

G. Wingert

Rainbow Option Notes

no scale

RAINBOW GROUP

825570

KERR ADIGSON MINES LTD

RAINBOW GROUP

CLAIMS MAP

NTS - 85 E SW

DRAWN BY - P.H.

SCALE - 1:20,000

REVISED -

DATE - F CHOW

DATE - SEPT - OCT, 1984

G. Wingert
Rainbow Option Notes

Contents:

pages 1-14: 1:1000 scale
mapping of
gridded area

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notes on area encompassing
serpentinized

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claim area on Air Photo.

1
Sept. 17, 1989 Rambow Property

Traverse: Mapping on 1:1000 scale.

Weather: Sunny & hot.

A1 - Altered serpentine - wht to cream
qtz - calcite w/ blotches of unaltered
mafics (~20%) which are fgy, dk
gray. - also slumped & broken, no atts
- no qtz veining - sample

A2 - Diorite - massive - gray-gray fgy
matrix w/ fsp & bi phenos.
~ 18% fsp < 4mm long sub-cubical
~ 7% bi - sub. flecks < 1m

D3 Diorite - Serpentinite contact follows
the base of the serpentinite ridges.

A4 Dominantly altered serpentinite -
silica carbonate rock w/ ~20%
mafics overall & local mafics up to
80% - local x-tal like qtz veins
< 1cm wide - overall occurrence of
qtz veining is low
- sample

D5 light grn altered serpentinite 2

~50% mafics w/ ~2% chloritic alt.

- oolite contains x-tal line

qtz veins ~ 2 pm trending @ 345°

dipping subvertical. - all veins

are < 1 cm wide

sample

D6 dk grn fg altered serpentinite

- rock is dominantly dk grn

siliceous serpentinite w/ ankerite alt

along fractures. - pregitc veins,

7 mm wide trending @ 78° dipping

subvertical. - sample taken

D7 mottled brown wht & green

altered serpentine - silica -

ankerite alt - no visible

qtz veins - 30% mafics.

Fractures 95/65 S poor 1 pm

37/70 NW poor 1 pm

Sept 18, 84 Rainbow Project

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Weather: Sunny

Traverse: v. 1000 scale mapping

Δ8 Serpentinite - Diorite Dike? contact.

- Serpentinite overlies diorite

→ @ one pt can be found

underlying it - contact is
appears to be sub horizontal
or dipping shallowly to the
east.

- thickness of diorite is $> 5m$

- diorite is intensely altered
w/ an epidote-chlorite rich
matrix & biotite & altered fsp
phenocrysts - phenos $< 2mm$ long.

- Fracture surfaces are lined
w/ serpentine & / or calcite.

- Diorite is cut by a stockwork
of qtz veins $< 2cm$ wide
(sample taken _____)

- Serpentinite is fg gry
& silice w/ w/ lenses & of calcite

- 50-70% mafics.

- locally it becomes rich in 4
ankerite/siderite, particularly
above the diorite

- a qtz vein marks the
upper contact bet. di + serp.

vein is 5-10cm wide, fg
sugary qtz w/ ankerite
br frags (sample taken

- sample of serp. also taken

A9 mafic intrusive - Diorite

fine + hb phos in a fine

grained grn matrix - orep is
heavily fractured + broken
up.

A10 - Serpentinite - fg dk gry +
silice lenses - boudins within

parallel to fd. ~ 038/60 W -

- dominant fracture directions @:

345/52 E good 1pm.

05/75.5 fair 2pm

qtz veins follow 345/52 E
direction ← 1cm wide

calcareous ankerite - siderite which
is foliated - ~ 40% mafic

- foliation shallows to the east

w/ fol = 50/50 W -

possibly slumped but doubtful
sample taken.

A11 - Diorite - mottled

red-brn + dk green fg. matrix,

well fractured + v. broken up w/ hb +

fsp plenos + qtz eyes.

~ 3-5% qtz eyes

10-15% fsp

3-5% hb.

sample taken.

Δ12 Serpentinite as Δ10
- no fol, outcrop slumped

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Δ13 Serpentinite - Diorite
Contact -

Diorite is more characteristically an
hb fsp gneiss

- Diorite is less altered than
before w/ ~ 20% fsp laths to
6mm long & ~ 50% fine hb laths < 1mm
long. - Fractured surfaces are slickensided
w/ chlorite epidote alt
sample taken.

