

Alaska Scientific Crime Detection Laboratory

DataMaster Calibration Form

Effective: 1/23/2024

Version: 4.0

Instrument #: 160693 Analyst or Technician Name: Megan Corlock

DataMaster DMT Calibration Start Date: 3/27/25

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)
- ☒ Set RFI Sensitivity
- ☒ Adjust internal barometer reading to match NIST-traceable barometer
Barometer/Thermometer/Hygrometer S/N: 240690771
Calibration Due Date: 9/10/26
- ☒ Verify Volume Setting (1.50 L $\pm$ 0.10 L), adjust if needed
- ☒ Print Technician Screen
- ☒ Print "Cal Factors"

When running the 0.150 tank for linearity the Interference Detected status message occurred. Two other tanks were used and the same status message was received. Linearity could not be completed, recommend repair.
MAC 3/27/25

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) 29.60 Temperature(C) 22.9 Relative Humidity(%) 12
Approved Concentrations (g/210L): 0.020, 0.040, 0.080, 0.100, 0.150, 0.300

Functional Tests

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

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: 3/27/25

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: 100693

Date: 03/27/2025
Time: 09:35:41

VERSIONS

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

TEMPERATURES

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

SETTINGS

Lamp Voltage = 1.67 V (1.00 V - 2.34 V)	PASSED
Cooler Voltage = 1.72 V (1.03 V - 2.41 V)	PASSED
Bias Voltage = 79 V (47 V - 111 V)	PASSED
Chopper Freq = 534 Hz (475 Hz - 575 Hz)	PASSED
Barometer = 29.6 in	

PUMP INFO

Flow Rate = 4.550 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 (0.002 V <= 0.010 V)	PASSED

FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

INTERNAL STANDARD

Xq = 0.091 0.19% (0.00% - 4.00%)	PASSED
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Technician Screen

DATAMASTER dmt: 100693

Date: 03/27/2025

Time: 9:57 AM

Temperatures (°C)

Sample Cell: 48.7°C

Breath Tube: 48.1°C

Current Barometer 29.6 in

Volume (Ltr) 1.56

Settings

Lamp: 1.72 V

Bias: 79 V

Cooler: 1.75 V

Chopper: 533 Hz

Voltages (V)

Flow: 1.04 V

Detector: 0.003 V

REJECTED

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 01/30/2025
Time: 10:10:38

OPERATOR NAME:
CARLIE GLAISTER
CERTIFICATE #: 10436

Ca	=	0.1000		
CAL	=	1.004259	0.800	<= CAL < 1.200
b1	=	0.0005	0.0000	<= b1 < 0.0040
b2	=	0.0045	0.0010	<= b2 < 0.0100
b3	=	0.0001	0.0000	<= b3 < 0.0040
Xq	=	0.0911	0.0500	<= Xq < 0.2000
a21	=	1.154775	1.050	<= a21 < 1.300
a31	=	0.402627	0.300	<= a31 < 0.800

