

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

Issued: 04/03/2018
Effective: 04/04/2018

Version: DMEF2018 R0
Status: Active

Instrument # 100687

Date: 09/20/2018

Analyst: Derck Walton

1. Reason for instrument evaluation

External standard interference during certification

2. Visual Inspection

Clean

Replace missing screws

Cermetex Box is secure

Ensure modem cable present

Gas Valve upright or secured to wall

All tubing and connections are secure

3. O-ring inspection and ensure 2 O-rings in replacement bag

4. Troubleshooting/Repair

Routed filter wires separately from stepper/chopper/etc.

Replaced regulator o-ring which was broken

Ran 3 subject tests with no issue. Ran a second VOC which also completed normally. Ran third VOC with different tank; also completed normally.

5. VOC (attached)

6. Internal Standard value $\leq 3.00\%$ Yes No

7. Verify software version

Return to Factory for Repair

Ready for Calibration

Ready for Certification

Proceed to Close Out

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100687

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 09/20/2018

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.87: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018
TANK PRESSURE: 160 psi

BLANK TEST	0.000	10:25
INTERNAL STANDARD	VERIFIED	10:25
Xq = 0.139	(0.32%)	
EXTERNAL STANDARD	0.076	10:26
X[1] = 0.0757	(-0.0031) (0.0012)	
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.077	10:27
X[1] = 0.0769	(-0.0018) (0.0008)	
BLANK TEST	0.000	10:28
EXTERNAL STANDARD	0.077	10:28
X[1] = 0.0774	(-0.0004) (0.0012)	
BLANK TEST	0.000	10:29
EXTERNAL STANDARD	0.078	10:29
X[1] = 0.0777	(0.0006) (0.0001)	
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.077	10:30
X[1] = 0.0773	(-0.0008) (0.0007)	
BLANK TEST	0.000	10:31

Average = 0.0770
Std Dev = 0.0007

Diagnostic Check

VERSIONS

DMT: 3.02
PIC: 3.02
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 49.1°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.64 V PASSED
(1.00 V - 2.34 V)
Cooler Voltage = 1.56 V PASSED
(0.97 V - 2.25 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 517 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.9 in

PUMP INFO

Flow Rate = 4.251 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 = 0.138 (0.19%) (0.00% - 4.00%) PASSED

