

896519

J. A.

89E

# HIGHLAND VALLEY DRILL LOG SHEET

Samples 189 330 391 470  
(1974) 680 728 824 995  
1100

Hole V 72-70  
018110 EOH 1308

Date Aug 15/73  
Sunny, warm,  
cumulus clouds

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	mag. fr.	min. fr.	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	grn	wh.							
110 - 123	vlq	-	-	Not 7 seen	-	-	12 <del>12</del>	✓ p	Fr chl ep	?	-	-	Fg Gu.	Rusty, <del>fr.</del> fractures
141-162	vlq	20	-	✓?	-	-	"	"	"	1	20	-	"	"
175-194	vlq	-	-	?	-	-	1-2 p	✓ (12)	chl	?	-	-	"	malachite
211-231	vlq	-	✓	?	-	-	2p	-	chl	?	4	-	"	rusty fr.
259-276	vlq	sort 5* of	✓	?	-	-	2-3 p	-	chl ser	?	4	-	"	locally emerald green fr. altn

- 1 Fg gtz-diorite mafic 25% bi, hb - almost + looks like a dyke! 112 C.R. mal on on bleached fr.
- 2 Gougey zone at 132 - sim. to 1  
150, 153, 156
- 3 chl fr 20, 30° bleached halos gtz-ser zone 30°  
deductic black. mineraloid (neotaxite?) fr 30°  
fr 30°  
fr 30°
- 4 Sim to 3 - still oxide zone
- 5 Half Rubble (6) also ~~fr~~ aplite stumps 30°  
rust-iron carbonate veins 35° sulphides oxidized  
CR fairly magnetite-rich (39% ~~est~~ estimated)
- 6 mostly gouge + assoc rusty yellow altn (3) - at box end is  
white 2-3 in pebbly rubble.
- 7 <sup>236 on</sup> Mostly gouge gtz-py veins w. gtz-ser  
halos 40° + then pink altn outside that in
- 8 local rubble zones throughout Box B  
similar to 7
- 9 Shearing at 35° Gauge zones throughout
- \* gtz-py veins 1/16" + less gtz-py zones with or without  
py-ser fr 50° 1 gtz-ser halos 35°  
wh altn 2p fr Gu.
- 10 Gougey + shattered to 285 chl-pyrite fr 50° cut by gtz-py  
veins as pink halos 35° 296 altn

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-70

Date Aug 10/73  
Aug 11/73 (130m)  
*clear, sunny,*

Property J. A.

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

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	H qtz	Mn fr	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	gray	wh							
1 296-313	vlq	20	W	✓	-	-	2p	-	chl	0.5	20	-	fg Gn	
3 329-347	lg	10	-	✓	2l	1-2 2	1-2p	-	chl	0.5	-	-	"	
5 365-383	lg	10	✓	✓	-	1-2 2	1p	✓	chl	0.2	10	-	"	

- 4 chl fr 50° chl-py-cpy fr 10° chl-py fr 35° gtz-cpy fr 35°  
 coarsely xltine py fr 30° chl-cpy fr 30°  
 gtz-py w. ser halos (not flaky) + thin pink altn
- 12 Sim. to 11 but pink (local 2) altn and one zolite vein @ 35°
- 13 Gauge 4" @ 345 ~~at~~ open space full of z vein 60°  
 (rebr. unclear) 35°  
 gtz-cpy <sup>adj to</sup> ~~at~~ ap-chl-cpy ~~at~~ borders  
 gtz-cpy-chl fr 10, 45° chl fr 50°, chl-cpy fr 45°  
 calcite veins 20° w pink halos cut chl fr.  
 some have pink halos
- 14 plng aplitic dyke 349 (contact 20-30°?) 351 - c.r.  
 green altn (2) w. pods of kspan-gtz-hb pegmatite  
 - cpy occurs in pods + alt rock adj. to them  
 353 cream + green altn (2-3p) Rock type ? than  
 gassy to 360 but seems to be aplitic say 353 → 363  
 than green (ser) altn (2-3p) of c.r. Some bn, cpy, pyr.
- 15 chl fr 0° pyrite fr 30° chl-py fr 35° chl-cpy fr 35°  
 gtz-py-cpy w gtz ser halos 30° (vuggy vein) gtz-cpy 35°  
 gtz-chl-py 40°
- 16 Rubby 392 to end of box + w. perv. cream altn (2-3)  
 all up to 392 - rim to 15

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Box Footage	Grade	Oz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration		Feld. Fresh	M. a. Fr.	M. m. Fr.	Oz.-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
7 400-419	hgt	5	✓	✓	cm	white		chl				Fr	I think
19 436-454	vlg	10	✓	?	pink	grn			?			"	"
21 471-488	lg	20	✓	✓	greenish wh	1-2 p		chl	0.3	10	✓	Gn	local cg chl. hb pknos - a bit odd
28 502-521	lg	10	-	-	pink 2-3p	grn 2-3		chl	0.5	10	-	G4	local gr eyes - second?

17 Int. rubble to 407 gts + rusty carbonate veins 35°  
 + Fr  
 gts - cpy vein 51 35° + dissem cpy in C.R. between 404  
 gts - cpy - py 20° fr 417 mntzn  
 18 fr - kspar vein 35° cream actn 2-3p loc. wh → green (2)  
Rubblly 435 → 444 lg  
 19 gts - pyrite zones w. central pyrite veins 45°  
 gts - och hem 40-50°  
 20 local rubble zones to 465 actn wh (p2)  
 plag. aplitic stamper 30° lg - ; cpy > ; kpy.  
 rock coarser more leuco var. of Gn - loc. gts eyes  
 near aplitic  
 21 Rubblly 473, 482, 483 chl - magnetite 20-30° fr  
 gts - chl fr. 40° gts - cpy - ser fr 40° ± chl  
 bx w. chlitized matrix (tectonic) 482 contains MoS<sub>2</sub> slips  
 gts - bn (ruggy) w. ser<sup>hgt</sup> cpy local halos 20-30, 50  
 22 Rubblly 488-90, 490-504  
 489 Bxtcd gts vein sem. by gts - och. hem.  
 chl - bn fr 30° greenish wh → green (2-3) actn vlg bn > ?  
 23 Rubblly throughout in local zones gts - ser  
 chl - och hem - gts fr 30° gts - ser cpy - bn frs 30°, 40° cpy, och-hem 35°



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NOTE - ignoring MoS<sub>2</sub> in grade est.

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration		Feld. Fresh	Mg Fric	Mn Fric	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
						wh							
25 542-559	lg	20	<del>10</del>	✓	-	-	1-2 p	-	chl	0.2	10	-	fg Gu
27 576-594	vlq	-	-	?	pink 2p	grn 2l	-	-	chl ser	1	10	✓	u
29 610-629	vlq	<sup>och hem</sup> 2	-	?	2l	grn 2-3 p	-	-	ser	?	1	-	fg Gu?
31 646-663	vlq	10	-	?	2l	3p 12l	-	-	11		2	✓	fg Gu? + Ap stringers 2007

24 Rubby throughout CR-not sure cpy > pyrite  
actn like 21

5 [25+26 Rubby throughout - zones 6"-11" wide]  
Pyl cpy after mafics chl-cpy fr chl-py fr 30°  
gtz-ser-py-cpy veins 15° gtz-chl-py ± cpy fr 0°-30°  
26 gtz-ep vein 40° actn like 23 men fr 1' pyrite=11% cpy > 45°  
vlq fg Gu 566 C.R.

27 local rubble zones in 27 one zone at 601-3 in 28  
gtz-ep-MoS<sub>2</sub> 30°, 45° veins gtz-ep vein 40°  
lots of epidote gtz-ser vein zone 20°

28 like 27 in actn but <sup>only abt of</sup> 100% MoS<sub>2</sub> gtz-ep veins common 2-zones

29 pervasive flaky ser "stockwork-type" actn 613  
gtz-och. hem 50°, 10° carbonate 45° fg-ep vein 10°  
abundant

30 [Gaugy 633-643] actn sim to 29 MoS<sub>2</sub> ✓

31 gtz-ser zones gtz-ep veins 35°, 20°  
calcare 70°, 30° gtz-och hem-ep veins 35°

32 gtz-ep ~~ser~~ ser zones occur CR fg Gu w.  
local mg more leucocratic bands @ 45° actn wh (1-2) fr-fash

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33 681-698	lg-20	-	✓	-	grn	wh	2p	-	chl	1	1	-	fring Gu	
35 716-734	lg-	-	✓	-	-	-	1p	✓	fr chl	1	-	-	fring Gu	Still not
37 752-770	lg-	-	W	-	-	-	1-2 P	-	"	0.8	7	-	fring Gu	type Curdson
39 785-807	lg+10	-	W	-	pink	-	4	✓	"	0.8	5	-	"	
41 824-844	lg	10	-	W	2l	-	2p	-	fr chl	0.8	5	✓	"	epidote abundant

33 Rubby 683, 697  
 chl-qtz-ep fr 150  
 gts-ep veins <sup>10°, 30°</sup> occur in pervasive flaky ser zones 0°, 45° cut by gts-chl-ep fr <sup>35°</sup>

35 gts-ep veins 350  
 chl-bi-cpy fr 30°  
 leucocratic zones { 45°  
 25°  
 ap stumps gts-chl halo 35°  
 outside that is pink alt 10° cut by qtz-ep

36 Sim. to 35

37 gypsum 30°, 70°  
 zeolite 10°, 35°  
 gts-cpy w. gts-ser-cpy halo (25°)  
 br after mafic loc

39 like 37

39 chl-ep fr 350  
 cpy after mafic loc. (Bonanza-type)  
gypsum veins 10, 30  
 branding gts-ep veins w. ser-  
 gts halo 15°, 35°

40 sim alt to 39 but gts-ser zones lacking ∴ lg  
gypsum 35, 45

41 orange ~~vein~~ vein w. gts-ser-ep halo  
 gts-fr veins w. chl-ser-gts halo (45°) cut by gts-ep (20°)  
 gts-ep-chl zone 40°  
 gts-chl-ser-cpy-br fr 15°  
 gts-MoS<sub>2</sub> w. gts-ep-MoS<sub>2</sub>-chl halo (35°)

42 Sim. alt to 41

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						wh								
43 862 - 881	lg	20	✓	✓	-	-	1-2 p	-	fr chl	0.3	10	-	Ga	lots of ep
45 900 - 918	lg	10	-	✓	-	-	2p	-	fr chl	1.0	10	✓	Ga	"
47 936 - 954	vlq	-	√ 1/2	✓	-	-	1-2 p	✓	fr chl	0.5	-	-	fr Gu	953-954 cg 610 dky hb 25%
49 973 - 991	vlq	20	✓	✓	pink 2l	-	4p	✓	fr chl	0.5	-	-	Ga	

43 chl-ep fr 35° gypsum 30 chl fr 20-30°  
 gts-ep 35° veins cut aplite + gts plat aplite steeper  
 gts-chl-cpy fr 10°; chl fr 35° <sup>(50°)</sup> adgts-py w. gts-ser <sup>(80°)</sup> py halos  
 occasional gts-ser-br ("black ser") fr 10° <sup>35°</sup> cut ppy 880  
 gts-ep-chl zones 45°

44 Sim. to 43 gypsum 10, 40° lots of epidote

45 gypsum 25, 35°, 10-20 gts-ep-MoS<sub>2</sub> veins with  
 cpy-chl fr 40° ~~gts-ep~~ <sup>ep-gts</sup> gts-ser <sup>py halos</sup>

46 Tectonic by zones chloritic made in between frags <sup>30°</sup>  
 cut by calcite veins; altn <sup>dk</sup> emerald green 2-3p wh 2(l)

47- gypsum 5°  
~~ep-gts~~ ep-gts vein 10° chl-py fr 30° chl-py-cpy fr 10°  
 pink zeolite 30° NO BN SEEN

48 Like 47 to 968 then <sup>xspen(?)</sup> gts-ser altn assoc w. <sup>xspen(?)</sup>  
 veining [or is it anhydrite??] w. assoc  
 pink altn (2-3.p) **969**

49 Rubbly 987, 989-ousterd chl-py fr 40°  
 gts-chl-ff fr 30° chl-cpy 35° fr  
 50 Sim. altn gts-ep vein 35° zeolite 50° gypsum

