

ANT/OFF/05

III

L. OFFE

ANTARCTICA

0035

ENDERBY LAND

1977

BMR.

Natniap Ntk

Mt Nils

Mt Christensen

Mt Norwegian

Near Armstrong Pk

Offe Pk

Thorp Ridges

Thala Hills

Wattle Is area

McKinnion Is

Mt Alekseyev

McNaughton Ridges

Reference Pk \rightarrow Wiers

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 ships right in.

Natmap Ntks



to at At (distance 200)

to year.

$$135 - 51 = 084$$

B-14a -

$$D 78 N$$

y-f grain.

phy Lo C^o → 135 51

(mat clay)

$$= 084$$

(At lay to y-f phy veins

up to - to cm wide.

near "near" of four

quit bit longer of grain up to

2 cm length of the fold)

Location leads to surface

reddening of the exposed

rock. Relict petroblast cylindrical

surfaces at top of exposure.

2nd unit layer of the formation

of rock (quit some dark unit)

y-f granite. Contains some

small bits of the ign & partly

crosses the boundary at

the margin. * Spc 4441

Some phy dykes contain

black crystals to 7 cm

* Spc 4442

15 cm layers of
granite conformable
under folia
- measured 174 m^2
- may be more
reliable than previous measurement

Folia
S. 150-51 = 099
D. 56 N
16 → 140-51
= 089

Green brecciated talon

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

Peeps out granite

* SPCC of b-lbde grains
4443

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

Nye Mts / 1 / 1706

Mt Nils

1. Limestones trend 182° (mostly mic
clay),
• Yarnie outcrops of b-blade
• q-f grains - 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 micaceous b-l-q-f rocks

2. B. hhd
peg dykes
network

Fols
S. 242-51-191
D. 41SE

In trunks near
just quite bit of grass.
Locally grass up to 1 cm across.

- *4444 SPEC med grad b-grad-q-f
- *4445 SPEC fine-med grad b-h-q-f ign
(minor ign)
- *4446 SPEC - bot rich layer
- *4447 SPEC b-hhd-q-f peg

Ny Mts / 1 / 1709

Mt Christensen

1. Hole-bit-q-f Fol.
greens 5. 263-51 = 212
Layers & lenses D. 23 SE
of qtz. field Plym 22 → 172-51
up to ~ 15 m (but clay) = 121
wide

* SPEC 4448

Cut by bit-q-f peg veins.

Bit 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 q-f gn.

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

Mt Christensen - crevasse
 Mt Norvegia - ice slide

Simpson Pk / 1 / 1713

1. Mt Norvegia Fol.

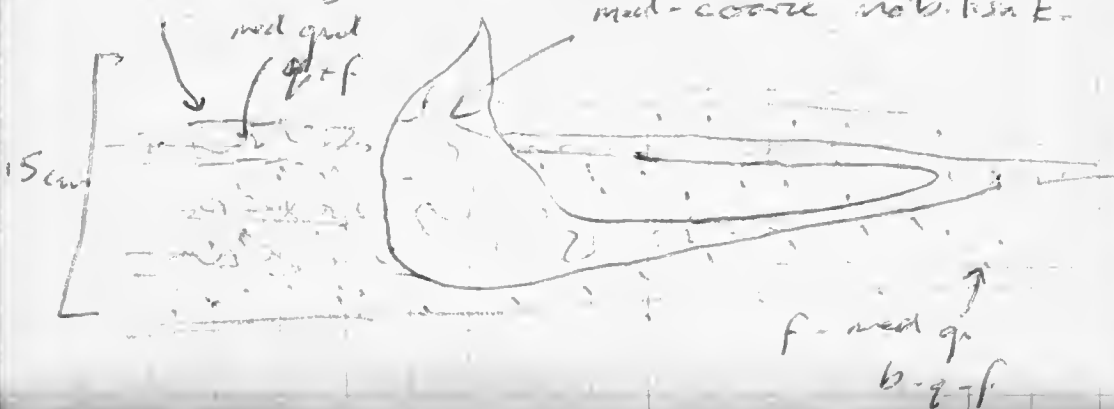
Fine to med - S. 155-51 = 104
 D. 79 NE

quartz brown - $W_{1/2} L = 25 \rightarrow 150-51$
 qtz-b. q-f (biot-elong.) = 099

gneiss intruded
 by red-qtz lens
 b. q-f granite.

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

Intrusion is foliated // to
 country rock.
 biot selo



✓ Hydrated b-q-f grn.

Coarsening of grn size - biotite
sclerites at margin of coarser
(med grn) layers - in parts
med - coarse cross-cutting metabasite
patches. Parent rock is a f - med
grn b-q-f grn.

