

Services List

Econotech Services Ltd.

www.econotech.com

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Email: info@econotech.com
Tel: (604) 526-4221 or
(800) 463-5700
Fax: (604) 526-1898

Address:
852 Derwent Way
Delta, BC V3M 5R1
Canada

This document lists the standard tests and services available at Econotech. For additional information, custom services and pricing please contact us.

SAMPLE SHIPMENT - Please provide a purchase order with each shipment. Samples should be shipped prepaid.

RUSH ANALYSES - Econotech can accommodate your requirements for rush analysis. Rush service may be subject to a surcharge.

US CUSTOMERS - Samples can easily be shipped to our facility. Please consult our website for detailed shipping instructions. Shipping instructions can be found in the "Contact Us" section of our website.

SAMPLE STORAGE - Samples will be retained at Econotech for a period of three months from time of sample receipt (where appropriate). Samples will be discarded unless prior arrangements have been made.

For more information regarding specific services at Econotech, please call us at 604-526-4221 or 1-800-463-5700

Service	Contact	Local	Email
General Information			info@econotech.com
Quality Assurance	Donna Johannes	237	donnaj@econotech.com
Chemical and Liquor Analysis	Thomas Yuen	238	tom@econotech.com
Pulp and Paper Testing	Sandra Fodor	253	sandra@econotech.com
Pulp and Paper Testing	Yolanda Cahoon	234	yolanda@econotech.com
Contaminant ID	Eric Chao	265	eric@econotech.com
Microscopy, Species ID and Asbestos	Jodi Murphy	256	jodi@econotech.com
Microscopy, Species ID and Asbestos	Heather McLeod	255	heather@econotech.com
Environmental Analysis	Jodi Murphy	256	jodi@econotech.com
Environmental Analysis	Lien Vu	226	gc@econotech.com
Environmental Analysis	Hur Begum	246	env@econotech.com
Organic Halide Analysis (AOX)	Jodi Murphy	256	jodi@econotech.com
Pulping and Bleaching Pilot Plant Studies	Keith Becker	233	keith@econotech.com
Dissolving Pulp End-Use Testing	Ralph Abley	232	ralph@econotech.com
Returned Lime Analyzer	Ralph Abley	232	ralph@econotech.com

MICROSCOPY SPECIES, FIBER AND ASBESTOS IDENTIFICATION

We use industry standard procedures, but can also customize testing to your specifications.

Please contact Jodi Murphy at 604-526-4221 or 1-800-463-5700 for more information.

Test

SPECIES ANALYSIS/SPECIES IDENTIFICATION

Species analysis of pulp and paper samples

Percentage breakdown of the species in pulp or paper.

Identification of all common North American pulpwoods – softwoods and hardwoods.

Also experienced with samples from South America and Asia.

Also available on sawdusts and mixed wood chip samples.

Analysis of chemical/mechanical pulp content

Two methods available according to amount of mechanical portion and accuracy needed:

By counting method (up to 30% mechanical and/or $\pm 10\%$ accuracy).

By trace pulp counter weighting – Strelis Method (over 30% mechanical and/or $\pm 2\%$ accuracy).

Non-wood and/or synthetic fiber determinations.

General species characterization

Some examples include:

Pure species of pulp confirmation.

Species of individual wood sample.

Fiber identification of non-wood pulp fibers. (eg. cotton, straw, bast, wool, hair, synthetic, etc.) Specific types of synthetic can be further identified by FTIR technique.

Estimates of HW/SW of species observed in powdered cellulose samples.

Comparative vessel counts

Determines relative amounts of hardwood vessel elements between pulps in a batch of samples. Vessels can also be categorized by size or observable damage (fibrillation, fragmentation). Photomicrographs are often helpful.

FIBER AND PULP CHARACTERISTICS BY MICROSCOPY METHODOLOGY

Cell wall thickness and fiber diameter

Average cell wall thickness and fiber diameter for a wood or pulp sample can be determined by direct microscopic measurements of individual fibers.

Sclereids per o.d. gram of pulp

Total stinky area and count (TSAC)

Determines the amount of stickies contamination in recycled pulps and papers. Reported as total count of stickies in sample and as total surface area of stickies per 100 o.d.grams of sample.



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Test

Total ink count (TIC) and total ink area (TIA)

Count and measure ink particles in recycled pulps and papers. Largest, smallest and average ink particle size, as well as particle color can also be noted.

MISCELLANEOUS

Contaminant identification

General microscopic examinations identify common pulp & paper contaminants like shives, bark and foreign material like plastic or synthetic fibers. Precise chemical identification further available by FTIR technique. Photomicrographs are often a useful addition.

Photomicrographs

A digital camera specially mounted onto microscopes with 10X through 400X magnification allows for detailed photographs of your sample. Very helpful in demonstrating what has been observed at the microscopic level. Many applications including general pulp or fiber qualities, embedded contaminants, physical materials or debris, general print quality, etc.

Particle size by microscopic methodology

Projecting a high-magnification microscopic image of your solid or liquid sample onto a video monitor allows for the measurement of particle diameters into any size categories you choose. Detection limit <1 μ m.

ASBESTOS ANALYSIS

Asbestos bulk samples

Identifying asbestos in various materials like insulation, floor tiles, etc.

Asbestos fiber counts

Fiber counts on air samples.

SEM or TEM

When requested, analysis by Scanning Electron Microscopy (SEM) or Transmission Electron Microscopy (TEM) is arranged through subcontract.