

## Natural Thermoluminescence (NTL) Data for Antarctic Meteorites

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The measurement and data reduction methods were described by Hasan et al. (1987, Proc. 17th LPSC E703-E709; 1989, LPSC XX, 383-384). For meteorites whose NTL lies between 5 and 100 krad, the natural TL is related primarily to terrestrial age. Samples with NTL <5 krad have TL below that which can reasonably be ascribed to long terrestrial ages. Such meteorites have had their TL lowered by heating within the past million years or so (by close solar passage, shock heating, or atmospheric entry), exacerbated, in the case of certain achondrite classes, by "anomalous fading". We suggest that meteorites with NTL > 100 krad are candidates for an unusual history involving high radiation doses and/or low temperatures. (July 1991 data set).

Sample	Class	NTL [krad at 250 deg. C]	Sample	Class	NTL [krad at 250 deg. C]
LEW85300	EUC	19 ± 4	LEW85471	L6	39.8 ± 0.1
LEW85302	EUC	28 ± 8	LEW88190	L6	0.5 ± 0.1
LEW85328	Ure	31 ± 6	LEW88174	H4	116.0 ± 0.6
LEW85311	C2	<1	ALH85024	H5	<0.1
ALH85002	C4	<1	ALH85025	H5	27.0 ± 0.2
			DOM85507	H5	0.7 ± 0.1
ALH85019	LL6	17.9 ± 0.1	GRO85206	H5	16.7 ± 0.2
			LEW85326	H5	150.6 ± 0.6
ALHA76009*	L6	10.4 ± 0.1	MIL85600	H5	30.6 ± 0.2
ALH85022	L6	55 ± 4	ALH85036	H6	41.7 ± 0.2
ALH85046	L6	13 ± 3	LEW85412	H6	97.9 ± 0.3

The quoted uncertainties are the standard deviations shown by replicate measurements of a single aliquot.

\*ALHA76009 was measured as part of an interlaboratory comparison in collaboration with W.A. Cassidy (University of Pittsburgh) and was not sampled under the rigorous JSC guidelines.