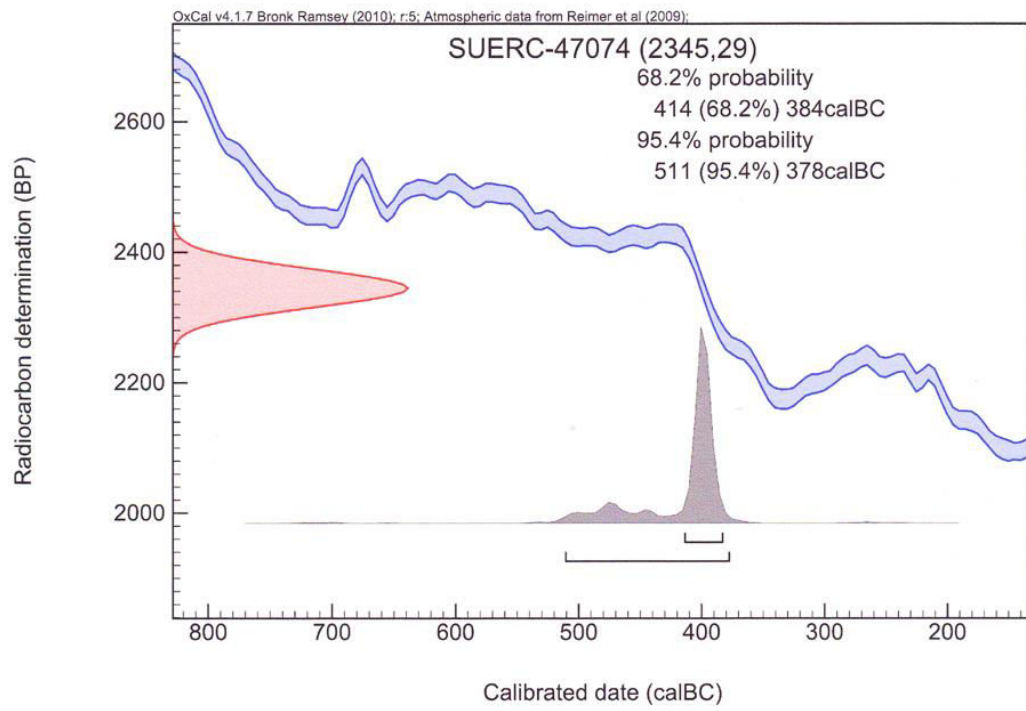


Radio-carbon dating of samples from WeDigs Project

SUERC

2013-14

Calibration Plot





Scottish Universities Environmental Research Centre

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RADIOCARBON DATING CERTIFICATE

02 July 2013

Laboratory Code SUERC-47074 (GU30613)

Submitter Martin Cook
AOC Archaeology
Edgefield Industrial Estate
Edgefield Road, Loanhead
Midlothian, EH20 9SY

Site Reference Wedigs 2012 Achnahaird
Context Reference 2.2
Sample Reference F05

Material Charcoal : Alder

$\delta^{13}\text{C}$ relative to VPDB -26.4 ‰

Radiocarbon Age BP 2345 \pm 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- *NRM*

Date :- *2.7.13*

Checked and signed off by :- *C. Muir*

Date :- *2/7/13*



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RADIOCARBON DATING CERTIFICATE

29 September 2014

Laboratory Code SUERC-55525 (GU35220)

Submitter Scott Timpany
ORCA Marine
Orkney College
East Road
Kirkwall, KW15 1US

Site Reference Achtercairn 3
Context Reference Kubierna 1
Sample Reference 03cm

Material Peat : humic acid dated

$\delta^{13}\text{C}$ relative to VPDB -29.8 ‰

Radiocarbon Age BP 313 ± 30

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

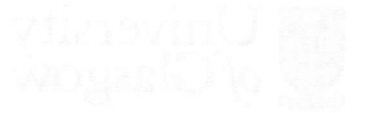
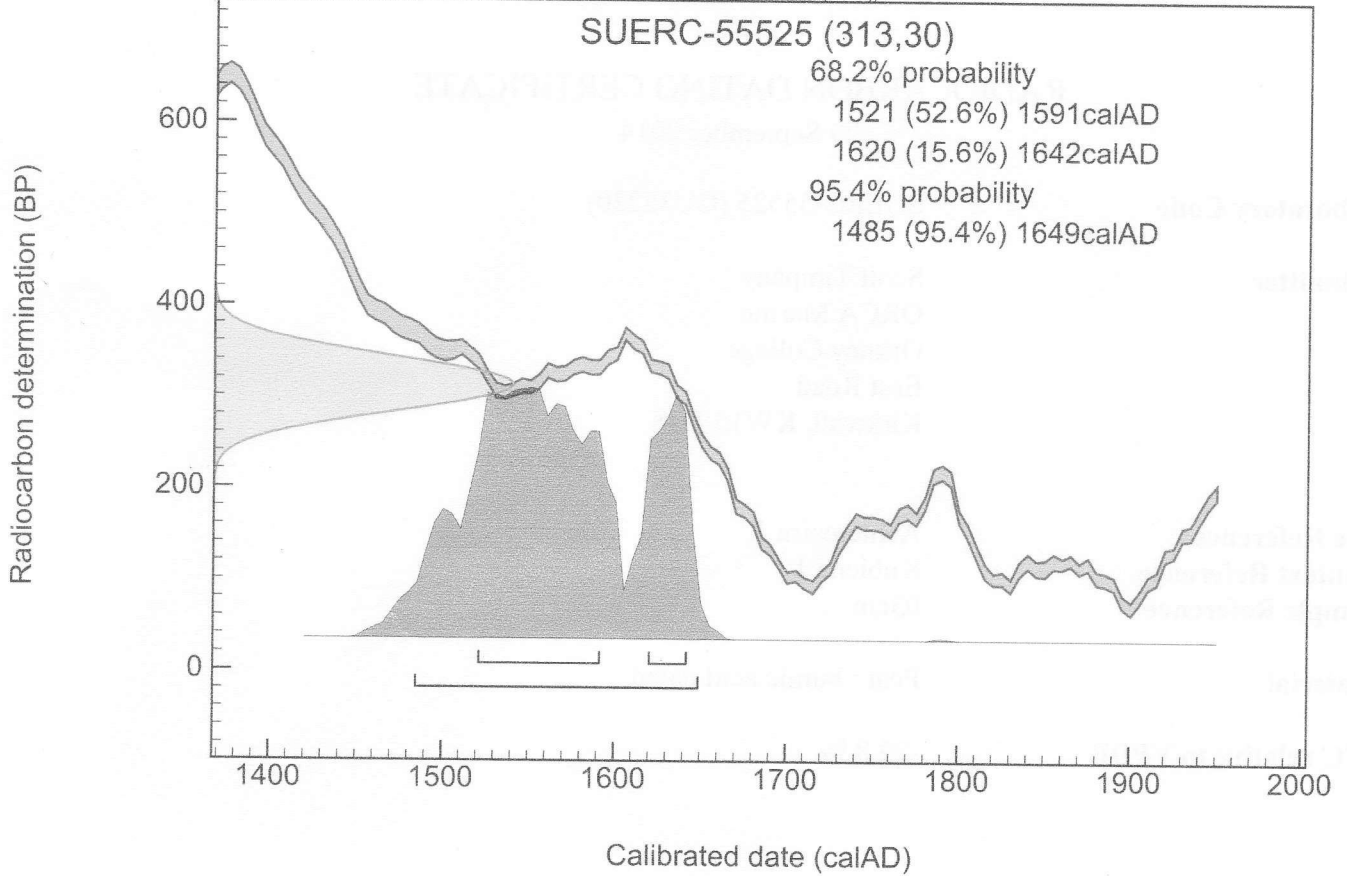
Conventional age and calibration age ranges calculated by :- *N. Russell* Date :- 29/09/2014

