

# 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 100375 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 1.6 L (1.3L to 1.7L)

### Linearity Test (attached)

#### Levels Used

- i. 0.020g/210L Mnf Argas Lot AG 928203 Exp 10/9/21
- ii. 0.040g/210L Mnf Argas Lot AG 111710 Exp 4/27/23
- iii. 0.080g/210L Mnf Argas Lot AG 018102 Exp 6/29/22
- iv. 0.100g/210L Mnf Argas Lot AG 108404 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

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: 100375  
-----

Date: 10/04/2021  
Time: 12:13:54

VERSIONS

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

TEMPERATURES

Sample Chamber = 49.0°C            PASSED  
(44.0°C - 52.0°C)  
Breath Tube       = 48.1°C        PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage    = 1.54 V            PASSED  
(0.92 V - 2.16 V)  
Cooler Voltage = 1.60 V            PASSED  
(0.92 V - 2.16 V)  
Bias Voltage    = 80 V             PASSED  
(47 V - 111 V)  
Chopper Freq   = 544 Hz            PASSED  
(475 Hz - 575 Hz)  
Barometer       = 29.9 in

PUMP INFO

Flow Rate = 3.946 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 = 0.092 0.67% (0.00% - 4.00%)            PASSED

Technician Screen

-----  
DATAMASTER dmt: 100375  
-----

Date: 10/04/2021  
Time: 12:34 PM

Temperatures (°C)

Sample Cell: 48.9°C  
Breath Tube: 48.0°C

Current Barometer 29.9 in  
Volume (Ltr) 1.43

Settings

Lamp: 1.54 V  
Bias: 80 V  
Cooler: 1.59 V  
Chopper: 543 Hz

Voltages (V)

Flow: 1.05 V  
Detector: -0.050 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100375  
-----

Date: 04/12/2011  
Time: 13:58:30

OPERATOR NAME:  
COLLEEN S OBRYANT  
CERTIFICATE #: 6237

LOT #: GUTH100  
BOTTLE #: 10260  
EXPIRATION: 10/25/2012

Ca = 0.1000  
CAL = 0.979715    0.800 <= CAL < 1.200  
b1 = 0.0001    0.0000 <= b1 < 0.0040  
b2 = 0.0041    0.0010 <= b2 < 0.0100  
b3 = 0.0003    0.0000 <= b3 < 0.0040  
Xq = 0.0913    0.0500 <= Xq < 0.2000  
a21 = 1.104953    1.050 <= a21 < 1.300  
a31 = 0.439751    0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dmt: 100375

Date: 10/04/2021  
Time: 12:35:34

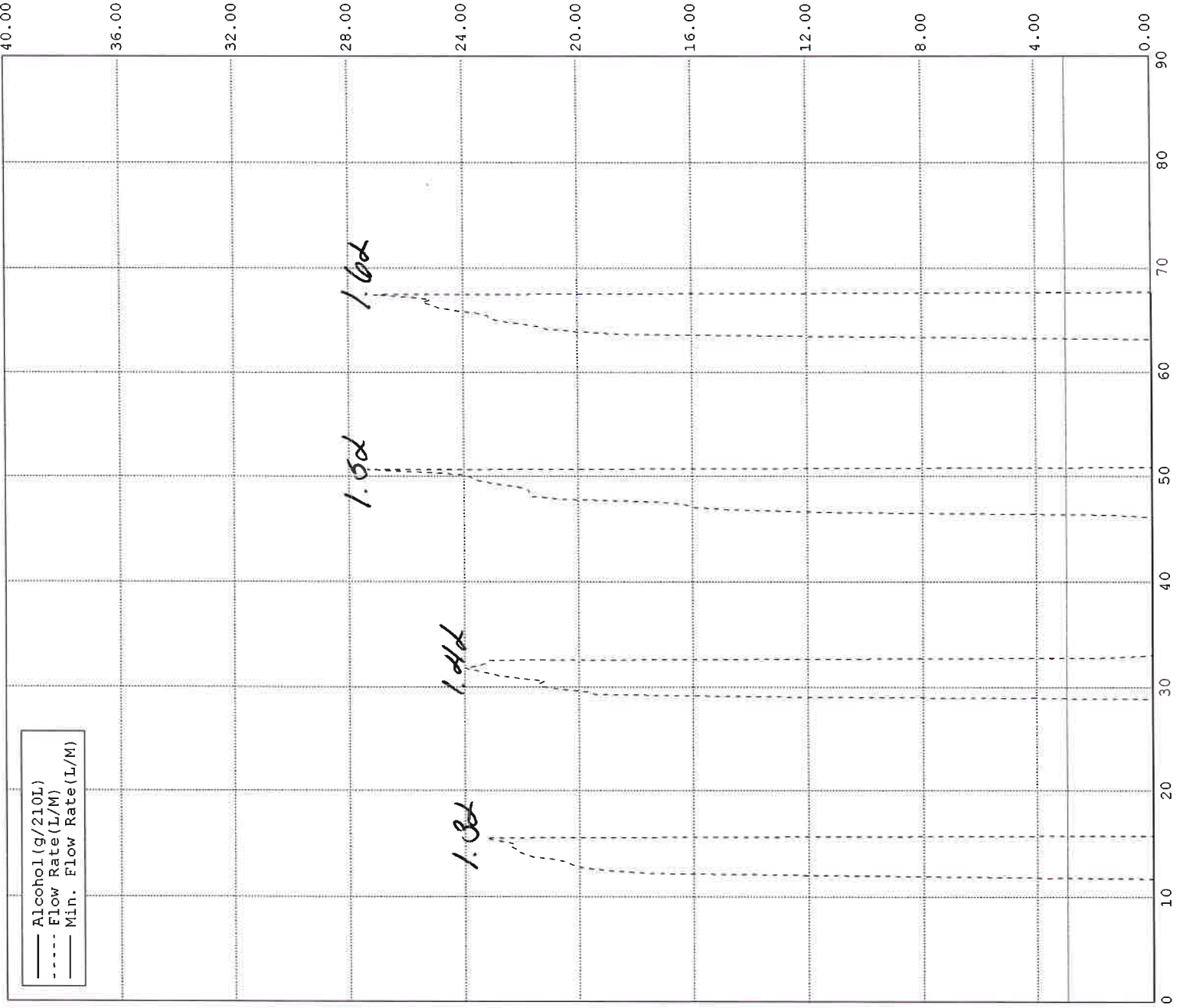
SUBJECT NAME:  
TEST TEST  
LICENSE #: MIN VOLUME

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 29.89: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	12:36
BLANK TEST	0.000	12:36
INTERNAL STANDARD	VERIFIED	12:36
EXTERNAL STANDARD	0.079	12:37
BLANK TEST	0.000	12:38
SUBJECT SAMPLE (Vol=1.60L)	0.000	12:39
BLANK TEST	0.000	12:40
EXTERNAL STANDARD	0.080	12:40
BLANK TEST	0.000	12:41



**LINEARITY CHECK**

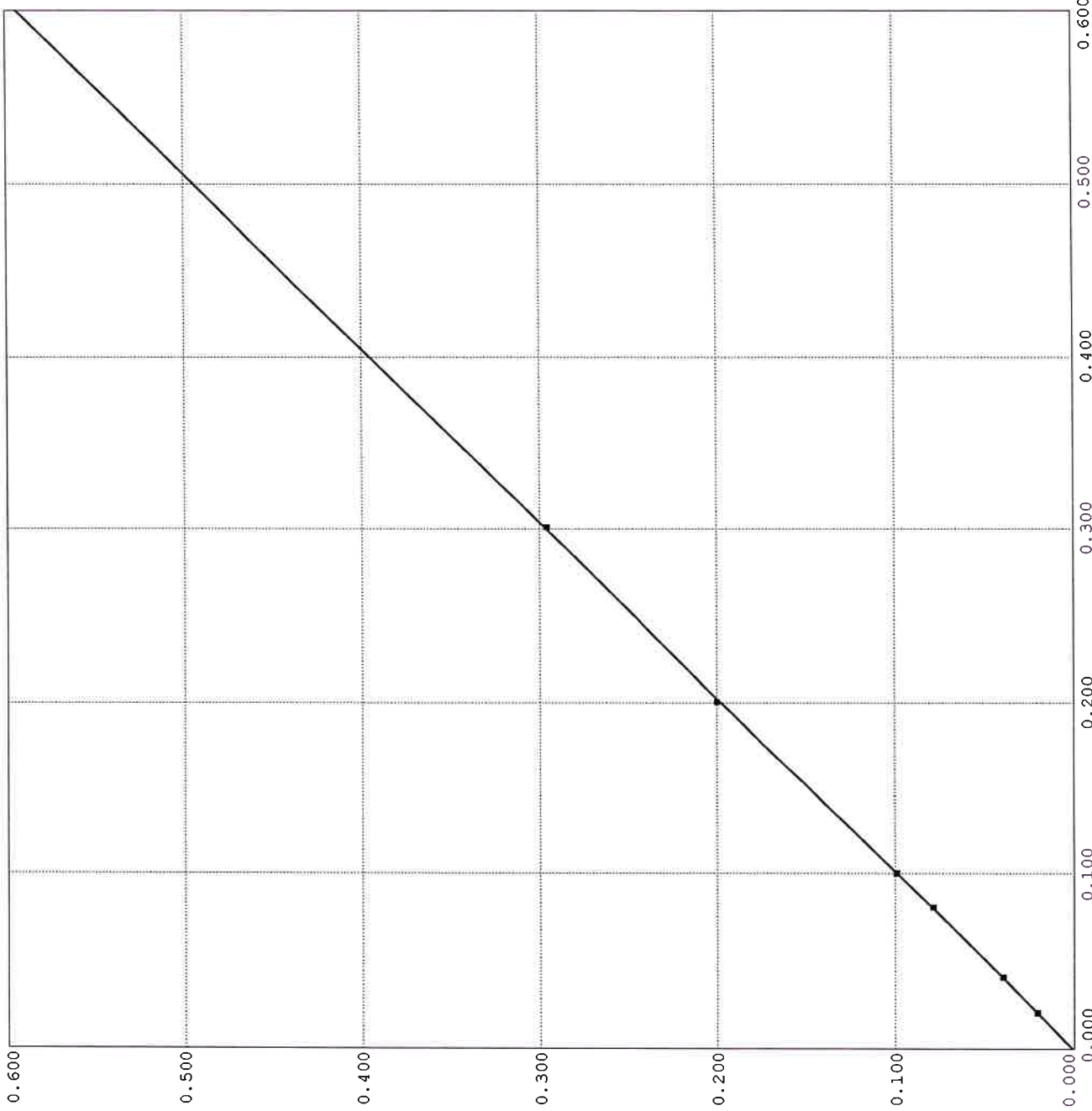
Alaska Department of Public Safety  
 DATAMASTER dmt: 100375

