

# Alaska Scientific Crime Detection Laboratory

## DataMaster Certification Form

Effective: 11/10/2021

Version: 2.0

Instrument #: 100690 Analyst: C.O. Bryant Start Date: 2/1/22

- Diagnostic Test (attached)
- Adjust voltages, if needed
  - Lamp (2.6V Maximum)
  - Bias
  - Cooler (2.0V Maximum)
- Internal Standard value  $\leq$  3.00%
  - Chopper Frequency
  - Detector Voltage (-0.100V to 0.100V)
- Set RFI Sensitivity
- 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)
- Minimum Volume Test 1.6 L (1.3L to 1.7L)

### Linearity Test (attached)

0.020g/210L Mnf: Argas Lot: AG100401 Exp: 1/4/23  
0.040g/210L Mnf: Argas Lot: AG111710 Exp: 4/27/23  
0.080g/210L Mnf: Argas Lot: AG018102 Exp: 6/09/22  
0.100g/210L Mnf: Argas Lot: AG108404 Exp: 3/25/23  
0.200g/210L Mnf: Guth Lot: 20510 Exp: 12/3/22  
Simulator S/N: DR4161 Date Calibrated: 6/16/21  
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
- Maximum Attempts Exceeded
- Radio Frequency Interference
- Interference (Volatiles)

Acetone Mnf: Guth Lot: 21DP41158 Level: 0.100 Exp: 4/29/23  
Simulator S/N: SD1174 Date Calibrated: 6/15/21  
Isopropanol Mnf: Guth Lot: 21DP41158 Level: 0.100 Exp: 4/29/23  
Simulator S/N: SD1198 Date Calibrated: 6/15/21  
Neg. Control Mnf: Guth Lot: 21DP41158 Level: 0.100 Exp: 4/29/23  
Simulator S/N: SD1088 Date Calibrated: 6/15/21

- Verify stylus is calibrated
- Non-Drinking Subject Test
- Reset Options
- Upload
- Clear Memory
- Remove Tank Prior to Shutdown
- Verification of Calibration
- Add Linearity Data to Spreadsheet

End Date: 2/6/22

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100690  
-----

Date: 02/01/2022  
Time: 16:34:35

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 46.2°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 2.02 V PASSED  
(1.21 V - 2.83 V)  
Cooler Voltage = 1.85 V PASSED  
(1.11 V - 2.59 V)  
Bias Voltage = 79 V PASSED  
(47 V - 111 V)  
Chopper Freq = 537 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.7 in

PUMP INFO

Flow Rate = 4.422 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  
(0.003 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED  
Filter 2 PASSED  
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.105 0.58% PASSED  
(0.00% - 4.00%)

Technician Screen

-----  
DATAMASTER dmt: 100690  
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Date: 02/02/2022

Time: 9:24 AM

Temperatures (°C)

Sample Cell: 48.7°C

Breath Tube: 44.6°C

Current Barometer 29.7 in

Volume (Ltr) 1.44

Settings

Lamp: 2.10 V

Bias: 80 V

Cooler: 1.95 V

Chopper: 530 Hz

Voltages (V)

Flow: 1.04 V

Detector: 0.093 V

CALIBRATION FACTORS

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Alaska Department of Public Safety  
DATAMASTER dmt: 100690  
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Date: 12/29/2021  
Time: 12:23:19

OPERATOR NAME:  
CARLIE GLAISTER  
CERTIFICATE #: 10436

Ca	=	0.1000			
CAL	=	0.977641	0.800	<=	CAL < 1.200
b1	=	0.0008	0.0000	<=	b1 < 0.0040
b2	=	0.0049	0.0010	<=	b2 < 0.0100
b3	=	0.0003	0.0000	<=	b3 < 0.0040
Xq	=	0.1060	0.0500	<=	Xq < 0.2000
a21	=	1.134893	1.050	<=	a21 < 1.300
a31	=	0.424975	0.300	<=	a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100690

Date: 02/02/2022  
Time: 09:32:27

SUBJECT NAME:  
TEST TEST  
LICENSE #: VOLUME TEST

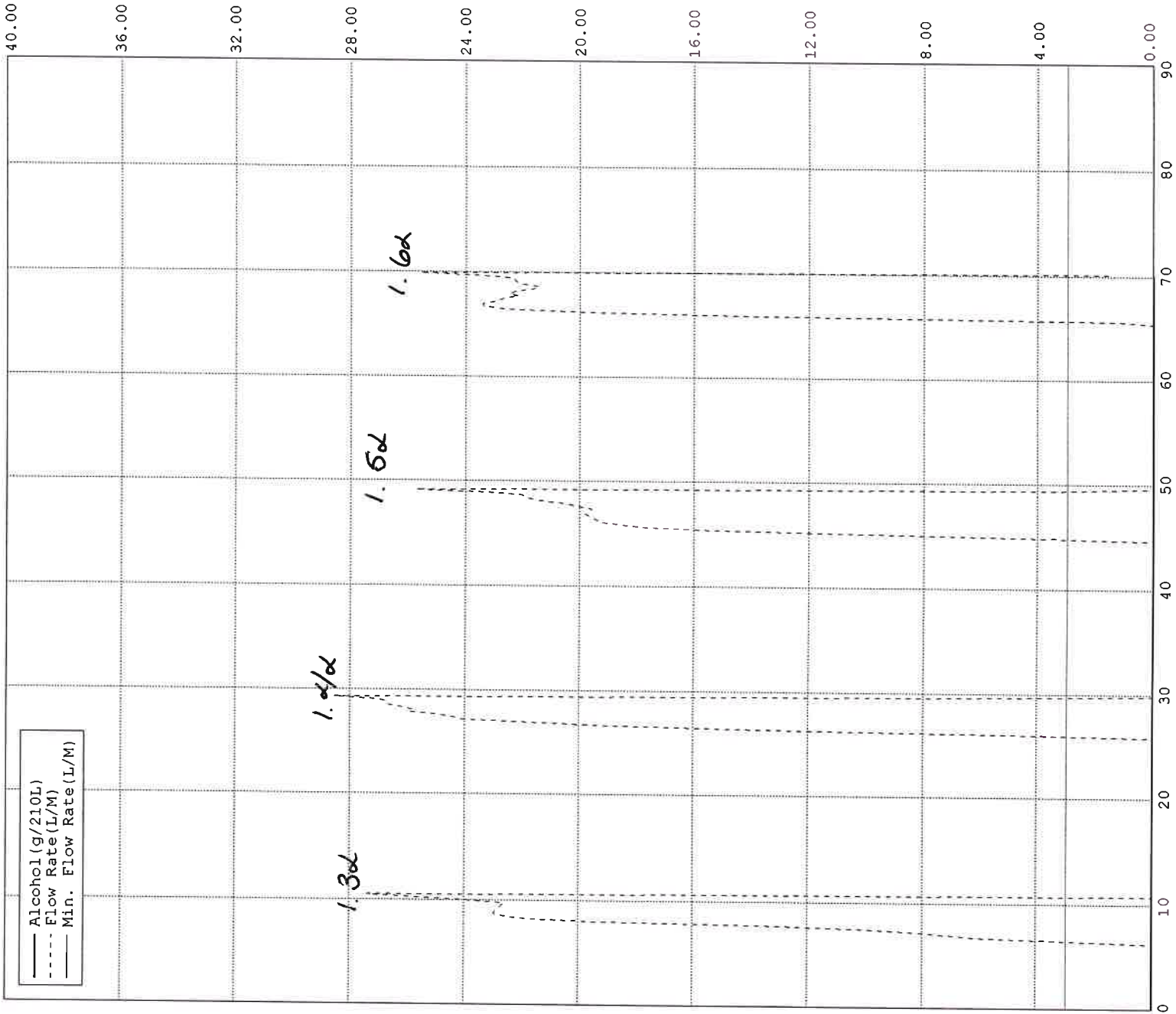
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 22-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.68: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	09:33
BLANK TEST	0.000	09:34
INTERNAL STANDARD	VERIFIED	09:34
EXTERNAL STANDARD	0.077	09:34
BLANK TEST	0.000	09:35
SUBJECT SAMPLE (Vol=1.56L)	0.000	09:36
BLANK TEST	0.000	09:37
EXTERNAL STANDARD	0.078	09:37
BLANK TEST	0.000	09:38