Serpentinite as Δ10

Fol = 155/50°

qtz retaining strong foliation &

inting @ 50/50° good, 1pm.

sample taken.

Sept 19, 1984 Rainbow Project 7

Weather: Sunny

Traverse: 1:1000 scale property mapping

DK - Kettle River Fm.

siltstone grading to med gr

grn gry arkosic sst &

pebble conglomerate

- bedding: 012/50SE

siltstones are laminated buff-grn

* gry w/ weak rusty weathering

* sporadic dk grey to blk clay

clasts < 2cm long (~1%)

- siltstones contain a weak jointing

@ ~ 098/90 - 70 N - PSDR 1/10cm

jointing pattern is radiating

Conglomerate consists of a

heterogeneous matrix supported

green-grey pebble conglomerate

- clasts are rounded to subrounded

ranging in size from 3cm to

a medium grained sst matrix

Clasts

- siltstone
- qtz
- fsp.
- argillite
- + minor other

poorly sorted & young although most clasts are ~ 0.5-0.5 cm in size

- oolite appears to be a graded bedding sequence w/ tops up?

The sst is a med gr grn gry arkose - w/ ~ 10% silt. clasts < 1mm
* > 10% fsp.

A15 As above
bedding 15/45 SE

- lower of oolite @ 181E 106N
- ripple mark indicate tops down

A16 As above - bedding 01 60 E
201 60 E

int. 128/85N poor 1 per m.

A17 Diorite - Altered fsp + hb laths in a fg green chloritic matrix

Oolite is well jointed - slated into " to ground - exfoliation?

185/17E good 1 per 5cm.

joints are lined w/ calcite

D18 44m @ 135° Fm Station 9

115N 202E

Serpentinite as D10

Fol: 080/55N

jnts: 172/90 poor 1 per 20cm.

sample taken

D19 Diorite - w/ fsp, bi, hb
plenos in a fgr grn matrix
-hb appears to be altering.

D20 Unaltered serpentinites.

rock is dominantly composed of
apple green → green-black serpentine-
epidote

Serpentinite has a phyllitic texture
w/ a fol @ 125/85N

D21 Serpentinite as D10 overlain
by arkosic sst - otop is highly
broken up. ∴ possibly float - no
other sst found - otop small.

Serpentinite contains gte veining
~ 30cm width of gte sampled
no attitude possible

- outcrop is possibly float 10

A22 Altered Serpentine (<20% mafic - composed dominantly of altered silicates & etc)

- Foliation is gently warped w/ grt rods || to the strike & plunge - outcrop plunges @ c 10° to the west - gen fol = 60/145 N

Jnt @ 101/80 E

A23 Altered Diorite - subleached partially altered fsp = hb plens in a calcareous & chloritic matrix - Diorite has a weak foliation - no tilt

A24 light grey to black laminated highly silicious (cherty) laminated sediment? interbedded w/ green-grey chloritic phyllites & dk grn amphibole rich rock - amphibolites - amphisilicified w/ calcite veining - amphi probably a member of the serp. unit, just a variation of it.

Fol: 100/47 N
sample taken

A25 ~~serpentine~~ pyroxene-amphibolite light green grey to dk grn amphi amphi is hard & well indurated containing a weak fol || to bedding. - amphi is also calcareous containing calcite lining Jnts & forming some pockets || to foliation

fol = 140/132 N

Jnt = 160/50 S } conjugates
055/45 NW } good exposures

D26 Extremely Calcareous amphibolite-
serp: as last station

D27 As above,

Fol = 048/47 NW

D28 Dk grn calcareous, ^{pyroxinite} amphibolite
amph is well indurated fg w/
calcite lining fractures - well
fractured.

into 172/81 W fair 2 perm

09/130 S poor 2 perm

Fol = 068/22 NW

sample taken.

Sept. 20, 1984 Rainbow Property

Traverse: 1:1000 mapping of grid area

Weather cloudy

D29 Diortite - med grained
dk green, epigranular

- well jointed

31/54 W 1 per 10cm good.

Δ30 Coarse gr Diorite w/ 7% obc 12
20% hb
60% fsp
5% qtz

otep is well fractured w/ calcite
veinlets infilling fractures - minor
to 20% in fracture & weathered surfaces
yrb: 1171735 good 2pm

sample taken

94-1602 is in ck.

Δ31 Weakly altered serpentinite
28% mafics - strongly magnetic
w/ magnetite stab 1mm long - otep
dip to NW - no att.

