

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

Effective: 10/10/2022

Version: 3.0

Instrument #: 100344
Start Date: 12/20/23
Date Received: 12/20/23

Analyst(s): C. O'Bryen

Reason for instrument evaluation

Internal Standard error + interference detected

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): 22.1 Relative Humidity (%): 16

Linearity Test (attached)

0.020g/210L Mnf: <u>Aurgas</u>	Lot: <u>AG217902</u>	Exp: <u>6/28/24</u>
0.080g/210L Mnf: <u>Aurgas</u>	Lot: <u>AG310901</u>	Exp: <u>4/19/25</u>
0.300g/210L Mnf: <u>Aurgas</u>	Lot: <u>AG327804</u>	Exp: <u>10/5/25</u>

Notes

IS Readings at lab less than 1%.
Unable to duplicate Utah's readings from the field.

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

Condition of item: Good Needs Repair

~~CCB~~ 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 #: 100344

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 #: AG310901
EXPIRATION: 04/19/2025
TANK PRESSURE: 726 psi

BLANK TEST	0.000	11:11
INTERNAL STANDARD	VERIFIED	11:11
Xq = 0.109 (0.41%)		
EXTERNAL STANDARD	0.075	11:11
X[1] = 0.0753 (-0.0025) (-0.0003)		
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.075	11:12
X[1] = 0.0752 (-0.0021) (-0.0003)		
BLANK TEST	0.000	11:13
EXTERNAL STANDARD	0.075	11:13
X[1] = 0.0754 (-0.0021) (0.0000)		
BLANK TEST	0.000	11:14
EXTERNAL STANDARD	0.076	11:14
X[1] = 0.0757 (-0.0017) (0.0002)		
BLANK TEST	0.000	11:15
EXTERNAL STANDARD	0.075	11:16
X[1] = 0.0754 (-0.0020) (-0.0004)		
BLANK TEST	0.000	11:16

Average = 0.0752
Std Dev = 0.0004

Diagnostic Check

VERSIONS

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

TEMPERATURES

Sample Chamber = 49.1°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 48.1°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 2.22 V	PASSED
(1.35 V - 3.15 V)	
Cooler Voltage = 1.92 V	PASSED
(1.15 V - 2.69 V)	
Bias Voltage = 79 V	PASSED
(47 V - 111 V)	
Chopper Freq = 516 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.0 in	

PUMP INFO

Flow Rate = 5.713 L/M	PASSED
(3.500 L/M - 6.500 L/M)	

DETECTOR INFO

PUMP ON	PASSED
(0.001 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 = 0.108	0.32%	(0.00% - 4.00%)	PASSED
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VOC Prior to linearity
CDS 12/20/23

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100344

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 #: AG310901
EXPIRATION: 04/19/2025
TANK PRESSURE: 712 psi

BLANK TEST	0.000	11:31
INTERNAL STANDARD	VERIFIED	11:31
Xq = 0.109 (0.41%)		
EXTERNAL STANDARD	0.076	11:31
X[1] = 0.0756 (-0.0008) (0.0009)		
BLANK TEST	0.000	11:32
EXTERNAL STANDARD	0.075	11:32
X[1] = 0.0751 (-0.0010) (0.0008)		
BLANK TEST	0.000	11:33
EXTERNAL STANDARD	0.075	11:33
X[1] = 0.0750 (-0.0012) (0.0004)		
BLANK TEST	0.000	11:34
EXTERNAL STANDARD	0.075	11:34
X[1] = 0.0751 (-0.0017) (0.0004)		
BLANK TEST	0.000	11:35
EXTERNAL STANDARD	0.075	11:35
X[1] = 0.0754 (-0.0010) (0.0004)		
BLANK TEST	0.000	11:36

Average = 0.0752
Std Dev = 0.0004

Diagnostic Check

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 48.1°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 2.22 V	PASSED
(1.35 V - 3.15 V)	
Cooler Voltage = 1.92 V	PASSED
(1.15 V - 2.69 V)	
Bias Voltage = 79 V	PASSED
(47 V - 111 V)	
Chopper Freq = 518 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.0 in	

PUMP INFO

Flow Rate = 5.776 L/M	PASSED
(3.500 L/M - 6.500 L/M)	

DETECTOR INFO

PUMP ON	PASSED
(0.001 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 = 0.109	0.16%	(0.00% - 4.00%)	PASSED
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VOC Prior to Linearity
CAB 12/20/23

