

Alaska Scientific Crime Detection Laboratory

DataMaster Calibration Form

Effective: 1/23/2024

Version: 4.0

Instrument #: 100381

Analyst or Technician Name: Derek Walton

DataMaster DMT Calibration Start Date: 11/24/2025

Diagnostic Test

- ☒ Perform Diagnostic Test (View Details)
- ☒ Internal Standard Value $\leq 3.00\%$

Technician Screen and Calibration Factors

- ☒ Adjust Voltages (if needed)
 - Lamp (2.60 V Maximum)
 - Bias
 - Cooler (2.00 V Maximum)
 - Chopper Frequency
 - Detector Voltage (-0.100V to 0.100V)
- ☒ Set RFI Sensitivity
- ☒ Adjust internal barometer reading to match NIST-traceable barometer
Barometer/Thermometer/Hygrometer S/N: 24068071
Calibration Due Date: 09/10/26
- ☒ Verify Volume Setting (1.50 L +/- 0.10 L), adjust if needed
- ☒ Print Technician Screen
- ☒ Print "Cal Factors"

Minimum Volume Test

- ☒ Perform Minimum Volume (Subject) Test: 1.5 liters (1.3 L to 1.7 L)

As Left Linearity Testing

Barometric Pressure (in Hg) 29.82 Temperature(C) 21.2 Relative Humidity(%) 8

Approved Concentrations (g/210L): 0.020, 0.040, 0.080, 0.100, 0.150, 0.300

Functional Tests

- ☐ Incomplete
- ☐ Invalid
- ☐ Interference (Volatiles) - *Print with View Details*
- ☐ Maximum Attempts Exceeded
- ☐ Radio Frequency Interference (RFI)

1. Acetone Reagent Lot Number: _____ Expiration Date: _____
Simulator S/N: _____ Thermometer Verification Performed? ☐
2. Isopropanol Reagent Lot Number: _____ Expiration Date: _____
Simulator S/N: _____ Thermometer Verification Performed? ☐
3. Negative (Ethanol Only) Lot Number: _____ Expiration Date: _____
Simulator S/N: _____ Thermometer Verification Performed? ☐

Calibrated External Thermometer S/N: _____

Calibration Due Date: _____

Administrative

- ☐ Verify Stylus Calibration
- ☐ Reset Options
- ☐ Clear Memory
- ☐ Verification of Calibration (VOC)
- ☐ Perform Non-Drinking Subject Test
- ☐ Upload Instrument
- ☐ Remove Dry Gas Tank Before Shutdown
- ☐ Add Ready for Tech Review Note

Completion

Lab Work End Date: 11/24/2025 DJW

Data Interpretation Date (Technician): _____ (if applicable)

Data Interpretation Date (Analyst): _____

All printed copies are uncontrolled.

Approved by: Chemistry Supervisor

Calibration did not
pass due to linearity
slope out of range.
DMV 11/24/2025

Adjustment
needed.

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100381

Date: 11/24/2025
Time: 08:10:08

VERSIONS

DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C (44.0°C - 52.0°C)	PASSED
Breath Tube = 48.0°C (38.0°C - 50.0°C)	PASSED

SETTINGS

Lamp Voltage = 1.79 V (1.02 V - 2.38 V)	PASSED
Cooler Voltage = 1.73 V (0.97 V - 2.27 V)	PASSED
Bias Voltage = 80 V (47 V - 111 V)	PASSED
Chopper Freq = 523 Hz (475 Hz - 575 Hz)	PASSED
Barometer = 29.8 in	

PUMP INFO

Flow Rate = 4.643 L/M (3.500 L/M - 6.500 L/M)	PASSED
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DETECTOR INFO

PUMP ON (0.002 V <= 0.010 V)	PASSED
PUMP OFF (0.003 V <= 0.010 V)	PASSED

FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD ✓	PASSED
Xq = 0.092 0.77% (0.00% - 4.00%)	

Technician Screen

DATAMASTER dmt: 100381

Date: 11/24/2025

Time: 8:17 AM

Temperatures (°C)

Sample Cell: 48.6°C

Breath Tube: 47.7°C

Current Barometer 29.8 in

Volume (Ltr) 1.57 ✓

Settings

Lamp: 1.73 V

Bias: 80 V

Cooler: 1.63 V

Chopper: 526 Hz

Voltages (V)

Flow: 1.08 V

Detector: -0.062 V ✓

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100381

Date: 08/12/2015
Time: 10:43:14

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

Ca	=	0.1000		
CAL	=	0.951119	0.800	<= CAL < 1.200
b1	=	0.0003	0.0000	<= b1 < 0.0040
b2	=	0.0036	0.0010	<= b2 < 0.0100
b3	=	0.0003	0.0000	<= b3 < 0.0040
Xq	=	0.0913	0.0500	<= Xq < 0.2000
a21	=	1.088949	1.050	<= a21 < 1.300
a31	=	0.418374	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100381

Date: 11/24/2025

Time: 08:20:02

SUBJECT NAME:

TEST TEST

LICENSE #: XXXX

OPERATOR NAME:

DEREK WALTON

OPERATOR'S #: 9508

DEPT/AGENCY:

MINIMUM VOLUME

CASE/REPORT: XXXX

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

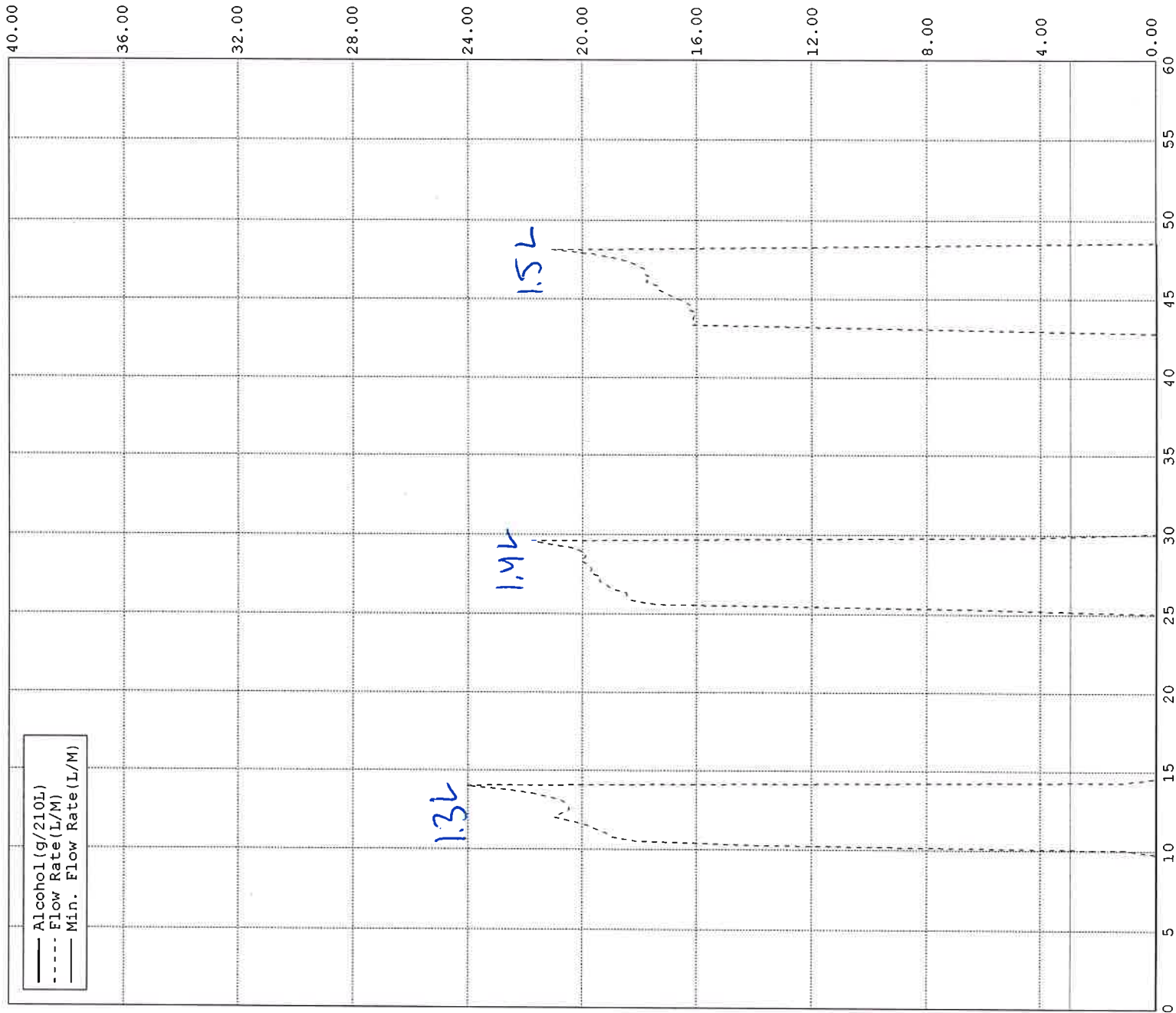
TARGET AT 29.83: 0.080

LOT #: AG335202

EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	08:21
BLANK TEST	0.000	08:21
INTERNAL STANDARD	VERIFIED	08:21
