1. Prospektering
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090/J. Kurki/65

KRYOLITSELSKABET ØRESUND A/S

Prospektering

OCCURRENCES OF BASIC TO ULTRABASIC ROCKS IN THE S-ISORTOQ AREA 1965

J.Kurki

L O C A L D E S C R I P T I O N S

Map sheet 64.V.1.

64.V.1, R/1

Samples 6137, 6174, 6198, 7627, 7629. The position is marked on the map sheet 65.V.2, C/31.

In the direction of ENE-WSW there occurs an ab. 8-9 km long formation, composed of a series of ultrabasic and basic intrusive rocks. The most basic member is composed of dunite, ab. 1 km long and o,5 km broad. Besides olivine the typical dunite includes slight amounts of Mg-rich hornblende, chlorite and spinel as well as a poor opaque dissemination composed of magnetite and chromite. On places the dunite massif displays a distinct magmatic layering.

The dunitic body is enveloped in a peridotitic "mantle" almost at all sides. The breadth of the peridotite zone is usually 2oo-3oo m, but it may amount to nearly a kilometer. Peridotite is nearest harzburgitic and it is mainly composed of olivine and enstatite as well as of ab. lo% of phlogopite. Like dunite, also peridotite is associated with varying amounts of chromite.

Dunite and peridotite are surrounded by usually distinctly oriented norite, the contacts of which outwards, against pyroxene-gneisses, are unknown. Norite, like partly also peridotite, are traversed by numerous granite-pegmatite veins. Besides there is found coarse-grained, biotite-bearing pyroxene-diorite-segregations.

6137. Biotite-bearing pyroxene diorite, from a mass with several hundreds of meters in diameter.

6174. A general sample of peridotite, N of dunite.

6198. A general sample of dunite, ab. 5 m from the contact of peridotite.

7627. Oriented norite, ab. 1,5 km NW of dunite.

7629. Unoriented norite, ab. 1 km W of dunite.

Map sheet 65.V.1.

65.V.1, R/16

Sample 7586.

Pyroxene (hornblende) gneiss, country rock.

65.V.1, S/18

Samples 6518, 652o.

A 2oo m long, loo m broad, conform, peridotitic body in the direction N 35° E. For the most part peridotite is unoriented with big crystals of pyroxene, but there occur also medium- and even-grained varieties. The ultrabasic body is surrounded by partly small-folded greenstones.

6518. Even-grained peridotite.
652o. Greenstone.

65.V.1, T/2o

Samples 7581, 7582.

Both samples originate from an ab. loo m long, elongate, conformable peridotite intrusion in garnet-bearing (granulitic) gneiss.

65.V.1, T/22

Samples 7578, 7579, 7584.

Several conform peridotite bodies, the greatest of which are ab. loo m long.

7578.
7584. } Samples from an ab. 3o m long, olivine-rich intrusion.

7579. A sample from another minor, olivine-rich peridotite.

65.V.1, T/24

Samples 7575, 7576.

Several elongate ultramafic (peridotite) lenses placed one after another in the direction of the main schistosity. The samples 7575 and 7576 originate from an ab. 2o m long body.

65.V.1, U/17

Sample 651o.

Three small, rusty successively placed exposures, composed of a dark, unoriented gabbro-like rock, on places with a weak pyrite and pyrrhotite dissemination.

651o. Rusty, gabbro-like rock.

65.V.1, U-V/24

Samples 7572, 7573.

An ab. 7o m long, conform peridotite body, rather strongly altered. The samples represent different rock varieties within the body.

65.V.1, V/22

Sample 6529.

Several elongate conformable bodies with peridotitic composition. The largest of them measures ab. 3o x 2o m. In the rock one can meet a distinct layering structure of magmatic derivation. Another characteristic is an irregular network of minute (1-2 mm) asbestos, mainly tremolite.

6529. General sample of the largest body.

65.V.1, Z/15

Sample 65o9.

In the supracrustal gneiss-series, composed of biotite-gneisses, hornblende-gneisses and amphibolites there occurs an ab. 1o m broad intercalation of migmatitized amphibolite, which is rusty on places, including a poor pyrrhotite-dissemination.

65o9. A sample of the rusty amphibolite.

65.V.1, Z/27

Samples 757o, 7571.

The samples come from different parts of an ab. 1oo m long noritic intrusion.

65.V.1, Æ/29

Sample 7569.

A sample from an amphibolitic intercalation in gneiss.

65.V.1, Ø/17

Sample 7294.

Ferruginous, amphibolite-like rock. The rustiness is associated with a movement zone, but there was not found any mineralizations. 7294 is a type sample of the rock.

65.V.1, Ø/26

Sample 7563, 7564.

A basic intrusion, containing two different rock varieties. One medium-grained, rather dark gray norite and the other lighter, greenish (hornblende-rich) type. The mutual relations between these types are not known at the locality.

7563. A sample of norite.

7564. A sample of hornblende gabbro.

65.V.1, Ø/29

Samples 7565, 7566.

The samples represent a small peridotite "lump", ab. lo m in diameter, in amphibolite.

65.V.1, Å/17

Sample 6567.

A basic, amphibolitic, conformable stratum in gneiss series.

65.V.1, Å/19

Sample 756o.

A basic, amphibolitic, conformable stratum in gneiss series.

65.V.1, Å/22

Samples 729o, 7291.

729o. An unknown rock, associated with fault zones and mylonites in many localities. The structure resembles on places that of an intrusive breccie, but the composition of the matrix is unknown.

7291. In the same area there occurs a rust zone, several hundred meters long, but any noteworth mineralizations has not been met with.

65.V.1, Å/3o

Samples 7737, 7742.

A large massif, ab. 1 x 2 km of dimensions, composed mainly of dunite. On the N-part there occur peridotitic (pyroxene-rich) rocks. The purest dunite occurs in the southern parts of the massif, while there is abundant gneissic, more siliceous portions in the central parts of the formation. Tiny veinlets of chromite were observed mostly in dunitic parts of the massif.

