

Customer: MESA LABORATORIES
12100 WEST 6TH AVE
LAKEWOOD, CO 80228

PO Number: PO-013021



Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Manufacturer: Ruska Instruments Corp.
Model Number: 7250i
Description: Pressure Calibrator
Serial Number: 68521
ID: TE10572

As-Found: Out Of Tolerance
As-Left: In Tolerance

Calibration Date: Feb 22, 2018
Due Date: Feb 22, 2019

Calibrated To: Manufacturer Specification
Calibration Procedure: 1-AC79413-0

Transcat Calibration Laboratories have been audited and found in compliance with ISO /IEC 17025:2005. Accredited calibrations performed within the Lab's Scope of Accreditation are indicated by the presence of the Accrediting Body's Logo and Certificate Number. Any measurements on an accredited calibration not covered by that Lab's Scope of Accreditation are listed in the notes section of the certificate. SCC, NRC, CLAS or ANAB do not guarantee the accuracy of an individual calibration by accredited laboratories.

Transcat calibrations, as applicable, are performed in compliance with the requirements of the Transcat Quality Manual QAC -P01-000 Revision 1.0, the customer's Purchase Order and/or Quality Agreement requirements, ISO 9001:2008, ANSI/NCSL Z540.1-1994 (R2002). Complete records of work performed are maintained by Transcat and are available for inspection. Laboratory standards used in the performance of this calibration are listed below.

Transcat documents the traceability of measurements to the SI units through the National Institute of Standards and Technology (NIST), or the National Research Council of Canada (NRC), or other national measurement institutes (NMI) that are signatories to the CIPM Mutual Recognition Arrangement, or accepted fundamental and/or natural physical constants, or by the use of specified methods, consensus standards or ratio type measurements. Documentation supporting traceability information is available for review upon written request at a Transcat facility. The measured quantity and the measurement uncertainty are required for further dissemination of traceability.

Uncertainties are reported with a coverage factor k=2, providing a level of confidence of approximately 95%. All calibrations have been performed using processes having a TUR of 4:1 or better (3:1 for mass calibrations), unless otherwise noted. The Test Uncertainty Ratio (TUR) is calculated in accordance with NCSL International RP-18. For mass calibrations: Conventional mass referenced to 8.0 g/cm³.

The results in this report relate only to the item calibrated or tested. Recorded calibration data is valid at the time of calibration within the stated uncertainties at the environmental conditions noted. The determination of compliance to the specification is specific to the model/serial no./ID no. referenced above based on the tolerances shown; these tolerances are either the original equipment manufacturers (OEM's) warranted specifications or the client's requested specifications. This certificate may not be reproduced except in full, without the written approval of Transcat. Additional information, if applicable may be included on separate report(s).

Notes:

Unit was received Out of Tolerance. Unit was adjusted to meet manufacturer's specifications. All readings were normalized.

The OOT readings were verified.