LINEARITY CHECK

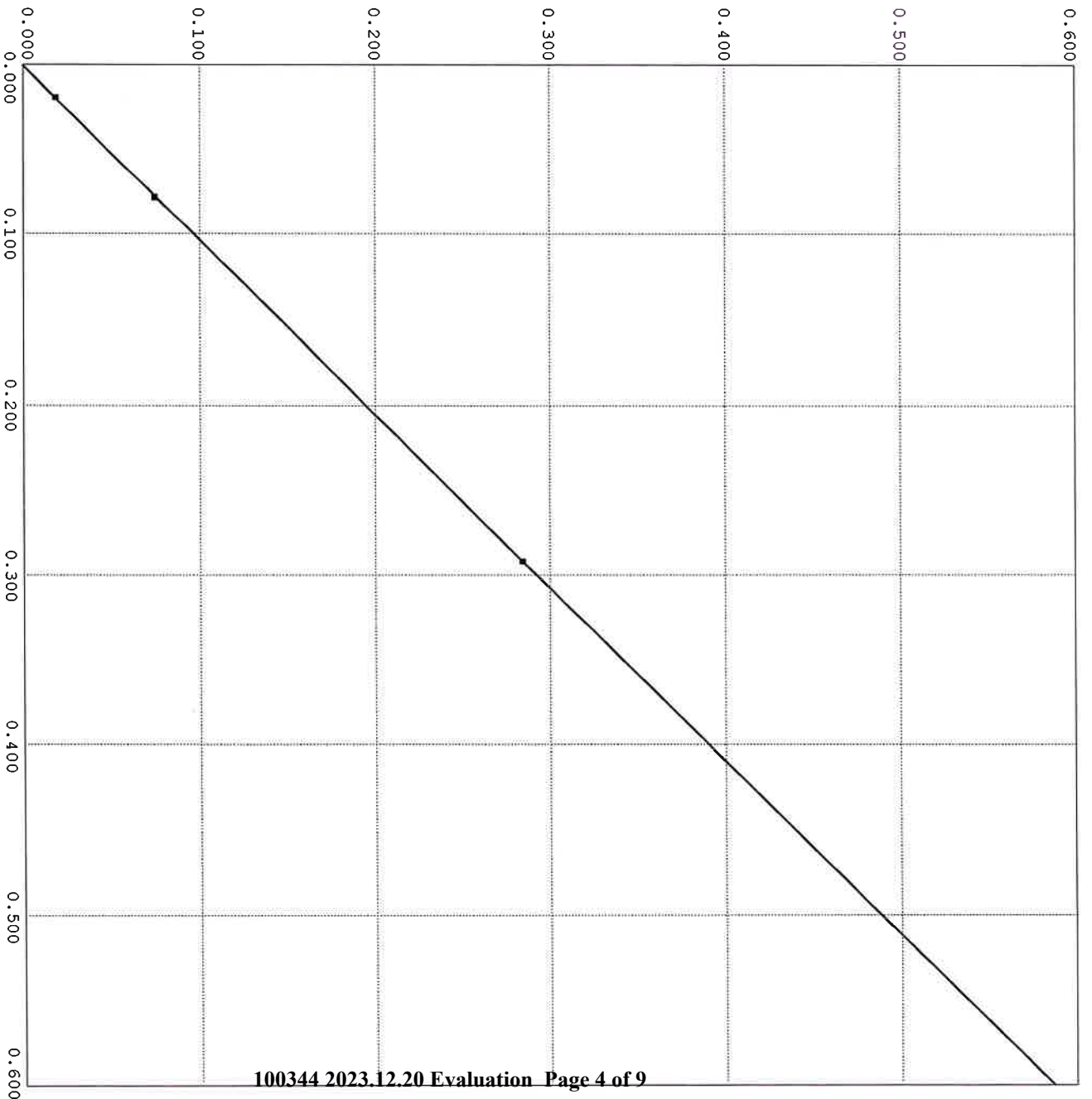
Alaska Department of Public Safety
DATAMASTER dmt: 100344

