RFN

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

896531

Property	Valley Copper	District	Highland Valley
Commenced	April 7,1970	Location	Decline B
Completed	April 14,1970	Core Size	BQ
Co-ordinates			
Objective			

Hole No.	12-0-1		
Tests at	500' was +11°	Hor. Comp.	
Corr. Dip		Vert. Comp.	
True Brg.		Logged by	D.A.
% Recov.	92.6%	Date	April 17,1970

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
		+15° at collar +11° at 500'		822'	12-0-1	1a

Footage From	To	Description	Sample No.	Length	Analysis
		SUMMARY OF GEOLOGY			
0	90	Low to moderate argillic alteration, K-spar content = 8.10% Sericite alteration low. Abundant, narrow barren qtz. veins			
90'	134'	Low argillic alteration. K-spar content = 5.8% Sericite alteration low. Many barren qtz. veins.			
134'	208'	Moderate argillic alteration. K-spar content = 8% Sericite low Barren qtz. veins still present.			
208'	288'	Low argillic alteration. K-spar content 5.8%. Sericite low Numerous narrow barren qtz. veins.			
288'	543'	Moderate argillic alteration, K-spar content 10-12%. Sericite alteration low. 510.5 - 511 - mafic dyke at 30°			
543'	553.5'	Dark green, mafic dyke cut by unmineralized qtz. veins			
553.5'	660'	Intense argillic alteration. K-spar content 7-10%. Sericite developement moderate. 621-623 - dark green, mafic dyke 647-650.5 - fault gouge			
660'	753'	Moderate argillic alteration. K-spar alteration 3-5%. Sericite low to moderate. Few qtz. veins. Dark green, mafic-rich dyke at 45° from 684'-691'			
753'	805'	Intense argillic alteration. K-spar low. Sericite moderate			
805'	822	Moderate to intense argillic alteration. K-spar < 5%. Sericite low			
	822	End of hole.			

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District	
Hole No.	12-0-1		
Commenced		Location	
Tests at		Hor. Comp.	
Completed		Core Size	
Corr. Dip		Vert. Comp.	
Co-ordinates		True Brg.	
Logged by			
Objective		% Recov.	92.6%
Date	April 17,1970		

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

Footage From	To	Description	Sample No.	Length	Analysis
0	250	6.73/25 = 0.269 0.0751/25 = 0.0030			
250	440	6.79/19 = 0.357 0.0686/19 = 0.0036			
440	822	18.79/38 = 0.494 0.1825/37 = -.0049			

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Highland Valley	Hole No.	12-0-1
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet

Footage From	To	Description											Sample No.	Length	Analysis
		ASSAY RESULTS													
0	10	.30	.0029	220	230	.36	.0006	440	450	.54	.0014	660-	670	.68	0086
10	20	.38	.0024	230	240	.22	.0018	450	460	.67	.025		80	.58	0049
20	30	.24	.0018	240	250	.23	.0036	460	470	.32	.0015		90	.16	0035
30	40	.28	.0089	250	260	.42	.012	470	480	.45	.0013		700	.36	0091
40	50	.26	.0009	260	270	.41	.0014	480	490	.64	.0005		10	.28	0015
50	60	.51	.0024	270	280	.22	.0002	490	500	.61	.0009		20	.48	0014
60	70	.21	.0043	280	290	.16	.0025	500	510	.60	.0007		30	.40	0017
70	80	.28	.0035	290	300	.40	.0006	510	520	.36	.0004		40	.82	0009
80	90	.30	.0018	300	310	.32	.0049	520	530	.60	.0013		50	.56	0071
90	100	.27	.0064	310	320	.36	.0040	530	540	.40	.0023		60	.50	0073
100	110	.26	.0032	320	330	.28	.0008	540	550	.15	.0010		70	.45	0049
110	120	.25	.0020	330	340	.34	.0068	550	560	.26	.0043		80	.55	0010
120	130	.36	.0091	340	350	.52	.0073	560	570	.57	.0014		90	.50	0078
130	140	.27	.0010	350	360	.48	.0076	570	580	.63	.0065		800	.40	0083
140	150	.40	.0047	360	370	.35	.0028	580	590	.53	.0024		10	.62	0030
150	160	.23	.0007	370	380	.44	.0019	590	600	.58			22	.41	0020
160	170	.26	.0008	380	390	.35	.0005	600	610	.67	.0026				
170	180	.21	.0012	390	400	.32	.0018	610	620	.49	.0007				
180	190	.20	.0007	400	410	.42	.0055	620	630	.38	.0038				
190	200	.21	.0068	410	420	.36	.0017	630	640	.40	.0015				
200	210	.10	.0020	420	430	.30	.0037	640	650	.59	.0110				
210	220	.14	.0016	430	440	.34	.0026	650	660	.60	.0390				

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District	Highland Valley	Hole No.	12-0-31
Commenced	April 7,1970	Location	Decline B	Tests at	+11° at 500'
Completed	April 14,1970	Core Size	BQ	Corr. Dip	
Co-ordinates				True Brg.	
Objective				% Recov.	92.6%

Hor. Comp.	
Vert. Comp.	
Logged by	D.A.
Date	April 10,1970

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

Footage From	To	Description	Sample No.	Length	Analysis					
		All Bethsaida Q.D. except where noted								
								0'	10'	7.0'
0'	90'	A section of low to mod argillic alteration with small pockets of moderate							20'	9.8'
		and three feet of low from 24' to 27'. Plug green to buff in low to mod.							30'	9.5'
		parts. Bistite present but has been partially chloritized in most cases.							40'	9.5'
		K-spar alt'n. low overall with a few feet of low to moderate sericite							50'	10.0'
		development.							60'	6.5'
		Quartz Veins: 29.5' - 30' at 80° Barren except for minor Bn along border							70'	10.0'
		34.5' - 4" q.v. at 80° Minor Bn along edge.							80'	9.5'
		42' - 2" q.v. - Barren							90'	9.2'
		50' - 1 1/2" q.v. at 30° Bn & Cp in sericite borders							100	10.0'
		80' 1" q.v. at 80° Barren							110	9.5'
		There are numerous narrow (< 1/4" wide) quartz veins typical of quartz-rich							120	9.0'
		core. Cu grade ≃ 0.25%							130	9.5'
									190	9.5'
90'	134'	Low argillic alteration with white, hard plug and fresh or sometimes partially							150	9.5'
		chloritized biotite.							160	10.0'
		K-spar is a little lower then in the previous section. ≃ 5-8%. Related							170	9.5'
		mainly to quartz veins (as borders) Sericite alt'n. low.							180	9.0'
									190	9.0'
									200	9.0'
									210	9.5'
									220	9.0'

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	District	Hole No. 12-0-#1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A.
Objective		% Recov.	Date April 10,1970

Sheet 2

Hole No. 12-0-2

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Analysis
		Quartz Veins: 106' 1" q.v. at 90° Minor Bn & Cp						220'	230'	9.5'
		110' 1" q.v. at 70° Moly & Bn & Cp							240'	9.0'
		122' 1" q.v. at 60° Bn & Cp							250'	10.0'
		There are abundant narrow quartz veins (< 1/4" wide) in this section. All							260'	10.0'
		barren and at various orientations. Cu grade ≃ 0.25%.							270'	9.5'
134'	208'	Moderate argillic alteration with green or greenish-white plug. Biotite consists							280'	10.0
		of a few remnant, chloritized flakes. Sometimes low to mod. sections over 2 or 3							290'	8.5'
		feet. K-spar content ≃ 8%.							300'	9.0'
		Sericite quite low.							310'	9.0'
		Quartz Veins: 154.5' 1 1/2" q.v. at 90° Sericite border with Bn							320'	10.0'
		158.5' two 1" q.v.'s at 70° Minor Bn along edges.							330'	9.5'
		There are about two q.v.'s < 1" wide per foot. The narrow quartz veins							340'	9.0'
		(< 1/4") are not as obvious or as abundant as previously but are still present.							350'	9.5'
		Some hematite developed in this section. Mainly along fractures and in associa-							360'	9.5'
		tion with mineralization in q.v.'s.							370'	7.5'
		At 160' shear at 35°							380'	8.5'
		179' - 180' Fault gouge							390'	9.7'
		185' Shear at 40° - Black sulfides							400'	8.5'
									410'	9.5'
									420'	9.5'
									430'	9.5'
									440'	9.5'

211-9437—H.P.

Scale

Colour Plot & Dips

0.

Drill Hole Record

Cominco

Property	District	Hole No. 12-0-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A.
Objective		% Recov.	Date April 10,1970

Sheet 3

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. 12-0-1
		Cu grade for section ≃ (0.20 →) 0.25%						490'	450'	10.0'
208'	288'	Low argillic alteration again with white, unaltered plug and fresh or only							460'	9.7'
		partially chloritized biotite. K-spar alt'n. 5-8%.							470'	9.0'
		Sericite alt'n. low with only a few fractures throughout the section.							480'	9.0'
		Quartz Veins: 219' 1" q.v. at 90° Bn & hematite in sericite borders.							490'	9.0'
		225' 1" q.v. at 90° Minor Bn							500'	9.0'
		271.5' 1" q.v. at 90° Sericite (1/2") borders with Bn							510'	10.0'
		At 262' good Bn & Cp in 1/2" q.v.							520'	10.0'
		About one q.v./foot which is < 1" wide - poorly mineralized							530'	10.0'
		There are numerous narrow q.v.'s characteristic at the quartz-rich core.							540'	10.0'
		Cu grade ≃ 0.20%							550'	10.0'
288'	543'	Generally moderate argillic alteration with some small sections of low, low to							560'	10.0'
		mod., and intense. Plug greenish-white. Biotite removed or chloritized remains.							570'	10.0'
		294' - 298' Low to Mod. 333' - 334.5' Intense							580'	9.5'
		314.5' - 316 ' Low 356' - 360' Intense							590'	9.0'
		322.5' - 323.5' Low							600'	8.0'
									610'	8.5'
									620'	9.7'
									630'	9.0'
									640'	7.5'
									650'	8.0'
									660'	9.0

Analysis

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	District	Hole No. 12-0-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A.
Objective		% Recov.	Date April 10,1970

Sheet 4

Hole No. 12-0-1

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Analysis
		K-spar alteration ≤ 10-12%						660'	670	9.0'
		Sericite alteration low. Along q.v.'s and a few fractures.							680	8.5'
		Quartz Veins: 301' 2" q.v. at 45° Barren							690'	9.5'
		307' 4" q.v. & K-spar Bn & Cp							700'	9.0'
		345' 1" q.v. at 60° Bn & Cp							710'	9.7'
		357' 1 1/2" q.v. at 60° Bn							720'	9.7
		378' 1" q.v. at 50° Sericite (1/4") borders with Bn							730'	9.5'
		398.5' 1" q.v. at 90° Bn							740'	10.0'
		Fault gouge at 329'							750'	10.0'
		Fault gouge at 352-354'							760'	9.5'
		Fault gouge at 363.5' - 365'							770	9.0'
		2" of gouge at 384.5'							780'	10.0'
		301' - 302' Emerald green sericite							790'	9.5'
		320.5' Seam 1/4" of chloritized biotite ll to core Cu grade 0.30%							800'	10.0'
		From 402' to 485' still moderate argillic alt'n. but with more patches of low							810'	8.0'
		argillic alt'n K-spar patchy some 1 foot sections of 20% K-spar. Overall 8%.							820'	7.5'
		Quartz Veins: 451' -452' Moly & Cp with quartz							822'	2
		454' 1" q.v. Sericite borders with Bn & Cp								
		475' 2" q.v. at 60° Bn & Cp								

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	District	Hole No. 12-0-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A.
Objective		% Recov.	Date April 12, 1970

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
					12-0-1	5

Footage From	To	Description	Sample No.	Length	Analysis
		482.5 - 483' Quartz & sericite - Bn & Cp			
		451' - 452' Gouge with qtz & moly & Cp			
		Cu grade ≃ 0.35%			
		From 491' to 493' Intense argillic pocket.			
		504' - 510' Emerald green sericite section			
		510.5 - 511' Fine-grained mafic-rich dyke - contact at 50°			
		- f.g. plug & biotite - dark green colour			
		From 485' to 543' about two q.v.'s/foot. Mineralized with Bn & Cp.			
543'	553.5'	Dark green dyke. Mafic-rich and feldspars. K-spar ≃ 8%. Mainly biotite			
		Mafic. Contact at 553.5' gradational over 6". Cut by 1/8" q.v.'s -mineralized			
553.5'	660'	Intense argillic alteration with greenish-white plug. Biotite present only as			
		fine, remnant flakes. Some local moderate sections, over 1 or 2 feet.			
		K-spar content ≃ 7-10%			
		Sericite alteration moderate with numerous narrow fractures			
		Quartz veins: Out of quartz - rich core.			
		572' 1 1/2" q.v. with Bn			
		585' 5" q.v. at 30° Bn & Cp			
		589' - 590' Emerald green sericite and qtz.			
		559' - 560' Emerald green sericite and qtz.			

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	District	Hole No. 12-0-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A.
Objective		% Recov.	Date April 14,1970

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 12-0-1 | Sheet 6

Footage From	To	Description	Sample No.	Length	Analysis
		From 590' to 660': Mainly intense argillic with some of core locally moderate as follows: 610' - 621' ; 629' - 631'; 636' - 641'; Sericite still moderate. This section contains fine Bn in and around q.v.'s.			
		Quartz Veins: 594.5' Quartz and moly shear at 15°			
		605' 2" q.v. with coarse sericite - Bn & Cp			
		616' 2" q.v. with fine Bn & Cp			
		650' 3" of quartz with moly & black(sheared) sulfides			
		656'k 4" of quartz with moly & Cp			
		593' - 594.5" Emerald green sericite			
		621' - 623' Sheared and leached dyke rock. Red-brown have but fresh is the mafic-rich, dark green dyke. (found earlier and also later in hole)			
		649' - 650.5' Fault Gouge			
		No narrow quartz veins .			
		Cu grade ≃ 0.40 - 0.45%.			
660'	753'	A section of dominantly moderate kaolinization, Plug is greenish-white. Biotite present but in most cases is partially chloritized. Some remnant, fresh biotite occurs in this section. Small pockets of intense argillic alt'n. K-spar alteration 3-5%. Low with no concentrations of K-spar at all.			

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	District	Hole No. 12-0-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A.
Objective		% Recov.	Date April 14,1970

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
					12-0-1	7

Footage From	To	Description	Sample No.	Length	Analysis
		Sericite alteration low to moderate. Intense sericite 741' - 743'.			
		Quartz Veins: 691' 5" of quartz at 45° Bn			
		737.5' 1" q.v. at 10° Bn & Cp			
		Few q.v.'s in this section. About one/three feet of core.			
		From 684' to 691' Dark green mafic-rich dyke (Biotite) Some 1/16" wide			
		gq.v.'s cut dyke. Contact at 45° - Cp along contact with q.v.			
		Around 711' Ground-up core			
		Around 746' - 747' Gouge material.			
		From 746' onward Hematite or fractures			
		Cu grade ≃ 0.25 - 0.35%.			
753'	805'	Characterized by intense argillic alt'n with soft greenish-white plug, and small remnant biotite flakes.			
		Sericite moderate.			
		Brick-red hematite common on fractures and within rock			
		756 - Small shear at 80°. 1/2" gouge. Moly on slip plane.			

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	District	Hole No. 12-0-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A. & M.D.M.
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet

Footage From	To	Description	Sample No.	Length	Analysis					
		780 Small shear at 85° with 1/4" gouge								
		789 Small shear at 30° with 1/2" gouge. Hematite present								
805	822	Moderate to intense argillic alteration								
		K-spar content low 5%								
		Small remnant biotite grains								
		Sericite development low								
		807 - Small shear at 85° with 1/4" gouge								
	822	End of hole								

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	District	Hole No. 12-0-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet

Footage From	To	Description	Sample No.	Length	Analysis					
0	250	6.73/25 = 0.269 0.0751/25 = 0.0030								
250	440	6.79/19 = 0.357 0.0686/19 = 0.0036								
440	822	18.79/38 = 0.494 0.1825/37 = 0.0049								

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property Valley Copper	District Highland Valley	Hole No. 12-0-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

Footage From | To | Description

ASSAY RESULTS

From	To											Sample No.	Length	Analysis
0	10	.30	.0029	220	230	.36	.0006	440	450	.54	.0014	660-670	.68	0086
10	20	.38	.0024	230	240	.22	.0018	450	460	.67	.025	80	.58	0049
20	30	.24	.0018	240	250	.23	.0036	460	470	.32	.0015	90	.16	0035
30	40	.28	.0089	250	260	.42	.012	470	480	.45	.0013	700	.36	0091
40	50	.26	.0009	260	270	.41	.0014	480	490	.64	.0005	10	.28	0015
50	60	.51	.0024	270	280	.22	.0002	490	500	.61	.0009	20	.48	0014
60	70	.21	.0043	280	290	.16	.0025	500	510	.60	.0007	030	.40	0017
70	80	.28	.0035	290	300	.40	.0006	510	520	.36	.0004	40	.82	0009
80	90	.30	.0018	300	310	.32	.0049	520	530	.60	.0013	50	.56	0071
90	100	.27	.0064	310	320	.36	.0040	530	540	.40	.0023	60	.50	0073
100	110	.26	.0032	320	330	.28	.0008	540	550	.15	.0010	70	.45	0049
110	120	.25	.0020	330	340	.34	.0068	550	560	.26	.0043	80	.55	0010
120	130	.36	.0091	340	350	.52	.0073	560	570	.57	.0014	90	.50	0078
130	140	.27	.0010	350	360	.48	.0076	570	580	.63	.0065	800	.40	0083
140	150	.40	.0047	360	370	.35	.0028	580	590	.53	.0024	10	.62	0030
150	160	.23	.0007	370	380	.44	.0019	590	600	.58		22	.41	0020
160	170	.26	.0008	380	390	.35	.0005	600	610	.67	0026	~~30~~		
170	180	.21	.0012	390	400	.32	.0018	610	620	.49	0007	~~40~~		
180	190	.20	.0007	400	410	.42	.0055	620	630	.38	0038			
190	200	.21	.0068	410	420	.36	.0017	630	640	.40	0015			
200	210	.10	.0020	420	430	.30	.0037	640	650	.59	0110			
210	220	.14	.0016	430	440	.34	.0026	650	660	.60	0390			

Mo .0033

440

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Highland Valley	Hole No.	12.5 - 0 - 1		
Commenced	February 28th, 1970	Location	Decline B, Cutout 12.5	Tests at	280 was +37° Az = 44.5°	Hor. Comp.	
Completed	March 9th, 1970	Core Size	BQ	Corr. Dip	+40° at collar	Vert. Comp.	
Co-ordinates				True Brg.	N45°E	Logged by	M. J. Casselman D. Anderson
Objective				% Recov.	85.5	Date	March 4th - 10th, 1970

Claim | T Brg. N45°E | Collar Dip +40° | Elev. | Length 505 | Hole No. 12.5-0-1 | Sheet 1.

Footage From	To	Description SUMMARY OF GEOLOGY	Sample No.	Length	Analysis
		Bethsaida quartz diorite. Alteration as follows.			
0	- 43	Generally moderate argillic alteration; sericite low; narrow quartz veins fairly common.			
43	- 74	Intense argillic alteration; sericite moderate; still some narrow quartz veins typical of quartz-rich core; shear zone 60 - 65.			
74	- 154	Moderate argillic alteration; sericite alteration low; possible shear zones 104 - 106.5, 130 - 135.			
154	- 261	Low to moderate argillic alteration except 154 - 161, 171 - 176, 215 - 230, and 238 - 245 which are moderate; sericite low 154 - 245, low to moderate 245 - 261; three 2' sections of emerald green sericite; narrow quartz veins still evident.			
261	- 358.5	Moderate argillic alteration with five 2' zones of intense; sericite low; still some barren quartz veins but not so many as previously.			
358.5	- 378	Moderate argillic alteration; sericite low to moderate; possible fault around 375.			
378	- 398	Low argillic alteration; sericite low to moderate; only a few narrow quartz veins.			

Scale

Colour Plot & Dips

Drill Hole Record

Comaco

Property	Valley Copper	District		Hole No.	12.5-0-1
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 2.

Hole No. 12.5-0-1

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From	To	Description	Sample No.	Length	Analysis
398	- 505	Dominantly moderate argillic alteration with 408 - 414 and 417 - 419 low, 445 -			
		459 and 482 - 488 low to moderate; sericite low to moderate; only few narrow			
		quartz veins.			
505		End Hole 12.5 - 0 - 1.			

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	12.5 - 0 - 1
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 2a.

Hole No. 12.5-0-1

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From	To	Description SUMMARY OF MINERALIZATION			Sample No.	Length	Analysis
		Length	% Cu	% Mo			
0 -	210	210	0.246	0.0035			
210 -	505	295	0.348	0.0038			
0 -	505	505	0.306	0.0049			

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	12.5 - 0 - 1
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 2a.

Hole No. 12.5-0-1

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From To | Description | Sample No. | Length | Analysis

SUMMARY OF MINERALIZATION

Footage From	To	Length	% Cu	% Mo
0 -	300	300	0.26	0.0059
300 -	505	202	0.37	0.0049

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	12.5 - 0 - 1
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 3.

Hole No. 12.5-0-1

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Analysis	Recovery
0	43	Generally moderately altered with white and greenish-white plagioclase; moderate				0	10				9.0
		argillic alteration predominates with exceptions as noted, moderate sections char-				10	20				8.5
		acterized by green plagioclase and orange Kspar and the lack of biotite; sericitic				20	30				7.0
		alteration low with only a few fractures; Kspar alteration moderate with about 10%				30	40				9.0
		except in low argillic zones; narrow quartz veins (1/4" wide) fairly common in				40	50				10.0
		this section; grade 0.2%.				50	60				9.0
		0 - 2 low argillic alteration.				60	70				7.5
		3 1" quartz vein at 40°; minor bornite.				70	80				9.5
		7 3/4" quartz vein at 10°; barren.				80	90				10.0
		9 - 12 low argillic alteration.				90	100				10.0
		21 - 24 intense argillic alteration.				100	110				8.5
		25.5 1" quartz vein at 80°; bornite in sericite borders.				110	120				7.0
		32 - 36 low argillic alteration.				120	130				9.5
		41 1-1/2" quartz vein at 75°; bornite and chalcopyrite in sericite.				130	140				9.0
						140	150				9.5
43	74	Intense argillic alteration with soft, greenish-white plagioclase; no biotite evi-				150	160				9.7
		dent; sericite alteration moderate with some 1' sections intense; Kspar alteration				160	170				9.7
		about 8% overall, some as quartz borders and some disseminated within rock; there				170	180				9.7
		are no quartz veins about 1" wide, some 1/2" veins cut core at variety of angles,				180	190				9.7
		narrow quartz veins characteristic of the quartz-rich core still prevalent; grade				190	200				9.7
		about 0.3% - 0.35%.				200	210				9.7
		44 - 45 intense sericite.				210	220				9.7

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	12.5 - 0 - 1
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 4.

Hole No. 12.5-0-1

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From	To	Description	Sample No.	Length	Analysis	Recovery
		46 - 47.5 intense sericite.			220 - 230	9.7
		55 - 57.5 intense sericite; essentially a quartz and sericite section with			230 - 240	9.7
		chalcopyrite and some bornite.			240 - 250	9.7
		60 - 65 shear zone.			250 - 260	9.7
					260 - 270	9.7
74	- 154+	Generally moderate argillic alteration with greenish plagioclase and orange Kspar;			270 - 280	9.7
		biotite preseent in only two short sections where rock not quite so altered; seri-			280 - 290	9.4
		cite alteration low with only a few fractures; Kspar alteration overall about 8%			290 - 300	8.5
		with one section of 15% at 92 - 102; grade about 0.20% - 0.25%.			300 - 310	5.0
		82.5 - 85 quartz vein; minor bornite on fractures.			310 - 320	3.0
		88 - 90 low argillic alteration.			320 - 330	6.5
		92 1" quartz vein at 45°; minor bornite.			330 - 340	9.7
		92 - 102 Kspar 15%.			340 - 350	9.7
		101 - 114 intense argillic alteration.			350 - 360	9.7
		104 - 106.5 possible shear zone.			360 - 370	7.0
		108 1" quartz vein at 75°; barren.			370 - 380	7.5
		130 - 135 intense argillic alteration; possible shear zone.			380 - 390	8.5
					390 - 400	9.0
154	- 261	Generally low-moderate argillic alteration; plagioclase has a greeny tinge; bio-			400 - 410	7.5
		tite fairly abundant but going strongly to chlorite; sericite very low, few veins			410 - 420	8.5
		exist and these 1/4" - 1/2" and generally 45° - 65°; some emerald green sericite			420 - 430	10.0
		present; Kspar generally unevenly dispersed, appears to have made entrance in			430 - 440	6.0

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No.	12.5 - 0 - 1	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Sheet 5.

