896426

geotec

1972 #2

WJM

335-8360

FIELD BOOK

6 5 4 3 2 1

geotec

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PAGE NO.	LOCATION	DATE
1	Jericho DDH 72-8 (by Highmont) + J72-7	July 8
2	Traverse along route to Lower Nicola	July 19
4	Promontory Hill area	July 22, 23 (9) page
		July 24 (14)
19	Craigmont office then	July 25, 26
	traverse near + west of Pit	
22	Broom Creek road traverse	July 27, 28
	- worked down to Aberdeen	
	Mine on 28th	
29	Chataway Core Logging	July 29
31	Petite Creek area	July 29
34	Chataway Core Logging	Aug 1
35	SW of Chataway Lake	Aug 10
	in valley S of PDHE 12	
	+ Chataway Core Logging	
	At back - looking for Kingsvale	

between Spences Bdge + Prom. Hill road

July 8/72
Rain, windy, sunny periods

Drill Hole Jericho 72-8

O/B ≈ 160'

Guichon - locally fg variety - some deep pink altn and zeolite veining (associated with shear zones)
↑ ie 360-395, 728-745

325-360 Chataway

Chat - Guich before that but too lazy to move the boxes to check early core

J 72-7 O/B ≈ 170'

Guichon to EOH
- some aplite dykes
- " xenoliths fg bi-rich
very narrow (a few mm)
assoml. zones at edges
- very local pink zeolite altn
≈ 478-480

081/24/2/2/4 ep.

150/90/0/2/4 ep
gt3

120/83/1/3/4 (chl
gt3
ep
± cpy

037/86/2/2/2

047/71/1/2/2

Sunny

Going to Lower Nicola July 19/72

15-36 mafic 3 cut by D2
D2 ≈ 065/90/s but
contact follows jnts
in detail

Cpy occurs as pods + along border of qtz - kspar peg segregns - have ep clots. Some tourmaline - quite large xls

BRECCIA

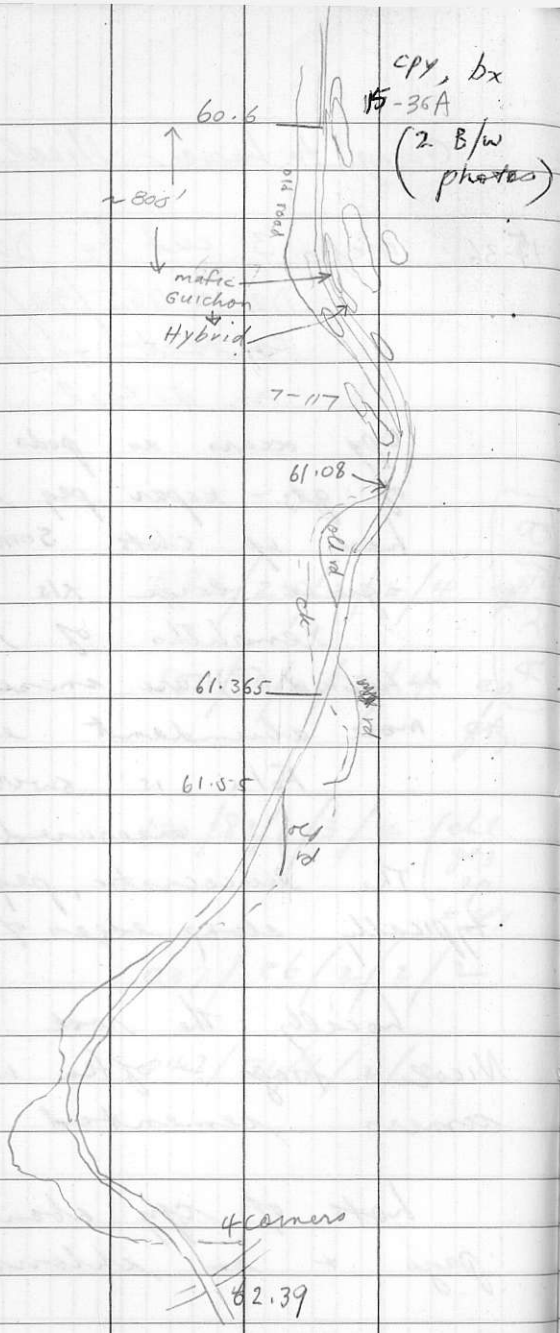
Xenoliths of rex'lld Nicola + hybrid (?) are increasingly more abundant eastward

Fol'n is swirly so not measured

The leucocratic, peg. segns are typically along edges of inclusions ± cpy

Locally the rock is rex'lld Nicola frags - often w. sharp corners cemented by qtz diorite

lots of cpy about in pegs + on chlorite joints

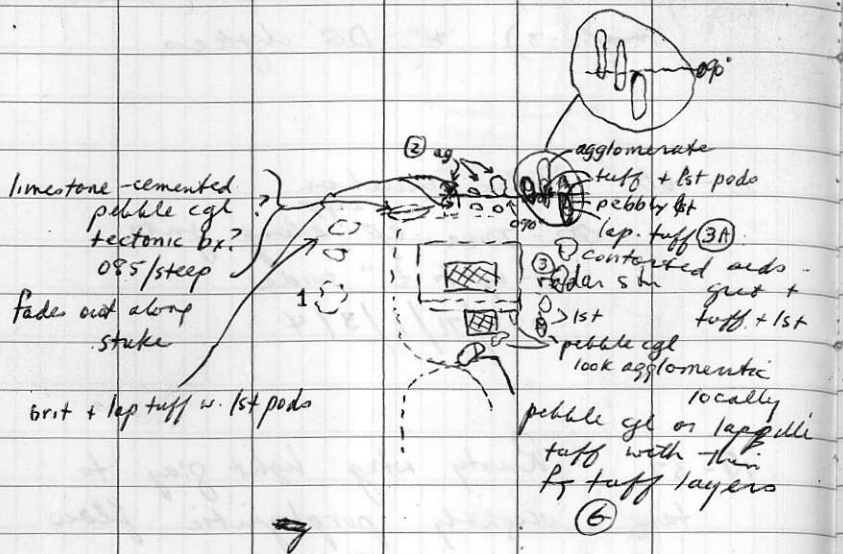

cpy, bx
15-36A
(2 B/w photos)
60.6
~805'
old road
mafic
Guichon
Hybrid
7-117
61.08
old rd
61.365
61.55
old rd
4 corners
62.39

6.0.6

15-36 A Hybrid + xenos (incl. mafic 3) + D2 dykes

17-36B Mafic anchon
Qtz-Tour-ep ±py along jnts
- up to ½" wide
023/71/1/3/4

15-37 Rusty wtrg light gray to tan slightly porphyritic flow rock - rhyolite?
Nicola? Young?
Rubbly o/c
75.57 - turnoff to DB etc Gulchon
Ck camp 75.8



2 B/W photos of "tops" area

22 July 72
cool
Sunny, breeze

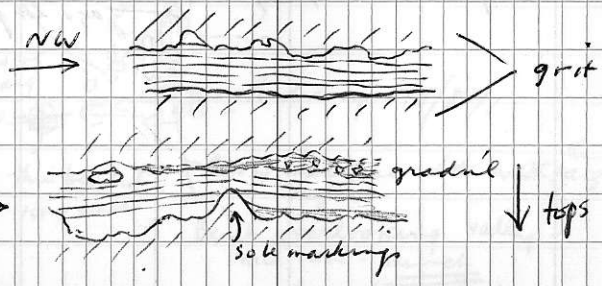
Top of Promontory Hill
15 - 38

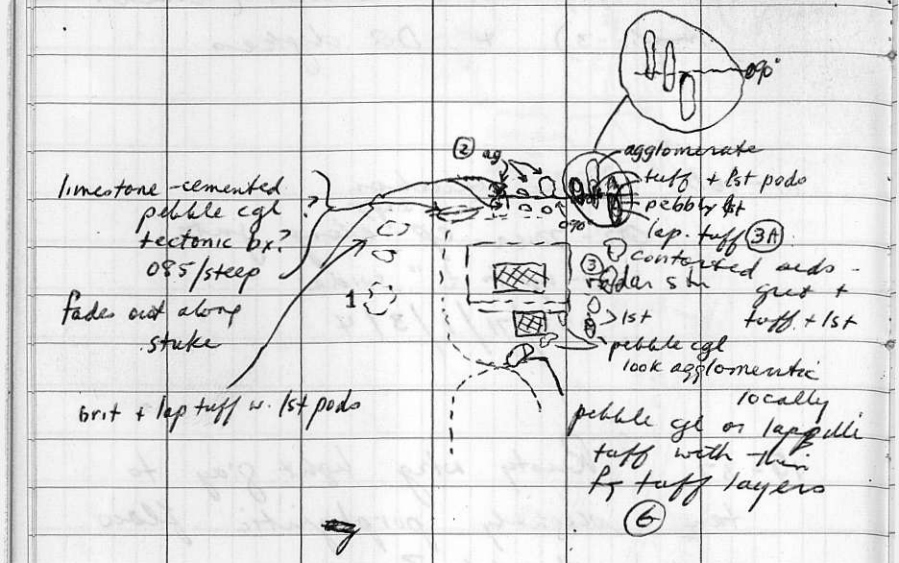
1 Near radar stn - black slate and
(F) grit with pelicious limestone
pods - poorly preserved pelecypod
& crinoid impressions

