

# Alaska Scientific Crime Detection Laboratory

## DataMaster Evaluation Form

Effective: 10/10/2022

Version: 3.0

Instrument #: 100371  
Start Date: 1/25/23  
Date Received: 1/25/23

Analyst(s): C. O Bryant

Reason for instrument evaluation

Preventative Maintenance

### 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): 29.37 Temperature (C): 22.1 Relative Humidity (%) 22

### Linearity Test (attached)

0.020g/210L Mnf: Aargas Lot: AG217902 Exp: 6/28/24  
0.080g/210L Mnf: Aargas Lot: AG135004 Exp: 12/16/23  
0.300g/210L Mnf: Aargas Lot: AG217903 Exp: 6/28/24

### Notes

- 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

End Date: 1/25/23

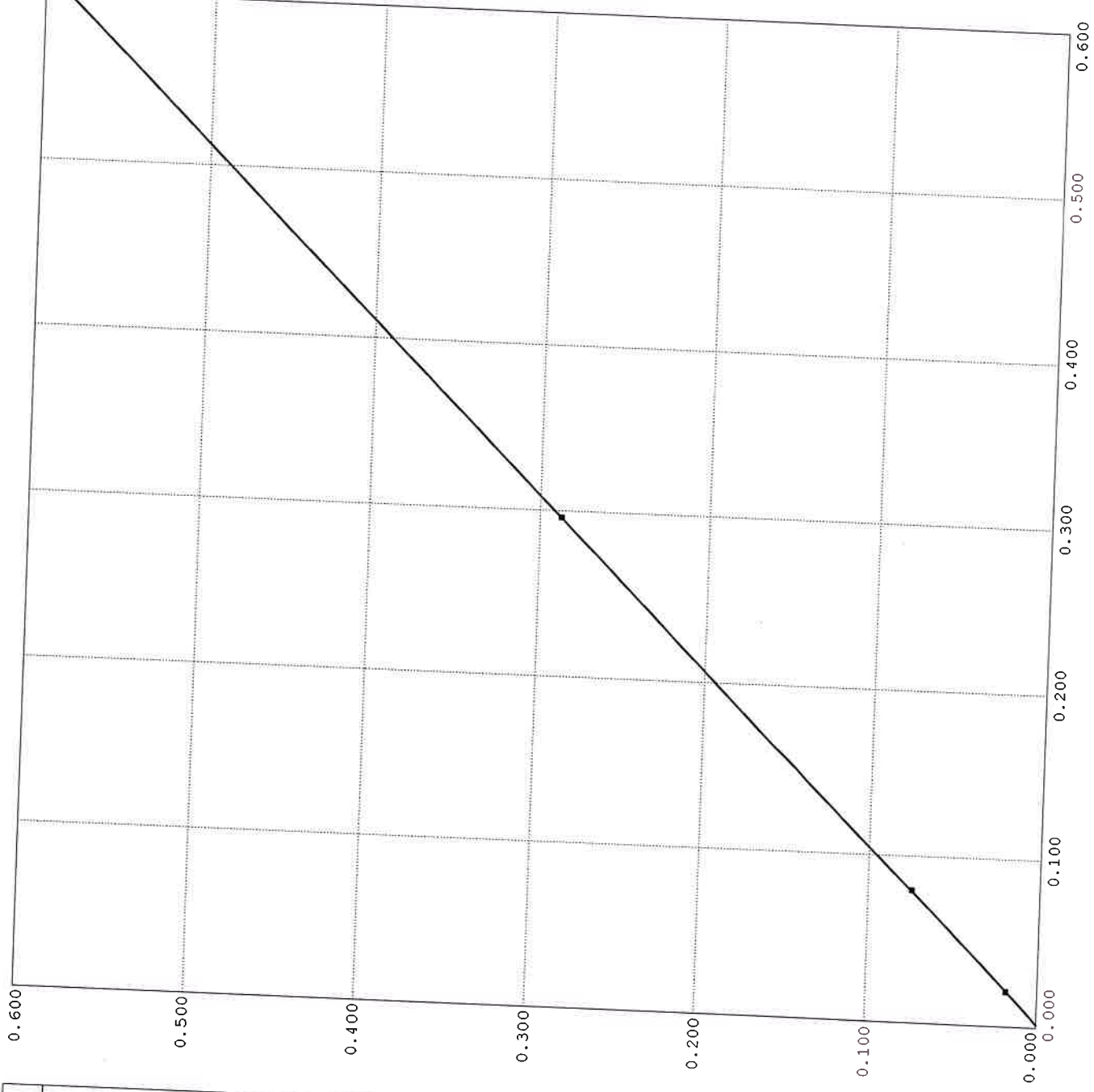
LINEARITY CHECK

-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100371  
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Date: 01/25/2023  
 Time: 11:08:02