EXTERNAL STANDARD	0.076	08:21
BLANK TEST	0.000	08:22
SUBJECT SAMPLE (Vol=1.53L)	0.000	08:23
BLANK TEST	0.000	08:24
EXTERNAL STANDARD	0.077	08:24
BLANK TEST	0.000	08:25

Don



LINEARITY CHECK

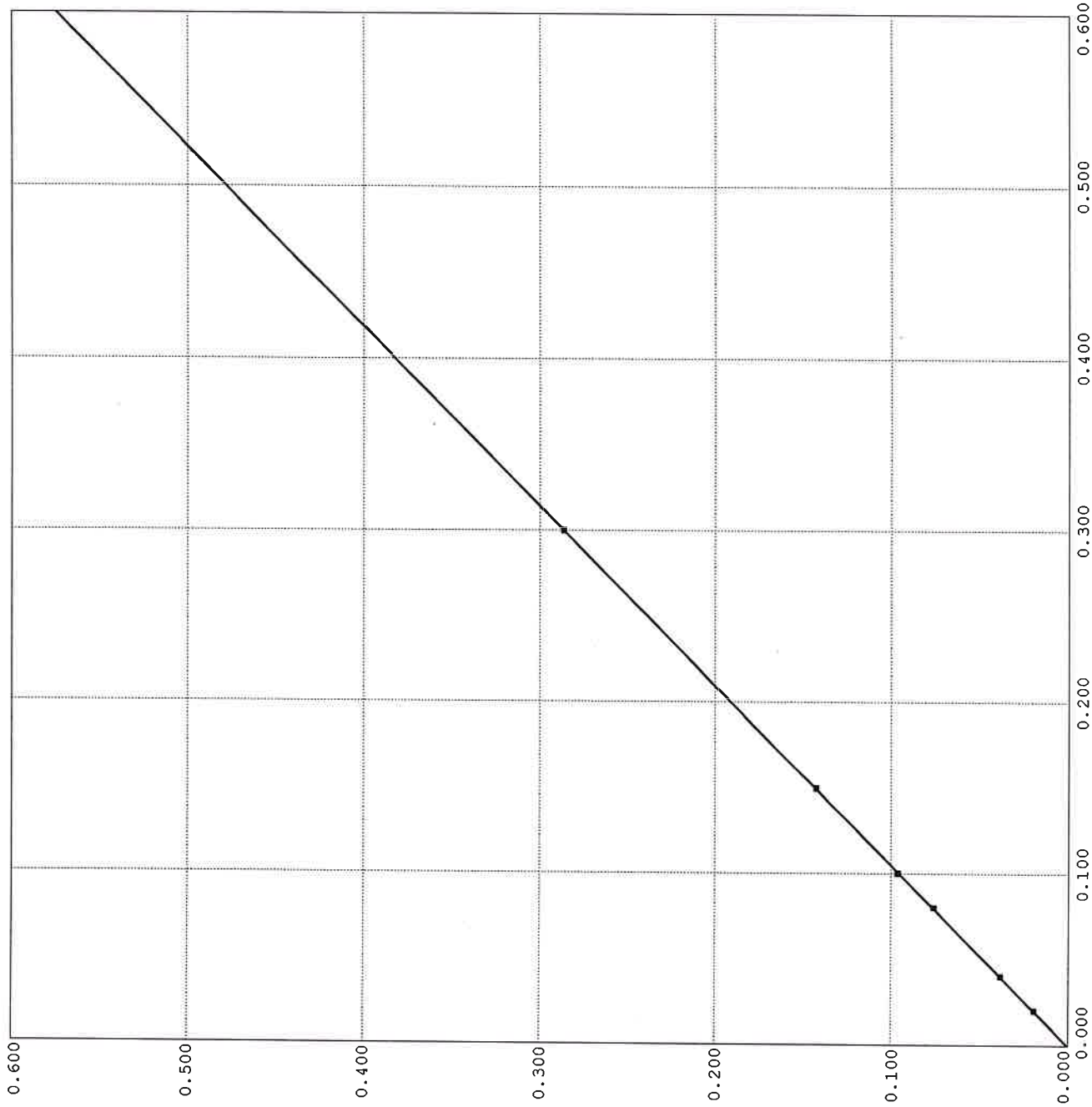
 Alaska Department of Public Safety
 DATAMASTER dmt: 100381

