

RON SCHEELE 1989

CATFISH

Rock type
color

810987

grain size
accessories, acid

matrix size

clasts %, shape, size

magnetic

altered

mineralized

trend, foliation joints

shearing amt

thickness

appearance

contacts

CATFISH

JUNE 18/89

JIM/RON

elevation 1150 m camp. #1

looking for official survey post
for claim 10

map 1:5000 1cm = 50m

- could not find survey post
- only post was an obsolete
claims post (1979)
- took one rock sample at post
at 1/2 m wide qtz vein

June 19

ROW/SIM

Found true location of camp

RON / GERALD / JIM

June 20/89

Air photo conversion

distance in mm $\times 0.754 =$ distance on
work map

Paces 70 paces = 100m in cm

MAPPING ALONG NORTH FACE
OF SOUTH MOUNTAIN

step #1 black slate
1248m along creek

RON / GERALD / JIM

June 21

Mapping north face of south mtn.

step #1 1248m confirmed rock is
1248m an argillite, 1% mineralized
concordal fracture
brown to grey weathered
greyish black fresh
very hard silicified
bornite & disseminated pyrite

#6 - flow similar to #2
 foliation of argillite 84/208
 trends between the two
 locations (6 & 2) in
 an recessive area

- Foliation may be affect by slumping
- weathered tan \rightarrow brown \rightarrow grey
- Fresh dark brownish grey
- microcrystalline mafic flow w
 mafic phenocrysts 25%

#7 - upper east outcrop
 joint 88°/231

Joint 85°/177°

well Fractured & jointed

Fault 58°/113°

joint 72°/192°

glacial striations trend 236°

bedding 71°/105°

Foliation 74°/146°

- flow (porphyroblastic)

euhedral prismatic mafic phenocrysts

weathered black Fresh greyish black

matrix weathered tan/buff

Fresh brown grey

aphanitic

III

Volcanic breccia
Flow
pyroclastic

7

Flow
6

argillite

Flow
24

205

Tuff

2

FIELD

5

- phenocrysts range from 3mm to 20mm

phenocrysts aligned for bedding

71/105° & not visible on

Fresh surface

- size of pheno. ↑ downstream ∴ top W

volcanic breccia mafic pyroclastic

weathered

- light buff clasts in a dark brown grey matrix

- sharp indistinct contact upper planar minor undulations 3cm 62/162°; iron stains

53/118° bedding from phenocrysts

clasts possible made up of

flow matrix

- clasts have mafic phenocrysts

#8 15601 1400m

brownish grey weathered

dk greyish black/brown Fresh

with Feldspar phenocrysts 5%

aphanitic flow

mafic & feldspar phenocrysts

glass shards present

increasing phenocrysts downslope NW

foliation 64/360°

15602

Fault zone, red/brown staining
 3-4m wide
 highly fractured, several joint sets
 5m down from #8
 rubble zone btw porphyroclastic
 flow
 goossan & bornite staining

aligned phenocrysts 6/162° ?

- #9 - lots of light grey colored
 volcanic breccia in gully
 must be coming from further
 up, look for when doing ridge!
- lots of slicken sides & copper staining
 - less phenocrysts in mafic flow
 upslope

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#10

15603

1400m

30cm wide aplite sill
cryptocrystalline
buff weathered & Fresh
micro porphytic
host rock is 20%
phenocrystic flow
36°/007° ✓

#11

15604

1355m

east of 20% phenocryst flow
similar to #10 with glass
decreasing phenocrysts to 5
tuff/flow
Fresh grey/black
w/td. brown/grey
blocky, ~~lacking~~ phenocrysts

11

June 22/89

RON/GERALD S115

elevation 1185m

backsight to camp 315°

- did soil sampling along north face of middle ridge
- re-did previous soil samples and made corrections
- morning Ron mapped Gerald sampled
- afternoon Ron sampled Gerald mapped
- sample S115
 - 2cm of A, well textured B in lots of pebbles
- located 10m downslope of adit

S116

back sight from camp 001°

1140m

B horizon well developed 4cm

A horizon none or little present

well developed C horizon 8cm

S117 back sight from camp 32°

1130m

2cm of A horizon

8cm of well developed B horizon

B horizon sandy & pebbly

5118

1100m

back sight from camp 045

3cm A horizon

12 cm B horizon

C horizon below

very good profile
beside river's edge5119

1100m

approx 76 paces from 5118

2cm A horizon

10 cm of sandy pebbly horizon

very good profile
beside river's edge5120

1070m

3cm A horizon

2cm B horizon in clay roots, sand

large C horizon in sand & pebbles

40cm

- along river bank

- was difficult to locate

- upstream of large bare
patch on N side of stream

June 23

RON/GERALD

Continued w soil sampling
on middle ridge

Gerald sampled in morning
Ron sampled in afternoon
- both slid down snow filled
gully and are one for one

5130

1210m on north side of
middle ridge on 20° slope
good drainage

2cm A horizon black humus

"B" horizon & "C" horizon hard
to distinguish

sample is a mixture of C
& B horizons? (mainly C)

fairly moist soil

medium brown "B" horizon with
clay, sand, pebbles & some roots

- sample taken at top of C (B?)
horizon

S131

82m from S130

1220m

4cm A horizon black humus
 w lots of roots
 no visible contact btw B & C horizons
 "B" horizon is medium brown
 and is sandy is less numerous
 pebbles & cobbles of various sizes
 sample is taken on steep
 talus slope of west colored
 oxidized scree
 sample taken at upper part
 of B horizon
 "C" horizon fairly wet
 - profile similar to S130

S132

1230m - 88m from S131

1-2cm of A horizon

B & C horizon are sandy
 & pebbly w roots & are
 hard to distinguish
 - sample taken at top

of B(C) horizon and is probably
a mixture

- area is a steep oxidized
talus slope
- soil is fairly dry

89 m from 5132 (1215 elev.)
reddish oxidized boulder
w/ chalcopite, pyrite & ^(marcasite)
some some soft brassy mineral
rock looks like a mafic tuff
with feldspar phenocrysts
rock has a sparkly appearance
probably from mica (musc & biot)

5133

1215 m 8m from 5132

A horizon 3-4 cm thick

B horizon absent or indistinguishable
from C horizon

soil is moderately moist

located on steep slope of
North side of middle ridge

4
C horizon is medium brown
is numerous pebbles, sand
& roots

5134 95 m from 5133 (1235m)

definite color change

NO B horizon

C horizon is brownish/
black and is close to
the same color as A horizon
lots of roots, humus & rocks
less sand & clay present
locate on grassy steep
slope near creek just
downslope of saddle in
middle ridge
sample may contain some
"A" horizon but tried to
get "C" horizon

June 24

Ren

- went soil sampling on north side of middle ridge took approx 1hr & 40 min to arrive at 5134 from camp

- windy morning & overcast
5135

1240m 98 m from 5135

soil profile poorly developed sample moderately wet

took soil from about 10cm down in what looks like the "C" horizon is lots of large & small pebbles, roots & sand

"C" horizon looks medium brown & there is no color distinction btw A or C, "B" horizon is absent

5136 sample 86 m from 5135

1242m

"A" horizon 6cm blackish brown

"B" horizon absent

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"C" horizon brown w lots
of pebbles, sand & roots
sample moderately dry
soil taken at upper part
of C horizon

5137 went 110m from 5136
1260m

no B horizon present
A horizon 6 cm thick &
is blackish brown
"C" horizon is same as
5136 & tried to take
sample near top of horizon
approx 15cm from top
of profile

5138 100m from 5137 1240m

no B present
soil taken from top of C
"A" horizon 4cm thick blackish brown
taken on steep (grassy w
talus) sort of slope
"C" horizon medium brown w
lots of roots pebbles sand

5139 100 m from 5138
1240 m

profile difficult to find
large "A" horizon 10-15 cm
no B horizon
"C" horizon very clayey
in some pebbles + sand
sample taken near talus gully
below large outcrop
'C' horizon medium brown
'A' horizon black

5140 100 m from 5139
1225 m

large A horizon 10-15 cm
& is blackish brown
no B horizon
C horizon is reddish brown
& was taken at top of C
horizon
moderately wet
among small shrubs

514 | 90m from 5140

1220m

A horizon well developed
is blackish brown 10-15cm
no B horizon

C horizon is brown
moderately wet & typical
texture

June 25

RON/SIM

9:13 am

1208 m same post

backlight from camp 201°

Reads: 'CATFISH 10

(252W)

POST 15

TAG: 119868

Sept. 3/88

11:40 am

stop #20 back sight from camp 210°
1306m - reddish brown w/td. surface

fresh greenish-gray matrix
w/td. surface has
buff color subangular clasts %
ranging size from 1mm to 25cm

lithic - clasts are hard to see in
fresh surface

- outcrop is reddish brown/oxidized and fairly blocky, moderately jointed
- slight mineralization of pyrite
- volcanic breccia (matrix support)

