

# 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 100403 Analyst Carlie Haigler Start Date 11/4/2021

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 Airgas Lot AG100401 Exp 1/4/23
- ii. 0.040g/210L Mnf Airgas Lot AG111710 Exp 4/27/23
- iii. 0.080g/210L Mnf Airgas Lot AG018102 Exp 6/29/22
- iv. 0.100g/210L Mnf Airgas Lot AG108404 Exp 3/25/23
- v. 0.200g/210L Mnf Puth Lot 20510 Exp 12/3/22  
Simulator S/N DR4101 Date Calibrated 6/16/21
- vi. 0.300g/210L Mnf Puth Lot 21030 Exp 2/2/23  
Simulator S/N SD1202 Date Calibrated 6/15/21

### Functional Tests (attached)

Incomplete

Invalid

Interference

- i. Acetone - Mnf LifeloC Lot 210P41158 Level 0.100 Exp 4/29/23  
Simulator S/N SD1177 Date Calibrated 6/15/21
- ii. Isopropanol - Mnf LifeloC Lot 210P41158 Level 0.100 Exp 4/29/23  
Simulator S/N SD1198 Date Calibrated 6/15/21
- iii. Negative Control - Mnf LifeloC Lot 210P41158 Level 0.100 Exp 4/29/23  
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 11/4/2021

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100403  
-----

Date: 11/04/2021  
Time: 08:52:57

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C            PASSED  
(44.0°C - 52.0°C)  
Breath Tube       = 42.3°C        PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage    = 1.68 V            PASSED  
(1.04 V - 2.42 V)  
Cooler Voltage = 1.75 V            PASSED  
(0.98 V - 2.30 V)  
Bias Voltage    = 79 V             PASSED  
(47 V - 111 V)  
Chopper Freq   = 536 Hz            PASSED  
(475 Hz - 575 Hz)  
Barometer       = 29.1 in

PUMP INFO

Flow Rate = 4.560 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 = 0.076 2.33% (0.00% - 4.00%)            PASSED

Technician Screen

-----  
DATAMASTER dmt: 100403  
-----

Date: 11/04/2021  
Time: 9:02 AM

Temperatures (°C)

Sample Cell: 48.7°C  
Breath Tube: 41.4°C

Current Barometer 29.1 in  
Volume (Ltr) 1.47

Settings

Lamp: 1.73 V  
Bias: 79 V  
Cooler: 1.70 V  
Chopper: 536 Hz

Voltages (V)

Flow: 1.05 V  
Detector: -0.038 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100403  
-----

Date: 05/18/2011  
Time: 13:44:51

OPERATOR NAME:  
COLLEEN S OBRYANT  
CERTIFICATE #: 6237

LOT #: GUTH100  
BOTTLE #: 10260  
EXPIRATION: 10/25/2010

Ca	=	0.1000		
CAL	=	0.986050	0.800	<= CAL < 1.200
b1	=	0.0000	0.0000	<= b1 < 0.0040
b2	=	0.0043	0.0010	<= b2 < 0.0100
b3	=	0.0000	0.0000	<= b3 < 0.0040
Xq	=	0.0743	0.0500	<= Xq < 0.2000
a21	=	1.112347	1.050	<= a21 < 1.300
a31	=	0.534530	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100403

Date: 11/04/2021  
Time: 09:03:57

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: 10436

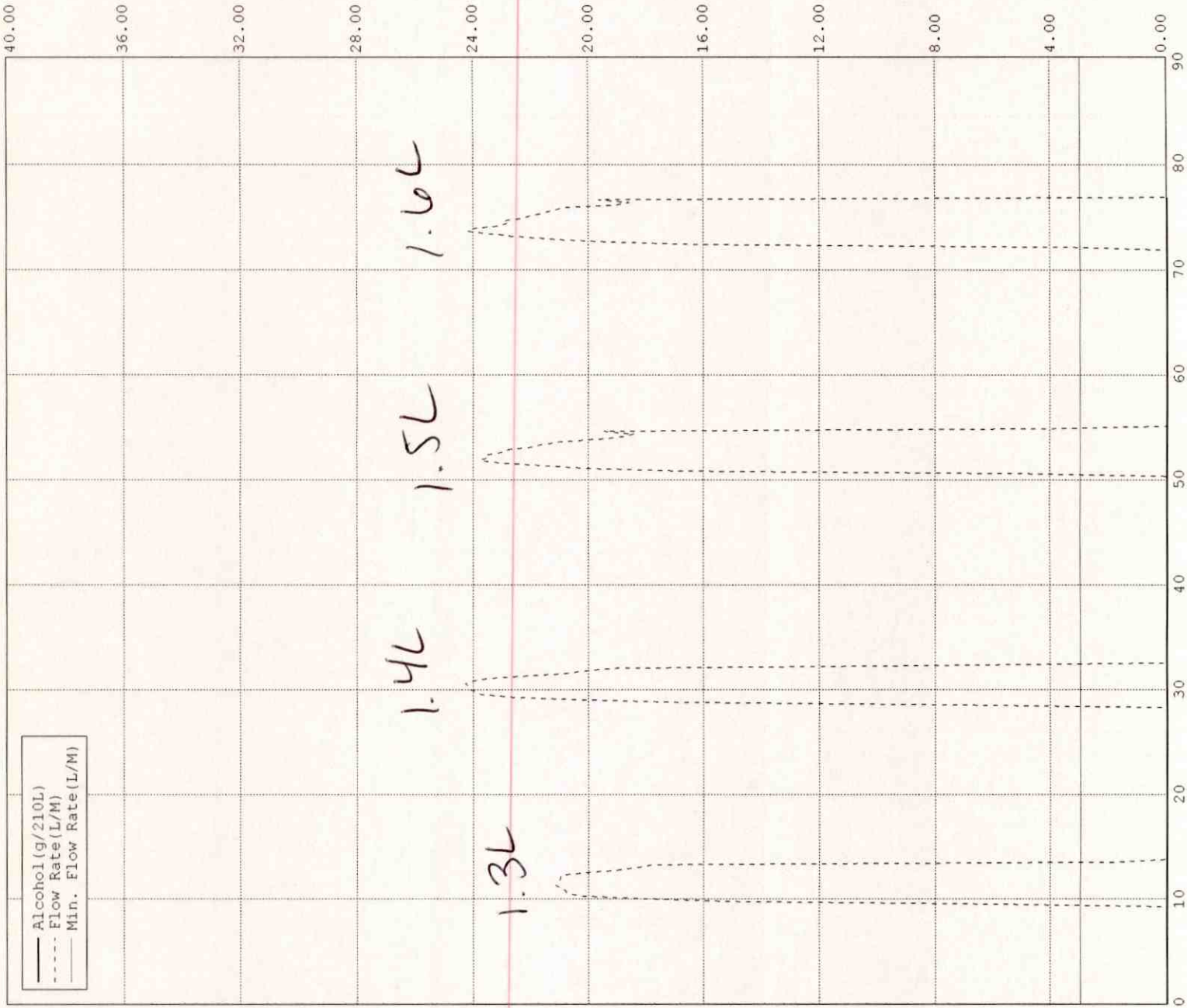
DEPT/AGENCY:  
MINIMUM VOLUME TEST  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.10: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	09:06
BLANK TEST	0.000	09:06
INTERNAL STANDARD	VERIFIED	09:06
EXTERNAL STANDARD	0.080	09:07
BLANK TEST	0.000	09:07
SUBJECT SAMPLE (Vol=1.62L)	0.000	09:09
BLANK TEST	0.000	09:10
EXTERNAL STANDARD	0.079	09:10
BLANK TEST	0.000	09:11

CYG



LINEARITY CHECK

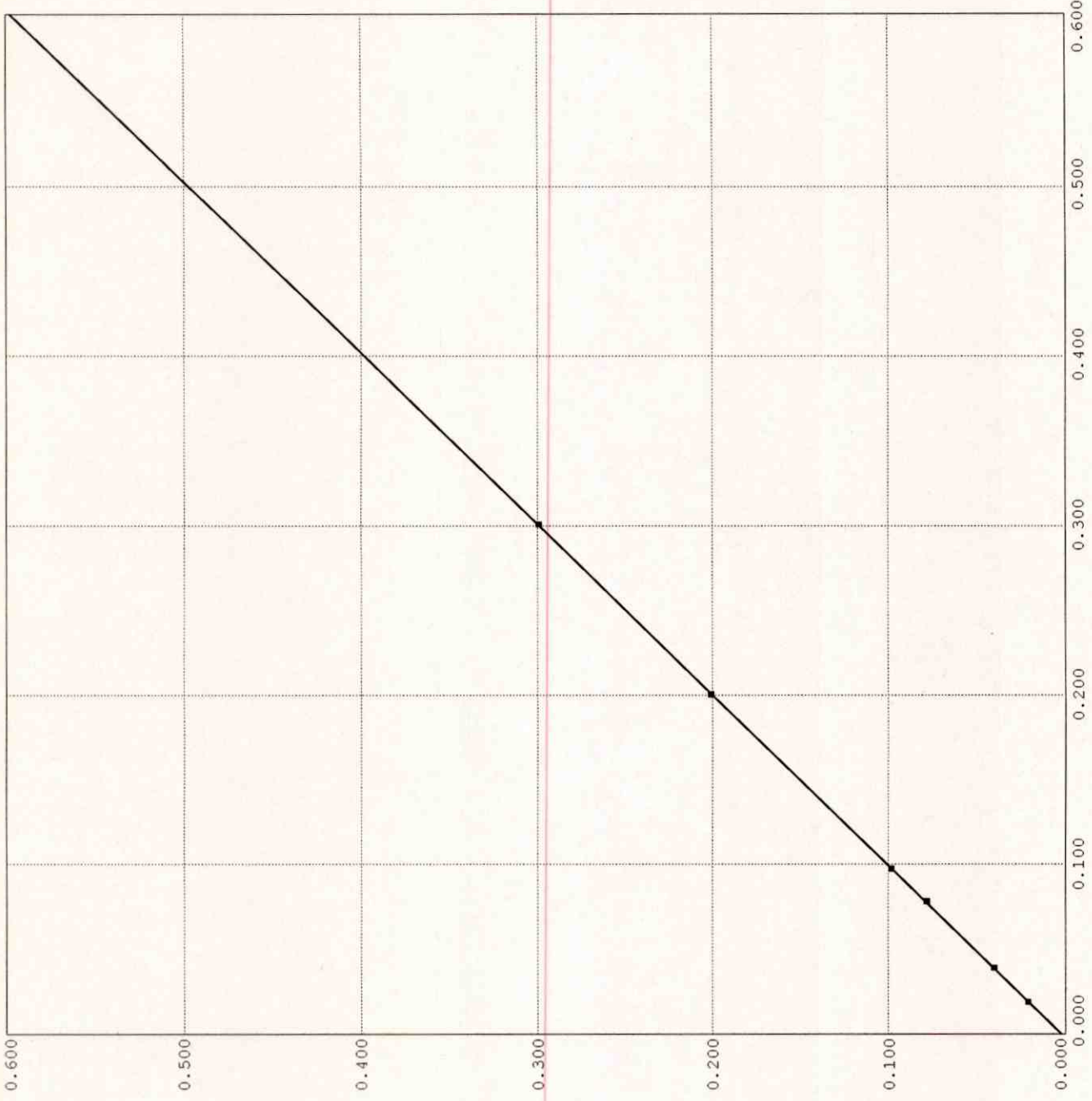
-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100403  
-----