Bedo 060 / ~~steep~~ 68 / 1
Foln 020 / 49 / 1
(Slaty cleavage)

folded cherty arg. lst
axis 262 / 80 Ax Pl. 042 / 85 / 1

Next o/c is lapilli tuff & grit with
then bedded argillite layers ~ 1/4" thick 3' +
apart. Possibly tops are ~~south~~ north





2 B/W photos
of "tops" area

22 July 72
Sunny, breeze

Top of Promontory Hill
15-38

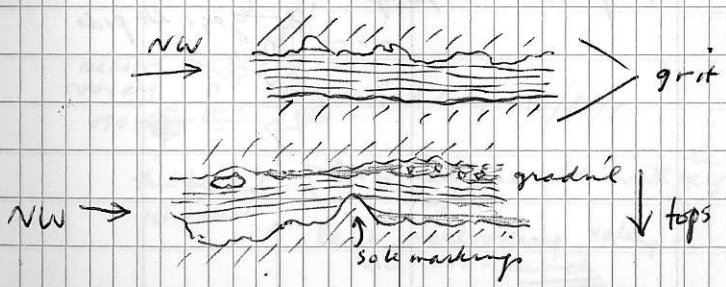
1 Near radar stn — black slate and grit with pelicious limestone pods — poorly preserved pelecypod & crinoid impressions (F)

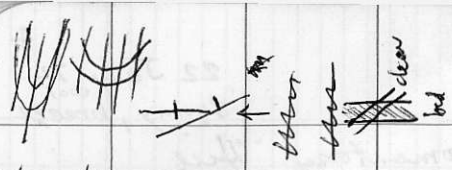
150°E 075°

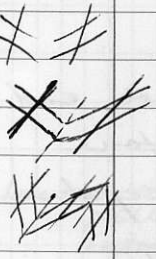
Beds 060/~~steep~~ 68/1
Fo/n 020/49/1
(Slaty cleavage)

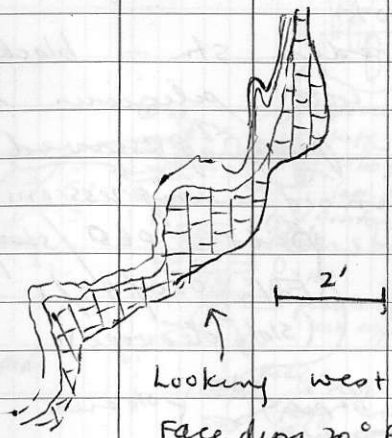
folded cherty arg. lst
axis 262/80 Ax Pl. 042/85/1

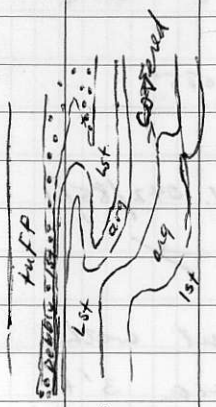
Next o/c is lapilli tuff & grit with thin bedded argillite layers ~ 1/4" thick 3'+ apart. Possibly tops are ~~south~~ north



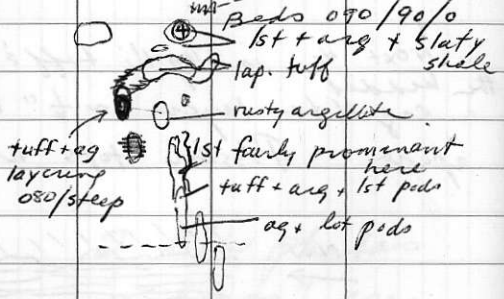

clear
bed




2'
Looking west
Face dips 30° East


softened
lst
arg
arg
lst
tuff
lst
1'

2 B/W photos

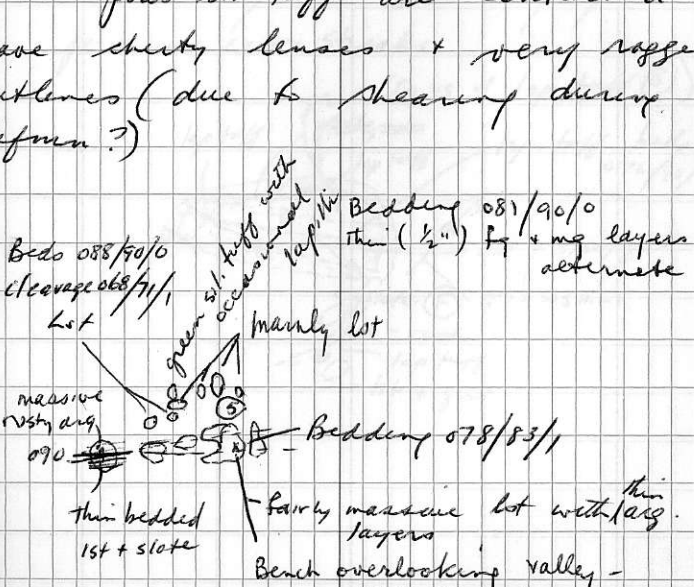

Beds 090/90/0
lst + arg + slaty shale
lap. tuff
rusty argillite
tuff + arg laying 080/steep
lst fairly prominent here
tuff + arg + lst pods
arg + lot pods

(2) Agglomerate with pebbles to cobble-boulder-sized frags – some banded argillite/gst frags – mainly fg volcs.

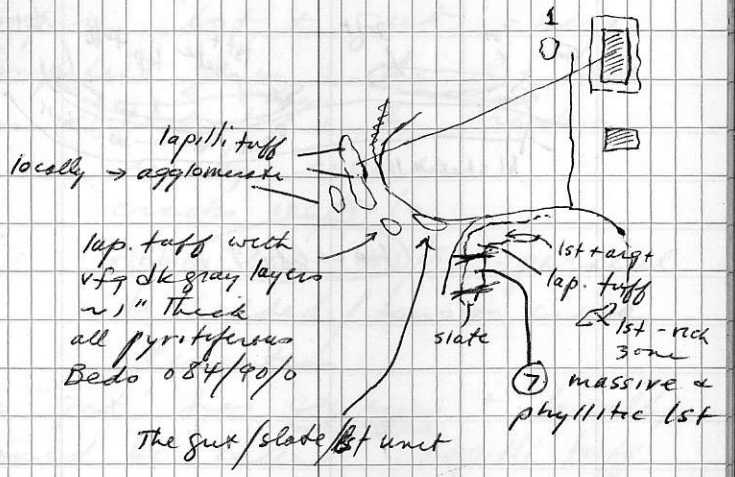
(3) Beds 078/83/2 mainly siliceous
1st with arg + gst ~~to~~ layers
~4-6" thick 1-3' apart
Some of the 1st is loaded with pebbles

(3A) green lapilli tuff sample

lot pods in tuff are contorted have cherty lenses + very ragged outlines (due to shearing during deform?)

