

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

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

Version: DMEF 2020 R0
Status: Active

Instrument # 100681

Start Date: 10/26/2021

Analysts: Carlie Maister

Reason for instrument evaluation

Previously marked as Return to Factory for refurbishment.
Not sending instruments out for refurb at this time.

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

Keyboard functioning normally (instrument returned to lab due to keyboard not working).

VOCs passed, however the external standard was reading on the low end of passing. 2 different tanks were tested. Recommend calibration.

- 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: 10/26/2021

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100681

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 10/26/2021

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.04: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022
TANK PRESSURE: 950 psi

BLANK TEST	0.000	13:49
INTERNAL STANDARD	VERIFIED	13:49
Xq = 0.106 (0.33%) ✓		
EXTERNAL STANDARD	0.074	13:49
X[1] = 0.0741 (-0.0022) (-0.0007)		
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.074	13:50
X[1] = 0.0742 (-0.0016) (-0.0007)		
BLANK TEST	0.000	13:51
EXTERNAL STANDARD	0.074	13:51
X[1] = 0.0737 (-0.0022) (-0.0006)		
BLANK TEST	0.000	13:52
EXTERNAL STANDARD	0.073	13:53
X[1] = 0.0735 (-0.0020) (-0.0002)		
BLANK TEST	0.000	13:53
EXTERNAL STANDARD	0.074	13:54
X[1] = 0.0741 (-0.0014) (0.0002)		
BLANK TEST	0.000	13:55

Average = 0.0738
Std Dev = 0.0004

Diagnostic Check

VERSIONS

DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.8°C (44.0°C - 52.0°C)	PASSED
Breath Tube = 46.7°C (38.0°C - 50.0°C)	PASSED

SETTINGS

Lamp Voltage = 1.70 V (1.02 V - 2.38 V)	PASSED
Cooler Voltage = 1.53 V (0.92 V - 2.14 V)	PASSED
Bias Voltage = 78 V (47 V - 111 V)	PASSED
Chopper Freq = 513 Hz (475 Hz - 575 Hz)	PASSED
Barometer = 29.0 in	

PUMP INFO

Flow Rate = 4.232 L/M (3.500 L/M - 6.500 L/M)	PASSED
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DETECTOR INFO

PUMP ON (0.002 V <= 0.010 V)	PASSED
PUMP OFF (0.002 V <= 0.010 V)	PASSED

FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD ✓	PASSED
Xq = 0.107 0.58% (0.00% - 4.00%)	

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100681

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 10/26/2021

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.04: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022
TANK PRESSURE: 247 psi

BLANK TEST	0.000	14:06
INTERNAL STANDARD	VERIFIED	14:06
Xq = 0.107 (0.50%)		
EXTERNAL STANDARD	0.074	14:06
X[1] = 0.0738 (-0.0014) (0.0005)		
BLANK TEST	0.000	14:07
EXTERNAL STANDARD	0.074	14:07
X[1] = 0.0736 (-0.0011) (0.0006)		
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.074	14:09
X[1] = 0.0738 (-0.0011) (0.0007)		
BLANK TEST	0.000	14:09
EXTERNAL STANDARD	0.074	14:10
X[1] = 0.0738 (-0.0013) (0.0008)		
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.073	14:11
X[1] = 0.0735 (-0.0017) (0.0001)		
BLANK TEST	0.000	14:12

Average = 0.0738
Std Dev = 0.0004

Diagnostic Check

VERSIONS

DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.7°C (44.0°C - 52.0°C)	PASSED
Breath Tube = 46.5°C (38.0°C - 50.0°C)	PASSED

SETTINGS

Lamp Voltage = 1.70 V (1.02 V - 2.38 V)	PASSED
Cooler Voltage = 1.53 V (0.92 V - 2.14 V)	PASSED
Bias Voltage = 78 V (47 V - 111 V)	PASSED
Chopper Freq = 516 Hz (475 Hz - 575 Hz)	PASSED
Barometer = 29.0 in	

PUMP INFO

Flow Rate = 4.268 L/M (3.500 L/M - 6.500 L/M)	PASSED
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DETECTOR INFO

PUMP ON (0.002 V <= 0.010 V)	PASSED
PUMP OFF (0.002 V <= 0.010 V)	PASSED

FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD	PASSED
Xq = 0.107 0.25% (0.00% - 4.00%)	