

ANT/SHE/09

MEMORANDUM

0048

②

BUNGER HILLS

1986

9/2/86

(84) S end of Charnockite body

massive charnockite, cut by
porphyritic dolerite dyke, trend 270
(dip 40°S)

Charnockite contains conspicuous
biotite X's

5951 Charnockite

5952 Dolerite dyke (BH 30) (~30cm)

5953 Charnockite

(85) SW outcrop of Burger Hills

Mainly rather layered pyroxene
gneiss, including massive granitic
gneiss. Some thin layers & inclusions
of garnet-keratite gneiss

Cut by dolerite dyke (~3m)

5954 Dolerite dyke

5955

5956

felsic

~~Massive gneiss~~ ~~the~~ ~~gneiss~~ ~~layer~~~~rather mafic~~ ~~felsic~~ ~~gneiss~~ (? pyroxene) + biotite(86) W end of Lake Volgoe

Rather layered gneisses, predominantly pyroxene gneisses, but with much biotite. Quite friable in places. Some interlayered garnet gneiss is also present.

Cut by 60cm ? alkaline dyke

5957 Dyke (BH 31) (dip 176/50)

5958-60 felsic pyroxene gneiss

5961 Garnet leucogneiss

(87) W. Charnokite contact

Charnokite gives way to felsic pyroxene gneiss within a few metres (actual contact not exposed). No evidence for mafic (subvolc) transitional zone.

5962 Charnokite

5963 Garnet gneiss from near contact

10/2/86

(88) ~11km N of Camp

Dolerite dyke cutting layered
pyroxene gneiss. Tightly folded
(prob. fr). ~~The~~ Dip of dolerite
~325/20 (1 m thick)

5964 Dolerite dyke (BH 32)

5965 Pyroxene gneiss

Just N of Camp

Dolerite dyke (~40 cm thick 125)
cutting layered garnet gneiss + some
pyroxene gneiss

5966 Dolerite dyke (BH 33)

5967 Garnet gneiss

11/2/86

(89) NW Charnockite Peninsula

Charnockite becomes rather fine grained and, at least locally, more melanocratic towards W (supposed contact with metagabbro). There are inclusions of mafic granulite, commonly, but not exclusively, of dyke-like form (? syn-plutonic). The charnockite is relatively heterogeneous here, with numerous pegmatitic veinlets and segregations. There are also X-cutting pink pegmatite & dolerite dykes. Shear zones and mylonites cut the mafic granulite "dykes" and some, at least, the dolerites (sheared margins) & pink pegmatite. No gradational contact with metagabbro seen.

5968 Melanocratic charnockite near W end of peninsula

5969 Mafic inclusion

5970 Megacrystic dyke (~30 cm) - ^{highly} irregular
shape - but continuous; cut by thin
pegmatite,

5971 Dolerite dyke (~120°, ~35m)
(BH 34)

5972 Fine, even grained phase of
charnockite (may be pyroxene
series in places?)

5973 2m dolerite dyke, trend 140° (BH 35)

5974, # Even grained charnockite

5975, # Coarse grained charnockite

5977 Dolerite dyke (trend 150°, ~5m) (BH 36)

The even grained charnockite grades into
megacrystic charnockite in places, in others
coarse, pegmatitic charnockite intrudes
fine, even-grained charnockite. The
intrusive relationships are complex.
Dyke 5973 has a sheared margin,
and is cut by a shear zone at one
place. Many shears & mylonites
at this locality.

12/2/86

(90) NE Highjump Arch (NW side)

Layered massive felsic gneiss -
pyroxene gneiss with some interlayered
mafic granulite. The felsic gneiss locally
contains garnet

5978 Felsic gneiss

5979 Felsic gneiss with minor garnet

(91) NE Highjump Arch (SE side)

Mostly layered garnet-bearing gneisses -
rather migmatitic & cordierite (mass small
tight to isoclinal folds). Much
garnet leucogneiss, and some mafic
granulite. Garnet development
associated with shear zones & pegmatite
veins, even in mafic granulite units

5980 Garnet leucogneiss

5981 Mafic layer (pyroxene granulite)

5982, 3 Garnet gneiss (rather massive
with greenish feldspar)

(92)

