



State of Vermont  
Department of Public Safety  
**VERMONT FORENSIC LABORATORY**  
45 State Dr. Waterbury, VT 05671

t: 802-244-8788  
f: 802-241-5557  
DPS.DMT@vermont.gov  
<http://vfl.vermont.gov>

## Certification of Calibration

Intox DMT Serial # 100151

Date of Adjustment: 09/18/25

Date of Calibration: 09/18/25

### Calibration Results:

Instrument was adjusted and calibrated in accordance with Vermont Forensic Laboratory procedure TOX\_P200\_DMT Manual. The calibration of this instrument is valid for 12 months from the date of calibration. Calibration results are reported as  $X \pm Y$ , where  $X$  is the measured value,  $Y$  is the measurement uncertainty.

#### As Left

| Measured Value | Uncertainty   |
|----------------|---------------|
| 0.021 $\pm$    | 0.001 g/210 L |
| 0.080 $\pm$    | 0.004 g/210 L |
| 0.098 $\pm$    | 0.005 g/210 L |
| 0.160 $\pm$    | 0.007 g/210 L |
| 0.352 $\pm$    | 0.016 g/210 L |

The measurement uncertainty for determining the ethanol concentration of aqueous solutions during the in-house calibration of the DMT evidential breath testing instrument is:

**4.3%**

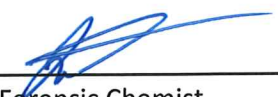
$k = 2.0$

Uncertainty is expressed as an expanded uncertainty at a 95.45% level of confidence and a coverage factor ( $k$ ) denoted above, in accordance with ISO/IEC 17025 and ANAB Accreditation Requirements for Forensic Testing and Calibration. The uncertainty associated with this analytical method has been calculated to incorporate uncertainty from the NIST traceable certified reference materials used to adjust and calibrate the instrument, simulator temperature calibration, simulator performance, and analytical performance of the instrument. The uncertainty estimate was evaluated using the VFL fleet of DMT instruments deployed in the field, including the DMT certified in this report.

### Traceability to SI through NIST

This calibration is traceable to the International System of Units (SI) through the National Institute of Standards and Technology (NIST) via an unbroken chain of comparisons. The DMT instrument was calibrated using certified reference materials (CRMs). The performance of the calibration was evaluated using NIST traceable control material from an ISO 17034 accredited supplier.

Analyzed CRM materials were prepared using pipettes calibrated by an ISO 17025 accredited calibration vendor. The instrument used to analyze the CRMs was calibrated using NIST traceable certified reference materials from an ISO 17034 accredited supplier. The performance of the method was evaluated using NIST traceable control materials from an ISO 17034 accredited supplier.

Calibration Certified by: 

Title: Forensic Chemist

Date: 10/2/2025

This document pertains only to the instrument being calibrated and shall not be reproduced, except in full, without written permission of the Vermont Forensic Laboratory.



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### DMT Technical Support Inquiry

DMT Serial #: 100151  
Date Initiated: 09/09/2025  
Initiated By: JSD/BMS

Problem:  
N/A

**Work Performed:**  
DMT adjustment, calibration, and verification performed prior to "redployment". DMT is now ready for installation in the field.

Performed On-Site ☐  
Performed In-House ☒

Performed By: Jeff Dukette

Date: 10/2/2025

Technical Reviewer: [Signature]

Date: 10/3/25

Administrative Reviewer: [Signature]

Date: 10/3/25

Director Reviewer: [Signature]

Date: 10/6/2025

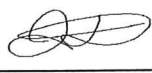
# ADJUSTMENT REPORT

DataMaster DMT: 100151  
Adjustment Date: 9/18/2025  
Adjusted by: JEFF DUKETTE  
Lot: 25-13-100



|     |   |          |       |                |
|-----|---|----------|-------|----------------|
| Ca  | = | 0.102    |       |                |
| CAL | = | 0.939735 | 0.800 | <= CAL < 1.200 |
| b1  | = | 0.002    | 0.000 | <= b1 < 0.004  |
| b2  | = | 0.008    | 0.002 | <= b2 < 0.010  |
| b3  | = | 0.001    | 0.000 | <= b3 < 0.004  |
| a21 | = | 1.197937 | 1.050 | <= a21 < 1.300 |
| a31 | = | 0.478066 | 0.300 | <= a31 < 0.800 |

Performed by

Date

9/18/2025

# CALIBRATION REPORT

DataMaster DMT: 100151  
Adjustment Date: 9/18/2025  
Calibration Date: 9/18/2025  
Calibrated by: JEFF DUKETTE



