

Alaska Scientific Crime Detection Laboratory

DataMaster Calibration Form

Effective: 1/23/2024

Version: 4.0

Instrument #: 100424 Analyst or Technician Name: Derek Watten

DataMaster DMT Calibration Start Date: 07/21/25

Diagnostic Test

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

Calibration rejected due to Filter Wheel
Errors during functional tests.
DJW 07/23/2025

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: 240680771
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: 1.6 liters (1.3 L to 1.7 L)

As Left Linearity Testing

Barometric Pressure (in Hg) 29.97 Temperature(C) 22.6 Relative Humidity(%) 50%
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: 07/21/25 DM 07/23/25
Data Interpretation Date (Technician): _____ (if applicable)
Data Interpretation Date (Analyst): _____

All printed copies are uncontrolled.

Approved by: Chemistry Supervisor

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 07/21/2025
Time: 11:14:40

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

TEMPERATURES

Sample Chamber = 48.8°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 46.7°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 1.68 V	PASSED
(1.03 V - 2.39 V)	
Cooler Voltage = 1.68 V	PASSED
(1.04 V - 2.42 V)	
Bias Voltage = 80 V	PASSED
(48 V - 112 V)	
Chopper Freq = 535 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 30.0 in	

PUMP INFO

Flow Rate = 3.972 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 = 0.080 1.99% (0.00% - 4.00%)	

Technician Screen

DATAMASTER dmt: 100424

Date: 07/21/2025

Time: 11:34 AM

Temperatures (°C)

Sample Cell: 48.7°C

Breath Tube: 47.0°C

Current Barometer 30.0 in ✓

Volume (Ltr) 1.48 ✓

Settings

Lamp: 1.68 V

Bias: 80 V

Cooler: 1.68 V

Chopper: 527 Hz

Voltages (V)

Flow: 1.04 V ✓

Detector: 0.000 V ✓

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 02/04/2021
Time: 08:40:43

OPERATOR NAME:
ST LOUIS INTOX A TECH
CERTIFICATE #: OV8122

Ca	=	0.1990		
CAL	=	1.027085	0.800 <= CAL < 1.200	
b1	=	0.0004	0.0000 <= b1 < 0.0040	
b2	=	0.0051	0.0010 <= b2 < 0.0100	
b3	=	0.0004	0.0000 <= b3 < 0.0040	
Xq	=	0.0785	0.0500 <= Xq < 0.2000	
a21	=	1.135345	1.050 <= a21 < 1.300	
a31	=	0.399030	0.300 <= a31 < 0.800	

SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100424

Date: 07/21/2025

Time: 11:36:20

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

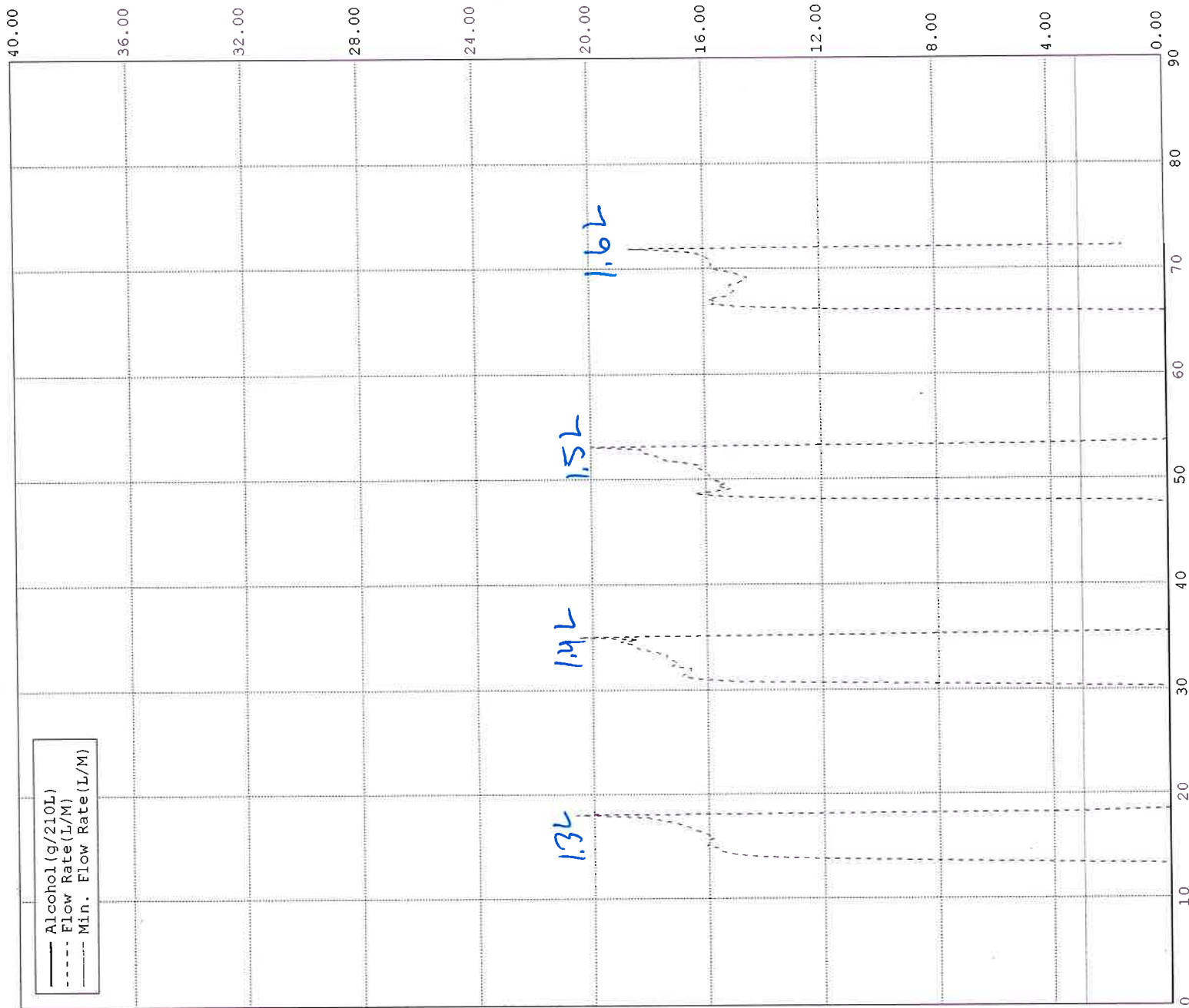
TARGET AT 29.99: 0.080

LOT #: AG335202

EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	11:37
BLANK TEST	0.000	11:37
INTERNAL STANDARD	VERIFIED	11:37
EXTERNAL STANDARD	0.082	11:38
BLANK TEST	0.000	11:39
SUBJECT SAMPLE (Vol=1.54L)	0.000	11:40
BLANK TEST	0.000	11:41
EXTERNAL STANDARD	0.082	11:41
BLANK TEST	0.000	11:42