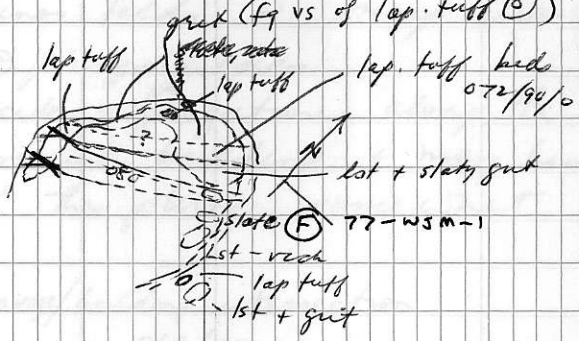


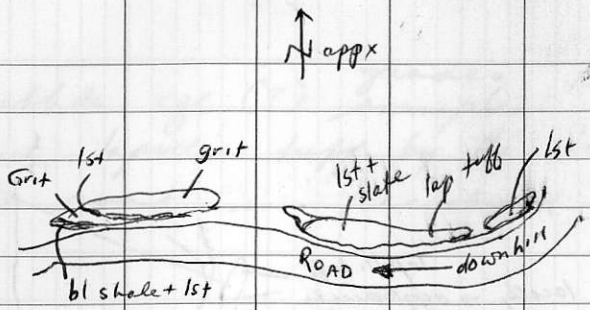
(b) pebble cgl (?) ~~sample~~ grades to true lapilli tuff by the time the road is reached



7 lineation ~~085~~ 090/15 Beds 090/90/0

pervasive color streaks




N approx
Grit
lst
grit
lst + slate
lap tuff
lst
ROAD
down hill
bl shale + lst

locality 9

(9) working down the rd fm the lookout
Beds 110/78/1
Impure lst + gst - more competent zones in the lst have been stretched + broken + the cracks filled in by calcite
cracks 000/90/0
ribbing lin 180/80 - parallel to bedded / tension crack lineation
The "gst" has qtz eyes + locally would be called lapilli tuff.
It is rusty wtrg.
Minor folds in black slaty rocks interbedded w bl. arg lst have minor folds w. steep ~~wst~~ west - ~~(up)~~ plunging axes
Calcite segregations along the zone crosscut bedding + may have altered the plunge somewhat

Cleavage/bedding intersection
069/03

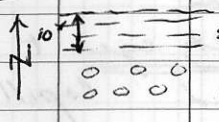
(10) Lapilli tuff + some areas that are so fg they seem to be porphyries
hoval zones are aphanitic + tan colored - tuff?

Synopsis.

grit + grake (tops North ? – poor)
– graded beds

green "flow?" qtz. plag. xls

PLAN



* Bedded (flow foln ??) zone not visible 50' east of o/c at bend in road. section there goes lapillituff → bxtd green → green "lava"

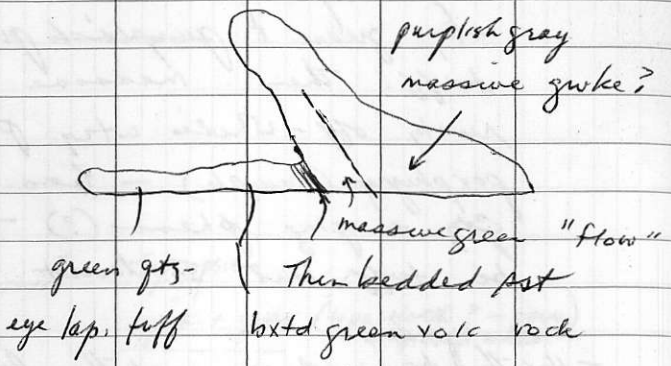
11 Bedding 089/73/2 Then bedded wtg green & ~~purplish~~ purplish tuff. Then massive slightly rusty off-white wtg pale green porphyry (sample) — has a few qtz + plag phenos (?) — could be tuff but I doubt it.

— Hit the secondary power-line — at the little green but the rock is sheared & rusty wtg but just a slightly more xllne version of the same rock

— next to the Hut is dk gray pyritiferous rock — gnoke? tuff? — then a few ft further is grit

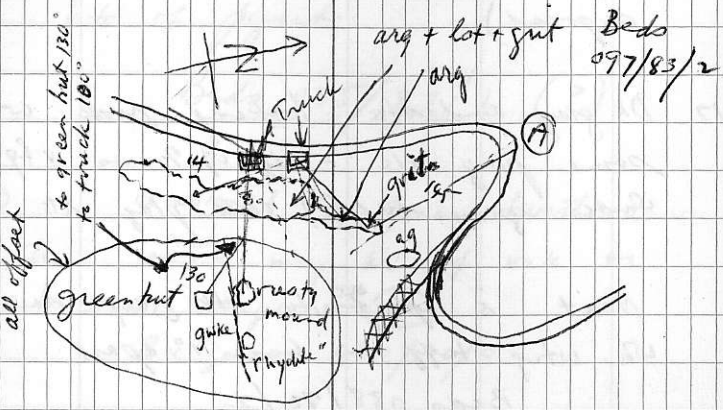
— east of the Hut Beds 090/90/0 Then bedded argillite

12 Bedded green 110/80/2 gives way to bedded purplish green tuff? then agglomerate


purplish gray
massive gwke?
massive green "flow"
green gtz-
eye lap. tuff
Thin bedded ast
bxtd green volc rock

Continuing onward. July 23/72 Sunny

13 Beds 076/63/2



065 Truck 145 to swbk (A)

Brg 160 to truck ∧ rusty arg with pyrite.
vfg gray tuff layers + grit layers
(14)
local pale gray lap tuff zones
s. of 14

15 Nearly aphanitic pale gray-green "lava" - gray-green lap tuff at N edge of 07c - occasional small limestone pods
local shearing along 125/63/2 has produced bx zones - almost mylonite

16 Pyrity. pale green rock with scattered plag xls & probably bedding (poorly exposed)

17 Dk gray andesitic - looking rock with some plag xls. - edge of 7c is vfg white argony tuff(?) with plag xls

Next is aphanitic dk gray rusty or wh. whg tuff - beds 1" apart

Beds 088/72/2

grading suggests beds upright

some soft sed. type deformn locally

fine tuff with grit interbands,

then cg qtz - eye plag tuff (18)

gives way in 15 - 20' to qtz - eye grit (fg vs of 18)

30' bk in % then qtz - eye grit with vfg gray - green tuff layers + some cg qtz - eye plag tuff layers

Good grading - tops east

(19) mainly vfg dk- + olive-greenish-gray tuff - bxtd (tectonically) + mesty - lots of pyrite

Beds 035/87/1 (?)

(20) occasional bx zones further down

The ~~road~~ rock may be of volc or tectonic origin (20)

Bx zone 030/90/0

(21) occasional dk gray lap. tuff layers

Bedding uncertain here

olc adj. to fault is vfg tuff + sandy lgrit

Slickensides 149/27

Face 131/64/2

(oriented sample taken)

(22) ∧ Beds 068/72/2 vfg thin bedded (1/8") tuff

Poor grading suggests beds overturned

Small-scale thrusts have 1/8" left lateral (H.W. north) movement

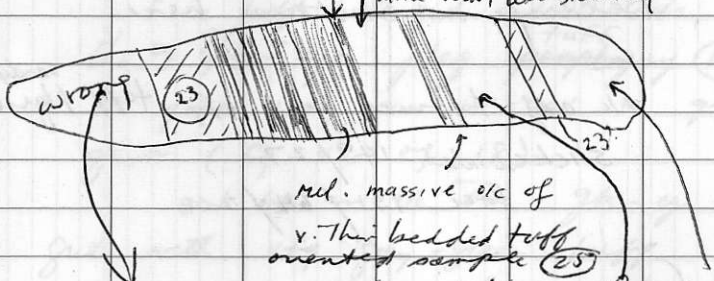
Fe-oxide cemented tectonic bx zones 070/90/0 zones up to 2" wide (40-50% frags 1/2" + less than in 10')

Bx Jones 1 m pale gray w/rg vfg massive
dk gray pys. tuff

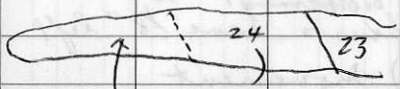
next o/c is very rusty w/rg thin bedded
to massive tuff then blue-gray looking ~~w/rg~~
(dk green under lens) lapilli tuff (could
be called graywacke I suppose) (23)
edge of gwke 060/68/2 (?) Bedding

Thinly bedded unit tops up? (grading)
050/74/2

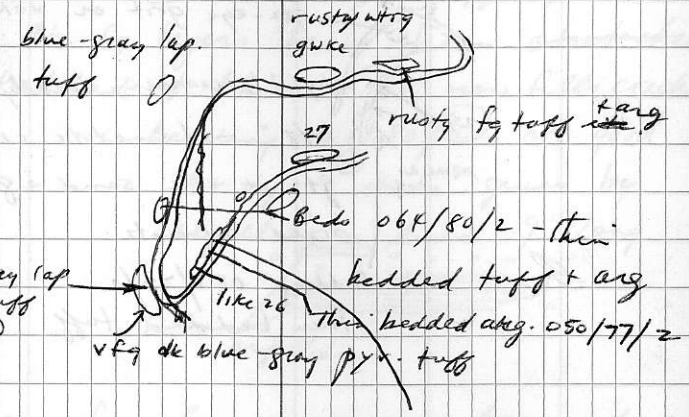
green vfg tuff - almost like shale
because of shearing
same rock, less shearing



mul. massive o/c of
v. thin bedded tuff
oriented sample (25)
almost black vfg - argillite?
+ mixed tuffs



thin bedded mainly olive green sandy grit
arg + tuff + grit
047/78/2



dk gray lap tuff + vfg dk gray tuff

27 Bluish gray vfg tuff and Blue-gray lapilli tuff

28 SW bk Beds 063/86/2

rubbly zone with dk gray lap. tuff
thin bedded tuff & arg.