Checked and signed off by :- *E. Dunbar* Date :- 29/09/2014

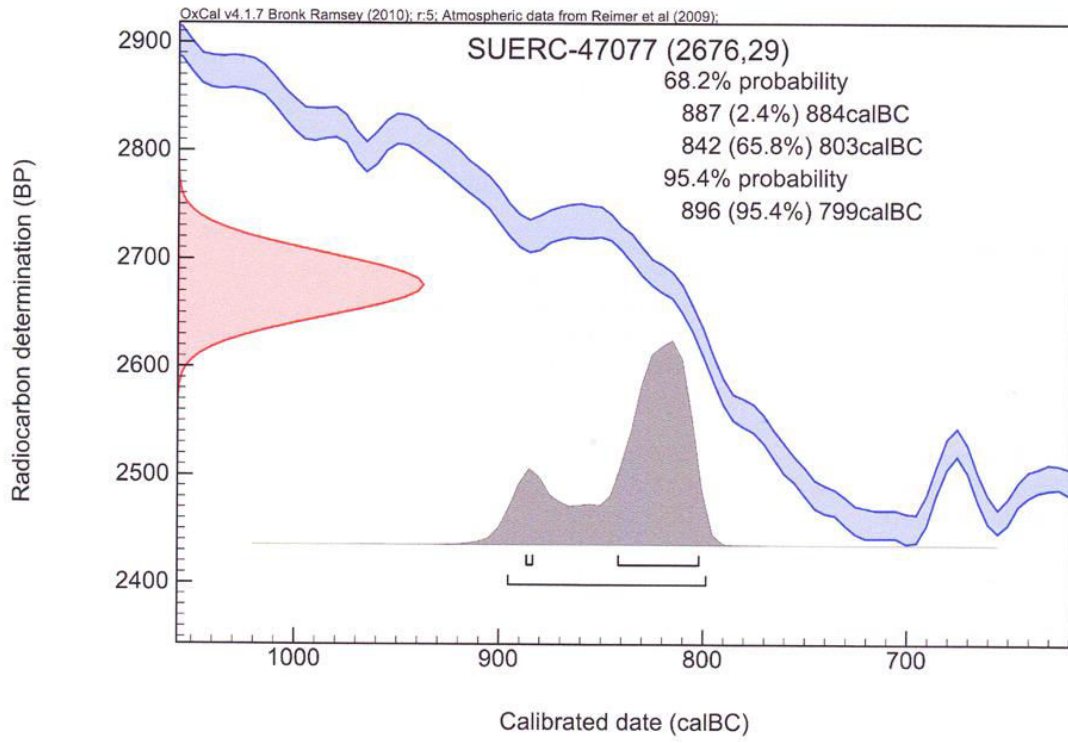


Calibration Plot

OxCal v4.1.7 Bronk Ramsey (2010); r:5; Atmospheric data from Reimer et al (2013);



Calibration Plot





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RADIOCARBON DATING CERTIFICATE

02 July 2013

Laboratory Code SUERC-47077 (GU30616)

Submitter Martin Cook
AOC Archaeology
Edgefield Industrial Estate
Edgefield Road, Loanhead
Midlothian, EH20 9SY

Site Reference Wedigs 2012 Achtercairn 2
Context Reference 1.11
Sample Reference 1.3

Material Charcoal : Birch

$\delta^{13}\text{C}$ relative to VPDB -25.3 ‰

Radiocarbon Age BP 2676 \pm 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- *N.R.M*

Date :- *2-7-13*

Checked and signed off by :- *E. Muir*

Date :- *2/7/14*





RADIOCARBON DATING CERTIFICATE

17 July 2014

Laboratory Code SUERC-53880 (GU34311)

Submitter Jackaline Robertson
AOC Archaeology
Edgefield Industrial Estate
Edgefield Road
Loanhead, EH20 9SY