DON



LINEARITY CHECK

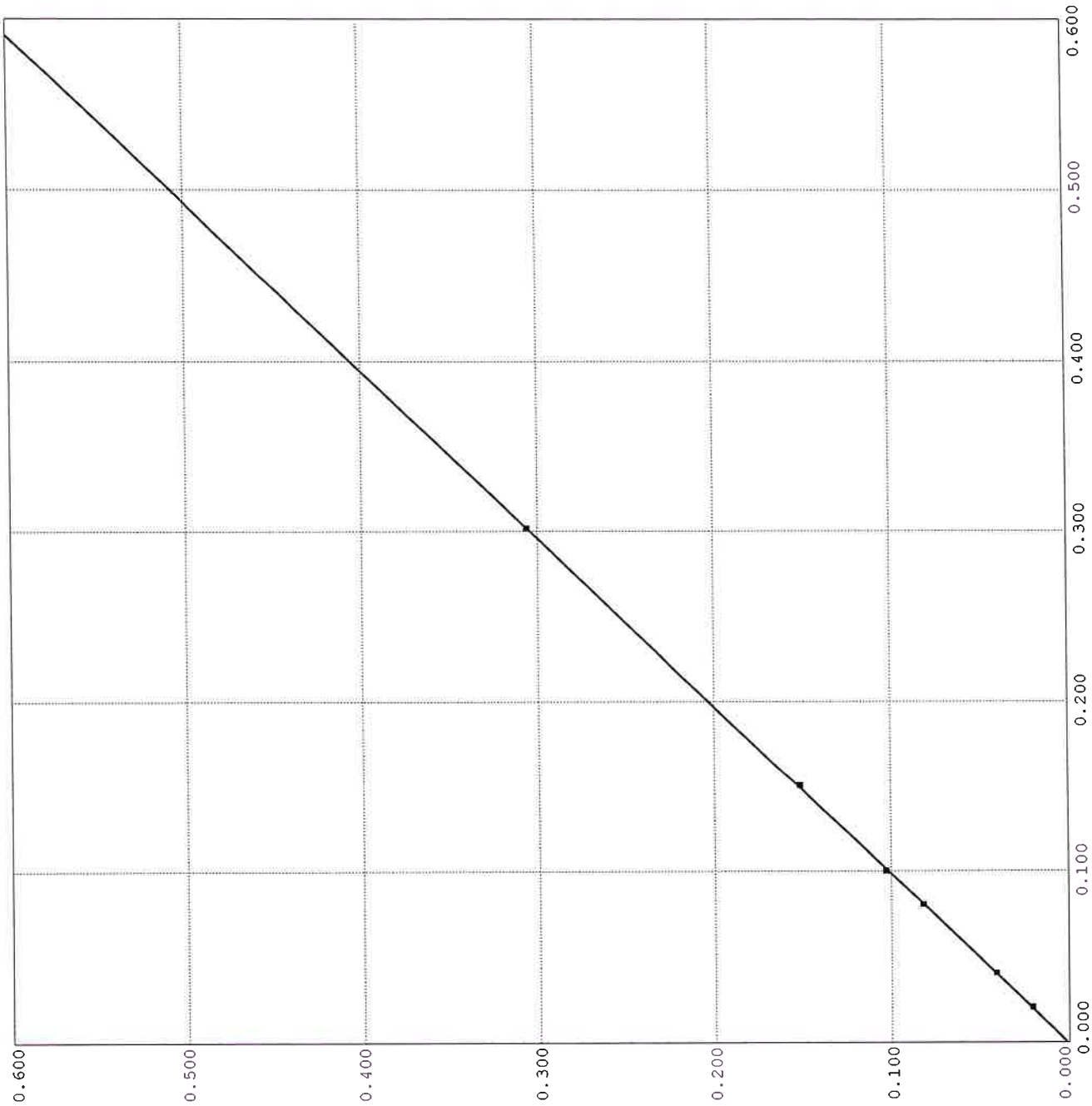
Alaska Department of Public Safety
 DATAMASTER dmt: 100424

Date: 07/21/2025
 Time: 13:23:39

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0212	0.0004
0.040	0.0418	0.0004
0.080	0.0830	0.0000
0.100	0.1040	0.0000
0.150	0.1522	0.0004
0.301	0.3068	0.0004

