February 25, 2014

Dr. Vincas Steponaitis
University of North Carolina
Research Laboratories of Archaeology
CB# 3120
Chapel Hill, NC 27599-3120
USA

RE: Radiocarbon Dating Results For Samples
MMT 5, MMT 8, MMT 26, MMT 117, MMT 126, MMT 200, MMT 211, MMT 262,
MMT 404, MMT 405, MMT 616, MMT 624, MMT 721, MMT 803, MMT 810, MMT 1004,
MMT 1046, MMT 1075

Dear Dr. Steponaitis:

Enclosed are the radiocarbon dating results for 18 samples recently sent to us. As usual, the method of analysis is listed on the report with the results and calibration data is provided where applicable. The Conventional Radiocarbon Ages have all been corrected for total fractionation effects and where applicable, calibration was performed using 2013 calibration database (cited on the graph pages).

The web directory containing the table of results and PDF download also contains pictures, a cvs spreadsheet download option and a quality assurance report containing expected vs. measured values for 3-5 working standards analyzed simultaneously with your samples.

Reported results are accredited to ISO-17025 standards and all chemistry was performed here in our laboratories and counted in our own accelerators here in Miami. Since Beta is not a teaching laboratory, only graduates trained to strict protocols of the ISO-17025 program participated in the analyses.

As always Conventional Radiocarbon Ages and sigmas are rounded to the nearest 10 years per the conventions of the 1977 International Radiocarbon Conference. When counting statistics produce sigmas lower than +/- 30 years, a conservative +/- 30 BP is cited for the result.

When interpreting the results, please consider any communications you may have had with us regarding the samples. As always, your inquiries are most welcome. If you have any questions or would like further details of the analyses, please do not hesitate to contact us.

Our invoices have been sent separately. Thank you for your prior efforts in arranging payment. As always, if you have any questions or would like to discuss the results, don't hesitate to contact me.

Sincerely,

Darden Hood
Digital signature on file

BETA ANALYTIC INC.

DR. M.A. TAMERS and MR. D.G. HOOD

4985 S.W. 74 COURT
MIAMI, FLORIDA, USA 33155
PH: 305-667-5167 FAX:305-663-0964
beta@radiocarbon.com

REPORT OF RADIOCARBON DATING ANALYSES

Dr. Vincas Steponaitis

Report Date: 2/25/2014

Sample Data	Measured Radiocarbon Age	13C/12C Ratio	Conventional Radiocarbon Age(*)
Beta - 372870	1530 +/- 30 BP	-23.9 o/oo	1550 +/- 30 BP

SAMPLE : MMT 5
ANALYSIS : AMS-Standard delivery
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid
2 SIGMA CALIBRATION :   Cal AD 420 to 575 (Cal BP 1530 to 1375)

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Beta - 372871	1340 +/- 30 BP	-24.5 o/oo	1350 +/- 30 BP

SAMPLE : MMT 8
ANALYSIS : AMS-Standard delivery
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid
2 SIGMA CALIBRATION :   Cal AD 645 to 685 (Cal BP 1305 to 1265)

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Beta - 372872	370 +/- 30 BP	-27.0 o/oo	340 +/- 30 BP

SAMPLE : MMT 26
ANALYSIS : AMS-Standard delivery
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid
2 SIGMA CALIBRATION :   Cal AD 1455 to 1645 (Cal BP 495 to 305)

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Dr. Vincas Steponaitis

Report Date: 2/25/2014

Sample Data	Measured Radiocarbon Age	13C/12C Ratio	Conventional Radiocarbon Age(*)
Beta - 372873	1860 +/- 30 BP	-25.9 o/oo	1850 +/- 30 BP
SAMPLE : MMT 117			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid			
2 SIGMA CALIBRATION : Cal AD 80 to 240 (Cal BP 1870 to 1710)			
Beta - 372874	1070 +/- 30 BP	-25.5 o/oo	1060 +/- 30 BP
SAMPLE : MMT 126			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid			
2 SIGMA CALIBRATION : Cal AD 900 to 925 (Cal BP 1050 to 1025) and Cal AD 945 to 1020 (Cal BP 1005 to 930)			
Beta - 372875	640 +/- 30 BP	-26.7 o/oo	610 +/- 30 BP
SAMPLE : MMT 200			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT : (organic sediment): acid washes			
2 SIGMA CALIBRATION : Cal AD 1290 to 1410 (Cal BP 660 to 540)			
Beta - 372876	510 +/- 30 BP	-26.5 o/oo	490 +/- 30 BP
SAMPLE : MMT 211			
ANALYSIS : AMS-Standard delivery			
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid			
2 SIGMA CALIBRATION : Cal AD 1410 to 1445 (Cal BP 540 to 505)			

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Report Date: 2/25/2014

Sample Data	Measured Radiocarbon Age	13C/12C Ratio	Conventional Radiocarbon Age(*)
Beta - 372877	1010 +/- 30 BP	-26.1 o/oo	990 +/- 30 BP

SAMPLE : MMT 262
ANALYSIS : AMS-Standard delivery
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid
2 SIGMA CALIBRATION : Cal AD 995 to 1050 (Cal BP 955 to 900) and Cal AD 1085 to 1125 (Cal BP 865 to 825) and Cal AD 1140 to 1150 (Cal BP 810 to 800)

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Beta - 372878	870 +/- 30 BP	-17.0 o/oo	1000 +/- 30 BP

SAMPLE : MMT 404
ANALYSIS : AMS-Standard delivery
MATERIAL/PRETREATMENT : (organic sediment): acid washes
2 SIGMA CALIBRATION : Cal AD 990 to 1045 (Cal BP 960 to 905) and Cal AD 1095 to 1120 (Cal BP 855 to 830) and Cal AD 1140 to 1145 (Cal BP 810 to 805)

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Beta - 372879	890 +/- 30 BP	-24.7 o/oo	890 +/- 30 BP

SAMPLE : MMT 405
ANALYSIS : AMS-Standard delivery
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid
2 SIGMA CALIBRATION : Cal AD 1040 to 1220 (Cal BP 910 to 730)

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Beta - 372880	590 +/- 30 BP	-28.1 o/oo	540 +/- 30 BP

SAMPLE : MMT 616
ANALYSIS : AMS-Standard delivery
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid
2 SIGMA CALIBRATION : Cal AD 1320 to 1350 (Cal BP 630 to 600) and Cal AD 1390 to 1435 (Cal BP 560 to 515)

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REPORT OF RADIOCARBON DATING ANALYSES

Dr. Vincas Steponaitis

Report Date: 2/25/2014

Sample Data	Measured Radiocarbon Age	13C/12C Ratio	Conventional Radiocarbon Age(*)
Beta - 372881	720 +/- 30 BP	-25.0 o/oo	720 +/- 30 BP

SAMPLE : MMT 624
ANALYSIS : AMS-Standard delivery
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid
2 SIGMA CALIBRATION : Cal AD 1260 to 1295 (Cal BP 690 to 655)

Beta - 372882	570 +/- 30 BP	-27.1 o/oo	540 +/- 30 BP

SAMPLE : MMT 721
ANALYSIS : AMS-Standard delivery
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid
2 SIGMA CALIBRATION : Cal AD 1320 to 1350 (Cal BP 630 to 600) and Cal AD 1390 to 1435 (Cal BP 560 to 515)

Beta - 372883	770 +/- 30 BP	-24.8 o/oo	770 +/- 30 BP

SAMPLE : MMT 803
ANALYSIS : AMS-Standard delivery
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid
2 SIGMA CALIBRATION : Cal AD 1220 to 1280 (Cal BP 730 to 670)

Beta - 372884	660 +/- 30 BP	-24.7 o/oo	660 +/- 30 BP

SAMPLE : MMT 810
ANALYSIS : AMS-Standard delivery
MATERIAL/PRETREATMENT : (organic sediment): acid washes
2 SIGMA CALIBRATION : Cal AD 1280 to 1320 (Cal BP 670 to 630) and Cal AD 1350 to 1390 (Cal BP 600 to 560)

REPORT OF RADIOCARBON DATING ANALYSES

Dr. Vincas Steponaitis   Report Date: 2/25/2014

Sample Data	Measured Radiocarbon Age	13C/12C Ratio	Conventional Radiocarbon Age(*)
Beta - 372885	1410 +/- 30 BP	-25.4 o/oo	1400 +/- 30 BP

SAMPLE : MMT 1004
ANALYSIS : AMS-Standard delivery
MATERIAL/PRETREATMENT : (bone collagen): collagen extraction: with alkali
2 SIGMA CALIBRATION : Cal AD 605 to 665 (Cal BP 1345 to 1285)

