

Alaska Scientific Crime Detection Laboratory

DataMaster Repair Form

Effective: 3/20/2025

Version: 2.0

Instrument #: 100411

Analyst(s): Charlie Glaister

Start Date: 11/4/25

Reason for Repair

Internal standard errors, high internal standard readings not corrected by adjustment. Internal standard readings are inconsistent.

Troubleshooting/Repair

VOC performed before beginning repair, IS values were 2.70% & 0.48%.
Replaced detector. Detector voltage was adjusted.
VOC attempted 2 times, both had internal standard errors 8.61% & 5.83% which is still highly variable.
Performed a filter test, 13 cycles & 0 errors.

Recommend adjustment to adjust internal standard value & determine if additional troubleshooting is needed.

☒ 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 #: 100411

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 11/04/2025

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.46: 0.079
LOT #: AG335202
EXPIRATION: 12/18/2025
TANK PRESSURE: 1152 psi

BLANK TEST	0.000	09:08
INTERNAL STANDARD	VERIFIED	09:08
Xq = 0.128 (0.48%)		
EXTERNAL STANDARD	0.078	09:08
X[1] = 0.0784 (-0.0024) (-0.0010)		
BLANK TEST	0.000	09:09
EXTERNAL STANDARD	0.078	09:09
X[1] = 0.0783 (-0.0016) (-0.0020)		
BLANK TEST	0.000	09:10
EXTERNAL STANDARD	0.078	09:10
X[1] = 0.0777 (-0.0031) (-0.0021)		
BLANK TEST	0.000	09:11
EXTERNAL STANDARD	0.079	09:11
X[1] = 0.0787 (-0.0021) (-0.0014)		
BLANK TEST	0.000	09:12
EXTERNAL STANDARD	0.079	09:12
X[1] = 0.0785 (-0.0008) (-0.0020)		
BLANK TEST	0.000	09:13

Average = 0.0784
Std Dev = 0.0005

Diagnostic Check

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 42.5°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 1.70 V	PASSED
(1.02 V - 2.38 V)	
Cooler Voltage = 1.82 V	PASSED
(1.09 V - 2.55 V)	
Bias Voltage = 80 V	PASSED
(48 V - 112 V)	
Chopper Freq = 522 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.5 in	

PUMP INFO

Flow Rate = 4.062 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 = 0.132 2.70% (0.00% - 4.00%)	PASSED
----------------------------------	--------

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100411

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 11/04/2025

External Standard Test Values

Diagnostic Check

VERSIONS

DMT: 3.02

PIC: 3.02

Modem: 2.6

Questions: 2.2

TEMPERATURES

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

PASSED

Breath Tube = 40.5°C
(38.0°C - 50.0°C)

PASSED

SETTINGS

Lamp Voltage = 1.70 V
(1.02 V - 2.38 V)

PASSED

Cooler Voltage = 1.82 V
(1.09 V - 2.55 V)

PASSED

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

PASSED

Chopper Freq = 514 Hz
(475 Hz - 575 Hz)

PASSED

Barometer = 29.5 in

PUMP INFO

Flow Rate = 4.026 L/M
(3.500 L/M - 6.500 L/M)

PASSED

DETECTOR INFO

PUMP ON
(0.002 V <= 0.010 V)

PASSED

PUMP OFF
(0.002 V <= 0.010 V)

PASSED

FILTER INFO

Filter 1

PASSED

Filter 2

PASSED

Filter 3

PASSED

INTERNAL STANDARD

FAILED

Xq = 0.139 8.61% (0.00% - 4.00%)

Diagnostic Check Failed

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100411

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 11/04/2025

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
(44.0°C - 52.0°C)

PASSED

Breath Tube = 41.4°C
(38.0°C - 50.0°C)

PASSED

SETTINGS

Lamp Voltage = 1.64 V
(1.02 V - 2.38 V)

PASSED

Cooler Voltage = 1.82 V
(1.09 V - 2.55 V)

PASSED

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

PASSED

Chopper Freq = 515 Hz
(475 Hz - 575 Hz)

PASSED

Barometer = 29.5 in

PUMP INFO

Flow Rate = 4.266 L/M
(3.500 L/M - 6.500 L/M)

PASSED

DETECTOR INFO

PUMP ON
(0.002 V <= 0.010 V)

PASSED

PUMP OFF
(0.002 V <= 0.010 V)

PASSED

FILTER INFO

Filter 1

PASSED

Filter 2

PASSED

Filter 3

PASSED

INTERNAL STANDARD

FAILED

Xq = 0.136 5.83% (0.00% - 4.00%)

Diagnostic Check Failed