Stop #21 ↙ back sight from camp 200°
1315m

- outcrop is 3-4m wide is contacted above by a red gossan type rock
- contact appears to be some sort of shear plane
- rock is hard to break & seems fresher, blocky & less fractured
- there are small shear planes thru it

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Description is similar to stop #18
 with: rock is greenish brown w/ euhedral
 shaped laths of feldspar 1-15mm &
 euhedral crystals of qtz 5-15mm
 fresh: dk greenish grey w/ white
 phenocrysts of feldspar + qtz in 10%
 aphanitic matrix
 possibly a diorite porphyry
 Foliation/Joint $85^{\circ}/229^{\circ}$

15357

rock above diorite porphyry
 approx. 4m up slope
 mafic volcanic breccia
 oxidized reddish brown &
 tan colored

- fresh surface is purplish
 grey aphanitic matrix with
 clasts from 1-40 cm
 clasts are angular approx 20%
 appears highly fractured & lots of
 shear planes thru out
 less blocky than diorite porphyry
 no visible mineralization
 strong gossan appear w/ Cu & Fe stains

clasts are lighter weathering & dark matrix
 compared to the matrix (mud clasts)

90°/260 contact btw porphyv & breccia

72°/1349° joints/foliation } may be slumped

86°/311 joint " " *

#22 1360m

Foliation/joint 84°/210° penetrative

85°/110°

010° bearing to camp

breccia, flow?

purplish grey aphanitic matrix

w/ 1% feldspar phenocrysts 2mm

weathered reddish/brown/tan

tan colored clasts 3-15cm

well jointed & fractured

no visible mineralization

Stop #23

15358 mafic flow (20% pheno)

phenocrysts aligned 72°/226°

known w/ creamy white phenocrysts
 of feldspar

- dk. grey brown w 20% white cuboidal feldspar phenocryst
- 3 - 8mm bladed in aphanitic groundmass
- alignment of phenocrysts define bedding $72/226^\circ$
- unit strongly sheared w at least 4 joint sets
- one joint may approx bedding
- very slightly calcareous
- no mineralization
- generally rubble
- back sight from camp 180°

mafic flow dark grey
phenocrysts 20%
 $70/340^\circ$ foliation
similar to # 23 $70/160$

E

23

Talus

(25)

(24)

grey
pinnac
fluv

293°



(23)

brown,
pseudocrystalline
fluv

1-10 ft - 1

FIELD

#26

1405m volcanic breccia

brown to tan color clasts in withrd.
fresh surface is purplish grey
aphanitic groundmass w/

30% angular clasts 1-15mm tan majority
2% clasts are also argillite few 20-30cm
moderately fractured
blocky

#27

15359 backsight from camp 172°

1390m

IJL:

- Argillite
- black, fissile
- moderately carbonaceous
- with vitreous plant remains
3mm
- 1% blocky pyrite
- possibly inklin formation
- contact btw Lakege Fm & inklin
buried in talus slope
- 63/40° bedding/foliation

#28 gtz vein in trace of arsenic
1420m 4 inches wide

15360 sample in aplite which hosts
vein

148° from here to #27
downslope from #27 30m?

June 26

Ron

- went mapping small outcrop
north side of south mtn.

- rainy day

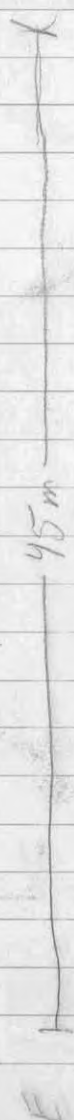
#29 blackish brown staining on a
1312m cream/tan/brown weathered surface
aplite

buff to tan aphanitic matrix with
phenocrysts of green ^{white} gtz 4-10mm 5%
and black mafic 2-4m w possible
alteration around them (hbl or pyx) 3%
moderately sheared

4 joint sets

no mineralization
resistant (hard to break)

192 backlight from camp



No markers
highly skewed
&/or jointed

badly sight
some 20 from camp
29 / 194
/ 330m

1320m #30
100
m/s-165

PIAT
69/246
Black
staining
from
water

61°/190
Joint

some 20
from camp

#29 1312 meters.
Feb. / joint 84/328°

Float

Float

Float

#30 same as 29 however there are no mafic & is a slightly lighter creamy/buff color back sight from camp 190°

#31 pure aplite but mafic appear plus also nodules of pyrite that appears to have replaced some mafic mineral

32 back sight from camp 186° elevation 1310m
aplite
none or very little mafics

33 aplite but in 1-2m phenocrysts mafic that are beginning to alter (they have brown color around possibly mineralization less qtz phenocrysts 1-4%) bearing to 27 is 169° back sight to camp 178°

1312m

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June 27

Ron

- went to map & sample upper and lower contact of argillite unit south mtn
- gorgeous sunny day

- outcrop 33

upper contact of argillite w
pyroclastic breccia appears wavy
and gradational over 1 to 4 cm

- conglomerate / argillite contact has slickensides resulting from shearing
- argillite is typical as described in #27

- breccia has a purplish grey
aplanitic matrix w both angular
& rounded clasts w the
majority of them sub-rounded

- back from camp 161°

- contact plane $72/132^\circ$ to SW

15361 sample of
breccia / argillite contact
chips over 20 cm

- congl also has some rip up
clasts of argillite pointing
to the west is "topo"

E

Gully

Mtn

34
light grey
fudge

photomicroscopic
Fluorid Similar
A # 7

33
cong.
amphib

35

SNOW

Ap.ite

36

3415362

20m upslope from 33
is a light gray tuff?

- this unit is only 20 cm
and has joints at $77/80^\circ$ to S.
and at $68/357^\circ$ to E.

- back sight from camp 161°
mineralization 2% pyrite arseno
dissem. then-out chalcoprite

3515363

chip over 10 cm of
pyroclastic breccia in calcite
veins or pods

slightly mineralized pyrite 3%
- calcareous

36

argillite outcrop $1/2 \text{ m}^2$
possibly lower contact is aplite
back sight of 157 from camp

37

argillite outcrop
back sight of 163° from camp
back sight of 281° from 36
bearing off 287° to 38

38 Black argillite39 upper contact of argillite is
~~siltstone~~ / tuff ✓

matrix of tuff is purplish grey
 weathers surface looks brownish
 grey + has a salt & pepper appearance

- also has stringers of argillite
- grain size is aphanitic
- argillite is very carbonaceous
- back sight from camp is 1.71°
- foliation / contact plane is
roughly $50 / 140$
- joints $86 / 224^\circ$, + $71 / 360^\circ$
- contact occurs at base of outcrop
of mtn.
- 15364 chips of rocks over
contact 30cm (just tuff)
- bearing of 154 to 27 (15359)
which is downslope about 70m

15365

reddish gossanous area
 5m below caved-in adit
 of north face of south-west
 rock is a purplish grey
 buff
 has mineralization in small
 pods possibly altered arseno

15366

aplite to qtz veins 5m
 thru-out
 arseno mineralization
 back sight to camp 185°
 about 25m E of #31

June 28

Ron

went mapping + rock sampling
of main gully up from camp
on north face of south mtn.

40 15367

- banded gneiss w/ qtz veins
- mafic bands are dark green to black & are approx 1-2 mm in width
- felsic bands are cream to white and are approx 1-3 mm in width mainly qtz
- width of bands varies considerably over outcrop 1m to 10m becoming ^{mass} felsic or mafic
- qtz vein is 30cm wide and is heavily shearing w/ slight mineralization + alteration
- back sight from camp 161
- trend of mineral lineations 329° dip
- blocky, prominent, w/ some Fe staining

41 15368

- aplite cream to buff aphanitic groundmass w/ green qtz phenocrysts 4% from 3-5mm
- 1-4% brown specks probably weathered mafic ~1mm - 3mm some lath shaped

- brownish red / tan weathered surface w/ Fe staining
- no visible mineralization
- highly fractured / jointed
- typically the same appearance in outcrop semi recessive

15369

aplite

- same as 15369 w/ the exception of a decrease in # of Qtz phenocrysts to 1%, outer surface is more oxidized w/ visible mineralization of pyrite + arsenopyrite < 1%
- outcrop appears to be fractured to slightly larger pieces 8cm x 4cm x 4cm average

