

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

Issued: 6/11/2014
Effective: 6/11/2014

Version: DMEF2014 R0
Status: Active

Instrument # 100673

Date: 3/13/15

Analyst: Colleen O'Bryant

1. Reason for instrument evaluation

Multiple internal standard errors on VOCs.

2. Troubleshooting/Repair

Unable to recreate the issue at the lab. Reached out to Dave Radomski (NPPRS) who suggested the following testing.

1. Test the instrument with dry air (Nitrogen) as the ambient purge to test for contaminants in the sample chamber.

2. Test the filter wheel alignment to ensure the spin is dropping during each filter change.

3. Watch the detector voltage while toggling between Filter 1 versus Filter 1 + Quartz, and look for a change in the difference over time.

All testing was unable to identify a mechanical issue or recreate the problem.

3. VOC (attached)

4. Verify software version

Return to Factory for Repair

Ready For Calibration

Ready For Certification

VERIFICATION OF CALIBRATION REPORT*of DataMaster dmt Breath Test Instrument**State of Alaska*

Serial #: 100673

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 03/13/2015

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.28: 0.078
 LOT #: 11313080A1
 EXPIRATION: 06/01/2015
 TANK PRESSURE: 322 psi

BLANK TEST	0.000	10:05
INTERNAL STANDARD	VERIFIED	10:05
Xq = 0.073 (1.97%)		
EXTERNAL STANDARD	0.077	10:05
X(1) = 0.0773 (-0.0036) (-0.0013)		
BLANK TEST	0.000	10:06
EXTERNAL STANDARD	0.078	10:06
X(1) = 0.0777 (-0.0037) (-0.0011)		
BLANK TEST	0.000	10:07
EXTERNAL STANDARD	0.078	10:08
X(1) = 0.0777 (-0.0042) (-0.0010)		
BLANK TEST	0.000	10:08
EXTERNAL STANDARD	0.078	10:09
X(1) = 0.0778 (-0.0033) (-0.0013)		
BLANK TEST	0.000	10:10
EXTERNAL STANDARD	0.078	10:10
X(1) = 0.0776 (-0.0037) (-0.0004)		
BLANK TEST	0.000	10:11

Average = 0.0778
 Std Dev = 0.0004

Diagnostic Check

VERSIONS

DMT: 3.00
 PIC: 3.03
 Modem: 2.6
 Questions: 2.2

TEMPERATURES

Sample Chamber = 48.7°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 42.1°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 1.57 V	PASSED
(0.96 V - 2.24 V)	
Cooler Voltage = 1.68 V	PASSED
(1.00 V - 2.32 V)	
Bias Voltage = 79 V	PASSED
(47 V - 111 V)	
Chopper Freq = 544 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.3 in	

PUMP INFO

Flow Rate = 4.647 L/M	PASSED
(3.500 L/M - 6.500 L/M)	

DETECTOR INFO

PUMP ON	PASSED
(0.002 V <= 0.010 V)	
PUMP OFF	PASSED
(0.002 V <= 0.010 V)	

FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD

Xq = 0.074	1.04%	(0.00% - 4.00%)
------------	-------	-----------------

I, Nita J. Bolz, after being first duly sworn, depose and state as follows:

- (1) I am a Forensic Scientist IV at the State of Alaska Scientific Crime Detection Laboratory.
- (2) The Alaska Scientific Crime Detection Laboratory is an entity within the Department of Public Safety.
- (3) I am the Scientific Director of the State Breath Alcohol Program.
- (4) In that capacity, I am responsible for overseeing the Breath Alcohol Program, which includes assuring that instruments are calibrated and maintaining program records.
- (5) The above is a true and accurate verification of calibration, which is performed by the instrument's software, as specified by the State Breath Alcohol Program. Verification of calibration is a regularly conducted and regularly recorded activity of the State Breath Alcohol Program.
- (6) The referenced instrument is certified for evidentiary use in the State of Alaska.