*CS*



LINEARITY CHECK

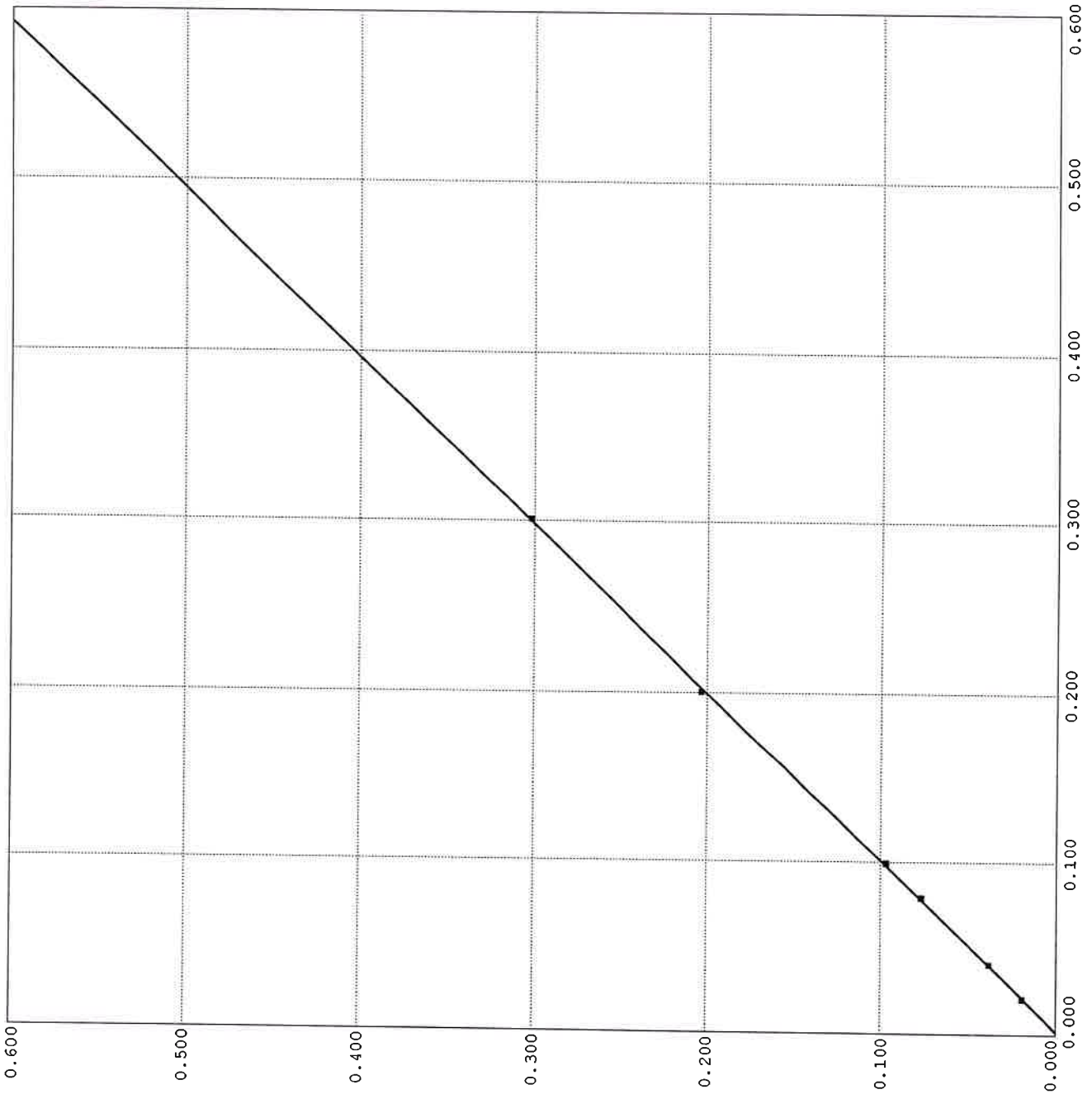
Alaska Department of Public Safety  
 DATAMASTER dmt: 100690

Date: 02/02/2022  
 Time: 09:45:13

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0390	0.0000
0.079	0.0778	0.0004
0.099	0.0978	0.0004
0.200	0.2042	0.0004
0.300	0.3024	0.0005

SLOPE = 1.015939  
 R<sup>2</sup> = 0.999814



*COB*

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
DATAMASTER dmt: 100690

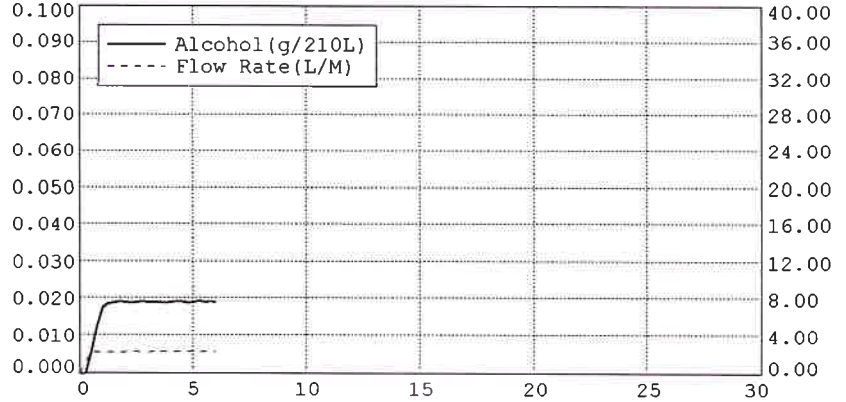
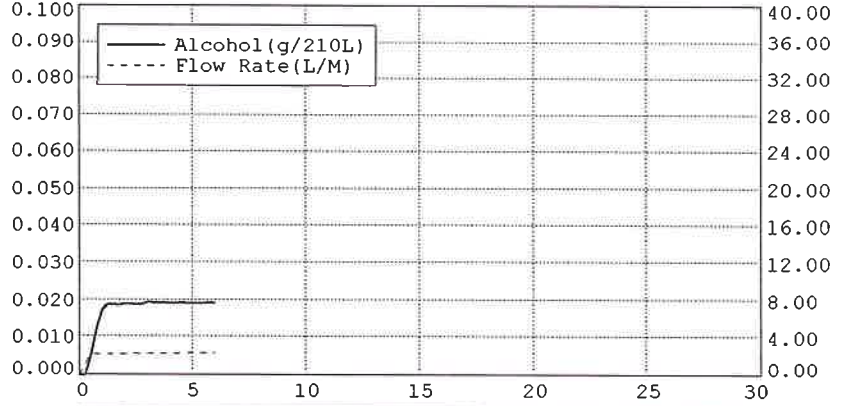
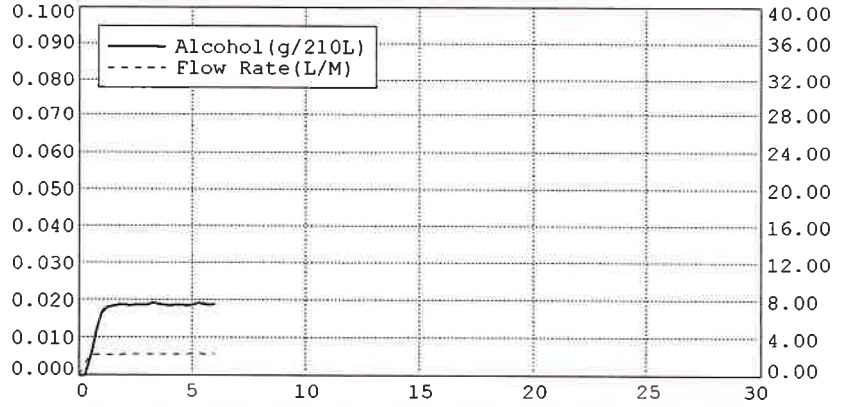
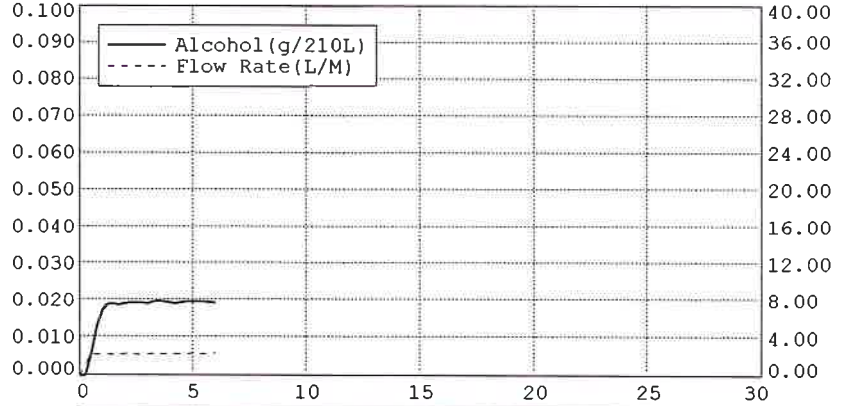
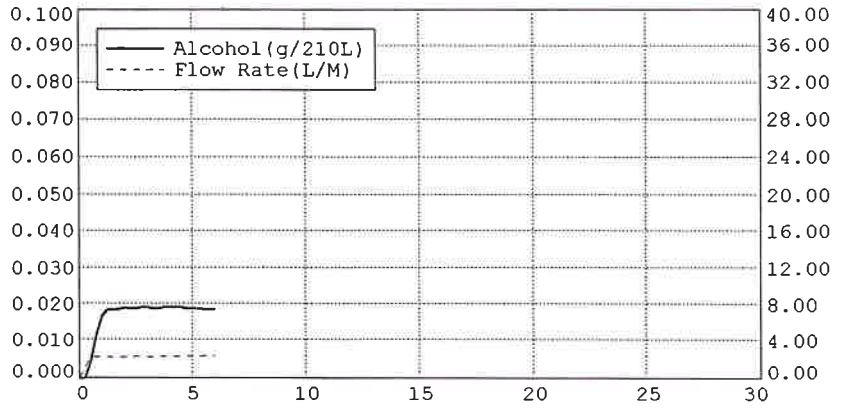
Date: 02/02/2022  
Time: 09:45:16

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
TARGET AT 29.68: 0.020  
LOT #: AG100401  
EXPIRATION: 01/04/2023  
TANK PRESSURE: 720 psi

BLANK TEST	0.000	10:00
INTERNAL STANDARD	VERIFIED	10:00
EXTERNAL STANDARD	0.020	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.020	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.020	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.020	10:04
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.020	10:05
BLANK TEST	0.000	10:06

