ANT/OFF/05

III

L. OFFE

ANTARCTICA

0035

ENDERBY LAND

1977

BMR.

INDEX

Page

Subject

Natmap Ntk

Mt Nils

Mt Christensen

Mt Norvegia

Near Armstrong Pk

Offe Pk

Thorp Ridges

Thala Hills

Wattle Is area

McKinnon Is

Mt Alekseyev

McNaughton Ridges

Reference Pk & Wyes

Mt Weller

Beaver Is

p 18

Thorp Ridges

Mt Berrigan

Budd Pk

McLeod Ntk

1/2/77

Ice broken out of Amundsen Bay - clear run for ship right in.

Natmap Ntks

to at At (Limestone) 200

longer.

$$5: 135 - 51 = 084$$

B-hla-

D 78 N

q-f grains.

ply Lc C^o → 135 51

(mar clay)

$$= 084$$

Cut lay b-q-f peg veins
up to 10 cm wide.

have "seam" of fine

quartz b-hla-q-f grains up to
2 cm length (off the jobs)

Limestone - tends to produce

reddening of the exposed

rock. Relict polychaet cylindrical

Surfaces at top of exposure

2 m wide layer of limestone

of nod. quartz (inner dark inner)

q-f grains. Contain some

remnants of the q-f & partly

corrodes the limestone at

the margins. * SPEC 4441

Some peg dykes contain

hblite crystals to 7 cm

* SPEC 4442

15 cm layer of
 granite conformable
 with fol.
 - measured $\phi_{\text{g.f.}} = 16 \Rightarrow 140 - 51$
 - may be more reliable than previous measurement
 $= 089$

Green brecciated talon

Since lineation (rodding) is
 so pronounced perhaps fol.
 is not reliable.

Peep out granite.

* SPEC of b-lbed gneiss
 4443

(g-f segregation - layers & lenses
 up to ~ 2 cm)

Nye Mts / 1 / 1706

Mt Nils

1. Limestones trend 182° (mostly mic
clayey),
- Yarnie outcrops of b-blake
- q-f gneiss - Minor
patches of red quartz q-f granite
Cut by b-q-f peg veins.

Locally where foliation plane
can be discerned dip is
mod to sw.

Some lenses & thin layers
of fine grained even grained b h-q-f rocks

2. B. hblde
peg dykes
network.

Fels

S. 242-51 = 191

D. 41 SE

In tunnels near
just qtz-biot-q-f gneiss.

Locally qtz up to 1 cm across.

*4444 SPEC red qtz b-qtz-q-f

*4445 SPEC fine-red qtz b-h-q-f gneiss
(minor qtz)

*4446 SPEC - biot rich layer

*4447 SPEC b-hblde-q-f peg

Ny Mts / 1 / 1709

Mt Christensen

1. Hle-biot-q-f Fol
greens S. 263-51 = 212
Layers & lenses D. 23 SE
of qtz. feld Pz h. 22 → 172-51
up to ~ 15 mm (but clay) = 121
wide.

* SPEC 4448

Cut by biot-q-f peg veins.

Biot forms ovals about 2-3 cm
long - probably what I thought
was hornblende at earlier outcrops
(in the pegs).

Whole of Christensen appears
massive pale brown colour
- prob. all same hb biot-q-f gr.

Mina. large of semi conformable
(biot-q-f granite). Slightly
discordant.

Mt Charleston - cream

Mt Norvegia - ice slide

Simpson Pk / 1 / 1713

1. Mt Norvegia Fol

Fin to road

S. $155-51 = 104$

D 79 NE

gnat brown - gL

25 $\rightarrow$ 150-51

gnat-b. q-f

(Gnat along) = 099

gneiss intruded

by red-gnat lens

b. q-f granite

Intruded mainly along parallel
to fol. Contains red
pieces of country rock.

Imme is foliated // to
country rock.

best selo

med gnat

q-f

med-coarse nob. lens k.

Hydrated b-q-f gr.

Coarsening of gm size - biotite
selvedges at margin of coarser
(med gr'd) layers - in parts
med - coarse cross-cutting melanocratic
patches. Parent rock is a f - med
gr'd b-q-f gr.

