

Alaska Scientific Crime Detection Laboratory

DataMaster Certification Form

Issued: 05/15/2020
Effective: 05/15/2020

Version: DMCEF 2020 R0
Status: Active

C. O'Bryant

Instrument S/N 100380 Analyst Carlie Glaister Start Date 10/15/2021

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 1.5 L (1.3L to 1.7L)

Linearity Test (attached)

Levels Used

i. 0.020g/210L Mnf Airgas Lot AG-100401 Exp 01/04/2023

ii. 0.040g/210L Mnf Airgas Lot AG-111710 Exp 04/27/2023

iii. 0.080g/210L Mnf Airgas Lot AG-018102 Exp 06/29/2022

iv. 0.100g/210L Mnf Airgas Lot AG-108404 Exp 03/25/2023

v. 0.200g/210L Mnf Guth Lot 20510 Exp 12/03/2022

Simulator S/N DR4161 Date Calibrated 06/16/2021

vi. 0.300g/210L Mnf Guth Lot 21030 Exp 02/02/2023

Simulator S/N SD1202 Date Calibrated 06/15/2021

Functional Tests (attached)

Incomplete

Invalid

Interference

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

Simulator S/N SD1177 Date Calibrated 06/15/2021

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

Simulator S/N SD1198 Date Calibrated 06/15/2021

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

Simulator S/N SD1088 Date Calibrated 06/15/2021

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 10/15/2021

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 10/15/2021
Time: 10:31:19

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 = 46.2°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.64 V PASSED
(1.00 V - 2.32 V)
Cooler Voltage = 1.56 V PASSED
(0.95 V - 2.23 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 528 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.4 in

PUMP INFO

Flow Rate = 4.748 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 = 0.086 0.60% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100380

Date: 10/15/2021
Time: 10:45 AM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 46.0°C

Current Barometer 29.4 in
Volume (Ltr) 1.58

Settings

Lamp: 1.61 V
Bias: 80 V
Cooler: 1.95 V
Chopper: 529 Hz

Voltages (V)

Flow: 1.04 V
Detector: 0.048 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 10/12/2021
Time: 14:32:42

OPERATOR NAME:
CARLIE GLAISTER
CERTIFICATE #: 10436

Ca	=	0.1000		
CAL	=	0.950703	0.800	<= CAL < 1.200
b1	=	0.0003	0.0000	<= b1 < 0.0040
b2	=	0.0061	0.0010	<= b2 < 0.0100
b3	=	0.0001	0.0000	<= b3 < 0.0040
Xq	=	0.0864	0.0500	<= Xq < 0.2000
a21	=	1.200696	1.050	<= a21 < 1.300
a31	=	0.480597	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 10/15/2021
Time: 10:48:05

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

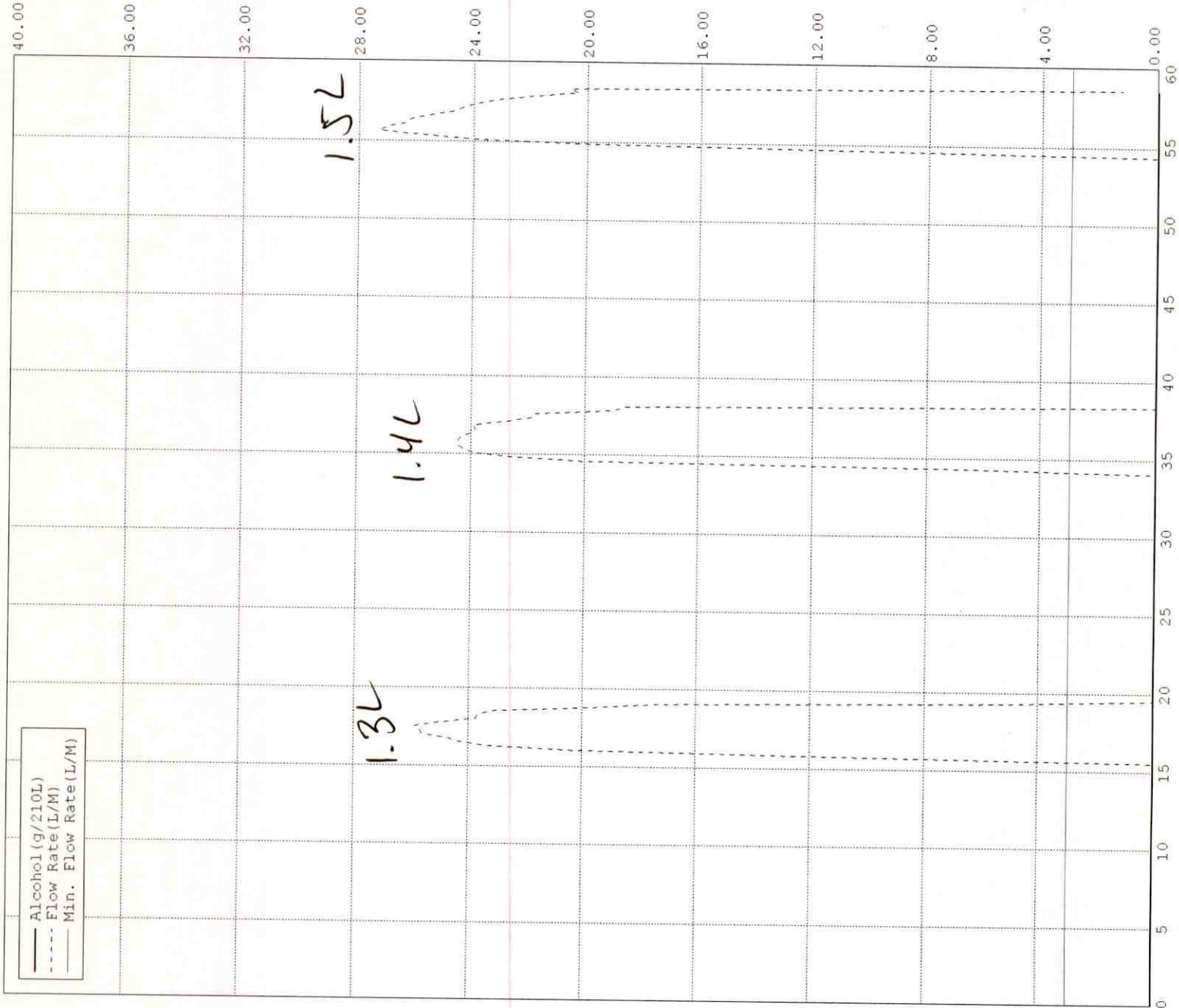
OPERATOR NAME:
CARLIE GLAISTER
OPERATOR'S #: 10436

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.36: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 10:49
BLANK TEST 0.000 10:49
INTERNAL STANDARD VERIFIED 10:49
EXTERNAL STANDARD 0.075 10:49
BLANK TEST 0.000 10:50
SUBJECT SAMPLE (Vol=1.55L) 0.000 10:51
BLANK TEST 0.000 10:52
EXTERNAL STANDARD 0.076 10:52
BLANK TEST 0.000 10:53

OK



LINEARITY CHECK

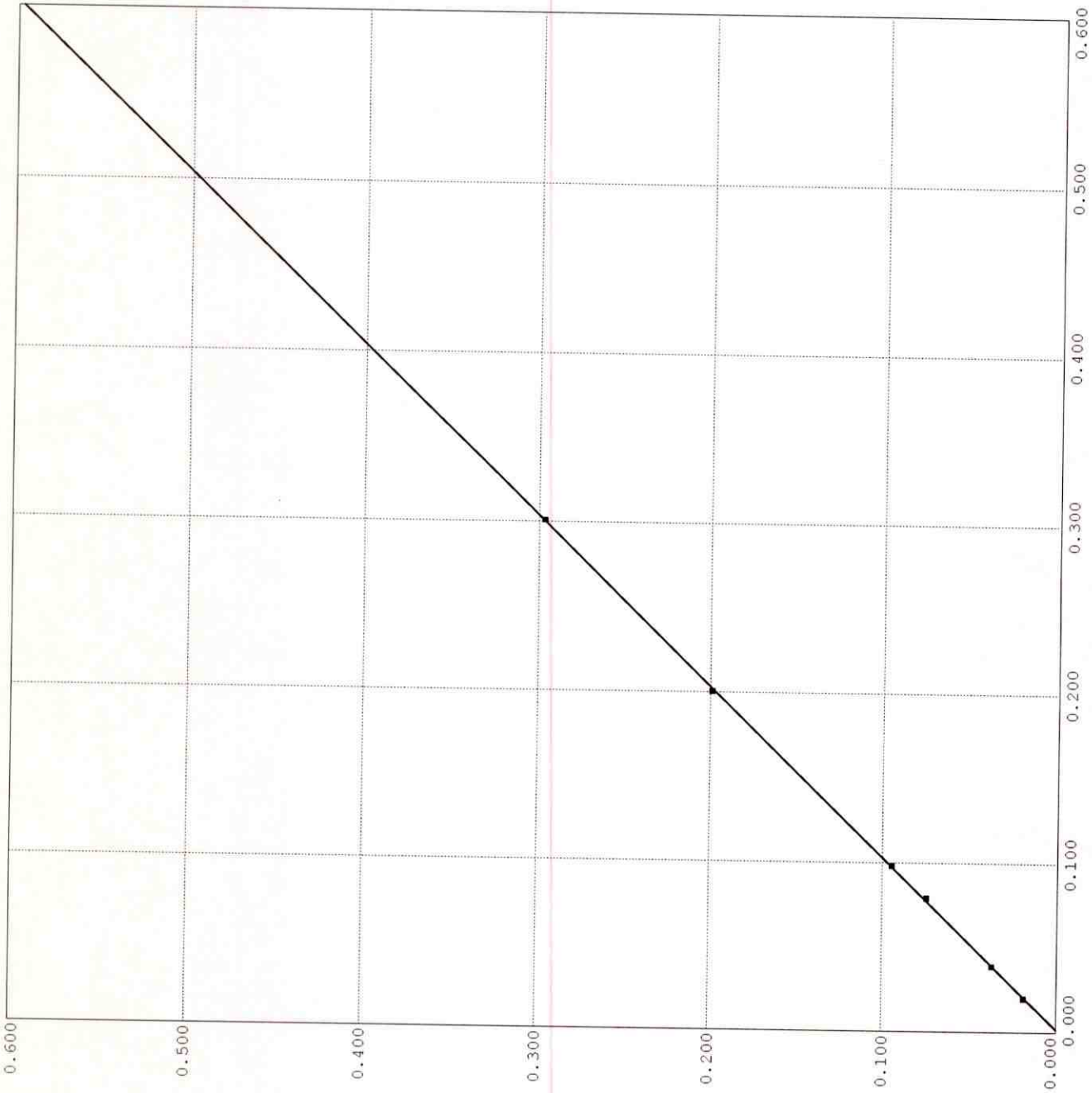
 Alaska Department of Public Safety
 DATAMASTER dmt: 100380

