FORM Nº. 630

HUDSON BAY EXPLORATION AND DEVELOPMENT COMPANY LIMITED

DIAMOND DRILL LOG

Claim: CAB 27

Location: Dolly Creek (Fox Creek) Y. T.
61°52' 133°22' NTS 105F-14

Mining Division Whitehorse

Hole Nº. 40 Angle: -78° Direction: 278°

Depth: 247.8 m Grid Nº.

Co-Ordinates: 7 + 07N
12 + 16W

Date Started: 29 June 1981 Finished: 5 July 1981 Logged By: M. Nicol and D. Lincoln

Drilled By: Caron Diamond Drilling

DEPTH From	DEPTH To	DESCRIPTION OF CORE Page 1 of 4
0.0	10.1	Casing
10.1	11.1	Intercalated skarn and grey beds, broken framented rock at 10.6 no reaction with acid
11.1	76.0	Biotite schist, some intercalated with minor skarn, chlorite because core is close to surface-biotite schist rotting to gossen, chlorite Conformable quartz stringers parallel to foliation 28.0 - evidence of ductile strain - change in dip angle 40.80 - quartz stringer with trace pyrrhotite found in the small conformable stringers 64.1 - 64.8 and 65.7 - 66.1 - rotted, fragmented zones with presence of chlorite and minor skarn Core Angles: @ 10.1 - 37° @ 33.3 - 42° @ 60.0 - 38° @ 14.4 - 27° @ 37.0 - 44° @ 62.6 - 42° @ 17.0 - 32° @ 38.0 - 40° @ 64.0 - 37° @ 20.0 - 39° @ 42.1 - 37° @ 67.7 - 37° @ 22.1 - 33° @ 44.5 - 34° @ 70.0 - 43° @ 25.3 - 36° @ 48.0 - 56° @ 75.0 - 40° @ 27.5 - 37° @ 50.6 - 30° @ 31.7 - 44° @ 56.2 - 38°
76.0	157.0	Schist and skarn - conformable quartz veins, some veins containing pyrite and pyrrotite - vertical fractures with calcite infilling and quartz infilling - schist and skarn ratio 45% schist, 55% skarn on average 77.25 - 77.4 - shearing breccia zone with core angle at 60° with minor pyrite and calcite infilling 80.2 - 90.2 - broken framented schist and skarn with gossen staining, larger conformable quartz veins show more pyrrhotite 91.8 - 93.3, 94.5-96.3 - rotting framented schist skarn and quartz veins

DEPTH		DESCRIPTION OF CORE
From	To	
		102.0 - 103.7 - fragmented, rotting zone, schist and skarn 104.1 - 104.4 - fragmented, rotting zone, schist and skarn 108.5 - 109.4 - fragmented, rotting zone, schist and skarn with gossan staining 107.2 - 107.4 - fracture zone, quartz vein with biotite showing leached biotite quartz transition 112.1 - 113.3 - skarn zone with verticle fractures, calcite infilling some chlorite present 113.3 - 120.1 - rotting fragmented zone with calcite fracturing 128.4 - 128.8 - calcite filled verticle fracture approx. 1 cm wide verticle fractures becoming more common 144.1 - 144.8 - quartz vein, conforming to bedding 147.2 - 148.65-quartz vein, with pyrrhotite, chlorite 150.9 - 151.1 - trace scheelite 151.9 - massive pyrrhotite in calcite fracturing with tr scheelite 152.4 - 154.1 - trace scheelite in skarn scheelite estimate - .2% from 153.3 - 154.1 in skarn pyrrhotite, trace chalcopyrite calcite fractures Core Angles: @ 77.0 - 40° @ 80.0 - 30° @ 82.0 - 30° @ 85.4 - 42° @ 87.0 - 30° @ 90.0 - 29° @ 96.3 - 41° @ 98.4 - 40° @ 103.8 - 32° @ 105.5 - 16° @ 108.0 - 30° @ 110.0 - 26° @ 113.4 - 12° @ 117.0 - 33° @ 120.5 - 39° @ 123.0 - 39° @ 126.2 - 38° @ 129.2 - 37° @ 132.5 - 32° @ 133.4 - 32° @ 138.6 - 22° @ 141.4 - 26° @ 144.0 - 23° @ 146.8 - 30° @ 150.0 +- 27° @ 151.0 - 23° @ 154.0 +- 50°
157.0	160.5	Skarn Zone 157 - 158.3 - chloride rich skarn 158.6 +- 159.4 - scheelite estimate of .1% 159.4 - 160.3 - scheelite estimate of .6% - disseminated pyrrhotite associated with chlorite and minor pyrite - calcite infilling associated with chlorite Core Angles: @ 157.0 - 38° @ 154.8 - 60°
160.5	162.0	Schist and skarn with vericle fractures and calcite infilling - fractures associated with pyrite
162.0	163.6	Skarn zone with quartz veining, verticle fractures with pyrrhotite
163.6	194.5	Schist and skarn 163.8 - 164.7 - rotting zone chlorite in schist and skarn 165.0 - 166.9 - rotting zone fracturing distorted bedding breccia zone with trace scheelite, chlorite rotting mud 167.7 - 168.6 - rotting, brecciated zone with chlorite mud 169.0 - 170.2 - rotted zone high % skarn with pyrite (minor) fractured infilled with calcite 170.4 - 173.3 - broken fractured zone with disseminated pyrite, trace scheelite found along verticle fractures 174.1 - 176.2 - skarn rich (90% skarn) zone with trace chalcopyrite, scheelite, pyrrhotite at 174.3 - unknown dark, metallic mineral 178.0 - 178.4 - skarn rich zone, trace scheelite, fractures with calcite infilling, pyrrhotite, pyrite