Med-grn granite (minor knot)
intrudes the partially migmat.
green // to foliation. Includes
relicts of the migmat. green

M + King

2.12.77

Time 10.40

510 863.76

Time 10.42

985 864.04

OH T = -14 °C

Fin film 11. - last shot (a) (M + Cool) (off pk)

M + Cool & Proc Ts / 15 / 2508

1. Time 11.44
985 844.68

Time 11.47
510 843.86

OH T = -4 °C

Largest part of

granulite

Fol.

S: 335-53=282

* SPEC 4449

(dark)

D: 19.5

4 ned. to course

S 300-53

pink ps - q - f

D rest = 247

leuc. quartz

also list of green

4 bit - ps - q - f green

* (S.P.C. 4450)

Down next ps - pink granular

4 disc. redent peg beam

Mt Cool 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

Ptg

S. 240 - 53 = 187

- felst lathe

P. 75W

to ~ 3 cm length

Coarse grained granite - g-f
(Died & bygone river)

5000. collected by T. D. ...
4574

- Field sketches appear to show
in a coarse grain of pebbles

Outcrop to E has slanting
slabs to pk.



Granite.

Similarly Amstrang Peak.

Pt to NW - brown massive
granite (from air)

Mt Cool & Proc Is / 15 / 2501

1. Gray massive outcrop.

Time 12:34

510 888.25

CAT = -8 °C

Time 12:55

905 888.17

- magnetic moment

Scout

- gravity

S = 195 - 53 = 142

due to cloddy

D = 76 SW

crests of

major minerals - different to
clastic crests:

Identified

Crystals of feldspar to ~2cm

- translucent; gray with orange
white rim, mafic clots

Diop (possibly altered to chlorite?)

Have mafic material there at
same locality

(Sampled by D.E. Hiss - 4575)

Bright orange, lichen

Also appears to be pyroclastic
preserved well - shape
clasts are interstitial to the
feld laths - prob. gives appearance
- same as in 3rd solution -
- prob. just ign. texture -

Xenoliths - thin slices up
to ~ 1 m length of fine to med -
quartz (maybe) - quartz grains -
- // to feld lath orient - in
the granite? - appears so - in
which case laths orient to
shallow dip to north
(heavy!)

• Mt. Col & Pro Is / 14 / 2446

Coffe Peak

Time: 1400 Readings at
510 = 861.08 (tail of outcrop)

Time 1402 DHT = -8 °C

985 = 861.12

Fold

Gnt. ps - q - f.
green.

S. 160 - 53 = 107

P. 26 SW

- lenses of
blue - purple
quartz

Phyl. 25 → 257 - 53
(min. elong) = 204

long / ~~high~~ ^{high} ~~to~~ ^{to} many up hill

Maize layers

S. 335 - 53 = 182

- ps - plng groundh. R. 80 SE

Discontinuity of f. peg vein

- * SPEC 4451 - Biot = 2px + (fine) layer
- * 52 - B - plag green lit
- * 53 - med. gr. orange f
thin layer
- * 54 - G-f - minor part
large (up to 7 cm
across) grey translucent
carbonate
- * 55 - speckled tan
p. (alt. w. G-f
green)

Top of peak - med. gr. orange
f. i. f. lam. carbonate green

Conformable with mafic layers
which dip almost vertically.

A + tail dip shallow.

Here, grass appears to be
partly indurine.

^

MT Code & Proc Is / 12 / 2322

Time 16.24 1'
485 863.06

Time 16.26 OHT =
510 862.83 - 6°C

Large med. gr. - quartz - biot - q of
~~gran~~ rocks containing xenoliths
↳ large of plagioclase granulate
- also biot sp.

* SPEC 456 gub. to - q of 12

Mt. Cord & Procs / 13/2259

Thorp Ridggs

Time: 17.06

985 841.22

AT = -8°C

Time: 17.08

510 841.01

F_{ch}

S. 235-53 = 182

P. 30 W

A₄: 0.5 → 263-53 = 210
(min stage)

B - gut - g - f green & slightly
corrus gut b g - f green

* SPEC 457

* 458

Some fold angles to 2cm

Mt King

Time 18.00
985. 863.45

OAT = -8°C

Time: 18.01
510 863.20

Eastern Thala Hills

9/2/77.

Conformable layers of migmatitic
biot (bbob 2) - g-f greensch.
Foliation almost destroyed.

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

Constituting

gran. dykes

(b-g-f - migmatite).