Date: 10/15/2021
 Time: 10:57:28

SUPERVISOR NAME:
 CARLIE GLAISTER
 OPERATOR'S #: 10436

TARGET	AVERAGE	STD. DEV.
0.020	0.0194	0.0005
0.039	0.0378	0.0004
0.079	0.0756	0.0005
0.098	0.0956	0.0005
0.200	0.1998	0.0004
0.300	0.2974	0.0005

SLOPE = 0.998141
 R² = 0.999866



OK

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100380

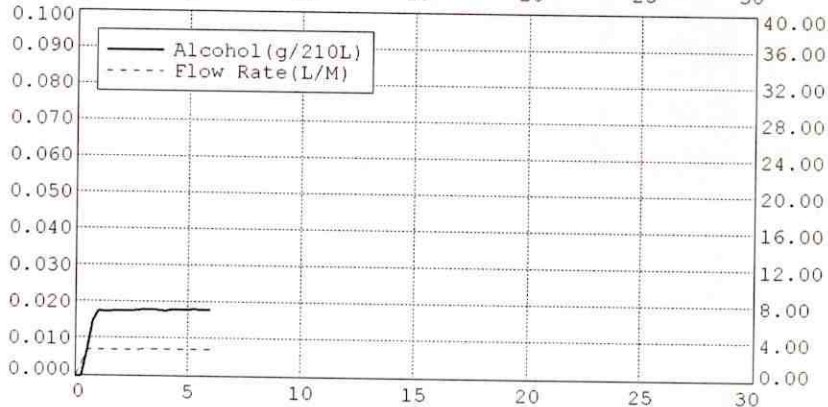
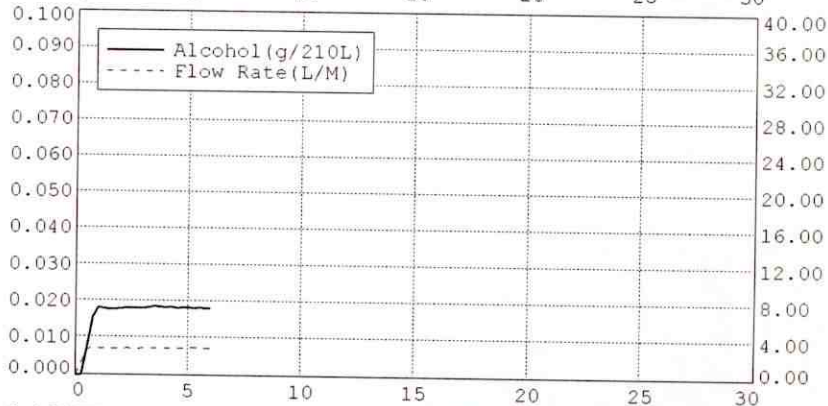
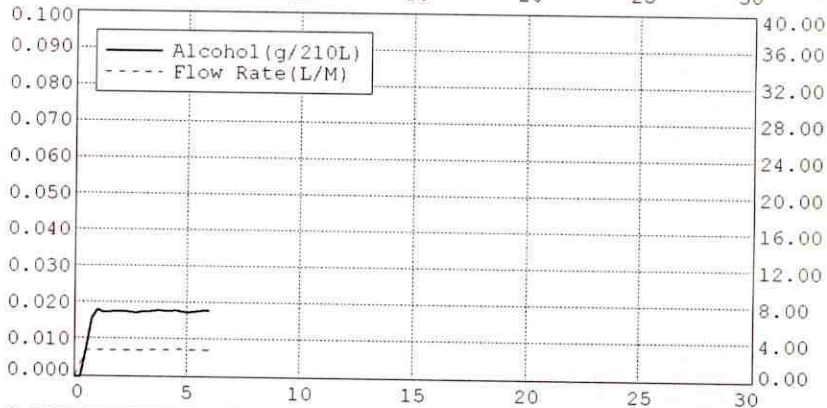
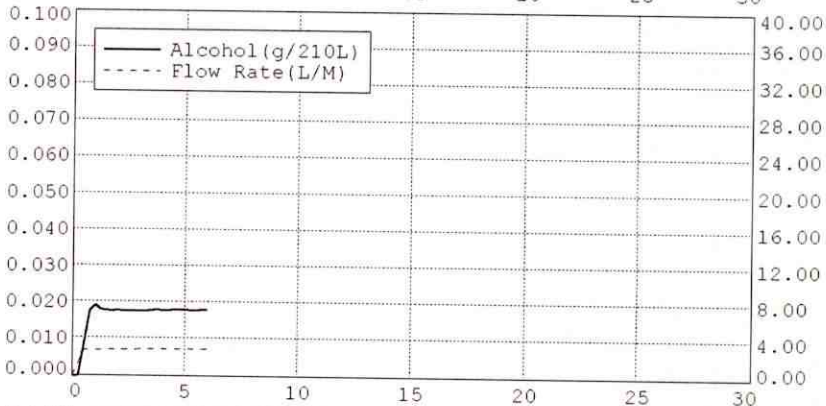
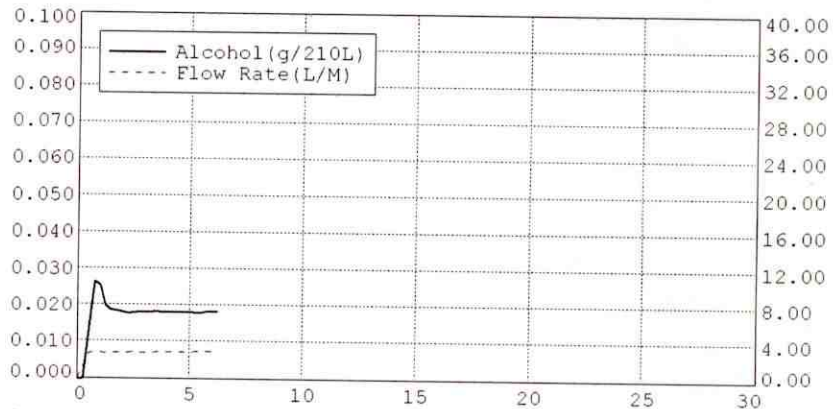
Date: 10/15/2021
 Time: 10:57:30

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.36: 0.020
 LOT #: AG100401
 EXPIRATION: 01/04/2023
 TANK PRESSURE: 1068 psi

BLANK TEST	0.000	10:58
INTERNAL STANDARD	VERIFIED	10:59
EXTERNAL STANDARD	0.020	10:59
BLANK TEST	0.000	11:00
EXTERNAL STANDARD	0.019	11:00
BLANK TEST	0.000	11:01
EXTERNAL STANDARD	0.019	11:01
BLANK TEST	0.000	11:02
EXTERNAL STANDARD	0.020	11:02
BLANK TEST	0.000	11:03
EXTERNAL STANDARD	0.019	11:03
BLANK TEST	0.000	11:04