Date: 12/20/2023
Time: 14:24:54

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

TARGET	AVERAGE	STD. DEV.
0.019	0.0190	0.0000
0.078	0.0754	0.0005
0.291	0.2850	0.0000

SLOPE = 0.979569
R² = 0.999974



CS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100344

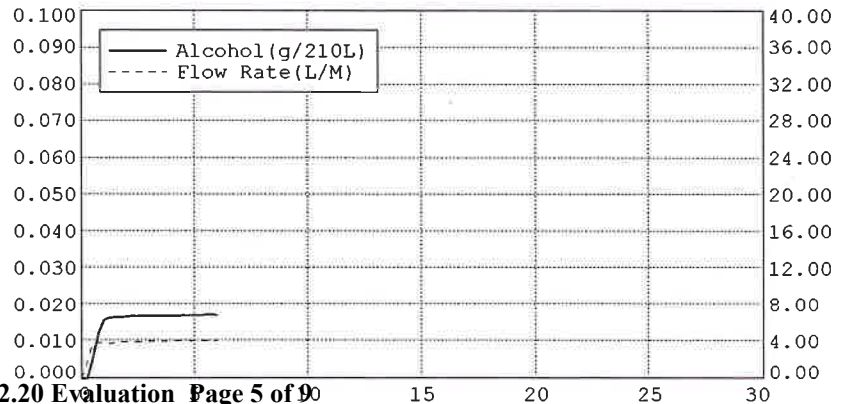
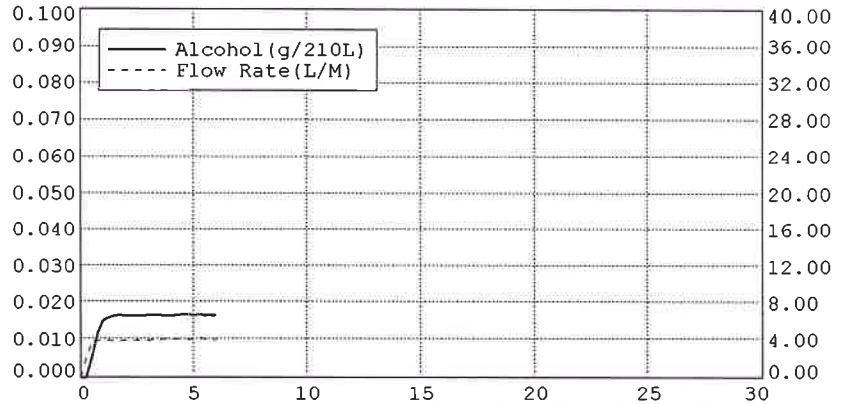
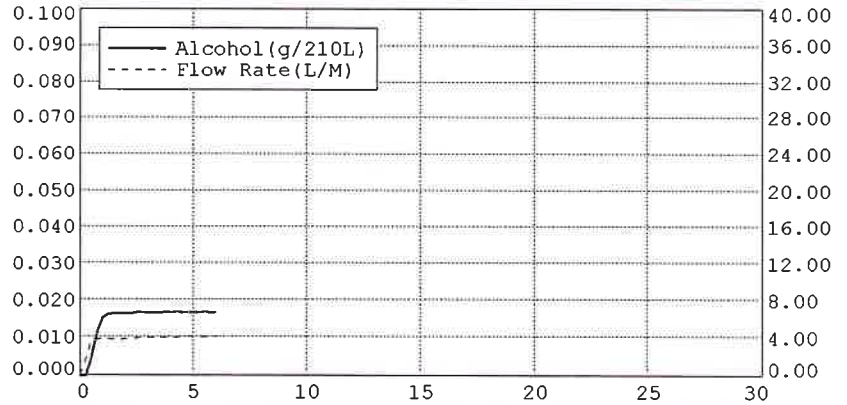
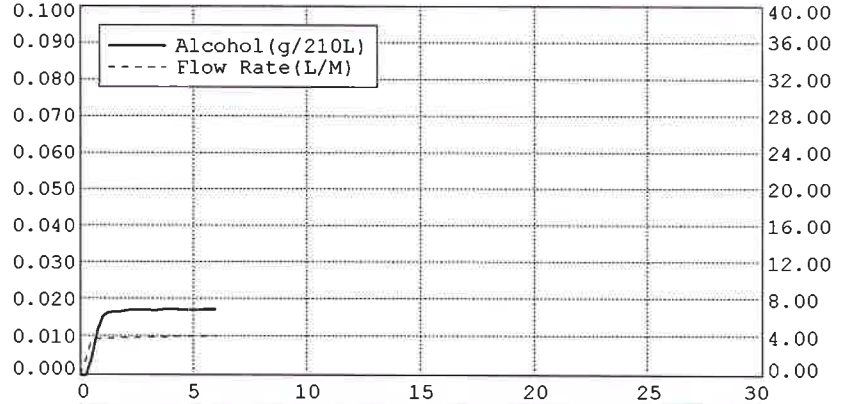
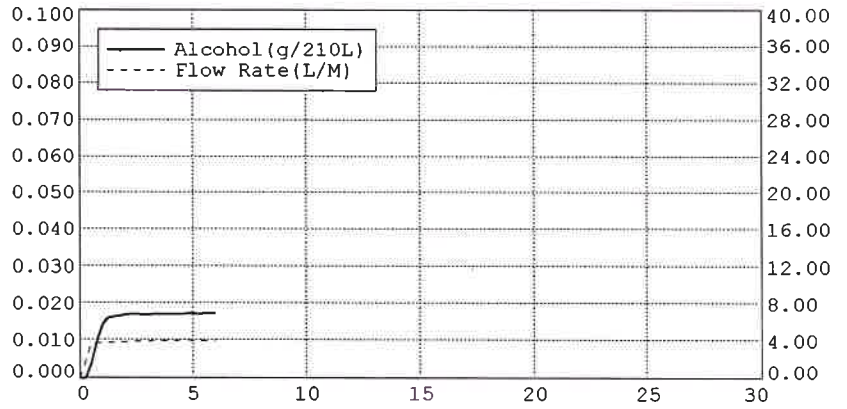
Date: 12/20/2023
 Time: 14:24:56

