



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: 100689

Report Issue Date: 05/18/2023

Date Received: 2023-03-20

Condition of Item: Good

Method Used: DataMaster DMT Calibration / Current Breath Alcohol Procedure Manual
Calibration Range: 0.020 g/210L - 0.300 g/210L

Start Date 03/20/2023 - As Found - End Date 03/20/2023 As Found - Evaluation Analyst: Tatiana Malnoske

As Found Conditions - Barometric Pressure (inHg): 29.52 Barometer Used: Fisher S/N 221250180 Temperature (C): 22.5

Relative Humidity (%): 11%

As-Found Data								
Nominal Values (g/210L)	Target Values (g/210L)	Lot Number	Results (g/210L)					Mean (g/210L)
0.020	0.020	AG217902	0.020	0.019	0.020	0.020	0.019	0.020
0.080	0.079	AG113402	0.077	0.077	0.077	0.077	0.077	0.077
0.300	0.298	AG217903	0.295	0.294	0.293	0.294	0.294	0.294

Keyboard seems to be working fine. I was able to perform a tank change and the linearity testing using the keyboard with no issues. In addition, I plugged and unplugged the keyboard from the DMT a couple of times to ensure it's still working and there were no issues.

Start Date 04/05/2023 - As Left - End Date 04/05/2023

As Left Conditions - Barometric Pressure (inHg): 29.36 Barometer Used: Fisher S/N 221250180 Temperature (C): 21.2 Relative Humidity (%): 23

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	0.019	0.019	0.019	0.019	0.020	0.019	+/- 0.002
0.040	0.039	AG217904	0.038	0.038	0.038	0.039	0.039	0.038	+/- 0.003
0.080	0.078	AG113402	0.077	0.077	0.077	0.077	0.077	0.077	+/- 0.003
0.100	0.098	AG211003	0.097	0.097	0.097	0.096	0.097	0.097	+/- 0.003
0.150	0.147	AG134205	0.146	0.146	0.146	0.146	0.146	0.146	+/- 0.004
0.300	0.294	AG217903	0.292	0.293	0.293	0.292	0.292	0.292	+/- 0.008

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.

Results authorized by Colleen O'Bryant on 05/16/2023

colleen.obryant@alaska.gov

Technically and administratively reviewed by Brandi Barnett on 05/18/2023

Alaska Scientific Crime Detection Laboratory

DataMaster Calibration Form

Effective: 10/10/2022

Version: 3.0

Instrument #: 100689 Analyst: C.O Bryant Start Date: 4/5/23

- 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 1.5 L (1.3L to 1.7L)

As Left Conditions:

Barometric Pressure (in Hg): 29.86 Temperature (C): 21.0 Relative Humidity (%): 23

Linearity Test (attached)

0.020g/210L Mnf:	<u>Argas</u>	Lot: <u>AG217902</u>	Exp: <u>6/28/24</u>
0.040g/210L Mnf:	<u>Argas</u>	Lot: <u>AG217904</u>	Exp: <u>6/28/24</u>
0.080g/210L Mnf:	<u>Argas</u>	Lot: <u>AG113402</u>	Exp: <u>5/14/23</u>
0.100g/210L Mnf:	<u>Argas</u>	Lot: <u>AG211003</u>	Exp: <u>4/20/24</u>
0.150g/210L Mnf:	<u>Argas</u>	Lot: <u>AG134005</u>	Exp: <u>10/8/23</u>
0.300g/210L Mnf:	<u>Argas</u>	Lot: <u>AG217903</u>	Exp: <u>6/28/24</u>

Functional Tests (attached)

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

Acetone Mnf: Lifeloc Lot: 2IKP41172 Level: 0.100 Exp: 11/9/23

Simulator S/N: SD41161 Verification Performed?

Isopropanol Mnf: Lifeloc Lot: 2IKP41172 Level: 0.100 Exp: 11/9/23

Simulator S/N: SD1088 Verification Performed?

Neg. Control Mnf: Lifeloc Lot: 2IKP41172 Level: 0.100 Exp: 11/9/23

Simulator S/N: SD1177 Verification Performed?

Calibrated External Thermometer:

Thermometer S/N: 010958384 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: 4/5/23

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 04/05/2023
Time: 11:14:36

VERSIONS
DMT: 3.02
PIC: 3.07
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 49.1°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 45.6°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.63 V PASSED
(0.99 V - 2.31 V)
Cooler Voltage = 1.61 V PASSED
(0.96 V - 2.24 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 531 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 4.144 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 = 0.086 0.31% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100689

Date: 04/05/2023
Time: 11:49 AM

Temperatures (°C)
Sample Cell: 48.7°C
Breath Tube: 45.3°C

Current Barometer 29.4 in
Volume (Ltr) 1.54

Settings
Lamp: 1.63 V
Bias: 80 V
Cooler: 1.55 V
Chopper: 530 Hz

Voltages (V)
Flow: 0.99 V
Detector: 0.041 V

CALIBRATION FACTORS

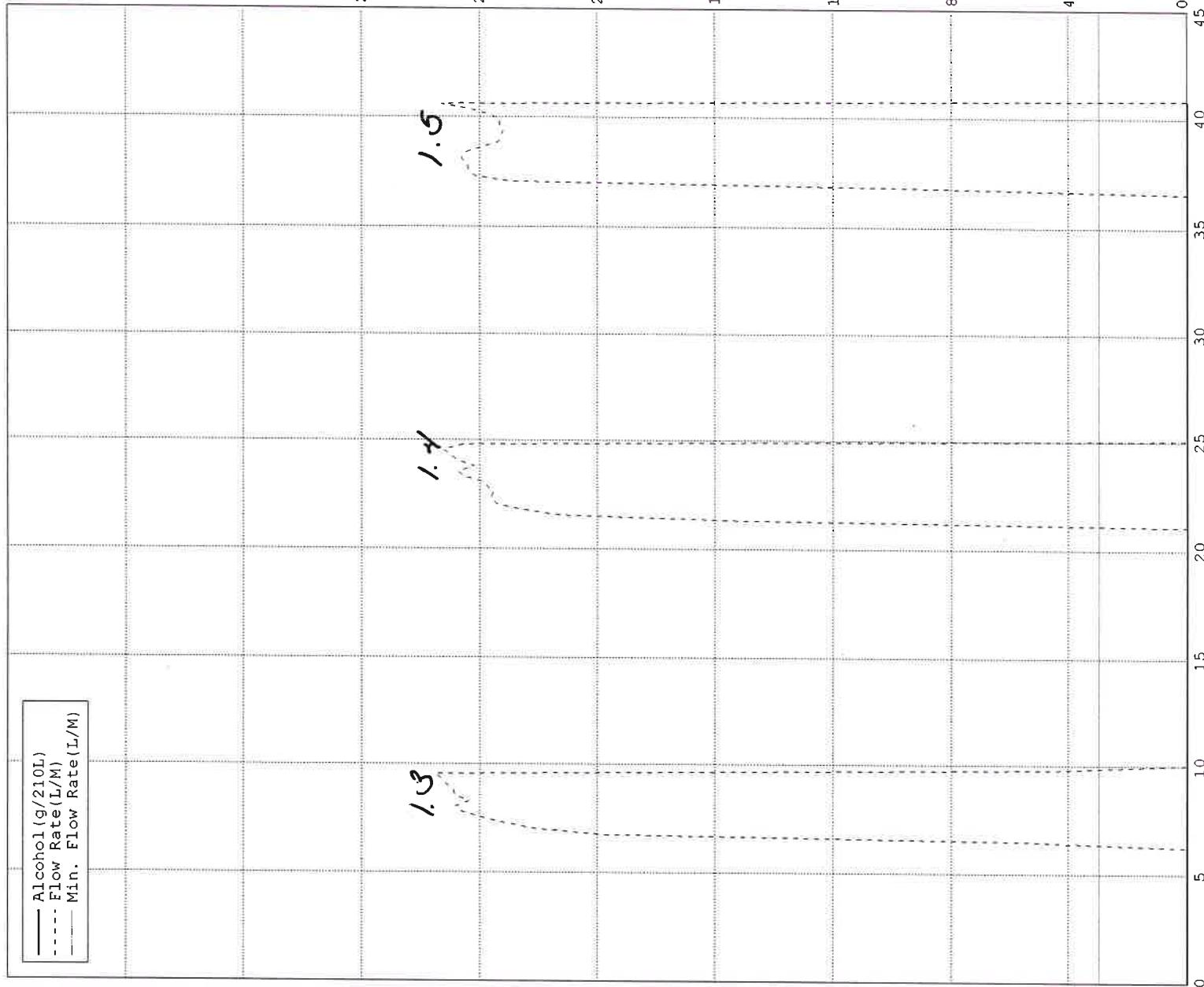
Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 10/12/2021
Time: 14:39:38

OPERATOR NAME:
BRANDI BARNETT
CERTIFICATE #: 7038

Ca = 0.1000
CAL = 0.976416 0.800 <= CAL < 1.200
b1 = 0.0006 0.0000 <= b1 < 0.0040
b2 = 0.0067 0.0010 <= b2 < 0.0100
b3 = 0.0004 0.0000 <= b3 < 0.0040
Xq = 0.0855 0.0500 <= Xq < 0.2000
a21 = 1.212362 1.050 <= a21 < 1.300
a31 = 0.543960 0.300 <= a31 < 0.800