Hole No. 12.5-0-1

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Analysis	Recovery
		definite avenues at 2' - 3' intervals that appear fairly evenly distributed				440	- 450				7.0
		throughout the section (about three/20'), intensity 12% - 15% and is disseminated				450	- 460				10.0
		and in quartz veins; in rest of core Kspar is disseminated and 8%; quartz veins				460	- 470				10.0
		still show ample evidence of the re-entrant zone in the core, ones over 1/2"				470	- 480				10.0
		generally barren except for trace Cu, general dip angle 45° or 80° - 90°, some				480	- 490				9.0
		evidence of fine network of barren quartz veins but not consistent through section				490	- 500				6.5
		or strongly developed; Cu 0.2% - 0.25%; bornite slightly greater than chalcopyrite.				500	- 505				5.0
		154 - 245 sericite very low, few veins.									
		154 - 161 moderate argillic alteration; considerably less biotite.									
		161 - 171 generally low argillic alteration.									
		171 - 176 moderate argillic alteration.									
		193.5 - 197 moderate argillic alteration.									
		197 - 215 generally low-moderate argillic alteration with 6" patches of									
		low argillic alteration dispersed through it.									
		215 - 230 generally moderate argillic alteration.									
		218 - 220 emerald green sericite disseminated, 3%; some chalcopyrite asso-									
		ciated with it.									
		219 - 221 moderate-intense argillic alteration.									
		222 - 225 intense argillic alteration									
		222 - 225.5 emerald green sericite, disseminated, 3%; associated chalcopyrite.									
		227 - 229 emerald green sericite, disseminated, 3%; associated chalcopyrite.									
		227 - 230 intense argillic alteration.									

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No.	12.5 - 0 - 1	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 12.5-0-1 | Sheet 6.

Footage From	To	Description	Sample No.	Length	Analysis
		230 - 238 low argillic alteration.			
		238 - 245 moderate argillic alteration.			
		245 - 261 sericite low-moderate; slight increase in sericite intensity.			
261	- 358.5	Generally moderate argillic alteration; plagioclase greeny but still fairly hard;			
		biotite almost all gone or is going to chlorite; some low-moderate altered mate-			
		rial; biotite more abundant; sericite generally low occurrence, few veins and			
		widely dispersed, occasional zones where sericite clots exist about 6", generally			
		contains bornite; some emerald green sericite; Kspar generally fairly evenly dis-			
		tributed and mainly disseminated, 8%, also veined and parallel to quartz veins in			
		section 261 - 286 where also about 12% - 15%; quartz veins generally barren or			
		contain very little mineralization until after 315 when coming out of re-entrant			
		zone and bornite present, Kspar in barren veins; Cu is 0.20% from 261 - 315, 0.30%			
		from 315 - 361.			
		280 - 283 moderate argillic alteration.			
		286.5 - 293 moderate argillic alteration			
		306.5 gouge zone of 3".			
		306.5 - 308 emerald green sericite.			
		306.5 - 315 intense argillic alteration.			
		320 - 326 intense argillic alteration.			
		330 - 332 moderate argillic alteration.			
		350 - 352 intense argillic alteration.			

Scale

Colour Plot & Dips

Drill Hole Record

Property	Valley Copper	District	Hole No.	12.5 - 0 - 1	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 12.5-0-1 | Sheet 7.

Footage From	To	Description	Sample No.	Length	Analysis
		353 - 354 intense argillic alteration; 3" emerald green sericite.			
		350 - 352 3" emerald green sericite.			
		358 - 358.5 intense argillic alteration.			
358.5	378	Dominantly moderate argillic alteration with scratchable, green plagioclase; biotite present in a few places but is generally partially chloritized; Kspar about 5% - 8% and generally related to quartz veins; sericite alteration low to moderate; grade about 0.25% Cu.			
		360 1" aplitic vein at 45°; Kspar and quartz aplite cut by chalcopyrite.			
		362 1-1/2" quartz vein at 45°; Kspar and sericite borders; minor bornite.			
		364 1-1/2" Kspar and quartz aplite vein at 70°; cut by quartz vein.			
		365.5 3/4" quartz vein at 70°; Kspar and sericite borders.			
		375 - 377 ground up, suggesting a fault.			
378	398	Low argillic alteration with white plagioclase and black, fresh biotite, few patches low to moderately altered but constitute small percentage of core; Kspar content low, less than 5%, except for a few 6" sections with 8%; sericite alteration low to moderate, generally related to quartz veining; some hematite in fractures; still a few narrow quartz veins; grade about 0.30% Cu.			
		387 1" quartz vein at 45°; bornite in vein and in sericite borders.			

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No.	12.5 - 0 - 1	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 12.5-0-1 | Sheet 8.

Footage From	To	Description	Sample No.	Length	Analysis
		392 1" quartz vein; chalcopyrite in sericite in vein.			
		393 2" of emerald green sericite.			
398	- 505	Long section of dominantly moderate argillic alteration with green and/or buff			
		plagioclase which scratches in most instances; Kspar alteration 8% - 10% with some			
		low sections as listed; sericite alteration low to moderate except where emerald			
		green sericite occurs, generally related to quartz veining; only a few narrow			
		(less than 1/4") quartz veins characteristic of the quartz-rich core - almost out			
		of the transitional zone; Cu grade about 0.25% - 0.30%.			
		408 - 414 low argillic alteration; white plagioclase and biotite.			
		415 - 417.5 less than 5% Kspar; emerald green sericite section.			
		417 3/4" quartz vein at 30° in emerald green sericite; chalcopyrite.			
		417 - 418 low argillic alteration; white plagioclase and biotite.			
		428 - 429.5 less than 5% Kspar; emerald green sericite section.			
		445.5 - 459 low to moderate argillic alteration.			
		447 3/4" quartz vein at 30° with Kspar borders; bornite.			
		460 - 462 intense argillic alteration.			
		472.5 1" quartz vein at 40°; bornite and chalcopyrite in vein.			
		480.5 3/4" quartz vein at 50°; bornite and chalcopyrite in vein.			
		482 - 488 low to moderate argillic alteration.			
		490 - 505 core ground up suggesting a fault zone; some evidence of oxida-			
		tion with malachite and iron oxide.			

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No.	12.5 - 0 - 1	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 12.5-0-1 | Sheet 9.

Footage From	To	Description	Sample No.	Length	Analysis
505		End Hole 12.5 - 0 - 1.			
DA:MJC:jr					
Vancouver Office					
April 24th, 1970					

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Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	
Hole No.	12.5 - 0 - 1		
Commenced		Location	
Tests at		Hor. Comp.	
Completed		Core Size	
Corr. Dip		Vert. Comp.	
Co-ordinates		True Brg.	
Logged by			
Objective		% Recov.	
Date			

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 12.5-0-1 | Sheet 10.

Footage From	To	Description Sample No.	Footage	% Cu	% Mo	Sample No.	Footage	% Cu	% Mo	Sample No.	Length	Analysis
		39017	0 - 10	0.18	0.0011	39039	220 - 230	0.32	0.0017			
		39018	10 - 20	0.23	0.0023	39040	230 - 240	0.24	0.0017			
		39019	20 - 30	0.28	0.0015	39041	240 - 250	0.42	0.0063			
		39020	30 - 40	0.29	0.0022	39042	250 - 260	0.28	0.0021			
		39021	40 - 50	0.38	0.0038	39043	260 - 270	0.37	0.0150			
		39022	50 - 60	0.35	0.0042	39044	270 - 280	0.24	0.0200			
		39023	60 - 70	0.19	0.0074	39045	280 - 290	0.23	0.0110			
		39024	70 - 80	0.29	0.0020	39046	290 - 300	0.26	0.0046			
		39025	80 - 90	0.24	0.0019	39047	300 - 310	0.38	0.0019			
		39026	90 - 100	0.24	0.0038*	39048	310 - 320	0.25	0.0006		*missing; assays assumed	
		39027	100 - 110	0.25	0.0057	39049	320 - 330	0.42	0.0067			
		39028	110 - 120	0.14	0.0037	39050	330 - 340	0.45	0.0300			
		39029	120 - 130	0.23	0.0031	93312	340 - 350	0.52	0.0079			
		39030	130 - 140	0.18	0.0041	93313	350 - 360	0.41	0.0039			
		39031	140 - 150	0.17	0.0047	92314	360 - 370	0.24	0.0077			
		39032	150 - 160	0.28	0.0058	92315	370 - 380	0.24	0.0027			
		39033	160 - 170	0.19	0.0026	92316	380 - 390	0.40	0.0005			
		39034	170 - 180	0.28	0.0280	92317	390 - 400	0.32	0.0021			
		39035	180 - 190	0.21	0.0063	92318	400 - 410	0.26	0.0008			
		39036	190 - 200	0.29	0.0037	92319	410 - 420	0.15	0.0013			
		39037	200 - 210	0.28	0.0038	92320	420 - 430	0.30	0.0036			
		39038	210 - 220	0.34	0.0120	92321	430 - 440	0.36	0.0058			

Scale

Colour Plot & Dips

0

Drill Hole Record

Property	Valley Copper	District		Hole No.	12.5 - 0 - 1
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 12.5-0-1 | Sheet 11.

Footage From	To	Description Sample No.	Footage		% Cu	% Mo	Sample No.	Length	Analysis
		92322	440 -	450	0.54	0.0017			
		92323	450 -	460	0.63	0.0056			
		92324	460 -	470	0.58	0.0020			
		92325	470 -	480	0.35	0.0022			
		92326	480 -	490	0.37	0.0015			
		92327	490 -	505	0.29	0.0049			

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	District	Hole No. 12.5-0-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length 505'	Hole No.	Sheet

Footage From	To	Description									Sample No.	Length	Analysis
0-10		.18	0011	200-210	.28	0039	400-410	.26	.0008	0-210 4.93/20 0.246	0.6979/20	0.0035	
-20		.23	0023	20	.34	012	20	.15	.0013				
-30		.28	0015	30	.32	0017	30	.30	.0036	210-505 9.75/28 0.348	0.1639/28	0.0058	
-40		.29	0022	40	.24	0017	40	.36	.0058				
-50		.38	0038	50	.42	0063	50	.54	.0017				
-60		.35	0042	60	.28	0021	60	.63	.0056				
-70		.19	0074	70	.37	015	70	.58	.0020	763/29 0.263	1723/29	.0059	
-80		.29	0020	80	.24	020	80	.35	.0022				
-90		.24	0019	90	.23	011	90	.37	.0015				
-100				300	.26	0046	505	.29	.0049	Summary of Assays:			
10		.25	0057	10	.58	.0019							
20		.14	0037	20	.25	.0006				Over 505' Cu = 1468/48 = 0.306%			
30		.23	0031	30	.42	.0067							
40		.18	0041	40	.45	.030				Mo = 2366/48 = 0.0049%			
50		.17	0047	50	.52	.0079							
60		.26	0058	60									
70		.19	0026	70	.24	.0077							
80		.28	028	80	.24	.0027							
90		.21	0063	90	.40	.0005							
200		.29	0037	400	.32	.0021							

211-9437—H.P.

Underground.

12.5-01 12.5-01

39017	0	10	-18	.0011						
18	10	20	-23	.0023						
19	20	30	-28	.0015						
39020	30	40	-29	.0022						
21	40	50	-38	.0038						
22	50	60	-35	.0042						
23	60	70	-19	.0074						
24	70	80	-29	.0020						
25	80	90	-24	.0019						
39026	90	Missing (Assume 0.24		.0038)						
27	100	110	-25	.0057						
28	110	120	-14	.0037	0-210					
29	120	130	-23	.0031						
39030	130	140	-18	.0041						
31	140	150	-17	.0047	0-300					
32	150	160	-28	.0058	0.26 ✓	.0059 ✓				
33	160	170	-19	.0026						
34	170	180	-28	.0280						
35	180	190	-21	.0063						
36	190	200	-29	.0037						
37	200	210	-28	.0038						
38	210	220	-34	.0120						
39	220	230	-32	.0017						
39040	230	240	-24	.0017						
41	240	250	-42	.0063						
42	250	260	-28	.0021						
43	260	270	-37	.0150					260-340	
44	270	280	-24	.0200					0.0112	
45	280	290	-23	.0110						
46	290	300	-26	.0046						
47	300	310	-38	.0019						
48	310	320	-25	.0006						
49	320	330	-42	.0067						
39050	330	340	-45	.0300						
93312	340	350	-52	.0079						
93313	350	360	-41	.0039						
92314	360	370	-24	.0077						
15	370	380	-24	.0027						
16	380	390	-40	.0005	300-505					
17	390	400	-32	.0021						
18	400	410	-26	.0008	0.37 ✓	.0049 ✓				
19	410	420	-15	.0013						
92320	420	430	-30	.0036						
21	430	440	-36	.0058						
22	440	450	-54	.0017						
23	450	460	-63	.0056						
24	460	470	-58	.0020						
25	470	480	-35	.0022						
26	480	490	-37	.0015						
92327	490	-505' (15')	-29	.0049						
	500	510								
	510	520								
	520	530	END OF HOLE.							
	530	540								
	540	550								
	550	560								
	560	570								
	570	580								
	580	590								
	590	600								
	600	610								
	610	620								
	620	630								
	630	640								
	640	650								
	650	660								
	660	670								
	670	680								
	680	690								
	690	700								

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	District	Hole No. 12.5-02	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Sheet / Hole No.

Footage From	To	Description	Sample No.	Length	Analysis
		Interval			
0	280	0.21% Cu 0.0026% Mo 280'			
280	360	0.30 0.0066 80'			
360	540	8.75/18 0.486 0.0728/18 0.0040 180'			
540	1006'	.60% Cu 0.0048% Mo. 466'			

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Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property VALLEY COPPER	District HIGHLAND VALLEY	Hole No. 12.5-0-2	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet 2

Footage From	To	Description								Sample No.	Length	Analysis
		Sample No.	Footage	Cu	Mo.	Sample No.	Footage	Cu	Mo.			
		42901	0-10	.16%	.0007		210-220	.21%	.0017			
			10-20	.25	.0010		220-230	.26	.0023			
			20-30	.32	.0019		230-240	.21	.0035			
			30-40	.29	.0010		240-250	.16	.0023			
			40-50	.34	.0025		250-260	.24	.0051			
			50-60	.19	.0006		260-270	.17	.0041			
			60-70	.21	.0017		270-280	.23	.0050			
			70-80	.31	.0009		280-290	.29	.0021			
			80-90	.26	.0068	42930	290-300	.36	.0052			
		42910	90-100	.18	.0011		300-310	.34	.0360			
			100-110	.17	.0009		310-320	.44	.0022			
			110-120	.22	.0120		320-330	.33	.0008			
			120-130	.17	.0010		330-340	.24	.0009			
			130-140	.22	.0007		340-350	.22	.0045			
			140-150	.19	.0022		350-360	.28	.0014			
			150-160	.19	.0016		360-370	.42	.0010			
			160-170	.22	.0054		370-380	.51	.0005			
			170-180	.19	.0016		380-390	.44	.0015			
			180-190	.16	.0038	42940	390-400	.33	.0015			
		42920	190-200	.18	.0007		400-410	.46	.0087			
			200-210	.18	.0011		410-420	.39	.0025			

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property VALLEY COPPER	District HIGHLAND VALLEY	Hole No. 12.5-0-2	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
						3

Footage From	To	Description								Sample No.	Length	Analysis					
		Sample No.	Footage	Cu.	Mo.	Sample No.	Footage	Cu.	Mo.								
			420-430	.40%	.011		630-640	.49	.0013								
			430-440	1.2	.0064	42965	640-650	.48	.0021								
			440-450	.54	.012	42966	650-670	.51	.0017								
			450-460	.38	.0006	42967	670-690	.48	.0230								
			460-470	.57	.0009	42968	690-700	.36	.0017								
			470-480	.49	.0089	42969	700-720	.43	.0024								
			480-490	.42	.012	42970	720-730	.46	.0036								
		42950	490-500	.39	.0015		730-740	.54	.0013								
			500-510	.43	.0010		740-750	.81	.0102								
			510-520	.53	.0013		750-760	1.00	.0016								
			520-530	.43	.0005		760-770	.56	.0007								
			530-540	.42	.0010		770-780	.42	.0001								
			540-550	.97	.0005		780-790	.46	.0081								
			550-560	.65	.0028		790-800	.64	.0026								
			560-570	.45	.0022		800-810	.64	.0023								
			570-580	.74	.0089		810-820	.71	.0005								
			580-590	.41	.0042	42980	820-830	.62	.0031								
		42960	590-600	.99	.0073		830-840	.52	.0280								
			600-610	.56	.0012		840-850	.56	.0065								
			610-620	.33	.0010		850-860	.64	.0085								
			620-630	.35	.0006		860-870	1.10	.0120								

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property VALLEY COPPER	District HIGHLAND VALLEY	Hole No. 12.5-0-2	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet 4

Footage From	To	Description	Sample No.	Length	Analysis
		Sample No. Footage Cu. Mo.			
		42985 870-880 .50% .0012			
		42986 880-900 .43 .0014			
		42987 900-910 .50 .0042			
		910-920 1.0 .0021			
		920-930 .55 .0025			
		42990 930-940 .43 .0007			
		940-950 .33 .0004			
		950-960 .26 .0010			
		960-970 .71 .0007			
		970-980 .34 .0004			
		980-990 1.2 .0070			
		990-1000 .55 .0085			
		42997 1000-1006 1.6 .018			

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Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Highland Valley	Hole No.	12.5-0-2
Commenced	March 12/70	Location	Decline B	Tests at	800' was 0° at 041° A2 Hor. Comp.
Completed	March 23/70	Core Size	BQ	Corr. Dip	0° Vert. Comp.
Co-ordinates				True Brg.	N45° E1 Logged by D.A./70
Objective	Section Drilling			% Recov.	83.0% Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
	N45° E	0°		1006'	12.5-0-2	1(a)

Footage From	To	Description SUMMARY OF GEOLOGY	Sample No.	Length	Analysis
0'	60'	Low argillic alteration. K-spar low with 5-8%. Sericite low to moderate. Typical of quartz-rich core with numerous narrow (< 1/4") quartz veins.			
60'	145'	Moderate and intense argillic section. Moderate zones are 60'-87', 102'-124', and 134'-145'. K-spar 8-10%. Sericite low to moderate.			
145'	257'	Moderate argillic alteration. K-spar = 10-12%. Sericite low to moderate Intense argillic alteration from 201' to 210'.			
257'	326'	Argillic alteration moderate to intense. K-spar ≃ 12%. Sericite low to mod. Only a few narrow quartz veins characteristic of transition zone.			
326'	350'	Moderate argillic. K-spar mod. with ≃ 10%. Sericite low.			
350'	459'	Intense argillic alteration generally. Moderate zones are 365' - 380', 395' to 401', and 454'-456'. From 417' to 442' - sericitized plug & quartz near a fault probably. K-spar ≃ 8-10%. Sericite alt'n. low to mod.			
459'	536'	Generally moderate argillic alt'n. with same small intense and low to mod. sections. K-spar low ≃ 5-8%. Sericite alt'n. Low to mod. (Some patches of emerald green sericite.			
536'	589'	Low argillic alt'n. K-spar ≃ 5-7%. Sericite moderate (more pervasive) Still a few narrow q.v.'s.			
589'	700'	Low to mod. kaolinization. Sericite low. (locally to moderate) K-spar low ≃ 5%.			
700'	839'	Intense kaolinization. 700' - 740'. Sericite low. 740'-839' sericite mod. Patchy emerald green sericite.			
839'	905'	Mod to intense argillic alt'n. K-spar ≃ 5% Sericite low.			
905'	955'	Low to mod. argillic alt'n. K-spar ≃ 10% Sericite low to mod with spotty			

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property: Valley Copper	District: Highland Valley	Hole No.: 12.5-0-2	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by: D.A./70
Objective		% Recov.	Date

Claim | T Brg. N45° at collar | Collar Dip 0° | Elev. | Length 1006' | Hole No. 12.5-0-2 | Sheet 1

Footage From	To	Description	Sample No.	Length	Analysis					
		mod. No narrow q.v.'s.								
955'	1006'	Mod to intense argillic alt'n. K-spar low. Sericite low - some emerald green sericite.								
0'	60'	A section of generally low argillic alteration with white plug which is hard.						0'	10'	5.5'
		Some low to moderate argillic alteration occurs as below:							20'	9.0'
		10' - 14' Low to mod argillic alteration & K-spar higher							30'	9.0'
		18' - 29' Low to mod argillic alteration & K-spar higher							40'	8.5'
		51' - 52' Low to mod argillic alteration & K-spar higher							50'	9.0
		The low argillic sections contain partially chloritized biotite. K-spar							60'	9.0'
		alteration about 5% in low sections and 8-10% in low to mod sections.							70'	6.0'
		Sericite alteration mainly along fractures is low to moderate.							80'	9.0'
		This section is cut by quite a number of narrow (< 1/4") quartz veins typical							90'	9.5'
		of the quartz-rich core.							100'	9.5'
		Quartz Veins: 25.5' 1" q.v. at 40° K-spar borders							110'	9.0'
		31.5' 1" q.v. at 60° K-spar borders							120'	9.5'
		41' 1" q.v. at 90° Sericite with Bn							130'	10.0'
		Cu grade ≃ 0.25 to 0.30% overall.							140'	8.5'
60'	145'	A zone of moderate and intense argillic alteration with green plagioclase and greenish-white plag which is found with altered biotite in the moderate sections. The moderate sections are:								

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Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property Valley Copper	District Highland Valley	Hole No. 12.5-0-2	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A./70
Objective		% Recov.	Date

Sheet 2

Hole No. 12.5-0-2

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From	To	Description	Sample No.	Length	Analysis
		60' - 87' Spotty biotite and green plag.			
		102' -124' Spotty biotite and green plag.			
		134' -145' Spotty biotite and green plag.			
		K-spar alteration generally 8-10%. K-spar along fractures and along a few quartz veins. Sericite alteration low to moderate. This section still contains a few narrow quartz veins (< 1/4") which usually cut the core at large angles.			
		Quartz Veins: 74' 1" q.v. at 90° K-spar borders - barren			
		97' 1" q.b. at 90° Some Cp.			
		A few quartz from 1/4 to 1" widths - on the average about 2 or 3 per foot.			
		Gouge from 144' to 146' - Possible fault zones.			
		From 154' to 155' is ground-up core.			
		Cu grade ≃ 0.25%.			

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Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Highland Valley;
Commenced	March 11/70	Location	
Completed		Core Size	BQ
Co-ordinates			
Objective			

Hole No.	12.5-0-2		
Tests at		Hor. Comp.	
Corr. Dip		Vert. Comp.	
True Brg.		Logged by	D.A.
% Recov.		Date	March 16/70

Sheet 3

Hole No. 12.5-0-2

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Analysis
145'	257'	A section of generally moderate argillic alteration with light and ark green						140	150	7.5'
		plagioclase. Some white plag along with zones of biotite. In general the bio-							160	8.5'
		tite has been altered completely but there are a few 1 to 2 foot sections of							170'	9.5'
		fresher rock with biotite. K-spar alteration moderate with about 10-12% K-spar							180'	10.0'
		K-spar is pervasive as well as related to fractures and quartz veins.							190'	10.0'
		Sericite alteration low to moderate with sericite generally related to fractures							200'	9.5'
		and only occassionally to quartz veins.							210'	6.5'
		Quartz veins: 166' 2" quartz and sericite Minor Bn & Cp							220'	9.0'
		188' 1" q.v. at 20° with K-spar borders							230'	9.5'
		190' 1" q.v. at 20° Barren							240'	9.0'
		198' 1" q.v. at 90° Barren							250'	8.5'
		212' 2" q.v. at 90° Barren							260'	9.5'
		232' 2" q.v. at 45° with K-spar							270'	9.0'
		250.5' two 1" q.v. at 45° & 80° Minor Bn.							280'	9.0'
		Gouge at 144' to 146'							290'	9.0'
		Gouge at 166' to 167'							300'	8.0'
		From 201' to 210' is intense argillic alteration							310'	9.5'
									320'	3.0'
		Cu grade ≃ 0.30%.							330'	7.5'
									340'	8.0'
									350'	10.0
									360'	9.5'

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Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property Valley Copper	District	Hole No. 12.5-0-2	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A.
Objective		% Recov.	Date March 17/70

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
					12.5-0-2	4

Footage From	Footage To	Description	Sample No.	Length	Analysis
257'	326'	A section similar to previous one except that the argillic alteration may be described as moderate to intense. The plag is buff to greyish-white and quite often soft. Biotite is heavily chloritized or absent except for a foot section from 265' to 266' where fresh biotite is found. K-spar alteration is moderate with about 12% K-spar along fractures and quartz veins.			
		Sericite alteration is low to moderate with a little emerald green sericite occurring around 296'.			
		Quartz veins: 279' 1" q.v. at 90° Barren with K-spar borders			
		285.5' 1" q.v. at 5° Cp & Bn			
		293' 1" q.v. at 60° Minor Cp & Bn			
		This section is characterized by pink K-spar fractures and K-spar borders along quartz veins.			
		From 292' to 295' the core is ground-up suggesting a possible shear zone. Cu grade ≃ 0.20 to 0.25%.			
		There are only a few narrow quartz veins suggesting almost out of transition zone.			
		From 324 to 326' possible fault zone.			
		Around 320' several shear fractures indicate a 15° to 20° angle to core axis.			

