

Alaska Scientific Crime Detection Laboratory

DataMaster Calibration Form

Effective: 10/10/2022

Version: 3.0

Instrument #: 100423

Analyst: Tatiana Malinck

Start Date: 06/27/2023

- Diagnostic Test (attached)
- Adjust voltages, if needed

- Internal Standard value \leq 3.00%

- 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

- Adjust volume setting, if needed (1.50 L +/- 0.10 L)

- Print Technician Screen (attached)

- Print Calibration Factors (attached)

- Minimum Volume Test 1.6 L (1.3L to 1.7L)

Data Interpretation

06/27/2023 2023.07.12

TLM COB

While running the 0.300 tank for linearity testing, the DataMaster received a Blank Error status message. I ran the tank again, then twice more using different 0.300 tanks and it still got a Blank Error status message. This error was received a total of four times. For this reason, the calibration is being rejected and the DMT is being kicked back to repair. TLM 06/27/2023

As Left Conditions:

Barometric Pressure (in Hg): 29.62 Temperature (C): 22.7 Relative Humidity (%): 40%

Linearity Test (attached)

0.020g/210L Mnf:	<u>Airgas</u>	Lot:	<u>AG217902</u>	Exp:	<u>06/28/2024</u>
0.040g/210L Mnf:	<u>Airgas</u>	Lot:	<u>AG217904</u>	Exp:	<u>06/28/2024</u>
0.080g/210L Mnf:	<u>ILNO</u>	Lot:	<u>09523080A1</u>	Exp:	<u>05/05/2025</u>
0.100g/210L Mnf:	<u>Airgas</u>	Lot:	<u>AG211003</u>	Exp:	<u>04/20/2024</u>
0.150g/210L Mnf:	<u>Airgas</u>	Lot:	<u>AG134205</u>	Exp:	<u>12/08/2023</u>
0.300g/210L Mnf:	<u>Airgas</u>	Lot:	<u>AG217903</u>	Exp:	<u>06/28/2024</u>

Functional Tests (attached)

- Incomplete
- Maximum Attempts Exceeded
- Interference (Volatiles)
- Invalid
- Radio Frequency Interference (RFI)

Acetone Mnf: _____ Lot: _____ Level: 0.100 Exp: _____

Simulator S/N: _____ Verification Performed?

Isopropanol Mnf: _____ Lot: _____ Level: 0.100 Exp: _____

Simulator S/N: _____ Verification Performed?

Neg. Control Mnf: _____ Lot: _____ Level: 0.100 Exp: _____

Simulator S/N: _____ Verification Performed?

Calibrated External Thermometer:

Thermometer S/N: _____ Calibration Due Date: _____

- Verify stylus is calibrated
- Reset Options
- Clear Memory
- Verification of Calibration (VOC)
- Non-Drinking Subject Test
- Upload
- Remove Tank Prior to Shutdown

Calibration End Date: 06/27/2023

TLM 07/06/2023

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 06/27/2023
Time: 07:59:05

VERSIONS
DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 49.0°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 45.2°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.79 V PASSED
(1.09 V - 2.53 V)
Cooler Voltage = 1.56 V PASSED
(0.97 V - 2.25 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 529 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 4.502 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 = 0.094 - 1.12% PASSED
(0.00% - 4.00%)

REJECTED

Technician Screen

DATAMASTER dmt: 100423

Date: 06/27/2023
Time: 8:55 AM

Temperatures (°C)
Sample Cell: 48.8°C
Breath Tube: 43.3°C

Current Barometer 29.6 in
Volume (Ltr) 1.41

Settings
Lamp: 1.87 V
Bias: 79 V
Cooler: 1.58 V
Chopper: 519 Hz

Voltages (V)
Flow: 1.06 V
Detector: 0.072 V

REJECTED

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 09/30/2014
Time: 10:52:52

OPERATOR NAME:
NPAS TECH
CERTIFICATE #: GUTH2100 DR7001 13340, 34.0C

Ca = 0.1000
CAL = 0.989254 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0038 0.0010 <= b2 < 0.0100
b3 = 0.0003 0.0000 <= b3 < 0.0040
Xq = 0.0933 0.0500 <= Xq < 0.2000
a21 = 1.151649 1.050 <= a21 < 1.300
a31 = 0.545950 0.300 <= a31 < 0.800

REJECTED

RLM

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 06/27/2023
Time: 09:03:35

SUBJECT NAME:
TEST TEST
LICENSE #: XXX

OPERATOR NAME:
TATIANA MALNOSKE
OPERATOR'S #: 10437

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: 09523080A1
EXPIRATION: 05/05/2025

DIAGNOSTIC CHECK	PASSED	09:04
BLANK TEST	0.000	09:04
INTERNAL STANDARD	VERIFIED	09:04
EXTERNAL STANDARD	0.076	09:05
BLANK TEST	0.000	09:05
SUBJECT SAMPLE (Vol=1.52L)	0.000	09:07
BLANK TEST	0.000	09:08
EXTERNAL STANDARD	0.077	09:08
BLANK TEST	0.000	09:09

TAM