15370

- aplite
 - has changed color from a creamy white/buff to a pale green
 - composition wise is same as 15368 but now contains biotite? & phenocrysts of pink feldspar 1-2% approx. 3-4mm lath shaped
 - rock is harder to break (impossible) and is now more prominent
 - visible mineralization of pyrite $< 1\%$
 - outcrop is whitish grey instead of the reddish brown color
 - outcrop is less fractured and breaks into larger pieces
 - outcrop has with it recessive areas which contain the creamy white/buff aplite
 - contact of the different color aplites is planar & sharp
 - back sight from camp 160°
- * color change may be due to staining but change in hardness may represent a compositional change

15371

aplite

creamy/white buff aplastic
groundmass w green qtz phenocrysts
to 3-5mm 2%

- similar to 15368 however
- weathered surface is extremely rusty (oxidized) + gossaneous and appears highly sheared + fractured (folded)

15372

qtz vein

creamy white w green/gray
weathered surface (from arseno?)

qtz appears very vuggy

full of green alteration minerals
medium to coarse crystals
w shearing thru out

- aplite host has turned greenish white w no visible mafics
- massive arsenopyrite mineralization
- vein $82/070^\circ$ roughly, dip towards South

42 phenocrystic (20%) mafic flow
see #7 description

15373 qtz vein within
banded gneiss
vein (auger) is 40cm across
appears to trend southerly
- qtz is white, very fractured
with visible pyrite +
Fe staining

June 30

Ron / Gerald

- went mapping + rock sampling
in Boundary Range Metamorphics
close to gully (contact of Intermontane
Belt + Coastal Plutonic Complex)

15707 banded gneiss/schist
- felsic bands to 2mm
- mafic bands to 5mm
- feldspar laths 1-3mm visible ~ 5%

medium grained

slight shearing w yellow + red staining

- visible pyrite disseminated 1%
- rock appears green (pistachio) w alteration minerals like epidote, chlorite
- outcrop appears fairly massive and is prominent & hard to break
- foliation 80/32 2j

15708

- banded gneiss
- felsic bands 2-10mm pale greenish/white
- mafic bands 3-12mm dark green
- fine to medium grained
- visible pyrite & some chalcopyrite 2% in mat of rock
- epidote visible in felsic bands
- outcrop is prominent & compositional banding is quite evident from

differential weathering

- weathered surface is brownish/grey w occasional rusty patches
- foliation $70/330 = 75/335$
 $\& 80/340^\circ$

15709 feldspar porphyry (diorite)
 greenish/dk grey aphanitic groundmass
 w feldspar phenocrysts 10-25mm
 20%, of green 1-5mm 5% &
 biotite 1-5mm 5%

plag. are creamy white fresh
 and are creamy/buff weathered
 weathered surface is brown
 contact is aplitic is sharp
 and waxy 1-5mm
 outcrop is prominent
 slight mineralization < 1%

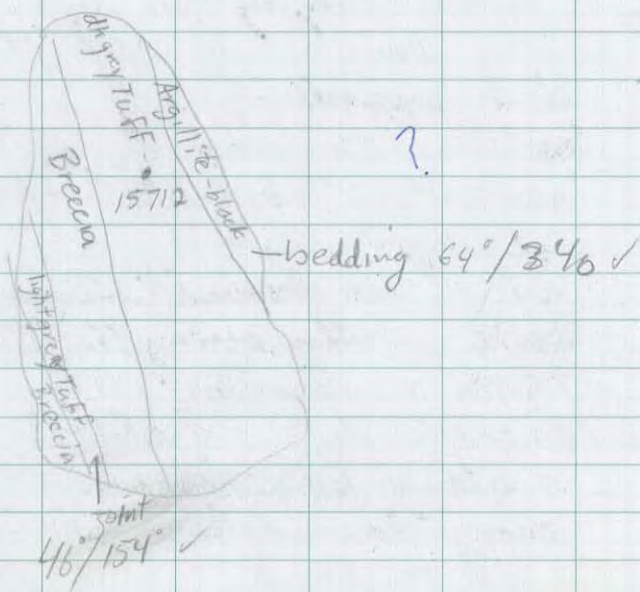
15374

- oxidized RED/ORANGE aplitic
- mineral mainly weathered out
 red or black

15375

shistose gneiss
 mainly felsic bands
 alignment of platy minerals
 range of pale to dk green
 w rusty weathering
 disseminated pyrite thru out
 3%

42



Argillite - black, same as #33

Tuff greenish grey w odd

15712 pad of green qtz, the grey clasts
disseminated pyrite thru-out
1-2 %

contact w argillite is sharp
& semi planar

Braccia

dk greenish grey sphaeritic matrix
w clasts ranging in size from
1mm to 70mm

matrix supports

- lapilli 1-5mm majority 35%
- several large bombs & clasts of
- argillite clasts 15%
- cast of tree branch (calcareous)
- lapilli weather creamy/puff
- bombs weather tan/brown
- argillite clasts are black
- weathering surface appears
raggy from weathered out lapilli

- 43 - dk. greenish gray tuff
 aphanitic groundmass
 heavily sheared & rubbly
 weathered brown
- also lapilli tuff/breccia
 - same as breccia #42 but
 less large bombs & clasts
 of argillite



- 44 - greenish grey tuff
 15713 no visible mineralization
- aphanitic groundmass
 - same as 43

45 crystal tuff
 dk greenish grey
 crystals are 1-2mm lath-shaped 4%
 & also, circular crystals of
 green qtz 1-4mm 4%
 aphanitic matrix
 weathers brown to grey
 no mineralization evident
 calcareous → calcite veins 1-2 mm
 50/30 2° foliation?

15714

sheared qtz veins w/ 1:1
 banded gneiss
 some very massive pyrite
 w/ in qtz

15710 red/orange oxidized aplite in gully

15711 weathers out pale green arsenopyrite
 vein

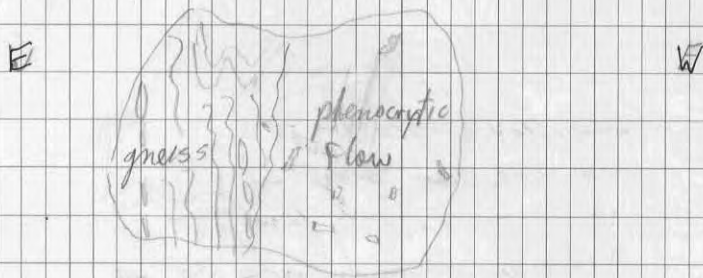
July 1

Ron

- went mapping in an
Boundary Range metamorphics
around south mtn. towards its
south face

- 15376 10% phenocrystic flow
granitic groundmass is
lt green/grey
- laths of feldspar appear same
color as groundmass & are
hard to pick out except by
their "gleam"
 - on weathered surface clasts
are creamy/white and are
euhedral 1-4mm 10%
and the groundmass is
brownish med grey
 - calcite veins cut thru
flow where micaceous minerals occur
 - little mineralization
 - outcrop appears polished from flowing
water + mod. jointed

- contact is gneiss on east side of exposure
- gneiss has greenish white felsic bands gtz 1-3mm & brownish mafic bands of biotite which have schistosity
- gneiss is weathered tan/brown and has discordant veins of calcite which appear to biotite
- outcrop is again polished from flowing water & is mod. sheared
- gneiss also has brecciated gtz veins numerous that are folded, faulted, || to foliation
- foliation $73^\circ/354^\circ$ ✓
- backslpt to camp 122°



looking up slope to the south

15377

aplite pale green

weathered orangish/buff

contains brotite phenocrysts

2-4m 5%

- mica have red weathering
rims around them

- shear planes have musc.
build-up on them

- phenocrysts of feldspar 6mm
pale green 2% also visible
(perhaps more hard to see)

- slightly shear w red
oxidizing stain (minimal)

- arsenopyrite was found in
rusty colored piece of aplite

15378

~~phenocrystic flow~~ → f.g. aplite ✓

- med. greenish grey w

lt grey bands, very fine grained groundmass

- feldspar phenocrysts range

in size from 1mm - 5mm

and appear very fresh 2%

- brotite phenocrysts

are 1-4mm and appear in
 anhedral irregular shaped masses
 and possibly in dark streaks 10-15%.

- almost looks like meta SST in one area!?
- rock shows flow banding perhaps?
- slightly calcareous along thin 1mm
 calcite/biotite vein where chalcocyanite
 is visible
- calcite vein occurs // to lt. grey band
- breaks easily into "flint like" pieces
- weathered buff/grey/cream
- bands are approx 1cm wide
 and are mainly planar but some
 are wavy
- has microfaults & slight shearing
- contact w/ gneiss is sharp &
 wavy with flow looking highly
 fractured near contact & a
 chilled margin approx 1cm
- bands foliation $70 \pm 70^\circ$?
- very fine grained almost cherty
 looking for 5cm near contact

15379

shist/gneiss

felsic & mafic bands

grey fresh surface

& rusty weathered surface

rock is very sheared &

easily to break

- outcrop is rubblely &

semi prominent

- batho of feldspar 1-2mm 10%?