7737. A general sample of dunite.

7742. A sample of a dark ?hornblenditic rock variety (with some chromite).

Map sheet 65.V.2.

65.V.2, A/15

Sample 6565.

The sample represents an unoriented variety of a dark ?amphibolitic rock forming elongate, conformable strata (1o-5o m thick) in the gneiss series.

65.V.2, A-B/17

Samples 6562, 6563.

An elongate, semiconcordant body of norite (ab. 5o x 1oo m). In the E-end it changes gradually into a clearly schistose, amphibolite-looking variety.

6562. A general sample of norite from central parts of the body.

6563. Schistose border variety.

65.V.2, A-B/18

Sample 6211.

A general sample of an ab. 2o x 2o m norite body in gneiss.

65.V.2, A/19

Sample 6284.

A norite intrusion, ab. 1oo x 5o m, in pyroxene gneiss. 6284 is a general sample of it.

65.V.2, A/2o

Sample 7289.

The sample 7289 represents a type specimen from a mylonitized norite.

65.V.2, A/27

Samples 7554-7559, 7562.

A dunite intrusion, ab. loo m in diameter. It is represented by several small outcrops and (weathered) olivine sand.

7554.
7555.
7556. Samples of dunite from different small outcrops.
7557.
7558.

7559. A sample from a 2o cm broad asbestos vein in dunite.

7562. A sample from a norite exposure near to the dunite. The mutual contact relations could not be observed.

65.V.2, A/3o

Samples 7724, 7727, 7729, 773o.

In gneiss there occurs a dunite massif, ab. 3oo x 2oo m in size. The homogenous and unoriented rock includes some small veinlets of chromite. Some narrow (1-5 cm) veins of asbestos (tremolite?) were also seen in the dunite.

7724. A sample of ab. 3 m broad contact variety between dunite and a pegmatite vein. The rock may be called soapstone.

7727. A tremolite-rich portion in dunite.

7729. A general sample of the dunite.

773o. A sample of a seam (pyroxene-rich) in dunite.

65.V.2, B/17

Samples 7292, 7293.

A broad movement zone in the direction N $6o^{o}$-$7o^{o}$ E. An intense mylonitization and brecciation is the most outstanding feature in this zone. Moreover an overall rustiness, caused by ferruginous coatings on the fracture planes characterizes especially the basic rocks in the zone. At places true breccia structures occur with dark amphibolitic xenoblasts in an oriented, coarse-grained

light-grey matrix.

7292. Oriented, uralitic hypersthene gabbro, matrix material in the breccia.

7293. Pyroxene-amphibolite, occurring as xenoliths in the breccia.

65.V.2, B/19

Samples 6411, 6412, 6413.

Several basic, lenticular formations in (chalcareous) hornblende gneiss. The greatest of the bodies is ab. 2oo m long and the others under loo m long with ab. lo-2o m in breadth.

6411. Central part of the greatest body.

6412. NW-part of the greatest body.

6413. The greatest body, near its SE-contact.

65.V.2, B/2o

Samples 7544, 7545.

The samples represent different parts of a conformable lenticular norite intrusion with dimensions of ab. 2o x loo m.

65.V.2, B/25

Samples 7549, 755o.

The samples originate from an elongate norite intrusion, ab. 5o x loo m in size.

65.V.2, B/26

Samples 7551, 7561.

At least 3 km long, 1 km bread norite massif about in E-W-direction. The samples originate from the W-end of the massif.

65.V.2, B/29

Sample 771o.

771o represents a sample from a rusty amphibolite. The rustiness is caused by iron sulphide dissemination.

65.V.2, C/9

Samples 6543, 6544.

Basic, unoriented rock of noritic composition. The field relations of the rock mass have not been demonstrated.

65.V.2, C/11

Sample 6541.

The sample represents a 2o m broad conformable amphibolite layer.

65.V.2, C/14

Sample 654o.

A general sample of an amphibolitic layer.

65.V.2, C/19

Samples 7143, 7231, 7341, 7347, 7348, 791o, 7953, 7959, 7975.

In the area there occur numerous basic rock masses of varying size, the greatest being ab. 2 x 3 km in the E-part of the area under consideration. All the larger rock bodies seem to form discordant to semiconcordant contacts against the gneisses. The rock in these masses can be divided into two main types, viz. a brownish grey, unoriented, usually slightly uralitized norite and another dark grey, often mottled, oriented uralite norite, to which uralite gabbro would perhaps be a more suitable name.

The observations indicate, that the uralite norite is an alteration product of the norite proper. The norite gradually changes into an uralitized type; the latter variety has usually been observed along contacts of the larger masses to gneiss, along cataclastic zones in the norite masses and also along contacts to pegmatite dykes. In one case a structure with ab. o,5 m thick bands of alternating darker ones of norite and lighter ones of uralite norite was observed, most possibly as a result of a slight movement along planes of dislocation and associated contemporaneous metasomatism in a certain zone. Finally, all the minor conformable basic bodies and schlieren in gneiss are exclusively composed of the oriented uralitic variety.

In the distance of ab. 5oo m in the direction of N 35° E there occur a swarm of small (ab. 3o-8o m) successively arranged, longitudinal, basic bodies, mainly composed of uralite norite (or gabbro). Many of these bodies include small, rusty spots, the norite of which contain a faint to moderate sulphide dissemination.

The swarm of the mineralized, small uralite norite bodies is situated in a broad dislocation zone.

7143. A sample of uralite gabbro from an ab. 6oo m long, longitudinal, conform massif.

7231. A sample from mineralized spot in an uralite gabbro (norite) body of ab. 5o x 3o m.

7341. Rusty (magnetite-bearing) quartz-amphibolite or hornblende gneiss, ab. lo m broad.

7347.
7348. } Ab. o,5 m thick bands of alternating darker augite-norite (7347) and lighter uralite-norite (7348).

