



DMT Technical Support Inquiry

DMT Serial #: 100151
Agency/Site: Newport PD
Date: 3/26/2021
DMT Supervisor: Charles Moulton

Problem:

Prior to installation, moved the DMT to a different location in the lab and monitored. Xq values remained high but stable. VFL staff decided to perform further cleaning based on the observations of other instruments with cal check errors. See included TSI dated 3/12/2021 for previous work performed.

4 802 4/7/2021

Work Performed:

The detector block was taken apart and cleaned on 3/26/2021. There was a fog-like haze on the side of the quartz closest to the other filters. The filters were cleaned with Alconox, rinsed in DI water, and finally cleaned with IPA. The parts were then dried under air and dry swabbed before being left to sit over the weekend. During the cleaning, it was noted that the side of the sample chamber closest to the detector block was loose so the taping was redone on that part in order to ensure a tighter seal. The detector block was put back together on 3/29/2021, using a small amount of lubricant dabbed onto the washers via a foam swab. 50 filter wheel cycles were run without errors and the voltages were optimized. The instrument was left to stabilize. On 3/31/2021, a successful calibration adjustment and certification were performed. The instrument is now ready for installation at the agency.

Performed On Site ☐
Performed In house ☒

Performed By: Sarah Stratton *SS*
Technical Reviewer: *[Signature]*
Administrative Reviewer: *[Signature]*
Director Reviewer: *[Signature]*

Date: 4/2/2021
Date: 4/6/21
Date: 4/6/21
Date: 4/6/2021

CALIBRATION REPORT

DataMaster DMT: 100151
Calibration Date: 03/31/2021
Calibrated by: SARAH STRATTON
Lot: 21-02-100



Ca	=	0.100		
CAL	=	0.947887	0.800	<= CAL < 1.200
b1	=	0.001	0.000	<= b1 < 0.004
b2	=	0.006	0.002	<= b2 < 0.010
b3	=	0.001	0.000	<= b3 < 0.004
Xq	=	0.088	0.050	<= Xq < 0.200
a21	=	1.171355	1.050	<= a21 < 1.300
a31	=	0.445377	0.300	<= a31 < 0.800

DI Water

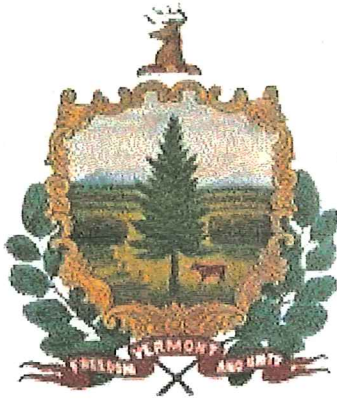
BL-DMT01072020 34.01°C *SSS* 3/31/2021

Performed by

SSS SSS

Date

03/31/2021



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMaster DMT: 100151

Date: 03/31/2021

Time: 13:57:25

SUPERVISOR NAME:

SGS CAL CHECK

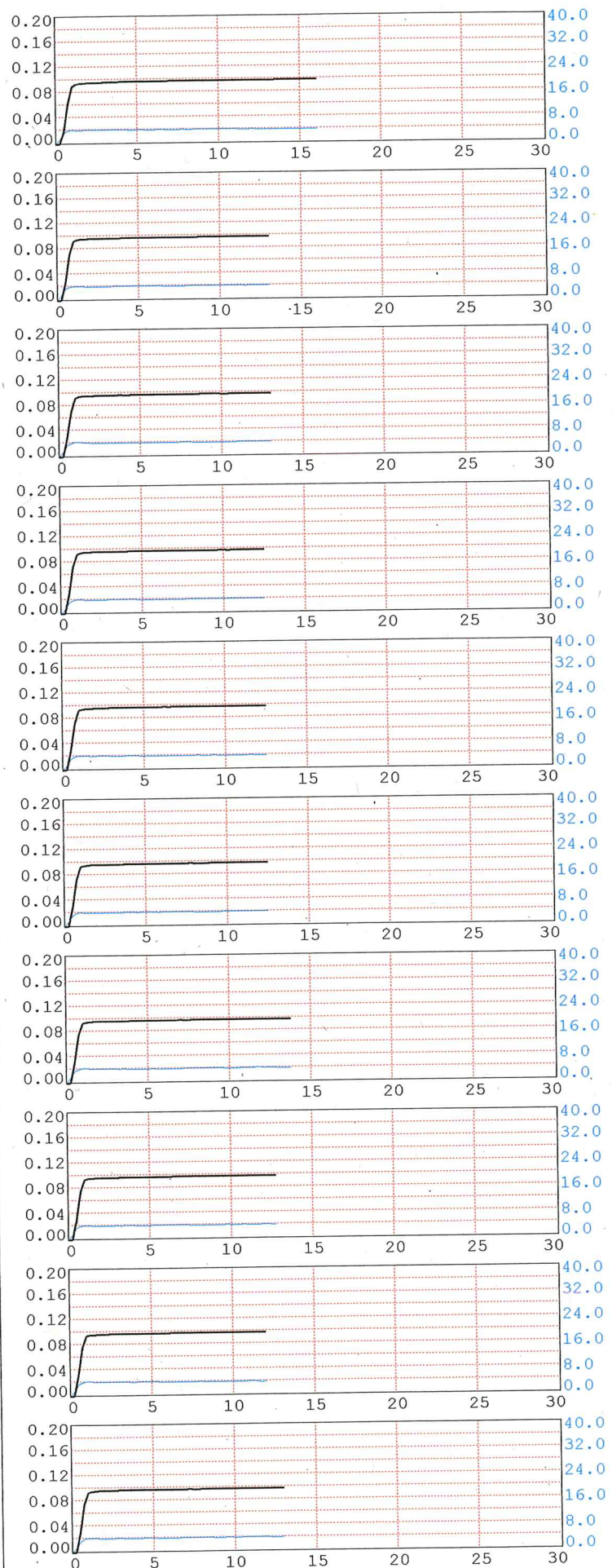
SOLUTION LOT #: ACS202010E

SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	13:58
CALIBRATION CHECK	PASSED	13:58
SIMULATOR VAPOR 34.0°C	0.099	13:58
SIMULATOR VAPOR 34.0°C	0.098	14:00
SIMULATOR VAPOR 34.0°C	0.098	14:01
SIMULATOR VAPOR 34.0°C	0.098	14:02
SIMULATOR VAPOR 34.0°C	0.098	14:03
SIMULATOR VAPOR 34.0°C	0.098	14:04
SIMULATOR VAPOR 34.0°C	0.098	14:05
SIMULATOR VAPOR 34.0°C	0.098	14:06
SIMULATOR VAPOR 34.0°C	0.098	14:07
SIMULATOR VAPOR 34.0°C	0.098	14:09
BLANK TEST	0.000	14:09

