VERMONT FORENSIC LABORATORY

PO BOX 47
WATERBURY, VERMONT 05676-0047
TEL: 802-244-8788
FAX: 802-241-5557
http://vfl.vermont.gov

DATAMASTER TECHNICAL SUPPORT INQUIRY

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

Date: 10/28/2014 Requestor: Robert Driscoll

Instrument Supervisor: Jim Otranto Phone #: (802) 457-1420

Taken By: Robert Driscoll

Problem: Detector voltage at filter one was 0.661V during October RPC.

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

Work Performed: Replaced noisy chopper wheel motor, installed adjustable flow rate valve and set volume to 1.5L. The detector voltage was then optimized with lamp and cooler voltage adjustments. 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: 10/28/2014
Final Review: [signature] Date: 10/29/2014

CALIBRATION REPORT

DataMaster DMT: 100152
Calibration Date: 10/28/2014
Calibrated by: ROBERT DRISCOLL
Lot: 14-07-100

Ca	= 0.100			
CAL	= 0.000000	0.800	<= CAL	< 1.200
b1	= 0.001	0.000	<= b1	< 0.004
b2	= 0.007	0.002	<= b2	< 0.010
b3	= 0.001	0.000	<= b3	< 0.004
Xq	= 0.084	0.050	<= Xq	< 0.200
a21	= 0.000000	1.050	<= a21	< 1.300
a31	= 0.000000	0.300	<= a31	< 0.800

Filter Wheel Error
RCD 10/28/14

Adjusted tension of filter wheel motor on filter wheel and cycled filter wheel to test. Will rerun calibration RCD 10/28/14

Performed by _____ Date 10/28/2014

CALIBRATION REPORT

DataMaster DMT: 100152
Calibration Date: 10/28/2014
Calibrated by: ROBERT DRISCOLL
Lot: 14-07-100

Ca	=	0.100				
CAL	=	0.997495	0.800	<=	CAL	< 1.200
b1	=	0.001	0.000	<=	b1	< 0.004
b2	=	0.007	0.002	<=	b2	< 0.010
b3	=	0.000	0.000	<=	b3	< 0.004
Xq	=	0.084	0.050	<=	Xq	< 0.200
a21	=	1.208427	1.050	<=	a21	< 1.300
a31	=	0.387726	0.300	<=	a31	< 0.800

Performed by RD Date 10/28/2014

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ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100152

