THE BOREHOLE NR. 55, Hjerkinn. BOREHOLE NO. 55.

Petrografical description.

0.00 - 23.60

The tender or more tiny-grained amphibolitic greenstone with small acicular crystales of actinolite or on some places more rodlike or acicular crystales of amphibole with some chlorite, epidote and klinozoisite too and with some big micas of biotite, which are acummulated at some places by some irregular weak intercalations, schliers or pellets etc. Carbonates creat some irregular intercalations, pellets, schliers, lenticles or fulfilling of some transversal or antithetic joints mostly. The mineralization of FeS2 mostly is very weak only, but on some places is little bit clear with some grains of FeS2 (max. 1-1,2 mm in average big), exactly between 0,20 - 1,10 m. Between 2,25 -2.65 m the amphibolitic greenstones breccic is present with quartz - feldspar, quartz or carbonates (small) fulfilling. Some big grains of Fe304 or FeS2 are present (1-3 mm in average). Some grains of Fe304 are little bit or mostly regular and these are breaked bye some joints which are fulfilled by carbonates or by quartz feldspar matter mostly. The biotite's micas (1-2 mm in average large) create some acumulations in some schliers, pellets or irregular intercalations etc. Epidote is present

In 1,10 m (2 cm), 1,25 m (5 cm), 1,80 m (7 cm), 2,75 m (5 cm) 3,60 m (5 cm), 6,75 m (3 cm) 7,40 m (2,5 cm), 7,65 m (5 cm), 10,50 m (4 cm), 11.00 m (2 cm), 11,20 - 11,40 m (breccic zone, 11,75 - 11,85 m are some positions of white quartz, with little bit carbonates intercalations, pellets etc. round and on some places in boundarys with more biotites micas and with more epidote etc. The some carbonate's veins (the fulfilling of joints mostly have more epidote some small acicular crystales of amphibole or actinolite and with a lot of small grains of pink or white-pink garnet. The total colour of this rock is green or gray-green. The average gradient of foliation is 55 round (?)

23,60 - 24,70

The tiny-grained or medium-grained amphibolitic greenstone with very strong mineralisation of carbonates with some irregular positions, schliers etc. of carbonates, with some weak irregular intercalations or schliers of biotite's micas, with some irregular intercalations, pellets, schliers of quarts and with some feldspar, with a lot of small crystales (acicular) of amphibole and smaller and longer actinolite and with some grains of garnet and with much epidote. The total colour of this rock is bright green-gray. The structure is pell-mell mostly. The some mineralisation of sulphides is very scarce only.

	24,70 - 35,80	The tiny-grained amphibolitic green-stone as well as in 0,00 - 23,60 m. In 34,55 - 34,90 m is some irregular fulfilling of some dislocation (antithetic) which is created by white, quartz with some irregular pellets or schliers of carbonates in within some mineralisation of sulphides etc.
	35,80 - 37,10	The tiny-grained or medium-grained amphibolitic, strongly carbonatic greenstone as well as in 23,60 - 24,70 m, but with more chlorite. At some places biotite micas creat 2-4 mm thickness irregular intercalations (in example in 36,90 m round).
	37,10 - 37,30	The tiny-grained amphibolitic green-stone as well as in 0,00 - 23,60 m.
	37,30 - 37,40	Just the same type of rock as in 23,60 - 24,70 m
	37,40 - 38,20	The tiny-grained amphibolitic green-stone as well as in 0,00 - 23,60 m
	38,20 - 38,55	The tiny-grained and medium-grained, strongly carbonatic amphibolitic greenstone as well as in 23,60 - 24,70 m.
	38,55 - 44,70	The tiny-grained amphibolitic greenstone as well as in 0,00 - 23,60 m. The average gradient of foliation is 40°-45° round (?)
	44,70 - 45,40	The tiny or medium-grained amphibolitic greenstone with aktinolite, epidote, some chlorite and with some irregular or regular grains of carbonate with some small white-pint or bright pint grains of garnet. The mineralisation of some sulphides is very scarce only.
	45,40 - 48,55	The tiny or tender-grained amphibolitic greenstone as well as in 0.00 - 23.60 m but with very small some carbonates intercalations, pellets etc.
	48,55 - 54,70	The tiny and medium-grained amphibolitic greenstone with aktinolite, trenolite; with some grains (small and irregular) of carbonates, with some note much irregular intercalations, schliers, pellets etc. of carbonates, with a lot of small grains of pint garnet. The some impregnation of FeS ₂ but FeS too is present but very poor only. The structure is pell-mell mostly. The total colour of rock is green.
	55.70 - 58,50	The tiny- and tender-grained amphibolitic greenstone with klinozoisite, aktinolite, some epidote, with no much irregular intercalations or pellets of carbonates. The mineralisation of sulphides is very weak only. The total colour of this rock is bright gray green.
	58,50 - 58,65	The strongly chloritic greenstone with aktimolite, klinozoisite, epidote, some irregular schliers or pellets of carbonates, with little bit quartz too am with some impregnation of FeS2 or FeS too but weak only. The total colour of this rock is bright graygreen. The schistosity isn't clear.