Average = 0.098

Std Dev = 0.0003



CERTIFICATION REPORT

DataMaster DMT: 100151
Calibration Date: 03/31/2021
Certification Date: 03/31/2021
Certified by: SARAH STRATTON



Diagnostic Results

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 44.3°C
Digital Sim = 34.0°C

SETTINGS

Lamp Voltage = 1.84 V
Cooler Voltage = 1.83 V
Bias Voltage = 80 V
Chopper Freq = 529 Hz

PUMP INFO

Flow Rate = 4.968 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX (V)	-0.0589	-0.0557
MIN (V)	-0.0606	-0.0567

FILTER INFO

Filter 1	-0.057	Zero = true
Filter 2	0.281	Zero = true
Filter 3	1.089	Zero = true

CALIBRATION CHECK

Xq = 0.089 0.20%

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

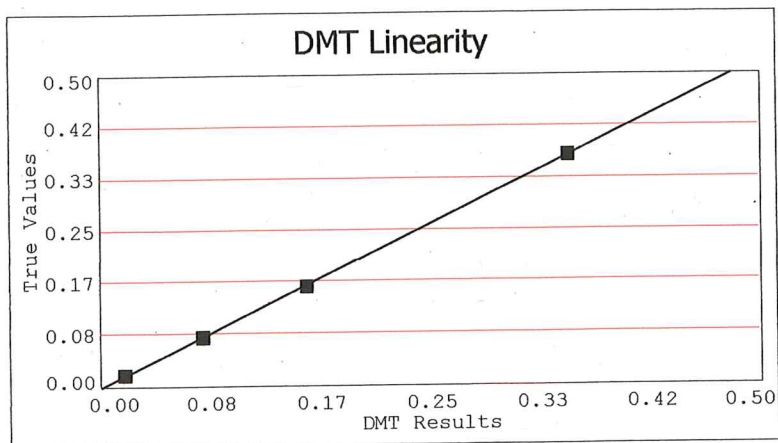
Software Configuration

Data Collection..... yes

Linearity Check Results

True Value	Reported Average	Std Dev
0.020 g/210L	0.018 g/210L	0.0004
Lot # 20-08-020		
0.080 g/210L	0.077 g/210L	0.0000
Lot # 20-12-080		
0.161 g/210L	0.156 g/210L	0.0006
Lot # 20-09-160		
0.371 g/210L	0.354 g/210L	0.0003
Lot # 20-16-360		

$R^2 = 0.9999$



Acetone Interference Test

Lot # 20-13-08A2

Interference Detected

Mouth Alcohol Test

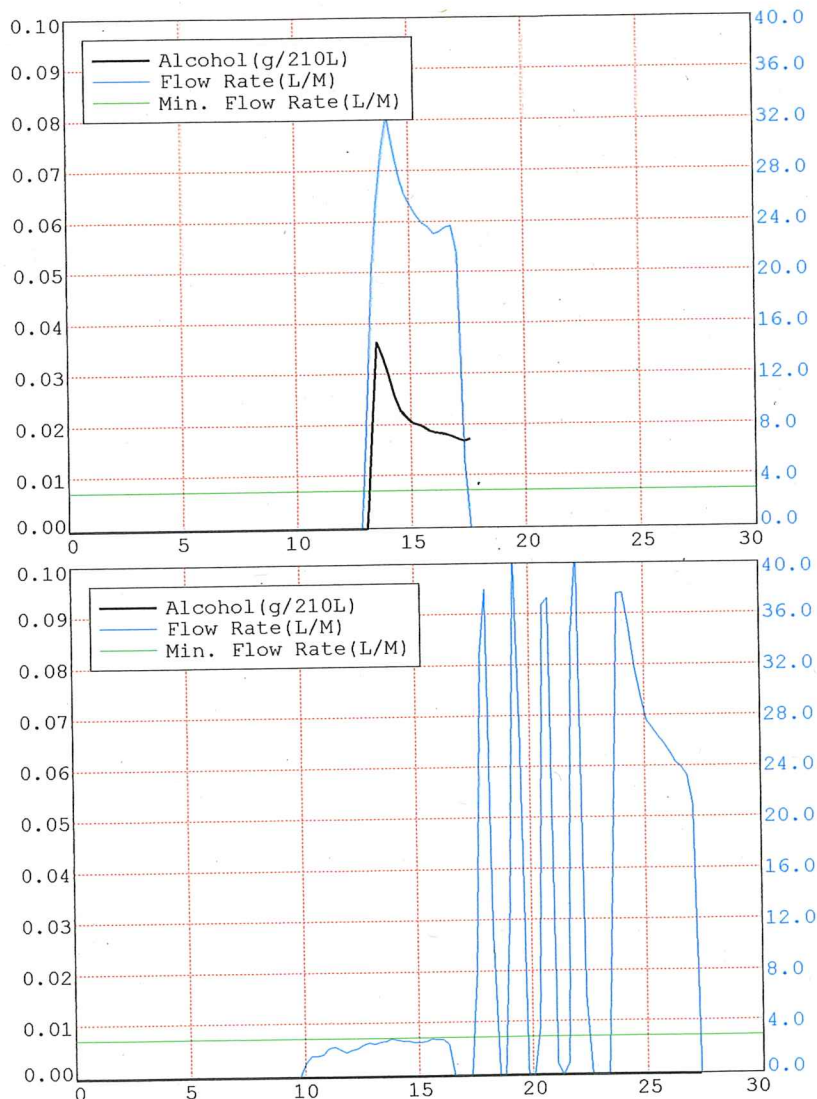
Mouth Alcohol Detected

RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by

SDS SDS

Date

03/31/2021

Reviewed by

[Signature]

Date

4/6/21

DMT Serial Number #100151

Page 2 of 2

03/31/2021 3:13 PM

100151

SDS

5a

DIAGNOSTIC RESULT

DataMaster DMT: 100151
Location:
Calibration Date: 03/12/2021
Certification Date: 03/12/2021
Installation Date:
Test Date: 03/31/2021
Test Time: 12:55:45



VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C
Breath Tube = 44.7°C
Digital Sim = 34.0°C