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As Found Data

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found	O O T	Cal Process Uncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
Leak Test										
			P	P	P					
Pressure Linearity: 150psi Range										
	0.0000psi	±(0.00188 psi)	-0.0019	0.0019	-0.0002 psi					
	4.6875psi	±(0.0407% Rdg)	4.6856	4.6894	4.6874 psi		7.5e-005	1.4e-004	psi	25.3 : 1
	14.0625psi	±(0.0153% Rdg)	14.0603	14.0647	14.0778 psi	*	2.3e-004	2.5e-004	psi	9.8 : 1
	23.4375psi	±(0.01097% Rdg)	23.4349	23.4401	23.4389 psi		3.8e-004	4.0e-004	psi	6.9 : 1
	32.8125psi	±(0.00943% Rdg)	32.8094	32.8156	32.8136 psi		5.3e-004	5.3e-004	psi	5.9 : 1
	46.8750psi	±(0.00901% Rdg)	46.8708	46.8792	46.8751 psi		8.9e-004	8.9e-004	psi	4.7 : 1
	65.6250psi	±(0.00901% Rdg)	65.6191	65.6309	65.6249 psi		1.2e-003	1.2e-003	psi	4.7 : 1
	93.7500psi	±(0.00901% Rdg)	93.7416	93.7584	93.7536 psi		1.8e-003	1.8e-003	psi	4.7 : 1
	131.2500psi	±(0.00901% Rdg)	131.2382	131.2618	131.2513 psi		2.5e-003	2.5e-003	psi	4.7 : 1
	150.0000psi	±(0.00901% Rdg)	149.9865	150.0135	150.0045 psi		2.9e-003	2.9e-003	psi	4.7 : 1
Pressure Hysteresis: 150psi Range										
	65.6250psi	±(0.00901% Rdg)	65.6191	65.6309	65.6249 psi		1.1e-003	1.1e-003	psi	5.6 : 1
	46.8750psi	±(0.00901% Rdg)	46.8708	46.8792	46.8768 psi		7.5e-004	7.5e-004	psi	5.6 : 1
	32.8125psi	±(0.00943% Rdg)	32.8094	32.8156	32.8143 psi		5.3e-004	5.3e-004	psi	5.9 : 1
Vacuum Linearity: 150psi Range										
	0.0000psi	±(0.0075 psi)	-0.0075	0.0075	0.0000 psi					
	-3.6250psi	±(0.20703% Rdg)	-3.6325	-3.6175	-3.6252 psi		5.8e-005	1.3e-004	psi	100.0 : 1
	-7.2500psi	±(0.10372% Rdg)	-7.2575	-7.2425	-7.2502 psi		1.2e-004	1.7e-004	psi	64.7 : 1
	-10.8750psi	±(0.06937% Rdg)	-10.8825	-10.8675	-10.8753 psi		1.7e-004	2.1e-004	psi	43.1 : 1
	-14.5000psi	±(0.05227% Rdg)	-14.5076	-14.4924	-14.5003 psi		2.3e-004	2.6e-004	psi	32.8 : 1
Vacuum Hysteresis: 150psi Range										
	0.0000psi	±(0.0075 psi)	-0.0075	0.0075	0.0004 psi		0.0e+000		psi	

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Description	Setpoints	Accuracy	Low Limit	High Limit	As Found	O O T	Cal Process Uncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
Barometric Reference Sensor Option										
	11.0000psia	±(0.002 psia)	10.9980	11.0020	11.0019 psia		1.8e-004	2.9e-004	psia	11.4 : 1
	13.0000psia	±(0.002 psia)	12.9980	13.0020	13.0018 psia		2.1e-004	3.1e-004	psia	9.6 : 1
	15.0000psia	±(0.002 psia)	14.9980	15.0020	15.0019 psia		2.4e-004	3.3e-004	psia	8.3 : 1

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As Left Data

Description	Setpoints	Accuracy	Low Limit	High Limit	As Left	O O T	Cal Process Uncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
Leak Test										
			P	P	P					
Pressure Linearity: 150psi Range										
	0.0000psi	±(0.00188 psi)	-0.0019	0.0019	0.0000 psi					
	4.6875psi	±(0.0407% Rdg)	4.6856	4.6894	4.6874 psi		7.5e-005	1.4e-004	psi	25.3 : 1
	14.0625psi	±(0.0153% Rdg)	14.0603	14.0647	14.0625 psi		2.3e-004	2.5e-004	psi	9.8 : 1
	23.4375psi	±(0.01097% Rdg)	23.4349	23.4401	23.4376 psi		3.8e-004	4.0e-004	psi	6.9 : 1
	32.8125psi	±(0.00943% Rdg)	32.8094	32.8156	32.8127 psi		5.3e-004	5.3e-004	psi	5.9 : 1
	46.8750psi	±(0.00901% Rdg)	46.8708	46.8792	46.8751 psi		8.9e-004	8.9e-004	psi	4.7 : 1
	65.6250psi	±(0.00901% Rdg)	65.6191	65.6309	65.6245 psi		1.2e-003	1.2e-003	psi	4.7 : 1
	93.7500psi	±(0.00901% Rdg)	93.7416	93.7584	93.7496 psi		1.8e-003	1.8e-003	psi	4.7 : 1
	131.2500psi	±(0.00901% Rdg)	131.2382	131.2618	131.2495 psi		2.5e-003	2.5e-003	psi	4.7 : 1
	150.0000psi	±(0.00901% Rdg)	149.9865	150.0135	149.9997 psi		2.9e-003	2.9e-003	psi	4.7 : 1
Pressure Hysteresis: 150psi Range										
	65.6250psi	±(0.00901% Rdg)	65.6191	65.6309	65.6257 psi		1.1e-003	1.1e-003	psi	5.6 : 1
	46.8750psi	±(0.00901% Rdg)	46.8708	46.8792	46.8751 psi		7.5e-004	7.5e-004	psi	5.6 : 1
	32.8125psi	±(0.00943% Rdg)	32.8094	32.8156	32.8129 psi		5.3e-004	5.3e-004	psi	5.9 : 1
Vacuum Linearity: 150psi Range										
	0.0000psi	±(0.0075 psi)	-0.0075	0.0075	0.0000 psi					
	-3.6250psi	±(0.20703% Rdg)	-3.6325	-3.6175	-3.6252 psi		5.8e-005	1.3e-004	psi	100.0 : 1
	-7.2500psi	±(0.10372% Rdg)	-7.2575	-7.2425	-7.2502 psi		1.2e-004	1.7e-004	psi	64.7 : 1
	-10.8750psi	±(0.06937% Rdg)	-10.8825	-10.8675	-10.8753 psi		1.7e-004	2.1e-004	psi	43.1 : 1
	-14.5000psi	±(0.05227% Rdg)	-14.5076	-14.4924	-14.5003 psi		2.3e-004	2.6e-004	psi	32.8 : 1
Vacuum Hysteresis: 150psi Range										
	0.0000psi	±(0.0075 psi)	-0.0075	0.0075	0.0004 psi		0.0e+000		psi	