Med-gr'd granite (minor biot)
intrudes the partially migmatized
green // to foliation. Includes
relicts of the migmatized green

M + King

2/2/77

Time 10.40

510

863.76

Time

10.42

985

864.04

OHT = -14 °C

Fin film 11. - last skat (a 1st Cool)
off pk

M + Cool & Proc Ts / 15 / 2508

1. Time 11.44

985

844.08

OHT = -4 °C

Time 11.47

510

843.86

Largest part of

granulite

SPC 4449

(dark)

Fab

S: 335-53=282

D. 195

4 red to orange
quartz - q - f
fine grains

Jawling
S 300 = 53
D rest = 247

also bit q - f grains

a bit - px - q - f green

* (S.P.E. 4450)

Dense matrix px - plg granulate
& disc. redent peg veins

Mt Cord 2 Proc Is / 16 / 2620

1. Homogeneous brown rock - no
layering. Same rx type as
Armstrong Pt most probably.

Time: 12.21

985 . 884.99

Time: 12.23

510 . 884 15

OAT = -8°

Granite

- flat lath

to ~ 3 cm length

Ptg

S. 240 - 53 = 187

D. 75W

7

Coarse grained granite - g-f
+ biot & hyps (minor)

(spec. collected by Dave)
4574

- Field sketches appear to define
the coarse phase of ponding

Outcrop to E has slanting
slab to pk.

Granite.

Similarly Annaberg Peak.

Pt to NW - brown massive
granite (from air)

Mt Cord & Proc Is / 15 / 2501

Gray massive outcrop.

Time : 12.34

510 : 888.25

CHT = -8°C

Time : 12.55

985 : 888.17

intrinsic ground

5 miles

- greenish

S: $195-53=142$

due to cloudy

D: 76 SW

crests of

major materials - difficult to
define crests:

Domestic

Consists of feld lathes to 2 cm

- translucent gray with opaque
white rim, mafic clots

lith (partly altered to chlorite?)

More mafic material than at
above locality

- (sampled by D.E.H. - 4575)

Bright orange lichen

Also appears to be pyroclasts.
Preserved as well. Clastic
clasts are interstitial to the
feld laths - prob gives appearance
- some of a 3rd foliation -
- prob just ign. texture.

Xenoliths - thin slivers up
to ~ 1 m length of fine to med -
grained (micro) - light green.
- // to feld lath orient - in
the granite? - appears so - in
which case laths orientated
shallow dip to north
(heavy!)

Mt Cad & Pro Is / 14 / 2446.

Offe Peak

Time: 1400 (Reading at
510: 861.08 tail of outcrop)

Time 14.02 CHT = -8°C

985 = 861.18

Fch

Gnt. ps-q-f.

S. $160 - 53 = 107$

green.

D. 26 SW

- lenses of
blue-purple
qtz[±]2

Phyl: 25 $\rightarrow$ 257-53
(min elong) = 204

Longy / Fch $\frac{1}{2}$ way up hill

Mafr. layer.

S. $235 - 53 = 182$

- ps-plag granulite. D. 80 SE

Dissident q. f. peg vein

- * SPEC 4451 - Biot = 2px (fine) layer
- * 52 - Pm-plag granulite
- * 53 - med. gr'd p-g-f
fine layer
- * 54 - g-f - minor px +
large (up to 7mm
across) grey translucent
cordierite
- * 55 speckled leuc
p. (alt. w. l). g-f
green

Top of peak - med. gr'd orange
p-g-f leucocratic green

Conformable with mafic layers
which dip almost vertically

A + tail dip shallow.

Here, green appears to be
partly intrusive.

^

Mt Cedar Proc Is / 12 / 2322

Time 16.24 1'
985 863.06

Time 16.26 OAT =
510 862.83 - 6°

Low med-grd - gnt - biot - q - f
~~gran~~ rocks containing xenoliths
2 layers of p2-plug granulate
- also biot gr.

* SPEC 456 gnt b-q-f rx

Mt Cord & Procs / 13/2259

Thorp Ridgys

Time: 17 06

985 841.22

AT = -8°C

Time: 17.08

510 : 841 01

Fdh

S. 235-53 = 182

P. 30 W

Ay L: 05 → 263-53 = 210
(min. stage)

B - gut - g - f green & slightly
earr, gut b - g - f green

* SPEC 457

* 456.

