


896515

plotted
Feb/74

LORNE X

L 11 N


HIGHLAND VALLEY DRILL LOG SHEET

Hole L 8
850 (EOT)

Date Aug 22/72

Property Lornex

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			min Fr	m afc	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					wh								
5 after 175 16 - 196	lg- 10	10	-	✓ ?	lp	-	-	.8	dk	10	✓	5	
9 231- 247	lg-	5	-	✓ ?	ll	-	-	✓ .5	dk	4	-	5	

1. oxide zone ~~skarna~~ ~~dk st dk~~ ~~bi books~~
(40-66) mal. sericite mat
local bx composed of vein qtz v. rubbly
98 mal. flakey ser
yell-wh. fs alter
2. mod wh. arg altn oxide zone still skarna
v. rubbly
3. v. rubbly mal, cct in qtz veins w. flakey ser zones
some cpy w. oxide rims
some chrysocolla
4. oxidized to 175' bi → ser
5. qtz-bn-cpy veins w qtz-ser envelopes @ 50°
qtz-MoS₂ vein frags at 163 ser. slips w. cpy @ 70°
qtz-ser-cpy-cct zones 170
after bn
6. qtz-cct veins
chl ± cpy/bn fractures
7. somewhat sheared - much like 6.
8. qtz-cpy-MoS₂ @ 70° qtz-ser-cpy-bn zones
cpy > bn ± bn
9. qtz-ser-cpy-bn zones @ 45° qtz-cpy w. ser. borders @ 65°

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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	mn f	m ² f/c	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					wh	gn	pink							
2 297-314	vlg lg	10?	-	?	123	12	-	-	?	chl ser	10?	-	5	Fault zone
15 354-372	lg+	10	-	✓?	-	yell grn 2-3	-	-	-	ser	2	✓	?	altered beyond recog.

- 10) virtually the same - rel fresh Sk
 menz. fract - 1.5 gtu veins 10.
 grade vlg gts-ser zones 10
 mafic - mainly bi, fresh or → chl
 after 275 the rock is gauge 275.
- 12 gts - bn - cpy veins @ 50°
 (± cpy, bn)
- 13 gts - MoS₂ - chl @ 60° gran altn (v) around vein
 rhhly + massive zones mafic → chl, ser
 general arg or ser altn level 1-2
- 14 more closely sheared, general gran ser. altn (2-3)
 gts - MoS₂ - cpy veins gts - ser - cpy zones
 cpy > bn
- 15 gts - ser - cpy - bn
 gts - cpy_{bn} with gts - ser - cpy - bn holes @ 35°
 reminiscent of Valley Copper

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Showers + Hair

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Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. > Bn.	Feldspar Alteration			Feld. Fresh	Mn	Mg	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
8 412-432	gtt	3	-	✓	yellow 2-3	-	-	-	-	ser	7	√	?	gts eyes
21 458-475	vg	10	-	?	dk grn 2-3	-	-	-	-	chl ser	5	√	5?	
24 503-524	vg	-	-	-	yellow 1-2	green	pink green alter	(2) 515'	8	chl ser	5	-	5	

16 ser alter 2-3 MoS₂ ✓ cpy > Bn lg -

17 similar yell-grn alter 2-3 MoS₂ ✓ cpy > Bn lg
gts - cpy - MoS₂ veins
16, 17 both rubblely

18 gts - cpy - MoS₂ (bonanza-type) veins w gts-ser -
cpy envelopes
440 gts - Bn w. flaky ser.
borders - yell-wh. fs alter mafic → chl, ser

19 finally - a gts - cpy - MoS₂ vein that hasn't been sheared
yell-grn alt (1-2) gts veins 2' Skeena?

20 mafic → chl local dk green alter (2-3)

21 cpy - Bn - MoS₂ - gts veins
gts - ser - Bn - cpy fi.

22 Green ser alter 1-2, one bonanza gts - MoS₂ - cpy
some gts - ser - cpy - Bn zones, suggest 50° to core vein

23 green alter goes way to yellow about 495'
more gts - ser - cpy - Bn zones
Skeena mafic → chl, ser

24 cpy - Bn - ser - chl fractured 20, 35, 60°
gts - ser in 45° gts - ser zones 70°

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B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	bn	mapk	Qz-Ser. Zones	MoS ₂	Rock Type	Comments
27 556-574	lg-	-	-	✓	yellow/gun	1-2	pk 2 (2)	-	.8	chl	10	-	5	
30 606-622	lg	5	-	x	cream	1-2	pk (22)		.3	chl ser	-	✓	5	

25 vlg one qtz - cpy - bn vein with qtz - ser -
rubbly cpy - bn (vuggy) halo(?)
mildly altered - plag yellowed white

26 vlg 19-20 rubbly almost fresh mafic → chl Skeena
bn - cpy - ser fr 10° to core

27 cpy - ser @ 10°, 50°
qtz - bn - cpy w. platy ser edges
ser. Fracts mainly (in fact all) are ser - cpy ± bn

28 qtz - cpy - MoS₂ @ 30° ; ser. slips subpar - to core
28 + 29 plag → yell. green (1-2) ^{to cream} mafic → chl, both rubbly

29 qtz - ser - cpy - bn (central quartz vein) 10° to core

30 rubbly qtz - cpy - bn veins w. ser borders @ 35°
qtz - cpy - bn ± ser blebs @ 05°, 60°
qtz - chl - cpy - bn Fractures @ 40, 60, 80°

L8:560
mafic → chl
fs → yell-wh altn

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Property Lornax

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Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mn. A.	M. Fe.	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
33 659-685	vlg	-	-	✓	yell. 22			2 ✓	1	chl	-	?	5	
36 724-743	lg	5	-	✓	gn (10)			✓	0.5	chl in fr.	-	-	5	

- 31 Milky qtz veins ~~with~~ with some mashed up bn, cpy in ^{them}
 → barren qtz stringers ^{at 10°} & cut mineralized fractures @ 40, 60°
 yellow → pink plg altn (2)
 chl coats fractures - some bn - 10°
- 32 qtz - cpy - bn w ser - qtz - cpy - bn selvages @ 45°
 rubble
- 33 Rubbly - not much core - either because gid bad or perhaps
 the core has been removed (sampled?)
 cpy - ser - chl fr @ 20°
- 34 Sem. to 33 vlg
- 35 almost fresh St. one qtz - ser - cpy zone
 ser - chl - cpy fr. @ 30° cpy > bn br fresh
- 36 Barren qtz stringer @ 30° cuts? men. fr.
 qtz - cpy - bn w ser border @ 80°
 fr - ser - cpy

HIGHLAND VALLEY DRILL LOG SHEET

Hole L8

Date Aug 22/72

Property Lornex

W. J. McMillan

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Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	mm f.	magn.	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
39 780-902	lg-	20	-	?	wh lp	-	-	-	.8	chl	-	-	5	
41 824-850	lg-	7	-	X	1-2 p	-	-	-	.5	chl	-	✓	5	some qtz eyes
(E0H)														

37 almost fresh sk magic → chl
 vuggy qtz - cpy veins @ 60° rubblely
 qtz - cpy - bn - ser @ 50°

38 white plag altn 1 ^{or fresh;} magic → chl rubblely

39 calate veins 10°
 cpy - bn - chl fr 10°, 50°

40 like 39

41 bn - chl fr. 10°
 sheared up MoS₂ - cpy - qtz veins

HIGHLAND VALLEY DRILL LOG SHEET

Hole L ⁴⁹~~84~~
(844 EOH)

Date Aug 14/72

Property LORNEX

W. J. McMillan
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Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Min. fr	M. a/c	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					wh	gn	pink							
173-189														
5 230-269	-	-	-	-	P3	-	-	-	-	chl ser	-	-	6	big gtz eyes