- pyrite & chalcopyrite is

visible disseminated thru out 2%

46

mafic tuff

dk. grey aphanitic groundmass

1-2mm lensoidal clasts

lt. grey 5-10%

mod. sheared

hard to break

wavy sharp contact with gneiss undulations

aplite

3cm

- pale green/creamy buff

aphanitic groundmass in

weathered red rims around

crystals 1-3mm 5% best?

Rusty color on outside &
mod. sheared

diorite porphyry

- dk grey aphanitic groundmass
w phenocrysts of feldspar
2-10mm 20% & brown phenocrysts
of biotite 2-5mm 5%
- slightly fractured
- no visible mineralization
- weathers brown to creamy white plagioclase crystals



looking southward uphill

47

aplite

pale green very fine groundmass
w phenocrysts of biotite?1-2mm 20% & feldspar 1-2mm
10%?

- rusty weathered surface

- mod. fractured & rubble

- red weathered rims around some
mafic.

- jointed into slabs 15-20 cm

15380

chlorte-calcite schist

highly altered

calcareous

fine grained

visible pyrite < 1%

greenish grey w

slight banding

July 3

Ron / Gerald / Jim

- went rock sampling south face of middle ridge
- established grid over intrusive area
- 25m interval southerly
- 5 rock samples E-W 3 intrusive 2 host plus any veins

75/10 E/V

qtz vein 74/333° ✓

145/30 W/V qtz vein 78/62-90?

roughly! Folded

140/25 W/V 15460

qtz vein 85/073

massive arsenopyrite

described elsewhere

150/2W/T 15479

fine grained aplitite

creamy buff

qtz phenocrysts 3mm 1%

mafics 1mm 1% biotite possibly hornblende

no visible mineralization

140/25W/V 15460

qtz highly weathered out

arseno (scorodite)

massive arsenopyrite bands 25%

w some pyrite cubes 1% 2mm

white w greenish weathering 85/073

150/35W/T 15462

aplitite

creamy buff w greenish tint

weathered cubes possibly arsenopyrite or pyrite

reddish brown weathered serafene

→ 2% 1-3mm

fine grained sugary texture

anhedral qtz crystals 3mm 1%

mafics 1-2mm <1%

150/68 W/H 15464

- med green / grey
- silty argillite
- foliation developed
- silt grain size
- may represent a silty shale
- Pre-Permian metamorphics
- metallic mineral < 1% brassy/silver

150/66 W/I 15463

fine grained argillite
 sargary texture
 arsenopyrite fine veins & blocky 6 mm
 pale green / buff
 waxy surface
 < 1% mafics

145/30 W/V 15461

qtz vein
 blocky bands of arsenopyrite 20%
 possibly some pyrite < 1%
 major vein > 10 Ft
 staurolite weathered surface

78/062-090° ✓ = 78/076

150/5E/H 15458

med. grey argillite w silty lenses
foliation developed mod.
slightly folded

PPm

clay-silt grain size
no visible mineralization

75/10E/H 15444

quartz feldspar schist
eye shaped Qtz + feld. xstals w 2-3mm
biotite flakes encompassing the Qtz

PPm

medium grained

no mineralization

med. grey / brown w white xstals

also med greyish green

silt size

massive

PPm

possibly tuff or siltstone
protolith

75/80W/IH *grains* **15439**

lt green bands 10 mm (qtz rich) w
alternating dk brown 3 mm of
mafics

fine grained

foliated & banded

sedimentary protolith

rusty weathered surface

no visible mineralization

PPm

75/10EIV

75/0W/I

75/30W/I

75/28W/I

top/0W/I

} left behind

Ron/Gerald/Jim

July 4

continued rock sampling grid on south
face of middle in coastal intrusives
aplite

- traverse 225 m
- west contact of gneiss is covered approx. 33 m west of base line
- samples 225/18 W/I and 225/25 W/I are double the regular size and will be used as controls for lab accuracy
- east contact of gneiss is covered but is approximately 15 m east of base line

225/18 E/I 15480

fine grained, silt size
metawacke

grayish med green
felsic lenses

slight foliation/banding
PPM

pyrite visible < 1%
rusty weathered surface
heavily sheared

225/18 W / I 15479

fine grained aplite
sugary texture
pale green/creamy color
weathered tan

coarse qtz phenocrysts 3-4mm green 3%
coarse feldspar " 2-10mm cream 1%
biotite & other mofic? << 1%

heavily sheared
no visible mineralization

225/25 W / T 15478

fine grained aplite
sugary texture
creamy white
weathered tan

antedral & square (qtz)?
coarse qtz phenocrysts 3-4mm green 2-3%
feldspar phenocrysts 1-2mm cream < 1%
biotite lenticular shaped 2-4mm brown 1%

some internal staining
pyrite << 1%

heavily sheared → hairline fractures

75/30w/I 15441

fine grained aplite
 sugary texture, creamy white to pale green
 coarse qtz phenocrysts 5-10mm 5% cream/green
 no mafics visible
 arsenopyrite cubes 1%
 qtz filled hairline fractures
 weathered rusty tan
 heavily sheared
 some weathered out cubes possibly arsenopyrite

75/10E/V 15443

qtz vein in PPM
 highly sheared
 no visible mineralization

74/333°

70p/10w/I 15423

fine grained aplite
 sugary texture
 pale green/creamy
 coarse qtz phenocrysts 2mm 1% green
 mafics 1mm "specks" 1%
 rusty weathered
 no visible mineralization

15/8W/I 15442

fine grained aplite
sugary texture

qtz phenocrysts 2-3m anhedral +
square 3%

feldspar phenocrysts 4-10mm 2%

mafics 2% weathering brown

pale green → creamy white

fractured w qtz filled fracture veins

75/75W/I 15440

fine grained aplite

microcrystalline → f.g.

lt green to pale greenish white

→ near Pm feldspar contact

rusty weathered out spots → mafics 1%

brown internal staining

heavily sheared

Shear Zone

approx 10m wide 50m long

striking approx. 013°

heavily fractured w rusty areas

July 5 groceries 60

July 6

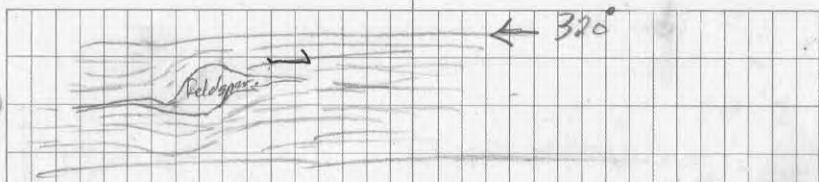
- RON - went mapping on south + east side of south mtn
- beautiful sunny day, very humid

48 1237m elev.

- qtz, feldspar biotite schist
 - greenish grey (med.)
 - fine grained
 - foliation mod. develop.
 - plum bands of qtz feldspar intercalated with mafic bands of aenulitized biotite flakes
 - visible py 1%
 - weathered tan/brown
 - possible protolith dirty ss.
- RPM

49 15390 1

- 1255m quartz feldspar biotite schist/gneiss same as 48 except more foliated
- large sugar shaped xstls of qtz 1-3cm 1%



fine qtz veins crosscut foliation (banding)
and fracture surface contain py. chpy.
qtz vein 62/042 8cm apart
foliation 78/320°

50 fg. aplate
lt. green
rusty specks 3%
asp visible
feldspar laths 1mm < 1%
rusty withed surface
mod sheared

50 1/2 shear 74/163°

51 eq. biotite qtz schist
white + brown banded, fol. well devel.
mafic (biotite) bands 1-3mm
felsic (feldspar + qtz) band 2-4mm
augen shaped feldspar xstals 2-3% 4-7mm
possible protolith dirty ss.
moderately sheared

wthd. tan/brown

PPm

elev. 1360

52 aplite

1360 m elev.

fine grained

cream/pale green

feldspar laths 2-4 mm 1-2%

mafica wthd rusty 2-4 mm 1-2%

no visible mineralization

sugary texture

53 diorite porphyry

1365 m elev

microcrystalline → w.f.g. mafic

groundmass dk greenish grey

feldspar laths 5-10 mm pale green

to creamy white, some stained rusty 20%

mafic phenocrysts brown (biotite) + may

include metallic mineral 3-6 mm 10%

rock seems heavy for its size

moderately sheared

- not able to see any alignment of crystals
- outcrop with gray w cream plag. phenocrysts

54 aplite

1360m

fine grained → pale green pass. near contact
 cream buff
 with rusty
 mafic 2-4mm 1%
 fractures 1-2mm filled w qtz & pr mafic
 moderately sheared
 sugary texture
 subtly outcrop
 no visible min.

