

Alaska Scientific Crime Detection Laboratory

DataMaster Calibration Form

Effective: 1/23/2024

Version: 4.0

Instrument #: 100396 Analyst or Technician Name: Derek Watten

DataMaster DMT Calibration Start Date: 07/21/25

Diagnostic Test

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

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"

Calibration rejected due to Filter Wheel Errors during interference testing. DJW 07/23/2025

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) 29.97 Temperature(C) 22.5 Relative Humidity(%) 50%
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: 20250603K5 Expiration Date: 07/27/25
Simulator S/N: SD1200 Thermometer Verification Performed? ☒
2. Isopropanol Reagent Lot Number: 20250603K5 Expiration Date: 09/03/25
Simulator S/N: SD198 Thermometer Verification Performed? ☒
3. Negative (Ethanol Only) Lot Number: 23IP41233 Expiration Date: 09/20/25
Simulator S/N: SD1199 Thermometer Verification Performed? ☒

Calibrated External Thermometer S/N: 250159297 07/21/2025 DJW 07/24/2025

Calibration Due Date: 03/14/27

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: 07/21/2025 DJW 07/23/2025

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: 100396

Date: 07/21/2025
Time: 11:18:07

VERSIONS
DMT: 3.02
PIC: 3.02
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 = 1.72 V (1.03 V - 2.41 V)	PASSED
Cooler Voltage = 1.76 V (1.06 V - 2.46 V)	PASSED
Bias Voltage = 80 V (48 V - 112 V)	PASSED
Chopper Freq = 539 Hz (475 Hz - 575 Hz)	PASSED
Barometer = 30.0 in	

PUMP INFO

Flow Rate = 5.336 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 ✓	PASSED
Xq = 0.104 1.01% (0.00% - 4.00%)	

Technician Screen

DATAMASTER dmt: 100396

Date: 07/21/2025

Time: 11:36 AM

Temperatures (°C)

Sample Cell: 48.7°C

Breath Tube: 48.1°C

Current Barometer 30.0 in ✓

Volume (Ltr) 1.50 ✓

Settings

Lamp: 1.72 V

Bias: 80 V

Cooler: 1.76 V

Chopper: 525 Hz

Voltages (V)

Flow: 1.08 V

Detector: -0.031 V ✓

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 07/15/2025
Time: 14:09:25

OPERATOR NAME:
KAIJA SWISHER
CERTIFICATE #: 10746

Ca	=	0.1000		
CAL	=	0.961593	0.800	<= CAL < 1.200
b1	=	0.0001	0.0000	<= b1 < 0.0040
b2	=	0.0046	0.0010	<= b2 < 0.0100
b3	=	0.0002	0.0000	<= b3 < 0.0040
Xq	=	0.1048	0.0500	<= Xq < 0.2000
a21	=	1.182154	1.050	<= a21 < 1.300
a31	=	0.431426	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100396

Date: 07/21/2025

Time: 11:39:56

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

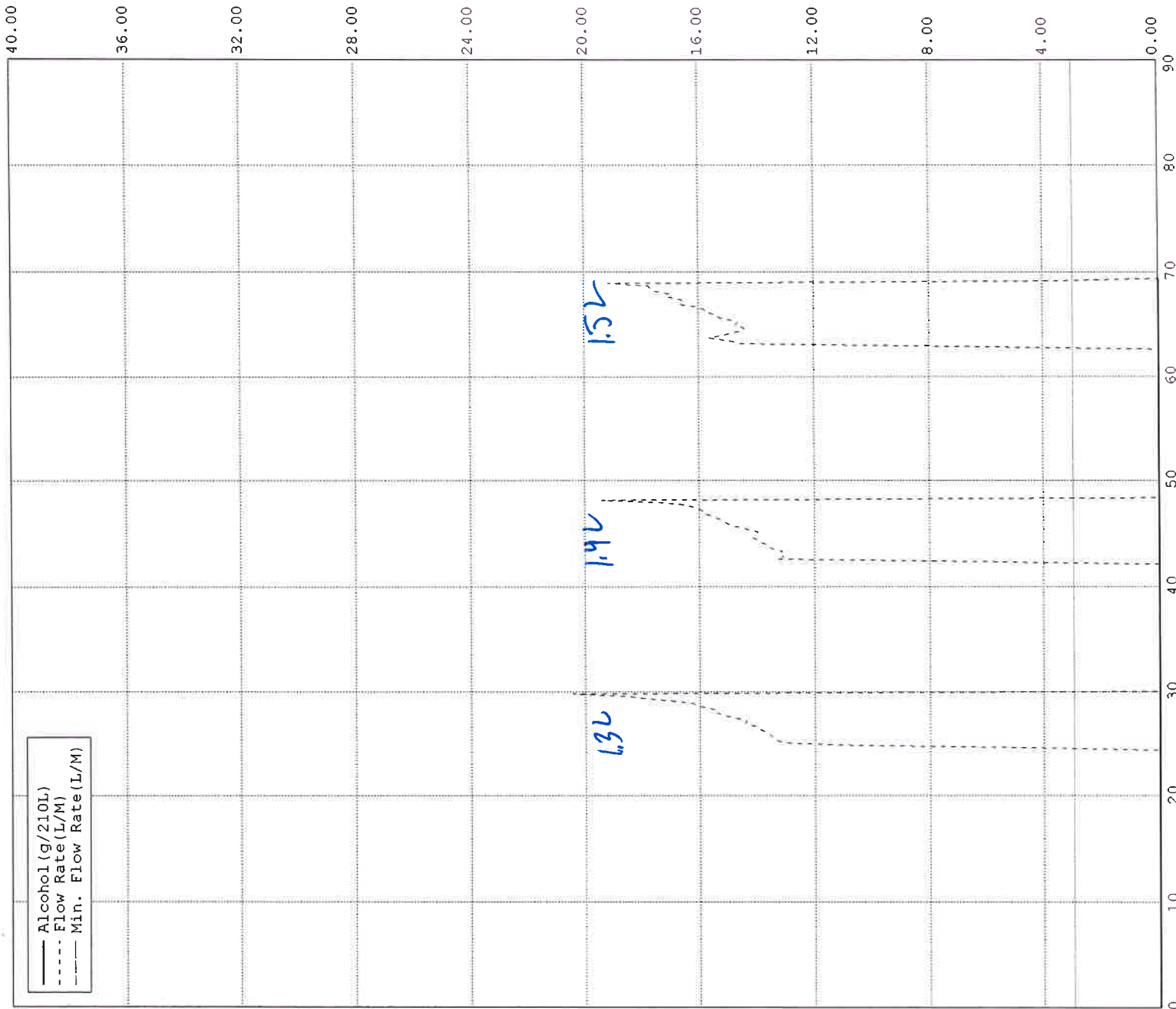
TARGET AT 29.97: 0.080

LOT #: AG335202

EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	11:41
BLANK TEST	0.000	11:41
INTERNAL STANDARD	VERIFIED	11:41
EXTERNAL STANDARD	0.078	11:42
BLANK TEST	0.000	11:43
SUBJECT SAMPLE (Vol=1.64L)	0.000	11:44
BLANK TEST	0.000	11:45
EXTERNAL STANDARD	0.079	11:45
BLANK TEST	0.000	11:46

ML



LINEARITY CHECK

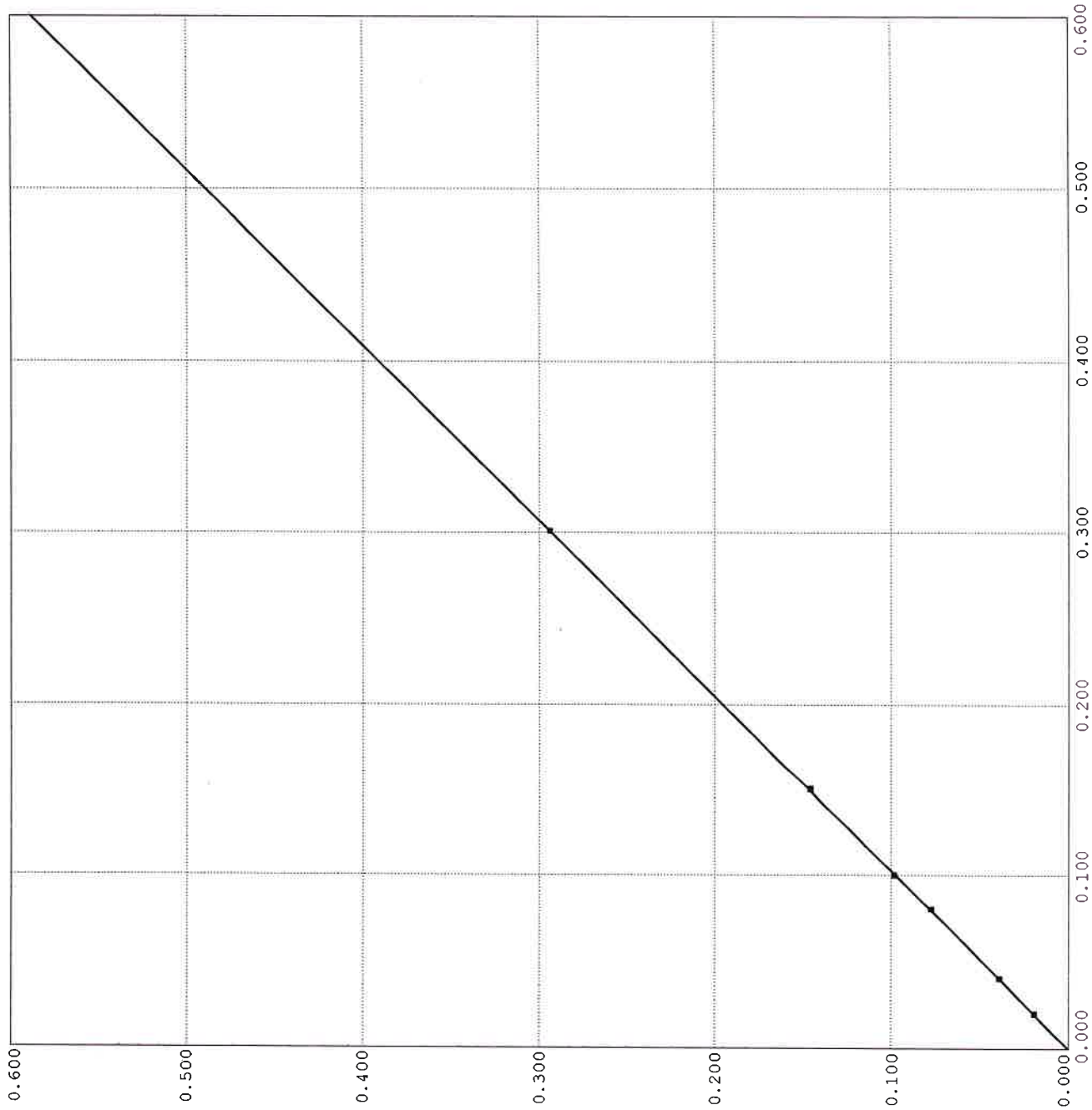
 Alaska Department of Public Safety
 DATAMASTER dmt: 100396