Date: 10/04/2021  
 Time: 12:54:32

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0210	0.0000
0.040	0.0404	0.0005
0.080	0.0798	0.0004
0.100	0.1000	0.0000
0.200	0.2008	0.0004
0.300	0.2966	0.0005

SLOPE = 0.988320  
 R<sup>2</sup> = 0.999905



*CS*



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

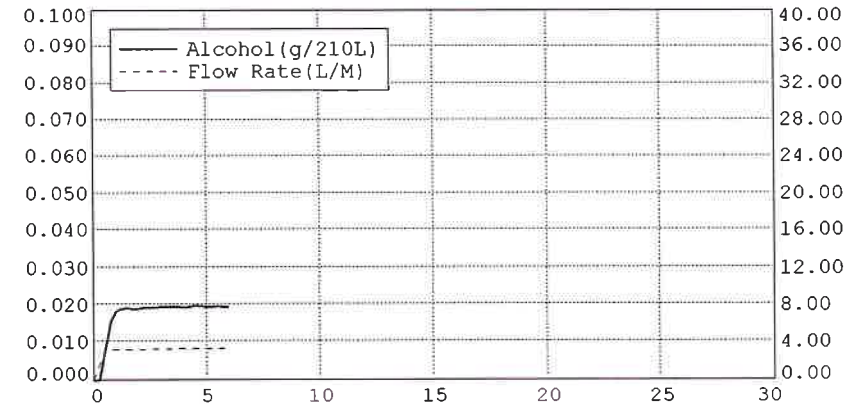
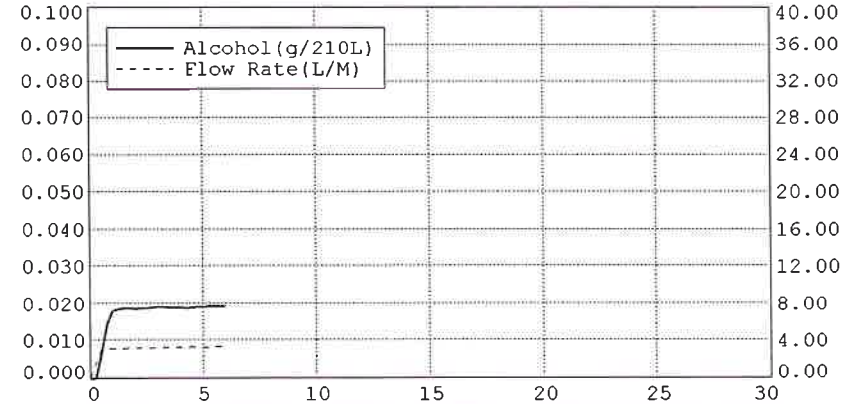
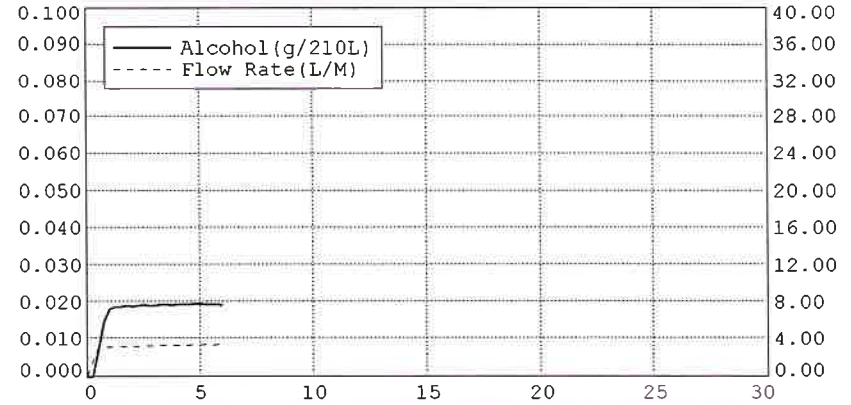
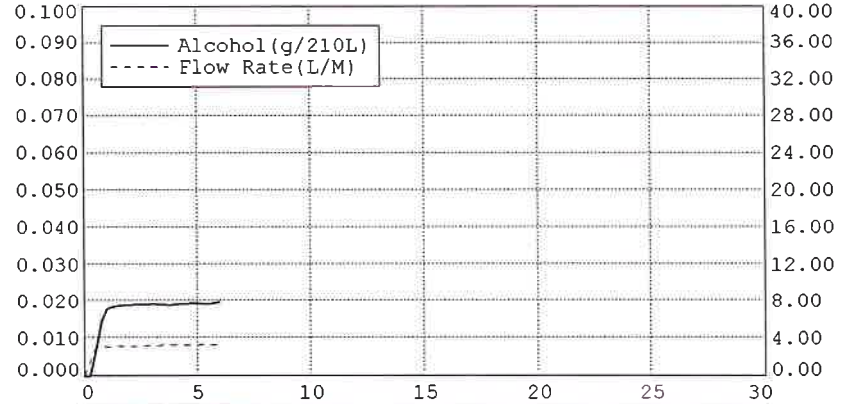
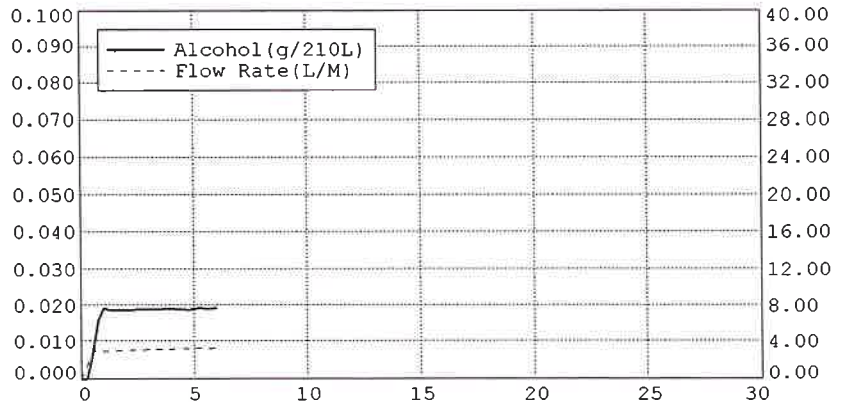
Date: 10/04/2021  
Time: 12:54:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
TARGET AT 29.88: 0.020  
LOT #: AG928203  
EXPIRATION: 10/09/2021  
TANK PRESSURE: 256 psi

BLANK TEST	0.000	13:10
INTERNAL STANDARD	VERIFIED	13:10
EXTERNAL STANDARD	0.021	13:10
BLANK TEST	0.000	13:11
EXTERNAL STANDARD	0.021	13:12
BLANK TEST	0.000	13:12
EXTERNAL STANDARD	0.021	13:13
BLANK TEST	0.000	13:14
EXTERNAL STANDARD	0.021	13:14
BLANK TEST	0.000	13:15
EXTERNAL STANDARD	0.021	13:15
BLANK TEST	0.000	13:16

