

METRIC
FIELD (S)

Gibraltar East - DETAILED SAMPLING

Sept 3, 1998

Clear, hot
Murray, Chris

Δ1 examining changes in mineralization
across sunset shear trend
down ramp off 2690 bench
on north west wall

- see epidote with Qtz-chlorite-pyrite
veins (patches) - larger (20cm to
1/2 m wide - 1st time seeing
epidote - also cp - coarsely
crystalline Qtz - some "vegs"
Kavities noted in one
sample (? carbonate)

Δ2 on face across from truck

DUL-98-114

- closely spaced, sheared
pyrite-quartz veins
cutting ~~sawtooth~~ epidotized
m.s. localite, moderate w/ly
foliation, 3 to 5 cm spacing of veins

low grade
to
waste?

veins

50g to 120

40
5
100

Photo 78 - parallel veins
#52
hammer placed
(End on) ~
(along strike) down
dip

53

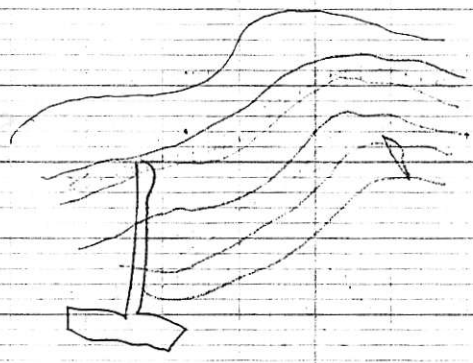
35

FIELD REPORT TO BE MADE TO SUPERVISOR BY
DARKNESS WALL EFFECT

628897

Clinton East - Darnley's

3 1908



36

DVL 98.115 - parallel veinlets
with qtz-pyrite
cutting m.g. tonalite

low grade? - tonalite mostly epidotized
but some small zones
roughly parallel to foliation

"Seeing things" ? → ore more whitish with
less epidote ~~ore~~

- veinlets possibly thicker
- wk to mod. foliation
- didn't notice any ep
- veinlets on average thicker (up to 1/2 cm) and more widely spaced than (114) (4 to 30 cm)

DVL 98.116 ^{chalcedony} ~~ore~~ - quartz veinlets
following crinkled
foliation in variably

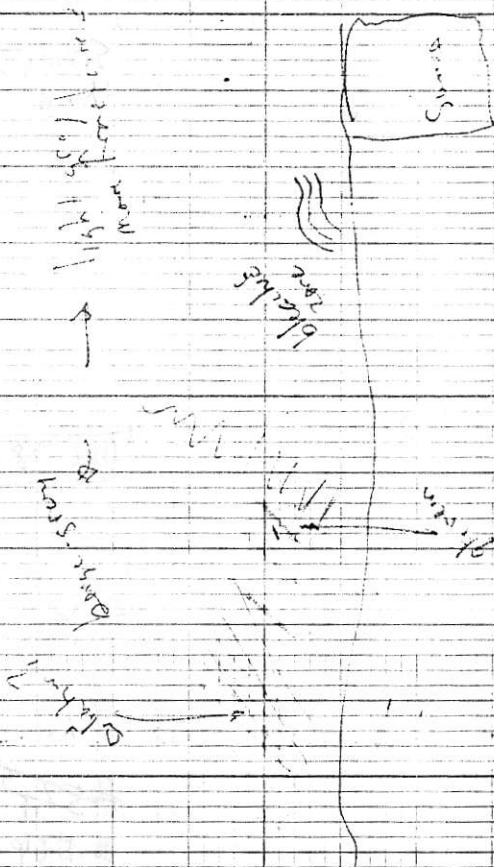
high grade bleached tonalite -
some epidote in bands
moderate foliation

Photos 9, 10, 11
#52, 53 hammer & pencil

#54, 55 - mineralization in foliation
but not all parallel
laminae

56

Can be strongly isolated
and still see epidote?
(at least a few instances)



38

Jul. 98 119

moderately foliated,
epidiotized m.g. tonalite
cut by thin sulphide
veinlets on hairline fractures
- chloritized mafics appear
"normal" - not bleached

Δ2 breccias - NW corner of
Gib East pit

Photos 12, 13, 14 ~~57, 58, 59~~

(12) - looking east to massive
zone overlain supragene
enrichment

(13) - looking southeast with
2695 bench at bottom
(sampled on Wednesday)

can see
slushing
along
wall
along
sunset
shadows

can see
- ore continues into wall
for SE side
to pipe bank in rock
stage but problems with
failures in walls,

(14) ^{east}
Inarc... Pollyanna,
- can see sediment-infilled
lake bottom and oxide-
weathering

METRIC
FIELD (S)

DVL 98.117

Polymer?

