

Alaska Scientific Crime Detection Laboratory

DataMaster Calibration Form

Effective: 1/23/2024

Version: 4.0

Instrument #: 100255 Analyst or Technician Name: Kaija Swisher

DataMaster DMT Calibration Start Date: 6/4/25

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)
 - 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: 246680771
Calibration Due Date: 9/10/26
- ☒ Verify Volume Setting (1.50 L +/- 0.10 L), adjust if needed
- ☒ Print Technician Screen
- ☒ Print "Cal Factors"

* Filter wheel error occurred during each step of linearity. Calibration Rejected.
- KS 6/4/25

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) 29.53 Temperature(C) 22.3 Relative Humidity(%) 29

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)

KS 6/5/25

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: 6/4/25

Data Interpretation Date (Technician): N/A (if applicable)

Data Interpretation Date (Analyst): 6/5/25

All printed copies are uncontrolled.

Approved by: Chemistry Supervisor

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100255

Date: 06/04/2025
Time: 08:09:57

VERSIONS

DMT: 3.02
PIC: 2.05
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.7°C	PASSED
(44.0°C - 52.0°C)	
Breath Tube = 44.3°C	PASSED
(38.0°C - 50.0°C)	

SETTINGS

Lamp Voltage = 1.55 V	PASSED
(0.93 V - 2.17 V)	
Cooler Voltage = 1.74 V	PASSED
(1.04 V - 2.44 V)	
Bias Voltage = 80 V	PASSED
(48 V - 112 V)	
Chopper Freq = 526 Hz	PASSED
(475 Hz - 575 Hz)	
Barometer = 29.5 in	

PUMP INFO

Flow Rate = 4.319 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 = 0.077 0.11%	PASSED
(0.00% - 4.00%)	

Technician Screen

DATAMASTER dmt: 100255

Date: 06/04/2025
Time: 8:23 AM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 43.8°C

Current Barometer 29.5 in
Volume (Ltr) 1.57

Settings

Lamp: 1.56 V
Bias: 80 V
Cooler: 1.74 V
Chopper: 527 Hz

Voltages (V)

Flow: 1.04 V
Detector: 0.026 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100255

Date: 04/22/2025
Time: 11:25:29

OPERATOR NAME:
MEGAN CARLOCK
CERTIFICATE #: 10747

Ca	=	0.1000		
CAL	=	0.979737	0.800	<= CAL < 1.200
b1	=	0.0017	0.0000	<= b1 < 0.0040
b2	=	0.0080	0.0010	<= b2 < 0.0100
b3	=	0.0020	0.0000	<= b3 < 0.0040
Xq	=	0.0767	0.0500	<= Xq < 0.2000
a21	=	1.210431	1.050	<= a21 < 1.300
a31	=	0.437052	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100255

