

## HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

DIAMOND DRILL LOG

Claim: HATCH 13 (Y67656)

Location: HATCH PROJECT, THACHELL CK.  
115 H/12

Mining Division Whitehorse

Dip Tests: 56° @ 250'

Hole Nº. 84 - 06

Angle: -50°

Direction: 066°

Depth: 393.0'

Grid Nº.

Co-Ordinates: 86 + 10E

110' @ 291° from

42 + 23S

DDH #1

Date Started: June 15, 1984

Finished: June 17, 1984

Logged By: G. Bidwell

Drilled By: Arctic Diamond Drilling

DEPTH		DESCRIPTION OF CORE	Page 1 of 3
From	To		
0.0	12.0	Overburden	
12.0	37.0	Calc-silicate Hornfels - combination of Calc-silicate hornfels, biotite, quartzite and magnetite skarn with QV <sub>1</sub> stockwork, good solid fresh core, 100% recovery 12.0 - 13.5 - Biotite quartz schist 13.5 - 17.0 - Garnet epidote skarn 17.0 - 23.0 - Calc-silicate hornfels, minor magnetite 19.5 ½" quartz vein 23.0 - 25.0 - Biotite quartz schist - minor magnetite - pyrite veinlets - QV <sub>1</sub> stockwork 25.0 - 30.0 - Calc-silicate hornfels biotite diopside, pyrite veinlets QV <sub>1</sub> stockwork 30.0 - 31.0 - Garnet epidote skarn 31.0 - 31.25 - Quartz veins, probably QV <sub>1</sub> (#98169) main sulphide pyrrhotite - minor pyrite, molybdenite - minor rusty fractures 31.25 - 37.0 - Calc-silicate hornfels biotite, quartz, magnetite, diopside trace moly, veinlet pyrite QV <sub>1</sub> stockwork (moly) magnetite in fractures and outside of veins, quartz on inside of veins, pyrite core	
37.0	72.0	Andesite Dike (diabase) - calcareous, disseminated pyrite, massive - very fine grained at margin, coarser after 2 feet but still fine grained - no veining, a few micro fractures	
72.0	73.5	Calc-silicate hornfels (diopside) - biotite schist sections - pyrite magnetite veinlets	
73.5	79.0	Garnet diopside Skarn (magnetite) - pyrite magnetite veinlets - QV <sub>1</sub> stockwork	

DEPTH		DESCRIPTION OF CORE	Page 2 of 3
From	To		
		74.6 - 76.1 - QV <sub>1</sub> vein disseminated and vein pyrite (#98170)	
		76.1 - 76.6 - #98171 - Garnet magnetite skarn	
		76.6 - 76.9 - #98172 - QV <sub>2</sub> vein? pyrite, dark mineral, fine grained in fractures?	
		76.9 - 79.0 - Garnet epidote magnetite skarn minor QV <sub>1</sub> stockwork	
79.0	86.0	Calc-silicate hornfels - appreciable biotite (15%) - Quartz pyrite magnetite veinlets	
		79.5 - 80.4 - #98173 - vein (metamorphic)	
		81.0 - 81.8 - Garnet skarn	
		85.3 - 85.8 - #98174 - QV <sub>1</sub> veins (pyrite)	
86.0	88.5	Garnet magnetite skarn - minor QV <sub>1</sub> stockwork	
88.5	127.6	Calc-silicate hornfels - sections quartz or biotite rich - disseminated and vein pyrite - minor magnetite	
		91.7 - 91.8 - #98175 - QV <sub>1</sub> vein	
		109.6 - 109.9 - 1" wide quartz pyrite sericite vein (QV <sub>1</sub> ?) #98176	
		116.4 - 116.6 - #98177 - QV <sub>1</sub> vein (pyrite)	
		119.0 - 119.1 - - 1" wide QV <sub>1</sub> vein # 98178	
		119.1 - 120.7 - #98179 - HW Calc-silicate (includes 0.2' siliceous pyrite bleached zone adjoining vein)	
		120.7 - 121.4 - #98180 QV <sub>2</sub> vein (pyrite, sphalerate, moly, tr galena)	
		121.4 - 123.0 - #98181 FW Biotitic hornfels (minor garnet)	
		127.2 - 127.6 - #98182 - QV <sub>1</sub> vein	
127.6	144.0	Biotite quartz schist - gradational change from above, 5% disseminated pyrite - QV <sub>1</sub> stockwork - section of cal-silicate, very minor garnet	
		128.9 - 129.7 - QV <sub>1</sub> vein (barren) massive bull quartz (#98183)	
		129.7 - 131.2 - bleached section of schist - abundant disseminated pyrite and pyrite QV <sub>1</sub> vein	
		138.4 - 140.2 - Calc-silicate hornfels, disseminated pyrite, QV <sub>1</sub> minor	
144.0	150.0	Calc-silicate Hornfels - gradational from above - biotite-rich section @144.3 - ½" wide QV <sub>1</sub> vein, magnetite on boundary 148.3 - 148.5 - brecciated QV <sub>1</sub> vein (pyrite) (#98184)	
150.0	159.5	Biotite Quartz Schist - contains some cal-silicate hornfels 153.2 - 153.6 - #98185 - brecciated quartz vein, pyrite, minor sphalerite, trace moly? - QV <sub>1</sub> stockwork abundant	
159.5	166.3	Calc-silicate Hornfels, sections biotitic (Hornfels/schist boundary parallel core axis) 159.3 - 161.0 - Garnet epidote skarn 163.0 - 163.5 - #98186 - 2" wide QV <sub>1</sub> vein with bleached zone (pyrite trace moly) 163.5 - 164.0 - #98187 - Intermediate calc-silicate 164.0 - 164.4 - #98188 - 2" wide QV <sub>2</sub> ? vein, mainly pyrrhotite, minor pyrite	