Average = 0.0210  
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

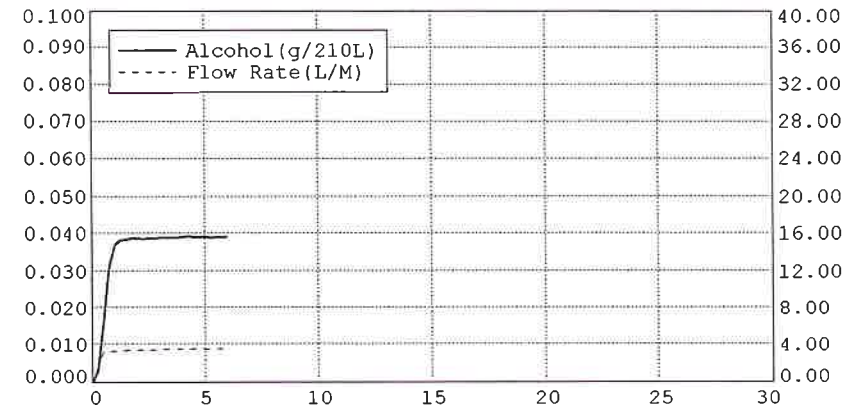
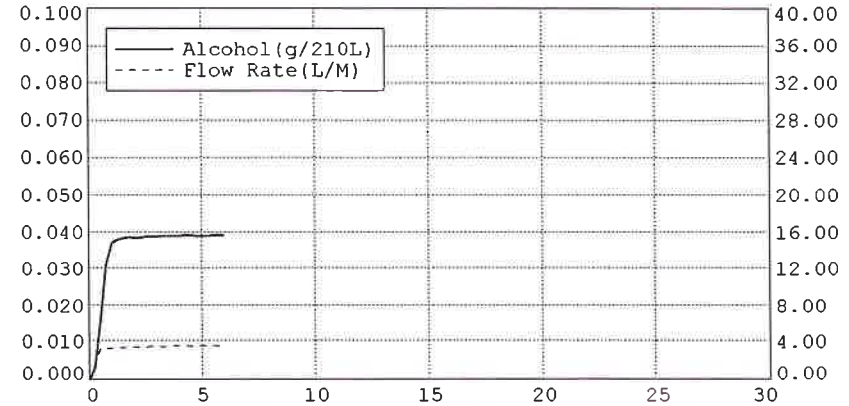
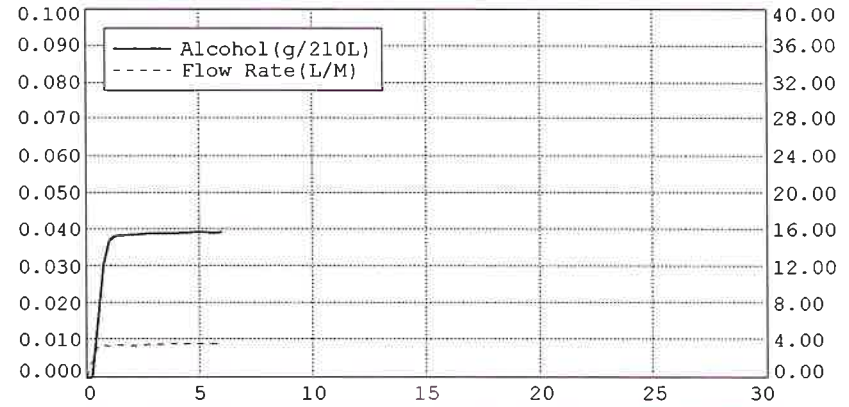
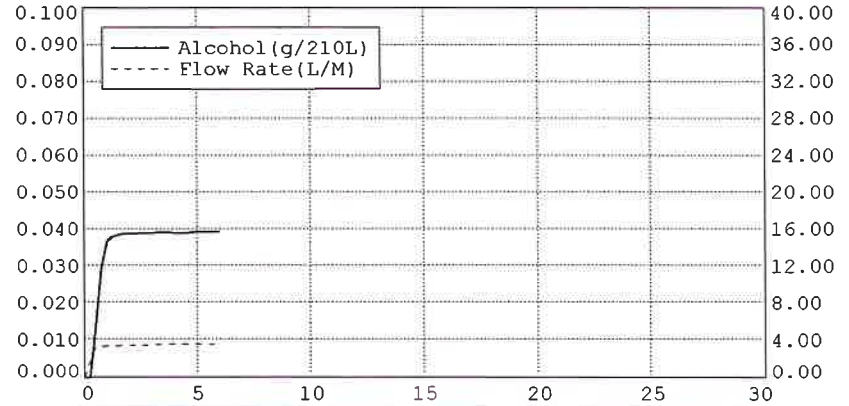
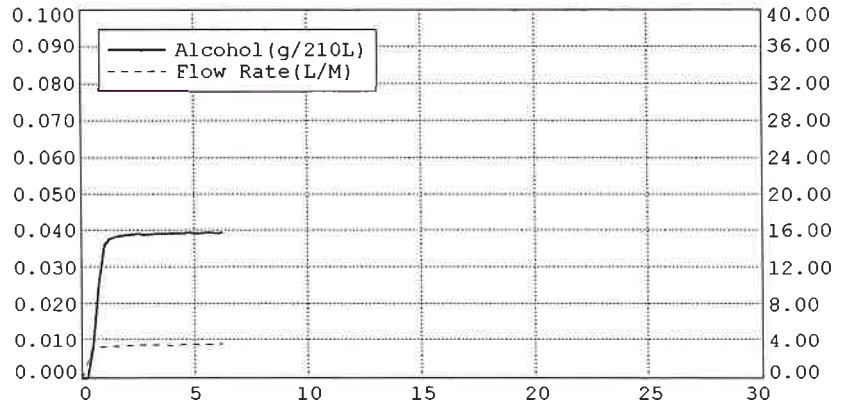
Date: 10/04/2021  
Time: 15:09:11

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
TARGET AT 29.88: 0.040  
LOT #: AG111710  
EXPIRATION: 04/27/2023  
TANK PRESSURE: 823 psi

BLANK TEST	0.000	15:10
INTERNAL STANDARD	VERIFIED	15:10
EXTERNAL STANDARD	0.041	15:10
BLANK TEST	0.000	15:11
EXTERNAL STANDARD	0.040	15:11
BLANK TEST	0.000	15:12
EXTERNAL STANDARD	0.041	15:12
BLANK TEST	0.000	15:13
EXTERNAL STANDARD	0.040	15:13
BLANK TEST	0.000	15:14
EXTERNAL STANDARD	0.040	15:15
BLANK TEST	0.000	15:15

Average = 0.0404  
Std Dev = 0.0005





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100375

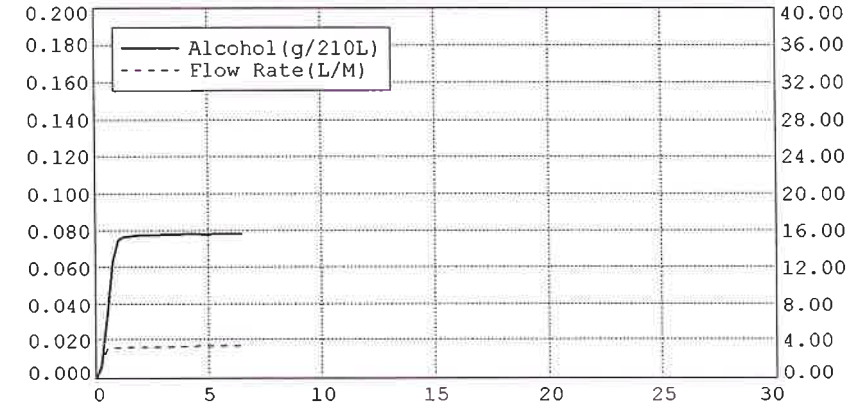
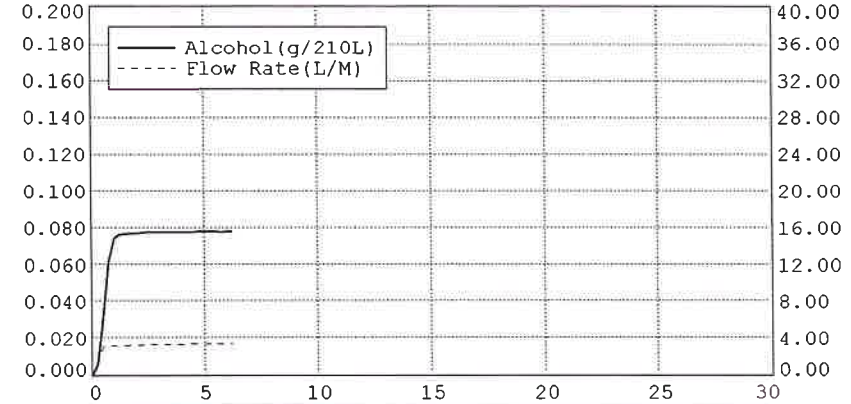
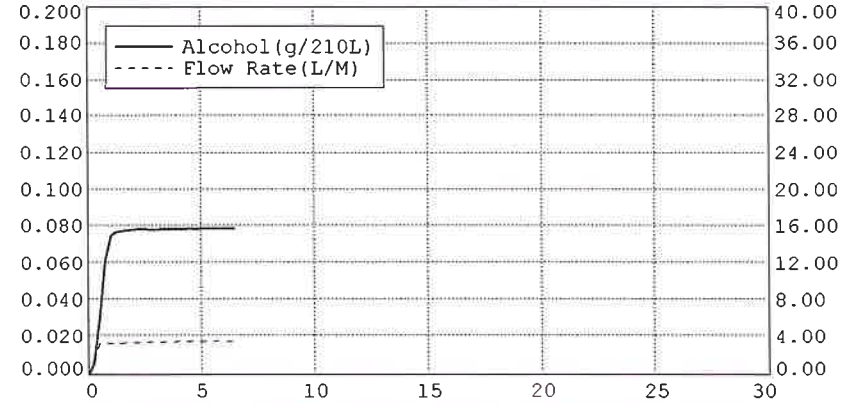
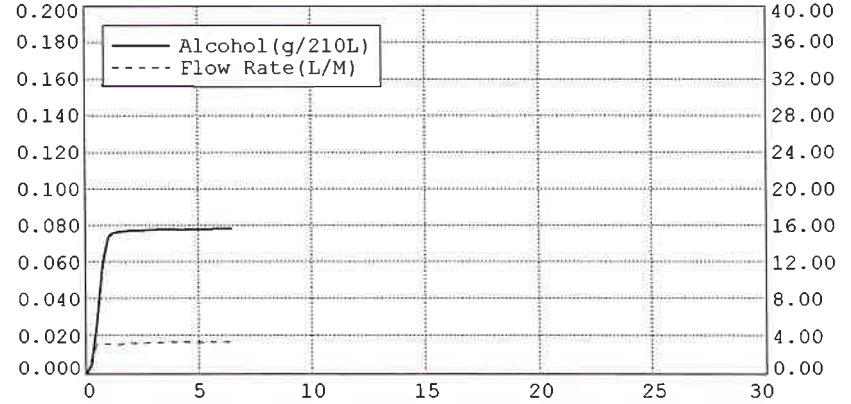
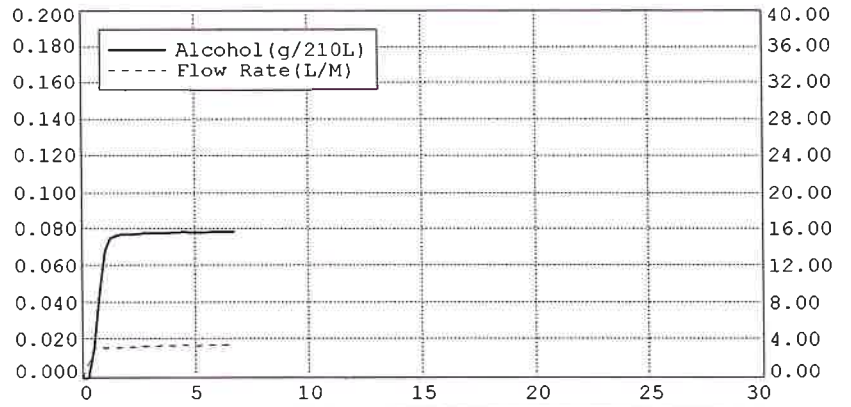
Date: 10/04/2021  
 Time: 15:17:18

