

# 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 100681 Analyst Carlie Blaister Start Date 11/4/21

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 1.5 L (1.3L to 1.7L)

### Linearity Test (attached)

#### Levels Used

- i. 0.020g/210L Mnf Airgas Lot AG-100401 Exp 11/4/23
- ii. 0.040g/210L Mnf Airgas Lot AG-111710 Exp 4/27/23
- iii. 0.080g/210L Mnf Airgas Lot AG-018102 Exp 6/29/22
- iv. 0.100g/210L Mnf Airgas Lot AG-108404 Exp 3/25/23
- v. 0.200g/210L Mnf Buth Lot 20510 Exp 12/3/22  
Simulator S/N DR41461 Date Calibrated 6/14/21
- vi. 0.300g/210L Mnf Buth Lot 21030 Exp 2/2/23  
Simulator S/N SD1202 Date Calibrated 6/15/21

### Functional Tests (attached)

Incomplete

Invalid

Interference

- i. Acetone - Mnf Lifela Lot Z1D41158 Level 0.100 Exp 4/29/23  
Simulator S/N SD1177 Date Calibrated 6/15/21
- ii. Isopropanol - Mnf Lifela Lot Z1D41158 Level 0.100 Exp 4/29/23  
Simulator S/N SD1198 Date Calibrated 6/15/21
- iii. Negative Control - Mnf Lifela Lot Z1D41158 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: 100681  
-----

Date: 11/04/2021  
Time: 09:49:49

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 47.1°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.70 V PASSED  
(1.02 V - 2.38 V)  
Cooler Voltage = 1.53 V PASSED  
(0.92 V - 2.14 V)  
Bias Voltage = 78 V PASSED  
(47 V - 109 V)  
Chopper Freq = 526 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.1 in

PUMP INFO

Flow Rate = 4.244 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

Xq = 0.107 0.08% (0.00% - 4.00%) PASSED

Technician Screen

-----  
DATAMASTER dmt: 100681  
-----

Date: 11/04/2021  
Time: 10:22 AM

Temperatures (°C)

Sample Cell: 48.7°C  
Breath Tube: 46.7°C

Current Barometer 29.1 in  
Volume (Ltr) 1.46

Settings

Lamp: 1.70 V  
Bias: 78 V  
Cooler: 1.60 V  
Chopper: 525 Hz

Voltages (V)

Flow: 1.07 V  
Detector: -0.026 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100681  
-----

Date: 10/29/2021  
Time: 13:14:55

OPERATOR NAME:  
CARLIE GLAISTER  
CERTIFICATE #: 10436

Ca = 0.1000  
CAL = 0.984251    0.800 <= CAL < 1.200  
b1 = 0.0004    0.0000 <= b1 < 0.0040  
b2 = 0.0051    0.0010 <= b2 < 0.0100  
b3 = 0.0001    0.0000 <= b3 < 0.0040  
Xq = 0.1066    0.0500 <= Xq < 0.2000  
a21 = 1.158479    1.050 <= a21 < 1.300  
a31 = 0.492122    0.300 <= a31 < 0.800



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100681

Date: 11/04/2021  
Time: 10:23:57

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: 10436

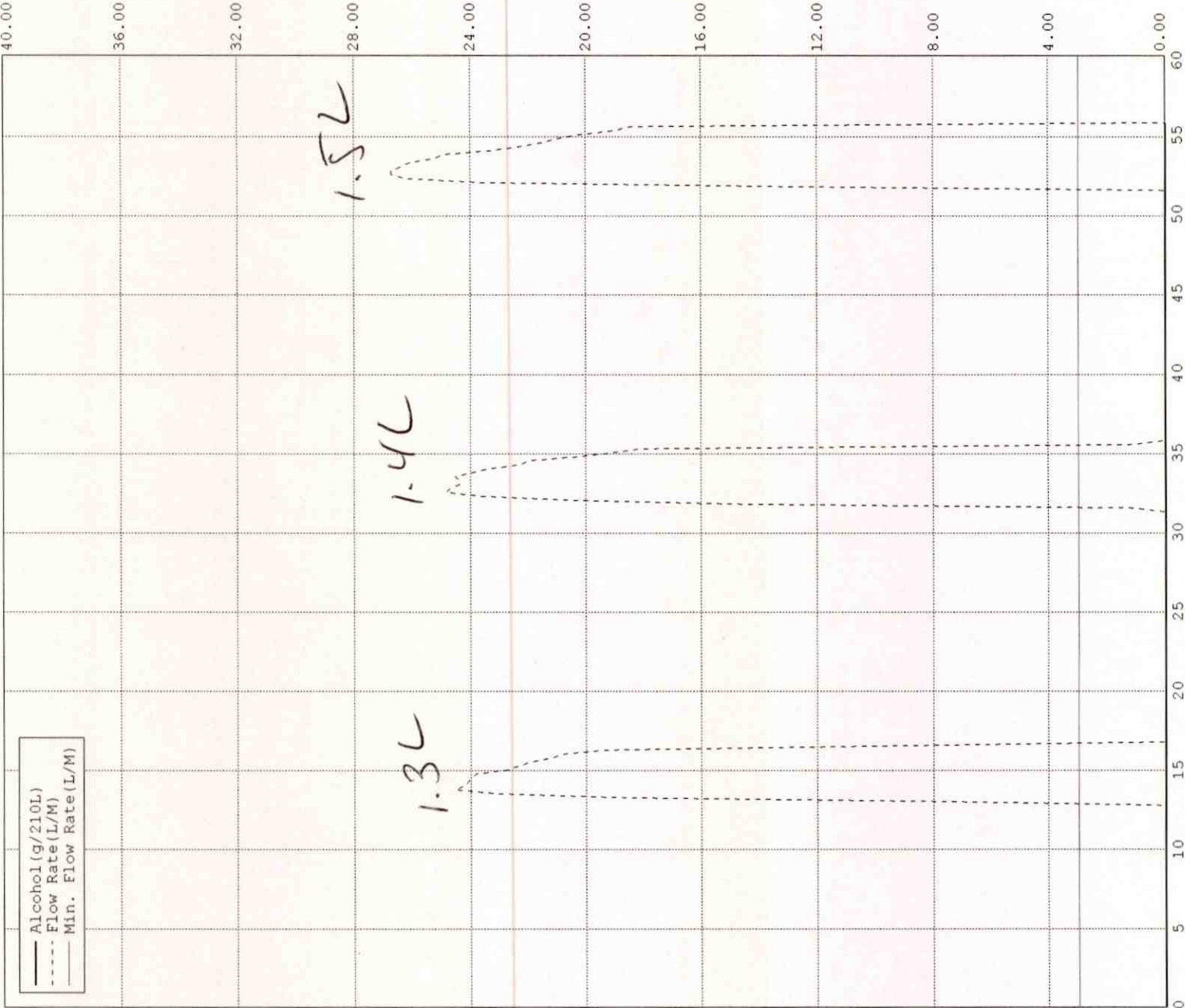
DEPT/AGENCY:  
MINIMUM VOLUME TEST  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	10:25
BLANK TEST	0.000	10:25
INTERNAL STANDARD	VERIFIED	10:25
EXTERNAL STANDARD	0.076	10:25
BLANK TEST	0.000	10:26
SUBJECT SAMPLE (Vol=1.52L)	0.000	10:27
BLANK TEST	0.000	10:28
EXTERNAL STANDARD	0.076	10:28
BLANK TEST	0.000	10:29

OK



LINEARITY CHECK

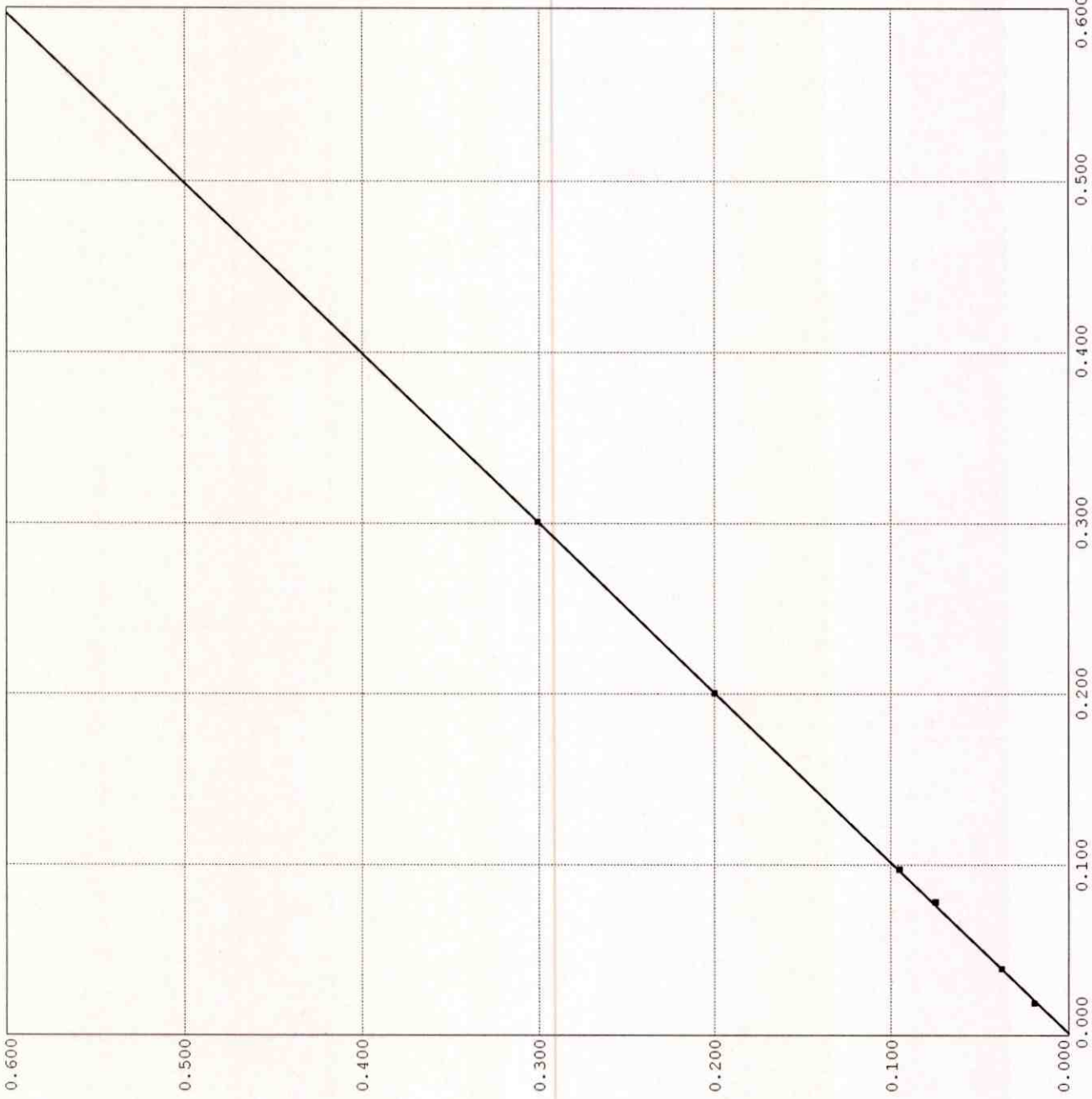
-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100681  
 -----

