1973 Season

PACIFIC WATERPROOF

WJM

Cruisers Transit Book

No. 340

HIGHLAND VALLEY

Rey Lake (bush)

August 1973

Shuswap Lake Provincial Park, British Columbia.
Photograph by E. OTTO, Miller Services Ltd

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
◗ First Quarter 5th	○ Full Moon 14th	☾ Last Quarter 21st	1 Sunny, Hot. To Cache Ck	Ran 1⅓ 2 Sunny, Hot (S, H) Hmt core	3 S, H Truck repair day	Ran 1⅓ 4 Sun → cloud → rain Hmt core
5 A.M. rain P.M. clearing Hmt in P.M. Core	Ran 2 6 Sunny → cloudy cool Hmt core	Ran 2 7 Sunny, Hot Hmt core	Ran 1⅓ 8 Sunny → cloudy pleasant Hmt core	Ran 1⅓ 9 Sunny, Hot Hmt core	10 S, H J.A. core	Ran 2 11 S, H J.A. Core
S, H 12 J.A. core	S, H 13 J.A. Core	S, H. 14 Rey Lake - Asarco	S, H. 15 Train core at Getty Mines "Leemac prop" near Afton	Sunny → rain near Abbotsford Cache Ck → 16 Victoria	17 Victoria at work	18 off Victoria
19 off Victoria	20 Ferry strike Victoria at work	21 Victoria at work	22 awaiting Ferry Lineups Victoria	Cloudy → sunny cool 23 Back to ~~Kamloops~~ Highland Valley ✓	Rain → cloudy 24 Nicola Cu Mines 3 mi East of Logan Lk ~~possibly to Rey Creek ranch (Asarco core)~~ x ~~Possibly to Shuba prop.~~	Sunny → cloudy, cool 25 JA core 1300' done x
Sunny, Cloudy cool 26 Most of day finding & discussing Cont. - Cinch grd 300' of JA core logged.	Sunny/Cloudy Cold wind 27 J.A. (1580') core logged - dropped in at Cont. Camp on way back x	Looked bad in AM - cleared up was quite nice 28 JA core logged 1500' Phoned Abe V. in Victoria x	Early - High clouds - then cleared & was nice then clouded over 29 JA Core logged quit at 4:50 - 1260' done	Rain over night cloudy, cold (Covers in Cache Ck) Oil change & Lube truck worked in Hmt's Asbestos office in afternoon - had beer & supper in Tim Chrusher Good visit 30	Sunny, cloudy, 31 hail + rain showers JA core 1700' To Merritt in evening	● New Moon 28th

JULY 1973

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

SEPTEMBER 1973

SUN	MON	TUE	WED	THU	FRI	SAT
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23/30	24	25	26	27	28	29

September 1973

Prince Albert National Park, Saskatchewan.
Photograph by E. OTTO, Miller Services Ltd.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			Jim + Rod here in evening			1 Sunny, warm Merritt Ski all day
◗ First Quarter 4th	○ Full Moon 12th	☾ Last Quarter 19th	● New Moon 26th			
2 Sunny, warm AM → cloudier, colder → squalls by 6 PM J.A. core only 120' from 8:30 AM → 56 PM	3 HOLIDAY Sunny → cloudy → warm cold sunny, cool J.A. core 1/500' Hon Hunt off from Eve. Labour Day—All Canada	4 Sunny, clear, quite hot - lovely Dropped in at Quintana camp - lagged core at JA - dropped in to see Art Redgrove	5 Sunny → cloudy warm at Nicola Copper Mines, got key for core, looked at Sheba core, finished off at Highmont	6 Sunny → cloudy in evening Finishing J.A ~~possibly finish~~ core ~~off by the date~~ X	7 Back from Highland Valley	8
9	10 office X	11 X	12 X	13 X	14 X	15
16	17 X	18 X	19 X	20 X	21 X	22
23/30	24 X	25 X	26 X	27 X	28 Art off strength	29

AUGUST 1973

SUN	MON	TUE	WED	THU	FRI	SAT
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

OCTOBER 1973

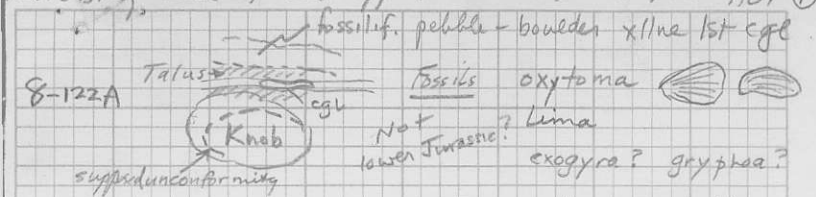
SUN	MON	TUE	WED	THU	FRI	SAT
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

