

# Alaska Scientific Crime Detection Laboratory

## DataMaster Evaluation Form

Effective: 10/10/2022

Version: 3.0

Instrument #: 100695  
Start Date: 07/18/2023  
Date Received: 07/18/2023

Analyst(s): Tatiana Malnocke

### Reason for instrument evaluation

Tank interference on subject tests, RFI on VOC, diagnostic failure on VOC x3 and elevated chopper wheel values

### Visual Inspection

- Clean
- Replace missing screws
- Cermetex Box (modem) is secure
- Ensure modem cable present
- Double Check Valve secured to wall
- All tubing and connections secure
- O-ring inspection and ensure 2 replacement O-rings in bag

### As Found Conditions:

Barometric Pressure (inHg): 29.81 Temperature (C): 22.7 Relative Humidity (%) 51%

### Linearity Test (attached)

0.020g/210L Mnf: <u>Airgas</u>	Lot: <u>A6217902</u>	Exp: <u>06/28/2024</u>
0.080g/210L Mnf: <u>Airgas</u>	Lot: <u>A6310901</u>	Exp: <u>04/19/2025</u>
0.300g/210L Mnf: <u>Airgas</u>	Lot: <u>A6217903</u>	Exp: <u>06/28/2024</u>

### Notes

- VOC (attached)
- VOC Internal Standard value  $\leq 3.00\%$
- Verify software version
- Non-Drinking Subject Test (attached)

Condition of item:  Good  Needs Repair

- Ready for Adjustment
- Ready for Calibration

End Date: 07/18/2023

LINEARITY CHECK

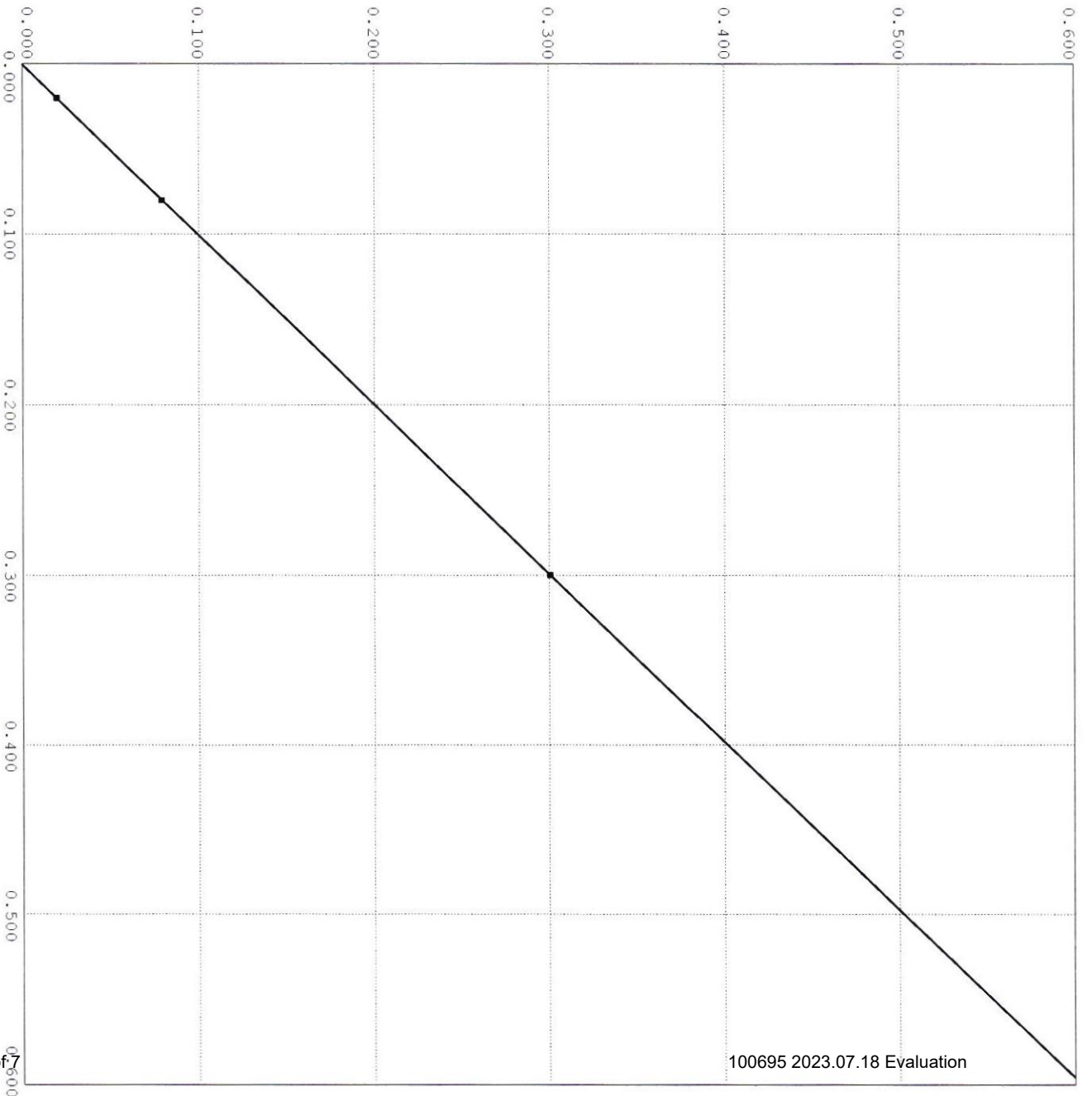
Alaska Department of Public Safety  
DATAMASTER dmt: 100695