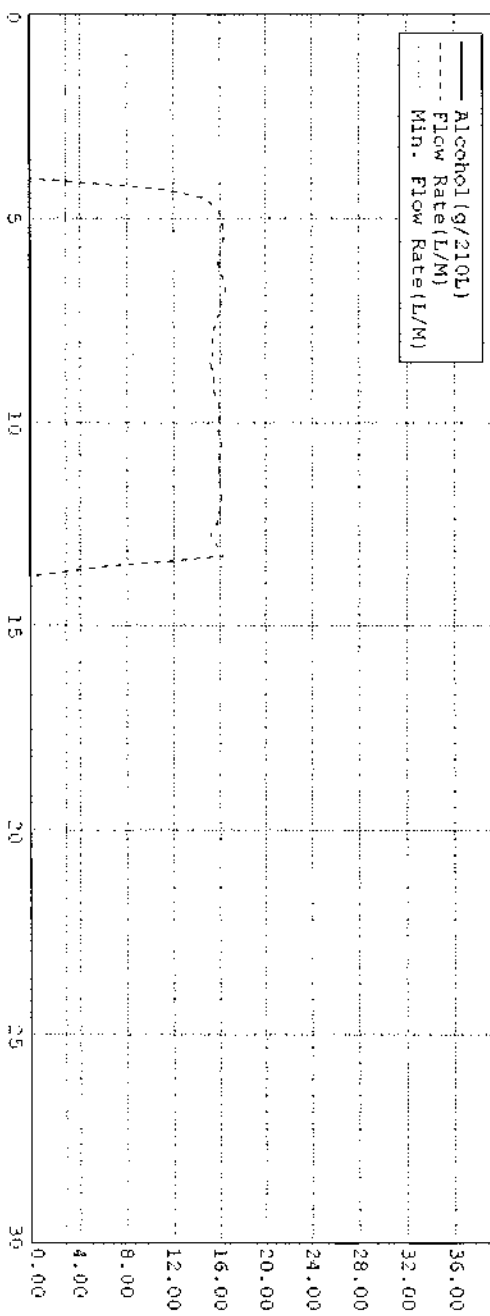
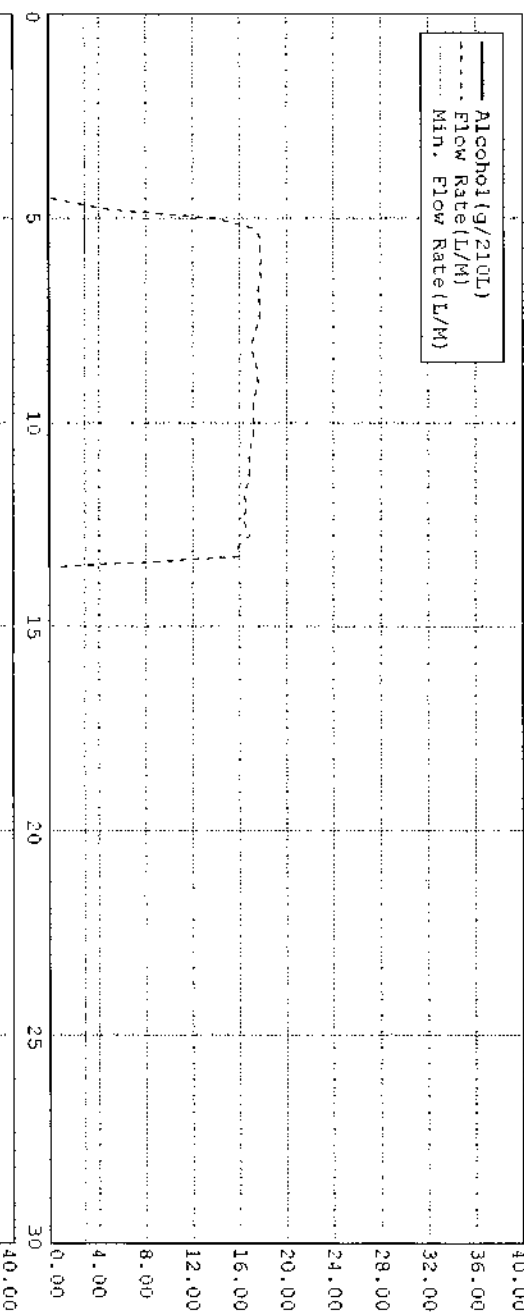
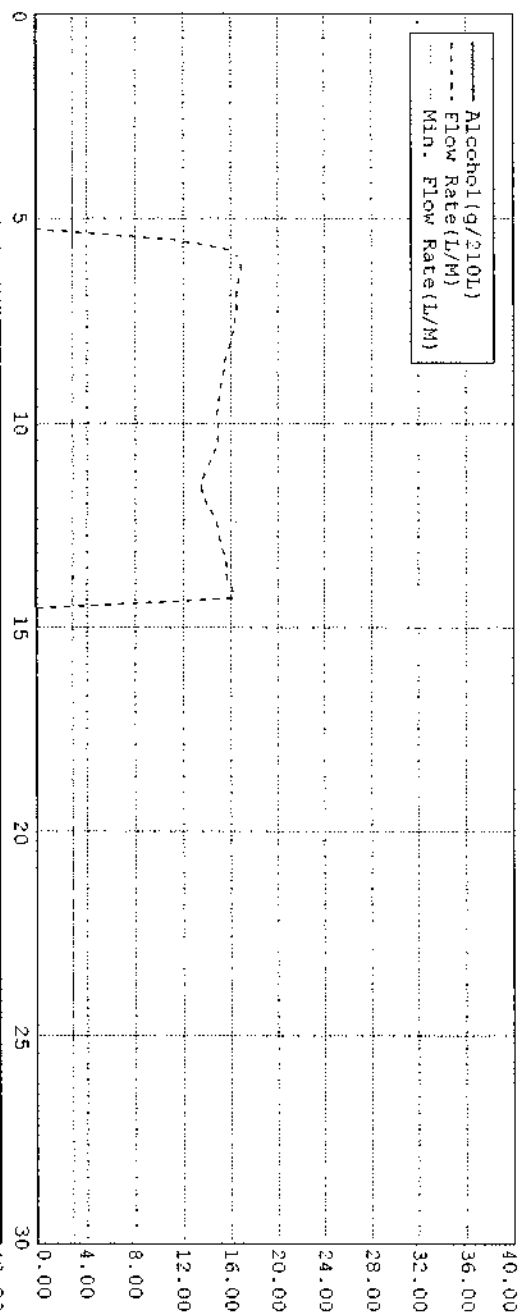
SUBJECT TEST

