

# Alaska Scientific Crime Detection Laboratory

## DataMaster Certification Form

Effective: 11/10/2021

Version: 2.0

Instrument #: 100699 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)
  - Chopper Frequency
  - Detector Voltage (-0.100V to 0.100V)
- Internal Standard value  $\leq$  3.00%
- 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 1.5 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: 6/29/22  
0.100g/210L Mnf: Argas Lot: AG08404 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: SD1177 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: 2/2/22

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100699  
-----

Date: 02/01/2022  
Time: 16:30:49

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

TEMPERATURES

Sample Chamber = 49.1°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 44.2°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.56 V PASSED  
(0.94 V - 2.18 V)  
Cooler Voltage = 1.56 V PASSED  
(0.94 V - 2.18 V)  
Bias Voltage = 80 V PASSED  
(48 V - 112 V)  
Chopper Freq = 538 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.7 in

PUMP INFO

Flow Rate = 4.573 L/M PASSED  
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED  
(0.001 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 PASSED  
Xq = 0.077 0.11% (0.00% - 4.00%)

Technician Screen

-----  
DATAMASTER dmt: 100699  
-----

Date: 02/01/2022  
Time: 4:40 PM

Temperatures (°C)

Sample Cell: 49.0°C  
Breath Tube: 44.4°C

Current Barometer 29.7 in  
Volume (Ltr) 1.54

Settings

Lamp: 1.56 V  
Bias: 80 V  
Cooler: 1.51 V  
Chopper: 536 Hz

Voltages (V)

Flow: 1.05 V  
Detector: 0.028 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100699  
-----

Date: 12/29/2021  
Time: 12:00:50

OPERATOR NAME:  
CARLIE GLAISTER  
CERTIFICATE #: 10436

Ca = 0.1000  
CAL = 0.976429    0.800 <= CAL < 1.200  
b1 = 0.0001    0.0000 <= b1 < 0.0040  
b2 = 0.0059    0.0010 <= b2 < 0.0100  
b3 = 0.0016    0.0000 <= b3 < 0.0040  
Xq = 0.0772    0.0500 <= Xq < 0.2000  
a21 = 1.162257    1.050 <= a21 < 1.300  
a31 = 0.412623    0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100699

Date: 02/02/2022  
Time: 09:25:00

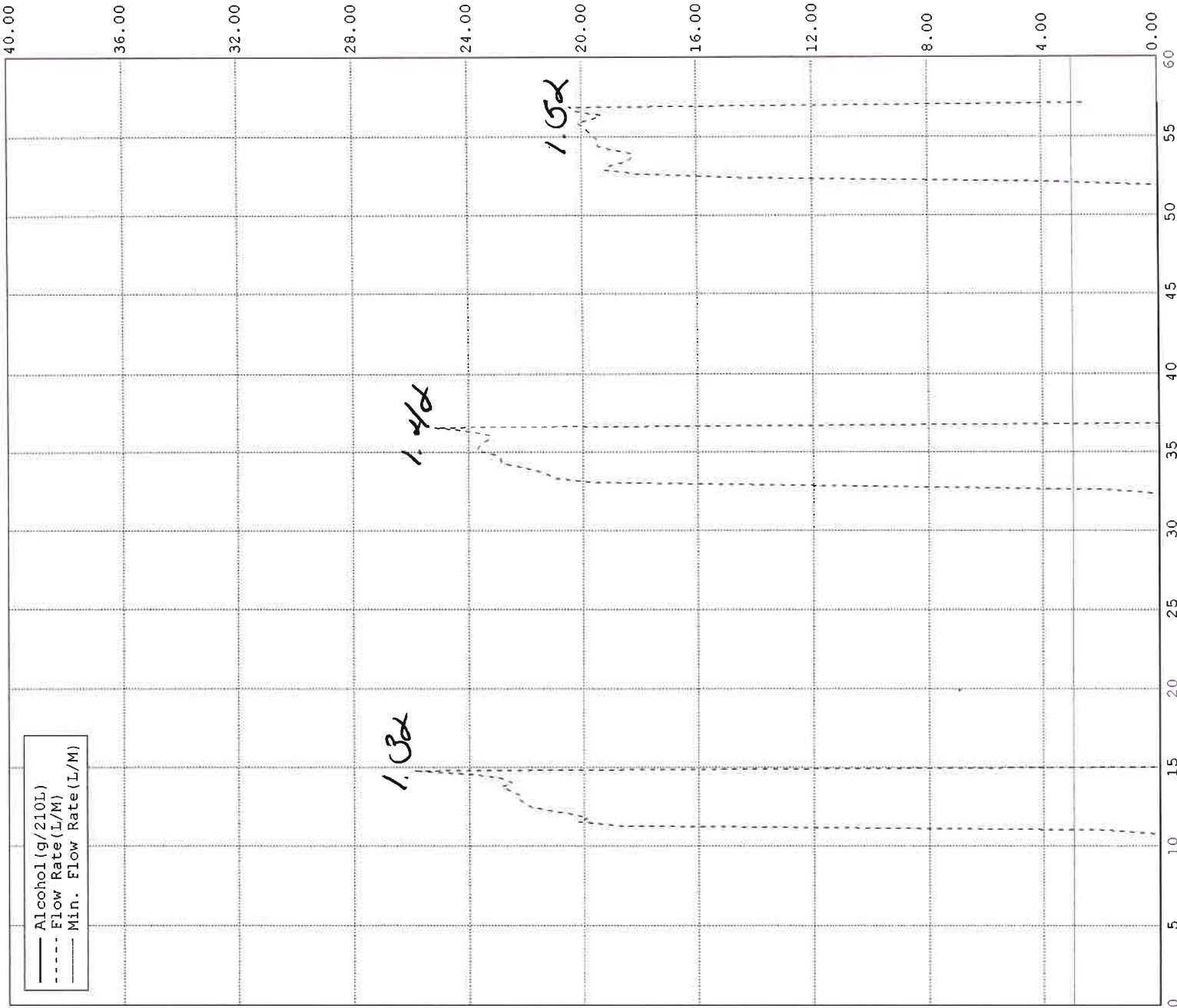
SUBJECT NAME:  
TEST TEST  
LICENSE #: VOLUME TEST

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 29.69: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	09:26
BLANK TEST	0.000	09:26
INTERNAL STANDARD	VERIFIED	09:26
EXTERNAL STANDARD	0.075	09:26
BLANK TEST	0.000	09:27
SUBJECT SAMPLE (Vol=1.53L)	0.000	09:28
BLANK TEST	0.000	09:29
EXTERNAL STANDARD	0.079	09:29
BLANK TEST	0.000	09:30



LINEARITY CHECK

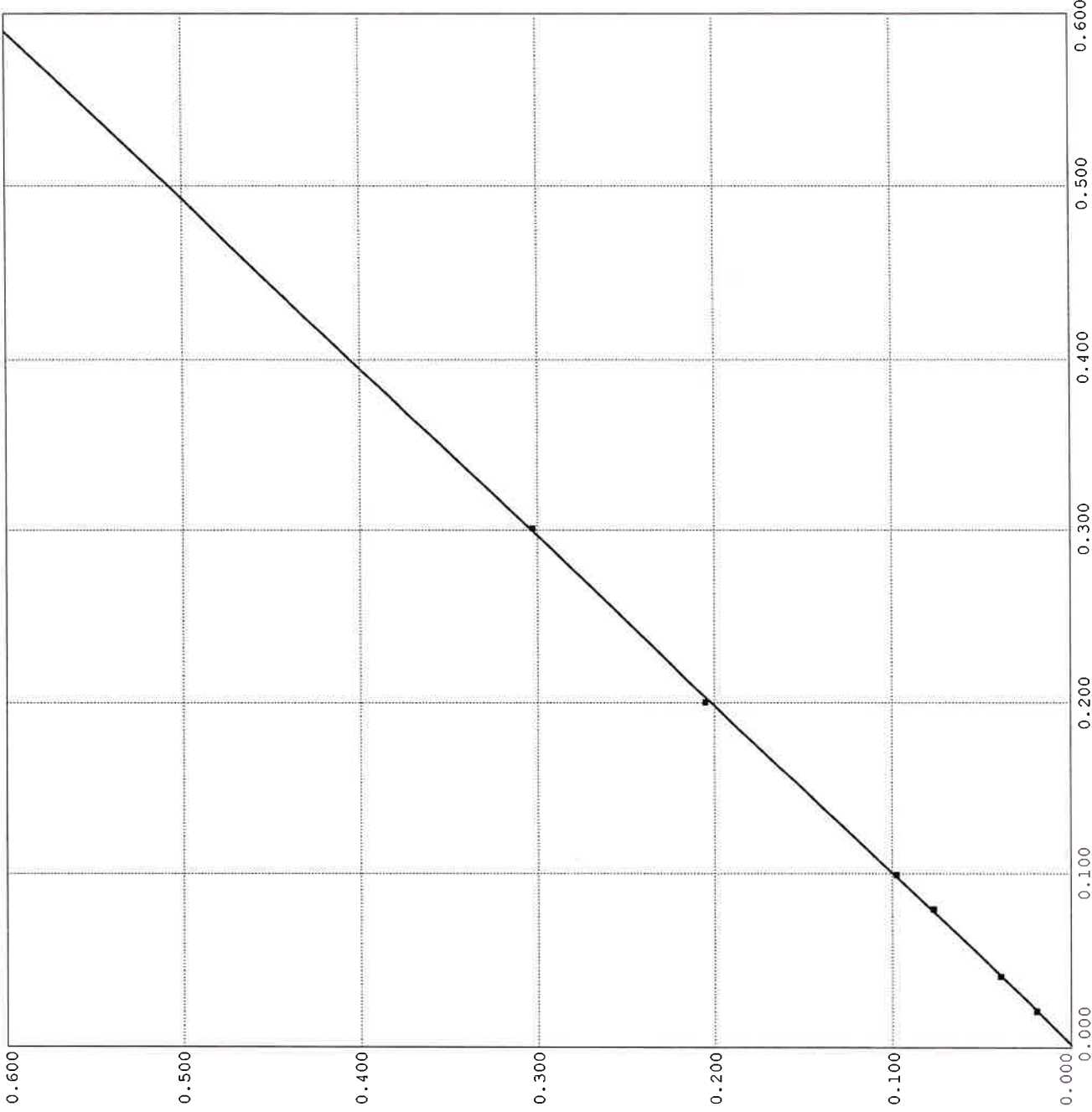
-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100699  
-----

