

# Alaska Scientific Crime Detection Laboratory

## DataMaster Calibration Form

Effective: 1/23/2024

Version: 4.0

Instrument #: 100424

Analyst or Technician Name: Carlie Glaister

DataMaster DMT Calibration Start Date: 7/1/25

### Diagnostic Test

- ☒ Perform Diagnostic Test (View Details)
- ☒ Internal Standard Value  $\leq 3.00\%$

### 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: 240680771
  - Calibration Due Date: 9/10/2026
- ☒ 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: 1.5 liters (1.3 L to 1.7 L)

### As Left Linearity Testing

Barometric Pressure (in Hg) 29.67 Temperature(C) 21.7 Relative Humidity(%) 46

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

### Functional Tests

- ☐ Incomplete
  - ☐ Invalid
  - ☐ Interference (Volatiles) - Print with View Details
  - ☐ Maximum Attempts Exceeded
  - ☐ Radio Frequency Interference (RFI)
  - ☐ Acetone Reagent Lot Number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Simulator S/N: \_\_\_\_\_ Thermometer Verification Performed? ☐
  - ☐ Isopropanol Reagent Lot Number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Simulator S/N: \_\_\_\_\_ Thermometer Verification Performed? ☐
  - ☐ Negative (Ethanol Only) Lot Number: \_\_\_\_\_ Expiration Date: \_\_\_\_\_ Simulator S/N: \_\_\_\_\_ Thermometer Verification Performed? ☐
- At start of linearity screen turned off & power supply started beeping. Reseated power cord & restarted instrument. Blank error on 0.020. Solenoid wire flaking & on warm mirror block. Recommend replacing solenoid & wire.

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: 7/1/25

Data Interpretation Date (Technician): \_\_\_\_\_ (if applicable)

Data Interpretation Date (Analyst): 7/1/2025

All printed copies are uncontrolled.

Approved by: Chemistry Supervisor

# DIAGNOSTIC RECORD

Alaska Department of Public Safety  
DATAMASTER dmt: 100424

Date: 07/01/2025  
Time: 10:43:32

## 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 = 1.68 V	PASSED
(1.03 V - 2.39 V)	
Cooler Voltage = 1.68 V	PASSED
(1.04 V - 2.42 V)	
Bias Voltage = 80. V	PASSED
(48 V - 112 V)	
Chopper Freq = 534 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.6 in	

## PUMP INFO

Flow Rate = 3.937 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 = 0.080 1.77%	PASSED
(0.00% - 4.00%)	

# Technician Screen

-----  
DATAMASTER dmt: 100424  
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Date: 07/01/2025

Time: 10:48 AM

## Temperatures (°C)

Sample Cell: 48.9°C

Breath Tube: 47.5°C

Current Barometer 29.7 in

Volume (Ltr) 1.57

## Settings

Lamp: 1.68 V

Bias: 80 V

Cooler: 1.68 V

Chopper: 534 Hz

## Voltages (V)

Flow: 1.04 V

Detector: -0.054 V

REJECTED

# CALIBRATION FACTORS

Alaska Department of Public Safety  
DATAMASTER dmt: 100424

Date: 02/04/2021  
Time: 08:40:43

OPERATOR NAME:  
ST LOUIS INTOX A TECH  
CERTIFICATE #: OU8122

Ca	=	0.1990		
CAL	=	1.027085	0.800	<= CAL < 1.200
b1	=	0.0004	0.0000	<= b1 < 0.0040
b2	=	0.0051	0.0010	<= b2 < 0.0100
b3	=	0.0004	0.0000	<= b3 < 0.0040
Xq	=	0.0785	0.0500	<= Xq < 0.2000
a21	=	1.135345	1.050	<= a21 < 1.300
a31	=	0.399030	0.300	<= a31 < 0.800

REJECTED

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100424

Date: 07/01/2025  
Time: 10:51:17

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: 10436

DEPT/AGENCY:  
MINIMUM VOLUME TEST  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.65: 0.079  
LOT #: AG335202  
EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	10:52
BLANK TEST	0.000	10:52
INTERNAL STANDARD	VERIFIED	10:52
EXTERNAL STANDARD	0.081	10:52
BLANK TEST	0.000	10:53
SUBJECT SAMPLE (Vol=1.61L)	0.000	10:54
BLANK TEST	0.000	10:55
EXTERNAL STANDARD	0.081	10:55
BLANK TEST	0.000	10:56

OK

