

DRILL LOG

803746

PROJECT 2153	GROUND ELEV. 1405m																				
HOLE NO. 20	BEARING 070°																				
LOCATION Sulphurets Gold Zone	DIP -43°																				
	TOTAL LENGTH 506 Ft 159.23m																				
LOGGED BY R. Baerg, D. Bridge	HORIZONTAL PROJECT 110.90m																				
DATE June 30 - July	VERTICAL PROJECT 102.21m																				
CONTRACTOR Arctic Diamond Drilling	ALTERATION SCALE 																				
CORE SIZE BQ																					
DATE STARTED June 29, change angle at 9pm	TOTAL SULPHIDE SCALE 																				
DATE COMPLETED July 2, 1981, surveyed 3-9 pm																					
DIP TESTS <table border="1"> <tr> <td>83'</td> <td>-42.5°</td> <td>068.5°</td> <td>041 obs.</td> </tr> <tr> <td>183'</td> <td>-42.1°</td> <td>070.5°</td> <td>040</td> </tr> <tr> <td>283'</td> <td>-42.0°</td> <td>065.0°</td> <td>037.5</td> </tr> <tr> <td>383'</td> <td>-41.9°</td> <td>067.5°</td> <td>040°</td> </tr> <tr> <td>493'</td> <td>-40.8°</td> <td>070.0°</td> <td>042.5°</td> </tr> </table>	83'	-42.5°	068.5°	041 obs.	183'	-42.1°	070.5°	040	283'	-42.0°	065.0°	037.5	383'	-41.9°	067.5°	040°	493'	-40.8°	070.0°	042.5°	
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COMMENTS 1.5m of casing above ground at -43° top of casing 1.1m at 070° From DDH 19 about 1.1m vertically From top of casing to ground	LEGEND																				

D. M. Baerg

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					py <1cm A	veins 1-10 B	qtz >10 C	cal V D	cal V E		
0				0.00 - 4.57 : overburden							
5.0				4.57 - 18.90 : chl-silic and: 4.57 - 5.30: silic. and: lt-med gr-gry, w-med well silic. local chl patches toward top, chl-ep-py on fract, bottom of unit highly fract.	7	0	0	4	0	M	
				5.30 - 6.85: chl. and: med-dk gr, very chl, locally silic.; chl-ep-py-iron staining on fract; locally some silic frags (to 1mm), no veining or relic text.	9	0	0	1	0	M	
10.0				6.85 - 10.15: silic and: lt gr-gr, locally sm (≈1mm) chl grains lt gr (relic?), some lger frags locally with py sept., local fract with py + chl on fract; one 8cm py seam on shear.	47	1	0	3	0	L	
				10.15 - 12.15: chl. and: dk gr-gry, locally silic, overall very chl with abundant dk gr chl grains up to 3mm, also assoc. w-qtz-cal veins; chl on fract, locally sm. amt ep in groundmass, local bleached zones;	21	0	0	2	2	L	
15.0				12.15 - 15.90: silic and: lt gry, local gr chl zones, lt to dk gr chl grains throughout, local relic text w-ep after hbl, fract have chl and locally are bleached and have ep. alt, very minor qtz-cal veining (1-2mm), locally py after chl, 13cm zone (bed?)	29	0	0	3	6	M	
20.0				dk gry w. f. dissem py + chab, sm. chl frags and dk gry halos (dissem. py?)							
				15.90 - 18.90: chl. and: med-dk gr, one local bleached zone, mottled w chl frags to 3cm	26	0	0	3	2	L	

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py seam on shear ~8cm

13cm bed?

