

# 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 100413 Analyst C. O. Bryant Start Date 6/30/21

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 AG928203 Exp 10/9/21

ii. 0.040g/210L Mnf Aargas Lot AG111710 Exp 4/27/23 AG111710

iii. 0.080g/210L Mnf Aargas Lot AG018102 Exp 6/29/22 COB 2021.07.16

iv. 0.100g/210L Mnf Aargas Lot AG108404 Exp 3/25/23

v. 0.200g/210L Mnf Guth Lot 19200 Exp 8/6/21

Simulator S/N DR6267 Date Calibrated 11/17/20

vi. 0.300g/210L Mnf Guth Lot 19330 Exp 11/13/21

Simulator S/N DR4177 Date Calibrated 11/17/20

### Functional Tests (attached)

Incomplete

Invalid

Interference

i. Acetone - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21

Simulator S/N DR4178 Date Calibrated 11/18/2020

ii. Isopropanol - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21

Simulator S/N DR4176 Date Calibrated 11/18/2020

iii. Negative Control - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21

Simulator S/N DR4163 Date Calibrated 11/17/2020

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 7/1/21

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100413  
-----

Date: 06/30/2021  
Time: 10:01:00

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

TEMPERATURES

Sample Chamber = 48.7°C                    PASSED  
(44.0°C - 52.0°C)  
Breath Tube       = 48.1°C                   PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage    = 1.92 V                    PASSED  
(1.15 V - 2.69 V)  
Cooler Voltage = 1.87 V                    PASSED  
(1.12 V - 2.62 V)  
Bias Voltage    = 80 V                      PASSED  
(48 V - 112 V)  
Chopper Freq   = 535 Hz                    PASSED  
(475 Hz - 575 Hz)  
Barometer       = 29.9 in

PUMP INFO

Flow Rate = 5.272 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 = 0.105 0.17% (0.00% - 4.00%)                    PASSED

Technician Screen

-----  
DATAMASTER dmt: 100413  
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Date: 06/30/2021  
Time: 10:17 AM

Temperatures (°C)  
Sample Cell: 49.2°C  
Breath Tube: 47.8°C

Current Barometer 29.9 in  
Volume (Ltr) 1.56

Settings  
Lamp: 1.89 V  
Bias: 80 V  
Cooler: 1.87 V  
Chopper: 534 Hz

Voltages (V)  
Flow: 1.05 V  
Detector: -0.048 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100413  
-----

Date: 05/19/2021  
Time: 11:40:05

OPERATOR NAME:  
CARLIE BAILEY  
CERTIFICATE #: 100436

Ca = 0.1000  
CAL = 0.995491    0.800 <= CAL < 1.200  
b1 = 0.0007    0.0000 <= b1 < 0.0040  
b2 = 0.0043    0.0010 <= b2 < 0.0100  
b3 = 0.0010    0.0000 <= b3 < 0.0040  
Xq = 0.1051    0.0500 <= Xq < 0.2000  
a21 = 1.140863    1.050 <= a21 < 1.300  
a31 = 0.447182    0.300 <= a31 < 0.800

SUBJECT TEST

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100413  
-----

Date: 06/30/2021  
Time: 10:21:32

SUBJECT NAME:  
TEST TEST  
LICENSE #: VOLUME TEST

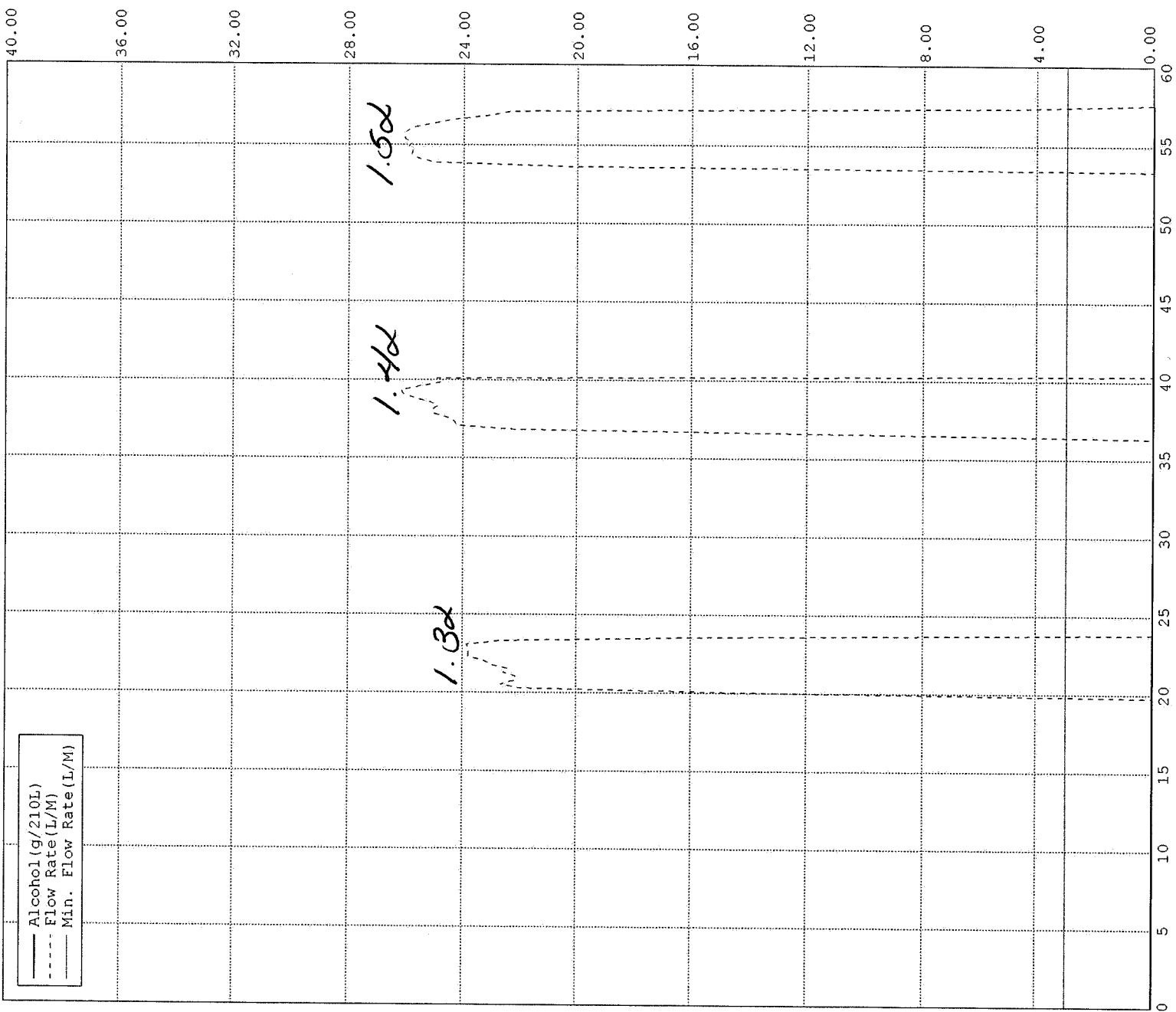
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.87: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK  
BLANK TEST PASSED 10:22  
INTERNAL STANDARD VERIFIED 10:22  
EXTERNAL STANDARD 0.079 10:23  
BLANK TEST 0.000 10:23  
SUBJECT SAMPLE (Vol=1.57L) 0.000 10:25  
BLANK TEST 0.000 10:25  
EXTERNAL STANDARD 0.080 10:26  
BLANK TEST 0.000 10:27

*MS*



LINEARITY CHECK

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

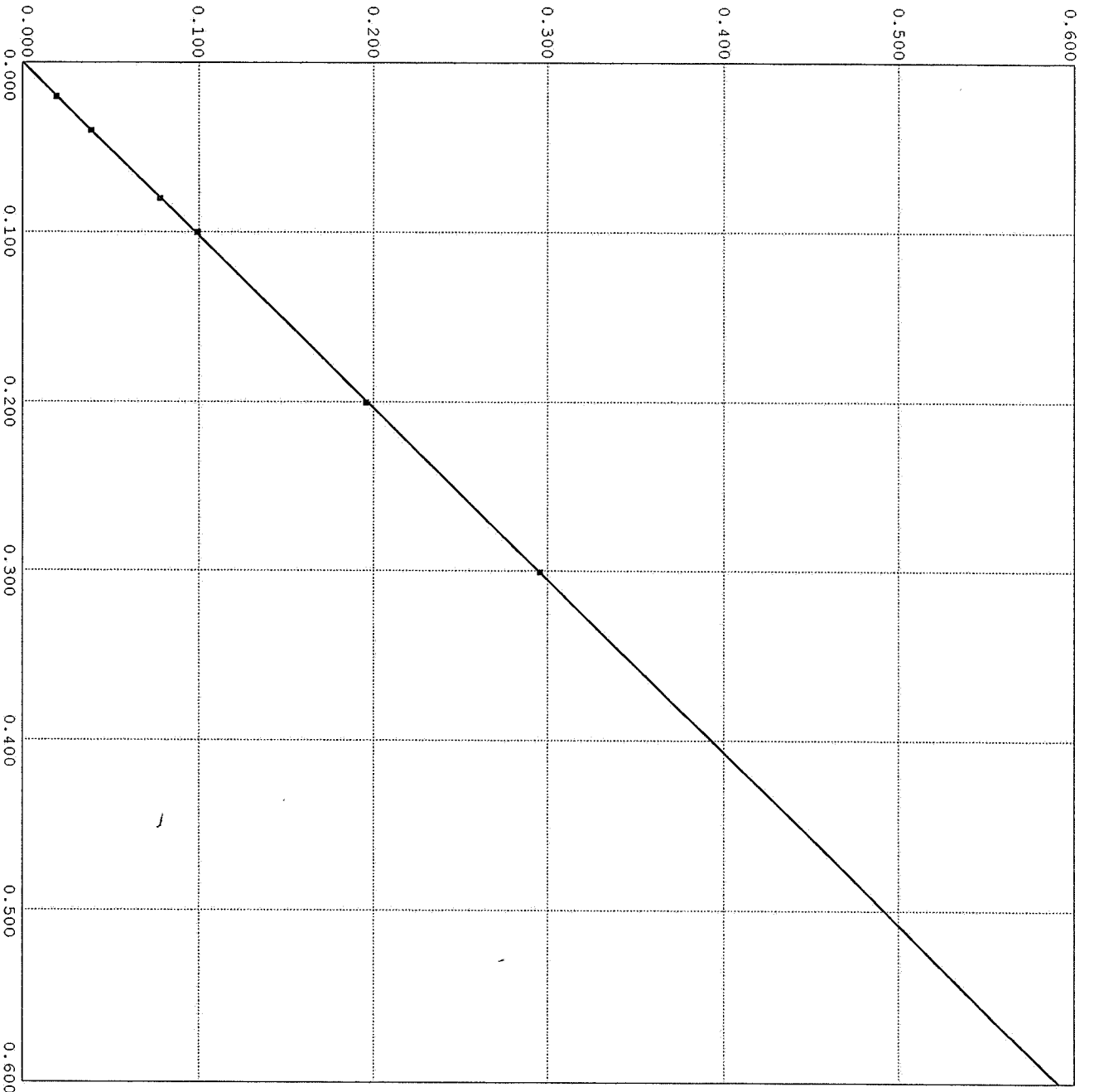
Date: 06/30/2021  
Time: 10:36:12

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0400	0.0000
0.080	0.0790	0.0000
0.100	0.1002	0.0004
0.200	0.1966	0.0005
0.300	0.2964	0.0005

