

# Environmental NEWS

Spring 2011

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 **Lancaster  
Laboratories**  
Celebrating **50** Years

# A great selling point

Viewpoint



by J. Wilson Hershey, Ph.D., President

Celebrating our 50th Anniversary this year has all of us at Lancaster Labs looking back as well as craning our necks toward what lies ahead. One of our greatest selling strengths for the past five decades has been delivering a seamless service experience for our customers. Consequently, we've enjoyed unprecedented organic growth.

Growing a great company means employees will want to be part of it, customers will return, and yes, the company will be an attractive investment for potential new owners. As most of you know, Thermo Fisher Scientific agreed to sell Lancaster Labs to Belgium-headquartered Eurofins Scientific this spring. The deal was finalized on April 4. As we are very excited about our new owners, Eurofins Scientific, we now have more reasons to celebrate during our 51<sup>st</sup> year. Here's why.

With about US\$900 million annual revenues (over \$1 billion with Lancaster Labs) and 9,000 employees across 150 sites in 30 countries, Eurofins Scientific is a leading international group of laboratories providing an unparalleled range of testing and support services to the pharmaceutical,

food, environmental and consumer products industries and to governments.

A great world steward, Eurofins is committed to helping us support our customers' endeavors for improving the human condition and planet, and they are dedicated to investing in and growing our operations. Therefore, we completely anticipate our customers will experience a seamless--even unnoticeable--ownership transition. Eurofins has announced that they do not anticipate any layoffs due to the acquisition.

With this acquisition, Eurofins becomes the global leader in this very stable and recurring business and significantly enlarges its North American footprint. It is a further expression of Eurofins' commitment to serve the pharmaceutical and biotechnology industries with laboratory services of the highest quality and reliability. The acquisition reinforces the company's leadership in terms of scale and quality of service on a wide range of laboratory activities for the pharmaceutical and biopharmaceutical industries in North America, Europe and Asia.

Also, Lancaster Labs is one of the oldest, largest and most reputable environmental testing laboratories in the US. We have a solid reputation for excellence in service, quality and reliability and enjoy long-standing relationships with many Fortune 500 clients. Our strong position and reputation for top quality service in environmental testing in the US fit well with Eurofins' strategy of being the global market leader with a focus on providing high quality services to large global corporations.

Here are some operating principles we stand for that will not change:

**Quality**--For every customer,

we focus on providing excellent quality and service in all that we do. While many talk about quality, we demonstrate it -- client by client, sample by sample. Viewing quality as fully meeting requirements, we make sure we understand exactly what those requirements are and then work as a partner to meet project needs. Our comprehensive management and quality systems enable us to complete the most complex projects accurately, responsively and in rigorous compliance with applicable regulations.

**Innovation**--Investing in new technology and capabilities expansion has been at the core of our business since 1961. With a 260,000 square-foot state-of-the-art facility; 24/7 on-line data access; five service models, including Fee-For-Service, FTE, and our award-winning Professional Scientific Staffing<sup>SM</sup> we provide endless innovative and cost-saving laboratory service options.

**Forging long-term customer partnerships**--Listening, caring and adapting to project needs has always been essential to our success and our customers'. Many of our environmental and pharmaceutical customers have trusted us with their business for decades. We value this trust and are continually looking at ways to improve our customer bonds.

**Reliability**--The bottom line is, we care about our employees, and when they are happy, customers are delighted. Our team members take pride in going above and beyond, and so there's never a shortage of volunteers to pitch in on weekends or holidays if a customer needs help. Setting the gold standard, our people get the job done, no matter what.

So for the next 50 years, we'll continue to listen, enhance services, and enjoy helping our environmental, biopharmaceutical and pharmaceutical customers make the world a healthier, greener place.

# Eurofins Scientific acquires Lancaster Labs

On April 4, Eurofins Scientific SE (Paris: EUFI.PA) purchased Lancaster Laboratories, Inc. from Thermo Fisher Scientific, Inc. for approximately US\$200 million.

Belgium-headquartered Eurofins, with 9,000 employees and over \$1 billion annual revenues, is the world leader in laboratory services, including pharmaceuticals, bioanalytical, environmental and food testing. The acquisition of Lancaster Laboratories significantly augments Eurofins' U.S. capabilities and capacity in pharmaceuticals, biologics, and environmental scientific solutions. It also positions Eurofins to enhance support to its clients' increasingly stringent quality and safety standards and the demands of regulatory authorities around the world.

"We are delighted to welcome Lancaster Laboratories with its global reputation for scientific expertise and customer service excellence to our laboratory portfolio," says Dr. Gilles Martin, Eurofins CEO.

