CANADA

DEPARTMENT OF ENERGY, MINES AND RESOURCES

OPEN FILE 56

# LOG OF DRILLHOLE HOTAILUH NO. 2

NTS 104 I, BRITISH COLUMBIA

J. G. SOUTHER

OTTAWA

1971

GEOLOGICAL SURVEY OF CANADA - OPEN FILE 56

# LOG OF DRILLHOLE HOTAILUH No. 2

Location: NTS 104 I; British Columbia
58° 09.6'N, 129° 51.9'W
on the Cassiar-Stewart road

Geological Information: The hole is located in Cry Lake map-area (see Geol. Surv. Can. map 62-29, map-unit 15b). It was drilled by the Earth Physics Branch, Department of Energy, Mines and Resources for scientific purposes. The core was logged by Dr. J.G. Souther of the Geological Survey.

A sample from the lower part of the core (1390 feet) has been dated by the Geochronology Section of the Geological Survey. Results of potassium-argon determinations are 139 ± 6 m.y. on biotite and 147 ± 8 m.y. on hornblende. These ages and others from the Hotailuh Batholith will be reported and discussed in Geol. Surv. Can. Paper 71-2A, "Age Determinations and Geological Studies, Report 10" (in preparation).

Log:

| Distance from surface (in feet) | Specimen | |
|---|---|---|
| 0 to 55 | | 1 foot recovered; brecciated fragments of pink porphyry with boxwork of quartz stringers. |
| 55 to 64 | 1 | Pink feldspar porphyry with about 15% rose phenocrysts up to 1/4 inch and small clots of chloritized biotite, coarse-grained rock, highly fractured; brecciated and filled with boxwork of quartz-epidote stringers; 8 feet recovered. |
| 64 to 71 | | 2 feet recovered, pink feldspar porphyry, lower half of interval highly fractured and containing sparse disseminated pyrite crystals. |
| 71 to 77 | 2 | 6 feet recovered, first feet mineralized with disseminated pyrite cubes in quartz-filled vugs and stringers; parent rock feldspar porphyry, light pink with about 10% rose K-feldspar phenocrysts and sparse chloritized biotite; entire interval cut by stockwork of quartz fractures becoming less fractured downward, no visible pyrite in lower part of interval. |
| 77 to 80 | | 3 feet recovered, fine-grained to aphanitic feldspar porphyry, light brownish pink matrix with euhedra of rose coloured K-feldspar to 1/4 inch forming 5 to 10%, small clots of chloritized biotite and 1 to 2% magnetite; badly broken and cut by stringers and shears filled with epidote, but not quartz. |

| Distance from surface (in feet) | Specimen | |
|---|---|---|
| 80 to 83 | | 3 feet recovered, fine-grained to aphanitic brownish pink feldspar porphyry with small euhedral rhombs of rose coloured K-feldspar in some cases manteling plagioclase. |
| 83 to 88 | 3 | Continuous recovery, fine-grained brownish pink feldspar porphyry with euhedral rhombs of rose feldspar and less than 2% chloritized biotite, rock moderately fractured with joints lined with chlorite and epidote, no quartz stringers. |
| 88 to 100 | 4 (2) | Complete recovery, rock has same colour but becoming more granitic in texture; groundmass is crystalline and phenocrysts are less well defined, still about 1 to 2% chloritized biotite. |
| 100 to 106 | 5 | Complete recovery, aphanitic brownish pink feldspar porphyry with 10% rose K-feldspar rhombs and irregular plagioclase to 3/16 inch, less than 1% chloritized biotite phenocrysts. |
| 106 to 109 | | No change; no specimens. |
| 109 to 110 | | No change, rock fractured and filled with calcite stringers. |
| 110 to 113 | 6 | Complete recovery, fine-grained sparsely porphyritic quartz monzonite with rhombs of flesh coloured K-feldspar to 3/8 inch clear quartz, 10%;less than 1% chloritized biotite; a coarser grained phase of the feldspar porphyry encountered down to this depth. |
| 113 to 118 | 7 | Complete recovery, no change; fine-grained quartz monzonite with blebs of clear quartz; phenocrysts are less predominant about 1% chloritized biotite; rock peppered with finely disseminated pyrite; should be assayed. |
| 118 to 120 | 8 | 1 1/2 feet recovered, dark green chloritized shear or shear breccia zone, containing disseminated pyrite. The rock appears to be a mylonite composed of fragments of the quartz monzonite surrounded by a mesostase of chlorite, quartz and epidote; within the zone are small quartz stringers containing pyrite, and trace of chalcopyrite. |
| 120 to 122 | | Complete recovery, fine-grained to aphanitic phase of the feldspar porphyry, brownish pink aphanitic matrix containing euhedral flesh coloured rhombs of plagioclase to 3/16-inch and rounded blebs of clear quartz, less than 2% chloritized biotite, no mineralization, no specimen. |