Date: 11/04/2021  
 Time: 11:09:50

SUPERVISOR NAME:  
 CARLIE GLAISTER  
 OPERATOR'S #: 10436

TARGET	AVERAGE	STD. DEV.
0.019	0.0200	0.0000
0.039	0.0384	0.0005
0.078	0.0758	0.0004
0.097	0.0960	0.0000
0.200	0.2008	0.0004
0.300	0.3016	0.0009

SLOPE = 1.007192  
 R<sup>2</sup> = 0.999874



CVG

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
DATAMASTER dmt: 100681

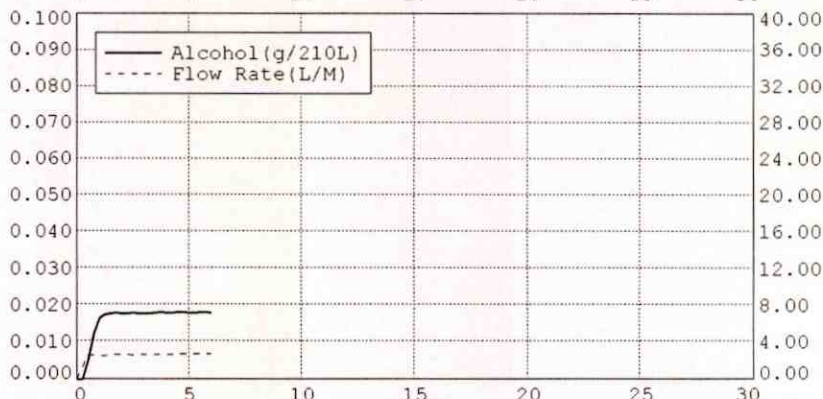
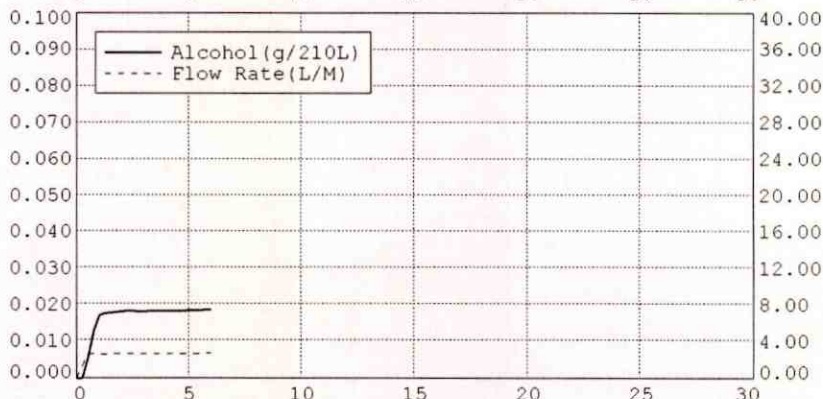
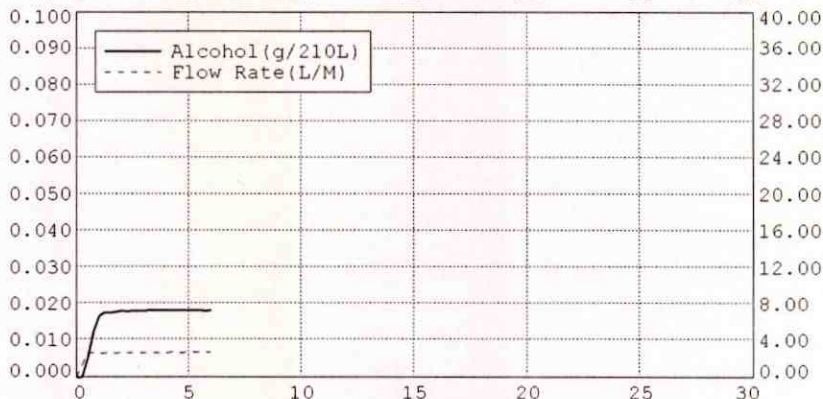
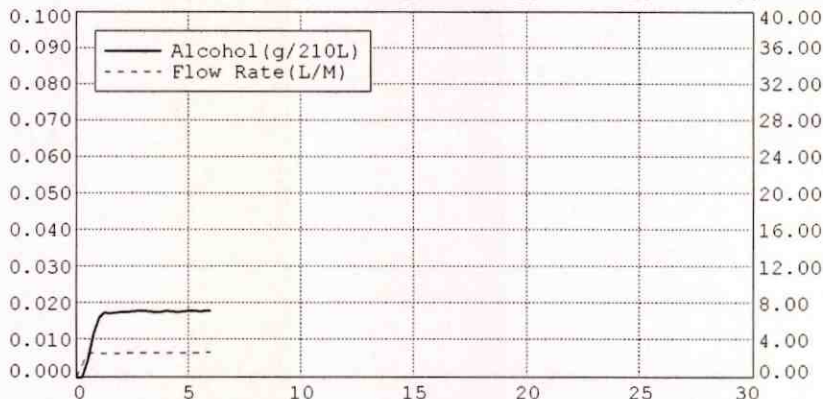
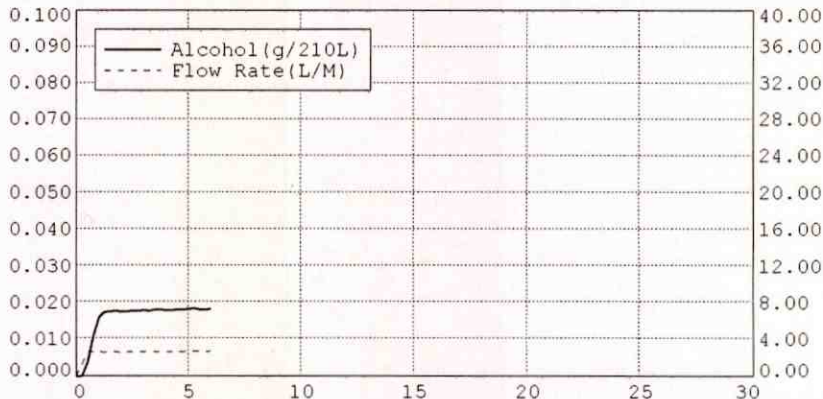
Date: 11/04/2021  
Time: 11:09:51

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
TARGET AT 29.08: 0.019  
LOT #: AG100401  
EXPIRATION: 01/04/2023  
TANK PRESSURE: 1014 psi

BLANK TEST	0.000	11:11
INTERNAL STANDARD	VERIFIED 0.020	11:11
EXTERNAL STANDARD	0.020	11:11
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.020	11:12
BLANK TEST	0.000	11:13
EXTERNAL STANDARD	0.020	11:13
BLANK TEST	0.000	11:14
EXTERNAL STANDARD	0.020	11:14
BLANK TEST	0.000	11:15
EXTERNAL STANDARD	0.020	11:15
BLANK TEST	0.000	11:16