July 7

Por Jim

- did mapping area south of south mt.
- determined claim bdy. & helicopter plan for tomorrow
- hot sunny day

saw 7 goats & 13 caribou.

July 8

Row

- went mapping on south face of South mtn
- hot humid day, lots of mosquitoes
- got dropped off by helicopter
- looking to determine contacts of muJV & muJC and also anticline syncline pair as shown by Mitchell
- Slice of Inklein may be present close to camp

MuJC - last supported congl.
derived from Inklein Fm.
siltstones and argillites

MuJV - variegated pyroclastic lapilli
tuffs, bladed feldspar porphyry
flows

top ukg
↑ muJV
LJLi
UTS
P-P m

#55

1520m beside creek

dk grey mafic ash crystal tuff
 microcrystalline
 no visible mineralization

clast supported congl.

matrix greyish green coarse sst. (dirty)

withd grey / brown / tan

clast subrounded to rounded

1-6 cm dominantly 4cm

range in color from light sst clasts

to dk. siltstone + tuff

no visible iron.

- some silty mudstone clasts are laminated
- slight rusty withd.
- bedding $45^\circ / 110$. Dip

1530m aplite 15393

fine grained med green

withd tan / buff

feldspar phenocrysts 2% 1-3mm

no mafics

56 lapilli (crystal) tuff 15394
1705m aphanitic dk green grey gndmass

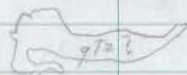
lapilli 1-2mm floc 10%

also lapilli 4-5mm same color as gndmass 5%

also lensoidal to irregularly shaped

floc crystals (qtz) some 2cm long bands 1mm thick

3%



crystals 1-2mm these too small
to recognize

weathered surface shows

lapilli eroded out

57 optite 15395

1715m fine-med gr.

lt-med green gndmass

phenocrysts of plagioclase qtz biot

biotite 1% 2-3mm

withd cream/buff

embedded plagioclase 3-4mm + as in cl

no vis min

blocky outcrop

58 15394 sheared mafic tuff
 1730m rusty withd.
 70/325°
 dk grey microcrystalline gndmass

59 mafic tuff
 very blocky & jointed
 85/070 joint/shearplane ✓

60 aplite
 fine - med gr.
 lt-med green gndmass
 phenocrysts of plagioclase & mafic
 mafic 1% 1-3mm
 with cream buff
 plagioclase 1-2mm
 no vesicular
 same as #57

61 mafic pyroclastic breccia dk grey
 w/ black & grey lapilli 4cm
 & black specks of glass 2mm 3%
 fine ground

62 Mu JV

1815m

contact btwn congl & tuff
lapilli (crystal) tuff

dk grey gsdmass

lapilli are rounded qtz 3-4mm 1%

microcrystalline

lapilli of same comp as gsdmass

40mm & ^{hard} _{are} to distinguish

small laths 1mm 2%

rather dk grey/brown

63 48°/122° bedding ✓

clast supported congl.

64 43°/100° bedding ✓

clast supported congl.

65 15397

1790 - rusty coarse gr. sst
& congl.

- sst is med. grey salt & pepper

- greywacke, well cemented

- clast supported congl.

- lt to dk grey clasts 1-4cm

- #66 - med gray lapilli tuff
 - lapilli slightly darker but
 - extremely hard to pick out
 - approx 6 cm angular
 - microcrystalline

1539B med. grayish green lapilli tuff

#67 weathering pale green 5mm round edges
 lapilli cream 2-3mm 270 green 2-3mm 3%

sub round to angular, hard to pick out, with brown
 med sheared, microcrystalline groundmass, very rusty with

#68 laminated lapilli tuff

1640m top of snow (ridge) South mtn.
 32/120 bedding
 ✓

July 10

Row / Gerald

went mapping north face of middle
 ridge
 hot sunny day

lower adit

back bearing to camp 315°

elevation 1233m

- found sardone can in exposure
date of 1949

foliation of PPM at contact

89/322° elev. 1270m

90/322

foliation of PPM

85/360 elev. 1325m

backright from camp 318°

foliation of PPM

82/316 elev. 1332m

backright from c, 346°

15754 aplite

elevation 1340m

fine grained, creamy / buff

sugary texture

with rusty color

moderately sheared

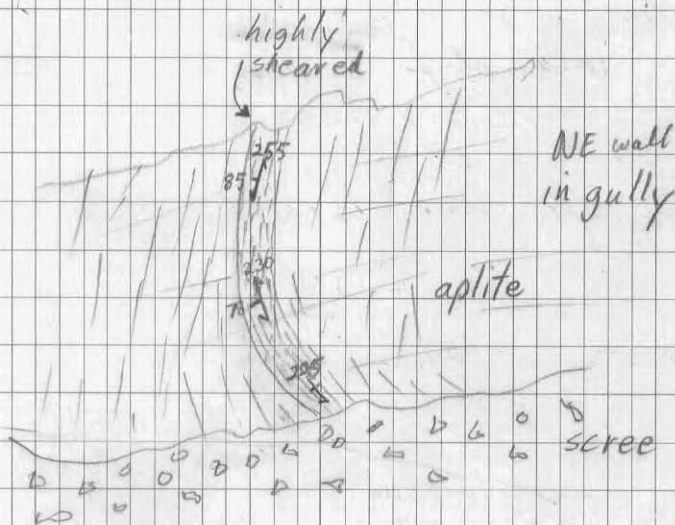
typical aplite as on south mbr.

no mafic
 no visible mineralization
 some oxide staining

July 12

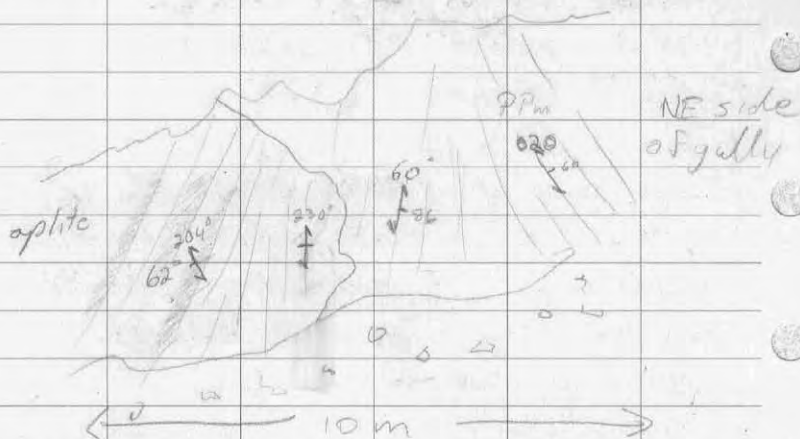
Ren

- went mapping structure in
 gully of south mtn



looking NE elev 1315 m

elev. 1320 in gully



elevation 1320

shear plane 82/072°

elev. 1365m

shear plane 72/280°

elev 1375 m

fol. 82/308° PPm

NE face of gully.

elev 1345m

fol. 55/350 PPm

NE face of gully

major shear fault striking
up gully at 325°

- fault breccia 15399
- some lithified
- made up of angular fragments of
gabbro and possibly volcanic or PPM
- clasts range in size from 5-60 cm
- approximately 50cm wide however
area was covered
- matrix was a sandy clay w a
steel blue/gray coating (Cu)

July 15

- spent July 13, 14 moving camp to
North side of middle ridge
- Ron / Jim / Gerald
- did detailed grid sampling of
aplite on North side of middle
ridge (mineralized zone)
- started at line 50 north
- traverses at 245° across aplite
- slope 37°
- baseline bearing of 335°

* 15755 → L50N/7W/I

shear 68/202

major slicken sides

approx. L50N/93W/I

Middle Ridge

PPn or Volcanics

aplite

aplite

scree

looking south

contact approx 10.9 m W of baseline

L50N/6 E/H 15756

fine grained
 med brownish grey fresh surface
 non-foliated
 weathered brown
 possible psilolith argillite
 PPM
 no visible microcrystalline

L50N/33W/I 15757

aplite

fine grained, creamy white

sugary texture

hackline fractures of gtz

gtz phenocrysts 1-3mm 5%

also med-green microcrystalline aplite

with 1% pegite from same area

no mafic

L50N/58W/I 15758

creamy white/buff aplite

very fine grained

specks of perhaps qtz < 1mm 5%

qtz hairline fractures

< 1% mafic

no visible mineralization

withd rusty color

L50/83W/I 15759

w fine grained aplite

pale green/buff

mafic specks < 1%

rusty withd. surface

mod. sheared

sugary texture

L50N/101W/I 15760

fine grained aplite

creamy buff

some chips with 4% mafic

looks like withd. out pyrite

withd rusty color

L50N / 114W / H 15761

fine grained
dk greyish black fresh
withd. brown

massive

eye shaped boudins of gfc & bi. 1%
4-8mm

one chip has withd pyrite
cubes thru-out 1-4mm 5%

possible protolith silty argillite
PPm

July 16

Ron/Gerald

- went sampling aplite (grid) on north side of middle ridge
- began L150N traverse approx. 30m down from L125N
- east contact approx. L150N/2W
- began day w altimeter set at 1055m for camp.

