

# Alaska Scientific Crime Detection Laboratory

## DataMaster Evaluation Form

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

Version: DMEF2018 R0  
Status: Active

Instrument # 100694

Date: 09/08/20

Analyst: Derek Walton

1. Reason for instrument evaluation

Would not turn on at check in. Also sent in for blank errors, internal standard errors, and standard out of range

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

Replaced breath hose. Replaced o-ring.  
Screw broken off in main cover - notified maintenance to remove.  
Replaced on/off switch - unit boots up now.  
Source block spins easily - removed, re-taped, and tightened.  
Routed the filter wires separately.

Instrument uploaded successfully. Adjusted lamp and cooler voltages.

Recommend calibration due to nature of status messages.

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 #: 100694

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 09/08/2020

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.97: 0.080  
LOT #: AG826101  
EXPIRATION: 09/18/2020  
TANK PRESSURE: 197 psi

BLANK TEST	0.000	16:11
INTERNAL STANDARD	✓ VERIFIED	16:11
Xq = 0.098 (0.81%)		
EXTERNAL STANDARD	0.079	16:12
X[1] = 0.0786 (-0.0009) (-0.0005)		
BLANK TEST	0.000	16:13
EXTERNAL STANDARD	0.078	16:13
X[1] = 0.0778 (-0.0017) (-0.0004)		
BLANK TEST	0.000	16:14
EXTERNAL STANDARD	0.078	16:14
X[1] = 0.0782 (-0.0014) (0.0001)		
BLANK TEST	0.000	16:15
EXTERNAL STANDARD	0.078	16:15
X[1] = 0.0781 (-0.0016) (-0.0003)		
BLANK TEST	0.000	16:16
EXTERNAL STANDARD	0.078	16:16
X[1] = 0.0784 (-0.0012) (0.0006)		
BLANK TEST	0.000	16:17

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 = 46.7°C	PASSED
(38.0°C - 50.0°C)	

### SETTINGS

Lamp Voltage = 1.66 V	PASSED
(0.95 V - 2.21 V)	
Cooler Voltage = 1.56 V	PASSED
(0.95 V - 2.23 V)	
Bias Voltage = 79 V	PASSED
(48 V - 112 V)	
Chopper Freq = 527 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 30.0 in	

### PUMP INFO

Flow Rate = 4.335 L/M	PASSED
(3.500 L/M - 6.500 L/M)	

### DETECTOR INFO

PUMP ON	PASSED
(0.005 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	✓	PASSED
Xq = 0.098	0.36%	(0.00% - 4.00%)