VERMONT FORENSIC LABORATORY

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DATAMASTER TECHNICAL SUPPORT INQUIRY

Agency/Site: _St. Johnsbury VSP_____ **DataMaster Serial #:** _103709_____

Date: _3/26/2015_ Requestor:_Cassandra Herbes_____

Instrument Supervisor: _Cassandra Herbes_____ Phone #: _(802) 748 - 3111_____

Taken By:_Robert Driscoll_____

Problem: _DataMaster software intermittently rebooting._____

Laboratory Response: ___Alcohol program staff will troubleshoot in-house.

Work Performed: ___Unable to replicate the fail so replaced the SI PCB to troubleshoot the intermittent software reboot. While assigning the serial number to the new SI PCB the prior data stored on the instrument was cleared. Optimized detector voltage to within +/- 0.100V, recalibrated, and certified the instrument. Also installed an adjustable flow rate valve and set the volume to 1.5L. Instrument is ready for installation at the agency.

☐ On Site ☒ In-house Attachments: ___7___ pages

Performed By: _Robert Driscoll_ RCD_____ Date: __4/1/2015____
Final Review: _____ Date: 4/7/15

Driscoll, Rob

From: Herbes, Cassandra
Sent: Friday, March 27, 2015 5:53 PM
To: Driscoll, Rob
Subject: RE: Datamaster VSP-St. Johnsbury

Rob –

Thank you for your time and attention in this matter.

Cassandra

From: Driscoll, Rob
Sent: Friday, March 27, 2015 1:31 PM
To: Herbes, Cassandra
Subject: RE: Datamaster VSP-St. Johnsbury

Cassandra,

I will come down Monday to take the instrument back to the Lab for troubleshooting. In the meantime, the instrument is still fine to use as it is passing all quality checks but only having a software reboot issue. I'm hoping that I can have it back to you by Tuesday or Wednesday.

Regards,
Rob

Robert Driscoll
Vermont Forensics Laboratory
103 South Main Street
Waterbury, VT 05671
Electronics Technician
Rob.Driscoll@state.vt.us
Desk: (802) 241-5817
Cell: (802) 585-0123

From: Herbes, Cassandra
Sent: Thursday, March 26, 2015 5:54 PM
To: Driscoll, Rob
Subject: Datamaster VSP-St. Johnsbury

Hi Rob -

Trooper McGranaghan told me he has been having issues with our datamaster at the St. Johnsbury barracks. He told me on several occasions when he has had to restart the fifteen minute observation period for burping, etc. the machine turns to that start up screen and freezes. He said he was to shut down the datamaster and turn it back on in order to unfreeze it. I do not know of a solution for this and didn't know if there was either something I could do or have someone come take a look! Thank you for your time.

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Cassandra

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CALIBRATION REPORT

DataMaster DMT: 103709
Calibration Date: 03/31/2015
Calibrated by: ROBERT DRISCOLL
Lot: 15-02-100

Ca	= 0.100			
CAL	= 0.973440	0.800	<= CAL <	1.200
b1	= 0.000	0.000	<= b1 <	0.004
b2	= 0.004	0.002	<= b2 <	0.010
b3	= 0.000	0.000	<= b3 <	0.004
Xq	= 0.076	0.050	<= Xq <	0.200
a21	= 1.110316	1.050	<= a21 <	1.300
a31	= 0.483407	0.300	<= a31 <	0.800

Performed by RD Date 03/31/2015

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ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 103709