- 1 Not split 173-189
very rusty plag yellowish or loc. pink
bi → chl large square gtz eyes — Bsd
Fairly closely fractured — inch — scale
- 2 Fractures still same density 50, 25,
Half the box has salmon pinky-red plag actn
Mafic → chl, ser Bsd
- 3 one calcite vein at 45°
fract as before — still in whd zone
like 3 with reddish alt zones — 35° to core
- 4 Hem (ocher) zones with slips at 45° at 235
as before to 235 then gravel zone to 244 then
zone w. plag → white (3) — calcite veins
at 45°, gtz veins 0° — fewer fractures seen.
- 5 gtz — cal veins 0 → 30° — rusty selvages
sheeting ~~not~~ fractures (rusty) at 50°, 40°

oxidized
220 ft → tan alt
mafic → ser

HIGHLAND VALLEY DRILL LOG SHEET

Aug 22/72

Hole L49

Date _____

Cloudy, Cool

Property Lornex

W. J. McMillan

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Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	min Ar	m. A. P. C.	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					Wh	Yell.	grn							
7 287-306	-	20	-	-	-	P 2-3	-	-	-	chl	-	-	6	
9 341-358	-	10	-	-	-	P 2-3	-	-	-	chl ser	-	-	6	
11 376-393	-	-	-	-	-	2 3	-	-	-	chl ser fresh	-	-	6	
13 411-430	-	-	-	-	-	2 p	-	-	-	"	-	-	6	same v. lg gtz eyes
15 449-467	-	-	-	-	-	2 p <small>+ orange</small>	-	-	-	"	-	-	6	

6 mafic → ser, chl; bsda local shears
cream to white plag altn mod(p) intense (e)
local ser altn (2)
NOT SPLIT

7 Rusty fi. 1" apart or less after 292
NOT SPLIT

8. altn intensity sl. lower

9 two gtz-och hem veins 35°-40°
generally rubblely → sandy, two aplite stringers at 342

10 the same

11 mainly ser altn after 380
The "fresh" bi is probably secondary + hydrothermal

12 pink + green altn (2) "fresh" + alt bi local sheeting at 35°

13 local rusty fi at 20°, 45°-55°

14 mainly green altn (2) some gtz veins in sheared zones
one cal. vein (seen - was 4" wide)

15 local shearing w. ser on slip faces

L49: 380
-fresh" bi stable, almost
fresh rock
to greenish color

1M-572-3322 Rusty cracks 10, 50°
och. hem altn zones along two cracks @ 40°

HIGHLAND VALLEY DRILL LOG SHEET

Hole L49

Date Aug 22/72

Property Lorner

W. J. McMillan
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Box Footage	Grade	Qz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mica	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments	
522-541	-	-	✓	-	green + rusty (p)	1-2		-	-	chl fresh	-	-	6	
633-651	-	-	✓	-	wh. rusty (z)	3 1/2	1 box	-	-	ser cal	-	-	6	

16 local rusty cracks 30, 50, 85°
yellow altn 1-2

17 yellow + green 1-2, otherwise like 16

18 v. lg pyrite in gts vein w. ser. ~~slips~~ selvages @ 35° "fresh" bi

orange → rusty, yellow + green prof altn 2 → 3

19 core split ~~at~~ 530' - 540'
v. local intense per altn along slips

20 Like 19 only altn even less intense

21 v. local rusty vein by zones + rusty fr @ 40°
rust + cal + gts cement
one ser. crushed zone is shot thru in pyrite

22 like 20 - pyrite in local ser. slips @ 35°

23 core split
633 - 643 intense arg. altn, sheared looking
pyrite sparsely dissem in arg. zone + along ser. slips
elsewhere - slickensides in pyr. on slip @ 30° and 10° to axis

24 massive again yellow + rusty altn (1-2)
ser. Bi → Achlo. + fresh pyr. on slips
local orangy-salmon altn

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Hole L49

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Box Footage	Grade	Qz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh			Qz. Ser. Zones	MoS ₂	Rock Type	Comments
					wh	pink	grn							
27 689-688	-	-	✓	-	3 l	2 l	-	-	-	-	-	-	?	porphyry?

25 Rusty zones are caused by pink alt. (broken core to get fresh face) - pervasive 1-2 yell-grn alt. (argillitic) bi → ser, chl or fresh pyrite xls quite large (1/8") on some fr.

26 can't get at the box well (won't pull out) - but almost wholly sheared up + consists from mid box anyway of porphyry - pale green, pyritif - nature of phenos uncert. (plag?) now pseudomorphed by iron oxide

27 fractures in dyke(?) are 85° to core the "phenos" are just pyrite - this may be a mylonite zone which now consists of gtz + ser + py + clay

28 like 27

29 slab outlined by "phenos" at 80° to core same stuff

30 "Falm" @ 30 + 45° to core the rock may be a plagopy in which plag has been alt.

L49: 633
red fg rock, white fs alt

L49: 700

L49: 710

L49: 731

wh. fs alt. red. fg rock gtz - poor

like 700.. all are foliated

Like 700 but "magic" as seen to be pyrite

HIGHLAND VALLEY DRILL LOG SHEET

Hole L 49

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					wh							
31 742-761	-	-	✓	-	1-2P 3R		-	-	-	-	?	porphyry
35 817-835	-	-	✓	-	2-3P		-	-	-	-	-	"
36 835-844 (E0H)	0.2	2	-	✓		grn pink 1-2P	-	-	ser	2	6.? ?	qtz eyes up to 1/8" plag phenos epitaxial matrix

- * two specs of cpy repl. plag? seen in box 30
- 31 locally the rock has frags w. arg. alt. between u looks like a bx - "frags" along 0 to 10° to core "foln" 10° to core
- 32 arg. alt. ~~3~~ 3 p, same rock but virtually all bx
- 33 " " 2 to 3 p " " "foln" 75° to core
- 34 " " " "
- 35 local black zones - manganese oxide + chlorite shearing 85° to core
qtz veins with ^{flaky} green alter (veins have cpy, bn)
"ppy" to 824 then a few ft are uncertain - then mixed qtz-ser-zones show up & qtz eyes.
local zones → gravel
- 36 Rock is a bi (1-2% → ser) qtz-plag ppy
cpy in qtz-ser veins @ 10°

844 pink
green alt
large qtz
eyes

HIGHLAND VALLEY DRILL LOG SHEET

Hole L 9~~0~~

Date Aug 23/72

743 (EOT)

Property Lornex

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Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	mm	m	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
					wh	grn	pink							
77-95	lg	-	-	✓	-	P 2-3	-	-	2	chl fresh	5	-	?	
129-150	lg+	?	-	✓	-	"	-	-	-	chl	2	-	?	
185-203	lg-	H	✓	✓	-	P 2-3	2	-	.8	chl	.7	-	5	quartz interzoned
						"								

- 1 gts - ser - cpy^{fn.} @ 20°, 50°
gts - cpy veins. w. gts - ser - cpy selvages @ 50°
"fresh" bi is probably secondary
- 2 gts - ser - cpy - bn - MoS₂ @ 50°
MoS₂ v v Cpy > Bn lg+
- 3 The rock has gts eyes - all mafic is bi SK?
sim. to L but MoS₂ v
- 4 gts - moS₂ - cpy veins 40°
like 3
- 5 [gauge 150-153] mafic → chl ser dk green alt 2
vuggy gts - cpy - (ser borders) veins @ 50° (lg)
- 6 gts - ser - cpy - veins @ 60°
- 7 ~~ser cpy fi.~~ gts - cpy - ser @ 40°
gts - cpy - py @ 45°
- 8 green 2-3p
- 9 [Gauge 221-225, 233-235] sim. to 7 lg-

HIGHLAND VALLEY DRILL LOG SHEET

Hole L9

Date Aug 23/72

Property Lornex

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Box Footage	Grade	Qtz Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	mm fr.	mm f.c.	Qtz. Ser. Zones	MoS ₂	Rock Type	Comments
					wh	grn	pink							
16 345-361	lg	10	-	√ _{on}	-	ll 2l	-	-	-	chl ser Asch	2	✓		✓ B5da ppp?
17 387-402	lg	10	-	√	-	1-2	-	-	.8	chl	10	-	?	see below
34 643-659	lg	7	-	√	-	ocean or green sp	-	-	.8	dl ser	3	✓	5	?