The acquisition reinforces Eurofins' leadership and strong market position in terms of scale and quality of service on a wide range of laboratory activities in North America, Europe and Asia. As a pharmaceutical CRO, Eurofins is part of the global top 10 list with about \$450 million revenues in this field, providing services that span the product development lifecycle. Eurofins is also the leading environmental testing laboratory network globally, as well as the top global provider of dioxin testing. Analyzing more than 10,000 dioxin samples per year, including PCBs (polychlorinated biphenyls) and POPs (Persistent Organic Pollutants), Eurofins, along with Lancaster Laboratories' dioxin services, can offer its clients a unique combination of cost-effective, timely advantages.

Lancaster Labs has laboratory facilities in the US and Ireland, and no site consolidations or restructuring costs are foreseen as a result of this acquisition. Based on Lancaster's historic profitability and budget for 2011, the transaction should be immediately margin and EPS accretive for Eurofins. Lancaster Labs' quality, technical leadership and service that customers expect will remain the same, and therefore, the transition to new ownership should be totally seamless from a customer perspective.



Eurofins and Lancaster Laboratories executives tour the Lancaster facility; from left they are: Dr. Timothy Oostdyk, Lancaster Labs executive vice president; Dr. Luc Leroy, Eurofins senior executive vice president; Thomas Wolgemuth, Lancaster Labs CFO; Dr. Wilson Hershey, Lancaster Labs president; and Dr. Gilles Martin, Eurofins CEO.

## *Why it's easier to work with us*

### Client feedback drives website improvements

Offering data users real time web access to their own information using LLabWeb is just one of the extra services that prompts clients to choose Lancaster Laboratories for their analytical testing needs. The next release of LLabWeb is being engineered to include changes based on client input that will make it even easier to work with Lancaster Labs. A client work group, made up of current system users, is providing feedback as the web access features are refined.

"We've had very positive comments on the current LLabWeb system," notes Don Wyand, director, Environmental Business Development. The new release will provide users with even more functionality and instant access to a number of documents that currently have to be scanned and e-mailed by a client service representative, such as signed analytical reports, sample submission paperwork, sample custody documents and invoices. Clients will be able to retrieve these documents as a .pdf file at any time of the day or night using their own secure web-based log in. Other features that users have requested, including the ability to view comments and filter detected analytes from those that are non-detected are being incorporated, too. LLabWeb will also allow

users to export data into their own applications, eliminating the need for manual data entry. Enhanced search features will make it easier to find information, especially for clients who manage multiple projects.

Lancaster Labs is listening to what clients need as improvements are implemented in other areas as well. For example, data deliverables have been streamlined by changing the order in which the data is presented, with the goal of providing a product that is more user-friendly for clients who are required to validate results. A global data package application that is also in the works will provide a more uniform appearance to the data deliverables. All of these client driven changes and more are being planned and executed with the goal of simplifying the process of working with Lancaster Labs. From providing sample bottles to delivering results electronically, Lancaster Labs strives to be the best lab in the industry.

LLabWeb is a secure web-based service available at no additional cost to environmental clients. Contact your client service representative for information about how to begin using this convenient, real-time feature to access your data or visit [LancasterLabsEnv.com](http://LancasterLabsEnv.com).

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# Dioxin/Furan testing capacity boosted

An additional high resolution gas chromatograph/high resolution mass spectrometer (HRGC/HRMS) is among the new instruments recently installed at Lancaster Laboratories. This recent acquisition brings the total number of instruments available for dioxin/furan testing to three, increasing capacity for that test by 50 percent. The HRGC/HRMS is the instrument of choice for dioxin/furan testing because it provides exceptional sensitivity and selectivity for the compounds of interest.

Considered to be highly toxic, dioxins are mainly by-products of industrial processes but can also be formed during natural processes, such as forest fires. Pennsylvania's Department of Environmental Protection added dioxin/furan testing to Lancaster Labs' scope of accredited tests last year after agency representatives performed an on-site audit and reviewed method validation data generated by the laboratory. Lancaster Labs is also approved for dioxin/furan testing by 20 other state agencies, including California and Texas. The expansion of this program is complemented by more extraction capacity to prepare soil and water samples for analysis. The

*Client response to this new program has exceeded expectations as there are a limited number of accredited laboratories capable of testing for this class of compound.*

laboratory space at Lancaster Labs was developed specifically for dioxin testing by incorporating systems to prevent sample contamination since ultra trace level detection limits are required. Analysis to meet these stringent requirements is achieved by using EPA methods 1613B and 8290A.