Date: 02/02/2022  
Time: 09:39:00

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0198	0.0011
0.040	0.0400	0.0000
0.079	0.0778	0.0004
0.099	0.0986	0.0005
0.200	0.2060	0.0000
0.300	0.3034	0.0005

SLOPE = 1.020025  
R<sup>2</sup> = 0.999721



CAS



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
DATAMASTER dmt: 100699

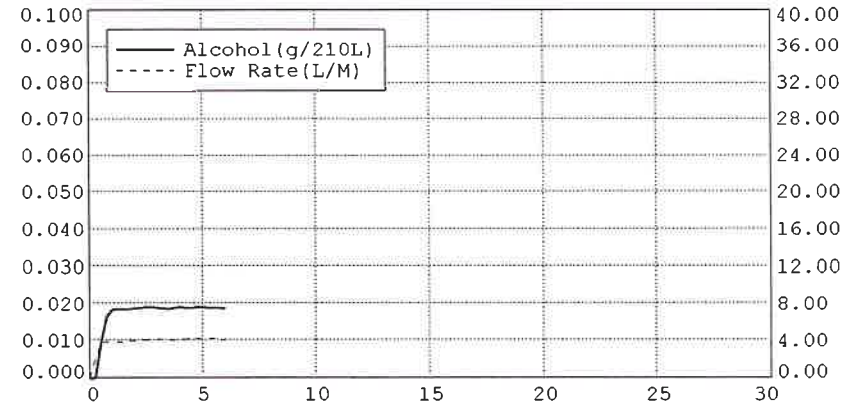
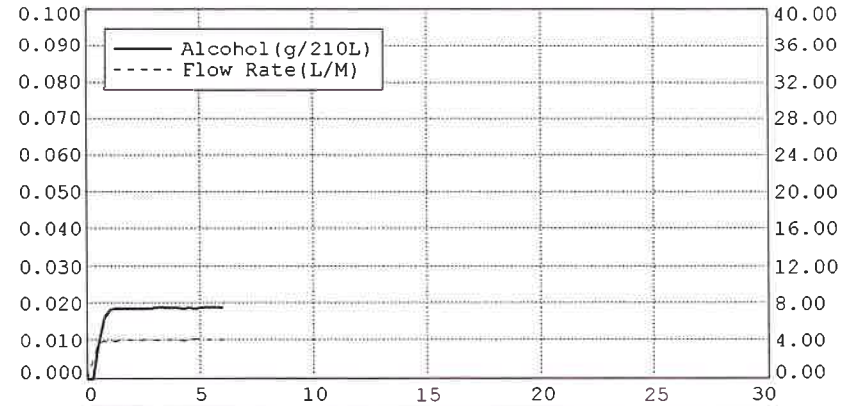
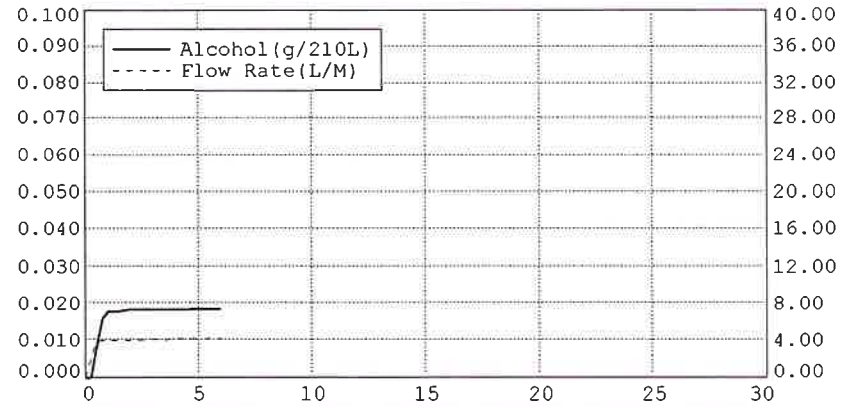
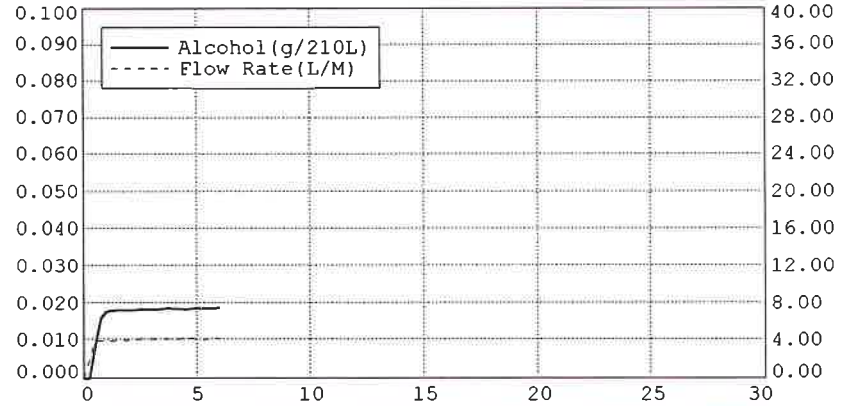
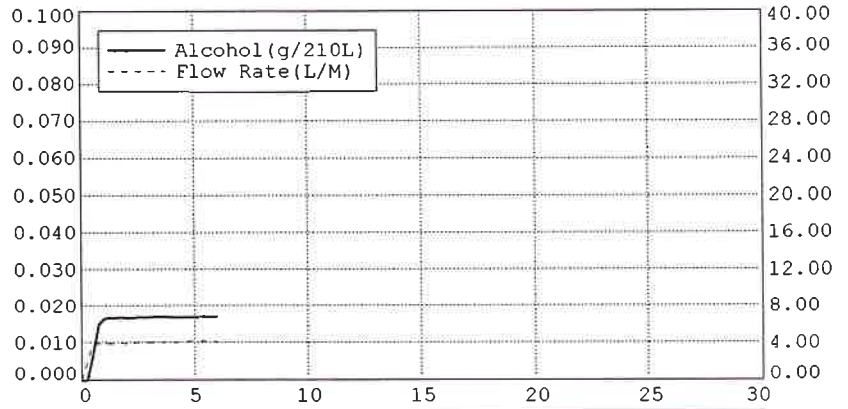
Date: 02/02/2022  
Time: 09:39:02

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
TARGET AT 29.69: 0.020  
LOT #: AG100401  
EXPIRATION: 01/04/2023  
TANK PRESSURE: 754 psi

BLANK TEST	0.000	09:49
INTERNAL STANDARD	VERIFIED	09:49
EXTERNAL STANDARD	0.018	09:49
BLANK TEST	0.000	09:50
EXTERNAL STANDARD	0.020	09:50
BLANK TEST	0.000	09:51
EXTERNAL STANDARD	0.020	09:51
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.020	09:52
BLANK TEST	0.000	09:53
EXTERNAL STANDARD	0.021	09:53
BLANK TEST	0.000	09:54

