675939
Erickson Creek
104P/4

ERICKSON T/S H-1 footwall Maura28

HAND SPECIMEN

FIELD: - dk-grn crackle breccia volc.
- part of a sharp 0.5mm wide alt. halo next to vein
- q.vlets → 2mm cut rx, dol. vn → 2mm. w/ qvnlets.

LAB - lgt. buff colour
- int. crackle text. → blk. stringers, veins → <0.5mm – 1.5mm.
- py in, adj. to blk veinlets, euh. → 2mm
- blk veinlets roughly ∥, frags pt up in same direction ⇒ CAUSED BY SHEARING?

Thin section.

quartz	25%	c.g in later qtz-carb vns, v.f.g. in earlier veinlet
carb.	65%	pervasive, f.g in matrix, c.g in q-carb veinlets late stage carb veins
opaques	2%	py – f.g – c.g anhedral (f.g – py) & euhedral (c.g) cubes conc. along q.vnlets, qtz carb-vns.
graphite	3%	v.f.g dusting throughout slide, / stronger w/ earliest qtz veinlet.
sericite	5%	f.g assoc. w/ veinlets, opaques
	100%	

Texture - zone of lathe xenos-x-ing, intergrown - remnant f.p. completely alt. qtz & sericite & carb.
- qtz-carb veinlets <1 → 5mm wide cut by later carb flooding veins, early qtz veinlets v.f.g. carry graphite, py, sericite - v.f.g & stressed - cut by later veins
~~- actually int. crackle text. of v.thin infilling fractures, sericite,~~
~~some carb. → some remnant f.p. lathe <1%~~

ERICKSON H/S 22-2 Hanging-wall Maura 28

HAND SPECIMEN:

Field: - blk volc, localcally brn colour
- py. disseminated cubes ≤3 mm. → 10%
- cut by qtz veinlets, carb (dol.) veinlets ≤1 – 4 mm wide

LAB - specimen is severely alt., abund influx of blk. graphitic matl w/ py.
- x-cutting dol veinlets – 3 stages – 1 4mm sharp growth zoning in open fracture
- weathers org-brn due to py.
- buff-grey-brn alt volc. frags appear rotated, in zones of influxing of graphitic blk. matl.

Thin section

qtz	15%	anhedral-ext, folded interlocking veinlets 1mm, v.f.g. - matrix, c.g. in carb veins, f.g. veinlets
carb	60%	- f.g. pervasive, f.g at rim of 4mm veinlet - c.g columns in centre, qtz w/ carb in some veins
musc/sericite	10%	abund. in matrix, f.g
plag	trace	int. alt. - biax - ve, v.f.g. remnant grains - broken down laths, comp. alt. laths repl. by sericite, qtz
graphite	15%	int. sub // bands pre carb ~~alt~~ veining, post carb alt, dusting throughout
opaques	1%	py - partially alt. cubes
	101%	

ERICKSON T/S MAURA 21 West. - footwall 23-4

HAND SPECIMEN:

FIELD: - buff brn. carb-alt. volc + weathers dker org-brn, Fe from py.
- sheared // to vn.
- carb-py → 2mm
- cut by late carb-veining
- abund gypsum (5/mm) for 1 mm below contact.

LAB - weathers org-brn.
- mod. int. crackle texture - blk stringers
- sample cut by 5 q-carb veinlet. 1 - 2.5 mm.
- py 1-2mm -- disseminated 2% - con w/ blk stringers, qtz

Thin section

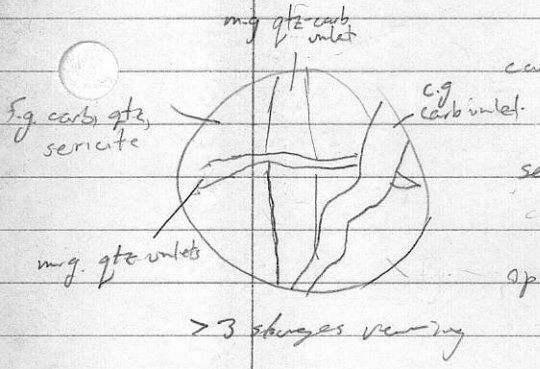
quartz 15% v.f.g in matrix, anhedral ext., m.g. in veinlets, grains // to vn walls in 1 qtz-carb vn. veinlets < 0.2mm → 2.5mm

carb 60% fine-lamellar in c.g. gr carb-qtz vn - no def., shows elv.

sericite / musc. 10% v.f.g. - m.g (rarely) in matrix, rarely caught up in veins - int. varies in slide

opaques 15% graphitic?? - f.g. - peppered throughout matrix, split by veinlets, lumps on q-carb veinlets, disconts stringers, density changes black colour int.

