



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: DIV20

Mail Stop: B51

Customer: DON BANNON

Manufacturer/Model: OHAUS / AV3102

Description: BALANCE

Serial Number: 8028091195

Asset Number: 012867

Procedure: BALANCES & SCALES - 1 DEC 06

Work Order: 303087715

Date Issued: 12-May-2009

Date Calibrated: 12-May-2009

* Date Due: 12-Nov-2009

** Results: FOUND-LEFT

Temperature: 79°F

Humidity: 42 %

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:

Standards Used

Asset #	Manufacturer	Model	Description	Cal Date	Due Date
001712	RICE LAKE	100G	WEIGHT, CLASS 1	5-Aug-2008	5-Aug-2009
001713	RICE LAKE	200G	WEIGHT, CLASS 1	5-Aug-2008	5-Aug-2009
001714	RICE LAKE	200G	WEIGHT, CLASS S	5-Aug-2008	5-Aug-2009
001715	RICE LAKE	500G	WEIGHT, CLASS S	5-Aug-2008	5-Aug-2009
001716	RICE LAKE	1KG	WEIGHT, CLASS 1	11-Jun-2008	11-Jun-2009
001717	RICE LAKE	2KG	WEIGHT, CLASS 1	11-Jun-2008	11-Jun-2009

Walt Hill

Laboratory Manager

Carlos Mendoza

Metrology Technician

Southwest Research Institute
Calibration Laboratory
Measurement Report

Work Order:	303087715	Mfr:	Ohaus	Technician:	com
Asset No:	012867	Model:	AV3102		
Serial No:	8028091195	Type:	Balance	Cal Date:	12-May-09
Remarks:					
Ambient Conditions 79 °F 42 % RH 14.24 PSIA					

Function/Range	Applied	TI Reading	Difference	+/-Limit	+/-Uncertainty	Found/Left
Corner Load	grams	grams	grams	grams	grams	Result
Reference	2000.00					
Front	0.00	0.01	0.01	0.04		Pass
Rear	0.00	0.00	0.00	0.04		Pass
Left	0.00	0.01	0.01	0.04		Pass
Right	0.00	-0.01	-0.01	0.04		Pass
Repeatability						
1	2000.00	2000.00				
2	2000.00	1999.99				
3	2000.00	1999.99				
4	2000.00	2000.00				
5	2000.00	2000.00				
6	2000.00	2000.01				
7	2000.00	2000.01				
8	2000.00	1999.99				
9	2000.00	2000.00				
10	2000.00	2000.01				
Std Deviation		0.008		0.020		Pass
Linearity	0.00	0.00	0.00	0.04	0.015	Pass
	300.00	299.99	-0.01	0.04	0.015	Pass
	600.00	600.00	0.00	0.04	0.015	Pass
	900.00	899.99	-0.01	0.04	0.015	Pass
	1200.00	1200.00	0.00	0.04	0.015	Pass
	1500.00	1500.00	0.00	0.04	0.015	Pass
	1800.00	1799.98	-0.02	0.04	0.015	Pass
	2100.00	2099.99	-0.01	0.04	0.015	Pass
	2400.00	2399.97	-0.03	0.04	0.015	Pass
	2700.00	2699.98	-0.02	0.04	0.015	Pass
	3000.00	2999.98	-0.02	0.04	0.015	Pass

End of Report