

Alaska Scientific Crime Detection Laboratory

DataMaster Certification Form

Issued: 05/15/2020
Effective: 05/15/2020

Version: DMCEF 2020 R0
Status: Active

Instrument S/N 100846 Analyst C. O'Bryant Start Date 10/4/21

Diagnostic Test (attached)

Internal Standard value $\leq 3.00\%$

Voltage Checks

Adjust voltages, if needed

- i. Lamp (2.6V Maximum)
- ii. Bias
- iii. Cooler (2.0V Maximum)

iv. Chopper Frequency

v. Detector Voltage (-0.100V to 0.100V)

Set RFI

Adjust barometer reading to match NIST traceable barometer

Adjust volume setting, if needed (1.5L +/- 0.1L)

Print Technician Screen (attached)

Print Calibration Factors (attached)

Volume Test - Minimum 1.5 L (1.3L to 1.7L)

** Factory Refurbishment
Not Currently Needed.*

Linearity Test (attached)

Levels Used

- i. 0.020g/210L Mnf Argas Lot AG928203 Exp 10/9/21
- ii. 0.040g/210L Mnf Argas Lot AG111710 Exp 4/27/23
- iii. 0.080g/210L Mnf Argas Lot AG113402 Exp 5/14/23
- iv. 0.100g/210L Mnf Argas Lot AG108404 Exp 3/25/23
- v. 0.200g/210L Mnf Guth Lot 20510 Exp 12/3/22
Simulator S/N DR4161 Date Calibrated 6/10/21
- vi. 0.300g/210L Mnf Guth Lot 21020 Exp 2/2/23
Simulator S/N SD1202 Date Calibrated 6/15/21

Functional Tests (attached)

Incomplete

Invalid

Interference

- i. Acetone - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N SD1177 Date Calibrated 6/15/21
- ii. Isopropanol - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N SD1198 Date Calibrated 6/15/21
- iii. Negative Control - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N SD1088 Date Calibrated 6/15/21

Exceeded Attempts

RFI

Verify stylus is calibrated

Reset Options

Clear Memory

Remove tank prior to shut down

Verification of Calibration

Non-Drinking Subject Test (attached)

Upload

Add Linearity Data to Spreadsheet

End Date 10/5/21

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 10/04/2021
Time: 12:13:11

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

TEMPERATURES

Sample Chamber = 49.0°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.2°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.69 V PASSED
(0.97 V - 2.25 V)
Cooler Voltage = 1.56 V PASSED
(0.97 V - 2.25 V)
Bias Voltage = 80 V PASSED
(47 V - 111 V)
Chopper Freq = 526 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.9 in

PUMP INFO

Flow Rate = 4.441 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 = 0.104 0.59% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100346

Date: 10/04/2021
Time: 12:20 PM

Temperatures (°C)

Sample Cell: 49.1°C
Breath Tube: 45.3°C

Current Barometer 29.9 in
Volume (Ltr) 1.53

Settings

Lamp: 1.69 V
Bias: 80 V
Cooler: 1.56 V
Chopper: 525 Hz

Voltages (V)

Flow: 1.06 V
Detector: -0.067 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 07/31/2018
Time: 09:33:11

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca = 0.1000
CAL = 0.962482 0.800 <= CAL < 1.200
b1 = 0.0014 0.0000 <= b1 < 0.0040
b2 = 0.0064 0.0010 <= b2 < 0.0100
b3 = 0.0011 0.0000 <= b3 < 0.0040
Xq = 0.1037 0.0500 <= Xq < 0.2000
a21 = 1.177531 1.050 <= a21 < 1.300
a31 = 0.414073 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 10/04/2021
Time: 12:20:33

SUBJECT NAME:
TEST TEST
LICENSE #: MIN VOLUME

OPERATOR NAME:
COLLEEN S OBRyant
OPERATOR'S #: 6237

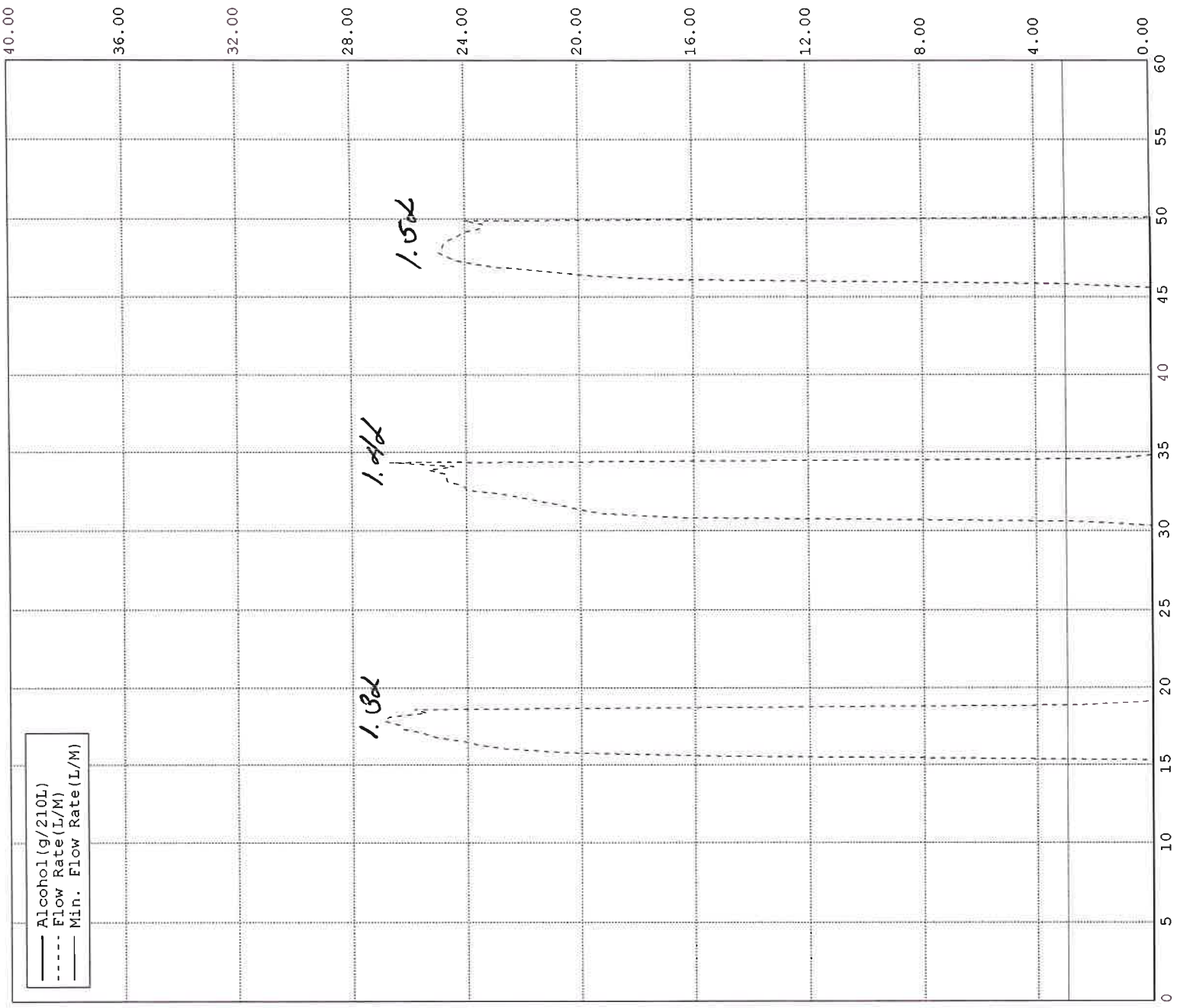
DEPT/AGENCY:
AAA1

CASE/REPORT: 21-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.89: 0.080
LOT #: AG113402
EXPIRATION: 05/14/2023

DIAGNOSTIC CHECK	PASSED	12:23
BLANK TEST	0.000	12:23
INTERNAL STANDARD	VERIFIED	12:24
EXTERNAL STANDARD	0.079	12:24
BLANK TEST	0.000	12:25
SUBJECT SAMPLE (Vol=1.56L)	0.000	12:26
BLANK TEST	0.000	12:26
EXTERNAL STANDARD	0.079	12:27
BLANK TEST	0.000	12:28



LINEARITY CHECK

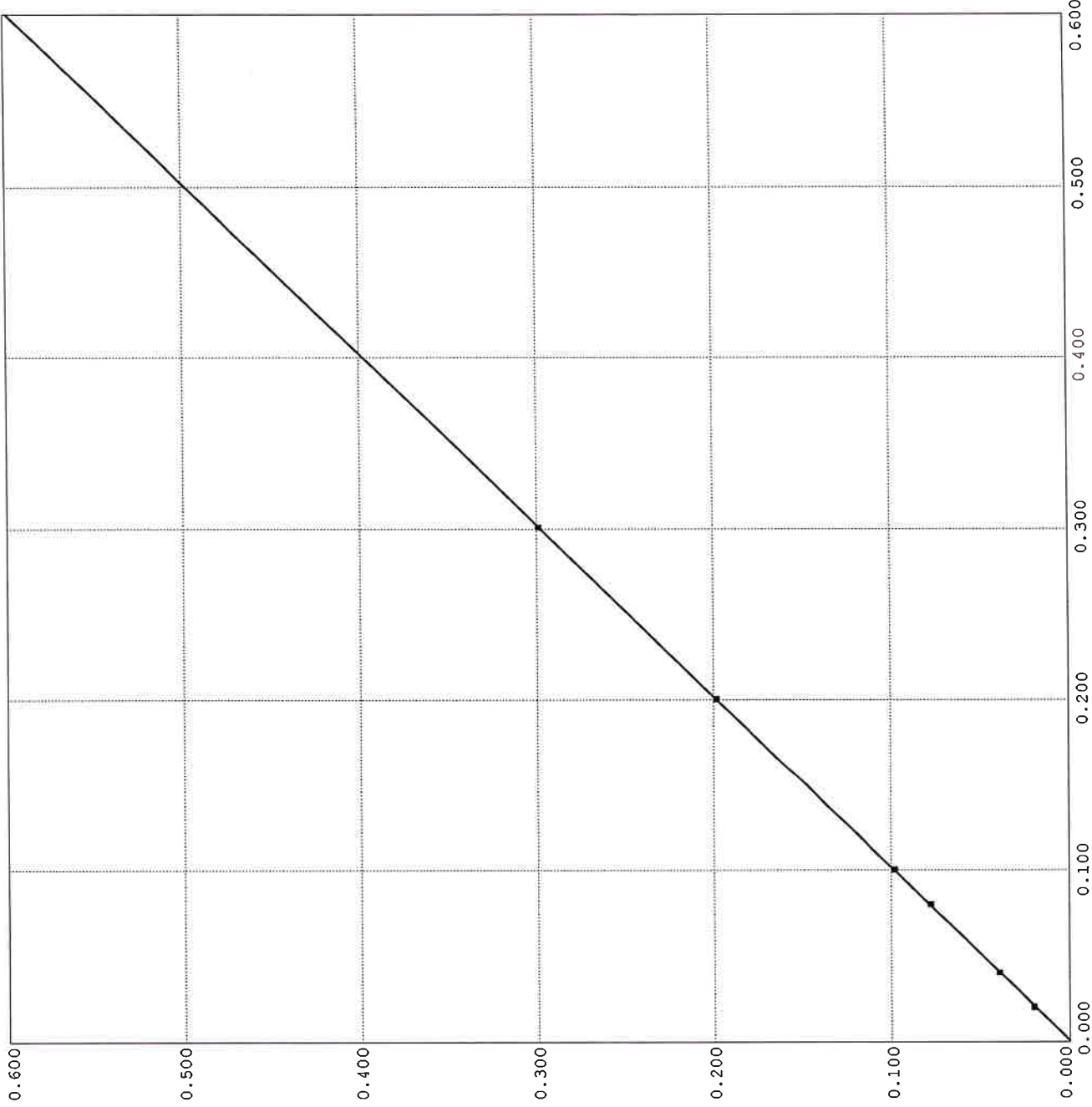
 Alaska Department of Public Safety
 DATAMASTER dmt: 100346

