CONSOLIDATED ANALYTICAL SYSTEMS

TE-6070V Sampler Calibration Worksheet
(Using G-Factor)

Customer Co./Org.	S.H. Bell
Customer Contact	Jim Langbehn
Project No.	17-3007
Insturment Model	TE-6070V
ID/Serial No.	P10244BL (HV1)
Instrument Site	S4
VFC G-Factor	0.0251890900

Date	9/11/2017
Technician Initials	TP
Location	Chicago, IL
Time of arrival	15:35
Time of departure	16:30
Service	Flow Verification

Calibration Orifice

Make	Tisch
Model	TE-5028A
Serial #:	3303
Qa Slope (m):	0.93771
Qa Int (b):	0.00061
Calibration Due Date:	02/16/18

Ambient Conditions

Temp (°F)	69.6	**BP (in Hg)**	29.60
Ta (°K)	294	**Pa (mm Hg):**	751.8
Ta (°C)	20.9		

Calibration Information

Run Number	Orifice "H2O	Qa m3/min	Sampler "H2O	Pf mm Hg	Po/Pa	Calculated m3/min	% of Diff
1	3.00	1.154	5.90	11.011	0.985	1.204	4.33
2	3.00	1.154	14.60	27.248	0.964	1.177	1.99
3	3.00	1.154	18.20	33.966	0.955	1.165	0.95
4	3.00	1.154	18.40	34.339	0.954	1.165	0.87
5	2.90	1.135	25.80	48.150	0.936	1.141	0.53

Calculate Total Air Volume Using G-Factor

Enter Average Temperature During Sampling Duration (Deg F)	N/A
Average Temperature During Sampling Duration (Deg K)	N/A
Enter Average Barometric Pressure During Sampling Duration (In Hg)	N/A
Average Barometric Pressure During Sampling (mm Hg)	N/A
Enter Clean Filter Sampler Inches of Water	N/A
Enter Dirty Filter Sampler Inches of Water	N/A
Average Filter Sampler (mm Hg)	N/A
Enter Total Runtime in Hours (xx.xx)	N/A
Po/Pa	N/A
Calculated Flow Rate (m3/min)	N/A
Total Flow (m3)	N/A

Calculations

Calibrator Flow (Qa) = 1/Slope*(SQRT(H20*(Ta/Pa))-Intercept)

Pressure Ratio (Po/Pa) = 1-Pf/Pa

% Difference = (Look Up Flow-Calibrator Flow)/Calibrator Flow*100

NOTE: Ensure calibration orifice has been certified within 12 months of use