plag ppy - white plag xls, black groundmass

sim. to "tuff" to N but with cobble-sized epidotized rounded clasts

(31)

qtz-eye grit or volc. sst

slightly coarser - locally "lapilli tuff" - hematitic cement

(29)

(30)

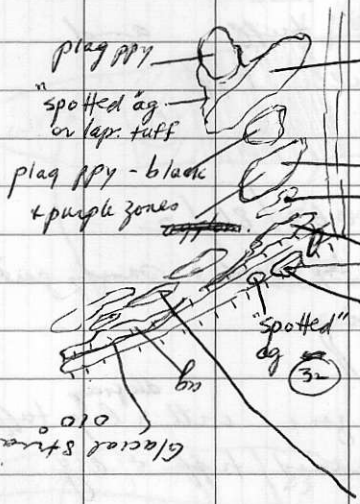
same as 29

qtz + volc sand → gravel-sized clasts

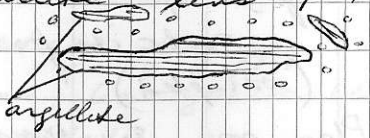
Bedding 057/77/2

Then bedded tuff

Relationship of plag ppy & "grit" is obscure



29 sheared lapilli tuff (?)
Dk fg layers have been ~~stretched~~ stretched & bken - ck now fills cracks.
Bedding 043/80/2 not good for dip - stake given by argillite lens 9" long



30 a few ft along a laminated zone has laminae
060 / steep SE
Glacial Grooves 290/05

31 Purple zones - on close examination, they are seen to be clastic - ∴ are grit in which the cement has been hematized.
Elsewhere they seem to be hematized zones in plag ppy
qtz - cp vein - up to 8" wide - qtz in centre
133/77/2

32 Spotted agglomerate

Heading down rd.

Next o/c Hematized, epidotized purple

(33) agglomeratic lapilli tuff.

(34) agglomerate purple matrix - mainly gray lava frags.

finer zone suggests bedding ≈ 050°

qtz - ep veining

calcite pods locally

(sampled)

(35) Plag ppy & mylonetized (?) plag ppy (sample)

ep. veins with qtz - feldspar pods with chlorite centres

across the road

either plag ppy ~~[illegible]~~

next o/c south of road
*Hematized & normal plag ppy

* some o/c's mapped as hematized but may be hematized epidotized plag ppy
ie (36)

(37) sheared, epidotized plag ppy with local tectonic bx zones cemented by epidote
- even where the ppy doesn't look sheared the plag xls are all broken up & have small offset breaks in them.

(38) Bedding in green tuff 017/63/2 (poor)
Possibly a welded tuff - frags look squashed & parallel bedding
on the o/c above beds 178/76/1 (good ~~poor~~)
Dark blue-gray & green lapilli tuff, v fg gray & green tuff
called fragmental purple plag ppy
Purple lapilli tuff next day which seems to have a plag ppy matrix & to grade into plag ppy - ppy dyke?
Has some qtz eyes unlikely - too much
east edge of o/c of it

Sunny, Hot
July 24 / 72

Continuing on Promontory Hill

39 Purple sidmass, white plag phenos & local zones with ~~fs~~ volcanic frags - epidotized + crossed by ep. veins with qtz - fs pods + bleached halos.
Essentially purple plag ppy with inclusions

40 Similar to 39 but more inclusions of volc rock - almost all 1/2" + less across

In the talus, one boulder displays graded + cross bedding but otherwise looks very similar - perhaps it is all clastic ie xls tuff!

41 Blue-gray lapilli tuff - w/ pale green - dk + light colored volc frags - normally < 1/2" across

up the hill the rock is finer but still clastic

42 Fragmental purple plag ppy (FPPP) now L.T.

Layering? 038/51/2 poor aligned plag laths

A few ft along 040/35/2 poor along. frags + feldspar laths

43 Purplish gut
E14500'

Through here gut ≠ "lapilli tuff"

same as FPPP (see above)

Road (E14340) no ol in betwn

mileage 32.25 leave fn sctbk on new road (very scruffy rd) no good

Went back up & started walking fm stn 32 area
page 80

The black plag ppy is apparently a pillow lava locally + has interpillow bx zones.

pillow

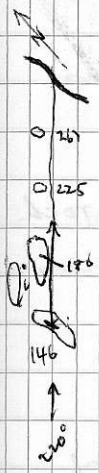
(2 B/W photos)

X'd ut – O/C's in open area
Blue-gray lap. lit. tuff
Head 220°

146 grit on lap-tuff

180 " + purple plag ppy

225 purple lap. tuff → ag



267 " " " "

317 Road – trends N-ward
open area

394 low lying oc of sandy grit

(44) 480 Intermately bxtd vfg
pale gray → white tuff? apparently massive

520 Grx rubble could represent O/C

540 (45) Pale gray overall – many ¢'n frags (both lam. tuff + volcs) in vfg matrix
Intrafmt bx? Volc bx?

at 570 the clastic unit is last seen — then get massive pale gray → green intermediately bxtd unit from 575 to 600

580 Thinly lemenated zone
010/50/2

588 Bxtd & mixed up but overall bedding 033/48/2

at fn - qtz - plag ppy - aphan.
(46) gray grdmass

(47) 950 o/c ? of rusty wtrg rock with mg→cg qtz + plag phenos in pale green grdmass
the o/c is in a grassy area
road strikes 120°
Phenos 50% qtz-eyes v. stubby

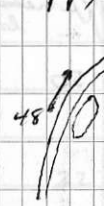
1005 fairly large o/c - fairly closed
↓
1030 area - evergreens
o/c left of rd. Qtz eye plag ppy
(wed) again

1030 rd swings to 135° large o/c east of rd brg 030 (ppy)

1061

by 1061 It is ppy stee but has fan zones w fg gts eyes in aphan. grdmass locally.

PPy Rubble on rd + o/c to east to 1100



1145 (48) lapilli tuff with local vfg thin bedded tuff zones (mowed, so no bedding) – the frags wthr in relief + the matrix looks rather limy.

1180 Blue gray rather calc. lap. tuff
Rd now going 035°

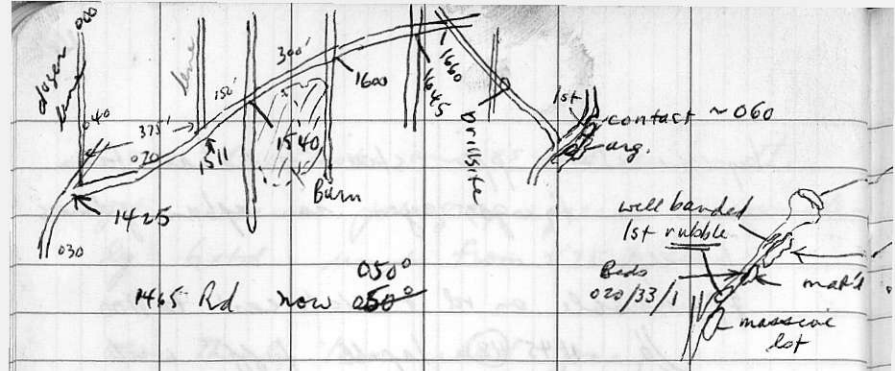
after 1200 appx fairly dense evergreen trees

1235 Rd 030° King angling upward slightly

jn 1320'

1332 Rusty dark blue-gray pyrite rich lap. tuff

Stn 11-93



1465 Rd now ~~050°~~ 050°

1600 Rd ≈ 060° loc. 50

1510
1425
1675
375

* pacer skipped 100 paces between 1425 & 1600

1730 Upper road
White to tan gray-wtrg xl/rne lot
and brecciated cherty argillite
(49)

1778 (50) Limestone

1800 massive lot on roadbed

1980 Rd jn Turn left

(51) 2135 Siliceous lot with arg + cherty (?) nodules + lenses interlayers with fine tuff — minor folds seen but orientn not measurable
Bedding seems to be
055/68/1 at the road

— massive to mottled
white → gray x blue
lst

mapped as limy ~~lap~~ tuff
on road below

1660
1320
340
1700

2270 Turn Back

~~HPL~~ 11-95 seems not to be there ?

