VERMONT FORENSIC LABORATORY

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DATAMASTER TECHNICAL SUPPORT INQUIRY

Agency/Site: Barre PD **DataMaster Serial #:** 100149

Date: 6/23/2014 Requestor: Robert Driscoll

Instrument Supervisor: Andrew Marceau Phone #: (802) 476-6613

Taken By: Robert Driscoll

Problem: Detector voltage at filter one was 0.624V during June RPC.

Laboratory Response: Alcohol program staff will bring instrument back to VFL for detector voltage adjustment.

Work Performed: Detector voltage optimized by making lamp and cooler voltage adjustment. An adjustable flow rate valve was installed and the volume set to 1.5L. The instrument was then calibrated, certified, and is ready for installation at the agency.

☐ On Site ☒ In-house Attachments: 5 pages

Performed By: Robert Driscoll RCD Date: 6/30/2014
Final Review: [signature] Date: 6/30/2014

CALIBRATION REPORT

DataMaster DMT: 100149
Calibration Date: 06/25/2014
Calibrated by: ROBERT DRISCOLL
Lot: 13-22-100

Ca = 0.099			
CAL = 0.953699	0.800	<= CAL <	1.200
b1 = 0.000	0.000	<= b1 <	0.004
b2 = 0.003	0.002	<= b2 <	0.010
b3 = 0.000	0.000	<= b3 <	0.004
Xq = 0.081	0.050	<= Xq <	0.200
a21 = 1.182318	1.050	<= a21 <	1.300
a31 = 0.559185	0.300	<= a31 <	0.800

