

# Alaska Scientific Crime Detection Laboratory

## DataMaster Evaluation Form

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

Version: DMEF2015 R0  
Status: Active

Instrument # 100416

Date: 8/11/16

Analyst: Brandi Barnett

1. Reason for instrument evaluation

Instrument failed certification due to unstable detector voltage.

2. Visual Inspection

3. Troubleshooting/Repair

Instrument was previously displaying unstable detector voltage that was no longer present on 8/9/16. See prior evaluation. Made it through most of certification and after isopropyl interference testing started getting ambient fail status messages. Detector voltage was very unstable. Jiggling the detector wires made the fluctuation worse. Instrument detector wires were tightened and fluctuation stopped. Will monitor for a few days to see if detector voltage remains stable.

Detector remained stable Ready for certification 8/23/16 BMB

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: 08/23/2016

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.78: 0.080  
LOT #: AG608504  
EXPIRATION: 03/25/2018  
TANK PRESSURE: 775 psi

BLANK TEST	0.000	12:37
INTERNAL STANDARD	VERIFIED	12:37
Xg = 0.087 (0.10%)		
EXTERNAL STANDARD	0.079	12:37
X[1] = 0.0783 (-0.0028) (0.0006)		
BLANK TEST	0.000	12:38
EXTERNAL STANDARD	0.078	12:38
X[1] = 0.0781 (-0.0027) (0.0005)		
BLANK TEST	0.000	12:39
EXTERNAL STANDARD	0.078	12:39
X[1] = 0.0777 (-0.0031) (0.0000)		
BLANK TEST	0.000	12:40
EXTERNAL STANDARD	0.079	12:40
X[1] = 0.0785 (-0.0020) (0.0005)		
BLANK TEST	0.000	12:41
EXTERNAL STANDARD	0.078	12:42
X[1] = 0.0781 (-0.0029) (0.0008)		
BLANK TEST	0.000	12:42

Average = 0.0782  
Std Dev = 0.0004

## Diagnostic Check

### 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 = 45.9°C	PASSED
(38.0°C - 50.0°C)	

### SETTINGS

Lamp Voltage = 1.60 V	PASSED
(0.96 V - 2.24 V)	
Cooler Voltage = 1.66 V	PASSED
(0.98 V - 2.30 V)	
Bias Voltage = 82 V	PASSED
(49 V - 115 V)	
Chopper Freq = 533 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.8 in	

### PUMP INFO

Flow Rate = 4.672 L/M	PASSED
(3.500 L/M - 6.500 L/M)	

### DETECTOR INFO

PUMP ON	PASSED
(0.001 V <= 0.010 V)	
PUMP OFF	PASSED
(0.002 V <= 0.010 V)	

