

GRADES
Good 7.5

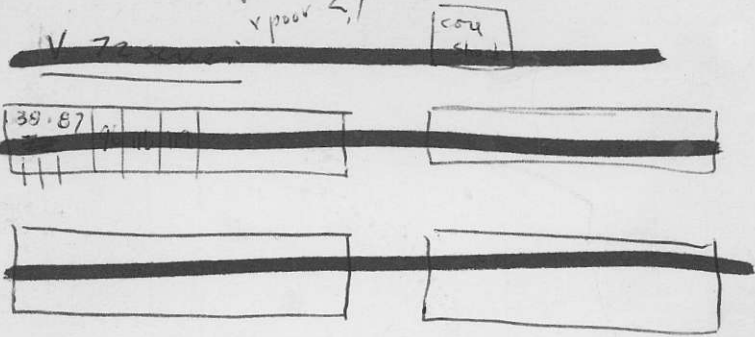
fair 2-5

poor 1-2

very poor 5/1

+ strong pyrite ^{appx.} > .75%

896522

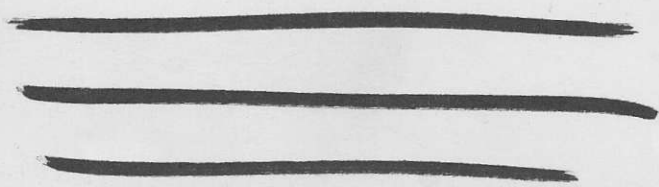


J.A.

105E

V-series

1972



Holes not logged by me -- check rock types

section end
 60 ^{(23) (25)} 1393-1440 DI → pBm
 ✓ 113 ~~117E~~ ✓
 ✓ 113 ~~117E~~ ✓
 61 120 ✓
 109 ----- 119 ✓ Gu
 57 ----- 121 ✓
 97 ----- 59 Gu

Shore on ↑

section Hole ~~117~~
 89 QSk? dykes in Gu
 930-1107; 1260 → QSk

89 29 all D12
 89 51 Gu-999 QBM 1300
 Gu + Ppy → EOH
 Ppy 1200-1300
 89 62 Gu → 1330 where is AP → EOH 60' of gauge
 Q Bm, Q Bm + P_b, Q Bm
 or 6p?

Rock Types Uncertain

85 - - - 7A qBmSk?

Qtz Kspar altn in 29?

85 - - - 21 Sk?

85 - - - 63 - - - Bm?

122 ✓

85 - - - 26 - - - D12 → 6p

85 - - - 39 - - - D12 → 6p

81 - - - 92 - - - Bm → Q Bm

81 - - - 54, 20, 10, 87 - - - Q Bm vs Porphyry

81 - - - 27 - - - 6p vs D12

~~check for faults~~ ... 108 - - - Bm or Q Bm?

NO D12

~~89 906~~ ~~101~~ ~~1187E~~ ... 32, 10A - Q Bm vs Ppy -- 24, 14, 86
 69E ... 35 " " "

FAULT LOC'NS 158N 69E ~~117~~ Q Bm? Bm?

- the way to do it is to go thru the logs systematically section by section plotting fault & shatter zones.
- Get gypsum loc'ns also

section ~~105E~~ 105E

1 box = 1200'
of 2 lines day

$\frac{1}{3}$ boxes = day

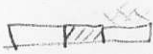
- 91 ~~1050~~ ✓
- 72 ~~1050~~ ✓
- 43 ~~1250~~ ✓
- 42 ~~900~~ ✓
- 41 ~~1100~~ ✓
- 58 ~~950~~ ✓
- 61 ~~700~~ ✓
- 102 ~~650~~ ✓

at least 600 into 43



Do every 3rd box in detail?

- say 6 days
22/8/73



~~15 3
19 2~~
Completed

7950 ~ 8000'
12 8000

6-7 days @

15
5
75
700
370
330

1200' / day

5 1/2 days @ 1500' / day

TIME ESTIMATED

Total dit 5 1/2 + 7 ≈ 15 days @ 1200' / day

2 1/2 + 4 1/2 + 5 ≈ 12 days @ 1500' / day

PRIORITIES - 89 then 105 then 69

SECTION
69E

≈ Ft of core

22N 69E

300

45

400

35

580

44

900

57

1000

66

1200

79

1000

670

58N 69E

~~6050~~
6050

5
~ ~~2 1/2~~ days
to 3 days @

1200' / day

~~2 1/2~~⁵ @ 1500' / day

Every 3rd box
in detail

— say 5 days —

HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-42

Date Aug 28/72

Property Bethlehem (JA)

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh			Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments

9B 371 EDH 1547 Quichon Throughout

- ① Quichon altm ~~2~~ 2 chloritic veins qtz-chl-cpy (pyrite?) ±bn w ser. halos (narrow) local intense ser. altm
- ⑤ sim. altm, some mafic-rich xenos qtz-mos₂-cpy-chl fr. local pink alt zones
- ⑩ mainly pink altm
- ⑮ mild arg. altm cpy-chl fr. cpy-mos₂-qtz veins w bleach halos
- ⑳ local pink overall like 15 reolite
- ⑲ sheared, chl & pink altm 2
- ⑳ ~~like 20~~ — in fact 31 on word & 29 fresh also mild arg altm, bleach halos
- ㉑ " " " qtz-ep; qtz^{bn} cpy veins chl-cpy-bn fr.
- ㉕ pervasive pink altm (2-3) after mid-box (1175)
- ㉖ back to normal
- ⑤ arg altm (1-2)
- ⑤ Rubbly - pink altm (2-3) ⑤4 → ⑤6 (over)

- 60 aplite stringers @ low \$ (start in 50)
 local strong pink altn
- 61) aplite + DI stringers
 62)
- 63 Guichon (1500) with aplite stringers
 + gypsum?
- 64 } Guichon + aplite stringers + gtz-ep veins
 65 }
- 66 mild arg altn (l). mafic → chl, gtz-ep
 veins
 wh. alaskitic stringers
 low \$
 (EBH)

Grade	
F-G	760
P-VP	860
F-p	1140
VP	1250 (Local Good)
F-G	1290
F-P	1480
VP	-EBH

Local shattering

CPY > 750
 BN ≈ CPY
 pyrite

PRIORITY - J.A.

Section 69

✓ 45 ^{6p(?) → Ap @ 1442}
Rock type

✓ 35 Rock type 6p(?) same as top of 45

Section 73

✓ 16A redrilled part ??

✓ 34 ^{Qbm → 6p(?)}
D12 + 6p (like 45, 35)
Ap → 6p? → Ap

✓ 46 Pb → D12, 6p
Ap → 6p? w. occ. ap dykes

Section 77

✓ 24 Rock type Qbm → Ap → Qbm
→ Ap

✓ 25 D12 6p? → Ap

✓ 33 D12 + 6p → Qbm → 6p? → Ap

✓ 86 Rock type all 6p?

Section 81

✓ 27 D12 + 6p Ap - 6p? - Ap - 6p? - Ap

✓ 87 Qbm → Pb 6p? → Ap

✓ 54 rock type Qbm

✓ 92 check Bm part Bm →
Qbm → Qsk

Section 85

✓ 109 Gu? → Qbm ✓

✓ 26 D12 → 6p? Ap → 6p

✓ 39 D12 → 6p?

Ap → 6p?

Section 93

✓ 29 D12. Ap → 479 Ap

✓ 51 Gu - 999 Qbm 1300 then
Gu + 177x 6p + Ap

✓ 62 Gu → 1330 then Ap
60' gauge? 6p

Section 97

✓ 28 D12 top of hole
Ap → 6p → Gu (59)

✓ 59 Qbm?
Gu → 6p cutting Gu

85 - 26 ✓

97 - 28 ✓

93 - 29 ✓

85 - 39 ✓

93 - 57 ✓

81 - 54 ✓

97 - 59 ✓

93 - 62 ✓

81 - 92 ✓

85 - 109 ✓

HIGHLAND VALLEY DRILL LOG SHEET

Gu-906 D1-1037 Gu-60H (18 94 EOH 1114)

Date ~~Nov~~ Sept 3/73

Sunny, warm
siriuss clouds

Property J.A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Grade - VP
Samples 1972 180
365 450 509 1110

Box Footage	Grade	Qz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mg. Frc	Min. Fr	Qiz-Ser. Zones	MoS ₂	Rock Type	Comments
					plve	qpm	wh							
94 109	vlq-	-	-	?	-	-	1-2 p	-	chl	?	-	-	Gu	
149 165	vlq-	-	-	?	waxy grn 22	✓	1p	✓	chl	1	-	-	Gu	Brownish 1 semi no 2+3
201- 218	vlq	-	-	no ✓ Bn	cream green 1-2 R	✓	1-2 R	✓	fr chl	0.8	-	-	Gu	Blue grt fg → normal → brownish
10														

- 1 ep ; box very rubbly but oxidn slight - some calcite veins
rust + black oxide on 35° fr.
- 2 110-121 Rubbly + gauge fg Gu or Brownish Gu
pink + grn altn (1-2), fresh (p) gr, play aplite stringer at 112
white (il)
- 3 135-142 Rubbly mafic fr, chl fs altn wh (lp) ep (l)
mal on fr in rubbly zone, ep-grt fr 25° 132 CR
Min Fr 1.0 fg or Brownish Gu
- 4 some rust on low fr; Rubbly 145, 163-4 165-168
chl-oxide fr 30°, 15° ; ep-grt ^{bl.}oxide fr 35° 105-6
- 5 grt + grt-chl veinlets w. altn halos in which close
in fs → cream ± chl, ep + further out cream + ep (30°)
chl-ep-grt-cpy (rusty runs) fr 0° 175
overall altn like 4 ; fg Gu
- 6 ep-grt zones + fr 35°, 30°, 10° ; altn like 5
fg Gu ; ep fairly abundant 227
231 CR
- 7 grt-cpy fr (rusty halo + cpy) 30°, dissemin. cpy
ep-grt veins 20°, cream + green altn zones have
1M-572-3322 mafic → chl + dissemin-ep. Rubbly 233, 243
- 8 brownish + normal Gu, foln 50° ;
- 9 pink + grn altn 2p ; Brownish + normal Gu, sl. rubbly look throught

