

# Alaska Scientific Crime Detection Laboratory

## DataMaster Evaluation Form

Effective: 10/10/2022

Version: 3.0

Instrument #: 100361

Analyst(s): Tatiana Malnoske

Start Date: 04/10/2023

Date Received: 04/05/2023

### Reason for instrument evaluation

LOW external standard values on 02/21/23 VOC and multiple fatal error and interference detected status messages-

### 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): 29.58 Temperature (C): 22.9 Relative Humidity (%) 10%

### Linearity Test (attached)

0.020g/210L Mnf: <u>Airgas</u>	Lot: <u>AG1217902</u>	Exp: <u>06/28/2024</u>
0.080g/210L Mnf: <u>Airgas</u>	Lot: <u>AG135004</u>	Exp: <u>12/16/2023</u>
0.300g/210L Mnf: <u>Airgas</u>	Lot: <u>AG1217903</u>	Exp: <u>06/28/2024</u>

### Notes

The values on the linearity testing and VOC looks good. They all passed. I did not get a status message during the eval.

While printing the paperwork on 04/10/23 for linearity, the screen froze.

I restarted it and the screen was just blank - I restarted the unit a second time and that seems to have fixed the issue.

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

Condition of item:  Good  Needs Repair

Ready for Adjustment

Ready for Calibration

\*Upon Technical Review, it was discovered that there was a peak in the Non-Drinking Subject Test. Needs Repair to investigate. TLM 04/24/2023

End Date: 04/11/2023

LINEARITY CHECK

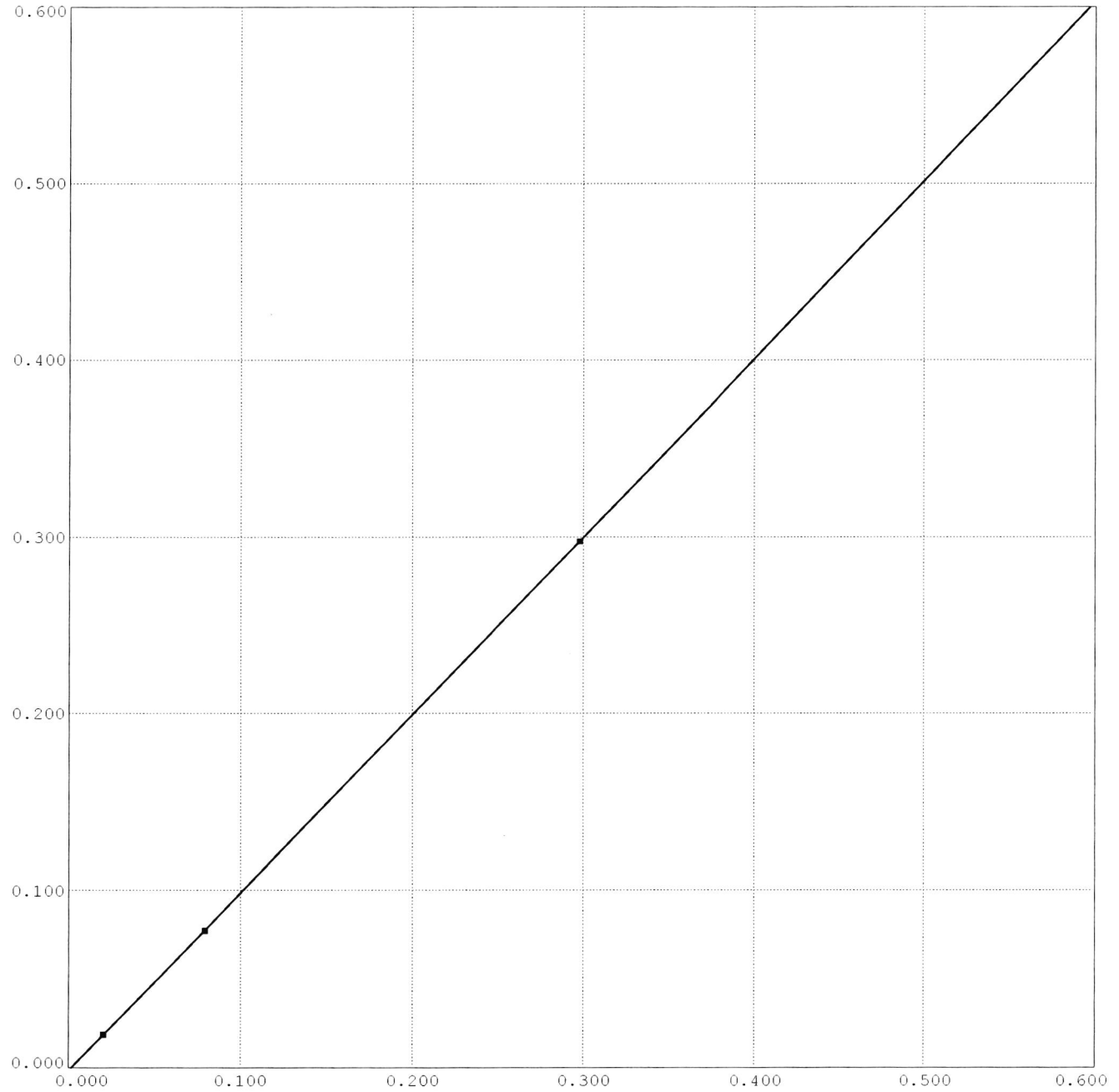
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Alaska Department of Public Safety  
DATAMASTER dmt: 100361  
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Date: 04/10/2023  
Time: 15:21:58