S: 346-50=296

D: 76NE

Bright orange lichen

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

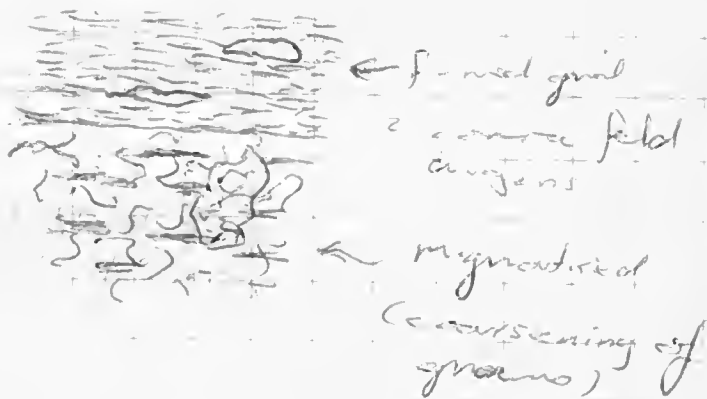
* SPEC 460

Also amphibolitic layers.

* SPEC 461.

Thin faulting.

Some corresponding malakhsati
in places. Cut by peg dikes



Promotory east of Wattle Is
Fol

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

5th side of an trap. Fol

- (Orange gut - f -
green
(gut - pink)
Mussel ps - gut - f - green.

Mussel honeycomb weathering

- Snow petrel clutches in rocks

McKinnon Island.

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

Biot-qtz-g-f greiss &
leucocratic orange g-f
rocks containing xenoliths
of mafic greiss.

Fels.

S. 210-50=160

D. 53 E

Microscopic folds within the
metabasites.

Key folds. 34 → 070-50=020

* JPC 462 - biot-plag-pr mafic
xenoliths

* 463 - (biot)-g-f leuc
metabasite

* 464 biot-qtz-g-f
layer.

*

#03

W. 100 ft. plug
exposed to day.



M/21/10

14



M/2170



M/2170

15

Sequence of layered bi-gran green
& bi-plag 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 fol. & mobilisate.

M + King

5/2/77

Time 11.25
910 863.45

Time 11.26 OAT = -17°C
985 863.50

Simpson Pk/15/0670

Time 13.17 OAT = -11°C
510 826.91

Time 13.20
985 827.01

✓ Yarrowian from F. to
from air 5 315-52 = 263
? 40N

Partial proof of ground & pa-play
granulite

✓ minor 25m later by the F. to
5 325-52 = 16273
? 33N

2
interbedded grey - Some small
pale lenses

Simpson PK / 16 / 0803

1.
Time 13 59

985. 836.94

OAT = -12 °C

Time 13 57

510: 836.85

R. 2-f (grey)

gneiss &

px-plag granulite.

Feb

S. 320-52 = 268

D. 70 N

Slightly discordant fault zones
- 1 m wide - blocks of country
rock via networks of black
pseudotachylite. Dip & strike
of country R. appear to be
constant.

Thin crosscutting hyp. g. f.
mobilisate

Simpson Pk / 15 / 0681

3 Mt. Alekseyev

Time: 14.38

510: 839.70

CAT = -10°C

Time: 14.40

485: 839.75

Proplage granulate ^{Felt} S 226-52 = 234

to gray p. of f. D 35 NW

green

Pseudo tachyble ^{Felt} S 300-52 = 228

breccia D 28 NW

- subparallel $\frac{1}{2}$ h; 18 \rightarrow 080-52

to f. (shaly p. of field \rightarrow 028
change)

Locally hyp-y-f + magnetic

micaceous - crinoids f.

* SPEC 466 - p. 2 - f. green

Along rubble ridge - 217
- country rock & mafic
dykes (gran of late
collected by W. Ellis) deformed
by fault zone trending E-W above
(difficult to define - but this
appears to be the result of the
shearing)

* spec 467 - old, gn.

Simpson Pk / 14 / 0638.

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

Peak. Fish
5 290-52 = 238
D: 21 N

Massive white 'qtz - red sp.'
- q-f green. Should be a coarse
quartz. Cont clots of iron ore.

Interlayer of ps-plag granulite,
biot - ps-plag granulite, qtz - biot
- feld green, ps-qtz - q-f
green - this whole layer
about 1m thick.

