

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

Issued: 05/15/2020
Effective: 05/15/2020

Version: DMEF 2020 R0
Status: Active

Instrument # 100364

Start Date: 12/14/20

Analysts: Derek Walton

Reason for instrument evaluation

Screen issues in field

Visual Inspection

- Clean
- Cermetex Box is secure
- Gas Valve upright or secured to wall
- O-ring inspection and ensure 2 O-rings in replacement bag
- Replace missing screws
- Ensure modem cable present
- All tubing and connections are secure

Troubleshooting/Repair

Source block loose - tightened. Recalibrated screen.

Adjusted lamp and cooler voltages.

Reloaded 3.02 full version.

No issues with screen encountered during evaluation.

- VOC (attached)
- Internal Standard value $\leq 3.00\%$
- Verify software version

- Return to Factory for Repair
- Ready for Certification
- Ready for Calibration
- Proceed to Close Out

End Date: 12/15/20

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100364

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/14/2020

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.27: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022
TANK PRESSURE: 1206 psi

BLANK TEST	0.000	15:45
INTERNAL STANDARD	VERIFIED	15:45
Xq = 0.100 (2.24%)		
EXTERNAL STANDARD	0.079	15:46
X[1] = 0.0794 (-0.0023) (-0.0009)		
BLANK TEST	0.000	15:47
EXTERNAL STANDARD	0.079	15:47
X[1] = 0.0788 (-0.0027) (-0.0003)		
BLANK TEST	0.000	15:48
EXTERNAL STANDARD	0.079	15:48
X[1] = 0.0790 (-0.0022) (-0.0008)		
BLANK TEST	0.000	15:49
EXTERNAL STANDARD	0.079	15:49
X[1] = 0.0791 (-0.0017) (0.0007)		
BLANK TEST	0.000	15:50
EXTERNAL STANDARD	0.079	15:50
X[1] = 0.0789 (-0.0032) (-0.0001)		
BLANK TEST	0.000	15:51

Average = 0.0790
Std Dev = 0.0000

Diagnostic Check

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 44.4°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 2.10 V	PASSED
(1.16 V - 2.72 V)	
Cooler Voltage = 1.97 V	PASSED
(1.18 V - 2.76 V)	
Bias Voltage = 79 V	PASSED
(48 V - 112 V)	
Chopper Freq = 526 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.3 in	

PUMP INFO

Flow Rate = 5.354 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
(0.003 V <= 0.010 V)	

FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD ✓

Xq = 0.101 2.59% (0.00% - 4.00%)	PASSED
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VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100364

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/15/2020

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.26: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022
TANK PRESSURE: 1204 psi

BLANK TEST	0.000	08:53
INTERNAL STANDARD ✓	VERIFIED	08:53
Xq = 0.101 (2.68%)		
EXTERNAL STANDARD	0.079	08:54
X[1] = 0.0788 (-0.0012) (0.0024)		
BLANK TEST	0.000	08:54
EXTERNAL STANDARD	0.079	08:55
X[1] = 0.0789 (-0.0018) (0.0019)		
BLANK TEST	0.000	08:56
EXTERNAL STANDARD	0.080	08:56
X[1] = 0.0797 (-0.0002) (0.0027)		
BLANK TEST	0.000	08:57
EXTERNAL STANDARD	0.079	08:57
X[1] = 0.0791 (-0.0007) (0.0024)		
BLANK TEST	0.000	08:58
EXTERNAL STANDARD	0.079	08:58
X[1] = 0.0793 (-0.0016) (0.0020)		
BLANK TEST	0.000	08:59

Average = 0.0792
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 = 45.4°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 2.10 V	PASSED
(1.16 V - 2.72 V)	
Cooler Voltage = 1.96 V	PASSED
(1.18 V - 2.76 V)	
Bias Voltage = 79 V	PASSED
(48 V - 112 V)	
Chopper Freq = 535 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.3 in	

PUMP INFO

Flow Rate = 5.322 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 = 0.100 2.41%	PASSED
(0.00% - 4.00%)	