VERMONT FORENSIC LABORATORY

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DATAMASTER TECHNICAL SUPPORT INQUIRY

Agency/Site: Franklin County SO St. Albans **DataMaster Serial #:** 100135

Date: 10/13/2014 Requestor: Robert Driscoll

Instrument Supervisor: Jay Sweeny Phone #: (802) 524-2121

Taken By: Robert Driscoll

Problem: Detector Voltage at filter one was 0.649V during October RPC.

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

Work Performed: Detector voltage was unable to be optimized with cooler and lamp voltage adjustment. Replaced detector and optimized detector voltage. Installed adjustable flow rate valve and set the volume to 1.5L. The instrument was then calibrated, certified, and is ready for installation at the agency.

☐ On Site ☒ In-house Attachments: 4 pages

Performed By: Robert Driscoll RCD Date: 10/16/2014
Final Review: [signature] Date: 10/16/2014

CALIBRATION REPORT

DataMaster DMT: 100135
Calibration Date: 10/16/2014
Calibrated by: ROBERT DRISCOLL
Lot: 14-07-100

Ca	= 0.100		
CAL	= 0.989019	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	= 1.215423	1.050	<= a21 < 1.300
a31	= 0.439237	0.300	<= a31 < 0.800

Performed by RCD Date 10/16/2014

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100135

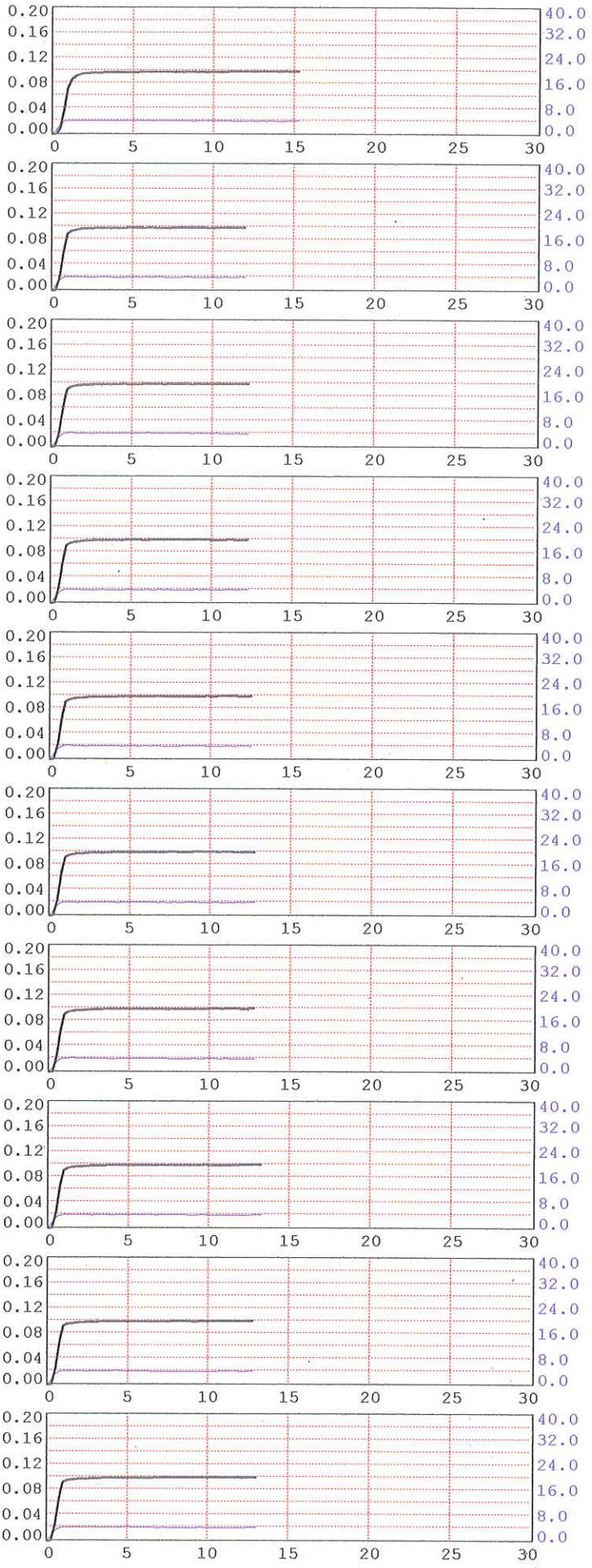
Date: 10/16/2014
Time: 09:26:26

SUPERVISOR NAME:
ROBERT DRISCOLL CAL CHECK RCD 10/16/14

SOLUTION LOT #: GUTH 14110
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	09:27
CALIBRATION CHECK	PASSED	09:27
SIMULATOR VAPOR 33.8°C	0.099	09:27
SIMULATOR VAPOR 33.8°C	0.099	09:28
SIMULATOR VAPOR 33.9°C	0.100	09:29
SIMULATOR VAPOR 33.9°C	0.100	09:30
SIMULATOR VAPOR 33.8°C	0.100	09:32
SIMULATOR VAPOR 33.8°C	0.100	09:33
SIMULATOR VAPOR 33.9°C	0.100	09:34
SIMULATOR VAPOR 33.9°C	0.101	09:35
SIMULATOR VAPOR 33.9°C	0.100	09:36
SIMULATOR VAPOR 33.9°C	0.100	09:37
BLANK TEST	0.000	09:38