REJECTED

SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100693

Date: 03/27/2025
 Time: 09:58:01

SUBJECT NAME:
 TEST TEST
 LICENSE #: XXX

OPERATOR NAME:
 MEGAN CARLOCK
 OPERATOR'S #: 10747

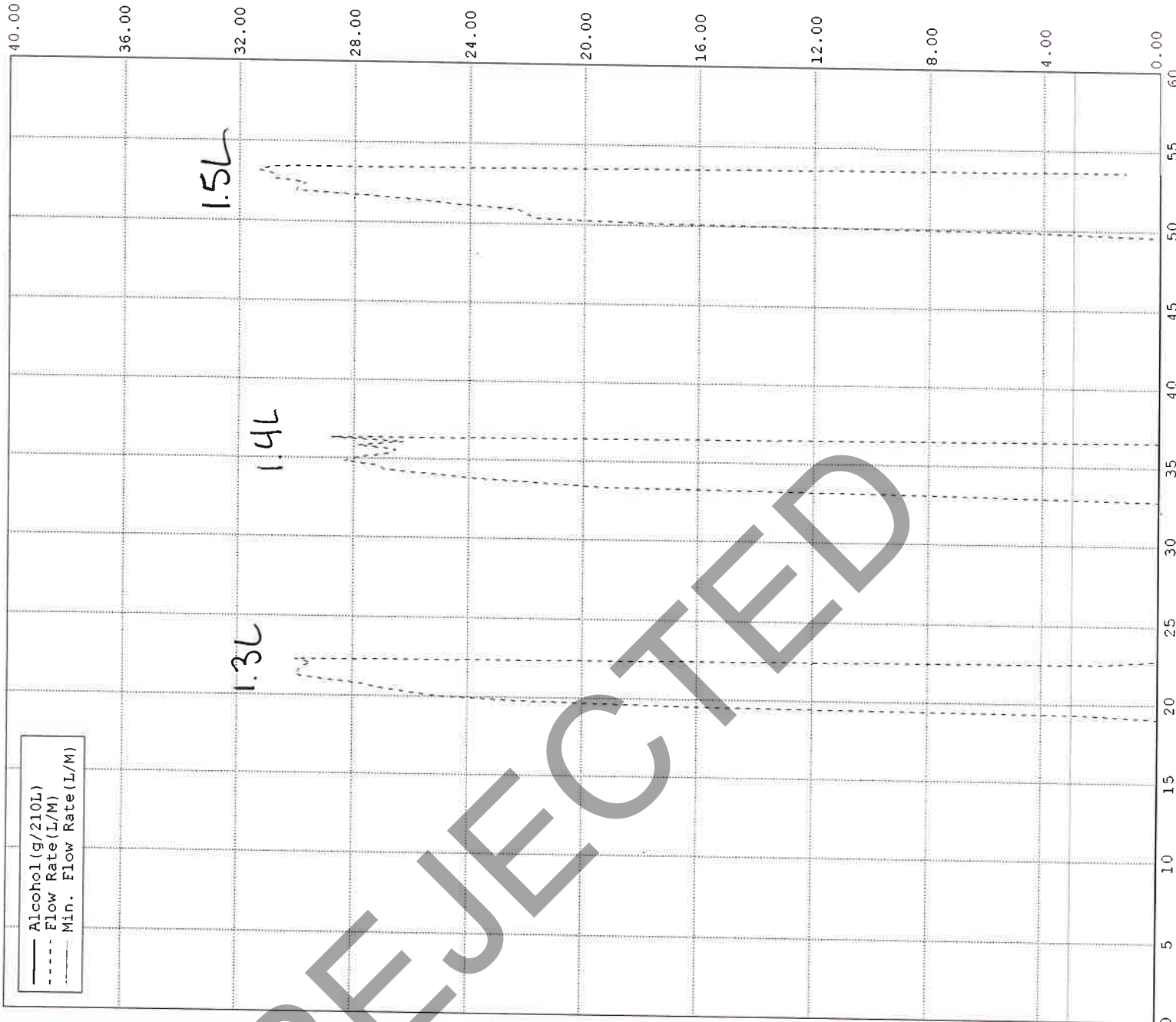
DEPT/AGENCY:
 MINIMUM VOLUME TEST
 CASE/REPORT: XXX
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.60: 0.079
 LOT #: AG335202
 EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	09:59
BLANK TEST	0.000	09:59
INTERNAL STANDARD	VERIFIED	09:59
EXTERNAL STANDARD	0.078	09:59
BLANK TEST	0.000	10:00
SUBJECT SAMPLE (Vol=1.58L)	0.000	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.078	10:02
BLANK TEST	0.000	10:03