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.87: 0.080  
 LOT #: AG018102  
 EXPIRATION: 06/29/2022  
 TANK PRESSURE: 519 psi

BLANK TEST	0.000	15:18
INTERNAL STANDARD	VERIFIED	15:18
EXTERNAL STANDARD	0.080	15:18
BLANK TEST	0.000	15:19
EXTERNAL STANDARD	0.080	15:19
BLANK TEST	0.000	15:20
EXTERNAL STANDARD	0.080	15:21
BLANK TEST	0.000	15:21
EXTERNAL STANDARD	0.079	15:22
BLANK TEST	0.000	15:23
EXTERNAL STANDARD	0.080	15:23
BLANK TEST	0.000	15:24

Average = 0.0798  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

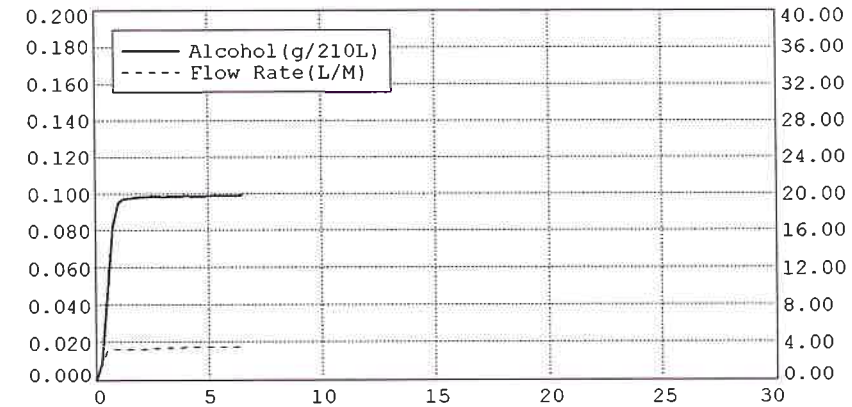
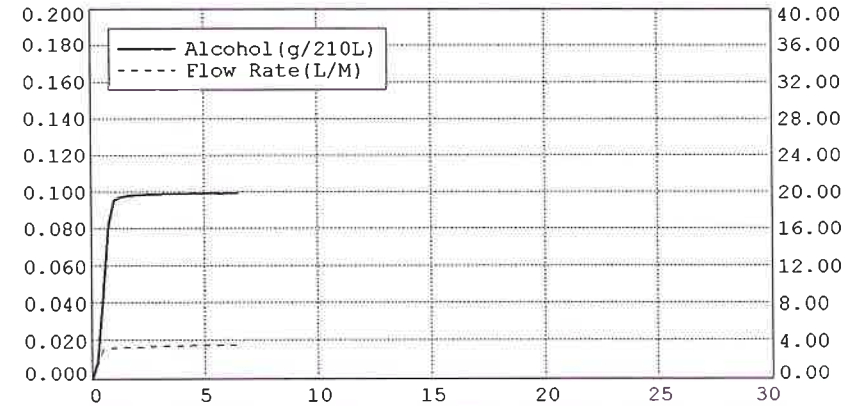
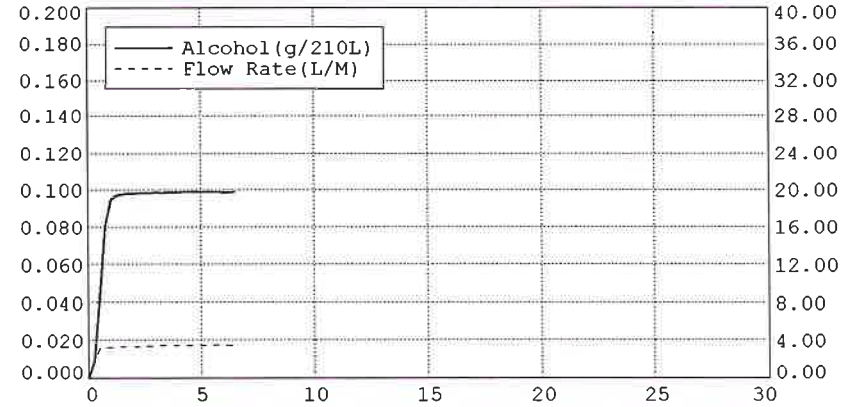
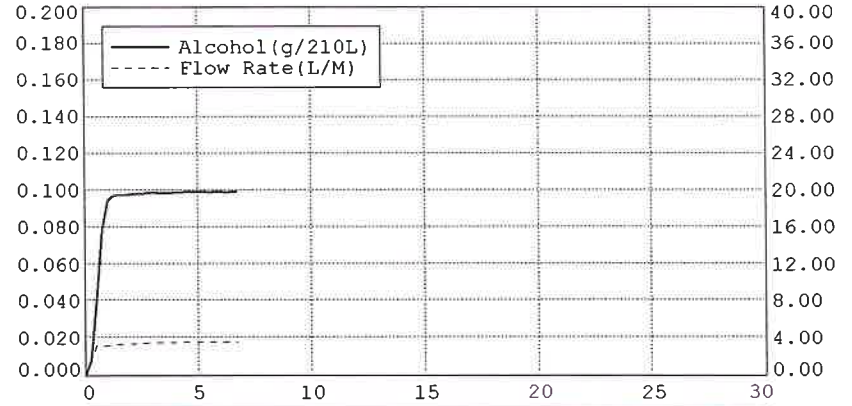
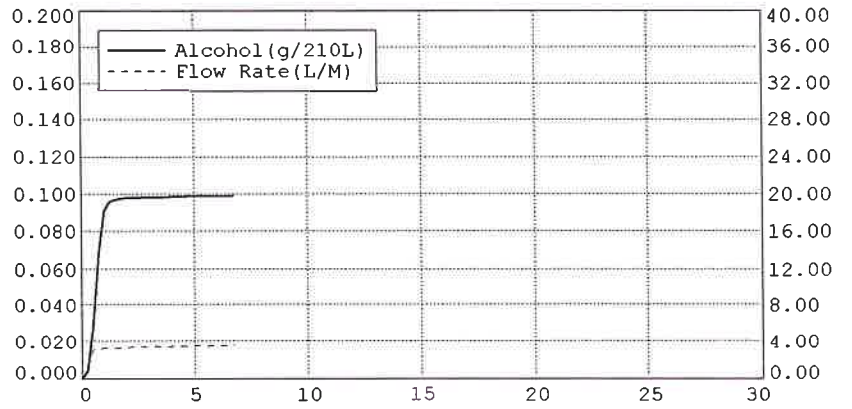
Date: 10/04/2021  
Time: 15:27:15

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
TARGET AT 29.87: 0.100  
LOT #: AG108404  
EXPIRATION: 03/25/2023  
TANK PRESSURE: 1002 psi

BLANK TEST	0.000	15:28
INTERNAL STANDARD	VERIFIED	15:28
EXTERNAL STANDARD	0.100	15:28
BLANK TEST	0.000	15:29
EXTERNAL STANDARD	0.100	15:29
BLANK TEST	0.000	15:30
EXTERNAL STANDARD	0.100	15:30
BLANK TEST	0.000	15:31
EXTERNAL STANDARD	0.100	15:32
BLANK TEST	0.000	15:32
EXTERNAL STANDARD	0.100	15:33
BLANK TEST	0.000	15:34

