

Analytical Sciences Laboratory

Laboratory Services Fee List

Holm Research Center
Shipping: 2222 West 6th Street
Mailing: 875 Perimeter Dr. MS 2203
Moscow, Idaho 83844-2203

(208) 885-7081
FAX: (208) 885-8937
email: asl@uidaho.edu

Prices Effective: October 1, 2015



Soil Analyses

Chemical Analyses:

Code	Test Description	Price		Sample Size
		1-5 Samples	> 5 Samples	
SSFT*	Standard Fertility Test: pH, P, K, NO ₃ , NH ₄ , Organic Matter	\$45	\$45	100 g
SEFT*	Extended Fertility Test: pH, P, K, NO ₃ , NH ₄ , SO ₄ , Organic Matter, and Boron	\$55	\$55	150 g
SNMP*	NRCS Nutrient Management Plan: pH, EC, P, K, NO ₃ , NH ₄ , & Organic Matter	call	call	250 g

* Drying and grinding included with above tests.

Code	Test Description	Price		Sample Size
		1-5 Samples	> 5 Samples	
SDRG**	Drying & Grinding **	\$4	\$4	—
SPH	pH	\$13	\$11	300 g
SAMN	Nitrogen-Ammonia	\$20	\$18	30 g
SNNN	Nitrogen-Nitrate + Nitrite	\$20	\$18	30 g
SNAN	Nitrogen-Ammonia and Nitrate + Nitrite (SNNN + SAMN)	\$29	\$26	30 g
SAPK	Available Phosphorus & Potassium	\$23	\$21	20 g
	SAPK — Single Element	\$18	\$16	20 g
SSOS	Sulfate Sulfur	\$20	\$18	75 g
SEXCL	Extractable Chloride	\$27	\$23	100g
SOML	Organic Matter – Colorimetric	\$15	\$13	10 g
SOMH	Organic Matter – Titrimetric	\$27	\$24	10 g
SB	Available Boron	\$21	\$18	60 g
SCN	Percent Carbon & Nitrogen	\$26	\$23	3 g
SCEC	Cation Exchange Capacity	\$32	\$27	30 g
SELC	Electrical Conductivity	\$13	\$11	300 g
SLRQ	Lime Requirement	\$16	\$13	100 g
SMNS	Micronutrient Screen: DTPA - Fe, Mn, Cu, Zn	\$35	\$32	60 g
SEXC	Extractable Cations: Na, K, Ca, Mg	\$35	\$32	20 g
SSC	Soluble Cations: Na, K, Ca, Mg	\$35	\$32	200 g
SSAR	Sodium Adsorption Ratio (calculated from SSC)	\$4	\$4	—
PISO	Phosphorus Adsorption Isotherm	\$250	\$220	1000g
SCCE	Calcium Carbonate Content	\$26	\$21	30 g
SMNA	Mineralizable Ammonia	call	call	30 g

** Required for all samples not previously dried, ground & homogenized.

NOTE: All inorganic soil and plant analysis results will be reported on a dry-weight basis unless specified otherwise.

Physical Characteristics:

Code	Test Description	Price		Sample Size
		1-5 Samples	> 5 Samples	
SMC	Moisture Content	\$13	\$11	100 g
SPSD	Particle Size Distribution - Hydrometer	\$35	\$29	200 g
SFRG	Sand Fractions	call	call	—
SCoarse	Coarse Fraction	call	call	—
SGRA	Soil Aggregate Gradation	call	call	—
SPD	Particle Density	call	call	100 g
SBD	Bulk Density	call	call	100 g
SPOR	Porosity	call	call	200 g

Plant Analyses

Inorganics:

Code	Test Description	Price		Sample Size
		1-5 Samples	> 5 Samples	
PDRG**	Drying & Grinding **	\$6	\$6	—
PMCN	Moisture Content	\$13	\$11	10 g
PA	Percent Ash	\$16	\$14	10 g
PCN	Percent Carbon & Nitrogen	\$25	\$22	3 g
PPRO	Crude Protein	\$23	\$20	5 g
PNNN	Nitrogen-Nitrate + Nitrite	\$28	\$25	5 g
PMES	Macro Element Screen: Ca, K, Mg, Na, P, S	\$47	\$42	10 g
PMTES	Micro Trace Element Screen: As, Cd, Cr, Co, Cu, Fe, Mn, Mo, Ni, Pb, V, Zn	\$47	\$42	10 g
PMM	Macro & Micro Trace Element Screen (PMES + PMTES)	\$74	\$68	10 g
	Trace Element Screen — any single element	\$37	\$32	10 g

** Required for all samples not previously dried, ground & homogenized.

NOTE: Additional elements can be added to the macro- and microelement screens; please contact the lab for pricing.

