

V-3 - Three rock types

observed 1) c. gr. granodiorite
(perhaps more correctly a granit)
less than 15% mafics - biotite
and hornblende, 40% quartz
subhedral looking, remainder
cream feldspar, notably coarser
grain than quartz; - microplitic
cavities up to 5mm across lined
with euhedral qtz.

2) fine gr. biot. micro
granite saccaroidal texture
overall white with fine black
flecks (mafic & small microplitic
cavities).

3) f. gr. light grey feld.
pyph, highly microplitic with med.
to coarse grained qtz and feld
surrounding and lining the cavities.
Cavities very abundant $\approx 15\%$ and
largest over 5mm.

Andesite. - green pyroxene?
phenocrysts. 2-3 mm blocky -
25%. fine grained matrix 50-50
white feldspar and mafics less
than 0.5 mm.

V-10 - Fragmental volcanic
rock with fine grained
basaltic matrix and porphyritic
andesite fragments an
inch or more across. dk.
green in color - scattered fine
grains pyrite or pyrrhotite.

VII v.f. grained dk green
basaltic rock with scattered
f. gr. feld. - very fine
grains of pyrite or pyrrhotite
- Some may be very fine chalcopyrite
grains.

See next page on V12

V-22 light grey grt
feld porphy - 15%
dk glossy rounded quartz
phenocrysts \approx 1mm, cream
feldspar \approx 2mm - 20%
65% very fine grained
medium grey groundmass.

V13 light grey feld. porphyry
dyke rock containing
dark grey possibly latite
porphy frequent up to 3cm
(total - 15%). main rock
black to white phenos of feld 1.5mm
in med grey, v. fine grained groundmass
also scattered fine mafic frag.

V15 dk grey. Andesite porphyry.
feld phenos 10% \approx 2mm - Hornblende

10% - 1-3 mm. v.f. gr. qtz
mass - salt & pepper feld
& hmbd.

V-16 - finely laminated buff
micaceous, feldspathic(?)
quartzite & black granite

V-12 - black v.f. grained
basalt.

V18 - light grey and
light buff f. grained microlitic
microgranite - moderate argillitic
? alteration. scattered small
qtz grains, cavities. Matrix
altered to waxy soft green
grain - talc like (chlorite?).

V19 - thickly laminated &
crenulated dk grey buff
quartz metasediment.

V-22 Dk grey mottled
porph. andesite (same as 2),
and f. grained qtz feld.
porphyry - dk smoky qtz
eye 1 mm (15%) and buff
2-3 mm feld. in v. f. grained
medium grey groundmass.

V23-

- 1) grey laminated biot
quartzite (f gr). ^{minor pyrite}
- 2) dk greenish grey andesitic
dyke rock.
- 3) Rusty quartz sweat
strongly lined.

V24 Dk greenish grey qtz
biotite schist.
s medium greenish grey Biotite
qtz feld. quartz.

V25 — buff and light
greenish qtz feld. porph.
feld. \approx 3mm (20%) 10%
qtz phenos \approx 1-2mm. in v.f. qz
qtz-feld. matrix. One spec.
Several phenos feld & qtz \leq up to
10% hornblende. (2mm).

V26. buff altered medium
grained hornblende qtz
monzonite - qtz interstitial
fine and less than 10%
black hornblende laths 2mm (15%)
buff feld. med qz. \approx 75%
scattered soft waxy green
alteration mineral grains -
talc like. Rusty pits and cavities.

V27 med grained qtz diorite
10% qtz, 35% hornblende with
minor biotite 2-3% 50% white feld

few maroon garnets (very fine gr.), scattered light brown transparent grains (rounded apatite? zircon?)

V-28 -) coarse grained

hornblende granodiorite (or quartz diorite?) - 10% qtz
30% hb and 60% grey feld. few rusty pits and mild argillitic(?) alt of some feld. grains.

-) loose blocks of dk blue
V 3 basal from above.

V28A - 2 mi SE of ²⁸ saddle.

Three specimens (two types).

- Coarse grained but hornblende granodiorite. - feldspar buff over 5 mm, qtz much finer gr.

- medium grained porphyritic biotite hornblende granodiorite or qtz ^{more}

V 29 - c. grained hornblende

qtz diorite. May be
granodiorite but less
than 10% quartz.

