

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

Effective: 10/10/2022

Version: 3.0

Instrument #: 100359
Start Date: 4/13/23
Date Received: 4/13/23

Analyst(s): C. Bryant

Reason for instrument evaluation

(Detector overflow) + blank errors.

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
- Ensure modem cable present
- All tubing and connections secure

As Found Conditions:

Barometric Pressure (inHg): 29.57 Temperature (C): 21.5 Relative Humidity (%) 16

Linearity Test (attached)

0.020g/210L Mnf: <u>Airgas</u>	Lot: <u>AG217902</u>	Exp: <u>6/28/24</u>
0.080g/210L Mnf: <u>Airgas</u>	Lot: <u>AG113402</u>	Exp: <u>5/14/23</u>
0.300g/210L Mnf: <u>Airgas</u>	Lot: <u>AG217903</u>	Exp: <u>6/28/24</u>

Notes

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

(Did not perform)

Condition of item: Good Needs Repair

- Ready for Adjustment
- Ready for Calibration

End Date: 4/4/23

LINEARITY CHECK

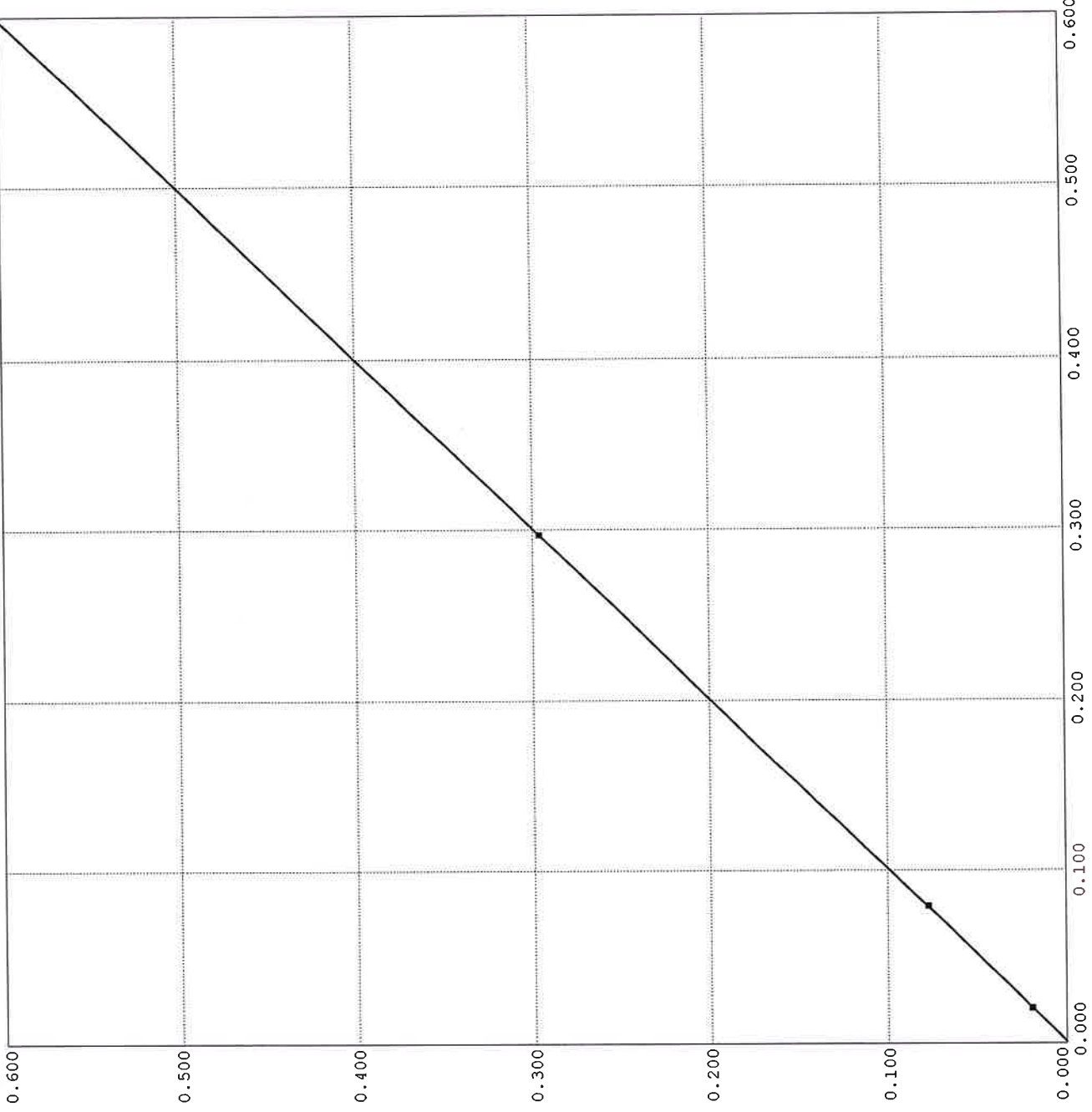
 Alaska Department of Public Safety
 DATAMASTER dmt: 100359

