

S Strong
M moderate
W weak

Dusty mac
824007
by Royanna
Holder
1989

911

chlorite Alt

silicification

946

Brown Alt

942

yellow/Rust Alt

904

Carbonate Alt

HA Alt

Yellow/Brown Alt

Brown Alt (ES)

956

Clay Alt

915

silicification

1 Qz Breccia

2 Qz Vein

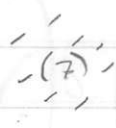
3 Silicification

4 ^{coloured} Brown ALT (Fe Carb?, Fe?)

5 ^{Coloured} yellow/Rust ALT

6 Chlorite ALT

7 Clay ALT



overprint w type alteration in brackets



1881

500458

1981

5d:



WEATH SURFACE IS SILT COVERED

W-M

FRESH SURFACE IS LIGHT TO MED



GREEN W WEAK WHITE + BROWN/HEMATIC
PATCHES. FELDSPARS ARE MODERATELY DIFFICULT

TO PULL OUT (MOD. BLITZED)



[REPRESENTS WHITE PATCHES]

5b:

SIMILAR TO 5a, EXCEPT $\sim 5\%$

QZ (QZ VEINS + FRAGS + QZ VEINS);

SOME AREAS ARE WEAKLY BRECCIATED.

Bb:

QZ BRX, WHITE, WITH QZ

MATRIX, MINOR CHLORITE

II:

QZ VEIN? - MASSIVE, YET CONTAINS

SOME BRECCIA FRAGMENTS. - QZ

BRX \bar{w} QZ MATRIX?

8A

CHLORITIC QZ BRX



6a :

Qz Vein - MASSIVE, WR GREEN (CHLORITIC)
COLOUR IS MOTTLED WITHIN



187

BROWN TO : GREEN MATRIX QUARTZ BRECCIA



6:

QZ NEIN - MASSIVE

WEATH SURFACE IS A FLAT WHITE,

FRESH SURFACE IS WHITE, FINE GRAINED



4: QZ BRECCIA N - 70% CLASTS

~ 30% MATRIX

MATRIX IS LIGHT GREEN

(CHLORITIC). CLASTS ARE ANGULAR

VARYING IN SIZE FROM 0.5cm

TO 10cm. PATCHES WITHIN

ARE DARK GREY/BLACK MATRIX.

QZ CLASTS ARE WHITE TO

MOTTLED WHITE + GREEN, AND

ARE APHANITIC.

UNALTERED

12:

ANDESITE FELDSPAR PORPHYRY

- SIMILAR TO 2 EXCEPT YELLOW -

RUSTY WEATHERING COLOUR IS NOT PRESENT.

FRESH SURFACE IS MED - DARK GREY \bar{w}

WHITE FELDSPAR PHENOCRYSTS (Euhedral -

14:

MW

MOD CHLORITIC ALTERED AND
BRX CONTAINING 3-5% QZ
VEINS, WK SILICIFICATION;
CONTAINS FELSIC FRAGMENTS

1:

Andesite FS Porphyry

Rock is light brown. On weath surface, rusty-orange colour. Fresh surface is fine grained/aphanitic with feldspar phenocrysts. Feldspars are 3-5mm, euhedral to subhedral, and white.

la: Same as ... except FS hemocrysts

are 3-7mm and rx is med brown.

M





W-M

3: WEATH SURFACE IS A MED TO
LIGHT BROWN W RUSTY PATCHES
FRESH SURFACE IS MED GREY W
FELDSPAR PHENOCRYSTS. CENTERS
OF SOME FELDSPARS ARE Fe
ALT. WEATH SURFACE LOOKS
'MANGLED'

APPROX EQUIVALENT

2.11. MED GRAY AND FELDSPAR PORPHYRY

THAT IS QUITE RUSTY ON WEATH

SURFACE. 2 IN WIDTH.

1-2% QZ

15

ANDESITE

MASSIVE, PALE GREEN AFFINITY

DOM ALT → SILICIFICATION

(GRADING INTO QZ VEIN → CHERTY)

2:

Andesite Porphyr: Weath Surface
is yellow-rust in colour

Fresh Surface is a medium grey
with white to light green feldspars.
The groundmass is fine grained

The feldspar phenos are
subhedral to euhedral, 3-5 mm.
Pods of wk-mod clay alt.