Average = 0.0200  
Std Dev = 0.0000





LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100681

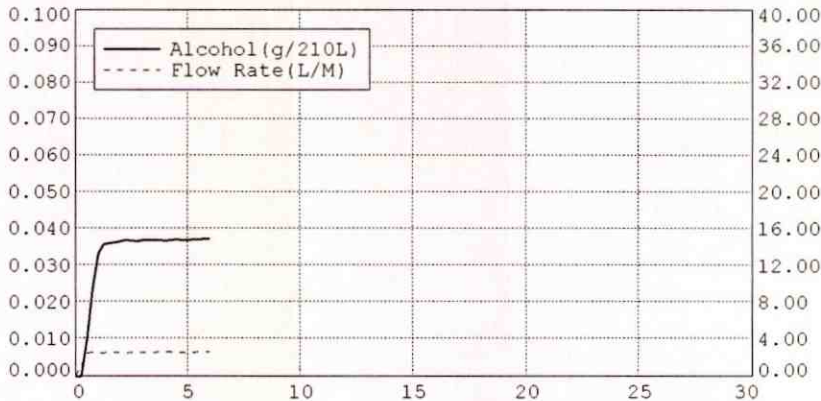
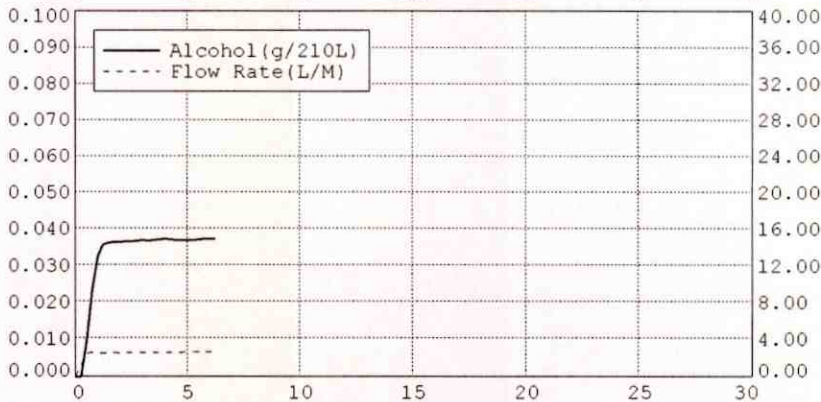
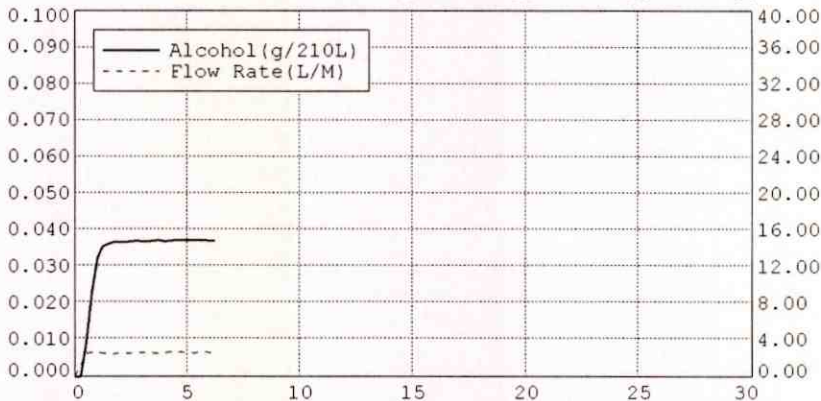
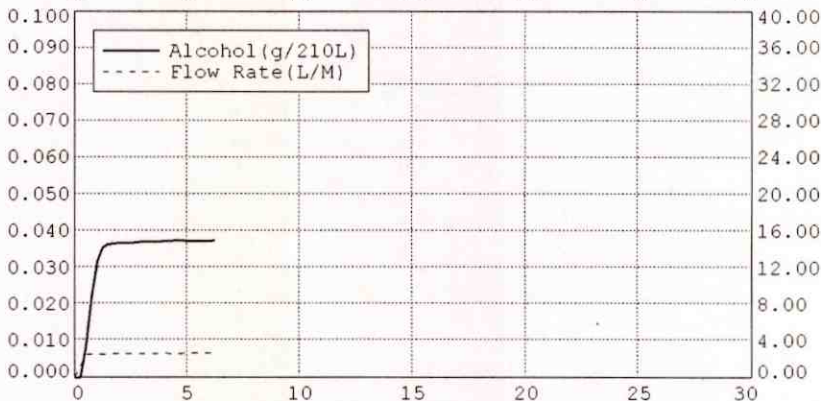
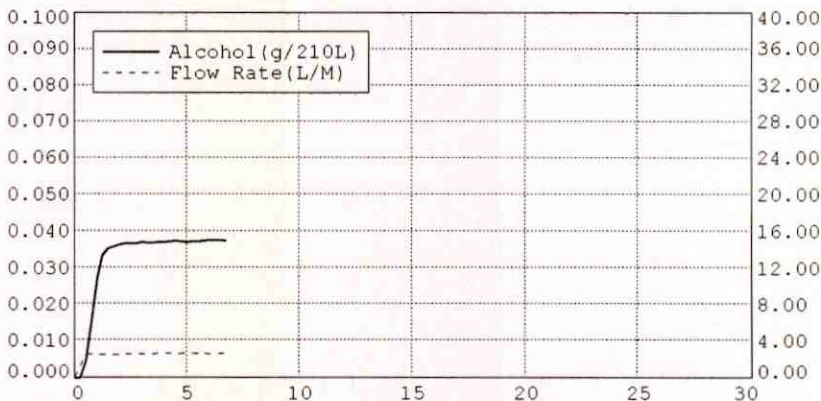
Date: 11/04/2021  
 Time: 11:17:29

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.08: 0.039  
 LOT #: AG111710  
 EXPIRATION: 04/27/2023  
 TANK PRESSURE: 686 psi

BLANK TEST	0.000	11:19
INTERNAL STANDARD	VERIFIED	11:19
EXTERNAL STANDARD	0.039	11:19
BLANK TEST	0.000	11:20
EXTERNAL STANDARD	0.039	11:20
BLANK TEST	0.000	11:21
EXTERNAL STANDARD	0.038	11:21
BLANK TEST	0.000	11:22
EXTERNAL STANDARD	0.038	11:22
BLANK TEST	0.000	11:23
EXTERNAL STANDARD	0.038	11:23
BLANK TEST	0.000	11:24

Average = 0.0384  
 Std Dev = 0.0005





LINEARITY CHECK: Control Test 3

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 Alaska Department of Public Safety  
 DATAMASTER dmt: 100681  
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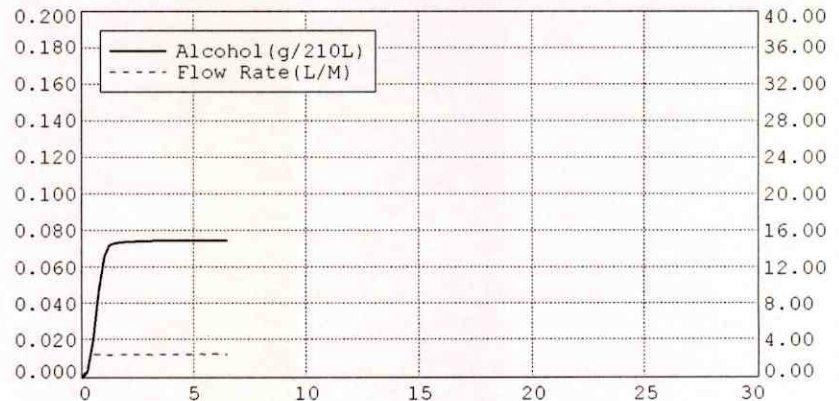
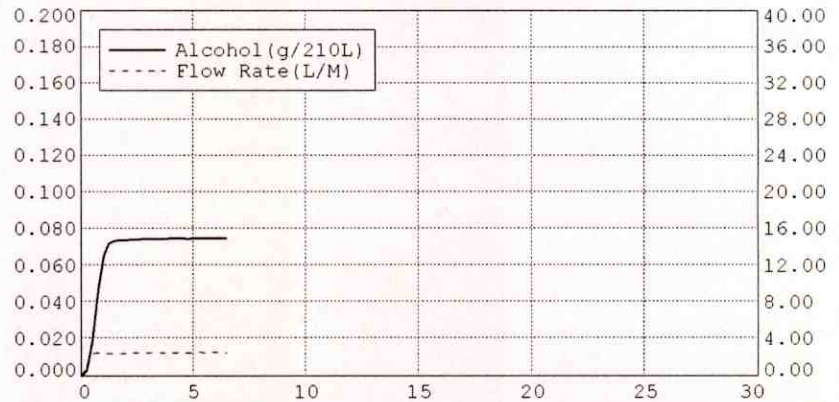
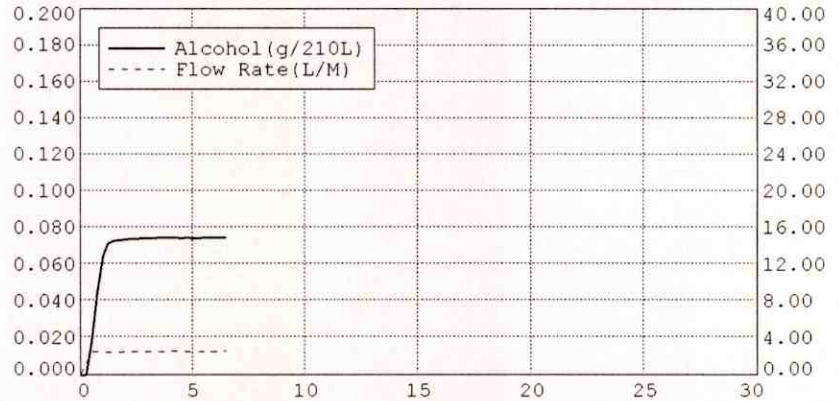
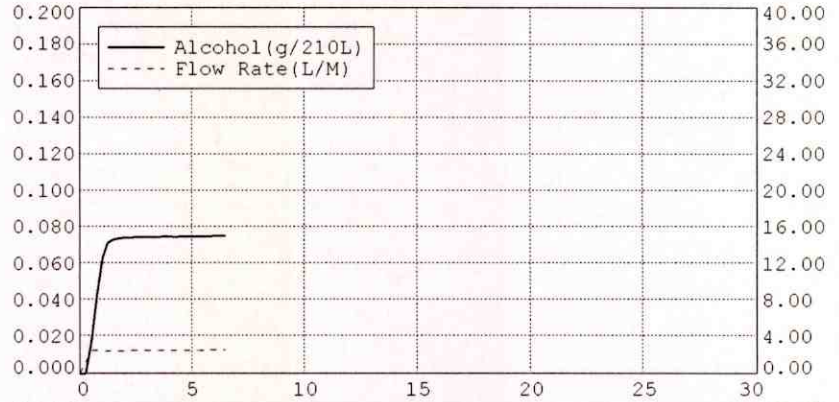
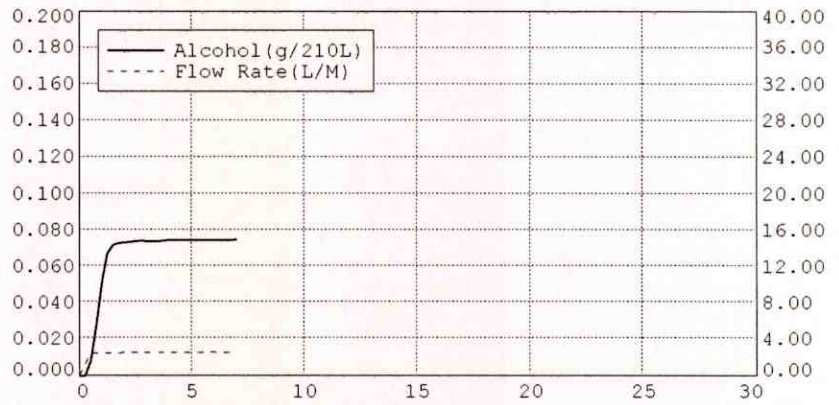
Date: 11/04/2021  
 Time: 11:27:51

