

# Alaska Scientific Crime Detection Laboratory

## DataMaster Evaluation Form

Effective: 1/18/2024

Version: 4.0

Instrument #: 100670

Analyst/Technician(s): C. O. Bryant

Start Date: 8/6/24

Date Instrument Received: 8/6/24

Reason for instrument evaluation

Screen issues, modem issues + PM due.

### Visual Inspection:

- Clean
- Cermetex Box (modem) is secure
- Double Check Valve secured to wall
- O-ring inspection and ensure 2 replacement O-rings in bag
- Replace missing screws *only 3 screws present COB 8/7/24*
- Ensure modem cable present
- All tubing and connections secure

*Third screw Fourth screw was broken off. Did not replace.*

- Attach VOC
- VOC Internal Standard  $\leq 3.00\%$
- Verify software version

Condition of item:  No apparent damage  Damaged

NOTE: As Found Linearity is required if the instrument is not damaged and the internal standard value is not more than 4.00%

### As Found Conditions (if performed):

Barometric Pressure (inHg): 29.76 Temperature (C): 21.4 Relative Humidity (%): 59

Linearity Test Levels (g/210L): 0.020, 0.080, 0.300

Notes: Modem still isn't functional, will need to be repaired.

- Attach Non-Drinking Subject Test

### Conclusion:

- Ready for Adjustment
- Needs Repair
- Ready for Calibration

Lab Work End Date: 8/7/24

# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100670

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 08/07/2024

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.77: 0.080  
LOT #: AG335202  
EXPIRATION: 12/18/2025  
TANK PRESSURE: 949 psi

BLANK TEST	0.000	14:53
INTERNAL STANDARD	VERIFIED	14:53
Xq = 0.089	(0.20%)	
EXTERNAL STANDARD	0.080	14:54
X[1] = 0.0803	(0.0017) (0.0014)	
BLANK TEST	0.000	14:54
EXTERNAL STANDARD	0.080	14:55
X[1] = 0.0803	(0.0011) (0.0012)	
BLANK TEST	0.000	14:56
EXTERNAL STANDARD	0.080	14:56
X[1] = 0.0802	(0.0013) (0.0001)	
BLANK TEST	0.000	14:57
EXTERNAL STANDARD	0.080	14:57
X[1] = 0.0804	(0.0018) (0.0008)	
BLANK TEST	0.000	14:58
EXTERNAL STANDARD	0.081	14:58
X[1] = 0.0806	(0.0023) (0.0013)	
BLANK TEST	0.000	14:59

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 = 49.0°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 48.1°C	PASSED
(38.0°C - 50.0°C)	

### SETTINGS

Lamp Voltage = 1.75 V	PASSED
(1.05 V - 2.45 V)	
Cooler Voltage = 1.68 V	PASSED
(1.01 V - 2.35 V)	
Bias Voltage = 79 V	PASSED
(47 V - 111 V)	
Chopper Freq = 518 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.8 in	

### PUMP INFO

Flow Rate = 4.884 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	PASSED
Xq = 0.088	0.59% (0.00% - 4.00%)