Date: 11/24/2025
 Time: 08:30:48

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0390	0.0000
0.080	0.0770	0.0000
0.100	0.0972	0.0004
0.149	0.1434	0.0005
0.299	0.2870	0.0000

SLOPE = 0.957259
 R² = 0.999987



WWT

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100381

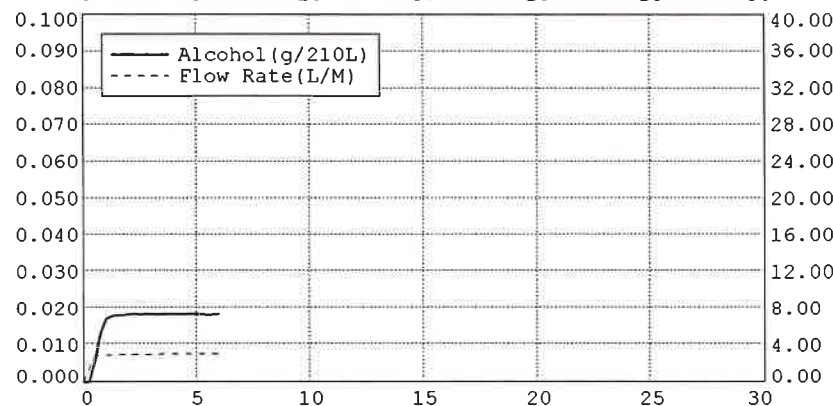
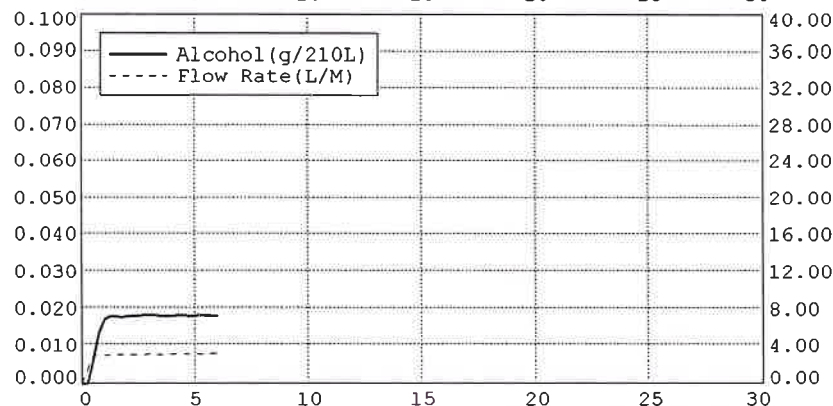
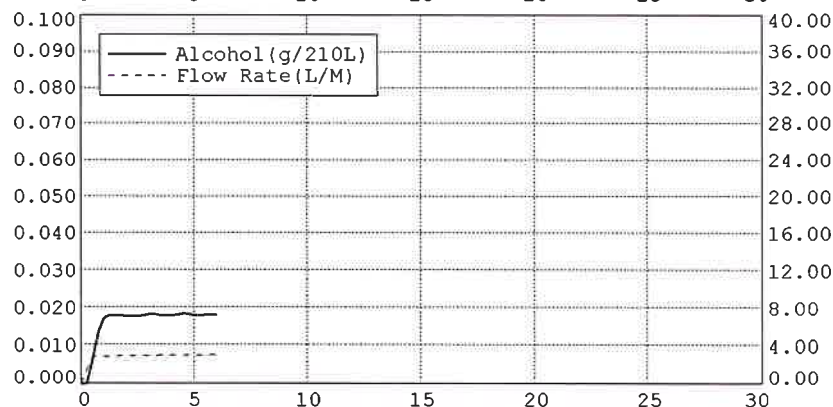
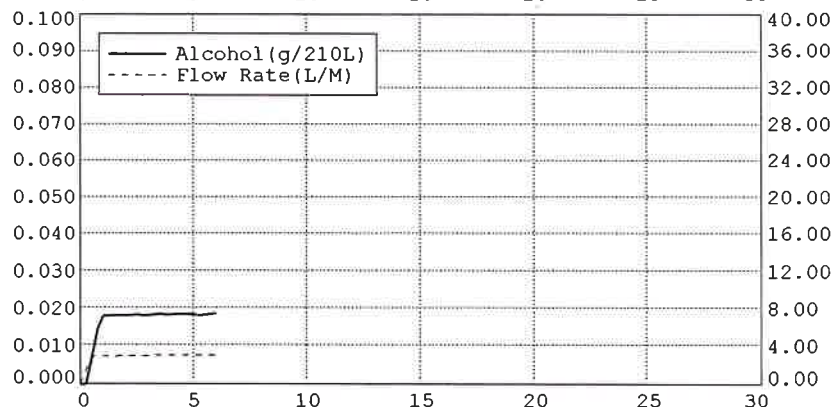
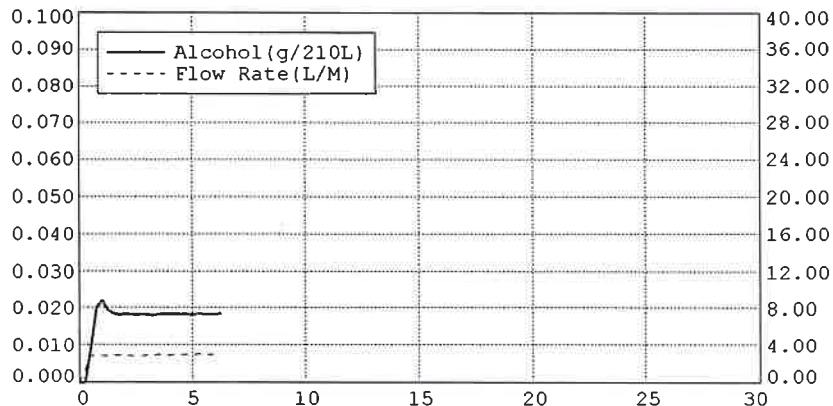
Date: 11/24/2025
Time: 08:30:51