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.08: 0.078  
 LOT #: AG018102  
 EXPIRATION: 06/29/2022  
 TANK PRESSURE: 185 psi

BLANK TEST	0.000	11:29
INTERNAL STANDARD	VERIFIED	11:29
EXTERNAL STANDARD	0.076	11:29
BLANK TEST	0.000	11:30
EXTERNAL STANDARD	0.076	11:30
BLANK TEST	0.000	11:31
EXTERNAL STANDARD	0.075	11:31
BLANK TEST	0.000	11:32
EXTERNAL STANDARD	0.076	11:32
BLANK TEST	0.000	11:33
EXTERNAL STANDARD	0.076	11:33
BLANK TEST	0.000	11:34

Average = 0.0758  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

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 Alaska Department of Public Safety  
 DATAMASTER dmt: 100681  
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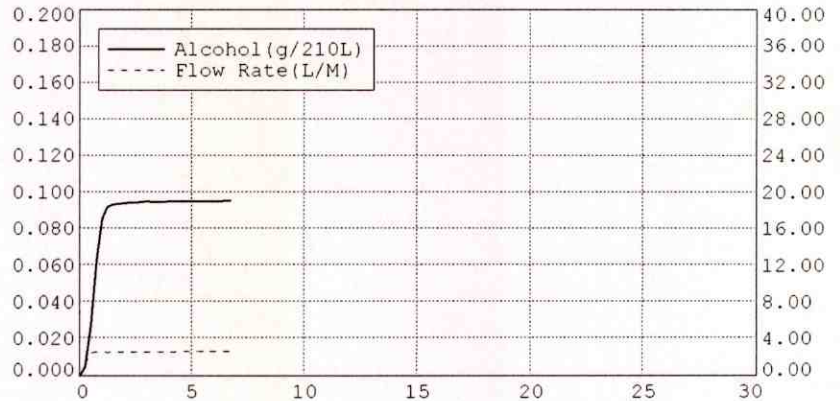
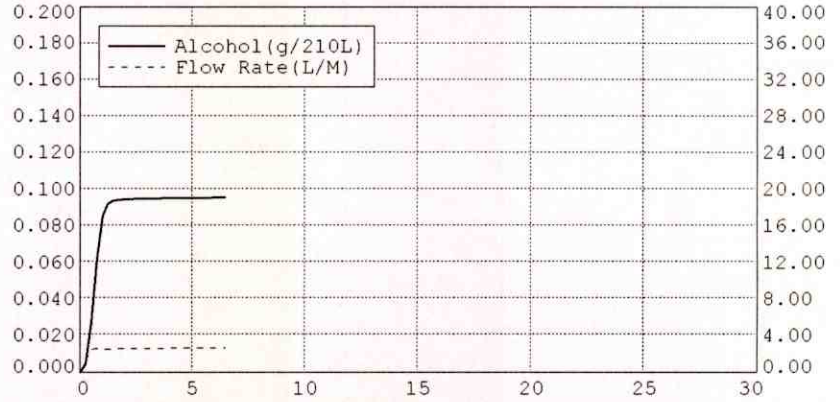
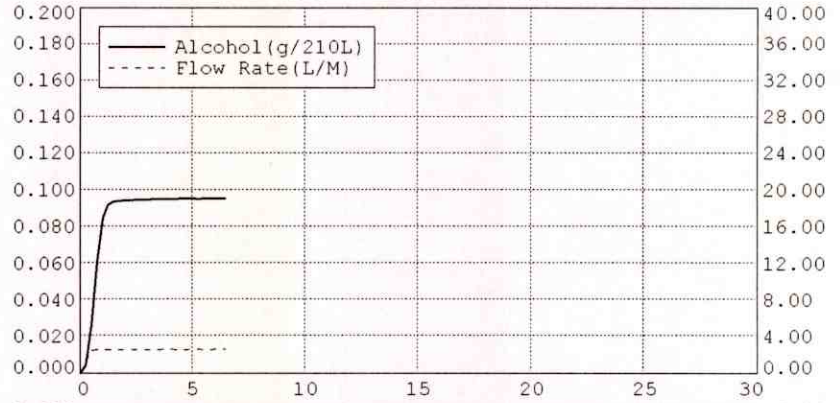
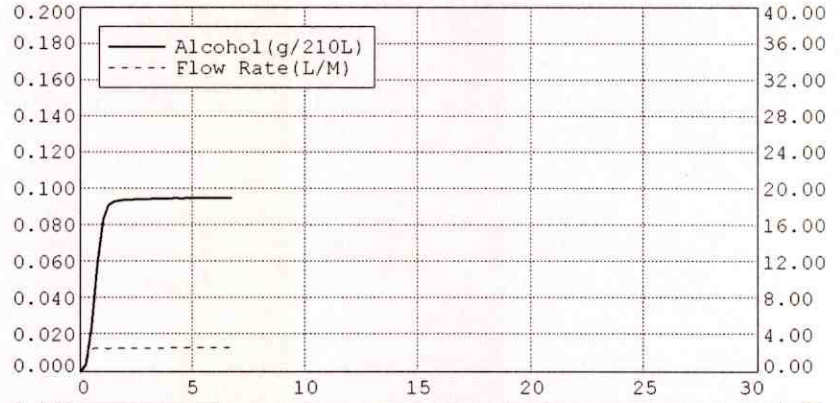
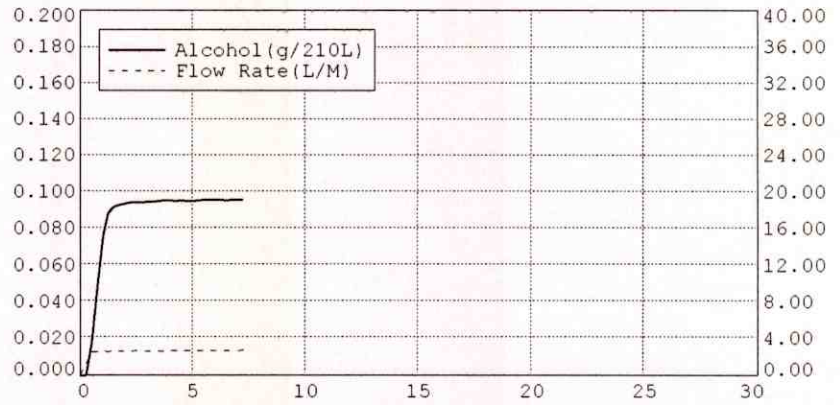
Date: 11/04/2021  
 Time: 11:36:07

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.09: 0.097  
 LOT #: AG108404  
 EXPIRATION: 03/25/2023  
 TANK PRESSURE: 786 psi

BLANK TEST	0.000	11:37
INTERNAL STANDARD	VERIFIED	11:37
EXTERNAL STANDARD	0.096	11:37
BLANK TEST	0.000	11:38
EXTERNAL STANDARD	0.096	11:38
BLANK TEST	0.000	11:39
EXTERNAL STANDARD	0.096	11:39
BLANK TEST	0.000	11:40
EXTERNAL STANDARD	0.096	11:41
BLANK TEST	0.000	11:41
EXTERNAL STANDARD	0.096	11:42
BLANK TEST	0.000	11:43

