

Petrographical description.

0,00 - 1,60

The biotitic-chloritic greenschist with klnozoisite and little bit epidote too. Biotite creat some big micas, transversal somewhere too. There a lot of intercalations, schliers, pellets, or lenticles are created by carbonates. This rock has phacoidal - schistose structure. The total colour of this rock is green-gray or dark green-gray. The average gradient of schistosity is 70° round. This rock is without mineralisation or has very weak somewhere only.

1,60 - 20,40

The chloritic greenschist with not much biotite's micas (max. 1 mm in average), with klnozoisite and epidote and with a lot of intercalations, schliers, pellets and lenticles, which are created by carbonates (average thickness of them is 0,5 mm to max. 1-2 cm). The mineralisation of FeS_2 mostly is very, very weak, without importance. From 18,00 m biotites micas are very scarce. The total colour of this rock is gray-green. The average gradient of foliation is 65° round. The some transversal fault is in 19,20 - 19,50 m, with quartz, carbonatic or limonitic filling. In 19,50 - 19,95 m is position of white quartz with chlorite, epidote, klnozoisite and with some lumps of greenschist in. It is dislocation breccic perhaps. The angle of dip of joint in 19,20 - 19,50 m is 5° - 10° round. In 20,20 m is position of white quartz with chlorite and carbonates in as well as in 19,50 - 19,95 m.

20,40 - 39,15

The tiny-grained or tender-grained amphibolitic and chloritic greenstone with some a lot of not thick positions, intercalations (1-2 mm in average), schliers, pellets etc. (max. thickness 5-10 mm in average) of carbonates. Amphibole is created by small acicular crystals (in 20,50 - 20,60 m etc.), biotitesmicas are very scarce, klnozoisite and epidote are present. The mineralisation (impregnation) of FeS_2 mostly is present on some places in not thick positions (1-1,5 cm), without some importance, in 23,25 m, 23,70m, 23,90 m, 24,30 m, 24,40 m too. Some joints or faults, which are transversal or amphibolitic, are in 22,55 m (10° with limonite and pyrite filling), 23,30 - 23,40 m (75° and 60° with limonitic filling) in 25,10 - 25,75 m is a joint or fault zone (10° - 70° with limonitic filling) 28,50 - 28,70 m is joint or fault zone (30° with limonitic and carbonatic filling) and in 29,10 m (10° with carbonatic and limonitic filling. The total colour of this rock is green, gray-green or dark gray-green. The average gradient of foliation is 55° round. The other joints or faults are in 30,00 - 30,35 m (5° round, with carbonatic and limonitic filling), 35,00 m (20°), 35,80 m (15°); 37,00 m (30°) and 38,70 m (25°). Every joints or fault have limonitic

and carbonatic filling. Atausion - in 36,35 m is some position (thickness 2 cm) with some mineralisation of FeS mostly with quartz, feldspar and chlorite or the other micas.

39,15 - 45,90

The biotitic micaschist with sericite, chlorite, garnet, quartz and feldspar too. The micaschist has a lot of intercalations, schliers, pellets etc. which are created by carbonates or dolomitic-carbonates. The schistose structure is very clear. From 43,00 m is in this type of rock more and more biotite (transversal too), garnet, chlorite, epidote and klnozoisite. The mineralisation is not present here, or very weak only. The total colour of this rock is bright gray or gray. The average gradient of foliation is 60° - 65° round.

45,90 - 46,10

The strong mineralisation of FeS and FeS₂ in dislocation zone with limonite or hematite on the dislocation plates (joints plates). This impregnation is present in chlorite micaschist with quartz, feldspar, garnet, carbonates, epidote and zoisite too. The angle of dip of these faults in average is 15° - 20° . These faults are transversal and little bit antithetic too.

46,10 - 46,30

The greenstone and greenschist as well as 20,40 - 39,15 m.

46,30 - 46,45

The mineralisation of FeS₂ mostly in some position of micaschist with mostly quartz and feldspar too. This mineralisation is strong but without importance.

46,45 - 52,95

The tiny or tender-grained greenstone with a lot of intercalation, schliers, pellets etc. which are created by carbonates, the same type of rock as well as in 20,40 - 30,15 m. The average gradient of foliation is 70° round. Some joints or faults with carbonatic and little bit limonitic filling, which are antithetic or transversal, are in 47,40 m (10°), 47,70 m (20°), 47,90 m (20°), 46,80 - 47,00 m (5° - 10° round).