SUPERVISOR NAME:  
 COLLEEN S O'BRYAN  
 OPERATOR'S #: 6237

TARGET	AVERAGE	STD. DEV.
0.020	0.0188	0.0004
0.079	0.0756	0.0005
0.295	0.2882	0.0008
SLOPE = 0.980883		
R <sup>2</sup> = 0.999985		



*ONS*

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100371

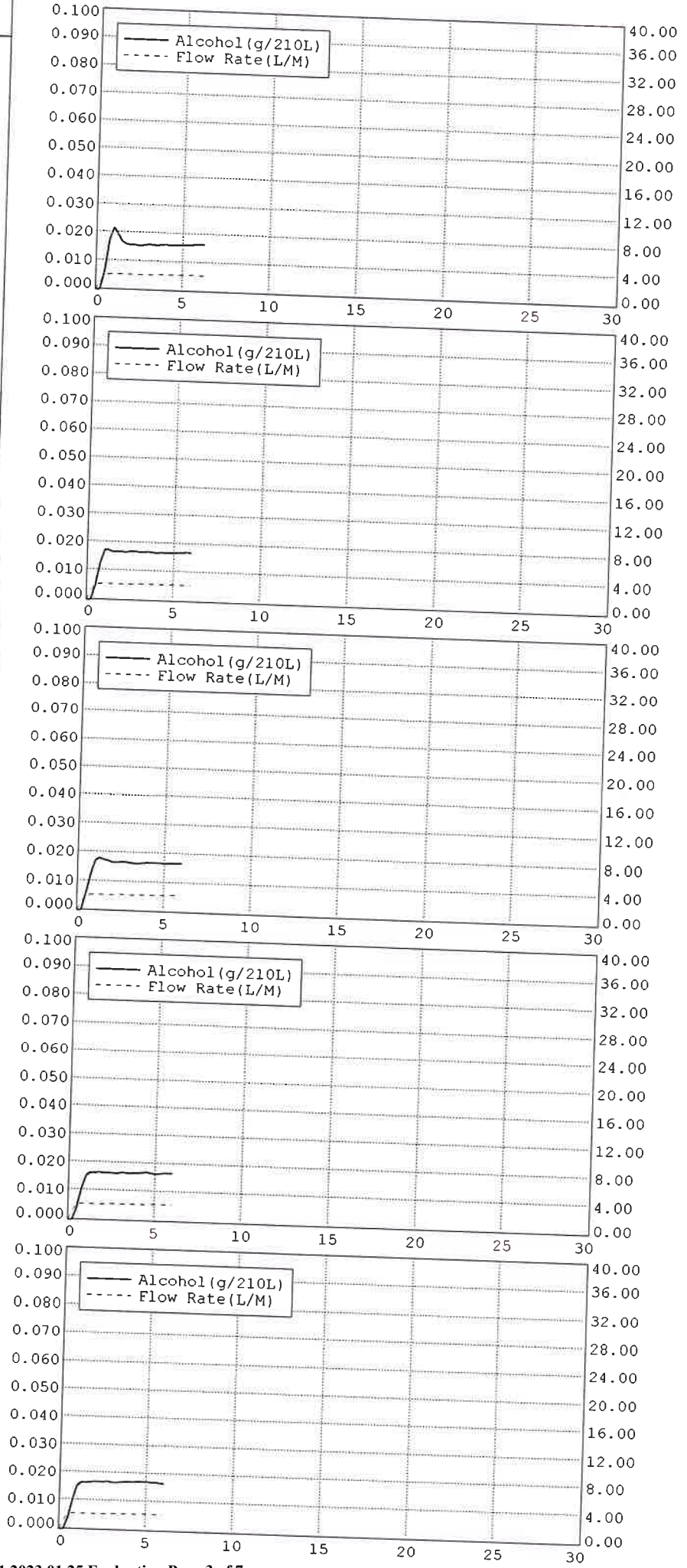
Date: 01/25/2023  
 Time: 11:08:04

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.40: 0.020  
 LOT #: AG217902  
 EXPIRATION: 06/28/2024  
 TANK PRESSURE: 1005 psi