SLOPE = 0.984982  
R<sup>2</sup> = 0.999954

*CS*



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

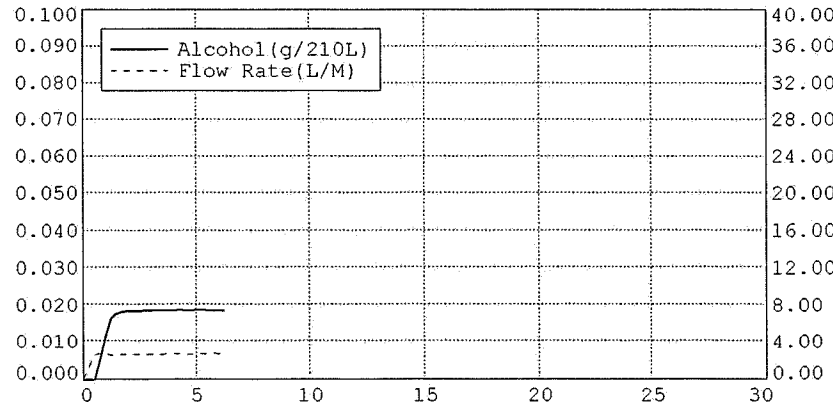
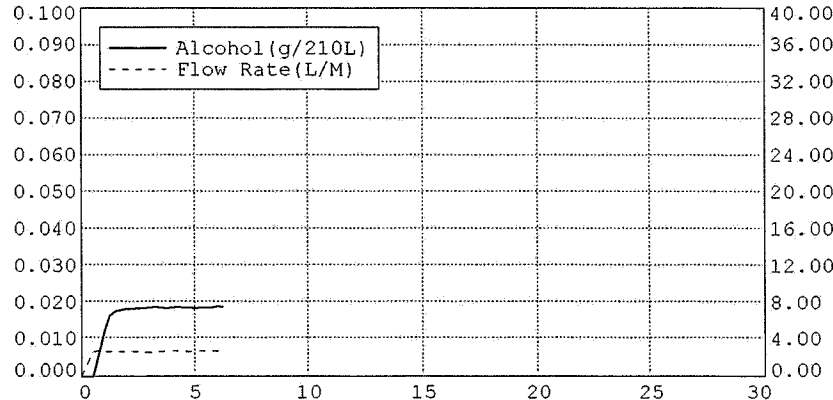
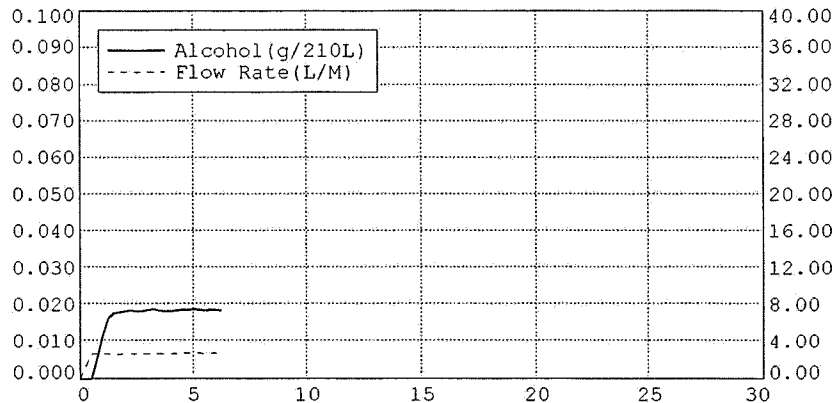
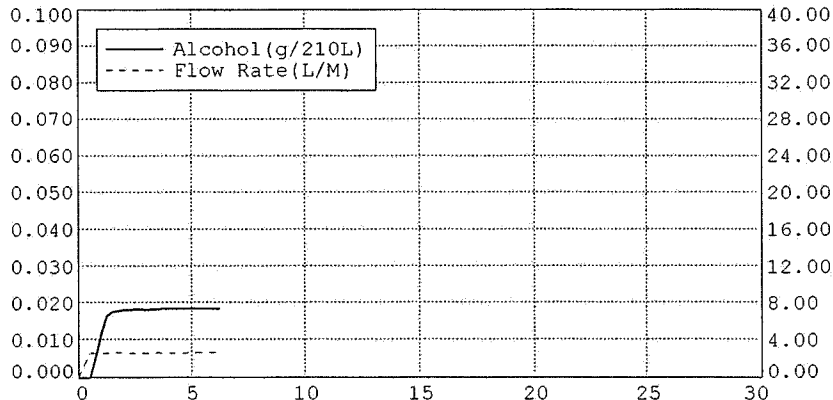
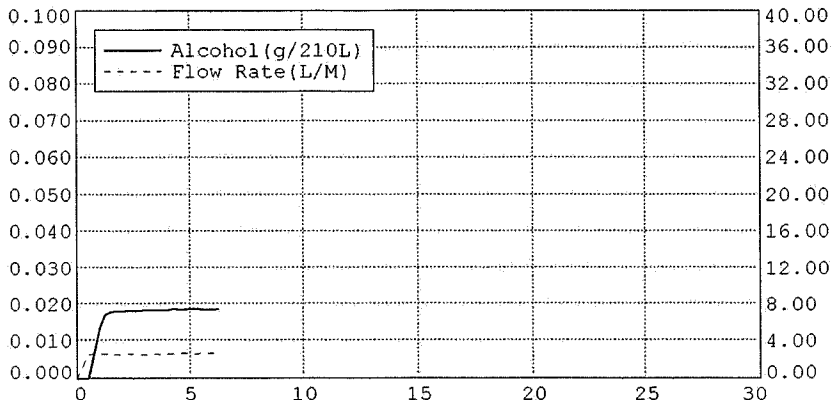
Date: 06/30/2021  
Time: 10:36:14

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
TARGET AT 29.87: 0.020  
LOT #: AG928203  
EXPIRATION: 10/09/2021  
TANK PRESSURE: 304 psi

BLANK TEST	0.000	10:43
INTERNAL STANDARD	VERIFIED	10:44
EXTERNAL STANDARD	0.020	10:44
BLANK TEST	0.000	10:45
EXTERNAL STANDARD	0.020	10:45
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.020	10:46
BLANK TEST	0.000	10:47
EXTERNAL STANDARD	0.020	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.020	10:48
BLANK TEST	0.000	10:49

