



State of Alaska
Department of Public Safety
Scientific Crime Detection Laboratory

4805 Dr. Martin Luther King Jr. Ave.
Anchorage, Alaska 99507
David Kanaris, Chief, Forensic Laboratories

Breath Alcohol Calibration Report

Calibration Item: DataMaster DMT

Serial Number: 100684

Report Issue Date: 07/06/2023

Date Received: 2022-12-14

Condition of Item: Needs Repair

Method Used: DataMaster DMT Calibration / Current Breath Alcohol Procedure Manual

Calibration Range: 0.020 g/210L - 0.300 g/210L

No As-Found Data Collected

Unable to perform As-Found due to ticket db pop-up message.

Start Date 06/13/2023 - As Left - End Date 06/13/2023

As Left Conditions - Barometric Pressure (inHg): 29.92 Barometer Used: Fisher S/N 221250180 Temperature (C): 22.1 Relative Humidity (%): 34

As-Left Data									
Nominal Values (g/210L)	Target Values (g/210L)	Lot Number	Results (g/210L)					Mean (g/210L)	Uncertainty (g/210L)
0.020	0.020	AG217902	0.020	0.019	0.020	0.020	0.020	0.020	+/- 0.002
0.040	0.040	AG217904	0.039	0.039	0.040	0.039	0.040	0.039	+/- 0.003
0.080	0.080	09523080A1	0.080	0.079	0.080	0.079	0.079	0.079	+/- 0.004
0.100	0.100	AG211003	0.098	0.099	0.098	0.099	0.099	0.099	+/- 0.004
0.150	0.150	AG134205	0.148	0.148	0.148	0.148	0.148	0.148	+/- 0.005
0.300	0.300	AG217903	0.297	0.297	0.297	0.297	0.297	0.297	+/- 0.011

Calibration is performed using dry gas standards traceable to NIST. Standards are sourced from an external provider accredited to ISO/IEC 17025 and ISO 17034 standards. Internal instrument barometer readings are traceable to NIST. External barometers are calibrated by an external calibration provider accredited to the ISO/IEC 17025 standard.

The As-Left results listed above include the estimated measurement uncertainty with a coverage factor k=2 and an expanded coverage probability of 95%. The estimated uncertainty applies to the calibration process and not to subject breath samples.

This report applies only to the item being calibrated and shall not be reproduced, except in full, without written approval from the laboratory.

A handwritten signature in black ink that reads "Colleen O'Bryant".

Results authorized by Colleen O'Bryant on 06/29/2023

colleen.obryant@alaska.gov

Technically and administratively reviewed by Brandi Barnett on 07/06/2023

Alaska Scientific Crime Detection Laboratory**DataMaster Calibration Form**

Effective: 10/10/2022

Version: 3.0

Instrument #: 100684 Analyst: C. O Bryant Start Date: 6/13/23

- Diagnostic Test (attached) Internal Standard value ≤ 3.00%
- 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
- Adjust volume setting, if needed (1.50 L +/- 0.10 L)
- Print Technician Screen (attached)
- Print Calibration Factors (attached)
- Minimum Volume Test 1.6 L (1.3L to 1.7L)

As Left Conditions:

Barometric Pressure (in Hg): 29.92 Temperature (C): 22.1 Relative Humidity (%): 34

Linearity Test (attached)

0.020g/210L Mnf:	<u>Aegas</u>	Lot: <u>AGJ17902</u>	Exp: <u>6/28/24</u>
0.040g/210L Mnf:	<u>Aegas</u>	Lot: <u>AGJ17904</u>	Exp: <u>6/28/24</u>
0.080g/210L Mnf:	<u>IDMO</u>	Lot: <u>0902X3080A1</u>	Exp: <u>5/5/25</u>
0.100g/210L Mnf:	<u>Aegas</u>	Lot: <u>AGJ11003</u>	Exp: <u>4/20/24</u>
0.150g/210L Mnf:	<u>Aegas</u>	Lot: <u>AGK134205</u>	Exp: <u>12/8/23</u>
0.300g/210L Mnf:	<u>Aegas</u>	Lot: <u>AGJ17903</u>	Exp: <u>6/28/24</u>

Functional Tests (attached)

- Incomplete Invalid
- Maximum Attempts Exceeded Radio Frequency Interference (RFI)
- Interference (Volatiles)

Acetone Mnf: Aegas Lot: 20HP41301 Level: 0.100 Exp: 8/24/24Simulator S/N: DR4176 Verification Performed? Isopropanol Mnf: LifeLoc Lot: 20HP41301 Level: 0.100 Exp: 8/24/24Simulator S/N: DR4177 Verification Performed? Neg. Control Mnf: LifeLoc Lot: 21KP41172 Level: 0.100 Exp: 11/9/23Simulator S/N: DR6267 Verification Performed?

Calibrated External Thermometer:

Thermometer S/N: 210958384 Calibration Due Date: 11/9/23

- Verify stylus is calibrated
 Reset Options
 Clear Memory
 Verification of Calibration (VOC)

- Non-Drinking Subject Test
 Upload
 Remove Tank Prior to Shutdown
Calibration End Date: 6/13/23

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100684

Date: 06/13/2023
Time: 10:10:40

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

TEMPERATURES

Sample Chamber = 49.0 °C (44.0 °C - 52.0 °C)	PASSED
Breath Tube = 43.3 °C (38.0 °C - 50.0 °C)	PASSED

SETTINGS

Lamp Voltage = 1.82 V (1.11 V - 2.59 V)	PASSED
Cooler Voltage = 1.63 V (0.98 V - 2.28 V)	PASSED
Bias Voltage = 79 V (48 V - 112 V)	PASSED
Chopper Freq = 527 Hz (475 Hz - 575 Hz)	PASSED
Barometer = 30.0 in	

PUMP INFO
Flow Rate = 4.049 L/M
(3.500 L/M - 6.500 L/M) PASSED

DETECTOR INFO
PUMP ON PASSED
(0.002 V <= 0.010 V)
PUMP OFF PASSED
(0.001 V <= 0.010 V)

FILTER INFO
Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD PASSED
Xq = 0.093 0.28% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100684

Date: 06/13/2023
Time: 10:19 AM

Temperatures (°C)
Sample Cell: 49.0 °C
Breath Tube: 43.2 °C

Current Barometer 29.9 in
Volume (Ltr) 1.50

Settings
Lamp: 1.88 V
Bias: 80 V
Cooler: 1.58 V
Chopper: 527 Hz

Voltages (V)
Flow: 1.03 V
Detector: 0.007 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100684

Date: 10/04/2019
Time: 12:49:11

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca = 0.1000
CAL = 0.986837 0.800 <= CAL < 1.200
b1 = 0.0009 0.0000 <= b1 < 0.0040
b2 = 0.0048 0.0010 <= b2 < 0.0100
b3 = 0.0009 0.0000 <= b3 < 0.0040
Xq = 0.0929 0.0500 <= Xq < 0.2000
a21 = 1.174117 1.050 <= a21 < 1.300
a31 = 0.531210 0.300 <= a31 < 0.800