SETTINGS

Lamp Voltage = 1.84 V
Cooler Voltage = 1.83 V
Bias Voltage = 80 V
Chopper Freq = 529 Hz

PUMP INFO

Flow Rate = 4.960 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX (V)	-0.0756	-0.0717
MIN (V)	-0.0774	-0.0732

FILTER INFO

Filter 1	-0.072	Zero = true
Filter 2	0.266	Zero = true
Filter 3	1.063	Zero = true

CALIBRATION CHECK

Xq = 0.088 34.97%



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMaster DMT: 100151

Date: 03/31/2021

Time: 12:47:47

SUPERVISOR NAME:

SARAH STRATTON

SOLUTION LOT #: TEST

SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	12:48
CALIBRATION CHECK	ERROR	12:48

CALIBRATION CHECK ERROR

*Previous calibration no longer valid due to
cleaning. SDS 4/2/2021*

*A&P was intended to check the seal of the
sample chamber after adjusting the end
fitting and allowing the instrument to sit
for a couple days while monitoring the
Xq values. SDS 4/6/2021*

DIAGNOSTIC RESULT



DataMaster DMT: 100151
Location:
Calibration Date: 03/12/2021
Certification Date: 03/12/2021
Installation Date:
Test Date: 03/31/2021
Test Time: 09:29:56

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C
Breath Tube = 44.8°C
Digital Sim = 0.0°C *Sim not plugged in 828 4/5/2021*

SETTINGS

Lamp Voltage = 1.81 V
Cooler Voltage = 1.84 V
Bias Voltage = 80 V
Chopper Freq = 529 Hz

PUMP INFO

Flow Rate = 4.875 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX (V)	0.0813	0.0876
MIN (V)	0.0795	0.0862

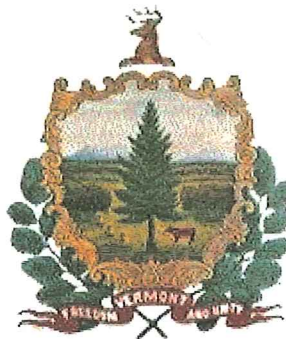
FILTER INFO

Filter 1	0.087	Zero = true
Filter 2	0.417	Zero = true
Filter 3	1.163	Zero = true

CALIBRATION CHECK

Xq = 0.088 35.36%

DIAGNOSTIC RESULT



DataMaster DMT: 100151
Location:
Calibration Date: 03/12/2021
Certification Date: 03/12/2021
Installation Date:
Test Date: 03/30/2021
Test Time: 09:45:07

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C
Breath Tube = 44.9°C
Digital Sim = 0.0°C *Sim not plugged in 828 4/5/2021*

SETTINGS

Lamp Voltage = 1.86 V
Cooler Voltage = 1.81 V
Bias Voltage = 80 V
Chopper Freq = 528 Hz

PUMP INFO

Flow Rate = 5.004 L/M

DETECTOR INFO

	ON	OFF
MAX(V)	-0.2244	-0.2177
MIN(V)	-0.2256	-0.2189

FILTER INFO

Filter 1	-0.218	Zero = true
Filter 2	0.125	Zero = true
Filter 3	0.936	Zero = true

CALIBRATION CHECK

Xq = 0.088 35.61%

DIAGNOSTIC RESULT

DataMaster DMT: 100151
Location:
Calibration Date: 03/12/2021
Certification Date: 03/12/2021
Installation Date:
Test Date: 03/29/2021
Test Time: 14:20:37



VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 44.9°C
Digital Sim = 0.0°C *Sim not plugged in S28 4/5/2021*

SETTINGS

Lamp Voltage = 1.86 V
Cooler Voltage = 1.81 V
Bias Voltage = 80 V
Chopper Freq = 523 Hz

PUMP INFO

Flow Rate = 4.966 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.1943	-0.1880
MIN(V)	-0.1955	-0.1894

FILTER INFO

Filter 1	-0.188	Zero = true
Filter 2	0.153	Zero = true
Filter 3	0.957	Zero = true

CALIBRATION CHECK

Xq = 0.089 35.04%

Diag ^{run} ~~running~~ post cleaning of the filter wheels/quartz block. S28 4/2/2021
S28 4/5/2021

Diag = diagnostic S28 4/6/2021

DIAGNOSTIC RESULT



DataMaster DMT: 100151
Location:
Calibration Date: 03/12/2021
Certification Date: 03/12/2021
Installation Date:
Test Date: 03/26/2021
Test Time: 10:35:31

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 46.7°C
Digital Sim = 0.0°C *Sim not plugged in SDS 4/5/2021*

SETTINGS

Lamp Voltage = 1.86 V
Cooler Voltage = 1.81 V
Bias Voltage = 80 V
Chopper Freq = 531 Hz

PUMP INFO

Flow Rate = 4.861 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.1352	-0.1317
MIN(V)	-0.1368	-0.1331

FILTER INFO

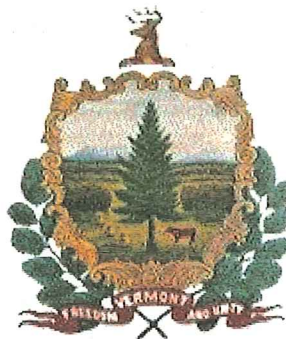
Filter 1	-0.132	Zero = true
Filter 2	0.208	Zero = true
Filter 3	1.030	Zero = true

CALIBRATION CHECK

Xq = 0.136 0.07%

Returned instrument to DMT lab. SDS 4/5/2021

DIAGNOSTIC RESULT



DataMaster DMT: 100151
Location:
Calibration Date: 03/12/2021
Certification Date: 03/12/2021
Installation Date:
Test Date: 03/25/2021
Test Time: 14:48:53

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C
Breath Tube = 47.3°C
Digital Sim = 0.0°C *Sim not plugged in SDB 4/5/2021*

SETTINGS

Lamp Voltage = 1.86 V
Cooler Voltage = 1.81 V
Bias Voltage = 80 V
Chopper Freq = 529 Hz

PUMP INFO

Flow Rate = 4.934 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.1384	-0.1348
MIN(V)	-0.1400	-0.1360

FILTER INFO

Filter 1	-0.135	Zero = true
Filter 2	0.205	Zero = true
Filter 3	1.029	Zero = true

CALIBRATION CHECK

Xq = 0.136 0.00%

DIAGNOSTIC RESULT



DataMaster DMT: 100151
Location:
Calibration Date: 03/12/2021
Certification Date: 03/12/2021
Installation Date:
Test Date: 03/24/2021
Test Time: 16:10:12

