

# Alaska Scientific Crime Detection Laboratory

## DataMaster Evaluation Form

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

Version: DMEF2015 R0  
Status: Active

Instrument # 100425

Date: 9/13/16

Analyst: Colleen O'Bryant

1. Reason for instrument evaluation

Loaner instrument returned from Clear AFB,  
no longer needed.

2. Visual Inspection

3. Troubleshooting/Repair

Experienced blank errors and interference  
on the external standard when attempting  
an out of service VOC.

- Switched out o-ring on regulator
- Ambient fail on first VOC attempt, purged  
sample chamber for ~5 minutes. VOC passed.
- Performed a tank change + attempted a  
second VOC with a newer tank, without issue
- Performed a supervisor test ~~x2~~ <sup>x3</sup>

Possible the issue was environmental or  
related to purging the system.

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 #: 100405

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 09/13/2016

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.38: 0.079  
LOT #: 01315080A2  
EXPIRATION: 02/05/2017  
TANK PRESSURE: 651 psi

BLANK TEST	0.000	11:11
INTERNAL STANDARD	VERIFIED	11:11
Xq = 0.065 (0.20%)		
EXTERNAL STANDARD	0.076	11:11
X[1] = 0.0756 (-0.0003) (0.0003)		
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.075	11:12
X[1] = 0.0752 (-0.0005) (0.0004)		
BLANK TEST	0.000	11:13
EXTERNAL STANDARD	0.075	11:14
X[1] = 0.0751 (0.0003) (0.0003)		
BLANK TEST	0.000	11:14
EXTERNAL STANDARD	0.075	11:15
X[1] = 0.0753 (-0.0003) (0.0003)		
BLANK TEST	0.000	11:16
EXTERNAL STANDARD	0.075	11:16
X[1] = 0.0750 (-0.0005) (0.0004)		
BLANK TEST	0.000	11:17

Average = 0.0752  
Std Dev = 0.0004

## Diagnostic Check

### VERSIONS

DMP: 3.02  
PIC: 3.02  
Modem: 2.6  
Questions: 2.2

### TEMPERATURES

Sample Chamber = 49.1°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 41.6°C	PASSED
(38.0°C - 50.0°C)	

### SETTINGS

Lamp Voltage = 1.66 V	PASSED
(1.03 V - 2.41 V)	
Cooler Voltage = 1.69 V	PASSED
(0.98 V - 2.30 V)	
Bias Voltage = 81 V	PASSED
(49 V - 113 V)	
Chopper Freq = 539 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.4 in	

### PUMP INFO

Flow Rate = 5.005 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 = 0.085	0.71%	(0.00% - 4.00%)	PASSED
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# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100405

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 09/13/2016

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.38: 0.079  
LOT #: AG608504  
EXPIRATION: 03/25/2018  
TANK PRESSURE: 668 psi

BLANK TEST	0.000	11:28
INTERNAL STANDARD	VERIFIED	11:28
Xq = 0.085 (0.10%)		
EXTERNAL STANDARD	0.079	11:28
X[1] = 0.0791 (0.0002) (0.0026)		
BLANK TEST	0.000	11:29
EXTERNAL STANDARD	0.079	11:29
X[1] = 0.0786 (0.0004) (0.0029)		
BLANK TEST	0.000	11:30
EXTERNAL STANDARD	0.079	11:31
X[1] = 0.0786 (0.0006) (0.0023)		
BLANK TEST	0.000	11:31
EXTERNAL STANDARD	0.078	11:32
X[1] = 0.0779 (-0.0005) (0.0021)		
BLANK TEST	0.000	11:33
EXTERNAL STANDARD	0.078	11:33
X[1] = 0.0783 (0.0005) (0.0020)		
BLANK TEST	0.000	11:34

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 = 48.8°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 45.0°C	PASSED
(38.0°C - 50.0°C)	

### SETTINGS

Lamp Voltage = 1.66 V	PASSED
(1.03 V - 2.41 V)	
Cooler Voltage = 1.69 V	PASSED
(0.98 V - 2.30 V)	
Bias Voltage = 81 V	PASSED
(49 V - 113 V)	
Chopper Freq = 541 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.4 in	

### PUMP INFO

Flow Rate = 4.903 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
(0.002 V <= 0.010 V)	

### FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

### INTERNAL STANDARD

Xq = 0.085	0.41%	(0.00% - 4.00%)	PASSED
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SUPERVISOR TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100405

Date: 09/13/2016  
 Time: 11:35:19

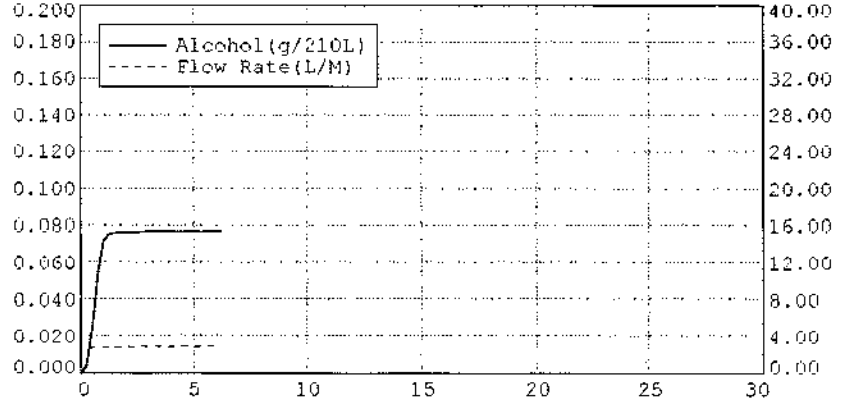
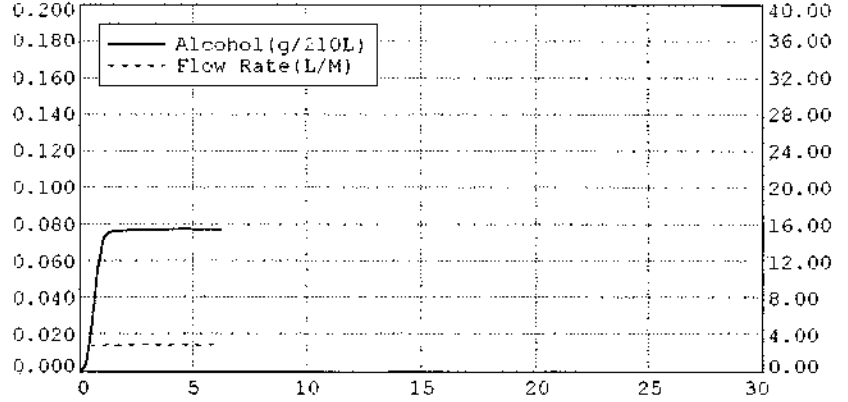
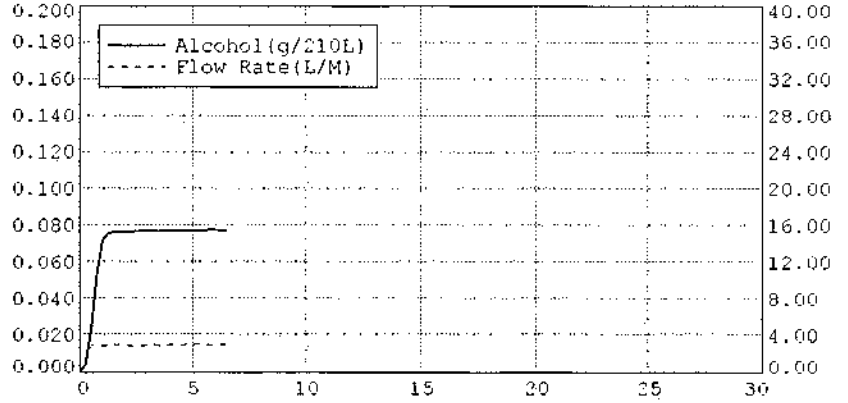
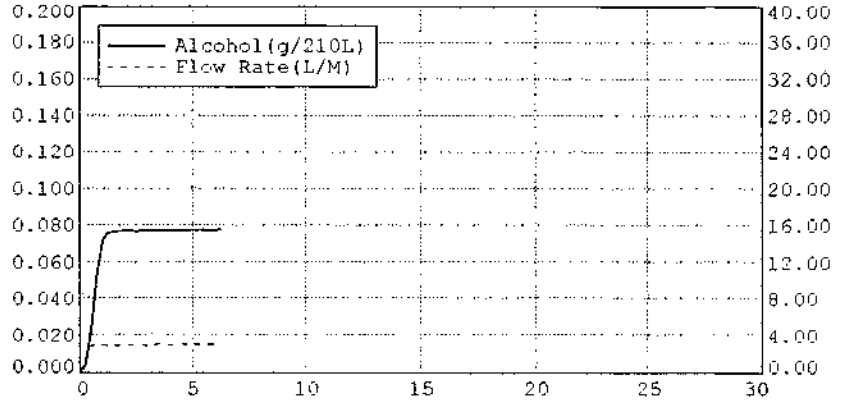
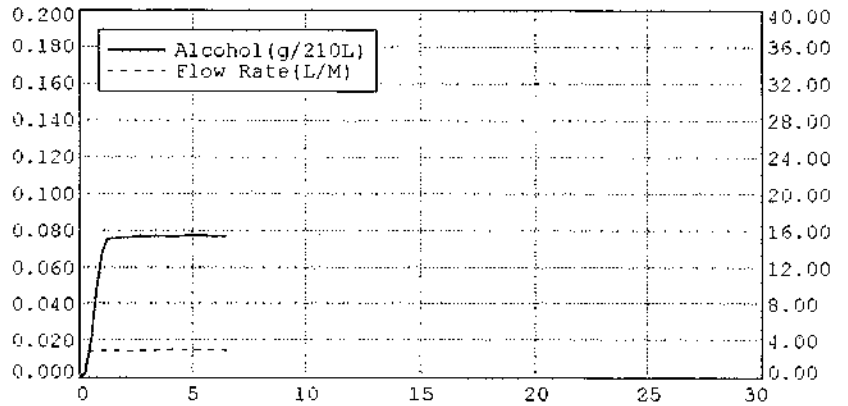
SUPERVISOR NAME:  
 COLLEEN S OBRYANT  
 OPERATOR'S #: 6237