Date: 11/04/2021  
Time: 09:53:29

SUPERVISOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: 10436

TARGET	AVERAGE	STD. DEV.
0.019	0.0218	0.0004
0.039	0.0410	0.0000
0.078	0.0792	0.0004
0.097	0.0992	0.0004
0.200	0.2016	0.0005
0.300	0.3000	0.0007

SLOPE = 0.992408  
R<sup>2</sup> = 0.999976



DVG

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100403

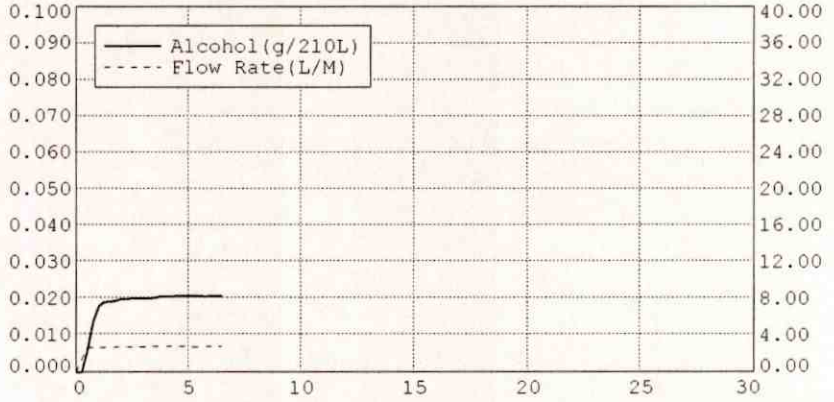
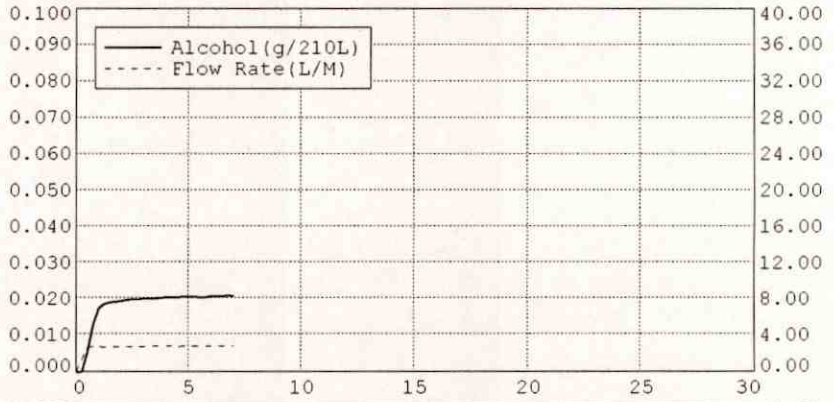
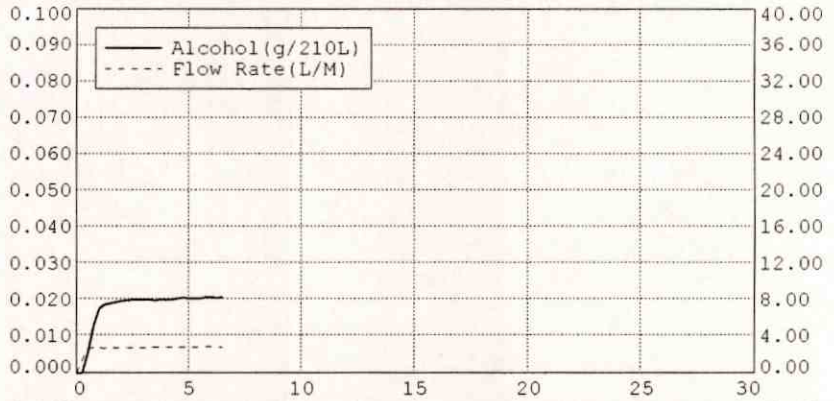
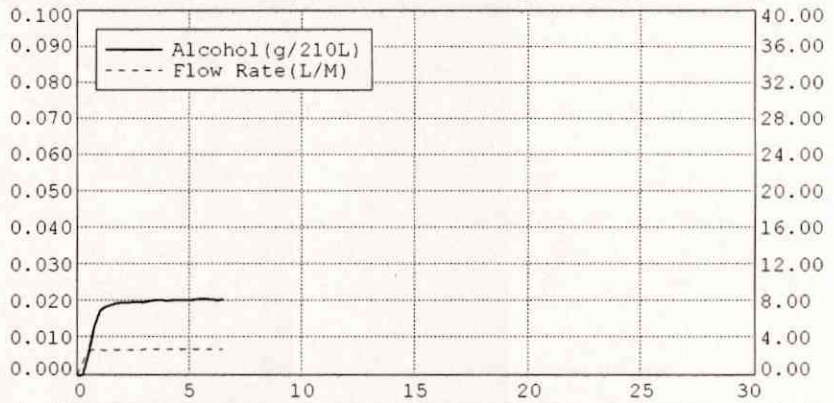
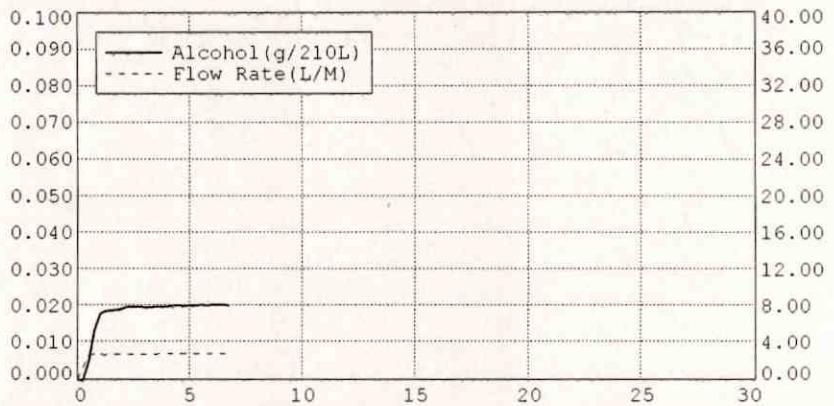
Date: 11/04/2021  
 Time: 09:53:31

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.11: 0.019  
 LOT #: AG100401  
 EXPIRATION: 01/04/2023  
 TANK PRESSURE: 1038 psi

BLANK TEST	0.000	09:55
INTERNAL STANDARD	VERIFIED	09:55
EXTERNAL STANDARD	0.021	09:55
BLANK TEST	0.000	09:56
EXTERNAL STANDARD	0.022	09:56
BLANK TEST	0.000	09:57
EXTERNAL STANDARD	0.022	09:57
BLANK TEST	0.000	09:58
EXTERNAL STANDARD	0.022	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.022	09:59
BLANK TEST	0.000	10:00

