

MARINE ENVIRONMENTAL CHEMISTRY LABORATORY

2021 ANALYTICAL RATES

Updated 2021-02-01 E. Goddard

NOTES

- Rates are based on an *hourly* or *per sample* basis depending on the instrumentation.
- Assisted rate indicates that MECL staff are responsible for preparation and analysis.
- *Unassisted* rate indicates that the user will responsible for preparation and analysis. Training and pre-approval required.

CONTACT

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LIGHT STABLE ISOTOPES

(SIRMS: δ^{13} C; δ^{15} N; δ^{18} O; δ^{34} S; δ^{2} H)

Carbon, Nitrogen and Sulfur (bulk ,organic	Carbon,	, Nitrogen	and Sulfur ((bulk ,	organic
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 δ^{13} C, δ^{15} N, δ^{34} S, %C, %N, %S, C:N:S ThermoElectron DeltaV+; Flash HT w/ Fast GC-oven

USF/ SOF University System non-USF

Assisted Unassisted Assisted Unassisted Unassisted \$18.75/sample* \$11.75/sample \$22.50/sample* \$17.50/sample

Carbon and Nitrogen only (bulk, organic)

δ¹³C, δ¹⁵N, %C, %N, C:N ThermoElectron Delta+XL; Carlo-Erba NA2500-II

USF/ SOF University System non-USF

Assisted Unassisted Assisted Unassisted \$12.50/sample* \$7.50/sample \$15.00/sample* \$10.00/sample

^{*} Subtract \$2.50 for samples that are submitted ready-to-run (weighed, encapusulated, organized in 96-position well-plate trays with electronic (.xlsx) sample list)

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Sulfur only (bulk, organic)

δ³⁴S, %S ThermoElectron DeltaV+; Flash HT w/ Fast GC-oven

USF/ SOF University System

non-USF

Assisted Unassisted Assisted Unassisted Unassisted \$12.50/sample* \$7.50/sample \$15.00/sample* \$10.00/sample

Oxygen and Carbon (carbonate)

 δ^{18} O, δ^{13} C ThermoElectron MAT253; GasBench-II

<u>USF/ SOF University System</u> <u>non-USF</u>

Assisted Unassisted Assisted Unassisted \$12.50/sample \$7.50/sample \$15.00/sample* \$10.00/sample

Carbon or Nitrogen (Compound-Specific Isotope Analysis, CSIA)

 δ^{13} C or δ^{15} N ThermoElectron DeltaV+; Thermo Trace GC; Isolink-II

<u>USF/ SOF University System</u> <u>non-USF</u>

Assisted Unassisted Assisted Unassisted \$80/hr \$60/hr \$100/hr \$80/hr

- prior approval required before sample submission and pending technical personnel availability
- GC/C-irms, does NOT incl. pre-CSIA molecular characterization by GC-MS
- Extraction, SPE and/or derivatization NOT included in price. See Additional Services

ORGANIC BIOMARKERS AND ENVIRONMENTAL CONTAMINANTS

(GC-MS/LC-MS/HPLC)

PAHs; Pesticides; Hydrocarbons GC-MS/MS (Agilent 7890/7010b MS/MS)
Biomarkers, TEX86, et al. LC-MS/MS (Agilent 1290LC 6470 QQQ-MS)

USF/ SOF University System non-USF

Assisted Unassisted Assisted Unassisted \$60/hr \$40/hr \$80/hr \$60/hr

^{*} Subtract \$2.50 for samples that are submitted ready-to-run (weighed, encapusulated, organized in 96-position well-plate trays with electronic (.xlsx) sample list)

^{*} Subtract \$2.50 for samples that are submitted ready-to-run (weighed, submitted in plug-cap glass-shell vials with electronic (.xlsx) sample list)

ADDITIONAL SERVICES

(Sample preparation, extraction, processing, etc.)

Specified as \$/sample - USF Assisted / USF Unassisted / non-USF Assisted / non-USF Unassisted

Accelerated Solvent Extraction (Dionex ASE200, Dionex ASE350): \$6/\$3/\$10/\$5

Lyophilization (Freeze-Drying): \$2/\$1/\$4/\$2

Sample pre-treatment (eg. Acidification, grinding): \$2/\$1/\$4/\$2

Organic Extraction, derivatization, column cleanup/isolation: \$30/\$10/\$60/\$20