

## CERTIFICATE OF CALIBRATION

<b>CUSTOMER:</b>	TRACE ANALYTICS LLC AUSTIN, TX	<b>CALIBRATION DATE:</b>	11/29/17
<b>PO NUMBER:</b>	17K152	<b>CALIBRATION DUE:</b>	11/29/18
<b>INST. MANUFACTURER:</b>	KEY INSTRUMENTS	<b>PROCEDURE:</b>	NAVAIR 17-20MG-02
<b>INST. DESCRIPTION:</b>	FLOWMETER	<b>CALIBRATION FLUID:</b>	AIR @ 14.7 PSI 70 F
<b>MODEL NUMBER:</b>	14 - 140 SLPM (01B74004458)	<b>STANDARD(S) USED:</b>	A4 DUE 06-28-2018
<b>SERIAL NUMBER:</b>	485895	<b>NIST TRACE # 'S:</b>	1390386562,1390378403,1331545884
<b>RATED UNCERTAINTY:</b>	+/- 3% F.S.	<b>AMBIENT CONDITIONS:</b>	764mmHGA 43% RH 73F
<b>UNCERTAINTY GIVEN:</b>	+/- 0.172% RD K=2	<b>CERTIFICATE FILE #:</b>	485895.17
<b>NOTES:</b>	AS RECEIVED/AS LEFT WITHIN SPEC REFERENCE CONDITIONS ARE 760mmHGA 70F		

TEST POINT NUMBER	UUT INDICATED SLPM	DM.STD. ACTUAL SLPM	% F.S. ERROR
1	14	15.341	0.958
2	20	21.279	0.914
3	50	52.093	1.495
4	80	80.490	0.350
5	110	111.295	0.925
6	140	140.976	0.697

All instruments used in the performance of the shown calibration have traceability to the National Institute of Standards and Technology (NIST). The uncertainty ratio between the calibration standards (DM.STD.) used and the unit under test (UUT) is a minimum of 4:1, unless otherwise noted. Calibration has been performed per the shown procedure number, in accordance with ISO 10012:2003, ISO 17025:2005, ANSI/NCSL-Z-540.3, and/or MIL-STD-45662A. Test methods: API2530-92 & ASME MFC-3M-1989.

**Dick Munns Company** • 11133 Winners Circle • Los Alamitos, CA 90720  
Phone (714) 827-1215 • Fax (714) 827-0823

This Calibration Certificate shall not be reproduced, except in full, without approval by DICK MUNNS COMPANY. The data shown applies only to the instrument being calibrated and under the stated conditions of calibration.

Date:

Approved By:

Calibration Technician:

11/29/2017