SLOPE = 1.014229
 R^2 = 0.999932



DMC

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100424

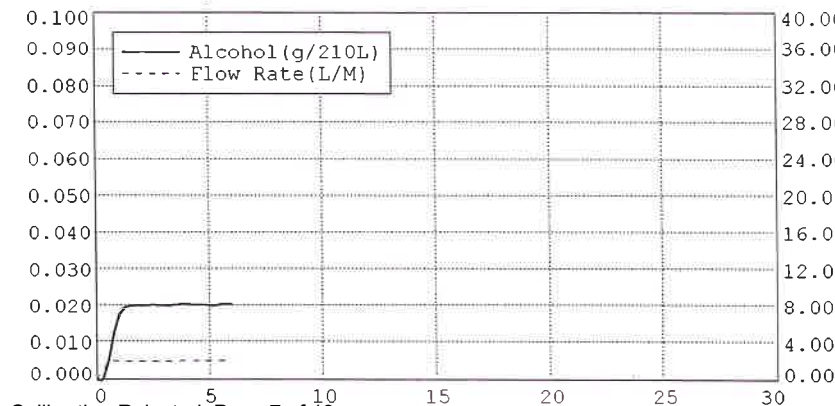
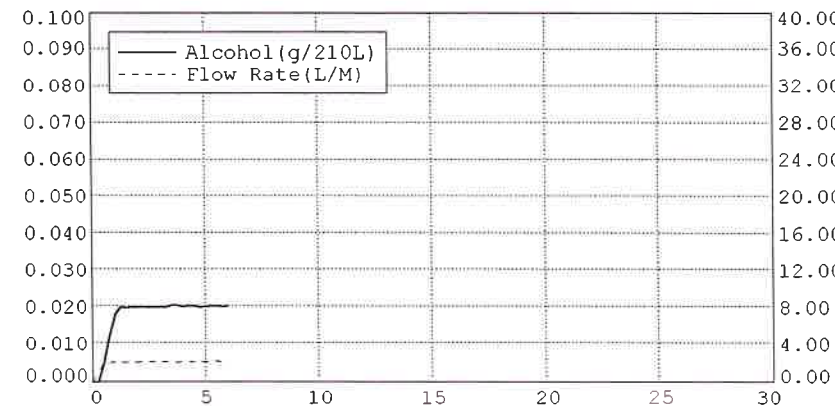
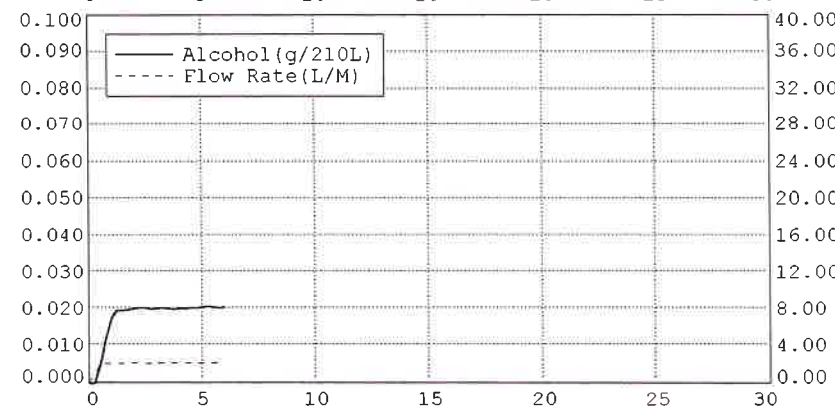
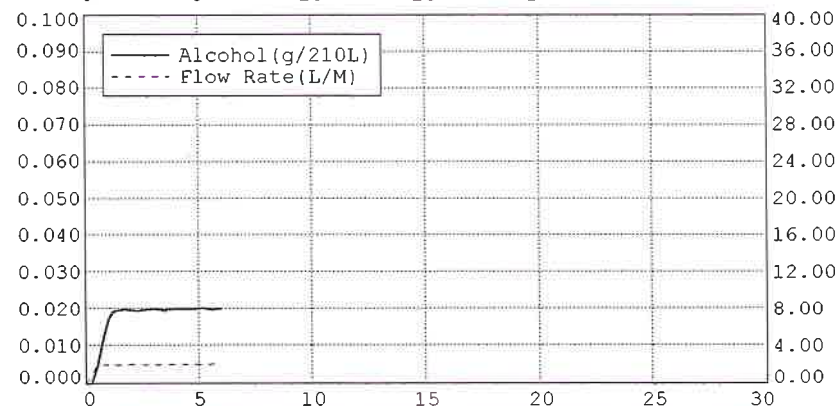
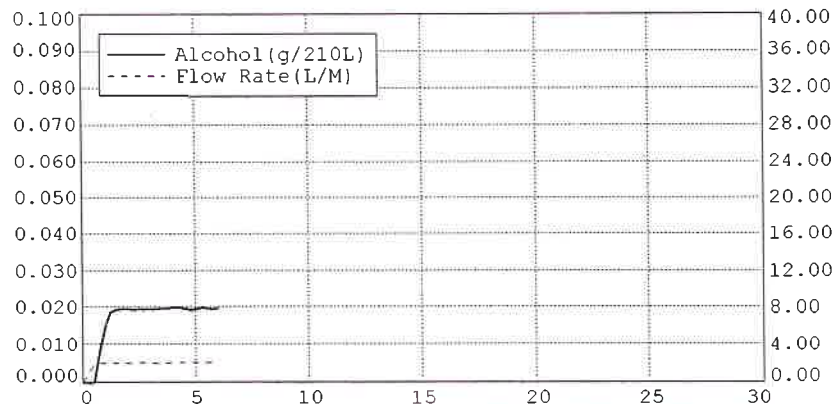
Date: 07/21/2025
Time: 13:23:41

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.98: 0.020
LOT #: AG408002
EXPIRATION: 03/20/2026
TANK PRESSURE: 527 psi

BLANK TEST	0.000	13:25
INTERNAL STANDARD	VERIFIED	13:25
EXTERNAL STANDARD	0.021	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.021	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.021	13:27
BLANK TEST	0.000	13:28
EXTERNAL STANDARD	0.021	13:28
BLANK TEST	0.000	13:29
EXTERNAL STANDARD	0.022	13:30
BLANK TEST	0.000	13:30