2327 Blue-gray
Rhapelle tuff with local finer (sand-size)
11-95 Beds 029/61/2 layers
Interlayered are pebbly zones with calcareous cement (pebbly lst)

2358 ~~Cut~~ Bulldozer line
the road is covered with lupin + indian paintbrush

2560 Junction again

2575 Rubbly ~~rc~~ sil lst + tuff (like 51)
Beds ≈ 095/steep

(52)
needs 2513 Clearing at of road lst + tuff + arg
shld be 2613 Beds 095/68/2

Lawrie Hackman — Ken Doughty — Secretary

proceeding along clearing -
mainly lst
Bedding swerves to 060 then 055/80/2
across the road the rock is
mainly plag ppy & tuffac. rock

sidehilling now to maintain elevation

2676 vfg greenish tuff

2719 small o/c of dk gray arg lst (54)

2780 o/c of fg Hybrid on ~~as~~ it
border Coyle ? ~~(54)~~
o/c followed at brg 060 up hill
- gets finer grained (sample
→ 2815 (55)

2840 another o/c on 060 line

2875
2600
275
1375

3080
2600
480
2400

2874 Road

now going ≈ 080

2920
2940 greenish siliceous tuffs &
2955 tuffs laminae 088/74 12
3025 siliceous plag ppy

020

2966

(56) crystal tuff or plag ppy ?

new bag 120° @ 3025
30 x 5 o/c ends

3050 small o/c & dk gray pegs.
vfg tuff

3060 small o/c to left

3075 Dk gray sil vfg tuff

3080 Lookout road at Stn 18 ?

3185 SWBk - Stn 23 - 25

3580 Truck — the end —

25 July - at Craigmont office all day

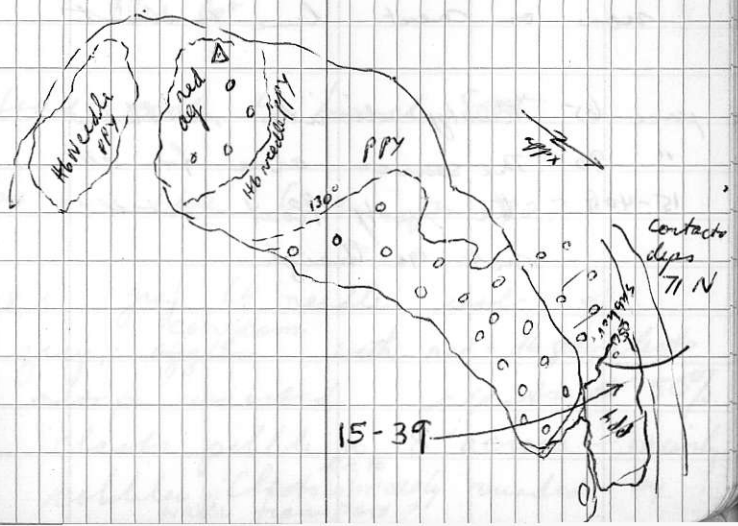
Sunny

Sunny
26 July '72

At Craigmont office till 9:30 then up the Hill to the top of the pit

First stop with multitudes of B/W & color photos was a bench ~200' from the Hilltop - red ag. cut by plag hb needle ppy dykes.

Top of Hill - red ~ ag with blocks + bombs of Hb ppy + apparently with both then dykes + flows of hb needle ppy



76.0 start

77.4 13-121

Flow aligned Hb needles 017°

in plane 017/75/2

Dk gray Hb needle ppy - Kingsvale

77.75 fm

77.9 o/c of dk gray olivine pyroxene

brg lava - basalt?

15-39A Kingsvale?

78-1 15-40 Dnd site

Gray wtrg black ol. basalt

now on next line to west

page 65 Rusty diorite rubble

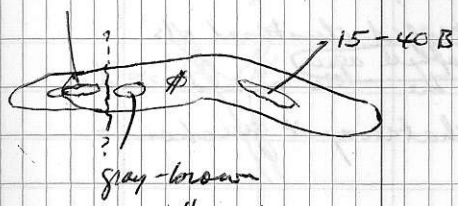
" 90 The source area for all

15-40A the rusty float - still

not o/c though

135, 185 Black basalt Rubble
200 Bl basalt ac
250 Trench
Back to cutoff @ 134
ac in trench has andesite with a rusty regolith separating it from Kingsvale above
Actual contact is covered

KL color bands 090/77/2



Head back to bench spot

Now on blue bike for 707.2

708.5 gray hb needle wole &
gray ~~agglom~~ conglom. with red + dk gray clasts
matrix unsorted clasts @ 50%
clasts pebble to 8" across - mainly cobbles - Clasts ~~to~~ 1½ to obviously rounded - by water transport?

Leave bike

pace 20 ag - frags larger, more abundant now

(15-41) - ~~displaced by accident~~ or up

95 Probably hybrid rc in bottom of trench

fnts 053/81/2/2/2

177/68/1/3/4 junk zeolite

072/53/2/4/4 " "

qtz 10 Mafic 30 Plag 60

anhedral Bi>Hb

closed interstitial ragged clustered xls

(Head upgrad again)

small zones in the rc could be mistaken for chatoway + gneiss - inclusions?

Hybrid rubble which represents rc to 160

conglomerate 163 (same as 20)

no granitic frags seen

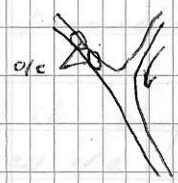
183 Back to bike

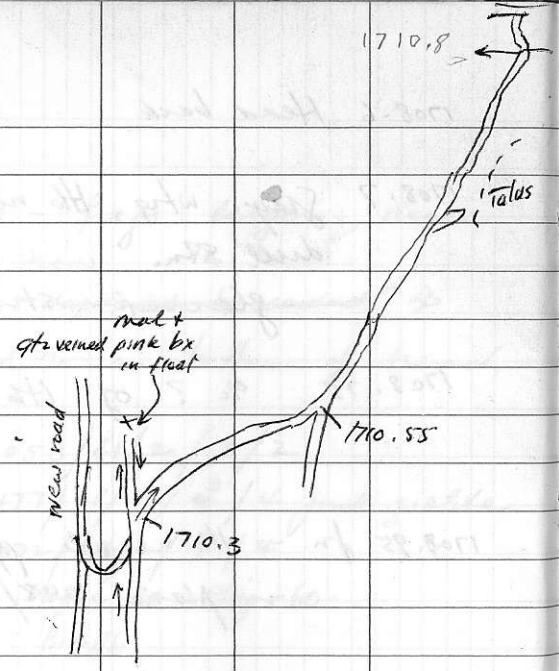
1708.6 Head back

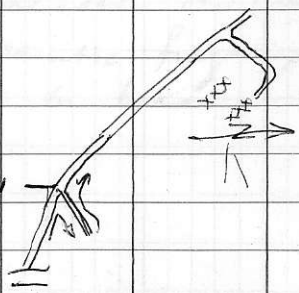
1708.7 Stay wtrg Hb needle ppy + drill stn.
glacial strae 115°

1708.75 o/c ? of Hb needle ppy

1709.95 fn - Hb needle ppy - Needles in plane 048/42/2 (?)




1710.8
Talus
mal +
qtz veined pink bx
in float
new road
1710.55
1710.3


1711.1

July 27/72
sunny

Broom Ck Road

Leave truck .8 miles fm turnoff

Bike odometer 1709.4

.7 x 5 = 3500'

1710.1 rd goes up hill to nt
lots of o/c

1710.2 the rd along the creek gusts
(virtually, I followed a cat
track thru far - past a
ransacked car-pulled trailer)

1710.8 Ck xing
1710.85 all of a sudden the road no
longer looks new + is better but not good
1711.1 jn
1711.4 Trench to nt of rd
rd splits one branch 125°
the other 090 + swampy N'wd

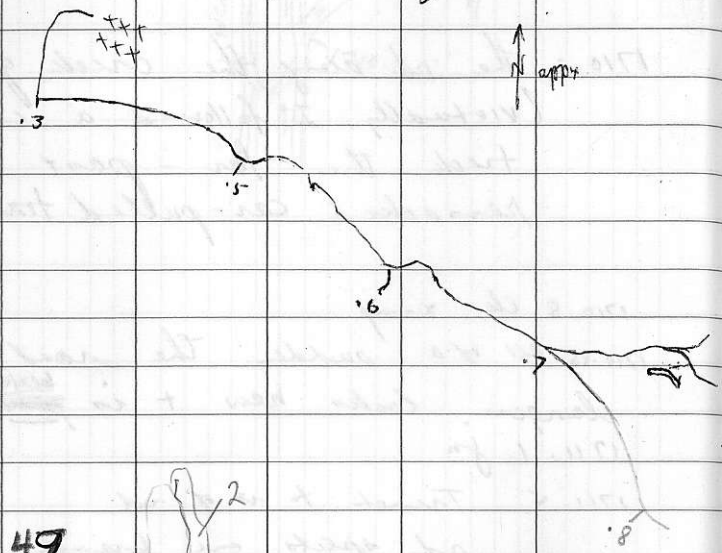
15-42A

rubble in trench is
rock like that at 15-7C
Possibly ~~42~~ possibly some other "dyke" rock

cont'd to #1711.6 to corner where road trends 175° & then swings to 100°

1712.0 main road again

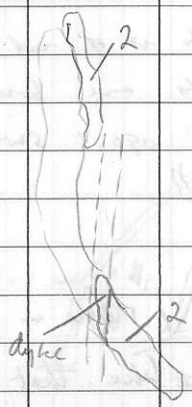
1712.3 Rd to rt leads to trenches examined 2 years? last? ago



15 - 49

~~15 - 48~~

See cards



Small shear
125/72/1
6" of chloritized gouge dip slip movement

(15-41B)

129 – small ~~o~~c of dyke? fg 3 ?