Ntk just to east

Similar to last locality - mainly
garnet gneiss + mafic granulite. The
latter are clearly discordant in some
places. Some mafics have widespread
development of garnet in small aggregates
(≈ 5 mm across)

- 5984 garnet granulite
- 5985 mafic granulite

(93)

Highjump Arch, 5 km W of Astro Point

(also Ntk just to E)

mainly charnockite, mostly rather
melanocratic and even granitic. With
numerous pegmatitic segregations and
agmatitic structures. Some mafic xenoliths
also present

5986 mafic inclusion (for more mafic

phase of charnockite intruded by felsic)

59878 Charnockite

(94) 3 km SW of above

5989 massive charnockite

(95) 2 km N of above

Layered felsic gneiss (rather biotite rich) with many leucocratic pegmatitic layers.

Cut by dolerite dykes which post-date pink pegmatite veins

5990 Felsic gneiss (BH40)

5991 Dolerite dyke (~10m, trend 110°)

Felsic veins (sub-concordant) cut by 2 sets of thin ultramylonite zones which both ~~pre~~^{post}-date pink pegmatites.

Some interlayered mafic granulite and subconcordant pink granites (part associated with pegmatites)

10K

(96) LNW of Chacabata Peninsula

Strongly layered gneiss - felsic, mafic and garnet-bearing. The mafic layers are partly banded, intruded by felsic material. Also present are layers, sometimes borders of garnet-rich gneiss.

5992 mafic granulite

5993 Felsic gneiss (intrusive)

5994,5 Garnet gneiss (partly mafic), with felsic parts

(97) NE Neck of N. Highjump Arch (Repeat group) (KJT)

5996 Dolerite dyke (6 m trend 010) (BH37)

(98) Astro Point - E Highjump Arch (KJT)

5997 Dolerite dyke (30m trend \approx N-5) (BH58)

(99) Small island ~ 8km N of Charnokite Peninsula (RJT)

5998 Dolerite dyke (1m, 125' vert) (BH 39)

5999 Charnokite vein

13/2/86

(100) Mt. Strathcona (main peak)

mainly garnet-kistite gneiss with
interlayered felsic (? kistite) gneiss
and quartzite. Dip ~ 330/65
Garnet gneiss is rather migmatitic
with small concordant felsic veins

6000, 1 Garnet gneiss

6002 Felsic kistite gneiss

6003 Quartzite

(101) Mt. Barr-Smith

Layered felsic kistite gneiss with
much quartzite (minor garnet + kistite)
Dip 155/85

6004 felsic biotite gneiss ↘
6005 Biotite quartzite ↘

(102) Cape Horn

massive garnet-biotite gneiss — foliated
granite? with subconcordant
garnet aplite layer. mafic inclusion
is also subconcordant

Wp ~ 130/30

6006 Garnet biotite granite gneiss
6007 Garnet aplite
6008 mafic xenolith

(103) Cape Jones N

Strain $T_r 175^\circ$ (but very variable)
massive pyroxene gneiss. with some
thin mafic layers and schlieren
much like Okroder Hills

6009 massive felsic pyroxene gneiss
6010 Altered basalt (greenstone from
mt Sander?) (float)

6011 massive felsic gneiss

(104) Cape Jones S (RJT)

6012 massive felsic gneiss

(105) Possession Rocks (RJT)

6013 Samek krotka granite gneiss

14/2/86

(106) Baldwin Rocks (train)

massive porphyritic charnockite, cut by
pos. felsic dykes (v et altered, & not seen in
situ) - trend $\sim 50^\circ$

6014, 5 massive charnockite

6016, 7 Dykes (felsic with fld? phenocrysts)

(107) NCK 3 miles W of Kableman Rocks

massive pink porphyritic granite (brilliant)
All NCK is the same

6018-20 Granite

(108) NCK 2 miles S of above

Pink, more even-grained granite
cut by thin (10 cm) mafic granitic
dyke

6021 Granite

6022 mafic dyke

(109) Watson Bluff (summit)

massive charnockite with biotite (dark brown)
6023, 4 charnockite

(II) Cape Gerlach (NE)

Layered pyroxene gneisses ~~cut~~ with
major granulate dykes (slightly discordant)
Cut by possible alkaline dyke
(not seen in ~~the~~ site, and may
be concordant)

