2002 HAT Property Diamond Drill Log HT - 7			Hole #:	***HT-7***					
Date Started:		June 6, 2002	Date Finished:	June 10, 2002			Final Depth:		589 feet
Grid location:		124+00N / 18+50W	Inclination:	-50			Azimuth:		090
Core Size:		NQ	Drill Rig:	Long Year 38			Logged By:		XD Jiang
Core Stored At:		200 Range Road, Whitehorse, YT Government core library.							
Drilling Contractor:		KLUANE DRILLING LTD., 14 MacDonald Road, Whitehorse, Y.T. Y1A 4L2							
Location:		On HAT 30 claim, about 1350 feet northwest of HAT 30 #1 post, and about 200 feet to the west of Whitehorse Traverse Line.							
Samples:	10265 - 10295	From 42.1 - 175.4 (133.3 ft) estimated 0.3 - 0.4% Cu in intercalated granodiorite and skarn							

Footage									
From (ft)	To (ft)	Width (ft)	Sample #	Description	Au ppb	Cu %	Ag ppm	Mo ppm	Bi ppm
0.0	**17.5**	**17.5**		Overburden.					
17.5	**24.0**	**6.5**		**Granodiorite,** light grey, medium to coarse grained, moderately broken core, local Cpy veinlets and associated disseminated trace Cpy. A 0.6 ft siltstone lens at 22 ft with rusty fractures and trace Mal coatings. Lower contact broken.					
24.0	**30.8**	**6.8**		**Skarnified Siltstone,** light to medium green, fine grained, with 0.5 to 1% disseminated fg Py Cpy and local Cpy stringers. Lower contact at 20 CA.					
26.8	30.8	4.0	10265	see above	10.0	0.362	0.4	4	<2
30.8	**75.0**	**44.2**		**Alterd Granodiorite / minor Skarn,** light to medium grey and greenish grey, medium to coarse grained granodiorite dominant, with a few fg skarnified siltstone lenses. 36.5 - 38 is an Ep-Gar skarn lens, 40.3 - 42.1 is an Ep-Diop skarn lens with contact at 20 CA. 45 - 49 is skarnified siltstone dominant with diorite lenses and irregular fingers. 63 - 64 is Gar-Diop skarn. The granodiorite is weakly altered, local skarnified (garnet) granodiorite. Epidote and chlorite alteration are developed near some fractures. A few fractures nearly parallel to core axis with in-filled Cpy and disseminated Cpy in bleached alteration halo. Lower contact sharp at 40 CA.					
30.8	33.0	2.2	10266	granodiorite with 1% Cpy in a fracture nearly parallel to core axis.	20	0.701	0.8	11	<2
42.1	45.0	2.9	10267	granodiorite with 1-2% Cpy in a couple of fractures nearly parallel to core axis.	10	0.258	1.0	7	<2

Bor - bornite, Cc - chalcocite, Cpy - chalcopyrite, Mal - malachite, Mo - molybdenite, Po - pyrrhotite, Py - pyrite.
Cal-calcite, Diop-diopside, Ep-epidote, Gar-garnet, Qz-quartz, Trem-tremolite, Wol-wollastonite. CA = (degrees to) core axis

Footage									
From (ft)	To (ft)	Width (ft)	Sample #	Description	Au ppb	Cu %	Ag ppm	Mo ppm	Bi ppm
45.0	50.0	5.0	10268	altered sedimentary dominant with granodioritic fingers and patches and few Cpy (1-2%) filled fine fractures nearly parallel to core axis.	10	0.276	0.2	10	<2
50.0	55.0	5.0	10269	Granodiorite with a couple of low core angle (5-15 to CA) Cpy veinlets and minoe Cpy as disseminated near the fractures (1-2% Cpy).	35	0.500	0.8	5	<2
55.0	60.0	5.0	10270	same as above	20	0.327	0.4	7	<2
60.0	65.0	5.0	10271	similar to above but with 1 ft garnet diopside skarn.	30	0.825	1.4	9	<2
65.0	70.0	5.0	10272	similar to above. 1-2% Cpy.	65	0.948	2.6	14	22
70.0	75.0	5.0	10273	similar to above, 2-3% Cpy and trace Bor.	20	0.477	1.2	27	6
75.0	**103.7**	**28.7**		**Mineralized Diopside Skarn / Skarnified Sediments / Granodiorite,** light green to local light purple to light brown, mostly fg diopside skarn or skarnified siltstone argillite, with local patches and lenses of garnet skarn and altered granodiorite. Some very low core angle Cpy - (Qtz - Cal) veinlets all way through interval, with bleached alteration halos local with disseminated Cpy Bor. Local rich disseminated Bor in diopside skarn. Lower contact irregular.					
75.0	80.0	5.0	10274	0.5% disseminated Cpy.	10	0.356	0.6	6	<2
80.0	85.0	5.0	10275	1-2% Cpy Bor.	80	0.418	3.0	3	18
85.0	90.0	5.0	10276	2-3% Bor Cpy.	365	1.840	21.2	1	84
90.0	95.0	5.0	10277	1-2% Bor Cpy. Minor scattered fresh pink feldspar phenocrysts of several mm sized.	65	0.660	3.6	45	16
95.0	100.0	5.0	10278	3-4% Cpy Bor.	435	1.470	6.0	52	50
100.0	103.7	3.7	10279	0.5 - 1% Cpy.	50	0.631	1.4	3	6

