

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

ENVIRONMENTAL ANALYSIS

The Environmental department is accredited with the Canadian Association for Environmental Analytical Laboratories (CAEAL) for specific tests.

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

Test	Reference
Acidity, effluents	SM 2310B 4C
Alkalinity, phenolphthalein and total, effluents	SM 2320B
Anions	Ion Chromatography
Fluoride, chloride, bromide, iodine, nitrite, nitrate, sulfate, each ion, effluents	
All ions in group	Ion Chromatography
sulfide (SO ₂), sulfite (SO ₃), thiosulfate (S ₂ O ₃), each ion, effluents	Ion Chromatography
chloride (Cl), chlorite (ClO ₂), chlorate (ClO ₃), each ion, effluents	Ion Chromatography
AOX (see Organic Halides)	
Biochemical oxygen demand, BOD ₅ , effluents	SM 5210B
in pulping liquor	
on pulp	
Chlorinated phenolics (effluents, soil extracts, sludges or wood products)	
tri, tetra and pentachlorophenol	
Chemical oxygen demand, COD, effluents	SM 5220D
from pulp	SCAN CM45:91 or CM45:00
Chlorine, residual or total, by titration, effluents	SM 4500 Cl- B or C
Chloride (see anions)	
Color, true, effluents	BCELM
Color, apparent, effluents	BCELM
Color, PAPTAC, effluents	PAPTAC H5
Coliform and Standard Plate Count (identification), effluents	
Conductivity, effluents	SM 2510B
Density, by hydrometer, liquid samples, effluents	
Density, by pycnometer, liquid samples, effluents	
Dioxin and Furan, aqueous or pulp	
Dissolved oxygen, effluents	SM 4500-OG
Filtration, 0.45 micron, effluents	
Formaldehyde, colorimetrically, water/aqueous extracts	Chromotopic acid
Formaldehyde, in pulp/paper products	HPLC - P+G
Formaldehyde, products in contact with skin	Merfin Japanese
Formaldehyde, tissue, odor from treated fabric, sealed jar	AATCC 112-1984



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Test	Reference
Formaldehyde, pulp/paper, non-wovens and pre-cursor fibers	Edana Water Extraction
Formaldehyde, free, emulsion polymers, air-laid tissue	ASTM 5910-96
Formaldehyde, in water/soil/solids	US EPA 8315A
Formaldehyde, in paper	Korean Method
Hardness, total (Ca, Mg by AA), effluents	SM 2340B
Hardness, total (Ca, Mg by AA or ICP plus digestion), effluents	SM 2340B
Loss on ignition (550°C or specified temperature) (solids & sludges)	
Metals	
preparation:	
by ashing and acid digestion	
by ashing and alkali fusion of acid insolubles	
routine metals in effluents (24 elements)	Inductively Coupled Plasma Spectrometer
(for Al, As, Ba, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mn, Mo, Ni, P, K, Si, Na, Sr, Ti, V, Zn)	
optional metals (B, Hg, Se, Th)	
by element (for Na, K, Mg, Ca, Cu, Fe, Mn, Pb)	SM 3111D using CsCl ₂
soluble (dissolved) metals	ICP or AA
Methanol, ethanol, effluents, condensates	NCASI DI/MEOH 94.02
Methylene blue active substances, MBAS, effluents	
Moisture (solids)	
Nitrogen, ammonia, effluents	SM 4500NH ₃ D
Nitrogen, Kjeldahl	
effluents	SM 4500-N-org-B+4500-NH ₃ C
soil	SM 4500-N-org-B-4500-NH ₃ C
Nitrogen, nitrate, by ion chromatography, effluents	
Nitrogen, nitrite, by ion chromatography, effluents	
Nitrogen, organic, effluents	SM 4500-N-org-B+ SM 4500NH ₃ B+C
Oil and grease, hexane extraction, gravimetric	EPA 1664 or SM 5520B
Hydrocarbons, hexane extraction, gravimetric	EPA 1664 or SM 5520B
Oil and grease, solids, includes Soxhlet extraction	SM 5520E
Organic halides, AOX, EOX, etc. (see Organic Halides)	
Oxygen, dissolved, effluents	SM 4500-OG