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.81: 0.020
LOT #: AG408002
EXPIRATION: 03/20/2026
TANK PRESSURE: 849 psi

BLANK TEST	0.000	08:32
INTERNAL STANDARD	VERIFIED	08:32
EXTERNAL STANDARD	0.020	08:32
BLANK TEST	0.000	08:33
EXTERNAL STANDARD	0.020	08:33
BLANK TEST	0.000	08:34
EXTERNAL STANDARD	0.020	08:34
BLANK TEST	0.000	08:35
EXTERNAL STANDARD	0.020	08:35
BLANK TEST	0.000	08:36
EXTERNAL STANDARD	0.020	08:36
BLANK TEST	0.000	08:37

Average = 0.0200
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100381

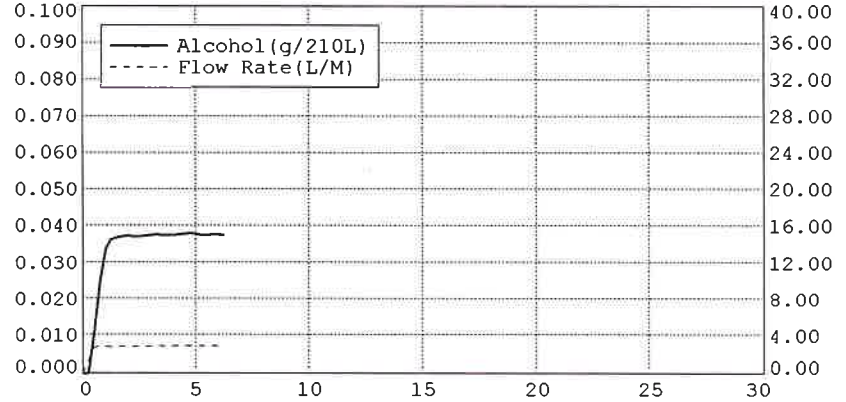
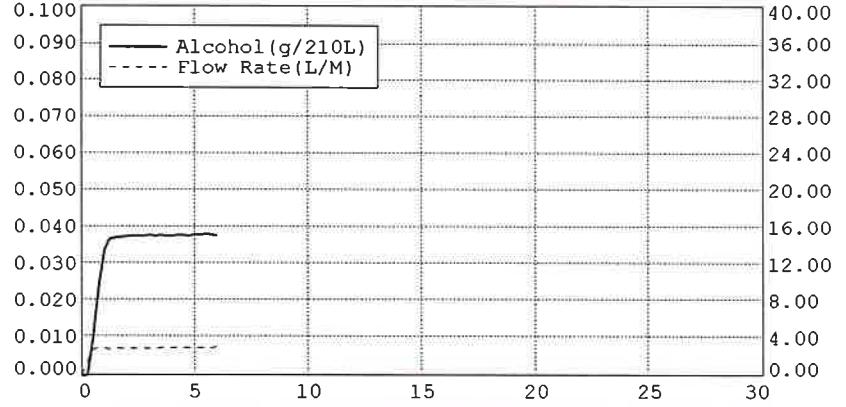
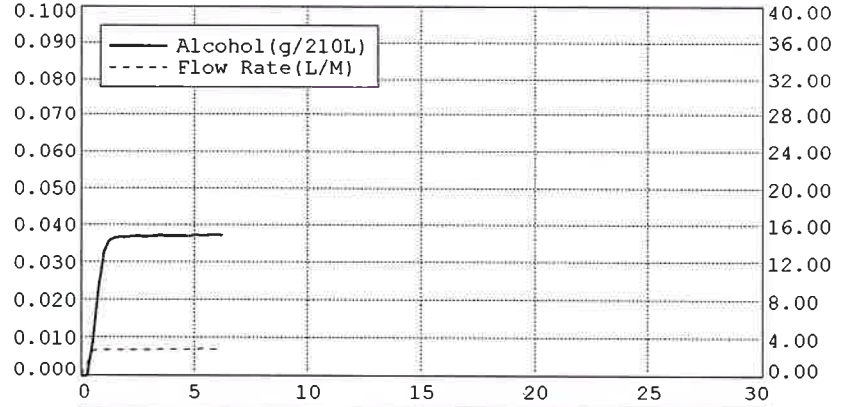
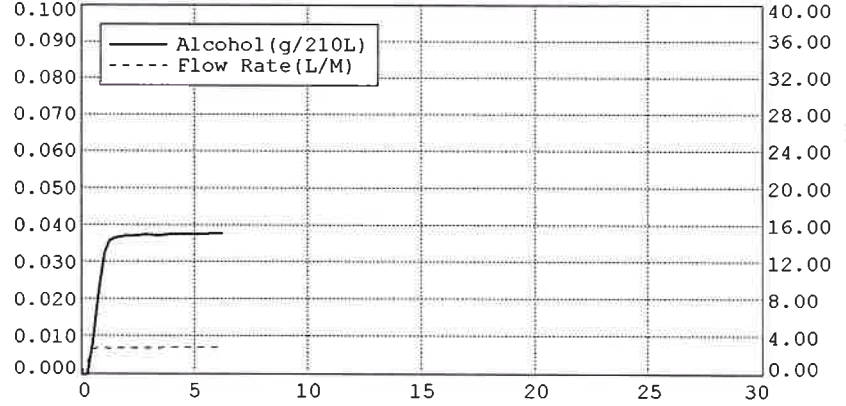
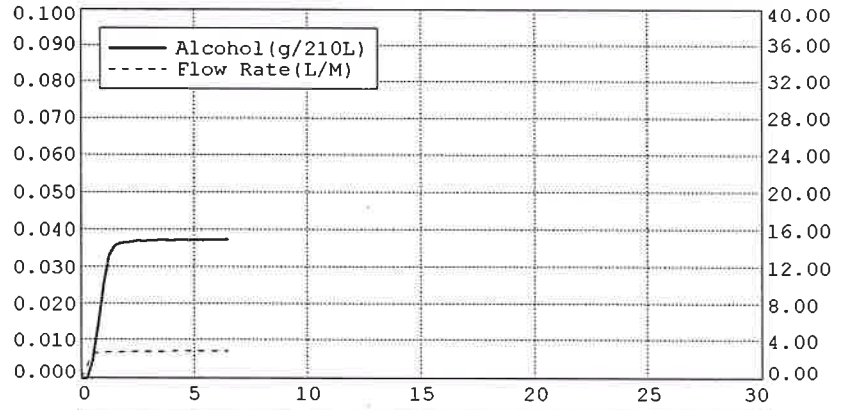
Date: 11/24/2025
Time: 08:38:52