Average = 0.0200  
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

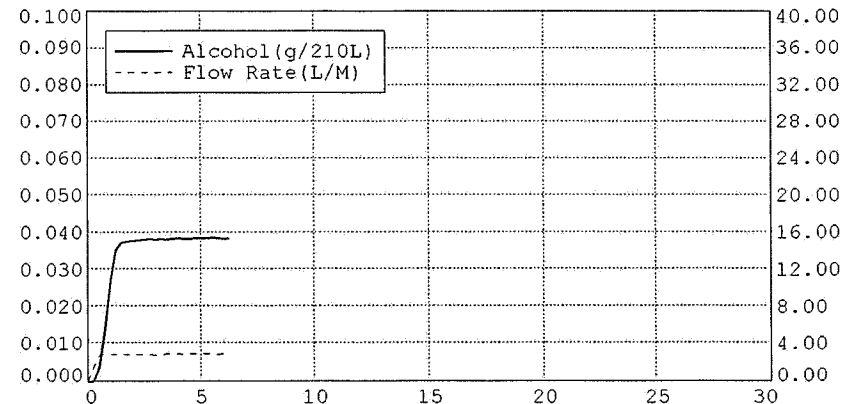
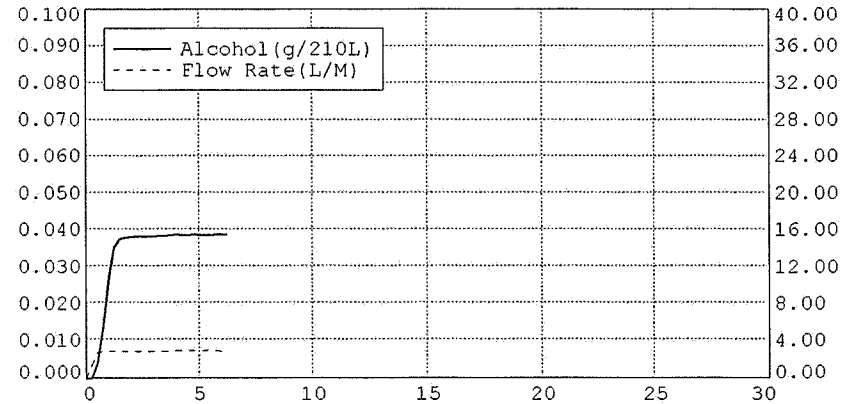
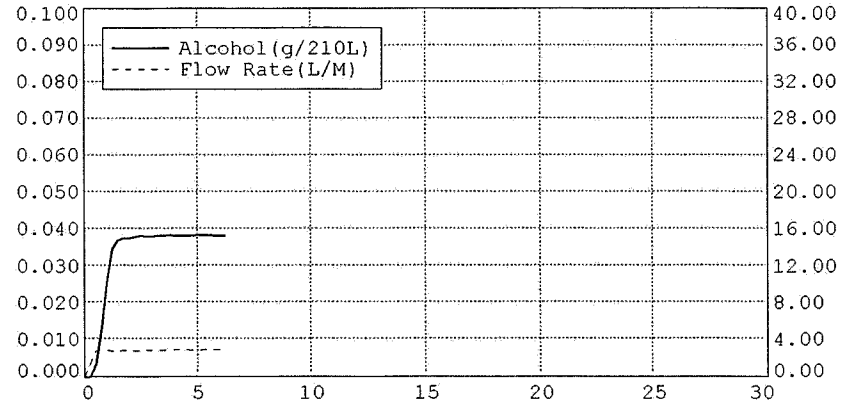
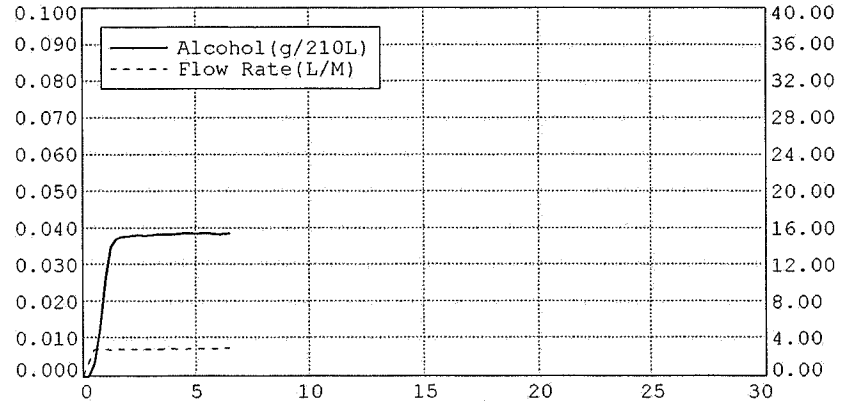
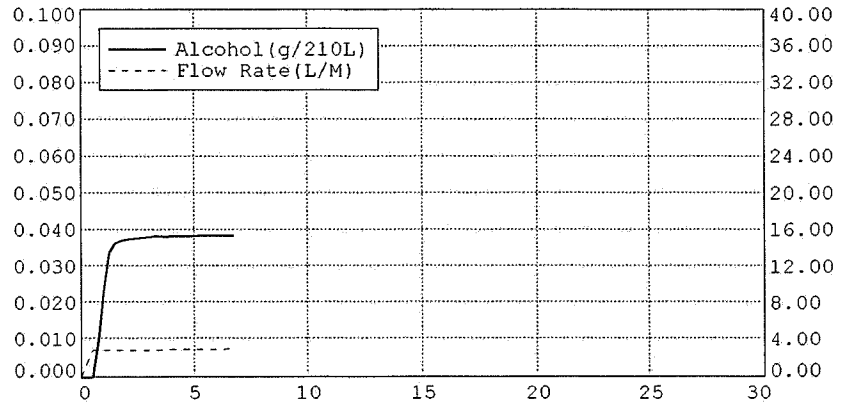
Date: 06/30/2021  
Time: 10:51:12

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
TARGET AT 29.86: 0.040  
LOT #: AG111710  
EXPIRATION: 04/27/2023  
TANK PRESSURE: 1020 psi

BLANK TEST	0.000	10:52
INTERNAL STANDARD	VERIFIED	10:52
EXTERNAL STANDARD	0.040	10:52
BLANK TEST	0.000	10:53
EXTERNAL STANDARD	0.040	10:53
BLANK TEST	0.000	10:54
EXTERNAL STANDARD	0.040	10:54
BLANK TEST	0.000	10:55
EXTERNAL STANDARD	0.040	10:55
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.040	10:57
BLANK TEST	0.000	10:57

Average = 0.0400  
Std Dev = 0.0000





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100413

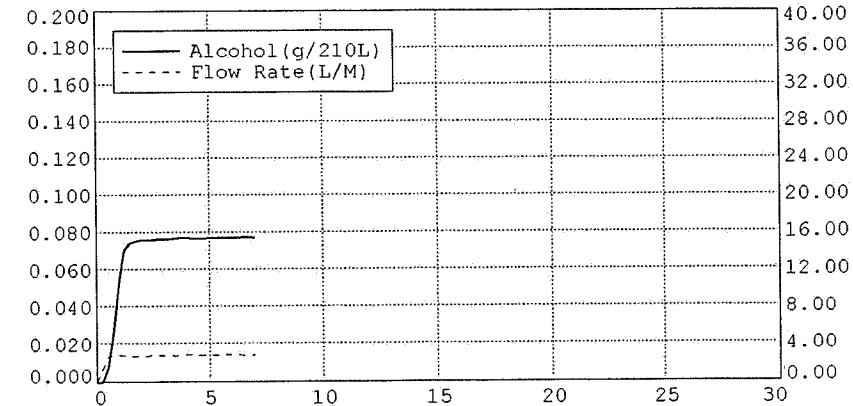
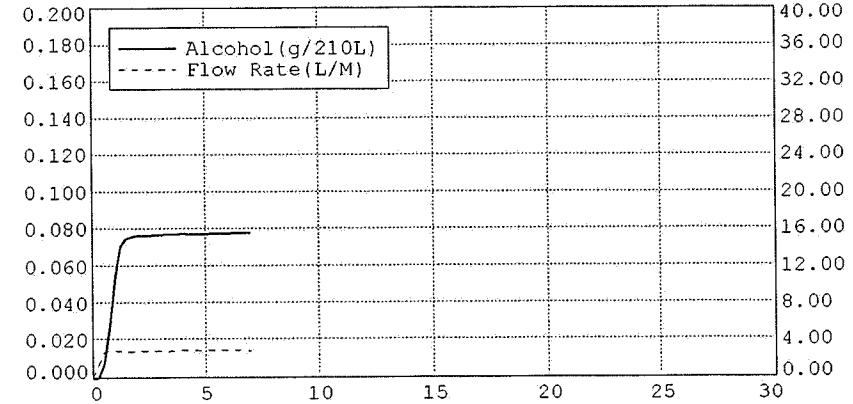
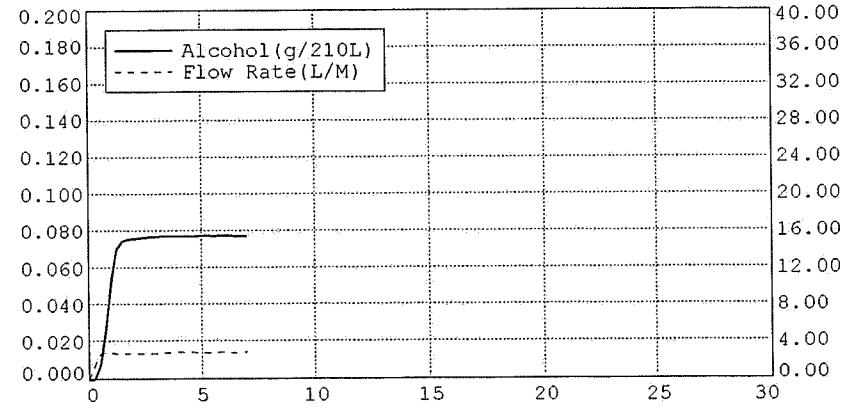
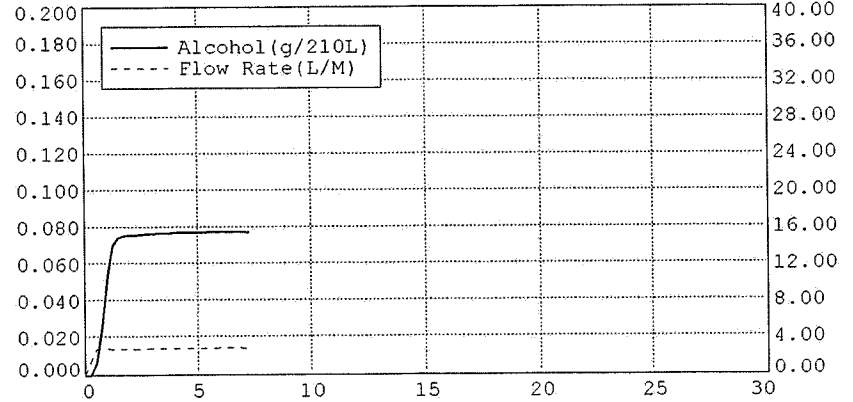
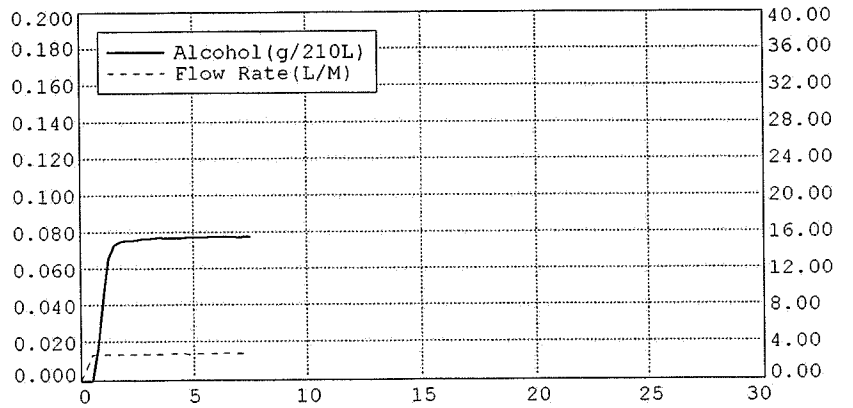
Date: 06/30/2021  
 Time: 15:15:45

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.86: 0.080  
 LOT #: AG018102  
 EXPIRATION: 06/29/2022  
 TANK PRESSURE: 964 psi

