

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 100687 Analyst Brandi Barnett Start Date 7/29/21

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 928203 Exp 10/09/21
- ii. 0.040g/210L Mnf Airgas Lot AG 111710 Exp 04/27/23
- iii. 0.080g/210L Mnf Airgas Lot AG 018102 Exp ~~06/22/22~~ 06/29/22 ^{enb}
- iv. 0.100g/210L Mnf Airgas Lot AG 924701 Exp 09/04/21
- v. 0.200g/210L Mnf Guth Lot 19200 Exp 08/06/21
Simulator S/N DR4161 Date Calibrated 06/16/21
- vi. 0.300g/210L Mnf Guth Lot 19330 Exp 11/13/21
Simulator S/N SD1202 Date Calibrated 06/15/21

Functional Tests (attached)

Incomplete

Invalid

Interference

- i. Acetone - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/2021
Simulator S/N DR4178 Date Calibrated 11/18/2020
- ii. Isopropanol - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/2021
Simulator S/N DR4176 Date Calibrated 11/18/2020
- iii. Negative Control - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/2021
Simulator S/N DR4163 Date Calibrated 11/17/2020

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 7/30/21

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 07/29/2021
Time: 09:13:14

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.4°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 = 30.0 in

PUMP INFO

Flow Rate = 4.410 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 = 0.085 0.10% PASSED
(0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100687

Date: 07/29/2021

Time: 9:17 AM

Temperatures (°C)

Sample Cell: 48.8°C

Breath Tube: 46.4°C

Current Barometer 30.0 in

Volume (Ltr) 1.56

Settings

Lamp: 1.56 V

Bias: 80 V

Cooler: 1.56 V

Chopper: 538 Hz

Voltages (V)

Flow: 1.06 V

Detector: -0.015 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 07/26/2021
Time: 15:00:12

OPERATOR NAME:
BRANDI BARNETT
CERTIFICATE #: 7038

Ca = 0.1000
CAL = 0.991668 0.800 <= CAL < 1.200
b1 = 0.0006 0.0000 <= b1 < 0.0040
b2 = 0.0038 0.0010 <= b2 < 0.0100
b3 = 0.0006 0.0000 <= b3 < 0.0040
Xq = 0.0851 0.0500 <= Xq < 0.2000
a21 = 1.156525 1.050 <= a21 < 1.300
a31 = 0.531846 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 07/29/2021
Time: 09:18:03

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

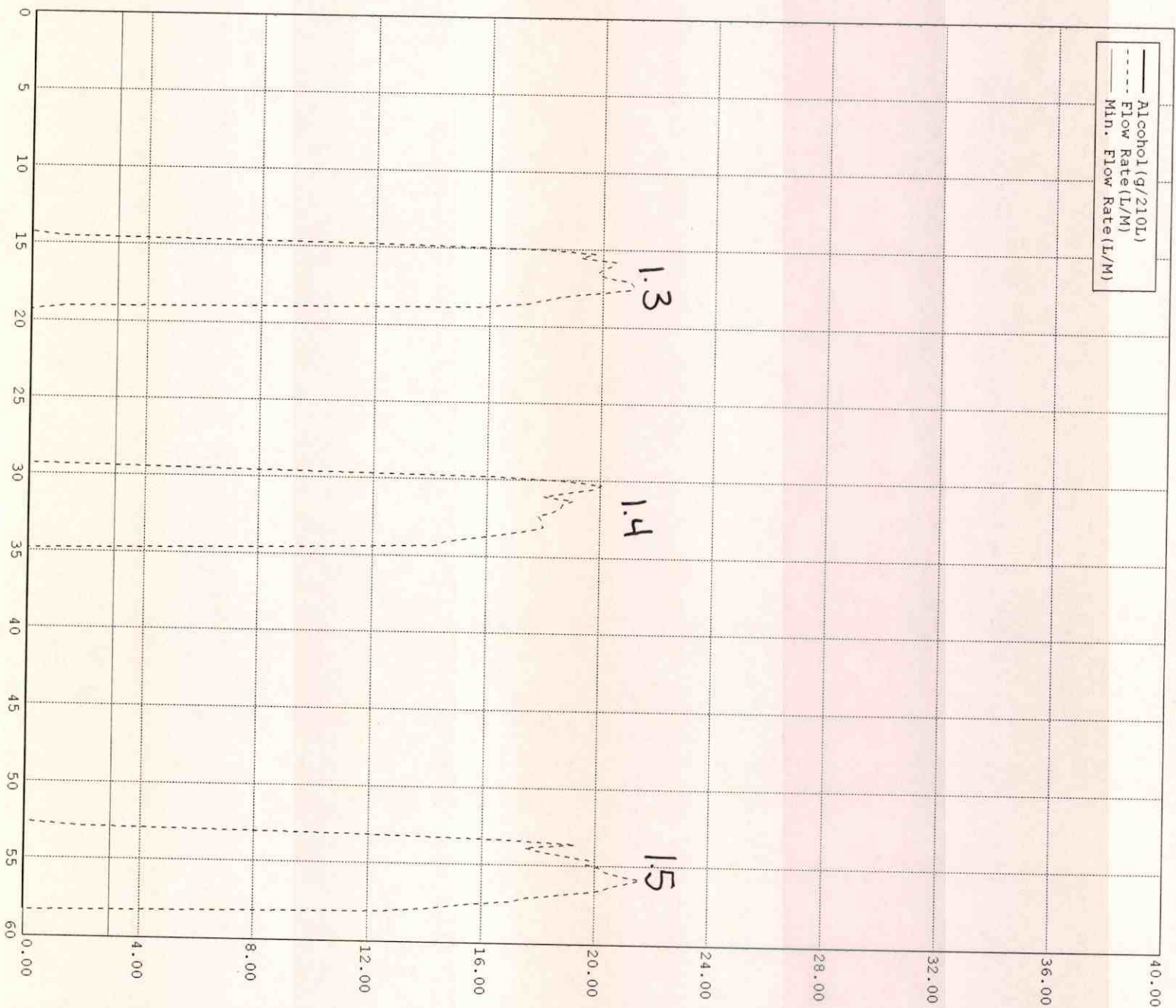
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.01: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	09:19
BLANK TEST	0.000	09:19
INTERNAL STANDARD	VERIFIED	09:19
EXTERNAL STANDARD	0.078	09:19
BLANK TEST	0.000	09:20
SUBJECT SAMPLE (Vol=1.59L)	0.000	09:21
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.078	09:22
BLANK TEST	0.000	09:23

BMB



LINEARITY CHECK

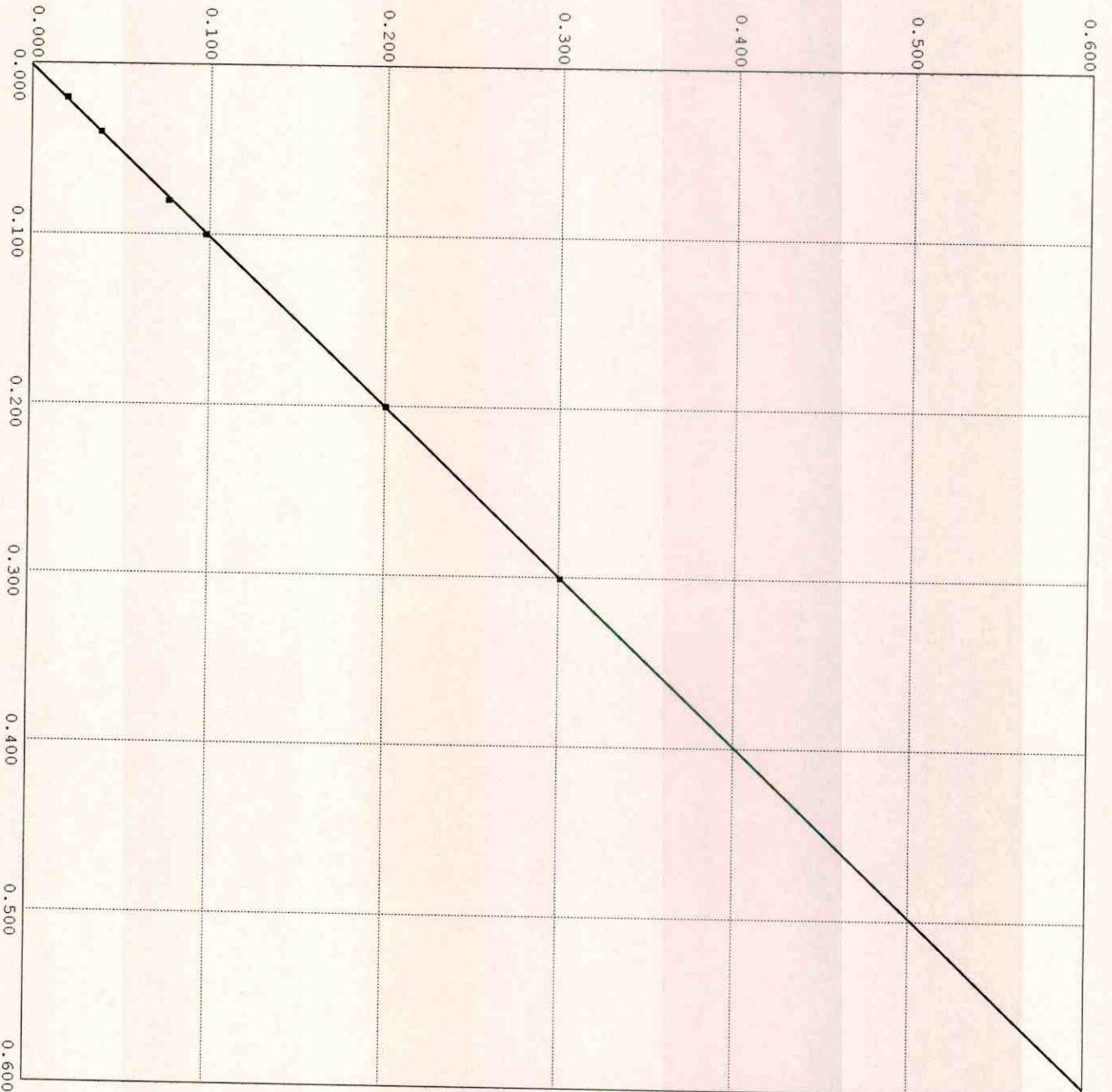
Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 07/29/2021
Time: 09:31:34