791o. A sample from mineralized spot in an uralitic augite-norite body with dimensions ab. 8o x 25 m.

7953. A sample from a small (ab. 2 m long) mineralized spot in an ab. 3o m long, at the most lo m broad norite body.

7959. A sample from an other small, mineralized spot in the same norite body as 7953.

7975. A sample from an ab. 12 x 7 m rusty spot (a weak dissemination of iron sulphides) in an uralite gabbro body of ab. 3oo x 2oo m.

65.V.2, C/21

Samples 7285, 7286, 7287, 7288.

Three different type samples (7285-7288) from a norite intrusion (7286 is an uralitic gabbro). The intrusion contains also a mineralized portion in a more fine-grained, amphibolite-resembling part (7288).

65.V.2, C/22

Samples 7546, 7547, 7548.

The samples originate from different parts of an loo-15o m long norite intrusion in the direction N 55° E.

65.V.2, C/28

Samples 7552, 7553.

An at least 1 km long norite massif. The samples originate from westerly parts of the norite.

65.V.2, C/29

Sample 7719.

A general sample of ultrabasic rock, the size and mode of occurrence of which are unknown.

65.V.2, C/3o

Sample 7682.

A general sample from small-grained norite, ab. o,5 x o,5 km, surrounding the intrusive complex, from which the samples 6137, 6174, 6198, and 7629 come.

65.V.2, D/15

Sample 6537.

6537 represents a general sample of an ab. 1oo m long, basic formation.

65.V.2, D/16

Samples 6469, 6499.

An ab. 9oo m long (in the direction N 6o° E), 1oo-3oo m broad basic intrusion, composed mainly of medium-grained, brownish norite with amphibole-rich contact varieties. Several fault zones in the direction N 6o° E. In the southernmost part the norite includes a rusty area (ab. 15 x 1o m) with a weak dissemination of iron sulphides.

6469. An amphibole-rich contact-variety.
6499. Medium-grained, fresh norite from the rusty area.

65.V.2, D/17 (NE-corner)

Samples 713o, 714o.

A longitudinal, conform intrusion, ab. 38o m long and 5o-12o m broad, in the direction N 6o° E. It is for the most part composed of medium-grained norite, but in the W-end it is composed of poicilitic peridotite with grains of pyroxene even 3 cm in diameter. The other constituents are olivine, hornblende and phlogopite and a little of chlorite. The contact between the noritic and peridotitic parts of the body seems to be gradual.

In E-part, in the vicinity of the northern contact there occurs in the norite a rusty portion, ab. 25 x 7-8 m, including disseminated nickeliferous pyrrhotite and chalcopyrite.

713o. A sample from the mineralized spot in the norite.
714o. A sample of the peridotitic part of the body.

65.V.2, D/17 (the central part)

Samples 6314, 6315, 6316, 6327, 6337, 6965.

An ab. 15o m long, 5o m broad, conform basic intrusion in the direction NE-SW. The rock of it is relatively coarse-grained, uralitic norite. The border part of the intrusion is of small-grained norite, where the amount of plagioclase is greater than in the central parts. In its central part the intrusion includes a rusty, mineralized area, ab. 4o x 3o m, with varying amounts of mostly disseminated nickeliferous pyrrhotite, pyrite and chalcopyrite.

Ab. lo m S of the intrusion there runs a conform, sheared formation of quartz-amphibolite, 6oo m of length and lo-5o m of breadth. A shear zone, running along this formation, has destroyed primary textures, but the formation may be a member of the original metamorphic rock series.

6314. Sheared uralite-gabbro (afb?). (The same formation as 6327).

6315. Small-grained norite near the contact to gneiss.

6316. Medium-grained norite in the vicinity of the mineralized area.(The central part of the massif).

6327. Sheared quartz-amphibolite ab. lo m S of norite.

6337. Medium-grained norite in E-part of the intrusion.

6965. A specimen from the mineralized area.

65.V.2, D/17 (SW-part)

Samples 6341, 635o, 6355, 69o4.

A conform massif, 55o x 5oo m. It is mainly composed of medium-grained, unoriented, often uralitic norite, which in S-part has many small inclusions of gneiss and there it is distinctly oriented. In the northern contact against gneiss there occurs a contact variety of uralite gabbro.

In the northernmost part the norite includes a mineralized area with varying amounts of iron sulphides, pentlandite and chalcopyrite. Norite in this area has been strongly uralitized.

The norite massif is traversed by several shearing and faulting zones in the direction N $4o^{o}$ E.

6341. Uralitized hypersthene gabbro near the contact of the mineralized area.

635o. Hornblende gabbro in the contact of norite and gneiss.

6355. Rusty norite from a small mineralized spot.
69o4. A specimen from the mineralized area.

65.V.2, D/17 (SW-corner)

Samples 7o51, 7o52.

A large basic massif, ab. 8oo long (in N-S-direction) and 1oo-4oo m broad. The massif is rather unhomogenous. It is for the most part rather light, resembling diorite, but it is rather a hornblende-gabbro with smaller amount of biotite. No rest of pyroxenes is left. Here and there this light rock goes over to darker, grey uralite-norite-type.

7o51. A sample of uralite-norite in E-part of the massif.
7o52. A sample of hornblende-gabbro in E-part of the massif.

65.V.2, D/17-18

Samples 7o3o, 7o35, 717o, 8oo5.

A large peridotite massif, ab. 12oo m long (in N-S-direction) and 3oo-5oo m broad. In the northern parts it is medium-grained and composed of olivine, diopside, hypersthene and hornblende, with accessoric amounts of phlogopite and serpentine. In the southern parts it seems to be rich in pyroxenes, while the amount of olivine is faint or it is totally lacking. The border parts of the massif are small-grained and composed of diopside and hornblende.

In the central parts the massif includes a small rusted spot, ab. 5 x 1o m of dimensions. The rock of it may be called uralitized pyroxenite with accessoric amounts of plagioclase and opaque material (ab. 5%), which is composed of disseminated nickeliferous pyrrhotite and chalcopyrite.