Date: 06/04/2025
Time: 08:51:22

SUBJECT NAME:
TEST TEST
LICENSE #: XXX

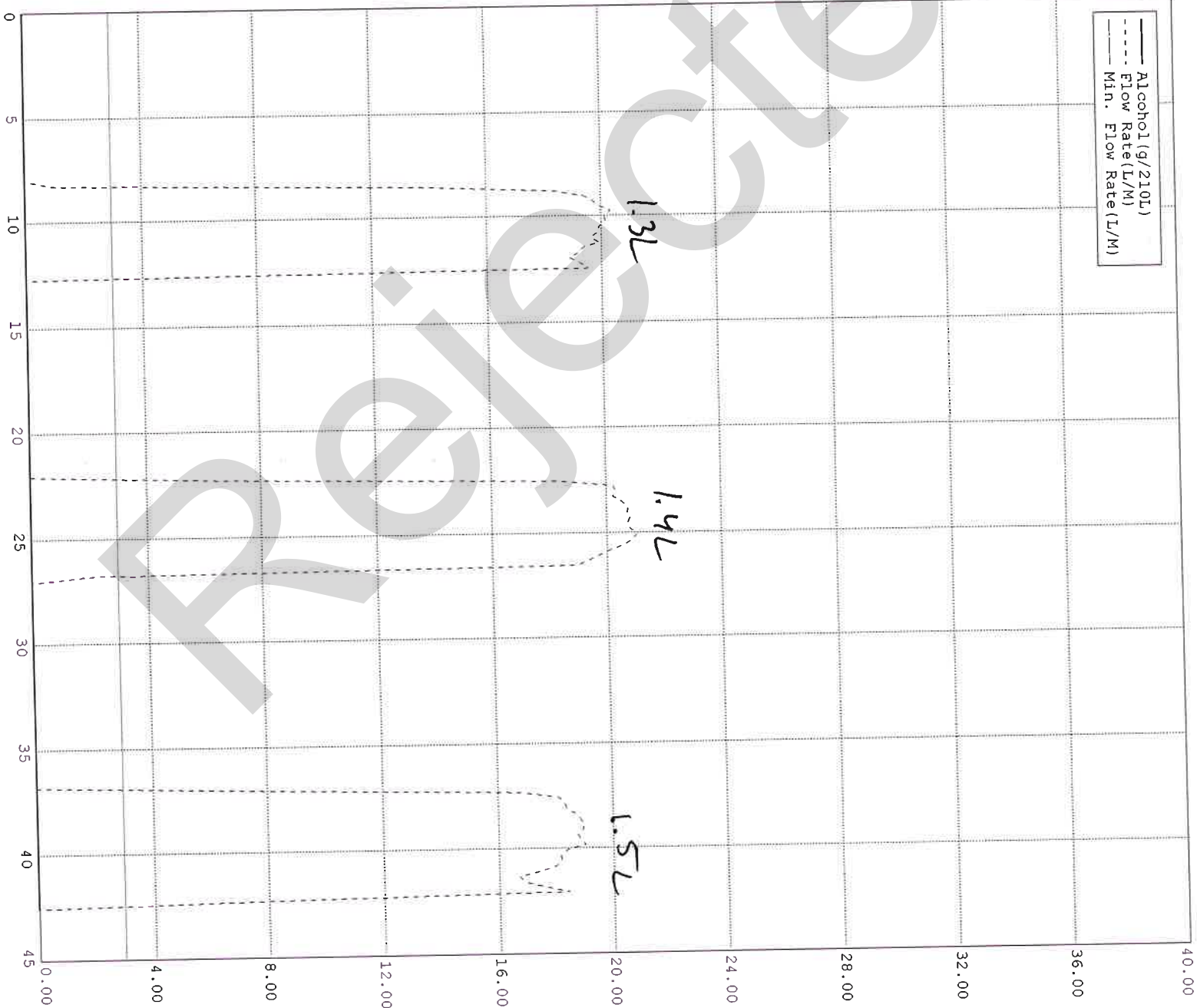
OPERATOR NAME:
KAIJA SWISHER
OPERATOR'S #: 10746

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.50: 0.079
LOT #: AG335202
EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	08:52
BLANK TEST	0.000	08:52
INTERNAL STANDARD	VERIFIED	08:52
EXTERNAL STANDARD	0.076	08:52