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From	To		
		178.7 - 179.4 - trace scheelite, trace pyrrhotite in a skarn rich zone 181.6 - 183.5 - skarn, diopside, with scheelite from 182.3 - 183.5 - scheelite estimate of .6% - skarn contains chalcopyrite in quartz veins, some chlorite with associated pyrite 187.4 - 187.9 - garnet diopside with trace scheelite and trace pyrrhotite - fracture with quartz stringers, pyrite pyrrhotite, chlorite infilling *-increasing frequency of quartz veining with mineralization zones in fractures 191.5 - large quartz vein with massive pyrrhotite Core Angles: @ 161.6 - 45° @ 163.7 - 49° @ 167.1 - 20° @ 170.4 - 34° @ 172.0 - 30° @ 174.0 - 37° @ 176.6 - 16° @ 180.1 - 16° @ 181.6 - 38° @ 184.1 - 34° @ 186.8 - 23° @ 190.2 - 26°
194.5	197.1	Garnet diopside skarn with scheelite 194.9 - 196.6 - scheelite estimate of .05% 196.6 - 197.1 - scheelite estimate of .6% skarn contains minor pyrite, pyrrhotite and chlorite
197.1	211.6	196.1 - 198.2 - brecciated, fragmented, rotting rock with semi-consolidated chlorite mud. Calcite present in fractures, quartz stringers throughout *intercalated schist, skarn and grey beds with quartz carbonate alteration throughout the zone - both conformable and verticle fractures, with calcite infilling - some minor garnet in zone near fractures - bedding is distored in some quartz carbonate beds 209.2 - 209.3 - brecciated zone with pyrite and chlorite Core Angles: @ 192.9 - 28° @ 196.1 - 50° @ 199.0 - 25° @ 202.0 - 0° @ 204.3 - 37° @ 207.3 - 43° @ 210.2 - 37° @ 213.7 - 70° @ 216.8 - 37°
211.6	215.0	Schist and skarn. Skarn is garnet diopside skarn with fractures including caclite with associated pyrite and chalcopyrite; disseminated pyrrhotite Scheelite Estimates - 211.9 - 213.1 - .1% 213.1 - 214.5 - .05%
215.0	218.0	Garnet diopside skarn - vertical fractures, quartz veins with massive pyrrhotite associated pyrite, pyrrhotite in massive form along margins of quartz veins 217.2 - 217.9 - rotting, fragmented zone
218.0	225.0	Biotite schist with minor skarn Conformable quartz stringers with calcite infilling in fractures minor calcite Core Angles: @ 219.6 - 43°

DEPTH		DESCRIPTION OF CORE
From	To	
225.0	232.5	Schist and skarn with verticle fractures with calcite quartz stringers disseminated pyrrhotite 225.4 - 227.9 - felsic dike, massive texture. homogeneous structure 20% muscovite mica, 50% at 226.2 - 226.3 - massive crystalline calcite vein pyrite crystals in dike fractures 228.7 - 228.9 - fragmented rotting calcite present 231.2 - 231.9 - brecciated zone, quartz and calcite veins intercalated minor pyrite, chalcopyrite in fractured zones quartz carbonate in breccia massive pyrrhotite crystalline pyrite Core Angles: @ 221.4 - 30° @ 225.0 - 45° @ 228.0 - 27° @ 229.7 - 25° @ 232.0 - 34°
232.5	237.0	Diopside skarn with garnet verticle fractures, calcite infilling, disseminated pyrrhotite conformable quartz veins with associated pyrrhotite 236.4 - shear zone richin chlorite, calcite 237.0 - contact with quartz monzonite intrusive Core Angle: @ 234.6 - 44°
237.0	250.2	Intrusive Quartz stringers - some assimilation near contact Quartz veins Zenolith in intrusive quartz monzonite At contact mineralized zone of pyrrhotite *242.6 - assimilated skarn with massive pyrrhotite present *243.2 - assimilated skarn with massive pyrrhotite, chlorite, alteration, pyrite