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As Left Data

Description	Setpoints	Accuracy	Low Limit	High Limit	As Left	O O T	Cal Process Uncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
Barometric Reference Sensor Option										
	11.0000psia	±(0.002 psia)	10.9980	11.0020	11.0000 psia		1.8e-004	2.9e-004	psia	11.4 : 1
	13.0000psia	±(0.002 psia)	12.9980	13.0020	12.9999 psia		2.1e-004	3.1e-004	psia	9.6 : 1
	15.0000psia	±(0.002 psia)	14.9980	15.0020	15.0000 psia		2.4e-004	3.3e-004	psia	8.3 : 1

Traceable Standards

Asset	Manufacturer	Model Number	Description	Cal Date	Due Date	Traceability Number	Use
DW11BA	Fluke/DH Instruments	PG7601	Piston Gauge	1-Nov-17	30-Nov-18	5-&DW11BA-5-1	AF/AL
DW11LOW	Fluke/DH Instruments	PC-7100/7600-10-TC	Gas Piston-Cylinder Module	2-Mar-17	31-Mar-22	5-&DW11LOW-1-1	AF/AL
DW11MASS	Fluke/DH Instruments	MS-AMH-38	AMH Mass Set	2-Mar-17	31-Mar-18	5-&DW11MASS-1-1	AF/AL
DW11MID	Fluke/DH Instruments	PC-7100/7600-50	Gas Piston-Cylinder Module	2-Mar-17	2-Mar-22	5-&DW11MID-1-1	AF

The use of the standard is defined as: AF - used for as-found readings, AL - used for as-left readings.

Environmental Data

	Temperature	Relative Humidity	Temp / RH Asset
As Found:	70.41°F /21.34°C	41.80%	DewK1
As Left:	70.23°F / 21.24°C	41.50%	DewK1

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Calibrated At:
1181 Brittmoore Road
Houston, TX 77043


Facility Responsible:
1181 Brittmoore Road
Houston, TX 77043
800-828-1470

Calibrated By:

 **Electronically Signed By:**
Michael Pennock

Michael Pennock Feb 22, 2018
Calibration Technician 02:10:54 -06:00

Reviewed By:

 **Electronically Signed By:**
Michael Valenzuela for

Scott D. Caine Feb 22, 2018
Lab Manager 06:58:31 -06:00

Unit Barcode: 
0900B221970

Date Received: February 17, 2018
Service Level: R9

Customer: MESA LABORATORIES

PO Number: PO-013021

Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Manufacturer: Ruska Instruments Corp.	Service Type: R9
Model Number: 7250i	
Description: Pressure Calibrator	
Serial Number: 68521	Calibration Date: Feb 22, 2018
ID: TE10572	Date Due: Feb 22, 2019
	Calibration Procedure: 1-AC79413-0

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found	O O T	Cal Process Uncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
Leak Test			P	P	P					

The column labeled Cal Process Uncertainty (CPU) does not include the short term component of the UUT. The column labeled Measurement Uncertainty includes both CPU and the short term component of the UUT. TUR is calculated using CPU.