Date: 07/18/2023  
Time: 09:58:43

SUPERVISOR NAME:  
TATIANA MALNOSKE  
OPERATOR'S #: 10437

TARGET	AVERAGE	STD. DEV.
0.020	0.0202	0.0004
0.080	0.0800	0.0000
0.299	0.3012	0.0004

SLOPE = 1.007943  
R<sup>2</sup> = 0.999995



TAM

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100695

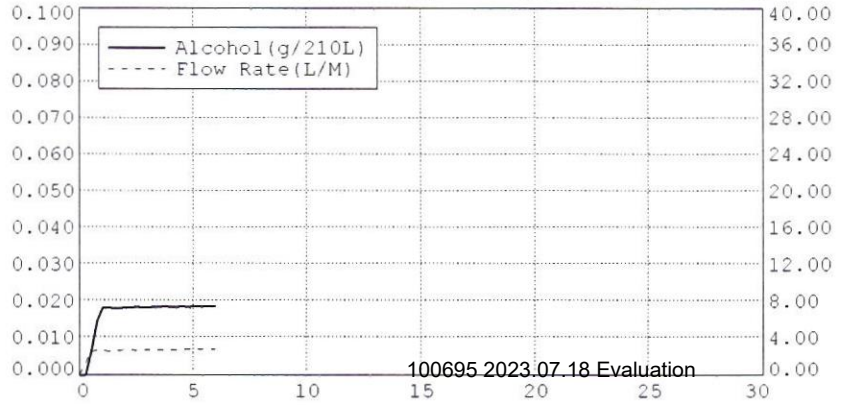
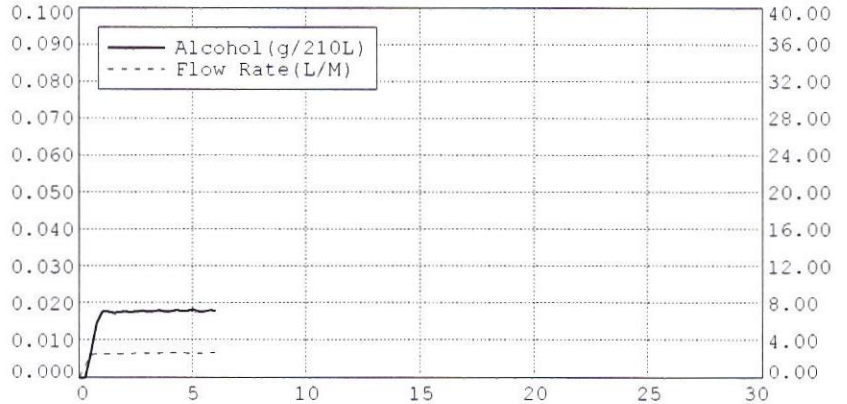
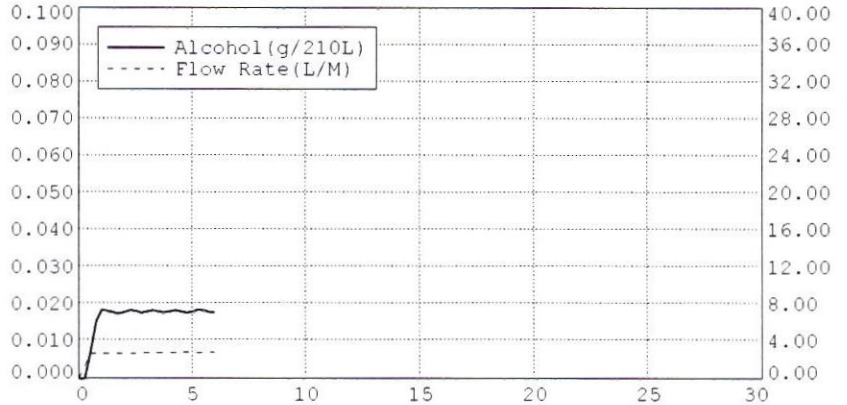
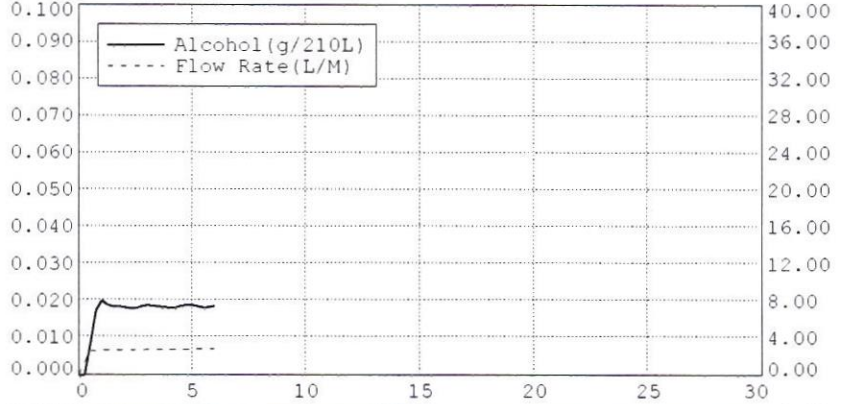
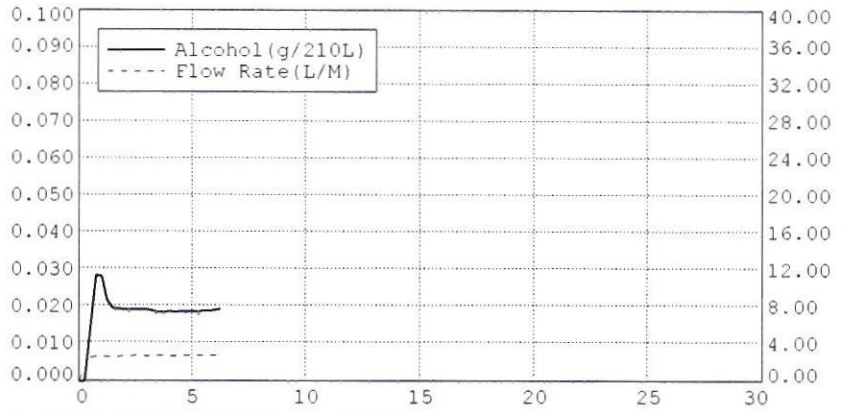
Date: 07/18/2023  
 Time: 09:58:45

