Borhull nr. 57. HJERKINN. 6400 S - 75 S

Petrographical description.

0.00 - 1,00 The biotitic gneissic micaschist with feldspar (plagioklase) and quartz. Chlorite is present very scarce. The mineralisation isn't present in. The total colour of this rock is dark-gray or black-gray. The average gradient of foliation is 40° about

1.00 - 32.60 The chloritic and biotitic micaschist with little porphyroblasts of quartz and plagioklase but with a lot of parallel positions, schliers, pellets and lenticulars, which follow schistosity of micaschist. The biotite's mica (1 mm in average) follow schistosity more, but to be transversal some where too. The total colour of rock is green-gray or bright green-gray. The average gradient of foliation is 30°-35° round. In 4,50 m is some joint (dipping this on against the foliation) with angle og dip 45° round and with carbonatic and limonitic filling. With the same filling some joints are in 7,25 m and 7.55 m antithetic too with angle of dip 45° and 50° round. The other antithetic faults are in 5,90 m (35° round) and 29,90 m (35°-40° round). From 23,50 m some mineralisation FeS and little bit FeS_2 begins and also some green schists or greenstones positions (1-2 mm thickness in average max.) with little bit more strong mineralisation round or in (in example in 25.65 m round.)

32.60 - 36.10 The biotitic gneissicmicaschist with plagioklase and quartz, just the same rock as in 0,00 - 1,00 m, but with a lot of positions, schliers, pellets, lenticulars or grains which is creat carbonates and which are parallel with schistosity or follow this one. The total colour of this rock is dark gray. The average gradient of foliation is 45° round. In 32.60 m, 32.70 m and 32 90 m and in 33,60 m, 34 40 m, 34.90 m and 35.85 m are some antithetic and transversal joints or faults, which have carbonatic and limonitic filling and the angle of dip 30°,30°,50°, 45°, 35°,40°,70°,30° round gradually. The mineralisation is not present or is very, very poor.

36.10 - 37.36 The strong mineralisation (impregnation of FeS, FeS_2 and $CuFeS_2$ too in biotitic, quartz-feldspatic paragneiss. On the same place is this mineralisation homogen. - the same as in mineralisated ore. Some much transversal or antithetic joints with limonitic filling are in this ore position. The total colour of ore is dark yellom gray.

37.36 - 39.85 The biotitic and chloritic gneissic micaschist with a lot of positions, schliers etc. of carbonates, just the same rock as in 32,60 - 36,10 m. but with some little bit more chlorite some where only too. In 37,70 m, 37,90 m, 37,20 - 37,40 m and 37,95 m and 37,98 m are some transversal or antithetic joints or faults with caronatic and limonitic filling. whic

have the angle of dip 30°,40°,20°,30°.55°,20° and 35°. Especially the fault in 37.90 m with angle of dip 40° round has mylonitic dislocation brecciation filling with strong FeS_2 mineralisation (the average thickness of this filling is 1-2 cm). The average gradient of foliation of this rock is 50°-55° round. Without some mineralisation.

39,85 - 46,05 The chloritic and biotitic micaschist as the same as in 1,00 - 32,60 m. very rich of carbonates too with some positions of greenschist or greenstone with klinozoisite, epidote and little bit tiny-grained amphibolite too. The mineralisation is very weak or isn't present. The total colour of this rock is gray-grenn, green or dark gray-green. The average gradient of foliation is 55° round. The some joints or faults which have carbonatic and limonitic filling are antithetic or transversal and are presen in 41,90 m (25°), 42,00 m (35°), 44,20 m (50°) and 44,50 m (40°).

46,05 - 49,60 The biotitic gneissic micaschist with a lot of carbonatic positions, schliers, pellets or lenticulars and without some mineralisation or with very weak this one. This rock is just the same as in 32,60 - 36,10 m. The average gradient of foliation is 50° round. Some transversal or antithetic joints or faults with carbonatic and limonitic filling are in 46,40 - 46,50 m, 46,70 m, 48,30 m and 48,50 m with average angle of dip 30°-40° round.

49,60 - 58,25 The biotitic gneissic micaschist with plagioklase and quartzite and more weak carbonatic, without carbonates somewhere. This type os rock is very relation with type in 0,00 - 1,00 m. The mineralisation isn't present or is very poor. The total colour of this rock is gray or dark gray. The average gradient of foliation is 45°-50° about. The some transversal and antithetic joints or faults are in 51,20 m (10°), 54,00 m (55°), 54.25 m (50°) and 54,60 m (35°). These every have carbonatic and limonitic filling: With Fe_2O_4 grains.