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0204	0.0005
0.040	0.0396	0.0005
0.080	0.0778	0.0004
0.100	0.0990	0.0000
0.200	0.2012	0.0004
0.300	0.3016	0.0005

SLOPE = 1.008495
R² = 0.999897



GBMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100687

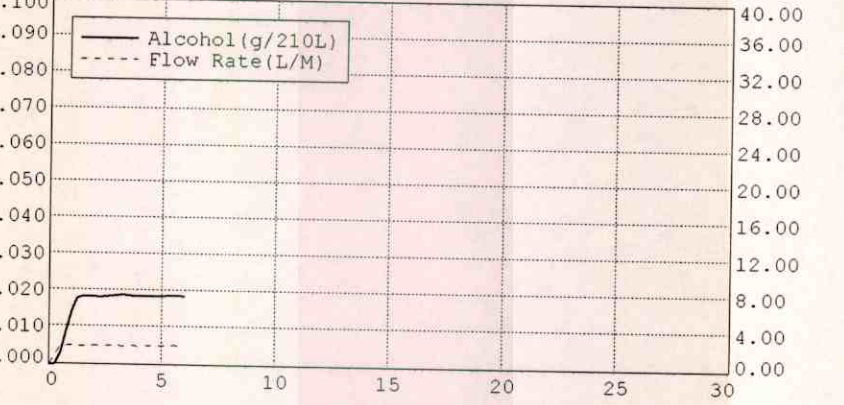
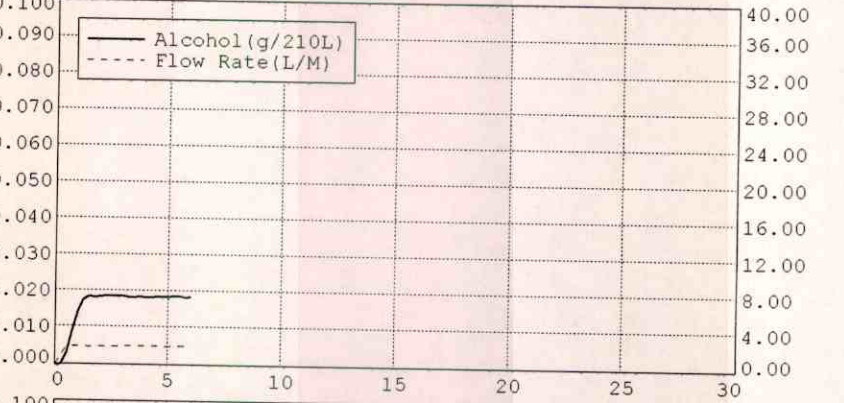
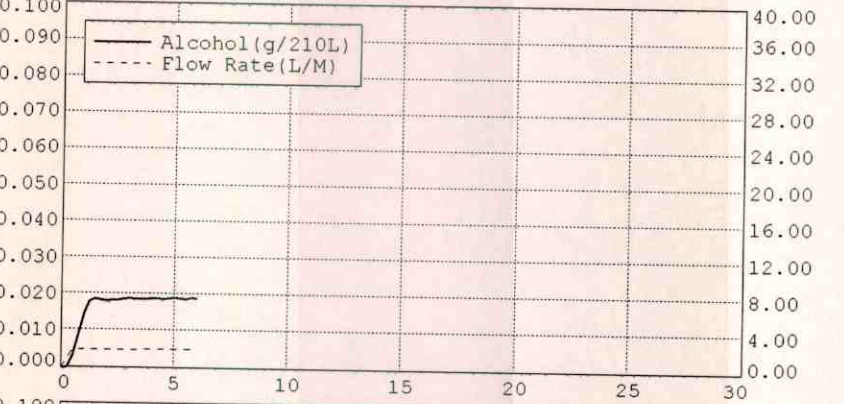
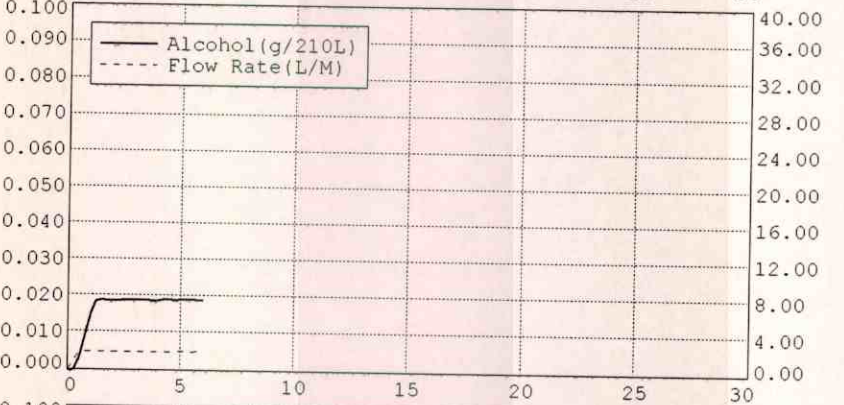
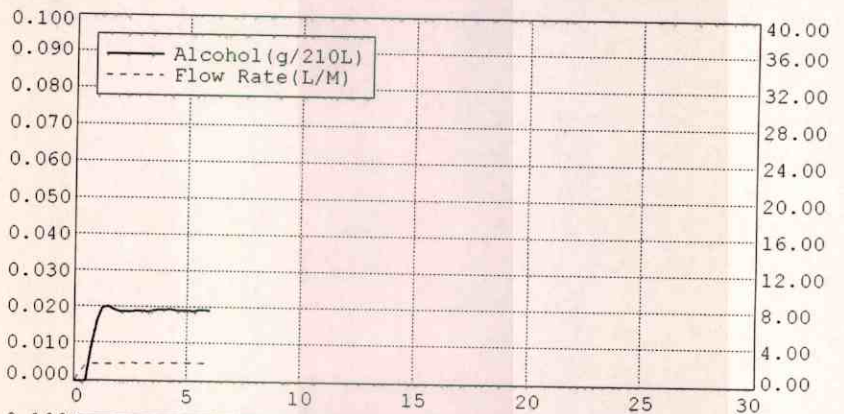
Date: 07/29/2021
 Time: 09:31:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 30.01: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 212 psi

BLANK TEST	0.000	09:36
INTERNAL STANDARD	VERIFIED	09:36
EXTERNAL STANDARD	0.021	09:36
BLANK TEST	0.000	09:37
EXTERNAL STANDARD	0.021	09:37
BLANK TEST	0.000	09:38
EXTERNAL STANDARD	0.020	09:38
BLANK TEST	0.000	09:39
EXTERNAL STANDARD	0.020	09:39
BLANK TEST	0.000	09:40
EXTERNAL STANDARD	0.020	09:41
BLANK TEST	0.000	09:41