Average = 0.0218  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100403

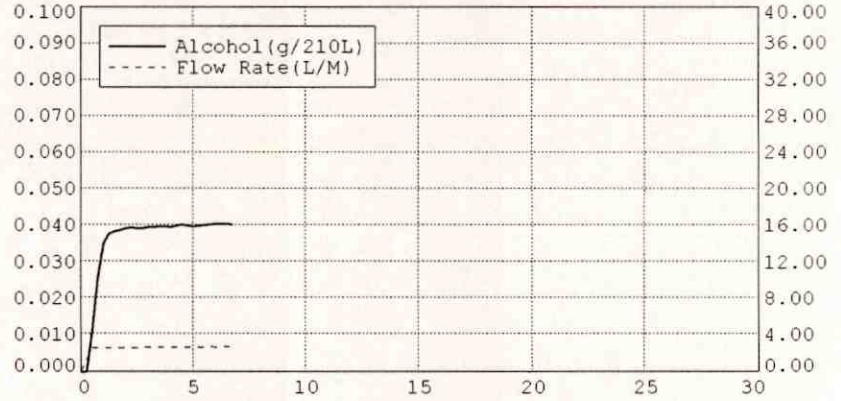
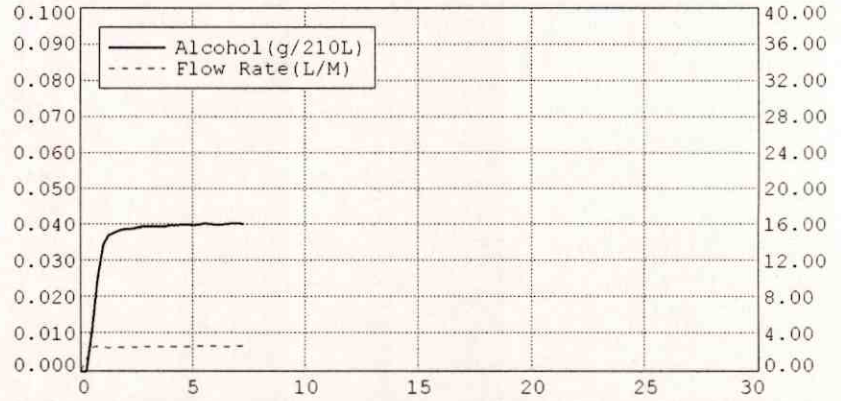
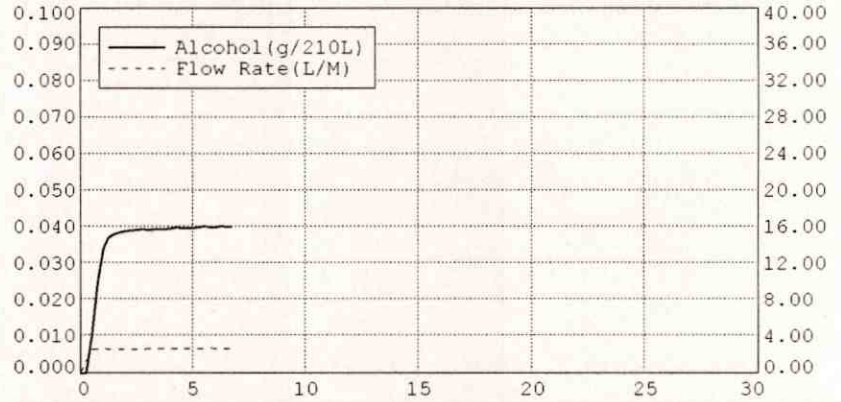
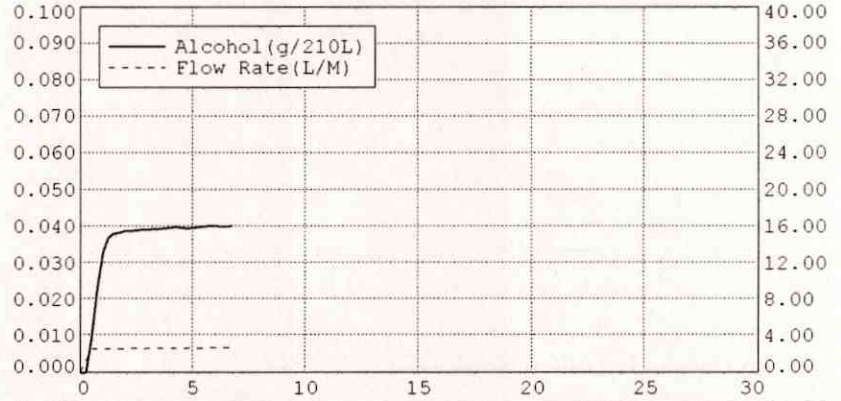
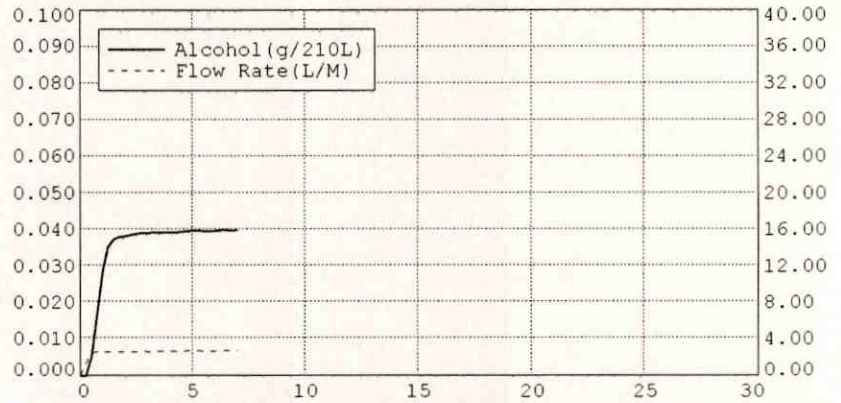
Date: 11/04/2021  
 Time: 10:01:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.11: 0.039  
 LOT #: AG111710  
 EXPIRATION: 04/27/2023  
 TANK PRESSURE: 715 psi

BLANK TEST	0.000	10:03
INTERNAL STANDARD	VERIFIED	10:03
EXTERNAL STANDARD	0.041	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.041	10:04
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.041	10:06
BLANK TEST	0.000	10:06
EXTERNAL STANDARD	0.041	10:07
BLANK TEST	0.000	10:08
EXTERNAL STANDARD	0.041	10:08
BLANK TEST	0.000	10:09

Average = 0.0410  
 Std Dev = 0.0000





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100403

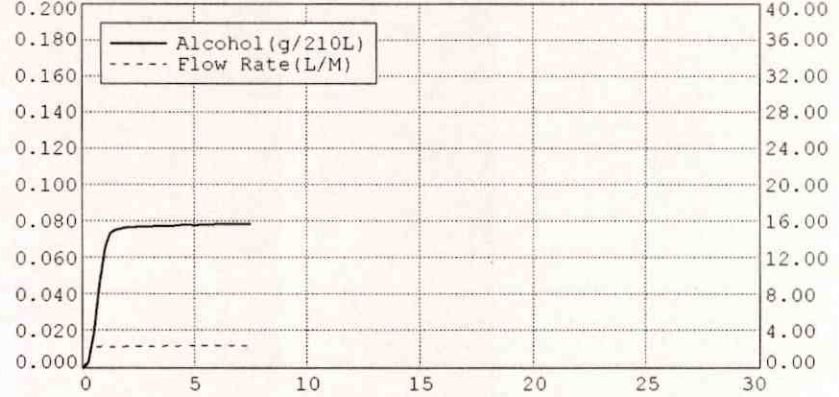
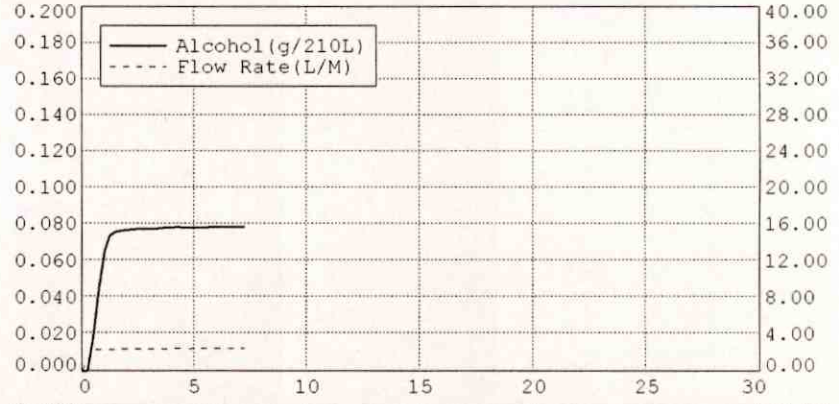
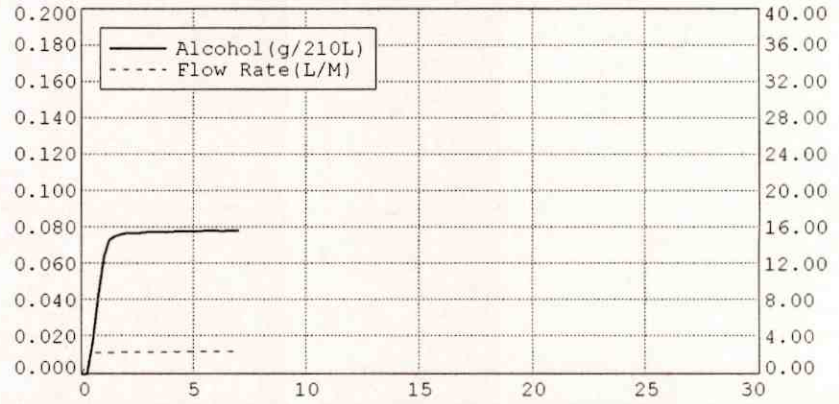
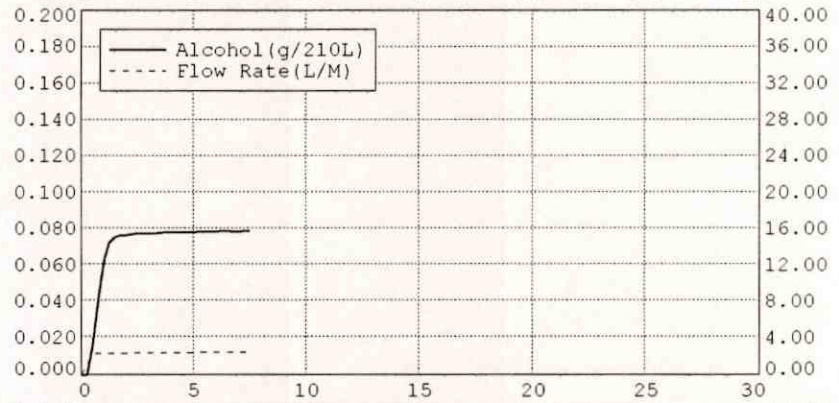
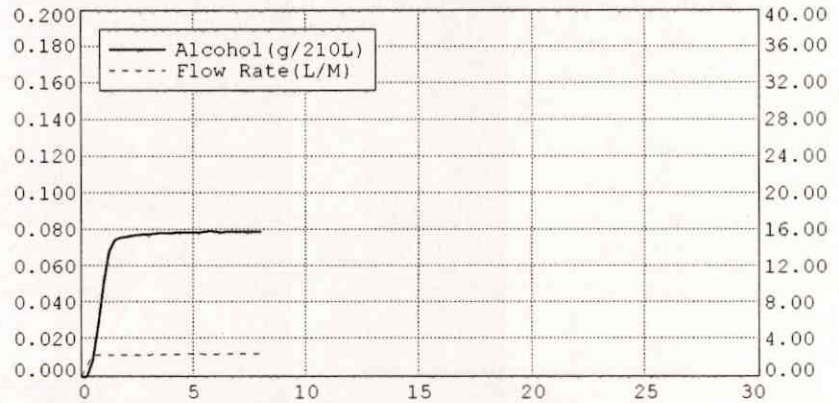
Date: 11/04/2021  
 Time: 10:10:51

