



GeoAnalytical Lab - Services and fees – Fall 2011

LA-ICP-MS for whole rock glasses, minerals (clinopyroxene, amphibole, garnet.), etc.

(currently underdevelopment, for analytical costs please contact Dr. Melanie Barnes)

ICP-MS (Agilent 7500cs) trace element analysis for aqueous solutions

(currently underdevelopment, for analytical costs please contact Dr. Melanie Barnes)

Sample preparation (per sample)

Service	Price
Crushing rock samples, pulverization in shatterbox; additional charge for samples exceeding 5 lbs (final product is approx 30 grams of powder plus the remaining rock chips)	\$15
Fusion with lithium metaborate, dissolution in HCl, for major and trace analysis	\$10
Determination of LOI (separately)	\$5
Microwave Digestion of soil, dust, or biological samples	\$20

ICP-AES analytical charges*

Whole rock analysis is \$75/sample. This includes fusion of the sample powder, loss on ignition measurement (LOI), and analysis of major oxides (SiO₂, TiO₂, Al₂O₃, Fe₂O₃, MnO, MgO, CaO, Na₂O, K₂O, P₂O₅) and trace elements (Ba, Rb, Sr, Zr, Y, Sc, V, Ni, Cr, Cu, Zn, Nb, Be) for each sample.

Aqueous samples charges are listed in the following table. Note that all costs are negotiable and rush analyses can be accommodated for an additional fee. Confirm actual costs with Dr. Melanie Barnes.

Numbers of elements	Cost per sample (in USD)	Minimum daily charge (in USD)	<i>Maximum</i> number of samples per day with minimum daily charge

1	10	350	40
2-5	20	350	20
6-10	25	350	16
10+	30	350	12

**For grant submissions more pricing detail can be requested.*

Iron Titration

\$25/sample if Fe₂O₃ is provided, ***otherwise:***

\$25/sample plus cost for fusion (\$10/sample) and ICP-AES run (\$350 daily minimum applies or \$20/sample which ever is greater) if Fe₂O₃ must be determined.

**For more information, please contact Dr. Melanie Barnes,
Melanie.Barnes@ttu.edu.**