BLANK TEST	0.000	08:53
SUBJECT SAMPLE (Vol=1.58L)	0.000	08:54
BLANK TEST	0.000	08:55
EXTERNAL STANDARD	0.077	08:55
BLANK TEST	0.000	08:56

Alcohol(g/210L)
Flow Rate(L/M)
Min. Flow Rate(L/M)



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LINEARITY CHECK

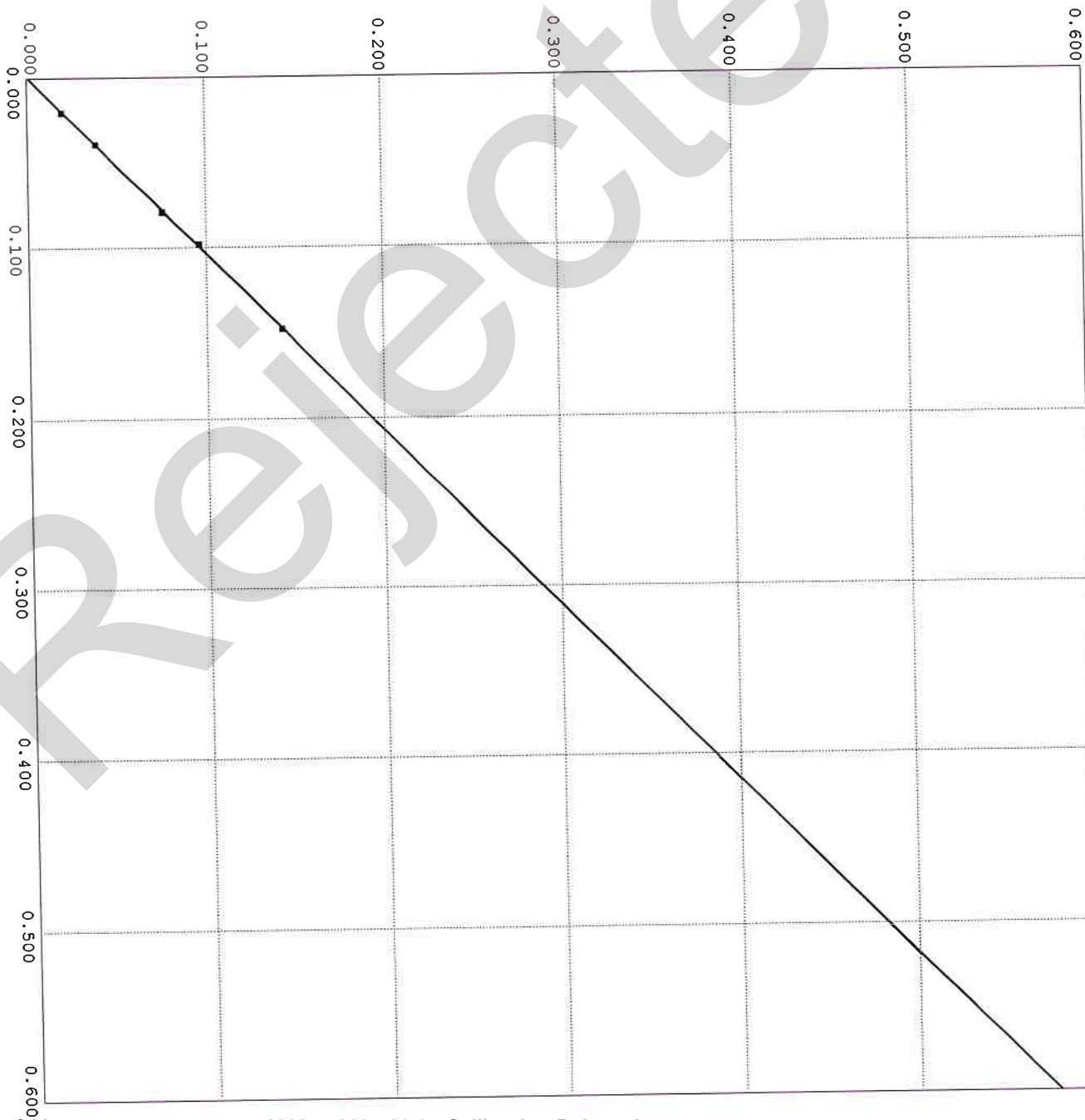
Alaska Department of Public Safety
DATAMASTER dmt: 100255