58,65 - 58,70

The very bright green or white-green quartz with some feldspar and with some small, acicular crystals of amphibole and some aktinolite too. The some impregnation of FeS2 only is poor only and the irregular grains of FeS2 are protracted to some directions (schistosity maybe?). Some irregular weak interleations, pellets etc. are present too but not so much. Chlorite present too.

58,70 - 58,80

The strong impregnation of FeS2 (with some CuFeS2-very poor) in white gray quartz with some irregular very weak pellets or intercalations of carbonates and some feldspar is little bit present too maybe.

58,80 - 59,45

Just the same quartz with some poor impregnation of FeS₂ as well as in 58,65 - 58,70 m

59,45 - 59.70

The epidotic greenstone with acicular crystales of amphibole, aktinolite with klinozoiste and with some carbonates, but not so much and with some impregnation of FeS2 only, but poor only.

59,70 - 67,25

The tiny-grained amphibolitic greenstone with aktinolite, some epidote and klinozoisite, with not so much irregular pellets, schliers or some intercalations of carbonates. The some impregnation of sulphides is very weak only. Some schistosity ins't clear. The total colour of this rock is bright graygreen or bright green or green too. In 60,00 - 60,30 m is some position of chlorite greenschist with some sericitic, quartz, aktinolite, klinozoisite, with some micas of biotite and with some irregular grains pellets or schliers of carbonates. Some mineralisation of sulphides os very scarce only. Between 60,30 - 63,20 m isn't present some core.

67,25 - 67,70

The strongly carbonatic epidotic greenstone with a lot of acicular crystales of amphibole and aktinolite with some klinozoisite, with some micas of biotite and with some poor impregnation of FeS2 mostly.

67,70 - 68,10

The tiny-grained amphibolitic greenstone as well as in 59.70 - 67.25 m.

68,10 - 69,00

The tender or tiny-grained amphibolitic, greenstone with a lot of chlorite, aktinolite, with some epidote and clinozoisite, with a lot of weak, mostly irregular intercalations, positions or schliers of carbonates, with a lot of small grains of garnet (pint colour). Biotite's micas creat, on some places strong concentration in some schliers or pellets etc. Some mineralisation (impregnation) of FeS2 mostly in very weak only. The schistose structure is very clear. The total colour of this rock is green or little bit gray-green too. The average gradient of foliation is 50 round.

69,00 - 69,45

The strongly carbonatic epidotic greenstone as well as in 67,25 - 67,70 m.

69,45 - 74,20

The tender or tiny-grained amphibolitic greenstone as well as in 68,10 - 69,00 m. The average gradient of foliation is 50 round. In 71,80 - 71,90 m and in 71,95 - 72,00 m are thick intercalations of carbonates without some impregnation of sulphides.

This borehole no. 55 was finished at 74,20 m.

(M. Motys).