Near to the southern end of the peridotite massif in question, there occurs another peridotite massif, ab. 1oo x 1oo m. In it there is a rusty spot, 2o x 1o m, fully similar to the mineralized area described above.

7o3o. Small-grained peridotite near to the northern contact of the great massif.
7o35. A sample from the central parts of the great massif.
8oo5. A sample from the rusty spot in the great massif.
717o. A sample from the rusty spot in the small peridotite.

65.V.2, D/19

Samples 7542, 7543.

7542 originates from an ab. 5o m long norite intrusion.
7543 originates from a smaller norite exposure.

65.V.2, D-E/21

Samples 7539, 754o.

Two noritic intrusions, the greater ab. loo m long.

7539. A general sample of the smaller norite body.
754o. A general sample of the greater norite body.

65.V.2, D/29 (central part)

Sample 7681.

A general sample from the rusty amphibolite. The rustiness was caused by a poor dissemination of iron sulphides.

65.V.2, D/29 (W-part)

Sample 7679.

The sample comes from a dunite intrusion, which seems to be unaltered. The size of the intrusion is ab. 1 x o,5 km.

65.V.2, E/8-9

Samples 6549, 655o, 6551, 6552.

A peridotite body, ab. loo m broad and 2oo m long.

6549.
655o. } Samples from different parts of the body.
6551.

6552. An amphibolitic sample, apparently an alteration variety of peridotite on the N-border of the peridotite mass.

65.V.2, E/1o

Sample 6555.

A basic, conform, ab. 5o m broad, lenticular body.

65.V.2, E/17

Sample 6559.

A conform, noritic body with dimensions ab. 2o x 1o m.

65.V.2, D-E/22

Sample 7537.

An ab. 2o m long, basic body, schistose near contacts.

65.V.2, E/3o

Samples 7688,7689, 7691, 7692, 7697.

A dunite massif, ab. 6oo x 3oo m, elongated in the E-W-direction. In the NE-corner it goes over to peridotite. In other parts the dunite contains also small, dark veinlets and schlieren. These are partly composed of pyroxenic material, partly of chromite.

Near to the S-contact in a peridotitic portion of the massif there was seen a small, rusty area, ab. lo x 1 m, containing varying amounts of nickeliferous pyrrhotite with chalcopyrite.

7688. A sample of asbestos in cracks of the dunite.
7689. A general sample of the dunite.
7691. A sample of the coarse-grained dunite containing some chromite.
7692. A sample of chromite-veinlets in dunite.
7697. A sample of the mineralization connected with the dunite.

65.V.2, F/14

Sample 6557.

An ab. o,5 km long, elongated norite massif.

65.V.2, F/17

Samples 66o6, 662o, 665l, 6658, 67ol, 67o3, 67o7.

An ab. 3oo m long, loo-15o m broad noritic formation in the direction of the main schistosity of the area, N 7o° E. The norite itself is for the most part more or less schistose with the same strike as gneisses outside. The contact between norite and gneiss is gradual. The norite is traversed by a distinct weakness and fault zone, in the direction N 5o° E. The gneiss outside has several weakness (mylonitic) zones parallel with it.

In the northern, central part of the norite there occurs an ab. 4o m long, lenticular, mineralized area in the direction of the fault zone and connected with it, ab. 3o m from the NW-contact of the gneiss. The mineralization intensity varies from dissemination to practically compact portions, and the ore sulphides are Ni-pyrrhotite, chalcopyrite and pyrite.

6606. A sample of unoriented, nearly coarse-grained, fresh norite in the mineralization.

6620. Small-grained contact variety of norite (rather strongly uralitized) against the mineralization.

6651. Sheared and deformed, uralitized norite, brecciated by sulphides.

6658. Small-grained norite in immediate contact with the mineralization.

6701. Schistose norite ab. 20 m N of the mineralization.

6703. Uralitized augite-norite. Ab. 30 cm from the specimen No.6701.

6707. Dark, amphibolitic (metagabbro?), which form irregular bands in gneiss. Ab. 200 m N of the mineralization.

65.V.2, F/18

Samples 6746, 6753, 6769.

In banded gneiss with schistosity N 80° E, 85°SW, there occurs a conform, lenticular basic massif with dimensions 350 x 150 m. The rock of it is hypersthene-bearing gabbro and it is schistose in border regions.

Through the massif there runs an ab. 5-10 m broad rust-zone in the direction N 70° W, 70°SW. It can be followed over 100 m. The mineralization is composed of moderate dissemination of iron sulphides.

Along the northern contact of the norite massif against banded gneiss there occur two peridotitic, lenticular bodies, 40-60 m long. Peridotite is composed of olivine, enstatite, and hornblende with accessoric amounts of augite, opaque material, spinel, and chlorite.

6746. A sample of gabbro from the mineralization.

6753. A sample from an ab. 40 m long peridotitic body.

6769. An iron sulphide-bearing sample from a 2 m broad, mineralized fracture zone in a small gabbro body, ab. 250 m E of the great norite intrusion.

65.V.2, F/21

Sample 7536.

A general sample from a basic, amphibolitic intercalation. Schistosity: N 65° E, 60°N.

65.V.2, F/27

Sample 7251.

The sample comes from an ab. 12o m long, 5-6 m broad "rust horizon" in gneiss. Schistosity ab. N-S, 75°E.

65.V.2, G/8-9

Samples 6571, 6572, 6573.

An ab. loo m long, conform noritic body. The samples originate from different parts of the formation.

65.V.2, G/1o

Sample 657o.

Dark, amphibolitic intercalation in gneiss.

65.V.2, G-H/14

Sample 6568.

A large gabbro-intrusion with schistose border parts.

65.V.2, H/16

Samples 6799, 68o5, 6826, 6828, 6834, 6891.