MNC



LINEARITY CHECK

Alaska Department of Public Safety
 DATAMASTER dmt: 100693

Date: 03/27/2025
 Time: 10:09:46

SUPERVISOR NAME:
 MEGAN CARLOCK
 OPERATOR'S #: 10747

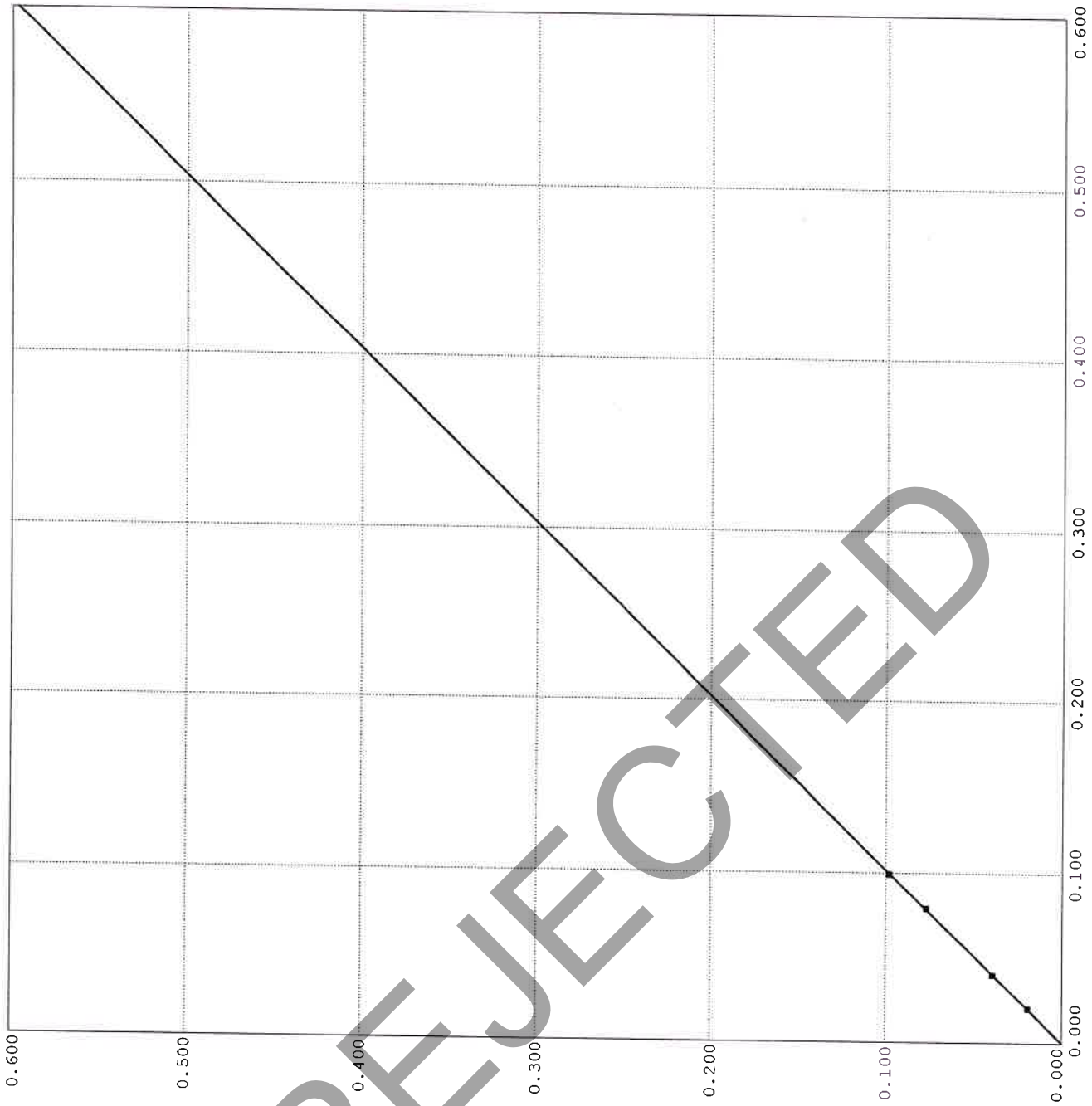
TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0400	0.0000
0.079	0.0780	0.0000
0.099	0.0990	0.0000