BLANK TEST	0.000	15:16
INTERNAL STANDARD	VERIFIED	15:17
EXTERNAL STANDARD	0.079	15:17
BLANK TEST	0.000	15:18
EXTERNAL STANDARD	0.079	15:18
BLANK TEST	0.000	15:19
EXTERNAL STANDARD	0.079	15:19
BLANK TEST	0.000	15:20
EXTERNAL STANDARD	0.079	15:20
BLANK TEST	0.000	15:21
EXTERNAL STANDARD	0.079	15:22
BLANK TEST	0.000	15:22

Average = 0.0790  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100413

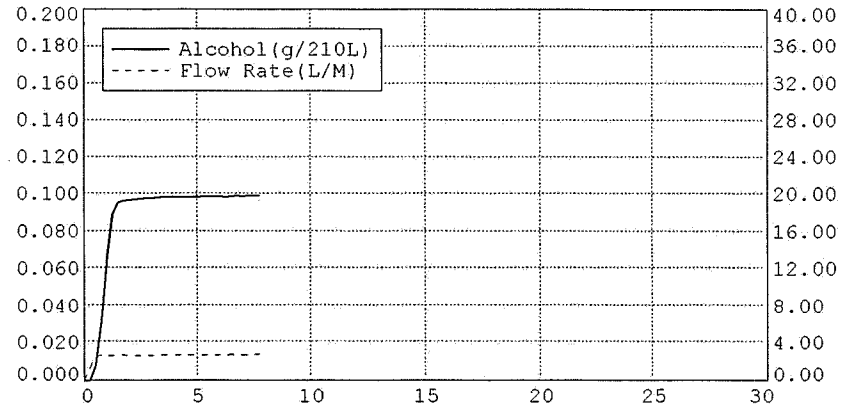
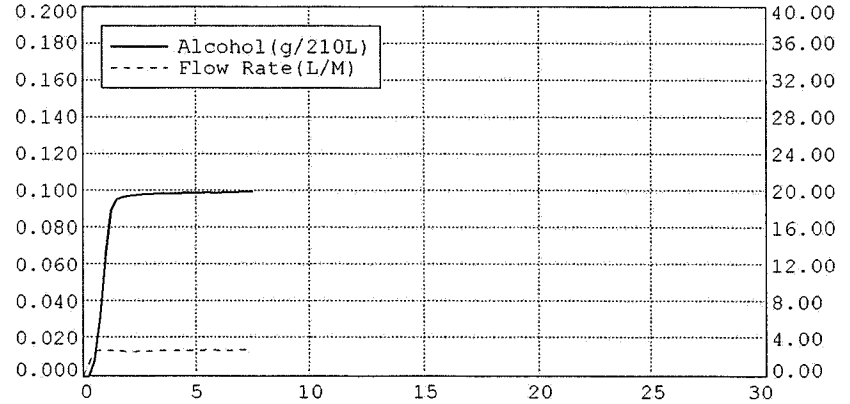
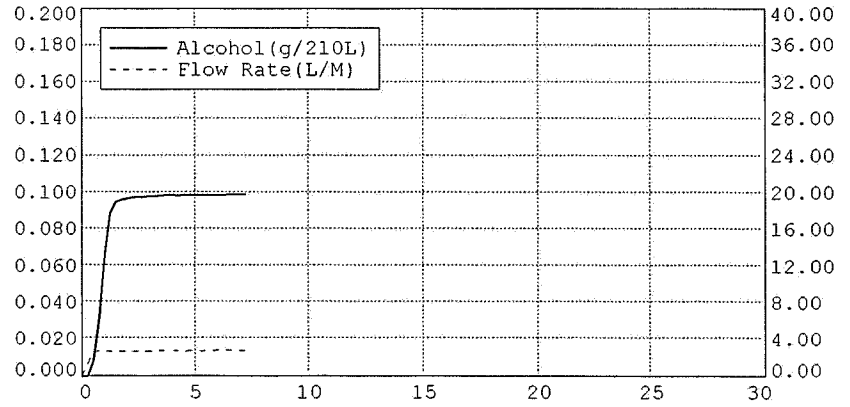
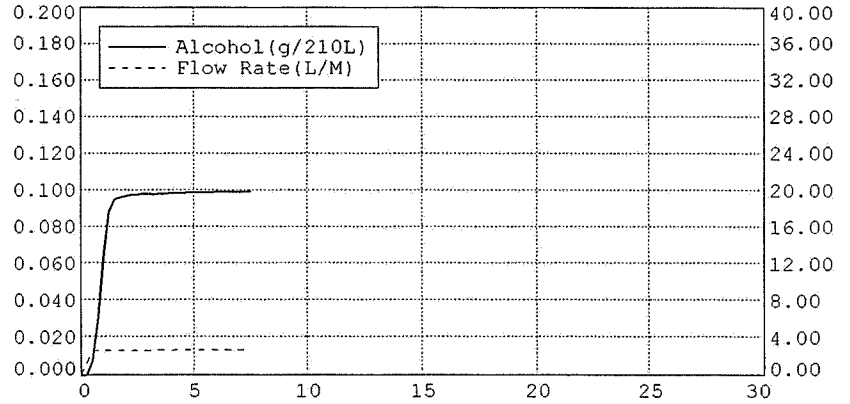
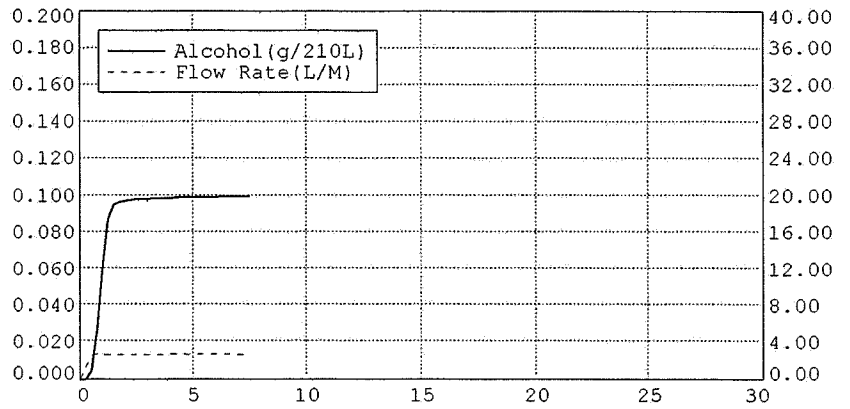
Date: 06/30/2021  
 Time: 15:25:22

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.86: 0.100  
 LOT #: AG108404  
 EXPIRATION: 03/25/2023  
 TANK PRESSURE: 340 psi

BLANK TEST	0.000	15:26
INTERNAL STANDARD	VERIFIED	15:26
EXTERNAL STANDARD	0.101	15:27
BLANK TEST	0.000	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	15:31
BLANK TEST	0.000	15:32

Average = 0.1002  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

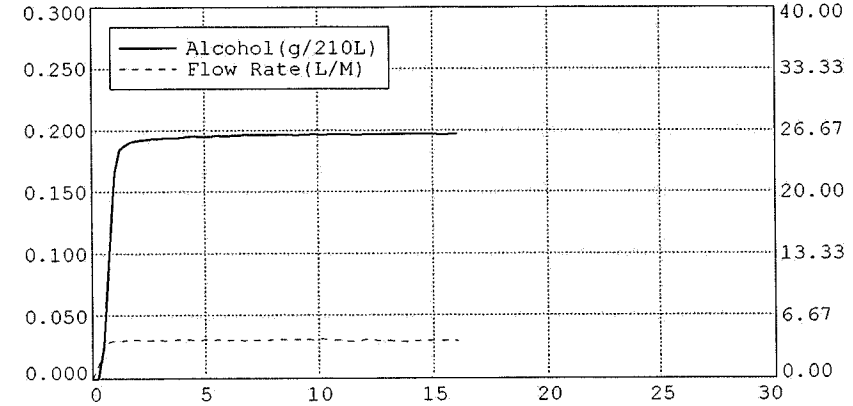
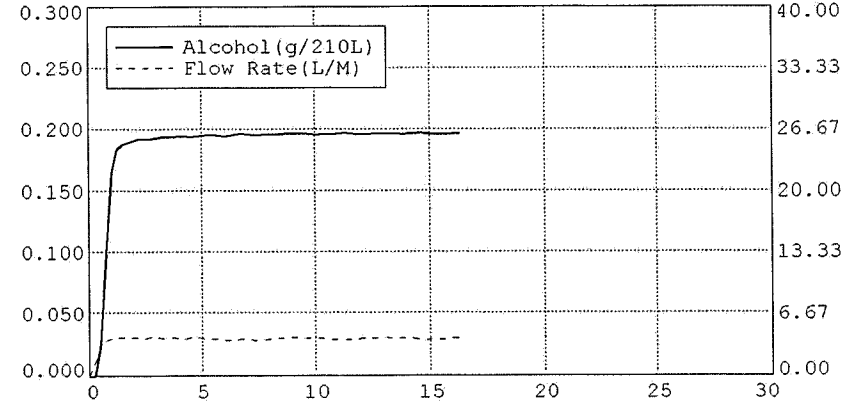
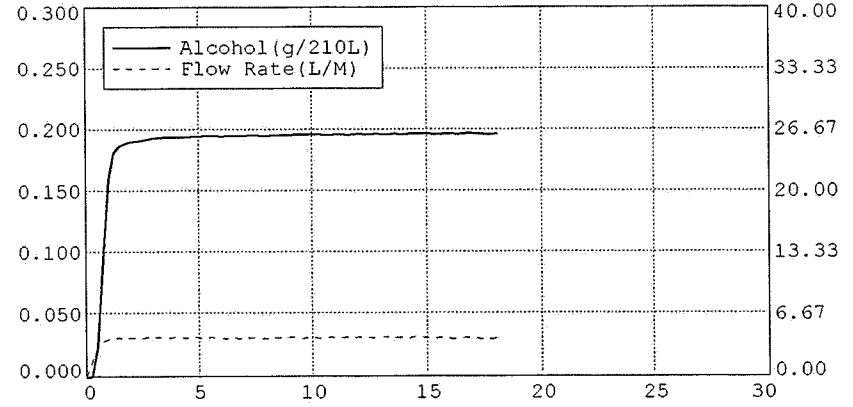
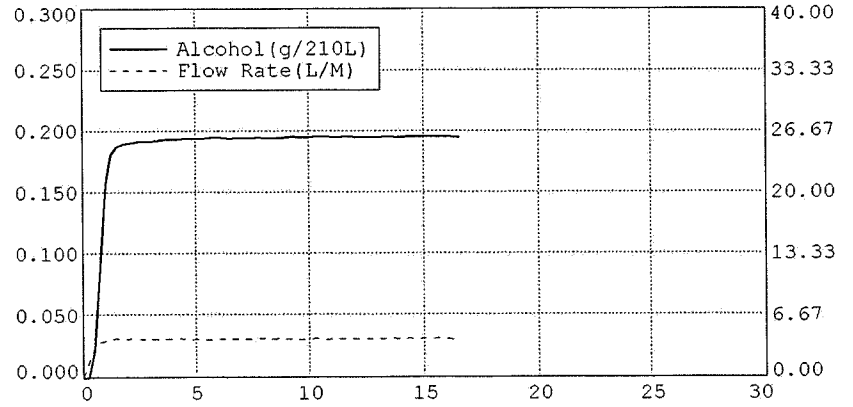
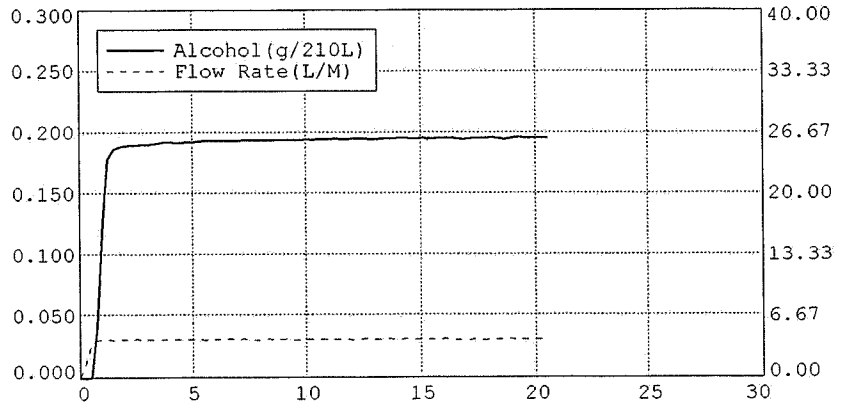
Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 06/30/2021  
Time: 15:33:36