Trip ~ 135/90

6025 Felicit pyroxene gneiss

6026, 7 Possible alkaline dyke (rich
in biotite flakes)

6028 (Cape Jones moraine) —
Greenstone (altered breccia) with minor
pyrite

(III) Cape Kennedy (RJT)

Massive melanocratic charnockite
cut by pink aplitic granite veins.
Possible felsic dykes may pre-date
this granite

- 6029 Feluc ? dyke
 6030, 1 melanocratic charnockite
 6032 Pink granite vein

(112) Watson Bluff SW

6033 massive charnockite

15/2/86

(113) Chugunor Is

Entirely moraine covered

Possible andesitic volcanics + much
 sandstone + rare "greenstone" (altered
 mafics) in moraine (as well as metamorphics)

6034, 5 ? Andesite

3 small ridges to rt are almost
 un-saturated - feluc gneiss, mafic gneiss,
 and even-grained granite. Feluc gneiss
 contains kyanite (\pm rare garnet)

6036 Feluc gneiss (kyanite)

6037 Granite (cut, gneiss)

6038 Feluc gneiss (kyanite + ? pyroxene)

16/2/86

31 Thomas Island East

Near Western dolerite dyke (sample 5660) - massive felsic gneiss with marked foliation - pink in colour with thin irregular mafic layers and schlieren. Minor garnet present

6039 felsic gneiss

Near paleomagnetic site, layered felsic gneiss (some gtl) is intruded by even-grained, but somewhat foliated charnockite. The actual contact is quite strongly deformed, but nevertheless discordant. Mafic granitic layers in the gneiss are folded & locally discordant, hence probably represent an earlier phase of dyke emplacement

6040 mafic granulate

6041 Pink granite (associated with pegmatite) cutting felsic gneiss

6042 Charnokite (also contains
mafic inclusions & possible ^{granite} dikes)

The pink granite is undeformed and
presumably post-dates the charnokite
also. The latter is clearly cut
by mylonite / pink pegmatite zones
and also even parallel granite veins.
These granites are essentially
undeformed & cut the mafic layers
in the gneiss.

Mafic granitoid layers do cut the
charnokite & are probably cut by
the pink granite / pegmatite. These
granite veins are essentially
subconcordant in general, but clearly
post-date the gneiss foliation.

(112) W side of island S of E Thomas

mafic granitoid dikes (metamorphosed)
are largely concordant, but are locally
cross-cutting. They are boudinaged.

and folded in some places; ~~not~~ particularly
broken up where cut by pink granite/
pegmatite veins. The country rocks
are mainly rather massive, migmatitic
gneiss.

6043 mafic granulite dyke (subconcordant)

6044 mafic granulite (folded, banded, etc.,
but cleaved, discordant)

6045 massive mafic granulite (subconcordant)

Relationships between folded & concordant
granulites not clear

Cut by 40cm mafic dyke (dolerite)

6046 mafic dyke (Ford ~015) (200/70-24)

6047 gneiss banded gneiss

(113) Island N of Chamokite Pen (West)

Massive chamokitic rocks, mostly
rather felsic with some melanocratic
phases. Inclusions of mafic granulite
(much biotite). Many mylonites and

pegmatitic veins and segregations
Cut by at least 2 sets of
dolerite dykes - subhorizontal
cuts vertical, N5 trending set

- 6048 Dolerite dyke (Trend 125) (BH 46) (~3m)
- 6049 Dolerite (subhorizontal) (BH 48) (~50cm)
- 6050 Dolerite dyke (Trend 125) (BH 47) (~0.3m)
- 6051, 2 Vm grained charnockite
- 6053 Mafic granitic inclusion

(114) Lame Island (E end)

Layered metasediments cut by
thin dolerite dykes. Trend 070/vertical

- 6054 Dolerite dyke (Trend 125, 70cm) (BH 49)

Metasediments include garnet gneiss
and calc-silicates, as well as interlayered
felitic gneiss and pyroxene gneiss.