Date: 10/04/2021
 Time: 12:43:35

SUPERVISOR NAME:
 COLLEEN S OBRyant
 OPERATOR'S #: 6237

TARGET	AVERAGE	STD. DEV.
0.020	0.0206	0.0005
0.040	0.0400	0.0000
0.080	0.0788	0.0004
0.100	0.0990	0.0000
0.200	0.1992	0.0004
0.300	0.2996	0.0005

SLOPE = 0.997923
 R² = 0.999964



CS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100346

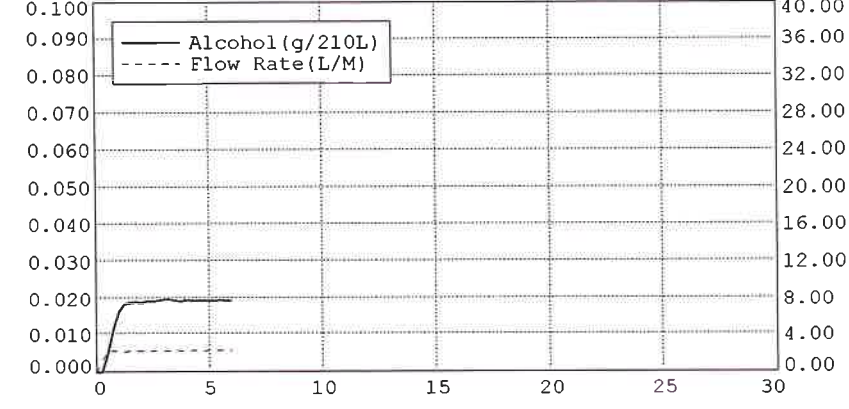
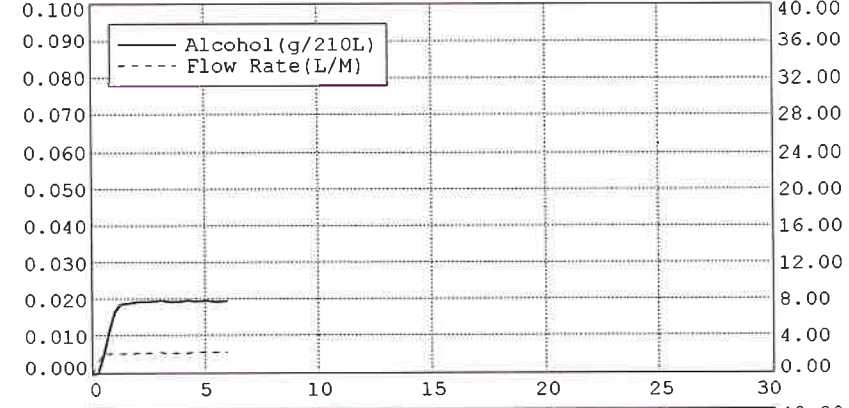
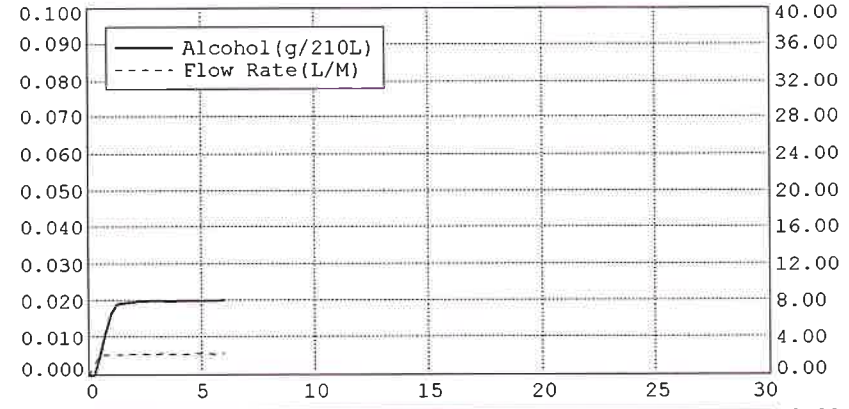
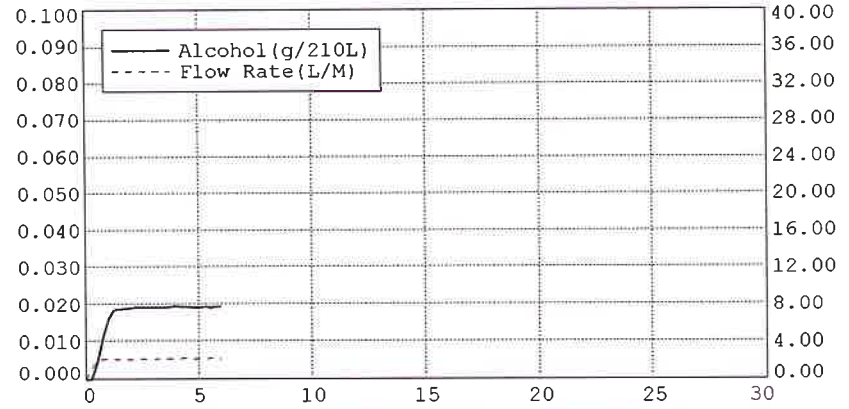
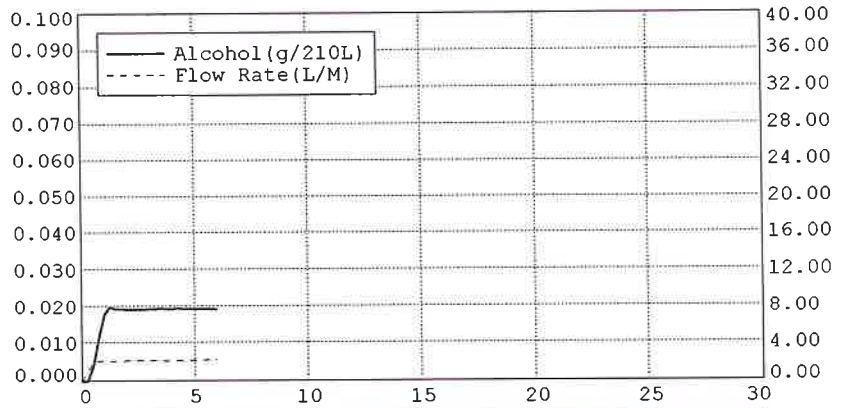
Date: 10/04/2021
 Time: 12:43:37

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.88: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 281 psi

BLANK TEST	0.000	12:51
INTERNAL STANDARD	VERIFIED	12:51
EXTERNAL STANDARD	0.020	12:52
BLANK TEST	0.000	12:52
EXTERNAL STANDARD	0.020	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.021	12:54
BLANK TEST	0.000	12:55
EXTERNAL STANDARD	0.021	12:55
BLANK TEST	0.000	12:56
EXTERNAL STANDARD	0.021	12:56
BLANK TEST	0.000	12:57