Note: Reported resolution of the UUT does not represent calibration uncertainty or accuracy of the UUT.

Revision 0

Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Field not applicable. (P = Pass, F = Fail)

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Description	Setpoints	Accuracy	Low Limit	High Limit	As Found	O	Cal Process	Measurement	Units	TUR
						T	Uncertainty (k=2; ±)	Uncertainty (k=2; ±)		
Pressure Linearity: 150psi Range										
	0.0000psi	±(0.00188 psi)	-0.0019	0.0019	-0.0002 psi					
	4.6875psi	±(0.0407% Rdg)	4.6856	4.6894	4.6874 psi		7.5e-005	1.4e-004	psi	25.3 : 1
	14.0625psi	±(0.0153% Rdg)	14.0603	14.0647	14.0778 psi	*	2.3e-004	2.5e-004	psi	9.8 : 1
	23.4375psi	±(0.01097% Rdg)	23.4349	23.4401	23.4389 psi		3.8e-004	4.0e-004	psi	6.9 : 1
	32.8125psi	±(0.00943% Rdg)	32.8094	32.8156	32.8136 psi		5.3e-004	5.3e-004	psi	5.9 : 1
	46.8750psi	±(0.00901% Rdg)	46.8708	46.8792	46.8751 psi		8.9e-004	8.9e-004	psi	4.7 : 1
	65.6250psi	±(0.00901% Rdg)	65.6191	65.6309	65.6249 psi		1.2e-003	1.2e-003	psi	4.7 : 1
	93.7500psi	±(0.00901% Rdg)	93.7416	93.7584	93.7536 psi		1.8e-003	1.8e-003	psi	4.7 : 1
	131.2500psi	±(0.00901% Rdg)	131.2382	131.2618	131.2513 psi		2.5e-003	2.5e-003	psi	4.7 : 1
	150.0000psi	±(0.00901% Rdg)	149.9865	150.0135	150.0045 psi		2.9e-003	2.9e-003	psi	4.7 : 1
Pressure Hysteresis: 150psi Range										
	65.6250psi	±(0.00901% Rdg)	65.6191	65.6309	65.6249 psi		1.1e-003	1.1e-003	psi	5.6 : 1
	46.8750psi	±(0.00901% Rdg)	46.8708	46.8792	46.8768 psi		7.5e-004	7.5e-004	psi	5.6 : 1
	32.8125psi	±(0.00943% Rdg)	32.8094	32.8156	32.8143 psi		5.3e-004	5.3e-004	psi	5.9 : 1

The column labeled Cal Process Uncertainty (CPU) does not include the short term component of the UUT. The column labeled Measurement Uncertainty includes both CPU and the short term component of the UUT. TUR is calculated using CPU.

Note: Reported resolution of the UUT does not represent calibration uncertainty or accuracy of the UUT.

Revision 0

Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Field not applicable. (P = Pass, F = Fail)

Customer: MESA LABORATORIES

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Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found	O	Cal Process	Measurement	Units	TUR
						O	Uncertainty	Uncertainty		
						T	(k=2; ±)	(k=2; ±)		
Vacuum Linearity: 150psi Range										
	0.0000psi	±(0.0075 psi)	-0.0075	0.0075	0.0000 psi					
	-3.6250psi	±(0.20703% Rdg)	-3.6325	-3.6175	-3.6252 psi		5.8e-005	1.3e-004	psi	100.0 : 1
	-7.2500psi	±(0.10372% Rdg)	-7.2575	-7.2425	-7.2502 psi		1.2e-004	1.7e-004	psi	64.7 : 1
	-10.8750psi	±(0.06937% Rdg)	-10.8825	-10.8675	-10.8753 psi		1.7e-004	2.1e-004	psi	43.1 : 1
	-14.5000psi	±(0.05227% Rdg)	-14.5076	-14.4924	-14.5003 psi		2.3e-004	2.6e-004	psi	32.8 : 1
Vacuum Hysteresis: 150psi Range										
	0.0000psi	±(0.0075 psi)	-0.0075	0.0075	0.0004 psi		0.0e+000		psi	

The column labeled Cal Process Uncertainty (CPU) does not include the short term component of the UUT. The column labeled Measurement Uncertainty includes both CPU and the short term component of the UUT. TUR is calculated using CPU.