BLANK TEST	0.000	11:09
INTERNAL STANDARD	VERIFIED	11:09
EXTERNAL STANDARD	0.018	11:09
BLANK TEST	0.000	11:10
EXTERNAL STANDARD	0.019	11:10
BLANK TEST	0.000	11:11
EXTERNAL STANDARD	0.019	11:11
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.019	11:12
BLANK TEST	0.000	11:13
EXTERNAL STANDARD	0.019	11:14
BLANK TEST	0.000	11:14

Average = 0.0188  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100371

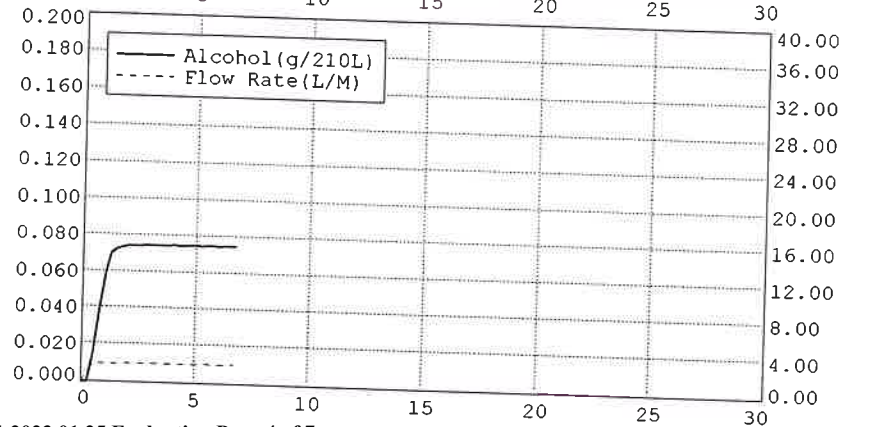
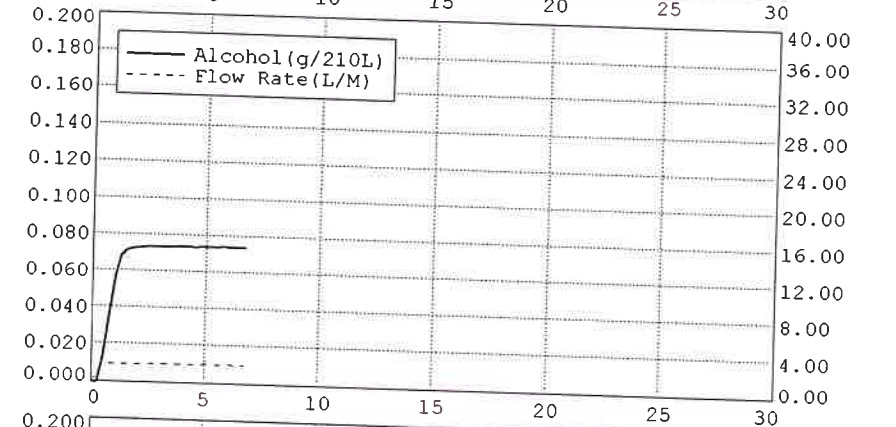
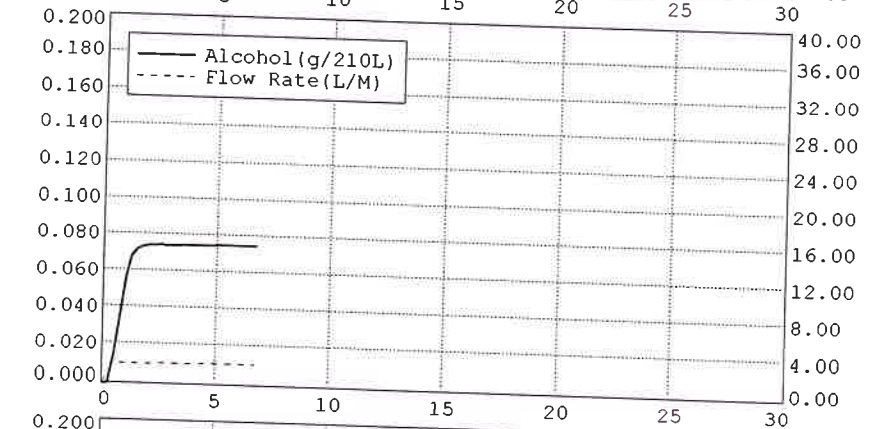
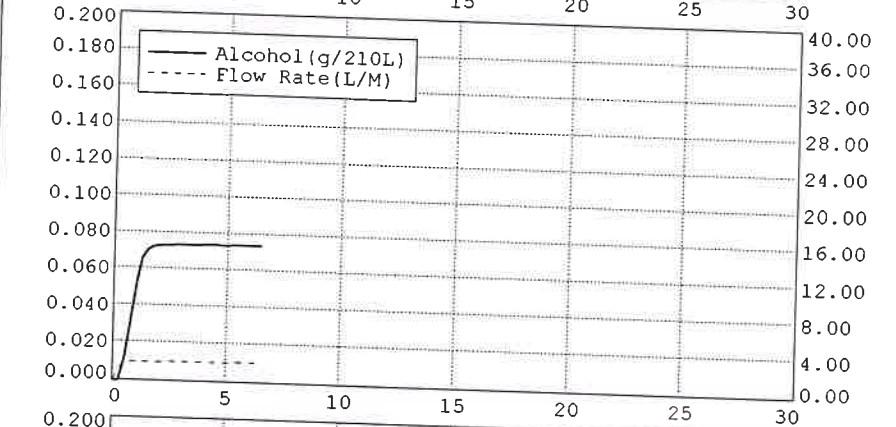
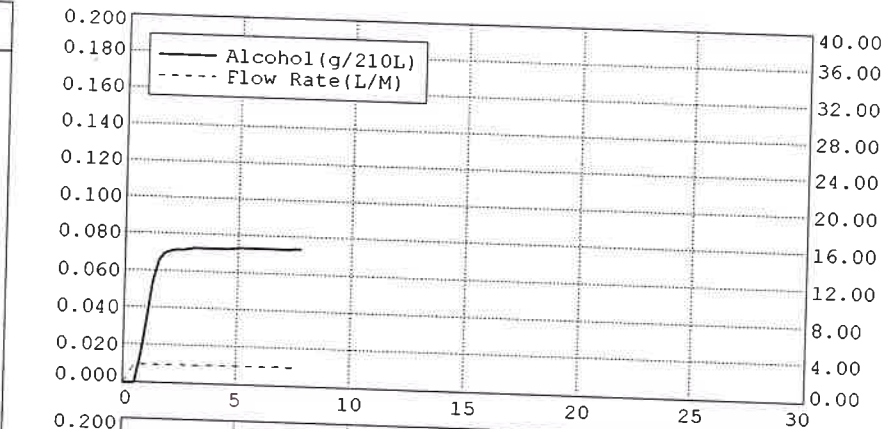
Date: 01/25/2023  
 Time: 11:16:20

