

9268

DIAMOND DRILLING REPORT
for
Sulphurets Property

part 2
42

Sulphurets 1 Group, Central 1 Group and
Central 2 Group Mineral Claims

Skeena Mining Division

104B/8E, 8W, 9E, 9W

56° 30' N, 130° 15' E

Claims owned by: Granduc Mines Limited (NPL)
Sidney F. Ross and
Esso Resources Canada Limited

Operated by: Esso Minerals Canada
600 - 1281 West Georgia Street
Vancouver, B.C. V6E 3J7

Report by: Dane A. Bridge

Submitted: September 29, 1981


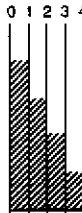
APPENDIX

Detailed Drill Logs, DDH 18-27

The recorded Au assays are all fire assays. The first Au assay is by the Canada Wide Mines assay lab at Granduc, B.C. The Au assay recorded directly below the first is by Min-En Labs Ltd., North Vancouver, B.C.

Analyses or assays for other elements on the same horizontal line as the lower Au assay are by Min-En Labs.

DRILL LOG

PROJECT Sulphurets 2153	GROUND ELEV. 3460' 1054.6m
HOLE NO. 18	BEARING N 1
LOCATION Sulphurets Gold Zone	DIP - 90°
	TOTAL LENGTH 548 ft. 167.03m
LOGGED BY D. Bridge, D. Feduk, W. Molnyk, T. Simpson	HORIZONTAL PROJECT 6.20m
DATE June 19 - June 23, 1981	VERTICAL PROJECT 166.60m
CONTRACTOR Arctic Diamond Drilling	ALTERATION SCALE  <p>absent slight moderate intense</p>
CORE SIZE BQ	
DATE STARTED June 15, drilling June 18 / 81	TOTAL SULPHIDE SCALE  <p>traces only < 1% 1% - 3% 3% - 10% > 10%</p>
DATE COMPLETED June 22, 1981, surveyed by 10:15 am	
DIP TESTS 44' - 89° 349.5° 322.0 obs 224' - 88° 045.5 018.0 424' - 83.2° 050.5 023.0 524' - 82.8° 057.5 030.0	LEGEND
COMMENTS lost water at 130' 0.2m stickup on casing	

Dave A. Bridge

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					no. of cl cm A	py 1-10 cm B	v. 2,10 cm C	qz V D	ca V E		
				0.0-2.13: overburden							
				2.13-7.68: weakly to moderately altered andesite: light green to light gray, F.g., local F.g. altered plg grains, local v.F.g. carb. amygdales?, minor qz & cal. v.	38	1	0	3	2	L	
5.0					7.0/m		0.5/m				
				7.68-15.0: intensely altered andesite: F.g., light gray, int. silicified, locally int. fractured and healed by hairline cal. veins, minor remnants of w-m. altered rock, avg. 2% small chlorite patches	62	8	0	1	4	L	
10.0					9.6/m		0.1/m				
	50	15 cm g.v. py on rims		15.0-17.14: chloritic andesite: F.g., med. green, abundant chl. grains and small patches	38	1	0	0	14	L	
15.0					18.2/m						
	40			17.14-17.54: massive pyrite: m-c grained, 10-20 cm light gray halo around v.			1		0		
				17.54-20.15: int. alt. andesite: mainly F.g., light gray, granular, silicified, local med green chl. and. remnants	44	1	0	1	18	L	
20.0					14.9/m		0.3/m				
	40			20.15-20.75: massive py v, coarse grained, minor cal-chl-qz patches			1		0		

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS							
		FROM	TO	WIDTH		^{oz} /ton	ppm	ppm	ppm	ppm	ppm	ppm	
						Au	Ag	Cu	Mo	As	Sb	Hg	
2.13 - 7.68 : 3-5 % py, F-mg, mainly veins		3.00											
				3.00	3601	.036	4.0	1520	12				
		6.0											
				1.68	3602	.016	2.2	630	16				
		7.68											
7.68 - 15.0 : avg 25% py, mainly veins, some dissem. in and around ch. patches, 2 obs moly in qz v.		9.00		1.32	3603	.027	2.6	690	24				
				3.00	3604	.043	3.0	700	32				
		12.00											
				3.00	3605	.089	3.2	490	30				
15.0 - 17.14 : 5-10 % py, veins, very minor dissem.		15.00											
				2.14	3606	.016	1.8	480	10				
17.14 - 17.54 : massive py v, c-m grained		17.14											
		18.0		0.86	3607	.056	7.6	105	12				
17.54 - 20.15 : 5-10 % py, mainly veins				2.15	3608	.052	2.8	615	12				
		20.15											
20.15 - 20.75 : massive py		21.00		0.85	3609	.040							
						.052	6.0	250	68	380	118	1100	
										Pb-A20	Zn-44		

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS						
		FROM	TO	WIDTH		g/t Au	ppm Ag	ppm Cu	ppm Mo	ppm Pb	ppm Zn	ppm Co
20.75-35.65: avg 15% py, mainly F-m				3.00	3610	.055	3.8	2240	6	32	40	1150
grained vein py.		29.00				.050				Pb-172	Zn-139	
at 21.64: 5mm sp. py v												
w. vuggy qz and												
minor stibnite?				3.00	3611	.027						
						.024	2.6	572	3	167	31	650
minor native Cu on some										Pb-136	Zn-72	
open, weathered fractures		27.0										
				3.00	3612	.017						
						.018	2.4	628	16	30	22	430
		30.00								Pb-52	Zn-35	
				3.00	3613	.014						
						.013	2.3	708	6	20	32	400
										Pb-49	Zn-33	
		33.00										
				2.65	3614	.010						
						.011	2.4	450	6	27	31	520
35.65-36.58: massive py, coarse grained, one minor sph. patch		35.65								Pb-44	Zn-50	
		36.00	0.35	3615	.055	2.8	150	22	252	104	110	
		36.58	0.58	3616	.032	6.4	582	24	170	107	158	
										Pb-400	Zn-2000	
36.58-37.70: 20% py, mostly v, some				1.12	3617	.025	2.6	212	8	23	50	300
dissem. c-f grains, subhed-an		37.70								Pb-88	Zn-272	
at 37.94-38.45: mass. py, c.g., subhed		38.45	0.75	3618	.038		6.0	480	12	166	122	1500
20cm halo		39.00	0.55	3619	.051		5.2	470	4	20	32	105
38.45-42.86: 5-10% py, F-m grain, qtz sat in some veins.						(.049)				Pb-72	Zn-1010	
				3.00	3620	.016	3.6	760	8	10	49	400
						.026				Pb-54	Zn-370	
		42.00										
				0.86	3621	.011						
42.86-43.32: avg 40% py, F-m grain		42.86				.016	2.8	460	1	2	51	200
qtz in py veins				0.46	3622	.094				Pb-32	Zn-160	
		43.32				.085	6.4	412	4	74	62	350
				1.68	3623	.013				Pb-34	Zn-16	
43.32-47.30: 10% py, veins with		45.00				.018	3.4	605	8	14	72	150
sat and minor qtz										Pb-24	Zn-149	

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS						
		FROM	TO	WIDTH		oz/tm Au	ppm Ag	ppm Cu	ppm Mo	ppm As	ppm Sb	ppb Hg
				3.00	3624	.052						
47.30-50.00: 10% py, mostly veins, Fm grain		48.00				.050	4.0	320	10	1	58	300
											Pb-48 Zn-180	
				3.00	3625	.098						
50.00-55.10: py veining		51.00				.081	4.4	664	6	26	32	320
											Pb-76 Zn-414	
50.00-57.40: 5% py, F-c grain associated cal. qt				3.00	3626	.019						
57.40-69.10: 1-2% F grain assoc. cal. qt							2.2	576	6			
63.10-72.90: 5% py, M-2 grain assoc. qt		54.00										
72.90-78.00: 1% py, F grain assoc. cal. qt				3.00	3627	.018						
78.00-85.10: 10% py, M-2 gr assoc. cal. qt		57.00					4.8	445	16			
				3.00	3628	.010						
		60.00					2.4	582	24			
				3.00	3629	.009						
							2.4	518	20			
		63.00										
				3.00	3630	.015						
							2.2	710	12			
		66.00										

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		wt/ton Au	ppm Ag	ppm Cu	ppm Mo
				3.00	3631	.008			
		69.00					2.0	510	4
				3.00	3632	.007			
		72.00					1.8	474	2
				3.00	3633	.009			
		75.00					1.8	514	6
				3.00	3634	.003			
		78.00					1.6	532	1
				3.00	3635	.019			
		81.00					2.2	190	10
				3.00	3636	.009	2.2	244	20
		84.00							
				1.10	3637	.012	3.0	370	14
		85.10							
85.10 - 90.95 : 5-10% py		85.90		0.80	3638	.057			
at 85.10-85.90 : 7cm and 20cm							12.6	98	22
mass: py v. and halo 5cm				1.10	3639	.026	4.0	487	16
		87.00							
				2.15	3640	.032	5.8	240	10
at 89.15 - 90.00 : 17cm mass py v.		89.15							
and siliceous patches									
		90.00		0.35	3641	.060	17.6	334	56

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					A	B	C	D	E		
90.00			25 cm py v.	90.95 - 94.16 : chl. alt. and lt-med gr. abundant chl(?) after field(?), some saussure(?)	22	0	0	2	78	L	
95.00			24 cm qt. cal v.	94.16 - 94.10 : cal. py. minor amounts of py, chl, epid.	0	0	0			0	
			1.5 cm cal. qt. epid v.	94.40 - 94.63 : chl alt. and lt-med-dk gr. abundant chl(?) after field(?), chl and epid in cal veins.	71	0	0	5	37	L	
			12 cm py, cal. chl v.	96.63 - 98.19 : chl alt. and lt-med gr. abund. chl(?) after field(?)	21	1	2	2	24	L	90.95 - 93.19
			5 cm py, test. epid v.	epid in cal v. 98.19 - 103.34 : chl alt. and lt-med gr. abund. chl(?) after field(?), silicified area 102.04 - 103.00, epidote present in most cal v.	113	0	0	25	65	L	
100.00			2 cm cal. epid. py v.		21.9/m		1.9/m				
				at 100.61 lost leaching observed							
105.00			24 cm qt. chl v.	103.34 - 107.85 : chl. alt. and lt gr. - gr. abund. chl(?) after field(?), chaled patch in qt v., mottled chl. area of lt gr at 104.68 with assoc py v., cal v. phigmatic	95	0	0			L	
			2 cm qt. chaled v.		18.8/m						
110.00			11 cm py, cal. gr v. 7 cm py gr v.	107.85 - 115.30 : chl alt. and mottled lt gr. and gr. abund. chl(?) after field(?), slight silic. throughout, brecciation of chl. in cal v., qt v. more intense, up to 7 cm in size, small amounts of moly assoc with enalce.	239	1	1	76	118	L	
					32.3/m		10.2/m				

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		wt% Au	ppm Ag	ppm Cu	ppm Mo
		90.23		0.23	3642	.053	27.2	160	32
90.25 - 94.16: 2% py, F grain, massive veins				2.37	3643	.009	5.6	560	20
		93.00		1.16	3644	.003			
94.16 - 94.40: 1% py, F grain, patches		94.16					2.3	340	20
		94.40		0.24	3645	.005			
				1.60	3646	.003	2.4	790	60
94.40 - 96.63: 1% py, F grain, veins		96.00					2.4	558	35
96.63 - 98.19: 10-15% py, G-F grain, veins at 97.75 - 98.19: 2cm, 15cm mass py v., 5cm halo, assoc cal, epid		97.75		1.75	3647	.029	12.0	580	18
		98.19		2.43	3648	.280			
98.19 - 103.34: 2% py, G-F grain, mostly veins		99.00		0.82	3649	.015	40.0	1560	20
							2.9	922	32
				3.00	3650	.011			
		102.00					2.8	546	3
103.34 - 107.85: 5% py, M-F grain, mostly veins, chalc in qt v. at 106.20, F grain				3.00	3651	.005	2.0	328	12
		105.00							
				3.00	3652	.005	3.0	672	20
107.85 - 115.30: 5-10% py, M grain, 7cm and 11cm semi-mass py v., 1% chalc as veins and patches with qt v.		108.00							
				3.00	3653	.014			
		111.00					7.2	1560	3

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au	ppm Ag	ppm Cu %	ppm Mo
				3.00	3654	.021	4.8	1500	24
		114.00							
		115.30		1.30	3655	.008			
115.30 - 117.12: 15-20% py, + mass py v., most veins py and qt, C-f grains, subind-ary,				1.70	3656	.056	8.8	510	48
		117.00							
				2.12	3657	.056	7.4	212	100
				119.12					
119.12 - 125.55: 5% py, C-f grain, 3 Semi-mass py v with assoc. qt and cal				0.83	3658	.024	4.2	1320	30
		120.00							
at 124.13: 10cm arsenopyrite in small veins and assoc. with qt v.				3.00	3659	.018	6.8	860	10
		123.00							
				2.55	3660	.050	8.4	650	26
				125.55					
125.55 - 131.37: 2% py, F grain, mostly veins, 3 or 4 small patches of chalc in cal and qt v.		126.00		0.45	3661	.009	2.8	1100	16
				3.00	3662	.006		%	
							2.0	120	48
		129.00							
				3.00	3663	.006			
							2.2	.098	48
131.87 - 141.22: 5% py, F grains, mostly veins, 16 chalc v < 1cm in size, chalc assoc with qt v., chalc concentrated 131.87-135.30 and 138.50-141.22 as the intensity of qt v is increased there		132.00							
				3.00	3664	.005			
							2.2	.101	30
		135.00							

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au	ppm Ag	% Cu	ppm Ni
				3.00	3665	.010			
							1.6	.159	38
	138.00								
				3.00	3666	.008			
							2.0	.086	60
	144.00								
141.22-143.15: 1% py, F grain, 5% chalc in veins, 5 mms to semi-mass chalc v assoc with qt v				3.00	3667	.018			
143.15-153.76: 10-15% py, C-F grain, mostly veins, 4 semi-mass veins assoc with qt v, 5% chalc 37 veins semi-mass assoc with qt v	144.00						13.0	.765	44
				3.00	3668	.008			
	147.00						3.6	.185	64
				3.00	3669	.008			
	150.00						3.4	.202	16
				3.00	3670	.008			
							3.8	.144	52
at 153.35: dissem native Cu (?)	153.00								
153.76-155.29: 1% py, F grain, veins and some dissem, no chalc				3.00	3671	.008			
							2.6	.188	50
at 154.1-154.5: dissem native Cu (?)									
155.29-158.50: <1% py, F grain, veins 29 chalc veins <1cm assoc with qt v,	156.00								