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Water Analyses

Nutrients and Wet Chemistry:

Code	Test Description	Price		Sample Size
		1-5 Samples	> 5 Samples	
WPH	pH	\$13	\$11	50 mL
WALK	Alkalinity	\$21	\$19	50 mL
WALK1	Expanded Alkalinity (includes pH)	\$28	\$25	50 mL
WCDT	Conductance	\$19	\$17	50 mL
WRSD	Filterable Residue - T.D.S.	\$19	\$17	1 L
WRSD2	Non-Filterable Residue - T.S.S.	\$19	\$17	1 L
WRSD3	Total Residue - T.S.	\$19	\$17	1 L
WTSSC	Total Suspended Sediment Concentration	\$19	\$17	500 mL
WION	Anions by IC - Fluoride, Chloride, Nitrite, Bromide, Nitrate, o-Phosphate, Sulfate	\$45	\$41	100 mL
	WION — Any Single Element	\$26	\$21	100 mL
WAM	Nitrogen-Ammonia	\$20	\$18	30 mL
WNNN	Nitrogen-Nitrate + Nitrite	\$20	\$18	30 mL
WNAN	Nitrogen-Ammonia/Nitrate + Nitrite (WAM + WNNN)	\$29	\$26	60 mL
WOP	Ortho Phosphorus (low level +\$3)	\$22	\$20	100 mL
WTP	Total Phosphorus (low level +\$5)	\$26	\$24	100 mL
WKN	Kjeldahl Nitrogen	Call	Call	Call
WTN	Total Nitrogen by Combustion	Call	Call	Call

Metals:

Code	Test Description	Price		Sample Size
		1-5 Samples	> 5 Samples	
WDMS	Dissolved Metal Screen by ICP: Ba, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, V, Zn	\$58	\$53	50 mL
	WDMS — Any Single Element	\$32	\$25	50 mL
WHDS	Hardness (CaCO ₃) (w/ WDMS, Calculated: \$4)	\$32	\$26	100 mL
WTMS	Total Recoverable Metal Screen by ICP (Same elements as WDMS)	\$68	\$63	100 mL
	WTMS — Any Single Element	\$42	\$35	100 mL
WHMS-D	Heavy Metal Screen by ICP-MS, Dissolved: Ag, As, Ba, Cd, Cr, Pb, Mo, Ni, Se	\$116	\$105	100 mL
	WHMS-D — Any single element	\$50	\$44	50 mL
WHMS-T	Heavy Metal Screen by ICP-MS, Total Recoverable (Same elements as WHMS-D)	\$126	\$116	100 mL
	WHMS-T — Any single element	\$60	\$54	50 mL
WHG	Mercury	\$53	\$47	50 mL

NOTE: Additional elements can be added to the ICP and ICP-MS screens; please contact the lab for pricing.

Water Quality & Biomass:

Code	Test Description	Price		Sample Size
		1-5 Samples	> 5 Samples	
WCLR	Chlorophyll Analysis:			
	Trichromatic Equations (chlorophyll a & b)			
	Filters	\$55	\$51	—
	Foam Plugs	\$43	\$39	—
	Pheopigment Corrected (chlorophyll a, b & c; & pheophytin)	\$76	\$70	—
	Filtering for chlorophyll analysis	\$20	\$17	—
WW	Weight, Wet	\$6	\$6	
DW	Weight, Dry	\$6	\$6	
AFDW	Weight, Ash-free dry weight	\$22	\$19	

- ❖ All samples should be submitted in appropriate containers and with suitable preservation.
- ❖ EPA and APHA Methods prescribe the appropriate preservation for the analysis to be performed. ASL is able to provide information on these requirements upon request.

Preservation available upon request: Call

Water sample filtration (if required): Call

- ❖ Sample containers for inorganic analyses can be provided. Please contact the laboratory for current prices.

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Environmental Monitoring Analyses

Inorganics:

Code	Test Description	Price		Sample Size
		1-5 Samples	> 5 Samples	
PREP	Additional Sample Preparation **	Call	Call	—
WION	Anions by IC - Fluoride, Chloride, Nitrite, Bromide, Nitrate, o-Phosphate, Sulfate	\$47	\$43	100 mL
	WION — any single element	\$28	\$22	100 mL
STES*	Total Recoverable Element Screen by ICP: (soil samples) As, Ba, Ca, Cd, Co, Cr, Cu, Fe, K, Mg, Mn, Mo, Na, Ni, P, Pb, S, V, Zn	\$77	\$72	100 g
	STES — any single element	\$39	\$33	100 g
STES-MS*	Total Recoverable Element Screen by ICP-MS: (soil samples) Ag, As, Ba, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Sb, Se, Ti, V, Zn	\$149	\$138	100 g
	STES-MS — any single element	\$55	\$50	100 g
EHMS*	Heavy Metal Screen by ICP-MS: (biological tissues): As, Ba, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, Se, V, Zn	\$149	\$138	10 g
	EHMS — any single element	\$50	\$45	10 g
ESE	Selenium — ICP-MS (biological tissues)	\$42	\$39	2 g
ESE	Selenium — ICP-MS (soil samples)	\$42	\$39	50 g
EHG	Mercury (biological tissues) — Cold Vapor Atomic Fluorescence	\$55	\$50	2 g
EHG	Mercury (soil samples) — Cold Vapor Atomic Fluorescence	\$55	\$50	50 g

* NOTE: Additional elements can be added to the ICP and ICP-MS screens; please contact the lab for pricing.

