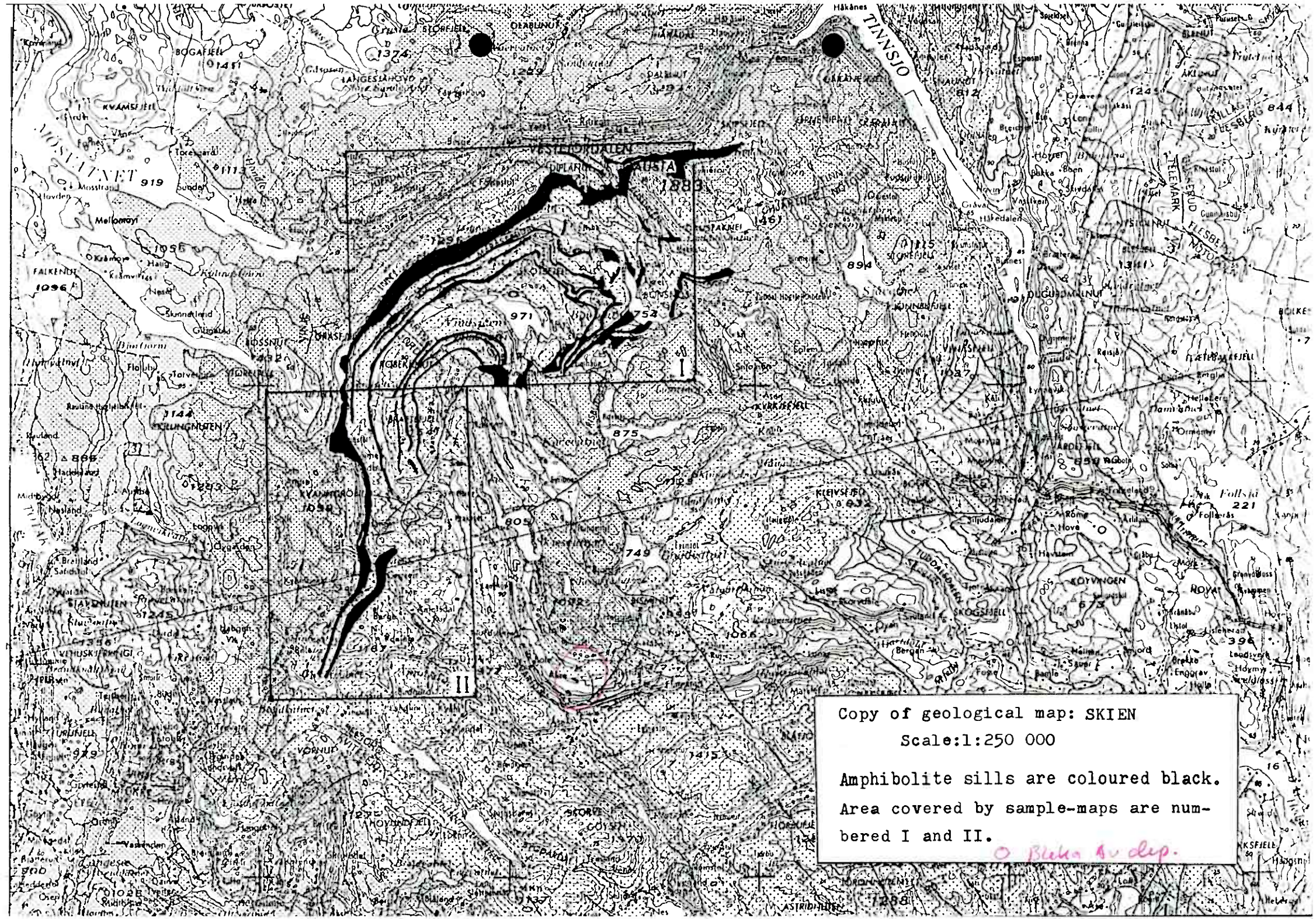
(604-607: 0-01 ppm Au. 608:0.07 ppm Au).

Conclusion proposal

As long as the mutual distances between samples are as big as at least 250 m, it is hard to say if the anomalies may be of interest.

It is proposed that new samples should be taken both upstreams and downstreams from anomalous samples. Mutual distance should be, if possible, 25-50 m. Geological reco. in the anomalous area should be made.

The work could be done in connection with a possible continuation of the Knaben project, and need not involve engagement of extra workers.



