

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

Issued: 7/10/2015
Effective: 7/10/2015

Version: DMEF2015 R0
Status: Active

Instrument # 100416

Date: 12/11/15

Analyst: CHF

1. Reason for instrument evaluation

Interference detected on external standard and PUMP ON / PUMP OFF failures during diagnostic

2. Visual Inspection

3. Troubleshooting/Repair

Monitored detector voltage in tech mode. The voltage is not stable when compared to other DMTs - 12/11/15 CHF

Restarted DMT on 8/9/16 and voltage is stable

Regulator O-ring was missing, replaced

4. VOC (attached)

5. Internal Standard value $\leq 3.00\%$ Yes No

6. Verify software version

Return to Factory for Repair

Ready For Calibration

Ready For Certification

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100416

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/11/2015

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.03: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017
TANK PRESSURE: 377 psi

BLANK TEST 0.000 10:35
INTERNAL STANDARD VERIFIED 10:35
Xq = 0.087 (0.80%)
EXTERNAL STANDARD 0.076 10:35
X[1] = 0.0760 (-0.0030) (-0.0004)
BLANK TEST 0.000 10:36
EXTERNAL STANDARD INTERFERENCE 10:36
X[1] = 0.0745 (-0.0051) (-0.0017)

Interference Detected

Diagnostic Check

VERSIONS

DMT: 3.01
PIC: 3.02
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 42.8°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.60 V PASSED
(0.96 V - 2.24 V)
Cooler Voltage = 1.64 V PASSED
(0.98 V - 2.30 V)
Bias Voltage = 82 V PASSED
(49 V - 115 V)
Chopper Freq = 522 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.0 in

PUMP INFO

Flow Rate = 4.605 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 = 0.085 2.50% (0.00% - 4.00%)

I, Nita J. Bolz, after being first duly sworn, depose and state as follows:

- (1) I am a Forensic Scientist IV at the State of Alaska Scientific Crime Detection Laboratory.
- (2) The Alaska Scientific Crime Detection Laboratory is an entity within the Department of Public Safety.
- (3) I am the Scientific Director of the State Breath Alcohol Program.
- (4) In that capacity, I am responsible for overseeing the Breath Alcohol Program, which includes assuring that instruments are calibrated and maintaining program records.
- (5) The above is a true and accurate verification of calibration, which is performed by the instrument's software, as specified by the State Breath Alcohol Program. Verification of calibration is a regularly conducted and regularly recorded activity of the State Breath Alcohol Program.
- (6) The referenced instrument is certified for evidentiary use in the State of Alaska.

Nita J. Bolz
Scientific Director
State Breath Alcohol Program

Subscribed and sworn before me this _____ day of _____, 20 _____

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100416

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/11/2015

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.03: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017
TANK PRESSURE: 371 psi

BLANK TEST 0.000 10:43
INTERNAL STANDARD VERIFIED 10:43
Xq = 0.086 (1.30%)
EXTERNAL STANDARD 0.075 10:43
X[1] = 0.0754 (-0.0048) (-0.0014)
BLANK TEST 0.000 10:44
EXTERNAL STANDARD 0.075 10:45
X[1] = 0.0752 (-0.0047) (-0.0015)
BLANK TEST 0.000 10:45
EXTERNAL STANDARD INTERFERENCE 10:46
X[1] = 0.0748 (-0.0053) (-0.0011)

Interference Detected

Diagnostic Check

VERSIONS

DMT: 3.01
PIC: 3.02
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 44.2°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.60 V PASSED
(0.96 V - 2.24 V)
Cooler Voltage = 1.64 V PASSED
(0.98 V - 2.30 V)
Bias Voltage = 82 V PASSED
(49 V - 115 V)
Chopper Freq = 523 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.0 in

PUMP INFO

Flow Rate = 4.686 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 = 0.086 2.00% (0.00% - 4.00%)

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Nita J. Bolz
Scientific Director
State Breath Alcohol Program

Subscribed and sworn before me this _____ day of _____, 20 _____

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100416

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/11/2015

External Standard Test Values

Diagnostic Check

VERSIONS

DMT: 3.01
PIC: 3.02
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 47.3°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.60 V PASSED
(0.96 V - 2.24 V)
Cooler Voltage = 1.68 V PASSED
(0.98 V - 2.30 V)
Bias Voltage = 82 V PASSED
(49 V - 115 V)
Chopper Freq = 530 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.0 in