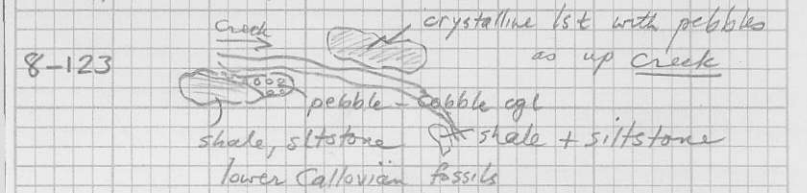
Stringers tied up

— END —

* Data on Rey Lake drill holes on back page

Traversing with Howard Tipper July 12, 1973 Sunny Hot (1)





East of Barnes Lake 10-165

Conglomerate - mainly volc pebbles, cobbles
matrix locally is fetid & limy

Fossils collected

Weyla bodendieri

" acuteplicata?

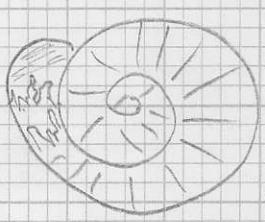
Rhynchonella (brach)

smooth shelled pelecepods (pectinid)

Pleinsbachian?

July 13/73 (2)
Sunny, HOT

Spent morning with Howard Tipper at stn 10-29 where we found one ammonite fragment and (Callovian ?)
Kepplerites ? branched ribs
at stn 10-78 where we found two pelecypod impressions  similar to those at 8-123 and Howard found an ammonite cast with straight ribs & dendritic sutures


diagrammatic
1"

DEFINITELY NOT LOWER JURASSIC

*At 89 MILE Howard has Triassic and Lower Jr fossils from clasts in cgl - he thinks interbeds in the cgl are of Callovian age

July 13

In the afternoon I worked on lab forms for samples submitted before I left and phoned around regarding work at Highmont - it is as well I did - a chain has been put across the road so I drove up to Savona & got a key from Merle Porter (cat driver, etc. for Highmont). Merle says nothing is going on in the Valley about Highmont drilled 8 pc holes and Roscoe Lk ($10 000 work committment on Pathfinder) & must spend $8000 on Tericho before August [may drop the claims then restake & eliminate a multitude of fractions etc.]

HIGHMONT COMMENTS

- Vern laid off
- Alan Reed logging core at Afton 15,000' DD rig 12000'(?) rotary drilling planned by end of August.

Section 105, 100 E

Dyke

70 - 235 — 130 onward

69 - 181 — 460 onward

68 - 53 — 460 - 530 (Int)
640 onward

68 - 52 (short)

69 - 179 ← 340 - 370, 710 onward

510 to 520 (EOH)

68 - 35, 68 - 34 (short)

68 - 34

69 - 138 No dyke

68 - 27 Dyke 610 - 650; 710 onward

69 - 178 No Dyke

68 - 26 off section

69 - 131 off section

103,900E

Logged as B&da

Dyke complex '400' on

68-29

68-28 (short)

68-21

68-20 (short) — 650 on

69-171 — 720 on

69-197 — 1070 on ppy dyke

70-227 went to 1250' - no dyke complex recorded

Perhaps from a previous check

69-175

69-173, 173A

102,800E

5

→ 69-147 (66-6) dyke 615 (command)

→ 68-16 (short one) 410-600 Int. dykes

→ 68-17

→ 69-145 Dyke 400-470; 630-780

~~70-221~~ or 224? Dyke 200-740 Int.

→ 70-221

70-243 No dyke
Fringe of west pit zone

X

Seem if time will should be altered

69-110 #4 ZONE

~~69-95E~~ ⊥ to section

69-75 #4 zone

69-120 (rent)

69-121 SK w-aplike dyke @ 707'

69-114 (?)

102800E 104100E 105100E

Done — 104, 100 — Looks more interesting than 103 900

66 to omitted - could not find it.

on surface

✓ 70 - 247 H9 dyke + Bx after 650

✓ 68-69 C23 dyke 320 - 420 ; after 690

✓ 68 - 68 C24 " 330 - 370

long 66 - 1 E? " 520 - 540, 620 - 710, 870-910
west side?

✓ C7 HU 6 underground? Horizontal

✓ 70 - 231 long H8 porphyritic zones 650, 718, 1050

✓ 68 - 47 Intermed. thin dykes 270 onward

C22

68 - 48 (short)

A12

✓ 70 - 233 850 - 910 Int. gtz ppy

long I9

rapid scan 69 - 123 ? off section but parallel

70 - 233 HU 6 ~~66 1~~ 68 - 48

70 - 229

Monday

5 zone

69 - 199

69 - 201
and/or 69 - 203

69-205 Rubble 55 - 100 Porphyry?

6 zone ? NO HOLES ?