Beta - 372886	1040 +/- 30 BP	-23.5 o/oo	1060 +/- 30 BP

SAMPLE : MMT 1046
ANALYSIS : AMS-Standard delivery
MATERIAL/PRETREATMENT : (charred material): acid/alkali/acid
2 SIGMA CALIBRATION : Cal AD 900 to 925 (Cal BP 1050 to 1025) and Cal AD 945 to 1020 (Cal BP 1005 to 930)

Beta - 372887	780 +/- 30 BP	-21.3 o/oo	840 +/- 30 BP

SAMPLE : MMT 1075
ANALYSIS : AMS-Standard delivery
MATERIAL/PRETREATMENT : (bone collagen): collagen extraction: with alkali
2 SIGMA CALIBRATION : Cal AD 1155 to 1260 (Cal BP 795 to 690)

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12 = -23.9 o/oo : lab. mult = 1)

Laboratory number	**Beta-372870**
Conventional radiocarbon age	**1550 ± 30 BP**
2 Sigma calibrated result 95% probability	**Cal AD 420 to 575 (Cal BP 1530 to 1375)**
Intercept of radiocarbon age with calibration curve	Cal AD 540 (Cal BP 1410)
1 Sigma calibrated results 68% probability	Cal AD 430 to 490 (Cal BP 1520 to 1460) Cal AD 510 to 515 (Cal BP 1440 to 1435) Cal AD 530 to 550 (Cal BP 1420 to 1400)
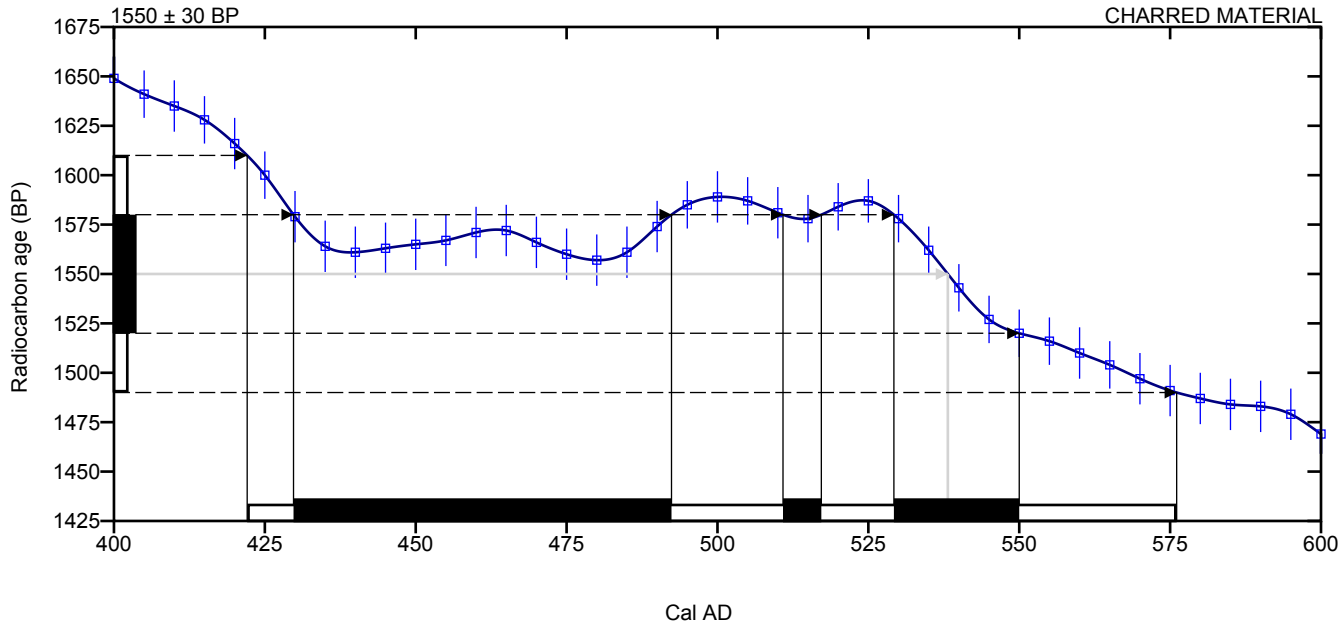
1550 ± 30 BP · CHARRED MATERIAL

Database used
  INTCAL13

References
  Mathematics used for calibration scenario
    A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
  References to INTCAL13 database
    Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12 = -24.5 o/oo : lab. mult = 1)

Laboratory number	**Beta-372871**
Conventional radiocarbon age	**1350 ± 30 BP**
2 Sigma calibrated result 95% probability	**Cal AD 645 to 685 (Cal BP 1305 to 1265)**
Intercept of radiocarbon age with calibration curve	Cal AD 660 (Cal BP 1290)
1 Sigma calibrated results 68% probability	Cal AD 655 to 670 (Cal BP 1295 to 1280)
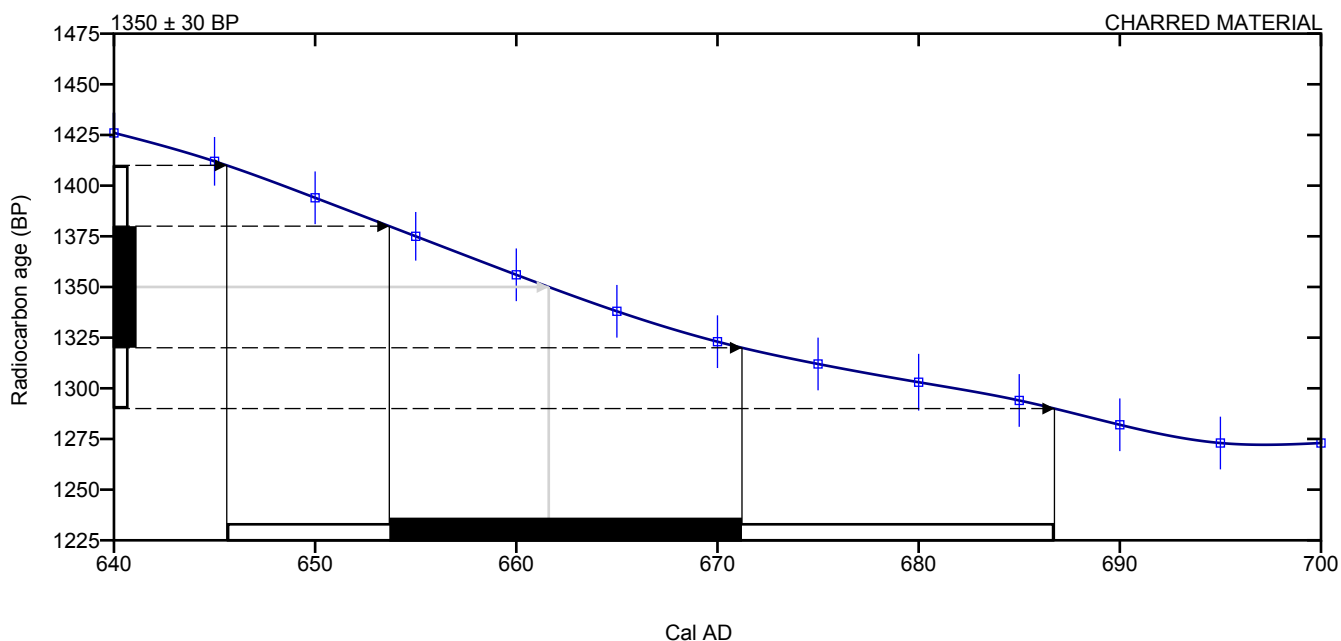
Database used
INTCAL13

References
Mathematics used for calibration scenario
A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
References to INTCAL13 database
Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12 = -27 o/oo : lab. mult = 1)

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Laboratory number	**Beta-372872**
Conventional radiocarbon age	**340 ± 30 BP**
2 Sigma calibrated result **95% probability**	**Cal AD 1455 to 1645 (Cal BP 495 to 305)**