40.00

36.00

32.00

28.00

24.00

20.00

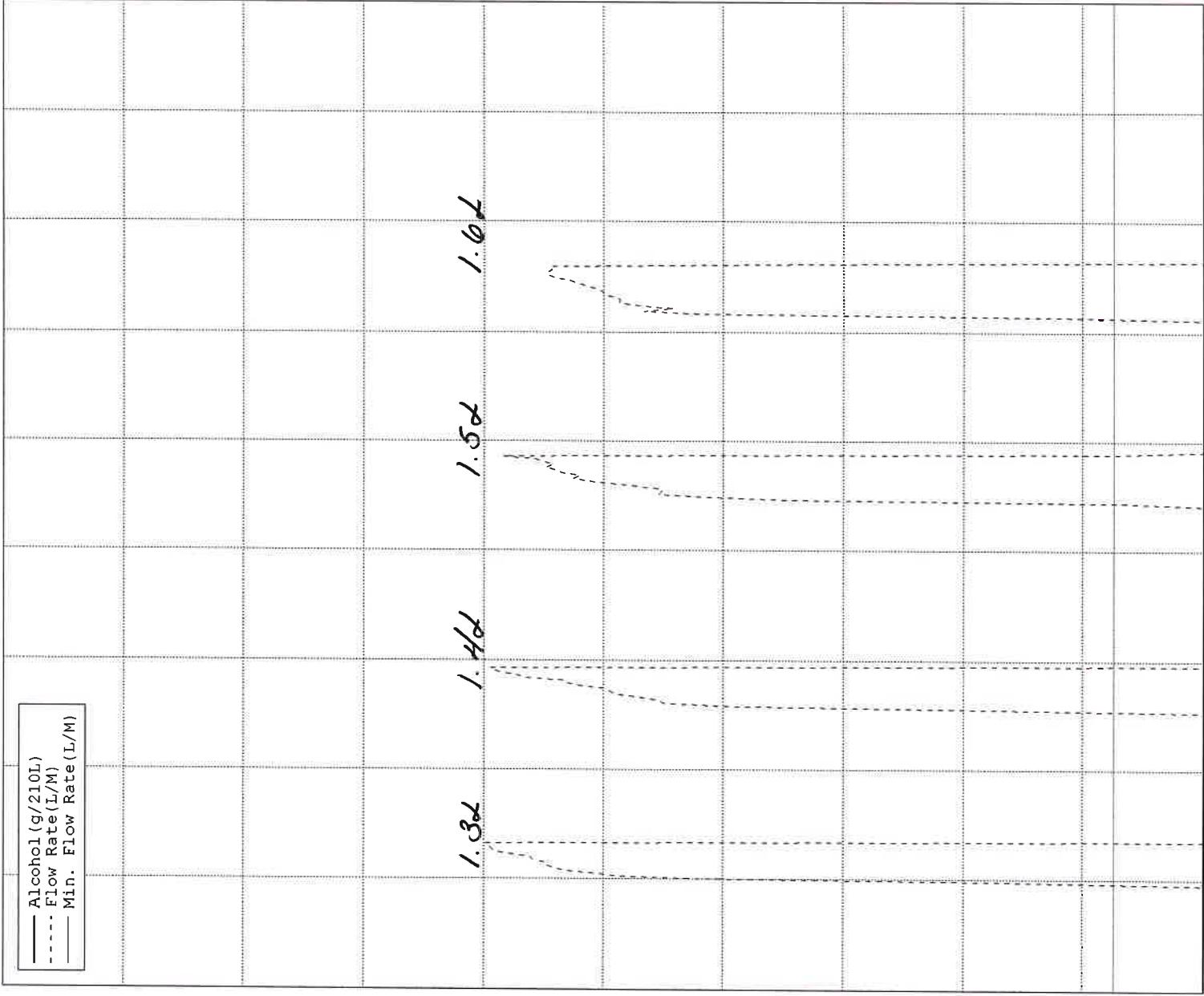
16.00

12.00

8.00

4.00

0.00



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100684

Date: 06/13/2023
Time: 10:20:28

SUBJECT NAME:
TEST TEST

LICENSE #: VOLUME TEST

OPERATOR NAME:

COLLEEN S O'BRYANT
OPERATOR'S #: 6237

DEPT/AGENCY:

AAA1

CASE/REPORT: 23-1234

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.93: 0.080

LOT #: 09523080A1

EXPIRATION: 05/05/2025

DIAGNOSTIC CHECK	PASSED	10:22
BLANK TEST	0.000	10:22
INTERNAL STANDARD	VERIFIED	10:23
EXTERNAL STANDARD	0.080	10:23
BLANK TEST	0.000	10:24
SUBJECT SAMPLE (Vol=1.58L)	0.000	10:25
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.079	10:26
BLANK TEST	0.000	10:27

LINEARITY CHECK

Alaska Department of Public Safety
DATAMASTER dmt: 100684

Date: 06/13/2023
Time: 10:30:49

SUPERVISOR NAME:
COLLEEN S O'BRYANT
OPERATOR'S #: 6237

TARGET

TARGET	AVERAGE	STD. DEV.
0.020	0.0198	0.0004
0.040	0.0394	0.0005
0.080	0.0794	0.0005
0.100	0.0986	0.0005
0.150	0.1480	0.0000
0.300	0.2970	0.0000

SLOPE = 0.989932

R² = 0.999993

0.600

0.500

0.300

0.200

0.100

0.000

0.600
0.500
0.400
0.300
0.200
0.100
0.000

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100684

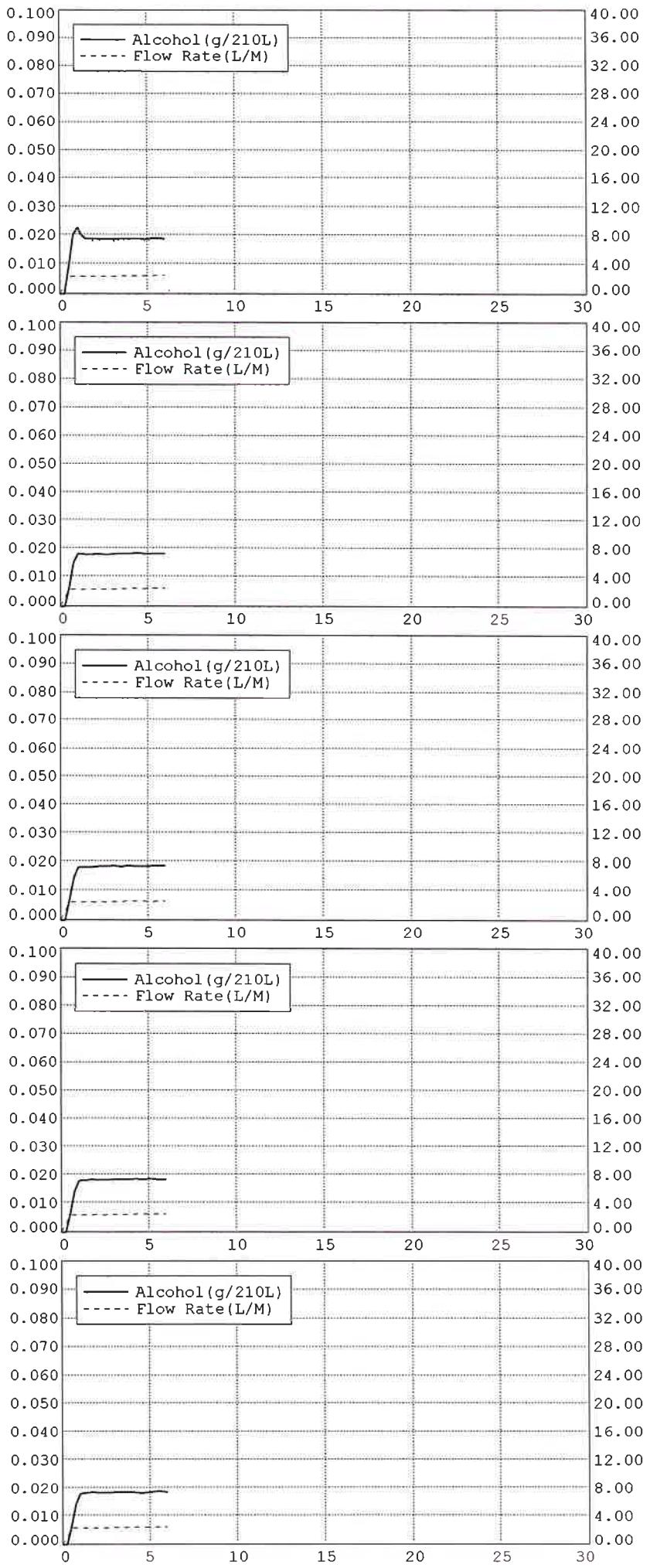
Date: 06/13/2023
Time: 10:30:51

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.93: 0.020
LOT #: AG217902
EXPIRATION: 06/28/2024
TANK PRESSURE: 700 psi

