

# Alaska Scientific Crime Detection Laboratory

## DataMaster Evaluation Form

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

Version: DMEF2017 R1  
Status: Active

Instrument # 100377

Date: 12/13/17

Analyst: C. O Bryant

1. Reason for instrument evaluation

Persistent gas flow error

2. Visual Inspection (internal and external)

3. O-ring inspection

4. Troubleshooting/Repair

Replaced regulator and performed a  
VOC and supervisor test.

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 #: 100377

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/13/2017

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.29: 0.078  
LOT #: AG608504  
EXPIRATION: 03/25/2018  
TANK PRESSURE: 262 psi

BLANK TEST	0.000	10:11
INTERNAL STANDARD	VERIFIED	10:11
Xg = 0.083 (1.49%)		
EXTERNAL STANDARD	0.078	10:11
X[1] = 0.0778 (-0.0001) (-0.0001)		
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.078	10:12
X[1] = 0.0778 (-0.0004) (0.0001)		
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.078	10:13
X[1] = 0.0779 (-0.0002) (-0.0001)		
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.078	10:14
X[1] = 0.0775 (-0.0006) (-0.0006)		
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.078	10:15
X[1] = 0.0780 (0.0001) (-0.0001)		
BLANK TEST	0.000	10:16

Average = 0.0780  
Std Dev = 0.0000

## Diagnostic Check

### VERSIONS

DMT: 3.02  
FTE: 2.05  
Modem: 2.6  
Questions: 2.2

### TEMPERATURES

Sample Chamber = 49.0°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 45.9°C	PASSED
(38.0°C - 50.0°C)	

### SETTINGS

Lamp Voltage = 1.70 V	PASSED
(1.09 V - 2.53 V)	
Cooler Voltage = 1.68 V	PASSED
(1.03 V - 2.39 V)	
Bias Voltage = 79 V	PASSED
(48 V - 112 V)	
Chopper Freq = 543 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.3 in	

### PUMP INFO

Flow Rate = 4.681 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

Xg = 0.082 0.75%	PASSED
(0.00% - 4.00%)	