In this area there occur basic rocks, usually more or less schistose, forming massifs, lenses, bands or irregular fragments in biotite-gneiss. These basic rocks, which often can be called hornblende or uralite gabbros, are conform to the gneiss and synorogenic of nature.

In these basic rocks there occur plenty of rusty "spots" in more or less distinct zones. As ore minerals the rusty zones include iron sulphides from disseminations to compact portions.

The rocks in the eastern part under consideration form a synclinal structure. Connected with this there occur several peridotite bodies, especially between norite and gneiss. The greatest body is ab. 5oo m long, the other under loo m. The main minerals are olivine, hornblende and hypersthene, the accessoric spinel and opaque material. Besides there occur also some hornblendite bodies, ab. 2o m long.

6799 originates from an ab. 8oo m long, lenticular gabbro body.
68o5. Type sample from peridotite from the greatest body.

6826. Ab. 15 m long peridotite lens.

6828. Hornblendite.

6834. A sample of oriented uralitic gabbro from a small rusty spot.

6891. A sample of oriented amphibolitic rock, which originates from an at least 8oo m long, lenticular body, ab. 2 km SW of the other samples.

65.V.2, H/21

Sample 7533.

A general sample from a dark, amphibolitic intercalation in a gneiss series. Schistosity: N 65° W, ~ 9o°.

65.V.2, J/15

Sample 6581.

A general sample of an amphibolitic layer.

65.V.2, K/8-9

Sample 6576, 6577.

An ab. 2oo m long, conform ultrabasic (peridotite) body. It includes some small, rusty portions. The specimens are from the fresh, unrusty part of the rock.

65.V.2, K/13

Sample 6578.

A sample of basic rock, of gabbroic composition. Its mode of occurrence is not known.

65.V.2, K/22

Sample 7261.

An ab. o,5 km long ultrabasic massif, a folded, broken "sheet" in a fold hinge. The primary rock is dunite, from which the sample 7261 originates.

65.V.2, L/16

Sample 6582.

An ab. lo m broad diabase sill with the strike N 65° E.

65.V.2, M/6

Samples 6593, 6594, 6595.

Two rather small, peridotitic, hornblende-rich intrusions, displaying magmatic layering.

6593-6595 originate from different parts of the bodies.

65.V.2, L-M/9

Samples 6591, 6592.

A basic rock of probably magmatic derivation. The central parts of the rock mass are unoriented while the contact varieties are clearly schistose.

65.V.2, M/1o

Samples 6589, 659o.

Basic, unoriented rock, the mode of occurrence of which is unknown.

65.V.2, L-M/12

Samples 6586, 6587, 6588.

Minor elongated masses of hornblende gabbro in the gneiss. The gabbro masses are schistose in the border parts, otherwise the rock is unoriented and homogenous.

6586.
6587. } Medium-grained, unoriented hornblende-gabbro.

6588. Schistose (amphibolitic) contact variety.

65.V.2, L-M/14-15

Samples 6583, 6584.

Basic rock varieties forming minor elongate masses lying parallelly with the schistosity of the surrounding gneiss.

65.V.2, O/13

Samples 6596, 6598.

A lenticular peridotite intrusion, dimensions ab. 15o x 7o m.

6596. Coarse-grained, unoriented rock from central parts.
6598. Medium- or small-grained, oriented boarder variety.

65.V.2, P/12

Samples 7511, 7512, 7516, 7518, 7519.

Three small peridotite intrusions, the greatest of them ab. 15 x 10 m. It has several ca. 10-20 cm broad cracks filled with amphibolite-minerals (mainly tremolite), chlorite, talc etc.

7511. A general sample from the greatest peridotite body.

7512. Long-fibrous amphibole with talc from a crack in the greatest body.

7516. A sample of soapstone from a crack in the greatest body.

7518. Unaltered part of a smaller peridotite intrusion.

7519. Somewhat altered part of the same body as 7518.

65.V.2, P/16

Samples 7508, 7509, 7510.

7508.
7509. } Specimens from different parts of an ab. 100 m long, rather coarse-grained peridotite intrusion.

7510. A general specimen of an ab. 20 m long peridotite body in the vicinity of the first-named lens.

65.V.2, P-Q/17

Samples 6599, 7501, 7502, 7503, 7505, 7507.

A swarm of peridotite intrusions. The largest of them has dimensions 100 x 50 m.

6599. Coarse-grained rock from the center of the greatest body.

7501. Medium-grained rock from nearer to the contact of the greatest stock.

7502. Small-grained contact rock from the greatest stock.

7503. A general sample from a smaller (ab. 50 x 30 m) intrusion.

7505. A general sample from a still smaller, thoroughly altered, schistose (talc- and biotite-schist) body.

7507. A general sample from an ab. 20 m long body.

65.V.2, Q/20

Sample 7259.

A rust horizon, ab. 30 x 3 m, in a banded amphibolitic layer, the width of which is more than 50 m, otherwise unknown. Schistosity N 80°-85° E, 60°-70°SE. 7259 comes from the mineralization.

65.V.2, R/11

Samples 6525, 6526.

Two ab. loo m long, 5o m broad, conform peridotitic bodies. The rock is small- and even-grained.

6525.
6526. } General specimens from different parts of a body.

65.V.2, R/11-12

Samples 752o, 7521.

An amphibolitic rock series, 752o and 7521 representing the most common variety of the rock.

65.V.2, S-T/13-14

Samples 7522, 7523, 7525, 7526.

3 ultrabasic (peridotitic) lenses successively in the direction N 45° E, at least 5o m in diameter. Between two of them, touching the midmost body, there runs a fault zone in the direction N 15° E. The rock in the fault-zone has altered to talc-biotite-chlorite-schist.

7522. A general sample of the midmost body. Fresh rock.
7523. Talc-schist from the fault-zone.
7525. A general sample from the SW-most lens.
7526. A general sample from the NE-most lens.

65.V.2, T/15

Sample 7532.

A small peridotite lens. 7532 is a general sample of it.

65.V.2, T/28

Sample 7279.