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					pink	gn	wh							
51 1010-1029	vlg	10	√ <sub>2</sub>	√	-	-	1-2 p	√	Fr chl	0.3	-	-	Gu	1014-15, leuco zone @ 35°
53 1048-1066	lg	-	√	√	-	emerald	11	"	chl Fr	0.3	10	-	Gu	
55 1084-1103	vlg	-	√ <sub>2</sub>	√	-	emerald	lp	√	chl Fr	0.7	5	-	Gu	occas. eg Hbptanos
57 1121-1140	vlg	10	√	√	-	v.l.	lp	√	Fr chl	0.7	7	-	Gu	leuco + mafic inclusions scale layers 45°

51 Gypsum 45, 30° epidote ep-gtz - cpy vein (150) with gtz - chl fringes cut by younger parallel gypsum vein

52 altn w 1-2p Gypsum gtz veins with fs - cpy cores + MoS<sub>2</sub> fringes in my zones of speckled w. pyrite; epidote; MoS<sub>2</sub> √ lg

53 Gypsum veins 35° chl-ep fr 20° gtz - cpy vein pink halos 20° chl-ep-cpy some bn fr (20°) gtz - cpy - py veins in gtz - ser altn zones 35°

54 Emerald green 2-3p; wh 1-2 & pink 2; lots of Gypsum pyrite gyp. slickensided subpar. to core of faces @ 10-20°

55 gtz - pyrite - MoS<sub>2</sub> w. gtz - ser - py. halos 35° taln 35° to core chl-ep-ep fr 35° Gypsum

56 zeolite wh altn (1-2p)

57 gtz - ser - py. 35° fr Gypsum 35, 50° gtz - cpy w. gtz - chl altn zone 50°

58 gtz plg aplite (35°) 2" wide; altn like 57

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Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration		Feld. Fresh	m. qtz	lim. fr.	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments	
					grn	wh								
59 1158 -1178	vlg	-	✓	✓	-	emerald 3L	1-2 P	✓	chl	0.5	5	-	Gu	
61 1195 - 1215	vlg	20	✓	?	-	30m 30m	"	"	"	1	5	✓	Gu	
63 1233 - 1252	vlg	20	-	-	pink cream 1-2L	30m "	"	"	"	1	5	-	Gu	
66 1270 - -E5H	vlg	10	-	?	2L	2L	1-2 P	-	fr chl ser	1	7	-	Gu	
65 1308	vlg	-	-	-	green cub 1-2L	wh 1P	✓	fr chl	1	-	-	-	Gu	

59 chl-py ± ep gtz-py-ser halo, gypsum, chl fr  
gtz-MoS w-ser border, chl-ep fr Most @ 35°

60 similar altn but loc. wh 2-3

61 gypsum gtz vein gtz-ep vein w. 19% ser <sup>alt</sup> zones  
Gypsum as blebs in area (suggests anhydrite was  
a constituent of this vein) 1198 chl-ep fr  
gtz-ep - MoS<sub>2</sub> Most @ 35°

62 altn like 61 pink <sup>dyke</sup> stumper @ 35° - vlg gtz, plaq  
phenos., aphanitic gtdmass 1238 CR

63 gtz-ep-veins with ser-gtz halos containing veins -  
clots of chl (20-35°) Beautiful but barren! 1245

64 altn wh (1-2P) loc. pleached white (2-3)

66 dyke stumper - plaq phenos pink aphan. gtdmass  
E5H Qtz-och. hem veins ± chl  
gtz veins w gtz-ser altn halo  
gtz-chl-ep fr  
veins ~ 35°

65 ~~1308~~ - 66 like 66

# HIGHLAND VALLEY DRILL LOG SHEET

No 1972 Samples  
Guichon

Hole V72-52

Date Aug 26/73

o/b 382  
EOT 1104

Sunny → cloudy  
Aug 27 --- Sunny, cool

Property J.A.

W. J. McMillan Townard

Grade F-VP → 550 then VP

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Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M <sub>2</sub> hc	M <sub>1</sub> fr	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	grn	wh							
382-399	vlq	-	-	✓	-	-	1-2 P	-	chl	?	-	-	Gu	oxide zone
3 413-431	vlq	10	-	✓	pale pink 2	waxy grn 2	-	-	chl sa	1?	5	-	Gu	oxide zone
5 449-468	lg	-	-	✓	2R	-	2P	-	chl	1?	20	-	Gu	rusty fr
7 1057-1074					pink 2R		1-2 P	-	chl cp					rusty fr var.
7 481-498	vlq	-	✓	✓	-	-	1-2 P	l	chl fr	0.5	-	-	Gu	rel fg var

- 1 aplite dyke 45° (2" wide) gtz - cpy - act - mal vein 20°
- 2 chl-py-cpy fr 10, 20, 60° - some have pink altn halos (Kspar?)  
gtz vein 30° Rusty zone near massive pyrite-gtz vein (20°)
- 3 iron oxide-mal-cpy fr 0° Gauge 422  
ser-gtz zones 20°, gtz vein w ser-gtz halo 20°  
Near shear matrix of rock shot thru w flaky ser  
422 pink altn 422
- 4 chl-cpy fr 30°, rusty fr, aplite dyke 50°  
zone w eq blocky pink hb (≈30° contact) 443-444
- 5 Rusty, mal in gtz-cpy vein 10° 451-456 eq hb zone - locally matrix →  
aplite stamper at 25° chl fr 25° aplite [actn]
- 1 The CR is a relatively fg version of Guichon 453
- 6 Rusty, mal on low x fr but getting fresher 476 C.R.  
lubby 471, 474
- 7 484, 498-506, 518, 530 ser-py-cpy fr 10°; altn wh 1-2p  
~~gtz cpy~~ ~~Mass fr 25°~~ chl-py fr 25°, chl fr 250  
Rusty fr → 490  
1M-572-3322  
eq rel leuco zone 40° to core 51R
- 8 pink altn (2p) waxy grn (2l) After 509 matc → chl fr pink matrix → flaky  
ser

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Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M <sub>9</sub> fr	M <sub>11</sub> fr	Qtz.-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	sm	wh							
9 576-531	vlq	-	-	<	see below				chl	10	?	-	Gu	rel fq var.
10 549-523	lg	20	✓	NO BN	2l	-	1-2 p	-	chl ep	0.3	-	-	Gu	DI stampers 35°
13 579-595	vlq	-	✓	NO BN	"	-	"	-	chl fr	1	20	-	Gu	"
15 609-625	vlq	20	✓	NO BN	-	-	1p	✓	fr chl	1	7	-	Gu	rel fq. var steel
17 640-655	vlq	-	✓	NO BN	2l	-	1-2 p	✓	fr chl	1	10	-	Gu	" "

9 pink + pervasive ser. altn to 525 then pink 2-3p w. loc ser-qtz zones -- green (2l) chl-bn-cpy fr peg. qtz-kspen veins 35°

10 qtz-cpy veins 20° and fr. 30° pink + green (2p) whase (2l) lg-cpy > NO PY NO BN

11 py-chl fr 10° qtz-cpy fr 30-35° chl-ep-cpy fr 10° chl-cpy fr 30, 45° " vein (x?) chl-ep-py-qtz 573 CR.

12 <sup>Dead</sup> Aplite stampers 35° offset by ~~qtz-cpy-chl-py~~ fr 25° Rubbly zones 542-547, 586-67, 578-580, 605-607, 624 wh (1-2p) fresh (2) mafic fr or chl (2)

Box 13 overall Rubbly appearance

13 qtz-py vein w ser-qtz-py halo 10° chl-py fr 20° chl-ep-py 25° fr qtz-py-cpy vein 10° DI stampers 35°

14 altn wh 1p fresh (2) mafic fr, chl, vlq, pyrite ✓

15 ser-qtz-py 35° chl-ep-cpy fr 10° chl-cpy-py 30° <sup>some</sup> qtz-cpy-py vein w ser-qtz halo 10°

16 cp, pyrite (1/2) wh. altn (1p) fresh (2), mafic-fr, chl chl-cpy-py fr 20° NO BN

17 Rubbly 646-650, 654, 656, 661, 666, 670 pink altn along fr 30° pink quartz veins 10°, chl cpy fr 20°, chl-py-cpy fr 20°

18 sim. to 17

1M-572-3322



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Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M qtz	Min fr	Qtz-Ser. Zones	MoS2	Rock Type	Comments
					pink	grn	wh							
19 670-686	vlg	20	✓	No BN	pale 2l	-	1-2l 2-3 l	-	chl	1.5	20	-	Gu	red lg var
21 698-716	vlg	-	-	No BN	2l	waxy 2l	3l	-	chl	?	10	-	Gu	? "
23 734-751	lg	-	1/2	No BN	2-3 l	-	1-2 p	l	fr chl	0.8	2	-	Gu	Ap. stampers
25 770-787	lg	20	-	No BN	-	1-2 l	2p	-	fr chl	0.3	20	-	Gu	Ap stampers 40°
27														

Rubbly 671, 677, 680, Box 20 scuffy-looking, 698-700, 707-713, <sup>716</sup> ~~716~~

- 19 chl-ep-py-cpy fr 15°, chl fr 25°, gtz-cpy fr 10°  
gtz-ep vein 10° Massive ep veins 1" wide w. assoc pink altn 15° cpy-ser fr 10°
- 20 Sim. to #19
- 21 och hem veins 10° cut by wh calcite veins 65° 714 wh. altn (3)  
ser-gtz-py zones 30°
- 22 pink altn like 21 but mafic → chl, ser; gypsum veins  
gtz-cpy-MoS2 vein 30° cpy > lg- 70°, 40°
- 23 aplite stampers 40°, chl fr 15, 30° chl-ep-py fr 10°  
specularite-cpy-chl in ser-gtz-cpy zones 20°  
gtz-py veins in ser-gtz-py zones 25°; cpy gtz w. ser-gtz halo 35°  
Kspar fr 30° chl-py fr 25° gypsum cut aplite
- 24 altn wh (1-2p) fresh (p), gypsum 30°; vlg, ep-gypsum zone  
at 20° has wh altn (3) assoc + 15 cut by gyp veins (20°) 766
- 1M-572-3322 25 Gypsum 30°; ep-gtz-cpy fr (20→30°); chl-cpy fr 20°  
shatter zones (?) w. dissem. cpy blebs 20° bi-chl-cpy fr 25°  
gtz-cpy vein 30°



# HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-52

Date Aug 27/73

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	Mg Fc	Min Fc	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	grn	wh							
27 808-826	19	20	1/2	No BN	3L	2L	1P 2L	l	fr chl	l	7	-	Ga	ref. fg. var.
29 844-860	19	10	1/2	No BN	-	-	1-2 P	-	"	0.5	10	✓	Ga	min 3rd aplite stringer
31 850-898	19	20	✓	No BN	-	-	1+2 P	l	fr chl	0.8	7	✓	Ga	
33 918-935	19	-	✓	No BN	-	-	1P	l	"	1.5	-	-	Ga	ap stringer 45°
35 954-973	19	-	-	No BN	2L	-	1P	l	"	1	-	-	Ga	

26 altn wh (1p) fresh (2) Mafic → fr, chl ; Aplitic stringers, 19 much like Box 27.

27 chl-bi-cpy fr 30°, 35° <sup>± 9YP</sup> qtz-py w ser-qtz-py halo 15°, 40°  
ser-py fr 10°; qtz veins w. assoc 9YP veins + pale pink altn (3) 25°;

28 altn wh (1-2p)

29 cpy-qtz veins 15° qtz-cpy-py-no ser veins 20°  
qtz-py w ser-qtz-py halo 10° bi-py fr 0° (9YP sum)  
qtz-ep-chl-cpy-py fr. 25° chl-py-cpy fr 0° → 20° 0°, 20°  
ep-qtz veins w. serate halo 25°

30 sim. to 29

31 qtz ± py-cpy-Mafic vein w ser-qtz-py halo 15°, 40°  
(9YP sum) qtz-Mafic vein (15°) 896 C.R.

32 altn like 31

33 ser-py fr 10° chl-cpy-py fr 35°

34 epidote-chl fr, (9YP sum) altn wh(2p), green(2L)  
qtz-ep veins

35 Desc. pinkish wh altn w ep clots 955-961 956 altn  
1M-572-3322 bn-cpy-ser fr 30°, chl-bn fr 20° ep-qtz-chl  
(9YP sum) -bn fr 35°

36 epidote, pink altn (2L) wh(1-2p) - pink is typical type.