~~15-41C~~

15-42 103/57/1 joint with mal / ~~spec~~ cct / native Cu ?
Rock is either 2 or 3 – fg variety

(~~[illegible]~~) 108/51/2/3/4 chl-ep
045/78/2/3/4 iron oxide
022/43/1/4/4 chlorite ~~epid~~
065/52/1/3→2local/2

possibly fg 3

1713.05 ~~o~~c more or less continuous to creek xing @ 1713.05

Trench fg 3? dyke?

1713.3 road branches off to left

15-44 Fig 3

Joints 008/33/2/2→3/2

~~126~~ 122/56/2/2/4

137/50/2/4?/4 malachite up to 3" wide & 15" long in pods otherwise thin

033/38/1/2/4 chloritic zones & deep pink altn

/

afew ft along is 035/23/1

There are local intensive(?) bx zones but the rock is too wtrd to see much about its distribution.

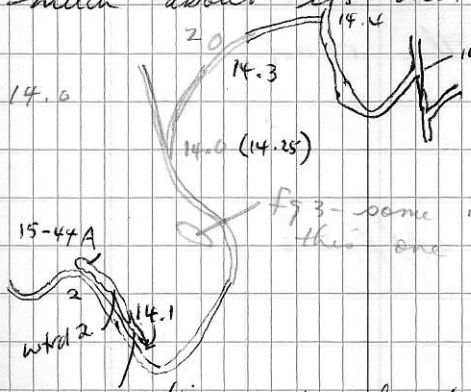


fig 3 - some mafic xenos - this one is nearly 2

rock/fill interface has 60° apparent dip northeast

(1714.9)

15-45 fg 3

171/61/1/4/-2

043/71/1/4/4 shear with chl + 2" gouge

032/36/1/3/4 pink zeolitic altn

across the swamp. subhorz sheeting is prominent (2' spacing)

molachite in float

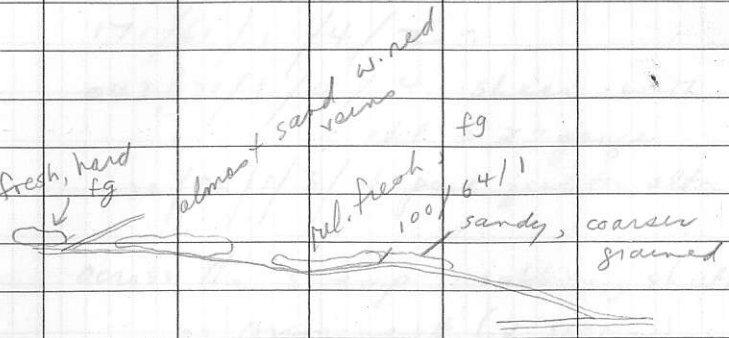
1715.1 o/c on hill to left

15.15 Crk crossing

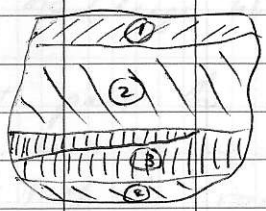
o/c (large bluff to rt of rd)

just past the ck in a trench w. o/c in to to the left (north) of the road

1715.3 Truck



veins have (1) sericitized halo, then a sericitized zone that thru with adv. hem then open space filling qtz vein cores (3)



July 28/72

Broom Creek

Turnoff 41.95

15-46 42.05

Road cuts right up hill (entrance cut off by main road) - the rock is rel. mafic rich mg Guichon(?) which weathers deeply (to sand consistency locally) It is veined by qtz - ch. hematite and has pink alta along jnts. This is interstratified with a finer grained rock which is rel. unweathered (contact 100/64/1 at one spot)

Local bx zones occur (not seen in place but float probably of local derivation) - have pink frags + black chloritic matrix between frags.

The f.g. rock has plag + mafic phenos + if one stretches things a bit, a sub-aplitic matrix - the mafic texture is Bethlehem-like — D2?

15-46A (3142.2) on corner
exfoliated fg 3 with xenoliths
of Chataway (2 samples) — 2 colors
3 B/w photos of xeno + exfoln (B/W)

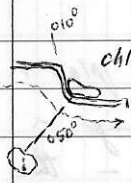
occasional black (qtz-tour?) veins
(sample)

15-46B (3142.4) east of road - very sandy oc of fg 3
~~wt~~ but qtz-tour - mal float. Drill
core presumably from here

15-47 across ck - see cards

3142.45 oc on road
aplite vein 138/15/1 3/4" wide >2' apart
15-47A

3142.55



chloritized fg 3 - matrix has
subaplitic qtz-kspar
intergrowths

3142.7 spot I left the truck yesterday
claim posts
~~Initial~~ Final cooper ~~4~~, 5, 6 (Mar 1967)
CA3, CA4 (mar 67)

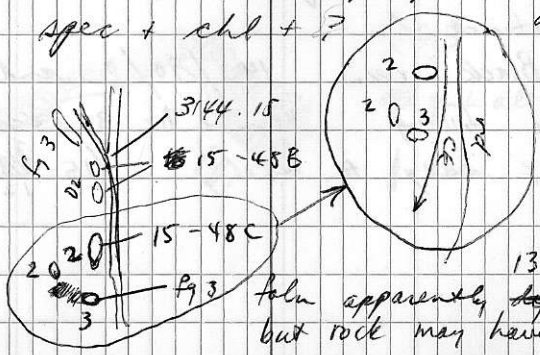
Initial CAP 1, 2 F.P. NW
(Mar '72)

42.85 Creek Xing

15-48A
across the ck fm 15-48 - Trenched Zone
No road - shear 129/84/1 intermittant
gouge zone 20' wide

fg 2

at
16-38 Deeply wtd fg 3 - locally sericitized
Black veins 119/83/2 up to ½" wide 22' apart
spec + chl + ?



folin apparently ~~lost~~
but rock may have slumped

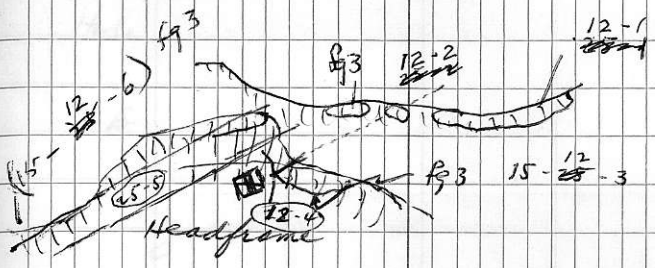
3144.3 Aberdeen

15 - 12

(15-12.1) Fg 3 with possible inclusions of 2
brg 070 to gond 130 to truck
Fol'n - poor 108/21/2
I may be getting faked out
by wtrg along incipient exfolia

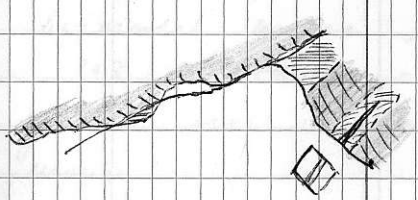
shear 099/24/2 ~1½' of gouge
wtrd mat'l
shear 081/83/2 10" of gouge
wtrd that'l
(accentuated by wtrg!)