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.200  
LOT #: 19200  
EXPIRATION: 08/06/2021

BLANK TEST	0.000	15:34
INTERNAL STANDARD	VERIFIED	15:35
EXTERNAL STANDARD	0.196	15:35
BLANK TEST	0.000	15:36
EXTERNAL STANDARD	0.196	15:36
BLANK TEST	0.000	15:37
EXTERNAL STANDARD	0.197	15:38
BLANK TEST	0.000	15:39
EXTERNAL STANDARD	0.197	15:39
BLANK TEST	0.000	15:40
EXTERNAL STANDARD	0.197	15:40
BLANK TEST	0.000	15:41

Average = 0.1966  
Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

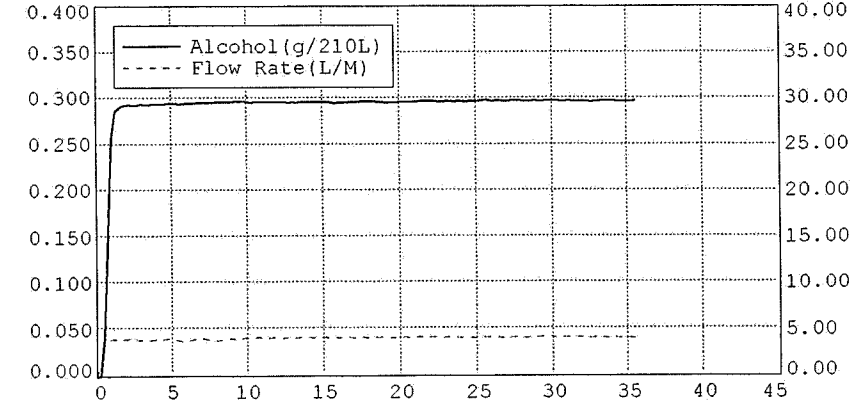
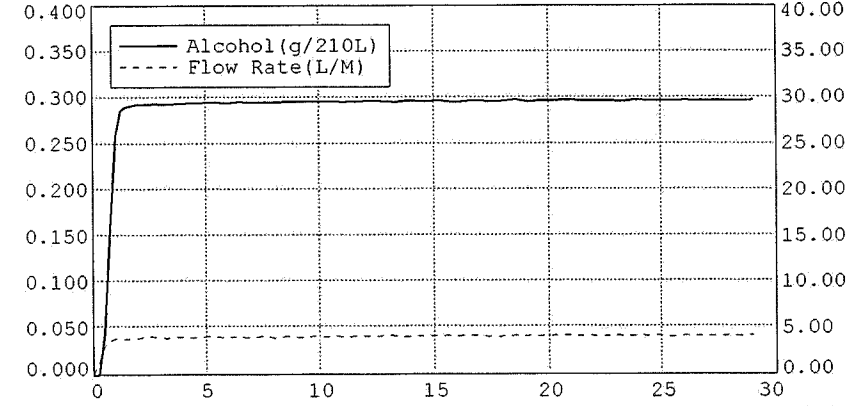
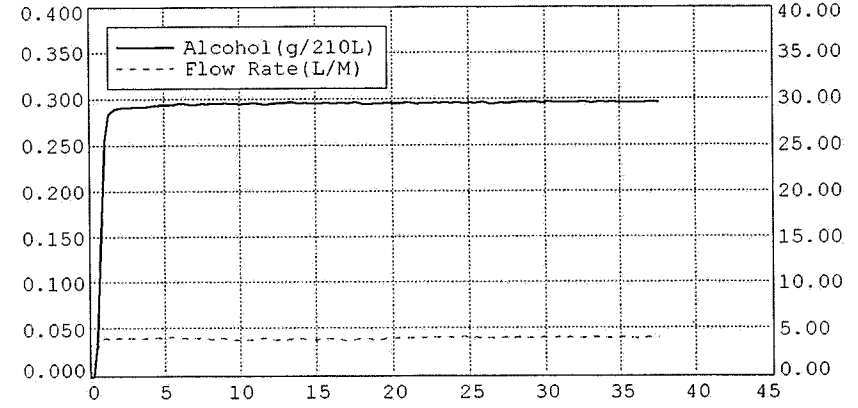
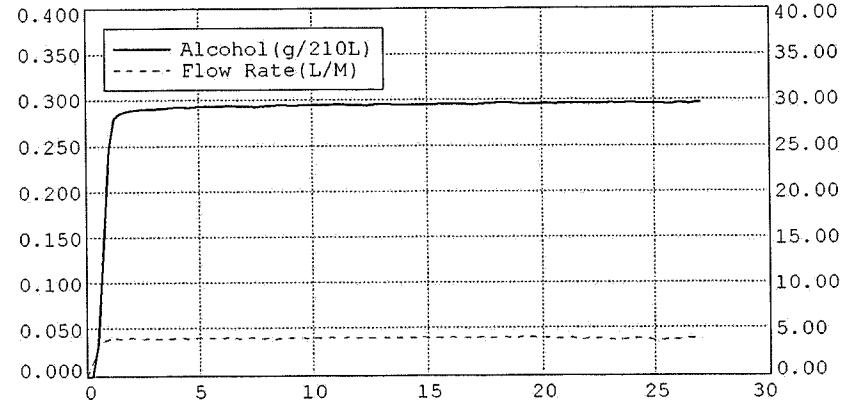
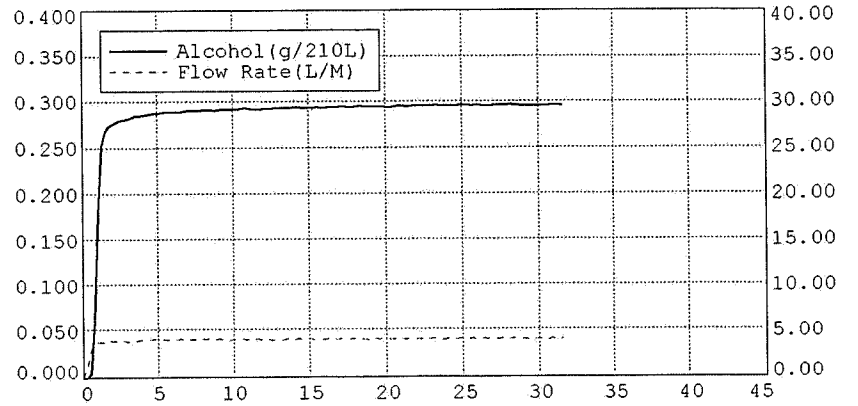
Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 06/30/2021  
Time: 15:42:53

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.300  
LOT #: 19330  
EXPIRATION: 11/13/2021

BLANK TEST	0.000	15:44
INTERNAL STANDARD	VERIFIED	15:44
EXTERNAL STANDARD	0.296	15:44
BLANK TEST	0.000	15:45
EXTERNAL STANDARD	0.296	15:46
BLANK TEST	0.000	15:47
EXTERNAL STANDARD	0.297	15:48
BLANK TEST	0.000	15:48
EXTERNAL STANDARD	0.296	15:49
BLANK TEST	0.000	15:50
EXTERNAL STANDARD	0.297	15:51
BLANK TEST	0.000	15:52

Average = 0.2964  
Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 06/30/2021  
Time: 16:32:49