Average = 0.0194
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100380

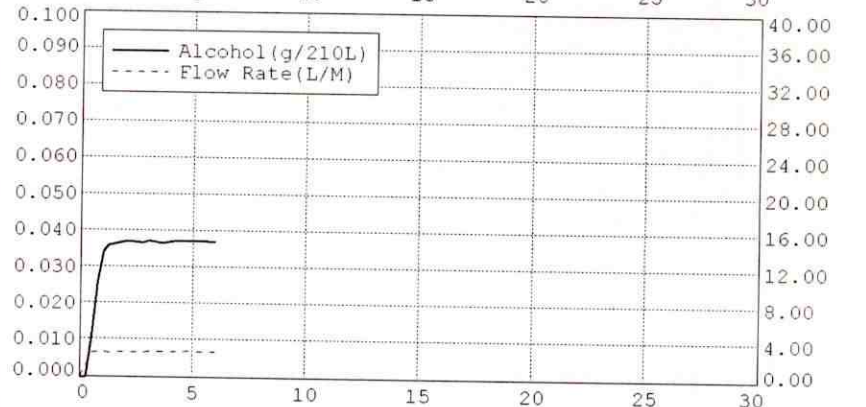
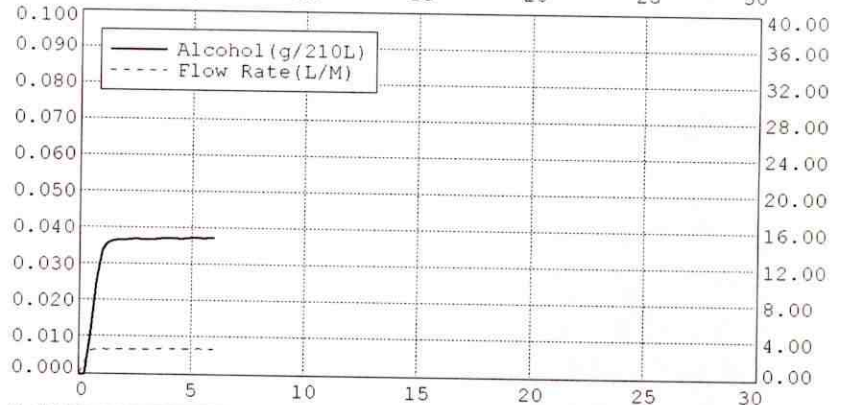
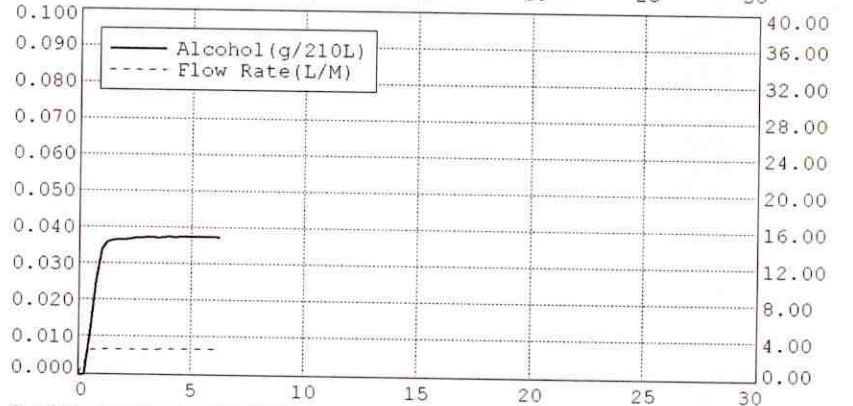
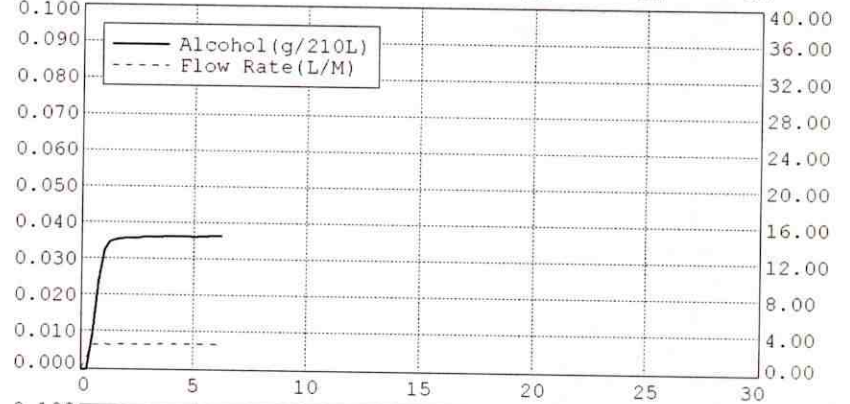
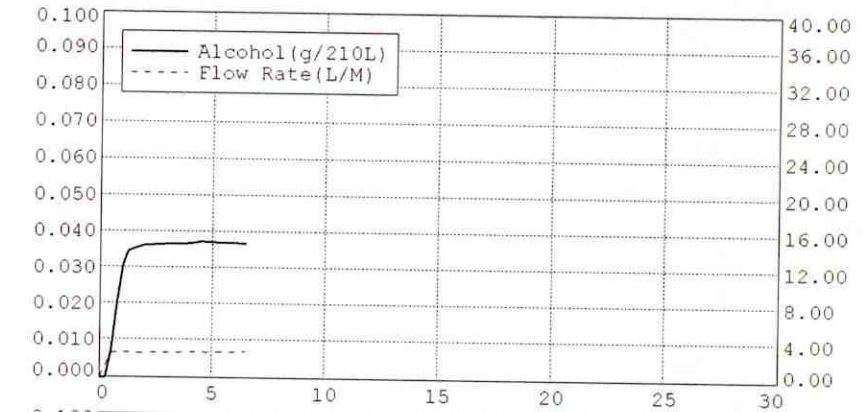
Date: 10/15/2021
 Time: 11:07:17

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.36: 0.039
 LOT #: AG111710
 EXPIRATION: 04/27/2023
 TANK PRESSURE: 739 psi

BLANK TEST	0.000	11:08
INTERNAL STANDARD	VERIFIED	11:08
EXTERNAL STANDARD	0.038	11:09
BLANK TEST	0.000	11:09
EXTERNAL STANDARD	0.037	11:10
BLANK TEST	0.000	11:11
EXTERNAL STANDARD	0.038	11:11
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.038	11:12
BLANK TEST	0.000	11:13
EXTERNAL STANDARD	0.038	11:13
BLANK TEST	0.000	11:14

Average = 0.0378
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100380

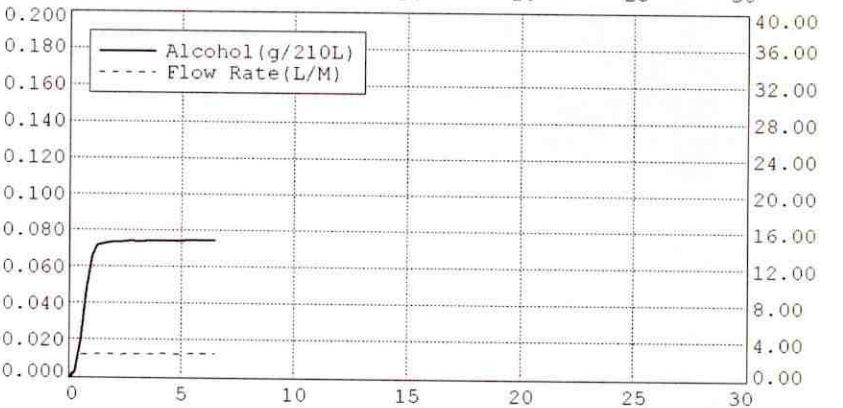
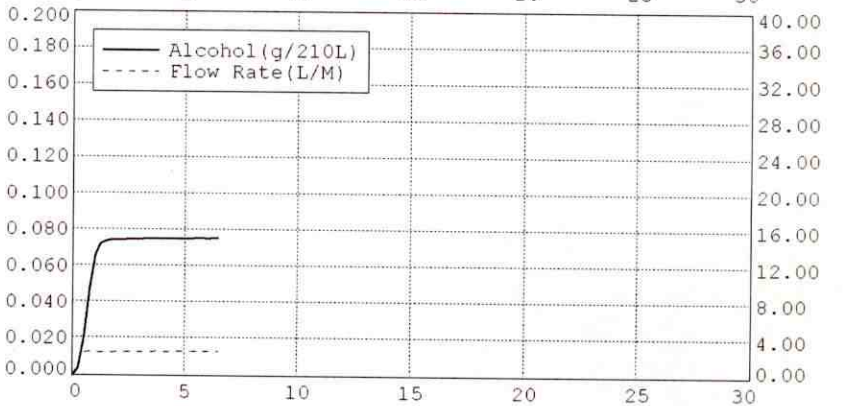
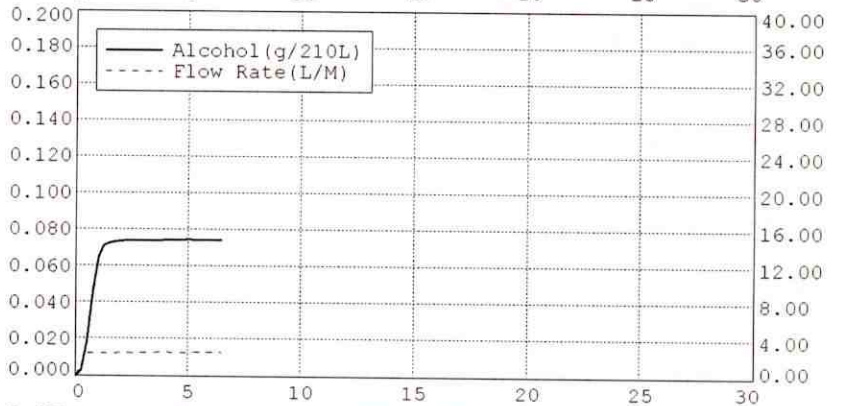
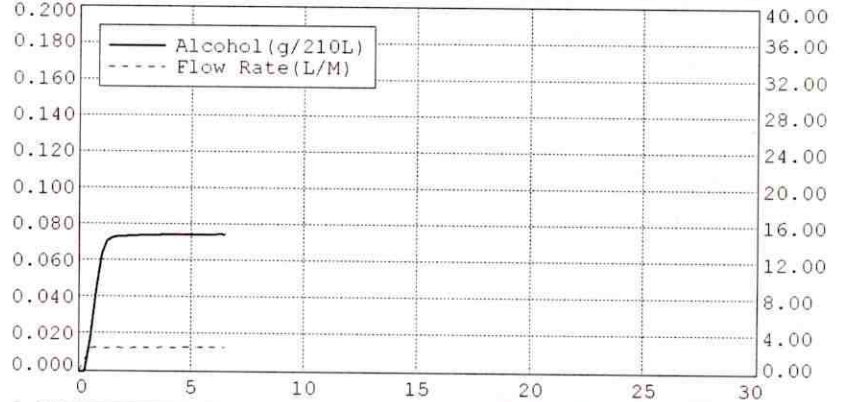
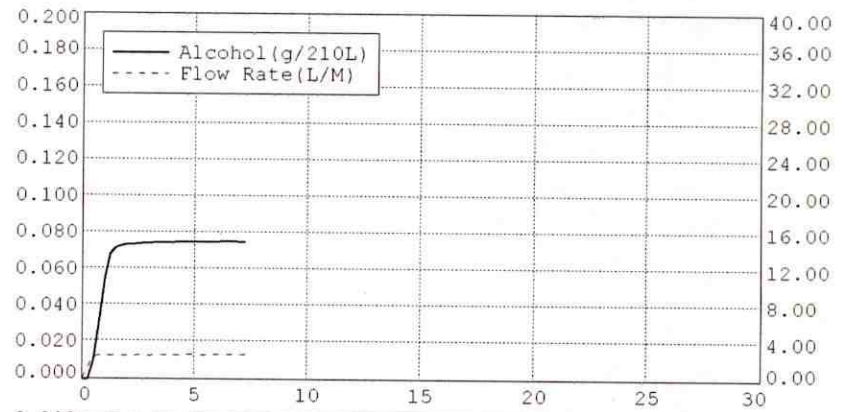
Date: 10/15/2021
 Time: 11:16:14

