

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

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

Version: DMEF2018 R0
Status: Active

Instrument # 100685

Date: 07/16/2018

Analyst: Derek Walton

1. Reason for instrument evaluation

Pump errors, communication errors

2. Visual Inspection

- | | |
|--|---|
| <input checked="" type="checkbox"/> Clean | <input checked="" type="checkbox"/> Replace missing screws |
| <input checked="" type="checkbox"/> Cermetex Box is secure | <input checked="" type="checkbox"/> Ensure modem cable present |
| <input checked="" type="checkbox"/> Gas Valve upright or secured to wall | <input checked="" type="checkbox"/> All tubing and connections are secure |

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

4. Troubleshooting/Repair

Replaced O-ring (broken)

Screeching sound at start of VOC. Re-ran diagnostic - completed normally.
Re-ran VOC - completed normally. Activated pump, valves, and filters in
Tech mode - all working normally.

Could not reproduce pump error or communication error.

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 #: 100685

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 07/16/2018

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.76: 0.080
LOT #: A3634001
EXPIRATION: 12/05/2018
TANK PRESSURE: 949 psi

BLANK TEST	0.000	09:45
INTERNAL STANDARD	VERIFIED	09:45
Xq = 0.080	(2.23%)	
EXTERNAL STANDARD	0.081	09:46
X[1] = 0.0810 (0.0000)	(0.0024)	
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.079	09:47
X[1] = 0.0793 (-0.0008)	(0.0027)	
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.079	09:48
X[1] = 0.0795 (-0.0004)	(0.0031)	
BLANK TEST	0.000	09:49
EXTERNAL STANDARD	0.080	09:49
X[1] = 0.0796 (-0.0009)	(0.0031)	
BLANK TEST	0.000	09:50
EXTERNAL STANDARD	0.079	09:50
X[1] = 0.0793 (-0.0007)	(0.0026)	
BLANK TEST	0.000	09:51

Average = 0.0796
Std Dev = 0.0009

Diagnostic Check

VERSIONS

DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.1

TEMPERATURES

Sample Chamber = 49.7°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 44.2°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 1.71 V	PASSED
(0.98 V - 2.30 V)	
Cooler Voltage = 1.62 V	PASSED
(0.96 V - 2.24 V)	
Bias Voltage = 79 V	PASSED
(47 V - 111 V)	
Chopper Freq = 520 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.8 in	

PUMP INFO

Flow Rate = 5.558 L/M	PASSED
(3.500 L/M - 6.500 L/M)	

DETECTOR INFO

PUMP ON	PASSED
(0.004 V <= 0.010 V)	
PUMP OFF	PASSED
(0.003 V <= 0.010 V)	

FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD

Xq = 0.077	(1.33%)	(0.00% - 4.00%)	PASSED
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VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100685

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 07/16/2018

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.76: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018
TANK PRESSURE: 933 psi

BLANK TEST	0.000	09:59
INTERNAL STANDARD	VERIFIED	09:59
Xg = 0.079	(1.56%)	
EXTERNAL STANDARD	0.080	09:59
X[1] = 0.0799 (-0.0017)	(0.0023)	
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.079	10:00
X[1] = 0.0795 (-0.0013)	(0.0023)	
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.079	10:01
X[1] = 0.0795 (-0.0012)	(0.0022)	
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.079	10:02
X[1] = 0.0791 (-0.0015)	(0.0026)	
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.079	10:03
X[1] = 0.0792 (-0.0005)	(0.0029)	
BLANK TEST	0.000	10:04

Average = 0.0792
Std Dev = 0.0004

Diagnostic Check

VERSIONS

DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.4°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 45.5°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 1.71 V	PASSED
(0.98 V - 2.30 V)	
Cooler Voltage = 1.62 V	PASSED
(0.96 V - 2.24 V)	
Bias Voltage = 79 V	PASSED
(47 V - 111 V)	
Chopper Freq = 531 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.8 in	

PUMP INFO

Flow Rate = 5.708 L/M	PASSED
(3.500 L/M - 6.500 L/M)	

DETECTOR INFO

PUMP ON	PASSED
(0.003 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

Xg = 0.079	(1.22%)	(0.00% - 4.00%)	PASSED
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