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Revision 0

Certificate/SO Number: 5-B6E2P-20-1 Revision 0

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Description	Setpoints	Accuracy	Low Limit	High Limit	As Found	O O T	Cal Process Uncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
Barometric Reference Sensor Option										
	11.0000psia	±(0.002 psia)	10.9980	11.0020	11.0019 psia		1.8e-004	2.9e-004	psia	11.4 : 1
	13.0000psia	±(0.002 psia)	12.9980	13.0020	13.0018 psia		2.1e-004	3.1e-004	psia	9.6 : 1
	15.0000psia	±(0.002 psia)	14.9980	15.0020	15.0019 psia		2.4e-004	3.3e-004	psia	8.3 : 1

As Found Data recorded from February 21, 2018 to February 22, 2018

Temperature 70.4°F / 21.3°C Relative Humidity 42% Temp/RH Asset DewK1

Asset	Manufacturer	Model	Description	Cal Date	Due Date	Traceability Numbers
DW11BA	Fluke/DH Instruments	PG7601	Piston Gauge	Nov 01, 2017	Nov 30, 2018	5-&DW11BA-5-1
DW11LOW	Fluke/DH Instruments	PC-7100/7600-10-TC	Gas Piston-Cylinder Module	Mar 02, 2017	Mar 31, 2022	5-&DW11LOW-1-1
DW11MASS	Fluke/DH Instruments	MS-AMH-38	AMH Mass Set	Mar 02, 2017	Mar 31, 2018	5-&DW11MASS-1-1
DW11MID	Fluke/DH Instruments	PC-7100/7600-50	Gas Piston-Cylinder Module	Mar 02, 2017	Mar 02, 2022	5-&DW11MID-1-1

Remarks

Unit was received Out of Tolerance. Unit was adjusted to meet manufacturer's specifications . All readings were normalized.

The OOT readings were verified.

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Revision 0

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Customer: MESA LABORATORIES

PO Number: PO-013021

Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Manufacturer: Ruska Instruments Corp.	Service Type: R9
Model Number: 7250i	
Description: Pressure Calibrator	
Serial Number: 68521	Calibration Date: Feb 22, 2018
ID: TE10572	Date Due: Feb 22, 2019
	Calibration Procedure: 1-AC79413-0

Description	Setpoints	Accuracy	Low Limit	High Limit	As Left	O O T	Cal Process Uncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
Leak Test			P	P	P					

The column labeled Cal Process Uncertainty (CPU) does not include the short term component of the UUT. The column labeled Measurement Uncertainty includes both CPU and the short term component of the UUT. TUR is calculated using CPU.

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Revision 0

Field not applicable. (P = Pass, F = Fail)