Date: 04/04/2023
 Time: 11:32:34

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0198	0.0004
0.079	0.0782	0.0004
0.296	0.2968	0.0013

SLOPE = 1.004638
 R² = 0.999991



✓

LINEARITY CHECK: Control Test 1

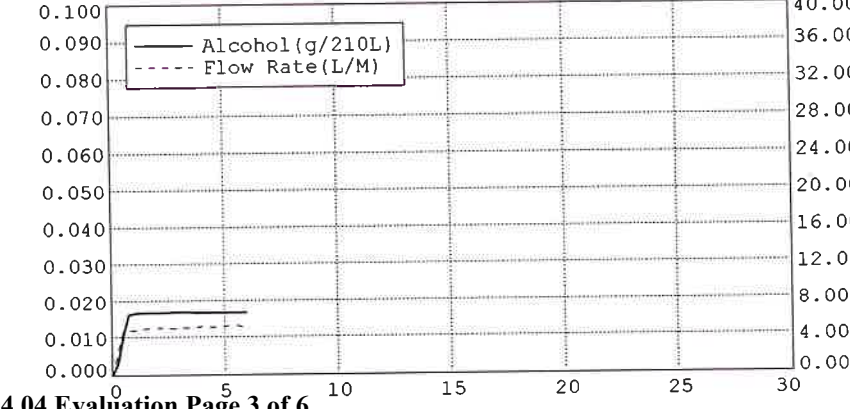
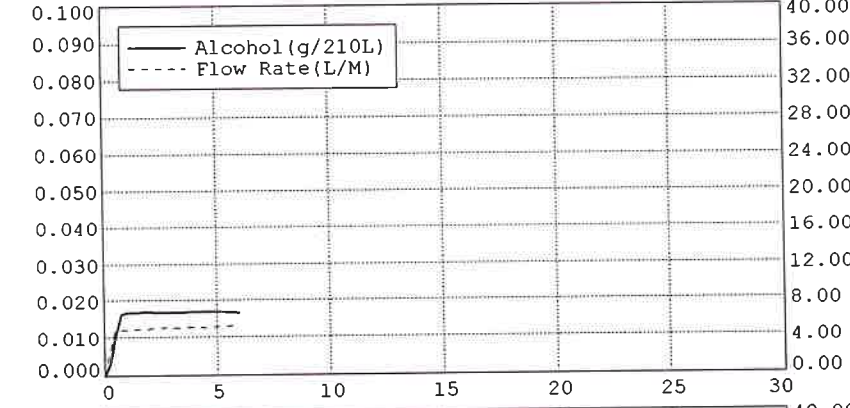
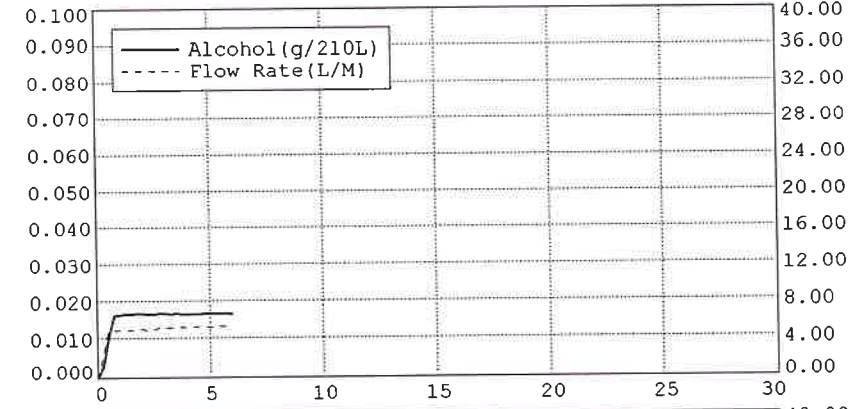
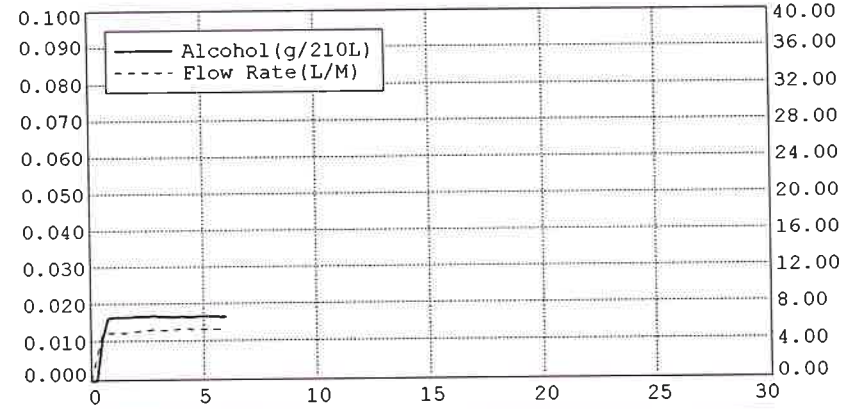
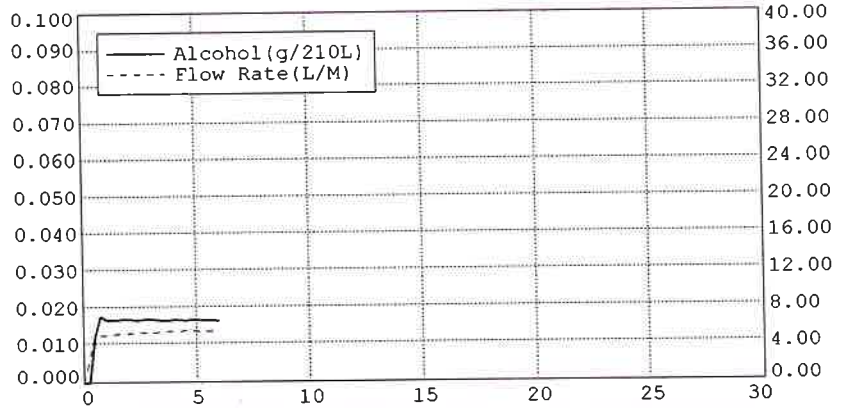
Alaska Department of Public Safety
 DATAMASTER dmt: 100359

Date: 04/04/2023
 Time: 11:32:36

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.020
 TARGET AT 29.48: 0.020
 LOT #: AG217902
 EXPIRATION: 06/28/2024
 TANK PRESSURE: 1052 psi