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.04: 0.019
 LOT #: AG217902
 EXPIRATION: 06/28/2024
 TANK PRESSURE: 617 psi

BLANK TEST	0.000	14:26
INTERNAL STANDARD	VERIFIED	14:26
EXTERNAL STANDARD	0.019	14:26
BLANK TEST	0.000	14:27
EXTERNAL STANDARD	0.019	14:27
BLANK TEST	0.000	14:28
EXTERNAL STANDARD	0.019	14:28
BLANK TEST	0.000	14:29
EXTERNAL STANDARD	0.019	14:29
BLANK TEST	0.000	14:30
EXTERNAL STANDARD	0.019	14:30
BLANK TEST	0.000	14:31

Average = 0.0190
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100344

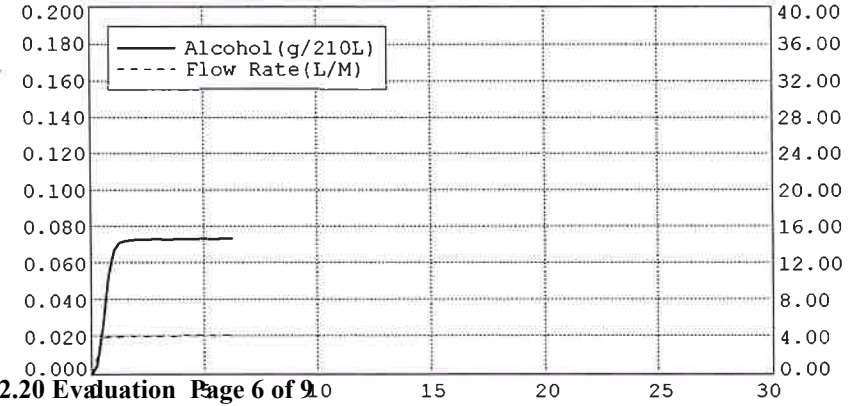
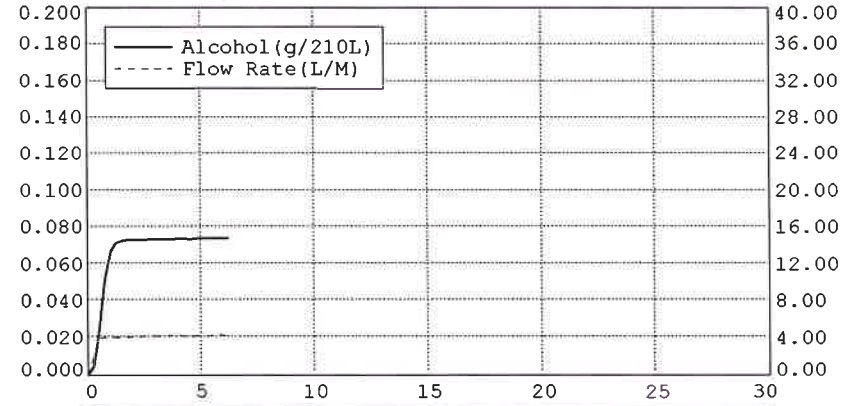