TRANSCAT[®] SUPPLEMENTAL REPORT

Trust in every measure CALIBRATION LAB DATA AS LEFT

Customer: MESA LABORATORIES

PO Number: PO-013021

Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Description	Setpoints	Accuracy	Low Limit	High Limit	As Left	O	Cal Process	Measurement	Units	TUR
						O	Uncertainty	Uncertainty		
						T	(k=2; ±)	(k=2; ±)		
Pressure Linearity: 150psi Range										
	0.0000psi	±(0.00188 psi)	-0.0019	0.0019	0.0000 psi					
	4.6875psi	±(0.0407% Rdg)	4.6856	4.6894	4.6874 psi		7.5e-005	1.4e-004	psi	25.3 : 1
	14.0625psi	±(0.0153% Rdg)	14.0603	14.0647	14.0625 psi		2.3e-004	2.5e-004	psi	9.8 : 1
	23.4375psi	±(0.01097% Rdg)	23.4349	23.4401	23.4376 psi		3.8e-004	4.0e-004	psi	6.9 : 1
	32.8125psi	±(0.00943% Rdg)	32.8094	32.8156	32.8127 psi		5.3e-004	5.3e-004	psi	5.9 : 1
	46.8750psi	±(0.00901% Rdg)	46.8708	46.8792	46.8751 psi		8.9e-004	8.9e-004	psi	4.7 : 1
	65.6250psi	±(0.00901% Rdg)	65.6191	65.6309	65.6245 psi		1.2e-003	1.2e-003	psi	4.7 : 1
	93.7500psi	±(0.00901% Rdg)	93.7416	93.7584	93.7496 psi		1.8e-003	1.8e-003	psi	4.7 : 1
	131.2500psi	±(0.00901% Rdg)	131.2382	131.2618	131.2495 psi		2.5e-003	2.5e-003	psi	4.7 : 1
	150.0000psi	±(0.00901% Rdg)	149.9865	150.0135	149.9997 psi		2.9e-003	2.9e-003	psi	4.7 : 1
Pressure Hysteresis: 150psi Range										
	65.6250psi	±(0.00901% Rdg)	65.6191	65.6309	65.6257 psi		1.1e-003	1.1e-003	psi	5.6 : 1
	46.8750psi	±(0.00901% Rdg)	46.8708	46.8792	46.8751 psi		7.5e-004	7.5e-004	psi	5.6 : 1
	32.8125psi	±(0.00943% Rdg)	32.8094	32.8156	32.8129 psi		5.3e-004	5.3e-004	psi	5.9 : 1

The column labeled Cal Process Uncertainty (CPU) does not include the short term component of the UUT. The column labeled Measurement Uncertainty includes both CPU and the short term component of the UUT. TUR is calculated using CPU.

Note: Reported resolution of the UUT does not represent calibration uncertainty or accuracy of the UUT.

Revision 0

Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Field not applicable. (P = Pass, F = Fail)

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Customer: MESA LABORATORIES

PO Number: PO-013021

Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Description	Setpoints	Accuracy	Low Limit	High Limit	As Left	O	Cal Process	Measurement	Units	TUR
						O	Uncertainty	Uncertainty		
						T	(k=2; ±)	(k=2; ±)		
Vacuum Linearity: 150psi Range										
	0.0000psi	±(0.0075 psi)	-0.0075	0.0075	0.0000 psi					
	-3.6250psi	±(0.20703% Rdg)	-3.6325	-3.6175	-3.6252 psi		5.8e-005	1.3e-004	psi	100.0 : 1
	-7.2500psi	±(0.10372% Rdg)	-7.2575	-7.2425	-7.2502 psi		1.2e-004	1.7e-004	psi	64.7 : 1
	-10.8750psi	±(0.06937% Rdg)	-10.8825	-10.8675	-10.8753 psi		1.7e-004	2.1e-004	psi	43.1 : 1
	-14.5000psi	±(0.05227% Rdg)	-14.5076	-14.4924	-14.5003 psi		2.3e-004	2.6e-004	psi	32.8 : 1
Vacuum Hysteresis: 150psi Range										
	0.0000psi	±(0.0075 psi)	-0.0075	0.0075	0.0004 psi		0.0e+000		psi	

The column labeled Cal Process Uncertainty (CPU) does not include the short term component of the UUT. The column labeled Measurement Uncertainty includes both CPU and the short term component of the UUT. TUR is calculated using CPU.

Note: Reported resolution of the UUT does not represent calibration uncertainty or accuracy of the UUT.