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS				
		FROM	TO	WIDTH		g/t Au	ppm Ag	% Cu	ppm Mo	
				3.00	3672	.010				
158.50-167.00: avg 5% py. C-P zone mostly veins, some mass v. zone above at 12 shales V. clon assoc with gt v.		159.00					2.4	.130	42	
				3.00	3673	.011				
							4.2	.152	8	
		162.00								
				3.00	3674	.005				
							1.8	.060	12	
		165.00								
				2.00	3675	.011				
		167.00					2.6	.050	12	

DRILL LOG

PROJECT Sulphurets 2153	GROUND ELEV. 4610' 1405m
HOLE NO. 19	BEARING —
LOCATION Sulphurets Gold Zone	DIP -90°
	TOTAL LENGTH 558' 170.08m
LOGGED BY R. Baerg, D. Bridge	HORIZONTAL PROJECT 4.29m
DATE June 29 - July 2/81	VERTICAL PROJECT 169.96
CONTRACTOR Arctic Diamond Drilling	ALTERATION SCALE
CORE SIZE 89	<p>absent slight moderate intense</p>
DATE STARTED June 22, drilling June 26, 1981	TOTAL SULPHIDE SCALE
DATE COMPLETED June 29, 1981, surveyed by 9:00 pm	<p>traces only < 1% 1% - 3% 3% - 10% > 10%</p>
DIP TESTS 195' - 89.1° 159.5 132 obs 345' - 88.7° 145.0 117.5 440' - 87.7° 161.5 134 545' - 85.2° 174.0 146.5	LEGEND
COMMENTS 0.3 m stickup on casing	

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					no. <1 cm A	of py. >10 B	v. >10 C	qtz >10 D	cal <1 cm E		
				0.0 - 2.7: overburden							
				2.7 - 3.55: bleached Andesite: med gr to lt gr residual patches, main unit cream colored (hydrothermal alt?) with chl patches, chl on fractures.	7	2	0	0	0	M	
5.0				3.55 - 6.70: mod. alt. Andesite med gr, chl patches, recementing by cal on fract's. minor (.5-1.0mm) cal. veins, chl. and cal on fract's, chl. frags decrease toward bottom.	7	1	0	1	26	H	
10.0				6.70 - 15.5: mod. alt. and: med gr - gr, py often in or surrounding chl patches, locally fractured and healed with cal., cal veins minor (.5-1mm) with one vein to 10mm, chl locally in stringers (.5-1mm) and patches chl varies from gr-blk to lt gr. bottom .5m becomes highly fractured, unit mod. silicified	58	3	0	0	59	H	
15.0											
				15.5 - 17.58: mod to int alt. and: med dk gr to pale gr and mottled, chl patches in upper part also highly fractured in first .5m, mod. silicified, chl on fract's.	14	0	0	1	9	H	
20.0				17.58 - 73.43: Flow Breccia: 17.58 - 18.85: int. alt. Breccia: locally some chl patches with py in or around them, very minor cal veining, well silicified	12	1	1	0	2	L	
				18.85 - 20.85: mod. alt. breccia frags <1mm to 3cm, dk chl? groundmass, some frags replaced by py, frags subround to subangular	15	0	0	10	0	0	

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS				
		FROM	TO	WIDTH		g/tm Au	ppm Ag	ppm Cu	ppm Mo	
				3.0	3686	.025				
						.020	4.2	72	5	
		24.0								
20.85 - 49.80: py - 30-35%, massive veins, patches and disseminated										
				3.0	3687	.062				
						.057	1.2	135	29	
26.7: mass. qtz py v, f-m g, anh - subh.		27.0								
				3.0	3688	.035				
						.040	1.2	273	12	
		30.0								
30.6: mass. qtz py v, f g, py anh.				3.0	3689	.083				
						.067	1.1	355	2	
		33.0								
				3.0	3690	.024				
						.020	1.3	300	3	
		36.0								
				3.0	3691	.032				
						.029	0.9	438	3	
		39.0								
				3.0	3692	.044				
						.047	0.6	456	10	
		42.0								
42.83: py v, f-m g with qtz, py anh to subh.				3.0	3693	.033				
						.028	0.8	258	16	
44.83: mass. py v, f-m g, py subh to anh.		45.0								

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					py cl am A	veins 1-10 B	>10 C	qtz D	cal E		
45.0											
			45	3.5cm py v							
			40	3.5cm py v							
			50	2.0cm py v							
50.0			50	2.5cm py v							
			35	8cm py v							
			45	9cm qtz py v 2.5cm py v							
				49.80 - 58.00: int. alt breccia: highly fractured and weakly cemented with qtz + cal, some local ep. + chl. alt., locally well silicified, locally breccia texture destroyed, py incr. with fract int., locally chl on fracts., sericite development in highly fract zones.	23	6	0	6	7	H	
55.0			65	3cm py v							
			30	60cm qtz py v							
60.0				57.80 - 58.40: mass. py v minor qtz + cal veining (≤.5mm), siliceous matrix 58.40 - 64.58: int. alt. breccia: most frags altered or destroyed, locally highly fract., locally well silicified, chl locally developed and on fractures, minor qtz + cal veining up to 1mm, locally frags replaced by py., ep. + sericite on fracts in int fractured zones, frags sub angular to sub round.	0	0	1	5	3	0	
			80	37cm py v							
65.0			80	64.58 - 64.95: mass. py v, fractured and rehealed w minor qtz veins (to ≤.5mm) 64.95 - 73.43: med alt. breccia: frags locally distinct to indistinct, frags up to 3cm, distinct breccia zones well silicified upper silicified zone grades into a	0	0	1	7	0	L	
			85	4cm py v							
					58	7	0	29	3	L	

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au	ppm Ag	ppm Cu	ppm Mo
		45.0							
				3.0	3694	.095			
						.092	0.8	350	24
		48.0							
				3.0	3695	.038			
49.80 - 58.00: py - 35-40% mainly diss. + patches, several Qtz - py veins, trace chalc in the larger Qtz veins py - f-mg		51.0				.090	1.2	394	22
				3.0	3696	.029			
						.020	0.7	350	8
		54.0							
				3.0	3697	.290			
						.230	1.0	430	6
		57.0							
				0.80	3698	lost			
		57.80		0.60	3699	.111			
57.80 - 58.40: py - 85-90%, f-mg, massive		58.40				.112	7.1	142	38
58.40 - 64.58: py - 20-25%, f-mg, mainly patches + disseminated, sm. amt's found with Qtz veins.		60.0		1.60	3700	.120			
						.098	3.7	1250	11
				3.0	3701	.040			
						.038	0.6	320	10
		63.0							
				1.58	3702	.046			
64.58 - 64.95: py - 90-95% f-mg, massive		64.58				.039	1.0	350	4
		64.95		0.37	3703	.105			
						.079	3.6	160	16
64.95 - 73.43: py - 30-35% f-mg, mainly veins and patches, trace chalc		66.0		1.07	3704	.079			
						.054	1.2	102	38

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					py < 5% A	veins (5-10) B	ns > 10 C	qtz v D	cal v E		
70.0				64.95 - 73.43: continued zone with a grainy texture and less silicified, this grades into a highly fract. zone, rehealed by qtz, local ep and chl alt. in fract rock, also some sericite alt on fract, minor qtz + cal veins (3.5-1mm)							
			35	5cm py v							
			80	3cm py v							
			85	5.5cm py v							
			90	2.0cm py v							
75.0			40	2cm py v	1	0	0	10	6	L	
				73.43 - 74.70: int. alt breccia; appears to be a transition zone, breccia to a cherty alt. and, chl and ep alt on fract, well silicified, minor qtz and cal veining up to \approx 3mm							
				74.70 - 75.15: chl-ep-cal-gtz vein; v is surrounded by, cherty and, mainly qtz with veins of chl and cal, local ep alt, mottled pale white to gr color, mineralization occurs mainly in chl, ep occurs mainly on outer edges of vein							
80.0			20	75.15 - 91.65: aph-cherty and: 75.15 - 79.3: aph-cherty and: lt to med gr, locally br (hematite?) med to int fract, locally pale gr - muddy looking and not as well silicified, minor (.5-1mm) qtz + cal veins throughout, rehealed some fract, extensive chl alt, on fract and patches in rock, chl frags?	0	0	0	15	11	H	
			35	shear							
				shear							
85.0				79.3 - 91.65: aph-cherty and: med to dk gr, v.f.g. and int. fract., extensive hairline cal + qtz veining - rehealing of fract, local ext. chl alt, chl and ep on fract, chl patches (rel. text?) cal + qtz together in veins, locally graph on shear surfaces, at 80.75 to 81.53 sm. shear - fault, rock highly fract and ground up. 87.27 to 90.83 is crushed rock	0	0	0	18	26	H	
90.0				shear							

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au	ppm Ag	ppm Cu	ppm Mo
				3.0	3705	.029			
						.022	1.2	162	16
		69.0							
				3.0	3706	.063			
						.052	1.8	440	18
		72.0							
				1.43	3707	.199			
73.43 - 74.70: py - 5%, f-m		73.43				.131	2.0	670	36
g, mainly as				1.27	3708	.023			
patches, increases with chertiness,		74.70				.020	5.4	2720	140
chalc - 2% in cherty rock		75.15		0.45	3709	.039			
						.039	600.0	3720	94
				2.85	3710	.016			
74.70 - 75.15: py - 5%, f-g,						.013	9.8	1800	64
chalc - 1-2%									
mainly on outer edge of vein,		78.0							
py in patches, also mainly on				3.00	3711	.009			
outer edges. 2-3% metallic							3.0	550	46
silver min over 37cm in center of									
vein.									
75.15 - 91.65: py - 5%, m-f-g,		81.0							
mainly patches				3.00	3712	.006			
and dissem, chalc - 0-2%							2.4	600	24
dissem + patches on shears + fract.									
trace hematite.									
75.15 - 79.3: py - 5-10%, f-m		84.0							
g, mainly dissem,				3.00	3713	.002			
and patches, chalc - 1-2%,							1.6	400	20
patches mainly on shears + fract									
79.3 - 91.65: py - 0-3%		87.0							
f-mg, mainly as				3.00	3714	.003			
patches, chalc - trace, hematite							1.6	314	16
- trace, chalc mainly on shears									
+ fract		90.0							

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		g/tm Au	ppm Ag	% Cu	ppm Mo.
				1.65	3715	.005			
	91.65						1.6	.037	16
91.65 - 93.70: py - 4-6%, f-mg, mainly patches.				1.35	3716	.007			
chalco - 0-1%, mainly patches trace moly + hematite?	93.0						1.4	.188	72
92.90 - 94.20: py - 5%, chalco - 1%, patches and on shear surfaces, one patch ca 2cm. silicified - bleached zone				3.0	3717	.017			
96.70 - 98.70: py - 5%, mainly patches, chalco - 0-1.5% mainly in patches and on fract's, pale br silic zone.	96.0						2.2	.472	88
				3.0	3718	.019			
98.70 - 105.50: py - 2-3%, mainly in patches, chalco - trace, trace moly, both occur on fract's, chalco as patches, moly as fine dissem layer. py occurs mainly in and around chl patches	99.0						1.8	.360	78
				3.0	3719	.003			
	102.0						1.2	.081	52
				3.0	3720	.002			
	105.0						1.0	.045	22
105.50 - 106.55: py - 3-5% mainly as sm. patches, trace chalco - dissem + sm patches, also in larger gtz veins trace moly.				1.55	3721	.006			
	106.55						1.6	.172	104
				1.45	3722	.003			
	108.0					.009	1.0	.060	56
				3.0	3723	.020			
						.022	2.4	.540	304
106.55 - 127.50: py - 3-5% f-mg, mainly in patches, chalco - 3-5%, f-mg, dissem. patches, along fract's, occurs in gtz veins	111.0								
				3.0	3724	.016			
						.032	2.4	.950	340

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					py < 1 cm A	veins (cms) 1-10 B	HS > 10 C	qtz D	cal E		
115.0			15 30 15	3cm qtz v							
				2cm qtz v							
				shear							
			20								
			80	2.5cm qtz v							
				2.5cm qtz v							
120.0											
			70	2.5cm qtz v							
			60								
			60	2.5cm qtz v							
				2.0cm qtz v							
			30	3.5cm qtz v							
125.0			30								
			90	4cm qtz - ep - cal - chl v							
				3cm qtz v							
130.0				127.50 - 137.00: w-mod alt and: lt gr to lt gry, w-mod silicified, 2-3% fg chl grains, minor local chl patches, ep + chl alt after hbl + fs local, good relic text, local chl frags up to 2cm, also w py replacement, chl + ep on fract, qtz-cal veins up to 1cm, most .5-1mm chl grains incr. toward bottom	17	0	0	28	30	2	
			20	fract							
135.0			20								
			20	fracts							

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS				
		FROM	TO	WIDTH		as/tm Au	ppm Ag	% Cu	ppm Mo	
106.55 - 127.50: cont.										
24 times usually in larger veins and toward top of the unit. Moly as f. dissem or on fract's throughout, trace sph?		114.0								
				3.0	3725	.037				
						.014	2.0	.455	276	
		117.0								
				3.0	3726	.022				
						.021	2.4	.570	232	
		120.0								
				3.0	3727	.039				
						.040	3.6	.825	160	
		123.0								
				3.0	3728	.028				
						.029	3.6	.795	128	
		126.0								
				1.5	3729	.028				
127.50 - 137.00: py - 5%, mainly as patches, trace chalc. as patches and in some minor qtz veins, trace moly on fract's + in qtz veins, py is f-m g, chalc. is f-m g.		127.5				.030	20.0	.630	192	
				1.5	3730	.009				
		129.0					1.8	.226	54	
				3.0	3731	.019				
							2.0	.188	36	
		132.0								
				3.0	3732	.007				
							2.4	.140	46	
		135.0								

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au	ppm Ag	g. Cu	ppm Mo
				2.0	3733	.009			
							8.2	.116	32
	137.0								
137.0 - 138.30: py - 1%				1.0	3734	.002			
f-m.g.,	138.0						2.0	.025	14
mainly as sm. patches,	138.30			0.30	3735	.002			
trace hematite in cal vein							2.4	.024	16
138.30 - 147.65: py - 5%									
f-m.g.,				1.70	3736	.003			
trace chalc. along qtz veins,							4.0	.076	24
trace maly along veins + fracts,	141.0								
trace hematite in a qtz-cal vein,									
trace silver - metallic mineral in qtz-cal-ep-chl vein				3.0	3737	.003			
py mainly as sm. patches							2.8	.079	54
	144.0								
				3.0	3738	.003			
							2.2	.040	11
	147.0								
				0.65	3739	.004			
147.65 - 160.00: py - 3-5%	147.65						2.4	.091	44
f-m.g.,				2.35	3740	.003			
dissem. and patches, trace chalc. and maly. chalc.							2.0	.038	30
mainly assoc. w qtz-cal veins	150.0								
maly in discont. fracts.									
				3.0	3741	.004			
							1.6	.097	72
	153.0								
				3.0	3742	.004			
							1.2	.040	36
	156.0								
				3.0	3743	.004			
							1.2	.068	72

