



**A&L EASTERN  
LABORATORIES, INC.**

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**SCHEDULE OF FEES**

**September 2008**

*Advancing Agriculture  
and  
Protecting the Environment*

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7621 Whitepine Road, Richmond VA 23237

Tel:(804)743-9401 · Fax:(804)271-6446

E-mail: [office@al-labs-eastern.com](mailto:office@al-labs-eastern.com)

Website: [www.al-labs-eastern.com](http://www.al-labs-eastern.com)

# GENERAL INFORMATION

(All fees are subject to change without notice)

## **Invoicing**

Invoices are normally issued at the beginning of month for all work done in previous month. Terms are net 30 days. Finance charge of 18% APR will be applied for amounts past due 30 days. Once an account goes past due for 90 days, no lab report will be released until the amount due is paid.

## **Discounts**

In some cases, discounts may be available for large volumes of samples or contract work. Please contact us for more information. Discount will be eliminated on accounts going past due for 90 days.

## **New Customers**

For first time customers, please send in a payment with your first order (Check, Visa or MasterCard only) or apply for account. Account application form can be downloaded from our website: [www.al-labs-eastern.com](http://www.al-labs-eastern.com).

## **Sample Submittal**

Sample should be submitted with proper submittal forms. These forms can be downloaded from our website [www.al-labs-eastern.com](http://www.al-labs-eastern.com). Sample matrices requiring extra preparation and/or clean up procedures will be charged an additional fee.

## **Reporting Procedures**

**E-mail (free):** We strongly recommend you to request reports by e-mail and go paperless to avoid the post delay and also be environmentally conscientious.

**Routine Reporting:** One copy of the results of routine analyses is usually mailed from our lab within 2-4 working days from the date received. Extra copy will be charged \$2.00 per report.

**Facsimile Reporting:** Reports and other documents can be sent by FAX for \$1.00 per page.

**Overnight Letter:** Overnight courier service is available at cost plus \$2.00 handling fee.

**Customized Forms:** Most results can be printed on customized report forms. Please contact us for more details and cost.

## **Confidentiality**

All work is performed in confidence. Results are released only to the each paying customer or his designated agent.

## **Turnaround Time**

Results of **routine** agricultural and environmental **in-house** analyses are usually reported within 2-4 working days from the **date received**. An e-mail notification will be sent out immediately once we receive your samples. We strongly suggest sending your samples only by Non-Postal carriers. Many testing laboratories apply RUSH charges for this type of turn around time. At A&L Eastern Labs, no work is delayed and no RUSH fee will be charged. Turnaround time for other analyses is dependent upon the test being performed.

## **Re-run Policy**

Results questioned by the client will be rerun upon request. No charge will be made unless re-assay confirms the original results.

## **Sample Holding**

Samples are held for varying lengths of time, depending on their stability and the amount of storage space required. All samples will be held a minimum of 10 days after results are reported. If longer storage is necessary, a storage fee will be charged based on the type of sample being held. Samples which require special means of disposal will be returned after analysis at the expense of the client.

## **Warranty & Limits of Liability**

Our warranty is limited to the accuracy of analyses of samples as received. We assume no responsibility for the purposes for which the client uses the test results, nor liability for any other warranties, expressed or implied, including warranties of fitness for particular purpose or for merchantability made by the client.

These terms and conditions shall supersede any conflicting terms and conditions stated on any purchase order, or other order of work submitted by the client.

# SOIL ANALYSIS

FEE  
 Recommendations  
 With Without

## BASIC SOIL TEST PACKAGES (USING MEHLICH 3 EXTRACTION SOLUTION):

**Basic (S1):** Organic Matter (colorimetric up to 9.9%)  
 Estimated Nitrogen Release, Available Phosphorus, Exchangeable Potassium, Magnesium Calcium and Hydrogen, Soil pH, Buffer Index, Cation Exchange Capacity and Percent Base Saturation of Cation Elements ..... 9.70 8.20

**Basic Northeastern (S1NE):** Same as S1 but replacing Mehlich 3 Phosphorus with Modified Morgan-P & Al to meet NE nutrient management program ..... N/A 9.40