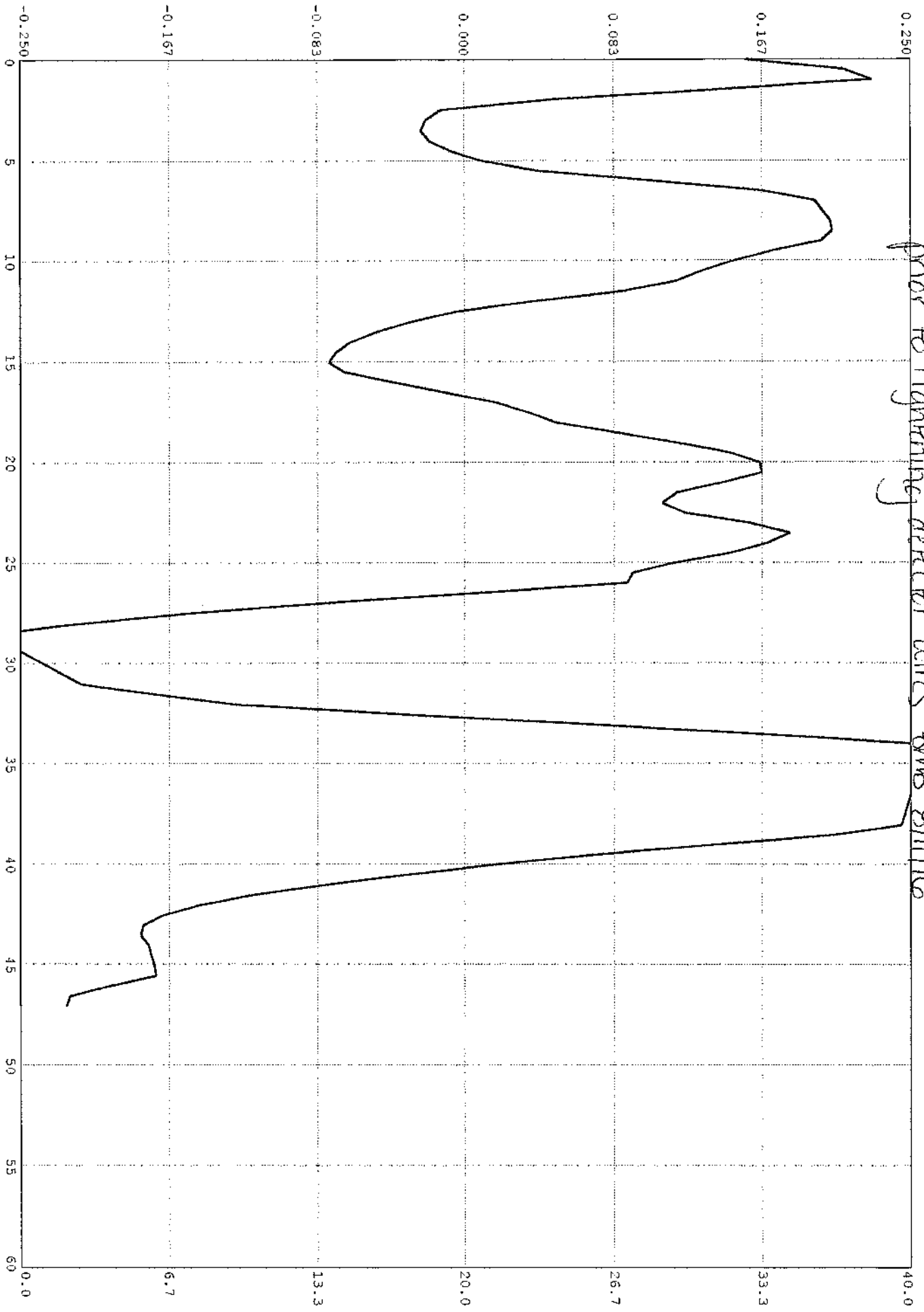
### FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

### INTERNAL STANDARD

Xg = 0.087	0.50%	(0.00% - 4.00%)	PASSED
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poor to fighting detector wires BMB 8/11/10



# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100416

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 08/11/2016

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.71: 0.079  
LOT #: AG608504  
EXPIRATION: 03/25/2018  
TANK PRESSURE: 799 psi

BLANK TEST                    0.000   12:44  
INTERNAL STANDARD            ERROR   12:44  
Xq = 0.091 (4.50%)

Internal Standard Error

prior to tightening detector  
wires BMS @ 11/16

## 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 = 46.1°C                PASSED  
(38.0°C - 50.0°C)

### SETTINGS

Lamp Voltage = 1.63 V                PASSED  
(0.96 V - 2.24 V)  
Cooler Voltage = 1.96 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 = 29.7 in

### PUMP INFO

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

### DETECTOR INFO

PUMP ON                                PASSED  
(0.007 V <= 0.010 V)  
PUMP OFF                               PASSED  
(0.006 V <= 0.010 V)

### FILTER INFO

Filter 1                                PASSED  
Filter 2                                PASSED  
Filter 3                                PASSED

### INTERNAL STANDARD

Xq = 0.087 0.40% (0.00% - 4.00%)

# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100416

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 08/11/2016

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.71: 0.079  
LOT #: AG608504  
EXPIRATION: 03/25/2018  
TANK PRESSURE: 798 psi

BLANK TEST	0.000	13:10
INTERNAL STANDARD	VERIFIED	13:10
Xq = 0.086 (1.10%)		
EXTERNAL STANDARD	0.077	13:10
X[1] = 0.0766 (-0.0032) (0.0022)		
BLANK TEST	0.000	13:11
EXTERNAL STANDARD	0.077	13:11
X[1] = 0.0768 (-0.0028) (0.0024)		
BLANK TEST	0.000	13:12
EXTERNAL STANDARD	0.077	13:12
X[1] = 0.0771 (-0.0024) (0.0022)		
BLANK TEST	0.000	13:13
EXTERNAL STANDARD	0.077	13:13
X[1] = 0.0774 (-0.0021) (0.0027)		
BLANK TEST	0.000	13:14
EXTERNAL STANDARD	0.077	13:14
X[1] = 0.0769 (-0.0029) (0.0022)		
BLANK TEST	0.000	13:15