Intercept of radiocarbon age with calibration curve	Cal AD 1520 (Cal BP 430) Cal AD 1595 (Cal BP 355) Cal AD 1620 (Cal BP 330)
1 Sigma calibrated results 68% probability	Cal AD 1485 to 1530 (Cal BP 465 to 420) Cal AD 1545 to 1635 (Cal BP 405 to 315)
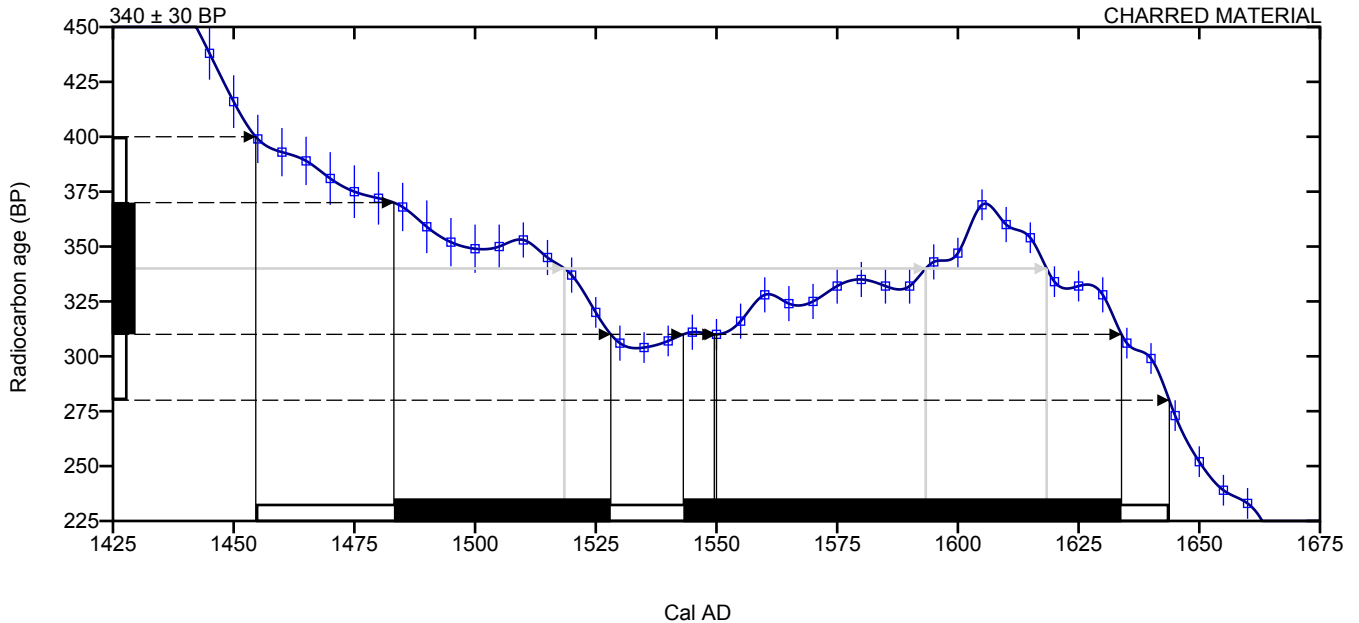
Database used
INTCAL13

References
Mathematics used for calibration scenario
A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
References to INTCAL13 database
Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12 = -25.9 o/oo : lab. mult = 1)

Laboratory number	**Beta-372873**
Conventional radiocarbon age	**1850 ± 30 BP**
2 Sigma calibrated result **95% probability**	**Cal AD 80 to 240 (Cal BP 1870 to 1710)**
Intercept of radiocarbon age with calibration curve	Cal AD 135 (Cal BP 1815)
1 Sigma calibrated results 68% probability	Cal AD 125 to 220 (Cal BP 1825 to 1730)
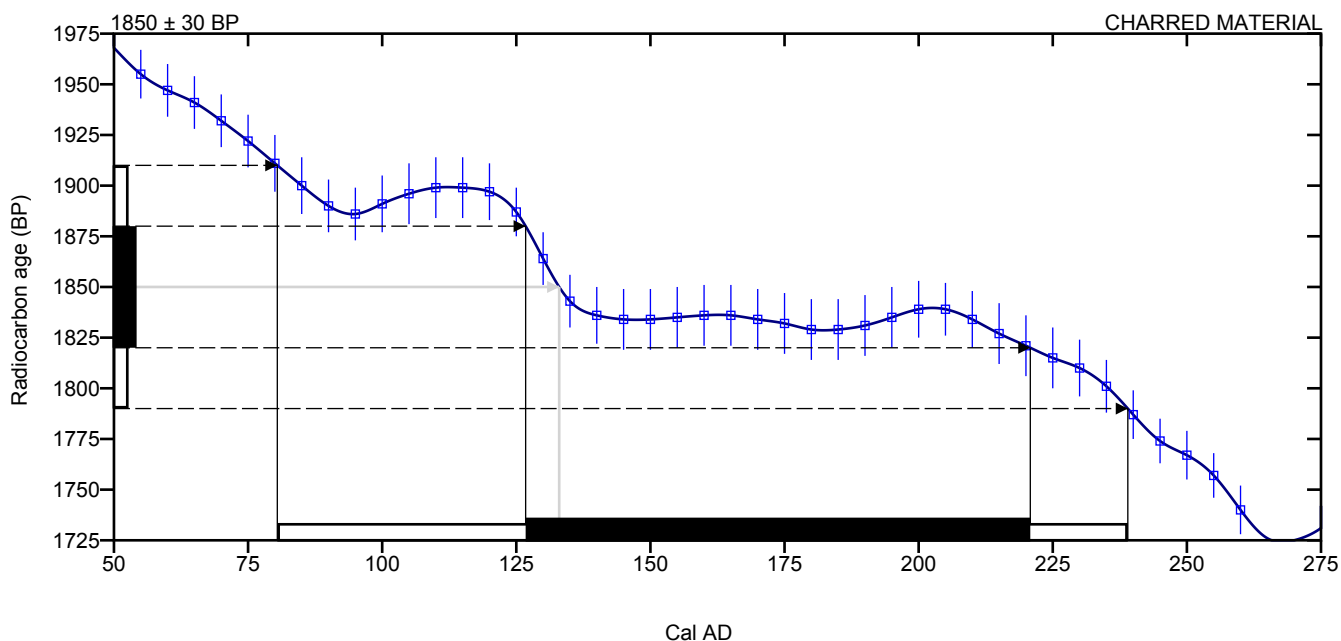
1850 ± 30 BP · CHARRED MATERIAL

Database used
INTCAL13

References
Mathematics used for calibration scenario
A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
References to INTCAL13 database
Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12 = -25.5 o/oo : lab. mult = 1)

Laboratory number **Beta-372874**

Conventional radiocarbon age **1060 ± 30 BP**

2 Sigma calibrated result **Cal AD 900 to 925 (Cal BP 1050 to 1025)**
95% probability **Cal AD 945 to 1020 (Cal BP 1005 to 930)**

Intercept of radiocarbon age with calibration curve Cal AD 990 (Cal BP 960)

1 Sigma calibrated results Cal AD 975 to 1015 (Cal BP 975 to 935)
68% probability

1060 ± 30 BP

CHARRED MATERIAL

Radiocarbon age (BP)

Cal AD

Database used
INTCAL13

References
Mathematics used for calibration scenario
A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
References to INTCAL13 database
Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS
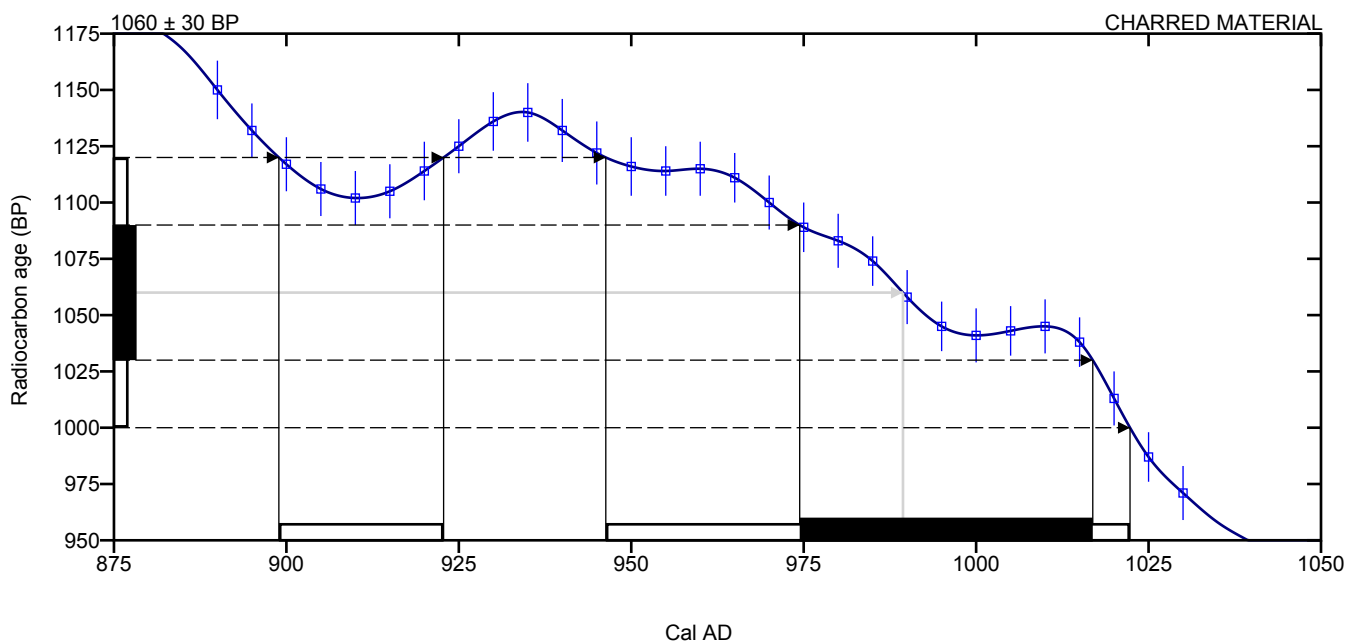
(Variables: C13/C12 = -26.7 o/oo : lab. mult = 1)