Average = 0.0212
Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100424

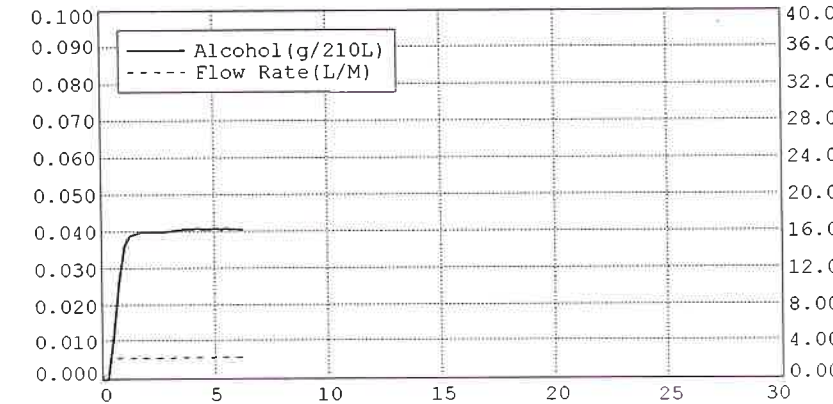
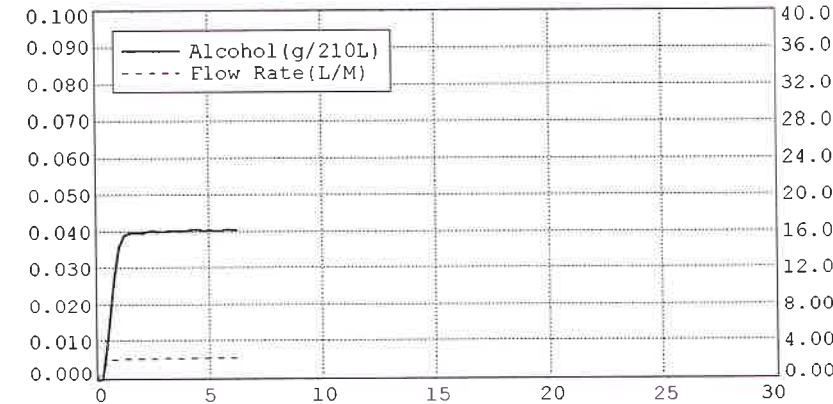
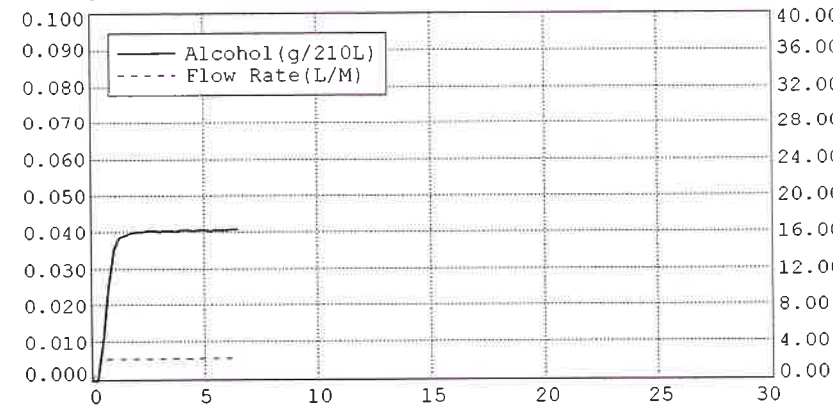
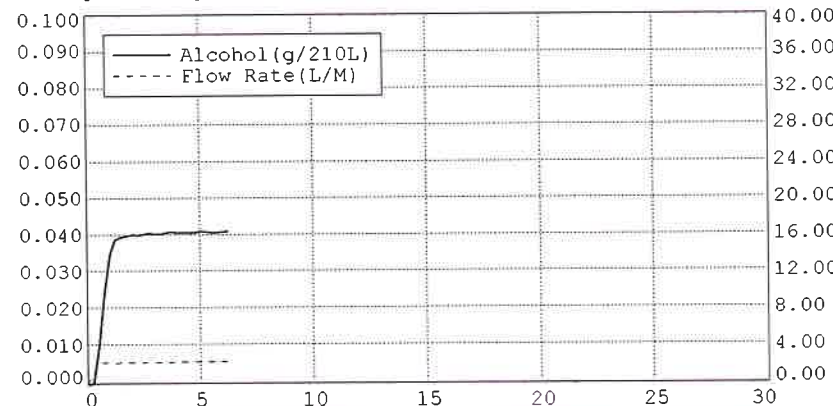
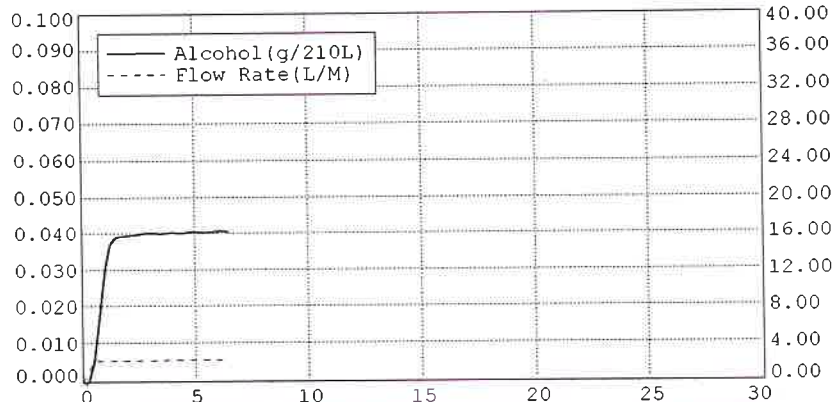
Date: 07/21/2025
Time: 13:31:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.98: 0.040
LOT #: AG407908
EXPIRATION: 03/19/2026
TANK PRESSURE: 933 psi

TEST TYPE	CONCENTRATION (g/210L)	TIME
BLANK TEST	0.000	13:32
INTERNAL STANDARD	VERIFIED	13:33
EXTERNAL STANDARD	0.042	13:33
BLANK TEST	0.000	13:34
EXTERNAL STANDARD	0.042	13:34
BLANK TEST	0.000	13:35
EXTERNAL STANDARD	0.042	13:35
BLANK TEST	0.000	13:36
EXTERNAL STANDARD	0.041	13:36
BLANK TEST	0.000	13:37
EXTERNAL STANDARD	0.042	13:37
BLANK TEST	0.000	13:38