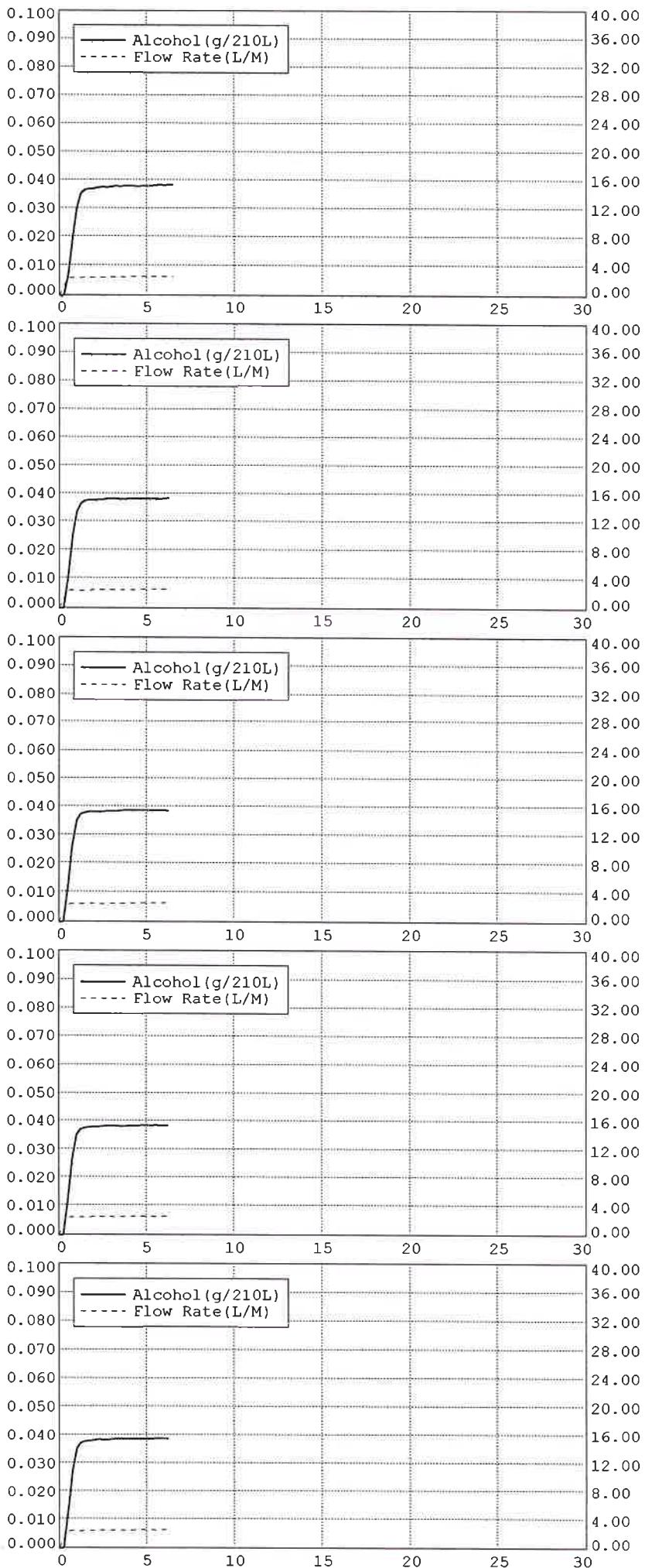
BLANK TEST	0.000	10:37
INTERNAL STANDARD	VERIFIED	10:37
EXTERNAL STANDARD	0.020	10:37
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.019	10:38
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.020	10:39
BLANK TEST	0.000	10:40
EXTERNAL STANDARD	0.020	10:40
BLANK TEST	0.000	10:41
EXTERNAL STANDARD	0.020	10:42
BLANK TEST	0.000	10:42

Average = 0.0198
Std Dev = 0.0004



LINEARITY CHECK: Control Test 2Alaska Department of Public Safety
DATAMASTER dmt: 100684Date: 06/13/2023
Time: 10:44:06**EXTERNAL STANDARD INFORMATION**NOMINAL: 0.040
TARGET AT 29.93: 0.040
LOT #: AG217904
EXPIRATION: 06/28/2024
TANK PRESSURE: 880 psi

BLANK TEST	0.000	10:45
INTERNAL STANDARD	VERIFIED	10:45
EXTERNAL STANDARD	0.039	10:45
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.039	10:46
BLANK TEST	0.000	10:47
EXTERNAL STANDARD	0.040	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.039	10:48
BLANK TEST	0.000	10:49
EXTERNAL STANDARD	0.040	10:50
BLANK TEST	0.000	10:50

Average = 0.0394
Std Dev = 0.0005

LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100684

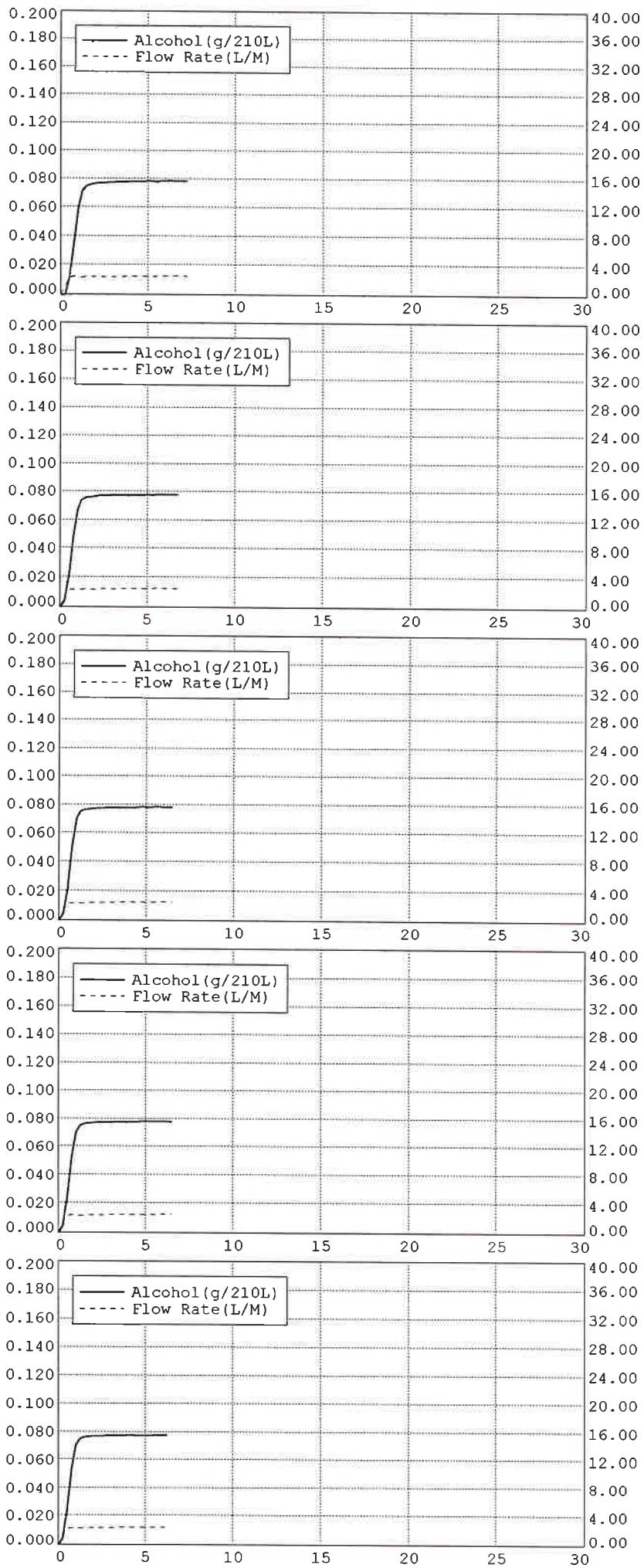
Date: 06/13/2023
Time: 10:52:01

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.93: 0.080
LOT #: 09523080A1
EXPIRATION: 05/05/2025
TANK PRESSURE: 825 psi

BLANK TEST	0.000	10:53
INTERNAL STANDARD	VERIFIED	10:53
EXTERNAL STANDARD	0.080	10:53
BLANK TEST	0.000	10:54
EXTERNAL STANDARD	0.079	10:54
BLANK TEST	0.000	10:55
EXTERNAL STANDARD	0.080	10:55
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.079	10:56
BLANK TEST	0.000	10:57
EXTERNAL STANDARD	0.079	10:57
BLANK TEST	0.000	10:58