**Excessive Salt (S2):** Test S1 plus Soluble Salts and Sodium ..... 12.50 11.00

**All Nutrients (S3):** Test S1 plus Sulfur, Zinc, Manganese, Iron, Copper and Boron ..... 14.40 12.80

**Complete Test (S23):** Test S2 plus S3... 17.20 15.60

**Complete Northeastern (S3NE):** Test S3 but replacing Mehlich 3 Phosphorus with Modified Morgan-P & Al to meet NE nutrient management program ... N/A 15.20

**High Yield (S6):** Cover essential minor nutrients to achieve higher yield Test S1 plus Sulfur, Zinc, Manganese and Boron ..... 13.10 11.50

**Lawn (MEL1):** Same as S1 plus Sulfur with color graphic report and lawn recommendation ..... 13.00

**Home Garden (MEL2):** Same as S3 with color graphic report and garden recommendation ..... 17.00

## INDIVIDUAL EXTRACTABLE NUTRIENT ANALYSIS (WITH ANY BASIC TEST PACKAGE)

Aluminum, Boron, Copper, Iron, Manganese, Sodium, Sulfur, Zinc, (per element) ..... 1.10 1.00  
 Soluble Salts ..... 3.00

## SOIL TEST PACKAGE (USING BRAY for P, AMMONIUM ACETATE for Cations & 0.1N HCl for Trace Nutrients)

**SA1:** Same as S1 plus Strong and Weak Bray Phosphorus and Ammonium Acetate for Cations ..... 11.30 9.70

**SA2:** Test SA1 plus Soluble Salts and Sodium ..... 14.50 12.80

**SA3:** Sulfur, Zinc, Manganese, Iron, Copper and Boron ..... 16.30 15.00

**SA6:** Sulfur, Zinc, Manganese and Boron ..... 15.20 13.40

**SA10:** Same as SA1 without P2 ..... 10.70 9.10

## INDIVIDUAL EXTRACTABLE NUTRIENT ANALYSIS

(WITH ANY BASIC TEST PACKAGE USING NON-MEHLICH 3 METHODS, WITHOUT PACKAGE HAS A MINIMUM CHARGE OF \$5.00)

Sodium, Soluble Salts, Zinc, Manganese, Iron, Sulfur Copper, Boron  
 Each above element ..... 5.80 5.00  
 Aluminum (Exchangeable) ..... 12.00 11.00  
 Phosphorus(Bray or Morgan) ..... 5.80 5.00

## OTHER INDIVIDUAL ANALYSES:

(For Heavy Metal Analysis see Environmental Analysis)

Ammonia Nitrogen ..... 13.80  
 Carbon to Nitrogen (C/N) Ratio ..... 45.00  
 Conductivity (soluble salts) ..... 5.80  
 Chloride ..... 13.80  
 Moisture (oven dried at 103°C) ..... 13.80  
 Molybdenum (available) ..... 15.00  
 Nitrate Nitrogen ..... 10.00  
 Nitrite Nitrogen ..... 16.00  
 Organic Matter by Combustion ..... 9.50  
 Organic Matter by Colorimeter ..... 5.90  
 pH ..... 5.80  
 pH and Buffer pH ..... 6.40  
 Resistivity (by Saturated Past) ..... 30.00  
 Silicon or Titanium(Fusion at 1050°C) ..... 60.00  
 Total Cation Exchange Capacity by  
 Sodium Saturation at pH 7.0 ..... 40.00  
 Total Organic Carbon by Combustion ..... 17.00  
 Total Kjeldahl Nitrogen ..... 23.00

## SOIL PHYSICAL MEASUREMENTS:

Available Moisture (1/3 + 15-Bar Limits measured with pressure Membrane apparatus) ..... 40.00  
 Additional pressure limits (each) ..... 28.00  
 Bulk density (disturbed soil) ..... 12.00  
 Particle-sized analysis (Texture) by hydrometer  
 (% sand, % silt, % clay) ..... 19.50  
 Sieve Analysis (any one sieve size) ..... 9.00

