

IMPORTANT NOTICE ABOUT DATA QUALITY AND INTEGRITY

A fundamental responsibility for us as a Canadian Network for Dairy Excellence and particularly in our dairy herd improvement function is to ensure data quality and data integrity. Dairy producers from coast to coast want this, and we strive to deliver it. In addition, as we see more and more producers using the data to manage herd performance, it is extremely important that test day production (milk and components) be reflective of actual production. We have many checks and balances in place to help us do this and bulk tank comparison is one metric we use. We want our test day results to be as close to the bulk tank reading as possible (within 3% is our target for production, although acceptable variability can be as high as 7%; for fat %, ≤ 0.10 and for protein %, ≤ 0.05). However, we must keep in mind that we are not comparing apples to apples, and there can be many reasons why the variability can be greater than desired.

1. Before we look at anything else, we must remember that Lactanet production is expressed in kgs while the bulk tank is measured in liters.

Milk is heavier than water, so you will need to first multiply the Valacta results by 0.97 to compare to bulk tank. For components, Lactanet expresses fat and **crude** protein as a percentage (kgs/100 kgs), whereas the dairy boards express fat and **true** protein as kgs/100 liters. As such, a conversion needs to be done when comparing component values between Lactanet and bulk tank. Columns display the converted values in the bottom section of the Lactanet Production Summary Report for true comparison.

2. Time of milking. It is important to respect the same milking schedule on test day that you would usually follow on any other day.

For tie stall barns, respect the same milking order and try to have the same milking time for the herd on test day. For herds with 2X milkings tested, you need to respect 24 hours milking time on milk recording; i.e. same time as previous morning. For herds on A/P, it is important to note the appropriate milking time coming from the time recorder. Herds on 3X schedule are strongly advised to maintain an 8 hour interval and alternate milkings sampled between tests is a required procedure.

3. All milk used on farm.

This includes milk to the calves, the house, or any cows treated and milk recorded, but not in the tank. Fresh cows going in the tank, which are too fresh to be included in test day results also need to be included in the comparison. It is important to provide this information to the technician for accurate calculation.

4. Meters not calibrated properly.

The calibration of meters must be done at least once per year for publishable records and genetic index calculations. The Canadian Dairy Network Standards Committee states that “meters must be verified for accuracy annually and must not exceed 15 months between verifications”. Lactanet technicians can verify some of the more traditional meters, while electronic meters must be calibrated by the dealer. Technicians must obtain a form, signed by the dealer, confirming that the calibration was done as required.

5. Incomplete or over milking.

This should be monitored carefully, especially if different people are milking on test day, and not using automatic take-offs.

6. Bulk tank not calibrated properly.

This BT calibration should be done when installed and checked again, if all other factors have been eliminated.

7. Sudden changes or special events affecting cows.

A sudden change in ration or feeding time, the visit of hoof trimmers or classifiers are factors that cause a sudden change in herd production. Heat stress can affect recent production as well. Any of these events can affect bulk tank comparison even if all items above are well considered.

8. Robotic systems.

The time of day at which the tank was emptied influences the comparison, as it is not a traditional system where cows are milked at set times. Our technicians are trained to know how to best account for this.

Timing Devices

One other very important point to ensure data quality and integrity, not to mention it is a requirement for AP Supervised Herds (factors for production are applied based on milking times to calculate 24 hour production), is the proper functioning (and plugged in) of an approved timing device. The Lactanet technician will verify the milking times on the timing device. If the timing device is not working properly, it is up to the Technician to bring it to your attention so that you can address the malfunction before the next test.

We ask for your cooperation on the points outlined above and when Lactanet test and bulk tank results do not meet our target, we will communicate this to you, outline the plan for the next test, and work with you to find a solution. If at any time you feel your components or production level are not reflective of your herd, please contact us so we can work together to investigate further. Thank you in advance for your cooperation and attention to this matter.

For questions or concerns, do not hesitate to bring up with your technician or Jeff Gunn, Regional Manager, at (902) 759-4866.