Average = 0.0198  
Std Dev = 0.0011



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
DATAMASTER dmt: 100699

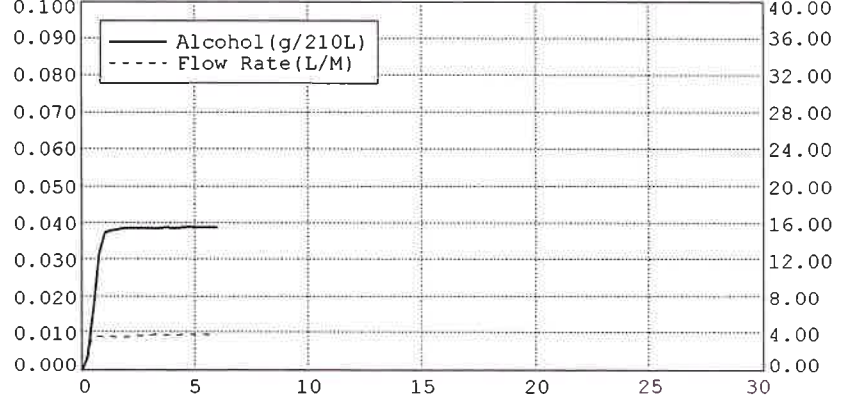
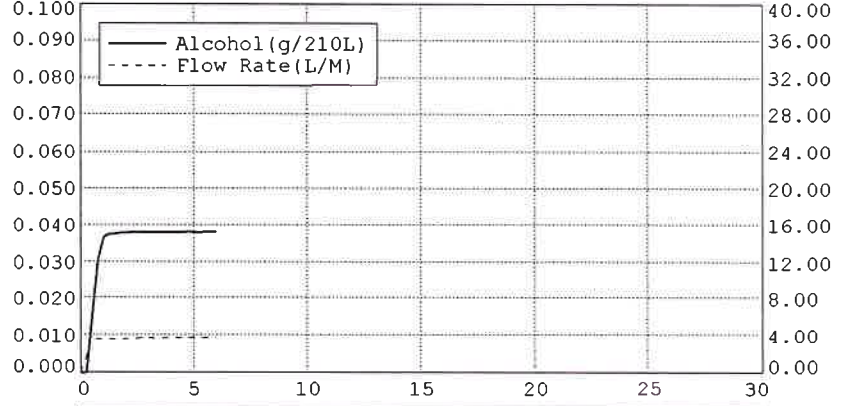
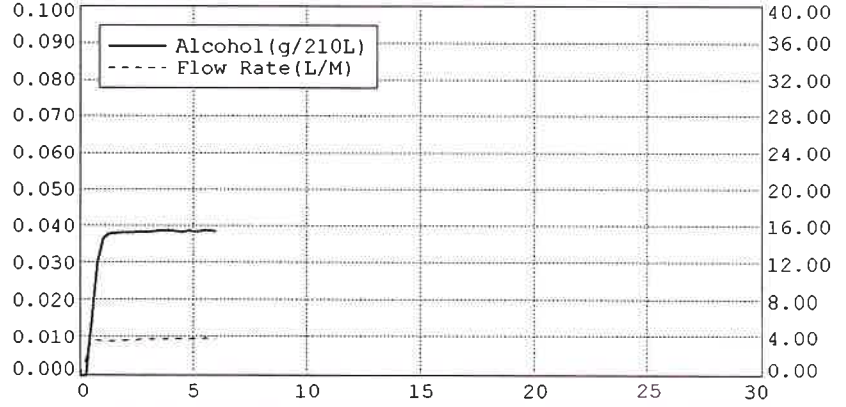
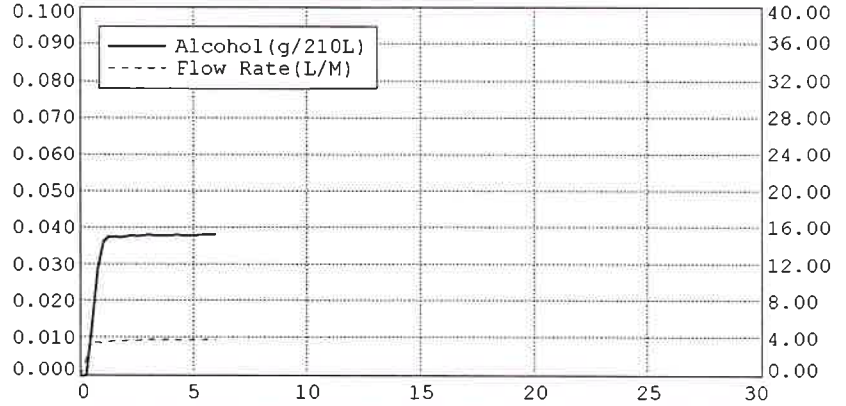
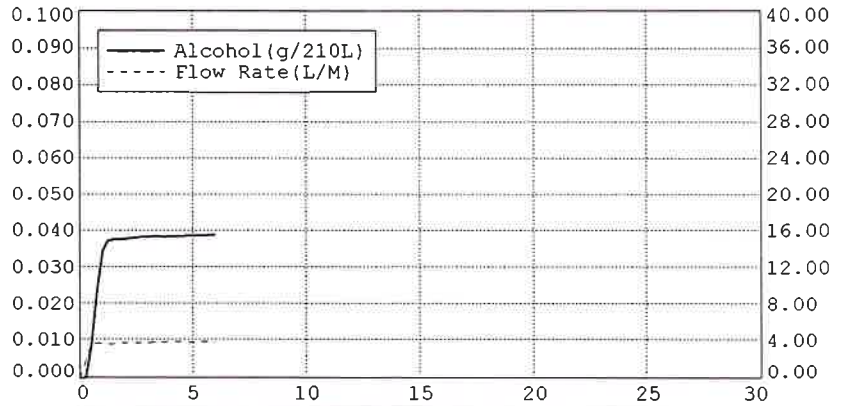
Date: 02/02/2022  
Time: 09:55:02

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
TARGET AT 29.67: 0.040  
LOT #: AG111710  
EXPIRATION: 04/27/2023  
TANK PRESSURE: 502 psi

BLANK TEST	0.000	09:57
INTERNAL STANDARD	VERIFIED	09:57
EXTERNAL STANDARD	0.040	09:57
BLANK TEST	0.000	09:58
EXTERNAL STANDARD	0.040	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.040	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.040	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.040	10:01
BLANK TEST	0.000	10:02

Average = 0.0400  
Std Dev = 0.0000





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100699

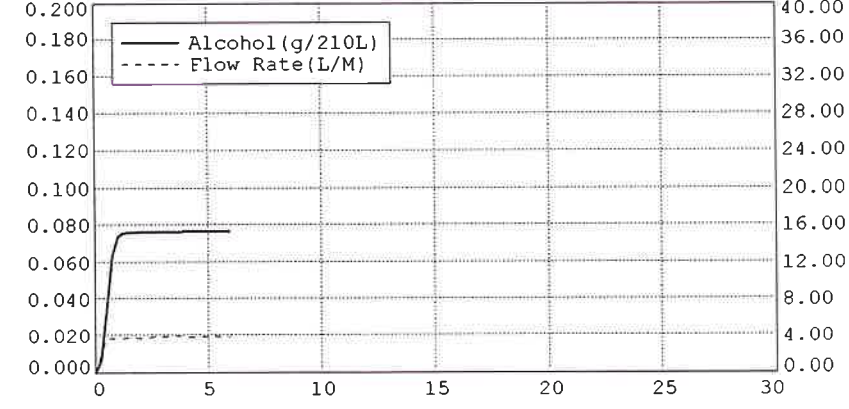
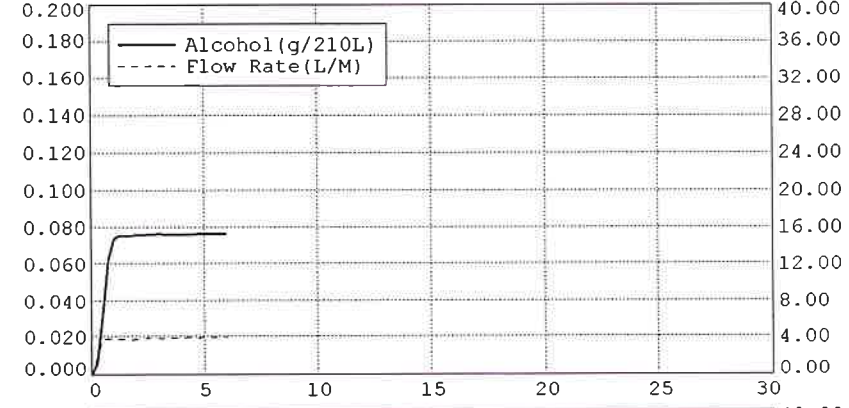
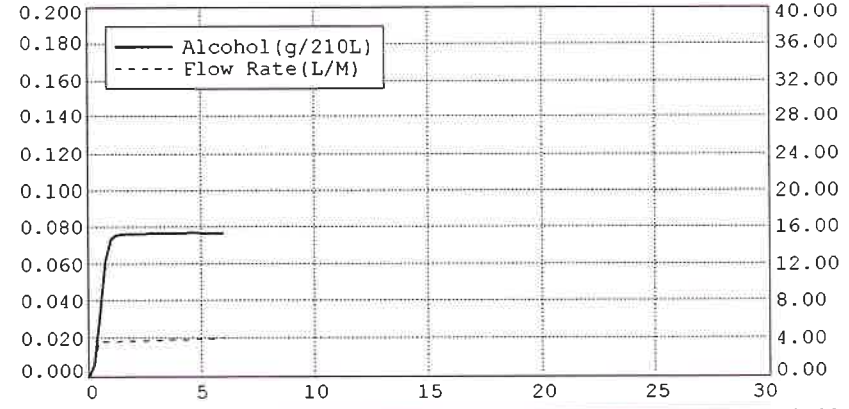
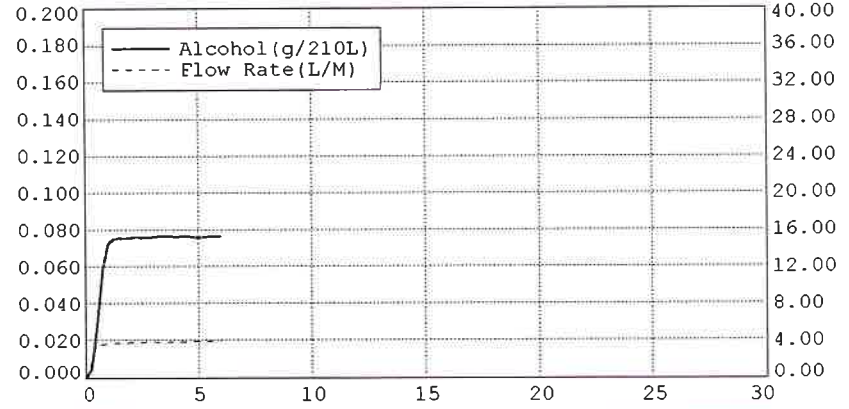
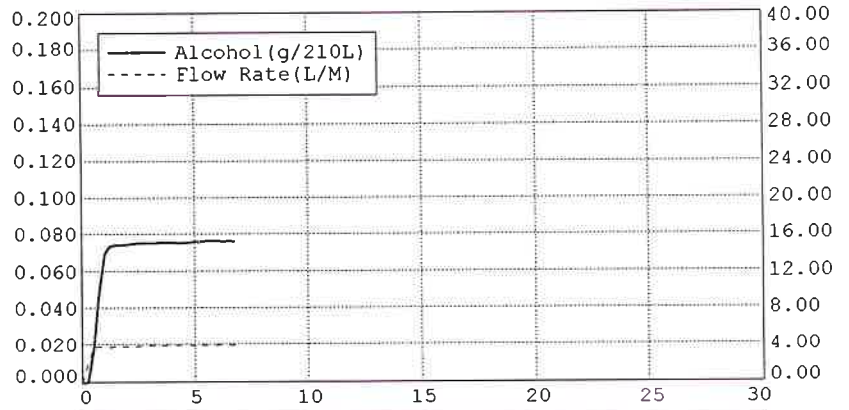
Date: 02/02/2022  
 Time: 10:04:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.69: 0.079  
 LOT #: AG018102  
 EXPIRATION: 06/29/2022  
 TANK PRESSURE: 584 psi

BLANK TEST	0.000	10:05
INTERNAL STANDARD	VERIFIED	10:05
EXTERNAL STANDARD	0.077	10:06
BLANK TEST	0.000	10:07
EXTERNAL STANDARD	0.078	10:07
BLANK TEST	0.000	10:08
EXTERNAL STANDARD	0.078	10:08
BLANK TEST	0.000	10:09
EXTERNAL STANDARD	0.078	10:09
BLANK TEST	0.000	10:10
EXTERNAL STANDARD	0.078	10:10
BLANK TEST	0.000	10:11

