

Our ELS technical, customer service and sample collection professionals take pride in their attention to detail, consistent high-quality service and the extra effort they put into meeting your specific needs.

We strive to provide the most accurate, timely and cost-effective dairy testing services in the industry.

ELS makes testing easy and convenient:

- Samples can be fresh, frozen or preserved.
- Milk samples can be sent with your milk truck driver or shipped directly to ELS.
- Payment is accepted by cash, check and credit card. Milk check deduction may also be available.

Contact ELS to see how they can help you manage your herd's health and improve reproductive performance.



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PCR Testing for Mastitis

Accurate · Timely · Economical





Eastern Laboratory Services (ELS) can help dairy producers manage their herds by providing the most accurate, timely and cost-effective dairy diagnostic and analytical services in the industry.

ELS is now offering Polymerase chain reaction (PCR) testing for mastitis detection. PCR testing is a technique that uses DNA to detect specific types of bacteria. It can be used with individual cow or bulk tank milk samples to find the presence of mastitis-causing bacterial types.

Why is Polymerase chain reaction (PCR) testing better than culturing?

Farmers attempting to treat cows and identify mastitis trends within their herds may find culturing frustrating. Approximately one-third of culture samples come back with no significant growth (NSG). The causes for NSG may include animals that were not shedding bacteria during sampling, bacteria in the sample dying before culturing or bacterial type not being viable during sampling. Contaminated samples may also pose a problem in the culturing process.

PCR offers several advantages over culturing:

- In bulk tanks, PCR can identify even low levels of contagious bacteria. Pathogens such as *Staph. aureus* shed bacteria intermittently. DNA-based methods, such as PCR, can detect the presence of these pathogens even when they are already dead or at very low levels.
- PCR eliminates the NSG problem. Contaminated samples are less of a problem since the pathogenic bacteria can still be detected even with contamination.
- PCR is quicker at *Mycoplasma* testing and better at detection. Besides being difficult to culture, a *Mycoplasma* culture can take between 7-14 days. Samples can also be pooled to save money.
- PCR includes a test for the B-lactamase gene. Bacteria possessing the B-lactamase gene are resistant to many common mastitis drugs. This can help your veterinarian make better treatment decisions and not waste antibiotics on resistant bacteria.

PCR tests for:

- *Staphylococcus aureus*
- *Staphylococcus species*
- *Streptococcus agalactiae*
- *Streptococcus dysgalactiae*
- *Streptococcus uberis*
- *Escherichia coli*
- *Corynebacterium bovis*
- *Enterococcus faecalis & faecium*
- *Klebsiella pneumoniae & oxytoca*
- *Serratia marcescens*
- *Arcanobacterium pyogenes & Peptostreptococcus indolicus*
- *Mycoplasma bovis*
- *Mycoplasma species*
- Yeast
- *Prototheca species*