L150N/8E/H 15783

foliation 52/140° ✓

elev. 1355m

mod. foliated, f.g.

banded tan/brown bands of mica 10mm

w/ dk grey bands of
pyrite cubes << 1% 1mm

w/whd. greyish brown

possible protolith silty argillite

PPm → biotite qtz schist

L150N/0W/H 15784

qtz boudin in PPm

mod. fractured

20cm by 40cm

trending NW

very faint (fine) gold metallic

mineral on shear surface

L150N/5W/I - 15785
 aplite

f.g.
 sugary texture
 buff/cream color
 rusty iron color
 in biotite staining
 no mafics
 highly sheared

L150N/30W/I - 15786

f.g. aplite
 creamy buff
 one chip with multiple hairline gte fractures
 1-2mm about 10-15cm apart
 coarse phenocrysts of gte 5%
 biotite phenocrysts 1%
 mod. rusty colored
 no visible mineralization

L150N/55W/I 15787

has duplicate as control 15737

creamy buff aplite

fine grained

coarse Qtz phenocrysts 5% 2-5mm

sugary texture

less sheared than typical aplite

feldspar xstals 1% 5-6mm

green patches (squares) perhaps
with out arseno.

no visible min.

L150N/80W/I 15788

f. g. creamy/buff aplite

sugary texture

coarse phenocrysts of Qtz 1% 2-3mm

mafics 2-5% possibly bi. 1-2mm

mineralization evident along
shear planes, very finely
disseminated

fine Qtz hairline fractures (only a
few 5-10cm spacing)

L150 N / 105 W / I 15789

f.g. buff / pale lt-green aplite

no mafic

fine hairline of fracture

fine 1mm specks of metallic mineral

mod. sheared

closer to PPM contact

contact / L150 / 111 W

L150 / 117 W / H 15790

well foliated, fine grained

mafic bands 1-3mm } varic

felsic bands 3-5mm }

mafic chp w <1% finely dis. py

possible protolith grey wacke

PPM

- feldspar xstals 1-2mm % not sure

- qtz, bi feldspar grains

- on dip tightly sheared in mafic bands (fractures) thru-out

- foliation 50 / 170° ✓

July 17

Ron / Gerald / Jim

- overcast & sunny day

- did rock sampling of grid on north side of middle ridge

- started at L150N/111W and took bearing of 335° then did traverse on bearing of 65° approx 60 m down at L200N/111WL200N/111W elev 1380 m
15804

fine grained aplite

cream buff

with rusty color

low to mod. sheared

coarse phenocrysts of Qtz 2-3 mm 3%

coarse " of feldspar 6-7 mm 21%

little or no mafics

no visible mineralization

however brown with out speckles

4200N/86W/I 15803

creamy buff aplite
fine grained

coarse qtz phenocrysts 2%
little or no mafics
no mineralization visible

2200N/61W/I 15802

creamy buff aplite

f.g.

coarse qtz phenocrysts 2%

- some or clear (white) & some green

- euhedral crystals

- no visible mineralization

- no mafics

one chip from very sheared area

- outcrop sheared up into larger
blocky chunks

- one chip with very fault breccia
coarse feldspar phenocrysts very oxidized

L195 N / 30 W / I 15801

f. g. aplite

creamy buff

one chip with fine qtz laminae 1mm

fractures thru out w qtz stockwork

phenocrysts 1%

very coarse phenocrysts of

plagioclase < 1% 10mm

pyrite cubes 2-5mm on shear planes

- cubes appear to be concentrated into lines %??

- brown staining on very oxidized shear planes

L200 N / 16 W / Contact
approx. back sight 329°

L206 N / 23 W / I 15800

v. f. g. cream buff aplite

no visible mineral

gtz phenocrysts 2-4mm 1%
 feldspar " 1-3mm 1%
 mafic <1% possibly biotite
 one chip in stockwork gtz
 veining 1-2mm about 10mm apart

87/168 foliation of PPM
 at L200N/14W elev. 1357m

L200N/0W/H 15799

- gtz biotite muscovite sheet
- well banding & foliated
- dk tan/brown bands of mica 4mm
- greenish white felsic bands 4mm
- circular pods of arsenopyrite 3-6mm
mainly in mica-rich layers 5%
- pyrite irregular masses 1-3mm 2%
- lots of gold, I can feel it!
- protolith possibly greywacke
- PPM

L225/0W/H elev. 1325 m
backlight from camp 163°

July 26

office work
check assay results

July 27

Ron

did rock sampling on
north & east side of middle
ridge

C8N 241 L found previous flag
elev. 1285

15605 elev. 1410 m

plotted on mapped at 1400 m
because seemed more accurate

f.g. aplite
highly oxidized & stained
coarse phenocrysts of plagioclase 4-5 mm
& quartz 2-3 mm

2-3% mafics
possibly aspy mineralization
withd rusty color
fresh creamy white

15606 elev. 1330 m
86⁸⁰/346° foliation ✓
PPm

qtz bi schist/gneiss
well foliated
highly oxidized
withd. rusty brown ✓ disseminated
highly mineralized in chalcopyrite
pyrite and possibly aspy. 10%
must have gold... I can feel it
possible protolith dirty ss.

15607 elev. 1340 m
PPm

qtz bi mure. schist/gneiss
foliated
oxidized
withd rusty brown
disseminated py 4% possibly

aspy, chpy & Au! ?
 mainly gtz in dark band 1mm
 of mafica "anastomosing"
 fine fractures/shear 1mm w/
 dark (rotted out sulfides) infills
 possible protolith dirty ssf.

15608 elev. 1380

PP_m

highly fractured & rotted.
 py mineralization 3%
 1 large pod 2cm
 little copper staining
 oxidized
 meta. silty argillite
 gtz bc sheet ?
 easily broken
 fresh surface greenish gang/white
 poorly foliated

15609PP_m

highly fractured & oxidized

9/2 bi musc schist

poor to med. fol.

possible protolith dirty sst

py mineralization ~1%

highly withed.

15610 elev. 1420m83/180 of shear plane
aplite fault brecciahighly fractured & well lithified
also chips from beside shear
fto m. grained

creamy brown (stained)

py min 1% diss.

coarse xstals of plag. 2-3mm

5% mafic por. with sulfides

15611 1350m elev

PPm

med. grey

f.g.

coarse xstole clay laths cubedrol

4-6mm 3% redmy white

f. diss. py thru out 10% or more

withd very rusty brown

possible protolith silty argillite ?

massive

or volcanic ?

15612 1340m

PPm

oxidized

mod. fol.

poth of py 5mm 2-3%

possible protolith dirty sst.

qtz mica schist

also py diss very fine 2-3%

light + darker bands

appear deformed

cross-cutting foliation are

fractures 1-4mm very wavy

mafic



July 28

- Went Rock / Soil Sampling on north side of middle ridge
- start at elev. 1150m traverse at 250°

0153 elev 1260m

poorly fol. PPM
lt to med. grey
w f. grained

f. dissemin. py 2-4%

accicular habit of metallic mineral 1-2cm

brassy/brownish black color

withd rusty red

"patchy" fresh surface

fol 65/340° ✓

0152 elev 1260m

mod. fol.

f. g

qtz musc bi schist
greenish grey

withed rusty brown
 pods of withed out sulfides in
 foliation plane
 gtz boudin w py cpy 3%
 coarsely dissem.
 massive dk grey mxstal w
 py VF dissem 4%

0151 elev 1250m

duplicate also

lt to med grey PPM
 massive w patchy coloring
 perhaps irregular shaped br bands
 thru-out more felsic minerals
 w dissem. py 1-2%
 brown withed surface
 protolith → sedimentary?

0154 1260m

f.g. aplite
 extremely oxidized
 very crumbly
 hard to obtain fresh unwaltered piece
 fresh is red/ran (stained) w/
 dark patches (probably waltered
 out sulfides)
 no visible mineralization
 need dynamite to get a
 good fresh piece

0155 1267m

f.g. aplite
 shear zone striking 290°
 highly sheared & fractured
 hard to obtain fresh piece
 fault breccia
 oxidized
 buff / rusty color
 dark hairline fracture
 no mafics some dark specks
 perhaps waltered out sulfides

no visible mineralization

July 29

Ron / Jim / Gerald

- went mapping on NW face of middle ridge

July 30

rain day

- wrote monthly report
- interpreted assay results

July 31

Ron

- went mapping & rock sampling on north side of middle ridge towards west claim boundary #11

0063 elev 1340

near base of outcrop at granite upper contact in phenocrystic flow

fine grained dk. grey groundmass
in phenocrysts of plagi.