Average = 0.0206
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100346

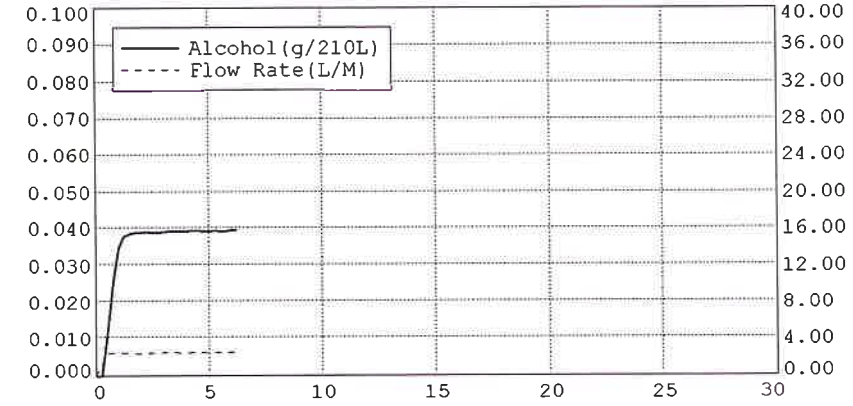
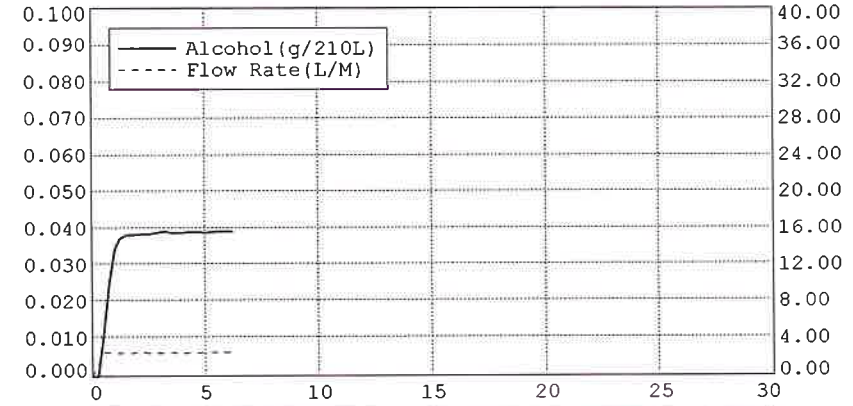
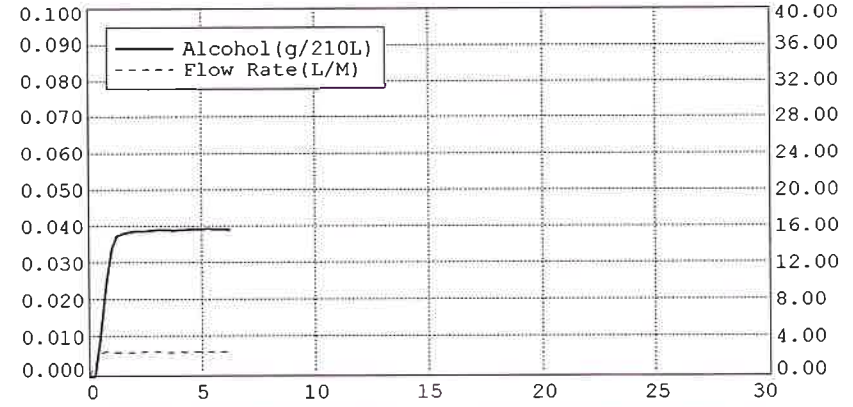
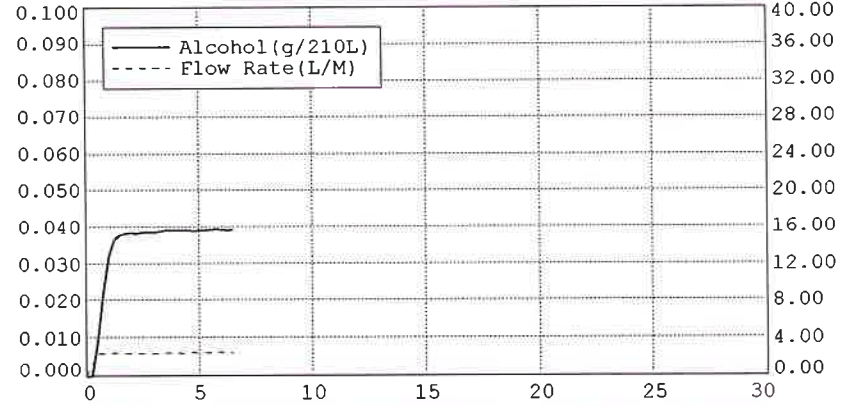
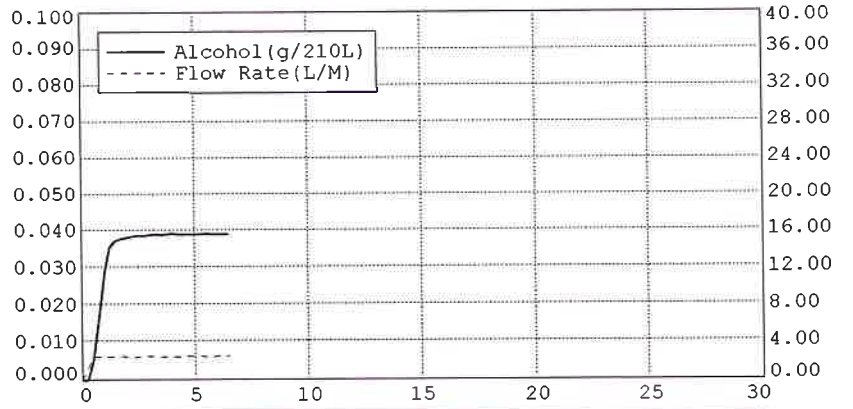
Date: 10/04/2021
Time: 12:59:52

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.88: 0.040
LOT #: AG111710
EXPIRATION: 04/27/2023
TANK PRESSURE: 853 psi

BLANK TEST	0.000	13:01
INTERNAL STANDARD	VERIFIED	13:01
EXTERNAL STANDARD	0.040	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.040	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.040	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.040	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.040	13:05
BLANK TEST	0.000	13:06

Average = 0.0400
Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

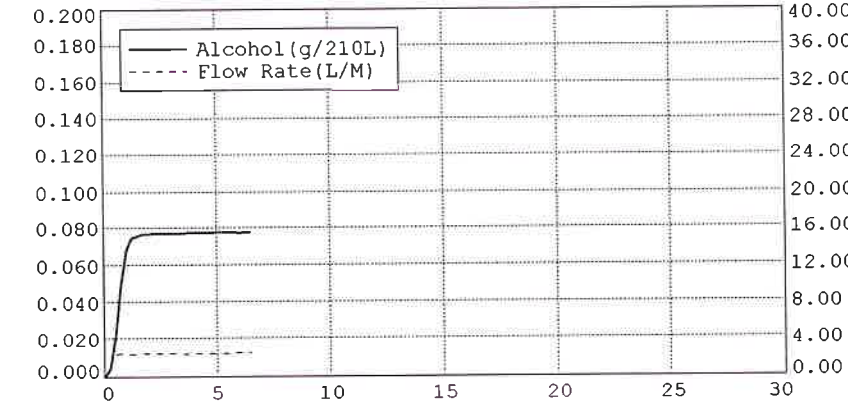
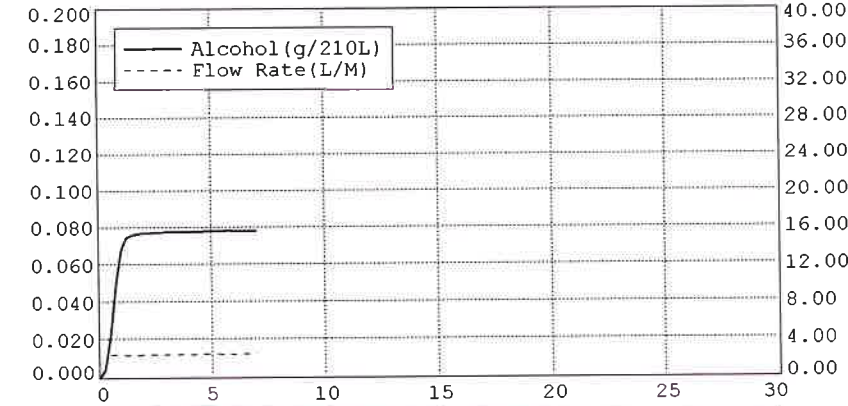
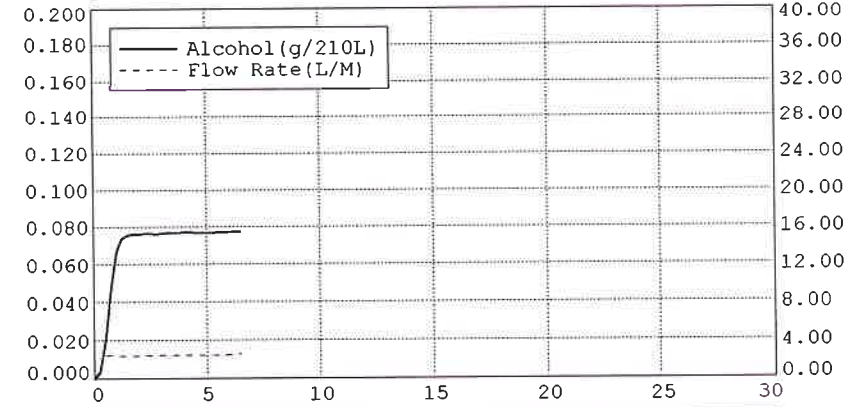
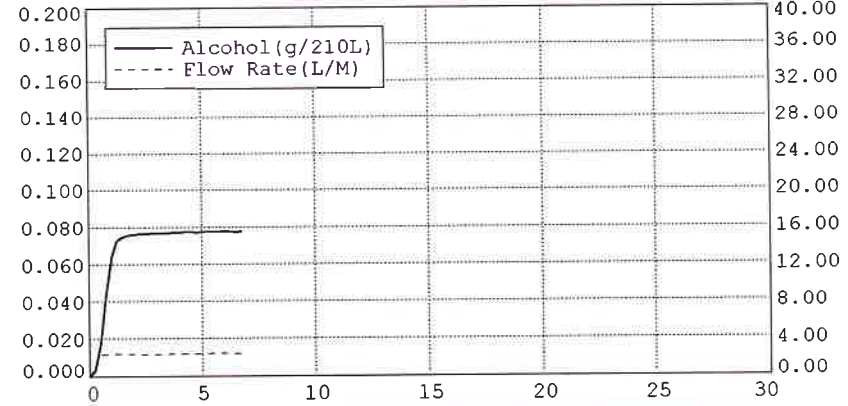
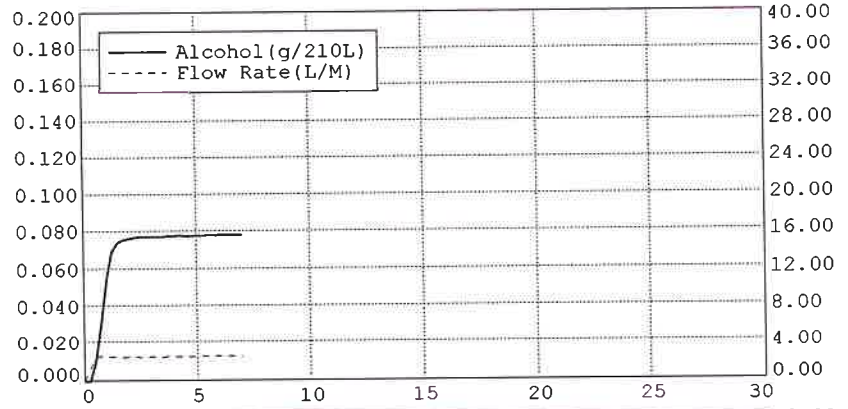
Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 10/04/2021
Time: 13:07:53

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.88: 0.080
LOT #: AG113402
EXPIRATION: 05/14/2023
TANK PRESSURE: 989 psi