2 ZONE

69 - 149 ~~or 69 - 151~~

69 - 151

68 - 40 (vertical)

68 - 41

69 - 153

70 - 241

These Holes are a N - S section

3 zone

69-116 (vert) 69 - 117

sunny, warm

Am at Comet Krain Warehouse
logging core from Getty's Krain
Samples ↓ drilling in 1973

30 Hole 73-1 vertical, 1178' long
42 07B24

D3 - "fresh" to 36.5 then Guichon
contact ~45°
75 Guichon very fresh to 65
a bit rubbly, at 61, 65 → 75 → 88 → 90
65 - 105 D3 - white to pink crowded hb plag ppy ← a few qtz eyes, ep clots, pyritiferous
105 Guichon ~~at~~ near dyke contact has
dissem. epidote clots and pyrite.
fractures
Rubbly zone @ 105 then rock in dk
pink + has a distinct vfg ~~pep~~ grdmass peppered
with mafics → standard D3 again by 118
- continues to have mafic / ep / pyr. clots
odd, soapy min + calcite on fractures
Dyke continues to ~~be~~ have rubbly zones
altn of fs loc arg (white) 2
- another ~~fg~~ matrix - rich (40%) zone 150 - 157
159 - at 157 is a "chill zone" - matrix 60% then
wierd fg rock - mafic-rich, pink matrix
ep clots to 160 where rock is text book
guichon - has ep clots + veins to 161
then virtually fresh

Rubbly zones

223 - 226

235 - 248 (low $)

297 - 302 (low $)

325

335, 337

386

487, 490, 495

498 - 505

517 → 531

545

553 - 560 Intermittent

186 Gouge (gravel-size) zone 10" wide with attendant cp alt'n + Kspar (?) alt'n

Cu but mild arg alt'n, local qtz - cp ≠ cpy (#) veins (30°)

Rubbly zones - see list

qtz - ep veins with chl - pyrite slips

230 - 260 pyriteferous veins 35° (qtz + chl) + fr common

274 after 260 Dk green alt'n (2) heavy pyrite → 295 qtz - pyrite veins 300

260 → to 600 Heavy pyrite continuing qtz - py veins 30, 45° fr; chl - py fr 35° occasionally cpy in w. pyrite

350 occasional qtz ep ep - qtz - calcite veins

355 370 area pyrite on fr @ 30°, 55°, 10° (spacing 6")

380 area Fr spacing ~ 2" - mainly chl - pyrite fr.

430 Chilled D2 Contact 45° pyrite veins + fr continue

432

465 D2 → Gneiss

517 area qtz - cp also

542 → 550 cp stringers - pre - chl - py fr (45°)

~~Sta~~ Rubbly zones
572 - 581
585 - 608
616 ; 628
650 → 665
687, 697 → 699
altn + gouge 710 → 890
927
958 → 965

580 area pink altn, ~~grn~~

584

590 area green altn — Guichon

650 - 665 mod - strong waxy ^ green ser altn

694 Chilled contact of ppy against Guichon (35°)

705 Dyke is D2? — ~~local~~ pervasive strong green ser altn (2-3)
~710 → 726 Then mod gouge → 735

Pyrite content low after 600'

740 735 → 890 Green altn (3) local gouge — rock type uncertain —

850 Not sure of rock type — Guess it is ppy

917 Still green altn zones (~45°) ^ but recog ~~as~~ as D2 now

990 995 Gu - aplite ~~dyke~~ stringers 35°, 25°
green altn 955 - 971 - pervas strong
~~at~~ in 971 area where dyke gave way to guichon
Gu-like rock (has aplitic grdness)
Fairly fresh 975 → 1060

Rubbly zones
1068
1098 – 1104
1165 - 1185

1065 to 1080 ~~[illegible]~~ some spotty cpy, pyrite fr & mld ^ arg altn to intense wk

1105 – 1120 chl-py fr 35°

1155 1155 cpy-chl-bi(?) fr 40°

Bright pink then green altn then chalky gouge rock 1165 ^ → 1180 & rubbly → 1185

"aplite Quechon" → 1205 EOH

EOH

KRAIN

14 Aug '73 II

Sunny, Hot

Hole 73-2

Inclined (-60°) OTB 90' Length ~~1237~~ 1488

100 Crowded plag ppy w. mafic/ep knots & disem ep in grdmass

by 210 is looking gneissic & has ep in mafics but not grdmass

225 a bit of pyrite ~ 250

290 Getting finer, more grdmass

296 Guichon contact

313 Brown ppy mafic & plag w/ pink/ phenos — locally plag → epidote — contacts shatter zones

322 Guichon

337 → " — green altn

342 Recog Gu @ 347 (guess 349)
" ppy @ 375 > contact/in green altn zone

Green altn goes ~ 380 then is

387 mafic-rich D2(?) but is cut by

393 D2 stringers

Skipped boxes 19 → 54 for the moment to be sure "ore" looked at

Rubbly
116
136-138
145-7, 158-60,
182, 190
209-13, 218-19
223-225,
243-297
273-280 Local Gouge
285-305
308; 311 → more
than 60% rubble → 338 - local gouge zones
~~Scatter~~
green altn + gouge
Zones 3 -365