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-91

Date Sept 3/73

Property J.A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M. Pie	M. Fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	gm	sl							
10 253 271	vlq	-	-	?	2-3 l	-	1-2 p	l	chl	1.0	-	-	Gu	
13 308- 326	vlq to lg	-	-	✓	1-2 l	3vl.	1-2 p	l	fr chl	0.8	-	-	Gu	altm gneiss mottled look
16 368 385	vg	-	-	NO BN	-	-	1l	p	fr chl	1.0	-	-	Gu	
19 422- 439	lg to vlq	-	-	✓	1l	dk grn 1l	1l	✓	fr chl	0.8	-	-	Gu	slip faces 30° slickensides 45°

Rubbly 253, 255, 285-9, 294-8, 318-322, 348-364, 396

rubbly + rusty

- 0 calcite veins 20, 30°, 60° ; ep-gtz fr w pink halo 60°
chl fr 15°, ep-gtz zones ; Rusty fr. 35°, 80° ; Gu
- 11 similar to 10
- 12 Box light - poor recovery? like 10 to 298 then almost fr
Gu ; a few aplitic stringers (35°)
- 13 aplitic stringers 35° ; gtz-chl-cpy-bn frs 50°
gtz-chl fr 10° ; shear has green ser + ep altm
chl-actin (?) veins have dk green ser altm halos 1 1/2"
wide @ 40° gtz-cpy 30° + ep-gtz 10° fr in aplitic
- 14 Gu - almost fresh throughout
- 15 Rubbly throughout, gony zones @ low & ? assoc pink + green
altm 2-3 + rusty CR 330
- 16 Rusty fr 20, 30°, 45° gtz-chl-ep fr 30° w. black halo
calcite veins 35° chl-cpy fr 30° ep-gtz fr zone 35°
- 17 like 16 but even fewer rusty fr
- 18 Gu, mottled by low intensity altm, local green zones
in which frs dk green (2) mafic → ep ; aplitic stringers
- 19 Rusty fr 0°, aplitic stringers or are they gtz-kasper altm zones?
60° w. assoc chl-cpy ; cal veins 40°
cpy, bn often mafic locally

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-91

Date Sept 3/73

Property J. A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration		Feld. Fresh	M qtz	Mn fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	grn wh							
22 473 496	vlg	-	-	✓	cream grn 1-2p	1p	✓	fr chl	2	-	-	Gu	fg
25 540 558	vlg	-	✓	No BN	" "	-	"	fr chl ep	0.8	-	✓	Gu	mottled
Rubbly 461 - 470, 526 - 530 slips low & → 30°, 552, 554													554

20 altn ^{waxy to} dk grn (1-2p) pink (2p) fresh (l) mafic - fr, chl
 ' Gu + bmesh Gu

21 altn like 20, loc. dissem cpy in green altn zones
 in the ~~rubbly~~ rubbly zone get loc pink + yell (2-3) 459

22 Rusty fr 0°, 20°
 bleached along fr 35°; gtz-chl-cpy-bn fr 20° each way
 with cream altn halos ep-chl ± cal fr 10°, 30°
 calcite veins 40°; cpy after chl-mafic

23 cream + green altn (1-2) to 502 then pink + yell wh altn
 24 (2-3p) to 515 where it tapers off to 495CR
 waxy green ser (v) ... another such zone 523 - 530
 Calcite veins common in the alt zones 10, 20, 35°
 ep-gtz veins 10°, 30° w. blech halos; CR fg Gu

25 yell + pink altn zone + rubbly zone (554-6)
 mottled because pink + green altn assoc w low &
 fractures - fresh in dk gray; loc gtz-kspars peg. veins 15°
 chl-ep-cpy-MoS₂ fr 30° ep-gtz-py. fr 30° 556
 dissem pt after chl mafic; cal-och. hem. MoS₂ vein
 in alt. zone 35° + gtz-ser-bn fr 25° 540CR

1M-572-3322 26 pink + yell altn zones 559-61, 585-6 elsewhere altn
 27 altn mainly fresh v. loc. greenish wh to pink (1); fg Gu.
 (contact 15° like 25)

HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-91

Date Sept 3/73

Sept 4/73 Sunny, clear
warm-lovely

Property J.A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M. a. fr	Mi Fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	grn	wh							
37 722-740	vlg	20	-	?	-	-	1-2 #2	✓	fr chl	0.6	-	-	Gu	fg
40 796-814	vlg	-	-	?	-	-	1-2 #2	✓	fr chl	0.7	-	-	Gu fg	mottled gray & wh
43 846-865	lg	-	-	✓	-	-	1-2 #P	✓	fr chl	-	-	-	Gu	fg → normal
42 424														

37 bleaching adv to qtz-chl-ep fr 0°, 30°; chl-ep fr 50°
 qtz-ep-chl vein w. cream alter halo
 38, 39 sim. to 37 footage → 781

40 ep-chl fr 15°; cream alter assoc w ep-qtz zones 20°;
 qtz-chl fr 15°;

41 ep-qtz frs (Low &) -- alter like 40

42 qtz veins; ^{50°} chl-actin ^{tour?} vein w. epidotized border 40°
 qtz-chl fr 35°
 ep-qtz zones 35° chl fr 30°
 alter generally mild but pink (2) locally; f-mg Gu

bn-chl fr some ep
 35° cut by
 qtz vein

43 ep-qtz zones in aligned bulbous "knots" 15°
 ep-qtz veins 15°, one vein has ep-qtz-
 cpy-bn w. chl-epy knot "halo" in cream alter
 zone - 858 856 CR
 cut by ep-qtz zone 15°

it is 6PM - to hell with it got to 865

44 ep-qtz fr, ep-chl-actin? tour? veins 40° w. ser-qtz halos
 vlg-872-884, chl-ep fr, normal, some brush ore - contact
 40° Rubby 872-4, 894-6 overall nearly fresh 878

45 mottled fr, cream-2 adv to ep-qtz No sulphides. Apstiriqua

HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-91

Date Sept 4/73

Sunny, clear

Property J.A.

W. J. McMillan

warm
NICE

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M ^g fr	Min Fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	grn	wh							
46 901-6 Gu 977	NIL	-	-	-	gact to near dyke	1-2 2-3	-	fr chl	0.8	-	-	-	-	→ Gu
46 906- Dyke 19	NIL	-	-	-	cream to white loc. ep.	1-2 1-2	-	chl	1.0	-	-	-	-	→ B ₁ Qtz-plag PPy
49 954 972	NIL	-	-	-	cream 1-2 P ₉₀	1-2 P ₇₀	-	fr chl ep	NIL	-	-	-	DI	
<u>Pebbly</u>	903-8													

46 chilled DI contact 906 → 912 pink w. cream alt
 Gu ^{chl} ep fr, chl fr 10°, 35° } Gu + dyke of fs phenos
 50° } 911 918 dyke
 after 912 matrix is gray + getting gray green as
 it xilled more + is speckled w. chl mafic

47, 48 zeolite 20° fr veins also 49 → 51

47 fs altm greenish wh (1p), wh (1-2 l), ep (r)
 mafic → chl, ep Ep fr common, a few ep-qtz veins
 DI

48 Now looks like bp; phenos altm as in 47, matrix
 fq, holoxline, shot thru w. chl, ep (dissem in-
 ated) 955

49 Matrix speckled w. mafic, vfg, 30%
 Dissem. ep in matrix but not really prominent

50 cream-pink (1-2p), calcite 0-20° 990
 min fr - NIL

51 Min Fr 2 - ep fr 35°, 40°, 15°
 matrix → pink phenos → pink + green (1-2)
 (1-2)

1M-572-3322

vlg - one very welcome fr has ep-chl + beautiful
 clots of bn 25° BN > No Cpy

HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-91

Date Sept 4/73

Property J. A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mg Fe	Mn Fr	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments	
52 1009 1025	NIL	-	-	?	see below			chl cp		5	-	-	DI		
55 - 1075	vlg	-	-	NO BN	cream + 1-22 ? ^{rn}	grainy wh 1-2 L		chl fr		0.8	-	-	Gu	Mottled or green actn	
58 1114 EoH					EoH								EoH		
					slip faces 0-20°										
Rubbly + Gassy				1015-1026, 1030, 1037, 1053-5											

52 pink(2) to 1012 then cream to yellow (1-2 p) zeolite in 53

53 DI has ophan. gndmass after 1024 - Contact - chilled, 20° at 1036

vlg Gu - actn wh (1p) calcite veins 35° hauline fr (disconten.) w. cpy

54 qtz-chl-cpy fr 25°, 35°, 50°; slip faces 80° - slickensides 75° to axis ↓ on och hem, calcite

55-58 a bit of zeolite as veins & on fr.