[illegible]

DRILL LOG

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 B9	0 1 2 3 absent slight moderate intense
DATE STARTED June 29, change angle at 9pm	TOTAL SULPHIDE SCALE
DATE COMPLETED July 2, 1981, surveyed 3-9 pm	0 1 2 3 4 traces only < 1% 1% - 3% 3% - 10% > 10%
DIP TESTS 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°	LEGEND
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	

James A. Baerg

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					py <1cm A	veins 1-10 B	ns >10 C	qtz ✓ D	cal ✓ E		
0.00 - 4.57				overburden							
4.57 - 18.90				chl-silic and:							
4.57 - 5.30				silic. and: lt-med gr-gr, w-med well silic., local chl patches toward top, chl-ed-py on fract, bottom of unit highly fract.	7	0	0	4	0	M	
5.30 - 6.85				py seam on shear (9cm) chl. and: med-dk gr, very chl, locally silic.; chl-ed-py-iron staining on fract; locally some silic frags (to 1mm), no veining or relic text.	9	0	0	1	0	M	
6.85 - 10.15				silic and: lt gr-gr, locally sm (±1mm) chl grains lt gr (relic?), some lger frags locally with py repl, 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-gr, 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	
12.15 - 15.90				silic and: lt gr-gr, 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 (1-2 mm), locally py after chl, 13cm zone (bed?)	29	0	0	3	6	M	
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	

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		as/m Au			
23.55 - 24.50: py - 35%, f-m.g., mainly as 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							
				2.0	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 fracts, + trace chalc in the py. 1 mass py vein (20cm)		39.0							
				3.0	3766	.022			
		42.0							
				3.0	3767	.023			
		45.0							

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au			
		45.0							
				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 + an fract.		51.0							
				3.0	3770	.020			
53.80 - 55.82: py - 10-15% f-m g, mainly as 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 sme veins + patches, a lot of dissem. as well, py favors med-alt ch areas, trace chalco + moly		62.0							
				3.0	3773	.042			
		63.0							
				3.0	3774	.027			
		66.0							
				3.0	3775	.033			

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/ton Au			
		69.0							
				3.0	3776	.036			
		72.0							
				3.0	3777	.049			
		75.0							
				3.0	3778	.044			
		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 chalc - molyb along Qtz vein.				2.32	3782	.009			
		87.0							
				3.00	3783	.008			
		90.0							

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					cl cm A	veins 1-10 B	>10 C	qtz ✓ D	cal ✓ E		
90.0				90.05 - 91.40: "cherty" and; lt gr - gr, med - int. silic, qtz veins to 2cm, most 1-2mm, minor ep - chl alt along veins; chl grains to 3mm locally, minor chl patches w ep alt, chl - graph on fract. w trace moly.	0	0	0	10	0	H	
95.0				91.40 - 96.90: "cherty" and; mottled med gr - gr, locally gr - br, due to hematite?; aph text w local f.g. zones, f.g. zones more cal, chl grains and patches locally, mainly in f.g. zones; minor qtz - cal - ep - chl veining, minor ep - chl alt. w qtz veins, chl - graph - moly locally on fract.	2	0	0	10	0	M	
100.0				96.90 - 97.45: aph. and; med - dk gr, silic zone w ep - chl - cal over 30cm, local chl grains (sm) and chl on fract.	0	0	0	2	0	0	
				97.45 - 102.82: aph - uf. g. and; med - lt gr, locally well silic - chloritized w minor ep. alt; local int. hairline fract. w cal or chl, local mottled text at lt + dk gr chl, chl patches often rimmed or replaced by py; locally graph on fract.	4	0	0	2	10	H	
105.0			fault	lower .5m shows recr. fract. int.							
			fault	102.82 - 103.40: aph. and; fault bx, healed w qtz - cal, frags sub angular to sub round, lt gr chl rims dk gr chl patches, some local frags of both to 1cm, minor local ep alt.							
110.0			fault	103.40 - 109.50: aph. and; lt - med gr, med silic, locally bleached, locally faulted and int fract to produce bx, bx healed w qtz - cal, local mottled text at lt + dk chl, chl grains abund. locally, chl in bx dk gr and angular to sub angular, chl on fract, minor ep alt.	6	0	0	7	10	H	
			4cm qtz vein								

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-chl veins; trace moly on fract's; 1.6cm band of w-med alt and. w 2-3% chalc, chalc-moly begins to incr. just above hematite zone.	93.0			3.0	3785	.016			
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.	96.0 96.9 97.45			0.90 0.55	3786 3787	.023 .011			
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			
102.82 - 103.40: py - 5%, f.g., mainly as discant veins and on fract's.	102.0			3.0	3790	.008			
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.	105.0 108.0 109.5			1.50	3792	.014			
109.50 - 112.60: py - 5%, f.g., mainly dissem; chalc - 1-1.5%, f.g., occurs mainly as soc w qtz veins and on fract's; trace moly.	111.0			1.50	3793	.012			
				1.60	3794	.012			
							1.8	.064	
							3.4	.229	
							2.0	.292	

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					py veins <1cm	1-10	>10cm	qtz v	cal v		
A	B	C	D	E							
115.0				109.50 - 112.60: silic and; lt-med gr, granular text, locally int fract and healed w qtz-cal, med silic w minor qtz-cal veins, 1 vein to 4cm, most 1-2mm; minor chl and py on fract, minor chl (lt gr) in groundmass of granular zones.	6	0	0	10	4	M	
120.0				112.60 - 115.90: aph and; lt gr-gr, int fract; med silic; minor discont qtz-cal veining; lt gr chl patches up to 15cm enclosing sm dk gr chl patches and grains (relic text?) dk gr chl rimmed and/or replaced by py; local silic patch of ep-chl-cal; chl on fracts.	9	0	0	5	5	H	
125.0				115.90 - 118.20: silic and; lt gr, med silic, int fract, granular text (f.g.); one 10cm qtz w chl, other veins 2-10mm; f. lt gr chl in groundmass fract as well, chl-cal on fracts, fault at 118.20, graph on slip surface	1	0	0	7	4	H	
130.0				118.20 - 118.75: chl. and; m. gr., med. + irregularly silic, int fract, caused by fault at 118.20?, chl + silic frags to 1cm healed by qtz-cal, minor chl-py on fracts.	0	0	0	0	0	H	
135.0				118.75 - 119.58: chl and; dk gr-gr, highly crushed and weakly silic, relic chl grains to 2mm, chl-py locally on fracts, "thin" fault at 119.58 w fault gouge 119.58 - 129.75: chl and; med gr-gr, f.g. to granular groundmass, 10-15% 1-3mm chl grains, locally angular (relic hbl-fsl), extens cal veining, veins (fracts?) hairline to 5mm, some w chl chl-cal on fracts, minor to	16	0	0	2	97	M	

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 along fract.; chalco - trace - 1%, f.g., mainly along fract. + qtz veins; trace moly; Py often replaces chl.		112.60							
				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 along fract.; trace chalco + moly, chalco along fract. + 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		0.15	3799	.007			
118.20 - 118.75: py - 5-10%, v.f.-f.g., disseminated + along fract.; chalco - < 1%, f.g., massive + along fract.; Vis. Au in one 7cm section, v.f. specks		119.58		0.83	3800	.007	1.8	.094	
		120.0		0.12	3801	.016	1.6	.032	
					3802	.015			
118.75 - 119.58: py - 5%, v.f.g.-f.g., disseminated and along fract.; trace moly							1.6	.020	
		123.0							
119.58 - 129.75: py - 5%, f.-m.g., disseminated; trace moly in fract.				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 clm A	veins 1-10 B	ns 2-10 C	qtz ✓ D	ca ✓ 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-gr silic patches to 1cm w chl + py; local int. hairline fract. w chl + cal on fracts; minor cal veining.	5	0	0	1	30	M	
145.0				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; 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.	5	0	0	2	30	L	
150.0				healed w qtz-cal, minor cal veining to 5mm; chl + cal on fracts.							
155.0				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?							
				150.08-154.23: alt. lithic arenite; lt-m. gr., epiclastic? mod silic, abundant f. chl grains, 1-2mm	0	0	0	5	18		
				abund. f. chl in groundmass w silic grains, silic grains + frags to 3mm, minor cal veins 15-3mm, apparent normal graded bedding?, one qtz vein w chl, minor cal in groundmass							

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au			
		135.0							
				3.0	3807	.008			
		138.0							
				3.0	3808	.007			
		141.0							
142.34 - 148.38: py - 5%, f.m.g., mainly disseminated + locally on fractures, 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 - 150.08: py - 1-2%, f.g., finely disseminated + on fractures, + trace hematite on fractures + in cal veins.				2.0	3811	.008			
		150.0							
150.08 - 154.23: py - 2-3%, f.m.g. mainly disseminated.				3.0	3812	.003			
		153.0							
				1.23	3813	.005			
		154.23							

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DRILL LOG

PROJECT 2153	GROUND ELEV.
HOLE NO. 21	BEARING 090°
LOCATION Sulphurets Lake Gold Zone	DIP 45
	TOTAL LENGTH 237.5' 51.19m
LOGGED BY D. Fedur, T. Simpson	HORIZONTAL PROJECT 36.20m
DATE July 7, 1981 - July 9, 1981	VERTICAL PROJECT 36.20m
CONTRACTOR Arctic Diamond Drilling	ALTERATION SCALE
CORE SIZE B9	 <p>absent slight moderate intense</p>
DATE STARTED July 6, 1981	TOTAL SULPHIDE SCALE
DATE COMPLETED July 7, 1981	 <p>traces only < 1% 1% - 3% 3% - 10% > 10%</p>
DIP TESTS unable to do - hole collapsed	
COMMENTS hole lost at 72.24m / 237.5', core barrel sheared off in hole	LEGEND

A.M. Lipead
SEPT 9, 1981

[illegible]

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					A	B	C	D	E		
25.0			401	fault	22.45-27.03; chl and; varegated pale gry-gr to dark gr-purple; flow banding very prominent, high py occurrences coincident with areas of high chl content, upper contact a fault between and. relic texture and flow banding, lower contact an oxidized frac., at 24.10 fault gouge	27	0	0	18	21	1
			80	py v, 5cm oxid rind							
			101	frac., 2cm oxid rind							
			30	py v, 6cm oxid rind							
			50	gtz v, 3cm oxid. rind	27.03-27.89; chl and; pale gr to dk gr, relic texture, more silic overall	2	0	0	14	0	1
			60	fault at boundary	27.89-48.37; chl and; varegated gr to gry to purple; flow banding distinct, F grain to aphanitic, chl. dissem as well as present along flow bands, py locally high and F grain along flow bands, trace hematite in some gtz v, some sections of relic and. texture between flow band sections	280	7	1	57	9	1
30.0			801	1cm py, gtz, chalc v.							
				11cm gtz, cal, py v including 3cm oxid rind							
			60	frac with 3cm oxid rind							
35.0			35	0.5cm py v							
			50	2cm semi-mass py v.							
			50	12cm semi-mass py v. including 4cm oxid rind							
40.0											
			30	1cm py v							
45.0			35	1cm py v.							

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au			
22.45-27.03: 2% py, F grain, mostly veins, oxid assoc.				1.55	3820	.003			
at 23.10: chalc in gtz v, trace galena also assoc. in veins		24.00							
				3.00	3821	.002			
		27.00							
27.03-27.89: 2% py, v F-m grain, dissem.									
27.89-48.37: F grain, anhedral, generally brown color				3.00	3822	.004			
27.89-29.25: 1% py, dissem.		30.00							
29.25-31.49: 1% py, veins, trace chalc in py v				3.00	3823	.006			
31.49-37.55: 5-7% py, veins and centre grained patches or spheroids of chl with py in the centre.		33.00							
				3.00	3824	.013			
		36.00							
37.55-45.24: 1-5% py, veins but mostly dissem				3.00	3825	.021			
		39.00							
				3.00	3826	.007			
		42.00							
				3.00	3827	.008			
		45.00							
45.24-45.55: 10% py, veins and									

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					A	B	C	D	E		
45.0											
			40	25cm semi-mass py veins and ool. rinds 2% shales							
				48.37-55.64: chl. alt. and: gr-gry to gr, low sulphide content, py found commonly in centre of spheroid chl rimmed with qtz, chl brecc in some cal v. from 50.00 to 50.50 excessive oxid and frac. relic texture preserved throughout interval	10	0	0	11	55	M	
50.0			40 25	25cm ool. rind around trace							
			40 25	frac with 4cm ool. rind							
			40 25	frac with 12cm ool. rind							
			40 25	1cm cal v. with chl brecc.							
55.0			40 25	55.64-56.37: and. dyke? M grain, med gr, chl pale- anhed, smaller, border chill zones	0	0	0	1	14	L	
			40 25	1cm cal, qtz v. iron stain							
			40 25	23cm frac and iron stain	110	0	0	24	51	M	
			40 25	frac with 2cm ool. rind							
				as before low sulphide levels with some local highs, some flow banded sections, some pale gr chl sections, some mottled pale and dk gr chl sections containing sulphides, the rest exhibit relic texture, fracture intensity and accompanying oxid. moderate, lowermost section also exhibits chl brecc. (≤4cm)							
60.0											
65.0			40	frac with 3cm ool. rind							

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DRILL LOG

PROJECT 2153		GROUND ELEV.																															
HOLE NO. 22		BEARING 090°																															
LOCATION Sulphurets Lake Gold Zone		DIP 70°																															
		TOTAL LENGTH 133.54 m 432 ft																															
LOGGED BY D. Feduk, R. Berg, D. Bridge		HORIZONTAL PROJECT																															
DATE July 9, 1981 - July 10, 1981		VERTICAL PROJECT																															
CONTRACTOR Arctic Diamond Drilling		ALTERATION SCALE absent slight moderate intense																															
CORE SIZE B9		TOTAL SULPHIDE SCALE traces only < 1% 1% - 3% 3% - 10% > 10%																															
DATE STARTED July 7, 1981																																	
DATE COMPLETED July 8, 1981																																	
<table border="1"> <thead> <tr> <th>DIP TESTS</th> <th>depth</th> <th>angle</th> <th>obs. log</th> <th>corr. log</th> </tr> </thead> <tbody> <tr> <td></td> <td>33'</td> <td>71.5</td> <td>059.5</td> <td>067</td> </tr> <tr> <td></td> <td>133'</td> <td>70.5</td> <td>061</td> <td>068.5</td> </tr> <tr> <td></td> <td>233'</td> <td>70</td> <td>070.5</td> <td>097.5</td> </tr> <tr> <td></td> <td>333'</td> <td>69.5</td> <td>074</td> <td>101.5</td> </tr> <tr> <td></td> <td>433'</td> <td>69.5</td> <td>n/a</td> <td>n/a</td> </tr> </tbody> </table>				DIP TESTS	depth	angle	obs. log	corr. log		33'	71.5	059.5	067		133'	70.5	061	068.5		233'	70	070.5	097.5		333'	69.5	074	101.5		433'	69.5	n/a	n/a
DIP TESTS	depth	angle	obs. log	corr. log																													
	33'	71.5	059.5	067																													
	133'	70.5	061	068.5																													
	233'	70	070.5	097.5																													
	333'	69.5	074	101.5																													
	433'	69.5	n/a	n/a																													
COMMENTS		LEGEND																															