Average = 0.0204
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100687

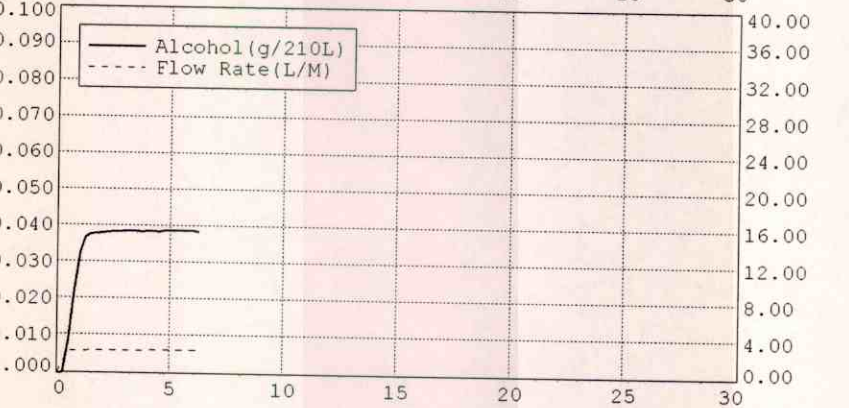
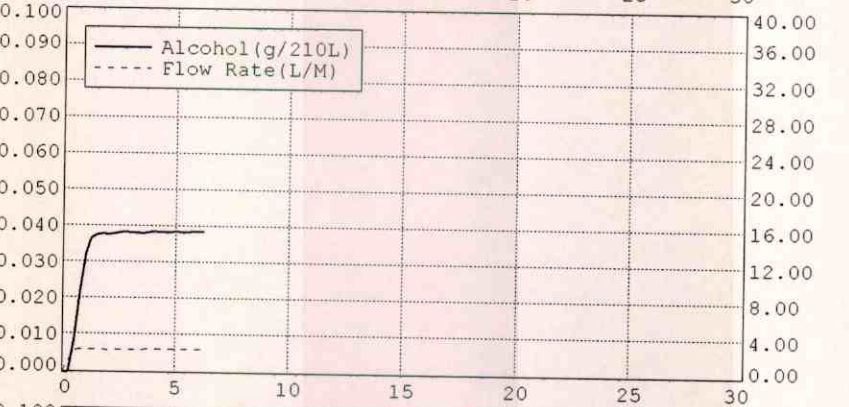
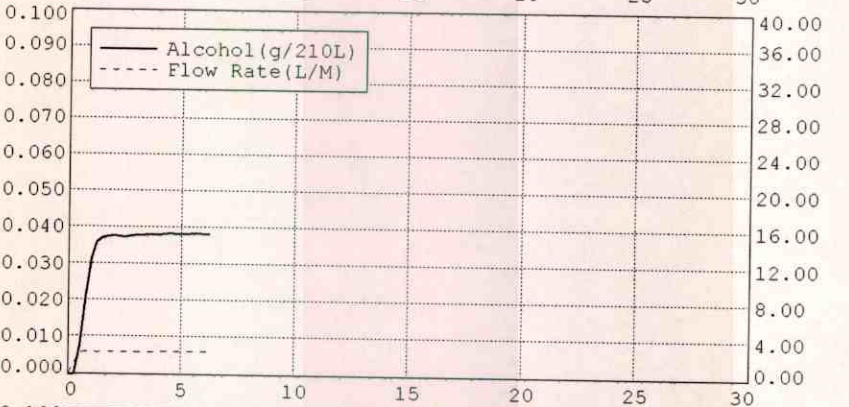
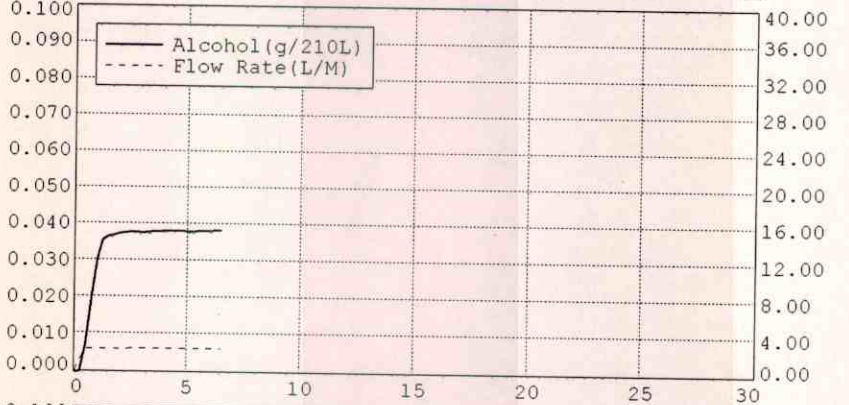
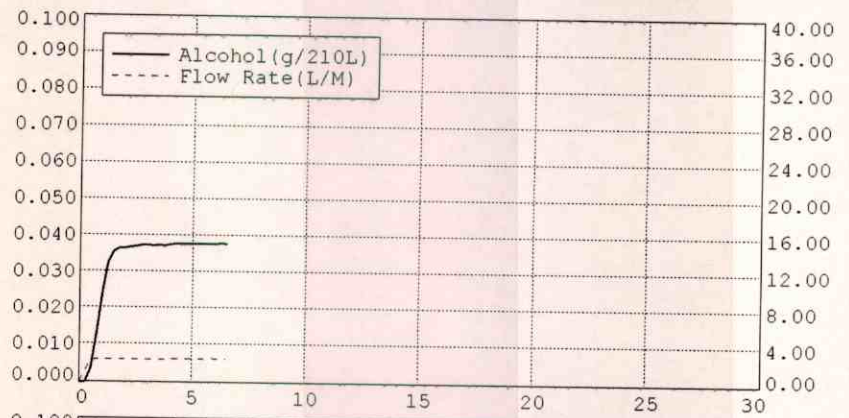
Date: 07/29/2021
 Time: 09:44:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 30.01: 0.040
 LOT #: AG111710
 EXPIRATION: 04/27/2023
 TANK PRESSURE: 1042 psi

BLANK TEST	0.000	09:45
INTERNAL STANDARD	VERIFIED	09:45
EXTERNAL STANDARD	0.039	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.039	09:47
BLANK TEST	0.000	09:47
EXTERNAL STANDARD	0.040	09:48
BLANK TEST	0.000	09:49
EXTERNAL STANDARD	0.040	09:49
BLANK TEST	0.000	09:50
EXTERNAL STANDARD	0.040	09:50
BLANK TEST	0.000	09:51

Average = 0.0396
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100687

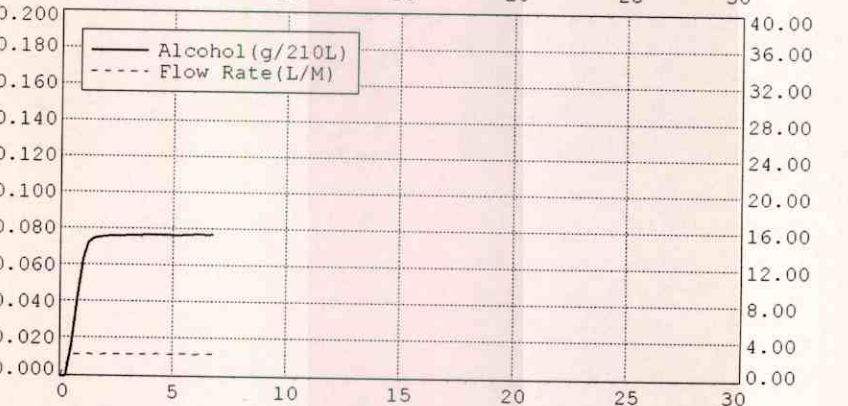
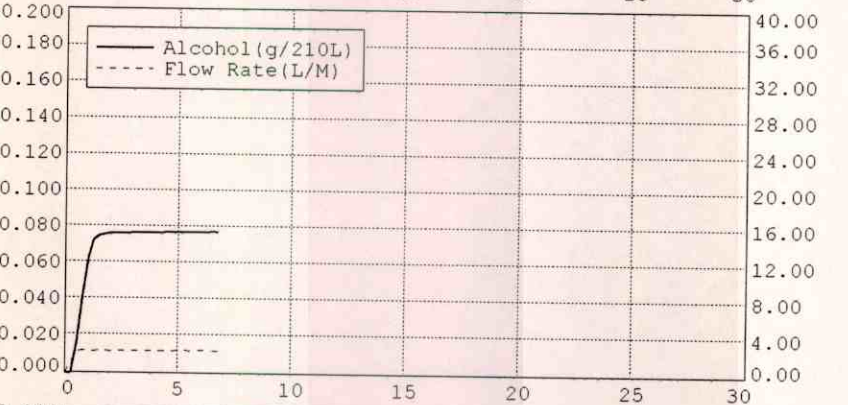
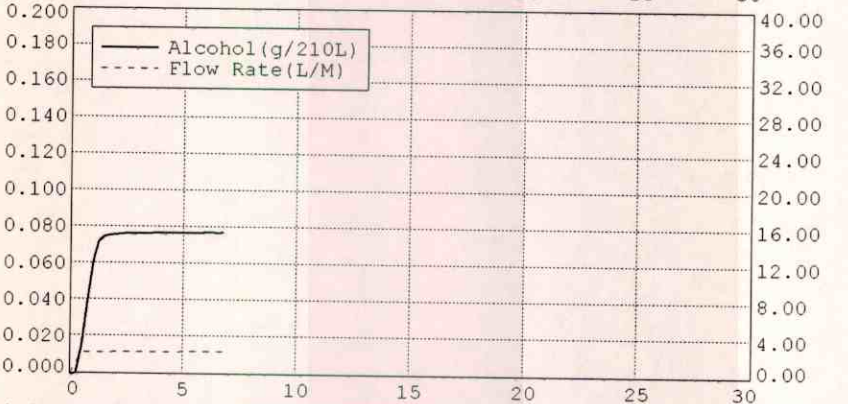
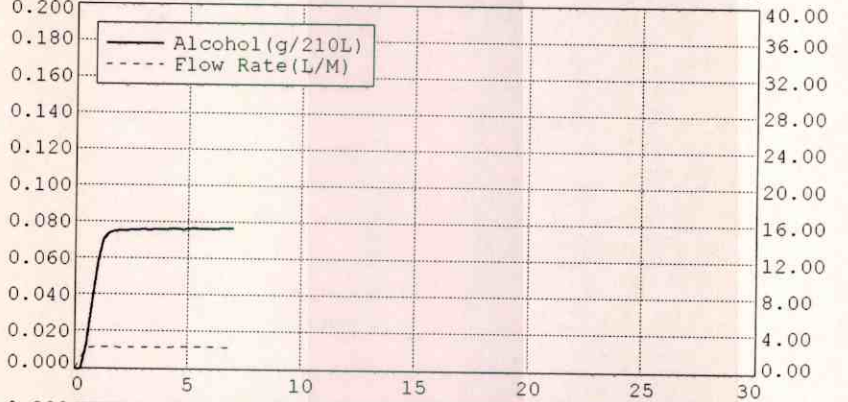
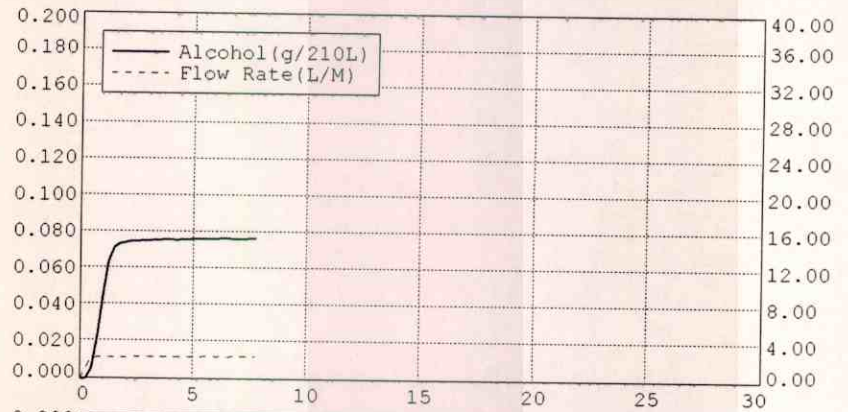
Date: 07/29/2021
 Time: 09:53:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 30.01: 0.080
 LOT #: AG018102
 EXPIRATION: 06/29/2022
 TANK PRESSURE: 842 psi