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.11: 0.078  
 LOT #: AG018102  
 EXPIRATION: 06/29/2022  
 TANK PRESSURE: 278 psi

BLANK TEST	0.000	10:12
INTERNAL STANDARD	VERIFIED	10:12
EXTERNAL STANDARD	0.080	10:12
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.079	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.079	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.079	10:15
BLANK TEST	0.000	10:16
EXTERNAL STANDARD	0.079	10:17
BLANK TEST	0.000	10:18

Average = 0.0792  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100403

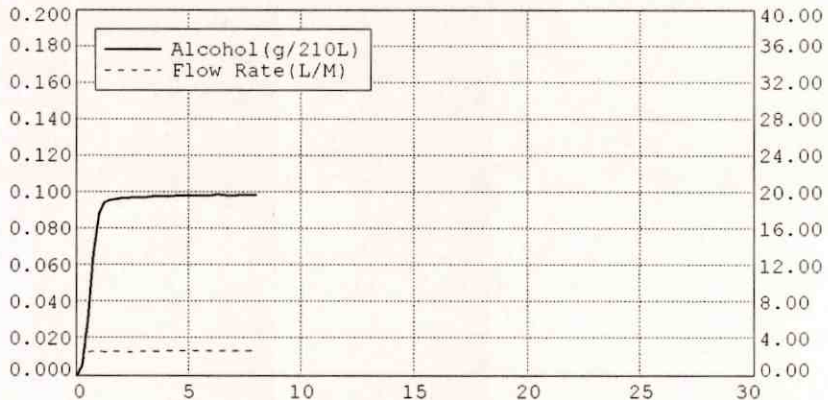
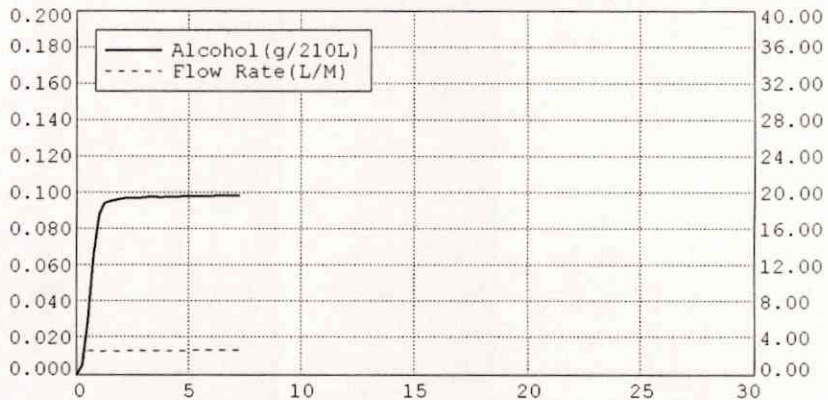
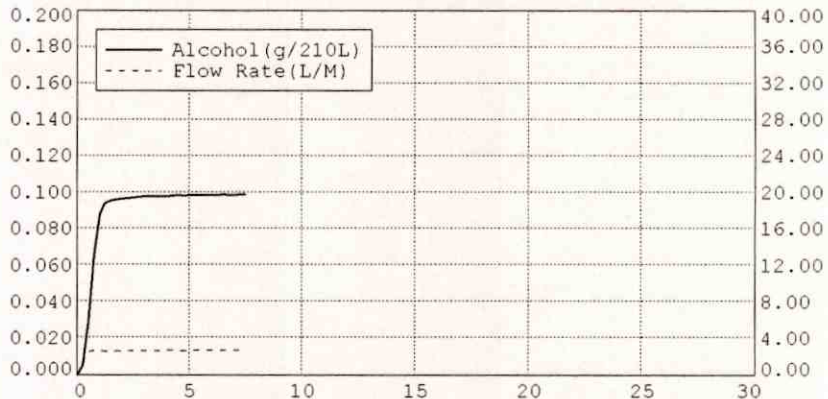
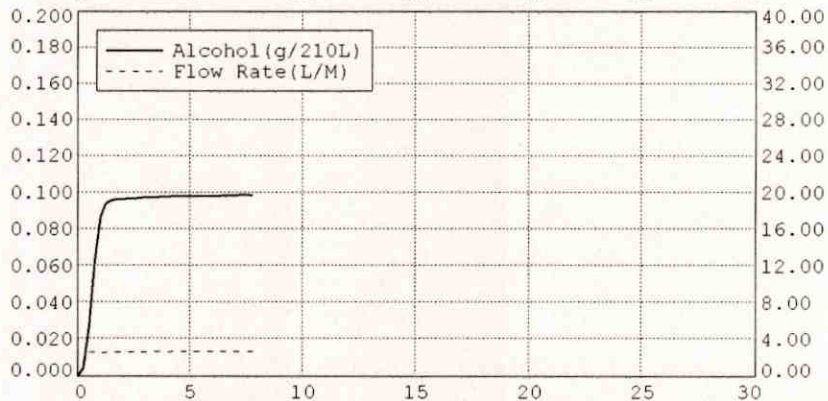
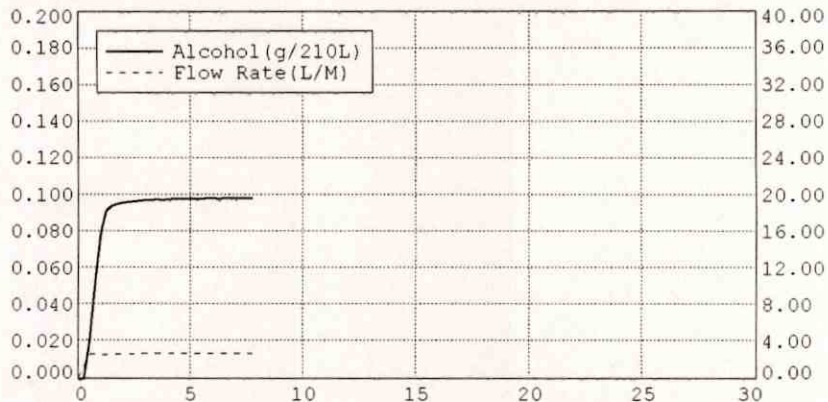
Date: 11/04/2021  
 Time: 10:19:07

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.10: 0.097  
 LOT #: AG108404  
 EXPIRATION: 03/25/2023  
 TANK PRESSURE: 817 psi

BLANK TEST	0.000	10:20
INTERNAL STANDARD	VERIFIED	10:20
EXTERNAL STANDARD	0.099	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.100	10:22
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.099	10:23
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.099	10:24
BLANK TEST	0.000	10:25
EXTERNAL STANDARD	0.099	10:25
BLANK TEST	0.000	10:26

Average = 0.0992  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety  
 DATAMASTER dmt: 100403

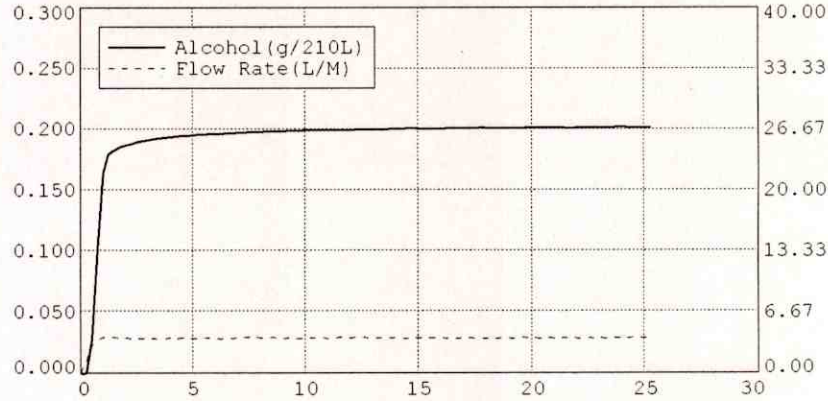
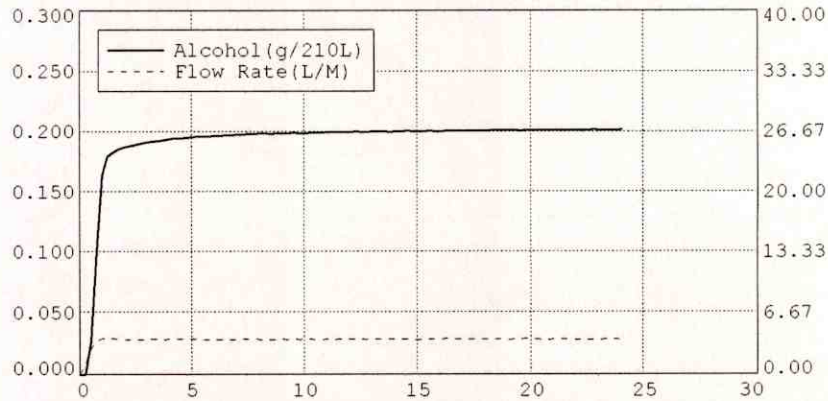
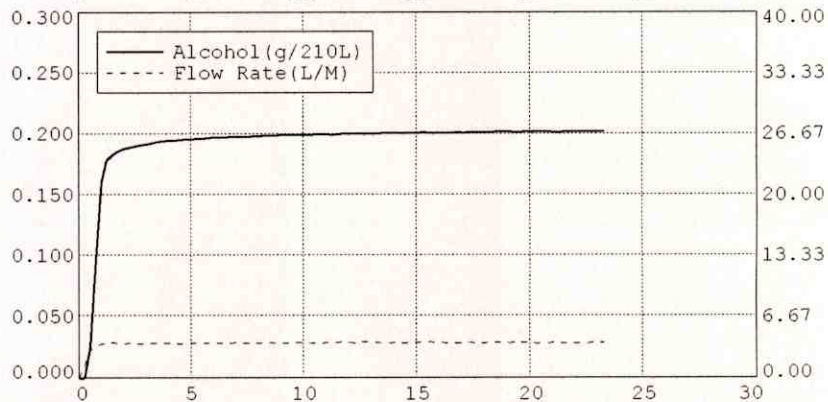
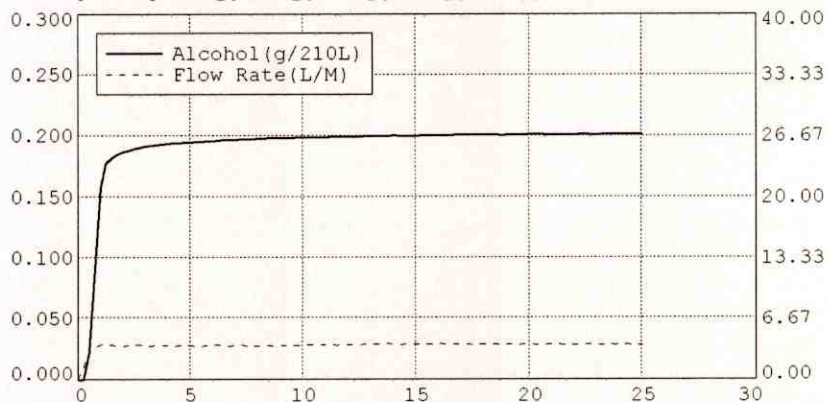
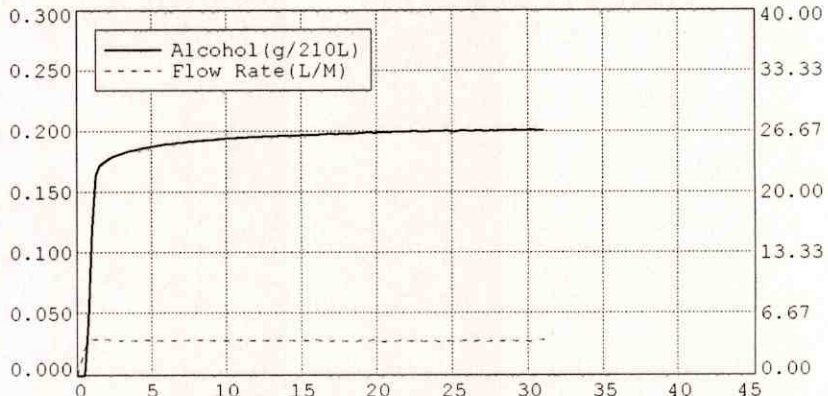
Date: 11/04/2021  
 Time: 11:13:16