- laths are euhedral 3mm wide
upto 2cm long 10%
weather creamy buff
fresh whitish green to greyish green
twinning is evident
- rock is moderate sheared
- py cpy 2% on shear surfaces
- qtz inclusions within and
are more prominent
- interlayer with massive &
finely laminated mafic rocks
similar to ones seen at 0061
- phenocrysts randomly oriented

den 1330

fol. 60/130°
61/120°

0064 elev. 1290m

- fine grained
- poor - mod. develop. foliation
- 1mm laminations
- mainly med. grey rock
- ethid brownish grey
- py, cpy ~1% in felsic bands
- biotite gtz schist

0065 elev. 1295m

qtz vein is massive
asp & py thru-out 10-20%
py in well formed cubes 2mm^3
vein is rusty orange
in pale green patches

vein is 15cm across where sample taken

striking 075° approx
dipping 62

rusty more possibly vein
seen striking roughly 056°
upslope

vein was traced downslope to
1265m

vein was striking at 058°
vein is 10cm wide & appear
to be parallel (within) a
shear zone

- vein is highly fractured & weathered
- fault breccia & gouge are found w/in shear zone
- shear zone & vein are hosted by very poorly foliated dk greenish grey rock
- faint lamination (elsewhere 1mm) are visible and dark color of rock mainly due to biotite
- contact of granite 1260m
- shear nor vein appear to crosscut granite

0066

1265 m

qtz vein → mainly asp + py

25°/084

10 cm thick

weathering rusty orange &
pale greenpy & asp almost totally
more py compared to asp as
0065 vein0067

1270 m

fine grained calcite-rich felsic rock
twin plag crystal 2 mm visiblewhitish grey with irregular mafic
bands (blebs) three-olt

white mica also visible

- very fine diss. py around black
mafic

- withed rusty orange

- very calcareous

- bluish mineral possibly
flourite

0068

granite

qtz 45%

feldspar 35%

biotite 15%

cpy present ~ 1%

granite withd rusty color
coarse grainedelevation may be off due
to changing weather 1225m
probably should be higher

August

1, 2, 3

moved & set up
camp next to highway
got groceries & did misc on 3rd

August 4

Ron

did mapping & recon. on south
face of north mtn. west of road

found dam post elev. 1370m

Read:

CATFISH

IN 2W

91170

JUNE 21/86

CATFISH 3

IN 1E

28835

OCT. 21/86

0069 elev 1338m

at W end of DAM #3

granite

withed. creamy white/grey
qtz, bi, feldspar

0070 elev 1390m

contact of granite in PPM
 mod. fol. also some chips massive
 with dk brownish grey
 fresh dk grey \rightarrow brown
 py 1% bands & blebs (dissem.)
 espec. in felsic areas
 host gtz schist

0071 elev 1335

granite
 C. g
 with rusty brown

August 5

Ron & Jim

- went mapping & sampling
 of north mtn.

RON / Jim / Gerald

August 6

- mapped road cuts
- went south along highway
- approx 4.3 km from bridge
- at camp
- outcrop approx 57 paces = 80m
- found contact of PPr with granite
- sampled rusty areas

0105

- well foliated finely laminated metamorphic rock
- alternating bands of mafic 50-75% and feldspathic minerals 25-50%
- fresh surface med grey
- py, asp, cp ~ 3%
- without rusty dk. grey
- close to contact to granite (10m)
- some bands appear bluish grey (heavy)
- bands are 1-4mm slightly undulating
- fol. 64/349 1-3mm

dwp

August 7

RON/JIM/GERALD

- rain day
- went snapping road cuts

August 8

RON/JIM

- went mapping & sampling north mtn south face

0081

mod. fol.

alternating bands of mafic 30% & feldspathic minerals to 5mm

fresh surface greyish green also black & whitish bands

withed very rusty color

oxidation of sulfides

py bornite ~ 1%

one chip very fractured

Row

August 9

went sampling north mtn.

0083 elev. 1525m

well foliated finely laminated
metamorphic rock
alternating mafic 75% and felsic
25% bands 1-5mm

fresh surface dk grey to lighter
buff color felsic bands

Trace of py << 1%

withd rusty grey/brown
fol. 65/347?

PPm

fol. 80/360 1430m South wall of gully

0084 elev 1575m

massive dk green grey
withd very rusty brown

biotite flakes thru-out 20%
possible, also plagioclase?

trace of bornite, copper, py
mainly on shear surfaces
non-foliated

looks like PPM? possibly stibim.
altering to sericite/chlorite

fol. 61/335 ✓ elev 1565
5m from gully on
north side

0085 elev. 1565

fol. 55/350 ✓

dk greenish grey massive

f. g. rock w/ 3mm grtz vein

cutting thru it

py <<< 1%

also lt green/white alternating

- bands 3mm that are deformed
- microfolds scale of 2cm
- without brown
- some qtz veining & boudins
- no visible mineralization

0086 elev 1580

main gully

fol. 58 / 350° ✓

very well fol. in alternating
white feldspathic bands 50% and
dark greenish black mafic bands
50% approx 2-5 mm
micro folds evident
without very rusty brown

py 1%

Bands are undulatory 5-10mm
definitely P.P.m

0087

elev. 1530m

dark greenish grey
massive

f g

laths of plag. 1-2mm
rusty brown withd.

py finely dissemin. along
qtz hairline fractures + also
on shear planes ~ 1%

~~possibly a dike~~ volcanic protolith
mod sheared possibly staurolite?

0088

elev 1375m

well fol. w alternating
bands of felsic 40% and
mafic 60% minerals

laminations approx 3-5mm
schistosity evident

qtz boudins to 4cm

- also one chip of mica-rich
schist

- very soft malleable

- med. greyish brown / buff

washed brown
fol. 70/330

0089 elev 1275

qtz vein

86/095

490/095

med fractured

rusty white

50 cm wide

very resistive to erosion

intrudes (crosscuts) granite

no visible mineralization

assay for Mo because

other similar qtz veins

had molybdenite present

August 10

hot sunny day
flew up to top of north mtn
by helicopter

located PPM / Stuhini contact
mapped & sampled along
ridge then down gully towards
camp

0090 elev. 1635 m

well foliated

dk greenish grey

laminations mafic 80% felsic 20%

slightly undulatory 1-5mm mainly planar

1-10mm wide bands

with rusty brown / grey

trace of py << 1%

fol. 80/352

close to contact w/ fld. porphyry

def. PPM

cut by dioritic dike 2m wide

trending 32/050

dike has irregular contact 090° - 090°

fld. porphyry

- plag. phenocrysts 5-10mm long weathering creamy buff on a brownish withed surface.
- groundmass is aphanitic and is dk. greenish grey
- 10-15% phenocrysts
- contact trending roughly 80°
- roughly 15m wide

0091

elev 1608m

well fol. metamorphic rock
 with alternating bands 1-3mm wide
 rock is mottled light to dark green
 rock is mainly gtz feldspathic
 trace of py < 1%
 withed rusty brown / buff
 fol 75/347 J

0092

1545 m

fol. 79 / 355° ✓

mod. fol

ranging from well banded

lt green to dk. green / brown

bands felsic 60 mafic 40%

to more massive dk greenish

grey with faint greenish white

bands 1 mm

withd. very rusty brown

PPm

trace of py < 1%

0093

1525 m

- ranges from massive microcrystalline

dk gran to mod. fol. dk

green bands alternating with creamy

white felsic bands 20% 1-2 mm

to highly sheared white massive

rocks

- all are weathered very rusty brown

- py thru out 1-3%

sphalerite may also be
 present 2%
 very rusty colored talus slope

saw rocks that had been
 piled up trending in a line
 of 115° elev. 9505m

0094 elev 1290 in gully

mottled dk. greenish grey to
 creamy buff massive

one chip pale greenish buff
 in one cube of py 5mm $\ll 1/16$

otherwise no visible mineral
 highly sheared

very rusty brown int. surface
 non-fabated

|||

0095

elev 1200 m

very rusty orange aplite
 highly oxidized & weathered
 rock approx 5m across
 looks mainly like gtz
 within it is granodiorite
 looking c.g. rock is
 py 5% covering completely
 sheared surfaces as well as
 disseminated thru-out 100cm wide

0096

elev 1075m

very rusty orange
 highly oxidized
 pale greenish white
 microcrystalline
 gtz vein
 py 5-7% dissemin thru out
 trace of cpx
 5-10 m oxidized area?
 aplite

August 11

Ron

hot sunny day

went sampling south face of
north mtn. looking for rock
where very high Au values were
found from previous work 6700 ppb.

