

PYRITE

SECTIONS A & B

4600 Elev.

Ratio	py	cpy	
50:1	1.0	.02	74-4
3:1 35:1	.75	.25 .05	73-15
1:1	.2	.2	73-10
~1:1	.25	.2	73-12
1.5:1	-	-	73-1
0.7:1			73-11
1.5:1			73-3
30:1	.01	.3	73-6
1:1			73-1 74-2
3:1			74-1
50:1	5	01	73-13
5:1			73-9

PFP

Altn

Phenocrysts
 2 to 5mm; 1.5 to 40
 matrix
 Plag - complex osc zoning
 Qtz - partly absorbed - rounded w. "coronas" - overgrown sometimes as fragments
 ± mafics → chl + carb + Qtz
 to 5% biotite → chl
 carb sev (chl)

HfLs

porphyritic ± phenocrysts - Plag 1-2 mm 20%
 Matrix: Biotite: actv carb Qtz sev chl kaol
 Sp. op + chl
 Qtz fs biotite often
 + biotite

MP - Mafic → chl bio Fe carb sev

Hornfelsed

Plag → carb sev HM

Complex oscill play zoning

apatite magnetite matrix → Qtz bio carb sev



P Plag

Phenocr

Matrix

40%

1/2 - 2 mm to 5mm

AN 37

25% Plag carb sev

Post-ore Dykes 10% Mafic - chl + Fe carb after Hb

An 15 ap 1% Qtz finely sutured borders, egg-shaped

Hydro altn

- mafic altn

- Plag altn

altn
xsections

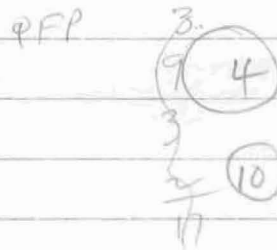
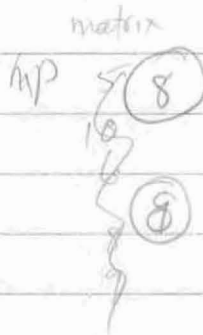
- Overall altn scheme

early bio

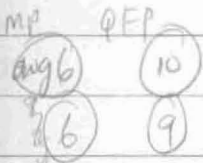
later propy-argillic mixed assemblage

- Altn relative to porphyries, ^{esp} as it applies to their relative ages

37-43



Phenos



~14 106
98

General QFP 6 + phenos
~3 matrix

P	M
7	7
3	3
4-6	8

MP not Hfsd: 6 Phenos
8 matrix

MP Hfsd Phenos 6 / sl wken
Matrix 7 / not much

Post Ore
3/7

Pyrite - more abundant on avg inside .15 contour -

Figure

fairly strong along east side of 0.25 area (& inside it
vaguely & incompletely wraps around 0.25 contour

Pyrite vs. esten. in accord w MRW estimates

- zoning - inside .15 contour to outside it
inside .15 contour

.7 to 5 / 1 avg 1:1 to 2:1

outside 50/1 to 2:1 avg 30:1

Section A — NO EPIDOTE —

Chlorite

Except in few. sev. alt. zones mafics

(primar) all pervasively chloritized

Partial + loc. complete
~~Pervasive to partial~~ chloritization of h/feld rocks

is general throughout.

Pew chlorite alt. extends ^{more than} ~~at least~~ 300 feet beyond the 0.15 contour on the south it could be a target.

Seen chlorite

seemingly most abund where pew is least common?

Locally across the section but more common in $\frac{1}{2}$ at fringes of +0.25 zones.

Compare to
TS data

Values
 $\approx 2^{00} / \text{ton Au}$ add $\approx .14$ to cu
 \equiv to 3 #/ton Cu $\therefore .35 \rightarrow .5$
 $= 3 / 2000 \times 100 \times \frac{13.14}{1}$

early HFls up
 later Ppy + altn
 later post-ox ppy + altn

~~syn~~
 amalgamate this with
 vein age relationships (if con)

complicated on east by bio-free ppy ("young")

on west more normal

Synopsis:

prop/arg \rightarrow (young)
 phyllic \rightarrow prop/arg
 + prop/arg

73-3

outside 0.15 contour

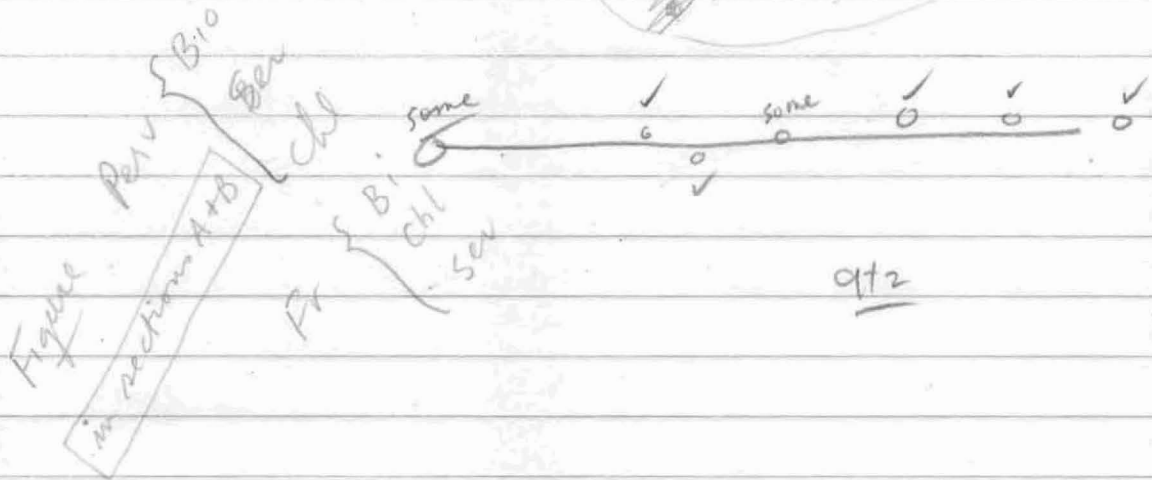
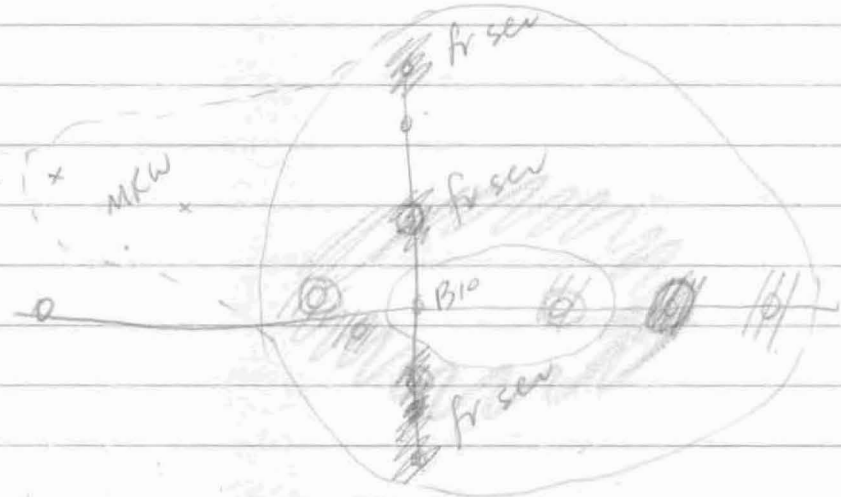
Hfsd pl. ppy

altn phenos 20-40

matrix biotized pervasively

then altn 50-70%

Early biotite → chl qtz ser ± Carb ± HM
loc acton



check overall altn intensity varms (from core logs)

SECTION

Distribution of Flaky Sericite

(A)

Pervasive 74-1 lower half of hole

local in 73-6 near bottom

Spotty in 74-2

¹⁰ Spotty near fringes + outside +.25 in contour
rare elsewhere

Ven Cutld

Fairly common in +.25 + ady to it for
about the width of the +.25 zone (all within
.15 zone)

Antipathetic relationship with pervasive biotite altn

73-1 (.15% zone)

POST ORE DYKE

ser + carb altn + chl + clay(?)

ALTN BIOT → carb + ser + qtz ± chl
kaol + HM
- chlorite

GIVES WAY DOWN HOLE TO MORE PERV

RETROGRADE ALTN

Pheno altn top → bottom goes fr 50 → 100%

Matrix " avg 60-80% decreases to 30% downward

JUDGING FROM POST-ORE DYKES - wash of prop/arg
altn extended beyond end of reaction period

73-11 (.15% zone)

altn 60-100 except in QFP where phenos

30 to 100 / matrix 60-20

avg 40

avg 40

EARLY BIOT → carb / ser / qtz ± chl

local HM, Gypsum

Mafcos → chl + Fe carb + opaque

QFP ser ± kaol ± carb ± chl (mafcos)

± qtz ± gyp

73-10

Altn early bio
later chl + carb

CR Bio Hfls

core of
better mineral

Fs → ser carb kfs
matrix → car + qtz + bio/chl + ser

DYKES ser - carb - Qtz - HM - chl (after mafics)

BIOT → PROP/ARG
(PHYLLIC)

?? QFP cuts some biotite ??

ALTN INT DIFF TO ASSESS IN HFLS
" " DYKES mod. 50% to High 90%
QFP loc low 20% (both)

73-12

new edge of
better mineral

Propytic Hfls
phenos avg 30-40% altn

Plag → ser ± carb ± qtz Bio → chl
+ bio ± HM
(minor)

matrix bio ser carb chl

scheme BIOT → ser + qtz + carb mafic → chl
± HM

PHYLLIC → ARG → PROPYLITIC?

Thin section

Peripheral 74-4 Fs + matrix → car + ser ± gte ± chl ± kaol
occas. biot.

Mafic → chl + ser ± gte + carb ± map ± py
± op occas biot

sericite stronger in + adj to QFP

PROPYLITIC LOCAL PHYLLIC/ARG.

Mafics 100%

PROPY/ARGILLIC

carb chl ser gte py
kaol (bio)

AUG INTENSITY

Phenocr 30-80 Matrix 50+ avg 70-80
except 100 in QFP except QFP ~ 30

73-15

0.25 contour

73-15 altm matrix avg 70% Phenocr avg 80%

minerals carb^{chl} kaol HM ser gte py
~~biot~~

Fs → ser carb gte

kaol HM py

Mafics → chl ± ser ± sulphide ± map
+ HM + ~~Fe~~ Fe Carb

PROPY/ARGILLIC

Mafics 100%