3a:

SIMILAR TO 3; FELDSPARS ARE

SLIGHTLY SMALLER (UP TO ~ 5 mm), AND

V. LITTLE QZ ($\sim 1\%$ VEINS). APPEARS

MORE MASSIVE; CHLORITE ALT

3b

ANDESITE FELDSPAR PORPHYRY

W MOD TO STRONG CHLORITE ALT.
CAN SEE FELDSPARS ON WEATH
SURFACE (MORE EASILY THAN FRESH
SURFACE); YELLOW-ORANGE RUSTY
WEATHERING



M?

M?

AND FELDSPAR PORPHYRY

WEATH SURFACE IS A MED GREEN W
 ~ 10% FELDSPAR PHENOCRYSTS AND ~ 5%
 'NUGS' (BOXWORK, VESICLES ???) FRESH
 SURFACE IS MED BROWN TO MED GREEN
 WITH WHITE TO WHITE/LIGHT GREEN FELDSPARS
 (~10%) THAT ARE SUBHEDRAL TO EUCEDRAL.
 ALSO, ~2% BLACK SPECKS

(SIMILAR TO 2?)



10:

DARK GREEN (ANDESITIC[?] OR STRONG CHLORITIC)

MATRIX \bar{w} QZ CLASTS (10 - 40%)



10A:

DARK GREEN MATRIX W QZ CLASTS THAT

TENDS TO GRADE MORE INTO QZ VEINS

AS MOVE SOUTHWARDS PAST ~7m.

S

R

W

7:

Y

?

WEATH. SURFACE IS WHITE

WITH RUSTY PATCHES. FRESH SURFACE

IS SIMILAR IN COLOUR EXCEPT THERE ARE

YELLOW (LIGHT) PATCHES. QZ VEINING IN

ALT. HOST RX. QZ VEINS ~ 5% RUST

COLOURING FOLLOWS FRACTURES → POSSIBLE

BRX. ^{STRONG} ~~WK~~ CLAY ALT + (PATCHES OF

WK CHLORITE ALT ?)

1
w?

12a

- WEATH / FRESH SURFACE IS MOTTLED

GREEN/GREY w LIGHTER + DARKER PATCHES ○

3:

DARK GREEN RX - DIFFICULT

TO PULL OUT FEATURES. SOME AREAS
HAVE FELDSPARS (TO ~6mm) SOME
AREAS APPEAR CLASTIC.

∴ PROBABLY INTENSELY CHLORITE

ALT ANDESITE FELDSPAR PORPHYRY
[BRECCIA?].

ALSO, 5-10% QUARTZ⁺ PRESENT
PREDOMINANTLY AS VEINSET (5-30mm
WIDTH); NO PREFERRED ORIENTATION.

5:

W-M

WEATHERED SURFACE IS WHITE TO
GREY (CARBONATE) TO WHITE-BLUE COLOUR.
FRESH SURFACE IS MOTTLED WHITE, GREEN,
AND HEMATITIC RED PATCHES.
ALT AND FS FOR?

ALTERATION: CHLORITE, CARBONATE (WK)

FROM DISTANCE
UNITS 3 & 5 SEEM
CONTINUOUS

13 mod-wk

1 - brown
And massive wk

9. mod chl?
mod brown

2 yellow → rust
pyritic?
wk chloritic
wk mod clay alt patches

12-unaltered
2.
12a-wk clay?

2a

10. Dark Green
to 10-40% Qz clasts
10a. ≈ 10

3. strong chlorite alt
wk silicification

3a strong chlorite

no qz or v. little

3b strong chlorite, wk-mod yellow/rust

Qz Brx lt green matrix

8 Qz Brx (Brown-Green matrix Qz Brx)

8a Chloritic Qz Brx

8b Qz Brx, Qz matrix (≈ 4) minor Chlor

4.

5. Carb Alt.
wk mod. chlorite

5b ~ 5a + 5% Qz

hematitic
5a. brown patches

- mod carb?

11. Qz Vein, minor Brx

6.

Qz Vein

6a Qz Vein
Wk Chlorite

7.

Strong Clay Alt
Qz Vein
Wk chlorite Alt.
Pyritic? (Yellow) Rust

14

mod chlorite Brx
3-5% Qz
(Felsic Frags)

15.

silicification