Average = 0.0960  
 Std Dev = 0.0000





LINEARITY CHECK: Control Test 5

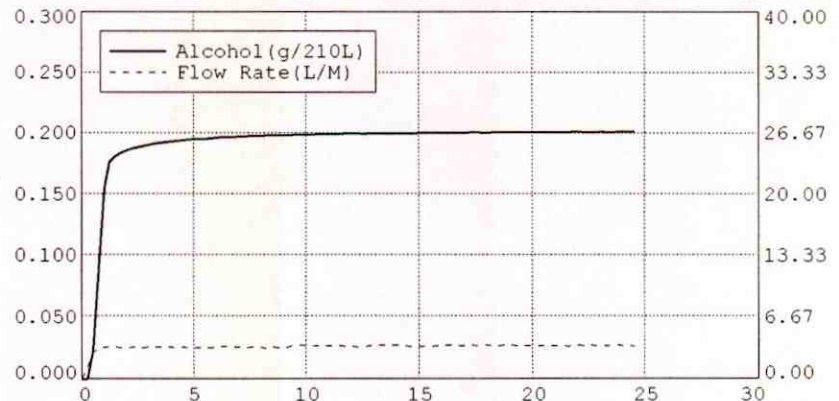
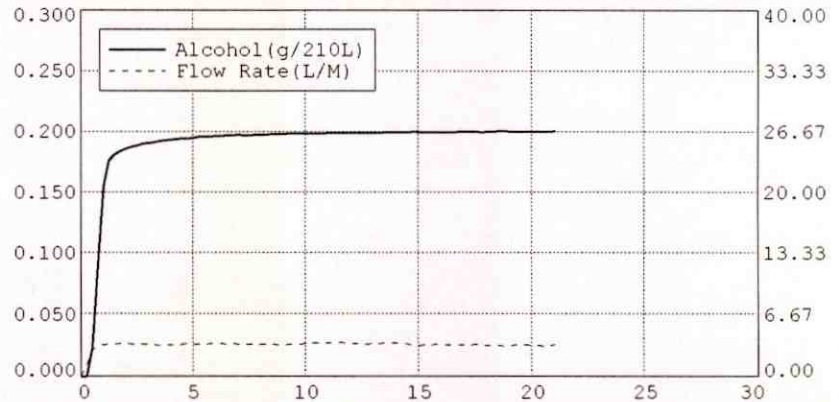
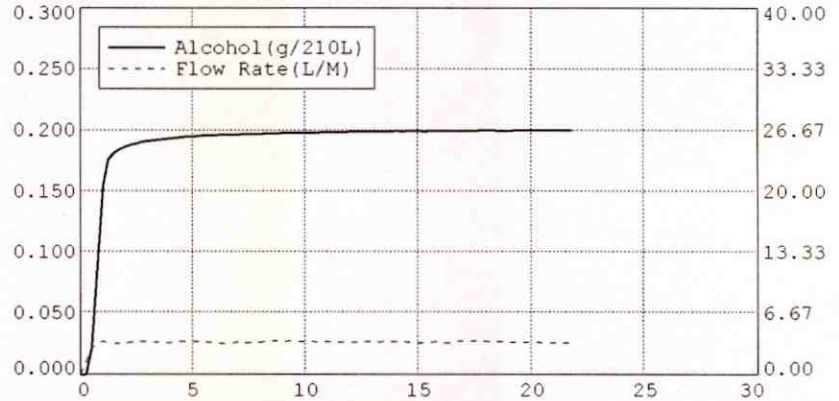
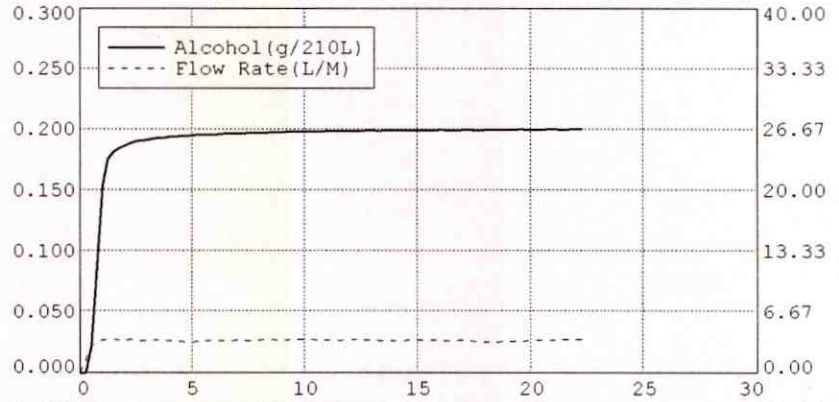
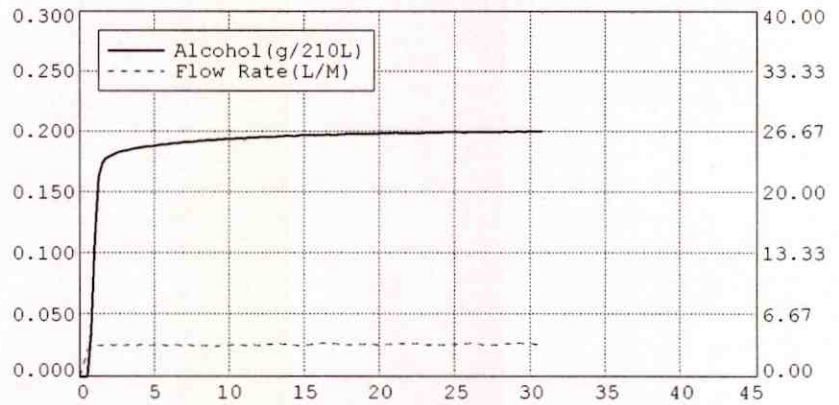
Alaska Department of Public Safety  
 DATAMASTER dmt: 100681

Date: 11/04/2021  
 Time: 11:59:14

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.200  
 LOT #: 20510  
 EXPIRATION: 12/03/2022

BLANK TEST	0.000	12:00
INTERNAL STANDARD	VERIFIED	12:00
EXTERNAL STANDARD	0.200	12:01
BLANK TEST	0.000	12:02
EXTERNAL STANDARD	0.201	12:02
BLANK TEST	0.000	12:03
EXTERNAL STANDARD	0.201	12:03
BLANK TEST	0.000	12:04
EXTERNAL STANDARD	0.201	12:05
BLANK TEST	0.000	12:06
EXTERNAL STANDARD	0.201	12:06
BLANK TEST	0.000	12:07

Average = 0.2008  
 Std Dev = 0.0004





LINEARITY CHECK: Control Test 6

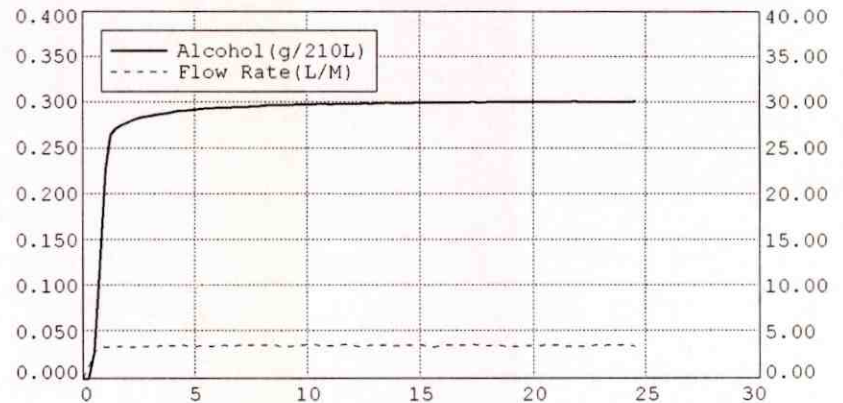
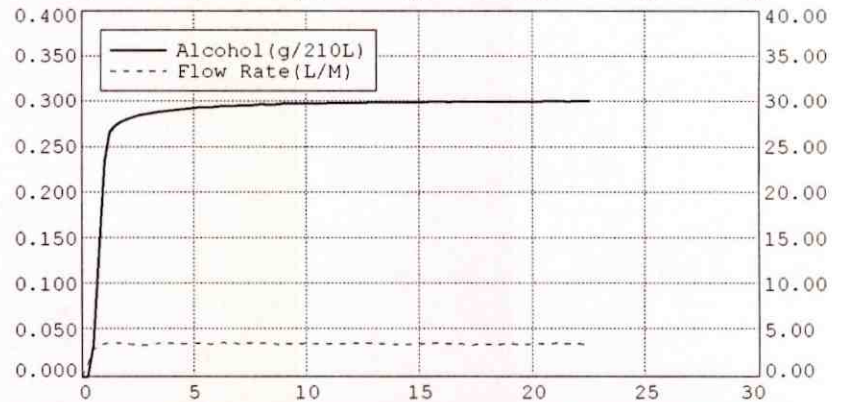
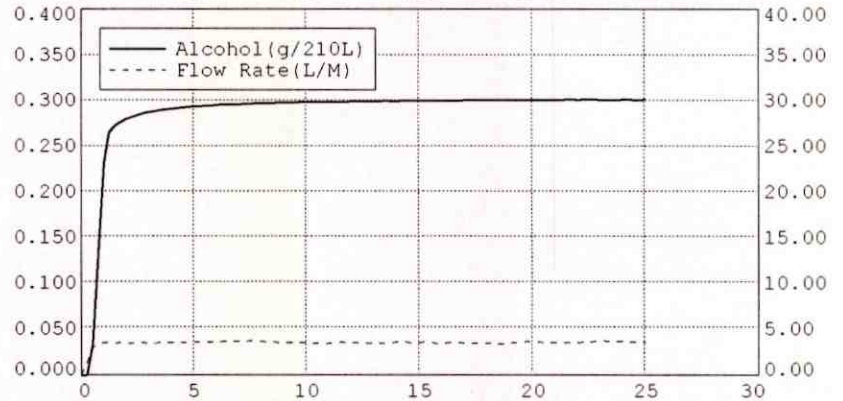
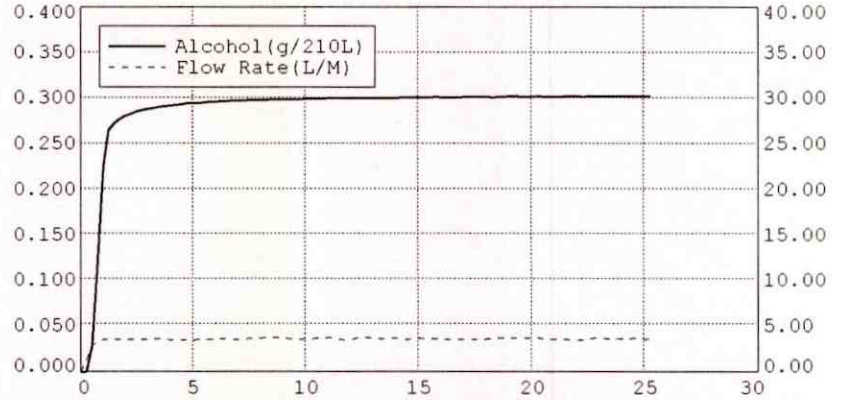
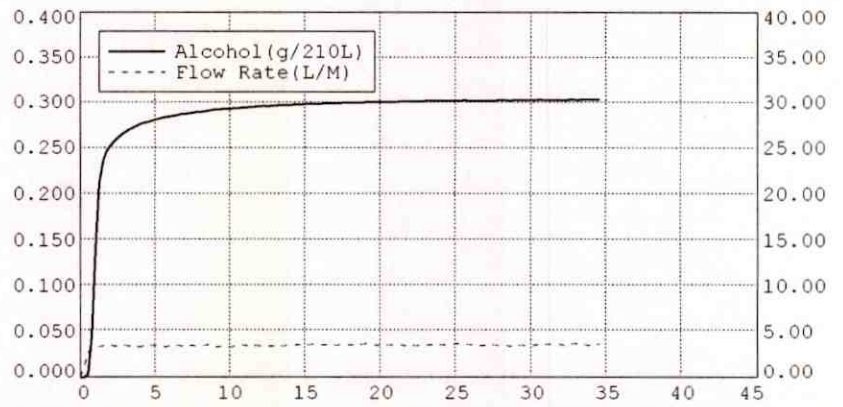
Alaska Department of Public Safety  
DATAMASTER dmt: 100681