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.82: 0.020  
 LOT #: AG217902  
 EXPIRATION: 06/28/2024  
 TANK PRESSURE: 913 psi

BLANK TEST	0.000	09:59
INTERNAL STANDARD	VERIFIED	10:00
EXTERNAL STANDARD	0.021	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.020	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.020	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.020	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.020	10:04
BLANK TEST	0.000	10:05

Average = 0.0202  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100695

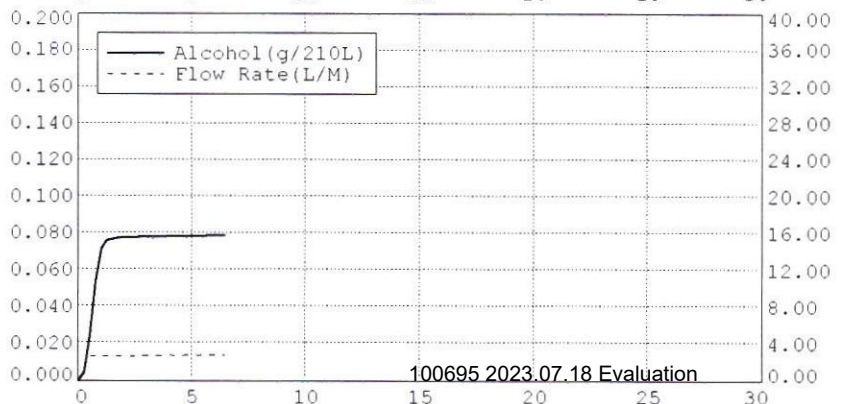
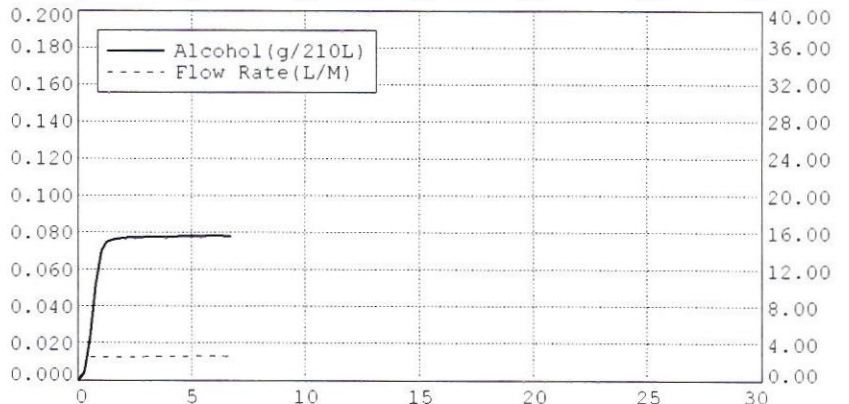
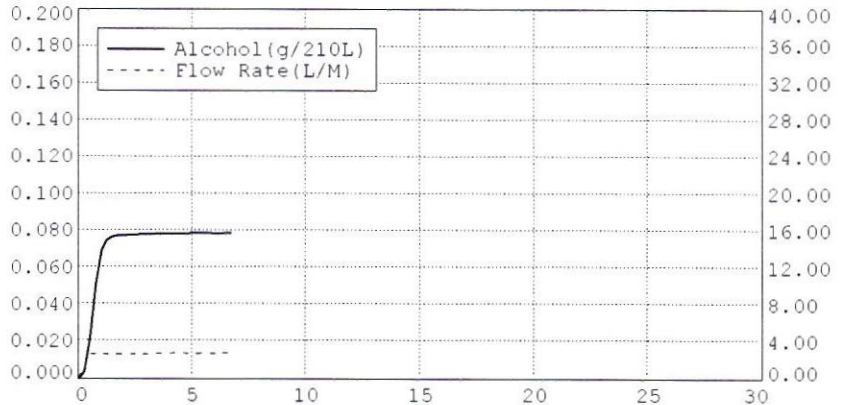
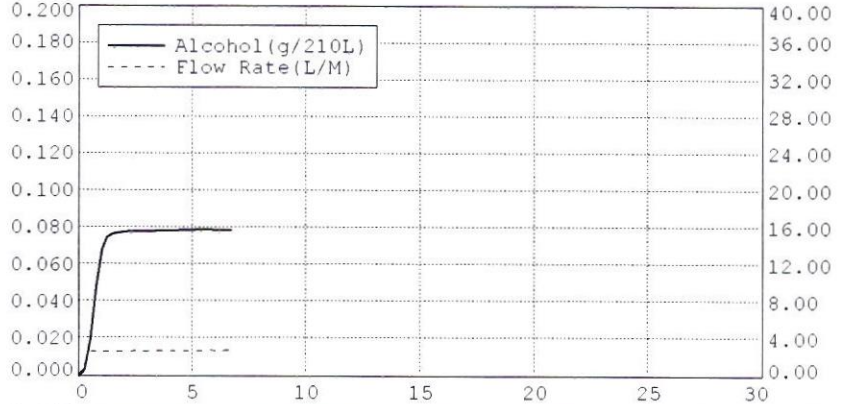
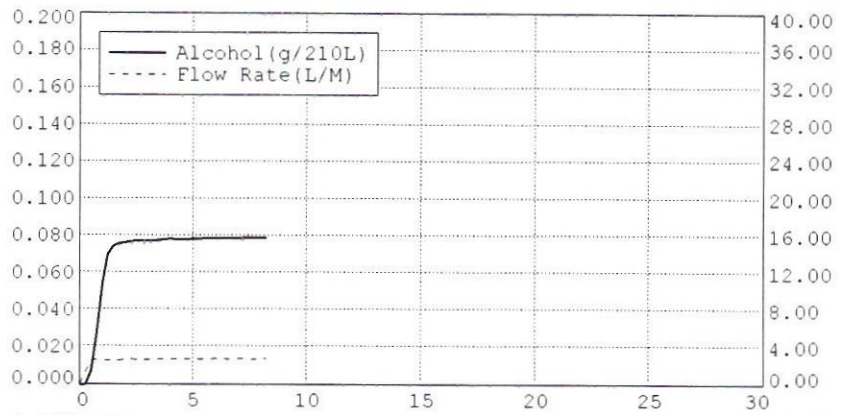
Date: 07/18/2023  
 Time: 10:32:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.83: 0.080  
 LOT #: AG310901  
 EXPIRATION: 04/19/2025  
 TANK PRESSURE: 1182 psi