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS		
		FROM	TO	WIDTH		oz/tm Au		
4.57 - 5.30: py - 15-20%, f.g., mainly dissem.		4.57		0.63	3749	.009		
5.30 - 6.85: py - 25-30%, f.g., mainly dissem + sm. patches		5.30		0.70	3750	.008		
6.85 - 10.15: py - 20-25%, f.-m.g. mainly as sm. veins + patches		6.00		0.85	3751	.010		
		6.85		2.15	3752	.010		
		9.00		1.15	3753	.012		
10.15 - 12.15: py - 5-10%, f.-m.g., mainly dissem + veins.		10.15		1.85	3754	.012		
12.15 - 15.90: py - 3-5%, f.-m.g., mainly dissem, trace chalc		12.00		3.00	3755	.013		
		15.00		0.90	3756	.004		
15.90 - 18.90: py - 5-10%, f.g., mainly as sm veins and patches,		15.90		2.10	3757	.008		
		18.00		0.90	3758	.003		
18.90 - 21.70: py - 20-25%, f.-m.g., mainly dissem., trace chalc, as py?		18.90		2.10	3759	.057		
		21.00		3.00	3760	.068		
21.70 - 23.55: py - 25-30%, f.-m.g. mainly dissem + patches.								

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ.
					py <1cm A	u 1-10 B	eins >10 C	qtz D	cal E		
25.0	45 30			15.90 - 18.90: cont; w. silic, local hairline fract w cal, chl on fract, relic chl grains locally, speckled (chl) text overall							
				18.90 - 21.70: silic flow bx: int silic, int fract, py-cal on fract, abund. silic frags, minor amt chl frags, minor local foliation, lt gry.	13	1	0	0	4	H	
				21.70 - 23.55: silic flow bx: med-dk gry-blk, med-int silic, frags of siliceous material and chl to 4cm, dk silic-chl matrix, frag to matrix ratio decreases toward bottom, frags are sub angular to sub round, local hairline fract, lower contact?	8	1	0	10	0	L	
35.0	35			23.55 - 38.85: silic flow bx: med gry, int silic; ~10% dk gr chl frags, sub ang. to round, local lt green chl clasts w dk gr chl inclusions (relic porph?) locally chl rimmed or replaced by py; dk gr frags to 1cm, lt gr clasts to 2.5cm; chl-py on fract, local hairline fract w qtz; local rectangular chl grains, relic hb1?; silic clasts, sub round, to 3.5cm; local int. fract.	48	4	0	7	0	L	
				38.85 - 50.35: silic. bx: lt-med gry, int. silic, minor qtz-cal veining, 1 vein to 2 cm, mainly 1-2mm; bx text virtually gone, local chl patches with py replacement, lt and dk gr chl grains 2-5mm, local fine dk gr chl specks, lt gr chl is relic clast? chl-py on fract; shear zone from 42.40 - 42.65, highly fract and pyritized; local hairline fract w qtz-cal.	52	2	1	11	6	F	
40.0	35 40			3.5cm py v.							
				1.5cm py v.							
45.0	30			20cm py v.							
				shear							

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS		
		FROM	TO	WIDTH		g/tm Au		
23.55 - 24.50: py - 35%, f-m.g., mainly 25 lg. patches + 1 vein		24.00						
24.50 - 38.85: py - 10-15%, f-m.g., mainly dissem. + sm. patches.				3.0	3761	.048		
		27.00						
				3.0	3762	.033		
		30.0						
				3.0	3763	.011		
		33.0						
				3.0	3764	.011		
		36.0						
				3.0	3765	.015		
38.85 - 50.35: py - 10-15%, f-m.g., mainly in sm veins + on fractcs, + trace chalco in the py, 1 mass py vein (20cm)		39.0						
		42.0						
				3.0	3766	.022		
				3.0	3767	.023		
		45.0						

