



# Technical Chemical Services Inc.

Chemical Treatments & Process Monitoring Services



Specialty Chemicals



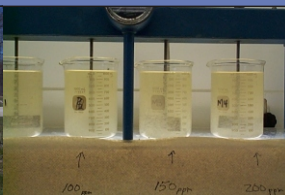
Manufacturing



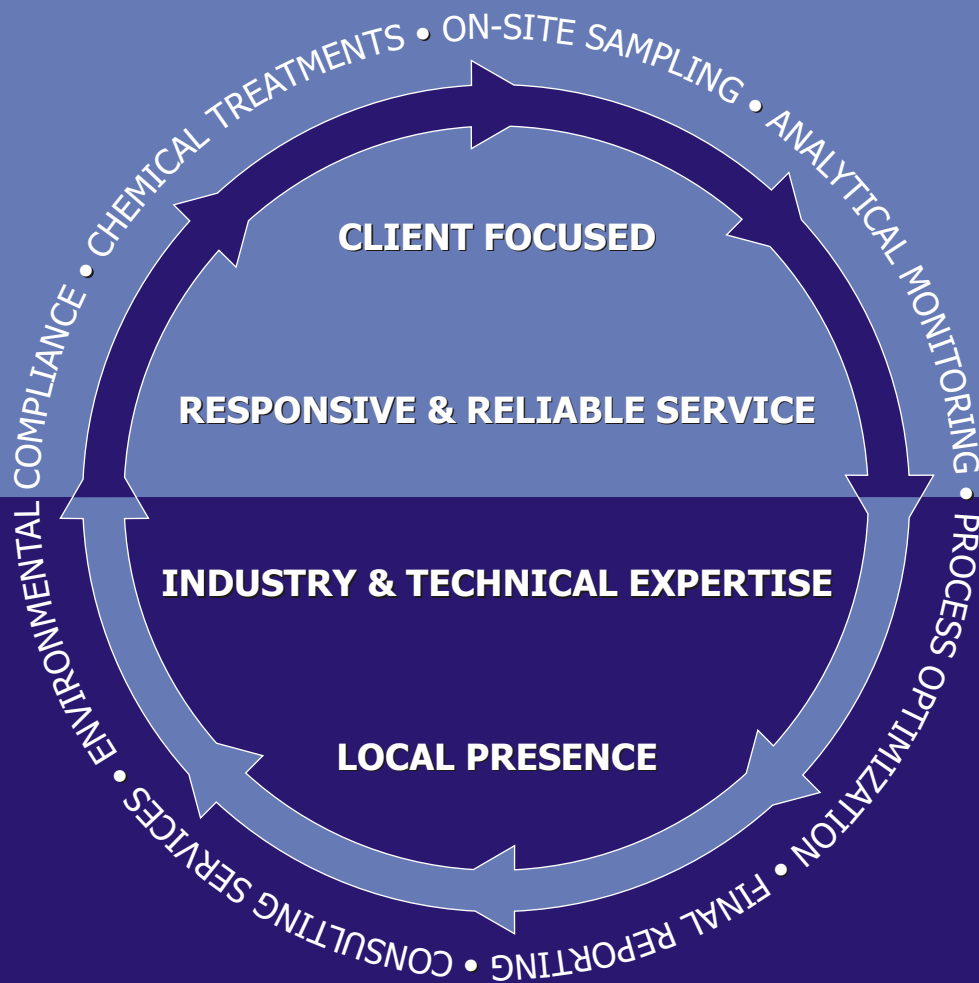
Distribution



On-Site Sampling



Custom Formulations



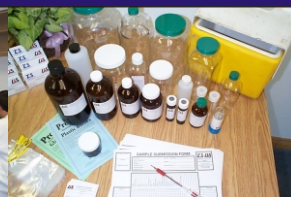
Routine Conventional



Metals by ICP, GFAAS, AAS



Organics by GC-MS/FID/ECD



Government Regulations



Waste Classification

**Lambton Scientific**  
Analytical Laboratory Services & Reporting



Telephone: (519) 344-4747  
Toll Free: 1-888-344-8383  
Fax: (519) 344-2350  
Email: [info@techchemservices.com](mailto:info@techchemservices.com)

391 Vidal Street South  
P.O. Box 2020  
Sarnia, ON, Canada  
N7T 7L1

# TIMELY, ACCURATE ANALYTICS: THE LAMBTON SCIENTIFIC WAY

## Our Role In Improving The Environment

Lambton Scientific offers solutions for influent-to-effluent environmental analytics, customized processing analytics, internal and governmental reporting. Our aim is to develop long-term partnerships with our clients, enabling them to improve business performance and bottom-line results.