Cut by probable alkaline dyke trend 125°

- 6055 ? Alkaline dyke

- 6056, 7 Garnet gneiss (biotite garnet)

18/2/66

(115) Peninsula W of Fuchtail Bay

Massive charnockite with minor garnet

6058 charnockite (minor garnet)

6059 Dolomite (3-4m trend 145°)

6060 Charnockite

6061 Garnet charnockite

Contact with migmatitic garnet gneiss
not well exposed, but ~~with~~
generally concordant. However, clear
intrusive contacts present in some places
and charnockite contains blocks
of garnet gneiss and pyroxene gneiss.
Dip of gneiss on NW side $260/70^\circ$

6062,3 migmatitic garnet gneiss

6064 Pink granite vein from migmatite
(subconcordant)

(116) W of inlet on W side of Fuchtail Bay

Charnockite with garnet, some charnockite
looking garnet gneiss with chert-like garnet

6065 Garnet charnockite

25/11/86

(117) NE Fichtel Bay

Layered pyroxene gneiss up 255/35
cut by thin (30cm) dolerite trend 110°

6066 felsic pyroxene gneiss

6067 Dolerite (trend 110°) (BH50)

6068 felsic pyroxene gneiss

Interlayered with garnet gneiss and
qtz quartzite and cut by pink pegmatites
(quite discordant) > some alteration
zones > mylonites

6069 Garnet gneiss

6070 Felsic pyroxene gneiss

6071, 2 Garnet gneiss

Pyroxene gneiss (dk grey) has some
garnet where adjacent to garnet-rich
gneiss (6071 is "charoite" in colour)

Subconcordant (but intrusive relations locally obvious) pink-cream garnet granite (~5-6m thick)

6073 Fine grained garnet granite

6074 Garnet gneiss (charnockitic)

6075 Large dolerite dyke (~40m)

6076 Dolerite (80cm trend 105°) (BH51)

(118) NW side of Fichtal Bay

Mostly massive felsic pyroxene gneiss cut by dolerite dyke (thickness ~1-5m variable, trend ~130°)

6077 Dolerite dyke (trend 130°) (BH52)

6078 Felsic gneiss (massive, ? pyroxene)

6079 Pink to white, even-grained to pyroxenitic granite with minor garnet

The felsic gneiss is v. massive, & contains prot. pyroxene however, kistite is conspicuous and the gneiss is locally well foliated

To west is an outcrop of pink granite
(garnet-bearing) with layers + schlieren
of gt-biotite gneiss.

6080 Garnet-biotite gneiss

This passes upwards into massive
charnockitic gneiss — subconcordant
contact, but pink granite/pegmatite
appears to intrude the charnockitic
gneiss — the latter is coarser grained than
that at the landing place, and less
layered. It may be part of the intrusive charnockite.

6081 Charnockitic gneiss

Massive charnockitic gneiss in bluffs
to S, SE of above outcrop — does not
look retrogressed.

6082 massive pyroxene gneiss

Just to E of this place is more like
landing place — much biotite in the
gneiss which has a more distinct
foliation.

6083,4 massive blue gneiss (biotite)

6085 Subhorizontal mafic dyke

(119) Head of 2nd inlet on W of Fichtland Bay

Layered, migmatitic garnet-biotite
gneiss ^{has} ~~is~~ subconcordant contact
with charnockitic gneiss (also
garnetiferous) latter contains
inclusions of pyroxene gneiss.

It grades into massive even-grained
charnockitic gneiss like last locality

This contains patches & veins of ^{the} coarse charnockite (gt)

6086 Massive even grained pyroxene gneiss

6087 Dolerite dyke (5m, 140° trend) (BH53)

6088 Garnet charnockite

6089 Charnockite

6090 Migmatitic garnet-biotite gneiss

6091 Layer (50m) dolerite dyke trend 130°
(BH54 from SE Burger Hills)

2/2/86

(120) SE Burger Hills

migmatitic felsic + mafic gneiss - prob.
pyroxene gneiss unit but much
migmatized - cut by numerous pegmatitic
and granitic veins & strongly folded.
Layering very irregular. much biotite
& hornblende in the gneiss

- 6092 massive felsic gneiss layer
6093 granitic ^{gneiss} layer - ~~layer~~ foliated
but weakly layered
6094 massive charnockitic gneiss
6095 felsic gneiss (granitic)

To N of dyke, more typical pyroxene
gneiss, but relatively migmatitic -
megacrystic with felsic, coarse-grained
layers

- 6096 felsic gneiss
6097 dolerite dyke (Fol - 115, ~ 4m) (BH55)

(121)