2% pyrite - cubic, disseminated throughout, appears to post date peppering graphite → cuts stringers, 90% conc. along qtz-carb veinlets, <0.5mm - 1.5mm -



102%

pg 26

ERICKSON T/S 23-6 hw - Mount 21 W. 11

HAND SPECIMEN

FIELD - blk. muddy carb alt. volc. ← by colour made actually of mica or carbon (graphite)
- carb. py → 3 mm. - locally abund.
- cut by q. v.s, carb. v.m.s
- sheared textures ⊥ to vein

LAB: py in spec - 7% - in matrix & ↗ in quartz veinlets - fresh-
Lat. blk. graphitic veining, crackle text. - in
- q. carb veinlets < 0.5 mm → 1 cm.
- non graphitic rx - is buff. - grn-grey colour par insud

Thin section

quartz 10% v. f-g in matrix, m-c.g in vns - crackle text
undulose ext

carbs 50% - c.g in veinlets, pervasive in matrix) c.g twins

musc/sericite 20% v.f-g - mg (variably) - blk. ↑ in graphitic stringers
appear sub ∥ to graphitic stringers

opaques 13% graphite - int. locally, predates vning
distant stringers across sample, peppering of fg blk specks

7% py. - f-c.g - anhedral - destroyed grains, c.g carb grains

* rx rim of c.g carb, mg qtz about py grains

100%

Texture - q. - carb veinlets carb > qtz - grain ⊥ to walls of vn

SLIDE TOO THICK-

ERICKSON T/S 9-1 Alison 28 W - hanging wall- 3/

HAND SPECIMEN

FIELD : - blk. volc.- andesite
- pyritohedrons -1→ 3mm disseminated
- locally massive graphite in h.w.

LAB : - qtz-carb (calcite) veinlets <0.5mm - 2mm x-cutting sample
- carb. coating on unweathered surfaces.
- minor org. Fe stains on veinlets
- crackle texture defined by <0.2mm black stringers in cream brn-grey matrix
- v.f.g.

THIN SECTION:

quartz 10% - rare except in qtz-carb veinlets - crackle (rect) text
- f.g rarely, mostly c.g. in vnlts., microvnlts.

carb. 50% - rhombs, anhedral grains, rhomb cleavage pervasive - dolomite, in qtz.veinl., c.g in dol.vnlts.

graphite } : - ptygmatic microfolds throughout → crackle texture
10%

opaques. pyrite pyritoh., sharp. bounds w/ dol, qtz, sericite

feldspar: 30% un-ve, incl., carlsbad twins, 2V ≈ 50° plag.
anhedral, rare remnant lathes (plag?) / zoned - matrix.

musc/sericite : 1% clear, ext ||, f.g.

101%

Textures: - fdsp. - remnant lathe-like texture to rx.
- vnlets of qtz ± dol x-cut slide, microbenlets <0.2mm of qtz only ± of dol. only., dol. flooding pre q.v. and post q.vnlts.
lg. veinlets of qtz-dol are last stage in veining

SLIDE TOO THICK

ERICKSON T/S 9-2 Alison 28 W - footwall 4/

HAND SPECIMEN:

FIELD: lgt. brn carb. alt. volc.
- qtz veining < 3mm; (wht) - minor
- q.v x-cut each other.
- minor maraposite

LAB: - intensely alt.
- crackle text. defined by blk. microvnlts < 0.5mm - cross crossing rx.
- carb. vnlts 1mm x cutting rx.
- <1% fg. diseem. py. (<1mm).

THIN SECTION: qtz - 2% stressed, m-c.g in carb. veins, one lining on vn wall w/ sericite, dol. centre filling.

carb - 70% - pervasive ⇒ flooding matrix, f.g. ; m.g in veinlets rare clu. of turbs - calc.? - dol?

musc/sericite 20% - alt of fdsp. & meas? - ~~elongate lathe shapes~~ high 2nd order birefr.

opaques: } 5% - mostly destroyed, rare remnant cubes
graphite: } left - py
- anthing crackle texture

plag ~~fdsp~~ 5% - lathes, outline remnant, int. alt to sericite, carb.
- no twins seen, -ve opt. sign - biaxial

102%

Textures - aband. text. feature is lathes < 0.1mm → 3mm. of completely dest. fdsps, ~~mostly lathes~~ - no twins left - f.g sericite, lathes in sub ∥ allign. across slide.
- carb alt. is intensive.
- lg dol. vn - 0.5cm - 0.8cm - x cutting slide
- sericite envelopes 1 → 4× the width of < 1mm q. veinlets, sericite envel. & w/in carb. veins.