LINEARITY CHECK

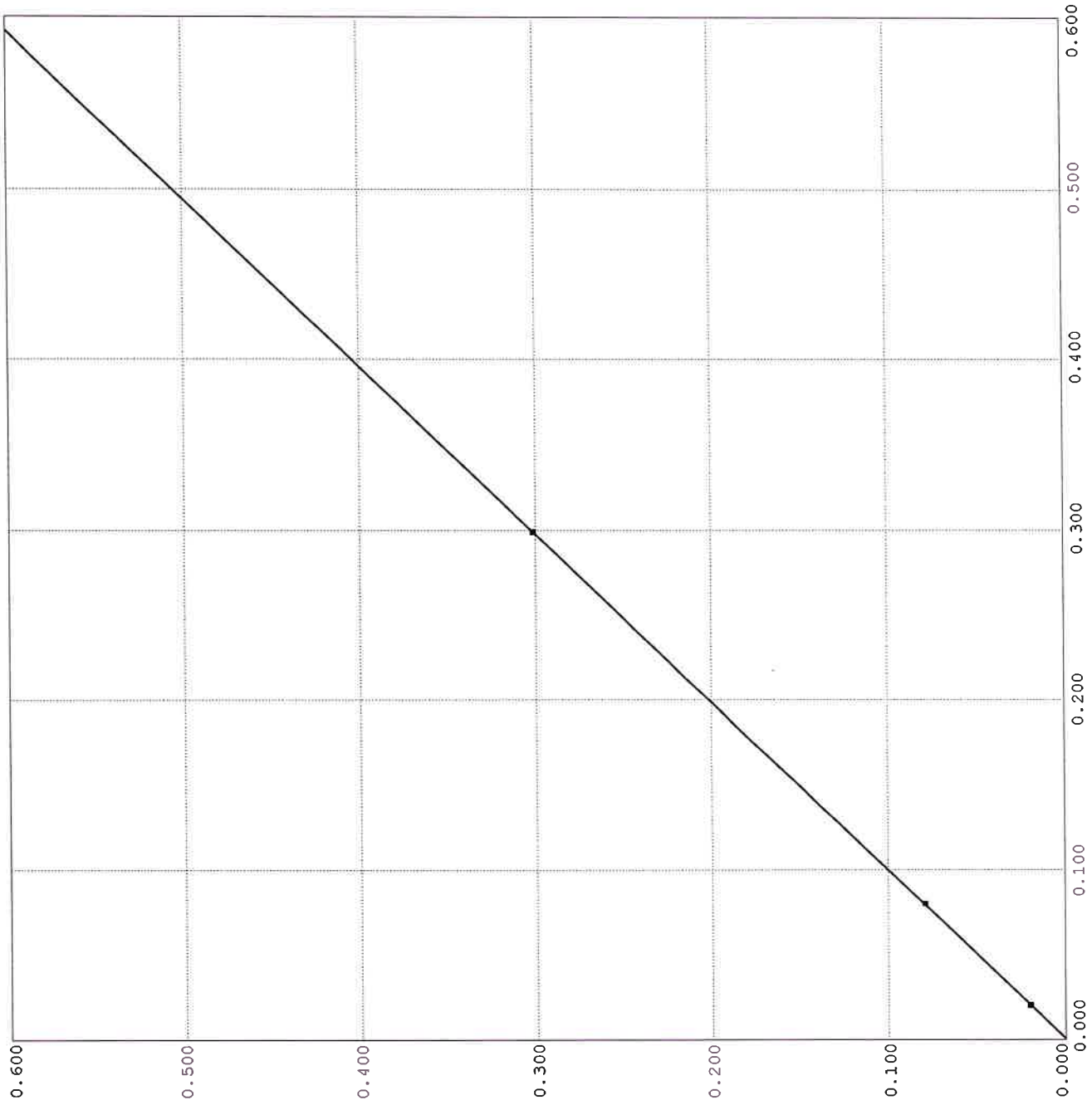
-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100670  
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Date: 08/07/2024  
 Time: 15:07:31

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0204	0.0005
0.080	0.0802	0.0004
0.298	0.3020	0.0000

