

**Accelerator Mass Spectrometry Result**

This result for the sample submitted is for the exclusive use of the submitter.  
All liability whatsoever to any third party is excluded.

**Sample ID** Kaumaile  
**Description** Wood chips from shaft of spear  
**Fraction Dated** Treated wood- cellulose  
**Submitter** Julia Becker GNS

\* **Radiocarbon Age** **880 ± 25 BP** **δ<sup>13</sup>C =** -24.1 ‰  
\*\* **Per cent modern =** 89.01 ± 0.3 **δ<sup>14</sup>C =** -108.2 ± 3.1 ‰ **Δ<sup>14</sup>C =** -109.9 ± 3 ‰

\* Reported age is the conventional radiocarbon age before present (BP)

\*\* Per cent modern means absolute per cent modern relative to the NBS oxalic acid standard (HOxI)  
corrected for decay since 1950.

Age, Δ<sup>14</sup>C, δ<sup>14</sup>C and absolute per cent modern are as defined by Stuiver Polach, Radiocarbon 19:355-363 (1977)

**Sample Treatment Details**

Sample consisted of three large slithers of dark brown wood. Microscopic exam revealed one slither seems very shiny and smooth. Dirt attached to all 3 slithers, blue paint on a couple, parts of wood seem greasy. Put aside slither with most blue paint. Using the other two slithers removed all of the outer surfaces with scalpel. When using scalpel wood seems hard and greasy. Treated with organic washes of hexane; isopropanol and acetone. Followed by cellulose extraction process. Dried in vacuum oven.

**Stored** remainder

**Comments**

The reported errors comprise statistical errors in sample and standard determinations, combined in quadrature with a system error component based on the analysis of an ongoing series of measurements on an oxalic acid standard.

For the present result the system error component is conservatively estimated as 0.18% (= ± 14 radiocarbon years).

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**RADIOCARBON CALIBRATION REPORT**

NZA 27153 CONVENTIONAL RADIOCARBON AGE 880 ± 25 years BP

Atmospheric data from Reimer et al (2004);

PJ Reimer, MGL Baillie, E Bard, A Bayliss, JW Beck, C Bertrand, PG Blackwell, CE Buck, G Burr, KB Cutler, PE Damon, RL Edwards, RG Fairbanks, M Friedrich, TP Guilderson, KA Hughen, B Kromer, FG McCormac, S Manning, C Bronk Ramsey, RW Reimer, S Remmele, JR Southon, M Stuiver, S Talamo, FW Taylor, J van der Plicht, and CE Weyhenmeyer (2004), Radiocarbon 46:1029-1058

CALIBRATED AGE in terms of confidence intervals (Smoothing parameter: 1, Offset: 0)

2 sigma interval is 1047 AD to 1092 AD	903 BP to 858 BP (21.6% of area)
plus 1122 AD to 1219 AD	828 BP to 731 BP (72.2% of area)
1 sigma interval is 1156 AD to 1211 AD	794 BP to 739 BP (59.4% of area)