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Footage									
From (ft)	To (ft)	Width (ft)	Sample #	Description	Au ppb	Cu %	Ag ppm	Mo ppm	Bi ppm
103.7	**120.2**	**16.5**		**Altered Granodiorite,** light greenish grey, fine to coarse grained, chlorite epidote altered, bleached halos near fractures, mafic mineral content vary greatly. Minor skarnified siltstone argillite lenses. Some low core angle fractures in-filled with disseminated Cpy and local disseminated Cpy halos. Lower contact irregular.					
103.7	108.0	4.3	10280	1% Cpy.	65	0.931	3.0	5	10
108.0	111.4	3.4	10281	1% Cpy, trace Bor.	35	1.070	6.0	4	14
111.4	115.0	3.6	10282	1% Cpy.	20	1.030	1.0	1	<2
115.0	120.2	5.2	10283	1-2% Cpy.	20	0.809	0.6	2	<2
120.2	**130.5**	**10.3**		**Skarnified Siltstone / Argillite,** light green to local purple, fine grained, massive to local weakly banded, minor local calcitic veinlets and stringers some with trace Cpy. Local scattered pinkish red Gar. Vuggy and broken ground near 129 ft. Lower contact irregular.					
120.2	123.5	3.3	10284	1% disseminated and stringer Cpy.	20	0.342	0.6	3	<2
126.2	130.5	4.3	10285	1 -1.5% disseminated and stringer Cpy, trace Bor.	80	0.451	4.0	8	18
130.5	**137.5**	**7.0**		**Altered Granodiorite,** light greenish grey, medium to coarse grained, skarnified, with fracture filling Cpy veinlets at very low core angle, local minor disseminated Cpy. Lower contact broken core.					40
130.5	133.0	2.5	10286	1% Cpy.	155	1.080	7.4	4	18
133.0	137.5	4.5	10287	0.5-1% Cpy.	160	0.700	4.6	4	<2
137.5	**166.0**	**28.5**		**Siltstone Sandstone,** light purple to local weakly skarnified greenish purple, fine to local medium grained, massive. Local with 1% disseminated Cpy possibly near some low core angle Cpy veinlet. Mostly barren. 155 - 163 ft, broken ground, well fractured core with malachite coated fractures. Lower contact at about 20 CA.					

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Footage									
From (ft)	To (ft)	Width (ft)	Sample #	Description	Au ppb	Cu %	Ag ppm	Mo ppm	Bi ppm
143.7	147.0	3.3	10288	1% Cpy.	35	1.400	1.6	1	<2
157.0	162.5	5.5	10289	1-2% Mal, trace Cpy.	40	0.465	1.0	1	<2
162.5	166.0	3.5	10290	0.5 - 1% Cpy, trace Mal.	15	0.160	1.0	2	<2
166.0	**200.5**	**34.5**		**Granodiorite,** light grey to light greenish grey, medium to coarse grained, massive granular, local weakly altered. Top 9.4 ft moderately fractured and with 0.5% disseminated Cpy, local trace Mal on fractures. The rest has occasional Cpy blebs, local trace Mo along fractures.					
166.0	171.0	5.0	10291	see above	5	0.051	<0.2	3	<2
171.0	175.4	4.4	10292	see above	20	0.198	0.4	2	<2
200.5	**219.0**	**18.5**		**Basaltic Dikes in Granodiorite,** Ithis is an interval of granodiorite intruded by 10 basaltic dikelets, the dikelets are light to medium green, fine grained, mostly chloritic, local weakly porphyritic with minor feldspar phen's and or aggregates, local granodiorite inclusions, the dikes are from a few cm's to about 2 ft, at various sharp clean contacts. no mineralization.					
219.0	**240.5**	**21.5**		**Basaltic Dike,** this interval is mainly basaltic dike, with 4 granodiorite inclusions up to 1 ft size. Lower contact sharp @ 45 CA.					
240.5	**261.6**	**21.1**		**Granodiorite,** light grey, coarse grained, local Cpy veinlets at low CA, also local trace Mo blebs. A few small basaltic dikelets. lower contact irregular at about 50 CA.					
261.6	**279.6**	**18.0**		**Basaltic Dike,** psimilar to that of above. top end weakly bleached with some rusty modern fractures. lower contact sharp at 45 CA.					
279.6	**335.7**	**56.1**		**Granodiorite / Basaltic Dikes,** granodiorite dominant with about 30% basaltic dikelets. Only trace local occasional Cpy in fine chloritic to Ep altered fractures in the granodiorite.					