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 46.9°C
Digital Sim = 0.0°C *Sim not plugged in S28 4/5/2021*

SETTINGS

Lamp Voltage = 1.86 V
Cooler Voltage = 1.81 V
Bias Voltage = 80 V
Chopper Freq = 526 Hz

PUMP INFO

Flow Rate = 4.987 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX (V)	-0.1234	-0.1193
MIN (V)	-0.1250	-0.1209

FILTER INFO

Filter 1	-0.121	Zero = true
Filter 2	0.217	Zero = true
Filter 3	1.039	Zero = true

CALIBRATION CHECK

Xq = 0.136 0.13%

Transferred DMT to different location in the lab to see if the change in location would impact the Xq value. S28 4/5/2021



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VERMONT FORENSIC LABORATORY
45 State Dr. Waterbury, VT 05671

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Certification of Calibration

DMT Serial # 100151

Date of Calibration: 03/12/21

Date of Certification: 03/12/21

Instrument Location: Newport PD

Calibration Results:

Instrument was calibrated and certified in accordance with Vermont Forensic Laboratory procedure TOX_P200_DMT Manual. Calibration results are reported as $X \pm Y$, where X is measured value, Y is measurement uncertainty equals Y .

Measured Value Uncertainty

0.019 $\pm$ 0.001 g/210 L

0.078 $\pm$ 0.004 g/210 L

0.097 $\pm$ 0.005 g/210 L

0.158 $\pm$ 0.008 g/210 L

0.356 $\pm$ 0.017 g/210 L

The measurement uncertainty for determining the ethanol concentration of aqueous solutions using the DMT evidential breath testing instrument within the lab is:

4.7%

Uncertainty is expressed as an expanded uncertainty at the 95.45% level of confidence and a coverage factor $k=2$, in accordance with ISO 17025 and the ANAB ISO/IEC 17025:2017 Forensic Science Testing and Calibration Laboratories Accreditation Requirements. 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 or Guide 34 accredited vendor.

Analyzed CRM materials were prepared using pipettes calibrated semi-annually 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 17025 accredited vendor. The performance of the method was evaluated using NIST traceable control materials from an ISO 17025 accredited vendor.

Calibration Certified by: SJS Sarah Stratton

Title: Forensic Chemist

Date: March 18th, 2021

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.

TOX_F200_2_v2 11052018

Approved by Lab Director

Instrument never put into service with this cal. SJS 4/15/2021

100151

SJS

SJS 4/15/2021

Page 1 of 1

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State of Vermont
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DMT Technical Support Inquiry

DMT Serial #: 100151
Agency/Site: Newport PD
Date: 3/4/2021
DMT Supervisor: Charles Moulton

Problem:

During a DUI test, the DMT produced a calibration check error. Subsequent follow-up testing by the DMT supervisor continued to produce this error and a diagnostic indicated that the Xq was significantly out of range.

Work Performed:

On 3/9/2021, VFL staff brought the instrument back to the lab. While picking up the instrument, it was noted that it was covered in a thin layer of dust. The DMT was left to sit with a daily diagnostic to see if there were any significant changes in the Xq as a result of the change in location or time. On 3/12/2021, a calibration was run. The cal check solution failed low twice so it was replaced and the subsequent cal check was successful. A successful certification was ~~produced~~^{*performed} and the instrument was left to sit for two days to continue to monitor the Xq values. As of 3/18/2021, the Xq values appeared to be holding steady. Instrument ready for installation at the agency.

**performed
SJS 4/5/2021*

Performed On Site ☐
Performed In house ☒

Performed By: Sarah Stratton SJS

Date: 3/18/2021

Technical Reviewer: _____

Date: _____

Administrative Reviewer: _____

Date: _____

Director Reviewer: _____

Date: _____

CALIBRATION REPORT

DataMaster DMT: 100151
Calibration Date: 03/12/2021
Calibrated by: SARAH STRATTON
Lot: 21-02-100



Ca	=	0.100		
CAL	=	0.945438	0.800	<= CAL < 1.200
b1	=	0.002	0.000	<= b1 < 0.004
b2	=	0.007	0.002	<= b2 < 0.010
b3	=	0.001	0.000	<= b3 < 0.004
Xq	=	0.136	0.050	<= Xq < 0.200
a21	=	1.176085	1.050	<= a21 < 1.300
a31	=	0.446861	0.300	<= a31 < 0.800