BLANK TEST	0.000	11:33
INTERNAL STANDARD	VERIFIED	11:33
EXTERNAL STANDARD	0.019	11:33
BLANK TEST	0.000	11:34
EXTERNAL STANDARD	0.020	11:35
BLANK TEST	0.000	11:35
EXTERNAL STANDARD	0.020	11:36
BLANK TEST	0.000	11:37
EXTERNAL STANDARD	0.020	11:37
BLANK TEST	0.000	11:38
EXTERNAL STANDARD	0.020	11:38
BLANK TEST	0.000	11:39

Average = 0.0198
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100359

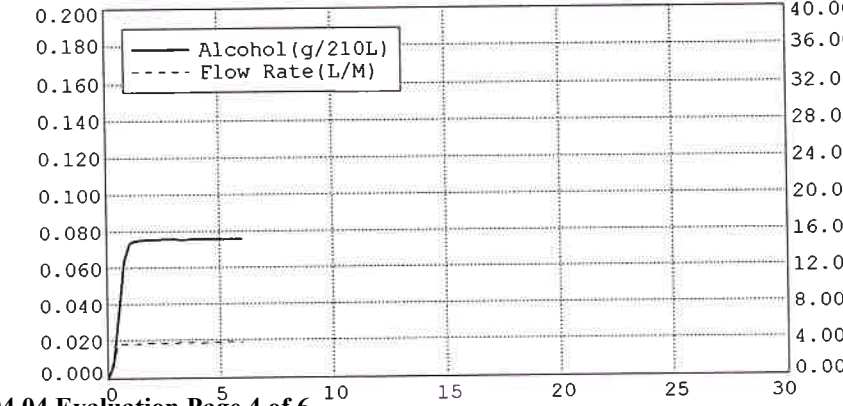
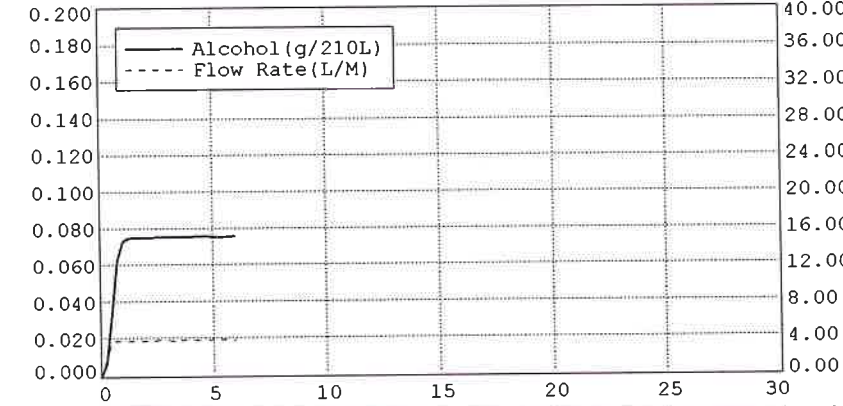
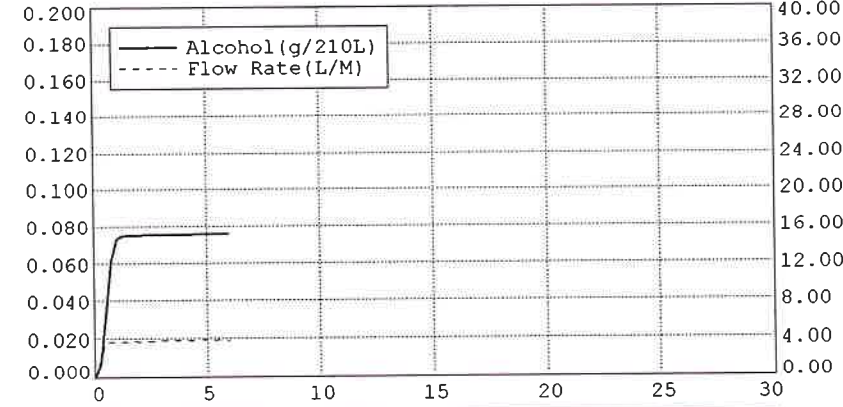
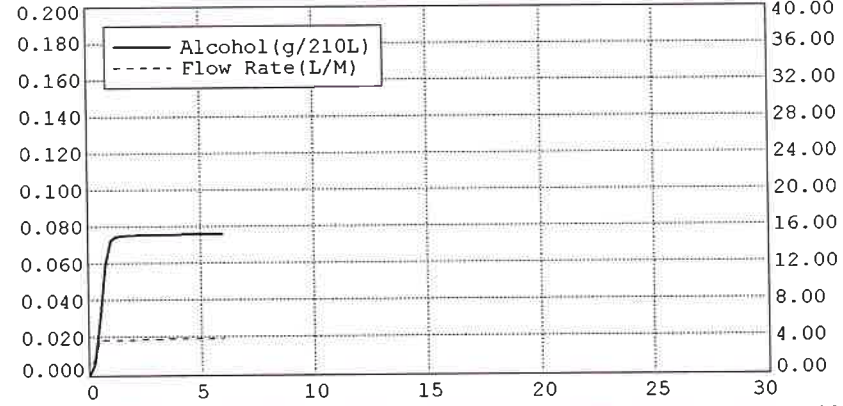
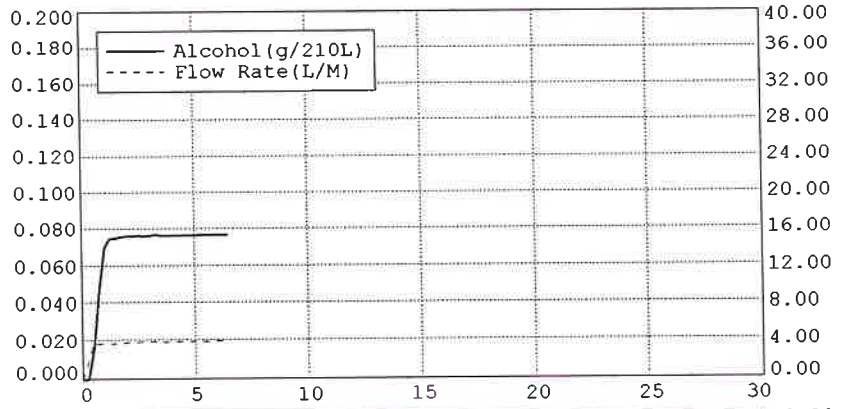
Date: 04/04/2023
Time: 11:41:10

