

Customer: Mesa Laboratories, Inc.
Lakewood, CO
Description: PRT
Model: 5628
Serial Number: 1452
Unit ID: TE10344

Certificate Number: 106673
Calibration Date: 01 SEP 2016
Calibration Due: 01 SEP 2017
Ambient Temperature: 20 to 27°C
Ambient Humidity: 30 to 50%RH
Barcode: C004952

Calibration of this instrument is accredited to ISO/IEC 17025:2005 and is traceable to the International System of Units through NIST or other National Measurement Institutes. The reported expanded uncertainty used a coverage factor of k=2 for a level of confidence equal to approximately 95%. The results stated relate only to the item calibrated.

If this Certificate of Calibration is reproduced, it must be duplicated in full, unless permission for the publication of an approved abstract is obtained in writing from Masy BioServices.

This Certificate of Calibration shall not be used to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the Federal Government.

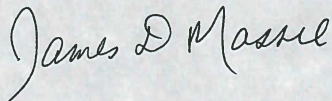
This Certificate of Calibration is not valid unless appropriately signed.

As Found Condition:
In tolerance.

Action Taken:
Calibrated.

As Left Condition:
In tolerance.

Performed by:



Digitally signed by James
Massie, Calibration Technician
Reason: I attest to the
accuracy and integrity of this
document
Date: 2016.09.01 09:28:40
-04'00'

Approved by:



Digitally signed by
Sarah Wilson, Quality
Specialist II
Reason: I am approving
this document
Date: 2016.09.01
13:24:01 -04'00'

PRT Loop-Comparison (Rev 0)

Calibration Measurement Results

Work Instruction: Thermometer PRT Loop Calibration (Rev 0)
 Comments: None.

Certificate Number: 106673

Measurement Results

* Asterisk denotes an Out of Tolerance measurement.

Nominal	As Found Measurement Results				As Left Measurement Results				Expanded Uncertainty
	Standard	UUT	Error	MPE (Tolerance)	Standard	UUT	Error	MPE (Tolerance)	
420°C	418.725	418.720	-0.005	±0.025	418.725	418.720	-0.005	±0.025	0.0060°C
232°C	231.596	231.599	0.003	±0.025	231.596	231.599	0.003	±0.025	0.0045°C
157°C	156.512	156.517	0.005	±0.025	156.512	156.517	0.005	±0.025	0.0039°C
0°C	0.010	0.013	0.003	±0.025	0.010	0.013	0.003	±0.025	0.0017°C
-39°C	-38.715	-38.711	0.004	±0.025	-38.715	-38.711	0.004	±0.025	0.0026°C
-196°C	-195.757	-195.752	0.005	±0.025	-195.757	-195.752	0.005	±0.025	0.0027°C

Configuration and Coefficient Details

Thermometer Information		Coefficient	As Found	As Left
Model:	1502A	R0	25.7789	25.7789
Serial Number:	A72595	A	-2.640471E-05	-2.640471E-05
Unit ID:	TE10345	B	9.387751E-06	9.387751E-06
Channel:	1	A4	8.605919E-06	8.605919E-06
		B4	-7.983488E-06	-7.983488E-06

Measurement Standards Used

MSI	Description	Serial Number	Calibration Due
5739	Super Thermometer	A17148	18 FEB 2017
8742	Resistor, Standard	1102435	09 NOV 2016
1999	SPRT	1119	16 NOV 2016
4815	SPRT	0546	10 NOV 2016
8327	RadioLogger	0215-00845	30 APR 2017
8787	Water Triple-Point Cell	C-G2063	NA

This calibration is based on the information contained in NIST Technical Note 1265, "Guidelines for Realizing the International Temperature Scale of 1990 (ITS-90)" section 4.6. The comparison standards used were calibrated in accordance with ITS-90 and are traceable to SI.

~ End of Report ~