VERMONT FORENSIC LABORATORY

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DATAMASTER TECHNICAL SUPPORT INQUIRY

Agency/Site: _FCSO Enosburgh **DataMaster Serial #:** _122206

Date: 10/19/15__ Requestor:_VFL Alcohol Program Staff_____

Instrument Supervisor: _Jay Sweeny_____ Phone #: _(802) 524-2121_____

Taken By:_Robert Driscoll_____

Problem: Detector voltage at filter one is above 0.600V._____

Laboratory Response: ____Alcohol Program staff will bring instrument to the Lab to optimize the detector voltage.

Work Performed: ___Optimized detector voltage at filter one to within +/- 0.100V with lamp and cooler voltage adjustments. Installed a new communication PCB and loaded updated software. Data was downloaded to a USB drive and then transferred into DM Host. The instrument has been Calibrated, Certified, and is now ready for installation at the agency.

☐ On Site ☒ In-house Attachments: __4____ pages

Performed By: _Robert Driscoll RD_____ Date: _10/19/15_____
Final Review: _____ Date: 10/19/15

CALIBRATION REPORT

DataMaster DMT: 122206
Calibration Date: 10/19/2015
Calibrated by: ROBERT DRISCOLL
Lot: 15-08-100

Ca = 0.100			
CAL = 1.013185	0.800	<= CAL <	1.200
b1 = 0.000	0.000	<= b1 <	0.004
b2 = 0.005	0.002	<= b2 <	0.010
b3 = 0.000	0.000	<= b3 <	0.004
Xq = 0.103	0.050	<= Xq <	0.200
a21 = 1.184675	1.050	<= a21 <	1.300
a31 = 0.450056	0.300	<= a31 <	0.800

Performed by RCD Date 10/19/2015

2015 RCD

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMaster DMT: 122206

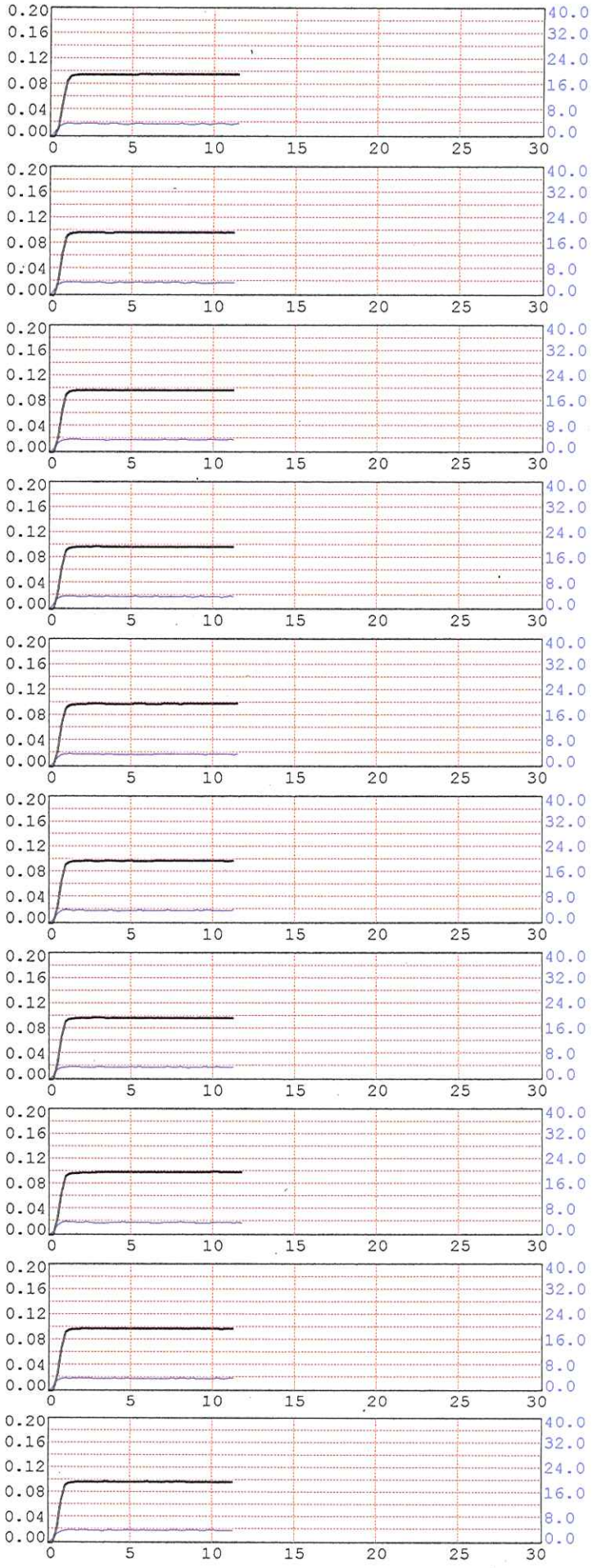
Date: 10/19/2015
Time: 13:47:47

SUPERVISOR NAME:
ROBERT DRISCOLL

SOLUTION LOT #: GUTH 15050
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	13:48
CALIBRATION CHECK	PASSED	13:48
SIMULATOR VAPOR 33.8°C	0.096	13:49
SIMULATOR VAPOR 33.8°C	0.098	13:50
SIMULATOR VAPOR 33.9°C	0.097	13:51
SIMULATOR VAPOR 33.8°C	0.097	13:52
SIMULATOR VAPOR 33.9°C	0.099	13:53
SIMULATOR VAPOR 33.8°C	0.098	13:54
SIMULATOR VAPOR 33.8°C	0.097	13:55
SIMULATOR VAPOR 33.8°C	0.100	13:56
SIMULATOR VAPOR 33.9°C	0.098	13:57
SIMULATOR VAPOR 33.8°C	0.097	13:58
BLANK TEST	0.000	13:59