| Distance from surface (in feet) | Specimen | |
|---|---|---|
| 122 to 125 | | Complete recovery, feldspar rhomb porphyry, brownish pink groundmass, 5% flesh coloured K-feldspar rhombs, 5% plagioclase, low quartz finely disseminated pyrite, less than 2% chloritized biotite, high magnetite. |
| 125 to 126 | 10 | Same rock, here contact with green, fine-grained green metavolcanic rock with porphyroblasts of plagioclase. Both contact and the green rock are mineralized with pyrite and chalcopyrite? |
| 126 to 136 | 11 | Green, fine-grained metavolcanic rock, possibly a deep igneous breccia zone, mineralized with small veinlets and pockets of pyrite as well as finely disseminated pyrite no visible chalcopyrite. |
| 136 to 143 | 12 | Very coarse grained mesocratic quartz monzonite with about 40% hornblende, minor biotite? and disseminated pyrite, forming less than 1%. |
| 143 to 145 | 13 | Fine-grained crudely foliated mesocratic quartz diorite or monzonite with large irregular sploches of epidote, this appears to be in sharp intrusive contact with the coarse-grained hornblende quartz monzonite; zone of epidotization extends from the contact for 6 inches to a foot into the coarse-grained rock on either side of the fine-grained foliated rock. |
| 145 to 156 | 14 | Very coarse-grained hornblende quartz monzonite. Here contact with what is probably a dyke rock; there appears to be a chilled selvage against the coarse-grained quartz monzonite, the dark rock appears to be an andesite with small plagioclase (about 1/16 inch); a little veining and fine dissemination of pyrite in the dyke rock. |
| | 15 | Contact. |
| 156-163 | 16 | Fresh purplish grey porphyritic andesite with 10% phenocrysts of white plagioclase to 2mm and small amount of pyrite and a trace of chalcopyrite. |
| 163-168 | 17 | In this zone the andesite, which is probably a dyke appears to be altered to a light green rock containing considerable epidote and chlorite as well as disseminated pyrite. |
| 168-191 | 18(and) | Continuous dark andesite with a sprinkling of small feldspar phenocryst (at 172 feet), small amount of disseminated pyrite; this could be an inclusion, contains spots that are rich in epidote. |
| | 19 | Andesite cut by stringer of the quartz monzonite porphyry (at 176 feet). |