E side near lee - dip

mainly felsic + mafic gneiss interlayered
rather massive, with irregular, not
well-marked layering. Cut by folded
mafic granulite bodies (not dykes), then
by dolerite dykes. The granulites are
clearly discordant locally (quite good dykes)

- 6098 Mafic granulite
6099 Grey felsic biotite gneiss
6200 Felsic gneiss (charoiteite)
6201 Dolerite dyke (Twd 140, ~~2~~ 1m) (BHS6)
6202 Thin (10cm) mafic granulite dyke

The mafic granulites are cut by
pink pegmatite dykes, which are cut
by the dolerites. Much of the gneiss
is light coloured (retrogressed? or
amphibolite facies)

- 6203 mafic granulite (dyke)
6204 Felsic gneiss
6205 "Repakian" granite (float)

~~Some ... to strongly ...~~
orientation ^{of} ~~grains~~ ^{of} ~~biotite~~

Some grains layers present, but not abundant & massive granite layers are locally foliated (oriented biotites), but elsewhere biotites are randomly oriented (grains up to ~5cm)

6206 Coarse-grained biotite granite

(22) ~ 4-5 km N of above

6207,8 granite gneiss (no foliation)

6209 Gneiss (? charnockitic) granite gneiss (trace of garnet present)

Massive granite gneiss. Little layering present, although a very diffuse layering can be discerned. Folitic (leucogranite)

Veins darker green & nephritic veins & segregation, common. Subconcordant mafic granitite may represent m/m dykes, cut by pink nephritic veins

6210 Charnokitic gneiss

6211 Foliated granite gneiss (diffuse
layering with pegmatite segregation)

(23) End NE inlet of Lake Figueras

Layered gneiss including garnet gneiss,
felitic gneiss and mafic granulite. The
felitic gneiss included charnockitic &
granitic gneiss. Cut by subconcordant
pink granite Dip 280/60

6212 Pink granite

6213 Granite gneiss (grey, diffuse layering)

6214 Garnet gneiss

6215 Dolente dyke

The felitic to mafic, charnockitic gneisses
are probably retrogressed - much kyanite
developed & many pegmatitic segregations.
Grey granite gneiss also looks retrogressed
(20% chlorite). Cut by pink granite (even-
to coarse-grained) & pinkish fine
even-grained granite (all foliated) -
similar to last locality

6216 Dark granitic gneiss (only slightly foliated)

6217 Retrogressed charnockitic gneiss

24/2/86

(124) Geologov Island

Massive charnockitic pyroxene gneiss, but distinctly foliated. Even-grained pyroxene gneiss has numerous subconcordant veins of coarse-grained, more leucocratic material.

Impure melting & veining.

Dip 270/30

6218 Layered ~~rock~~ fine to medium

finely layered charnockitic gneiss

6219 Dolomite dyke (~1m, trend 090°) (BM 57)

~~6220~~ Interlayered garnet gneiss is partly quartz-rich. Subconcordant mylonite zones present

6220 Garnet gneiss

6221 Massive even-grained pyroxene gneiss

cut by pink pegmatite & very magnetite
rich pegmatites. Some of the felsic gneisses have
conspicuous biotite.

30cm red-brown felsic dyke trend $\sim 055^\circ$

6222 Felsic dyke

6223 Dolerite dyke (trend 050° , $\sim 1m$) (BHS8)

6224 Venicular part of same dyke

6225 Felsic gneiss (massive charnockitic)
(coarse + finer grained layers)

Some charnockitic coarse-grained layers
contain conspicuous ~~large~~ garnet.
These are cut by the dolerites

(125) S W Fishtail Bay

massive pyroxene gneiss (+ much biotite)
similar to last locality, but with much
more mafic granulite. Cut by mylonite

6226 Altered gabbro (float)

6227 massive charnockitic gneiss

Some interlayered granite leucogranites
(subconcordant) and coarse grained garnet
granite (somewhat charnockitic looking in
places). The massive pyroxene gneiss
locally has ~~has~~ large ? hornblende
porphyroblasts

6228 massive charnockitic gneiss with ? Hb

6229 garnet granite (coarse-grained)

The garnet granite contains schlieren of
garnet gneiss & there is some interlayered
garnet gneiss. Pink pegmatite/granite
forms subconcordant layers, pink X-cutting
pegmatites are also present

27/2/86

(126) Grace Rocks

massive felsic pyroxene gneiss (charnockitic)
much like Obanchar Hills. ~~It~~ contains
some mafic xenoliths and cut by
even-grained charnockitic veins, then
by gneiss pegmatite dikes. An
area of garnet gneiss is apparently
a large xenolith. Much megacrystic
granite in the moraine.

