

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

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

Version: DMEF 2020 R0
Status: Active

Instrument # 100353

Start Date: 09/15/21

Analysts: Dereu walton

Reason for instrument evaluation

Refurbished by manufacturer, repaired for sticking 5 way valve and leaking regulator

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

Instrument has a new model regulator. Mirror blocks taped, controller board modification present, 5 way valve and filter wheel assembly are smooth, source block is tight.

VOCs produced internal standard error and tank interference. Recommend recalibration.

- VOC (attached)
- Internal Standard value $\leq 3.00\%$ ND - 4.01%
- Verify software version
- Return to Factory for Repair
- Ready for Certification
- Ready for Calibration
- Proceed to Close Out

End Date: 09/15/21

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100353

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 09/15/2021

External Standard Test Values

Diagnostic Check

VERSIONS

DMT: 3.02 ✓
PIC: 3.07
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.84 V PASSED
(1.10 V - 2.58 V)
Cooler Voltage = 1.80 V PASSED
(1.08 V - 2.52 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 525 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 5.341 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
(0.010 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.117 4.01% (0.00% - 4.00%) FAILED

Diagnostic Check Failed

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

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Serial #: 100353

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 09/15/2021

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.57: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022
TANK PRESSURE: 930 psi

BLANK TEST 0.000 14:49
INTERNAL STANDARD VERIFIED 14:49
Xq = 0.111 (1.02%)
EXTERNAL STANDARD INTERFERENCE 14:50
X[1] = 0.0747 (-0.0046) (-0.0092)

Interference Detected

Diagnostic Check

VERSIONS

DMT: 3.02 ✓
PIC: 3.07
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.84 V PASSED
(1.10 V - 2.58 V)
Cooler Voltage = 1.80 V PASSED
(1.08 V - 2.52 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 525 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 5.455 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 = 0.113 (0.94%) (0.00% - 4.00%) PASSED