| Distance from surface (in feet) | Specimen | |
|---|---|---|
| | 20 | At 183 feet. |
| | 21 | At 191 feet showing contact with coarse-grained quartz monzonite. |
| 191 to 201 | 22 | Coarse-grained hornblende quartz monzonite (taken at 197 feet). |
| | 23 | At contact<br>At 201 feet the coarse-grained rock is in contact with black to dark grey very fine-grained sparsely finely porphyritic andesite?; contact strongly mineralized with pyrite across an interval of 2 to 3 inches, mineralization takes the form of fine-grained stringers parallel to contact. |
| 201 to 223 | | Dark grey porphyritic andesite, the contact zone for a distance of 1 foot to 18 inches adjacent to the country rock is very fine-grained with an alignment of phenocrysts parallel to the contact; the main body of the andesite is fine-grained with large 2 to 3mm phenocrysts of feldspar unoriented in a grey crystalline matrix; the entire andesite interval is sparsely mineralized with disseminated pyrite clots up to 3 mm in diameter. |
| | 24 | At 214 feet.<br>Lower contact suggests that the coarse quartz monzonite is intruded by the andesite. There is a decrease in grain size in both rocks, however as the contact is approached the coarse-grained quartz monzonite appears to have been brecciated and surrounded by the andesite. Contact mineralized with fine veinlets of pyrite and possibly some chalcopyrite. |
| | 25 | (Contact). |
| 223 to 225 | | Coarse-grained hornblende quartz monzonite, the upper contact with andesite is again mineralized with veinlets of pyrite. No specimen. |
| 225 to 235 | | Fine-grained andesite porphyry showing distinct decrease in grain size and decrease in abundance of phenocrysts as the upper and lower contacts are approached; both contacts contain disseminated pyrite and small veinlets of pyrite. |
| | 26 | At 232 feet. |
| 235 to 273 | | Entirely very coarse-grained hornblende quartz monzonite. At several places within this interval the crystalline rock is cut by small basaltic or andesitic dykelets in which fragments of the wall-rock are suspended. |

| Distance from surface (in feet) | Specimen | |
|---|---|---|
| | 27 | At 243 feet. |
| | 28 | At 252 feet. |
| | 29 | At 260 feet. |
| 273 to 299 | | Rock is highly mylonitized, fine-grained with a strong random foliation, much feldspathization and joint zones covered with chlorite; lower part of interval shows strong fracturing combined with flowage and development of fractures with pyrite and possibly some chalcopyrite. |
| | 30 | At 279 feet. |
| | 31 | At 298 feet. |
| | 32 | Lower contact. |
| 299 to 306 | 33 | Coarse-grained hornblende quartz monzonite, strongly mineralized with pyrite, the mafic minerals, largely chloritized hornblende, have been partly replaced by sulphides. |
| | 34 | Contact; with stringers and clots of pyrite. |
| 306 to 324 | | Complex dark andesitic dyke rock, mainly fine-grained dark grey with 1 to 2% phenocrysts of white plagioclase from 1 to 3 mm. The lower part of the dyke is darker andfiner grained than the upper portion. Throughout the dyke are inclusions, some irregular as though partial melting had occurred. The inclusions are coarse grained hornblende quartz monzonite similar to the intruded rock. Fractures and veinlets throughout the dyke are coated with pyrite, quartz and epidote. Epidotization and general alteration are more intense in the lower half of the dyke than in the upper portion. |
| | 35 | (Interval showing the relation between the dyke rock and included fragments of quartz-monzonite, at 310 feet). |
| | 36 | At 312 feet. |
| | 37 | At 320 feet. |
| 324 to 330 | | Coarse-grained, highly altered quartz monzonite or monzonite, mainly flesh coloured feldspar with ragged patches of hornblende and chlorite to 5 mm. Entire interval strongly mineralized with pyrite. |
| | 38 | At 326 feet. |

| Distance from surface (in feet) | Specimen | |
|---|---|---|
| 330 to 333 | | Complete recovery, strongly epidotized dyke or mylonite zone with disseminated pyrite, dark green, fine-grained rock with rhombs of pink feldspar to 2 mm. |
| | 39 | At 332 feet. |
| 333 to 340 | | 75% recovery, medium-grained leucocratic quartz monzonite, pink with flesh coloured feldspar rhombs and round quartz grains to 1 mm, strongly pyritized and fractured with joint surfaces covered with chlorite and pyrite. |
| | 40 | At 336 feet. |
| 340 to 344 | | Green, fine-grained andesite or greywacke? Has texture of greywacke but contact relations suggest that it intruded the coarse-grained quartz monzonite. Probably another dyke. |
| | 41 | At 342 feet. |
| 344 to 349 | | Coarse-grained quartz monzonite, hornblende quartz monzonite with disseminated pyrite. |
| | 42 | At 348 feet. |
| 349 to 359 | | 80% recovery, highly fractured and epidotized dyke rock badly jointed, joints replaced with epidote and pyrite also disseminated pyrite. |
| | 43 | At 352 feet. |
| 359 to 366 | | Coarse-grained hornblende quartz monzonite, in lower 2 feet of interval feldspar stained pink and strongly epidotized and extensive veining with pyrite. |
| | 44 | (Upper contact containing pyrite). |
| | 45 | Centre of interval<br>At 366 feet sharp contact with fine-grained andesitic rock containing needles of hornblende and disseminated pyrite, possibly some chalcopyrite. |
| 366 to 380 | | Fine-grained nonporphyritic andesite with small hornblende crystals sparse feldspar phenocrysts to 2 mm; has the texture of a greywacke, however almost certainly a dyke rock. |
| | 46 | At 379 feet. |
| | 47 | Lower contact. |

