



### DMT Technical Support Inquiry

**DMT Serial #:** 100158

**Agency/Site:** Northfield PD

**Date:** 1/31/2023

**DMT Supervisor:** Michael Gero

**Problem:**  
 DMT has a history of cal check errors. It was picked up on 1/31/2023 and brought back to the lab for cleaning and maintenance.

**Work Performed:**  
 On 2/1/2023, cleaned the detector block with DI water and left to dry for a couple hours, then cleaned with a dry swab and air. After the detector block was put back together, received filter wheel errors. Adjusted the tension on the stepper motor before running 82 filter wheel cycles without errors. Optimized voltages and allowed to stabilize. A successful calibration adjustment and certification were performed. Instrument is now ready for installation at agency.

*Adjusted flow rate on 2/27/2023.*  
*808 3/15/2023*

**Performed On Site**

**Performed In house**

**Performed By:** Sarah Stratton 808 **Date:** 2/23/2023

**Technical Reviewer:** [Signature] **Date:** 2/24/23

**Administrative Reviewer:** [Signature] **Date:** 2/27/23

**Director Reviewer:** [Signature] **Date:** 2/27/2023

# CALIBRATION REPORT

DataMaster DMT: 100158  
Calibration Date: 02/23/2023  
Calibrated by: SARAH STRATTON  
Lot: 22-11-100



Ca	=	0.100		
CAL	=	0.960040	0.800	<= CAL < 1.200
b1	=	0.001	0.000	<= b1 < 0.004
b2	=	0.007	0.002	<= b2 < 0.010
b3	=	0.001	0.000	<= b3 < 0.004
Xq	=	0.101	0.050	<= Xq < 0.200
a21	=	1.163814	1.050	<= a21 < 1.300
a31	=	0.481583	0.300	<= a31 < 0.800