55 slip faces 50° slickensides 45° to axis (chl) chl fr 45°, 20° cpy in chl mafics 1071 CR, mottled

56 altn pink + green 1-2 to 1080 then altn almost fresh; one ep-gtz vein 35° has qtz-cpy in its core + dissemin cpy/mafic outward

almost fresh (p) loc. wh (1-2) pink (2) bxt'd, rehealed 1089

1M-572-3322 57 one qtz-ep-cpy - MoS₂ vein some cpy in bleach halo on chl fr 30° + in altn adj to ep-gtz vein

HIGHLAND VALLEY DRILL LOG SHEET

Samples 1972: 305, 1189 Hole V72-72 Date Sept 2/73
 Gu-743; D1-825; Gu → EoH % 221 EoH 1297 Try to get to 800

Property J. A. W. J. McMillan
 B.C. Dept. of Mines and Petroleum Resources

Grades P-F throughout (VP in dyke)

Box Footage	Grade	Oz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M _{gr} fr	M _{fr}	Oiz. Ser. Zones	MoS ₂	Rock Type	Comments
					pink	grn	wh							
221-240		oxide zone					not sure		20% fr chl	oxide zone			Gu	
275-293	lg	-	?	NO BN	-	2L	Yell-wh 2-3	✓	fr chl	0.5	-	-	Gu	overall gray looking
327-345	vlg	-	✓	NO BN	-	1L		✓	fr chl	1?	-	-	fg Gu	Gu → Gu after 335 - dk gray
382-400	NIL	20	-	?	-		Yell-wh 2-3 after 389	✓ to 389	fr serv	2(fr) (alt)	-	-	Gu	normal

Rubblly 238-9, 247, 257, 267, Yell altn 276-80, 294-8; 309-10; 349-50, 381, 413, 417

- 1, 2 all fractures rusty
- 3 Freshens up about 270 - no more pervasive rust altn slight, rock dark gray mel-cpy on fr. in a green-looking altn zone.
- 4 chl-cpy fr 20°; bi-cpy fr 40°, rusty fr 40°
50°
- 5 Gu → fg Gu (after 300 approx) used to be pyrite perhaps
- 6 Gu → fg Gu; altn like 4 314 CR
- 7 Rusty fr 0, 40°; gtz-py fr w. pink halo (narrow) 35°
dl-py fr 35°, chl-py-cpy fr 35°
- 8 very rusty 349 → 368 altn like 7 but loc. yell wh
(2-3) zones 375 → 377; Calcite veins 75° ... vlg Gu → fg Gu ~ 350
- 9 fg Gu ... vlg ... altn like 8
- 10 Calcite vein 40°
fr 30° - black - MoS₂? --- others black + cpy (30°)
Some slip faces slickensides 45°, 9tz rock-hen zone 80°
Several carbonate veins at 40°

1M-572-3322 almost fresh Guichen, looks barren as hell. cut by carbonate veins 30° 45°
 12 Rusty fr 10°, 30° overall fresh Guichen, loc. pink + red wh zones. vlg cpy-bn fr 15°; chl-mo₂ 15°; 9tz-dl vein 10°

HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-72

Date Sept 2/73

Cloudy, dammed cold wind
NOT PLEASANT

Property J. A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mg fr	Mn Fr	Qtz. Ser. Zones	MoS ₂	Rock Type	Comments
					pink	gn	wh							
13 459				NO BN	12	1-2		✓	fr	1	-	✓	Em	normal - 450
477	vlg	-	-	BN	12	2		✓	fr	1	-	none	Em	then fg
16 492				NO BN	see below				fr	1	-	-	Gu	fg ≈ 500
509	vlg	20	✓	BN					ch ser	1	-	-	Gu	then normal

Rubblly 440, 445-6, 449-52, 455, 457-65, 467, 472-3, 485, 490, 514, 517, 540-3

13 Rusty + carbonate veining in rubblly zones; 445 } CR
457 }
chl - cpy fr 15°
ep-gtz zone 25° ; w. pinkish altn halo, calcite 25°
chl - cp - cpy - MoS₂ fr 20°

14 altn like 13 -- Gu
15 " " " --- fg Gu (-Bmist almost - has blue gts) foln 50° to core --- vlg

16 almost fresh to 500 then pink (2) to 502 then
yell-wh + pink (3-2) to 510 [has gtz + carbonate veins]
chl - py fr 80°, 10° ... black min-gtz-cpy fr 25° in altn zone ; chl-cpy - bn fr 15°, 70° ; ep-gtz - chl vein 20°

17 altn variable from pink to fresh w-pink halo
(vlg) to pink + green (1-2) .. ep fr 25° ... later zonal. on some fr
calcite veins 25° - gtz - cpy ; chl-cpy fr 40° w

18 pink altn halos
1M-572-3322 mixed fresh zones + greenish-yell-pink zones (2-3)
(vlg)

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-72

Date Sept 2/73

*start to rain now
also is 5:30 PM.*

Property J.A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources
*Sunny,
Sept 3/73 after lunch -- getting*

Box Footage	Grade	Qz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M ₉ fr.	M ₁₀ fr.	Qz. Ser. Zones	MoS ₂	Rock Type	Comments
					pink	gn	wh							
19 544-562	vlg-	-	-	?	see below				chl	?	-	-	Gu	normal
22 597-615	vlg-	-	-	NO BN	2-BR (odd) to 606			✓ after 606	fr chl	1.5	-	-	Gu	"
23					cream + green 1-2 l		1 p	l						
24					" "		2 l	1 p	l					

Rubby zones 547-8, 551-6, 563, 565, 575-6, 583-4

Box 21 very light suggests poor recovery

19 mixed fresh + pink + green (1-2) to 552 then pink + yell altn (2-3) to 565 (with short interruptions after mixed fresh and pink + green to end Box 20 - Box 21 about half + half)

ep. fr 30°

20 fr w. bleaching 35°; chl-cpy fr 20°; gtz vein 25° vlg- cpy; NO BN - Gurchon

21 ep-gtz veins w. salmon pink (zonalite-looking) altn halo or perhaps they just occur together (I think this is so) grade NIL

weather worsening --- to hell with it ---
now 5:45 PM --- got to 596'.

22 gtz-chl-cpy fr 30°/35°, chl fr 40°, bleached fr 25°
one grain of cpy seen

1M-572-3322 23 Rubby 629-632, 634 Normal → fr Gurchon of 20 → normal ± 630 (faler 40°)

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-72

Date _____

Property J.A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mg f.c.	Min. Fr	Qtz. Ser. Zones	MoS ₂	Rock Type	Comments
					pink	gn	wh							
25 650 667	vlg	-	-	no bn	1- 2l	-	-	P	fr cl	1	-	-	Gr	mg
28 701 720	vlg-	-	-	?	-	-	1p	✓	Fr	0.8	-	-	Gr	mg → normal
30	D Y K E (D I)								B E G I N S					

25 Salmon pink + ep aplitic-looking; altn zone contact 35° ~ 6" wide cpy after mafic loc. 660 CR ep-gtz fr 35°, 15° - some with pink altn halos
zeolite 0 → 70° in 26, 27

26 altn like 25 but wh (1-2) also; a salmon pink altn zone has mafic → chl, actin, cpy + gtz-cpy ± actin. fr (10°) --- vlg

27 vlg+; gtz-cpy fr 35° w bleach halos; chl-cpy fr 35°; Min fr 1.0; fg → Bronck Gr after 690 (appx) altn like 26
Rubby --- 673 718-19

28 chl-gtz fr 35° (some w bleach halos) bi fr 35°; zeolite (low &)

29 chl fr 10°; chl-cpy fr 35°; altn like 28 Fair number of low & slip faces (calcite) Bronck Gr

30 gtz vein w ser-gtz-cpy halo 35°; chl-cpy fr 50°; slip face 15° slickensides 10° cream altn 1-2p to 743 then chilled pink gndmass ppy (contact ~ 40°) in 4' gndmass becomes gray-green. Some dissemin cpy in gndmass. A few ft later the matrix is distinctly green 752

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-72

Date Sept 3/73
Now 60% cloud cover

Property J. A.

W. J. McMillan
B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M ₉ fr	Min. P ₁	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	grn	wh							
31 752 768	vlgt	-	-	✓	1-2 2	-	1p	-	chl ser	1	-	-	D1	H6 B1 Qtz plag ppy
34 805 822	vlgt	-	-	No BN	cream 1-2 2	-	1p	-	chl ep	1.5	-	near ✓	D1	
37 857 874	vlgt	-	-	✓	cream 1.2	-	1l	-	fr chl cpy				D1 → Gu	
	Rubbly				860, 865, 6,									

31 ep-chl-cpy - bn (2) fr 10°;
ep-qtz fr 30° w. pink alt halo
calate veins 30° (slickensides 45°) 753
embayed
qtz, mndgn

32 chl-ep fr 25°; dissem. cpy; salmon pink alt makes
784 d. after 775 (1-2p, 3l)
gid mass / plag pheno segr difficult ---- lg -
qtz-ep-cpy-bn fr 35° (spectacular - looking but thin)

33 after 800 altn returns to mild wh(1p); Mufic fresh → chl
matrix of ppy now vfg but holoxline
The beginning + end of pink alt signal the first
& last a zeol. fr --- I suspect the pink alt is zeolitic

34 → 36 zeolitic fr @ low X's, 40° - veins

34 qtz-chl-cpy fr 30°; chl-ep-cpy fr 30°;
qtz-ep-fr w. cpy knots 35°; ser-cpy-moS₂ 50°

35 ep. fr 35°; pink alt (2p)

36 like 3 but pink (1-2) near end of box

37 chilled matrix again after 860; Dissem. cpy;
chl-ep fr 15°; qtz-cal-cpy fr 35°; qtz-ep-cpy-bn fr 25°
chilling less pronounced at this end - contact
at 874' w. fr Gu.

HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-72

Date Sept 3/73

Property J. A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mg. Fr.	Min. Fr.	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	gr.	wh							
40 910-929	lg-	-	✓	No BN	cream + green 1-2	1-2 P	-	chl	1	-	-	-	Gu	mg w. fg zones (xenos?)
43 961-977	vlg	5	-	✓		2l P		chl	0.6	-	-	-	Gu	fg
944-6, 950, 953-4														
Rubbly 884, 886-9, 891-2, 911, 916-9, 933, 939-41,														

- 38 ep-gts-bn fr 30°; chl-ep fr 25°; zeolite low & chl-cpy fr 40°; chl fr 35°; gtz-chl vein 35° calcate veins 30° (each way) altn (1-2p) wh mafic → chl, cpy --- fg Gu --- vlg + 899CR
- 39 ep-gts zone; fg Gu w local incl of mafic knots chl-bn fr 15°; altn like 38 -- vlg 908
- 40 chl fr 20°; ep-gts frags in rubble at 916-7; chl-cpy fr 30°; chl-py-cpy fr 35°, gtz-chl-cpy fr 0°, gts-cpy fr 35° 939CR
- 41 altn wh 1 → fresh; mafic fr, ep, vlg; fg-mg Gu
- 42 fg-mg Gu; altn like 41
- 43 gts-chl vein 20°, chl-cpy-bn fr 20°; gtz-chl vein 30° cuts ep-gts zone 25°
local bx zones cemented by gts-chl-cpy 976
- Rubbly zones 979, 984-7
- 44 Similar to 43
- 45 altn wh (l) fresh pervasive local wh (1-2) --- fg Gu epidote in 43-45 but not all that abundant

HIGHLAND VALLEY DRILL LOG SHEET

Hole v72-72

Date Sept 3/73

Property JA

now sort of chilly
later - clearing again

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration		Feld. Fresh	M ₉ fr	Min Fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
						wh							
46 1010 1028	vlq	20	-	?	yell-green 2p	ll	xl	chl	?	-	-	Gu	mg
49 1062 1079	lg-	-	-	<	cream + green 1-2	ll	p	fr chl	1	-	-	Gu	fg
52 1112 1131	vlq-	-	-	?	-	ll	p	fr chl	1	-	-	Gu	fg → mg
1061, 1130, 1153													
Rubble 1011-17, 1020-21, 1024-5, 1028-9, 1034, 1044													

zeolite fr - low x in 47 + 48 a few

- 46 ep-gtz zones 30°; ep fr 10°, gtz-chl vein
- 47 slip faces 35°, slickensides 45°; chl-MoS₂ slips, vlq, mg Gu
yell alt. 2p loc. ep. alt. of fs; loc. wh 1 → fresh pervasve
- 48 pink (2) near rubblely areas; generally wh(1) → fresh
mg quartzon; gtz-cpy fr 35° 1060 CR
- 49 ep-gtz fr 25°, gtz-chl fr 20°, bn-ep fr 10°;
ep-gtz-MoS₂ fr 10°; chl-bn-cpy fr 25° 1063
- 50 min fr 2; vlq; alt. like 49 cream + grn
alt.
- 51 alt. + mantzn like 50; one ~~ep~~ ep zone 6" wide
-gtz
contact 30°
- 52 ep-gtz-chl vein 15°; ep-gtz-chl fr 25°
- 53 like 52 to 1145 then olive green ~~3~~ 1147 (3) → 1150 then (1-2) to 1153
+ mafic → ser
- 54 Sim. to 52 but local cream + green (ep) (1-2)

HIGHLAND VALLEY DRILL LOG SHEET

Hole 572-72

Date Sept 3/73

Property J.A.

W. J. McMillan
B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Oz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M ₂ Fe	M ₁ Fe	Oz.-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	grn	wh							
55 1171 1190	vlq slip	10	-	2	cream + 1-2	grn 1-2	wh 1-2	✓	fr chl	2.5	-	-	Gu	fg
58 1226 1244	vlq-	20	-	NO CPY ?	-	waxy 1-2 to 1235	wh 1-2 offer	✓ 1235	fr chl ser	2.5 ?	-	-	Gu	fg-ng
61 1281 1297	vlq+	20	-	NO CPY	1-2 2	-	wh 1-2	l	fr chl	1	-	-	Gu	fg
EOH														

55 ep-gtz fr 30° ep-gtz zones 30° (altm cut from fr really) gtz-carbonate veins 80°

56 Rubble 1205-7, 1226-7, 1231-4, 1282-3 1197 OR
altm wh 1-2 to 1195 then "fresh" to 1203 + wh 1-2 again
fg Gu ~~no Cu sulphides seen~~, ep present
one fr 30° has chl-cpy = bn

57 Rel fresh to 1220 then closely fr. with cream fr altm
+ ~~altm~~ ep-gtz veins + altm to 1222 then waxy
green. altm 2-3p to end of box - grad decreases to 1-2
calcite veins 15-25° and ends ¹²²⁷ at 1235

58 slip faces 25 slickensides 45° Bi - bn fr 30°

59 Mostly "fresh"; vlq-; fg Gu

60 gtz - bn - chl fr, ep fr, chl fr, mostly "fresh"
local pink + cream (2), vlq-, fg Gu

61 ep-gtz ~~fr~~ ^{veinlet} 40° w. pink helo
ep-gtz fr 15° ep-chl fr 35°

1M-572-3322 meandering gtz vein w. ep-dotzied border
(0-35°) gtz-chl-bn 30° fr

HIGHLAND VALLEY DRILL LOG SHEET

VP-P to 500; P-F to 700
 P-VP to 1450; VP to EOH
 Property J. A.
 DI to 417 then Gu

Hole V 72-43
 7B 322 EOH 1559

Date Aug 31 / 73
 Sunny → cloudy →
 Hail showers
COOL

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M. Fe	Mn. Fr	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	grn.	wh							
1 322 340	NIL	-	V 1/2	-	1-2 2	grn. wh with 1-2 l	-	sr chl	7	3	-	DI	bi qtz plag ppy tan grd mass 40%	
4 376 394	vlq	-	V 1/2	NO BN	waxy grn 2-3p	1-2 l	-	chl PY cpy	?	4	✓	DI		
7 431- 449	vlq	-	V 1/2	NO BN	-	1p	✓	fr chl	0.8	-	-	Gu	gray appearance	
8 like	7													
9 like	7													

1 qtz - MoS₂ - PY fr 35° pyrite - qtz veins in ser.
 323 CR
 347 u
 qtz - pyrite zones 35°
 (30°)

Rubbly 323, 338-339, 360-1, 370, 380-386 then slip faces to 400
 415-417, 422, 425, 432

2 could almost be called bp -- ser. qtz 5
 dissem. PY. Grade NIL -- altn gm-wh (1p)

3 altn gm-wh (1-2 l), wh (3 l), pink + green (2 l)
 mafic → chl, ser yellowish

qtz-cpy-py-MoS₂ fr 50° cut by cpy-qtz fr 15°
 qtz-ser 7 grade vlq cpy > BN (NO BN)

4 pyrite ± chl fr 10-20°; qtz-MoS₂-pyrite 40°;
 pyrite-qtz in ser-qtz-py zone 35°

5 altn fresh → wh mafic fr → chl grd mass brown gray
 sph. 20%

6 417 Dyke contact ... chilled zone ≈ 1.5 feet
 Guichon -- bi-cpy-py fr 10°; pyrite-qtz-cpy in ser-qtz-
 altn wh (2p) PY. zone 15°

Rubbly zones 433-435, 450-1 480-485

450CR

1M-572-3322 7 qtz - pyrite veins, fr 20°, chl-pyrite 25°
 pyrite-cpy fr 50° qtz-cpy fr 30°

HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-43

Date Aug 31/73

Property J. A.

W. J. McMillan
B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M ₀ Fe	M ₁ Fr	Qtz. Ser. Zones	MoS ₂	Rock Type	Comments
					pink	grn	wh							
10 485-500	lg-	-	✓	✓	-	-	1 to 2p	-	fr chl	0.5?	-	-	Gu	
13 537-555	lg	10	✓	NO ✓ Bn	-	-	1p	✓	fr chl	0.5	-	✓	Gu	Good stuff local fg zones contact 25°
16 594-610	lg-	10	✓	NO Bn	-	-	1-2 p	-	fr chl	0.5	10	✓	Gu	fg zones - xenos?

Rubbly zones; intermittent 493-500; 506, 508,
 10 calcite 30', chl-cpy - bn fr 25° ^{cut by} qtz-cpy fr (30°); zeolite fr 10'
 qtz-chl-cpy fr 20-30°; chl-cpy-py-bn fr 75°
 11 ep-qtz-cpy w ser-qtz-cpy-py halo 35°
 bxd qtz-cpy-MoS₂ vein w 9 calcite xls filling spaces
 altn like 10 --- lg-
 12 like 10 --- good Gu -- bleached ady to ep-qtz zones
 lg- but pink (1-2L) + fr @ 40°
 # zeolite fr -- low # -- in 14 x 15
 13 qtz-cpy-MoS₂ vein 10°
 cpy after mafics, bi-cpy fr 20°, chl-bi-cpy fr 30°
 547 P₉/Gu cont. - 542 fr + CR
 14 sim. to 13 but pyrite picking up again -- chl-py-cpy fr 10°
 15 sim. to 14 --- lg-
 16 cpy-qtz vein w ser-qtz-cpy halo 35° qtz vein 50°
 loc. fg Gu has drusem cpy chl-bi-cpy-MoS₂ fr 30°
 chl-py-cpy fr 10, 35° 607 --- zeolite present.
 1M-572-3322 17 ep-qtz zone 25°, chl-bn-cpy fr 10° otherwise like ^{mineral}
 17 -- altn wh (1p) → fresh --- lg 620 CR
 18 like 16 --- lg 638-

HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-43

Date Sept 2/73

A Beautiful sunny day

Property J. A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M _g Fe	M _{in} Fr	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	gn	wh							
19 649 667	vlgr	-	✓	NO Bn	2R	-	1-2 L	✓	fr chl ep	0.4	-	-	Gr	qtz blue to bss then, upper fg qtz-poor
22 706 722	lg-	-	-	✓	see below				fr chl actin	0.4 to 712 ? later	-	✓	Gr	

19 pink zeolite vein 3/8" @ 25°

35° { ep zone, some dissem. chl fr 10' chl-cpy-pyr fr 35°
B1 will { kpy. - fr remnants pink ± chl-ep

ser-chl-och lam fr 40° some have slickensides = strike slip

pyrite frs 70° → 50° some = dipslip

pink alt. zone could be a dyke 659 CR 664

Rubbly 655-8, 712, 1740-1,

20 zeolite vein 0° ; qtz-poor rock ; altn like 19 ;
epidatized zones 666-669 ; 674
qtz-cpy-MoS₂ stungers ~~40°~~ 40°, pyrite, vlgr or lg-

21 chl-cpy-MoS₂ fr 50° ; qtz 10% closed interstitial
vlgr zeolite 0, 20° veins, zeolite vein 15° ; altn like 19

22 ep-qtz veins 30° chl-MoS₂ - cpy fr 80°
qtz-chl-cpy-bn fr 350 chl-cpy fr 50°
green altn (1-2p) to 712 then rather gray-looking
+ "fresh" --- mntzgn drops off sharply in fresh zone
of fr. decreases + the ones present are ^{poorly} not mntzgd.