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	11:14
INTERNAL STANDARD	VERIFIED	11:14
EXTERNAL STANDARD	0.201	11:15
BLANK TEST	0.000	11:16
EXTERNAL STANDARD	0.201	11:16
BLANK TEST	0.000	11:17
EXTERNAL STANDARD	0.202	11:17
BLANK TEST	0.000	11:18
EXTERNAL STANDARD	0.202	11:19
BLANK TEST	0.000	11:20
EXTERNAL STANDARD	0.202	11:20
BLANK TEST	0.000	11:21

Average = 0.2016  
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100403

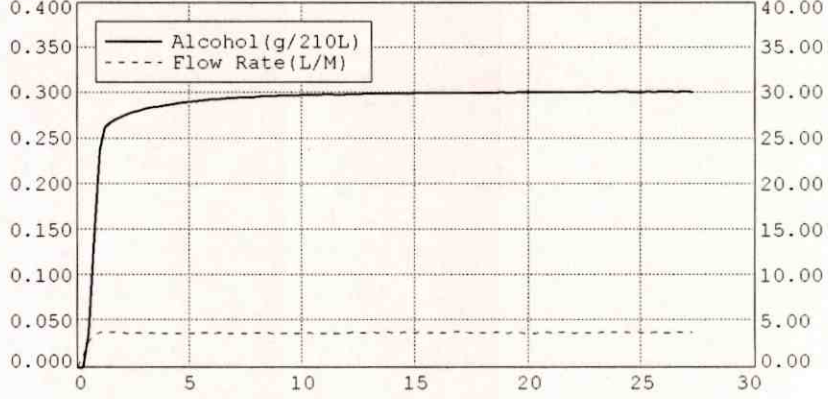
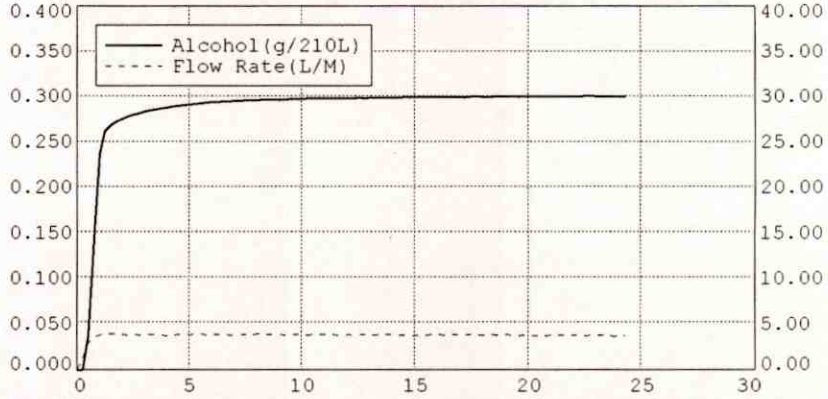
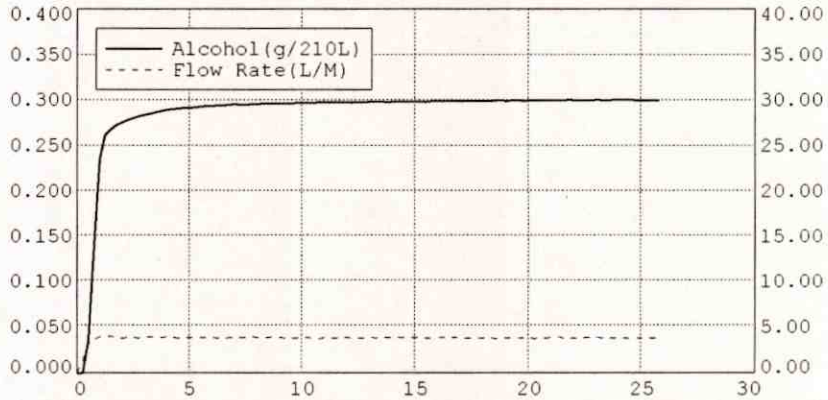
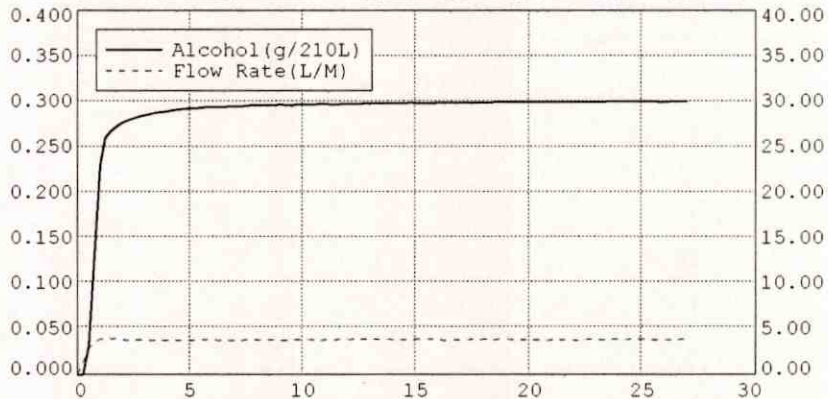
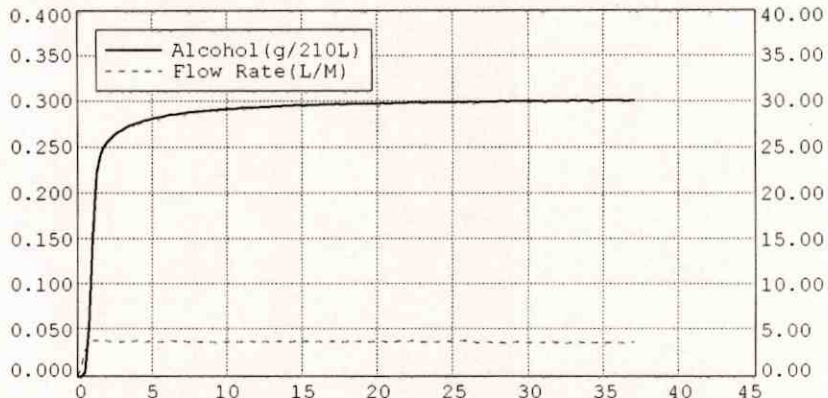
Date: 11/04/2021  
 Time: 11:23:31

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	11:24
INTERNAL STANDARD	VERIFIED	11:24
EXTERNAL STANDARD	0.300	11:25
BLANK TEST	0.000	11:26
EXTERNAL STANDARD	0.299	11:27
BLANK TEST	0.000	11:27
EXTERNAL STANDARD	0.300	11:28
BLANK TEST	0.000	11:29
EXTERNAL STANDARD	0.300	11:29
BLANK TEST	0.000	11:30
EXTERNAL STANDARD	0.301	11:31
BLANK TEST	0.000	11:32