Date: 07/21/2025
 Time: 13:19:22

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0398	0.0004
0.080	0.0784	0.0005
0.100	0.0992	0.0004
0.150	0.1466	0.0005
0.300	0.2946	0.0005

SLOPE = 0.979922
 R^2 = 0.999969



DW

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 07/21/2025

Time: 13:19:25

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020

TARGET AT 29.97: 0.020

LOT #: AG408002

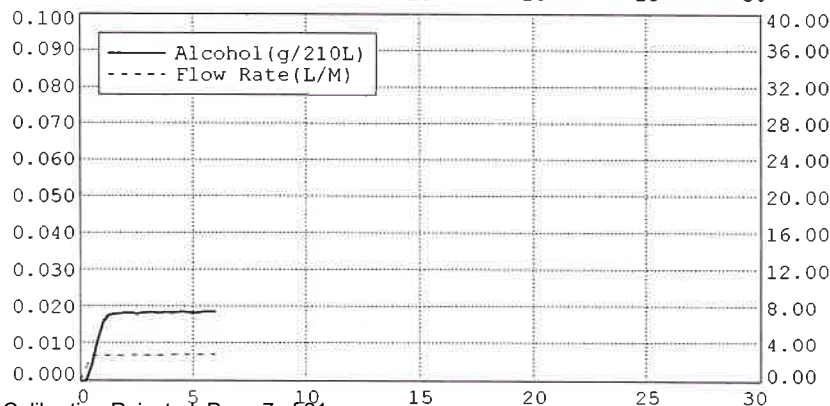
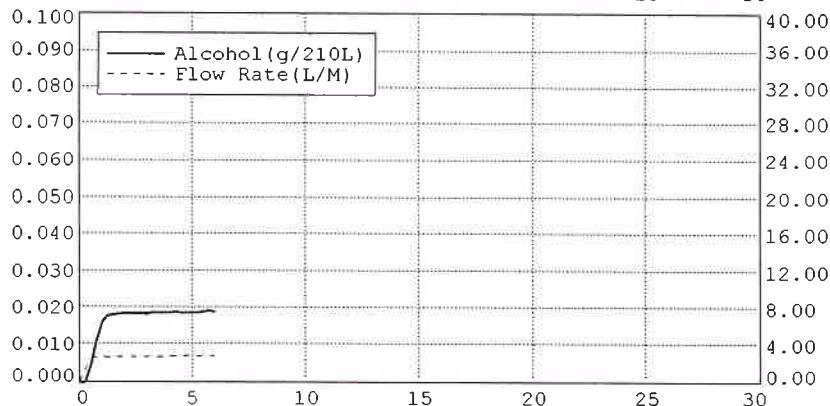
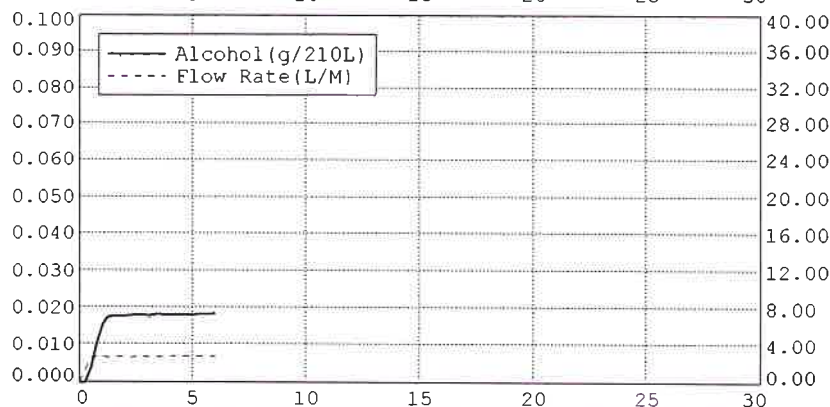
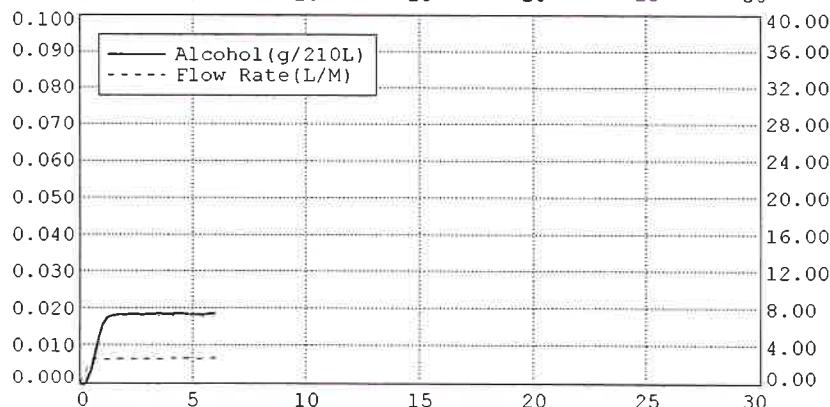
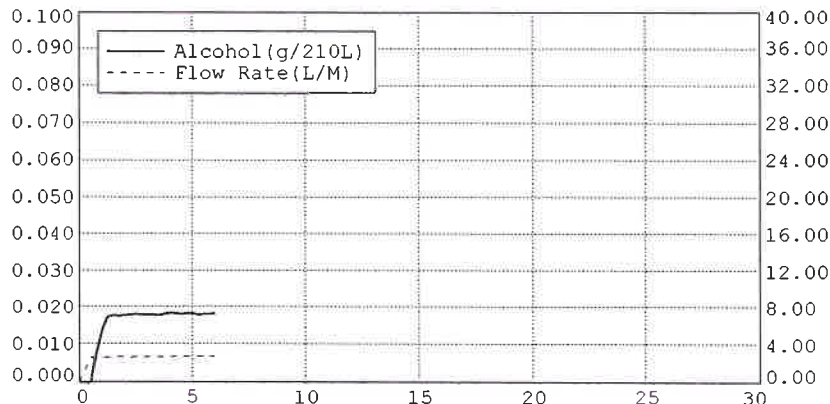
EXPIRATION: 03/20/2026

TANK PRESSURE: 1040 psi

BLANK TEST	0.000	13:20
INTERNAL STANDARD	VERIFIED	13:20
EXTERNAL STANDARD	0.020	13:21
BLANK TEST	0.000	13:21
EXTERNAL STANDARD	0.020	13:22
BLANK TEST	0.000	13:23
EXTERNAL STANDARD	0.020	13:23
BLANK TEST	0.000	13:24
EXTERNAL STANDARD	0.020	13:24
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.020	13:25
BLANK TEST	0.000	13:26

