

AUG 3, 1983

SAU CLNM GP

H. AWMACK

673973

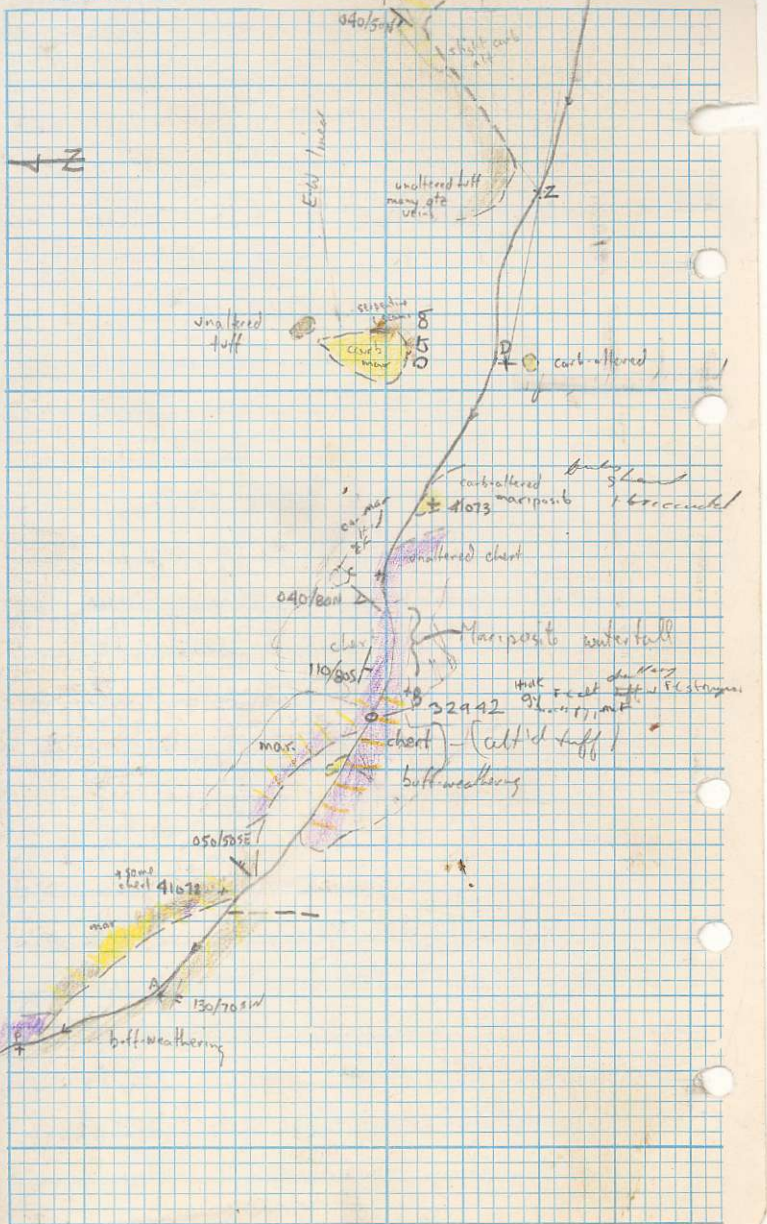
Traverse up main carbonate-altered zone, starting near bottom of canyon. ^(A) Here the unaltered rock is olive-grey andesitic (basaltic?) tuff with minor ^{disseminated} pyrite, slightly altered (fg platy or silky, olive-grey, soft - chlorite-gls ??) cut by black fractures and white gls-cal stringers.

The carbonate alteration is patchy, though much rock is buff-weathering. One shear, not especially altered, strikes 130/70SW

Along creek 17m at 140°, SAMPLE 41072

Sericite ^(carb?)-gls altered tuff. Minor fg pyrite. Pale green knots of sericite (? ~~can~~ Not likely mariposite). Occurs adjacent to narrow (15m)ankerite seam. Taken as first in series of alteration samples to show any longitudinal geochem trends along creek.

(B) 52m at 140 from A. Waterfall runs for 15m at 080 from B (Mariposite w. fall). Numerous seams of fairly coarse white buff-weathering carbonate, irregular in width and orientation, but mainly oriented near 040/80N, from 1mm to 20 cm in width, bearing brecciated fragments of wallrock (light grey to black chert). Chert is in 4cm bands, interbanded with 2-10 mm thick shale bands (possibly a shearing feature but likely sedimentary). Bedding is warped, averages γ 110/80S



1:7000 + shear Δ carb seam X bedding

C is 16m at 080 from B. Dis 33 m at 120 from C
E is 63 m at 100° from D.

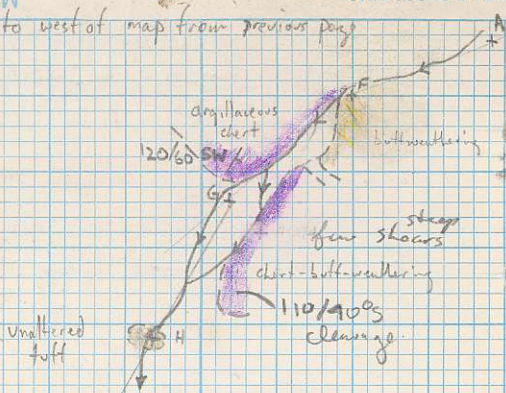
41073 (12m at 120° from C). Ankerite-mariposite alteration. No original textures preserved. Mariposite is both vfg, and disseminated (giving rock a pale green cast) and coarsening along fractures. Rock is unaltered chert just ~~to~~ west.