Δ32 Serpentinite - Diorite contact

- seip as above

- Diorite is light grn, fine grained w/
hb prop < 1mm long - Diorite is
very calcic & highly (randomly fractured)

- diorite underlies seip

Another component of the otep is
a highly silicified rck - probably
silicified diorite w/ a component
of sil. seip - rck contains blobs of
mafics & calcite w/ ~ 10% py.
- weathered surface is oxidized.

- contact trends @ 2170/60E

Sample taken
di
seip
cd.
sil.

D33 - Otep? probably subcrop. 13

Southerly contact of Diorite Serp.

Serp contains 260% mafic.

sample taken

D34 - Coarse grained Diorite

- dk grn in colour ~ 30-40% mafic

- very little calcite along fractures

- well fractured

pts: 218/60NW good 1 per 10cm.

100/75 S Per 1 per m

- @ contact w/ serp. find silicic rocks

D32 - sample taken.

D35 - Serpentinite 700% mafic

- weathered surface oxidised

- dk grn or grey lenses of fine grained serpentinite in fine bands of calcite-silica.

- Serp. is hard + silicified

becoming more felsic to the west.

- otep well jointed ~ 30/65 E 1pm

- otep was randomly sampled

- calcidonic etc was found in float but not in otep

- veins of the silicic

rock as found in D32

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was found in atep - possibly
an equivalent to the calcedonic
qtz.

Δ36 Altered Serpentinite

Dominantly antlerite - siderite
w/ ~~less~~ mafic serpentinite.
~40-50% mafic
Crop cut by qtz veins ~1p2m
ranging in width from 1cm
to 5cm - generally following a
fracture @ $\approx 120^{\circ}15'N$

qtz sampled

Δ37 As above.

Sample taken of - serf
- only minor qtz veining.

Δ38 Chemical sample across vein in altered serf
- vein consists of calcedonic qtz w/ unimpregnated
intensely silicified serf - 5% w/ serf
randomly oriented throughout vein
att = 010/38 E - vein is 30cm thick & planar
Sample 115072

Δ39 Felspathic intrusive w/ 2

60% ksp, 20% mafics (hb) + 20%
other - trachyte?

sample taken.

Δ40 as above except w/ less

mafics - finer grained.

sample taken

Sept. 21, 84

Δ41 - Altered serpentinite - very silicious
on a scale of 1-3 silicification = 2.5-3

- only ~20% original mafics left.

- atep poorly exposed & cut by a
network of veins & $< 3mm$ wide.

sample taken

15

A42 - Diorite - Fg grn-gry matrix
w/ bi flecks ~ 3% + plag
phenos - 40%

- outcrop is not well exposed w/
oxidized weathered surfaces.

Sept. 22, 84

A43 - Calcedonic qtz w/ incorporated
ankerite-siderite breccia fragm - zone
is ~ 80cm wide pinching to
the top + trends @ 40° + dipping
 265° to the south.

sample taken - 118922

a second 50cm vein spotted
lower down on cliff - also an
old adit - veining runs ~
@ 40° all dipping steeply N-S.

Old adit is 0.5km NW of main
mine workings

- serpentinite is moderately altered
to ank-sid w/ ~ 60% - 70%
silicious dk grn mafic.

- alteration occurs as foliated
bands + stringers around lenses
of unaltered serpentinite

- outcrop is oxidized

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- random sample of serp. taken
over length of stop-sample

11893E

- Dominant qtz veining follows
fractures @ 20/825 - fracturing
is good, 1pm

- qtz veinlets < 2cm wide form
stockworks throughout random
fracturing w/in serp - these
veinlets are also calcadonic.

- veinlets of x-talline calcite
also x-cut serp - forming open
space veins w/ well formed
xtals

= random grab sample of calcadonic
qtz taken from the dump - 11894E

11895E - Calcadonic qtz veining in
altered serp. as D43 - veining
< 5cm wide - 2° grn oxide
malachite probably

- sample taken just above old
cabin.

11896E - Calcedonic qtz vein 8cm wide
 @ 27172N in altered serp.
 60-70% mafics.

11900E - Sample in old trench above
 mine workings @ st. 127N 88E
 - Qtz in altered serp - Qtz is
 calcedonic, grey w/ ank-sid breccia
 frags - qtz is vuggy w/ drussy qtz
 linings.