BLANK TEST	0.000	10:34
INTERNAL STANDARD	VERIFIED	10:34
EXTERNAL STANDARD	0.080	10:34
BLANK TEST	0.000	10:35
EXTERNAL STANDARD	0.080	10:35
BLANK TEST	0.000	10:36
EXTERNAL STANDARD	0.080	10:36
BLANK TEST	0.000	10:37
EXTERNAL STANDARD	0.080	10:37
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.080	10:38
BLANK TEST	0.000	10:39

Average = 0.0800  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100695

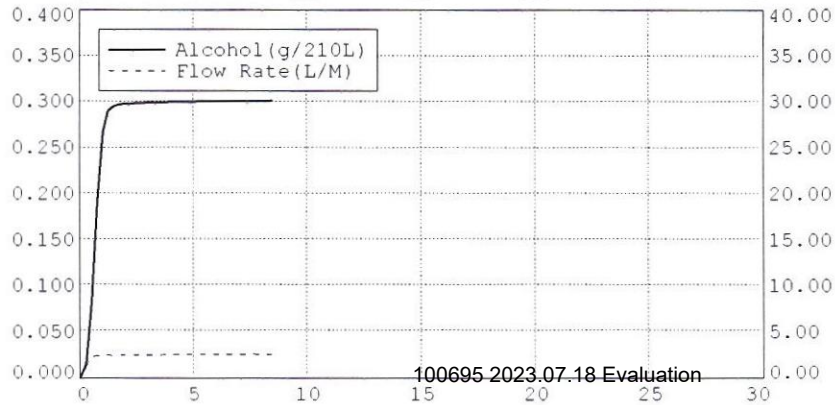
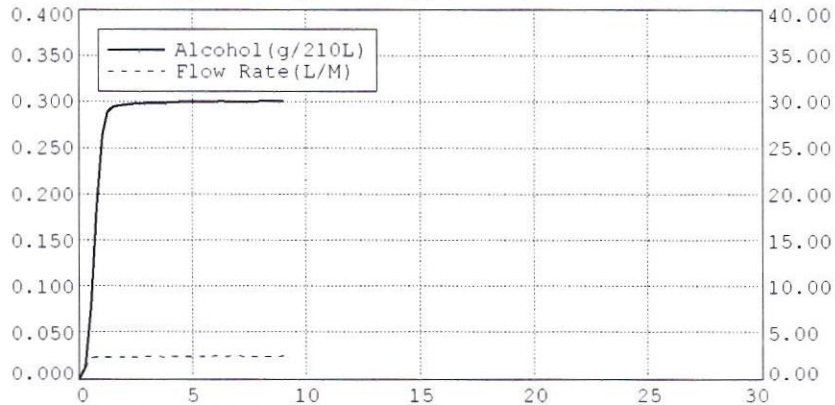
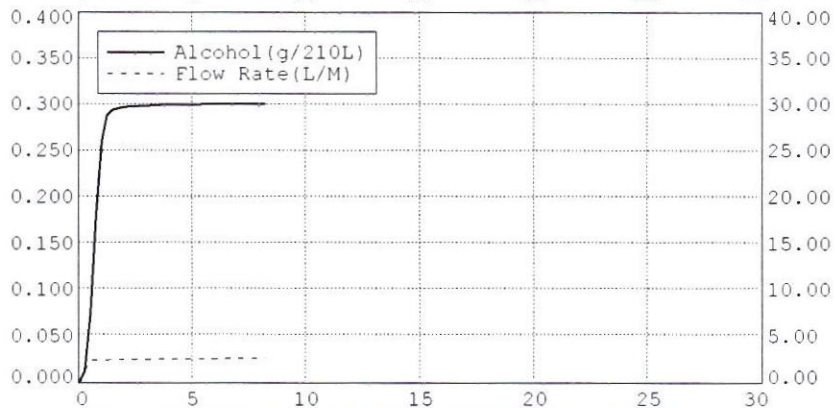
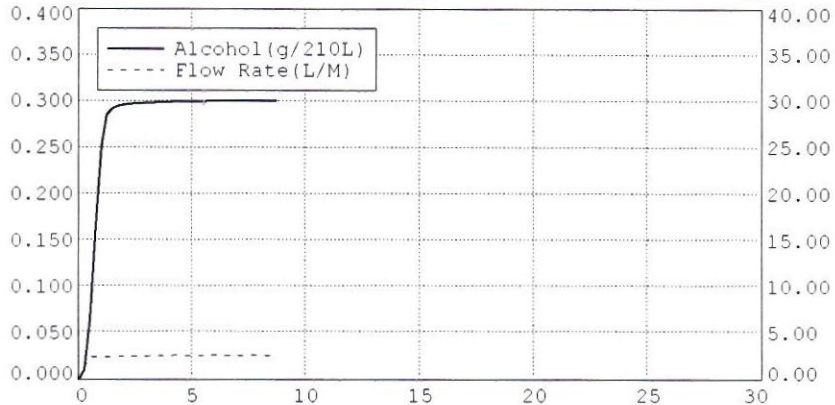
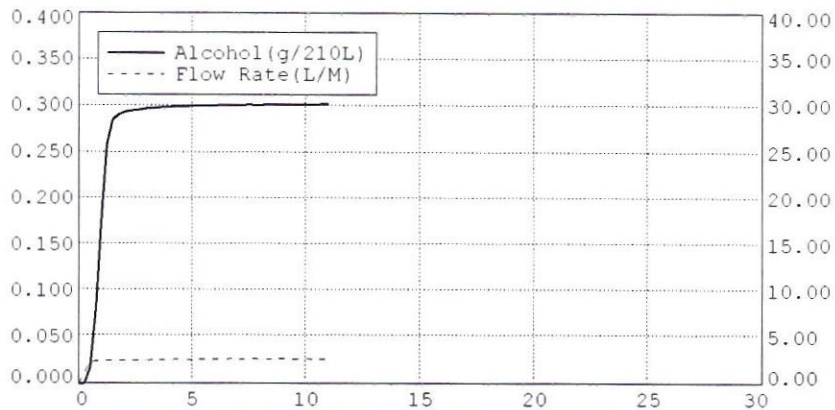
Date: 07/18/2023  
 Time: 10:41:30