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-52

Date Aug 27/73

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 <sub>a</sub> Fc	M <sub>in</sub> Fr	Qtz. Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	gm	wh							
37 992-1009	vlg	-	✓	≤	-	-	1-2 P	✓	fr chl	0.8	<del>1</del>	-	Ga	mg variety not really text book
39 1030-1048	lg	-	1/2	✓	-	-	" 32	✓	fr chl	0.8	-	-	Ga	"
41 1064-1083	lg	7	-	↓	2 holes box	-	1-2 half box	-	fr chl	0.8	-	-	Ga	"
43 1100-1104	vlg	-	-	<	see below				see below	1	-	-	Ap or alt Ga	
-E0H-														

37 gtz-chl-ep veins + fr 30° ep-gtz veins 35°  
 gypsum 15° chl-bn fr 30°, ser-chl-bn-cpy fr 30°,  
 pyrite-gtz fr 25° 1004 C.R.

38 gtz-cpy fr 30°, chl-cpy fr 50°, cpy-py-gtz-ep vein 30°  
 altn like 37 19 cpy >

39 pyrite-gtz-w. ser-gtz-py holes 25° gypsum 25-35°  
 chl-py fr 25°, gtz-ep-cpy fr 30°

40 altn wh (1-2p) "ptic" pink w epidote clots (32) cpy >

41 gypsum 30°, gyp-gtz-ep veins + zones 30°  
 gtz-ep-chl fr 35° gtz-cpy veins 35° some w.  
 1065 pink altn pink holes - 1082  
 chl-bi-cpy fr 35°

42 ~~fr~~ Goupy 1093-1094 @ 30°?, epidote  
 ad. to gtz-kspan peg. stunner  
 loc pale pink altn w. mafic → chl, bn  
 overall wh. altn (1-2p) gypsum

43 aplite-looking rock wh or pink (2) cut by  
 1102  
 gtz-chl-bn fr 30°, chl fr 30°

-E0H- chl-ep-bn clots may be after mafic

# HIGHLAND VALLEY DRILL LOG SHEET

all Guichon, some DI, AP  
 samples 1972 stumper  
 570 793 980 1100

Hole V71-9  
 o/a 499  
 EOH 1114

Date Aug 25/73

Sunny, some  
 cumulus clouds

Property J. A.

W. J. McMillan Lovely

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M <sub>a</sub> f.c.	M <sub>h</sub> Fr	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	grn	wh							
499-48 516-531	lg	?	-	NO VV BN	-	-	2p	-	f chl	1.0 ?	3	-	Gu ?	
3 531- 550	lgt	-	√ flare	NO BN	-	2L	2P	-	chl	?	1	-	Gu	
5 563- 578	lg	10	√	NO BN	2L	-	1-2 P	-	chl	1	10	-	Gu	
7 590- 605	lg*	-	√ 1/2	NO BN	2vL	-	"	L	chl	1	1	-	Gu	
9 620- 636	lg	-	√ 1/2	NO BN	-	2-3 1	3vL	"	fr chl	1	1	-	Gu	

1 Rubblly 50%--Box 1, 2 ; 30% Box 3, 4

ser-qtz-cpy zone 30° ser-qtz<sup>±cpy</sup> zones 35° ser-ep fr 30° ±cpy  
 cpy fr 35° some have vuggy qtz-cpy veins in cores

3 gts-cpy v ser-qtz-cpy halo 40° cpy-bi fr 35°  
 4 Sim. to 3

Boxes 5+6--10% rubblly ; 7+8--30% 9, 10--5%

5 aplate stumper 1/2", 40°; chl-pyrite-cpy fr 35°

ser-qtz-py ±cpy zones gts<sup>±cpy</sup> veins 20°  
 ser-py fr 40° chl-py fr 10°

6 like 5 but ep + zeolite present

7 DI stumper 1" @ 20° has thin pink chilled rims  
 chl-cpy fr 45°, 25° ser-cpy fr 35° ser-qtz-py<sup>±cpy</sup> zones 25°  
 chl-py ±cpy fr 35° gtz-cpy w ser-cpy-py halos 20°

8 Similar to 7

9 gts-py-cpy veins w ser-qtz-py-cpy halo 30°  
 DI stumper 30°,  
 pyrite-cpy fr 20°

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V71-9

Date Aug 25/73

Property J.A.

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. $\nabla$ Bn.	Feldspar Alteration			Feld. Fresh	M <sup>g</sup> fcs	M <sup>in</sup> A	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	grn	wh							
11 650-667	lg	20	V $\frac{1}{2}$	No BN	-	-	1-2 P	2	chl	0.5	1.5	-	Gu	
13 679-695	lg	-	V $\frac{1}{2}$	No BN	-	-	2P	-	chl	0.8	1	✓	Gu	
15 712-726	lg+	-	V $\frac{1}{2}$	No BN	-	-	1-2 P	-	chl	?	1.5	-	Gu	
17 739-754	lg-	-	V	No BN	-	-	"	-	"	?	1	✓	Gu	
19 772-791	lg <sup>or</sup> lg-	-	W	No BN	-	-	"	-	"	?	0.5	-	Gu	

11 py-chl-cpy fr 10°, 20° ser-qtz-cpy zones 20°  
 " " - py-cpy " 10°

Rubby zones Box 11, 12 ... 10%; 14 ... 20%, 15, 16 ... 15%  
 17 ... 15%

12 Sim. to 11

13 ser. zones 20° pyrite predominates in these aplite stringers  
 ser-py-cpy-MoS<sub>2</sub> fr in ser-qtz-py-cpy zone

14 ser-qtz-py-cpy zones some 10. qtz-py-cpy veins (0.8' apart) alt<sup>r</sup> like 13

15 Sim. to 13 ... some epidote.

16 Sim. to 13 ... lg

17 qtz-eye aplite stringer 20° qtz-ser-py-cpy zone w qtz-py (open space filling) vein - MoS<sub>2</sub> dissem along vein borders ... 35° ser zones 20 → 30° in this box

18 almost all ser-qtz or qtz-ser zones carrying py+cpy w qtz-py-ker<sup>laser</sup> veins 10 → 30°

19 Gypsum 45° otherwise like 18

20 ser zones 1.0' " " 19

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V71-9

Date Aug 25/73

Now cloudy (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	M. of Fr.	Min. Fr.	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments	
					pink grn	wh									
21 310-827	lg-	-	vv	NO BN	cream → wh → green 1-2p			-	chl	?	0.8	-	Gu		
23 20px 845-865 20px	lg	20	vv	NO BN	lt	lt	lt	-	chl	?	0.5	-	Gu	? I think	
25 334-900	lg-	-	1/2	NO BN	-	-	1-2 p	-	fr	chl	0.5	2	-	Gu	
27 922-938	lg-	-	1/2	NO BN	-	-	"	-	"	?	1.5	-	Gu		
29 957-983	lg-	20	1/2	NO BN	-	-	"	-	chl	0.3	2	1	Gu		

- 21 Salmon-colored gypsum 20°, 35° white gypsum 60°, 30°  
 pyrite-gt veins in ser-gtz-py zones 20°-30°  
 ser-gtz-py-cpy zones 20°
- 22 like 21
- 23 Similar to 21  
 Qtz 1 cut, gtz-ser zone 1 but cut by gtz-pyrite (25°)
- chl-cpy fr 30°
- 24 MoS<sub>2</sub> present altn wh 1-2p Qtz-ser zones 1.0'  
 vlg pyrite vv
- 25 Qtz-py in ser-gtz-py zone 25°; cpy after mafic locally white aplite stringers have dissemin. cpy (10°) & have gtz-py fr || to borders - one has been cut by a gtz-cpy-tour veinlet (25°); chl-py-cpy fr 20°; Gypsum
- 26 like 25
- 27 like 25
- 28 Qtz-ser (2) Min. fr. 0.5 otherwise like 27
- 29 MoS<sub>2</sub> in ser-gtz-py-cpy zone 30° gypsum-pyrite fr 15°
- chl-py-cpy fr 25°, 10°
- 1M-572-3322
- gypsum pink veinlet  
 30 gtz-pyrite 25° p. narrow gtz vein 20°  
 ser-gtz-py halo otherwise like 29

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V71-9

Date Aug 25/73

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. fics	Min. Fr	Qtz.-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	grn	wh							
991 -1008	lg-	-	√ <sup>1</sup> / <sub>2</sub>	NO BN	-	l2	l-2 p	2	fr al	1	1.5	-	Gu	
1027- 1045	lg-	-	√ <sup>1</sup> / <sub>2</sub>	NO BN	-	-	"	2	"	0.8	1	-	Gu	
1063- 1077	lg	-	√ <sup>1</sup> / <sub>2</sub>	NO BN	-	-	"	"	"	0.1	1	-	Gu	
1095- +38 1114	lg-	20	√ <sup>1</sup> / <sub>2</sub>	NO BN	-	-	"	"	fr chl	0.3	2	✓	Gu	
EDH														

31 pink zoelite 0-20° gypsum 20°, 30°  
ser-gtz-pyrite zone 15° chl-py-cpy fr 25°

32 like 31 gtz-ser 2.0

33 gtz-ser zones narrower now - mainly pyrite gypsum 30°  
ser-py-cpy fr 10° mafic concn (foln?) 30° to core  
chl-cpy fr 10°, 40°; bi-py-cpy fr 10°

34 also like 33 zoelite on fractures sample 1027

35 Disturbers 25°  
gypsum 30° occupies cpy-ser-gtz zone - relationship  
not clear sample 1028  
overall is like 33 fr-mainly chl-py @ 20°

36 similar to 35

37. Disturbers 20° mafic → cpy chl-py-~~fr~~<sup>±cpy</sup> fr 35°  
cut by gtz-gyp(?) - py-~~fr~~<sup>vein</sup> vein 30°  
ser-gtz-py-cpy 25° cut CR + Disturbers  
gtz-chl-py (20°) fr vuggy gtz-py & ser-gtz  
py-cpy halo 30°  
(each way)

— EDH —

470

# Samples 1972 HIGHLAND VALLEY DRILL LOG SHEET

470, 547, 801 SK → 914

Hole V71-8A

Date Aug 13/73

1075, 1330 Gu after that

010 457 80#1340

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 <sub>2</sub> Fe	M <sub>1</sub> Fr	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	gn	wh							
1 459-475	lg	-	✓	✓ No bn	-	2L	2p	-	Fr chl ser	0.3	2	1	Q <sub>bn</sub>	up to 470 not sure after is Q <sub>bn</sub>
3 490-508	lg	10	✓	"	2ul	2ul	1-2 p	-	chl ser	0.2	1 1/2	✓	SK	large anh. gtz
5 525-542	lg	-	-	"	2p	2	-	-	chl	0.3	1 1/2	-	Q <sub>bn</sub>	on sk?
7 559-576	lg+	-	-	"	-	2L	1-2	-	chl	0.2	1 1/2	✓	Q <sub>bn</sub>	
8 alt like	7	-	-	pyrite present										

1 gtz - cpy<sup>±</sup> veins w. ser-gtz - cpy selvages 20°, 40°  
 ser-cpy fr 30° ser-gtz - py - cpy zones 0°  
 (35°) gtz - cpy (bonanza-type) w. dk green ser - cpy <sup>actn</sup> zones  
 bi - ser - cpy fr 35° matrix repl. by flaky ser; gtz unchanged  
 ser - gtz - cpy - MoS<sub>2</sub> zone 0° ser - pyr. fr 30°  
 Gauge @ 467, 490 Q<sub>bn</sub> - has rounded gtz phenos, sub-aphitic  
 matrix (20%)  
 2 Bonanza veins @ 35, 50° alt like  
 3 gtz - cpy - MoS<sub>2</sub> 35° most veins, fr, alt zones 10-35°  
 gtz - chl - cpy veinlet in dk green ser gtz cpy alt zone  
 Pink + dark green <sup>(35°)</sup> alt adj. to gtz-ser zones  
 4 pink alt 2p, cut by aplitic stamper (w. dissemin. cpy)  
 Gauge zones 510-14, 521, 525, 540-44 - Box 5 rubble  
 5 ~~vuggy~~ gtz with vuggy ep-cpy cores + ser-gtz borders  
 ser-gtz - cpy fr 0°, 30° gtz - ksp zones 35°  
 Bonanza gtz cpy-gtz in ser-gtz - cpy zones 35° (each way)  
 gtz - chl - cpy fr 40° chl - cpy fr 30° pink actn zone  
 6 wh. alt 1-2 p --- Q<sub>bn</sub> --- lg -

sample 526

pre-mylon aplitic stamper 0° w. gtz ksp per core zones  
Bonanza veins 10-25°



# HIGHLAND VALLEY DRILL LOG SHEET

Hole V 71-8A

Date Aug 13/73

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 <sub>0</sub> f/c	M <sub>10</sub> fr	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
						wh							
9 595 - 604	lg	-	√ <sub>2</sub>	NO BN	pink green 2p	2d	-	chl	?	1.	✓	Φ Bm +	numerous aplite stringers
11 621 - 637	lg	-	√ <sub>2</sub>	NO BN	-	2-3 p	-	chl	0.2	4.	✓	Φ Bm + ap	"
13 651 - 665	vlg	20	√ <sub>2</sub>	NO BN	greenish wh	2p	-	chl	0.3	5	?	Φ Bm + ap	(less than)
15 682 706	lg-20		√ <sub>2</sub>	NO BN	gm wh	2p	-	chl PY	0.	2	-	Φ Bm	