40.00



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689Date: 04/05/2023
Time: 11:52:08

SUBJECT NAME:

TEST TEST
LICENSE #: VOLUME

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 29.36: 0.079

LOT #: AG113402

EXPIRATION: 05/14/2023

DIAGNOSTIC CHECK	PASSED	11:54
BLANK TEST	0.000	11:54
INTERNAL STANDARD	VERIFIED	11:54
EXTERNAL STANDARD	0.077	11:54
BLANK TEST	0.000	11:55
SUBJECT SAMPLE (Vol=1.54L)	0.000	11:56
BLANK TEST	0.000	11:57
EXTERNAL STANDARD	0.078	11:57
BLANK TEST	0.000	11:58

LINEARITY CHECK

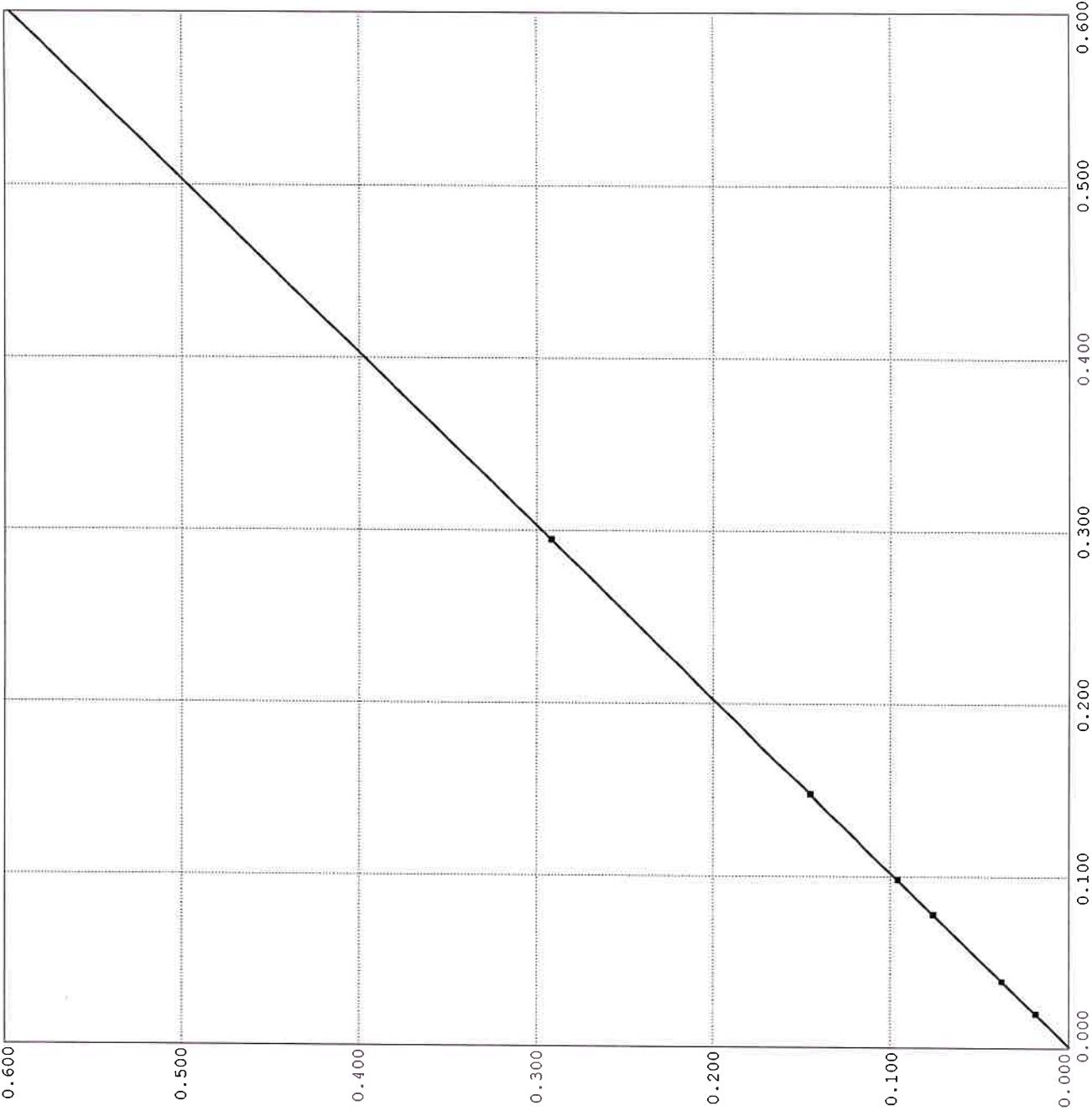
Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 04/05/2023
Time: 12:01:17

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0192	0.0004
0.039	0.0384	0.0005
0.078	0.0770	0.0000
0.098	0.0968	0.0004
0.147	0.1460	0.0000
0.294	0.2924	0.0005

SLOPE = 0.996891
 R^2 = 0.999998



COB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100689

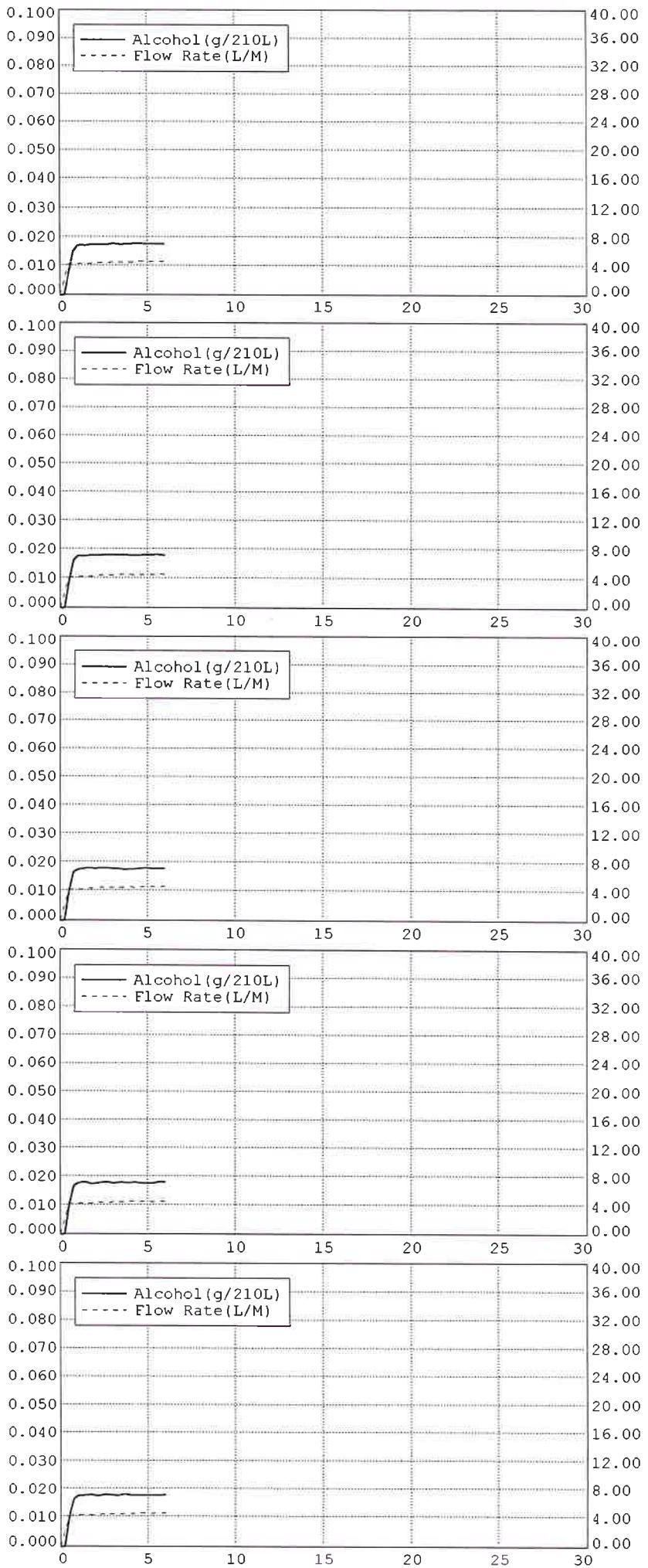
Date: 04/05/2023
Time: 12:01:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.35: 0.020
LOT #: AG217902
EXPIRATION: 06/28/2024
TANK PRESSURE: 998 psi

BLANK TEST	0.000	12:38
INTERNAL STANDARD	VERIFIED	12:38
EXTERNAL STANDARD	0.019	12:38
BLANK TEST	0.000	12:39
EXTERNAL STANDARD	0.019	12:39
BLANK TEST	0.000	12:40
EXTERNAL STANDARD	0.019	12:41
BLANK TEST	0.000	12:41
EXTERNAL STANDARD	0.019	12:42
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.020	12:43
BLANK TEST	0.000	12:44