Dave A. Bridge

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					A	B	C	D	E		
				0.00-1.83: overburden							
5.00				1.83-10.50: silic. and. : pale gr to dark gr-gry, alternating sections of cherty (pale gr) and flow banded (gr and gry) and mottled dark gr and gry, overall silic, in the area of 6.05 spheroids of a soft white mineral (due to devitrification?), interval fractured and intensely oxid.	59	1	0	26	4	M	
			30	fract with Rem oxid rind							
10.00			20	flow bands, py v. oxid frons							
			45	33cm fracs and oxid rinds							
15.00				flow banded 10.50-20.75: chl. and. : pale gr to dark gr-gry, half relic and. texture and half flow banding, locally silic, areas of high chl in flow bands	60	0	0	58	4	M	
			30	py v. with 1cm oxid rind							
20.00			45	flow bands, py v.							
				20.75-26.10: chl. and. : pale gr to gry, almost completely a fault zone and gouge, intensely oxid	8	0	0	2	17	M	

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS						
		FROM	TO	WIDTH		oz/tm Cu	ppm Ag	ppm Cu	ppm Mo	ppm As	ppm Sb	ppb Hg
1.83 - 10.50: 4% py, veins, also along areas of flow banding,		1.83										
F-C grain, many areas so oxid py completely lost		3.00		1.17	3994	.058						
				3.00	3995	.013						
		6.00										
				3.00	3996	.016						
		9.00										
				1.50	3997	.043						
10.50 - 84.32:		10.50										
				1.50	3998	.036						
		12.00										
10.50 - 20.75: avg 5% py, C-f grain, along flow bands and in patches along fractures, moderately disseminated also				3.00	3999	.011						
		15.00										
				3.00	4000	.006						
		18.00										
				3.00	4001	.003						
20.75 - 26.10: 1% py, some veins, mostly disseminated, M-f grain		21.00										

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		g/t Au			
				3.00	1002	.003			
		24.00							
				3.00	1003	.002			
26.10-52.87; overall 1 1/2% py except for locally higher contents		27.00							
				3.00	1004	.004			
at 29.87-32.52% 5-10% py		30.00							
				3.00	1005	.004			
		33.00							
				3.00	1006	.007			
		36.00							
				3.00	1007	.005			
		39.00							
				3.00	1008	.011			
		42.00							
				3.00	1009	.008			
		45.00							



MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		g/tm Au			
				3.00	4010	.016			
		48.00							
				3.00	4011	.007			
		51.00							
52.87-53.45 : 0% py				3.00	4012	.009			
53.45 - 55.30 : 4% py, few veins, mostly dissem, trace chalc		54.00							
55.30 - 59.40 : 2% py, dissem, F grain, trace chalc		57.00		3.00	4013	.010			
				2.40	4014	.020			
59.40 - 60.71 : 5% py, dissem, F grain		59.40							
		60.00		0.60	4015	.008			
		60.71		0.71	4016	.004			
5- 60.71 - 67.60 : 10% py, veins and along fracs, C-F grain, trace chalc along veins at 66.70				2.29	4017	.003			
		63.00							
				3.00	4018	.007			
		66.00							
				1.50?	4019	.030			

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au			
67.60 - 72.05: 10-15% py, mostly veins and small patches, C-f grain, minor chalc along qtz and cal veins		69.00		1.50?	4020	.041			
				3.00	4021	.007			
		72.00							
72.05 - 77.80: 5-10% py, mostly along flow bands, M-f grain, trace chalc as patches				3.00	4022	.006			
		75.00							
				3.00	4023	.003			
77.80 - 79.06: no py		78.00							
				3.00	4024	.004			
79.06 - 84.32: 5-10% py, mostly veins and along flow bands, C-f grain, sub-ortho crystals, trace chalc with py, trace sphalerite		81.00							
				3.00	4025	.012			
		84.00							
84.32 - 108.07: 3-5% py, C-f grain, mostly veins and patches, trace chalc, trace sphalerite				3.00	4026	.001			
		87.00							
				3.00	4027	.003			
		90.00							

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					A	B	C	D	E		
115.00				115.37-133.54: chl. and: lt to med. gray-gr. relic texture throughout, trace epidote(?) in some cal v., oxid. still present at depth, relic texture entails 10-15% chl grains ≤ 3 mm with an aphanitic groundmass	339	3	0	33	14	1	
120.00											
125.00											
130.00											
135.00				hole ends at 133.54							

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS				
		FROM	TO	WIDTH		g/tm Au				
				3.00	4035	.027				
		114.00								
				1.37	4036	.006				
		115.37								
115.37-133.54 85-10% py, as veins and patches, C-f grain, spars from bronze to dark brown to dark grey when fine grained				1.63	4037	.007				
		117.00								
				3.00	4038	.004				
		120.00								
				3.00	4039	.002				
		123.00								
				3.00	4040	.002				
		126.00								
				3.00	4041	.036				
		129.00								
				3.00	4042	.004				
		132.00								
				1.54	4043	.012				
		133.54								

DRILL LOG

PROJECT 2153	GROUND ELEV. 3495'
HOLE NO. 23	BEARING 090°
LOCATION Sulphurets Gold Zone	DIP -45°
	TOTAL LENGTH 329' (98.76m) to 318' 96.93m <i>core recovery</i>
LOGGED BY R. Baerg, D. Bridge	HORIZONTAL PROJECT based on 96.93 m; 68.54m
DATE July 11/81 - July 13/81	VERTICAL PROJECT 68.54m
CONTRACTOR Arctic Diamond Drilling	ALTERATION SCALE 
CORE SIZE B9	
DATE STARTED July 10/81	TOTAL SULPHIDE SCALE 
DATE COMPLETED July 12/81	
DIP TESTS none	
COMMENTS hole broke out of cliff face at 329'. rods were lost down the hole.	LEGEND

Dave A. Bridge

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS						
		FROM	TO	WIDTH		oz/tan Au	ppm Ag	ppm Cu	ppm Mo	ppm As	ppm Sb	ppb Hg
4.80 - 6.20: py - 10%, f-m.g., anhedral, mainly as sm mass. patches + on fract., very Fe stained	4.80			1.20	3838	.018						
		6.00				.021	1.9	878	12	22	39	350
										Pb-136	Zn-492	
6.20 - 9.62: py - 40-45%, f-m.g., anhedral to subhedral; mainly as veins + mass. patches.				3.00	3839	.094						
						.041	4.8	678	14	116	71	820
										Pb-264	Zn-820	
	9.0											
9.62 - 13.95: py - 15-20%, f-m.g., mainly sm veins, mass. patches, anhed. to subhed; trace to minor chalc.; vis. Au, 13.10- 13.25, halos around sm. py veins	9.62			0.62	3840	.040						
						.039	2.0	1280	6	43	39	310
										Pb-112	Zn-540	
				2.38	3841	.026						
						.029	2.2	2040	2	33	41	500
	12.00									Pb-268	Zn-700	
13.95 - 14.63: mass. py vein - patch, py - 75-80%, f-m.g., mainly f.g., one obs. of sph.				1.95	3842	.079						
						.074	4.8	2800	4	138	68	1300
	13.95									Pb-520	Zn-2040	
14.63 - 15.63: py - 10-15%, f-m.g., mainly dissem., anhed. to subhed.	14.63			0.68	3843	.054	4.4	1200	4	65	65	1650
						.053				Pb-1020	Zn-2380	
	15.00			0.37	3844	.036	2.2	894	2	26	22	200
						.032				Pb-132	Zn-250	
	15.63			0.63	3845	.060	2.8	858	8	53	9	380
						.061				Pb-180	Zn-340	
15.63 - 16.78: mass. py - gtz vein, py - 20%, f-m.g., anhed. to subhed.				1.15	3846	.102						
						.110	4.0	1720	44	103	101	400
										Pb-108	Zn-280	
16.78 - 45.0: py - 15-20%, f-m.g., mainly dissem. + sm. veins, trace chalc.; py in many gtz veins				1.22	3847	.036						
						.040	3.0	1240	24	120	72	400
										Pb-158	Zn-1040	
				3.00	3848	.039						
						.040	3.2	1280	6	41	41	950
										Pb-520	Zn-1120	
	21.00											

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		² /t. Au	ppm Ag	ppm Cu	ppm Mo
				3.00	3849	.017			
						.019	1.2	1040	7
		29.0							
				3.00	3850	.011			
						.012	0.9	935	3
		27.0							
				3.00	3851	.028			
						.028	0.9	1025	1
		30.0							
				3.00	3852	.047			
						.042	1.0	2000	2
		33.0							
				3.00	3853	.016			
						.020	0.9	1000	2
		36.0							
				3.00	3854	.041			
						.030	1.0	1360	2
		39.0							
				3.00	3855	.015			
						.020	1.0	952	2
		42.0							
				3.00	3856	.034			
						.030	1.2	676	4
		45.0							

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ.
					py <1cm A	veins 1-10cm B	>10cm C	qtz D	cal E		
43.0				45.00-53.30 : aph chl and; med - dk gr; well chloritized med - dk gr, locally chl on fract. minor local ep. alt.; ext. qtz veining; 1mm to 5cm veins locally have cal - chl - ep; fine grained - mottled text. overall; some veins contain angular chl frags; locally py after chl.	80	0	0	42	12	M	
50.0						9.6/m		5.7/m			
55.0				53.30-54.20: massive qtz - py; qtz is lt - med gry, py throughout. 54.20-56.76: alt chl and; lt gry, fine granular text; fine chl ground mass, weakly silic, local relic, larger chl patches; locally fract. minor qtz veining. 56.76-62.08: chl. and; med gr - gry; abund sm (1-2mm) chl grains, about 5-10%, chl ground mass, locally bleached w minor ep alt., local chl grains after hbl + fs; minor qtz veining w one 27cm vein; locally fract. w chl on fract.	0	0	1	0	0	L	
60.0				27cm qtz v	29	0	0	11	0	L	
					11.3/m		4.3/m				
65.0				62.08-74.78 : aph. chl. and; lt - med gr, fine grained mottled text; chl is pale - med gr, locally int fract w qtz - cal healing, local ep alt along qtz veins + in fract zones, minor to ext qtz veining throughout veins to 2cm; frags in fract zones very angular, locally sericite alt on fract.	52	0	0	20	4	M	
					9.8/m		3.8/m				
					44	0	0	38	7	H	
					3.5		3.8				



MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au	ppm Ag	ppm Cu	ppm Mo
		45.0							
45.00 - 53.30: py - 25%, f - m.g., anhed to subhed., mainly as sm. veins + patches; trace - minor chalc., fine grains to sm. patches in w the py. Trace Ag sulfide in gtz veins (3 observ.)		—		3.00	3857	.020 .020	0.7	1320	1
		48.0		3.00	3858	.018 .019	0.8	1300	1
		51.00		3.00	3859	.110 .060	1.0	3000	48
53.30 - 54.20: py - 70-75%, f - m.g., massive		54.0		3.00	3860	.022 .077	0.8	1380	2
54.20 - 56.76: py - 15%, f - m.g., mainly as sm. veins + dissem.		57.0		3.00	3861	.102 .084	1.6	1600	4
56.76 - 62.08: py - 10-15%, f - m.g., mainly sm. veins + dissem.; trace chalc., f. grains + patches in py; 3 obs. of vis. Au, assoc. w sm. py veins, v.f. grains.		60.0		2.08	3862	.041 .031	0.8	960	40
62.08 - 74.78: py - 10%, f - m.g., sm.		62.08		0.92	3863	.001			
vein + patches; trace maly + chalc., maly obs. in gtz vein, chalc. dissem. in py.		63.0		3.00	3864	.003 .010	0.8	784	2
		66.0		3.00	3865	.020 .021	1.1	1620	2

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS				
		FROM	TO	WIDTH		oz/tm Au	g/t Ag	ppm Cu	ppm Mo	
		69.0								
				3.00	3866	.029				
						.011	0.9	996	1	
		72.0								
				3.00	3867	.003				
						.031	1.0	1160	6	
		75.0								
				3.00	3868	.044				
						.039	0.9	1880	1	
		78.0								
				3.00	3869	.027				
						.028	1.0	2410	10	
		81.0								
		81.60		0.60	3870	.031				
						.030	0.9	1180	24	
				2.40	3871	.023				
						.020	1.0	1920	1	
		84.00								
		84.53		0.53	3872	.058				
						.052	1.2	3050	24	
				2.47	3873	.012				
						.052	1.1	3060	52	
		87.0								
				3.00	3874	.011				
						.013	0.9	1180	2	
		90.0								

ESSO RESOURCES CANADA LIMITED

ESSO MINERALS CANADA

DRILL LOG

PROJECT 2153		GROUND ELEV. 3495' 1065.3m																									
HOLE NO. 24		BEARING —																									
LOCATION Sulphurets Gold Zone		DIP -90																									
		TOTAL LENGTH 552' 168.25m																									
LOGGED BY R. Baerg, D. Budge		HORIZONTAL PROJECT 5.38 m																									
DATE July 13/81		VERTICAL PROJECT 168.08 m																									
CONTRACTOR Arctic Diamond Drilling		ALTERATION SCALE  <ul style="list-style-type: none"> absent slight moderate intense 																									
CORE SIZE B9		TOTAL SULPHIDE SCALE  <ul style="list-style-type: none"> traces only < 1% 1% - 3% 3% - 10% > 10% 																									
DATE STARTED July 12/81																											
DATE COMPLETED																											
DIP TESTS <table border="1"> <thead> <tr> <th></th> <th>tip</th> <th>abs. log</th> <th>corr. log</th> </tr> </thead> <tbody> <tr> <td>60'</td> <td>83.6</td> <td>155.5</td> <td>182.0</td> </tr> <tr> <td>130'</td> <td>84.8</td> <td>146.5</td> <td>174.0</td> </tr> <tr> <td>300'</td> <td>88.1</td> <td>125</td> <td>152.5</td> </tr> <tr> <td>420'</td> <td>86.8</td> <td>105.5</td> <td>133.0</td> </tr> <tr> <td>540'</td> <td>85.0</td> <td>115.</td> <td>142.5</td> </tr> </tbody> </table>			tip	abs. log	corr. log	60'	83.6	155.5	182.0	130'	84.8	146.5	174.0	300'	88.1	125	152.5	420'	86.8	105.5	133.0	540'	85.0	115.	142.5		
	tip	abs. log	corr. log																								
60'	83.6	155.5	182.0																								
130'	84.8	146.5	174.0																								
300'	88.1	125	152.5																								
420'	86.8	105.5	133.0																								
540'	85.0	115.	142.5																								
COMMENTS 0.85 m stick-up on casing		LEGEND																									



DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					py ≤ 1cm A	veins 1-10 B	qtz ≤ 10 C	cal ≤ 10 D	cal ≤ 10 E		
0				2.00 - 1.98: overburden							
5.0				1.98 - 21.72: chl. and; 1.98 - 4.96: chl. and; med gr-gry; abund. dk gr chl grains ~ 5%, local alt chl frags to 1cm, chl an fracta, chl grains are .5-2mm; minor qtz-cal veining, hairline to .5cm	12	2	0	10	5	0	
				4.96 - 14.78: chl. and; lt-med gr; chl grains locally, 1-2mm, chl ground mass w lighter + darker gr chl patches giving mottled text, locally some v. dk gr chl patches w py, to 5mm; locally fract and healed; qtz-py veins, to 2cm, throughout; locally silic;	130	8	0	29	14	M	
10.0				shear							
				shear							
				4cm qtz-py vein							
				2cm qtz-py vein							
15.0				14.78 - 21.72: chl. and; med gr-gry; chl grains through out, up to .5% locally, grains to 3mm, dk gr chl, subang. to sub round; chl groundmass, weakly silic locally; locally int. fract w qtz-cal healing; local ep alt on fracta, local ep after fs grains; chl-py on fractures, qtz-cal veining + patches throughout, minor qtz-chl veining.	41	0	0	31	13	M	
20.0											
				21.72 - 23.25: chl. and; med gr- gr; transition unit?, minor amt. of chl grains, locally fract	11	0	0	5	4	M	
					11.1/m			3.3/m			

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/ton Au	ppm Ag	ppm Cu	ppm Mo
1.98 - 4.96: py - 5-10%, f-m.g., mainly as veins; 6 obs. of vis Au, mainly along sm py veins & sm qtz-chl - py veins.	1.98	3.0		1.02	3878	.005			
				2.24	3879	.025			
						.024	2.0	1400	1
4.96 - 5.24: py - 10%, f-m.g., mainly as veins; 3 obs. of vis Au in and around py veins.	5.24	6.0		0.76	3880	.040			
						.040	3.2	144	1
5.24 - 9.78: py - 40-45%, f-m.g., mainly as patches & veins, some patches to 8cm, 17 obs. of vis Au in w py patches and along sm py veins, & trace chalc, & grains & patches in py.	9.78			3.00	3881	.042			
						.040	2.4	684	2
				6.78	3882	.019			
						.030	2.8	4800	12
9.78 - 14.78: py - 10-15%, f-m.g., mainly as sm-med veins; 9 obs. of vis. Au, in py veins and patches, trace chalc, dissem in py.	12.0			2.12	3883	.027			
						.029	2.6	1032	2
				3.00	3884	.029			
						.029	1.6	560	1
14.78 - 21.72: py - 5-10%, f-m.g., mainly as sm. veins, 1 obs. of vis. Au in 1.5cm qtz-py vein; trace chalc in py; trace Ag-gr mineral in several qtz veins, 1 obs. of sphalerite.	15.0			3.00	3885	.027			
						.030	1.6	1140	1
				3.00	3886	.027			
						.029	2.0	812	1
				21.0					
21.72 - 23.25: py - 5-10%, f-m.g., mainly small veins, trace dissem chalc in py.				3.00	3887	.047			
						.040	2.6	880	2

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/lm Au	ppm Ag	ppm Cu	ppm Mo
23.25 - 36.30 : py - 20% f.m.g. mainly as sm. veins + irreg. patches; 7 obs. of vis Au, mainly along sm. py veins and in gtz-cal-py veins	21.0			3.0	3888	.048			
						.048	1.8	850	1
	27.0								
				3.0	3889	.033			
						.032	3.2	836	2
	30.0								
				3.0	3890	.096			
						.090	5.8	1340	2
	33.0								
				3.0	3891	.027			
						.030	3.0	1360	1
	36.0								
36.30 - 55.36 : py - 5-10% f.m.g., mainly as sm. veins; 9 obs of vis Au, mainly assoc w sm. py veins and py-gtz veins, trace chalc and moly, several obs of Ag-gr mineral in or along gtz veins; labs of chalcocite	39.0			3.0	3892	.009			
						.013	1.2	918	22
	42.0								
				3.0	3893	.014			
						.013	1.6	774	8
	45.0								
				3.0	3894	.013	1.2	454	18
						.011			

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					py <1cm A	veins 1-10 B	>10 C	qtz v D	cal v E		
45.0				entire unit; locally fract. w/ minor py + chl on fract's, locally sericite alt on some fract's.							
50.0											
55.0											
55.0				55.36-60.40: chl. diac; med-dk gr, coarse grained, good relic text. after diorite? very abund. dk gr. chl grains to 2mm, chl after hbl? locally up to 40%, subangular; locally abund. white grains, relic fs?; minor cp alt in ground mass, locally bleached along qtz veins; minor qtz veining, up to 1cm, minor hairline cal veining,	22	0	0	19	11	0	
60.0				60.40-61.02: mass. qtz-py vein, 6cm		1.4		3.8			
60.0				61.02-72.04: chl and; med gr-gry to dk gr; abund. dk gr. chl grains, up to 30% locally, grains are 1-3mm, subhedral to euhedral, chl after hbl?; locally grains are aligned (flow?), local white subhed. to euhed. grains, relic fs?; locally silic and bleached, chl grains fade to lt gr, bleached and silic along qtz veins, qtz veining to 7mm, throughout; fault? contact w/ lower unit,	44	0	0	35	7	1	
65.0						4.0		3.2			

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		as/ton Pw	ppm Ag	ppm Cu	ppm Ni
		45.0							
				3.0	3895	.019			
						.028	1.6	474	16
	48.0								
				3.0	3896	.041			
						.031	2.2	860	58
	51.0								
				3.0	3897	.016			
						.018	1.8	364	32
	54.0								
55.36 - 60.40: py - 5%, f-m g, mainly 25 sm veins, trace chalc + moly obs in several qtz veins				3.0	3898	.012			
						.012	1.6	466	20
	57.0								
				3.0	3899	.011			
						.012	1.8	88	16
	60.0								
	60.4		0.40	3900	.025	2.0	546	58	
60.40 - 61.02: py - 85%, f-m g, massive; trace moly in qtz; py is anhedral to subhed.	61.04		0.64	3901	.022 .003				
			1.96	3902	.040 .008	3.8	1160	208	
					.012	1.8	84	34	
61.02 - 72.04: py - 5-10%, f-m g, mainly as sm veins; good chalc to ~12% from 67.68 - 68.41, dissem in ground mass + along sm qtz veins (.5mm), trace in rest of unit; abund chalc in 15cm healed fault contact w. lower unit, also 3 obs of sphalerite and 1 of galena	63.0								
				3.0	3903	.009			
						.011	1.4	368	26
	66.0								
				3.0	3904	.016			
						.020	1.8	1520	32

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					Py <1cm A	VE 1-10 B	NS >10 C	qtz 2-10 D	cal U E		
70.0				rip-up clasts of lower unit abundant, up to 2cm, clasts of upper unit to 1.5cm, zone mod. to well silic., clasts of the upper unit are less alt. than than upper unit is along contact.							
75.0				72.04 - 73.94: aquagene ash tuff, med-dk gry; v.f. g crystalline, mod. silic, very f.g. ash frags?, white (quenched?) rim along upper contact, 2-10% <1mm spherical to sub-spherical chl grains, chl is pale gr-gry and translucent, minor, 1-5m, qtz veining	6	0	0	1	2	M	
				73.94 - 81.63: silic. alt. and; med gr-gry, well silic., locally some relic dk gr. chl grains, 1-2mm; locally fract. and healed w qtz, 2 faults w crushed rock; local zones w chl grains less silic. and have f. chl ground mass, pale lt gr and translucent, minor qtz veining, to 2cm, through out, usually w minor amt of py.	2	0	0	2	1	5	F
80.0				81.63 - 82.79: aquagene ash tuff, same as previous tuff unit; contact very broken, tuff brecciated cracks + seams filled w f. py., frags show bleached rims, lower contact also has a white-bleached rim; an e qtz vein contains sm. ang. tuff frags; local hairline fract. w py, indistinct upper contact	44	0	0	2	2	M	
85.0				82.79 - 84.25: silic alt. and; lt-med gry, same as 73.94 - 81.63, very well silic.; a few local patches w chl grains, locally fract. w qtz healing.	5	0	1	4	3	M	
				84.25 - 86.61: aquagene ash tuff, same as previous tuffs, more abund. py; abund. 25-30%, spherical grains of py after chl, locally bleached	29	0	0	2	0	L	
90.0											

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		g/tm Au	ppm Ag	ppm Cu	ppm Mo
		69.0							
				3.0	3905	.009			
						.011	1.6	1035	40
		72.0							
72.04 - 73.94: py - 20%, f.-m. g., mainly as sm patches + dissem. veins, v.f. dissem py throughout, several obs. of sph. in sm dissem. gtz + cal veins; 1 obs of vis Au? (72.3)				1.94	3906	.015			
						.032	1.4	120	2
		73.94							
				1.06	3907	.006			
		75.0				.018	1.2	820	32
py stringers appear to be mainly in sm gtz veins.									
73.94 - 78.56: py - 10-15%, f.-m. g., mainly as sm patches + dissem; 4 minor obs. of chalc, sm patches + dissem in py.				3.0	3908	.010			
						.019	1.6	582	24
		78.0							
78.56 - 79.44: py - 70%, f.-m. g., semi-mass. py in gtz - chl ground mass.				3.0	3909	.012	1.4	180	4
						.020			
79.44 - 81.63: py - 10%, f.-m. g., mainly as sm patches + dissem.		81.0							
		81.63		6.63	3910	.009			
81.63 - 82.79: py - 15%, v.f.-m g., mainly as sm veins + on fract.				1.16	3911	.023	1.2	718	24
		82.79				.024	1.4	82	20
82.79 - 84.25: py - 25-30%, v.f.-m g., mainly as sm patches + 1-2.5m mass. section (84.0 - 84.25)				1.21	3912	.012			
		84.0				.023	1.6	320	30
84.25 - 86.10: py - 30-35%, v.f.-f. g., mainly as v.f. dissem + irreg. veins + patches.				2.56	3913	.032	2.4	64	2
		86.50				.041			
				0.50	3914	.018			
		87.0				.021	1.6	65	10
86.10 - 86.61: py - 50-60%, v.f. g., semi-mass + dissem.				3.0	3915	.012			
86.61 - 88.35: py - 5-10%, v.f.-m. g., mainly as sm sphericals + veins.									
		90.0							

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					Px A	veins B	qtz C	cal D	cal E		
88.0				to pale white, gives appearance of banding.							
				86.61 - 88.35: Tuff; med gr, v.f. g., minor qtz-cal veining to 5mm, abund. subhedral grains of chl (<1mm) often replaced by py; local anhed patches (.5-1mm) of cal.; minor ep. alt, locally dk gr chl on fract.	9	0	0	5	7	6	
						5.2		2.9			
95.0				88.35 - 91.85: chl and.; med-dk gr., abund. anhed. to subhed. chl grains, to 3mm, several sm. chl veins (.5mm), lt gr med. silic chl ground mass; locally some larger ang. chl frags, to 5cm, accidental clasts?, abund qtz veining up to 1.5 cm.	6	0	0	34	4	2	
						11.7		9.7			
100.0				91.85 - 109.19: aph chl and; med-dk gr-blk, overall mottled text, local bleached (lighter gr.) silic zones, locally varies from a smooth cherty text. to a fine granular text; locally int. fract. with cal healing; locally some zones with 1-2 mm chl grains; qtz veining throughout, to 2cm, usually w hematite and/or py + chl, chl-cal and locally py on fract.	30	0	0	44	23	11	
						5.2		2.5			
105.0											
				109.19 - 109.75: chl and.; lt gr., abund. subhed to cubed chl grains, .5 to 2mm, chl grains show alignment (flow?), slightly bleached along qtz veins; cal + chl on fract.	2	0	1	1	0	5	
						5.1		11.8			
110.0				109.75 - 116.92: aph-chl and; med pale gr - dk gr-blk; overall							

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au	ppm Ag	ppm Cu	ppm Mo
88.35 - 91.85: py - 5%, f-m g, mainly as sm. veins, one abs. of Ag-gry mineral in qtz vein with hematite + py.	90.0			3.0	3916	.016			
91.85 - 109.19: py - 5-10%, f-m g, mainly as sm. veins and irreg. patches; minor chalc throughout, dissem + in qtz-py-hematite veins, several abs of chalcocite? and Ag-gry mineral.	93.0			3.0	3917	.038			
	96.0			3.0	3918	.046			
	99.0			3.0	3919	.014			
	102.0			3.0	3920	.023			
	105.0			3.0	3921	.011			
	108.0			3.0	3922	.026			
109.19 - 109.75: py - 70%, f-m g, mass. section 30cm; trace Ag-gry mineral in qtz vein.	111.0			3.0	3923	.006			
109.75 - 116.97: py - 15%, f-m g, mainly as sm. veins, and dissem patches; trace chalc dissem. in py.				3.0		.019	2.4	948	2

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS				
		FROM	TO	WIDTH		oz./ton Au	ppm Ag	ppm Cu	ppm Mo	
		114.0								
				3.0	3924	.007				
						.013	2.0	1060	2	
116.97 - 120.92 : py - 15-20%, f.m. g. mainly as sm.		117.0								
veins + dissem patches; trace Ag-gry mineral in gtz veins; one obs. of chalc. on a fract.				3.0	3925	.009				
						.020	2.4	1120	2	
		120.0								
120.92 - 124.50 : py - 10-15%, f.m. g. mainly as sm. veins + dissem patches on fract.; trace chalc. assoc w gtz veins. 1 obs of Ag-gry min. in gtz vein.				3.0	3926	.006				
						.019	2.0	664	4	
		123.0								
				3.0	3927	.026				
124.50 - 141.32 : py - 5-10%, f.m. g. mainly as sm. veins + irreg. dissem patches; trace chalc. dissem patches + w py.		126.0								
				3.0	3928	.011				
		129.0								
				3.0	3929	.014				
		132.0								
				3.0	3930	.065				
		135.0								