52,95 - 60,55

The biotitic micaschist with chlorite (on some places only chlorite without biotite), quartz and the other for example klnozoisite, epidote, garnet (on some places a lot of grains) and feldspar too. The lot of some intercalations, pellets, schliers, lenticles etc. are created by carbonates, dolomite or both together. The structure of this micaschist is schistose to 55,65 m but after is phacoidal or pell-mell on some places (between 55,65 m and 57,00 m). After the combination phacoidal and much more schistose structure follow to 60,55 m. Between 54,65 m and 54,80 m the quartz and quartz with feldspar creat some thick pellets or schliers. In 55,70 - 55,90 m the quartz position (white quartz may be vein) with somewhere chlorite and with chlorite, amphibolite, epidote and grains Fe₃O₄, which are closed together in Ca after 56,00 m the some intercalations or schliers of garnet are in

- rock somewhere (not thick - 2-5 mm max.) After 56,00 m some more and more grains of Fe_3O_4 are shown in rock (1 mm - 2 mm maximally). The mineralisation of FeS , FeS_2 etc. is not present or is very, very weak only. The total colour of this rock are gray, dark gray and green dark gray. The entire average gradient of foliation is 55° - 60° round.
- 60,55 - 61,05 The position of blue quartz with some intercalations schliers, or positions of magnetite (Fe_3O_4) and of garnet which exchange between them. (Average thickness of these positions of Fe_3O_4 is 0,5 - 1 cm) These magnetite's positions not follow only foliation.
- 61,05 - 61,30 The chloritic and sericitic micaschist with very clear schistose structure, with quartz, feldspar and with very little magnetite grains. The total colour of this rock is bright green gray. The average gradient of foliation is 55° round. In 61,25 - 61,30 m is a white quartz.
- 61,30 - 64,30 The chloritic and chloritic-sericitic micaschist with quartz, epidote, klnozoisite, garnet (creat weak positions or schliers), with some schliers or pellets of carbonate and with a lot of big grains (1 mm, max. 2 mm in average) of Fe_3O_4 . Feldspar perhaps present too. The total colour of this rock is gray, dark gray or dark green gray. The mineralisation of FeS_2 , FeS etc. isn't present or is very, very weak only. The structure of this rock is phacoidal-schistose. The average gradient of foliation is 65° round.
- 64,30 - 66,20 The chloritic micaschist with quartz, feldspar, carbonates some amphibole, epidote, klnozoisite and garnet and with very tender-grained impregnation of Fe_3O_4 . Mineralisation of FeS , FeS_2 is not present or is very weak only. The structure of this rock is phacoidal - pell-mell. The total colour of rock is dark gray. In 64,80 - 65,10 m is some dislocation zone with some angle's of dip 5° , 10° , 20° , 30° .
- 66,20 - 67,75 Amphibolitic and chloritic micaschist with biotite, a lot of garnet (creat some schliers by grains), with quartz feldspar and some intercalations, schliers or pellets of carbonates. In this rock is some impregnation of FeS_2 and some positions and schliers of Fe_3O_4 (1-3 mm thickness). The total colour of this rock is dark green gray. The average gradient of foliation is 55° round. The structure is phacoidal-schistose.
- 67,75 - 73,00 The chloritic and chloritic-sericitic micaschist with quartz, epidote, klnozoisite, little amphibole, biotite and with a lot of garnet (creat some intercalations or schliers too.) Carbonates creat some schliers, pellets or intercalations too, but not much and with very weak thickness. In this type of micaschist are a lot of some intercalations

