VERMONT FORENSIC LABORATORY

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DATAMASTER TECHNICAL SUPPORT INQUIRY

Agency/Site: VFL **DataMaster Serial #:** 100147

Date: 3/16/2012 Requestor: A. Bolduc

Instrument Supervisor: _____ Phone #: _____

Taken By: _____

Problem: Repeated blank errors after the interference test during a Certification sequence

Laboratory Response: After repeated attempts, NPAS was contacted for troubleshooting assistance.

Work Performed: Using a volt meter to monitor the output voltage, I was able to observe that if a simulator was not attached to the sim ports during the purge cycle post interference test, the system would over-purge to more than 10 mV below zero, causing a blank error. If the simulator was attached, the system would purge to a level equivalent to the pre-sample blank and would be acceptable.

Working with the manufacturer, we were unable to determine a cause for or a solution to prevent this phenomenon. Going forward we will ensure the simulator remains attached during the certification to prevent errors.

Unit being used for software testing

☐ On Site ☒ In-house Attachments: ~~8~~ 6 pages 1/10/13

Performed By: A. Bolduc Date: 1/10/13

Final Review: [signature] Date: 1/10/2013

CALIBRATION REPORT

DataMaster DMT: 100147
Calibration Date: 03/16/2012
Calibrated by: AMANDA BOLDUC
Lot: 12-33-100

Ca	= 0.100				
CAL	= 0.985906	0.800	<=	CAL	< 1.200
b1	= 0.001	0.000	<=	b1	< 0.004
b2	= 0.004	0.002	<=	b2	< 0.010
b3	= 0.000	0.000	<=	b3	< 0.004
Xq	= 0.118	0.050	<=	Xq	< 0.200
a21	= 1.170497	1.050	<=	a21	< 1.300
a31	= 0.550188	0.300	<=	a31	< 0.800

Performed by Amanda Bolduc Date 03/16/2012

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CERTIFICATION REPORT

DataMaster DMT: 100147
Calibration Date: 03/16/2012
Certification Date: 03/16/2012
Certified by: AMANDA BOLDUC

Diagnostic Results

```
VERSIONS
DMT: 1.01
PIC: 2.06
Modem: 2.2
Questions: 2.1

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube    = 44.5°C
Digital Sim    = 0.0°C

SETTINGS
Lamp Voltage   = 1.53 V
Cooler Voltage = 1.50 V
Bias Voltage   = 81 V
Chopper Freq   = 526 Hz

PUMP INFO
Flow Rate = 6.180 L/M

DETECTOR INFO
PUMP     ON        OFF
MAX(V)    0.0030    0.0073
MIN(V)   -0.0004    0.0061

FILTER INFO
Filter 1   0.007  Zero = true
Filter 2   0.509  Zero = true
Filter 3   1.254  Zero = true

CALIBRATION CHECK
Xq  = 0.116  1.73%
```