6230 megacrystic granite (float)

6231 massive pyroxene gneiss

massive charnockitic gneiss

contains xenoliths of even-grained
pyroxene gneiss - clearly intrusive
charnockitic

6232,3 massive charnockitic gneiss

(127) 5 km SSE of Dobrowolka

Layered felsic gneiss mainly, with some mafic gneiss. Commonly granitic in composition with biotite-rich layers. Pinkish colour, rather than grey charnockitic appearance.

- 6234 Dolerite dyke (8m, trend 130) (BH 59)
6235 Granitic gneiss (massive foliated layer)
6236 Gneiss (altered mafic) (flat)

Gneiss is rather light in colour, possibly altered charnockitic gneiss. There is much concordant granite (pinkish generally)

- 6237 Dolerite dyke (flat - lying)
6238,9 Felsic gneiss (biotite, ? retrograde)

mafic to ultramafic pods & layers contain much biotite. One massive layer is 20-30m thick

(128)

3 km S of Zolnowoliki

Pyroxene gneiss cut by large & smaller
dolente dyke. Gneiss contains
much krotite & is markedly megacrystic
To S, some st. horn gneiss is present.

6240 Felicit gneiss (krotite + ? pyroxene)

2 km to N

Layered sand quartzite and blue
gneiss (krotite granitic gneiss) Most of
the gneiss here is well-layered krotite gneiss

6241 Felicit gneiss

(129)

E of Fichtel Bar

massive, rather melanocratic charnockite
cut by pink pegmatite veins
Krotite is prominent in ~~the~~ the
charnockite

6242,3 Charnockite

Dolente dyke trends $\sim 130^\circ$ (30m)

6244 Dolente (130 trend) (BH 61)

6244 Pn, green chlorite

28/2/86

(130) Island N of Chamokile Pen

Varied strongly layered metasediments including garnet gneiss, felsic gneiss, pegmatite etc.

Rusty weathering layers common.

Cut by a horizontal dy green pyroxenite (cpx?) body. Clearly intrusive - felsic gneiss forms boudins (reverse to normal relationship)

6246 Pyroxenite

6247-9 Garnet gneiss

Other rocks include interlayered chloritic gneiss & mafic granulite, garnet-biotite gneiss etc.

6250 Garnet gneiss

6251 felsic gneiss with garnet (diffusely-layered granitic gneiss with pink pegmatitic segregations)

(131)

Small Island to West

massive gt-kf gneiss (granite) not
well-layered, but (possibly kf-rich
schlieren) + charnockitic granitic gneiss

6252 Gt-kf granitic gneiss

6253 Gt gneiss

6254 Charnokitic kf gneiss

Some of the gneiss is pink in colour,
~~the~~ other gneiss has a dark, charnockitic
appearance. $\frac{1}{2}$ Interlayered mafic

(bordering) granulates / are present, and these

are cut by felsic even-grained, but

metamorphosed dykes (darker granulate may also be a dyke) 6256

6255 mafic granulate ~~layer~~ (? pos dyke-like)

6256 Felsic dyke

6257 massive granitic layer (krotte leuco-gran)

134) Island - 5 km W of

Layered gneiss including much mafic
granulite (? megacrysts) - rather inhomogeneous
& migmatitic (coarser-grained more yellow layers)
Cut by ~6 m dyke (trend 125°) rather
altered & cut by shear-zone. This
is cut by a 70cm fresher-looking
dyke

- 6258 mafic granulite
- 6259 6m altered dyke
- 6260 fresher, younger dyke
- 6261 gneiss gneiss

The gneiss include garnet-biotite gneiss, pink
granitic gneiss, with minor biotite ± garnet,
and some charnockitic gneiss. These
are cut by a large shear zone with
minor folds showing the new axial
plane foliation. Near the shear, the
gneisses are clearly retrogressed
(lighter in colour - bleached)

Pink ~~granitic~~ ^{granite} layers pegmatites are
both conformable & discordant dykes