SLOPE = 0.994976
 R^2 = 0.999830

100693-2025-03-27-Calibration

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MNC



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100693

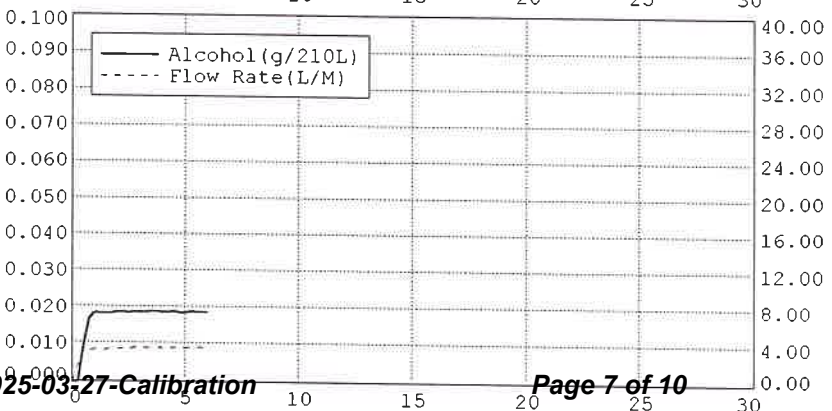
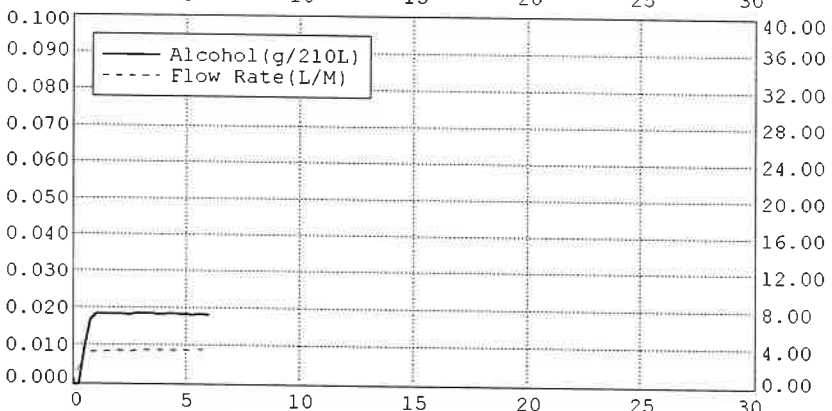
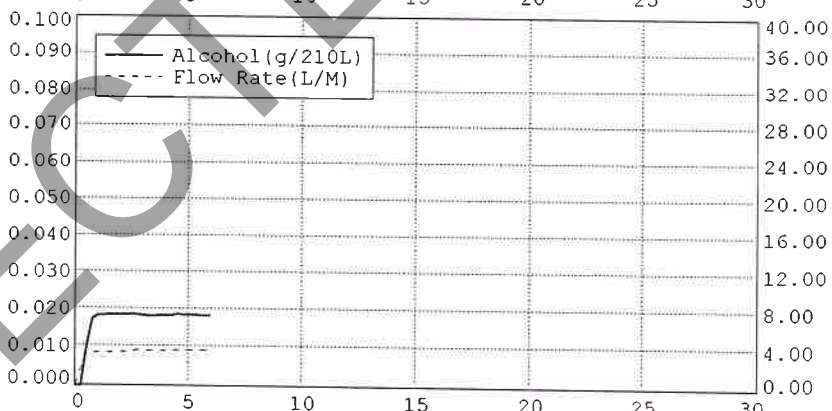
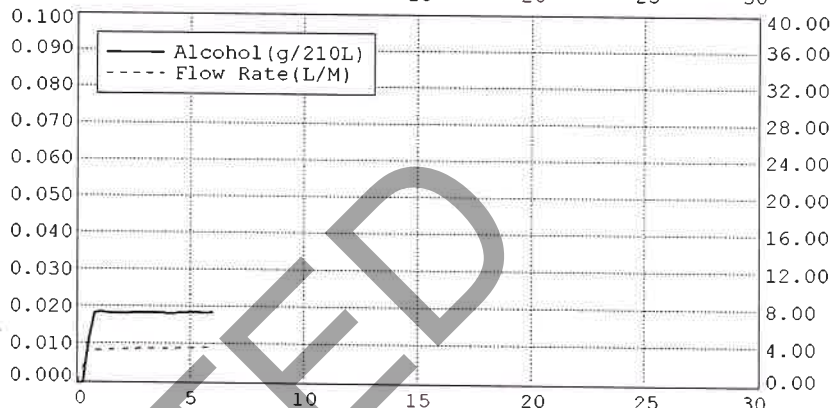
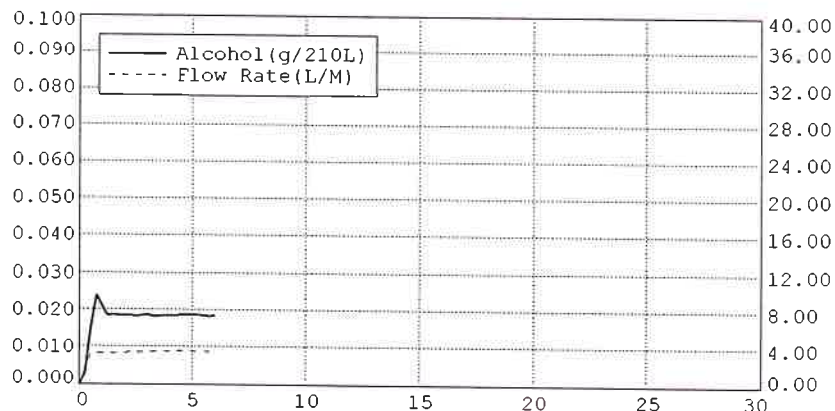
Date: 03/27/2025
Time: 10:09:49