16 Half the core is gone gtz - cpy - MoS₂ 40°
 gtz - ser - cpy - bn 40°
 only bi. phenos, seem to see gtz eyes - ppy??

17 bi fresh or chl^{on ser}, gtz eyes bi phenos fq matrix - pptc6
 cpy repl. mafic
 alt. yellowish bn = cpy bi content up to 15°

18 core half gone (after 387) (as low as 5)
 some rock to 387 alt. yell-wh - level 172

19 gtz - cpy veins @ 35°
 mafic → cpy cpy - chl @ 30° on fr.
 gtz - plag - bi (ser) ppy 401-404
2018
 same rock to 401

364 mafic fresh →
 chl, greenish wh fs act.

375 greenish wh
 fs act, mafic chlor-
 itized

20 after 404 no skena

21 (lg) gtz - MoS₂ - cpy @ 70° green alt. 2 → 3 CR?

22 box empty - 452 452 - 622 Missing

23 Not much core left - has cpy - gtz - MoS₂ veins
 green alt. 2-3 p

34 cpy - ser fr @ 25°, 60°, 80° gtz - ser - cpy - bn zones

HIGHLAND VALLEY DRILL LOG SHEET

Hole L9

Date Aug 23/72

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Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	mm A	mm for Fes	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
36 676-693	lg+	5	-	✓	yellow-wh. or " - grn	1-2	p	-	.5	chl	4	✓	5	? see below
39 726-743	lg-	10	-	✓	creams yell. green	1-2		-	1.5	chl	7	✓	5	? "#36
(E04)														

35 gts - bn veins with ser gts - bn - cpy halos
bn > cpy there @ 20°
veins vuggy rich MoS₂ - cpy stung @ 30° @ MoS₂ v
gts - ser - cpy zones @ 20° overall Bn ≈ cpy

36 Rock type - bi predom. mafic, gts open interstit.
and as "eyes" - some problem as before
gts - ser fr @ 30°, 40°
either green or flaky white
vuggy gts - cpy w gts ser cpy halos 40°
gts - bn - ser zones @ 35°

37 altn white to pale green 1-2 lg - but otherwise like 36

38 pink + green alt 1-2 mafic → chl
one bonanza cpy-gtz vein otherwise lg -

39 gts - ser - cpy @ 60° ser - cpy fr @ 40°, 60°

677 dissem hg
 cpy ^{flaky}
 serate

HIGHLAND VALLEY DRILL LOG SHEET

Hole L10

Date Aug 23/72

Property Lornex

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Box Footage	Grade	Qtz Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	M _{in} fr	M _g f _e	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					wh	gm	pk							
1 444-461 426-444	lg-10	-	✓	-	1e 2-3 p	-	-	2	ser chl	10	-	5		
13 480-495	lg-10	-	✓	wh	2p	-	2 vf	-	1	ser	5	-	5?	alteration obscured texture
16 530-548	lg	2	-	✓	2p	-	-	-		add	3	✓	5	

poorly mineralized

11 qtz-ser-chl pods w. och. hem. ser-br-cpy
qtz stringers w. occasional br blebs @ 40° fr @ 40°

Intense altn is rather pale (yellow-green)
white calcite @ 35°

12 MoS₂ - cpy - qtz @ 30°
pink + green altn (2p)

L10: 472
pink altn

13 qtz-ser-cpy 45° ; cpy-br-ser fr. @ 30°
locally ~~fine~~ gouge

14 Half the box is gouge - similar to 13.

15 second bi or fractures @ 35°
still sheared up but less so +
rock fresher (50°)

L10: 485
min. fr.
yell-wh altn

16 rub. poorly min quartz vein cuts

L10: 525
Hydro biotite

br-cpy-qtz-ser zone (40°) qtz-MoS₂ @ 30°
ser-cpy fr. 30°

L10: 547

L10: 542
odd mafic
fractures, talc on fr.

mafic mins altered and have grown
- cores clear edges dk green - odd!

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Hole L10

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9 581-597	lg	3	-	?	yellow sm	2p	pink 2l	1	ser	7	-	?	
22 648-666	lg	3?	-	✓	white (1) to yell. sm (2-3)			1?	chl ser	5?	✓	5	

17 similar to 16

18 green + pink altn (2p) gtz veins uncommon
 altho a gtz-cpy-mos₂ vein occurs

19 gtz-bn-cpy @ 20° with orangy gypsum at the edges
 vuggy gtz-cpy veins ser-cpy tr @ 05°
 locally sheared

20 greenish wh (1-2) gangy 30%

21 porc. wh fs altn second bi some masses of
 lg second bi have cpy + bn in them L10:635 Bi
 mainly in chlorite-bi? clot

22 gtz-ser-cpy with intense ser. altn
 gtz-cpy-mos₂ barren gtz stringers @ 70°

23 empty box

24 all small frag - box 1/2 full

25 yell-white altn (2) between quartz-ser-cpy
 veins - all small fragments

HIGHLAND VALLEY DRILL LOG SHEET

Hole L10

Date Aug 23/72

Property Lornex

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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	mm f	µm of fcs	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments	
26 715-732	lg-	2.5	-	√?	yellow	2p	-	-	1	ser	10?	√	?	
29 766-783	lg	2	-	√	wh to pale green	1-2p	-	.8	dl	-	-	-	5	

26 Box 2/3 full ser-cpy fr. @ 10° coats a barren qtz vein where it crosses it
 ↑ rubbly
 ↓ qtz-cpy-bn
L10:730
 yell-wth fs altn

27 similar

28 back to the more typical green altn 1-2 (lg-)

29 Box 2/3 full
 qtz stringers @ 60° ser-cpy fr @ 20°
 qtz-cpy-bn at 30°
Barren cuts mineralized quartz vein L10:777

30 qtz-bn-cpy-ser fr. @ 50°
 gypsum - amber colored @ 20°

31 Richly mineralized qtz-cpy-MoS₂ @ 20°
 19.0m? qtz-cpy w. ser halo @ 45°
 dl-bn-cpy-ser pockets
 gypsum veins ≈ 2 apart - white
 One massive cpy pod 3" long

HIGHLAND VALLEY DRILL LOG SHEET

Hole L10

Date Aug 23/72

Property Lornex

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mn	Mg	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
32 818-837	lg+	2	-	✓	greenish white 1-p	-	-	1	ser chl	-	-	5		
35 875-894	lg	4	-	✓	gray p	-	-	1	chl	-	-	5		

32 gypsum vein @ 50, 30, 0, 20° (abundant gypsum
qtz-cpy - bn - MoS₂ @ 50, 35) obviously
white → orangey.
(L10:832) gypsum loc. closely assoc with ore but cross-cuts it

33 sl. lower grade, less gypsum

34 ls altn gray; grade less again (lg)
gypsum common

35 gauge after 878 cpy - qtz - ser @ 30°, 05°
~~cpy~~ after ~~878~~ mffc qtz - cpy w ser selvages @ 60°
gypsum 20°, 50°

36 cpy - MoS₂ subper. to core (bonanza-type) - cpy bnd
slip @ 10° to core has striae @ 45°
gypsum - orangey - common anhydrite?? (L10:911)
Kspen??

37 (lg) qtz + Kspen? veins @ 40°
Anhydrite

1M-572-3322

pink altn dom. (i)
lots of shearing qtz veins 4

HIGHLAND VALLEY DRILL LOG SHEET

Hole L10

Date Aug 23/72

Property Lornex

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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	mm f	Maf. fcs	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
38 932-951	lg+	2	-	✓	pink + green	2		-	1	chl	-	-	5	
41 988-1007	lg	3	-	✓	"			-	1	chl	10	10	5	
44 1045-1063	lg	4	-	✓	pink + green	1-2		-	1	ser chl	-	✓	5	?