Δ44 Altered serp - v. siliceous
 w/ ank oxidation & some calcite
 siderite - some malachite or.

Δ45. Malachite or in serp - serp
 is cut by tiny qtz stringers
 which probably carried the Cu
 - sample taken on southern exposure
 of okep near dry lakes where an old
 adit was started, adit is only ~ 1m
 into okep.

Δ46 Qtz lense in Hb. Fsp porph.
 (diorite)

Sept 23, 84 - Rainbow Option.

- Sunny.

W-1-84 - Fg andesitic to porphyritic
 inter strongly & randomly fractured
 w/ iron oxide 2mm on fractured
 surfaces

- rock is a red grey-purple colour,
 varying from a fine homogeneous

andesitic rock to a porphyry
 elev = 31m - porph. has a fg red

grey-purple matrix w/ ~ 20%
 plag phenos (< 5mm long) & 20%
 altered hb phenos (< 3mm long)

- hb is altering to chl. ep.
 - otcp is located @ the top of
 a low ridge.

W-2-84 - 20m - hb, fsp, bi porph

- light grey fsp matrix w/ ~
 20% plag (< 4mm long cr.)
 5% alter hb
 5% bi - weathering out

- otcp in general is more altered
 than W-1 - hb is hard to
 distinguish - almost completely
 altered to chl

W-3-84 - Hb, fsp, bi porphyry - as last station - hb \rightarrow chl-ep

plug appears to be altering to ep. as well.

matrix is now a light grn colour. (probably due to \uparrow chl-ep altⁿ)

jnt @ 86174N Fan, 1 per 20cm

clew = 50m

W-4-84 - 70m Hb - fsp porphyry

- no bi present

- Qtz eyes present

fsp light grn-gry matrix

w/2 15% hb lath (< 5mm long - eu)
10% plag lath (< 5mm long - sub)
3% Qtz eyes (< 5mm long)

hb's generally clean but can be partially altered

plg is not cream - altering to ep.

W-5-84 - 40m Hb-fsp-bi porphyry

fsp grn matrix w/ ~ 25% plag

5% altered hb (ep-chl)

3% bi

W-6-84 - 25m Hb-fsp-bi purph.

fsp grn-grn matrix, locally matrix can be calcareous.

5-10% hb < 1cm long eu-sub

10-25% plag < 1cm long cu-sub

bi occurs randomly < 3% bi, in places bi flakes range up to 0.5cm in di.

locally Qtz eyes can also be found (< 5mm in diam) < 2% Qtz eyes

locally amygdales of calcite can also be found - forming a lattice lining in open spaces - some

index @ 74174 N Fair, 1p ²⁰ 15cm

W-7-84 - 30m - hb-fsp-bi porph
as before

W-8-84 - 18m - as before

W-9-84 - 0m - hb-fsp porph
as before

W-10-84 - 10m - as W-6-84

W-11-84 - 15m - fsp-hb porph

light
fg, gry-grn matrix

35% sub. fsp plenos < 3mm long

7% cm. hb plenos - altered to
cut ep.

W-12-84 - 10m - just above rd which

follows Ingram Ck - hb, fsp, bi
porphyry as W-2-84

W-13-84 - (-30m) - fsp-bi porphyry

- 25% fsp laths, sub-ev, as
large as 2cm long.

- 3% bi flakes < 3mm in diam.

- med gr. light. gry-grn matrix

W-14-84 - (-30m) bi-hb-fsp porph

as W-5-84

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W-15-84 - (-30m) O'cap appears
to be volcanic w/ amygdales
basalt (calcite)

Rock is fgy olive green containing
~ 2% mafic clasts - rk is possibly
a basalt

- samples taken.

O'cap grades into the hb fsp p'p'ph
to the west

W-16-84 - 25m hb, fsp, bi p'p'p.

as W-5-84

hb completely altered to chl-ep.

W-17-84 - 15m as above.

Sept 26, 84

W-18-84 Hb fsp p'p'ph.

~ 30% hb phenos < 0.5cm long sub-ev

- hb phenos have a general alignment

~ 10% plag phenos < 0.4cm subbedded

~ 10% calcite eyes < 0.5cm.

matrix is medium grained feldspar

rich in ^{various} tan brown colour to grn-grey

intng. - 010144 NW good 1 p 20cm

150174 E good 2 p m

W-19-84 O'cap as before.

intng. - 062190 2 p m good

148176 S "

W-20-84 Andesite - f-grained red-grn-grey

extrusive - magnetic ~ 2/10 strength

- weathered surfaces are oxidized

- and. is calcareous - gives a weak fizz.

