

# Alaska Scientific Crime Detection Laboratory

## DataMaster Certification Form

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

Version: DMCEF 2020 R0  
Status: Active

*Carlie Glaister*

Instrument S/N 100697 Analyst C. O. Bryant Start Date 10/15/21

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)

### Linearity Test (attached)

#### Levels Used

- i. 0.020g/210L Mnf Aargas Lot AG100401 Exp 1/4/23  
ii. 0.040g/210L Mnf Aargas Lot AG111710 Exp 4/27/23  
iii. 0.080g/210L Mnf Aargas Lot AG018102 Exp 6/29/22  
iv. 0.100g/210L Mnf Aargas Lot AG108404 Exp 3/25/23  
v. 0.200g/210L Mnf Guth Lot 20510 Exp 12/3/22  
Simulator S/N DR4161 Date Calibrated 6/16/21  
vi. 0.300g/210L Mnf Guth Lot 21030 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

Verification of Calibration

Reset Options

Non-Drinking Subject Test (attached)

Clear Memory

Upload

Remove tank prior to shut down

Add Linearity Data to Spreadsheet

End Date 10/15/21

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100697  
-----

Date: 10/15/2021  
Time: 08:57:43

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

TEMPERATURES

Sample Chamber = 48.7°C                    PASSED  
(44.0°C - 52.0°C)  
Breath Tube       = 45.1°C                PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage     = 1.75 V                PASSED  
(1.06 V - 2.46 V)  
Cooler Voltage   = 1.69 V                PASSED  
(1.01 V - 2.37 V)  
Bias Voltage     = 80 V                    PASSED  
(48 V - 112 V)  
Chopper Freq     = 522 Hz                PASSED  
(475 Hz - 575 Hz)  
Barometer        = 29.3 in

PUMP INFO

Flow Rate = 4.929 L/M                    PASSED  
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON                                    PASSED  
(0.003 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 = 0.080 0.55% (0.00% - 4.00%)      PASSED

Technician Screen

-----  
DATAMASTER dmt: 100697  
-----

Date: 10/15/2021  
Time: 9:15 AM

Temperatures (°C)

Sample Cell: 49.0°C  
Breath Tube: 44.0°C

Current Barometer 29.3 in  
Volume (Ltr) 1.53

Settings

Lamp: 1.70 V  
Bias: 80 V  
Cooler: 1.69 V  
Chopper: 515 Hz

Voltages (V)

Flow: 1.06 V  
Detector: 0.024 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100697  
-----

Date: 10/12/2021  
Time: 14:20:09

OPERATOR NAME:  
BRANDI BARNETT  
CERTIFICATE #: 7038

Ca = 0.1000  
CAL = 1.004496    0.800 <= CAL < 1.200  
b1 = 0.0007    0.0000 <= b1 < 0.0040  
b2 = 0.0037    0.0010 <= b2 < 0.0100  
b3 = 0.0006    0.0000 <= b3 < 0.0040  
Xq = 0.0795    0.0500 <= Xq < 0.2000  
a21 = 1.145818    1.050 <= a21 < 1.300  
a31 = 0.495505    0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100697

Date: 10/15/2021  
Time: 09:17:33

SUBJECT NAME:  
TEST TEST  
LICENSE #: MIN VOLUME

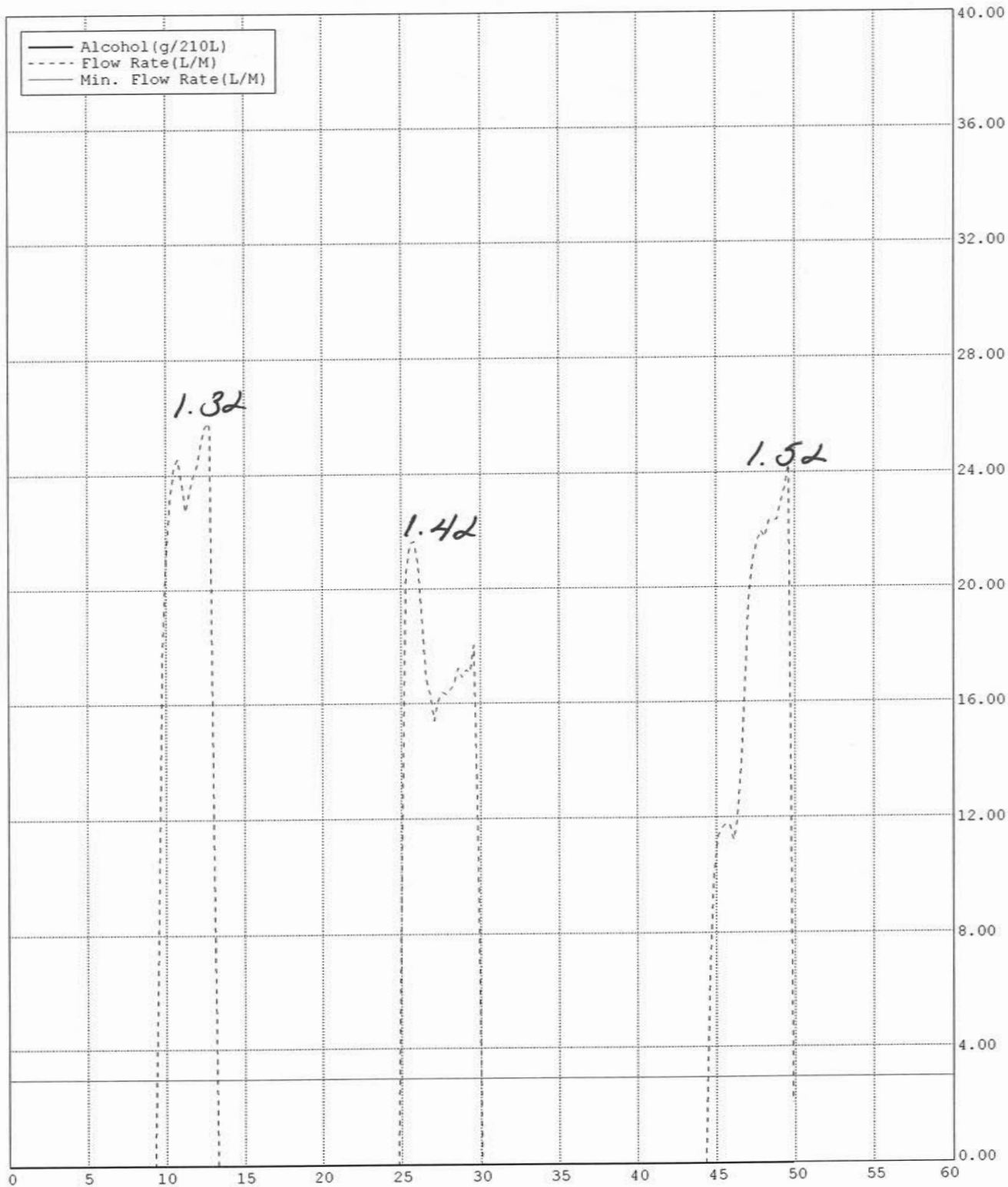
OPERATOR NAME:  
COLLEEN S OBRYANT  
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.32: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	09:21
BLANK TEST	0.000	09:21
INTERNAL STANDARD	VERIFIED	09:21
EXTERNAL STANDARD	0.078	09:21
BLANK TEST	0.000	09:22
SUBJECT SAMPLE (Vol=1.50L)	0.000	09:23
BLANK TEST	0.000	09:24
EXTERNAL STANDARD	0.077	09:24
BLANK TEST	0.000	09:25

*CS*





LINEARITY CHECK

Alaska Department of Public Safety  
DATAMASTER dmt: 100697

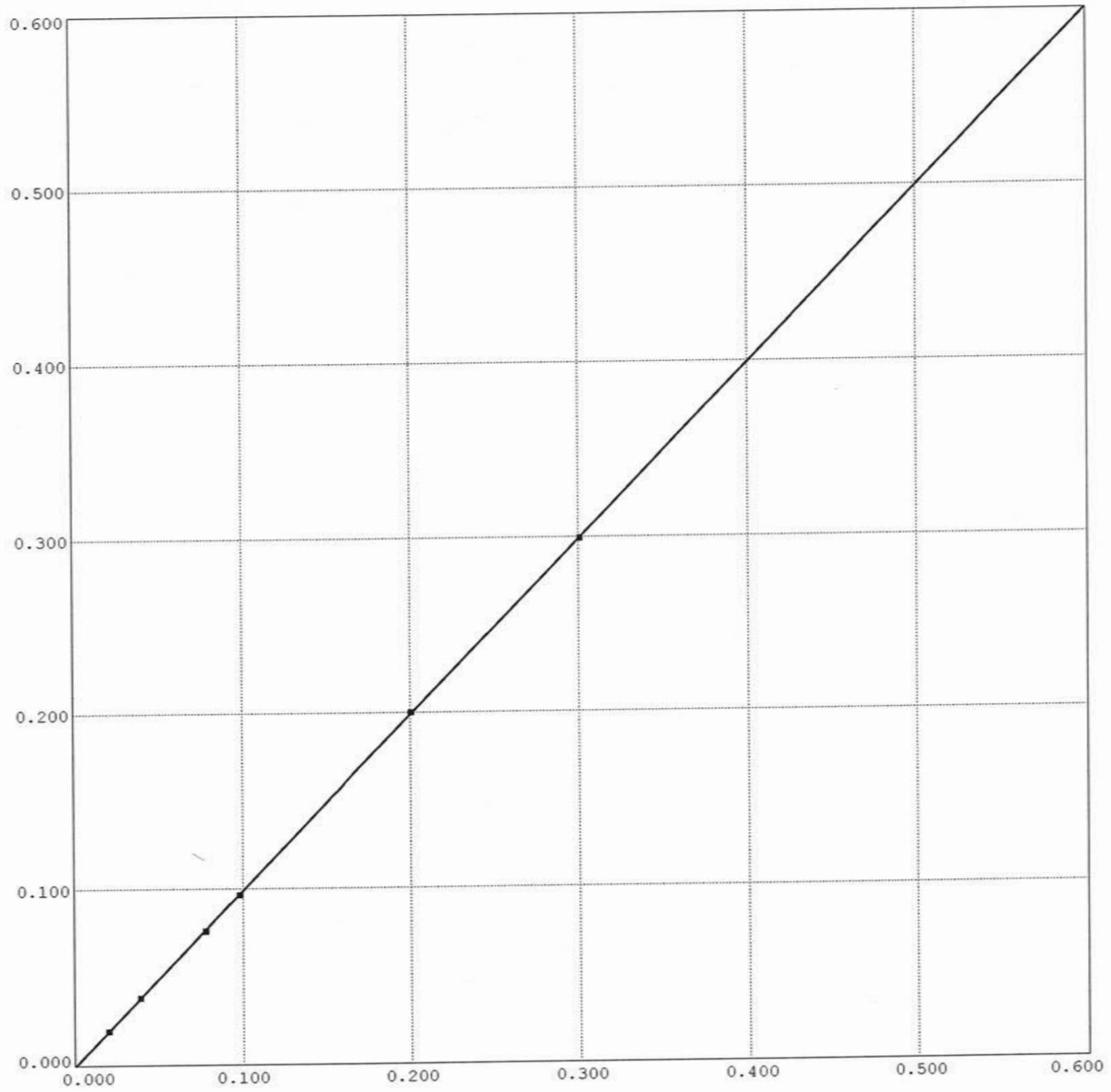
Date: 10/15/2021  
Time: 09:26:57

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.039	0.0390	0.0000
0.078	0.0770	0.0000
0.098	0.0974	0.0005
0.200	0.2008	0.0004
0.300	0.2998	0.0004