In the year since Lancaster Labs began performing dioxin/furan testing, client response to this new program has exceeded expectations. There are a limited number of accredited laboratories capable of testing for this class of compound.

Duane Luckenbill, director of Environmental Services, credits the success of the new offering to Lancaster Labs' ability to offer a complete array of testing services. "Interest in dioxin/furan testing has been tremendous. Clients who are monitoring these compounds at their sites appreciate that we can meet all of their testing needs.

Submitting samples is easier because there's no need to ship samples to different labs," explains Luckenbill. He adds that having all the testing performed under a single quality program is another plus for clients using Lancaster Labs' dioxin/furan laboratory.

For more information on dioxin/furan testing, contact Environmental Business Development at 717-656-2300.

*Why it's easier to work with us for:*

## Site specific method development

The difficulty of managing a site remediation project increases along with the number of contractors that need to be involved. Analysis of site-specific compounds that are not included in typical lists of environmental analytes often requires use of multiple laboratories or shipping samples to multiple sites. Field work can be simplified when all the testing is being done by a single company at the same location because all the samples are shipped together, rather than to several different laboratories.

As the largest single-site environmental testing laboratory in the U.S., Lancaster Laboratories has the experienced chemists and latest instrumentation needed to perform a wide variety of tests, both standard and nonstandard. Its Specialty Services Laboratory was established specifically to develop new methods where published methods don't exist, but the analysts in the standard testing laboratories are well-versed in the procedures for validating published methods for site-specific compounds.

One project currently in-house at Lancaster Labs involves the analysis of dozens of compounds, both organic and inorganic, on each sample submitted. While most of the compounds are routine, several are specific to the industries that once occupied the site where samples are being collected,

including analysis of terphenyls to the lowest detection limit possible. Using their experience with similar organic compounds, analysts in the Miscellaneous Organics Group at Lancaster Labs were able to help the client by obtaining the required standards and validating the terphenyl method using gas chromatography with flame ionization detection to the agency required limits. Polychlorinated triphenyls (PCTs) were also of concern at the same site. In this case, analysts in the Pesticide/PCB laboratory at Lancaster Labs extended their experience with PCB analysis to a new set of compounds by acquiring the standards for various PCTs and developing chromatographic libraries for the peak patterns generated.

"We used standard extraction techniques that we already had in place to meet the client's nonstandard testing needs," commented Jenifer Hess, manager of the Pesticide/PCB laboratory. She added that using their latest gas chromatograph was helpful in attaining the lowest detection limits possible. The clients were pleased when they learned that so many of their site-specific requirements could be met by sending the samples to a single laboratory.

For more information about analysis of site-specific compounds, contact Environmental Business Development at 717-656-2300.

# Instrumental investments address growing project demands

As with so many industries today, technological advances continue to revolutionize the way laboratory data is generated and disseminated. Lancaster Laboratories is committed to maintaining an inventory of cutting edge tools for environmental analysis so that clients can receive the most reliable data in the most efficient manner. Their continued investment in new instrumentation demonstrates their dedication to this goal. The list of recent acquisitions in their Environmental Division includes:

**A Thermo ISQ GC/MS** installed in the Air Testing Laboratory. This instrument was chosen for its excellent sensitivity, making it ideal for analyses like New Jersey's low-level TO-15 test.

A new **Entech Preconcentrator** is used to introduce air samples into the GC/MS, and another preconcentrator was purchased to upgrade an existing system with improved technology.

A **Thermo Quantum XLS GC/MS/MS** was purchased for use in the Specialty Services Laboratory. "The use of triple-quad instrumentation allows for lower detection limits in the presence of background interferences. They work well for the types of tests we are asked to develop in Specialty Services, like pesticides in plant materials, for example," says Duane Luckenbill, director of Environmental Services.

In the Metals Analysis laboratory, a **Thermo iCAP 6500 Duo** is replacing two older ICP units. The powerful, new iCAP provides better stability and sensitivity than its predecessors, allowing increased efficiency when processing samples.

The Pesticide/PCB Laboratory is also benefitting from new investments. Three new **Agilent 7890 GCs** are being employed there. One of them is fitted with



Chemist Ashley Adams tests samples for hexavalent chromium using the Dionex ICS 1100.

dual nitrogen/phosphorus detectors for use in organophosphate pesticide testing, while the other two have dual electron capture detectors for organochlorine pesticide and herbicide analysis.

Lancaster Labs' capacity for hexavalent chromium testing in water and soil samples is increased with use of a new **Dionex ICS 1100**. Analysts in the Water Quality laboratory also plan to validate low level test methods for hexavalent chromium based on EPA method 218.6 using the new instrument.