Date: 11/04/2021  
Time: 12:10:17

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

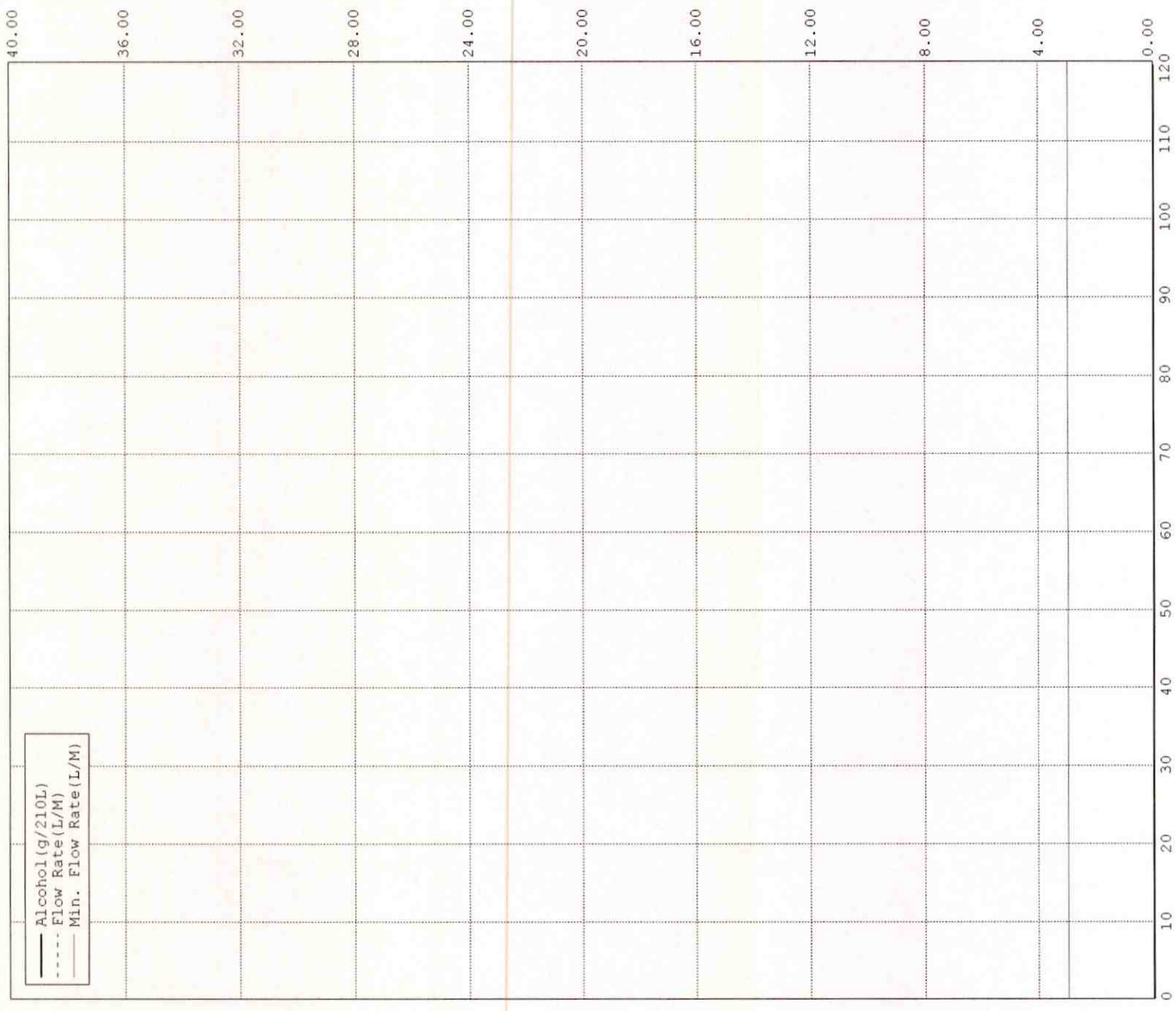
BLANK TEST	0.000	12:11
INTERNAL STANDARD	VERIFIED	12:11
EXTERNAL STANDARD	0.303	12:12
BLANK TEST	0.000	12:13
EXTERNAL STANDARD	0.302	12:13
BLANK TEST	0.000	12:14
EXTERNAL STANDARD	0.301	12:15
BLANK TEST	0.000	12:16
EXTERNAL STANDARD	0.301	12:16
BLANK TEST	0.000	12:17
EXTERNAL STANDARD	0.301	12:17
BLANK TEST	0.000	12:18

Average = 0.3016  
Std Dev = 0.0009



SUBJECT TEST

-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100681  
 -----  
 Date: 11/04/2021  
 Time: 12:23:54  
 -----  
 SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX  
 OPERATOR NAME:  
 CARLIE GLAISTER  
 OPERATOR'S #: ~~100436~~ 10436 CKG 11/17/21  
 DEPT/AGENCY:  
 INCOMPLETE  
 CASE/REPORT: XXXX  
 TEST TYPE: TEST  
 -----  
 EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.08: 0.078  
 LOT #: AG018102  
 EXPIRATION: 06/29/2022  
 -----  
 DIAGNOSTIC CHECK PASSED 12:25  
 BLANK TEST 0.000 12:25  
 INTERNAL STANDARD VERIFIED 12:25  
 EXTERNAL STANDARD 0.076 12:25  
 BLANK TEST 0.000 12:26  
 SUBJECT SAMPLE INCOMPLETE 12:28



CKG

SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100681

Date: 11/04/2021

Time: 13:24:44

SUBJECT NAME:

TEST TEST

LICENSE #: XXXX

OPERATOR NAME:

CARLIE GLAISTER

OPERATOR'S #: ~~100436~~ 10436 OKG 11/17/21

DEPT/AGENCY:

INVALID

CASE/REPORT: XXXX

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.08: 0.078

LOT #: AG018102

EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK

BLANK TEST

INTERNAL STANDARD

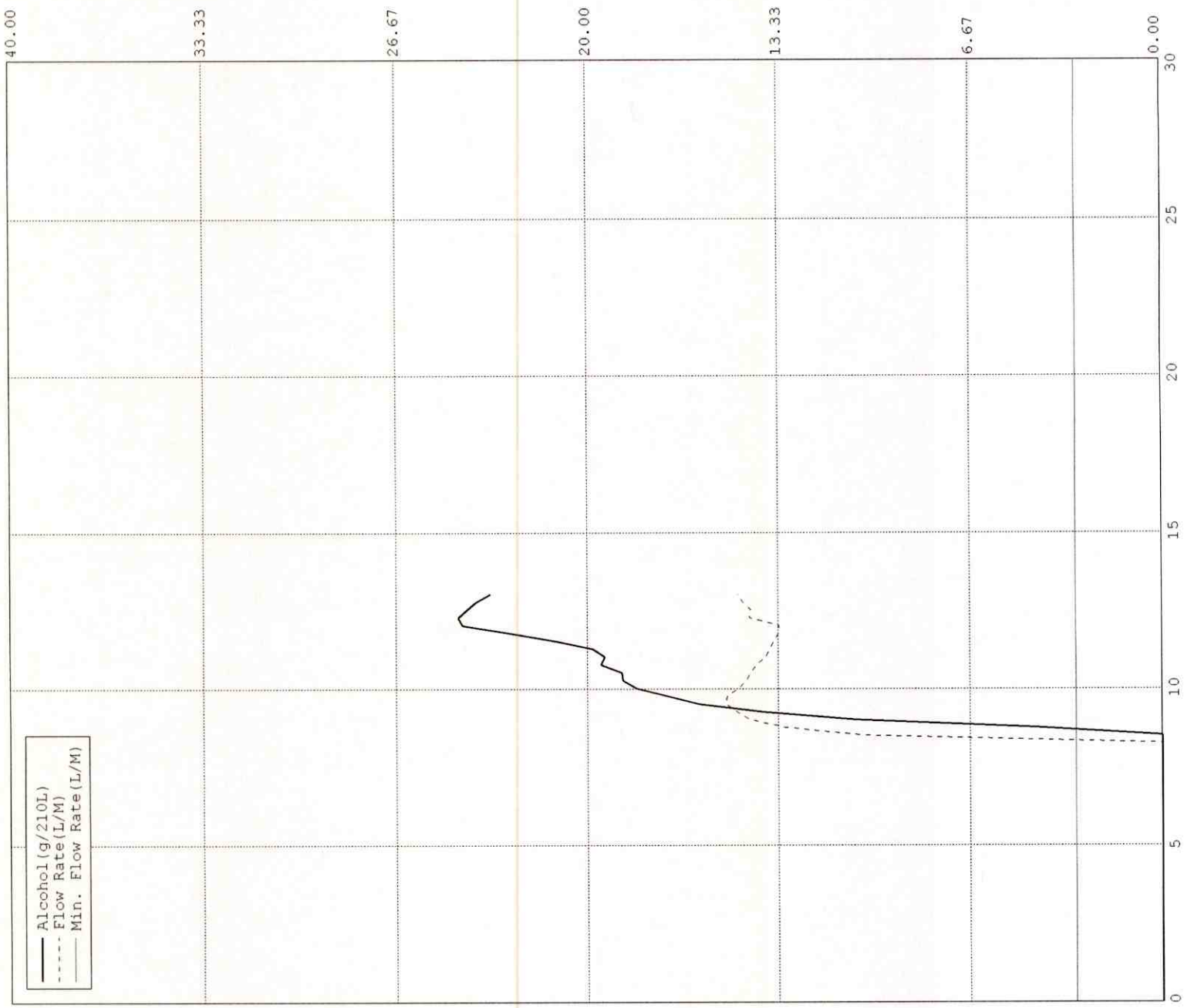
EXTERNAL STANDARD

BLANK TEST

SUBJECT SAMPLE

PASSED 13:26  
0.000 13:26  
VERIFIED 13:26  
0.077 13:26  
0.000 13:27  
INVALID 13:28

OKG





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100681

Date: 11/04/2021  
Time: 14:07:31

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: 100436 10436 CLK 11/17/21

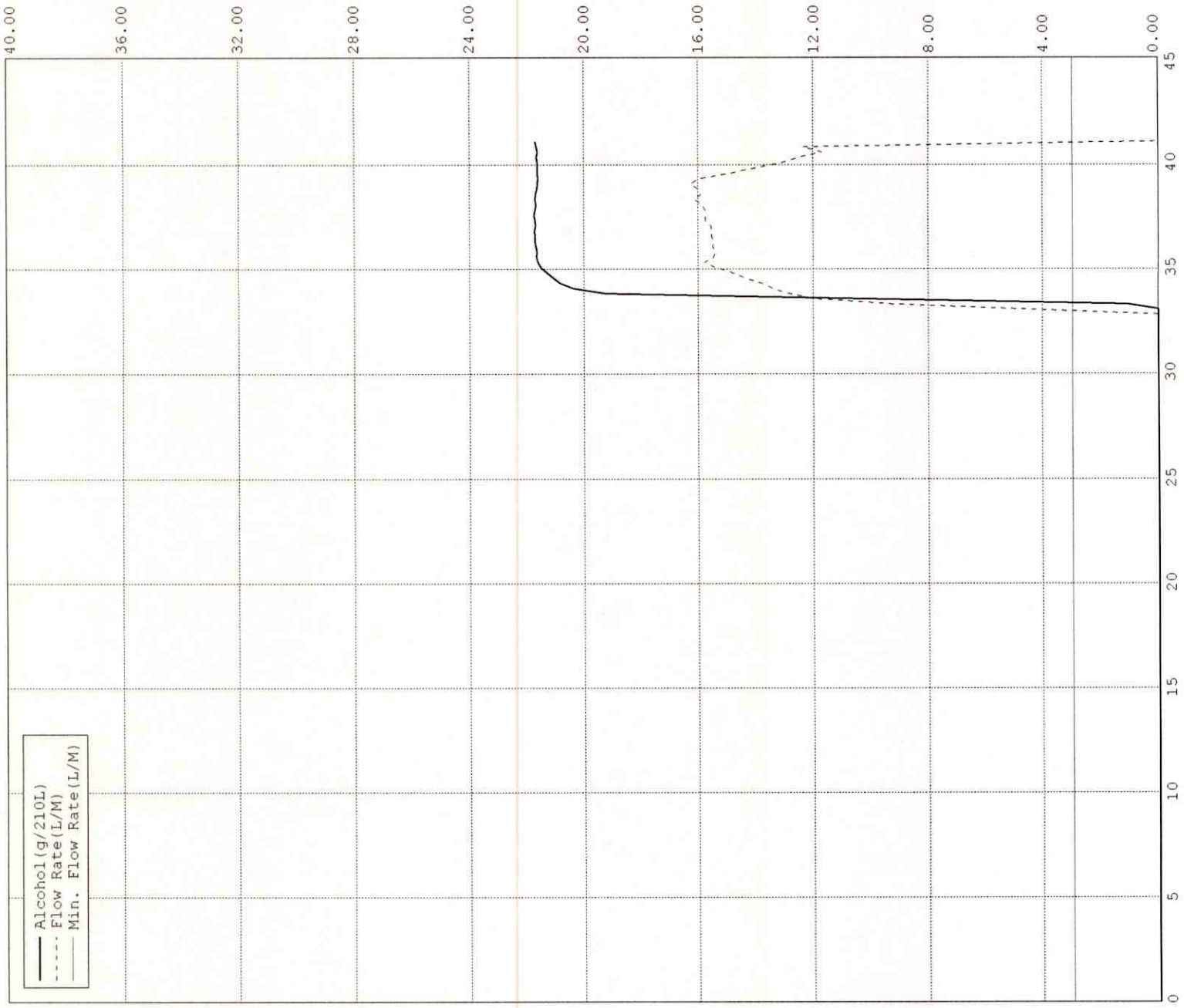
DEPT/AGENCY:  
INTERFERENCE ACETONE  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.08: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	14:08
BLANK TEST	0.000	14:08
INTERNAL STANDARD	VERIFIED	14:08
Xg = 0.107 (0.17%)		
EXTERNAL STANDARD	0.076	14:09
X[1] = 0.0760 (-0.0010) (0.0029)		
BLANK TEST	0.000	14:09
SUBJECT SAMPLE	XXX	14:10
X[1] = 0.1094 (-0.0196) (0.0012)		

Interference Detected

Filter 2 Average: -0.0009  
Filter 3 Average: ~~0.0023~~  
0.0022  
CLK 11/4/2021 CLK 11/17/21



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100681

Date: 11/04/2021

Time: 14:14:31

SUBJECT NAME:

TEST TEST

LICENSE #: XXXX

OPERATOR NAME:

CARLIE GLAISTER

OPERATOR'S #: ~~100430~~ 10436 OVG 11/17/21

DEPT/AGENCY:

INTERFERENCE IPA

CASE/REPORT: XXXX

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.08: 0.078

LOT #: AG018102

EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK

PASSED 14:15

BLANK TEST

0.000 14:15

INTERNAL STANDARD

VERIFIED 14:16

$x_q = 0.106$  (0.33%)

EXTERNAL STANDARD

0.076 14:16

$x[1] = 0.0762$  (-0.0008) (0.0021)

BLANK TEST

0.000 14:17

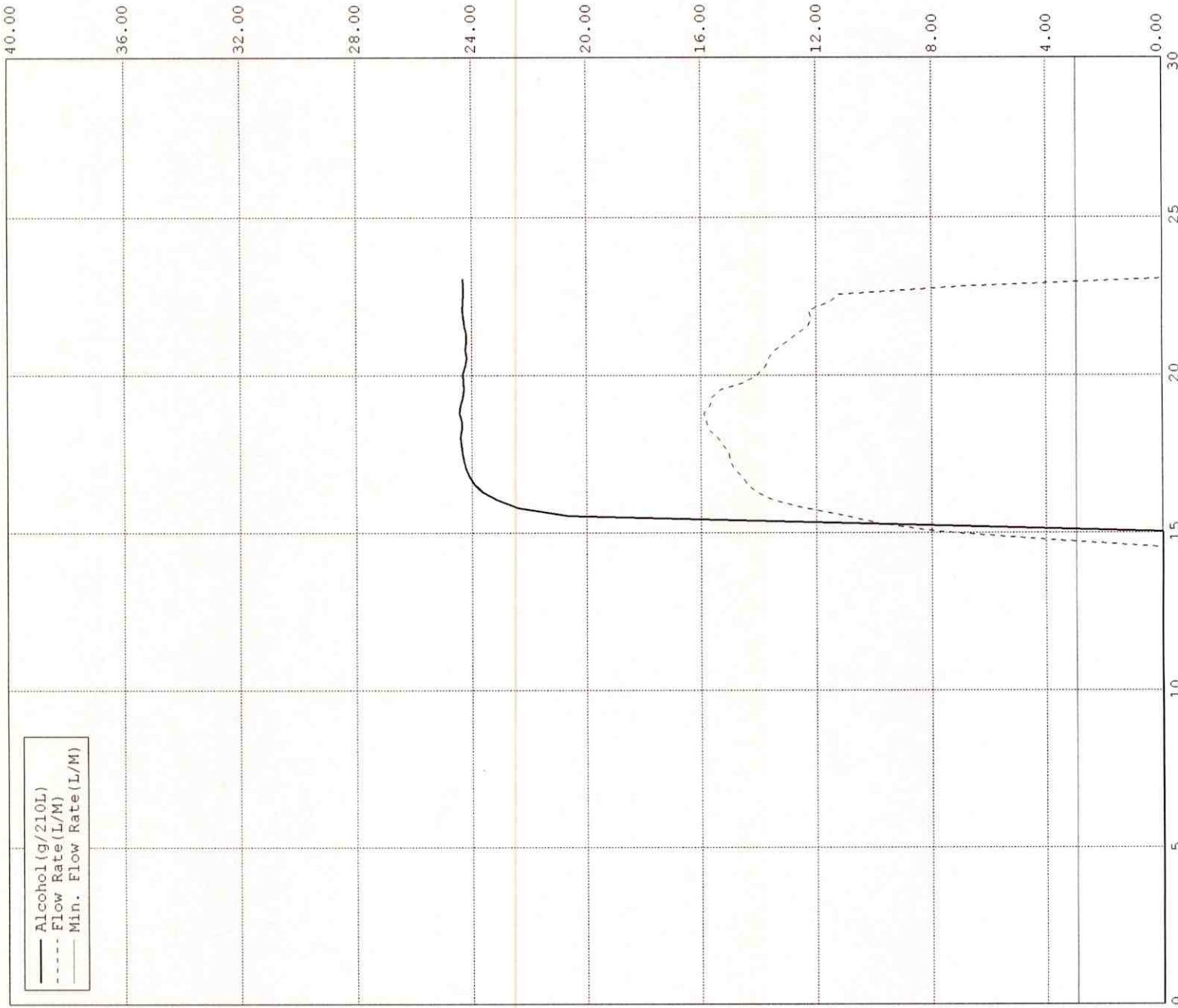
SUBJECT SAMPLE

XXX 14:17

$x[1] = 0.1223$  (-0.0262) (0.0015)

Interference Detected

OVG



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100681

Date: 11/04/2021  
Time: 14:19:19

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: ~~100436~~ 10436 OKG 11/17/21

