

Alaska Scientific Crime Detection Laboratory

DataMaster Repair Form

Effective: 3/20/2025

Version: 2.0

Instrument #: 100682

Analyst(s): Carlie Glaister

Start Date: 11/4/25

Reason for Repair

Inconsistent internal standard values & maxed out lamp/cooler settings.

Troubleshooting/Repair

2 VOCs were run on 11/4/25 to determine if environmental blank errors were still occurring. Both completed normally. Internal standard values were inconsistent: 0.41%, 3.31%, 1.24%, 2.89%. In technician mode the detector voltage was 20.4 & the lamp & cooler settings were nearly maxed out w/ no room to adjust. Replaced ~~det~~^{cell} detector & adjusted voltage. 2 VOCs attempted & internal standard failed 16.63% & 18.27%. The instrument was attempted to be adjusted & failed with "Simulator Timed out" message. The detector voltage was highly variable, which was verified in technician mode. It is suspected that this is an old detector. Replaced detector w/ a new one, adjusted detector voltage. Detector voltage appears stable. VOC completed. Recommend adjustment due to detector replacement.

☒ VOC (attached)

☒ VOC Internal Standard value $\leq 3.00\%$

☒ Verify software version

☒ Non-Drinking Subject Test (attached)

☒ Ready for Adjustment

☐ Further Repair Needed

☐ Proceed to Close Out

☐ Ready for Calibration

☐ Return to Factory

End Date: 11/4/25

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100682

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 11/04/2025

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.10: 0.078

LOT #: AG335202

EXPIRATION: 12/18/2025

TANK PRESSURE: 599 psi

BLANK TEST	0.000	10:27
INTERNAL STANDARD	VERIFIED	10:28
Xq = 0.103 (3.31%)		
EXTERNAL STANDARD	0.078	10:28
X[1] = 0.0776 (-0.0022) (0.0016)		
BLANK TEST	0.000	10:29
EXTERNAL STANDARD	0.078	10:29
X[1] = 0.0780 (-0.0019) (0.0013)		
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.078	10:30
X[1] = 0.0779 (-0.0021) (0.0012)		
BLANK TEST	0.000	10:31
EXTERNAL STANDARD	0.078	10:31
X[1] = 0.0779 (-0.0021) (0.0012)		
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.078	10:32
X[1] = 0.0782 (-0.0020) (0.0012)		
BLANK TEST	0.000	10:33

Average = 0.0780

Std Dev = 0.0000

Diagnostic Check

VERSIONS

DMT: 3.02

PIC: 3.03

Modem: 2.6

Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)

Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 2.55 V PASSED
(1.53 V - 3.57 V)

Cooler Voltage = 1.96 V PASSED
(1.18 V - 2.74 V)

Bias Voltage = 80 V PASSED
(48 V - 112 V)

Chopper Freq = 528 Hz PASSED
(475 Hz - 575 Hz)

Barometer = 29.1 in

PUMP INFO

Flow Rate = 4.569 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.001 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 = 0.106 0.41% (0.00% - 4.00%)

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Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 11/04/2025

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.10: 0.078

LOT #: AG335202

EXPIRATION: 12/18/2025

TANK PRESSURE: 581 psi

BLANK TEST	0.000	10:42
INTERNAL STANDARD	VERIFIED	10:42
Xq = 0.103 (2.89%)		
EXTERNAL STANDARD	0.078	10:42
X[1] = 0.0783 (-0.0012) (0.0025)		
BLANK TEST	0.000	10:43
EXTERNAL STANDARD	0.078	10:43
X[1] = 0.0783 (-0.0019) (0.0017)		
BLANK TEST	0.000	10:44
EXTERNAL STANDARD	0.078	10:44
X[1] = 0.0781 (-0.0018) (0.0013)		
BLANK TEST	0.000	10:45
EXTERNAL STANDARD	0.078	10:46
X[1] = 0.0780 (-0.0011) (0.0014)		
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.078	10:47
X[1] = 0.0782 (0.0013) (0.0010)		
BLANK TEST	0.000	10:48

Average = 0.0780

Std Dev = 0.0000

Diagnostic Check

VERSIONS

DMT: 3.02

PIC: 3.03

Modem: 2.6

Questions: 2.2

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)

Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 2.55 V PASSED
(1.53 V - 3.57 V)

Cooler Voltage = 1.96 V PASSED
(1.18 V - 2.74 V)

Bias Voltage = 80 V PASSED
(48 V - 112 V)

Chopper Freq = 529 Hz PASSED
(475 Hz - 575 Hz)

Barometer = 29.1 in

PUMP INFO

Flow Rate = 4.673 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.001 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 = 0.105 1.24% (0.00% - 4.00%) PASSED

VERIFICATION OF CALIBRATION REPORT

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Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 11/04/2025

