

April 17, 1987

Paterson Group Claims,  
Pt. Alzemi, Vanuatu. (1)

Checked out roads +  $^{\circ}$ k along roads  
that run through Paterson Gp. claims.

First  $^{\circ}$ k after crossing bridge  
near mainna = massive basalt (mb)  
with some  $\text{Q}$  veining + minor cc veining  
locally. Some amygdalites filled w/epit  $\text{Q}$   
+ minor chl. Veining running  $\sim 135^{\circ}/90$   
until I get a proper map, declination  
is  $20^{\circ}$ . Adjust reading after getting right decl.

671509

Gravel pit w/ copper showing. Sample 70701  
flag is here. Shear zone in massive  
basalt trending:  $170^{\circ}$ /vertical. See  
2 shears, each about 15cm wide +  
50cm apart, marked by abundant malachite  
+ a brilliant orange-red rust in a totally  
altered basalt (to an olive green clay?)  
Exposed on back wall of pit on E side of  
road. Shear must push + swell as you  
don't see it cont'd on S side of exposure  
(1 is, the other is not). See  $\text{Q}$ -filled  
fractures in shear also. A blue-grey  
alt<sup>e</sup> occurs as well. One malachite  
sample. Moly??

- Fork in road, see L 5400 E crossline just south of fork + creek. Line running  $\sim 15^\circ$

- BL running  $\sim 110^\circ$

- rusty pit near 36+00 E, 18+00 N, Bill's

Sample 87-B-043. F.g. intrusive?

Some py min<sup>es</sup> + minor malachite.

Lots of limonite stain, brecciated.

Took 2 samples of this

- <sup>old</sup> Claim posts at <sup>Baseline</sup> 16+50 N, 29+50 E

dated 1967

**Red Lolo**

- Bill's sample 87-B-047 = epidotized basalt

with minor malachite + cpy. Cpy in

epidote a lot. Some associated @. All

in massive basalt in hanging wall of a

narrow shear zone oriented  $\sim 130^\circ/45^\circ$  E

A dyke (?) exists to the W of this etc

+ weathers light gray. Lots of

feld pheno in a dark green matrix.

Near 28+00 E, 15+75 N. Took a sample

of epi+cpy, dyke, + basalt.

- Bill's samples 096+097. Real rusty

limonite + hematite rx exposed in road

bed. Surrounded by fragmental basalts

+ massive. Seems to be a large

shear zone running roughly 80°/60N  
taken from fracture face // to sheared rock.  
Several metres wide. Sample.

Bill's sample 098 is about 30m S  
down the road from a gully incised  
right in the road of heavily laminated  
rock. 099 is still further down  
road on E side. Small % of  
mae - Looks siliceous & weathers rusty  
red. Sample

Claim posts 40m NW of Patterson Lk

#13406 = LCP

Patterson Lake #2

Albert McMaster 198082 (Emc)

Jan 15, 1984 9:00 AM

March 6, 1984 11:30 PM

4S 5W

#13402 = LCP

Patterson Lake #1

Same as above

Jan 8, 1984

11:30 PM

NEVILLE CROSBY INC 46 LF

March 16, 1984

3:00 PM

3N 5W

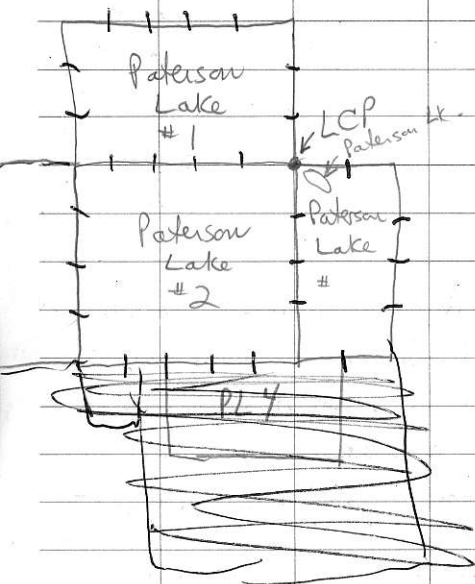
# 13414 = LCP Paterson Lk #3

Herbert McMaster 198082 (Em.)

March 23, 1984 9:00 am

April 21, 1984 1:00 pm

4S 2E



April 18, 1987

- started mapping

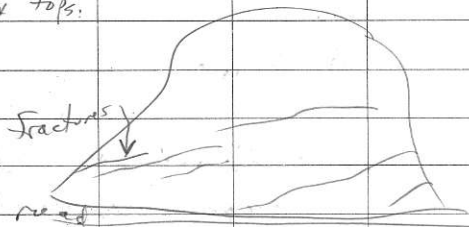
(3)

near river. 1<sup>st</sup> major % part plain is massive basalt w/ local pillows (?) and pyroclastics. Basalt is slightly pyroclitic = it has a green hue, with lots of manganese stain on fractures and local cc pockets + veinlets, locally more apple green, as if epidote is in the groundmass. Rock weathers to a rusty orange color. Lots of moss on hummocks w/ some sparse tree growth.