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
```


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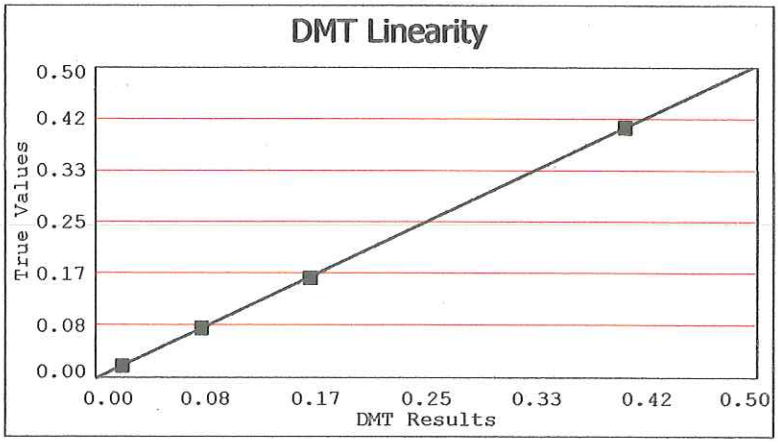
Linearity Check Results

True Value	Reported Average	Std Dev
0.020 g/210L Lot # 12-52-020	0.020 g/210L	0.0000
0.081 g/210L Lot # 12-63-080	0.080 g/210L	0.0000
0.162 g/210L Lot # 12-60-162	0.162 g/210L	0.0000
0.404 g/210L Lot # 12-62-400	0.400 g/210L	0.0000

$R^2 = 1$



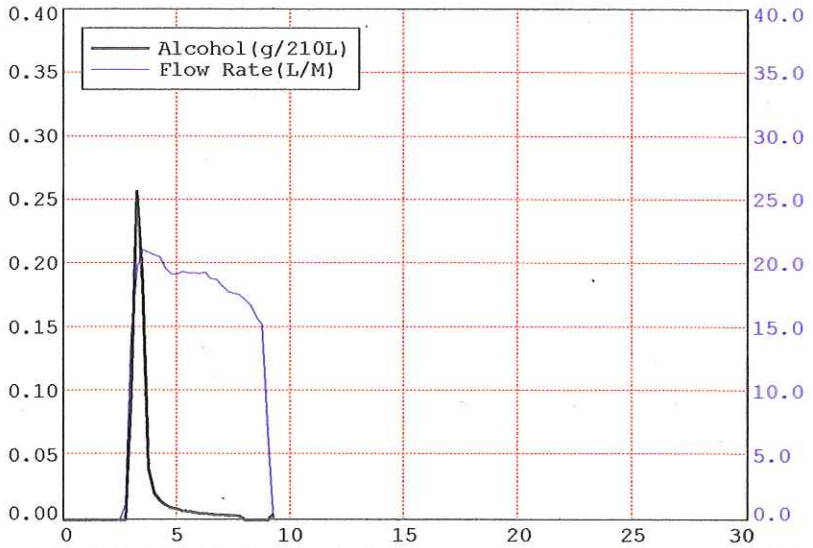
Acetone Interference Test

Lot # 12-63-080A1

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

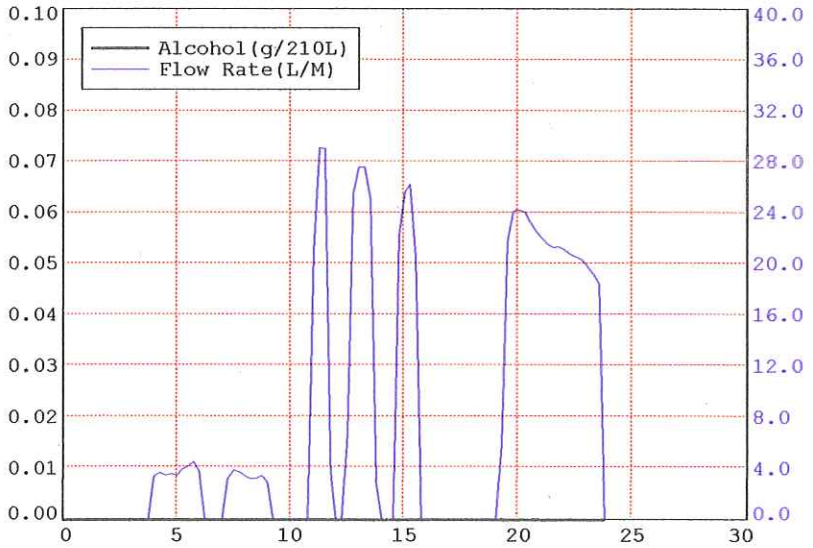


RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by Amanda Boldue Date 03/19/2012

Reviewed by [signature] Date 1/10/2013

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DIAGNOSTIC RESULT

DataMaster DMT: 100147
Location:
Calibration Date: 03/16/2012
Certification Date:
Installation Date:
Test Date: 03/16/2012
Test Time: 10:28:25

VERSIONS
DMT: 1.01