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ.
					A	B	C	D	E		
45.0											
50.0				50.35 - 53.80: silic bx; int silic, lt-med gry, highly fract, chl clasts and alt; frags largely siliceous, to 3cm, sm local shears; no veining, veining pre-fract?, local dk gr chl clasts, most chl lt gr. v.f.g dissem py seams on shears.	5	0	0	0	0	H	
55.0				53.80 - 55.82: silic bx; int silic, m. gry, minor pale gr chl clasts w py replacement, minor local dk gr chl grains, 1 bright gr grain?, local fract with qtz rehealing; chl clast to 2cm, chl-py on fract.	12	0	0	6	0		
60.0				55.82 - 56.58: silic bx; m. gry, int silicified, no relic text, minor qtz-cal veining, to 1mm; local dk chl grains to 2mm; unit is massive and v.f.g., py-cal-chl on fract.	4	0	0	4	1	0	
65.0				56.58 - 59.13: silic bx; lt-med gry, mod silic, local lt gr chl clasts, to 3cm w dk gr chl inclusions; locally int fract, healed w qtz-cal; v. minor qtz-cal veining, to 1mm; cal-chl-py on fract, minor amts of ep locally;	21	0	0	6	0	M	
65.0				59.13 - 84.68: silic bx; lt gry - lt gr, w-mod silic, locally well chloritized, chl clast-frags abund, more than prev. units, chl is pale to dk green, local pale chl zones up to 15cm with dk gr chl grains	139	4	0	33	18	L	

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS		
		FROM 45.0	TO	WIDTH		oz/tm Au		
				3.0	3768	.036		
		48.0						
				3.0	3769	.026		
50.35 - 53.80: py - 30-35% v.f. g. to med. g., mainly dissem + on fract.		51.0						
				3.0	3770	.020		
53.80 - 55.82: py - 10-15%, f-m. g., mainly dissem and patches		54.0						
				3.0	3771	.028		
55.82 - 56.58: py - 15%, f. g., mainly dissem.		57.0						
56.58 - 59.13: py - 10-15% f-m.g., mainly dissem.				3.0	3772	.032		
59.13 - 84.68: py - 20% avg, f-m.g., ext amt of some veins + patches, a lot of dissem. as well, py favors mod-alt ch. areas, trace chalc + moly		60.0						
		63.0						
				3.0	3774	.027		
		66.0						
				3.0	3775	.033		

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS		
		FROM	TO	WIDTH		oz/tm Au		
		69.0						
				3.0	3776	.036		
		72.0						
				3.0	3777	.049		
		75.0						
				3.0	3778	.049		
		78.0						
				3.0	3779	.041		
		81.0						
				3.0	3780	.010		
		84.0						
		84.68		0.68	3781	.011		
84.68 - 109.50: py - 3-5% f. g., mainly dissem; trace chalco - moly. along qtz vein.				2.32	3782	.009		
		87.0						
				3.00	3783	.008		
		90.0						

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS		
		FROM 90.0	TO	WIDTH		oz/tm Au	ppm Ag	% Cu
90.05 - 91.40: py - 2-3%, f.g., mainly dissem; trace chalc + moly on fract's.				3.0	3784	.012		
91.40 - 96.90: py - 3-5%, f.g., mainly dissem; trace -.5% chalc mainly dissem + in qtz-cul veins; trace moly on fract's; 1.6cm band of w-mod alt and w 2-3% chalc, chalc- moly begins to incr. just above hematite zone.		93.0		3.0	3785	.016		
		96.0		0.90	3786	.023		
96.90 - 97.45: py - 2-3%, f-m.g., mainly dissem; chalc - 2-3%, f.g., mainly dissem + sm. patches on fract's, trace silver- metallic sulphide over 10cm, trace hematite in qtz-co- chl vein; trace moly.		96.9		0.55	3787	.011		
		97.45		1.55	3788	.035		
97.45 - 102.82: py - 2-3%, f-m.g., mainly dissem + patches, conc. near or in chl patches or zones chalc - trace - 1%, f.g., mainly dissem + sm. patches, on fract's and w py, also in highly chl zones; trace hematite		99.0		3.0	3789	.006		
		102.0		3.0	3790	.008		
102.82 - 103.40: py - 5%, f.g., mainly as discont veins and on fract's.				3.0	3791	.004		
103.40 - 109.50: py - 5%, f-m.g., mainly dissem + patches, 108.80 - 109.5 has ~ 25-30% py; chalc - trace - 1%, f.g., mainly as dissem + sm patches locally on fract's; trace hematite + moly.		108.0		1.50	3792	.014		
		109.5				1.8	.064	
109.50 - 112.60: py - 5%, f.g., mainly dissem; chalc - 1-1.5%, f.g., occurs mainly assoc w qtz veins and on fract's; trace moly.		111.0		1.50	3793	.012		
				1.60	3794	.012		
						2.0	.292	