Sometimes break off "balls" that are more green (epidotized?), with Q crystals + Q fillings in what appear to be interstices between small patches of basalt. Are these the cores of pillows? Sometimes when you break off a chunk of it it is massive basalt.

Other times it is mottled green, white + black, like it has feldspars that have been albited or kaolinized, + the small black specks are a mafic mineral or something. Are these flows or pyroclastics? Along the road exposure it looks all massive basalt - vfg, no features, blue-green.

The hummock here as a whole is steep on its NE side + more gentle on its SW side. attitude on prominent joint fractures here =  $175^{\circ}/32W$  - could be flow shears <sup>sub</sup> // to flow sheet bottoms + tops.



- Near Bill's sample 077 = massive basalt apparently overlying Fragmentals. See local  $\text{Q}$  veinlets + ill-fittings between fragmentals. Difficult to tell what entire cliff is made out of. Local  $\text{Q}$  + epidote + chl veins. Saw tiny speck of sulphide in massive basalt adjacent to a tiny  $\text{Q}$  vein. Fragmentals are exposed in road bed well, + show angular frags of massive basalt in a brecciated matrix. Basalt weathers black whereas the matrix is green + white.

Called Bill - he said map grid 1<sup>st</sup> + may have to lump all greenstone together if too difficult to delineate due to moss cover, cliffs, etc. Symbols for mapping:

- mb = massive basalt
- ab = amygdaloidal "
- pb = pillow basalts
- py = pyroclastics (tuffs)
- Fr = fragmental or brecciated
- Fb = flow top brecciated
- ank =ankerite alt<sup>s</sup>
- Qb = quartz breccia
- Cu = copper min<sup>z</sup>
- QV = quartz vein

Have seen some fragmentals with a light green breccia frags that are porphyritic (seld phos.). Could be more of an andesite than basalt. Have seen amygdaloidal basalt with dk green chl as the filling.

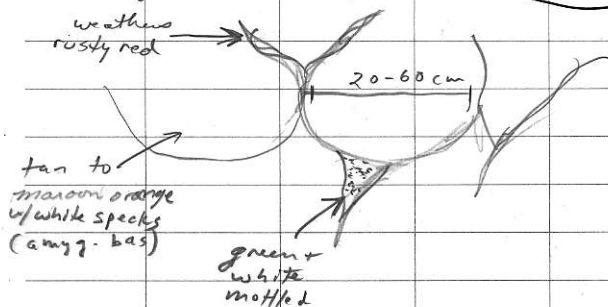
- 53+00E, 10+50N abouts, is a road quarry of Fragmental basalt. Could be a flow top breccia, or actually pillow flow tops that are brecciated. See some blebs that

could be pillows, but mostly chaotic with blebs of a light-mud gray Fg bas w/ amygdalites filled w/ chl ± Q surrounded by fragmental debris that is green + white mottled.

See what looks like bedding to the flows that is more or less striking N-S ( $\sim 170^\circ$ ) and dipping shallowly to the east ( $\sim 15^\circ$ ).

amyg. bas weathers such to give a porphyritic look to surface, sometimes with green knobs (chl + ep), sometimes with white (radiating Q that looks like weathered feldspar at first glance).

Looking at these % more carefully you can see, now + again, this sort of thing: = pillows



But usually, you don't see all the textures together and you may only see the maroon-orange w/ white specks with the occasional rusted "vein" or just



the green + white mottled blob in the speckled white stuff. So, whenever I see either the green + white interstitial blebs or the rusty-red veining (also interstitial to pillows, probably chlorite margins or something) I may write it as pillows. Often see fragmental, brecciated rx which are probably flow top breccias on top of pillow-lava flows. Not actual pillows, but probably related to them, i.e. the pillows were probably forming below, but the tops of them were cooking so fast that they broke up as the flow moved forward:



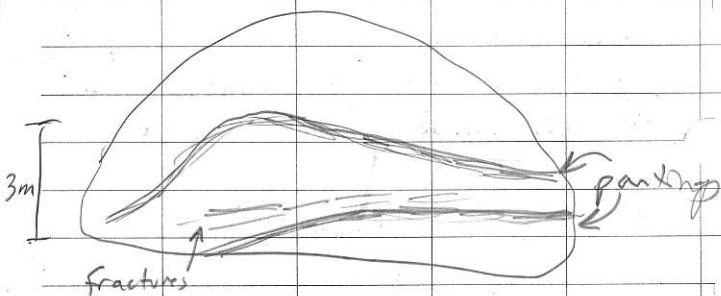
pillows  
surging  
forward  
as flow  
advances

Mapping in volcanics =  
I'm just putting symbols  
wherever I recognize  
what the rock type is.

No contacts, unless I see them.