Average = 0.3000  
 Std Dev = 0.0007



SUBJECT TEST

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100403  
-----

Date: 11/04/2021  
Time: 12:16:44

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

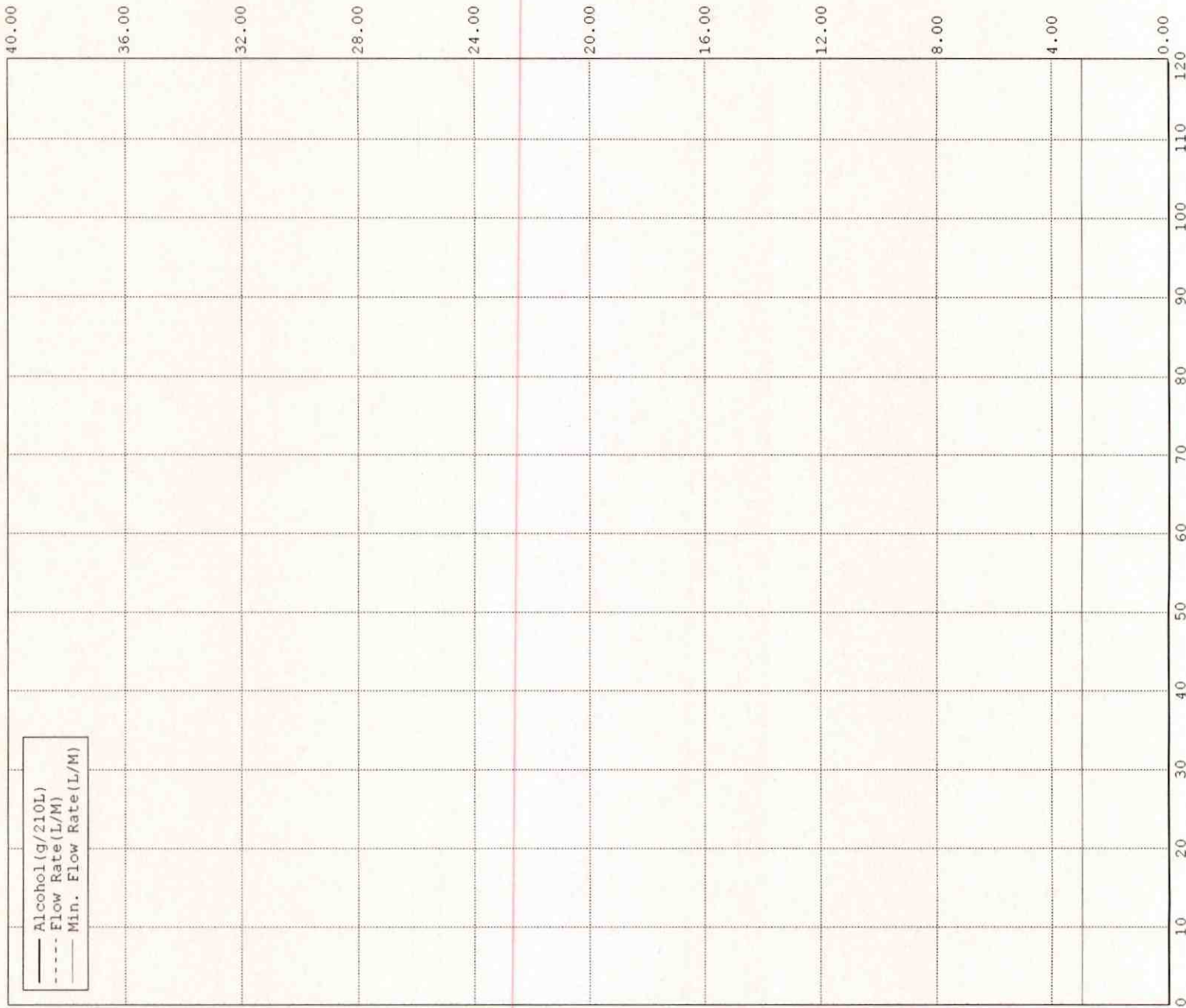
OPERATOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: 10436

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.11: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:17  
BLANK TEST 0.000 12:18  
INTERNAL STANDARD VERIFIED 12:18  
EXTERNAL STANDARD 0.078 12:18  
BLANK TEST 0.000 12:19  
SUBJECT SAMPLE INCOMPLETE 12:21



SUBJECT TEST

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100403  
-----

Date: 11/04/2021  
Time: 12:28:49

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: 10436

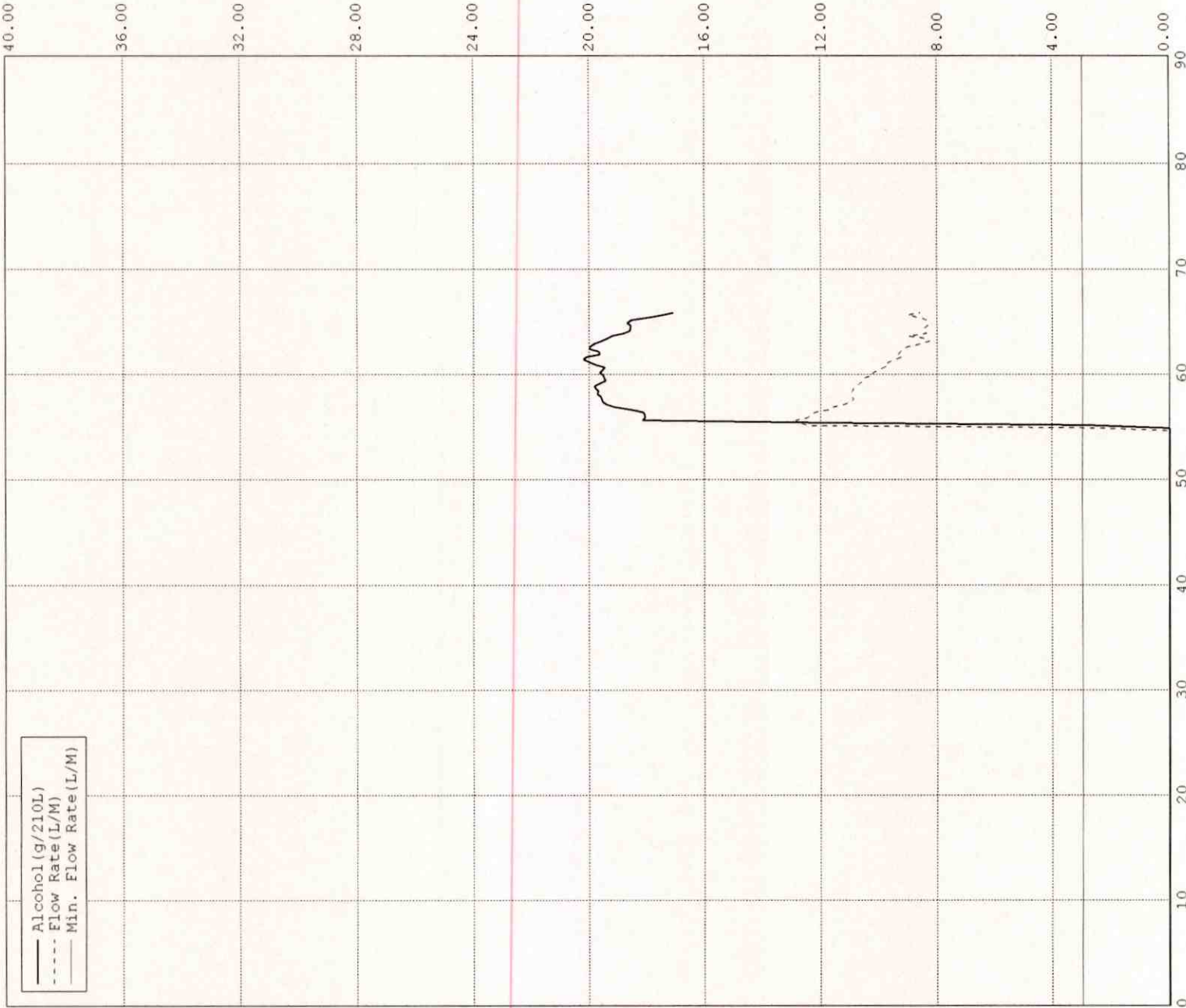
DEPT/AGENCY:  
INVALID  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.11: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:30  
BLANK TEST 0.000 12:30  
INTERNAL STANDARD VERIFIED 12:30  
EXTERNAL STANDARD 0.079 12:30  
BLANK TEST 0.000 12:31  
SUBJECT SAMPLE INVALID 12:32

CYG



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100403

Date: 11/04/2021  
Time: 12:45:45

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: 10436

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

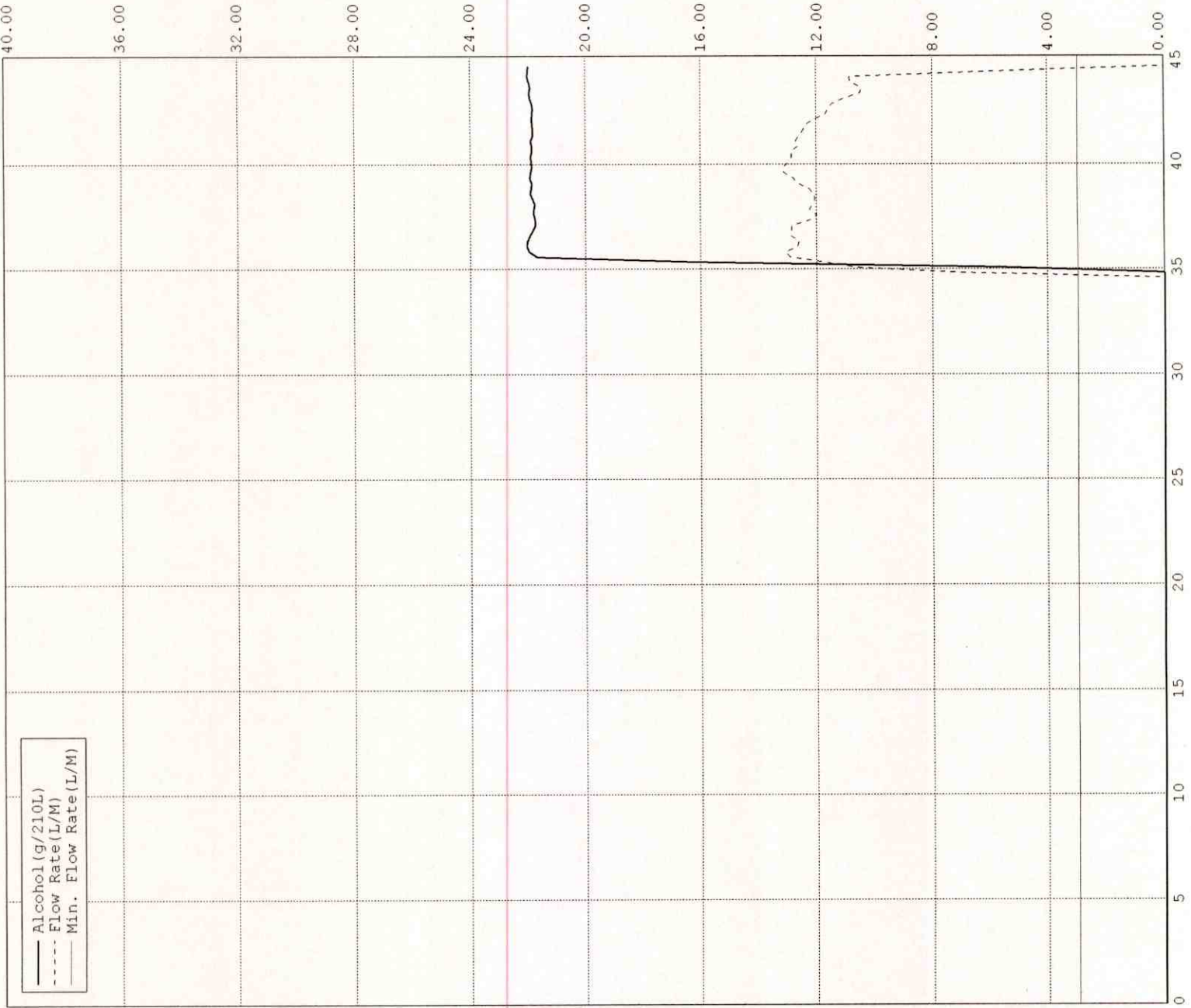
EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.11: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:46  
BLANK TEST 0.000 12:47  
INTERNAL STANDARD VERIFIED 12:47  
Xq = 0.075 (0.70%)  
EXTERNAL STANDARD 0.079 12:47  
X[1] = 0.0791 (0.0001) (0.0007)  
BLANK TEST 0.000 12:48  
SUBJECT SAMPLE XXX 12:49  
X[1] = 0.1105 (-0.0213) (0.00006)