** NOTE: Samples requiring additional preparation work will incur additional charges.

Organics:

Code	Test Description	Price		Sample Size
		1-5 Samples	>5 Samples	
WNPP	Nitrogen & Phosphorus Pesticides	Call	Call	Call
WOCS	Chlorinated Pesticides	Call	Call	Call
WCLA	Chlorinated Herbicides	Call	Call	Call
WCC	Carbamate/Carbamoyloxime Pesticides	Call	Call	Call
WEG	Ethylene and Propylene Glycol	Call	Call	Call

Project Discounts:

ASL offers discounts for projects submitting large numbers of samples. Contact the laboratory for a cost estimate for your project.

Special Request Analyses:

ASL has the ability to analyze for many elements, substances, and compounds not listed in this booklet.

Contract Research:

ASL has a staff of over 10 scientists, a full complement of advanced instrumentation, and outstanding facilities. We can provide technical assistance with all aspects of your research project.

Turn-Around Time: ASL policy is a 5-15 work-day turn-around time, depending upon the test requested and laboratory workload. Large projects and some complex analyses may require more time. Clients are encouraged to contact the laboratory regarding specific turn-around-time questions.

Rush Analyses: Rush analysis service is offered contingent upon prearrangement with ASL. The surcharge will be 50-200% of the listed fee depending on the analysis to be performed and required turn-around time.

Sample Retention: Samples are normally retained for **30 days** after the date of reporting.

Recheck Analyses: Confirmatory duplicate analyses performed at the client's request may result in an additional charge.

Hazardous Substances: It is the client's responsibility to contact the lab before submitting any sample containing or suspected to contain a pathogen or substance that is considered hazardous. ASL reserves the right to refuse acceptance of hazardous samples. Highly contaminated samples may be subject to an additional 100-300% surcharge. Samples that are determined to be hazardous waste may be returned to the client at the client's expense for proper disposal.

Veterinary Diagnostic Toxicology Service

ASL operates its Veterinary Diagnostic Toxicology Service cooperatively through the Washington Animal Disease Diagnostic Laboratory (WADDL) at Washington State University, which is accredited by the American Association of Veterinary Laboratory Diagnosticians. Please call ASL for additional information about this program.

Sample Submission

All samples should be submitted in appropriate containers and under suitable storage conditions and preservation. ASL is able to provide information on these requirements upon request. Samples that are shipped by mail or other delivery service should be packaged so that the integrity of the sample is not compromised.

Sample containers can be provided and ASL may be able to aid clients in determining the best method of shipment that provides timely, cost-efficient delivery of samples to the laboratory.

Samples should be accompanied by an ASL or client provided Chain of Custody form detailing samples submitted and analyses requested. Copies of the ASL Sample Submission Form may be obtained from ASL by mail or downloaded from our website: www.uidaho.edu/asl

Normal sample receiving hours are from 8 a.m. to 4 p.m., Monday through Friday (excluding holidays). If extended times are required, please contact the laboratory for this accommodation.

Quotations and Discount Policy: Please contact ASL for large, project specific quotations. Economy-of-scale discounts are available for many analyses.

Payment Terms: All samples should be accompanied by a check, purchase order or a University budget number. Payment terms for purchase orders are net 30 days. Prices are subject to change without notice.

If you have any questions or special requirements, please contact ASL at (208) 885-7081 or asl@uidaho.edu.

Quality Assurance

An established Quality Assurance Unit (QAU) maintains the integrity of the Quality System and reliability of our results. QAU personnel are members of the Society of Quality Assurance and are committed to ensuring data quality and regulatory compliance. Quality control samples, analyzed within a batch to ensure sample data integrity, also serve as part of a greater picture for ongoing method performance evaluations.

ASL's standard operating procedures follow EPA, AOAC and APHA/AWWA methods whenever possible. Some methods have been developed within ASL and are validated to ensure they meet appropriate recovery, accuracy and precision standards for a wide variety of matrices. When possible, all results are traceable to the National Institutes of Standards and Technology or a similar certifying organization.

ASL participates in several third-party proficiency testing programs, including:

- North American Proficiency Testing (NAPT) for soils and plant analyses
- ERA Proficiency Testing for inorganics and pesticides in water
- Interlaboratory comparisons and round-robin studies for veterinary toxicology

In addition, a comprehensive training program is required of all laboratory personnel. Analysts are instructed in aspects of quality control, quality assurance, ethics, data integrity and regulatory compliance.

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