



MesaLabs



NVLAP Lab Code 200661-0
Calibration

Calibration Certificate

Certificate No.	481222	Sold To:	Mesa Laboratories, Inc
Product	200-530+ Low Defender 530+ Low Flow		12100 W 6th Ave
Serial No.	204778		Lakewood, CO 80228
Cal. Date	19-May-2022		US
Sales Date			

All calibrations are performed in accordance with ISO 17025 at Mesa Laboratories, Inc., 12100 W. 6th Ave, Lakewood, CO 80228, an ISO 17025:2017 accredited laboratory through NVLAP. This report shall not be reproduced except in full without the written approval of the laboratory. Results only relate to the items calibrated. This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

Calibration Data

Certificate No	481222	Lab. Pressure	607.8 mmHg
Technician	Jeff Vue	Lab. Temperature	23.2 °C

Instrument Reading	Lab Standard Reading	Deviation	Allowable Deviation	As Shipped
455.48 ccm	452.98 ccm	0.55%	1.00%	In Tolerance
101.4 ccm	101.45 ccm	-0.05%	1.00%	In Tolerance
32.25 ccm	32.27 ccm	-0.06%	1.00%	In Tolerance
23.7 °C	23.69 °C	-	± 0.8°C	In Tolerance
613 mmHg	613 mmHg	-	± 3.5 mmHg	In Tolerance

Mesa Laboratories Standards Used

Description	Standard Serial Number	Calibration Date	Calibration Due Date
ML_800_10	103743	28-Oct-2021	28-Oct-2022
Precision Thermometer	A11146	27-Jul-2021	27-Jul-2022
Precision Barometer	41000LOB	15-Oct-2021	15-Oct-2022



Calibration Notes

The expanded uncertainty of flow, temperature, and pressure measurements all have a coverage factor of $k = 2$ for a confidence interval of approximately 95%.

Flow testing is in accordance with our test number MP-00672 with an expanded uncertainty of 0.27% using high-purity nitrogen or filtered laboratory air.

Pressure testing is in accordance with our test number MP-01045 with an expanded uncertainty of 0.16 mmHg.

Temperature testing is in accordance with our test number MP-01045 with an expanded uncertainty of 0.04 °C.

Traceability to the International System of Units (SI) is verified by accreditation to ISO/IEC 17025 by NVLAP under NVLAP Code 200661-0.

Technician Notes:

By:

A handwritten signature in blue ink, appearing to read "Jeff Vue".

Jeff Vue
Assembler II

Approved By:

A handwritten signature in blue ink, appearing to read "Casey Reitz".

Casey Reitz
Engineering Technician - Quality



Calibration Certificate

Certificate No.	481526	Sold To:	Mesa Laboratories, Inc
Product	200-530+ High Defender 530+ High Flow		12100 W 6th Ave
Serial No.	204808		Lakewood, CO 80228
Cal. Date	19-May-2022		US
Sales Date			

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Calibration Data

Certificate No	481526	Lab. Pressure	608.2 mmHg
Technician	Jeff Vue	Lab. Temperature	24 °C

Instrument Reading	Lab Standard Reading	Deviation	Allowable Deviation	As Shipped
25013.26 ccm	25031.07 ccm	-0.07%	1.00%	In Tolerance
4991.07 ccm	4991.87 ccm	-0.02%	1.00%	In Tolerance
1475.93 ccm	1488.44 ccm	-0.84%	1.00%	In Tolerance
22.9 °C	22.93 °C	-	± 0.8°C	In Tolerance
606.9 mmHg	606.39 mmHg	-	± 3.5 mmHg	In Tolerance

Mesa Laboratories Standards Used

Description	Standard Serial Number	Calibration Date	Calibration Due Date
ML_800_44	103521	26-Aug-2021	26-Aug-2022
Precision Thermometer	A11146	27-Jul-2021	27-Jul-2022
Precision Barometer	41000LOB	15-Oct-2021	15-Oct-2022



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Calibration Notes

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Pressure testing is in accordance with our test number MP-01045 with an expanded uncertainty of 0.16 mmHg.

Temperature testing is in accordance with our test number MP-01045 with an expanded uncertainty of 0.04 °C.

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Technician Notes:

By:

Jeff Vue
Assembler II

Approved By:

Casey Reitz
Engineering Technician - Quality