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.36: 0.079
 LOT #: AG018102
 EXPIRATION: 06/29/2022
 TANK PRESSURE: 465 psi

BLANK TEST	0.000	11:18
INTERNAL STANDARD	VERIFIED	11:18
EXTERNAL STANDARD	0.076	11:18
BLANK TEST	0.000	11:19
EXTERNAL STANDARD	0.075	11:19
BLANK TEST	0.000	11:20
EXTERNAL STANDARD	0.076	11:20
BLANK TEST	0.000	11:21
EXTERNAL STANDARD	0.076	11:21
BLANK TEST	0.000	11:22
EXTERNAL STANDARD	0.075	11:22
BLANK TEST	0.000	11:23

Average = 0.0756
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100380

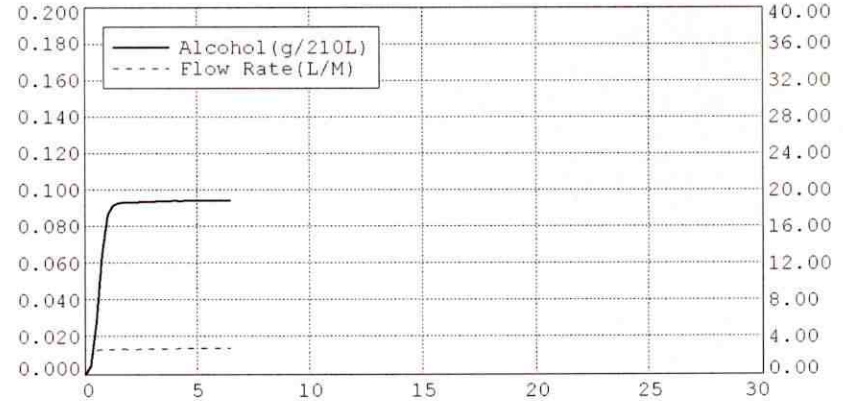
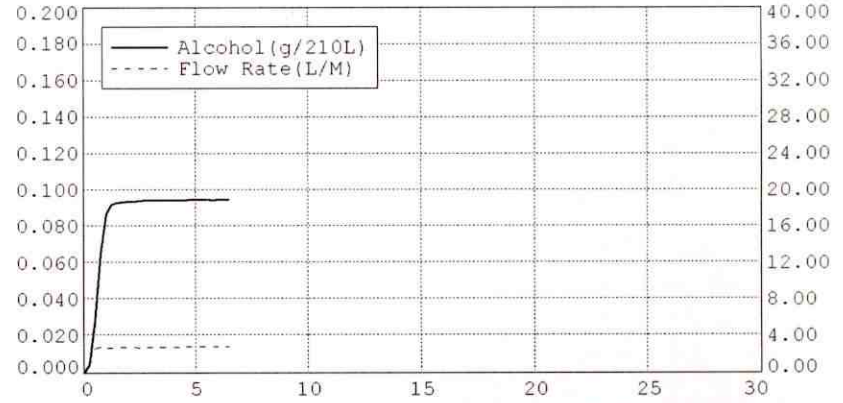
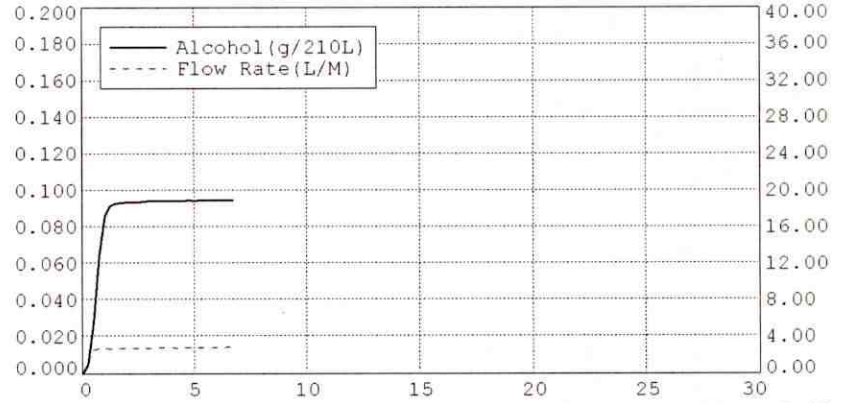
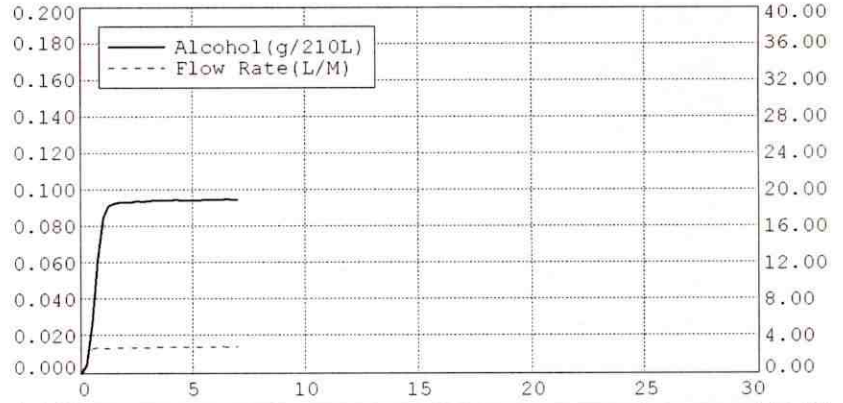
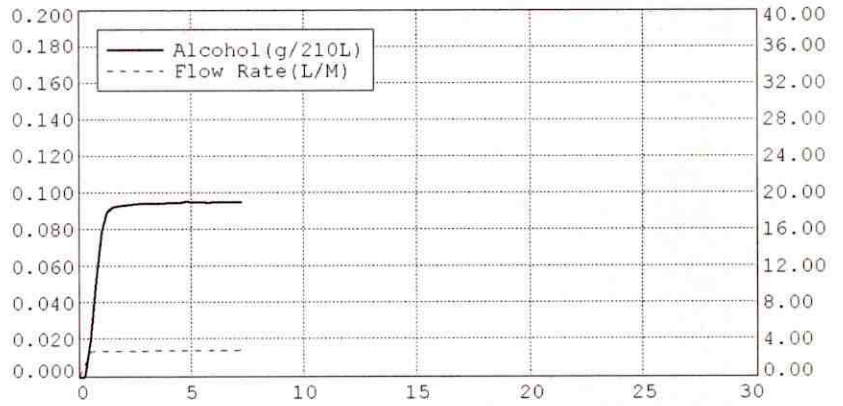
Date: 10/15/2021
Time: 11:24:57

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.36: 0.098
LOT #: AG108404
EXPIRATION: 03/25/2023
TANK PRESSURE: 844 psi

BLANK TEST	0.000	11:26
INTERNAL STANDARD	VERIFIED	11:26
EXTERNAL STANDARD	0.096	11:26
BLANK TEST	0.000	11:27
EXTERNAL STANDARD	0.095	11:28
BLANK TEST	0.000	11:28
EXTERNAL STANDARD	0.096	11:29
BLANK TEST	0.000	11:30
EXTERNAL STANDARD	0.096	11:30
BLANK TEST	0.000	11:31
EXTERNAL STANDARD	0.095	11:31
BLANK TEST	0.000	11:32