## BASIC POTTING MEDIA TEST PACKAGES:

(For greenhouse mixes with less than 50% mineral soil. Using DTPA saturated extract method)

**S8:** Conductivity, pH, Ammonium and Nitrate Nitrogen, Phosphorus, Potassium, Magnesium, Calcium, Sulfur, and Sodium ..... 30.00 27.00

**S8A:** S8A plus Aluminum, Manganese, Iron, Copper, Zinc, and Boron ..... 40.00 37.00

# PLANT ANALYSIS

## BASIC PLANT TEST PACKAGES:

	FEE
	RECOMMENDATIONS
	With    Without

**PT1:** Sulfur, Phosphorus, Potassium, Magnesium, Calcium, Sodium, Iron, Aluminum, Manganese, Boron, Copper and Zinc ...NA 17.00

**PT2:** All Elements in PT1 plus Nitrogen ....26.20 24.00

(Research volume discount on request, with Excel and paperless report only)

**PT503:** EPA 503 metals (Arsenic Copper, Cadmium, Chromium, Lead, Mercury, Molybdenum, Nickel, Selenium, Zinc) on plant tissue ..... 180.0

# FEED ANALYSIS

## BASIC FEED TEST PACKAGES:

	FEE
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**F2A:** Moisture, Crude Protein, Acid Detergent Fiber, Calculated TDN and Net Energy ..... 22.00

**F2B:** Same as Basic Test F2A plus Available Protein (Crude Protein - ADF Protein) ..... 32.00

**F3:** (Not for Mineral Supplements)  
Moisture, Sulfur, Phosphorus, Potassium, Magnesium, Calcium, Sodium, Iron, Aluminum, Manganese, Copper and Zinc ... 20.00

**F4:** Moisture and Crude Protein ..... 18.00

**F5:** Moisture, Crude Protein, Calcium and Phosphorus ..... 26.00

**F6:** Moisture, Crude Protein, Acid Detergent Fiber, Calculated TDN, Net Energy, Calcium, Phosphorus, Potassium, Magnesium and Sulfur .. 32.00

**F7:** Moisture, Crude Protein, Acid Detergent Fiber, Calculated TDN, and Net Energy, Calcium and Phosphorus ..... 31.00

**F8:** Moisture, Crude Protein, Crude Fat, and Crude Fiber (suggested for grain samples) ..... 32.00

**F12:** Moisture, Protein, Fat, Ash, Calcium and Phosphorus ..... 41.50

**F15:** Moisture, Protein, Fat, Fiber, Calcium and Phosphorus, Salt (Sodium based) ..... 41.50

### Livestock Hair Analysis

Same as Basic Test F3 ..... 20.00

## INDIVIDUAL PLANT AND FEED ANALYSES:

Phosphorus, Potassium, Sulfur, Calcium, Magnesium, Sodium, Iron, Aluminum, Manganese, Boron, Copper, Zinc (Grain or Forage, not for Minerals & Supplements)

