

Healthcare • Hospitality • Commercial • Government • Manufacturing



Legionella Testing Services

Faster. More Accurate. More Comprehensive.



Potable Water | Utility Water



Phigenics
Validation Test®

Phigenics *Legionella* Testing Services for Validation of Water Management Programs



Phigenics Analytical Services Laboratory (PASL) provides comprehensive *Legionella* testing for all water systems found in commercial, institutional, and industrial facilities. PASL delivers the fastest and most accurate *Legionella* testing results by applying the Phigenics patented **TimeZero™** test method for quantitative measurement of viable *Legionella* and Total Heterotrophic Aerobic Bacteria (THAB) as well as the **Phigenics Ultra-Rapid DNA Extraction (P.U.R.E.)™** Protocol, which guarantees a **Next Day *Legionella* PCR™** result.

Benefits

Compared to other methods, the Phigenics Validation Test® (PVT) using the TimeZero™ method is:

Faster because culturing occurs at “time zero” (t = 0) and results are typically communicated 4 days after sampling in the field.

More Accurate because variations due to changes in water samples during shipment are entirely eliminated.

More Comprehensive because *Legionella* bacteria and Total Heterotrophic Aerobic Bacteria (THAB) are obtained from the same sample with one protocol.

Compared to other methods, the PVT Next Day *Legionella* PCR™ is:

Faster because of the Phigenics Ultra-Rapid DNA Extraction (P.U.R.E.)™ Protocol, which guarantees a next day PCR result.

More Accurate because the PVT Next Day *Legionella* PCR™ process, including P.U.R.E.™, is ISO 12869:2012 compliant and the PCR is AFNOR certified.

More Comprehensive because of increased species coverage at 21, compared with 10 previously. Includes *L. pneumophila* serogroups 1 and 2-14.



PVT Next Day *Legionella* PCR™

Polymerase Chain Reaction (PCR) provides an analysis of a water sample at a genetic level. Detection of *Legionella* species DNA by the Next Day *Legionella* PCR™ is used to deliver fast, preliminary results to indicate whether water systems are well-managed. It does this by providing molecular-marker negative screen data. If the test result is negative, then there is a 99% probability the traditional culture-based results will also be negative.

Thorough Analytical Reporting, Digital Imaging, and Chain of Custody



Digital Image Record

- Results at next day, 4 days, and 11 days
- Microbial growth
- ID labels to establish chain of custody

Phigenics Validation Test PREMIUM Analytical Report
Method Used: Next Day Legionella PCR™ TimeZero™ and Standard ISO 11731 Spread Plate

Location Identification: J. Smith
Name of Collector: J. Smith
Contact email: jsmith@email.com

Sample Information
PVT ID: 1001
Date of Collection: 20191112
Date of Plating: 20191112
Date of Analysis: 20191112

Legionella Test Results
TimeZero™: 7 CFU
Standard ISO 11731: ND
CFU Count: 7 CFU

Digital Images
Sink #1 Hot
Sink #2 Hot
Sink #3 Hot
Sink #4 Hot
Sink #5 Hot
Sink #6 Hot
Sink #7 Hot
Sink #8 Hot
Sink #9 Hot
Sink #10 Hot

Phigenics Validation Test PREMIUM Report Summary
Method Used: Next Day Legionella PCR™ TimeZero™ and Standard ISO 11731 Spread Plate

PVT ID	Date	Time	Location	Test Results
10001	20191112	10:00	Sink #1 Hot	7 CFU
10002	20191112	10:05	Sink #2 Hot	ND
10003	20191112	10:10	Sink #3 Hot	ND
10004	20191112	10:15	Sink #4 Hot	ND
10005	20191112	10:20	Sink #5 Hot	ND
10006	20191112	10:25	Sink #6 Hot	ND
10007	20191112	10:30	Sink #7 Hot	ND
10008	20191112	10:35	Sink #8 Hot	ND
10009	20191112	10:40	Sink #9 Hot	ND
10010	20191112	10:45	Sink #10 Hot	ND

Comprehensive summary for all samples submitted in one easy-to-read table

Phigenics *Legionella* Tests with TimeZero™ and Next Day *Legionella* PCR™



PVT PREMIUM includes TimeZero™ test method for *Legionella* species and THAB, Next Day Legionella PCR™, and the Standard *Legionella* 11731 ISO spread plate culture method.









PVT SELECT includes TimeZero™ test method for *Legionella* species and THAB and Next Day *Legionella* PCR™.

Phigenics *Legionella* Testing Services

Faster. More Accurate. More Comprehensive.

Phigenics Validation Tests

Attribute	 PVT PREMIUM Phigenics Validation Test®	 PVT SELECT Phigenics Validation Test®	 PVT TimeZero™ Phigenics Validation Test®	 PVT TimeZero™ Phigenics Validation Test®	 PVT Next Day Phigenics Validation Test®	 PVT Standard ISO Phigenics Validation Test®	 PVT THAB Phigenics Validation Test®
Product Number	MB-210	MB-600	MB-300	MB-100	MB-1410	MB-1010	MB-400
Culture inoculated at TimeZero™ (t=0)	✓	✓	✓	✓	⊘	⊘	✓
Utilizes Phigenics Ultra-Rapid DNA Extraction (P.U.R.E.)™ Protocol	✓	✓	⊘	⊘	✓	⊘	⊘
Time Required to Receive Reports*	Next Day / 4 Days / 11 Days	Next Day / 4 Days	4 Days / 11 Days	4 Days	Next Day	11 Days	4 Days
Limit of Detection (CFU/mL)	1**	10	1**	10	~1	1**	100
Differentiates <i>L. pneumophila</i> SG 1, <i>Lp</i> SG 2-14, and <i>Legionella</i> Species	✓	✓	✓	✓	⊘	✓	⊘
Reports Next Day Molecular Marker Negative Screen	✓	✓	⊘	⊘	✓	⊘	⊘
Measures Total Heterotrophic Aerobic Bacteria (THAB)	✓	✓	✓	✓	⊘	⊘	✓
Conforms to ISO 11731 Spread Plate Culture Method	✓	⊘	✓	⊘	⊘	✓	⊘

*From sample in the field

**The practical limit of quantification according to the results published by the CDC is about 10 CFU/mL



Phigenics Laboratory Certifications

Phigenics Analytical Services Laboratory (PASL) is certified as proficient in the Environmental *Legionella* Isolation Techniques Evaluation (ELITE) program administered by the Centers for Disease Control and Prevention (CDC) for using the Phigenics Patented TimeZero™ test method and the ISO 11731 spread plate method. PASL has passed every proficiency test since the beginning of the CDC ELITE program. PASL is a New York State ELAP-certified laboratory for the analysis of potable and non-potable water and provides a wide range of other testing services for microbial hazards such as *Pseudomonas*, *Stenotrophomonas*, *Acinetobacter*, *Mycobacterium*, *Aspergillus*, and *Fusarium*. PASL also provides complete testing services required by the Safe Drinking Water Act.

Phigenics Analytical Services Laboratory

Call us today at 844.850.4087 or go to www.phigenics.com/testing

35701 West Ave, Suite 100 | Warrenville, IL 60555 | 844-850-4087

www.phigenics.com | info@phigenics.com

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