BLANK TEST	0.000	13:09
INTERNAL STANDARD	VERIFIED	13:09
EXTERNAL STANDARD	0.079	13:09
BLANK TEST	0.000	13:10
EXTERNAL STANDARD	0.079	13:10
BLANK TEST	0.000	13:11
EXTERNAL STANDARD	0.078	13:11
BLANK TEST	0.000	13:12
EXTERNAL STANDARD	0.079	13:12
BLANK TEST	0.000	13:13
EXTERNAL STANDARD	0.079	13:13
BLANK TEST	0.000	13:14

Average = 0.0788
Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100346

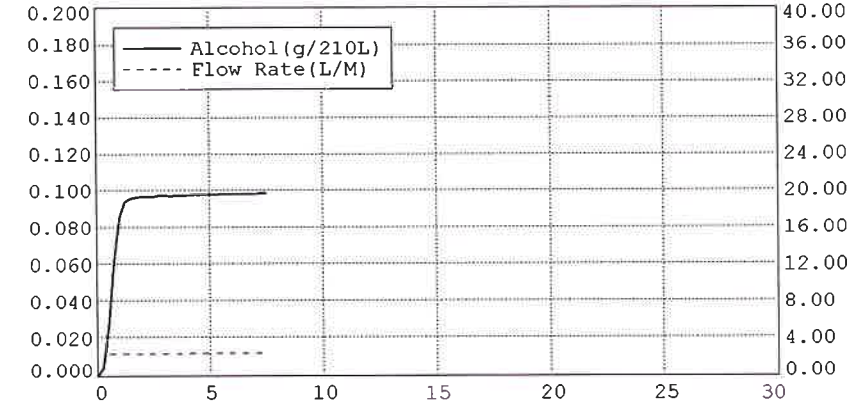
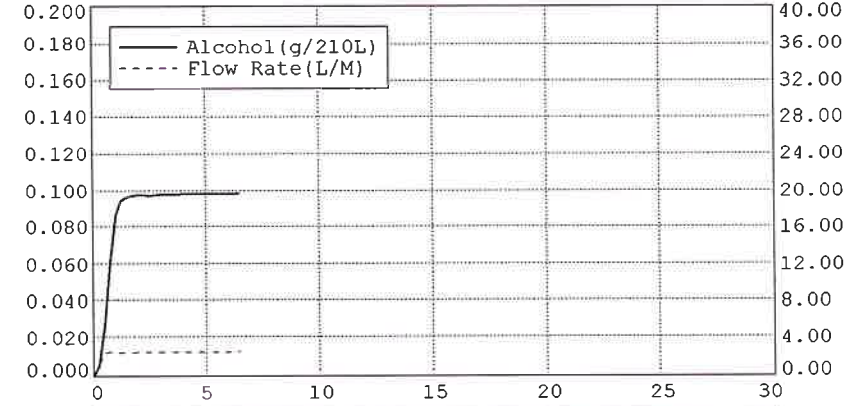
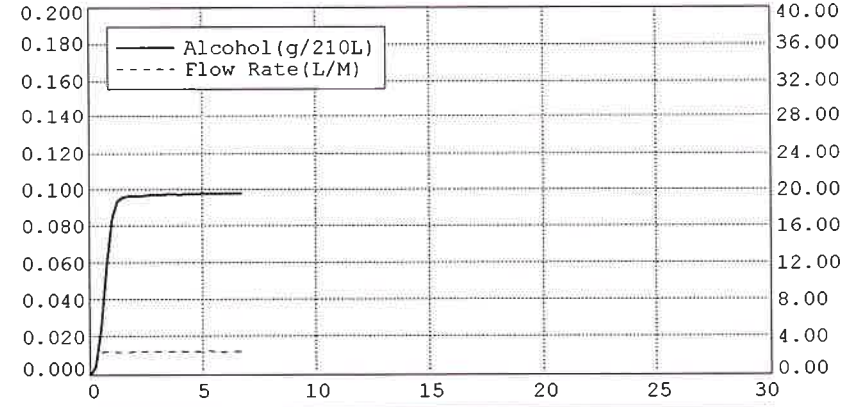
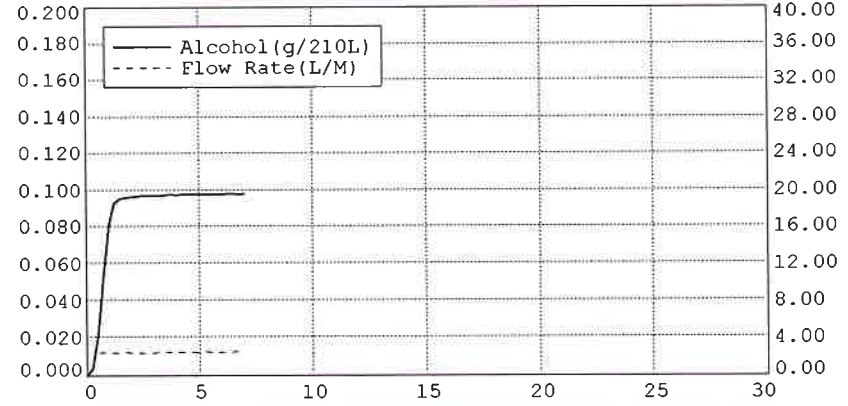
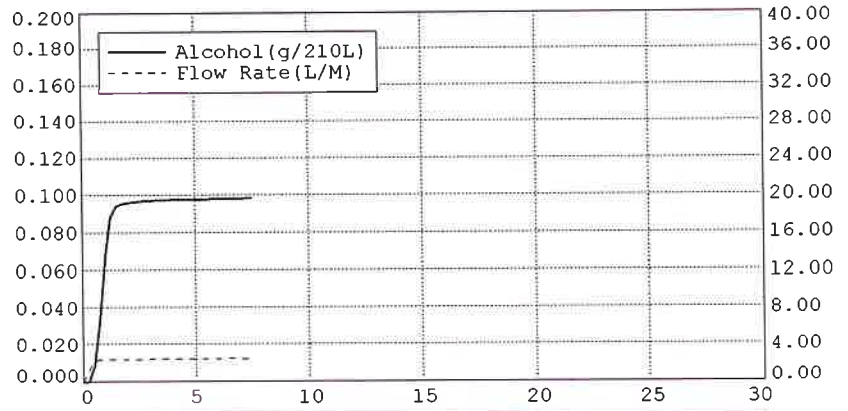
Date: 10/04/2021
 Time: 15:06:52

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.88: 0.100
 LOT #: AG108404
 EXPIRATION: 03/25/2023
 TANK PRESSURE: 1049 psi

BLANK TEST	0.000	15:08
INTERNAL STANDARD	VERIFIED	15:08
EXTERNAL STANDARD	0.099	15:08
BLANK TEST	0.000	15:09
EXTERNAL STANDARD	0.099	15:09
BLANK TEST	0.000	15:10
EXTERNAL STANDARD	0.099	15:10
BLANK TEST	0.000	15:11
EXTERNAL STANDARD	0.099	15:11
BLANK TEST	0.000	15:12
EXTERNAL STANDARD	0.099	15:12
BLANK TEST	0.000	15:13

Average = 0.0990
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

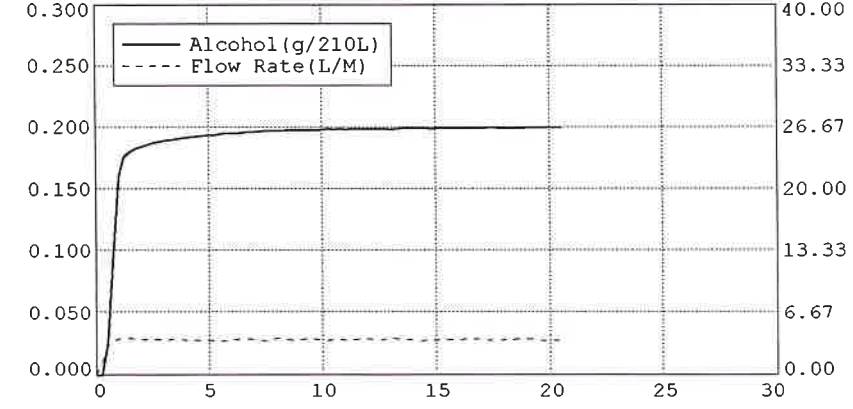
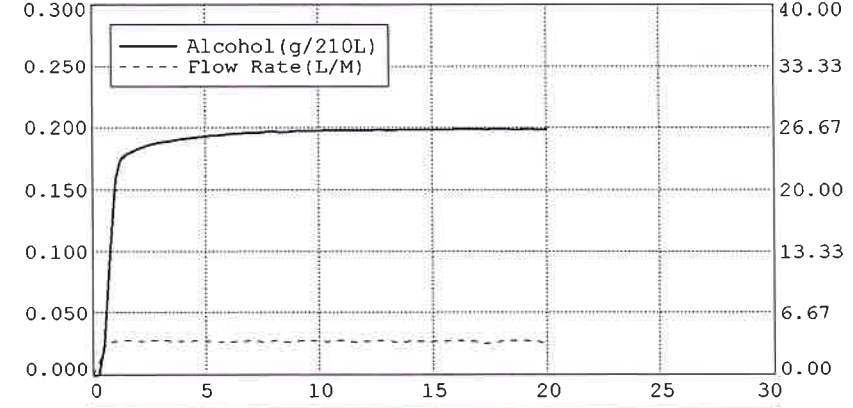
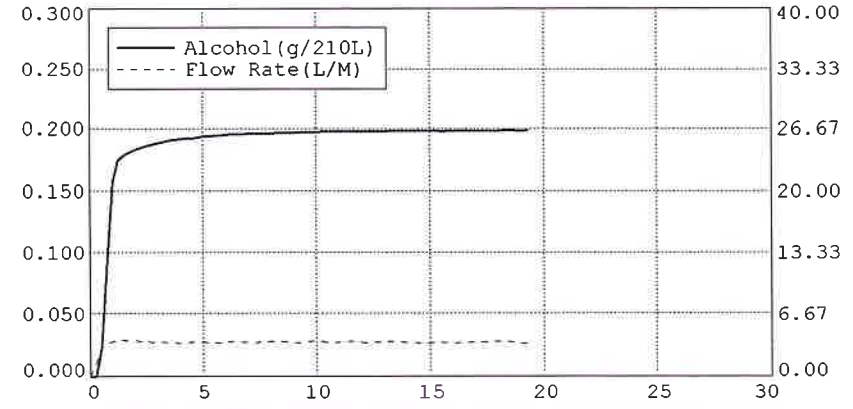
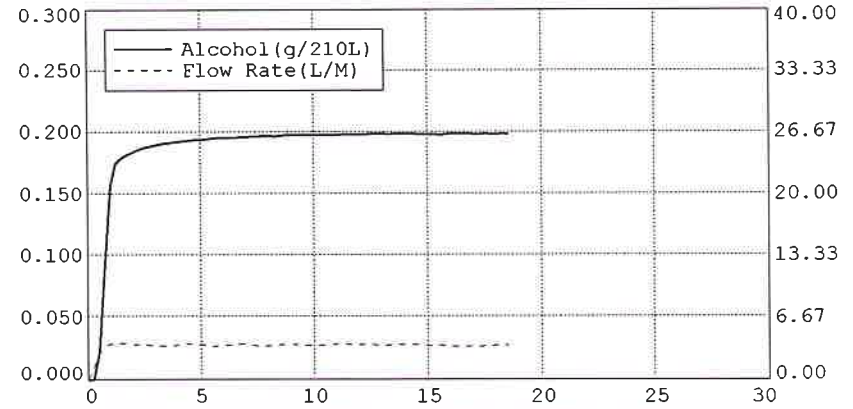
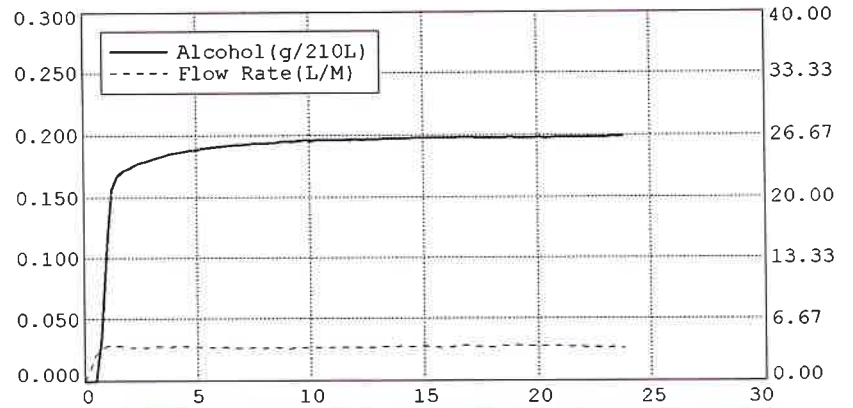
Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 10/04/2021
Time: 15:14:49