- I see = if rx. in the 10+00 - 13+60 on  
lines 56+00E - 52+00E are fragmentals  
(on this huge plateau above the river valley)  
+ I see massive basalt in the river  
valley (so far), perhaps there is a large  
NW fault along the cliffs down-dropping  
upper member karnutyan (massive flows) +  
uplifting middle + lower member (karnutyan  
(pillows + breccias)).

April 19, 1987 - Prominent fracture at L50+00  
13+75N in large cliff of fragmental  
basalt = 40/155. Also see what may  
be bedding (?) of flows (?) that more or less  
parallel this fracture set, recognized  
by parting in the cliff.



L52+00 between 13+75 and 15+75 is

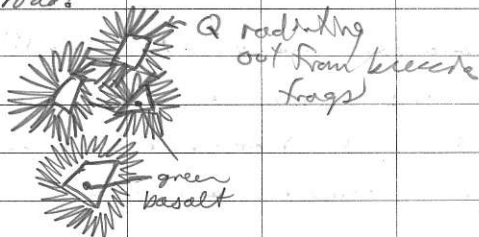
(6)

very very steep! Distance on airphoto between 14+25 + 14+50 is too far but may be result of distortion. On ground, on baseline, between stns 50+50E and 51+50E the distance is too short. Believe it is a mistake. They forget stn 50+75 and 51+25.

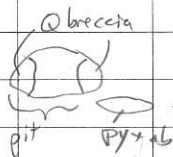
Sometimes see a granular or porphyritic looking basalt, as described before with Feldspar phenocrysts. Now think this may be a tuffaceous basalt, mapped p4 (pyroclastic) where obvious. Often it is amygdaloidal as well. On ~~the~~ <sup>weathered</sup> surfaces it is dark green with a texture of small bumps all over everywhere, like a rash. On fresh surfaces it is mottled olive green and forest green with pale green Feldspar crystals, dark green blebs (rock frags?) and botryoidal looking texture to "groundmass".

Took 3 character samples of this stuff, taken from  
 fresh  $\text{Q}$  near Fort in road, S of grid lines.  
 2 are amygdaloidal, 1 is not. Seem to  
 grade into each other on  $\text{Q}$  scale. Could  
 be a large ashflow sheet (?).

- Bill's 052-054 =  $\text{Q-brec}$  <sup>vein</sup> in basalt  
 along road:



Lots of limonite staining along  
 fractures + in basalt frags. See minor  $\text{cpx}$  + borate  
 + drusy  $\text{Q}$  in vugs + malachite stain (minor).  
 Exposed in pit (1.5m x 1.5m = area of pit),  
 vein width at least 70cm. Some  
 siderite and calcite. Rock type immediately  
 adjacent to vein is the  $\text{py-ab}$  rock:

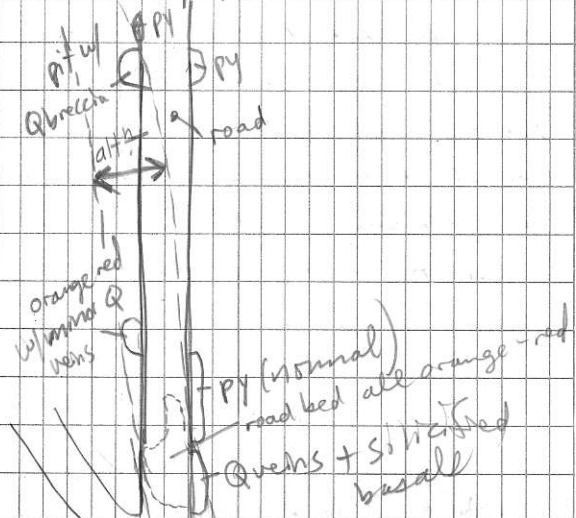


Bearing to other exposure (east, on road) =  $90^\circ$

on S side of road at Bill's 050 + 052 (I) (7)

Think he wrote the wrong # here; probably 051 instead of 052) see an altered basalt to an orange-red color (ankerite?) w/ some Q veining. Again at Bill's 049, see a larger Q vein-breccia exposure, vein running ~ 85°/vertical. Basalt here is gray, totally silicified, with lots of limonite stain. Rocks on the edge of the main vein have the orange-red alt<sup>n</sup>. Two samples from here for characters.

one is orange-red alt<sup>n</sup>, other is Q breccia. See it exposed in road bed here for a total exposed width of ~ 4m

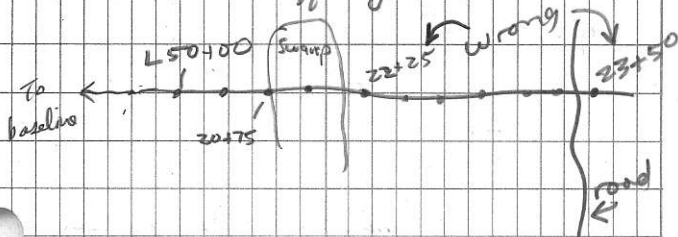


- Line 50+00E, Sta 20+25, see some old cable lying around. Old grade?
- Line 50+00E, Sta 17+75 on % of amyg. basalt see opit + q veins trending  $175^\circ$ . % here is steep on NE side, sloping gently to SW

April 20, 1987 - where I can't see any texture at all in massy %<sup>s</sup> (ie, no amygdules or indication of pillows or fragments) I map it as massive basalt. In some instances the pyroclastics + massive may be one + the same. Some massive basalts look like they could be fig. equivalents of more coarse, obvious pyroclastics. So, amyg. basalt + pyroclastics +/or massive basalt are probably spatially related, while fragmental + pillows are spatially related.

