

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

Effective: 11/10/2021

Version: 2.0

Instrument #: 100360

Analyst(s): Curlie Glaister

Start Date: 8/25/2022

Reason for instrument evaluation

Internal Standard Errors + Fatal System Error + Communication Error + Burning Smell

Visual Inspection

- | | |
|---|---|
| <input checked="" type="checkbox"/> Clean | <input checked="" type="checkbox"/> Replace missing screws |
| <input checked="" type="checkbox"/> Cermetex Box (modem) is secure | <input checked="" type="checkbox"/> Ensure modem cable present |
| <input checked="" type="checkbox"/> Double Check Valve secured to wall | <input checked="" type="checkbox"/> All tubing and connections secure |
| <input checked="" type="checkbox"/> O-ring inspection and ensure 2 replacement O-rings in bag | |

Troubleshooting/Repair

Replaced power supply. Reloaded 3.0Z DMT Software. No change in communication error. Replaced controller board with an updated one, no change in communication error. Tried replacing all ribbon cables attached to the SI board per Lottox recommendation after communicating with them for help troubleshooting.

This did not work as original ribbon cables were reinstalled. Replaced SI board. This solved communication error. No burning smell noted after power supply was replaced. Replaced O-ring. Detector overflow when attempting VOC. Lamp & cooler nearly maxed to get detector voltage passing. Replaced detector. Detector at max voltage. No

- | | |
|--|--|
| <input checked="" type="checkbox"/> VOC (attached) | <input checked="" type="checkbox"/> Verify software version |
| <input checked="" type="checkbox"/> VOC Internal Standard value \leq 3.00% | <input checked="" type="checkbox"/> Non-Drinking Subject Test (attached) |

VOC
internal
standard
above
3%.

- Return to Factory
 Ready for Certification
 Further Evaluation Needed

End Date: 11/11/2022

11/6 11/4/2022
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Approved by: Chemistry Supervisor

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

Effective: 11/10/2021

Version: 2.0

Instrument #: 100360

Analyst(s): Currie Glaster

Start Date: 8/25/2022

Reason for instrument evaluation

Eval continued

Visual Inspection

Clean

Cermetex Box (modem) is secure

Double Check Valve secured to wall

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

Replace missing screws

Ensure modem cable present

All tubing and connections secure

Troubleshooting/Repair

During review it was noticed that the lamp voltage failed on the VOC in addition to the internal standard. Additionally replacing the SF board changed the serial #, date & time. New detectors were received 11/4/22 & a new detector was installed. The detector voltage was adjusted in Technician mode. Put original SD card back in Datamaster. Serial # was corrected in Datamaster. Date & time was set.

Internal standard above 3%. Needs Adjustment.

VOC (attached)

VOC Internal Standard value \leq 3.00%

Verify software version

Non-Drinking Subject Test (attached)

Return to Factory

Ready for Certification

Further Evaluation Needed

Ready for Calibration

Proceed to Close Out

End Date: 11/4/2022

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Approved by: Chemistry Supervisor

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100683

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/31/2009

External Standard Test Values

Diagnostic Check

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

TEMPERATURES

Sample Chamber = 49.0°C
(44.0°C - 52.0°C) PASSED
Breath Tube = 43.9°C
(38.0°C - 50.0°C) PASSED

SETTINGS

Lamp Voltage = 2.54 V FAILED
(1.00 V - 2.34 V)
Cooler Voltage = 1.95 V PASSED
(1.00 V - 2.32 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 523 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 4.706 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.004 V <= 0.010 V)
PUMP OFF PASSED
(0.003 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.108 4.50% (0.00% - 4.00%) FAILED

Diagnostic Check Failed

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100360

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 11/04/2022

External Standard Test Values		Diagnostic Check
VERSIONS		
DMT: 3.02		
PIC: 3.02		
Modem: 2.6		
Questions: 2.2		
TEMPERATURES		
Sample Chamber = 49.1 °C (44.0 °C - 52.0 °C)		PASSED
Breath Tube = 44.3 °C (38.0 °C - 50.0 °C)		PASSED
SETTINGS		
Lamp Voltage = 2.01 V (1.00 V - 2.34 V)		PASSED
Cooler Voltage = 1.66 V (1.00 V - 2.32 V)		PASSED
Bias Voltage = 80 V (48 V - 112 V)		PASSED
Chopper Freq = 522 Hz (475 Hz - 575 Hz)		PASSED
Barometer = 29.5 in		
PUMP INFO		
Flow Rate = 4.739 L/M (3.500 L/M - 6.500 L/M)		PASSED
DETECTOR INFO		
PUMP ON (0.002 V <= 0.010 V)		PASSED
PUMP OFF (0.001 V <= 0.010 V)		PASSED
FILTER INFO		
Filter 1		PASSED
Filter 2		PASSED
Filter 3		PASSED
INTERNAL STANDARD		FAILED

Diagnostics Check Failed