DIAMANTBORHULL NR. 75,
Hjerkinn.

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(Petrografical description.)

0,00 - 2,03 The chloritic micaschist with sericite, biotite garnet, quartz, epidote, klinozoisite and feldspar too. The carbonates' intercalations, pellets, schliers lenticles etc. which follow schistosity (thickness 1-2 mm, but 0,5 cm or more too in average) are present a lot of in this micaschist. The mineralisation of FeS_2 is very weak only. The total colour of rock is gray-green, bright green-gray and on the beginning of this borehole bright brown-grey or yellow-gray because this part is slight stale. The average gradient of foliation is 30^0 round.

2,03 - 3,45 The position of white quartz with a very scarce some impregnation of FeS_2 and with some limonitic carpets on joint's places.

3,45 - 5,90 The chloritic micaschist as well as in 0,00 - 2,03 m, but with some rodlike or acicular crystales of amphibole (max. 1 mm) and with some small grains of Fe_3O_4 too. The structure of this rock is more phacoidal or phacoidal-schistose, with some folding which is been details rugose. The average gradient of foliation is 0^0 - 5^0 round on both direction (down or up).

5,90 - 6,17 The position of white quartz as well as in 2,03 - 3,45 m.

6,17 - 8,13 The chloritic micaschist as well as in 3,45 - 5,90 m, but with more grains of Fe_3O_4 (1 mm in average too). In some places this rock is stale, it is round some transversal (vertical) dislocations (angle of dip = 10^0,0^0,5^0), in 6,60 - 6,90 m and in 7,90 - 8,13 m. More limonite, epidote and sericite, klinozoisite etc. are present in these places. The mineralisation of FeS_2 etc. and of Fe_2O_4 is very very weak only but clear for a first lokk. The average gradient of foliation is in 6,20 m 35^0, but after 5^0,10^0 or 0^0 round on both side (up or down).

8,13 - 9,60 The white or blue quartz with a weak impregnation of FeS_2(grains 1-2 mm in average) with a lot of faults or joints which are filled by limonite, (angle of dip - 10^0,20^0,40^0 round). On the both boundarys of quartz) is impregnation little bit more strong (0,5-1 cm).

9,60 - 15,87 The chloritic micaschist with a lot of grains of garnet (on some places 0,5 cm in average) with more, but weak impregnation of FeS_2 and Fe_3O_4 (magnetites grains are 1-2 mm in average big too). For the other is this rock just the same as in 6,17 - 8,13 m. The structure of this rock is phacoidal and phacoidal schistose. This rock has recumbeut folding, which is detail rugose. The average fradient of foliation is 0^0,5^0,10^0 or 15^0 round on both direction (up or down).

15,87 - 18,98	The thick position of white quartz with very scarce only FeS_2, which is stale, or with some limonite filling in joints.
18,98 - 20,25	The chloritic mica schist as well as in 9,60 - 15,87 m with phacoidal or phacoidal-schistose structure or with pell-mell structure too. The average gradient of foliation is 10^0-35^0 round.
20,25 - 20,52	The white quartz as well as in 15,87 - 18,98 m.
20,52 - 20,62	The chloritic micaschist as well as in 18,98 - 20,25 m with pell-mell structure. Foliation isn't clear.
20,62 - 21,97	The white quartz as well as in 20,25 - 20,52 m.
21,97 - 22,33	The chloritic micaschist as well as in 18,98 - 20,25 m but with more clear schistose structure or phacoidal schistose structure. The average gradient of foliation is 60^0 round.
22,33 - 22,50	The white quartz as well as in 20,62 - 21,97 m.
22,50 - 22,65	The chloritic micaschist as well as in 21,97 - 22,33 m with folding in boundary with quartz and with some big grains of FeS_2 and big acummulation of biotite in some pellets there too. The average gradient of foliation is 5^0 or 0^0 round.
22,65 - 23,12	The white quartz as well as in 22,33 - 22,50 m. In 22,67 m is some pellets of biotite (0,5 cm in average) which is closed in.
23,12 - 23,44	The chloritic micaschist as well as in 21,97 - 22,33 m. The average gradient of foliation is 50^0-55^0 round
23,44 - 23,89	The white quartz as well as in 22,33 - 22,50 m but with some littel fragments of chloritic micaschist and with some schliers or pellets of chlorite which are closed in.
23,89 - 24,08	The chloritic micaschist as well as in 18,98 - 20,25 m. The average gradient of foliation is 45^0 round.
24,08 - 24,32	The white quartz as well as in 23,44 - 23,89 m, with some fragments of micaschist or with schliers etc. of chlorite are closed in too.
24,32 - 28,50	The chloritic micaschist as well as in 9,60 - 15,87m with phacoidal schistose and phacoidal structure only, with more strong impregnation of FeS_2 in some positions or schliers with Fe_3O_4 grains or some few schliers and with much more biotite too. The average gradient of foliation is 10^0 or 5^0 in both directions (up or down). Some more strong mineralisation of FeS_2 is in 27,00 m round (1 cm. position).
28,50 - 34,40	The chloritic greenschist with a lot of biotite and with a lot of schliers, pellets or lenticles of carbonates, also some joints are filled by