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.200
LOT #: 20510
EXPIRATION: 12/03/2022

BLANK TEST	0.000	15:16
INTERNAL STANDARD	VERIFIED	15:16
EXTERNAL STANDARD	0.199	15:16
BLANK TEST	0.000	15:17
EXTERNAL STANDARD	0.199	15:18
BLANK TEST	0.000	15:18
EXTERNAL STANDARD	0.199	15:19
BLANK TEST	0.000	15:20
EXTERNAL STANDARD	0.199	15:20
BLANK TEST	0.000	15:21
EXTERNAL STANDARD	0.200	15:22
BLANK TEST	0.000	15:22

Average = 0.1992
Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

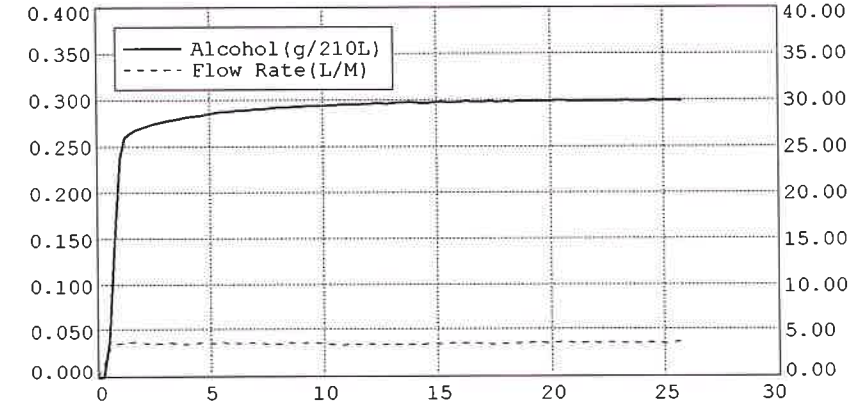
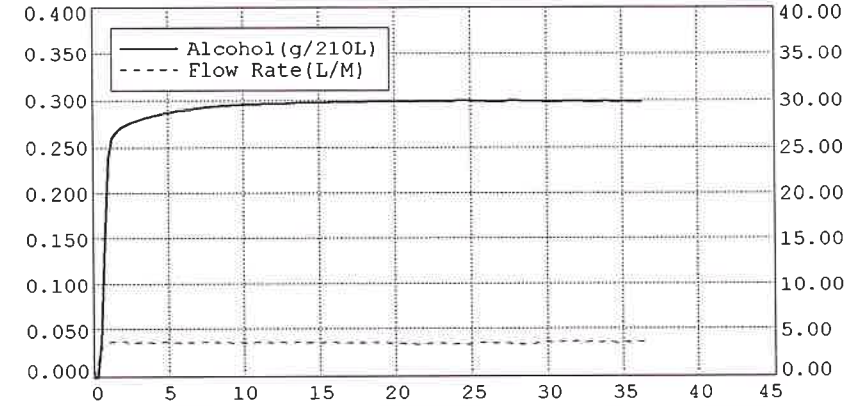
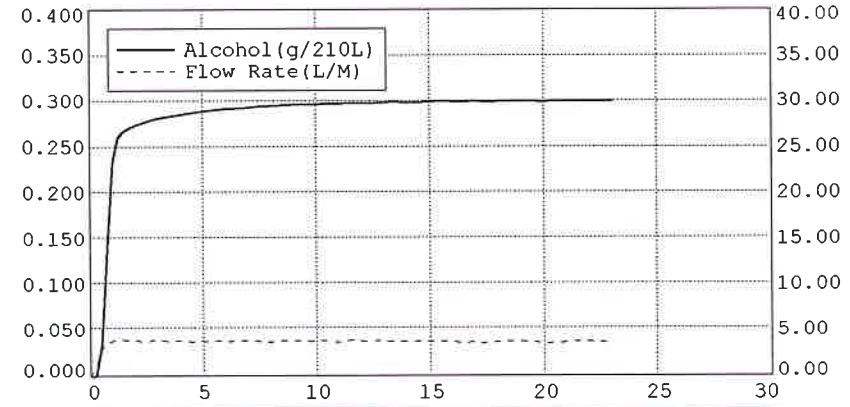
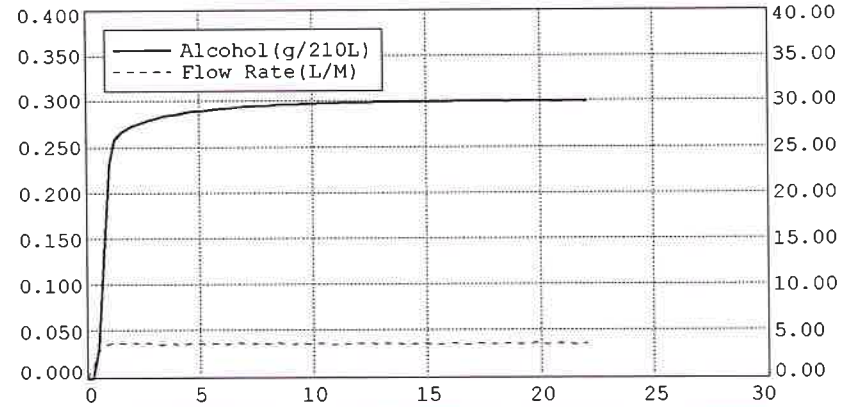
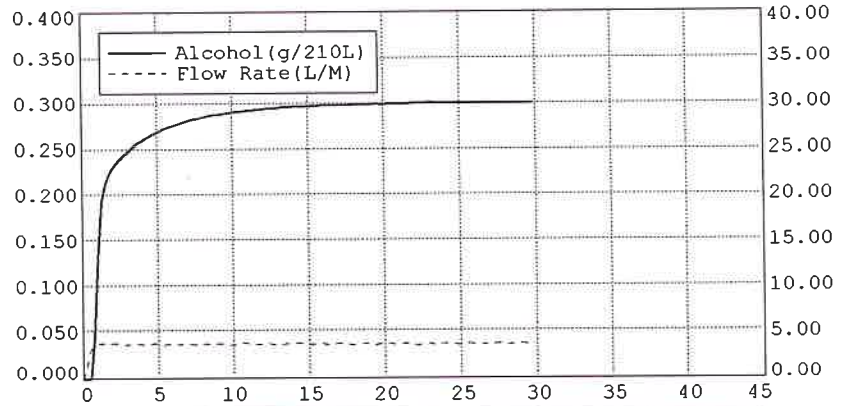
Alaska Department of Public Safety
 DATAMASTER dmt: 100346

Date: 10/04/2021
 Time: 15:26:16

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 21030
 EXPIRATION: 02/02/2023

BLANK TEST	0.000	15:27
INTERNAL STANDARD	VERIFIED	15:27
EXTERNAL STANDARD	0.300	15:28
BLANK TEST	0.000	15:29
EXTERNAL STANDARD	0.300	15:29
BLANK TEST	0.000	15:30
EXTERNAL STANDARD	0.300	15:30
BLANK TEST	0.000	15:31
EXTERNAL STANDARD	0.299	15:32
BLANK TEST	0.000	15:33
EXTERNAL STANDARD	0.299	15:33
BLANK TEST	0.000	15:34

Average = 0.2996
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 10/04/2021
Time: 15:41:34