BLANK TEST	0.000	09:55
INTERNAL STANDARD	VERIFIED	09:55
EXTERNAL STANDARD	0.077	09:55
BLANK TEST	0.000	09:56
EXTERNAL STANDARD	0.078	09:57
BLANK TEST	0.000	09:57
EXTERNAL STANDARD	0.078	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.078	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.078	10:00
BLANK TEST	0.000	10:01

Average = 0.0778
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100687

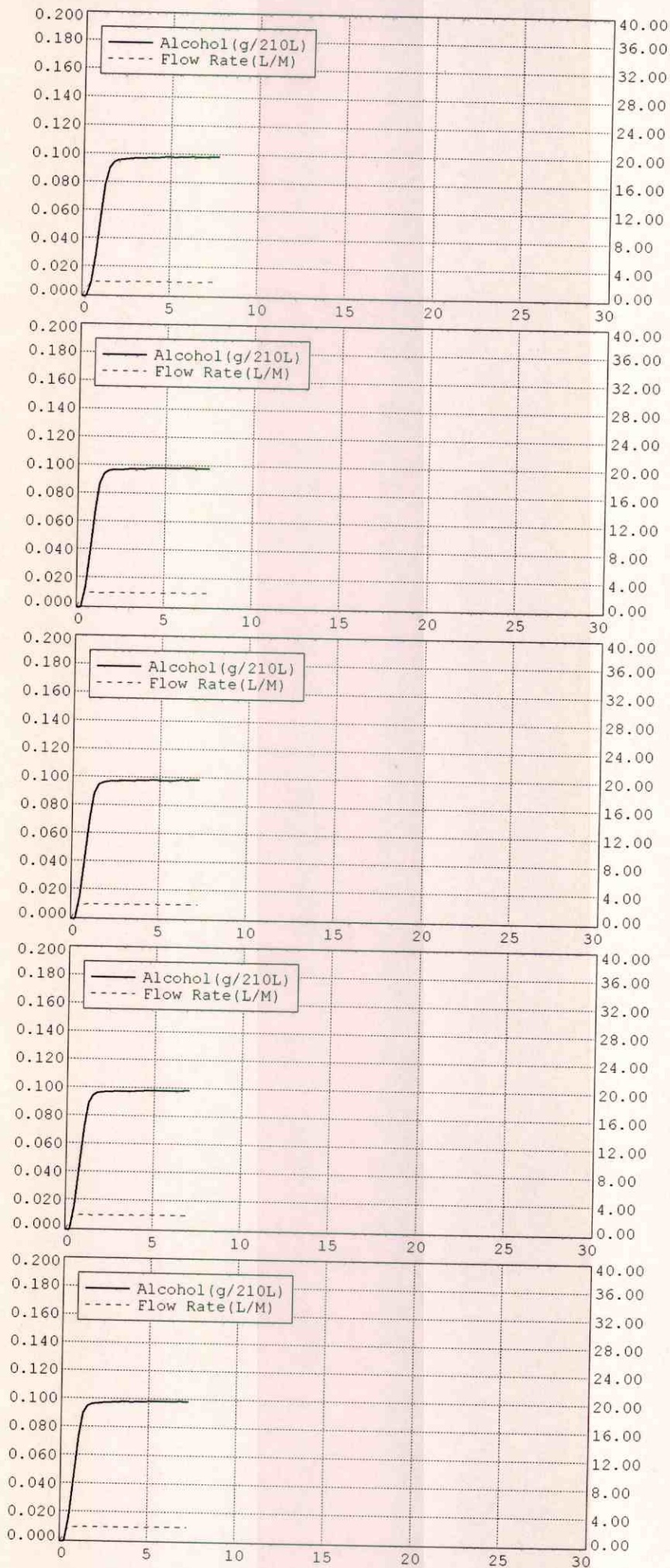
Date: 07/29/2021
 Time: 10:01:46

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 30.01: 0.100
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 261 psi

BLANK TEST	0.000	10:04
INTERNAL STANDARD	VERIFIED	10:04
EXTERNAL STANDARD	0.099	10:04
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.099	10:05
BLANK TEST	0.000	10:06
EXTERNAL STANDARD	0.099	10:06
BLANK TEST	0.000	10:07
EXTERNAL STANDARD	0.099	10:07
BLANK TEST	0.000	10:08
EXTERNAL STANDARD	0.099	10:09
BLANK TEST	0.000	10:09

Average = 0.0990
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100687

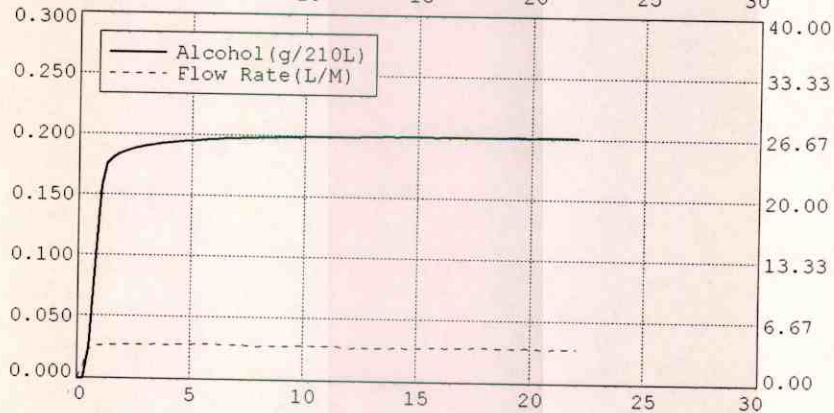
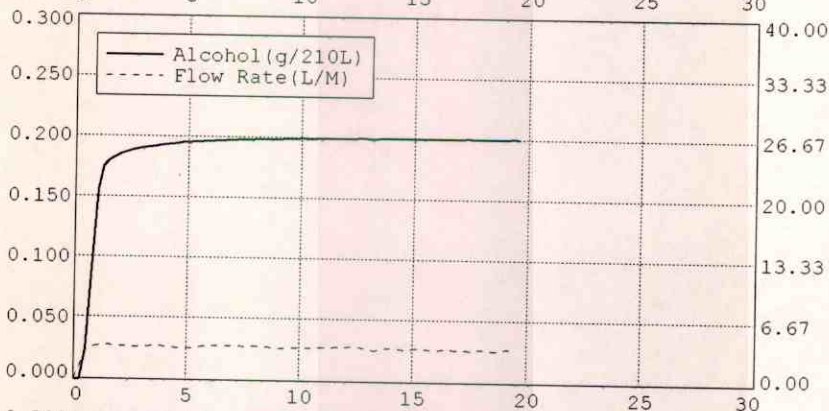
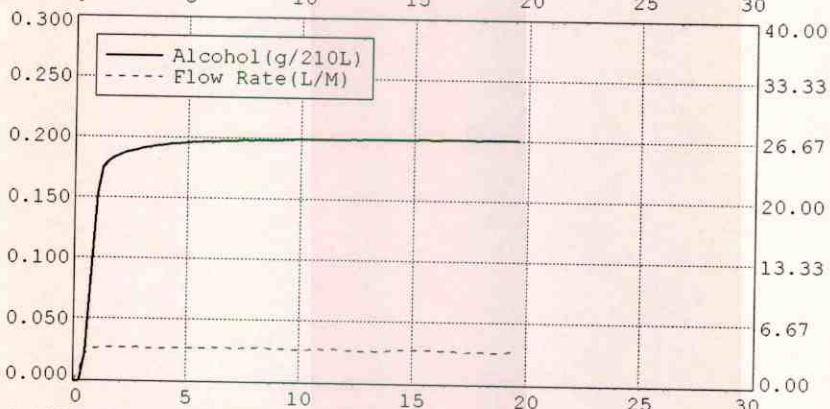
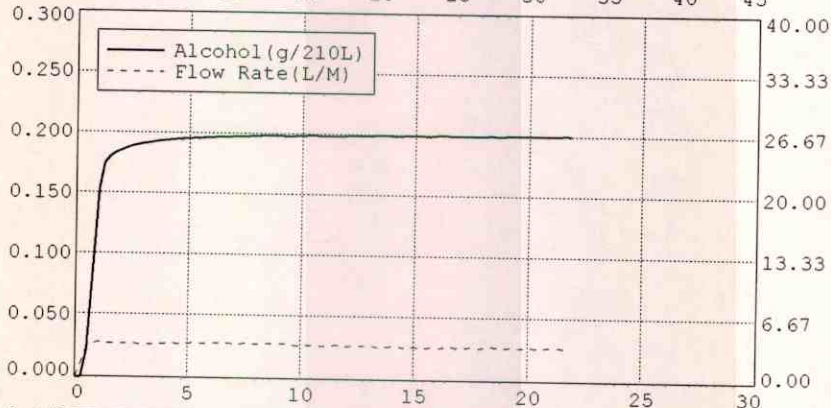
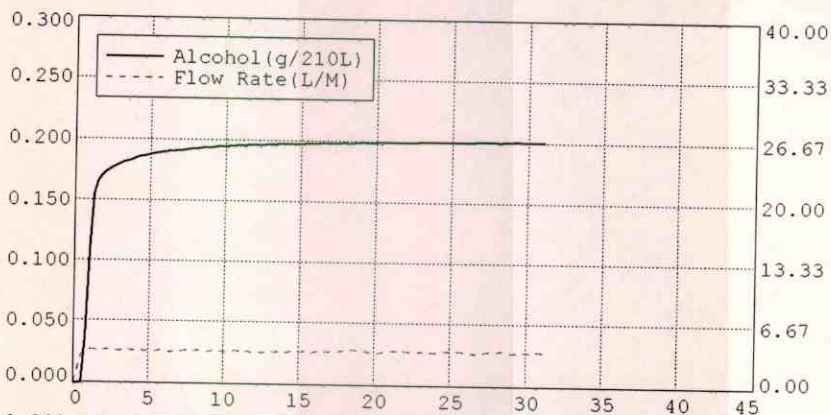
Date: 07/29/2021
 Time: 10:55:11

