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# THE FAMILY COW RAW MILK LAB

*Placing Simple, Economical Food Safety “Test-and-Hold” protocol within the reach of every raw milk farmer.*

**Analog Incubator:** Order Item# 3055-80

Source: **Weber Scientific:** <http://www.weberscientific.com/lab-incubators-quincy-lab> **1-800-328-8378**

Cost: \$340

**Mini Light Box:** Order Item# 3045-30 (The Light Box and Magnifier aid in reading test results)

**Mini Magnifier:** Order Item# 3045-33

**AC Adapter Plug:** Order Item# 3045-36

Source: **Weber Scientific** <http://www.weberscientific.com/mini-light-box-bel-art-scienceware>

Cost for pair w/AC adapter plug: \$350.

**Butterfield’s Buffer: (99ml buffered water)** Order Item# 3127-14 (for dilution of sample for SPC test)

Source: **Weber Scientific** <http://www.weberscientific.com/weber-db-sterilized-pre-filled-dilution-bottles>

Cost: \$.60 each (sold by case of 72)

**Transfer Pipets, 3 ml Sterile:** (individually wrapped) Order Item# 3017-18

Source: **Weber Scientific** <http://www.weberscientific.com/disposable-transfer-pipets>

Cost: \$.07 per pipet (sold by case of 500)

**Coliform Count Petri Films:** Item# 6410 (Ask for the Free ‘Coliform Count Plate Interpretation Guide’)

<http://www.shop3m.com/3m-petrifilm-coliform-count-plate-6410.html>

Source: **3M Food Safety:** [www.3m.com/foodsafety.com](http://www.3m.com/foodsafety.com) **1-866-290-0795 ext. 13** (Jenny/Beth)

Cost: \$.88 each

**SPC (Rapid Aerobic Count) Petri Film:** Item# 6478 (Ask for the Free ‘Aerobic Count Plate Interpretation Guide’)

[http://www.3m.com/3M/en\\_US/company-us/all-3m-products/~3M-Petrifilm-Rapid-Aerobic-Count-Plates?N=5002385+8709314+8710780+8711017+8711295+8711414+8711726+8716589+8720505+3293303854&rt=rud](http://www.3m.com/3M/en_US/company-us/all-3m-products/~3M-Petrifilm-Rapid-Aerobic-Count-Plates?N=5002385+8709314+8710780+8711017+8711295+8711414+8711726+8716589+8720505+3293303854&rt=rud)

Source: **3M Food Safety:**

Cost: \$1.43 each

## NOTES:

- Total cost for supplies needed to run both tests together is about \$2.98.
- The \$690 cost of the incubator and test reading supplies adds about \$.18 per test if it depreciated over 5 years with 15 lots tested per week.
- The total labor to start tests, read tests and record results is about 15 minutes total for each testing.
- Electricity to run the incubator is minuscule.
- Attainable bench-marks for hygienic raw milk production are <3CC/ml and <2000 SPC/ml. At *The Family Cow* we often are often <half of this bench-mark. We start looking for the “The Why” and “The Fix” if our in-the-bottle numbers move above this. We test every lot we bottle.

If you have questions or wish for an over-the-phone tutorial to learn lab operation and test reading, call me at 717-729-9730. I’ll be glad to set up an appointment to teach you. It is very simple and within the reach of all.

Keep Safe!

Edwin Shank

Founder: *The Family Cow* LLC, Chambersburg, PA

Owner: Shankstead EcoFarm

Advisory Board Member: RAWMI (Raw Milk Institute) [www.RawMilkInstitute.org](http://www.RawMilkInstitute.org)