SUPERVISOR NAME:  
TATIANA MALNOSKE  
OPERATOR'S #: 10437

TARGET	AVERAGE	STD. DEV.
0.020	0.0192	0.0004
0.079	0.0782	0.0004
0.297	0.2982	0.0004

SLOPE = 1.007750  
R<sup>2</sup> = 0.999997



TMM

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
DATAMASTER dmt: 100361

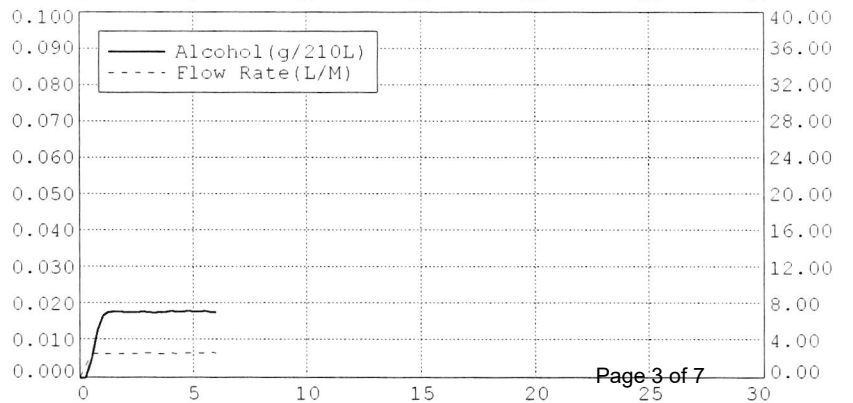
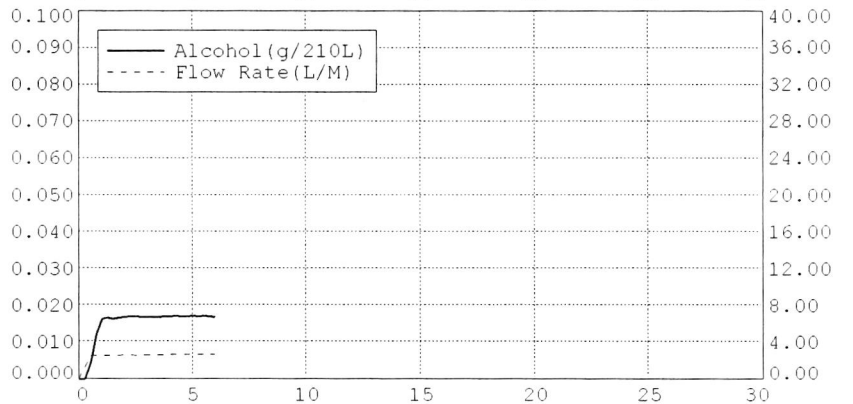
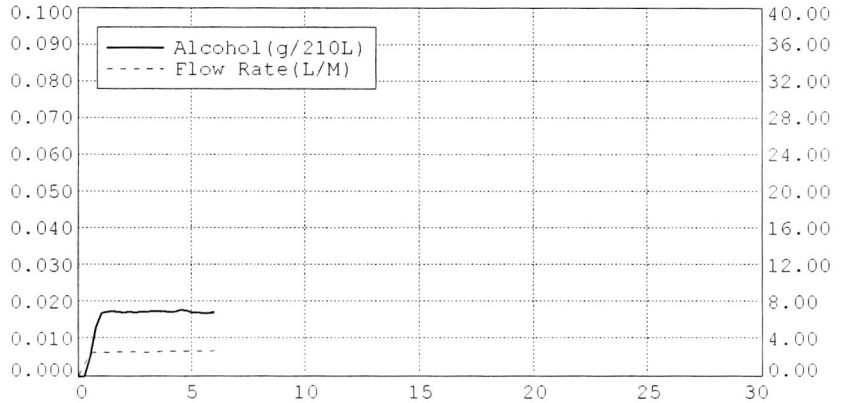
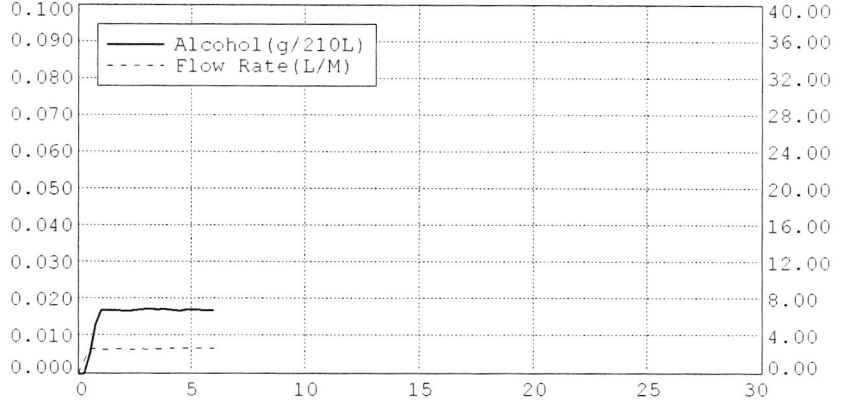
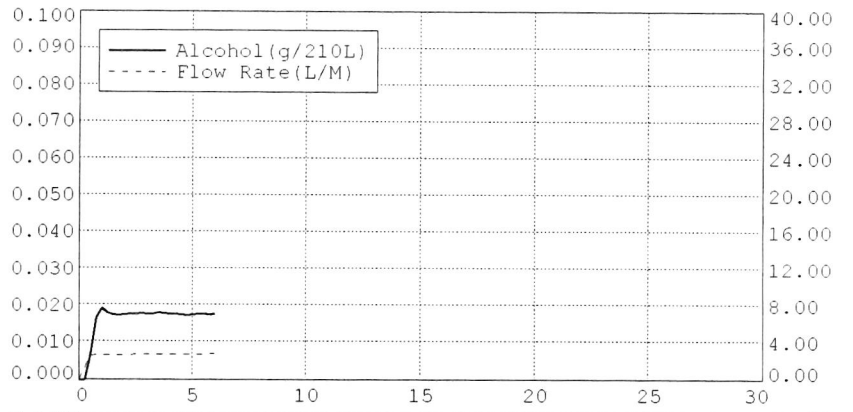
Date: 04/10/2023  
Time: 15:22:00

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
TARGET AT 29.61: 0.020  
LOT #: AG217902  
EXPIRATION: 06/28/2024  
TANK PRESSURE: 946 psi