38 gypsum 10 → 20° cpy on fr @ 10°
 gtz - cpy @ 10° a 1' section has gtz 50%
 cpy 50% @ 30°

39 MoS₂ - cpy veins with gtz - ser - cpy veins @ 35°
 gypsum - orange
 mainly green altin 39 + 40

40 lg - few gtz veins - cpy after mafic
 41 some gypsum later than mafic
 strike 10° to core axis on face @ 20°
 gtz - cpy - bn @ 50°

42 lubby gypsum gtz - ser - cpy zones @ 10°

43 gypsum green + pink altin 2 → 3 gtz - ser - cpy -
 veins @ 40°
 gtz - MoS₂ - cpy vein (not rich) at 05°
 ± bn

44 gtz - ser - cpy ± MoS₂ @ 30°, 10° fr. 20, 40° ser - cpy - bn
 gypsum gtz w. cpy - bn - ser pods @ 40° along
 och hem on face at 0° borders of vein + locally crossing
 slickensided at 80° to axis the vein

45 the same gypsum, 0° orange cpy fr. 30° - loc. slickensided

46 greenish wh. altin 1-2 gtz veins uncommon

1M-572-3322

HIGHLAND VALLEY DRILL LOG SHEET

Hole L10

Date Aug 23/72

Property Lornex

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B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration		min fr	M. f.c.	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments	
47 1150-1119	lg	1.8	-	x ?	gray to pale green		-	.8	chl	-	-	5	
50 1157-1176	lg	5	-	100 %	yell. - whs orange zp		-	2	ser	7	✓	?	
53 1211-1226 (EDH)	lg	2	-	100 %	cream		-	2	ser	-	✓	?	

- 47 Lots of gypsum @ 20° strae @ 80° gtz - cpy - some bn @ 30°
bn - ser fr. @ 50°
poorly mndzd quartz veins 20, 50 (same bn) L10:1103 gypsum
- 48 cream + green altn (2) gypsum gtz-ser zones 0°
- 49 gtz - bn - MoS₂ - gtz - ser zones ^{apparently} cut a barren gtz vein
sum. to 48 L10:1135
- 50 gtz vein w. finely chss. MoS₂ cut by gtz-cpy-bn vein @ 20° L10:1166
- gtz - ser - bn @ 20° strae on ser @ 70°
gypsum - uncommon
- 51 mainly gouge green altn internal
local bonanza cpy - MoS₂ - gtz vein frags
- 52 rubbly gtz - cpy w. ser selvage @ 30°
gtz - cpy - MoS₂ vein cream & green altn / ?
- 53 Rubbly gtz - cpy w ser borders 05° degree altn.
cpy - bn - quartz at 40° 1239 MoS₂ → chl
pyritiferous

HIGHLAND VALLEY DRILL LOG SHEET

Hole L11

Date Aug 24/72

Property Lornex

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

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	mm	Matrix	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
45 1070-1088	lg	2	-	=	-	gran	some milky zones	2-3	-	ser	-	✓	?	
46, 47 1088-1110	lg	1.5	-	X =	-		-	-	-	ser	5	✓	?	
EDH														

43 - 45 all are rubblely
 43 sim. to 42 sample of gts veins (lg-) L11:1051
 44 gts-ser zones (3) (lg)
 gts - bn - cpy - ser zones ^{50°} cut by milky gts
 veins w occas. ser pods + pink alt. halos
 cpy ≅ BN 20, 30° (?)
 Some bn + cpy in alt. zone

45 alt. L11:1087 emerald gm.
 46) gts - cpy - bn @ 40°
 47) Virt. barren gts @ 30, 40°
 gts - cpy ^{@ 20°} w ser - gts - cpy halos
 gts - bn - cpy - MoS₂ (sulphides as blurb + along edges) 10°

15
230
740

HIGHLAND VALLEY DRILL LOG SHEET

Hole L 11
1110 (EoH)

Date Aug 23 / 72

Property LORNEX

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

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Min A	Min E	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
5 326-346	lg	10	-	✓	yellow	2p	-	-	5	ser	4	✓	5	?
6 379-398	lg	2	-	=	green	1-2	-	-	1	chl	10	✓	5	
9 431-448	lg	1.8	-	=	pink	2p	-	-	2	per	10	-	5?	quartz enlarged

① 288 - 305

some gtz - cpy veins but basically just ground-up looking ^{rock with} intense argillie altn

② - same

③ - grunge to 330 cpy - ser fractures @ 15, 30°
quartz - ser - cpy zones @ 30°
barren gtz (10°) into gtz - ser - cpy (20°)

④ gtz - bn veins @ 30° gtz veins + cream + green altn (2)

horsetailing gtz - cpy - MoS₂ veins

⑤ altn less intense ser - bn fr 20, 30°



⑥ ser - cpy - bn fr (30° 10°) gtz - bn - cpy

⑦ MoS₂ ✓ yell gm altn 1-2; a bit rubble

⑧ Rubbly 50%, pink altn (2)

LIQ: 443
pink altn

1M-572-3322

⑨ cpy - gtz - ser 30° veins + min. fr.

gtz - cpy - bn 30°, 40° some w gtz - ser - cpy - bn

HIGHLAND VALLEY DRILL LOG SHEET

Hole L10

Date Aug 24/72

Sunny
High Clouds

Property Lorner

W. J. McMillan

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Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration		Feld. Fresh	Mn. Fe	Mn. Zn	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
12 481-498	lg	2	-	✓ ?	pink + gm 2p		-	1	chl	4	✓	5	
14 576-533	lg	4	-	✓	pale bell- 2	-	-	2	chl	10	✓	5?	altered
13 587-605	lg	2	-	✓ Yell wh wh 2p	gm 2l	pink 2l	-	0.5	chl ser "fresh"	2	✓	5	

10 } lg - MoS₂ ✓ 40% rubble pink altn (2)
11 }

12 gtz - cpy - bn w ser-gtz-cpy bn borders @ 35°
 cpy - bn - ser on fr. @ 10°, 30°
 gtz with bn, cpy in Vags + MoS₂ at edges
 (bn = cpy) (cpy > bn)
 has quartz-ser-cpy-bn halos vein @ 20°
 (Some halos have dissem. MoS₂)

13 Similar to 12

14 MoS₂ on slope @ 20° w-ser

gtz - cpy - bn @ 20° 50° 10°

Those w gtz-ser halos are cut by those

15. virtually ~~no~~ gravel with with none (L10: 535)
 after 538
 slichensides 20° to axis - face 30°

16 gauge throughout → 573

(L10: 563 gauge)

17 gtz - cpy - bn w ser selv. @ 35°

second. bi. yell wh → gm @ altn. (2)

gtz - cpy - bn (no halos) 20, 30°

mineral fr - cpy - ser (some bn) 40°, 10°

chl - bn - chl
fr. 20°

HIGHLAND VALLEY DRILL LOG SHEET

Hole L10

Date Aug 24/72

Property Lornex

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration		Feld. Fresh	mm R	mm R's	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
20 639-657	lg	1.5	-	✓	grn + yell grn	1-2p	-	1	chl	5	-	5	
23 689-707	lg	4	-	✓	pink grn	2p 2l	-	1	ser chl	3	✓	?	
26 742-761	lg	4	-	=?	pink or cream veins - otherwise green (2-3)	nr.		1.5	ser	3	-	5?	
	men fr	-	-	ser	grn	- bn	10		gts veins	- cpy	- bn	arrag	in gts-ser zone @ 20°
one	almost barren is vuggy (gts xls)				gts (mucky) formed			30'	(>1" wide)				cpy - bn at borders

- 18 pink altn around gts - ser - cpy - bn stungers @ 35°
otherwise pale green 1-2
- 19 sim but with local rubbly zones
- 20 ~~from~~ white mud (ser? clay?) along slips @ Low of
gts - ser - cpy - bn @ 35°
cpy - ser fr @ 20°
gts stungers ± cpy, bn 10, 20, 45°
Those with no holes cut gts - ser zones
- 21 Rubby throughout with yellow or green alt 2-3
- 22 mafic - ser, a few rubbly zones
pink + green altn 2-3
gts - cpy - some bn veins @ 20, 65° simult.
- 23 gts - cpy - bn veins w gts - ser - MoS₂ holes @ 20°
cpy - bn - ser fr @ 10, 20°
L10: 685
yell - wh. altn
- 24 green + pink (2) gts veins (4)
- 25 3/8 barren gts vein (20') cuts (?) min. fr @ 20°
has a few specs of MoS₂ S/keena

HIGHLAND VALLEY DRILL LOG SHEET

Hole L11

Date Aug 24/72

Property Lorne

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 ₁ Tr	M ₂ Tr	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
29 797-813	lg	2.5	-	 or X	cream - 2-3 p	-	-	5	ser	10	-	-	?	
32 848-865	lg-	4	-	X	yell-grn 2p pink 2l	-	-	1	chl	7	-	-	5	
35 899-915	lg+	4	-	V	cream-grn - 2-3 p	-	-	5	ser	10	✓	-	?	