carbonates. The mineralisation of FeS_2 is very weak but on some places more strong (31,10 m round, 33,80 - 34,10 m round carbonatic pellets, schliers etc.). The total colour of this rock is dark green or dark gray-green. The average gradient of foliation is 25° round.

34,40 - 34,92 The chloritic micaschist as well as in 24,32 - 28,50 m, but with more clear schistose structure. The average gradient of foliation is 20°-25° round.

34,92 - 38,60 The chloritic greenschist as well as in 28,50 - 34,40 m. The average gradient of foliation is 30° round.

38,60 - 50,35 The chloritic micaschist as well as in 34,40 - 34,92 m, but with much more biotite. The average gradient of foliation is 35° round. Ca. from 40,00 m chloritic greenschists intercalations are more present in micaschist. In some places the impregnation of FeS_2 or FeS is present in some schliers, pellets etc. but not thick(impregnation in average is very weak only). Some more strong impregnation of mostly FeS is in 42,85 m round, 43,40 m - 43,55 m round, 44,40 m round, 44,70 - 44,80 m round, 46,85 - 47,10 m round, 47,30 - 47,35 m, 47,50 - 47,55 m, 48,15 m round, 48,30 - 48,40 m, 48,90 m round, 49,30 - 49,40 m round and 49,75 m round. In this rock the impregnation of FeS and FeS_2 too is little bit more strong than in type of rock before.

50,35 - 54,40 The tender or tiny-grained amphibolitic greenstone with some a lot of positions, schliers, pellets etc. of carbonates, with a lot of small acicular crystales of amphibolite, with epidote, chlorite and klinozoisite too and with impregnation of Fe_3O_4 grains (0,2 - 0,5 mm in average), but in 52,70 - 54,20 m some grains of Fe_3O_4 are 1-2 mm in average. The mineralisation of FeS_2 or FeS is very weak only. In 52,60 m and 52,75 m round are some intercalations of carbonates 1-2 cm in average thickness. Some joint with millonitic filling is between 50,60 - 51,35 m. Angle of dip of this joint is 5°-10°-0° round. Some more strong impregnation of FeS_2 is in 53,00 m round (2 cm) in carotates intercalation. The total colour of this rock is green or little bit grey-green. The average gradient of foliation is 45°-50° round.

54,40 - 58,35 The biotitic micaschist and chloritic-biotitic greenschist with some more strong impregnation as well as in 38,60 - 50,35 m. Some positions with little bit more strong impregnation of FeS_2 and FeS too are in 55,30 m round (1 cm), 56,40 m round (4-6 mm), 56,50 - 56,70 m round, 56,90 m round (1 cm), 57,00 m round (2 cm), 57,15 - 57,40 m round, 57,50 m round (2 cm), 57,70 - 57,75 m round. The total colour of this rock is gray-green or green-grey. The average gradient of foliation is

58,35 - 59,30 The tiny-grained amphibolitic greenstone with a lot of carbonates, with schliers, pellets etc. of carbonates too, with epidote, klinozoisite and

chlorite too. The mineralization of FeS or FeS_2 is very, very weak only. Some impregnation of FeS_2 is in 58,35 - 58,45 m (grains of FeS_2 1-2 mm in average). The total colour of this rock is gray-green or green-gray. The average gradient of foliation is 45°-50° round.

59,30 - 59,65 The biotitic micaschist with chlorite and sericite, with some intercalations, schliers, pellets of carbonates. The schistose structure is very clear. The impregnation of FeS_2 or FeS is very very weak or not present, but in some positions with some greenschist's intercalations is little bit this impregnation of FeS_2 mostly more strong. The total colour of this rock is green-grey or grey. The average gradient of foliation is 45° round.

59,65 - 60,10 The very strong impregnated ore of FeS_2 mostly in quartz or quartzy micaschist.

