ARCHER, CATHRO & ASSOCIATES (1981) LIMITED

DIAMOND DRILL LOG

Project	WJV (IGOR)	**Grid Coordinates**	38+50 N	0+50 E	**Azimuth**
Hole No.	82I028	**Elevation**	1086 m	**Total Depth**	196.6 m (645') **Incl.** -90°
Date Started	30 June, 1982	**Date Completed**	3 July, 1982	**Logged by**	D. Heberlein

Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)	Geology
20.0						10	
						20	
M02078 24.0	< 0.01	0.5	163		100%		
M02079 31.0	0.07	0.3	94	50		30	Homoclast Breccia - with varying proportions of quartzite to argillite fragments. Breccia strongly foliated (dip 40-65°). Argillite carbonatized with tan ankerite(?) which forms euhedral crystals, often augened by foliation. Quartz occurs in veins with carbonate. The latter exhibits cockade textures implying open space filling. Chalcopyrite occurs in the veins and also as blebs in matrix. Mineralization similar to Zone F. Py up to 30%, Cp ½-3%, CB 30%, Ba <½%
M02080 36.0	0.44	0.3	166				
M02081 41.75	0.82	1.1	113	60	100%	40	
M02082 46.0	1.13	1.8	119				
M02083 50.0	0.31	56.0	133	70 125 190	100%	50	Fault - pervasive albitization on hanging wall of fault. Breccia salmon pink colour. Quartzite fragments not pervasively altered. Py 3-5%, Cp ½%
M02084 56.0	0.60	2.0	179	100 60 125			
M02085 60.0	0.36	0.6	145	100	100%	60	Clast-Deficient Breccia - see description on following page..
M02086	0.74	1.1	133	90			

091445

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Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)	Geology
65.0				90			
M02087 70.0	0.34	0.5	180	90		70	Clast-Deficient Breccia - carbonate totally replacing original fragments and matrix. Veins of quartz and carbonate contain large blebs of chalcopyrite. Pyrite and chalcopyrite also present in matrix. Lath-shaped chlorites could be pseudomorphs after an amphibole or primary euhedral chlorites (up to 15 mm in length). Barite occurs in micro veins. Py 10%, Cp ½%, CB 30%, Cl ½%
M02088 75.0	0.05	0.3	141		100%		
M02089 80.0	0.04	0.2	125			80	
M02090 84.0	0.02	0.3	120	80			
M02091 88.0	0.15	0.4	136				
M02092 94.0	1.00	0.8	116		37%	90	
M02093 97.0	1.22	0.3	110	80			
M02094 102.0	0.58	1.0	133		100%	100	sharp contact
M02095 107.0	0.06	0.2	105	70	100%		Homoclast Breccia - pale grey with strong foliation. Magnetite crystals replaced by hematite and/or euhedral pyrite. Albite occurs as pervasive alteration in magnetitic zones, replacing some quartzite fragments. Py tr, Cp tr-2%, CB 5%, Mg 5%
M02096 112.0	0.05	0.7	70	80		110	
M02097 116.0	0.84	2.2	172	65 70	92%		
M02098 120.0	0.43	0.8	84			120	
M02099 125.0	0.27	0.6	112				
				70	100%		Homoclast Breccia - as above, except magnetite crystals replaced by chlorite not hematite. Pyrite usually occurs as fine disseminations but becomes nearly massive in places. Grains parallel foliation (45° dip).
					100%	130	

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Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)
				70		140
						150
				60	100%	
						160
				125		
				70		170
				150		
				70		
				125	100%	180
193.0						
MO1525	0.18	24.0	170	70		190
197.0						
						200
					100%	
						210

Geology

Homoclast Breccia - with intense carbonate alteration of argillite fragments and matrix. In places quartzite fragments are chloritized around margins. Carbonate crystals are augened in areas of intense foliation (-65°). In these zones chlorite is also abundant (2-5%). Replacement of carbonate by barite can be seen between 173 and 173.50 feet. Quartz-magnetite-chlorite veins are common throughout. They appear to be earlier than quartz-carbonate-chalcopyrite veins. Sulphides are irregularly distributed although pyrite is concentrated in bands paralleling foliation. Pyrite is most abundant from 129.00 to 129.80 and 170.00 to 173.50, where it forms up to 50% of the rock. Chalcopyrite occurs as disseminations in matrix.
Py 5%, Cp <½%, CB 10%, Cl 1%

