

4065 bend 11.01.71

- 1 F₄ fold axis 105° 2°-5° W
max. plane foliation, but 100°-105° f
- 2 29.10.71
- 2 S_v 105° 40° SW biot. musc. schist
ε thin interbands of calc.
schist.
- 3 S_v 105°-110° 22° SW
muscovite biotite schist
- 4 S_v 115° 42° SW south side of
fault in musc. bio. schist.
- 5 biotite musc. schist S₂ 75° 75° SE
- 6 S₂: 109° 70° SW musc. biot. schist.
- 7 at contact with ore:
S₂: 125° 68° SW no gneiss contact with ore
on gross scale contact conformable
in detail not.
NO BARRING AVAILABLE IN STES.
- 8 F₄ 115°-120°, 20° SE
axial plane 125° 78° SW
- 9 S₂ 100°, 57° W contact ore/musc. schist.
- 10 foliation 140° SW
- 11 S_v 135° 68° SW musc. biot. schist.
- 12 150° 80° SW " " "

000820
Pit Mapping

4135 bench

1.11.71

1 Mus. bio schist S_2 $115^{\circ} 51^{\circ} SW$ conspicuous stand
partly blank

2 Mus. bio schist, probable T_2 folds in
axis $120^{\circ}, 14^{\circ} SE$ $S_2 = axial plane$
 S_2 $100^{\circ}, 45^{\circ} SW$

3 S_2 $133^{\circ} 40^{\circ} SW$ Mus. bio. schist

4 S_2 $125^{\circ} 40^{\circ} SW$ Mus. bio. schist

5 S_2 $138^{\circ} 30^{\circ} SW$ bio. Mus. schist

4100 BENCH

3/11/71

1) Musc-bio schist : S_2 $151, 65 SW$

Jts : ① $142, 87 SW$ ② $11, 73 W$ ③ $43, 89 NW$

Faults : $146, 87 SW$ ① = ② = ③

2) Musc-bio schist : S_2 $114, 55 SW$

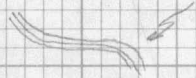
Jts : ① $23, 78 NW$

Fault : $105, \perp$ slicks pitch $50^{\circ} NW$ in fault plane

3) Musc-bio schist : S_2 $100, 58 SW$

Jts : ① $35, 88 W$ ② $81, 69 NW$ ① = ②

Fold : $F_4 (?)$ axis $126, 30 W$ open, 11 warp



4) Musc-bio schist : S_2 $139, 75 SW$

Jts : ① $77, 76 NW$ ② $169, 62 SW$ ① = ②

Faults : ① $162, 74 SW$ ② $86, \perp$

5) Musc-bio schist : S_2 $139 38 SW$

Jts : ① $16, 82 NW$ ② $127, 85 SW$ ③ $119, 77 SW$

- 6) Musc-bio schist: S_2 144, 46 SW
Fault: 88, 57N
- 7) Bio-musc schist: S_2 133, 77 SW
Fault \approx S_2 147, 65 SW Slicks \perp
- 8) Musc-bio schist: S_2 142, 70 SW
Fault: 139, 72 SW slick pitch 64 SE
in plane of fault (Fault $\parallel S_2$)
- 9) Mass. sulfides: banding 104, 34 SW
 S_2 in qtz-musc schist under sulfides
116, 43 SW



4170 Bench

4/11/71

- 1) Bio-musc schist: S_2 56, 31 SE
- 2) " " " : S_2 103, 26 SW
- 3) " " " immed above sulfides
 S_2 92, 39 S. Banding concordant
in sulfides @ 80, 32 SE. Minor
Fold_n (open, monoclinial slightly
similar), unknown generation



axis trend 35, plunge SSW axial plane \approx 35, 70 NW. Fold only local not main generation

4) Sinterified bio-musc schists: S_2 141, 46 SW Fault 169, 66 SW, strikes pitch 65 NW in plane of fault. Interbanded sequence of ^{massive} musc-qtz schists & more qtz rich bio-musc schists. Faults 70, 75 SE 95, 75 NE

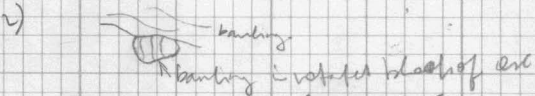
65 20
70 25
95 45

5) As above: S_2 on S side of fault zone 69, 41 SE, on E in fault zone 21, 14 NW Fault zone Σ 78, 69

3870 Bench

5, Nov. 1971

1) Massive sulfides in fault zone: Banding 100° 36° SW sulphide bodies badly oxid. sph. gal py. pyrr. pyrite in xs jointing 122° , \perp , 80° 78° NW to 80° NE



3) qtz below ore; foliation: 55° 35° SE banting in sides is comparable to this

A) fault in sides \sim N-S, 75° - 80° W.

