



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: PAROSCIENTIFIC / 740-45A

Description: PRESSURE GAGE, DIGITAL

Serial Number: 60999

Asset Number: 003972

Procedure: PRESSURE, DIGITAL GAGES - 15 MAR 06

Work Order: 303084107

Date Issued: 28-Oct-2008

Date Calibrated: 28-Oct-2008

***Date Due :** 28-Apr-2009

****Results:** FOUND-LEFT

Temperature: 68°F

Humidity: 40 %

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. **Found/Left = adjustment and/or repair was not required, As Left = adjusted and/or repaired was required. The customer has sole responsibility for determination of in-/out-of-tolerance or compliance/noncompliance. See Remarks or attached Measurement Report with the same Work Order number for data.

Reported uncertainty calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM) and represents an expanded uncertainty with a coverage factor of k=2 to approximate a 95% confidence level.

Remarks Accuracy +/-0.025% of Full Scale

Standards Used

<u>Asset #</u>	<u>Manufacturer</u>	<u>Model</u>	<u>Description</u>	<u>Cal Date</u>	<u>Due Date</u>
002856	RUSKA	2468-714-69900	WEIGHT SET, CLASS N/S	17-Jul-2008	17-Jul-2010
003048	RUSKA	2468-758	DEAD WEIGHT PISTON	23-May-2007	23-May-2009
003949	TROEMNER	5MG-100G	WEIGHT SET, CLASS 1	16-Apr-2008	16-Apr-2009
013203	HASTINGS	DV-6M	VACUUM GAUGE	7-Dec-2007	7-Dec-2008

Reviewed By: (✓) srk () mar () wgh

Laboratory Quality Manager

m:VA2LA OCT_08.rpt

Calibrated By: Perry Carpenter

Metrology Technician

Southwest Research Institute
Calibration Laboratory
Measurement Report

Work Order:	303084107	Mfr:	Paroscientific	Technician:	PWC
Asset No:	003972	Model:	740-45A		
Serial No:	60999	Type:	Digital Pressure Gauge	Cal Date:	28-Oct-08
Remarks:	Accuracy +/- 0.025% of Full Scale.				

Function/Range	Test Point	TI Reading	Difference	+/-Limit	+/-Uncertainty	Found/Left
Pressure	PSIA	PSIA	PSIA	PSIA	PSIA	Result
	0.0010	0.0043	0.0033	0.0113	0.0019	Pass
	4.5048	4.5030	-0.0018	0.0113	0.0019	Pass
	9.0048	9.0036	-0.0012	0.0113	0.0019	Pass
	13.5048	13.5040	-0.0008	0.0113	0.0019	Pass
	18.0048	18.0039	-0.0009	0.0113	0.0019	Pass
	22.5048	22.5041	-0.0007	0.0113	0.0019	Pass
	27.0048	27.0035	-0.0013	0.0113	0.0019	Pass
	31.5048	31.5034	-0.0014	0.0113	0.0019	Pass
	36.0048	36.0036	-0.0012	0.0113	0.0019	Pass
	40.5048	40.5041	-0.0007	0.0113	0.0019	Pass
	45.0048	45.0052	0.0004	0.0113	0.0019	Pass
	40.5048	40.5042	-0.0006	0.0113	0.0019	Pass
	36.0048	36.0038	-0.0010	0.0113	0.0019	Pass
	31.5048	31.5034	-0.0014	0.0113	0.0019	Pass
	27.0048	27.0040	-0.0008	0.0113	0.0019	Pass
	22.5048	22.5041	-0.0007	0.0113	0.0019	Pass
	18.0048	18.0043	-0.0005	0.0113	0.0019	Pass
	13.5048	13.5042	-0.0006	0.0113	0.0019	Pass
	9.0048	9.0039	-0.0009	0.0113	0.0019	Pass
	4.5048	4.5030	-0.0018	0.0113	0.0019	Pass
	0.0010	0.0049	0.0039	0.0113	0.0019	Pass
END OF REPORT						