Average = 0.0200  
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100690

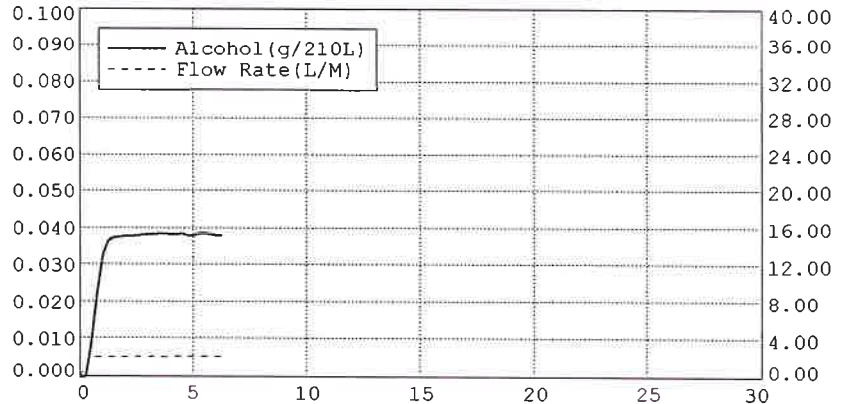
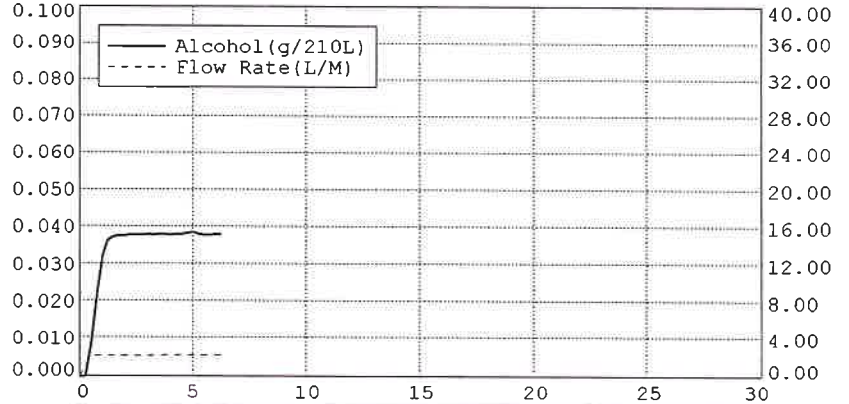
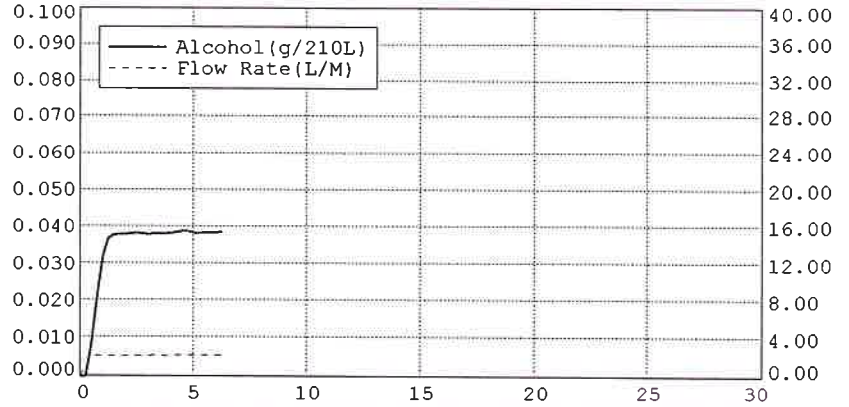
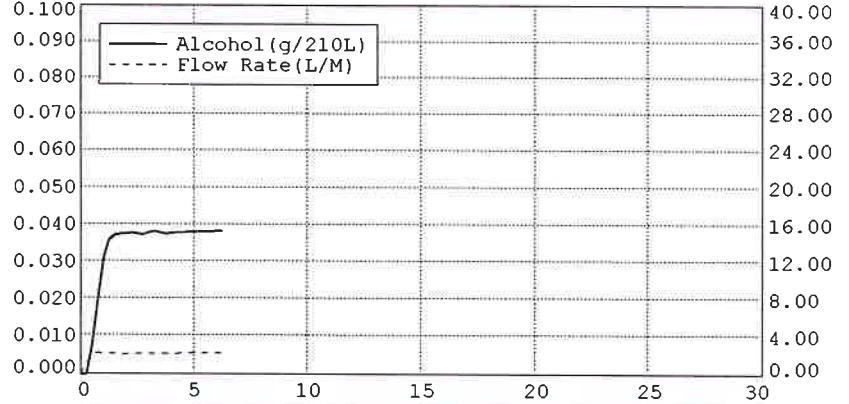
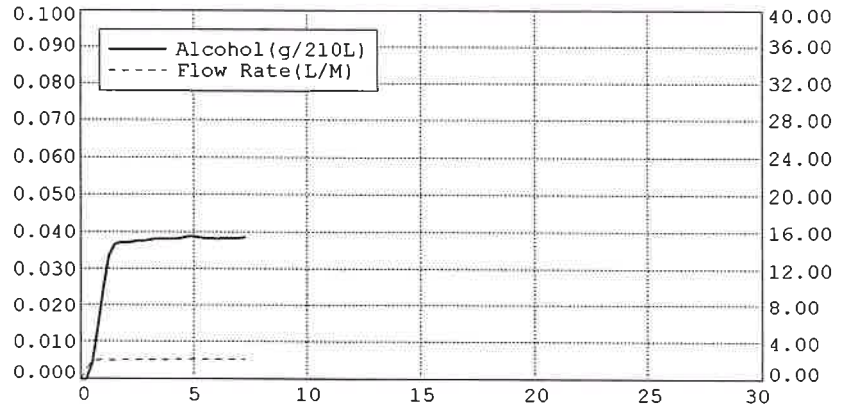
Date: 02/02/2022  
 Time: 10:09:10

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.68: 0.040  
 LOT #: AG111710  
 EXPIRATION: 04/27/2023  
 TANK PRESSURE: 470 psi

BLANK TEST	0.000	10:10
INTERNAL STANDARD	VERIFIED	10:10
EXTERNAL STANDARD	0.039	10:10
BLANK TEST	0.000	10:11
EXTERNAL STANDARD	0.039	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.039	10:12
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.039	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.039	10:15
BLANK TEST	0.000	10:15

Average = 0.0390  
 Std Dev = 0.0000





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
DATAMASTER dmt: 100690

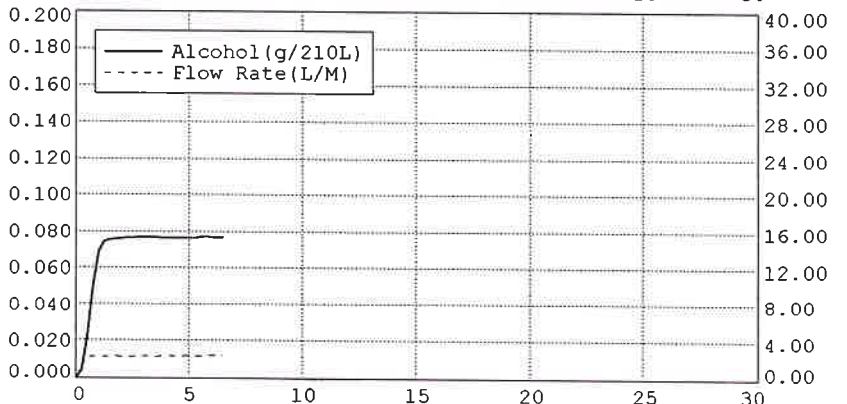
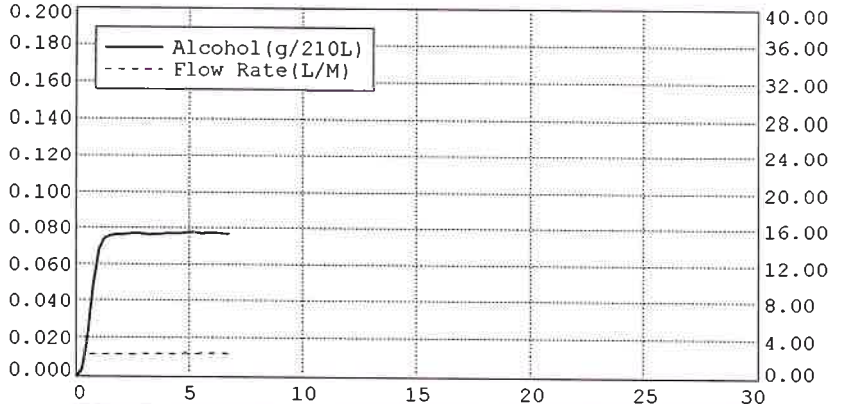
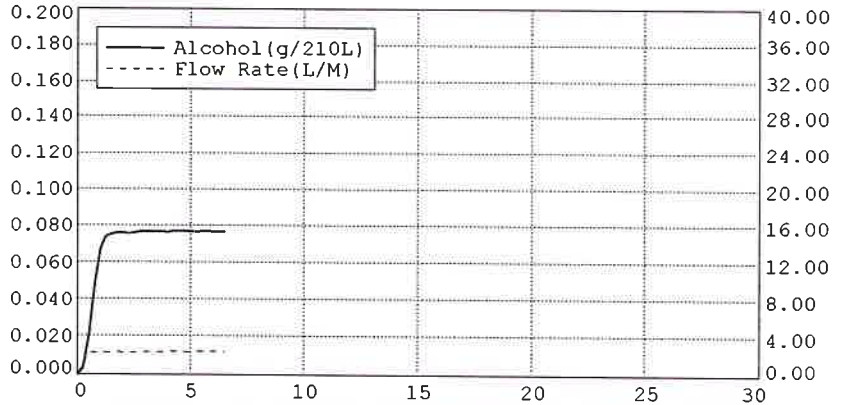
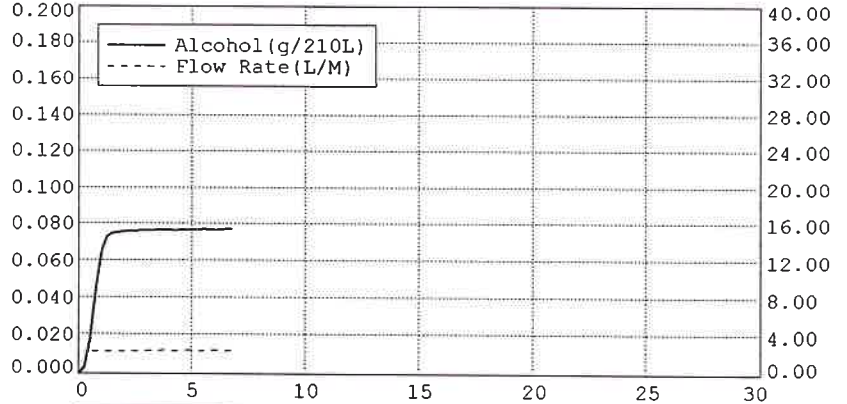
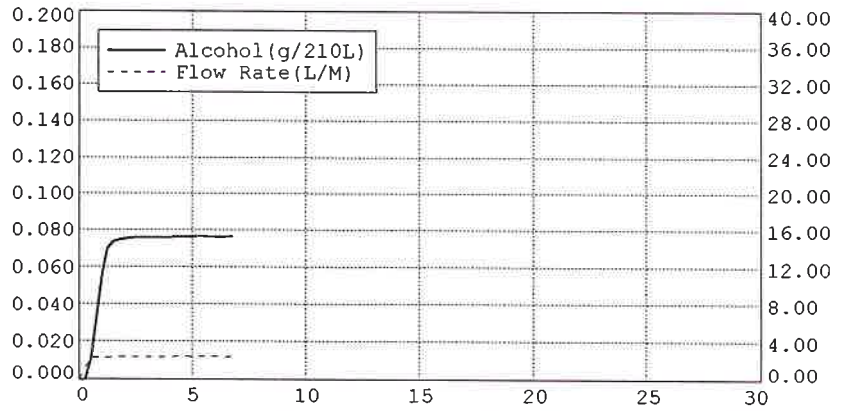
Date: 02/02/2022  
Time: 10:16:51