"ORE ZONE" roughly 1050 - 1250

55 969 - 982.5
Gu, pyrite - chl fr qtz-py veins
fr 0-10°; 35°, 40°, 55° veins

998 - 1014 Rubbly throughout
sem. to 55 — one qtz-chl-bn vein 60°

1040 → 1049 Mod - intense arg altn of ppy? aplitic type
pyrite prom.
local dk green feldspar altn
ahead of this

1049 Gu cut by ppy stringers @ 45°

1070 1050 → mainly dk green altn
Box 60 qtz-py-cpy veins which pinch + swell @ 40°

Box 61 arg altn 2-3
(1080 - 1098)
MoS2 slips 0°
qtz-bn-some cpy veins 0° with
1092 assoc. cpy dissem in adj alt. rock
- rock is wh. porphyritic aplite

1109 Box 62 chl-cpy fr 20°, 40°
(1098-1114) ser-qtz-cpy zones
est 0.5

- 1133 Gu - chl-cpy fr - - - rel lg
est .25

- 1151 1138-39 ppy dyke has qtz-cpy veins
est 0.4 + fr; chl-cpy fr in C.R.
- 1170 Gu + ppy dykes - both mineral on fr
est .45 locally fr 2" apart

Rubbly

1050 - 1064
Intermittent
1092 - 1109

66 1170 – 1188 mnlzd fr 1.5" apart
1170 (est .5) altn slight

67 – 1204 chl, chl - cpy ± bn, fr
(est. 0.4) qtz – chl – bn veins

68 – 1221 chl - cpy - bn fr – (spacing
1215 est .5 – .6 1–2" loc ½ ")

69 – 1238 Shatter & altn zone 1222 – 1254
.6+? fs green & mafic → ser
looks barren but has very fine cpy ± bn fr
½ – 1" apart

70 – 1256 qtz – bn – cpy veins
.3 – .4?

will get rest of hole data
from Getty

Nicola mine still running tests

Nicola Copper Mines Ltd. is continuing to diamond drill test its Meadow Creek property in the Highland Valley near Logan Lake.

The number two hole in the current series encountered a number of significant intersections in highly altered porphyritic andesite, a company spokesman said today.

Assay results of the significant sections of hole number two were as follows:

At an interval of 73.5 feet a six foot section assayed .83 per cent copper, at the 95 foot level a seven foot section assayed 2.8 per cent copper, at the 128 foot level a 10 foot section assayed 1.83 per cent copper, at the 192 foot level a 10 foot section assayed .57 per cent copper, at the 208 foot level a five foot section assayed 1.04 per cent copper, at the 329 foot level a five foot section assayed 1.14 per cent copper, and at the 854 foot level a five foot section assayed 1.08 per cent copper.

The number three hole also encountered copper mineralization including some native copper.

An electromagnetic survey is under way on the property about one and a half miles southeast of the present drilling site.

Several conductive zones have been found in the area. The two most significant are about 2,000 feet long and 600 feet apart, both trend northwest and southeast.

The area of these zones has been covered by soil sampling and drill hole locations will be based on the final result of the soil tests.

Nicola Copper Mines (HW claims?)

KR + K claims 3.5 miles east of Logan Lake (The Lake not the town)

(Old "Ford" showing)

1st hole — DUD (Due South -45°)

2nd hole — 900' avg .24 (Due North -45°) several sections ~10' wide of 1-2% Cu - cct mainly

3 hole - hitting min'lzn - cct, nature Cu

—— Core from DDH's 1, 2 & 696' of 3 are in Vancouver

#3 - 696' -717: carbonate veined, chl on fr rusty bb(?) plag phenos - plag white to green (chl) - yell grn (epidote) - epidote alt pervasive in zones a foot or two wide

Gougy, rusty zone @ 40° 698-700

Becoming amyg by 701 & a quartz-carbonate - pencate(?) vein has stringers of gray mn'lzn (cct?)

amyg & carb veined to 717

Some veins have a greenish coating of talc?