SLOPE = 1.014152  
 $R^2$  = 0.999987



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
DATAMASTER dmt: 100670

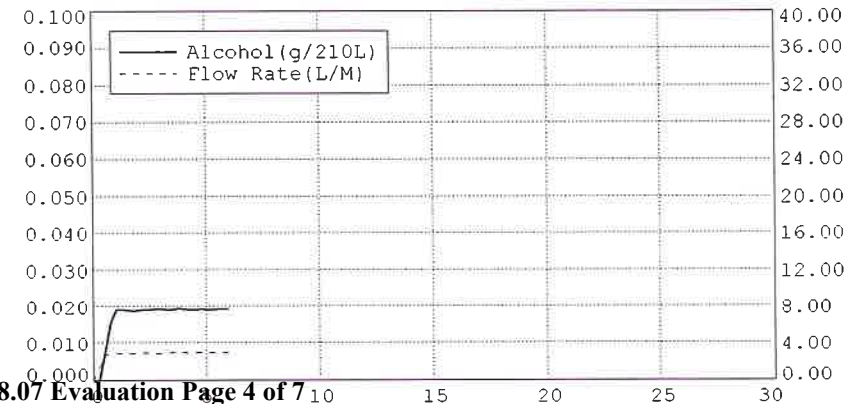
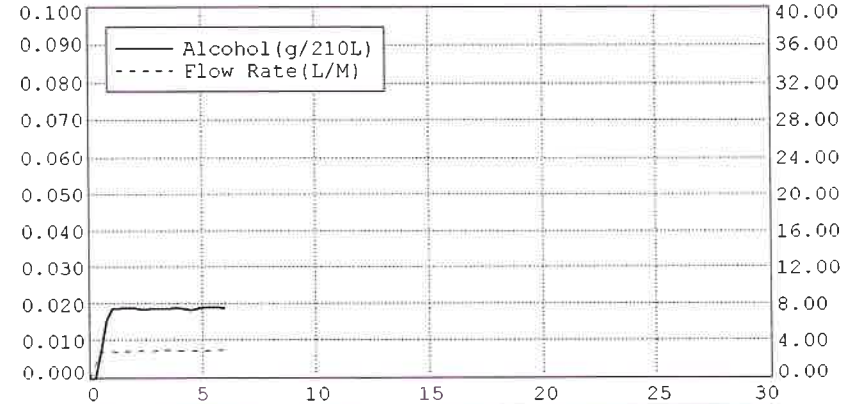
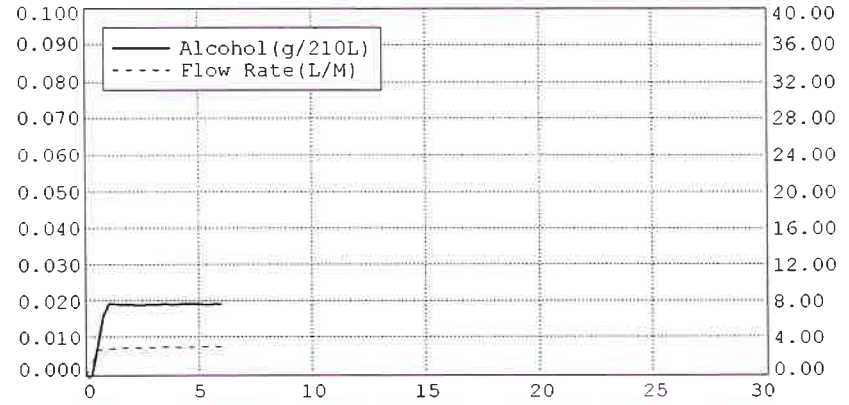
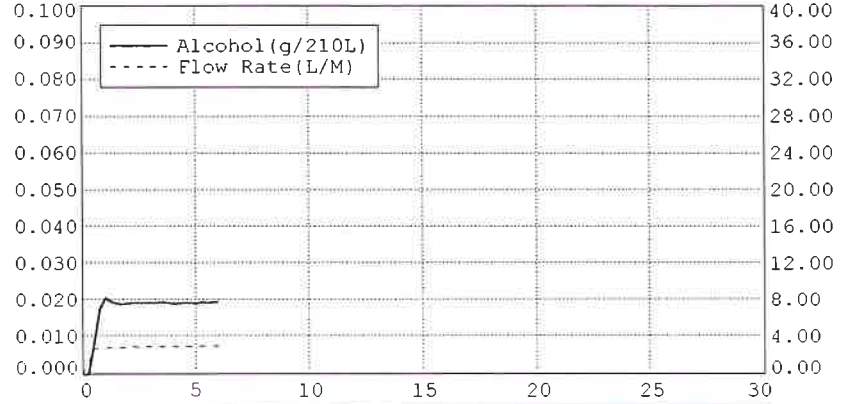
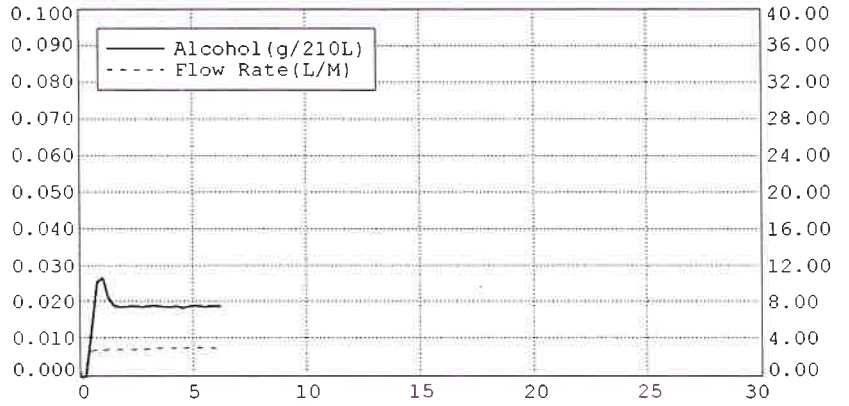
Date: 08/07/2024  
Time: 15:07:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
TARGET AT 29.77: 0.020  
LOT #: AG408002  
EXPIRATION: 03/20/2026  
TANK PRESSURE: 910 psi