BLANK TEST	0.000	15:23
INTERNAL STANDARD	VERIFIED	15:23
EXTERNAL STANDARD	0.019	15:23
BLANK TEST	0.000	15:24
EXTERNAL STANDARD	0.019	15:24
BLANK TEST	0.000	15:25
EXTERNAL STANDARD	0.019	15:25
BLANK TEST	0.000	15:26
EXTERNAL STANDARD	0.019	15:26
BLANK TEST	0.000	15:27
EXTERNAL STANDARD	0.020	15:27
BLANK TEST	0.000	15:28

Average = 0.0192  
Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
DATAMASTER dmt: 100361

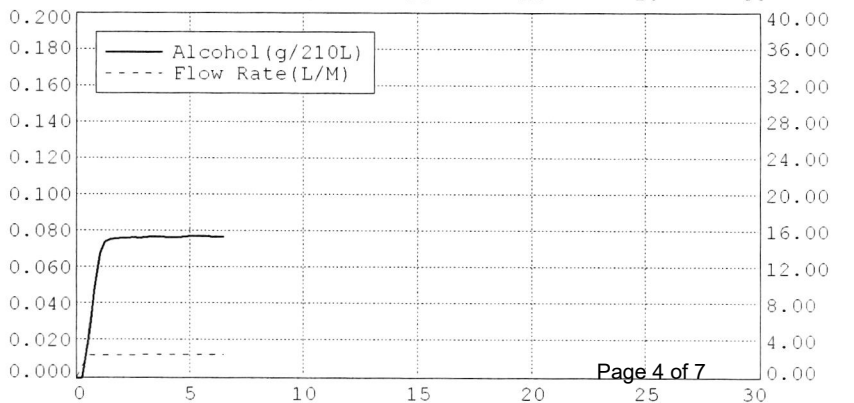
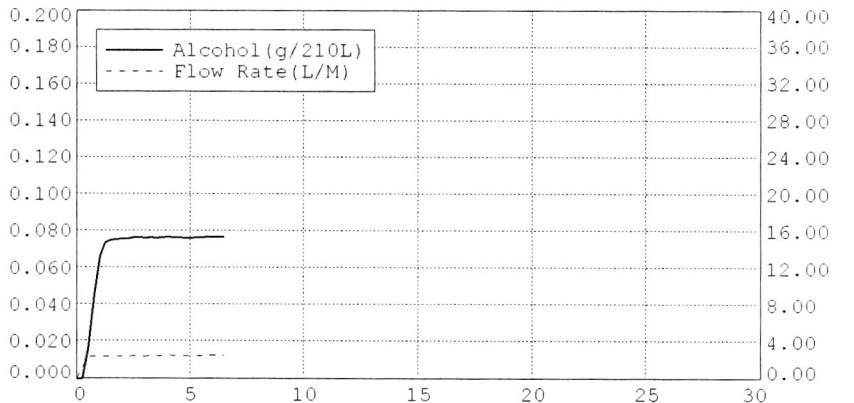
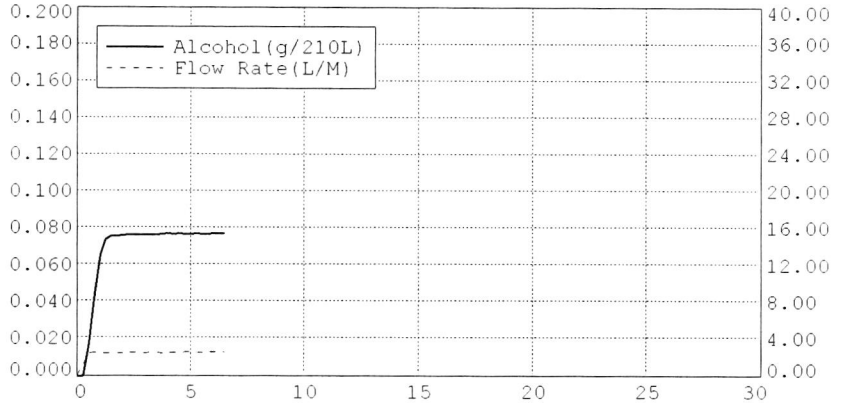
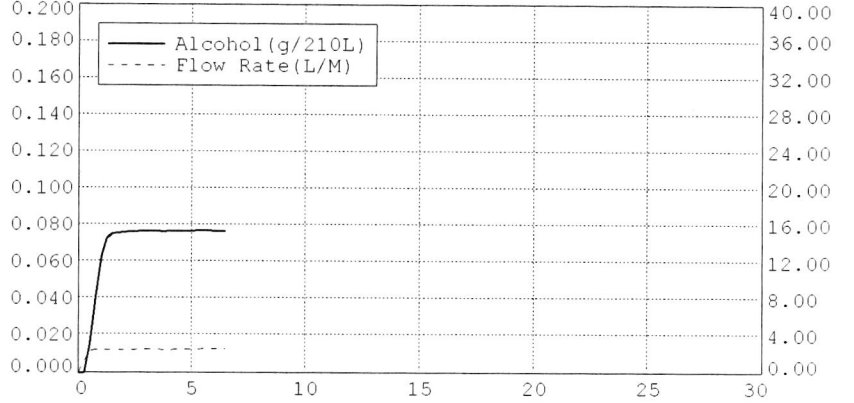
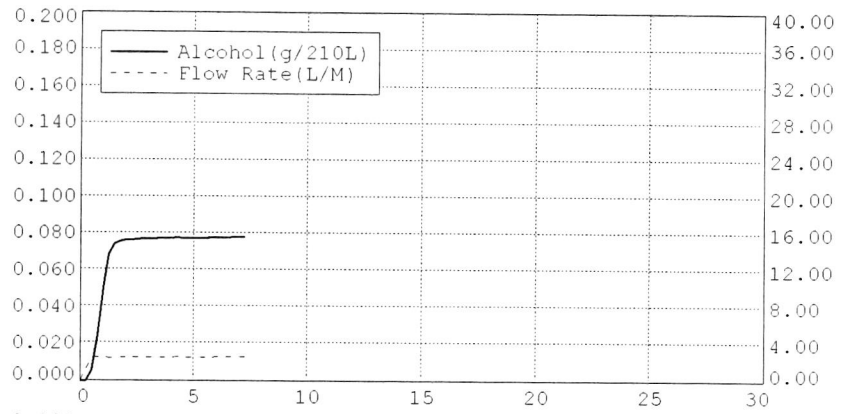
Date: 04/10/2023  
Time: 15:29:18

