

Field Visit

86/08/27

Brazierne

~ 1 MT @ 250t (150,000 of -45)
 8th level as level we will visit
 (main working level)

Cadwalader fault system
 steep bedded flt couple

- Diorite 250 Ma Pyrox Hb Gabbro-diorite
 intrudes Ferguson Fm, Bridge R
 Gp - ribbon cherts

- Greenstone in between the two flts
 are TR?

Graben 1500 m long 1500 m deep

Undergrd 857 vein - main producer

Production 4.15 million oz from 8 MT Ore
 1900-1971 (avg .5402)

sulphide in vein

1-3% py / arsenic

vein is ribboned

deep plumbing system

Nwd - shallower

Carbonate in vein - some
alt. to carbonate in CR

Gold - streaks, u.w. pyrite (in halo)

of gray gtz around pyrite)
mainly in Hw?

veins - on echelon gash fractures

Gold is locally in Hg shoots

'Bonanza' ore was more common in
the Pioneer system.

Purpose - to map 925/15W to put menlyn
in regional setting.

Paleozoic cherts / graphitic

Triassic pillow lavas - Pioneer

argillites
lot
volcanics } Hurley

Underground - will visit

- 5' vein

- 8 1/2' vein (A114m bra)

Veins have carbonate alt. halo -
fuchsite (from serpentine)

Diorite → 'paper sheet' → carbonate
alt. → vein

8 1/2' vein

streaks 070 line

ribbon gtz

rusty wtrg

vein narrow / alt. narrow

Host rock Diorite

gtz - epid -
Early ~~serpentine~~ fuchsite veining
pre-ore?

Diorite texture highly variable - lots
of assimilated Pioneer gneiss

Veins - ribboned sulphide brg
sulphides in alt. ribbons
arsenic mainly

ankerite carb alt adjacent

sulphide also occurs in
CR adjac. to vein

carb actn - hb → buff ∴
are nearing a vein

5: Vein

Relaxed gtz with strong
carbonate actn halo (photo 20)

Bxtd zone in vein (photo 21)

Further along - ribboned gtz vein
(photo 22)

CR still diorite

Zircons in process

albite No granite diorite (K/A)
intra/post vein grn hb /
PPg dyke (90 Ma) (nearly 210)

albite - pre-mineral peak
associated?

8
vein - ribboned stickmarked inside
- CR also

- nearby - albite dyke (sub-
parallel to vein) - pre-mineral
- here is ~2m wide

There are like quartz white & black
Carbonate veins (falcite)

BENDOR PHOTON 50-55 Ma

The sampled vein is at the edge of the
albite + in the albite

ELSEWHERE IN AREA

Scheelite in veins - different part of
the system.

No change in grade / mineralogy / actn
with depth

Diorite - gtz ~ 10%
Hb → chl / carb (causes buff color)

Buffy carbonate

↓ gtz carb white mica arsen py
vein

- shearing may or may not be present with veins
- gneiss - with chromite from ultramafic(?)
- plagioclase - albite
albitization may occur but is tricky to recognize
- carbonate zone - feldspar destruction
- albite in diorite may reflect the regional greenschist metamorphism

DRILL CORE - Normans Pacific Eastern prop
Ferguson - graphitic metachert
folia may also be chloritic
or bio + garnet in higher grade rocks

- where strained, gets pulled apart, then to pebbles 6x

- Bounding Faults
Cadwallader / Ferguson

- cut by 'no plug ppy

Resident ultramafic - marks
part of Ferguson Fault zone

Motherlode - Ponderosa slate localities
strain - ^{parallel} related to serpentinite

Congress

↓
vein
Karl/Hall/Schaper
carbonate
crackles
amorphous carbon in
fresh rock

Properties outside - Bralorne Belt
gold is generally related to
ppg dykes
Try Rhyolite?

El/Hurley - has Bridge River
clasts

Chet. Taylor

Bridge R & Hurley

also rhyolite

PIONEER MINE

serpentine just to the north
on the road

Highway stop 1 -

Old diorite cut by soda
(Bralorne intrusion)
granite

contact bxt'd with many
veins of soda granite

soda granite has Hardly
Pioneer greenstone in both
diorite and soda granite

(remember the qtz ^{approach carbonate} veins
underdred at Bralorne)

soda granite

Qtz - albite ch after 146

(photo 25)

stop 2 - Ferguson Chert

old diorite
chert road
chert

Base of R - pillows over chert -

contact u. sheared

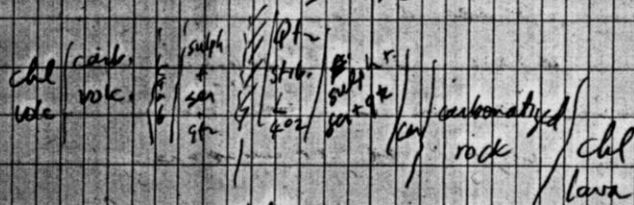
Pillows lava probably Pioneer

Heavily sheared

cut by wandering shears with
up to 25 or 30 in shears cutting
the pillow lavas

- assoc carbonate alter

sample 86-5



HOWARD VEIN

- Lunch -

50P



Old Diorite intrudes chert
Serpentine intrudes contact
(follows semi-circular contact)
and then serp. intruded by Tert. dyke

50P

Noel/Hurley argillites and
Hurley volcanics
qtz & epid. amygdulose

50P

Black argillite - over lavas

50P

Conglomerate - above arg -
hot chert

Ferguson & Trossie

Rushmore - all Breils Carman / Norrie
from this type of rock

50P

Sandy - pebbly sediment - beds
2 to 1 m shown by pebble trains