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Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property Valley Copper	District Highland Valley	Hole No. 12.5-0-2	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A./70
Objective		% Recov.	Date March 17/70

Footage From	To	Description	Sample No.	Length
326'	350'	A section of moderate argillic alteration with green plagioclase and moderate K-spar. Biotite is present as partially chloritized flakes. K-spar alteration is moderate with about 10% K-spar mainly along quartz veins. Sericite alteration is low with only a few isolated occurrances of sericite on fractures. There are still a few narrow quartz veins as well as:		
		334' 1" q.v. at 90° Barren		
		342' 1" q.v. at 90° Barren		
		343.5 1½ q.v. at 80° Minor Bn & Cp		
		347' 1" q.v. at 80° Barren		
		Cu grade ≃ 0.20%.		
350'	459	A section consisting of dominantly intense argillic alteration with soft, greyish-white plag. A few occurrences of moderate argillic alteration exist from:		
		365' to 380' Green plagioclase		
		395' to 401' Green Plagioclase		
		454' to 456'		
		From 417' to 442' is a zone sericitized plagioclase and quartz with very little K-spar alteration. This whole section appears to be related a fault zone indicated by quartz, Cp, and moly from 440' to 441'.		

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
Analysis						
				370	9.5'	
				380'	10.0'	
				390'	9.5'	
				400'	10.0'	
				410'	9.5'	
				420'	8.5'	
				430'	9.0'	
				440'	9.0'	
				450'	8.5'	
				460'	9.0'	
				470'	7.0'	
				480'	5.5'	
				490'	5.0'	
				500'	9.5'	
				510'	10.0'	
				520'	8.0'	
				530'	9.0'	
				540'	9.5'	
				550'	8.0'	
				560'	9.5'	
				570'	9.0'	
				580'	10.0'	

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Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property Valley Copper	District Highland Valley	Hole No. 12.5-0-2	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A.
Objective		% Recov.	Date Mar.17/70

Sheet 6

Hole No. 12.5-0-2

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Analysis
		K-spar alteration (except for previous zone) is low to moderate with about							590'	9.5'
		8-10% K-spar related to fractures and quartz veins. In general the K-spar							600'	8.5'
		is not as widespread as in the previous sections of this hole.							610'	8.5'
		Sericite alteration is low to mod. with some patchy occurrences as well as that							620'	9
		along fractures and quartz veins. Some of the sericite appears to have flooded							630'	9.5'
		the rock over 1" or 2" lengths. Some emerald green sericite occurs in the							640'	9
		zone from 417' to 442'.							650'	5
		Quartz veins: 351' 3" q.v. at 30° Minor Cp & Bn in q.v. & Bn in sericite							660'	3
		borders. 353.5 2.5" q.v. with sericite & Bn along edges.							670'	7.5'
		355' 1" q.v. at 75° Barren							680'	7
		From 356' to 400' there is about 2 or 3 1/2" to 1" q.v. per foot. Most have							690'	4
		sparse Bn in them. Most have K-spar borders and are at large angles (760°) to							700'	8
		core.							710'	3
		404' 2" q.v. at 90° Fine Bn in q.v.							720'	1.5
		408.5' 1" q.v. at 80° Bn							730'	8
		From 417' to 442' the quartz is generally barren (except for 1' mentioned above)							740'	5
		with Cp and minor Bn in sericite bordering the quartz.							750'	8
		450' 1" q.v. at 90° Barren							760'	9
									770'	9.5'
									780'	8
									790'	5
									800'	8

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Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property Valley Copper	District Highland Valley	Hole No. 12.5-0-2	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A.
Objective		% Recov.	Date

Sheet 7

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No.

Footage From	To	Description	Sample No.	Length	Analysis
		Cu grade ≃ 0.40 (D.A.) 0.45 - 0.50% (RN)			
459'	536'	A zone of moderate argillic alteration with some locally intense and low to moderate sections within it. The plagioclase is generally green and barely scratches. Biotite where it occurs is usually 50% chloritized.			
		460' - 461' low to mod.			
		489' - 495.5' intense - fault zone			
		512' -521' intense - fault zone			
		534' - 536' low to mod - plag green.			
		K-spar alteration is low to mod with 5 to 8% K-spar generally related to fractures.			
		Sericite alteration low to moderate - occassional 1" to 2" patches. Emerald green sericite alt'n. of plag in faults.			
		Quartz veins: 474' 1" q.v. at 60° Bn in sericite borders.			
		489'-490' Quartz in fault with pyrite, Cp, and fine moly			
		505.5' 3" q.v. at 30° Minor Bn & Cp			
		524.5-525' Barren q.v.			
		Cu grade ≃ 0.30 to 0.35%.			
536'	589'	A section of generally low argillic alteration with white, hard plagiaclase and only partially chloritized biotite flakes.			

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Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property Valley Copper	District Highland Valley	Hole No. 12.5-0-2	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A.
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet 8

Footage From	To	Description	Sample No.	Length	Analysis
		K-spar is spotty with an overall average content of about 5-7%. Some			
		2" to 4" sections contain up to 15% K-spar. Sericite alteration has increased			
		to moderate with sericite more pervasive up to lengths of 6".			
		Quartz veins: 549' 2" q.v. with Bn & Cp			
		550' 2" q.v. with sericite & Bn in it.			
		560' 3" q.v. with Bn & Cp.			
		There are still a few narrow quartz veins in some parts of this section.			
		Cu grade ≈ 0.45 to 0.50%. Bn: Cp = 3:1			
		At 562' there is 1½" fine aplitic dyke cutting core at 25°.			
589	700	Low - moderate kaolinization plags turning green - still hard to knife			
		mafies mostly chloritic.			
		Sericite poor - locally to moderate qtz. veins generally uncommon			
		K-spar generally poor (5%) except where noted.			
		600 2" q.v. @ 45° large blebs of chalco - also bn.			
		611-623 K-spar 10-15% along veins & fracs.			
		615 - shear @ 50° 2" gouge.			

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Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property Valley Copper	District Highland Valley	Hole No. 12.5-0-2	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A.
Objective		% Recov.	Date

Sheet 6

Footage From	To	Description	Sample No.	Length	Analysis				Length	Hole No.
		635 - 637 1" q.v. @ 10° minor bn. Intense Kaol., em.green sericite adjacent.						800	810	8.5
		640 - 720 approx. 50% core recovery core broken badly.							20	8
		670 - minor shear @ 10-20° minor gouge							30	8
		674 - 1" pink aplitic dyke @ 10°							40	8.5
									50	9
700	839	Intense kaolinization - patchy emerald green sericite mafics chloritic to sericite.							60	8.5
		700 740 Sericite poor Bn occais = to chalco							70	10
		K-spar very poor (less than 5%)							80	9.5
		740 839 Sericite up to moderate now. Bn fairly well developed.							90	4
		726-727 q.v. @ 30° chalco- MoS_2							900	5
		744 q.v. with large crystals of K-spar							10	9.0
		756 qtz K-spar well mineralized with bornite							20	10.0
		771-787 - Shear zone main attitude 0-10° 1/4-1" gouge							30	10.0
		798 bank of mafics and magnitite.							40	9.5
		812-828 8- 1-2" q.v.'s most @ 60° bn.							50	9.0
									60	8.0
									70	8.5
									80	9.0
									90	10.0
									1000	9.0
									1006	4.5

Claim | T Brg. | Collar Dip | Elev.

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property Valley Copper	District Highland Valley	Hole No. 12.5-0-2	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A.
Objective		% Recov.	Date

Sheet 10

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.

Footage From	To	Description	Sample No.	Length	Analysis
839	905'	Kaolinization now only moderate to intense. Mafics fresh to chloritic low occasionally to low-mod sericite development. mineralized q.v's uncommon. K-spar poor (up to 5%)			
		855 - small band of mafics @ 20°			
		864 - minor shear @ 20° - bbls. of bn in q.v. along shear			
		879- 897 33% recovery - core intensely kaolinized. A few minor shears @ 10-30°. 900 6" q.v. @ 30°; abundant bn.			
		905 minor shear @30°.			
905	955'	A section of low to moderate argillic alteration with plag which is generally green in colour and barely scratches. Biotite is present usually and only partially chloritized. K-spar alteration from 905' to 934' ranges from 5 to 8%. K-spar alteration from 934' to 944 ranges from 10 to 12%. Sericite alteration overall is low to moderate with a few small sections of moderate. Sericite fractures common as well as borders along quartz veins:			

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property Valley Copper	District Highland Valley	Hole No. 12.5-0-2	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A.
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet 11

Footage From	To	Description	Sample No.	Length	Analysis
		Quartz veins: 925' 4" of quartz with fine Bn			
		926' 1" of quartz with Cp & Bn			
		929 1½" of quartz with minor Bn			
		No quartz veins characteristic of the quartz-rich core.			
		At 937' fracture surface with probable epidote. The K-spar zone from 934' to 949' contains hematite on fractures and in quartz veins. Cu grade ≃ 0.35% (Fine Bn in narrow sericite fractures) Cp: Bn = 1:2.			
955'	1006'	A section of moderate to intense argillic alteration with a predominance of intensely altered, crumbly plagioclase. Some completely altered to kaolin. Biotite sericite alt'n of the plag exists from 956.5' to 964'.			
		K-spar alteration is negligible.			
		Sericite alteration is represented by mainly emerald green sericite. There are only occasional fractures with sericite Alt'n.			
		Quartz veins: 965.5' 2" quartz and sericite with Bn			
		984' Two 2" q.v. with massive Cp and some Py.			
		998 to 998.5' Quartz with sericite and spotty Bn & Cp			
		999.5' Two 1" q.v.'s at 45° with patchy Bn & Cp			
		1003.5' - 1005' Quartz with good Bn developed and some Cp			

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property Valley Copper	District Highland Valley	Hole No. 12.5-0-2	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by D.A.
Objective		% Recov.	Date

Sheet 12

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.

Footage From	To	Description	Sample No.	Length	Analysis
		Fault gouge probable from 967' to 968.5'			
		Shear zone with massive Cp and some moly in quartz from 983.5' to 986'.			
		Shear zone from 992' to 993' with possible angle to core of 30°.			
		Cu grade ≃ overall about 0.40% - some grading 0.50% in quartz-rich areas.			

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	12.5-0-3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 12.5-0-3 | Sheet

Footage From	To	Description	Sample No.	Length	Analysis
		SUMMARY OF ASSAYS			
		0-310 = 0.202% Cu			
		310-480 = 0.360% Cu			
		480-550 = 0.481% Cu			
		550-930 = 0.583% Cu			
		930-1002 = 0.365% Cu			

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	District	Hole No. 12.5-0-3	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 12.5-0-3 | Sheet

Footage From	To	Description % Cu	%Mo	Footage From	To	% Cu	% Mo	Footage From	To	% Cu	% Mo	Sample No.	Length	Analysis
0	10	.08	0.013	220	230	.21	.0004	440	450	.42	.0028			
10	20	.21	.0011	230	240	.11	.0012	450	460	.44	.0010			
20	30	.16	.0004	240	250	.16	.0021	460	470	.42	.0013			
30	40	.15	.0019	250	260	.21	.0029	470	480	.38	.0038			
40	50	.18	.0024	260	270	.65	.0030	480	490	.49	.0025			
50	60	.15	.0011	270	280	.37	.0037	490	500	.64	.0013			
60	70	.11	.0007	280	290	.20	.0013	500	510	.54	.0011			
70	80	.10	.0021	290	300	.21	.0020	510	520	.42	.0005			
80	90	.22	.0020	300	310	.27	.0029	520	530	.47	.0004			
90	100	.44	.0017	310	320	.33	.0067	530	540	.40	.0150			
100	110	.23	.0030	320	330	.46	.0043	540	550	.41	.0180			
110	120	.23	.0016	330	340	.14	.0031	550	560	.55	.0007			
120	130	.11	.0012	340	350	.47	.0014	560	570	.44	.0043			
130	140	.16	.0014	350	360	.32	.0011	570	580	.52	.0019			
140	150	.17	.0010	360	370	.32	.0021	580	590	.72	.0025			
150	160	.35	.0010	370	380	.35	.0048	590	600	.75	.0092			
160	170	.09	.0008	380	390	.22	.0072	600	610	.66	.0009			
170	180	.12	.0069	390	400	.15	.0008	610	620	.90	.0079			
180	190	.15	.018	400	410	.35	.0016	620	630	.65	.0017			
190	200	.07	.0014	410	420			630	640	.72	.0013			
200	210	.20	.0024	420	430	.27	.0044	640	650	.40	.0095			
210	220	.16	.0063	430	440	.39	.0017	650	660	.59	.0094			

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	District	Hole No. 12.5-0-3	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet

Footage From	Footage To	Description % Cu	% Mo	Footage From	Footage To	% Cu	% Mo	Sample No.	Length	Analysis
660	670	.62	.0011	880	890	0.29	.0015			
670	680	.76	.0010	890	900	.50	.0021			
680	690	.38	.0029	900	910	.52				
690	700	.64	.0043	910	920	.43	.0031			
700	710	.56	.0012	920	930	.57	.0078			
710	720	.45	.0029	930	940	.40	.0110			
720	730	.74	.0031	940	950	.41	.0019			
730	740	.69	.0050	950	960	.42	.0013			
740	750	.33	.0012	960	970	.23	.0016			
750	760	.72	.0063	970	980	.30	.0014			
760	770	.47	.0014	980	1002	.43	.0640			
770	780	.72	.0007							
780	790	1.00	.0013							
790	800	.74	.0008							
800	810	.65	.0009							
810	820	.53	.0009							
820	830	.54	.0004							
830	840	.28	.0030							
840	850	.53	.0005							
850	860	.59	.0003							
860	870	.55	.0019							
870	880	.53	.0004							

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	12.5-0-3		
Commenced	April 15, 1970	Location	Decline B	Tests at	500' = 4° Az=210°	Hor. Comp.	
Completed	April 24, 1970	Core Size	BQ	Corr. Dip		Vert. Comp.	
Co-ordinates				True Brg.		Logged by	MDM and DA
Objective				% Recov.	92.5%	Date	April 28, 1970

Claim | T Brg. | Collar Dip 0° | Elev. | Length 1002' | Hole No. 12.5-0-3 | Sheet 1 of Sum.

Footage From	To	Description	Sample No.	Length	Analysis
		SUMMARY OF GEOLOGY			
0	520	Low to moderate argillic alteration. Kspar content generally<3%. Sericite alteration low. Generally, the qtz. veins are narrow and unmineralized.			
520	702	Moderate to intense argillic alteration. Potassic and sericitic alteration low. Equal number of barren and mineralized qtz. veins. Shearing : 621.5-639.5, 652-702.			
702	777	Moderate to intense argillic alteration. Kspar content 8-10%. Sericite development is moderate. Bethsaida prophyry dike at 30° from 761.5-777.			
777	834	Generally low argillic alteration. Kspar content and sericite alteration are low. Most qtz. veins are mineralized.			
834	1002	Generally moderate argillic alteration. Kspar content averages 5%. Sericite development moderate. Out of transitional zone.			
1002		END OF HOLE			

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	12.5-0-3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet —

Footage From	Footage To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
		Bethsaida phase except where noted.						0	10	9.5
								10	20	9.5
0	520	Low to moderate argillic alteration. Plag. grains vary from fresh to slightly altered with a						20	30	9.5
		lt. - green color. Kspar content is variable generally it is less than 3%, but over short						30	40	10
		sections, can be as high as 15%. Where the kspar is high, the rock is permeated with small						40	50	9.5
		vugs. Sericite development is low-confined to bordering fractures and some qtz. veins. Biotite						50	60	10
		grains are present in all parts of the section except where the kspar content is high. Here						60	70	10
		they are noticeably absent.						70	80	10
		Qtz. veins occur about 3-4 per foot, sometimes forming a stockwork. Generally, the veins are						80	90	10
		unmineralized and hv. no sericitic borders althought some qutz. carry minor cpy and bn and						90	100	9
		have small sericitic borders.						100	110	10
		203 Small shear at 85° with ½" gouge						110	120	9.5
		213-213.5 Pervasive sericite						120	130	10
		225-225.5 Pervasive sericite						130	140	10
		266-268 Pervasive sericite with cpy and bn.						140	150	10
		331-333 Mod to intense kaolinization						150	160	10
		408-411 Mod to intense kaolinization.						160	170	10
								170	180	10
520	702	A section of moderate to intense argillic alteration. Plag. varies from lt- green, hard grains to						180	190	10
		grains with a skin of kaolin. Kspar content is generally low-usually (5%. Sericite development						190	200	10
		is low confined to areas bordering fractures or qtz. veins. Biotite grains are slightly						200	210	10
		chloritized in areas low in kspar and are completely or partially sericitized in areas higher						210	220	9.5
		in kspar.								

Analysis

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	12.5-0-3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 8

Footage From	Footage To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
		Qtz. veins occur approx. 2/foot. There is an equal number of barren veins and mineralized						220	230	10
		(bn + cpy) veins. Minor hematite along fractures or within rock.						230	240	10
		568.5-570 Section of ground up rock						240	250	10
		592 6" q.v. at 30° ? . Bn + cpy.						250	260	10
		615.5 Shear at 45°. 6" gouge. moly on slippage plane						260	270	10
		616-620 Section of ground up rock						270	280	10
		621.5-639.5 Section of ground up rock. Small lengths of gouge. Intense argillic alteration.						280	290	10
		639.5-652 Generally intense argillic alteration. Kspar nil. Sericite low to moderate						290	300	10
		652-702 Extremely broken and ground up rock. Small sections <1" of gouge.						300	310	10
		Intense argillic alteration.						310	320	9.5
								320	330	10
702-777		Moderate to intense argillic alteration. Plag. grains vary from lt. green to chalky green with						330	340	10
		a skim of kaolin. Kspar content is 8-10%. Sericite development is moderate - found along						340	350	10
		fractures and bordering qtz. veins. Biotite grains are corroded. In sections rich in kspar,						350	360	10
		biotite is absent.						360	370	10
		Qtz. veins average 1 / 2 feet and all are mineralized (bn + cpy) and have sericitic borders.						370	380	9.5
		725 4" q.v. with 12" pervasive sericite on either side.						380	390	9.5
		753-754 q.v. at 0°. Cpy > Bn.						390	400	9
		761-761.5 q.v. at 30°. Bn and cpy.						400	410	9.5
		761.5-777 Bethsaida prophyry dike at 30° ?. Mineralized with bn and cpy. Cut by 5" q.v. at						410	420	8.5
		763.5. Dike appears to be altered in places creating lighter area.						420	430	10
								430	440	10

Analysis

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	12.5-0-3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 3

Hole No. 12.5-0-3

Footage From	Footage To	Description	Sample No.	Length	Analysis			Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
777	834	Section of generally low argillic alteratinn grading to moderate in some parts of the section.									440	450	10
		Kspar alteration is low averaging less than 1%. Sericite development is low - found bordering									450	460	10
		fractures and q.v. Q.v. average 1/foot. Most are mineralized (bn and cpy) but the odd one is									460	470	10
		barren. Biotite grains appear fresh in some parts of the section, but are partially sericitized									470	480	10
		in other parts, particularly where plag. have undergone a moderate alteration.									480	490	10
		830-832.5 Ground up and strongly fractured rock. Mod. to intense argillic alteration.									490	500	10
		832.5-834 Shear at 85°. Hematite on shear planes. 2" gouge present.									500	510	10
											510	520	10
834	1002	A little more altered than previous section with grayish white plag. which is scratchable									520	530	8
		dominating. This makes the zone of moderate kaolinization, but it does grade into low									530	540	9.6
		argillic alteration in a few locations as listed below:									540	550	10
		874-882 low and low to mod. argillic									550	560	10
		974-989 Mostly low to mod. argillic									560	570	6
		Biotite fresh in lower sections. Partially chloritized or removed in mod. zones. Kspar alteration									570	580	10
		averages 5%. Varies from 3 to 7% max. Kspar widespread not along fractures or q.v.'s.									580	590	10
		Sericite alteration moderate with some small sections of intense. Generally fine Bn and some Cp.									590	600	10
		Quartz veins: 837 1" q.v. at 80° bn in sericite borders. 1½" wide.									600	610	10
		872.5 1" q.v. at 80° bn in q.v. and in sericite borders.									610	620	9
		892 3" q.v. at 90° bn in q.v. and in sericite borders									620	630	7.5
		900 3" at quartz with massive cp and moly.									630	640	8
		924 1.5" q.v. at 60°. Bn + cp in q.v.. Moly along one margin.									640	650	10
		948.5 2" of quartz and sericite with bn + cp.									650	660	5
		999-1000 Quartz with some fine Bn + Cp.											

211-9437—H.P.

Scale

Colour Plot
Dips

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	12.5-0-3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 4

Footage From	Footage To	Description	Sample No.	Length
		Out of transitional zone.		
		854-855 Possible small fault.		
		866-867.5 Possible small fualt - sheared ll to core - black sulphide coating		
		906-907 Possible small fualt - at 15°		
		961-967 Possible fualt gouge.		
		994-995 Sand from fault gouge?		
		Cu grade ≲ 0.4% (fine mineralization in sericite and also in some q.v.'s) Bn: Cp = 2.5:1		
1002		END OF HOLE		

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
Analysis					
660	670	4.8	880	890	9.0
670	680	6	890	900	8.0
680	690	2.0	900	910	7.5
690	700	8.0	910	920	6.0
700	710	10	920	930	8.5
710	720	10	930	940	7.0
720	730	10	940	950	8.5
730	740	10	950	960	7.5
740	750	10	960	970	6.5
750	760	10	970	980	8.0
760	770	10	980	990	9.5
770	780	10	990	1000	9.5
780	790	10	1002		2.0
790	800	10			
800	810	10			
810	820	10			
820	830	10			
830	840	9.5			
840	850	7.5			
850	860	9.0			
860	870	8.5			
970	880	9.5			

211-9437—H.P.

Drill Hole Record

Comaco

Property	Valley Copper	District	Highland Valley	Hole No.	14 - 0 - 5		
Commenced	March 25th, 1970	Location	Sump A	Tests at	800' was -21° Az = 038°	Hor. Comp.	
Completed	April 4th, 1970	Core Size	BQ	Corr. Dip	-18°	Vert. Comp.	
Co-ordinates				True Brg.	N45°E	Logged by	D. Anderson
Objective				% Recov.	91.2	Date	March 30th, 1970

Claim | T Brg. N45°E | Collar Dip -18° | Elev. | Length 1,169 | Hole No. 14-0-5 | Sheet 1.

Footage From	To	Description SUMMARY OF GEOLOGY	Sample No.	Length	Analysis
0 -	70	Section of low argillic alteration; sericite development mainly along fractures and low to moderate; Kspar content 3% - 5%.			
70 -	112	Low to moderate argillic alteration, slightly more altered than previous section; sericite development, mainly along fractures, low; Kspar alteration low to moderate; quartz veins all less than 1" wide and have low frequency of occurrence.			
112 -	147	Generally section of intense argillic alteration with few small sections of moderate; sericite development along fractures low to moderate; Kspar content about 5%; only few quartz veins, ususally about 1/2" in width.			
147 -	224	Section of low to moderate argillic alteration; sericite development intense and pervasive; Kspar content averages 5%; 1/2" quartz veins about two per foot.			
224 -	281	Generally intense argillic alteration although short lengths of moderate or low to moderate also found; Kspar content $<$5%; sericite development mainly along fractures and moderate; shearing at 30°, 231 - 350.			
281 -	327.5	Section of low to moderate argillic alteration; moderate sericite development along fractures; Kspar content about 35%; occurrence of quartz veins low.			
327.5 -	343	Dark green porphyry dyke at 30° cut by mineralized quartz veins.			

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	14 - 0 - 5
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 14-0-5 | Sheet 2.

Footage From	To	Description	Sample No.	Length	Analysis
343 -	375	Section of low argillic, potassic, and sericitic alteration; very few quartz veins.			
375 -	431	Dominantly low to moderate argillic alteration but does vary; Kspar 3% - 5%; sericite alteration varies: 375 - 400 is low to moderate and restricted to fractures, 400 - 425 is moderate and pervasive.			
431 -	482	Moderate to intense argillic alteration; Kspar 5%; overall moderate sericite development; quartz veining moderate; shearing at low angles 445 - 449; 1' of gouge.			
482 -	532.5	Argillic alteration generally low although two short lengths of low to moderate present; sericite development low to moderate and restricted to fracture borders; Kspar content < 5%; quartz veins occur two per foot.			
532.5 -	550	Intense argillic alteration; Kspar 3% - 5%; sericite development moderate, pervasive in parts.			
550 -	640	Moderate argillic alteration; Kspar about 8% - 12%; sericite low to moderate; most quartz veins mineralized; intense argillic 593 - 610; gouge 559.5 - 560, 593 - 599, 609 - 610.			
640 -	711	Low to moderate argillic alteration; Kspar about 5% - 8%; sericite alteration low to moderate; 3 or 4 quartz veins per foot; gouge 645 - 646.			

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	14 - 0 - 5
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 14-0-5 | Sheet 3.