Some field auger to 2cm

Mt King

Time 18.00
985 863.45

OAT = -8°C

Time: 18.01
510 863.20

Eastern Thata Hills 9/2/77.

Conformable layers of migmatized
biot (bbob?) - g-f greensch.
Foliation almost destroyed.

* SPEC 459 - similar in
appearance & composition to Mt
Fols. Christensen

Continuing

S: 346-50-296

peg dykes

D: 76NE

(b-g-f - migmatite).

Bright orange lichen

Also layers of fine to med. grained
biot? - b g-f greensch. Some
feld augen to ~ 3 cm

* SPEC 460

Also amphibolite layers.

* SPEC 461.

Thin faulting.

Some corresponding malakiasis
in places. Cut by peg dikes.

Promotory east of Wattle Is.
Fol

Ps - play granule S: 338-50-288
P. 63 NE

Sth side of ant trap. Fol

— Change qut g-f S: 345-50-295
green
(qut - pink)
More px - qut g-f green.

More honeycomb weathering

- Snow petrel clucks in rocks

McKinnon Island.

(contour ^{west} ~~5th~~ of Shaw Is.)

Biot-gnt-q-f greis &
leucocratic orange q-f
rock containing xenoliths
of mafic greis.

Fch.

S. $210 - 50 = 160$

D. 53 E

Microscopic folds within the
mylonite.

My folds: $34 \rightarrow 070 - 50 = 020$

* 362 - 462 - biot-plag-px mafic
xenoliths

* 463 - (biot)-q-f leuc
mylonite

* 464 biot-gnt-q-f
larger.

*

463 Wot-px - plag
granulite layer.

M/2170

M/2170

M/2170

15

Sequence of layered b- and green
2b-p- plagioclase green. Layers
of completely mobilised rock
containing xenoliths and
disrupted layers of mafic
green. Mafic layers & lenses
commonly folded on macroscopic
scale. The mobilisate does
not appear to be crosscutting
in respect to adjoining layers
(only affected layers in its
own vicinity).

One late granite vein seen
which cuts folio & mobilisate.

M + King

5/2/77

Time 11.25

510 863.45

Time 11.26

985 863.50

OAT = -17°C

Simpson Pk/15/0670

Time 13.17

510 826.91

OAT = -11°C

Time 13.20

985 827.01

Fth

S 315-52 = 263

2 40N

✓ Yarrowian loam
from air

Pinked pr-g f green & pr-play
granulose

Fth

S 325-52 = 1273

✓ Minor pseudotachylyte
lenses

2. 33N

Outcrop grey. Some small
pink lenses.

Simpson PK / 16 / 0803

1.

Time 13 59

985: 836.94

OAT = -12°C

Time 13 57

510: 836.85

P = 2-f (grey)

gneiss &

px-plag granulite

Ft.

S. $320-52=268$

D. 70 N

Slightly discordant fault zone
- 1 m wide - blocks of country
rock in network of black
pseudotachylite. Dip & strike
of country rock appears to be
constant.

Minor crosscutting hyp. g. f.
mobilisate.

Simpson Pk/15/0681

3 Mt Alekseyev

Time: 14.38

510: 839.70

OAT = -10°C

Time 14.40

985: 839.75

	Feb
Px-plag granulite	S 226-52 = 234
± gray px-grt	D 35 NW

gneiss

	Feb
Biotite schist	S 300-52 = 228
breccia	D 28 NW

— subparallel plg lns: 18 → 080-52
to fol. (stubby pr + feld elong)

Locally hyp-grt + magnetite
metasite - crosscut fol.

* SPEC 466 - pr-grt + gneiss

- long rubble ridge - ⁰¹⁻¹
- country rock & mag. dykes (spec. of late collected by D. Ellis) deformed by fault zone trending ^{SE} above (difficult to define - but this appears to be the result of the Shearage)

* SPEC 467 - calc. gr.

Simpson Pk / 14 / 0638.

1. Time : 15 49 - reaching at
985 : 846.21 ^{base NW end of}
pt ① below pk.
OAT = - 6 ° C
Time 15 51
510 : 846.05

Peak : ^{Fish}
5 290-52 = 238
D: 21 N

Massive white (wt + red spec.)
- q - f green. Med to coarse
grit. Cont dots up to ~ 1 cm.