SLOPE = 1.001489  
R<sup>2</sup> = 0.999970

CS



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
DATAMASTER dmt: 100697

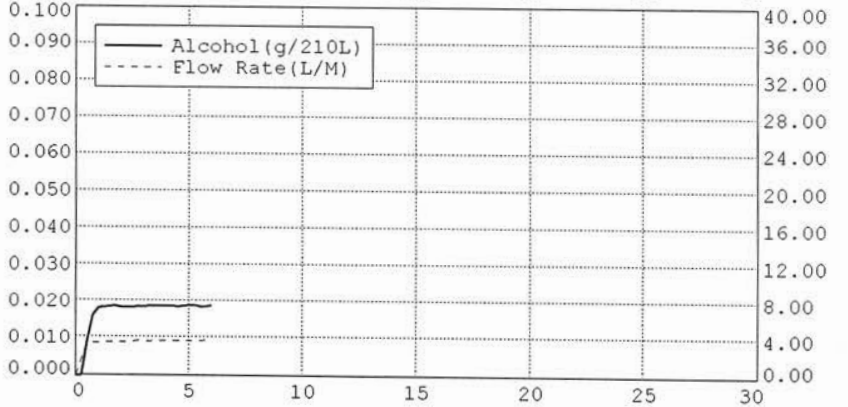
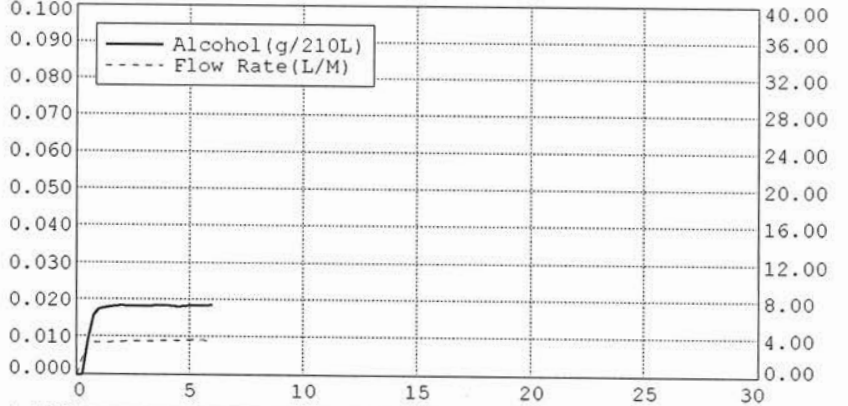
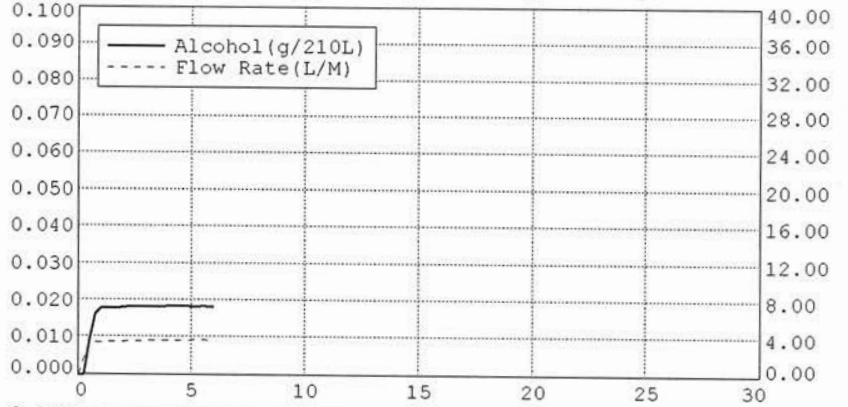
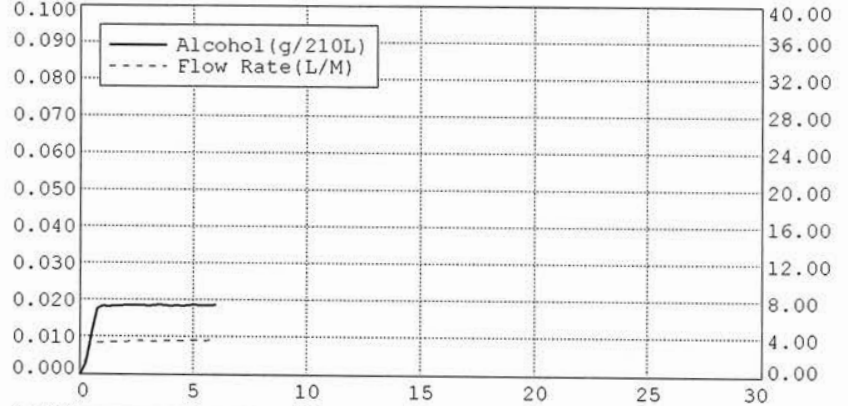
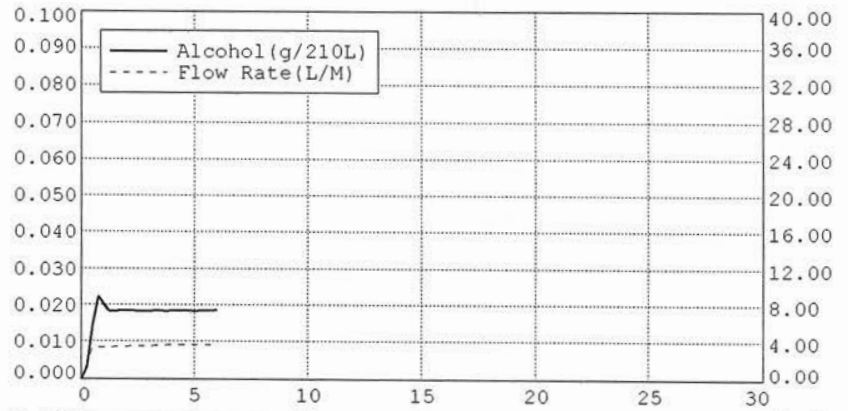
Date: 10/15/2021  
Time: 09:27:00

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
TARGET AT 29.32: 0.020  
LOT #: AG100401  
EXPIRATION: 01/04/2023  
TANK PRESSURE: 1120 psi

BLANK TEST	0.000	09:28
INTERNAL STANDARD	VERIFIED	09:28
EXTERNAL STANDARD	0.020	09:28
BLANK TEST	0.000	09:29
EXTERNAL STANDARD	0.020	09:29
BLANK TEST	0.000	09:30
EXTERNAL STANDARD	0.020	09:30
BLANK TEST	0.000	09:31
EXTERNAL STANDARD	0.020	09:32
BLANK TEST	0.000	09:32
EXTERNAL STANDARD	0.020	09:33
BLANK TEST	0.000	09:34

Average = 0.0200  
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
DATAMASTER dmt: 100697