23 ep zones w actin(?) - chl knots + chl-ep-ser altn
habes 50° ; chl-cpy-bn fr 30° 738 CR
actn - wh(lp) fresh(?) - (oc. with (2) chl-cpy-pyr fr 0°

24 altn like 23 -- Gives rock a mottled gray + wh + green aspect

1M-572-3322

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-43

Date Sept 2/73

Property JA

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M ₉ f.c.	M ₁₀ f.c.	Qz. Ser. Zones	MoS ₂	Rock Type	Comments
					pink	qm	wh							
25 760-778	lg ⁵¹ lg	-	√ _{1/2}	No √ Bn?	cream 75G onward	-	-	-	chl py	0.3	7	√	Gu	qtz - poor or porphyry?
28 812-827			√	N ¹	cream → wh 2P				chl ep py	loc.	all → ep		?	ppy?
30	pink or ep.				alt. in rubblely zone									
	chl - cpy fr 70° mixed normal + Ag				Gu - contact				chl - ep - cpy fr 45° 40° sharp				ep	ft. fr 50° (bleach halo)

Rubblely 772-3, 826, 848-851
857 → 863 - 863

25 chl-py-cpy fr 75°, 20°; chl-py fr 35°, qtz-MoS₂-cpy fr 70°
qtz - py - cpy fr 30°, ep-zed(?) vein 30° cut by
py-qtz fr w. ser. halos + both cut by barren stock-
work qtz veinlets **763** ser-qtz-py zone 35° cut
by qtz-chl fr 40° (each way)

26 epidotized zones 35° w. pink alt. halos + some have
core veins Every irreg borders - possibly void-filling
of pink zed. (Kspar?) - chl - py **785** alt. like 25
min fr 1 grade vlg

27 min fr grade alt. sim. to 25
alt. makes rock qtz - poor + gives it a porphyro-
itic look in mafic phenos. in uniform cream matrix
zeolite fr 10° ... even where alt. (28) wh. the rock
seems to be crowded ppy.

28 chl-py fr 0°, pyrite 60°, ser-qtz-py-cpy fr 35°
chl-ep-py fr 35° LOTS OF EPIDOTE
loc. ep replaces mafic but more commonly replaces
the "matrix" of the ppy **822** **827 CR**

29 cream alt. stops at 840 - after that rock is
"fresh" normal Gu! unable to see any suggest-
ion of cooling or other dyke contact effects but
alt. to fresh xtn very sudden.

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-43

Date Sept 2, 1973

Property JA

W. J. McMillan
B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M. Qtz. Fr	Min. Fr	Qtz. Ser. Zones	MoS ₂	Rock Type	Comments
					Pink	Gm	wh							
31 861 879	lg -	-	✓	✓	-	-	lp	✓	fr chl	1	-	-	Gu	fr-872 than normal
34 919 938	lg	20	✓	≥	pink + green 2p + 930		2p often 930	-	chl	0.3	-	✓	Gu	fg + normal

31 qtz-cpy-chl fr 25° (each way) 60°; ~~chl-cpy~~ 879CR
chl-cpy-py fr 30°

Rubbly zones 888-90, 907, 914, 920, 925-7 (slips 40°), 946-8

32 zeolite 0-20°, sh. x line calcite 35°
altn like 31 loc., pink (2) in zones w. chl-cpy,
py-cpy, ep-chl-cpy, qtz-ser(?) - cpy-bn frs 20, 30°
+ qtz-mos₂-cpy fr 0°

33 qtz-mos₂-cpy vein 10°, pink altn 2p, Gu.
fair bit of epidote

34 qtz-chl-cpy ± bn fr 0-20°, 30° (other way) bn-chl-epfr
ep-chl fr 35° qtz-ep-bn-mos₂ vein in ep-qtz-chl
dl fr 10, 50° qtz-chl-bn-mos₂ fr 10° zone 35°
ser-chl-py-cpy fr 0° slickensides 45°

35 qtz-cpy-bn-mos₂ vein 20°, Gu, ep, lg-, altn like 34
in vein core dissem. near vein border

36 zeolite-stockwork w. ep locally; vlg; ~~bn~~ mos₂, cpy,
rock fg Gu - altn like 35 to 920 then "fresh" bn
cpy ≈ bn ??

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-43

Date Sept 2/73

V72-43

Property J.A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mg Fe	Min. Fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					Pink	qm	wh							
37 976 993	lg-10	-	<	-	-	2l 1p	✓	fr chl	0.3	10	✓	Gu	fg	
40 1028- 1046	vlg	4	<?	cream- pink 2p	-	2l 1l	-	chl	0.5	?	✓	Gu	fg	
43 1082 1100	lg	4	≥	-	-	1-2 p	-	chl	0.5	-	✓	Gu	fg + normal	
44	Normal Enecheron, almost fresh - vlg													
45	pink altm after 1120 (level 1-2) chl-br-cpy fr 30° vlg → lg-													

~~37~~ Rubby 995; 993-5 pink altm → 998, 1082, 1149-57

37 gts - chl-br fr 30-35°, Mos₂-gtz - chl-ep fr 25°,
gtz - chl-ep-br fr 0, 20°; gtz-ep veins w. ser-gtz-
ep halos 35°; gtz-chl-br-cpy fr 0°, gtz-ep-chl-br vein
15°

38 fg + normal Gu; altm pink (2l), wh(H) → fresh (p)
min fr 1.0 - vlg - ep.

39 fg br, min fr 1.0 zeolite, ep, chl-gtz-br 10°
vlg

40 gtz - some ep, ser, br vein 40°, gtz-chl-MoS₂ veins 35-45°
ep-gtz zones 1w ep-ser-gtz halos almost contin-
uous from 1032-1040 in ep. v. abundant
chl-ep 0°, gtz-chl ep 30° fr.

41 altm wh(2) to 1055 then "fresh", ep fr 35°
gtz-br-cpy vein 25°; chl-cpy-MoS₂ fr 15°, cpy >, lg-
1062 CR fg Gu sticksides 45°

42 altm wh(1p) fresh (l) Min fr 1.0, vlg, cpy >

45 zeolite veins + fr 20, 40° (chl-cpy; gtz-chl-cpy veins
fr 25, 50°)

43 Mafic-neck zone, fg, 1080-1088 - xenolith? out
1M-572-3322 by gtz-br-cpy veins 25° gtz-ep-cpy-br vein 40°
& ep-gtz veins 20, 45°; CR loc gtz-ep-br-MoS₂ veins 10°

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-43

Date Sept 2/73

Property JA

now a breeze var. fm N + S -
quite cloudy to the south

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M. % Fe	Min. Fr	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	gm	wh							
46 1137 1155	lg-	-	-	<	-	-	1/2	✓	fr	0.6	-	-	Gu	fg
49 1193- 1210	vlg	-	-	?	magaly 30% altm zone	1 (0)	1 (0)	✓	fr ser cell	1?	?	✓	Gu	
52 1244 1262	lg-10	-	-	<	-	-	1-2 p	-	chl	-	-	✓	Gu	fg
53	altm like		52	but		local			pink & green		(2)			
54 Sim. to	52 to 1290 3 by 1296		1290	then		pink & green		(2)	grad				yellow (waxy)	vent movement

46 Gu ± cpy - chl - ep fr 10°, gtz - ep zones w magnetite
dots (some cpy) 10°, ep - gtz fr have pink halos (30°)
zeolite veins & fr 10° calcite veins 70°
w. assoc pink altm

47 Similar altm + mentz; Gu + fg 6 + mafic Xenos.

48 " " " " vlg, Gu + some Gu lg-

but local wh (2)

49 Ep - gtz zones w. pink blobs "veins" [zeol. "kspars"??]
w. assoc ser - gtz - chl - ep altm ^{from} 1200 - 1213 +
w. local zones to
chl fr 10°, chl - MoS₂ fr 40°, ep - gtz - MoS₂ fr 10°

50 altm wh (1-22) pink (1-22) ^{green} peritectic zones; fg → standard Gu
Rubbly zones 1200 - 1203; 1219; 1222 - 4; 1279 - 80

51 altm wh (1-ep) fresh (ll); ep; gtz - bn - spec vein
chl fr 30°, chl - bn - cpy fr 40° - - - BN > - - - vlg 35°

52 chl - bn fr 10° chl - ep - bn - mag. fr 40°, 0°
och hem blobs on fr 35°
ep - gtz - MoS₂ vein 70° 1257 CR
gtz - bn - cat vein 35° 1250

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-43

Date Sept 1973

cloud cover virtually 100%
now

Property JA

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M _{gr} Fr	M _{in} Fr	Qtz. Ser. Zones	MoS ₂	Rock Type	Comments
55 1299 1316	vlg-	-	-	?	see below				ser chl	0.8	-	-	Ga	fg, normal
58 1360 1387	vlg	20	-	✓	pink 2P 3P	grn	wh		chl	0.6	-	-	Ga	
60	slip faces		30° = strike slip			10° = top slip			movement		20° off vertical			
	chl-bn	cpy	slip faces			10° = strike slip					some at 30° show			
	alt	pink	→ green → wh			(1-2)					then sense of movement also			

Rubbly zones 1302-4; 1309-14; 1316; 1321-5; 1346-9, 1370, 1385, 1388, 1393
(good tectonic bx locally here)

55 green alt cases off + replaced by pink(2) and green at 1301 to 1323 then wh 1p, fresh l to 1337 where pink(2) takes over again to end of box 57
chl fr 20°, ep fr 20°

56 Qtz - cpy - MoS₂ veins (25°) w/ pink halos
qtz - chl - cpy fr 0, 30, 40° ... NO BN ... vlg } all in rel fresh zone

57 chl, chl-ep fr. qtz - cpy - bn vein
chl-ep matrix in Bx zones ... cpy > ? ... vlg
zeolite

58 zeolite veins. fr (20°) also in 59 + 60
qtz - MoS₂ - cpy - bn vein, chl-PPY-bn fr 0°
ep-gr veins + zones 45°, qtz - cpy - bn fr 35°
calcite vein 30° qtz - chl - cpy 35° cut by 3
ep-qtz fr 0-10° 1362 CR + alt

59 Bxtd zone cemented by cal. w ser. ^{yellow} gm alt
has a qtz - bn - cpy vein at 80° [1370-2]
alt wh (1p) fresh (e) after 1372.