Sample Digestion ..... 10.00  
Each Element Above ..... 4.00

Cadmium, Chromium, Cobalt, Lead, Molybdenum And Nickel by ICP Emission

Sample Digestion ..... 10.00  
Each Element ..... 12.00

Acid Detergent Insoluble Protein (unavailable) ... 18.00

Available Protein (calculated from unavailable) .... 18.00

Ammonia ..... 12.80

Arsenic ..... 35.00

Ash ..... 17.00

Chloride ..... 15.00

Fat (Ether Extraction) ..... 15.00

Fiber (Crude or Acid Detergent) ..... 10.00

Moisture (Oven 110 C) ..... 6.00

Mercury ..... 48.00

Nitrate ..... 12.00

Nitrogen ..... 14.00

Non-Protein Nitrogen ..... 20.00

pH ..... 6.00

Protein (Crude) ..... 14.00

Salt (from Sodium Content) ..... 13.00

Salt (from Soluble Chloride) ..... 13.00

Selenium ..... 35.00

Urea ..... 20.00

Urease Activity ..... 30.00

# MINERAL SUPPLEMENTS & PREMIXES:

**See Fertilizer Analysis Next Page**

# FERTILIZER, MINERAL AND LIME ANALYSIS

FEE

## SAMPLE PREPARATION:

Dry Fertilizer or Lime ..... 6.00

## BASIC FERTILIZER TEST PACKAGES:

**FT1:** Total Nitrogen (N), Available or Total Phosphorus (P<sub>2</sub>O<sub>5</sub>), and Soluble Potash (K<sub>2</sub>O) ..... 61.00

**FT2:** Total Nitrogen (N) and Soluble Potash (K<sub>2</sub>O) ..... 41.00

**FT3:** Total Nitrogen (N) and Available or Total Phosphorus (P<sub>2</sub>O<sub>5</sub>) ..... 41.00

**FT4:** Available or Total Phosphorus (P<sub>2</sub>O<sub>5</sub>), and Soluble Potash (K<sub>2</sub>O) ..... 41.00

**FTTE:** Boron, Calcium, Copper, Iron, Magnesium, Manganese, Sodium, Sulfur and Zinc ... 95.00

## LIMESTONE MATERIAL TEST PACKAGES:

**L1:** Calcium, Magnesium, and Total Neutralizing Value ..... 62.00

**L2:** Calcium, Magnesium, and Effective Neutralizing Value (2 Sieves) ..... 68.00

**L3:** Calcium, Magnesium, and Effective Neutralizing Value (3 Sieves) ..... 76.00

Total Neutralizing Value (CaCO<sub>3</sub> equivalent) ..... 19.50

Effective Neutralizing Value  
Total Neutralizing Value plus 2 Sieves ..... 37.50  
Total Neutralizing Value plus 3 Sieves ..... 46.50

Sieve Analysis (Specify Sizes Desired)  
Each Screen Size ..... 9.00  
Moisture ..... 13.80

**ELEMENTAL ANALYSIS:** (Total or Water Soluble)  
Aluminum, Boron, Calcium, Copper, Iron, Magnesium, Manganese, Molybdenum, Sodium, Sulfur and Zinc

Digestion Charge ..... 16.20  
Each additional ..... 13.00

Heavy Metals using EPA SW846 procedures see next page in **Environmental Analysis**.

## INDIVIDUAL ANALYSIS:

Chloride ..... 19.20  
Free Acid ..... 17.00  
Free Ammonia ..... 17.00  
Lost on Ignition (or Ash) ..... 17.00  
Moisture ..... 13.80  
**Nitrogen:** Ammonia ..... 20.00  
Nitrate ..... 24.00  
Total ..... 24.00  
Urea ..... 25.00  
Water Soluble ..... 26.80  
Water Insoluble ..... 26.80  
pH ..... 8.00  
**Phosphate:** Available (Citrate Sol) ..... 26.00  
Ortho ..... 26.00  
Poly (Non-Ortho only) ..... 26.00  
Total ..... 26.00  
Water Soluble ..... 26.00  
**Potash** (Fertilizer) ..... 26.00  
(Green Sand) ..... 50.00  
Salt Index ..... 15.50  
Silicon ..... 55.00  
Specific Gravity ..... 15.00  
Total or Sulfate Sulfur (by gravimetric) ..... 44.00  
Urease Activity ..... 35.00

# MANURE ANALYSIS

**WARNING;** DO NOT SHIP MANURE SAMPLES IN GLASS

## BASIC MANURE TEST PACKAGES: FEE

**M1:** Moisture, Total Kjeldahl Nitrogen, Ammonium Nitrogen, Phosphorus And Potassium ..... 40.00

**M2:** Basic Test M1 plus Sulfur, Calcium, Magnesium, Sodium, Iron, Aluminum, Manganese, Copper Boron and Zinc ..... 55.00