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS		
		FROM	TO	WIDTH		oz/tm Au	ppm Ag	% Cu
112.60 - 115.90: py - 10-15%, v.f.-m.g., mainly disseminated and along fract's; chalco - trace - 1%, f.g., mainly along fract's + Qtz veins; trace moly; Py often replaces chl.		112.6						
				1.40	3795	.015		
		114.0					1.8	316
				1.90	3796	.015		
							3.4	164
115.90 - 118.20: py - 3-5%, f.-m.g. mainly disseminated and along fract's; trace chalco + moly, chalco along fract's + Qtz vein, moly along fract.		115.90						
				1.10	3797	.010		
		117.0					2.8	280
				1.20	3798	.016		
		118.20					1.6	.086
		118.75		0.45	3799	.007		
118.20 - 118.75: py - 5-10%, v.f.-f.g., disseminated + along fract's; chalco - < 1%, f.g., massive + along fract's; vis. Au in one 7cm section; v.f. specks							3.8	168
		119.58		0.83	3800	.007	1.8	.094
		120.0		0.42	3801	.016	1.6	.032
					3802	.015		
118.75 - 119.58: py - 5%, v.f.g.-f.g., disseminated and along fract's; trace moly							1.6	.020
		123.0						
119.58 - 129.75: py - 5%, f.-m.g., disseminated; trace moly in fract's.				3.0	3803	.005		
		126.0						
				3.0	3804	.004		
129.75 - 142.34: py - 3-5%, f.-m.g., mainly disseminated; trace chalco Py mainly assoc. w chl.								
		129.0						
				3.0	3805	.005		
		132.0						
				3.0	3806	.005		
		135.0						

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ.
					Py <1mm	veins 1-10	ns >10	qtz ✓	cal ✓		
					A	B	C	D	E		
135.0				119.58-129.75: cont; mod local fracturing							
140.0				128.75-142.34: aph. and: mainly lt gr = gr w local med gr patches, mottled text., local dk gr. chl zones, local lt gr. silic patches to 1cm w chl + py; local int. hairline fract w chl + cal on fracts; minor cal veining, hairline to several mm; locally minor py + ep on fracts, local well silic zones, local zones w minor chl grains, to 2mm, chl locally replaced by py	5	0	0	1	30	M	
145.0				142.34-148.38: chl. and: med-dk gr, f. g.; 10-15% 1-2mm chl grains, local hairline fract w cal; one 5m fault(?) zone w brecciation healed w qtz-cal, minor cal veining to 5mm; chl + cal on fracts.	5	0	0	2	30	L	
150.0				148.38-150.08: And; med-dk gr, f.-med.g., good relic text., groundmass mainly ep, alt. plag fs? abund. chloritized mafics (bb1?), unit is well saussuritized. local mass. patches of ep; minor cal veining, .5-1mm, several local bedding structures?							
155.0				150.08-154.23: alt. lithic arenite; lt-m. gr, = epiastic? , mod silic, abundant f. chl grains, 1-2mm abund. f. chl in groundmass w silic. grains, silic grains + frags to 3mm, minor cal veins 1.5-3mm, apparent normal graded bedding?, one qtz vein w chl, minor cal in groundmass	0	0	0	5	18		

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS		
		FROM 135.0	TO	WIDTH		oz/tm Au		
				3.0	3807	.008		
		138.0						
				3.0	3808	.007		
		141.0						
142.34 - 143.38: py - 5%, f-m.g., mainly dissem + locally on fract's, trace hematite in several cal. veins, some brass scrapings from core tube in 141.0 - 144.0				3.0	3809	.011		
		144.0						
				3.0	3810	.004		
		147.0						
148.38 - 150.03: py - 1-2% f.g., finely dissem + on fract's, + trace hematite on fract's + in cal veins.				3.0	3811	.008		
		150.0						
150.08 - 154.23: py - 2-3%, f-m.g. mainly dissem.				3.0	3812	.003		
		153.0						
				1.23	3813	.005		
		154.23						