

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

Issued: 05/15/2020
Effective: 05/15/2020

Version: DMEF 2020 R0
Status: Active

Instrument # 100384

Start Date: 10/27/2021

Analysts: Carlie Glaister

Reason for instrument evaluation

Internal standards on VOCs

Visual Inspection

- Clean
- Cermetex Box is secure
- Gas Valve upright or secured to wall
- O-ring inspection and ensure 2 O-rings in replacement bag
- Replace missing screws
- Ensure modem cable present
- All tubing and connections are secure

Troubleshooting/Repair

VOC passed. Internal standard values are above 2%. Recommend calibration due to previous internal standard errors.

Check in not performed due to it being an in house instrument. ckg 10/29/2021

- VOC (attached)
- Internal Standard value \leq 3.00%
- Verify software version

- Return to Factory for Repair
- Ready for Certification

- Ready for Calibration
- Proceed to Close Out

End Date: 10/27/2021

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100384

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 10/27/2021

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.28: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022
TANK PRESSURE: 926 psi

BLANK TEST 0.000 14:17
INTERNAL STANDARD ✓ VERIFIED 14:17
Xq = 0.090 (2.59%)
EXTERNAL STANDARD 0.077 14:17
X[1] = 0.0771 (-0.0043) (-0.0017)
BLANK TEST 0.000 14:18
EXTERNAL STANDARD 0.077 14:18
X[1] = 0.0768 (-0.0046) (-0.0012)
BLANK TEST 0.000 14:19
EXTERNAL STANDARD 0.077 14:19
X[1] = 0.0768 (-0.0029) (-0.0016)
BLANK TEST 0.000 14:20
EXTERNAL STANDARD 0.077 14:20
X[1] = 0.0772 (-0.0027) (-0.0011)
BLANK TEST 0.000 14:21
EXTERNAL STANDARD 0.077 14:22
X[1] = 0.0771 (-0.0024) (-0.0016)
BLANK TEST 0.000 14:22

Average = 0.0770
Std Dev = 0.0000

Diagnostic Check

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 = 46.8°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.64 V PASSED
(1.02 V - 2.38 V)
Cooler Voltage = 1.78 V PASSED
(1.01 V - 2.35 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 513 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.3 in

PUMP INFO

Flow Rate = 4.583 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
(0.002 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD ✓ PASSED
Xq = 0.089 2.19% (0.00% - 4.00%)