Performed by _____ Date 06/25/2014

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 06/25/2014
Time: 08:45:52

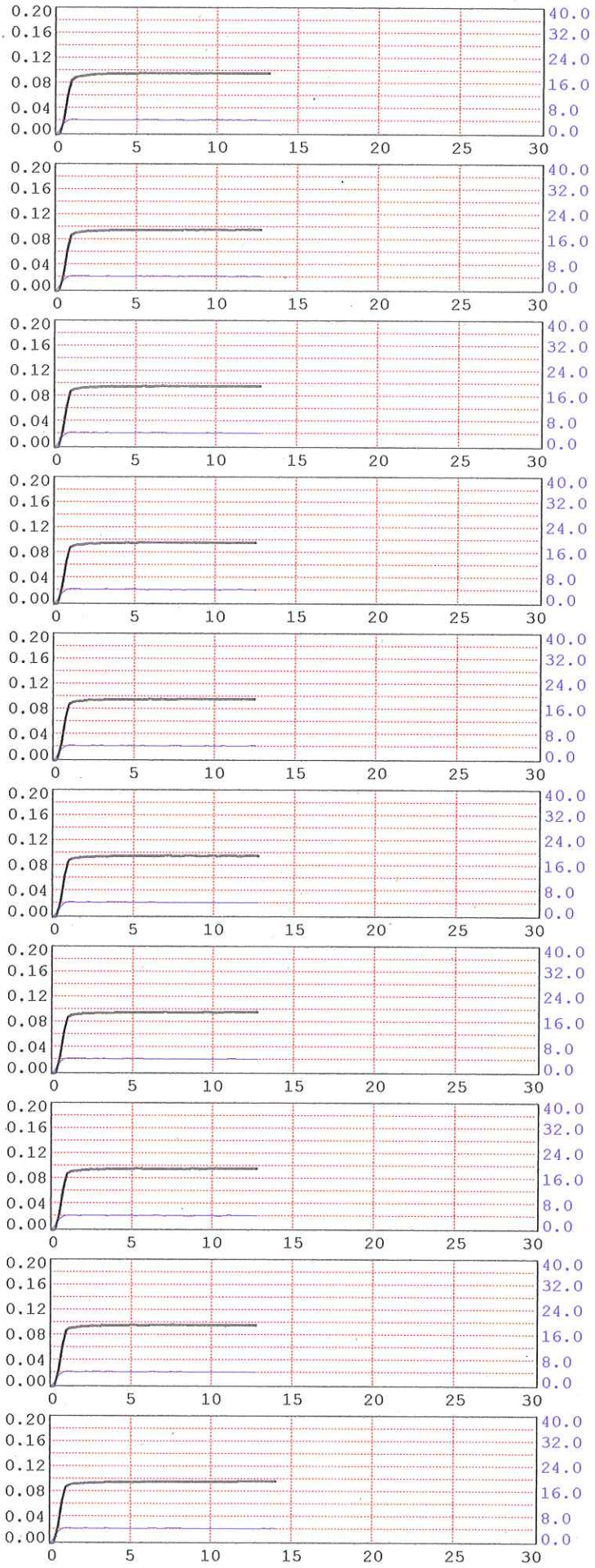
SUPERVISOR NAME:
RCD CAL CHECK

SOLUTION LOT #: GUTH 13100
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	08:46
CALIBRATION CHECK	PASSED	08:46
SIMULATOR VAPOR 34.1°C	0.097	08:47
SIMULATOR VAPOR 34.1°C	0.096	08:48
SIMULATOR VAPOR 34.1°C	0.097	08:49
SIMULATOR VAPOR 34.1°C	0.096	08:50
SIMULATOR VAPOR 34.2°C	0.096	08:51
SIMULATOR VAPOR 34.1°C	0.096	08:52
SIMULATOR VAPOR 34.1°C	0.096	08:53
SIMULATOR VAPOR 34.1°C	0.096	08:54
SIMULATOR VAPOR 34.2°C	0.096	08:55
SIMULATOR VAPOR 34.1°C	0.097	08:56
BLANK TEST	0.000	08:57

Average = 0.096
Std Dev = 0.000

Out of range. Replaced with new bottle of Guth 1300 and reran A+P check. RCD 6/25/14



