Radiocarbon Dating, non-bone samples

Analysis	Standard 15–20 days	Rush 7 days	University System of Georgia & Emory University
Full Processing & Analysis	**$450**	**$800**	**$250**
Prepared Samples (combustion only)	**$400**	**$600**	**$200**
CO_2 Gas	**$300**	**$450**	**$150**
Graphite (10 days)	**$120**		

Radiocarbon Dating, bone & tooth samples

Analysis	Standard 15–20 days	Rush 7 days	University System of Georgia & Emory University
^{14}C, plus $\delta^{13}C$, $\delta^{15}N$ & C:N ratio (collagen)	$500	$850	$300
^{14}C, plus $\delta^{13}C$ and $\delta^{18}O$ (bioapatite)	$500	$850	$300
^{14}C, plus $\delta^{13}C$, $\delta^{15}N$ & C:N ratio (collagen), & $\delta^{13}C$ & $\delta^{18}O$ (bioapatite)	$550	$1000	$350
^{14}C with XAD resin purification	$825		$625
^{14}C on hydroxyproline	*please inquire*		
$\delta^{13}C$, $\delta^{15}N$ & C:N ratio (collagen), & $\delta^{13}C$ and $\delta^{18}O$ (bioapatite)	$160	$300	$120
$\delta^{13}C$, $\delta^{15}N$ & C:N ratio, including collagen extraction	$120	$200	$100
$\delta^{13}C$ and $\delta^{18}O$ (bioapatite)	$75	$120	$50
$^{87}Sr/^{86}Sr$	$300		$200

Submitting more than 10 samples? Contact us about volume discounts

NOTE: Additional charges may apply for samples requiring special or difficult processing. Under certain circumstances samples may fail during the pretreatment or analytical process. We may seek recovery of partial or full cost of laboratory treatment/analysis up to the point of failure.

Radiocarbon Biobased Product Testing (ASTM D6866–16)

Analysis	Method	Standard 2–4 weeks	Rush 7 days	Rush 4 days
^{14}C and $\delta^{13}C$	**B** (AMS)	**$260***	**$450***	**$650***
^{14}C and $\delta^{13}C$	**C** (LSC)		*please inquire*	

***sample pretreatment, if necessary, is extra.**

Radiocarbon & Stable Isotope Authenticity Testing

Analysis	Sample Size	Standard 2–3 weeks	Rush 7 days	Rush 4 days
^{14}C, $\delta^{13}C$ and δ D*	5 g	$325	$540	$750
^{14}C and $\delta^{13}C$	5 g	$260	$450	$650

*Required for process validation and conclusive statement.

Compound Specific & Authenticity Stable Isotope Analysis

Analysis	Sample	Standard 2 –3 weeks
Compound Specific GC/IRMS $\delta^{13}C$	(≤ 5 compounds)	$100
Compound Specific GC/IRMS $\delta^{13}C$	(> 5 compounds)	please inquire
Compound Specific GC/IRMS δD	(≤ 5 compounds)	$100
Compound Specific GC/IRMS δD	(> 5 compounds)	please inquire
IRMS $\delta^{13}C$	organic compounds	$20
IRMS δD	organic compounds	$20
IRMS $\delta^{13}C$ & δD	organic compounds	$25
IRMS $\delta^{13}C$ & $\delta^{15}N$	organic compounds	$25
IRMS $\delta^{18}O$	organic compounds	$20
IRMS $\delta^{18}O$ & δD	water	$20

Stable Isotope Ecology Lab

Analysis	Sample	Standard 2 –3 weeks (for samples received ready for analysis)	Comment
IRMS $\delta^{13}C$	solid organic tissues or extracts, soils, sediments, carbonates	$9.50	Includes total %C
IRMS $\delta^{15}N$	solid organic tissues or extracts, soils, sediments, carbonates	$9.50	Includes total %N
IRMS $\delta^{13}C$ & $\delta^{15}N$	solid organic tissue or extracts, soils, sediments, carbonates	$9.50	Includes total %N and %C
IRMS $\delta^{13}C$ & $\delta^{18}O$	carbonates and bioapatite	$16*	*13.00 for UGA & Emory
IRMS $\delta^{18}O$	keratinous material only	$20	
IRMS D/H	keratinous material only	$20	
IRMS NH4 Diffusion (includes $\delta^{15}N$)	water samples	$45	preparation included
IRMS NO3 Diffusion (includes $\delta^{15}N$)	water samples	$45	preparation included
IRMS Lipid–Urea Extraction (includes $\delta^{15}N$ & $\delta^{13}C$)	animal tissues	$24	includes total %N and %C
Total %N & %C	solid organic tissues or extracts, soils, sediments, carbonates	$5.50	
Total %S	solid organic tissues or organic rich material	$10	