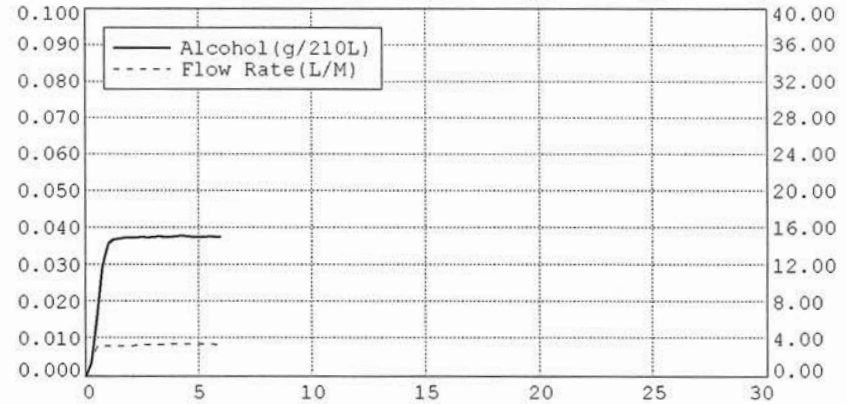
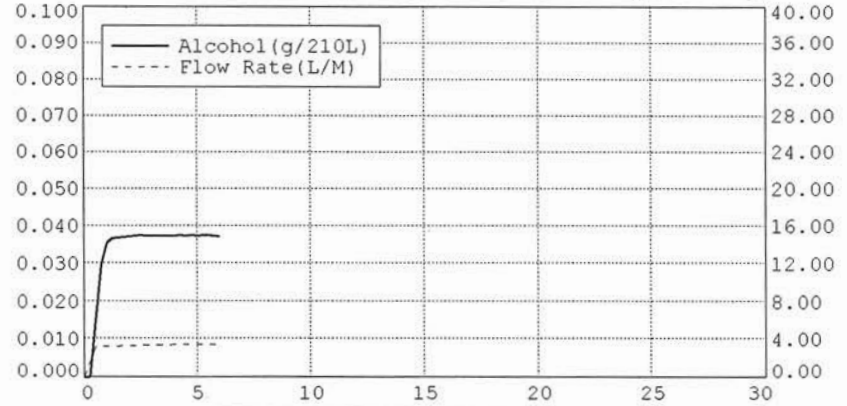
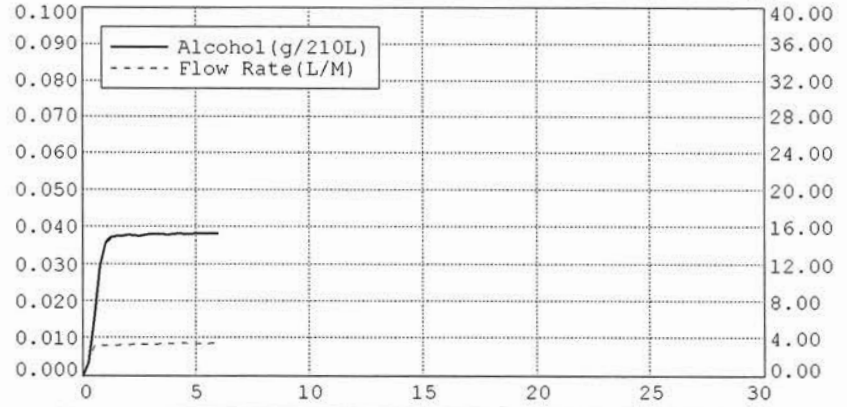
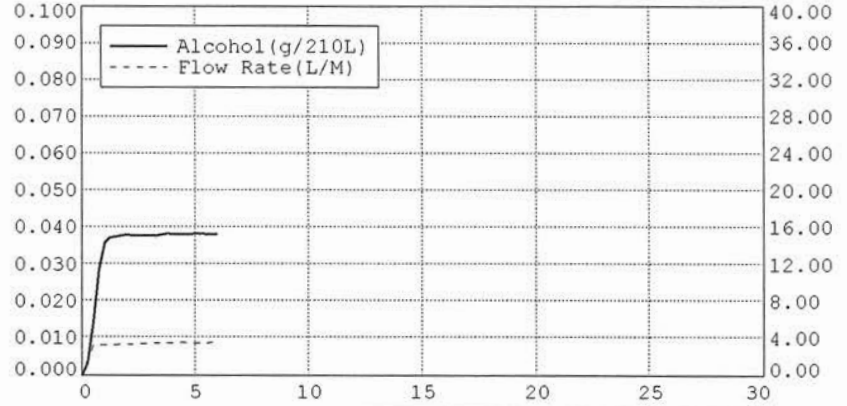
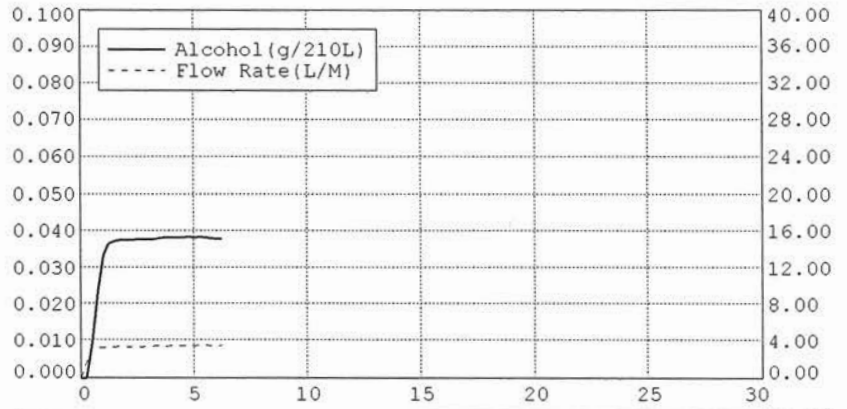
Date: 10/15/2021  
Time: 09:34:29

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
TARGET AT 29.32: 0.039  
LOT #: AG111710  
EXPIRATION: 04/27/2023  
TANK PRESSURE: 939 psi

BLANK TEST	0.000	09:36
INTERNAL STANDARD	VERIFIED	09:36
EXTERNAL STANDARD	0.039	09:36
BLANK TEST	0.000	09:37
EXTERNAL STANDARD	0.039	09:37
BLANK TEST	0.000	09:38
EXTERNAL STANDARD	0.039	09:38
BLANK TEST	0.000	09:39
EXTERNAL STANDARD	0.039	09:39
BLANK TEST	0.000	09:40
EXTERNAL STANDARD	0.039	09:40
BLANK TEST	0.000	09:41

Average = 0.0390  
Std Dev = 0.0000





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100697

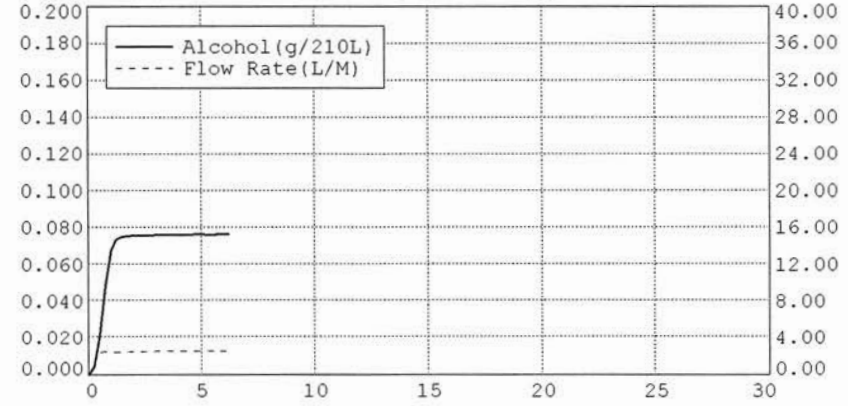
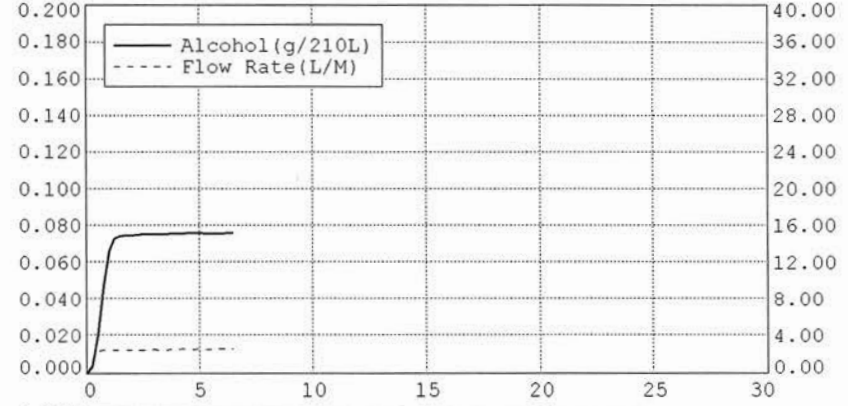
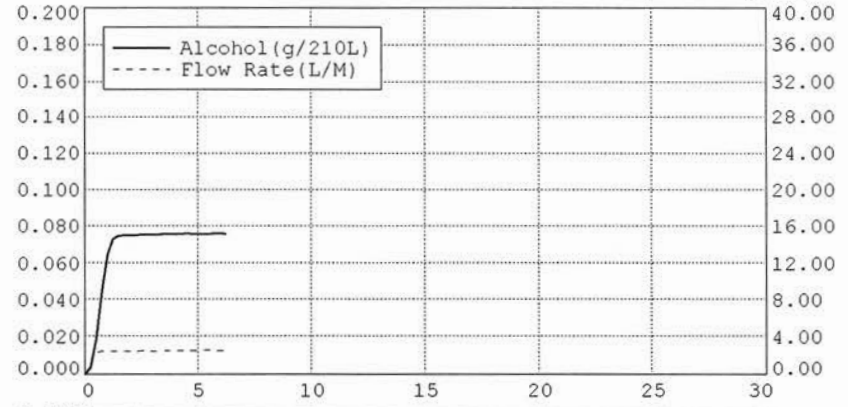
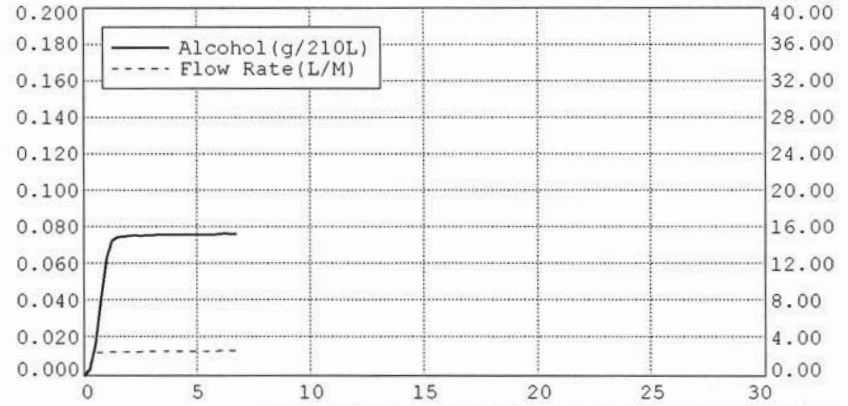
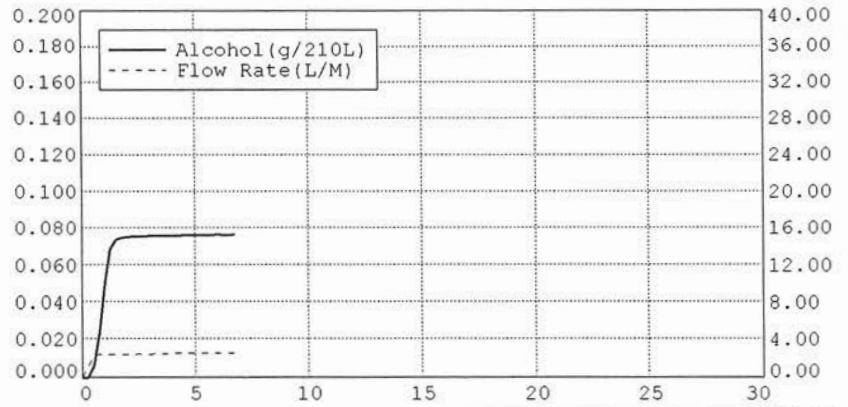
Date: 10/15/2021  
 Time: 10:07:35

