

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

Effective: 10/10/2022

Version: 3.0

Instrument #: 100367
Start Date: 12/20/23
Date Received: 12/20/23

Analyst(s): C. O Bryant

Reason for instrument evaluation

internal standard errors + a static analysis error.

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): 29.01 Temperature (C): 22.0 Relative Humidity (%): 16

Linearity Test (attached) Argas

0.020g/210L Mnf: <u>AG217998</u>	Lot: <u>AG217902</u>	Exp: <u>6/28/24</u>
0.080g/210L Mnf: <u>ILMO</u>	Lot: <u>09523080A1</u>	Exp: <u>5/5/25</u>
0.300g/210L Mnf: <u>Argas</u>	Lot: <u>AG327804</u>	Exp: <u>10/5/25</u>

Notes

Internal standard errors in the field were at ~ 4.5%. One internal standard error during linearity.

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

COB 2023.12.27

Condition of item: Good Needs Repair

- Ready for Adjustment
- Ready for Calibration

End Date: 12/20/23

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100367

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/20/2023

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.04: 0.078
LOT #: 09523080A1
EXPIRATION: 05/05/2025
TANK PRESSURE: 691 psi

BLANK TEST	0.000	14:22
INTERNAL STANDARD	VERIFIED	14:22
Xq = 0.084 (3.30%)		
EXTERNAL STANDARD	0.078	14:23
X[1] = 0.0781 (-0.0020) (0.0001)		
BLANK TEST	0.000	14:24
EXTERNAL STANDARD	0.078	14:24
X[1] = 0.0778 (-0.0019) (0.0003)		
BLANK TEST	0.000	14:25
EXTERNAL STANDARD	0.078	14:25
X[1] = 0.0783 (-0.0017) (-0.0001)		
BLANK TEST	0.000	14:26
EXTERNAL STANDARD	0.078	14:26
X[1] = 0.0782 (-0.0017) (-0.0001)		
BLANK TEST	0.000	14:27
EXTERNAL STANDARD	0.076	14:27
X[1] = 0.0759 (-0.0023) (0.0015)		
BLANK TEST	0.000	14:28

Average = 0.0776
Std Dev = 0.0009

Diagnostic Check

VERSIONS

DMT: 3.02
PIC: 3.06
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.7°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 47.9°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 1.59 V	PASSED
(0.92 V - 2.16 V)	
Cooler Voltage = 1.55 V	PASSED
(1.01 V - 2.35 V)	
Bias Voltage = 80 V	PASSED
(48 V - 112 V)	
Chopper Freq = 524 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.0 in	

PUMP INFO

Flow Rate = 4.460 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 = 0.085	PASSED
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VOC Prior to linearity
COR 12/20/23