Rusty veins in sandy wtrd rock
143/42/2 original mat'l
now all gone only iron oxide left
brg 103 to truck
Black vein 143/90/0 and bx
zone filling Vein + bx 3' across -
not easy to see (15-12-2)



Vein 131/90/0 fractures controlling it continue but vein pinches out just above me. Fractures are actually two sets - one vert one dipping 80°N (15-25-4)

128/85/1 Red fs altn zone ~10' wide (15-15-5)



fg3

pink alt

vein

Chataway
core logging

147

Box 4

Chataway

Canadian Superior Drilling
Grady 305N 323E
Hole 72-1 O/B 25'
fg Gneiss
Box 2 mafic pl. chl - otherwise very fresh - looking - some zeolite veins

Box 3 Some pink alta adjacent to fractures, slip have thin coats of chl ± ep
Box 4 at 147' there is a ¼" leuco-cratic mg segregation - texture is that of Chataway!
calcite + pink zeolite veins w. orangy-pink alta halos - mafic xenos - CR texture now has bi-modal mafic size distn.
148 Chataway - contact uneven gradual over a few mm - timing unsure.
Box 4 starts as fg 3 then progressively mafics switch to look like fg 4, then get Chataway stringers + pods
(CONFUSING)

71-1 Chataway

Box 5 161 onward ~ Chataway

to 161 it is a quartz-rich gray rock which is tentatively called fg 4

Box 6 Chat.

Box 7 chat to 207 then shear zone with chat + fg 4 to 220 then grad. rock becomes fg 3 with mafic clots

chlorite veins

Chat at end of box - 233'

Box 8 shear 245 → 8

mainly chat w pink altn zones

at 256 the chat is cut by a 2' dyke of fg 4 - could be a xenolith!

Box 9 Rather rubbly Chataway

10 " " "

at least some shearing is at 45° to core

11 Ditto 9 + 10

slickensides show dip-slip movement HW down?

12 Ditto slickensides are devel on sch. hear + chlorite

Box 13 Ditto
Pink alt, ep. veining

Box 14 Massive, fresh Chataway with chloritized stgrs @ 30° to core

" 15 Ditto 14 but with pink fibrous zeolite veins @ 30° to core

Ditto to Box 18
Hole ended at 500!

Grid Ref 313N 326E

Chataway Cdn Sup. Hole 72-2

Box 1 Massive Chat. Slightly finer

" 2 " " grained than that in 72-1

" 3 75 to 78 is a fg 4 dyke cutting Chat. Has one granite peg → aplite border. Aplite stringer at 74½' also contact quite sharp @ 40° to core. Keep in mind that these "dykes" may be xenoliths — also some small mafic xenos occur.

Continued on cards

red aq.

(ie vesicular flow top!) flattened amygs

flattened + normal amygs

5'

Jenny
29 July 72

Checking Rocks above
Petite Ck with Norm
Jergensen

"Bedded" plag ppy
and
glac. strice
335°

14.2 remoated
agglom with scattered
bombs but predominant lapilli
- frags are mainly plag ppy with both
red & gray groundmasses. One bomb
was buck red hb plag ppy
SPENCES BRIDGE ?
matrix sand-sized plag + other frags.
* NOT VERY DIFFERENT THAN WHAT
I CALLED BX WITH N. J.
a few fa xphis
alogged plag xls 173/85/2
define plane (poor)

calcite in voicles
on the rd - ppy + ag give way
to brown wtg gray andesite
flattened amygs 173/52/1 good

50' along the road

and.

~~ag~~ crowded plag ppy

ppy = ~~gray~~ green

14-3

ag + hb plag ppy (dykes?)

ag. has red + gray plag ppy + fg volc pebbles, cobbles + boulders

matrix looks like bken up porphyry Spences Bridge?

jn - ~~tu~~ keep on left to get to 4-11

The rock is hb plag ppy with fg hallow elne matrix. It has local fg zones which appear to be flow tops but no attitude could be established

Spences Bridge?

o/c near 14-11 (14-11A)

Kingsvale Hb needle ppy dyke? 14-11A-1

Spences Bridge?

flow bx

Hb plag ppy - mg brown - gray matrix

linear

ag with black grdmass crowded plag ppy matrix

frags gray + red plag ppy & fg dk gray, could conceivably be flow breccia

Linear 006/86/1 - filled by an easy-wtrg mafic-fi dyke 14-11A-2

15-49

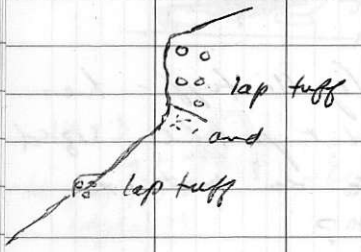
Epidote veined lapilli tuff - has jasperoid sand + pebble-sized fragments. Epidote in matrix also — Nicola?

14-9A Holo Holo x 11m fg diorytized andesite NICOLA?

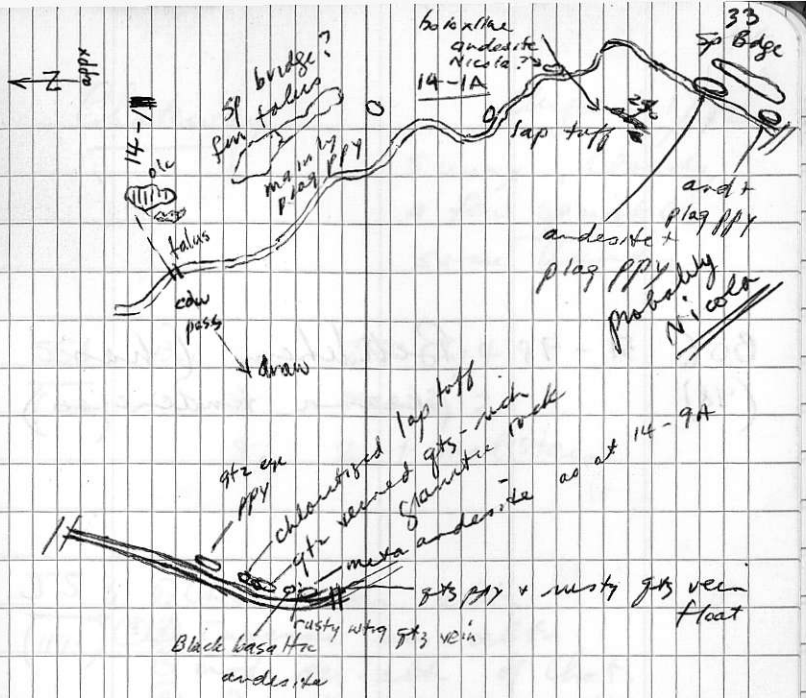
14-9 Beds 075/75/2 good
Interbedded argillac. thin bedded lst and lapilli tuff. NICOLA
v-f. all frags <1", frags 75%, some lst frags

14-10 Light + dk gray vfg massive tuff + blue-gray wtrg "gunke"
NICOLA

14-13 Contact between lap tuff + andesite 030/60/2



The tuff look like Nicola the and. like Sp Bridge



pale green qtz - plag ppy - cp veined (NICOLA)

qtz vein has open space filling with chl - per filling last talus

B06 (98)	51 - 98	Bethlehem (has Skeena tendencies)			

Chataway

August 1/82

Sunny, Cloudy,
a few sprinkles
some thunder

SS1 Box 2 2 + fg 4
( )? 3 mainly 2
4 2 + mal stain

JS 3 ① Chat + ser. altn
(117) ③ ② Intense ser. altn.
② mod ser. altn of Chat.
④ " " " "
⑤ Low ser. altn mod pink in last 10'
⑥ Chloritic slips in 2
SS2 Box 1 Chataway

JS 4 103 - 117 Chataway - weak
(117) chloritization along
slips

JS 5 119 - 139 Chataway - slight
(139) chloritic altn -
along slips

Stn 15-49 used on Broom Ck ∴

next one 15-50

SW of Chataway Lake in Valley S. of P.D.H. E-12

Jaunt with Int. Mogul People

Chat with ep on jnts + sl. chl alth. local fg zones

has stringers of qtz - ~~eye~~ ~~Dr~~ plag.

aplite (alaskite)

2nd 7c Chat

3rd mainly Ch, some Pm dykes

000/90/0

5/c - fairly large - gully

mainly Chat - ~~some~~ one Pm dyke

ep on jnts lots of aplitic stringers

10 Aug '72
Cloudy

35

Chateaway core

72-3 fg rock - Bethlehem ? D2?
chlorite on slips, some native copper
general wk pale green plag altn
some grtz veining

chlorit'zd Rubble zone 143 - nearly 170
chloritized bx zones near 170 & 240

170-190 The feldspar is altered to pink assemblage - looks like a diff rock.
zeolite veins
calcite veins

300 - 315 Intense chloritic altn

Pretty much unchanged except for local pink zones + local chl. zones to 501 (EOH)

Moss 4

Box 1 Chat + act. chat + qtz veins - some bxtd + recemented 86 - 90

One Mo52 spec seen, some Ochr hem. (86)

mafic generally chloritized

local intense sericite altn (sample) and some pervasive hem. altn near calcite veins

231 (EOH) still Chataway

JUST LOOKING AT. A FEW ~~Box 1~~ BOXES

CS 4 Chataway 107 - 150

CS 5 Chataway 45 - 105

CS 6 poor Chataway 20 - 124

CS 7 Chat. with 62 - 554 (EOH)
some guchan - like areas

CS 8 same as CS 7 40 - 297 (EOH)
250' malachite

CS10 132 –

pink mottled K-feldspathized rock

local flakey sericite alt'n

some places it is definitely Chat – others I'm not sure – looks like junction & grain size varies

Good "2" after 190'

410 – 435 Shattered zone

467 steel chat

SUS 1 10'

Chat with Bm defes – some areas look like Skeena – Bm >> Ch.

