



Calibration Date: 12/30/2015 Calibration By: BZ Calibration Due: 6/30/2016

Using: Spirometer  
Use Procedure: WH-L-AMER-Cal-1141  
Description:  
Serial: 29.12  
Model: 71-S  
Asset #: 1268

Run Number	Meter Initial	Barometric Pressure	Spirometer Temperature	Vapor Pressure of H <sub>2</sub> O (Hg)	Meter Temperature	Meter Pressure	Measurement Inches	Spirometer Volume	Meter Final	Y
1	642.560	29.12	70.0	0.7320	64.8	2	22.9375	1.0426	643.560	1.0064
2	643.560	29.12	69.4	0.7170	64.6	2	22.9375	1.0426	644.560	1.0077
3	644.560	29.12	69.6	0.7220	64.5	2	22.9375	1.0426	645.560	1.0070
AVERAGE									1.0070	
STDEV.									0.00065	
MU of Y									0.0017	

Reviewed by: KS Date: 12/30/15 0.739

Measurement Uncertainty is calculated using the following formula:  
 $O.M.U. = k \cdot \sqrt{(A.D.)^2 + (S.D.)^2 + (R.M.U.)^2}$   
O.M.U. = Overall Measurement Uncertainty  
A.D. = Average Deviation of the difference of all measured results compared to the reference value.  
S.D. = Standard Deviation of the difference of all measured results compared to the reference value.  
k = Confidence Factor (2 for 95% confidence)  
R.M.U. = Standard Measurement Uncertainty of Reference Measurement Equipment. R.M.U. is considered as the measurement uncertainty as stated on calibration certificates of equipment, or the tolerance listed in it