Average = 0.0200

Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100396

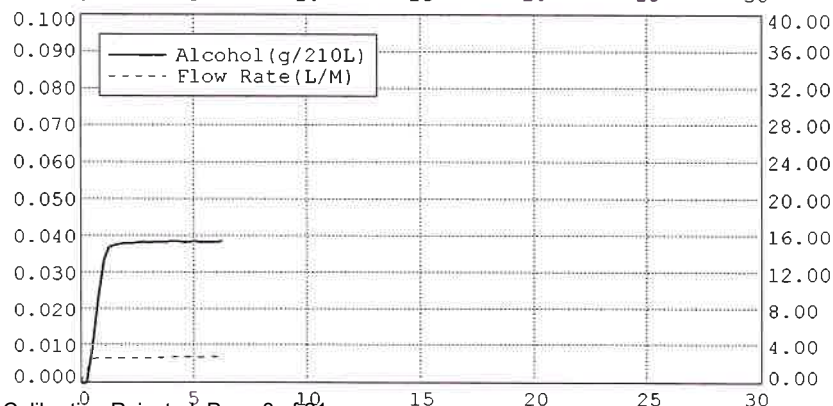
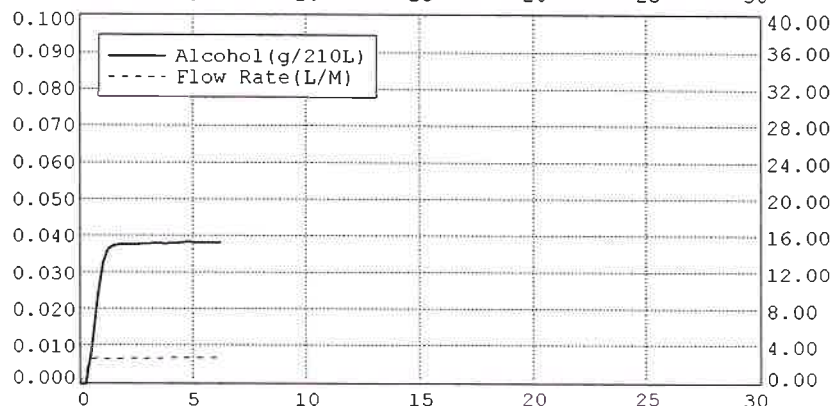
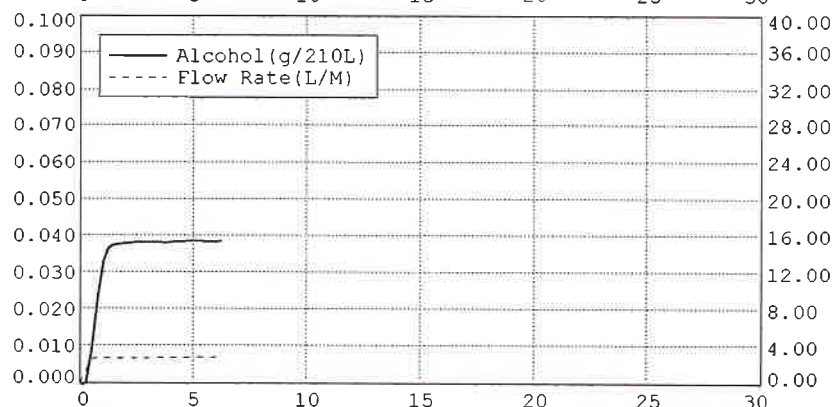
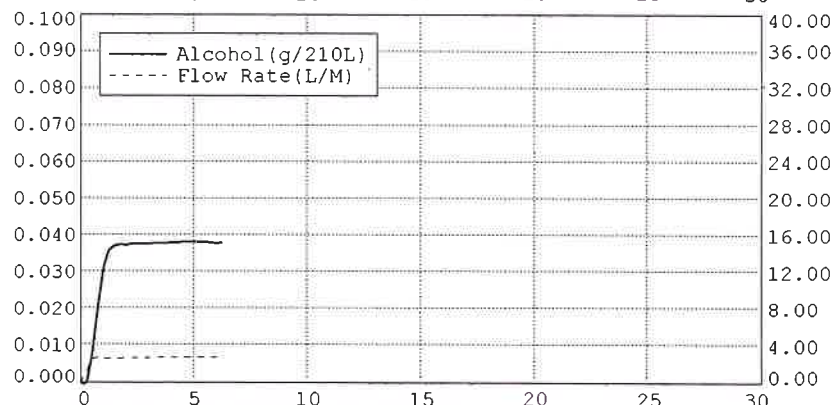
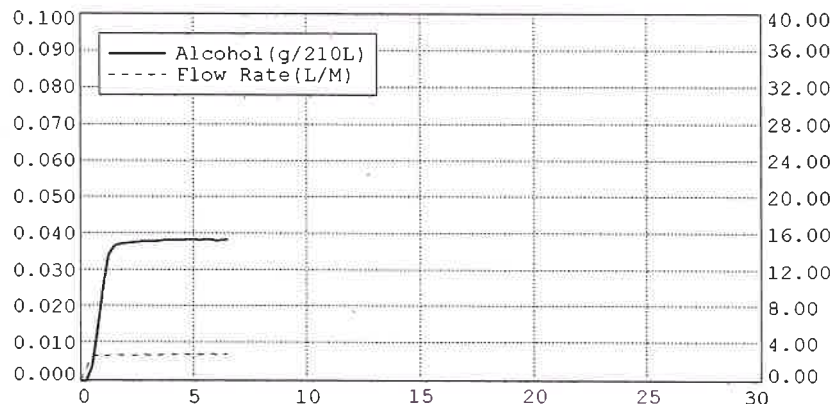
Date: 07/21/2025
Time: 13:28:20

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.97: 0.040
LOT #: AG407908
EXPIRATION: 03/19/2026
TANK PRESSURE: 678 psi

BLANK TEST	0.000	13:29
INTERNAL STANDARD	VERIFIED	13:29
EXTERNAL STANDARD	0.040	13:29
BLANK TEST	0.000	13:30
EXTERNAL STANDARD	0.039	13:30
BLANK TEST	0.000	13:31
EXTERNAL STANDARD	0.040	13:32
BLANK TEST	0.000	13:32
EXTERNAL STANDARD	0.040	13:33
BLANK TEST	0.000	13:34
EXTERNAL STANDARD	0.040	13:34
BLANK TEST	0.000	13:35

Average = 0.0398
Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100396

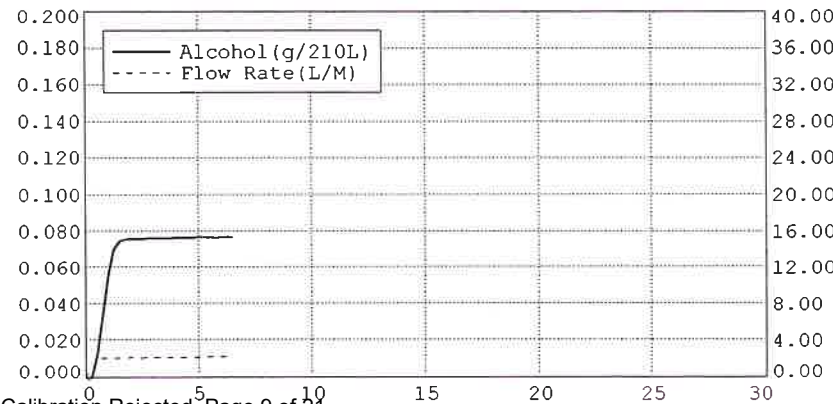
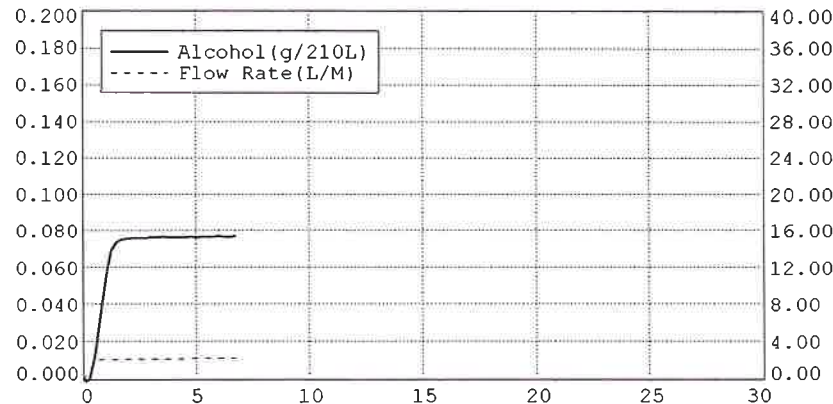
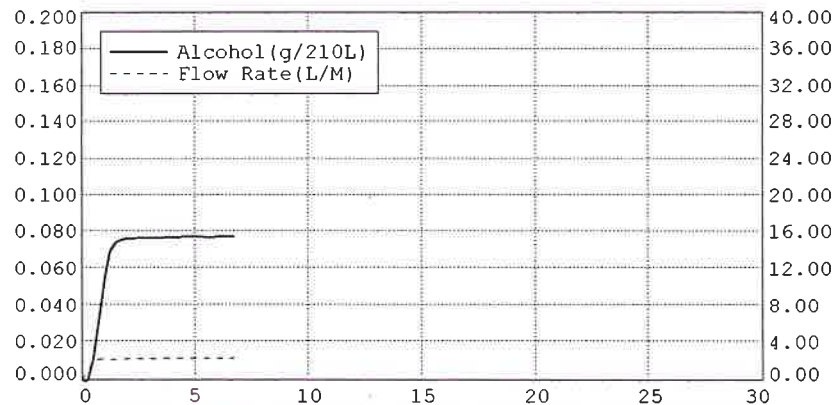
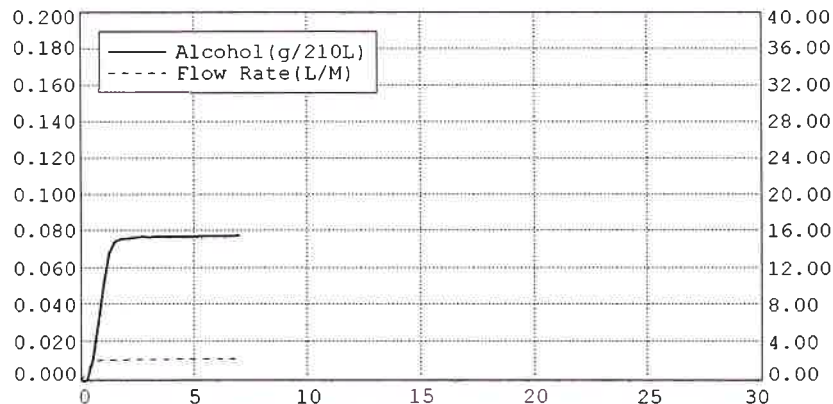
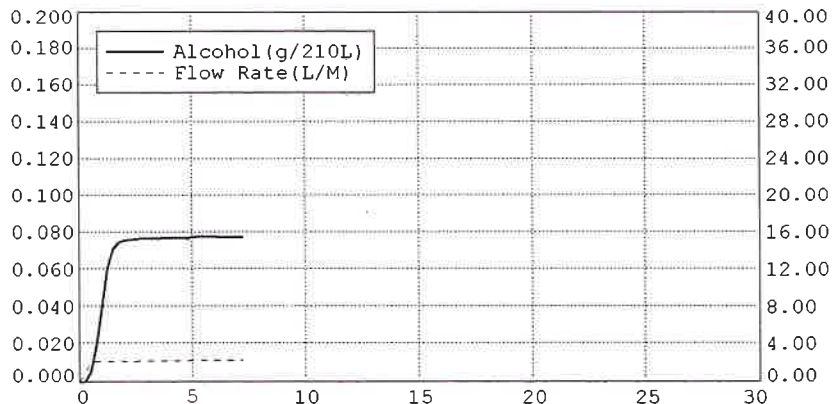
Date: 07/21/2025
Time: 13:35:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.97: 0.080
LOT #: AG335202
EXPIRATION: 12/18/2025
TANK PRESSURE: 136 psi