ERICKSON T/S 18-1 Hanging wall Allison 21E 6

HAND SPECIMEN -

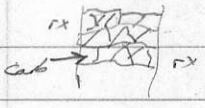
Field: - blk volc.
- 1-2% diss. euh. py → 3 mm., locally highly py.
- cut by carb veinlets → 2 mm
- highly graphitic at q.v. contact

LAB - py in discont. stringer veins 1 mm wide, euh xstals.
- dk. grey - blk w/ crackle text., brecciation locally - text. outlined by blk outlines → int. inc. to sub. ll closely packed blk. zone w/ inc py, graphitic

Thin section

qtz.	15%	stressed, v.f.g in matrix, m.g. in dol. vein
carb.	60%	pervasive throughout samples, f.g. cg in 2 mm. veinlet x-cutting slide - minor q. - grain ⊥ to walls
ser. ite	15%	f.g throughout - all of fp. evident by remnant lathe shaped grains - compl. qtz-carb-ser'ic.
graphite?	2%	org. stems envel. stringers - Fe cont.?, x-cutting throughout slide, cut by dol vn. - dense crackle text.
opaques	10%	py cubes, pyrite. < 1 mm → 3 mm. - dissem. conc. ↑ w/ ↑ in graphitic stringers
	102%.	

- x-cutting veinlet of carb. - growth ⊥ to walls of e.g. dol?



Erickson T/S 18-2 Footwall: Alison 2E 7.

HAND SPECIMEN: - blk. volc. w/ ~x cutting dol-cc veins

FIELD: identical to 18-1

- py. fine-grained, some in clusters → 0.8 cm - dissem. 10%
- trace py in dol-cc. veins, blk volc. frags, q. veinlets // w/ dol-cc veins
- py. in discont. stringer veinlets, curv. → 4 mm.

Thin section:

quartz	10%	- stressed, latest stage veining cuts dol., minor fine-grained at rims of veinlets, late stage repl. veinlets.
carb	60%	- pervasive throughout, veinlets <1 mm → >1 cm cut fractured groat. (prev. alt) - fg contact rims of veinlets w/ qx, sharp cont. → fracture controlled.
sericite	15%	- throughout slide, some w/ opaques, in dol. vns, qtz vns, fg.
opaques	7%	- py - anhedral fg clusters, occas. cubes → 3 mm dissem., some w/ qtz, sericite rx, near graphitic stringers, ↑ stringers ↑ py.
graphite	7%	in stringers, x-cutting in all dir but overall // layered accum. is apparent over the entire slide, gives crackle texture - cut by dol., q. veinlets.

~~100~~ 99%

ERICKSON T/S 8-5 Table Mtn. - Vollaug Vein. - F.W ✓

HAND SPECIMEN: Footwall to Vollaug Vn.

Field - lgt. grn - blk. andesite? sed?
- py - cubes → 3mm w/ Fe oxid. staining
- locally intensely silicified
- qtz. veinlets 1-2mm - x-cutting

LAB - 5cm x 4cm x 3cm.
- rare int. lgt. grn stain rimming qtz-carb veinlet ⇒ Cr-mica flecks?
- org-brn carb. alt throughout rx.
- qtz blebs 1.5cm x 0.3cm.

THIN SECTION:

qtz: ~~30~~ % crackle texture throughout, stressed extinction ~~only~~
fine grains → course.g., veinlets contain mosaic carb
grow ⊥ to walls - carb. post-mineral, obscures contacts

carb: 60% mostly dolomite? twin lamellae, pervasive throughout shale, interstitial to qtz. grains & replacing them
qtz.-carb veinlets (carb after qtz?) latest stage carb. veinlets

sericite: trace white mica, rims, replaces opaques, rare in matrix

opaques: trace ?