Alaska Department of Public Safety
 DATA MASTER dmt: 100687

Date: 09/20/2018
 Time: 10:39:53

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.88: 0.080
 LOT #: AG634001
 EXPIRATION: 12/05/2018

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	10:40
BLANK TEST	0.000	10:41
INTERNAL STANDARD	VERIFIED	10:41
EXTERNAL STANDARD	0.078	10:41
BLANK TEST	0.000	10:42
SUBJECT SAMPLE (Vol=2.30L)	0.000	10:42
BLANK TEST	0.000	10:43
EXTERNAL STANDARD	0.077	10:43
BLANK TEST	0.000	10:44
SUBJECT SAMPLE (Vol=2.45L)	0.000	10:44
BLANK TEST	0.000	10:45
EXTERNAL STANDARD	0.078	10:46
BLANK TEST	0.000	10:47
SUBJECT SAMPLE (Vol=2.46L)	0.000	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.078	10:48
BLANK TEST	0.000	10:49



VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

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Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 09/20/2018

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.89: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018
TANK PRESSURE: 130 psi

BLANK TEST	0.000	10:53
INTERNAL STANDARD	VERIFIED	10:53
Xq = 0.139	(0.45%)	
EXTERNAL STANDARD	0.077	10:54
X[1] = 0.0774 (-0.0001)	(0.0021)	
BLANK TEST	0.000	10:54
EXTERNAL STANDARD	0.078	10:55
X[1] = 0.0784 (-0.0003)	(0.0044)	
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.078	10:56
X[1] = 0.0776 (-0.0022)	(0.0034)	
BLANK TEST	0.000	10:57
EXTERNAL STANDARD	0.078	10:57
X[1] = 0.0776 (0.0012)	(0.0018)	
BLANK TEST	0.000	10:58
EXTERNAL STANDARD	0.078	10:58
X[1] = 0.0778 (0.0007)	(0.0018)	
BLANK TEST	0.000	10:59

Average = 0.0778
Std Dev = 0.0004

Diagnostic Check

VERSIONS

DMT: 3.02
PIC: 3.02
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 44.3°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 1.64 V	PASSED
(1.00 V - 2.34 V)	
Cooler Voltage = 1.56 V	PASSED
(0.97 V - 2.25 V)	
Bias Voltage = 80 V	PASSED
(48 V - 112 V)	
Chopper Freq = 527 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.9 in	

PUMP INFO

Flow Rate = 4.297 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
(0.001 V <= 0.010 V)	

FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD

Xq = 0.141	(1.81%)	(0.00% - 4.00%)	PASSED
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VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100687

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 09/20/2018

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.87: 0.080
LOT #: AG735001
EXPIRATION: 12/16/2019
TANK PRESSURE: 1017 psi

BLANK TEST	0.000	11:07
INTERNAL STANDARD	VERIFIED	11:07
EXTERNAL STANDARD	0.077	11:07
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.078	11:09
BLANK TEST	0.000	11:09
EXTERNAL STANDARD	0.078	11:10
BLANK TEST	0.000	11:11
EXTERNAL STANDARD	0.078	11:11
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.078	11:12
BLANK TEST	0.000	11:13

Average = 0.0778
Std Dev = 0.0004

Diagnostic Check

VERSIONS

DMT: 3.02
PIC: 3.02
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 49.1°C	PASSED
Breath Tube = 46.1°C	PASSED

PUMP INFO

Flow Rate = 4.333 L/M	PASSED
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DETECTOR INFO

PUMP ON	PASSED
PUMP OFF	PASSED

FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD	PASSED
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