| Distance from surface (in feet) | Specimen | |
|---|---|---|
| 380 to 386 | | Coarse-grained quartz monzonite, hornblende quartz monzonite with patches of epidote and a few widely spaced veins of pyrite. |
| | 48 | At 383 feet. |
| 386 to 388 | 49 | Fine-grained purplish grey andesite dyke with angular inclusions of the quartz monzonite. |
| 388 to 395 | 50 | Medium-grained hornblende biotite granodiorite about 40% mafics crudely foliated and white anhedral plagioclases, no mineralization. |
| 395 to 413 | 51 | Mixed zone comprising ...? |
| 413 to 431 | 52 | Coarse-grained hornblende-biotite quartz monzonite interval contains a few inclusions 1 to 2 feet through similar to last interval. |
| 431 to 452 | | Hybrid zone of igneous inclusions spotted with epidote containing large porphyroblasts of feldspar and clots crystalline rock could be a mylonitized or mobilized zone; few small stringers of pyrrhotite and pyrite, may be small amount of chalcopyrite (see second specimen). |
| | 53 (2) | |
| 452 to 460 | 54 | Coarse-grained hornblende biotite granodiorite, crude foliation, colour index 30. |
| 460 to 483 | | Coarse-grained hornblende-biotite quartz monzonite with biotite clusters up to 1 cm. |
| | 55 | At 468 feet. |
| 483 to 485 | 56 | Mafic-rich band with colour index about 40, hornblende and biotite in a pink quartz monzonite or granodiorite. |
| 485 to 515 | | Coarse-grained hornblende-biotite quartz monzonite, very coarse biotite in books up to 1 cm. |
| | 57 | At 489 feet. |
| | 58 | At 502 feet. |
| | 59 | At 509 feet. |
| 515 to 518 | 60 | Hydrothermally altered zone of coarse-grained quartz monzonite in which the feldspar has been changed to a rose coloured material partly replaced by epidote, interval veined by epidote and small stringers of pyrite. |

| Distance from surface (in feet) | Specimen | |
|---|---|---|
| 518 to 534 | | Continuous coarse-grained hornblende-biotite quartz monzonite. |
| | 61 | At 523 feet.<br>At 534 feet, 1 foot hydrothermally altered zone, feldspar bleached, altered pink, rock veined by pyrite. |
| 534 to 545 | | Coarse-grained hornblende biotite quartz monzonite, colour index 30, mafics to 5 mm. |
| | 62 | At 537 feet. |
| 545 to 555 | | Dark, fine-grained dioritic phase, colour index 55 to 60, probably just a large inclusion or screen, disseminated sulphides mainly pyrite and pyrrhotite but may include some small veinlets of chalcopyrite. |
| | 63 | At 550 feet. |
| 555 to 570 | | Coarse-grained hornblende-biotite quartz monzonite. |
| | 64 | At 565 feet. |
| 570 to 575 | | Hydrothermally altered zone; in coarse-grained hornblende-biotite quartz monzonite, feldspar bleached, coloured pink, many clots of epidote and amphibole-epidote stringers some containing traces of pyrite, and pyrrhotite. |
| | 65 | Mid-point. |
| 575 to 580 | | Continuation of same altered zone, no specimen. |
| 580 to 585 | | Coarse-grained hornblende-biotite quartz monzonite. |
| | 66 | Mid-point. |
| 585 to 586.5 | 67 | Fine-grained grey dyke rock mineralized with veinlets of pyrite chalcopyrite and epidote. |
| 586.5 to 588 | | Normal coarse-grained hornblende-biotite quartz monzonite. Here contact with second dyke. |
| 588 to 590 | | Fine-grained andesite dyke, at steep angle to core; no specimen. |
| 590 to 592 | | Hydrothermally altered zone of coarse-grained hornblende-biotite quartz monzonite, containing spots of epidote and a small amount of pyrite; no specimen. |