Laboratory number	**Beta-372875**
Conventional radiocarbon age	**610 ± 30 BP**
2 Sigma calibrated result 95% probability	**Cal AD 1290 to 1410 (Cal BP 660 to 540)**

Intercept of radiocarbon age with calibration curve	Cal AD 1315 (Cal BP 635)
	Cal AD 1355 (Cal BP 595)
	Cal AD 1390 (Cal BP 560)

1 Sigma calibrated results 68% probability	Cal AD 1300 to 1330 (Cal BP 650 to 620)
	Cal AD 1340 to 1370 (Cal BP 610 to 580)
	Cal AD 1380 to 1395 (Cal BP 570 to 555)
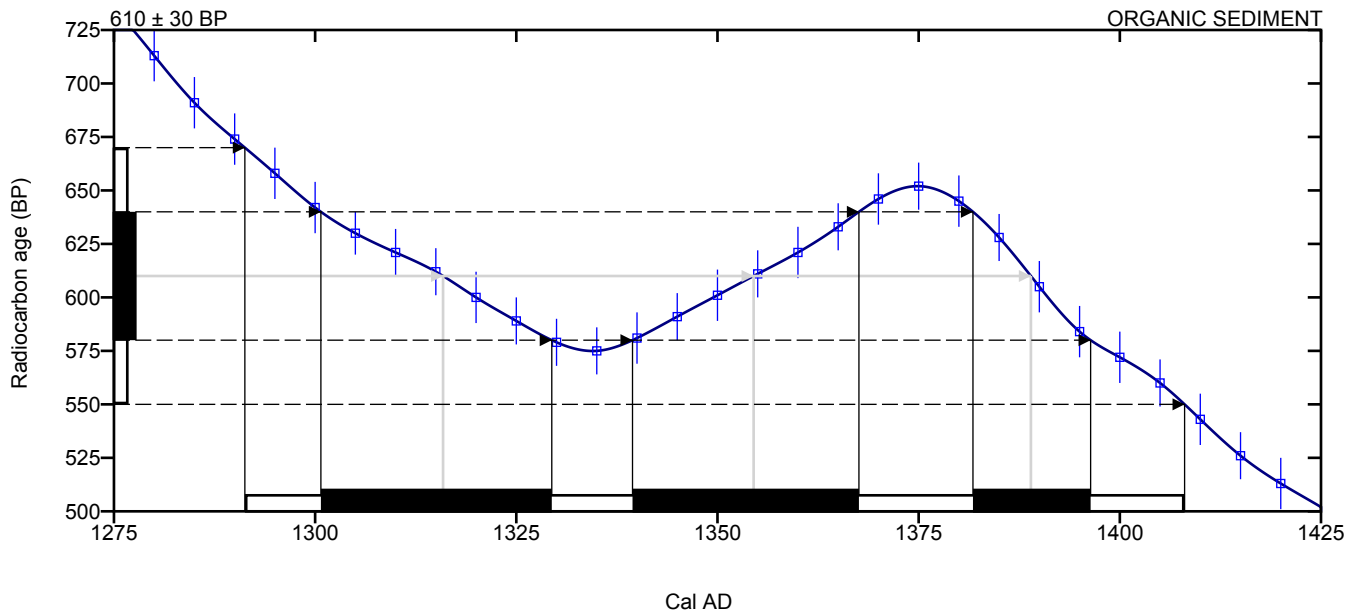
Database used
INTCAL13

References
Mathematics used for calibration scenario
A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
References to INTCAL13 database
Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12 = -26.5 o/oo : lab. mult = 1)

Laboratory number	**Beta-372876**
Conventional radiocarbon age	**490 ± 30 BP**
2 Sigma calibrated result 95% probability	**Cal AD 1410 to 1445 (Cal BP 540 to 505)**
Intercept of radiocarbon age with calibration curve	Cal AD 1430 (Cal BP 520)
1 Sigma calibrated results 68% probability	Cal AD 1415 to 1440 (Cal BP 535 to 510)

490 ± 30 BP   CHARRED MATERIAL

Radiocarbon age (BP)

Cal AD

Database used
INTCAL13

References
Mathematics used for calibration scenario
A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
References to INTCAL13 database
Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

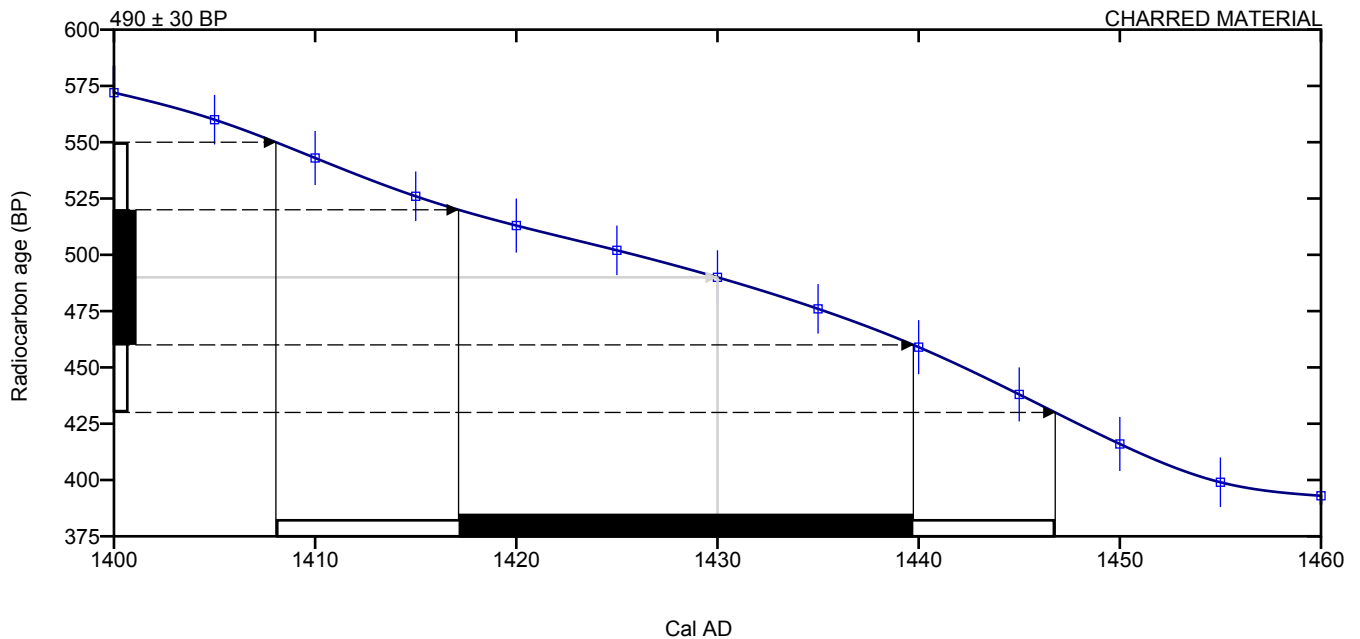(Variables: C13/C12 = -26.1 o/oo : lab. mult = 1)