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Test	Reference
pH, effluents	SM 4500-B
Phenols, colorimetric, with distillation effluents	SM 5530-B,C
solids & sludges	SM 5530-B,C
Phosphate, total (HClO ₄ digestion) (PO ₄) effluents	SM 4500-P-B+E
solids & sludges	SM 4500-P-E
Phosphate, total dissolved (ortho), (PO ₄)	SM 4500-P-E
Resin and fatty acids	
<i>Resin acids</i> - pimaric acid, sandaracopimaric acid, isopimaric acid, levopimaric acid, dehydroabietic acid, abietic acid, neoabietic acid, chlorodehydroabietic acid, dichlorodehydroabietic acid	
<i>Fatty acids</i> - C12 lauric acid, C14 myristic acid, C16 palmitic acid, C18:0 stearic acid, C18:1/C18:3 oleic/linolenic acid, C18:2 linoleic acid, C20 arachidic acid, C22 behenic acid, C24 lignoceric acid	
aqueous	Env Canada V3.1
soil	Env Canada V3.1
free & total on wood (includes grinding and extraction)	Soxhlet & Env Canada V3.1
Salinity, by conductivity, effluents	SM 2520B
Solids, total (103-105°C), effluents	SM 2540B
Solids, dissolved (103-105°C or 108°C as specified), effluents	SM 2540C
Solids, suspended non-filterable (103-105°C), effluents	SM 2540-D
Solids, volatile suspended (550°C), effluents	SM 2540D,E
Solids, non-volatile or fixed (550°C), effluents	SM 2540D,E
Solids, fixed and volatile (550°C) when run with other solids tests	
Solids, fixed in solid and semi-solid samples	SM 2540G
Solids, settleable, by volume, effluents	SM 2540F
Solids, settleable, by weight (103-105°C), effluents	SM 2540F
Solids, settleable, by weight with suspended solids, effluents	SM 2540F
Solids, total in solid and semi-solid samples	SM 2540G
Solids, volatile in solids and semi-solid samples	SM 2540G
Specific gravity, pycnometer, liquid samples	
Standard plate count, (SPC)	
Starch, soluble, effluents	St. Lawrence
Sulfide (SO ₂), sulfite (SO ₃), thiosulfate, (S ₂ O ₃), effluents	Ion Chromatography
Sulfite (SO ₃), by titration, effluents	SM 4500S03B



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Test	Reference
Surfactant, anionic, (MBAs), effluents	012C
Tannin and lignin-like compounds, TLLC, effluents	SM 5550B
Total organic carbon, TOC, effluents	
Toxicity, Daphnia (handling included), effluents	
Toxicity, 96 hour LC50 (handling included), effluents	
Toxicity, MST, 100% (handling included), effluents	
Toxicity, Microtox (handling included), effluents	
Turbidity, effluents	SM 2130B
Terpenes (aqueous or solids)	Gas Chromatography
α -pinene, Camphene, β -pinene, Myrcene, Δ^3 -carene, α - phellandrene, α -terpinene, ρ -menthene, ρ -cymene, α -limonene, β - ocimene, γ -terpinene, α -terpineol	

Soils, sludges and other complex sample matrices requiring extensive sample preparation will be surcharged based on procedures required.

Standard quality assurance practices include one blank, duplicate or spike for every batch of ten samples. QA/QC data is available for smaller batch sizes, a surcharge may apply depending upon laboratory scheduling.

As required, ECONOTECH would be pleased to supply appropriate sample containers, shipping and sample preservation guidelines.

We invite specific inquiries for contracts to satisfy your production and environmental monitoring needs or to establish methods not listed above.