Footage From	To	Description	Sample No.	Length	Analysis
711 -	982	Generally moderate argillic alteration; sericite low; Kspar about 5% - 8%; quartz veins one per foot; shearing at 50° from 777 - 826, 60° from 837.5 - 859, 80° from 888.5 - 890, 85° from 921 - 925.			
982 -	1,041	Low to moderate argillic alteration; Kspar about 5% - 10%; sericite alteration low: quartz veins one per two feet; shearing at 60° from 987 - 989; low argillic 1,005 - 1,041.			
1,041 -	1,160	Low to moderate and moderate argillic alteration; Kspar moderate; sericite alteration low; gouge and broken rock 1,095 - 1,107.			
1,160 -	1,169	Fault gouge with intense argillic alteration; quartz-rich zone.			
1,169		End Hole 14 - 0 - 5.			

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	14.0 - 0 - 5
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 3a.

Hole No. 14.0-0-5

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From	To	Description SUMMARY OF MINERALIZATION			Sample No.	Length	Analysis
		Length	% Cu	% Mo			
0 -	160	160	0.31	0.0020			
160 -	330	170	0.58	0.0059			
330 -	680	350	0.41	0.0025			
680 -	840	160	0.24	0.0027			
840 -	990	150	0.22	0.0036			
990 -	1,169	179	0.16	0.0063			

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Comaco

Property	Valley Copper	District		Hole No.	14 - 0 - 5
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 4.

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. 14-0-5

Footage From	To	Description	Sample No.	Length	Analysis					Recovery
		Bethsaida quartz diorite except where noted.				0	-	10		5.0
						10	-	20		8.5
0 -	70	Low argillic alteration with white plagioclase and fresh biotite flakes; Kspar al-				20	-	30		8.0
		teration varies from 3% to maximum of 5%; sericite alteration low to medium, main-				30	-	40		8.5
		ly along fractures, few pervasive areas up to 2" long; some hematite along seri-				40	-	50		9.0
		cite fractures; more chalcopyrite along fractures than is normally found; grade				50	-	60		9.5
		about 0.40% - 0.45% Cu.				60	-	70		10.0
		16.5 1" quartz vein at 60°; bornite.				70	-	80		9.5
		30 - 31 low to moderate kaolinization.				80	-	90		10.0
		40 - 46 low to moderate kaolinization; white to buff plagioclase.				90	-	100		9.5
		44 1" width of quartz with 1/2" sericite borders.				100	-	110		9.5
		46 1-1/2" quartz vein with bornite and molybdenum on slip plate				110	-	120		9.0
		at 15°.				120	-	130		8.8
		51 1" quartz vein at 45°; bornite.				130	-	140		10.0
		52 - 54 low to moderate kaolinization.				140	-	150		10.0
						150	-	160		9.0
70 -	112	Generally low to moderate argillation; in contrast to previous section plagioclase				160	-	170		9.5
		is a little altered to green or buff colour but retains hard nature; biotite is				170	-	180		9.5
		partially chloritized but still evident in most areas; Kspar alteration low to mo-				180	-	190		8.0
		derate, a little more which ranges 5% - 8%, occurrence spotty with poor colour				190	-	200		10.0
		making it difficult to distinguish from plagioclase; sericite alteration low with				200	-	210		9.5
		only a few fractures and nothing pervasive, intense 71 - 74 only; no quartz veins				210	-	220		9.5

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	14 - 0 - 5
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 5.

Hole No. 14-0-5

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. 14-0-5
		>1", only a few about 1/2" which are at large angles to core (>45°); occasional				220	-	230		7.0
		hematite on fracture surfaces; grade about 0.35% - 0.30% Cu.				230	-	240		9.5
						240	-	250		9.0
112 -	147	Intense argillic alteration with dominantly white, crumbly plagioclase completely				250	-	260		9.5
		altered to kaolin, small sections of moderate alteration where plagioclase is				260	-	270		9.5
		greenish and scratches; biotite (partially chloritized) only in moderate sections;				270	-	280		10.0
		Kspar alteration about 5%; sericite alteration low to moderate with about 3 frac-				280	-	290		8.5
		tures per foot; only a few quartz veins of about 1/2" widths and mineralized with				290	-	300		10.0
		sericite borders; shear zone 130 - 132; more hematite than usual; grade about				300	-	310		9.0
		0.40% - 0.45% Cu.				310	-	320		10.0
						320	-	330		8.0
147 -	224	Low to moderate argillic alteration with green to buff plagioclase, some parts				330	-	340		9.0
		close to moderate argillic alteration with green to white plagioclase; biotite oc-				340	-	350		9.5
		currence spotty with some small, fresh flakes; Kspar alteration low with about 5%				350	-	360		10.0
		overall; sericite alteration intense with pervasive sericite over much of the sec-				360	-	370		10.0
		tion; quartz veins as noted below, also about two 1/2" veins per foot; grade about				370	-	380		8.5
		0.50% - 0.55% Cu.				380	-	390		10.0
		165 1" quartz vein at 20°; 3/4" sericite borders; bornite.				390	-	400		9.5
		189 2" quartz vein; minor bornite.				400	-	410		10.0
		190 5" quartz vein; chalcopyrite and molybdenum; shear zone.				410	-	420		10.0
		190 1" quartz vein, vuggy with quartz crystals and massive chalco-				420	-	430		8.5
		pyrite.				430	-	440		10.0

Analysis

Recovery

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	14 - 0 - 5
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 6.

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. 14-0-5

Footage From	To	Description	Sample No.	Length	Analysis		Recovery	
		216 1" quartz vein at 70°; sericite borders; bornite.			440	-	450	9.5
					450	-	460	9.5
224 -	281	Intense argillic alteration most consistent, some moderate and one section of low			460	-	470	9.0
		to moderate; biotite present only as small flakes in the moderate and intense sec-			470	-	480	8.5
		tions; Kspar low with <5%; sericite alteration moderate with some 6" lengths cut			480	-	490	9.5
		by numerous cross-cutting sericite fractures; hematite present on fractures and			490	-	500	9.5
		in sericite fractures.			500	-	510	9.5
		231 - 250 possible fault zone with gouge; shears about 30°.			510	-	520	9.0
		248.5 1" quartz vein at 80°; bornite.			520	-	530	9.5
		255 - 256 3/4" quartz vein parallel to core; sericite borders; bornite.			530	-	540	9.0
		260 - 264 moderate argillic alteration.			540	-	550	9.0
		264 - 266 low to moderate argillic alteration.			550	-	560	9.0
		266 - 272 moderate argillic alteration.			560	-	570	9.5
		270 shear plane with quartz (1/2"); molybdenum and chalcopyrite.			570	-	580	9.5
		276 3" of quartz; chalcopyrite and black sulphides; shearing.			580	-	590	9.0
		277 - 280 moderate argillic alteration.			590	-	600	7.0
		279 25" quartz vein at 30°; partially sheared; good bornite and			600	-	610	7.0
		chalcopyrite strung out along joints in the quartz.			610	-	620	9.5
					620	-	630	9.5
281 -	327.5	Low to moderate argillic alteration with green or white plagioclase and biotite			630	-	640	10.0
		which is generally partially chloritized, cannot scratch plagioclase but it is at-			640	-	650	9.5
		least superficially altered; Kspar quite low with about 3% - 5%; sericite			650	-	660	10.0

Drill Hole Record

Comaco

Property	Valley Copper	District	Hole No.	14 - 0 - 5	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Sheet 7.

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No. 14-0-5

Footage From	To	Description	Sample No.	Length	Analysis		Recovery		
		alteration moderate, not pervasive but widespread along numerous fractures and				660	-	670	10.0
		quartz veins; grade about 0.45% Cu.				670	-	680	9.5
		283.5 quartz vein; molybdenum on fracture.				680	-	690	9.5
		284 1" quartz vein at 80°; bornite in quartz and in sericite bor-				690	-	700	10.0
		ders.				700	-	710	10.0
		295 1" quartz vein at 5°; bornite and chalcopyrite.				710	-	720	6.0
		301 4" of quartz; molybdenum on fracture at 45°.				720	-	730	7.5
		317 1" quartz vein at 85°; bornite and sericite borders.				730	-	740	10.0
		327 1" quartz vein at 35°; bornite and chalcopyrite; sericite				740	-	750	8.5
		then Kspar borders.				750	-	760	9.0
						760	-	770	10.0
327.5 -	343	Dark green porphyry dyke with plagioclase and a few quartz phenocrysts, biotite				770	-	780	9.0
		forms fine phenocrysts in places, plagioclase phenocrysts up to 1/2 cm.; minerali-				780	-	790	8.0
		zation in quartz veins, along fractures and finely disseminated in dyke; first				790	-	800	8.5
		contact at about 30° to core; grade about 0.20% - 0.25% Cu.				800	-	810	9.0
		331 1" quartz vein at 80°; unmineralized; 1/4" Kspar borders.				810	-	820	7.5
						820	-	830	9.5
343 -	375	Low argillic alteration with white and greenish-white plagioclase with partially				830	-	840	9.0
		chloritized biotite, especially adjacent to the dyke the rock is fresh and only				840	-	850	5.0
		very minor alteration exists; Kspar alteration low, < 5% Kspar in rock; sericite				850	-	860	9.0
		alteration low with only a few fractures; only two or three 1/2" quartz veins in				860	-	870	10.0
		section, veins are mineralized; grade about 0.30% Cu.				870	-	880	9.5

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	14 - 0 - 5
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 14-0-5 | Sheet 8.

Footage From	To	Description	Sample No.	Length	Analysis	Recovery	
375 -	431	Variable argillic alteration but dominantly low to moderate; green plagioclase			880	- 890	9.0
		still quite hard; biotite 50% or more chloritized; Kspar alteration low, 3% - 5%;			890	- 900	10.0
		sericite alteration low to moderate 375 - 400, moderate and quite pervasive 400 -			900	- 910	9.5
		431; grade 375 - 400 = 0.35% Cu, 400 - 431 = 0.45% - 0.50% Cu.			910	- 920	10.0
		399.5 2-1/2" quartz vein at 90°; Kspar borders; bornite minor.			920	- 930	9.0
		400 3" quartz vein at 40°; good bornite in sheared quartz.			930	- 940	10.0
		413 - 420 moderate argillic alteration.			940	- 950	9.0
		401 - 406 low argillic alteration.			950	- 960	9.0
					960	- 970	9.0
431 -	482	Moderate to intense argillic alteration with grayish and greenish-white plagio-			970	- 980	8.5
		clase, 75% intense and 25% moderate; biotite generally visible only as pale green,			980	- 990	9.0
		almost wholly chloritized flakes; Kspar alteration 5% to maximum of 8%; sericite			990	- 1,000	9.0
		alteration moderate overall with a few intense pockets; most shearing at low an-			1,000	- 1,010	9.5
		gles to core (<30°).			1,010	- 1,020	9.5
		431.5 1" quartz vein at 60°; some bornite.			1,020	- 1,030	9.0
		434 1-1/2" quartz vein at 60°; vuggy; minor chalcopyrite and bor-			1,030	- 1,040	10.0
		nite.			1,040	- 1,050	8.0
		438 - 439 fault gouge.			1,050	- 1,060	9.0
		439 1" quartz vein at 20°; sericite borders with bornite and			1,060	- 1,070	9.5
		chalcopyrite.			1,070	- 1,080	10.0
		444 1" quartz vein with bornite and chalcopyrite.			1,080	- 1,090	9.5
		445 - 449 fault zone.			1,090	- 1,100	10.0

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	14 - 0 - 5
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 9.

Hole No. 14-0-5

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length
		445 - 446 quartz with molybdenum and chalcopyrite; molybdenum slip at 45°.			Analysis				
		446 - 448 gouge with quartz; minor molybdenum and chalcopyrite.					Recovery		
		455.5 w" quartz vein at 15°; chalcopyrite.			1,100	- 1,110			9.5
		470 1" quartz vein at 80°; chalcopyrite and bornite.			1,110	- 1,120			9.5
		471 1/8" molybdenum and chalcopyrite slip at 20°.			1,120	- 1,130			9.0
		478 1" quartz vein at 75°; minor chalcopyrite.			1,130	- 1,140			9.0
		481 4" quartz with chalcopyrite on fractures.			1,140	- 1,150			9.0
					1,150	- 1,160			8.5
					1,160	- 1,169			7.5
482 - 532.5		Low argillic alteration with some low to moderate; white plagioclase and large, fresh biotite flakes; Kspar alteration low with < 5% except for last 10' where is 8%; sericite alteration low to moderate, along fractures and bordering quartz veins; quartz veins about two per foot, 1" wide, good bornite and chalcopyrite in most with associated sericite; fractures approximately parallel to core with good bornite and chalcopyrite in narrow sericite veins quite common; grade ≈ 0.50% Cu.							
		482 - 486 low to moderate argillic alteration.							
		498 1" quartz vein at 70°; minor chalcopyrite and bornite.							
		499 1" quartz vein at 75°; chalcopyrite and bornite.							
		521 - 523 Kspar and quartz-rich section.							
		523 - 530.5 low to moderate argillic alteration.							
		523.5 - 524 Kspar and quartz-rich section at 45°; gradational contact with regular Bethsaida; mineralized with chalcopyrite.							

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	14 - 0 - 5
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 14-0-5 | Sheet 10.

Footage From	To	Description	Sample No.	Length	Analysis
532.5 -	550	Intense argillic alteration with soft, grey-green plagioclase and no biotite, most			
		of this zone probably part of fault gouge; Kspar alteration low at 3% - 5%; seri-			
		cite alteration moderate, quite pervasive in parts; grade about 0.35% Cu.			
		535 2" quartz vein with minor bornite and chalcopyrite.			
		538 gouge at 40°.			
		538 - 544 fault zone; shear planes approximately parallel to core.			
		454 1" quartz vein with minor, fine bornite.			
550 -	640	Dominantly moderate argillic alteration with pale green plagioclase and partially			
		chloritized biotite, no biotite in half of section; Kspar alteration 8% - 12% with			
		Kspar quite widespread; sericite alteration restricted to narrow zones around			
		fractures and quartz veins, overall low to moderate; grade about 0.35% Cu.			
		553 1" quartz vein at 45°; sericite borders; minor chalcopyrite.			
		559.5 - 560 gouge material.			
		566 1" quartz vein at 35°; massive chalcopyrite; shear at 15°.			
		569 2.5" quartz vein at 30°; massive chalcopyrite; sheared quartz.			
		581 1.5" quartz vein at 60°; barren except for minor chalcopyrite			
		and bornite in sericite borders.			
		582.5 1.5" quartz vein cutting 0.5" quartz vein at 35°; sericite and			
		chalcopyrite and bornite associated.			
		588 1" quartz vein at 50°; bornite.			
		591 1" quartz vein at 30°; minor bornite.			

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No.	14 - 0 - 5	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Sheet 11.

Hole No. 14-0-5

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From	To	Description	Sample No.	Length	Analysis
		593 - 599 gouge material.			
		593 - 610 some intense argillic.			
		602 1" quartz vein with chalcopyrite.			
		609 - 610 gouge material.			
		629 - 630 broken quartz; Kspar then sericite border.			
		633 4" quartz and Kspar.			
		639 two 1" quartz veins at 60° and 0.5" apart; barren.			
640 -	711	Dominantly low to moderate argillic alteration with white or green plagioclase;			
		parts of section fresh with only slight alteration; biotite evident, often par-			
		tially chloritized; Kspar alteration low to moderate with 5% - 8%, where Kspar is			
		higher, biotite less evident; sericite alteration low to moderate with sericite			
		generally limited to narrow zones along fractures; about three or four quartz			
		veins per foot which are 1" wide, generally only sparse mineralization.			
		644 2" quartz vein at 65°; minor bornite.			
		645 - 646 gouge zone.			
		647 1.5" quartz vein at 20°; minor chalcopyrite and bornite along			
		edges.			
		650 2.5" quartz vein at 30°; Kspar and minor chalcopyrite.			
		660 1" quartz vein at 75°; barren.			
		662 aplite dyke 0.75" wide; Kspar and quartz.			
		663 molybdenum slip 1/8" thick at 30° to core.			

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Comiraco

Property	Valley Copper	District		Hole No.	14 - 0 - 5
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 14-0-5 | Sheet 12.

Footage From	To	Description	Sample No.	Length	Analysis
		675 1" quartz vein at 35°; bornite and chalcopyrite.			
		682 1" quartz vein at 60°; minor bornite and chalcopyrite.			
		688 6" quartz vein; barren.			
		706 - 711 moderately altered with respect to plagioclase.			
711 -	982	Generally moderate, occasionally intense argillic alteration; plagioclase grains			
		vary from hard to scratch, light green to white, chalky grains; sericite develop-			
		ment low, being found in areas bordering fracture planes or as envelopes around			
		quartz veins; quartz veins about one per foot, carry bornite and chalcopyrite;			
		Kspar content about 5% - 8%; biotite content low, slightly chloritized or serici-			
		tized.			
		712 - 713 biotite-rich section; intense argillic alteration.			
		715.5 6" shear at 80°.			
		723.5 - 724.5 shear about 80°; much broken rock; quartz vein and accompany-			
		ing sericite have been sheared.			
		730 - 730.5 shear about 45°; much small, broken fragments of rock.			
		746 3" quartz vein at 45°; bornite and chalcopyrite.			
		777 - 826 intensely fractured and sheared rock; many small, angular frag-			
		ments of rock.			
		786 4" of gouge; no angle available			
		803 2" of gouge at 50°.			
		819 8" of gouge at 55°			

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No.	14 - 0 - 5	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 14-0-5 | Sheet 13.

Footage From	To	Description	Sample No.	Length	Analysis
		836 small shear at 60° with 1/4" gouge.			
		837.5 - 859 strongly fractured and sheared rock; many small, angular frag-			
		ments of rock.			
		851 - 856 gouge at 60°.			
		883 4" section of gouge at 80°.			
		884 small shear at 80° with 1/2" gouge.			
		888.5 - 890 shearing at 80°; 1' of gouge; development of emerald green			
		sericite.			
		898 - 900 shearing at 80°; many small, angular fragments of rock.			
		910 - 920 Kspar content increases to 15% - 20%.			
		921 - 925 intense fracturing and shearing at 85°.			
		981 - 983 Kspar content increases to 15% - 20%.			
982	1,041	Low to moderate argillic alteration with light green or cream plagioclase grains;			
		Kspar content generally 5% - 10%; sericite development low, occurring along frac-			
		tures or bordering quartz veins; quartz veins about one per two feet, with bornite			
		and chalcopyrite; biotite grains generally in various stages of sericitization or			
		slightly chloritized.			
		987 - 989 shearing at 50°; 6" gouge.			
		1,005 - 1,041 dominantly low argillic alteration with white plagioclase and			
		fresh biotite; sericite low.			

211-9437—H.P.

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No.	14 - 0 - 5	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 14-0-5 | Sheet 14.

Footage From	To	Description	Sample No.	Length	Analysis
1,041	1,160	Low to moderate and moderate argillic alteration about 50:50; plagioclase generally green and just scratches; Kspar moderate gives this section the green and orange mottled colouration; Kspar alteration moderate with some intense zones over several feet, overall 15%, widespread, pervades entire core; sericite alteration low with only about two narrow fractures per foot; a few <1" quartz veins generally poorly mineralized or unmineralized; grade poor at about 0.25% with bornite:chalcopyrite = 1:2; few narrow quartz veins (<1/4" wide).			
		1,013 - 1,016 25% Kspar.			
		1,044 1" quartz vein at 50°; partial Kspar and sericite borders; unmineralized.			
		1,095 - 1,107 gouge for 3' then ground-up core.			
		1,108 - 1,132 25% Kspar.			
		1,116 3/4" quartz vein at 10°; vuggy with bornite and chalcopyrite.			
		1,140 - 1,142 25% Kspar.			
		1,144 4" of quartz; minor chalcopyrite.			
		1,156.5 shear with talc at 30°.			
1,160	1,169	Zone of fault gouge with intense argillic alteration, very little Kspar, and only small amount of emerald green sericite; zone is quartz-rich but no well defined veins evident; molybdenum and black (sheared) sulphides occur on some shear planes.			
		1,164 quartz with molybdenum.			

Scale

Colour Plot & Clips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	14 - 0 - 5
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 15.

Hole No. 14-0-5

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From	To	Description	Sample No.	Length	Analysis
1,169		End Hole 14 - 0 - 5.			

DA:jr
Vancouver Office
~~May 5th, 1970~~

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	14 - 0 - 5
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 16.

Hole No. 14-0-5

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From	To	Description Sample No.	Footage	% Cu	% Mo	Sample No.	Footage	% Cu	% Mo	Sample No.	Length	Analysis
		42998	0 - 10	0.33	0.0043	43520	220 - 230	0.57	0.0037			
		42999	10 - 20	0.20	0.0020	43521	230 - 240	0.47	0.0019			
		43000	20 - 30	0.46	0.0007	43522	240 - 250	0.70	0.0091			
		43501	30 - 40	0.15	0.0010	43523	250 - 260	0.58	0.0019			
		43502	40 - 50	0.44	0.0060	43524	260 - 270	0.39	0.0043			
		43503	50 - 60	0.14	0.0013	43525	270 - 280	0.55	0.0130			
		43504	60 - 70	0.29	0.0005	43526	280 - 290	0.50	0.0021			
		43505	70 - 80	0.63	0.0007	43527	290 - 300	0.56	0.0005			
		43506	80 - 90	0.21	0.0007	43528	300 - 310	0.44	0.0043			
		43507	90 - 100	0.27	0.0005	43529	310 - 320	0.41	0.0011			
		43508	100 - 110	0.20	0.0001	43530	320 - 330	0.52	0.0040			
		43509	110 - 120	0.21	0.0006	43531	330 - 340	0.23	0.0005			
		43510	120 - 130	0.34	0.0004	43532	340 - 350	0.23	0.0001			
		43511	130 - 140	0.37	0.0095	43533	350 - 360	0.41	0.0006			
		43512	140 - 150	0.32	0.0012	43534	360 - 370	0.42	0.0020			
		43513	150 - 160	0.34	0.0019	43535	370 - 380	0.22	0.0047			
		43514	160 - 170	0.53	0.0004	43536	380 - 390	0.48	0.0057			
		43515	170 - 180	0.51	0.011	43537	390 - 400	0.73	0.0013			
		43516	180 - 190	1.3	0.022	43538	400 - 410	0.59	0.0016			
		43517	190 - 200	0.68	0.0074	43539	410 - 420	0.68	0.0047			
		43518	200 - 210	0.51	0.0011	43540	420 - 430	0.72	0.0013			
		43519	210 - 220	0.68	0.012	43541	430 - 440	0.52	0.0054			

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	14 - 0 - 5
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 14-0-5 | Sheet 17

Footage From	To	Description Sample No.	Footage	% Cu	% Mo	Sample No.	Footage	% Cu	% Mo	Sample No.	Length	Analysis
		43542	440 - 450	0.50	0.012	43464	660 - 670	0.21	0.0064			
		43543	450 - 460	0.40	0.0015	43465	670 - 680	0.57	0.0004			
		43544	460 - 470	0.41	0.0014	43466	680 - 690	0.06	0.0014			
		43545	470 - 480	0.35	0.0015	43467	690 - 700	0.28	0.0023			
		43546	480 - 490	0.32	0.0016	43468	700 - 710	0.21	0.0009			
		43547	490 - 500	0.43	0.0070	43469	710 - 720	0.20	0.0004			
		43548	500 - 510	0.43	0.0011	43470	720 - 730	0.18	0.0075			
		43549	510 - 520	0.36	0.0004	43471	730 - 740	0.21	0.0048			
		43550	520 - 530	0.23	0.0004	43472	740 - 750	0.21	0.0011			
		43551	530 - 540	0.41	0.0005	43473	750 - 760	0.32	0.0033			
		43552	540 - 550	0.52	0.0002	43474	760 - 770	0.31	0.0003			
		43553	550 - 560	0.44	0.0010	43475	770 - 780	0.20	0.0004			
		43554	560 - 570	0.50	0.0025	43476	780 - 790	0.13	0.0019			
		43555	570 - 580	0.31	0.0016	43477	790 - 800	0.20	0.0005			
		43456	580 - 590	0.41	0.0064	43478	800 - 810	0.39	0.0015			
		43457	590 - 600	0.49	0.0007	43479	810 - 820	0.31	0.0082			
		43458	600 - 610	0.38	0.0022	43480	820 - 830	0.22	0.0033			
		43459	610 - 620	0.17	0.0006	43481	830 - 840	0.33	0.0051			
		43460	620 - 630	0.24	0.0018	43482	840 - 850	0.16	0.0015			
		43461	630 - 640	0.41	0.0008	43483	850 - 860	0.31	0.012			
		43462	640 - 650	0.43	0.0020	43484	860 - 870	0.25	0.0041			
		43463	650 - 660	0.25	0.0041	43485	870 - 880	0.22	0.0020			

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	14 - 0 - 5
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 18.