PUMP INFO

Flow Rate = 4.670 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON FAILED
(0.032 V <= 0.010 V)
PUMP OFF FAILED
(0.022 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.086 1.30% (0.00% - 4.00%) PASSED

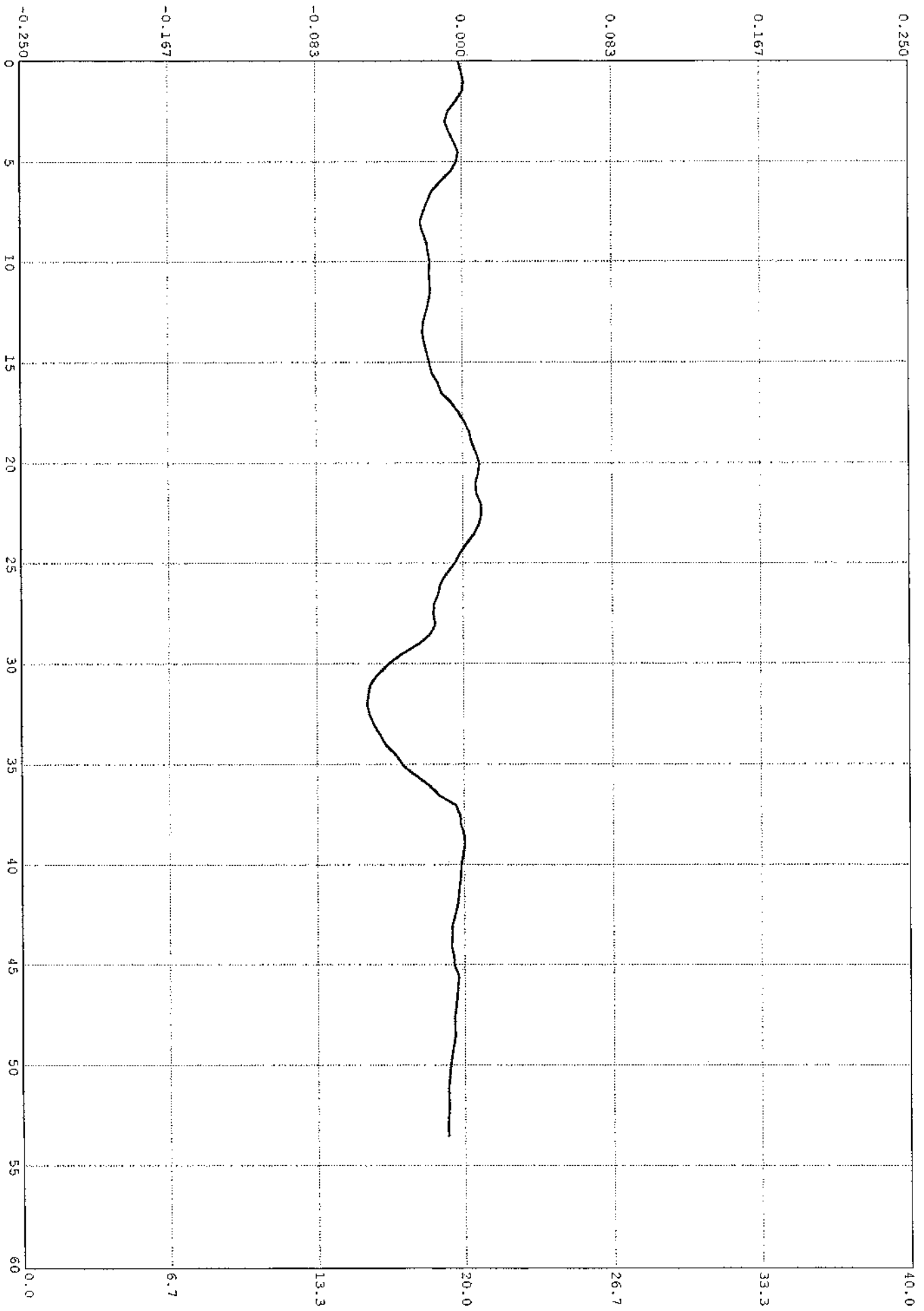
I, Nita J. Bolz, after being first duly sworn, depose and state as follows:

Diagnostic Check Failed

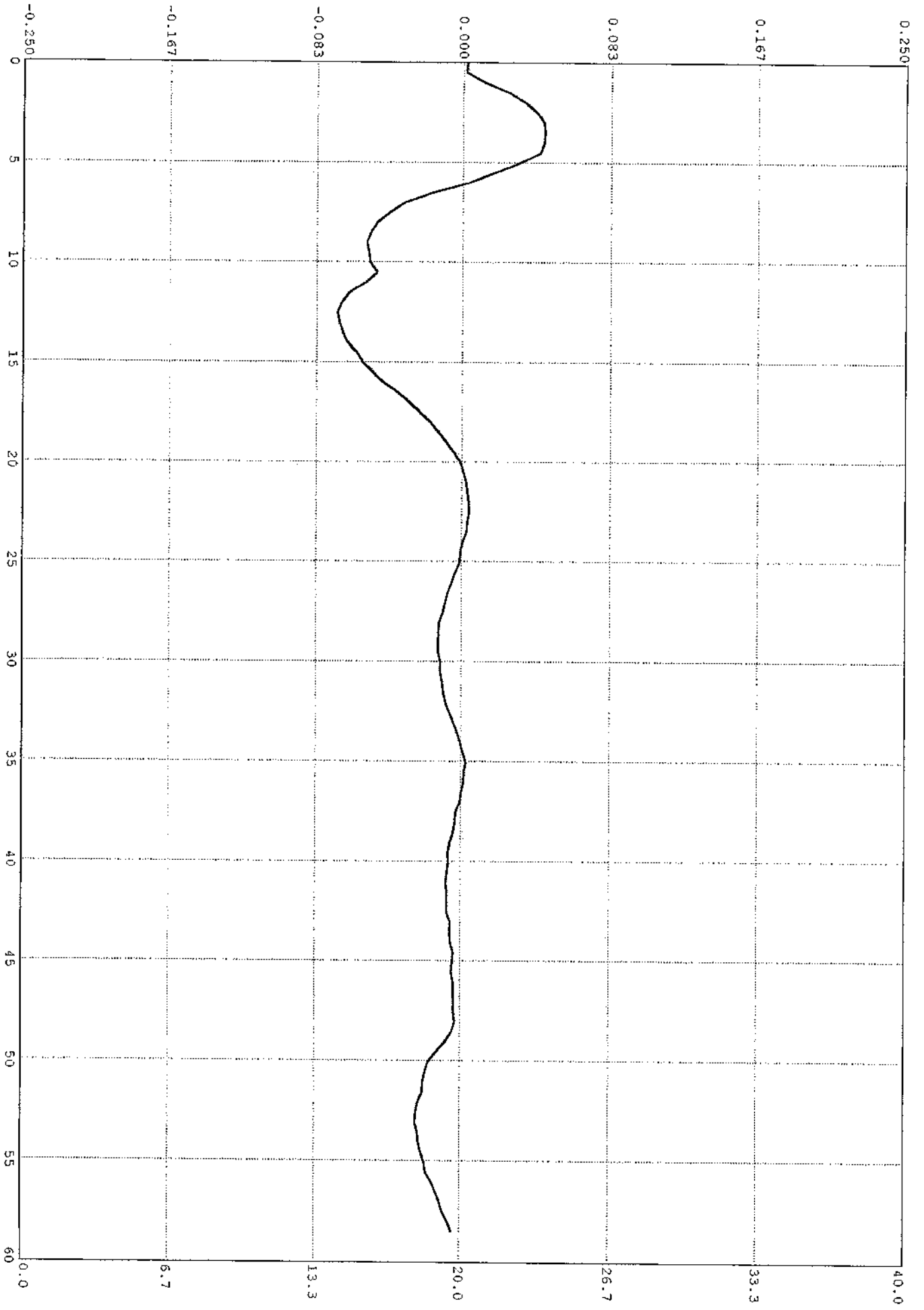
- (1) I am a Forensic Scientist IV at the State of Alaska Scientific Crime Detection Laboratory.
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Nita J. Bolz
Scientific Director
State Breath Alcohol Program