BLANK TEST	0.000	13:36
INTERNAL STANDARD	VERIFIED	13:36
EXTERNAL STANDARD	0.079	13:37
BLANK TEST	0.000	13:38
EXTERNAL STANDARD	0.079	13:38
BLANK TEST	0.000	13:39
EXTERNAL STANDARD	0.078	13:39
BLANK TEST	0.000	13:40
EXTERNAL STANDARD	0.078	13:40
BLANK TEST	0.000	13:41
EXTERNAL STANDARD	0.078	13:41
BLANK TEST	0.000	13:42

Average = 0.0784
Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100396

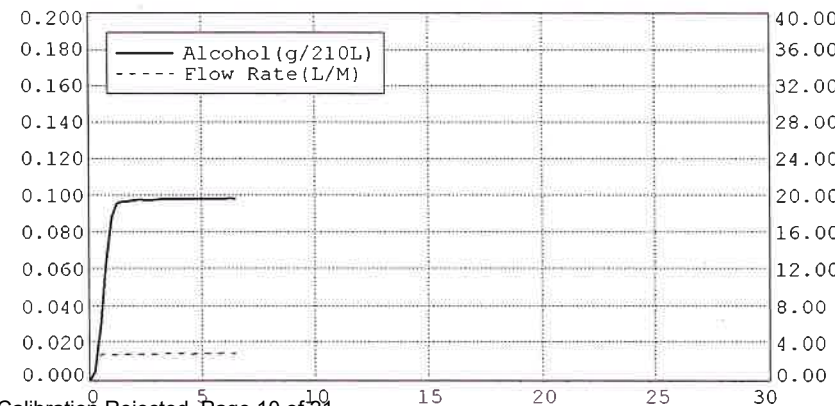
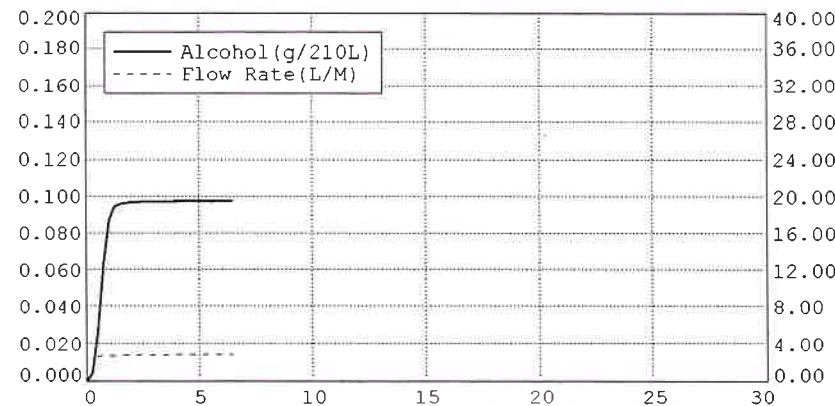
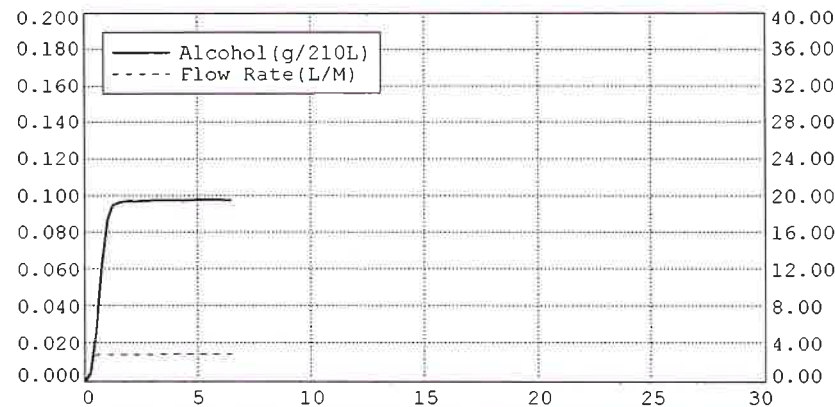
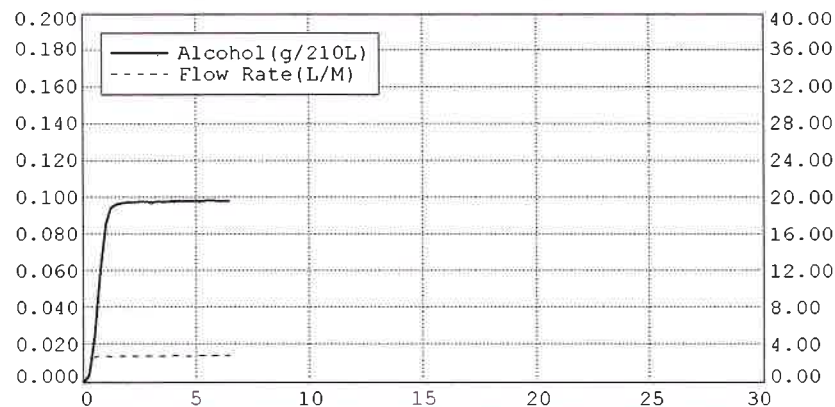
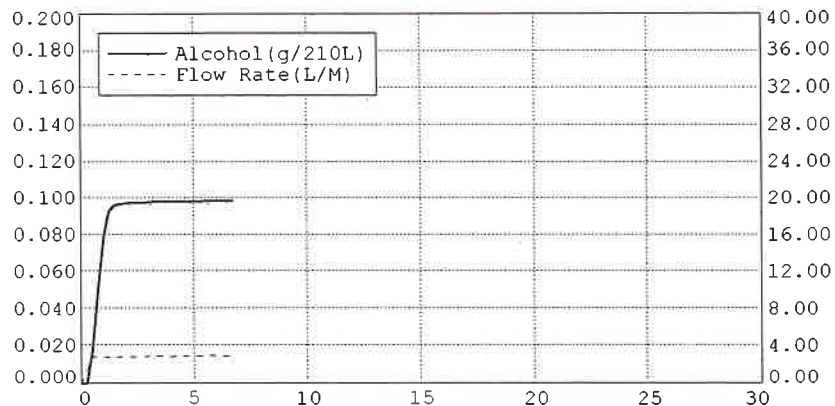
Date: 07/21/2025
Time: 13:43:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.97: 0.100
LOT #: AG333401
EXPIRATION: 11/30/2025
TANK PRESSURE: 922 psi

BLANK TEST	0.000	13:45
INTERNAL STANDARD	VERIFIED	13:45
EXTERNAL STANDARD	0.100	13:45
BLANK TEST	0.000	13:46
EXTERNAL STANDARD	0.099	13:46
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.099	13:47
BLANK TEST	0.000	13:48
EXTERNAL STANDARD	0.099	13:48
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.099	13:49
BLANK TEST	0.000	13:50

Average = 0.0992
Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
DATAMASTER dmt: 100396