SUPERVISOR TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100377

Date: 12/13/2017  
 Time: 09:14:15

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

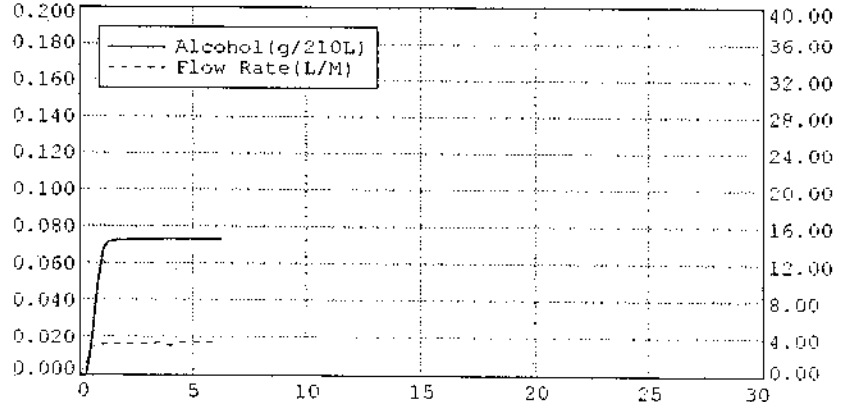
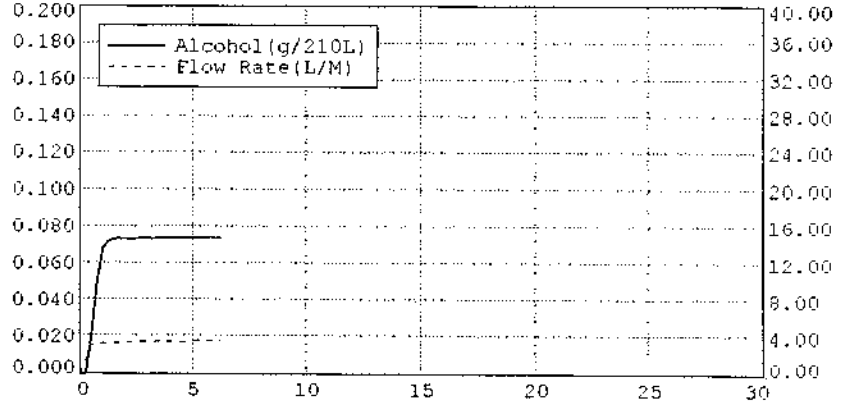
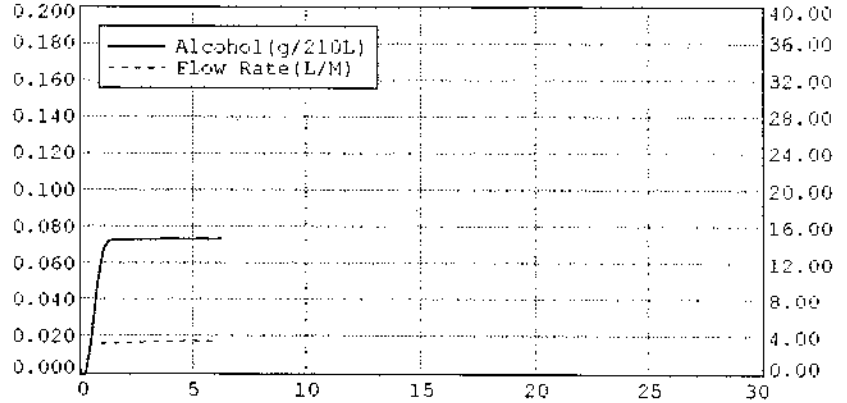
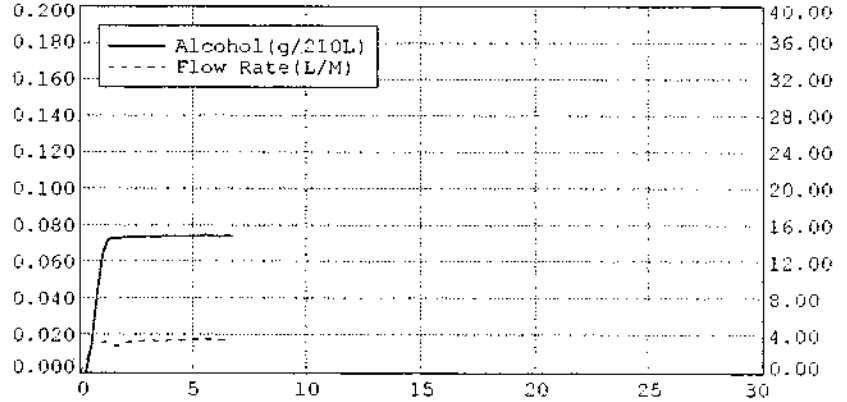
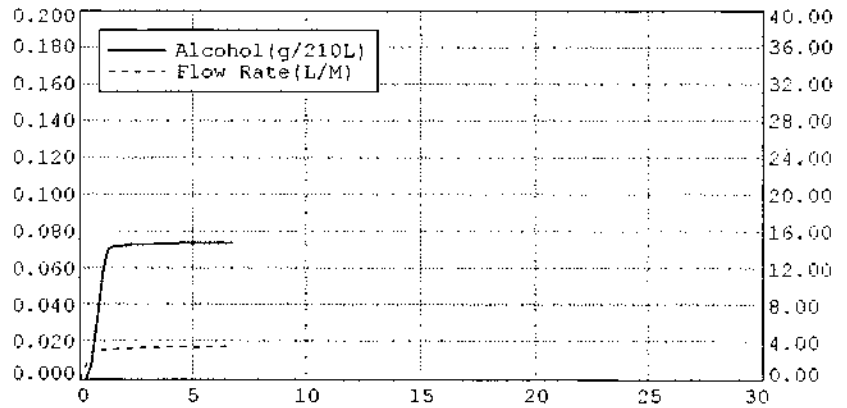
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.26: 0.078  
 LOT #: AG608504  
 EXPIRATION: 03/25/2018  
 TANK PRESSURE: 424 psi