DI Water

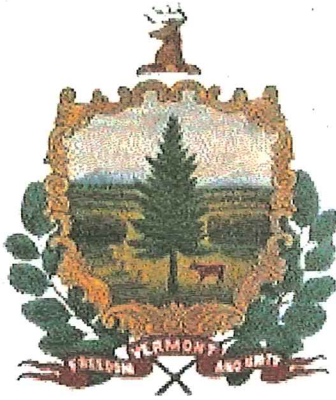
BL-DMT01072020 34.00°C *SSS* 3/12/2021

Performed by

SSS SSS

Date

03/12/2021



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMaster DMT: 100151

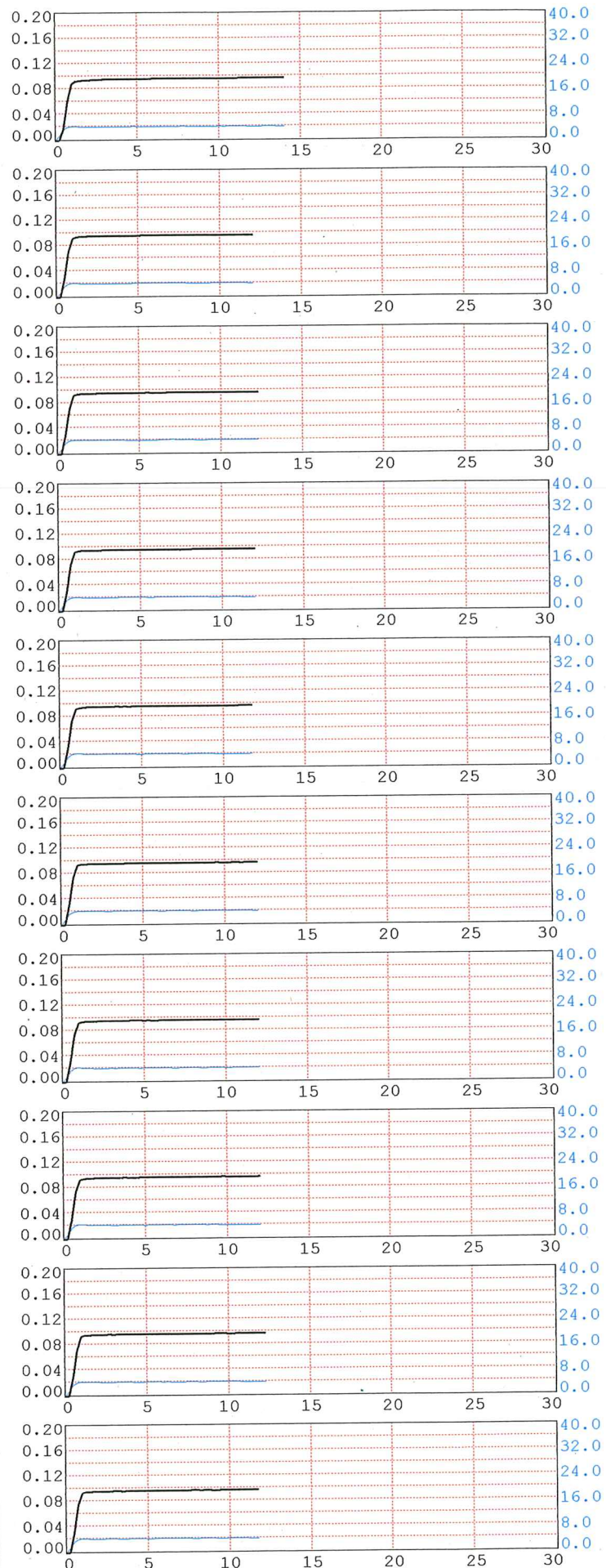
Date: 03/12/2021
Time: 12:43:00

SUPERVISOR NAME:
SGS CAL CHECK

SOLUTION LOT #: ACS201912C
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	12:43
CALIBRATION CHECK	PASSED	12:44
SIMULATOR VAPOR 34.0°C	0.097	12:44
SIMULATOR VAPOR 34.0°C	0.097	12:45
SIMULATOR VAPOR 34.0°C	0.097	12:46
SIMULATOR VAPOR 34.0°C	0.097	12:47
SIMULATOR VAPOR 34.0°C	0.097	12:48
SIMULATOR VAPOR 34.0°C	0.097	12:50
SIMULATOR VAPOR 34.0°C	0.097	12:51
SIMULATOR VAPOR 34.0°C	0.097	12:52
SIMULATOR VAPOR 34.0°C	0.097	12:53
SIMULATOR VAPOR 34.0°C	0.097	12:54
BLANK TEST	0.000	12:55

Average = 0.097
Std Dev = 0.0000





ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMaster DMT: 100151

Date: 03/12/2021

Time: 10:53:01

SUPERVISOR NAME:

SGS CAL CHECK

SOLUTION LOT #: ACS201912C

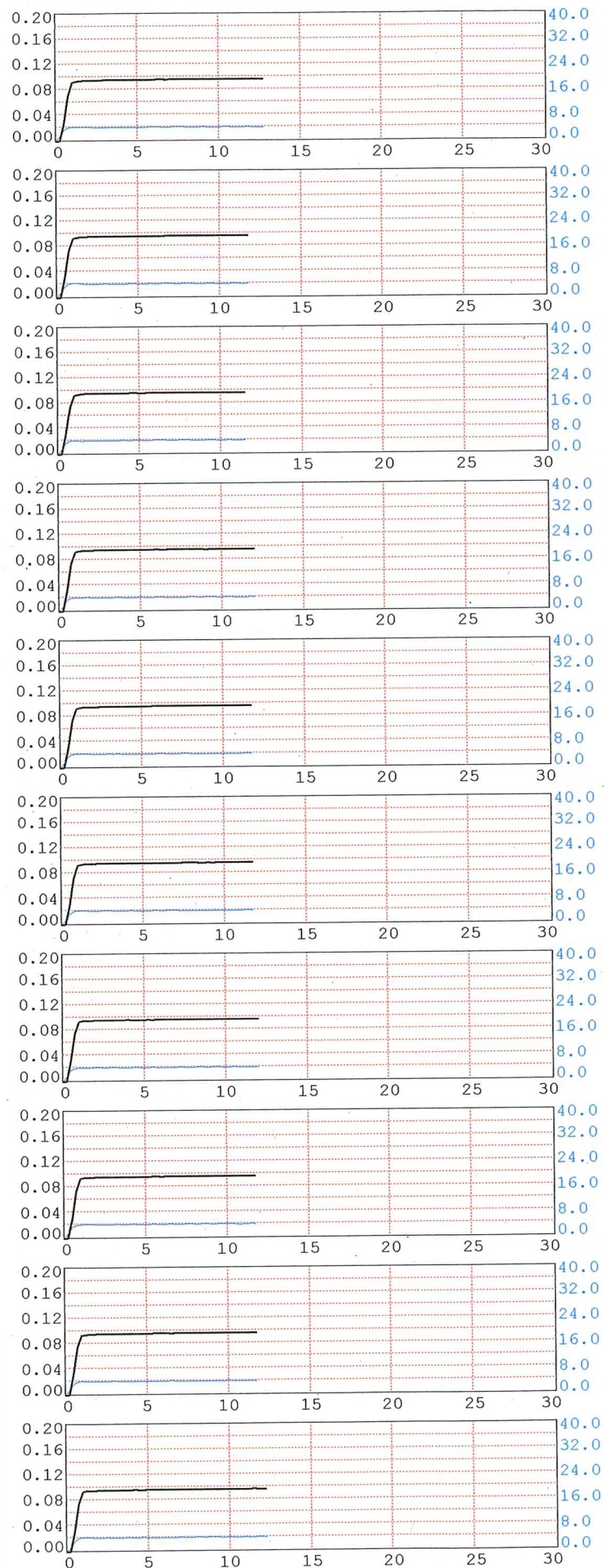
SOLUTION CONCENTRATION: 0.100

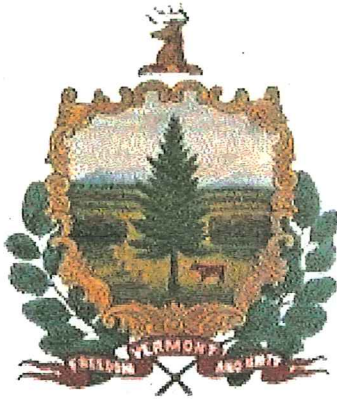
BLANK TEST	0.000	10:53
CALIBRATION CHECK	PASSED	10:54
SIMULATOR VAPOR 34.0°C	0.096	10:54
SIMULATOR VAPOR 34.0°C	0.096	10:55
SIMULATOR VAPOR 34.0°C	0.096	10:56
SIMULATOR VAPOR 34.0°C	0.096	10:57
SIMULATOR VAPOR 34.0°C	0.096	10:58
SIMULATOR VAPOR 34.0°C	0.096	10:59
SIMULATOR VAPOR 34.0°C	0.096	11:01
SIMULATOR VAPOR 34.0°C	0.096	11:02
SIMULATOR VAPOR 34.0°C	0.096	11:03
SIMULATOR VAPOR 34.0°C	0.096	11:04
BLANK TEST	0.000	11:05