Interfinger of ps - plag granulite,
biot - ps - plag granulite, qnt - biot
- feld gneiss ps - qnt - q - f
gneiss -- this whole layer
about 1 m thick.

Behind peak ^{Ptg} S. 295-52-243
D. 255

ps - plag granulite
2. Then below this
brown ps - q - f gneiss

* SPC = 468

- Twisted (oxidation plane
fracture??)

- In the (fine) qnt gneiss - locally
layers where qnt predom.
(pink - red layers) and aggregates
several cm's across

Along rubble road

Pt 1

256

Appearance of light folds within
the fine gnt grains — defined
by folded trails of garnet.

2. Lower part. (good boulder rolling spot)

Brown p. - q. f. green
- micritic

S 222 - 52 = 130

D. 87 NW

To SW - layered
gnt. - q. f. green,
biot - gnt. - q. f.
green

F.L.

S 225 - 52 = 173

D. 20 E

Ph L: 20 → 102 - 52
(min elong) = 050

Biot. p. - q. f. gn

F.L.

S 184 - 52 = 132

D. 22 E

Ph L: 15 → 100 - 52
(min elong) = 048

Gnt - q. f. gn.

S 280 - 52 = 228

D. 82 N

Ph L: 25 → 102 - 52
= 056

Eastern end of

56

pt @ general

S. $250 - 52 = 228$

steep fol. $\rightarrow$ D 875

* SPEC 469

- phlog., pale green, etc - part of
p. nite layer

Minor molachid stng.

This ridge consists of an
antiform plunging mod to
NE. Mesoscopic folds - on
nose - this is what was
measured above - all in
one domain. . . indicates
same plunge direction.

The large apparent thickness
of the lens. gnt. g. f. green
layer is caused by the
crumpling on the nose of the
antiform.

Mt King

Time: 19.24
510 = 864.04

OAT = ~~9~~ -9°C

Time: 19.23
985 = 864.40

Simpson Pk/11/1102

6/2/77.

1. Layered ps-plag
granulite &
px-y-f-gneiss.

Fch

S. 331-52=279

P. 305

Angle: 24 → 272-52=220
(stubby min + large)

Slightly 'steered' margin - mass
of granular Trend. 279-52=227 N
phlog-light ps-plag
granulite.

The trend

of the contact
of this rock type

against the layered rock is shown

Thin vein of black
flinty fault
rock delineate
Fault - truncates some
pyroxenite pods within the
main phlg-pr-plag rock.

Fault

S. 245-52-193

D. 30 NW

The lens rock type is also
interlayered with the more melanocr-
atic layers (first impressions
wrong). The points are partly
bonded & lenses out within
this rx type. Folds within the
lens rock - defined by thin
pr-plag granulite layers &
quartz strings

* SPEC 470 phlg-pr-plag granulite
* 471 quartz-pr-plag granulite

At fault

Fault

S. 260-52-208

quartz is inflated

D. 49 N

& coarse type q-f veins infl fault.

Within fault zone $\frac{1}{2}$ in layer
 of red: qtz dense prisms - lenses
 out - deformed dyke? - sheared
 out prisms layer * SPEC 472

Lenses gently warped - some
 microscopic tighter fold but may
 be related to these sharp
 fault planes which cut the area.

About 1 m layer of qtz-q-f,
 qtz-pg-q-f & qtz-Sapph-pg
 - q-f grains

* SPEC 473 - gnt. sapph. pr - q - f
green

Simpson Pk / 14 / 0630

1. Reference Pk.

W

5th r face
(approx)

main peak

E

overturned fold

doubly plunging?
overturned fold

— level
layers
define
structure

1.

px-peg granulite

↓
Fol.

$$S: 345 - 52 = 293$$

$$D: 82 L$$

~40 cm wide

layer of ~~gnt-q-f~~ gnt(contains some px streaks, prismatic
fine-grist like run & shaly part)

$$SPC \in 474$$

Then a 60 cm wide px-peg granulite
layer.