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.33: 0.078  
 LOT #: AG018102  
 EXPIRATION: 06/29/2022  
 TANK PRESSURE: 324 psi

BLANK TEST	0.000	10:11
INTERNAL STANDARD	VERIFIED	10:11
EXTERNAL STANDARD	0.077	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.077	10:12
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.077	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.077	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.077	10:15
BLANK TEST	0.000	10:16

Average = 0.0770  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
DATAMASTER dmt: 100697

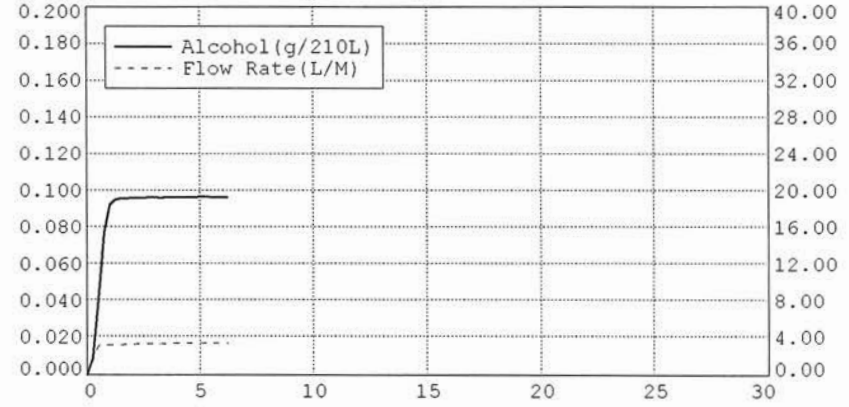
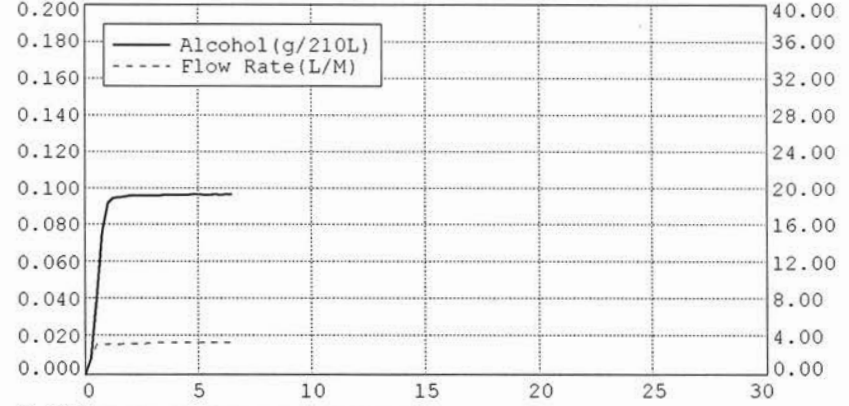
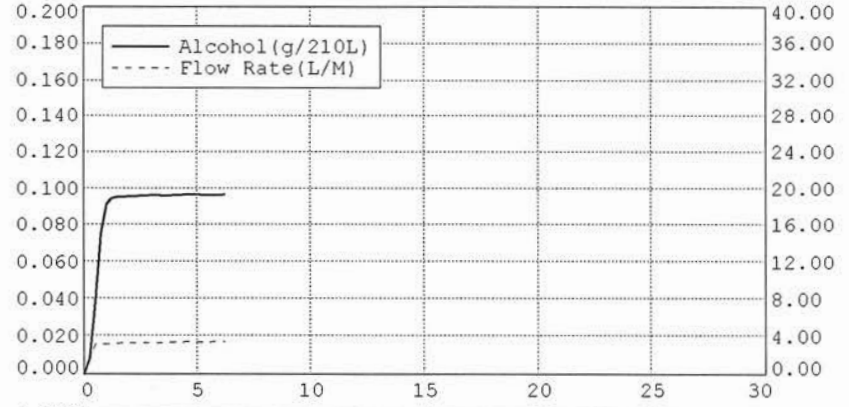
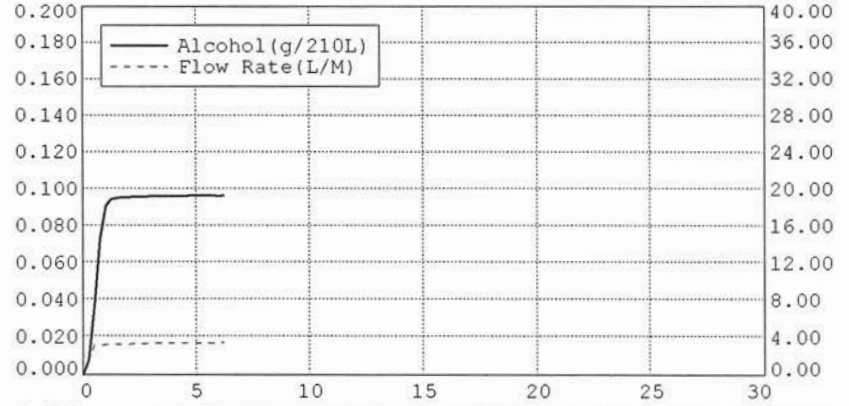
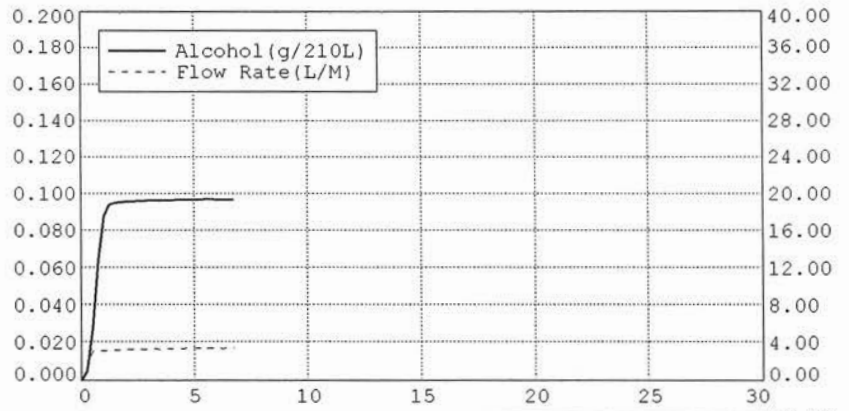
Date: 10/15/2021  
Time: 10:17:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
TARGET AT 29.34: 0.098  
LOT #: AG108404  
EXPIRATION: 03/25/2023  
TANK PRESSURE: 900 psi

BLANK TEST	0.000	10:18
INTERNAL STANDARD	VERIFIED	10:18
EXTERNAL STANDARD	0.098	10:19
BLANK TEST	0.000	10:20
EXTERNAL STANDARD	0.097	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.097	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.097	10:22
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.098	10:23
BLANK TEST	0.000	10:24

Average = 0.0974  
Std Dev = 0.0005





LINEARITY CHECK: Control Test 5

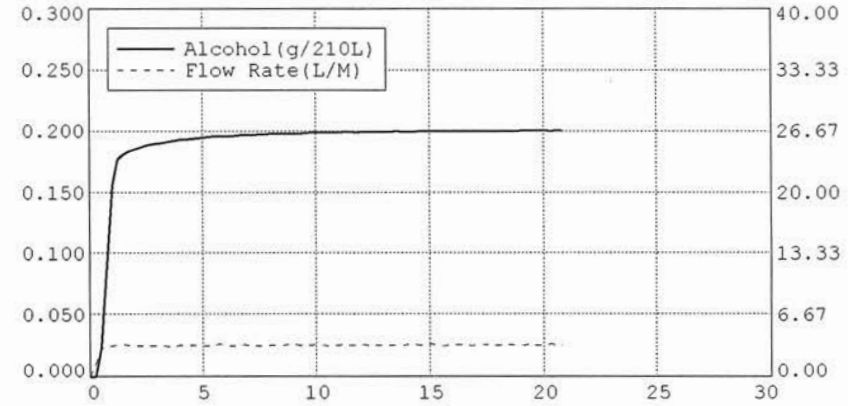
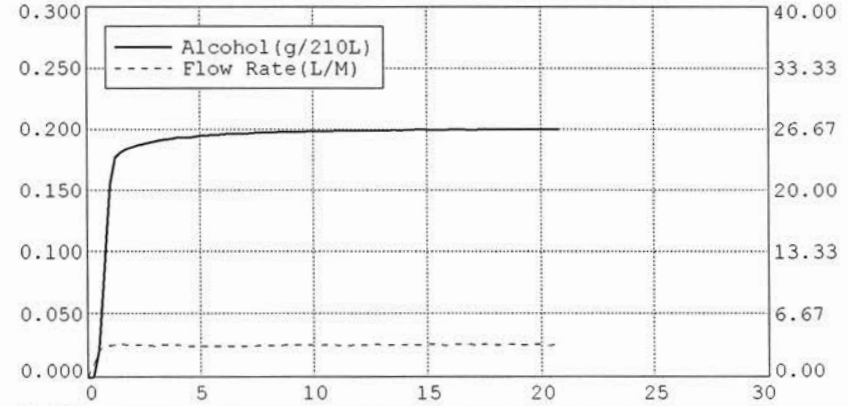
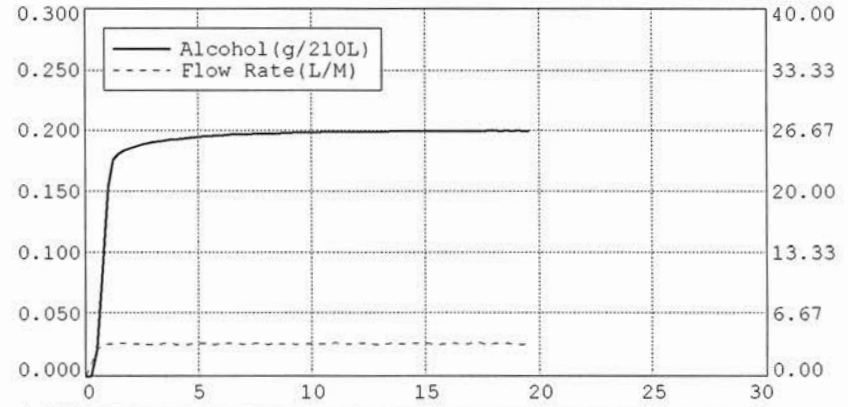
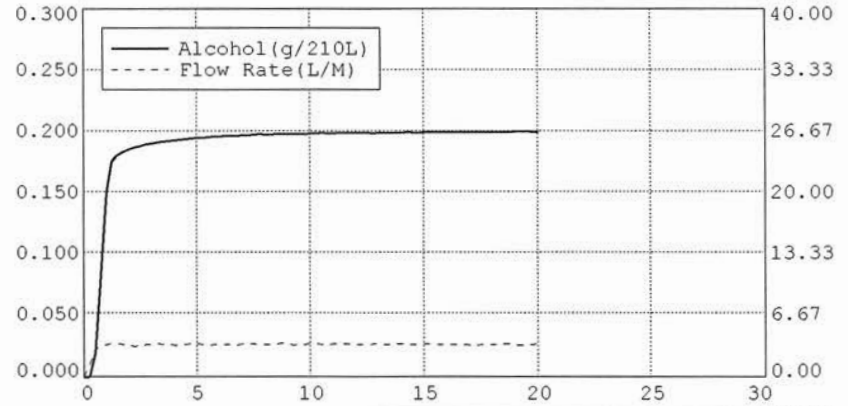
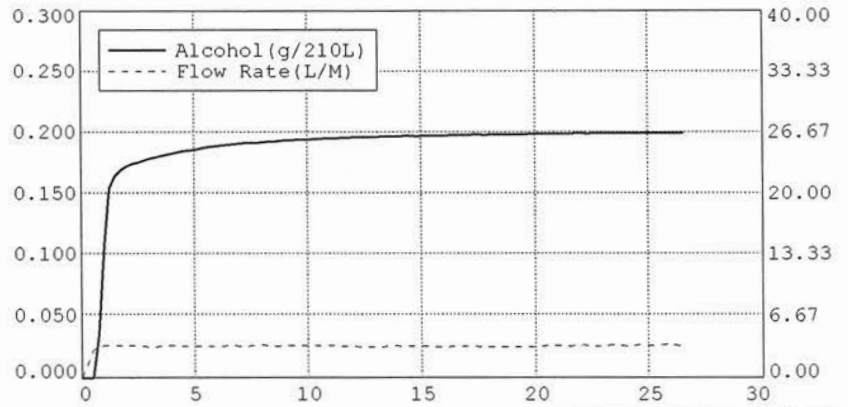
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 Alaska Department of Public Safety  
 DATAMASTER dmt: 100697  
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Date: 10/15/2021  
 Time: 10:24:51