9 V 71-8A gts-cpy vein in ser-gtz-cpy zone 30°;  
 gts vein w epy-py stringers in core + adv. ser-  
 gtz-py-cpy zone 10°, 40°, 25° 663  
 aplite stringers 20°, 30° pyrite stringer in ser-gtz-py  
 ser-py-MoS<sub>2</sub> slips 0° zone 35°

10 altm wh (2) Φ Bm, lots of ap. stringers Qtz-ep  
 (lg → hg) only seen loc because of ser-gtz zones

11 aplite stringers 30°, 45° gts-py-MoS<sub>2</sub> w. ser-gtz-  
 halo 25°

12 Qtz-MoS<sub>2</sub> veins 10°, 35° ← cuts gts-cpy-spec w.  
 ser-gtz-cpy halo (Qtz veins 10°)  
 altm like 11 Rubbly 645-647

13 aplite 20°, 30° gts-cpy pyrite core + ser-gtz-pyr.  
 pyr-chl fr 35°; ser-py fr halo 10°

14 Sort of Rubbly 653-665 lg, gypsum 40°  
 altm wh (1-2p)

15 gts-cpy vein (30° gypsum-cpy vein) ± gyp-pods  
 gts-pyrite ser halo 30°  
 gts-cpy-w ser halo 10, 30°

16 gts-py-cpy-MoS<sub>2</sub> w. ser-gtz-py-cpy halo 15°  
 gypsum veins altm like 15



# HIGHLAND VALLEY DRILL LOG SHEET

Hole V71-9A Date Aug 13/73

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 <sub>g</sub> Fe	M <sub>g</sub> Fr	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	grn	wh							
17 722 -738	lg	20	√ 1/2	NO BN	lz	-	1-2 P	-	chl	0.4	1 1/2	-	φ Bm	
19 755- 774	lg	-	√	NO BN	zl	-	2 P	-	chl	0.2	2	-	φ Bm +	ap. stunges 30° 10°
21 791 -810	lgt	20	√	NO BN	greenish white	-	-	-	chl	?	2	√	φ Bm	→ Bm almost
23 829- 849	lg	10	√ 1/2	NO BN	-	-	wh 1-2 P	-	chl py cpy	0.3	4	√	φ Bm	
25 865- 883	lg	-	√ 1/2	NO BN	pink 1-2 l	-	1-2	-	"	0.2	10	-	φ Bm	

- 17 gypsum; salmon colored zeolite 10-30°  
 chl-pyr 35° fr; gtz-chl-cpy fr 0°  
 ser-gtz-py-cpy fr 25° cut by gypsum vein (25°)  
 gtz-w. gyp, cpy pods 30° + ser-gtz-py halo  
 gtz-pyrite w. ser-gtz pyrite halo
- 18 zeol, gypsum, lg, pyr., altn wh(1-2p)
- 19 zeolite (0 → 20° variable) **774** ser-gtz altn zone as  
 seen in this hole
- 20 General pink altn (2)
- 21 very nice Bonanza gtz-cpy some MoS<sub>2</sub> veins w.  
 aplite stunger 50° ser-gtz-cpy halos 10°  
 gtz-ep-chl veins 30° cut ser-gtz?  
 ser-gtz zones all low &
- 22 altn wh(1-2p) pink(2l) green(2l)
- 23 gypsum gtz-MoS<sub>2</sub> 35° cuts gtz-pyrite w. <sup>Kspar</sup> ~~10°~~  
 altn halo 10°
- 24 Qtz-cp-MoS<sub>2</sub> vein; altn wh(2p) **877** chl, gyp  
 Kspar altn?
- 25 gypsum, aplite stunger 30°
- 26 Pink + green (1-2p) some zeolite, minor ep.

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V71-8A

Date Aug 13/73

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 <sub>g</sub> fc	M <sub>in</sub> fr	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
27 902-913	lg-10	10	1/2	NO BN	pink, gm, wh	1-2 2	-	chl py	0.2	10	✓	P bn	→ Gu
29 932-949	vlg	5	1/2	NO BN	pink	2l	-	fr chl	0.3	20	-	Gu	
31 967-986	vlg	20	1/2	NO BN	-	1-2 p	✓	"	0.3	-	-	Gu	
33 1005-1023	vlgt	20	1/2	NO BN	-	"	"	"	0.3	-	-	Gu	DI stampers 10°, 30°
35 1042-1057	vlg	20	✓	NO BN	-	"	"	"	0.3	-	-	Gu	+ ap. stampers

27 chl - cpy fr 20, 30° chl - ep - py fr 30° gypsum  
 gypsum 30°, 40° gts - chl - ep - cpy veins 15°  
 gts - ~~py~~ w ser - gts - cpy halo 30° ser - py - cpy fr 10°, 30°  
 gts - pyr - MoS<sub>2</sub> w ser - gts - py halo 30°  
 cuts gts - chl - py vein 20°  
 contact ≈ 904 - no obvious shearing or chilling  
 - core a bit messed up so contact itself not seen

28 altn wh (2p) pink (2l) Gu. sample 913

29 barren qt z veins 30° gypsum fr 0, 30°

30 Rubbly 957-960 wh (1-4) green (2-3) pink (2) locally - even fresh in one place

31 gts - pyr - vein 20° gypsum most fr 10-30° 977 CR

32 altn ~~white~~ (1-2p) gypsum gts - pyrite - MoS<sub>2</sub> vein 25°

33 brick red zeol fr 0°

34 local zones are <sup>more</sup> <sup>e35°</sup> leucocratic w. eg hb xls in boxes 33 + 34 altn wh (1-2p, 23) pink (2)

35 aplite zones 20, 30° gypsum 30° 45° gts - py - cpy vein 10°

36 sim. altn Rubbly 1057-59, 1061, 1070

# HIGHLAND VALLEY DRILL LOG SHEET

1972 Sample at 1330

Hole V71-8A

Date Aug 13/73

Aug 25/73 Cool, Sunny  
a beautiful fall-type day.

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 <sub>g</sub> Fr	Min Fr	Qz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
							wh							
7 1073-1091	vlg	10	1/2	NO BN	-	-	1-2 P	✓	fr chl	0.3	10	-	Gu	
39 1106-1125	lg	-	✓	✓	-	-	"	-	chl	0.1	-	-	Gu	
41 1142-1159	vlg	-	✓	NO BN	-	-	"	-	"	0.5	-	-	Gu + ap	+ D1 stumps
43 1175-1194	lg	-	✓	NO BN	-	-	"	L	fr chl	0.5	-	-	"	

37 Gypsum 20° 45° gts - chl - cpy vein 35°  
chl - pyrite fr 35°, 60°, 20° chl fr 35°  
Barren gts 45° cut by pyrite - cpy - chl 25°

ser-gts - py - cpy zones 10°, 30°

39 Similar to 37  
(1091-1108)

4's 5:30 --- to here with it ---

39 chl-ep veins 30° ——— gypsum - younger but same fracture  
gts-ep-cpy veins + fr 25° chl-py ± cpy fr 20°  
chl-cpy-bn fr 10° py-cpy fr 10°

40 Gauge 1125-1130 Gu cpy > moS<sub>2</sub> pink altm nr gauge elsewhere altm wh (1-2 p) fresh (R)

41 CR cut by aplite which is cut by D1 - D1 has chilled border + cpy, cpy-py + ep-cpy fr; contact 05°  
CR + dyke chl-cpy fr 20° Gypsum 35°

Rubbly after 1155 ~~1159~~ 1169 @ 1150 D1 cut + offset by aplite stumps (30°)

42 like 41

1M-572-3322 43 Gypsum present; not abundant - here we have D1 cutting D1!

44 Gu + D1 + Ap; epidote present; altm as in 43; 1972-cpy vein 30°

Samples

1142, 1147,  
1181 all show  
dyke relationships

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V8A  
V71-8A

Date Aug 25/73

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 <sub>a</sub> f/c	M <sub>in</sub> Fr	Qtz.-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
							wh							
45 1208 - 1225	lg-	20	-	NO BN	-	-	1-2 P	2	fr chl	0.5	-	-	Ga	a few sp stumps (100)
47 1245- 1262	lg-	20	-	✓✓	pink R2	-	"	"	"	0.3	-	none	Ga	"
49 1279- 1297	lg-	-	-	NO BN	-	-	"	"	"	0.5	-	✓	Ga	+ aplite
51 1315- 1332	vlq	7	-	✓✓	R2	-	"	"	"	0.8	-	✓	Ga	+ "
52 (EOH) - 1341.5	vlq	-	-	✓✓	1-2 P	-	1-2 P	-	chl	0.8	-	-	Ga	

45 gts-chl - bi - cpy fr 10°, 35° Gypsum 40°  
gt2-cpy vein 10°

46 like 45 but has pink zoelite veins (35°)

47 ep-chl - biotite - cpy zone (15°) cut by gyp - cpy vein 40°  
gypsum 0° gts - cpy some bn, MoS<sub>2</sub> (20°)

48 aplite zone & then rock type seems to change - NOT SURE  
epidote in zones + apl. fs locally - rel. abundant  
bn picking up in CPY ≥ BN here

49 chl-cpy fr 20° gts-cpy fr 20° cpy-MoS<sub>2</sub> fr 10°  
aplite - 2' of core length - 20° ~~cut by~~ gt2-cpy fr 10°  
ep. loc after fs; cpy after mafics loc; Gypsum 30°

50 like 49 but local pink alter (2-3)

51 chl-cpy - bn fr 35° gts-chl-ep fr 25° some  
gts-ser-ep-MoS<sub>2</sub> zones 20° gts-cpy veins 10°

52 1333-1336 rubble gypsum ~~pink~~ ep in zones + after fs  
sample 1337 pink alter zones

— EOH —

# HIGHLAND VALLEY DRILL LOG SHEET

Samples 197-

540 575 690 730  
757 880 901 927 1006

Hole V 71-6

Date Aug 13/73

01B479

Sunny, Warm, some cumulus clouds

Hole depth 1027

Property J.A.

W. J. McMillan

Q Bm → Gu ?

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M <sup>a</sup> fr	M <sup>m</sup> fr	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
							wh							
1) 479-501	qt	<del>2</del>	✓	✓	-	-	1-2	-	chl	0.8	3	✓	Q Bm	
3) 518-535	21% hg	-	✓	✓	-	-	"	-	"	0.3	1.5	✓	"	not much
5) 551-569	21% hg	-	✓	✓	Pink 2P	where rock is not sericitized	grn	-	chl ser	0.3	0.5	✓	"	CR <del>fr</del>
7) 584-602	hg	-	✓	✓	2P	grn	2L	-	chl	0.3	0.3	✓	"	? between ser-qtz zones
8) F5 altu				wh	1-2P	pink 2L	where							CR can be seen!

