

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

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

Version: DMEF 2020 R0
Status: Active

Instrument # 100357

Start Date: 09/03/20

Analysts: Derek Walton

Reason for instrument evaluation

Detector overflow, internal standard errors

Visual Inspection

- | | |
|---|---|
| <input checked="" type="checkbox"/> Clean | <input checked="" type="checkbox"/> Replace missing screws |
| <input checked="" type="checkbox"/> Cermetex Box is secure | <input checked="" type="checkbox"/> Ensure modem cable present |
| <input checked="" type="checkbox"/> Gas Valve upright or secured to wall | <input checked="" type="checkbox"/> All tubing and connections are secure |
| <input checked="" type="checkbox"/> O-ring inspection and ensure 2 O-rings in replacement bag | |

Troubleshooting/Repair

Purged sample chamber and adjusted voltages.
Blew out filter wheel assembly with canned air. Instrument
failing pump on / pump off and still producing internal standard errors.
Recommend calibration and potential pump replacement.

- 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: 09/16/20

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 09/04/2020
Time: 08:47:36

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 44.3°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.83 V PASSED
(1.12 V - 2.60 V)
Cooler Voltage = 1.76 V PASSED
(1.07 V - 2.51 V)
Bias Voltage = 80 V PASSED
(47 V - 109 V)
Chopper Freq = 510 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.9 in

PUMP INFO

Flow Rate = 4.531 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 = 0.089 1.74% (0.00% - 4.00%) PASSED

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100357

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 09/04/2020

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.88: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020
TANK PRESSURE: 303 psi

| | | |
|----------------------------------|------------|-------|
| BLANK TEST | 0.000 | 09:08 |
| INTERNAL STANDARD | ✓ VERIFIED | 09:09 |
| Xq = 0.089 (1.35%) | | |
| EXTERNAL STANDARD | 0.076 | 09:09 |
| X[1] = 0.0764 (-0.0001) (0.0018) | | |
| BLANK TEST | 0.000 | 09:10 |
| EXTERNAL STANDARD | 0.077 | 09:10 |
| X[1] = 0.0769 (0.0007) (0.0028) | | |
| BLANK TEST | 0.000 | 09:11 |
| EXTERNAL STANDARD | 0.078 | 09:11 |
| X[1] = 0.0781 (0.0001) (0.0017) | | |
| BLANK TEST | 0.000 | 09:12 |
| EXTERNAL STANDARD | 0.077 | 09:12 |
| X[1] = 0.0771 (0.0009) (0.0027) | | |
| BLANK TEST | 0.000 | 09:13 |
| EXTERNAL STANDARD | 0.077 | 09:13 |
| X[1] = 0.0767 (-0.0001) (0.0020) | | |
| BLANK TEST | 0.000 | 09:14 |

Average = 0.0770
Std Dev = 0.0007

Diagnostic Check

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

TEMPERATURES

| | |
|-------------------------|--------|
| Sample Chamber = 48.7°C | PASSED |
| (44.0°C - 52.0°C) | |
| Breath Tube = 43.7°C | PASSED |
| (38.0°C - 50.0°C) | |

SETTINGS

| | |
|-------------------------|--------|
| Lamp Voltage = 1.83 V | PASSED |
| (1.12 V - 2.60 V) | |
| Cooler Voltage = 1.81 V | PASSED |
| (1.07 V - 2.51 V) | |
| Bias Voltage = 80 V | PASSED |
| (47 V - 109 V) | |
| Chopper Freq = 528 Hz | PASSED |
| (475 Hz - 575 Hz) | |
| Barometer = 29.9 in | |

PUMP INFO

| | |
|-------------------------|--------|
| Flow Rate = 4.611 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 | ✓ | PASSED |
| Xq = 0.090 | 0.39% | (0.00% - 4.00%) |