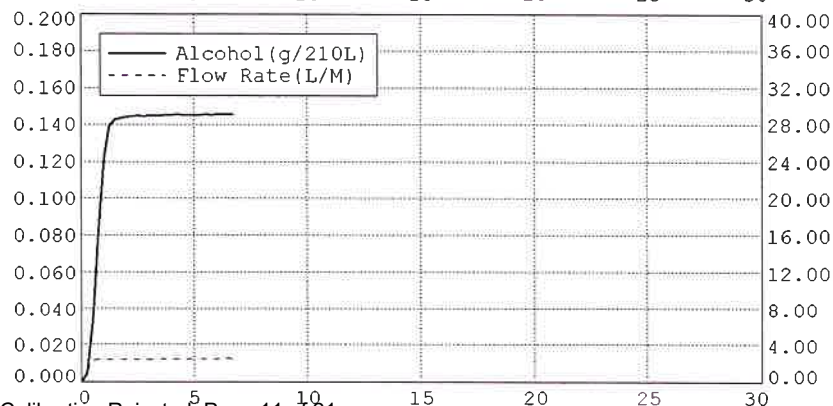
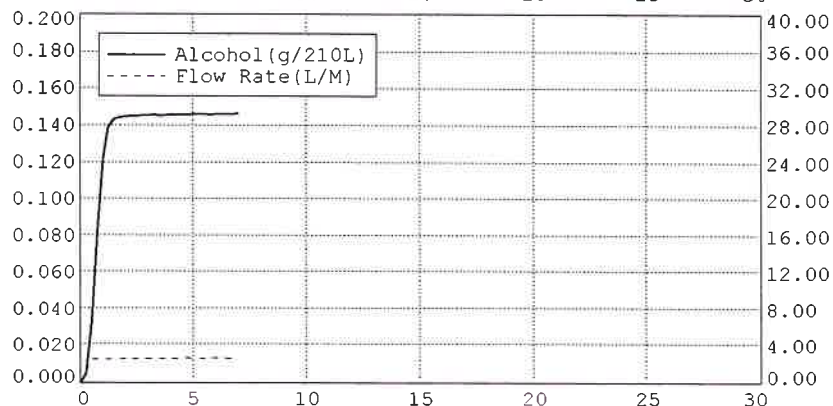
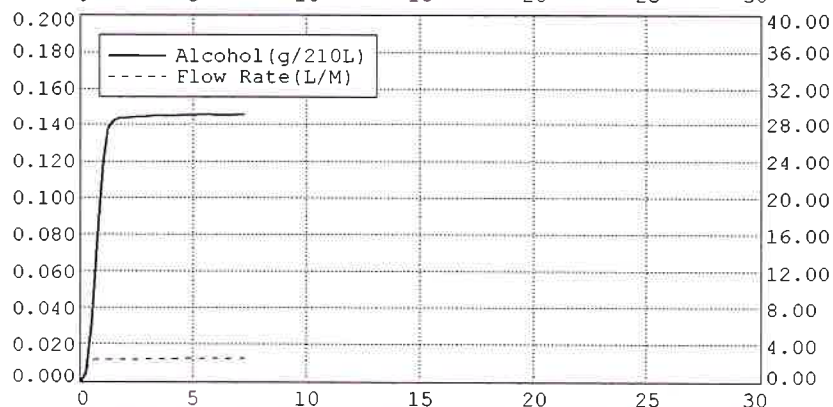
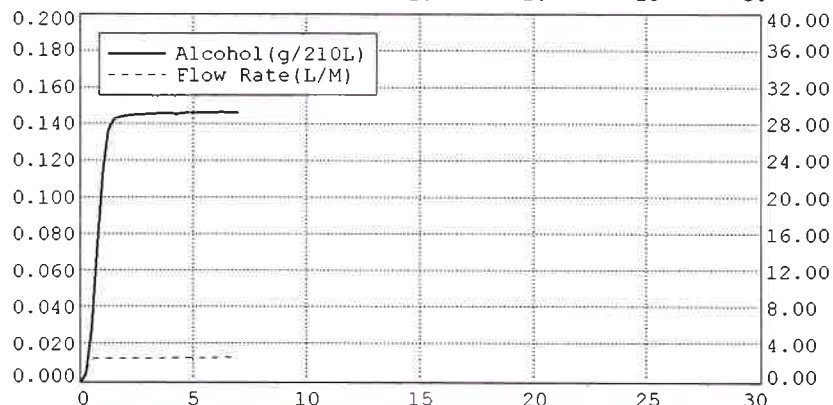
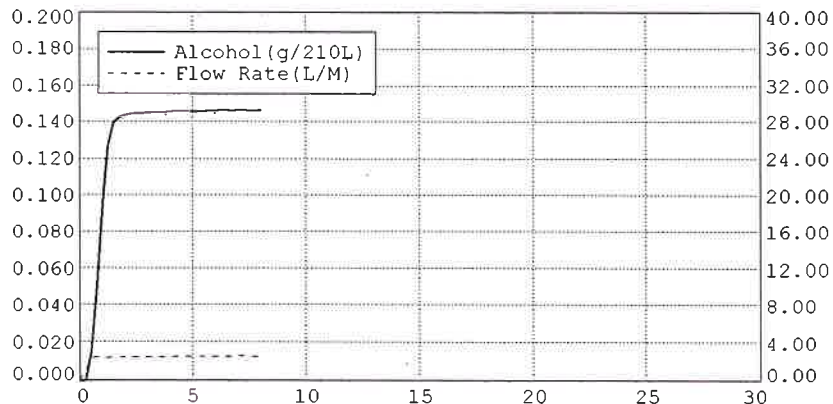
Date: 07/21/2025
Time: 13:56:01

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.150
TARGET AT 29.97: 0.150
LOT #: AG515604
EXPIRATION: 06/05/2027
TANK PRESSURE: 776 psi

BLANK TEST	0.000	13:57
INTERNAL STANDARD	VERIFIED	13:57
EXTERNAL STANDARD	0.147	13:57
BLANK TEST	0.000	13:58
EXTERNAL STANDARD	0.147	13:58
BLANK TEST	0.000	13:59
EXTERNAL STANDARD	0.146	13:59
BLANK TEST	0.000	14:00
EXTERNAL STANDARD	0.147	14:01
BLANK TEST	0.000	14:01
EXTERNAL STANDARD	0.146	14:02
BLANK TEST	0.000	14:03

Average = 0.1466
Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 07/21/2025

Time: 14:06:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300

TARGET AT 29.96: 0.300

LOT #: AG427706

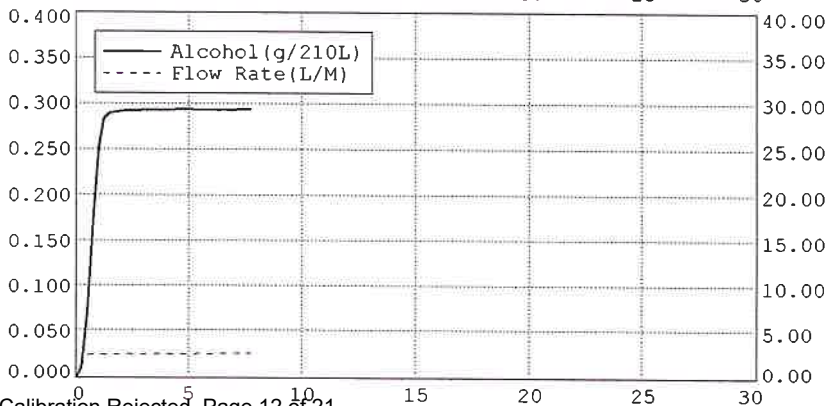
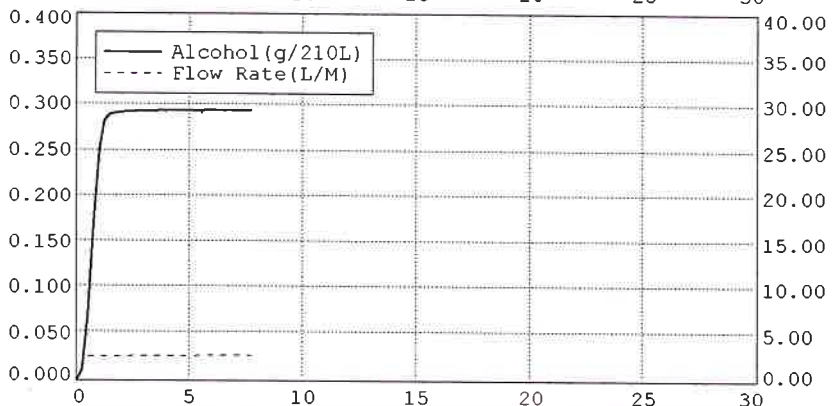
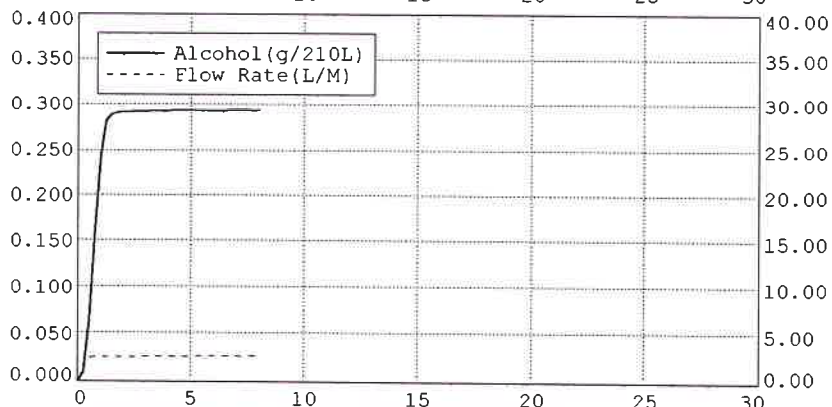
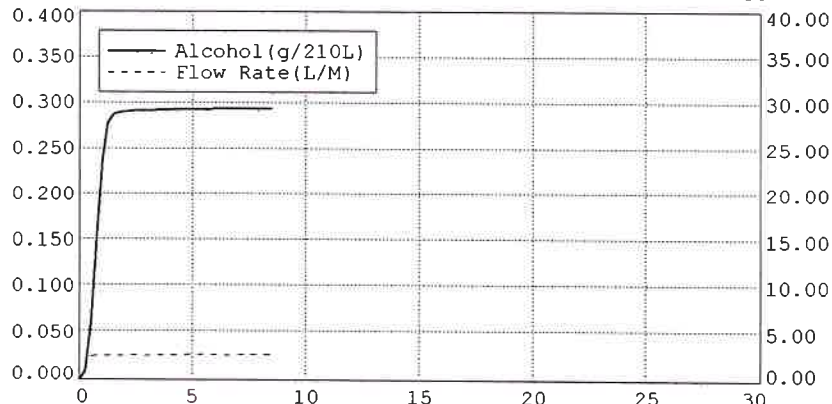
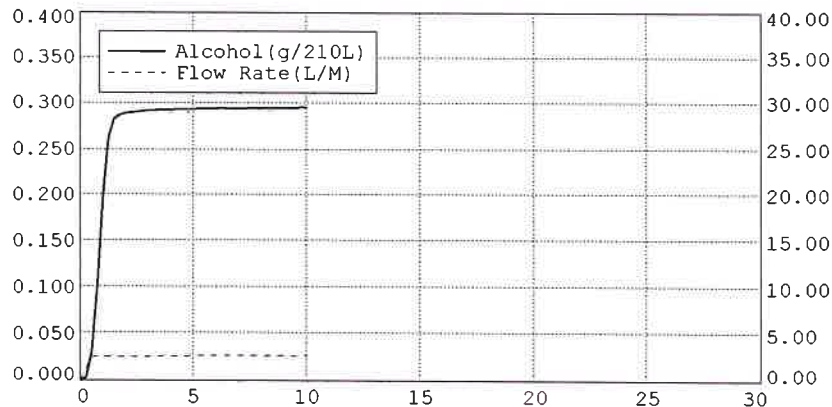
EXPIRATION: 10/03/2026