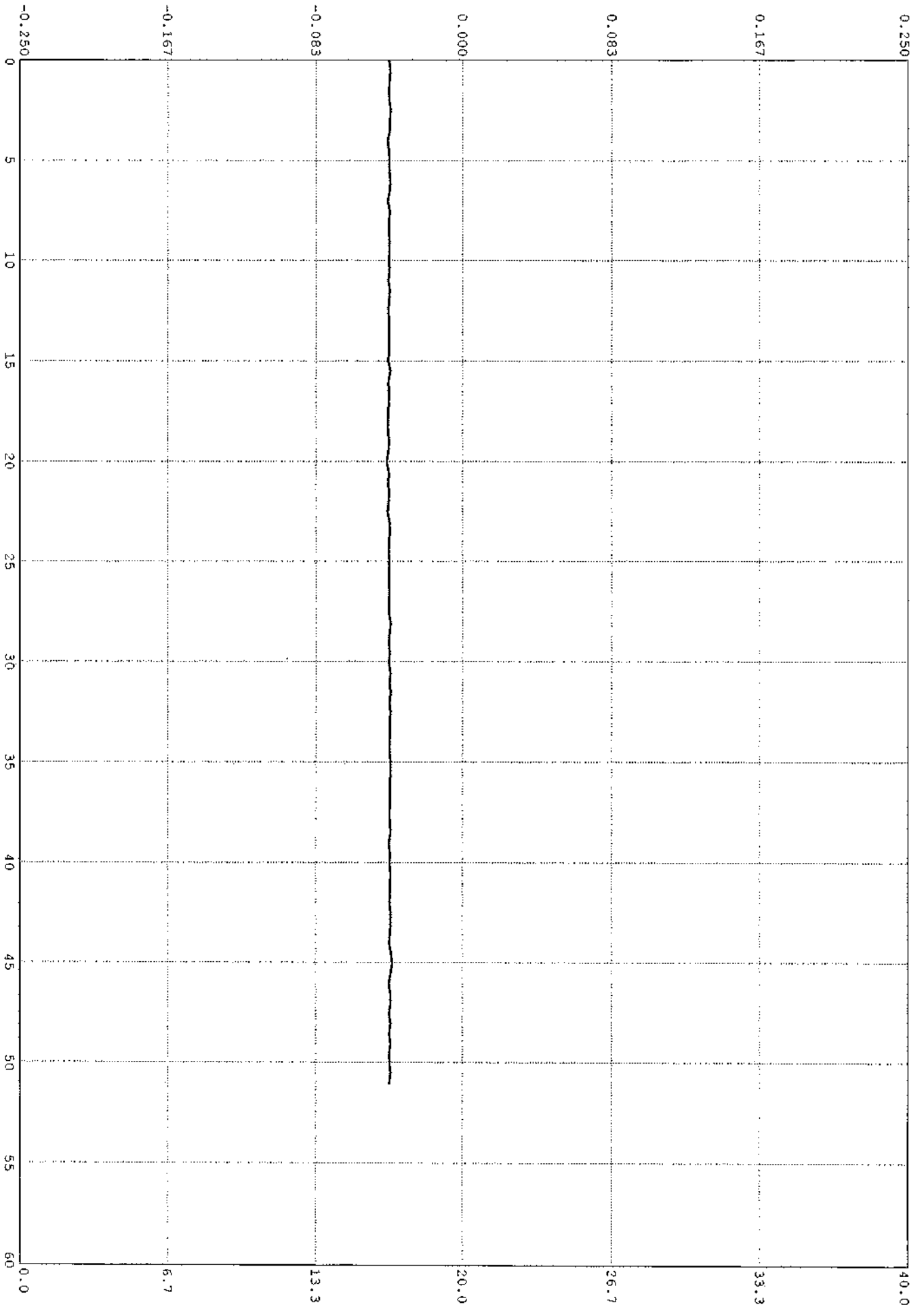
Subscribed and sworn before me this _____ day of _____, 20 _____