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
 TARGET AT 29.83: 0.299  
 LOT #: AG217903  
 EXPIRATION: 06/28/2024  
 TANK PRESSURE: 178 psi

BLANK TEST	0.000	10:42
INTERNAL STANDARD	VERIFIED	10:42
EXTERNAL STANDARD	0.302	10:43
BLANK TEST	0.000	10:44
EXTERNAL STANDARD	0.301	10:44
BLANK TEST	0.000	10:45
EXTERNAL STANDARD	0.301	10:45
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.301	10:46
BLANK TEST	0.000	10:47
EXTERNAL STANDARD	0.301	10:47
BLANK TEST	0.000	10:48

Average = 0.3012  
 Std Dev = 0.0004



# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100695

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 07/18/2023

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.83: 0.080  
LOT #: AG310901  
EXPIRATION: 04/19/2025  
TANK PRESSURE: 1146 psi

BLANK TEST	0.000	10:54
INTERNAL STANDARD	VERIFIED	10:54
Xq = 0.112 (2.58%)		
EXTERNAL STANDARD	0.081	10:55
X[1] = 0.0809 (0.0017) (0.0033)		
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.080	10:56
X[1] = 0.0803 (0.0015) (0.0024)		
BLANK TEST	0.000	10:57
EXTERNAL STANDARD	0.080	10:57
X[1] = 0.0804 (0.0014) (0.0025)		
BLANK TEST	0.000	10:58
EXTERNAL STANDARD	0.080	10:58
X[1] = 0.0802 (0.0010) (0.0024)		
BLANK TEST	0.000	10:59
EXTERNAL STANDARD	0.080	10:59
X[1] = 0.0800 (0.0015) (0.0027)		
BLANK TEST	0.000	11:00

Average = 0.0802  
Std Dev = 0.0004

## Diagnostic Check

### VERSIONS

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

### TEMPERATURES

Sample Chamber = 48.8°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 48.1°C	PASSED
(38.0°C - 50.0°C)	

### SETTINGS

Lamp Voltage = 1.76 V	PASSED
(0.95 V - 2.23 V)	
Cooler Voltage = 1.66 V	PASSED
(0.95 V - 2.21 V)	
Bias Voltage = 79 V	PASSED
(49 V - 113 V)	
Chopper Freq = 562 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.8 in	

### PUMP INFO

Flow Rate = 4.425 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
(0.001 V <= 0.010 V)	

### FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD PASSED

Xq = 0.112 2.50% (0.00% - 4.00%)

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100695

Date: 07/18/2023  
Time: 11:02:35

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

OPERATOR NAME:  
TATIYANA MALNOSKE  
OPERATOR'S #: 10437

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.83: 0.080  
LOT #: AG310901  
EXPIRATION: 04/19/2025

DIAGNOSTIC CHECK	PASSED	11:03
BLANK TEST	0.000	11:03
INTERNAL STANDARD	VERIFIED	11:03
EXTERNAL STANDARD	0.080	11:04
BLANK TEST	0.000	11:04
SUBJECT SAMPLE (Vol=1.73L)	0.000	11:05
BLANK TEST	0.000	11:06
EXTERNAL STANDARD	0.081	11:06
BLANK TEST	0.000	11:07

TMM