Average = 0.0794
Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100684

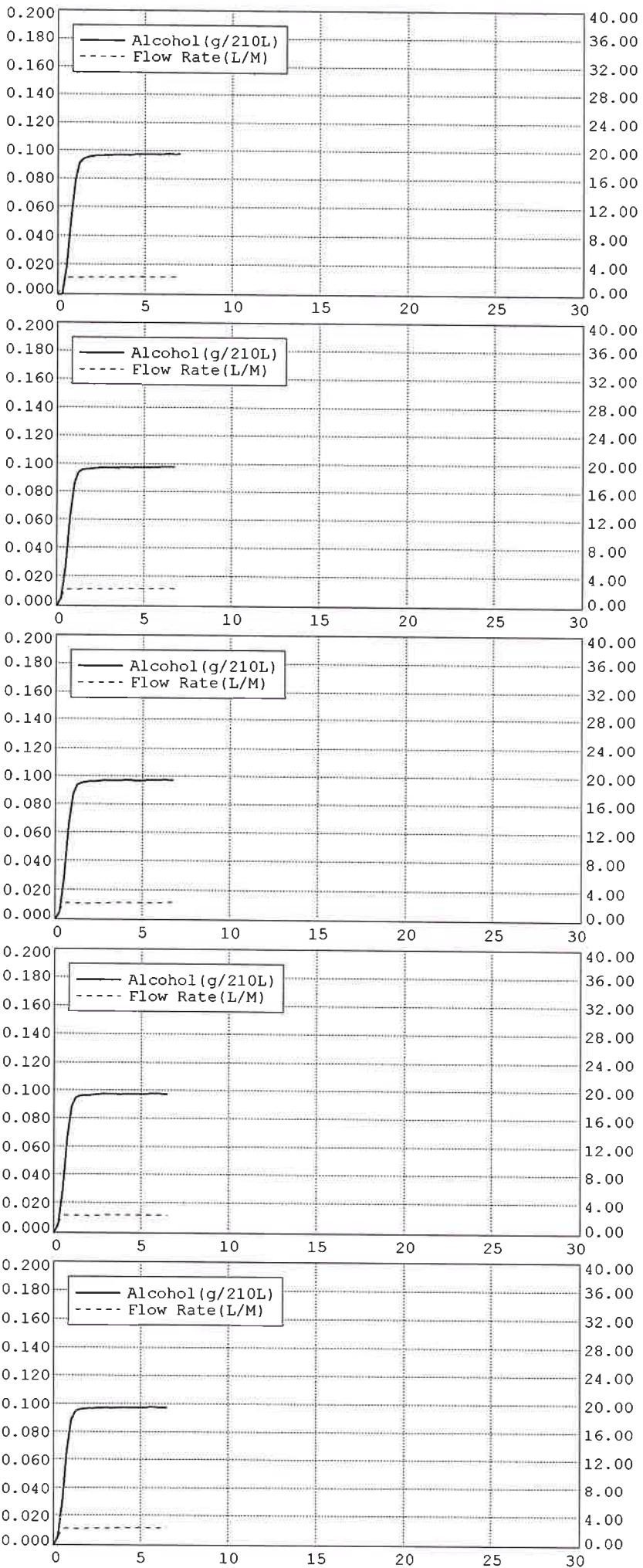
Date: 06/13/2023
Time: 11:00:32

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.92: 0.100
LOT #: AG211003
EXPIRATION: 04/20/2024
TANK PRESSURE: 638 psi

BLANK TEST	0.000	11:01
INTERNAL STANDARD	VERIFIED	11:01
EXTERNAL STANDARD	0.098	11:02
BLANK TEST	0.000	11:02
EXTERNAL STANDARD	0.099	11:03
BLANK TEST	0.000	11:04
EXTERNAL STANDARD	0.098	11:04
BLANK TEST	0.000	11:05
EXTERNAL STANDARD	0.099	11:05
BLANK TEST	0.000	11:06
EXTERNAL STANDARD	0.099	11:06
BLANK TEST	0.000	11:07

Average = 0.0986
Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
DATAMASTER dmt: 100684

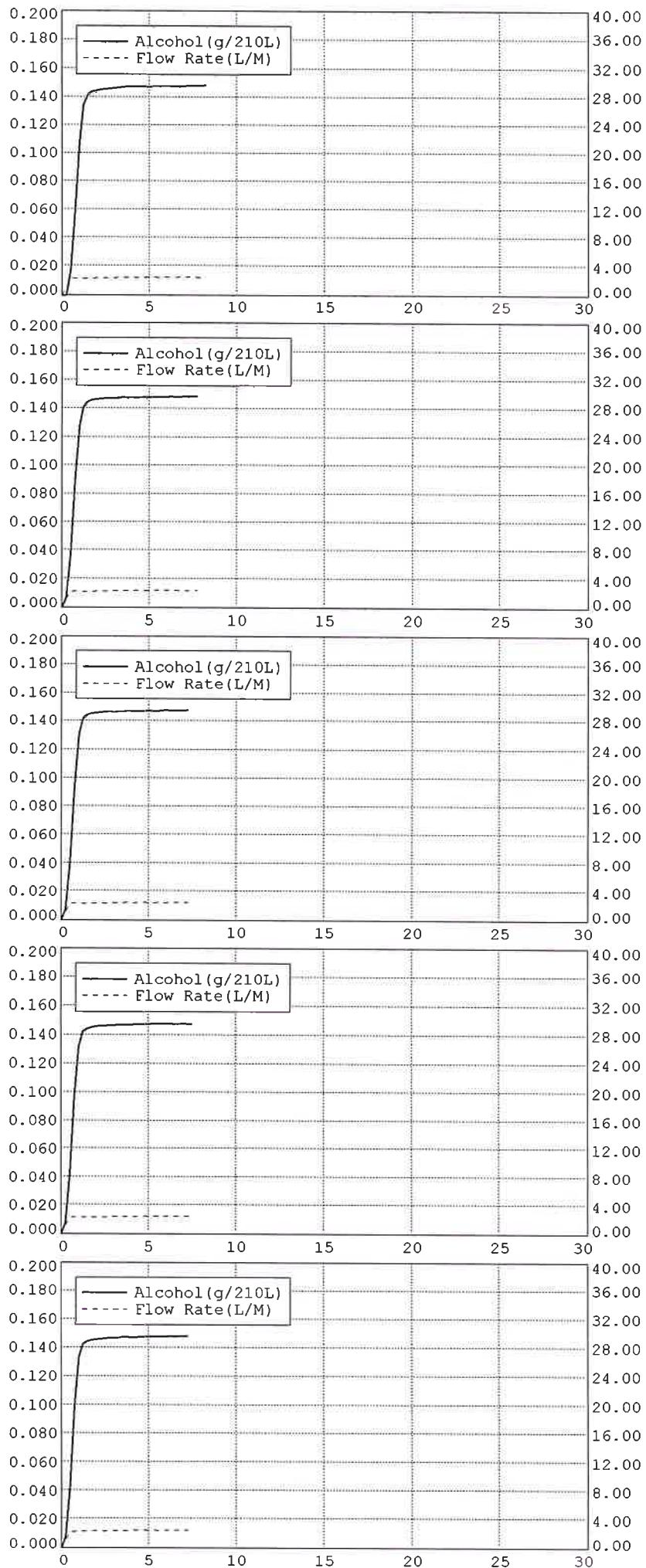
Date: 06/13/2023
Time: 11:39:54

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.150
TARGET AT 29.93: 0.150
LOT #: AG134205
EXPIRATION: 12/08/2023
TANK PRESSURE: 776 psi

BLANK TEST	0.000	11:41
INTERNAL STANDARD	VERIFIED	11:41
EXTERNAL STANDARD	0.148	11:41
BLANK TEST	0.000	11:42
EXTERNAL STANDARD	0.148	11:42
BLANK TEST	0.000	11:43
EXTERNAL STANDARD	0.148	11:43
BLANK TEST	0.000	11:44
EXTERNAL STANDARD	0.148	11:44
BLANK TEST	0.000	11:45
EXTERNAL STANDARD	0.148	11:46
BLANK TEST	0.000	11:46

Average = 0.1480
Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
DATAMASTER dmt: 100684

