BC milk MARKETING BOARD

Component & Quality Testing Information

The BCMMB expanded component and quality testing for all BC dairy producers effective May 1, 2016 to provide results from every pickup, or as often as possible. Producers have made many enquiries since we began emailing component and quality results to fully understand all the information.

> Components

The BCMMB will test every viable sample for "components;" this includes:

- *Butterfat* (BF)
- *Protein* (PR)
- *Lactose and other solids* (LOS). Lactose is measured from your milk sample and other solids are a factor that is added to the lactose result

In the past, producer's test results were based on a weighted average of four tests per month, but now are based on all tested pickups for the month. Individual producer test results will be available on the producer section of the BCMMB website under "daily results," as well as by email.

> Quality

The BCMMB will test every viable sample for "quality", except for IBC where we will only use fresh samples, this includes:

- *Somatic Cell Count* (SCC) – we test every viable sample for SCC
- *Individual Bacteria Count* (IBC) – Previously tested as Plate Loop Count or PLC, we strive to test TWO (2) samples per week. Bacteria can only be tested on fresh samples hence the lesser frequency. If you see a result displayed as "0" this means that particular sample was not tested for IBC.
- *Cryoscope* (Cryo or Cry) – Is a measure of added water in your milk, we test every viable sample for Cryo.

Quality results (SCC and IBC) will be done by a weighted average at the end of the month. IBC will only be tested on fresh samples (which will done twice per week); the two tests will be performed randomly on fresh samples. An example calculation on weighted average is found below.

Cryoscope results are treated a bit differently. If in a month a producer has two results above 3.7%, then their month end result is the average of those results above 3.7%. If a producer has only one or no results above 3.7% then their month end average is the straight average of all their cryoscope results for that month.

> Milk Urea Nitrogen (MUN)

We test every viable sample for MUN. MUN does not factor into producers component or quality results, and has no impact to a producers pay. MUN is provided to producers for information only to help maximize on-farm feeding efficiencies. Producers are encouraged to discuss with their feed representatives or nutritionists to further understand how MUN impacts your farm. MUN will fluctuate day to day, depending on many factors such as time since feeding and feed intake, and it is important to look at trends and averages rather than day to day MUN results.

> Inhibitor Infractions

It is the responsibility of every producer to ensure that milk made available for pick-up meets the provincial guidelines. A producer whose milk has been found to contain veterinary drug residues or inhibitory substance residues is not permitted to sell or supply milk until a subsequent bulk milk sample taken from the farm bulk milk tank tests negative. Following a positive test result:

- Shipments are immediately suspended for the offending producer.
- A producer is required to test their milk and provide a negative result to the BCMMB before shipping can resume.
- It is the producer's responsibility to inform the BCMMB to resume pick up.

Please see attached Non-Qualifying Milk Policy for further information.

> Producer Concerns

If you receive a lab result that you believe is not representative of your milk, you must contact the Quality & Transportation department at the BCMMB as quickly as possible. We have the ability to review component and quality results to ensure test results are representative of your milk. We will not, however, change component or quality results due to a producer request unless we can determine that the results are not representative of your milk.

The Below Tables summarize the thresholds for the all lab results:

Component	Frequency of testing	Quality Bonus Threshold	Ministry Penalty Threshold	Comments	Payment Calculation
Butterfat (BF)	Every Sample	N/A	N/A	< 3.35 results in deemed quota	Based on actual Volume multiplied by test result = value in kh/hL
Protein (PR)	Every Sample	N/A	N/A		Based on actual Volume multiplied by test result = value in kh/hL
Lactose & Other Solids (LOS)	Every Sample	N/A	N/A	Other solids is a factor added to lactose	Based on actual Volume multiplied by test result = value in kh/hL

Quality	Frequency of Testing	Quality Bonus Threshold	Ministry Penalty Threshold	Comments	Payment Calculation
Somatic Cell Count (SCC)	Every Sample	≤ 250,000	≤ 400,000	Results are truncated @ 999,000	Based on weighted average using only the volumes from the dates that SCC is reported
Individual Bacteria Count (IBC)	2 tests per week (random)	≤ 30,000	≤ 121,000	Results are truncated @ 999,000	Based on weighted average using only the volumes from the dates that IBC is reported. See example
Cryoscope (CRY)	Every Sample	≤ 3.7%	≤ 3.7%	This test detects "added water"	If ≤ 1 cryo test result is greater than 3.7% in a month, all cryo results for that month are averaged. If ≥ 2 cryo test results are greater than 3.7% in a month, only cryo results ≥3.7% are averaged.
Inhibitor	Once per month (random)	Not Permitted	Not Permitted	See attached Non-Qualifying Milk Policy document at the end of this notice	If a sample is found positive for any inhibitory substance either at a processor or during random testing, an infraction will be levied. See attached Non-Qualifying Milk Policy document at the end of this notice
Milk Urea Nitrogen (MUN)	Every Sample	N/A	N/A	A high MUN value is considered to be 14-16 mg/dL. A high MUN is indicative of excess urea which is likely an imbalance in rumen available protein/carbohydrate. High urea can cost a producer money.	N/A

Example of a weighted average calculation

Date	Volume Shipped	IBC	Volume x IBC
01-May	3,200	0	No test
03-May	3,279	8,000	26,232,000
05-May	3,130	10,000	31,300,000
07-May	6,409	0	No test

Volume (A)	Volume X IBC (B)	Weighted Average = (B divided by A)
6,409	57,532,000	8,977

If you have any questions or concerns, please contact Kelly Harris at 604-854-4479 or kharris@bcmilk.com, or you can contact Woody Siemens at 604-854-4476 or wsiemens@bcmilk.com