Average = 0.0192
Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100689

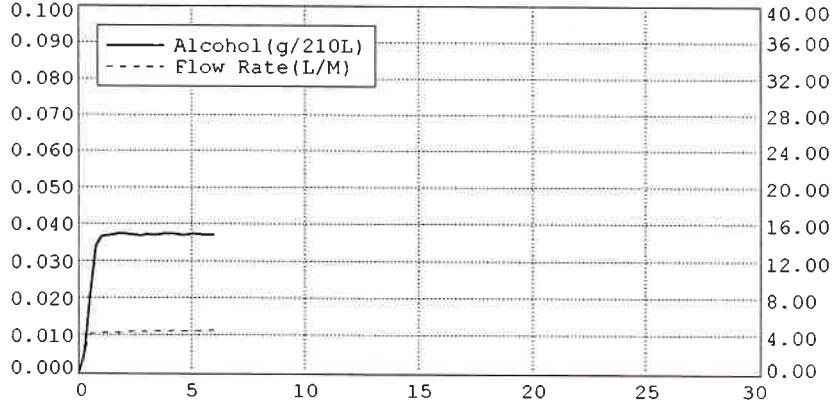
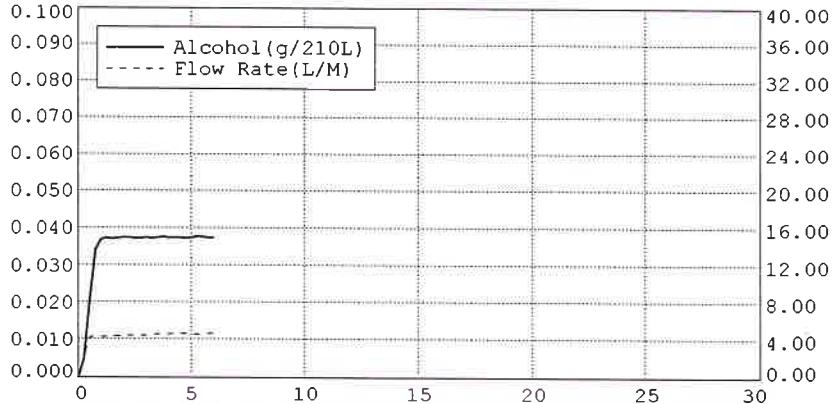
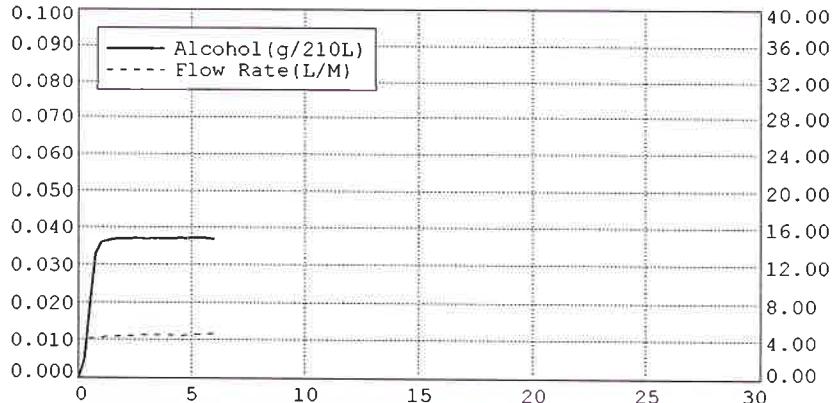
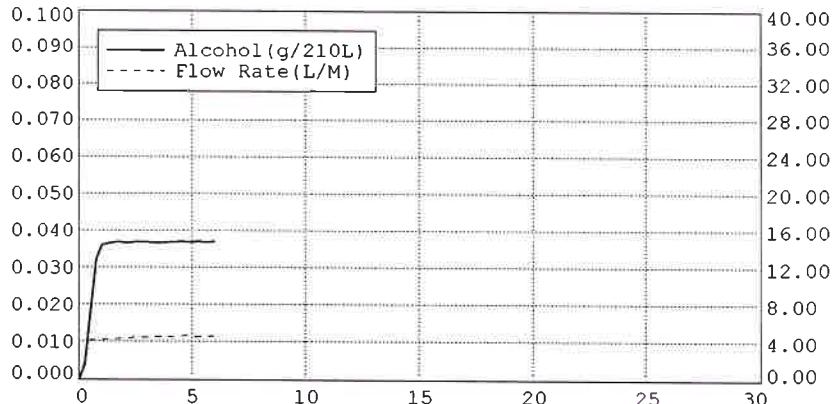
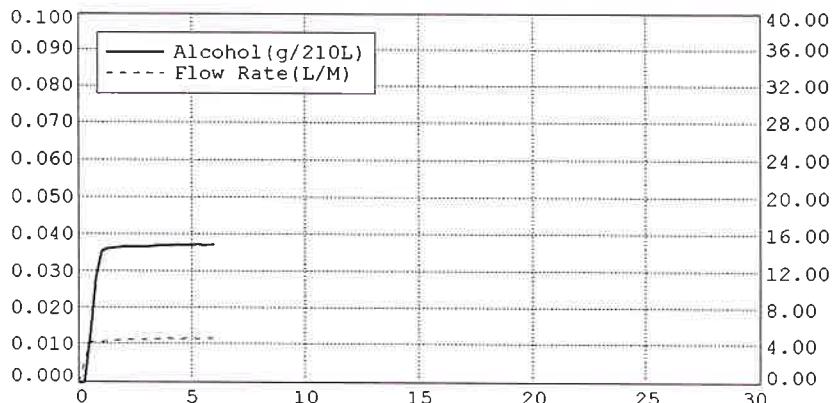
Date: 04/05/2023
Time: 12:48:07

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.35: 0.039
LOT #: AG217904
EXPIRATION: 06/28/2024
TANK PRESSURE: 1054 psi

BLANK TEST	0.000	12:49
INTERNAL STANDARD	VERIFIED	12:49
EXTERNAL STANDARD	0.038	12:49
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.038	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.038	12:51
BLANK TEST	0.000	12:52
EXTERNAL STANDARD	0.039	12:52
BLANK TEST	0.000	12:53
EXTERNAL STANDARD	0.039	12:53
BLANK TEST	0.000	12:54

Average = 0.0384
Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100689

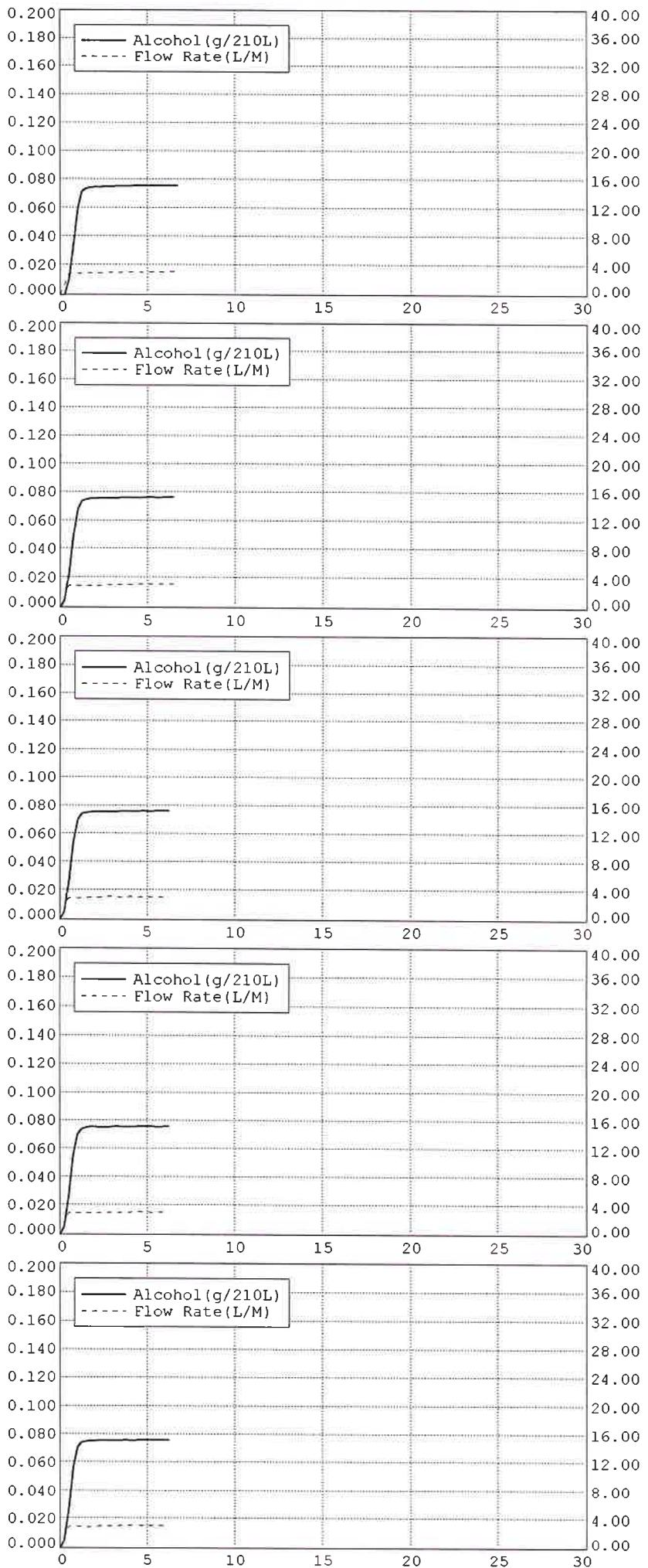
Date: 04/05/2023
Time: 12:56:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.34: 0.078
LOT #: AG113402
EXPIRATION: 05/14/2023
TANK PRESSURE: 301 psi