Average = 0.1000  
Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

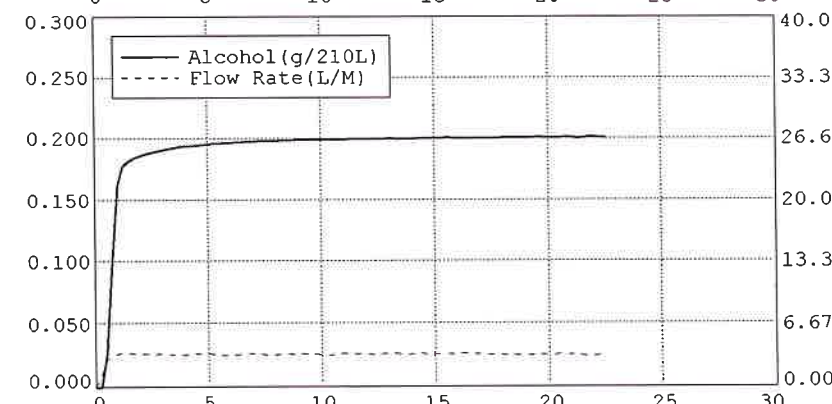
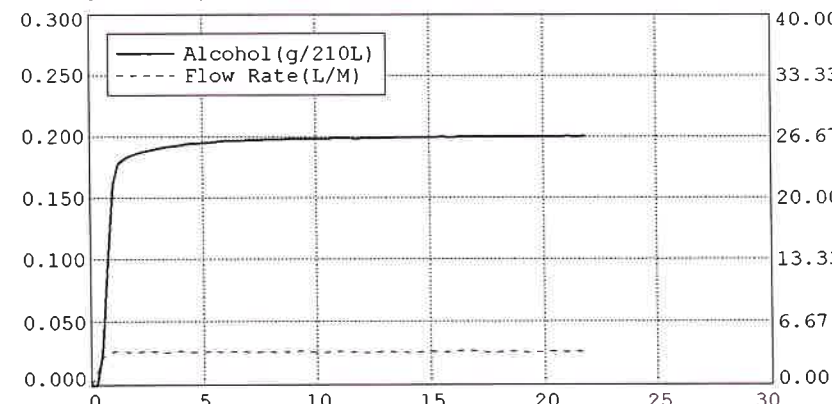
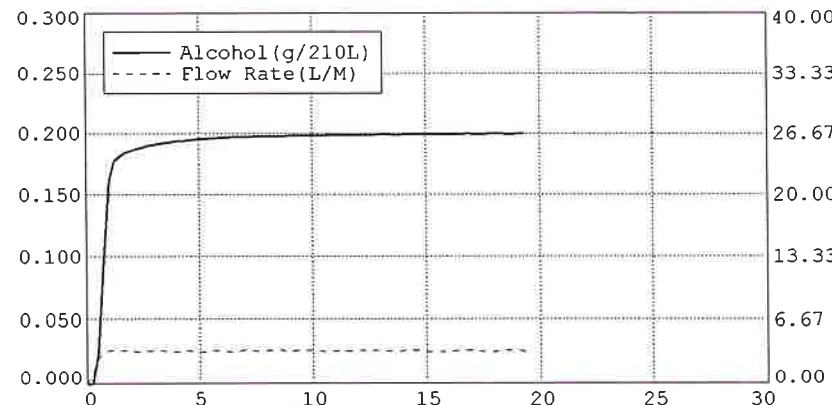
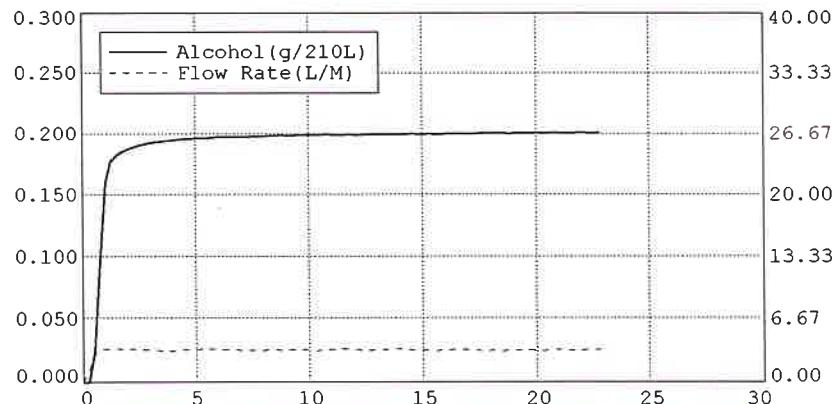
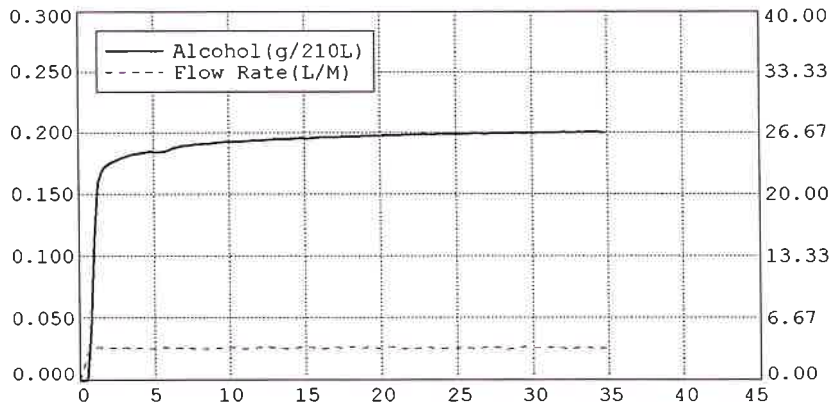
Date: 10/04/2021  
Time: 15:41:04

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200  
LOT #: 20510  
EXPIRATION: 12/03/2022

BLANK TEST	0.000	15:42
INTERNAL STANDARD	VERIFIED	15:42
EXTERNAL STANDARD	0.201	15:42
BLANK TEST	0.000	15:43
EXTERNAL STANDARD	0.201	15:44
BLANK TEST	0.000	15:45
EXTERNAL STANDARD	0.200	15:45
BLANK TEST	0.000	15:46
EXTERNAL STANDARD	0.201	15:47
BLANK TEST	0.000	15:48
EXTERNAL STANDARD	0.201	15:48
BLANK TEST	0.000	15:49

Average = 0.2008  
Std Dev = 0.0004





LINEARITY CHECK: Control Test 6

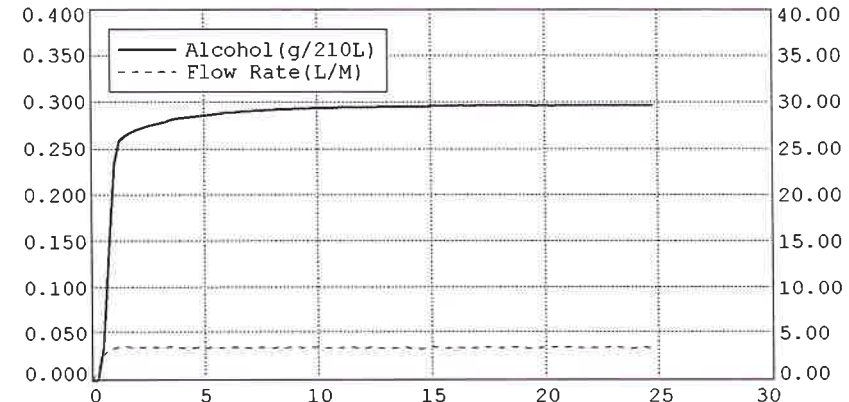
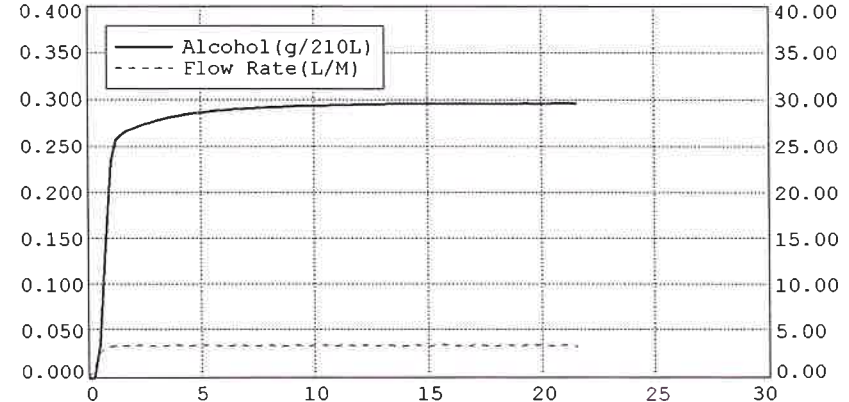
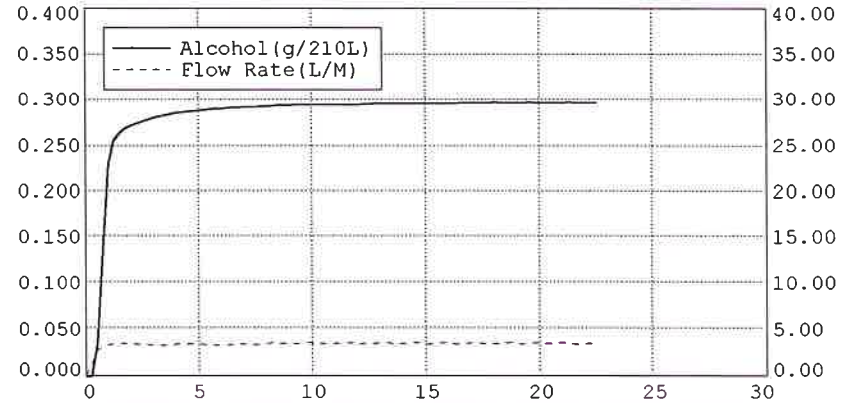
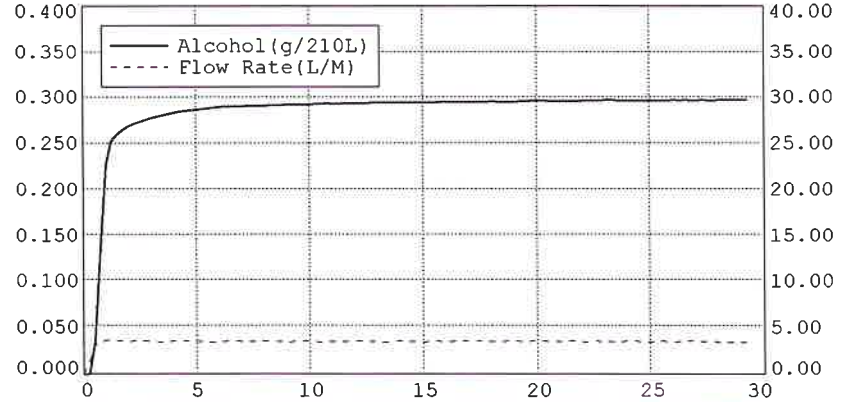
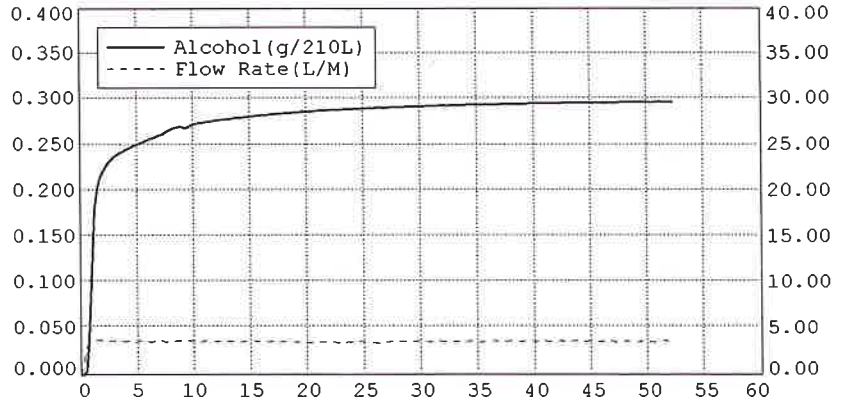
Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 10/04/2021  
Time: 16:01:55