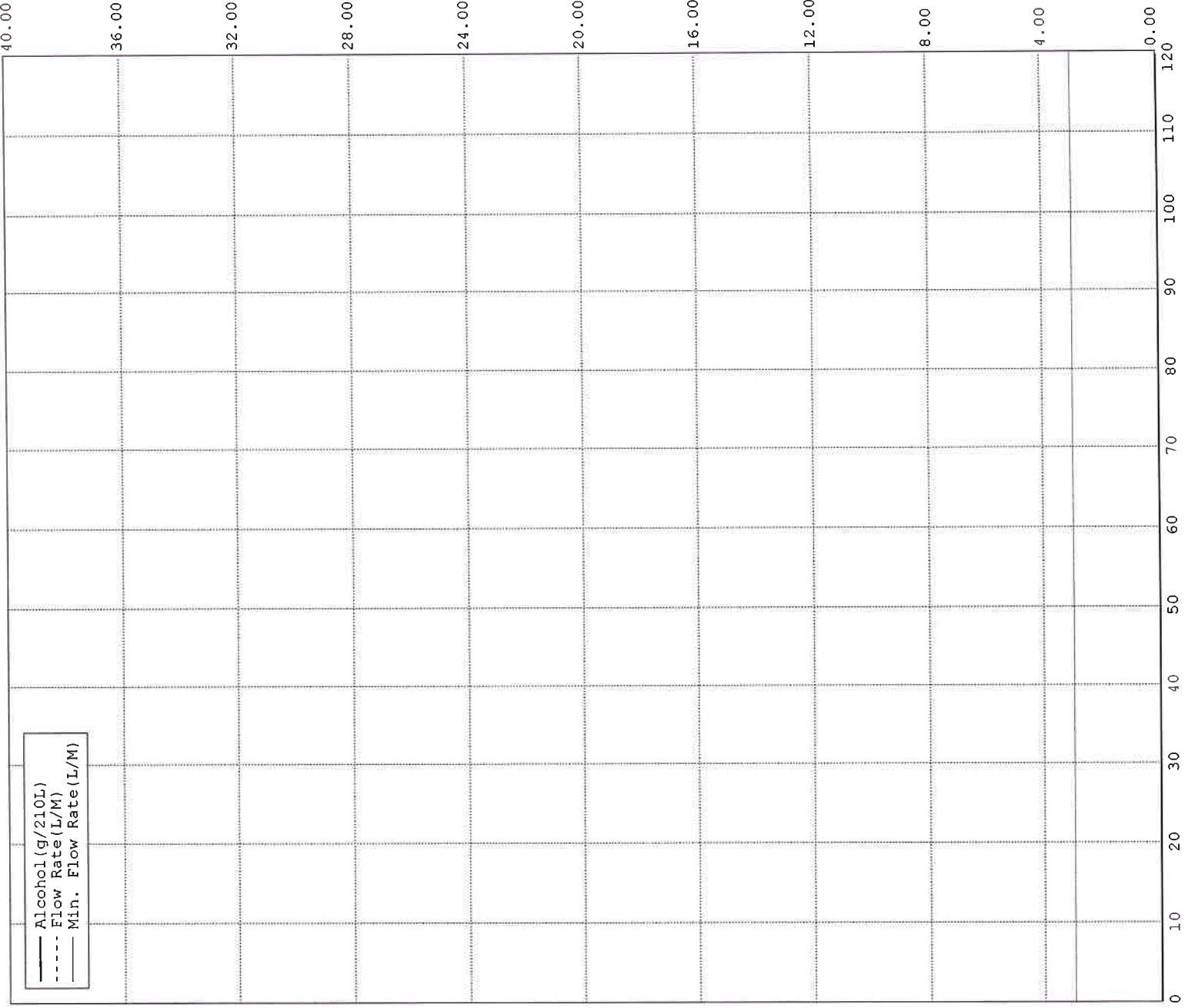
SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

OPERATOR NAME:
COLLEEN S OBRyant
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 21-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.84: 0.080
LOT #: AG113402
EXPIRATION: 05/14/2023

DIAGNOSTIC CHECK PASSED 16:42
BLANK TEST 0.000 16:42
INTERNAL STANDARD VERIFIED 16:42
EXTERNAL STANDARD 0.078 16:42
BLANK TEST 0.000 16:43
SUBJECT SAMPLE INCOMPLETE 16:45



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 10/05/2021
Time: 08:18:49

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

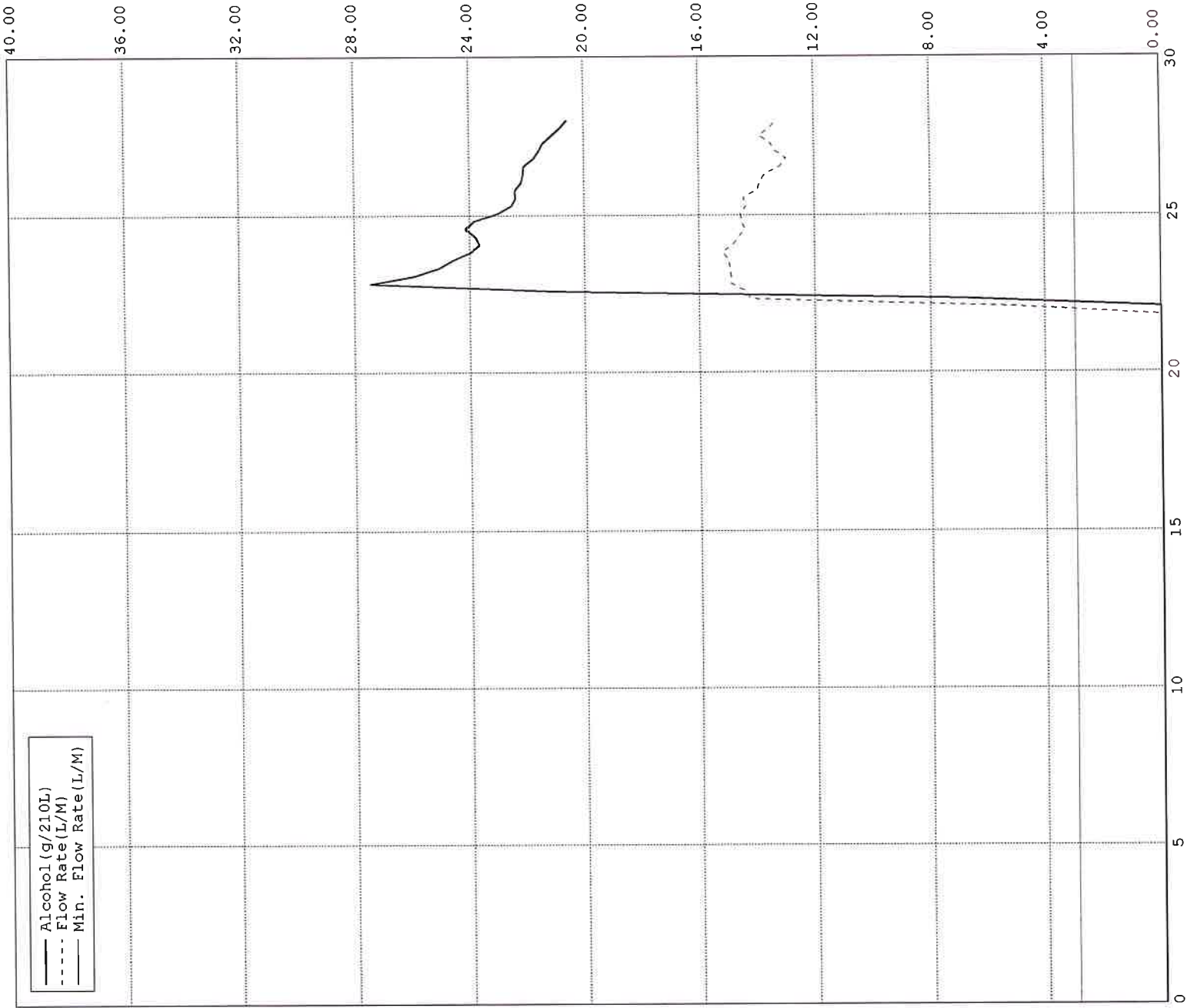
OPERATOR NAME:
COLLEEN S OBRYANT
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 21-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.72: 0.079
LOT #: AG113402
EXPIRATION: 05/14/2023

DIAGNOSTIC CHECK	PASSED	08:20
BLANK TEST	0.000	08:20
INTERNAL STANDARD	VERIFIED	08:20
EXTERNAL STANDARD	0.079	08:20
BLANK TEST	0.000	08:21
SUBJECT SAMPLE	INVALID	08:22



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 10/05/2021
Time: 08:29:02

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

OPERATOR NAME:
COLLEEN S OBRyant
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 21-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.72: 0.079
LOT #: AG113402
EXPIRATION: 05/14/2023

DIAGNOSTIC CHECK PASSED 08:30
BLANK TEST 0.000 08:30
INTERNAL STANDARD VERIFIED 08:30
 $x_q = 0.104$ (0.00%) 0.079 08:30
EXTERNAL STANDARD $x[1] = 0.0786$ (-0.0015) (0.0008)
BLANK TEST 0.000 08:31
SUBJECT SAMPLE XXX 08:32
 $x[1] = 0.1034$ (-0.0173) (-0.0004)