58,25 - 61,37 The same biotitic gneissic micaschist as in 49,60 m - 58,25 m, but with more, not thick carbonatic positions, schliers, pellets etc. with a lot of garnet and with some mineralisation (impregnation) of FeS_2 but poor and weak. The pyritic grains have on some places crystales plates (grain is 3-5 mm large in average). The average gradient of foliation is 50°-55° round. A lot of magnetite are present too On some places the not thick parallel positions are very relation of greenschist or greenstone with chlorite, klinozoisite, epidote and little tiny amphibolite and with FeS mineralisation only (58,70 - 59,10 m round).

61,37 - 61,90 The same type of rock with a lot of garnet as in 58,25 - 61,37 m but without mineralisation or with very weak. The average gradient of foliation is 50° round.

61,90 - 68,40 The chloritic greenschist with a lot of parallel positions, schliers, pellets or clongatic grains of carbonates (also magnetite is present). The epidotite and klinozoisite are present little bit too. The mineralisation og FeS_2 isn't present. The total colour of rock is green or gray-green. The average gradient of foliation is 50^{o} round. In 64,50 - 64,90 m round the green-schist present to carbonatic, tiny-grained amphibole-chloritic greenstone with klinozoisite and epidote.

68,40 - 77,50 The biotitic micaschist with magnetite and with a little bit garnet somewhere and with chlorite. On the same place are some intercalation, schliers or pellets schloritic-amphibolitiv greenschist and little bit greenstone too. The same mineralisation of FeS_2 most and some garnet are present round or in these positions. This mineralisation is strongly in 71,34 - 71,42 m. where quartz is present too in 71,40 and 72,00 m. Some joints or faults are present in 69,40 m (10^{o}), 69,80 m (35^{o}), 74,20 m (45^{o}), 74,40 m and 75,60 m (50^{o}). These joints or fault are antithetic or transversal with carbonatic and limonitic filling. The total colour of this rock is gray or dark-gray. The average gradient of schistosity is 45^{o}.

77,50 - 78,41 The chloritic greenschist or greenstone on some place, with a lot of garnet some little bit biotite and with klinozoisite and epidote. Some a lot of schliers, pellets etc. of carbonate or carbonate-dolomite. are present too. The mineralisation of FeS_2 most is very very weak. The total colour of this rock is green-gray, dark gray-green and gray-green. The average gradient of foliation is

78,41 - 79,61 The position of the quartz with a not much strong mineralisation of FeS_2 mostly. Chlorite is little bit present too.

79,61 - 80,05 The biotitic micaschist with magnetite and with chlorite and garnet and quartz. This rock has some schliers or intercalations of carbonates or carbonate-dolomite. The mineralisation isn't present or is very weak only. The total colour of this rock is bright green-gray or gray. The average gradient of foliation is 55^{o} round.