LINERITY CHECK

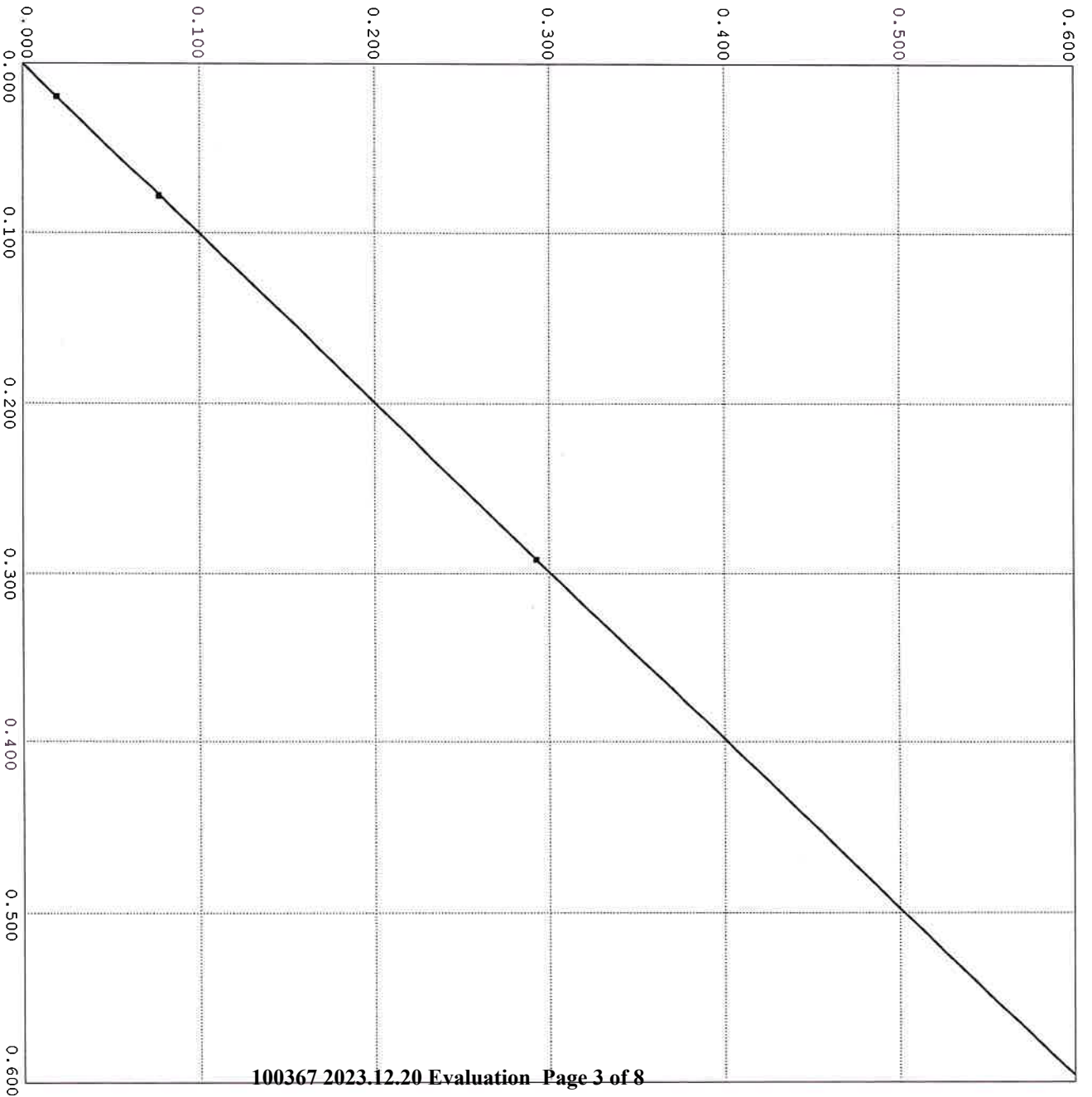
Alaska Department of Public Safety
DATAMASTER dnt: 100367