Feldspar 5-7 mm

white rims grey cores. — 70%

black hb. (few biotite flecks)

30% (irregular interstitial).

— also on rusty specimen.

V 30 - c. q. hornblende

qtz diorite (5% qtz)

and much more mafic green

hybrid rock perhaps near
volcanic contact

V 31 - Granite porphyry.

15% feld phenos 3-5 mm

15% qtz phenos 1-2 mm

in fine grained "microgranite"
matrix - overall buff colour
abundant fine rusty pores.

V32 - light grey gtz
feld. porphyry.

gtz - 1mm - 15%

feld - 3mm 10%

matrix v. f. g. 25%

scattered rusty pits. &

- Y.G. rusty quartzite.

V33 - dk grey porphyritic

hyo-dacite. 20% white

feldsp. phos. average 1mm

up to 2mm. in dk grey

siliceous aphanitic gneiss.

V33A - gtz feld. porphyry

gtz 1.5mm \approx 15%

feld 2mm \approx 10%. light grey
matrix

scattered olive green
alteration mineral grains.
(epidote? chl?).

- 2nd spec - rusty cavities (small).
V34 - Med grained foliated
hornblende granodiorite.

V35 VG - black graphitic
schist. (specimen lost).

V36 hornblende biotite granite
Fine to med. grained. One
large (7-8mm) feld. phenos.

V37 - Cream coloured
felsite dikes cutting.
- coarse grained Alaskite
qtz. 3-4mm 35-40%
remainder white (argillitic alt?)
feld. 6-8mm. - abundance
of small rusty pits and fractures

from dissolved sulphide!

Other specimens - (see notes)

-) dk gray. felsite
-) qtz feld. porph. (argill alt.)
-) fine grained phase of alaskite

V. 38 - Cream coloured
qtz feld. porphyritic
medium(?) argillitic alt.
scattered cavities (small).

V. 39 C. gr. biot. subblende
granodiorite. hb is
partly chloritized.

V. 40 light grey - qtz feld
porphyritic (albite porph.).
qtz 1mm \approx 10%. feld.
2-3mm \approx 15%.

V-41 - f. gr. porphyritic
qtz monzonite (microclitic)
with rusty cavities -
less than 10% quartz.

15% pink to cream feld.
phenon 2-3 mm, in.

feldspathic fine gr
matrix. mod. argillitic alt.

- 2nd. spec - splenetic

dyke rock. - highly feldspathic

65% splenetic.

V-42 - med. gr. biotite ^{knubled} qtz
monzonite (?).

15% knubled

10% biotite

25% qtz

50% feld.

Cut by v. & g
rhyolite -

matrix - abundant quartz

V-43 - fine grained
light grey sugary text.
granite. 10% biot. 35%
qtz 55% feld (white)

V-44 - v. f. grained thinly
laminated grey quartzite
(metasiltstone?)

V-45 - dk grey thinly banded
chert.

V-47 - feld. porphy.
altered (argill. & limonite).
feld. phos. 15% in a
Khaki v. f. q. Feldspathes
matrix - abundant rusty
cavities.

V-48 - rusty quartzite
and highly pitted (15%
solution cavities) brecchia
(intrusion rock frags) !!
(headwaters of 50 ppm Ca creek)

V50 - highly feldspathic
fine to med gr syenite(?)
with scattered rusty cavities.

V51 Phylite porphyry.

qtz eyes 5mm - 10%

V64 Feld - 2mm - 5%

in white aphanitic ~~quartzite~~

V53 - micaceous feldspathic
quartzite - light grey foliated.

V58 - highly feldspathic fine
grained rock - feldspar porphyry.
2mm pler 30% - qtz eyes - 5%

rock is very light grey - aegirite
alt. 10% altered mafic
patches. scattered rusty pits.

59 - med. greenish grey.
v.f. grained silicified?
Andesite.

V61? med. gr. highly microlitic
qtz mm zoned(?) coarse qtz
xts and feld. surround and line
the cavities. Cavities commonly over
1cm. - 35% qtz, 5% hornblende, 60% feld.

V-62 - v.f. grained dk green
andesite.

V64 Dk greenish porphyritic
andesite. phenos 20%
(hornblende?).

V 65 - med to coarse gr.

biotite hornblende granodiorite.
with fine grained diorite inclusions.
qtz 20%, hornbl. 20%, biot. 5%
feld (white) 55%.