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

ps-plag granulite
then below this
brown ps-q-f green

* DPE = 468

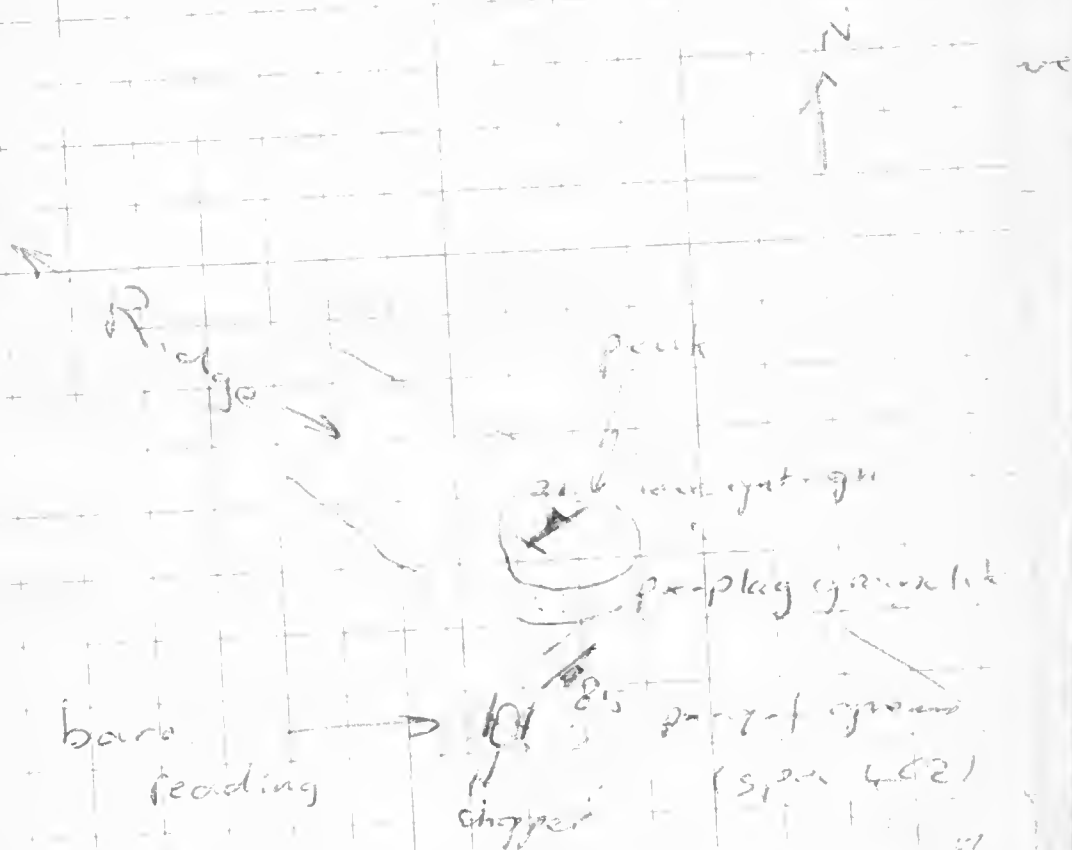
- Jointed (axial planar
fracture??)

- In the thin qtz green - locally
layers where qtz predom
(pink - red layers) and aggregates
several cm's across

Along rubble road

pt 1

256



Appearance of slight folds within
 the fine grt matrix - defined
 by folded trails of garnet.

Lower part (good boulder rolling spot)

Gravelly part of gravel

- massive

$$S \quad 222 - 52 = 170$$

$$D \quad 87NW$$

To six layered

part of gravel,

bit part of f

gravel

FL

$$S \quad 225 - 52 = 173$$

$$D \quad 20E$$

$$Phy L: \quad 20 \rightarrow 102 - 52$$

$$\text{(massive)} \quad = 050$$

Bit part of gravel

FL

$$S \quad 184 - 52 = 132$$

$$D \quad 22E$$

$$Phy L: \quad 15 \rightarrow 100 - 52$$

$$\text{(massive)} \quad = 048$$

Gravelly part of gravel

$$S \quad 260 - 52 = 208$$

$$D \quad 82N$$

$$Phy L: \quad 25 \rightarrow 102 - 52$$

$$= 056$$

Eastern end of $\bar{N}4$
pt @ general $S. 200-52 = 228$
steep fold \rightarrow $D 275$

* SPEC 469

- phlog., sil. green, etc - part of
granite layer

Minor metachert string.

This ridge consists of an
antiform plunging north 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 &
ps-q-f gneiss.

Forh

S. 331 - 52 = 279

P. 305

Play L: 24 → 272 - 52 = 220
(stubby-min elong)

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

The trend
of the contour
of this rock type
against the layered rock is shown



Fault

This vein of black
 flinty fault
 rock delineate
 fault - truncates some
 pyroxene pools within the
 main phly. p. - play rock.