Average = 0.0418
Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100424

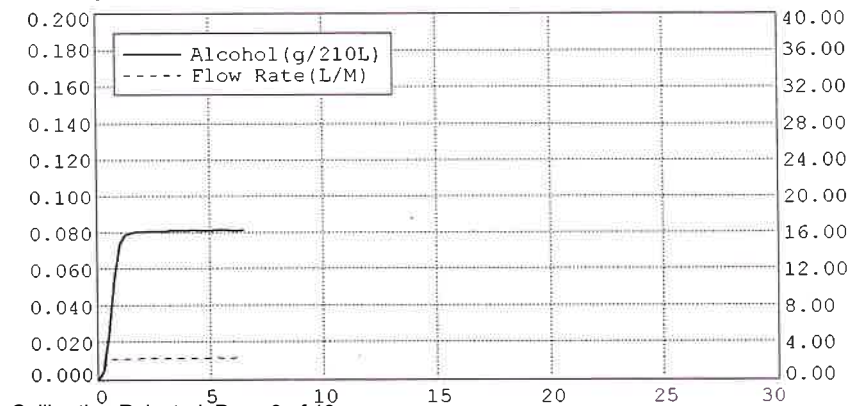
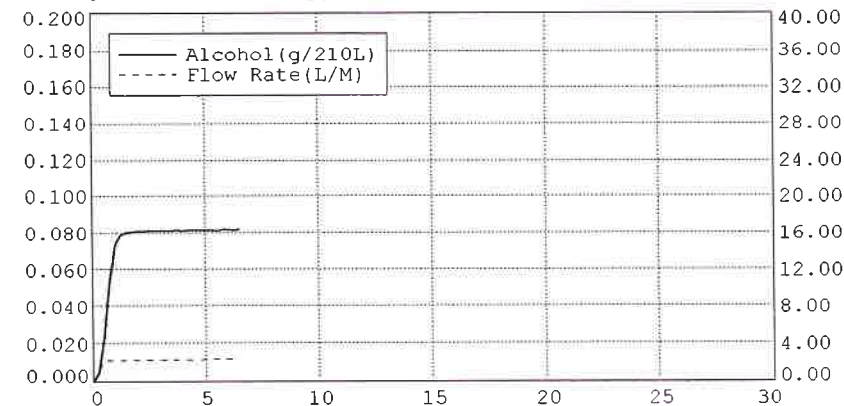
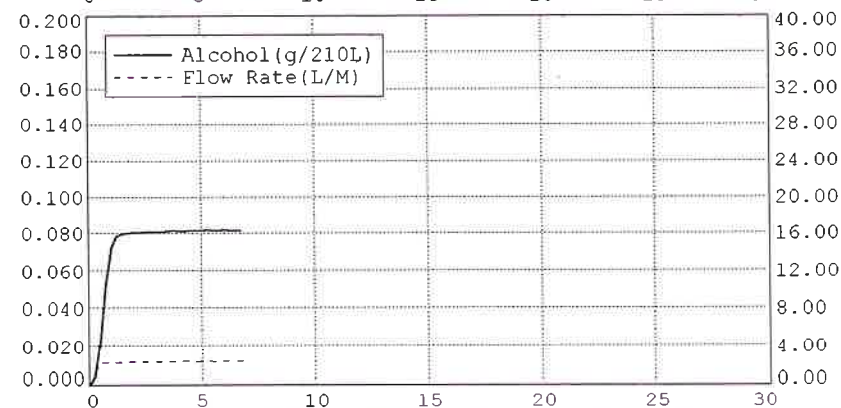
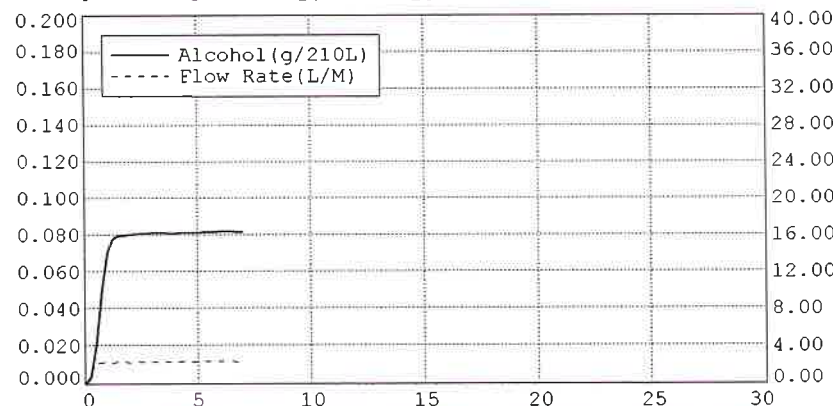
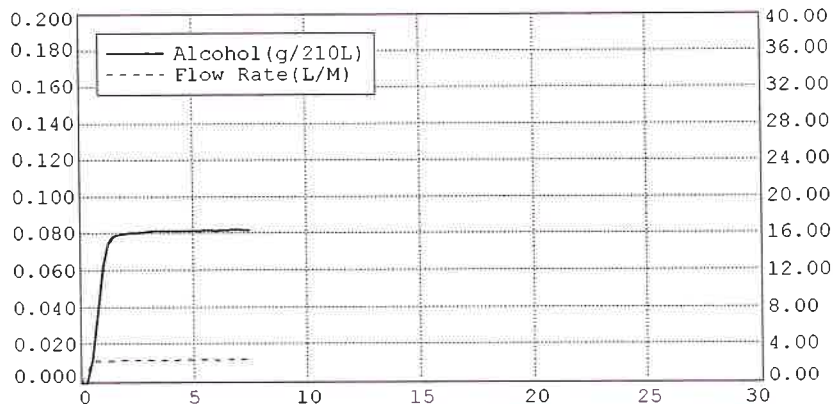
Date: 07/21/2025
Time: 13:39:00

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.98: 0.080
LOT #: AG335202
EXPIRATION: 12/18/2025
TANK PRESSURE: 1182 psi

BLANK TEST	0.000	13:40
INTERNAL STANDARD	VERIFIED	13:40
EXTERNAL STANDARD	0.083	13:40
BLANK TEST	0.000	13:41
EXTERNAL STANDARD	0.083	13:41
BLANK TEST	0.000	13:42
EXTERNAL STANDARD	0.083	13:42
BLANK TEST	0.000	13:43
EXTERNAL STANDARD	0.083	13:44
BLANK TEST	0.000	13:44
EXTERNAL STANDARD	0.083	13:45
BLANK TEST	0.000	13:46