Main

$$S: 340 - 52 = 288$$

lens layer

$$D: 07.5$$

$$\text{Phy } L: 03 \rightarrow 171 - 52$$

$$= 119$$

(prismatic run
& large)

Fol

Major lens

$$S: 154 - 52 = 102$$

$$D: 16 N$$

W
N

face

W
N

side of notes
- marking
- direction

W
N

NE (magnetic)

passage - creek

stream

here

SE face.

SW

23

Px-q f green Phyl: $0 \rightarrow 338-52=286$
2 just = elong!

Px-play.

granulite — folded but now
consists of redolent pieces
of rock. — lamination is prominent
in qtz bearing gneiss.

Minor malachite string

* SAC 475 phlog-px play granulite

* 476 px-q f gneiss

* 477 qtz-px-q-f gneiss

Simpson Pk/15/0688

Mt Weller

1.

Brown

Fd.

$$S: 278 - 52 = 226$$

px-gnt-q-f

D 42N

green

$$\text{Plg Cr: } 35 \rightarrow 349 - 52 = 297$$

and

px elong.

hyp-q-f green

Close jointing

$$S: 196 - 52 = 144$$

In places

D 82NE

Close jointing (next common)

very intense

$$S: 145 - 52 = 093$$

-however

D Vert

apparently

varies somewhat in strike direction

Location also defined by gnt elong= in the quartz bearing greens

Also grey gnt-q-f green and px-plag granulite. Compositional zoning not strongly pronounced.

Simpson PK / 16 / 0780

Beaver Island

5. Grey. gut - g. f. green

S. 295-52=243

D: 705

? Phy L- 23 → 282-52=230
(gut colour)

Fol

S: 279-52=227

D: 695

Fol

S 304-52=252

D. 70 N

Care of fold - med. gut gut g. f.
green (orange fold)

* SPEC 478

Fol

S. 285-52=233

D: vent

Fol

S 255-52=203

D. 4556

major fold → nose

Large of gnt-g
-magredid.

Large
S 230-52=178
D. 2156

Large
S: 290-52=238
D. 745

From quick look at schedule
indicates this needs more than
 $\frac{1}{2}$ hr. Opposite sense of plage - pos. folded line
Gnt - sapph - g - f. SPEC 4480 *

Mt Kung

7/2/77

Time 10.45

985 : 865.75

Time 10.47

510 865.50

Off T: -15°C

Fin 13 gvec last night sunset to sunset = 16.79h Gnt - sapph

Simpson Pk / 4 / 1509

10 km E of Demidov Is

1. Time : 12 36

510 : 996.95

OAT = +2 °C

Time : 12 37

985 : 997.07

(base of "island")

Northern end of island (gnt) - 2px -
Plag granulite. Cut by pegmatite
veins up to ~ 30 cm across

Trend of gnt. b. peg is $335 - 51 = 284$

About ~~3~~ 3 m

wide layer

of px - mag - quartz rock

Laying

S. $330 - 51 = 279$

D 49 N

(SPEC ~~480~~ collected by D Ellis)

* SPEC 481 - (gnt) - 2px - plag granulite
Layers of gnt-px-q f gneiss

Lenses of coarse-grained gnt-px
rock within the mag-q rocks.
(Pec by D Ellis)

Locally felsic layers within the
gnt-pr-q f gneiss appear to cleavage
light folds.

Stm half
of hill

more lens rocks.
- grey/orange layers.

- gnt-pr-q-f gneiss with
patches of coarse gr'd gnt-q-f
mobilisate

Thin grey mafic dyke trend, 293

- possibly fault rocks?

(looks quartz zone). Cut by a slightly
displaced by the pegmatites.

* SPEC 482

Biot-gnt-q-f gneiss

- gnt → biot. Gnt ~~pink~~ pink.

* SPEC 483.

30cm wide zone
of mylonized

mylonized gneiss

S: 335-51 = 284

D: 61N

gneiss between

the darker rocks to the north of
the island & the lighter coloured
r.s. to the south.

The pegmatites ^{appear to be cut by} ~~the~~ the fault ~~and~~ and
are partially displaced.

Lighter coloured r.s. consists
of px-plag granitic, gnt. & f gnt (± biot)
gnt-px-q-f greensch & px rutes.

- Some parts of coarse-grained dark
px rute layers consist of pale
brown px & fine-grained interstitial
green diopside.