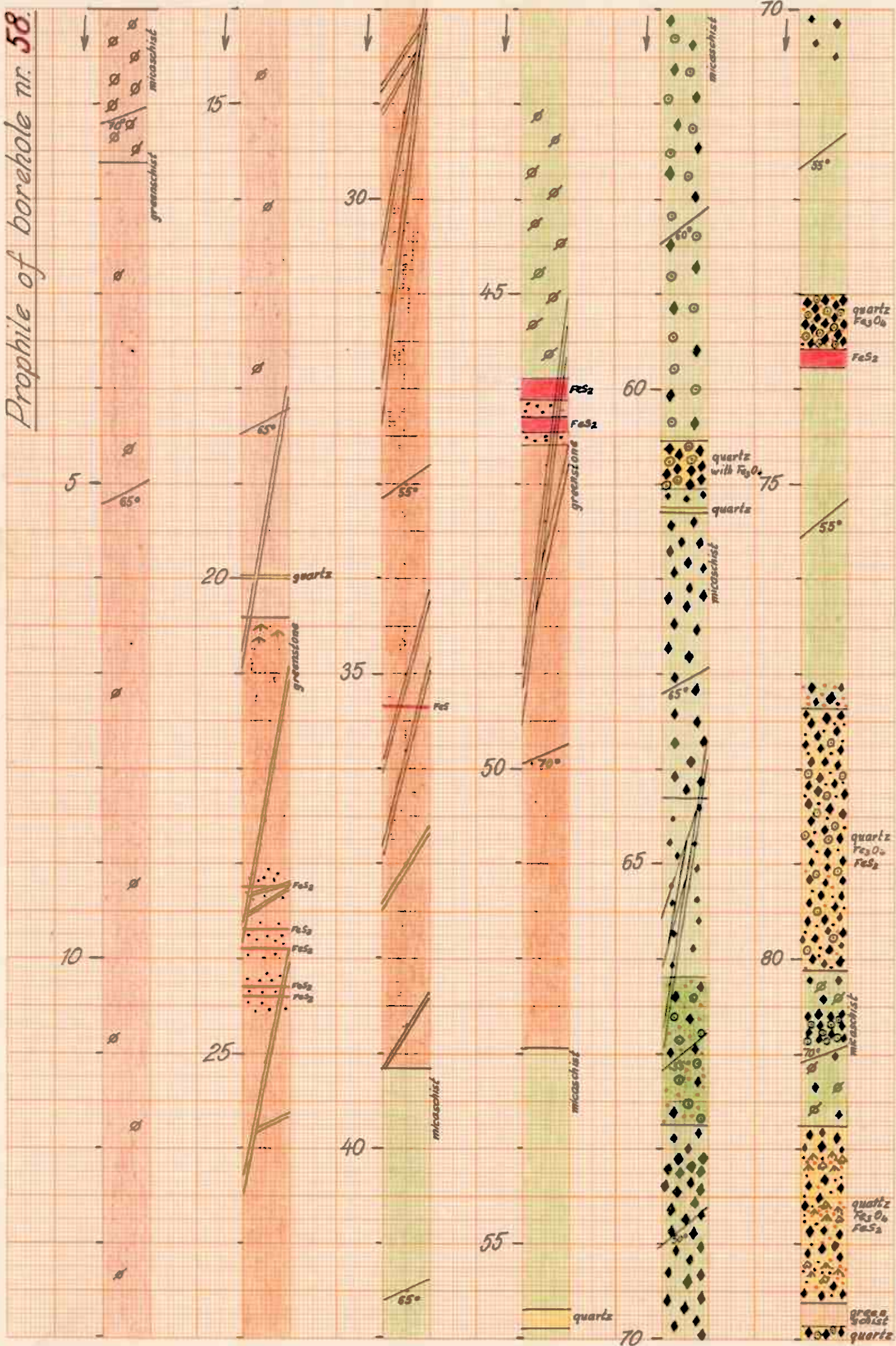
- schliers or positions of Fe_3O_4 . In 68,10 - 70,00 m are these exactly. Magnetite's positions are 2-5 mm thickness in average. (in 68,20 m round is some thick complex, little bit homogenetic of Fe_3O_4 positions). The mineralisation of FeS_2 is very, very poor (weak) only. The total colour of this rock is gray or bright gray and dark gray too. The average gradient of foliation is 50° round.
- 73,00 - 73,57 The white quartz (may be hydrothermal dislocation breccic) with some positions of Fe_3O_4 and amphibolite, chlorite, feldspar, garnet and FeS_2 . The positions or schliers of Fe_3O_4 have thickness 2-5 mm or 1 cm and more. The garnet creat grains 1 mm and max. 2 mm in average.
- 73,57 - 73,76 The homogenitic impregnated ore of FeS_2 mostly.
- 73,76 - 77,34 The chloritic or chloritic-sericitic micaschist just the same as well as in 67,75 - 73,00 m, but without impregnation of FeS_2 , FeS and Fe_3O_4 too. On the finish of this rock's position is beginning some mineralisation of FeS_2 and little bit Fe_3O_4 too from 77,10 m (this type just the same as well as in 66,20 - 67,75 m). The average gradient of foliation is 45° round.
- 77,34 - 80,10 The white or blue quartz with a lot of schliers or parallel positions too of Fe_3O_4 , which are changed by garnets positions or schliers or by chloritic-amphibolitic greenschist with garnet, epidote, biotite etc. and with some mineralisation of FeS_2 . The average thickness of Fe_3O_4 positions is 1 mm, but 1-2 cm too. Garnet creat some big crystals 2-5 cm in average) in some parallel more thick positions of Fe_3O_4 . Average gradient of foliation is 55° round.
- 80,10 - 81,73 The chloritic micaschist with biotite and sericite, with garnet, quartz and some schliers or intercalations of carbonates. The biotite creat some big micas (1 mm, but more in average). The schistose structure is very clear. The total colour of this rock is gray or green gray. The average gradient of foliation is 55° round. In 80,55 - 80,80 m is position with more big micas of biotite (transversal too), with a lot of grains of garnet, with more chlorite, some epidote, klnozoisite amphibolite and with some not thick schliers of Fe_3O_4 .
- 81,73 - 83,60 The position of blue quartz or quartzite with a lot of parallel positions (1-3 mm but 1-3 cm too in average thickness) of Fe_3O_4 , with some not thick positions greenschist or greenstone with epidote amphibolite, chlorite, garnet and with more strong mineralisation of FeS_2 (1 cm average thickness of greenschist etc.)