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.68: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022  
TANK PRESSURE: 999 psi

BLANK TEST	0.000	10:17
INTERNAL STANDARD	VERIFIED	10:18
EXTERNAL STANDARD	0.077	10:18
BLANK TEST	0.000	10:19
EXTERNAL STANDARD	0.078	10:19
BLANK TEST	0.000	10:20
EXTERNAL STANDARD	0.078	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.078	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.078	10:22
BLANK TEST	0.000	10:23

Average = 0.0778  
Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100690

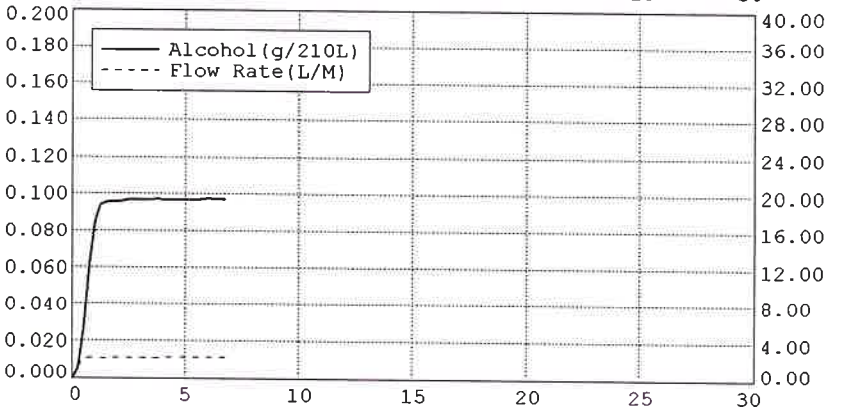
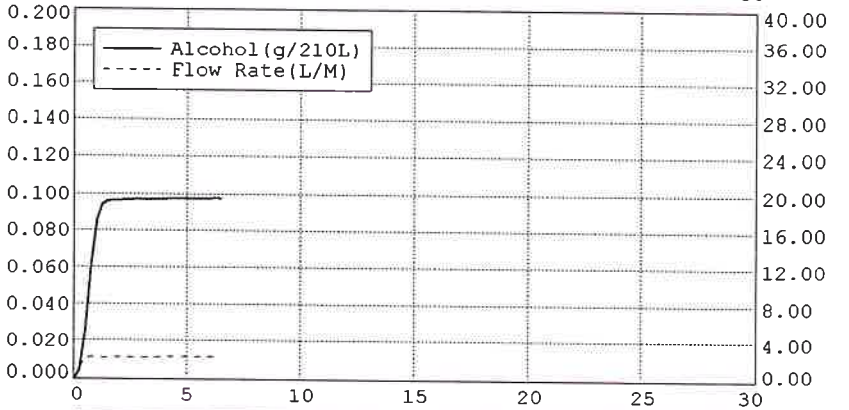
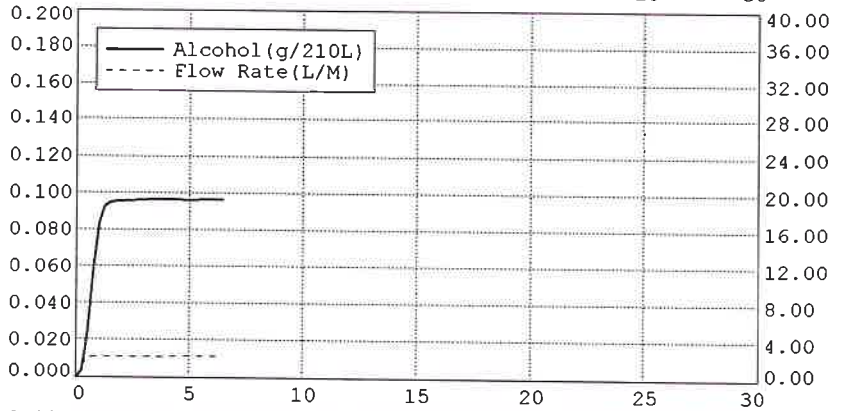
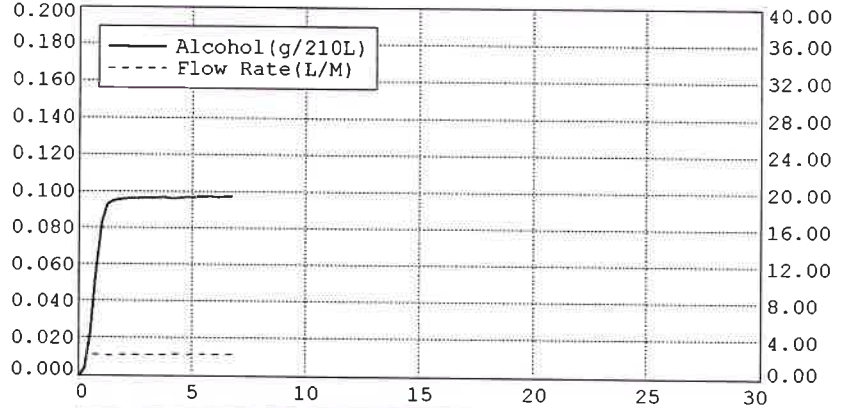
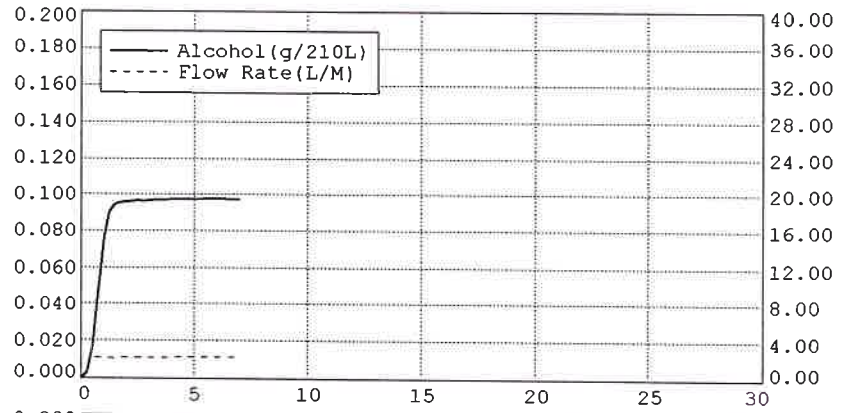
Date: 02/02/2022  
 Time: 10:24:42

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.68: 0.099  
 LOT #: AG108404  
 EXPIRATION: 03/25/2023  
 TANK PRESSURE: 735 psi

BLANK TEST	0.000	10:25
INTERNAL STANDARD	VERIFIED	10:25
EXTERNAL STANDARD	0.098	10:26
BLANK TEST	0.000	10:27
EXTERNAL STANDARD	0.097	10:27
BLANK TEST	0.000	10:28
EXTERNAL STANDARD	0.098	10:28
BLANK TEST	0.000	10:29
EXTERNAL STANDARD	0.098	10:29
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.098	10:30
BLANK TEST	0.000	10:31

Average = 0.0978  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety  
 DATAMASTER dmt: 100690

