

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

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

Version: DMEF2018 R0
Status: Active

Instrument # 100667

Date: 1/8/19

Analyst: Colleen O'Bryant

1. Reason for instrument evaluation

Detector Overflow

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

Detector volt voltage was ~ 0.5v upon arrival. I adjusted the lamp + cooler voltages up to bring the detector voltage down. This held steady overnight. Upon restarting the instrument the lamp + cooler voltages reset to their lower voltages and detector voltage increased. I did this twice. Recommendation - DMT needs an updated controller board to maintain lamp + cooler voltages.

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 #: 100667

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 01/08/2019

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.89: 0.080
LOT #: AG735001
EXPIRATION: 12/16/2019
TANK PRESSURE: 709 psi

BLANK TEST	0.000	15:03
INTERNAL STANDARD	VERIFIED	15:03
Xg = 0.108 (0.16%)		
EXTERNAL STANDARD	0.078	15:03
X[1] = 0.0778 (-0.0039) (-0.0026)		
BLANK TEST	0.000	15:04
EXTERNAL STANDARD	0.078	15:04
X[1] = 0.0780 (-0.0036) (-0.0018)		
BLANK TEST	0.000	15:05
EXTERNAL STANDARD	0.078	15:05
X[1] = 0.0782 (-0.0034) (-0.0020)		
BLANK TEST	0.000	15:06
EXTERNAL STANDARD	0.078	15:06
X[1] = 0.0783 (-0.0032) (-0.0018)		
BLANK TEST	0.000	15:07
EXTERNAL STANDARD	0.079	15:07
X[1] = 0.0787 (-0.0031) (-0.0015)		
BLANK TEST	0.000	15:08

Average = 0.0782
Std Dev = 0.0004

Diagnostic Check

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.6°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 45.3°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 1.92 V	PASSED
(1.12 V - 2.62 V)	
Cooler Voltage = 1.89 V	PASSED
(1.10 V - 2.58 V)	
Bias Voltage = 80 V	PASSED
(48 V - 112 V)	
Chopper Freq = 525 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.9 in	

PUMP INFO

Flow Rate = 4.838 L/M	PASSED
(3.500 L/M - 6.500 L/M)	

DETECTOR INFO

PUMP ON	PASSED
(0.001 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 = 0.109 0.57% (0.00% - 4.00%)	PASSED
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