Average = 0.096

Std Dev = 0.0000

*Sim solution failed low. Replaced sim solution.
SJS 3/12/2021*





ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMaster DMT: 100151

Date: 03/12/2021

Time: 10:38:51

SUPERVISOR NAME:

SGS CAL CHECK

SOLUTION LOT #: ACS201912C

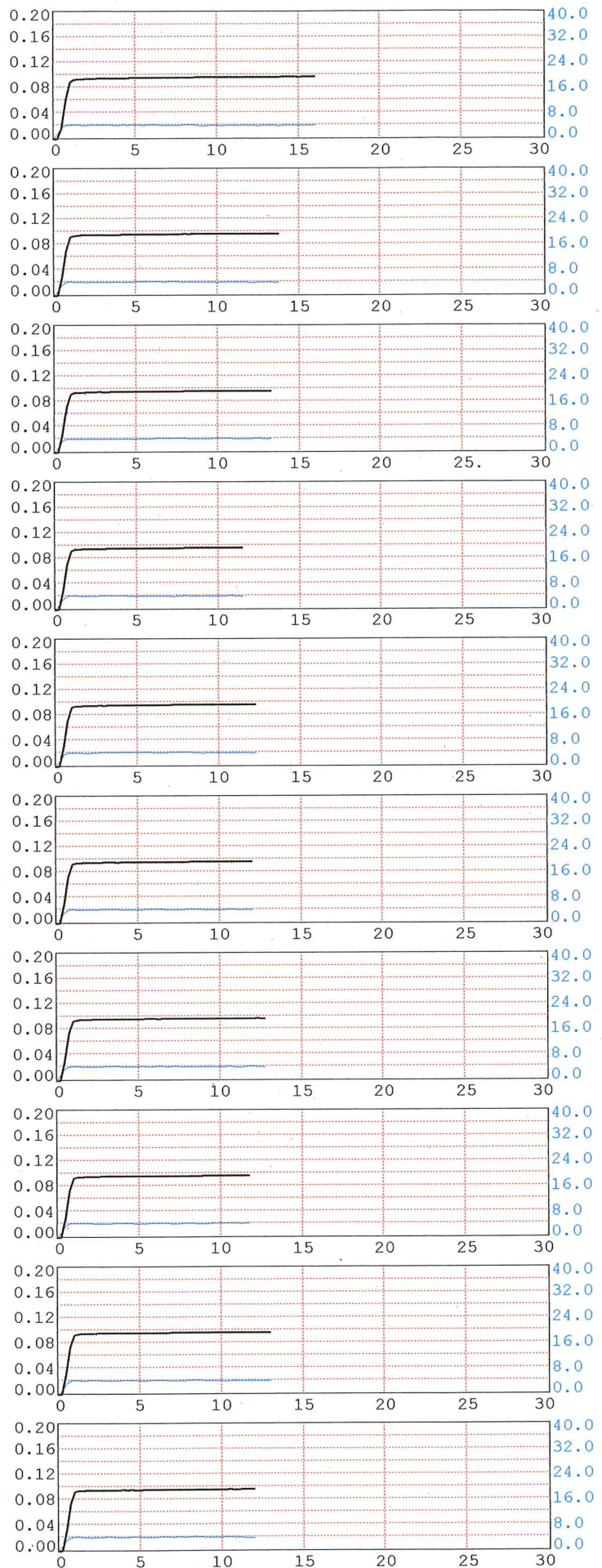
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	10:39
CALIBRATION CHECK	PASSED	10:39
SIMULATOR VAPOR 34.0°C	0.097	10:40
SIMULATOR VAPOR 34.0°C	0.097	10:41
SIMULATOR VAPOR 34.0°C	0.097	10:42
SIMULATOR VAPOR 34.0°C	0.096	10:43
SIMULATOR VAPOR 34.0°C	0.096	10:44
SIMULATOR VAPOR 34.0°C	0.096	10:45
SIMULATOR VAPOR 34.0°C	0.097	10:47
SIMULATOR VAPOR 34.0°C	0.096	10:48
SIMULATOR VAPOR 34.0°C	0.096	10:49
SIMULATOR VAPOR 34.0°C	0.096	10:50
BLANK TEST	0.000	10:51

Average = 0.096

Std Dev = 0.0005

Sim solution failed low. Recan. 8/28 3/12/2021



CERTIFICATION REPORT

DataMaster DMT: 100151
Calibration Date: 03/12/2021
Certification Date: 03/12/2021
Certified by: SARAH STRATTON



Diagnostic Results

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 45.0°C
Digital Sim = 34.0°C

SETTINGS

Lamp Voltage = 1.86 V
Cooler Voltage = 1.81 V
Bias Voltage = 80 V
Chopper Freq = 529 Hz

PUMP INFO

Flow Rate = 4.968 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX (V)	-0.0453	-0.0427
MIN (V)	-0.0467	-0.0437

FILTER INFO

Filter 1	-0.043	Zero = true
Filter 2	0.288	Zero = true
Filter 3	1.109	Zero = true