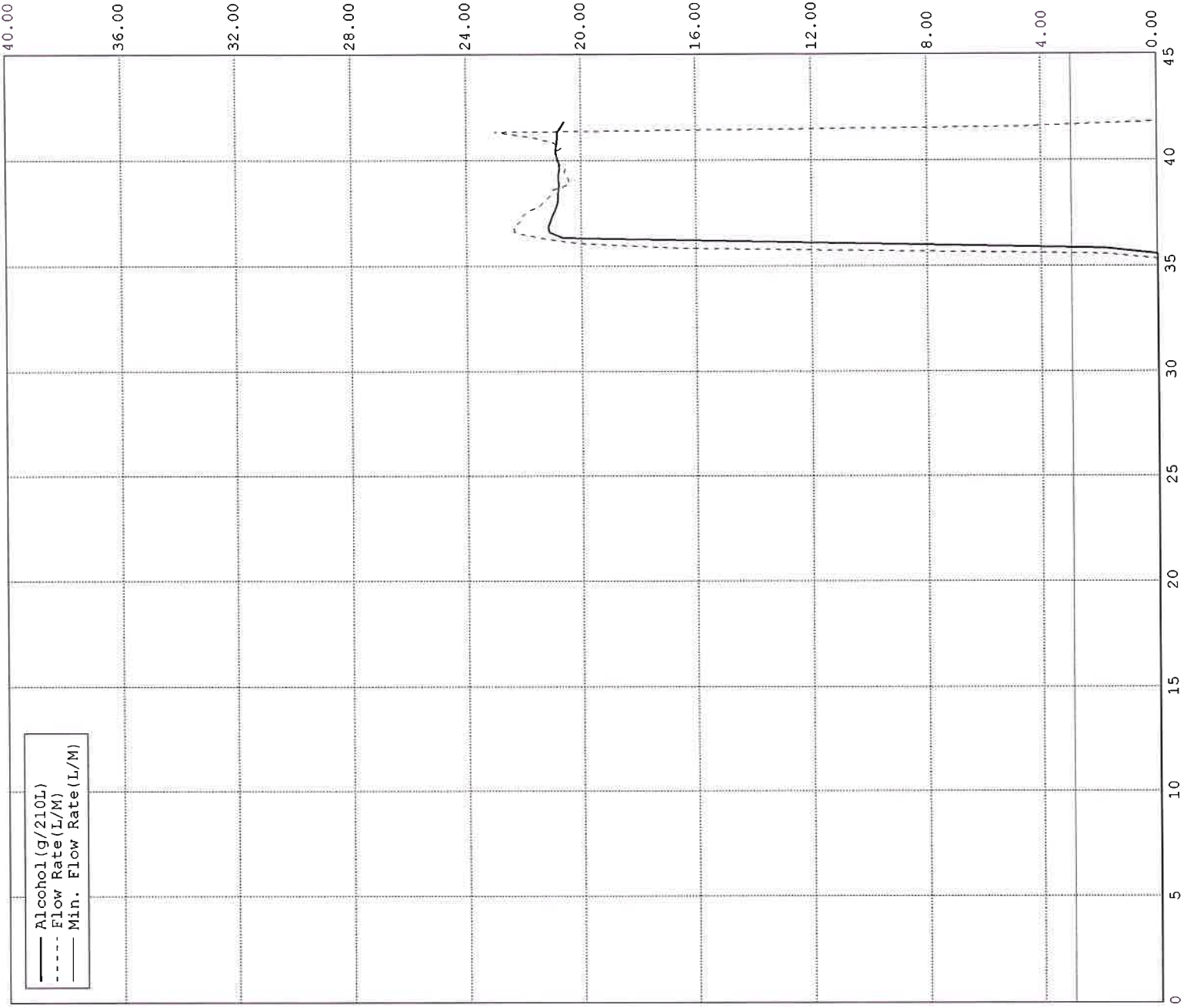
Interference Detected

Filter 2 Average: -0.0014

Filter 3 Average: 0.0010

COB 2021.10.05

COS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 10/05/2021
Time: 08:35:21

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

OPERATOR NAME:
COLLEEN S OBRYANT
OPERATOR'S #: 6237

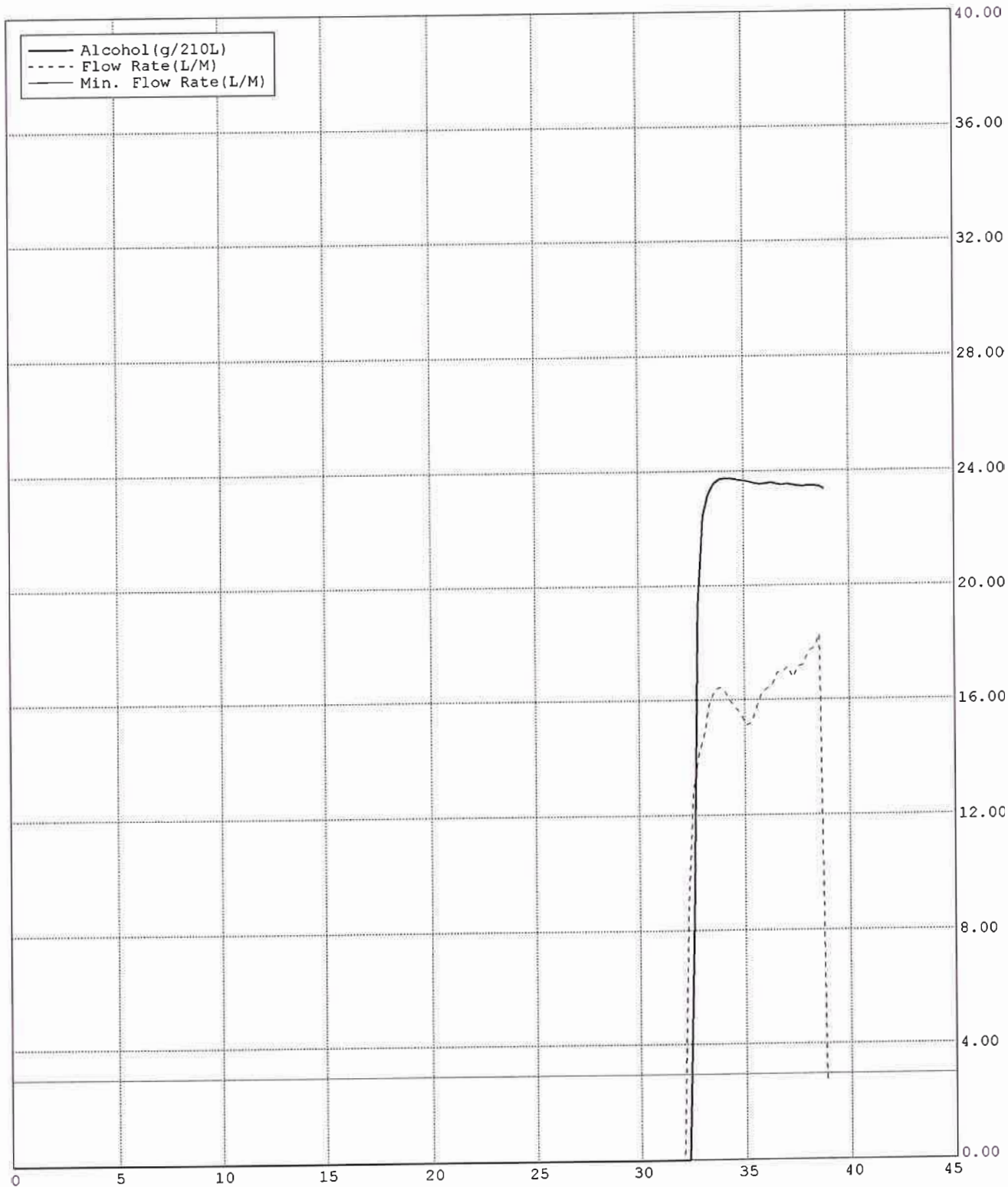
DEPT/AGENCY:
AAA1
CASE/REPORT: 21-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.72: 0.079
LOT #: AG113402
EXPIRATION: 05/14/2023

DIAGNOSTIC CHECK	PASSED	08:36
BLANK TEST	0.000	08:36
INTERNAL STANDARD	VERIFIED	08:37
Xq = 0.104 (0.25%)		
EXTERNAL STANDARD	0.078	08:37
X[1] = 0.0783 (-0.0012) (0.0010)		
BLANK TEST	0.000	08:38
SUBJECT SAMPLE	XXX	08:38
X[1] = 0.1173 (-0.0323) (0.0000)		

Interference Detected

COB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 10/05/2021
Time: 08:41:53

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

OPERATOR NAME:
COLLEEN S OBRVANT
OPERATOR'S #: 6237

DEPT/AGENCY:

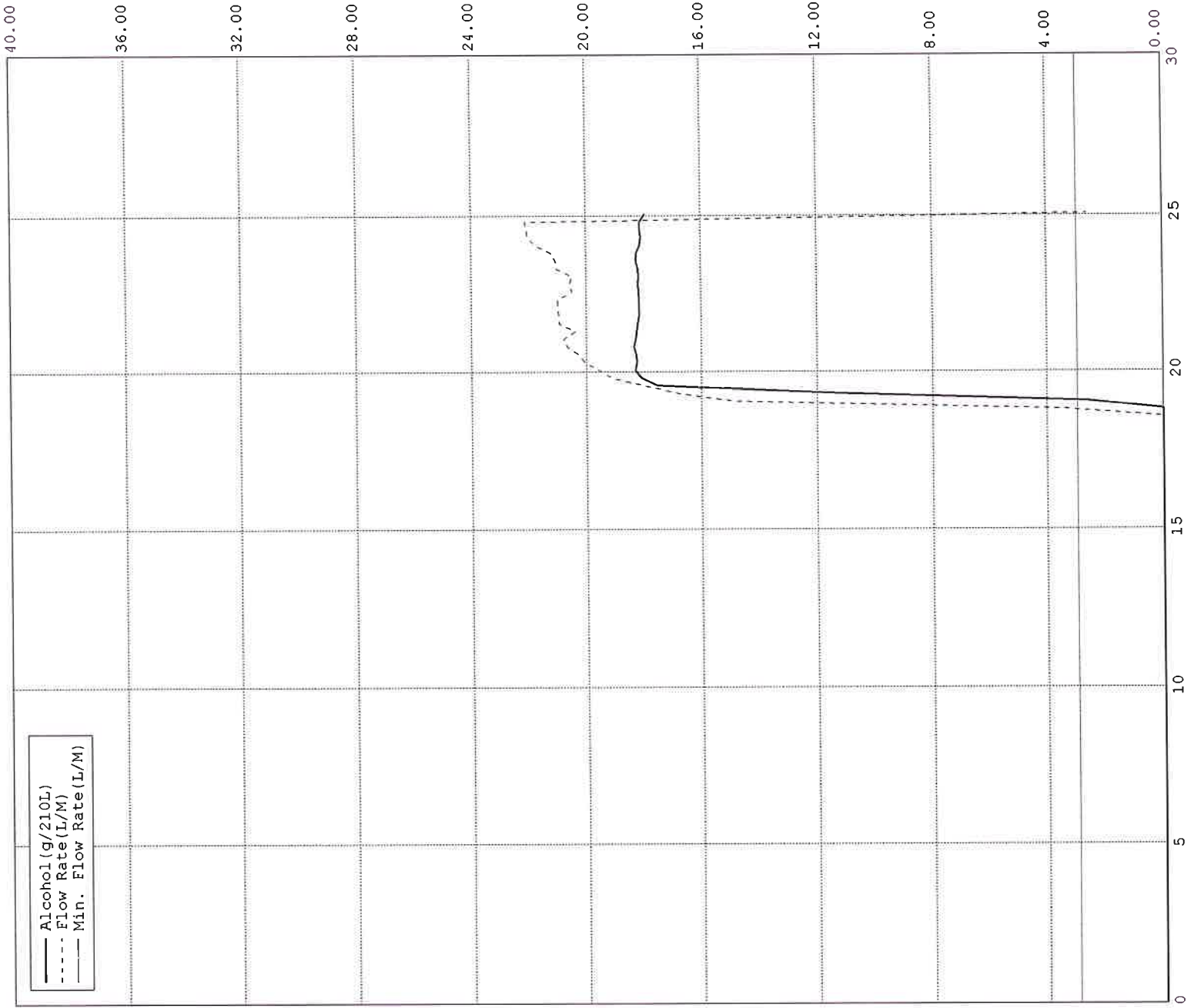
AAA1
CASE/REPORT: 21-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.72: 0.079
LOT #: AG113402
EXPIRATION: 05/14/2023