34 – 115 Bethlehem only

115 – 167 vil fg chat – shattered w. zeolite veins

epidote stringers

167 – 182 gtz eye + normal pink aplite

182 contact low ∠ to core

183 chrysocolla on fracture

(SUS1) (cont'd)

184 - 190 mottled rock - chat pods in finer mou mafic zones (gneiss?)

then 190 → 227 scruffy chatoway

(A1) altered throughout - sericite + pink - qtz eyes - some euhedral some anhedral

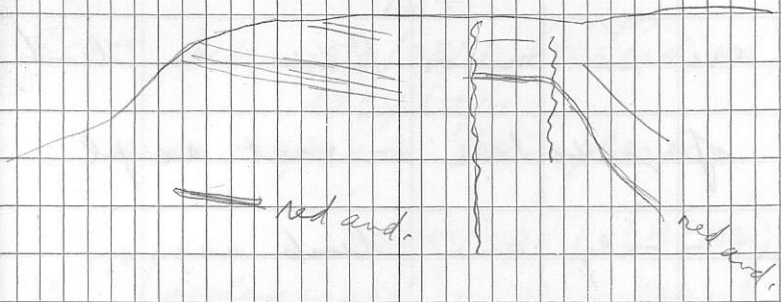
Bda? Sk?

OR DYKE ROCK?

* these are mean los cole

(A2) similar to A1

15-50 Nicola grit w. cp.
veining
near Pekiska ck



apparent dip 8° South

Flow layer

115/13/2

gray andesite

Craigmont

ore in minor folds on limb of anticline - vert. ax. pl.

- only one limb seen.

Ore closely associated with shear zones.

Looking for Kingsvale near
Dot

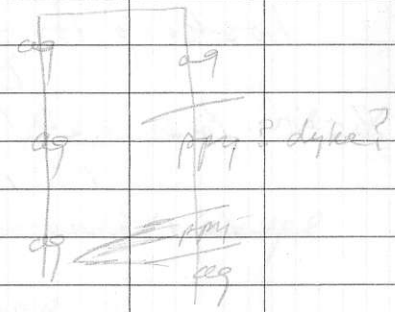
8-246 Beds 124/28/1 (dips toward rd)
173/37/1

seds + dykes — fossil plants

055/09/1 (13-132)

13-134
to 13-132
SP
Bdge

agglomerate + greenstone + volc bx sequence to 9c with bedding. Bedding is in a 40' thick volc sst unit — overlain by ag. underlain by ag — No ⊥'r descendance
Cut by Hb needle
PPy dyke (Kingsvale ?)



Samples

① o o o brown ag

o o o rusty ag

o ② lava boulder

o o

o o

p! ppy dyke

165/90/0

③, ④ volc,

⑤ pink plag

ppy

(750)

(61 15)

New Rd

70.1 Brg 140 to

Prom. Hills Lookout

(~ ½ mile to rds end)

71.35 Jn - Gdn Lk Rd?

Plag ppy + wtd plag ppy
for another 150' vert up
Hill then clinker + bomb
ag for at least another
150' vertically
*upper ag has similar compsn
to acid "flow" seen lower down

lower contact of ag tends ~115° along
hillside

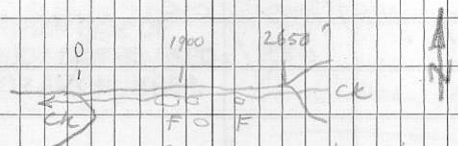
large boulder? (Flow banding - underlie
116/16/1 rusty ag

ag 031/32/1 bedding
green vs brown rusty ag

Gordon Ck

Fossil hoc - carbon
plants
190' fm ck Xing

El 2500'



To Nevs road

Bds 072/38/2

Mike Kenyon

Ernie Gaslin - owns ranch next to ranch @ S end of Summit
Mrs. Garside (?) own ranch at S. end.
4-corners - Foley ranch

Craigmont
Jim Bristow
Jerry Sanford

epidote veined amyg flow rock
(dacite ?)
agglomerate with siltstone lenses (?) 091/33/1

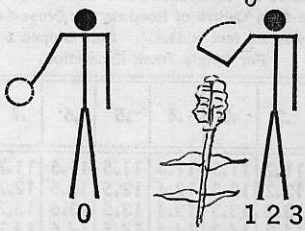
acid flow with hummocks
ag-looking wtd face
bk m o/c
ag - then
amyg plag ppy overlain by plag ppy
085/26/1 Flow top -
Flow Bott. contact

Penstemmon
nth Penstemmon (?)
~~Fairy Cup?~~ Spotted saxifrage
Fleabane
salsify
aster

geotec

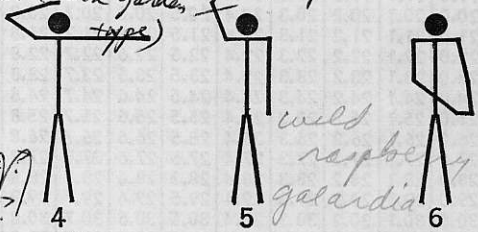
FIELD SIGNALS FOR NUMBERS

Yarrow
Everlasting
Wooley ~~Wh~~ Sunflower ?
milk ~~ketch~~? purple pea-like
Lupin
columbine
STONEHENGE
Several var. of dandelion
wild onions
~~Sta~~ Self Heal
Blue-Purple
Pea-like flowers in a lump at the head of the stalk



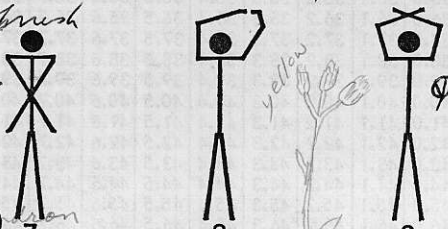
(Number of motions)

Yellow flower (rock garden type)
~~Spanish~~
sulphur eriogonum



yellow

larkspur
~~Alpine Spiraea~~
~~Wheat~~
wild raspberry
galardia
sticky geranium ✓
~~Fireweed~~
Mountain Forget-me-not
Indian Paintbrush
wild strawberry
Purply-Blue w. yellow Centre - 5 petals



yellow

~~mock orange~~?
(White rhododendron)
arnica
wild currant?

NOTE: EITHER SIDE OF BODY CAN BE USED FOR ANY NUMBER.

Saskatoon Berries

green fruit in clusters - each fruit has 3 lobes At sticky - looking

Low shrub (creeper)

geotec

Tables for Excavations and Embankments.
Distances from Centre of Roadway for Cross-Sectioning.
Roadway 22 feet wide. Side Slopes 1 to 1.
For Single Track Excavation.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	0
1	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	1
2	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	2
3	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	3
4	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	4
5	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	5
6	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	6
7	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	7
8	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	8
9	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	9
10	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	10
11	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	11
12	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	12
13	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	13
14	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	14
15	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	15
16	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	16
17	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	17
18	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	18
19	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	19
20	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	20
21	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	21
22	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	22
23	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	23
24	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	24
25	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	25
26	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	26
27	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	27
28	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	28
29	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	29
30	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	30
31	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	31
32	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	32
33	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	33
34	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	34
35	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	35
36	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	36
37	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	37
38	49.0	49.1	49.2	49.3	49.4	49.5	49.6	49.7	49.8	49.9	38
39	50.0	50.1	50.2	50.3	50.4	50.5	50.6	50.7	50.8	50.9	39
40	51.0	51.1	51.2	51.3	51.4	51.5	51.6	51.7	51.8	51.9	40