Date: 12/20/2023
Time: 14:31:34

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

TARGET	AVERAGE	STD. DEV.
0.019	0.0198	0.0004
0.078	0.0780	0.0000
0.291	0.2934	0.0005

SLOPE = 1.007320
R² = 0.999981



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100367

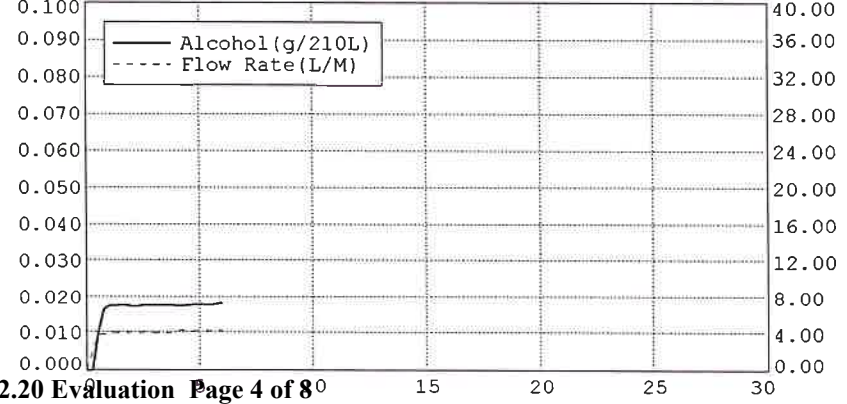
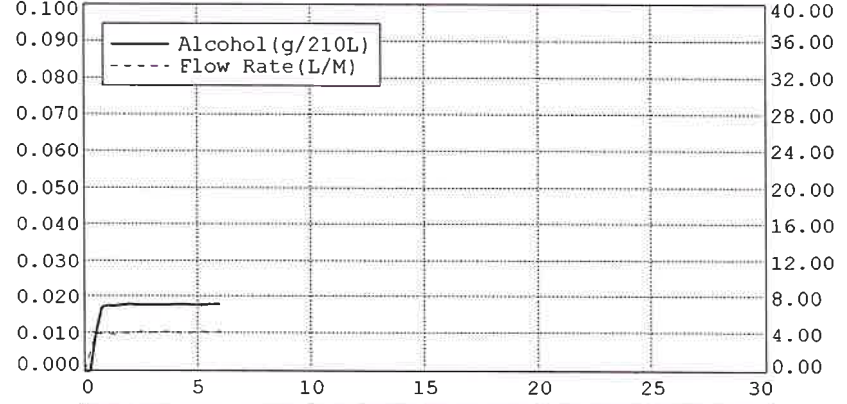
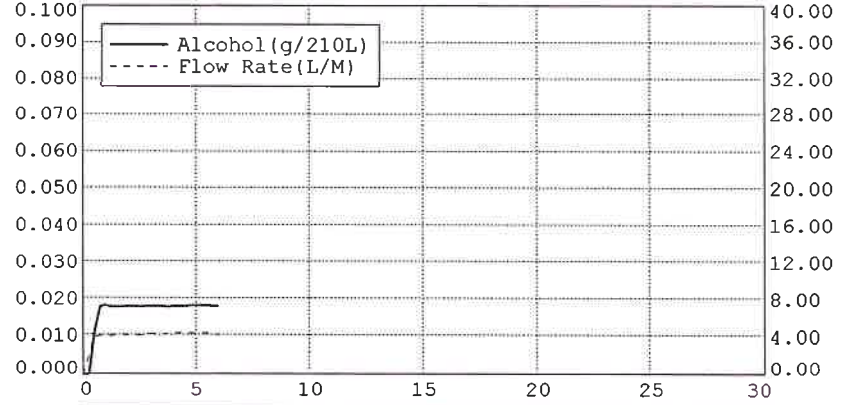
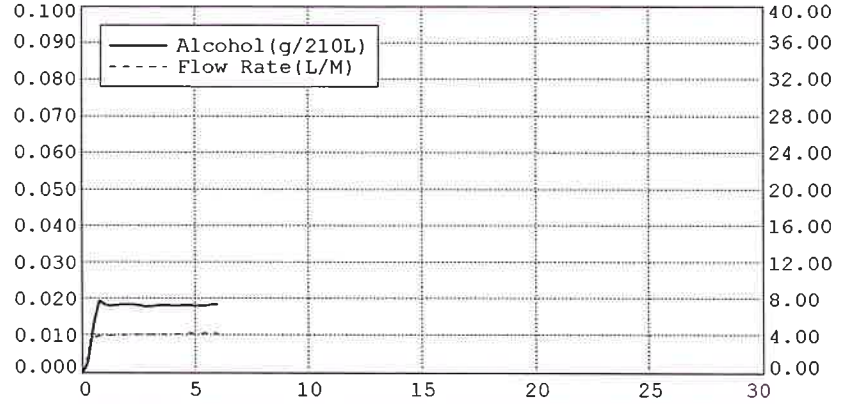
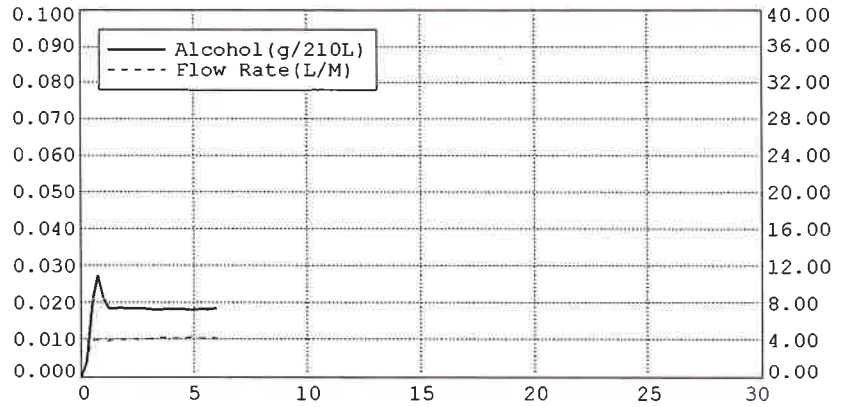
Date: 12/20/2023
Time: 14:31:37