60,10 - 61,30 The biotitic micaschist, just the same as in 59,30 - 59,65 m with some more strong impregnation of FeS_2 mostly in. The average gradient of foliation is

61,30 - 61,90 The very strong impregnated ore of FeS_2 mostly in quartz or quartzy micaschist, but between 61,70 - 61,90 m in homogenet FeS_2 ore body.

61,90 - 63,20 The biotitic micaschist but more biotitic greenschist which are exchange. This type of rock is the same as in 60,10 - 61,30 m with strong impregnation of FeS_2 mostly. Strong impregnated ore of FeS_2 is between 62,25 - 62,35 m, 62,55 m round (2 cm), 62,65 m round (2 cm), 62,80 - 62,95 m round. The total colour of this rock is green-gray or bright green-grey. The average gradient of foliation is 25° round. In 61,90 - 62,05 m is position of carbonates with some impregnation of FeS and FeS_2 and with 3 intercalations (1 cm thickness) of FeS2 mostly.

63,20 - 63,65 The carbonatic tender or tiny-grained greenstone as well as 58,35 - 59,30 m. The schistosity isn't clear.

63,65 - 65,15 The carbonatic greenstone and biotitic carbonatic greenschist which are exchange, with some intercalations, pellets, schliers etc. (0,5 m - 2 cm thickness in average) of carbonates. The impregnation of FeS and FeS_2 is very weak only. The total colour of this rock is gray-green or bright green-gray too. The average gradient of foliation is 30° round.

65,15 - 66,90 The carbonatic tender or tiny-grained greenstone as well as in 63,20 - 63,65 m. In 66,00 m round is some joint with limonitic filling and with angle of dip 10° round (the oblique joint).

66,90 - 84,50 The carbonatic greenstone with some intercalations of biotitic carbonatic greenschist or micaschist (1-2 cm thickness in average). The mineralisation of FeS_2 isn't present or is very weak only. The total colour of this rock is bright green-gray. The average gradient of foliation is 30°-35° round.

Some transversal or antithetic joints with limonitic or carbonate-limonitic filling are in 72,70 m (15°-20°), 75,50 m (10°), 75,80 m (15°), 76,10 m (10°), 76,55 m (15°).

84,50 - 100,90 The biotitic greenschist with some not thick intercalations of greenstone and with a lot of positions, intercalations (1 cm thick in average max.), schliers, pellets etc. of carbonates. Biotites micas are present very much and creat often 1-5 mm thick positions or intercalations. Some micas of biotite is transversal too. The mineralisation of FeS is very weak, but in some places are present some FeS grains mostly only FeS_2 are very scarce. Some grains of Fe_3O_4 are present too, but only between 94,00 - 96,00 m (1 mm in average but much more smaller). This impregnation of Fe_3O_4 is very clear in 95,00 m - 95,40 m round. This biotitic greenschist has very clear schistose structure. The total colour of this rock is green-gray. The average gradient of foliation is 30°-35° round.

100,90 - 104,00 The carbonatic greenstone with some intercalations of carbonatic-strongly biotitic greenschist as well as in 66,90 - 84,50 m. The impregnation of FeS mostly, but FeS_2 too in very weak, but in 101,15 - 101,25 m is position of very strong impregnation of FeS_2 mostly. The total colour of this rock is bright green-grey or green-grey. The average gradient of foliation is 40°-45° round.

104,00 - 104,30 Carbonatic greenstone breccic in some dislocation zone with general average angle of dip 0°-5°.

104,30 - 105,80 Biotitic and chloritic greenschist with a lot of intercalations, schliers, pellets etc. of carbonates, with very, very weak mineralization of FeS mostly but FeS_2 too. This type of rock is the same as in 84,50 - 100,90 m. The average gradient of foliation is 40° round.