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

BLANK TEST	0.000	10:26
INTERNAL STANDARD	VERIFIED	10:26
EXTERNAL STANDARD	0.200	10:27
BLANK TEST	0.000	10:28
EXTERNAL STANDARD	0.201	10:28
BLANK TEST	0.000	10:29
EXTERNAL STANDARD	0.201	10:29
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.201	10:31
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.201	10:32
BLANK TEST	0.000	10:33

Average = 0.2008  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

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 Alaska Department of Public Safety  
 DATAMASTER dmt: 100697  
 -----

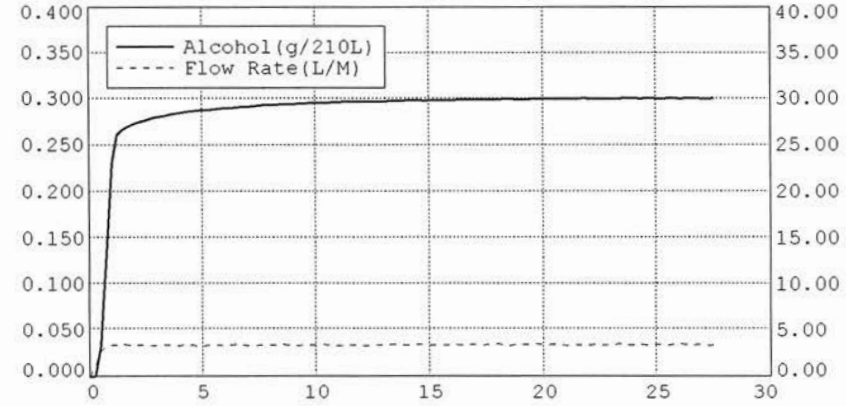
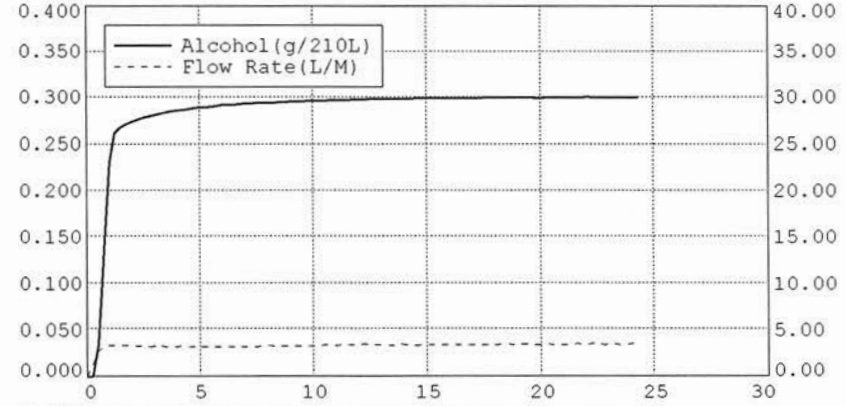
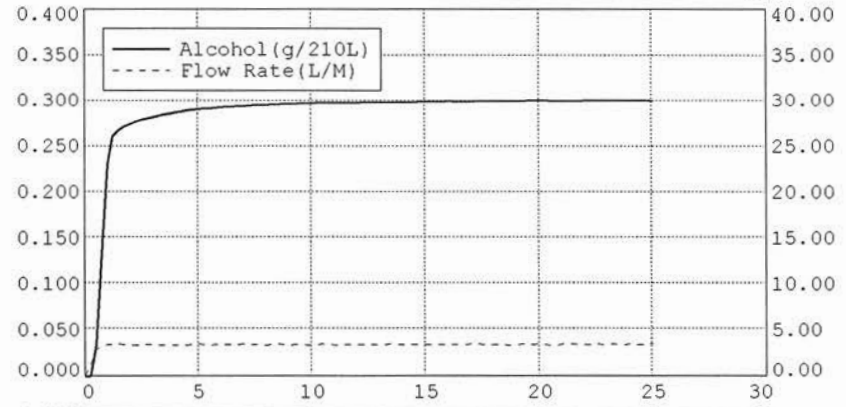
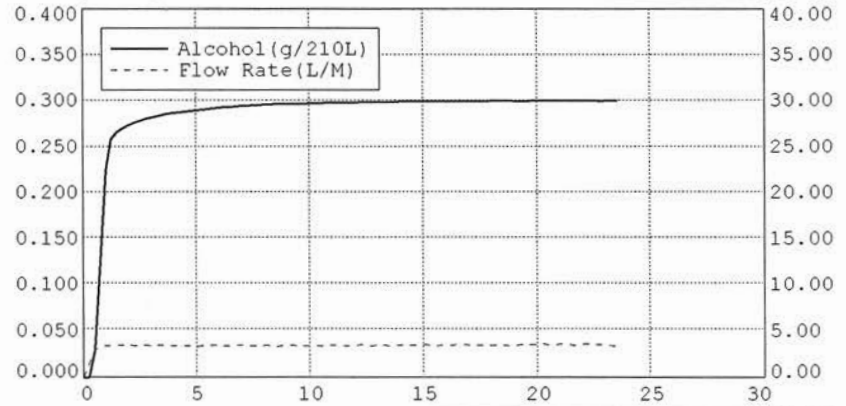
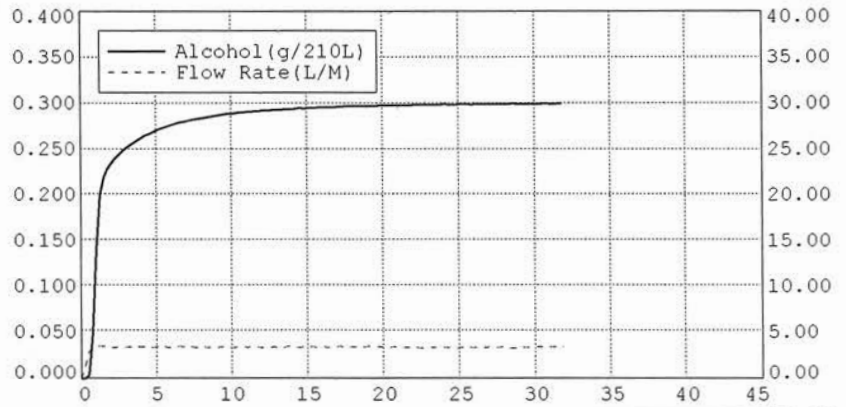
Date: 10/15/2021  
 Time: 10:44:09

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
 LOT #: 21030  
 EXPIRATION: 02/02/2023

BLANK TEST	0.000	10:45
INTERNAL STANDARD	VERIFIED	10:45
EXTERNAL STANDARD	0.299	10:46
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.300	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.300	10:48
BLANK TEST	0.000	10:49
EXTERNAL STANDARD	0.300	10:50
BLANK TEST	0.000	10:51
EXTERNAL STANDARD	0.300	10:51
BLANK TEST	0.000	10:52