W-21-84 - Hb-fsp porph.

22

10-20% hb phenos } < 5mm long

10-20% plag phenos } eu-sub.

matrix is a red grey-gn colour
+ fine grained

W-22-84 Andesite as W-20-84

except otc is more friable &
oxidized, andesite is a brn-

purple colour

W-23-84 - Andesite as W-20-84

w/ local hb phenos = < 3% of

total otc - phenos are lath shaped
< 4mm long.

Otc is strongly fractured @
25/80 W 1 per 10cm.

W-24-84 - Hb-fsp porphyry

w/ 10-15% hb + 5-10% plag

phenos in a fine gr. andesitic
matrix

- otc appears to be banded

porphyry & andesite - area would
have to be mapped on a larger

scale to determine, to a better
degree, the relationship.

W-25-84 - Hb pphyry as W-23-84
 Jnting - 40/70 NE Fair 1 per 10cm
 20/60 N " 1 per 2cm

W-26-84 - Hb-Fsp pphy. w/ local
 biotite phenos

5-15% hb phenos < 5mm cu-sub

10-15% plag phenos < 2mm - sub

< 1% bi phenos < 6mm sub

rock is weakly magnetic 2/10

W-27-84 - as W-25-84 - appear to have
 an andesitic bed along the to
 of the ridge s which ~ 50m thick
 striking @ 260° & dipping
 to the NW ~ 35-40°

W-28-84 - Andesite - dk purple-grey

Fgr. friable & oxidized - some

hb phenos - ~ 10%

- magnetic 15/10

W-29-84 - hb-Fsp-bi pphyry

~ 8% hb - partially oxidized } < 3mm long

10% plag - } sub-cu

2% bi

matrix is Fg, andesitic in composition

W-30-84 as above

except phenos are larger.

plag phenos to 1.5cm long x 1cm wide

hb to 5mm long.

W-31-84 Hb-Fsp pphyry

~ 25% plag phenos < 3mm long } sub-letra

~ 5% hb phenos < 1mm long } " " "

~ 10% bi " " "

magnetic - 2/10

Fg dk. gry-grn matrix - minor epidote alt.

atcp is friable, well, but randomly

fractured - fracture surfaces or lined w/

Fe oxide

W-32-84 Hb fsp porphyry 29

~ 25% plag plenos < 1cm x 0.4cm
cv-sub. weak alignment to
laths

~ 2% hb. altering to chl-ep.

~ 2% bi flakes.

- fgy light grn-gry matrix - andesitic
- magnetic 25/10

W-33-84. hb, fsp, bi porphyry
as before except w/ ↑ hb ↓ plag.

W-34-84 as above w/

~ 10% plag } subhedral. < 0.5cm long
3% hb }
10% bi }

W-35-84 as above - matrix is more
aphanitic (fine grained)

int: 105/42 S fair 1 per m

66/60 N good 1 per 50cm.

W-36-84 Adolite fgr. dk grn w/

~ 10% hb laths.

magnetic. 2/10

int. 48/58 S good 1 per m.

- 10m away step grades back

into porphyry. w/ ~ 10% altered
hb plenos (ep-chl), ~ 10% plag,
matrix is purple / brn.

W-37-84 - hb fsp porphyry which
 contains ~ 10-15% hb
 10-15% plag } < 5m subhedral.
 10% bc

moving progressively N porphyry
 changes from unaltered w/ a purple-hrn
 matrix to altered w/ hb \rightarrow ep-chl
 plag \rightarrow ep & the matrix becoming
 more green w/ 2^o ep-chl
 the more altered porphyry appears to be
 more magnetic.

W-38-84 porphyry as W-35-84

W-39-84 - hb-plag porphyry - otc altered
 w/ hb \rightarrow ep-chl. matrix is purple w/ Mg
 oxide.
 -magnetic. $\approx 1/5$

W-40-84 Hb-fsp porphyry
 light greenish andesitic matrix
 ~ 5% hb \rightarrow altering to chl ep.
 5% fsp

W-41-84 - Hb-fsp porphyry as W-26-84

W-42-84 - as above.