SUBJECT NAME:  
TEST TEST  
LICENSE #: INCOMPLETE

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

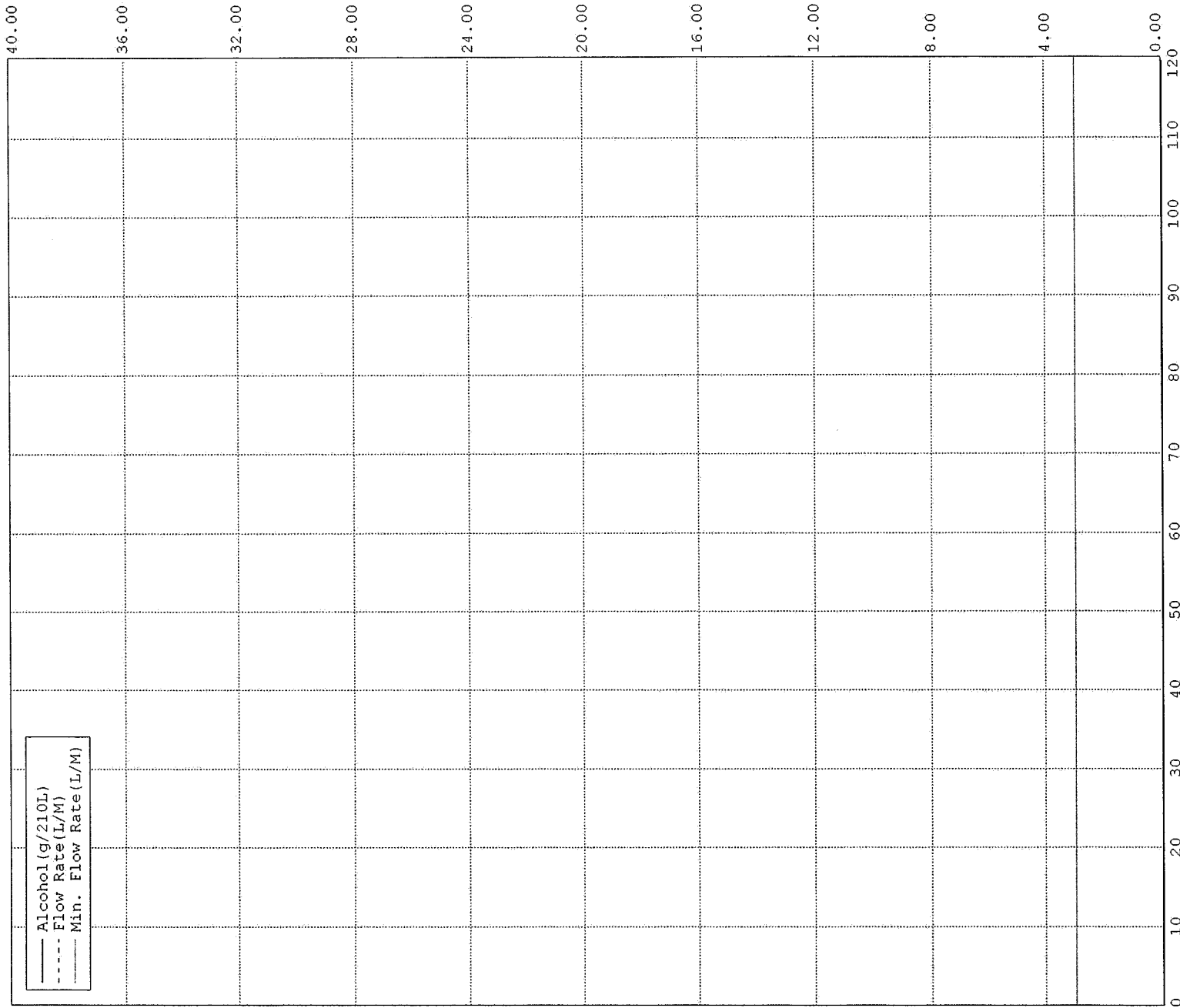
DEPT/AGENCY:  
AAA1

CASE/REPORT: 21-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.86: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 16:33  
BLANK TEST 0.000 16:33  
INTERNAL STANDARD VERIFIED 16:34  
EXTERNAL STANDARD 0.079 16:34  
BLANK TEST 0.000 16:35  
SUBJECT SAMPLE INCOMPLETE 16:37



SUBJECT TEST

Alaska Department of Public Safety  
DAYMASTER dmt: 100413

Date: 06/30/2021  
Time: 16:17:01

SUBJECT NAME:  
TEST TEST  
LICENSE #: INVALID

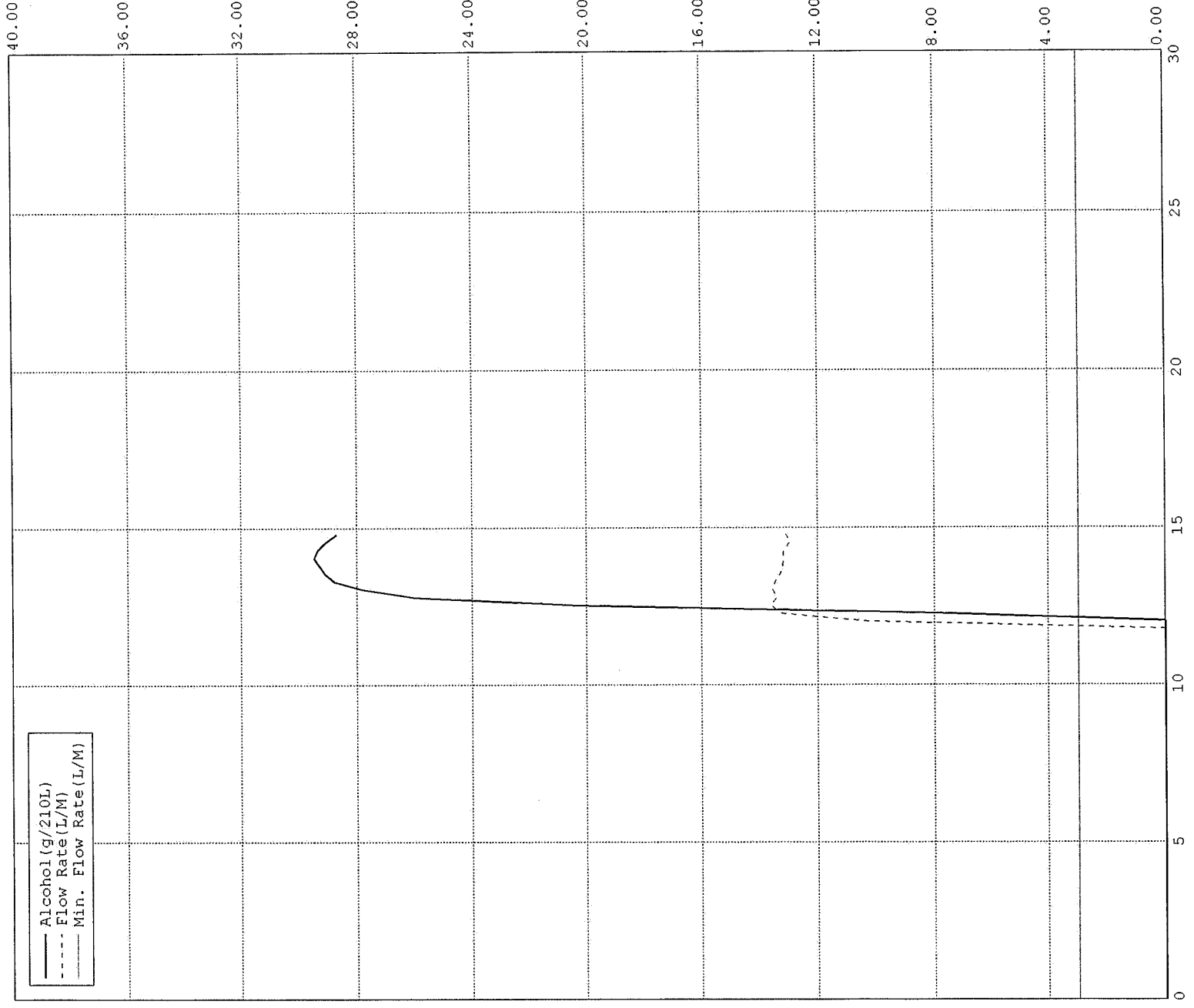
OPERATOR NAME:  
COLLEEN S OBRYANT  
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.86: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 16:18  
BLANK TEST 0.000 16:18  
INTERNAL STANDARD VERIFIED 16:18  
EXTERNAL STANDARD 0.079 16:19  
BLANK TEST 0.000 16:19  
SUBJECT SAMPLE INVALID 16:20

*COS*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 06/30/2021  
Time: 15:56:11

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 29.86: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

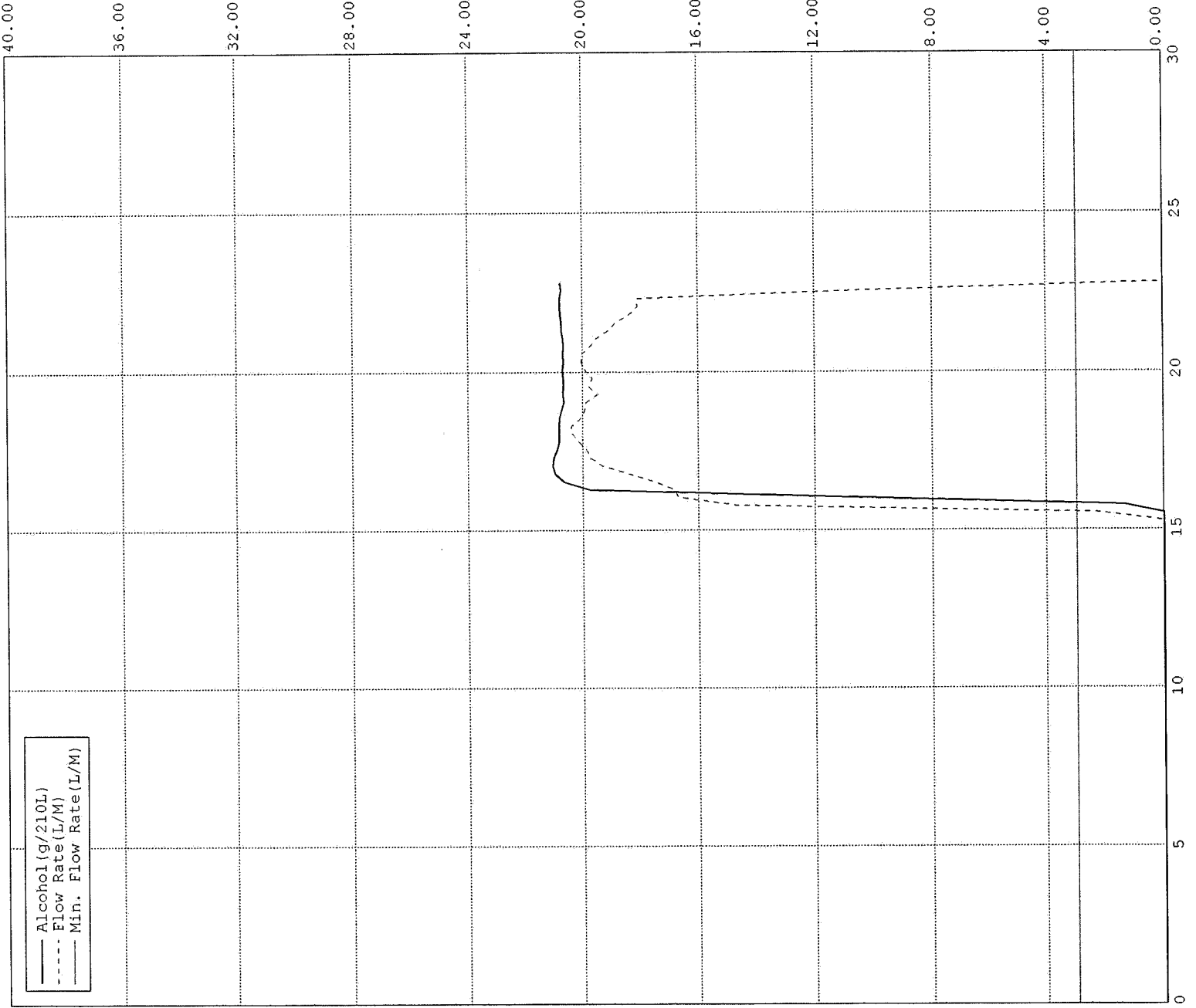
DIAGNOSTIC CHECK	PASSED	15:57
BLANK TEST	0.000	15:57
INTERNAL STANDARD	VERIFIED	15:57
Xq = 0.105 (0.33%)		
EXTERNAL STANDARD	0.078	15:57
X[1] = 0.0785 (0.0029)		
BLANK TEST	0.000	15:58
SUBJECT SAMPLE	XXX	15:59
X[1] = 0.1046 (-0.0184) (0.0013)		

