## *BJ Farm quarter-level culture summary*

| *Type of intramammary infection (IMI)* | *Number of IMI over study period* | | *Type of intramammary infection* | *Average quarter-level SCC by infection type* | *Range of quarter-level SCC:* Min | Max |
|---|---|---|---|---|---|---|
| Staph. species | 15 | | *Mixed infection:* Staph. aureus, Strep. species | 1,205,000 | 810,000 | 1,600,000 |
| Corynebacterium species | 8 | | Staph. aureus | 1,157,556 | 62,000 | 4,100,000 |
| Unknown organism | 6 | | Staph. species | 298,706 | 3,000 | 2,000,000 |
| Staph. aureus | 4 | | Strep. species | 270,000 | 4,000 | 799,000 |
| Other Gram-positive bacteria | 3 | | Gram-negative, non-coliform organism | 42,000 | 42,000 | 42,000 |
| Strep. species | 3 | | Unknown organism | 19,500 | 8,000 | 37,000 |
| *Mixed infection:* Staph. aureus, Strep. species | 1 | | Corynebacterium species | 13,000 | 2,000 | 37,000 |
| Gram-negative, non-coliform organism | 1 | | *Mixed infection:* Strep. species, Corynebacterium sp. | 13,000 | 13,000 | 13,000 |
| *Mixed infection:* Strep. species, Corynebacterium sp. | 1 | | Other Gram-positive bacteria | 7,000 | 4,000 | 10,000 |

**Summary of quarter-level results:** As seen in the first table, the large majority of intramammary infections on your farm were caused by Staph. species (15), followed by infections with Corybebacterium species (8). However, looking at the average quarter-level SCC of infected quarters (right-hand table), you can see that the infected quarters contributing most to a higher bulk tank SCC would be the Staph. aureus infected quarters (and quarters with mixed infections containing S. aureus). Although infections with Staph. species (CNS) and Corynebacterium were the most common, the SCC for these quarters were not dramatically increased (average around 300,000 and 13,000 cells/mL, respectively). The fairly large range of quarter-level SCC for Staph. species quarters could likely be explained by identifying exactly what species of Staph is causing the infection, as some species of CNS are more of a concern than others. We are currently in the process of identifying all Staph to species level, but don't yet have these results.

**Take home message:** From the low number of intrammary infections seen during the study period, milk quality on your farm is clearly excellent! Although the majority of infections were caused by Staph. species (CNS), the primary opportunity identified by these quarter-level culture results for milk quality improvement would be identifying Staph. aureus-positive quarters within the herd.