BLANK TEST	0.000	12:57
INTERNAL STANDARD	VERIFIED	12:57
EXTERNAL STANDARD	0.077	12:58
BLANK TEST	0.000	12:59
EXTERNAL STANDARD	0.077	12:59
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.077	13:00
BLANK TEST	0.000	13:01
EXTERNAL STANDARD	0.077	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.077	13:02
BLANK TEST	0.000	13:03

Average = 0.0770
Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100689

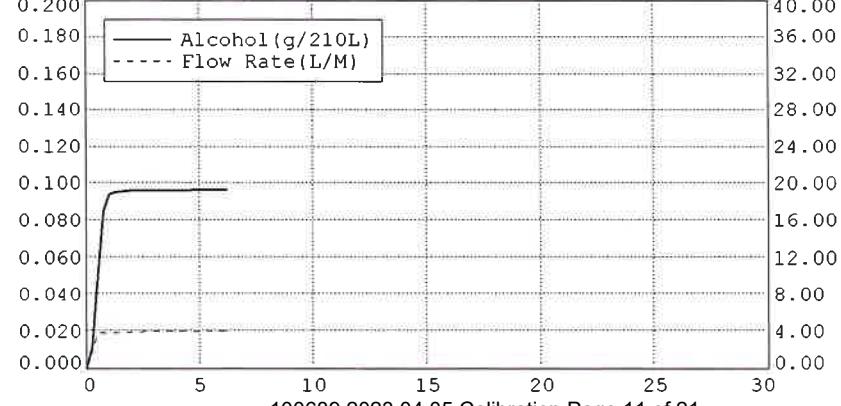
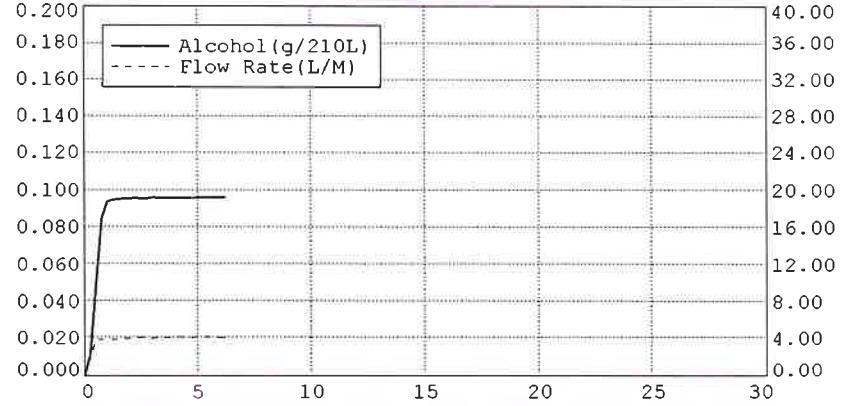
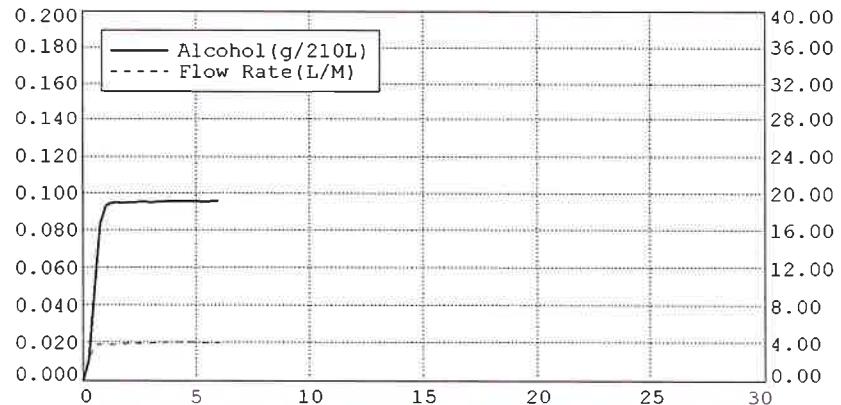
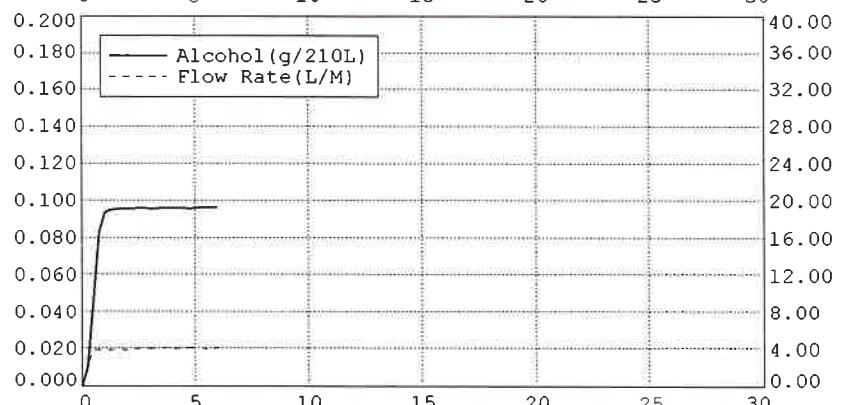
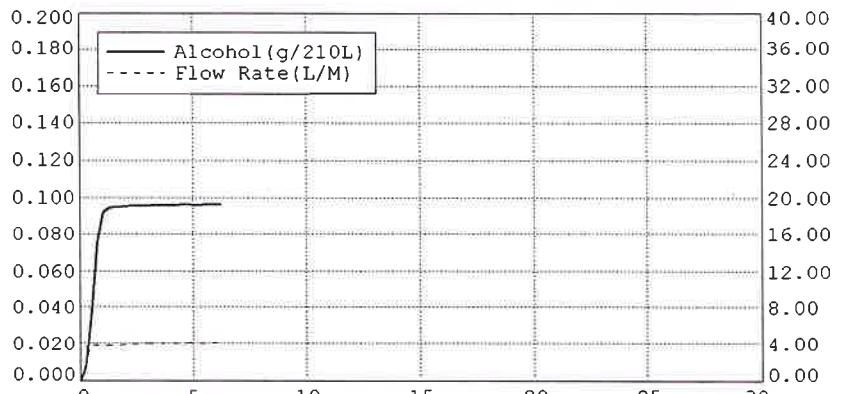
Date: 04/05/2023
Time: 13:03:51

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.34: 0.098
LOT #: AG211003
EXPIRATION: 04/20/2024
TANK PRESSURE: 760 psi

BLANK TEST	0.000	13:04
INTERNAL STANDARD	VERIFIED	13:05
EXTERNAL STANDARD	0.097	13:05
BLANK TEST	0.000	13:06
EXTERNAL STANDARD	0.097	13:06
BLANK TEST	0.000	13:07
EXTERNAL STANDARD	0.097	13:07
BLANK TEST	0.000	13:08
EXTERNAL STANDARD	0.096	13:08
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.097	13:09
BLANK TEST	0.000	13:10

Average = 0.0968
Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
DATAMASTER dmt: 100689