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: GUTH 19200
 EXPIRATION: 08/06/2021

BLANK TEST	0.000	10:56
INTERNAL STANDARD	VERIFIED	10:56
EXTERNAL STANDARD	0.201	10:57
BLANK TEST	0.000	10:58
EXTERNAL STANDARD	0.201	10:58
BLANK TEST	0.000	10:59
EXTERNAL STANDARD	0.201	10:59
BLANK TEST	0.000	11:00
EXTERNAL STANDARD	0.201	11:01
BLANK TEST	0.000	11:02
EXTERNAL STANDARD	0.202	11:02
BLANK TEST	0.000	11:03

Average = 0.2012
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100687

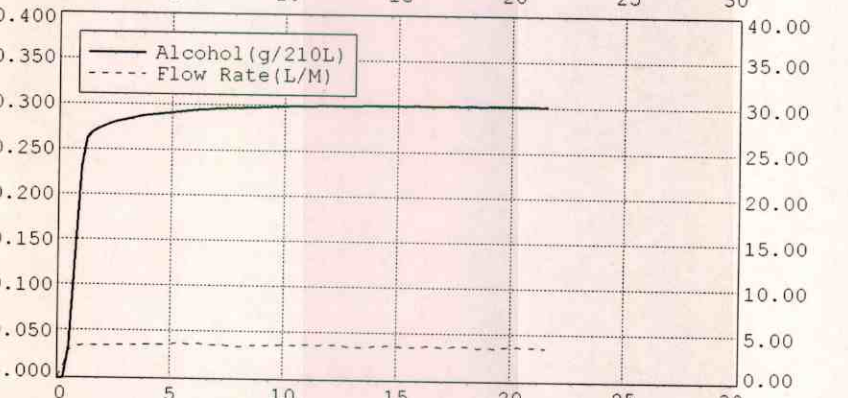
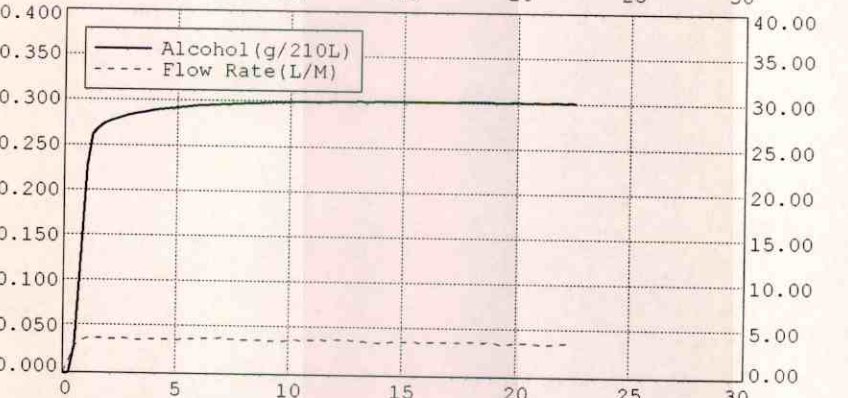
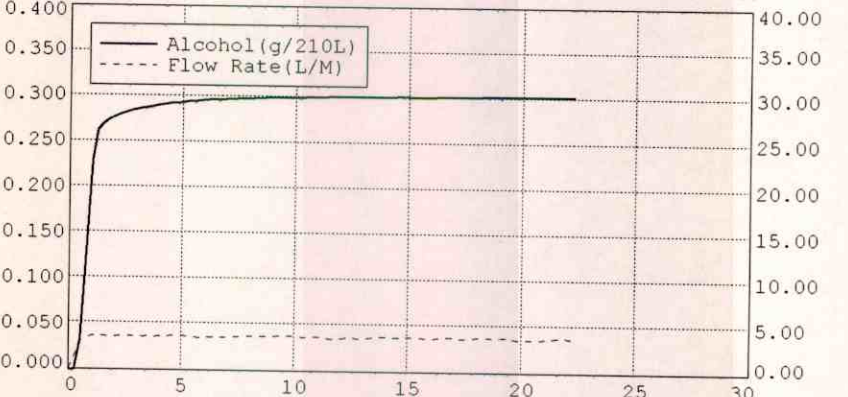
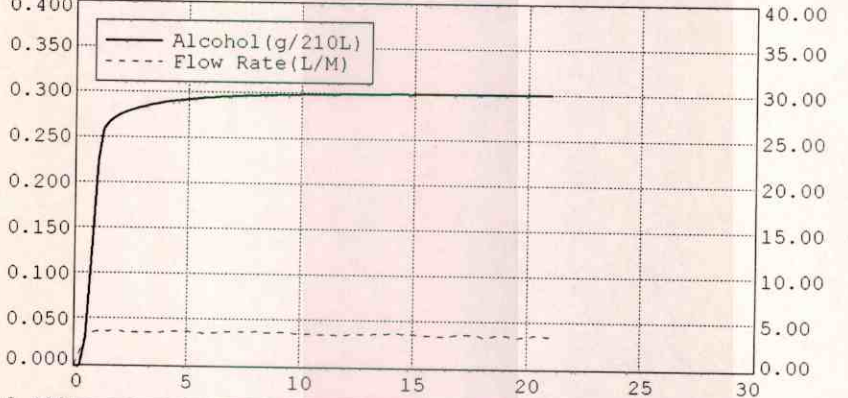
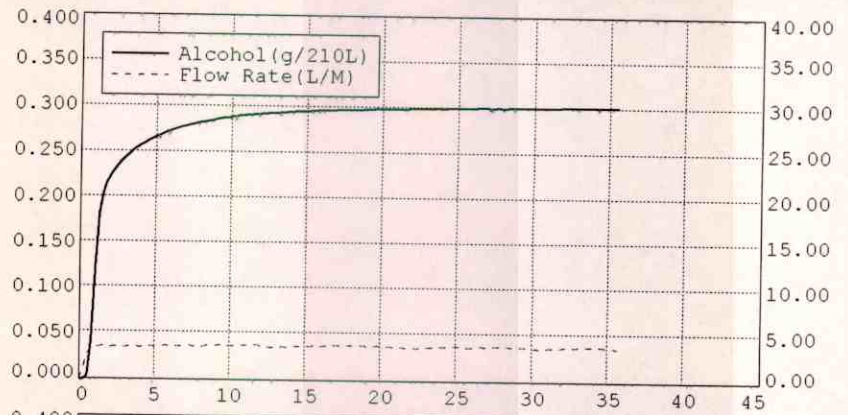
Date: 07/29/2021
 Time: 11:05:24

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: GUTH 19330
 EXPIRATION: 11/13/2021

BLANK TEST	0.000	11:06
INTERNAL STANDARD	VERIFIED	11:06
EXTERNAL STANDARD	0.301	11:07
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.301	11:08
BLANK TEST	0.000	11:09
EXTERNAL STANDARD	0.302	11:10
BLANK TEST	0.000	11:10
EXTERNAL STANDARD	0.302	11:11
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.302	11:12
BLANK TEST	0.000	11:13

Average = 0.3016
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 07/29/2021
Time: 11:17:35