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

BLANK TEST	0.000	16:03
INTERNAL STANDARD	VERIFIED	16:03
EXTERNAL STANDARD	0.296	16:04
BLANK TEST	0.000	16:05
EXTERNAL STANDARD	0.296	16:05
BLANK TEST	0.000	16:06
EXTERNAL STANDARD	0.297	16:07
BLANK TEST	0.000	16:08
EXTERNAL STANDARD	0.297	16:08
BLANK TEST	0.000	16:09
EXTERNAL STANDARD	0.297	16:09
BLANK TEST	0.000	16:10

Average = 0.2966  
Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 10/04/2021  
Time: 16:17:47

SUBJECT NAME:  
TEST TEST  
LICENSE #: INCOMPLETE

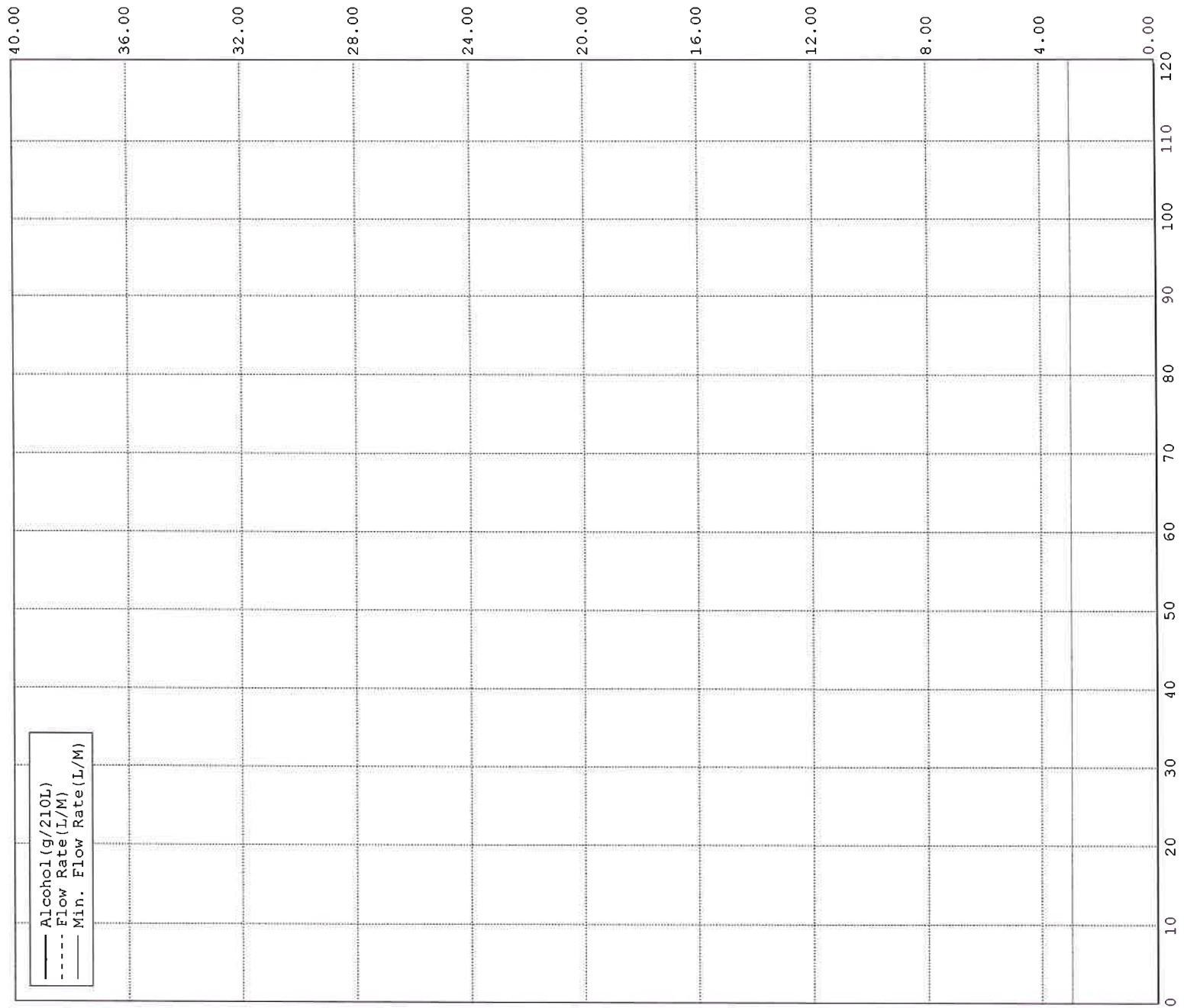
OPERATOR NAME:  
COLLEEN S OBRyant  
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.84: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 16:42  
BLANK TEST 0.000 16:43  
INTERNAL STANDARD VERIFIED 16:43  
EXTERNAL STANDARD 0.080 16:43  
BLANK TEST 0.000 16:44  
SUBJECT SAMPLE INCOMPLETE 16:46

CUB



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 10/05/2021  
Time: 08:19:38

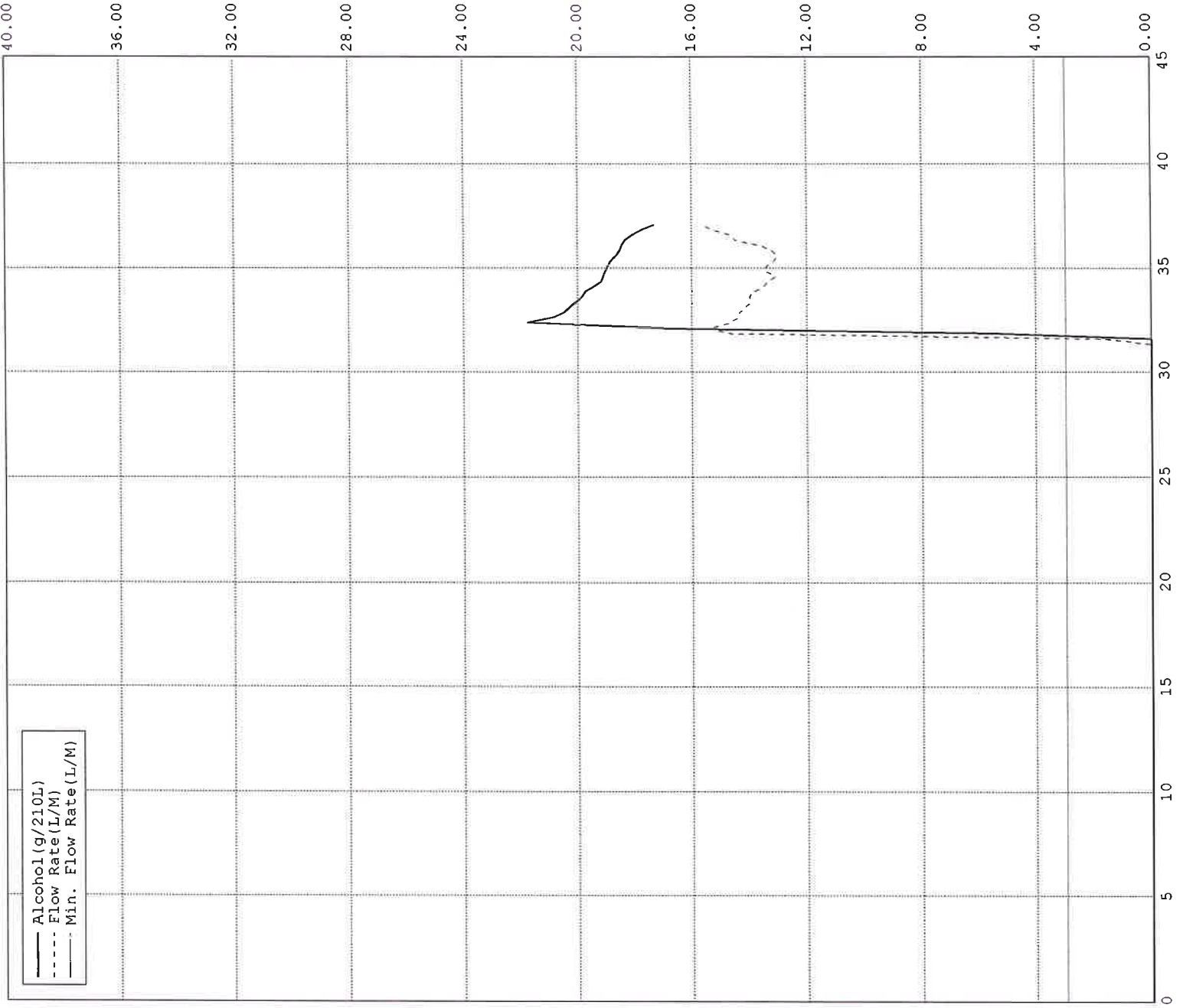
SUBJECT NAME:  
TEST TEST  
LICENSE #: INVALID