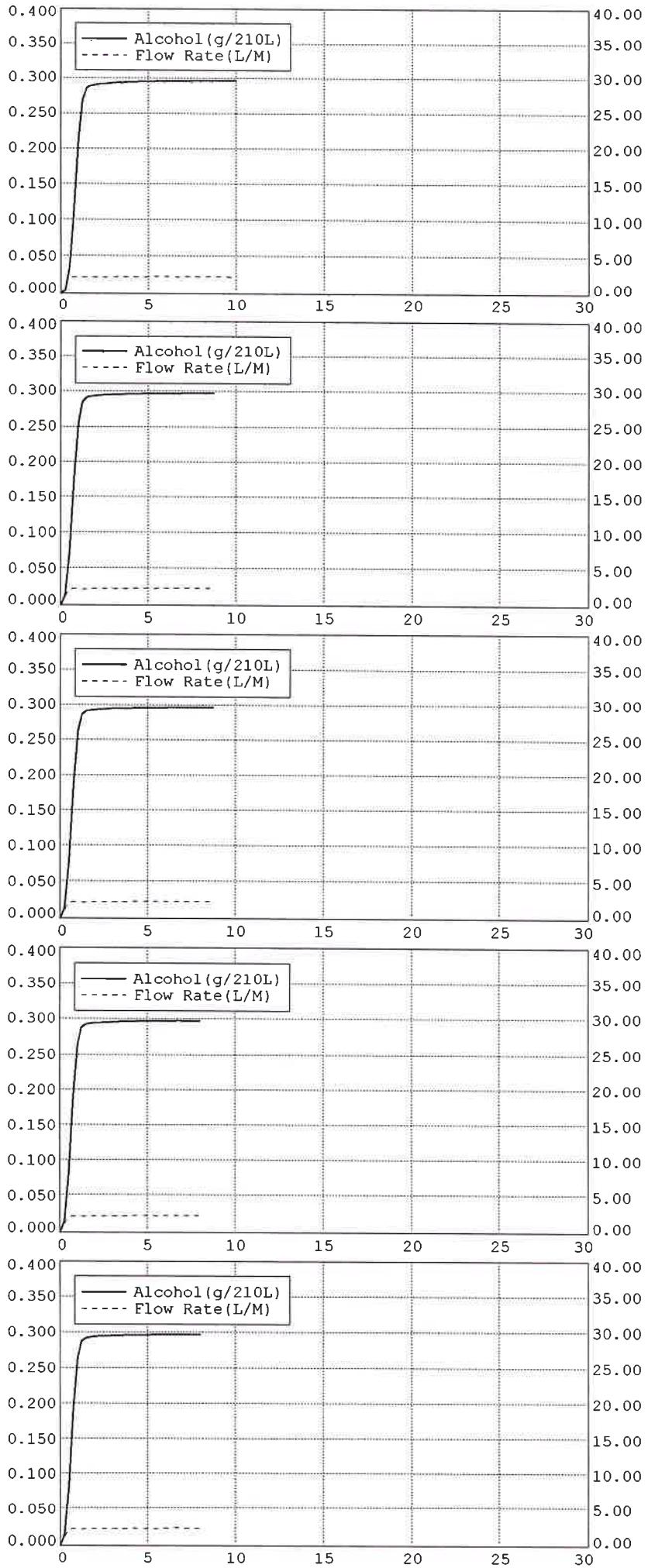
Date: 06/13/2023
Time: 11:48:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
TARGET AT 29.93: 0.300
LOT #: AG217903
EXPIRATION: 06/28/2024
TANK PRESSURE: 333 psi

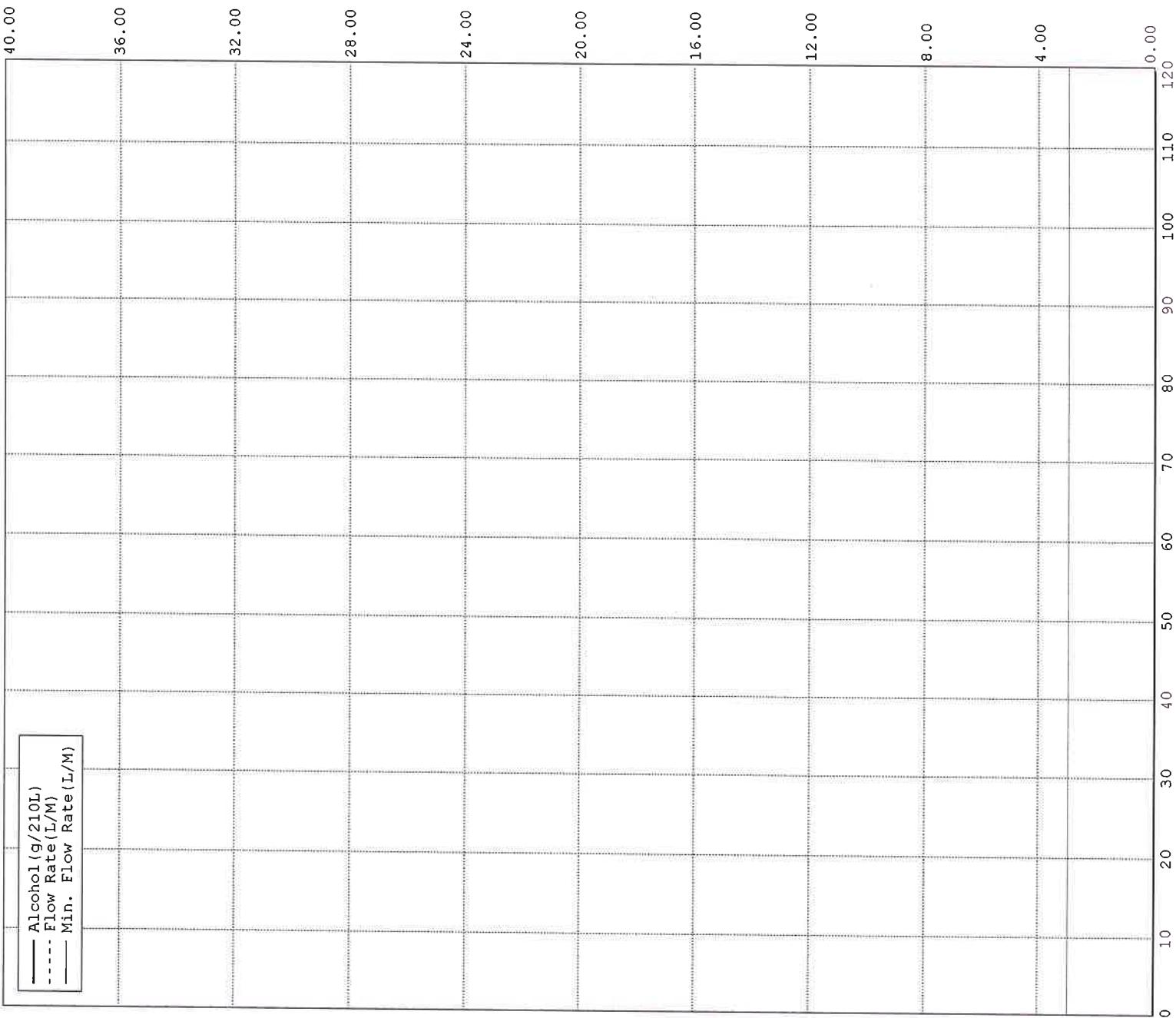
BLANK TEST	0.000	11:49
INTERNAL STANDARD	VERIFIED	11:49
EXTERNAL STANDARD	0.297	11:49
BLANK TEST	0.000	11:50
EXTERNAL STANDARD	0.297	11:50
BLANK TEST	0.000	11:51
EXTERNAL STANDARD	0.297	11:52
BLANK TEST	0.000	11:52
EXTERNAL STANDARD	0.297	11:53
BLANK TEST	0.000	11:54
EXTERNAL STANDARD	0.297	11:54
BLANK TEST	0.000	11:55

Average = 0.2970
Std Dev = 0.0000



SUBJECT TEST	
Alaska Department of Public Safety	
DATAMASTER dmt:	100684
Date:	06/13/2023
Time:	11:58:41
SUBJECT NAME:	
TEST TEST	LICENSE #: INCOMPLETE
OPERATOR NAME:	COLLEEN S O'BRYANT
OPERATOR'S #:	6237
DEPT/AGENCY:	AAA1
CASE/REPORT:	23-1234
TEST TYPE:	TEST
EXTERNAL STANDARD INFORMATION	
NOMINAL:	0.080
TARGET AT:	29.92: 0.080
LOT #:	09523080A1
EXPIRATION:	05/05/2025
DIAGNOSTIC CHECK	PASSED
BLANK TEST	0.000
INTERNAL STANDARD	VERIFIED
EXTERNAL STANDARD	0.080
BLANK TEST	0.000
SUBJECT SAMPLE	INCOMPLETE
	12:00
	16.00
	12.00
	8.00
	4.00
	0.00

[Signature]