Date: 06/04/2025
Time: 11:05:35

SUPERVISOR NAME:
KAJJA SWISHER
OPERATOR'S #: 10746

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.039	0.0390	0.0000
0.079	0.0764	0.0005
0.098	0.0970	0.0000
0.148	0.1434	0.0005

SLOPE = 0.965179
R² = 0.999670



KS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100255

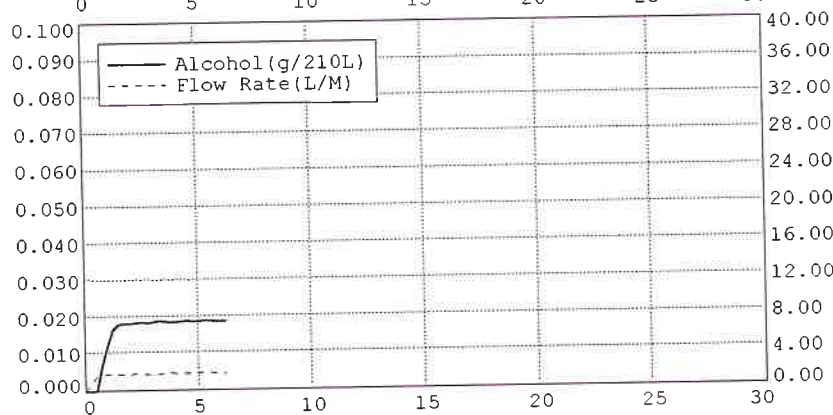
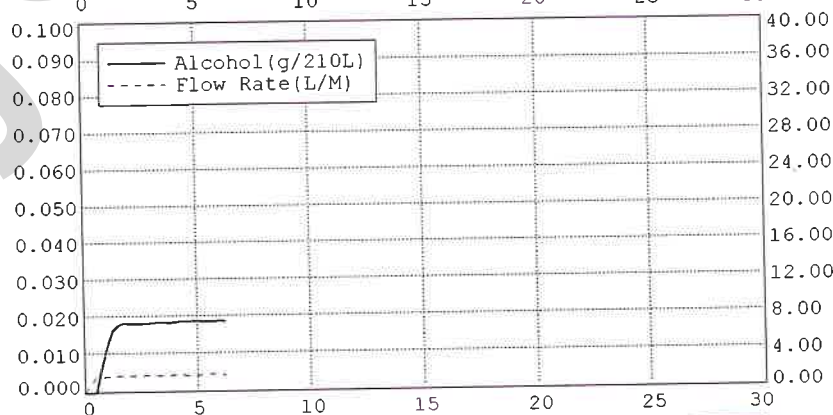
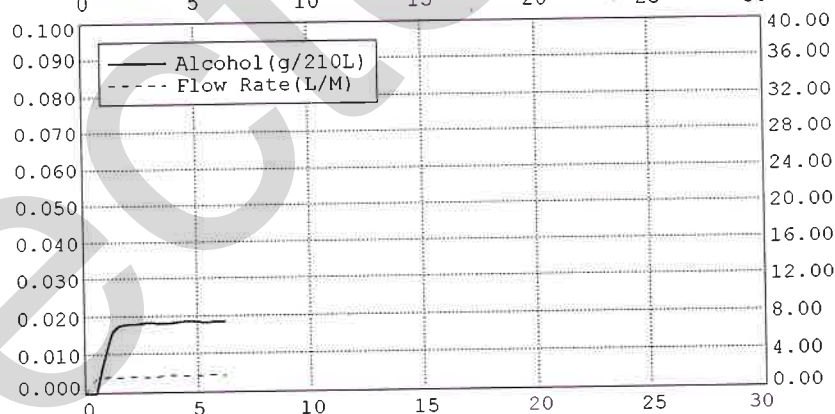
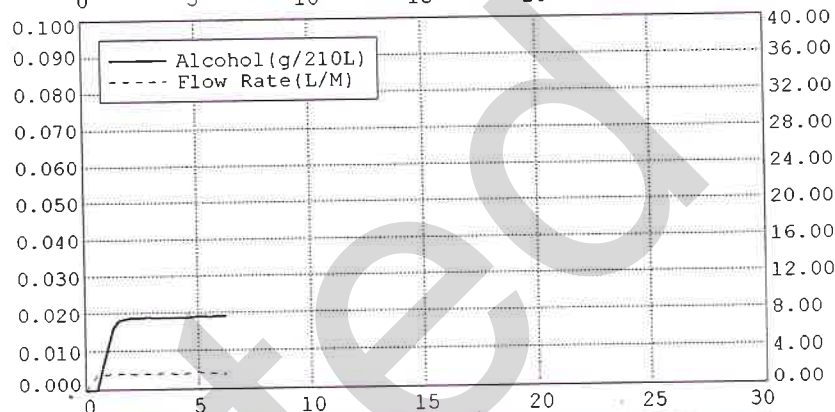
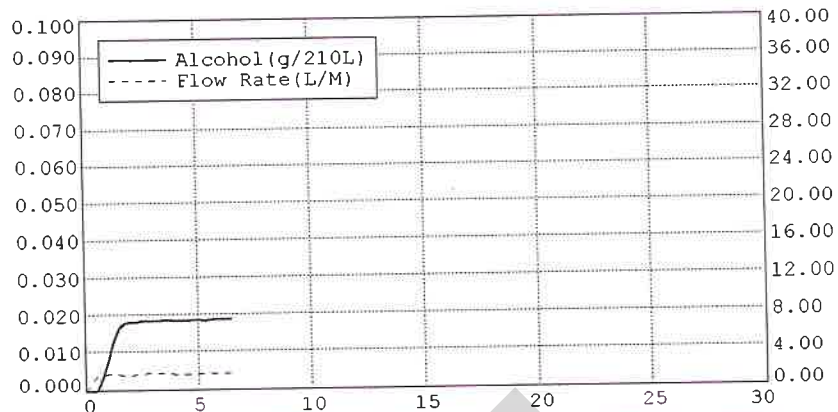
Date: 06/04/2025
Time: 11:05:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.46: 0.020
LOT #: AG408002
EXPIRATION: 03/20/2026
TANK PRESSURE: 160 psi

BLANK TEST	0.000	11:07
INTERNAL STANDARD	VERIFIED	11:07
EXTERNAL STANDARD	0.020	11:08
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.020	11:09
BLANK TEST	0.000	11:09
EXTERNAL STANDARD	0.020	11:10
BLANK TEST	0.000	11:11
EXTERNAL STANDARD	0.020	11:11
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.020	11:12
BLANK TEST	0.000	11:13

