

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

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

Version: DMEF2018 R0
Status: Active

Instrument # 100371

Date: 09/20/18

Analyst: Dereen Walton

1. Reason for instrument evaluation

Could not calibrate due to periodic oscillation in detector output
during water simulator
DM 09/20/18

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 chopper/stepper/etc.

Previously had internal standard errors on VOC

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 #: 100371

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 09/20/2018

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.86: 0.080
LOT #: AG735001
EXPIRATION: 12/16/2019
TANK PRESSURE: 1188 psi

BLANK TEST	0.000	15:00
INTERNAL STANDARD	VERIFIED	15:00
Xg = 0.080	(2.67%)	
EXTERNAL STANDARD	0.077	15:00
X[1] = 0.0773 (-0.0012)	(0.0010)	
BLANK TEST	0.000	15:01
EXTERNAL STANDARD	0.078	15:02
X[1] = 0.0777 (-0.0012)	(0.0007)	
BLANK TEST	0.000	15:02
EXTERNAL STANDARD	0.078	15:03
X[1] = 0.0783 (-0.0018)	(0.0008)	
BLANK TEST	0.000	15:04
EXTERNAL STANDARD	0.078	15:04
X[1] = 0.0779 (-0.0020)	(-0.0007)	
BLANK TEST	0.000	15:05
EXTERNAL STANDARD	0.078	15:05
X[1] = 0.0780 (-0.0025)	(-0.0003)	
BLANK TEST	0.000	15:06

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 = 49.2°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 48.0°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 1.66 V	PASSED
(1.03 V - 2.41 V)	
Cooler Voltage = 1.74 V	PASSED
(1.01 V - 2.37 V)	
Bias Voltage = 79 V	PASSED
(47 V - 111 V)	
Chopper Freq = 535 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.9 in	

PUMP INFO

Flow Rate = 4.467 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 PASSED
Xg = 0.080 (2.45%) (0.00% - 4.00%)