



Study conducted by the University of Georgia



CASE STUDY

Sanitation Verification Using Aseptic Sampling

Determining the effectiveness of the QualiTru sampling system in identifying the source of high bacteria counts found in a milk bulk tank sample (> 30,000 CFU).

CHALLENGE:

Is the QualiTru sampling system effective in determining whether high bacteria counts found in a milk bulk tank sample (> 30,000 CFU) are the result of poor herd health or inline contamination? This question was the subject of a case study completed at the University of Georgia.

SOLUTION:

Individual milk samples from the four quarters were collected from 16 cows and compared to the QualiTru inline representative samples collected before the bulk tank. Samples were cultured for aerobic bacterial isolation and mycoplasma using standard approved methodologies.



RESULTS:

Samples from individual cows within the group showed that the individual cow samples were negative for bacteria isolation. However, the milk line pooled sample was positive for non-hemolytic *Streptococcus*, *Klebsiella pneumoniae* ssp *pneumoniae*, *Acinetobacter* sp, *Klebsiella* ssp *ozaenae*, *Enterococcus durans*, and *Streptococcus Bovis*. Notably, none of the bacteria isolated from the sampling device was present in the individual cow cultures, suggesting that the milk line was highly contaminated with biological material from milk and several environmental bacteria.

Results indicate that the QualiTru aseptic, representative sampling system is an effective tool for determining the source of bacteria in a bulk tank. It can be a tool to identify biofilms in the milk lines as an indication of ineffective cleaning and sanitization.

“QualiTru aseptic, representative sampling system is an effective tool for determining the source of bacteria in a bulk tank.”

BENEFITS:

QualiTru’s aseptic sampling systems provide representative composite samples to effectively identify bacteria and possibly isolate environmental contamination within the milking process. Bacteria present in the milk line may turn into contaminants of the bulk tank milk, which can become foodborne pathogens for human consumption.



**QUALITRU 4-COMPONENTS
4-APPLICATIONS BROCHURE**