DI Water

BL-DMT10222021 34.00°C *SSS* 2/23/23

Performed by

*SSS* *SSS*

Date

02/23/2023



### ACCURACY & PRECISION REPORT

#### STATE OF VERMONT

DataMaster DMT: 100158

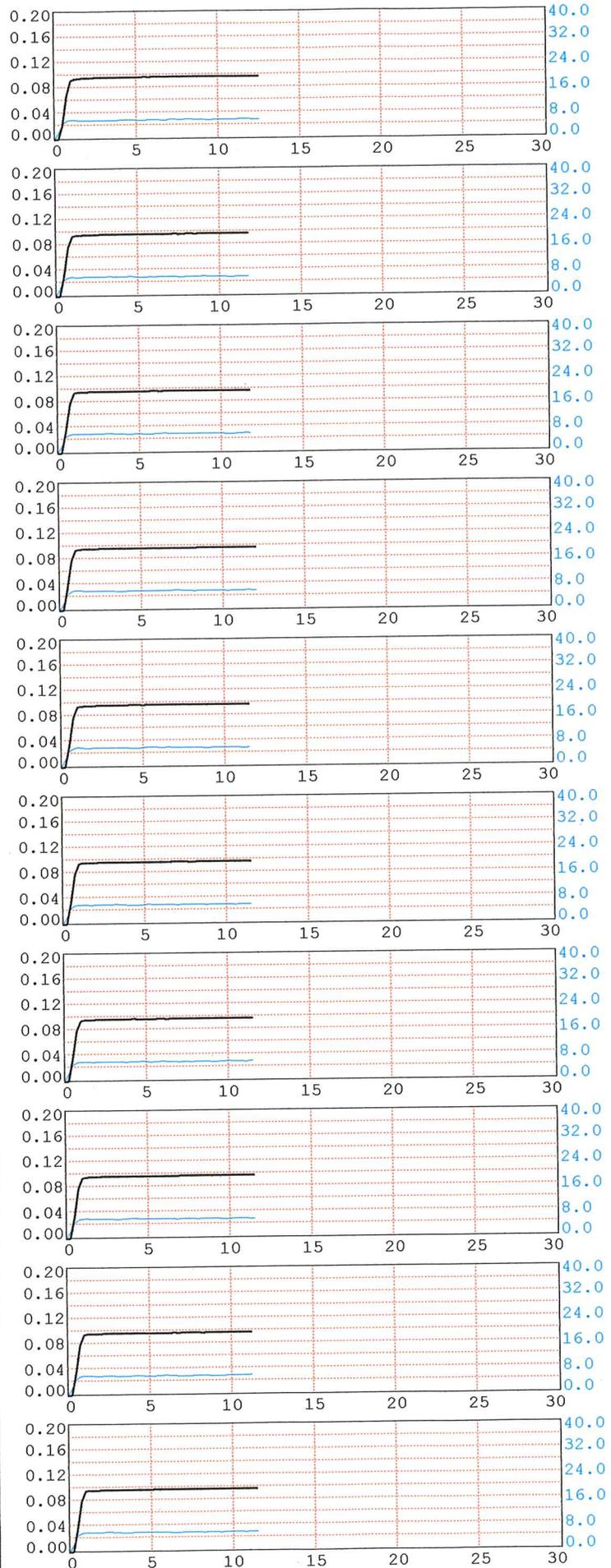
Date: 02/23/2023  
Time: 10:24:59

SUPERVISOR NAME:  
SGS CAL CHECK

SOLUTION LOT #: 22HP41201  
SOLUTION CONCENTRATION: 0.100

Test Type	Value	Time
BLANK TEST	0.000	10:25
CALIBRATION CHECK	PASSED	10:26
SIMULATOR VAPOR 34.0°C	0.098	10:26
SIMULATOR VAPOR 34.0°C	0.098	10:27
SIMULATOR VAPOR 34.0°C	0.098	10:28
SIMULATOR VAPOR 34.0°C	0.098	10:29
SIMULATOR VAPOR 34.0°C	0.098	10:30
SIMULATOR VAPOR 34.0°C	0.098	10:31
SIMULATOR VAPOR 34.0°C	0.098	10:33
SIMULATOR VAPOR 34.0°C	0.098	10:34
SIMULATOR VAPOR 34.0°C	0.098	10:35
SIMULATOR VAPOR 34.0°C	0.098	10:36
BLANK TEST	0.000	10:37

Average = 0.098  
Std Dev = 0.0000



# CERTIFICATION REPORT

DataMaster DMT: 100158  
Calibration Date: 02/23/2023  
Certification Date: 02/23/2023  
Certified by: SARAH STRATTON



## Diagnostic Results

### VERSIONS

DMT: 2.06  
PIC: 3.07  
Modem: 2.6  
Questions: 2.1

### TEMPERATURES

Sample Chamber = 48.9°C  
Breath Tube = 44.4°C  
Digital Sim = 34.0°C

### SETTINGS

Lamp Voltage = 1.57 V  
Cooler Voltage = 1.56 V  
Bias Voltage = 80 V  
Chopper Freq = 556 Hz

### PUMP INFO

Flow Rate = 6.499 L/M

### DETECTOR INFO

PUMP	ON	OFF
MAX (V)	-0.0154	-0.0114
MIN (V)	-0.0167	-0.0130

### FILTER INFO

Filter 1	-0.012	Zero = true
Filter 2	0.343	Zero = true
Filter 3	1.314	Zero = true