* SPK- 484

Island just to Nth - trend of
layers NNE

N

Simpson Pk / 4 / 1506

4 km SW of Hydrographer Is

3. P₂-plag granulite & px-q-f
green

Microscopic folds defined by
q-f layers.

General foli-
trend

S: 300-51 = 249

P: 75 N

Also gnt (pink) px-q-f gnt.

Black layer of fold-gnt-px green
~ 1 m wide

* SPEC 485

Gn-q-f-green + biot and
px-gnt-q-f green. Gnt bright
pink in colour & forms aggregates
commonly up to 2 cm long.

Locally brown px to 2 cm.

* SPEC 486

$\frac{1}{2}$ m wide fault zone trending
190°-51° angular cobbles (stress)
= 139 of country rock in fine-grained
grey sheared matrix.

Phy fol. 34 → 353-51
= 302
'S' folded grey q.-f. gneiss.

Other mesoscopic folds mentioned
earlier have appeared to be
S fold as well.

Boulders of gnt-kyanite - q.-f
gneiss - also brown-green
coarse grained granite
(must be fairly local).

Quartz veins trending 225°-51° = 174
(a 10 cm wide)

Some more leuc layers contain
xenoliths of mafic gneiss.
Sequence is layered, lightly
folded with some local
intrusion by the more leuc
layers.

3 km W of Hydrographer Is.

4. Px-plag granulite
- some schists
of quartz.

Logos

S: 298-51=247

P: 65 N

3 m leuc layer consisting
of b-gnt - q - f & px-gnt - q - f

* SPEC 487.

~2 m of grey gnt-px gneiss

Layers truncated by

fault zone trending 354° - 51 = 303

Another shear

steaming

S: 338-51=287

zone - well parted D 78 SW

gnt-px - q - f mylonized gneiss

* SPEC 488

~~MASSIVE~~

Zone may be ~ 20 m wide
(in rubble).

Some thin granite & pinky
orange b. q-f aplite veins

P. q-f gneiss

Med-grd granite vein (5 cm)

Truncating foliation but including
mafic strings which // foliation
($\Rightarrow$ earlier than fol.).

Nth side of
island fold $\rightarrow$

Layering
S: $316 - 51 = 265$
P: 85 NE

Mesoscopic fold.

Phy fold 15 $\rightarrow$ 320-51
(estimated) = 269

(assumed plane steep dip to NE
& strike $\sim$ // to foliation
as measured top of this page)

~~Foliation exposed on fault face~~
Mafic dyke on NE side of island
trending NW (see D Ellis spec)

Nth side of island (from air) - well-
exposed pink (orange) aplite dykes
- crosscutting.

Simpson Pk/5/1435

6 km SW of Neenah

7. Lenc layers of b-grit. g of
greis. (grey) - biot secondary

* SPEC ~~488~~ 489

Mafic layers - folded
- foliation in greis
appears to be axial plane
to these folds.

The lenc layers may also
be partly intrusive.

More time needed ~~for~~

Mt King

Time : 19.18

985 : 867.03

OAT = -9°C

Time : 19.20

510 : 866.68

Mt King

8/2/77

Time : 10.27

985 : 868.05

OAT = -13°C

Time : 10.29

510 : 867.94

Mt Cool & Pra Is / 13 / 2259

Tharp Ridges

2. Time : 11.11

510 : 823.74

(Top of highest
ridge)

Time : 11.13

985 : 823.89

OAT =

-8°C

Altd to coarsely grained hyp-gnt
 - g-f green. Black layers
 1/4 to ~ 3 cm across
 * SPEC 490

(Determined by g-f green - speckled
 with dark clots of biotite?)

* SPEC 491

Edge of cliff - possibly ^{units above} underlain
 by biot? - gnt. g-f greis
 (light whitish grey)

* SPEC 492

Layering
 S. 254-51=203
 P. 27 NW

to more accurate $240-51=189$
laying $\rightarrow$ D. 30 NW
measurement

appears to be tight folds (inclined)
- axial planes - // to laying
- most folds of this type seen
on screen. One seen in outcrop.
Lamination difficult to measure in
in fact cracks. - some screen
blocks - lamination defined by
fracts of dark minerals (biotite?)