Average = 0.0200
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100255

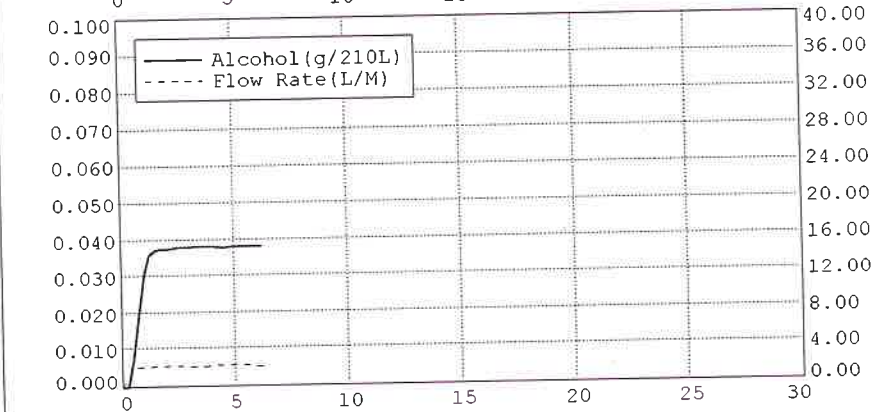
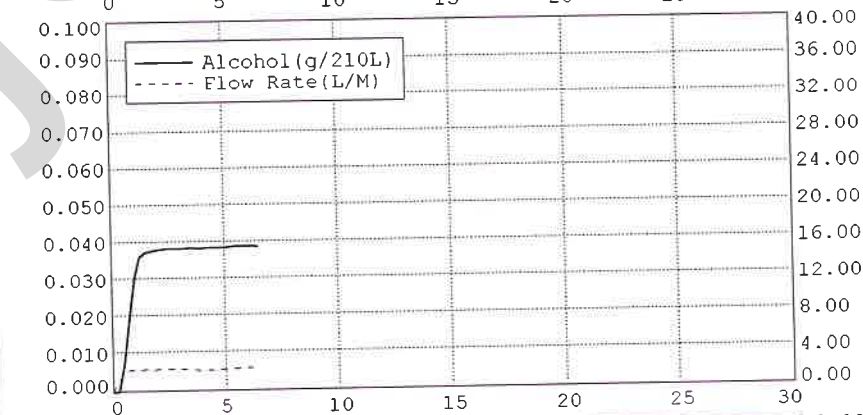
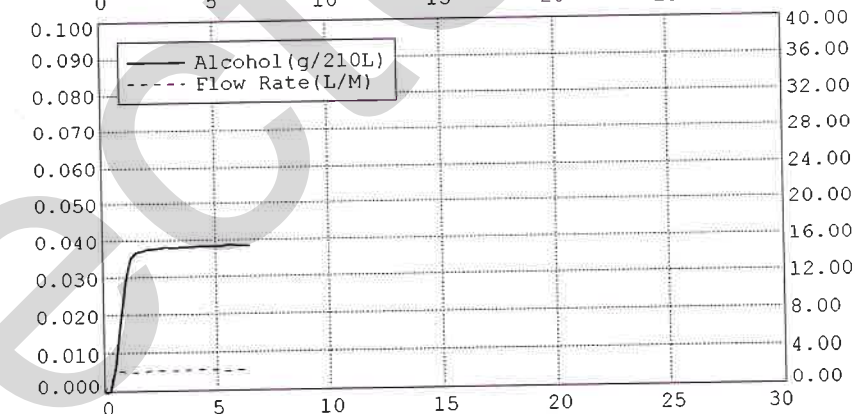
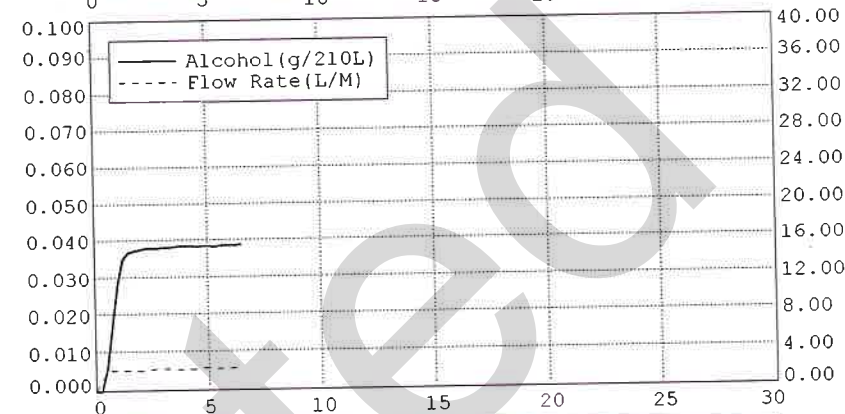
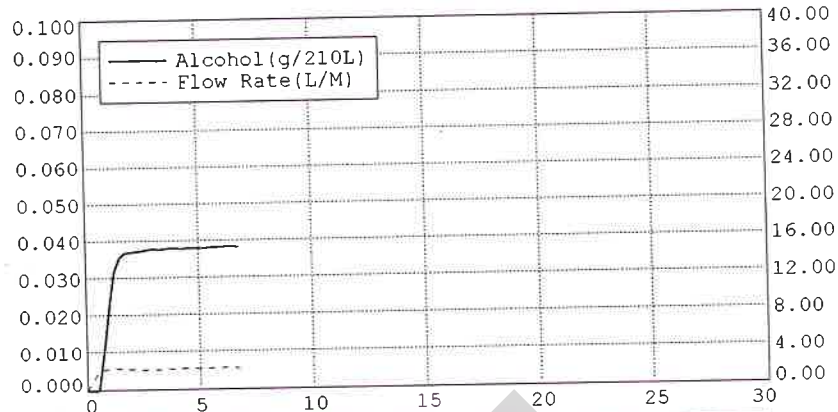
Date: 06/04/2025
Time: 11:17:05

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.45: 0.039
LOT #: AG407908
EXPIRATION: 03/19/2026
TANK PRESSURE: 739 psi