TANK PRESSURE: 440 psi

BLANK TEST	0.000	14:07
INTERNAL STANDARD	VERIFIED	14:07
EXTERNAL STANDARD	0.295	14:07
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.294	14:08
BLANK TEST	0.000	14:09
EXTERNAL STANDARD	0.294	14:10
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.295	14:11
BLANK TEST	0.000	14:12
EXTERNAL STANDARD	0.295	14:12
BLANK TEST	0.000	14:13

Average = 0.2946

Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 07/21/2025
Time: 14:25:07

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

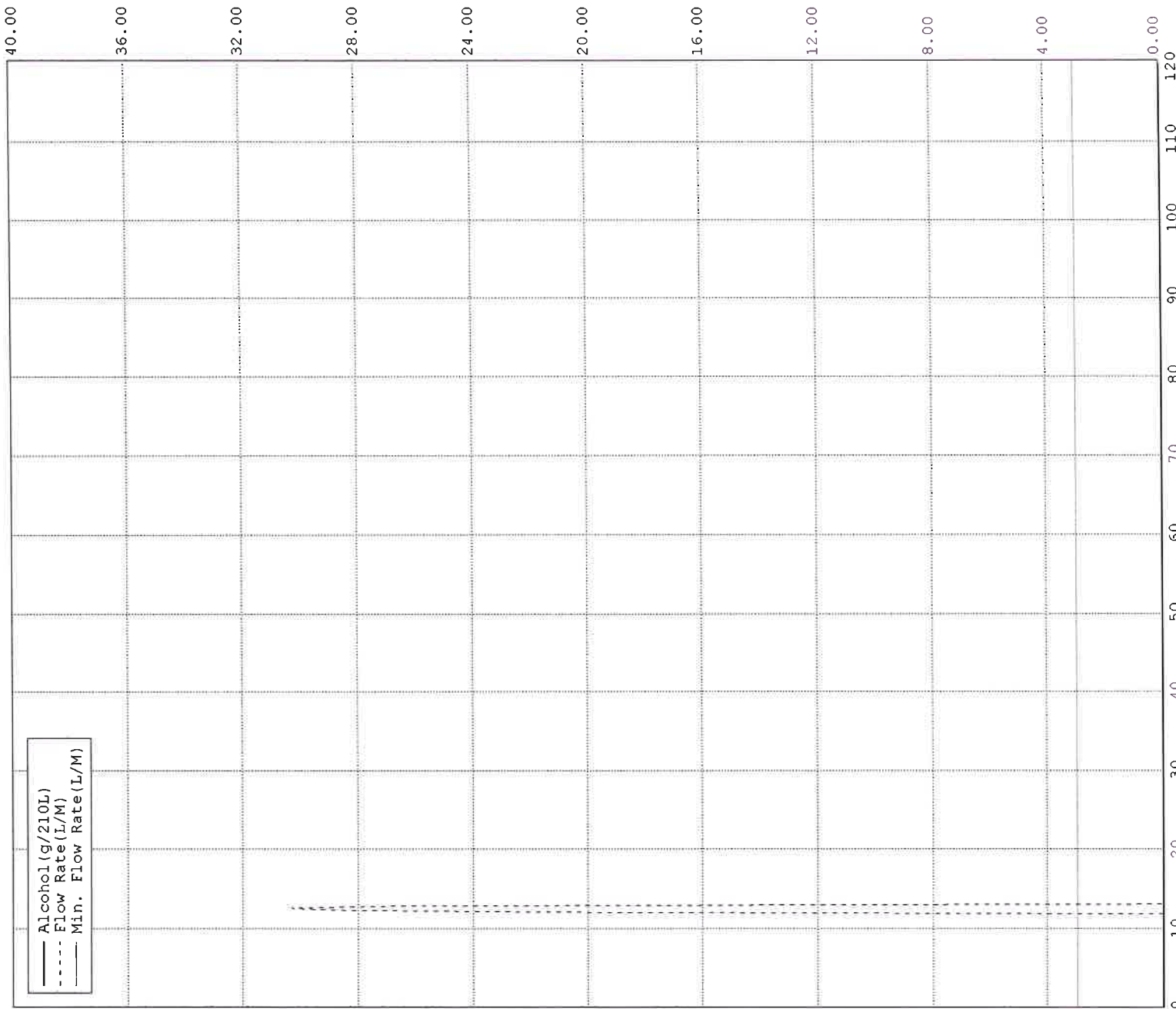
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.96: 0.080
LOT #: AG335202
EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	14:27
BLANK TEST	0.000	14:27
INTERNAL STANDARD	VERIFIED	14:27
EXTERNAL STANDARD	0.080	14:28
BLANK TEST	0.000	14:28
SUBJECT SAMPLE	INCOMPLETE	14:31

Handwritten signature



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 07/21/2025
Time: 14:33:32

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

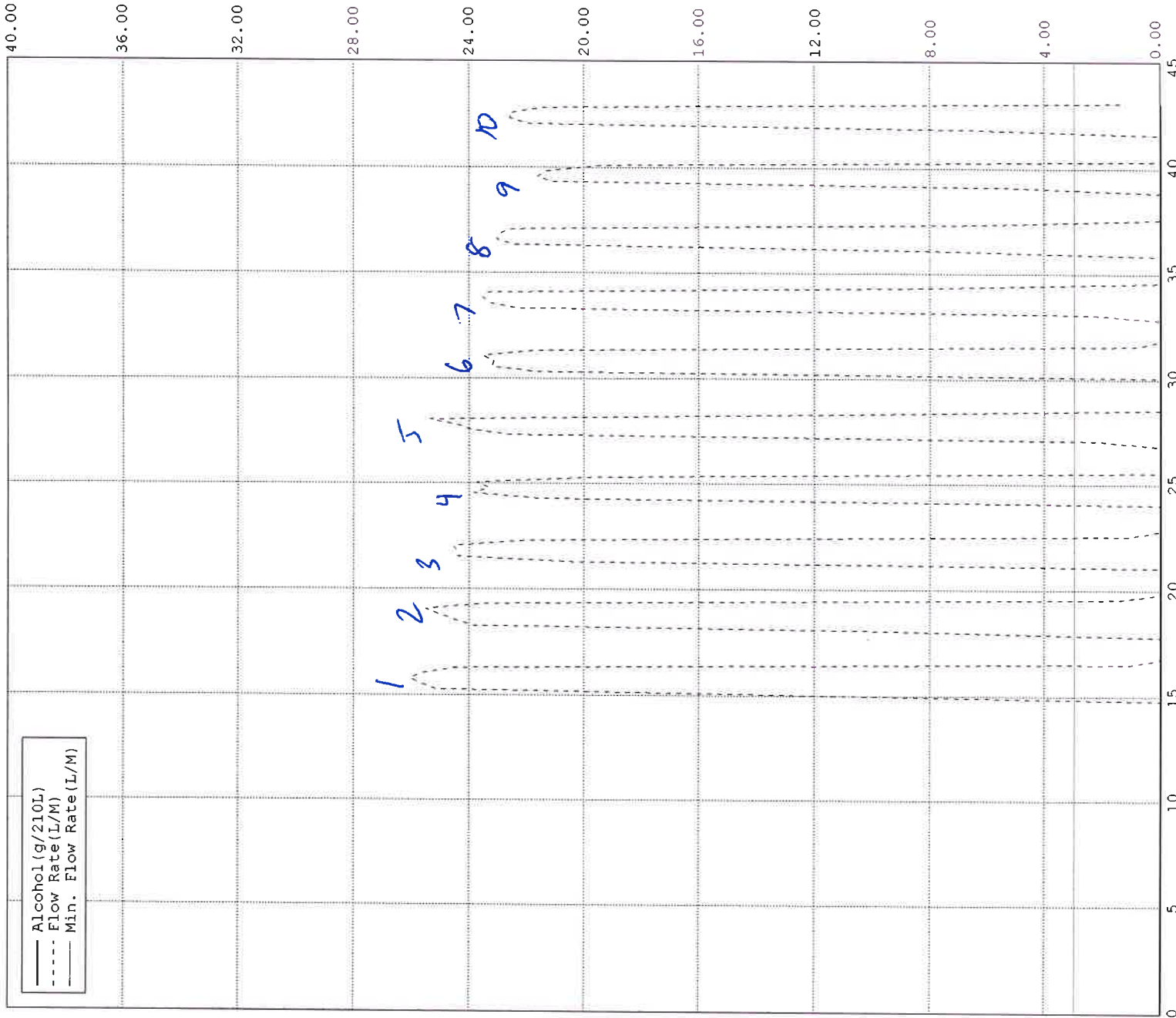
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	14:34
BLANK TEST	0.000	14:34
INTERNAL STANDARD	VERIFIED	14:34
EXTERNAL STANDARD	0.079	14:35
BLANK TEST	0.000	14:35
SUBJECT SAMPLE	XXX	14:36