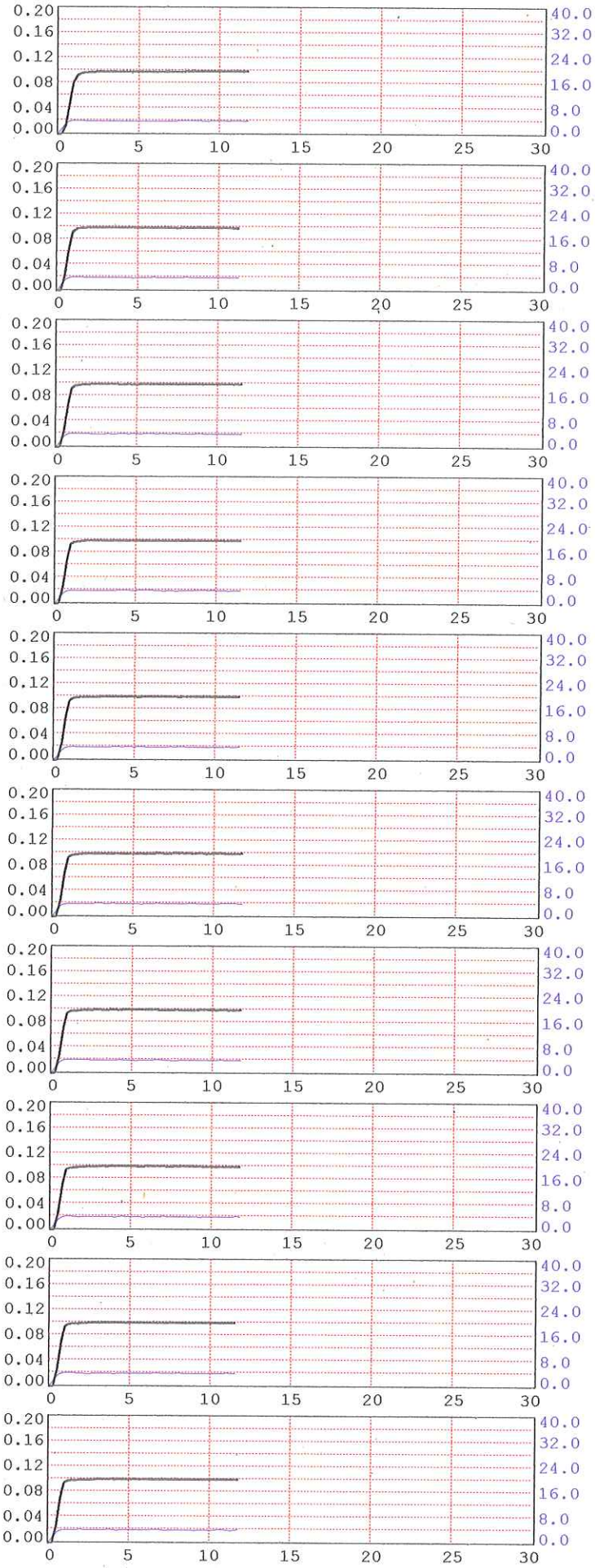
Date: 10/28/2014
Time: 13:40:23

SUPERVISOR NAME:
RCD CAL CHECK

SOLUTION LOT #: GUTH 14110
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	13:41
CALIBRATION CHECK	PASSED	13:41
SIMULATOR VAPOR 34.0°C	0.099	13:41
SIMULATOR VAPOR 34.1°C	0.099	13:42
SIMULATOR VAPOR 34.0°C	0.100	13:43
SIMULATOR VAPOR 34.0°C	0.100	13:44
SIMULATOR VAPOR 34.0°C	0.100	13:45
SIMULATOR VAPOR 34.0°C	0.100	13:46
SIMULATOR VAPOR 34.0°C	0.100	13:47
SIMULATOR VAPOR 34.0°C	0.100	13:48
SIMULATOR VAPOR 34.0°C	0.100	13:49
SIMULATOR VAPOR 34.0°C	0.100	13:51
BLANK TEST	0.000	13:51

Average = 0.099
Std Dev = 0.000



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CERTIFICATION REPORT

DataMaster DMT: 100152
Calibration Date: 10/28/2014
Certification Date: 10/28/2014
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 = 47.9°C
Digital Sim = 34.0°C

SETTINGS
Lamp Voltage = 1.71 V
Cooler Voltage = 1.72 V
Bias Voltage = 80 V
Chopper Freq = 528 Hz

PUMP INFO
Flow Rate = 4.904 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0669	0.0693
MIN(V)	0.0648	0.0677

FILTER INFO
Filter 1 0.067 Zero = true
Filter 2 0.403 Zero = true
Filter 3 1.047 Zero = true