27 locally rubbly
yell + yell gm (ser) 2

28 almost all gouge - with white mud
to 795 L11: 797

29 gtz - bn - cpy in gtz - ser - bn @ 30°
cpy - ser fr @ 10° slickensides @ 80°

30 yell gm ~~alt~~ altn (2) Skeena?

31 pink + green altn gtz - ser zones (1.5)
(lg+)

32 ser - cpy - bn fr 10° gtz - ser - bn some cpy @ 20°
gtz stonger 30° gtz - cpy - bn 10°

33-35 generally fairly rubbly - esp quartz - cpy - MoS₂ veins

33 MoS₂ w/ generally plag → ser (2) (grn or yell gm)
CY > BN lg+ gtz - cpy ± bn veins @ 40°
have gtz - ser - cpy halos

34 green + cream altn (2) lg - (few gtz veins)

35 gtz - ser - cpy zones 10°
cpy - gtz - MoS₂ - bonanza veins 15°
L11: 909 altn to ser + yell-wh.

HIGHLAND VALLEY DRILL LOG SHEET

Hole L11

Date Aug 24/72

Property Lornex

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

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	min. fr.	ser. fr.	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
38 949-967	lg	2	-	≅	-	gm 2p	-	-	1	chl "fresh"	-	?	?	
42 1019-1036		1.8	-			gm 2-3 p	-some rusty wtg			ser	7	✓	5?	texture obscure

36 like 35 938 chl fr + alt

37 gts w. trivial cpy, bn cuts (?) mineralized fr. (-chl- ser. fr. bn) pale green altn 1-2 p slickensides @ 75°

38 green coating on ~~fr~~ ^{fracts.} here (+ in 37) @ 15°
milky gts - almost barren @ 10°
"fresh" bi is secondary one calcite? vein @ 05° cuts gts (barren)

39 green altn 2-3 mifer → ser bn > cpy (lg)
gts - Kspar veins? 30° (L11-979) assoc. pink altn

41 Couldn't get it out - box bottom bken

40 sim to 39 but cpy = BN (lg)

42 gty - ser-bn-cpy @ 30° or gty - ser - cpy @ 30°
gty - cpy - bn w ser borders 10°
nearly barren gty w ser-gtz - bn-cpy halos 35°
gty - cpy - bn - MoS₂ & gty - ser halos 10°

HIGHLAND VALLEY DRILL LOG SHEET

Hole L12
(943 EOH)

Date Aug 24 / 72

Property Lornex

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	men fr	m g fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
2 251-268	lg	4	-	~	-	ycl grn 2p	3R	-	2?	ser ch	5	-	5	
5 306-324	lg	1.8	-	✓	wly 1-2 P	-	-	-	1	fresh ch	10	-	5	
8 358-377	lg	2	-	✓	-	cream bn 2-3 P	-	-	?	ser	7?	-	?	

- ① qtz och hor ven @ 10° green + "rusty" alter (as in L11)
231-251 Rubbly mos₂-cpy-qtz veins (level 2)
- ② Rubbly qtz veins with bn @ 05°, 30°
qtz-cpy bn veins w ser halos @ 50°, 10°
- ③ Sim. to 2 rubbly
- ④ Rubbly to 303 then rel. fresh Skeena
- ⑤ quartz veins w. 2-3 together + at low x to core
contain some bn + cpy chl-ser-bn fr 10°
qtz-ser-bn-cpy @ 20° qtz veins cut qtz-ser zones
(L12: 377)
- ⑥ more rubbly and alter to level 2 (yellowish-white)
- ⑦ rubbly alter like 6
- ⑧ sim. to 7 - what is the dk men on the fr?
- ⑨ like 5 in rel fresh Skeena (L12: 390)

HIGHLAND VALLEY DRILL LOG SHEET

Hole L12

Date Aug 24/72

Property Lornex

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qz. Veins	Pyr.	Cpy. Vn. Bn.	Feldspar Alteration		Feld. Fresh	men f ₂	m g f ₂	Qz-Ser. Zones	MoS ₂	Rock Type	Comments	
					grn	pink								
4 416-434	lg	4?	-	✓ ₃	-	pale 233	2	-	1	ser chl "fresh"	-	✓	?	quartz enlarged
14 461-483	lg	1(?)	-	✓	-	231 P	rusty loc.	-	-	ser chl	10	-	?	

11 gtz veins @ 40°
Rubbly - second bn - cpy - bn 10° (fractures)

12 ser - ~~quartz~~ ^{zones} with blobs of quartz + bn-cpy
altn like 11
pink quartz eye ppy stinger @ 447' @ 35° (1' wide?)

13 gtz veins 1' wide fr altn pale green (2) elsewhere
second. brotite blebs + rejuvenating former bi xls
quartz-eye aplite up to 14"
451-452(?) - 447-452(?)
gtz-ser with bn blobs in dyke

14 gtz veins low @ 35°; low grade but w. local bn-ser
gtz veins w. gtz-ser envelopes are well men
w. cpy+bn in the vein + the halo (20°)
(lg) gtz cuts gtz-ser? CPY > BN

15 gtz-bn with quartz-ser-bn halos @ 15°
lg + BN = CPY quartz cuts gtz-ser
one banana quartz-cpy-pyrite vein

16 gtz-cspar(?) veins @ 10° + gtz veins @ 30° (synchronous)
mofe → chl, fresh altn - ser 1-2 (2 3)

HIGHLAND VALLEY DRILL LOG SHEET

Hole L12

Date Aug 24/72

Property Lornex

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

Box Footage	Grade	Qz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	min fr	m fpa	Qz-Ser. Zones	MoS ₂	Rock Type	Comments
					wh	grn	pink							
7 519-533	lg-	2	-	X	-	l ₂₋₃	p ₂	-	-	ser chl	7	-	?	Skeena?
20 569-587	lg-	2	-	✓	yellow	rusty	juv	-	-	ser	7	-	?	
23 623-640	lg-	2 1/2	-	✓	-	rusty	-	-	2	ser	5	-	?	
	ser-	cpy	slips	@ 05°			baren	gtz	@ 50°					ser. crem alth
	cpy-	ser	pois;		gtz	bn-cpy	ser	@ 25°		baren	gtz			gtz-ser-cpy

@ 633'

17 gtz ven @ 20, 10° no halo
gtz - bn w ser ^{bn} halos @ 10°, 40°

18 second. bi after chl or ser mafic
sl. less alt than 17

19 Rubbly, pink & green 2 → 3
fewer veins, cpy > BN lg-
L12: 559 To be cut to see if new relationships show up

20 gtz ven w ser pods - barren 40°(?)
rubbly neck quartz - cpy ven has ser borders 20°
barren gtz veins 30° each way

21 Rubbly argillc & ser alt (2-3) lg +
quartz-ser-qty zones @ 30°

22 arg alt intense along slips 0-30° to core
22 almost all gangy

24 pink & green 2-3; pink gtz-eye ppy (plag phenos
rubbly also & leucos) - contact 35°, ~1' wide @ 646

25 gangy pale green ppy zone adv to shear zone 657-664
slips at 10°
like 23 after 664

HIGHLAND VALLEY DRILL LOG SHEET

Hole L12

Date Aug 24 / 72

Property Lornox

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration		Feld. Fresh	Mn. Fr.	M. Fr.	Qz-Ser. Zones	MoS ₂	Rock Type	Comments
26 675-693	lg	1.3	-	?	cream + green 2	-	-	2	chl M Fr.	-	-	5	?
29 731-747	lg	3	-	X	yell gm 3l	pink 3l	-	-	2	10	-	-	?