In supracrustal schist series there occur numerous ultrabasic ophiolite intrusions, which are crystallized in the conditions of amphibolite-facies. Intrusions are composed of homogenous, massive rocks and they are mostly of considerable size. In some of them great parts of the massif are made up of fibrous tremolite (- anthophyllite) rocks. 7279 represents this kind of rock.

65.V.2, T-U/15-16

Samples 7527, 7529.

7527 and 7529 are general samples from different parts of an at least loo m long peridotitic body.

65.V.2, X/29

Samples 7281, 7282, 7283.

All of these samples represent different types of an ultrabasic ophiolite intrusion.

65.V.2, Z/25

Sample 7278.

In volcanic rock of a schist series there occurs a local mineralization, controlled by a weak faulting zone and associated with intense silicification. The ore minerals are pyrrhotite with slight amounts of chalcopyrite. 7278 represents the mineralization.

26/1 1966

J.Kurki

KJ 28/1 66

THE SAMPLES ARRANGED IN NUMERICAL ORDER

No	Map sheet	Grid	Description on page
6137	64.V.1	R/1	1
6174	"	"	1
6198	"	"	1
6211	65.V.2	A-B/18	5
6284	"	A/19	5
6314	"	D/17	11
6315	"	"	11
6316	"	"	11
6327	"	"	11
6337	"	"	11
6341	"	"	11
6350	"	"	11
6355	"	"	11
6411	"	B/19	7
6412	"	"	7
6413	"	"	7
6469	"	D/16	10
6499	"	"	10
6509	65.V.1	Z/15	3
6510	"	U/17	3
6518	"	R/16	2
6520	"	"	2
6525	65.V.2	R/11	20
6526	"	"	20
6529	65.V.1	V/22	3
6537	65.V.2	D/15	10
6540	"	C/14	8
6541	"	C/11	8
6543	"	C/9	7
6544	"	"	7
6549	"	E/8-9	13
6550	"	"	13
6551	"	"	13
6552	"	"	13
6555	"	E/10	13
6557	"	F/14	14
6559	"	E/17	13
6562	"	A-B/17	5
6563	"	"	5
6565	"	A/15	5
6567	65.V.1	A/17	4
6568	65.V.2	G-H/14	16
6570	"	G/10	16
6571	"	G/8-9	16
6572	"	"	16
6573	"	"	16
6576	"	K/8-9	17
6577	"	"	17
6578	"	K/13	17
6581	65.V.2	J/15	17
6582	"	M/16	17
6583	"	L-M/14-15	18
6584	"	"	18
6586	"	L-M/12	18
6587	"	"	18
6588	"	"	18
6589	"	M/10	18
6590	"	"	18
6591	"	L-M/9	18
6592	"	"	18
6593	"	M/6	18
6594	"	"	18
6595	"	"	18
6596	"	O/13	18
6598	"	"	18
6599	"	P-Q/17	19
6606	"	F/17	14
6620	"	"	14
6651	"	"	14
6658	"	"	14
6701	"	"	14
6703	"	"	14
6707	"	"	14
6746	"	F/18	15
6753	"	"	15
6769	"	"	15
6799	"	H/16	16
6805	"	"	16
6826	"	"	16
6828	"	"	16
6834	"	"	16
6891	"	"	16
6904	"	D/17	11
6965	"	"	11
7030	"	D/17-18	12
7035	"	"	12
7051	"	D/17	12
7052	"	"	12
7130	"	"	10
7140	"	"	10
7143	"	C/19	8
7170	"	D/17-18	12
7231	"	C/19	8
7251	"	F/27	16
7259	"	Q/20	19
7261	"	K/22	17
7278	"	Z/25	21
7279	"	T/28	20

No	Map sheet	Grid	Description on page
7281	65.V.2	X/29	21
7282	"	"	21
7283	"	"	21
7285	"	C/21	9
7286	"	"	9
7287	"	"	9
7288	"	"	9
7289	"	A/2o	6
729o	65.V.1	Å/22	4
7291	"	"	4
7292	65.V.2	B/17	6
7293	"	"	6
7294	65.V.1	Ø/17	4
7341	65.V.2	C/19	8
7347	"	"	8
7348	"	"	8
75o1	"	P-Q/17	19
75o2	"	"	19
75o3	"	"	19
75o5	"	"	19
75o7	"	"	19
75o8	"	P/16	19
75o9	"	"	19
751o	"	"	19
7511	"	P/12	19
7512	"	"	19
7516	"	"	19
7518	"	"	19
7519	"	"	19
752o	"	R/11	2o
7521	"	"	2o
7522	"	S-T/13-14	2o
7523	"	"	2o
7525	"	"	2o
7526	"	"	2o
7527	"	T-U/15-16	21
7529	"	"	21
7532	"	T/15	2o
7533	"	H/21	17
7536	"	F/21	15
7537	"	D-E/22	14
7539	"	D-E/21	13
754o	"	"	13
7542	"	D/19	13
7543	"	"	13
7544	"	B/2o	7
7545	"	"	7
7546	"	B-C/22	9
7547	"	"	9
7548	"	"	9
7549	"	B/25	7
755o	"	"	7
7551	65.V.2	B-C/26	7
7552	"	C/28	9
7553	"	"	9
7554	"	A/27	6
7555	"	"	6
7556	"	"	6
7557	"	"	6
7558	"	"	6
7559	"	"	6
756o	65.V.1	Å/19	4
7561	65.V.2	B-C/26	7
7562	"	A/27	6
7563	65.V.1	Ø/26	4
7564	"	"	4
7565	"	Ø/29	4
7566	"	"	4
7569	"	Æ/29	3
757o	"	Z/27	3
7571	"	"	3
7572	"	U-V/24	3
7573	"	"	3
7575	"	T/24	2
7576	"	"	2
7578	"	T/22	2
7579	"	"	2
7581	"	T/2o	2
7582	"	"	2
7584	"	T/22	2
7586	"	R/16	2
7627	64.V.1	R/1	1
7629	"	"	1
7679	65.V.2	D/29	13
7681	"	"	13
7682	"	C/3o	1o
7688	"	E/3o	14
7689	"	"	14
7691	"	"	14
7692	"	"	14
7697	"	"	14
771o	"	B/29	7
7719	"	C/29	9
7724	"	A/3o	6
7727	"	"	6
7729	"	"	6
773o	"	"	6
7737	65.V.1	Å/3o	5
7742	"	"	5
791o	65.V.2	C/19	8
7953	"	"	8
7959	"	"	8
7975	"	"	8
8oo5	"	D/17-18	12


