

Alaska Scientific Crime Detection Laboratory

DataMaster Calibration Form

Effective: 1/23/2024

Version: 4.0

Instrument #: 100411 Analyst or Technician Name: Kuja Swisher

DataMaster DMT Calibration Start Date: 10/28/25

Diagnostic Test

☒ Perform Diagnostic Test (View Details)

☒ Internal Standard Value $\leq 3.00\%$

**Performed tank change prior to calibration. Unable to pass a VOC. 2 internal standard errors, 1 blank error. Repair for internal standard errors.*

Technician Screen and Calibration Factors

☒ Adjust Voltages (if needed)

- Lamp (2.60 V Maximum)
- Bias
- Cooler (2.00 V Maximum)
- Chopper Frequency
- Detector Voltage (-0.100V to 0.100V)

☒ Set RFI Sensitivity

☒ Adjust internal barometer reading to match NIST-traceable barometer

Barometer/Thermometer/Hygrometer S/N: 246680771

Calibration Due Date: 9/10/26

☒ Verify Volume Setting (1.50 L +/- 0.10 L), adjust if needed

☒ Print Technician Screen

☒ Print "Cal Factors"

Minimum Volume Test

☐ Perform Minimum Volume (Subject) Test: _____ liters (1.3 L to 1.7 L)

As Left Linearity Testing

Barometric Pressure (in Hg) 29.65 Temperature(C) 21.1 Relative Humidity(%) 19

Approved Concentrations (g/210L): 0.020, 0.040, 0.080, 0.100, 0.150, 0.300

Functional Tests

☐ Incomplete

☐ Maximum Attempts Exceeded

☐ Invalid

☐ Radio Frequency Interference (RFI)

☐ Interference (Volatiles) - *Print with View Details*

1. Acetone Reagent Lot Number: _____ Expiration Date: _____

Simulator S/N: _____ Thermometer Verification Performed? ☐

2. Isopropanol Reagent Lot Number: _____ Expiration Date: _____

Simulator S/N: _____ Thermometer Verification Performed? ☐

3. Negative (Ethanol Only) Lot Number: _____ Expiration Date: _____

Simulator S/N: _____ Thermometer Verification Performed? ☐

Calibrated External Thermometer S/N: _____

Calibration Due Date: _____

Administrative

☐ Verify Stylus Calibration

☐ Reset Options

☐ Clear Memory

☐ Verification of Calibration (VOC)

☐ Perform Non-Drinking Subject Test

☐ Upload Instrument

☐ Remove Dry Gas Tank Before Shutdown

☐ Add Ready for Tech Review Note

Completion

Lab Work End Date: 10/28/25

Data Interpretation Date (Technician): NA (if applicable)

Data Interpretation Date (Analyst): NA

All printed copies are uncontrolled.

Approved by: Chemistry Supervisor

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 10/28/2025
Time: 10:08:15

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 = 42.5°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 = 539 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.6 in	

PUMP INFO	
Flow Rate = 3.927 L/M	PASSED
(3.500 L/M - 6.500 L/M)	

DETECTOR INFO	
PUMP ON	PASSED
(0.003 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	
Xq = 0.094 2.73% (0.00% - 4.00%)	PASSED

Technician Screen

DATAMASTER dmt: 100411

Date: 10/28/2025

Time: 10:12 AM

Temperatures (°C)

Sample Cell: 48.7°C

Breath Tube: 42.6°C

Current Barometer 29.6 in

Volume (Ltr) 1.52

Settings

Lamp: 1.70 V

Bias: 80 V

Cooler: 1.82 V

Chopper: 538 Hz

Voltages (V)

Flow: 1.04 V

Detector: -0.044 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 10/22/2025
Time: 13:10:51

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca	=	0.1000	
CAL	=	0.997361	0.800 <= CAL < 1.200
b1	=	0.0004	0.0000 <= b1 < 0.0040
b2	=	0.0040	0.0010 <= b2 < 0.0100
b3	=	0.0002	0.0000 <= b3 < 0.0040
Xq	=	0.0963	0.0500 <= Xq < 0.2000
a21	=	1.138248	1.050 <= a21 < 1.300
a31	=	0.482468	0.300 <= a31 < 0.800

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100411

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 10/28/2025

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.64: 0.079
LOT #: AG335202
EXPIRATION: 12/18/2025
TANK PRESSURE: 1189 psi

BLANK TEST 0.000 09:11
INTERNAL STANDARD ERROR 09:11

Internal Standard Error

Diagnostic Check

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED
Breath Tube = 43.6°C PASSED

PUMP INFO

Flow Rate = 4.001 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 #: 100411

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 10/28/2025

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.64: 0.079

LOT #: AG335202

EXPIRATION: 12/18/2025

TANK PRESSURE: 1189 psi

BLANK TEST 0.000 09:14

INTERNAL STANDARD ERROR 09:15

Internal Standard Error

Diagnostic Check

VERSIONS

DMT: 3.02

PIC: 3.02

Modem: 2.6

Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C

Breath Tube = 42.6°C

PASSED

PASSED

PUMP INFO

Flow Rate = 4.004 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 #: 100411

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 10/28/2025

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.63: 0.079

LOT #: AG335202

EXPIRATION: 12/18/2025

TANK PRESSURE: 1189 psi

BLANK TEST	0.000	10:01
INTERNAL STANDARD	VERIFIED	10:01
EXTERNAL STANDARD	0.079	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.077	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.075	10:04
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.074	10:05

Blank Error

Diagnostic Check

VERSIONS

DMT: 3.02

PIC: 3.02

Modem: 2.6

Questions: 2.2

TEMPERATURES

Sample Chamber = 48.8°C

Breath Tube = 43.4°C

PASSED

PASSED

PUMP INFO

Flow Rate = 3.902 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