- Gauge 471-3** bonanza 1 qtz - cpy w. ser + cpy - halos 15°  
ser + cpy ± py zones + fr 10, 30, 40 chl - pyrite 35° fr  
qtz - cpy - MoS<sub>2</sub> vein a ser - qtz - cpy halos 15°  
ser - pyrite fr 35° Grade is high next to shear because of bonanza qtz - cpy ± MoS<sub>2</sub> veins + ser - qtz - cpy zones  
cpy stringers in
- lg sim. to 1 overall - some of the Q Bm has obvious, fq aplitic matrix & well defined qb eyes
- qtz - cpy - MoS<sub>2</sub> (bonanza-type) in ser - qtz - chl - cpy zone  
ser - cpy fr, 10°; py - qtz ± fr ± py veins with ser - qtz halos 10°, 40°, 510  
qtz - pyrite ser - qtz - py halos, cpy - qtz ± py veins " " - cpy " 35°, 45°
- Gravelly 529, 532-3, 535** altu like 3 overall but loc. pink & greenish wh. zones (2)
- Rubblly 552** - overall core looks vaguely rubblly  
qtz veins w ep - cpy knots + och hem streaks tend to be vuggy (15°) - have ser - qtz - cpy halos
- pyrite ✓ wh, pink, grn altu (2P) less rubblly-looking after 575'
- "Bonanza-style" qtz - pyrite veins w. ser - qtz - py halos 0°  
ser - MoS<sub>2</sub> - cpy slips 35° in ser - qtz - cpy zones 0 → 15°
- one bonanza qtz - cpy vein has chl - cpy knots - vein in ser - qtz cpy zone

1M-572-3322

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V71-6

Date Aug 13/73

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	Mafic	Min. fr	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pk	grn	sh							
9 615-632	lg	-	✓	✓	-	2-3 P	-	-	ser chl	a3	0.3	-	φ Bm	pyrite v. abund.
11 652-669	lgt	-	✓	✓	-	2-3 2P 1L	✓	✓	chl	0.2	0.4	✓	φ Bm	
13 687-705	lgt+10	✓	✓	✓	see below		-	-	ser chl	0.1	0.8	✓	φ Bm	lots of gypsum
15														

9 pyrite - gtz - ser ± cpy fr 45, 35, 15  
 vuggy gtz - pyr. vein w. ser - gtz - cpy halo 30°, 0°  
 some have massive pyrite stringers  
 vuggy gtz - cpy in ser ± gtz - cpy zone (0°)  
 cpy, py after mafic loc.

10 lots of "bonanza" gtz - py zones but most at 10% core  
 altn of C.R. sh (2p) <sup>apparent</sup> abundance may be misleading

11 gypsum (10-30°) vein  
 - cpy ± MoS<sub>2</sub>  
 bonanza gtz - cpy + gtz - pyrite veins (0-10°)  
 ser - gtz - cpy - pyr. halo  
 ser - pyr. - cpy fr @ 50°, 35°, 0°  
 gtz - cpy - py vein in ser gtz - cpy - py zone cut by gypsum  
 gtz - cpy vein (30°) ser - gtz - bi + cpy zone 0°  
**552, 557, 558**

12 gtz - per zones have meandering gypsum veins + are cut  
 by chl - cpy fr coated w. gypsum **680** kg but  
 bonanza style veins @ low % to core **689**

13 ectn var. wh (1-2) to green (2) to dk green (3) to cream (2-3) **702**  
 gypsum; pyr - ser fr 35° pp - chl fr 35° gtz - cpy vein 35°  
 gtz - MoS<sub>2</sub> - cpy 35° cut off by gypsum - chl? 35°  
 gtz - cpy vein - in halo 35° gtz - cpy ser fr 35-45° cut gtz - ser cpy  
 zones w cpy stringers



# HIGHLAND VALLEY DRILL LOG SHEET

Hole V71-6

Date Aug 13/73

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	Min. Fr	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
						wh							
15 725-743	lg+	-	✓	No Bn	green-pink (2 v. l.)	1-2 P	-	ser chl	0.1	0.3	✓	Q Bm	
17 762-781	lg+	20	✓	No Bn	dk emerald green 3 v. l.	1-2 P	✓	ser chl	0.2	0.5	✓	Q Bm	
19 798-817	lg+	10	✓ 1/2	"	pink 2 l.	1-2 P	✓	ser chl	0.2	0.5	✓	Q Bm	
21													

14 gtz-moss-cpy 40° cuts bonanza gtz-cpy 0°  
 so much gtz-ser altn CR not common - what is visible has wh (0-2) altn & is beautiful Q Bm

15 Mnlyzn like 13 Bonanza gtz-cpy gtz-py-cpy <sup>± MoS<sub>2</sub></sup> low's  
 ser  
 v. 1 gtz-cpy-py halos gypsum ± cpy 20-35° cut  
 727 ser-gtz zones

16 gtz-kspen-cpy vein (30° cut by chl-gyp-cpy vein which  
 (occupies) parallels & cross cuts the older vein (both cut <sup>ser</sup> gtz zone)  
 Bonanza veins — too much altn to be sure of CR altn

17 Mnlyzn like 15 but less of it  
gypsum pyrite-gtz <sup>± cpy</sup> 0° cuts ser-gtz-cpy-py  
 quartz vein 30° (10-30°)  
 gypsum 30°  
 apparently cut by gtz-py which is cut by  
 py & cpy brg fr 20-30° ser-gtz altn zones <sup>with 705</sup> gypsum

18 Sim. to 17 but sl. lower grade - altn sl. less also

19 fuzzy and zeol.-cal. vein 809, 813  
 gtz-cpy-MoS<sub>2</sub> vein 30°; ser-py-cpy fr 05° gtz-kspen veins  
 cpy-gtz vein w. ser-gtz halo 15° - the cpy-rich vein  
 is enclosed loc by <sup>subpar.</sup> gypsum veins ± surmise  
 veins were gtz-cpy-anhydrite entirely

1M-572-3322  
 chl-bi-cpy fr 20°  
 20 sim altn to 19 gypsum 10-20° Q Bm

# HIGHLAND VALLEY DRILL LOG SHEET

Hole ~~#7~~ V71-6

Date Aug 13 / 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 <sub>g</sub> Rc	M <sub>in</sub> Fr	Qtz.-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					-	-	wh							
21 824- 900-843	lg	20	√ 1/2	NO BN	-	-	1 p	√	fr chl cpy	0.3	3	√	Q Bm	gts eyes round → kidney shaped + embayed
23 871- 890	lg	10	√ 1/2	NO BN	-	-	"	"	"	0.3	10	√	"	"
25 907- 927	lg-	10	√	NO BN	-	-	2p	-	chl ser	0.3	3	√	Q Bm +Ap	and + Gu
27 945- 945	lg-	3	-	"	pink 2l	cm 2l	2l	-	chl fr cpy	0.1	20	7	Gu	

21 gypsum gts - cpy fr 15° cpy - py w ser - gtz - cpy -  
pyr. fr 10°, 30° ± py ± MoS<sub>2</sub> py holes 20° (each way)

gypsum - pyrite veins 30° pyr ± cpy u. ser - gtz - pyr  
" - cpy " " holes 20° (each way)

bi - chl - py ± cpy fr 35° cpy fr 0° gyps. 130° vein  
anhyd. - pyrite

22 pink zoelite 35° altm like 21 gtz - MoS<sub>2</sub> - cpy - py 35°  
740

23 like 21

24 altm like 23 - mineralized pale pink bi gtz plag aplite  
@ 896 - 30° contact - true width ~ 1' - has cpy - MoS<sub>2</sub>  
fr 10° gtz - MoS<sub>2</sub> fr 10-20° both sets cut by gypsum  
(at various X's)

25 Aplite stringers 20°  
pink gts - plag ppy - aph. - gridmass 20°  
pink zoelite gypsum  
CK changes at 916 → gneiss? No real fault  
zone + Q Bm seems more aplitic than 915 u. m contact

26 Gneiss altm (3h 2p) cut by bi (chl) gts plag (pink altm)  
ppy - aph. tan - pink gridmass

27 gray fresh D stringers 20°, gypsum 30°, chl - cpy fr 30°  
fr. mainly 10-20° gts - ep 30° ≠ gts - cpy fr 20°  
≠ chl - bi - cpy fr 0, 25°



# HIGHLAND VALLEY DRILL LOG SHEET

Hole V71-6

Date Aug 13/73

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	Mafic	Mun Fr	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments	
					pink	wh								
29 980-998	lg	5	-	No Bn	3l	-	(2 P	-	chl	0.3	-	✓	Gu +	DI, ap stungers 15°
31 1016-1027	lg	20	-	≥	-	-	2p	-	chl	0.4	-	✓	Gu +	aplite stungers
<del>EDH</del>														

28 altn mainly wh (2) Gu more epidote now

29 gypsum 30°, 45°, 0°, 70° gtz-cpy vein 20°

gtz-MoS<sub>2</sub> vein 10°, <sup>35°</sup> aplite chl fr 30° chl-cpy fr 25°

gtz-ser-cpy fr 35° 985-986 pink alt. bxt'd zone cemented by gypsum 986

30 Qtz-ep veins (3/4) 35°, lg, cut by qbm dyke 1008-1013 which <sup>is wh.</sup> cut by tan apl. dyke stungers 1013 contact - little or no chilling CR altn as in 29

31 Bi-chl-cpy fr 25° chl-ep fr 30° aplite dykelet w. sub-graphic zones (cut by pink wh aplite (20°) chl-br ± cpy fr 35° chl-cpy 30° gypsum 10, 30° ser-MoS<sub>2</sub>-cpy fr 20°

— EDH —

# HIGHLAND VALLEY DRILL LOG SHEET

Samples 1972  
 965 | 1533  
 1248 | 1641  
 1490

D12 after  
 ≈ 1500

Hole V 71-12A

Date Aug 12/73

1/8 731; EOH/1659 Sunny, Clear, Hot  
 Fabulous

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 <sub>9</sub> Rc	M <sub>11</sub> f	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
1 731-750	lgt	20	-	✓	see below			-	ser chl	0.3	✓	✓	?	
3 767-784	lgt	7	-	≥	mixed salmon pink - pink + green (2-3)				"	0.7	✓	✓	?	
5 802-815	lg	7	-	✓	wh - grn wh (2) local pink (3)			fr chl		0.5	✓	✓	⊕ Bm?	qtz eyes
7											h o f s			

1 Dr salmon pink (3R), pale pink (2E) + waxy grn (2-3) (Kspar?)  
 Bonanza gtz - cpy - MoS<sub>2</sub> cpy - MoS<sub>2</sub> (40) w. gtz - ser - cpy  
 gtz - ser - cpy zones 20° ser - gtz zones w cpy - MoS<sub>2</sub> stampers 35°  
 ser - cpy - MoS<sub>2</sub> slips 25° Gougy throughout

2 pink alt 3p (green 3v) still not sure of rock but NOT porphyry local gougy zones

3 779-782 Gougy DISTINCTION BETWEEN QTZ-SER ZONES AND FR V. FINICKY AND NOT MEANINGFUL -  
 ∴ all listed under fr ~~is not~~ [seen to permeate out fm fr.]

ser - gtz - dissemin cpy  $\frac{1}{4}$ " fr - cpy also dissemin. in  
 adj. alt. c.R. 30° ser - ptz - cpy fr (1/4") - 20°, 30°  
 gtz - cpy - bn vein (30°) ser - cpy - bn slip 35°  
 gtz - MoS<sub>2</sub> cpy N bn 20°  $\rightarrow$  cuts ser - gtz - cpy - bn fr - zone  
 4 Rock type? alt like 3 gtz - ep - bn vein 25°  
 5 chl - cpy - bn fr w. bleach halos 35° cut by gtz - MoS<sub>2</sub> - cpy N  
 frs 10° - also cuts ser - gtz - cpy - bn fr (350)  
 ser - bn fr 70° gtz - bn - MoS<sub>2</sub> vein 20°  
 chl - ep - bn - cpy fr 15° 807 pink (Kspar?) alt zone

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V71-12A

Date Aug 12/73

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. Fr. G. Fr.	Min. Fr.	Qtz.-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	wh							
2830 - 849	lg	4	-	≧	2 half	-	2 half	-	chl	0.2	✓	✓	Qtz? eyes
7867 - 886	lg	5	-	≧	-	-	1.2	1.2	fr chl cpy bn	0.2	✓	1/2	"
71902- 916	lg	5	-	≧	2.3 p	-	-	-	ser cpy	0	✓	✓	"

6 815-16 Rubbly alt. milder now gr-wh → wh (1-2p)  
min. fr ~~0.1~~ 0.1

7 Bx zone w ser-qtz between frags  
ser-MoS<sub>2</sub>-chl slip 10°  
by qtz-ser-bn-MoS<sub>2</sub> fr (30°) gypsum 30° (fine ways)  
qtz-MoS<sub>2</sub>-cpy-bn cut by qtz-ep-chl-MoS<sub>2</sub> fr 30° ser-qtz-cpy-bn 35° cut  
qtz-ser-bn-cpy zones w. bi? - look black **847**  
qtz-bn 35° cuts ser-qtz-cpy-bn zones (40°)