CALIBRATION CHECK

Xq = 0.136 0.00%

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

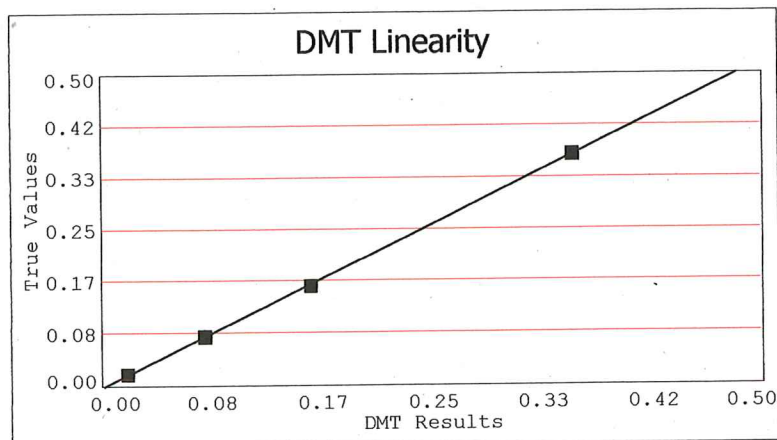
Software Configuration

Data Collection..... yes

Linearity Check Results

True Value	Reported Average	Std Dev
0.020 g/210L	0.019 g/210L	0.0000
Lot # 20-08-020		
0.080 g/210L	0.078 g/210L	0.0000
Lot # 20-12-080		
0.161 g/210L	0.158 g/210L	0.0005
Lot # 20-09-160		
0.371 g/210L	0.356 g/210L	0.0006
Lot # 20-16-360		

$R^2 = 0.9999$



Acetone Interference Test

Lot # 20-13-08A2

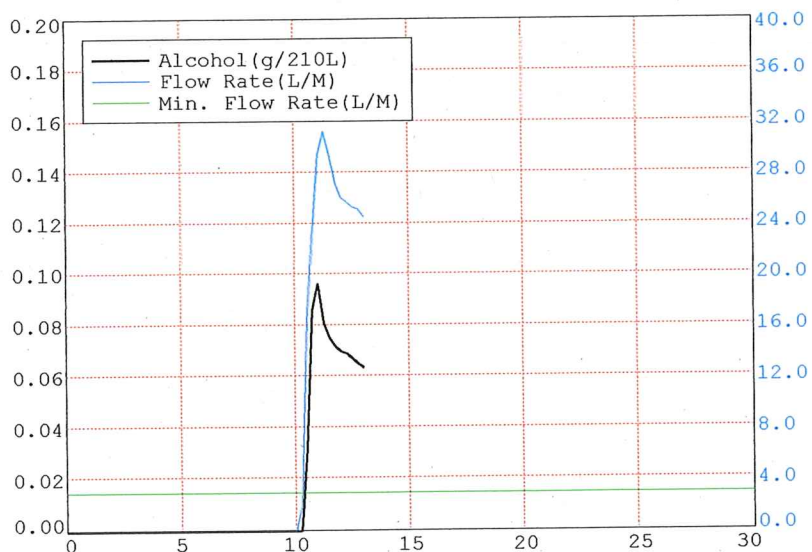
Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

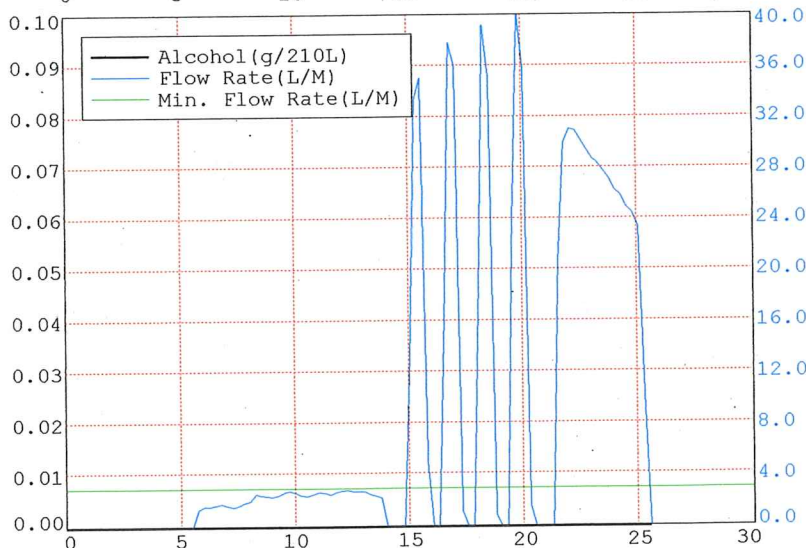
RF Detection Test

Passed



Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by

SJS SJS

Date

03/12/2021

Reviewed by

Date

DMT Serial Number #100151

Page 2 of 2

03/12/2021 2:04 PM

100151

SJS

21a

7

DIAGNOSTIC RESULT

DataMaster DMT: 100151
Location:
Calibration Date: 03/12/2021
Certification Date: 03/12/2021
Installation Date:
Test Date: 03/18/2021
Test Time: 08:28:27



VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C
Breath Tube = 44.6°C
Digital Sim = 0.0°C *Not plugged in 828 3/18/2021*

SETTINGS

Lamp Voltage = 1.86 V
Cooler Voltage = 1.81 V
Bias Voltage = 80 V
Chopper Freq = 530 Hz

PUMP INFO

Flow Rate = 4.942 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0787	-0.0736
MIN(V)	-0.0803	-0.0748

FILTER INFO

Filter 1	-0.075	Zero = true
Filter 2	0.259	Zero = true
Filter 3	1.062	Zero = true

CALIBRATION CHECK

Xq = 0.135 0.26%

DIAGNOSTIC RESULT



DataMaster DMT: 100151
Location:
Calibration Date: 03/12/2021
Certification Date: 03/12/2021
Installation Date:
Test Date: 03/17/2021
Test Time: 15:17:59

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 44.0°C
Digital Sim = 0.0°C

SDS 4/7/2021
Sim not plugged in SDS 4/7/2021

SETTINGS

Lamp Voltage = 1.86 V
Cooler Voltage = 1.81 V
Bias Voltage = 80 V
Chopper Freq = 528 Hz

PUMP INFO

Flow Rate = 4.967 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX (V)	-0.0805	-0.0750
MIN (V)	-0.0821	-0.0766

FILTER INFO

Filter 1	-0.076	Zero = true
Filter 2	0.258	Zero = true
Filter 3	1.057	Zero = true

CALIBRATION CHECK

Xq = 0.135 0.26%

DIAGNOSTIC RESULT



DataMaster DMT: 100151
Location:
Calibration Date: 03/12/2021
Certification Date: 03/12/2021
Installation Date:
Test Date: 03/15/2021
Test Time: 14:41:23

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C
Breath Tube = 46.6°C
Digital Sim = 0.0°C *Sim not plugged in S28 4/7/2021*

SETTINGS

Lamp Voltage = 1.86 V
Cooler Voltage = 1.81 V
Bias Voltage = 80 V
Chopper Freq = 531 Hz