DIAGNOSTIC CHECK	PASSED	08:43
BLANK TEST	0.000	08:43
INTERNAL STANDARD	VERIFIED	08:43
$Xg = 0.104$ (0.25%)		
EXTERNAL STANDARD	0.078	08:43
$X[1] = 0.0782$ (-0.0014) (0.0019)		
BLANK TEST	0.000	08:44
SUBJECT SAMPLE (Vol=2.05L)	0.090	08:45
$X[1] = 0.0901$ (-0.0022) (0.0003)		
BLANK TEST	0.000	08:46
EXTERNAL STANDARD	0.078	08:46
$X[1] = 0.0776$ (-0.0014) (0.0003)		
BLANK TEST	0.000	08:47

CS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 10/05/2021
Time: 08:51:43

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

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

DEPT/AGENCY:
AAA1

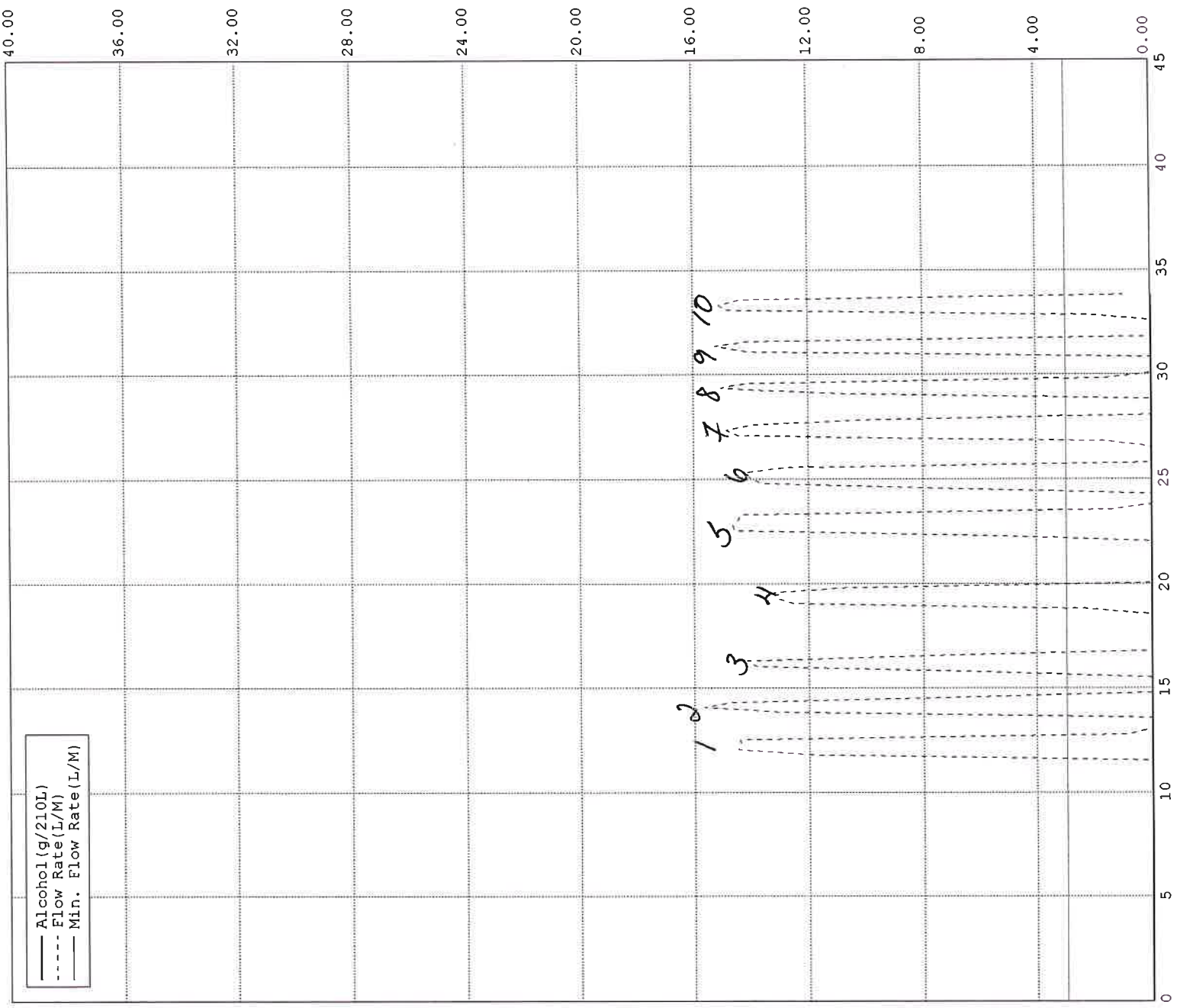
CASE/REPORT: 21-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: AG113402
EXPIRATION: 05/14/2023

DIAGNOSTIC CHECK PASSED 08:53
BLANK TEST 0.000 08:53
INTERNAL STANDARD VERIFIED 08:53
EXTERNAL STANDARD 0.078 08:53
BLANK TEST 0.000 08:54
SUBJECT SAMPLE XXX 08:55

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100346

Date: 10/05/2021

Time: 09:01:35

SUBJECT NAME:

TEST TEST

LICENSE #: RFI

OPERATOR NAME:

COLLEEN S OBRyant

OPERATOR'S #: 6237

DEPT/AGENCY:

AAA1

CASE/REPORT: 21-1234

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.72: 0.079

LOT #: AG113402

EXPIRATION: 05/14/2023

DIAGNOSTIC CHECK

BLANK TEST

INTERNAL STANDARD

EXTERNAL STANDARD

BLANK TEST

PASSED 09:10

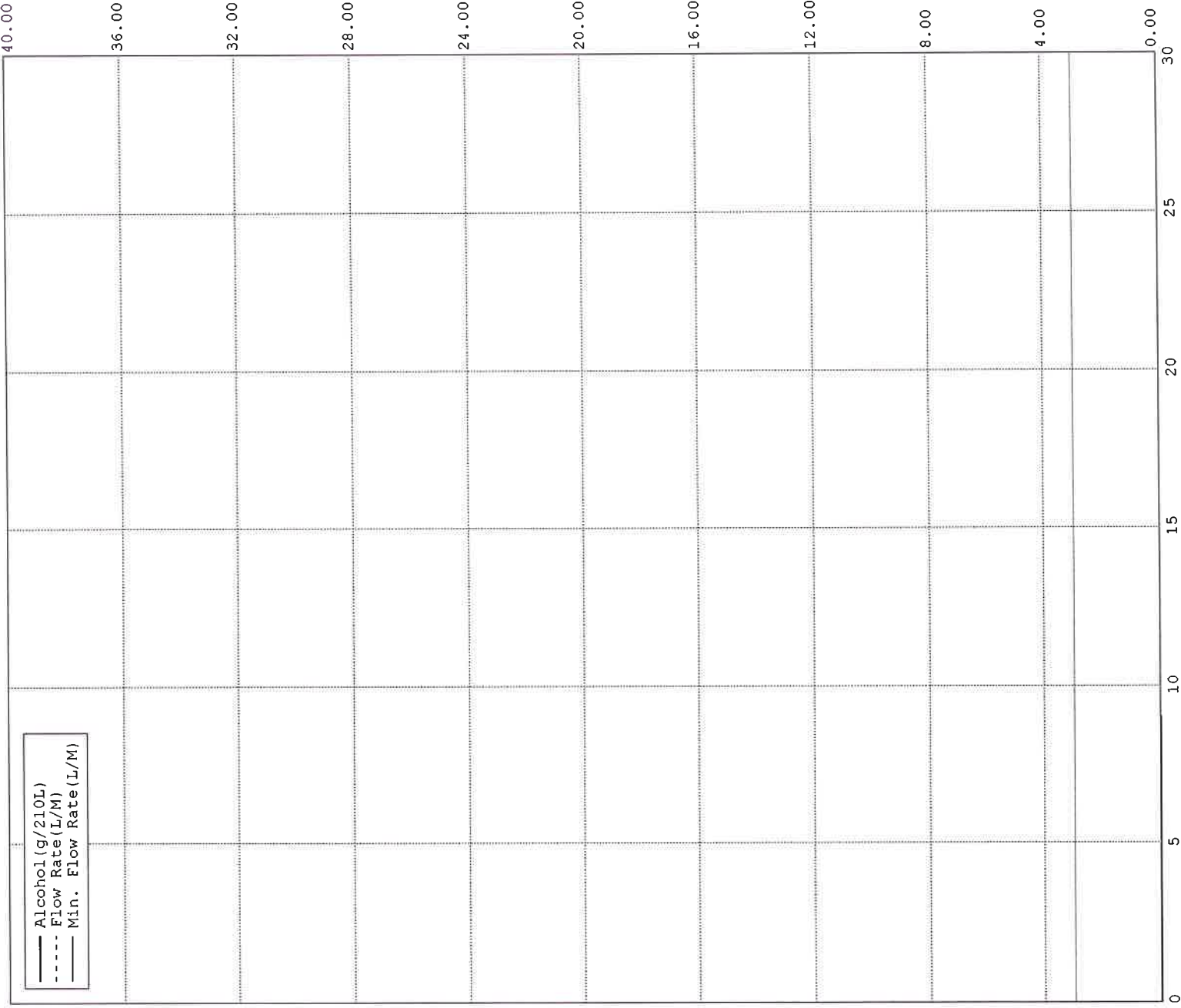
0.000 09:10

VERIFIED 09:10

0.079 09:10

0.000 09:11

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 10/05/2021
Time: 09:23:52

SUBJECT NAME:
TEST TEST
LICENSE #: NONDRINKING

OPERATOR NAME:
COLLEEN S OBRyant
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 21-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: AG113402
EXPIRATION: 05/14/2023

DIAGNOSTIC CHECK	PASSED	09:25
BLANK TEST	0.000	09:25
INTERNAL STANDARD	VERIFIED	09:25
EXTERNAL STANDARD	0.079	09:25
BLANK TEST	0.000	09:26
SUBJECT SAMPLE (Vol=1.90L)	0.000	09:26
BLANK TEST	0.000	09:27
EXTERNAL STANDARD	0.079	09:27
BLANK TEST	0.000	09:28