Date: 03/31/2015
Time: 10:14:46

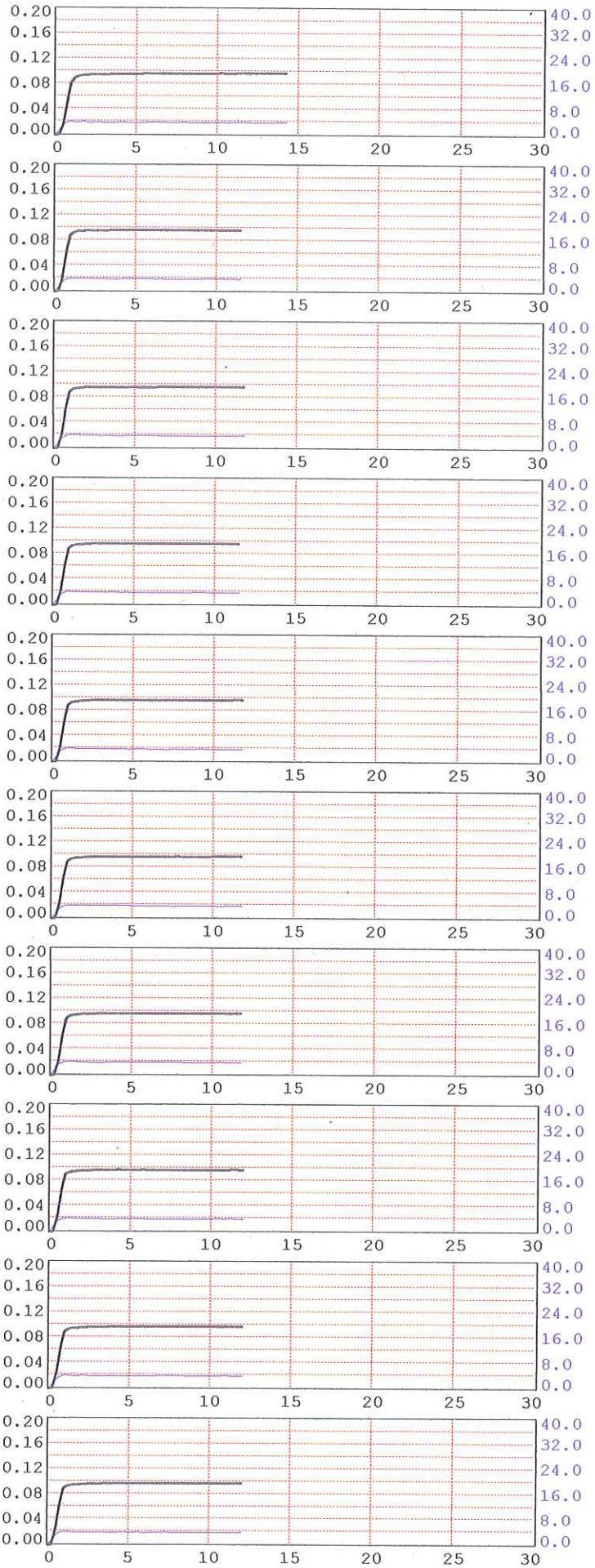
SUPERVISOR NAME:
RCD CAL CHECK

SOLUTION LOT #: GUTH 14110
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	10:15
CALIBRATION CHECK	PASSED	10:15
SIMULATOR VAPOR 33.9°C	0.097	10:16
SIMULATOR VAPOR 33.8°C	0.097	10:17
SIMULATOR VAPOR 33.9°C	0.096	10:18
SIMULATOR VAPOR 33.8°C	0.097	10:19
SIMULATOR VAPOR 33.9°C	0.097	10:20
SIMULATOR VAPOR 33.9°C	0.097	10:21
SIMULATOR VAPOR 33.9°C	0.096	10:22
SIMULATOR VAPOR 33.9°C	0.097	10:23
SIMULATOR VAPOR 33.9°C	0.097	10:24
SIMULATOR VAPOR 33.8°C	0.097	10:25
BLANK TEST	0.000	10:26

Average = 0.096 RCD 3/31/15
Std Dev = 0.000

Replaced Guth 0.100 solution and reran CAL CHECK. RCD 3/31/15



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ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 103709

