TE-PUFPLUS Hi-Vol Calibration Data Form

Site Information

Full Site Name: Burns Harbor - Port of Indiana

Site Abbreviation BHP Sampler Serial No. 1002

Field Technician Name Kate Haile & Scott Hamilton Date 7/8/2021 Time 08:20 CST

Timer/Sensor Checks *Allow Temp/Pressure standard to acclimate for 10 minutes before reading.*

Is the date correct? YES NO (circle one)

Is the time within ±5 minutes of local standard time? YES NO (circle one)

Temp/Pressure Standard Make/Model: BGI Incorporated, Delta Cal

Temp/Pressure Standard Serial No.: 179112 Temp/Pressure Standard Certification Date: 2/2/2021

$T_{amb\ transfer\ standard}$ (°C) 19.6 $T_{amb\ PUFPLUS}$ (°C) 19.9 ($T_{amb\ transfer\ standard} - T_{amb\ PUFPLUS}$)= -0.3 °C

Is the PUFPLUS Temperature sensor within ±2°C of the Transfer Standard? YES NO (circle one)

$P_{amb\ transfer\ standard}$ (mmHg) 742.0 $P_{amb\ PUFPLUS}$ (mmHg) 743 ($P_{amb\ transfer\ standard} - P_{amb\ PUFPLUS}$)= -1 mmHg

Is the PUFPLUS Pressure sensor within ±10mmHg of the Transfer Standard? YES NO (circle one)

- If both of the above are YES, sensor check is complete. Proceed with flow check.
- If either of the both is NO, use the TE-PUFPLUS Operator's Manual to troubleshoot and retry the sensor check. If the issue persists, add a calibration point to the faulty sensor as described in the SOP in Section 10.2.3. Note that a calibration was done here:

Calibration Orifice Information

Orifice Make/Model: Graseby/Tisch Orifice Serial No.: 62K

Orifice Slope "$m_{orifice}$": 10.46067 Orifice Intercept "$b_{orifice}$": -0.16706

Orifice Certification Date: 2/4/2021

Hi-Vol Calibration Information *Check off each item.*

☑ Flow Conditions are set to "STD"?

☑ Flow Rate is set to 225 liters per minute?

Calibration Method: Manual Automatic (circle one)

Enter $m_{orifice}$ value from above when prompted to "Enter Calibrator Standard m".

Enter $b_{orifice}$ value from above when prompted to "Enter Calibrator Standard b".

☑ Hi Flow Rate should be 247 liters/min

☑ Lo Flow Rate should be 202 liters/min

Correction Coefficient "R" 0.9999 >0.990? Yes No (circle one)

Hi-Vol Slope "m_{hivol}" (A1) 39.8398 Hi-Vol Intercept "b_{hivol}" (A0) -1.6643

Note: If the Correction Coefficient is ≤0.990, repeat the calibration.

☑ Calibration saved?