BLANK TEST	0.000	09:19
INTERNAL STANDARD	VERIFIED	09:19
EXTERNAL STANDARD	0.076	09:19
BLANK TEST	0.000	09:20
EXTERNAL STANDARD	0.076	09:20
BLANK TEST	0.000	09:21
EXTERNAL STANDARD	0.075	09:21
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.075	09:23
BLANK TEST	0.000	09:23
EXTERNAL STANDARD	0.075	09:24
BLANK TEST	0.000	09:25

Average = 0.0754  
 Std Dev = 0.0005

*Tank #1*



SUPERVISOR TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100377

Date: 12/13/2017  
 Time: 09:29:46

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

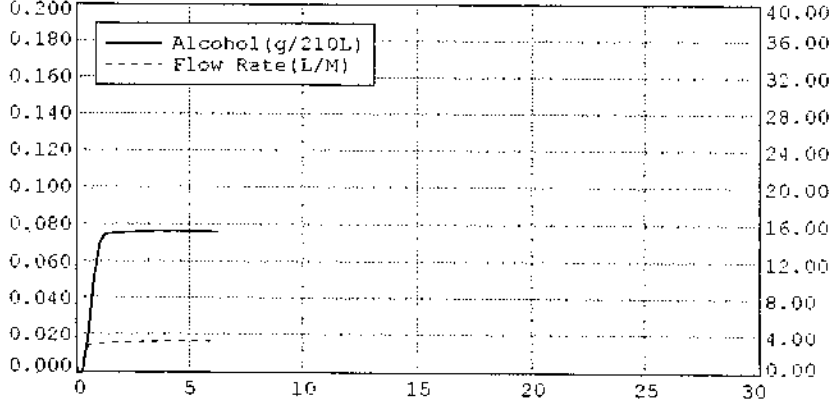
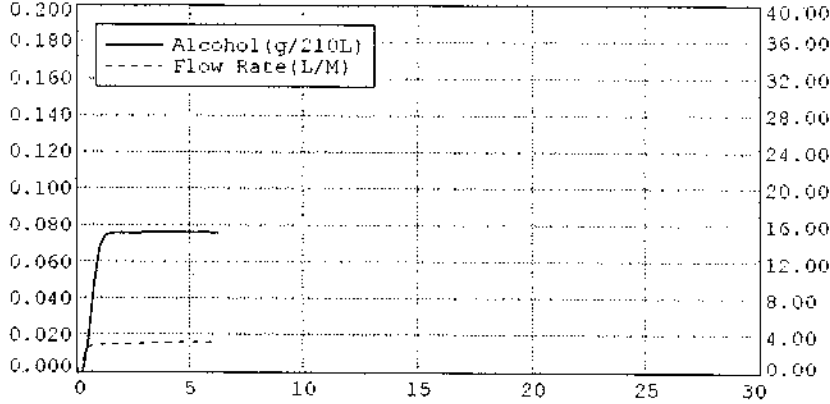
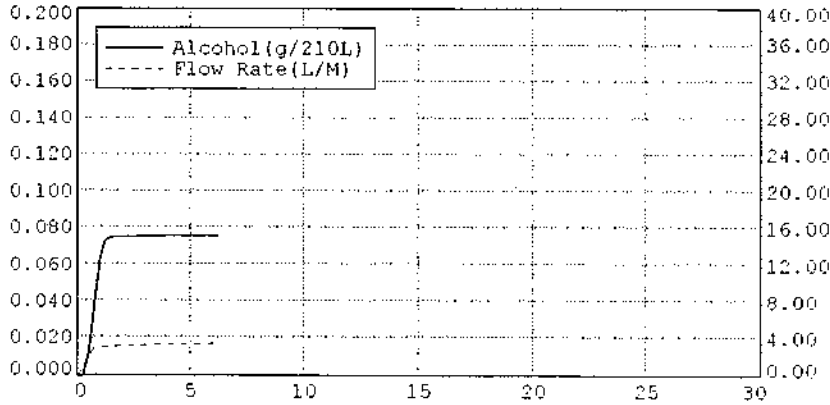
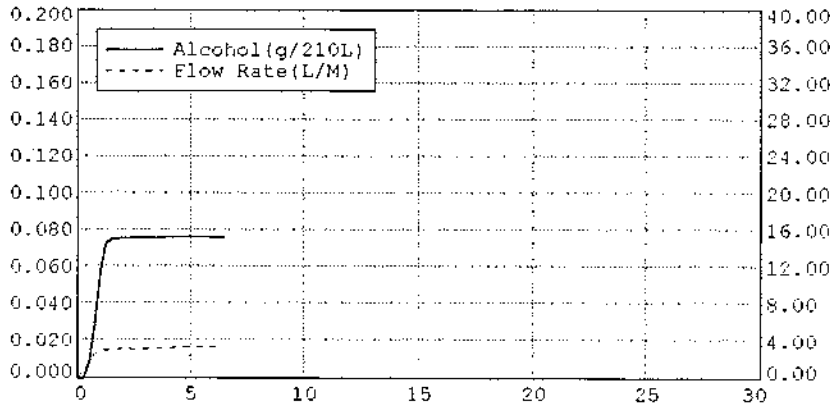
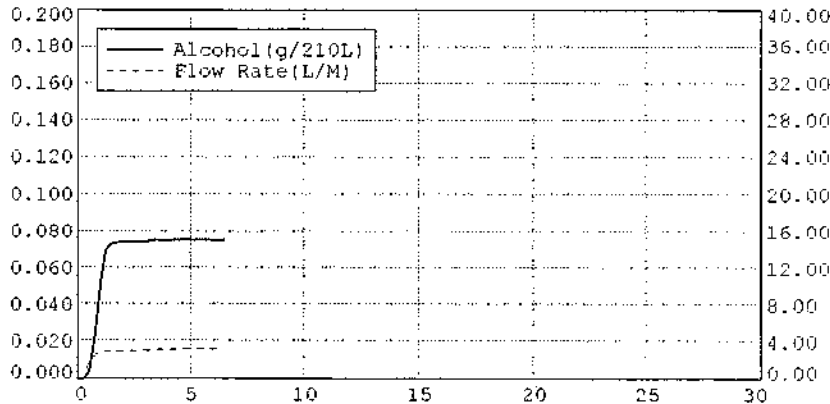
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.25: 0.078  
 LOT #: AG608504  
 EXPIRATION: 03/25/2018  
 TANK PRESSURE: 284 psi

