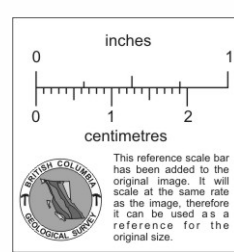






Figure 1.  
 Sketch Map Showing Location  
 of 1974 Drill Holes and  
 Part 1972 I.P. Survey Grid  
 Hickman Project - Liard M.D., B.C.  
 Hecla Operating Company  
 Scale: 1" = 2500'



DIAMOND DRILL HOLE #1

Geological Core Log

Location: 23258N, 4030W  
Elevation: 2950 feet  
Bearing: due West  
Inclination: -60°W  
Length: 231 feet  
Recovery: 94%  
Date drilled: June, 1974  
Core storage: Schaft Creek, B.C.

0 - 6' Overburden  
6 - 153' Grey-green, fine grained Andesite tuff. Banding at 25 - 30° to core. Minor pyrite with trace amounts of chalcopyrite. Minor amounts of hematite along quartz-calcite veins up to 130'. Local high alteration.  
70 - 90' Strongly schistose with minor bands of siliceous tuff.  
76 - 77' Bleached rock.  
80 - 110' Much coarse pyrite with very minor chalcopyrite.  
153 - 156' Andesite dyke. Biotite-plagioclase phenocrysts.  
156 - 196' Banded, fine grained Andesite tuff with minor pyrite and trace amounts of chalcopyrite. Rock is more calcareous with CaCO<sub>3</sub> veins containing siliceous fragments.  
196 - 231' Medium to coarse grained diorite with approximately 50% mafics.  
200 - 220' Pyritic along fractures.  
231' End of hole.

DIAMOND DRILL HOLE #2

Geological Core Log

Location: 23258N, 4030W  
Elevation: 2950 feet  
Bearing: due East  
Inclination: -45°E  
Length: 506 feet  
Recovery: 91%  
Date drilled: June, 1974  
Core storage: Schaft Creek, B. C.

0 - 10' Overburden

10 - 18' Siliceous to schistose, grey-green tuff fractures filled with CaCO<sub>3</sub> and hematite. Minor pyrite and sparse chalcopyrite.

18 - 21' Andesite dyke.

18 - 60' Andesite tuff as above, banding at approximately 30°. Tuff is pyritic with minor chalcopyrite. Local high alteration.

60 - 72' Andesite sill or flow. Foliation at 30°. Biotite and K-feldspar with CaCO<sub>3</sub> veins containing chalcopyrite. High degree of alteration.

72 - 82' Andesite tuff. Very pyritic and siliceous. High alteration.  
78-1/2' Fault.

82 - 89' Medium grained, unaltered Andesite dyke. Minor hematite along shears.

89 - 166' Siliceous, schistose and micaceous tuff. Chloritic along shears. Minor pyrite and chalcopyrite. Local high alteration with minor epidote. Banding at approximately 30° to the core.

166 - 193' Andesite flow, fine grained with coarse to disseminated pyrite. Local high alteration.

193 - 205' Andesite tuff as above.

205 - 207' Dacite dyke. Bleached rock on contacts.

207 - 228' Andesite tuff. Local coarse pyrite with minor chalcopyrite.

228 - 232' Augite porphyry basalt dyke. Coarse grained with crystals of pyroxene up to 5mm.

232 - 303' Andesite tuff. Banded with less pyrite and very minor  
chalcopyrite. Local high alteration. Some hematite  
along veinlets.  
258 - 259' Shear with graphite.

303 - 318' Medium to coarse grained dioritized Andesite.

318 - 414' Thin banded tuff. Local high alteration. Pyritic to  
380'. Trace amounts of chalcopyrite.  
402.5 - 414' Gouge - probably major fault.

414 - 506' Andesite with minor banding. Extreme hematite and  
graphite in gouge. Local high alteration. Rock is  
distinctly more calcareous.  
443 - 461' Gouge.  
468 - 475' Gouge.

506' End of hole.

DIAMOND DRILL HOLE #3

Geological Core Log

Location: 23020N, 1820E  
Elevation: 2570 feet  
Bearing: S60W  
Inclination: -50°W  
Length: 162 feet  
Recovery: 89%  
Date drilled: June, 1974  
Core storage: Schaft Creek, B. C.