DEPTH		DESCRIPTION OF CORE	Page 3 of 3
From	To		
166.3	181.0	Biotite quartz Schist - QV <sub>1</sub> stockwork with sericite alteration 174.2 - 174.7 - QV <sub>1</sub> bull quartz vein, sericite, tr moly (#98189) 176.5 - shear filled with quartz, minor sulphides parallel core axis	
181.0	210.5	Calc-silicate hornfels QV <sub>1</sub> stockwork becoming more intense pyrrhotite, pyrite, tr moly minor garnet skarn 189.0 - 189.6 - #98190 - brecciated quartz vein - all pyrite in fractures - rusty alteration on one side of vein 194.0 - 197.0 - Biotite rich section - 196.0 - 1" wide quartz sericite vein 207.5 - 208.0 - #98191 - 2" wide quartz vein (sericite, pyrrhotite, pyrite, tr chalcopryrite) 209.0 - 209.2 - Quartz sericite (pyrite) vein	
210.5	235.0	Garnet magnetite skarn (epidote) - pyrite and magnetite in fractures - QV <sub>1</sub> stockwork present - disseminated pyrite and pyrrhotite 213.5 - 215.9 - #98192 - QV <sub>2</sub> vein vuggy, sericitic in fractures - pyrite, pyrrhotite, moly, minor chalcopryrite @ 216.0 - 1" wide bull quartz vein QV <sub>1</sub> no sulphides, sericite boundaries	
235.0	241.0	Griesen - contact with skarn sharp (shear) no gouge, probably little movement core angle = 25° - griesen in quartz blocks (breccia) in sericite rich matrix, disseminated pyrite - contact with alaskite gradational over 2 feet	
241.0	393.0	Alaskite - typical quartz feldspar muscovite unit 242.1 - 1" wide bull quartz vein - fractures in Alaskite somewhat open, minor rust 251.0 - 253.0 - fractures along core axis - minor spots of pyrrhotite and moly and trace sphalerite 261.3 - 261.4 - 1½" wide quartz vein 281.5 - splotch of pyrite, moly and sphalerite 328.8 - ½" wide quartz vein with sericite 329.9 - 330.9 - #98193 - spots of pyrite, sphalerite, galena? 332.3 - 1" wide bull quartz vein 338.6 - 338.8 - shear? filled with sulphides sphalerite, galena? pyrite (#98194) 339.0 - 1" wide bull quartz vein 351.7 - 353.0 - minor shears core angle = 60° 353.0 - 353.8 - concentration of pyrite, sphalerite and moly 356.5 - 1" wide pyrite Quartz vein with moly and sphalerite 362.3 - 363.0 - minor shears core angle = 60° 368.0 - 369.0 - shear contact core angle = 60°, clots of pyrite & moly 371.0 - 372.0 - clots of pyrite and sphalerite 391.2 - ½" wide bull quartz vein	
	393.0	END OF HOLE	