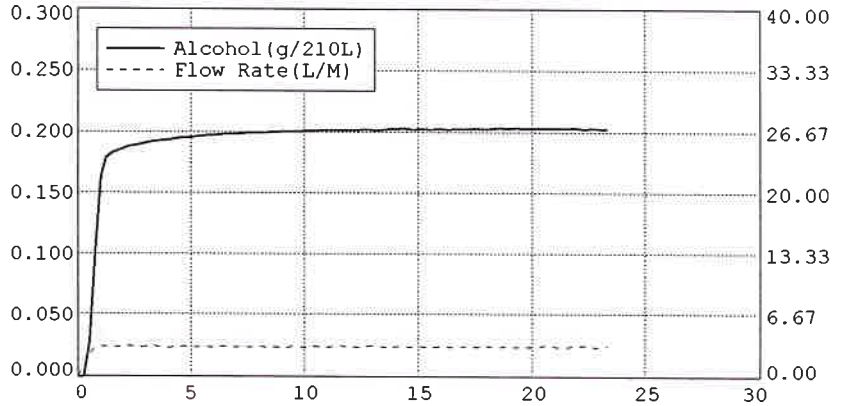
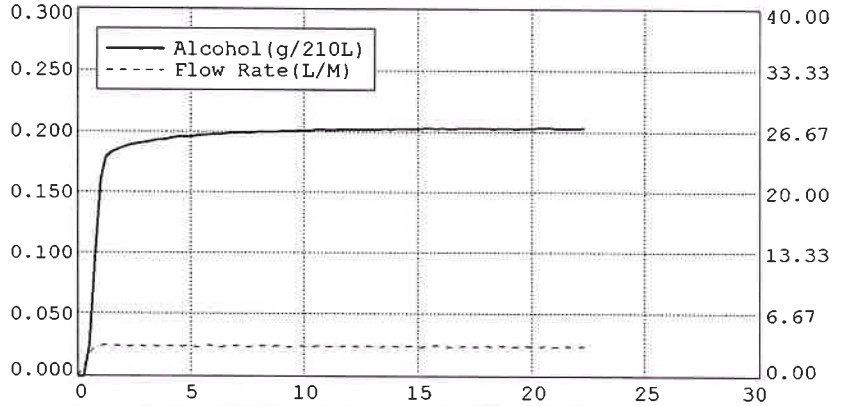
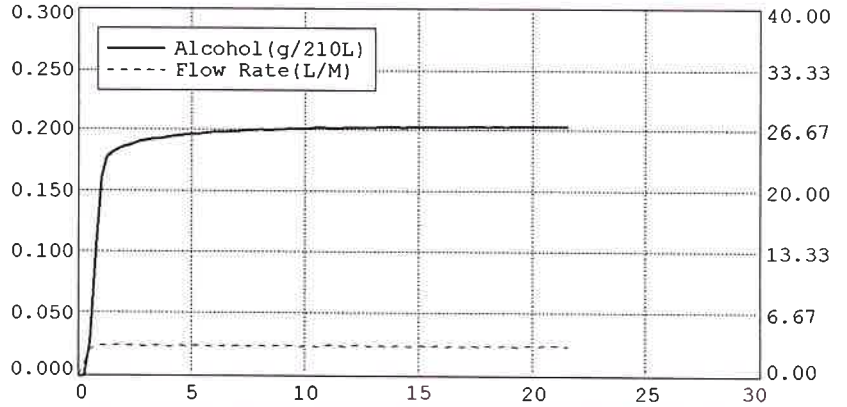
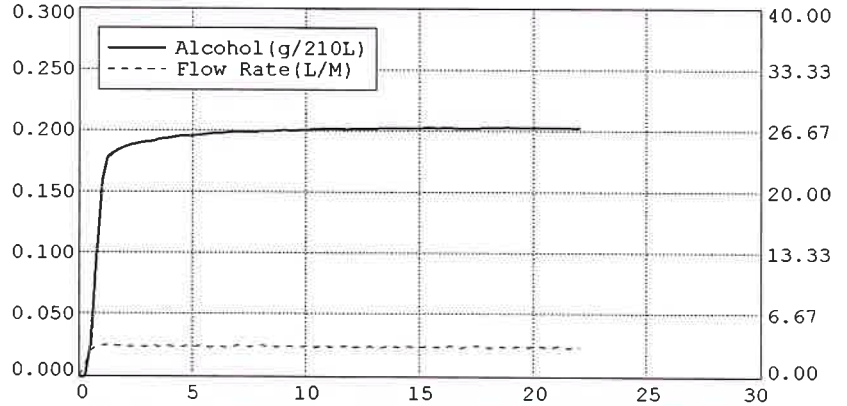
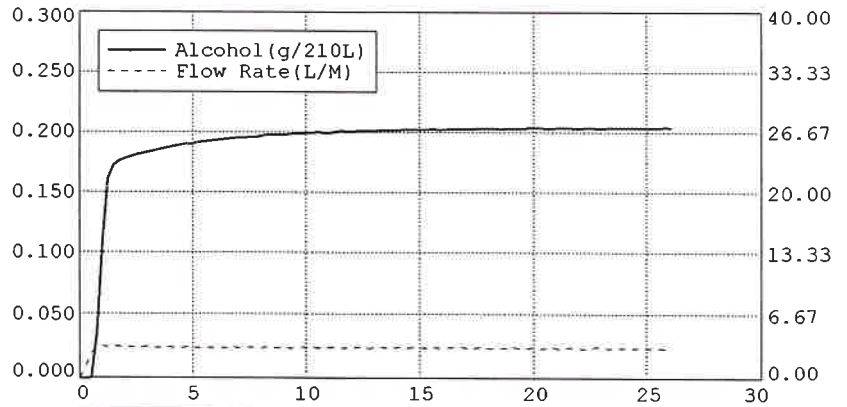
Date: 02/02/2022  
 Time: 10:31:58

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:33
INTERNAL STANDARD	VERIFIED	10:33
EXTERNAL STANDARD	0.205	10:33
BLANK TEST	0.000	10:34
EXTERNAL STANDARD	0.204	10:35
BLANK TEST	0.000	10:36
EXTERNAL STANDARD	0.204	10:36
BLANK TEST	0.000	10:37
EXTERNAL STANDARD	0.204	10:38
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.204	10:39
BLANK TEST	0.000	10:40

Average = 0.2042  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100690

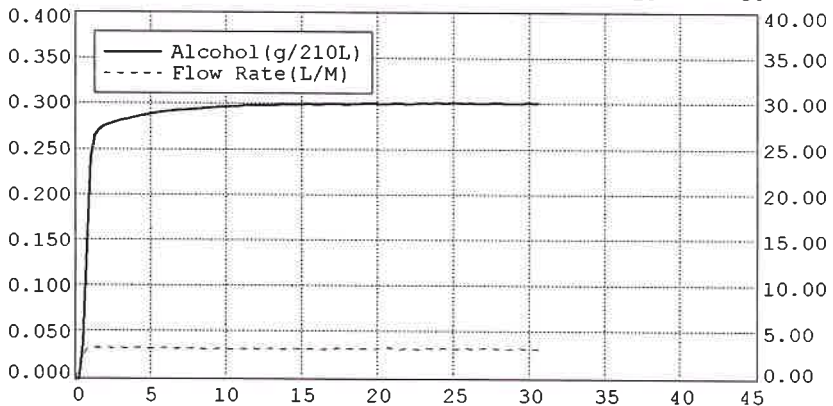
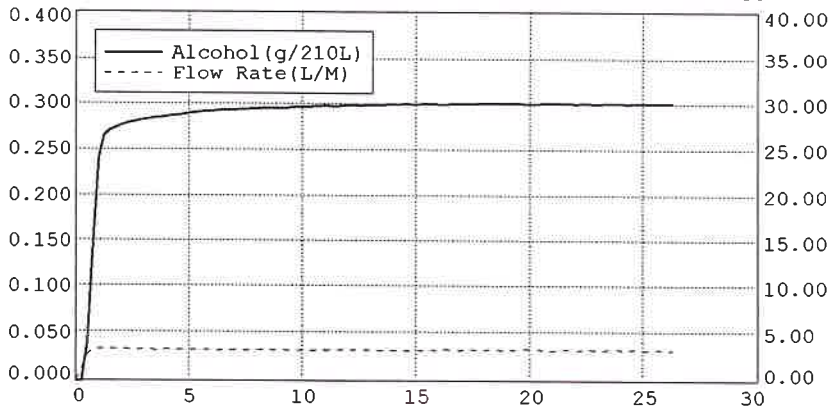
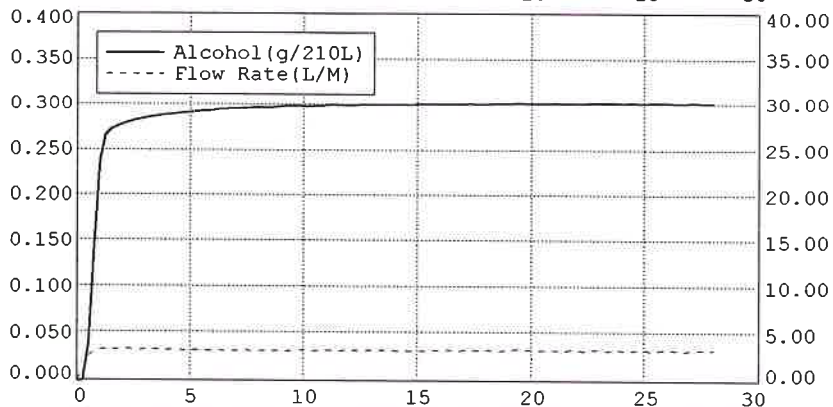
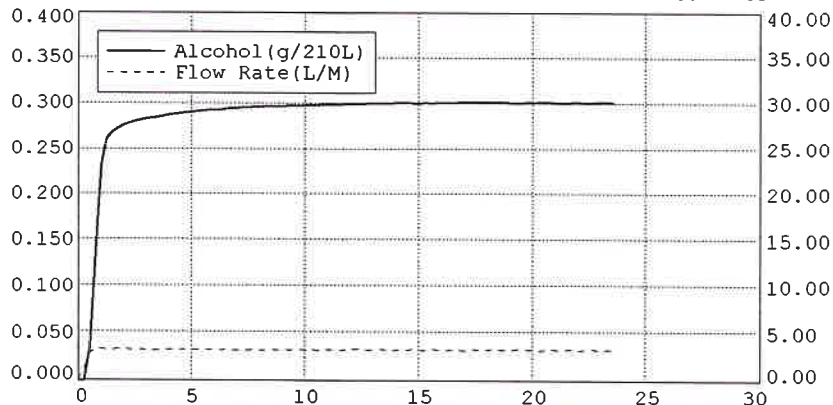
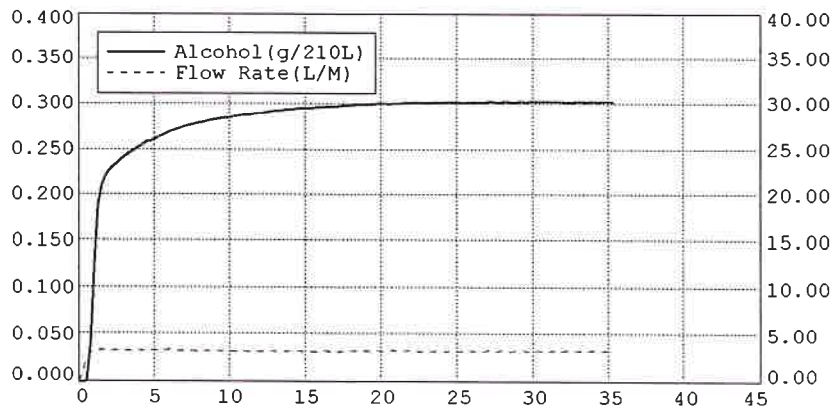
Date: 02/02/2022  
 Time: 11:12:45

