

# Alaska Scientific Crime Detection Laboratory

## DataMaster Calibration Form

Effective: 1/23/2024

Version: 4.0

Instrument #: 100343 Analyst or Technician Name: Deron Walter

DataMaster DMT Calibration Start Date: 05/16/24

### Diagnostic Test

- Perform Diagnostic Test (View Details)  
 Internal Standard Value  $\leq 3.00\%$  NO

Internal Standard  $> 3.00\%$  -

### 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: \_\_\_\_\_  
Calibration Due Date: \_\_\_\_\_
- Verify Volume Setting (1.50 L +/- 0.10 L), adjust if needed
- Print Technician Screen
- Print "Cal Factors"

instrument will return to

Adjustment

DMV 05/16/24

### Minimum Volume Test

- Perform Minimum Volume (Subject) Test: \_\_\_\_\_ liters (1.3 L to 1.7 L)

### As Left Linearity Testing

Barometric Pressure (in Hg) \_\_\_\_\_ Temperature(C) \_\_\_\_\_ Relative Humidity(%) \_\_\_\_\_

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*

- 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?

Calibrated External Thermometer S/N: \_\_\_\_\_

Calibration Due Date: \_\_\_\_\_

### Administrative

- Verify Stylus Calibration  Perform Non-Drinking Subject Test  
 Reset Options  Upload Instrument  
 Clear Memory  Remove Dry Gas Tank Before Shutdown  
 Verification of Calibration (VOC)  Add Ready for Tech Review Note

### Completion

Lab Work End Date: \_\_\_\_\_

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

Data Interpretation Date (Analyst): \_\_\_\_\_

All printed copies are uncontrolled.

Approved by: Chemistry Supervisor

DIAGNOSTIC RECORD

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Alaska Department of Public Safety  
DATAMASTER dmt: 100343  
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Date: 05/16/2024  
Time: 10:03:27

VERSIONS  
DMT: 3.02  
PIC: 3.06  
Modem: 2.6  
Questions: 2.2

TEMPERATURES

Sample Chamber = 49.1°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 47.3°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.73 V PASSED  
(1.04 V - 2.44 V)  
Cooler Voltage = 1.75 V PASSED  
(1.05 V - 2.45 V)  
Bias Voltage = 80 V PASSED  
(49 V - 113 V)  
Chopper Freq = 527 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.267 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 X PASSED  
Xq = 0.092 3.32% (0.00% - 4.00%)

Rejected