- Line 56+00E, Sta 23+75 = massive + amyg. basalt w/ prominent joint planes perhaps || to flow bedding =  $25^\circ / 15^\circ N$

- Line 50+00E, Stn 21+25N is mislabeled. It reads 22+25N instead, so all numbers above this are off by 100m:



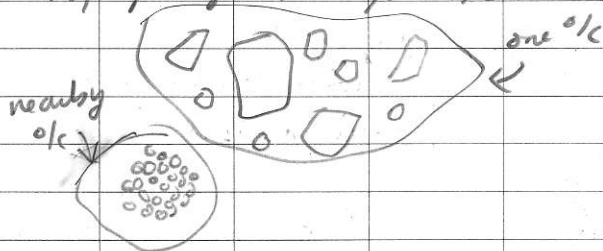
- Near L 48+00, along the road near the power line is an  $\text{m}^2$  of massive amyg basalt w/ prominent joints bearing  $120^\circ/13^\circ$  SW. on the baseline near here see blobs of epi + q in the amyg. basalt up to 20cm across.
- Vicinity of L 42+00E and powerline are numerous  $\text{m}^2$ 's of ab that appear to be successive flows topographically:
- St+0's on flat joints  $\parallel$  to these "flows"
- =  $90/25$  SW (near  $\sim 42+50$ E, 17+75N)
- =  $135/13$  SW (near  $\sim 48+00$ , 17+75N)

April 21, 1987

- on road that intersects L38+000 at Sta 41+50 N is a diorite dyke. Hbl + plg phenocrysts in a green "grm". See dyke exposed in road  $\%$ , but can't trace it in either direction. See it in road bed next to road cut + appeared to trend  $\sim 105^\circ$  and is  $\approx 5$  m wide. A big <sup>straight</sup> valley occurs downhill from the  $\%$  which could reflect a fault in which the dyke follows. But don't see it on hill behind  $\%$ .

April 22, 1987

- See Fragmentals that are pisolitic ("r"). Balls of material about marble size occur all together in an ashly matrix. These occur in vicinity of regular fragmentals.





(on Ash main)

(9)

April 23, 1987

Quarry near Mud Lk

linear is pyroclastic basalt that is sheared. See (cpy, bornite + mal) in 1" shears (plus lots of limonite gouge) on west side quarry, and a knob of antlerite on the east side. Shears w/cpy trend  $50/48^{\circ}$  NW

April 24

all over property see cobbles boulders of the hbl diorite - glacial.

Mud Lake = toad chorus. Also, Bill's

sample 076 taken of 1cm wide Q veins in pyroclastic basalt. Veins trend  $85^{\circ}$  dipping steeply northward, occurring w/epi.

At east end of Mud Lk looks like a trench was dug along the linear that is now filled in w/water:



See % on the north side of the trench looks to be fragmental - perhaps a fault breccia rather than igneous in origin. See py parts as well.

- Bill's 067-069 at a hand-rucked quarry on Mud Lk linear. 2 other

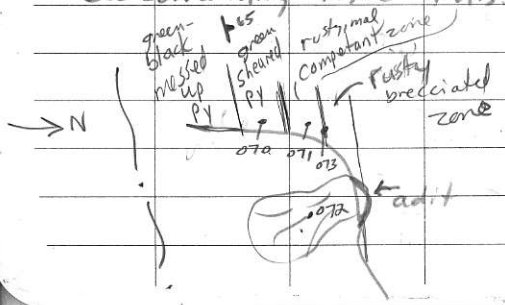
↓ south side of ck. NEVILLE CROSSBY INC 46 LF

Hand-mined quarry

previous samples taken here: BCS 2397 and 76703. Quartz + mal + bor + ~~epi~~ along a fracture set trending 155/50 NW. Some drusy @ xls, hematite stain + Mn, brecciation of basalt. Min<sup>2+</sup> area appears very local -> 40-50 cm wide, w/ mal stain extending to outlying fractures.

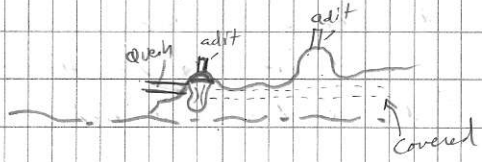
Sample 066 from rock dump just south of this quarry.