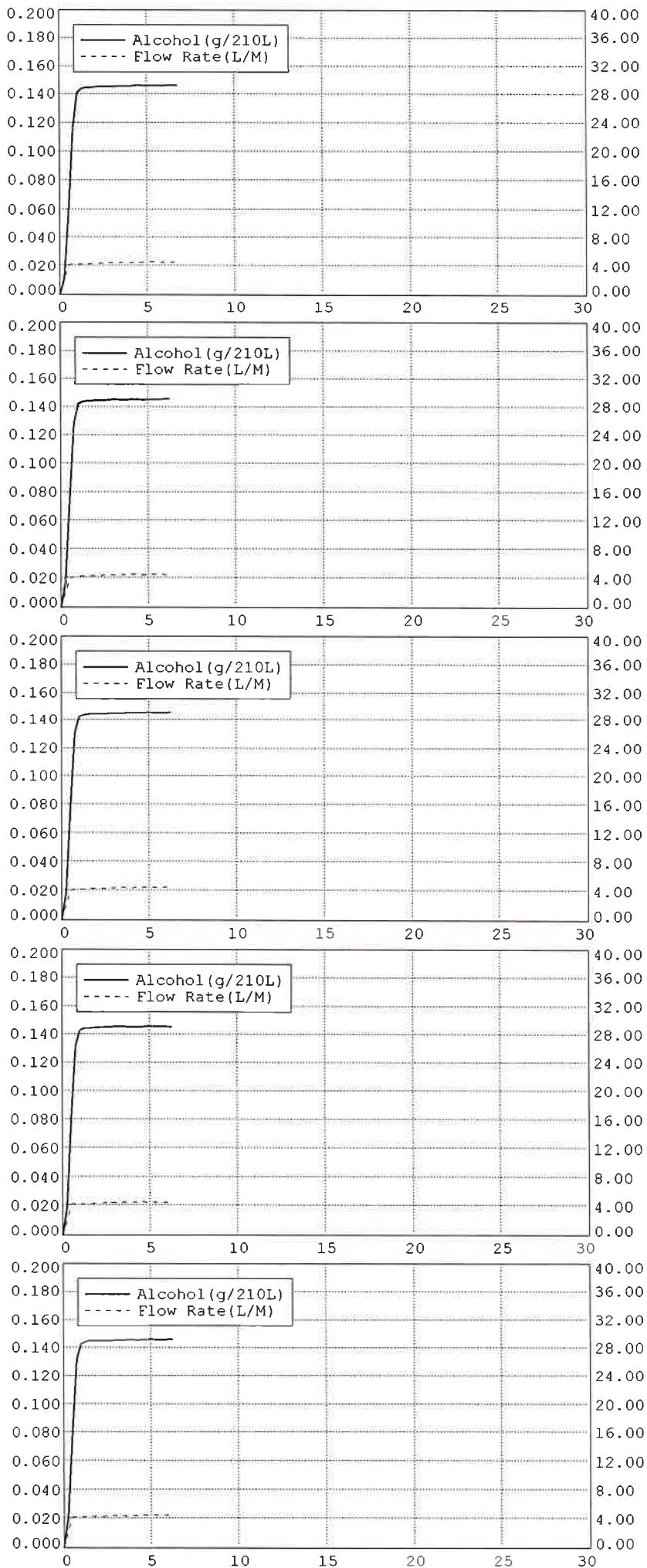
Date: 04/05/2023
Time: 13:11:46

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.150
TARGET AT 29.34: 0.147
LOT #: AG134205
EXPIRATION: 12/08/2023
TANK PRESSURE: 975 psi

BLANK TEST	0.000	13:12
INTERNAL STANDARD	VERIFIED	13:12
EXTERNAL STANDARD	0.146	13:13
BLANK TEST	0.000	13:14
EXTERNAL STANDARD	0.146	13:14
BLANK TEST	0.000	13:15
EXTERNAL STANDARD	0.146	13:15
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.146	13:16
BLANK TEST	0.000	13:17
EXTERNAL STANDARD	0.146	13:17
BLANK TEST	0.000	13:18

Average = 0.1460
Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
DATAMASTER dmt: 100689

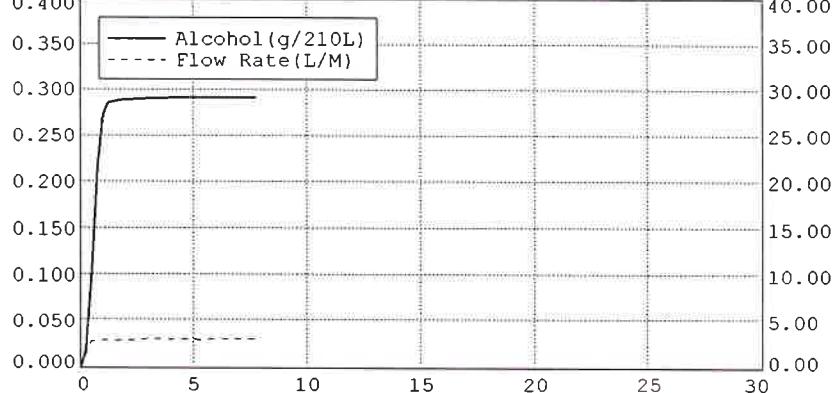
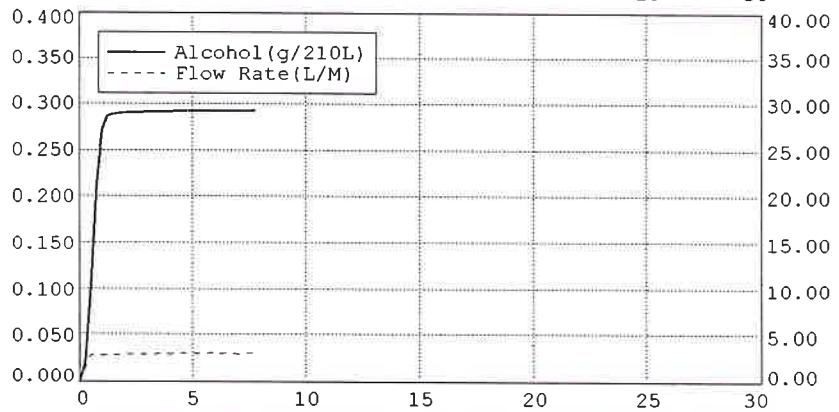
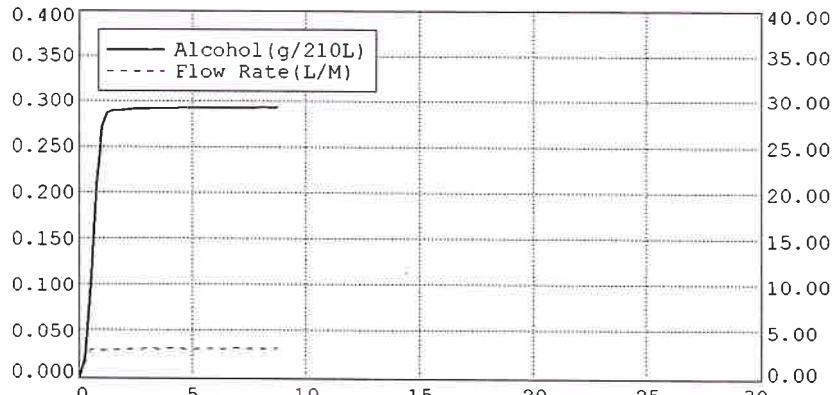
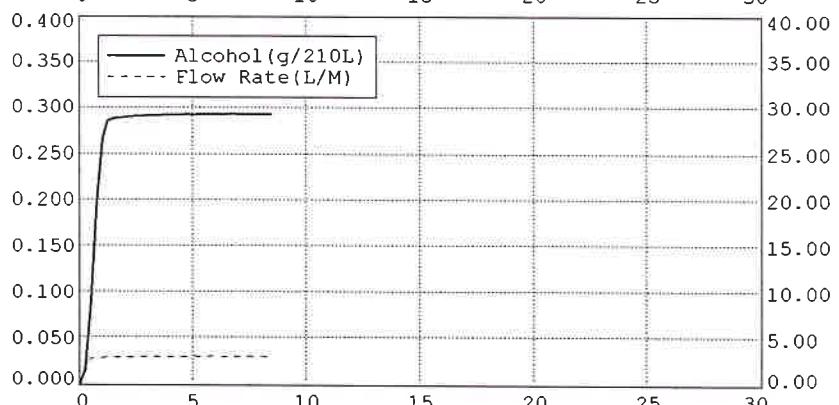
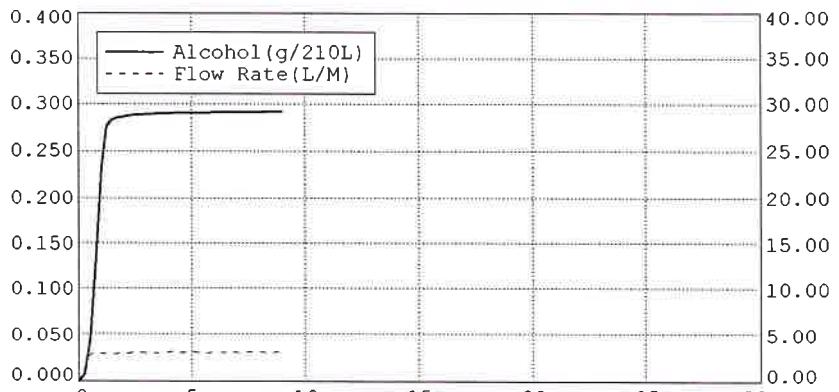
Date: 04/05/2023
Time: 13:19:50