TEST TYPE	Value	Time
BLANK TEST	0.000	11:18
INTERNAL STANDARD	VERIFIED	11:18
EXTERNAL STANDARD	0.039	11:18
BLANK TEST	0.000	11:19
EXTERNAL STANDARD	0.039	11:19
BLANK TEST	0.000	11:20
EXTERNAL STANDARD	0.039	11:20
BLANK TEST	0.000	11:21
EXTERNAL STANDARD	0.039	11:21
BLANK TEST	0.000	11:22
EXTERNAL STANDARD	0.039	11:22
BLANK TEST	0.000	11:23

Average = 0.0390
Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100255

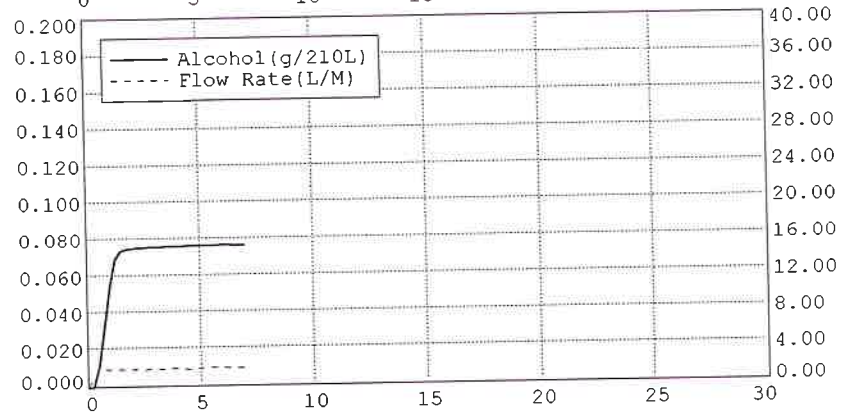
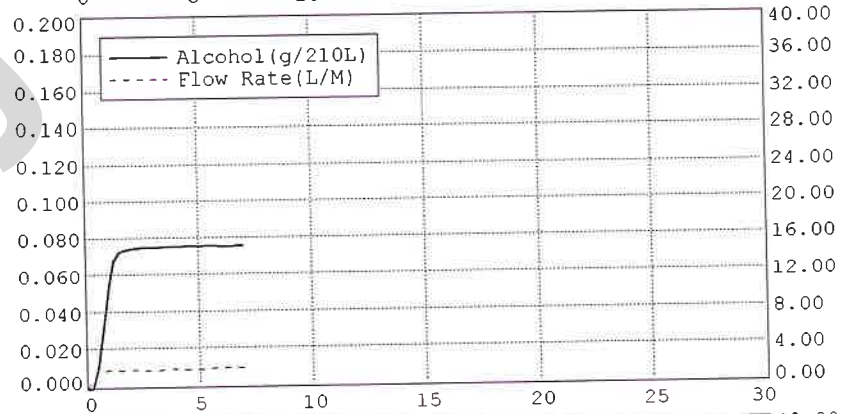
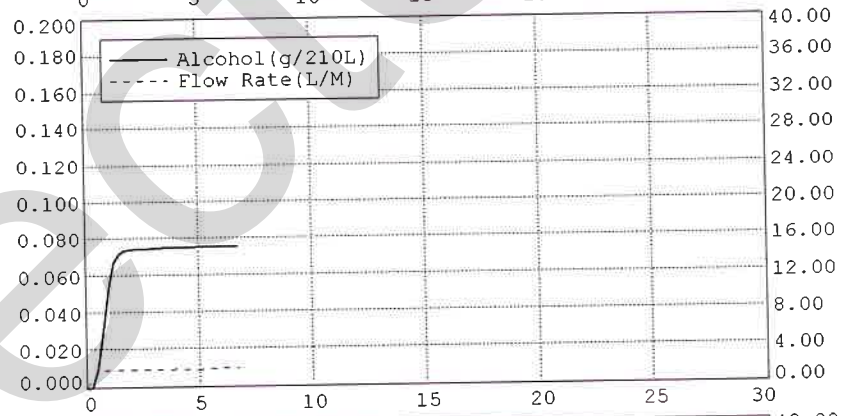
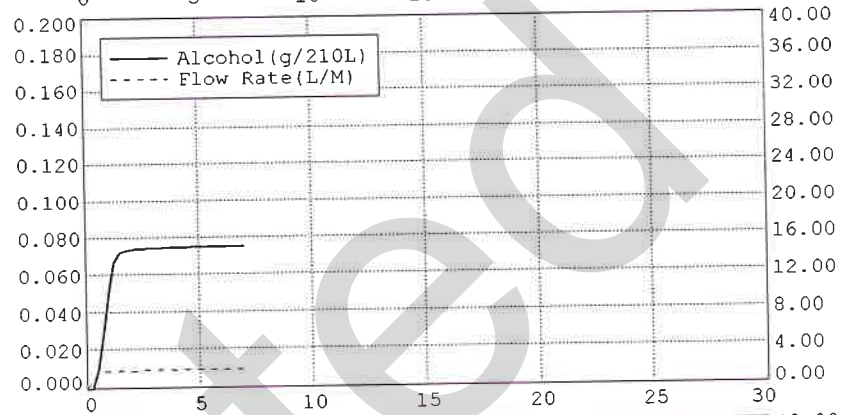
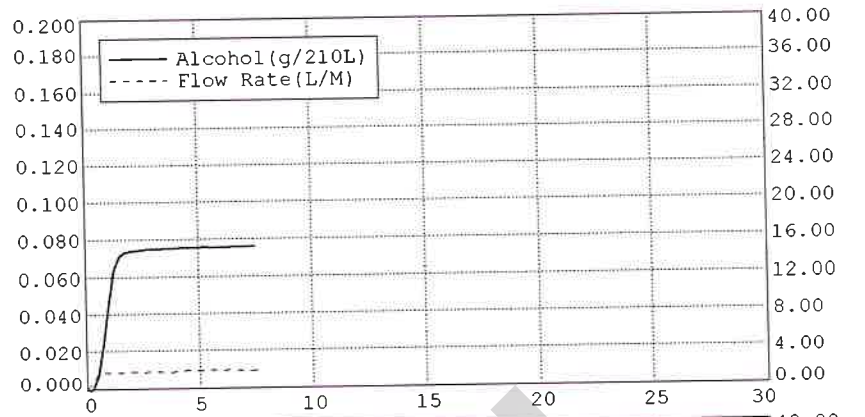
Date: 06/04/2025
Time: 11:33:14