## Diagnostic Results

### VERSIONS

DMT: 2.07  
PIC: 3.07  
Modem: 3.0  
Questions: 3.0

### TEMPERATURES

Sample Chamber = 48.7°C  
Breath Tube = 43.2°C  
Digital Sim = 34.0°C

### SETTINGS

Lamp Voltage = 1.97 V  
Cooler Voltage = 1.76 V  
Bias Voltage = 80 V  
Chopper Freq = 529 Hz

### PUMP INFO

Flow Rate = 4.730 L/M

### DETECTOR INFO

|        |         |         |
|--------|---------|---------|
| PUMP   | ON      | OFF     |
| MAX(V) | -0.0484 | -0.0439 |
| MIN(V) | -0.0508 | -0.0470 |

### FILTER INFO

|          |        |             |
|----------|--------|-------------|
| Filter 1 | -0.046 | Zero = true |
| Filter 2 | -0.193 | Zero = true |
| Filter 3 | 0.628  | Zero = true |

## Options

### OPTIONS

#### Units

Alcohol..... g/210L

#### Simulator

Tolerance Check..... yes  
Standard Type..... wet  
Nominal..... 0.100  
Digital Simulator..... Guth

#### Subject

Ask Questions..... yes  
Number of Tests..... 2  
Alcohol Display..... yes  
Volume Display..... yes  
Query Refusal..... yes  
Copies..... 3  
Simulator Before..... yes  
Simulator Between..... yes  
Simulator After..... no  
Observation Time..... 0

#### Supervisor

Number of Tests..... 10

#### Adjustment

Standard Type..... wet  
Nominal..... 0.100  
Nominal(Dry Gas)..... 0.100  
Number of Tests..... 1

#### Printer

Printer On..... yes  
Software Configuration  
Data Collection..... yes

### Linearity Check Results

| True Value      | Reported Average | Std Dev |
|-----------------|------------------|---------|
| 0.020 g/210L    | 0.021 g/210L     | 0.0002  |
| Lot # 25-07-020 |                  |         |
| 0.080 g/210L    | 0.080 g/210L     | 0.0002  |
| Lot # 24-13-080 |                  |         |
| 0.162 g/210L    | 0.160 g/210L     | 0.0004  |
| Lot # 25-05-160 |                  |         |
| 0.367 g/210L    | 0.352 g/210L     | 0.0004  |
| Lot # 24-18-360 |                  |         |