0 - 26'	Overburden
26 - 42'	Dioritic Andesite. Medium grained with albite-epidote alteration. Some coarse pyrite. Hematite and chlorite along shears.
42 - 49'	Intrusive dyke. Monzonite? Mafic with magnetite and hematite.
49 - 51'	Andesite. Highly altered.
51 - 98.5'	Granodiorite(?) Medium to coarse grained. Locally magnetic. Some veins of specularite. Minor pyrite with abundant fine hematite. Chlorite and epidote along shears.
98.5 - 104'	Andesite. Fine grained with minor pyrite and epidote.
104 - 127'	Granite. Fine grained to aphanitic. Abundant hematite, minor specularite and pyrite.
127 - 162'	Chloritic Andesite with up to 30% granite stringers. Veinlets of hematite. Minor chalcopryrite and pyrite. Some albite-epidote alteration.
162'	End of hole.

DIAMOND DRILL HOLE #4

Geological Core Log

Location: 5231S, 685W  
Elevation: 3740 feet  
Bearing: due East  
Inclination: -60°E  
Length: 390.5 feet  
Recovery: 97%  
Date drilled: June, 1974  
Core storage: Schaft Creek, B. C.

0 - 9' Overburden  
9 - 91' Granite. Pink to grey, medium grained with xenoliths of Andesite. Weakly magnetic. Some quartz veining with epidote. Trace amounts of pyrite and minor CaCO<sub>3</sub>.  
91 - 98' Andesite. Highly altered. Minor pyrite and quartz - CaCO<sub>3</sub> veins.  
98 - 100' Granite.  
100 - 111' Andesite with minor granite stringers. Highly altered. Some albite-epidote alteration with epidote veins. Minor coarse pyrite.  
111 - 133' Granite. Medium grained, slightly magnetic. Local high mafics. Epidote along small quartz veins.  
133 - 135' Andesite. High alteration with epidote albite alteration. Coarse pyrite with epidote veins. 1/4" of magnetite at 135'.  
135 - 150' Granite. Much assimilated Andesite. Some high feldspathized xenoliths. Minor chalcopyrite with coarse pyrite.  
150 - 162' Andesite with up to 30% granite stringers. Foliation parallel to stringers. Good chalcopyrite and pyrite.  
162 - 169' Granite. Medium grained, weakly magnetic.  
169 - 173' Andesite, highly altered.  
173 - 174' Granite.  
174 - 176' Andesite.  
176 - 200' Granite, medium grained with Andesite xenoliths up to 2'. Disseminated pyrite with traces of chalcopyrite, abundant hematite. Weakly magnetic.  
190.5 - 192.5' Andesite.

200 - 220' Andesite. Highly altered with minor granite stringers. Some foliation at 40°. Epidote and hematite along fractures.

220 - 224' Granite.

224 - 364' Andesite. Foliated at 40 - 45°, coarse pyrite along fractures to 250'. Numerous hematite veins. Some quartz - K-feldspar veins as well as granite stringers. Minor epidote and chalcopyrite.

364 - 367' Granite.

367 - 390.5' Andesite as above.

390.5' End of hole.



DIAMOND DRILL HOLE #5

Geological Core Log

Location: 7000S, 2200E  
Elevation: 3110 feet  
Bearing: due East  
Inclination: -70°E  
Length: 226 feet  
Recovery: 70%  
Date drilled: June, 1974  
Core storage: Schaft Creek, B. C.

0 - 81' Overburden

81 - 95' Andesite. Dark grey to black, chloritic with coarse pyrite. Minor CaCO<sub>3</sub> veins with trace chalcopyrite.  
84' Minor gouge.

95 - 178.5' Sediments, probably argillites, extremely pyritic and graphitic. Core badly broken. Bedding at 40° to core. Minor sandstone layers.  
124 - 127' Gouge.  
127.5' Ground core.

178.5 - 204' Uniform dark grey-green, fine grained Andesite.

204 - 226' Sediments, thin bedded argillites and minor sandstones. Bedding at 40°. Minor pyrite and graphite.  
204 - 205' Pebble conglomerate.

226' End of hole.