Interference Detected

Filter 2 Average: 0.0005  
Filter 3 Average: 0.0005  
OMG 11/4/2021

OXG



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100403

Date: 11/04/2021  
Time: 12:52:12

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: 10436

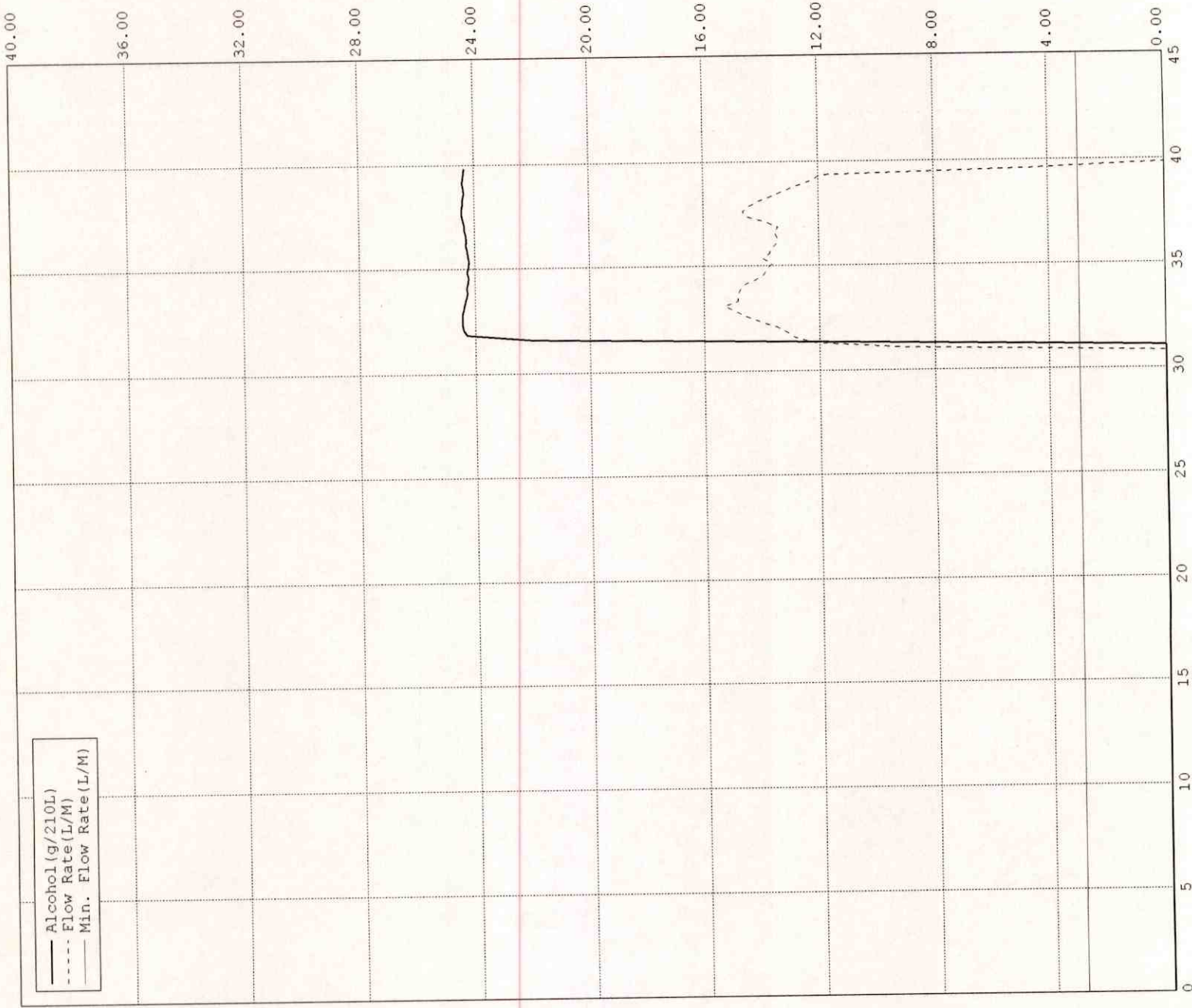
DEPT/AGENCY:  
INTERFERENCE IPA  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.10: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	12:53
BLANK TEST	0.000	12:53
INTERNAL STANDARD	VERIFIED	12:53
$x_q = 0.076$ (1.87%)		
EXTERNAL STANDARD	0.080	12:53
$x[1] = 0.0796$ (0.0010) (0.0007)		
BLANK TEST	0.000	12:54
SUBJECT SAMPLE	XXX	12:55
$x[1] = 0.1223$ (-0.0207) (0.0010)		

Interference Detected

CLG





SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100403

Date: 11/04/2021

Time: 12:58:28

SUBJECT NAME:

TEST TEST

LICENSE #: XXXX

OPERATOR NAME:

CARLIE GLAISTER

OPERATOR'S #: 10436

DEPT/AGENCY:

INTERFERENCE NEGATIVE

CASE/REPORT: XXXX

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

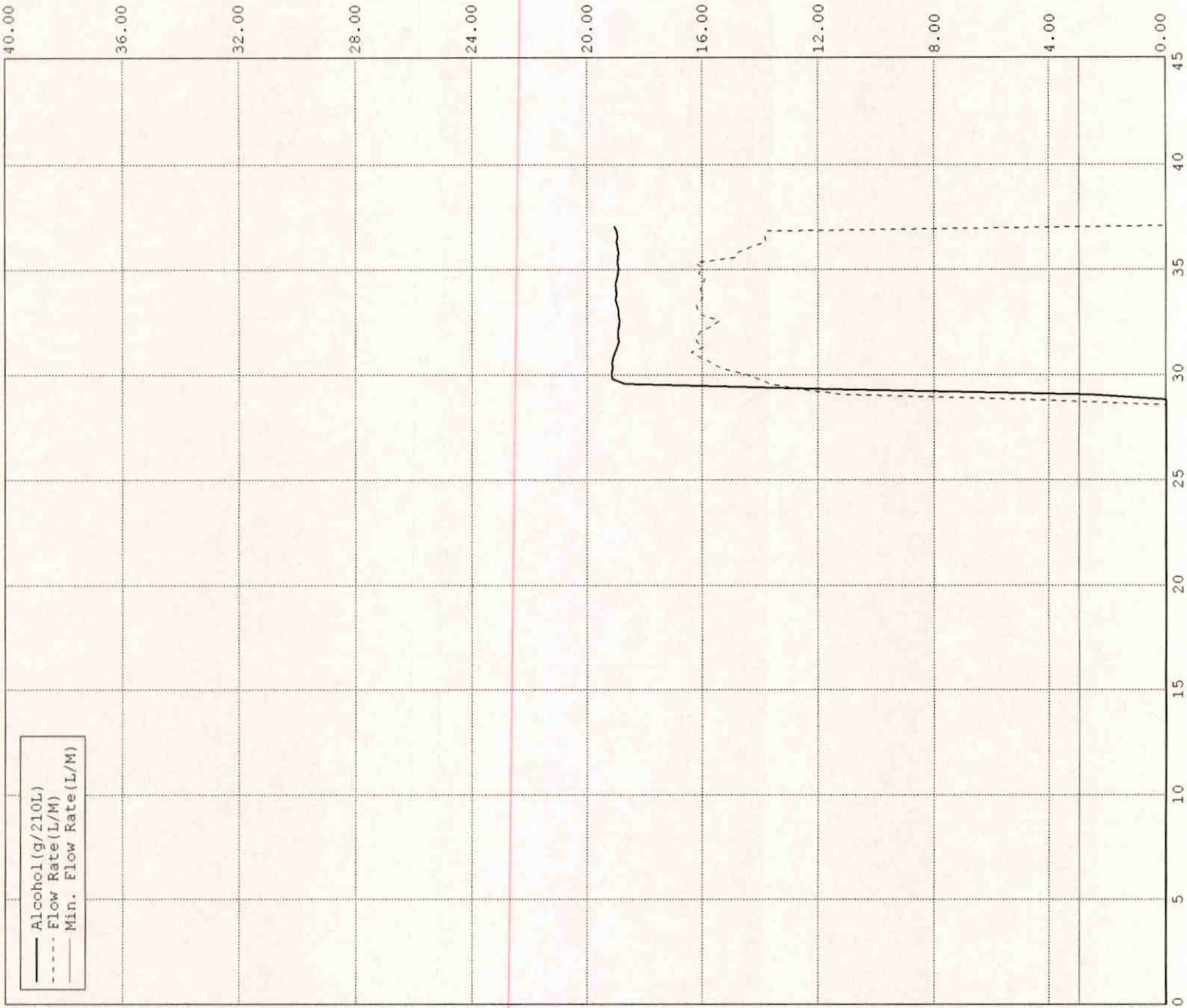
TARGET AT 29.11: 0.078

LOT #: AG018102

EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	12:59
BLANK TEST	0.000	12:59
INTERNAL STANDARD	VERIFIED	12:59
$x_q = 0.075$ (0.82%)		
EXTERNAL STANDARD	0.079	13:00
$x[1] = 0.0790$ (0.0000)	(0.0003)	
BLANK TEST	0.000	13:01
SUBJECT SAMPLE (Vol=2.05L)	0.095	13:01
$x[1] = 0.0959$ (0.0003)	(0.0011)	
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.079	13:02
$x[1] = 0.0786$ (0.0008)	(0.0004)	
BLANK TEST	0.000	13:03