8 Sim. to 7

9 pink zeolite 10° gypsum-30°-post zeolite  
fr. loc. form stackworks **878**

10 Sim to 9 to 890 then pink alt 2p + rubbly zones

11 gouge + rubble 908-916 -924 zeolite 20° gypsum 80°, 30°  
ser-MoS<sub>2</sub>-bn fr 35°; bn-chl-cpy ser fr 30°  
qtz-bn-cpy-ser fr 25°, 50° <sup>ser-</sup>qtz-cpy ~~zones~~ <sup>zones</sup> 30°  
qtz-cpy-bn 35° cut, offset by qtz-bn-cpy w.  
pink alt. halos 20°, 40° <sup>some</sup>qtz-bn cpy 10° seen  
kspars ~~seen~~ fr 30° cut by <sup>ser-</sup>qtz-cpy fr 30° **906 alt**

12 pink + green (2-3p) to 930 then wh (2p)

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V71-12A

Date Aug 12/73

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. of f.c.	Mn. f.	Qtz. Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments	
					wh	grn								
3 932-951	lg	5	-	≈	wh	grn	wh	1-2p	1/2 chl	0.3	10	√ 1/2	9 Bm + D1	Both merged
15 970-988	lg	5	-	1/2	-	grn	pink	2-3 p	ser chl	0.1	?	√	0 Bm	

13 Dyke contact ~80° (uneven). Dyke has pinky tan to brown aphi. matrix, gtz + plag phenos - contact <sup>some bi</sup> rel chilled shows flow alignment. A few ft along the phenos are coarser & more abundant - GOOD D1 acts beyond 550 in green (waxy, ser) 3p matrix, emerald green (3p) plag xls. [may be C.R.] 936 CR 946 Dyke

14 Waxy green (2-3 p) wh. loc (2)

15 982 onward - rubble gtz - cpy - MoS<sub>2</sub> - kspar veins 30°  
 MoS<sub>2</sub> fr 250 gtz - bn - <sup>35°</sup> MoS<sub>2</sub> 45° splits <sup>45°</sup> / <sup>30°</sup> / <sup>60°</sup>  
 Calcite - cpy cuts cuts gtz - ser - bn zone 10° gtz - cpy - tour <sup>35°</sup>  
 gtz - ser - cpy kspar? alt adj to cracks

\* EVERYTHING TO HERE BEST DESCRIBED AS A \_\_\_\_\_  
 \_\_\_\_\_ CLOSELY FR. STOCKWORK \* @ 975

16 Near 988 pink #2fs porphyritic dyke  
 lots of kspar alt adj. to cracks  
 pink to green ser alt up to 997 then gauge to 999  
 alt light green 1-2 after 1000



# HIGHLAND VALLEY DRILL LOG SHEET

Hole V71-12A

Date Aug 12/73

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	K f/c	min f	Qtz. Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
17 1004 -1023	lg	10	-	≥	mixed waxy, emerald green + pink	2-3p		ser chl	0.9	?	✓	Φ Bm	
19 1038 1057	lg	4	-	≤	grn-wh	1-2p		chl	0.8	5	-	Φ Bm	
21 1076 1094	lg	3	-	≤	like 19 but pink 22 also			chl	0.2	-	-	"	
23 1112 1130		3	-	<	pink 2-3 p	wh 2l		chl	0.2	-	✓	"	

17 gypsum 1016 altm

18 Gouzy 1019-1021, 1024-1033

altm sercitic green to 1034 (level 2-3) than grn-wh (1-2) fractures w. assoc pink altm in less alt. rock

19 qtz-bn-cpy vein (60°) cut by (?) barren qtz (20°) qtz w ser-qtz-bn fringe 35° pink altm zones along fr gypsum on same fact. as earlier qtz vein 10° ser-qtz-bn-cpy 30° qtz-cpy-bn w ser-qtz-cpy bn qtz-w 1" wide zone of salmon pink altm (45°) altm (45°) qtz-bn-cpy fr 15° chl-cpy fr 30°

20 flag xls greenish wh (1-2p) fr. common w. pink altm locally matrix pink 1068 MoS<sub>2</sub> ✓

21 1084 CR

22 1108 altm pink altm 2-3p + pink fr.

23 salt + pepper texture w. little blebs of sulphide - qtz(?) ser(?) [ie my famous little black blebs] - inch-scale qtz-bn-cpy veins ± MoS<sub>2</sub> (65°, 30°)

1M-572-3322 24 qtz, etc veins 0° fr 30-40° mostly qtz-ser 10 pink altm 2p.

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V71-12A

Date Aug 13/73

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. Fe	min. Fe	Qtz.-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	wh							
25 1148-1166	lg+	3	-	≈	2-3 p			chl ser	0.1	4	✓	Q Bm	
27 1185-1204	lg	4	-	<	2l	wh 1-2 p		chl fr	0.2	7	✓	Q Bm	Skeena? Q Bm?
29 1222-1240	lg-	7	-	≈	pink + green 2p			ser	?	7			?
31 1258-1276	vlg	20	-	≈	pink + green 2l		1p	fr chl	0.5	-	-		Q Bm, D12 (1266-1270), Q Bm
dyke mineralized													

25 pink zirconite ~~15°~~ 3 1/4" aplite stumper - not chilled - contact 25°  
 fr. 10°, 30°  
 gts - bn - MoS<sub>2</sub> ± cpy 10°; 35° gts - bn veins 30° (each way)  
cut by gts - chl - bn ± cpy cut gts - chl - bn @ 25° veins  
 qtz - bn - cpy - MoS<sub>2</sub> vein <sup>fr @ 10°</sup> (25°) on ~~25°~~ gts - chl - cpy - bn zone fr 10°; 35°  
 N E where these intersect they are synchronous i.e. the rock was shattered then frags spread to allow minerals to be deposited

26 [Rubbly @ 1180] altm like 25  
 27 gts - ep veins ± MoS<sub>2</sub> ± pink altm folios  
 28 overall pink 2p, wh 1-2 l, ~~even~~ fresh (l)  
 29 qtz - cpy - bn - ser zone tract v cem. by carbonate  
 @tz (vuggy) w bn - ser ltr edges kspar fr 10°  
 [Gaugy 1223 - 1230]  
 30 pink + green (1-2p); Q Bm  
 31 pink D1 stumper (chilled) 25° pink zirconite fr 0°  
 Q Bm - loc zones w cpy <sup>pink</sup> hb 1266 contact  
 1M-572-3322 @ 1266 the rock suddenly changes to D12 (no chill zone)  
 for gts plag aplite - pale pink matrix  
 Ppy mineralized wth cpy, MoS<sub>2</sub> mix fr. density lower

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V 71-12A

Date Aug 12/73

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 <sub>2</sub> fr	M <sub>1</sub> fr	Qtz.-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
							Wh							
33 1293-1311	vlg	-	-	≤	emerald green	altn	1	✓	fr chl	0.9	-	✓	Φ Bm	
35 1329-1347	vlg	10	-	≤	pink	-	wh 1-2 p	-	fr chl	0.5	-	✓	Φ Bm	
37 1364-1383	vlg	-	-	?	-	-	2p	-	chl	1	-	-	Φ Bm	
39 1401-1420	vlg	10	-	<	pink	-	wh 1-2 p	-	cu ep cpy	1	-	✓	Φ Bm	

32 Φ Bm - ap. stamper 30° The Φ Bm is nearly fresh + has beautiful, rounded grs eyes. **1272CR**

33 grs-bn-cpy-MoS<sub>2</sub> fr 30° chl-cpy-bn fr 45°, 35° Kspar fr 35° Emerald green has assoc waxy green altn - zone @ 35° Bn-cpy fr 0° MoS<sub>2</sub> slip 10°

34 Qtz-Kspar veinlets 70° wh 1-2 altn gives way to pink + green level (-2) a few fr into the box

35 gypsum veins 35° ep fr 35°; chl-ep fr 20°

36 gougy area w. pink ser + emerald green ser altn to 1350 where dk gray-green amyg (?) dyke -- Lamprophyre or Kv? to 1357 where it terminates in a shear zone which has some dyke frags in it (a post-dyke)

**1355 dyke** Shatter zones continue w. wh (2) altn to end of box

37 ep-zeolite (pale pink silky-looking prisms) grs-Kspar veins 30° gypsum

38 pink altn 1-2 p wh 1-2 MoS<sub>2</sub> ✓ bn > cpy? vlg

**1M-572-3322**

39 Shatter zone 1417-1425, 1429-30 "Lamprophyre" dyke 1425-1429



# HIGHLAND VALLEY DRILL LOG SHEET

Hole V71-12A

Date Aug 11/73

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 Alc	m L	Qtz.-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	grn	wh							
41 1434-1452	lg-	20	-	<	2l	2p	wh → fr	fr	fr	0.8	-	-	Q	loc. qtz eyes cg - looks almost like bp
43 1470-1487	lg-	-	-	≤	2l	2p	-	-	chl ep	0.8	-	✓	Q Bm	
45 1505-1524	1/9	10	-	<?	pink + grn	2p (3l)	-	-	chl ep	1	-	-	Q Bom	qtz eyes loc cg.
47														

40 Qtz - ser - bn zones (10') altn pinkish wh → green (1-2 p)  
bn ≥ cpy

41 pink altn ~~veins~~ (kspars? qtz) 35° (each way) cut by  
qtz - bn (35°) ; cpy - bn - chl fr 10° ; bn - chl fr 30°  
cpy, bn after chl mafic loc. qtz - cpy fr 20° 1439 veins  
cpy - bn - qtz fr 0° 1453

42 loc. matrix of rock permeated w. aplite ↑  
overall mild altn grn. wh → fresh

43 chl - cpy fr 35° cpy after chl. qtz - ser - bn - cpy  
MoS<sub>2</sub> - ser slaps  
ser - qtz - bn veinlets w kspars Labs 20°

44 shatter zone 1493 onward  
pink + green altn (2p) Q. Bm Qtz - ep zones

45 gypsum ~~sh~~ aplitic zones w cg qtz - kspars  
(rubblly @ 1524 → 1527) in core areas

46 at 1529 rock is salmon pink alt. aplite  
there is a zone in which rock could be CR or D12  
but by <sup>qtz</sup> it is definite D12 (bright pink matrix  
Bil(chl) ~~plg~~ <sup>aplite</sup> ~~plg~~ aplite. Fs phenos salmon pink  
(Rubblly has no gouge zones) → cream (2)



# HIGHLAND VALLEY DRILL LOG SHEET

Hole V71-12A

Date Aug 12/73

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 <sub>2</sub> Ac	M <sub>24</sub> f	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
47 1539-1558	NIL	20	-	?				chl ep	3	-	-	D12	
49 1568-1587	"	-	-	?	like	47		"	5?	-	-	D12	
51 1607-1625	vlg	5	-	✓	see below			"	5?	NOT SORT	-	D12	or D11
53 1642-1659	NIL	-	-	-	phenos	wh (1-2) (1) cream (1-2) (1) matrix - pink		"	5?	-	-	D12	B1 Qtz flag PPy →
(EDH)					6" gauge zone @	EDH							B1 Qtz flag aplite

47 Local gauge zones throughout 1550-D12  
 phenos cream (2) matrix salmon pink (2)  
 chl+eptr 25° calcite vein 10°  
 calcite/zeolite vein 60°

48 Qtz-ep-chl-br vein 45° Rubbly but no real gauge zones

49 Qtz-ep zone - low % to 50°

50

Quite rubbly in 49 + Fairly Rubbly in 50  
 alt. of matrix is ~~less~~ muted pink loc. in 50 rather than salmon pink.  
 Epidote moderately abundant in 49 + 50

51 green alt. in area w bkt d<sub>12</sub> <sup>Qtz-rich area w dissemin</sup> ~~Qtz veins with~~ ser. blabs with apy pods; cemented by calcite around 1620 matrix of PPy → flaky ser - thus PPy looks odd 1620  
 matrix - pink → salmon pink; phenos cream-pink (2)

52 Rubbly 1625-1632 51 + 52 matrix does not look like alt. from aplite - perhaps rock was D1.  
 all matrix → flaky ser in 52

53 Matrix not aplitic to 1646 - then aplitic; ser slips 30° with local non-ep. zones

# HIGHLAND VALLEY DRILL LOG SHEET

Sampled 1972 at

996, 1150, 1431, 1608

Hole V71-18

o/b 990

EoH 1609

Date Aug 25/73

Sunny → cloudy  
cool cumulus clouds

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 <sub>o</sub> Ac	M <sub>u</sub> Fr	Qtz. Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
1990-1990 21000-1615	vlg	20	-	✓	cream or green 1-2p			-	fr chl	2	-	✓	Apt PPY	qtz plag aplite or porphyry
3 1015 - 1031	vlg	-	-	✓	see 996 below			-	fr chl ser	2	-	✓	AP	
5 1050 - 1067	vlg	-	-	≥	cream-green 1-2p				chl	2	-	✓	AP + PPY	
7 1085 - 1101	vlg	-	-	✓	see below				chl ser	?	-	✓	"	