Average = 0.0956
Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100380

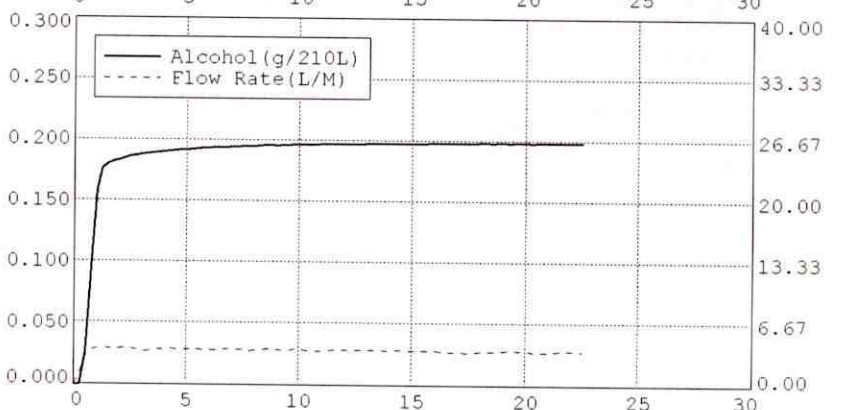
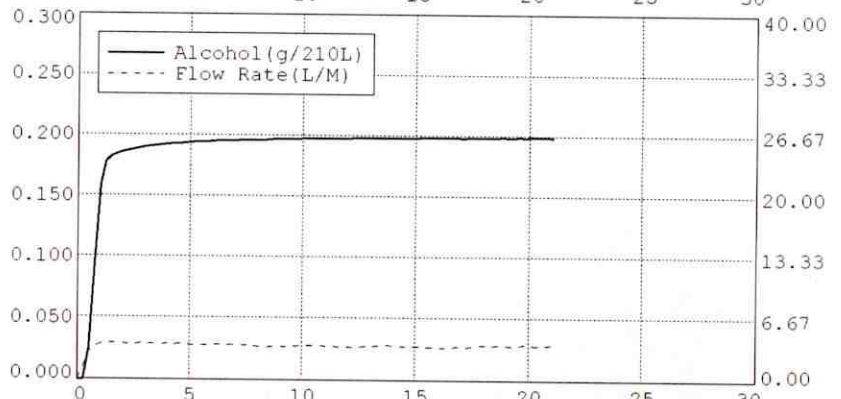
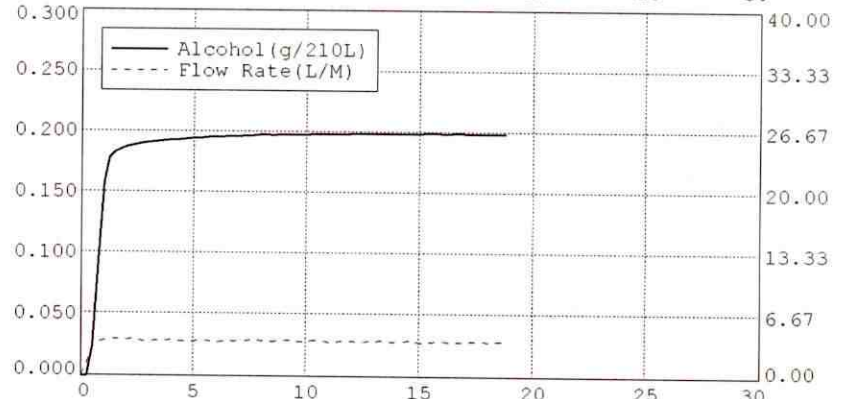
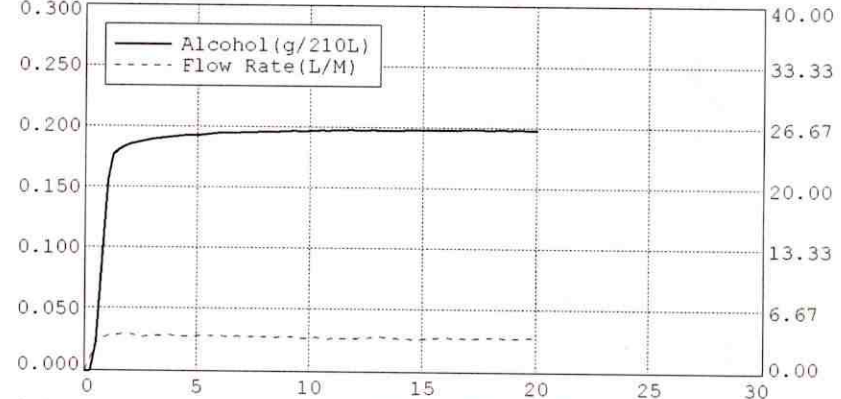
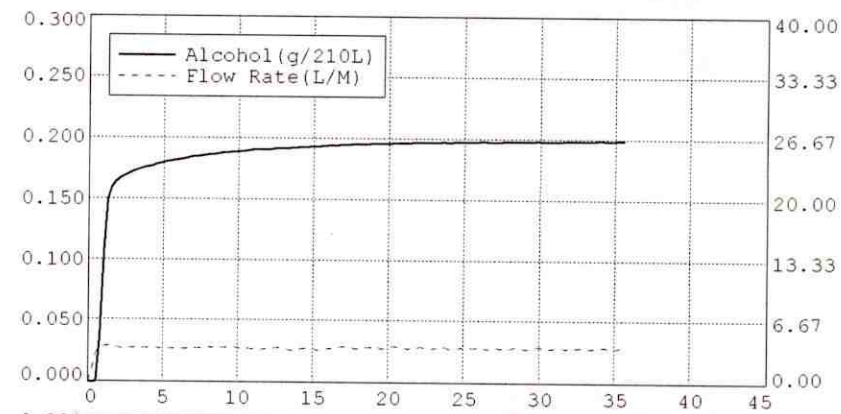
Date: 10/15/2021
 Time: 11:33:23

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	11:35
INTERNAL STANDARD	VERIFIED	11:35
EXTERNAL STANDARD	0.200	11:36
BLANK TEST	0.000	11:36
EXTERNAL STANDARD	0.199	11:37
BLANK TEST	0.000	11:38
EXTERNAL STANDARD	0.200	11:38
BLANK TEST	0.000	11:39
EXTERNAL STANDARD	0.200	11:40
BLANK TEST	0.000	11:40
EXTERNAL STANDARD	0.200	11:41
BLANK TEST	0.000	11:42

Average = 0.1998
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

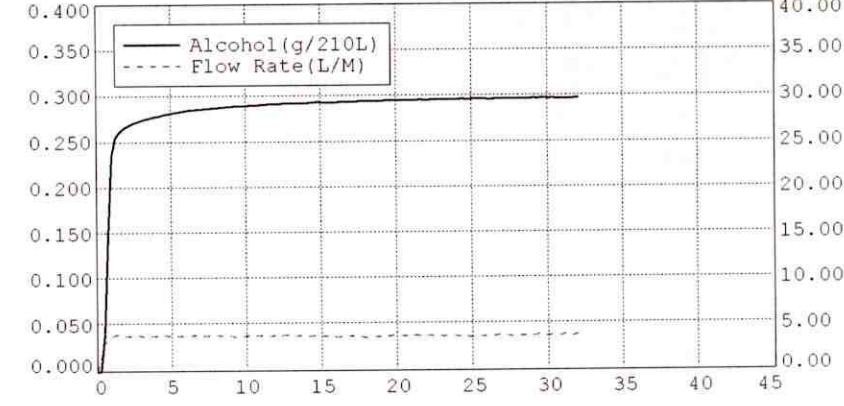
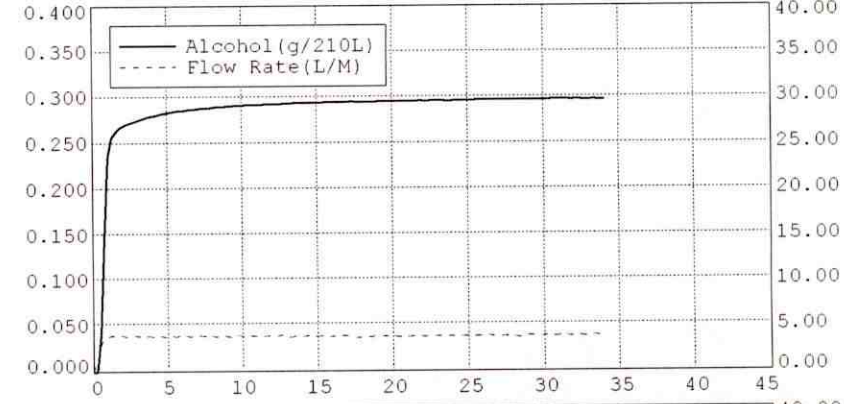
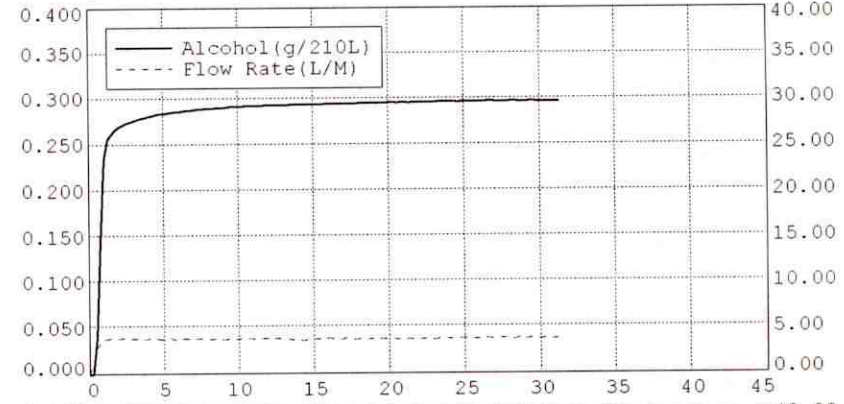
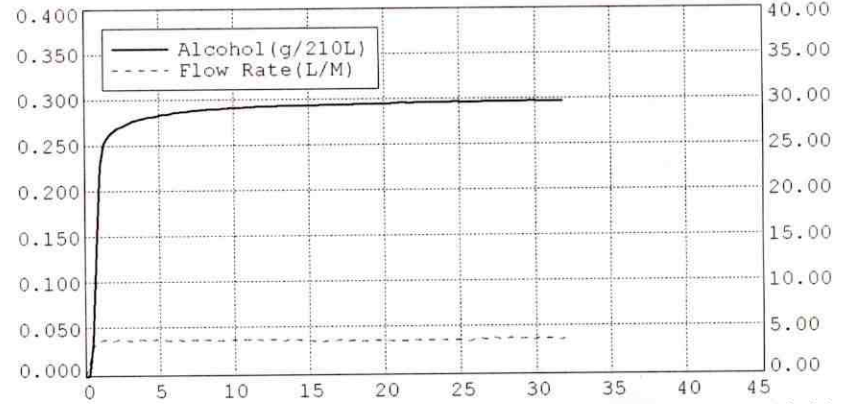
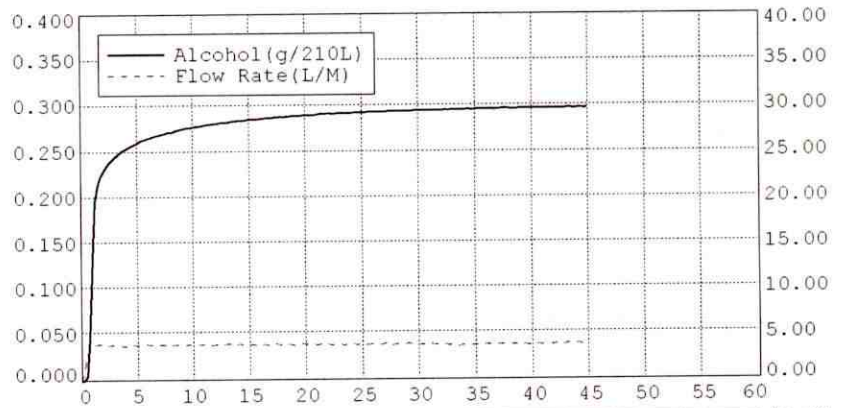
Alaska Department of Public Safety
 DATAMASTER dmt: 100380