Luckenbill noted that laboratory support functions were benefitting from new equipment purchases, as well. He cited the automated glassware washing equipment used in the sample preparation lab as an example. "We've found that the automated process is more reliable

than hand-washing and background interferences are lower," he said, adding that all of these major investments demonstrate Lancaster Labs commitment to continuing to be a leader in the environmental testing field.

## Contact us

**For information on services:**  
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Development, 717-656-2300  
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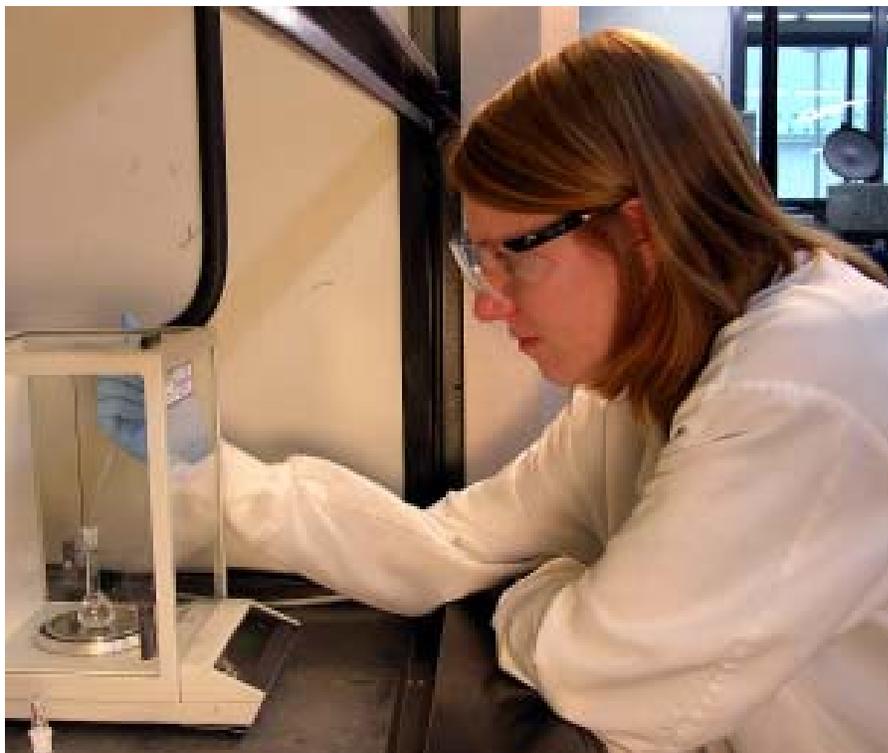
**For literature requests or  
address changes:** Susan Wike,  
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# Proposed holding time changes for certain VOAs explored

by Kenneth Boley, Volatiles by GC/MS group leader/senior chemist

In an update to EPA SW-846, Chapter 4 (Revision 4, effective February 2007), the EPA recommended changes to the preservation methods of aqueous samples for which the presence and concentration of several Volatile Organic Analytes would be determined using the GC/MS technique. Specifically, the EPA cites Styrene and Vinyl Chloride as highly reactive compounds for which "Chemical preservation may be inappropriate... since it may accelerate loss by polymerization or other rapid chemical reaction." In Table 4-1, the EPA also cites Acrolein and Acrylonitrile as highly reactive in aqueous samples and recommends adjusting the pH to a range between four and five.

Lancaster Laboratories conducted a holding time study in its Volatiles by GC/MS Department to validate the EPA claims. The study focused on the loss of concentration of Vinyl Chloride, Styrene, Acrolein, and Acrylonitrile over a 16 day period of time. Each analyte was obtained in neat from which working standards were prepared. An aliquot of laboratory-grade reagent water and an aliquot of locally obtained groundwater were then spiked with the working standards of each analyte to obtain samples with known theoretical concentrations. A total of 12 samples were analyzed every other day beginning on day 1 and ending



Chemist Kerri Legerlotz preps standards for stability studies.

on day 16, including three unpreserved lab-grade reagent water samples, three preserved lab-grade reagent water samples, three unpreserved groundwater samples, and three preserved groundwater samples. All unpreserved samples had a pH=7. All preserved water samples had a pH<2.

Through the holding time study, Lancaster Laboratories found that Styrene and Vinyl Chloride recovered within acceptable limits (70%-130%) in both preserved matrices,

therefore testing of unpreserved aqueous samples would not be necessary. The study also showed that Acrolein and Acrylonitrile recovered within acceptable limits (70%-130%) in aqueous samples preserved to a pH<2, therefore testing of aqueous samples whose pHs were adjusted to between four and five would also not be necessary. Lancaster Laboratories submitted the necessary documentation of the study as proof to the EPA along with recommended changes during the commenting period following the release of the method update. What does this mean for clients? If the EPA would agree with Lancaster Laboratories' findings, no changes in the way clients currently collect, preserve, and submit aqueous samples would be necessary, resulting in no increased costs for analysis.