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 = 48.8°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 45.4°C	PASSED
(38.0°C - 50.0°C)	

### SETTINGS

Lamp Voltage = 1.60 V	PASSED
(0.96 V - 2.24 V)	
Cooler Voltage = 1.66 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 = 4.683 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

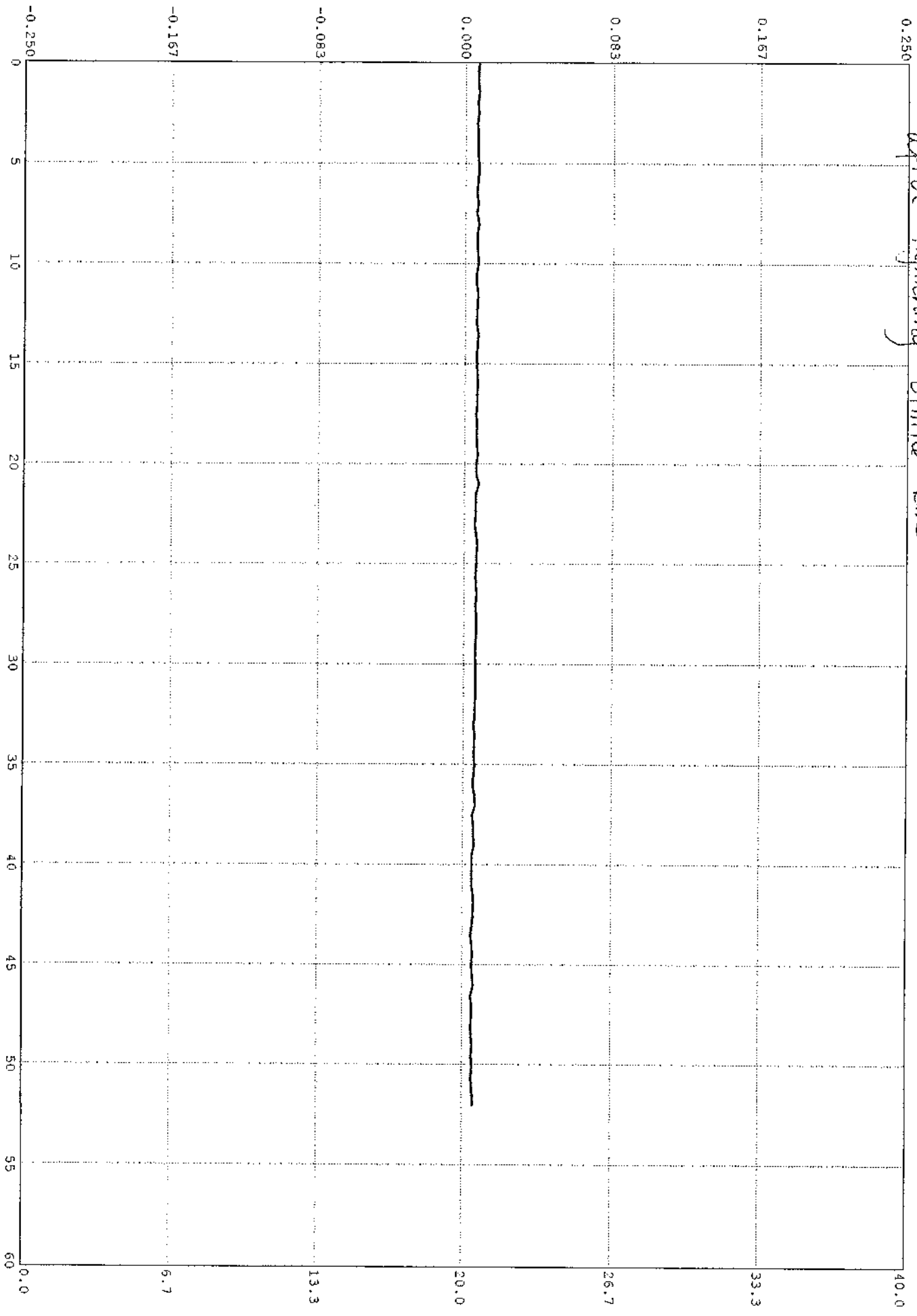
Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

### INTERNAL STANDARD

Xq = 0.086 1.10%	PASSED
(0.00% - 4.00%)	

after tightening 8/11/16 BMB

after fighting blithe ends



DIAGNOSTIC RECORD

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Alaska Department of Public Safety  
DATAMASTER dmt: 100416  
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Date: 08/16/2016  
Time: 09:34:56