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.38: 0.079  
 LOT #: AG608504  
 EXPIRATION: 03/25/2018  
 TANK PRESSURE: 651 psi

BLANK TEST	0.000	11:36
INTERNAL STANDARD	VERIFIED	11:36
Xq = 0.085 (0.51%)		
EXTERNAL STANDARD	0.079	11:36
X[1] = 0.0785 (0.0000) (0.0030)		
BLANK TEST	0.000	11:37
EXTERNAL STANDARD	0.079	11:37
X[1] = 0.0787 (0.0011) (0.0026)		
BLANK TEST	0.000	11:38
EXTERNAL STANDARD	0.079	11:38
X[1] = 0.0787 (0.0005) (0.0031)		
BLANK TEST	0.000	11:39
EXTERNAL STANDARD	0.079	11:40
X[1] = 0.0786 (0.0007) (0.0031)		
BLANK TEST	0.000	11:40
EXTERNAL STANDARD	0.078	11:41
X[1] = 0.0784 (0.0006) (0.0029)		
BLANK TEST	0.000	11:42

Average = 0.0788  
 Std Dev = 0.0004



SUPERVISOR TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100405

Date: 09/13/2016  
 Time: 14:45:36

SUPERVISOR NAME:  
 COLLEEN S OBRYANT  
 OPERATOR'S #: 6237

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.41: 0.079  
 LOT #: AG608504  
 EXPIRATION: 03/25/2018  
 TANK PRESSURE: 640 psi

BLANK TEST	0.000	14:46
INTERNAL STANDARD	VERIFIED	14:46
Xq = 0.087 (1.12%)		
EXTERNAL STANDARD	0.079	14:46
X[1] = 0.0787 (0.0014) (0.0020)		
BLANK TEST	0.000	14:47
EXTERNAL STANDARD	0.079	14:48
X[1] = 0.0789 (0.0009) (0.0020)		
BLANK TEST	0.000	14:49
EXTERNAL STANDARD	0.079	14:49
X[1] = 0.0791 (0.0014) (0.0022)		
BLANK TEST	0.000	14:50
EXTERNAL STANDARD	0.079	14:50
X[1] = 0.0786 (0.0004) (0.0022)		
BLANK TEST	0.000	14:51
EXTERNAL STANDARD	0.079	14:51
X[1] = 0.0788 (0.0008) (0.0017)		
BLANK TEST	0.000	14:52

Average = 0.0790  
 Std Dev = 0.0000