Average = 0.2998  
 Std Dev = 0.0004





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100697

Date: 10/15/2021  
Time: 11:16:28

SUBJECT NAME:  
TEST TEST  
LICENSE #: INCOMPLETE

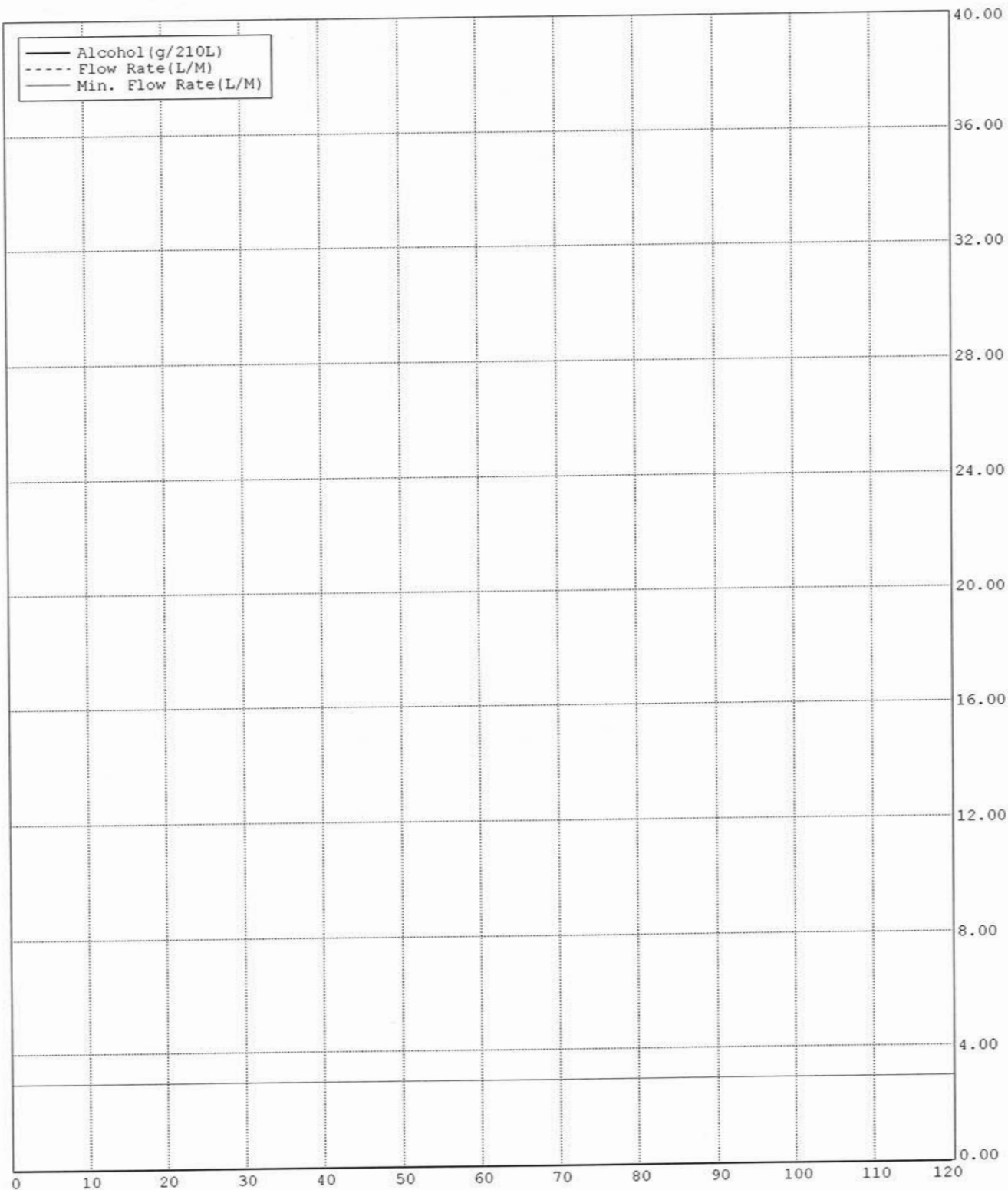
OPERATOR NAME:  
COLLEEN S OBRYANT  
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.37: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	11:21
BLANK TEST	0.000	11:21
INTERNAL STANDARD	VERIFIED	11:22
EXTERNAL STANDARD	0.077	11:22
BLANK TEST	0.000	11:23
SUBJECT SAMPLE	INCOMPLETE	11:25

CB



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100697

Date: 10/15/2021  
Time: 13:56:24

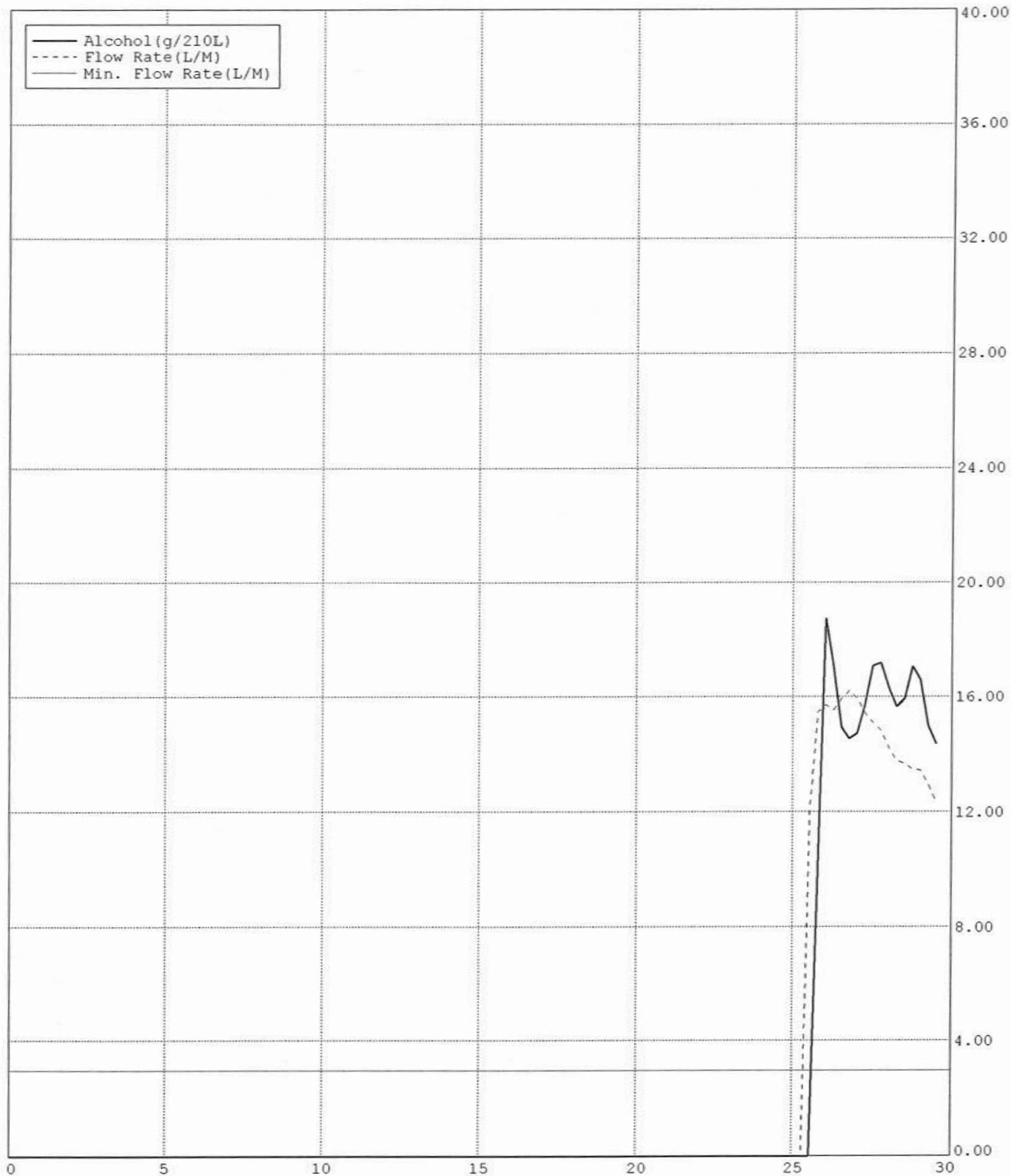
SUBJECT NAME:  
TEST TEST  
LICENSE #: INVALID

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

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.41: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	13:57
BLANK TEST	0.000	13:57
INTERNAL STANDARD	VERIFIED	13:57
EXTERNAL STANDARD	0.077	13:57
BLANK TEST	0.000	13:58
SUBJECT SAMPLE	INVALID	13:59



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100697

Date: 10/15/2021  
Time: 11:40:01

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 29.37: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

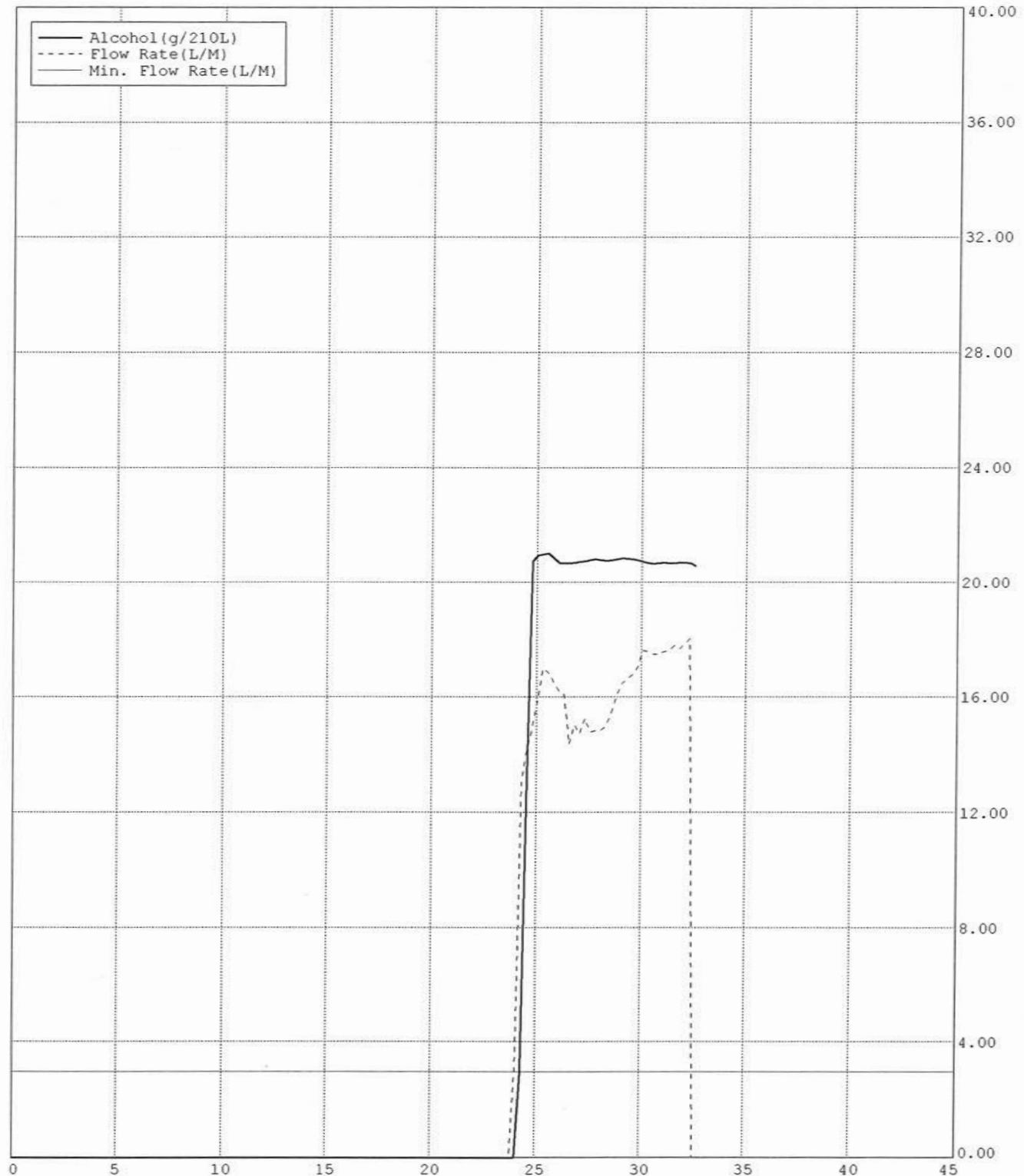
DIAGNOSTIC CHECK	PASSED	11:41
BLANK TEST	0.000	11:41
INTERNAL STANDARD	VERIFIED	11:41
Xq = 0.081 (1.42%)		
EXTERNAL STANDARD	0.078	11:41
X[1] = 0.0778 (0.0025) (0.0041)		
BLANK TEST	0.000	11:42
SUBJECT SAMPLE	XXX	11:43
X[1] = 0.1032 (-0.0188) (0.0008)		