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.82: 0.040
LOT #: AG407908
EXPIRATION: 03/19/2026
TANK PRESSURE: 588 psi

BLANK TEST	0.000	08:40
INTERNAL STANDARD	VERIFIED	08:40
EXTERNAL STANDARD	0.039	08:40
BLANK TEST	0.000	08:41
EXTERNAL STANDARD	0.039	08:41
BLANK TEST	0.000	08:42
EXTERNAL STANDARD	0.039	08:42
BLANK TEST	0.000	08:43
EXTERNAL STANDARD	0.039	08:43
BLANK TEST	0.000	08:44
EXTERNAL STANDARD	0.039	08:44
BLANK TEST	0.000	08:45

Average = 0.0390
Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100381

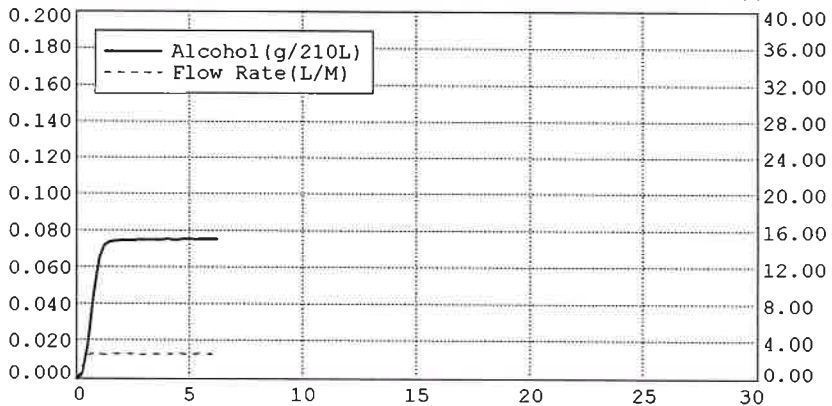
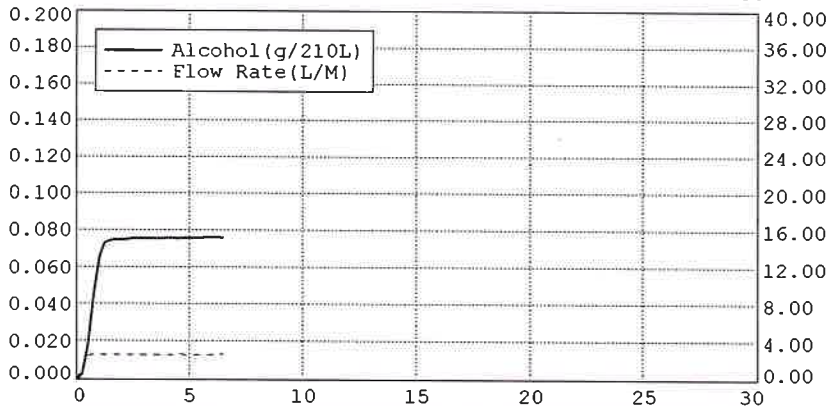
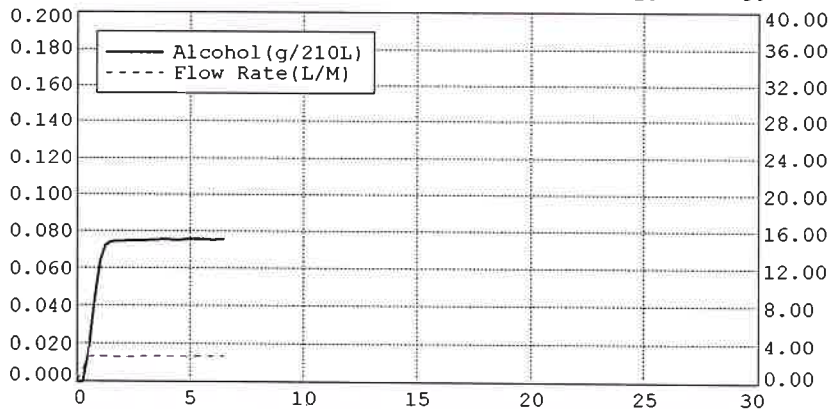
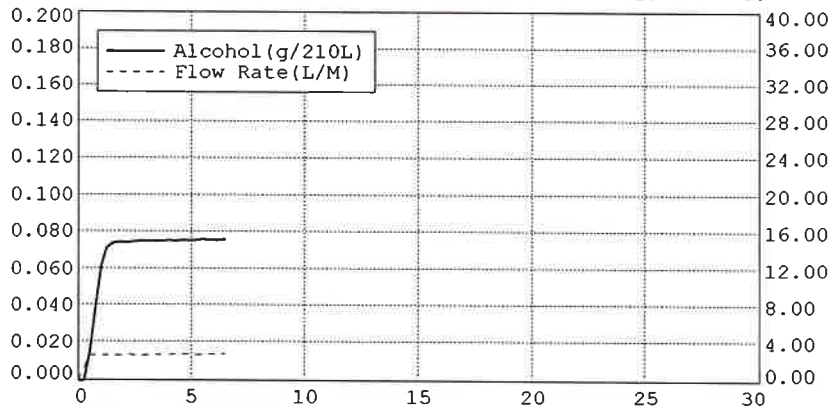
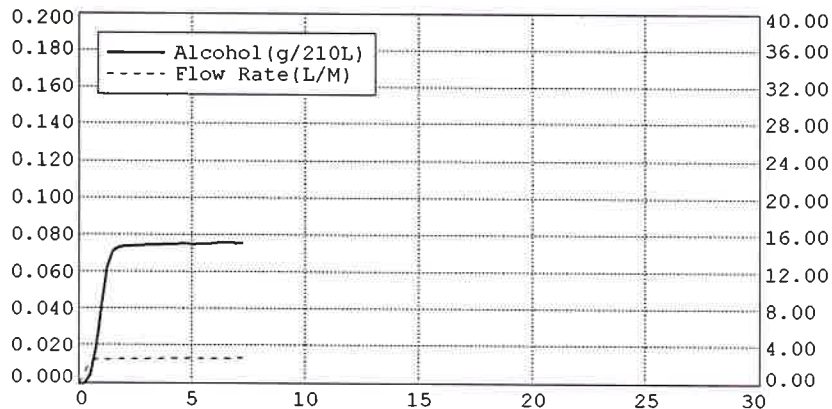
Date: 11/24/2025
Time: 09:03:27

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.83: 0.080
LOT #: AG335202
EXPIRATION: 12/18/2025
TANK PRESSURE: 275 psi

BLANK TEST	0.000	09:04
INTERNAL STANDARD	VERIFIED	09:04
EXTERNAL STANDARD	0.077	09:05
BLANK TEST	0.000	09:06
EXTERNAL STANDARD	0.077	09:06
BLANK TEST	0.000	09:07
EXTERNAL STANDARD	0.077	09:07
BLANK TEST	0.000	09:08
EXTERNAL STANDARD	0.077	09:08
BLANK TEST	0.000	09:09
EXTERNAL STANDARD	0.077	09:09
BLANK TEST	0.000	09:10