5) banting - 120° , 17° SW

6) " 0° , 34° W

7) " 150° , 15° SE

NW 4 4.7 5.7

10.4

6. 11.71 3870 Bend.

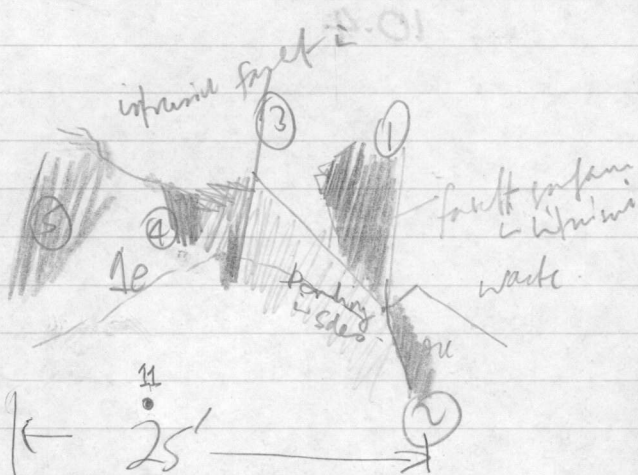
8 Banking $24^{\circ} 54^{\circ}$ NW
in sides, becoming sub parallel
in strike to fault surface. Sides pitch 28° N
in plane of fault.

9 Banking in sides $15^{\circ} 22^{\circ}$ SW
Fault $152^{\circ} 84^{\circ}$ SW slides pitch 17° NW
in plane of fault.

10 faulted contact with blended limestone
with ore $21^{\circ} 83^{\circ}$ NW slides pitch 10° N in
plane of fault.

Banking in sides above limestone $23^{\circ} 16^{\circ}$ NW
joints in intr. $59^{\circ} 61^{\circ}$ SW, $153^{\circ} 70^{\circ}$ NE,
 111° L, $56^{\circ} 70^{\circ}$ NW

11.



①

② 32° 88° NW slides 4° NE in plane of fault.

③

④

⑤

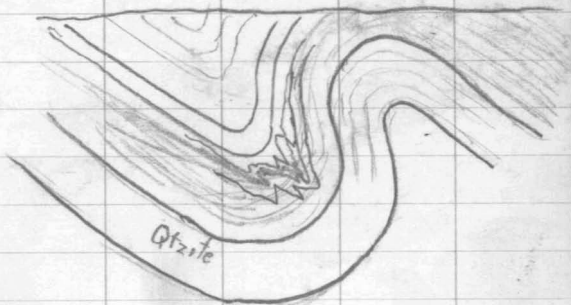
- 11 banding in sides below int.
 $92^{\circ} 38^{\circ}$ SW
- 12 banding in sides below int.
 $6^{\circ} 45^{\circ}$ W
 fault surface $120^{\circ} 80^{\circ}$ SW
- 11 8 12 on S and N limbs of antiform map
 under dyke.
- 13 fault in on $120^{\circ} 83^{\circ}$ NE
 slicken pitch 5° NE
 banding in side $1^{\circ} 38^{\circ}$ W
- 14 fault $164^{\circ} 56^{\circ}$ SW slicken pitch, 1° NW
 in plane of fault.
 banding in sides $141^{\circ} 8^{\circ}$ W
 fault intersecting same fault $56^{\circ} 64^{\circ}$ SE
 pitch of slicken 3° E
- 15 banding in side $163^{\circ} 39^{\circ}$ SW
- 16 " " " $163^{\circ} 10^{\circ}$ NE
- 17 " " " $37^{\circ} 60^{\circ}$ NW
- 18 faultal contact with intrusive $37^{\circ} 87^{\circ}$ NW
 slicken pitch 12° E

Station

320 LX Pacific Rainproof
Bench: 3910

Date: 10 Sept

- 1) Bio-musc. schist: Ant faulted
faults ① 120, \perp ② 100, \perp
 S_2 : 49, 35SE Rdg. in fault zone
- 2) Bio musc. schist: S_2 fold about
 F_4 (?) axes: axis 103, 25°E Ave.
 S_2 34, 16SE S_4 : 115, \perp
- 3) Graphitic schist (4): Boulder
line trend 96, plunge 35°E
Ave S_2 : 70, 38SE
- 4) Graphitic schist in contact w/
qtzite: F_4 fold: axis 100, 18
axial plane 116, 70SW



5) Biotite musc. schist arge S_2
reading $90^\circ 20'S$ F_2
axis 122° plunge $6^\circ E$ axial plane
Strike 114° dip $78^\circ SW$

6) Fault in biot. musc. schist strike 78°
slides pitch $6^\circ E$ in plane
of fault

Fault to north $118^\circ 50' SW$. 2 sets of
slicks: ① old pitches $12^\circ W$ in plane
of fault ② young sets pitches $65^\circ W$
in plane of fault.

