

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

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

Version: DMEF 2020 R0
Status: Active

Instrument # 100411

Start Date: 02/12/21

Analysts: Dereck Walton

Reason for instrument evaluation

Screen display issue (distortion)

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 |
| <input checked="" type="checkbox"/> O-ring inspection and ensure 2 O-rings in replacement bag | |

Troubleshooting/Repair

Replaced ribbon cable to controller board (damaged).
Checked all screen connections.
Still experiencing blank errors and internal standard errors.
No screen distortion observed during evaluation after cable replacement.

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

- | | |
|-------------------------------------------------------|-----------------------------------------------------------|
| <input type="checkbox"/> Return to Factory for Repair | <input checked="" type="checkbox"/> Ready for Calibration |
| <input type="checkbox"/> Ready for Certification | <input type="checkbox"/> Proceed to Close Out |

End Date: 02/12/21

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100411

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 02/12/2021

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.92: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022
TANK PRESSURE: 1101 psi

BLANK TEST 0.000 09:27
INTERNAL STANDARD ERROR 09:28
 Xq = 0.078 (4.07%)

Internal Standard Error

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 = 41.6°C PASSED
 (38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.77 V PASSED
 (1.09 V - 2.55 V)
Cooler Voltage = 1.77 V PASSED
 (1.09 V - 2.55 V)
Bias Voltage = 80 V PASSED
 (48 V - 112 V)
Chopper Freq = 533 Hz PASSED
 (475 Hz - 575 Hz)
Barometer = 29.9 in

PUMP INFO

Flow Rate = 5.470 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 = 0.077 3.84% (0.00% - 4.00%) PASSED

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100411

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 02/12/2021

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.92: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022
TANK PRESSURE: 1083 psi

BLANK TEST 0.000 10:22
INTERNAL STANDARD VERIFIED 10:22
 Xq = 0.076 (2.56%)
EXTERNAL STANDARD 0.080 10:22
 X[1] = 0.0799 (-0.0023) (0.0031)

Blank Error

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 = 39.4°C PASSED
 (38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.76 V PASSED
 (1.09 V - 2.55 V)
Cooler Voltage = 1.77 V PASSED
 (1.09 V - 2.55 V)
Bias Voltage = 80 V PASSED
 (48 V - 112 V)
Chopper Freq = 524 Hz PASSED
 (475 Hz - 575 Hz)
Barometer = 29.9 in

PUMP INFO

Flow Rate = 5.515 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

Xq = 0.077 2.79% (0.00% - 4.00%) PASSED