

# Alaska Scientific Crime Detection Laboratory

## DataMaster Repair Form

Effective: 10/10/2022

Version: 1.0

Instrument #: 100387

Analyst(s): Derek Walton

Start Date: 07/15/24

Observed by Kaija Swisher and Megan Carlock  
DJW 07/17/2024

### Reason for Repair

Diagnostic Failures for Pump on during VOCs post-Adjustment

### Troubleshooting/Repair

dm 07/15/24  
Adjusted lamp, sol cooler, and chopper settings. Chopper wheel is somewhat noisy. Chopper motor replaced. Encountered a couple of filter wheel errors after filter wheel reinstallation. One diagnostic passed with no issues. Ran a filter wheel test - 0 errors in 25 cycles.

Recommend Adjustment due to optical bench maintenance.

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

End Date: 07/16/24

DIAGNOSTIC RECORD

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Alaska Department of Public Safety  
DATAMASTER dmt: 100387  
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Date: 07/16/2024  
Time: 14:28:56

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

TEMPERATURES

Sample Chamber = 48.6°C PASSED  
Breath Tube = 43.0°C PASSED

PUMP INFO  
Flow Rate = 4.868 L/M PASSED

DETECTOR INFO  
PUMP ON PASSED  
PUMP OFF PASSED

FILTER INFO  
Filter 1 PASSED  
Filter 2 PASSED  
Filter 3 PASSED

INTERNAL STANDARD PASSED

# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100387

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 07/16/2024

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.70: 0.079  
LOT #: AG335202  
EXPIRATION: 12/18/2025  
TANK PRESSURE: 1008 psi

BLANK TEST	0.000	16:17
INTERNAL STANDARD ✓	VERIFIED	16:17
Xq = 0.091 (1.67%)		
EXTERNAL STANDARD	0.082	16:18
X[1] = 0.0818 (0.0009) (0.0011)		
BLANK TEST	0.000	16:19
EXTERNAL STANDARD	0.082	16:19
X[1] = 0.0820 (0.0011) (0.0016)		
BLANK TEST	0.000	16:20
EXTERNAL STANDARD	0.082	16:20
X[1] = 0.0822 (0.0009) (0.0006)		
BLANK TEST	0.000	16:21
EXTERNAL STANDARD	0.082	16:21
X[1] = 0.0819 (0.0012) (0.0007)		
BLANK TEST	0.000	16:22
EXTERNAL STANDARD	0.082	16:22
X[1] = 0.0822 (0.0012) (0.0009)		
BLANK TEST	0.000	16:23

Average = 0.0820  
Std Dev = 0.0000

## Diagnostic Check

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

### TEMPERATURES

Sample Chamber = 48.7°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 46.5°C PASSED  
(38.0°C - 50.0°C)

### SETTINGS

Lamp Voltage = 1.80 V PASSED  
(1.10 V - 2.56 V)  
Cooler Voltage = 1.71 V PASSED  
(1.00 V - 2.32 V)  
Bias Voltage = 80 V PASSED  
(48 V - 112 V)  
Chopper Freq = 536 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.7 in

### PUMP INFO

Flow Rate = 4.632 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  
(0.002 V <= 0.010 V)

### FILTER INFO

Filter 1 PASSED  
Filter 2 PASSED  
Filter 3 PASSED

INTERNAL STANDARD ✓ PASSED  
Xq = 0.090 1.08% (0.00% - 4.00%)

SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100387

Date: 07/16/2024

Time: 16:25:27

SUBJECT NAME:

TEST TEST

LICENSE #: 9508

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 29.71: 0.079

LOT #: AG335202

EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	16:26
BLANK TEST	0.000	16:26
INTERNAL STANDARD	VERIFIED	16:26
EXTERNAL STANDARD	0.082	16:26
BLANK TEST	0.000	16:27
SUBJECT SAMPLE (Vol=3.26L)	0.000	16:28
BLANK TEST	0.000	16:29
EXTERNAL STANDARD	0.082	16:29
BLANK TEST	0.000	16:30

*DM*