 Nita J. Bolz
 Scientific Director
 State Breath Alcohol Program

Subscribed and sworn before me this _____ day of _____, 20 _____

SUPERVISOR TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100673

Date: 03/23/2015
 Time: 13:19:16

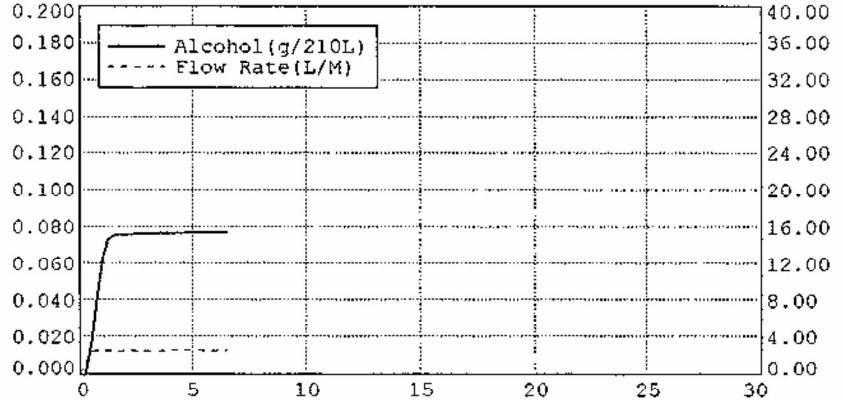
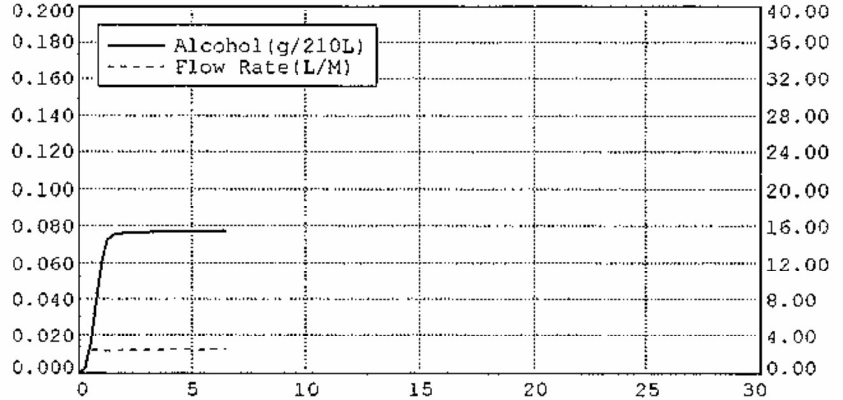
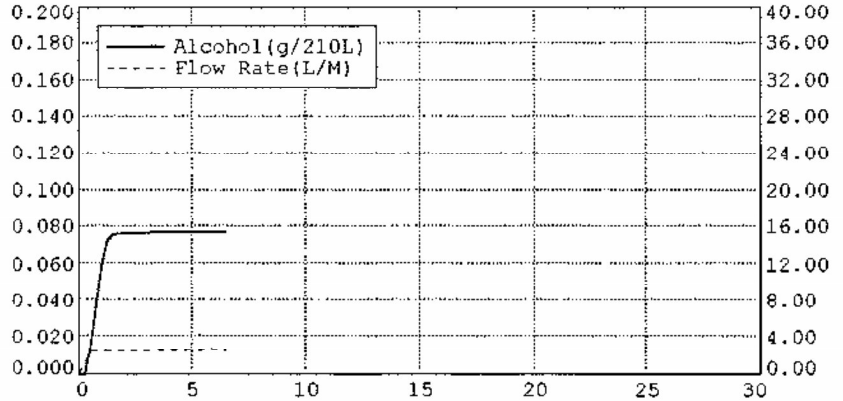
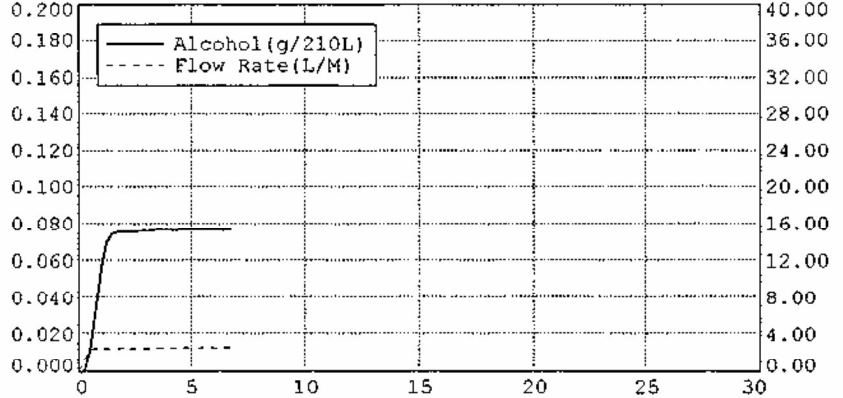
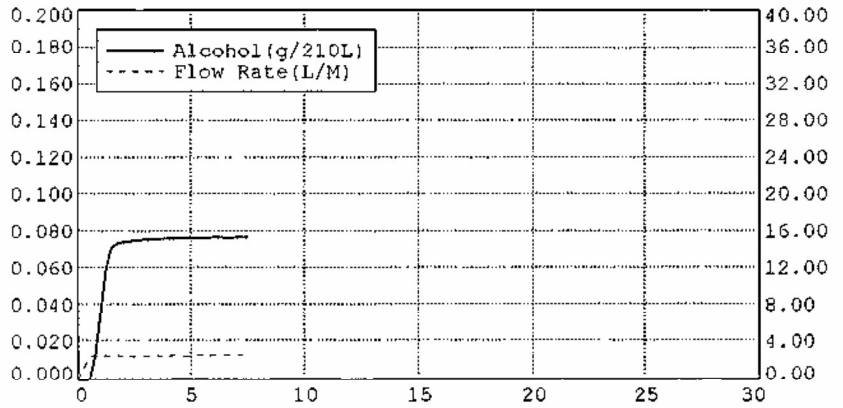
SUPERVISOR NAME:
 COLLEEN S OBRYANT
 OPERATOR'S #: 6237

