

Macdonald Campus Farm Cattle Complex Standard Operating Procedure # DC-615

MILK SAMPLING

1. PURPOSE

Collecting milk samples directly from the cow's teats for culturing. Samples are taken from cows with;

- High somatic cell count.
- Clinical and subclinical mammary infections.
- · Fresh cows (when indicated as good for the bulk tank on the Milking Instructions Sheet)
- Research purposes

2. **RESPONSIBILITY**

Trained and qualified personnel.

3. MATERIAL

- 3.1 Alcohol swabs
- 3.2 Sterile tubes
- 3.3 Permanent marker
- 3.4 California Mastitis Test (CMT) paddle and solution
- 3.5 Clean nitrile or latex gloves

4. PROCEDURES

- 4.1 Practice clean techniques.
- 4.2 Don gloves.
- 4.3 Prepare the cow for milking as per SOP <u>DC-605 Preparing cow for Milking</u>.
- 4.4 Perform a California Mastitis Test (CMT) as per SOP <u>DC-617 California Mastitis Test.</u> Identify any quarter that is positive and record it in the Treatment Log.
- 4.5 Attach the tail on overhead bars so it does not interfere with and contaminate your sampling._Restrain the cow with a halter, if required.
- 4.6 Remove your gloves.
- 4.7 Identify each tube with:
 - Date (on the Q1 tube)
 - Quarter # (Q1, Q2, Q3, Q4)
 - Cow ID #
- 4.8 Place the sample tubes and box of alcohol swabs on paper towel on the stall floor, next to the cow (close enough for you to reach but not too close for the cow to step on it)
- 4.9 Don clean gloves.
- 4.10 Any quarters testing positive on the CMT should be sampled last to avoid contamination of the sample.
- 4.11 Using alcohol wipe, disinfect the tip of the teat thoroughly, ensuring all teat dip is removed.
- 4.12 Remove the cap from the tube and hold it facing down (without the inside of the cap touching your gloves) in the same hand you will be holding the sample tube.
- 4.13 Hold the tube at 45° angle and fill at least ³/₄. Place the cap back on.
- 4.14 Repeat steps 4.11 to 4.13 using new alcohol wipe for each teat.



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- 4.15 Detach the tail once all your samples have been taken. The cow can now be milked. (refer to the corresponding SOPs:
 - DC-607: Milking Procedure: General
 - DC-608: Milking Fresh Cows
 - DC-609: Milking Pail Cows
 - DC-610: Milking Cos with Box Stall Milker
 - DC-611: Milking Staphylococcus aureus Cows
- 4.16 Culture the sample as per SOP <u>DC-616: Milk Culturing.</u>

NOTE: If samples cannot be immediately cultured, Store them in the refrigerator for up to 24 hours.

4.17 Return all materials to designated areas in the pharmacy.

Document Status and Revision History

DATE	STATUS
12-Dec-2017	Version 01: MAC Campus FACC approved
10-Aug-2023	Version 02: MAC Campus FACC approved