



Bergvesenet

Postboks 3021, 7002 Trondheim

Rapportarkivet

Bergvesenet rapport nr BV 2241	Intern Journal nr	Internt arkiv nr	Rapport lokalisering	Gradering Fortrolig
Kommer fra ..arkiv Sulitjelma Bergverk A/S	Ekstern rapport nr "522230011"	Oversendt fra	Fortrolig pga	Fortrolig fra dato:

Tittel

Report on the geological mapping of Bolna becken and Raufjellet.

Forfatter STOAKES M. MOORHOUSE S.	Dato 1969	Bedrift Sulitjelma Gruber A/S
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Kommune	Fylke	Bergdistrikt	1: 50 000 kartblad	1: 250 000 kartblad
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Fagområde	Dokument type	Forekomster
Råstofftype	Emneord	

Sammendrag

Detaljert kartlegging av kyanitt - kropper ved Bolna. Sonen med kyanitt-bergarten er kalt aluminiumsonen, og er til dels sterkt folda. Fleire kvartsitt-kropper i samme sonen. Fire større kyanitt-forekomster er skildra.

522.230. 011

Report on the geological
mapping of Bolnabecken
and Raurfjellet

M.R. Stoakes/S.J. Moorhouse

1969

REPORT ON THE GEOLOGICAL MAPPING OF BOLNABECKEN AND RAUFJELLET
SEPTEMBER 1969 M.R. STOAKES S.J. MOORHOUSE

Introduction

The aim of mapping was to extend and revise the preliminary field work of Platt concerning the Alumina zone, thus this report should be read in conjunction with his earlier work.

Stratigraphy

The stratigraphy and lithological description of Platt are accurate and would be repetitions if written here, however some discussion over the exact position of the upper boundary of the Alumina zone is inevitable because frequently the white to pink banded arkosie quartzites of the sparagmite abut against banded quartzites of Alumina zone. This similarity tends to confirm Platt's supposition that the Alumina zone should be considered as part of the sparagmite.

The rocks of the Alumina zone tend to have a characteristic "scaly" white or light green weathered surface but a similar pinkish surface is sometimes seen in the sparagmite itself so caution is necessary in identification.

Along the lower boundary of the alumina zone for a large part of the area mapped is an amphibolite body but this apparently dies out in the region of loc.13 and is replaced by gneisses. Some of the gneisses seen below the zone are very similar to gneisses seen in the sparagmite above the zone and also to gneisses folded into the zone especially in the area south of loc.14.

Structure and Outcrop

The western boundary of the amphibolite and alumina zone is overturned to the west so that the sparagmite and alumina zone pass under the amphibolite. In this area between localities 11/ and 14/ the alumina zone is much folded and interdigitates with the overlying sparagmite. The zone here is mainly represented by quartzites and although no kyanite outcrop was seen it may be that some kyanite rock is present but covered by drift etc., this may explain the presence of kyanite rock boulders in the area (of course the presence of the boulders does not necessarily imply that there is a hidden outcrop).[^]

The overturned lower boundary of the zone continues northwards until the anticline closes and the zone outcrop swings back south east towards loc.13. The general dip of the zone in this area is of the order of 15° NE roughly parallel to the hillside and there is here a wide exposure of the zone on the hillside before the outcrop swings round again and continues north eastwards into the valley. As the zone outcrop nears the river it abruptly changes strike and runs southerly parallel to the river with dips of the order of 40 - 50°. After a short distance the zone swings across the river and runs up the hillside apparently parallel to the quartz bodies mapped by Platt. Thus the present writers disagree with Platt as there now seems to be no reason for supposing a discordance between the quartz and alumina zones as the antiform affecting the quartz (as mapped by Platt) is now seen to affect the alumina zone also.

042.003

The kyanite rock

Your bodies of kyanite rock previously unknow were mapped. The first ore of these was in the area previously mapped by Platt (loc. 7) it is an exposure of grey and light blue kyanite rock of approximately 300 sq.metres outcrop area passing into drift eastwards.

The second body (loc. 13) is an exposure of blue and white kyanite rock of approximately 400 sq.metres it passes westwards into a drift filled gully containing a small lake. This exposure can be seen to be much folded into the surrounding zone rocks. The general dip here is N.E.

The third and fourth bodies (loc. 15 and 16) are very similar in appearance and consist of grey to light blue kyanite rock not quite as fine as loc. 13 as here mica and pyrite imperities can be seen. These two outcrops may be connected as their apposite ends dissapear into drift which covers the c. 70 meters between the two. Both exposures are of the order of 400 sq.metres, with loc. 15 perhaps a little larger than 16.

