

SOUTHWEST RESEARCH INSTITUTE®

6220 Culebra Road, P.O. Drawer 28510 Institute Quality Systems Institute Calibration Laboratory Phone: 210-522-5215 Fax 210-522-4834



Calibration Laboratory Certificate #0972-01

Certificate of Calibration

Cost Center / Customer: DIV20 / DON BANNON

Mail Stop: B57

Manufacturer/Model: METTLER / PR5002

Description: BALANCE Serial Number: 1122142733 Asset Number: 010225

Procedure: BALANCES & SCALES - 1 DEC 06

Work Order: 303101256

Date Issued: 2-May-2011

Date Calibrated: 2-May-2011
* Date Due: 2-Nov-2011

** Results: FOUND-LEFT

Temperature: 69.7 °F Humidity: 44 %RH Barometer: 14.36 psia

This certificate documents traceability to the National Institute of Standards and Technology (NIST) and the International System of Units (SI). The Laboratory quality system conforms to ISO/IEC 17025, 2005, ANSI/NCSL Z540-1-1994 and relevant requirements of the ISO 9000-2000 standard. This certificate shall not be reproduced, except in full, without the written approval of the Southwest Research Institute Calibration Laboratory. This certificate shall not be used to claim product endorsement by Southwest Research Institute, American Association for Laboratory Accreditation (A2LA) or any agency of the U. S. Government. Results of this calibration relate only to the instrument described above at the time of calibration and does not imply any long term stability of the instrument.

*Determined by the customer, does not imply the instrument will remain within tolerance as any number of factors may cause an out-of-tolerance condition before this date. **Data type found in this certificate or attached measurement report must be interpreted as: Found-left - adjustment and/or repair was not performed, As-found - data is before unit is adjusted and/or repaired, As-left - data is after adjusted and/or repaired was performed. The customer has sole responsibility for determination of in-/out-of-tolerance or compliance/noncompliance.

Measurement uncertainty calculated in accordance with the method described in the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM), for a confidence level of approximately 95 percent using a coverage factor of k=2.

Remarks: None

Standards Used

Asset #	<u>Manufacturer</u>	Model	Description	Cal Date	Due Date
001715	RICE LAKE	500 G	WEIGHT, CLASS S	21-Jul-2010	21-Jul-2011
001716	RICE LAKE	I KG	WEIGHT, CLASS I	4-Jun-2010	4-Jun-2011
001717	RICE LAKE	2 KG	WEIGHT, CLASS I	4-Jun-2010	4-Jun-2011
001718	RICE LAKE	2 KG	WEIGHT, CLASS I	4-Jun-2010	4-Jun-2011
001719	RICE LAKE	5 KG	WEIGHT, CLASS I	4-Jun-2010	4-Jun-2011

Walt Hill

Laboratory Manager m:\VA2LA OCT_08.rpt

Carlos Mendoza Metrology Technician

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Southwest Research Institute Calibration Laboratory Measurement Report

Work Order:	303101256	Mfr:	Mettler	Technician:	com
Asset No:	010225	Model:	PR5002	Type Data:	Found-left
Serial No:	1122142733	Туре:	Balance	Cal Date:	2-May-11
Remarks:					

Function/Range	Applied	TI Reading	Difference	± Limit		Result	% Limit
Corner Load	grams	grams	grams	grams			
Reference	2000						
Front		2000.01	0.01	0.04		Pass	25%
Rear		2000.00	0.00			Pass	0%
Left		2000.00	0.00			Pass	0%
Right		1999.98	-0.02			Pass	50%
Repeatability	grams	grams					
. 1 · 1	2000	1999.98					
2		1999.98					
3		1999.98					
4		1999.99					
5		1999.98					
6		1999.97					
7		1999.98					
8		1999.98					
9		1999.98					
10		1999.98					
Std Deviation		0.005		0.010		Pass	47%
Function/Range	Applied	TI Reading	Difference	± Limit	± Uncertainty	Result	% Limit
Direct Weighing	grams	grams	grams	grams	grams		
	0	0.00	0.00	0.04	0.013	Pass	0%
	500	500.01	0.01			Pass	25%
	1000	1000.00	0.00			Pass	0%
	1500	1500.00	0.00			Pass	0%
	2000	2000.01	0.01			Pass	25%
	2500	2500.00	0.00			Pass	0%
	3000	2999.99	-0.01			Pass	25%
	3500	3499.99	-0.01			Pass	25%
	4000	4000.00	0.00			Pass	0%
		4499.99	-0.01			Pass	25%
		5000.02	0.02			Pass	50%
			OF REPORT				
	3500	3499.99 4000.00 4499.99 5000.02	-0.01 0.00 -0.01 0.02			Pass Pass Pass	