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.69: 0.079
 LOT #: 11313080A1
 EXPIRATION: 06/01/2015
 TANK PRESSURE: 311 psi

BLANK TEST	0.000	13:21
INTERNAL STANDARD	VERIFIED	13:21
Xq = 0.074 (0.58%)		
EXTERNAL STANDARD	0.078	13:21
X[1] = 0.0780 (-0.0030) (0.0002)		
BLANK TEST	0.000	13:22
EXTERNAL STANDARD	0.078	13:22
X[1] = 0.0784 (-0.0022) (0.0002)		
BLANK TEST	0.000	13:23
EXTERNAL STANDARD	0.078	13:23
X[1] = 0.0782 (-0.0024) (0.0006)		
BLANK TEST	0.000	13:24
EXTERNAL STANDARD	0.079	13:24
X[1] = 0.0786 (-0.0025) (0.0003)		
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.078	13:25
X[1] = 0.0784 (-0.0032) (0.0010)		
BLANK TEST	0.000	13:26

Average = 0.0782
 Std Dev = 0.0004



SUPERVISOR TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100673

Date: 04/30/2015
 Time: 09:17:09

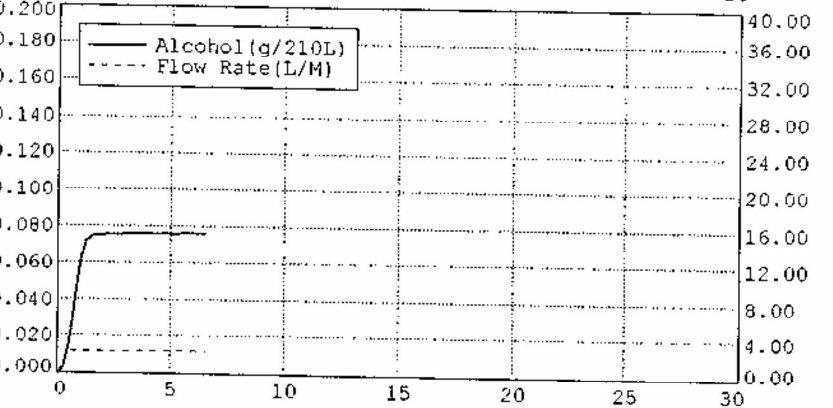
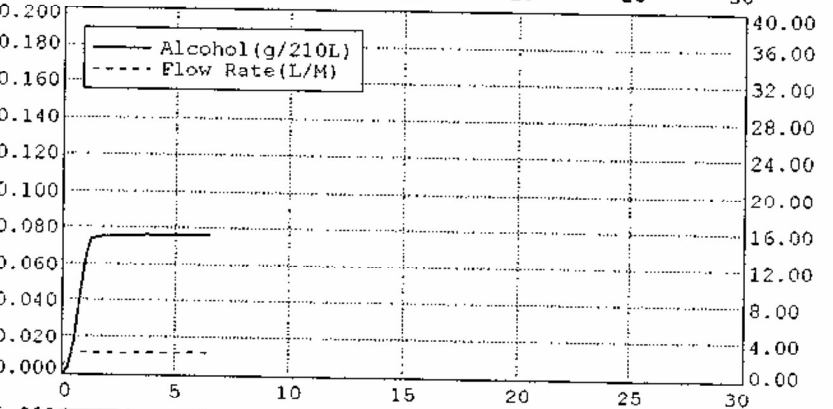
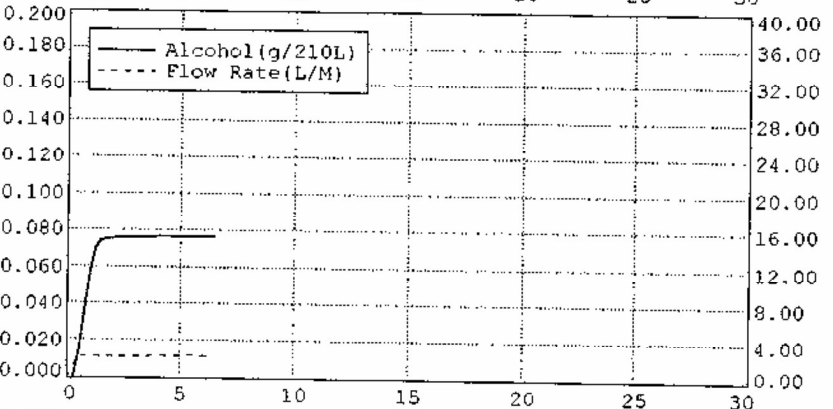
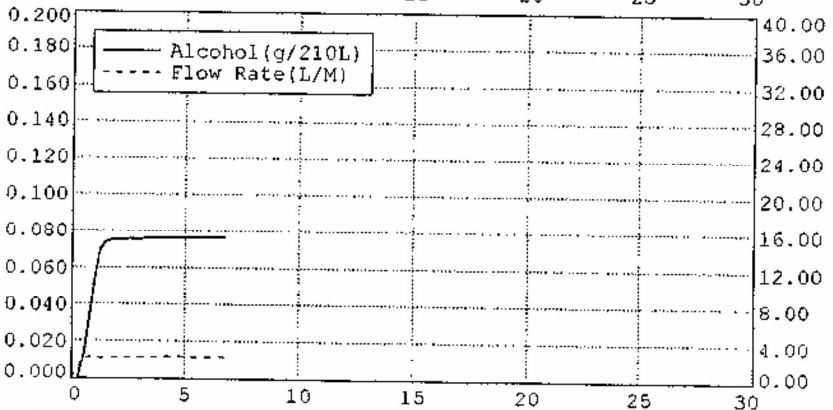
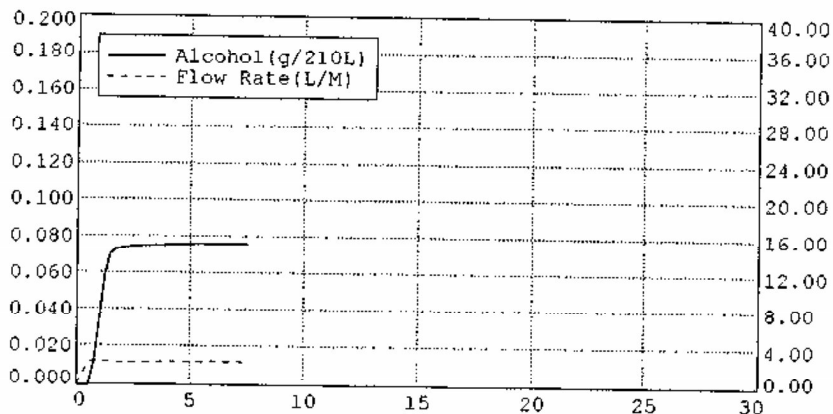
SUPERVISOR NAME:
 COLLEEN S OBRYANT
 OPERATOR'S #: 6237

