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[REDACTED]
[REDACTED]
GIA Gem Trade Laboratory
50 W. 47th St.
New York, NY 10036

02 October 2015

Dear Mr. [REDACTED]:

We have completed our AMS radiocarbon determination on the samples we received from you on 19 August 2015.

The sample was ultrasonically cleaned for one-hour in several changes of Type 1 water. Carbon was isolated as carbon dioxide after acid hydrolysis and cryogenic distillation. Stable isotope measurements ($\delta^{13}\text{C}$) were made offline on aliquots of sample gas. Graphitization and measurement were carried out using established protocols. The measurements are background subtracted and isotope fractionation corrected.

Below (page 2) is a summary page of the result for your sample. Following the summary page is an individual report for the sample, which includes the stable isotope measurement ($\delta^{13}\text{C}$), radiocarbon age (uncalibrated), and calibrated (calendar) ages.

The dates have been calibrated to calendar age ranges using the Marine13 Database and OxCal 4.2.4 software (plots included) with a local marine reservoir correction (i.e. Delta R, listed on page 3). Delta R was determined using the Marine Reservoir Correction Database (Stuiver, Reimer, Reimer), and calculated as the mean delta R from the five nearest reference samples.

Please contact me if you have any questions.

Yours truly,



Dr. Greg Hodgins

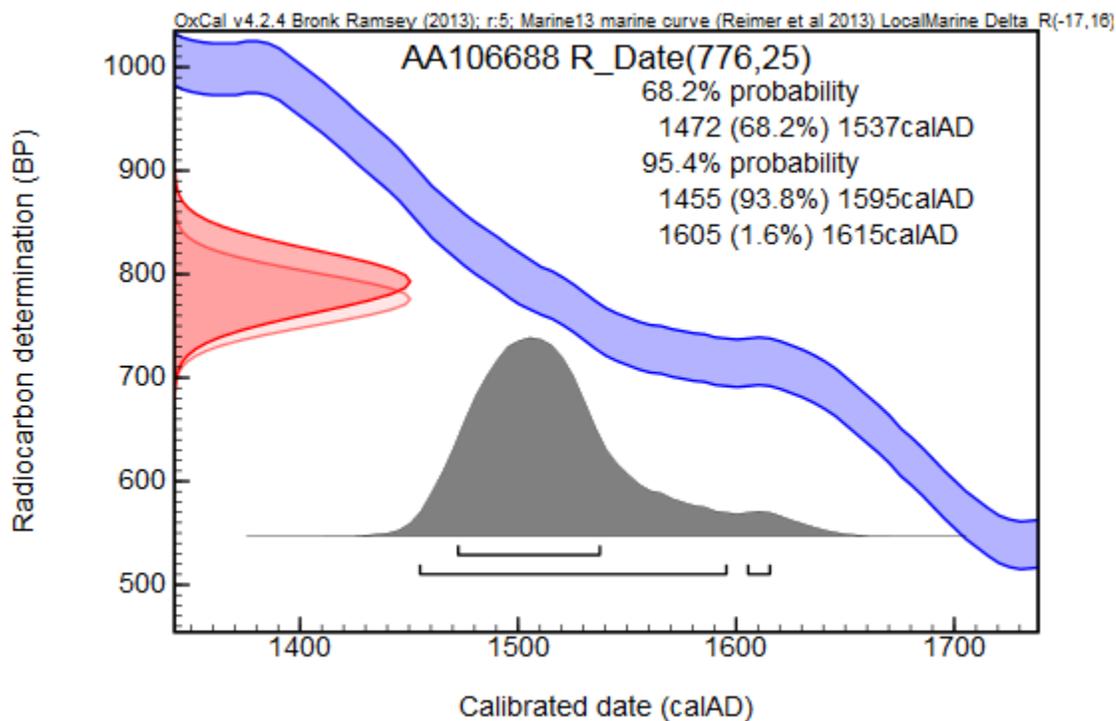
Director

Data Summary Page

<u>AA</u>	<u>lab #</u>	<u>sample ID</u>	<u>d13C value</u>	<u>F (d13C)</u>	<u>dF (d13C)</u>	<u>14C age BP</u>	<u>d14C age</u>	<u>calendar ages</u>			
								<u>68% confidence</u>		<u>95% confidence</u>	
AA106688	X29274	1	1.9	0.9079	0.0028	776	25	1472	1537	1455	1615

<i>User Information</i>	<i>Laboratory Information</i>
<u>Submitter</u> : Chunhui Zhou	<u>AA-number</u> : AA106688
<u>User ID</u> : 1	<u>Laboratory number</u> : X29274
<u>Expected age</u> : 400 – 500 years?	<u>Sample type</u> : shell fragment
<u>Sample origin</u> : Cubagua, Venezuela?	<u>Pretreatment</u> : Sonicated in Type 1 H2O for 1 hour, followed by acid hydrolysis
	<u>NOTES</u> :

<i>Results</i>	
$\delta^{13}\text{C}$ ($\pm 0.1\text{‰}$):	1.9‰
Fraction of modern carbon:	0.9079 \pm 0.0028
Uncalibrated ^{14}C Age:	776 \pm 25 years BP
Delta R:	-17 \pm 16 **
Calendar Age Range (68%):	1472 AD to 1537 AD
Calendar Age Range (95%):	1455 AD to 1615 AD



** Delta R value obtained from the Marine Reservoir Correction Database on the CALIB website (<http://calib.qub.ac.uk/calib/>). The utilized Delta R value was determined as the mean of the 5 nearest measurements in the database.