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

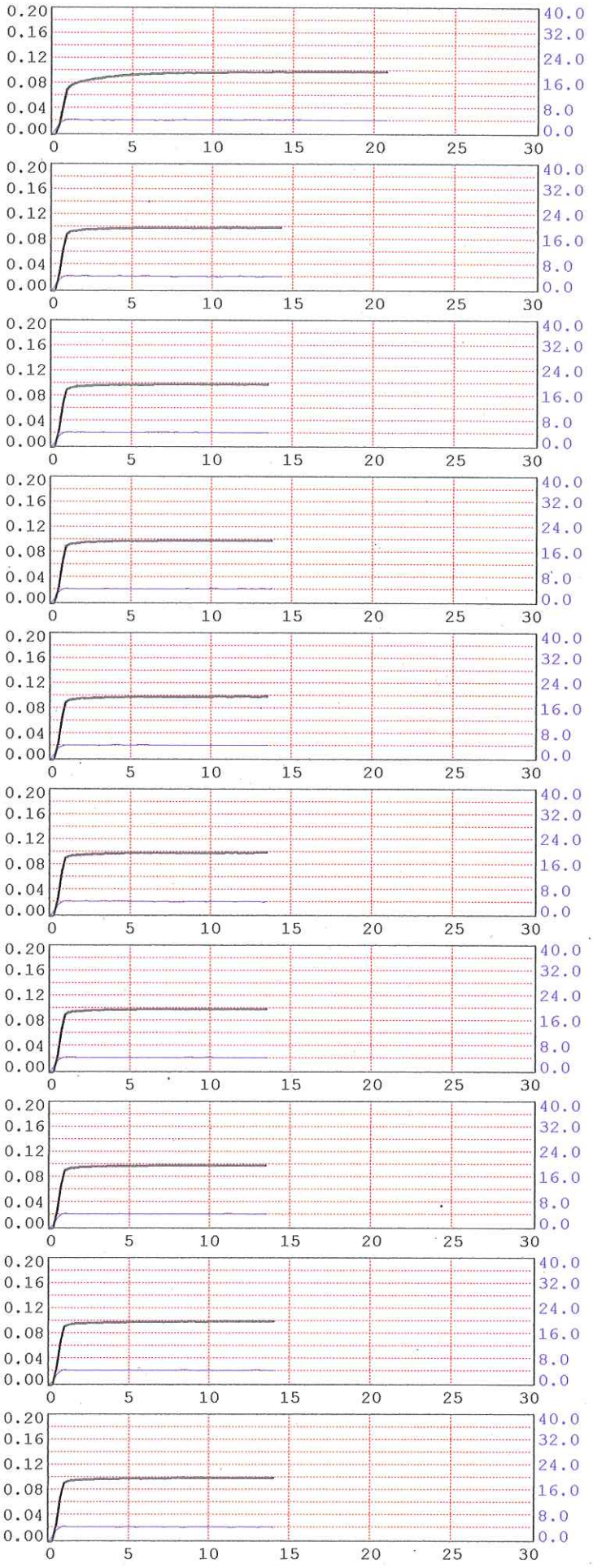
Date: 06/25/2014
Time: 09:20:54

SUPERVISOR NAME:
RCD CAL CHECK

SOLUTION LOT #: GUTH 13100
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	09:21
CALIBRATION CHECK	PASSED	09:21
SIMULATOR VAPOR 34.1°C	0.099	09:22
SIMULATOR VAPOR 34.1°C	0.099	09:23
SIMULATOR VAPOR 34.2°C	0.099	09:24
SIMULATOR VAPOR 34.0°C	0.099	09:25
SIMULATOR VAPOR 34.1°C	0.100	09:26
SIMULATOR VAPOR 34.1°C	0.099	09:27
SIMULATOR VAPOR 34.2°C	0.099	09:28
SIMULATOR VAPOR 34.1°C	0.099	09:29
SIMULATOR VAPOR 34.2°C	0.100	09:31
SIMULATOR VAPOR 34.1°C	0.100	09:32
BLANK TEST	0.000	09:32

Average = 0.099
Std Dev = 0.000



CERTIFICATION REPORT

DataMaster DMT: 100149
Calibration Date: 06/25/2014
Certification Date: 06/30/2014
Certified by: ROBERT DRISCOLL

Diagnostic Results

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

TEMPERATURES

Sample Chamber = 49.2°C
Breath Tube    = 45.4°C
Digital Sim    = 34.1°C

SETTINGS
Lamp Voltage   = 1.81 V
Cooler Voltage = 1.81 V
Bias Voltage   = 80 V
Chopper Freq   = 537 Hz

PUMP INFO
Flow Rate = 5.623 L/M

DETECTOR INFO
PUMP     ON         OFF
MAX(V)    0.0352     0.0382
MIN(V)    0.0339     0.0368

FILTER INFO
Filter 1   0.037  Zero = true
Filter 2   0.333  Zero = true
Filter 3   0.573  Zero = true