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.48: 0.079
 LOT #: 11313080A1
 EXPIRATION: 06/01/2015
 TANK PRESSURE: 264 psi

BLANK TEST	0.000	09:18
INTERNAL STANDARD	VERIFIED	09:18
Xq = 0.075 (0.58%)		
EXTERNAL STANDARD	0.077	09:18
X[1] = 0.0775 (-0.0017) (0.0020)		
BLANK TEST	0.000	09:19
EXTERNAL STANDARD	0.077	09:19
X[1] = 0.0774 (-0.0024) (0.0011)		
BLANK TEST	0.000	09:20
EXTERNAL STANDARD	0.077	09:20
X[1] = 0.0774 (-0.0019) (0.0015)		
BLANK TEST	0.000	09:21
EXTERNAL STANDARD	0.077	09:22
X[1] = 0.0775 (-0.0022) (0.0016)		
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.077	09:23
X[1] = 0.0773 (-0.0024) (0.0017)		
BLANK TEST	0.000	09:24

Average = 0.0770
 Std Dev = 0.0000



VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100673

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 05/06/2015

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.79: 0.080
 LOT #: 11313080A1
 EXPIRATION: 06/01/2015
 TANK PRESSURE: 248 psi

BLANK TEST	0.000	14:16
INTERNAL STANDARD	VERIFIED	14:16
EXTERNAL STANDARD	0.079	14:17
BLANK TEST	0.000	14:17
EXTERNAL STANDARD	0.078	14:18
BLANK TEST	0.000	14:19
EXTERNAL STANDARD	0.078	14:19
BLANK TEST	0.000	14:20
EXTERNAL STANDARD	0.078	14:20
BLANK TEST	0.000	14:21
EXTERNAL STANDARD	0.078	14:21
BLANK TEST	0.000	14:22

Average = 0.0782
 Std Dev = 0.0004

Diagnostic Check

VERSIONS
 DMT: 3.00
 PIC: 3.03
 Modem: 2.6
 Questions: 2.2

TEMPERATURES

Sample Chamber = 49.0°C	PASSED
Breath Tube = 47.2°C	PASSED

PUMP INFO

Flow Rate = 4.813 L/M	PASSED
-----------------------	--------

DETECTOR INFO

PUMP ON	PASSED
PUMP OFF	PASSED

FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD	PASSED
-------------------	--------

I, Nita J. Bolz, after being first duly sworn, depose and state as follows:

- (1) I am a Forensic Scientist IV at the State of Alaska Scientific Crime Detection Laboratory.
- (2) The Alaska Scientific Crime Detection Laboratory is an entity within the Department of Public Safety.
- (3) I am the Scientific Director of the State Breath Alcohol Program.
- (4) In that capacity, I am responsible for overseeing the Breath Alcohol Program, which includes assuring that instruments are calibrated and maintaining program records.
- (5) The above is a true and accurate verification of calibration, which is performed by the instrument's software, as specified by the State Breath Alcohol Program. Verification of calibration is a regularly conducted and regularly recorded activity of the State Breath Alcohol Program.
- (6) The referenced instrument is certified for evidentiary use in the State of Alaska.

 Nita J. Bolz
 Scientific Director
 State Breath Alcohol Program

Subscribed and sworn before me this _____ day of _____, 20 _____