40.00

36.00

32.00

28.00

24.00

20.00

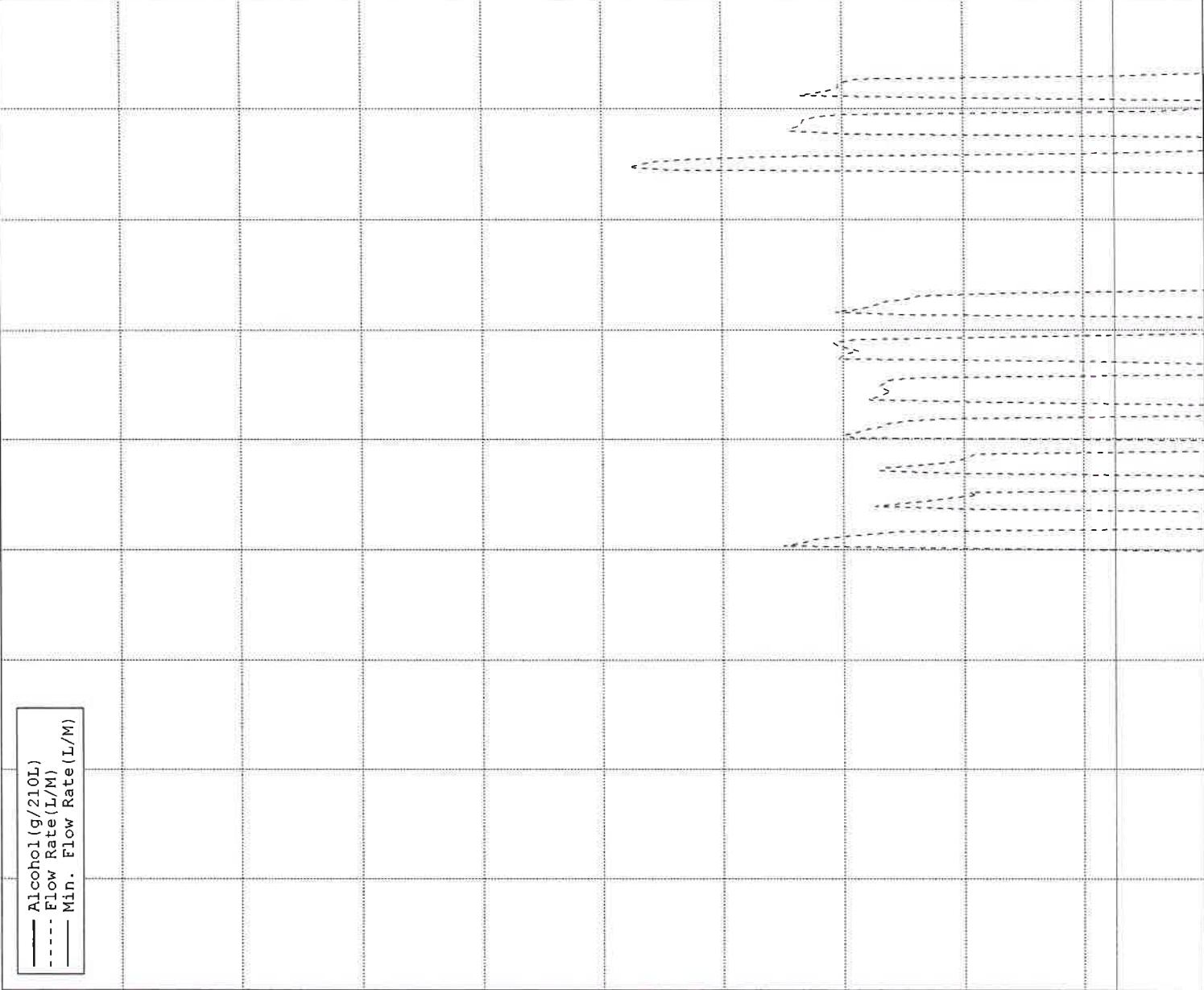
16.00

12.00

8.00

4.00

0.00

90
80
70
60
50
40
30
20
10
0

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100684

Date: 06/13/2023
Time: 12:35:52

SUBJECT NAME:

TEST TEST
LICENSE #: MAX ATTEMPTS

OPERATOR NAME:

COLLEEN S O'BRYANT
OPERATOR'S #: 6237

DEPT/AGENCY:

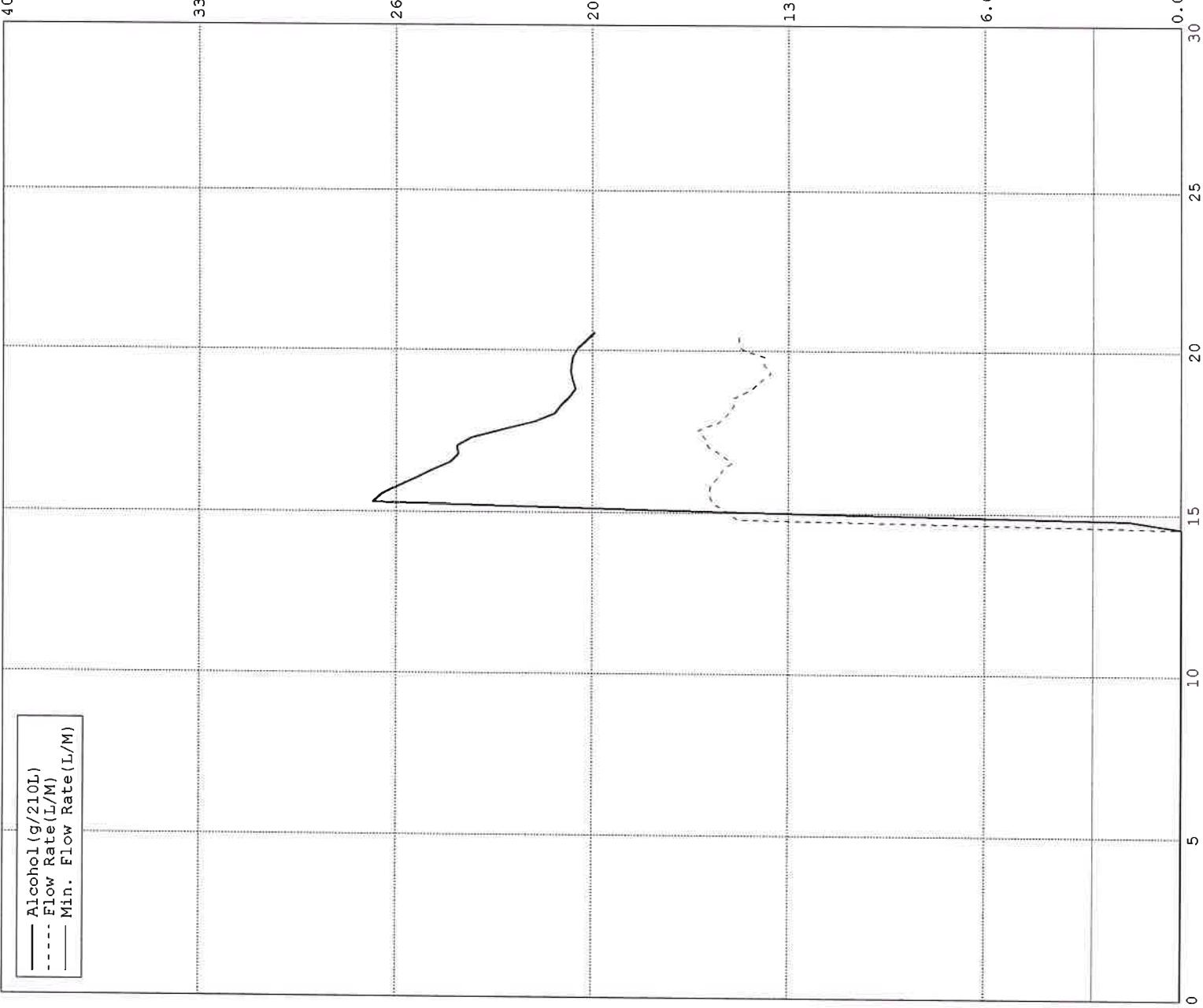
AAA1
CASE/REPORT: 23-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.92: 0.080
LOT #: 09523080A1
EXPIRATION: 05/05/2025

