



## Pipette Calibration Certificate 001193075

|  |   |  |
|--|---|--|
| Customer: BRAZORIA COUNTY AUDITOR<br>3602 COUNTY ROAD 45<br><br>ANGLETON, TX 77515-9575<br>Work Order: 00130722LS-1<br>Contact: ALEIA WINTERS (aleiaw@brazoria-county.com) | Asset ID: UJ05493<br>Serial No.: UJ05493<br>Equipment Type: PIPETTE | Result: <b>PASS</b><br>Cal Date: 04/04/2024<br>Next Cal Date: 4/4/2025<br>Performed At: Allometric's Laboratory<br>Performed By: RJUHLIN |
|--|---|--|

### TEST ENVIRONMENT DATA

|                                 |                             |                  |                               |
|---------------------------------|-----------------------------|------------------|-------------------------------|
| Start: Air Temperature: 20.2 °C | Water Temperature: 19.83 °C | Humidity: 50.0 % | Barometric Pressure: 1014 hPa |
| Stop: Air Temperature: 20.3 °C  | Water Temperature: 19.86 °C | Humidity: 50.0 % | Barometric Pressure: 1014 hPa |

### TEST DATA

Manufacturer: GILSON  
 Model Number: MICROMAN  
 Capacity: 1000 µl  
 Type: D2 - Variable Volume  
 Channel: Single  
 Accuracy Tol.: ± 12.0 µl [1]  
 Precision Tol.: ± 4.0 µl [1]  
 z-factor: 1.00282 µl/mg

[1] ISO 8655 tolerances.

| Test Volume     | As Found Data |          |          | As Returned Data |          |          |
|-----------------|---------------|----------|----------|------------------|----------|----------|
|                 | 100 µl        | 500 µl   | 1000 µl  | 100 µl           | 500 µl   | 1000 µl  |
| Sample 1 (mg)   | 102.7         | 501.7    | 993.3    | 102.7            | 501.7    | 993.3    |
| Sample 2 (mg)   | 103.0         | 503.3    | 995.3    | 103.0            | 503.3    | 995.3    |
| Sample 3 (mg)   | 102.8         | 501.9    | 993.9    | 102.8            | 501.9    | 993.9    |
| Sample 4 (mg)   | 103.2         | 500.1    | 993.4    | 103.2            | 500.1    | 993.4    |
| Sample 5 (mg)   | 102.9         | 501.6    | 993.8    | 102.9            | 501.6    | 993.8    |
| Sample 6 (mg)   | 102.3         | 500.6    | 993.7    | 102.3            | 500.6    | 993.7    |
| Sample 7 (mg)   | 103.1         | 500.6    | 994.3    | 103.1            | 500.6    | 994.3    |
| Sample 8 (mg)   | 102.9         | 502.4    | 994.8    | 102.9            | 502.4    | 994.8    |
| Sample 9 (mg)   | 102.9         | 499.7    | 994.9    | 102.9            | 499.7    | 994.9    |
| Sample 10 (mg)  | 102.5         | 502.3    | 994.8    | 102.5            | 502.3    | 994.8    |
| Mean (mg)       | 102.8         | 501.4    | 994.2    | 102.8            | 501.4    | 994.2    |
| Precision (µl)  | 0.271         | 1.138    | 0.697    | 0.271            | 1.138    | 0.697    |
| V20 (µl)        | 103.1         | 502.8    | 997.0    | 103.1            | 502.8    | 997.0    |
| Error (µl)      | 3.1           | 2.8      | -3.0     | 3.1              | 2.8      | -3.0     |
| Result          | Pass          | Pass     | Pass     | Pass             | Pass     | Pass     |
| Uncertainty k=2 | ± 0.55 µl     | ± 2.3 µl | ± 1.4 µl | ± 0.55 µl        | ± 2.3 µl | ± 1.4 µl |

### TEST EQUIPMENT

| Description               | ID                         | Serial Number | Cal. Due Date |
|---------------------------|----------------------------|---------------|---------------|
| LAB ENVIRONMENTAL MONITOR | 1251                       | 73167         | 4/30/2025     |
| WEIGHT SET / 10MG TO 50G  | 1616                       | 401299390     | 3/31/2025     |
| DIGITAL THERMOMETER       | 3013                       | 192608473     | 4/30/2025     |
| BALANCE / PIPETTE BALANCE | 6050                       | T0102697      | 6/30/2024     |
| <u>Balance Model</u>      | <u>Sensitivity</u>         |               |               |
| AND AD4212B-101           | 101g x.1mg/31x.01/5.1x.001 |               |               |

### PROCEDURE

| Procedure Name | Description                        | Revision Level | Revision Date |
|----------------|------------------------------------|----------------|---------------|
| 5-4WI06        | PIPETTE CALIBRATION IAW ISO 8655-6 | G              | 4/16/2021     |

Inspections and measurements were performed in accordance with ISO 8655-6:2002(E) and ISO 17025. Pass/Fail status determination is derived from allowable tolerances established in ISO 8655 unless other tolerances are specifically requested by the client. If this is an accredited report, then our accredited logo will appear in the top right corner and the uncertainty associated with these measurements were determined using a coverage factor of k=2 and is not included in the determination of Pass/Fail status. This calibration is traceable to the SI through NIST or other NMI utilizing the equipment shown on the calibration certificate.

ACCEPTANCE OF THIS CERTIFICATION OR CALIBRATION DOCUMENT OR THE CONTINUED USE OF THE EQUIPMENT LISTED ON THIS DOCUMENT INDICATES AGREEMENT WITH ALLOMETRICS INC. TERMS AND CONDITIONS AS FOUND AT <https://www.allometrics.com/terms-and-conditions/> AND AGREEMENT THAT THOSE CONDITIONS GOVERN ANY TRANSACTION RELATED TO THE CERTIFICATION, CALIBRATION, REPAIR OR USE OF ANY EQUIPMENT LISTED ON OR ASSOCIATED WITH THIS DOCUMENT.

### COMMENTS

----- end report -----

Approved and Released by: Terry Baldwin, Quality Manager  
 Date of Issue: 04/04/2024

This report applies only to the item calibrated. This report may not be reproduced, except in full, without the written consent from Allometrics, Inc. © 2024