Average = 0.0830
Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100424

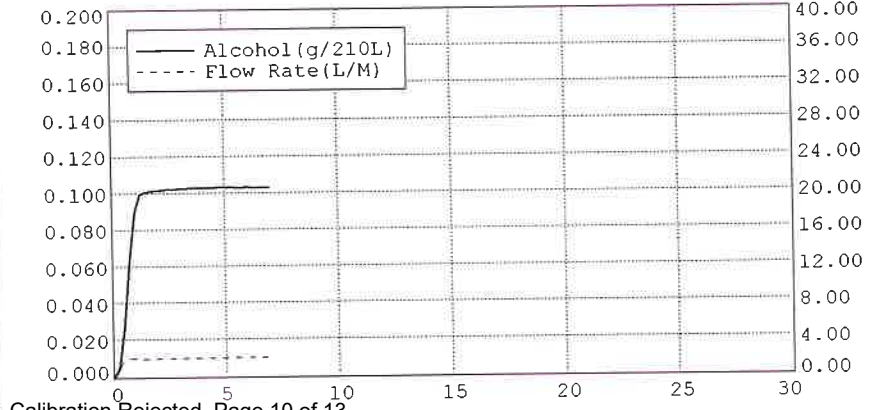
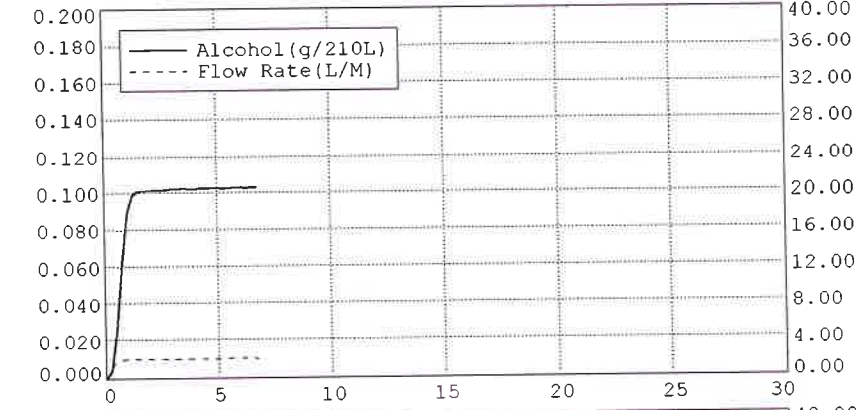
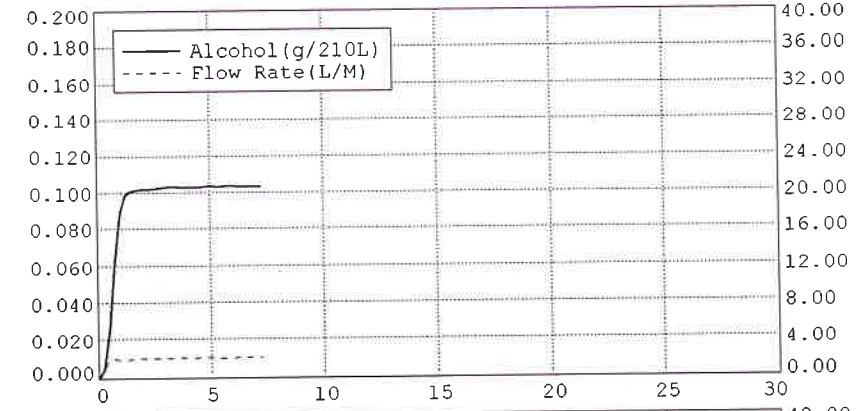
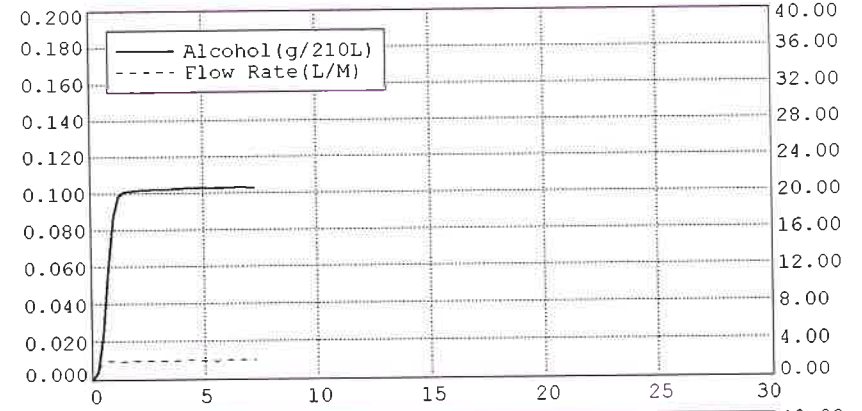
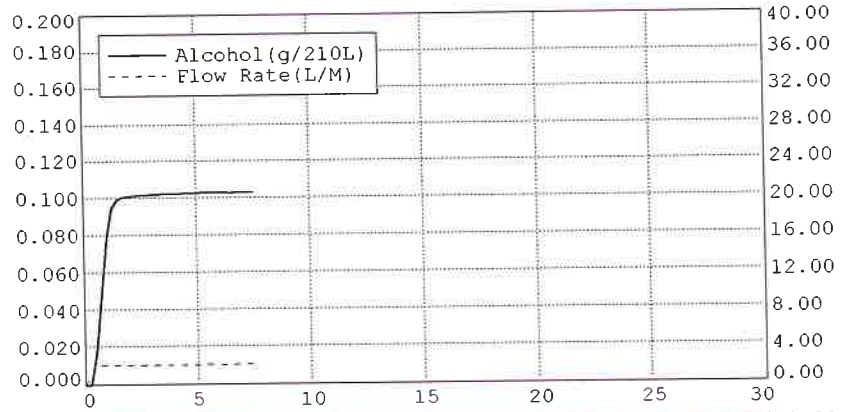
Date: 07/21/2025
Time: 13:46:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.98: 0.100
LOT #: AG333401
EXPIRATION: 11/30/2025
TANK PRESSURE: 537 psi

BLANK TEST	0.000	13:48
INTERNAL STANDARD	VERIFIED	13:48
EXTERNAL STANDARD	0.104	13:48
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.104	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.104	13:50
BLANK TEST	0.000	13:51
EXTERNAL STANDARD	0.104	13:51
BLANK TEST	0.000	13:52
EXTERNAL STANDARD	0.104	13:53
BLANK TEST	0.000	13:53

Average = 0.1040
Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
DATAMASTER dmt: 100424