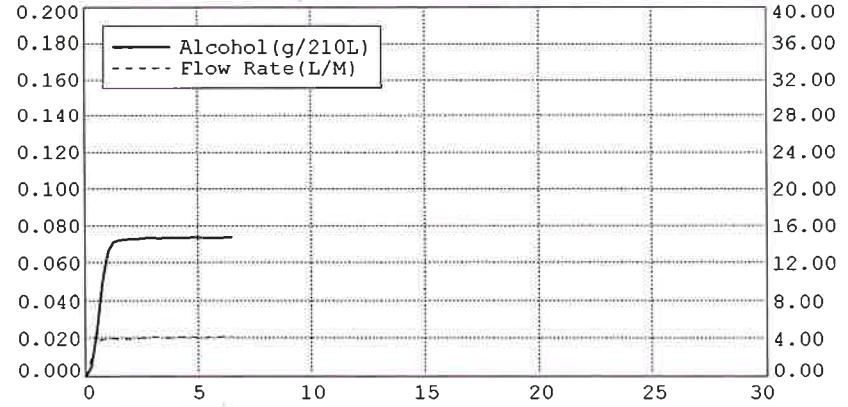
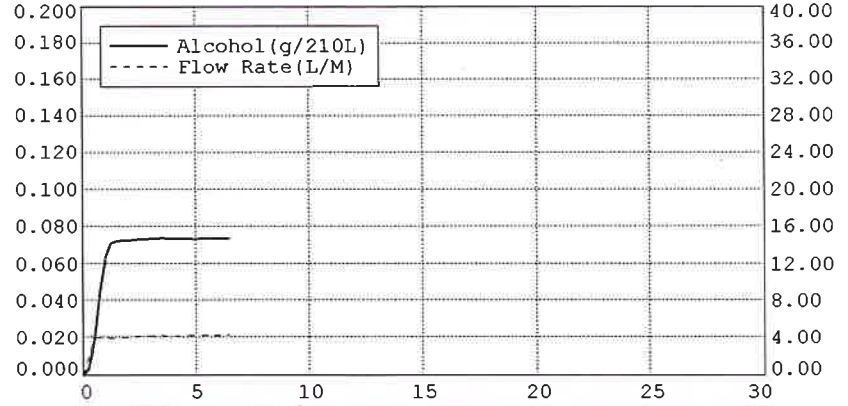
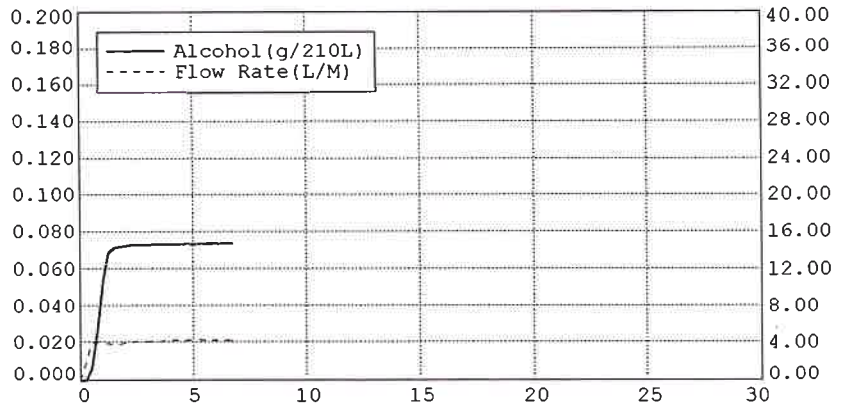
Date: 12/20/2023
 Time: 14:32:22

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.04: 0.078
 LOT #: AG310901
 EXPIRATION: 04/19/2025
 TANK PRESSURE: 685 psi

BLANK TEST	0.000	14:33
INTERNAL STANDARD	VERIFIED	14:33
EXTERNAL STANDARD	0.075	14:33
BLANK TEST	0.000	14:34
EXTERNAL STANDARD	0.075	14:34
BLANK TEST	0.000	14:35
EXTERNAL STANDARD	0.076	14:36
BLANK TEST	0.000	14:36
EXTERNAL STANDARD	0.075	14:37
BLANK TEST	0.000	14:38
EXTERNAL STANDARD	0.076	14:38
BLANK TEST	0.000	14:39

