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<b>Customer:</b>	Mesa Laboratories, Inc. Lakewood, CO	<b>Certificate Number:</b>	110013
<b>Description:</b>	PRT	<b>Calibration Date:</b>	28 MAR 2017
<b>Model:</b>	5628	<b>Calibration Due:</b>	28 MAR 2018
<b>Serial Number:</b>	1514	<b>Ambient Temperature:</b>	20 to 27°C
<b>Unit ID:</b>	TE10309	<b>Ambient Humidity:</b>	30 to 50%RH
		<b>Barcode:</b>	C004779

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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.

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**As Found Condition:**

In tolerance.

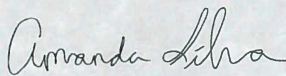
**Action Taken:**

Calibrated with adjustment.

**As Left Condition:**

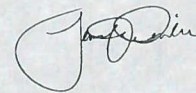
In tolerance.

**Performed by:**



Digitally signed by Amanda  
Silva, Calibration Technician  
Reason: I attest to the  
accuracy and integrity of  
this document  
Date: 2017.03.28 10:15:39  
-04'00'

**Approved by:**



Digitally signed by  
Jennifer Weinbeck,  
Quality Associate I  
Reason: I am approving  
this document  
Date: 2017.03.28  
14:59:54 -04'00'

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PRT Loop-Comparison (Rev 0)



# Calibration Measurement Results

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

Certificate Number: 110013

### 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	417.888	417.900	0.012	±0.025	417.881	417.885	0.004	±0.025	0.0060°C
232°C	231.597	231.609	0.012	±0.025	231.600	231.604	0.004	±0.025	0.0045°C
157°C	156.521	156.532	0.012	±0.025	156.530	156.533	0.003	±0.025	0.0039°C
0°C	0.010	0.012	0.002	±0.025	0.010	0.010	0.000	±0.025	0.0017°C
-39°C	-38.707	-38.706	0.001	±0.025	-38.705	-38.706	-0.001	±0.025	0.0026°C
-196°C	-195.684	-195.686	-0.002	±0.025	-195.704	-195.706	-0.002	±0.025	0.0027°C

### Configuration and Coefficient Details

Thermometer Information		Coefficient	As Found	As Left
Model:	1502A	R0	25.6564	25.6568
Serial Number:	A1C627	A	-1.219448E-04	-3.225520E-05
Unit ID:	TE10244	B	1.138114E-04	-1.778682E-05
Channel:	1	C	-4.418044E-05	0.000000E+00
		A4	6.795516E-06	6.795516E-06
		B4	3.770019E-06	3.770019E-06

### Measurement Standards Used

MSI	Description	Serial Number	Calibration Due
7441	Super Thermometer	A09098	25 AUG 2017
8742	Resistor, Standard	1102435	29 NOV 2017
8247	SPRT	0832	03 AUG 2017
4816	SPRT	0548	12 JUL 2017
8787	Water Triple-Point Cell	C-G2063	NCR
8327	RadioLogger	0215-00845	30 APR 2017

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 ~