

The University of Waikato
Radiocarbon Dating Laboratory



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Head: Dr Alan Hogg

Report on Radiocarbon Age Determination for Wk- 19140

Submitter S.J Cronin
Submitter's Code AZ06-D01
Site & Location SW Taranaki coastline, S of Kaupokonui stream, New Zealand
Sample Material Wood
Physical Pretreatment Surfaces scraped clean. The wood was chopped up into small splinters and milled. Washed in demineralized water and dried.
Chemical Pretreatment Solvent extracted. Treated with Sodium Chlorite to leave holocellulose. Treated with Sodium Hydroxide (5%W/V) rinsed, washed with 10%HCl, rinsed and dried.

$\delta^{14}\text{C}$	-1000.1 ± 0.6	‰
$\delta^{13}\text{C}$	-25.9 ± 0.2	‰
D^{14}C	-1000.1 ± 0.6	‰
% Modern	0.0 ± 0.1	%
Result	>50,000 BP	

Comments

Alan Hogg

20/9/06

- 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.

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Report on Radiocarbon Age Determination for Wk- 19141

Submitter S.J Cronin
Submitter's Code AZ06-D02
Site & Location SW Taranaki coastline, Ohawe beach, New Zealand
Sample Material Wood
Physical Pretreatment Surfaces scraped clean. The wood was chopped up into small splinters and milled. Washed in demineralized water and dried.
Chemical Pretreatment Solvent extracted. Treated with Sodium Chlorite to leave holocellulose. Treated with Sodium Hydroxide (5%W/V) rinsed, washed with 10%HCl, rinsed and dried.

$\delta^{14}\text{C}$	-999.7 ± 0.5	‰
$\delta^{13}\text{C}$	-20.0 ± 0.2	‰
D^{14}C	-999.7 ± 0.5	‰
% Modern	0.0 ± 0.0	%
Result	>50,000 BP	

Comments

Alan Hogg

20/9/06

- 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.

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Report on Radiocarbon Age Determination for Wk- 19142

Submitter S.J Cronin
Submitter's Code AZ06-D04
Site & Location SW Taranaki coastline, Opunake Beach, New Zealand
Sample Material Wood
Physical Pretreatment Surfaces scraped clean. The wood was chopped up into small splinters and milled. Washed in demineralized water and dried.
Chemical Pretreatment Solvent extracted. Treated with Sodium Chlorite to leave holocellulose. Treated with Sodium Hydroxide (5%W/V) rinsed, washed with 10%HCl, rinsed and dried.

$\delta^{14}\text{C}$	-980.0 ± 0.9	‰
$\delta^{13}\text{C}$	-20.0 ± 0.2	‰
D^{14}C	-980.2 ± 0.9	‰
% Modern	2.0 ± 0.1	%
Result	31,522 ± 381 BP	

Comments

Alan Hogg

20/9/06

- 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.

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Report on Radiocarbon Age Determination for Wk- 19143

Submitter S.J Cronin
Submitter's Code AZ06-D06
Site & Location SW Taranaki coastline, S of Opunake Beach, New Zealand
Sample Material Wood
Physical Pretreatment Surfaces scraped clean. The wood was chopped up into small splinters and milled. Washed in demineralized water and dried.
Chemical Pretreatment Solvent extracted. Treated with Sodium Chlorite to leave holocellulose. Treated with Sodium Hydroxide (5%W/V) rinsed, washed with 10%HCl, rinsed and dried.

$\delta^{14}\text{C}$	-972.3 ± 0.8	‰
$\delta^{13}\text{C}$	-24.1 ± 0.2	‰
D^{14}C	-972.4 ± 0.8	‰
% Modern	2.8 ± 0.1	%
Result	$28,824 \pm 237 \text{ BP}$	

Comments

Alan Hogg

20/9/06

- 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.

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Report on Radiocarbon Age Determination for Wk- 19144

Submitter S.J Cronin
Submitter's Code AZ06-D10
Site & Location SW Taranaki coastline, S of Oeo stream, New Zealand
Sample Material Wood
Physical Pretreatment Surfaces scraped clean. The wood was chopped up into small splinters and milled. Washed in demineralized water and dried.
Chemical Pretreatment Solvent extracted. Treated with Sodium Chlorite to leave holocellulose. Treated with Sodium Hydroxide (5%W/V) rinsed, washed with 10%HCl, rinsed and dried.

$\delta^{14}\text{C}$	-999.8 ± 0.6	‰
$\delta^{13}\text{C}$	-26.7 ± 0.2	‰
D^{14}C	-999.8 ± 0.6	‰
% Modern	0.0 ± 0.1	%
Result	>50,000 BP	

Comments

Alan Hogg

20/9/06

- 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.