Average = 0.0754
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100344

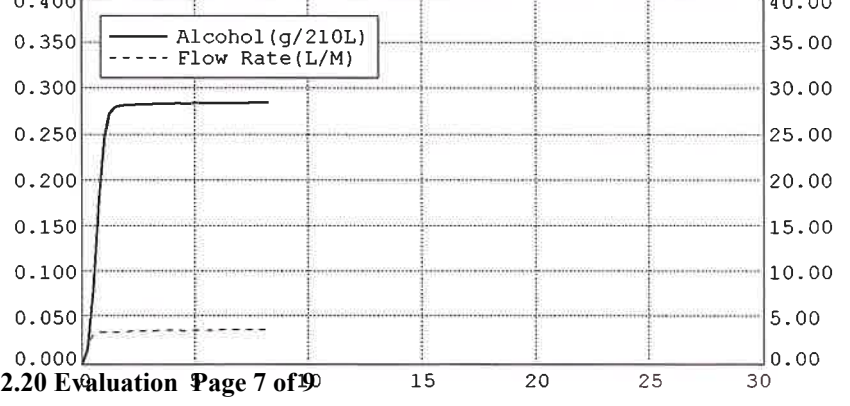
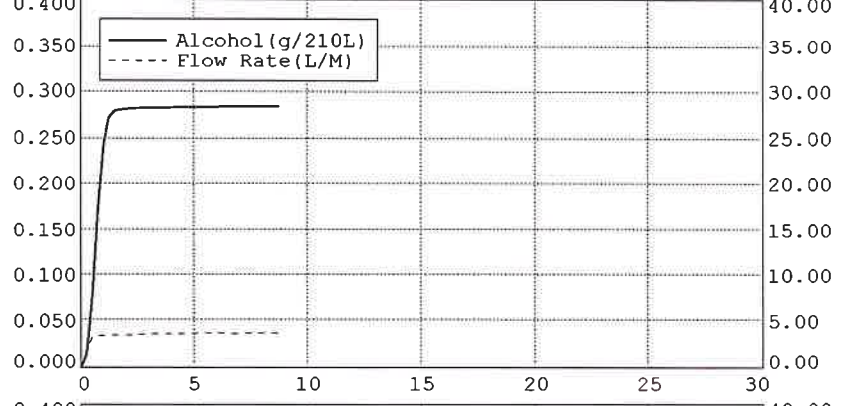
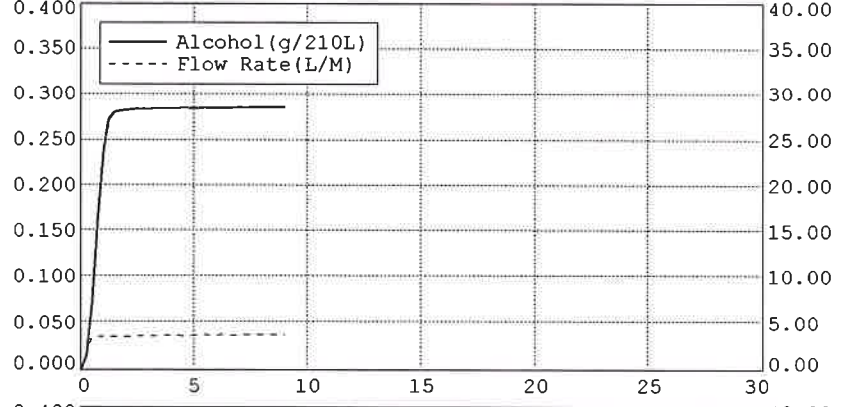
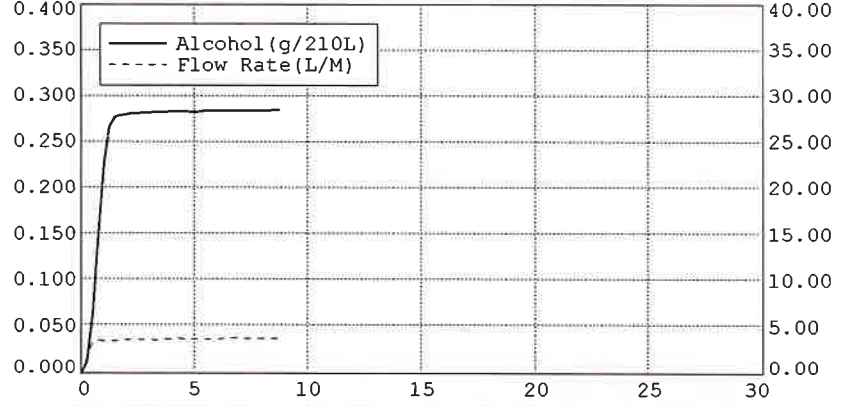
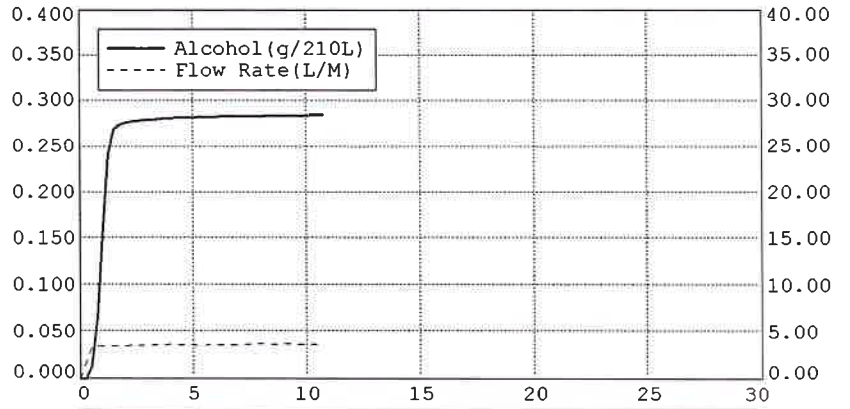
Date: 12/20/2023
Time: 14:44:42