Site Reference Acht3

Context Reference T5.2

Sample Reference 8

Material Charcoal : Alder

$\delta^{13}\text{C}$ relative to VPDB -26.8 ‰

Radiocarbon Age BP 3341 \pm 35

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

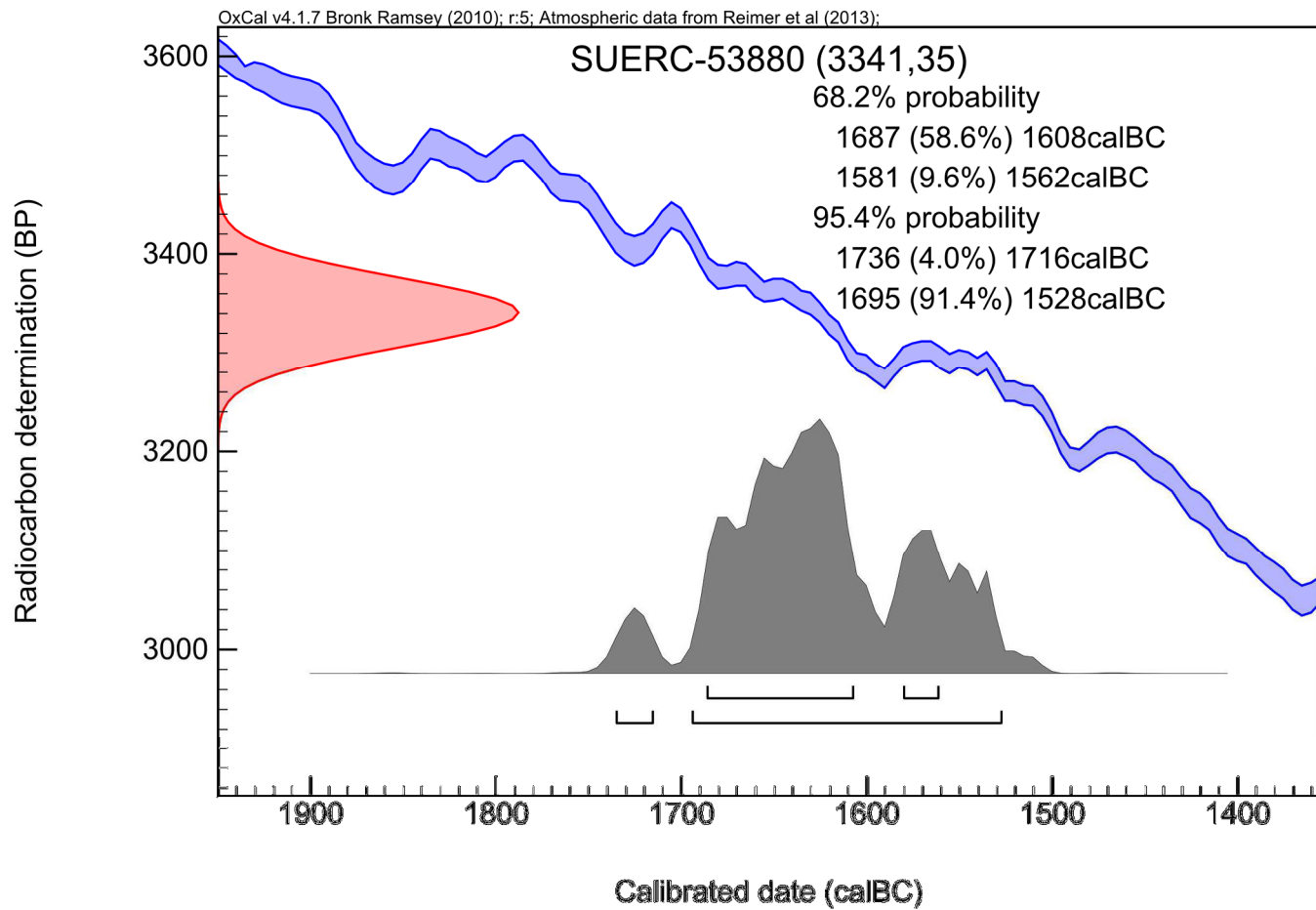
Conventional age and calibration age ranges calculated by :-

Date :- 17/07/2014

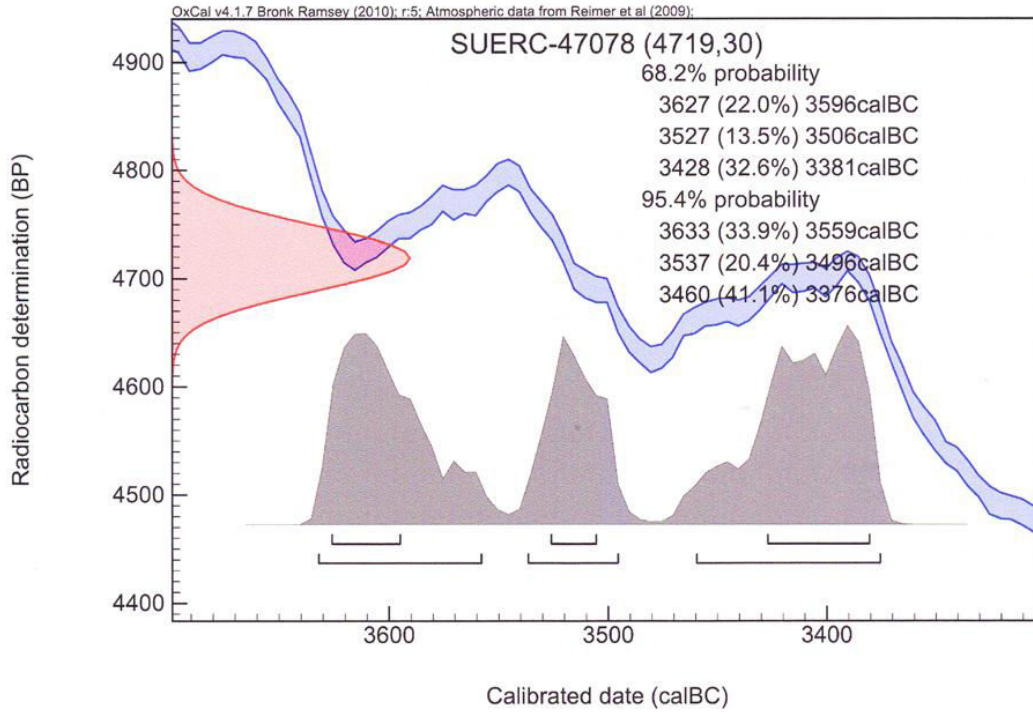
Checked and signed off by :-

Date :- 17/07/2014

Calibration Plot



Calibration Plot





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RADIOCARBON DATING CERTIFICATE

02 July 2013

Laboratory Code SUERC-47078 (GU30617)

Submitter Martin Cook
AOC Archaeology
Edgefield Industrial Estate
Edgefield Road, Loanhead
Midlothian, EH20 9SY