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	11:13
INTERNAL STANDARD	VERIFIED	11:13
EXTERNAL STANDARD	0.303	11:14
BLANK TEST	0.000	11:15
EXTERNAL STANDARD	0.303	11:16
BLANK TEST	0.000	11:16
EXTERNAL STANDARD	0.302	11:17
BLANK TEST	0.000	11:18
EXTERNAL STANDARD	0.302	11:18
BLANK TEST	0.000	11:19
EXTERNAL STANDARD	0.302	11:20
BLANK TEST	0.000	11:21

Average = 0.3024  
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100690

Date: 02/02/2022  
Time: 12:39:03

SUBJECT NAME:  
TEST TEST  
LICENSE #: INCOMPLETE

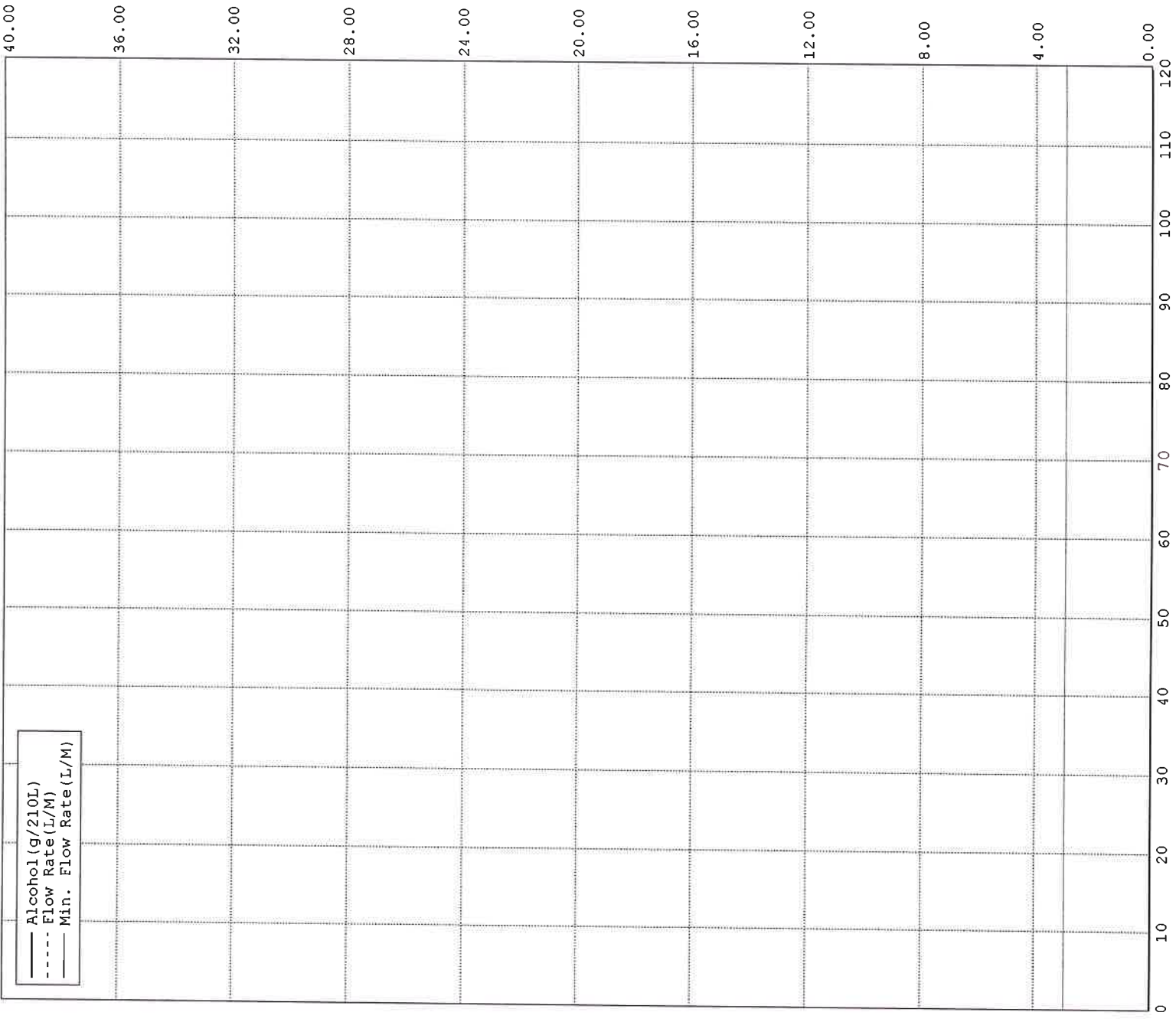
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 22-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.66: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:40  
BLANK TEST 0.000 12:40  
INTERNAL STANDARD VERIFIED 12:40  
EXTERNAL STANDARD 0.076 12:40  
BLANK TEST 0.000 12:41  
SUBJECT SAMPLE INCOMPLETE 12:43

(105)



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100690

Date: 02/02/2022  
Time: 13:32:47

SUBJECT NAME:  
TEST TEST  
LICENSE #: INVALID

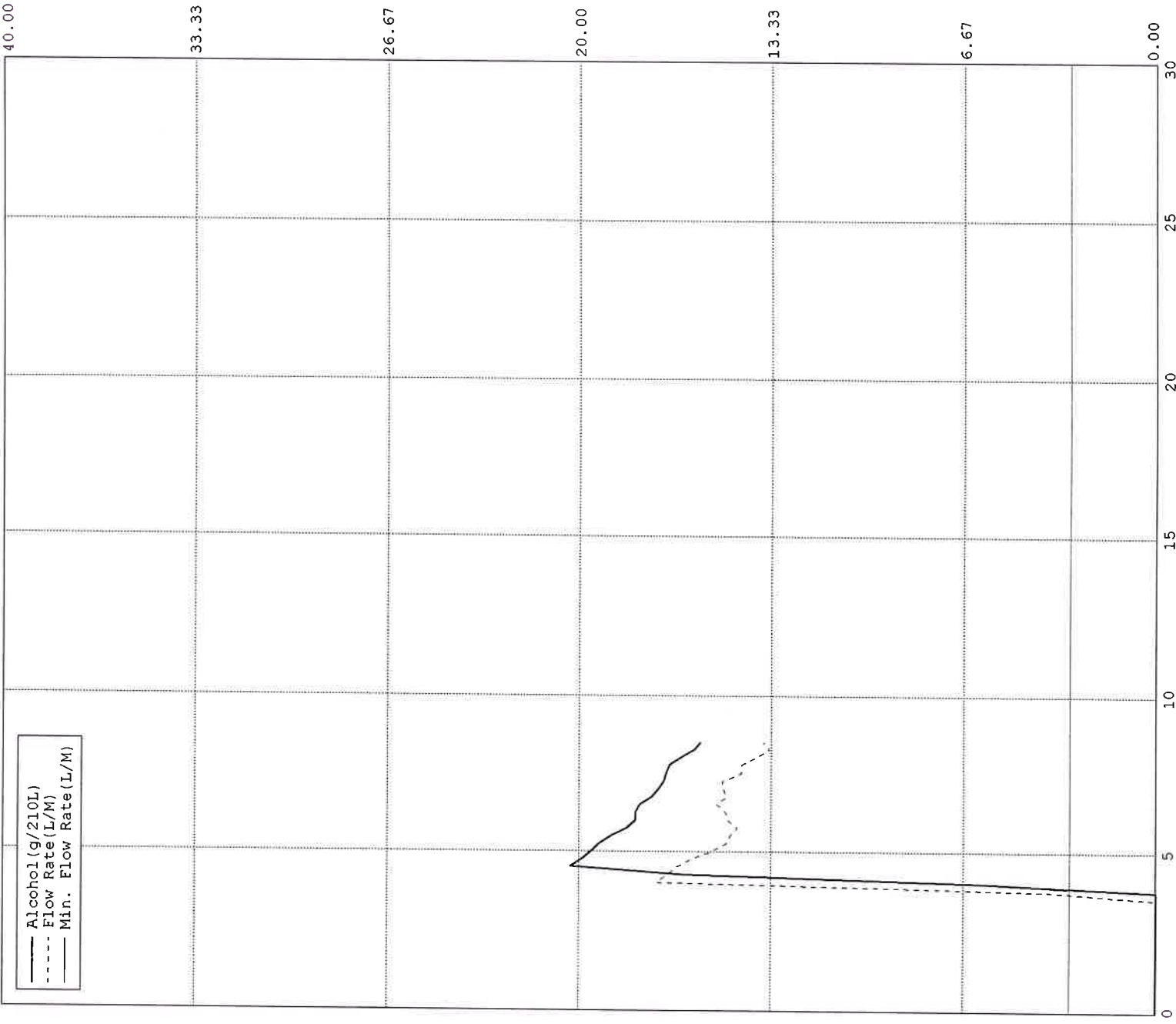
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 22-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.66: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	13:34
BLANK TEST	0.000	13:34
INTERNAL STANDARD	VERIFIED	13:34
EXTERNAL STANDARD	0.077	13:34
BLANK TEST	0.000	13:35
SUBJECT SAMPLE	INVALID	13:36