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		
135.0											
140.0											
145.0				141.32 - 147.51: aph. chl. and; pale - dk gr., int fract and silicified; ext qtz veining throughout, to 14cm; minor f. ep alt throughout, as sm. grains + on rims of chl frags; qtz veins often w chl; minor cal veining, to 1cm; locally a f. granular text, sm. dk. gr. chl grains in fine ll gr. chl groundmass; fault contact w lower unit	23	1	0	56	10	H	
						3.9		9.0			
150.0				147.51 - 152.08: chl. alt. and; med- dk gr., f. g. to aph. text, locally int. fract, cal + qtz healed locally, local aph. chl. frags; upper section has abund. 1-2mm, dk. gr. chl. grains, w- mod silic.; lower section is int. silic.; ep + sericite alt. along fract + on rims of chl. frags + grains; int qtz veining throughout, veins to 2cm; minor cal, mainly as patches + on fract.	28	0	0	33	5	H	
						6.1		7.2			
155.0				152.08 - 156.06: aph. chl. and; med-dk gr., w- mod silic., local zones of granular qtz + fs (?) w abund. f. chl. local zones of chl. and w abund. 1-2mm dk. gr. chl. grains, locally w larger chl. frags.; local int fract w cal healing; minor cal. veining, hairline to several mm, minor qtz veining, one vein to 2cm; local zones w ep. alt. usually as f. irreg. patches and the odd vein.	19	0	0	17	8	M	
						4.8		2.8			
				156.06 - 160.24: silic. fault zone; it gry. to med gr.; to 158.07 very	10	0	0	2	1	H	
						2.9/m		0.5/m			

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		g/t Au	ppm Ag	ppm Cu	ppm Mo
	135.0								
				3.0	3931	.005			
	138.0								
				3.0	3932	.009			
	141.0								
141.32 - 147.51 : py - 5%, f-m.g., mainly as sm veins, trace chalco in gtz veins + silic areas; trace Ag-gr min in gtz vein.				3.0	3933	.009			
	144.0								
				3.0	3934	.013			
						.013	3.0	654	24
	147.0								
147.51 - 152.08 : py - 10%, f-m.g., mainly as sm veins and on discont. fract; trace chalco as sm dissem patches; trace mob. in gtz vein.				3.0	3935	.024			
						.020	2.8	1260	44
	150.0								
				3.0	3936	.021			
152.08 - 156.06 : py - 3-5%, f-m.g., mainly as sm veins; trace chalco as dissem patches.						.020	2.0	628	2
	153.0								
				3.0	3937	.026			
						.026	2.4	2160	40
156.06 - 160.24 : py to 158.07 - 5-10%, from 158.07 - 160.24 - 2-3%, mainly as sm veins and on fract; trace chalco as dissem patches.	156.0			3.0	3938	.026			
						.023	2.8	1920	44

DRILL LOG

PROJECT 2153	GROUND ELEV. 3495' 1065.3m
HOLE NO. 25	BEARING 090°
LOCATION Sulphurets Gold Zone	DIP - 63°
	TOTAL LENGTH 157.5'
LOGGED BY R. Baerg, D. Bridge	HORIZONTAL PROJECT 207.70m
DATE July 17/81 - 19/81	VERTICAL PROJECT 323.50m
CONTRACTOR Arctic Diamond Drilling	ALTERATION SCALE 0 1 2 3 absent slight moderate intense
CORE SIZE 89	
DATE STARTED July 14, 1981 6 P.M.	TOTAL SULPHIDE SCALE 0 1 2 3 4 traces only < 1% 1% - 3% 3% - 10% > 10%
DATE COMPLETED July 17, 1981 9 P.M.	
DIP TESTS none, hole abandoned due to cave, unable to reenter hole, left core barrel and tube in hole	
COMMENTS Au assays in 02/ton, metal analyses in ppm, First Au assay by Canada wide Mines - Granduc, second by Min - En Labs Ltd.	LEGEND

D. M. Bridge

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/ton Au	ppm Ag	ppm Cu	ppm Mo
22.50 - 33.66: py = 5-10%, f.m.g., mainly as sm veins and in grt veins; trace chalc. as sm patches in w py, sev. obs. of vis Au? in w and along py veins + patches.		24.0							
				3.00	3950	.036			
						.029	1.4	1800	2
		27.0							
				3.00	3951	.029			
						.028	2.0	1340	4
		30.0							
				3.00	3952	.012			
						.009	2.0	1040	2
		33.0							
33.66 - 51.32: py = 15-20%, v.f. = m.g., mainly as sm veins + mass irreg. patches; trace chalc. dissem. in py; several obs. of vis Au? in and along py veins; several obs. of Ag-grt mineral in grt veins; py incr. in int. silic. zone from 44.30 - 51.32				3.00	3953	.028			
						.021	2.4	1980	12
		36.0							
				3.00	3954	.013			
						.011	2.0	850	1
		39.0							
				3.00	3955	.016			
						.011	1.8	1000	12
		42.0							
				2.30	3956	.009			
						.010	1.2	650	6
		44.30							
				0.70	3957	.016			
		45.0				.016	1.2	1050	2

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					Py <1mm A	ve 1-10 B	ns >10 C	qtz ✓ D	cal ✓ E		
45.0											
50.0											
55.0				51.32-69.08: chl. and; w. alt., pale to med. gray-gr;							
				51.32-54.46: chl. and; pale-med. gr; f-m. g. text, abund. pale to dk. gr. chl. grains, subhed. to euhed., 1-2mm; minor pale white grains, anhedral to subhed., 5-2mm, cp after fs?; groundmass is pale gr. translucent chl. w. minor cp alt; minor qtz-cal veining veins to 3mm, local pale gr. chl. frags to 1cm, some show cp. alt; local chl-cal on fract.	29	0	0	11	3	0	
				54.46-55.46: qtz stockwork; white-med. gray, int. qtz veining, veins irreg. to mass., local zones of less silic. groundmass w. dk. gr. chl. grains; minor cal + cp w. qtz veins.							
60.0				55.46-69.08: chl. and; same as for 51.32-54.46; more int. qtz veining, veins to 12mm, local int. silic. zones w. relic chl. grains; local lt + dk. gr. chl. frags to 6mm; frags usually oxidized, locally w. chl.	42	7	0	74	11	2	
65.0					32			49			

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au	ppm Ag	ppm Cu	ppm Mo
		45.0							
				3.00	3958	.023			
						.020	1.9	1500	76
	48.0								
				3.0	3959	.029			
						.028	2.8	1300	24
51.32-54.00: py-5%, f.-m.g., mainly as sm. veins and patches; lobs of Ag-gry min. in qtz vein	51.0			2.0	3960	.019			
						.018	2.2	1100	19
54.00-55.46: py-25-30%, f.-m.g., mainly as irreg patches + dissem; several obs. of vis Au? in py; several sm. hairline veins + patches of Ag-gry mineral in qtz veins	54.0 54.48			0.96 1.00	3961 3962	.157 .116	2.6	600	8
	55.46					.052	2.0	1000	95
55.46-59.08: py-5%, f.-m.g., mainly as sm. veins; trace chalc as dissem grains; trace moly in qtz vein + dissem; several obs. of Ag-gry min in qtz veins	57.0			1.59	3963	.026			
						.027	1.9	750	8
				3.00	3964	.012			
						.011	1.5	600	1
	60.0								
				3.00	3965	.033			
						.029	2.2	1750	10
	63.0								
				3.00	3966	.009			
						.008	1.2	391	20
	66.0			3.00					
					3967	.007			
						.002	0.8	172	36



DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					py	veins					
					klcm	<10	>10	qtz	cal		
					A	B	C	D	E		
70.0				69.08 - 74.06: silic. chl. and.; med gr-gry to gry; int qtz veining, veins to 12cm, usually w minor py, locally w ep + cal; local pale gr chl grains, anhedral to subhed, 1-2mm, locally bleached to a pale white (cp?); abund ep alt in w. silic zones, local less alt zones w dk gr chl grains in pale gr. chl. ground mass; silic zones very bleached, only a few chl. grains remain.	15	1	0	87	0	F	
						3.2		17.5			
75.0				74.06 - 77.41: silic-chl and.; med gr-gry; med-int qtz veined, locally well silic, veins to 4cm; locally abund dk gr chl grains, 1-3mm, anhedral - subhed, 10-15% locally; local patches of w. alt chl. and. of irreg. shape in silic zones; fract. locally oxidized and/or w chl.	17	0	0	48	3	F	
						5.1		14.3			
80.0				77.41 - 81.50: aph. chl. and.; med pale gr to dk gr; int. fract., locally healed w cal, chl + cal on fract., also locally graph. on fract.; minor qtz + cal veining, veins to 4mm. 81.50 - 82.68: chl. and.; med gr-gry; minor amt. of anhedral to subhed. dk gr chl. grains (1mm); tabular pale white to white ep grains (after fr?) fault contact w lower unit; minor qtz-cal veining, veins to 3mm; cal healing of karlike fract.; chl + minor ep on fract.	17	0	0	44	5	H	
						4.2		1.0			
85.0				82.68 - 85.01: silic alt. and.; lt-med gr; med silic, minor qtz veining veins to 3mm; int fract. and pyritic; local f. pale gr. relic chl. grains; last 50 cm is crushed - broken rock, chl + minor ep + py on fract.	8	0	0	4	2	M	
						6.8		3.9			
90.0				85.01 - 91.80: chl. and.; dk gr. to med. gr; locally silic, minor py in silic zones; minor qtz-cal veining, veins to 3cm, rock is int. broken up, local patches of crushed rock and fault	18	0	0	6	2	H	
						6.1		2.6			
					0	0	10	30	H	H	
						0.0		1.4			

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ
					py <1cm A	veins 1-10 B	qtz >10 C	al D	al E		
90.0				gauge; local zones w 1-3 mm dk gr. chl grains in f. pale gr chl ground-mass; crushed rock has abund silic. and chl. frags, frags to 1.5cm.							
				91.80-95.10: silic + chl. and; lt. gr - lt. gr; extremely fract., sheared + crushed, abund pale gr. translucent chl frags and abund white to pale gr silic frags; local chl and. frags w pale gr chl grains; abund chl + sericite alt around frags + in shear zones; appears to be main zone of the fault from 82.6 - 98.45.	0	0	0	2	0	H	
95.0				95.10 - 100.45: chl. and; lt. to med gr - gr; w. to mod. silic locally, abund qtz veining, veins to 2.5cm; abund. dk gr chl grains in upper half of unit, locally grains show alignment and are less distinct, beginning of foliation?; chl grains fade in lower more silic half of unit, ground mass is pale to med gr translucent chl; upper part of unit is int. fract. w local chl + ser. alt.	0	0	0	0	0		
				100.45 - 105.49: f. gr. chl. and; dk gr. to lt. gr - gr; mod. to well silic., abund. qtz veining, veins to 5mm; dk gr sections have abund dk gr chl grains (<1mm), local pale to med. gr chl sections have abund. 1-3mm chl. grains, local minor ep. alt. as f. irreg. grains, after ls. 9; frags. oxidized or w chl.	1	0	0	4	6	H	
100.0			shear	100.45 - 105.49: f. gr. chl. and; dk gr. to lt. gr - gr; mod. to well silic., abund. qtz veining, veins to 5mm; dk gr sections have abund dk gr chl grains (<1mm), local pale to med. gr chl sections have abund. 1-3mm chl. grains, local minor ep. alt. as f. irreg. grains, after ls. 9; frags. oxidized or w chl.	2.6		8.6				
			3cm py.v.	105.49 - 118.10: silic. chl. and; lt. med gr.; int. silic. and locally pyritic, abund. qtz veining, veins to 27cm, abund. discont. irreg. qtz veinlets; locally fract. + healed w qtz; one local spot w silic chl and. text. f. 1-2mm chl grains; text. varies from aph. to f. granular; local med silic. zones w pale gr. chl ground mass,							
			2.5cm py.v.	105.49 - 118.10: silic. chl. and; lt. med gr.; int. silic. and locally pyritic, abund. qtz veining, veins to 27cm, abund. discont. irreg. qtz veinlets; locally fract. + healed w qtz; one local spot w silic chl and. text. f. 1-2mm chl grains; text. varies from aph. to f. granular; local med silic. zones w pale gr. chl ground mass,	1	2	0	7	3	L	
105.0				105.49 - 118.10: silic. chl. and; lt. med gr.; int. silic. and locally pyritic, abund. qtz veining, veins to 27cm, abund. discont. irreg. qtz veinlets; locally fract. + healed w qtz; one local spot w silic chl and. text. f. 1-2mm chl grains; text. varies from aph. to f. granular; local med silic. zones w pale gr. chl ground mass,	2.6		9.5				
			mineralized qtz v., 27cm	105.49 - 118.10: silic. chl. and; lt. med gr.; int. silic. and locally pyritic, abund. qtz veining, veins to 27cm, abund. discont. irreg. qtz veinlets; locally fract. + healed w qtz; one local spot w silic chl and. text. f. 1-2mm chl grains; text. varies from aph. to f. granular; local med silic. zones w pale gr. chl ground mass,							
			mineralized qtz v., 7cm	105.49 - 118.10: silic. chl. and; lt. med gr.; int. silic. and locally pyritic, abund. qtz veining, veins to 27cm, abund. discont. irreg. qtz veinlets; locally fract. + healed w qtz; one local spot w silic chl and. text. f. 1-2mm chl grains; text. varies from aph. to f. granular; local med silic. zones w pale gr. chl ground mass,	8	2	0	1	2	H	
110.0				105.49 - 118.10: silic. chl. and; lt. med gr.; int. silic. and locally pyritic, abund. qtz veining, veins to 27cm, abund. discont. irreg. qtz veinlets; locally fract. + healed w qtz; one local spot w silic chl and. text. f. 1-2mm chl grains; text. varies from aph. to f. granular; local med silic. zones w pale gr. chl ground mass,	7.0		10.5				

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/ton Au	ppm Ag	ppm Cu	ppm Mo
		90.0							
				3.0	3975	.009			
91.80-95.10; py - 10-15%, v.f. - m g., all as f.						.009	1.6	578	1
dissem py.		93.0							
				3.0	3976	.012			
						.031	1.9	1320	140
95.10-100.45; py - 5-10%, f.-m g., mainly as sm.		96.0							
veins + f. dissem; trace chalc on a fract. as sm. patch, lobs. of malachite staining on a fract				3.0	3977	.039			
						.031	1.4	1880	16
		99.0							
100.45-105.49; py - 5%, f.-m.g., mainly as sm. veins,				3.0	3978	.010			
trace - minor chalc, one section						.011	1.2	850	10
104.53-104.73 has \approx 5% chalc as sm. + mod patches + dissem;		102.0							
trace Ag-grt min. in grt vein				3.0	3979	.038			
						.031	1.8	2200	8
		105.0							
105.49-118.10; py - 15-20%, f.-m.g., mainly as sm. veins +		105.49		0.49	3980	.023			
mass. dissem patches; minor chalc,						.013	1.4	828	24
several obs. of chalc in grt veins, also				2.51	3981	.045			
as sm. patches + dissem. in groundmass						.041	2.2	1330	18
several obs. of galena + sphalerite		108.0							
in grt veins, usually assoc w/ chalc; several obs. of vis Au?				3.0	3982	.036			
in w py veins + patches; several						.029	2.0	778	1
obs. of Ag-grt min. in grt veins		111.0							
				3.0	3983	.058			
						.050	1.6	546	10