Site Reference Wedigs 2012 Achtercaim 2

Context Reference 4.3

Sample Reference 4.5

Material Charcoal : Alder

$\delta^{13}\text{C}$ relative to VPDB -25.6 ‰

Radiocarbon Age BP 4719 \pm 30

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- *N.R.M.*

Date :- *2-7-13*

Checked and signed off by :- *G. Muir*

Date :- *2/7/13*





RADIOCARBON DATING CERTIFICATE

17 July 2014

Laboratory Code SUERC-53880 (GU34311)

Submitter Jackaline Robertson
AOC Archaeology
Edgefield Industrial Estate
Edgefield Road
Loanhead, EH20 9SY

Site Reference Acht3

Context Reference T5.2

Sample Reference 8

Material Charcoal : Alder

$\delta^{13}\text{C}$ relative to VPDB -26.8 ‰

Radiocarbon Age BP 3341 \pm 35

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

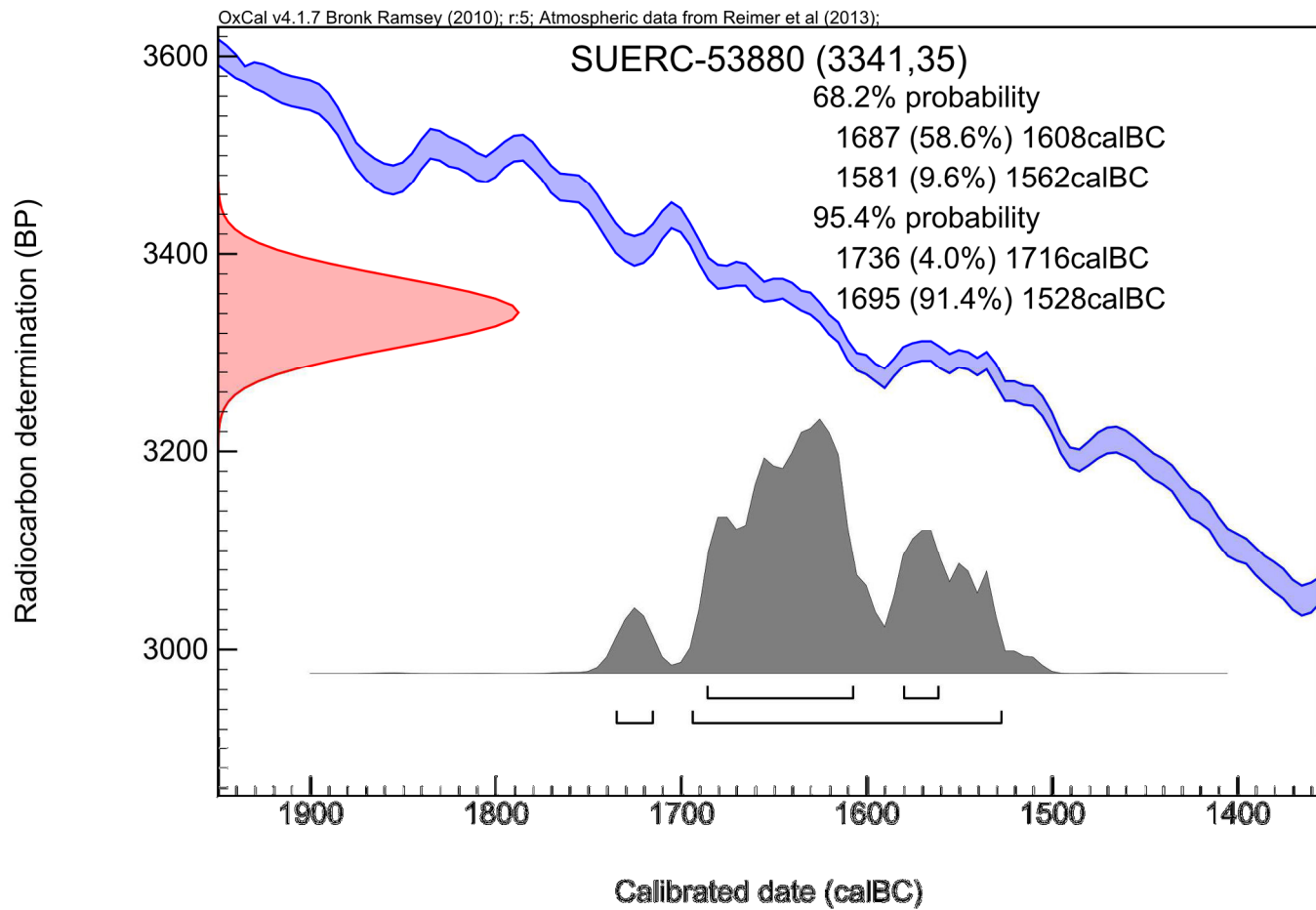
Conventional age and calibration age ranges calculated by :-