Laboratory number	**Beta-372877**
Conventional radiocarbon age	**990 ± 30 BP**
2 Sigma calibrated result **95% probability**	**Cal AD 995 to 1050 (Cal BP 955 to 900)** **Cal AD 1085 to 1125 (Cal BP 865 to 825)** **Cal AD 1140 to 1150 (Cal BP 810 to 800)**
Intercept of radiocarbon age with calibration curve	Cal AD 1025 (Cal BP 925)
1 Sigma calibrated results 68% probability	Cal AD 1020 to 1035 (Cal BP 930 to 915)
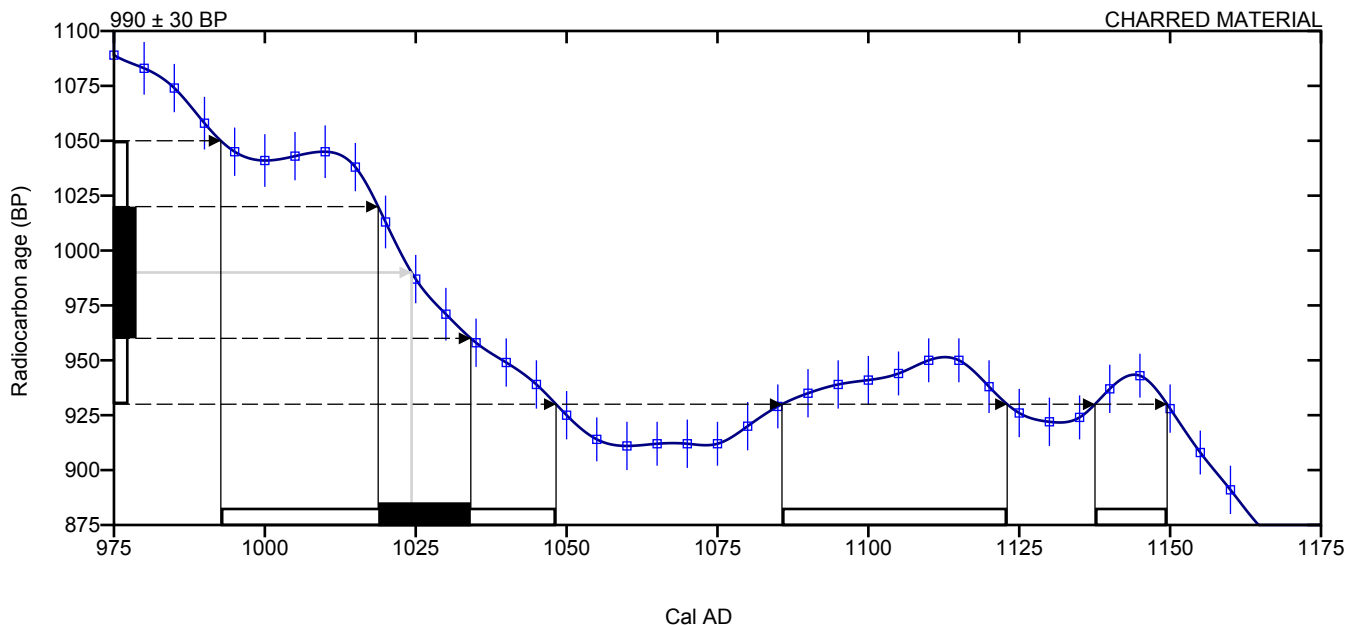
Database used
    INTCAL13

References
    Mathematics used for calibration scenario
        A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
    References to INTCAL13 database
        Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12 = -17 o/oo : lab. mult = 1)

Laboratory number	**Beta-372878**
Conventional radiocarbon age	**1000 ± 30 BP**
2 Sigma calibrated result **95% probability**	**Cal AD 990 to 1045 (Cal BP 960 to 905)** **Cal AD 1095 to 1120 (Cal BP 855 to 830)** **Cal AD 1140 to 1145 (Cal BP 810 to 805)**
Intercept of radiocarbon age with calibration curve	Cal AD 1020 (Cal BP 930)
1 Sigma calibrated results 68% probability	Cal AD 1015 to 1030 (Cal BP 935 to 920)

1000 ± 30 BP   ORGANIC SEDIMENT

Database used
    INTCAL13

References
    Mathematics used for calibration scenario
        A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
    References to INTCAL13 database
        Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

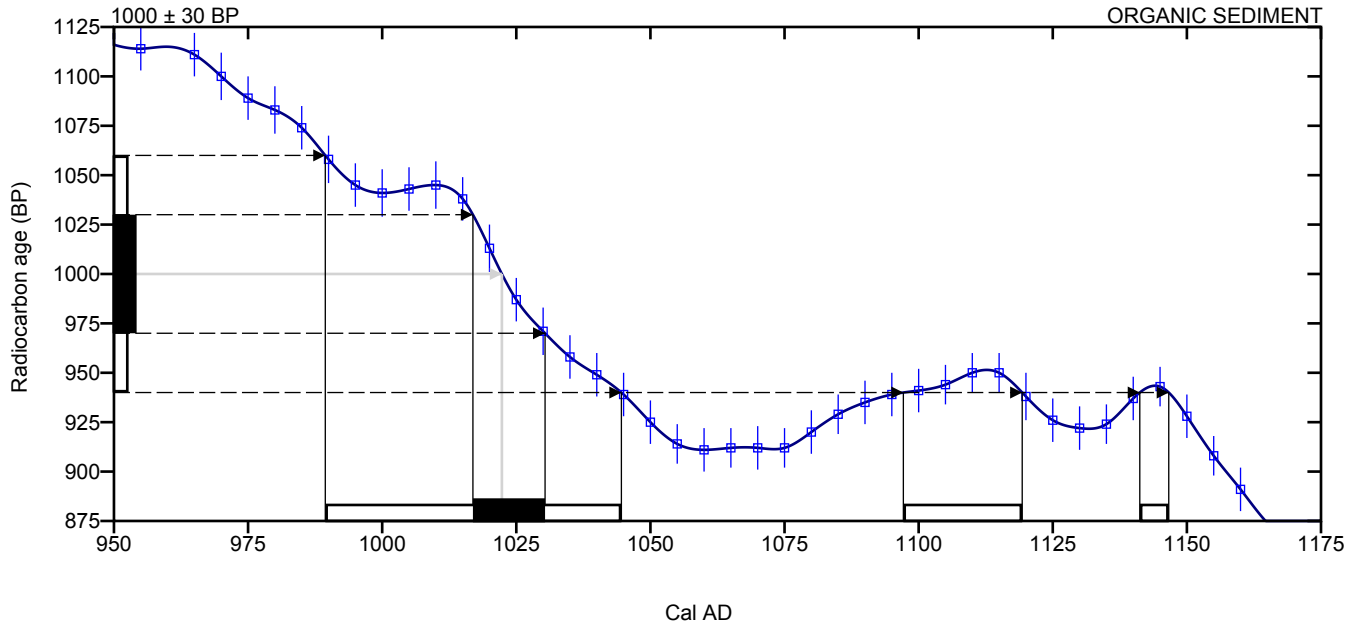(Variables: C13/C12 = -24.7 o/oo : lab. mult = 1)

Laboratory number	**Beta-372879**
Conventional radiocarbon age	**890 ± 30 BP**
2 Sigma calibrated result 95% probability	**Cal AD 1040 to 1220 (Cal BP 910 to 730)**
Intercept of radiocarbon age with calibration curve	Cal AD 1160 (Cal BP 790)
1 Sigma calibrated results 68% probability	Cal AD 1050 to 1080 (Cal BP 900 to 870) Cal AD 1150 to 1190 (Cal BP 800 to 760)
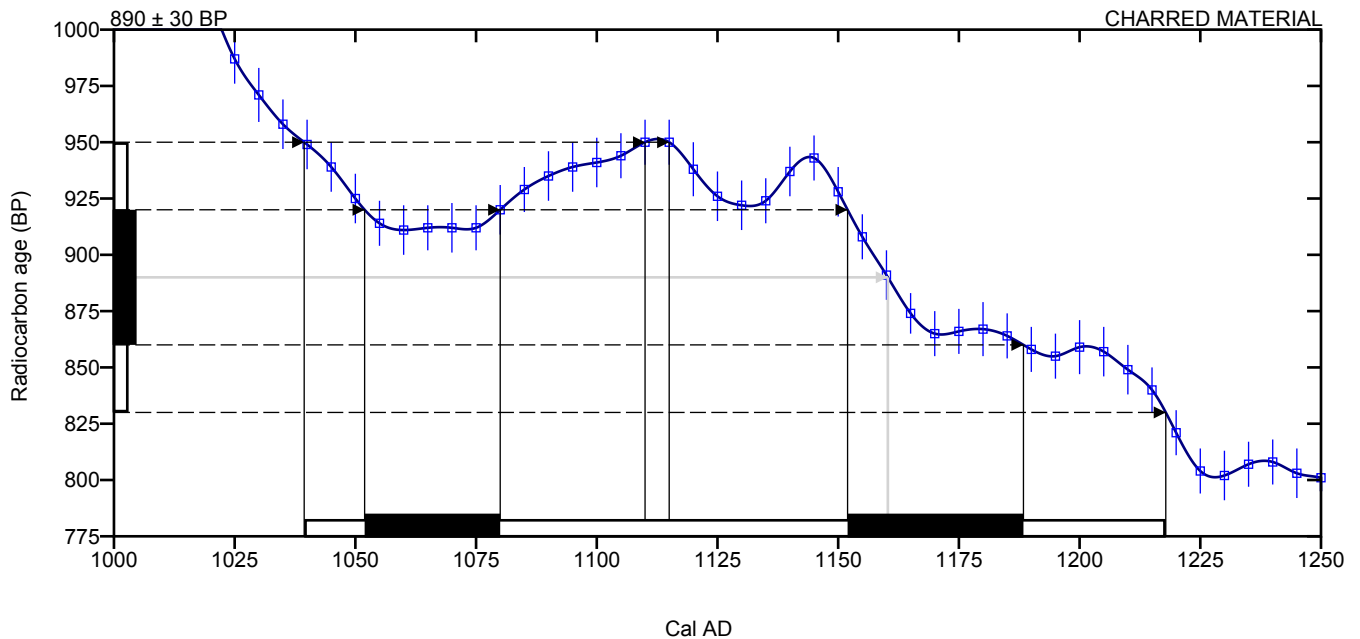
890 ± 30 BP   CHARRED MATERIAL

