

Customer: Mesa Laboratories, Inc.
Lakewood, CO
Description: PRT
Model: 5628
Serial Number: 0526
Unit ID: TE10249

Certificate Number: 108716
Calibration Date: 19 JAN 2017
Calibration Due: 19 JAN 2018
Ambient Temperature: 20 to 27°C
Ambient Humidity: 30 to 50%RH
Barcode: C002462

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.

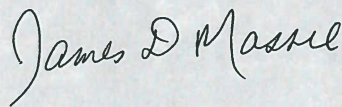
Action Taken:

Calibrated 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: 2017.01.19 15:44:19
-05'00'

Approved by:



Digitally signed by Sarah
Wilson, Quality Specialist II
Reason: I am approving
this document
Date: 2017.01.20 10:39:38
-05'00'

PRT Loop-Comparison (Rev 0)

Calibration Measurement Results

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

Certificate Number: 108716

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	418.111	418.101	-0.010	±0.025	418.108	418.104	-0.004	±0.025	0.0060°C
232°C	231.599	231.601	0.002	±0.025	231.601	231.600	-0.001	±0.025	0.0045°C
157°C	156.525	156.528	0.003	±0.025	156.520	156.521	0.001	±0.025	0.0039°C
0°C	0.010	0.011	0.001	±0.025	0.010	0.010	0.000	±0.025	0.0017°C
-39°C	-38.714	-38.709	0.005	±0.025	-38.714	-38.714	0.000	±0.025	0.0026°C
-196°C	-195.698	-195.700	-0.002	±0.025	-195.732	-195.733	-0.001	±0.025	0.0027°C

Configuration and Coefficient Details

Thermometer Information		Coefficient	As Found	As Left
Model:	1502A	R0	25.5403	25.5403
Serial Number:	A21667	A	-4.727289E-04	-4.340622E-04
Unit ID:	TE10248	B	4.489748E-05	6.826213E-06
Channel:	1	A4	-2.818115E-04	-3.633128E-04
		B4	3.855123E-05	-8.416699E-06

Measurement Standards Used

MSI	Description	Serial Number	Calibration Due
7441	Super Thermometer	A09098	25 AUG 2017
8742	Resistor, Standard	1102435	29 NOV 2017
9665	SPRT	1880103	21 JUN 2017
8772	SPRT	0543	18 APR 2017
8786	Water Triple-Point Cell	C-G2040	NA
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 ~