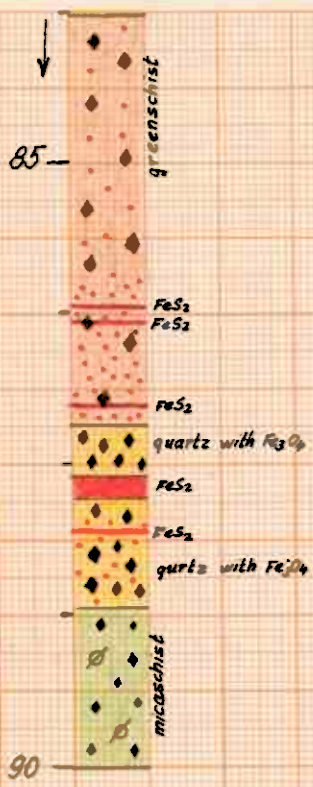
- 83,60 - 83,85 The chloritic and biotitic greenschist with a lot of grains of garnet. The mineralisation of FeS_2 is very weak only or isn't present. The total colour of this rock is green or gray-green. The average gradient of foliation is 70° round.
- 83,85 - 84,02 The same quartz with Fe_3O_4 positions as well as in 81,73 - 83,60 m.
- 84,02 - 86,72 The chloritic greenschist with biotite, epidote, klinozoisite, feldspar and with some carbonates schliers or weak intercalations. The mineralisation of FeS_2 follow schistosity and it is very weak only. In this rock is a lot of big grains (1-2 mm in average of Fe_3O_4). The little bit more strong mineralisation of FeS_2 is begun in 85,40 m and exactly FeS_2 creat some not thick homogenithick positions in 85,95 m (2 cm), in 86,05 m 81,5 cm) and in 86,60 m (1 cm). The total colour of this rock is green or gray-green.
- 86,72 - 87,95 The white or blur quartz or quartzite with a lot of positions or schliers of Fe_3O_4 (thickness 1-2 cm) with impregnation of Fe_3O_4 grains and om some place with impregnation of FeS_2 (very weak). In 87,08 - 87,22 m is homogenitic impregnated ore of FeS_2 . In 87,42 m is parallel position of impregnation of FeS_2 (1 cm thickness).
- 87,95 - 90,00 The chloritic and sericitic micaschist with quartz feldspar and some carbonates' schliers too and with a lot of very small grains of Fe_3O_4 (0,5 mm in average). Biotite micas are present too. The total colour of this rock is gray. The average gradient of schistosity (foliation) is 65° - 70° round.

This borehole was finished in 90,00 mm.

(M. Motys).

Profile of borehole nr. 58.





This borehole was finished at 90,00m.