

Alaska Scientific Crime Detection Laboratory

DataMaster Calibration Form

Effective: 1/23/2024

Version: 4.0

Instrument #: 100355 Analyst or Technician Name: Megan Carlock

DataMaster DMT Calibration Start Date: 11/21/24

Diagnostic Test

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

Internal standard is above 3%.
Recommend repair for internal standard
cleaning because adjustment was performed
prior to this attempted calibration.
MNC 11/21/24

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"

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

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 ☐ 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

Alaska Department of Public Safety
DATAMASTER dmt: 100355

Date: 11/21/2024
Time: 10:23:28

VERSIONS

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

TEMPERATURES

Sample Chamber = 49.1°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 46.6°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 1.80 V	PASSED
(1.08 V - 2.52 V)	
Cooler Voltage = 1.69 V	PASSED
(1.01 V - 2.37 V)	
Bias Voltage = 80 V	PASSED
(48 V - 112 V)	
Chopper Freq = 518 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 30.0 in	

PUMP INFO

Flow Rate = 5.316 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 = 0.126 3.87%	PASSED
(0.00% - 4.00%)	