Vermont Department of Health Laboratory

195 Colchester Avenue, P.O. Box 1125, Burlington VT 05402-1125
DataMaster Technical Services (ph) 802-863-7641; (fax) 802-863-7632

DATAMASTER TECHNICAL SUPPORT INQUIRY

Agency/Site: Woodstock PD _____ **DataMaster Serial #:** 100152_____

Date: 2/21 /2012 Requestor: A.Bolduc_____

Instrument Supervisor: Hanson_____ Phone #: _____

Taken By: Harnois, Steve_____

Problem: RFI not detected on RPC by SH_____

Laboratory Response:_____

Work Performed:_____

Upon my attempt at doing the Radio Frequency Interference (RFI) test during the Routine Performance Check (RPC) the RFI did not trigger for the handheld radio, after I reset the RFI sensitivity, the test worked,

Upon Return to the Lab, ALB asked that I have the RFI tested again in the tech mode by the supervisor, it was found that the instrument DID indicate RFI, I asked the supervisor to turn the instrument off and back on, after this was done the same RFI test was done, the instrument did not indicate RFI, the instrument was placed out of service. The DataMaster Supervisor, Sgt. Hanson was asked if he had turned the instrument off and back on between the time the instrument was installed and when I had worked on the instrument, Sgt Hanson indicated NO. SH

03-05-2012 Replaced Controller Board as Set point for RFI would not hold. Trisha Conti Witnessed. SH

03-07-2012 Performed power up, calibration and certification verified that simulator was at correct temperature and reading, Instrument ready for field use. SH Trisha Conti Witnessed.

☐ On Site ☒ In-house Attachments: 6 pages

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Performed By: Steven Harnois Date: 03/07/2012

Final Review: Trisha Conti Date: 03/07/2012

ALB review 3/19/12

DIAGNOSTIC RESULT

DataMaster DMT: 100152
Location: Woodstock PD
Calibration Date: 09/14/2011
Certification Date: 09/15/2011
Installation Date: 09/22/2011
Test Date: 03/07/2012
Test Time: 08:32:44

VERSIONS
DMT: 1.01
PIC: 2.06
Modem: 2.2
Questions: 2.0

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 47.7°C
Digital Sim = 34.4°C

SETTINGS
Lamp Voltage = 1.70 V
Cooler Voltage = 1.72 V
Bias Voltage = 81 V
Chopper Freq = 543 Hz

PUMP INFO
Flow Rate = 5.752 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0876	0.0904
MIN(V)	0.0858	0.0892

FILTER INFO
Filter 1 0.089 Zero = true
Filter 2 0.428 Zero = true
Filter 3 1.052 Zero = true

CALIBRATION CHECK
Xq = 0.079 1.33%

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CALIBRATION REPORT

DataMaster DMT: 100152
Calibration Date: 03/07/2012
Calibrated by: STEVEN E HARNOIS
Lot: 12-33-100

Ca	= 0.100		
CAL	= 0.959110	0.800	<= CAL < 1.200
b1	= 0.000	0.000	<= b1 < 0.004
b2	= 0.006	0.002	<= b2 < 0.010
b3	= 0.000	0.000	<= b3 < 0.004
Xq	= 0.079	0.050	<= Xq < 0.200
a21	= 1.206734	1.050	<= a21 < 1.300
a31	= 0.369948	0.300	<= a31 < 0.800

Performed by _____ Date 03/07/2012

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ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100152