Adits on north side of creek where samples 070-073 of Bill's, and a BCS 2398. West adit goes in 2 m. Large rusty zone w/ lots of malachite stain, some azurite. Real brecciated at adit entrance - whole zone appears to be 3-3.5 m wide, basically trending 115°/65 N. See something like this:



Compstent zone is real quartzite with cpy, bor, mal, azurite and is ~ 1-5 m wide. Adit went right back into black/green basalt.

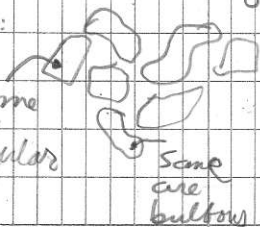
Next adit over looks to go in further but is all caved in at the entrance. Bill's sample 074 here. Just looks all limonitic here in wall rocks, + fractured up a bit. Seems like they would have been too far N of Q vein:



Fragmental (Fr) vs. Flow top breccia (Fb)

are sometimes hard to tell apart. Basically, fragmental are almost like volc. breccias w/ differing rock types for the fragments in a more-or-less chaotic matrix. Fb are bulbous, wavy, verging on pillows:

Some are angular



Some are bulbous

Could be considered "mini pillows".

The fragmentals may be a degree of flow-top brecciation, as you sometimes see them in proximity to each other.

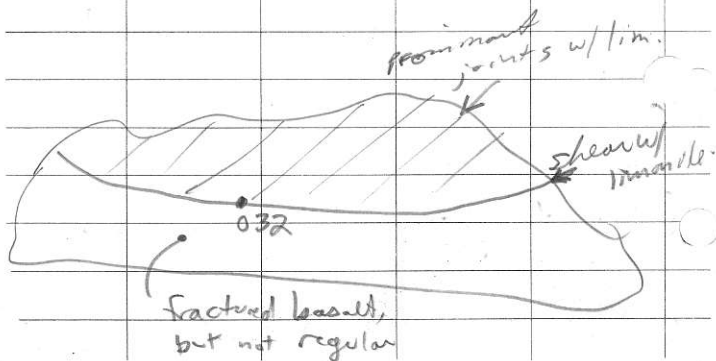
Diorite dyke near Bill's 033 on Ashman's road

Same as other dyke on southern part of property - hbl/Plag phenocrysts in blue green "grm". Dike contact with basalt =  $115^{\circ}/78^{\circ}N$ ; exposed on north edge of road only. More blocky fracture than basalt %'s, and weathers cream colored, with black hbl needles obvious.

- At Bill's 032, road cut on Ashman.

Fracture sets w/ lots of Mnonite =  $75/55N$ . How % looks from road:

Some Q veins



Pyroclastic vs. massive basalt = usually  
 may massive when it is so f.g. that  
 it looks uniformly dark green on  
 fresh surfaces. Pyroclastics look  
 mottled on fresh + weathered surfaces  
 with greenish-white splashes and  
 specks of black - very often amygdaloidal.  
 Have probably mixed up py + mb  
 alot while mapping. Usually, if  
 I see that "rash" texture on  
 glaciated, weathered "c", I just  
 call it py + move on.

April 25, 1987

Looking closely at the  
fragmentals, the blocky chunks are  
 sometimes pitted + black + look like  
 weathered ls; but on fresh surfaces  
 they are super f.g. + black, that looks  
 like chilled, almost glassy basalt.  
 On one of the chunks looked like  
 sinter so I think these are tops of  
 flows that are all broken up  
 + recemented by tuffaceous  
 material

April 29, 1987 - Checking out

Showing w/ Doug Peterson.

volc. 92<sup>15</sup>

Took a grab sample of py/bor  
rock that occurs as float in the  
road. Vein probably in road.

Located west of Dickson Lake  
about 1000 m on Ash 102

branch. Assay - if kicks, dig  
up road to expose "vein". Drush &

**Sample 48986** = float ↴

Took a grab on Branch 101  
Central Claims on road side

(S side) - Calcite veins w/ minor  
mariposite, lots of py, minor  
Cpy + born. Just uncovered.

Lots of rust in this zone.

Diorite → volcanic contact

**Sample 48985** - grab of  
this.

April 30, 1987 - Cont'd seeing Paterson claims (12)

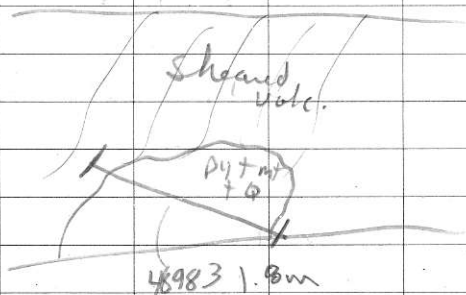
m30 road

- AP Claims - New exposure of highly sheared + altered DIO + mafic volcanics w/ local massive sulphide pads. Shears in DIO trend 100/75 N, 110/68 N, 95/00 N

See lots of specks of py all through both dIO + volc., also local, small Q veins, some barren, some w/ py. Rocks are really chewed up along shears, w/ gouge, Fe-oxide alt. DIO may be dykes intruding volc. Some really gougy shear zones are 2m wide, but don't see sulfides in them. See specks of py + very minor epy in more competent volc. segments. See massive magnetite in with massive py. Entire road cut is highly oxidized, + Day says entire AP property looks like this. Massive py sections associated w/ mt + Q + some epy + minor epy.