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.61: 0.079  
LOT #: AG135004  
EXPIRATION: 12/16/2023  
TANK PRESSURE: 472 psi

BLANK TEST	0.000	15:30
INTERNAL STANDARD	VERIFIED	15:30
EXTERNAL STANDARD	0.079	15:31
BLANK TEST	0.000	15:32
EXTERNAL STANDARD	0.078	15:32
BLANK TEST	0.000	15:33
EXTERNAL STANDARD	0.078	15:33
BLANK TEST	0.000	15:34
EXTERNAL STANDARD	0.078	15:34
BLANK TEST	0.000	15:35
EXTERNAL STANDARD	0.078	15:35
BLANK TEST	0.000	15:36

Average = 0.0782  
Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

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 Alaska Department of Public Safety  
 DATAMASTER dmt: 100361  
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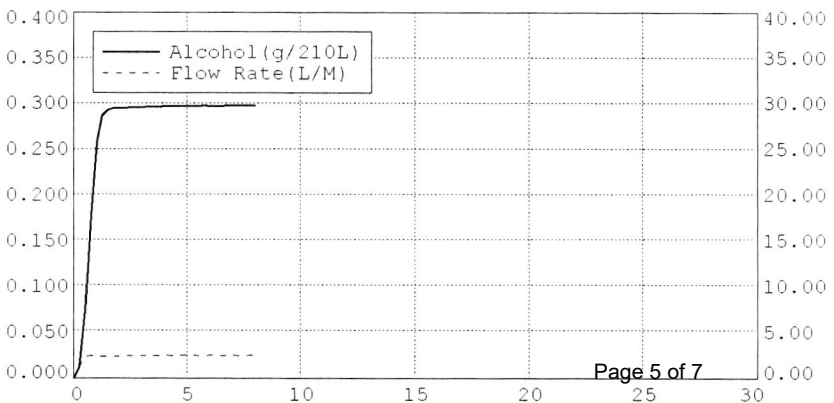
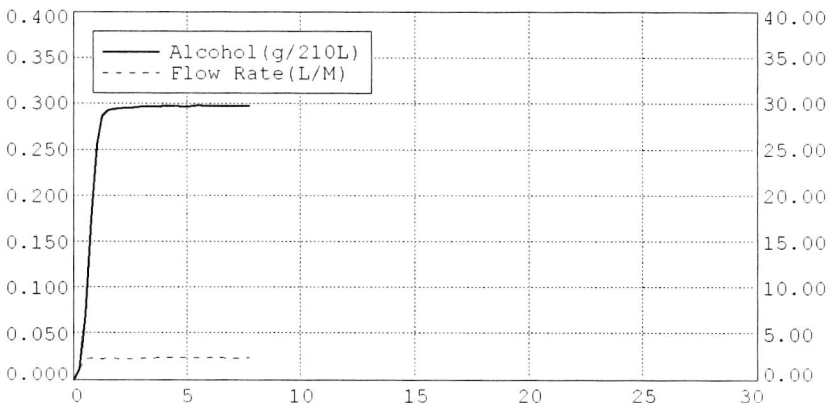
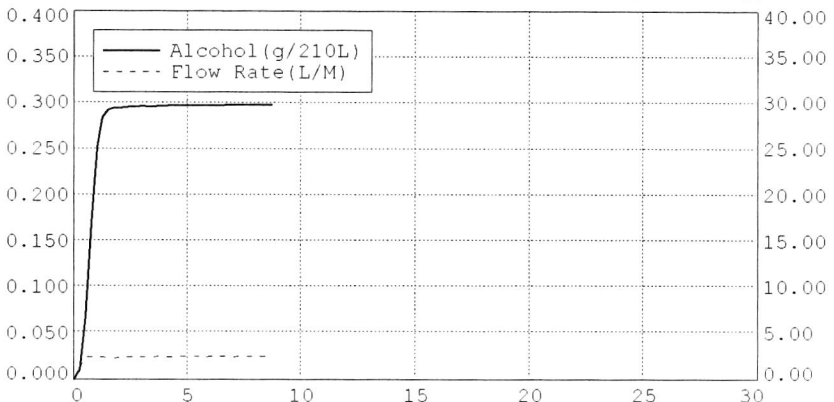
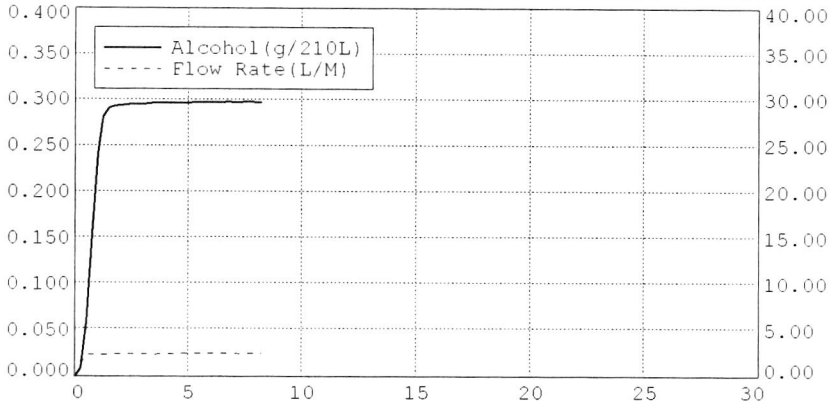
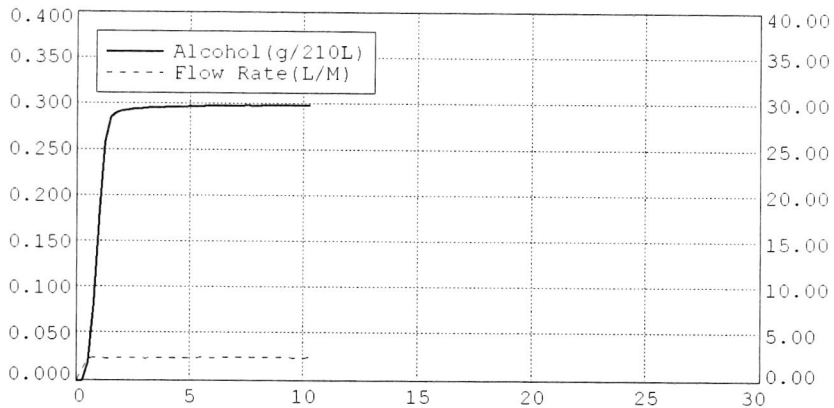
Date: 04/10/2023  
 Time: 15:37:11