| Distance from surface (in feet) | Specimen | |
|---|---|---|
| 592 to 597 | 68 | Medium-grained melanocratic phase of hornblende-biotite quartz diorite. |
| 597 to 612 | | Hydrothermally altered phase of coarse-grained hornblende-biotite quartz monzonite. Feldspar reddened, much epidote; interval appears to be running nearly parallel to a basic dyke contact and portions of the dyke show on the core running parallel to it; this is responsible for the alteration; it would appear that the alteration extends for a very short distance on either side of the dyke rock, however the long intersection here is due to the nearly parallel relationship between the core and the contact. |
| | 69 | At 609 feet. |
| 612 to 623.6 | | Very fine-grained, nonporphyritic medium grey dyke rock containing disseminated sulphides and small veinlets of sulphides; this intersection appears to be of a nearly vertical dyke; there is a very low angle between the hole and the dyke. The dyke is much thinner than the drill intersection. |
| | 70 | At 615 feet. |
| 623 to 655 | | Typical coarse-grained, fresh hornblende-biotite quartz monzonite, uniform texture, here and there within the rock are a few small stringers containing some pyrite and possibly a little chalcopyrite. |
| | 71 | At 644 feet. |
| 655 to 659 | | Fine-grained basaltic or andesitic dyke at high angle to core. |
| | 72 | Mid-point |
| 659 to 689 | | Coarse-grained hornblende-biotite quartz monzonite with greater than normal degree of foliation, several schlieren zones intersected by the core. |
| | 73 | At 673 feet. |
| 689 to 710 | | Coarse-grained hornblende-biotite quartz monzonite; hydrothermally altered locally with patches of epidote and chlorite and stringers and disseminated pyrite, the amount of sulphide in this interval is very small; the sample containing the richest section; rock relatively leucocratic with a high degree of chloritization of the mafics. |
| | 74 | At 704 feet. |

| Distance from surface (in feet) | Specimen | |
|---|---|---|
| 710 to 733 | | Medium grey aphanitic to very fine grained andesite or basalt dyke cutting hole at about 20 degrees, contains small patches to 3 mm of epidote with cores of pyrite and a few small very thin fractures lined with epidote and chlorite. |
| | 75 | At 722 feet. |
| 733 to 741 | | Coarse-grained hornblende-biotite quartz monzonite, colour index 20 containing both large hornblende and large biotite; lower two feet of interval contains narrow hydrothermally altered zones in which are thin veinlets of pyrite, adjacent to these the rock is altered to a pink colour. |
| | 76 | At 738 feet. |
| 741 to 744 | | Fine-grained andesite dyke rock, cutting coarse-grained quartz monzonite at a very low angle. |
| | 77 | Lower contact. |
| 744 to 804 | | Very uniform coarse-grained pinkish grey coarse hornblende-biotite quartz monzonite, interval contains a few small sections 6 inches to a foot across in which the rock has been bleached white and veined with epidote and chlorite with a little pyrite, otherwise interval is extremely uniform. |
| | 78 | At 762 feet. |
| | 79 | At 780 feet. |
| | 80 | At 797 feet. |
| 804 to 817 | | Very coarse-grained hydrothermally altered coarse-grained hornblende-biotite quartz monzonite, feldspar bleached and altered to flesh colour, patches and veins of epidote with small amounts of pyrite rock relatively leucocratic with colour index of about 15. |
| | 81 | At 810 feet. |
| 817 to 834 | | Fine-grained melanocratic dioritic phase, colour index 55 to 60, a few intervals altered to contain porphyroblasts of pink K-feldspar, in most cases however interval has uniform dioritic texture, nonfoliated. |
| | 82 | At 824 feet. |
| 834 to 840 | | Interval of highly fractured core, probably corresponding to a mylonitized dyke, completely shattered with many hairline cracks running through the rock, no mineralization but much chlorite, epidote and possibly carbonate. |