Radiocarbon age (BP)

Cal AD

Database used
  INTCAL13

References
  Mathematics used for calibration scenario
    A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
  References to INTCAL13 database
    Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12 = -28.1 o/oo : lab. mult = 1)

Laboratory number	**Beta-372880**
Conventional radiocarbon age	**540 ± 30 BP**
2 Sigma calibrated result **95% probability**	**Cal AD 1320 to 1350 (Cal BP 630 to 600)** **Cal AD 1390 to 1435 (Cal BP 560 to 515)**
Intercept of radiocarbon age with calibration curve	Cal AD 1410 (Cal BP 540)
1 Sigma calibrated results 68% probability	Cal AD 1400 to 1420 (Cal BP 550 to 530)

540 ± 30 BP — CHARRED MATERIAL

Radiocarbon age (BP) vs Cal AD

Database used
INTCAL13

References
Mathematics used for calibration scenario
A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
References to INTCAL13 database
Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12 = -25 o/oo : lab. mult = 1)

Laboratory number	**Beta-372881**
Conventional radiocarbon age	**720 ± 30 BP**
2 Sigma calibrated result 95% probability	**Cal AD 1260 to 1295 (Cal BP 690 to 655)**
Intercept of radiocarbon age with calibration curve	Cal AD 1280 (Cal BP 670)
1 Sigma calibrated results 68% probability	Cal AD 1270 to 1285 (Cal BP 680 to 665)
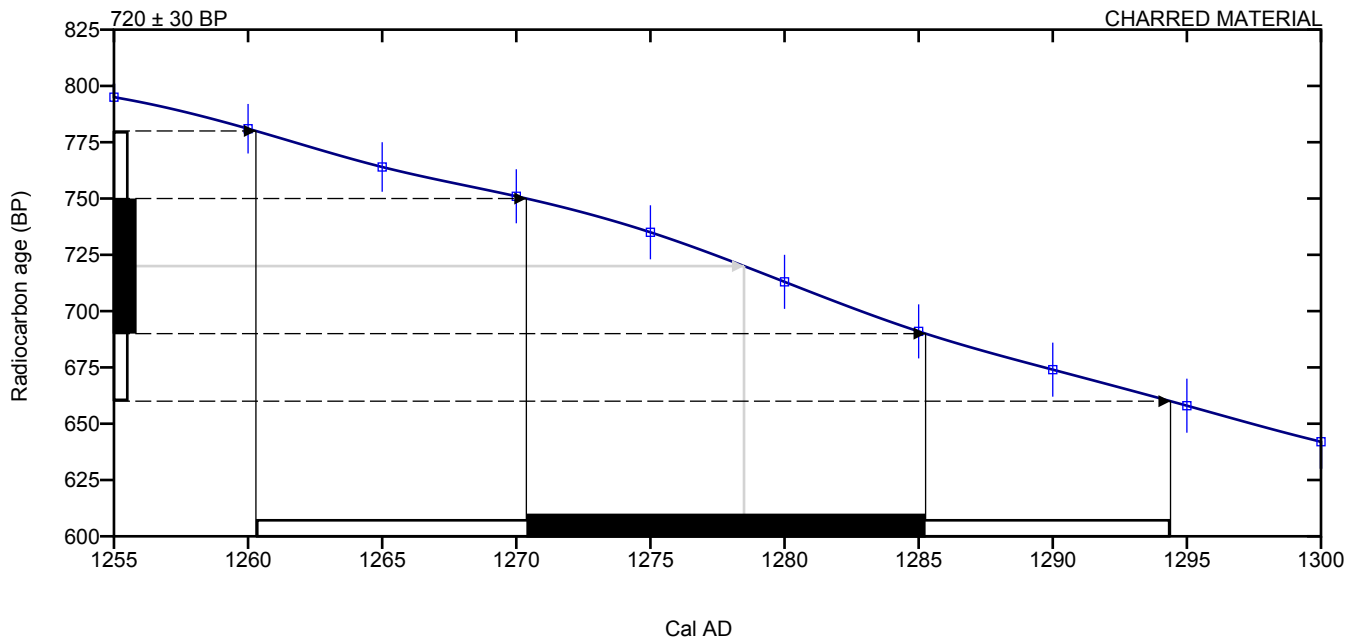
720 ± 30 BP   CHARRED MATERIAL

Radiocarbon age (BP)

Cal AD

Database used
INTCAL13

References
Mathematics used for calibration scenario
A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
References to INTCAL13 database
Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12 = -27.1 o/oo : lab. mult = 1)

Laboratory number	**Beta-372882**
Conventional radiocarbon age	**540 ± 30 BP**
2 Sigma calibrated result **95% probability**	**Cal AD 1320 to 1350 (Cal BP 630 to 600)** **Cal AD 1390 to 1435 (Cal BP 560 to 515)**
Intercept of radiocarbon age with calibration curve	Cal AD 1410 (Cal BP 540)
1 Sigma calibrated results 68% probability	Cal AD 1400 to 1420 (Cal BP 550 to 530)

540 ± 30 BP · CHARRED MATERIAL

Radiocarbon age (BP) vs Cal AD

Database used
INTCAL13

References
Mathematics used for calibration scenario
A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
References to INTCAL13 database
Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

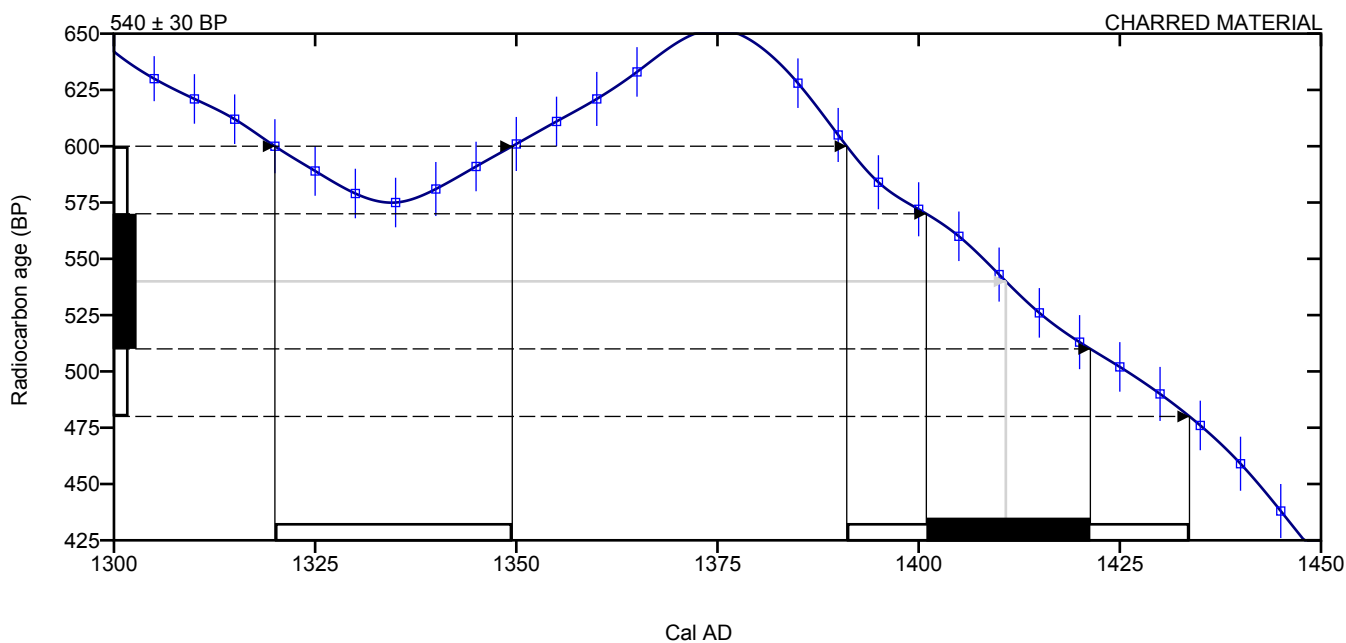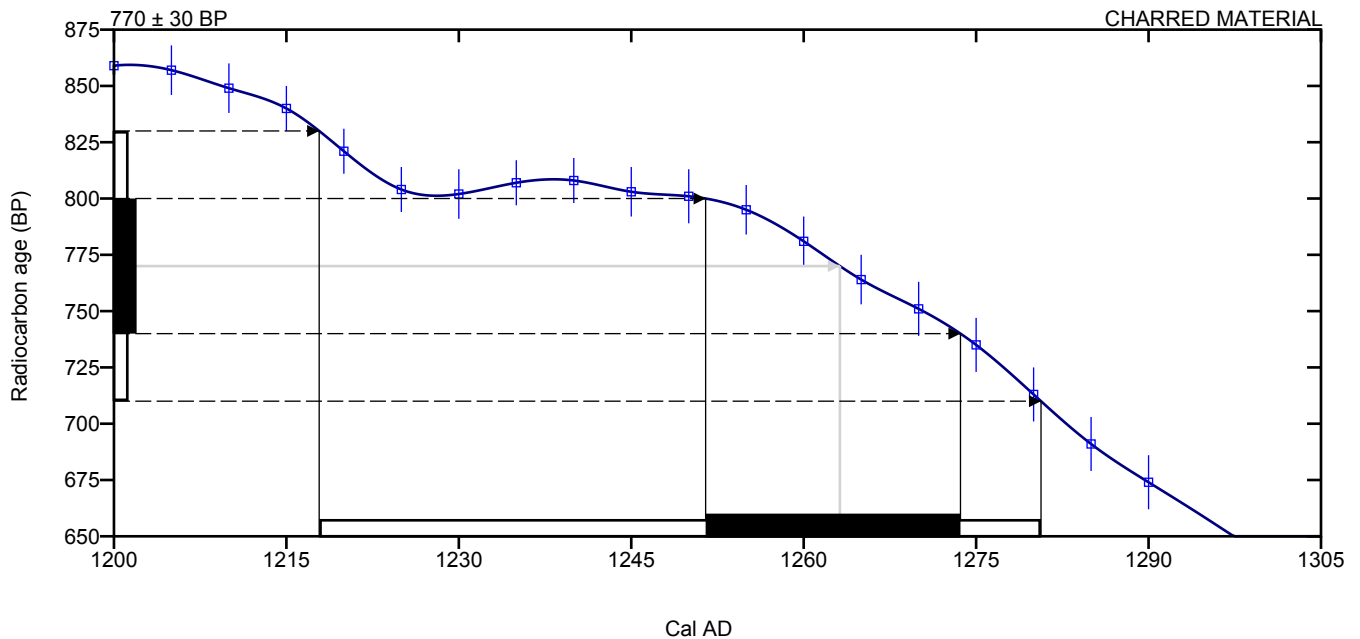(Variables: C13/C12 = -24.8 o/oo : lab. mult = 1)