*CS*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100690

Date: 02/02/2022  
Time: 13:26:26

SUBJECT NAME:  
TEST TEST  
LICENSE #: MAX ATTEMPTS

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

DEPT/AGENCY:  
AAA1

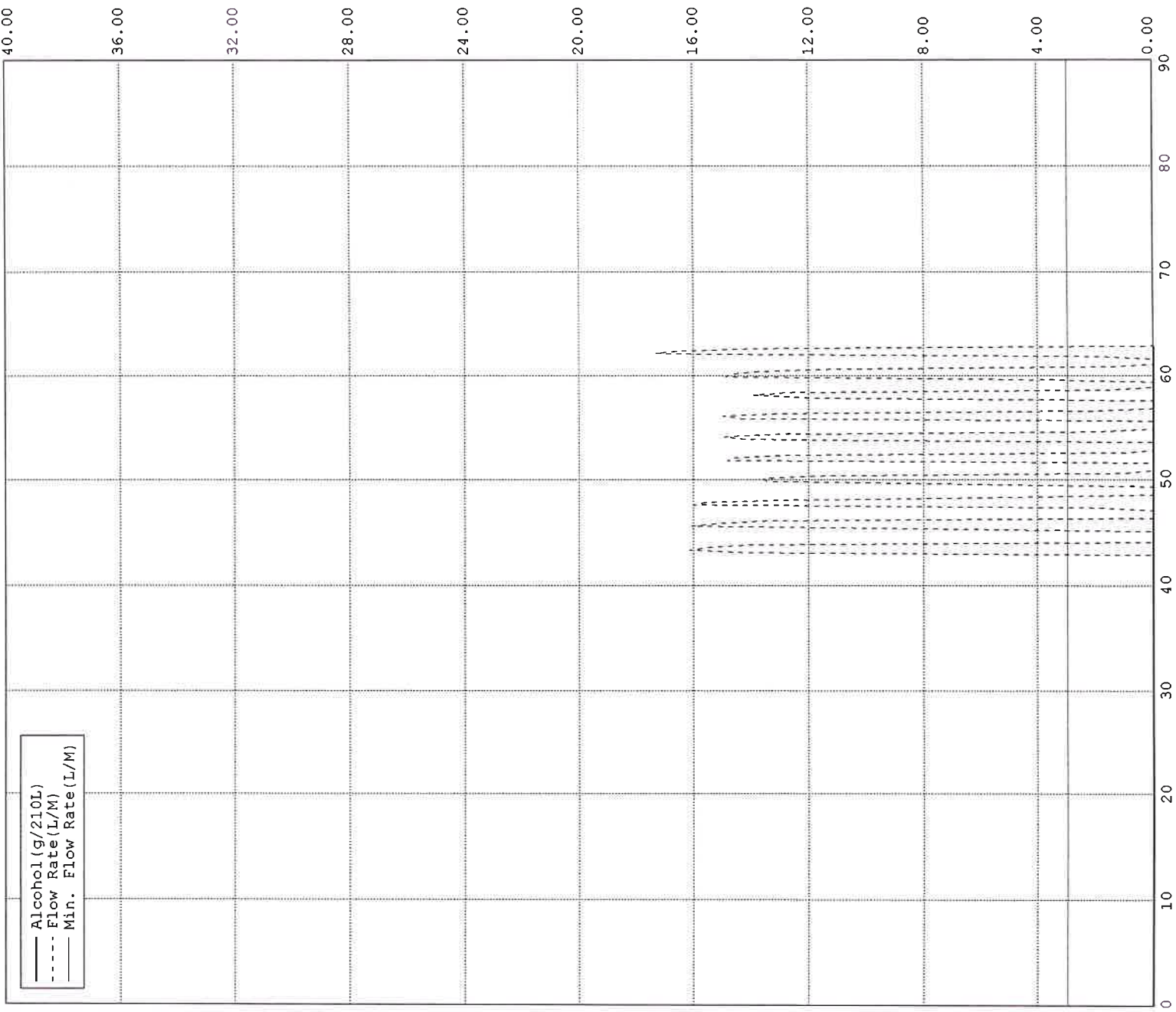
CASE/REPORT: 22-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.65: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	13:27
BLANK TEST	0.000	13:27
INTERNAL STANDARD	VERIFIED	13:28
EXTERNAL STANDARD	0.078	13:28
BLANK TEST	0.000	13:29
SUBJECT SAMPLE	XXX	13:30

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100690

Date: 02/02/2022  
Time: 13:18:28

SUBJECT NAME:  
TEST TEST  
LICENSE #: RFI

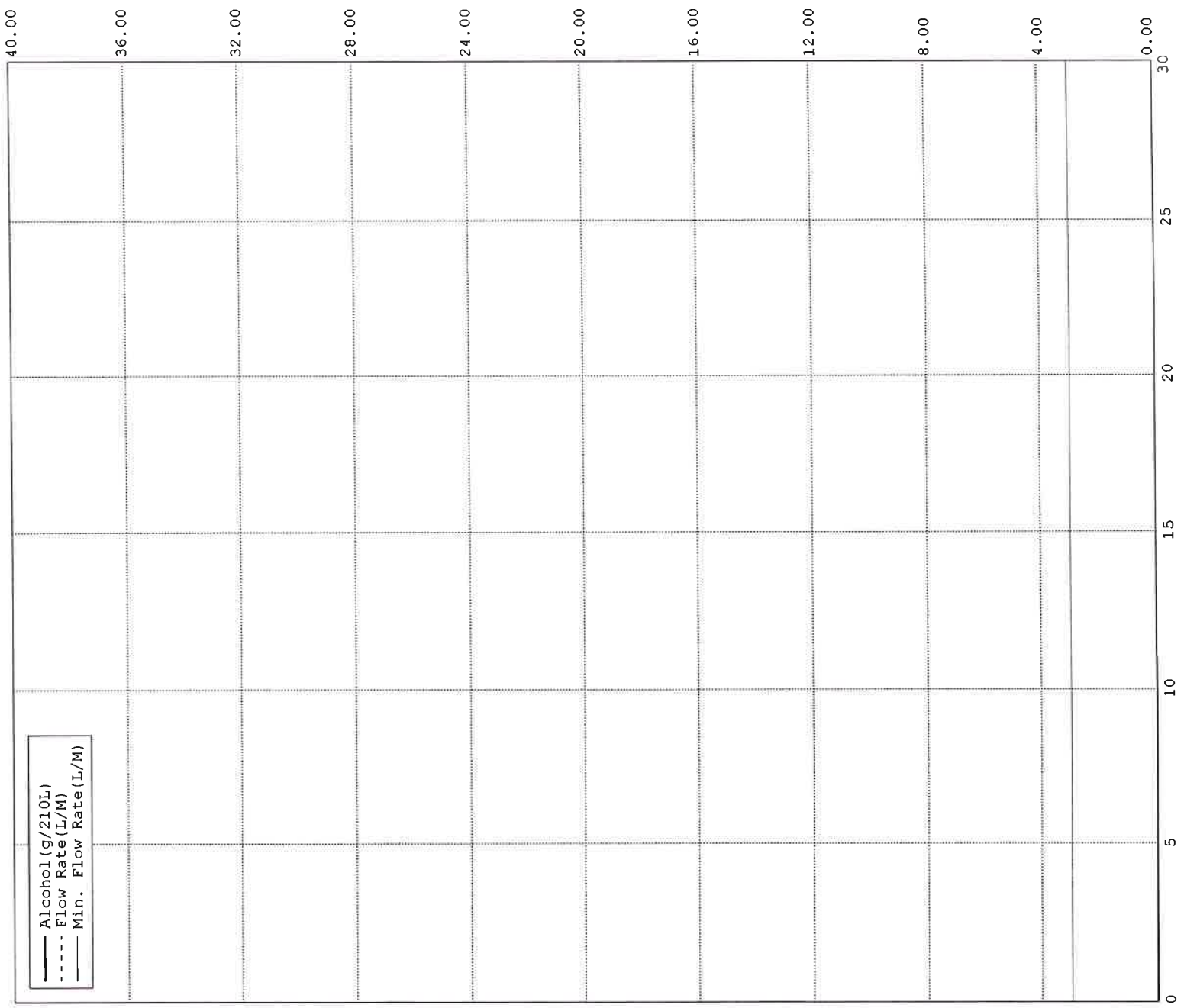
OPERATOR NAME:  
COLLEEN S OBRyant  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 22-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.64: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 13:21  
BLANK TEST 0.000 13:21  
INTERNAL STANDARD VERIFIED 13:21  
EXTERNAL STANDARD 0.078 13:22  
BLANK TEST 0.000 13:23

RFI DETECTED





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100690

Date: 02/02/2022  
Time: 11:25:43

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-ACETONE

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

DEPT/AGENCY:  
AAA1

CASE/REPORT: 22-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.66: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

