

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

Issued: 04/03/2018
Effective: 04/04/2018

Version: DMEF2018 R0
Status: Active

Instrument # 100667

Date: 03/04/2019

Analyst: Derch Walton

1. Reason for instrument evaluation

Instrument will not recall correct lamp and cooler voltages after shutdown

2. 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

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

4. Troubleshooting/Repair

Detector 0.296 V. Changed lamp, cooler, & chopper settings to reduce voltage. Saved values and restarted instrument. Changed values not recovered. Current controller board is 37120-A. Installed controller board model 37120-B. Reloaded 3.02 software (full version). Detector voltage > 2.00 V. Adjusted lamp & cooler to normalize. Values are still not saving after reboot.

Ran filter wire separately.

Instrument likely needs updated controller board. Recommend return to factory.

5. VOC (attached)

6. Internal Standard value $\leq 3.00\%$ Yes No

7. Verify software version

Return to Factory for Repair

Ready for Calibration

Ready for Certification

Proceed to Close Out

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100667

Date: 03/04/2019
Time: 14:44:54

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.5°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 44.9°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.99 V PASSED
(1.12 V - 2.62 V)
Cooler Voltage = 1.78 V PASSED
(1.10 V - 2.58 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 528 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 30.2 in

PUMP INFO

Flow Rate = 5.007 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
(0.003 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.107 1.14% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100667

Date: 03/04/2019
Time: 2:43 PM

Temperatures (°C)

Sample Cell: 48.7°C
Breath Tube: 44.8°C

Current Barometer 30.2 in
Volume (Ltr) 0.00

Settings

Lamp: 1.99 V
Bias: 79 V
Cooler: 1.78 V
Chopper: 528 Hz

Voltages (V)

Flow: 1.07 V
Detector: 0.041 V