26 qtz - bn cpy w ser edges @ 30° // aplite stringers @ 30°
 Barren qtz stringers are several; inches wide
 quite abundant cut by qtz veins,
 cpy - ser Fr. Fractures in aplite post-date qtz vein I think

27-28 vuggy qtz bn veins w ser borders @ 30°
 rubbly bn + ser full vugs
 otherwise like 26 lg

28 rubbly aplite stringers @ 40° (several)
 pink + green altn 2-3 lg-

29-31 Rubbly

29 CR cut by aplite, then qtz veined, then sheared
 (L12: 747) Mylonite? with a remnant of aplite or
 being cut by aplite?

30 like 29 but in aplite mylonite

31 more sheared; more quartz veins BN > cpy
 altn like 29 (lg - but almost lg)

HIGHLAND VALLEY DRILL LOG SHEET

Hole L12

Date Aug 24/72

Property Lornex

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration		Feld. Fresh	Min. A	M. G. H. S.	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments	
					grn	pink								
32 783-800	lg-	1	-	X	-	2l *3	2l *3	-	5	ser	10	-	?	CR + pink gtz - eye aplite
35 834-851	lg-	1.7	-	√?	yell-grn 2-3			-	4	dl	-	-		see below

32 Rubbly gtz veins w. ser. + bn blebs 20°
 " " " (20°) - cpy halos + pink altn
 barren gtz stringers crosscut altn zones

33 cream → pink altn 2 → 3; Reconstituted bi
 confuses the issue of rock type
 the aplite zones @ 40° don't help either

34 quartz-eye loc in aplite - contact 30° aplite fresh
 mafic → ser green altn 2 → 3
 one zone where altn tacked off is Skeena

35-37 somewhat rubbly (824 is → grn mafic → chlo)
 35 SK(?) + Lornex gtz ppy (L12: 841) (L12: 836)
 gtz - Kspar veins at 20° gtz Kspar vein
 gtz vein in ap. has cpy blebs 20° gtz vein 30° + aplite

36 MoS₂ on a slip face in a ser. zone
 like 35 but no gtz-Kspar veins

37 gtz-Kspar gtz 30° ± bn, cpy gtz w. ser gtz - bn halos 20°
 Cpy = 1/Bn

HIGHLAND VALLEY DRILL LOG SHEET

Hole L12

Date _____

Property Lornex

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. Vn.	Feldspar Alteration			Feld. Fresh	men fi	m fi	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					wh	grn	pink							
38 888-903	lg	1.5	-	✓	green + cream					chk	5	-	?	aplite + C.R.
41 937-943 EDH					Rubblly						@ 10°			with ser + cpy

38 about half aplite
Rubblly gtz-ser zones but only a bit of cpy
 barren quartz @ 10, 20, 35°
 quartz with ser. edges with cpy pods

39 gtz-ser - bn - mos₂ (?) 10°
 yellowish white altn 2→3 + green 2→3
 aplite + CR

40 ser - cpy fi @ 10°
 aplite with local gtz eyes + CR.

41 sample of mntzld fs L12: 943 Black Mineral?
 with ser cpy bn on fr @ 10°

EDH

cream fs altn
 gtz veinlet w flaking
 ser. borders

HIGHLAND VALLEY DRILL LOG SHEET

Hole L13
(1310 Eolt)

Date Aug 24/72

Property Lornex

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

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. Vn.	Feldspar Alteration			Feld. Fresh	min. fr	mag. fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					wh	grn	prk							
40-59	vg	-	-	✓	1-2 P	2 l	-	fr	1 fr	chl cp	10	-	5	at fresh
96-113	lg-20	-	-	✓	fr P	2 P	-	-	.3	chl	20	-	5	
146-164	lg-10	-	✓	✓	-	1-2 P	-	-	.5	chl	10	w	5	
because of one 5' section														

- 1 sample (L13:57) almost fresh, mag. fr, chl
of CR calcite veins 30°
qtz-ser-cpy @ 50° chl-cpy fr @ 40°
- 2, 3 similar to 1
- 4 chl-cpy @ 35°, 15° cpy in vuggy qtz-ser zone @ 60°
qtz-cpy @ 70°
- 5 slightly fresher min. fr. 0.8
- 6 local zones of intense ser altn have vuggy
lg- qtz-cpy (veins @ 45° + 50°
± och kern locally, these veins have flaky ser. selvages
der. fm spec?
- 7 qtz-cpy · MoS₂ banana veins high & to core
149 - 150 1/2
qtz-ser (not flaky) - cpy - pyrite zone 147 - 149
130 fr → yell-ash mafic → chl
- 8 mafic → chl or fresh green altn 1 → 2 p
- 9 183-184 qtz-moS₂-cpy 45°(?) otherwise like 7

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Hole L13

Date Aug 24/72

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Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	mu fr	m qtz	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
8 200-218	lg-	-	-	✓	gnish green	wh	wh	-	.5	chl fresh	20	-	5	
11 252-270	lg-	10	-	✓	wh-plagi	gn		-	.8	chl fresh	10	-	5	
14 307-325	lg-	-	-	✓	gn			-	.8	fresh chl	7	-	5	

- 8 ser - cpy - chl @ 50° (fractures)
 qtz - ser - cpy @ 50° a bit of dissemin ep.
 9 aplitic stringer @ 15° ap. width 10" has ser-cpy fr @ 50° (lg-) like 8
 10 aplitic @ 50° (10" of core) greenish-white altn 1-2-p sk. calcite? veins @ 20° Mafic fresh or chl. (vlg) aplitic has local vuggy pegmatitic zones L13: 245
- 11 qtz - ser (flaky) - cpy @ 60, 80°
 chl - cpy fr @ 45° qtz - cpy w ser.
 ser - chl - ep - cpy^{fr} @ 50° selvages @ 45°
- 12 green altn 2p vlg green or fr. @ 10°, 50° - chl
- 13 like 12 to 296 then like 11 again
- 14 qtz - ser - cpy @ 50°
 cpy - ser fr @ 45°
- 15 qtz - cpy - no S₂ veins @ 45° (two of them) lg otherwise - like 14
- 16 white → greenish white altn 1-2 p L13: 348
 several qtz - cpy - no S₂ veins w. ser selvages @ 50°

HIGHLAND VALLEY DRILL LOG SHEET

Hole L13

Date Aug 24/72

Property Lornex

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

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	mm. fr.	m. ap. fr.	Qtz. Ser. Zones	MoS ₂	Rock Type	Comments
					wh	grn	pink							
17 361-378	g-	-	-	✓	1-2 p	-	-	-	.5	fresh chl	2.5	-	5	
20 424-443	g+	7	-	✓	white pale green 3- after 41B'	-	-	-	?	chl ser	3	W	?	sheared
23 470-487	g-	20	-	✓	-	2 p	-	-	?	chl	10	-	5	

17 white powdery fs altn along fr @ 10°
gts-ser-cpy (cpy as central ^{areas} ~~veins~~ in gts veins
+ ser as rim)
one aplite stringer chl-cpy (sparse) fr @ 50°

18 similar to 17 but no aplite

19 aplite 3/8" wide, 20° to core - two stringers
like 17

20 bonanza gts-cpy-moS₂-ser zones @ 80°
shearing 50° to core?

