

Alaska Scientific Crime Detection Laboratory

DataMaster Repair Form

Effective: 10/10/2022

Version: 1.0

Instrument #: 100416
Start Date: 10/13/23

Analyst(s): C. O'Bryant

Reason for Repair

Failed adjustment due to blank errors.

Troubleshooting/Repair

Replaced filter wheel assembly - maintained detector.

Recommend adjustment post filter wheel assembly change

Attempted VOC has internal std > 10%

- | | |
|---|--|
| <input checked="" type="checkbox"/> VOC (attached) <i>Failed.</i> | <input checked="" type="checkbox"/> Verify software version |
| <i>No</i> <input type="checkbox"/> VOC Internal Standard value $\leq 3.00\%$
<i>COB 10/13/23</i> | <input type="checkbox"/> Non-Drinking Subject Test (attached) <i>Not performed</i> |
| <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: 10/13/23

Alaska Scientific Crime Detection Laboratory

DataMaster Adjustment Form

Effective: 12/21/2022

Version: 2.0

Instrument #: 100416

Analyst: C. O. Bryant

Date: 9/14/23

Reason for Adjustment

Internal standard errors + tank interference during calibration. Trouble shooting performed. Adjustment recommended based on history.

0.100 Adjustment Simulator Solution

Manufacturer: Lifeloc

Lot: 22HP41201

Expiration Date: 8/24/24

0.100 Adjustment Wet Bath Simulator

Serial Number: SD 1176

Verification Performed?

Calibrated External Thermometer

Serial Number: 210958384

Calibration Due Date: 11/9/23

Blank (Water) Wet Bath Simulator

Serial Number: DK 41602

Verification Performed?

*

Failed adjustment due to blank errors. COB 9/14/23

- Attach "Cal Factors"
- Attach Verification of Calibration (VOC)
- Internal Standard Value \leq 3.00%

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100416

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 09/14/2023

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: AG310901
EXPIRATION: 04/19/2025
TANK PRESSURE: 933 psi

BLANK TEST	0.000	11:50
INTERNAL STANDARD	VERIFIED	11:50
Xq = 0.080 (1.18%)		
EXTERNAL STANDARD	0.077	11:50
X[1] = 0.0771 (-0.0007) (0.0017)		
BLANK TEST	0.000	11:51
EXTERNAL STANDARD	0.078	11:51
X[1] = 0.0778 (0.0002) (0.0026)		
BLANK TEST	0.000	11:52
EXTERNAL STANDARD	0.078	11:53
X[1] = 0.0779 (0.0002) (0.0018)		
BLANK TEST	0.000	11:53
EXTERNAL STANDARD	0.077	11:54
X[1] = 0.0767 (-0.0025) (0.0014)		
BLANK TEST	0.000	11:55
EXTERNAL STANDARD	0.077	11:55
X[1] = 0.0771 (-0.0010) (0.0017)		
BLANK TEST	0.000	11:56

Average = 0.0774
Std Dev = 0.0005

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 = 44.4°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 1.60 V	PASSED
(0.96 V - 2.24 V)	
Cooler Voltage = 1.56 V	PASSED
(0.94 V - 2.18 V)	
Bias Voltage = 82 V	PASSED
(49 V - 115 V)	
Chopper Freq = 527 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.2 in	

PUMP INFO

Flow Rate = 4.681 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
(0.003 V <= 0.010 V)	

FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD PASSED

Xq = 0.081 0.54% (0.00% - 4.00%)

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100416

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 09/14/2023

External Standard Test Values

Diagnostic Check

VERSIONS

DMT: 3.02

PIC: 3.02

Modem: 2.6

Questions: 2.2

TEMPERATURES

Sample Chamber = 48.8°C

PASSED

Breath Tube = 43.8°C

PASSED

PUMP INFO

Flow Rate = 4.652 L/M

PASSED

DETECTOR INFO

PUMP ON

FAILED

PUMP OFF

PASSED

FILTER INFO

Filter 1

PASSED

Filter 2

PASSED

Filter 3

PASSED

INTERNAL STANDARD

PASSED

Diagnostic Check Failed

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 09/14/2023
Time: 11:30:57

OPERATOR NAME:
COLLEEN OBRYANT
CERTIFICATE #: 6237

Ca	=	0.1000			
CAL	=	0.970747	0.800	<=	CAL < 1.200
b1	=	0.0005	0.0000	<=	b1 < 0.0040
b2	=	0.0058	0.0010	<=	b2 < 0.0100
b3	=	0.0004	0.0000	<=	b3 < 0.0040
Xq	=	0.0809	0.0500	<=	Xq < 0.2000
a21	=	1.179138	1.050	<=	a21 < 1.300
a31	=	0.544665	0.300	<=	a31 < 0.800

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 09/14/2023
Time: 11:18:14

OPERATOR NAME:
COLLEEN OBRYANT
CERTIFICATE #: 6237

Ca = 0.1000
CAL = 0.000000 0.800 <= CAL < 1.200
b1 = 0.0000 0.0000 <= b1 < 0.0040
b2 = 0.0000 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0803 0.0500 <= Xq < 0.2000
a21 = 0.000000 1.050 <= a21 < 1.300
a31 = 0.000000 0.300 <= a31 < 0.800

Simulator Timed Out

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 09/14/2023
Time: 10:51:05

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

Ca = 0.1000
CAL = 0.000000 0.800 <= CAL < 1.200
b1 = 0.0000 0.0000 <= b1 < 0.0040
b2 = 0.0000 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0774 0.0500 <= Xq < 0.2000
a21 = 0.000000 1.050 <= a21 < 1.300
a31 = 0.000000 0.300 <= a31 < 0.800

Blank Error

Detector or Source Issue

Fluctuation of voltage
w ND (Blank) and steady
flow.

Repair needed. COB 9/14/23

Change chopper wheel
motor - noisy
change - chopper wheel - maybe

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 09/14/2023
Time: 10:47:30

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

Ca = 0.1000
CAL = 0.000000 0.800 <= CAL < 1.200
b1 = 0.0000 0.0000 <= b1 < 0.0040
b2 = 0.0000 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0800 0.0500 <= Xq < 0.2000
a21 = 0.000000 1.050 <= a21 < 1.300
a31 = 0.000000 0.300 <= a31 < 0.800

Simulator Timed Out

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100416

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 10/03/2023

External Standard Test Values

Diagnostic Check

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 42.7°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.58 V PASSED
(0.96 V - 2.24 V)
Cooler Voltage = 1.53 V PASSED
(0.94 V - 2.18 V)
Bias Voltage = 82 V PASSED
(49 V - 115 V)
Chopper Freq = 518 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.9 in

PUMP INFO

Flow Rate = 4.693 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

Xq = 0.090 10.87% (0.00% - 4.00%) FAILED

Diagnostic Check Failed

*Post filter wheel change.
No detector change.*

Recommend adjustment