

The University of Waikato
Radiocarbon Dating Laboratory



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Report on Radiocarbon Age Determination for Wk- 18031

(AMS measurement by IGNS [NZA-23887])

Submitter	S Boreham
Submitter's Code	Liugang001
Site & Location	Unknown, China
Sample Material	Paper (parchment)
Physical Pretreatment	Visible contaminants removed. Sample broken up.
Chemical Pretreatment	Sample was washed in hot 10% HCl, rinsed and treated with hot 0.5% NaOH. The NaOH insoluble fraction was treated with hot 10% HCl, filtered, rinsed and dried.

$\delta^{14}\text{C}$	-28.0 ± 3.5	‰
$\delta^{13}\text{C}$	-26.6 ± 0.2	‰
D^{14}C	-27.6 ± 3.8	‰
% Modern	97.2 ± 0.4	%
Result	225 ± 31 BP	

Comments

7/2/06

- Result is *Conventional Age or % Modern* as per Stuiver and Polach, 1977, Radiocarbon 19, 355-363. This is based on the Libby half-life of 5568 yr with correction for isotopic fractionation applied. This age is normally quoted in publications and must include the appropriate error term and Wk number.
- Quoted errors are 1 standard deviation due to counting statistics multiplied by an experimentally determined Laboratory Error Multiplier of 1.
- The isotopic fractionation, $\delta^{13}\text{C}$, is expressed as ‰ wrt PDB.
- Results are reported as % Modern when the conventional age is younger than 200 yr BP.

Atmospheric data from Reimer et al (2004); OxCal v3.10 Bronk Ramsey (2005); cub r:5 sd:12 prob usp[chron]