21 white - pale green altn 1-2 g-

22 Couldn't get the box to come out

23 gts-ser-cpy (vuggy) at 60°
green altn (possibly ep) 2 (L13: 481) ^{fs → olive green} mafic chl or "fresh"

24 gts veins - gts-ser ^{cpy} 4 g- green altn 1-2

25 gts veins 10 gts-ser 10 cpy-ser fr 35° (den. is)
altm green 1-2 p 3l mafic → chl, ser.
2 MoS₂-cpy-gts with ser. incls

HIGHLAND VALLEY DRILL LOG SHEET

Hole L13

Date Aug 25/72
Sunny, warm

Property Lornex

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

Box Footage	Grade	Qtz Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Min A	M.F. %	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
26 525-544	lg	20	-	✓	yell wh 1-2	-	-	-	.5	chl ser	2.2	✓	5	some quartz eggs - not really sub. radial though
27 590-597	lg	20	-	✓ but close	wh. → yell grn	-	-	-	.5	chl fresh	2	-	5	
32 630-649	lg	70 25	-	✓	wh 2p	-	-	-	.5	fresh? chl	5	-	5	"

26 ~~chl-~~
ser - cpy fr @ 60, 80, 10° (w. chl)
gtz - ser - cpy zones @ 60° gtz - bn @ 30°

26, 27 Local "sheeted" zones have gtz - ser - cpy zones

27 like 26

28 lg + local gtz - cpy - bn zones @ 60° with
~~gtz~~ ser - cpy - MoS₂ selvages

29 587-590 Gauge chl - cpy fr @ 60°
vein #'s as in 27 - gtz - ser zones have cpy + bn
local "sheeting"

30 604-613 Rubbly otherwise like 29

31 local intense wh. altn
greenish wh altn 1-2p chl - ser - cpy @ 10°
L13 637 CR

32 gtz - cpy veins @ 50° w. ser - cpy halos
cpy repl. chl mafic cpy - bn - ser fr @ 130°, 45°
fresh bi reconstituted? calcite veins 10°

33 like 32

34 like 32 to 672 then green altn (2p) + chl - ser on fr.
MoS₂ ✓ lg at 10° → 20°

HIGHLAND VALLEY DRILL LOG SHEET

Hole L13

Date Aug 25/72

Property Lornex

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Min Fe	Mafics	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
					wh	grn	pink							
35 686-703	lg	10	-	✓	1-2 (2/3)	2 (1/3)	-	-	.5 in loc	fresh chl	4	-	5	
38 738-756	lg	10	-	✓	1-2 P	-	2	-	.3	chl fresh	2	✓	5	
41 793-811	lg	10	-	✓	" 2/3	2-3 (1/3)	-	-	.5	chl fresh	2	-	5	gts eyes
44 848-861	lg+	10	-	✓	P 1-2	-	-	✓	.5	chl fresh	3	-	5	" not entirely

- 35 chl - cpy fr @ 10°, 30°
gts - ser - cpy @ 40°
- 36 like most of 35 altn white 1-2p
- 37 " " " " " "
- 38 gts - ser - cpy zones @ 40°
chl - cpy fr @ 40° gts - cpy - MoS₂ [rich] @ 40°
- 39, 40 sim. to 38 with ser stringers has a rock cpy - MoS₂ -
gts vein 1/3" wide @ 60°
- 41 gts - ser - cpy ^{± bn} @ 80°, 65°
ser - cpy fr @ 80°
- 42 similar but has cpy - MoS₂ - gts vein @ 70°
- 43 like 42 but more gts - cpy - MoS₂ vein - lg +
+ some inch - wide gts - ser - cpy zones
ser - cpy fr @ 10° fresher + lower grade after 839
- 44 rich mottled quartz - ser (not flaky) - cpy zones (L13:856)
The "fresh" mafic is invariably biotite
ser - cpy fr @ 10°, 50° ^{vagly} gts - cpy veins w ser halos @ 60°
- 45 } a few gts - cpy - bn - MoS₂ vein @ 50° → 45°
46 } 46 has local green altn (2) (L13:889)

HIGHLAND VALLEY DRILL LOG SHEET

Hole L13

Date Aug 25/72

Property Lornex

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz Veins	Pyr.	Cpy. ∇ Bn.	Feldspar Alteration			Feld. Fresh	mch fr	m qtz fr	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					wh	gm	pink							
47 903-922	lg-	-	-	✓	1-2 p	-	-	-	.3	chl fresh	1.8	-	5	qtz, cpy - not well- crystal
50 958-973	lgt	?	-	✓	2-3 p	-	-	-	.5	ser chl	-	✓	5	?
53 1009-1026	lg	10	-	✓	1-2 p	wh pale green	-	-	.3	chl fresh	4	✓	5	

47 qtz - ser - cpy @ 40°
 qtz - chl - some cpy fr @ 40 → 50°
 48 similar but has one vuggy qtz - cpy vein @ 70°
 with quartz - ser - cpy - some MoS₂ around it
 49 general green alter 2 → 3
 qtz - ser - MoS₂ fr @ 25° mafic → ser, chl or
 "fresh"
 50 quartz - MoS₂ - cpy veins @ 959, 964 - 970
 ↑
 (Rubble 970-980) Bonanza type not very well
 mentz'd
 local sheeting ser - cpy fr + zones @ 50°, 30°
 51 green alter p 2-3 no qtz veins qtz - ser zones (2)
 lg -
 52 one qtz - cpy - MoS₂ vein @ 35°(?) ser stringers @ 50°
 lg - bi → chl, "fresh"
 53 qtz cpy bn - MoS₂ vein @ 50°
 qtz - cpy - MoS₂ vein w. ser - MoS₂ borders (L13 = 1011)
 cpy - bn - chl fr @ 40, 50° (+ ser?) (qtz - cpy w flaky
 ser halos fr → pink
 or green)
 54 similar
 55 green alter 2-3p qtz - ser - cpy / zones @ 50-60°
 (lg+) ≠ MoS₂

HIGHLAND VALLEY DRILL LOG SHEET

Hole L13

Date Aug 25/72

Property Lornex

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	mm f	M f ₁₀₅	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
					yell	grn	pink							
46 1063-1079	lg	10	✓	✓	yell 2	grn 3p	pink 2L	-	.5	chl	5	✓	5	10 cal gts eyes
59 1116-1135	lg	10	-	✓	gray	green 1-2 p	pale green	-	.3	chl ser fresh	1.8	✓	5	gts bluish gts eyes
62 1190-1209	lg	-	?	✓	pink	grn 2		-	.5	chl	-	-	5	gts large anhedral

56 gts - ser - cpy - bn @ 45° (parallel calate veins)
 subly gts - cpy - MoS₂ (not Bonanza-type)
 chl - pyr, ser - cpy fr @ 20, 45°
 gts vein w cpy p.d.s @ 45°

57 sim. but less sheared $\frac{1}{3}$ less alt'd greenish w 1-2 lg - p.

58 cpy - MoS₂ slips @ 30° lg
 calate @ 20° alt'n green 1-2 bl 3
 rock gts - cpy vein w serate - halos @ 50°

59 gts - ser - cpy - mafic @ 45° cpy - ser fr @ 40°
 MoS₂ slips @ 30° w. cpy, quartz chl - cpy @ 10°
 ± bn, och - hem (?) red brown

60 like 59 L13: 1143

61 sl. more alt. grn 1-2 calate veins @ 40°

62 almost all gneiss yell grn alt'n 3 Bonanza - cpy - MoS₂ - gts

63 calate veins 20, 35° chl - ser - cpy fr @ 35°, 50°

64 calate veins @ low $\frac{1}{2}$'s (20° + less) L13: 1204
 fs gray (fresh) mafic → chl or fresh lg -

HIGHLAND VALLEY DRILL LOG SHEET

Hole L13

Date Aug 25/72

Property Lornex

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration		Feld. Fresh	mm f	mm ² f/c	Qtz.-Ser. Zones	MoS ₂	Rock Type	Comments
65 1229-1248	lg	10	✓	✓	grn 2 p	creamy 2l	-	.2	chl	20	✓	5	anhedral qtz
1310? 1277 (EHT)													

65 chl - cpy^{pyr.} f/c @ 10, 20, 50 (L10: 1239)
 one poorly mineralized mos. - cpy - qtz veins
 one quartz - ep stringer @ 50° - some cpy with it