Date :- 17/07/2014

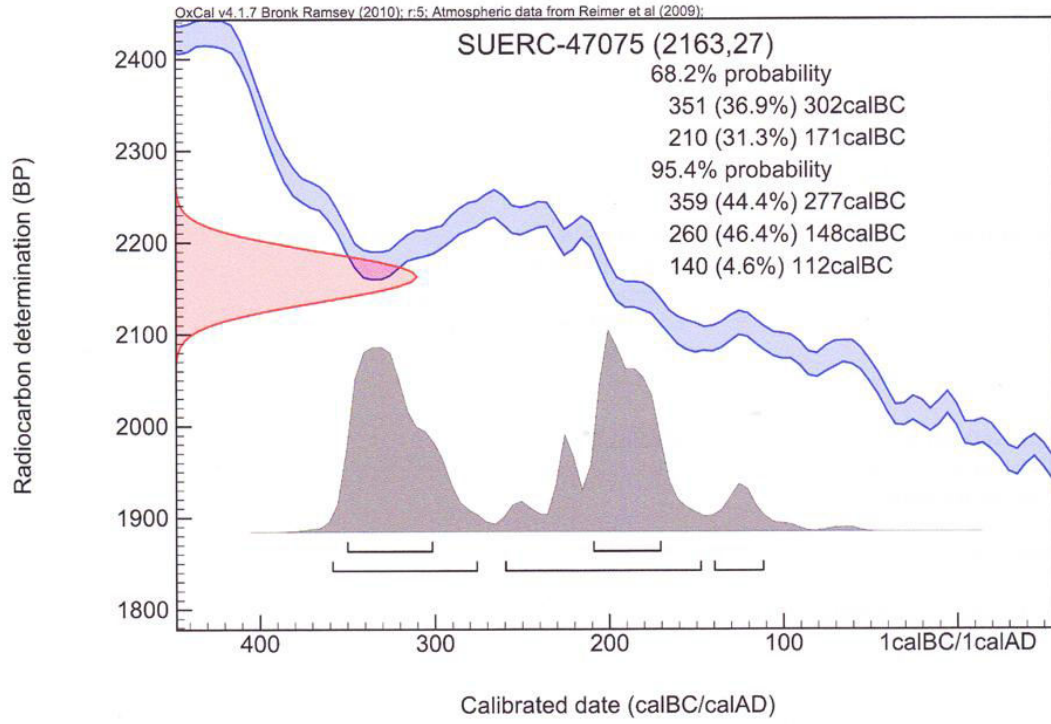
Checked and signed off by :-

Date :- 17/07/2014

Calibration Plot



Calibration Plot





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RADIOCARBON DATING CERTIFICATE

02 July 2013

Laboratory Code SUERC-47075 (GU30614)

Submitter Martin Cook
AOC Archaeology
Edgefield Industrial Estate
Edgefield Road, Loanhead
Midlothian, EH20 9SY

Site Reference Wedigs 2012 Achtercairn 1
Context Reference 1.3
Sample Reference 1.2

Material Charcoal : Birch

$\delta^{13}\text{C}$ relative to VPDB -26.1 ‰

Radiocarbon Age BP 2163 \pm 27

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- *NRM*

Date :- *27/3*

Checked and signed off by :- *G. Muir*

Date :- *2/7/13*

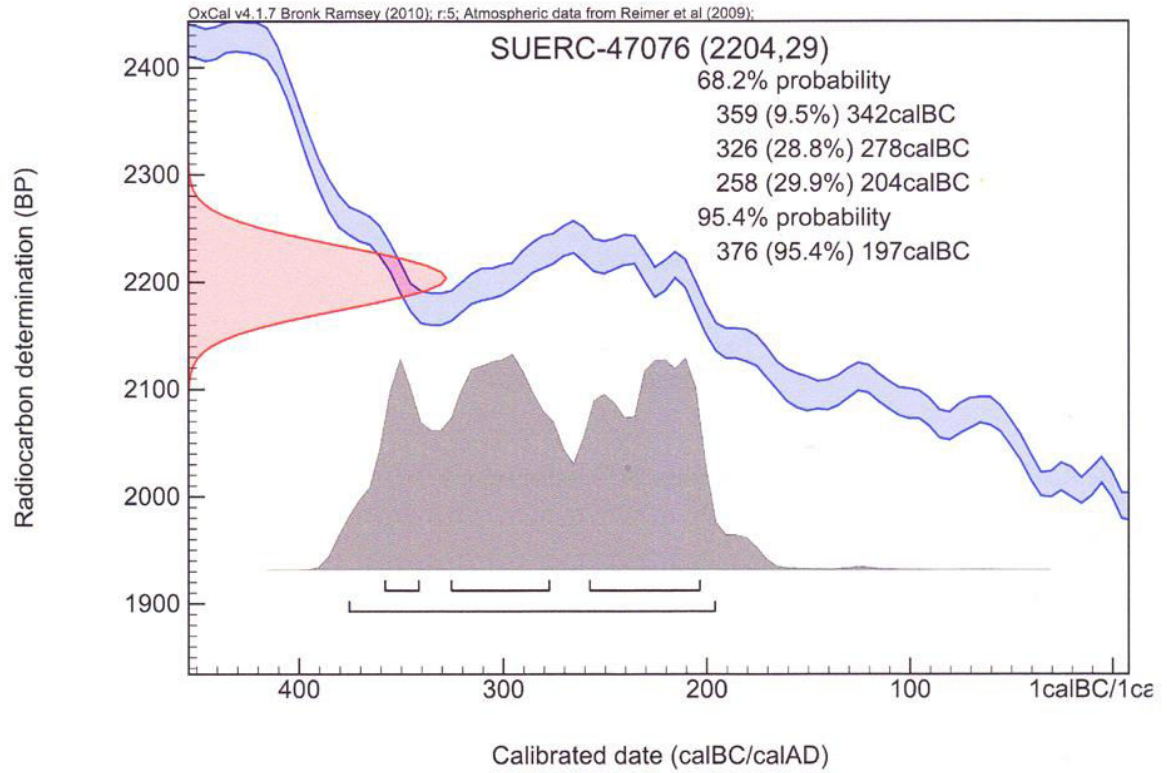


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RADIOCARBON DATING CERTIFICATE

02 July 2013

Laboratory Code SUERC-47076 (GU30615)

Submitter Martin Cook
AOC Archaeology
Edgefield Industrial Estate
Edgefield Road, Loanhead
Midlothian, EH20 9SY

Site Reference Wedigs 2012 Achtercairn 1
Context Reference 1.4
Sample Reference 1.7

Material Charcoal : Birch

$\delta^{13}\text{C}$ relative to VPDB -26.5 ‰

Radiocarbon Age BP 2204 \pm 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- *N.R.M.*