Laboratory number **Beta-372883**

Conventional radiocarbon age **770 ± 30 BP**

2 Sigma calibrated result **Cal AD 1220 to 1280 (Cal BP 730 to 670)**
95% probability

Intercept of radiocarbon age with calibration Cal AD 1265 (Cal BP 685)
curve

1 Sigma calibrated results Cal AD 1250 to 1275 (Cal BP 700 to 675)
68% probability

770 ± 30 BP

CHARRED MATERIAL

Radiocarbon age (BP)

Cal AD

Database used
INTCAL13

References
Mathematics used for calibration scenario
A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
References to INTCAL13 database
Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12 = -24.7 o/oo : lab. mult = 1)

|	
Laboratory number	**Beta-372884**
Conventional radiocarbon age	**660 ± 30 BP**
2 Sigma calibrated result	**Cal AD 1280 to 1320 (Cal BP 670 to 630)**
95% probability	**Cal AD 1350 to 1390 (Cal BP 600 to 560)**
Intercept of radiocarbon age with calibration curve	Cal AD 1295 (Cal BP 655)
1 Sigma calibrated results	Cal AD 1285 to 1305 (Cal BP 665 to 645)
68% probability	Cal AD 1365 to 1385 (Cal BP 585 to 565)
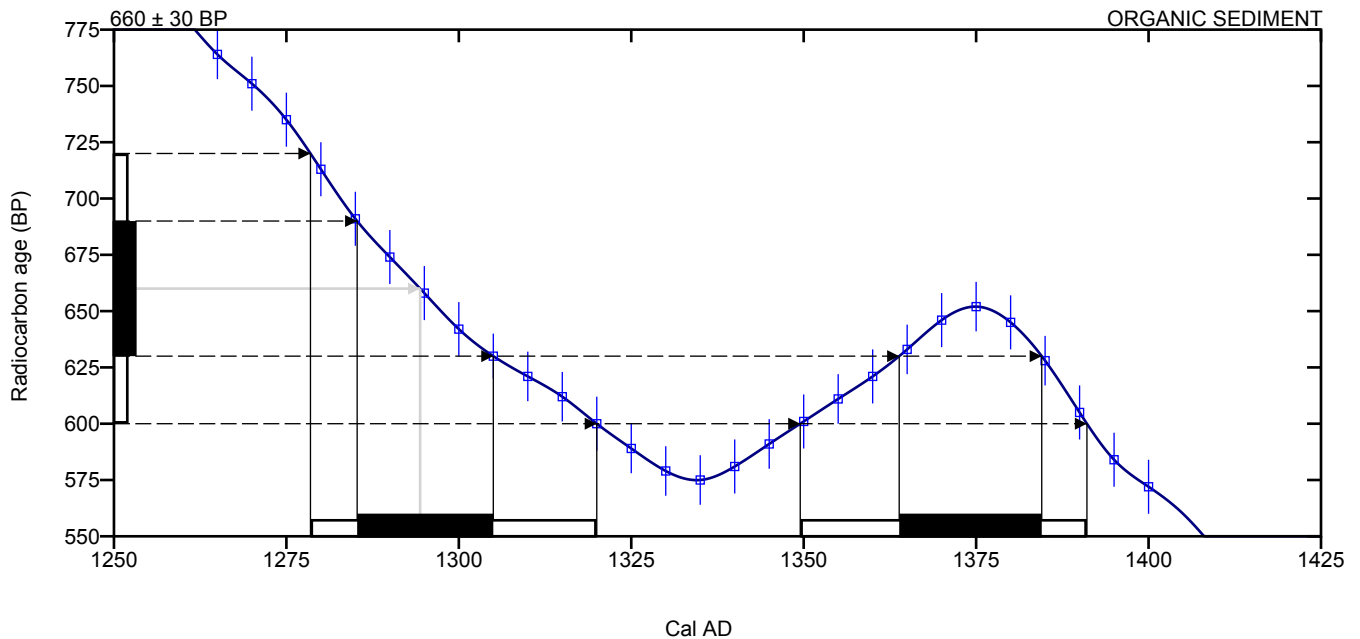
Database used
INTCAL13

References
Mathematics used for calibration scenario
A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
References to INTCAL13 database
Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12 = -25.4 o/oo : lab. mult = 1)

Laboratory number **Beta-372885**

Conventional radiocarbon age **1400 ± 30 BP**

2 Sigma calibrated result **Cal AD 605 to 665 (Cal BP 1345 to 1285)**
95% probability

Intercept of radiocarbon age with calibration curve   Cal AD 650 (Cal BP 1300)

1 Sigma calibrated results   Cal AD 640 to 655 (Cal BP 1310 to 1295)
68% probability

1400 ± 30 BP   BONE COLLAGEN

Cal AD

Database used
INTCAL13

References
Mathematics used for calibration scenario
A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
References to INTCAL13 database
Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