Average = 0.0770
Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100381

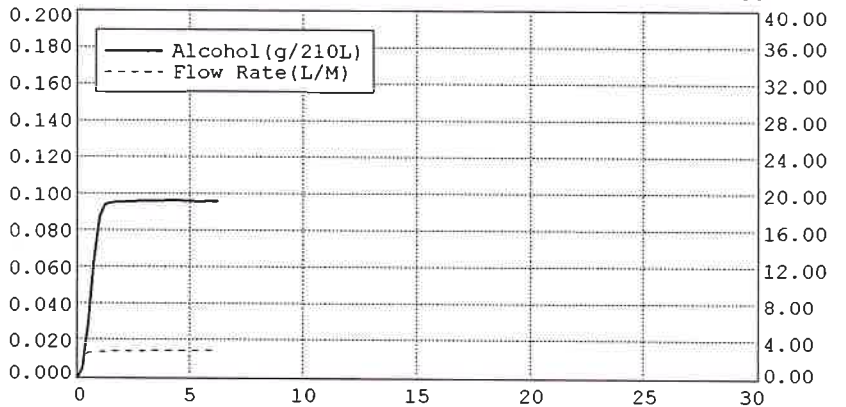
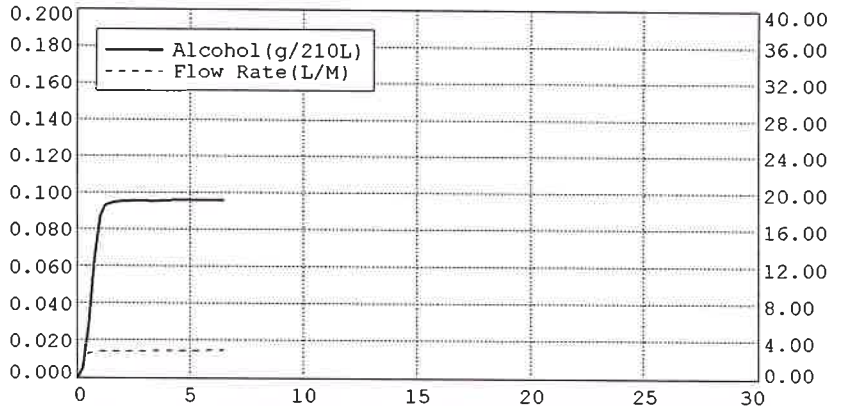
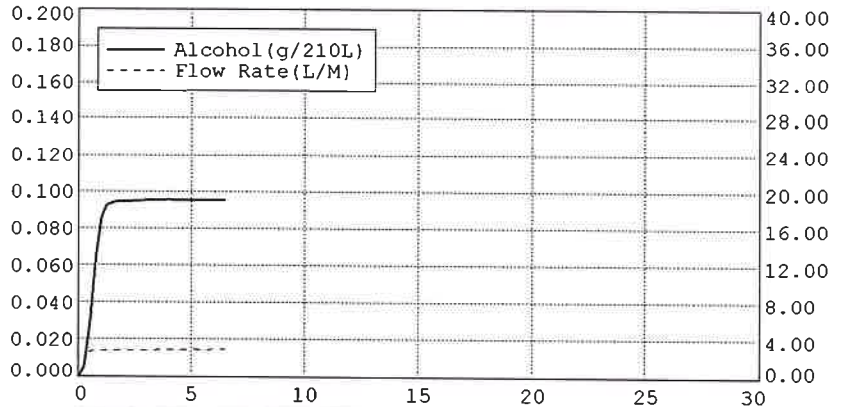
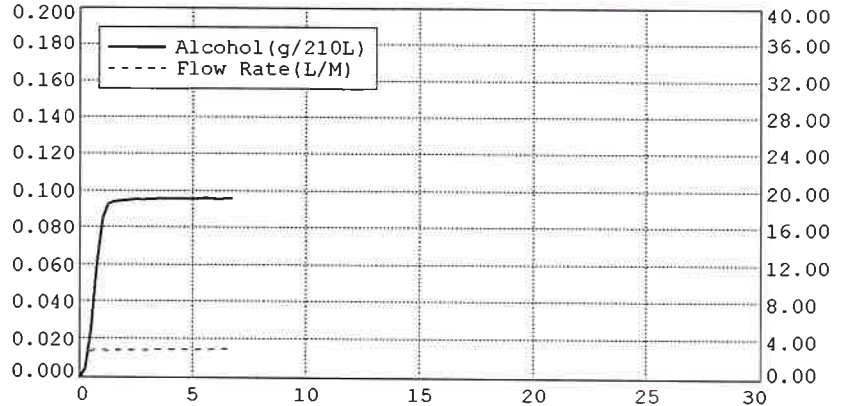
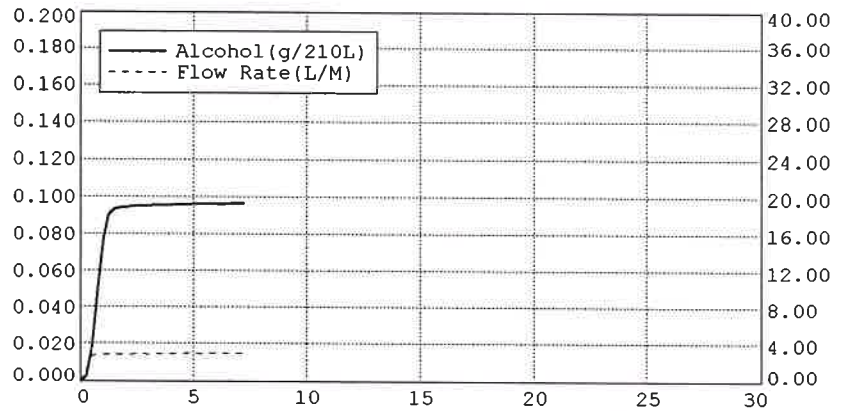
Date: 11/24/2025
Time: 09:11:47

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.82: 0.100
LOT #: AG333401
EXPIRATION: 11/30/2025
TANK PRESSURE: 752 psi

Test Type	Value	Time
BLANK TEST	0.000	09:12
INTERNAL STANDARD	VERIFIED	09:13
EXTERNAL STANDARD	0.098	09:13
BLANK TEST	0.000	09:14
EXTERNAL STANDARD	0.097	09:14
BLANK TEST	0.000	09:15
EXTERNAL STANDARD	0.097	09:15
BLANK TEST	0.000	09:16
EXTERNAL STANDARD	0.097	09:16
BLANK TEST	0.000	09:17
EXTERNAL STANDARD	0.097	09:17
BLANK TEST	0.000	09:18

Average = 0.0972
Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
DATAMASTER dmt: 100381