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au	ppm Ag	ppm Cu	ppm Mo
		114.0							
				3.00	3984	.061			
						.049	2.0	990	24
		117.0							
				1.10	3985	.061			
118.10-132.25: py = 5%, f-m.g., mainly as sm veins;		118.10				.049	2.8	700	32
trace chalc., in gtz veins + dissem.,				1.90	3986	.008			
several obs. of Ag-gry min. in gtz veins.						.008	1.6	1120	40
		120.0							
				3.0	3987	.045			
						.012	1.6	800	1
		123.0							
				3.00	3988	.036			
						.016	1.4	830	1
		126.0							
				2.00	3989	.058			
						.010	1.2	818	1
		129.0							
				3.00	3990	.061			
						.010	1.6	1080	2
		132.0							
132.25-139.45: py = 5-10%, f-m.g., mainly as sm veins +									
dissem.; trace chalc., as dissem.				3.00	3991	.016			
and in several gtz veins; several						.012	1.6	840	1
obs. of Ag-gry min. in gtz veins.									
		135.0							

DRILL LOG

PROJECT 2153	GROUND ELEV. 1085.1 m
HOLE NO. 26	BEARING 045°
LOCATION Sulphurets Lake Gold Zone	DIP 045°
	TOTAL LENGTH 225.55 m / 740 ft
LOGGED BY D. Feduk, D. Bridge	HORIZONTAL PROJECT 188.72 m
DATE July 21, 1981 - July 26, 1981	VERTICAL PROJECT 119.72 m
CONTRACTOR Arctic Diamond Drilling	ALTERATION SCALE  <ul style="list-style-type: none"> absent slight moderate intense
CORE SIZE BQ	
DATE STARTED July 20, 1981	
DATE COMPLETED July 25, 1981	TOTAL SULPHIDE SCALE  <ul style="list-style-type: none"> traces only < 1% 1% - 3% 3% - 10% > 10%
DIP TESTS 72' - 41° 037.5° 010° 065' 442' - 28° 037° 009.5° 063 132' - 38.2° 036° 008.5° 612' - 27° 089° 011.5° 252' - 36° 039.5° 012° 732' - 23.5° 042° 014.5° 372' - 31.7° 039.3° 012°	
COMMENTS sucking water at ~90 ft cement used at 30.18 m / 99 ft Au assays in oz/ton, metal analyses in ppm, First Au assay by Canada wide Mines - Granduc, second by Min-En Labs Ltd.	LEGEND

D. M. A. Bridge

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QZ	% tourmaline
					A	B	C	D	E			
0.00				0.00-3.66: overburden and broken bedrock that was not recoverable								
5.0				3.66-10.70: fresh to altered and with 2 mass. sulph veins; higher tourm. content in alt and; chl grains diffuse, some feld. noted								
			11cm semi-mass py, qtz	3.66-4.62: mod. silic. and; lt gry, F grain; tourm. dissem (F grain, black); leaching, oxid on fracs.	22	0	0	1	0			5
				4.62-6.00: semi-mass py vein; 10% silic. tourmaline	11	6	1	14	7			
			fine with 2cm oxid. rind	minor cal, qtz v to 1cm;								
10.0			py, qtz veining	6.00-9.29: and.: med. gr; 10-15% pale gr-chl grain, upper contact silic; 15-20% fine pale gr-gry feld highly visible	40	0	0	2	0			2-3
			cal, chl vein	9.29-10.70: qtz, py v; minor cal, chl, 1 trace v.g.	48	4	0	1	0			15%
15.0				10.70-35.72: and.: massive Fm grain, med. gry-gr, abundant small scale variants from lt to md; groundmass F-v F grain; chl pale gr abund; epid. white (sauss.) locally; tourm. in varying amounts (subsections below);	13.7			16.4	5.64-10.90			
			1cm cal, epid, chl v	10.70-15.21: tourm. mainly dissem, assoc with py; qtz cal veins ≤ 1 cm, evenly distrib;	37	0	0	13	50			2-3
				15.21-15.96: highly veined; bleached, broken zone with higher cal (patches, veins); tourm. F grain	6	0	0	2	14			1
			cal veining	15.96-35.72: tourm. decrease at ~18.19, dissem or veinlets (some py assoc); local bleaching related to veining; becoming more silic. near lowermost part; becoming mottled near end of interval also; abund. hairline veins evenly distrib throughout	227	0	0	353	72			1-2
20.0			fine with 2cm oxid. rind		10.8			10.8	10.80-35.72			

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ	% tourmaline
					A	B	C	D	E			
25.0												
				1cm qtz v								
				fract with gem oxid nod								
30.0				cal qtz veins								
				two sets of qtz veining								
35.0												
				35.72-44.29: massive and: lt gry-gr to med gry-gr; variable silic areas; chl grains fine, ranging from abund to mod content	157	T	2			M		
				21cm 70% cal; chalc, py, qtz v								
				10cm chalc, cal v								
				ben semi-mass py v.								
				35.72-38.10: mod silic and 3 stages of veining, qtz-cal → py-tourm → cal-chalc → py-tourm not evenly distrib, some heavy halos; mod chl grain; cal brecc midsection								
40.0				15cm chl v.								
				38.10-40.70: chl. and: pale gry-gr; abund. chl grain, few feld (white, sauss); bleaching assoc with veining; tourm uniform distrib.								
				22cm semi-mass py, qtz, chalc v.								
				40.70-44.29: and: aphanitic gry, py, tourm halos, qtz v. healing angular frac.								
				15cm py v.								
45.0				44.29-64.25: aphanitic andesite								

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS				ppm As
		FROM	TO	WIDTH		oz/tm Au	ppm Ag	ppm Cu		
				3.00	4051	.003				
						.002	1.3	137		8
		24.00								
				3.00	4052	.005				
						.001	1.0	136		46
		27.00								
				3.00	4053	.002				
						.001	1.0	134		41
		30.00								
				3.00	4054	.004				
						.002	1.2	150		32
		33.00								
				3.00	4055	.013	4.0	500		36
						.018				
		36.00								
				3.00	4056	.075				
35.72-38.10: avg 30-35% py						.070	15.4	6540		90
mostly veins;										
chalco 35.72-36.83: 1%		39.00								
as veins with 36.83-37.60: 15%										
cal and py 37.60-38.10: minor				1.70	4057	.010				
38.10-40.70: 5% py mostly		40.70				.009	2.8	360		60
veins, locally										
concentrated, assoc gtz v.				1.30	4058	.064				
		42.00				.052	10.0	384		212
40.70-44.29: avg 25-30%										
semi-mass v,				2.29	4059	.045				
trace chalco, heavy dissem.						.038	3.9	188		430
		44.29								
		45.00		0.71	4060	.009				
						.009	1.4	344		10

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ	% tourmaline
					A	B	C	D	E			
45.00				44.29-44.94: fault zone with halo of highly silic aphan. and.;	7	0	0	7	11	H		21
			15 cm py. & bz v	44.94-46.22: aphan and.: int silic; extremely mottled lt to med gry-gr; int frac and shattered	12	0	0	7	11	H		0
				46.22-46.91: semi-mass py v w int silic and	12	2	1	2	0	M		0
50.00				46.91-48.96: chl in lowermost, fold. chl grains visible	38	2	0	17	9	H		0
				48.96-56.07: aphan and.: lt gry-gr; int frac.; varying silic and chl sections; veining small and irregular for most part	187	1	0	94	22	H		41
			15 cm py v		21.7/m		10.5/m		44.29-56.07			
			35 cm empty v									
55.00												
			15 cm gtz v									
			10 cm gtz, py, tourm v.	56.07-64.25: aphan. and.: mottled lt gry and lt gr; int frac; tourm content increased; speckled texture prominent; brecc along cal veins; veining small scale and irregular	197	1	0	31	25	H		233
					23.5		1.5					
60.00												
			10 cm py v.									
			20 contact 64.25	64.25-114.16: aphanitic andesite								
65.00												
			25 contact 66.45	64.25-68.86: chl and: med-dk gry to med gr; some silic aphan. areas; mod frac, veining small scale and irreg.; chl grains vary from prominent (trace here)	72	0	0	39	29	M		0
					15.6		8.5					

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS				ppm As
		FROM	TO	WIDTH		oz/tm Au	ppm Ag	ppm Cu		
		46.22		1.22	4061	.031				
		46.91		0.69	4062	.027 .013 .051	3.7 1.2	1300 94		37 48
		48.00			4063	.041	2.0	2200		49
				3.00	4064	.028 .023				
46.22 - 46.91 : 50-60% py, c-f gr						1.6	700			18
46.91 - 48.96 : 20-25% py, semi-mass v	51.00									
48.96 - 56.07 : avg 20% py, mostly veins and patches,				3.00	4065	.028				
	54.00					.019	1.6	900		36
				3.00	4066	.017 .013	0.6	700		<1
56.07 - 64.25 : 10-15% py, mostly veins and patches, trace chalc, trace arseno(?)	57.00									
				3.00	4067	.013 .012	0.8	750		10
	60.00									
				3.00	4068	.009 .009	0.8	595		<1
	63.00									
				3.00	4069	.019 .019	0.8	865		<1
64.25 - 68.86 : 5-10% py, mostly veins, M-f grain	66.00									

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ	% tourmaline
					<1cm	1-10	>10	g	c			
					A	B	C	D	E			
70.0				to indistinct (66.45-68.86: med-dk gr, slightly silic, speckled patches) 68.86-91.29: chl. and. med gr to dk gry-gr, uniform aphan groundmass, abund pale chl grains ($\pm 20\%$, 1-6mm); diffuse and irreg. veining; color lightens in last 5m, chl grains became very distinct; several 1-2cm patches of dk chl in a lt groundmass; several lighter silic areas 20-30cm long	268	2	0	94	44	L		0
75.0												
80.0												
85.0				5cm qtz, py, chl.								
90.0				25 3cm py v.								

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS				ppm As
		FROM	TO	WIDTH		oz/tm Au	ppm Ag	ppm Cu		
68.86-91.29: avg 5% py, mostly veins, increasing content in last 1m of interval				3.00	4070	.021				
		69.00				.020	1.4	920		<1
				3.00	4071	.012				
		72.00								
				3.00	4072	.009				
		75.00								
				3.00	4073	.007				
		78.00								
				3.00	4074	.008				
		81.00								
				3.00	4075	.009				
		84.00								
				3.00	4076	.007				
		87.00								
				3.00	4077	.012				
		90.00								

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ	t ₅ four
					1	1-10	>10	8	C			
					A	B	C	D	E			
90.0				25m chl. & calc								
				contact 91.29	15	1	1	16	13	1		
				91.29-92.40: chl and: lt to med gry; chl grains	15.3			14.1				
				11cm semi-mass quartz v. indist.; weakly silic.								
				92.40-97.72: chl and: lt to med gry-gr; bleached	57	1	0	40	26	1		
				in areas of high veining; chl grains very distin	10.9			2.5				
95.0												
				contact 97.72	138	1	0	57	10	1		
				97.72-107.14: aphan and: lt to med gry-gr;	13.7			4.0				
				int frac; mod silic; diffuse highly irreg veining; very blocky recovery; tourm (rutile?) grains appear again								
100.0				25m py v. in more silic sections; chl concentrated in banded section above shear zone								
				25cm banding; quartz v. Shearing								
				4m qtz v. (ent. chalc)								
105.0												
				contact 107.14	161	0	0	13	11	1		
				107.14-112.09: chl and: lt gry to lt gry-gr;	12.3			2.6				
				int silic; upper contact a shear zone; highly frac, a few veins which are concentrated locally								
110.0												
				112.09-114.16: aphan and: lt to pale gr; speckled	41	2	0	16	11	1		
				texture absent; larger py veins have dk aphan chl combined; interval	20.3			2.9				
				contact 112.09								

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		g/tm Au			
				1.29	4078	.023			
91.29-92.40: 10-15% py, mostly veins,		91.29							
semi-mass section 60-70% py		92.40		1.11	4079	.047			
		93.00		0.60	4080	.013			
92.40-97.72: 10-20% py, veins and disse				3.00	4081	.008			
		96.00							
				3.00	4082	.014			
97.72-107.14: 5-15% py, mostly as patches and filling fracs in highly broken, silic areas.		99.00							
				3.00	4083	.022			
		102.00							
				3.00	4084	.014			
		105.00							
				3.00	4085	.018			
107.14-112.09: 15-20% py, veins and numerous small (5-10mm) patches, trace sphal, trace chalco as patches and one vein at 109.35		108.00							
				3.00	4086	.017			
		111.00							
112.09-114.16: 5-10% py, mostly veins, C-f grain, following fracs and silic bands.									

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		g/tm Au			
				3.00	4087	.010			
		114.00							
114.16-120.40: 15-20% py, as veins and abund disse. patches of F grain crystals (1-17mm)				3.00	4088	.011			
		117.00							
				3.00	4089	.007			
		120.00							
120.40-134.18: 5-10% py, as veins and abund dissem small patches (1-5mm)				3.00	4090	.003			
		123.00							
				3.00	4091	.006			
		126.00							
				3.00	4092	.005			
		129.00							
				3.00	4093	.004			
		132.00							
134.18-135.68: 5% py, mostly dissem, F-vf grain, evenly distrib.				3.00	4094	.010			
		135.00							

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		alter Ar			
135.68-149.14: avg 40-60% py, locally 5-15% as veins but mostly dissem patches (1-5mm) also with abund larger patches (1-7cm), C-vf grains				3.00	4095	.022			
	138.00								
				3.00	4096	.035			
	141.00								
				3.00	4097	.007			
	144.00								
				3.00	4098	.008			
	147.00								
				3.00	4099	.009			
	150.00								
149.14-152.93: 5-15% py, as veins and dissem patches				3.00	4100	.016			
152.93-153.79: avg 20% py, locally 10-15% as veins and dissem C-f g	153.00								
153.79-155.80: 10-15% py, as veins and dissem patches (1-10mm)				3.00	4101	.042			
	156.00								



MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		g/t Au			
155.80-164.21: 15-20% py, locally 5-10%, locally 30-40%, as veins but mostly disseminated patches and filling small scale fractures				3.00	4102	.030			
	159.00								
				3.00	4103	.010			
	162.00								
				3.00	4104	.016			
	163.00								
164.21-181.71: 20-25% py, locally 5-10%, locally 30-40%, as veins and disseminated abundant patches, follows chl-gtz. banding in several places, small disseminated patches form a speckled or dotted texture, vc-vf grain, dk-black when vf gr 3 areas of semi-mass py and gtz combined, trace chalc in largest semi-mass area				3.00	4105	.012			
	168.00								
				3.00	4106	.006			
	171.00								
				3.00	4107	.011			
	174.00								
				3.00	4108	.027			
	177.00								
				3.00	4109	.024			
	180.00								