Date: 10/15/2021
 Time: 11:44:43

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

BLANK TEST	0.000	11:46
INTERNAL STANDARD	VERIFIED	11:46
EXTERNAL STANDARD	0.298	11:47
BLANK TEST	0.000	11:48
EXTERNAL STANDARD	0.298	11:48
BLANK TEST	0.000	11:49
EXTERNAL STANDARD	0.297	11:50
BLANK TEST	0.000	11:51
EXTERNAL STANDARD	0.297	11:52
BLANK TEST	0.000	11:52
EXTERNAL STANDARD	0.297	11:53
BLANK TEST	0.000	11:54

Average = 0.2974
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 10/15/2021
Time: 12:03:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXX

OPERATOR NAME:
CARLIE GLAISTER
OPERATOR'S #: I0436

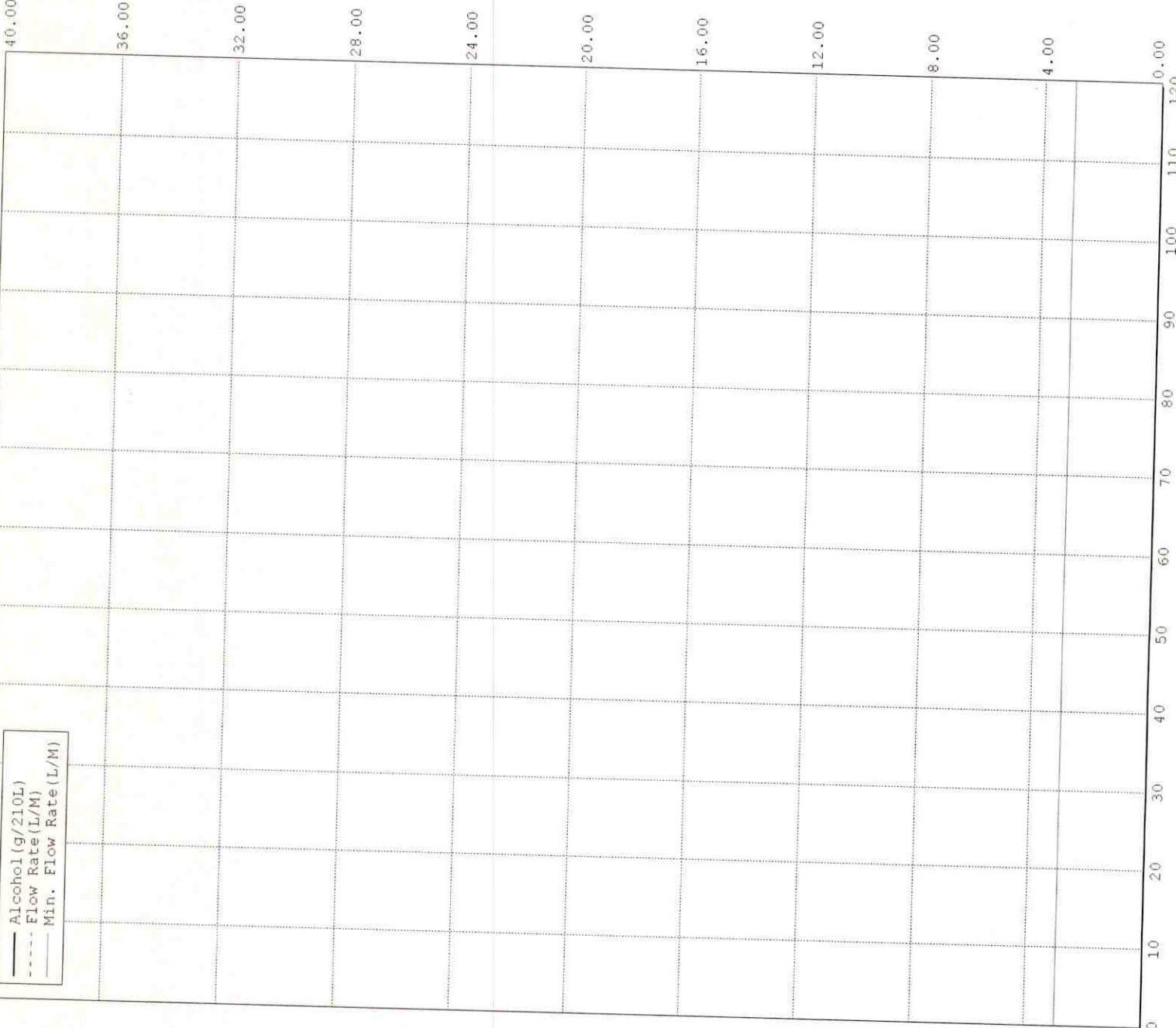
DEPT/AGENCY:
INCOMPLETE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.37: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK
BLANK TEST PASSED 12:05
INTERNAL STANDARD 0.000 12:05
EXTERNAL STANDARD VERIFIED 12:05
BLANK TEST 0.075 12:06
SUBJECT SAMPLE 0.000 12:07
INCOMPLETE 12:09

OK

Alcohol (g/210L)
Flow Rate (L/M)
Min. Flow Rate (L/M)



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 10/15/2021
Time: 13:45:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

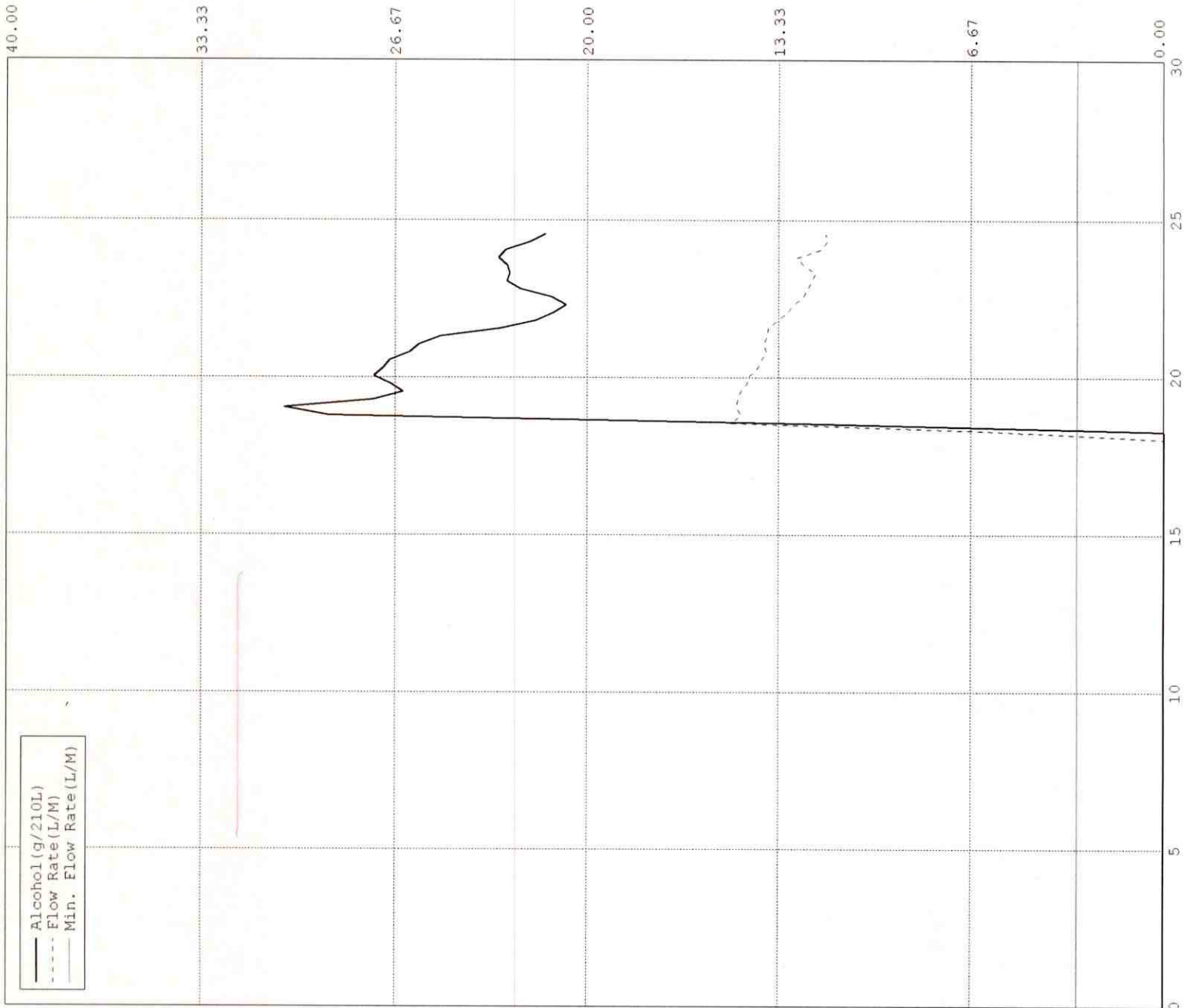
OPERATOR NAME:
CARLIE GLAISTER
OPERATOR'S #: 10436

