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Tables to accompany the article:

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Table DD-1: Main IR absorption bands associated with quartz and chrysocolla in the blue (B) and whitish blue (WB) areas of chrysocolla chalcedony.

Country	Sample nos.	Area	IR absorption bands (cm <sup>-1</sup> )		Remarks
			Quartz	Chrysocolla	
Taiwan	TW-1, TW-2, TW-6, TW-8, TW-9	B	1090, 1167	—	
	TW-3	B	1085, 1167	1030	Intensity of 1085 cm <sup>-1</sup> > 1030 cm <sup>-1</sup>
	TW-5, TW-7, TW-10	B	1085	1030	Intensity of 1085 cm <sup>-1</sup> > 1030 cm <sup>-1</sup>
	TW-4	B	1090, 1167	—	
WB		—	1025	Almost no IR bands of quartz	
Indonesia	ID-1, ID-2, ID-3, ID-5, ID-6, ID-7, ID-8, ID-9	B	1090, 1167	—	
	ID-4	B	1085, 1167	1030	
USA	US-M-1, US-M-4, US-M-5, US-R-1, US-R-3, US-R-4	B	1090, 1167	—	
	US-M-2, US-M-3	B	1090, 1167	—	
		WB	1085, 1167	1030	
	US-I-1, US-R-2	B	1090, 1167	—	
		WB	1085	1030	Very weak 1085 cm <sup>-1</sup>

Table DD-2: Main Raman peaks obtained from blue areas of chrysocolla chalcedony.

Country	Sample nos.	Raman peaks (cm <sup>-1</sup> )			Remarks
		Quartz	Moganite	Chrysocolla	
Taiwan	TW-1	464	—	—	
	TW-2, TW-4, TW-6, TW-8, TW-9	464	501	—	
	TW-3	464	501	338, 410, 640, 673	Weak 338 and 410 cm <sup>-1</sup>
	TW-5, TW-7, TW-10	464	—	338, 410, 640, 673	Weak 464 cm <sup>-1</sup>
Indonesia	ID-1, ID-5	464	—	—	
	ID-3, ID-6, ID-7, ID-8	464	501	—	
	ID-2, ID-4, ID-9	464	501	673	Very weak 673 cm <sup>-1</sup>
USA	US-M-3, US-M-4, US-R-1	464	—	—	
	US-M-5, US-I-1, US-R-3, US-R-4	464	501	—	
	US-M-1, US-M-2, US-R-2	464	501	673	Very weak 673 cm <sup>-1</sup>