- pinkish qtz - plag ppy - matrix vlg not aplitic. Matrix → chl, 2p  
or aplitic ± variable  
bn(?) ser fr 45°, qtz-cpy-bn(?) veins 45°  
covellite coating on cpy perhaps
- Rubbly hole caved at 1010. MoS<sub>2</sub> fr 30°  
cpy dissem or in short zones along fr (some bn) (30°)
- ser-bn pods along fr 30°. qtz-cpy-MoS<sub>2</sub> fr (40°)  
phenos wh → green (1-2p); overall pink loc green (2-3p)
- Basically like 3 but grain size & % of matrix varies  
it varies from good ap ppy → crowded ppy
- local rubbly zones w. accompanying green ser. altn.  
1050, 1056, 1061. Disseminated ser-qtz-cpy ± bn  
"spots"  
qtz-cpy-bn fr 40°  
Possible local k-feldspathization 1052 sample
- 1070 shear zone waxy green  
w/ser. altn (40°) qtz-cpy-MoS<sub>2</sub>  
vein (40°)
- Gaugy 1096 → 1109  
waxy gr ser altn vein shear zone otherwise  
rock is pink - both matrix & phenos salmon pink-k-spar?  
pink zeolite veins locally
- rock only slightly altered by 1115

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V 71-18

Date Aug 25/73

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 <sub>9</sub> fc	M <sub>10</sub> Fr	Qz. Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
7 1117 - 1134	vlg	-	-	≤	see below		-	chl	1 1/2	-	-	Ap PPY	
11 1153 - 1171	lg	10	-	≤	pheno green	wh → pink 1-2p		chl, bn	1	-	✓	PPY	biotite gtz plag PPY
13 1189 - 1205	lg	-	-	<	cream 1-2p	waxy grn 2p		chl "	2	-	-	PPY	still not aplite
15 1224 - 1240	vlg	-	-	<	see below		-	chl	5	-	-		aplite PPY again
16					white 2p			chl ser					1250 sample

9 matrix varies from salmon pink to almost white; generally aplitic; Samples 1123, 1133

sheared zones waxy green 2-3 - 1133 1/2 - 1134

gtz - ep fr 0°      gtz - bn + ser fr 35°

10 Ap to 1144 the matrix → flakey ser + pheno green

the vlg rock w. blotchy dendritic-looking kspar - gtz blobs to 1148 where the rock is recognizable PPY - there is a chl zone w some gtz - bn - cpy blobs then fg gtz plag PPY w. wh → pink very fine aplitic matrix. 1147, 1148

11 MoS<sub>2</sub> fr 35°      MoS<sub>2</sub> - bn - cpy slip 10°

gtz - ep - bn - cpy vein 10°      Rock continues to be fg - matrix not quite aplitic but close

12 Gougy 1183, 1187 sim. to 11 sample 1100 1202

13 Rubbly 1190 - 1195 (low) ser - gtz - bn blobs dissem + along fr @ 0°

1M-572-3322 14 Distinctly aplitic matrix by 1220

15 Rubbly 1231, 1244 emerald green fs alt. (2-3p) local cream (2)

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V 71-18

Date Aug 25/73

25 onward Aug 26/73  
Sunny → cloudy,  
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	M <sub>9</sub> f.c.	M <sub>11</sub> fr	Qtz.-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
7 1258 -1274	vlg	10	-	<	cream to waxy pale green		2 p	chl	3	-	-	-	Apppy	
19 1292- 1309	vlg	-	-	?	waxy → emerald green		2-3 p			5	-	-	Ap py	matrix pale to salmon pink
21 1330 -1347	vlg-	-	-	?	see below			chl	5	-	-	-	"	
23 1365- 1381	vlg	-	-	✓	" " "			chl ep	5	10	-	-	"	
25 1401- 1420	vlg	-	-	✓	pink 2	waxy grn 2-3	wh 2	- ser cul ep	5	5	-	rare ✓	"	mag/c <u>wh</u> biotite

- 17 Ser - bn - cpy fr 25° gtz - bn - cct veins 10°, 20°  
 Possibly 1259 1275-6, changed to smaller core at 1280  
 1307, 1321, 1331-2
- 18 like 17
- 19 gtz - chl - ep veins 0° ser dips 20, 45°
- 20 Matrix salmon pink - 1320 then white to cream (2) 1310 - Rock type
- 21 Salmon pink to 1343 then more subdued pink - 1348  
 fs phenos pink (2) more subdued pink - 1348  
 epidote fr (?), gtz - ep fr 0° fs phenos cream to  
 gtz - chl fr 35° waxy green (2)
- 22 Mainly salmon pink altn - "barren"
- 23 gassy 1365, 1377 Mainly bright salmon pink altn  
 1377 gtz - ser zones at 1365, these dissem cpy 1370  
 for rock type
- 24 green ser - gtz zones 4' apart - not mixed  
 elsewhere salmon pink altn (2)
- 25 matrix wh (2) → pink (2) locally waxy grn 2-3  
 1, ser - cpy - MoS<sub>2</sub> fr 40°  
 1M-572-3322 ser - gtz - bn knots ser - gtz - cpy zones 30°  
 calcite veins 20°, 30°
- 26 Mainly pink cctn.

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V71-18

Date Aug 26/73  
 sunny → cloudy  
 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	Mg. Fr.	Min. Fr.	Qtz.-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	grn	wh							
27 1437-1455	vlg	10	-	?	2- matrix	way 2-3			chl ser	7	10	-	AP PPY	
29 1474-1494	vlg	-	-	✓	like	27	-		" ep	5	20	✓	AP PPY	
31 1515-1537	vlg	-	-	?	2- P	way grn 2-3 P	-	-	ser chl	7	-	-	"	
33 1556-1575	vlg	-	-	<	2-3 P	2-3 P			ep ep local (grn)	?	7	-	"	
35 1607-1609 E04	vlg	-	-	-	pink 2				fr chl	5	-	-	"	E04-

Gougey zones 1458-1460 1517, 1521, Box 32 Rubby-looking

27 gtz, vein w. some MoS<sub>2</sub> @ 20°; ser fr 50°, 30°  
 28 pink zeolite veins 30°; ser-pyrite fr 40°; gtz-py vein  
 general pink → salmon pink; grn near shears  
 cubes 40°

29 MoS<sub>2</sub> slip 20° pink zeolite; epidote after fr locally  
 ser-gtz-ep fr 30°;

30 like 29 Rock type 1501

31 Green alt in gougey zones & locally elsewhere, alter-  
 wise pink also along fr @ 10° (shears ≈ 25°)

32 MoS<sub>2</sub>-bn fr 0°; overall like 31

Rubby in loc zones throughout

local pervasive "network" ser alt w. cpy + bn  
 alt to gtz-ep-ser/alt zone @ 10°  
 ep-chl-bn knots  
 -hematite (?)

34 like 33 to 1592 then matrix pink fr phenos wh 1-2 u  
 alt intensity drops off 1574, 1575 alt, matrix

1M-572-3322 35 gtz-ep fr 30°; E04

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-88

Date Aug 10/73

9/8 1027 Cost 1464 sunny, cum. clouds

Property J. A.

W. J. McMillan

Lovely

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mfc	Min	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
					pink	qzn	wh							
1027-1043	lg	5	-	Bn ≥	2l	-	2p	-	fr chl ep bn	0.2	-	✓	DH? 6p	<9 sub haul qtz phenos
3 1061-1084	lg	10	-	cpy ≥	2l	3l	2p	-	fr chl ser cpy	0.2	-	✓	6p	cut by ap/ky

Box 2 { actn with 1-2p The rock is bi qtz plag ppy w. pink 2l  
20% aplitic qtz-kspn matrix

Box 1 chl-bn-cpy fr 35°, 60° qtz-bn-cpy w. pink halos 35°  
bn-chl-spec-ep fr 35°

Gauge 1037 for 60° barren qtz 15° cut by qtz-ep 35°  
with MoS<sub>2</sub> dessem along ~~border~~ <sup>outer</sup> 1/2" of vein  
zeolite-ep vein 15° 1033 pink zone vein 35° in pink  
alt zone MoS<sub>2</sub> on pink alt. fr 45°

2 - ser-qtz zone (10) m. pink alt. area - no sulphides  
bn-cpy-ep-qtz fr 30° qtz-bn <sup>top</sup> veins 35°, 45°

Central  
zone?  
odd pink qtz poor alt. (?) zone 1060 seems to be centered  
on qtz-cpy-bn vein 35° - sim veins nearby have no  
halos so pink zone is ambiguous.

3 qtz-moS<sub>2</sub>-cpy-bn veins 45° qtz-cpy-bn vein 35° w.  
pink halos, cuts ser-cpy-bn fr 37° calcite 20°  
cpy fr 20° bi-cpy-bn fr 90° 1062 CR 1067 AP  
1079-1081 Emerald green (3) loc in green (phenos) <sup>salmon</sup> pink  
matrix fr alt. zone Aplitic mnt'd Contact 45°  
Ap bleached in contact has loc. graphic zones - has  
two generations of qtz veins - qtz-cpy (35°) cut qtz (55°), cpy-bn fr 80°

4 Gauge 1082 w. emerald green alt. ; loc zones of "stockwork" ser-  
chl-cpy actn 1080



# HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-88

Date Aug 10/73

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 <sub>2</sub>	Rock Type	Comments
					pink	-	wh							
5 1094-1114	lg	5	-	≤	lz	-	2p	-	fr chl ser bn cpy	0.2	-	-	6p	81 Qtz - plagi rock - ap. later matrix
7 1130-1149	lg	25	-	✓	2p	gr 2-3 al	2l	-	fr chl ser cpy	0.3	20	✓	6p	
9 1164-1184	lg	2	-	≥	all	below			fr chl	0.3	-	✓	D12	

5 chl - bn fr 15°    qtz - bn fr 35°    calcite 35°  
 qtz - bn - cpy veins fr 20, 30°  
 CR cut by 1/2" qtz - plagi ppy w tan aphan. <sup>minilzd</sup> gsd mass (40°)  
 6 EP - chl fr 30°    qtz - ep - MoS<sub>2</sub> veins 40°  
 otherwise like 5  
 CR cut by 6" (all) qtz plagi aphan (D12) dyke (30°)  
 qtz veins (5) <sup>minilzd</sup>

7 500g w. emerald gm altm 3 ft 1135-1137 pink 1132 altm  
 cpy fr 16°    qtz, some <sup>cpy</sup> ~~altm~~ 30° pink halos  
~~qtz, some cpy~~ 40° cuts qtz, some cpy (30°) + an emerald gm  
 altm zone + a pink altm zone  
 qtz - cpy, ser - cpy halos 35°

8 1150-1157 green (sericitic) 3. Then pink - wh. 1-2p  
 D12 now - matrix 50% 1162 CR  
 \* NOTE \* pink color of matrix could be fooling me!

9 Matrix pink (loc. salmon pink) phenon wh 1-2p salmon  
 pink where matrix is (Kspar?) 1179 Dissem. cpy  
 cpy - qtz fr; bn - cpy fr 0°, qtz - bn - cpy fr 30°, 45°, 60°  
 qtz - cpy - bn veins w. pink halos <sup>cut by</sup> ep - qtz - MoS<sub>2</sub> (35°)  
 qtz - bn - cpy 60° <sup>cut by</sup> qtz - bn - cpy at 35° each way both  
 & offset by calcite 1168

10 D12 w loc zones of 6p - gradul - Kspar(?) altm <sup>(2-3)</sup> after  
 1190 Kspar veins 10° 1200 Grade down?



# HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-88

Date Aug 10/73

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/c	min. Fr	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
1# 1202-1220	vlg	20	-	✓	see below				for cal cp	5.0	-	✓	D12	
13 1236-1254	vlg	-	-	?	"	"	"		for cal cp	10	-	-	6p	aphan. gndmass ? loc D12

11 Emerald green (2-3) gougy shears w. MoS<sub>2</sub> coating  
 0° strike 80° to axis of core 1212 → END OF BOX  
 Phenos wh → pale green (1-2) matrix salmon pink  
 cpy dissem. thru rock calate 20°  
 occ. salmon pink zones have no phenos - pervasive kspars?  
 1203 altn? (aplitic texture) -- OR AP. STRINGERS??  
 matrix distinctly aplitic loc, seemingly uniform  
 pink elsewhere (still aplitic when closely examined)  
 Looks like org. kspars being made pinker - some  
 kspars fr + veins (100)

12 phenos cream-pink (1-2) green (2-3) matrix pink but  
 1234 not salmon-pink after 1220  
 kspars "veins" - pervasive replacement? 1227 vlg.