60 see above

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-43

Date Sept 2/73

Property J.A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mg Fe	Mn Fe	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	gn	wh							
61 1397 1415	lg-	-	-	≡	see below				fr chl cpy	0.5	-	✓	Gu	
64 1454 1470	vlg	-	-	≡	¹⁴⁵⁴⁻⁵ 2-3 l	-	lp	✓	fr chl	1	-	✓	Gu	almost chatoid locally
67 1506 - 1524	vlg-	-	-	?	2l	-	1l	l	fr chl	?	-	✓	Gu	"
69 -E07H-	vlg-	-	-	?	see below slip face				fr chl	0.6	-	-	Gu	fg
(Rubbly zones 1399, 1438 slips @ 35° - (subhor. movement) 1411-2 (1507 → 1522, 1527-30, 1555-9			

61 brought salmon pink altn 1397-1403 then mottled wh(1-2) and gray (fresh) possibly a dyke 1399
 chl-bn fr 20°, 30°; chl-cpy 20° fr; gtz-chl-MoS₂-cpy
 gtz-chl fr in pink zone 30°, 1403 fr 30°
 what magic there is has → chl, cpy in pink zone
 also gtz-cpy-bn fr 35° →

62 almost fresh Gu, loc. pink zones assoc w ep-gtz
 veins 30°, 05°, vlg 1425CR

63 altn like 62, ep, MoS₂, cpy, bn, ~~cpy~~ cpy = Bn
 slip faces 0° move 30° off vert
 reserve fr 0° box 65 Rubbly zones 1470, 1505-6

64 gtz-chl-bn fr 10° gtz-bn-cpy-MoS₂ fr 35°

65 generally altn like 64 but local pink zones level 2
 vlg 1477CR C.R. like 65

66 almost fresh except in rubbly zones where it is pink(2)

67 slips at 0° (45° slickensides) have pink altn below
 ep, chl on them

1M-572-3322 ep-gtz-MoS₂ veins 35°; ep-gtz zones 35, 50°

68 fg Gu ep, vlg, altn wh(1-2p) pink (l2) 1547CR

69 ep-gtz zones. ep fr altn like 68 (pink in rubbly zones) vlg

HIGHLAND VALLEY DRILL LOG SHEET

1972 Samples NIL
all Guichon

Hole V72-42

Date Aug 28/73

$\frac{1}{8}$ 371 EOH 1547 Sunny w high clouds

Property J. A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Grade F-G \rightarrow 760 P-VP loc. F \rightarrow 1250; G-P \rightarrow 1480, VP \rightarrow EOH

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M _{act}	M _{in} Fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					pln	grn	wk							
1 372-389	lg	2.5	-	✓	-	Waxy 2p	2l	-	chl	0.3	20	✓	lg Gu	Rock gray looking
4 426-445	lg	-	✓	NO BN	2l	-	1p	✓	fr chl	0.5	4	✓	Gu	Brownish var. loc. Gu

1 chl-cpy fr 20°, bi-ser-cpy fr 60°
 qtz-cpy-MoS₂ veins 25° w. assoc waxy gm altn
 qtz-cpy-br vein w sericite halo (narrow)
 bi-cpy-ser-some br fr 30° qtz-calc-cpy veins 45°

2 Like 1 to 400 the altn with (1), fresh ^{fr} looks gray but can see twins, etc. 400 CR

3 altn same to 415 then pink to green (2-3p)

4 zeolite 10°
 Rubbly 441, 466, 480-481,

5 qtz-chl-cpy-MoS₂ fr 30°; qtz-chl-cpy-mag vein w. pink aplitic-looking halo 20°; chl-MoS₂ fr 65°
 most mineralized fr at 20-30°
 ser. qtz-chl-cpy zones w. qtz-cpy-MoS₂ veins in their cores 25°
 pyrite-ser fr 25°

6 standard Gu to 455 then a zone of dk green ^(ser) and pink altn 2-3p w. num. slip faces #545
 Min fr 0.3...lg... 480
apparently a shattered altn. zone

qtz-mag-chl-cp-cpy-MoS₂ vein 25° seems to 480
X cut pink/green altn contact ↗

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-42

Date Aug 28 / 73

Property J.A.

Now clouds darkening & has cooled off

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M ⁺ fr.	Min Fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	grn	wh							
7 484 501	lg	2	-	no Bn	2-3 1	2-3 p	-	-	chl ser	5?	10	1/2	?	fg Gu?
10 539 557	vlg	20	✓	no Bn	see below			-	fr chl ser	3.	-	✓		fg Bmsh Gu
13 591 608	lg-	-	✓	✓	-	-	1-2 p	-	fr chl	0.5	10	✓		Gu fg

Rubbly 484-490, 492-3, 499, 505-7, 510-11, 515-6, 588-90

7 Qtz-cpy-MoS₂ veins 30-35° ^{qtz zone} cpy-ser-A 30°
 cpy-ser-qtz fr 45°
 8 like 7; MoS₂ v
 9 altn grad. cases off to ^{yellow-} olive green (2-3 p) 538
^{to dk green - 545}
 10 ol. green altn to 545 then wh. (1p) fresh (l)
 # pyrite-cpy-chl fr 40°, chl-py fr 10° ser-cpy fr 15°
 slip faces 20-30° slickensides 60° Qtz-cpy-MoS₂ vein 20°
 11 Qtz-ser 5 altn wh (1-2p) pink (1-2l) - lg -
 Qtz vein 7, Min fr 0.8 - Bmsh → fg Gu
 12 Qtz vein 7, Min fr 0.5, lg-, fg Gu, chl-MoS₂-cpy fr 10°
 575 CR
 zeolite, not from 20° ... Boxes 13 + 14

Rubbly 591-3, 606

13 MoS₂ slips 35°, qtz-cpy fr 15°, MoS₂-bn-cpy slips 55°
 calcite 20°, ep-qtz fr 10°, chl-py fr 60°
 ep-chl fr 20°
 14 Several qtz-cpy-MoS₂ veins ^{fr 15°, 45°} altn wh (1p)
 lg - sim. to 14

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-#2

Date Aug 28/73

Aug 31/73 700 on hard
Sunny, cumulus clouds,
Cool

Property J.A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mafic	M. Fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	gm	wh							
16 646 664	lg	10	-	✓	cream to green 2R		1p	✓	Sr	0.7	4	✓	Gu	fg loc. Bmish
19 700 718	lg	10	✓ abit	No Bn	-	-	1p	✓	chl	0.5	20	✓	Gu	fg
22 780 769	lg	7	-	≈	-	-	1p	✓	"	0.2	-	✓	fg Gu	colate + clear mineral (as ser. chd earlier) 0°
					qtz-ep (0°) vein 2eolite fr 20°									gtz-MoS ₂ -chl vein (40°)

Rubblly 662-665, 668-675, 678,

slip face 20° slickensides 60°

16 gtz-col-epy veins 60° gtz-chl-epy fr 10' ± bn
ser-gtz-epy zone (30°) cut by barren gtz (0→40°)
chl-ep-epy fr 30°; gtz-MoS₂-epy fr 50°, 60°
gtz-chl-bn vein w ser-gtz-epy halo 10°
gtz-epy (barren type) v. ser-gtz-epy halo 20°

17 altn pink or waxy → dk gm in ~~at~~ rubblly zones (2-3)
white (1-~~2~~) elsewhere.

18 681→700 altn wh (1p); mafic fr, chl
Gurdon C.R. --- lg --- 695 CR
--- almost raining now ---
time to go home ---

19 gtz-chl-epy fr 10° gtz-epy-MoS₂-magnetite veins 30°
chl-epy-ser fr 45° ± ep
2eolite fr 10° - pink or colorless (transparent, radiating)
gtz-epy-chl veins w ser-gtz-epy PY halos 10°
chl-epy-MoS₂ fr 10°; gtz-ep-chl-epy fr w pink
20 gtz-epy-some MoS₂ veins 15°, cuts ep-gtz vein 35°
altn sim to 19 but local pink (2)

1M-572-3322

21 like 20 Rubblly 748 (0°) gtz-ep-epy-bn-MoS₂ pin. halos

22 chl-bn fr (some cpy locally) 10°, 50°, 35° gtz-chl-bn fr 0→10°

HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-42 Date Aug 31/73

Property J. A.

