

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

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

Version: DMEF 2020 R0
Status: Active

Instrument # 100685

Start Date: 03/22/2021

Analysts: Derck Walton

Reason for instrument evaluation

Repaired by manufacturer for communications errors

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

NO communications errors on startup. Chopper wheel is extremely loud during diagnostic. Adjusted lamp and cooler voltages as well as chopper speed. Chopper wheel volume is now normal.

Filter 2 readings on the external standard were outside ± 0.0010 . Recommend calibration to address.

- | | |
|---|---|
| <input checked="" type="checkbox"/> VOC (attached) | |
| <input checked="" type="checkbox"/> Internal Standard value $\leq 3.00\%$ | |
| <input checked="" type="checkbox"/> 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: 03/22/2021

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100685

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 03/22/2021

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.76: 0.080
LOT #: AG923401
EXPIRATION: 08/22/2021
TANK PRESSURE: 789 psi

BLANK TEST	0.000	09:12
INTERNAL STANDARD	✓ VERIFIED	09:12
Xq = 0.082 (0.11%)		
EXTERNAL STANDARD	0.079	09:12
X[1] = 0.0792 (-0.0045) (-0.0015)		
BLANK TEST	0.000	09:13
EXTERNAL STANDARD	0.079	09:13
X[1] = 0.0788 (-0.0042) (-0.0013)		
BLANK TEST	0.000	09:14
EXTERNAL STANDARD	0.079	09:14
X[1] = 0.0785 (-0.0043) (-0.0011)		
BLANK TEST	0.000	09:15
EXTERNAL STANDARD	0.079	09:16
X[1] = 0.0786 (-0.0045) (0.0001)		
BLANK TEST	0.000	09:16
EXTERNAL STANDARD	0.078	09:17
X[1] = 0.0783 (-0.0040) (-0.0010)		
BLANK TEST	0.000	09:18

Average = 0.0788
Std Dev = 0.0004

Diagnostic Check

VERSIONS

DMT: 3.02 ✓
PIC: 3.07
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 44.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.76 V PASSED
(1.09 V - 2.53 V)
Cooler Voltage = 1.86 V PASSED
(1.07 V - 2.49 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 527 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 5.439 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 ✓ PASSED
Xq = 0.082 0.53% (0.00% - 4.00%)

SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100685

Date: 03/22/2021
 Time: 09:50:44

SUBJECT NAME:
 TEST TEST
 LICENSE #: XXXX

OPERATOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

DEPT/AGENCY:
 NON-DRINKING SUBJECT
 CASE/REPORT: XXXX
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.73: 0.079
 LOT #: AG923401
 EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK	PASSED	09:51
BLANK TEST	0.000	09:51
INTERNAL STANDARD	VERIFIED	09:51
$X_q = 0.083$ (1.39%)		
EXTERNAL STANDARD	0.079	09:52
$X[1] = 0.0792$ (-0.0027) (0.0004)		
BLANK TEST	0.000	09:53
SUBJECT SAMPLE (Vol=2.92L)	0.000	09:54
$X[1] = 0.0000$ (0.0000) (0.0000)		
BLANK TEST	0.000	09:54
EXTERNAL STANDARD	0.079	09:55
$X[1] = 0.0789$ (-0.0032) (0.0007)		
BLANK TEST	0.000	09:56

DW

