

**DATA REPOSITORY ITEM 2002043**

to accompany Whitehead et al. The origin of toasted quartz in impact structures

Table DR1: A selection of impact structures that contain toasted quartz. Structures in **bold** text are those for which thin section samples were studied for this work. Toasted quartz has also been observed by Short and Gold (1996) in the impact structures quoted in normal (non-bold) text.

Structure	Location	Latitude	Longitude	Diameter (km)	Age (Ma)	Target rocks	
Brent	Ontario, Canada	N 46° 5'	W 78° 29'	3.8	450 ± 30	crystalline	G
<b>Charlevoix</b>	Quebec, Canada	N 47° 32'	W 70° 18'	54	357 ± 15	mixed	G M L
<b>Clearwater East</b>	Quebec, Canada	N 56° 5'	W 74° 7'	26	290 ± 20	mixed	G M L
<b>Clearwater West</b>	Quebec, Canada	N 56° 13'	W 74° 30'	36	290 ± 20	mixed	G M L
<b>Haughton</b>	Nunavut, Canada	N 75° 22'	W 89° 41'	24	23 ± 1	mixed	G L
<b>Lappajärvi</b>	Finland	N 63° 12'	E 23° 42'	23	77.3 ± 0.4	mixed	G C L
<b>Manicouagan</b>	Quebec, Canada	N 51° 23'	W 68° 42'	100	214 ± 1	mixed	G A M L C
Manson	Iowa, U.S.A.	N 42° 35'	W 94° 33'	35	73.8 ± 0.3	mixed	G C L E
<b>Mistastin</b>	Labrador, Canada	N 55° 53'	W 63° 18'	28	38 ± 4	crystalline	G A
<b>Popigai</b>	Russia	N 71° 40'	E 111° 40'	100	35.7 ± 0.2	mixed	G C L
Ries	Germany	N 48° 53'	E 10° 37'	24	15.1 ± 0.1	mixed	G L C
<b>Rochechouart</b>	France	N 45° 50'	E 0° 56'	23	214 ± 8	mixed	G (C)
Steen River	Alberta, Canada	N 59° 30'	W 117° 38'	25	95 ± 7	mixed	G C
<b>Wanapitei</b>	Ontario, Canada	N 46° 45'	W 80° 45'	7.5	37 ± 2	crystalline	G M
West Hawk	Manitoba, Canada	N 49° 46'	W 95° 11'	2.44	100 ± 50	crystalline	G M

Legend: crystalline includes igneous and metamorphic rocks; 'mixed' denotes both crystalline and overlying sedimentary units.

G - granites, gneisses and schists; A - anorthosites; M - mafic igneous and metamorphic rocks; C - clastic sedimentary rocks;

L - limestones and dolomites; E - gypsum.