

## INVISIBLE SENTINEL LABORATORY SERVICES

# Ensure the safety of your products with rapid and robust contract microbial testing services

### THE CHALLENGE

New regulations, harsh penalties, and brand-threatening recalls place substantial pressures on food manufacturers. The need for reliable and rapid microbial detection to monitor product quality is critical to protect your company's reputation. Invisible Sentinel Laboratory Services, conducted in our ISO 17025 and A2LA accredited lab, can streamline quality monitoring for food, and beverage processors across a wide range of products.

### THE INVISIBLE SENTINEL ADVANTAGE

Our proprietary AOAC certified molecular testing methods have been adopted by dozens of global food and beverage processors to improve accuracy and drive down testing costs. The Veriflow system, using our proprietary DNA Signature Capturing Technology, allows for unsurpassed rapid turn-around time. Our Laboratory Services clients benefit from rapid, accurate, cost-effective, and actionable test results – to find issues early, take corrective action and prevent large-scale contamination.

### ASSURANCE OF QUALITY

Our expertise in molecular science and detection technology, supported by a robust quality monitoring and audit process, assure that our clients receive accurate test results every time. Testing services are performed in our dedicated A2LA accredited lab, in which we adhere to strict operating procedures, technician training, equipment calibration, and environmental monitoring.

### UNMATCHED SPECIFICITY & SENSITIVITY OF THE VERIFLOW PLATFORM

- ▶ Broad inclusivity with 100% detection rate demonstrated in AOAC validation, internal studies, and partner customer validation studies
- ▶ Correctly excludes non-applicable strains
- ▶ Target amplification of specific gene markers in each assay
- ▶ Robust detection in both simple and challenging matrices such as nutraceuticals, poultry carcass rinsates, nut butters, confectionary, juices, and beer and wine

### MATRIX COMPATIBILITY

- ▶ Poultry & meats, carcass rinsates, broth, fats, MDM
- ▶ Ready to Eat food products
- ▶ Nutraceuticals
- ▶ Juice, soft drinks, ciders
- ▶ Spices
- ▶ Confectionary
- ▶ Nut butters
- ▶ Dairy products
- ▶ Fruits & vegetables
- ▶ Beer, hard sodas, yeast slurries
- ▶ Wine
- ▶ Facility environmental swabs

### FOR CUSTOMERS MOVING TO IN-HOUSE TESTING

Veriflow is ideally suited for onsite implementation, with a modest capital investment and affordable per test cost.

- ▶ The system is easy to use and can be completed by existing staff with minimal training.
- ▶ Simple workflow, with less than 15 minutes of user hands-on time per sample.

## INVISIBLE SENTINEL LABORATORY SERVICES

Invisible Sentinel's Scope of Accreditation extends to the following test methods and target analytcs:

### FOOD / BEVERAGE SAFETY AND QUALITY

- Turn-around time:** NEXT DAY from sample receipt
- Method:** Veriflow DNA Signature Capturing Technology
- Sample size:**
- 25, 125, or 375 gram product samples
  - Environmental swabs

### FOOD SAFETY PORTFOLIO - PATHOGEN TESTING

Assay	License
Salmonella species	AOAC 011404
Listeria monocytogenes	AOAC 051304
Listeria species	AOAC 121302
Campylobacter	AOAC 101201
E.coli O157:H7	AOAC 121401
Listeria confectionary	AOAC 051304
Salmonella peanut butter	AOAC 011404
Shiga toxin-producing Escherichia coli	AOAC 111601
Salmonella spice	AOAC 011404
Staphylococcus aureus	OMA #2003.07

### WINE & BEER SPOILAGE DETECTION PORTFOLIO

Assay	Target Organism
vinoBRETT	<i>Brettanomyces bruxellensis</i>
vinoPAL	<i>Pediococcus</i> and <i>Lactobacillus</i>
brewPAL	<i>Pediococcus</i> and <i>Lactobacillus</i>
brewDEK	<i>Brettanomyces/ Dekkera</i> species: <i>B. bruxellensis</i> , <i>B. anomala</i> , <i>B. naardenensis</i> , <i>B. custersiana</i>
brewBRUX	<i>Brettanomyces/ Dekkera bruxellensis</i>
brewMAP	<i>Megasphaera</i> and <i>Pectinatus</i>
brewLAP	<i>Pediococcus</i> and <i>Lactobacillus</i>
Alicyclobacillus	<i>A. acidoterrestris</i> , <i>A. acidiphilus</i> , <i>A. cycloheptanicus</i> , <i>A. herbarius</i>

### GENERAL LABORATORY TESTS

Type	Target Organism	License/Reference Method	Turn Around
Aerobic Plate Count	<i>Aerobic bacteria</i>	OMA #2015.13	2 days
Yeast and Mold	Yeast and Mold colonies	OMA #2014.05	2 days
Total Coliform	<i>E.coli</i> and <i>coliform</i> bacteria	OMA #991.14	2 days
Total Enterobacteriaceae	<i>Enterobacter</i> species	AOAC 030601	2 days
Staphylococcus aureus	<i>Staphylococcus aureus</i>	OMA #2003.07	2 days

### CONFIRMATORY TESTING

Target Organism	License/Reference Method	Turn Around
<i>Listeria</i> species	BAM, Chapter 10; FSIS MLG 8.09	5 days
<i>Listeria monocytogenes</i>	BAM, Chapter 10; FSIS MLG 8.09	5 days
<i>Salmonella</i> species	BAM, Chapter 5; FSIS MLG 4.08 Table-B	5 days
<i>Campylobacter</i> species	FSIS MLG 41.03	5 days

Pricing available from your Invisible Sentinel representative. Volume discounts may apply.

Swabs and other sampling supplies are also available from Invisible Sentinel.

Local courier service (greater Philadelphia) available on request.