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.46: 0.079
LOT #: AG335202
EXPIRATION: 12/18/2025
TANK PRESSURE: 224 psi

BLANK TEST	0.000	11:34
INTERNAL STANDARD	VERIFIED	11:34
EXTERNAL STANDARD	0.077	11:34
BLANK TEST	0.000	11:35
EXTERNAL STANDARD	0.076	11:35
BLANK TEST	0.000	11:36
EXTERNAL STANDARD	0.076	11:36
BLANK TEST	0.000	11:37
EXTERNAL STANDARD	0.076	11:37
BLANK TEST	0.000	11:38
EXTERNAL STANDARD	0.077	11:38
BLANK TEST	0.000	11:39

Average = 0.0764
Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100255

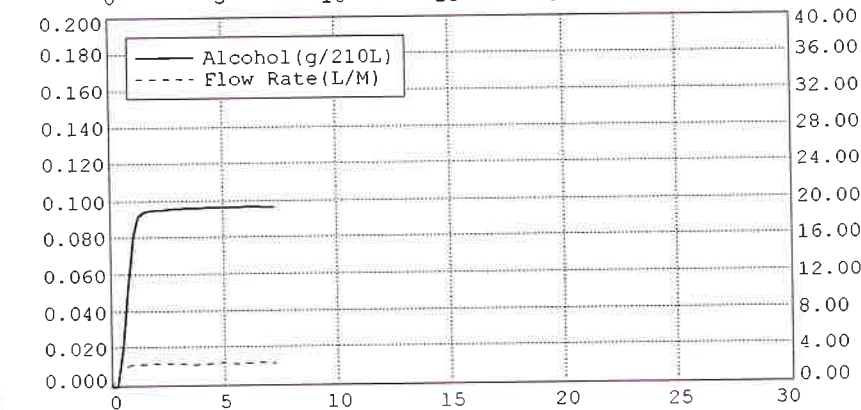
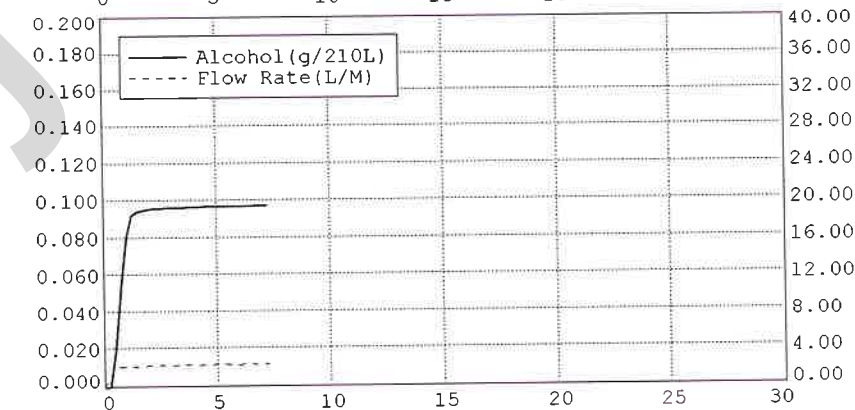
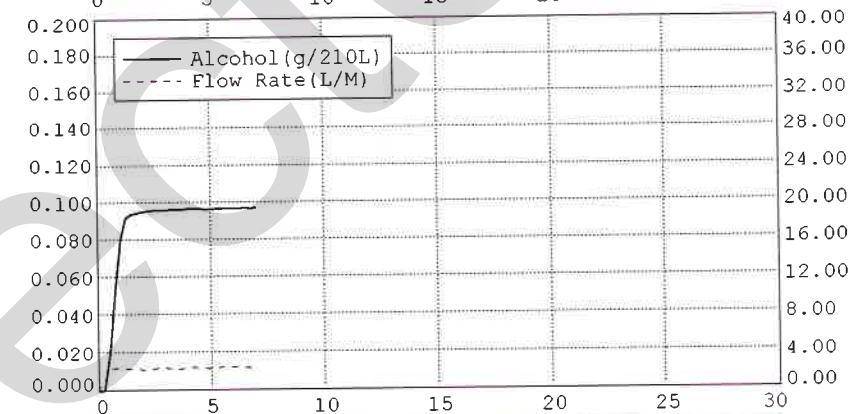
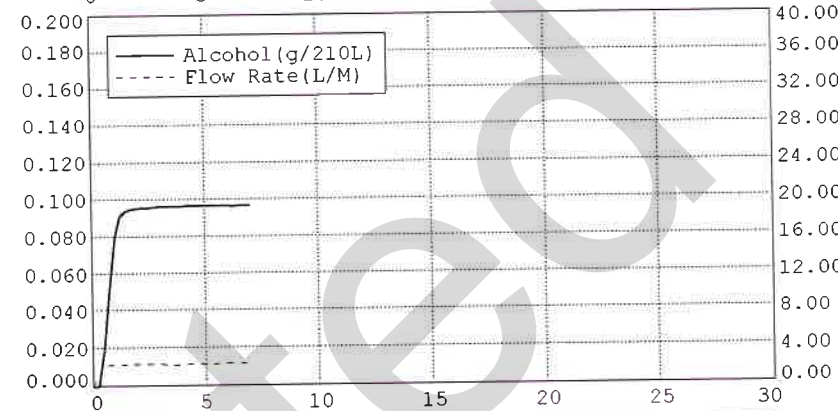
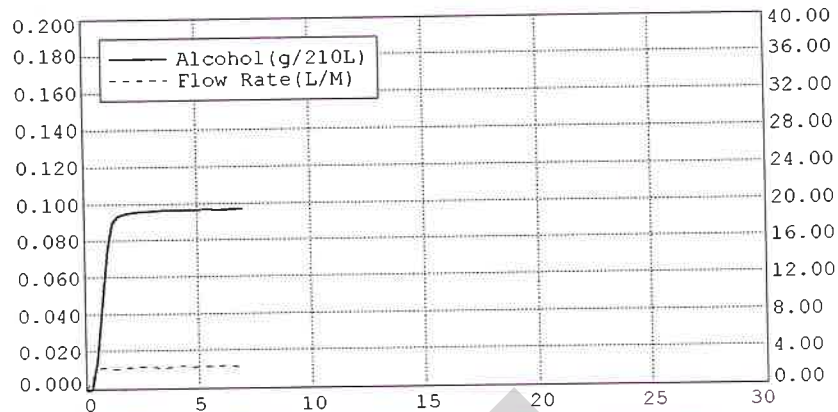
Date: 06/04/2025
Time: 11:46:26

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.46: 0.098
LOT #: AG333401
EXPIRATION: 11/30/2025
TANK PRESSURE: 1034 psi

BLANK TEST	0.000	11:47
