Animal Health Laboratory (AHL), Laboratory Services Division (LS), University of Guelph, List of methods falling under flexible scope

The Animal Health Laboratory (AHL) of Laboratory Services (LS), University of Guelph is accredited for veterinary laboratory testing test methods (fixed scope) and techniques under test method development and non-routine testing specialty area (flexible scope) as listed on LS' SCC ISO/IEC 17025 scope of accreditation <u>https://www.scc.ca/en/search/laboratories/ahl</u>. The test methods listed below are accredited and fall under the flexible scope mentioned above. If the test method you are seeking is not on this controlled list, contact the Quality Assurance unit at qamail@uoguelph.ca.

The Animal Health Laboratory identifies unknown hazards in a range of matrices, for example, animal samples, feed, soil, and plants. Hazards include infectious agents (bacteria, mycoplasmas, yeasts, molds, viruses, and parasites), organic and inorganic elements and compounds. Infectious agents are detected directly or indirectly through various technologies listed under LS' SCC scope of accreditation.

Techniques for which the laboratory is accredited are listed below:

1. Culture detection of microorganisms

Method code	Method name	Agent
MYC-100	<i>Mycoplasma</i> and <i>Ureaplasma</i> isolation	• Mycoplasma, Ureaplasma, Acholeplasma spp.

2. Inorganic analysis by inductively coupled plasma spectroscopy (ICP)

Method code	Method name	Elements
CHEM-162	ICP-MS analysis of trace metals in serum, plasma and blood	• manganese, iron, cobalt, copper, zinc, selenium, molybdenum, lead

3. Enzyme linked immunosorbent assay (ELISA)

Method code	Method name	Agent
V-002	ELISA	• <i>Coxiella burnetii</i> (Q fever)
		• Transmissible gastroenteritis virus
		(TGEV) and porcine respiratory
		coronavirus (PRCV) antibodies

4. Agglutination

Method code	Method name	Agent
V-008	Leptospira microscopic	• <i>Leptospira</i> spp.
	agglutination test (MAT)	
V-007	Agglutination - Brucella,	Salmonella Pullorum/Salmonella
	Mycoplasma, Salmonella	Gallinarum

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5. Polymerase chain reaction (PCR)

Method code	in reaction (PCR) Method name	Agent
MOL-181	Mycoplasma bovis real- time PCR	Mycoplasma bovis for matrices: embryo collection fluid/embryo transportation fluid (ETF), lung, semen, and swabs.
MOL-197	PCR detection of avian mycoplasmas	 Mycoplasma gallisepticum Mycoplasma iowae Mycoplasma synoviae
MOL-218	Chlamydia PCR	 Chlamydia abortus Chlamydia psittaci Chlamydia suis
MOL-235	Real-time PCR detection of <i>Pseudogymnoascus</i> <i>destructans</i> (formerly <i>Geomyces destructans</i>)	• Pseudogymnoascus destructans (formerly Geomyces destructans)
MOL-249	PCR detection of fish viruses	Infectious Pancreatic Necrosis Virus (IPNV)
MOL-251	Honey bee molecular testing	 Acute bee paralysis virus (ABPV) Black queen cell virus (BQCV) Chronic bee paralysis virus (CBPV) Deformed wing virus (DWV) Israeli acute paralysis virus (IAPV) Kashmir bee virus (KBV) Sacbrood virus (SBV)
MOL-257	Chytrid PCR (Batrachochytrium dendrobatidis & B. salamandrivorans)	 Batrachochytrium dendrobatidis B. salamandrivorans
MOL-262	Echinococcus species PCR	Echinococcus multilocularis
MOL-267	<i>Myxobolus cerebralis</i> (whirling disease pathogen) PCR	• Myxobolus cerebralis
MOL-282	PCR detection of fish bacterial pathogens	 Aeromonas salmonicida ssp salmonicida Flavobacterium psychrophilum. Lactococcus garvieae Renibacterium salmoninarum

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5. Polymerase chain reaction (PCR) continued

Method code	Method name	Agent
V-005	Polymerase chain reaction (PCR)	 Bluetongue virus (BTV) /Epizootic hemorrhagic disease virus (EHDV) Infectious bovine rhinotracheitis virus, bovine herpesvirus 1) (IBRV) Infectious laryngotracheitis virus (ILTV gallid herpesvirus 1 [GaHV- 1]) Porcine circovirus 2 (PCV-2) Porcine parvovirus (PPV) Porcine respiratory coronavirus (PRCV) Severe acute respiratory syndrome virus 2 (SARS-CoV-2) – E gene and (SARS-CoV-2) – RdRp gene

6. Whole genome sequencing

Method code	Method name	Agent
BAC-041	Whole genome sequencing	Bacterial isolates
	(WGS) of bacterial isolates	