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.08: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	14:20
BLANK TEST	0.000	14:20
INTERNAL STANDARD	VERIFIED	14:20
Xg = 0.107 (0.33%)		
EXTERNAL STANDARD	0.076	14:20
X[1] = 0.0764 (-0.0006) (0.0019)		
BLANK TEST	0.000	14:21
SUBJECT SAMPLE (Vol=1.95L)	0.095	14:22
X[1] = 0.0954 (0.0001) (0.0001)		
BLANK TEST	0.000	14:23
EXTERNAL STANDARD	0.075	14:23
X[1] = 0.0754 (-0.0010) (0.0018)		
BLANK TEST	0.000	14:24

OKG





SUBJECT TEST

Alaska Department of Public Safety

DATA MASTER dmt: 100681

Date: 11/04/2021  
Time: 13:13:17

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: 100436 10436 CLK 11/17/21

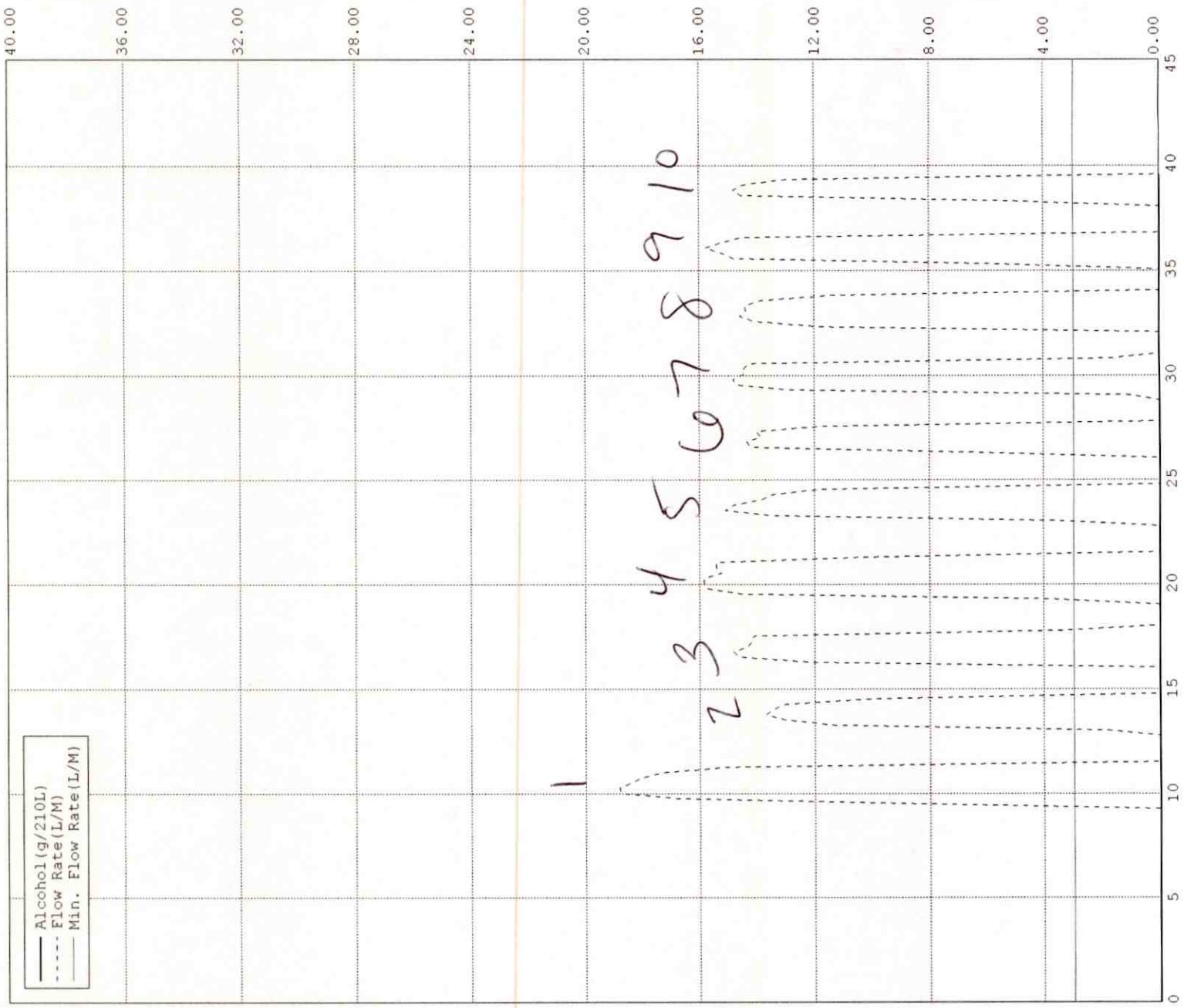
DEPT/AGENCY:  
MAXIMUM ATTEMPTS EXCEEDED  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.08: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 13:14  
BLANK TEST 0.000 13:14  
INTERNAL STANDARD VERIFIED 13:14  
EXTERNAL STANDARD 0.076 13:14  
BLANK TEST 0.000 13:15  
SUBJECT SAMPLE XXX 13:16

Maximum Attempts Exceeded

CLK



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100681

Date: 11/04/2021  
Time: 13:31:49

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
CARLIE GLAISTER  
OPERATOR'S #: ~~100436~~ 10436 OKG-11/17/21

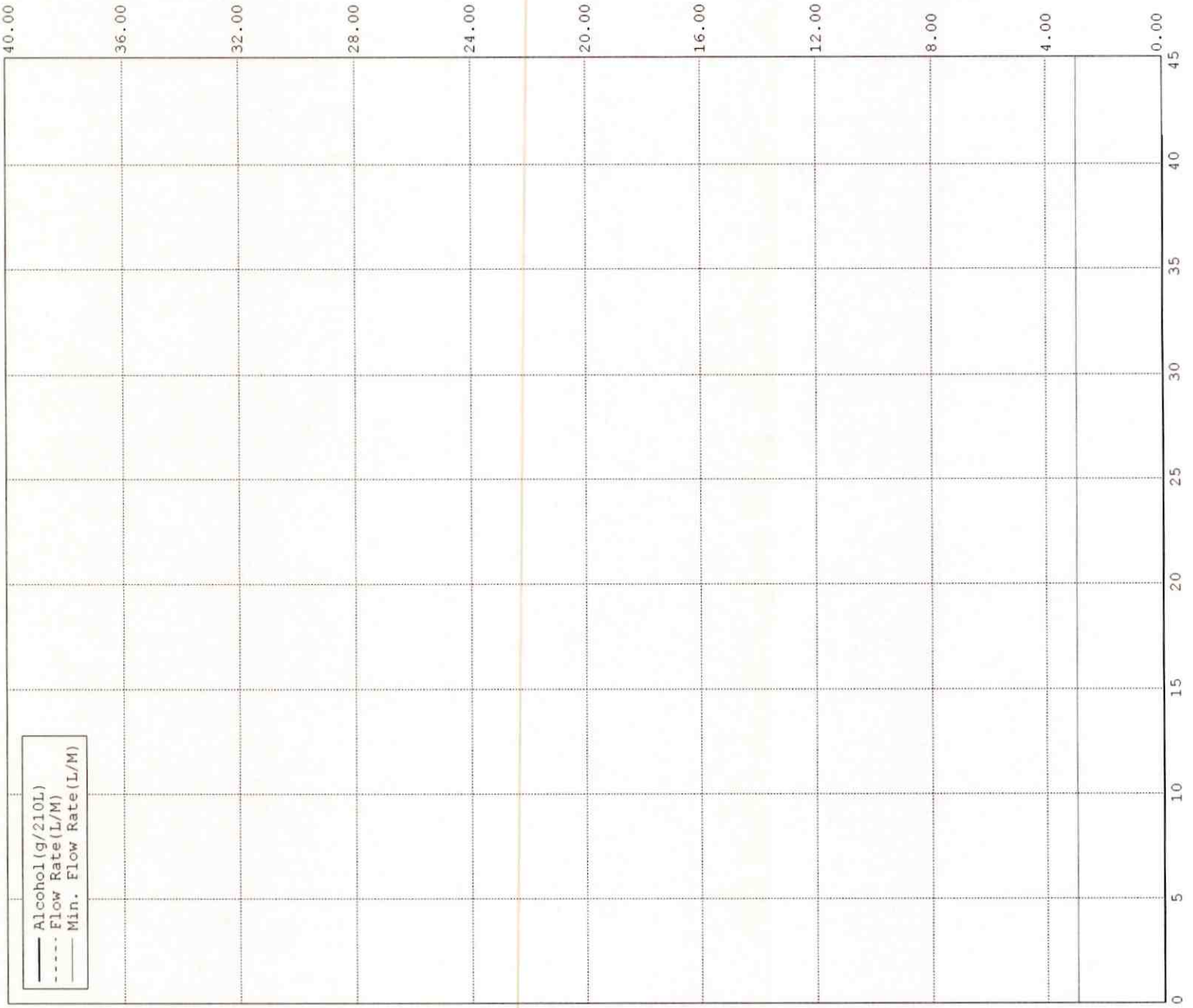
DEPT/AGENCY:  
RFI  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.09: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK  
BLANK TEST PASSED 13:32  
INTERNAL STANDARD VERIFIED 13:33  
EXTERNAL STANDARD 0.077 13:33  
BLANK TEST 0.000 13:34

RFI DETECTED

OKG



SUBJECT TEST

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Alaska Department of Public Safety  
DATAMASTER dmt: 100681  
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Date: 11/04/2021  
Time: 14:47:38

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 29.08: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 14:48  
BLANK TEST 0.000 14:48  
INTERNAL STANDARD VERIFIED 14:49  
EXTERNAL STANDARD 0.077 14:49  
BLANK TEST 0.000 14:50  
SUBJECT SAMPLE (Vol=2.52L) 0.000 14:50  
BLANK TEST 0.000 14:51  
EXTERNAL STANDARD 0.077 14:51  
BLANK TEST 0.000 14:52

CKG