Hole No. 14-0-5

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From To | Description

Sample No.	Footage	% Cu	% Mo	Sample No.	Footage	% Cu	% Mo	Sample No.	Length	Analysis
43486	880 - 890	0.19	0.0024	38308	1,100 - 1,110	0.10	0.0049			
43487	890 - 900	0.23	0.0006	38309	1,110 - 1,120	0.21	0.0009			
43488	900 - 910	0.14	0.0004	38310	1,120 - 1,130	0.07	0.0064			
43489	910 - 920	0.23	0.0017	38311	1,130 - 1,140	0.10	0.0051			
43490	920 - 930	0.12	0.012	38312	1,140 - 1,150	0.12	0.0007			
43491	930 - 940	0.28	0.0042	38313	1,150 - 1,169	0.23	0.044			
43492	940 - 950	0.28	0.0024							
43493	950 - 960	0.23	0.0084							
43494	960 - 970	0.16	0.0010							
43495	970 - 980	0.22	0.0002							
43496	980 - 990	0.23	0.0009							
43497	990 - 1,000	0.17	0.0027							
43498	1,000 - 1,010	0.18	0.0007							
43499	1,010 - 1,020	0.19	0.0008							
43500	1,020 - 1,030	0.20	0.0029							
38301	1,030 - 1,040	0.18	0.0009							
38302	1,040 - 1,050	0.17	0.0025							
38303	1,050 - 1,060	0.33	0.019							
38304	1,060 - 1,070	0.23	0.0058							
38305	1,070 - 1,080	0.10	-							
38306	1,080 - 1,090	0.06	0.0018							
38307	1,090 - 1,100	0.11	0.0016							

RFN

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	15.5-0-1
Commenced	February 11, 1970	Location	Decline C Cutout Section 15.5	Tests at	Hor. Comp.
Completed	February 18, 1970	Core Size	BQ	Corr. Dip	Vert. Comp.
Co-ordinates	Lat. 96,238.01 Dep. 98,895.56 (New Co-ords)			True Brg.	Logged by RFN
Objective				% Recov. 77.4%	Date Feb. 18, 1970.

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
	045°	+ 40°	3,648.96'	492'	15.5-0-1	Summary of Geology

Footage From	Footage To	Description	Sample No.	Length	Analysis
		SUMMARY OF GEOLOGY			
0	492	Bethsaida Quartz Diorite. Alteration as follows:			
		0 - 43 Low-moderate kaolinization. Sericite poor.			
		43 - 118 Moderate kaolinization - local patches to intense.			
		Sericite poor - medium to moderate.			
		118 - 238 Intense kaolinization. Sericite moderate.			
		238 - 353 Moderate - intense kaolinization. Sericite moderate.			
		353 - 455 Intense kaolinization. Sericite moderate to well developed.			
		455 - 492 Moderate kaolinization. Sericite up to moderate.			
		474 - 492 Oxidized Zone.			
		Malachite and limonite present.			
	492	END OF HOLE			

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	15.5-0-1
Commenced	February 11, 1970	Location	Decline C Cutout Section 15.5	Tests at	Hor. Comp.
Completed	February 18, 1970	Core Size		Corr. Dip	Vert. Comp.
Co-ordinates	Lat. 96,238.01 Dep. 98,895.56 (New Co-ords)			True Brg.	Logged by RFN
Objective				% Recov. 77.4%	Date Feb. 18, 1970.

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet | Summary of Minaralization

Footage From	Footage To	Description			Sample No.	Length	Analysis
		SUMMARY OF MINERALIZATION					
		Length	%Cu	%Mo			
0	130	130'	.38	.0060			
130	250	120'	0.54	0.0099			
250	492	242'	0.42	0.0057			
0	492	492'	0.44	0.0068			

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property VALLEY COPPER	District HIGHLAND VALLEY	Hole No. 15.5-0-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet

Footage From To

Description

Sample #	Footage From	Footage To	%Cu	%Mo	Sample #	Footage From	Footage To	%Cu	%Mo	Sample #	Footage From	Footage To	%Cu	%Mo
33601	0	10	.46	.0140		200	210	.66	.0140		400	410	.30	.0009
	10	20	.27	.0015		210	220	.42	.0074		410	420	.63	.0130
	20	30	.46	.0014		220	230	.93	.0037		420	430	.30	.0021
	30	40	.40	.0014		230	240	.78	.0042		430	440	.34	.0043
	40	50	.52	.0015		240	250	.39	.0006		440	450	.49	.0130
	50	60	.29	.0078		250	260	.27	.0053		450	460	.42	.0013
	60	70	.28	.0030		260	270	.41	.0003	33647	460	470		
	70	80	.36	.0053		270	280	.35	.0064		470	480	.41	.0030
	80	90	.48	.0100		280	290	.37	.0057		480	492	Poor core recovery 32' sample.	
33610	90	100	.38	.0190	33630	290	300	.34	.0021					
	100	110	.28	.0055		300	310	.51	.0003					
	110	120	.38	.0014		310	320	.57	.0003					
	120	130	.36	.0063		320	330	.43	.0033					
	130	140	.63	.0140		330	340	.44	.0035					
	140	150	.54	.0022		340	350	.34	.0015					
	150	160	.50	.0390		350	360	.51	.0067					
	160	170	.50	.0100		360	370	.41	.0150					
	170	180	.33	.0056		370	380	.34	.0290					
	180	190	.36	.0005		380	390	.63	.0041					
33620	190	200	.38	.0180	33640	390	400	.43	.0086					

Sample No. | Length | Analysis

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	15.5-0-1
Commenced	February 11, 1970	Location	Decline C Cutout Section 15.5	Tests at	Hor. Comp.
Completed	February 18, 1970	Core Size	BQ	Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by RFN
Objective				% Recov. 77.4%	Date Feb. 18, 1970.

Claim	T Brg.	Collar Dip	Elev.	Length	Sheet
	045°	+ 40°		492	1

Hole No. 15.5-0-1

Footage From	Footage To	Description	Sample No.	Length	Analysis					
		Bethsaida Quartz Diorite						0	10	8.5
0	43	Low - mod. kaolinization. Sericite generally poor - patches to mod. Qtz. poor - except							20	9
		27-38 where there is ≈ 1q.v/1-1½ ft. Bn. main sulphide. K-spar poor.							30	9.5
43	118	Mostly mod. kaolinization - patchy to intense kaolinization. Sericite generally low - mod. to							40	8.5
		mod. development. 1 q.v./3-4 ft. Bn > Cpy. K-spar poor - 5%							50	7
		62 - 66 Emerald green sericite - mostly cpy.							60	9
		106 - 116 Most low kaol. - poor sericite.							70	8.5
118	238	Mostly intense kaolinization. Sericite mod. approx. 1q.v/2 ft. Bn > Cpy. K-spar up to ≈ 8%.							80	9
		143 Shear @ 60° up to 1" group.							90	6
		154 - 161 Shearing @ 0-10° - minor gouge.							100	6
		166 - 168 Shearing @ 30° upto 1" gouge - core broken.							110	7
		203 Shear @ 30°.							120	8.5
		204 - 205 1' q.v. @ 45° (?) cpy. and MoS_2. Emerald green sericite below the vein.							130	9
		225 Shear in sericite - bn. - cpy. abundant.							140	9.5
238	353	Moderate - intense kaolinization. Sericite mod. Bn. ≫ cpy. K-spar poor along fracs. & vein borders.							150	10
		264 - 265½ Emerald green sericite.							160	10
		277 - 278 " " "							170	9
		304 Minor shear @ 10°.							180	8.5
		352 - 354 Minor emerald green sericite.							190	9.5
353	455	Intense kaolinization. Sericite moderate to well developed. Bn. > cpy. K-spar poor.							200	9
		375 - 376 1' q.v. abundant MoS_2.							210	8.5
		383 - 385 Pervasive and emerald green sericite. Bn. - Cpy.							220	9

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	15.5-0-1
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 2

Hole No. 15.5-0-1

Footage From	Footage To	Description	Sample No.	Length	Analysis			Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
353	455	(continued)									220	230	7
		395 - 415 7' of core recovered possible shear zone with gouge washed away.(Mud reported @ 392)										240	8
		395½ Emerald green sericite.										250	8
		443 - 444 1' q.v. cpy. MoS_2.										260	9
455	492	Most mod. kaol. Sericite to mod.										270	9
		474 - 492 Oxidized zone. Malachite & limonite present.										280	8.5
		475 - 492 1 ft. of core recovered. Mud indicated by drillers - may be a surface feature										290	8
		of surface mud filling a crack similar to those observed at the portal of										300	8
		the decline.										310	9.5
												320	8.5
		END OF HOLE.										330	8
												340	9
												350	9
												360	9
												370	5
												380	7
												390	6
												400	4

Scale

Colour Plot & Dips

Drill Hole Record

COMINCO

Property	Valley Copper	District	Highland Valley	Hole No.	15.5 - 0 - 2		
Commenced	February 19th, 1970	Location	Decline C, Cutout Sec. 15.5	Tests at	500 (acid)	Hor. Comp.	
Completed	March 6th, 1970	Core Size	BQ	Corr. Dip		Vert. Comp.	R. F. Nichols ~~M. J. Casselman~~
Co-ordinates	96,241.70 lat.; 98,899.48 dep.			True Brg.		Logged by	D. Anderson
Objective				% Recov.	85.8	Date	February 20th - March 6th, 197

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
	045°	0°	3,639.64	1,014	15.5-0-2	1.

Footage From	To	Description	Sample No.	Length	Analysis
		SUMMARY OF GEOLOGY			
		Bethsaida quartz diorite. Alteration as follows.			
0 -	193	Low kaolinization (argillic); sericite generally poor.			
		52 - 77 moderate kaolinization; moderate sericite.			
		93 - 104 intense kaolinization; moderate sericite.			
		148 - 193 Kspar now moderate (10%).			
193 -	318	Intense kaolinization; sericite low-moderate.			
		250 - 293 fault zone about 10° - 30°.			
318 -	450	Low-moderate kaolinization; sericite poor.			
450 -	504	Intense kaolinization; sericite moderate.			
504 -	556	Low-moderate kaolinization; sericite poor.			
556 -	599	Intense kaolinization; sericite well developed.			
599 -	660	Moderate kaolinization and sericite.			
660 -	925	Intense kaolinization; sericite poor to moderate; intervals of emerald green sericite common.			

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 2
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 15.5-0-2 | Sheet 2.

Footage From	To	Description	Sample No.	Length	Analysis
		725 - 733 moderate kaolinization.			
925 -	967	Moderate kaolinization and sericite.			
967 -	1,004	Intense kaolinization; sericite mostly moderate, some to well developed.			
1,014		End Hole 15.5 - 0 - 2.			

211-9437—H.P.

Scale

Colour Plot & Dipe

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 2
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 2a.

Hole No. 15.5-0-2

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From To | Description SUMMARY OF MINERALIZATION | Sample No. | Length | Analysis

Footage From	To	Length	% Cu	% Mo
0	60	60	0.323	0.0038
60	130	70	0.550	0.0015
130	250	120	0.281	0.0052
250	380	130	0.616	0.0095
380	560	180	0.380	0.0096
560	810	250	0.436	0.0049
810	930	120	0.604	0.0018
930	960	30	0.377	0.0035
960	1,014	54	0.612	0.0022

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 2
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 3.

Hole No. 15.5-0-2

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Analysis
0 -	193	Low kaolinization with local patches to more intense as noted below; mafics fresh				0	-	10		3.0
		to chloritic; sericite poor; mineralized quartz veins also uncommon; Kspar poor.				10	-	20		9.0
		52 - 77 mostly moderate kaolinization; sericite up to moderate.				20	-	30		9.0
		66 - 69 1/2" - 1" quartz vein at 0°; bornite and chalcopyrite.				30	-	40		9.0
		93 - 104 intense kaolinization; sericite moderate.				40	-	50		9.0
		99 1/2" chalcopyrite stringer at 30°; emerald green sericite ad-				50	-	60		9.5
		jacent.				60	-	70		9.5
		116.5 - 118 pervasive sericite; bornite, minor chalcopyrite.				70	-	80		9.5
		148 - 193 Kspar increases to 10%, occasionally to 15%.				80	-	90		9.5
		178 shear at 70°; 1" gouge.				90	-	100		10.0
		179 1/10" stringer of bornite and chalcopyrite at 60°.				100	-	110		9.5
						110	-	120		8.5
193 -	318	Intense kaolinization; sericite low-moderate to moderate; Kspar poor, locally up				120	-	130		9.0
		to 10% - 15%; bornite > chalcopyrite.				130	-	140		10.0
		198 - 199 pink aplitic dyke at 30°.				140	-	150		8.0
		208 - 211 emerald green sericite.				150	-	160		9.0
		234 small fragments of pink aplitic dyke.				160	-	170		9.0
		245 - 252 emerald green sericite, often pseudomorphous after plagio-				170	-	180		9.0
		clase; chalcopyrite and MoS_2 common; minor bornite.				180	-	190		9.0
		250 - 293 fault zone; appears to be low angle (10° - 30°); bad core				190	-	200		8.0
		loss; gouge common.				200	-	210		8.5
		263 - 265 quartz vein; chalcopyrite and MoS_2.				210	-	220		9.0

Recovery

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 2
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 15.5-0-2 | Sheet 4.

Footage From	To	Description	Sample No.	Length	Analysis	Recovery
		315 - 318 mostly broken core and gouge; Kspar up to 25%.			220 - 230	9.0
					230 - 240	8.5
318 -	450	Low-moderate kaolinization, patches of intense (1' - 2'); mafics fresh to chlori-			240 - 250	10.0
		tic; sericite poor, small local areas to moderate; quartz veining poor; Kspar poor			250 - 260	3.0
		(5%); bornite > chalcopyrite, disseminated on sericite and quartz.			260 - 270	3.0
		341 - 346 moderate sericite.			270 - 280	4.0
		342 - 343 quartz, sericite, bornite.			280 - 290	2.5
		356 2" massive sericite; bornite and chalcopyrite.			290 - 300	6.0
		387 - 398 quartz and sericite up to moderate.			300 - 310	7.0
		412 - 417 sericite moderate.			310 - 320	8.0
		416 2" aplite dykelet; MoS_2 in adjacent sericite.			320 - 330	9.5
		418 - 421 emerald green sericite.			330 - 340	7.0
		434 - 436 mostly mud and ground core.			340 - 350	9.0
		447 - 450 emerald green sericite.			350 - 360	9.0
		450 possible alteration change to moderate; Kspar to 10%; sericite			360 - 370	9.5
		low-moderate.			370 - 380	8.5
					380 - 390	8.5
450 -	504	Mostly intense kaolinization, few patches only to moderate; sericite moderately de-			390 - 400	9.0
		veloped; quartz veining up to 1/2 feet; Kspar poor; bornite abundant in sericite			400 - 410	9.5
		and quartz; bornite > chalcopyrite.			410 - 420	7.5
		463 - 465 emerald green sericite; shear associated with emerald green			420 - 430	9.5
		sericite; some gouge noted; attitude 30° - 40°.			430 - 440	9.5

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No.	15.5 - 0 - 2	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 15.5-0-2 | Sheet 5.

Footage From	To	Description	Sample No.	Length	Analysis	Recovery
504 -	556	Low-moderate kaolinization, patches of intense as noted below; sericite poor;			440 - 450	9.5
		quartz veining poor, 1 quartz vein/4 feet; Kspar about 5%; mafics fresh to chlori-			450 - 460	8.0
		tic; bornite chalcopyrite, fairly well developed in what sericite there is.			460 - 470	9.0
		532 - 540 intense kaolinization; sericite moderate-well developed.			470 - 480	9.0
		536 shear at 10°; up to 2" gouge.			480 - 490	10.0
					490 - 500	10.0
556 -	599	Intense kaolinization; patchy emerald green sericite; sericite well developed; 1			500 - 510	9.0
		quartz vein/2 feet; bornite abundant in the sericite and in some of the quartz			510 - 520	9.5
		veins; Kspar up to 10%; mafics to sericite.			520 - 530	9.0
		576 2 - 3" quartz veins at 10°; specks of MoS_2 and chalcopyrite.			530 - 540	9.5
		587 - 591 quartz vein; minor chalcopyrite.			540 - 550	9.5
		590 core ground, possible shear.			550 - 560	9.5
					560 - 570	10.0
599 -	660	Mostly moderate, occasional only to low kaolinization; sericite moderate develop-			570 - 580	9.5
		ment; 1 quartz vein/3 to 4 feet, usually well mineralized and 1/2" - 2" in width;			580 - 590	7.0
		Kspar poor, about 5%; mafics mostly chloritic.			590 - 600	9.5
		608 minor shear at 60°; 1/2" gouge; sericite.			600 - 610	10.0
					610 - 620	9.5
660 -	725	Predominantly intense kaolinization; sericite poor to poor-moderate; quartz poor -			620 - 630	9.0
		1 quartz vein/3 to 4 feet; Kspar 10% and often salmon pink in colour; bornite pre-			630 - 640	9.0
		sent in sericite, quartz, and occasionally along hairline fractures.			640 - 650	10.0
		677 minor shear at 45°.			650 - 660	9.5

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 2
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 15.5-0-2 | Sheet 6.

Footage From	To	Description	Sample No.	Length	Analysis			Recovery
		689 - 691 emerald green sericite; minor shears at 10° - 20°.			660	-	670	9.0
		718 MoS_2 on shear in quartz vein.			670	-	780	9.0
		707 - 724 hematite staining common on fractures and surrounding sul-			680	-	690	9.0
		phides and mafics.			690	-	700	9.0
					700	-	710	9.5
725 -	733	Moderate-intense argillic; some biotite exists but most destroyed; plagioclase has			710	-	720	10.0
		kaolin coat and can be scratched; sericite moderate, no distinct veins but more			720	-	730	9.2
		mottled; Kspar 10% - 12% and mainly disseminated; quartz veins contain bornite, as			730	-	740	9.0
		does the sericite; Cu = 0.45%.			740	-	750	9.5
					750	-	760	9.5
733 -	925	Intense argillic alteration; plagioclase very heavily kaolinized; no biotite or			760	-	770	9.5
		only relic; large zones of emerald green sericite which generally contains mainly			770	-	780	8.0
		chalcopyrite, probably just starting to develop; sericite generally moderate, veins			780	-	790	8.0
		mainly 70° - 90° but some 45° and mainly 1/4" - 1/2" wide, occasional zones where			790	-	800	9.5
		sericite more intense (slightly) but these 6" - 8" wide, fairly uniform distribu-			800	-	810	9.0
		tion, contains bornite; Kspar generally about 5% - 8%, most in quartz veins or dis-			810	-	820	8.0
		seminated as blebs or incomplete veins, appears to have been somewhat destroyed by			820	-	830	5.0
		the solutions which caused argillic alteration, fairly evenly distributed; many			830	-	840	9.7
		zones where plagioclase pea green colour but not so green as emerald green sericite;			840	-	850	8.0
		quartz veins about 5/box over 1", nearly all 60° - 80°, away from emerald green			850	-	860	8.5
		sericite contain predominantly bornite, within emerald green sericite contain most-			860	-	870	9.0
		ly chalcopyrite and some bornite, also some pyrite.			870	-	880	9.7

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No.	15.5 - 0 - 2	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Sheet 7.

Hole No. 15.5-0-2

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Analysis Recovery
		733 - 735 emerald green sericite, disseminated, 20%.				880	-	890		8.5
		748 - 750 emerald green sericite, disseminated, 30%.				890	-	900		9.0
		756 - 761 emerald green sericite, disseminated, 40%.				900	-	910		8.5
		785 1' mud seam.				910	-	920		2.0
		785 - 786 emerald green sericite, disseminated, 35%.				920	-	930		9.0
		794 - 830 emerald green sericite, disseminated, 30%, fairly evenly dis-				930	-	940		9.7
		tributed.				940	-	950		9.7
		844 - 846 very fine-grained Bethsaida quartz diorite contains fine-				950	-	960		9.7
		grained Kspar disseminated; Cu = 0.45%.				960	-	970		9.7
		848 - 851 emerald green sericite, disseminated, 30%.				970	-	980		8.5
		860 - 873 emerald green sericite, disseminated, 35%.				980	-	990		9.5
						990	-	1,000		8.5
925 -	967	Generally moderate argillic; little biotite exists; low-moderate argillic 927 -			1,000		-	1,004		3.4
		938 and 945 - 949, intense argillic 958 - 961; sericite moderate, veins 1/4" and								
		evenly distributed, generally 60° - 90°; Kspar 8% and fairly evenly distributed,								
		in veins and disseminated; quartz veins 5/box and 70° - 90°, a few at 45°, most								
		contain bornite, a few all chalcopyrite; Cu = 0.45%.								
967 -	1,004	A section of intense argillic alteration with soft, crumbly, green to buff plag-								
		ioclase; not biotite remaining; plagioclase in lesser quantities 1,000 - 1,004								
		with emerald green sericite and quartz predominating; Kspar alteration generally								
		pervasive with 10% - 12% Kspar, also localized along fractures and quartz veins.								

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 2
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 8.

Hole No. 15.5-0-2

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From	To	Description	Sample No.	Length	Analysis
		sericite alteration moderate with intense for last 4', both along fractures and as			
		borders on quartz veins; possible fault at 1,002; Cu ≈ 0.45% - 0.50%.			
		975.5 2" quartz vein with bornite in sericite.			
		980.5 1" quartz vein at 60° with bornite in sericite borders.			
		990 1.5" quartz vein at 45° with bornite and chalcopyrite in			
		quartz.			
		991 - 993 quartz with good bornite and chalcopyrite.			
		1,000.5 1" quartz vein at 70° with chalcopyrite and bornite.			
1,014		End Hole 15.5 - 0 - 2.			

RFN:MJC:DA:jr
Vancouver Office
April 22nd, 1970

211-9437—H.P.

Scale

Colour Plot & Dips

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Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 2
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 15.5-0-2 | Sheet 9.

Footage From	To	Description Sample No.	Footage		% Cu	% Mo	Sample No.	Footage		% Cu	% Mo	Sample No.	Length	Analysis
		33648	0 -	10	0.23	0.0010	39370	220 -	230	0.20	0.0040			
		33649	10 -	20	0.34	0.0036	39371	230 -	240	0.30	0.0061			
		33650	20 -	30	0.44	0.0008	39372	240 -	250	0.24	0.0180			
		39351	30 -	40	0.25	0.0030	39373	250 -	260	0.54	0.0089			
		39352	40 -	50	0.30	0.0034	39374	260 -	270	1.20	0.0290			
		39353	50 -	60	0.38	0.0110	39375	270 -	280	0.69	0.0120			
		39354	60 -	70	0.64	0.0010	39376	280 -	290	0.69	0.0120			
		39355	70 -	80	0.47	0.0054	39377	290 -	300	0.68	0.0190			
		39356	80 -	90	0.47	0.0015	39378	300 -	310	0.54	0.0084			
		39357	90 -	100	0.67	0.0005	39379	310 -	320	0.54	0.0010			
		39358	100 -	110	0.59	0.0011	39380	320 -	330	0.53	0.0043			
		39359	110 -	120	0.52	0.0006	39381	330 -	340	0.39	0.0022			
		39360	120 -	130	0.49	0.0006	39382	340 -	350	0.56	0.0170			
		39361	130 -	140	0.31	0.0017	39383	350 -	360	0.70	0.0025			
		39362	140 -	150	0.22	0.0005	39384	360 -	370	0.41	0.0036			
		39363	150 -	160	0.29	0.0020	39385	370 -	380	0.57	0.0040			
		39364	160 -	170	0.34	0.0031	39386	380 -	390	0.32	0.0330			
		39365	170 -	180	0.39	0.0120	39387	390 -	400	0.35	0.0057			
		39366	180 -	190	0.26	0.0015	39388	400 -	410	0.40	0.0350			
		39367	190 -	200	-	-	39389	410 -	420	0.39	0.0110			
		39368	200 -	210	0.25	0.0074	39390	420 -	430	0.32	0.0034			
		39369	210 -	220	0.29	0.0011	39391	430 -	440	0.21	0.0057			

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 2
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 15.5-0-2 | Sheet 10.