| Distance from surface (in feet) | Specimen | |
|---|---|---|
| | 83 | Mid-point. |
| 840 to 859 | 84 | Fine-grained uniform hornblende diorite, melanocratic, colour index 60. |
| 859 to 867 | | Andesite dyke, intersected at 30 degrees, medium grey aphanitic rock, nonporphyritic with spots of epidote, few small stringers of pyrite. |
| | 85 | At 864 feet. |
| 867 to 892 | | Melanocratic dioritic inclusion swarm or migmatite zone comprising comprising angular to rounded inclusions of mafic rock in relatively less mafic rock, also what appear to be large inclusions or remnants of the coarse-grained hornblende-biotite quartz monzonite, this is probably an inclusion swarm. |
| | 86 | At 883 feet. |
| 892 to 925 | | Very coarse-grained hornblende-biotite quartz monzonite, colour index 20 no mineralization or alteration, two small fine-grained mafic inclusions. |
| | 87 | At 908 feet. |
| 925 to 929 | | Pink, leucocratic aplite. |
| | 88 | Mid-point. |
| 929 to 939 | | Pink and white mottled coarse-grained hornblende-biotite quartz monzonite. |
| | 89 | At 935 feet. |
| 939 to 949 | | Agmatite zone, comprising a swarm of inclusions of more mafic fine-grained material in less mafic coarse-grained material, fragments comprise 80% of interval, very nebulitic relationships between fragments and matrix, overall colour index 60 to 80. |
| | 90 | Mid-point. |
| 949 to 965 | | Fine-grained leucocratic aplite dyke. |
| | 91 | Mid-point. |
| 965 to 983.5 | | Fine-grained melanocratic agmatite zone, colour index 60 to 70, no mineralization. |
| | 92 | At 980 feet. |

| Distance from surface (in feet) | Specimen | |
|---|---|---|
| 983.5 to 1014 | | Uniform textured, coarse-grained hornblende-biotite quartz monzonite, colour index 15. |
| | 93 | At 1,000 feet. |
| 1014 to 1021 | | Fine-grained biotite aplite dyke appears to be at nearly right angles to the core. |
| | 94 | At 1,017 feet. |
| 1021 to 1062.5 | | Very uniform interval of coarse-grained hornblende-biotite quartz monzonite, light pinkish grey feldspar and mafic clusters up to a centimetre across. |
| | 95 | At 1,047 feet. |
| 1062.5 to 1064 | | Small mafic inclusion. |
| 1064 to 1080 | | Typical coarse-grained hornblende-biotite quartz monzonite with mafic clots up to 1 cm, a small interval near the base of this interval has been hydrothermally altered and a little epidote formed in stringers, otherwise fresh. |
| | 96 | At 1,073 feet. |
| 1080 to 1850 | | Dioritic, melanocratic but biotite-rich clot or zone nonfoliated, fine-grained, no mineralization. |
| | 97 | Mid-point. |
| 1085 to 1147.5 | | Very uniform coarse-grained hornblende-biotite quartz monzonite. |
| | 98 | At 1,088 feet. |
| | 99 | At 1,116 feet. |
| | 100 | At 1,129 feet. |
| 1147.5 to 1159 | | Fine-grained hornblende-biotite aplite with colour index 10. |
| | 101 | At 1,156 feet. |
| 1159 to 1168.5 | | Typical hornblende-biotite quartz monzonite, coarse-grained, similar to previous intervals; no specimen. |
| 1168.5 to 1169.5 | | Leucocratic aplite or healed mylonite zone, felsitic, light coloured rock with moderately good foliation with neubulitic mafics comprising 10 to 15%; no specimen. |