DIAGNOSTIC CHECK	PASSED	12:37
BLANK TEST	0.000	12:37
INTERNAL STANDARD	VERIFIED	12:37
EXTERNAL STANDARD	0.080	12:37
BLANK TEST	0.000	12:38
SUBJECT SAMPLE	XXX	12:39

Maximum Attempts Exceeded



SUBJECT TEST	

Alaska Department of Public Safety	
DATAMASTER dmt: 100684	

Date:	06/13/2023
Time:	12:47:42

SUBJECT NAME:	
TEST TEST	
LICENSE #:	INVALID

OPERATOR NAME:	
COLLEEN S O'BRYANT	
OPERATOR'S #:	6237

DEPT/AGENCY:	
AAA1	
CASE/REPORT:	23-1234
TEST TYPE:	TEST

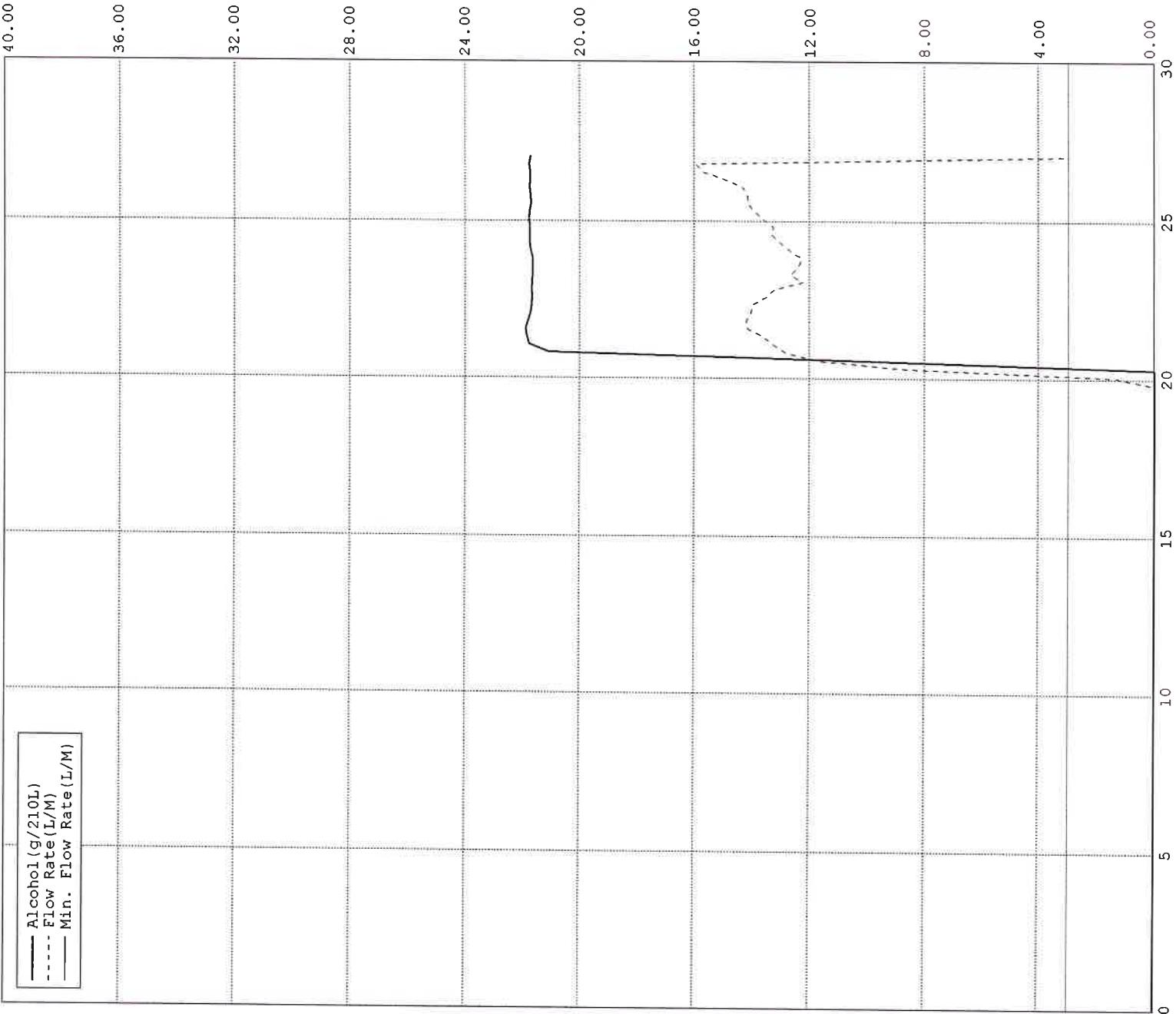
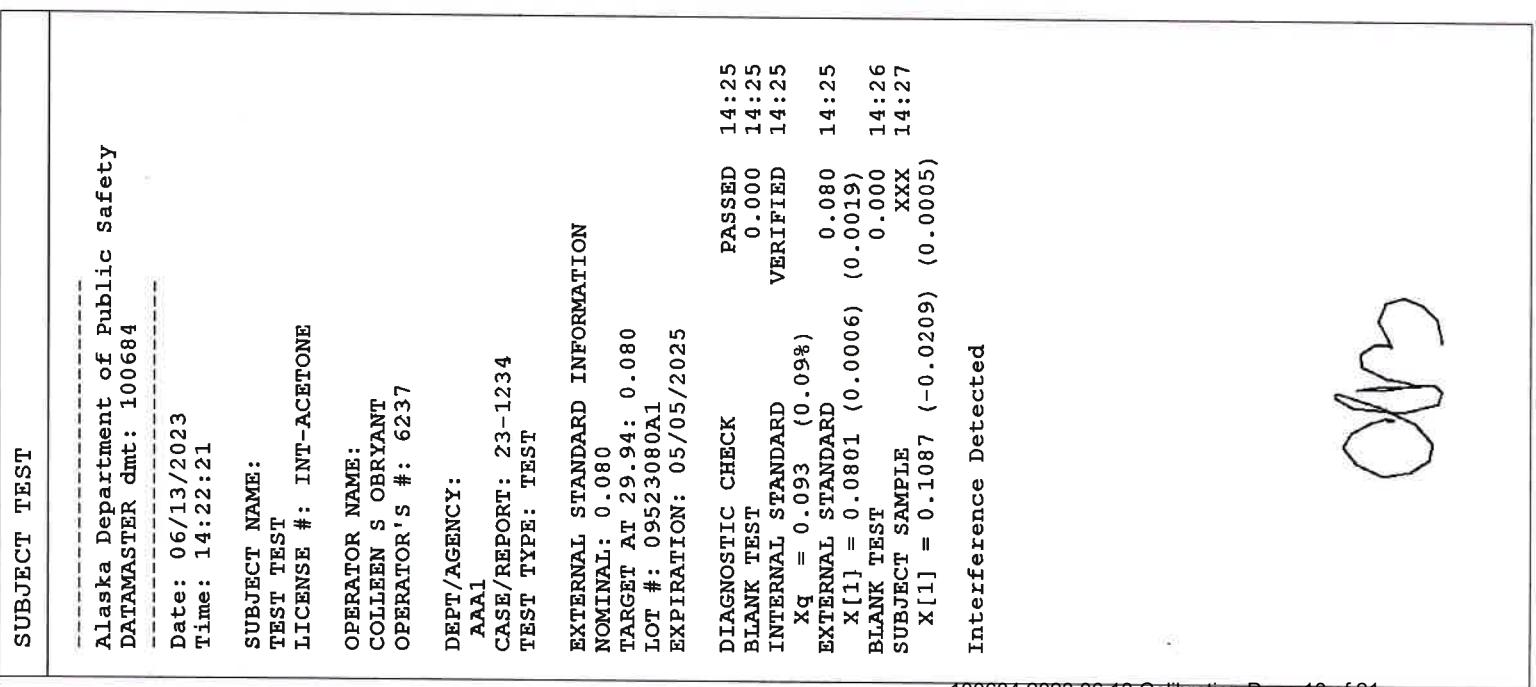
EXTERNAL STANDARD INFORMATION	
NOMINAL:	0.080
TARGET AT:	29.93: 0.080
LOT #:	09523080A1
EXPIRATION:	05/05/2025

DIAGNOSTIC CHECK	PASSED 12:48
BLANK TEST	0.000 12:48
INTERNAL STANDARD	VERIFIED 12:48
EXTERNAL STANDARD	0.080 12:49
BLANK TEST	0.000 12:50
SUBJECT SAMPLE	INVALID 12:50

40.00

A blank graph template featuring a large grid of 16 columns and 8 rows. The grid lines are thin and light gray. In the bottom-left corner, there is a legend box with a thin black border. Inside the legend box, there are three entries: a solid blue line segment followed by the text "Alcohol (g/210L)", a dashed red line segment followed by the text "Flow Rate (L/M)", and a solid green line segment followed by the text "Min. Flow Rate (L/M)".