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.40: 0.079  
 LOT #: AG135004  
 EXPIRATION: 12/16/2023  
 TANK PRESSURE: 656 psi

BLANK TEST	0.000	11:17
INTERNAL STANDARD	VERIFIED	11:17
EXTERNAL STANDARD	0.075	11:17
BLANK TEST	0.000	11:18
EXTERNAL STANDARD	0.075	11:18
BLANK TEST	0.000	11:19
EXTERNAL STANDARD	0.076	11:20
BLANK TEST	0.000	11:20
EXTERNAL STANDARD	0.076	11:21
BLANK TEST	0.000	11:22
EXTERNAL STANDARD	0.076	11:22
BLANK TEST	0.000	11:23

Average = 0.0756  
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100371

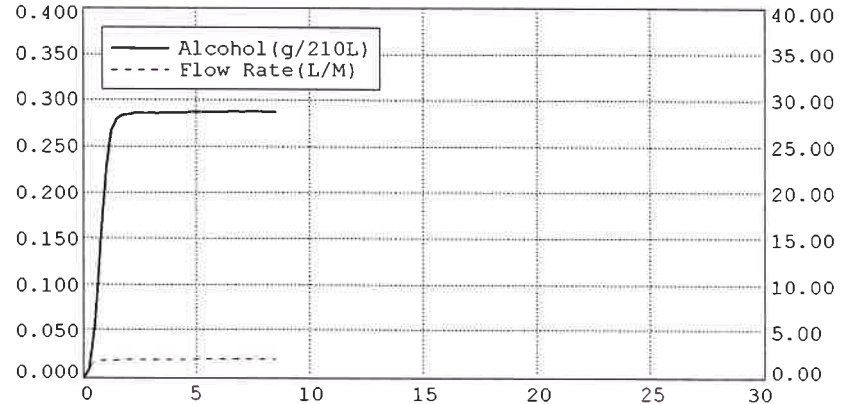
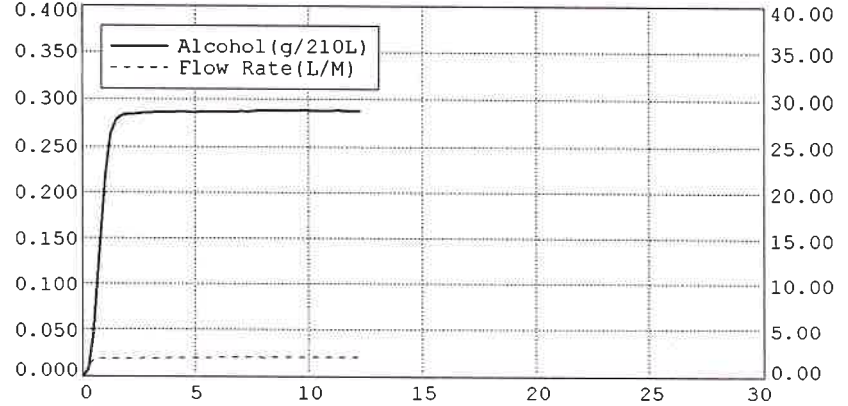
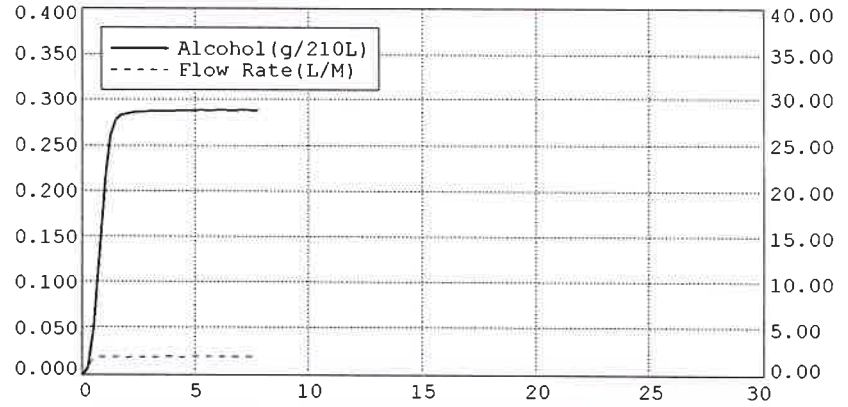
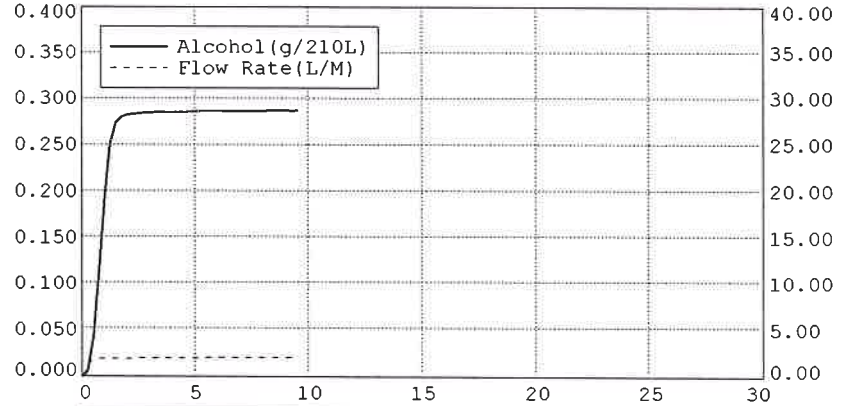
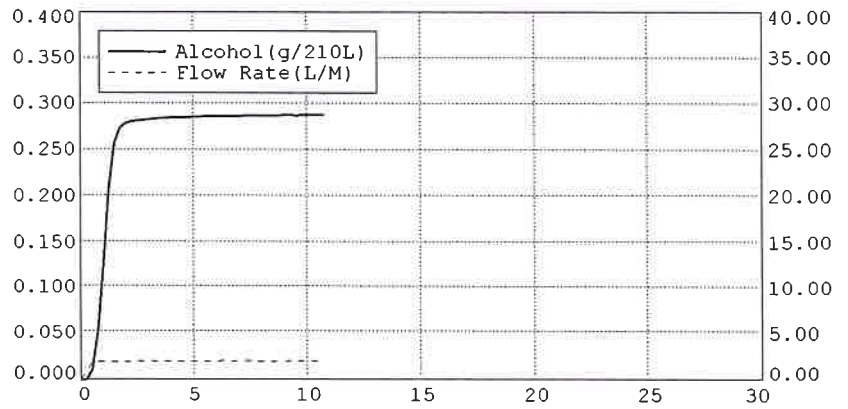
Date: 01/25/2023  
 Time: 11:23:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
 TARGET AT 29.40: 0.295  
 LOT #: AG217903  
 EXPIRATION: 06/28/2024  
 TANK PRESSURE: 471 psi

