Cleaning the SQA Concentration Channel While Monitoring REF2
Applies to the following: ALL SQA-V (V, Vb, Ve, Vp and Vt)
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Introduction

A value in the service report called **REF2** is a good indicator of the cleanliness of the CONCENTRATION channel of the SQA-V. When the **REF2** value decreases below a certain range, the SQA concentration channel needs to be cleaned. Dirt or semen from previous testing may be obstructing the concentration "light" and a potential system failure can occur. To avoid a system shut down, MES recommends following the process below.

Checking the REF2 value:

1. **Optimal working range for REF2:** REF2 should be in the range of 3000+/-100 (mV). This is the optimal working range of the concentration channel of the SQA-V. When REF2 drops below 2900, its usually because there is dirt/semen debris on the concentration channel.

2. **How often should REF2 be checked?: Daily** when the SQA-V is turned on.

3. **Checking REF2:** The best and easiest way to insure that REF2 is checked each day is to set AUTO PRINT SELF TEST REPORT ON SET-UP in the V-Sperm 'SETTINGS'. If this is set, a SELF TEST report strip will be printed each time the SQA-V is turned on.

4. **How to set the AUTO PRINT default from V-Sperm:** Run V-Sperm and select:
   Setup>>SQA-V>>SQA-V Defaults
   The screen below will be displayed. Check the option to: **AUTOMATICALLY PRING SELF TEST REPORT on START-UP**

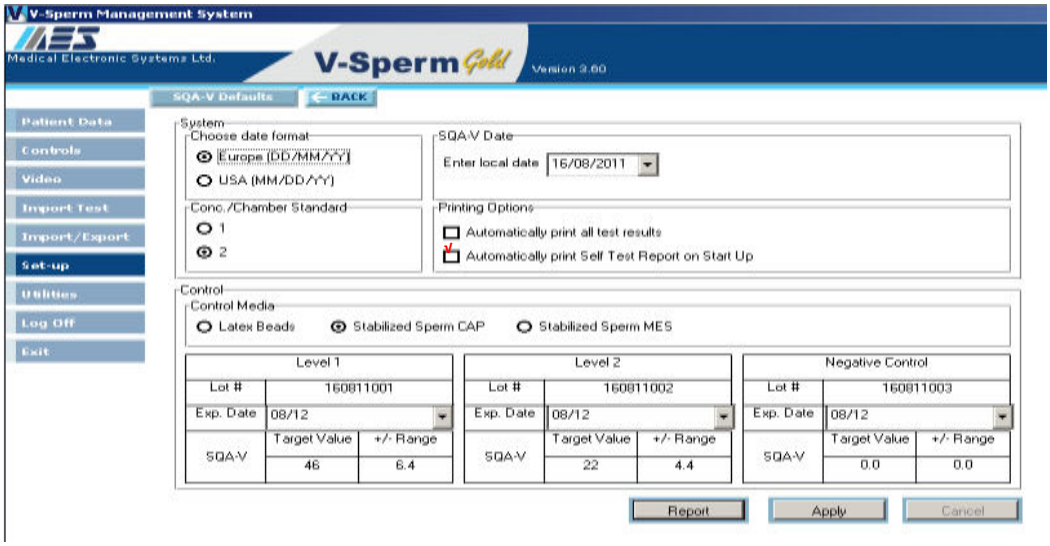

Figure1: Define Automatic Printing of SELF TEST REPORT

Cleaning the SQA-V Concentration Channel:

How often to clean: It is recommended to clean the SQA-V:

- DAILY or after every 5-10 tests
- If the system fails the self- test
- Whenever the REF2 is below 2900mV (to get the REF2 back to 3000 +/- 100mV)

SQA-V Cleaning Instructions:

1. Turn on the SQA-V and connect it to the V-sperm software.

2. Insert the wooden brush (bristle-side down) into the lower chamber of the SQA-V (figure 2)
3. Pull the brush out of the chamber while sweeping or "dusting off" the LED (you will feel a step or shelf at the back and top of the chamber – this is the top of the LED).

Figure 2: cleaning using the wooden brush

4. While cleaning, monitor the value of REF2 on V-sperm as follows:
   - On the SQA-V- go to: SERVICE -> SERVICE DATA
   - Open V-Sperm and go to Utilities -> Self Test data. The Online monitoring screen will be seen (Figure 3).
   - Opening this screen is recommended when cleaning the concentration channel. It allows seeing the impact of the cleaning during the operation.

Important note: in order to achieve effective cleaning- verify that you are actually touching the REF2 hole. This can be done by examining the values of REF2 on the online monitoring screen: when the brush touches the REF2 hole- the value of REF2 will drop significantly (to around 50-100mV)

Figure 3: online monitoring screen on V-sperm

5. Reboot the SQA-V and observe self-test results. The SQA-V should now PASS the self-test and the value of REF2 should increase relatively to the initial value (prior to the cleaning process)
6. If the SELF TEST fails or in case the value of REF2 has not increased- repeat cleaning procedure with the brush.
7. In case the problem persists after repeating the cleaning process- please refer to MES customer support

Distribution:

ALL SQA Users