Maximum Attempts Exceeded

mw



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100396

Date: 07/21/2025

Time: 14:40:04

SUBJECT NAME:

TEST TEST

LICENSE #: XXXX

OPERATOR NAME:

DEREK WALTON

OPERATOR'S #: 9508

DEPT/AGENCY:

INVALID

CASE/REPORT: XXXX

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.97: 0.080

LOT #: AG335202

EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK

BLANK TEST

PASSED

14:41

INTERNAL STANDARD

VERIFIED

14:42

EXTERNAL STANDARD

0.079

14:42

BLANK TEST

0.000

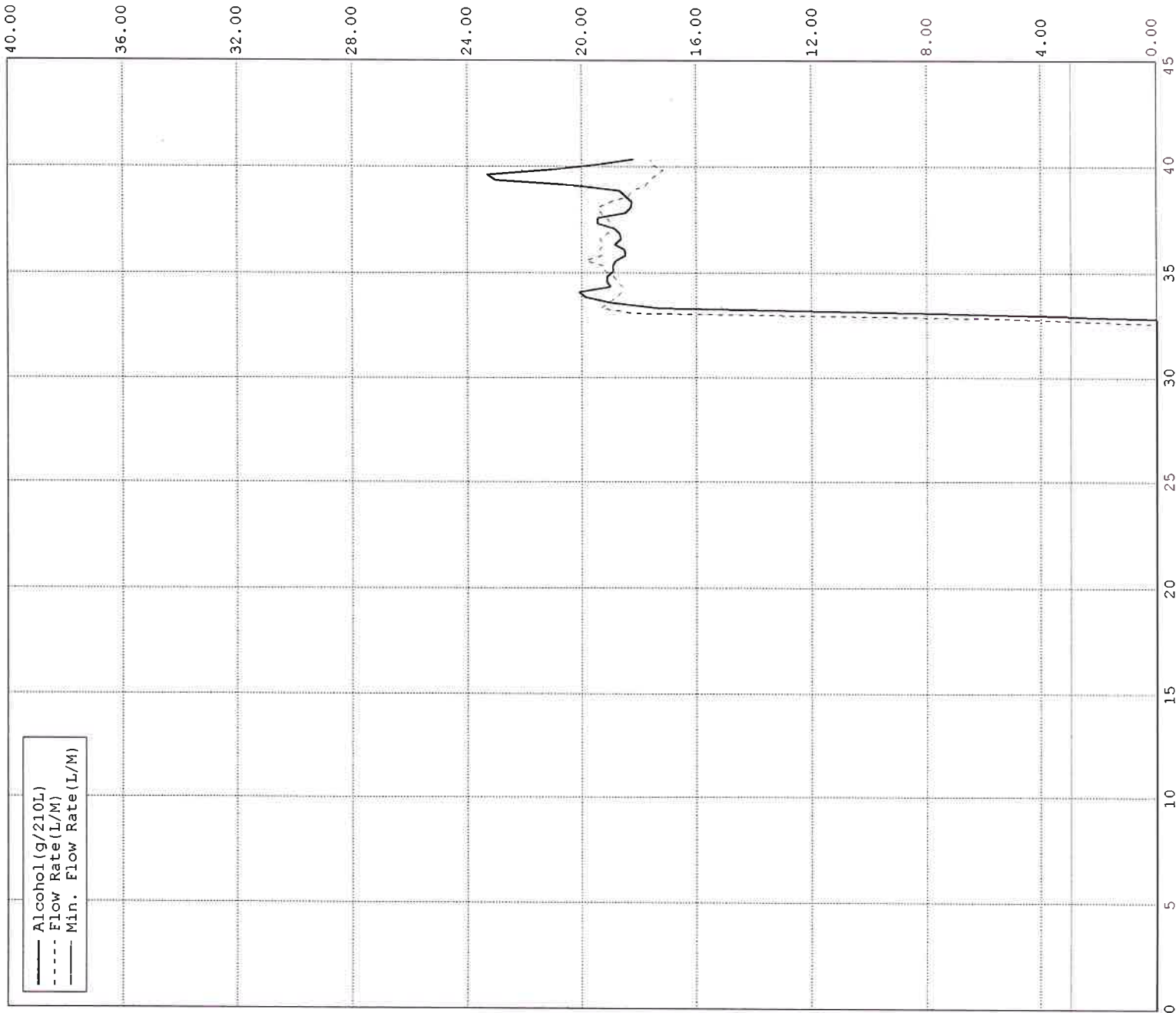
14:43

SUBJECT SAMPLE

INVALID

14:44

MLF



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100396

Date: 07/21/2025
Time: 14:50:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

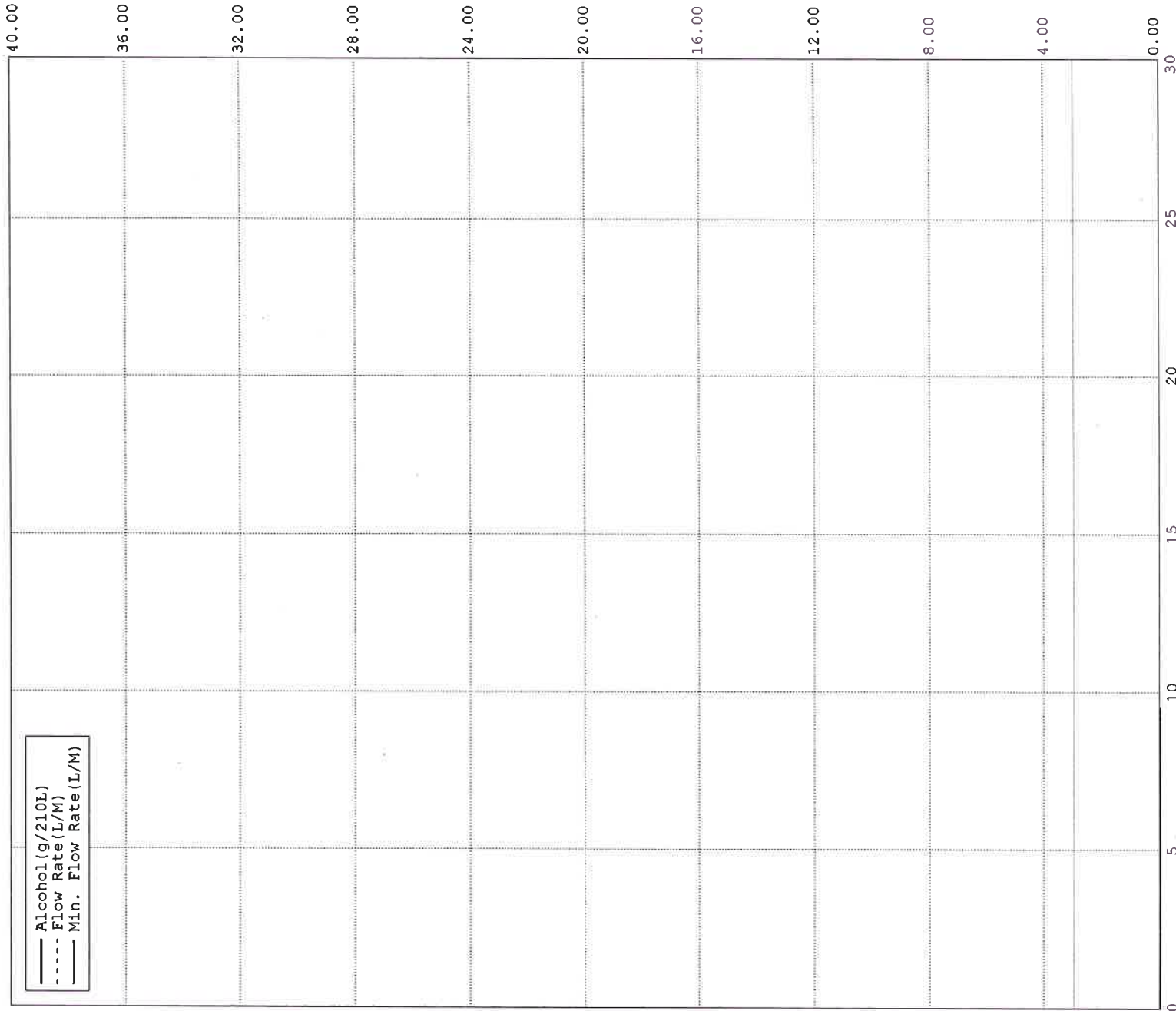
EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	14:51
BLANK TEST	0.000	14:51
INTERNAL STANDARD	VERIFIED	14:51
EXTERNAL STANDARD	0.079	14:51
BLANK TEST	0.000	14:52