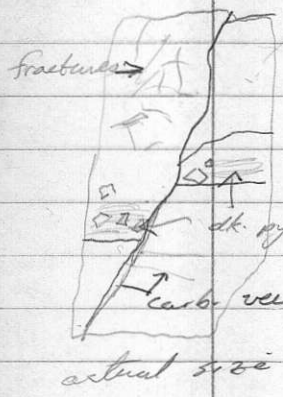
graphite 10% discont. stringers, zones of higher conc., cut by qtz carb. veinlets, int. folded, deform.
- zones w/ higher conc. assoc. w/c. org-brn oxid stain

100%

poss. a sed. due to high. Graphite content., lack of fp. laths and layered (although very deform) appearance-

ERICKSON T/S: 11-5 CWSAC -hem. vdc. 5

HANDSPECIMEN: FIELD: -



- lgt. grn-brn buff vdc - and.?
- disseminated py cubes, pyrite → 3 mm, most v.f.g
- fractured, faults filled w/ qtz-carb veinlets.
- layered - dk. 0.5 cm layer rich in py offset by fault
- isn't fractured, infilling dk. mottled py - gives crackle text. to rx.

THIN SECTION:

qtz:	20%	- stressed, v.f.g-m matrix, c.g isol. blebs in veinlets, w/ carb in veinlets
carb:	60%	- pervasive, f.g, c.g, in veinlets - dol.?
opaques:	1%	py. - cubes, pyrite: fractures, part. destroyed
	7%	aspy. filled w/ qtz, sericite
	trace	columns ← ~~marcasite~~ pyrite? - 2 only.
sericite	15%	f.g - m.g evenly disseminated grains, abund. sericite in matrix

103%

graphite - trace - along fault wall

- q. vnlg post dol. vnlt. xcuts it, dol. vns also post q.v.
- opaques fractured, filled w/ later qtz, carb, sericite
- aspy disseminated throughout qtz-sericite-carb. matrix
- dark band - layer of int. sericitization, // qtz veinlets, x-cutting latest carb veins, o
- qtz carb veinlets
- bands of carb. alt pervade sericitized zone - all directions, mostly ⊥

ERICKSON T/S 23-7 Elan - footwall volc- 12

HAND SPECIMEN - FIELD (andesite) lgt-gry-ppl volc, dk. org-brn weathering
- carb-sil. alt. - very hard
- in contact w/ dk grn volc. - alt. dom.
- py. - cub. → 2mm (f.g.
EAB - specimen is dk. grn sil. variety
- ~~mod. crackle texture - trace.~~
- f.g. chl. veins <1mm - shows as dark discont. lines

Thin section:

quartz: 15%? f.g. in matrix, c.g rarely w/ qtz.

carb.: 20% repl. laths - f.g, c.g in vugs, compl. alt. of fdsp.

chlorite 10% - stringers, undulose ext., c.g size, w/ carb pervasive in matrix

Kspar: 5%? m.g - bi. twe. - Kspar-, f.g? in matrix

brn. munge: 30% 40% of matrix - dissem. throughout, f.g. carb - clays?

opaques 20% f.g peppering of blk. grains throughout conc. in matrix - not phenos. of carb

100%

matrix - c.g fdsp alt to carb
- rest of matrix m.g laths alt. to brown munge, qtz.

⇒ plag porphyry

ERICKSON T/S 8-6 Table Mtn. - Vollaug Vn - H.W 3

HAND SPECIMEN: HANGING wall to Vollaug Vn.

FIELD: blk - dk. grey-brn argillite
- mod. fissile (locally highly fissile / well indurated)
- minor clear q. veinlets < 2mm. ⊥ to foliation (bdg?)
- 102/35°N; folds 35° → 010° < 20 cm amplitude
- grey → org. brn Fe weathering

LAB - clear q. veinlets ⊥ to foliation (bdg?)
- v.f.g. - clay stone, clay weathering (coating on ⊥ x)
- slightly calc.

THIN SECTION

quartz: 55% - stressed qtz. - blue colours, xcrosses, grains on rotation, vf.g matrix → mg. - in veinlets, crackle text.

carbonate: 35 fig-mg aggregates in q. veinlets, anhedral grains - brn-colour, no twins ⇒ siderite?, vfig in matrix

graphite: 43% - gives contorted, layered appearance - tightly packed layers locally

holes? → x 5% - grey ing figure / in qtz veinlets, graphite stringers
- stringer like or in slabs → 1mm. ⇒ CLAST?

opaques: 21% interstitial to q. grains, fig. - dissem.

~~calcareous/muscovite~~ 21% v.f.-mg., occurs in microveinlets < 0.1mm, usually assoc. dk brn carb. areas

95%

Textures: - abund. multidirectional q. veinlets <0.1mm - 2mm
- dk. org brn Fe-stain
- graphite layers folded, contorted, act as a barrier to q. veinlets x-cutting
- int carb. envel. along fractures, holes