Claim

HW -3

" -4

"

"

Inv. # 92I/SE-9

99218K
(100518K, 100519K)

99219K (101081P)

99221(6) 99220(5)

90670K

90671K

HW 7,8 lapsed

Ramloops

H. Wiley Wiggins

Aug '71

JG1 101068
2# 101096
10 115871-3
-32

6 4
5 3

Gemp72
158

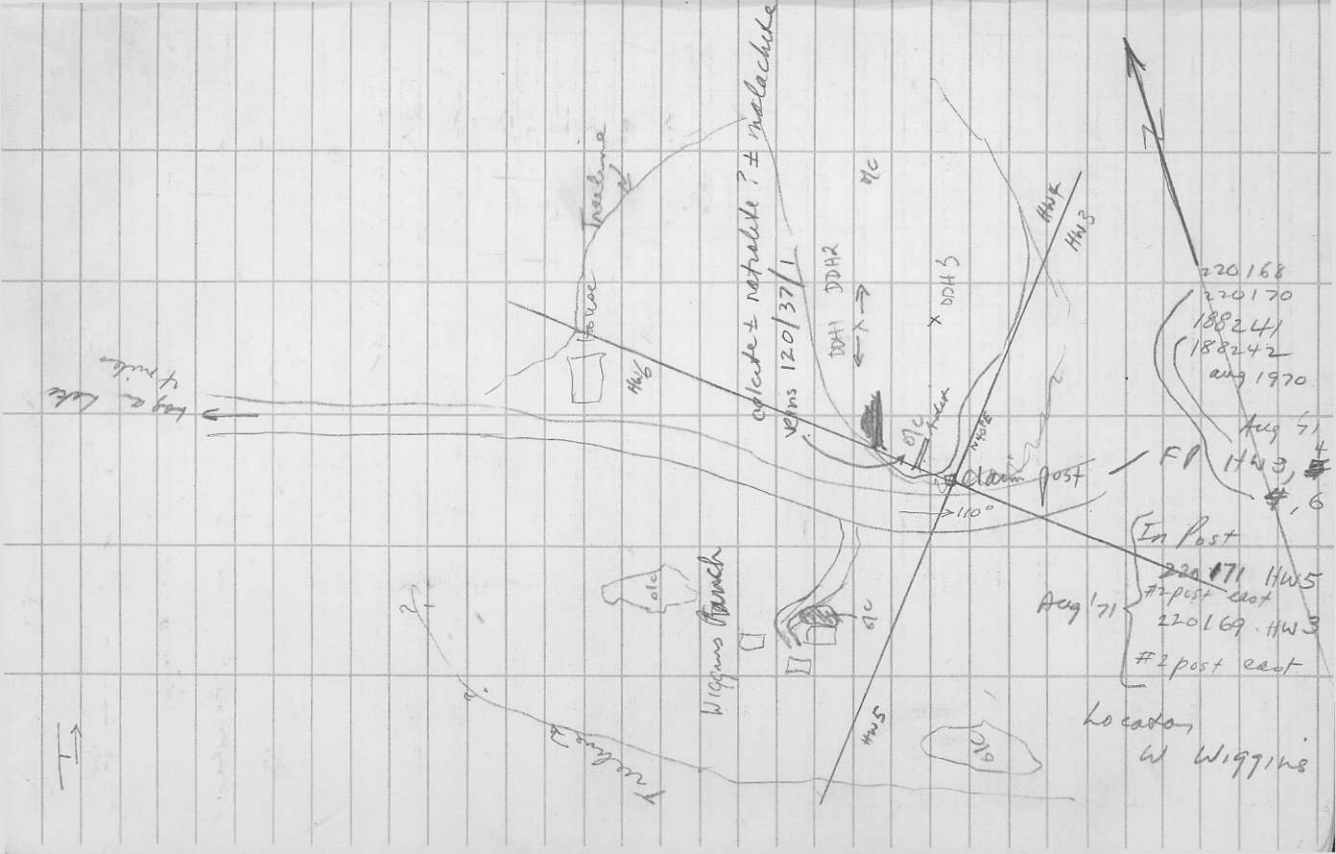
100518
100519

HW 3-6 ~~Col 1/2~~

~~BH 1-2~~

JG 1-32

405



Treeline
house
HW6
calcite ± natrolite ? ± malachite
veins 120/37/1
DDH2
DDH1
DDH3
MC
HW4
HW3
claim post
110°
N40°E
o/c
Wiggins Ranch
HW5
FP
220168
220170
188241
188242
aug 1970
Aug '71
HW3, 4, 6
In Post
220171 HW5
#2 post east
220169 HW3
#2 post east
Aug '71
Location W Wiggins

Boxes logged out of sequence

~~717 – 736~~

741 – 765 Highly amyg & rusty – 746 then less amyg grad → sl. amyg – elong amygs ~ 30° to core – contact at 35° (@ 754') weak lava with 40% mafic & plag phenos carbonate veins avg 1' apart No mineln seen but black specs in grdmass of amyg zone could conceivably be chalcocite

765 – 787 Highly ppytic to 770 then variable amyg content to 780 then sl. ppytic pel measure & sheared