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.04: 0.019
LOT #: AG217902
EXPIRATION: 06/28/2024
TANK PRESSURE: 598 psi

BLANK TEST	0.000	14:32
INTERNAL STANDARD	VERIFIED	14:32
EXTERNAL STANDARD	0.020	14:33
BLANK TEST	0.000	14:34
EXTERNAL STANDARD	0.020	14:34
BLANK TEST	0.000	14:35
EXTERNAL STANDARD	0.019	14:35
BLANK TEST	0.000	14:36
EXTERNAL STANDARD	0.020	14:36
BLANK TEST	0.000	14:37
EXTERNAL STANDARD	0.020	14:37
BLANK TEST	0.000	14:38

Average = 0.0198
Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100367

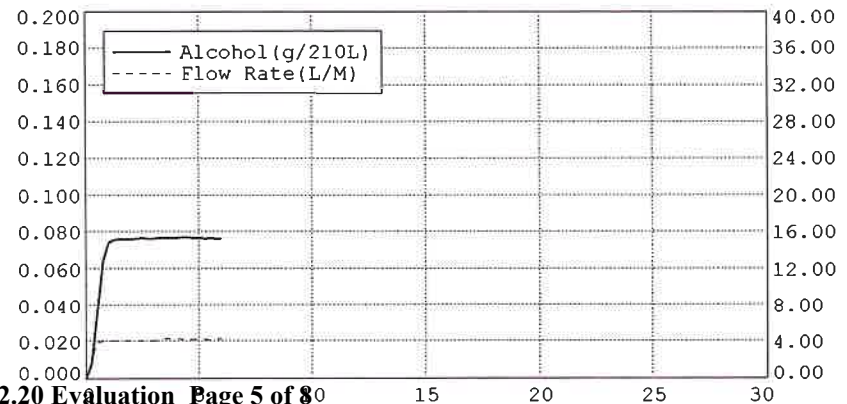
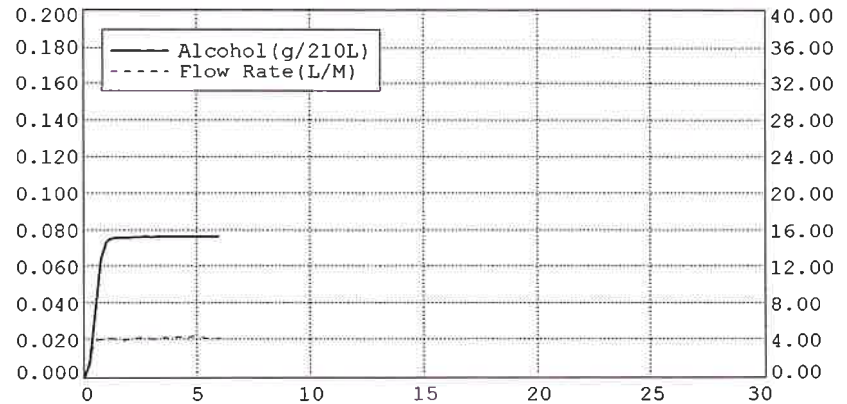
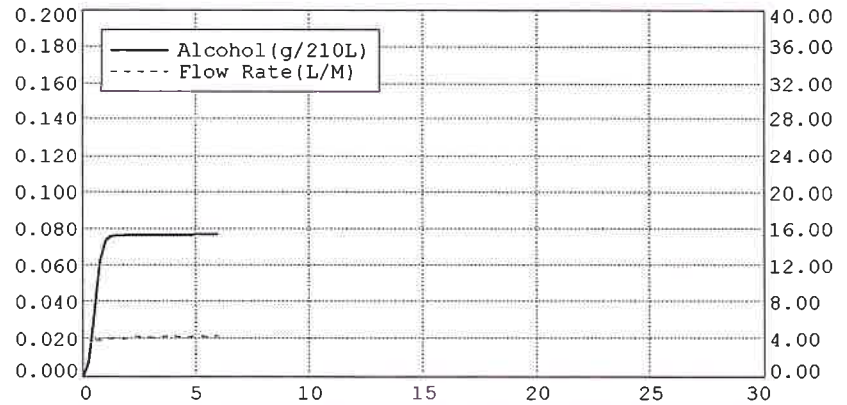
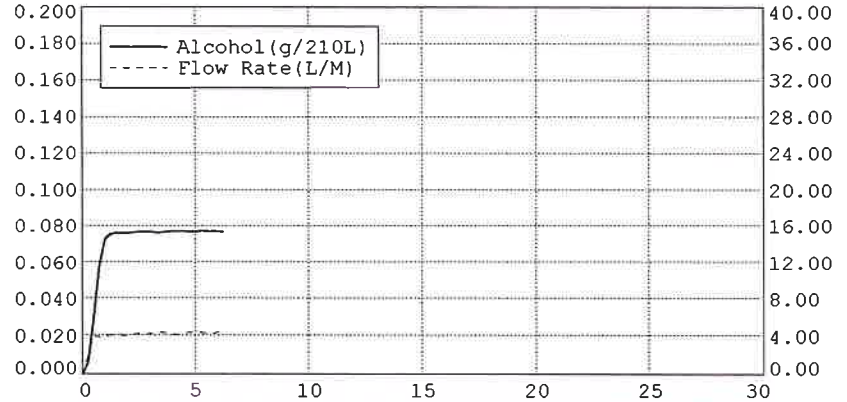
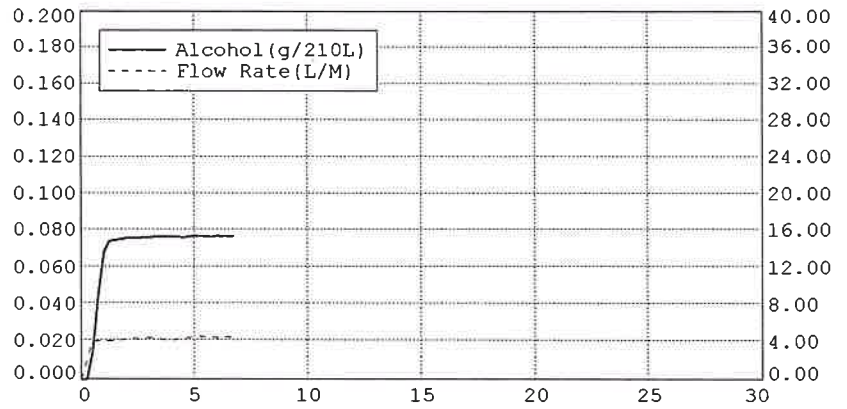
Date: 12/20/2023
Time: 14:44:37