Footage From	To	Description Sample No.	Footage		% Cu	% Mo	Sample No.	Footage		% Cu	% Mo	Sample No.	Length	Analysis					
		39392	440 -	450	0.37	0.0042	36392	660 -	670	0.39	0.0060								
		39393	450 -	460	0.61	0.0160	36393	670 -	680	0.21	0.0032								
		39394	460 -	470	0.46	0.0150	36394	680 -	690	0.34	0.0043								
		39395	470 -	480	0.39	0.0048	36395	690 -	700	0.36	0.017								
		39396	480 -	490	0.34	0.0005	36396	700 -	710	0.44	0.0007								
		39397	490 -	500	0.49	0.0007	36397	710 -	720	0.33	0.0079								
		39398	500 -	510	0.46	0.0034	36398	720 -	730	0.43	0.0009								
		39399	510 -	520	0.25	0.0031	36399	730 -	740	0.19	0.0003								
		39400	520 -	530	0.40	0.0021	36400	740 -	750	0.43	0.019								
		36379	530 -	540	0.43	0.0160	90958	750 -	760	0.50	0.0088								
		36380	540 -	550	0.37	0.0055	90959	760 -	770	0.47	0.0017								
		36381	550 -	560	0.38	0.0084	90960	770 -	780	0.46	0.0095								
		36382	560 -	570	0.53	0.0024	90961	780 -	790	0.49	0.0035								
		36383	570 -	580	0.49	0.0076	90962	790 -	800	0.46	0.0010								
		36384	580 -	590	0.41	0.0013	90963	800 -	810	0.40	0.0005								
		36385	590 -	600	0.66	0.0043	90964	810 -	820	0.65	0.0040								
		36386	600 -	610	0.58	0.0054	90965	820 -	830	0.57	0.0008								
		36387	610 -	620	0.61	0.0013	90966	830 -	840	0.70	0.0005								
		36388	620 -	630	0.54	0.0007	90967	840 -	850	0.43	0.0005								
		36389	630 -	640	0.43	0.0010	90968	850 -	860	0.58	0.0012								
		36390	640 -	650	0.40	0.0071	90969	860 -	870	0.74	0.0028								
		36391	650 -	660	0.37	0.0072	90970	870 -	880	0.43	0.0012								

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 2
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Sheet 11. | Hole No. 15.5-0-2

Footage From	Footage To	Description Sample No.	Footage		% Cu	% Mo	Sample No.	Length	Analysis					
		90971	880	- 890	0.50	0.0027								
		90972	890	- 900	0.59	0.0022								
		90973	900	- 910	0.95	0.0012								
		90974	910	- 920	0.58	0.0011								
		90975	920	- 930	0.54	0.0029								
		90976	930	- 940	0.41	0.0016								
		90977	940	- 950	0.32	0.0080								
		90978	950	- 960	0.40	0.0009								
		90979	960	- 970	0.78	0.0038								
		90980	970	- 980	0.48	0.0017								
		90981	980	- 990	0.59	0.0024								
		90982	990	- 1,000	0.78	0.0018								
		90983	1,000	- 1,014	0.43	0.0011								

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District	Highland Valley	Hole No.	15.5 - 0 - 3		
Commenced	March 8th, 1970	Location	Decline C, Cutout Section 15.5	Tests at	800 (Tropari)	Hor. Comp.	
Completed	March 18th, 1970	Core Size	BQ	Corr. Dip	-1°	Vert. Comp.	
Co-ordinates	96,202.52 lat.; 98,862.91 dep.			True Brg.		Logged by	~~R. F. Nichols~~ D. Anderson
Objective				% Recov.	91.1%	Date	March 12th - 18th, 1970

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
	225°	0°	3,640.98	1,113	15.5-0-3	1.

Footage From	To	Description SUMMARY OF GEOLOGY	Sample No.	Length	Analysis					
		Bethsaida quartz diorite. Alteration as follows.								
0 -	43	Weak kaolinization; sericite poor.								
43 -	164	Weak to moderate kaolinization; sericite poor-moderate.								
164 -	176	Intense kaolinization; sericite well developed.								
176 -	224	Moderate kaolinization; moderate sericite.								
224 -	338	Weak to moderate kaolinization; sericitization poor to moderate.								
338 -	418	Intense kaolinization; moderate to well developed sericite.								
418 -	445	As 224 - 338.								
445 -	574	Intense kaolinization; moderate sericite.								
574 -	746	Weak kaolinization; sericite poor.								
746 -	754	Porphyry dyke: dark green ground mass; 10% - 20% feldspar and quartz phenocrysts; steep contact.								

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 15.5-0-3 | Sheet 2.

Footage From	To	Description	Sample No.	Length	Analysis					
754 -	884	As 574 - 746.								
884 -	953	Moderate-intense kaolinization; sericite generally moderate.								
953 -	1,032	Weak kaolinization; sericite poor.								
1,032 -	1,092	Moderate kaolinization; sericite poor, up to moderate.								
1,092 -	1,113	Intense kaolinization; sericite poor.								
1,113		End Hole 15.5 - 0 - 3.								

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Comaco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 2a..

Hole No. 15.5-0.3

Claim	T Brg.	Collar Dip	Elev.	Length

Footage From	To	Description SUMMARY OF MINERALIZATION			Sample No.	Length	Analysis
		Length	% Cu	% Mo			
0 -	50	50	0.412	0.0094			
50 -	200	150	0.583	0.0043			
200 -	350	150	0.398	0.0026			
350 -	540	190	0.538	0.0056			
540 -	720	180	0.313	0.0016			
720 -	810	90	0.539	0.0035			
810 -	950	140	0.374	0.0039			
950 -	1,113	163	0.299	0.0030			
0 -	950	950	0.448	0.0039			

211-9437—H.P.

Scale

Colour Plot & Dipe

0

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 3.

Hole No. 15.5-0-3

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length
		Bethsaida quartz diorite.							
0 -	43	Predominantly low kaolinization; sericite poor; Kspar up to 10%; quartz veining							
		uncommon; bornite > chalcopyrite.							
43 -	164	Generally low to moderate kaolinization, intense kaolinization noted below; seri-							
		cite variable, low to moderate; bornite > chalcopyrite; Kspar 5% - 10%, locally to							
		15%; 1 quartz vein/3 - 4 feet.							
		53 - 65 intense kaolinization and emerald green sericite; minor shear							
		at 0° - 10°.							
		87 - 103 bornite speckled along hairline fractures.							
		98 6" quartz - sericite - bornite at 30°.							
		105 - 106 quartz vein at 60° - 70°; sericite borders.							
		107 - 108 quartz vein at 60° - 70°; sericite borders.							
		144 - 153 intense kaolinization.							
		148 10" quartz vein at 60°; abundant bornite.							
		150 shear at 80°; 3" gouge.							
		153 shear at 70°; 1/4" gouge.							
		156 - 156.5 orange coloured, fine-grained, aplitic dyke rock cut by nar-							
		157.5 now (bornite) mineralized fractures; 2" of this at 157.5.							
		161 - 161.5 same as 156 - 156.5.							
		153 - 161.5 good bornite in sericite along fractures and quartz veins.							

Analysis				
		Recovery		
	0	-	10	7.0
	10	-	20	7.0
	20	-	30	9.0
	30	-	40	8.0
	40	-	50	7.5
	50	-	60	8.5
	60	-	70	9.5
	70	-	80	10.0
	80	-	90	9.5
	90	-	100	9.0
	100	-	110	9.0
	110	-	120	9.0
	120	-	130	8.5
	130	-	140	8.0
	140	-	150	7.0
	150	-	160	9.0
	160	-	170	9.0
	170	-	180	10.0
	180	-	190	8.5
	190	-	200	9.5
	200	-	210	10.0
	210	-	220	10.0

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 15.5-0-3 | Sheet 4.

Footage From	To	Description	Sample No.	Length	Analysis	Recovery
164 -	176	A section of fairly intense alteration where the plagioclase is partially or com-			220 - 230	9.5
		pletely altered to light green sericite; some white, soft plagioclase occurs in			230 - 240	10.0
		places indicating intense argillic alteration; Kspar alteration very low with < 5%;			240 - 250	10.0
		sericite alteration with light green sericite and fairly coarse sericite or musco-			250 - 260	9.5
		vite; quartz veining as noted below; Cu = 0.45%.			260 - 270	9.5
		166.5 - 167 quartz and sericite with chalcopyrite.			270 - 280	10.0
		168.5 1" quartz vein at 40° with chalcopyrite.			280 - 290	9.5
		172.5 - 174 quartz with coarse sericite; bornite and chalcopyrite in both.			290 - 300	9.5
		175 - 176 molybdenum in quartz, also bornite and chalcopyrite.			300 - 310	10.0
		165.5 molybdenum and chalcopyrite slip at 20°.			310 - 320	9.5
		176 - 176 molybdenum, bornite, and chalcopyrite slip.			320 - 330	9.5
					330 - 340	10.0
176 -	224	A section which is generally of moderate argillic alteration but contains a few			340 - 350	10.0
		short sections of intense with white to green plagioclase 176 - 181, 194 - 201,			350 - 360	9.5
		202.5 - 205, 223 - 224; no biotite is in evidence; plagioclase generally buff to			360 - 370	10.0
		green; Kspar 176 - 205 about 10%, 205 - 224 about 25%; sericitic alteration mode-			370 - 380	9.5
		rate, not pervasive; sericite occurs along fractures and quartz veins; very fine			380 - 390	9.0
		(1 mm.) biotite flakes occur in last 10'; Cu ≈ 0.40% - 0.45%; bornite:chalcopyrite			390 - 400	10.0
		= 2:1; quartz veining:			400 - 410	10.0
		190 2" quartz vein at 80°; bornite in sericite.			410 - 420	9.5
		196 - 196.5 quartz with bornite and sericite and bornite borders.			420 - 430	10.0
		212.5 quartz and aplitic rock for 2"; minor chalcopyrite and bornite.			430 - 440	10.0

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 5.

Hole No. 15.5-0-3

Footage From	Footage To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Analysis	Recovery
		214 3" quartz vein with sericite borders with chalcopyrite and			440	-	450				9.2
		bornite.			450	-	460				9.0
					460	-	470				9.5
224 -	338	Generally low to moderate argillic alteration with fairly hard white plagioclase			470	-	480				10.0
		and fresh euhedral biotite throughout most of the section; intense with greenish-			480	-	490				9.0
		white plagioclase 237 - 239, 275 - 278, 286 - 288; Kspar alteration generally low			490	-	500				9.0
		to moderate with about 5% - 8%; sericite alteration low to moderate, very few frac-			500	-	510				9.5
		tures with sericite, sericite related to quartz veining; some hematite occurs along			510	-	520				10.0
		fractures in this section; Cu grade: 224 - 270 ≈ 0.35% - 0.40%, 270 - 280 ≈ 0.45%,			520	-	530				9.5
		280 - 310 ≈ 0.35% - 0.40%, 310 - 338 ≈ 0.30%.			530	-	540				9.0
		243 4" of barren quartz.			540	-	550				8.5
		248 6" of quartz with bornite.			550	-	560				9.5
		251 1" quartz vein at 80°; barren.			560	-	570				9.0
		253.5 - 254 aplitic, orange dyke rock.			570	-	580				9.0
		273 1" quartz vein at 10°; bornite in vein.			580	-	590				9.5
		286 aplicit, orange dyke.			590	-	600				9.5
		292 1" quartz vein at 80°; sericite borders.			600	-	610				9.5
		306 1-1/2" quartz vein at 90°; sericite borders with bornite.			610	-	620				9.0
					620	-	630				10.0
338 -	418	A section of intense argillic alteration with buff to white plagioclase which is			630	-	640				10.0
		generally soft; moderate argillic sections with buff plagioclase: 339.5 - 341,			640	-	650				9.5
		391 - 395, 400 - 402.5, 411 - 413; occurrence of biotite irregular - some intense			650	-	660				9.5

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 6

Hole No. 15.5-0-3

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Analysis / Recovery
		sections contain no evidence of biotite while other zones contain fresh flakes;			660	-	670			9.5
		the less altered sections listed above usually contain some biotite; Kspar altera-			670	-	680			9.0
		tion generally quite low except for moderate argillic sections where Kspar is low			680	-	690			9.5
		to moderate, overall percentage about 5% - 7%, Kspar widespread and not limited to			690	-	700			9.0
		fracture or quartz zones; sericite alteration moderate with some pervasive sec-			700	-	710			8.0
		tions where sericite has flooded the rock; numerous sericite fractures cut the			710	-	720			9.5
		core at large angles; most fractures are at angles >45°; some hematite on frac-			720	-	730			9.0
		tures; Cu 0.40% - 0.45%.			730	-	740			9.5
		349 1" quartz vein at 45°; minor bornite.			740	-	750			8.0
		350.5 4" quartz vein at 90°; minor chalcopyrite.			750	-	760			9.0
		352 - 352.5 quartz with minor chalcopyrite.			760	-	770			9.0
		355 - 360 four quartz zones about 4" or 5" long with related sericite;			770	-	780			5.0
		bornite and chalcopyrite found as pactches in quartz and seri-			780	-	790			9.0
		cite; all veins 10° - 20° to core axis.			790	-	800			5.0
		368 1" quartz vein at 0°; bornite.			800	-	810			3.0
		372 calcite crystals in vugs.			810	-	820			6.0
		374 2" quartz vein at 10°; minor bornite, Kspar, then sericite			820	-	830			10.0
		borders.			830	-	840			9.0
		376 - 378 quartz paralleling core with part of it vuggy and containing			840	-	850			9.0
		calcite crystals; bornite occurs throughout most of the quartz.			850	-	860			8.0
		387 2" quartz vein at 90°; minor bornite.			860	-	870			9.0
		391 1" quartz vein at 45°; bornite in sericite borders.			870	-	880			9.0

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 7.

Hole No. 15.5-0-3

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From	To	Description	Sample No.	Length	Analysis	Recovery
		414 4" quartz vein at 45°; barren.			880 - 890	9.0
		416 7" quartz vein at 75°; bornite and chalcopyrite.			890 - 900	10.0
					900 - 910	9.0
418 -	445	A section of low to moderate argillic alteration with some moderate sections also;			910 - 920	9.5
		plagioclase buff coloured and fresh; ragged biotite flakes common; intense argil-			920 - 930	9.5
		lic 432 - 432.5; mostly quartz 440 - 445, which is a vein paralleling the core;			930 - 940	9.0
		Kspar alteration low with < 5%; sericite alteration low to moderate and spotty with			940 - 950	7.0
		few 6" lengths of pervasive sericite, otherwise only few sericite fractures; Cu			950 - 960	9.0
		(fine bornite in sericite) ≈ 0.40%.			960 - 970	9.5
		423 - 424.5 quartz vein parallel to core; some bornite along with seri-			970 - 980	10.0
		cite and Kspar in quartz.			980 - 990	9.5
		432 1" quartz vein at 70°; minor bornite.			990 - 1,000	9.5
		440 - 445 quartz vein with minor, spotty bornite and hematite.			1,000 - 1,010	9.0
					1,010 - 1,020	9.0
445 -	574	A section of dominantly intense argillic alteration with greenish-white plagio-			1,020 - 1,030	9.0
		clase and a few chloritized remnants of biotite, moderate alteration 476 - 483 and			1,030 - 1,040	9.5
		485 - 489; Kspar alteration low with limits of 5% - 7% maximum in rock, generally			1,040 - 1,050	7.0
		related to fractures; sericitic alteration low-moderate with numerous sericite			1,050 - 1,060	9.0
		fractures; plagioclase altered to light green sericite 492 - 494 and 496 - 497,			1,060 - 1,070	10.0
		several more 6" sections where plagioclase being replaced by sericite; sericite			1,070 - 1,080	9.5
		along fractures has flooded the surrounding rock for widths up to 6"; a possible			1,080 - 1,090	9.5
		fault zone with gouge 455 - 457.5 and 450 - 451; around 469, hematite on			1,090 - 1,100	10.0

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No.	15.5 - 0 - 3	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 15.5-0-3 | Sheet 8.

Footage From	To	Description	Sample No.	Length	Analysis		Recovery			
		fracture surface parallel to core axis; a possible shear zone with gouge 510 -			1,100		- 1,113			12.0
		512; Cu ≈ 0.35% - 0.40%.								
		445.5 2" quartz vein at 45°; chalcopyrite and bornite.								
		465.5 1" quartz vein at 40°; minor bornite in sericite.								
		483 1" quartz vein at 20°; chalcopyrite and bornite in quartz.								
		494 1" quartz vein at 15°; bornite in sericite borders.								
		502.5 1-1/2" quartz vein with bornite in sericite borders.								
		510 1-1/2" quartz vein with chalcopyrite and molybdenum; shear								
		gouge adjacent.								
		524 2" quartz vein at 45°; barren.								
574 -	746	Predominantly low kaolinization, local patches (1' - 2') of moderate or intense;								
		mafics fresh to chloritic; sericite development poor to occasionally poor-moderate;								
		quartz veining poor - 1 quartz vein/5 feet; Kspar very poor, < 5%; bornite > chalco-								
		pyrite, usually in the sericite and often in the quartz veins.								
		609 - 615 minor shear at 0° - 10°.								
		638 shear at 60°; quartz vein with chalcopyrite and MoS_2.								
		661 - 664 minor shear at 0° - 10°.								
		682 - 697 mostly intense kaolinization; sericite up to moderate develop-								
		ment.								
		683 - 684 shear at 0° - 10°.								
		689 - 695 shear at 0° - 10°; up to 1/2" gouge.								

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Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 9.

Hole No. 15.5-0-3

Claim	T Brg.	Collar Dip	Elev.	Length

Footage From	To	Description	Sample No.	Length	Analysis					
		704 - 711 intense kaolinization; minor shearing throughout at 0° - 10°;								
		up to 1/4" gouge.								
		722 2" quartz vein at 45°; large bleb of bornite.								
		736 - 746 moderate to intense kaolinization; sericite up to moderate;								
		Kspar variable 5% - 20%.								
		736.5 2" quartz vein at 45°; bornite, chalcopyrite, MoS_2.								
		739 and 740 shears at 30° - 45°; up to 1/2" gouge.								
746 -	754	Porphyry dyke: dark green ground mass; 10% - 20% phenocrysts (feldspar and quartz)								
		contact appears steep (partically obscured).								
754 -	884	As 574 - 746.								
		755 - 815 sericite moderate to well developed; abundant bornite in the								
		sericite.								
		771 - 772 porphyry dykelet.								
		772 - 810 poor core recovery; mostly intense kaolinization; possible								
		sheared area - low angle.								
		810 - 835 moderate kaolinization predominant.								
		828 - 829 minor emerald green sericite; 1" quartz vein at 60°; chalco-								
		pyrite and minor bornite.								
		846 4" quartz vein at 60°; MoS_2, also bornite and chalcopyrite.								
		848 - 862 sericite patchy up to moderate.								

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Scale

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Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 10.

Hole No. 15.5-0-3

Claim | Brg. | Collar Dip | Elev. | Length

Footage From	To	Description	Sample No.	Length	Analysis
		883 6" pervasive sericite at 30°; bornite.			
884 -	953	Moderate to intense kaolinization; sericite generally up to moderate development;			
		Kspar poor; bornite fairly well developed on the sericite.			
		887 - 888 quartz vein at 60°; MoS_2, chalcopyrite, bornite.			
		890 - 900 sericite well developed; abundant bornite.			
		910 - 912 shear at 10°; up to 1/2" gouge.			
		915 - 916 3 - 1/2" to 1" quartz veins at 30°; abundant bornite.			
		921 shear at 60°; 1/2" gouge.			
		924 1" quartz vein at 60°; chalcopyrite; MoS_2.			
953 -	1,032	Predominantly low kaolinization, occasionally to low-moderate; sericite poor;			
		bornite > chalcopyrite; quartz veining uncommon; Kspar poor except where noted.			
		966 - 1,000 Kspar 10% - 15%.			
		970 6" massive sericite at 60°; abundant bornite.			
		1,000 - 1,001 1" - 2" quartz vein at 0° - 10°; chalcopyrite, minor bornite.			
		1,012 4" - 5" massive sericite at 60°; bornite.			
1,032 -	1,042	Mostly moderate kaolinization, small patches of intense; sericite poor-moderate to			
		moderate; quartz veining uncommon; Kspar poor.			
		1,003 shear at 60°; 1" gouge.			
		1,047 shear at 10°; 1/2" gouge.			

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Scale

Colour Plot & Dips

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Drill Hole Record

Cominco

Property	Valley Copper	District	
Hole No.	15.5 - 0 - 3		
Commenced		Location	
Tests at		Hor. Comp.	
Completed		Core Size	
Corr. Dip		Vert. Comp.	
Co-ordinates		True Brg.	
Logged by		Objective	
% Recov.		Date	

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 15.5-0-3 | Sheet 11.

Footage From	Footage To	Description	Sample No.	Length	Analysis
1,092	1,113	Intense kaolinization; sericite poor.			
		1,100 - 1,101 pink aplitic dyke at 45°.			
		1,104 2" quartz vein at 45°; chalcopyrite.			
		1,105 shear at 60°; 1/2" gouge.			
1,113		End Hole 15.5 - 0 - 3.			

DA:RFN:jr
Vancouver Office
April 21st, 1970

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Scale

Colour Plot & Dips

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Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | 'T Brg. | Collar Dip | Elev. | Length | Hole No. 15.5-0-3 | Sheet 12.

Footage From	Footage To	Description Sample No.	Footage		% Cu	% Mo	Sample No.	Footage		% Cu	% Mo	Sample No.	Length	Analysis
		42601	0 -	10	0.29	0.0014	42623	220 -	230	0.44	0.0011			
		42602	10 -	20	0.47	0.013	42624	230 -	240	0.25	0.0003			
		42603	20 -	30	0.34	0.024	42625	240 -	250	0.40	0.0008			
		42604	30 -	40	0.35	0.0057	42626	250 -	260	0.27	0.0010			
		42605	40 -	50	0.61	0.0027	42627	260 -	270	0.48	0.0003			
		42606	50 -	60	0.29	0.0019	42628	270 -	280	0.60	0.0003			
		42607	60 -	70	0.55	0.0087	42629	280 -	290	0.51	0.0003			
		42608	70 -	80	0.29	0.0019	42630	290 -	300	0.29	0.0004			
		42609	80 -	90	0.40	0.0024	42631	300 -	310	0.32	0.0003			
		42610	90 -	100	0.77	0.0090	42632	310 -	320	0.37	0.0052			
		42611	100 -	110	0.66	0.0077	42633	320 -	330	0.33	0.0003			
		42612	110 -	120	0.46	0.0018	42634	330 -	340	0.47	0.0025			
		42613	120 -	130	0.47	0.0030	42635	340 -	350	0.40	0.017			
		42614	130 -	140	0.87	0.0110	42636	350 -	360	0.67	0.0038			
		42615	140 -	150	1.10	0.0029	42637	360 -	370	0.66	0.016			
		42616	150 -	160	0.50	0.0026	42638	370 -	380	0.63	0.0036			
		42617	160 -	170	0.44	0.0070	42639	380 -	390	0.60	0.0029			
		42618	170 -	180	0.62	0.0022	42640	390 -	400	0.57	0.012			
		42619	180 -	190	0.44	0.0022	42641	400 -	410	0.58	0.0084			
		42620	190 -	200	0.88	0.0003	42642	410 -	420	0.77	0.0096			
		42621	200 -	210	0.40	0.0035	42643	420 -	430	0.60	0.0027			
		42622	210 -	220	0.44	0.0060	42644	430 -	440	0.34	0.0014			

Scale

Colour Plot & Dips

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Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 13.

Hole No. 15.5-0-3

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From	Footage To	Description Sample No.	Footage	% Cu	% Mo	Sample No.	Footage	% Cu	% Mo	Sample No.	Length	Analysis					
		42645	440 - 450	0.71	0.0026	42767	660 - 670	0.28	0.0014								
		42646	450 - 460	0.40	0.0052	42768	670 - 680	0.39	0.0003								
		42647	460 - 470	0.52	0.0010	42769	680 - 690	0.28	0.0006								
		42648	470 - 480	0.41	0.0030	42770	690 - 700	0.39	0.0002								
		42649	480 - 490	0.34	0.0050	42771	700 - 710	0.28	0.0015								
		42650	490 - 500	0.29	0.0024	42772	710 - 720	0.38	0.0028								
		42751	500 - 510	0.38	0.0020	42773	720 - 730	0.40	0.0027								
		42752	510 - 520	0.56	0.018	42774	730 - 740	0.56	0.0092								
		42753	520 - 530	0.64	0.0049	42775	740 - 750	0.65	0.0069								
		42754	530 - 540	0.46	0.0020	42776	750 - 760	0.50	0.0019								
		42755	540 - 550	0.35	0.0015	42777	760 - 770	0.40	0.0022								
		42756	550 - 560	0.23	0.0010	42780	770 - 800	0.61	0.0005								
		42757	560 - 570	0.38	0.0033	42781	800 - 810	0.65	0.0009								
		42758	570 - 580	0.27	0.0012	42782	810 - 820	0.27	0.0014								
		42759	580 - 590	0.27	0.0009	42783	820 - 830	032	0.0011								
		42760	590 - 600	0.36	0.0003	42784	830 - 840	0.34	0.0017								
		42761	600 - 610	0.36	0.0010	42785	840 - 850	0.36	0.015								
		42762	610 - 620	0.27	0.0002	42786	850 - 860	0.57	0.0016								
		42763	620 - 630	0.20	0.0008	42787	860 - 870	0.43	0.0006								
		42764	630 - 640	0.39	0.0068	42788	870 - 880	0.35	0.0010								
		42765	640 - 650	0.36	0.0035	42789	880 - 890	0.55	0.0180								
		42766	650 - 660	0.19	0.0030	42790	890 - 900	0.35	0.0019								

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	15.5 - 0 - 3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 15.5-0-3 | Sheet 14.

