VERMONT FORENSIC LABORATORY

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DATAMASTER TECHNICAL SUPPORT INQUIRY

Agency/Site: _Middlesex VSP_____ **DataMaster Serial #:** _100146_____

Date: _11/27/2015_____ Requestor:_Crista Maurice_____

Instrument Supervisor: _Crista Maurice_____ Phone #: _(802)229-9191_____

Taken By:_Robert Driscoll_____

Problem: Calibration check error messages during subject samples_____

Laboratory Response: _Alcohol program staff reviewed data on DM Host computer and will remove the instrument from service for repair at the VFL.

Work Performed: __Disassembled the filter wheel assembly to clean the internal quartz standard. Reassembled the filter wheel assembly and tested its functionality with 100 filter wheel tests. The instrument has been Calibrated, Certified, and now awaits installation at the agency._____

☐ On Site ☒ In-house Attachments: __6____ pages

Performed By: Robert Driscoll RD Date: __12/01/2015_
Final Review: [signature] Date: 12/1/15

Driscoll, Rob

From: Maurice, Crista
Sent: Friday, November 27, 2015 9:56 PM
To: Driscoll, Rob
Subject: DMT 100146 error message

Rob,

The past few times the Troops have tried to use the Datamaster it displays a calibration check error message while its running through its calibration checks. Sometimes Troops can run through the start-up checks again and it works fine. Other times it runs through the start-up checks and they get the same error. When it has worked the second time through, the Troops have moved the suspect further away from the machine and the Datamaster going through its checks fine.

Are the suspects sitting too close to the machine which is causing the Calibration check error or is it something else? I didn't see anything in the supervisors manual that would explain it or how to fix it.

Thanks,
Crista

Trooper Crista Maurice & K9 Cole
Vermont State Police - Middlesex
1080 US Rte 2
Middlesex, Vermont

Phone: (802) 229-9191
Fax: (802) 229-2648

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CALIBRATION REPORT

DataMaster DMT: 100146
Calibration Date: 12/01/2015
Calibrated by: ROBERT DRISCOLL
Lot: 15-08-100

Ca = 0.100				
CAL = 0.975048	0.800	<=	CAL	< 1.200
b1 = 0.000	0.000	<=	b1	< 0.004
b2 = 0.007	0.002	<=	b2	< 0.010
b3 = 0.000	0.000	<=	b3	< 0.004
Xq = 0.080	0.050	<=	Xq	< 0.200
a21 = 1.213078	1.050	<=	a21	< 1.300
a31 = 0.540781	0.300	<=	a31	< 0.800