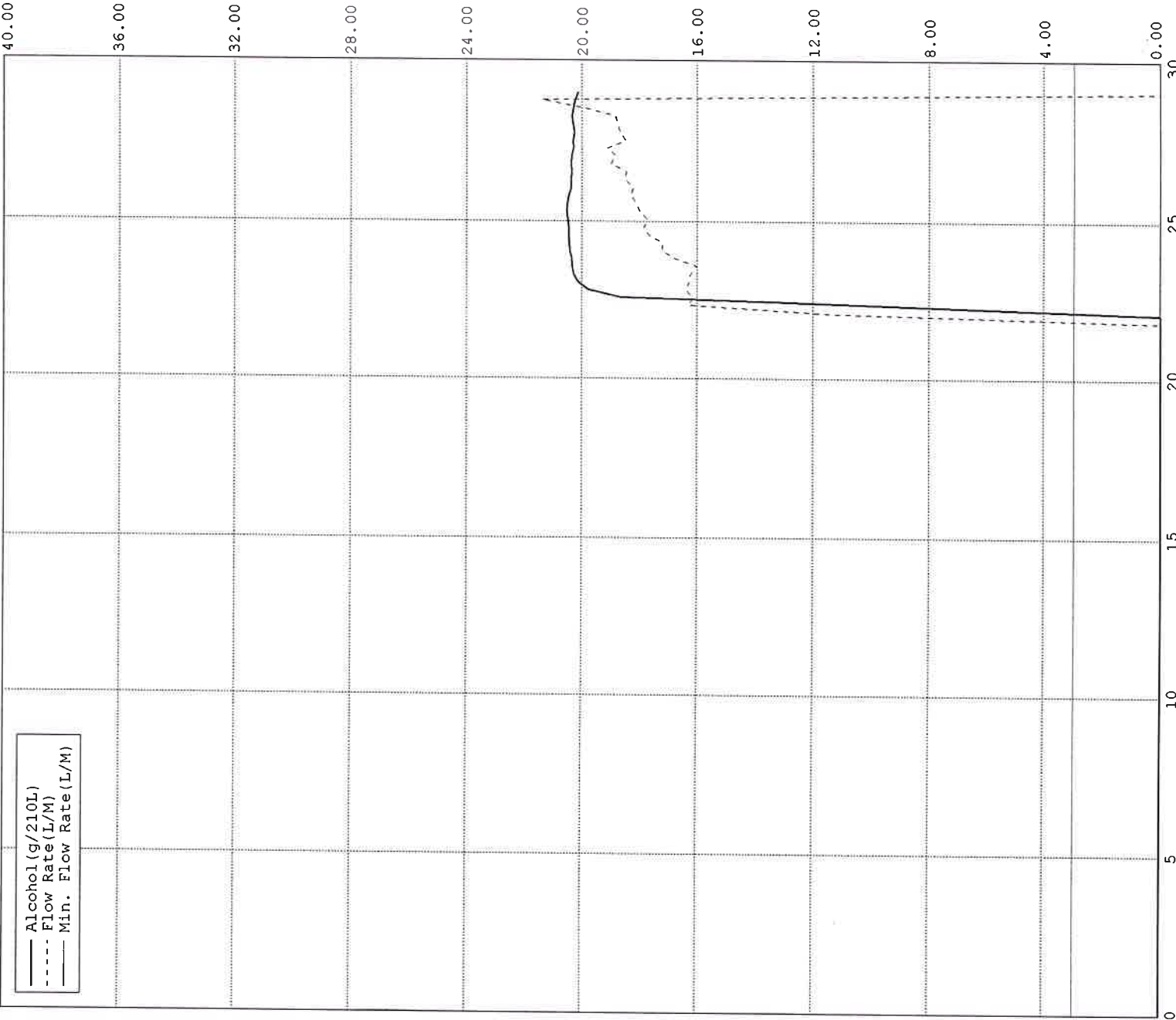
DIAGNOSTIC CHECK	PASSED	11:27
BLANK TEST	0.000	11:27
INTERNAL STANDARD	VERIFIED	11:27
Xg = 0.106 (0.33%)		
EXTERNAL STANDARD	0.077	11:27
X[1] = 0.0768 (-0.0011) (0.0020)		
BLANK TEST	0.000	11:28
SUBJECT SAMPLE	XXX	11:29
X[1] = 0.0999 (-0.0188) (0.0002)		

Interference Detected

*Filter 2 Avg = 0.0001*

*Filter 3 Avg = 0.0024*

*COB*



SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dmt: 100690

Date: 02/02/2022  
Time: 12:09:43

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-IPA

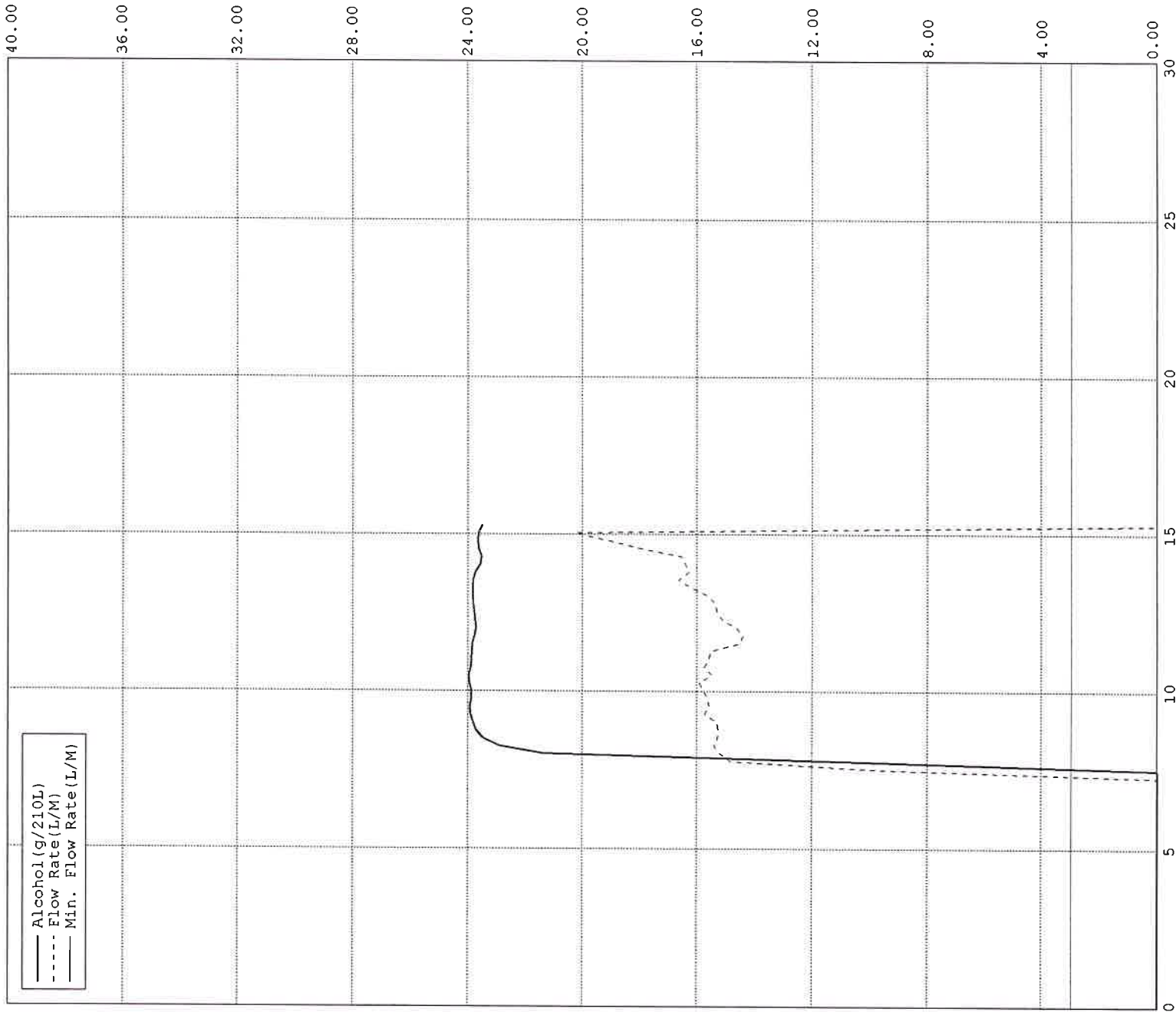
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 22-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.66: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:11  
BLANK TEST 0.000 12:11  
INTERNAL STANDARD VERIFIED 12:12  
Xq = 0.107 (1.08%) 0.078 12:12  
EXTERNAL STANDARD X[1] = 0.0780 (0.0008) (0.0029)  
BLANK TEST 0.000 12:13  
SUBJECT SAMPLE XXX 12:13  
X[1] = 0.1162 (-0.0236) (0.0009)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100690

Date: 02/02/2022  
Time: 12:16:46

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-NEGATIVE

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

DEPT/AGENCY:  
AAA1

CASE/REPORT: 22-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.64: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	12:17
BLANK TEST	0.000	12:18
INTERNAL STANDARD	VERIFIED	12:18
Xq = 0.106 (0.08%)		
EXTERNAL STANDARD	0.078	12:18
X[1] = 0.0776 (-0.0006)	(0.0022)	
BLANK TEST	0.000	12:19
SUBJECT SAMPLE (Vol=1.99L)	0.090	12:19
X[1] = 0.0904 (-0.0014)	(0.0002)	
BLANK TEST	0.000	12:20
EXTERNAL STANDARD	0.078	12:20
X[1] = 0.0776 (0.0013)	(0.0023)	
BLANK TEST	0.000	12:21



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100690

Date: 02/02/2022  
Time: 13:52:28

SUBJECT NAME:  
TEST TEST  
LICENSE #: NONDRINKING

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

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 22-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.65: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	13:53
BLANK TEST	0.000	13:53
INTERNAL STANDARD	VERIFIED	13:53
EXTERNAL STANDARD	0.078	13:54
BLANK TEST	0.000	13:54
SUBJECT SAMPLE (Vol=2.67L)	0.000	13:55
BLANK TEST	0.000	13:56
EXTERNAL STANDARD	0.078	13:57
BLANK TEST	0.000	13:57