Sample 48982] : Chip across shear zone that appears to be chlorite cutting Karamtzen volc. - Shear zone (+ chip) width = 1.4 m. No obvious sulfide.

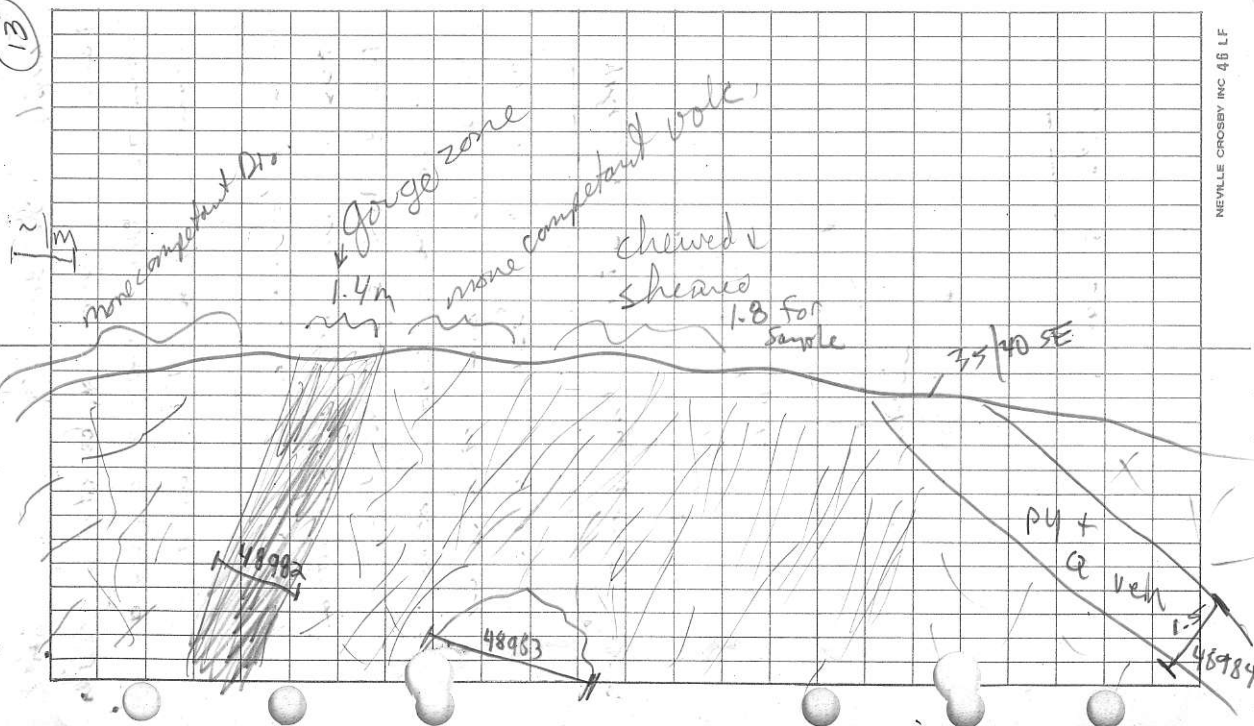
Sample 48983] = 3 m S of 48982 along rd cut. Chip across massive sulfide "ven" or pod that has abundant py + magnetite mixed w/ Q + altered green volc. - Seems to be pod shaped, or thickening below ground as you see sheared volcanics above: Chip width = 1.8 m



Sample 48984] - py (massive) + Q  
ven cutting sharply the shear zones  
Chip width = 1.5 m. Trend of ven  
= 35/40 SE



13



AP  
Whole road edge (exposure) is very altered, even continuing further up road. Seem to go in + out of dykes + volcanics. Near Tammy Group Gold find. About 4 km away. Seem to be on the edge of a major intrusion. We visited AP1 (or 2) (close to line separating them) could be Apple even. About 200 m up road is a clay gouge w/ py in it. Solid clay.

Sample 48987 - Clay gouge - gray clay w/ py + some competent, highly altered volc(?). Rock is very altered. Dip width = 0.8 m. Gouge appears to be shallowly dipping, running horizontal along the bottom of the ditch for at least 10 m. Dipping shallowly to NE. Sample is 500 m up rd from other samples.

Apple

(west)

14

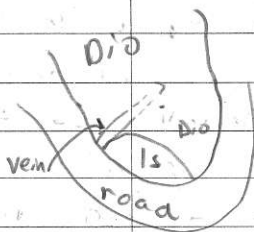
Just down Hwy 4 from M30  
turnoff is a paved road to the right  
w/ a cement barrier over it. 30m  
on the left is an  $\%$  of a shear  
zone in altered Diorite (?). Shear  
zone is  $\sim 2.2$  m + is very  
yellow-rusty colored w/ lots of py  
cubes all through it. Some green  
volcanics are caught up in the  
shear zone, also w/ py cubes.  
Took 2 chips across the zone.