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.04: 0.078
LOT #: 09523080A1
EXPIRATION: 05/05/2025
TANK PRESSURE: 669 psi

BLANK TEST	0.000	14:45
INTERNAL STANDARD	VERIFIED	14:45
EXTERNAL STANDARD	0.078	14:45
BLANK TEST	0.000	14:46
EXTERNAL STANDARD	0.078	14:47
BLANK TEST	0.000	14:48
EXTERNAL STANDARD	0.078	14:48
BLANK TEST	0.000	14:49
EXTERNAL STANDARD	0.078	14:49
BLANK TEST	0.000	14:50
EXTERNAL STANDARD	0.078	14:50
BLANK TEST	0.000	14:51

Average = 0.0780
Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100367

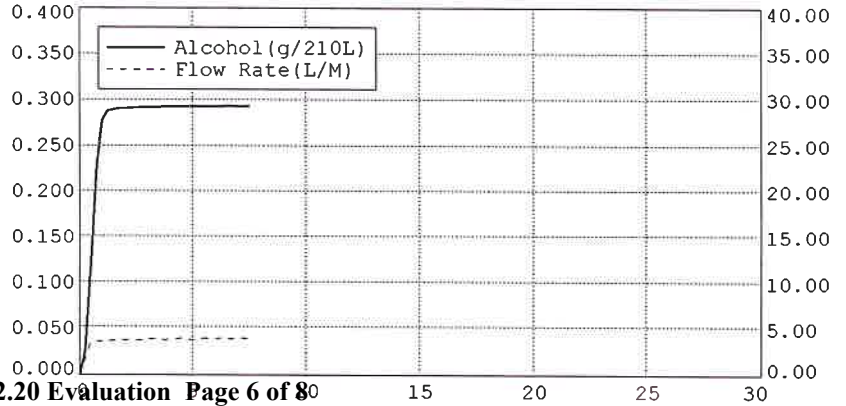
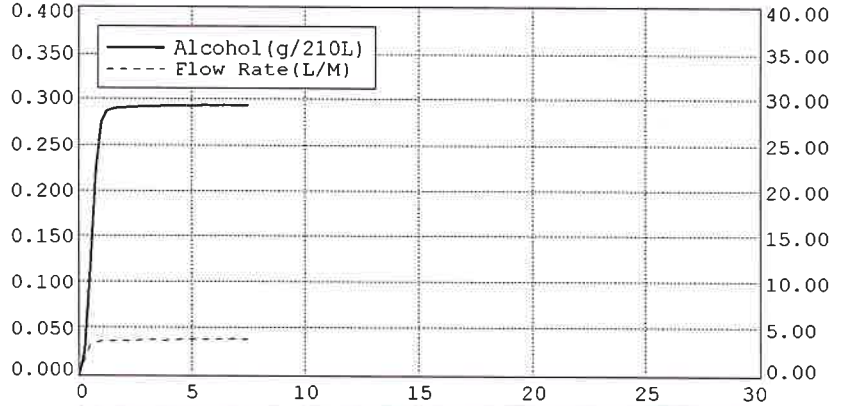
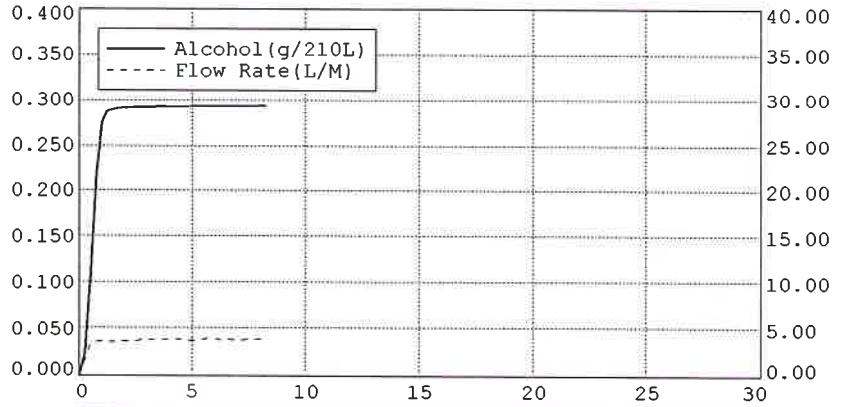
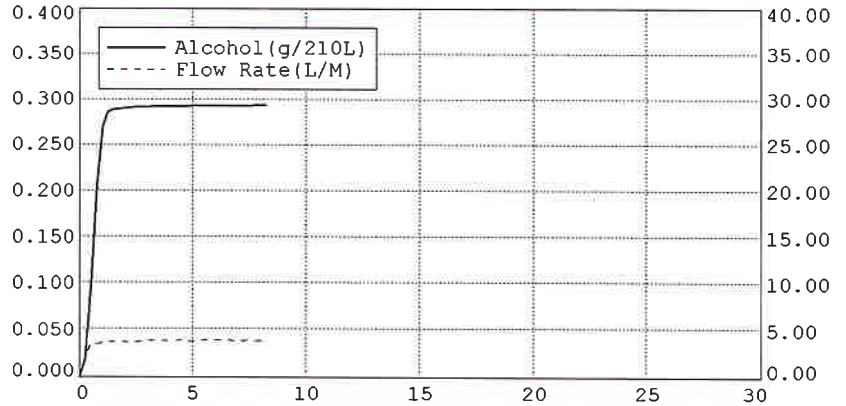
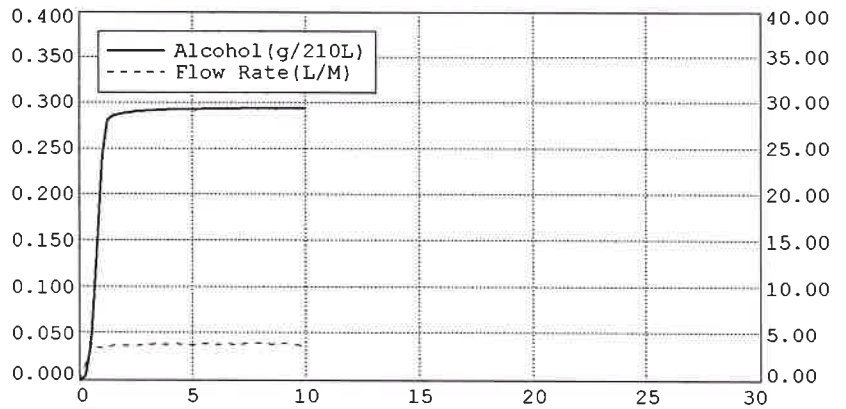
Date: 12/20/2023
 Time: 14:53:05