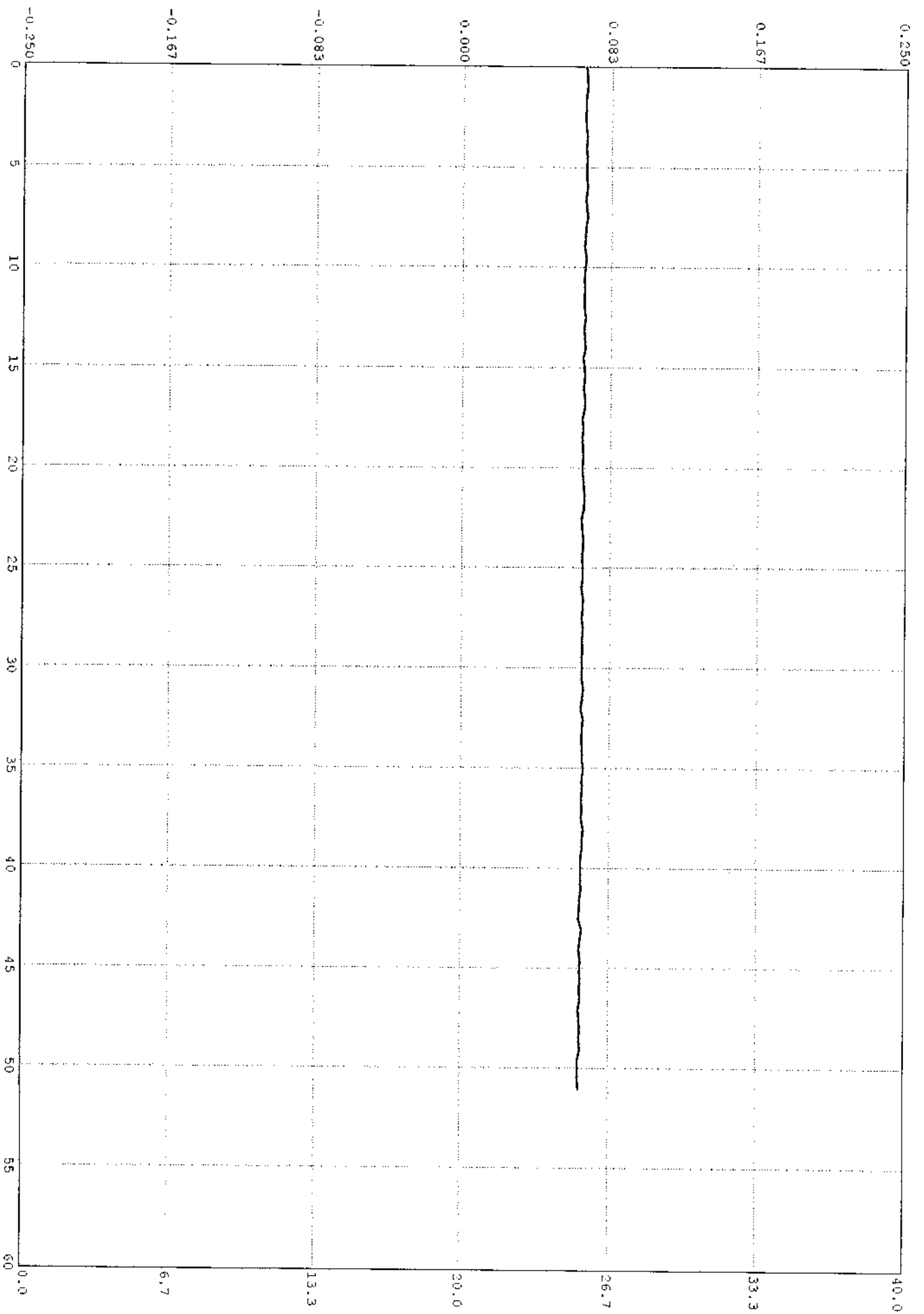
100416
 12/11/15 1251



100416
12/11/15 1258



100687 (Fei comparison)
 12/11/15 1250



100916
 8/9/16 0937

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100416

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 08/09/2016

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.65: 0.079
LOT #: AG608504
EXPIRATION: 03/25/2018
TANK PRESSURE: 984 psi

BLANK TEST 0.000 09:53
INTERNAL STANDARD VERIFIED 09:53
Xq = 0.087 (0.70%)
EXTERNAL STANDARD 0.077 09:54
X[1] = 0.0773 (-0.0040) (-0.0007)
BLANK TEST 0.000 09:55
EXTERNAL STANDARD 0.077 09:55
X[1] = 0.0768 (-0.0039) (-0.0006)
BLANK TEST 0.000 09:56
EXTERNAL STANDARD 0.077 09:56
X[1] = 0.0771 (-0.0032) (-0.0004)
BLANK TEST 0.000 09:57
EXTERNAL STANDARD 0.077 09:57
X[1] = 0.0771 (-0.0034) (-0.0000)
BLANK TEST 0.000 09:58
EXTERNAL STANDARD 0.077 09:58
X[1] = 0.0766 (-0.0038) (-0.0003)
BLANK TEST 0.000 09:59

Average = 0.0770
Std Dev = 0.0000

Diagnostic Check

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 45.2°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.63 V PASSED
(0.96 V - 2.24 V)
Cooler Voltage = 1.59 V PASSED
(0.98 V - 2.30 V)
Bias Voltage = 82 V PASSED
(49 V - 115 V)
Chopper Freq = 524 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.7 in

PUMP INFO

Flow Rate = 4.595 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 = 0.087 0.90% (0.00% - 4.00%)