Sample 48988 is the western  
one and 48989 is the eastern  
one. 48988 = 0.9 m wide  
48989 = 1.5 m wide.

Shear zone trend here = 108/82 N.  
Apple claim. Wall rock (Dio) has  
a lot of disseminated py all  
through it.

# San Claim

Sample 48990 = Grab of min<sup>z</sup>  
zone occurring betw ls + diorite.



Min<sup>z</sup> = py (massive) w/ minor cpy + bor  
+ some gray-blue mineral (fresh  
bornite?). The diorite is very  
altered right next to this  
zone + around the backside of  
the ls (argillically altered).

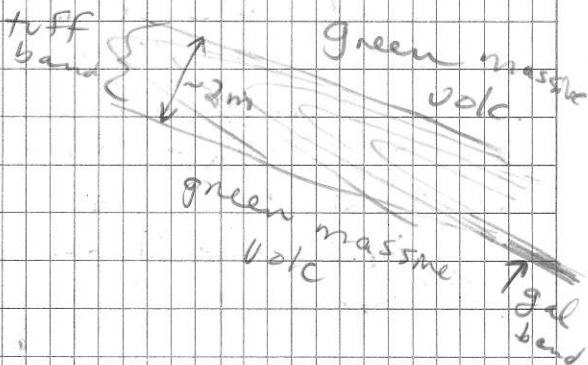
← dipping steeply to NE (near vertical)  
vein seems to be trending  
~ 145° and is approx 2 1/2 feet  
wide. Couldn't get a good  
chip sample, so sample is  
composite grab of what is exposed.

Sample 48991

- Epi-altered green volcanics. See blobs of epi alt + stringers of py/cpy running through. Bits of disseminated py are in the unaltered volc as well. Ls of c just to north of this one. Grab of various epi + py + cpy stringers.

Sample 48992

<sup>Grab</sup> = tuff band in green volcanics w/ epi + gal + py + cpy in a thin band (2" wide). Can see the tuff band is isoclinally folded, very similar to Terrace (Kalam) property:

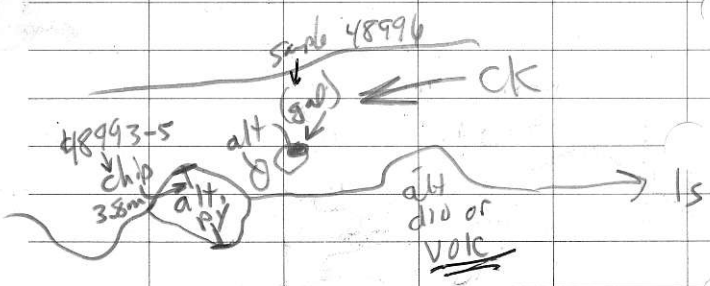


San Clark - up creek on Branch  
 700. Inaudible o/c of  
 massive sulfide + completely  
 altered rock to @ + Fe-oxide  
 "tufa". Took chip across  
 entire o/c sample 48993-5  
 totaling 3.85 m.

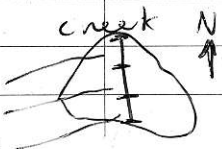
Can see "vein" continuing into  
 ck, trend ~ 80°. Only the  
 rock possibly altered down here  
 as seen just up ck ~ 5 m.

(or walk)

See lots of epi too in the  
 massive py section. Took  
 a grab of massive py/gal  
 in ck itself, also in this  
 altered zone = 48996



- 48993 = 1.1 m
- 48994 = 1.6 m
- 48995 = 1.25 m



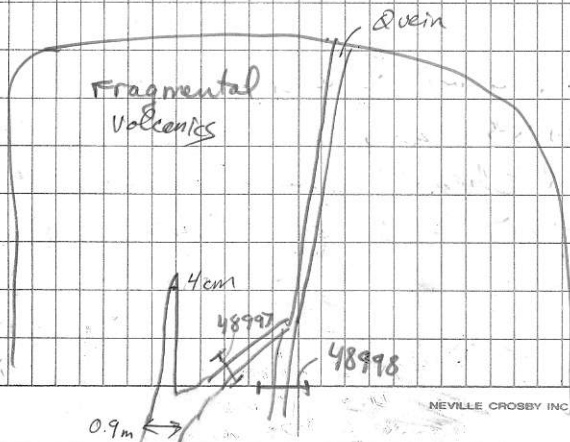
See an intimate mixture of ls & volcanics just up stream from here. We found some float of mal + agurite + py + epy in volc but couldn't find the source. If this stuff kicks, should spend a long time figuring this place out.

~~Sept~~

May 1, 1987

- Cont'd seeing Paterson claims.

65/80 Abbey 9 Claim (Alphonse's) Gallent  
- Large Q vein in road %:



Abbey

Q vein has cpy specks, mal staining, + possible malposite. Cuts green, fragmental karstified volcanic w/ local massive parts. Q vein with waves from 4 cm to 0.9 m at base before going under rubble.