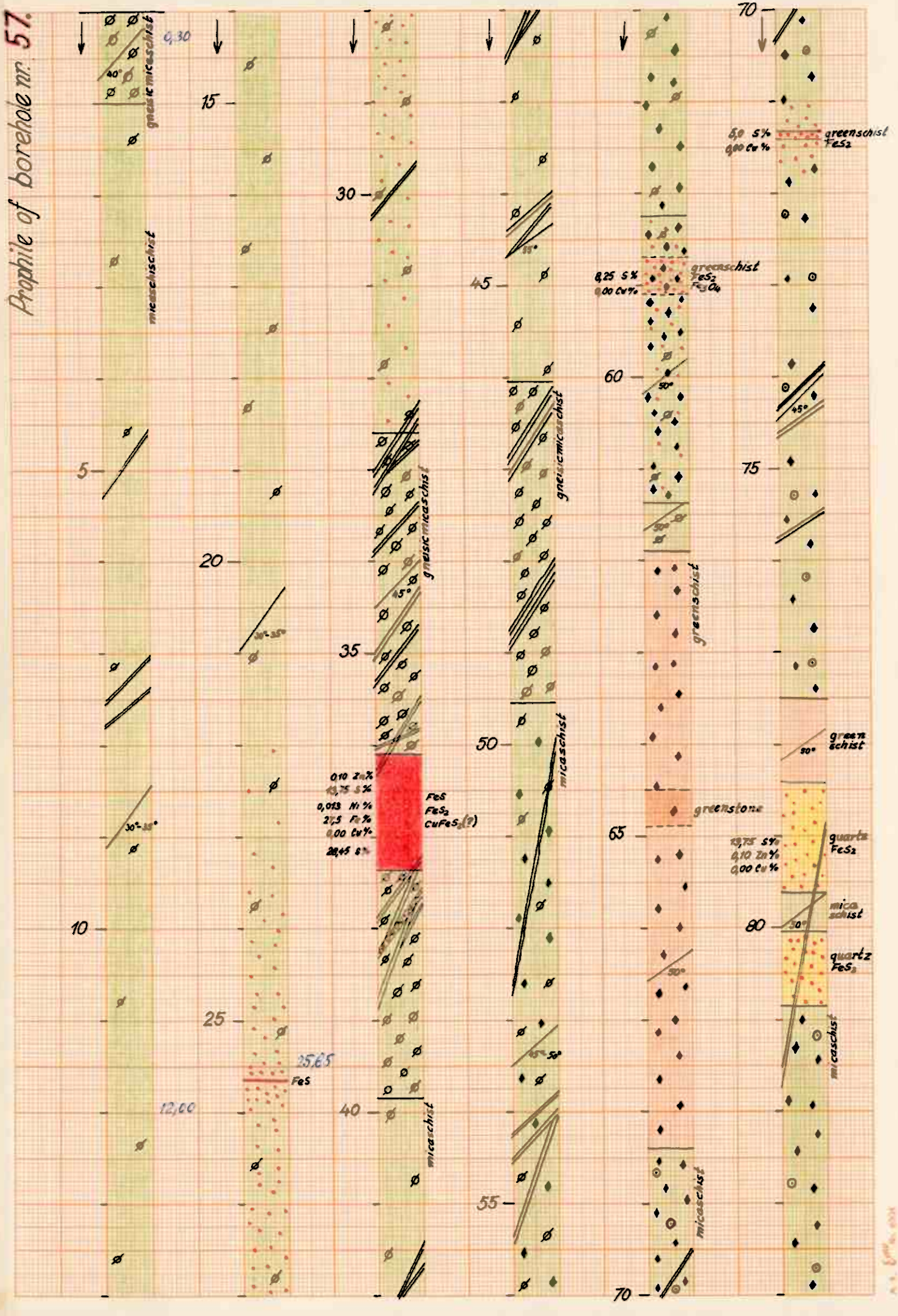
80,05 - 80,85 The blue or gray quartz with a weak impregnation of FeS_2 only with some chlorite. somewhere. The quartz has a lot of transversal (dislocations) joints. which are filled by limonite, quartz and some carbonates. The angle of dip of these joints in average is 5^{o}-10^{o} round. Some system of joints is in 80,30 - 80,45 m.

80,85 - 88,35 The biotitic micaschist with magnetite and with chlorite and with quartz and with carbonatic schliers positions, pellets etc. Type of this rock as well as in 68,40 - 77,50 m. The mineralisation of FeS_2 is very very weak only. The average gradient of foliation is 60^{o} round.

88.35 - 91.75 The chloritic micaschist with some little bit magnetite, with garnet, quartz, klinozoisite or epidote on some place only. This rock has a lot of some intercalations, schliers, pellets etc. of carbonates. The mineralisation is only very very weak or not present in. The total colour of rock is green-gray. The average gradient of foliation is 60° round.

This hole was finished in 91.75 m.

(M. Motys).


Profile of borehole nr. 57.
0,30
gneisic micaschist
micaschist
12,00
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
40°
30°-35°
45°
55°
50°
65°-50°
25,65
FeS
0,10 Zn%
13,75 S%
0,013 Ni%
2,5 Fe%
0,00 Cu%
28,45 S%
FeS
FeS2
CuFeS2(?)
gneisic micaschist
micaschist
8,25 S%
0,00 Cu%
greenschist
FeS2
Fe3O4
greenschist
greenstone
micaschist
8,0 S%
0,00 Cu%
greenschist
FeS2
45°
50°
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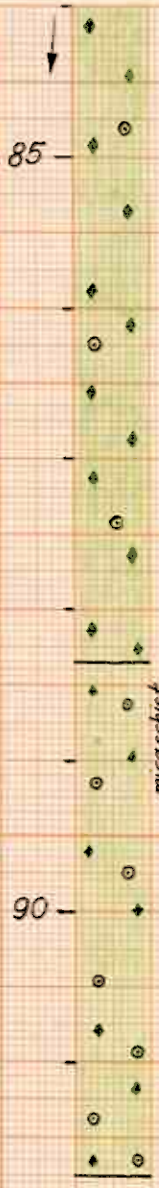

This borehole nr. 57 was finished at 91,75 m