



The University of Georgia

Center for Applied Isotope Studies

RADIOCARBON ANALYSIS REPORT

August 14, 2012

Hugo Miller
1215 Bryson Rd.
Columbus, OH 43224-2009

Dear Mr. Miller

Enclosed please find the results of carbon content analyses for the sample received by our laboratory on July 5, 2012.

UGAMS #	Sample ID	Material	C, %	N, %	¹⁴ C age, years BP	pMC	δ ¹³ C, ‰
11752	P-T-4bh	bulk bone	1.81	0.05	33570±120	1.53±0.02	-17.1
11752a		bioapatite			41010±220	0.61±0.02	-4.3

The bone was cleaned and washed, using ultrasonic bath. After cleaning, the dried bone was gently crushed to small fragments.

The crushed bone was treated with diluted 1N acetic acid to remove surface absorbed and secondary carbonates. Periodic evacuation insured that evolved carbon dioxide was removed from the interior of the sample fragments, and that fresh acid was allowed to reach even the interior micro-surfaces.

The crushed bone was treated with 1N HCl at 4°C for 24 hours. The residue was filtered, rinsed with deionized water and under slightly acid condition (pH=3) heated at 80°C for 6 hours to dissolve collagen and leave humic substances in the precipitate. The sample has got no collagen.

Sincerely,

Dr. Alexander Cherkinsky

Center for Applied Isotope Studies University of Georgia

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INVOICE

August 14, 2012

Results To:

Hugo Miller
1215 Bryson Rd.
Columbus, OH 43224-2009

Invoice To:

Invoice Nos.: 11529

Description of Work:	1 radiocarbon (AMS) analysis of bulk bone	@ \$525.00
	1 radiocarbon (AMS) analysis of bioapatite	@ \$575.00
	1 carbon and nitrogen content analyses	@ \$20.00

Total Samples: 2
UGAMS 11752 and 11572a.

Please Pay This Total AmountUS\$1120.00
Make Check Payable ToUniversity of Georgia/CAIS

Remit Payment to Center for Applied Isotope Studies
C.A.I.S. Building
120 Riverbend Rd.
Athens, GA 30602-4702

Invoice Submitted byAlexander Cherkinsky

Center for Applied Isotope Studies