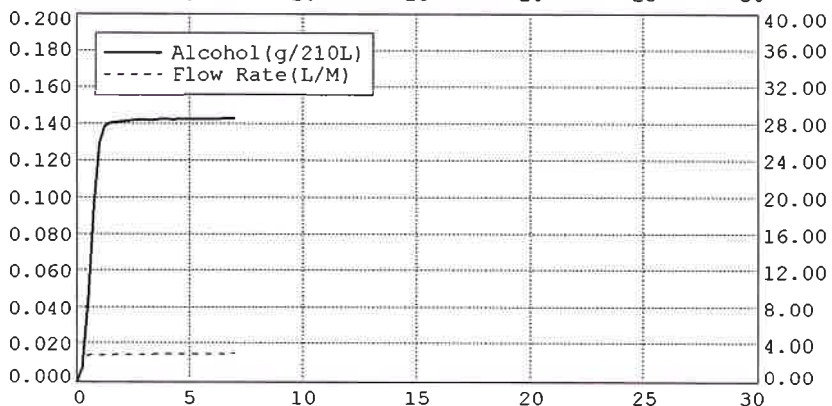
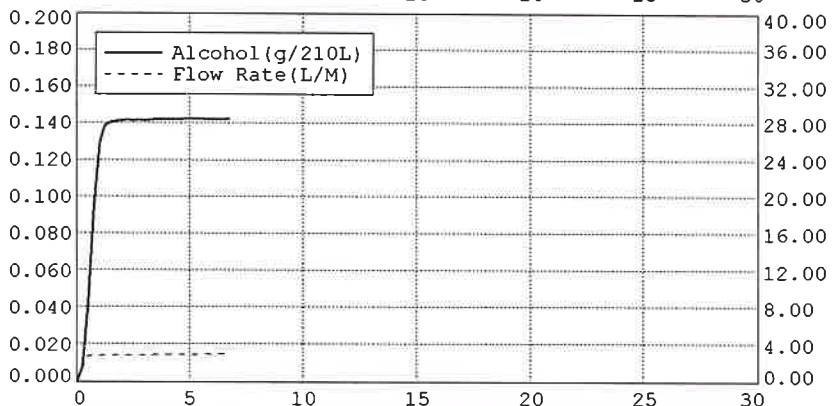
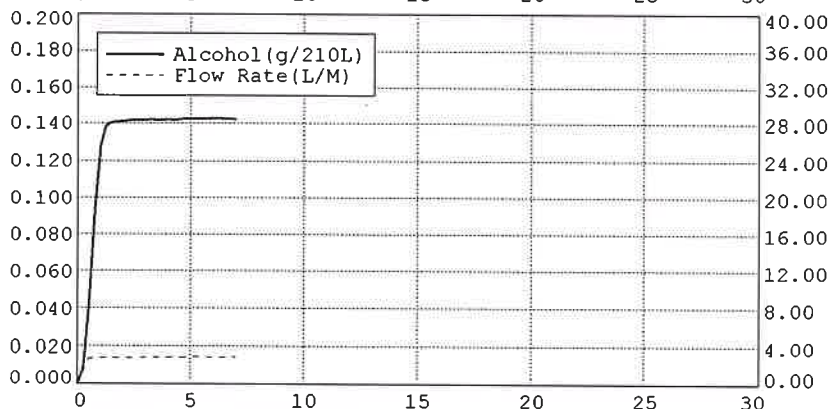
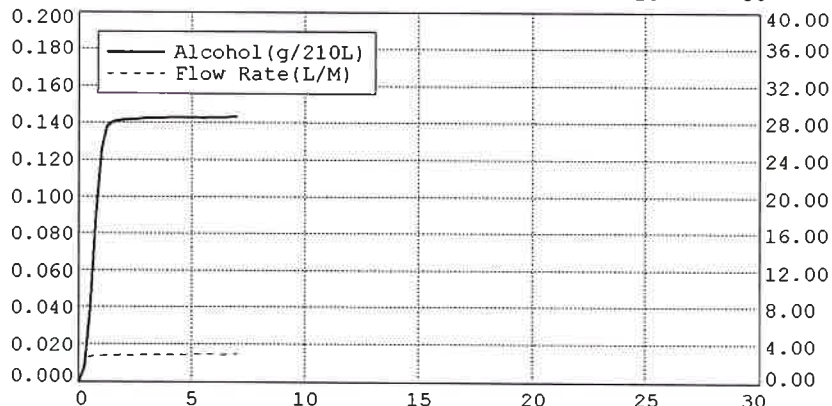
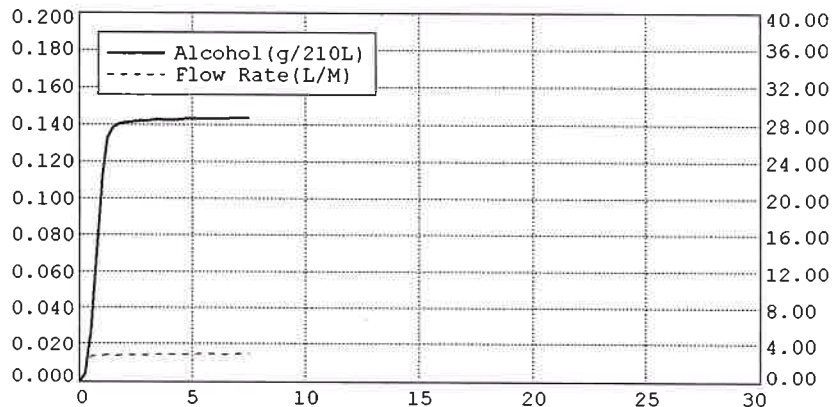
Date: 11/24/2025
Time: 09:19:14

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.150
TARGET AT 29.82: 0.149
LOT #: AG515604
EXPIRATION: 06/05/2027
TANK PRESSURE: 783 psi

BLANK TEST	0.000	09:20
INTERNAL STANDARD	VERIFIED	09:20
EXTERNAL STANDARD	0.144	09:20
BLANK TEST	0.000	09:21
EXTERNAL STANDARD	0.144	09:21
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.143	09:23
BLANK TEST	0.000	09:23
EXTERNAL STANDARD	0.143	09:24
BLANK TEST	0.000	09:25
EXTERNAL STANDARD	0.143	09:25
BLANK TEST	0.000	09:26

Average = 0.1434
Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
DATAMASTER dmt: 100381

Date: 11/24/2025
Time: 09:27:07

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
TARGET AT 29.82: 0.299
LOT #: AG427706
EXPIRATION: 10/03/2026
TANK PRESSURE: 293 psi

BLANK TEST	0.000	09:28
INTERNAL STANDARD	VERIFIED	09:28
EXTERNAL STANDARD	0.287	09:28
BLANK TEST	0.000	09:29
EXTERNAL STANDARD	0.287	09:29
BLANK TEST	0.000	09:30
EXTERNAL STANDARD	0.287	09:31
BLANK TEST	0.000	09:31
EXTERNAL STANDARD	0.287	09:32
BLANK TEST	0.000	09:33
EXTERNAL STANDARD	0.287	09:33
BLANK TEST	0.000	09:34

Average = 0.2870
Std Dev = 0.0000