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Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)	Geology
						220	Homoclast Breccia - as previously described.
					100%	230	
						240	
				70		250	
						260	
					100%	270	
						280	

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Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)	Geology
				70	100 %	290	Homoclast Breccia - as previously described.
						300	
						310	
				55	98 %	320	
						330	
						340	
346.0							Fault Zone - with disseminated pyrite and trace chalcopyrite.
M01526	0.02	6.0	275			350	
351.0				70	92%		Homoclast Breccia - chloritic alteration becoming more intense downwards. Magnetite and sulphides also increasing. The dominant alteration is carbonate which occurs throughout matrix and in veins. Py <1%, Cp 1%, CB 10%
M02101	0.48	0.8	147				
356.0							
M02102	0.84	0.5	167				
359.0							
360.0	3.72	7.8	350			360	

M02103

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Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)	Geology
M01527 366.0	0.31	18.0	126	90	100%		Homoclast Breccia - with salmon pink to brick red albite in hanging wall of fault. Chalcopyrite occurs with chlorite. Py 10%, Cp 10%, CB 20%, He 5%, Cl 3%
M01528 372.0	0.15	1.6	43		80%	370	
M01529 379.5	0.06	52.0	52	110 150	100%		Chloritic Homoclast Breccia - above fault. Chlorite intense paralleling foliation. Hematite more abundant near fault, replaces magnetite.
M02104 382.0	0.09	0.6	67	90		380	Homoclast Breccia - typical.
				125	100%		Hematized and Chloritized Homoclast Breccia alteration near fault(?) magnetite crystals replaced by chalcopyrite and hematite. Py < ½%, Cp < 0.5%, CB 5%, Cl 20%, He 20%
						390	Homoclast Breccia - with strong foliation. Carbonate and chlorite occur in matrix and microveins, up to 10% in places.
				90		400	
					100%		
						410	
				80			
				120		420	
					100%		
				70		430	
							Vein - of red barite between 431 and 431.50

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Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)	Geology
						440	Homoclast Breccia - as previously described.
						450	
				70	100%		
						460	
						470	
					90%		
						480	
					100%		
						490	
				55	97%		
						500	

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Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)	Geology
				55	91%	510	Homoclast Breccia - as previously described.
516.0							Fault Zone - albite in footwall. Chlorite concentrated in shear zone. Pyrite with chlorite. Py 5%, Cp tr
M01530	0.01	94.0	60		100%		
521.0						520	
				65	100%		Homoclast Breccia - as previously described except for pyritic interval between 550 and 557', where pyrite is finely disseminated parallel to foliation and comprises 1-2% of rock. Py <1%, Cp tr
534.0						530	
M02105 537.0	0.01	0.2	91				
						540	
545.0							
546.0	0.01	0.2	97	78	92%		
M02106							
550.0						550	
M02107 553.0	0.13	0.2	47				
				60			
						560	
							Chloritic Fault Breccia - foliation destroyed by fault zone. Pyrite occurs finely disseminated in chlorite matrix. No chalcopyrite.
					78%	570	
							Homoclast Breccia - as previously described.
						580	

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Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)	Geology
					92%	590	Possible Fault Zone in Homoclast Breccia - a few highly fractured zones are intensely chloritized, however carbonate is dominant alteration type in this interval. It occurs as fine grains and euhedral crystals in matrix. Sulphides occur in trace amounts.
					100%	600	
				60		610	
					100%		
					100%	620	Homoclast Breccia - below contact breccia dominated by quartzite fragments in argillite matrix (as opposed to argillite with occasional quartzite fragments). Hematization is dominant alteration with specularite reaching 10%. Chlorite accompanies hematite as microveins and disseminations in matrix.
					100%	630	
						640	
						645	End of Hole.

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