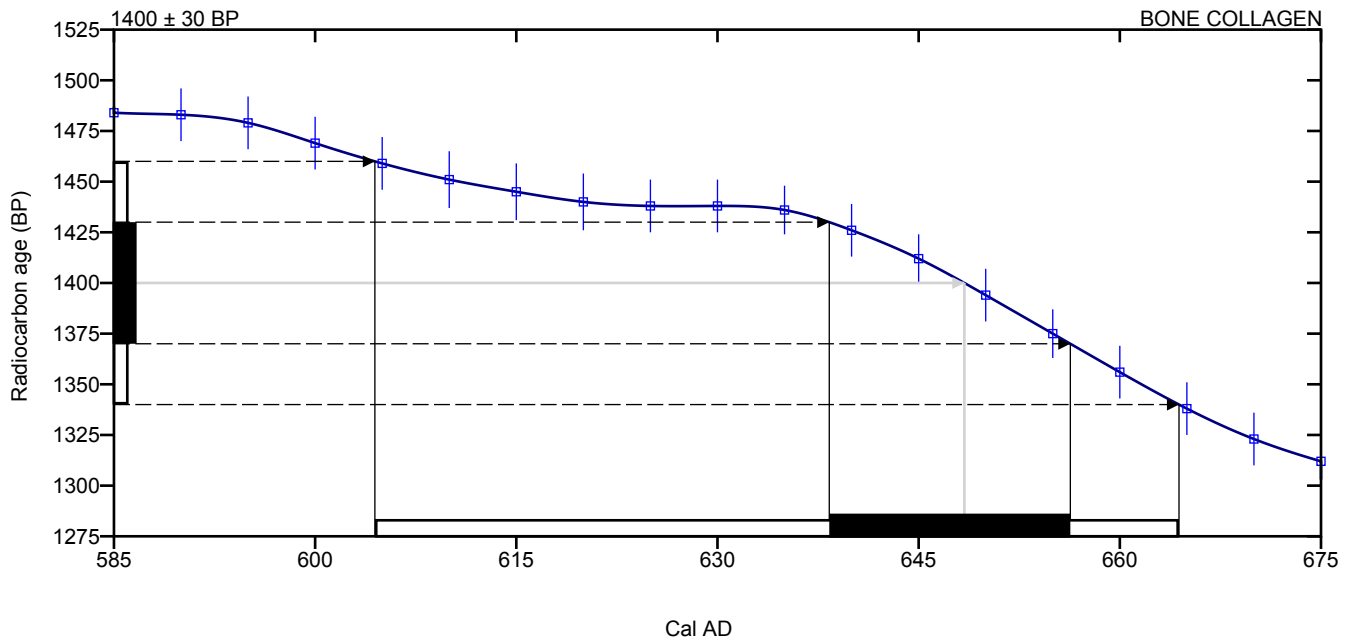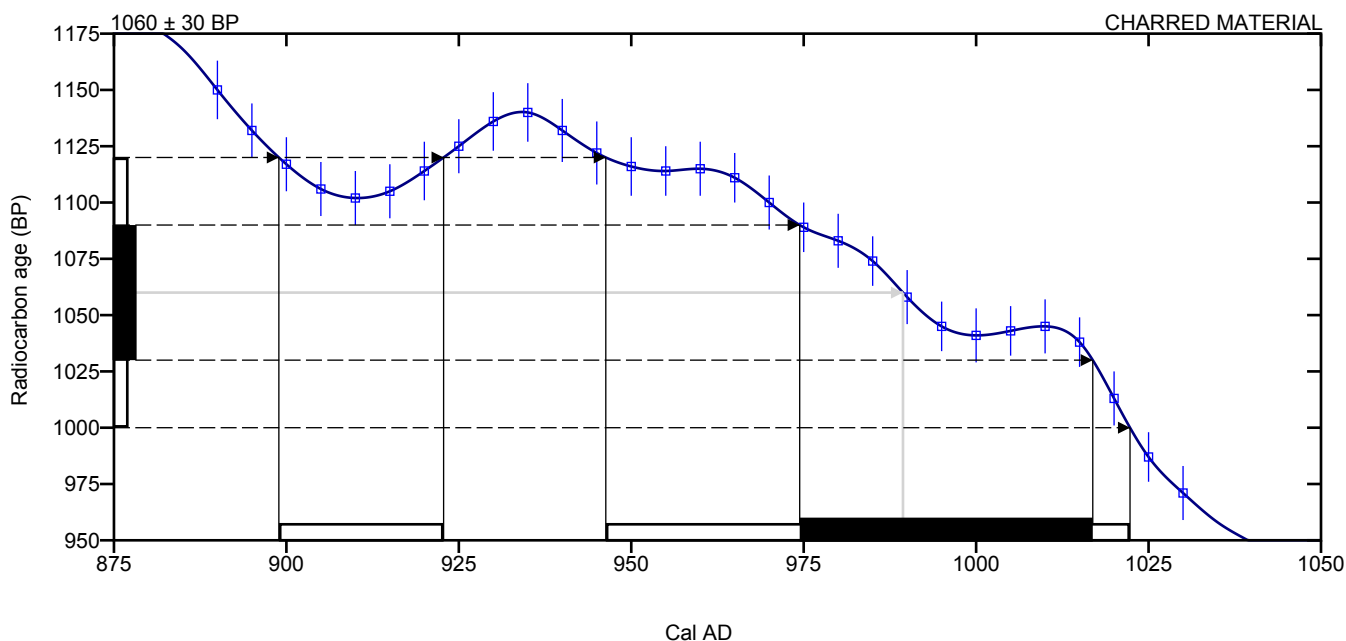(Variables: C13/C12 = -23.5 o/oo : lab. mult = 1)

Laboratory number	**Beta-372886**
Conventional radiocarbon age	**1060 ± 30 BP**
2 Sigma calibrated result **95% probability**	**Cal AD 900 to 925 (Cal BP 1050 to 1025)** **Cal AD 945 to 1020 (Cal BP 1005 to 930)**
Intercept of radiocarbon age with calibration curve	Cal AD 990 (Cal BP 960)
1 Sigma calibrated results 68% probability	Cal AD 975 to 1015 (Cal BP 975 to 935)

1060 ± 30 BP

CHARRED MATERIAL

Radiocarbon age (BP)

Cal AD

Database used
  INTCAL13

References
  Mathematics used for calibration scenario
    A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
  References to INTCAL13 database
    Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.

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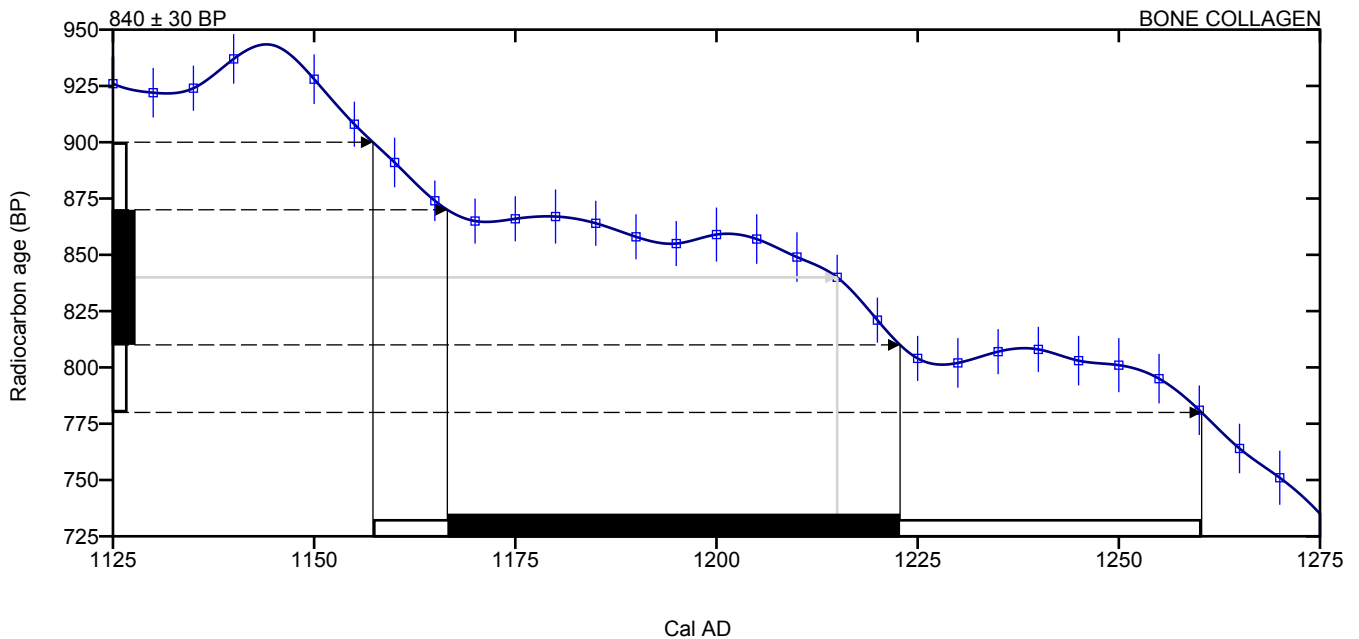
(Variables: C13/C12 = -21.3 o/oo : lab. mult = 1)

Laboratory number	**Beta-372887**
Conventional radiocarbon age	**840 ± 30 BP**
2 Sigma calibrated result **95% probability**	**Cal AD 1155 to 1260 (Cal BP 795 to 690)**
Intercept of radiocarbon age with calibration curve	Cal AD 1215 (Cal BP 735)
1 Sigma calibrated results 68% probability	Cal AD 1165 to 1225 (Cal BP 785 to 725)

840 ± 30 BP

BONE COLLAGEN

Radiocarbon age (BP) — Cal AD

Database used
INTCAL13

References
Mathematics used for calibration scenario
A Simplified Approach to Calibrating C14 Dates, Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2):317-322
References to INTCAL13 database
Reimer PJ et al. IntCal13 and Marine13 radiocarbon age calibration curves 0–50,000 years cal BP. Radiocarbon 55(4):1869–1887.