BLANK TEST	0.000	09:31
INTERNAL STANDARD	VERIFIED	09:31
EXTERNAL STANDARD	0.077	09:31
BLANK TEST	0.000	09:32
EXTERNAL STANDARD	0.078	09:32
BLANK TEST	0.000	09:33
EXTERNAL STANDARD	0.077	09:33
BLANK TEST	0.000	09:34
EXTERNAL STANDARD	0.078	09:34
BLANK TEST	0.000	09:35
EXTERNAL STANDARD	0.078	09:35
BLANK TEST	0.000	09:36

Average = 0.0776  
 Std Dev = 0.0005

*Tank #2*



Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

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

Version: DMEF2015 R0  
Status: Active

Instrument # 100377

Date: 5/24/17

Analyst: Colleen Bryant

1. Reason for instrument evaluation

persistent gas flow errors

2. Visual Inspection

3. Troubleshooting/Repair

Replaced regulator and ran a series of  
supervisor tests + a VOC.  
◦ still got gas flow errors  
◦ uninstalled original regulator back in  
◦ replaced o-ring on original regulator  
◦ still got gas flow errors  
◦ replaced controller board  
◦ still got gas flow errors  
◦ replaced regulator (again), adjusted lamp  
voltage  
◦ still got gas flow errors

4. VOC (attached)

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

See Eval form  
from 12/13/17.

6. Verify software version

Return to Factory for Repair

Ready For Calibration

Ready For Certification

Troubleshoot instrument  
in 5/2017 and then  
replaced regulator in  
12/2017. Documented on  
updated DMEF2017 01  
COB 12/13/17