The lens rock type is also
 interlayered with the more melanocratic
 layers (first impressions
 wrong). The points are partly
 boudinaged & lenses out within
 this rock type. Folds within the
 lens rock - defined by thin
 p. - play granulate layers &
 quartz strings

* SPEC 470 phly. p. - play granulate

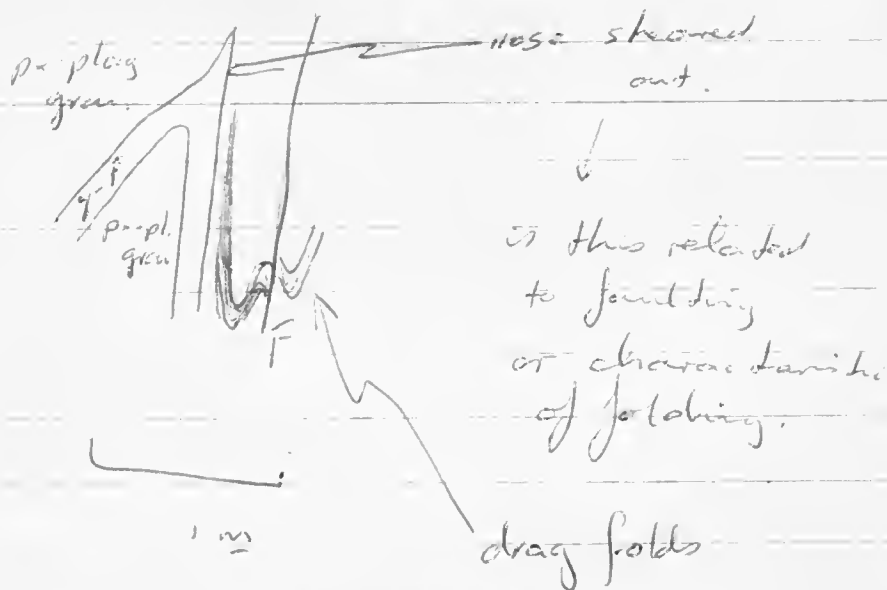
* 471 quartz - p. - play granulate

Fault

At fault
 grain is inflated
 & coarse type q-f veins infl fault

S 260-52-208
 D. 49 N.

Within fault zone $\frac{1}{2}$ in layer
of med. epid dense granite lenses
out - deformed dyke? - sheared
out granite layer * SPEC 472



Lenses gently warped - some
microscopic tight folds but may
be related to the steep
fault planes which cut the area.

About 1 m layer of qtz - g - f,
qtz - px - g - f & qtz - Sapph - px
- g - f grain

* SPEC 473 - gnt. supph. p. - z - f
green

Simpson Pk / 14 / 0630

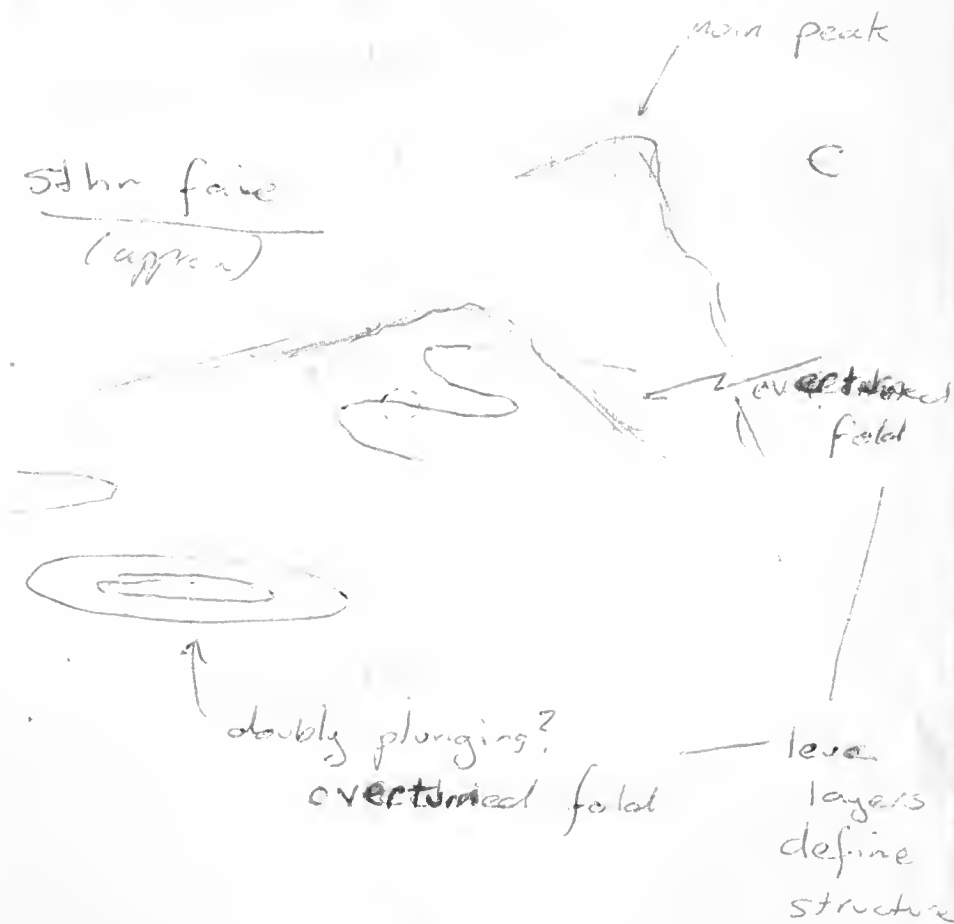
1. Reference Pk.