Performed by ROD Date 12/01/2015

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMaster DMT: 100146

Date: 12/01/2015
Time: 10:31:40

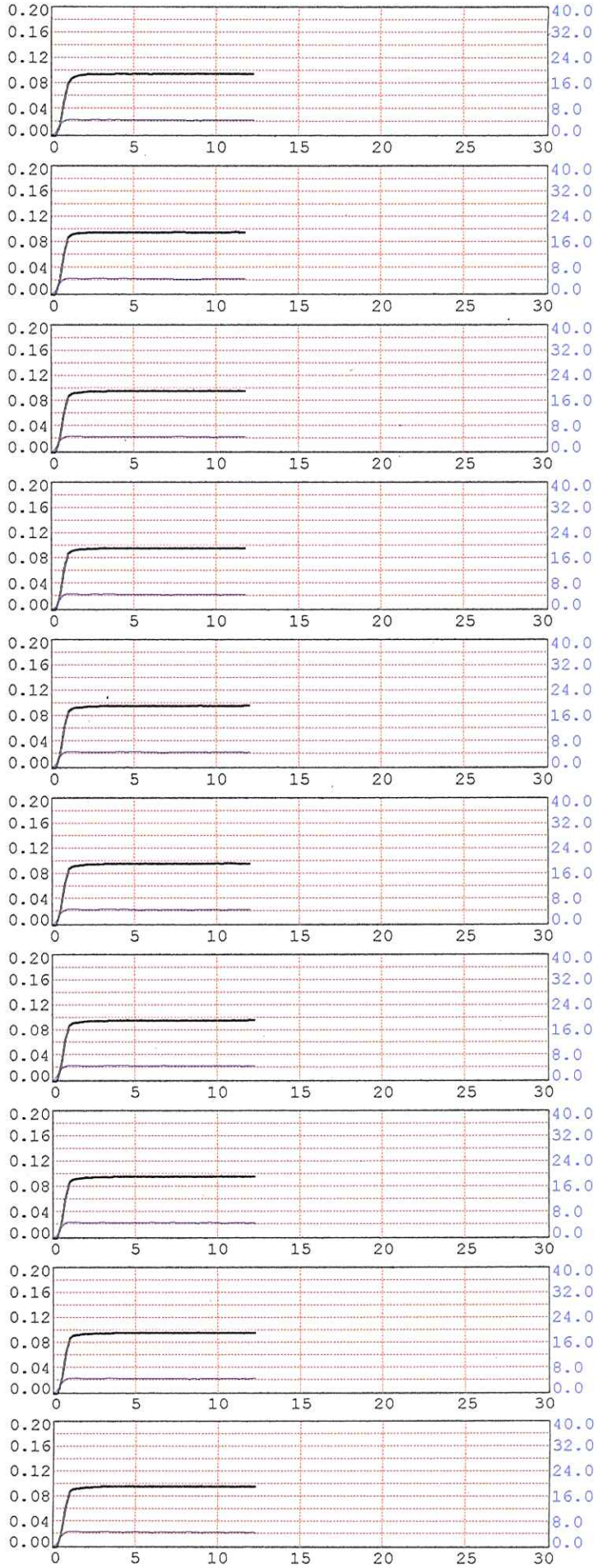
SUPERVISOR NAME:
RCD CAL CHECK

SOLUTION LOT #: GUTH 15050
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	10:32
CALIBRATION CHECK	PASSED	10:32
SIMULATOR VAPOR 33.7°C	0.096	10:32
SIMULATOR VAPOR 33.7°C	0.096	10:34
SIMULATOR VAPOR 33.8°C	0.097	10:35
SIMULATOR VAPOR 33.8°C	0.097	10:36
SIMULATOR VAPOR 33.8°C	0.097	10:37
SIMULATOR VAPOR 33.7°C	0.097	10:38
SIMULATOR VAPOR 33.8°C	0.097	10:39
SIMULATOR VAPOR 33.7°C	0.097	10:40
SIMULATOR VAPOR 33.7°C	0.097	10:41
SIMULATOR VAPOR 33.8°C	0.097	10:42
BLANK TEST	0.000	10:43

Average = 0.096
Std Dev = 0.0004

Will rerun Cal Check
RCD
12/1/15



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ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMaster DMT: 100146