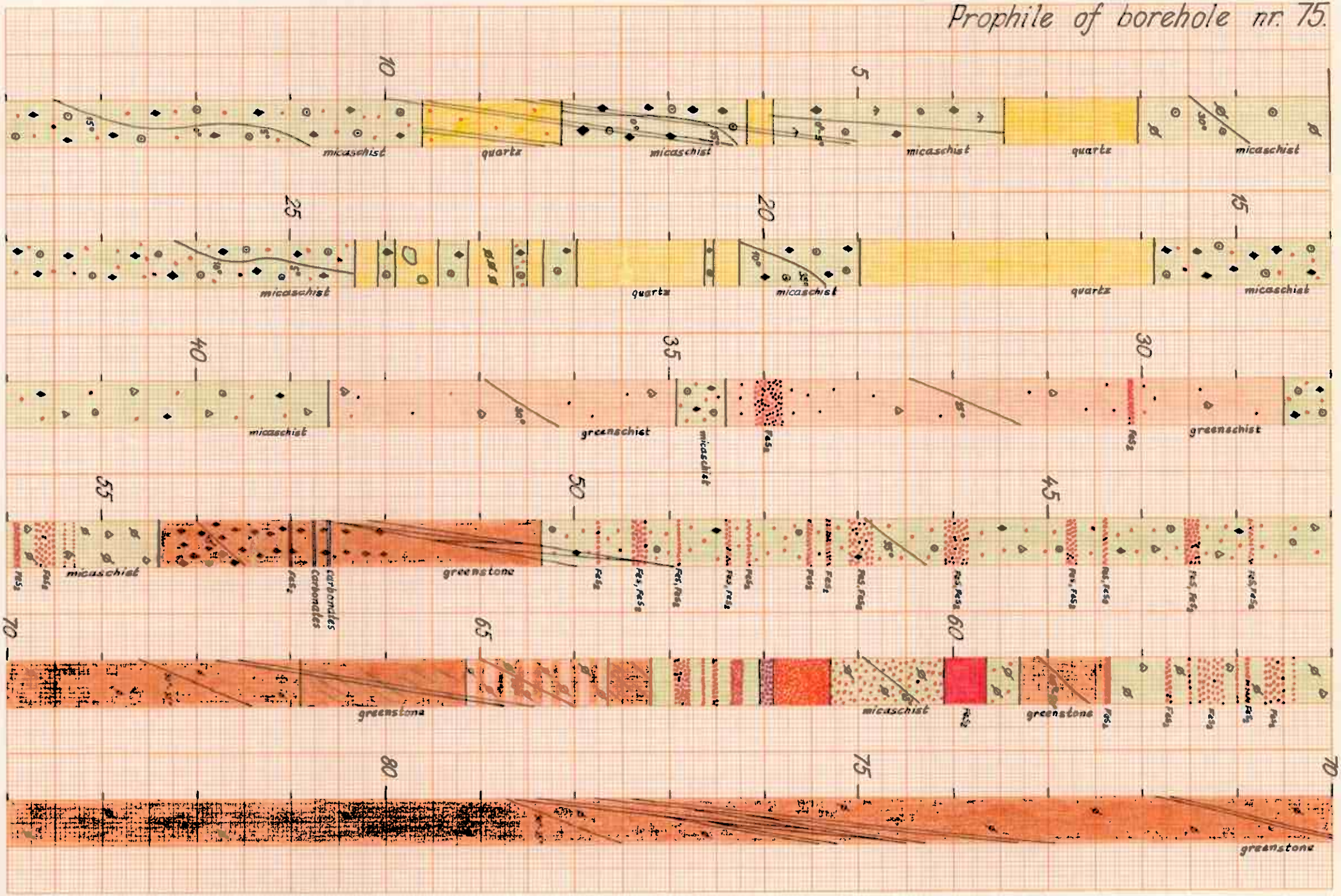
105,80 - 106,75 The dislocation millonitic, carbonatic greenstone or greenschist breccic with some parallel joints with angle of dip 5°-10° round, without some mineralisation.

