**Exhibit 1**

**Specifications**

**Somatic Cell Counter and Autosampler (SomaCount FC Somatic Cell Counter or an approved equal) must include the following features:**

**1. Somatic Cell Counter** must include the following features:

1.1 The unit must be a self-contained bench-top unit capable of counting somatic cells in raw, fresh, or preserved milk.

1.2 The process for counting cells must be approved by the FDA and/or AOAC. 1.3 The instrument must meet NCIMS (National Conference on Interstate Milk Shipments) standards, utilizing the most current FDA form 2400.

1.4 Specifications

1.4.1 Sample condition – fresh or preserved raw milk

1.4.2 Sample carry-over must be typically less than 1.5% from sample to sample

1.4.3 Repeatability – A Standard in the 300K to 800K range must have a coefficient of variation of 5% or less on 10 replicates

1.4.4 Replicate injections from a single vial must have a coefficient of variance of : <7.0% @ 105 cells/mL, <5.0% @ 3x105 cells/mL, <4.0% @ 5x105 cells/mL

1.4.5 Measurement range – 0 to 107 cells

1.4.6 Sample temperature 30-45°C

1.4.7 Accuracy – within 10% relative to Direct Microscopic Somatic Cell Count

1.4.8 Standard’s average – Each must be within 10% of the DSMCC for that level, except within 15% for the 100K-200K standard

1.4.9 Measuring speed – Minimum of 50 samples per hour

1.4.10 The counter must have the ability to have bar-code readers attached

 2. **Autosampler, Data Station, Printer** must include the following features:

 2.1. Self-Contained Bench-top Model

2.2. New and a model currently in production. Refurbished or demonstration models are not acceptable.

2.3. Built in data station or computer with software counter.

2.4. Printer for print-out of test results.

2.5. It is the desire of the State of Oklahoma to purchase an instrument that has as many automated capabilities as possible.

2.6. Able to operate in laboratory conditions that range from 16 - 27°C and a relative humidity of 20 - 70 % non-condensing. The instrument must be able to operate with temperature changes of up to 2.5°C per hour without any degradation of performance.

2.7. Instrument start-up and shut down is computer controlled.

2.8. Fully compatible with equipment in section 1.

2.9. Fully integrated with data station software for unattended operation.

**3. Software**

3.1. The instrument controlling software is 64-bit architecture running under Microsoft Windows 10.

3.2. Has password security that provides selected access to different parts of the software.

3.3. Reports and sample data are exportable as a PDF and/or XLS file type.

3.4 Has a minimum of 16” flat panel multimedia monitor, optical mouse and keyboard.

3.5 Has a hard disk that will hold at least 500 GB of information.

3.6 Includes an integrated LAN network adaptor.

**4. Installation, Training, Support, and Service**

4.1 Specifications

4.1.1 Shipping costs must be included with FOB to the destination agency located in Oklahoma City, OK

4.1.2 Installation combined with initial onsite operator training on method development and preventative maintenance must be included

4.1.3 During installation, the vendor must demonstrate operational qualification by validating the system performance

4.1.4 Manufacturer must provide telephone support between the hours of 7:00 am and 6:00 pm Central Time. Call back times must not exceed 4 business hours

4.1.5 Manufacturer must provide a minimum of a 1-year on-site warranty and preventative maintenance including parts, travel, labor, and instrument control software updates