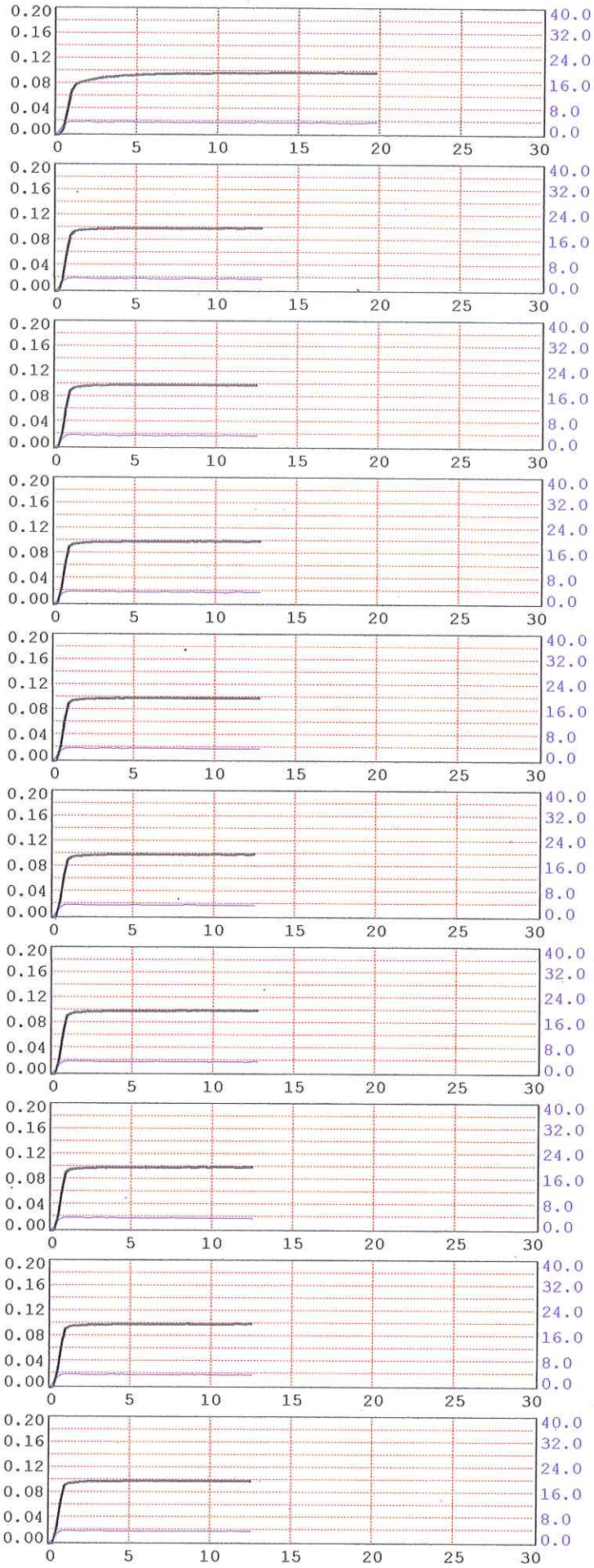
Date: 03/31/2015
Time: 12:18:48

SUPERVISOR NAME:
RCD CAL CHECK

SOLUTION LOT #: GUTH 14110
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	12:19
CALIBRATION CHECK	PASSED	12:19
SIMULATOR VAPOR 33.9°C	0.098	12:20
SIMULATOR VAPOR 33.9°C	0.099	12:21
SIMULATOR VAPOR 33.9°C	0.099	12:22
SIMULATOR VAPOR 33.8°C	0.099	12:23
SIMULATOR VAPOR 33.9°C	0.099	12:24
SIMULATOR VAPOR 33.9°C	0.100	12:25
SIMULATOR VAPOR 33.9°C	0.100	12:26
SIMULATOR VAPOR 33.7°C	0.099	12:27
SIMULATOR VAPOR 33.9°C	0.099	12:28
SIMULATOR VAPOR 33.8°C	0.099	12:29
BLANK TEST	0.000	12:30

Average = 0.099
Std Dev = 0.000



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CERTIFICATION REPORT

DataMaster DMT: 103709
Calibration Date: 03/31/2015
Certification Date: 03/31/2015
Certified by: ROBERT DRISCOLL

Diagnostic Results

```
VERSIONS
DMT: 1.01
PIC: 2.06
Modem: 2.4
Questions: 2.1

TEMPERATURES

Sample Chamber = 49.1°C
Breath Tube    = 47.2°C
Digital Sim    = 33.8°C

SETTINGS
Lamp Voltage   = 1.81 V
Cooler Voltage = 1.81 V
Bias Voltage   = 80 V
Chopper Freq   = 542 Hz

PUMP INFO
Flow Rate = 5.142 L/M

DETECTOR INFO
PUMP     ON        OFF
MAX(V)   0.0083    0.0106
MIN(V)   0.0071    0.0089

FILTER INFO
Filter 1   0.009  Zero = true
Filter 2   0.115  Zero = true
Filter 3   0.400  Zero = true

CALIBRATION CHECK
Xq  = 0.077  0.91%
```