Ramping hard – go to tape recorder

Looking at old workings

Adit ~ 40' long driven at 040°

Possible flow bedding 172/20/1 plug-

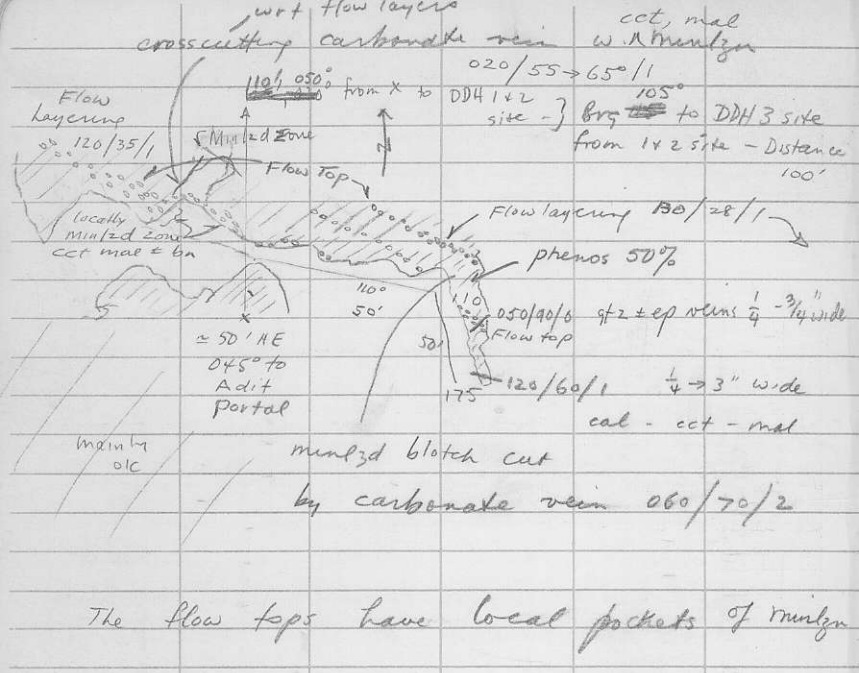
geated by amyg-rich zone

slip face 078/64/2 ~~shear~~

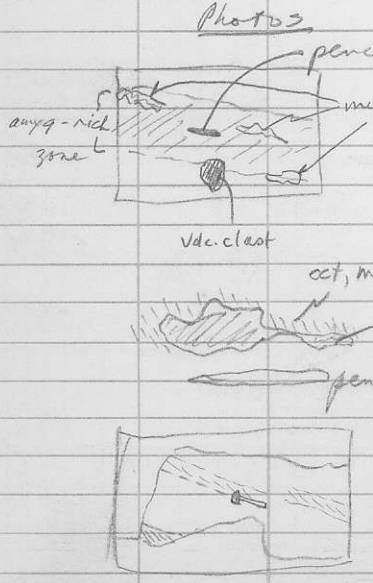
Possibly slicken-sides 12° NE left-lateral offset

036/66/1

dip-slip — normal fault



The flow tops have local pockets of mnlzn



Coming up the hill for the adit

gtz - carbonate ∪ some cct, mal.

150/63/1 — 2" wide
pinches out - strike length 3'

155/70/1 10" max width
strike length 4'

