

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

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

Version: DMEF 2020 R0
Status: Active

Instrument # 100347

Start Date: 02/23/21

Analysts: Derek Walton

Reason for instrument evaluation

Refurbished by manufacturer, repaired for gas flow errors

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

Mirror blocks taped, controller board modification present, source block feels tight, filter wheel assembly feels appropriate.

Adjusted lamp and cooler voltages.

Repeated Diagnostic Check failed on VOCs due to internal standard.

- VOC (attached)
- Internal Standard value $\leq 3.00\%$ NO
- 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: 02/23/21

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100347

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 02/23/2021

External Standard Test Values

Diagnostic Check

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 41.6°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.63 V PASSED
(1.01 V - 2.37 V)
Cooler Voltage = 1.64 V PASSED
(1.00 V - 2.34 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 525 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 30.0 in

PUMP INFO

Flow Rate = 4.910 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 FAILED

Xq = 0.108 (6.51%) (0.00% - 4.00%)

Diagnostic Check Failed