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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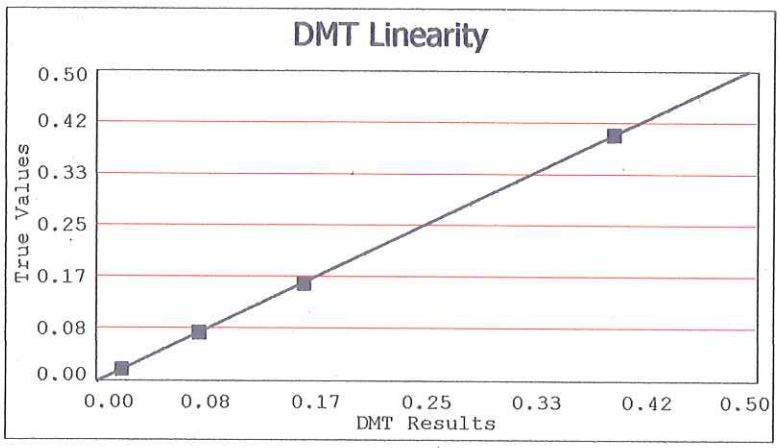
Linearity Check Results

True Value	Reported Average	Std Dev
0.020 g/210L Lot # 14-13-020	0.019 g/210L	0.0000
0.079 g/210L Lot # 14-08-080	0.078 g/210L	0.0000
0.158 g/210L Lot # 14-06-160	0.157 g/210L	0.0000
0.398 g/210L Lot # 14-09-400	0.391 g/210L	0.0000

$R^2 = 1$



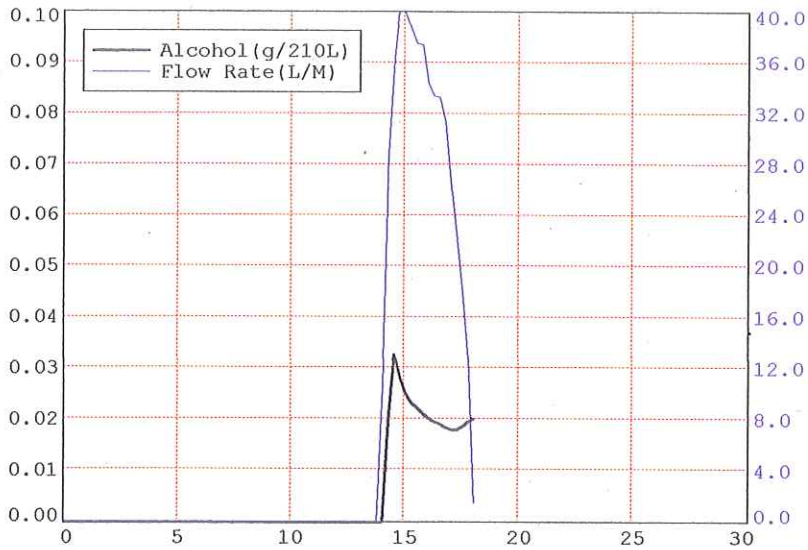
Acetone Interference Test

Lot # 15-04-08A1

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

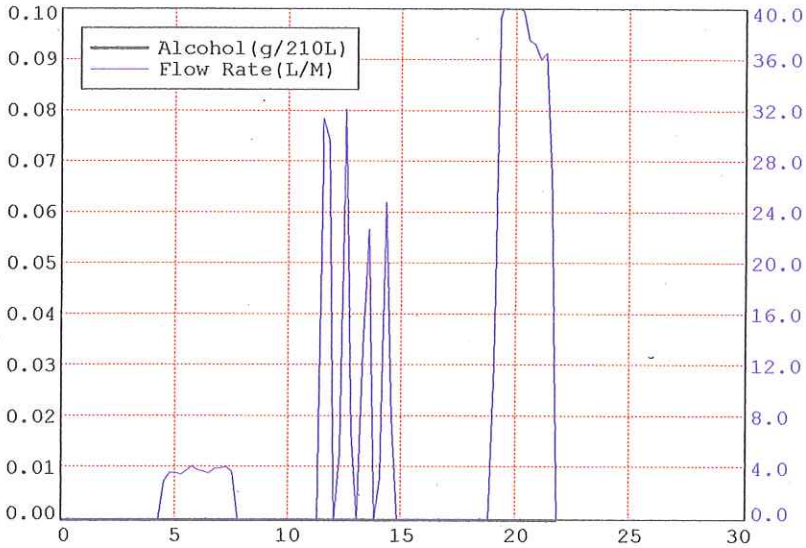


RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by RCD **Date** 03/31/2015

Reviewed by A Bolden **Date** 4/1/15

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