Footage From	To	Description Sample No.	Footage	% Cu	% Mo	Sample No.	Length	Analysis
		42791	900 - 910	0.20	0.0003			
		42792	910 - 920	0.40	0.0032			
		42793	920 - 930	0.49	0.0034			
		42794	930 - 940	0.27	0.0009			
		42795	940 - 950	0.34	0.0052			
		42796	950 - 960	0.13	0.0021			
		42797	960 - 970	0.29	0.0023			
		42798	970 - 980	0.16	0.0011			
		42799	980 - 990	0.32	0.0003			
		42800	990 - 1,000	0.40	0.0011			
		43951	1,000 - 1,010	0.40	0.0024			
		43952	1,010 - 1,020	0.27	0.0040			
		43953	1,020 - 1,030	0.53	0.0006			
		43954	1,030 - 1,040	0.30	0.0015			
		43955	1,040 - 1,050	0.30	0.0011			
		43956	1,050 - 1,060	0.18	0.0015			
		43957	1,060 - 1,070	0.18	0.0019			
		43958	1,070 - 1,080	0.22	0.0130			
		43959	1,080 - 1,090	0.31	0.0010			
		43960	1,090 - 1,100	0.48	0.0050			
		43961	1,100 - 1,113	0.32	0.0090			

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	District	Hole No. 16-0-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Sheet Hole No. 16-0-1

Footage From	To	Description	Sample No.	Length	Analysis

SUMMARY OF MINERALIZATION

Interval	From	To	% Cu	% Mo
230'	0	230	.48	.0028
60'	230	290	.37	.0023
80'	290	370	.48	.0025
50'	370'	420	.19	.0049
70	420	490	.66	.0020
50	490	540	.37	.0027
110	540	650	.58	.0010
72	650	722	.28	.0009

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	District	Hole No. 16-0-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet

Footage From	Footage To	Description % Cu	% Mo	Footage From	Footage To	% Cu	% Mo	Footage From	Footage To	% Cu	% Mo	Sample No.	Footage From	Footage To	Length	Analysis	% Cu		% Mo
0	10	.59	.0056	220	230	.76	.0041	440	450	.64	.0025		660	670			0.16		.0009
10	20	.55	.0006	230	240	.36	.0071	450	460	.78	.0024		670	680			0.14		.0011
20	30	.46	.0027	240	250	.35	.0010	460	470	.78	.0010		680	690			0.32		.0004
30	40	.57		250	260	.36	.0033	470	480	.64	.0038		690	700			0.51		.0006
40	50	.44	.0017	260	270	.53	.0043	480	490	.69	.0017		700	710			0.41		.0010
50	60	.74	.0014	270	280	.28	.0012	490	500	.31	.0040		710	720			0.11		.0003
60	70	.37	.0018	280	290	.31	.0024	500	510	.44	.0025		722				0.28		.0020
70	80	.30	.0023	290	300	.68	.0059	510	520	.34	.0038								
80	90	.46	.0040	300	310	.31	.0020	520	530	.40	.0011								
90	100	.51	.0005	310	320	.51	.0009	530	540	.34	.0019								
100	110	.60	.0100	320	330	.55	.0018	540	550	.93	.0003								
110	120	.33	.0018	330	340	.43	.0043	550	560	.68	.0010		0-290		13.30/29		0.459		
120	130	.47	.0040	340	350	.40	.0004	560	570	.63	.0006								
130	140	.72	.0009	350	360	.54	.0034	570	580	.59	.0230								
140	150	.50	.0003	360	370	.40	.0013	580	590	.35	.0018								
150	160	.60	.0003	370	380	.28	.0076	590	600	.53	.0039								
160	170	.44	.0033	380	390	.29	.012	600	610	.44	.0016								
170	180	.32	.0005	390	400	.13	.0043	610	620	.50	.0006								
180	190	.12	.0058	400	410			620	630	.40	.0003								
190	200	.24	.0063	410	420	.27	.0006	630	640	.55	.0038								
200	210	.43	.0024	420	430	.56	.0002	640	650	.74	.0073								
210	220	.59	.0020	430	440	.56	.0024	650	660	.32	.0010								

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	16-0-1		
Commenced	March 19, 1970	Location	Decline C	Tests at	350' was + 19°	Hor. Comp.	
Completed	March 1970	Core Size	BQ	Corr. Dip	+20° at collar	Vert. Comp.	
Co-ordinates				True Brg.	S45°W	Logged by	RFN + DA
Objective				% Recov.	88.5%	Date	

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet
	S45°W	+20°		722	16-0-1	1 of Sum.

Footage From	To	Description	Sample No.	Length	Analysis
		SUMMARY OF GEOLOGY			
0	102	Low to moderate argillic alteration. Low to mod sericite. Kspar low. Few quartz veins.			
102	373	Moderate to intense kaolinization. Kspar approx. 5-10%. Sericite moderate 153-157'. Emerald Green sericite.			
373	456	Intense argillic alteration with local patches of moderate. Kspar alteration low. Sericite moderate. Most q.v. unmineralized. 385-414 emerald green sericite.			
456	610	Intense argillic alteration. Kspar < 3%. Sericite moderate. Emerald green sericite: 460.5' to 465'; 515' - 517'; 525'-537'; and 563'-573'; and 593'-602'. Patches (1'-3') of intense sericite. Gouge at 468'-470'.			
610	722	50% low to mod and 50% low argillic alteration. Kspar approx 5-8%. Sericite alteration low to moc. Quartz veins mineralized.			

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	16-0-1
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 1

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
					16-0-1

Footage From	Footage To	Description	Sample No.	Length	Analysis					
0		BETHSAIDA QUARTZ DIORITE						0	10	8
								10	20	9
0-102		Low to moderate kaolinization. Poor moderate sericite, qutz. veining poor. Bn > chalco						20	30	8
		common in the sericite, Kspar poor.						30	40	9
		10-12 Band of mafics and magnetite @ 20°						40	50	9
		33-34 Massive sericite @ 10°, dissem. bornite.						50	60	9
		62-63 Shear @ 0-10° ½" gouge. Intense kaolinization adjacent.						60	70	9
		78 Minor shear @ 80° ½" gouge.						70	80	9.5
		95-96 1" qtz. sericite @ 10° bn.						80	90	7
								90	100	8
102-373		Moderate - intense kaolinization. Mafics variable fresh to mostly sericite. Sericite moderate						100	110	9
		1 q.v./3 feet. Bn > chalco. Kspar 5 to occas. 10%.						110	120	8
		129-134 Mafics 10-20%						120	130	9.5
		142 2" q.v., sheared @ 45°						130	140	8
		148-152 Shearing @ 070° up to ¼" gouge.						140	150	9
		153-157 Emerald green sericite, minor shears @ 10-20°						150	160	6
		179-193 Shearing @ 0-10°, gouge common (50% of the core) emerald green sericite main alteration of						160	170	10
		the BQD.						170	180	9.5
		209-213 Shearing @ 10-30° up to ⅓" gouge						180	190	6
		221 Shear @ 30°, ⅓ gouge.						190	200	9.5
		224,229 4" q.v. @ 45° bn						200	210	7
		249 2" q.v. @ 10° bn.						210	220	8

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	District	Hole No. 16-0-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Sheet 2

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
		261 2" q.v. @ 10° bn.						220	230	9.5
		294-295 q.v. @ 30° bn - minor MoS2						230	240	9.5
		308 Shear @ 60° 2" gouge.						240	250	9.5
		310 4" q.v. @ 45° bn						250	260	9.5
		323 Shearing @ 60° ½" gouge.						260	270	8.5
		326-327 q.v. @ 60° bn						270	280	9
		350-353 2" q.v. @ 20° blebs of bn.						280	290	9
		355 8" pink aplite dyke @ 60°.						290	300	9
								300	310	9
373-456		Now mostly intense kaolinization local patches of moderate. Sericite moderate mineralized q.v.'s						310	320	8.5
		uncommon (as noted) Bn> chalco. Kspar poor.						320	330	9.5
		385-414 Pervaisive and emerald green sericite. Dissem. chalco the main sulphide.						330	340	9.5
		386 Shear @ 10° ½" gouge.						340	350	9.5
		389,390 Shears @ 10° ½" gouge.						350	360	10
		403-406 Shearing " 0° minor gouge.						360	370	9.5
		424 1" q.v. @ 30° bn						370	380	10
		429 Shear @ 30° ½" gouge						380	390	9
		444 3" q.v. @ 30°, bn-chalco.						390	400	7
								400	410	6.5
456-610		A section of 95% intense argillic alteration with white, soft, and crumbly plagioclase. There						410	420	9.5
		are only a few occurrences of moderate kalinization and these are confined to < 6 inch lengths						420	430	7
								430	440	8.5

Analysis

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	District	Hole No. 16-0-1	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Sheet 3

Footage From	To	Description	Sample No.	Length	Analysis	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
		Emerald green sericite is prominent in several zones. The plag. in these zones has been completely							440	450	8
		altered to e.g. sericite. the sections are:							450	460	9.5
		from 460.5 to 465'							460	470	9
		from 515' to 517'							470	480	9.5
		from 525' to 537'							480	490	10
		spotty 563' to 573'							490	500	9
		from 593' to 597'							500	510	10
		from 600' to 602'							510	520	9.5
		Biotite occurrence is spotty and generally limited to small (~/mm) flakes which are partially							520	530	9.5
		chloritized. Kspar is rare in this section with the only visible kspar along a low fractures.							530	540	10
		Definitely < 3% of core.							540	550	10
		Sericite alteration (aside from emerald green sericite) is moderate with sericite on numerous							550	560	10
		fractures and in areas of quartz veining. In some zones the sericite is intense over 1 or 2'							560	570	10
		sections such as:							570	580	10
		462' -463' Intense (pervaisive)sericite							580	590	10
		472'-473' "							590	600	9.5
		544'-545' "							600	610	9.5
		531'-534' "							610	620	10
		565'-568' "							620	630	9.5
		Quartz veins 462' 2 1" q.v. at 80° bn							630	640	10
		468' 2 1" q.v. at 90° + cp - sericite borders.							640	650	8.5
		488' 4" q.v. at 80° good bn + cp - sericite borders.							650	660	9

211-9437—H.P.

Drill Hole Record

Cominco

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Sheet 4

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.

Footage From	To	Description	Sample No.	Length	Analysis					
		494'-495' quartz with sericite + cp - slip plane at 30°						660	670	10
		508'-510' quartz on shear at 20° with cp + moly.						670	680	10
		517'-518' Quartz on shear at 20° with cp + moly.						680	690	9.5
		525 1" q.v. at 50° bn						690	700	8
		534 4½" q.v. with cp						700	722	10.5
		543.5 2" q.v. with bn + sericite								
		553 3" q.v. with bn + sericite.								
		560 1½" q.v. with minor bn - shear at 45°								
		(Fault gouge 469' to 470'								
		(Shear around 517'								
		Cu grade ≃ 0.60% to 0.65%. Cp : Bn + 1:1.5 overall.								
610-722		Low to mod and low argillic a Heration characterize this section. The split between low to mod and								
		low is about 50:50. The fresher sections contain white plag. with fresh biotite flakes ranging								
		from 1 cm. in size. The low to mod sections contain finer, partially chloritized biotite and the								
		plag. is green to buff colored.								
		Kspar alteration is low to mod with the low to mod argillic zones contain about 3-5% more kspar								
		than the low argillic sections. Overall kspar 5%-7%. Sericite alteration low to mod overall.								
		There are 5 or 6 six inch length of pervaissive sericite the remainder of the section has sericite								
		slong fractures. Quartz veining: 618' 1" q.v. at 45° bn with sericite borders.								
		619 1½" q.v.with bn and cp								

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Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. | Sheet 5

Footage From	To	Description	Sample No.	Length	Analysis
		633' 1" q.v. at 45° with bn + cp.			
		634' 3" q.v. at 45° with good bn + cp.			
		640' 4" q.v. at 45° (vuggy) bn + cp.			
		648' 3" q.v. with bn + cp.			
		650' 3" q.v. with minor bn + cp.			
		659' 2" q.v. with bn ≠ cp			
		676.5' 1" q.v. with +30° minor bn + cp.			
		705' 2" q.v. at 0° minor bn + cp.			
		698 2" of porphyritic dyke rock at 45° - fine grained K-spar? matrix with plag, quartz & biotite phenocrysts.			
		702 4" of same fine-grained, pink dyke, (aplitic)			
		Cu grade 0.40 to 0.45% Good mineralization in quartz veins with both Bn & Cp = however low to mod sericite lowers grade somewhat.			
		Bn : Cp = 2:1			

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Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Highland Valley	Hole No.	16 - 0 - 2				
Commenced	March 27th, 1970	Location	Decline B	Tests at	400	800	Az = 221°	Hor. Comp.	
Completed	April 8th, 1970	Core Size	BQ	Corr. Dip	-20°	-14°		Vert. Comp.	
Co-ordinates				True Brg.	S45°W			Logged by	M. D. McInnis D. Anderson
Objective				% Recov.	97.4			Date	March 29th - April 8th, 1970

Claim | T Brg. S45°W | Collar Dip -20° | Elev. | Length 1,206 | Hole No. 16-0-2 | Sheet 1.

Footage From	To	Description Summary of Geology	Sample No.	Length	Analysis
		All Bethsaida quartz diorite except where noted.			
0 -	97	Low to moderate argillic alteration; Kspar 5% -8%; sericite low to moderate.			
97 -	125	Low argillic alteration; Kspar <5%; sericite low.			
125 -	341	Moderate to intense argillic alteration; Kspar about 3% - 8%; sericite low to moderate; some spotty emerald green sericite, some intense sericite zones; green dyke 329.5 - 337.			
341 -	394	Intense kaolinization; sericite moderate to intense; Kspar about 5% - 8%.			
394 -	599	Low to moderate argillic alteration, patches of intense; sericite intense; Kspar <5%; first fracture with gypsum 443, also at 518 and 535.			
599 -	626	Moderate to intense argillic alteration; sericite moderate to intense; Kspar ≤5%; stringers of gypsum.			
626 -	680	Low to moderate argillic alteration; Kspar about 10% - 15%; sericite low to moderate.			
680 -	827	Moderate to intense argillic alteration; sericite development moderate to intense;			

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Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No.	16 - 0 - 2	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 16-0-2 | Sheet 2.

Footage From	To	Description	Sample No.	Length	Analysis
		Kspar ≤5%; quartz and sericite zone 765 - 780.			
827 -	925	Intense argillic alteration; intense sericite; Kspar about 8% - 12% and pervasive; still gypsum on fractures.			
925 -	1,084	Low to moderate argillic alteration; Kspar low at 3% - 5%; sericite low to moderate; still gypsum on fractures and as stringers.			
		1,013 - 1,015.5 dark green dyke with plagioclase and quartz phenocrysts.			
		1,019 - 1,025 dark green dyke; disseminated bornite and chalcopyrite.			
		1,029 - 1,030 porphyry with green ground mass.			
		1,030 - 1,035 lighter porphyry with more Kspar.			
1,084 -	1,203	Bethsaida porphyry dyke; ground mass either greenish-white or pinkish, two varieties alternate; argillic alteration low; sericite development moderate.			
1,203 -	1,206	Bethsaida quartz diorite with moderate argillic alteration; Kspar about 8%; moderate sericite.			
1,206		End Hole 16 - 0 - 2.			

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Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	16 - 0 - 2
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 3.

Hole No. 16-0-2

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From	To	Description Summary of Mineralization			Sample No.	Length	Analysis					
		Length	% Cu	% Mo								
0 -	120	120	0.48	0.0045								
120 -	200	80	0.43	0.0054								
200 -	420	220	0.58	0.0074								
420 -	460	40	0.39	0.0023								
460 -	640	180	0.66	0.0030								
640 -	720	80	0.41	0.0010								
720 -	960	240	0.55	0.0043								
960 -	1,206	246	0.36	0.0014								

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Scale

Colour Plot & Dipe

0

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No. 16 - 0 - 2		
Commenced		Location	Tests at	Hor. Comp.	
Completed		Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates			True Brg.	Logged by	
Objective			% Recov.	Date	

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 16-0-2 | Sheet 4..

Footage From	To	Description	Sample No.	Length	Analysis	Recovery			
		All Bethsaida quartz diorite except where noted.				0	-	10	4.0
						10	-	20	8.0
0 -	97	Low to moderate argillic alteration with pale green, occasionally buff coloured				20	-	30	10.0
		plagioclase; Kspar approximately 5% - 8%, locally increasing to as much as 15%;				30	-	40	9.0
		Chloritization of biotite grains varies from low in the first part of the section				40	-	50	10.0
		to very low in the last part, some biotite grains sericitized; frequence of quartz				50	-	60	10.0
		veins about one per foot, generally have border of sericite and may or may not have				60	-	70	9.5
		Kspar envelope; bornite > chalcopyrite; sericite development over section low to				70	-	80	10.0
		moderate.				80	-	90	10.0
		19 1' of intense sericitization.				90	-	100	10.0
		31 intense fracturing at 30° over 1'.				100	-	110	10.0
		37.5 shear at 10°; approximately 3" gouge.				110	-	120	10.0
		81 - 83 intense sericitization bordering three 1" quartz veins.				120	-	130	10.0
		83 - 88 Kspar alteration increases noticeably; Kspar 15% - 20%.				130	-	140	9.0
						140	-	150	9.5
97 -	125	Low argillic alteration with pale green, hard plagioclase; development of Kspar				150	-	160	9.5
		weak, generally <5%; biotite grains fresh to slightly chloritized, some have been				160	-	170	10.0
		sericitized; quartz veins down to about one per 2.5 feet; sericite alteration cor-				170	-	180	10.0
		respondingly low; bornite > chalcopyrite.				180	-	190	10.0
		114 - 115 Kspar content increases to 5% - 8%.				190	-	200	10.0
						200	-	210	10.0
125 -	341	Moderate to intense argillic alteration; plagioclase grains vary from light green				210	-	220	9.5

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No. 16 - 0 - 2		Sheet 5.
Commenced		Location	Tests at	Hor. Comp.	
Completed		Core Size	Corr. Dip	Vert. Comp.	
Co-ordinates			True Brg.	Logged by	
Objective			% Recov.	Date	

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 16-0-2

Footage From	To	Description	Sample No.	Length	Analysis	Recovery
		to cream, chalky grians; sericite development varies from low to moderate, is			220 - 230	10.0
		found bordering quartz veins or singularly filling fractures with widths up to			230 - 240	9.5
		1/2"; Kspar content 3% - 8%; quartz veins about one per two feet, widths vary from			240 - 250	10.0
		5" - 1', generally bordered by sericite and carry bornite and chalcopyrite; bornite			250 - 260	10.0
		>chalcopyrite; biotite absent in parts and where present is slightly chloritized or			260 - 270	10.0
		sericitized.			270 - 280	10.0
		141.5 - 142.5 1' quartz vein at 15°; carries bornite and chalcopyrite; de-			280 - 290	10.0
		velopment of emerald green sericite bordering vein.			290 - 300	10.0
		142.5 shear; 2" gouge.			300 - 310	10.0
		143 - 144.5 1.5' quartz vein at 30°; carries bornite and chalcopyrite.			310 - 320	10.0
		147 5" quartz vein with bornite and chalcopyrite.			320 - 330	10.0
		160 shear at 55°; 0.25" gouge.			330 - 340	10.0
		177 - 183 shear zone; development of emerald green sericite; intense			340 - 350	10.0
		argillic alteration.			350 - 360	10.0
		185 2" shear at 55°; 0.5" gouge.			360 - 370	10.0
		194 - 196 shear zone cut by several 0.5" quartz veins; moderate to in-			370 - 380	10.0
		tense sericitization and argilization; emerald green sericite			380 - 390	10.0
		development.			390 - 400	9.5
		199 8" shear zone with 0.5" gouge.			400 - 410	10.0
		200 - 204 shear zone with two sections of 1" gouge; intense argillic al-			410 - 420	9.5
		teration; very little Kspar.			420 - 430	10.0
		225 - 230 shear zone cut by 4" and 2" quartz veins carrying bornite and			430 - 440	10.0

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No.	16 - 0 - 2	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Sheet 6.

Hole No. 16-0-2

Claim	T Brg.	Collar Dip	Elev.	Length

Footage From	To	Description	Sample No.	Length	Analysis		Recovery	
		chalcopyrite.			440	-	450	10.0
		249 - 263 emerald green sericite; intense argillic alteration; no Kspar;			450	-	460	10.0
		4" sections of gouge at 251, 253, 260; cut by several quartz			460	-	470	9.5
		veins.			470	-	480	10.0
		282 - 283 shear zone; 5" gouge.			480	-	490	9.0
		293 - 294 shear zone at 50°; 3" gouge.			490	-	500	10.0
		306 - 315 intense sericite development.			500	-	510	10.0
		317 - 326.5 shear zone at 10°; 6" gouge.			510	-	520	10.0
		329.5 - 337 green dyke at 50°.			520	-	530	10.0
					530	-	540	10.0
341 -	394	Intense argillic alteration with white, chalky plagioclase; sericite development			540	-	550	10.0
		moderate to intense; quartz veins about one per two feet, carry bornite and chalco-			550	-	560	10.0
		pyrite; bornite > chalcopyrite; biotite grains vary from partially to wholly serici-			560	-	570	10.0
		tized, those unaffected by sericitization are slightly chloritized; Kspar content			570	-	580	10.0
		generally < 5%, though patches up to 8% - 10%.			580	-	590	10.0
					590	-	600	10.0
394 -	599	Low to moderate argillic alteration with occasional patches of intense; sericite			600	-	610	10.0
		development generally intense; biotite grains generally fresh to slightly chlori-			610	-	620	10.0
		tized, however sericitized in some parts; quartz veins about one per three feet,			620	-	630	10.0
		contain bornite and chalcopyrite; Kspar generally < 5%.			630	-	640	10.0
		425 small shear at 50°; 0.5" gouge.			640	-	650	10.0
		443 0.5" fracture at 45° filled with gypsum.			650	-	660	10.0

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No.	16 - 0 - 2	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Sheet 7.

Hole No. 16-0-2

Claim	T Brg.	Collar Dip	Elev.	Length

Footage From	To	Description	Sample No.	Length	Analysis		Recovery
		497 - 500 Kspar up to 10%.			660	670	10.0
		512 - 513 1' quartz vein with bornite and chalcopyrite.			670	680	10.0
		517 shear at 45°; 0.5" gouge.			680	690	10.0
		518 0.25" fracture at 45° filled with gypsum.			690	700	10.0
		535 0.25" fracture at 45° filled with gypsum.			700	710	10.0
					710	720	10.0
599 -	626	Moderate to intense argillic alteration: biotite grains chloritized and serici-			720	730	9.5
		tized; sericite development moderate to intense; Kspar content < 5%; quartz veins			730	740	10.0
		about one per three feet, carry bornite and chalcopyrite; bornite > chalcopyrite;			740	750	10.0
		several stringers of gypsum.			750	760	9.5
		617 6" quartz vein; bornite and chalcopyrite.			760	770	9.5
					770	780	8.5
626 -	680	Low to moderate argillic alteration with fresh-appearing to light green plagioclase			780	790	10.0
		grains; Kspar 10% - 15%; biotite grains slightly chloritized or sericitized; seri-			790	800	10.0
		cite development low to moderate; hematite present filling hairline fractures or as			800	810	9.5
		smears; several stringers of gypsum present; two veinlets of gypsum border quartz			810	820	9.5
		veins at 40°.			820	830	9.0
					830	840	10.0
680 -	827	Moderate to intense argillic alteration; sericite development moderate to intense;			840	850	9.0
		Kspar content < 5%; quartz veins about one per 1.5 feet; biotite grains either			850	860	9.5
		slightly chloritized or sericitized.			860	870	10.0
		711 6" shear zone with emerald green sericite; 0.25" gouge.			870	880	10.0

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No.	16 - 0 - 2	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Sheet 8.

Hole No. 16-0-2

Footage From	To	Description	Sample No.	Length	Analysis Claim	T Brg.	Collar Dip	Elev.	Length	Recovery
		725 6" shear at 20°; 1.5" gouge.			880	-	890			10.0
		727 4" shear at 45°; 0.5" gouge.			890	-	900			10.0
		731 3" shear at 30°; 1" gouge.			900	-	910			10.0
		765 - 780 largely quartz and sericite zone; only minor mineralization;			910	-	920			10.0
		some molybdenum; very broken and sheared rock; abundant gouge.			920	-	930			10.0
		784 brick-red hematite on fracture planes.			930	-	940			9.5
		793.5 shear at 40°; 0.25" gouge.			940	-	950			10.0
		818 shear at 60°; 0.25" gouge.			950	-	960			9.5
					960	-	970			10.0
827 -	925	Well developed alteration; intense argillic alteration with soft, yellowish or			970	-	980			10.0
		chalky, white plagioclase grains; sericite development intense and often pervasive;			980	-	990			9.5
		Kspar about 8% - 12% and pervasive rather than enveloping; quartz veins only about			990	-	1,000			9.5
		one per eight feet, carry bornite and chalcopyrite; bornite > chalcopyrite; bornite			1,000	-	1,010			10.0
		often with halo of brick-red hematite is found disseminated through sericite; rock			1,010	-	1,020			10.0
		not very fractured; biotite grains either slightly chloritized or sericitized.			1,020	-	1,030			10.0
		855 small shear at 40° with 1/8" gouge.			1,030	-	1,040			9.0
		875 0.5" gypsum vein at 70°.			1,040	-	1,050			10.0
		877.5 small shear at 85° with 1/8" gouge.			1,050	-	1,060			10.0
					1,060	-	1,070			10.0
925 -	1,084	Generally low to moderate argillic alteration; plagioclase grains difficult to			1,070	-	1,080			10.0
		scratch and range in colour from buff to light green; sericite development general-			1,080	-	1,090			10.0
		ly low, occurs mainly along fractures or bordering quartz veins; biotite grains			1,090	-	1,100			9.5

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	16 - 0 - 2
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 9.