| Distance from surface (in feet) | Specimen | |
|---|---|---|
| 1168.5 to 1172 | | Complex secondary diorite, hornblende-rich rock, altered and veined with chloritic stringers containing pyrite pyrrhotite and chalcopyrite in substantial amounts. |
| | 102 | Lower part of interval. |
| 1172 to 1175 | | Coarse-grained hornblende-biotite quartz monzonite, no mineralization; no specimen. |
| 1175 to 1177 | | Medium-grained aplite with hornblende biotite to 10%; no specimen. |
| 1177 to 1192 | | Complex migmatite zone or hydrothermally altered and sheared zone including some greenstone fragments within the granitic rock, entire interval is veined by pyrite, chlorite stringers also contains clots and disseminations of pyrite associated with minor amounts of chalcopyrite, the latter occurring in pieces or grains up to one cm long. |
| | 103 | At 1,183 feet. |
| | 104 | At 1,186 feet.<br>The width of this zone may be more apparent than real as the veins appear to run parallel to the core. |
| 1192 to 1198 | | Typical coarse-grained hornblende-biotite quartz monzonite. |
| | 105 | Mid-point. |
| 1198 to 1199 | | Basalt dyke, intersecting at low angle; no specimen. |
| 1199 to 1200 | | Coarse-grained hornblende-biotite quartz monzonite; no specimen. |
| 1200 to 1204 | | Basalt or andesite dyke, fine-grained medium grey rock not porphyritic, intersecting at about 20 degrees. |
| | 106 | Mid-point. |
| 1204 to 1207 | | Pink fine-grained hornblende-biotite aplite; no specimen. |
| 1207 to 1221 | | Typical coarse-grained hornblende-biotite quartz monzonite. |
| | 107 | At 1,214 feet. |
| 1221 to 1228 | | Mainly fine-grained aplite but containing a few zones of the typical coarse-grained hornblende-biotite quartz monzonite and a few dark inclusions. |

| Distance from surface (in feet) | Specimen | |
|---|---|---|
| | 108 | At 1,224 feet. |
| 1228 to 1246 | | Fine-grained mafic micro-dioritic phase, non-foliated very uniform, contains a few sections of fine-grained leucocratic aplitic rock from 2 to 6 inches across, remainder of interval is very uniform, fine, even-textured micro-diorite. |
| | 109 | At 1,240 feet. |
| 1246 to 1248 | | Leucocratic or mesocratic fine-grained aplite |
| | 110 | Mid-point. |
| 1248 to 1257 | | Typical coarse-grained hornblende-biotite quartz monzonite. |
| | 111 | At 1,253 feet. |
| 1257 to 1269 | | Fine-grained mesocratic, microdiorite, predominantly a hornblende, plagioclase rock, minor biotite with long lath-like to needle-like hornblende, very uniform throughout with crude orientation of mafic minerals adjacent to both upper and lower contacts. |
| | 112 | At 1,262 feet. |
| 1269 to 1271 | | Typical coarse-grained hornblende-biotite quartz monzonite; no specimen. |
| 1271 to 1274 | | Fine-grained mesocratic micro-diorite, probably a mafic inclusion; no specimen. |
| 1274 to 1351 | | Continuous coarse-grained hornblende-biotite quartz monzonite. |
| | 113 | At 1,277 feet. |
| | 114 | At 1,298 feet. |
| | 115 | At 1,303 feet. |
| | 116 | At 1,335 feet. |
| | 117 | At 1,344 feet. |
| 1351 to 1386 | | Fine-grained melanocratic microdioritic zone, fairly uniform with slight nebulitic variation from lighter to darker phases, ranges between colour index of 40 to 60, overall aspect is very uniform fine-grained even-textured rock. |

| Distance from surface (in feet) | Specimen | |
|---|---|---|
| | 118 | At 1,365 feet. |
| | 119 | At 1,379 feet. |
| 1386 to 1401 | | Typical coarse-grained, hornblende-biotite quartz monzonite. |
| | 120 | Mid-point. |

BOTTOM OF HOLE

LOCATION OF DRILL-HOLE "HOTAILUH #2", 58°-09.6'N 129°51.9'N, NTS 104 I