On dip slope - mafic dyke
(D. Ellis for sample) - appears
to follow strike but may not
be same dip - from air
- obviously cross-cutting

Mt Cod & Proc Is / 13 / 2257

5th Thorp Ridge

1. Light layers
towards
the base
of the
spire
consist
of gnt-q-f & px-q-f green
- layers
S. 290-51 = 239
D. 20 N
Phy ho: 16 → 043-51 =
(difficult to dipse 352
- may be simple change)

Thin layers of px-play granulite
& brown biot-px-q-play green.

The brown massive looking layers
(francs) consist of px-play
granulite, px-q-f gneiss
& biot-gnt-q-f gneiss

* SPEC 493

Some partial reaction of
hyp-q-f & gnt-q-f.

Mt Cad & Fox Is / 12 / 2330

Mt Berrigan

Sth side - massive brown rocks
with interlayered dark rocks.
Cut by mafic dykes.

Nth side - possibly one of these
dark layers folded.

Dark layers - 20 m wide
consisting of biot-px greenschist

* SPEC 494

also px-q-f green & px-plag
granulite. Some malachite
staining - also limonite.
Slightly discordant layer
of hyp-q-f peg.

Layer of gnt-hyp-q-f
greenschist

Qtz veins // foliation - some
crosscutting.

Fol.

$$S: 254 - 51 = 203$$

D: 80 NW

Phyl. L.a. ⁰⁷⁴⁻⁵¹
(grit elong.) $31 - 90 = 023$

* SPEC 495 - for TS

hyp. peg layer is about $\frac{1}{2}$ m
(wide)

Main brown layers consist
of red-grit - hyp-q - f. gneiss

Fol.

Fol. in brown gneiss

$$S: 268 - 51 = 217$$

- can't distinguish
lineation.

D: 70 NW

Major dyke ~ 15 m wide

cuts brown unit (see D. Ellis
for spec).

~~At~~ Bird Peak

Marine brown in outcrop. Some dark layers - folded. Possible mafic dyke.

1 m layer of pale brown px-plag granulite - some biotite present.

Main rock type is brown

massive
hr-g-f gneiss
(med-grd -
inner hyp)

Layers/fm
S: 240-51 = 189
D: 79 NW

(spec. collected by D Ellis for T.S.)

From the pt mafic dyke cut
Berrigan clippings ~60 to 100.

Some veins of g-f pegmatite.

Didn't examine mafic dyke.
- fairly certain that it is.

McL Nths / 13 / 2409

9 McLeod Nths.

The synform seen last year
at southern end of this
nth is a synform.

On saddle.

Time: 1514 OAT -12°C

510: 839 56

Time 15.16

185: 839 76

Px-plag granulite containing
layers of steeply dipping px-biot
layers. Some crosscutting
hyp-q-f peg.

The px-q-f layers (also
according to Deane Vg-f &
Mg-q-f rocks)

1 night fold delineated by
mafic layer - are the two pink
layers on the same? Rubby
exposure + lack of foliation

Western most ridge in MCL. Ntk.

Top of ridge (with end)

Time: 15.59

510: 845.17

-8

OAT = ~~15~~ °C

Time: 1600

985: 845.49

Pyroxenite (g - pink & white
feld - biot & locally prismatic
grains of light translucent black
non metallic mineral)

- also magnetite present.

* SPEC 496

Feld

Pyx intrusals

S

332 - 51 = 281

country rock

D

41 SW

& mafic layer

* - meta intrusives? - SPEC
497

County rock - brown k-q-f gn
e? px - q - f gn. (D. Ellis for spec)

McL Ntk's / 13 / 2409

McLeod Ntk's

10. Grey-brown Fol
px⁺-q-f S. 255-51 = 204
green D. 17 NW
h = ~~51~~ 320-51
= 269
* SPEC 498

(Also biot present. Layer of
px-plag granulite (minor quartz))

Same hyp-q-f melanosome.
Folding - difficult to measure.
(lack of enthusiasm!)

NB. Main ntk

- couldn't land to measure
other (nth=) limb of fold but
clipping mod - steeply ssw.

Mt King

Alt. -7°C

Time : 17.33

510 : 867.35

Time : 17.34

985 : 867.65

Apparent snow
drift

($\frac{1}{2}$ way
entre Bookel
& Fyfe Hills)

310

270

280

040 T

080