CALIBRATION CHECK
Xq  = 0.082  0.86%
```

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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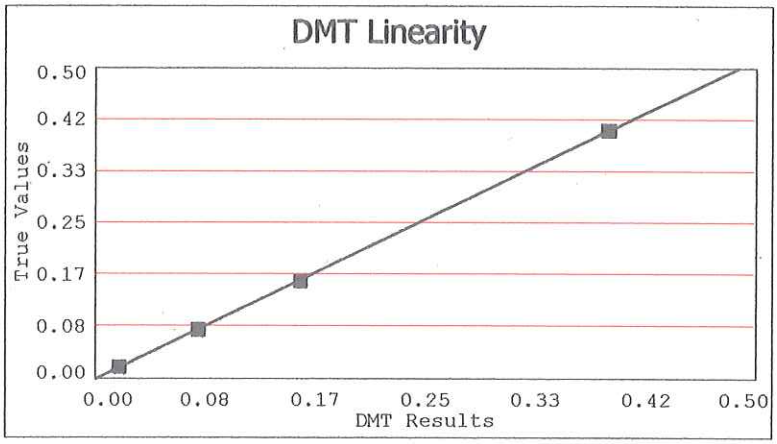
Linearity Check Results

True Value	Reported Average	Std Dev
0.020 g/210L	0.018 g/210L	0.0000
Lot # 13-17-020		
0.080 g/210L	0.078 g/210L	0.0000
Lot # 13-18-080		
0.158 g/210L	0.155 g/210L	0.0000
Lot # 14-06-160		
0.400 g/210L	0.388 g/210L	0.0000
Lot # 13-20-400		

$R^2 = 0.9999$



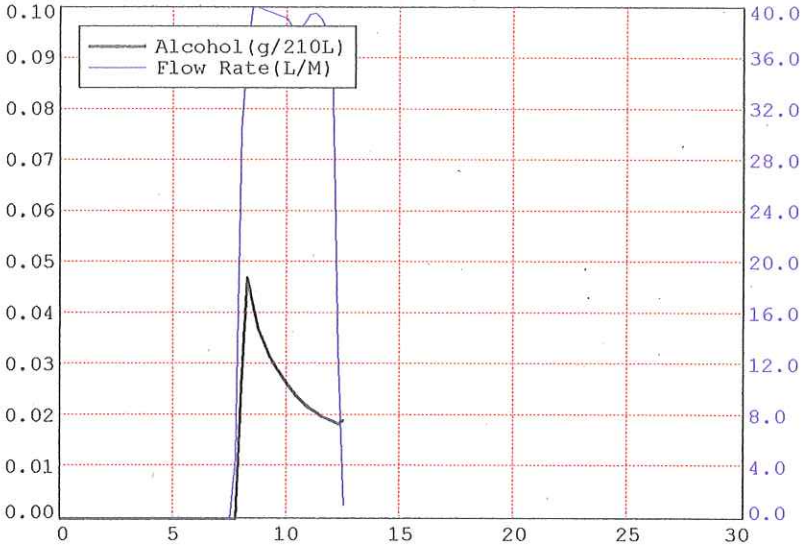
Acetone Interference Test

Lot # 14-03-08A1

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

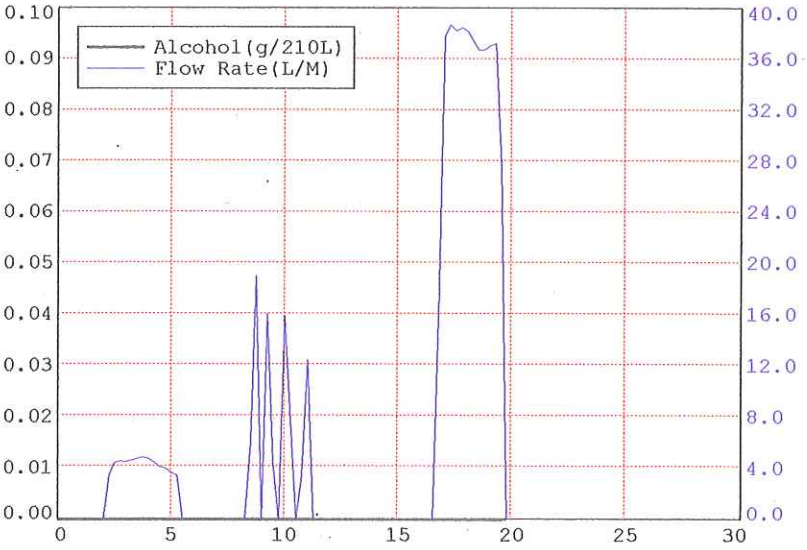


RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by _____ Date 06/30/2014

Reviewed by _____ Date 6/30/2014

6 of 6 RCD