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

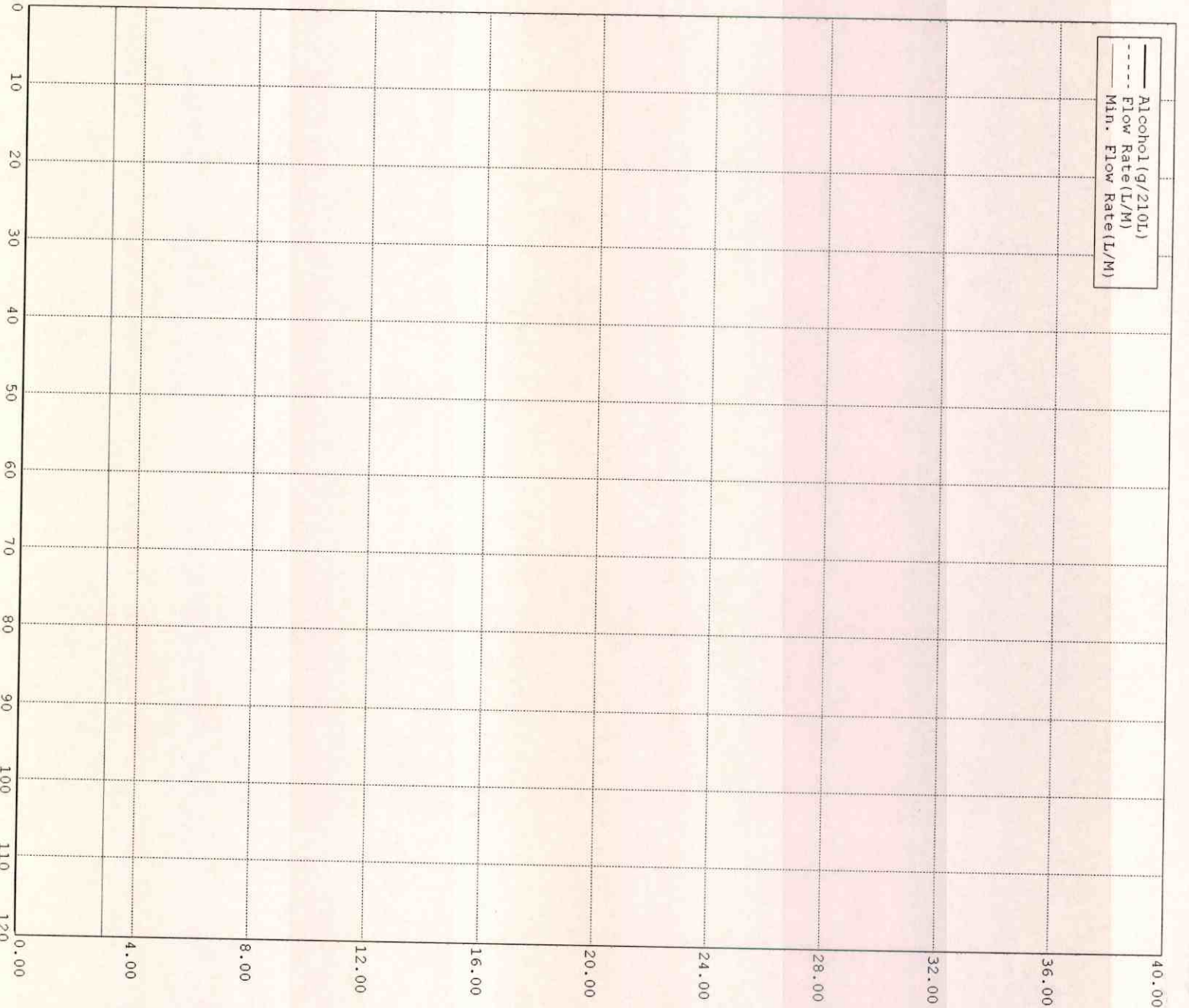
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.00: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	11:19
BLANK TEST	0.000	11:19
INTERNAL STANDARD	VERIFIED	11:19
EXTERNAL STANDARD	0.077	11:19
BLANK TEST	0.000	11:20
SUBJECT SAMPLE	INCOMPLETE	11:22

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 07/30/2021
Time: 11:00:14

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

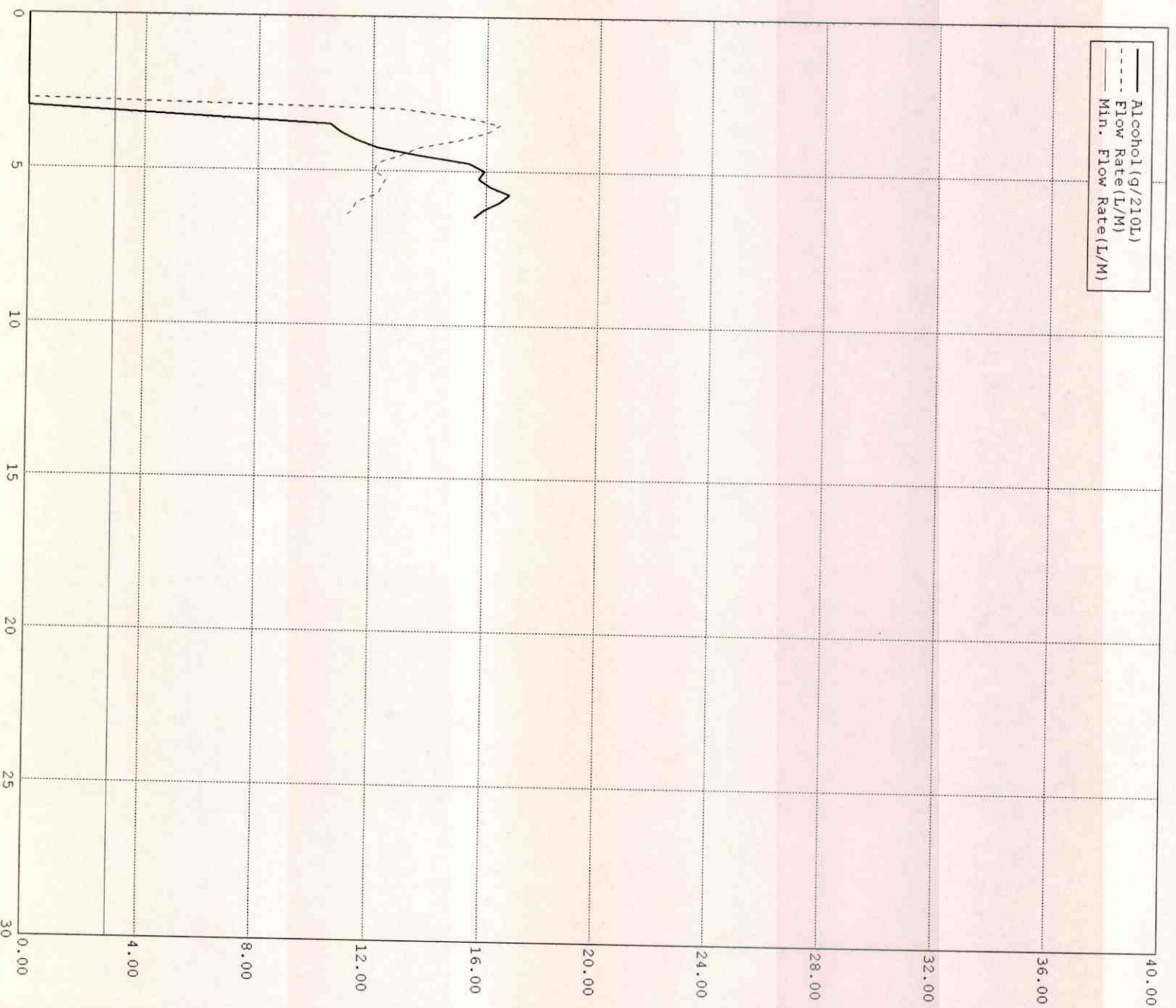
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.94: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	11:01
BLANK TEST	0.000	11:01
INTERNAL STANDARD	VERIFIED	11:01
EXTERNAL STANDARD	0.077	11:01
BLANK TEST	0.000	11:02
SUBJECT SAMPLE	INVALID	11:02

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 07/30/2021
Time: 11:18:31

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.94: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

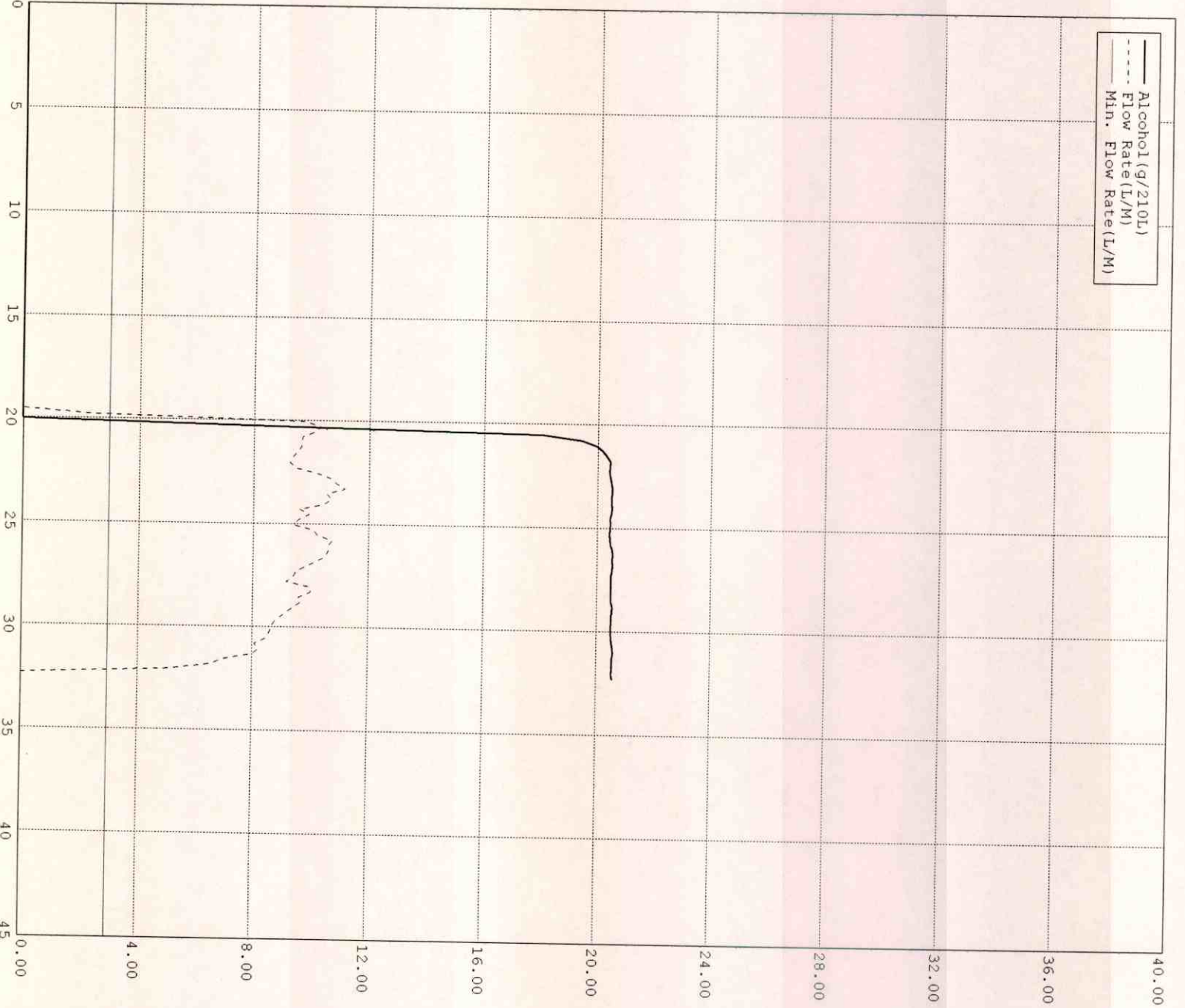
DIAGNOSTIC CHECK	PASSED	11:19
BLANK TEST	0.000	11:19
INTERNAL STANDARD	VERIFIED	11:19
Xq = 0.085 (0.00%)		
EXTERNAL STANDARD	0.077	11:20
X[1] = 0.0775 (0.0009)	(0.0020)	
BLANK TEST	0.000	11:20
SUBJECT SAMPLE	XXX	11:21
X[1] = 0.1035 (-0.0192)	(-0.0001)	

