



RADIOCARBON SAMPLE DATA SHEET

Please contact us at any time for advice, assistance or discussion of results.

SUBMITTER NAME: _____ DATE: _____

ADDRESS: _____

TELEPHONE: _____ FAX: _____ E-MAIL: _____

METHOD OF PAYMENT: PURCHASE ORDER / CREDIT CARD / CHECK / BANK - WIRE TRANSFER

OTHER (SPECIFY) _____ PURCHASE ORDER # _____

CREDIT CARD #: _____ EXP. DATE MM/YR AUTH. CODE _____

ZIP CODE FROM YOUR CREDIT CARD BILLING ADDRESS: _____

| | | |
|-------------------------|--|-------------------------------|
| YOUR SAMPLE CODE | _____ | _____ |
| | PLEASE CHOOSE ≤ 12 INITIAL CHARACTERS TO APPEAR ON YOUR FINAL REPORT | ADDITIONAL LABELING IF NEEDED |

INSTRUCTIONS TO LABORATORY

| | |
|---|--|
| TECHNIQUE: <input type="checkbox"/> AMS | <input type="checkbox"/> RADIOMETRIC PLUS |
| DELIVERY SERVICE: <input type="checkbox"/> STANDARD within 14 BUSINESS DAYS <input type="checkbox"/> PRIORITY within 6 BUSINESS DAYS <input type="checkbox"/> TIME-GUIDE 2-3 BUSINESS DAYS | Within 30 BUSINESS DAYS |

ISOTOPE RATIOS
 $\delta^{13}C$ (by IRMS) - free with radiocarbon dating for all sample types
 $\delta^{15}N$ - free with radiocarbon dating for non-cremated bones
 $\delta^{18}O$ - free with radiocarbon dating for water samples and carbonates
 δD (δ^2H) - free with radiocarbon dating for water samples

- COMPLEX / NON-STANDARD SERVICES** ADDITIONAL FEES APPLY
- MICRO-SAMPLE AMS COUNTING – AMS ONLY – 100-300 micrograms final carbon
 - NON-BURNED BONE DATING – COLLAGEN EXTRACTION REQUIRED – AMS ONLY
 - CREMATED / BURNED BONE DATING – CARBONATE EXTRACTION REQUIRED – AMS ONLY
 - CELLULOSE EXTRACTION – Non-burned wood and textiles with extreme contamination
 - SOLVENT EXTRACTIONS – AMS ANALYSIS ONLY – contamination by varnishes, preservatives, oils, tar, etc.

SAMPLE MATERIAL TYPE: _____ SAMPLE WEIGHT: _____

FOR CARBONATE SAMPLES: **MARINE** ($\Delta R =$ _____ \pm _____) or **FRESH WATER**
For Marine carbonates, visit <http://calib.org/marine> to get the Delta-R value for the general geographical region of your site.

GENERAL GEOGRAPHIC LOCATION: _____
(REQUIRED FOR CALIBRATION OF CARBONATE SAMPLES – NOT REQUIRED FOR CALIBRATION OF ORGANIC SAMPLES) (OVER)

FOR ADDITIONAL INFORMATION FROM FRONT PAGE

EVIDENCE OF CONTAMINATION: _____

(ROOT PENETRATION, LEACHING, HUMIC ACIDS, ETC.)

COLLECTION, TREATMENT AND STORAGE PROCEDURES: _____

STRATIGRAPHIC AND ENVIRONMENTAL DETAILS: _____

(PLEASE PUT DRAWINGS AND ADDITIONAL TEXT HERE)

ADDITIONAL INFORMATION

* For Calibration, indicate if Northern or Southern Hemisphere - _____

* For bones, indicate the species _____ and whether it is terrestrial or marine - _____

* For water, indicate type (groundwater, seawater, surface water, or brackish water) - _____ and if these samples have been in the proximity of any location using labeled 14C (artificial 14C). ____ YES ____ NO

GENERAL SAMPLE SIZE REQUIREMENTS

Smaller quantities than those listed can be analyzed. Size generally does not affect precision for AMS samples but does affect precision for radiometric samples. You are welcome to contact us before sending samples or to send the optimal sample size for your research and ask to be contacted with the best method of analysis.

AMS samples providing less than 300 micrograms final carbon require the Micro-Sample AMS service.

QUANTITIES LISTED PRESUME MATERIALS ARE DRY AND FREE OF ADHERING / ASSOCIATED MATRIX.

| Material | AMS | Radiometric |
|-----------------------------------|------------------|---------------|
| Charcoal | 2-100 milligrams | 15-50 grams |
| Wood | 3-100 milligrams | 20-50 grams |
| Dung | 5-100 milligrams | 20 grams |
| Plant, Seeds | 3-100 milligrams | 20 grams |
| Peat (fibrous) | 3-100 milligrams | 50-100 grams |
| Shell / Coral / CaCO ₃ | 5-100 milligrams | 50-100 grams |
| Organic Sediment, Gyttja | 1-10 grams | not available |
| Insect (chitin) | 10-50 milligrams | not available |
| Hair | 20-50 milligrams | not available |
| Fish Otolith | 5-20 milligrams | not available |
| Bone / Antler | 1-4 grams | not available |
| Teeth | 1-2 teeth | not available |
| Cremated bone | 1-4 grams | not available |
| Phytoliths (extracted) | 300 milligrams | not available |
| Pollen (extracted) | 20 milligrams | not available |
| Forams | 4-10 milligrams | not available |
| Water DIC as SrCO ₃ | 50 milligrams | not available |
| Water for DIC extraction | 250 mL – 1 liter | not available |

By sending samples to Beta Analytic, you accept the Terms and Conditions found at www.radiocarbon.com/tc.pdf