

Environmental Sedimentology and Ichnology Lab Charges

(updated August 1, 2026)

Procedure	Instrument	Comment	Price/sample (gov't, industry)	Price/sample (academic) Assisted	Price/sample (academic) Unassisted	Training
Grain Size Analysis*						
Grain size analysis (fine)	Micromeritics Sedigraph 5120	0.01–250 µm	\$73.5	\$52.5	\$21	\$52.5
Develop a new SOP for Micromeritics Sedigraph 5120			\$31.5	\$31.5	\$15.8	
Grain size analysis (coarse; dry sieve)	Analytical sieve shaker RETSCH 200 digit with Comfort clamping device	63 µm to >4mm (0.5φ step)	\$52.5	\$42	\$15.8	\$26.3
Laboratory Analyses						
Hydrogen Peroxide Pre-Treatment			\$10.5	\$5.3	\$5.3	
Crushing	Mortar and Pestle/ Ball mill		\$15.8	free	free	
Sediment drying	Drying oven BINDER 56 L		\$10.5	\$5.3	\$5.3	
Calcium Carbonate (lime) Content Analysis**						
Calcium carbonate analysis	Eijkelkamp calcimeter		\$52.5	\$42	\$15.8	\$52.5
Loss on Ignition (LOI) Content Analysis						
Loss on Ignition (LOI) analysis	Muffle furnace	Organic/carbonate content via controlled ignition	\$40–45	\$32–35	\$12–13	\$40–45
Core/sample description and analysis ***						
Color determination	Munsell soil color chart			\$21	\$15.8	
Mineralogy	Binocular microscope/ 10x professional hand lens/ grain size chart			\$21	\$15.8	
Core/ sample photography	Camera RICOH			\$21	\$15.8	
Water quality monitoring***						
Multi Water Quality Checker	HORIBA U-52G (pH, oxidation reduction potential, dissolved oxygen, electrical conductivity, salinity, total dissolved solids, seawater specific gravity, water temperature, turbidity, GPS)	Cable length 10 m (~33 ft)	\$200–225†	\$130	\$30	
External Equipment Rental (off-site)	HORIBA U-52G — client-operated, unsupervised, off-site use	Signed rental agreement + refundable security deposit required (amount TBD)	\$300–350/day			

All requested rush deliveries (< 1 week) subject to a 50% surcharge. Replicate analyses are billed per run at the standard analysis rate. One QC replicate per batch of 20 samples is provided free of charge.

* Use of glassware, magnetic stirrer, deionized water, ultrasonic bath, analytical microbalance is included in the price

** Use of calcium carbonate powder (98.5%) and hydrochloric acid is included in the price

*** Price per day of use, unassisted only. The External Equipment Rental line is a new off-site rental service, approved July 27, 2026; the refundable security deposit amount has not yet been finalized.

† Government/industry water quality day rate increased from \$150 to \$200–225 (Dr. Shchepetkina, June 12, 2026); market benchmarking showed comparable Ontario field-instrument rentals run \$200–400/day.

1. Unassisted analysis and use of rented equipment requires training and adhering to strict laboratory protocols. Any costs to fix damaged equipment that results from user error is the responsibility of the individual user (for unassisted analyses/rentals).
2. All laboratory users must show evidence of completing lab safety training. Additionally, all Micromeritics Sedigraph operators must show evidence of completing x-ray safety training.