

LERO Bandalero Ranch Equine

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## **INSTRUCTIONS for Milk Calcium Evaluation to Estimate Foaling**

Using CHEMetrics Hardness (calcium) Titrets Kit found at https://www.chemetrics.com

Catalog No. K-1705 range 50-500 ppm as CaCO3

- 1. Collect at least 1.5 ml mare's mammary secretions into clean container (clean udder ideal).
- 2. Measure 1.5 ml mammary secretion into syringe and deposit into mixing cup included in kit
- 3. Add 9 ml **DISTILLED WATER** to mixing cup and swirl secretions and water until mixed thoroughly
- 4. Add 1 drop **RED INDICATOR DYE** to mixing cup and swirl again until contents mixed thoroughly. *\*Mixture will change a variety of color variations of orange-magenta*
- 5. Take glass ampoule and gently break tip at indicated BLACK MARK
- Load ampoule into Titrettor (aspirator device) included in kit.
  \*Do NOT express lever on Titrettor unless tip of ampoule is submerged in sample
- 7. Submerge tip of ampoule into sample and **LIGHTLY** and **BRIEFLY** aspirate some sample into ampoule.
- 8. Remove ampoule and gently rock ampoule contents 3-5 times mixing it

## \*Watch for **BLUE** Color Change!

- 9. If no color change, continue aspirating **SMALL** amounts of sample into ampoule, mix, and check color
- Once <u>BLUE</u> color change occurs STOP and PRESS the lever, releasing the rest of the air in the ampule. Now CHECK number that correlates with level of fluid in ampoule.

Run test once a day, preferably in afternoon/evening, when able to collect secretions from mare's udder especially if calcium level exceeds 100 ppm. Most ( $\sim$ 90%) mares will not foal within 24 hours with milk calcium levels < 100 ppm

When the calcium level first reaches 200 ppm, about 50% of mares will foal within 24 hours. (Birth within 24 hours is uncommon when calcium levels are below 200 ppm.). Birth usually is very near (usually within 24 hours) when the mare's calcium concentration reaches 300-500 ppm.

Rapid change (e.g. serial calcium values of 55, 80, 125+ ppm) over span of 3 days also is a good indication that foaling is fast approaching and may occur before mare tests at level >200 ppm.

## CLICK HERE to Watch the VIDEO for a full demonstration.