Interference Detected

*Filter & Avg: 0.0005*

*Filter & Avg: 0.0007*

*CAB*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 06/30/2021  
Time: 16:02:07

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-IPA

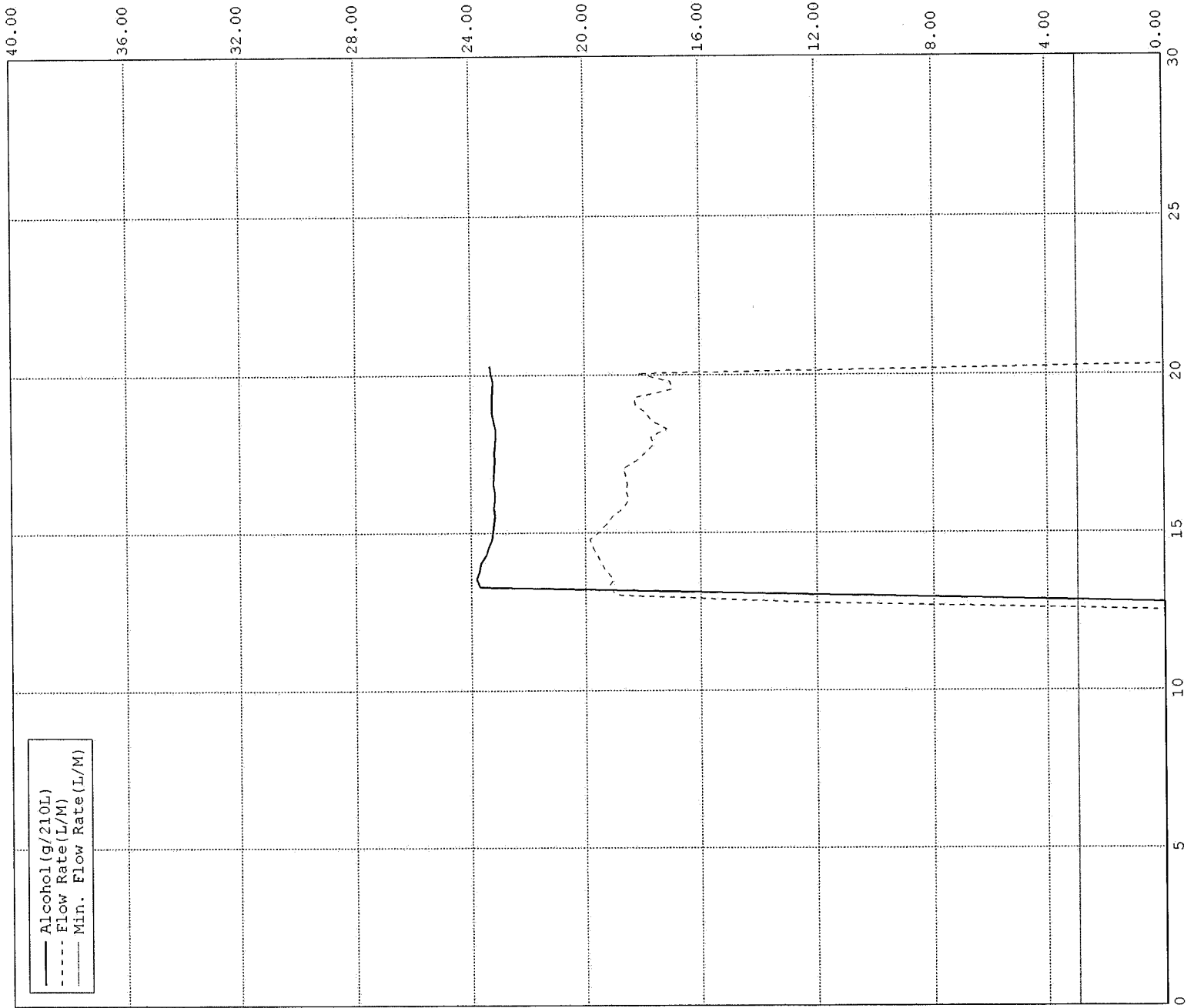
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.86: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 16:03  
BLANK TEST 0.000 16:03  
INTERNAL STANDARD VERIFIED 16:03  
Xq = 0.106 (1.09%) 0.079 16:03  
EXTERNAL STANDARD X[1] = 0.0791 (0.0003) (0.0031) 0.000 16:04  
BLANK TEST 0.000 XXX 16:04  
SUBJECT SAMPLE X[1] = 0.1168 (-0.0204) (0.0032) 0.000 16:04

Interference Detected





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 06/30/2021  
Time: 16:07:47

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-NEGATIVE

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

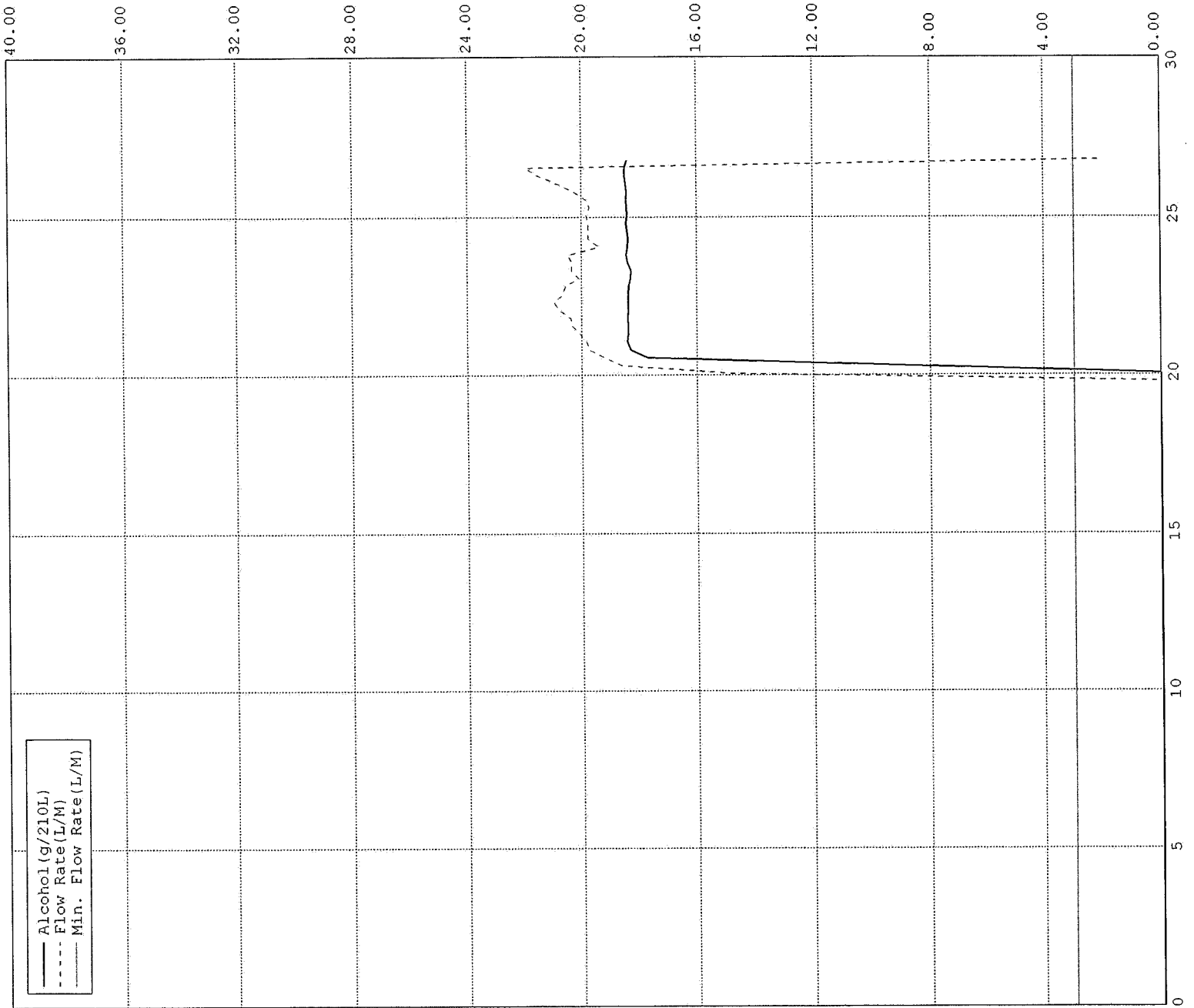
DEPT/AGENCY:  
AAA1

CASE/REPORT: 21-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.86: 0.080  
LOF #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	16:08
BLANK TEST	0.000	16:08
INTERNAL STANDARD	VERIFIED	16:09
Xq = 0.106 (1.26%)		
EXTERNAL STANDARD	0.079	16:09
X[1] = 0.0792 (0.0005) (0.0027)		
BLANK TEST	0.000	16:10
SUBJECT SAMPLE (Vol=2.25L)	0.092	16:10
X[1] = 0.0926 (0.0037) (0.0017)		
BLANK TEST	0.000	16:11
EXTERNAL STANDARD	0.078	16:11
X[1] = 0.0784 (0.0006) (0.0021)		
BLANK TEST	0.000	16:12