DANMARK
GEODÆTISK INSTITUT
GRÖNLAND 1:250 000
65 V. 1 SUKKERTOPPEN
(66 V. 1)
(64 V. 1)
A B C D E F G H I J K L M N O P Q R S T U V X Y Z Æ Ø Å
A B C D E F G H J K L M N O P Q R S T U V X Y Z
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30.
66° 54° 53° 52° 51° 50° 65° 45' 30' 15'
SUKKERTOPPEN (MANITSOQ)
KANGÂMIUT (GL. SUKKERTOPPEN)
AGPAMIUT
HAMBORGERLAND (SERMERSÛT)
Narssarmiut
Timerdlît
Ikamiut
Manîtsoq
Kangerdluarssuk
Ikerasak
Alángua
NAPASSOQ
EVIGHEDSFJORD (KANGERDLUGSSUATSIAQ)
SÖNDRE ISORTOQ
Hamborgersund (Tuno)
52° v. f. Greenwich
Surveyed 1937 and 1947–48. Corrected 1951
Geodetic Institute. Copenhagen 1957
Målt 1937 og 1947–48. Rettet 1951
Geodætisk Institut. København 1957
Copyright
1 : 250 000
kilometer 1 0 2 4 6 8 10 12 14 16 18 20 22 24 25 kilometer
1 millimeter = 250 meter
statute miles 1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 statute miles
1 inch = 3,946 statute miles
GODHAVN By igdlorpagssuaqarfik Town
SKANSEN Udsted niuvertoruseqarfik Outpost
Sioraq Boplads asimioqarfik Small village
Kommunegrænse kommuneqarfiup kigdlinga Municipality border
Eneliggende hus igdlo Isolated house
Kirkeruin oqalugfikoq itsarnisaq Church ruin
Tidligere eskimobebyggelse igdlukut Former Eskimo dwelling - place
Nordbo gårdtomt qavdlunâtsiait igdlukue Site of Norse farm
Mindre nordboruin qavdlunâtsiait igdlukúnguat Lesser Norse ruin
Höjdekurver (höjdeforskel 50 m) Contours (interval 50 m)
Krat Scrub
Anden bevoksning Other vegetation
Sand, sten og ler Sand, pebbles and clay
Delta Delta
0–ca 200 m Lavland nunap pukínera Lowland
Indlandsis Inland ice
Gletscher (bræ) Glacier
Moræne Moraine
Isbjerge (isfjelde) Icebergs
Årgammel is Palæocrystic ice
Höjfjeldis Ice cap
Havn (ankerplads) umiarssualivik (kisarfik) Harbour (anchorage)
Bådehavn umiatsialivik Boat harbour
Sömærke imarsiortunut nalunaerqutaq Navigation aid
Undervandsskær (usikker beliggenhed) ikardluk tinuneq ajugâ Submerged rock (position doubtful)
942 Höjder i meter qáqaq úgtorparput metere atordlugo Heights in meters
Trigonometrisk station med og uden varde nunamik úgtuivfik (inugsulik inugsoqángitsordlûnit) Trigonometric point with and without cairn
Radio- og telegrafstation radioqarfik Wireless station
Mine, brud piaivfik Mine
Kilde puilassoq Spring
Slædevej qimugsertarfik Sledging route
MAP SHEET 65.V1.
BL. 65 V. 2.
STEREOPLANIGRAF nr. I.
1: 250 000.
Aerotriangulation: Chr. Larsson.
Aerotriangulation: O. Haeusler.
udtegnet af: Chr. Larsson.
udtegnet af: O. Haeusler.
sammentegnet af: O. Haeusler.
afsluttet d. 1-11-1956.
MAP SHEET 65.V2.
KRYOLITSELSKABET ØRESUND A/S
GEOLOGISK-MINERALOGISK AFDELING
POSITION OF BASIC TO ULTRA-BASIC FORMATIONS SAMPLED
1965

INSTITUT (66 V. 1) DANMARK 65 V. 1 SUKKERTOPPEN GRØNLAND 1:250 000

GEODÆTISK INSTITUT (66 V. 2) 65 V. 2 MAJORQAQ

Compilation scale 1:200 000 on oblique photography 1936–37.
Planimetric detail revision on vertical photography.
Names, populated places and other details 1951.
A few essential corrections 1963.
Geodetic Institute. Copenhagen 1964.
Copyright.

(63 V. 1)

Udtegnet i 1:200 000 på grundlag af skråfotografering 1936–37.
Lineær revision på grundlag af lodret fotografering.
Navne, bebyggelse og andre topografiske enkeltheder 1951.
Enkelte rettelser 1963.
Geodætisk Institut. København 1964.
Eftertryk forbydes.

