

RPC Review Instructions

April 20, 2011

- Check the **date** of the RPC to ensure the correct time frame. RPC's may be completed no sooner than 15 days prior to the RPC month. (1/17, 5/17 or 9/16).
- The RPC must be submitted in color (electronic or paper)
- Current **Versions**:
 - DMT 1.04
 - PIC 2.05 or 2.06
 - Modem 1.06
 - Questions 1.00
 - Reports 1.02
- **Temperatures**
 - Sample Chamber Temperature acceptable range 44-52°C.
 - Breath Tube temp 40°C ±10.
 - Digital Sim 34.0°C ±0.5
- **Settings**
 - The voltages will differ depending on the brand of detector being used.
 - If the Bias is set at ~120V, the lamp and cooler voltages should be ~2.0.
 - If the Bias is set at ~80V, the cooler should be 1.7 ±0.2V.
- **Pump Info**
 - Flow rate should be >3.0
- **Detector Info**
 - The detector voltage should be within ±0.300V of 0.000V.
 - If the detector voltage is not within range, review the RPC log for voltage trends.
 - If the detector voltage is between +0.300 - +0.600V, the detector voltage will be flagged in yellow in the RPC log.
 - If the detector voltage is <-0.300 or >+0.600, the voltage will be flagged in red in the RPC log and the instrument will be put Out Of Service and returned to VDHL for service.
 - For further instruction/information, refer to the DataMaster DMT Technical Manual.
- **Filter Info**
 - Zero = true for all filters.

- **Calibration Check**

- $X_q = \leq \pm 4\%$

- **Accuracy and Precision Check**

- Concentration: Ensure the proper concentration is entered.
- Lot: Check the simulator solution log to ensure the concentration matches the lot that was entered.
- Average: Ensure the average is within $\pm 5\%$ of the concentration.
- Std Dev: Ensure the result is < 0.002 .
- If an incorrect lot number or target concentration is entered, the DMT Supervisor shall be notified immediately. A Simulator Solution Change protocol may be performed to assign the correct solution to the instrument. The SSC report will be sent to VDHL and attached to the original RPC report. This is deemed acceptable as long as the original average reported on the RPC is within $\pm 5\%$ or the actual target value.

- **RFI Test**

- Should report RFI detected.

- **Sample Acceptance Test**

- Should report Passed.
- The graph should reflect a shallow, intermittent, suck-back and alcohol free breath sample.
- A passing sample acceptance test should not show the presence of apparent ethanol. If there is a sustained ethanol reading (more than a noise blip) the DMT Supervisor shall be contacted and requested to perform a new sample acceptance test on a check-in ticket. The check-in ticket will be sent to VDHL and attached to the RPC. If the second attempt at a sample acceptance test still displays apparent ethanol, further investigation by VDHL Technical Services are required.

- **Logging and filing of reports**

If all parameters have been met, the reviewer should sign and date the RPC. In the DMT log spreadsheet, enter the solution, Accuracy and Precision, and voltage results information on the RPC Track tab. If the detector voltage is flagged, also change the color of the cells for Serial Number and Location to yellow or red as necessary.

Any corrections required of the agency should be documented on the notes lines, if necessary, a TSI may be started. All completed, reviewed RPC Reports should be filed in the DataMaster monthly completed reports file in the DataMaster filing cabinet in the IR laboratory (room 124). Once the monthly updates have been completed, the report will be filed in corresponding folder for the specific DMT.