



Bergvesenet

Postboks 3021, N-7441 Trondheim

Rapportarkivet

Innlegging av nye rapporter ved: Arve

Bergvesenet rapport nr 5098	Intern Journal nr	Internt arkiv nr	Rapport lokalisering	Gradering
Kommer fra ..arkiv Elkem Skorovas AS	Ekstern rapport nr P4-11-36 BA 244	Oversendt fra Elkem Skorovas AS	Fortrolig pga	Fortrolig fra dato:

Tittel

The Sells Coppermines in Gudbrandsdalen

Forfatter

Friis, J.p

Dato

År

29.06 1907

Bedrift (Oppdragsgiver og/eller oppdragstaker)

Adv. Sam Johnson, Kristiania

Kommune

Sel

Fylke

Oppland

Bergdistrikt

1: 50 000 kartblad

17184

1: 250 000 kartblad

Lillehammer

Fagområde

Forekomstbeskrivelse

Dokument type

Forekomster (forekomst, gruvefelt, undersøkelsesfelt)

Rusten
Musehullet
Sels-gruvene

Råstoffgruppe

Malm/metall

Råstofftype

Cu, py, po

Sammendrag, innholdsfortegnelse eller innholdsbeskrivelse

Bergverkshistorien

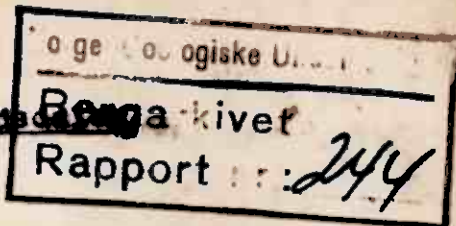
Malmens kvalitet, gruves tilstand og geologiske setting.

Plan for videre undersøkelser og igangsetting av ny drift, samt transportforhold



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by: Asher
P4-11-36



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The Sells Coppermines in Gudbrandsdalen

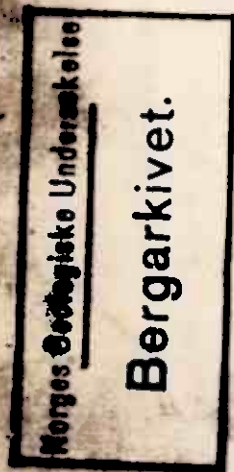
The history
of the works.

The vacated Sells works in Gudbrandsdalen are the oldest copperworks in the country. They were started 1624, that is 80 years before both Kongsberg silverworks and Røros copperworks. People called them the Rustmines. It was coppery iron- and magnetic pyrite, which was broken out. The mines were finally vacated in 1784, according to tradition as a consequence of a flood, which carried away the smeltinghouse and everything belonging to it. And this is no doubt correct, as one otherwise at the site of the small smeltinghouse, some 3,5 km. north of the station of Otta, at the Ulafos, from which it got the necessary waterpower, after more than 160 years work must have found large mud-heaps, whereas one at the old site only finds a few mud-heaps.

The ore lies in strata.

The quality
of the ore
and the geological conditions.

It is according to Professor Helland (Occurrences of pyrites in Norway. Universityprogram), identical with others of our large pyrite-veins. "For," says Helland, "the ore, the rock and the geological conditions are the same," what agrees with my own observations, up to the fact that I found a large occurrence of Gabbro, 1 or 2 km. north of the vacated mines. And the occurrences of pyrite in our country all seem to be connected with the gabbro, which by reason of this by our geologists has been called an "ore-bringer". The conditions seem to be present for perhaps quite as large a collection of ore as the Undal, Røros, Foldalen, besides of the mines at Killingdøl, where the work recently has been resumed, and at Kjelli in Guldalen. About the work and state of the Sells mines, little or nothing is known. Relations concerning this are wanting, at any rate in our archives. They were worked by Germans, sent up from Denmark. What one knows and may observe is, that there were to large mines, the "Bower mine" and The "Upper mine", also called the "Middle mine", and a smaller one



The condition
of the mines.

called the "Muschullet" (The mousehole). This last one is full of water and the two others inaccessible, the day openings being filled by earth. This is especially the case in the Lower mine. In the southern part of the middle mine one can in one place get down to the layer, in which the work has been going on, and which here shows 65 rich export pyrite of the best kind. It seems really that one here towards the south and west has a vein of ore, which has not been worked. As, however, the remaining stratum only lies a few metres below the surface it is on the other hand possible that it comparatively soon will come up in the day.

The southern, smaller mine the "Muschullet" lies some what higher than and 140 m. south of the Middle mine. It is probably the latest opened, as I suppose most of the pyrite broken out is lying here.

2 men picked out during my presence of but larger pieces probably about 10 tons in 14 day.

One may now ask, why was this pyrite left here? Was it because the flood now happened, after which it of course would be of no use to continue the mining-work, or did the pyrite perhaps contain too little copper to be smelted? The latter is ^{the} most probable. If the "Muschullet" is drained is it is therefore probable that one will find strata of pyrites, perhaps deficient in copper, but yet in our time worth working.

Plan for the investigations.

When one now intends to resume the mining work, and the question is for a plan for the work, one may in the first place without hesitation advise the resuming or continuation of the work in the remaining stratum in the middle mine, and the draining of the "Muschullet" for possible continuation of the work. That the result of this should be any large mining work, is not very probable. The vacated mines must be supposed to have been worked in the largest strata. The question is then, whether these strata are quite emptied or if there are left any quantities of iron-pyrite, which in that time contained too little copper to be

taken out, as was the case in the "Kongensgrube" at Røros. Only when the railway came here, one could break out great quantities of export-pyrite of the best kind, which, however, had not been worth smelting.

But at present I dare not propose to resume the work in the old mines from the outside. At the Lower mine one should probably start by claiming out the day tunnel, or if possible through this to come in far enough to state the conditions of the mine. The middle mine looks less discouraging; here one might perhaps at a comparatively small expense get through the day opening far enough to learn for certain, whether there is left anything of consideration in the old mines. If it is right, what people tell, that the mining gang suddenly was called up from one of the mines because one feared a great slide, one should have reason to believe, that the stratum in the mine, in which this happened is not emptied.

The direction, extent, and fall of the two main-mines are not known. I one could approximately state the extent in the day or on the surface, one might by boring with diamond-auger perhaps in the surest and cheapest way learn, whether the veins of pyrite continues beyond the old mines. But about this I dare not yet propose anything. For the present I confine myself to observe, that it probably would be regrettable, if the condition of the old mines should ~~detour~~ from more extensive investigations than here suggested, as upon the whole the conditions seem to be favourable for a large mining business.

The situation
situation and
transport.

The mines are situated but a couple of kilometres (direct line) east of and about 600 m. above Otta railway station. The ground is favourable for the construction of a ropeway.

There is a second-class road from the station and almost up to the mines, which somewhat repaired and lengthened, may be used as a transport-road for materials up to the mines.

Christiania June 29th 1907.

(Signed) J.P. Friis.

Former director of the Røros works.

Norges Geologiske Undersø

Bergarkivet.