### CALIBRATION CHECK

Xq = 0.101 0.09%

## 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

#### Calibration

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

#### Printer

Printer On..... yes

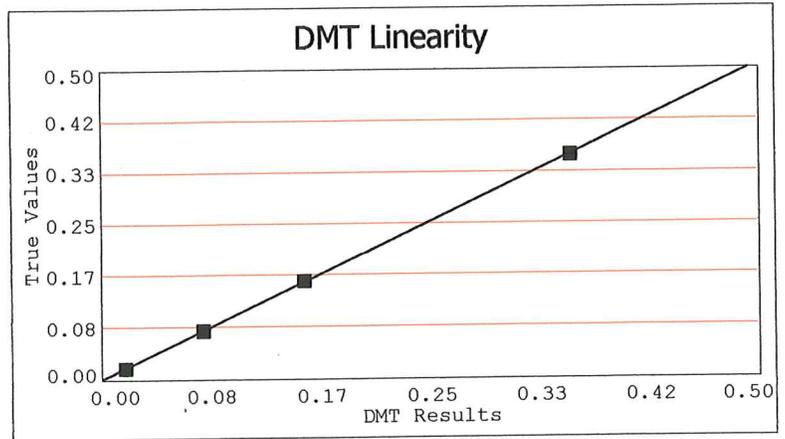
#### Software Configuration

Data Collection..... yes

**Linearity Check Results**

True Value	Reported Average	Std Dev
0.020 g/210L	0.018 g/210L	0.0005
Lot # 22-02-020		
0.080 g/210L	0.077 g/210L	0.0000
Lot # 22-08-080		
0.160 g/210L	0.154 g/210L	0.0004
Lot # 22-03-160		
0.362 g/210L	0.356 g/210L	0.0003
Lot # 22-18-360		

R<sup>2</sup> = 0.9999



**Acetone Interference Test**

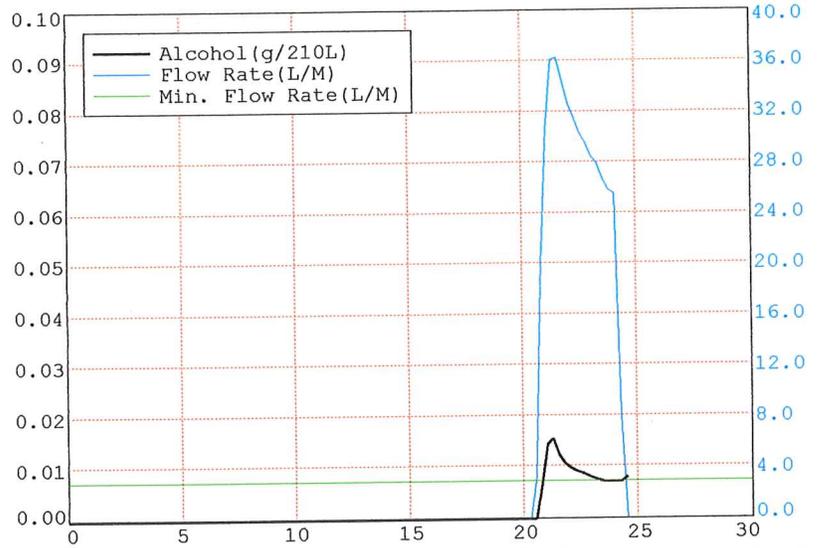
Lot # 22-09-08A2  
Interference Detected

**Mouth Alcohol Test**

Mouth Alcohol Detected

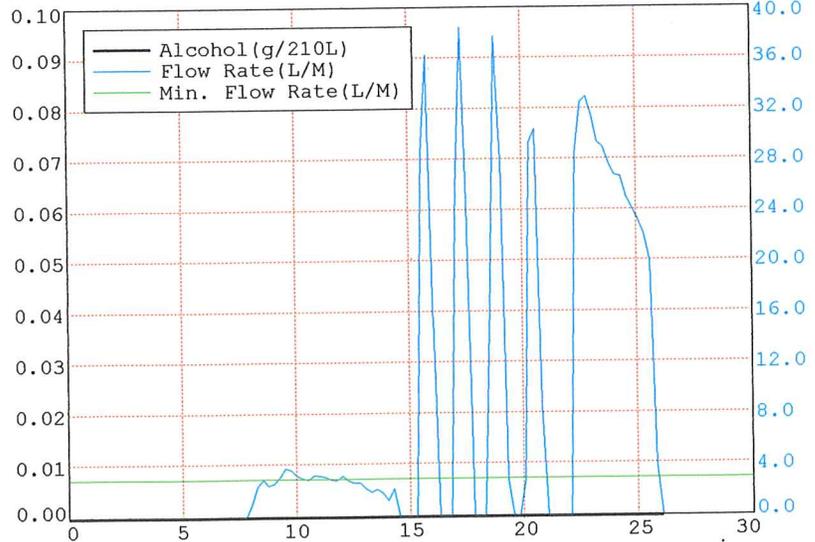
**RF Detection Test**

Passed



**Sample Acceptance Test**

Passed



**CERTIFICATION PASSED**

Performed by SOS SOS

Date 02/23/2023

Reviewed by [Signature]

Date 2/23/23

DMT Serial Number #100158