BLANK TEST	0.000	11:24
INTERNAL STANDARD	VERIFIED	11:24
EXTERNAL STANDARD	0.288	11:25
BLANK TEST	0.000	11:26
EXTERNAL STANDARD	0.287	11:26
BLANK TEST	0.000	11:27
EXTERNAL STANDARD	0.288	11:27
BLANK TEST	0.000	11:28
EXTERNAL STANDARD	0.289	11:28
BLANK TEST	0.000	11:29
EXTERNAL STANDARD	0.289	11:29
BLANK TEST	0.000	11:30

Average = 0.2882  
 Std Dev = 0.0008



# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Serial #: 100371

Date: 01/25/2023

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.41: 0.079  
LOT #: AG135004  
EXPIRATION: 12/16/2023  
TANK PRESSURE: 631 psi

BLANK TEST	0.000	11:41
INTERNAL STANDARD	VERIFIED	11:41
Xq = 0.081	(1.08%)	
EXTERNAL STANDARD	0.077	11:42
X[1] = 0.0773 (-0.0023)	(0.0013)	
BLANK TEST	0.000	11:42
EXTERNAL STANDARD	0.077	11:43
X[1] = 0.0768 (-0.0008)	(0.0017)	
BLANK TEST	0.000	11:44
EXTERNAL STANDARD	0.076	11:44
X[1] = 0.0764 (-0.0013)	(0.0011)	
BLANK TEST	0.000	11:45
EXTERNAL STANDARD	0.076	11:45
X[1] = 0.0764 (-0.0015)	(0.0014)	
BLANK TEST	0.000	11:46
EXTERNAL STANDARD	0.077	11:46
X[1] = 0.0767 (-0.0011)	(0.0012)	
BLANK TEST	0.000	11:47

Average = 0.0766  
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 = 47.0°C PASSED  
(38.0°C - 50.0°C)

### SETTINGS

Lamp Voltage = 1.83 V PASSED  
(1.00 V - 2.34 V)  
Cooler Voltage = 1.79 V PASSED  
(1.04 V - 2.44 V)  
Bias Voltage = 78 V PASSED  
(47 V - 111 V)  
Chopper Freq = 529 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.4 in

### PUMP INFO

Flow Rate = 4.367 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 = 0.081 (0.86%) (0.00% - 4.00%) PASSED

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100371

Date: 01/25/2023  
Time: 11:48:26

SUBJECT NAME:  
TEST TEST  
LICENSE #: NON-DRINKING

OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1

CASE/REPORT: 23-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.43: 0.079  
LOT #: AG135004  
EXPIRATION: 12/16/2023

DIAGNOSTIC CHECK	PASSED	11:49
BLANK TEST	0.000	11:49
INTERNAL STANDARD	VERIFIED	11:49
EXTERNAL STANDARD	0.077	11:49
BLANK TEST	0.000	11:50
SUBJECT SAMPLE (Vol=1.79L)	0.000	11:51
BLANK TEST	0.000	11:52
EXTERNAL STANDARD	0.077	11:52
BLANK TEST	0.000	11:53

CS

Alcohol (g/210L)  
Flow Rate (L/M)  
Min. Flow Rate (L/M)