PIC: 2.06
Modem: 2.2
Questions: 2.1

TEMPERATURES

Sample Chamber = 49.1°C
Breath Tube = 42.7°C
Digital Sim = 34.0°C

SETTINGS
Lamp Voltage = 1.53 V
Cooler Voltage = 1.50 V
Bias Voltage = 81 V
Chopper Freq = 538 Hz

PUMP INFO
Flow Rate = 6.154 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0252	0.0293
MIN(V)	0.0238	0.0283

FILTER INFO
Filter 1 0.029 Zero = true
Filter 2 0.534 Zero = true
Filter 3 1.305 Zero = true

CALIBRATION CHECK
Xq = 0.117 0.30%

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ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100147

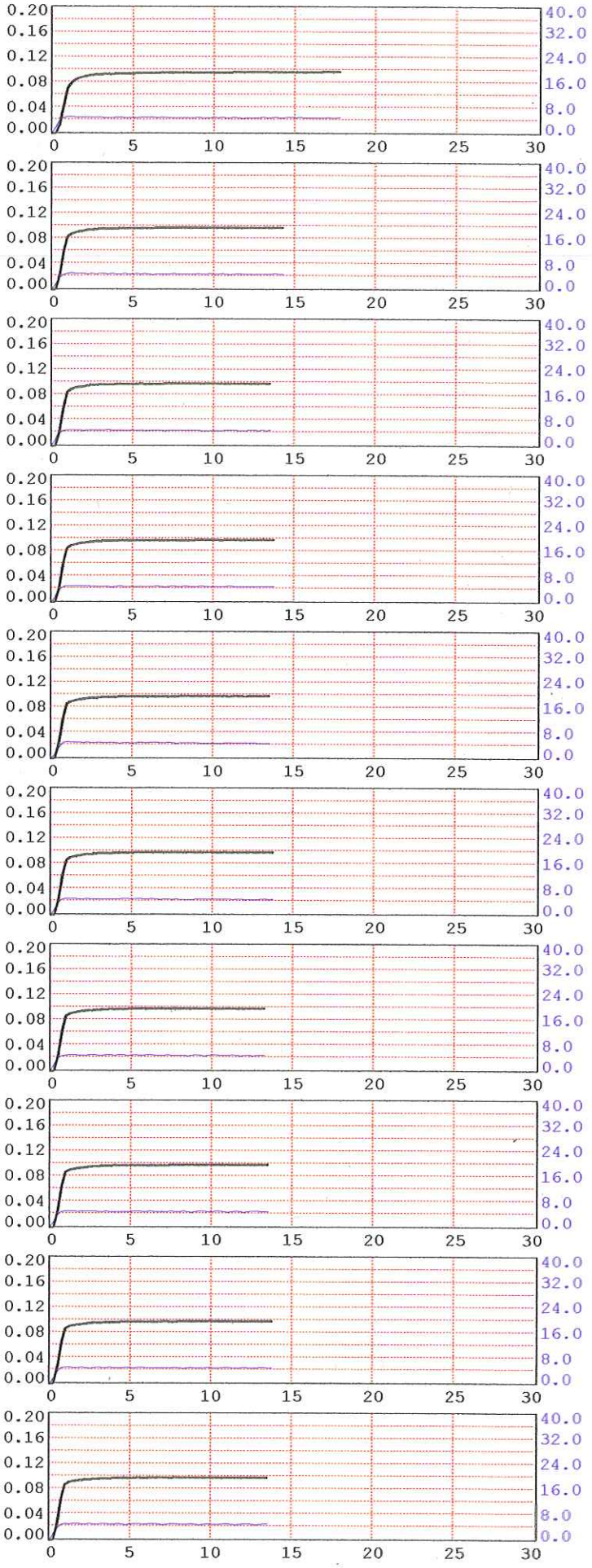
Date: 03/16/2012
Time: 10:32:24

SUPERVISOR NAME:
ALB CAL CHECK

SOLUTION LOT #: GUTH 11250
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	10:33
CALIBRATION CHECK	PASSED	10:33
SIMULATOR VAPOR 33.9°C	0.097	10:33
SIMULATOR VAPOR 34.0°C	0.098	10:34
SIMULATOR VAPOR 34.0°C	0.099	10:35
SIMULATOR VAPOR 34.0°C	0.099	10:37
SIMULATOR VAPOR 33.9°C	0.098	10:38