13 Most of the "aplitic" matrix is actually fq plag. qtz +  
 vfg gndmass - altn gives misleading impression - changes in  
 Salmon Pink altn of matrix gone after 1237 then white to  
 muted pink  
 phenos altn like 11 gndmass matrix loc → ser (much of  
 the muted pink zone). 1247 1251  
 a bit of gouge 1241, 1262, 1265-6 (10° MoS<sub>2</sub> Bxtd)

14 Muted pink throughout a ser altn. 6p(?) qtz vein

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-88

Date Aug 10 / 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			M. Fresh	M. Fc	Min. F	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
15 1267-1287	vlq	20	-	v?	see below	-	chd ep	10	20	✓	6p			
17 1300-1319	vlq	7?	-	?	see below	-	"	?	-	✓	6p or Q Bm?			

15 Qtz-ep fr 20°, 10° slip faces (low X) Struc (high X)  
 Phenos ~~pink~~ pink (2) wh (2) matrix aplitic at least locally  
 9th 2-3 → Black gtz-ser-some cpy  
 MoS<sub>2</sub> fr 10° gtz-ep-MoS<sub>2</sub> veins (low X) zone 20°  
 calcite 30°, 60°

16 mix w (1-2) + pink (1-2) altn cq gtz eyes mafic → chd, ep  
 loc. gtz eyes mg mafic bimodal - almost -- Q Bm 1300

17 MoS<sub>2</sub> on low X slips

Gaugy 1302-3, 1314 - End of Box on + off to 1325

ser slips 0 → 20° pink holes  
 Except for the cq gtz eyes, looks like Q Bm.  
 Matrix / pheno distinction not easy now (matrix 20%?)  
 altn gm-wh to 1268 then emerald green 2-3 - CR? NOTE a few ft into the box, altn suggests matrix % higher (50%)  
 - confirmed in mixed pink + green altn (2-3) zone after 1315 - Rock is Qtz Plag Ap by END OF BOX  
 calcite veins 20 → 30°

18 Matrix Salmon pinky to 1333 then pale pink + sparse  
 1M-572-3322 (abundant (50%)) + aplitic phenos green → em green  
 1318 altn (obviously so 1323-1333) 1326 ap 2 3

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V 72-68

Date Aug 10 1973

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	Mag. fr	Min. fr	Qtz. Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments	
19 1334-1354	vlg	-	-	✓	see below				chl ep	5	25	✓	6p	(matrix sub-apl. 20%)	
21 1370-1389	vlg	-	-	?					fr chl ep	5	-	-	6p	→ D12?	

19 phenos whitish green - waxy green (2p) cream (fr)  
 och. hem. fr 45°  
 qtz-ep veins 45°  
 och. hem. fr 40°  
 qtz-ep-chl-MoS<sub>2</sub> vein 40°  
 cpy loc along fr 50°  
 chl-MoS<sub>2</sub> fr 25°  
 dissemin. in alt. zones  
 Calcare 30° veins  
 one chl-bn fr 20°  
 qtz-MoS<sub>2</sub>-sheared - 25°  
 1342 CA

20 overall wh altn (2) loc thin kspen veins  
 some pink (orig. kspen?) in matrix 6p. 1357

21 overall wh (2p) but 1380-1385 pink matrix green  
 pink zoelite (10%) pink halo phenos  
 qtz-ep-och hem. 20°, 35°

22 qtz-ep-chl-bn cpy pods along fr @ 350 adj to pink  
 bn-brg aplite (1" wide @ 60°) The bn occurs w qtz +  
 buckered kspen in filling <sup>90%</sup> cavities (interpretation).  
 more zoelite % matrix varies + at box end rock  
 has 50% matrix ie is D12. x is pink - The D12  
 has an aplite "zone" also but contact is gradal (30°)

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V-72-88

Date Aug 10/73

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 <sub>1</sub> ac fl	m <sub>2</sub> fl	Qtz.-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
23 1405-1425	vlg	20	-	<	see below				fr chl ep	3	-	✓	D12	
25,26 1440-1464	vlg	20	-	≈ ?	"	"	"	-	chl ser	3	-	✓	D12	→ ? e EDH
- EDH														

23 matrix pink throughout, 50%, + aplitic phenos wh 2p, green 2l ep, ep-MoS<sub>2</sub>, MoS<sub>2</sub> fr 10° gts - bn-ep vein, w. pinker altn halo 40° 1422 zool, CR orange zoelite fr 30°

24 Sim. to 23 but ~~ser~~ ser-gts-cpy fr 0° D12 also bn-ep-gts splotches on fr. faces 10° vlg

25,26 pink zoelite 20° fr-MoS<sub>2</sub> fr 30° gts-cpy-chl-some bn veins 0° matrix pink → cream (1446-1450, 1458-1464 EDH) phenos cream, wh, green (2) → emerald green (3), calcite vein 0° 1443 c.R. 1463 altn

————— EDH —————

sampled 1972 1322, 1374 1107 AP. 9EBm

HIGHLAND VALLEY DRILL LOG SHEET

Samples 1972: 1107  
1322, 1374

Hole V72-96

Date Aug 11/73

ap → 1315  
QEM → 1332  
AP → 1355  
QEBm EDIT?

1/8 1041 EB # 1377

Sunny, clear, fabulous

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. Ac	Mn. Ac	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
1 1041 - 1053	vlg	10	-	✓	see below			chl	5	5	✓	D12	perhaps should be designated Pb?	
3 1070 - 1088	lg	1	-	≥	an. for 1			?	1	2	✓	D12		
5 1113 - 1130	vlg	7	-	✓	pale green (1p) em. gn (2-3x)			✓ chl	1	-	-	Dr	qtz, plag phenos	
6 gougey near overall	near			1131	u. attendant			pale green		ser		alter (2-3)		
					alter like 5									

- Mixed rock types (boulders) to 1041 then aplite emerald green ser alter zones 10° - have had movement along them  
qtz - cpy - MoS<sub>2</sub> vein 35°  
phenos away from zones also emerald green, matrix as. alt salmon pink [Kspar]  
Rock is Bi (chl) qtz plag ppy with qtz-Kspar aplite matrix cpy fr. 35°  
Some spec cpy in chl fr 15° ser fr 60°  
1047 CR 1051 alter 1066 C.R.
- Sim. to 1 but has one zone where whole rock subj. to green ser. alter (2-3).
- Qtz vein 30° qtz-ser bn 30° fr, ser-qty-bn 35° fr  
qtz-bn-MoS<sub>2</sub> vein 30° qtz-ser-qty-MoS<sub>2</sub> vein  
Rubble 1083-1085 dessem. cpy locally
- alt eases - matrix salmon pink still but phenos pale green (1-2p).  
Gougey 1089-1100 sand 1098-1100  
Bi-loc. cpy phenos - mosic avg 2-3%  
matrix Kspar looks perthitic

5 dessem cpy, qtz-qty 30°, ser-qty slip 10° alt. fr 80°  
D12 cut by aplite stringer & dessem cpy 20°

# HIGHLAND VALLEY DRILL LOG SHEET

Hole V-72-96

Date Aug 11/73

90ward Aug 12/73 Sunny  
clear hot perfect

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	M. K	Qtz.-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
7 1147 - 1163	lg	10	-	<	see below		chl	0.9	7	✓	D12	on P <sub>6</sub> ?	
9 1180 - 1196	vg	20	-	✓	wh cream pink (2) matrix is sol. pink		chl	6.9	-	-	D12	gtz plag phenos	
11 1212 - 1230	vg	-	-	✓	20 m "9"		chl	1	-	✓	D12	" " x loc. bi phenos	
13 1250 - 1267	lg- #	4	-	✓	grn wh-cm 2-3 1-2 p 2		chl	1	-	✓	"	± bi gtz plag PPy cut by sim PPy	
The bi-gtz plag PPy stringer (4") has 1/2" "chell"													

7 Gouge 1148, 1154, 1163, 1166 length of zones ~ 1'  
after 1155 altn wh to pale green 1-2p matrix pink -  
prior to that altn cream  
gtz - MoS<sub>2</sub> w. gtz - ser habos 20° gtz - bn - ser w. <sup>ser</sup> ~~gtz~~ -  
~~ser - ock. hem. slips 35°~~, ser - MoS<sub>2</sub> slips 35°<sub>20°</sub> gtz - bn habos 20°  
ser - ock. hem. slips 25° gtz - cpy vein 35°

8 muddly altered bi gtz plag aplite (D12?) **1174 CR**

9 ser slips 0-20° w. gtz - cpy blabs -; dissem (?) cpy  
occas. thin gtz - kspan - **1185 Dissem 97**

10 Rubbly 1199 - 1205 <sup>ser</sup> <sub>slip 35°</sub> MoS<sub>2</sub> <sup>✓</sup> mafic → ser, chl  
aplite stringers 40° in shatter zone

11 Gouge 1218 - 22, 1223 - 1230 w. waxy green ser altn 2-3  
elsewhere altn  
ser - MoS<sub>2</sub> - cpy fr 30-35° ser - cpy

12 altn gen. wh (1-2) loc cream or green (2) **1251 PPy stringer in Box 13**

13 gtz - cpy (1/16" vein) <sup>40°</sup> <sub>25°</sub> <sup>ser</sup> <sub>slip 35°</sub> cpy - MoS<sub>2</sub> - bn veins 35°  
ser - MoS<sub>2</sub> slips <sup>form</sup> vein borders  
Barren gtz vein in Gouge zones - 1260 - 1266 waxy + em.  
Kspan - cpy - calven cut by gtz alt vein emerald green altn (2-3)



# HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-96

Date Aug 12 / 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. & f.c.	m. f.	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments
15 1283-1301	vlq	-	-	✓	ser	below		-	chl	1	10	✓	D12	
17 1318-1336	lq	5	-	✓	ser	below		-	chl ep (CR)	1	10	✓	CR + D12	

14 pale waxy green ser alt zone that then w. Qtz veins at 450 (approx 2" apart 1267 → 1271) Qtz-ser-epy zones cream to emerald green to white - (2) alt matrix salmon pink rubbly at 1271, 1284 also

15 Qtz-bn fr 20° ser-MoS<sub>2</sub> slips 35° phenos cream (2) - emerald green (2+3) matrix salmon pink ~~all~~ pervasive waxy green in gougy area 1285-6 + rubble cont. to 1288 Qtz-ser zone w MoS<sub>2</sub> slip in middle 35° ser-epy-MoS<sub>2</sub> slips 40°

16 mostly gougy zones with waxy → emerald green alt 2-3 to 1315 but definitely ppy locally at least as far as 1312. lots of Qtz veins in alt. zones. After 1315 mafic 8% Qtz eyes - overall ng rock. Affinity?

17 Qtz-epy pods in fr (20°) Qtz-epy-ser fr 30° pink granitic sharp contact w. unchilled D12 - 30° - @ 1320 35°   
1319 pink matrix by 1322 an in rock w mafic → chl, fresh fs wh (2) looks like bp a bi Qtz plag crowded ppy - matrix 20% speckled w. mafic Ap. again after 1332



# HIGHLAND VALLEY DRILL LOG SHEET

Hole V72-96

Date Aug 12/73

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	m fs	Qtz-Ser. Zones	MoS <sub>2</sub>	Rock Type	Comments	
19 1352-1370	lg		-	✓	see below			✓	fr chl ep	1	-	-	D12 6p		
20 1370-1377	vlg	10	-	✓	---								6p	with a gtz plag ppy steeper	
					E8H										
									pink grdmass vfg						

18 gouge / 334 rubble after 1345 all porphyry matrix salmon pink phenos cream → wh(2) (D12)

19 calcite 0°  
aplite ppy (D12) to 1255 then ppytic bi-gtz-plag rock  
gtz-ser-epy fr 40°  
gtz-chl-ep fr 40° chl-epy pods along fr @ 10°  
Rock has eq mafics + mafics peppered thru grdmass  
gtz euhedral → subhedral mafic mainly bi loc fresh  
fs alter gen. wh(1) → fresh --- 6p?  
ep-chl fr 40° gtz-chl-epy vein 40°

20 Rubby 1371-73 local green alter (2) near rubble otherwise like 19  
zeolite 30°

— E8H —