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
TARGET AT 29.04: 0.291
LOT #: AG327804
EXPIRATION: 10/25/2025
TANK PRESSURE: 427 psi

BLANK TEST	0.000	14:45
INTERNAL STANDARD	VERIFIED	14:46
EXTERNAL STANDARD	0.285	14:46
BLANK TEST	0.000	14:47
EXTERNAL STANDARD	0.285	14:47
BLANK TEST	0.000	14:48
EXTERNAL STANDARD	0.285	14:48
BLANK TEST	0.000	14:49
EXTERNAL STANDARD	0.285	14:49
BLANK TEST	0.000	14:50
EXTERNAL STANDARD	0.285	14:50
BLANK TEST	0.000	14:51

Average = 0.2850
Std Dev = 0.0000



VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100344

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 12/20/2023

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.05: 0.078
LOT #: AG310901
EXPIRATION: 04/19/2025
TANK PRESSURE: 663 psi

BLANK TEST	0.000	14:59
INTERNAL STANDARD	VERIFIED	14:59
Xq = 0.109 (0.41%)		
EXTERNAL STANDARD	0.077	14:59
X[1] = 0.0767 (0.0000) (0.0020)		
BLANK TEST	0.000	15:00
EXTERNAL STANDARD	0.076	15:00
X[1] = 0.0760 (-0.0005) (0.0025)		
BLANK TEST	0.000	15:01
EXTERNAL STANDARD	0.075	15:01
X[1] = 0.0755 (-0.0005) (0.0025)		
BLANK TEST	0.000	15:02
EXTERNAL STANDARD	0.076	15:03
X[1] = 0.0756 (-0.0003) (0.0021)		
BLANK TEST	0.000	15:03
EXTERNAL STANDARD	0.076	15:04
X[1] = 0.0761 (-0.0002) (0.0022)		
BLANK TEST	0.000	15:05

Average = 0.0760
Std Dev = 0.0007

Diagnostic Check

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 48.1°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 2.22 V	PASSED
(1.35 V - 3.15 V)	
Cooler Voltage = 1.92 V	PASSED
(1.15 V - 2.69 V)	
Bias Voltage = 79 V	PASSED
(47 V - 111 V)	
Chopper Freq = 522 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.0 in	

PUMP INFO

Flow Rate = 5.767 L/M	PASSED
(3.500 L/M - 6.500 L/M)	