INTERNAL STANDARD	VERIFIED	11:47
EXTERNAL STANDARD	0.097	11:47
BLANK TEST	0.000	11:48
EXTERNAL STANDARD	0.097	11:48
BLANK TEST	0.000	11:49
EXTERNAL STANDARD	0.097	11:49
BLANK TEST	0.000	11:50
EXTERNAL STANDARD	0.097	11:50
BLANK TEST	0.000	11:51
EXTERNAL STANDARD	0.097	11:51
BLANK TEST	0.000	11:52

Average = 0.0970
Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
DATAMASTER dmt: 100255

Date: 06/04/2025
Time: 11:58:20

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.150
TARGET AT 29.45: 0.148
LOT #: AG332004
EXPIRATION: 11/16/2025
TANK PRESSURE: 310 psi

TEST TYPE	Value	Time
BLANK TEST	0.000	12:00
INTERNAL STANDARD	VERIFIED	12:00
EXTERNAL STANDARD	0.143	12:00
BLANK TEST	0.000	12:01
EXTERNAL STANDARD	0.143	12:01
BLANK TEST	0.000	12:02
EXTERNAL STANDARD	0.143	12:02
BLANK TEST	0.000	12:03
EXTERNAL STANDARD	0.144	12:03
BLANK TEST	0.000	12:04
EXTERNAL STANDARD	0.144	12:04
BLANK TEST	0.000	12:05

Average = 0.1434
Std Dev = 0.0005