Hole No. 16-0-2

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From	To	Description		Sample No.	Length	Analysis		Recovery
		appear unaltered or only slightly sericitized; Kspar low at about 3% - 5%; brick-				1,100	- 1,110	9.5
		red hematite found along some fracture plane surfaces or occasionally as halo				1,110	- 1,120	9.0
		around bornite grains; quartz veins about one per ten feet.				1,120	- 1,130	9.5
		928	fine-grained orthoclase-rich dyke at 45°, about 14" wide;			1,130	- 1,140	10.0
			mineralized with chalcopyrite within dyke itself and along			1,140	- 1,150	9.7
			fractures; sericite fills hairline fractures.			1,150	- 1,160	9.5
		945 - 948	biotite-rich section; fine- to medium-grained plagioclase as-			1,160	- 1,170	10.0
			sociated with biotite has undergone intense argillic altera-			1,170	- 1,180	10.0
			tion; sericite development moderate.			1,180	- 1,190	9.5
		951 - 960	highly fractured and broken rock; 6" gouge at 85°; gypsum			1,190	- 1,200	8.0
			stringers at 85°; hematite along some fractures.			1,200	- 1,206	5.0
		977	0.25" gypsum stringer at 85°.					
		997 - 1,002	intense, pervasive sericite development.					
		1,013 - 1,015.5	fine-grained, dark green dyke with phenocrysts of feldspar					
			and quartz; mineralization and sericitization along fractures;					
			width 2', at 30° to core.					
		1,019 - 1,020	another green dyke as in 1,013 - 1,015.5.					
		1,020 - 1,025	darker Bethsaida with green colouration and finely dissemi-					
			nated bornite and chalcopyrite with hematite perimeters; a					
			finer, less distinguishable Bethsaida; no biotite flakes;					
			effect of dyke rock?					
		1,029 - 1,030	porphyry - green matrix with plagioclase and quartz					

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District	Hole No.	16 - 0 - 2	
Commenced		Location	Tests at		Hor. Comp.
Completed		Core Size	Corr. Dip		Vert. Comp.
Co-ordinates			True Brg.		Logged by
Objective			% Recov.		Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 16-0-2 | Sheet 10.

Footage From	To	Description	Sample No.	Length	Analysis
		phenocrysts; fine bornite.			
		1,030 - 1,035 lighter porphyry with more Kspar.			
		1,041 - 1,042 green porphyry with fewer phenocrysts; fine biotite.			
		1,042 - 1,084 regular low to moderately altered Bethsaida quartz diorite			
		with moderate sericite; good bornite and chalcopyrite in seri-			
		cite.			
		1,048 0.25" gypsum at 45°; fracture.			
		1,055.5 0.25" gypsum at 45°; fracture			
		1,056.5 0.25" gypsum at 45°; fracture.			
		1,057 1/8" gypsum plane at 10°.			
		1,064 0.25" gypsum at 45°; fracture.			
		Grade from 1,020 - 1,084 about 0.45% - 0.50% Cu.			
1,084	- 1,203	All Bethsaida porphyry dyke with a fine (colour variable) matrix; a greenish-white			
		variety of dyke closely related and interchanges with pinkish dyke rock; first va-			
		riety has large (to 1 cm.) plagioclase phenocrysts and quartz phenocrysts with bio-			
		tite present as small (1 mm.) flakes; pink variety has more orthoclase and the			
		plagioclase phenocrysts are less evident, quartz phenocrysts still obvious; first			
		variety except where listed below; argillic alteration low; Kspar 5% - 10% in first			
		variety and 15% - 35% in second; sericite moderate, along narrow but numerous frac-			
		tures, quite well mineralized; quartz veins less than one per two feet, only few			
		0.25" - 0.50".			

Scale

Colour Plot
Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	16 - 0 - 2
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 16-0-2 | Sheet 11.

Footage From	To	Description	Sample No.	Length	Analysis
		1,088 - 1,096 pink dyke.			
		1,105 - 1,107 pink dyke.			
		1,108.5 - 1,122 pink dyke.			
		1,113 3/4" quartz vein at 30°; bornite and chalcopyrite.			
		1,132 - 1,140 pink dyke.			
		1,146 - 1,154 pink dyke.			
		1,163 - 1,182 pink dyke.			
		1,172 - 1,176 intense argillic alteration.			
		1,181 1" quartz vein at 45°; massive bornite and chalcopyrite.			
		1,184 - 1,200 pink dyke.			
		1,190 - 1,191 1/8" of gypsum and a few other narrow fractures in dyke.			
		Grade about 0.40% Cu.			
1,203 - 1,206		Regular Bethsaida quartz diorite with moderate argillic alteration; Kspar about 8%;			
		moderate sericite development; upper and lower contacts of dyke gradational over			
		3" to 4".			
1,206		End Hole 16 - 0 - 2.			
MDMcI:DA:jr					
Vancouver Office					
May 8th, 1970					

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Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	16 - 0 - 2
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 16-0-2 | Sheet 12.

Footage From To | Description | Analysis

Sample No.	Footage	% Cu	% Mo	Sample No.	Footage	% Cu	% Mo	Sample No.	Length
43551	10 - 20	0.46	0.0054	43573	230 - 240	0.65	0.0086		
43552	20 - 30	0.42	0.0054	43574	240 - 250	0.36	0.0037		
43553	30 - 40	0.50	0.0011	43575	250 - 260	0.68	0.0055		
43554	40 - 50	0.57	0.0026	43576	260 - 270	0.50	0.028		
43555	50 - 60	0.25	0.0072	43577	270 - 280	1.3	0.0059		
43556	60 - 70	0.51	0.0043	43578	280 - 290	0.64	0.0029		
43557	70 - 80	0.36	0.012	43579	290 - 300	0.54	0.0038		
43558	80 - 90	0.51	0.0046	43580	300 - 310	0.48	0.0039		
43559	90 - 100	0.51	0.0010	43581	310 - 320	0.53	0.0240		
43560	100 - 110	0.51	0.039	43582	320 - 330	0.33	0.012		
43561	110 - 120	0.67	0.0030	43583	330 - 340	0.26	0.011		
43562	120 - 130	0.38	0.0003	43584	340 - 350	0.41	0.0085		
43563	130 - 140	0.46	0.0012	43585	350 - 360	0.59	0.0071		
43564	140 - 150	0.26	0.0073	43586	360 - 370	0.46	0.015		
43565	150 - 160	0.26	0.0073	43587	370 - 380	0.65	0.0018		
43566	160 - 170	0.37	0.0097	43588	380 - 390	0.72	0.020		
43567	170 - 180	0.44	0.0059	43589	390 - 400	0.45	0.0036		
43568	180 - 190	0.75	0.014	43590	400 - 410	0.70	0.0013		
43569	190 - 200	0.35	0.0015	43591	410 - 420	0.74	0.0005		
43570	200 - 210	0.49	0.0021	43592	420 - 430	0.39	0.0031		
43571	210 - 220	0.59	0.0037	43593	430 - 440	0.32	0.0009		
43572	220 - 230	0.76	0.0073	43594	440 - 450	0.44	0.0037		

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	16 - 0 - 2
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 16-0-2 | Sheet 13.

Footage From To | Description

Sample No.	Footage	% Cu	% Mo	Sample No.	Footage	% Cu	% Mo	Sample No.	Length	Analysis
43595	450 - 460	0.42	0.0015	39917	670 - 680	0.30	0.0007			
43596	460 - 470	0.76	0.0010	39918	680 - 690	0.46	0.0009			
43597	470 - 480	0.94	0.0027	39919	690 - 700	0.58	0.0001			
43598	480 - 490	0.74	0.0014	39920	700 - 710	0.37	0.014			
43599	490 - 500	0.41	0.0003	39921	710 - 720	0.48	0.0016			
43600	500 - 510	0.71	0.0018	39922	720 - 730	0.80	0.0011			
39901	510 - 520	0.71	0.012	39923	730 - 740	0.39	0.0007			
39902	520 - 530	0.42	0.0025	39924	740 - 750	0.76	0.030			
39903	530 - 540	0.29	0.0083	39925	750 - 760	0.42	0.0035			
39904	540 - 550	0.69	0.0004	39926	760 - 780	1.0	0.0018			
39905	550 - 560	0.73	0.0013	39928	780 - 790	0.44	0.0030			
39906	560 - 570	0.90	0.0037	39929	790 - 800	0.51	0.0012			
39907	570 - 580	0.42	0.0008	39932	800 - 810	0.50	0.0027			
39908	580 - 590	0.59	0.0010	39933	810 - 820	0.39	0.0006			
39909	590 - 600	0.90	0.0042	39934	820 - 830	0.43	0.018			
39910	600 - 610	0.37	0.0028	39935	830 - 840	0.62	0.0010			
39911	610 - 620	0.88	0.0014	39936	840 - 850	0.31	0.0010			
39912	620 - 630	0.63	0.0017	39937	850 - 860	0.61	0.0014			
39913	630 - 640	0.74	0.0067	39938	860 - 870	0.35	0.0015			
39914	640 - 650	0.42	0.0013	39939	870 - 880	0.40	0.0005			
39915	650 - 660	0.36	0.0019	39940	880 - 890	0.24	0.0007			
39916	660 - 670	0.30	0.0003	39941	890 - 900	0.66	0.019			

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	Valley Copper	District		Hole No.	16 - 0 - 2
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 16-0-2 | Sheet 14.

Footage From	To	Description Sample No.	Footage	% Cu	% Mo	Sample No.	Footage	% Cu	% Mo	Sample No.	Length	Analysis
		39942	900 - 910	0.61	0.0009	38364	1,120 - 1,130	0.22	0.0015			
		39943	910 - 920	0.69	0.0014	38365	1,130 - 1,140	0.14	0.0020			
		39944	920 - 930	0.51	0.0004	38366	1,140 - 1,150	0.36	0.0059			
		39945	930 - 940	0.51	0.0004	38367	1,150 - 1,160	0.49	0.0027			
		39946	940 - 950	0.66	0.0013	38368	1,160 - 1,170	0.40	0.0012			
		39947	950 - 960	1.0	0.0041	38369	1,170 - 1,180	0.22	0.0018			
		39948	960 - 970	0.22	0.0009	38370	1,180 - 1,190	0.36	0.0017			
		39949	970 - 980	0.27	0.0006	38371	1,190 - 1,206	0.26	0.0035			
		38350	980 - 990	0.32	0.0008							
		38351	990 - 1,000	0.62	0.0043							
		38352	1,000 - 1,010	0.55	0.0009							
		38353	1,010 - 1,020	0.47	0.0004							
		38354	1,020 - 1,030	0.40	0.0006							
		38355	1,030 - 1,040	0.22	0.0024							
		38356	1,040 - 1,050	0.22	0.0001							
		38357	1,050 - 1,060	0.33	0.0013							
		38358	1,060 - 1,070	0.43	0.0006							
		38359	1,070 - 1,080	0.44	0.0002							
		38360	1,080 - 1,090	0.40	0.0001							
		38361	1,090 - 1,100	0.67	0.0003							
		38362	1,100 - 1,110	0.27	0.0009							
		38363	1,110 - 1,120	0.40	0.0004							

Scale: 1" = 1"

Colour Plot & Dips

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	16-0-3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No. 16-0-3 | Sheet

Footage From	Footage To	Description			Sample No.	Length	Analysis
		SUMMARY OF MINERALIZATION					
		Interval	% Cu	% Mo			
0	290	290	.45	.0045			
290	530	240	.57	.0039			
530	580	50	.35	.0114			
580	803	223	1.27	.0180			

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	District	Hole No. 16-0-3	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.	Sheet

Footage From	To	Description % Cu	% Mo	Footage From	To	% Cu	% Mo	Footage From	To	% Cu	% Mo	Footage From	To	Sample No.	Length	% Cu	Analysis % Mo
0	10	.12	.0002	220	230	.43	.0025	440	450	.65	.0012	660	670			.62	.0028
10	20	.41	.0032	230	240	.25	.0016	450	460	.71	.0002	670	680			.66	.015
20	30	.50	.0035'	240	250	.48	.0029	460	470	.49	.0002	680	690			.37	.0021
30	40	.76	.0084	250	260	.32	.0026	470	480	.48	.0007	690	700			2.9	.025
40	50	.39	.010	260	270	.45	.0084	480	490	.56	.0039	700	710			3.4	.027
50	60	.44	.0080	270	280	.40	.0029	490	500	.41	.0040	710	720			3.8	.0088
60	70	.52	.0120	280	290	.32	.0014	500	510	.55	.0013	720	730			.76	.0012
70	80	.38	.0190	290	300	.57	.0029	510	520	.40	.0015	730	740			1.1	.0011
80	90	.48	.0035	300	310	.56	.020	520	530	.68	.015	740	750			.48	.083
90	100	.49	.0019	310	320	.68	.0020	530	540	.39	.011	750	760			.54	.011
100	110	.70	.012	320	330	.56	.0044	540	550	.25	.017	760	770			.42	.0008
110	120	.34	.0061	330	340	.52	.0062	550	560	.43	.0087	770	780			.31	.0050
120	130	.46	.0068	340	350	.41	.0096	560	570	.31	.019	780	790			.31	.0021
130	140	.65	.0006	350	360	.62	.0009	570	580	.35	.0025	790	800			.56	.0019
140	150	.71	.0012	360	370	.51	.0003	580	590	.51	.0015						
150	160	.53	.0015	370	380	.99	.0005	590	600	3.5	.049						
160	170	.78	.0014	380	390	.60	.0007	600	610	3.1	.025						
170	180	.43	.0012	390	400	.70	.0003	610	620	1.6	.068						
180	190	.46	.0003	400	410	.47	.0043	620	630	.27	.023						
190	200	.47	.0032	410	420	.50	.0057	630	640	.86	.028						
200	210	.37	.0006	420	430	.69	.0029	640	650	.67	.0037						
210	220	.30	.0005	430	440	.38	.0016	650	660								

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	16-0-3		
Commenced	April 1970	Location	Decline C	Tests at	400' was 0° Az:037'	Hor. Comp.	
Completed	April 1970	Core Size	BQ	Corr. Dip		Vert. Comp.	
Co-ordinates				True Brg.	045°	Logged by	DA & MDM
Objective				% Recov.	86.6%	Date	April 15, 1970

Claim	T Brg.	Collar Dip	Elev.	Length 803'	Hole No. 16-0-3	Sheet 1 of Sum.

Footage From	To	Description	Sample No.	Length	Analysis
		SUMMARY OF GEOLOGY			
		All Bethsaida phase except where noted.			
0	171	Moderate argillic alteration kspar content averages 12%. Sericite moderate.			
171	234	Low to moderate argillic alteration. Kspar content approx. 8-12%. Sericite low to moderate. Some emerald-green sericite.			
234	323	Low to moderate and moderate argillic alteration. Kspar content averages 10%. Sericite low to moderate. Not many qtz. veins.			
323	779	Intense argillic alteration. Kspar content 57%. Sericite moderate. Some emerald-green sericite. Fault zone from 590-655.			
779	803	Low to moderate argillic alteration. Sericite is low. Kspar content is 3-5%.			
803		END OF HOLE			

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	16-0-3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 1

Hole No. 16-0-3

Footage From	Footage To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Analysis
		All Bethsaida quartz diorite except where noted.						0	10	8.
0	171	First 5' is lencocratic (light brown) dyke rock. Plag. + a few kspar phenocrysts. Rest of						10	20	9.
		section is generally of moderate argillic alteration with the plag green and just scratchable.						20	30	8.5
		The first 11' of this section might be called low to moderate. The remainer is moderate except						30	40	9.
		for intense sections listed below:						40	50	10
		17-24.5)						50	60	9.5
		48-55) White, crumbly plagioclase						60	70	10
		83-86)						70	80	9.5
		132-137)						80	90	10
		Biotite partially chloritized or completely removed. Kspar alteration overall approx. 12%.						90	100	8.
		Lower kspar in intense zones of argillic alteration. Kspar along fractures, but also in short						100	110	8.5
		zones to 5" in length. Sericite alteration moderate - not pervaisive - just along fractures -						110	120	9.5
		up to 1" wide zones.						120	130	9.5
		Quartz veins: 5.5 1" q.v. at 30° sericite borders 1/8" some bn + cp.						130	140	10
		18 1" q.v. at 60° bn						140	150	9.
		22 1" q.v. at 90° bn						150	160	10
		34.5 2" q.v. at 45° coarsely crystalline - minor cp.						160	170	9.5
		46.5 1½" q.v. at 60° good bn						170	180	9.5
		73 3" of quartz, bn along edges.						180	190	9.5
		75 1" q.v. at 35° kspar then sericite borders bn.						190	200	8.5
		75-171 2 or 3 q.v./foot -generally mineralized with bn and minor cp.						200	210	8.5
		108-109 Quartz with sericite + minor bn.						210	220	10.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property VALLEY COPPER	District HIGHLAND VALLEY	Hole No. 16-0-3	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Sheet 2

Hole No. 16-0-3

Footage From	To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.
		147.5-148.5 Emerald green sericite.						220	230	10
		2" of gouge at 29' - sheared (black) sulphides.						230	240	10
		49' 6" of fault gouge.						240	250	10
		Around 75'-85' Hematite on a few fractures.						250	260	9.5
		Cu grade from 0' to 153' is 0.40%						260	270	10
		158'-159') Generally f.g., pink rock with no well defined phenocrysts.						270	280	10
		163'-169') Mineralized along fractures.						280	290	9.5
								290	300	10
171-234		A little fresher than previous section. Low to mod. argillic alteration with greenish-white						300	310	9
		plag and fresh or only partially chloritized biotite. Some mod. and also intense zones:						310	320	9
		182-187 Moderate argillic						320	330	10
		204-205 Intense argillic						330	340	7
		208-209 Intense argillic						340	350	7.5
		kspar approx. 8-12%. Along fractures and q.v.'s. Sericite low to moderate.						350	360	10
		Quartz veins: 174.5 1" q.v. at 80° barren						360	370	9.5
		180.5 1" q.v. at 50° barren - kspar borders.						370	380	9.5
		183 1" q.v. at 80°, bn + cp - kspar borders.						380	390	10
		196 1" q.v. at 20°, Minor bn + cp.						390	400	8.5
		207 2" q.v. at 85°, minor bn + cp.						400	410	9
		224 6" of quartz. Dissem. bn + cp in q.v.						410	420	10
		About 2 quartz veins/foot - most <1" wide - only average mineralization.						420	430	9.5
								430	440	9.5

Analysis

211-9437—H.P.

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	160-3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 3

Hole No. 16-0-3

Footage From	Footage To	Description	Sample No.	Length	Claim	T Brg.	Collar Dip	Elev.	Length	Analysis
		204.5-205.5)						440	450	9
		213.5-215 } Emerald green sericite developjent instead of kaolinization.						450	460	10
		223-224 }						460	470	8
		Cu grade approx. 0.35 to 0.40%. Bn : Cp = 2:1						470	480	10
								480	490	9.5
234	323	Same as section before last one. Some low to mod. and some moderate argillic alteration with						490	500	10
		greenish-white plag. Biotite evident for first 26' of section then absent, except for a few						500	510	9.
		small remnant flakes.						510	520	9.3
		Kspar alteration overall about 10%. Some 6" of 25% kspar. Sericite alteration low to moderate						520	530	9.2
		mainly in narrow fractures zones.						530	540	7.5
		Quartz veins: 249 1" q.v. at 70° bn						540	550	9
		290.5 1" q.v. at 40° bn						550	560	8
		294.5 3" of quartz with bn + sericite.						560	570	9.5
		298.5 3" of quartz with bn ± cp.						570	580	10
		Not too many q.v.'s in this section except for last 15' where 2 q.v.'s occur per foot - all						580	590	9
		mineralized.						590	600	8.5
		235 3/4" of f.g., pink dyke (?) quartz phenocrysts. Some						600	610	9
		effect on surrounding rock.						610	620	5
		276.5 4" of f.g., almost aplitic dyke. Cut by quartz veins at						620	630	4
		45° to core axis. Contains quartz phenos.						630	640	4
		286 Pink, f.g. dyke for 5".						640	650	3.5
		313-314 Emerald green sericite.						650	660	7.5

Cu grade approx. 0.35% overall. Bn : Cp + 3:1.

211-9437—H.P.

Scale

Colour Plot & Dips

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	16-0-3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 4

Claim	T Brg.	Collar Dip	Elev.	Length	Hole No.

Footage From	Footage To	Description	Sample No.	Length	Analysis					
323-779		Intense argillic alteration with light green kaolinization and in some cases emerald green						660	670	8.5
		sericite. The plag. is almost completely altered while biotite is present only as a few random						670	680	9.5
		flakes throughout this section.						680	690	6.5
		Kspar alteration low approx. 5-7% but there are 5' lengths with up to 10% kspar scattered though						690	700	7
		rock. Sericite alteration moderate with the majority of sericite confined to narrow fracture						700	710	5.5
		zones. Approx. 3 pervasive 6" section.						710	720	7.5
		Quartz veins: 333 4" of quartz, barren						720	730	5.5
		370.5 3" q.v. at 40° bn						730	740	7
		376 1" q.v. at 45°, good bn						740	750	8.5
		394 2" q.v. at 20°, good bn						750	760	9
		409 6" of quartz, bn + cp.						760	770	8
		425 1" q.v. at 30°, bn + cp - sericite + kspar along borders.						770	780	9.5
		454.5-455 1½" quartz with poor bn - at approx. 10°						780	790	6.5
		458 6" of quartz with spotty bn						790	800	5.0
		472 7" of quartz with spotty bn						800	803	3.0
		Emerald green sericite developed in the following zones:								
		326-327 Pervasive								
		337-345 Spotty								
		342.5-408.5 Pervasive								
		422.5-423.5 Pervasive								
		426-427.5 Spotty								
		438-441 Spotty								
		442-444 Pervasive								

Scale

Colour Plot & Dips

0

Drill Hole Record

Cominco

Property	VALLEY COPPER	District	HIGHLAND VALLEY	Hole No.	16-0-3
Commenced		Location		Tests at	Hor. Comp.
Completed		Core Size		Corr. Dip	Vert. Comp.
Co-ordinates				True Brg.	Logged by
Objective				% Recov.	Date

Sheet 5

Claim | T Brg. | Collar Dip | Elev. | Length | Hole No.

Footage From	To	Description	Sample No.	Length	Analysis
		Leached-out section with large cavities up to 1 cm. evident from 460' to 479'. Within a fault zone. Intense kaolinization. Still q.v.'s cutting it. Q.v's contain bn + cp. In some areas chloritized biotite still evident. Very little hematite suggesting not sulphides which have been leaches. Large q.v.'s cut section and contain only 1 or 2 vugs over 6" lengths. Still Bn in sericite - rich sections.			
		Fault gouge 441-492 Black sulphides + moly			
		" " 451-452 " " "			
		" " 486-487.5 " " "			
		Remainder of intense argillic zone. Still characterized by white or green kaolinization. Kalinization pervasive except where emerald green sericite occurs.			
		503-504			
		512-516 Spotty emerald green sericite			
		542.5-543 Pervasive emerald green sericite			
		571-573 Spotty emerald green sericite			
		653-656 Spotty emerald green sericite			
		504 1" q.v. at 30°, minor bn + cp.			
		509.5 1" q.v. at 40°, bn + cp.			
		526 2.5" q.v. at 30°, vuggy - bn + cp.			
		Fault zone begins at 590' and continues to at least 655'. Zone represented by abundant gouge and quartz from 595' to 635'. Massive cp from 596 to 611. From 606 to 608 black core from sheared sulphides. From 611 to 637 abundant black sulphides.			

Scale

Colour Plot & Dips

Drill Hole Record

Comaco

Property	District	Hole No.	
Commenced	Location	Tests at	Hor. Comp.
Completed	Core Size	Corr. Dip	Vert. Comp.
Co-ordinates		True Brg.	Logged by
Objective		% Recov.	Date

Sheet 6

Hole No. 16-0-3

Claim | T Brg. | Collar Dip | Elev. | Length

Footage From	To	Description	Sample No.	Length	Analysis
		Also gouge at: {532-532.5 / 550-554			
		661 2" q.v. at 30°, bn + cpy			
		662 2" q.v. at 30°, bn + cpy			
		663 1.5" q.t. at 45°, bn + cyp			
		663.5 1.5" q.v. at 45°, cp> bn			
		664.5 1.5" q.v. carrying massive cpy			
		667 1" q.v. at 55°, bn + cpy			
		668 Small shear at 60°, qtz. fragments and massive cpy.			
		670-671 Shearing at 45° with several ½" sections of gouge. Qtz. vein carrying bn and cpy.			
		683 1" qtz. vein at 55°. Bn and cpy.			
		689-670 Evidence of shearing at 30°. Shear planes but no measurable gouge. Minor development of emerald green sericite.			
		693.5-694.5 Qtz. vein at 30° (?). Vug cavities are filled with massive cpy.			
		696-720 Shattered qutz. vein carrying massive cpy and black sulphides in hairline fractures. 707-709 section of black gouge. May be major fault zone.			
		751.5 1" qtz. vein at 30° carrying cpy in vugs.			
779-803		Section of low to moderate argillic alteration. Sericite development is not pervasive but rather restricted to bordering fractures. Kspar content is 3-5%. Biotite grains are not prominent a large proportion have been sericitized.			
803		END OF HOLE			

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