

# Alaska Scientific Crime Detection Laboratory

## DataMaster Evaluation Form

Effective: 11/10/2021

Version: 2.0

Instrument #: 100376

Analyst(s): Carlie Aaister

Start Date: 12/3/2021

### Reason for instrument evaluation

Internal standard error

### Visual Inspection

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

### Troubleshooting/Repair

Replaced o-ring.  
Filter wheel test, 50 cycles w/ 2 errors.

Internal standard was consistently high in the field.  
Test VOCs during evaluation had internal standard values  
between 0.12% & 2.80% during the month of december.  
Calibration is recommended.

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> VOC (attached)                           | <input checked="" type="checkbox"/> Verify software version              |
| <input checked="" type="checkbox"/> VOC Internal Standard value $\leq$ 3.00% | <input checked="" type="checkbox"/> Non-Drinking Subject Test (attached) |
| <input type="checkbox"/> Return to Factory                                   | <input checked="" type="checkbox"/> Ready for Calibration                |
| <input type="checkbox"/> Ready for Certification                             | <input type="checkbox"/> Proceed to Close Out                            |
| <input type="checkbox"/> Further Evaluation Needed                           |  |

End Date: 12/28/2021

Page 1 of 1

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Approved by: Chemistry Supervisor

# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100376

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/03/2021

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.95: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022  
TANK PRESSURE: 999 psi

BLANK TEST	0.000	13:39
INTERNAL STANDARD	VERIFIED	13:39
Xq = 0.074 (0.12%)		
EXTERNAL STANDARD	0.077	13:39
X[1] = 0.0774 (-0.0039) (-0.0008)		
BLANK TEST	0.000	13:40
EXTERNAL STANDARD	0.078	13:40
X[1] = 0.0779 (-0.0039) (-0.0008)		
BLANK TEST	0.000	13:41
EXTERNAL STANDARD	0.078	13:42
X[1] = 0.0782 (-0.0029) (-0.0003)		
BLANK TEST	0.000	13:42
EXTERNAL STANDARD	0.078	13:43
X[1] = 0.0782 (-0.0029) (-0.0004)		
BLANK TEST	0.000	13:44
EXTERNAL STANDARD	0.078	13:44
X[1] = 0.0784 (-0.0019) (-0.0002)		
BLANK TEST	0.000	13:45

Average = 0.0778  
Std Dev = 0.0004

## 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 = 47.2°C	PASSED
(38.0°C - 50.0°C)	

### SETTINGS

Lamp Voltage = 1.64 V	PASSED
(1.02 V - 2.38 V)	
Cooler Voltage = 1.66 V	PASSED
(1.00 V - 2.32 V)	
Bias Voltage = 80 V	PASSED
(48 V - 112 V)	
Chopper Freq = 521 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.9 in	

### PUMP INFO

Flow Rate = 4.141 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 = 0.075 0.47% (0.00% - 4.00%)	

# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100376

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/03/2021

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.95: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022  
TANK PRESSURE: 985 psi

BLANK TEST	0.000	13:57
INTERNAL STANDARD	VERIFIED	13:57
Xq = 0.076 (1.98%)		
EXTERNAL STANDARD	0.079	13:57
X[1] = 0.0785 (-0.0026) (0.0013)		
BLANK TEST	0.000	13:58
EXTERNAL STANDARD	0.078	13:58
X[1] = 0.0784 (-0.0021) (0.0012)		
BLANK TEST	0.000	13:59
EXTERNAL STANDARD	0.079	13:59
X[1] = 0.0786 (-0.0025) (0.0013)		
BLANK TEST	0.000	14:00
EXTERNAL STANDARD	0.079	14:00
X[1] = 0.0785 (-0.0028) (0.0010)		
BLANK TEST	0.000	14:01
EXTERNAL STANDARD	0.078	14:01
X[1] = 0.0780 (-0.0036) (0.0007)		
BLANK TEST	0.000	14:02

Average = 0.0786  
Std Dev = 0.0005

## Diagnostic Check

### VERSIONS

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

### TEMPERATURES

Sample Chamber = 48.7°C (44.0°C - 52.0°C)	PASSED
Breath Tube = 46.7°C (38.0°C - 50.0°C)	PASSED

### SETTINGS

Lamp Voltage = 1.64 V (1.02 V - 2.38 V)	PASSED
Cooler Voltage = 1.66 V (1.00 V - 2.32 V)	PASSED
Bias Voltage = 80 V (48 V - 112 V)	PASSED
Chopper Freq = 525 Hz (475 Hz - 575 Hz)	PASSED
Barometer = 30.0 in	

### PUMP INFO

Flow Rate = 4.119 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 PASSED

Xq = 0.075 1.05% (0.00% - 4.00%)

# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100376

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/12/2021

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.46: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022  
TANK PRESSURE: 968 psi

BLANK TEST	0.000	12:02
INTERNAL STANDARD	VERIFIED	12:02
Xq = 0.076 (1.63%)		
EXTERNAL STANDARD	0.077	12:02
X[1] = 0.0767 (-0.0028) (0.0007)		
BLANK TEST	0.000	12:03
EXTERNAL STANDARD	0.077	12:03
X[1] = 0.0766 (-0.0030) (0.0005)		
BLANK TEST	0.000	12:04
EXTERNAL STANDARD	0.077	12:04
X[1] = 0.0770 (-0.0029) (0.0001)		
BLANK TEST	0.000	12:05
EXTERNAL STANDARD	0.077	12:05
X[1] = 0.0772 (-0.0030) (0.0004)		
BLANK TEST	0.000	12:06
EXTERNAL STANDARD	0.077	12:06
X[1] = 0.0773 (-0.0025) (0.0002)		
BLANK TEST	0.000	12:07