V. 66 -

Biotite hornblende granodiorite
contacting andesite - med gray
v. fine grained - hornblended near
contact. - slightly coarser grain.

V67 - c. gr. biot. hornblende
granodiorite -
qtz 20%, hornbl 15%, biot 5%
feld. bust - 60%

V68 - v. f. gr. black basalt.

V69 - dk greenish v. f. gr.
silicified (?) andesite or
dacite.

V70 - Grey bust syenite -
medium grained. Argillitic
alt.

V-1-YG gtrite - North of
planned stop.

V-2 Basalt - flew over
YG. to basalt. high topo.

Then Seaward over Ad.

pillars to V3 - bear excellent
rock - two types c. gr. porph

gtr monzonite & v.f. gr. grey granitic
rock (biotite) - saccaroidal tab
tab with micaceous cavities
rock deeply weathered.

- Rocks have pronounced
"paper chip" cleavage
a phenom at Casins, Galore
Creek - and common in Chile
Assoc with porph depon.

- gtr is Euhedral & runs up
to 50% !!

Sail samples V-7

V3, A, B, C, D, E

going west on spur @ 200' intervals - start approx 300' W of pillar capped hill.

V-4 - rusty grt many? also c. gr. ϕ micritic quartz - sail

V-5 gritic - grey
sail: 1/2 W of Ad.

V-7 Amph sch.

2 mile SE of V-7

very rusty creek - landed on
Casino road at Xing & took
silt & water samples.

- V-8 - V.G. f.g. gn.

Small K + pan auger
looks like V.G. westward
in way to V-9.

V-9 - med grey-green
andesite.

V-10 - basalt.

V-11 - ϕ basalt.

V-12 - basalt.

V-13 - gray silt purp - dyke
rock?

V-14 - no landing till
looks like basalt.

V-15 - basalt.

V-16 - YG -
white ash.

V-17 - small

tarn in depression
- water sample.

- cut over to # 27

VR-27 - biob. granod.

Coarsened. gr. - soil.

VR-28 c-gr. hb. gd.
soil. - some basalt boulder

from above

VR 28A

2 mi SE of 28 - on saddle

Coars. gr. ? $\frac{1}{2}$ monz. - weathers smooth. - gd eich. side. Soil. - prob. $\frac{1}{2}$ monz. (biot).

VR-29

C. gr. granodiorite -

VR-29A - rusty etc

C. gr. granodiorite -

rusty soil - steeply dipping (strikes $\frac{1}{2}$ E / 570°) poka chip cleavage. Rock is 2 soil.

To Gas cache to refuel.

the to VR-25

VR-25 - gtr feld porph
soil (near contact)

VR-26 bott altered

med cr. gtr monzonite
alt. feld - rusty spots
- black min - possibly magnetite

olive greenish min. epid? or
possibly Lindgrenite!!

VR-18 - f. grained

aplitic rock - perhaps
gtr monz. - less Qtzose
than previous. - Soil.

VR-19 YG. finely lam.
biot gr - sandy soil

20 quartz (black) & biol.
gts sch. contact
a gr. biol. g/2 many
related to batholithic gl.

Soil.
contact E-W \approx

VR 21 - purple and grey
white field - Carlbad twin
noted.

VR-22 - 1 white ϕ ?

one grey sample i

one buff. fgr.

23 - 46 - diabase - py.
rusty. Soil

24 46 - bio gr & bio sch

V-31 purple granite -
med gr. ~~qtz~~ feld
matrix - coarse phos
V of pink feld - rock is
overall pink.

— back to cache. (Nishin)

V-57 - couldn't land
granite?

V-58 - granite - v. fq.
qtz euhedral small.

V-59 - andesite

V-60 - no landing
but is VQ shallow
NE dip?

V 61 pillars - 5/70

C.p. granodiorite

V 62 - green and white

- 1 mi down spur
- granodiorite

V 63 - couldn't load

V 64 and white

V 65 granodiorite
(C.p. hb -)

Nissling Recce May 13/70

V-66 - gd. dykes of
pyro in tuffels^s

V67 - biot. hb. gnd. (c.g.).

70 - Syenite.

71 - Andesite (epid.).

71A - Andesite.

72 - Volc. bx - pyrocl.

73 - Andesite

74 - F. P. ϕ ϕ latite ϕ dykes
cutting hb biot - gd.

75. rusty gnd. mgn.