Water Quality Analysis

Analysis	Sample	Standard 2 –3 weeks
Fluorometer	chlorophyll a	$3
Fluorometric NH_4	water quality	
Colorimetric NH_4-N	water quality	$5
Colorimetric NO_3-N	water quality	$5
Colorimetric PO_4–P	water quality	$5
Colorimetric dissolved organic N	water quality	$5
Colorimetric dissolved organic P	water quality	$5
Colorimetric silicates	water quality	$5
DIC dissolved inorganic C	water quality	$5
DOC dissolved organic C	water quality	$5
Total dissolved C	water quality	$5
TIC total inorganic C	water quality	$5

Water Quality Analysis (continued)

Analysis	Sample	Standard 2 –3 weeks
TOC total organic C	water quality	$5
Ion Chromatography - acetate	water quality	$5
Ion Chromatography - bromide	water quality	$5
Ion Chromatography - carbonate	water quality	$5
Ion Chromatography - chlorate	water quality	$5
Ion Chromatography - chloride	water quality	$5
Ion Chromatography - chlorite	water quality	$5
Ion Chromatography - fluoride	water quality	$5
Ion Chromatography - formate	water quality	$5
Ion Chromatography - nitrate	water quality	$5
Ion Chromatography - nitrite	water quality	$5
Ion Chromatography - sulfate	water quality	$5

Sample Preparation	Price
processing, drying & grinding	$8
subsample microgram weighing	$8
filtering (0.45 micron membrane)	$4
filtering (glass fiber filter)	$4
freeze drying (lyophilization)	$3
soil persulfate digest (Total P)	$9
water persulfate N digest	$9
water persulfate P digest	$9
chlorophyll a extraction	$4
dry ash, double acid extraction (metals & Total P)	$9

Plasma Chemistry Analytical Services

Analysis	Standard 2– 4 weeks	Rush 3 days	Rush 1 days	University System of Georgia & Emory University
ICP–OES (1 element)	$30	$50	$60	$15
ICP–OES (20 element)	$40	$60	$80	$25
ICP–OES (27 element)	$50	$70	$100	$35
ICP–MS (1 element)	$30	$50	$60	$20
ICP–MS (20 element)	$50	$70	$100	$40
ICP–MS (27 element)	$70	$90	$140	$60
ICP–OES & ICP–MS (20 element)	$80	$100	$160	$50

Plasma Chemistry Analytical Services (continued)

Analysis	Standard 2– 4 weeks	Rush 3 days	Rush 1 days	University System of Georgia & Emory University
ICP–OES & ICP–MS (20 element)	$80	$100	$160	$50
ICP–OES (1 element)	$30	$50	$60	$15
ICP–OES & ICP–MS (27 element)	$110	$130	$220	$70
$^{86}Sr/^{87}Sr$	$300			$100
$^{204}Pb/^{206}Pb/^{207}Pb/^{208}Pb$	$150			$100
Digestion	$20			$20
Digestion	$5			$5
Digestion	$10			$10

XRF Analytical Services

Analysis	Standard 2– 4 weeks	Rush 3 days	Rush 1 day*
Major Elements by WD-XRF	$40	$60	$80
Trace Elements by ED-XRF	$35	$52	$70
Obsidian & other volcanics (non-destructive)	$18	$27	$36
Obsidian & other volcanics (student projects)	$12	$18	$24
Other rock types (non–destructive)	$25	$37	$50
Obsidian source samples		no charge	
Other rock types (non–destructive)	$25	$37	$50
Pigments (non–destructive)	$25	$37	$50
Metals & Alloys	$35	$52	$70
Qualitative Composition	$25	$37	$50

MINIMUM CHARGE: $200

* when possible, call ahead to inquire

University System of Georgia and Emory University 30% discount