Revision 0

Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Field not applicable. (P = Pass, F = Fail)

Customer: MESA LABORATORIES

PO Number: PO-013021

Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Description	Setpoints	Accuracy	Low Limit	High Limit	As Left	O O T	Cal Process Uncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
Barometric Reference Sensor Option										
	11.0000psia	±(0.002 psia)	10.9980	11.0020	11.0000 psia		1.8e-004	2.9e-004	psia	11.4 : 1
	13.0000psia	±(0.002 psia)	12.9980	13.0020	12.9999 psia		2.1e-004	3.1e-004	psia	9.6 : 1
	15.0000psia	±(0.002 psia)	14.9980	15.0020	15.0000 psia		2.4e-004	3.3e-004	psia	8.3 : 1

As Left Data recorded from February 21, 2018 to February 22, 2018

Temperature 70.2°F / 21.2°C Relative Humidity 42% Temp/RH Asset DewK1

Asset	Manufacturer	Model	Description	Cal Date	Due Date	Traceability Numbers
DW11BA	Fluke/DH Instruments	PG7601	Piston Gauge	Nov 01, 2017	Nov 30, 2018	5-&DW11BA-5-1
DW11LOW	Fluke/DH Instruments	PC-7100/7600-10-TC	Gas Piston-Cylinder Module	Mar 02, 2017	Mar 31, 2022	5-&DW11LOW-1-1
DW11MASS	Fluke/DH Instruments	MS-AMH-38	AMH Mass Set	Mar 02, 2017	Mar 31, 2018	5-&DW11MASS-1-1

Remarks

Unit was received Out of Tolerance. Unit was adjusted to meet manufacturer's specifications . All readings were normalized.

The OOT readings were verified.

The column labeled Cal Process Uncertainty (CPU) does not include the short term component of the UUT. The column labeled Measurement Uncertainty includes both CPU and the short term component of the UUT. TUR is calculated using CPU.

Note: Reported resolution of the UUT does not represent calibration uncertainty or accuracy of the UUT.

Revision 0

Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Field not applicable. (P = Pass, F = Fail)

Customer: MESA LABORATORIES

PO Number: PO-013021

Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Manufacturer: Ruska Instruments Corp.	Service Type: R9
Model Number: 7250i	
Description: Pressure Calibrator	
Serial Number: 68521	Calibration Date: Feb 22, 2018
ID: TE10572	Date Due: Feb 22, 2019
	Calibration Procedure: 1-AC79413-0

Description	Setpoints	Accuracy	Low Limit	High Limit	As Found	O O T	Cal Process Uncertainty (k=2; ±)	Measurement Uncertainty (k=2; ±)	Units	TUR
Pressure Linearity: 150psi Range										
	14.0625psi	±(0.0153% Rdg)	14.0603	14.0647	14.0778 psi	*	2.3e-004	2.5e-004	psi	9.8 : 1

As Found Data recorded from February 21, 2018 to February 22, 2018

Temperature 70.4°F / 21.3°C Relative Humidity 42% Temp/RH Asset DewK1

Asset	Manufacturer	Model	Description	Cal Date	Due Date	Traceability Numbers
DW11BA	Fluke/DH Instruments	PG7601	Piston Gauge	Nov 01, 2017	Nov 30, 2018	5-&DW11BA-5-1
DW11LOW	Fluke/DH Instruments	PC-7100/7600-10-TC	Gas Piston-Cylinder Module	Mar 02, 2017	Mar 31, 2022	5-&DW11LOW-1-1
DW11MASS	Fluke/DH Instruments	MS-AMH-38	AMH Mass Set	Mar 02, 2017	Mar 31, 2018	5-&DW11MASS-1-1
DW11MID	Fluke/DH Instruments	PC-7100/7600-50	Gas Piston-Cylinder Module	Mar 02, 2017	Mar 02, 2022	5-&DW11MID-1-1

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Note: Reported resolution of the UUT does not represent calibration uncertainty or accuracy of the UUT.

Revision 0

Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Field not applicable. (P = Pass, F = Fail)

Customer: MESA LABORATORIES

PO Number: PO-013021

Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Remarks

Unit was received Out of Tolerance. Unit was adjusted to meet manufacturer's specifications. All readings were normalized.

The OOT readings were verified.

The column labeled Cal Process Uncertainty (CPU) does not include the short term component of the UUT. The column labeled Measurement Uncertainty includes both CPU and the short term component of the UUT. TUR is calculated using CPU.

Note: Reported resolution of the UUT does not represent calibration uncertainty or accuracy of the UUT.

Revision 0

Certificate/SO Number: 5-B6E2P-20-1 Revision 0

Field not applicable. (P = Pass, F = Fail)

Calibration Lab Out of Tolerance Data Report (As Found Data) - Page 2 of 2

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