Average = 0.0778  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100699

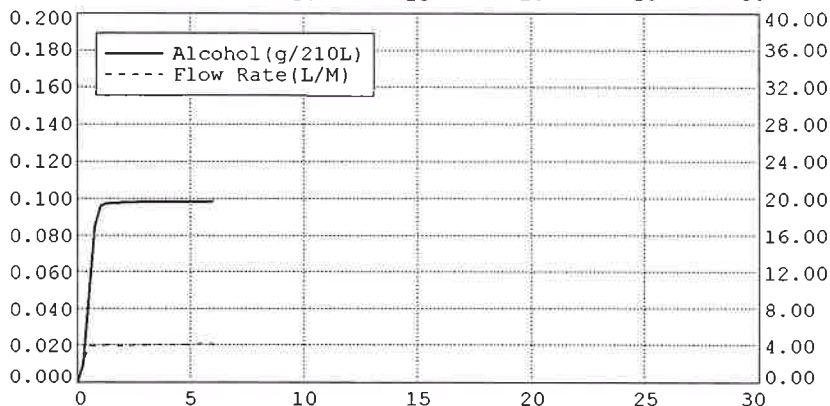
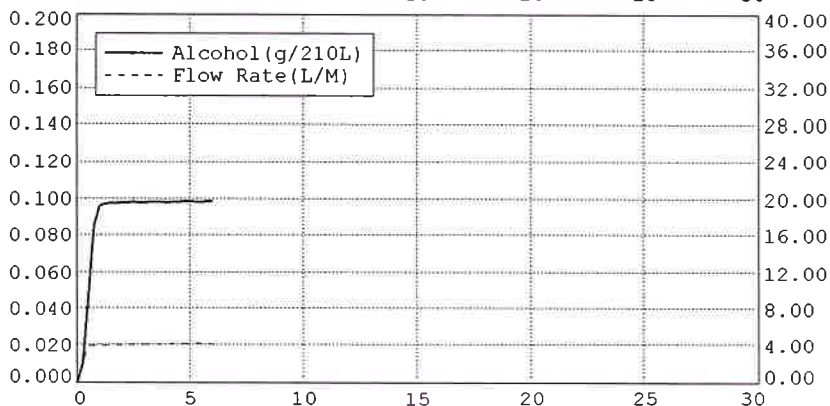
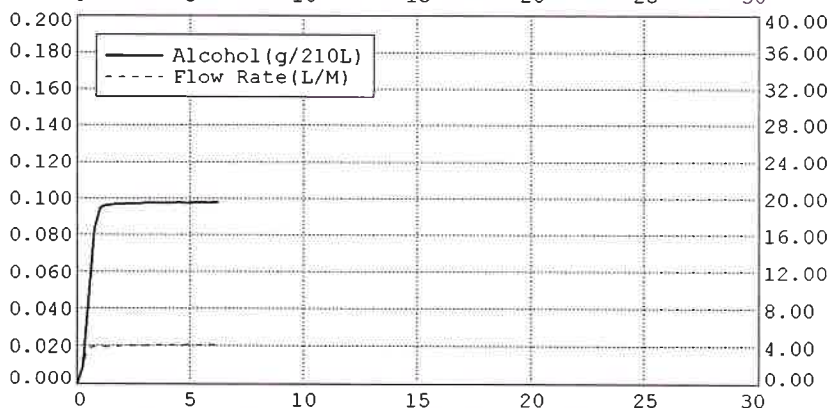
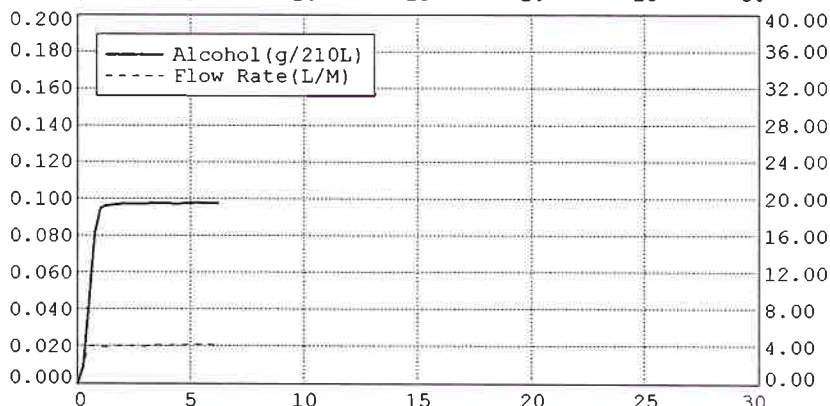
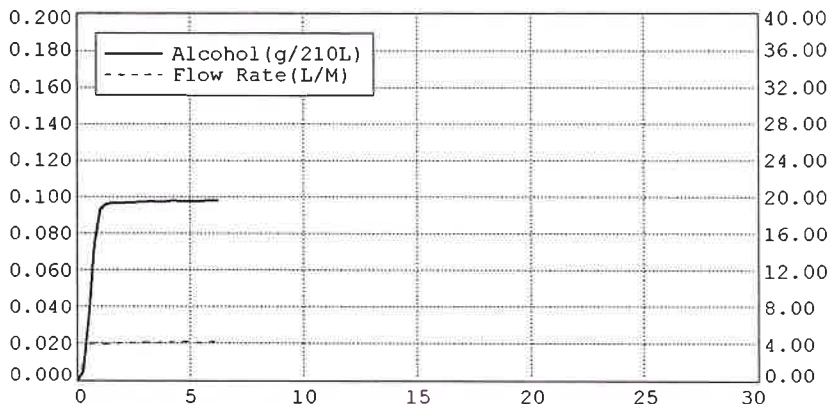
Date: 02/02/2022  
 Time: 10:12:23

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.67: 0.099  
 LOT #: AG108404  
 EXPIRATION: 03/25/2023  
 TANK PRESSURE: 765 psi

BLANK TEST	0.000	10:13
INTERNAL STANDARD	VERIFIED	10:13
EXTERNAL STANDARD	0.098	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.099	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.098	10:16
BLANK TEST	0.000	10:17
EXTERNAL STANDARD	0.099	10:17
BLANK TEST	0.000	10:18
EXTERNAL STANDARD	0.099	10:18
BLANK TEST	0.000	10:19

Average = 0.0986  
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety  
 DATAMASTER dmt: 100699

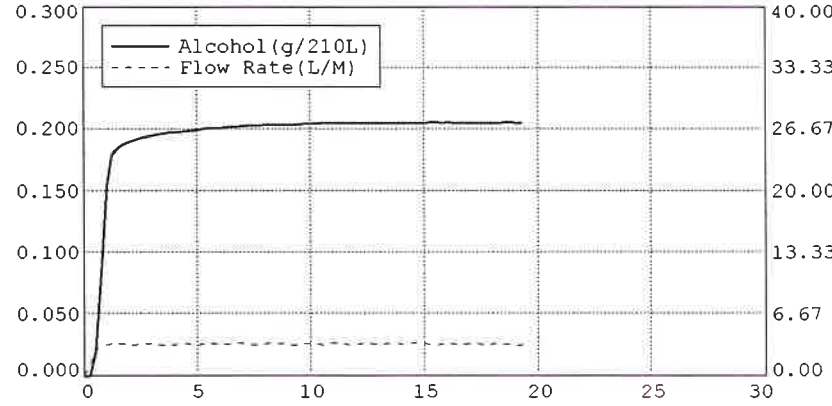
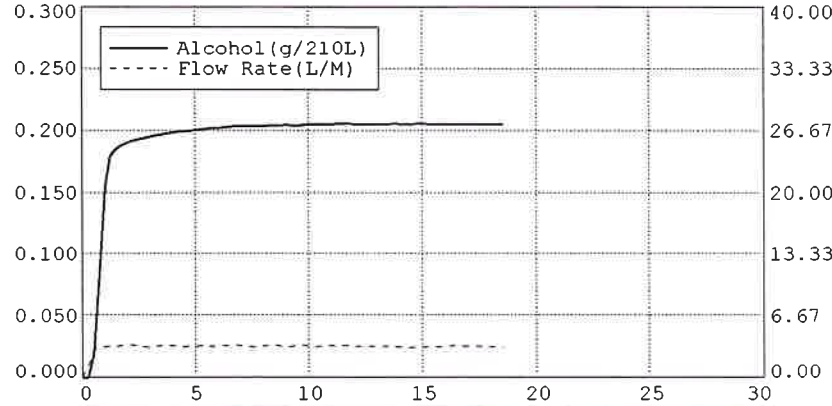
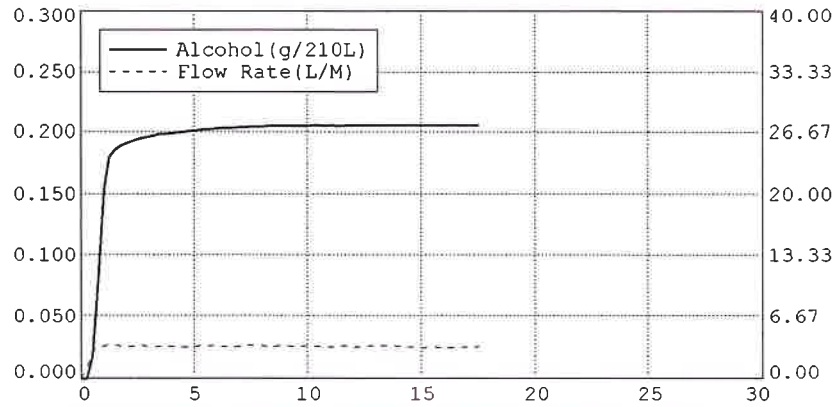
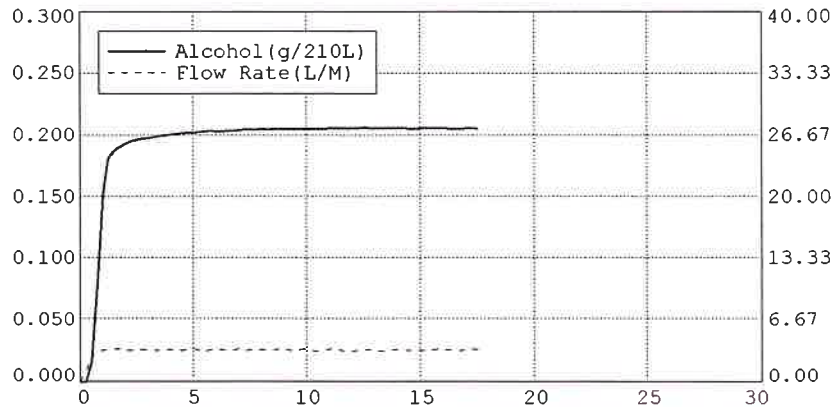
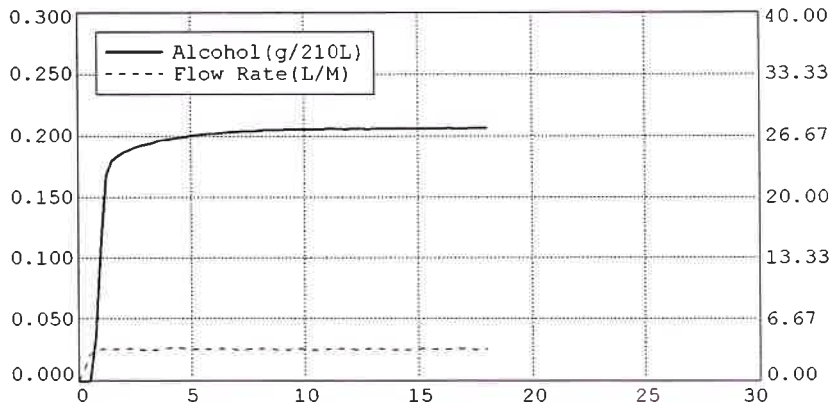
Date: 02/02/2022  
 Time: 10:19:42