76. - gd. dyke or small
stock?

77 near fault.
no landing (gd).

78 - higher up ridge
than proposed -
fine med. gr. gd or gm.

79 - silt

Lunch. then SE loop.

V-30 - Andesite? cut by gd.

V-32 - gd in saddle, YG.
Eastward ϕ peak ridge to the East
Sail from ϕ .

32 A & B - water & silt
from fork in Rhyolite Creek
L fork & R fork resp.

V-33 - ϕ Andesite.

V33A - beautiful Qtz
feld. porph

V34 - fl. qd. just SW
of YG. contact.

V35 - YG. black graph?
sch.

V36 - rusty patches on
mountain E of V36
- rusty granite contacts YG.
on E side of ridge.

V37 - C. q. Alaskite
cut by rhyolite (felsite).
Qtz feld porphy etc. rusty
cavities (small) & apparent
argillic alt. of feld. (secondary?)

V38 - f. gr. granite
rusty alt. -
rusty cavities - mapped
as Va. by G.S.C.

V-39 - in area of Cu Mo
geochem of Empson proj.
- gd.

V40 - yellow orange w.s.
Finely fractured felsic
mass - rhyolite porph.

V41 - 38 cu in Stream
Down hill to N

Rhyolite - with spherulite
- rusty cavities (sulphides)

V42 rhyolite cutting gd.
a gm.

V43 S. gneiss
granite - headwaters
of creek bearing ≈ 10 Mo.

V44 - Y.G. - possibly
slightly hornfelsed
creek downstream
has 54 ppm Cu. silt.

V45 Y.G. - chert (banded).

V46 - Y.G. dips 15° N

V47 up on east ridge
south of original site.
F. porph rusty with
cavities. - feld. argill.

V48 - 50 ppm Cu creek

V49 - Y.G. & gr. (bx?) rusty
cavities large.

U 50

- rhynolite - rusty
pits.

U 51

- " "

NW (Thistle) May 12

V-118 - amph. sch. - some
6" white qtz veins, soil.

V119 - ridge summit -
biot sch. soil.

V120 Qtz biot sch.
f60 - small qtz stringers

V121 - C. gr. Hb. Sycamore
(pegmatite)

V122 - Amph sch
R & Soil

V123 - Y. G. & herbed
pink granite rock
fol.

V124 - fol. sugary f.g. pink qtz mag.

dyke like body.

V125 - white - buff.

— sordite - feld. intrusive
rock is YG. - grey, flesh-
magnite or Mosby?
rusty fractures.

V-126 - ~~Amph - pag. qu.~~
~~is granodiorite? stringer~~

V127 - amph pag. qu.
— is su. granod. stringer

V128 - gr. qu. is amph qu.
soil

V-129 - YG. is pag.

V130 - C. gr. pink biot. gr. scattered
plum

May 17

V117 - really good rust
fract. f.g. in c. gr. granite
in qtz - yellow ochre
weathering. 117 silts, soils,
water in bank. - Check
staking of I.M.S. near
Hayes Creek.

V116 - YG. - micaceous
schist(?)

Re route to V.99 because
of snow & cloud.

V99 - black marble (??)

V115 - f.g. andesite - dk grey.

V96 - acid feld porph cutting
fol. mygd.

V106 - rusty grey feldspathic
rock - Y.G.? or porph.?

V107 Silt in left (south)
fork, & right (R.
good quartz - feld. sand
& silt.

V 97 - f.g. foliated granite
Some coarser pegmatitic
phases.

V 98 - Feld porph?

V 94. greenish granite porph.

V 93 - couldn't get on to
summit (cloud).

granodiorite on flank
med. gr. (or qm).

V 92 - West side Mt. Wagon
dk green Amphibole(?) basalt(?)

V 91 - basalt.

V 89 - Muscovite schist cut
by granite stringers.

✓ 71 - Fine grained epidotized
andesite:

✓ 71A - prop. andesite - 10%
white (weathering) feld, 5%
black amph.

✓ 74 m. grained ^{biot} hoblende
granodiorite cut by
argillite(?) altered gr feld
porphyry & latite(?) porphyry.

✓ 75 - hematite stained - medium
grained hoblende gr
monzonite(?).

✓ 76 - med grained hoblende biot
gr monzonite(?).

✓ 78 Fine to med gr. hoblende
biotite gr monzonite(?)