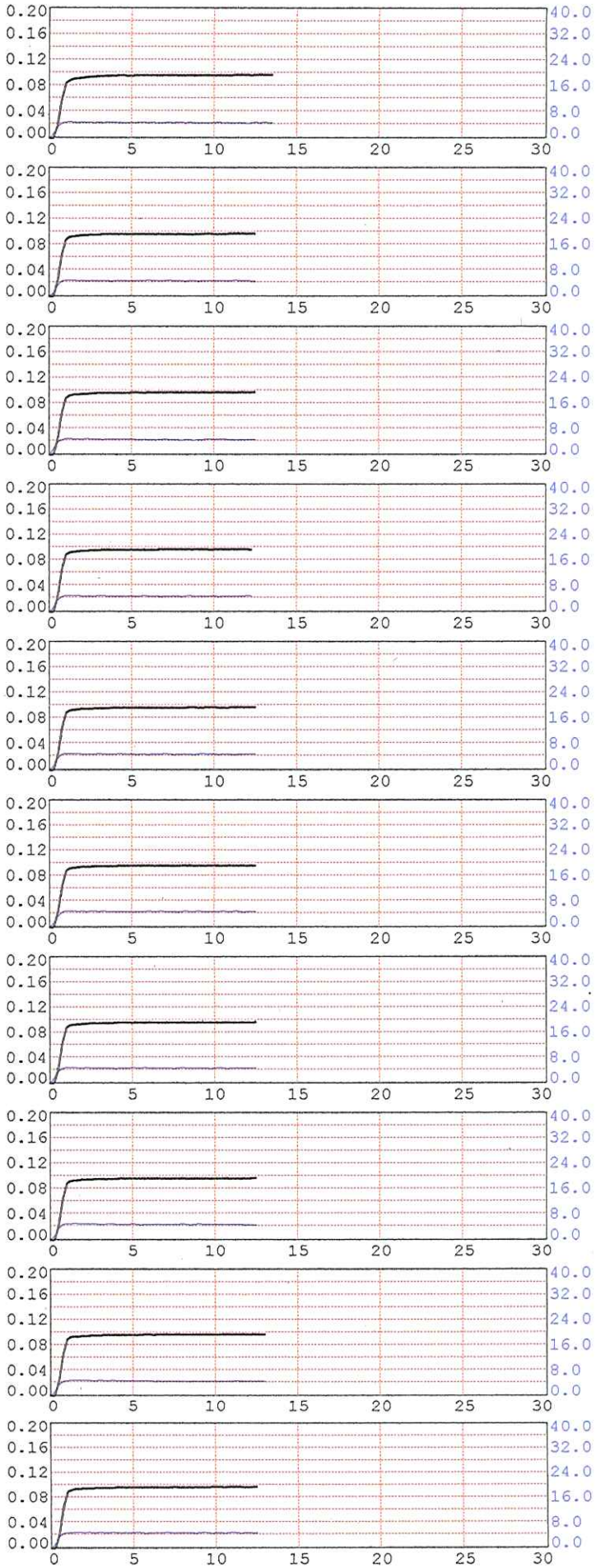
Date: 12/01/2015
Time: 10:44:56

SUPERVISOR NAME:
RCD CAL CHECK

SOLUTION LOT #: GUTH 15050
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	10:45
CALIBRATION CHECK	PASSED	10:45
SIMULATOR VAPOR 33.7°C	0.097	10:46
SIMULATOR VAPOR 33.8°C	0.097	10:47
SIMULATOR VAPOR 33.8°C	0.098	10:48
SIMULATOR VAPOR 33.7°C	0.097	10:49
SIMULATOR VAPOR 33.8°C	0.097	10:50
SIMULATOR VAPOR 33.7°C	0.097	10:51
SIMULATOR VAPOR 33.7°C	0.097	10:52
SIMULATOR VAPOR 33.7°C	0.097	10:53
SIMULATOR VAPOR 33.7°C	0.097	10:54
SIMULATOR VAPOR 33.7°C	0.097	10:55
BLANK TEST	0.000	10:56

Average = 0.097
Std Dev = 0.0003



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CERTIFICATION REPORT

DataMaster DMT: 100146
Calibration Date: 12/01/2015
Certification Date: 12/01/2015
Certified by: ROBERT DRISCOLL

Diagnostic Results

```
VERSIONS
DMT: 2.00
PIC: 2.05
Modem: 2.6
Questions: 2.1

TEMPERATURES

Sample Chamber = 48.8°C
Breath Tube    = 45.3°C
Digital Sim    = 33.8°C

SETTINGS
Lamp Voltage   = 1.70 V
Cooler Voltage = 1.71 V
Bias Voltage   = 80 V
Chopper Freq   = 549 Hz

PUMP INFO
Flow Rate = 6.057 L/M

DETECTOR INFO
PUMP     ON        OFF
MAX(V)   0.0333    0.0358
MIN(V)   0.0317    0.0344

FILTER INFO
Filter 1   0.035  Zero = true
Filter 2   0.267  Zero = true
Filter 3   0.556  Zero = true

CALIBRATION CHECK
Xq  = 0.080  0.76%
```