Date: 03/07/2012
Time: 09:29:30

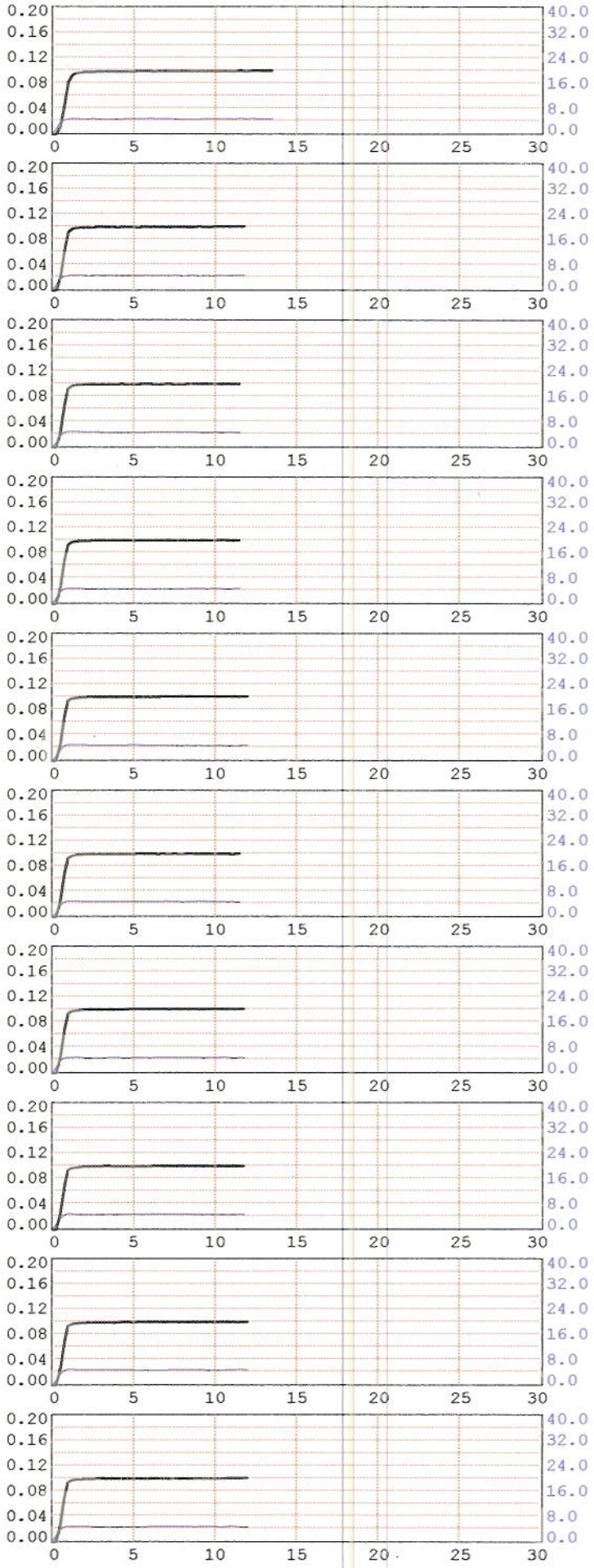
SUPERVISOR NAME:
STEVEN E HARNOIS

CAL CHECK
THC 3/7/12

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

BLANK TEST	0.000	09:30
CALIBRATION CHECK	PASSED	09:30
SIMULATOR VAPOR 34.0°C	0.100	09:30
SIMULATOR VAPOR 34.0°C	0.101	09:31
SIMULATOR VAPOR 34.0°C	0.100	09:32
SIMULATOR VAPOR 34.0°C	0.101	09:33
SIMULATOR VAPOR 34.0°C	0.101	09:35
SIMULATOR VAPOR 34.0°C	0.100	09:36
SIMULATOR VAPOR 34.0°C	0.101	09:37
SIMULATOR VAPOR 34.0°C	0.100	09:38
SIMULATOR VAPOR 34.0°C	0.100	09:39
SIMULATOR VAPOR 34.0°C	0.101	09:40
BLANK TEST	0.000	09:41

