

W. P. 25
Pur/87

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
DIAMOND DRILL LOG

Project	WJV (IGOR)		Grid Coordinates	38+50 N 0+50 E		Azimuth	225°	
Hole No.	82I023		Elevation	1086 m		Total Depth	151.2 m (496')	
Date Started	10 June, 1982		Date Completed	13 June, 1982		Logged by	D. Heberlein	

Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)	Geology
							Overburden
						10	
						20	
						30	Homoclast Breccia - composed of quartzite fragments in a matrix of sheared grey-green argillite. Quartzite fragments are up to 6 cm in diameter and undeformed. This unit is characterized by euhedral crystals of magnetite (5 mm or less in diameter) and chlorite in microveins which parallel foliation. Small grains of disseminated pyrite are common. Fault zone strongly chloritized.
				110	76%	40	
					40%	50	Homoclast Breccia - with considerably more quartzite than sheared argillite. Colour is a pale greenish-grey. Matrix strongly foliated. Carbonate replaces some fragments and forms tan coloured euhedral crystals in the matrix. Chlorite is present in microveins. Pink barite occurs in irregular veins as well as in the matrix. Magnetite is disseminated throughout.
				115	95%	60	

Project WJV
Page 1 of 7
Hole 82I023

091445

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
DIAMOND DRILL LOG

Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)	Geology
				115		0	Fault Zone - strongly chloritized.
						70	Homoclast Breccia - with varying proportions of undeformed quartzite and deformed argillite clasts. Matrix pervasively carbonatized. Chlorite occurs in microveins parallel to foliation. Magnetite is the dominant oxide occurring as disseminations of euhedral crystals. Pyrite is rare. Chalcopyrite not seen.
				110	88%	80	
						90	
				125	100%	100	Clast-Deficient Breccia - consisting of a zone of nearly massive magnetite with massive pyrite. Pyrite occurs as streaks and as patches elongated parallel to foliation. Chalcopyrite is generally associated with chloritized microfractures. Pink barite is associated with weak radioactivity. Py 10%, Cp 3-5%, Mg 20-80%
MOI300 101.5 106.75	1.54	16.0	47	105			
MOI301 111.50	0.48	5.0	120	125			
MOI302 117.0	0.15	1.5	30	105			
MOI303 121.0	0.01	0.5	18	130	100%	110	
				100			
				110	93%	120	Homoclast Breccia - with disseminated magnetite. Pervasive carbonatization including crystals in matrix. Py <1/2%, Cp <1/2%
						130	Chloritized Fault Zone - with slickensides, dip 15°.
				100	96%		Homoclast Breccia - with disseminated magnetite and up to 20% barite. Occasional small grains of pyrite visible (<0.5%).
				105			

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Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)	Geology
				105	96%	140	Gradational contact between homoclast breccia and chloritic, clast-deficient breccia.
145.0					81%		
MOI304 150.0	0.17	1.4	30				Clast-Deficient Breccia - chalcopyrite associated with intense chloritization. Magnetite replaced by hematite. Veins of pink barite also occur with chlorite. Cp 0.5%, Py up to 40%, Ba 5%
MOI305 155.0	0.05	5.8	46	115	100%	150	
MOI306 160.0	0.14	14.0	48	130			Clast-Deficient Breccia - abundant sulphides with chlorite and barite. Pyrite in bands parallel to foliation. Chalcopyrite as irregular blebs within pyrite and with chlorite. Py up to 40%, Cp 0.1-1%, Ba 5%
MOI307 165.0	0.27	9.5	220	115	100%	160	
				120			Chloritized Fault Zone
				115		170	
					96%		Homoclast Breccia - with intense carbonatization and irregular blebs of pyrite, barite disseminated and in veins. Py 10-20%, Cp 0.5%, Ba 5%
				115		180	
186.0							Clast-Deficient Breccia - with up to 30% massive (foliated) pyrite. Large euhedral magnetite crystals (up to 3 cm) are disseminated throughout. Py 30%, Cp < 0.5%, Mg 10%, CB 20%
MOI328 191.0	0.15	5.8	78	115	100%	190	
				135			Homoclast Breccia - see description on following page.
				135	94%		
				115		200	
					96%		
				115		210	