Interference Detected

*Filter 2 Avg: 0.0018*

*Filter 3 Avg: 0.0031*

*CPB*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100697

Date: 10/15/2021  
Time: 11:45:53

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-IPA

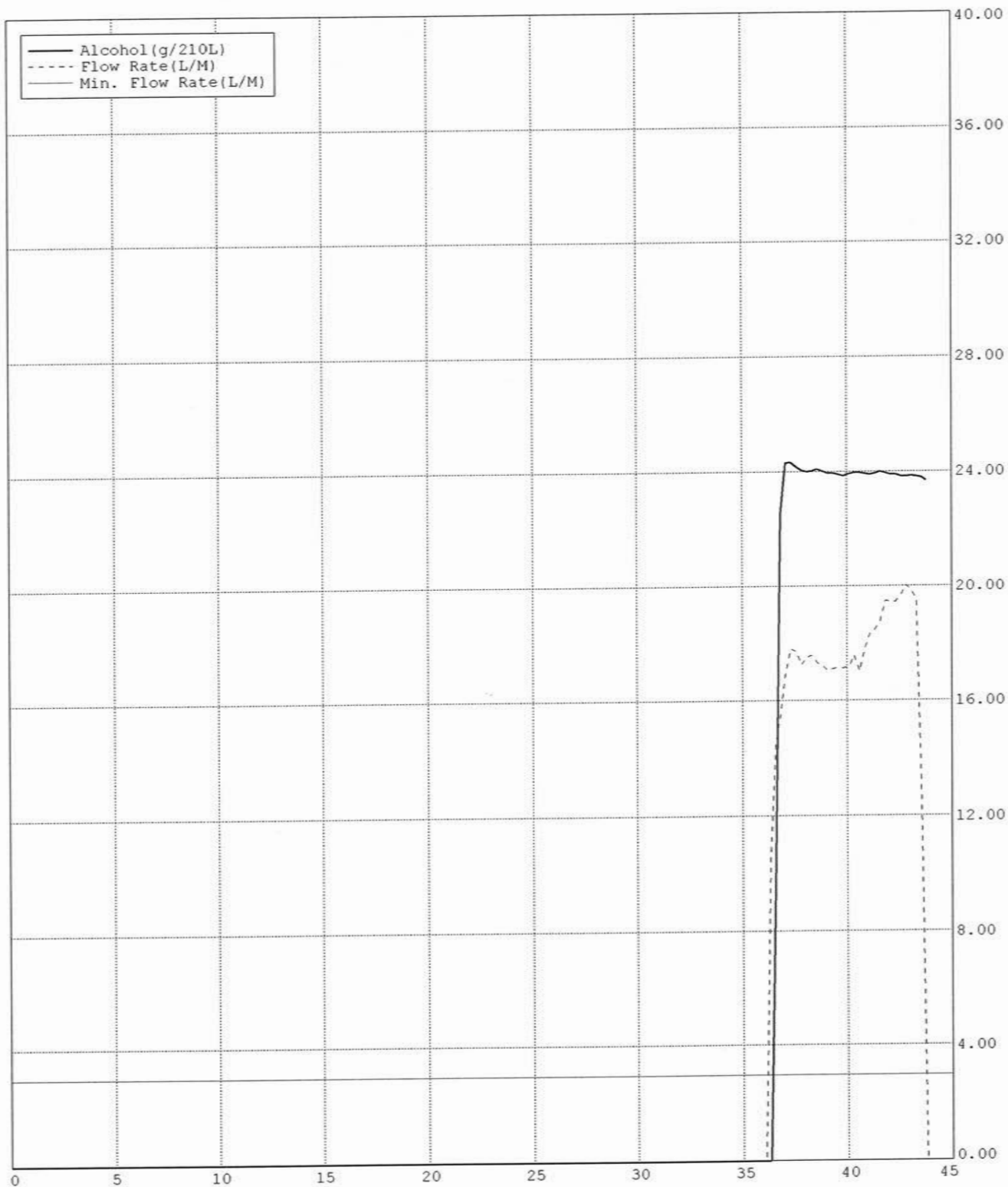
OPERATOR NAME:  
COLLEEN S OBRYANT  
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.38: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	11:47
BLANK TEST	0.000	11:47
INTERNAL STANDARD	VERIFIED	11:47
Xq = 0.081 (1.42%)		
EXTERNAL STANDARD	0.078	11:48
X[1] = 0.0776 (0.0021) (0.0035)		
BLANK TEST	0.000	11:49
SUBJECT SAMPLE	XXX	11:49
X[1] = 0.1186 (-0.0190) (0.0029)		

Interference Detected





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100697

Date: 10/15/2021  
Time: 11:54:21

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-NEGATIVE

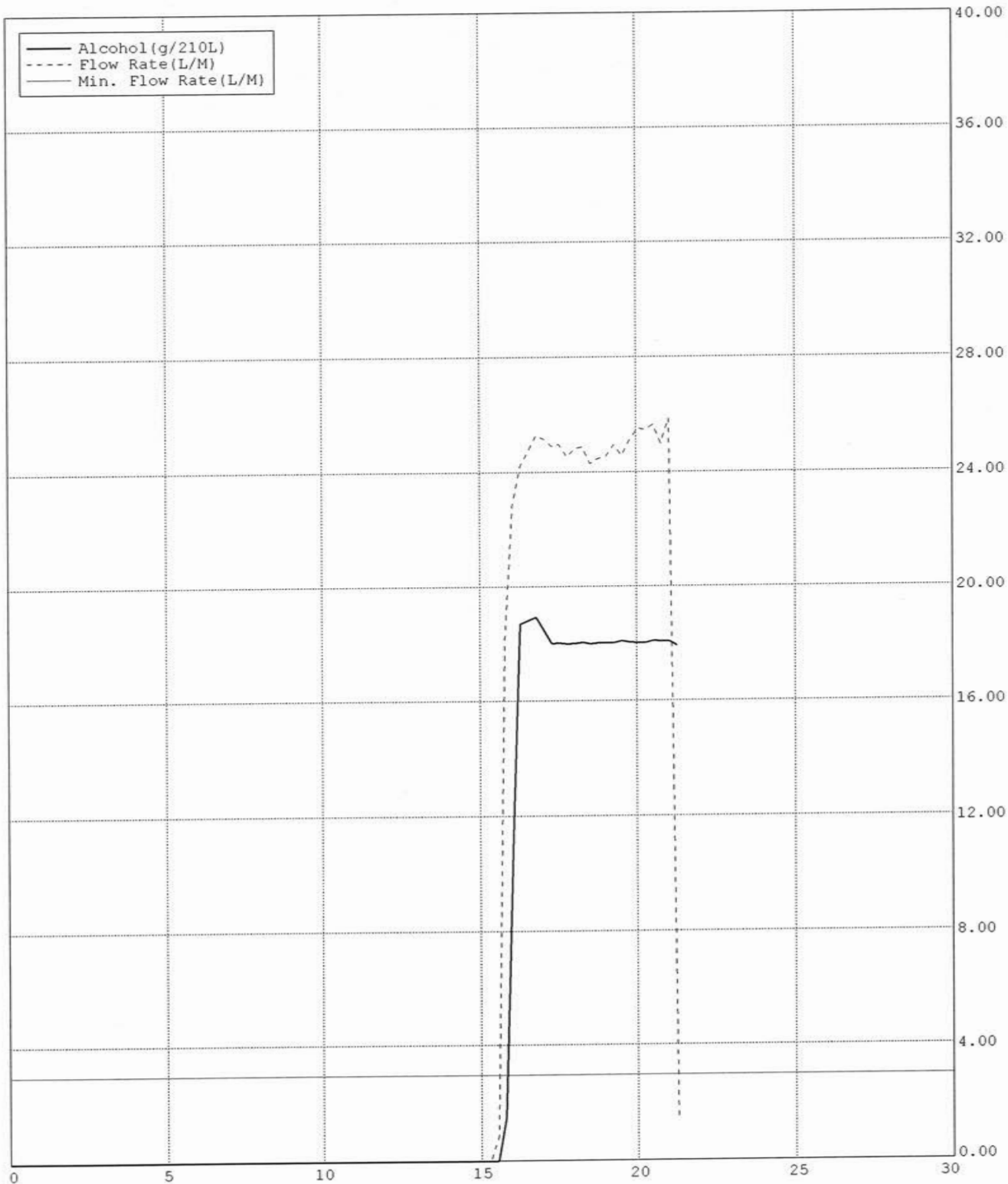
OPERATOR NAME:  
COLLEEN S OBRYANT  
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.38: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	11:55
BLANK TEST	0.000	11:55
INTERNAL STANDARD	VERIFIED	11:55
Xq = 0.080 (0.44%)		
EXTERNAL STANDARD	0.076	11:55
X[1] = 0.0764 (0.0010) (0.0030)		
BLANK TEST	0.000	11:56
SUBJECT SAMPLE (Vol=2.25L)	0.089	11:57
X[1] = 0.0896 (-0.0004) (0.0021)		
BLANK TEST	0.000	11:58
EXTERNAL STANDARD	0.077	11:58
X[1] = 0.0769 (0.0015) (0.0019)		
BLANK TEST	0.000	11:59