W. J. McMillan
B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M _a f _c	Min Fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	qm	ch							
25 805 - 823	lg-	7	-	≥	2P	-	12 P	-	chl	0.5	10	✓	Grn	standard → Bonish qtz's rather large
28 862 879	lg-	-	√ 1/2	✓	1-2 P	-	12	-	chl	0.2	-	-	Gu	standard to fg
31 914- 932	vlg lg	10	√ Some	NO Bt	1-2 2	-	1P	✓	fr chl	0.5	-	-	Gu	good Gu w. fg mafic-rich zones partly remade Xenoliths

23 like 22 but lg- -- no qtz veins ? zeolite fr
24 " " ; fg → Bonish Gu) + veins 20°

25 Qtz-ep-cpy-bn-MoS₂ veins 15°
ep veins in ep-qtz-ser zones 15°, 45° cut by ep-qtz (60°)
w. pink outer helos
chl fr 0°, chl-bn ± cpy 10°, 50° 822 CR

Rubbly 842-3, 850-3, 861, 862-3, 866-8, 870, 942, 918, 920

26 slip faces 30° slickensides 15°; 45° slickensides 80°
cpv → lg-, wh. actn 1p Mafic → fr, chl fg → Bonish Gu

27 fg Gu; pervasive pink altn abund. ep; slip faces 35°
lg-, bn →, zeolite 10° slickensides 60°

28 Qtz-py-chl some cpy fr P; chl-py fr 10°
chl-py-cpy fr 35° cut by ser-qtz-cpy-py.
zeolite fr 10° fr 15° ← Qtz-chl-bn-cpy fr 25°

29 altn wh (1p) fresh (e) ep fr 25°; mntn like 28 but
0-15° min fr 0.5

30 slip faces 905-6 have slickensides 80°; like 29 away from slip-
page zone

31 Qtz-ep-cpy fr 0°, Qtz-chl-cpy fr 45°, chl-bi-cpy-py fr 10°

32 ep-Qtz veins + fr otherwise like 31

1M-572-3322

33 Qtz-cpy-chl vein 25° half box pink 2 related to ep-Qtz veins
Qtz-chl-bn-cpy fr 20° 40° --- half box wh (1p)

HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-42 Date Aug 31/73

Property J. A.

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B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mg Fe	Mn Fe	Qtz. Ser. Zones	MoS ₂	Rock Type	Comments
					pink	gn	wh							
34 968-986	lg	5	-	⇒	23	-	lp	✓	fr chl	0.2	7	-	Gu	
37 1023-1042	lg+	7	-	⇒	-	-	lp	✓	fr chl	0.3	-	-	Gu	
40 1079-1098	lg-	10	-	⇒	-	-	"	"	"	0.5	-	✓	Gu	slipping over Chatard line

34 a series of bn-qtz fr in a zone of fr ser-qtz-cpy altn; qtz-cpy fr 10°; ep-qtz-bn-cpy vuggy zeolite-qtz-cpy zones 10° cut by fr 20° 985CR
986

Rubbly & slip faces, 968-973, 982, 1022-3, 1017, 1056, 1100, 1123-25° slickensides 15° 30

35 like 34 but no qtz veins, ser-qtz zones. lg-
36 altn wh (2p) (lp, 2e), qtz veins 10, lg-
37 qtz-cpy-bn veins 25° cut qtz-chl-cpy fr 35°
chl-ser-bn-cpy fr 50° qtz-cpy-ep-bn fr 0°
chl-cpy fr 30° 1 bn-chl fr (some cpy) 30°;
38 slip faces 10° slickensides 70°; lg; ep-qtz zones with assoc. pink altn, otherwise like 37
39 like 37, lg 1065CR
40 chl-bi-cpy±bn fr 50°, 10°; qtz-bn-cpy-MoS₂ vein 30°
41 zeolite 25°; a bit rubbly but otherwise like 40; lgGu
42 " " altn wh(2p), lg-, Gu

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-42 Date Aug 31/73

Property J. A.

W. J. McMillan
B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M _g Fc	Min F	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	grn	wh							
43 1131 -1147	vlq	20	-	?	2l	-	1-2 r	-	chl fr	1	-	-	Gu	
46 1184 -1201	vlq	-	-	✓	2l	-	1-2 p	-	chl fr	0.5	-	✓	Gu fg	
49 1233 -1250	vlq	-	-	?	pale pink 2l	-	1-2 p	-	fr chl	1	-	✓	Gu	

43 ~~st~~ Rubbly zones 1136-1147; 1196-1218

43 Qtz-ep zones or pervasive zones of fs → ep altn; zeolite sh hem on fr

44 Pon-gtz-ep vein 25° altn wh(1p) fresh (l)

45 wh 1p to then pink 2p w. local tectonic bx zones

46 zeolite 25°; chl-cpy fr 40°, chl-ep fr 0°; chl-ser-cpy bn fr 20°, chl-cpy fr 40°
25° slip face on MoS₂ - slickensides 80° chl-ep fr 40°

47 Rubbly zones throughout - slip faces 15-35°, dip slip movement altn like 47

48 less rubbly but generally bleen up; platt altn 2p

49 chl-cpy slips 10°, 30° (dip slip) ep-chl fr 50°
→ 20°

MoS₂-chl slips 50° slickensides but can't tell out. movement sense [oblique]

50 chataid Gu 1260
gtz-cpy-bn vein 25° gt-ep^{bn} veins 20°, altn wh(1p)
rad. sheafs --- lg-

51 Qtz-ep-MoS₂ vein 35° pink altn & dissemin. cpy 1287
altn wh(1p) pink 2l sheared gtz-cpy-MoS₂ veins
mudstone shreds

HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-42 Date Aug 31/73

Property J. A.

W. J. McMillan
B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mg Fr	Mn Fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	gm	wh							
52 1285 1303	lg	7	-	✓	1-2 2	-	1p	✓	fr	0.8	-	✓	Gu	lg; some Chertoid zones
55 1341- 1360	vlg	-	-	?	2p	-	-	-	chl ep	1	-	✓	Gu	standard
58 1395- 1413	vlg	20	-	-	after 1405 2-3 p	-	1p	✓	chl fr	1.5	-	-	Gu	
					pink + green			→	1421					

52 qtz-cpy-MoS₂ fr 30°; qtz-cpy-MoS₂-bn^{ep} vein 20°
ser-cpy fr 50° ep-gtz vein 20° loc. bx w.
Rubby zones 1302-3, 1328-1348 matrix → chl

53 like 52 but no qtz veins -- lg-

54 ~~the~~ rubby zone contains massive bxted ep-gtz zones (shattered rock) --- vlg green altn in shattered zone 1338

55 shattered zone w. ep-gtz zones - och. hem. on fr, tectonic shear foln 50°, stockwork younger calcite ep-gtz ± MoS₂ veins^{20°}, chl fr 30°

56 zeolite 25, 35 (also 57) chl-bn fr 10°, 35°; qtz-bn veins 15°

57 qtz-bn-cpy-chl fr 30° BN > NOCPY lg-
qtz w. bn-cpy pods 20, 35, 50°
Disturbers (30°) cut by qtz-ep-bn veins 45°
also cut by mixed fr. --- lg- 1403 CR

58 pink altn in almost salmon pink --- 1408
chl-bn fr 35° qtz-bn veins 35° pink tabs

59 Box 58 in reverse

60 aplite stingers altn wh (p → fresh); loc salmon pink (2-3) Kspan?
0 → 20° bn ≈ cpy --- lg- 1445

HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-42

Date Aug 31/73

Property J.A.

scattered hail/rain showers - not too

W. J. McMillan *bad though*

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M _g fr	M _{in} fr	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	grn	wh							
61 1450 1468	vlq	5	-	No CPY	1-2 l	-	1l	p	fr	l	-	-	Gu	D1 + Ap stumpers 2, 25°
64 1506 1523	vlq	20	-	?	see below				fr ser	2.5	-	-	Gu	gray appearance aplite stumpers 10°
66 1542 1547	EOH													

61 qtz-ep-brn cpy 50° veins + fr qtz-ep veins
zeolite fr 20° chl-ep fr 35°, 10° 30, 50

62 like 61 - Gu-standard

63 1501 on yellow (3) yellow or green alt (2-3) pervasive
to 1501. wh (1-2 f) pink (1-2 l) mafic → ser

64 altn continues to 1509 at 35° to core (?)
- carbonate veins 35°
local pegmatoid qtz-kspen knots
after 1509 "fresh" and lesser seratic zones occur. 1509
qtz veins w epidotized holes 40°

65 vlq fresh, loc wh (1-2) v. loc pink (2)
ep-qtz fr + veins; aplice stumpers - low &

66 like 65. vlq
1525 CR

~~EOH~~

HIGHLAND VALLEY DRILL LOG SHEET

1020 → 1145
Greuchon Rubblly Hole V72-41 Date Aug 28/73
 1972 Samples - NIK 01B 515 EOH 1603 now almost clean but
 is 5PM so is cooling again
 Property J. A. W. J. McMillan Aug 29/73
 Grade F-G some poor → 1350; VP after that B.C. Dept. of Mines and Petroleum Resources
 sunny, high thin clouds

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M ₀ f.c.	M _n Fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	qm	wh							
1 515-531	vlq	-	✓	No BN	-	-	1-2 P	-	chl ser	1	-	✓	Gu	fg var.
4 562-580	lg	10	not mod	✓	-	-	1-2 P	✓	"	0.7	20	-	Gu	" "
7 616-634	lg	10	✓	No BN	-	-	" "	"	chl	0.3	-	-	Gu	" mainly
10 671-687	lg	-	✓	No BN	2R	-	1-2 P	l	chl	0.3	-	-	Gu	Brownish

1 chl fr 15°, chl-py fr 15°, cpy-bi-chl fr 45°
 py-cpy-chl fr 40° qtz-moS₂-cpy fr 30°
 2 like 1
 3 steep faces 0° slickensides 70° Rubblly 557-2, 561, 590, 640, 645, 666
 4 qtz-cpy veins 20°, 0°; ep-qtz-chl vein 35° w. cream
 qtz-chl-cpy-bi fr 70° chl-cpy 10°, 70°; altm halos
 qtz-cpy-py-chl veins w. ser-qtz halos 10° 576 CR
 5 similar to 4 ... pyrite present...lg-
 6 " " 5 " " ... vlq(?)
 7 pyrite-cpy fr 30°; chl-cpy fr 25°, qtz-cpy-py vein 0°
 bi-py-chl fr 10°; qtz-cpy vein 25°
 8 similar to 7
 9 altm sim. to 7, pyrite uncommon, lg, Mn fr 0.3
 — could not hack any more ... 5:45 PM ...
 10 py-cpy fr 15°; qtz-py fr w pink halos 20°; ep fr 15°;
 ep-chl fr 35°; qtz-cpy, some chl fr 20°, chl-cpy fr 50°, 40°
 chl-py-cpy fr 35° Rubblly 718, 720 685 CR
 11 qtz-ep-cpy-MoS₂ vein 85°, altm wh (1-2 p) Mn/zn like 10
 1M-572-3322
 12 Massive qtz-ep zone w MoS₂ on fr 35°. altm wh (2p) pink (2R)
 Rock darker - more akin to standard Gu

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-41

Date _____

Property J. A.