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.60: 0.020
LOT #: AG408002
EXPIRATION: 03/20/2026
TANK PRESSURE: 356 psi

TEST TYPE	CONC	TIME
BLANK TEST	0.000	10:11
INTERNAL STANDARD	VERIFIED	10:11
EXTERNAL STANDARD	0.020	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.020	10:12
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.020	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.020	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.020	10:15
BLANK TEST	0.000	10:16

Average = 0.0200
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100693

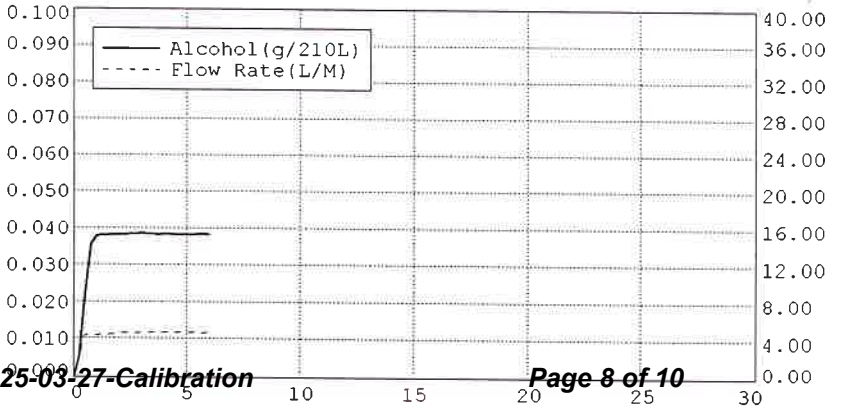
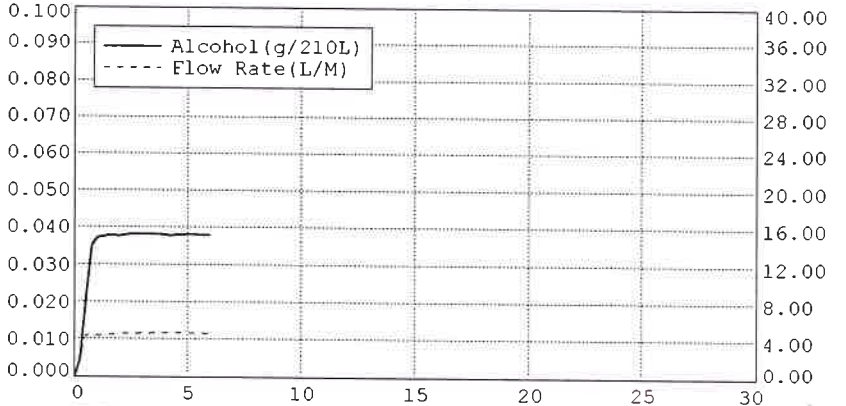
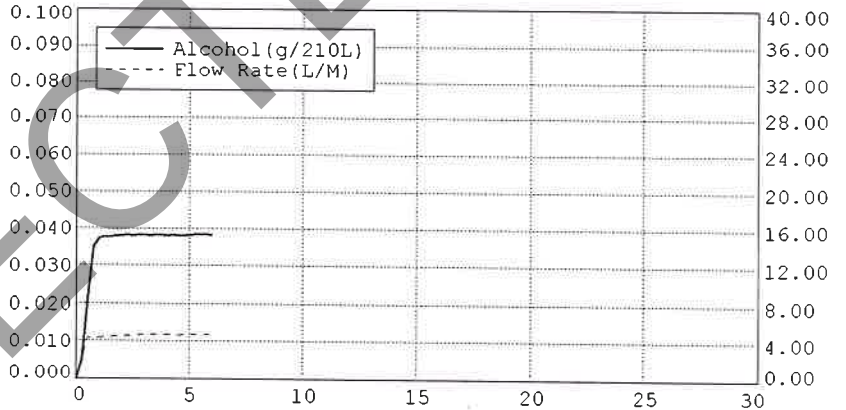
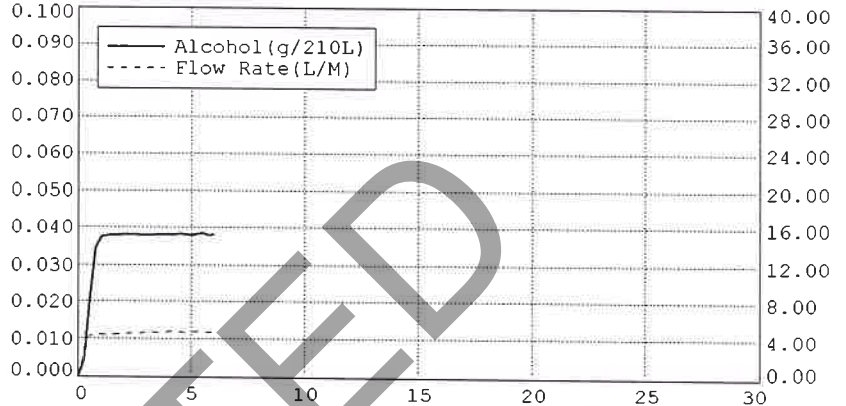
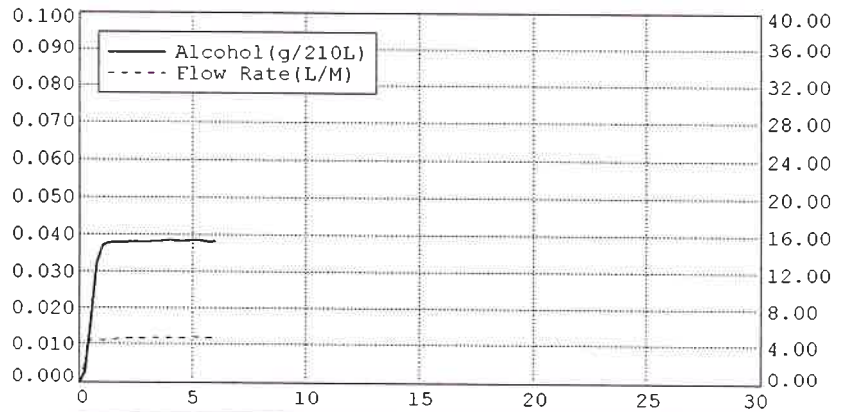
Date: 03/27/2025
Time: 10:19:26