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 TARGET AT 29.04: 0.291
 LOT #: AG327804
 EXPIRATION: 10/05/2025
 TANK PRESSURE: 400 psi

BLANK TEST	0.000	14:54
INTERNAL STANDARD	VERIFIED	14:54
EXTERNAL STANDARD	0.294	14:54
BLANK TEST	0.000	14:55
EXTERNAL STANDARD	0.294	14:55
BLANK TEST	0.000	14:56
EXTERNAL STANDARD	0.293	14:57
BLANK TEST	0.000	14:57
EXTERNAL STANDARD	0.293	14:58
BLANK TEST	0.000	14:59
EXTERNAL STANDARD	0.293	14:59
BLANK TEST	0.000	15:00

Average = 0.2934
 Std Dev = 0.0005



VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100367

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/20/2023

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.04: 0.078
LOT #: 09523080A1
EXPIRATION: 05/05/2025
TANK PRESSURE: 644 psi

BLANK TEST	0.000	15:09
INTERNAL STANDARD	VERIFIED	15:09
Xq = 0.084 (3.09%)		
EXTERNAL STANDARD	0.079	15:09
X[1] = 0.0786 (-0.0020) (0.0018)		
BLANK TEST	0.000	15:10
EXTERNAL STANDARD	0.079	15:10
X[1] = 0.0786 (-0.0015) (0.0018)		
BLANK TEST	0.000	15:11
EXTERNAL STANDARD	0.079	15:11
X[1] = 0.0788 (-0.0013) (0.0016)		
BLANK TEST	0.000	15:12
EXTERNAL STANDARD	0.078	15:12
X[1] = 0.0783 (-0.0018) (0.0007)		
BLANK TEST	0.000	15:13
EXTERNAL STANDARD	0.078	15:13
X[1] = 0.0782 (-0.0017) (0.0017)		
BLANK TEST	0.000	15:14

Average = 0.0786
Std Dev = 0.0005

Diagnostic Check

VERSIONS

DMT: 3.02
PIC: 3.06
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 = 1.59 V	PASSED
(0.92 V - 2.16 V)	
Cooler Voltage = 1.55 V	PASSED
(1.01 V - 2.35 V)	
Bias Voltage = 80 V	PASSED
(48 V - 112 V)	
Chopper Freq = 527 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.0 in	

PUMP INFO

Flow Rate = 4.466 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 = 0.084	3.30%	(0.00% - 4.00%)	PASSED
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SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100367

Date: 12/20/2023
Time: 15:15:46

SUBJECT NAME:
TEST TEST
LICENSE #: NDST

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

DEPT/AGENCY:
AAAI

CASE/REPORT: 23-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.04: 0.078
LOT #: 09523080A1
EXPIRATION: 05/05/2025

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	15:17
BLANK TEST	0.000	15:17
INTERNAL STANDARD	VERIFIED	15:17
EXTERNAL STANDARD	0.079	15:17
BLANK TEST	0.000	15:18
SUBJECT SAMPLE (Vol=2.08L)	0.000	15:18
BLANK TEST	0.000	15:19
EXTERNAL STANDARD	0.079	15:19
BLANK TEST	0.000	15:20