W

5th or 6th
(approx)

main peak

C



1.
px-play granulite

↓
Fels.
S: 345 - 52 = 293

~40 cm wide

D 82 L

layer of ~~px~~-q-f gn

(contains some px streaks, prismatic
fine-grained like run & shaly part)

* SPC = 474

Then a 60 cm wide px-play granulite
layer.

Main
base layer

S: 340 - 52 = 288

D. 07.5

Phy L: 03 → 171 - 52

(prismatic run
& large) = 119

Fels

Main base

S: 154 - 52 = 102

D 16 N

W
N



force

W
N

start of notes
- marking
A direction.

3
5

NE (magnetic)



SE face

SW

Px-q f green Pylons: $0 \rightarrow 338 - 52 = 286$

2 just a elong!

Px-play.

granulite - folded but more
consists of redolent pieces
of rose. - lamination is prominent
in quartz bearing gneisses.

Thin mediate string
~~rock~~

* SAC 475 phlog-px play granulite

* 476 px-q f gneiss

* 477 quartz-px-q-f gneiss

Simpson Pk/15/0688

Mt Weller

1.
Brown
px-qnt-g-f
grew
and
hyp-g-f gneiss
In places
close jointing
very intense
- however
apparently
varies somewhat in strike direction.

Fol.
S: $278 - 52 = 226$
D 42N
Plg Cr: $35 \rightarrow 349 - 52 = 297$
px elong:
Close jointing
S: $196 - 52 = 144$
D 82NE
Close jointing (most common
orientation).
S: $145 - 52 = 93$
D Ver +

Orientation also defined by qnt elong =
in the quartz bearing gneiss

Also grey qnt-g-f gneiss and
px-plag granulite. Compositional
language not strongly pronounced.

Simpson PK / 16 / 0780

Beaver Island

5. Grey. gut - g. / green

S. 295-52=243

D: 705

? Phy L₂ 23 → 282-52=230
(gut calory)

F₁₁

S: 279-52=227

D: 695

F₁₂

S 304-52=252

D. 70N

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

* SPEC 478

F₁₃

S. 285-52=233

D: vent

F₁₄

S 255-52=203

D. 455E

mijn field →
nose



→ 74



Gas-pu langes

SPEC 479

Layer of quartz-g
- magnetite.

Layer
S 230-52=178
D. 215E

Layer
S: 290-52=238
D. 74S

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

MT King

7/2/77

Time : 10.45

985 : 865.75

Time : 10.47

510 : 865.50

OUT: -15°C

Fin 13 gvec. last night sunset to sunset 5/16/77. 6.5/10.0

Simpson Pk / 4 / 1509

10 km E of Remickson Is

1. Time : 12.36
510 . 996.95

DIT = +2 °C

Time : 12.37
985 . 997.07

(base of "island")

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

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

About ~~2~~³ m
wide layer

Laying

S. $330 - 51 = 279$

D 49 N

of px - mag - quartz rocks

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

* SPEC 481 - (gnt) - zpx - plag granulite
Layers of gnt-px-g of gneiss

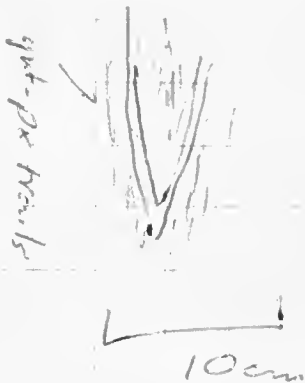
Remains of coarse-grained gnt-px
rock within the ^{px} mag-g rocks.
(SPEC by D Ellis)

Locally felsic layers within the
gnt-pr-g-f greiss appear to delineate
tight folds.

Other half
of hill

more lens rocks
- grey/orange layers.