Surveyed 1937 og 1947–48. Corrected 1951
Geodetic Institute. Copenhagen 1954

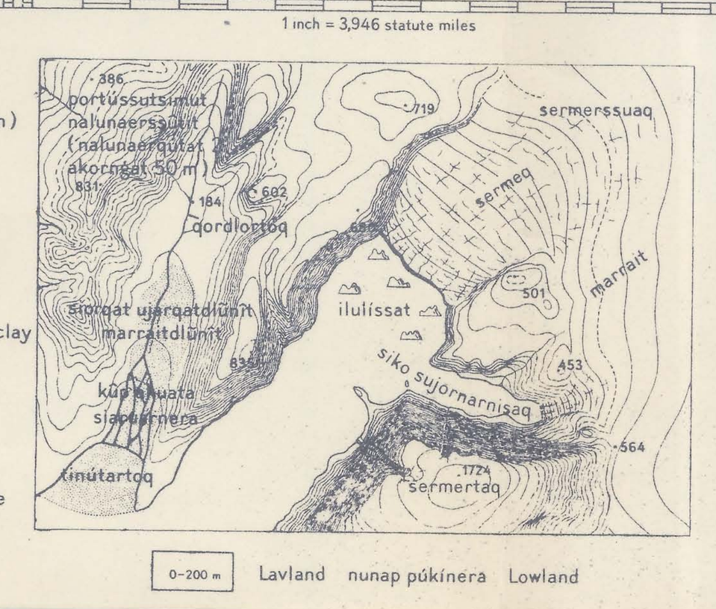
1:250 000

kilometer 1 0 2 4 6 8 10 12 14 16 18 20 22 24 25 kilometer
1 millimeter = 250 meter
statute miles 1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 statute miles
1 inch = 3,946 statute miles

GODHAVN — By / igdloqarfik / Town
SKANSEN — Udsted / niuvertoruseqarfik / Outpost
Sioraq — Boplads / asimioqarfik / Small village
TOVQUSSAQ — Fiskerihavn / aulisartunut umiarssualivik / Fish port
Kommunegrænse / kommûneqarfiup kigdlinga / Municipality border

Eneliggende hus / igdlo / Isolated house
Nordbo kirkeruin / qavdlunâtsiait oqalugfikuat / Norse church ruin
Tidligere eskimobebyggelse / kalâtdlit igdlukue / Former Eskimo dwelling-place
Nordbo gårdtomt / qavdlunâtsiait igdlukue / Site of Norse farm
Mindre nordboruin / qavdlunâtsiait igdlukûnguat / Lesser Norse ruin

Höjdekurver (höjdeforskel 50 m) / Contours (interval 50 m)
Vandfald / Waterfall
Sand, sten og ler / Sand, pebbles and clay
Delta / Delta
Tört ved lavvande / Bank dry at low tide



Lavland nunap púkínera Lowland

Indlandsis / Inland ice
Gletscher (bræ) / Glacier
Moræne / Moraine
Isbjerge (isfjelde) / Icebergs
Årgammel is / Palæocrystic ice
Höjfjeldsis / Ice cap

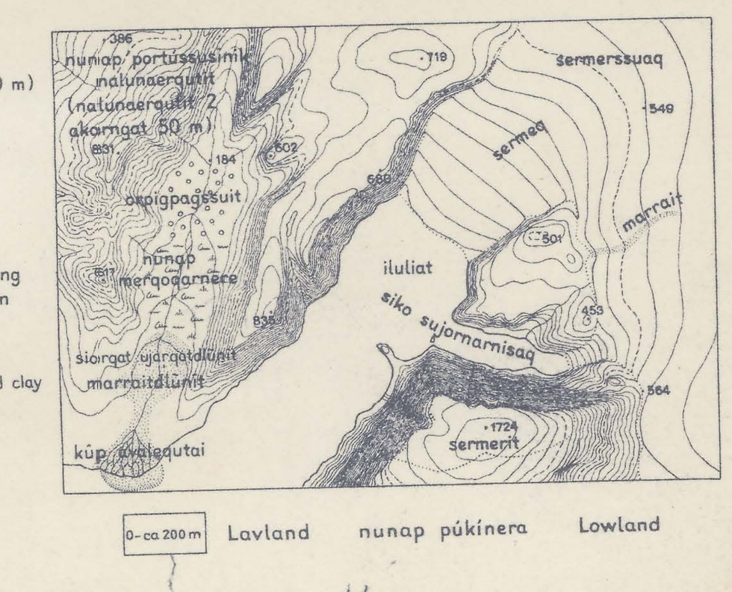
Havn (ankerplads) / umiarssualivik (kisarfik) / Harbour (anchorage)
Bådehavn / umiatsialivik / Boat harbour
Fyr / naoralaortitsivik / Light
Sömærke / umiartortunut nalunaerqutaq / Navigation aid
Undervandsskær (usikker beliggenhed) / ikardluk tinutiuitsoq / Submerged rock (position doubtful)

Trigonometrisk station med og uden afmærkning / nunamik ûgtuivfik nalunaerqutalik nalunaerqutaqángitsordlûnit / Trigonometric point, marked and unmarked
942 Höjder i meter / portússuseq mîteringordlugo / Heights in meters
Mine, brud / piaivfik / Mine
Kilde / puilassoq / Spring
Slædevej / qimugsertarfik / Sledging route
Radio- og telegrafstation / râdioqarfik / Wireless station

GODHAVN — By / igdlorpagssuaqarfik / Town
SKANSEN — Udsted / niuvertoruseqarfik / Outpost
Sioraq — Boplads / asimioqarfik / Small village
Kommunegrænse / kommuneqarfiup kigdlinga / Municipality border

Eneliggende hus / igdlo / Isolated house
Kirkeruin / oqalugfikoq itsarnisaq / Church ruin
Tidligere eskimobebyggelse / igdlukut / Former Eskimo dwelling-place
Nordbo gårdtomt / qavdlunâtsiait igdlukue / Site of Norse farm
Mindre nordboruin / qavdlunâtsiait igdlukûnguat / Lesser Norse ruin

Höjdekurver (höjdeforskel 50 m) / Contours (interval 50 m)
Krat / Scrub
Anden bevoksning / Other vegetation
Sand, sten og ler / Sand, pebbles and clay
Delta / Delta



0–ca 200 m Lavland nunap púkínera Lowland

Indlandsis / Inland ice
Gletscher / Glacier
Moræne / Moraine
Isbjerge / Icebergs
Årgammel is / Palæocrystic ice
Höjfjeldsis / Ice cap