Average = 0.097
Std Dev = 0.0011



CERTIFICATION REPORT

DataMaster DMT: 122206
Calibration Date: 10/19/2015
Certification Date: 10/19/2015
Certified by: ROBERT DRISCOLL

Diagnostic Results

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

TEMPERATURES

Sample Chamber = 48.6°C
Breath Tube    = 43.4°C
Digital Sim    = 33.8°C

SETTINGS
Lamp Voltage   = 1.82 V
Cooler Voltage = 1.85 V
Bias Voltage   = 80 V
Chopper Freq   = 539 Hz

PUMP INFO
Flow Rate = 4.949 L/M

DETECTOR INFO
PUMP     ON         OFF
MAX(V)    0.0569     0.0587
MIN(V)    0.0549     0.0571

FILTER INFO
Filter 1   0.058  Zero = true
Filter 2   0.713  Zero = true
Filter 3   1.558  Zero = true

CALIBRATION CHECK
Xq  = 0.103  0.34%
```

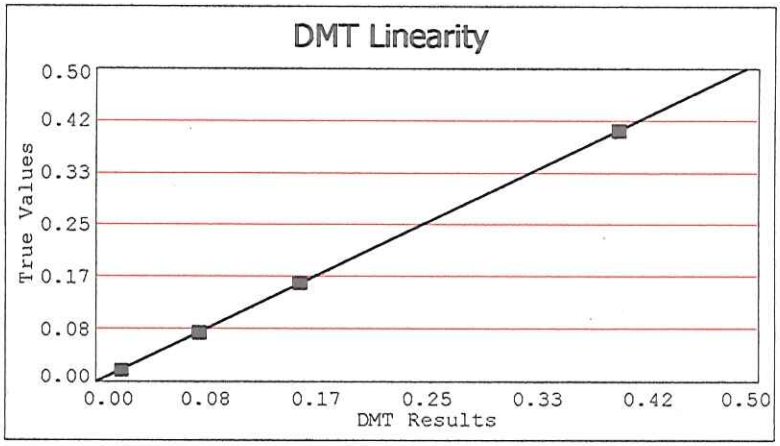
Options

```
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	0.0005
0.080 g/210L Lot # 15-04-080	0.078 g/210L	0.0008
0.159 g/210L Lot # 15-03-160	0.154 g/210L	0.0007
0.402 g/210L Lot # 15-10-400	0.394 g/210L	0.0011

$R^2 = 1$



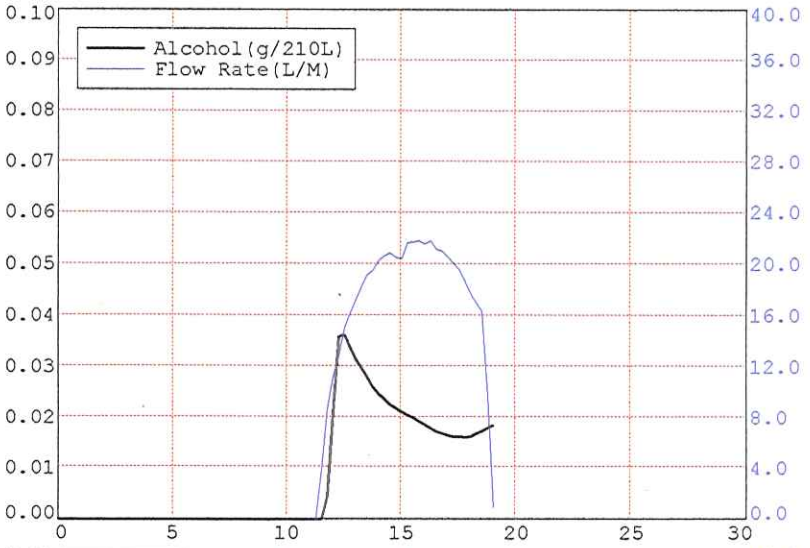
Acetone Interference Test

Lot # 15-04-08A1B

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

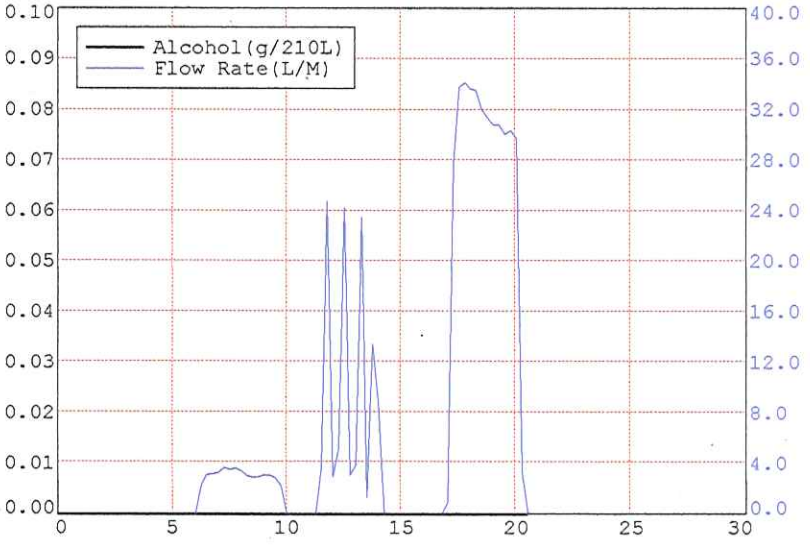


RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by RD Date 10/19/2015

Reviewed by Date 10/19/15