Lambton Scientific's clients benefit from: our convenient location / close proximity to clients, the diversity of our analytical capabilities and the expertise of our people. These strengths result in the delivery of timely, high calibre analytical services.

### Client Proximity:

Lambton Scientific is located in the north end of Sarnia's "Chemical Valley", in close proximity to all of our major industrial and petrochemical customers. This location is also convenient to serve our Michigan-based clients, and US on-site customer sample pick-ups are performed daily. Our local presence allows for quick response in times of plant upsets and abnormal discharge situation where rapid analytical turnaround time is absolutely paramount. Clients need to know where they stand immediately, and cannot wait as samples are shipped out of town. Approximately 50% of the analytical work performed by Lambton Scientific is reported "same-day" i.e. samples typically arrive in the early morning and analytical results are reported near end of business day. This is not to say that all this work is the result of crises or emergencies, but there are numerous clients that demand rush analytics as a vital component in their business risk management.

As a customer convenience we also offer on-site sample collection services. Highly trained staff are used to ensure that environmental samples collected meet the applicable sampling protocols, ensuring the integrity of the sample and the accuracy of the subsequent analytics. Routine customer pickups by Lambton Scientific also aids in quick response.

Off-hours support is typically extended to clients with established analytical service support agreements or emergency situations. In times of prolonged process upsets, off-hours upsets or where timely business decisions need to be made based on analytical data, Lambton Scientific offers off-hours and/or weekend support. Through the use of both flexible manpower and modern analytical instrumentation equipped with autosamplers it is possible to perform timely analytics "24/7".

Every client of Lambton Scientific has customized "reporting templates" for their analytical results and related quality assurance data. One of the most critical components of these templates are "internal alert levels" or "trigger concentrations" for the analytical parameters reported. These triggers (calculations based on assorted mathematical models) are implemented so as to flag any abnormal excursion in the reported data. Typically, for data in exceedence of the triggers, Lambton Scientific immediately contacts the client to inform them of the situation so that follow-up actions can be initiated as part of due diligence.



*... convenient  
"Chemical Valley"  
location, diverse  
analytical capabilities  
and staff expertise*

### Sophisticated Analytical Capability:

Lambton Scientific has an extensive listing of analytical services from "pH to PAH". Our analytical strengths include:

- Conventional environmental parameters (such as anions, BOD<sub>5</sub>, TP, TKN, etc.)
- Metals analytics (via ICP, GFAAS, Hg-CVAAS)
- Organics (Purge & Trap GC/MS, TPH, GC/MS/MS)
- MISA, US EPA, ASTM recognized methodologies
- Client supplied (and confidential) methodologies. Typically for "third party" work



*Plasma Torch of an ICP Argon Flame*

We consider ourselves to be an "analytical boutique" with numerous customized methods tailor-made for the matrices typical of Chemical Valley:

- Specialized sample handling and extraction procedures
- VOC (volatile Organic Compound) scans via GC/MS that include most of the common solvents, alcohols, ketones and glycols
- "Extended Petroleum Hydrocarbon" scan capable of characterizing the vast of majority of oils in water or soil samples with a diverse molecular weight range from C10 to C50
- Rapid "BTEX" scan, for the determination of benzene, toluene, ethylbenzene and xylenes and other organic compounds
- Unknown waste identification methodologies via "open characterization" GC/MS techniques for both volatile and semi-volatile organic compounds (to identify the waste or what toxic components are present)
- Customized digestion and analytical methods for the determination of heavy metals in oil or hydrocarbon samples via ICP

### Experience and Expertise:

With all its instrumentation and analytical capabilities, Lambton Scientific ultimately relies on the quality and experience of its people. Our people have years of technology and industry training, and extensive experience in analysis. Experience and knowledge are required to evaluate the unique client requirements, and make recommendations or present alternate analytical options to resolve client process / environmental related issues. Lambton Scientific's staff also provide client support for the interpretation of environmental regulations, operating Certificates of Approval, and have the knowledge to further explain what clients' results mean.

Through our client-focused approach, Lambton Scientific responds with technical expertise and provides reliable analytical services when they are needed most. Our knowledge and commitment makes us true partners with our clients, and we work hand-in-hand in helping them grow.