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.40: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 13:46
BLANK TEST 0.000 13:46
INTERNAL STANDARD VERIFIED 13:46
EXTERNAL STANDARD 0.076 13:47
BLANK TEST 0.000 13:47
SUBJECT SAMPLE INVALID 13:48

OK



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 10/15/2021
Time: 13:22:13

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
CARLIE GLAISTER
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.40: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

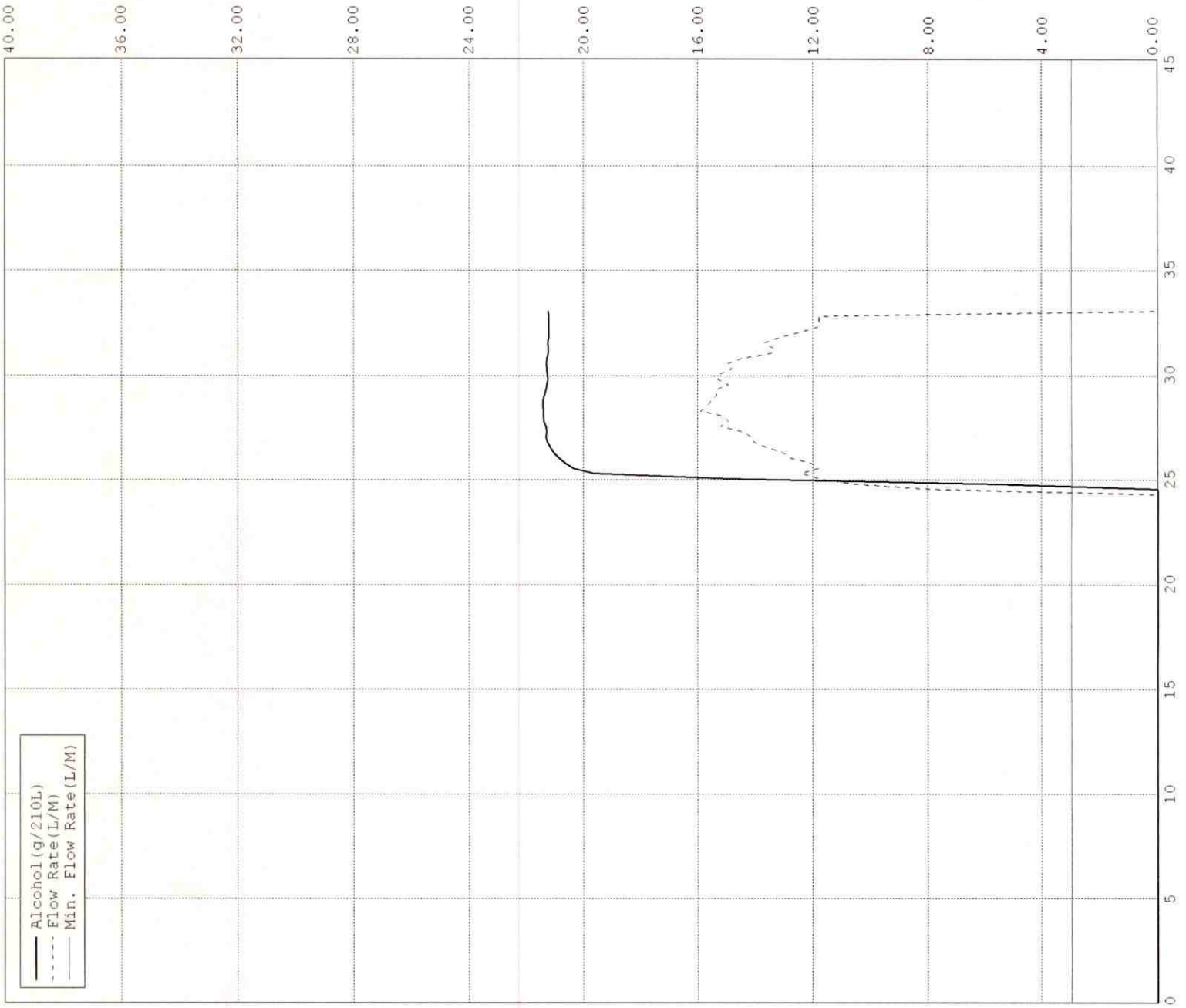
DIAGNOSTIC CHECK	PASSED	13:23
BLANK TEST	0.000	13:23
INTERNAL STANDARD	VERIFIED	13:23
$X_q = 0.087$ (0.40%)		
EXTERNAL STANDARD	0.075	13:24
$X[1] = 0.0752$ (-0.0014) (0.0029)		
BLANK TEST	0.000	13:25
SUBJECT SAMPLE	XXX	13:25
$X[1] = 0.1066$ (-0.0141) (0.0022)		

Interference Detected

Filter 2 average: -0.0013

Filter 3 average: 0.0030

CKG



SUBJECT TEST

Alaska Department of Public Safety

DATE/TIME dmt: 100380

Date: 10/15/2021

Time: 13:27:54

SUBJECT NAME:

TEST TEST

LICENSE #: XXXX

OPERATOR NAME:

CARLIE GLAISTER

OPERATOR'S #: XXXX

DEPT/AGENCY:

INTERFERENCE ISOPROPANOL

CASE/REPORT: XXXX

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.41: 0.079

LOT #: AG018102

EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 13:28

BLANK TEST 0.000 13:29

INTERNAL STANDARD VERIFIED 13:29

Xg = 0.087 (0.20%) 0.075 13:29

EXTERNAL STANDARD X[1] = 0.0754 (-0.0012) (0.0027)

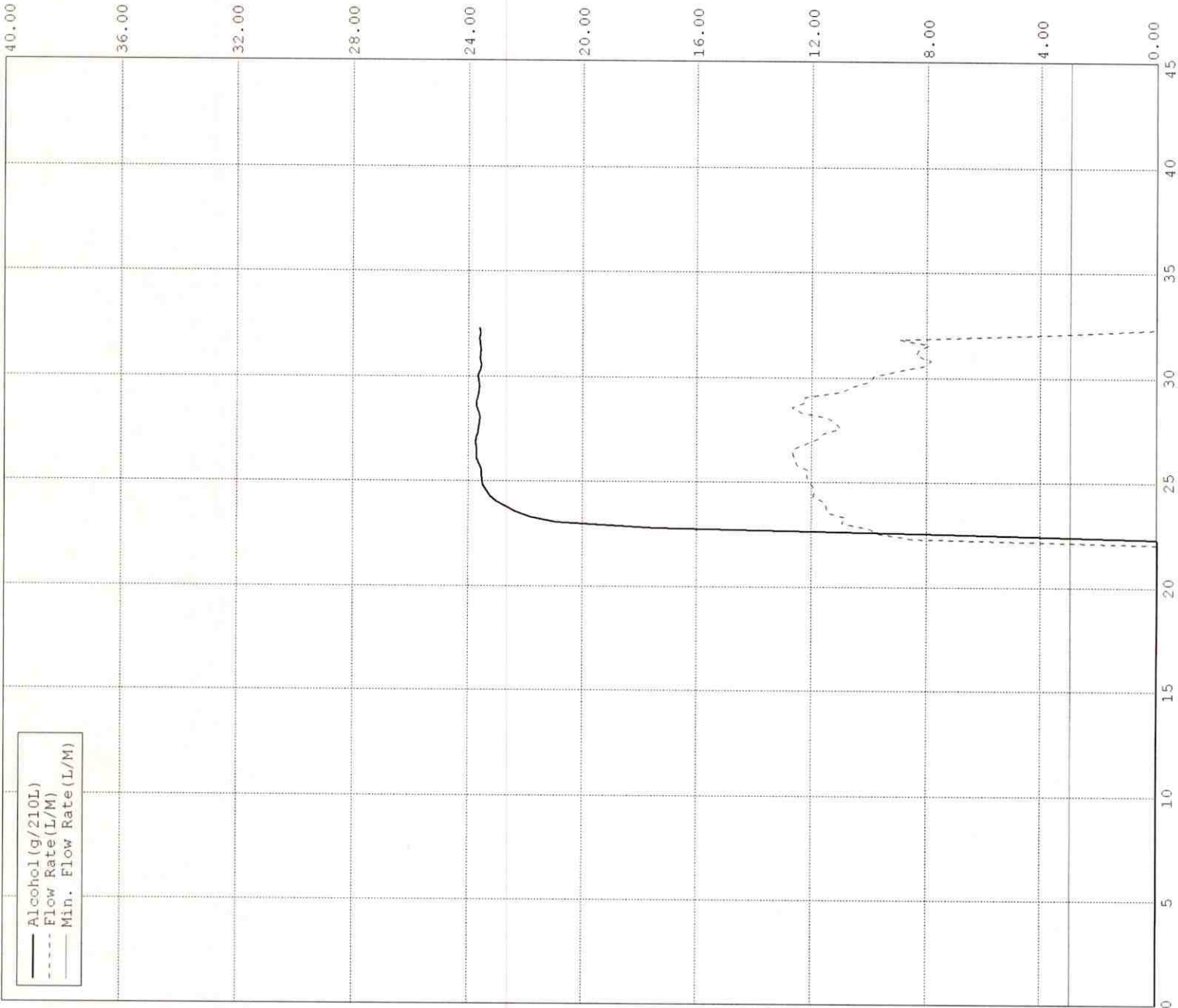
BLANK TEST 0.000 13:30

SUBJECT SAMPLE XXX 13:30

X[1] = 0.1184 (-0.0336) (0.0025)

