

*THE BOREHOLE NR. 59,
Hjerkinn.*

4438

Borhull nr. 59, H J E R K I N N .
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(Petrografical description).

0,00 - 1,60

The chloritic greenschist with sericitic, epidote and klnozoisite and with not so much micas of biotite (1 mm in avreage). The same acicular crystals of amphibole are present too on some places but too scarce only. Some intercalations, schliers, pellets etc. of carbonates (1-2 mm thickness in average max.) are present rather plantifully. On some place these carbonates positions (paralell with schistosity) have thickness 1-2 cm. The mineralisation or impregnation of FeS₂ mostly is very very weak only. In 0,75 m, 0,80 m, 1,03 m and 1,50 m are some lenticles or veins of white quartz but without mineralisation etc. and not thick too (1-2 cm max.). The total colour of this rock is gray or green-gray. The average gradient of schistosity (foliation) is 55° round.

1,60 - 11,80

The chloritic greenschist as well as 0,00 - 1,60 m. on some places and chloritic micaschist or green-schist with quartz, epidote, klnozoisite etc., which has dark green or dark green gray colour. The mineralisation of FeS₂ only is very very poor (weak). The structure of rock is phacoidal-schistose, schistose or pell-mell-schistose too on some place. On some places, are some not thick lenticles or pellets of carbonates or quartz. The average gradient of foliation is 55° round..

11,80 - 12,50

The chloritic greenschist as well as in 0,00 - 1,60 m. In 12,10 - 12,40 m some grains of Fe₃O₄ are present, but not so much (1 mm max. in average). The average gradient of foliation is 55° round.

12,50 - 13,10

The tiny-grained or tender-grained amphibolitic and chloritic greenstonr with biotite, epidote and klnozoisite and with some schliers, intercalations or pellets of carbonates. The quartz and plagioblaste are present too but not much. The mineralisation (impregnation) of FeS₂ only is very very weak. The total colour of this rock is green-gray or dark gray-green. The average gradient of foliation is 55° round.

13,10 - 13,66

The homogenitic impregnated ore of FeS₂ mostly in quartzite, quartzzy greenschist or greenstone (these rocks exchange). In homogenetic ore of FeS₂ are present a lot of rodlike or acicular crystals of amphibollite (3-5 m , max. 1 cm long).

13,66 - 18,95

The tiny-grained or tender-grained amphibolitic and chloritic greenstone as well as in 12,50 - 13,10 m. The very strong mineralizations of FeS₂ (ore position) are in 13,92 m (1 cm), in 14,90 m - 15,00 m (some not homogeneitic impregnation FeS₂, in position with pell-mell structure with carbonates

and greenstone, but with 0,5 cm intercalations FeS₂ too) and in 15,40 m (three homog. positions of FeS₂ but max. 1 cm thickness in average, which are exchanged by carbonates schliers or intercalations). The total colour of this greenstone is dark gray-green. The mineralisation is weak only. The average gradient of foliation is 55° round.

18,95 - 20,45

The coarse-grained carbonatic amphibolitic greenstone with epidote, klnozoisite and chlorite. Smphibolle is created by big rodlike minerals. Carbonates creat some schliers intercalations, pellets abd on some places thick positions or thick lenticles (1-2 cm in average). The mineralization isn't present or is very weak only. The total colour of this rock is green or gray-green. The foliation is not clear (structure is porphyroblastic) but average gradient of foliation is 55° along the amphibollite's grain clongation.

20,45 - 23,73

The strong mineralisation of FeS₂ mostly, FeS, CuFeS maybe, homogenitic ore positions of FeS₂ etc. in 20,60 - 20,66 m, 21,65 - 21,75 m, 22,00 - 22,05 m, 22,10 - 22,15 m, 22,30 - 22,35 m, 22,42 - 22,52 m, 22,57 - 22,65 m; 22,78 - 22,85 m and 23,60 - 23,65 m in chloritic greenschist, carbonatic intercalations, greenstone and quartzly chloritic micaschist, which are exchanged between themself, but more are present chloritic greenschist. The average gradient of foliation is 50°-55° round.

23,73 - 81,60

The tiny-grained or tender-grained amphibolitic greenstone with chlorite, klnozoisite, epidote and with phagioklase too. The mineralisation of FeS₂ or FeS maybe too is very very weak only, but the magnetite's grains, big or some places (1-2 mm in average are present like as some impregnation on some places rather strong. In this greenstone are a lot of positions, intercalations, schliers, pellets or lenticles which are created by carbonates. The average thickness is 1-2 mm, but some positions 1-2 cm and some thick positions or lenticles 5 - 10 cm and more (in 29,40 m, 29,95 m, 30,85 m, 34,85 m etc.). In carbonates matter are some FeS₂, chlorite, epidot klnozoisite etc.. The total colour of this rock is gray-green or little bit dark gray-green. The average gradient of foliation is 40°-45° round in 30 m. The other carbonatic positions are in 60,00 m (10 cm) with some mineralisation of FeS₂ round boundary. in 67,10 m (10 cm), in 68,60 m (10 cm) and in 73,70 m (10 cm). The other some mineralisation of FeS₂ is in 61,25 m (2 cm). Some dislocation zone is in 79,70 m, with some carbonatic filling and with some little caverns which are created by water, leaching. The average angle of dip of this dislocation is 0°-5° round. It is some transversal dislocation. The average gradient of foliation in 70 m is 55° round and in 80 m 50° round.

This borehole are finished in 81,60 m.

Petrog. profile of borehole nr. 59.