EXTERNAL STANDARD INFORMATION

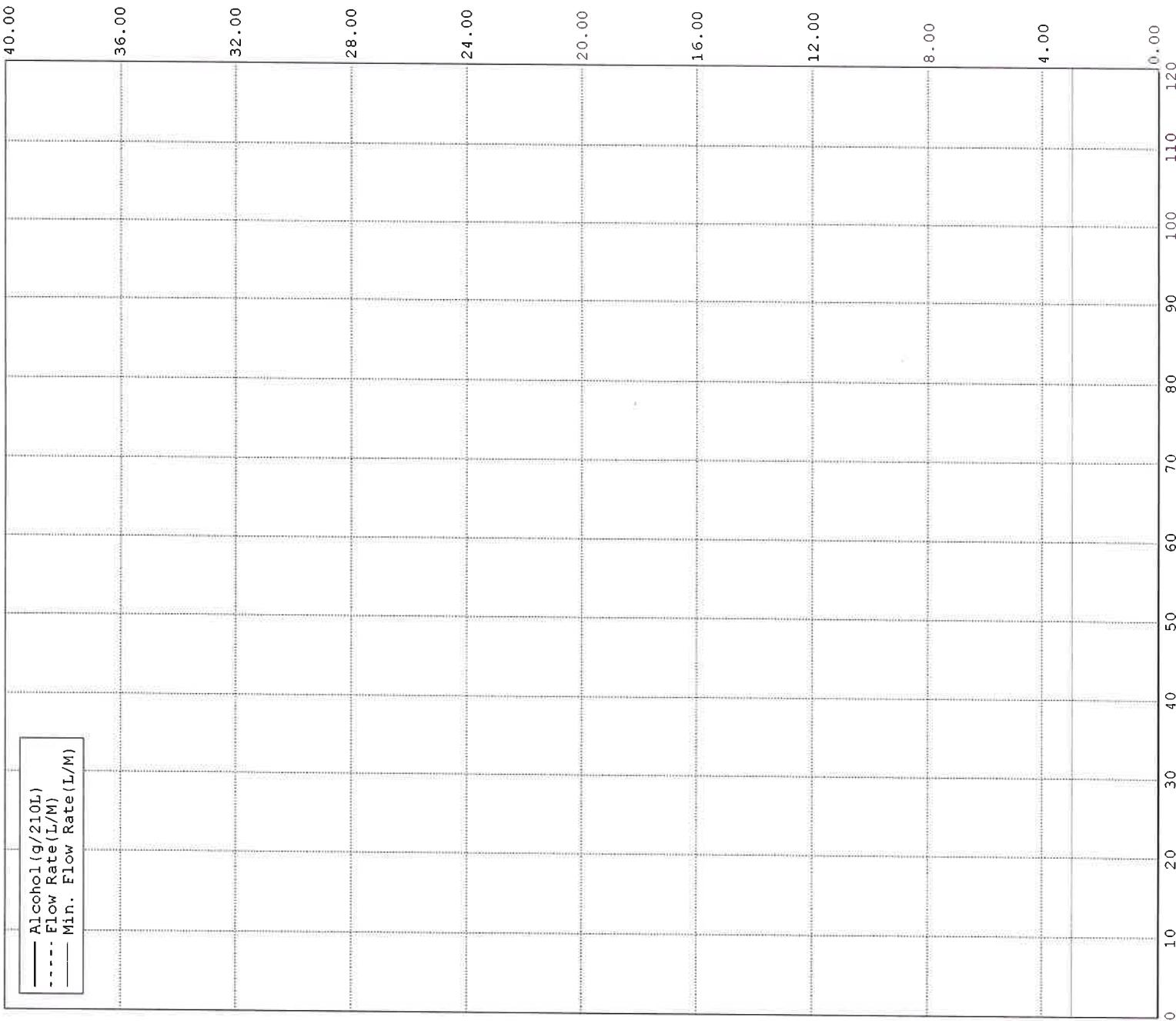
NOMINAL: 0.300
TARGET AT 29.34: 0.294
LOT #: AG217903
EXPIRATION: 06/28/2024
TANK PRESSURE: 332 psi

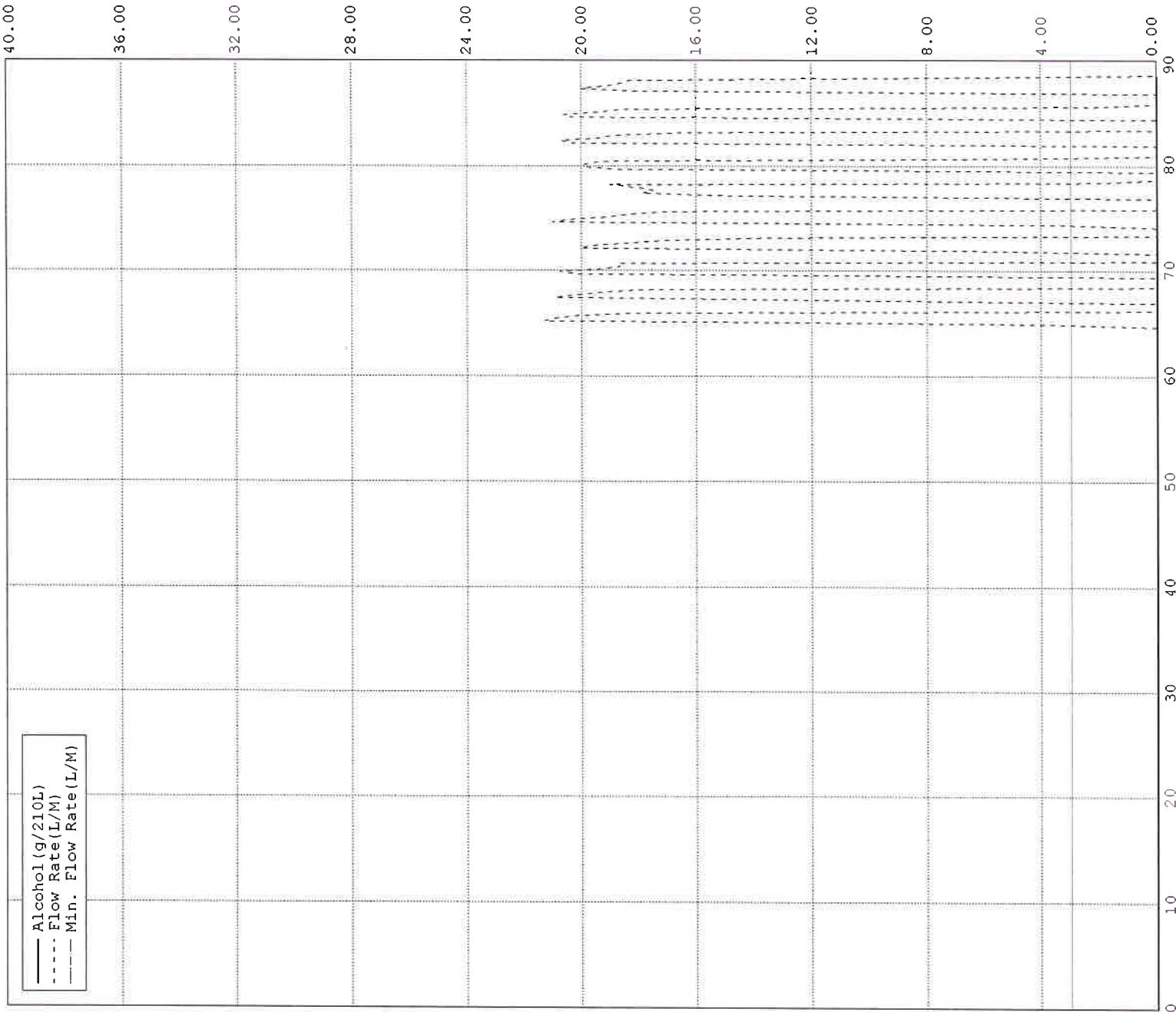
BLANK TEST	0.000	13:21
INTERNAL STANDARD	VERIFIED	13:21
EXTERNAL STANDARD	0.292	13:22
BLANK TEST	0.000	13:22
EXTERNAL STANDARD	0.293	13:23
BLANK TEST	0.000	13:24
EXTERNAL STANDARD	0.293	13:24
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.292	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.292	13:26
BLANK TEST	0.000	13:27

Average = 0.2924
Std Dev = 0.0005



SUBJECT TEST	
Alaska Department of Public Safety DATAMASTER dmt: 100689	
Date:	04/05/2023
Time:	13:54:30
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:	29.34: 0.078
LOT #:	AG113402
EXPIRATION:	05/14/2023
DIAGNOSTIC CHECK	PASSED
BLANK TEST	0.000
INTERNAL STANDARD	VERIFIED
EXTERNAL STANDARD	0.078
BLANK TEST	0.000
SUBJECT SAMPLE	INCOMPLETE
	13:56
	13:56
	13:56
	13:56
	13:57
	13:59

