

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

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

Version: DMEF 2020 R0
Status: Active

Instrument # 100255
4 DMV 09/04/20
Start Date: 09/03/20

Analysts: Derck Walton

Reason for instrument evaluation

Preventive maintenance due

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
- O-ring inspection and ensure 2 O-rings in replacement bag

Troubleshooting/Repair

Replaced o-ring. Added modem cable.

Instrument producing gas flow errors on VOCs. Replaced regulator.

Source block loose - tightened.

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

Return to Factory for Repair

Ready for Calibration

Ready for Certification

Proceed to Close Out

End Date: 09/04/20

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100255

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 09/04/2020

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.86: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020
TANK PRESSURE: 1035 psi

BLANK TEST 0.000 10:30
INTERNAL STANDARD VERIFIED 10:31

Gas Flow Error

Diagnostic Check

VERSIONS

DMT: 3.02
PIC: 2.05
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED
Breath Tube = 44.5°C PASSED

PUMP INFO

Flow Rate = 4.790 L/M PASSED

DETECTOR INFO

PUMP ON PASSED
PUMP OFF PASSED

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

PASSED

VERIFICATION OF CALIBRATION REPORT

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External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.86: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020
TANK PRESSURE: 1034 psi

BLANK TEST ✓ 0.000 11:32
INTERNAL STANDARD ✓ VERIFIED 11:32
Xq = 0.078 (0.90%)
EXTERNAL STANDARD 0.078 11:32
X[1] = 0.0777 (-0.0010) (0.0015)
BLANK TEST 0.000 11:33
EXTERNAL STANDARD 0.078 11:33
X[1] = 0.0778 (-0.0008) (0.0008)
BLANK TEST 0.000 11:34
EXTERNAL STANDARD 0.078 11:34
X[1] = 0.0777 (-0.0010) (0.0006)
BLANK TEST 0.000 11:35
EXTERNAL STANDARD 0.078 11:35
X[1] = 0.0781 (-0.0011) (0.0003)
BLANK TEST 0.000 11:36
EXTERNAL STANDARD 0.078 11:36
X[1] = 0.0781 (-0.0014) (-0.0004)
BLANK TEST 0.000 11:37

Average = 0.0780
Std Dev = 0.0000

Diagnostic Check

VERSIONS ✓
DMT: 3.02
PIC: 2.05
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.5°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 44.2°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.61 V PASSED
(0.97 V - 2.25 V)
Cooler Voltage = 1.59 V PASSED
(0.95 V - 2.23 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 529 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.724 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 ✓ PASSED
Xq = 0.077 0.45% (0.00% - 4.00%)