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
 TARGET AT 29.61: 0.297  
 LOT #: AG217903  
 EXPIRATION: 06/28/2024  
 TANK PRESSURE: 333 psi

BLANK TEST	0.000	15:38
INTERNAL STANDARD	VERIFIED	15:38
EXTERNAL STANDARD	0.299	15:39
BLANK TEST	0.000	15:40
EXTERNAL STANDARD	0.298	15:40
BLANK TEST	0.000	15:41
EXTERNAL STANDARD	0.298	15:41
BLANK TEST	0.000	15:42
EXTERNAL STANDARD	0.298	15:42
BLANK TEST	0.000	15:43
EXTERNAL STANDARD	0.298	15:43
BLANK TEST	0.000	15:44

Average = 0.2982  
 Std Dev = 0.0004



# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100361

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 04/11/2023

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.66: 0.079  
LOT #: AG135004  
EXPIRATION: 12/16/2023  
TANK PRESSURE: 452 psi

BLANK TEST	0.000	10:43
INTERNAL STANDARD	VERIFIED	10:43
Xq = 0.088 (0.60%)		
EXTERNAL STANDARD	0.079	10:44
X[1] = 0.0792 (-0.0021) (0.0009)		
BLANK TEST	0.000	10:45
EXTERNAL STANDARD	0.078	10:45
X[1] = 0.0781 (-0.0026) (0.0021)		
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.079	10:46
X[1] = 0.0787 (-0.0018) (0.0015)		
BLANK TEST	0.000	10:47
EXTERNAL STANDARD	0.078	10:47
X[1] = 0.0780 (-0.0024) (0.0009)		
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.078	10:48
X[1] = 0.0782 (-0.0022) (0.0012)		
BLANK TEST	0.000	10:49

Average = 0.0784  
Std Dev = 0.0005

## 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 = 44.8°C	PASSED
(38.0°C - 50.0°C)	

### SETTINGS

Lamp Voltage = 1.87 V	PASSED
(1.17 V - 2.73 V)	
Cooler Voltage = 1.89 V	PASSED
(1.01 V - 2.35 V)	
Bias Voltage = 79 V	PASSED
(48 V - 112 V)	
Chopper Freq = 521 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.7 in	

### PUMP INFO

Flow Rate = 4.532 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 PASSED

Xq = 0.088 0.10% (0.00% - 4.00%)

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100361

Date: 04/11/2023  
Time: 11:05:06

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

OPERATOR NAME:  
TATIANA MALNOSKE  
OPERATOR'S #: 10437

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.68: 0.079  
LOT #: AG135004  
EXPIRATION: 12/16/2023

DIAGNOSTIC CHECK	PASSED	11:06
BLANK TEST	0.000	11:06
INTERNAL STANDARD	VERIFIED	11:06
EXTERNAL STANDARD	0.078	11:06
BLANK TEST	0.000	11:07
SUBJECT SAMPLE (Vol=1.93L)	0.000	11:07
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.079	11:08
BLANK TEST	0.000	11:09

*tmw*