External Standard Test Values

Diagnostic Check

VERSIONS

DMT: 3.02

PIC: 3.03

Modem: 2.6

Questions: 2.2

TEMPERATURES

Sample Chamber = 48.7°C

(44.0°C - 52.0°C)

PASSED

Breath Tube = 46.9°C

(38.0°C - 50.0°C)

PASSED

SETTINGS

Lamp Voltage = 2.40 V

(1.53 V - 3.57 V)

PASSED

Cooler Voltage = 1.94 V

(1.18 V - 2.74 V)

PASSED

Bias Voltage = 80 V

(48 V - 112 V)

PASSED

Chopper Freq = 524 Hz

(475 Hz - 575 Hz)

PASSED

Barometer = 29.1 in

PUMP INFO

Flow Rate = 4.642 L/M

(3.500 L/M - 6.500 L/M)

PASSED

DETECTOR INFO

PUMP ON

(0.006 V <= 0.010 V)

PASSED

PUMP OFF

(0.009 V <= 0.010 V)

PASSED

FILTER INFO

Filter 1

PASSED

Filter 2

PASSED

Filter 3

PASSED

INTERNAL STANDARD

Xq = 0.089 16.63% (0.00% - 4.00%)

FAILED

Diagnostic Check Failed

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100682

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 11/04/2025

External Standard Test Values

Diagnostic Check

VERSIONS

DMT: 3.02

PIC: 3.03

Modem: 2.6

Questions: 2.2

TEMPERATURES

Sample Chamber = 49.0°C

PASSED

(44.0°C - 52.0°C)

Breath Tube = 46.9°C

PASSED

(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 2.40 V

PASSED

(1.53 V - 3.57 V)

Cooler Voltage = 1.94 V

PASSED

(1.18 V - 2.74 V)

Bias Voltage = 80 V

PASSED

(48 V - 112 V)

Chopper Freq = 525 Hz

PASSED

(475 Hz - 575 Hz)

Barometer = 29.1 in

PUMP INFO

Flow Rate = 4.644 L/M

PASSED

(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON

PASSED

(0.008 V <= 0.010 V)

PUMP OFF

FAILED

(0.012 V <= 0.010 V)

FILTER INFO

Filter 1

PASSED

Filter 2

PASSED

Filter 3

PASSED

INTERNAL STANDARD

FAILED

Xq = 0.087 18.27% (0.00% - 4.00%)

Diagnostic Check Failed

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100682

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 11/04/2025

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.11: 0.078

LOT #: AG335202

EXPIRATION: 12/18/2025

TANK PRESSURE: 564 psi

BLANK TEST 0.000 12:37

INTERNAL STANDARD VERIFIED 12:37

Xq = 0.105 (1.65%)

EXTERNAL STANDARD 0.077 12:38

X[1] = 0.0771 (-0.0038) (0.0023)

BLANK TEST 0.000 12:38

EXTERNAL STANDARD 0.078 12:39

X[1] = 0.0776 (-0.0031) (0.0017)

BLANK TEST 0.000 12:40

EXTERNAL STANDARD 0.078 12:40

X[1] = 0.0775 (-0.0034) (0.0017)

BLANK TEST 0.000 12:41

EXTERNAL STANDARD 0.078 12:41

X[1] = 0.0777 (-0.0031) (0.0022)

BLANK TEST 0.000 12:42

EXTERNAL STANDARD 0.078 12:42

X[1] = 0.0776 (-0.0037) (0.0010)

BLANK TEST 0.000 12:43

Average = 0.0778

Std Dev = 0.0004

Diagnostic Check

VERSIONS

DMT: 3.02

PIC: 3.03

Modem: 2.6

Questions: 2.2

TEMPERATURES

Sample Chamber = 49.0°C PASSED
(44.0°C - 52.0°C)

Breath Tube = 45.5°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 2.45 V PASSED
(1.53 V - 3.57 V)

Cooler Voltage = 1.94 V PASSED
(1.18 V - 2.74 V)

Bias Voltage = 80 V PASSED
(48 V - 112 V)

Chopper Freq = 522 Hz PASSED
(475 Hz - 575 Hz)

Barometer = 29.1 in

PUMP INFO

Flow Rate = 4.797 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 = 0.107 0.83% (0.00% - 4.00%) PASSED

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100682

Date: 11/04/2025
Time: 13:12:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
CARLIE GLAISTER
OPERATOR'S #: 10436

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.10: 0.078
LOT #: AG335202
EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	13:13
BLANK TEST	0.000	13:13
INTERNAL STANDARD	VERIFIED	13:13
EXTERNAL STANDARD	0.079	13:14
BLANK TEST	0.000	13:14
SUBJECT SAMPLE (Vol=1.71L)	0.000	13:15
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.078	13:16
BLANK TEST	0.000	13:17

OK