- hard, largely
white-colored
area of wall

high
grade? - would be termed
leucocratic, Mg tonalite
- very little epidote

- some chlorite

- cut by chalcopyrite grain
trends associated with
hairline fractures?

- adjacent rocks altered,
possibly silicified, sometimes
has small veins

- can see remnant m.g.
texture throughout rock

- some sericite

silicified tonalite as selvages
to cp-veins in bleached
tonalite

R. D. FERRELL, INC. MADE IN CANADA
DUNSMUIR, BRITISH COLUMBIA

DVL 98.118

CAS-98.214

- sericite-chlorite
shear zone

- minor sulphides

- late

- some gouge

- hematite coloration
in part?

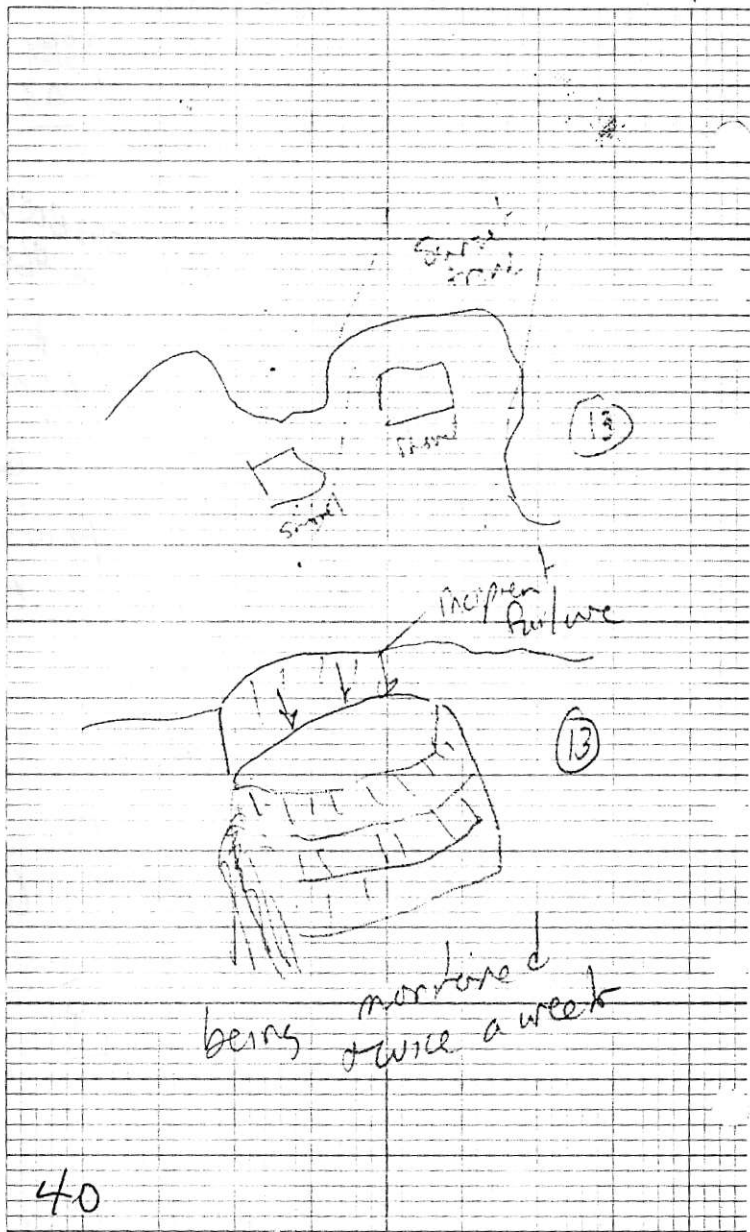
- well east of

camp New top
of camp

39

70N
/
shear zone

minor
structure



Δ3 gtz veinlet with minor chl
cutting white mg. tonalite
- no foliation or very weak

093B206 - chlorite - phyllo sericite
- #60 shears on fractures with
pyrite - epidote only adjacent
fracture

photo 16

photo 17 - gtz-chlorite stockwork

~~62~~ 61 cuts chloritic stock
fractures with py

photo 18 - aplite gtz eye fig.