Can see it partially in road.

South vein width  $\sim$  35 cm + trending 65/80 N. Connecting vein trend

= 130/50 NE, west vein trends =

70/75 N. Volcanics in vicinity of veins are chewed up + partially altered (rotten).

Two samples (chips across veins).

48997 = Chip across connector <sup>vein</sup>  
= 45 cm

48998 = Chip = 40 cm.

See Q veins further up road as well as stringers + one wider one. Q in shear zones. Some shear zones w/ no Q. Very little cpy in these Q veins.



Abby / Claim + <sup>known gold</sup> along McTush 17

Large shear zone in diorite  
At least 20m wide exposed along  
road 9c. Entire road for nearly  
1km is highly sheared. Walks  
up road further. Could take a  
chip across whole shear, but only  
took a 1.1 m chip (Sample 48999)  
across a section that had alot  
of silica in it + minor py. Lots  
of silica flooding in the zone,  
but zone is very crumbly +  
not competent. See stringers of  
limonite + hematite, stringers of dis.  
Strong lineation to shear zone,  
trending 030 + dipping steeply  
NW. Not alot of min<sup>z</sup> here -  
specks of py here + there.

Sample 49000 = Grab of gray  
silica rock w/ pyrite + opi. + cpy.  
Massive, gray silica (altered  
diorite?) up the road from  
shear zone. See stringers of  
py + oxide stain also in

~~Q vein has cpy specks, mal stain,  
possible malpasio. Green  
volcanic host rock is fragmented  
breccias + local massive  
basalt. Q vein width  
varies from 30cm to 0.9m.  
at base. See Q veins  
further up road at well.  
Small stringers and one  
water one, in shear zone  
very little cpy in them. See  
multiple shows in v. calc. %, but  
not all have Q veins.~~

Shear zone here. Entire area is  
interesting. If kicks, look in to  
it more, chip across whole  
road cut.

PT-111 Claim - Diorite intruder  
w/ local mafic dykes. See py +  
cpy plus minor bornite all through  
dio + especially on fracture  
surfaces. Took a grab just to  
see what happens

Sample 100 = Grab of Dio w/ py, cpy, bar.

Just down the road from this, in the ditch, is an outcrop at least 1.5m wide. If Bill's outcrops sample kick on Paterson, may want to sample this.

Lots of fine disseminated Py & Cpy. in diorite all up & down the road. McTush property is near here (adjacent claim) & they have disseminated sulfides in diorite too (Cu, Au, Ag). Doug said it is  $\text{Cu}$  veins though.

## Claim Post

LCP 13415

Paterson Lake #4

Herbert MacMaster 198082

Begin March 28/84 9:30 AM

End April 1/84 11:00 AM

2 S 4 E

and

Initial Post 513120 M

Paterson Lake #5

March 28/84

Dist. to #2 Post = 5.1457.2 m  
 Feet to right = 157.2 m

May 2, 1987 - Back to mapping property

- At end of photo where rd is heading to Central Lk. is an exposure of

fg. diorite under glacial till.

It is mottled gray & tingy, frosty biotites<sup>(?)</sup> are visible, feld, possibly quartz. Very different from the hbl-porphry dikes. Gray, not green.

Remember. py = both pyroclastic (or tuffaceous-looking basalts) and porphyritic basalt (Seldapan phenocrysts in an aphanitic matrix w/ amygdules filled w/ chl or epi often).

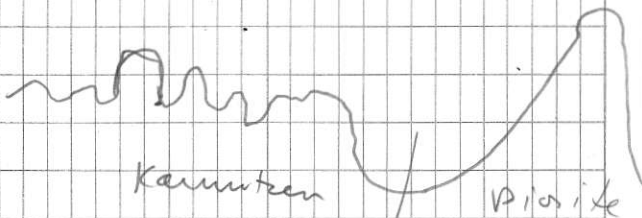
Near the far western edge of property you see more & more hbl porphyry dikes cutting the basalt, often w/ shears along the contacts. Think small shears exist all over the property & many represent edges of hummocks or small creeks/hollows.

Glaciation has smoothed + polished many of the

Dikes on branch road northwest of end of BL trend  $130-145^\circ$  and dip  $40-50^\circ$  NE. They are libl-plag porphyric in greenish blue "grm".

Bill's 030+031 = sheared pyroclastic basalt w/ lots of limonite staining + minor Q veining.

Big topography change from Kamutzen v. to SW: hummocks, knolls, cliffs, all over the land, vs. steep smooth slopes ending in rubbles.



Contact is obscured under overburden in valley.

See big amygdules in ab (up to 30 cm long).

mylonite - py that is totally  
sheared into a mylonite.  $\theta$ 's  
seem to have a fol  $\leq$  trending  
 $10^\circ$  to  $165^\circ$  (mainly N-S)  
+ variable dip, but mainly to the  
E + steep.