Sunny, Pervasive high
wispy clouds - cool
odd day

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Oz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M ₉ fic	M ₁₁ fr	Oiz-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	grn	wh							
13 723 741	lg-20	-	1/4	✓	-	-	1p	gray ✓	fr chl	0.5	✓	Gu	overall gray-looking rock	
16 700- 797	lg	-	1/4	NO BN	-	-	1p	✓	fr	0.5	7	Gu	standard	
19 842- 854	lg	-	1/2	NO BN	-	-	1p (1-2) 2	✓	fr chl ep	(local) 0.3		Gu	"	

13 qtz - cpy - py - ep vein 30°, bleach tabo 740 CR
 chl - MoS₂ - cpy fr 45°, chl - ep - cpy fr 50°; ep - qtz fr 30°
 chl - bn - ser(?) fr 0°; chl - py - cpy fr 10°, chl - py fr 50°

14. 15 zoelite (low 4, 30°)

14 like 13 to 745 then wh(1-2p) Mixed Gu + Bmud Gu
 "The Gu in 13 is more mafic + mafic blockier"
 15 altn wh(1-2p), Guichon 775 CR

16 qtz - cpy - py vein 20° chl - py ± cpy fr 30°, 40°, 50°
 qtz - cpy - MoS₂ fr 25°; } occasional ones are cpy - free

17 altn (wh(1p) → fresh) qtz - ser 20, lg -
 18 " " " qtz - cpy - MoS₂ vein ± seratic tabo 70°
 qtz - ser 10' part; qtz 10'; Guichon; lg -

19 zoelite 30° in 19 + 20, 21 → 23 Rubby zones 842, 846, 870 - 878, 880
 chl - cpy fr 50°; qtz - chl - cpy fr 0°, 30°, 45°, 55°, 0°
 dk grn altn zones fr → ser (not flaky) mafic - chl @ 45° - cpy
 on fr. down: in then
 20 altn like 19 except in rubby, zed. veined zone... pend(2-3)
 21 chl - bn - ser fr 0°; qtz vein 7, altn wh(1-2p), lg -, cpy > BN

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-41

Date Aug 29/73

Property J.A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M ₉ f.c.	M ₁₀ Fr	Qz. Ser. Zones	MoS ₂	Rock Type	Comments
					pink	grn	wh							
21 890-907	lg	7	-	≈	1-2 p	-	1-2 l	vr	fr chl	0.3	5	✓	Gu	rel. fq
24 943-961	lg	-	-	≥	2l	-	1p	l	fr chl	0.5	-	-	Gu	"

21 Rubbly zones 906, 918, 965, 978, 980, 982, 990

ep-gtz-bn-carbonate zone 40° --- in rubbly zone
 ser-gtz-bn zone chl-ep fr 10°
 gtz-cpy fr w. ser. borders 0-20°, ep fr 15°
 gtz-bn vein w ser-gtz halo (10°) cut by ep-gtz
 gtz-ep-MoS₂ vein 50° gtz-cpy-bn vein 15°
 22 ep-gtz ^{bn} veins w. epidote halos 1/2" wide (45°)
 altn wh (1-2p) grn (1-2l) pink (2e); lg-
 23 ser-gtz-cpy zones 60°, bonanza gtz-cpy. MoS₂ ^{veins} 160°
 altn wh (1-2p) pink (2e)
 24 gtz-chl-bn-cpy fr 10°, chl-cpy-bn fr 50°, 950
 zeolite 10°
 25 " 30° ep-gtz veins in pink
 some cpy altn zones 10°
 26 Fairly numerous ep-gtz-bn
 - these cut ⁹⁷⁵ gtz-bn-cpy veins w ser-gtz-chl-cpy halos
 altn wh (1l, 2l) pink (1-2l) green (2-3l) lg, Bn > cpy
 27 clear x-luc carbonate (no fizz in HCl) - another vein has
 altn wh (2p) pink (2e)
 rad. orange mineral, the clear 990
 stuff, white matrix + calcite
 lining vugs

lg → vlg

HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-41

Date Aug 28 / 73

Property J. A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M ^g Fc	Min Fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	qm	wh							
37 1154-1172	lg+	3	-	no cpy	-	-	lp	2	fr chl	0.2	-	✓	Gu	foln 30°
40 1209-1227	lg	3	-	<	-	-	lp	✓	fr	0.8	-	-	Gu	chatoid zones
43 1263-1282	lg-	5	-	no cpy	2-3	lp	lp	✓	fr	0.8	-	-	Gu	brnsh foln 35°

37 Bn after mafic; qtz-bn vein 25°; ep-qtz vein 30°; qtz-ep-bn stumps 10° cut fr. of sm. compsn @ 50° bonanza qtz-bn - MoS₂ veins 40° cut by qtz-bn-chl-ep fr. at 35° pink holes

38 Lg - sim. to 37 but fewer qtz + vein

39 Min fr 1.2; Gu w. loc. Chatoid zones; buggier - all mineralization ^{vlg.} qtz-chl ± cpy, bn fr 10°, 35° 1207 CR ep-chl fr 35°, qtz-chl-bn veinlet 15°

40 qtz-ep-bn vein 50° pink holes; qtz-bn-cpy-chl vein and fr 35°; qtz-bn-cpy vein (buggy) - Cu sulphides on fr in vein + in vein core (35°)

Rubbly + green alter 2-3 with aplite stumps 1224-1231

41 Montz & pink Di stumps 30° to core 4" wide alter as in 40 --- Gurchon --- lg-

42 sim. to 41 1258 CR

43 qtz-bn vein 10°; qtz-bn-chl fr 0-10°; qtz-bn; chl bn fr 25° Di stumps 40° qtz-ep-bn vein 35° one has an odd "aplitic" zone - relationship unclear

44 alter w/ (p), Brnsh Gu w. foot-scale chat aid zones - foln 35°

45 similar to 44 1308 Contact

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-41

Date Aug 28/73

now have sheet off

Property JA

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Oz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M ^g Kc	Mn Fe	Oz.-Ser. Zones	MoS ₂	Rock Type	Comments
					pink	grn	wh							
46 1322-1340	vlg	7	-	<	-	-	lp	✓	fr	1.2	-	-	Gr	Bornish
49 1377-1395	vlg	4	-	v?	2l	-	lp	✓	fr	2	-	✓	"	" foln 30°
52 1432-1450	vlg	-	-	?	"	"	"	"	"	-	-	✓	Gr	Bornish-1440 than standard
53	Gu	-	-	-	-	-	-	-	-	-	-	-	locally Bornish	altm wh (lp) fresh (2)
54	altm	wh (2p) pink (2l)	-	-	-	-	-	-	-	-	-	-	massive zeol-cal-ep zone	1471-2 (35°) Guechon

46 gtz - bn - cpy - ep veins 40° bleach halo
 chl - bn - cpy fr 25° gtz - chl - ep - bn - cpy fr 25°
 1345

47 Mixed Bornish + Chatoid Guechon; altm like 46 contact

48 Mafic rich lg zone (xenolith?) contact w. chatoid
 Gu 35° @ 1362 → 1364 contact sharp or min scale
 NO EVIDENCE OF CHILLING
 1374 → Rubby, gougy zone with pink → grn
 altm 2-3p and gtz - cpy (bxt'd, rehealed) veins

[49] zeolite low \$ [50] zeolite 30°

49 ep-gtz vein 0°, cuts gtz - chl - ep fr 30°
 chl fr 30°, have pink altm halos
 gtz - ep - cpy - MoS₂ vein 15°, pink halo

50 foot-scale massive ep-gtz zones + veins with
 sericite halos 40°; Bornish Gu; altm wh (lp)

51 like 50 but ep-gtz veins inch-scale; vlg; Bornish Gu;
 1429-1431 pervasive Salmon-pink altm (2-3) ^{Kspen?}
 1430

52 gtz - ep fr 30°, zeolite vein 30°, chl-MoS₂ fr 35°
 gtz vein cuts ep-gtz knot in pink altm zone

1M-572-3322 zeol - cal - waxy grn min. vein ^{35°} in tourmaline altm zone

54 - zeolite 15°, ep or ep-zeol. fr 15° -- vlg 1433

HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-41

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Property J. A.

W. J. McMillan
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Box Footage	Grade	Qz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mg. Fe	Mn. Fe	Qz. Ser. Zones	MoS ₂	Rock Type	Comments
					pink	grn	wh							
55 1488 1505	vlg	20	-	?	cream → green 1-2	2	1-2	-	fr chlo	2	-	-	Gu	red-fg; loc. Bmsh
58 1543- 1581	vlg	-	-	?	-	-	1p	✓	fr chl (2)	2	-	-	Gu	
61 1600- 1603					E O H									

55 → 58 zeolite (not prominent) veins 35° + fr 50°

55 shear zone w och hem slips 35° + rock bxt'd 1498-1500

ep-gtz fr 30° (cont) gtz-chl fr 20°; chl-bn fr 10°; gtz-ep-chl vein 25°

56 ash altn (1-2p) pink (2) adj. to ep-gtz veins; CR as 55

57 sim. to 56 but a few gtz (35°) gtz-ep ± MoS₂ veins 10°, 35°

58-61 zeolite 30°, 15°, --- CR Guichon 1550 CR

58 chl fr 0°, chl-cpy fr 50°, ep-cpy fr w pink halo 30° 1580 zeol

59 similar to 58 altn sl. more intense

60 altn wh (1p) fresh pink (2) around ep-gtz zones @ 50° some of which have ep-gtz-ser halos

61 ~~to 60~~ altn wh (1-2p) zeol. on fr 0° + pink altn assoc with it.

— E O H —