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 = 48.7°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 44.8°C	PASSED
(38.0°C - 50.0°C)	

### SETTINGS

Lamp Voltage = 1.64 V	PASSED
(1.02 V - 2.38 V)	
Cooler Voltage = 1.66 V	PASSED
(1.00 V - 2.32 V)	
Bias Voltage = 80 V	PASSED
(48 V - 112 V)	
Chopper Freq = 533 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.5 in	

### PUMP INFO

Flow Rate = 4.053 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 = 0.075 1.17% (0.00% - 4.00%)

# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100376

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/27/2021

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.65: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022  
TANK PRESSURE: 964 psi

BLANK TEST	0.000	13:59
INTERNAL STANDARD	VERIFIED	13:59
Xq = 0.076 (2.21%)		
EXTERNAL STANDARD	0.077	13:59
X[1] = 0.0772 (-0.0015) (0.0013)		
BLANK TEST	0.000	14:00
EXTERNAL STANDARD	0.077	14:00
X[1] = 0.0772 (-0.0021) (0.0013)		
BLANK TEST	0.000	14:01
EXTERNAL STANDARD	0.077	14:01
X[1] = 0.0771 (-0.0028) (0.0003)		
BLANK TEST	0.000	14:02
EXTERNAL STANDARD	0.077	14:02
X[1] = 0.0774 (-0.0021) (0.0004)		
BLANK TEST	0.000	14:03
EXTERNAL STANDARD	0.077	14:03
X[1] = 0.0775 (-0.0023) (0.0003)		
BLANK TEST	0.000	14:04

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 = 48.0°C	PASSED
(38.0°C - 50.0°C)	

### SETTINGS

Lamp Voltage = 1.65 V	PASSED
(1.02 V - 2.38 V)	
Cooler Voltage = 1.66 V	PASSED
(1.00 V - 2.32 V)	
Bias Voltage = 80 V	PASSED
(48 V - 112 V)	
Chopper Freq = 534 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.7 in	

### PUMP INFO

Flow Rate = 4.000 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 = 0.076 2.21% (0.00% - 4.00%)

# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100376

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/27/2021

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.65: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022  
TANK PRESSURE: 946 psi

BLANK TEST	0.000	14:10
INTERNAL STANDARD	VERIFIED	14:10
Xq = 0.076 (2.80%)		
EXTERNAL STANDARD	0.077	14:10
X[1] = 0.0773 (0.0015) (0.0013)		
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.077	14:11
X[1] = 0.0774 (0.0015) (0.0011)		
BLANK TEST	0.000	14:12
EXTERNAL STANDARD	0.077	14:12
X[1] = 0.0774 (0.0014) (0.0010)		
BLANK TEST	0.000	14:13
EXTERNAL STANDARD	0.077	14:14
X[1] = 0.0774 (0.0002) (0.0009)		
BLANK TEST	0.000	14:14
EXTERNAL STANDARD	0.078	14:15
X[1] = 0.0777 (0.0006) (0.0009)		
BLANK TEST	0.000	14:16

Average = 0.0772  
Std Dev = 0.0004

## 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 = 47.3°C	PASSED
(38.0°C - 50.0°C)	

### SETTINGS

Lamp Voltage = 1.64 V	PASSED
(1.02 V - 2.38 V)	
Cooler Voltage = 1.66 V	PASSED
(1.00 V - 2.32 V)	
Bias Voltage = 80 V	PASSED
(48 V - 112 V)	
Chopper Freq = 533 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.7 in	

### PUMP INFO

Flow Rate = 3.978 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
(0.003 V <= 0.010 V)	

### FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD PASSED

Xq = 0.076 1.86% (0.00% - 4.00%)

# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100376

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/28/2021

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.79: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022  
TANK PRESSURE: 930 psi

BLANK TEST	0.000	10:01
INTERNAL STANDARD	VERIFIED	10:02
Xq = 0.076 (2.80%)		
EXTERNAL STANDARD	0.078	10:02
X[1] = 0.0777 (-0.0012) (0.0008)		
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.078	10:03
X[1] = 0.0782 (-0.0011) (0.0012)		
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.078	10:04
X[1] = 0.0785 (-0.0014) (0.0009)		
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.078	10:05
X[1] = 0.0785 (-0.0019) (0.0008)		
BLANK TEST	0.000	10:06
EXTERNAL STANDARD	0.078	10:06
X[1] = 0.0778 (-0.0021) (0.0007)		
BLANK TEST	0.000	10:07

Average = 0.0780  
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 (44.0°C - 52.0°C)	PASSED
Breath Tube = 47.8°C (38.0°C - 50.0°C)	PASSED

### SETTINGS

Lamp Voltage = 1.64 V (1.02 V - 2.38 V)	PASSED
Cooler Voltage = 1.66 V (1.00 V - 2.32 V)	PASSED
Bias Voltage = 80 V (48 V - 112 V)	PASSED
Chopper Freq = 533 Hz (475 Hz - 575 Hz)	PASSED
Barometer = 29.8 in	

### PUMP INFO

Flow Rate = 4.022 L/M (3.500 L/M - 6.500 L/M)	PASSED
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### DETECTOR INFO

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

### FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD	PASSED
Xq = 0.076 2.45% (0.00% - 4.00%)	

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100376

Date: 12/28/2021  
Time: 10:09:28

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: 10436

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.80: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 10:10  
BLANK TEST 0.000 10:10  
INTERNAL STANDARD VERIFIED 10:10  
EXTERNAL STANDARD 0.078 10:11  
BLANK TEST 0.000 10:12  
SUBJECT SAMPLE (Vol=2.22L) 0.000 10:12  
BLANK TEST 0.000 10:13  
EXTERNAL STANDARD 0.078 10:13  
BLANK TEST 0.000 10:14

CKG

