# Case Study

Using teat end scoring and milking procedure analysis to troubleshoot high bulk tank somatic cell (BTSCC) issues

History: BTSCC had been climbing steadily, and was currently averaging 200,000

Questions: Is the vacuum level too high? Is teat end health a problem, and if so, why?

Procedure: Teat end scores were performed on the herd, and the milking procedure was observed. Teat end vacuums and lactocorder readings were taken.

Results: Teat end vacuum was within recommended guidelines. Takeoffs were properly functioning and units were not being pulled off under vacuum. Strip yields averaged 250ml, with none recorded <100ml. Hyperkeratosis was prevalent, with 40% of the herd scoring >2 on a scale of 1-4. Units were being attached 45 seconds after brief forestripping (one strip/teat) when a second milker (the cow pusher) was in the parlor, but was >90 seconds when just one milker was in the parlor. Lactocorder graphs were recorded for each turn, revealing >33% bimodal letdown.

Bimodal letdown

Normal letdown
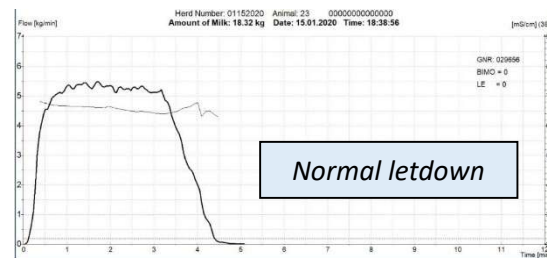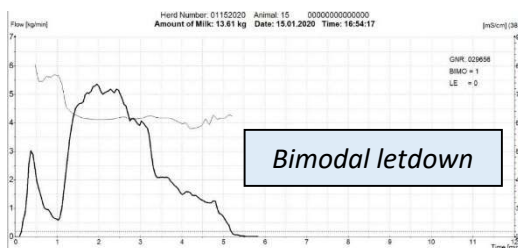
Interpretation: Poor teat end health and improper letdown were contributing to the elevated BTSCC. Vacuum and ATO settings were appropriate and not contributing factors.

Outcome: Forestripping was modified to three strips per teat. When the second milker came into the parlor, more careful attention was paid to timing so that the milking process was not being rushed and units were being attached >90 seconds after stimulation. The herd was switched to an exfoliating teat dip for 4 weeks, and teat end scores returned to normal (<20% greater than 2) within 8 weeks. BTSCC gradually declined to 110,000.