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 29.72: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

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





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 10/05/2021  
Time: 08:32:21

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-ACETONE

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

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.71: 0.079

LOT #: AG018102  
EXPIRATION: 06/29/2022

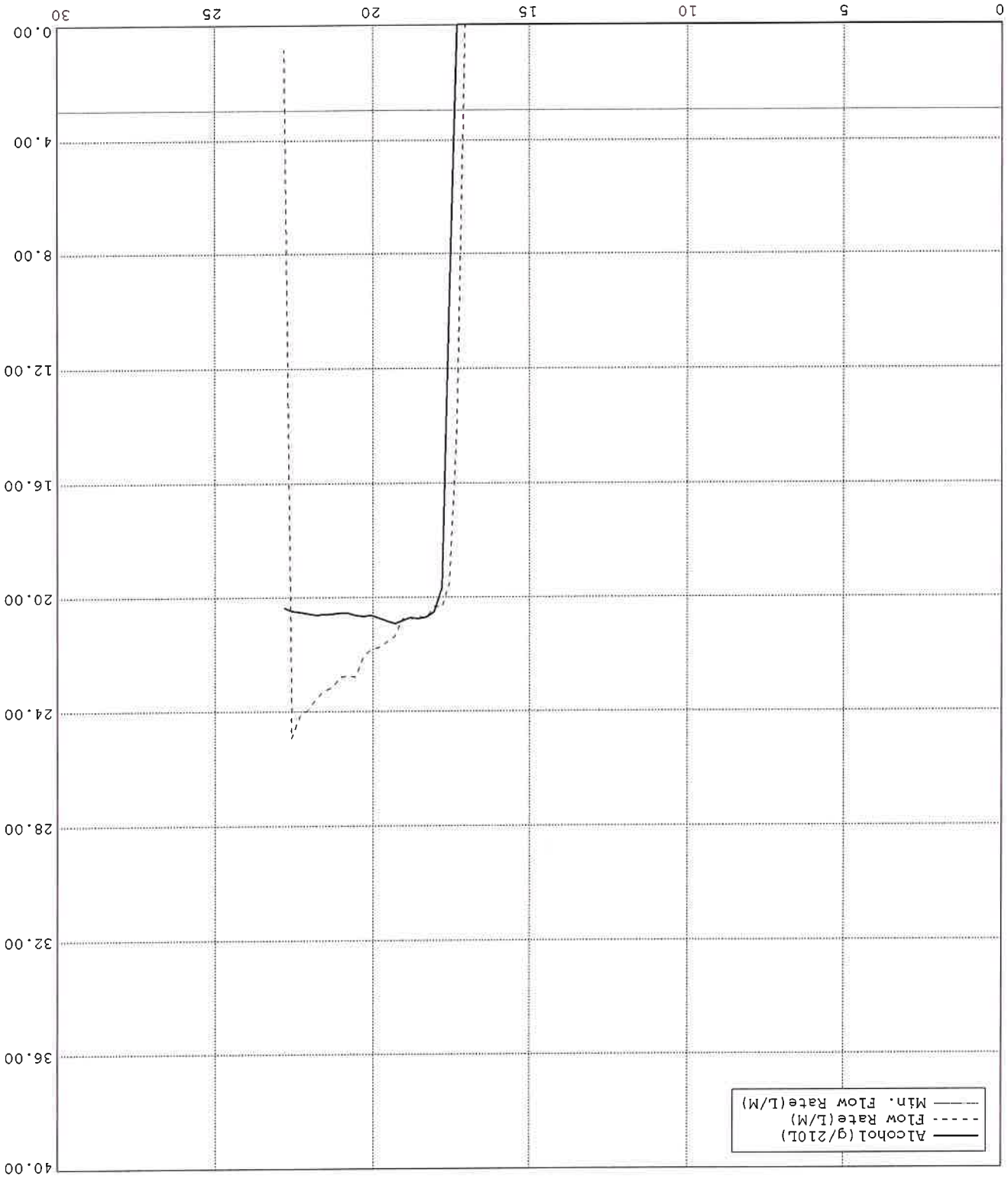
DIAGNOSTIC CHECK PASSED 08:34  
BLANK TEST 0.000 08:34  
INTERNAL STANDARD VERIFIED 08:34  
Xq = 0.092 (0.67%)  
EXTERNAL STANDARD 0.079 08:34  
X[1] = 0.0792 (-0.0010) (0.0008)  
BLANK TEST 0.000 08:35  
SUBJECT SAMPLE XXX 08:36  
X[1] = 0.1020 (-0.0181) (-0.0007)  
Interference Detected

Filter 2 Average: -0.0009

Filter 3 Average: 0.0009

COB 2021.10.05

WCS



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 10/05/2021  
Time: 08:40:22

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-IPA

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

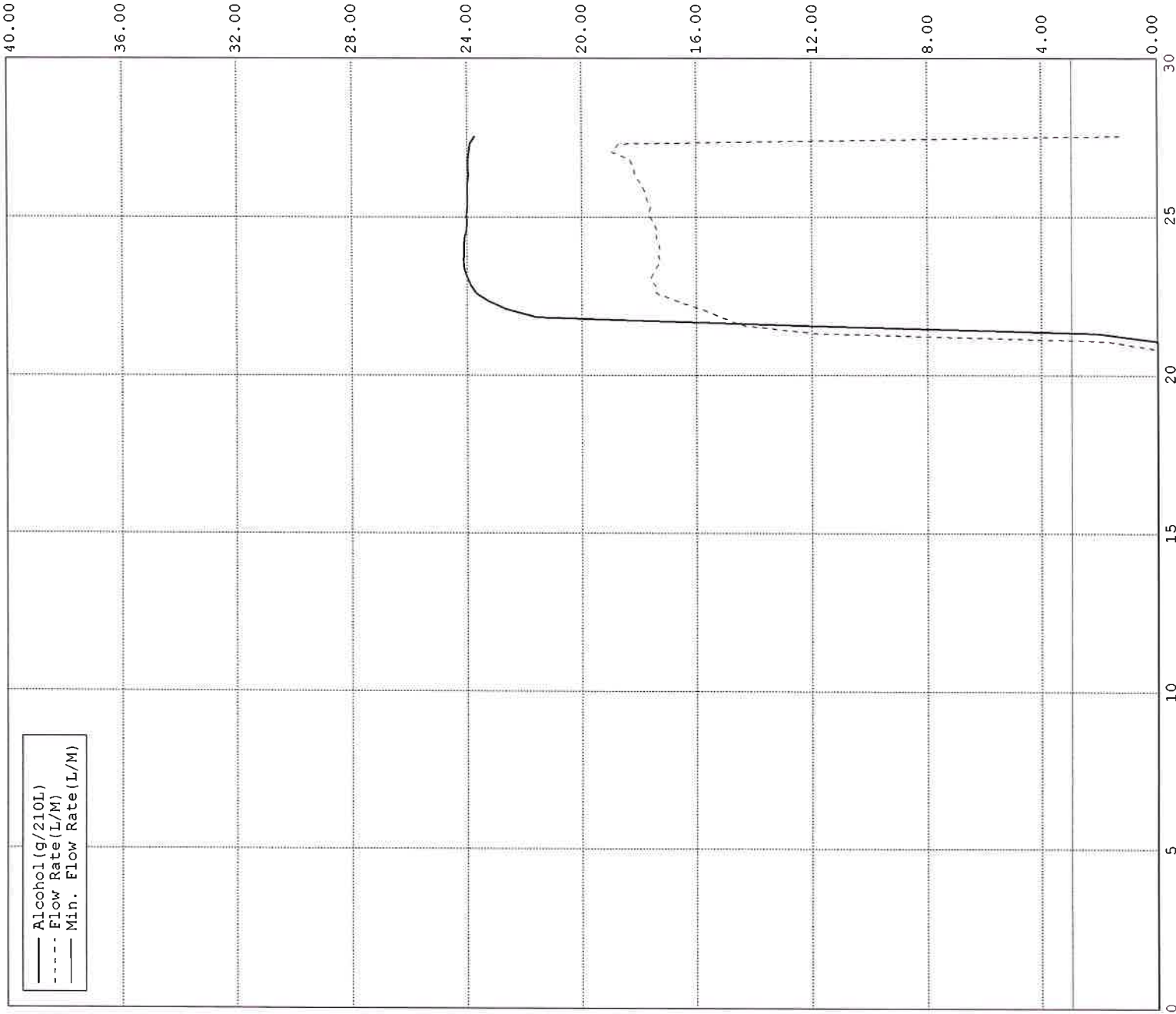
DEPT/AGENCY:  
AAA1  
CASE/REPORT: 21-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.72: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 08:42  
BLANK TEST 0.000 08:42  
INTERNAL STANDARD VERIFIED 08:43  
Xq = 0.092 (0.86%)  
EXTERNAL STANDARD 0.079 08:43  
X[1] = 0.0795 (-0.0008) (0.0007)  
BLANK TEST 0.000 08:44  
SUBJECT SAMPLE XXX 08:44  
X[1] = 0.1188 (-0.0214) (0.0009)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 10/05/2021  
Time: 08:49:53