CXG



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100403

Date: 11/04/2021  
Time: 12:23:52

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: 10436

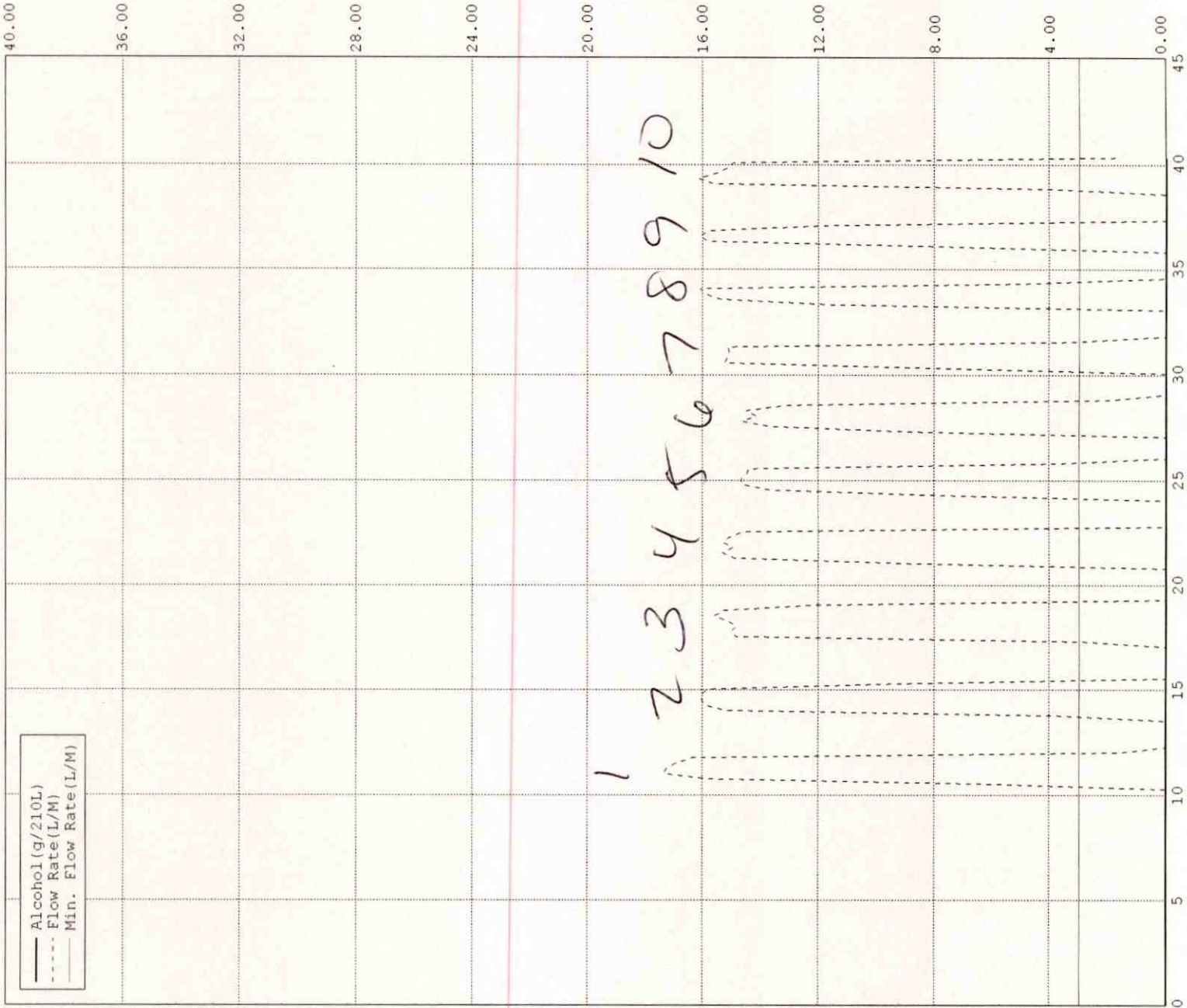
DEPT/AGENCY:  
MAXIMUM ATTEMPTS EXCEEDED  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.11: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:24  
BLANK TEST 0.000 12:25  
INTERNAL STANDARD VERIFIED 12:25  
EXTERNAL STANDARD 0.079 12:25  
BLANK TEST 0.000 12:26  
SUBJECT SAMPLE XXX 12:27

Maximum Attempts Exceeded

CKG



SUBJECT TEST

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100403  
-----

Date: 11/04/2021  
Time: 12:34:33

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: 10436

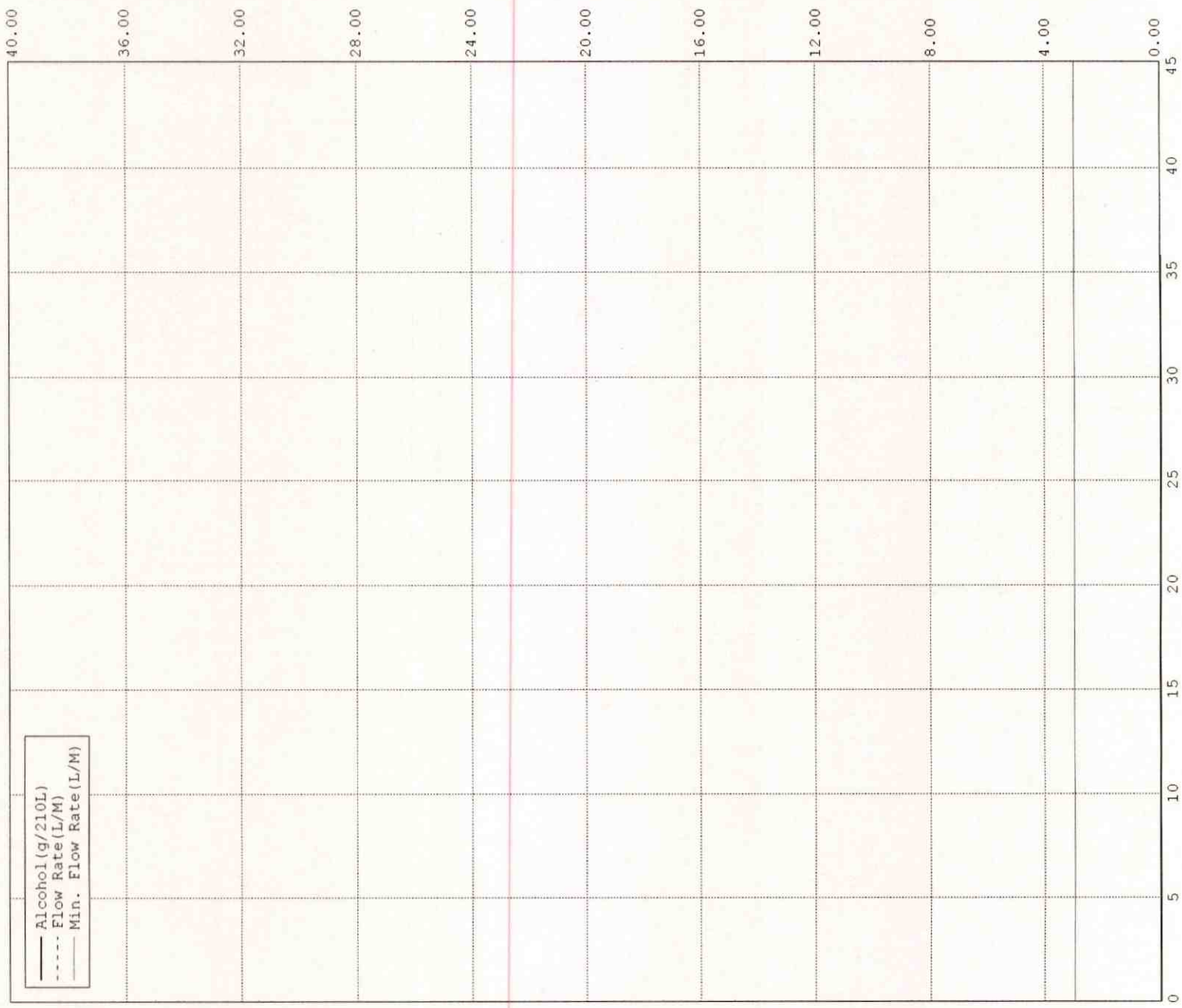
DEPT/AGENCY:  
RFI  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.11: 0.078  
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 12:37

RFI DETECTED

CVG



SUBJECT TEST

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100403  
-----

Date: 11/04/2021  
Time: 13:45:34

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: 10436

DEPT/AGENCY:  
NON-DRINKING SUBJECT TEST  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.11: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	13:46
BLANK TEST	0.000	13:46
INTERNAL STANDARD	VERIFIED	13:46
EXTERNAL STANDARD	0.080	13:47
BLANK TEST	0.000	13:48
SUBJECT SAMPLE (Vol=2.28L)	0.000	13:48
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.080	13:49
BLANK TEST	0.000	13:50

CKG