CALIBRATION CHECK
Xq = 0.084 0.31%

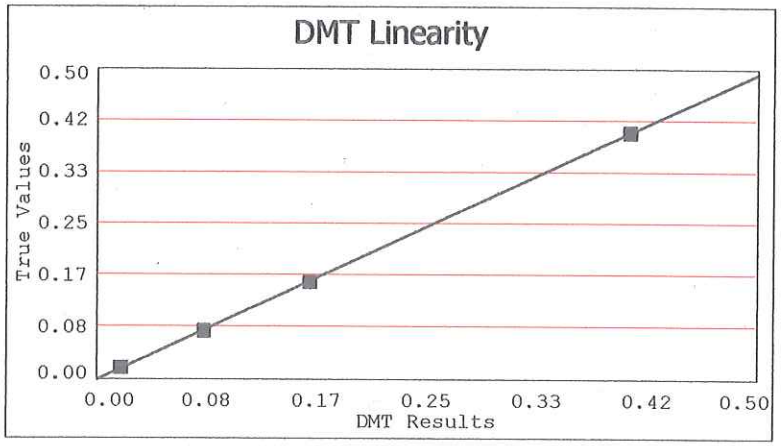
Options

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 # 14-13-020	0.018 g/210L	0.0000
0.079 g/210L Lot # 14-08-080	0.081 g/210L	0.0000
0.158 g/210L Lot # 14-06-160	0.161 g/210L	0.0000
0.398 g/210L Lot # 14-09-400	0.403 g/210L	0.0000

$R^2 = 0.9999$



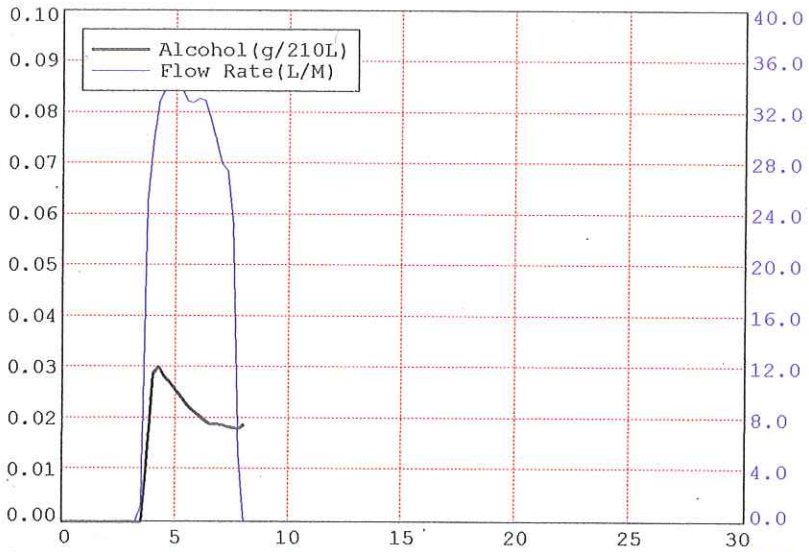
Acetone Interference Test

Lot # 14-11-08A1

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

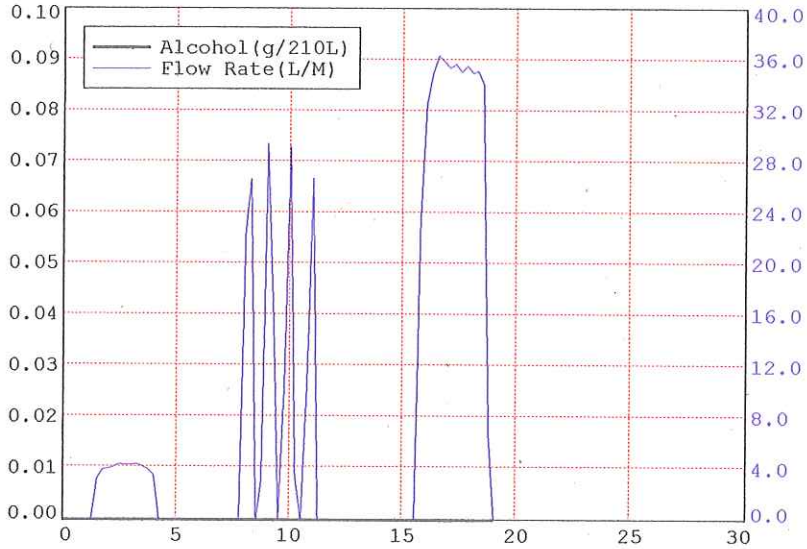


RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by RCD Date 10/28/2014

Reviewed by TLGA Date 10/29/2014