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-NEGATIVE

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 29.72: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	08:50
BLANK TEST	0.000	08:51
INTERNAL STANDARD	VERIFIED	08:51
$Xq = 0.092 (0.77\%)$		
EXTERNAL STANDARD	0.079	08:51
$X[1] = 0.0789 (-0.0007)$	(0.0011)	
BLANK TEST	0.000	08:52
SUBJECT SAMPLE (Vol=2.01L)	0.093	08:52
$X[1] = 0.0938 (-0.0010)$	(0.0005)	
BLANK TEST	0.000	08:53
EXTERNAL STANDARD	0.079	08:53
$X[1] = 0.0787 (-0.0012)$	(0.0010)	
BLANK TEST	0.000	08:54



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 10/05/2021  
Time: 09:05:07

SUBJECT NAME:  
TEST TEST  
LICENSE #: MAX ATTEMPTS

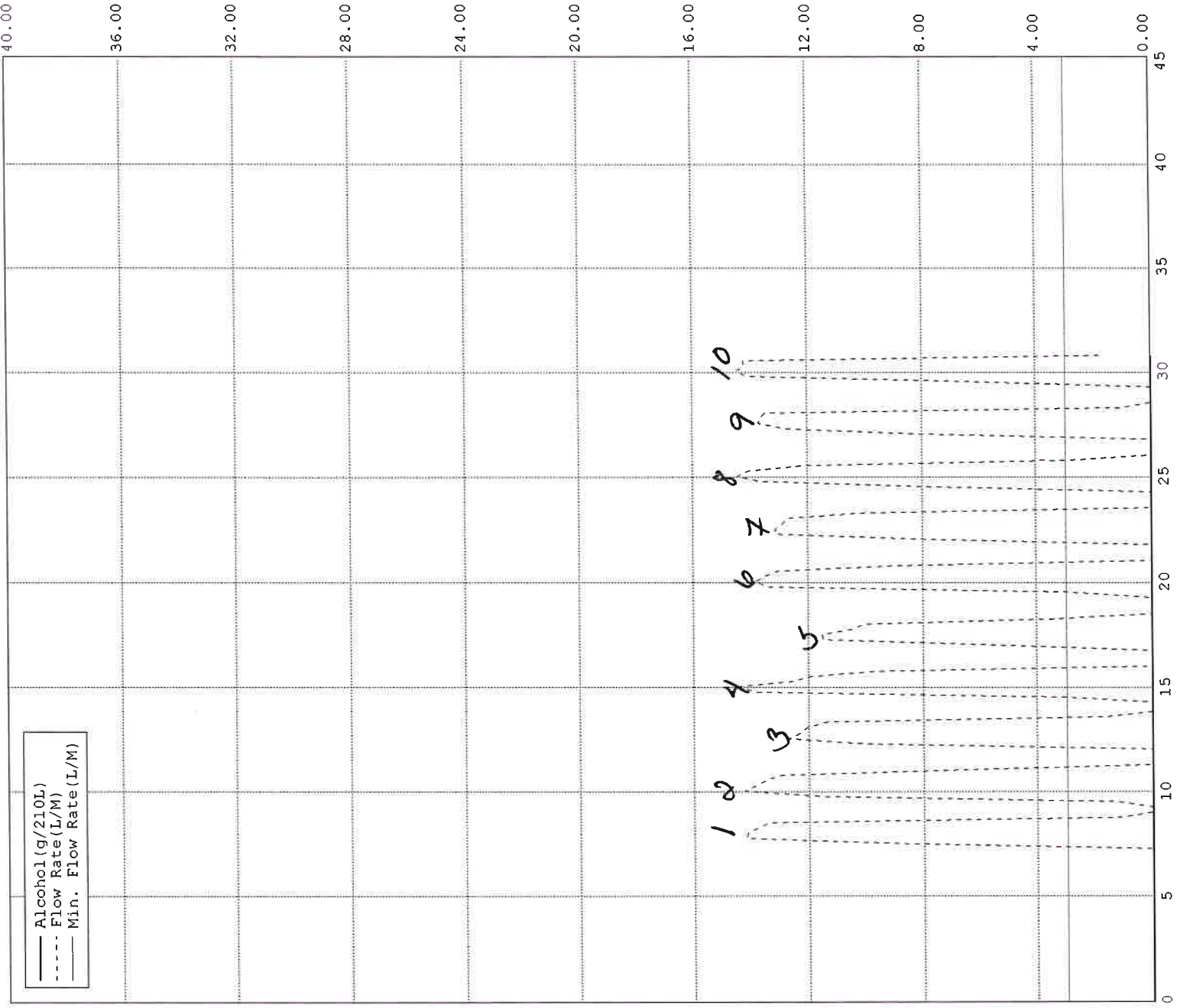
OPERATOR NAME:  
COLLEEN S OBRVANT  
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.71: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 09:06  
BLANK TEST 0.000 09:06  
INTERNAL STANDARD VERIFIED 09:06  
EXTERNAL STANDARD 0.079 09:06  
BLANK TEST 0.000 09:07  
SUBJECT SAMPLE XXX 09:08

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 10/05/2021  
Time: 09:09:34

SUBJECT NAME:  
TEST TEST  
LICENSE #: RFI

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

DEPT/AGENCY:  
AAA1

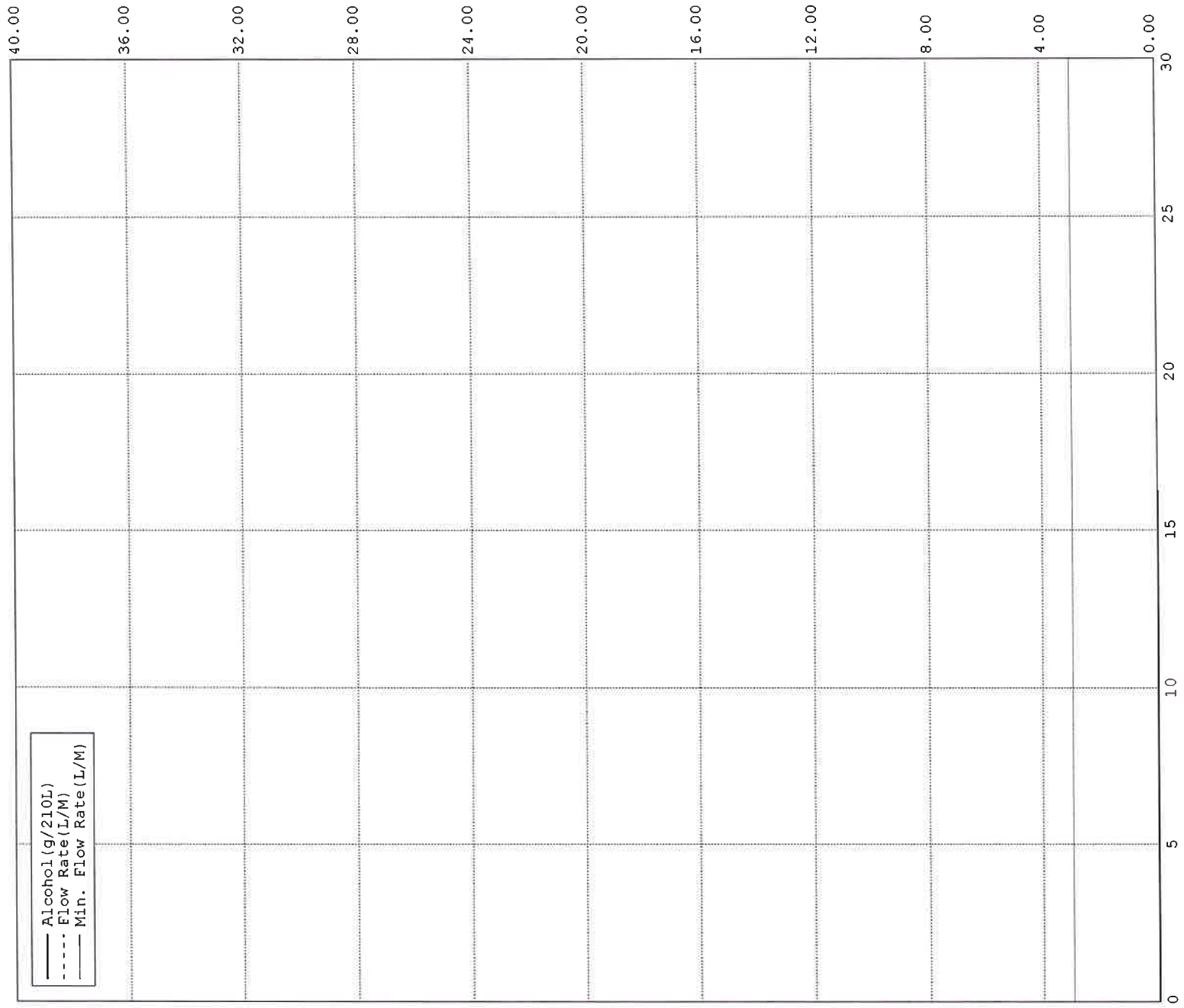
CASE/REPORT: 21-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.70: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 09:10  
BLANK TEST 0.000 09:10  
INTERNAL STANDARD VERIFIED 09:10  
EXTERNAL STANDARD 0.079 09:11  
BLANK TEST 0.000 09:12

RFI DETECTED





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 10/05/2021  
Time: 09:24:51

SUBJECT NAME:  
TEST TEST  
LICENSE #: NONDRINKING

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 29.72: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	09:25
BLANK TEST	0.000	09:25
INTERNAL STANDARD	VERIFIED	09:26
EXTERNAL STANDARD	0.079	09:26
BLANK TEST	0.000	09:27
SUBJECT SAMPLE (Vol=1.92L)	0.000	09:27
BLANK TEST	0.000	09:28
EXTERNAL STANDARD	0.079	09:28
BLANK TEST	0.000	09:29