BLANK TEST	0.000	15:08
INTERNAL STANDARD	VERIFIED	15:08
EXTERNAL STANDARD	0.020	15:09
BLANK TEST	0.000	15:09
EXTERNAL STANDARD	0.021	15:10
BLANK TEST	0.000	15:11
EXTERNAL STANDARD	0.021	15:11
BLANK TEST	0.000	15:12
EXTERNAL STANDARD	0.020	15:12
BLANK TEST	0.000	15:13
EXTERNAL STANDARD	0.020	15:13
BLANK TEST	0.000	15:14

Average = 0.0204  
Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
DATAMASTER dmt: 100670

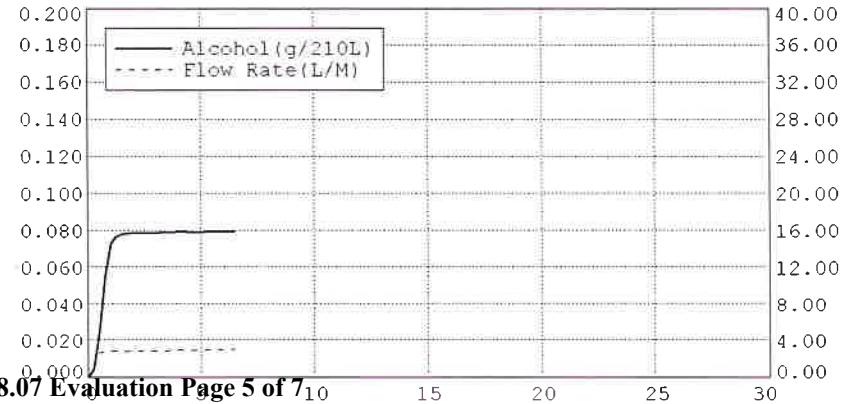
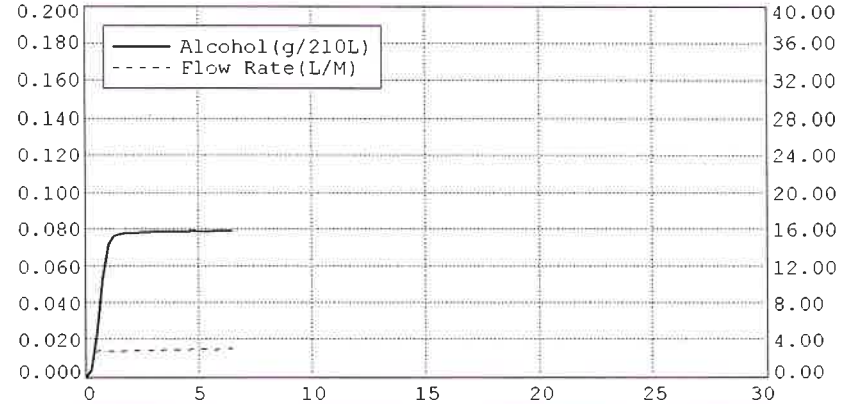
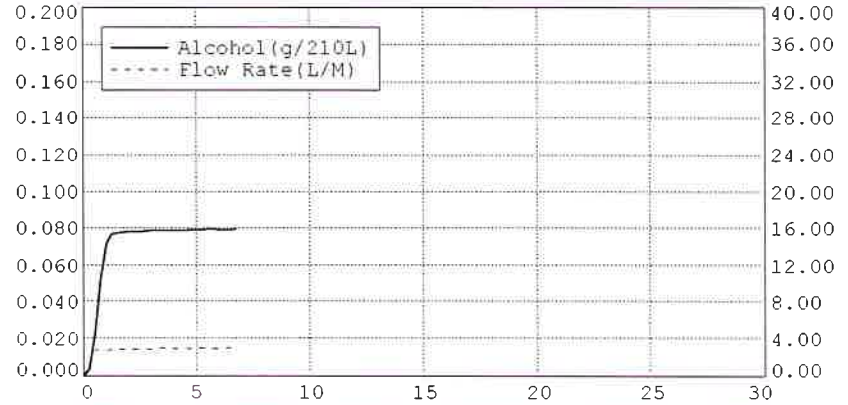
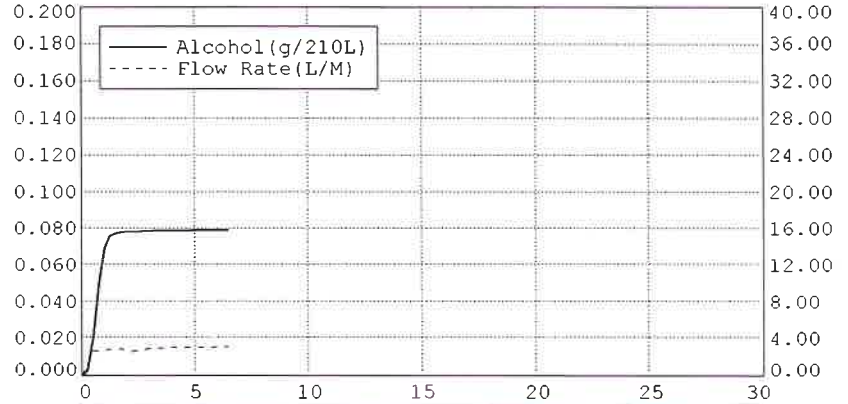
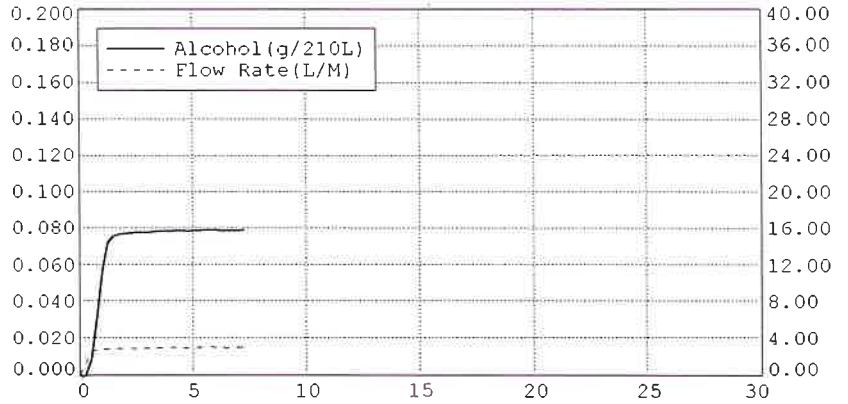
Date: 08/07/2024  
Time: 15:15:14

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.77: 0.080  
LOT #: AG335202  
EXPIRATION: 12/18/2025  
TANK PRESSURE: 928 psi