(132) Nick to Mid

Layered, but relatively narrow,
migmatitic garnet-khite gneiss cut by
many small mafic zones
Cut by pegmatite

6262 Garnet gneiss

(134) Nick to E of above

Layered - migmatitic garnet gneiss
some ~~cut by~~ with sillimanite & pos. cordierite

6263 Garnet gneiss

6264 Garnet-sill gneiss

6265 Garnet ? cord gneiss

Cut by diorite dyke

(135) Mass Island

Layered garnet gneiss & khite gneiss
+ much pegmatite. Cut by mafic granulate
dykes, which are cut in turn by
pink pegmatite, & thin mafic zones
Also cut by kufft opt-ki pegmatite

- 6266 ~~7~~ Mafic granite dyke (thicker)
 6267 granite dyke (trend 020)
 6268 Biotite gneiss with minor garnet
 and possible cordierite

The thicker granite dyke
 has a more felsic phase which
 intrudes & contains xenoliths of a
 more mafic phase

Interlayered mafic granulite may
 be a metagabbro - some layers are
 10s of metres in thickness (although
 foliated, pegmatites & felsic veins)

The granulite is somewhat layered
 & foliated & contains quite abundant

biotite 6269 mafic granulite

~~6270 mafic granulite~~

6270 - Biotite gneiss with minor garnet
 Some interlayered chromitiferous gneiss
 (with a high prop. of coarse grained
 felsic layers)

(136) SW Charnockite Penonville

basic granule (or megacrysts) interlayers
with felsic gneiss to W. Then
mostly, megacrysts - rather heterogeneous,
variable grain size, ~~with~~ with
coarser gravel patches. Cut by
more felsic veins (commonly
rather coarse-grained). Also
interbedded by the pink to white
inequigranular leucogranite.
The latter is somewhat foliated
locally. Further east is
more felsic charnockite (but still
relatively melanocratic)

6271

~~6271~~ Pink leucogranite

6272 Melanocratic coarse charnockite

6273 Finest grained melanocratic charnockite

6274 ? megacrysts

gneiss to W of are biotite gneiss
& magnetite

leucogranite is cut by a pink even-grained
biotite granite dyke & pink pegmatites

(137) Ntkr 10km ENE of Charnokite Pen (central mass)

Massive charnokite - generally
med-coarse, but even grained. Cut
by dolerite dyke, & rather inhomogeneous,
somewhat boudinaged - fine-grained
dark grey charnockitic dyke

Cut by pegmatite veins

6275-7 Charnokite

6278. Felsic charnockitic dyke

6279 Dolerite dyke

(138) Ntkr just to S

Similar massive charnokite (med coarse,
but not porphyritic)

6280, Charnokite

6282 ? Se rock (float) E of Fishtail Is

6283 Blue g/s

6284 Volcanic from moraine at
Chuganor Is - prehnite + quartz \Rightarrow
in veins (XRD)

88286295	andesite	Paríacota
6	"	"
7	basalt	Olomo
8	dyke	Leona Cathedral
9	diorite	Torres del Paine

88286301-10 granites (Nainital)

88286311 ? orthoamphibole rock
 2 volcanic rock from Korean Tc
 3 } Alex volcanics (Kashmir)
 4 }

91286324 - 76 ~~26~~ PGM mafic dykes
 (Mikhailov)

P 10

91286401-59 P. Kenig / Cove Samples NPCST

6461-96 W. Cove - Fisher Manning

6501-18 W. Cove samples NPCST

91286551- Vertfeld desks for
Joehr (Ruth)

93286600-48 Pauer Is / Vertfeld
(S. Harley)

93286649-99 Mitchellky Fisher
Manning Rocks

93286702-19 (DSE Eric Lake desks)

6721-70 (D. Mandel samples)

6771-4 (Heard Island pumice)

69280301-340 NPCST (old IM/DC samples) Δ
 Δ

96286781-800

Indian
Chamela

5793 Charcoalite from Mt. St. Helens (N)

Samples 5600-99
5800-99
5900-99
6000-99
6200-

15 in need of:-

21 Plastic racks 5600-6014 (+5793 in last bag)

6 Wooden boxes 6015-99; 6200-4

4 Drums 6205-24
6225-43
6244-63
6264-81