- gnt-pr-g-f greiss with
patches of coarse grid gnt-g-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-g-f greiss

- gnt → biot Gnt ~~pr~~ prnts

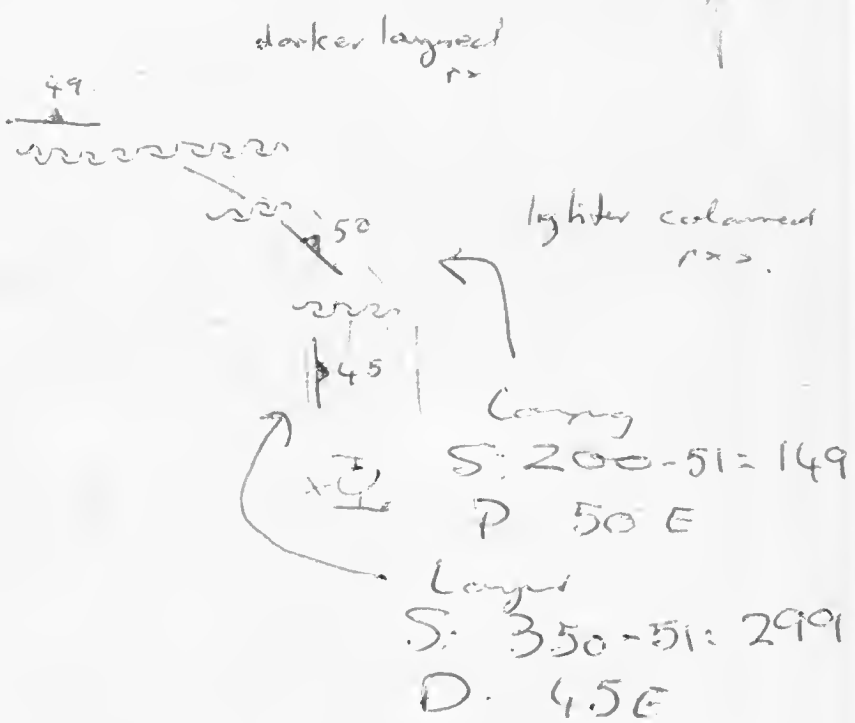
* SPEC 483

~30cm wide zone
of mylonitized
gneiss between

mylonitized gneiss.
S: 335-51 = 284
D: 61N

The darker rocks to the north of
the island & the lighter coloured
rxs to the south.

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



Lighter coloured ss consists
of px-plag granule, qtz & f qtz (± biot)
qtz-px-g-f green & px rutes.

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

* SPEC 484

Island just to NW - trench of
layers NNE

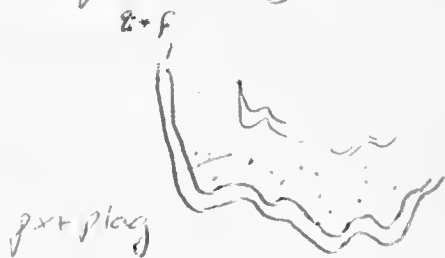


Simpson Pt / 4 / 1506

4 km SW of Hydrographic S

3. ps - plag granulate & px - q - f
green

Mesoscopic folds defined by
q - f layers.



General fold
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

On - q - f - green + knot 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 fold.. 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. P₂-plag granulite Layers
- some string S: 298-51=247
of quartz P: 65 N

3 m leuc layer consisting
of b-gnt-q-f & P₂-gnt-q-f

* SPEC 487

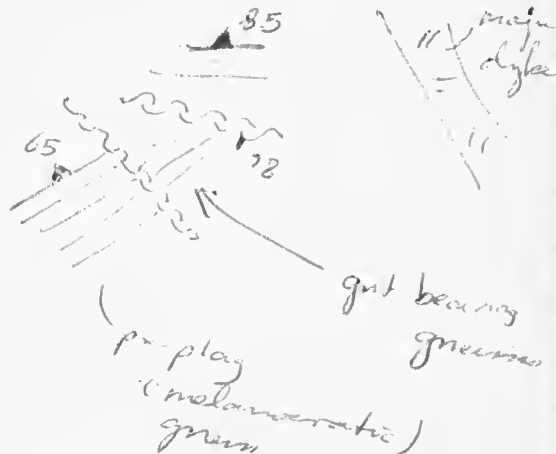
~2 m of grey gnt-p₂ gneiss
Layers truncated by
fault zone trending 354°-51=303

Another shear Steaming
zone - well parted S: 338-51=287
gnt-p₂-q-f mylonated gneiss P: 78 SW

* SPEC 488

~~*****~~

Zone may be ~ 20 m wide
(in rubble)



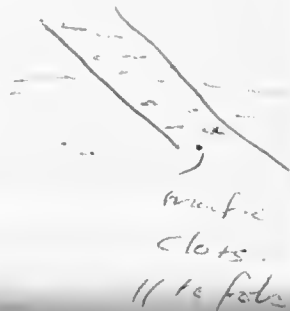
Some thin granite is pinkish
orange b. q-f aplite veins

P. q. f. gneiss

Med. qzt granite vein (5 cm)

Truncating foliation but including
magne strings which // foliation

(\Rightarrow earlier than fol.)