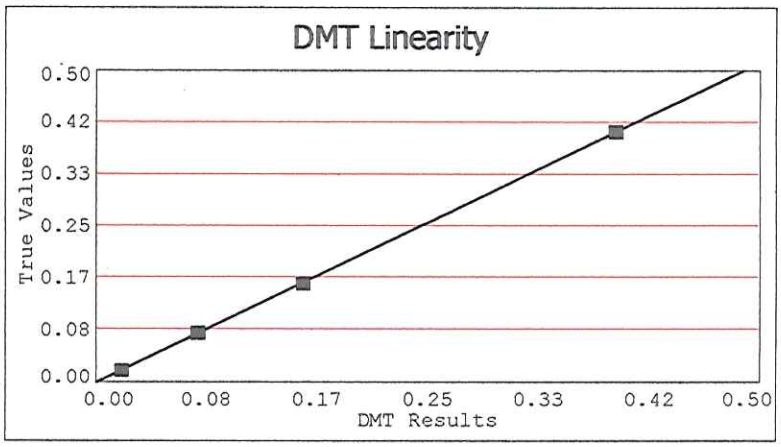
Options

```
OPTIONS
Units
   Alcohol................... g/210L
Simulator
   Tolerance Check........... yes
   Standard Type............ wet
   Nominal................... 0.100
   Digital Simulator........ Guth34CNP
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 Lot # 15-11-020	0.019 g/210L	0.0000
0.080 g/210L Lot # 15-04-080	0.077 g/210L	0.0005
0.159 g/210L Lot # 15-03-160	0.156 g/210L	0.0005
0.402 g/210L Lot # 15-10-400	0.391 g/210L	0.0011

$R^2 = 1$



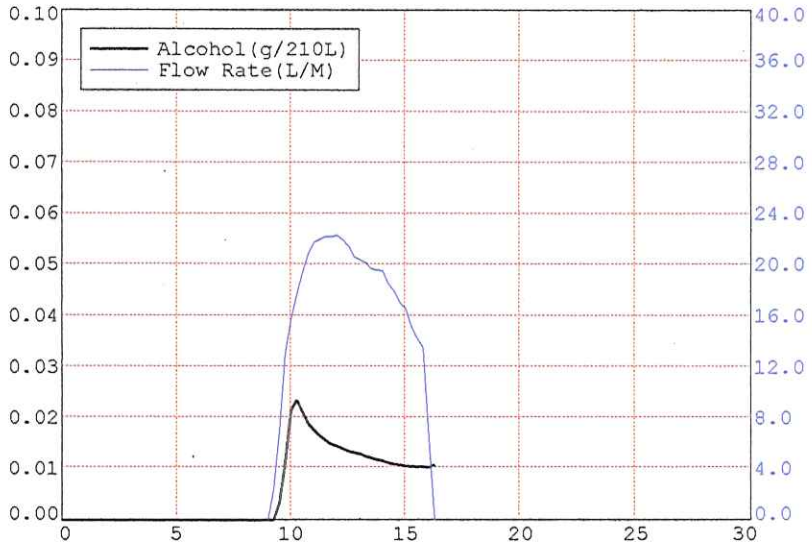
Acetone Interference Test

Lot # 15-04-08A1C

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

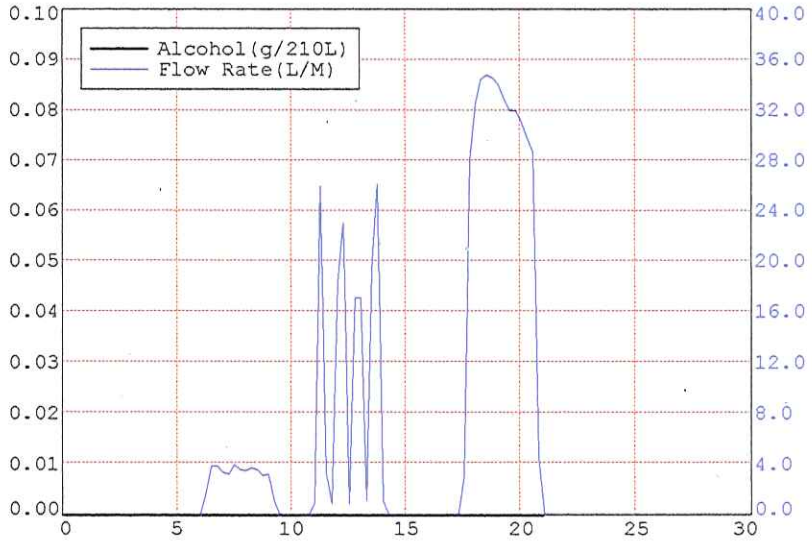


RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by RO Date 12/01/2015

Reviewed by Date 12/1/15