Average = 0.100
Std Dev = 0.000



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100152

Date: 03/07/2012
Time: 09:44:41

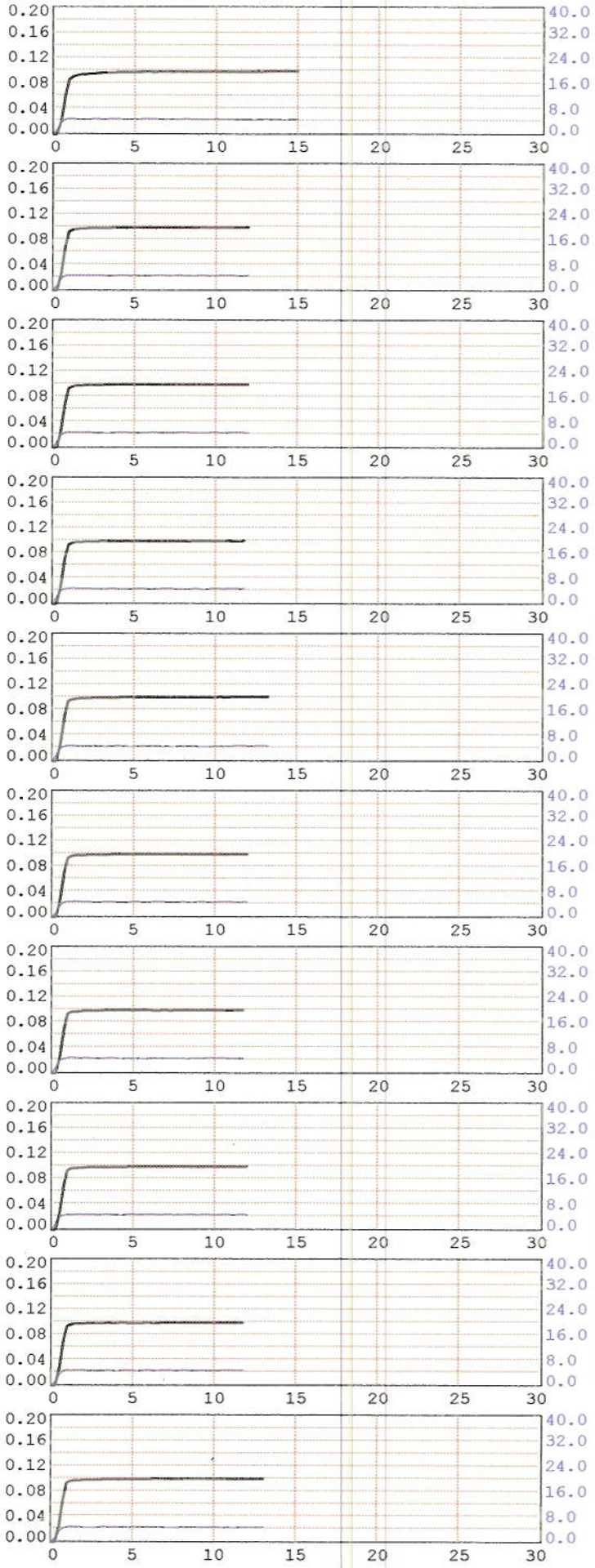
SUPERVISOR NAME:
STEVEN E HARNOIS

Cal Check TLC 3/7/12

SOLUTION LOT #: 11250 GUTH
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	09:45
CALIBRATION CHECK	PASSED	09:45
SIMULATOR VAPOR 34.0°C	0.099	09:46
SIMULATOR VAPOR 34.1°C	0.099	09:47
SIMULATOR VAPOR 34.0°C	0.099	09:48
SIMULATOR VAPOR 34.0°C	0.099	09:49
SIMULATOR VAPOR 34.0°C	0.100	09:50
SIMULATOR VAPOR 34.0°C	0.099	09:51
SIMULATOR VAPOR 33.9°C	0.100	09:52
SIMULATOR VAPOR 34.0°C	0.099	09:53
SIMULATOR VAPOR 34.0°C	0.099	09:54
SIMULATOR VAPOR 34.0°C	0.101	09:55
BLANK TEST	0.000	09:56

Average = 0.099
Std Dev = 0.000



CERTIFICATION REPORT

DataMaster DMT: 100152
Calibration Date: 03/07/2012
Certification Date: 03/07/2012
Certified by: STEVEN E HARNOIS

Diagnostic Results

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VERSIONS
DMT: 1.01
PIC: 2.06
Modem: 2.2
Questions: 2.0

TEMPERATURES

Sample Chamber = 49.1°C
Breath Tube    = 48.1°C
Digital Sim    = 34.0°C

SETTINGS
Lamp Voltage   = 1.71 V
Cooler Voltage = 1.72 V
Bias Voltage   = 81 V
Chopper Freq   = 541 Hz

PUMP INFO
Flow Rate = 5.686 L/M

DETECTOR INFO
PUMP     ON         OFF
MAX(V)    0.0801     0.0827
MIN(V)    0.0789     0.0811

FILTER INFO
Filter 1   0.080  Zero = true
Filter 2   0.421  Zero = true
Filter 3   1.064  Zero = true