62 dykelet - very sharp
- cut by green gtz
veinlets and
quartz veins
with ep + mo

Photo 19 - possible slight fold

63 in aplite dyke
8 1/2 cm wide
red pencil

DVL.98.120 leucocratic gtz-rich
unit cutting tonalite
- ~ 14 m wide
- sharp upper contact
with sauseritized mg. tonalite

trends 350° and dips steeply to east

R.D. PENNALL LTD. 24001 100% RECYCLED PAPER
DUNSMUIR WATERPROOF

has green sericite and white
sericite on shears ($\leq 5\%$ of rock but
stands out)
- cut by white qtz veins
pyrite veinlets $\frac{1}{2}$ minor cu (malachite!)
- in places looks like remnant
tonalite texture with n.g. qtz
and possible plag.

Photo 20 - abandoned pit and
flooded drilled bench

Photo 21 laminae on upper
contact of altered
64 tonalite zone

Photo 22 trend up walls
65 of altered zone

Photo 23 3/4 closeups of altered
66 out less bleached tonalite
of texture
foss (red pencil)

basal contact less clear,
over $\frac{1}{2}$ m, possibly
gradinal

- note only see green chlorite
on shears and fractures
in tonalite - no sericite

0VL.98.121 aplite dyke

photo 18 - not a fold

Same as - aphanitic, possible
0.5 mm qtz grains
sparse sulphides
cut by chloritic-
coated fractures

photo 25 chloritic selvage
in qtz veinlets
and fracture
67 (100% chl.) in
saussuritized
tonalite

photo 26 gray qtz-chlt py
veinlets cutting
68 tonalite - note
intensely foliated edge
of block tonalite
not saussuritized

- also saw a chloritic shear

69, zone
70 no descriptions //

Patent Grade

Microbiology

Cell Path
1975

///

Cell Path

~~XXXX~~
~~XXXX~~

Textbook

AIT

Observation

48

Gibraltar Discussion

- analyses of ² quartz porphyry leucocratic rocks contain high CaI , S , K_2O and low Ca , Na in porphyry volume
- leucocratic rocks from North Gibraltar have high normative orthoclase which is ~~very unusual~~ inconsistent with other intrusive rocks (G vol)
- So can assume some of leucocratic rocks are altered

Why are they not normally ore? "ore adjacent to ore" G Barker

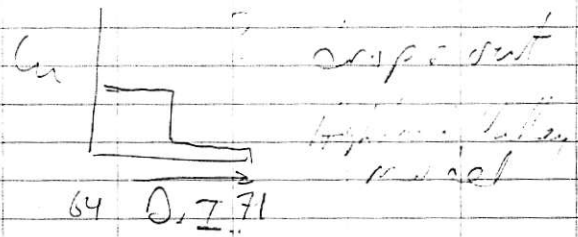
Are some ~~leucocratic~~?

Some bleached material in Pullyane pit

- how to explain mineral zoning from SE to NW
 - depth
 - lateral
 - lithology
 - porphyry
 - diagenetic ages

- Gibraltar has less Cu because deeper (G.B)
- definitely need to look at similar ages with Highland Valley
- good correlation between younger contact zones and Cu's (G.B) see Highland Valley data
- have observed Transjordanic zone porphyries
- in NW Mo.
- where's the centre of the intrusion
- is this similar to Highland Valley with deposits at felsic core
- possibility of a similar ages with Rainer Newberry model

R.D. PENNELL LTD. MADE IN WASH. STATE, U.S.A. DUNSMuir WALLPAPER CO.



METRIC
FIELD(S)

- Andre P. comments
Fraser Fault ages - 80 Ma

NB - Tertiary QAP in Pollyanna
pit sericitized and pyritized
(K-Ar 40-45 Ma)

on subsequent reflection
Andre couldn't find
this date or info

R D FERRIS LTD. 3415 FERRIS AVENUE, CALGARY
ALBERTA T2C 1E9 CANADA