Interference Detected

OKG



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 10/15/2021
Time: 13:34:06

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

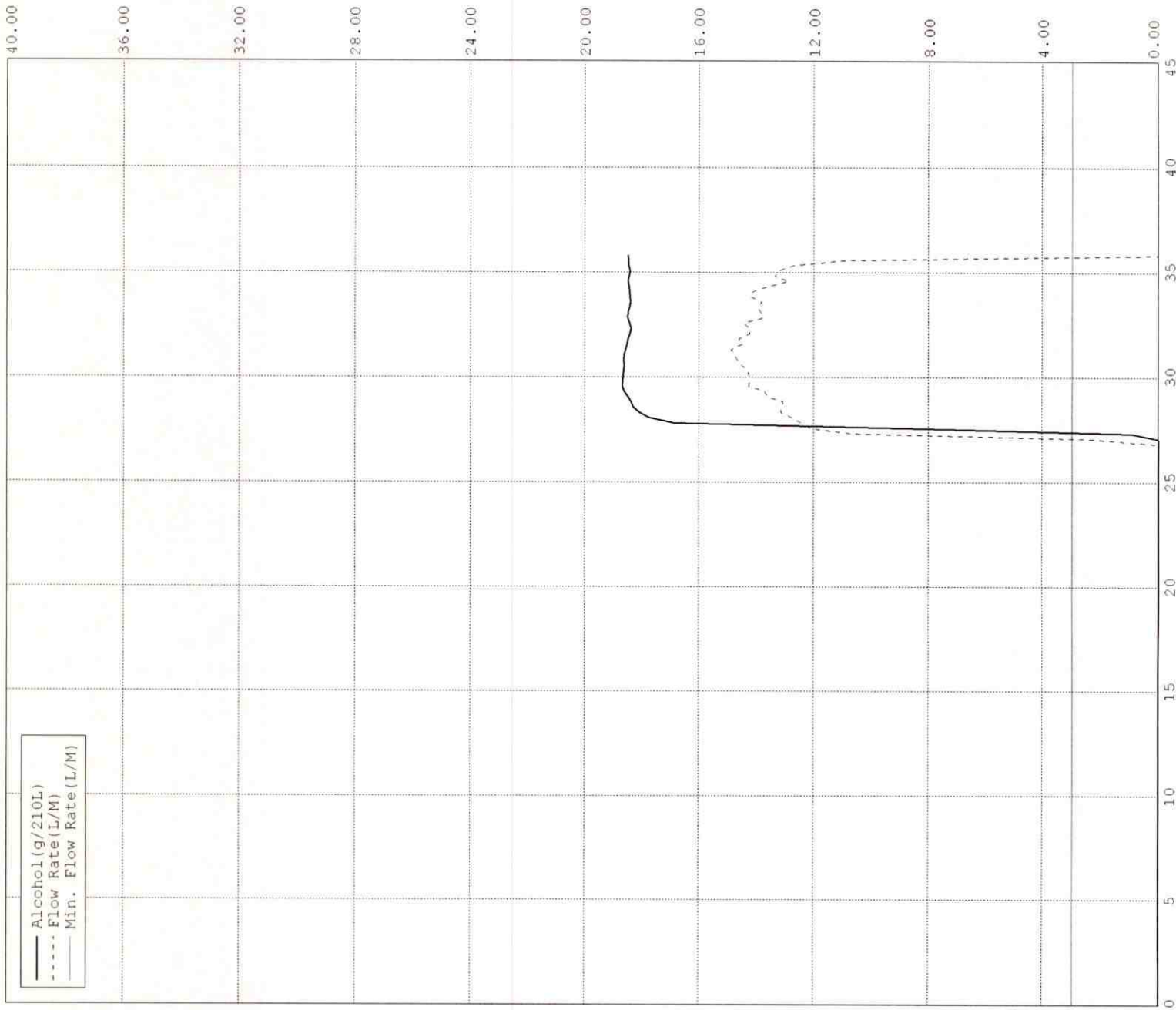
OPERATOR NAME:
CARLIE GLAISTER
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.40: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	13:35
BLANK TEST	0.000	13:35
INTERNAL STANDARD	VERIFIED	13:35
Xq = 0.087 (0.20%)		
EXTERNAL STANDARD	0.075	13:35
X[1] = 0.0755 (-0.0012) (0.0033)		
BLANK TEST	0.000	13:36
SUBJECT SAMPLE (Vol=1.93L)	0.092	13:37
X[1] = 0.0927 (-0.0012) (0.0021)		
BLANK TEST	0.000	13:38
EXTERNAL STANDARD	0.075	13:38
X[1] = 0.0752 (-0.0015) (0.0029)		
BLANK TEST	0.000	13:39

OKG



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 10/15/2021
Time: 13:15:51

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
CARLIE GLAISTER
OPERATOR'S #: XXXX

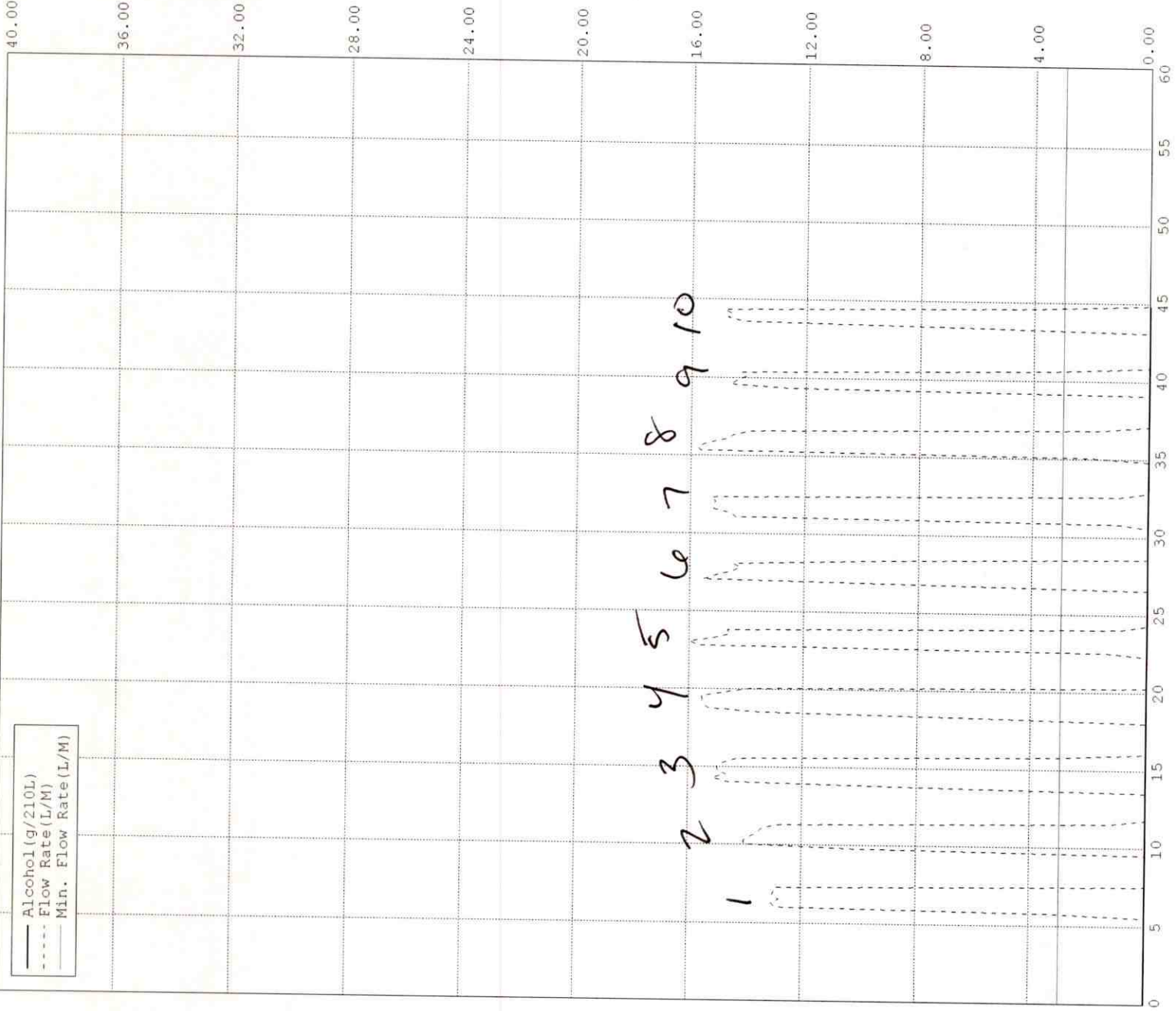
DEPT/AGENCY:
MAXIMUM ATTEMPTS EXCEEDED
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.40: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 13:17
BLANK TEST 0.000 13:17
INTERNAL STANDARD VERIFIED 13:17
EXTERNAL STANDARD 0.075 13:17
BLANK TEST 0.000 13:18
SUBJECT SAMPLE XXX 13:19

Maximum Attempts Exceeded

CKG



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100380

Date: 10/15/2021

Time: 14:05:13

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 29.40: 0.079

LOT #: AG018102

EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK

PASSED 14:06

BLANK TEST 0.000 14:06

INTERNAL STANDARD

VERIFIED 14:06

EXTERNAL STANDARD 0.076 14:06

BLANK TEST 0.000 14:07

RFI DETECTED

Alcohol (g/210L)
Flow Rate (L/M)
Min. Flow Rate (L/M)



OKG

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 10/15/2021
Time: 14:27:33

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 29.41: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	14:28
BLANK TEST	0.000	14:28
INTERNAL STANDARD	VERIFIED	14:28
EXTERNAL STANDARD	0.076	14:29
BLANK TEST	0.000	14:30
SUBJECT SAMPLE (Vol=2.60L)	0.000	14:30
BLANK TEST	0.000	14:31
EXTERNAL STANDARD	0.076	14:31
BLANK TEST	0.000	14:32

OKG