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 09/04/2020
Time: 09:36:05

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

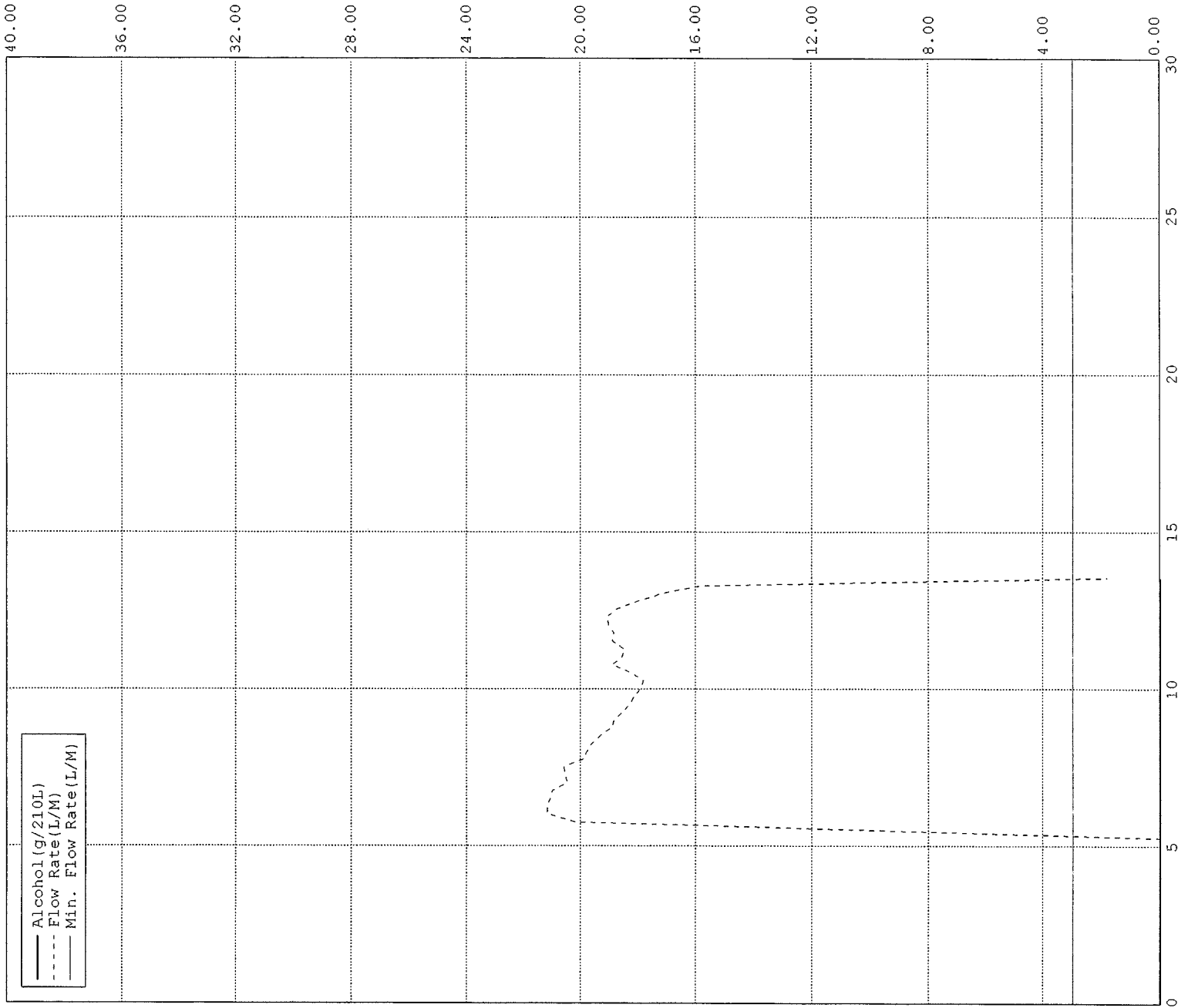
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
NON-DRINKING SUBJECT
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.89: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 09:37
BLANK TEST 0.000 09:37
INTERNAL STANDARD VERIFIED 09:37
EXTERNAL STANDARD 0.077 09:37
BLANK TEST 0.000 09:38
SUBJECT SAMPLE (Vol=2.52L) XXX 09:38

Blank Error



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of DataMaster dmt Breath Test Instrument

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External Standard Test Values

Diagnostic Check

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DMT: 3.02
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Modem: 2.6
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TEMPERATURES

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(44.0°C - 52.0°C)
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(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.83 V PASSED
(1.12 V - 2.60 V)
Cooler Voltage = 1.81 V PASSED
(1.07 V - 2.51 V)
Bias Voltage = 80 V PASSED
(47 V - 109 V)
Chopper Freq = 515 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.9 in

PUMP INFO

Flow Rate = 4.641 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON FAILED
(0.034 V <= 0.010 V)
PUMP OFF FAILED
(0.043 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.094 4.07% (0.00% - 4.00%) FAILED

Diagnostic Check Failed