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.48: 0.079
LOT #: AG113402
EXPIRATION: 05/14/2023
TANK PRESSURE: 387 psi

BLANK TEST	0.000	11:44
INTERNAL STANDARD	VERIFIED	11:44
EXTERNAL STANDARD	0.079	11:44
BLANK TEST	0.000	11:45
EXTERNAL STANDARD	0.078	11:45
BLANK TEST	0.000	11:46
EXTERNAL STANDARD	0.078	11:46
BLANK TEST	0.000	11:47
EXTERNAL STANDARD	0.078	11:47
BLANK TEST	0.000	11:48
EXTERNAL STANDARD	0.078	11:49
BLANK TEST	0.000	11:49

Average = 0.0782
Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

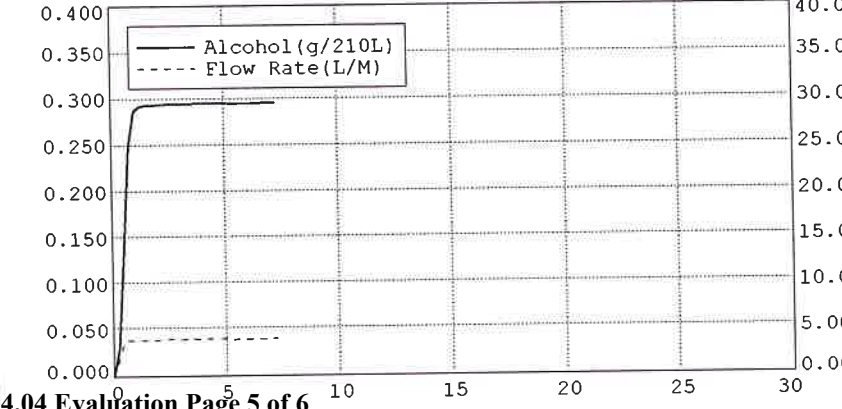
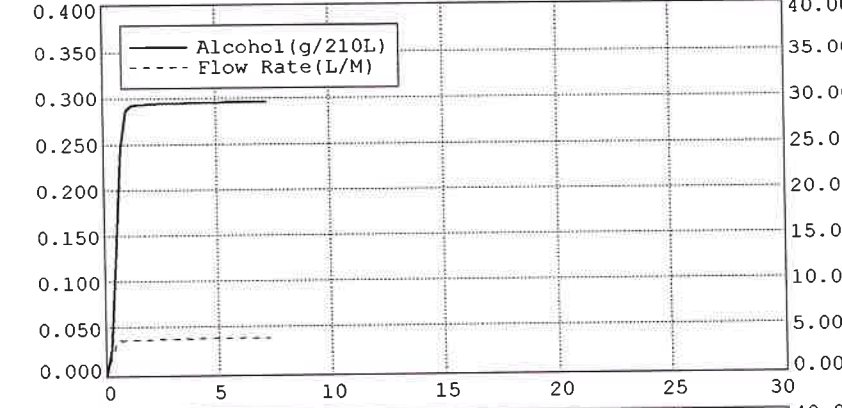
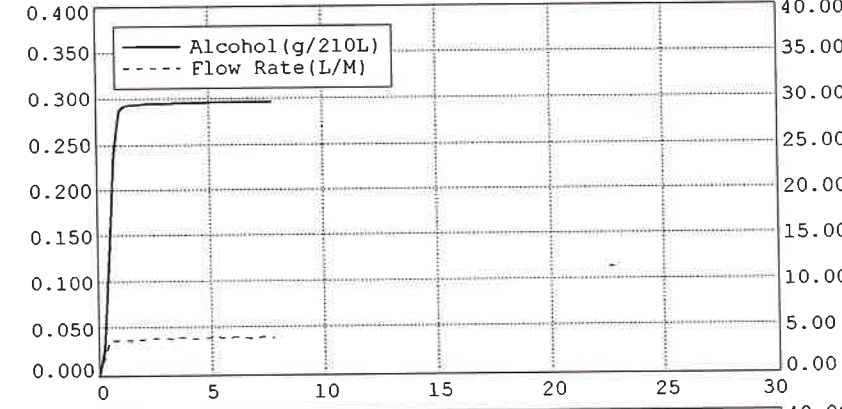
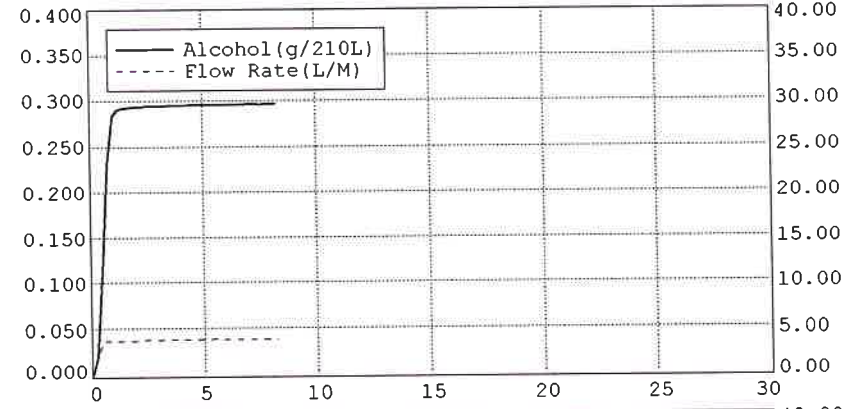
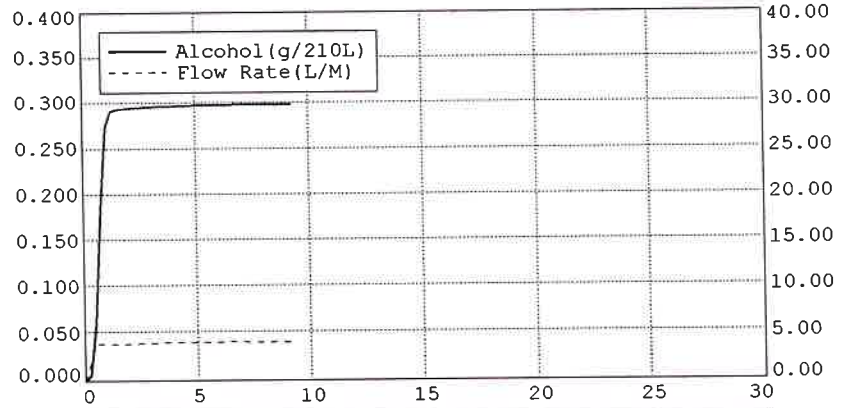
Alaska Department of Public Safety
 DATAMASTER dmt: 100359