$R^2 = 0.9999$

### Acetone Interference Test

Lot # 25-08-08A01

Interference Detected

### Mouth Alcohol Test

Mouth Alcohol Detected

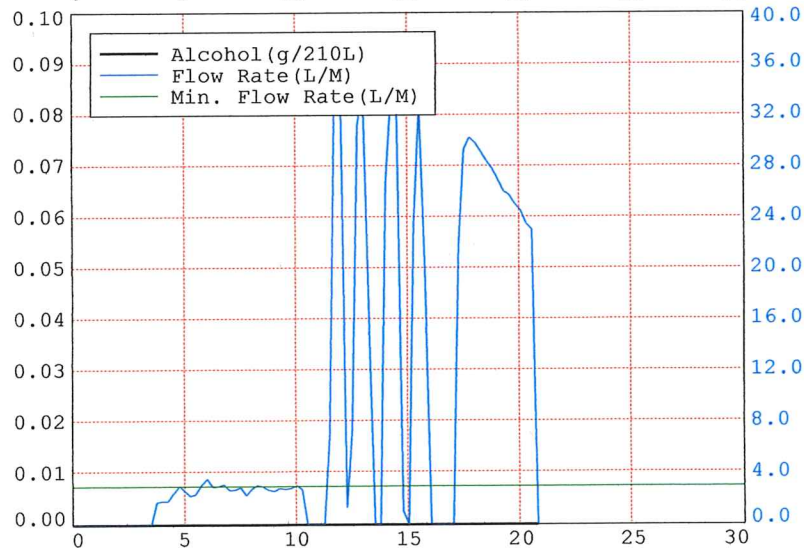
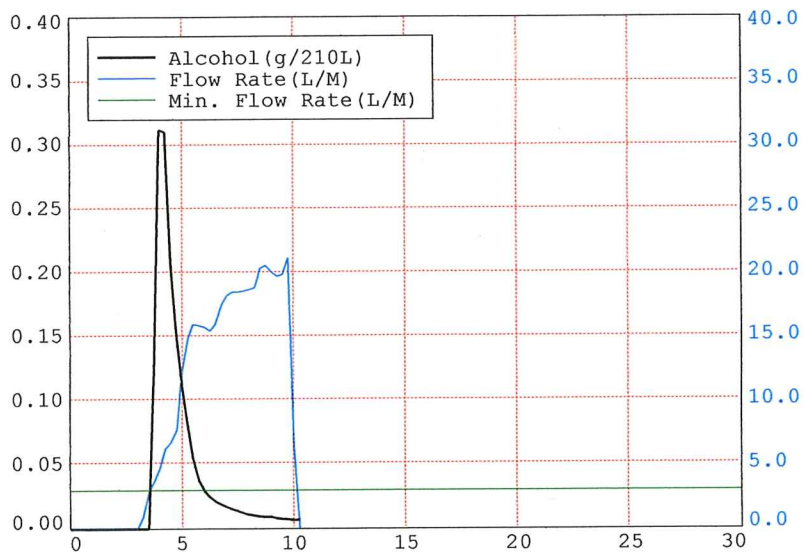
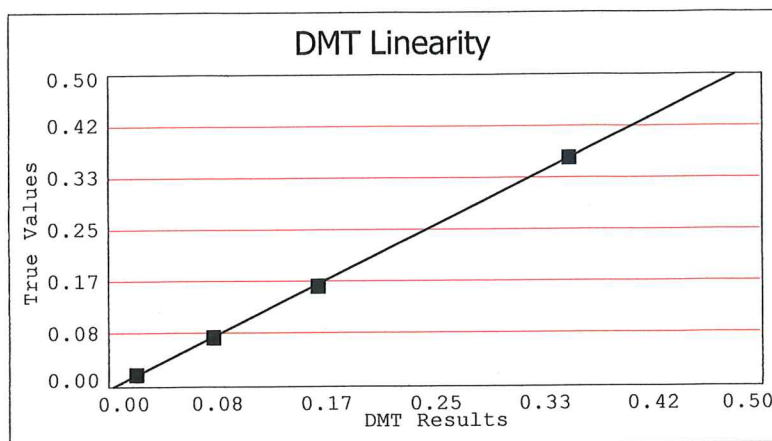
### RF Detection Test

Passed

### Sample Acceptance Test

Passed

**CALIBRATION PASSED**

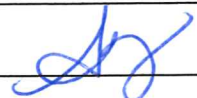


Performed by

 10/18/25

Date 9/18/2025

Reviewed by



Date

10/3/25

DMT Serial Number #100151

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100151

9/18/2025 1:10 PM



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## ACCURACY & PRECISION REPORT

### STATE OF VERMONT

DataMaster DMT: 100151

Date: 9/18/2025

Time: 13:11:45

SUPERVISOR NAME:

JSD MCS

SOLUTION LOT #: 24GP41260

SOLUTION CONCENTRATION: 0.100

|                                   |       |       |
|-----------------------------------|-------|-------|
| BLANK TEST                        | 0.000 | 13:12 |
| SIMULATOR VAPOR 34.0°C            | 0.098 | 13:13 |
| X[1] = 0.0985 (-0.0003) (0.0006)  |       |       |
| SIMULATOR VAPOR 34.0°C            | 0.098 | 13:14 |
| X[1] = 0.0985 (0.0001) (0.0001)   |       |       |
| SIMULATOR VAPOR 34.0°C            | 0.098 | 13:15 |
| X[1] = 0.0983 (-0.0007) (-0.0001) |       |       |
| SIMULATOR VAPOR 34.0°C            | 0.099 | 13:16 |
| X[1] = 0.0986 (0.0006) (0.0001)   |       |       |
| SIMULATOR VAPOR 34.0°C            | 0.098 | 13:18 |
| X[1] = 0.0984 (0.0000) (-0.0003)  |       |       |
| SIMULATOR VAPOR 34.0°C            | 0.098 | 13:19 |
| X[1] = 0.0981 (-0.0004) (0.0000)  |       |       |
| SIMULATOR VAPOR 34.0°C            | 0.099 | 13:20 |
| X[1] = 0.0986 (0.0006) (0.0003)   |       |       |
| SIMULATOR VAPOR 34.0°C            | 0.099 | 13:22 |
| X[1] = 0.0987 (0.0007) (0.0001)   |       |       |
| SIMULATOR VAPOR 34.0°C            | 0.099 | 13:23 |
| X[1] = 0.0986 (0.0002) (0.0001)   |       |       |
| SIMULATOR VAPOR 34.0°C            | 0.098 | 13:24 |
| X[1] = 0.0980 (0.0001) (0.0003)   |       |       |
| BLANK TEST                        | 0.000 | 13:25 |

Average = 0.098

Std Dev = 0.0002

