

# Alaska Scientific Crime Detection Laboratory

## DataMaster Evaluation Form

Issued: 08/08/2017  
Effective: 08/10/2017

Version: DMEF2017 R1  
Status: Active

Instrument # 100698

Date: 10/2/17

Analyst: Colleen O'Bryant

1. Reason for instrument evaluation

Standard out of range and interference detected on external standard status messages

2. Visual Inspection (internal and external)

3. O-ring inspection

4. Troubleshooting/Repair

• O-ring on regulator missing, replaced with a new one

• Ran a VOC with AG608504 / exp 3/25/18 @ ~200psi and filter agreement <sup>was</sup> was good and external standard values close to adjusted TV.

• Ran a VOC with AG634001 / exp 12/5/18 @ ~400psi and filter agreement was good and external standard values were close to adjusted TV.

• Possibly an environmental cause.

5. VOC (attached)

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

7. Verify software version

Return to Factory for Repair

Ready for Calibration

Ready for Certification

Proceed to Close Out

# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100698

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 10/02/2017

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.46: 0.079  
LOT #: AG634001  
EXPIRATION: 12/05/2018  
TANK PRESSURE: 368 psi

BLANK TEST	0.000	14:17
INTERNAL STANDARD	VERIFIED	14:17
Xq = 0.118	(2.30%)	
EXTERNAL STANDARD	0.079	14:17
X[1] = 0.0793 (-0.0001)	(0.0009)	
BLANK TEST	0.000	14:18
EXTERNAL STANDARD	0.079	14:19
X[1] = 0.0793 (0.0008)	(0.0016)	
BLANK TEST	0.000	14:19
EXTERNAL STANDARD	0.078	14:20
X[1] = 0.0785 (-0.0008)	(0.0011)	
BLANK TEST	0.000	14:21
EXTERNAL STANDARD	0.079	14:21
X[1] = 0.0785 (0.0002)	(0.0012)	
BLANK TEST	0.000	14:22
EXTERNAL STANDARD	0.078	14:22
X[1] = 0.0785 (-0.0007)	(0.0017)	
BLANK TEST	0.000	14:23

Average = 0.0786  
Std Dev = 0.0005

## Diagnostic Check

### VERSIONS

DMT: 3.02  
PIC: 5.03  
Modem: 2.6  
Questions: 2.2

### TEMPERATURES

Sample Chamber = 48.8°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 47.3°C PASSED  
(38.0°C - 50.0°C)

### SETTINGS

Lamp Voltage = 1.65 V PASSED  
(0.99 V - 2.31 V)  
Cooler Voltage = 1.60 V PASSED  
(1.00 V - 2.34 V)  
Bias Voltage = 81 V PASSED  
(49 V - 113 V)  
Chopper Freq = 529 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.5 in

### PUMP INFO

Flow Rate = 4.820 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 = 0.118 (1.99% (0.00% - 4.00%)) PASSED

# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100698

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 10/02/2017

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.46: 0.079  
LOT #: AG608504  
EXPIRATION: 03/25/2018  
TANK PRESSURE: 209 psi

BLANK TEST	0.000	14:04
INTERNAL STANDARD	VERIFIED	14:04
Xq = 0.117 (1.38%)		
EXTERNAL STANDARD	0.079	14:04
X[1] = 0.0786 (0.0003) (0.0001)		
BLANK TEST	0.000	14:05
EXTERNAL STANDARD	0.079	14:06
X[1] = 0.0794 (0.0009) (0.0004)		
BLANK TEST	0.000	14:06
EXTERNAL STANDARD	0.079	14:07
X[1] = 0.0789 (-0.0005) (-0.0006)		
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.078	14:08
X[1] = 0.0783 (-0.0007) (-0.0002)		
BLANK TEST	0.000	14:09
EXTERNAL STANDARD	0.078	14:09
X[1] = 0.0785 (0.0000) (0.0009)		
BLANK TEST	0.000	14:10

Average = 0.0786  
Std Dev = 0.0005

## Diagnostic Check

### VERSIONS

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

### TEMPERATURES

Sample Chamber = 48.7°C (44.0°C - 52.0°C)	PASSED
Breath Tube = 48.1°C (38.0°C - 50.0°C)	PASSED

### SETTINGS

Lamp Voltage = 1.65 V (0.99 V - 2.31 V)	PASSED
Cooler Voltage = 1.60 V (1.00 V - 2.34 V)	PASSED
Bias Voltage = 81 V (49 V - 113 V)	PASSED
Chopper Freq = 526 Hz (475 Hz - 575 Hz)	PASSED
Barometer = 29.5 in	

### PUMP INFO

Flow Rate = 4.773 L/M (3.500 L/M - 6.500 L/M)	PASSED
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### DETECTOR INFO

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

### FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

### INTERNAL STANDARD

Xq = 0.118 1.99% (0.00% - 4.00%)	PASSED
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SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100698

Date: 09/14/2017  
Time: 01:05:27

SUBJECT NAME:  
TEST TEST  
LICENSE #: 1234567

OPERATOR NAME:  
MEGAN SWANGEL  
OPERATOR'S #: 7924

DEPT/AGENCY:  
KENI  
CASE/REPORT: 0000-0000  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.98: 0.080  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	01:06
BLANK TEST	0.000	01:06
INTERNAL STANDARD	VERIFIED	01:06
Xq = 0.116 (0.69%)		
EXTERNAL STANDARD	INTERFERENCE	01:06
X[1] = 0.0764 (0.000%)	(0.0058)	

Interference Detected

*Test conducted @ KRD  
CBS 10/6/17*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100698

Date: 09/14/2017  
Time: 00:57:40

SUBJECT NAME:  
TEST TEST  
LICENSE #: 1234567

OPERATOR NAME:  
MEGAN SWANGEL  
OPERATOR'S #: 7924

DEPT/AGENCY:  
KENT  
CASE/REPORT: 0000-0000  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.98: 0.080  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	00:58
BLANK TEST	0.000	00:58
INTERNAL STANDARD	VERIFIED	00:58
Xq = 0.119 (3.15%)		
EXTERNAL STANDARD	INTERFERENCE	00:59
X[1] = 0.0804 (0.0036)	(0.0056)	

Interference Detected