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
DIAMOND DRILL LOG

Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)	Geology
				115			Homoclast Breccia - coarse grained, with quartzite fragments up to 20 cm in diameter. Barite occurs in veins and disseminated throughout the matrix. Sulphides and magnetite occur in trace quantities.
				100		220	
					96 %		
				105		230	
				105		240	
				100		250	
					93 %		
				100			
				120		260	Clast-Deficient Breccia - with brown, euhedral carbonate crystals, augened by foliation. Red barite veins are slightly radioactive. Py 40%, Cp < 1/2%, Ba 10%, CB 20%
				140			
				170			
266.0				230			
MOI308	0.09	86.0	300	170	100 %		
271.0				130		270	
MOI309	0.03	108.0	64	245			
276.0				245			
				160			
				240			
MOI310	0.01	14.0	145	160	96 %		Homoclast Breccia - hematite replacing magnetite pseudomorphs. Pyrite occurs in streaks and bands along foliation. Red barite veins are weakly radioactive. Py up to 20%, Cp < 1/2%, Ba < 5%, CB 30%
281.0				240		280	
MOI501	0.01	200.0	88	150			
283.0							
MOI311	0.02	21.0	140	120			
					92 %		

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Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)	Geology
288.0							
MO1502 291.5	0.03	4.4	13	110	92 %	290	Clast-Deficient Breccia - with almost complete replacement of magnetite by hematite. Carbonate alteration dominant. Disseminated pyrite, usually euhedral. Py 5%, Cp 1%, Mg (Hm) 20%, Ba <1%
MO1312 296.0	0.29	2.8	65				
MO1313 301.0	0.21	1.0	64	100	86 %	300	
MO1314 306.0	0.05	2.5	81		100 %		Chloritic Breccia - possibly heteroclast which has been faulted. Mixed fragment types: quartzite, argillite, red (albitic) quartzite, bleached argillite. Magnetite is disseminated and hematized. Pyrite is widely disseminated. Carbonate alteration intense. Py <1%, Cp <1%, Ba <1%, CB 10%
MO1315 311.0	0.11	1.2	93	105		310	
MO1316 316.0	0.03	0.6	74		100 %		
MO1317 321.0	0.41	4.4	300	105		320	Clast-Deficient Breccia - containing abundant sulphides and oxides plus quartzite fragments.
MO1318 326.0	0.76	15.0	200		91 %		
MO1319 331.0	<0.01	6.7	65	110		330	Heteroclast Breccia - with pervasive specularite. The matrix is chloritized. Fragments are unaltered and include black argillite, red and brown quartzites and white carbonate-altered fragments. Reaction rims of specularite surround many of the carbonate-altered fragments. Rock is very dark green. Py tr, CB 20%
				115		340	
				115	98 %		
						350	
				105			
				100		360	

Project

WJV

Page 5 of 7

Hole

821023

ARCHER, CATHRO & ASSOCIATES (1981) LIMITED
DIAMOND DRILL LOG

Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)	Geology
366.0				100	98%		
MOI320 371.0	0.01	2.2	52	100		370	<u>Fault Zone - with chloritic gouge.</u>
MOI321 376.0	0.06	2.4	150	100			Transition Zone - between homoclast and carbonate, hematite and chlorite altered heteroclast breccia.
MOI322 381.0	0.07	1.2	190			380	<u>Heteroclast Breccia</u> - as previously described.
MOI323 386.0	<0.01	3.3	77	105	96%		
MOI324 390.0	<0.01	2.8	56			390	<u>Homoclast Breccia</u> - with hematite and chlorite-rich groundmass. Specular hematite massive in places. No sulphides. Appears to be a transition zone between homoclast and heteroclast breccia. Py tr, Cp tr
MOI325 395.0	<0.01	5.0	50	110			
				145		400	
				135	83%		
				130		410	
				125			<u>Heteroclast Breccia</u> - with a chlorite and/or hematite matrix. Pervasive carbonate alteration. Py <1%, Cp tr, CB 10%, Ba 5%
				100	84%	420	
				110	80%	430	<u>Chloritic Heteroclast Breccia</u> - see description on following page.
					66%		

Project

WJV

Page 6 of 7

Hole

821023

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DIAMOND DRILL LOG

Sample No.	% Cu	ppm U	ppm Co	CPS	Core Recovery	Depth (feet)	Geology
				110	66%		<p>Chloritic Heteroclast Breccia - with carbonate and chlorite bands parallel to foliation. Mineralogy similar to normal heteroclast breccia but with no competent fragments. Strongly foliated. Veins of pink carbonate and barite common. Traces of disseminated sulphides. Py < ½%, Cp < ½%, CB 30%, Ba 1%</p>
				115	97%	440	
				115		450	
457.0							<p>Heteroclast Breccia - coarsening downwards. Grey quartzite fragments up to 1 cm across, otherwise same as previously described. Some red fragments may be albitized. Py < 1%, Cp tr, CB 20%.</p>
M01326 462.0	< 0.01	5.4	45	110		460	
M01327 467.0	< 0.01	5.3	70	110			
				125	96%	470	
				125		480	
				110		490	
						496	
							End of Hole.