Date :- *2-7-13*

Checked and signed off by :- *G. Muir*

Date :- *2/7/13*

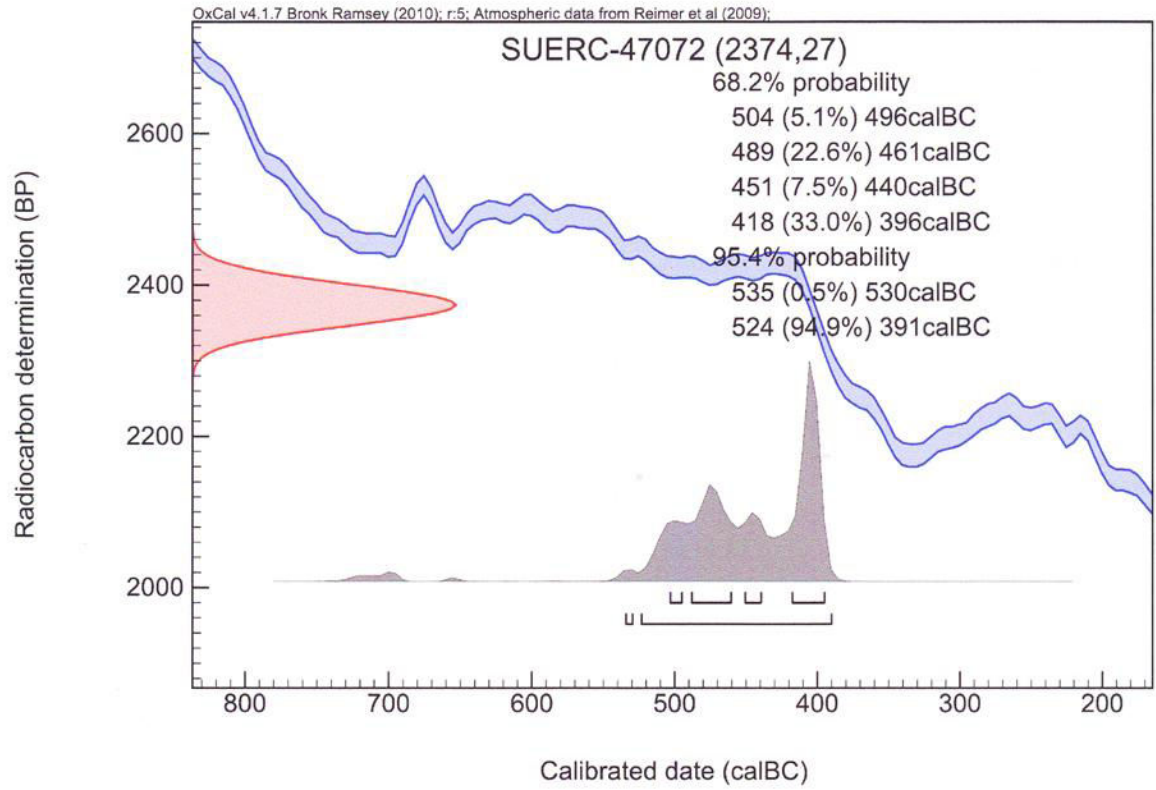


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RADIOCARBON DATING CERTIFICATE

02 July 2013

Laboratory Code SUERC-47072 (GU30611)
Submitter Martin Cook
AOC Archaeology
Edgefield Industrial Estate
Edgefield Road, Loanhead
Midlothian, EH20 9SY
Site Reference Wedigs 2012 Loch Raas
Context Reference 1.3
Sample Reference LR6
Material Charcoal : Hazel
 $\delta^{13}\text{C}$ relative to VPDB -26.8 ‰
Radiocarbon Age BP 2374 \pm 27

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- *J. R. M.*

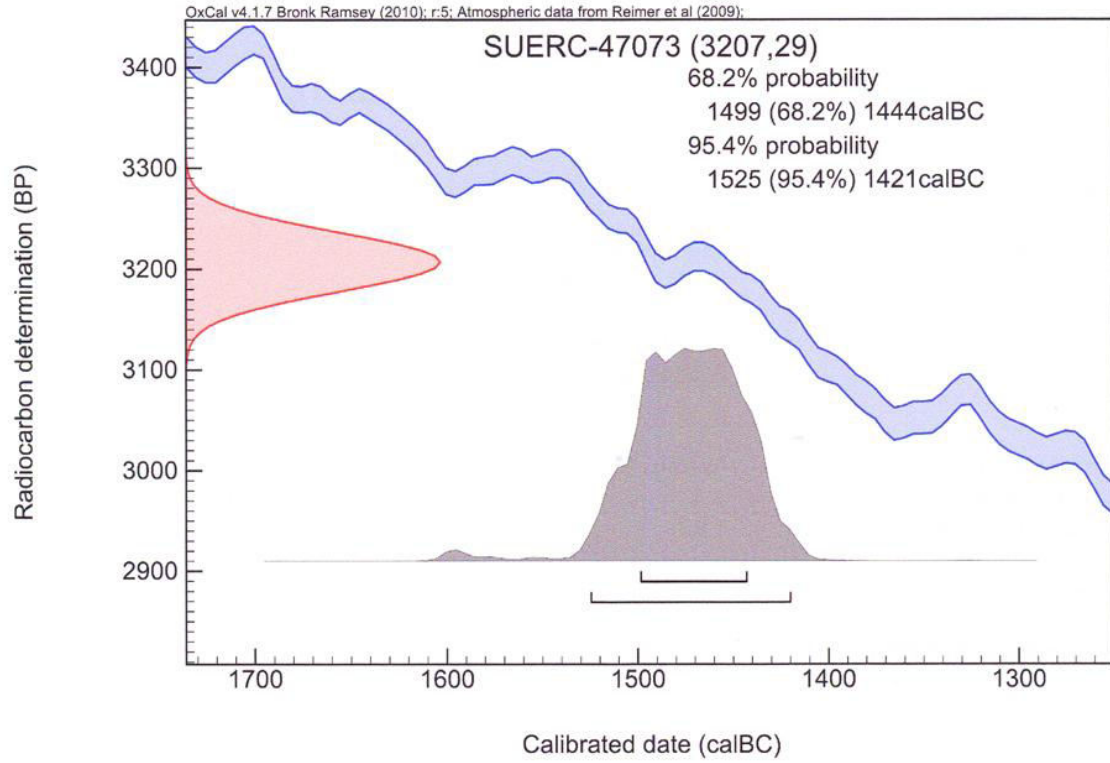
Date :- 2-7-13

Checked and signed off by :- *E. Muir*

Date :- 2/7/13



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RADIOCARBON DATING CERTIFICATE

02 July 2013

Laboratory Code SUERC-47073 (GU30612)

Submitter Martin Cook
AOC Archaeology
Edgefield Industrial Estate
Edgefield Road, Loanhead
Midlothian, EH20 9SY

Site Reference Wedigs 2012 Loch Ra
Context Reference 1.5
Sample Reference LR7

Material Charcoal : Hazel

$\delta^{13}\text{C}$ relative to VPDB -26.2 ‰

Radiocarbon Age BP 3207 ± 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- *N. Hall*