W-43-84 - Diorite - otc more granitic
 med grained w/ ~ 30% altered mafics
 10% biotite.

hb \rightarrow ep-chl.
 ~ 10% bi flakes

otc becomes progressively more porphyritic
 towards W-41-84 (N)

W-44-84 Altered hb-fsp porphyry.
 agr grn matrix w/ ~ 5% hb plags
 \rightarrow ep-chl & ~ 5% fsp \rightarrow sep.
 - otc is calcic w/ calcite lining
 some fracture surfaces or forming
 veinlets

Sept 27, 84 - Tie in adit in
gully ford.

• 115 N 149.5 E - 5m above rd
elev. = 1860m

- in gully. rd @ 1850m

- from rd head @ 1500^(330°?) fm

50m to bluff of
unaltered serpentinite

50m @ 115°^(295°)

115m @ 120° to adit

elev = 1885m in gully

bottom below → 1900m @
900°?
295°H.

W-45-84 - Dinite → gabbro

granitic - med grained ~ 40% mafic

weakly magnetic 2/10.

- below in gully are serpentinite

bluffs + adit

W-46-84 - Sects as mapped by

Fyles - laminated siltstones -

charitic.

W-47-84 - Altered Serpentinite
 ~ 40% mafic lenses in Qtz-calcite
 stringers

general fol: 130130 N - Qtz veins
 follow fol. ~ 1 pm, 1 cm wide -
 sampled.

W-48-84 - Highly silicified altered rock -
 probably the diorite - @ contact w/
 Serpentinite - rock is oxidized
 w/ some malachite - sample taken

W-49-84 Diorite - granitic texture - med. g.
 ~ 70% feldsp, 30% mafic - minor
 alteration to chl-ep.

W-50-84 Diorite as above - strongly
 but randomly fractured - Pc ex along
 fracture surfaces ~ 1 mm

W-51-84 - Med grained diorite
 2% biotite
 < 5% Qtz - interstitial
 25% altered hb - ep - chl.
 68% plag

W-52-84 - Basalt - Fine grained, dk
 green w/ some hb or plag phenocrysts,
 < 20% plenos.

W-53-84 - Diorite as W-51-84

W-54-84 - Float? - atkasic sst.

W-55-84 - Diorite - as W-51-84

W-56-84 - Fg. porphyritic andesite
 - Fg. gray matrix w/ ~ 15% plag
 plenos ~ 2 mm + 2% altered hb plenos
 < 3 mm long.

W-57-84 - Diorite approaching gabbro - granitic,
 med. grained

30% hb
 20% ep
 67% silicified.

jntgs: 102140 S good 1 per 15cm
W-58-84 - as above

jntgs: 027168E good 1 pm
047135 W good 2 1 pm.
W-59-84 - as above

jntgs 084/78N. fair 2 pm.
023175 E " "

W-60-84 Diomite - med grained
- rock is somewhat bleached-
light grn colour w/ hb crystals
to 3mm long

W-61-84 - Gabbro - med. gr - homogeneous
+ granitic. - top is well
fractured w/ calcite lining
fractures - one calcite veinlet
@ 090/85N - 3mm wide - white
coarsely crystalline calcite - no
vugs.

jntgs 090/85N fair 1 per 15cm
W-62-84 Gabbro as above - coarser
grained. - bi - 20%
altered hb (all ep) - 30%
Iso - 68%

jntgs: 030/62N good 1 per 15cm.

29

W-63-84 - Gabbro as above.

JNB 122160 N good 1 perm.
 122163 SE " "
 64160 S Fair 1 perm.

W-64-84 - basalt - 50% dk gray volcanic

w/ ~ 2% hb phenos < 2mm.

- top is intensely jointed.

JNB: 135150 S 1 per 10cm good.
 120130 N " " "
 080165 N Fair 1 perm.

- there is a gradual ↓ in grain size to the west a w/ decreasing elev.

W-65-84 - Gabbro as W-62-84

JNB 160140 W good 1 perm.
 130120 S Fair 2 perm.
 084150 W Fair 1 perm.
 137150 SW good 2 perm.