SIMULATOR VAPOR 34.0°C	0.099	10:39
SIMULATOR VAPOR 34.0°C	0.098	10:40
SIMULATOR VAPOR 33.9°C	0.098	10:41
SIMULATOR VAPOR 34.0°C	0.098	10:42
SIMULATOR VAPOR 33.9°C	0.098	10:43
BLANK TEST	0.000	10:44

Average = 0.098
Std Dev = 0.000



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ACCURACY & PRECISION REPORT

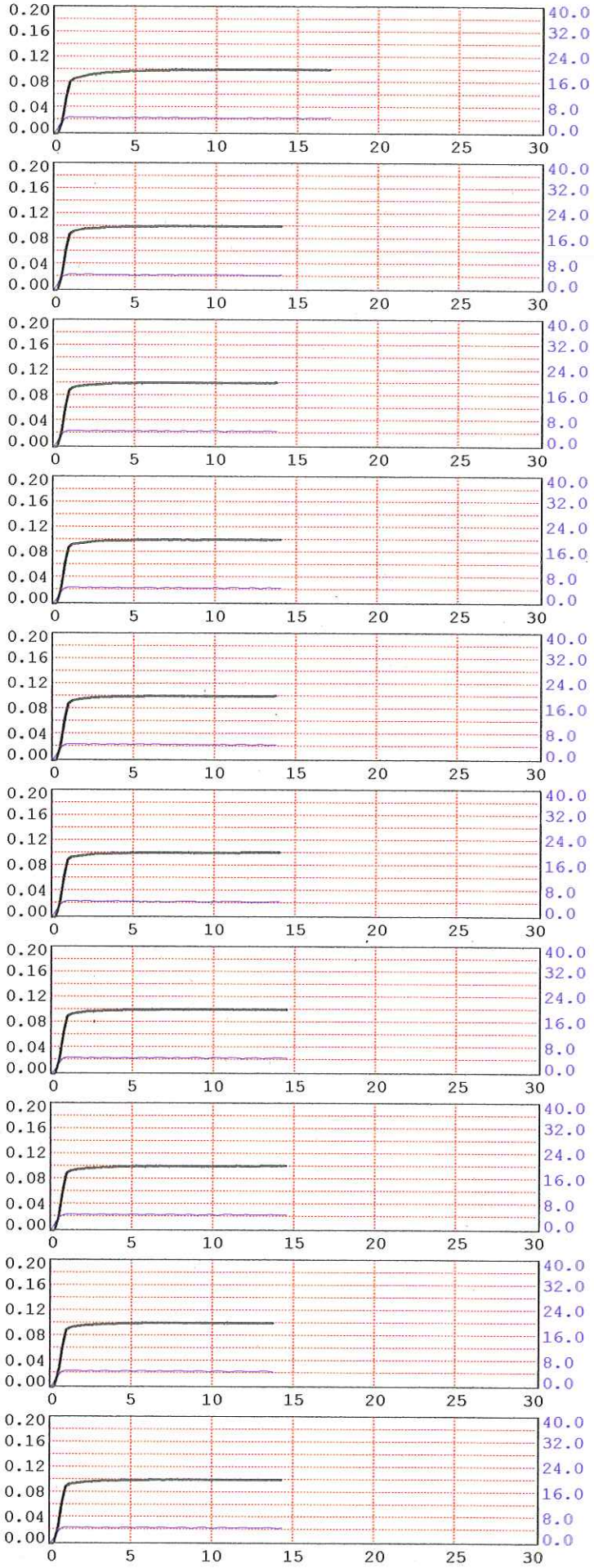
STATE OF VERMONT

DataMater DMT: 100147

Date: 03/16/2012
Time: 10:47:28

SUPERVISOR NAME:
ALB CAL CHECK

SOLUTION LOT #: 12-61-100
SOLUTION CONCENTRATION: 0.101

BLANK TEST	0.000	10:48
CALIBRATION CHECK	PASSED	10:48
SIMULATOR VAPOR 34.0°C	0.101	10:48
SIMULATOR VAPOR 34.0°C	0.101	10:49
SIMULATOR VAPOR 33.9°C	0.101	10:51
SIMULATOR VAPOR 33.9°C	0.101	10:52
SIMULATOR VAPOR 33.9°C	0.101	10:53
SIMULATOR VAPOR 34.0°C	0.101	10:54
SIMULATOR VAPOR 34.0°C	0.101	10:55
SIMULATOR VAPOR 33.9°C	0.101	10:56
SIMULATOR VAPOR 34.0°C	0.101	10:57
SIMULATOR VAPOR 33.9°C	0.101	10:58
BLANK TEST	0.000	10:59

Average = 0.101
Std Dev = 0.000