Footage									
From (ft)	To (ft)	Width (ft)	Sample #	Description	Au ppb	Cu %	Ag ppm	Mo ppm	Bi ppm
335.7	**372.1**	**36.4**		**Weakly Alterd Siltstone,** purplish grey light green, fine grained, massive to local well thinly banded with bands at 30 to 50 CA. Weakly pyritic, local Cpy stringers and veinlets along fractures, local trace disseminated Cpy and very trace Mo blebs along frac's. Included two small basaltic dikes and numerous small irregular granodioritic patches and fingers. Lower contact irregular.					
351.5	355.0	3.5	10293	light greenish grey altered banded siltstone argillite with >1% Cpy.	35	0.578	1.0	63	<2
355.0	357.6	2.6	10294	same as above with 1-2% disseminated Py and Cpy. 357.6 - 358.9 is a basaltic dike.	40	0.737	1.4	8	<2
358.9	362.1	3.2	10295	same as above with about 1% Cpy mostly in fine veinlets at low CA.	55	0.865	1.6	17	<2
372.1	**384.2**	**12.1**		**Granodiorite,** light grey, coarse grained, massive, inclusions of bedded siltstone common, weakly Ep altered, local trace to 0.5% disseminated Cpy Py patches or along frac's. Lower contact irregular.					
384.2	**396.1**	**11.9**		**Siltstone,** light purplish grey, fine grained, massive, local moderately fractured with calciticveinlets, trace disseminated Py, local trace Cpy. Lower contact irregular.					
396.1	**402.5**	**6.4**		**Granodiorite,**iWeakly Ep altered, weakly vuggy, local skarnified with minor garnet skarn. Trace disseminated Py Cpy. Lower contact broken core.					
402.5	**411.0**	**8.5**		**Feldspar Porphyry,** Medium to dark grey, with feldspar and dark grey to brown (biotitic) mafic phenocrysts. weakly magnetic. It is intruded by the granodiorite. Lower contact intruded by a granodiorite dikelet at 55 CA.					
411.0	**428.0**	**17.0**		**Siltstone / Argillite,** light purplish grey fine grained, mostly well thinly banded from nearly parallel to CA to 40-50 CA, local cross bedding recognizable. pyritic, local 1-2% disseminated vfg Py, trace Cpy. Lower contact core broken.					

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Footage									
From (ft)	To (ft)	Width (ft)	Sample #	Description	Au ppb	Cu %	Ag ppm	Mo ppm	Bi ppm
428.0	**436.0**	**8.0**		**Granodiorite,** light to medium greenish grey, well fractured broken core, with minor calcitic and qtz filled frac's, trace disseminated Py Cpy.Lower contact sharp irregular at about 40 CA.					
436.0	**466.6**	**30.6**		**Well Banded Siltstone Argillite,** mostly light greenish grey, to local light purplish grey, bands at 30-35 CA, composed of white feldspathic bands, light brownish biotitic bands and light green diopside bearing vfg argillite bands, local weakly calcareous and some calcitic veinlets. weakly pyritic, local trace Cpy on frac's. Lower contact irregular at about 50 CA.					
466.6	**480.5**	**13.9**		**Granodiorite / Siltstone,** weakly altered, two siltstone lenses and one basaltic dike. Trace disseminated Cpy on local pyritic fractures. Lower contact sharp between siltstone and granodiorite at 70 CA.					
480.5	**589.0**	**108.5**		**Granodiorite,** light tomedium grey, medium to coarse grained, massive, mostly barren with no mineralization, only local with trace Cpy along some fine fractures with limited bleached or chl or ep alteration halos. 534.5 - 535.5 is a vuggy quartz vein with Mo blobs and Cpy blobs; and at 566.7 is Mo filled fracture.					
589.0				EOH					

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