DETECTOR INFO

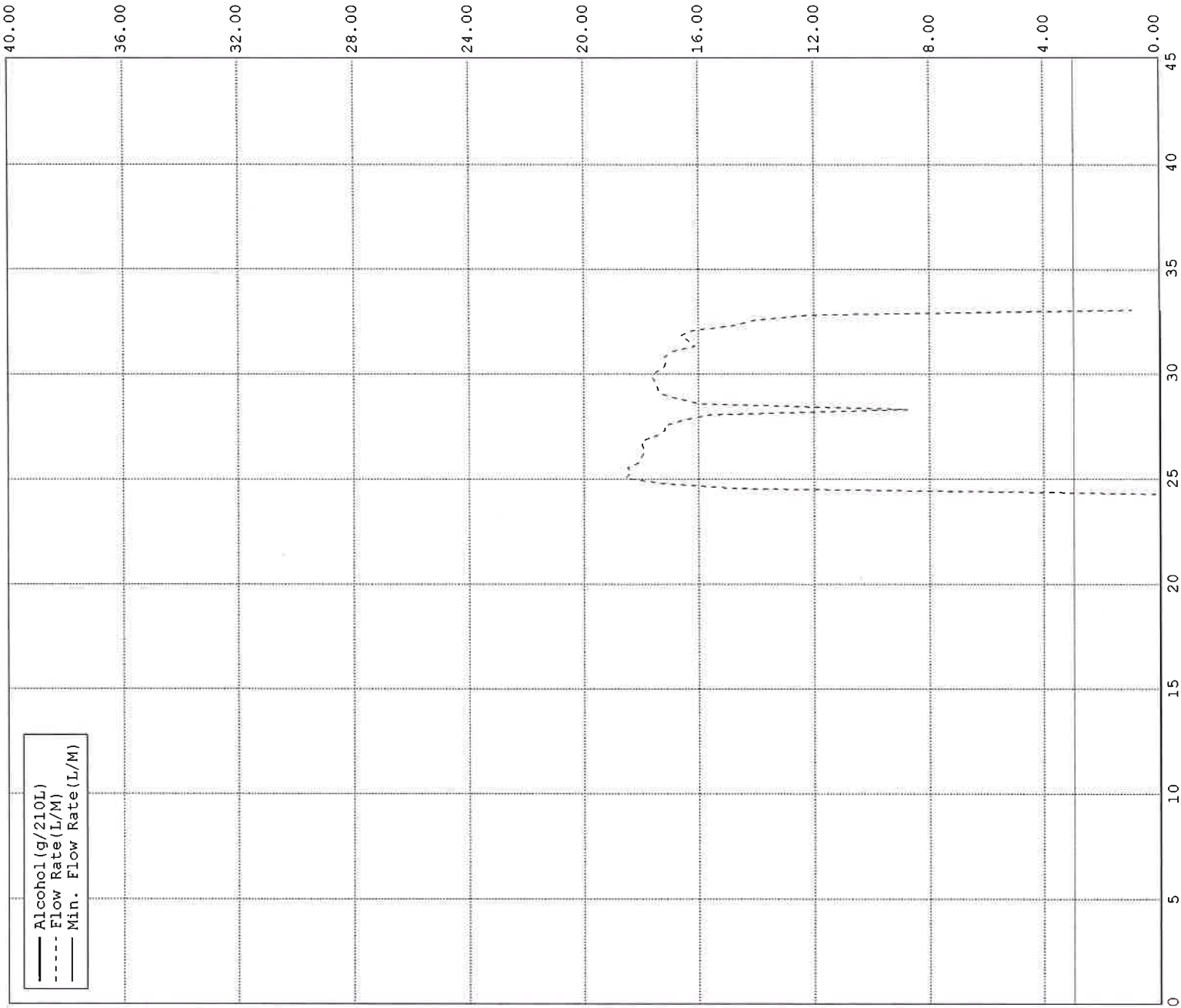
PUMP ON	PASSED
(0.001 V <= 0.010 V)	
PUMP OFF	PASSED
(0.001 V <= 0.010 V)	

FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD

Xq = 0.109 0.41%	PASSED
(0.00% - 4.00%)	



SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100344

 Date: 12/20/2023
 Time: 15:06:54

SUBJECT NAME:
 TEST TEST
 LICENSE #: NDST

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

DEPT/AGENCY:
 AAAA

CASE/REPORT: 23-1234
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.04: 0.078
 LOT #: AG310901
 EXPIRATION: 04/19/2025

TEST TYPE	Result	Time
EXTERNAL STANDARD	0.000	15:08
INTERNAL STANDARD	0.076	15:08
EXTERNAL STANDARD	0.000	15:09
INTERNAL STANDARD	0.000	15:10
EXTERNAL STANDARD	0.000	15:11
INTERNAL STANDARD	0.076	15:11
EXTERNAL STANDARD	0.000	15:12
INTERNAL STANDARD	0.000	15:08
EXTERNAL STANDARD	0.076	15:08
INTERNAL STANDARD	0.000	15:09
EXTERNAL STANDARD	0.000	15:10
INTERNAL STANDARD	0.000	15:11
EXTERNAL STANDARD	0.076	15:11
INTERNAL STANDARD	0.000	15:12

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