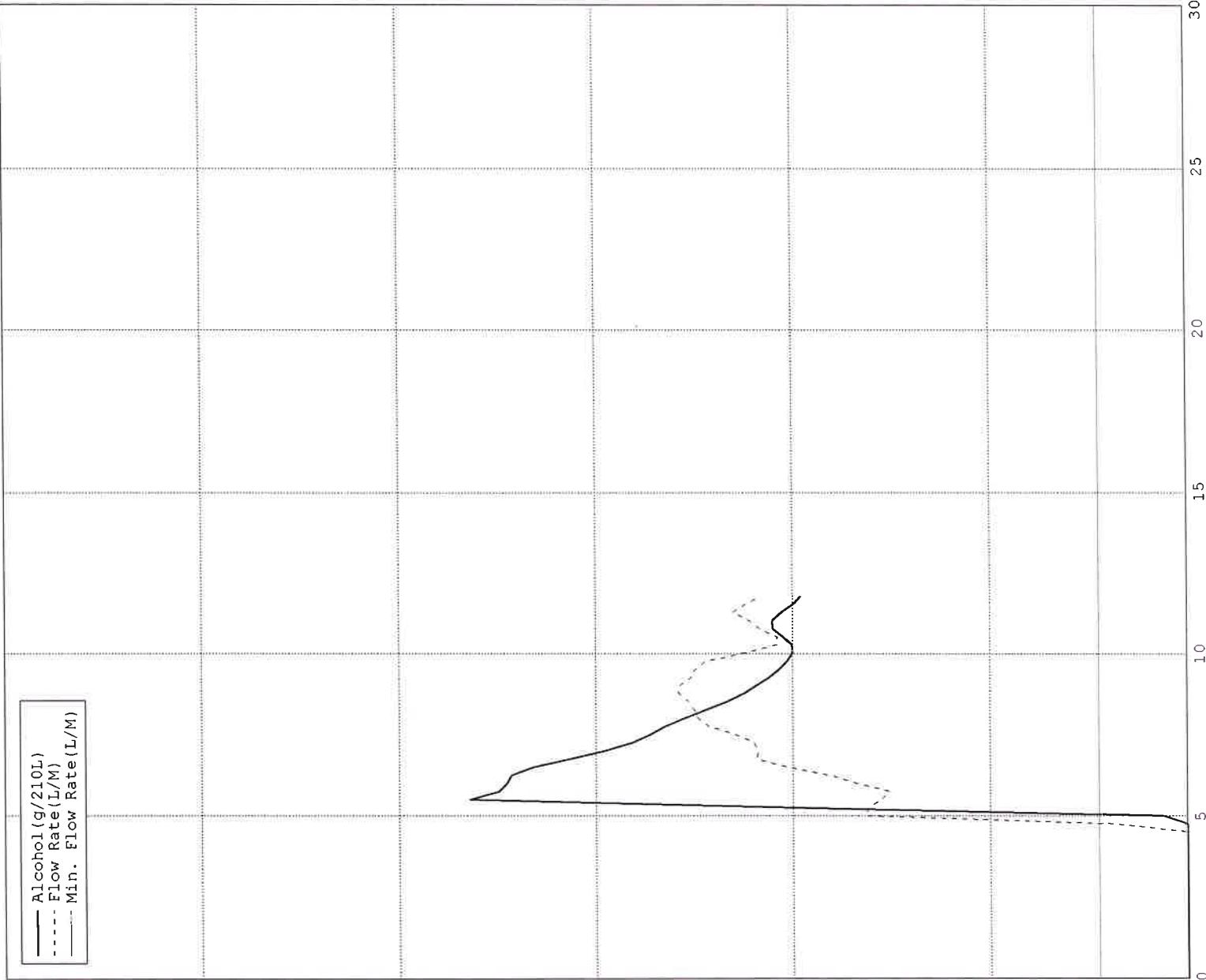




SUBJECT TEST	
Alaska Department of Public Safety DATAMASTER dmt: 100689	
TEST TEST	CASE/REPORT: 23-1234
LICENSE #:	TEST TYPE: TEST
SUBJECT NAME:	COLLEEN S O'BRYANT
OPERATOR NAME:	OPERATOR'S #: 6237
DEPT/AGENCY:	AAA1
EXTERNAL STANDARD INFORMATION	
NOMINAL:	0.080
TARGET AT	29.33: 0.078
LOT #:	AG113402
EXPIRATION:	05/14/2023
DIAGNOSTIC CHECK	PASSED 14:04
BLANK TEST	0.000 14:04
INTERNAL STANDARD	VERIFIED 14:04
EXTERNAL STANDARD	0.077 14:05
BLANK TEST	0.000 14:06
SUBJECT SAMPLE	XXX 14:07
Maximum Attempts Exceeded	

[Signature]

40.00



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

DATE: 04/05/2023
TIME: 14:18:35

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 29.33: 0.078
LOT #: AG113402
EXPIRATION: 05/14/2023

DIAGNOSTIC CHECK
BLANK TEST PASSED 14:19
INTERNAL STANDARD 0.000 14:20
EXTERNAL STANDARD VERIFIED 14:20
BLANK TEST 0.077 14:20
SUBJECT SAMPLE INVALID 14:21