RFI DETECTED

DM



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100396

Date: 07/21/2025

Time: 15:10:03

SUBJECT NAME:

TEST TEST

LICENSE #: XXXX

OPERATOR NAME:

DEREK WALTON

OPERATOR'S #: 9508

DEPT/AGENCY:

INTERFERENCE ACETONE

CASE/REPORT: XXXX

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.96: 0.080

LOT #: AG335202

EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK

BLANK TEST

INTERNAL STANDARD

EXTERNAL STANDARD

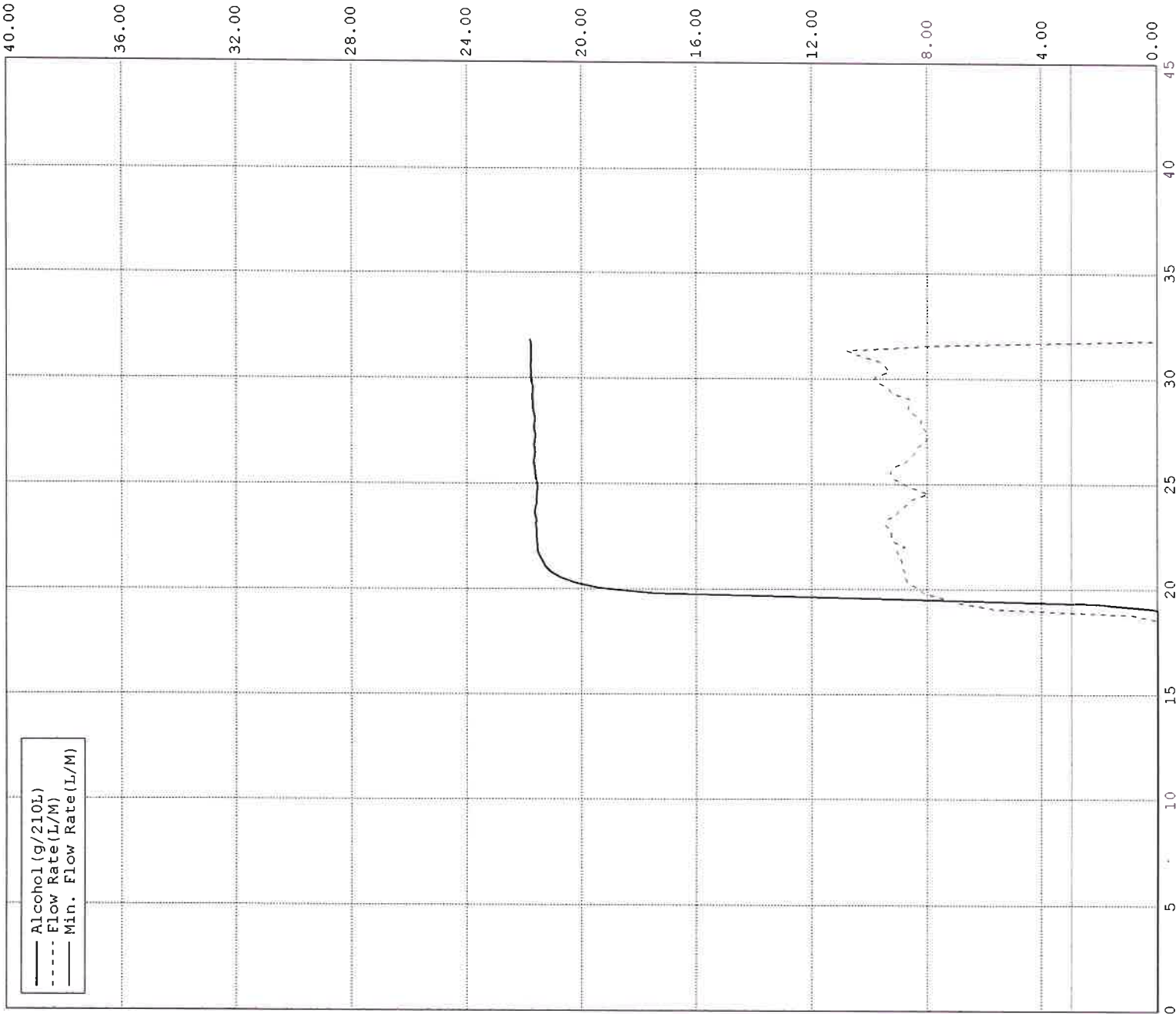
BLANK TEST

SUBJECT SAMPLE

PASSED 15:11
0.000 15:11
VERIFIED 15:11
0.078 15:11
0.000 15:12
XXX 15:13

Interference Detected

MD



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100396

Date: 07/21/2025
Time: 15:16:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

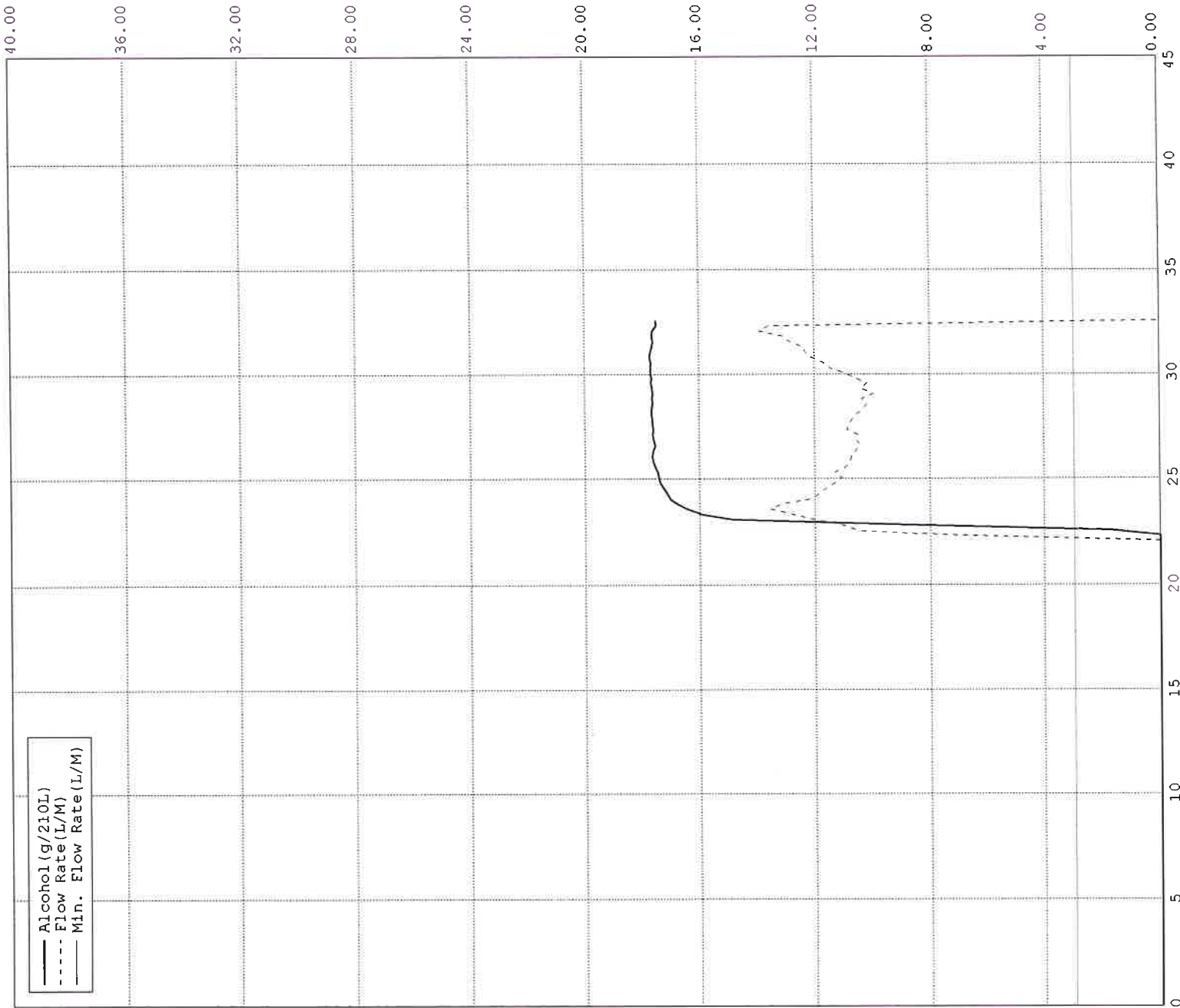
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
INTERFERENCE NEGATIVE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.96: 0.080
LOT #: AG335202
EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK	PASSED	15:18
BLANK TEST	0.000	15:18
INTERNAL STANDARD	VERIFIED	15:18
EXTERNAL STANDARD	0.079	15:18
BLANK TEST	0.000	15:19
SUBJECT SAMPLE (Vol=1.94L)	0.088	15:20
BLANK TEST	0.000	15:21
EXTERNAL STANDARD	0.078	15:21
BLANK TEST	0.000	15:22

ME



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100396

Date: 07/21/2025
Time: 15:25:27

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

Filter Wheel Error

WSE

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 07/21/2025
Time: 15:27:01

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

Filter Wheel Error

WPC

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 07/21/2025
Time: 15:30:13

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

Filter Wheel Error

mf