Date :- *2-7-13*

Checked and signed off by :- *E. Muir*

Date :- *2/7/13*

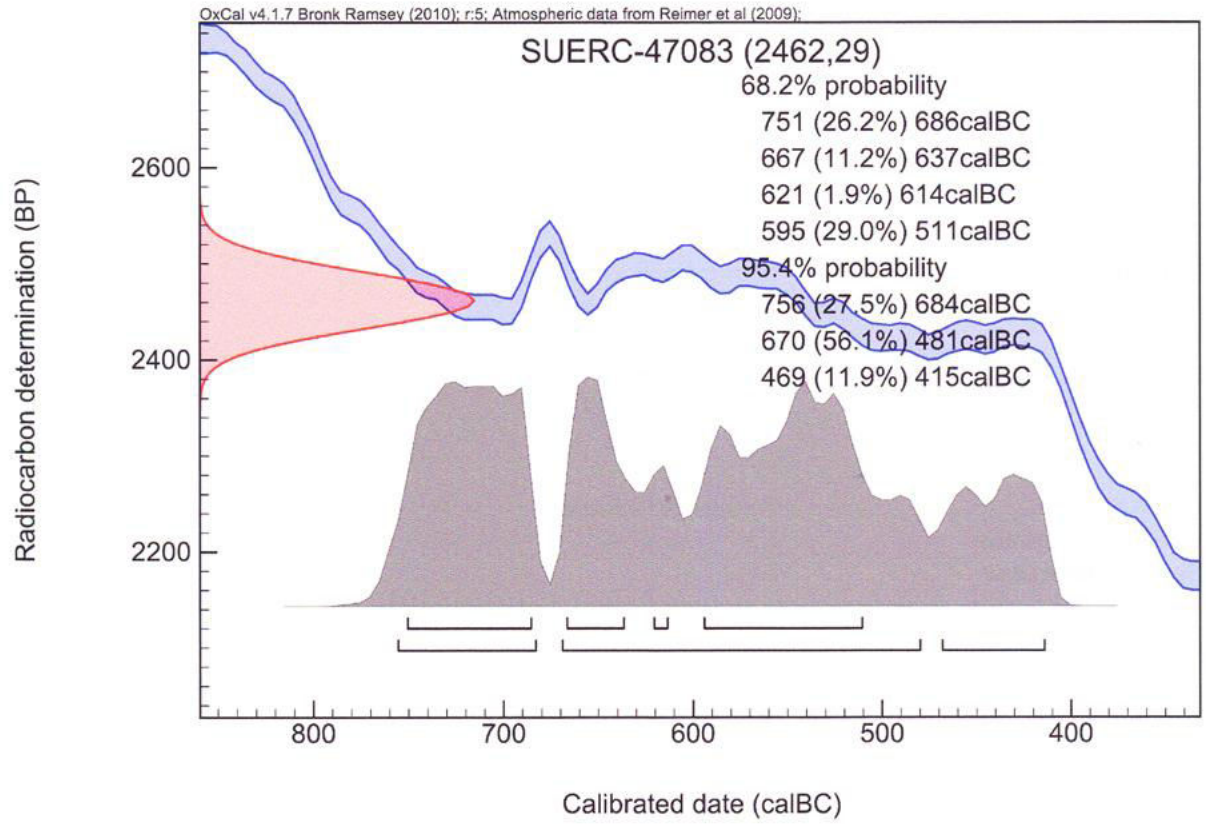


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Calibration Plot





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RADIOCARBON DATING CERTIFICATE

02 July 2013

Laboratory Code SUERC-47083 (GU30619)

Submitter Martin Cook
AOC Archaeology
Edgefield Industrial Estate
Edgefield Road, Loanhead
Midlothian, EH20 9SY

Site Reference Wedigs 2012 Rhue
Context Reference 1.3
Sample Reference F05

Material Charcoal : Birch

$\delta^{13}\text{C}$ relative to VPDB -26.8 ‰

Radiocarbon Age BP 2462 \pm 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- *NRM*

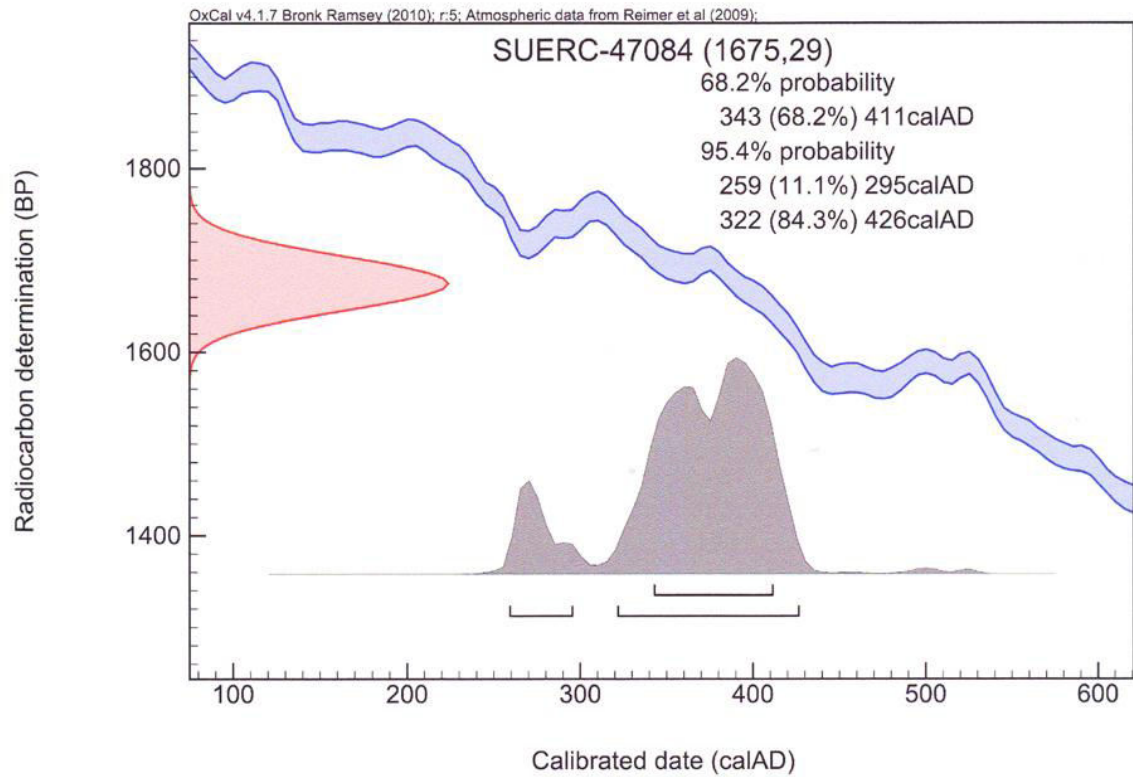
Date :- *2-7-13*

Checked and signed off by :- *E. Muir*

Date :- *2/7/13*



Calibration Plot





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RADIOCARBON DATING CERTIFICATE