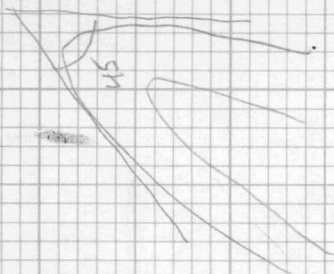
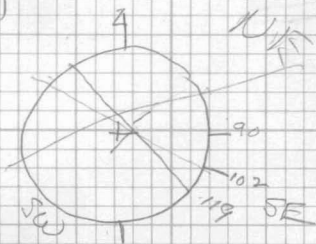
7) Fault in gne separating gne and ore from q.m. sch.
str $145^\circ 78^\circ SW$ slides pitch $12^\circ SE$ in
plane of fault
banding in gne & ore $115^\circ 19^\circ SW$

8) Fault $98^\circ 76^\circ NE$ slick pitch $8^\circ E$ in plane
of fault.

9) Fault $120^\circ 55^\circ SW$

- 1 - biotite chl. schist S_2 $130^\circ 43^\circ SW$
 L_3 $170^\circ 25^\circ SE$ main joint set in
 dyke \perp 160° second joint set $45^\circ 65^\circ NW$
- 2 biot. chl. schist - S_2 $117^\circ 25^\circ SW$
 L_3 $172^\circ 15^\circ S-SE$
- 3 fault $70^\circ 6^\circ SE$
- 4 calc. silicate gneiss S_2 $110^\circ 27^\circ SW$
 L_3 $153^\circ 23^\circ SE$
 main joint set $160^\circ 78^\circ SW$ ~~unip. joint set~~ $78^\circ 70^\circ NW$
- 5 calc. sil. gneiss S_2 $150^\circ 17^\circ SW$
 L_3 $160^\circ 4^\circ SE$ joint sets: $170^\circ \perp$, $33^\circ 80^\circ NW$
- 6 Calc-silicate gneiss: S_2 $128, 21/56$
 L_3 $158, 14 SE$
- 7 Calc. sil. gneiss: S_2 $125^\circ 17^\circ SW$
 L_3 $170^\circ 17^\circ SE$
- 8 Calc. sil. gneiss: S_2 $130^\circ 24^\circ SW$
 L_3 $167^\circ 18^\circ SE$
 joints $84^\circ, 75^\circ N \rightarrow 75^\circ S$; $165^\circ 80^\circ SW$.
- 9) Bio-chl. schist: S_2 $51, 17^\circ SE$
 L_3 $171, 14 SE$

NW



- 10) Graphitic schist: S_2 125, 23SW
 L_3 156, 6°SE Qtz border lines
 64, 11NE
- 11) As above: S_2 129, 20SW L_3 not available
- 12) Musc-bio schist: F_4 axis 102, 10°NW
 Axial plane 119, 82SW Average
 S_2 58, 15SE Reading shows general
 description of S_2 during faulting
 in broad zone of normal
- 13) Musc-bio schist: S_2 (?) 159, 60SW
 This surface permeates zone of sheared
 rbo. May be S_2 rotated along
 edge of normal fault zone. Circulation
 lineation in this plane 140, 15E
 Generation uncertain, possibly L_4 ??
- 14) Bio-musc schist: F_4 axis 133, 20SE
 Axial plane 126, 82SW Axe S_2

26.10.71

4030 bench

15. str. $118^{\circ} 49^{\circ} \text{SW}$ unacc. blattite schist

(S_2 bedding)

16. str $114^{\circ} 54^{\circ} \text{SW}$ (S_2)

F_4 fold axis $105^{\circ} 12^{\circ} \text{SW}$

axial plane $114^{\circ} 53^{\circ} \text{SW}$

folded lineations

$87^{\circ}, 27^{\circ} \text{E};$

$92^{\circ}, 12^{\circ} \text{E};$

$90^{\circ}, 8^{\circ} \text{E}.$

17. S_2 $120^{\circ} 75^{\circ} \text{SW}$

18. $118^{\circ} 80^{\circ} \text{SW}$

19. $25^{\circ} 60^{\circ} \text{NW}$ fault surface

20. F_4 fold axis 105° horiz.

21. S_2 145° vertical.