Nth side of
island fold →

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

Mesoscopic fold.



Plg fold 15 → 320-51
(estimated) = 269

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

~~Fracture exposed on fault face~~

Yapic dyke on NE side of island
trending NW (see D. Ellis spec)

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

Simpson Pk / 5 / 14 35

6 km SW of nearby.

→ Lenc layers of b-grit. of
green (grey) - biot secondary

* SPEC ~~488~~ 489

Yapic 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 & Prae Is / 13 / 2259

Tharp Ridges

2. Time: 11.11

510: 823.74

(Top of highest ridge)

OAT =

Time: 11.13

985: 823.89

-8°C

Went to canyon with hyp. cont
- 7- f green. Black layer
up to ~ 3 cm across
* SPEC 490



Underlain by 7- f green speckled
with clasts of biotite?

* SPEC 491

Edge of cliff - possibly ^{units above} underlain
by biotite - cont. 7- f green
(light whitish grey)

* SPEC 492

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

37 measurement
layering
measurement

240-51=189

-> D. 30 NW

appears to be tight folds (inclined)
- axial planes - // to layering
- most folds of this type seen
on screen. One seen in outcrop.
Lamination difficult to measure in
in fact exists - some screen
blocks - lamination defined by
fronds 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 qtz-g-f & p-g-f green

layers

S. 290-51 = 239

D. 20 N

Qty ha: 16 → 043-51 =

(difficult to define

352

- may be simple change)

Thin layers of px-p-lag granulite

& brown biot-px-g-plag green.

The brown massive looking layers

(franciscan) consist of px-p-lag

granulite, px-g-f green

& biot-qtz-g-f green

* SPEC 493

Some partial weathering of
hyp-g-f & qtz-g-f.

Mt Cat & Pie 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-pr greens

* SPEC 494

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

Layer of gnt-hyp-q-f
greens



Outz veins // foliation - some
crosscutting.

Fol.

$$S: 254-51 = 203$$

D: 80 NW

Phyl. (quartz elongation) $31-90$ ⁰⁷⁴⁻⁵¹
= 023

* SPEC 495 - for TS

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

Main brown layers consist
of red-quartz-hyp-q-f grains

Fol. in brown gneiss ^{Fol.}
- can't distinguish $S: 268-51 = 217$
lineation. $D: 70 NW$

Major dyke ~ 15 m wide
cuts brown unit (see D Ellis
for spec).

Bird Peak

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

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

Main rock type is brown

massive
~~hp~~-q-f green
 (med-grid -
 minor hyp)

Layers/ft
 5: 240-51=189
 D: 79NW

(Spec collected by D Ellis for J.S.)

From the pt mafic dyke at
 Benning clipping ~60 to 100.

Some veins of q-f pegmatite.

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

McL Ntk's / 13 / 2409

9 McLeod Ntk's.

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

On saddle.

Time 15.14 OAT -12°C

510 : 839 56

Time 15.16

985 : 839 76

2x-plant apiculite - containing
layers of steeply dipping px-biot
layers. Some crosscutting
hyp-q-f peg.

The px-q-f layers (also
according to Deane (q-f
Mica - q-f rocks)

1 night fold obliterated by
mafic layers are the two parallel
layers are or the same? Rubby
exposure + lack of foliation

Western most ridge in MCL Ntk's

Top of ridge (with road)

Time 15.59

510: 845.17

-8

OAT = ~~15~~ °C

Time 1600

985: 845.49

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

- also magnetite present.

* SPEC 496 Fels
Pyroxenite 332 - 51 = 281
country or 415W
& mafic layer

* - meta igneous? - SPEC
497

County rock - brown k-q-f gn
e? px - q - f gn. i. Ellis for spec

McL Ntk, 13/2409

McLeod Ntk

10.

Grey - brown

Fol.

S. 255-51 = 204

px⁺ - q - f

D. 17 NW

green

N. 51^{1/2} W → 320 - 51

= 269

* SPEC 498

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

Some hyp-q - f mottled.

Folding - difficult to measure.

(lack of enthusiasm!)

NB. Main ntk

- couldn't land to measure
other (ntk) 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