CALIBRATION CHECK
Xq  = 0.080  1.65%
```

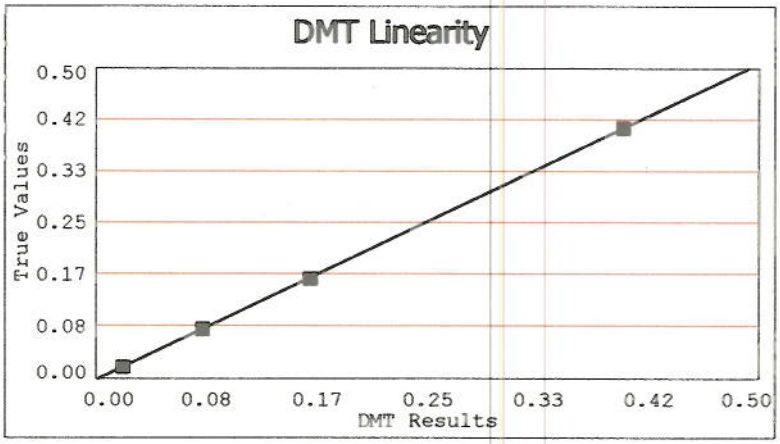
Options

```
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 # 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 # 12-60-160	0.161 g/210L	0.0000
0.404 g/210L Lot # 12-62-400	0.397 g/210L	0.0000

$R^2 = 1$



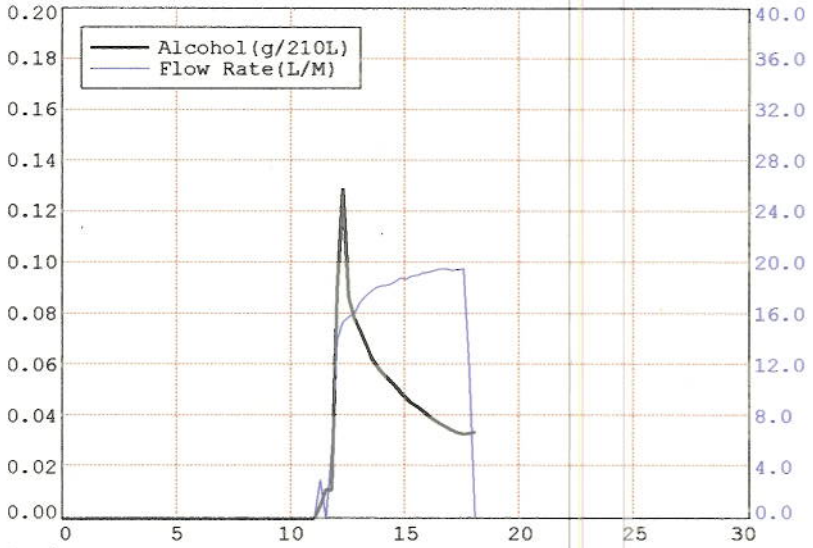
Acetone Interference Test

Lot # 12-63-080A1

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

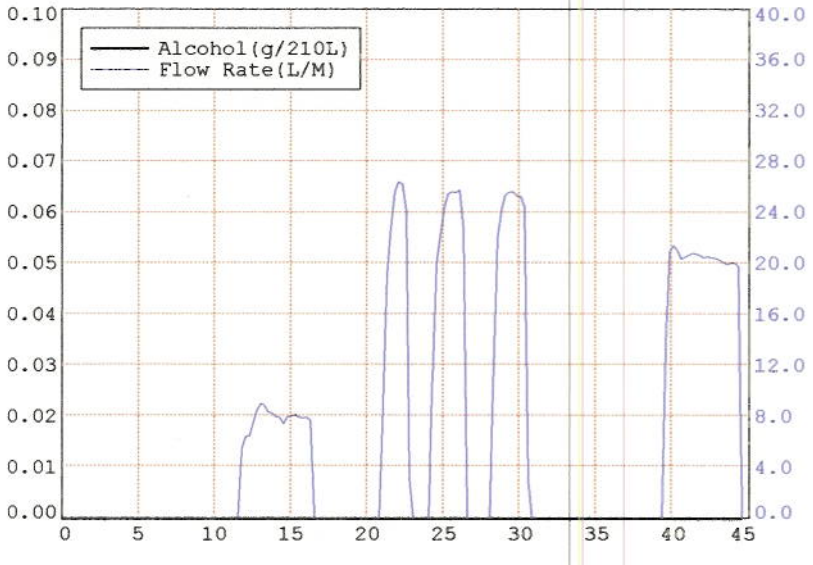


RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by _____ Date 03/07/2012

Reviewed by _____ Date 3/7/2012

3/19/12