Average = 0.099
Std Dev = 0.000



385 RCD

CERTIFICATION REPORT

DataMaster DMT: 100135
Calibration Date: 10/16/2014
Certification Date: 10/16/2014
Certified by: ROBERT DRISCOLL

Diagnostic Results

```
VERSIONS
DMT: 1.01
PIC: 2.05
Modem: 2.4
Questions: 2.1

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube    = 45.8°C
Digital Sim    = 33.9°C

SETTINGS
Lamp Voltage   = 1.78 V
Cooler Voltage = 1.74 V
Bias Voltage   = 80 V
Chopper Freq   = 511 Hz

PUMP INFO
Flow Rate = 5.094 L/M

DETECTOR INFO
PUMP     ON          OFF
MAX(V)    0.0189      0.0226
MIN(V)    0.0179      0.0217

FILTER INFO
Filter 1   0.022  Zero = true
Filter 2   0.251  Zero = true
Filter 3   0.702  Zero = true

CALIBRATION CHECK
Xq  = 0.103  0.17%
```

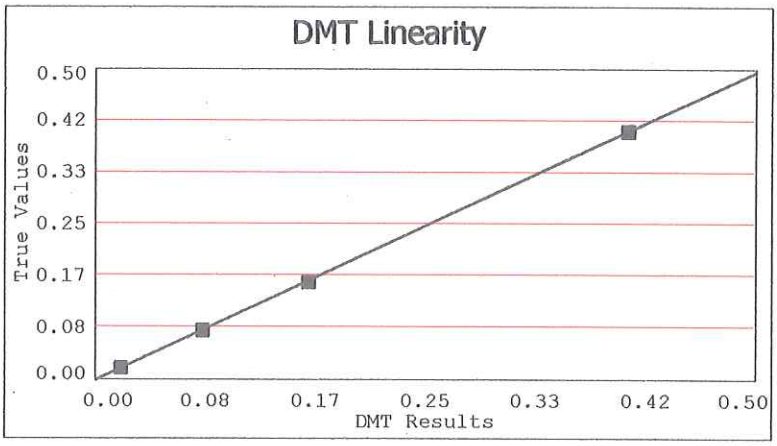
Options

```
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 # 13-17-020	0.019 g/210L	0.0000
0.080 g/210L Lot # 13-18-080	0.081 g/210L	0.0000
0.158 g/210L Lot # 14-06-160	0.161 g/210L	0.0000
0.400 g/210L Lot # 13-20-400	0.403 g/210L	0.0000

$R^2 = 0.9999$



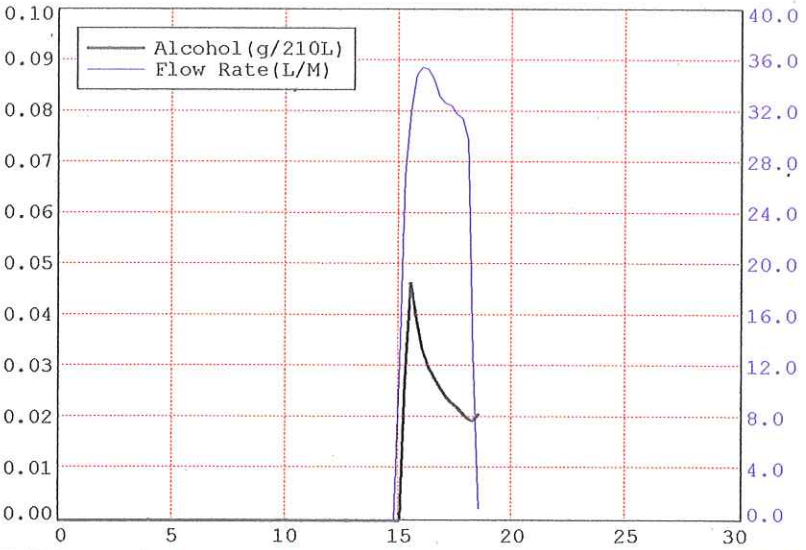
Acetone Interference Test

Lot # 14-11-08A1

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

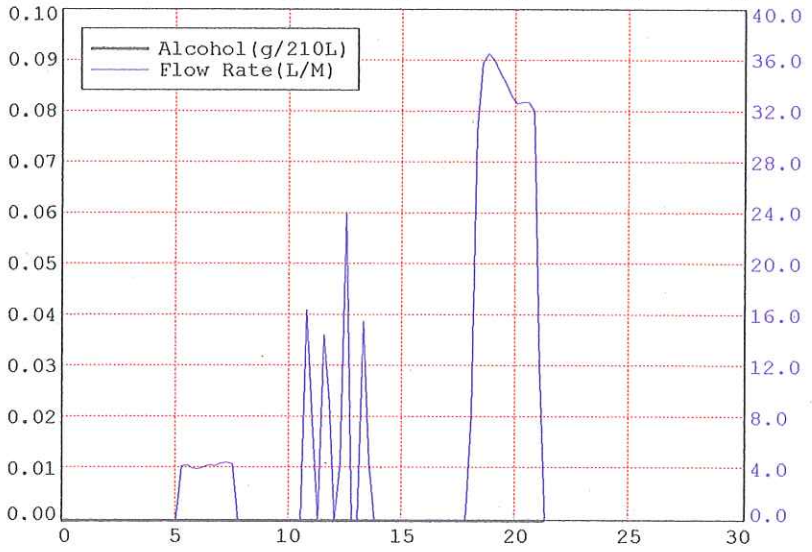


RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by RCD Date 10/16/2014

Reviewed by Date 10/16/2014