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:20
INTERNAL STANDARD	VERIFIED	10:20
EXTERNAL STANDARD	0.206	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.206	10:22
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.206	10:24
BLANK TEST	0.000	10:25
EXTERNAL STANDARD	0.206	10:25
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.206	10:26
BLANK TEST	0.000	10:27

Average = 0.2060  
 Std Dev = 0.0000





LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
DATAMASTER dmt: 100699

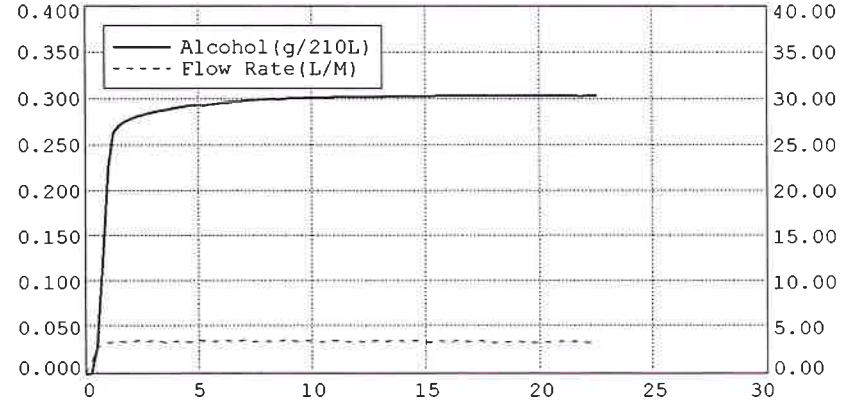
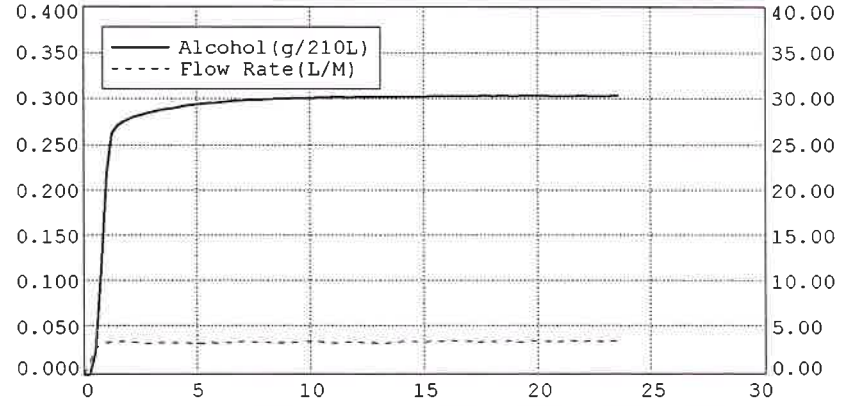
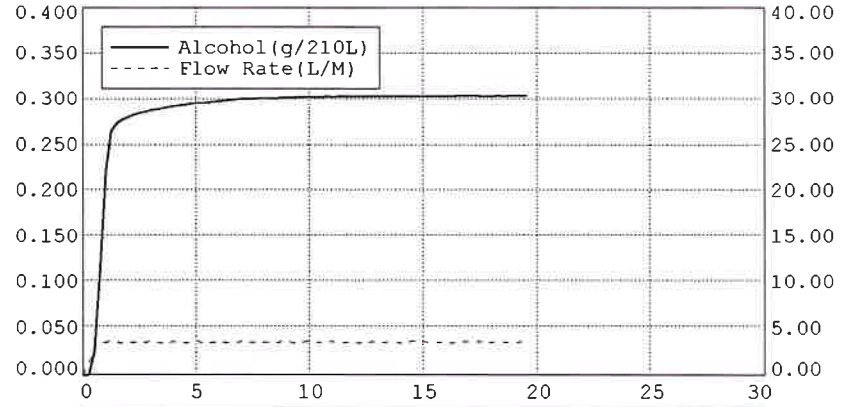
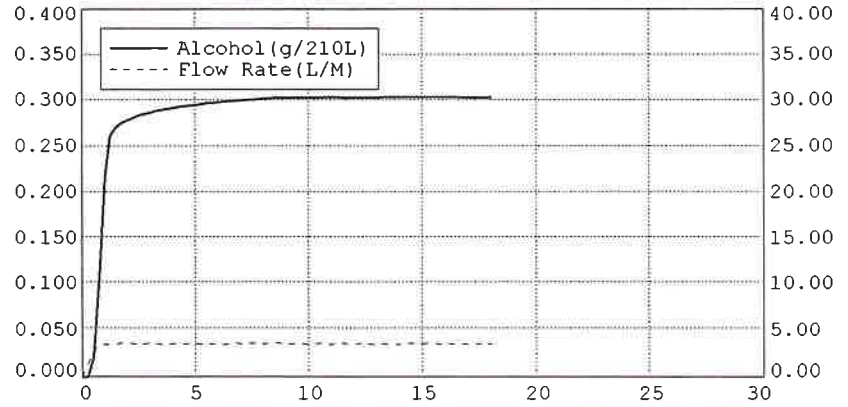
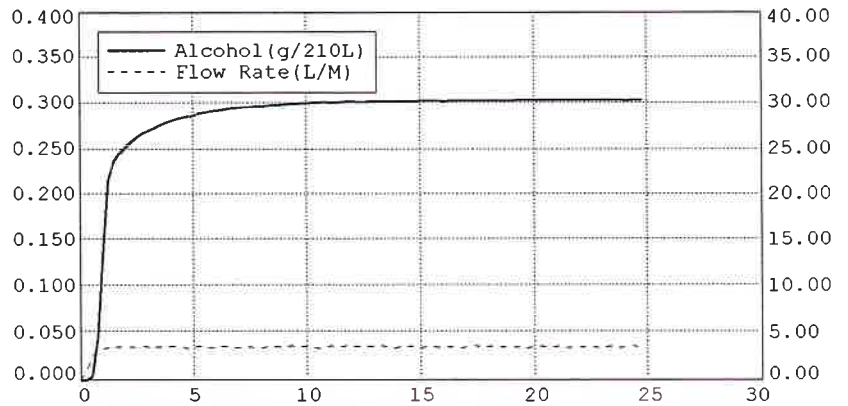
Date: 02/02/2022  
Time: 10:29:22

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:30
INTERNAL STANDARD	VERIFIED	10:30
EXTERNAL STANDARD	0.303	10:31
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.303	10:32
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.303	10:33
BLANK TEST	0.000	10:34
EXTERNAL STANDARD	0.304	10:35
BLANK TEST	0.000	10:36
EXTERNAL STANDARD	0.304	10:36
BLANK TEST	0.000	10:37