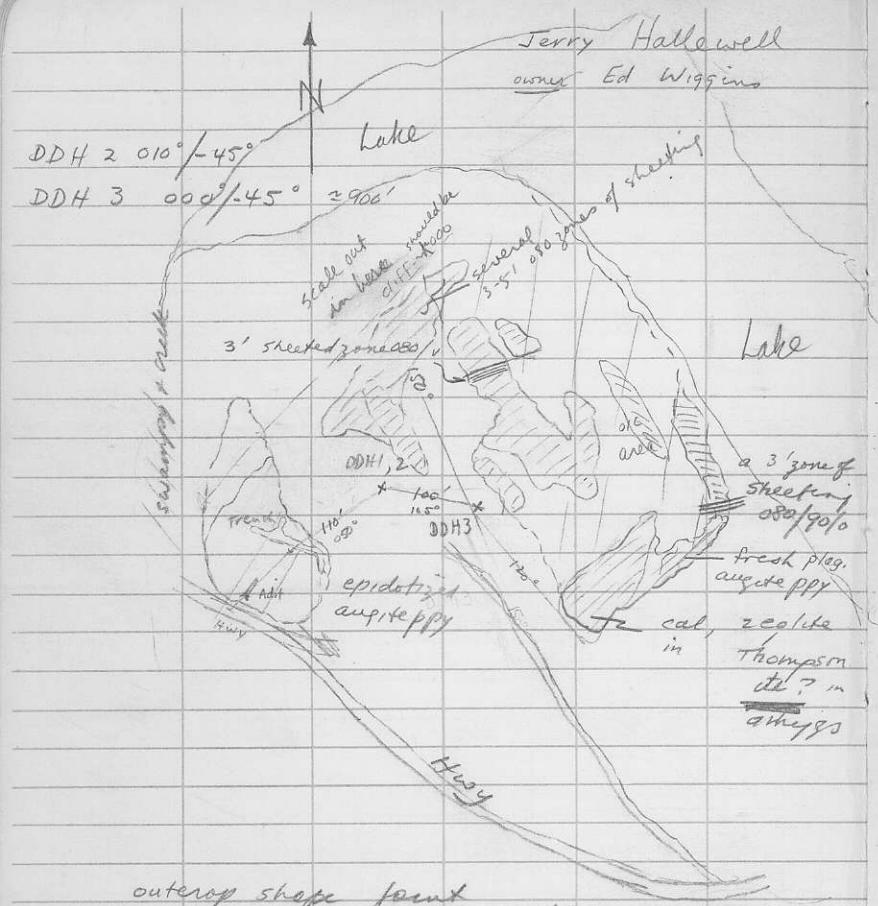
Flows appear to be < 10' thick

Flow top suggested by ∧ concentration of clongs.

amygs 130/28/1

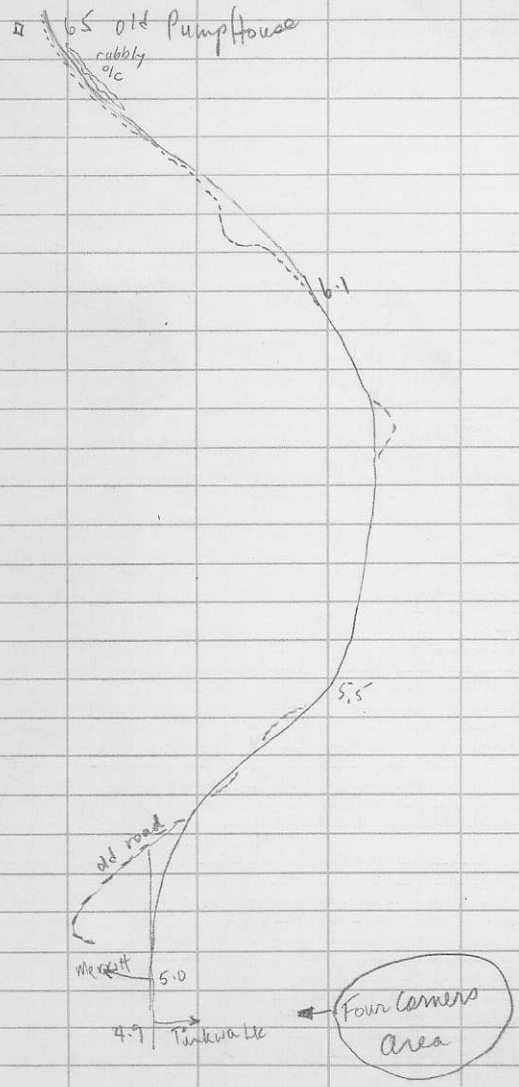
Much of the mafic is in the larger calcite knots which appear to be coalesced ~~amy~~ vesicle fillings in part & just large vesicles (or small lava tubes?) in part

