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<b>Customer:</b>	Mesa Laboratories, Inc.	<b>Certificate Number:</b>	114094
	Lakewood, CO	<b>Calibration Date:</b>	08 NOV 2017
<b>Description:</b>	PRT	<b>Calibration Due:</b>	08 NOV 2018
<b>Model:</b>	5628	<b>Ambient Temperature:</b>	20 to 27°C
<b>Serial Number:</b>	1705	<b>Ambient Humidity:</b>	30 to 50%RH
<b>Unit ID:</b>	TE10383	<b>Barcode:</b>	C001150

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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.

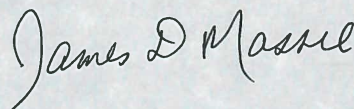
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**As Found Condition:**  
In tolerance.

**Action Taken:**  
Calibrated with adjustment.

**As Left Condition:**  
In tolerance.

**Performed by:**



Digitally signed by James  
Massie, Calibration Technician

Reason: I attest to the accuracy  
and integrity of this document  
Date: 2017.11.08 14:02:39  
-05'00'

**Approved by:**



Digitally signed by Sarah Wilson, Quality  
Specialist II  
Reason: I am approving this document  
Date: 2017.11.09 09:53:15 -05'00'

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PRT (Rev 1a)

# Calibration Measurement Results

Calibration Procedure: Thermometer PRT Loop Calibration (Rev 1)

Certificate Number: 114094

## As Found Measurement Results

Nominal	Standard	UUT	Deviation	Tolerance	Status	Expanded Uncertainty
420°C	417.8339°C	417.836°C	0.0021°C	0.0250°C	Pass	6.0E-03°C
232°C	231.5905°C	231.600°C	0.0095°C	0.0250°C	Pass	4.5E-03°C
157°C	156.5338°C	156.543°C	0.0092°C	0.0250°C	Pass	3.9E-03°C
0°C	0.0099°C	0.016°C	0.0061°C	0.0250°C	Pass	1.7E-03°C
-39°C	-38.6974°C	-38.695°C	0.0024°C	0.0250°C	Pass	2.6E-03°C
-196°C	-195.6593°C	-195.656°C	0.0033°C	0.0250°C	Pass	2.7E-03°C

## As Left Measurement Results

Nominal	Standard	UUT	Deviation	Tolerance	Status	Expanded Uncertainty
420°C	417.8346°C	417.831°C	-0.0036°C	0.0250°C	Pass	6.0E-03°C
232°C	231.5911°C	231.592°C	0.0009°C	0.0250°C	Pass	4.5E-03°C
157°C	156.5333°C	156.533°C	-0.0003°C	0.0250°C	Pass	3.9E-03°C
0°C	0.0099°C	0.010°C	0.0001°C	0.0250°C	Pass	1.7E-03°C
-39°C	-38.6964°C	-38.699°C	-0.0026°C	0.0250°C	Pass	2.6E-03°C
-196°C	-195.6334°C	-195.633°C	0.0004°C	0.0250°C	Pass	2.7E-03°C

# Calibration Measurement Results

Calibration Procedure: Thermometer PRT Loop Calibration (Rev 1)

Certificate Number: 114094

## Configuration Details

Thermometer Information		Coefficient	As Found	As Left
Model	1502A	R0	25.5754	25.5760
Serial Number	A83940	A8	-9.441765E-05	-8.035059E-05
ID	TE10382	B8	-5.076405E-06	-3.581426E-05
Channel	1	A4	-1.017674E-04	-7.459805E-05
		B4	-3.236862E-05	-6.188907E-06

## Measurement Standards Used

MSI	Description	Serial Number	Cal Due Date
5739	Super Thermometer	A17148	07 DEC 2017
3580	Resistor, Standard	1100605	31 MAR 2018
8247	SPRT	0832	14 JAN 2018
4816	SPRT	0548	27 DEC 2017
8787	Water Triple-Point Cell	C-G2063	NCR
8785	Water Triple-Point Cell	D-Q1101	NCR
8327	RadioLogger	0215-00845	30 APR 2018

## Comments

None.

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 ~