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 = 45.4°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.60 V PASSED  
(0.96 V - 2.24 V)  
Cooler Voltage = 1.66 V PASSED  
(0.98 V - 2.30 V)  
Bias Voltage = 82 V PASSED  
(49 V - 115 V)  
Chopper Freq = 532 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.693 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)

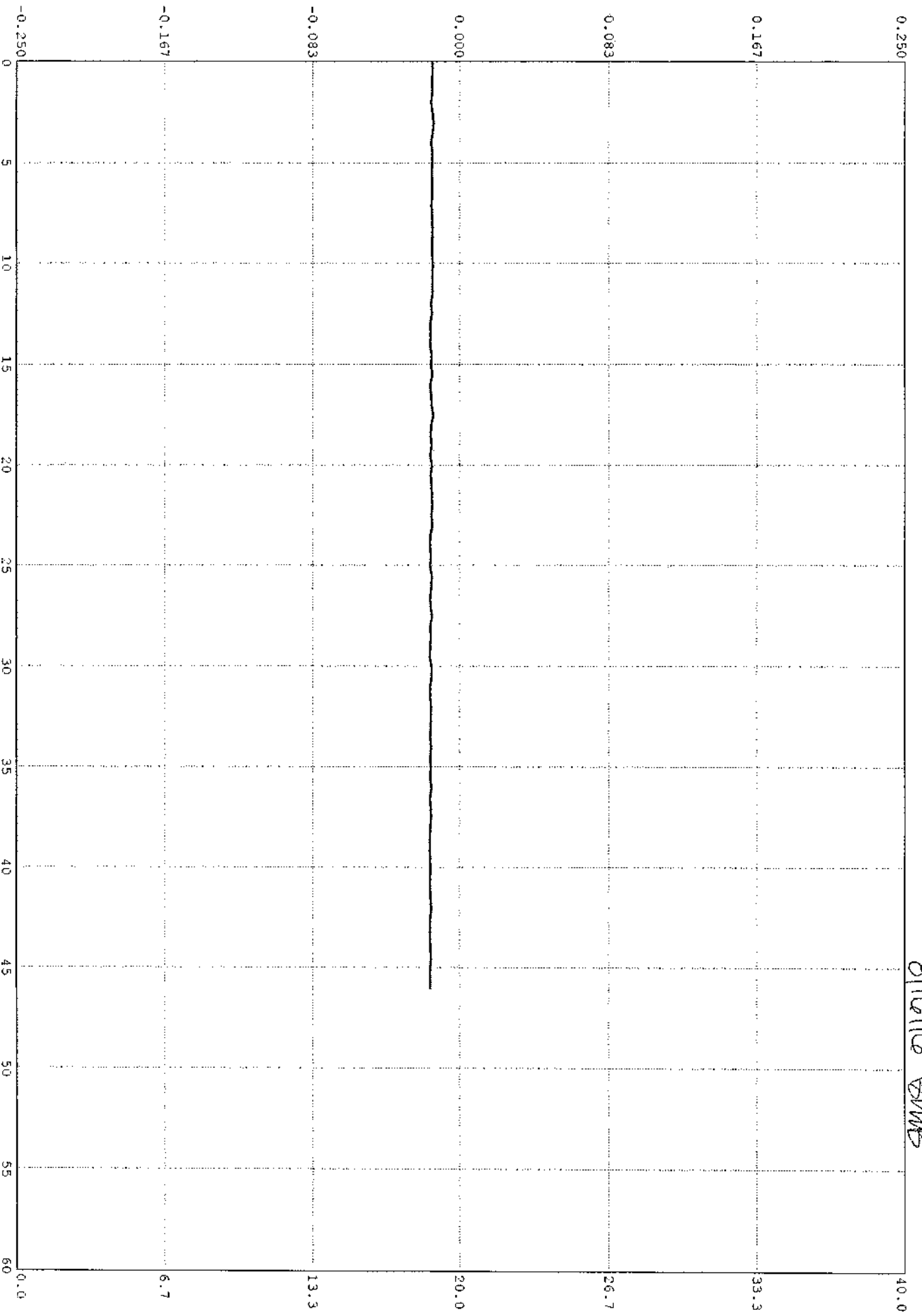
FILTER INFO

Filter 1 PASSED  
Filter 2 PASSED  
Filter 3 PASSED

INTERNAL STANDARD PASSED

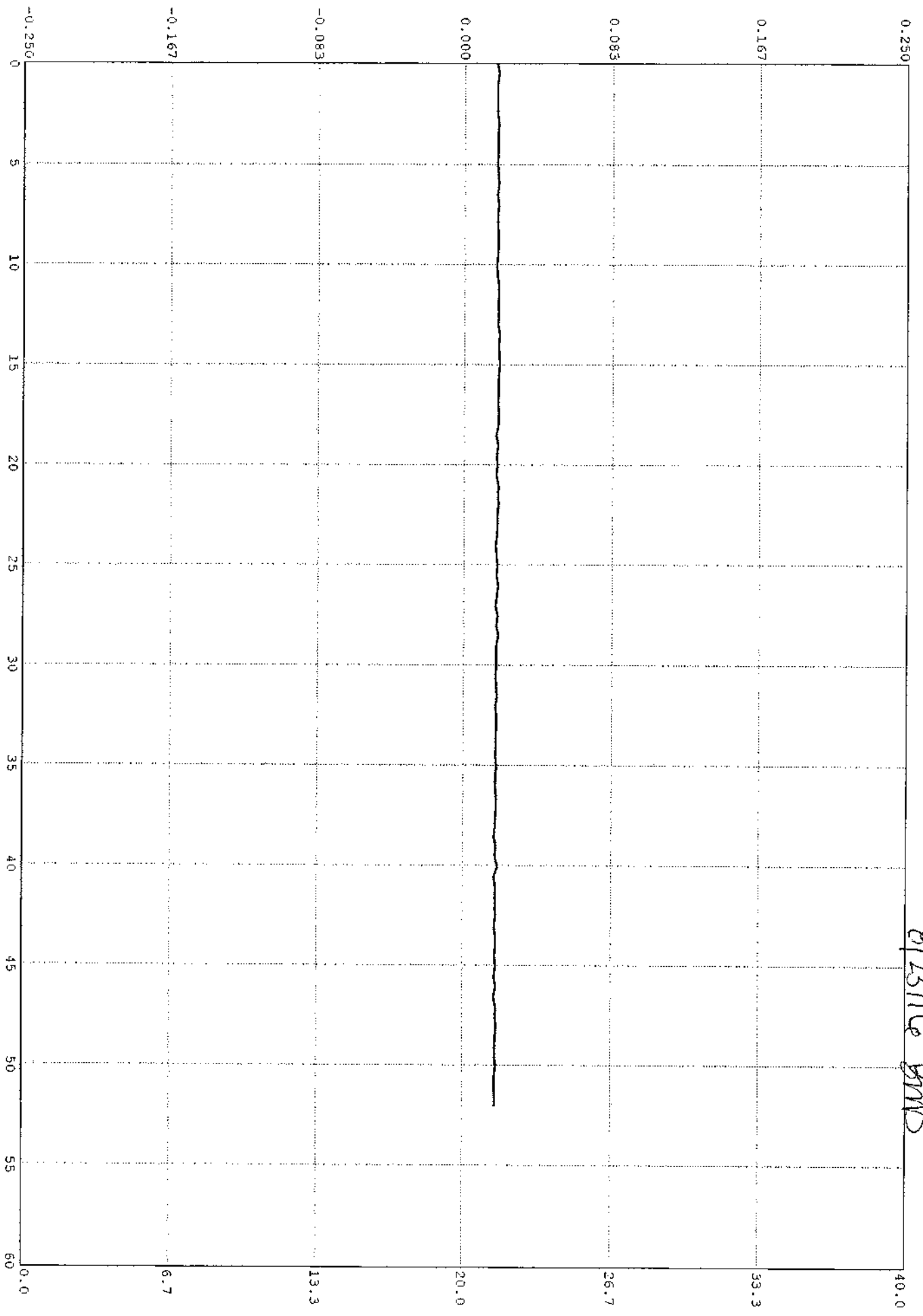
Xq = 0.087 0.90% (0.00% - 4.00%)

Blue Hill BMB





B/23/14 BMS



DIAGNOSTIC RECORD

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Alaska Department of Public Safety  
DATAMASTER dmt: 100416  
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Date: 08/23/2016  
Time: 12:33:31

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 = 46.2°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.60 V PASSED  
(0.96 V - 2.24 V)  
Cooler Voltage = 1.66 V PASSED  
(0.98 V - 2.30 V)  
Bias Voltage = 82 V PASSED  
(49 V - 115 V)  
Chopper Freq = 533 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.682 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 = 0.087 0.00% (0.00% - 4.00%) PASSED