PUMP INFO

Flow Rate = 5.013 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX (V)	-0.0650	-0.0608
MIN (V)	-0.0667	-0.0620

FILTER INFO

Filter 1	-0.061	Zero = true
Filter 2	0.272	Zero = true
Filter 3	1.084	Zero = true

CALIBRATION CHECK

Xq = 0.135 0.46%

SD

DIAGNOSTIC RESULT

DataMaster DMT: 100151
Location: NEWPORT PD
Calibration Date: 01/25/2021
Certification Date: 01/25/2021
Installation Date: 01/28/2021
Test Date: 03/12/2021
Test Time: 09:02:27



VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 46.8°C
Digital Sim = 0.0°C *Not plugged in 828 3/12/2021*

SETTINGS

Lamp Voltage = 1.86 V
Cooler Voltage = 1.81 V
Bias Voltage = 80 V
Chopper Freq = 531 Hz

PUMP INFO

Flow Rate = 4.958 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX (V)	-0.0628	-0.0589
MIN (V)	-0.0642	-0.0602

FILTER INFO

Filter 1	-0.060	Zero = true
Filter 2	0.273	Zero = true
Filter 3	1.086	Zero = true

CALIBRATION CHECK

Xq = 0.136 46.19%

DIAGNOSTIC RESULT

DataMaster DMT: 100151
Location: NEWPORT PD
Calibration Date: 01/25/2021
Certification Date: 01/25/2021
Installation Date: 01/28/2021
Test Date: 03/11/2021
Test Time: 12:41:15



VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C
Breath Tube = 47.0°C
Digital Sim = 0.0°C *Not plugged in 828 3/11/2021*

SETTINGS

Lamp Voltage = 1.86 V
Cooler Voltage = 1.81 V
Bias Voltage = 80 V
Chopper Freq = 530 Hz

PUMP INFO

Flow Rate = 4.898 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0602	-0.0555
MIN(V)	-0.0614	-0.0571

FILTER INFO

Filter 1	-0.057	Zero = true
Filter 2	0.275	Zero = true
Filter 3	1.089	Zero = true

CALIBRATION CHECK

Xq = 0.135 46.00%

DIAGNOSTIC RESULT



DataMaster DMT: 100151
Location: NEWPORT PD
Calibration Date: 01/25/2021
Certification Date: 01/25/2021
Installation Date: 01/28/2021
Test Date: 03/10/2021
Test Time: 13:24:57

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C
Breath Tube = 47.0°C
Digital Sim = 0.0°C *Not plugged in SDS 3/10/2021*

SETTINGS

Lamp Voltage = 1.86 V
Cooler Voltage = 1.81 V
Bias Voltage = 80 V
Chopper Freq = 529 Hz

PUMP INFO

Flow Rate = 5.020 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0567	-0.0530
MIN(V)	-0.0585	-0.0547

FILTER INFO

Filter 1	-0.053	Zero = true
Filter 2	0.278	Zero = true
Filter 3	1.090	Zero = true

CALIBRATION CHECK

Xq = 0.135 46.00%

DIAGNOSTIC RESULT



DataMaster DMT: 100151
Location: NEWPORT PD
Calibration Date: 01/25/2021
Certification Date: 01/25/2021
Installation Date: 01/28/2021
Test Date: 03/09/2021
Test Time: 13:55:04

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 45.9°C
Digital Sim = 0.0°C *Not plugged in 828 3/10/2021*

SETTINGS

Lamp Voltage = 1.86 V
Cooler Voltage = 1.81 V
Bias Voltage = 80 V
Chopper Freq = 527 Hz

PUMP INFO

Flow Rate = 5.010 L/M

DETECTOR INFO

	ON	OFF
PUMP	ON	OFF
MAX(V)	0.0061	0.0110
MIN(V)	0.0041	0.0096

FILTER INFO

Filter 1	0.010	Zero = true
Filter 2	0.337	Zero = true
Filter 3	1.113	Zero = true

CALIBRATION CHECK

Xq = 0.136 46.86%

DIAGNOSTIC RESULT

DataMaster DMT: 100151
Location: NEWPORT PD
Calibration Date: 01/25/2021
Certification Date: 01/25/2021
Installation Date: 01/28/2021
Test Date: 03/09/2021
Test Time: 10:43:49



VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 41.5°C
Digital Sim = 34.0°C

SETTINGS

Lamp Voltage = 1.86 V
Cooler Voltage = 1.81 V
Bias Voltage = 80 V
Chopper Freq = 531 Hz

PUMP INFO

Flow Rate = 4.953 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX (V)	-0.0750	-0.0683
MIN (V)	-0.0766	-0.0695

FILTER INFO

Filter 1	-0.069	Zero = true
Filter 2	0.264	Zero = true
Filter 3	1.050	Zero = true

CALIBRATION CHECK

Xq = 0.136 46.28%

Re: DMT Error

DPS - DMT <DPS.DMT@vermont.gov>

Thu 2021-03-04 8:42 AM

To: Charles Moulton <charles.moulton@newportpd.org>

Hey Sgt Moulton,

Unfortunately, there is nothing you can do to remedy this. We believe this is a product of the lab space conditions being different than the processing area at the PD so the DMT needed to equilibrate. We will need to come pull your DMT and perform a calibration adjustment now that it has had a chance to equilibrate. Hopefully it will be out of service for a shorter period of time than last time. This happens periodically, especially this time of year when rapid temperature changes and general dirtiness are common. Hopefully make it up tomorrow.

Sorry for the inconvenience.

Thanks,

Jeff

From: Charles Moulton <charles.moulton@newportpd.org>**Sent:** Thursday, March 4, 2021 3:30 AM**To:** DPS - DMT <DPS.DMT@vermont.gov>**Subject:** DMT Error

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

Good morning,

We are having an error code of "Calibration Check Error". While one of my guys was processing a DUI he had the error code come up twice. The room was aired out and there was nothing obvious as to a reason why.

The room was let to air out longer and I tried a Check-In test. This gave the same error code.

I then did a Diagnostic Test which seemed to come out fine.

I shut the DMT off and let it set for over a minute, turned it back on and did an A&P which also gave the same error code.

I have attached scans of the print-outs. Help?

Sergeant Charles Moulton
Newport Police Department
222 Main Street
Newport City Vermont
(P) 802-334-6733
(F) 802-334-2818
(E) Charles.Moulton@Newportpd.org