Average = 0.3034  
Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100699

Date: 02/02/2022  
Time: 12:34:55

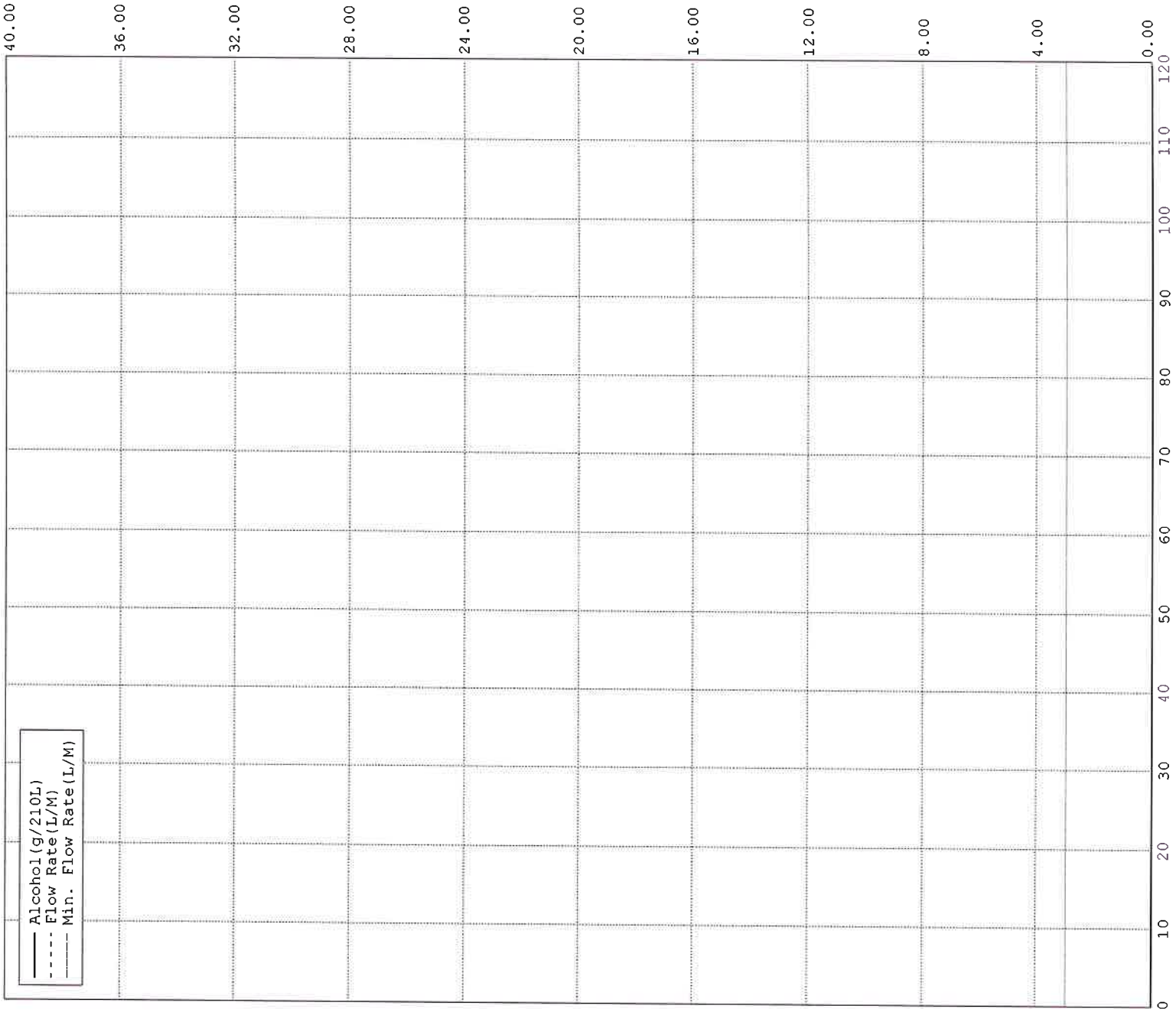
SUBJECT NAME:  
TEST TEST  
LICENSE #: INCOMPLETE

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 29.64: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 13:10  
BLANK TEST 0.000 13:10  
INTERNAL STANDARD VERIFIED 13:11  
EXTERNAL STANDARD 0.079 13:11  
BLANK TEST 0.000 13:12  
SUBJECT SAMPLE INCOMPLETE 13:14



SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dmt: 100699

Date: 02/02/2022  
Time: 13:28:48

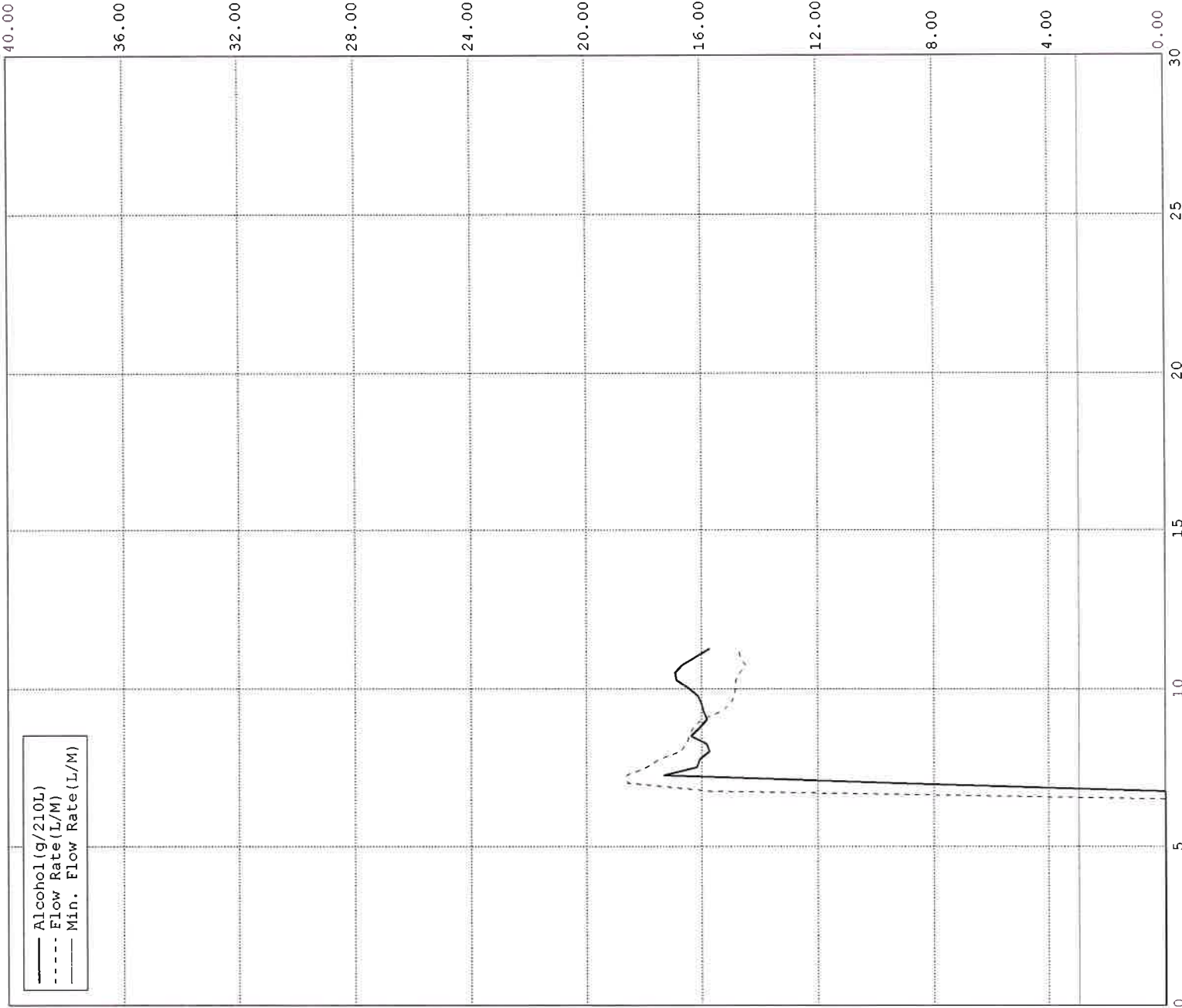
SUBJECT NAME:  
TEST TEST  
LICENSE #: INVALID

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 29.65: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 13:30  
BLANK TEST 0.000 13:30  
INTERNAL STANDARD VERIFIED 13:30  
EXTERNAL STANDARD 0.077 13:30  
BLANK TEST 0.000 13:32  
SUBJECT SAMPLE INVALID 13:32





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100699

Date: 02/02/2022  
Time: 13:22:23

SUBJECT NAME:  
TEST TEST  
LICENSE #: MAX ATTEMPT

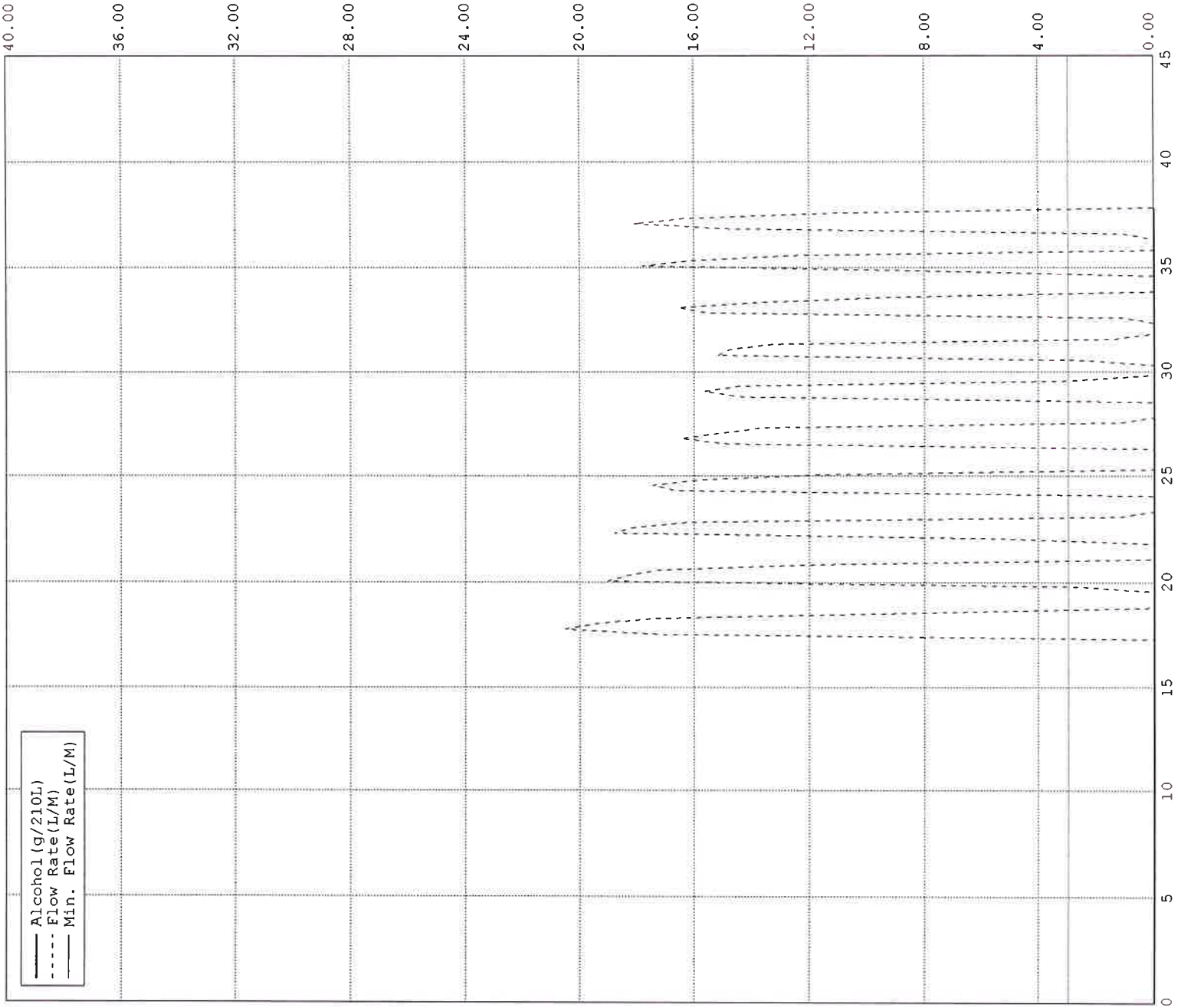
OPERATOR NAME:  
COLLEEN S OBRyant  
OPERATOR'S #: 6237

