

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

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

Version: DMEF 2020 R0
Status: Active

Instrument # 100350

Start Date: 02/04/21

Analysts: Derek Walton

Reason for instrument evaluation

Returbished by manufacturer, repaired for communications errors and maxed cooler voltage

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

Controller board modification present, mirror blocks taped, filter wires routed separately, source block is tight, filter wheel assembly feels good.

Adjusted lamp and cooler voltages.

VOC failed due to internal standard valve.

- VOC (attached)
- Internal Standard value $\leq 3.00\%$ NO - 6.35%
- Verify software version

- | | |
|-------------------------------------------------------|-----------------------------------------------------------|
| <input type="checkbox"/> Return to Factory for Repair | <input checked="" type="checkbox"/> Ready for Calibration |
| <input type="checkbox"/> Ready for Certification | <input type="checkbox"/> Proceed to Close Out |

End Date: 02/04/21

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 02/04/2021
Time: 11:24:58

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

TEMPERATURES

Sample Chamber = 48.6°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 41.9°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.52 V PASSED
(0.93 V - 2.17 V)
Cooler Voltage = 1.52 V PASSED
(0.92 V - 2.16 V)
Bias Voltage = 81 V PASSED
(49 V - 113 V)
Chopper Freq = 528 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 30.0 in

PUMP INFO

Flow Rate = 5.452 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
(0.001 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.114 6.35% (0.00% - 4.00%) FAILED