Note on the map accompanying this report:

That part mapped on the 1 : 20 000 aerial photograph A 2 is as accurate as was possible under the prevailing weather conditions but that part mapped on the 1 : 50 000 topographicsheet can only be regarded as an approximation.

10.9.1969 S.J. Moorhouse
 M.R. Stoakes

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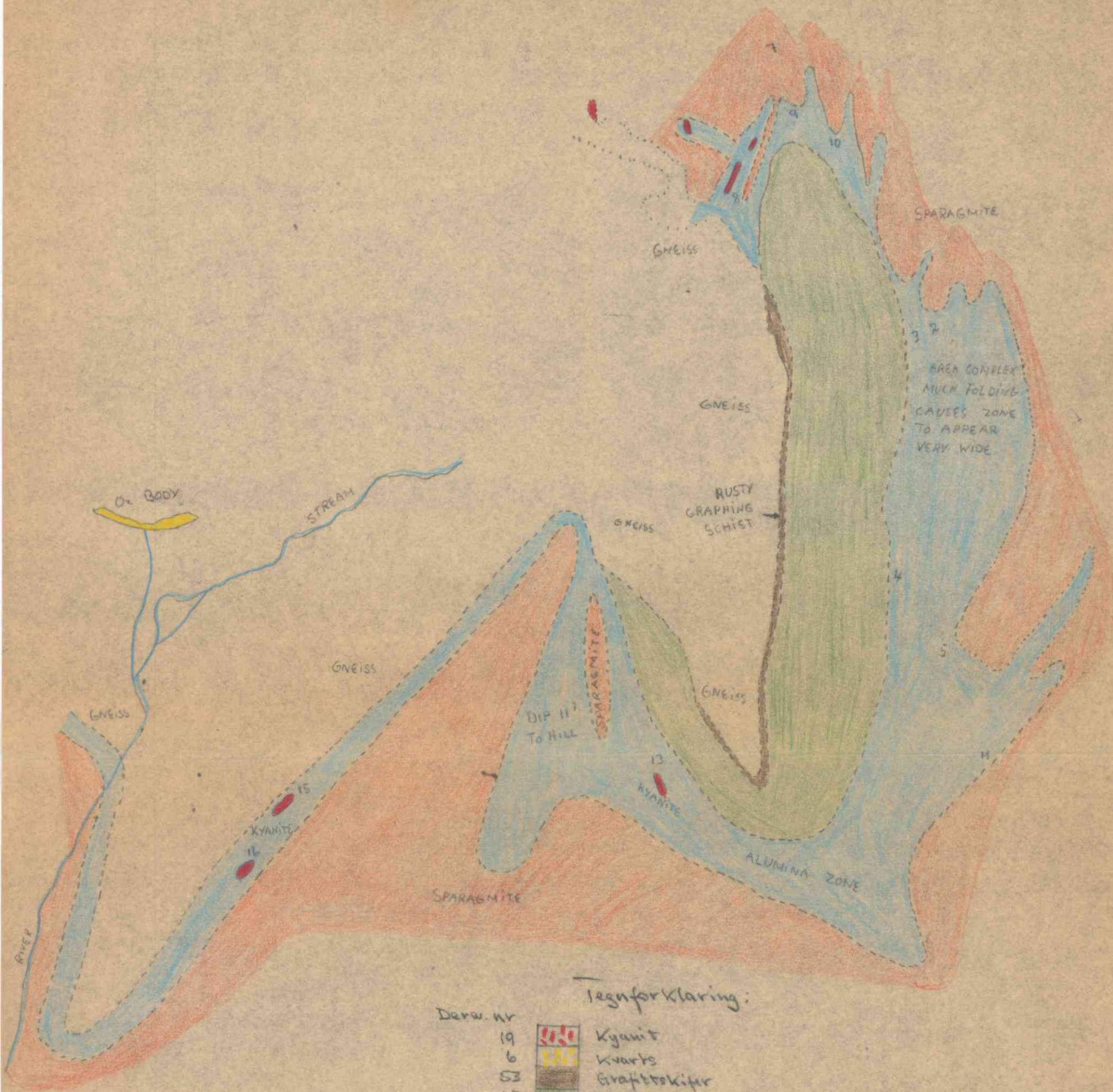
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 M.R. Stoakes



Derw. nr

19
6
53
45
33
12



Kyanit

Kvarst

Graftstekker

Amfibolit

AL-rik som

Sparagmitt

Legnforklaring:

Kvarst- Kyanitfelt
vest for Bolnais
Saltfjell

M=1:20.000