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

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

DIAGNOSTIC CHECK PASSED 13:23  
BLANK TEST 0.000 13:23  
INTERNAL STANDARD VERIFIED 13:23  
EXTERNAL STANDARD 0.077 13:24  
BLANK TEST 0.000 13:24  
SUBJECT SAMPLE XXX 13:25

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100699

Date: 02/02/2022  
Time: 13:16:43

SUBJECT NAME:  
TEST TEST  
LICENSE #: RFI

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

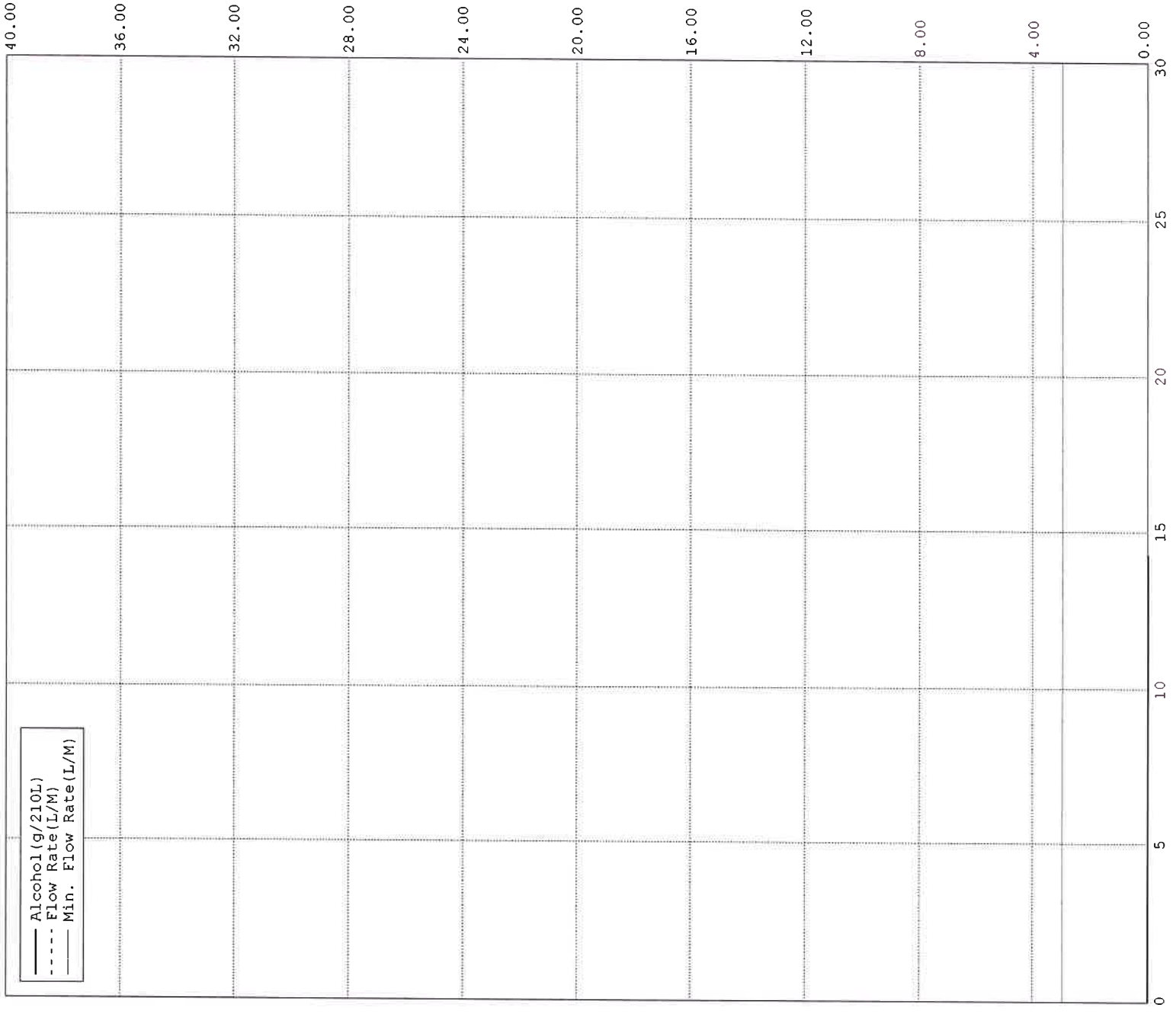
DEPT/AGENCY:  
AAA1  
CASE/REPORT: 22-1234  
TEST TYPE: TEST

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

DIAGNOSTIC CHECK PASSED 13:17  
BLANK TEST 0.000 13:17  
INTERNAL STANDARD VERIFIED 13:18  
EXTERNAL STANDARD 0.076 13:18  
BLANK TEST 0.000 13:19

RFI DETECTED

*CVB*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100699

Date: 02/02/2022  
Time: 11:10:38

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-ACETONE

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 29.65: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

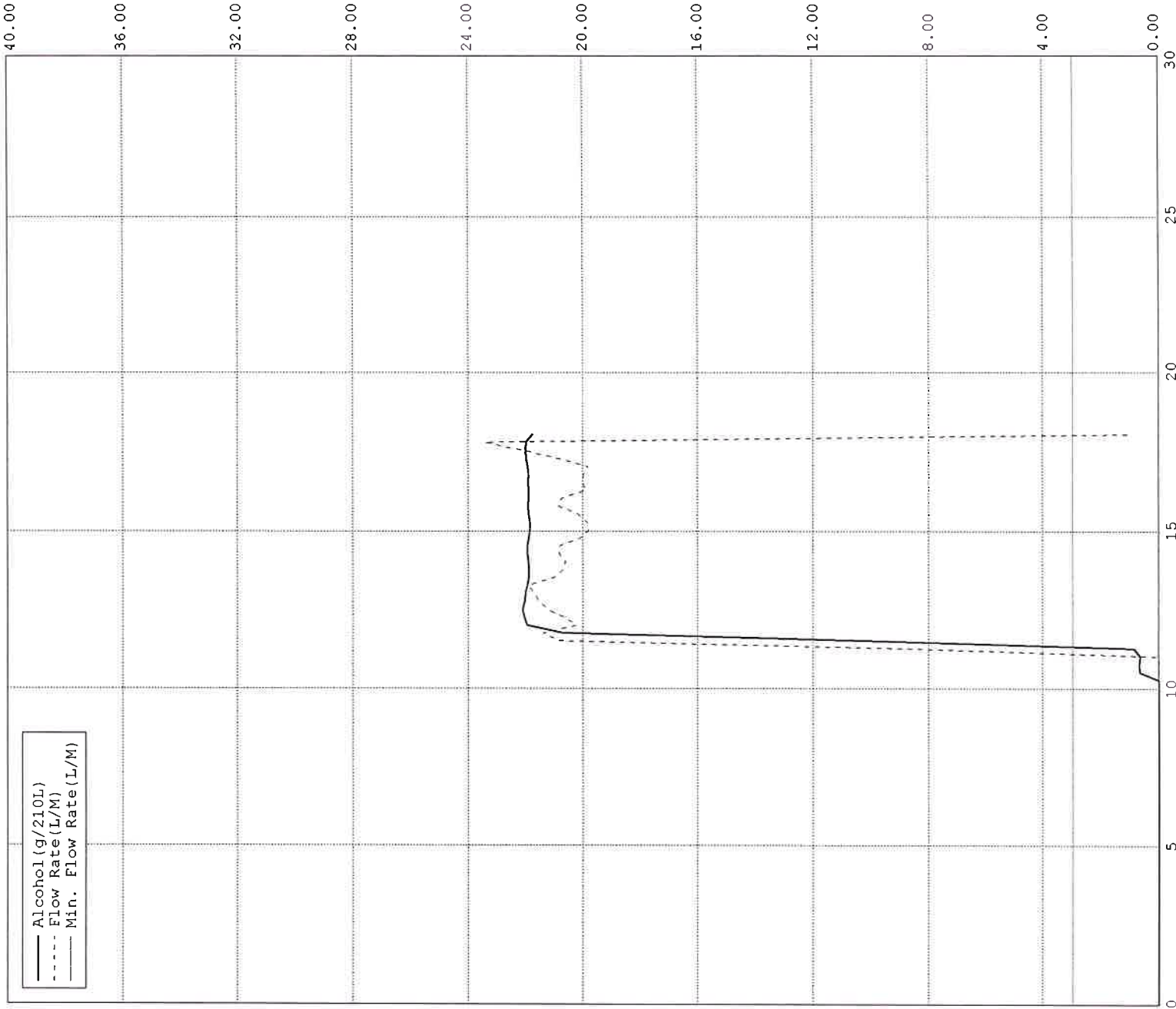
DIAGNOSTIC CHECK	PASSED	11:12
BLANK TEST	0.000	11:12
INTERNAL STANDARD	VERIFIED	11:12
Xq = 0.077 (0.11%)		
EXTERNAL STANDARD	0.076	11:12
X[1] = 0.0760 (-0.0021)	(0.0016)	
BLANK TEST	0.000	11:13
SUBJECT SAMPLE	XXX	11:13
X[1] = 0.1073 (-0.0130)	(0.0015)	