Carbonate-altered outcrop 13m N of D. At north end of this outcrop is unaltered andesite tuff. However, buff-weathering talus continues to east. The carbonate altered o/c is v. oxidized, difficult to get fresh surfaces. Mariposite is ~5% of rock (vfg and on fractures); remainder is buff-weather carbonate. Serpentine may also be present locally. S-A 30cm seam of black, lumpy serpentine ^{partially} bounds outcrop to east. The carb-altered rock appears sheared and highly fractured.

5m north of point 22m at 100° from D. Unaltered tuff with many milky qtz veinlets (1mm - 5mm thick), randomly oriented

E is in 'unaltered' tuff. Sporadic 1-2m wide zones of weak carbonate alteration (presumably offshoots from the main zone between C+D) continue up creek

Continuation to west of map from previous page



all
glacial
float
to main
creek (serpent into Head)

F is 20m at 340° from A. G is 21m at 320° from
H is 21m at 300° from G

The argillaceous clert by G is somewhat phyllitic, with soft grey clayey material defining a foliation which parallels the ~~sp~~ conspicuous & warped bedding (?). There is no carbonate alteration

41074 Qtz veins with minor ankerite along fractures and with pieces of brecciated wallrock (black, v. soft, phyllitic - possibly graphite/serpentine alteration). Qtz looks dull; it's milky and without sulphides. Rare pale green platy mineral in Qtz (not possibly scorodite - not likely). Veins are poddy \approx V 070/70N. Four roughly parallel veins, 50cm to 1m apart; 30cm wide at widest points. None can be more than 3m long (exposed for 1.5m)

Upstream to "slippery waterfall" there is much float and lesser outcrop of the phyllitic "graphite-seep" alteration (or phyllitic argillite). Numerous milky Qtz (gash veins in tuff (up to 10cm, no limonite or carbonate) schistosity \approx V 130/80NE. May be sedimentary or due to faulting.

AUG 4, 1983

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Traverse to ridge north of camp.

83 CAX-101 70m x 10m mod silt/sand/rocks
pools brown 5% org andesite float (o/c starts
+ chert
100 m uphill)

o/c above CAX-101 light grey chert with zillions of black
hairline fractures; locally argillaceous.

50 m higher further up creek: Tuff, andesitic (or basaltic)
fg, dark green, not magnetic, no sulphides, chloritic.

Farther up creek the andesite is variable in color
and texture (light grey to dk green; tufaceous to microcrystalline)

Rare eply and malachite/azurite occur along fractures in
dark grey andesite tuff(?) near top of creek

Next creek west (with prominent rusty gully -ankerite alt
zone). Pale green-grey chert, unaltered outcrops in
creek 50 m below ^{rusty} gully.

83 CAX-102 10m Below chert d/c 70m x 5m mod sand/silt
pools grey 1% org chert/and/ankerite float.

A small o/c (1m square) of strong ankerite alt^z occurs
in main creek a few meters south of gully. Rock in

gully is buff-weathering andesite^(?), extremely fractured and rubble. 83 CACT-101 is 20m up gully from creek

in rubble rock
83-CACT-101 Gr br gr/sand/silt in rubble rock ^{near} bottom of gully. 10% org.

41075c Ankerite zone. brecciated fragments of andesite (chart?), randomly oriented and jagged, in a white, fg, buff-weathering carbonate matrix. No sulphides, max. posit. fairly common on fractures. Locally (only one boulder seen), the breccia is bleached (gts-ser?) and contains minor disse. py. Main alteration zone ~ 20m x 50m, pinches to weak alteration (i.e. buff-weathering andesite) and basal parts of ankerite along linear. No significant gts.

83 CACT-102 on Ankerite zone linear. Much ankerite float
Red br silt/sand/clay grassy 5° slope 1% org

83 CACT-103 On Ankerite linear. No ankerite float. Br
gravel/silt/clay/sand grassy 5° slope 5% org
Linear trends 025°

There is a patch of serpentinite float 100m below the top of the third west-trending gully (on the west edge of hill).

The serpentinite is partly replaced by talc and part appears brecciated. All nearby o/c is andesitic tuff.

There is a prominent rusty zone 300m further down the gully. This is mainly due to a 5m wide ser-gtz-early alteration zone (v. similar to one of the 41075c specimens). A narrow (<30cm) milky gtz vein is at top of outcrop, exposed for 2 meters. Rare (1 grain) cpy occurs in adjacent (to east) buff-weathering sl. phyl. Pis (sheared?) chart.

AUG 5, 1983

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Traverse ^E along ridge north of camp

83 CACT-104 In gully; o/c of rubble, weakly
ankeritized (buff-weathering) andesite, float of
ankerite breccia: br, no veg, 1% org 15° slope

83 CAX-103 50cm x 5cm (part dry) br, 5% org,
sand/silt/rocks mod pools below andesite/c.

Upstream there is abundant red hematitic volcanic
float - none in place.

83 CACT-105 Br, grassy, 10° slope 1% org
Much limonitic, altered (?) chert float.

There is a little pale green chert mixed in with
no andesite above CACT-105. Some of the andesite is
purple (sic hematitic) and an irregular, pobby jasper
vein (bed??) cuts some of the purple andesite. Epidote
is common along fractures.

83 CAX-104 100cm x 5cm med green 1% org sand/silt
pools. serpentinite/andesite

83 CAX-105 50cm x 5cm mod green-grey 1% org silt/sand
pools andesite/serp/chert. Arg.aceous chert o/c beside sample