Interference Detected

Filter 2 Avg: 0.0007
Filter 3 Avg: ~~0.0010~~ - BMB
0.0020

BMB 7/30/21

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 07/30/2021
Time: 11:23:55

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

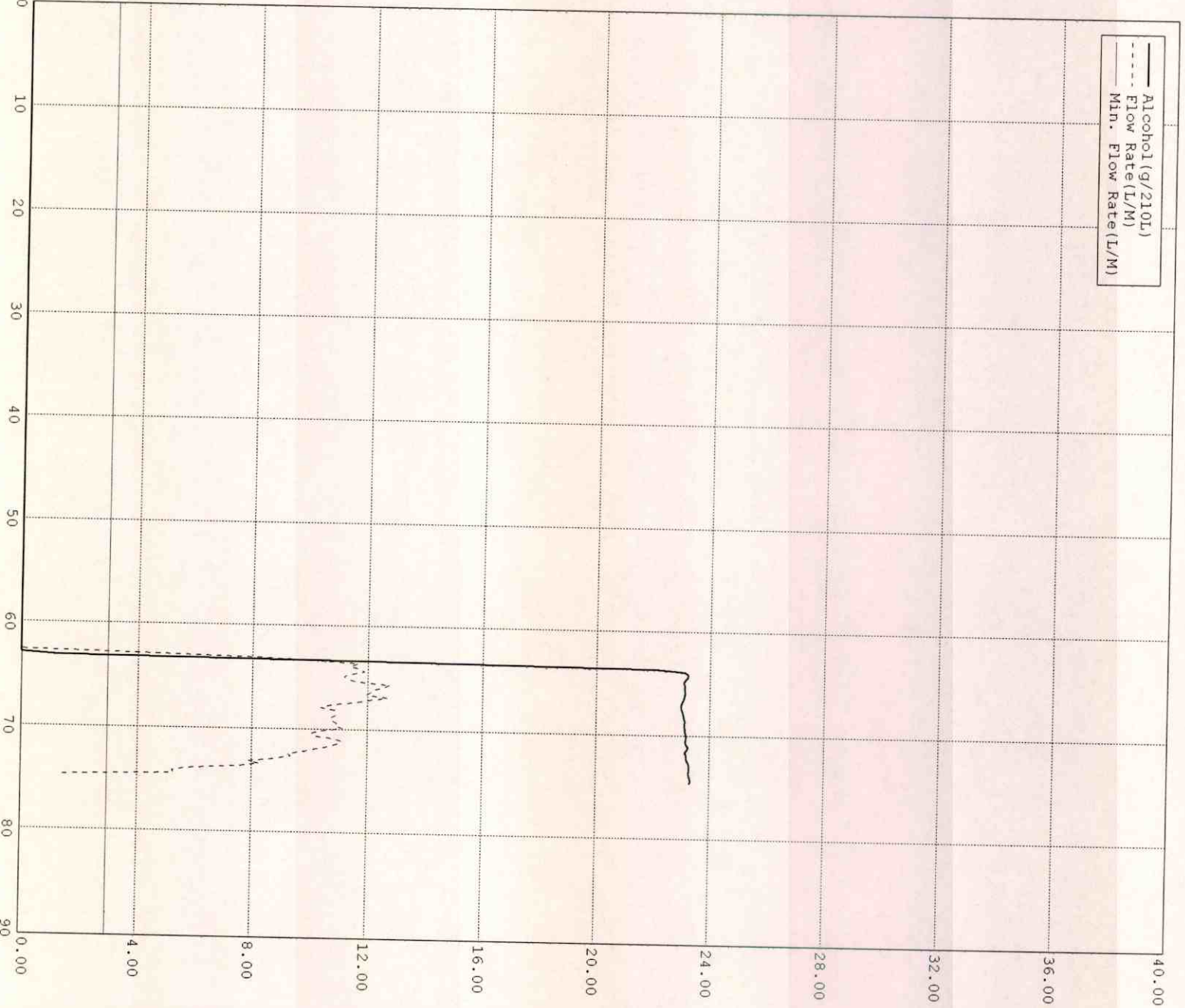
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.95: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK
BLANK TEST PASSED 11:25
INTERNAL STANDARD VERIFIED 11:25
Xq = 0.086 (0.72%)
EXTERNAL STANDARD 0.078 11:25
X[1] = 0.0778 (0.0006) (0.0020)
BLANK TEST 0.000 11:26
SUBJECT SAMPLE XXX 11:27
X[1] = 0.1172 (-0.0233) (0.0011)

Interference Detected

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 07/30/2021
Time: 11:30:10

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

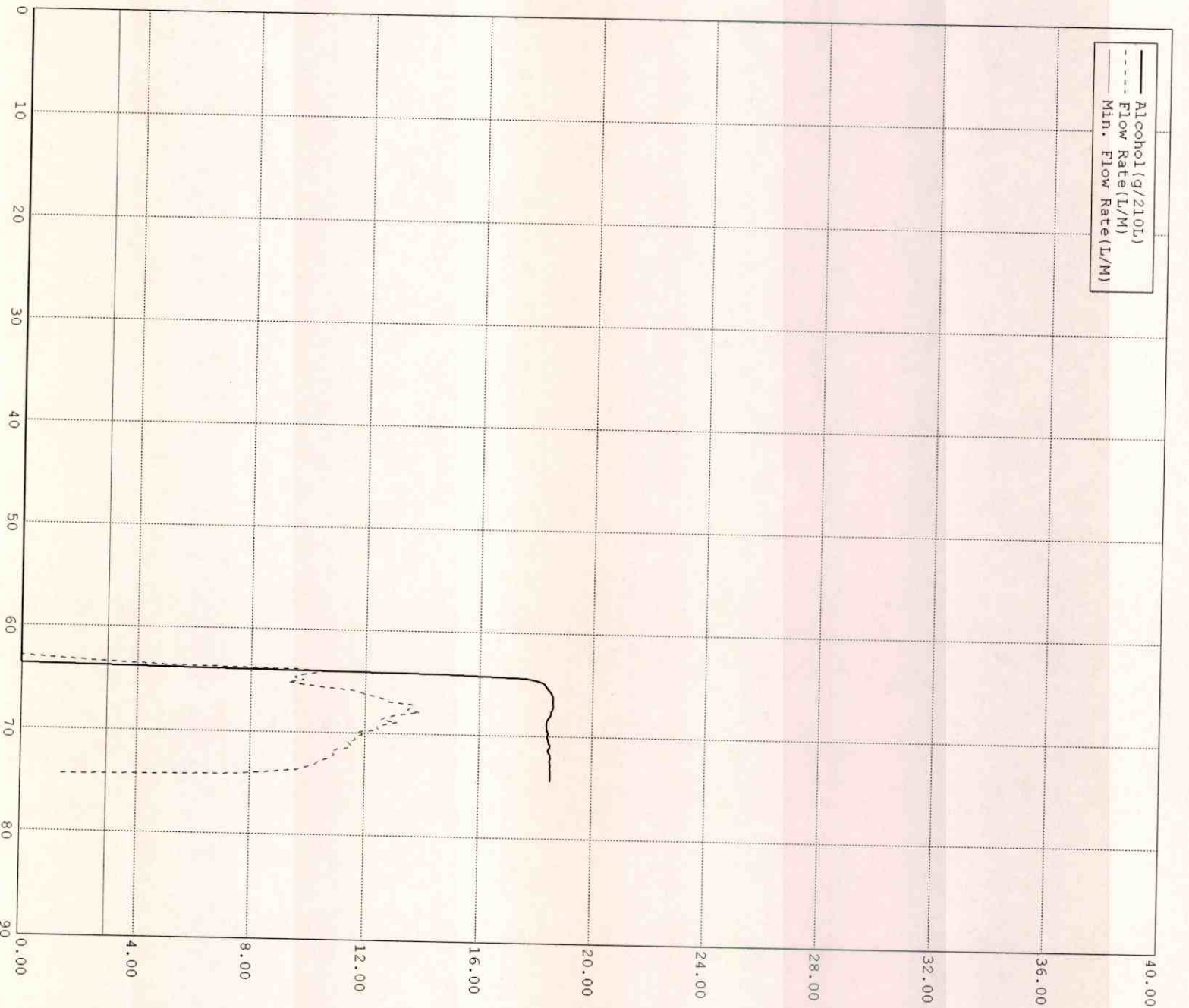
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.94: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	11:31
BLANK TEST	0.000	11:31
INTERNAL STANDARD	VERIFIED	11:31
Xq = 0.086 (1.23%)		
EXTERNAL STANDARD	0.078	11:31
X[1] = 0.0780 (0.0005)	(0.0023)	
BLANK TEST	0.000	11:32
SUBJECT SAMPLE (Vol=2.02L)	0.093	11:34
X[1] = 0.0936 (0.0004)	(0.0006)	
BLANK TEST	0.000	11:35
EXTERNAL STANDARD	0.077	11:35
X[1] = 0.0773 (0.0008)	(0.0018)	
BLANK TEST	0.000	11:36