W-66-84 - Gabbro as above

Sept 23-84 Rainbow Option

Mapping of Graham Camp

W-67-84 - 14b^{Fsp} porphyry - Fgr
 basaltic matrix - dk purple-gry
 in color w/ 2 5% altered
 hb phenos^{14% Fsp. phenos} & 20% bi phenos.
 hb → chl ep. + ore weathered
 out on the weathered surface.
 - weathered surface is oxidized
 - top is weakly magnetic 2/10

W-68-84 - as above,

jnts: 48/44 N grad, 1 pm

- phenos become finer grained

on the southern boundary < 1mm

W-69-84 - porphyritic basalt as above

(tree area contains porph. basalt
 talus)

W-70-84 - porphyritic basalt as above

jnts: 110/75 N fan 1 per 2m

016/48 W fan 3 per m

W-71-84 - porphyritic basalt - top

is more altered & friable than

below - fsp is whiter, more chalky,
 hb is altered to ep-chl.

- otop is non magnetic w/ no Fe Ox or major jointing.
- W-72-84 - as last otop except fsp is not as bleached & contains ~ 20% fsp w/ phenos as large as 1cm long.
- W-73-84 - Basaltic hb fsp porphyry.
 ~ 20% plagi phenos < 5mm long sub-eo
 5% hb phenos - altered to chloep.
 2% bi flakes < 3mm wide
 - purple-grn mottled basaltic fg. matrix - fracture surfaces are oxidized - weakly magnetic - 2/10
 - otop has no major jointing
- W-74-84 - as above
- W-75-84 - Summary of drilled in area - low otop of hb-bas porphyry as above - otop generally has no major fracture patterns, is weakly magnetic 1-2/10 & is weakly oxidized & has hb attr.
- W-76-84 - as above
- W-77-84 - Dunit ^{ca. 50% abho} coarse grained, weathered & friable - 30% mafic 70% feldic.
 - otop is weakly magnetic & weakly oxidized mag = 1/10
 jointing: 140/855 weak 2 per m.
 020/100 " 1 per 15cm
- W-78-84 - as above except otop is becoming more feldic
 joints: 40/30 SW fair 1 per m.
 131/34 NE good 2 per m.
 068/76 S fair 3 per m.
 110/100 good " " "
- Following otop to the NE rock progressively grades back into the porphyry

W-79-84 - Porphyrific Basalt

as W-75-84

W-80-84 - Basalt w/ < 5%

hb - fsp porph phenose² calcite

amydules - dk gry in colour

- non magnetic. - weathered

surface is oxidized, up to

3mm of rock is oxidized.

W-81-84 - Fg dk gry basalt

magnetic 3/10 - well indurated.

- well jointed 025/70 E good 1 per 10cm

120/62 N good 1 per 10cm

W-82-84 - ~~porphyritic basalt-andesite~~

Diorite - light grey colour w/ ~ 75%

feldsp, hb - chop. - top is well jointed

non mag. - no iron ox

into: 140/76 S good 1 per 2m.

050/25 W Fair 1 per 10cm.

W-83-84 Diorite ~ med to coarse

grained - granitic - 70% feldsp

30% mafics = 70% altered hb

* 30% bi

68% plag.

25% hb.

4% bi

3% qtz.

W-84-84 - Diorite - stop becomes progressively finer grained to the west & is approaching a porphyry.

- light grn-gry ground mass w/ coarse hb + plag + tab.
- Composition as last station is more felsic than the last station

W-85-84 - Diorite → gabbro

35-40% mafic occurring as a fgy groundmass or hb plenos.

plag also has the same occurrence

- as last station → porphyry

Ints: 118154 S good 2 perm
 048185 W good 3 perm
 025130 W good 1 perm

w/ iron ox on joint surfaces weak

W-86-84 - as above.

Ints: 135180 N good 2 perm
 94180 N " " variation of the same joint
 27122 W good 1 perm

W-87-84 - Hb-fsp porphyry

30% plag plenos - < 3mm, sub.
 15% hb " < 3mm, sub

hb → chl-ep.

- fgy light-med grey andesitic-basaltic matrix.

- jointing interval has increased

- magnetic - 3/10

- v little Fe ox on weathered surface

Ints have no dominant jointing direction

W-88-84 Diorite - med. gr - granitic

- 60% plag

- 30% hb - altered

- 5% other.

rock weathers easily because high mafic content.

- weakly magnetic 2/10

- minor iron oxidation.

- jnto: 158/65 S good 1 perm.
- 080/61 N good 1 perm.
- 050/50 E fair "

W-88-84 - 03 W-79-84, porphyritic basalts - low dip - no jnto

W-89-84 - basalt. dk grey-black - v fine grained - oxidized on weathered surface - magnetic 3/10

- jnto: 070/38 N good 1 perm
- 260/80 NW " 1 perm
- 128/30 S " 2 perm.