



SOUTHWEST RESEARCH INSTITUTE®

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Calibration Laboratory
Certificate #0972-01

Certificate of Calibration

Submitted By: DIV20

Address: B51

Contact: DON BANNON

Manufacturer / Model: PAROSCIENTIFIC / 740-45A

Description: PRESSURE GAGE, DIGITAL

Serial No: 60999

Asset No: 003972

Procedure: PRESSURE, DIGITAL GAGES - 15 MAR 06

Work Order: 303080486

Date Issued: Apr 25, 2008

Calibration Date: Apr 25, 2008

***Calibration Due:** Oct 25, 2008

Calibration Location: Bldg. 64

Environment: Temp. 68.0°F Hum. 40 %RH

****Data Type:** FOUND-LEFT

DivID/Location: N/A

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 client 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

Asset No.	Serial No.	Manufacturer	Model	Description	Cal Due
013203	13203	HASTINGS	DV-6M	VACUUM GAUGE	Dec 07, 08
003949	3949	TROEMNER	5MG-100G	WEIGHT SET, CLASS 1	Apr 16, 09
003048	TL-1261	RUSKA	2468-758	DEAD WEIGHT PISTON	May 23, 09
003220	2581	HASTINGS	VT-6B	VACUUM GAUGE	Jul 26, 08
005141	38936(18-31)	RUSKA	2468-714-69900	WEIGHT SET, CLASS N/S	Feb 28, 09

Reviewed by: () srk () mar () wgh

Measurements by: Perry Carpenter
Metrology Technician

Southwest Research Institute
Calibration Laboratory
Measurement Report

Work Order:	303080486	Mfr:	Paroscientific	Technician:	PWC
Asset No:	003972	Model:	740-45A		
Serial No:	60999	Type:	Digital Pressure Gauge	Cal Date:	25-Apr-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	-0.0020	-0.0030	0.0113	0.0019	Pass
	4.5048	4.5039	-0.0009	0.0113	0.0019	Pass
	9.0048	9.0045	-0.0003	0.0113	0.0019	Pass
	13.5048	13.5047	-0.0001	0.0113	0.0019	Pass
	18.0048	18.0047	-0.0001	0.0113	0.0019	Pass
	22.5048	22.5045	-0.0003	0.0113	0.0019	Pass
	27.0048	27.0045	-0.0003	0.0113	0.0019	Pass
	31.5048	31.5042	-0.0006	0.0113	0.0019	Pass
	36.0048	36.0041	-0.0007	0.0113	0.0019	Pass
	40.5048	40.5047	-0.0001	0.0113	0.0019	Pass
	45.0048	45.0052	0.0004	0.0113	0.0019	Pass
	40.5048	40.5047	-0.0001	0.0113	0.0019	Pass
	36.0048	36.0042	-0.0006	0.0113	0.0019	Pass
	31.5048	31.5042	-0.0006	0.0113	0.0019	Pass
	27.0048	27.0046	-0.0002	0.0113	0.0019	Pass
	22.5048	22.5046	-0.0002	0.0113	0.0019	Pass
	18.0048	18.0050	0.0002	0.0113	0.0019	Pass
	13.5048	13.5051	0.0003	0.0113	0.0019	Pass
	9.0048	9.0048	0.0000	0.0113	0.0019	Pass
	4.5048	4.5039	-0.0009	0.0113	0.0019	Pass
	0.0010	-0.0013	-0.0023	0.0113	0.0019	Pass

END OF REPORT