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 07/30/2021
Time: 11:11:08

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

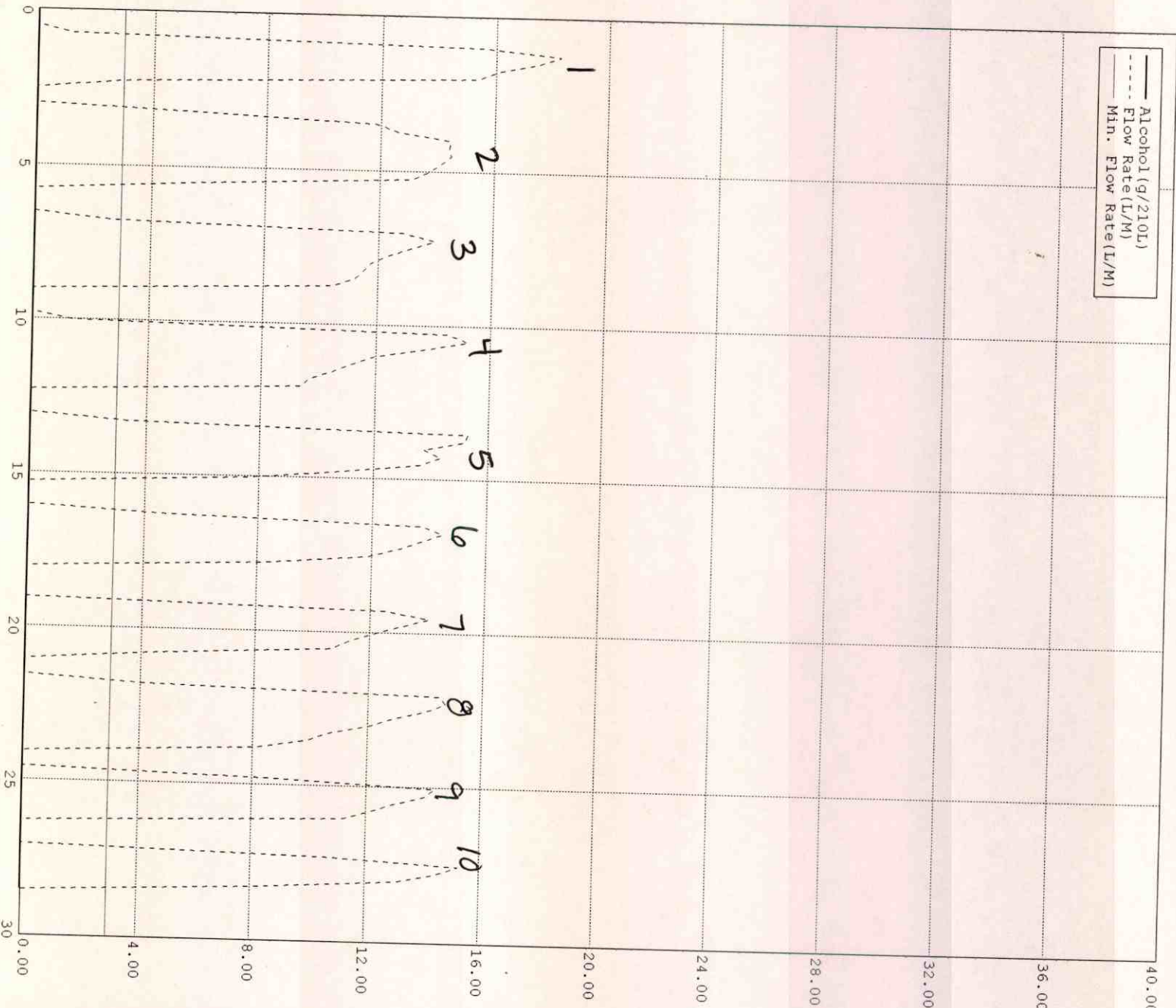
DEPT/AGENCY:
EXCEEDED ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.95: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK
BLANK TEST PASSED 11:12
INTERNAL STANDARD VERIFIED 11:12
EXTERNAL STANDARD 0.078 11:12
BLANK TEST 0.000 11:13
SUBJECT SAMPLE XXXX 11:14

Maximum Attempts Exceeded

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 07/30/2021
Time: 11:04:34

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

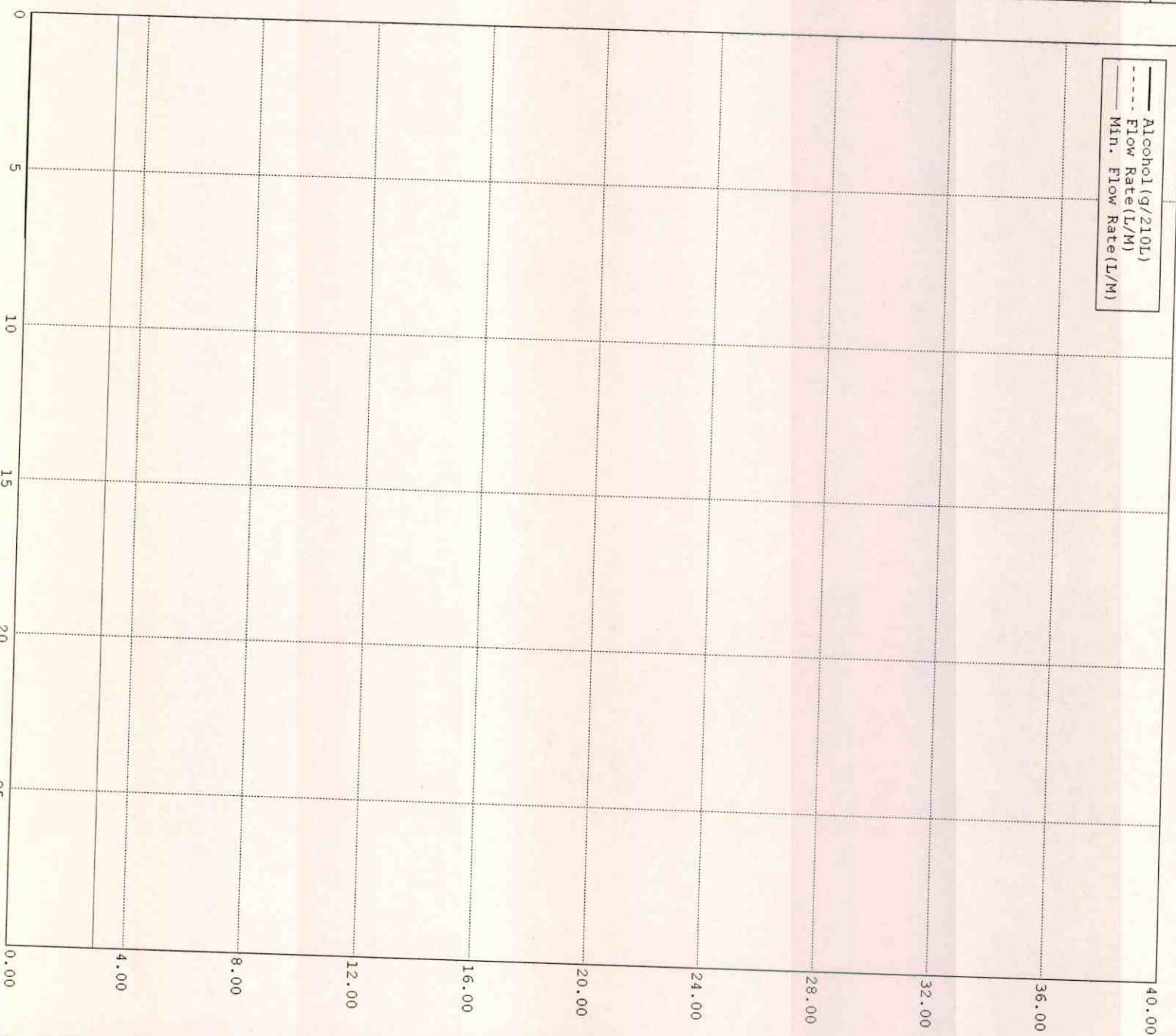
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.94: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK
BLANK TEST PASSED 11:05
INTERNAL STANDARD VERIFIED 11:05
EXTERNAL STANDARD 0.078 11:06
BLANK TEST 0.000 11:07

RPI DETECTED

BIMB

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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 07/30/2021
Time: 12:13:51

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.94: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	12:15
BLANK TEST	0.000	12:15
INTERNAL STANDARD	VERIFIED	12:15
EXTERNAL STANDARD	0.077	12:15
BLANK TEST	0.000	12:16
SUBJECT SAMPLE (Vol=2.28L)	0.000	12:16
BLANK TEST	0.000	12:17
EXTERNAL STANDARD	0.078	12:18
BLANK TEST	0.000	12:19

EMB

