

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

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

Version: DMEF 2020 R0
Status: Active

Instrument # 100700

Start Date: 09/13/21

Analysts: Derck Watton

Reason for instrument evaluation

Regulator leaking, preventive maintenance due

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

Instrument has not been refurbished.

Routed filter wires separately. Source block is tight. Filter wheel assembly and 5 way valve feel Ok. Replaced o-ring.

Recalibrated touch screen.

Computed VOCs with 2 different dry gas tanks. ^{DW 09/13/21} No leaking observed as long as tank is firmly installed. Did experience some leaking during evaluation. Recommend return to factory for regulator replacement and refurbishment.

- | | |
|---|--|
| <input checked="" type="checkbox"/> VOC (attached) | |
| <input checked="" type="checkbox"/> Internal Standard value $\leq 3.00\%$ | |
| <input checked="" type="checkbox"/> Verify software version | |
| <input checked="" type="checkbox"/> Return to Factory for Repair | <input type="checkbox"/> Ready for Calibration |
| <input checked="" type="checkbox"/> Ready for Certification | <input type="checkbox"/> Proceed to Close Out |

DW 09/13/21

End Date: 09/13/21

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100700

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 09/13/2021

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022
TANK PRESSURE: 520 psi

BLANK TEST	0.000	09:47
INTERNAL STANDARD	✓ VERIFIED	09:47
Xq = 0.079 (1.83%)		
EXTERNAL STANDARD	0.077	09:47
X[1] = 0.0775 (-0.0015) (-0.0002)		
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.077	09:48
X[1] = 0.0773 (-0.0014) (0.0004)		
BLANK TEST	0.000	09:49
EXTERNAL STANDARD	0.077	09:50
X[1] = 0.0768 (-0.0014) (0.0002)		
BLANK TEST	0.000	09:50
EXTERNAL STANDARD	0.077	09:51
X[1] = 0.0775 (-0.0008) (0.0005)		
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.077	09:52
X[1] = 0.0774 (-0.0014) (0.0009)		
BLANK TEST	0.000	09:53

Average = 0.0770
Std Dev = 0.0000

Diagnostic Check

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 47.8°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 1.70 V	PASSED
(1.02 V - 2.38 V)	
Cooler Voltage = 1.68 V	PASSED
(0.98 V - 2.28 V)	
Bias Voltage = 80 V	PASSED
(49 V - 115 V)	
Chopper Freq = 540 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.2 in	

PUMP INFO

Flow Rate = 4.576 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	✓	PASSED
Xq = 0.079	1.40%	(0.00% - 4.00%)

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100700

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date:09/13/2021

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022
TANK PRESSURE: 902 psi

BLANK TEST	0.000	10:02
INTERNAL STANDARD	VERIFIED	10:02
EXTERNAL STANDARD	0.078	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.078	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.077	10:04
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.078	10:05
BLANK TEST	0.000	10:06
EXTERNAL STANDARD	0.078	10:06
BLANK TEST	0.000	10:07

Average = 0.0778
Std Dev = 0.0004

Diagnostic Check

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C	PASSED
Breath Tube = 48.1°C	PASSED

PUMP INFO

Flow Rate = 4.570 L/M	PASSED
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DETECTOR INFO

PUMP ON	PASSED
PUMP OFF	PASSED

FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD	PASSED
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