Date: 04/04/2023
 Time: 11:50:39

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 TARGET AT 29.49: 0.296
 LOT #: AG217903
 EXPIRATION: 06/28/2024
 TANK PRESSURE: 410 psi

BLANK TEST	0.000	11:51
INTERNAL STANDARD	VERIFIED	11:52
EXTERNAL STANDARD	0.299	11:52
BLANK TEST	0.000	11:53
EXTERNAL STANDARD	0.297	11:53
BLANK TEST	0.000	11:54
EXTERNAL STANDARD	0.296	11:54
BLANK TEST	0.000	11:55
EXTERNAL STANDARD	0.296	11:55
BLANK TEST	0.000	11:56
EXTERNAL STANDARD	0.296	11:57
BLANK TEST	0.000	11:57

Average = 0.2968
 Std Dev = 0.0013



VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100359

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 04/04/2023

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.49: 0.079
LOT #: AG113402
EXPIRATION: 05/14/2023
TANK PRESSURE: 360 psi

BLANK TEST	0.000	12:05
INTERNAL STANDARD	VERIFIED	12:05
Xq = 0.105	(3.12%)	
EXTERNAL STANDARD	0.080	12:05
X[1] = 0.0796	(-0.0015) (0.0019)	
BLANK TEST	0.000	12:06
EXTERNAL STANDARD	0.079	12:06
X[1] = 0.0786	(-0.0028) (0.0014)	
BLANK TEST	0.000	12:07
EXTERNAL STANDARD	0.079	12:07
X[1] = 0.0785	(-0.0025) (0.0012)	
BLANK TEST	0.000	12:08
EXTERNAL STANDARD	0.078	12:08
X[1] = 0.0784	(-0.0017) (0.0012)	
BLANK TEST	0.000	12:09
EXTERNAL STANDARD	0.079	12:09
X[1] = 0.0787	(-0.0019) (0.0012)	
BLANK TEST	0.000	12:10

Average = 0.0790
Std Dev = 0.0007

Diagnostic Check

VERSIONS

DMT: 3.02
PIC: 3.07
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 42.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.55 V PASSED
(0.93 V - 2.17 V)
Cooler Voltage = 1.50 V PASSED
(0.90 V - 2.10 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 530 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.5 in

PUMP INFO

Flow Rate = 4.259 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
(0.001 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.105 (3.20%) (0.00% - 4.00%) PASSED