Interference Detected

*Filter 2 Avg = -0.0010*

*Filter 3 Avg = 0.0026*

*CSB*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100699

Date: 02/02/2022  
Time: 11:17:22

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-IPA

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

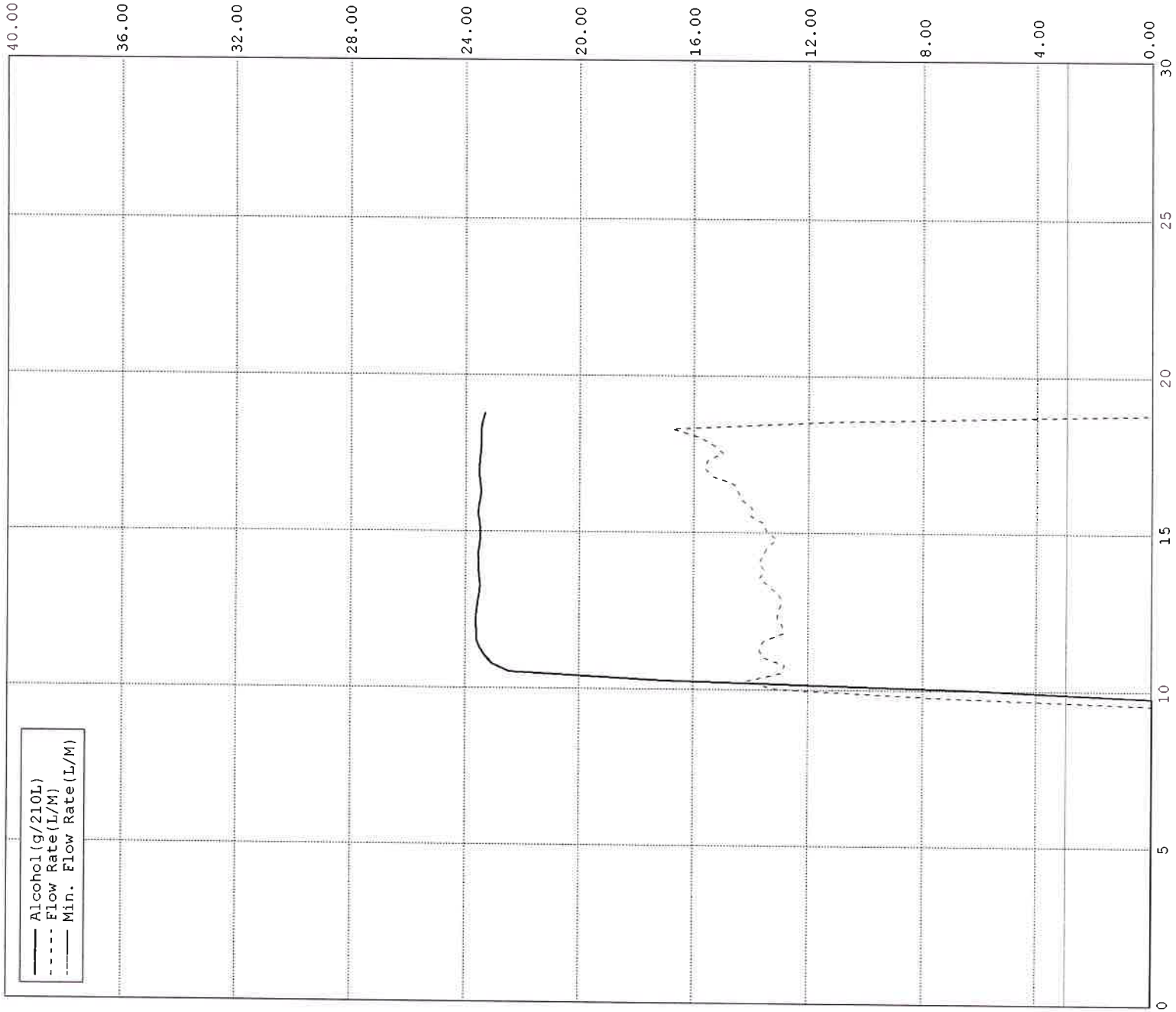
DEPT/AGENCY:  
AAA1  
CASE/REPORT: 22-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	11:19
BLANK TEST	0.000	11:19
INTERNAL STANDARD	VERIFIED	11:19
Xq = 0.077 (0.22%)		
EXTERNAL STANDARD	0.077	11:19
X[1] = 0.0772 (-0.0005)	(0.0040)	
BLANK TEST	0.000	11:20
SUBJECT SAMPLE	XXX	11:20
X[1] = 0.1162 (-0.0270)	(0.0037)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100699

Date: 02/02/2022  
Time: 12:04:24

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-NEGATIVE

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

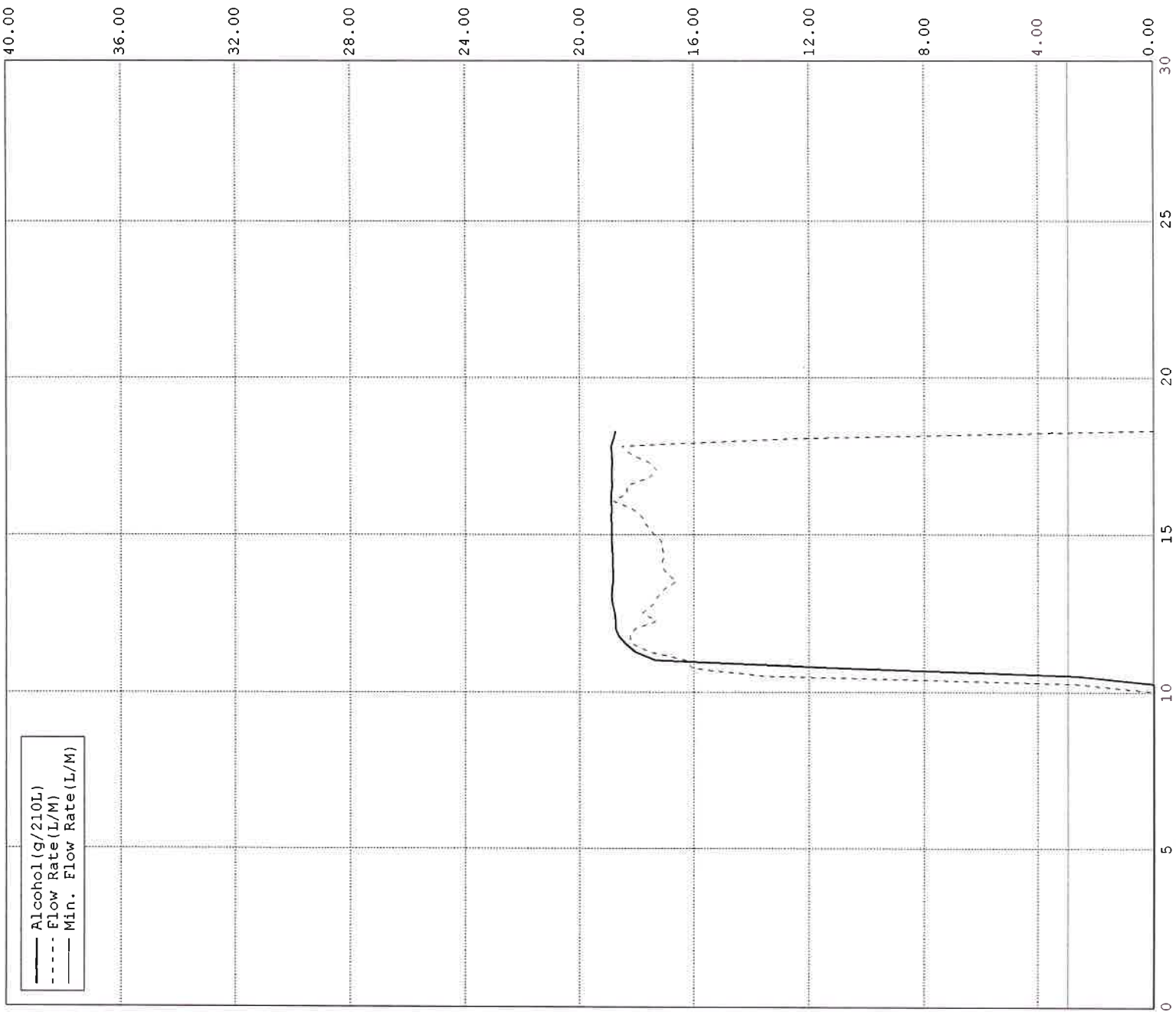
DEPT/AGENCY:  
AAA1

CASE/REPORT: 22-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	12:05
BLANK TEST	0.000	12:06
INTERNAL STANDARD	VERIFIED	12:06
Xq = 0.078 (1.24%)		
EXTERNAL STANDARD	0.077	12:06
X[1] = 0.0773 (-0.0010)	(0.0026)	
BLANK TEST	0.000	12:07
SUBJECT SAMPLE (Vol=2.23L)	0.094	12:07
X[1] = 0.0944 (0.0000)	(-0.0013)	
BLANK TEST	0.000	12:08
EXTERNAL STANDARD	0.077	12:09
X[1] = 0.0771 (-0.0005)	(0.0022)	
BLANK TEST	0.000	12:10





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100699

Date: 02/02/2022  
Time: 13:48:24

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 29.64: 0.079  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	13:49
BLANK TEST	0.000	13:49
INTERNAL STANDARD	VERIFIED	13:49
EXTERNAL STANDARD	0.078	13:50
BLANK TEST	0.000	13:51
SUBJECT SAMPLE (Vol=1.56L)	0.000	13:51
BLANK TEST	0.000	13:52
EXTERNAL STANDARD	0.079	13:52
BLANK TEST	0.000	13:53