## Visit our website

If you haven't already, check out our website, which is located at [www.LancasterLabsEnv.com](http://www.LancasterLabsEnv.com). Recently updated, the site contains company news, accreditations/certifications, departmental capabilities, career opportunities, technical information, and a literature request and comment form. We welcome your comments on how we can serve you better.

*At Lancaster Laboratories, we believe that our people provide our strength. Their dedication to quality, professional competence and hard work is the key element in the company's success. In this regular feature, we introduce you to some of the people who have helped make Lancaster Labs an industry leader.*

# People are the Chemistry

Because we invest in our employees, they in turn, invest in you, our client. For clients, there is value in knowing that the Lancaster Labs representative that they work with on a daily basis is considered a valuable member of the team. This means that they in turn will value the client relationships they build and work hard to exceed your expectations.

Lancaster Labs prides itself on having the most loyal employees in our industry. Currently, nearly 15



In each issue of *Environmental NEWS*, we typically introduce you to one of our valuable team members here at Lancaster Labs. However, during our 50<sup>th</sup> Anniversary, we would like to focus on our dedicated workforce as a whole. The reality is that the culmination of education, experience and talent that we have in our 1,119 employees in the US and Ireland is what makes Lancaster Labs flourish.

We realize that the key to exceeding client expectations is also exceeding those of our employees. As Aristotle said, "Pleasure in the job puts perfection in the work." And we aim to provide a positive, rewarding work environment for our valued staff members. We are convinced that this is one of the secrets to our company's success over the past 50 years.

Valuing and empowering our employees has provided opportunities

## Employees gather during a 50th Anniversary celebration.

for them to learn and grow personally and professionally and has created an extremely dedicated workforce for Lancaster Labs. Offering family-friendly benefits, reward and recognition programs, and extensive training opportunities are the common threads that have driven employee loyalty over the years.

A happy work environment is defined differently by each individual, so that is why we offer a variety of benefits above and beyond what other employers may provide, including an on-site family center with both child day care and adult day care centers, and an employee activities committee that plans team-building events and outings for employees and families.

percent of our staff has been with us for 20 years or more. From support staff and bench chemists to senior scientists, managers and members of our Senior Leadership Team, more than 150 employees have been with us for over 20 years—41 of which have dedicated themselves to our business for more than 25 years.

It was an honor to celebrate our 50<sup>th</sup> Anniversary this past March while also celebrating silver anniversaries for so many of our employees. We wanted to take this opportunity to recognize our dedicated workforce as a whole, including the 25-year veterans who have demonstrated a long-term commitment to our company's success. There is no doubt that we would not be where we are today without the expertise and commitment demonstrated by our top notch team.

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## See us at...

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NJ Water Environmental Association Conference & Exposition	Atlantic City, NJ	5/9-13/11
Society of American Engineers Expo	Grapevine, TX	5/24-27/11
2011 JETC Conference and Expo	Grapevine, TX	5/24-27, 2011
ASMA Conference on Mass Spectrometry	Denver, CO	6/5-9, 2011
BFR (Brominated/Other Flame Retardants)	Boston, MA	6/6-7, 2011
Battelle: International Symposium	Reno, NV	6/27-30, 2011
AEHS East Coast Conference	Amherst, MA	10/17-20, 2011
SETAC North America Annual Meeting	Boston, MA	11/13-17, 2011

## Lunch and Learn with Lancaster Labs

Lancaster Labs' offers technical seminars on regulatory topics and supporting testing capabilities along with lunch on us. Topics include:

Vapor and Air Analyses: project planning, regulations and sampling protocol for soil gas, vapor intrusion or other air related projects.

Petroleum Analyses: methods, results interpretation and common interferences.

Detection Limits and Low Level Analyses: Understanding MDLs, LOQs and PQLs; interpreting analysis reports and determining when low level analysis techniques are needed.

Low Level Metals Analysis Using ICP/MS Reaction/Collision Cell with HMI to Eliminate Interferences.

Specialty Analyses and Method Development: Explosives, Perchlorate, Hydrazines, Alkyl PAHS.

Laboratory Testing QC/QA: detailed explanation laboratory QC sample value and data evaluation.

Call environmental business development to schedule a presentation at your site. 717-656-2300.

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