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 07/01/2021  
Time: 10:39:34

SUBJECT NAME:  
TEST TEST  
LICENSE #: MAX ATTEMPTS

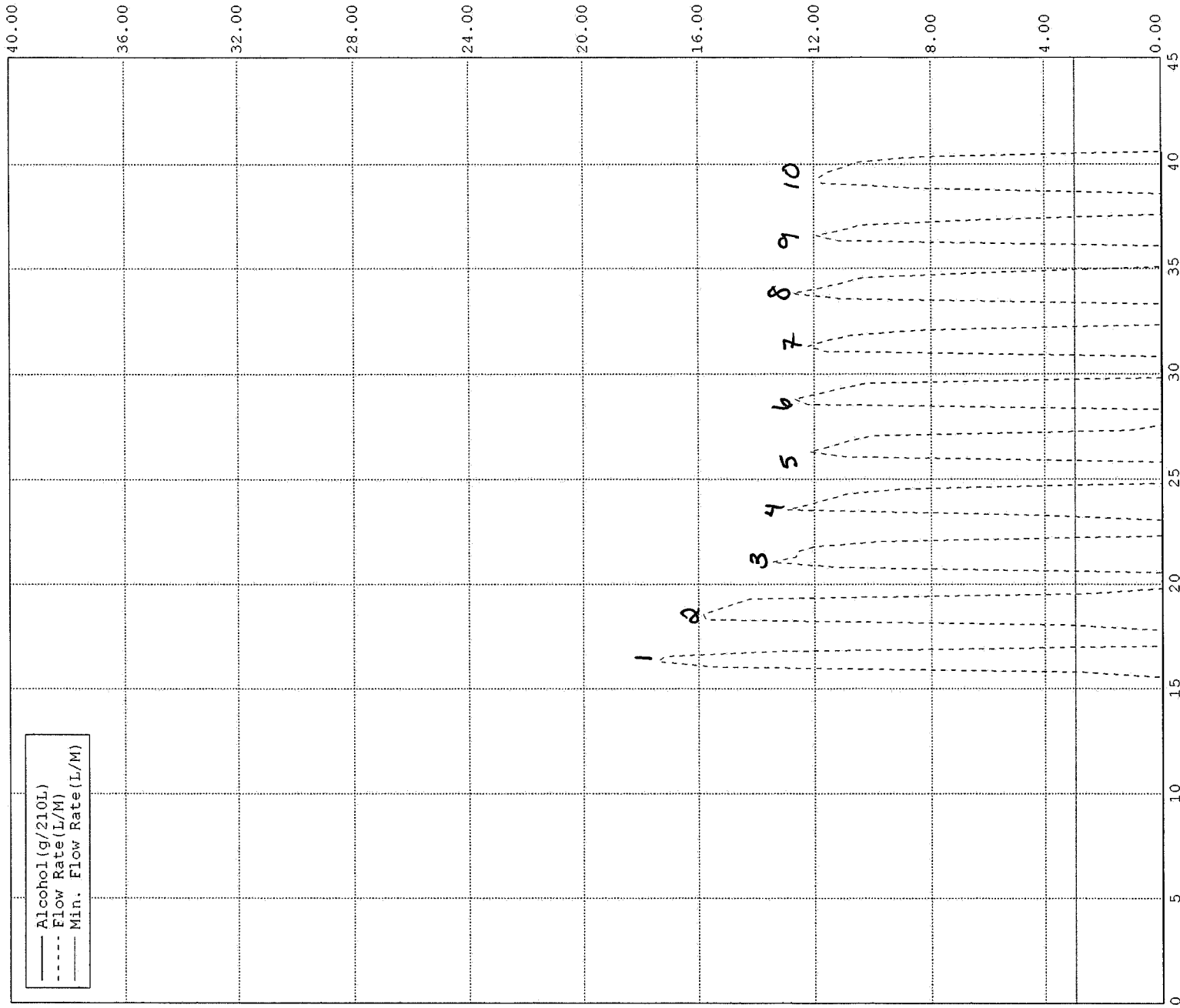
OPERATOR NAME:  
COLLEEN S OBRYANT  
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.86: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 10:41  
BLANK TEST 0.000 10:41  
INTERNAL STANDARD VERIFIED 10:41  
EXTERNAL STANDARD 0.079 10:41  
BLANK TEST 0.000 10:42  
SUBJECT SAMPLE XXX 10:43

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 06/30/2021  
Time: 16:22:26

SUBJECT NAME:  
TEST TEST  
LICENSE #: RFI

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

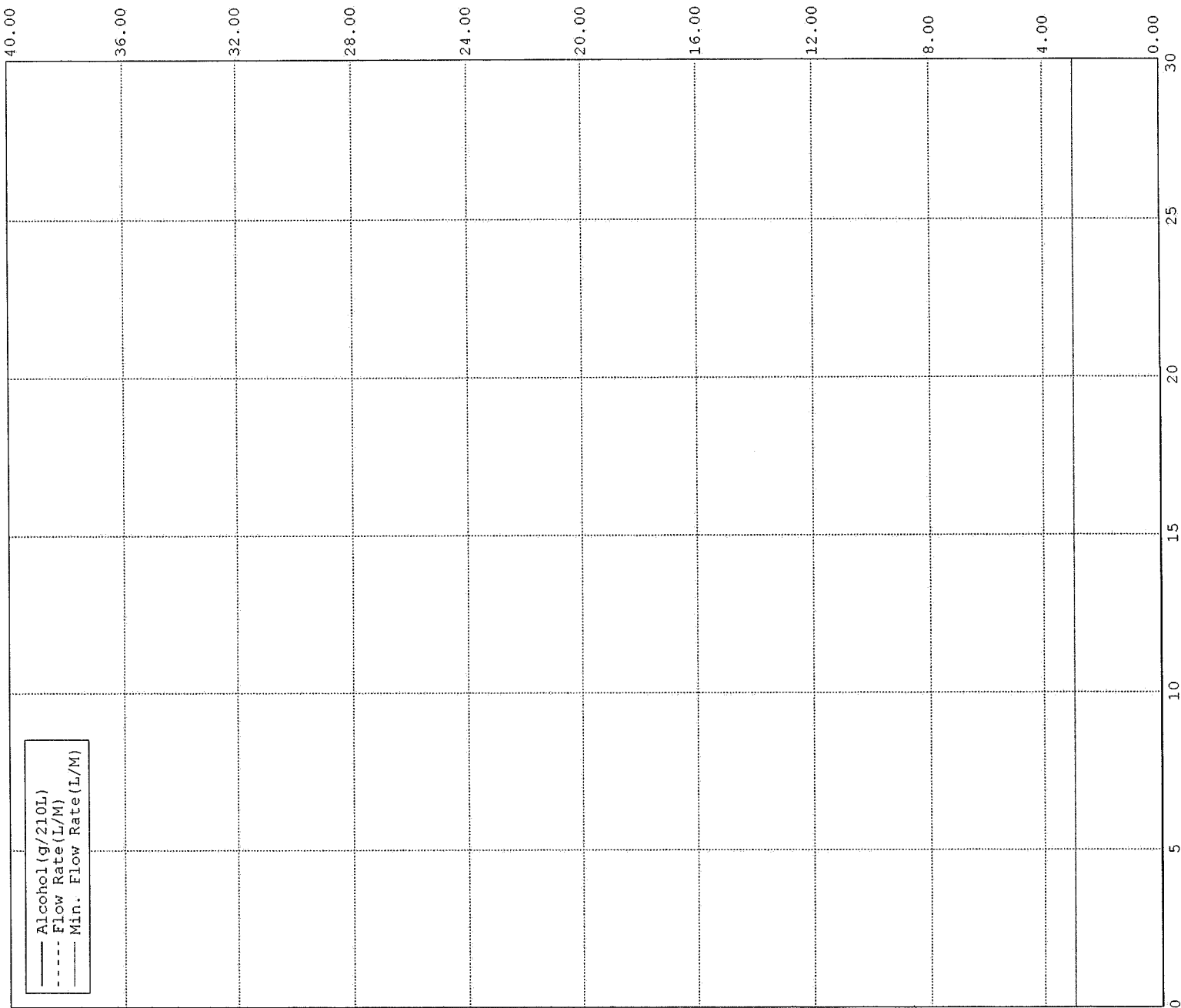
DEPT/AGENCY:  
AAA1  
CASE/REPORT: 21-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.86: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 16:23  
BLANK TEST 0.000 16:24  
INTERNAL STANDARD VERIFIED 16:24  
EXTERNAL STANDARD 0.079 16:24  
BLANK TEST 0.000 16:25

RFI DETECTED

*CS*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 07/01/2021  
Time: 10:51:22

SUBJECT NAME:  
TEST TEST  
LICENSE #: NON-DRINKING

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 29.86: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	10:52
BLANK TEST	0.000	10:52
INTERNAL STANDARD	VERIFIED	10:52
EXTERNAL STANDARD	0.079	10:53
BLANK TEST	0.000	10:54
SUBJECT SAMPLE (Vol.=2.61L)	0.000	10:54
BLANK TEST	0.000	10:55
EXTERNAL STANDARD	0.079	10:55
BLANK TEST	0.000	10:56