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.60: 0.040
LOT #: AG407908
EXPIRATION: 03/19/2026
TANK PRESSURE: 832 psi

BLANK TEST	0.000	10:20
INTERNAL STANDARD	VERIFIED	10:20
EXTERNAL STANDARD	0.040	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.040	10:22
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.040	10:23
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.040	10:24
BLANK TEST	0.000	10:25
EXTERNAL STANDARD	0.040	10:25
BLANK TEST	0.000	10:26

Average = 0.0400
Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100693

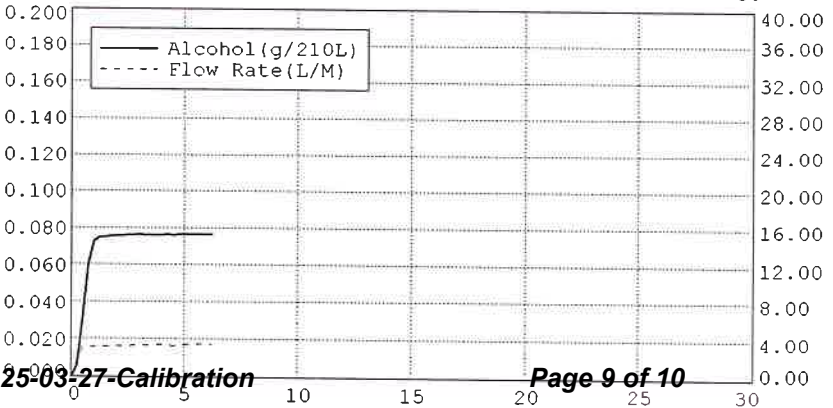
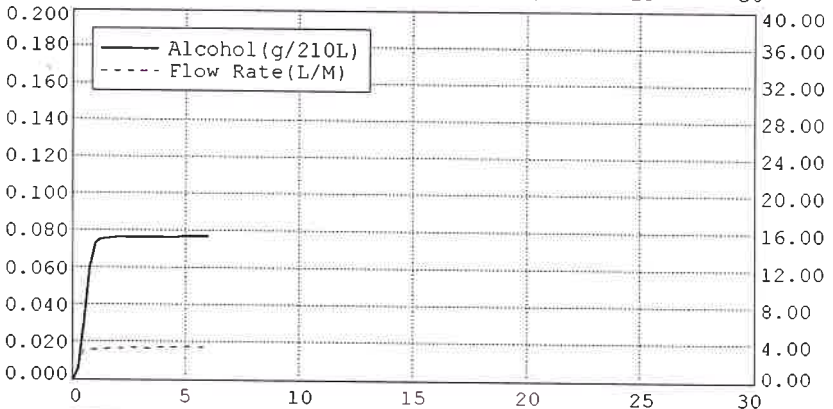
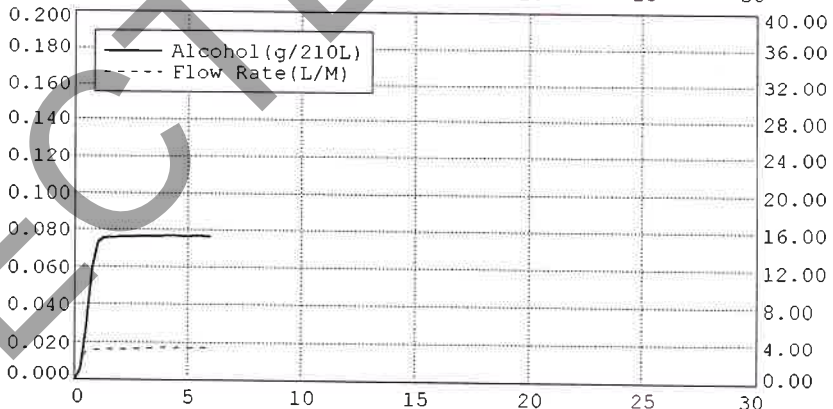
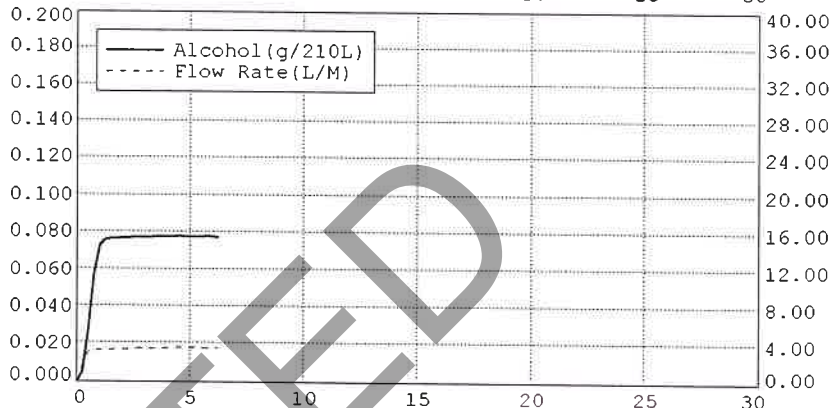
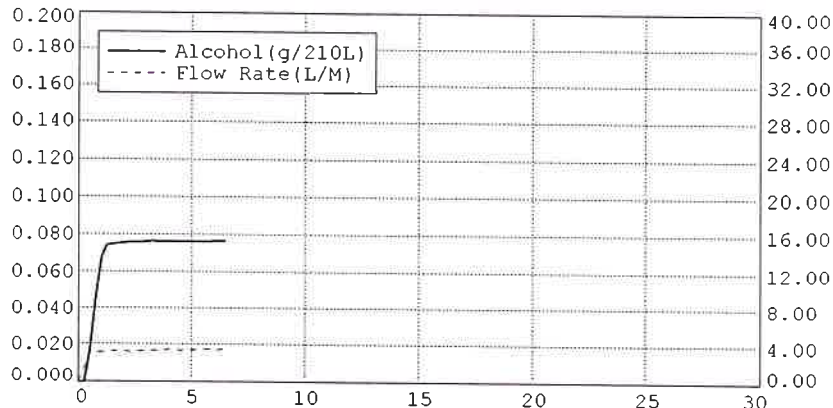
Date: 03/27/2025
Time: 10:27:58

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.60: 0.079
LOT #: AG335202
EXPIRATION: 12/18/2025
TANK PRESSURE: 329 psi

BLANK TEST	0.000	10:29
INTERNAL STANDARD	VERIFIED	10:29
EXTERNAL STANDARD	0.078	10:29
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.078	10:30
BLANK TEST	0.000	10:31
EXTERNAL STANDARD	0.078	10:31
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.078	10:32
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.078	10:33
BLANK TEST	0.000	10:34

Average = 0.0780
Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 03/27/2025

Time: 10:36:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100

TARGET AT 29.59: 0.099

LOT #: AG333401

EXPIRATION: 11/30/2025

TANK PRESSURE: 885 psi

BLANK TEST	0.000	10:38
INTERNAL STANDARD	VERIFIED	10:38
EXTERNAL STANDARD	0.099	10:38
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.099	10:39
BLANK TEST	0.000	10:40
EXTERNAL STANDARD	0.099	10:40
BLANK TEST	0.000	10:41
EXTERNAL STANDARD	0.099	10:41
BLANK TEST	0.000	10:42
EXTERNAL STANDARD	0.099	10:42
BLANK TEST	0.000	10:43

Average = 0.0990

Std Dev = 0.0000