66 calcite 20° green rock (not even sure it is
 Skeena now) (L13: 1264)
 15' 10' are ganggy

67 1278 - EHT ganggy lg -
 vuggy qtz - ep ~~z~~ pods
 calcite veins
 qtz - cpy vein @ 30°
 pink + green slta 2-3
 one vuggy mafic - rich zone
 1273 - 1274 (L13: 1273)

HIGHLAND VALLEY DRILL LOG SHEET

 Hole L 5 /

 Date Aug 22 / 72

(794 EBT)

 Property Lornex

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	min Fe	min Mn	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					wh	grn	pix							
51-67	lg	10	✓	✓	-	yellow K ₂	-	✓	1	fresh chl	-	-	5	
4 102-120	vlg lg	-	-	✓	-	1 p	-	-	-	main fresh	10	-	5	
7 170-187	lg	-	✓	✓	-	1p pe	-	-	5	chl ep	5	✓	5	

- 1 gts - pyrite - ser almost no oxidation layer @ 70°
ep. clots m chl - pyr. 30° pyrite 10°
gts - ser - cpy - och. hem 35°
- 2 Missing
- 3 almost fresh sh chl, ep, pyrite (in gts - ser - cpy zones)
- 4 aplite stringers
chl. fractures with opy, ser 10°
gts - ser - cpy 20°
slightly rubbly
- 5 Virtually fresh sh, cpy after mafic
gts - ser - cpy ± py zones 20° → 40° - ser altn
adj. to veins
- 6 white altn, ep - gts clots
- 7 sheared ep on fe + as clots + repl. mafics
gts - cpy is gts - ser - cpy envelopes @ 25°
ser - cpy fractures cpy - pyr - MoS₂ - chl
E 45°

HIGHLAND VALLEY DRILL LOG SHEET

Hole L51

Date Aug 22/72

Property Lornex

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

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration		Feld. Fresh	min. fr.	m. of fr.	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					grn								
0 220-236	lg	10	✓	✓	-	2-3 P	-	-	2 ser chl	-	✓	5?	
13 274-293	vg	-	-	✓	-	dk grn 2	-	-	-	chl	-	5?	Some qtz eyes
16 329-348	vlg	-	✓	✓	-	"	-	-	2	chl	20	5	

8 same as 7 pyrite, ep. wh fs alteration → L51: 185
L51: 2134

9 white alter level 1 green 1 → 3 after 215
ep clasts ser-chl-cpy clips
sheared after 215 wh fs alter. 2
matrix → chl

10 qtz-cpy-MoS₂ ± pyrite vein @ 35°
cpy-py-chl fr. 20'

11 similar but MoS₂ even better (VJ)

12 chl on fractures @ low 4 to core - some cpy
overall dk green alter (level 2) (vlg)
→ L51: 263

13 sim. to 12 a bit of ep after matrix

14 like 13 but alter tailing off abit (1→2)
och. hem + ser on fr. at 30°

15 sim. but with one qtz-cpy-MoS₂ vein
+ some sheared zones (low 4 to core)

16 qtz-ser-cpy-py fr @ 10°
caliche veins @ 10°

HIGHLAND VALLEY DRILL LOG SHEET

Hole L 51
L 51

Date Aug 22/72

Raining again

Property Lornex

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	Mn	M. sp. Pcs.	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
9 380-396	vlg	-	✓	✓	pink + green to 388 (2)			✓ 388	1	fr chl	-	-	D12 T5	contact 386'
22 413-432	vlg	-	v?	✓	wh lp	grn (K)	-	-	1	fresh ser	-	-	5	

- 17 green altn fading off, some pink altn and aplite / width of aplite not certain but occupies 2' of core - this is the start of a ser-pyrite fr. in the pink aplite Bi Qtz Plag ppy dylex
- 18 mixed green + pink altn level 2-3 p L51:383 sample
(ppy) some gts-ser-cpy veins @ 30°
- 19 biot. Qtz Plag ppy to 386 ppy to end of row then 5 - no obvious change in ppy
pyrite fr in 5 - @ 20° chl-cpy fr 30° near contact
calcite veins ser-cpy @ 20°
- 20 almost fresh SK
gts-ser-cpy fr at 25°
- 21 similar to 20 - pyrite; calcite - 10°
a few ep clots
- 22 Bi-chl-cpy @ 25° ± ppy (?)
cal. veins @ 70°
- 23 sim to 22 but green altn lp 2lp

HIGHLAND VALLEY DRILL LOG SHEET

Hole L51

Date Aug 23/72

Property Lornex

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration			Feld. Fresh	min. fr	fresh det	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
5 468-486	ulg	-	✓	✓	-	grn lp	-	-	5	fresh det	-	-	5	
28 502-539	lgt	?	✓	✓	-	23 p	-	-	2	ser	15	✓	?	least 5' v. rich in Moss
31 575-593	lg	-	✓	✓	white lp	-	-	-	1 1/2	fresh chl	2	✓	5	

- 24 green altn 1p 2l - like 23
- 25 local sheeting @ 60° to core
pyrite on fr. @ 15°
calcite @ 05°
- 26 Rubbly but otherwise like 25
- 27 mod. green (ser) altn after 515
pyrite fr - low \$
- 28 gts - cpy - moss vein occupies last 5' of box
- 29 gts - cpy veins at 30°
ser borders
- 30 virtually fresh
quartz - ^{ser} - cpy - py veins @ 30°
- 31 locally fractured
gts - ser - cpy ± MoS₂ + pyr. @ 30° sheared high & locally
- 32 green altn 1-2 p pyrite 30° mafic → chl, ser

L51: 451

pyrite mafic "fresh"
fr olive green
on faces w second. biotite

HIGHLAND VALLEY DRILL LOG SHEET

Hole L51

Date Aug 23/72

Property Lornex

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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	mm f	m. g. f.c.	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					wh	grn	pink							
34 628-647	vlg	-	-	✓	1-2 P	-	-	-	1.5	fresh chl	10	-	5	some quartz eyes
37 682-698	vlg	-	-	✓	-	21 P2 P3	v.l. 2	-	2	ser chl	-	-	5	
40 732-750	lg	-	-	✓	1-2 P	-	-	-	2	chl	-	-	5	
43 785-794 (EOH)														

- 33 caliche veins (sample L51: 629) at 10°
 rock rel fresh w local pink altn in veins
 gts - ser - pyr. @ 30°
 gts - cpy w ser below @ 50°
- 34 640 → 647 Missing L51: 630 "fresh"
 gts - ser - cpy veins @ 35°
- 35 Box empty
- 36 yellow-grn altn 1-2 mafic → chl
 gts - ser - pyr. zones chl fr. at 50°, 20°
- 37 cpy - chl fr @ 30° caliche @ 20°
 rubble shears low & to core
- 38 cream + green altn (1-2p) caliche veins @ 60°
 chl - cpy @ 20°
- 39 Gassy - shears 20-30°, gts - cpy - MoS₂ veins @ low &
 gts - ser - cpy zones at 20° green altn 1-2p 3l
 bi?
- 40 Caliche veins 10, 40° (white, massive / caliche) gts - bi @ 10°
 dl-cpy ment/d fr. 10° gts, chl, cpy, tour(?) @ 30° L51: 736

HIGHLAND VALLEY DRILL LOG SHEET

Hole L 51

Date Aug 23/72

Property Lornax

W. J. McMillan

B.C. Dept. of Mines and Petroleum Resources

Box Footage	Grade	Qtz. Veins	Pyr.	Cpy. V. Bn.	Feldspar Alteration		Feld. Fresh	mm	m af	Qtz-Ser. Zones	MoS ₂	Rock Type	Comments
					gm								
43 785-794	lg- mg	1 2	✓	✓	-	2p 13	-	3	50 + sid	5	-	?	

41
green altn 2(p) 3(l)

42 like 41 (plug x/s show up as dk green laths due to altn)
some och. her on fi @ 10°

43 lost foot or so in gauge
altn like 41, 42
qtz-ser-cpy-py zones @ 35°