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au			
181.71-182.77: 5-10% py, as veins but mostly dissem.				3.00	4110	.009			
182.77-187.33: 10-15% py, as veins and small dissem patches, C-f grain, trace chalc, 1 massive vein and small chalc vein at 186.3	183.00			3.00	4111	.005			
	186.00								
187.33-205.25: C-vf grain				3.00	4112	.006			
187.33-189.2: 1-5% py along hairline fracs already chl filled	189.00								
189.2-192.6: 10-15% py, as veins and dissem patches				3.00	4113	.022			
192.6-193.7: 5% py, small scale veins	192.00								
193.7-195.4: 10-15% py, as py and concn dissem patches				3.00	4114	.015			
195.4-205.25: 5% py, locally 10-15% for higher dissem concn.	195.00								
				3.00	4115	.007			
	198.00								
				3.00	4116	.013			
	201.00								

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ.	TOWN
					<1 A	1-10 B	>10 C	g D	C E			
205.0				205.25-212.54 : chl and s								
				205.25-209.61 : chl and (?) massive, VF grain,	17	0	0	6	9	H	0	
				granular, uniform; lt gry-gr; trace fine pale gr chl grains; chl in veins also as f grained, med gr; veining diffuse, irreg		3.9		1.4				
			5cm shear zone									
			chl, epid, gtx v.									
210.0				209.61-212.54 : chl and. or feld porphyry;	21	0	0	0	12	L	0	
				F grain, granular, uniform groundmass; med gr; abund fine pale chl grains, trace epidote, epid after plag(?) phenocrysts (1-2%, 1-8mm, tabular); veining diffuse, irreg		7.2		0.0				
				212.54-217.78 : aphan and. : lt to med gr; locally spheroids (1-10mm) pale gry-gr chl; veining diffuse irreg	33	0	0	0	29	L	0	
						6.3		0.0				
215.0												
				217.78-225.55 : chl and;								
				217.78-221.83 : chl and; massive, VF grain,	24	0	0	5	17	H	0	
				granular; lt gry; abund fine pale gr-gr chl grains; lower half of interval extremely broken and sheared; veining small scale, diffuse, irreg		5.9		1.2				
220.0												
			contact 221.83 shear zone									
				221.83-225.55 : chl and (?) massive, VF grain,	22	0	0	0	41	H	0	
				locally aphan; lt gry; minor to trace chl grains; int frac and veined; veining small scale, angular pattern		5.9		0.0				
						5.9		0.6				
225.0				hole ends at 225.55m								

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		g/tm Au			
				3.00	4117	.007			
		204.00							
205.25-209.61: 1-5% py, locally 10-15%, mostly veins and filling hairline fractures				3.00	4118	.008			
		207.00							
				3.00	4119	.011			
209.61-212.54: 5% py, as veins, some dissem, uniform distrib		210.00							
				3.00	4120	.011			
212.54-217.78: 5-10% py, locally 10-15%, mostly veins, some dissem patches in higher concent areas		213.00							
				3.00	4121	.004			
		216.00							
				3.00	4122	.006			
217.78-221.83: 1-5% py, as hairline fractures for most part, traces of chalco		219.00							
				3.00	4123	.007			
		222.00							
221.83-225.55: 1-5% py, locally 10-15% where veining in concn,				2.45	4124	.005			
		225.00							
		225.55		0.55	4125	.003			

DRILL LOG

PROJECT 2153		GROUND ELEV. 1085.1m																					
HOLE NO. 27		BEARING nil																					
LOCATION Sulphurets Gold Zone		DIP -90°																					
		TOTAL LENGTH 563 ft / 171.60 m																					
LOGGED BY D. Feduk, T. Simpson		HORIZONTAL PROJECT 23.07m																					
DATE July 30, 1981 / August 2, 1981		VERTICAL PROJECT 167.90 m																					
CONTRACTOR Arctic Diamond Drilling		ALTERATION SCALE 																					
CORE SIZE BQ		TOTAL SULPHIDE SCALE 																					
DATE STARTED July 29, 1981																							
DATE COMPLETED August 1, 1981																							
DIP TESTS <table border="1"> <tbody> <tr> <td>32'</td> <td>-90°</td> <td>N/A</td> <td>N/A</td> </tr> <tr> <td>112'</td> <td>-87.2°</td> <td>167.5°</td> <td>140° obs.</td> </tr> <tr> <td>262'</td> <td>-80.5°</td> <td>175.5°</td> <td>148°</td> </tr> <tr> <td>412'</td> <td>-74.1°</td> <td>173.5°</td> <td>146°</td> </tr> <tr> <td>552'</td> <td>-71.0°</td> <td>172.0°</td> <td>144.5°</td> </tr> </tbody> </table>		32'	-90°	N/A	N/A	112'	-87.2°	167.5°	140° obs.	262'	-80.5°	175.5°	148°	412'	-74.1°	173.5°	146°	552'	-71.0°	172.0°	144.5°		
32'	-90°	N/A	N/A																				
112'	-87.2°	167.5°	140° obs.																				
262'	-80.5°	175.5°	148°																				
412'	-74.1°	173.5°	146°																				
552'	-71.0°	172.0°	144.5°																				
COMMENTS		LEGEND																					

A.M. Lippard

SEPT. 9, 1981

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QZ	% tourmaline
					<1	1-10	>10	g	c			
A	B	C	D	E								
0.0				0.00-2.20: overburden								
5.0				2.20-44.24: chl. and: lt to med gry-gr, massive, granular local areas of silic (6.0-7.9, 24.5-27.6) lighter gry, highly frac; tourm content varies, halos veins (py, qtz, cal); sericite throughout, small grains, locally 5-10%; veining locally concn, irreg, two generations noted of cal then qtz, chl brecc along larger cal v.; epid as pale white and lt gr veins								
				2.20-24.50: veining	133	0	0	57	2310	L		
10.0				at 8.26-11.55: tourm concentrated grains 1-3mm uniformly distrib.	60%			23%				1-2
				8-m and zone, leaching, shears								
15.0				8-m and zone, shear								
				2-m and kindy shear								
20.0				at 18.9-24.25: tourm concentrated grains 1-3mm uniformly distrib, towards 24 more fine grain and concentrated								7-8
				1-m qtz veins - cuts tourm, calv.								

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEN QTZ	% Tactm
					<1 A	1-10 B	>10 C	3 D	C E			
				cal veining								
25.0				24.50-27.66: veining, epid also abund assoc w py v.; highly crushed and broken 26.5 to 27.3, also oxid; veins concent. locally	28	0	1	6	0	H		Trace
				27.66-29.35: veining; uniform throughout	20	0	0	11	2	M		Trace
30.0				29.35-33.76: epidote diffused in silic area 32.0; pale gry-gr to pale gry; veining diffuse, irreg	60	4	0	11	20	L		Trace
				33.76-40.97: lt to med gry-gr; lower py content, few veins, locally concentrated	13	0	0	0	10	L		0
35.0				40.97-42.75: lt to med gry, more silic, mod frac, veins mostly hairline	15	0	0	0	23	M		0
				42.75-44.24: lt gry-gr, mod oxid, veins mostly hairline	9	0	0	0	9	M		0
40.0				44.24-47.4: aphan and: lt gry to lt gr to lt gry-gr, small scale mottling and flow banding	21	0	0	0	19	M		Trace
45.0					66		0.6					

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	g/tm Au	ASSAYS		
		FROM	TO	WIDTH					
				3.00	4134	.003			
		24.00							
24.50-27.66: 20-25% py, veins, high dissem, semi-mass veins		24.70		0.70	4135	.003			
				2.30	4136	.005			
trace mal 27.5, trace v.g. (?) at 25.4		27.00							
27.66-29.35: 10-15% py, few veins, mostly dissem				3.00	4137	.033			
29.35-33.76: 20-25% py, locally 45-50% heavy dissem, patches (1-10cm), semi-mass to massive veins, v.c-v.f grain, cal assoc with larger veins		30.00							
				3.00	4138	.109			
		33.00							
33.76-40.97: 10-15% py, C-v.f grain, f grain dark brown to black as veins, C grain as patches, heavy amount dissem also				3.00	4139	.008			
		36.00							
				3.00	4140	.005			
				39.00					
40.97-42.75: 10-15% py, M-v.f grain, f grain dark color				3.00	4141	.007			
		42.00							
42.75-44.24: 10-15% py, few veins, small patches coarser grains				3.00	4142	.005			
44.24-47.4: 10-15% py, locally 20-25%, C-v.f grain, f grain dk brown to black,		45.00							

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QZ	% HOUR
					<1 A	1-10 B	>10 C	q D	c E			
45.0				veining small scale to hairline, only qtz veins are large and assoc w py; Tourm as small bluish veins.								
			25cm py, ser, chl banding	47.4-56.7: chl and:								
			35cm py v.	47.4-49.0: lt to med gry-gr, mod oxid frags, few veins locally concn.	12	0	0	0	14	L		0
50.0				49.0-53.79: lt to med gry-gr to lt gry; mod silic, more frac; 50.6-51.0 highly broken and crumbled	39	6	1	1	29	M		0
			50cm mass py v.	53.79-56.7: lt to med gry-gr, granular, chl grains distinct (10-15%);	20	1	0	3	27	L		0
55.0					9.2		0.8					
			fault apage Rem contact 56.7 shear	56.7-62.0: aphan and: lt to med gry-gr to lt gry, mod frac, py locally concn; areas of mottling and banding	61	0	0	3	54	L		0
			40cm qtz, py v.		11.5		0.6					
60.0				gradational lower contact								
			13cm py, epid, ser, chl banding	62.0-69.76: chl and:								
				62.0-65.94: chl and: lt gr to lt gry to lt gry-gr to dk gry-gr, sericite veins and grains dist in most of interval	40	0	0	39	B	L		0
65.0			11cm qtz, ser, chl, epid v.	65.94-68.3: chl and: mod silic, lt gry-gr to lt gry, int frac and veined	51	0	0	21	13	L		0

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au			
				3.00	4143	.009			
	48.00								
47.4-49.0: 10-15% py, few veins, mostly dissem and small patches, assoc w cal				3.00	4144	.007			
49.0-53.79: 25-30% py, many semi-mass veins, heavy dissem concn, mass veins assoc w cal	51.00								
				3.00	4145	.032			
	54.00								
53.79-56.7: 5% py, local concn of veins				3.00	4146	.008			
	57.00								
56.7-62.0: 15-20% py, locally 5-10% abund veins, dissem patches and single crystals (1-3mm) in chi banding, veins also enclosed frequently or brecc into cal veins				3.00	4147	.016			
	60.00								
				3.00	4148	.009			
62.0-65.94: 10-15% py, numerous veins, also abund speckles (1-3mm) and fine dissem; traces of moly	63.00								
				3.00	4149	.012			
65.94-68.3: 15-20% py, mostly veins, assoc qtz, traces of moly (?)	66.00								
				3.00	4150	.013			

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au			
68.3-69.76 : 5-10% py, mostly veins, locally concn dissem 15-20%		69.00							
69.76-71.49 : 5-10% py, mostly veins, gtz assoc		72.00		3.00	4151	.011			
71.49-72.45 : 10-15% py, some veins, mostly patches (1-3mm), veins haloed by cal				3.00	4152	.011			
72.45-73.12 : 5% py, veins, some dissem		75.00							
73.12-77.11 : 10-15% py, some veins, mostly speckled patches (1-3mm), cal assoc				3.00	4153	.020			
77.11-97.64 : 10-15% py, mostly veins, locally 20-25% where more frac, C-vf grain, brassy to dk brown to black when 1 grain, cal assoc as halo or combined		78.00							
				3.00	4154	.012			
traces of arseno 81.0, 83.9		81.00							
traces of moly 92.0, 92.7									
traces of chalco 82.0, 82.5, 90.5				3.00	4155	.030			
		84.00							
				3.00	4156	.024			
		87.00							
				3.00	4157	.040			
		90.00							

[illegible]

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		oz/tm Au			
				3.00	4158	.039			
	93.00								
				3.00	4159	.028			
	96.00								
97.64-105.80: 5-10% py, mostly veins, some patches, banded by and assoc with cal v.				3.00	4160	.011			
	99.00								
				3.00	4161	.011			
	102.00								
				3.00	4162	.006			
	105.00								
105.80-143.35: avg 5-10% py, mostly veins, locally 25% and locally 20-25% (423) veins. small scale, usually hairline, often across w cal-qtz veins, many traces of chalc, moly.				3.00	4163	.003			
	109.00								
				3.00	4164	.006			
trace chalc 120.5, 121.3 (frag 6x8mm), 121.8 (vein), 122.6, 124.3 (vein), 126.0 (vein), 129.4, 131.4 (vein), 131.5, 135.2, 137.0, 140.0, 140.5, 142.3,	111.00								

DEPTH (m)	% CORE REC	LITHOLOGY	STRUCTURE	GEOLOGICAL DESCRIPTION	ALTERATION					FRACTURE INTENSITY	% VEIN QTZ	% TAMP
					<1 A	1-10 B	>10 C	g D	c E			
115.00				to end; veining totally cal to ~120 with silice increasing till predominant ~140;								
			110	1cm cal, seri, non v.								
120.0				at 117.7-117.8 fault gouge								
			70	10cm cal, qtz v								
			70	apn, chalc, mag								
			70	5cm qtz, cal, chl, moly, chalc, py								
125.0			30	5mm chalc, qtz v.								
			25	2cm qtz, chalc, py, seri v.								
			85	5cm qtz, chl v.								
130.0			15	2cm qtz, chl, chalc v.								
			70	2cm qtz, chl, chalc v.								
135.0			70	2cm qtz, chl, chalc, moly, v.								

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		g/t Au			
				3.00	4165	.010			
trace moly 121.8, 135.0 (vein)		114.00							
				3.00	4166	.013			
trace sph 121.3, 133.65 (vein), 138.7 (v.g.?)		117.00							
				3.00	4167	.027			
		120.00							
				3.00	4168	.016			
		123.00							
				3.00	4169	.034			
		126.00							
				3.00	4170	.011			
		129.00							
				3.00	4171	.009			
		132.00							
				3.00	4172	.016			
		135.00							

MINERALIZATION DESCRIPTION	TOTAL SULPHIDE	SAMPLES			SAMPLE NUMBER	ASSAYS			
		FROM	TO	WIDTH		wt% Au			
				3.00	4173	.013			
	138.00								
				3.00	4174	.013			
	141.00								
				3.00	4175	.006			
143.35 - 144.11: 5% py, mostly veins F-vf grain, hairline fracs trace chalc 144.1	144.00								
144.11 - 171.60: 5-10% py, locally 5% where veins diffuse, M-vf grain	147.00			3.00	4176	.014			
				3.00	4177	.012			
trace chalc 147.8, 149.4, 150.3, 150.5, 151.0, 151.3, 152.4, 152.5, 153.6, 161.1, 161.9 (frags 6x3mm), 168.8	150.00								
				3.00	4178	.021			
	153.00								
				3.00	4179	.036			
	156.00								