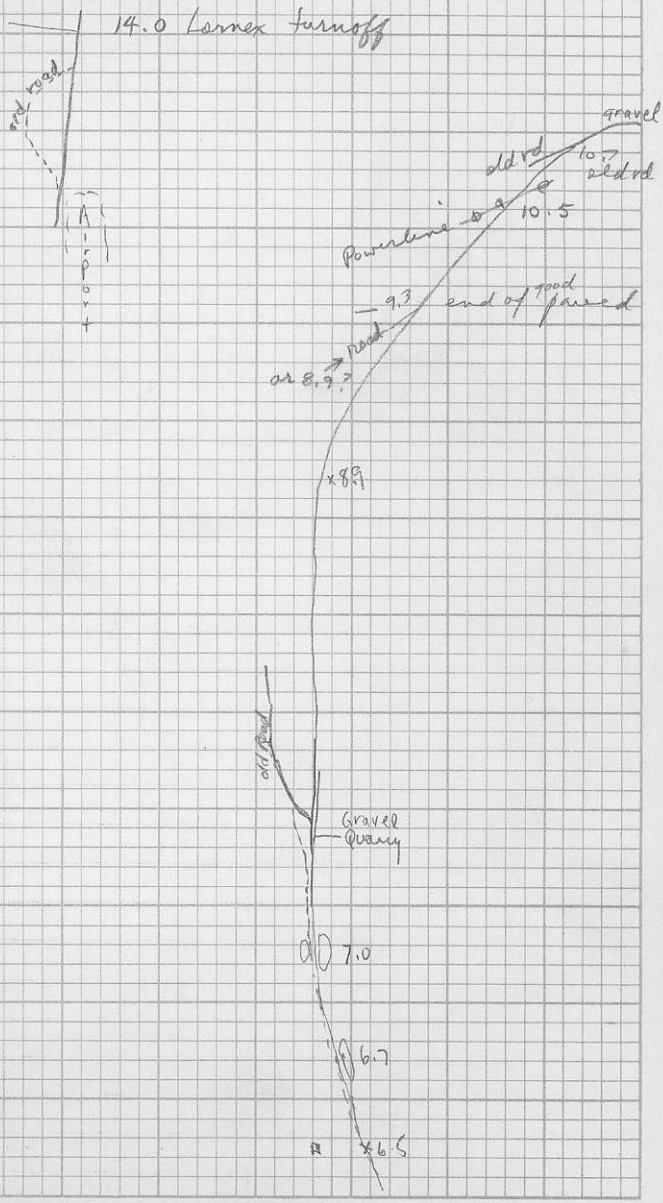
Lava matrix purple
Plag → epidote



outcrop shape joint controlled by set 145/80/1
030/60→80/1
080/80/2
veins 015/75/2
000/steep east

Checking Modifications of Hwy Route 24/8/73




14.0 Lornex turnoff
old road
A
gravel
old rd
10.7
old rd
10.5
Powerline
9.3
end of good paved road
or 8.9.7
x8.9
old Road
Gravel Quarry
7.0
6.7
x6.5

Native cu in vuggy areas w. green mineraloid in a zone of bx cemented by the mineraloid as far back as 450'.

26 Aug 73 19
Sunny, → cloudy, cool

Quintana Drilling – Continental

Cinch option

Crew
Jim Christie
Gordon Sinclair(?)
met Maitland Smith of Tonto Drilling

DDH2 0/B 270

Massive Kv to 275

Flow Top Volc bx to 339 with massive agglom? zones a couple of feet wide

Bombs? No just engulfed fragments

339 – 385 Massive Kv

385 – 463 Bx

463 – 523 Massive Dk gray Kv

as far as drill has gone so far

Poor flow banding suggests sub-horiz inclination of flows

The odd blue → green dessicating-type mineraloid seen last year is common & locally forms veins up to 1" wide – sample taken for analysis.

A black vfg basaltic zone at 505 – 513 has frags of volc. the frag phase altered rims and pyrite at their borders.
Native cu and pyrite on fracts in the volcs near the dyke.

27 Aug 73

Conten. Cont'd

526 → 546 thin bedded to laminated siltstone with inch-scale grit interbeds and carbon-rich "almost coaly" layers
Beds ~70° to core

546 - 556 "sand"

556 - 560 laminated siltstone

- 568 impure pst & silty interbeds

- 608 (as far as hole goes)

Pebbly grit and Conglomerate with sandy interbeds, Volc (Nicola) and granitic clasts - usually matrix separates clasts / often well rounded

near 608
- Rotten-looking zones may be regolith or something

DID NOT EXAMINE THIS CORE CLOSELY.
(spent 10 minutes 6 00 → 6 10 PM
after logging 1500'+ of JA core already)

* Mnlzd pebbles in cgl --- acid cpy on fr + dissem.

into C.R. ≃ 660' then ~125' of alt, ep veined Guichon - pome pyrite

see next page

Sunny, clear

Sept 4/73

608 - 628 Sandstone with carbonaceous lamellae. Beds 70° to core (loc. 60°)

628 - 645 Black laminated siltstone with local slump structures or deform due to compaction.

645 - 663 Brown rel. massive sandy siltstone - a few granitic pebbles after 662

633 about 3" of ~~salt~~ wtd rock then Guichon

some ep - qtz veing
mld greenish wh fs alter
mafic → chl
} propyl-itic (1)

a few aplitic stringers

a little pyrite on chl fr

zone split 669 - 680

Several other areas are split where propylitic alter is sl. more intense (say 1-2 (end)

780 EOH The rock is guichon but not very mafic-rich (20%) not v. close to hybrid contact.

Asarco - Rey Lake Showing

234
500
714 DDH 1 volc a few gran. dykes
to 525 then "granite" - 735' EOH

225
220 310
440 DDH 2 volc of various types to 285

315' < .25 Cu, .033 Mo → Bx → 606 EOH
volc, intr., sed rx

---

165 DDH 3 Sheared Int 246

---

80 DDH 4 Volc bx - 90
110 volc of var. kinds
160 to 398 EOH

---

20 DDH 5 volc → EOH (402)
82
120

---

110 DDH 6 Skarn - 263
341 volc - 340
365 635 EOH

DDH 7 Bx fingers out
upward + dips 60° NE