CEP



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100697

Date: 10/15/2021  
Time: 11:32:09

SUBJECT NAME:  
TEST TEST  
LICENSE #: MAX ATTEMPTS

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

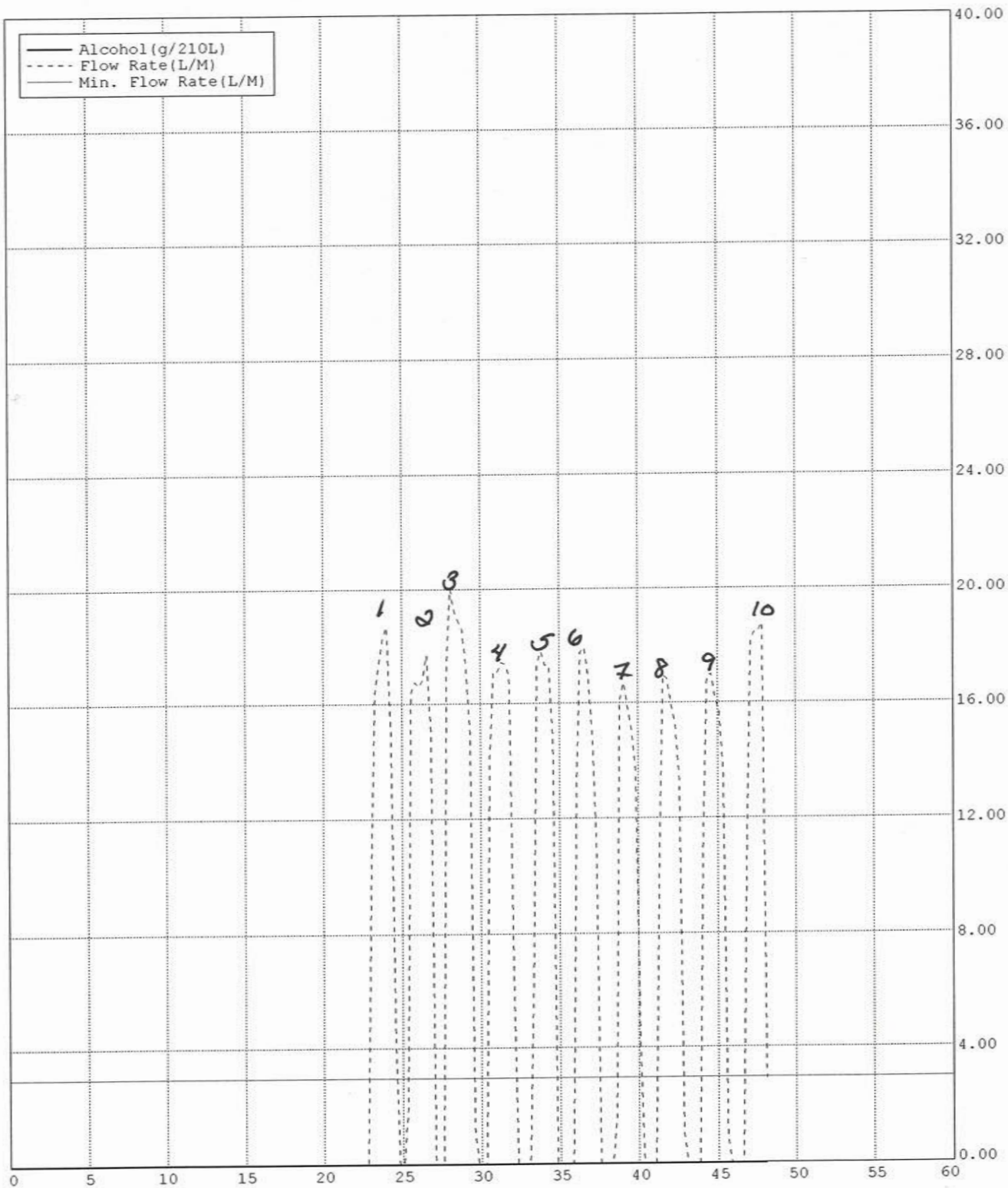
DEPT/AGENCY:  
AAA1  
CASE/REPORT: 21-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.37: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	11:34
BLANK TEST	0.000	11:34
INTERNAL STANDARD	VERIFIED	11:34
EXTERNAL STANDARD	0.077	11:34
BLANK TEST	0.000	11:35
SUBJECT SAMPLE	XXX	11:36

Maximum Attempts Exceeded

*OB*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100697

Date: 10/15/2021  
Time: 14:04:32

SUBJECT NAME:  
TEST TEST  
LICENSE #: RFI

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

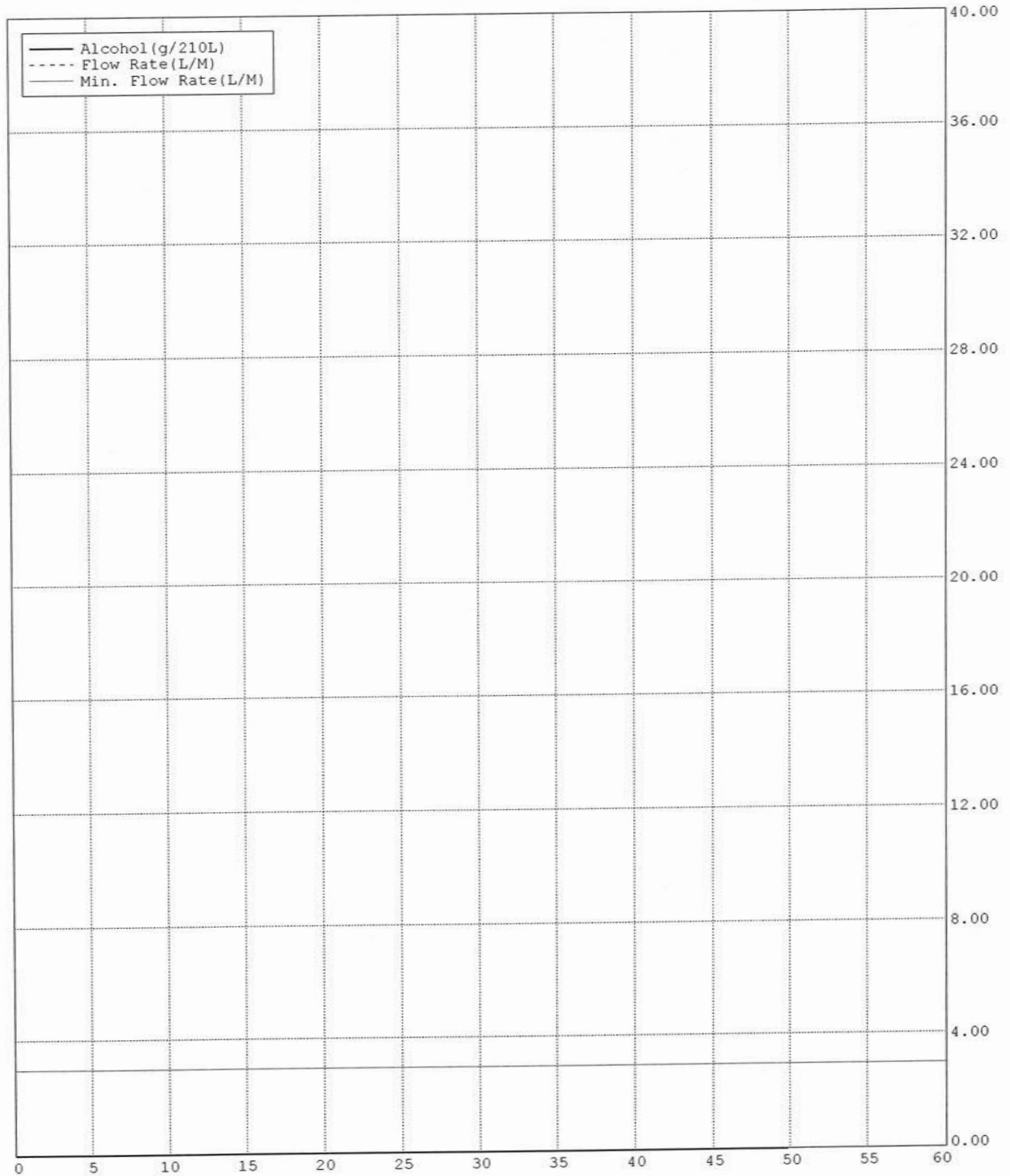
DEPT/AGENCY:  
AAA1  
CASE/REPORT: 21-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.42: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	14:05
BLANK TEST	0.000	14:05
INTERNAL STANDARD	VERIFIED	14:05
EXTERNAL STANDARD	0.077	14:06
BLANK TEST	0.000	14:07

RFI DETECTED

*CERS*





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100697

Date: 10/15/2021  
Time: 14:19:39

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 29.42: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	14:21
BLANK TEST	0.000	14:21
INTERNAL STANDARD	VERIFIED	14:21
EXTERNAL STANDARD	0.078	14:22
BLANK TEST	0.000	14:23
SUBJECT SAMPLE (Vol=2.49L)	0.000	14:23
BLANK TEST	0.000	14:24
EXTERNAL STANDARD	0.078	14:24
BLANK TEST	0.000	14:25

*CEB*