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0.00

25

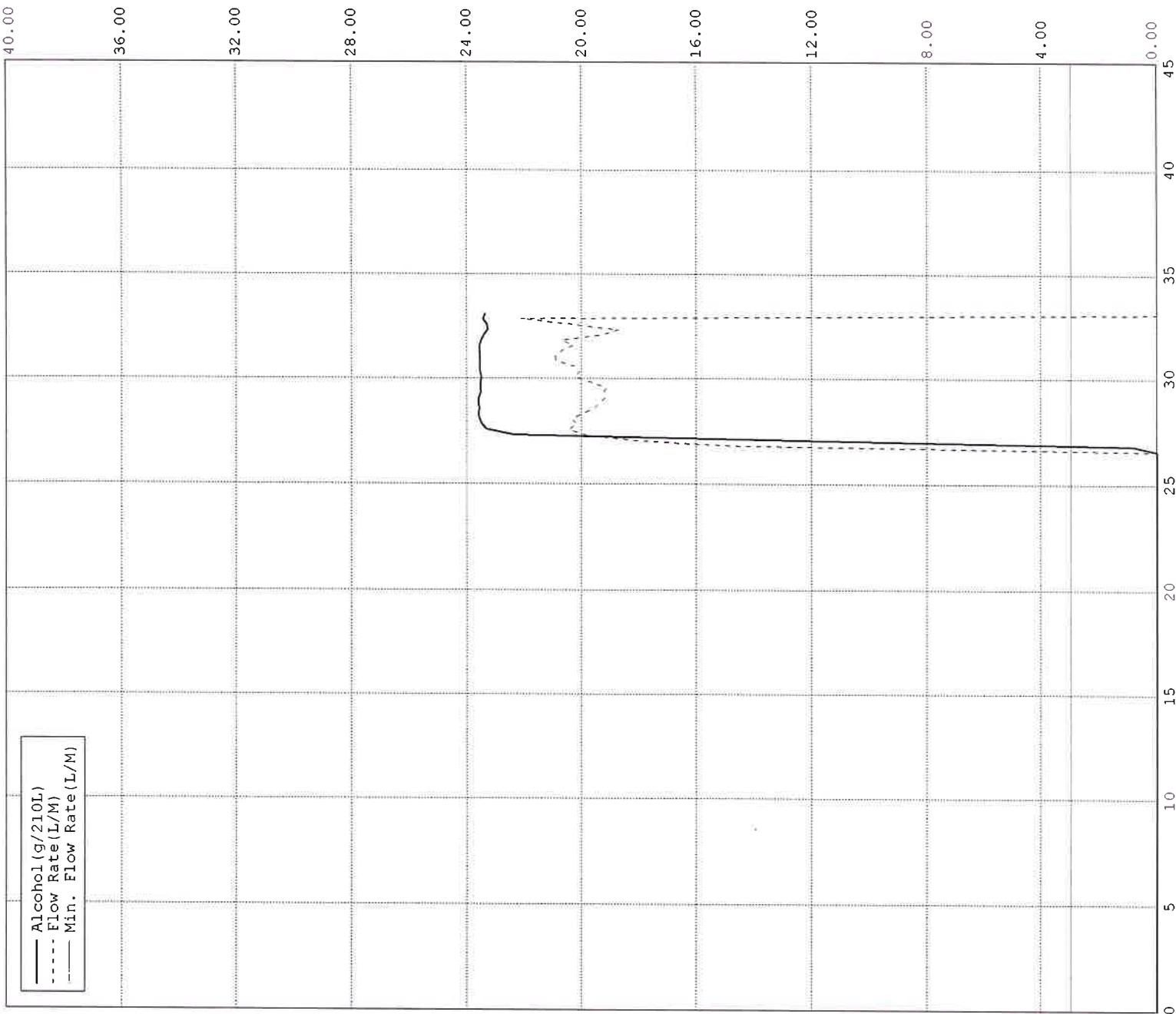
20

15

10

5

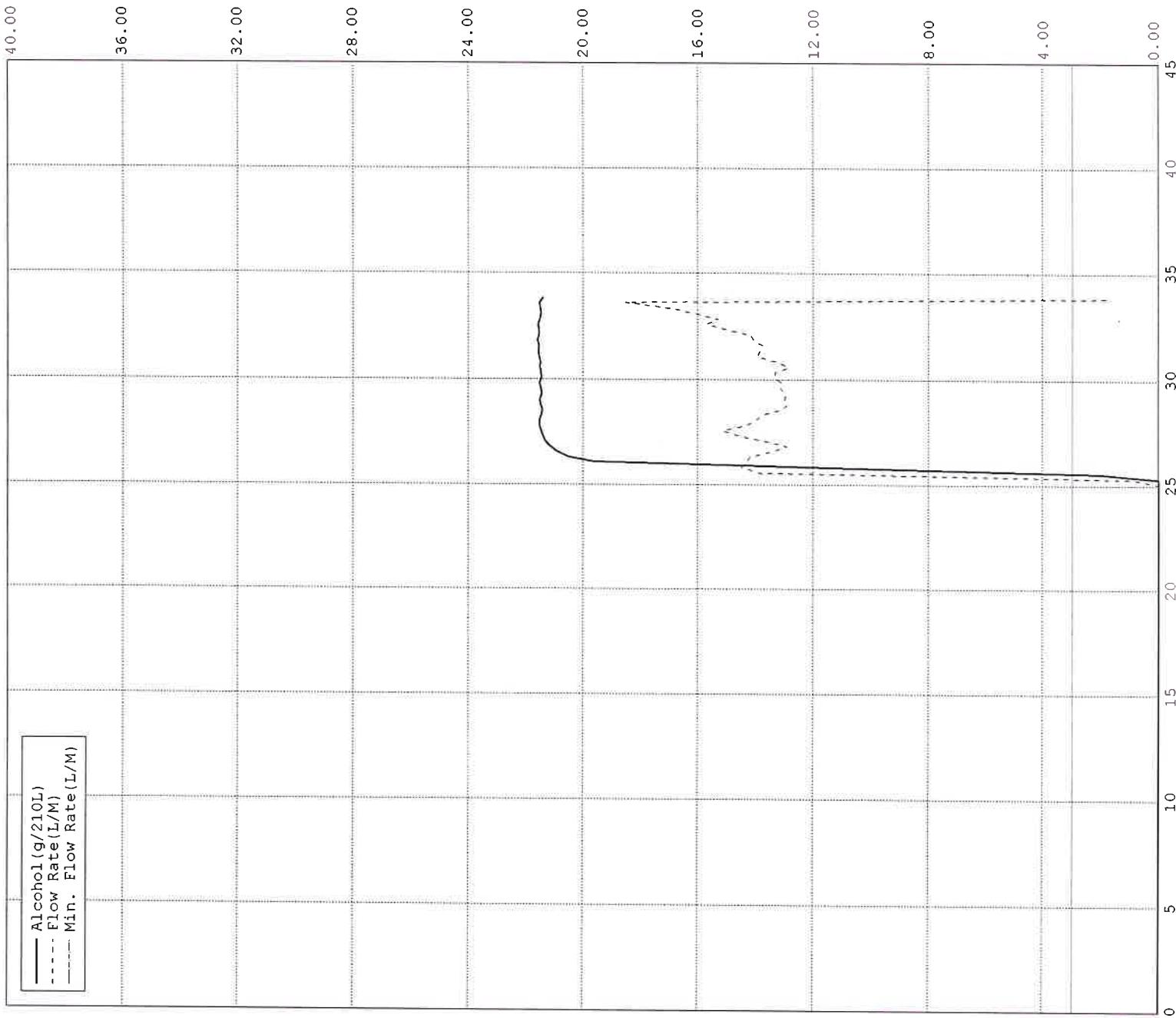
0



F₁/F₂ & Avg = -0.0013

F₁/F₂ & Avg = 0.0038

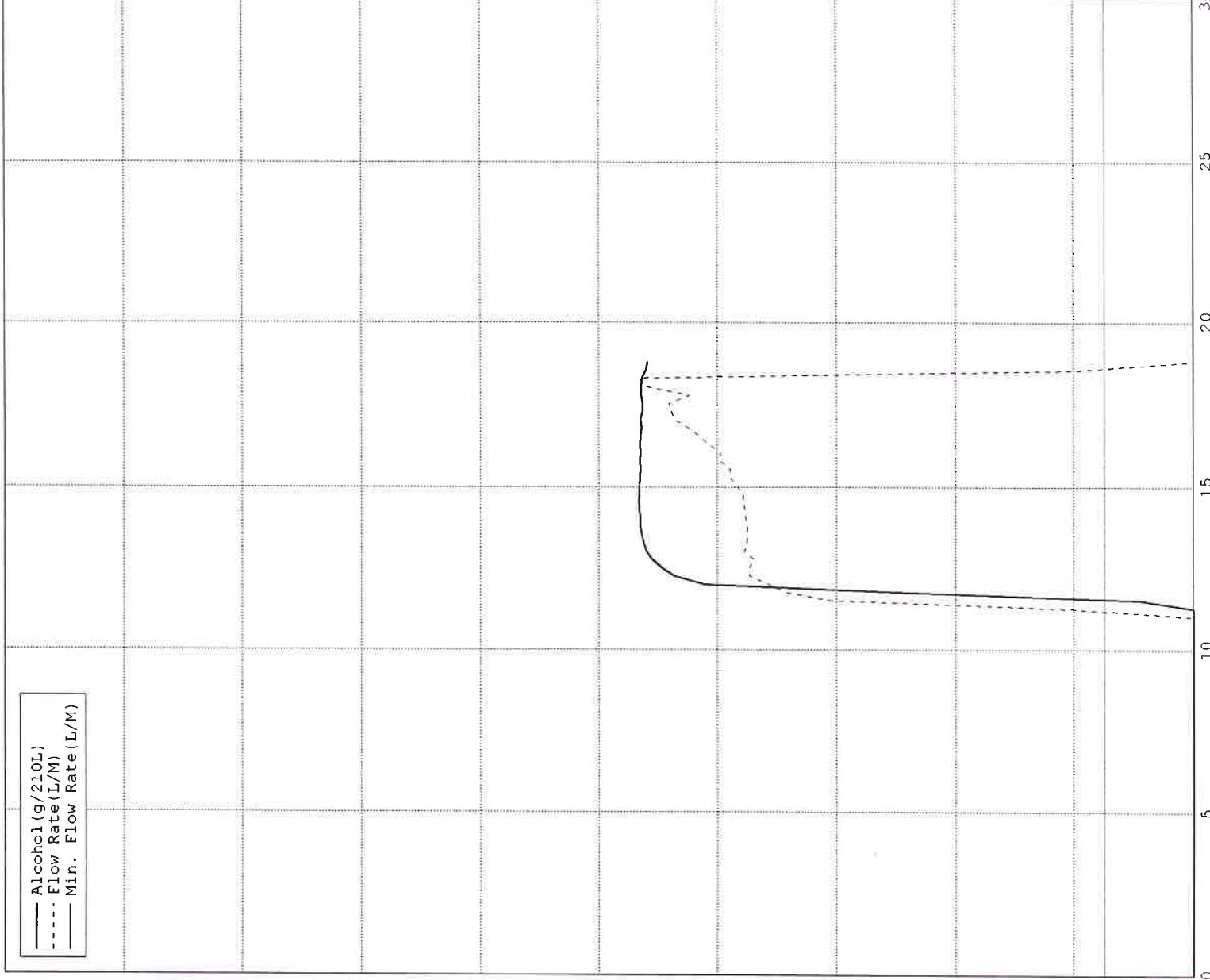
OB



SUBJECT TEST	
Alaska Department of Public Safety	
DATAMASTER dmt: 100689	
Date: 04/05/2023	TEST TEST
Time: 13:31:57	LICENSE #: INT-ACETONE
SUBJECT NAME:	COLLEEN S O'BRYANT
OPERATOR NAME:	OPERATOR'S #: 6237
DEPT/AGENCY:	AAA1
CASE/REPORT:	23-1234
TEST TYPE:	TEST
EXTERNAL STANDARD INFORMATION	
NOMINAL:	0.080
TARGET AT:	29.34: 0.078
LOT #:	AG113402
EXPIRATION:	05/14/2023
DIAGNOSTIC CHECK	PASSED
BLANK TEST	0.000
INTERNAL STANDARD	VERIFIED
X _Q = 0.087 (1.73%)	
EXTERNAL STANDARD	0.079
X [1] = 0.0785 (-0.0001)	(0.0045)
BLANK TEST	0.000
SUBJECT SAMPLE	XXX
X [1] = 0.1067 (-0.0191)	(0.0027)
Interference Detected	

[Signature]

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SUBJECT TEST	
Alaska Department of Public Safety DATAMASTER dmt: 100689	
Date: 04/05/2023	Time: 13:46:36
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:	29.33:
LOT #:	AG113402
EXPIRATION:	05/14/2023
DIAGNOSTIC CHECK	PASSED
BLANK TEST	0.000
INTERNAL STANDARD	VERIFIED
XQ = 0.086 (0.81%)	
EXTERNAL STANDARD	0.077
X[1] = 0.0766 (-0.0022)	(0.0040)
BLANK TEST	0.000
SUBJECT SAMPLE (Vol=1.87L)	0.092
X[1] = 0.0924 (-0.0015)	(0.0020)
BLANK TEST	0.000
EXTERNAL STANDARD	0.077
X[1] = 0.0765 (-0.0017)	(0.0031)
BLANK TEST	0.000

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CVR

40.00



36.00

Date: 04/05/2023

Time: 15:37:56

32.00

SUBJECT NAME:

28.00

TEST TEST

24.00

OPERATOR NAME:

20.00

COLLEEN S O'BRYANT

16.00

OPERATOR'S #: 6237

12.00

DEPT/AGENCY:

8.00

AAA1

4.00

CASE/REPORT: 23-1234

30.00

TEST TYPE: TEST

25

20

15

10

5

0

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 04/05/2023
Time: 15:37:56

SUBJECT NAME:
TEST TEST
LICENSE #: NONDINKING

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 29.32: 0.078
LOT #: AG113402
EXPIRATION: 05/14/2023

DIAGNOSTIC CHECK	PASSED	15:38
BLANK TEST	0.000	15:39
INTERNAL STANDARD	VERIFIED	15:39
EXTERNAL STANDARD	0.076	15:39
BLANK TEST	0.000	15:40
SUBJECT SAMPLE (Vol=1.95L)	0.000	15:40
BLANK TEST	0.000	15:41
EXTERNAL STANDARD	0.077	15:41
BLANK TEST	0.000	15:42