Copy of geological map: SKIEN
Scale: 1:250 000
Amphibolite sills are coloured black.
Area covered by sample-maps are num-
bered I and II.

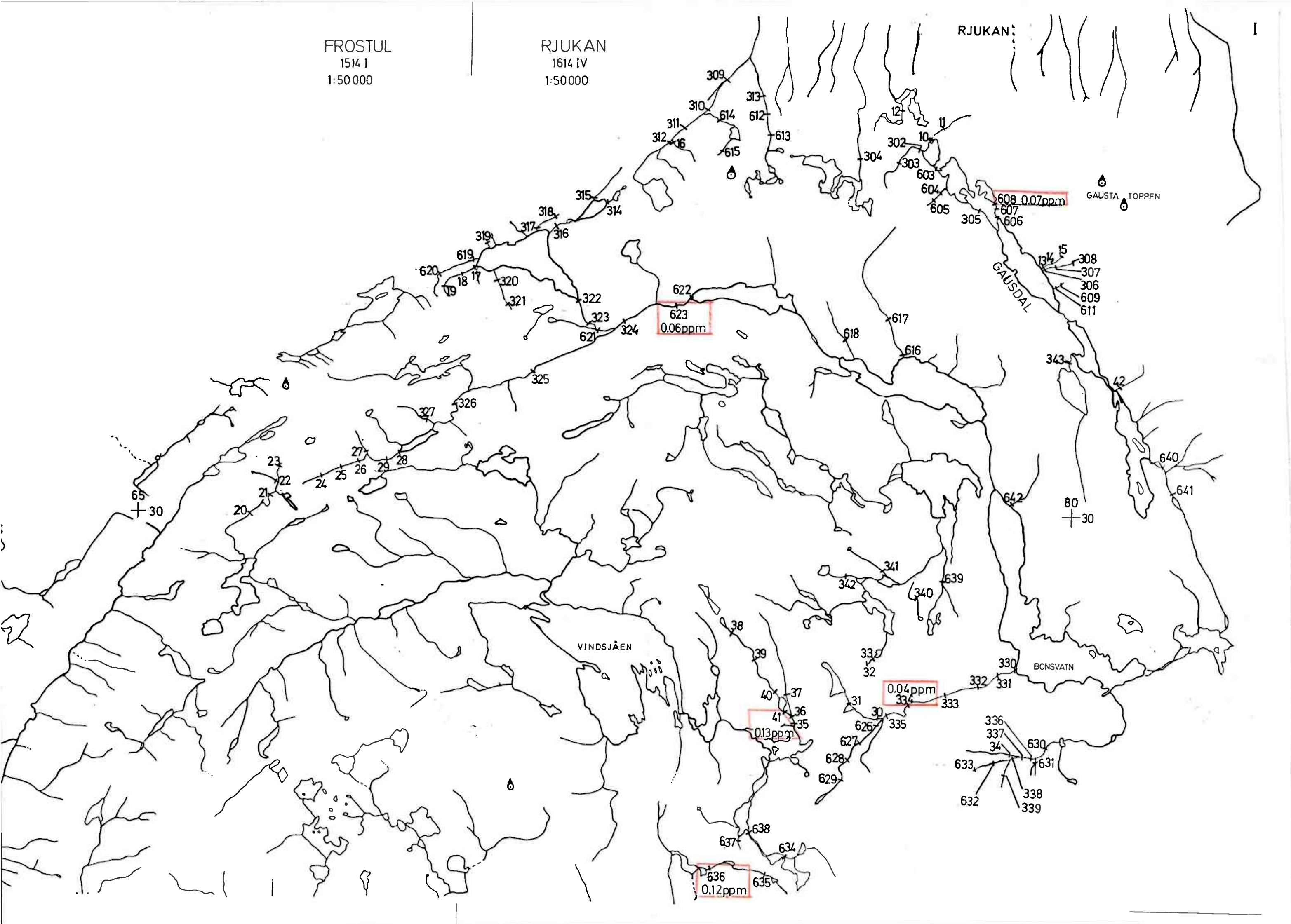
0 Black & dep.

FROSTUL
15¼ I
1:50 000

RJUKAN
16¼ IV
1:50 000

RJUKAN

I



SANDSETVN.

II

ÅMOTSDAL
1514 II
1:50 000

20

GROVEN

10

GJEVARVATN