



Bergvesenet

Postboks 3021, N-7441 Trondheim

Rapportarkivet

Bergvesenet rapport nr 7161	Intern Journal nr	Internt arkiv nr	Rapport lokalisering	Gradering
Kommer fra ..arkiv	Ekstern rapport nr	Oversendt fra Killingdal Grubeselskap A/S	Fortrolig pga	Fortrolig fra dato:
Tittel Undal Mine				
Forfatter Brodtkob Thoralf		Dato År 1924	Bedrift (Oppdragsgiver og/eller oppdragstaker) Killingdal Grubeselskap A/S	
Kommune Rennebu	Fylke Sør-Trøndelag	Bergdistrikt	1: 50 000 kartblad 15202	1: 250 000 kartblad Røros
Fagområde Geologi	Dokument type		Forekomster (forekomst, gruvefelt, undersøkelsesfelt) Undal grube	
Råstoffgruppe Malm/metall	Råstofftype Cu, Zn Py			

Sammendrag, innholdsfortegnelse eller innholdsbeskrivelse

Engelsk tekst, skrevet etter 1922, men usikker på om året er 1924.

Beskriver forekomstens lokalisering, med en 1,6 km lang taubane.

Funnet på 1700-tallet og har produsert ca 40 000 t py-malm. forekomstens opptreden beskrives, likeså hvordan avbygningen hittil er gjennomført.

Det gis en generalanalyse av "lump ore" som viser 1,15% Cu og 1,86% Zn og 41,1% S. Påviste og mulige malmreserver satt til 250 000 tonn.

Det vises til at med et oppredningsverk vil s-innholdet kunne økes.

U n d a l M i n e .

by
Th. Brodtkorb.
Mining Engineer.

This mine is situated at $62^{\circ}47'N.L.10^{\circ}1'E.Gr.$ 87 km. south of Trondhjem and 490 m. above sea level. It is connected by 1.6 km of aerial tramway with the nearest railway station.

The deposit has been known from the middle of the 17th century. For a short time it was worked as a copper mine, and from 1863-76 and 1915-22 in a small scale for pyrite ore, with a total production of about 40 000 t.

The ore is imbedded in phyllitic schists, conformable with the foliation of the rock and with rather sharp boundaries against it. It has the form of a stock with lens-shaped cross-out and axial direction down along the dip, which is inclined 45° to the east.

The workable striking length of the stock is about 80 m., further on it thins out. The thickness reaches 10 m., but generally varies between 3 and 6 m. The ore area, perpendicular to the axial direction, is about 480 square meters. To a vertical depth of 44 m. the ore is worked out, to the 84 m. level it is developed by mining operations, and to 110 m. vertical depth (150 m. along the dip) it is proved by diamond borings with constant ore area. (See fig.10.) On account of the marked axial direction and experience from similar Norwegian ores, it may be expected to continue to a very considerable depth.

The ore is hard and fine-grained, consisting of pyrite with small quantities of chalcopyrite, zincblende and pyrrhotite. The pyrrhotite mainly occurs in its southern, outpitching end. The average copper content is about 1,0 %, the zinc content in the export ores may rise to ab. 1,75%. Gangue minerals are quartz with a little calcite and amphibole. The sulphur content varies considerably and near the hanging-wall may rise to 48-49% S. Generally it is considerably lower, mainly in the thickest part of the ore lens.

By clobbering is produced an export ore with 40-41% S, and amounting to about 60% of the crude ore.

With an ore-dressing plant the sulphur content of the product might be increased and more of the crude ore utilized.

A general analysis of the produced lump ore shows:

S.....	41.13%
Fe.....	43.17%
Cu.....	1.15%
Zn.....	1.86%
Pb.....	1.96%
As.....	0.00%

SiO ₂	6.57%
Al ₂ O ₃	1.39%
CaO.....	1.98%
MgO.....	0.55%
H ₂ O.....	0.07%

99.87%

Bi, Cd, Ni.....None.

Ore Resources (as export ore)

A. Actual Ore.

Mainly developed by mining (to 84 m level) 30000 t
 Proved by boreholes to 110 m level (150 m
 down along the axis).....50000 " 80 000 t

B. Probable Ore.

Further 150 m down along the axis 170 000 "

C. Possible Ore.

About 1900 t of crude ore or 1 150 t of export
 ore per meter further down along the axis.....

In the neighbourhood of the mine are several prospects
 with similar ores, not yet developed.