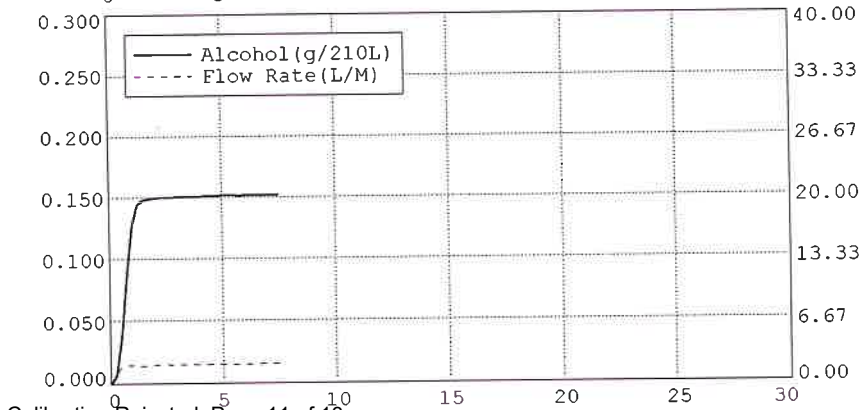
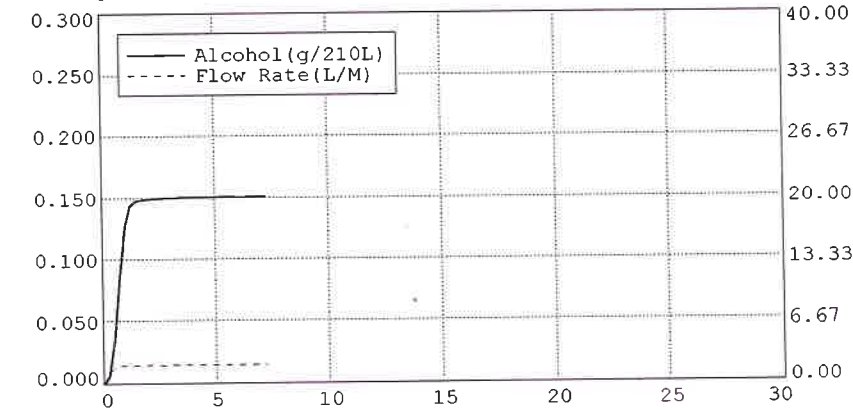
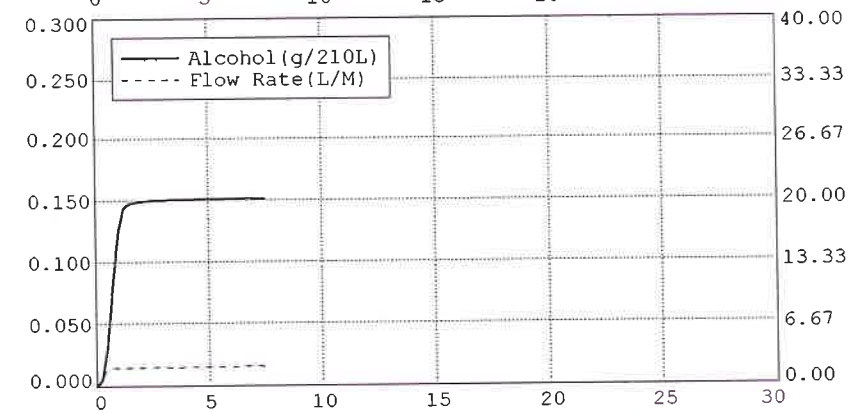
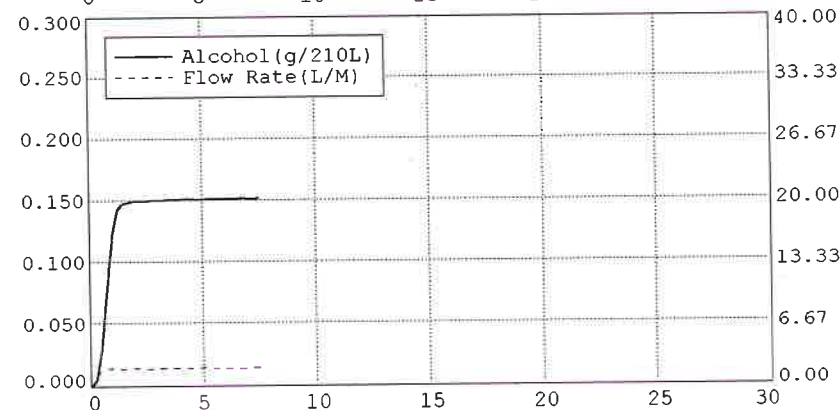
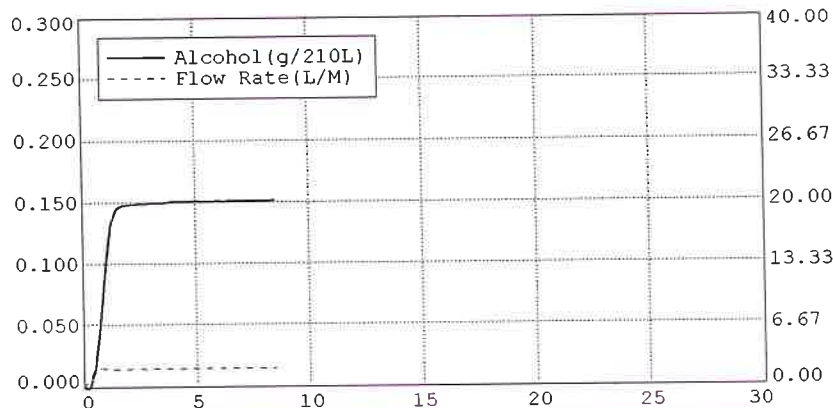
Date: 07/21/2025
Time: 14:05:12

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.150
TARGET AT 29.98: 0.150
LOT #: AG332004
EXPIRATION: 11/16/2025
TANK PRESSURE: 443 psi

BLANK TEST	0.000	14:08
INTERNAL STANDARD	VERIFIED	14:09
EXTERNAL STANDARD	0.152	14:09
BLANK TEST	0.000	14:10
EXTERNAL STANDARD	0.152	14:10
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.152	14:11
BLANK TEST	0.000	14:12
EXTERNAL STANDARD	0.152	14:12
BLANK TEST	0.000	14:13
EXTERNAL STANDARD	0.153	14:13
BLANK TEST	0.000	14:14

Average = 0.1522
Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
DATAMASTER dmt: 100424