## INDIVIDUAL ANALYSIS:

Phosphorus, Potassium, Sulfur, Calcium, Magnesium, Boron, Sodium, iron, Aluminum, Manganese, Copper & Zinc  
Digestion Charge ..... 15.00  
Each Element ..... 12.00  
Moisture (110 C) ..... 14.00  
Nitrogen – Ammonia ..... 18.00  
Nitrate ..... 18.00  
Total (TKN) ..... 21.00  
Organic Matter (by combustion) ..... 15.00  
pH ..... 7.00

# AGRICULTURAL WATER ANALYSIS

## BASIC WATER ANALYSIS PACKAGES FEE

**W1:** (Livestock Suitability) Sodium, Calcium, Magnesium, Chloride, Conductivity, Total Dissolved Solids, Sulfate, Nitrate and pH ..... 50.00

**W2:** (Irrigation Suitability) Sodium, Calcium, Magnesium, Chloride, Conductivity, Sulfate, Nitrate, pH, Carbonate, Bicarbonate, Phosphorus, Potassium, Boron, Total Dissolved Solids and SAR ..... 70.00

**SPRAY WATER SUITABILITY:** pH and Acid Required To Adjust pH to 6.0 ..... 40.00

For individual analysis see Environmental Analysis Section

# ENVIRONMENTAL ANALYSIS

## Biosolid/Soil/Sludge/Compost/Wastewater/

### BASIC TEST PACKAGES; FEE

**SL1:** Total Solids, Total Kjeldahl Nitrogen, Phosphorus and Potassium ..... 55.00

**SL2:** Basic Test SL1 plus Sulfur, Calcium, Magnesium, Sodium, Iron, Aluminum, Manganese, Copper and Zinc ..... 76.00

### INDIVIDUAL ANALYSIS:

Phosphorus, Potassium, Sulfur, Calcium, Magnesium, Sodium, Iron, Aluminum, Manganese, Copper, Zinc, Antimony, Beryllium, Barium, Cadmium, Chromium, Cobalt, Lead, Molybdenum, Nickel, Silver and Tin by ICP Emission (EPA SW846-6010B)

Digestion Charge (EPA SW846-3050) ..... 15.00  
Each Element Above ..... 15.00

Acidity (Total) ..... 16.00  
Alkalinity (Total) ..... 16.00  
Arsenic ..... 35.00  
Ash ..... 15.00  
Boron ..... 15.00  
CaCO<sub>3</sub> Equivalency (lime treated biosolid only) ... 20.00  
Carbon to Nitrogen (C/N) Ratio ..... 40.00

Chloride .....	17.00
Conductance (Specific) .....	13.00
Hardness .....	20.00
Hexavalent Chromium .....	35.00
Mercury .....	48.00
Moisture .....	15.00
Nitrogen – Ammonia .....	20.00
Nitrate (NO <sub>3</sub> + NO <sub>2</sub> ) .....	20.00
Nitrite (NO <sub>2</sub> only) .....	20.00
Total (TKN) .....	23.00
Oil and Grease(ether extraction) .....	29.00
Organic Matter (by combustion) .....	18.00
Paint Filter Test .....	22.00
pH .....	15.00
Phosphorus (Available, Citrate Sol) .....	26.00
Salt Index .....	17.00
Selenium .....	35.00
Solids – Dissolved .....	17.00
Suspended .....	17.00
Total .....	17.00
Volatile .....	17.00
Sulfate (Turbimetric) .....	26.00

# A BRIEF HISTORY OF A&L EASTERN LABORATORIES

In 1971, Don Ankerman and Dr. Richard Large founded A & L Laboratories in Memphis, Tennessee to serve the analytical needs of agricultural clients. It was their commitment to provide quality analytical services that resulted in an expansion that today includes eight regional laboratories serving the analytical needs of agriculture and industry across the USA and in Canada and Mexico.

In 1977 “A & L Eastern” was established in Richmond, Virginia to better serve the Atlantic Coast and the New England States. As growth continued and services expanded, we enlarged our facility in 1994. The commitment of providing prompt, quality analytical services combined with a quality assurance program, well trained staff, and state of the art instrumentations will bring to you, our client, the very best in analytical services.