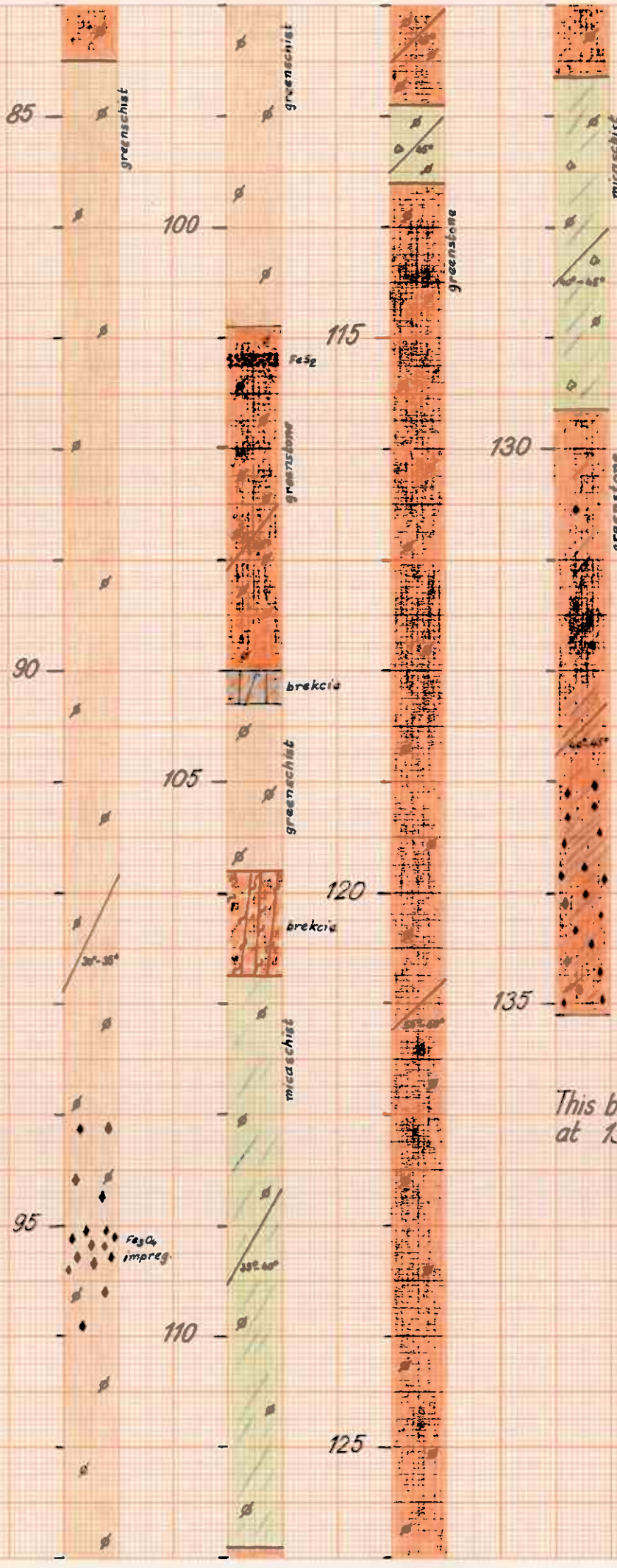
106,75 - 111,90 The biotitic, chloritic and strong carbonatic micaschist or gneissic micaschist with some intercalations of greenschist or greenstone (1-2 cm thickness) on some places. The carbonates creat some a lot of intercalations, pellets, schliers or lenticles (1-3 mm thickness max.). In this rock feldspar, quartz and a lot of sericite present too. The total structure of this rock is schistose or little bit phacoidal-schistose too. The total colour of this rock is gray or little bit dark gray too. The mineralisation or impregnation of FeS or FeS_2 too is very, very weak only. The average gradient of foliation is 35°-40° round.

111,90 - 112,90	Carbonatic greenstone with biotite and with some intercalations of biotitic-carbonatic greenschist as well as in 100,90 - 104,00. The mineralisation of FeS and FeS_2 is very, very weak only. The average gradient of foliation is 45° round.
112,90 - 113,60	The biotitic, sericitic and chlorite and very strong carbonatic micaschist or gneissicmicaschist as well as in 106,75 - 111,90 m. The mineralisation of FeS or FeS_2 is very, very weak only. The average gradient of foliation is 45° round.
113,60 - 126,65	The biotitic and very strong carbonatic greenstone with some intercalations of strong biotitic greenschist as well as 66,90 - 84,50 m. The mineralisation of FeS or FeS_2 is very, very weak only. The average gradient of foliation is 55°-60° round.
126,65 - 129,65	The biotitic, sericitic and chloritic and very strong carbonatic micaschist or gneissic schist with some weak intercalations of greenschist as well as 106,75 - 111,90 m. The mineralisation of FeS or FeS_2 is very, very weak only or isn't present. The average gradient of foliation is 40°-45° round.
129,65 - 135,10	The carbonatic tender or tiny-grained amphibolitic greenstone with a lot of intercalations, schliers, pellets etc. of carbonates (1-2 mm but 1 cm too in average thickness). On some places the some impregnation of FeS_2 mostly is in these carbonates intercalations in 133,50 m, 134,50 m, 134,65 m in example. The impregnation of Fe_3O_4 grains. (1 more mm in average.) is present from 133,60 m round. Before the Fe_3O_4 grains are present too, but more small and more scarce. The total colour of this rock is green or gray-green. The average gradient of foliation is 40°-45° round.

This borehole of no. 75 was finished at 135,10 m.

Prophile of borehole nr. 75.





This borehole nr. 75 was finished at 135,10 m.