SUBJECT TEST			
Alaska Department of Public Safety			
DATAMASTER dmt: 100684			
Date:	06/13/2023		
Time:	12:42:34		
SUBJECT NAME:			
TEST TEST			
LICENSE #:	RFI		
OPERATOR NAME:			
COLLEEN S O'BRYANT			
OPERATOR'S #:	6237		
DEPT/AGENCY:			
AAA1			
CASE/REPORT:	23-1234		
TEST TYPE:	TEST		
EXTERNAL STANDARD INFORMATION			
NOMINAL:	0.080		
TARGET AT	29.94: 0.080		
LOT #:	09523080A1		
EXPIRATION:	05/05/2025		
DIAGNOSTIC CHECK	PASSED 12:43		
BLANK TEST	0.000 12:43		
INTERNAL STANDARD	VERIFIED 12:43		
EXTERNAL STANDARD	0.079 12:44		
BLANK TEST	0.000 12:44		
RFI DETECTED			



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100684

Date: 06/13/2023
Time: 14:42:51

SUBJECT NAME:

TEST TEST
LICENSE #: INT-IPA

OPERATOR NAME:
COLLEEN S O'BRYANT
OPERATOR S #: 6237

DEPT/AGENCY:

AAA1
CASE/REPORT: 23-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.93: 0.080

LOT #: 09523080A1

EXPIRATION: 05/05/2025

DIAGNOSTIC CHECK	PASSED	14:46
BLANK TEST	0.000	14:46
INTERNAL STANDARD	VERIFIED	14:46
X _Q = 0.093 (0.28%)		
EXTERNAL STANDARD	0.079	14:47
X[1] = 0.0791 (-0.0002)	(0.0011)	
BLANK TEST	0.000	14:47
SUBJECT SAMPLE	XXX	14:48
X[1] = 0.1236 (-0.0320)	(0.0008)	

Interference Detected

40.00

36.00

32.00

28.00

24.00

20.00

16.00

12.00

8.00

4.00

0.00

30

25

20

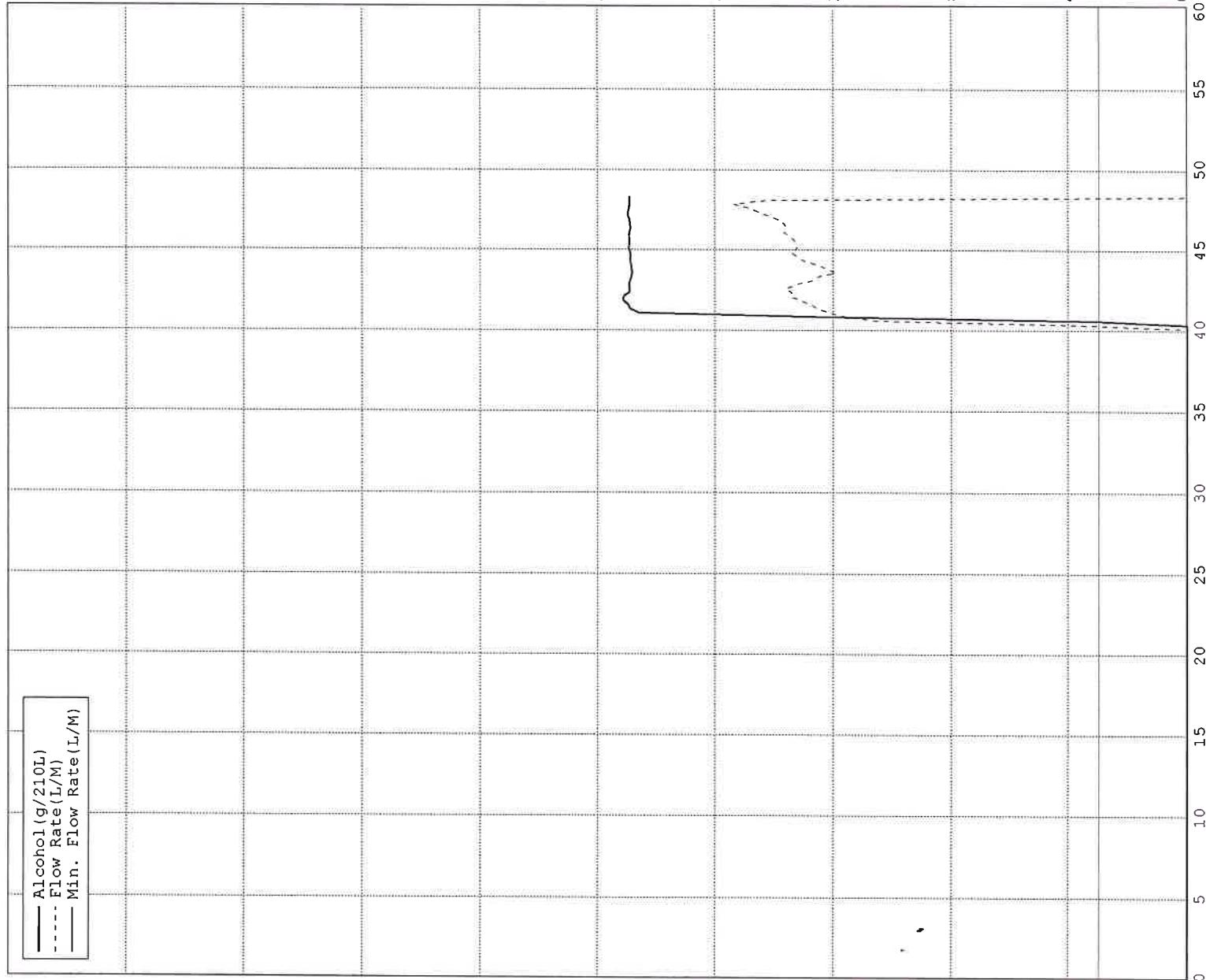
15

10

5

0

40.00



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100684

Date: 06/13/2023
Time: 14:54:09

SUBJECT NAME:

TEST TEST
LICENSE #: INT-NEGATIVE

OPERATOR NAME:

COLLEEN S O'BRYANT
OPERATOR'S #: 6237

DEPT/AGENCY:

AAA1

CASE/REPORT: 23-1234

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.93: 0.080

LOT #: 09523080A1

EXPIRATION: 05/05/2025

DIAGNOSTIC CHECK

INTERNAL STANDARD

Xq = 0.093 (0.478)

EXTERNAL STANDARD

X[1] = 0.0793 (0.0003) (0.0025)

BANK TEST

0.000

SUBJECT SAMPLE (Vol=1.72L)

0.095

X[1] = 0.0950 (-0.0017) (0.0002)

BANK TEST

0.000

EXTERNAL STANDARD

0.079

X[1] = 0.0793 (0.0007) (0.0015)

BANK TEST

0.000

T1/ter 2 Avg = 0.0004

T1/ter 3 Avg = 0.0018

COB 6/13/23



SUBJECT TEST	
Alaska Department of Public Safety	
DATAMASTER dmt: 100684	
Date: 06/13/2023	
Time: 15:20:41	
SUBJECT NAME:	
TEST TEST	LICENSE #: NON-DRINKING
OPERATOR NAME:	COLLEEN S O'BRYANT
OPERATOR'S #: 6237	
DEPT/AGENCY:	AAA1
CASE/REPORT: 23-1234	
TEST TYPE: TEST	
EXTERNAL STANDARD INFORMATION	
NOMINAL: 0.080	
TARGET AT 29.93: 0.080	
LOT #: 09523080A1	
EXPIRATION: 05/05/2025	
DIAGNOSTIC CHECK	PASSED
BLANK TEST	0.000
INTERNAL STANDARD	VERIFIED
EXTERNAL STANDARD	0.079
BLANK TEST	0.000
SUBJECT SAMPLE (Vol=2.03L)	0.000
BLANK TEST	0.000
EXTERNAL STANDARD	0.080
BLANK TEST	0.000