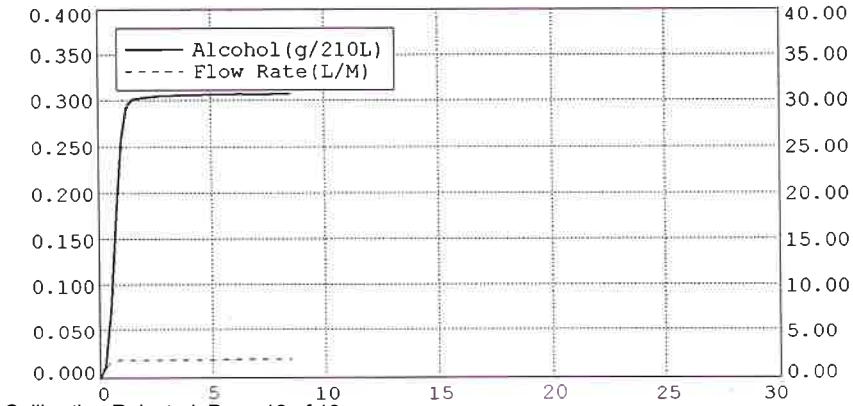
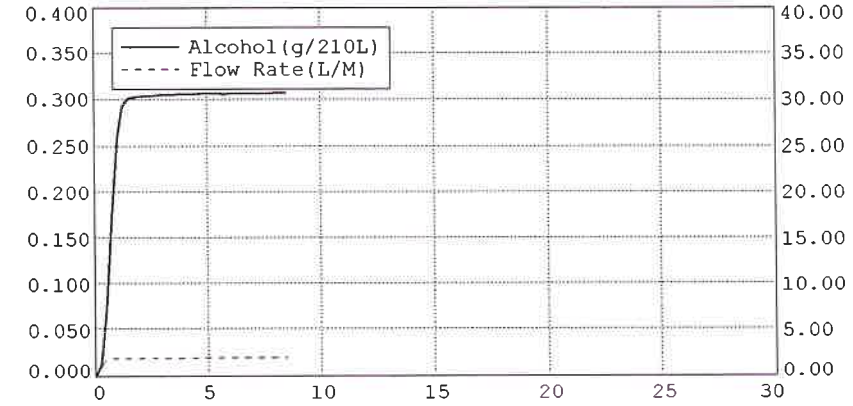
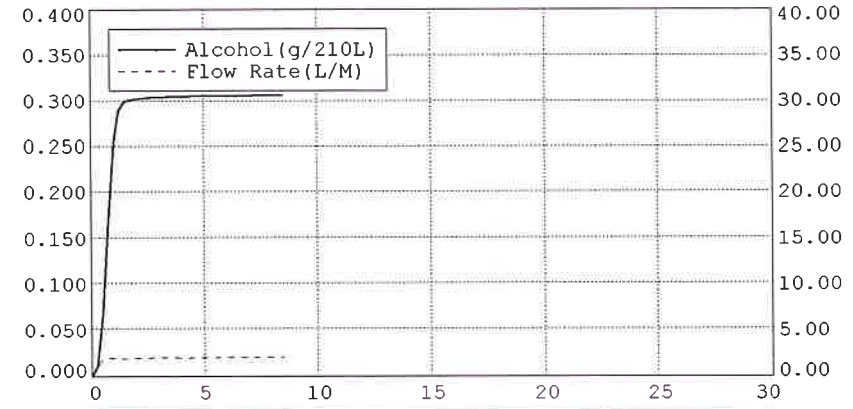
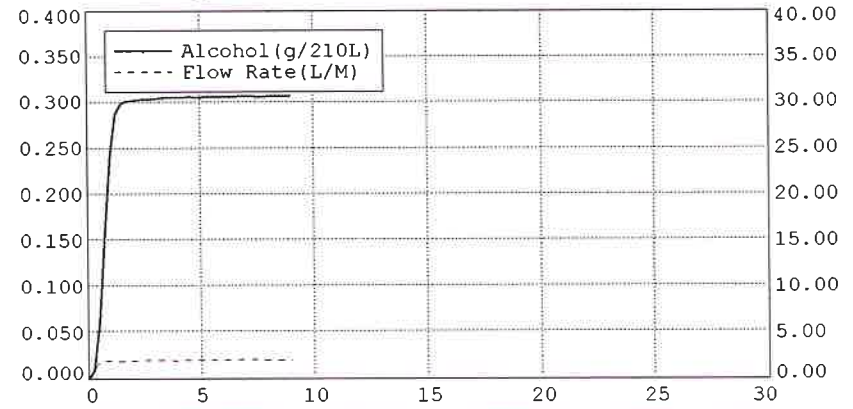
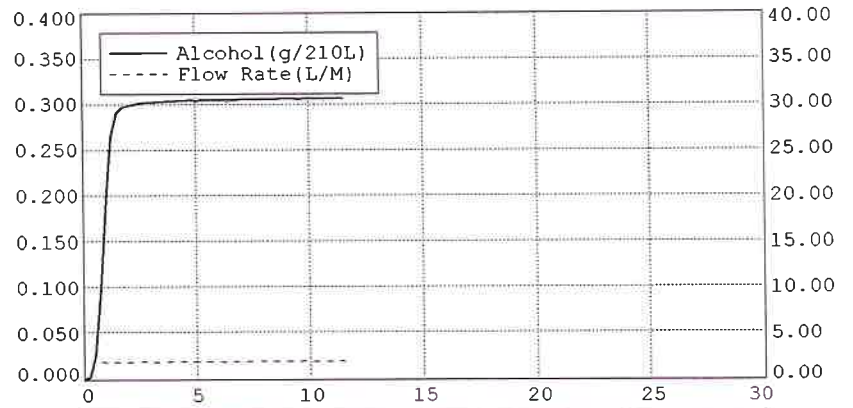
Date: 07/21/2025
Time: 14:20:14

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
TARGET AT 29.98: 0.301
LOT #: AG427706
EXPIRATION: 10/03/2026
TANK PRESSURE: 432 psi

BLANK TEST	0.000	14:21
INTERNAL STANDARD	VERIFIED	14:21
EXTERNAL STANDARD	0.307	14:21
BLANK TEST	0.000	14:22
EXTERNAL STANDARD	0.306	14:23
BLANK TEST	0.000	14:23
EXTERNAL STANDARD	0.307	14:24
BLANK TEST	0.000	14:25
EXTERNAL STANDARD	0.307	14:25
BLANK TEST	0.000	14:26
EXTERNAL STANDARD	0.307	14:26
BLANK TEST	0.000	14:27

Average = 0.3068
Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 07/21/2025
Time: 14:32:18

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
INCOMPLETE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.97: 0.080
LOT #: AG335202
EXPIRATION: 12/18/2025

Filter Wheel Error

NO