0097 elev 1315m

creamy white to buff coarse
grained granite

qtz 40% feldspar 40% bi 20%

withd rusty buff color

feldspars weathering to rusty brown clay
trace of py \ll 1%.

0098 elev 1325m

qtz vein in adit

very coarse grained

vuggy

white weathering rusty orange/brown

iridescent bluish black dendritic

like copper staining

no visible mineralization
 assay for Mo

3 semi-parallel veins 80cm to 150cm
 two of which converge 300cm wide

sampled all three
 90 / 076° 76 / 080°

host is PPm

0099

elev 1375m

PPm

- well fol.

- alternating mafic 30-70%

and felsic 30-70% laminations

1-2mm wide, slightly undulatory
 color ranges from creamy white
 to lt green to dk. bluish
 black

- all grt biotite schists

- no visible mineralization

fol. 39 / 350° dip varies

0100

elev 1415m

PPm

alternating laminations 1-2mm

felsic 30 mafic 70%

mod to well foliated

diss py thro-out < 1%

with rusty brown

fresh mainly brownish med grey

0201

elev approx 1435m

aplite f. g

fol. 60/270°?

approx 4-5m wide

- irregular wavy sharp contact
- cross-cut by Qtz veins 5-20mm
- phenocrysts of Qtz anhedral
5mm wide 10-20%
- creamy buff color
- one chip of contact with PPm
- appears fractured possibly due
to folding

0202

elev 1360 m may be off

Ppm

highly oxidized

with very rusty brown
alternating lt green + buff felsic
bands with mica (bi)

sandy outcrop just below cliff

py visible $< 1\%$ most everything else sulfides
weathered out0203

elev 1365 m

aplite

pale green white

phenocr of qtz

sulfides weathering out

1 m wide

several other aplites close by
contact $80^\circ/345^\circ$

August 12

sampled gtz vein & determined
how far its traceable

0204 elev 1275m

gtz vein

white milky color
with silty buff
coarse grained

vein is weathered out sulfide
no visible metallic although
some possibly copper staining

fol. $78/102^\circ$

width 375-400cm

offset by a sinistral fault
approx. 300cm

0205

elev. 1280m

qtz vein same as 0204 & 0089
east end is faulted off and
the vein can be traced only for
a total of 50m

74 / 275° *logs*0206

elev. 1305m

80 / 104° ✓

qtz vein

approx 300 cm wide

rusty withed.

traceable for approx 50m.

folded & faulted

no visible min.

e.g. raggy with out sulfides

* all qtz veins trend thru granite
approx east direction
ranging from 5cm to 400cm
approx 10-20 veins in gully

0207 elev. 1100m

cg. granite

withd very rusty brown

mainly qtz & feldspar very

little biotite

no visible mineralization

weathered out voids probably

sulfides

- hard to get a piece not weathered

August 14

found adit w good Au values
in qtz vein

0208/0209 elev. 1320m

- qtz vein white with rusty weathering

- wuggy $25/0.83?$

- wuggy $76-84^\circ / 043^\circ$

- approx 1 metre wide

- adit continues approx 20m

- cuts thru PPM

- py cubes w asp also possibly
cpy & Au 2%
- Kfs flakes (platy) also visible in
- took 2 samples one
for metallic gold analysis
- weathering products of scorodite
visible

qtz vein elev 1335m
75-81/220°
shearing at contact w pph
1.5 m wide

- kept tracing vein upslope
to blast hole/trench at 1380m
- was flagged previously
CFR-5
CFR-4

- vein 1.1m

75/020 roughly!

75/032

granite 1215m

0210

joints

75 / 170°

80 / 090°

3rd joint poorly developed

c.g

qtz, feldspar, bi

withd creamy brown/tan

no visible mineralization

0211

elev 1170m

qtz vein

200 cm wide

85 / 090° ✓

waggy

rudy withd.

cuts thru granite

very little mineralization

visible possibly py

very weathered

August 15

0212 elev 1450m

- mod. fol.
- alternating bands felsic & mafic
- weathered rusty brown
- greyish brown to whitish buff fresh surface
- trace of py $\ll 1\%$
- bands are 5-15mm wide
- PPM
- Qtz bi schist

0213 elev 1460 m

- well fol. PPM
- bi Qtz schist
- dk brownish grey
- weathered rusty brown
- fine laminations 1-2mm
- one chip buff colored f.g. possibly split, contain fine stringers of sulfide
- py dissem. thru bi $\sim 1\%$

qtz vein 1410 m

72 / 100

0.5 mm wide

Mo present

large crystals upto 5cm

wiggly

0214 elev. 1335 m

cg. granite

crumbly

highly weathered

qtz 40% anhedral

plagioclase 40% subhedral 1-10 mm

bi 20% " 1-4 mm

some rusty colored spots

0215

granite elev 1255 m

harder to break

same as 0214

August 16

Row

went mapping & sampling
gullies in claim CATTISH 1
on south west side of north mtn.

0216 elev 1220m

C.g. granite is qtz plag. bi
thin 0.5-7cm dikes of aplite
& qtz almost vertical striking
east-west

granite is creamy white color
with buff / tan
crumbly

possible shear down gully?
joints 88/096 ✓

88/352 ✓

2 others poorly dev.

0217

elev 1185 m

creamy white eq. granite

qtz 40%

feldspar 40%

bi 20%

small qtz vein running thru

one piece 1cm wide

irregular strike

dip 76 / 095 - 115°

0218

elev 1235 m

granite but sample is

mainly aplite in thin

qtz vein 1-10 mm thru it

qtz vein are subparallel

to strike of aplite

aplite is approx 30cm wide

70 / 090° - 090°

qtz veins || to joints

76 / 085

lev 1305m

44°/238 shear plane

0219

lev. 1320m

granite
slight rusty coloring
highly withed.

joint 76/0959 ✓ lev. 1335m

0220

1350m

granite & aplite
same as before

August 19

RBN / GERMAD

went mapping UTS along
creek + Llewellyn Fault

#1 med. to coarse grained
white + dk green grainy texture
qtz, feldspar + mafic visible
massive, intermediate mesocratic

#2 massive
dk. greenish grey
mafic tuff

#3 elev 770 m
- dk. greenish grey
- massive, some fibrous mineral (mm)
- altered epidotization
- very rough dendritic
differential weathered crust
which is dk. brown 1-3m
- possible shear surface w
epidote alteration product
- $\psi \ll \theta$

#4

82 / 172 shear
1 inch 90 / 155°

#5

85 / 064° shear plane

0221

#6

mottled buff to dk green
microcrystalline
py < 1% finely dissemin.
chloritization
interm altered granodiorite
sulfide staining

0222

#7

very poorly foliated
mottled buff to dk green
mod fractured
py 1-3% dis. thru-out
withd brownish grey
appears altered
sulfide staining
some pieces very fine (tuff)
sheared granodiorite

August 22

RON / GERARD

- went mapping Paddy Pass River

0223

lev 850m

- colors range from white → buff
→ green → brown → grey
- rusty brownish grey with
- broken up clasts of lsst. w
calcite veining
- calcareous
- appears very altered & fractured
- within stahini
- perhaps fault breccia
- some pieces appear vuggy w
differential weathering on withal
surface.
- lsst. vein w euhedral py cubes
< 1% 10-30 cm wide
- contact of PPr w stahini?
- microfold present 10 cm scale

46/004° Dip of 64/345?
elev 805m

0224 elev 805 along
river

shear trending 170°
strata highly fractured
caliche veining 4mm

* occurs at bend in river

Jimm / Gerold / Ron
August 24

fold hinge 31/345 Dip
at limestone argillite outcrop
very sheared

Gold

0065

0066

0067

0208

0209

0098

75 paces = 100 m

andesite - Fine grained intermediate volcanic rock w oligoclase or andesine

diorite - coarse grained plutonic intermediate rock

w increase in k-spar diorite \rightarrow monzonite
w increase in qtz diorite \rightarrow granodiorite

rhyolite - Fine grained to glassy acid volcanic rock

granite - coarse grained 20-40% qtz, K-spa & mica plutonic rock

rhyolite



trachytes



dacites



andesites



basalt



decreasing
qtz

aplite - fine grained, sugary texture
formed from magma low in
volatiles

tuff - dense to fine grained
fragmental texture w small
volcanic rock frags & ash
has a gritty feel
may be scratched w knife blade
well defined layers

I.C.P.

geochemical analysis for Au, Ag, As, Sb, Cu, Pb