02 July 2013

Laboratory Code SUERC-47084 (GU30620)

Submitter Martin Cook
AOC Archaeology
Edgefield Industrial Estate
Edgefield Road, Loanhead
Midlothian, EH20 9SY

Site Reference Wedigs 2012 Rhue
Context Reference 2.3
Sample Reference F04

Material Charcoal : Birch

$\delta^{13}\text{C}$ relative to VPDB -27.1 ‰

Radiocarbon Age BP 1675 \pm 29

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- *N.R.M*

Date :- *2-7-13*

Checked and signed off by :- *G. Muir*

Date :- *2/7/13*

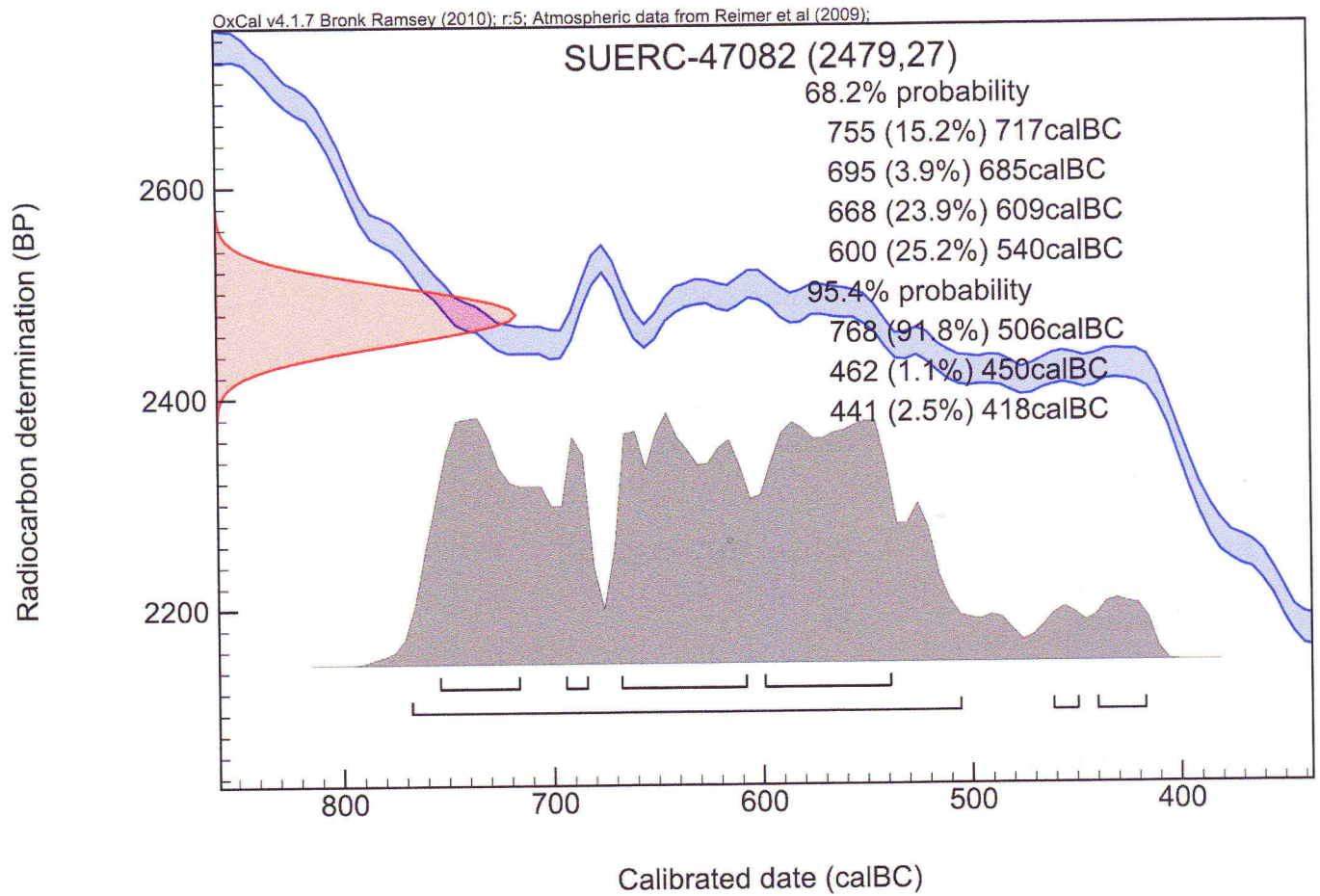


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RADIOCARBON DATING CERTIFICATE

02 July 2013

Laboratory Code SUERC-47082 (GU30618)

Submitter Martin Cook
AOC Archaeology
Edgefield Industrial Estate
Edgefield Road, Loanhead
Midlothian, EH20 9SY

Site Reference Wedigs 2012 Srathain 1

Context Reference 1.2

Sample Reference S1.1

Material Charcoal : Birch

$\delta^{13}\text{C}$ relative to VPDB -26.1 ‰

Radiocarbon Age BP 2479 \pm 27

N.B. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.

The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal4).

Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code. The contact details for the laboratory are email g.cook@suerc.gla.ac.uk or telephone 01355 270136 direct line.

Conventional age and calibration age ranges calculated by :- *N.R.M.*

Date :- *2-7-13*

Checked and signed off by :- *G. Muir*

Date :- *2/7/13*



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