BLANK TEST	0.000	15:16
INTERNAL STANDARD	VERIFIED	15:16
EXTERNAL STANDARD	0.080	15:16
BLANK TEST	0.000	15:17
EXTERNAL STANDARD	0.080	15:18
BLANK TEST	0.000	15:18
EXTERNAL STANDARD	0.080	15:19
BLANK TEST	0.000	15:20
EXTERNAL STANDARD	0.080	15:20
BLANK TEST	0.000	15:21
EXTERNAL STANDARD	0.081	15:21
BLANK TEST	0.000	15:22

Average = 0.0802  
Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100670

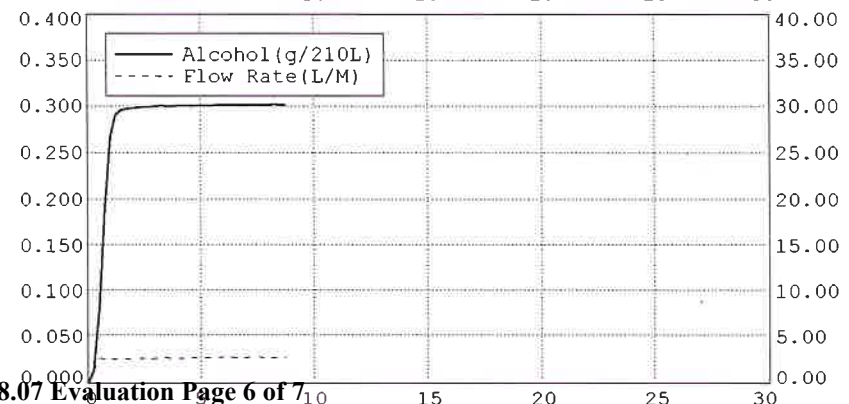
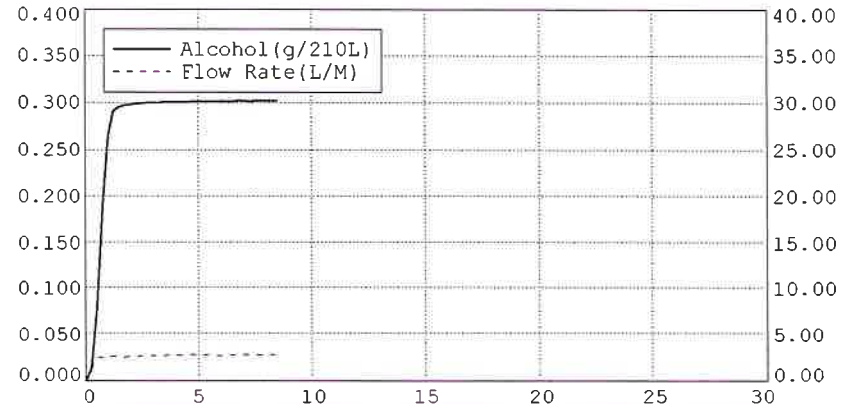
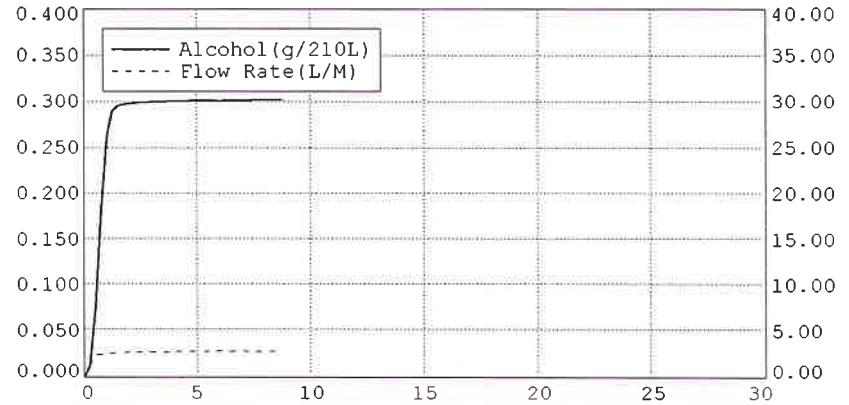
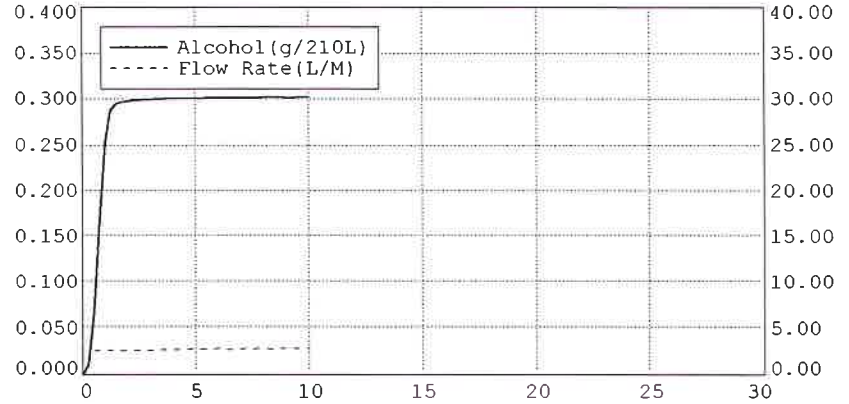
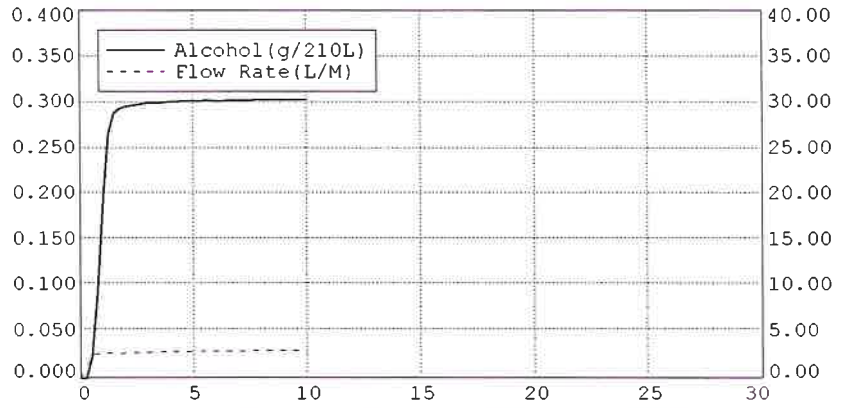
Date: 08/07/2024  
 Time: 15:22:44

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
 TARGET AT 29.77: 0.298  
 LOT #: AG327804  
 EXPIRATION: 10/05/2025  
 TANK PRESSURE: 196 psi

BLANK TEST	0.000	15:23
INTERNAL STANDARD	VERIFIED	15:24
EXTERNAL STANDARD	0.302	15:24
BLANK TEST	0.000	15:25
EXTERNAL STANDARD	0.302	15:25
BLANK TEST	0.000	15:26
EXTERNAL STANDARD	0.302	15:26
BLANK TEST	0.000	15:27
EXTERNAL STANDARD	0.302	15:27
BLANK TEST	0.000	15:28
EXTERNAL STANDARD	0.302	15:28
BLANK TEST	0.000	15:29

Average = 0.3020  
 Std Dev = 0.0000



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100670

Date: 08/07/2024  
Time: 15:32:45

SUBJECT NAME:  
TEST TEST  
LICENSE #: NON-DRINKING

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

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 24-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.78: 0.080  
LOT #: AG335202  
EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	15:33
BLANK TEST	0.000	15:33
INTERNAL STANDARD	VERIFIED	15:34
EXTERNAL STANDARD	0.082	15:34
BLANK TEST	0.000	15:35
SUBJECT SAMPLE (Vol=2.32L)	0.000	15:35
BLANK TEST	0.000	15:36
EXTERNAL STANDARD	0.081	15:36
BLANK TEST	0.000	15:37

