

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 100357 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 09/09/21
- ii. 0.040g/210L Mnf Airgas Lot AG 111710 Exp 04/27/23
- iii. 0.080g/210L Mnf Airgas Lot AG 018102 Exp 06/29/22
- 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 DR 4161 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 DR 4178 Date Calibrated 11/18/2020
- ii. Isopropanol - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/2021
Simulator S/N DR 4176 Date Calibrated 11/18/2020
- iii. Negative Control - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/2021
Simulator S/N DR 4163 Date Calibrated 11/17/2020

- 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 7/30/21

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 07/29/2021
Time: 09:14:17

VERSIONS

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

TEMPERATURES

Sample Chamber = 49.0°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 44.8°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.80 V PASSED
(1.09 V - 2.53 V)
Cooler Voltage = 1.89 V PASSED
(1.13 V - 2.65 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 522 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 30.0 in

PUMP INFO

Flow Rate = 4.458 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
(0.001 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.086 0.30% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100357

Date: 07/29/2021
Time: 9:21 AM

Temperatures (°C)

Sample Cell: 48.6°C
Breath Tube: 44.0°C

Current Barometer 30.0 in
Volume (Ltr) 1.53

Settings

Lamp: 1.81 V
Bias: 80 V
Cooler: 1.94 V
Chopper: 522 Hz

Voltages (V)

Flow: 1.04 V
Detector: -0.027 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 07/26/2021
Time: 14:51:58

OPERATOR NAME:
BRANDI BARNETT
CERTIFICATE #: 7038

Ca	=	0.1000		
CAL	=	0.972666	0.800	<= CAL < 1.200
b1	=	0.0000	0.0000	<= b1 < 0.0040
b2	=	0.0042	0.0010	<= b2 < 0.0100
b3	=	0.0003	0.0000	<= b3 < 0.0040
Xq	=	0.0861	0.0500	<= Xq < 0.2000
a21	=	1.170709	1.050	<= a21 < 1.300
a31	=	0.526742	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 07/29/2021
Time: 09:23:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

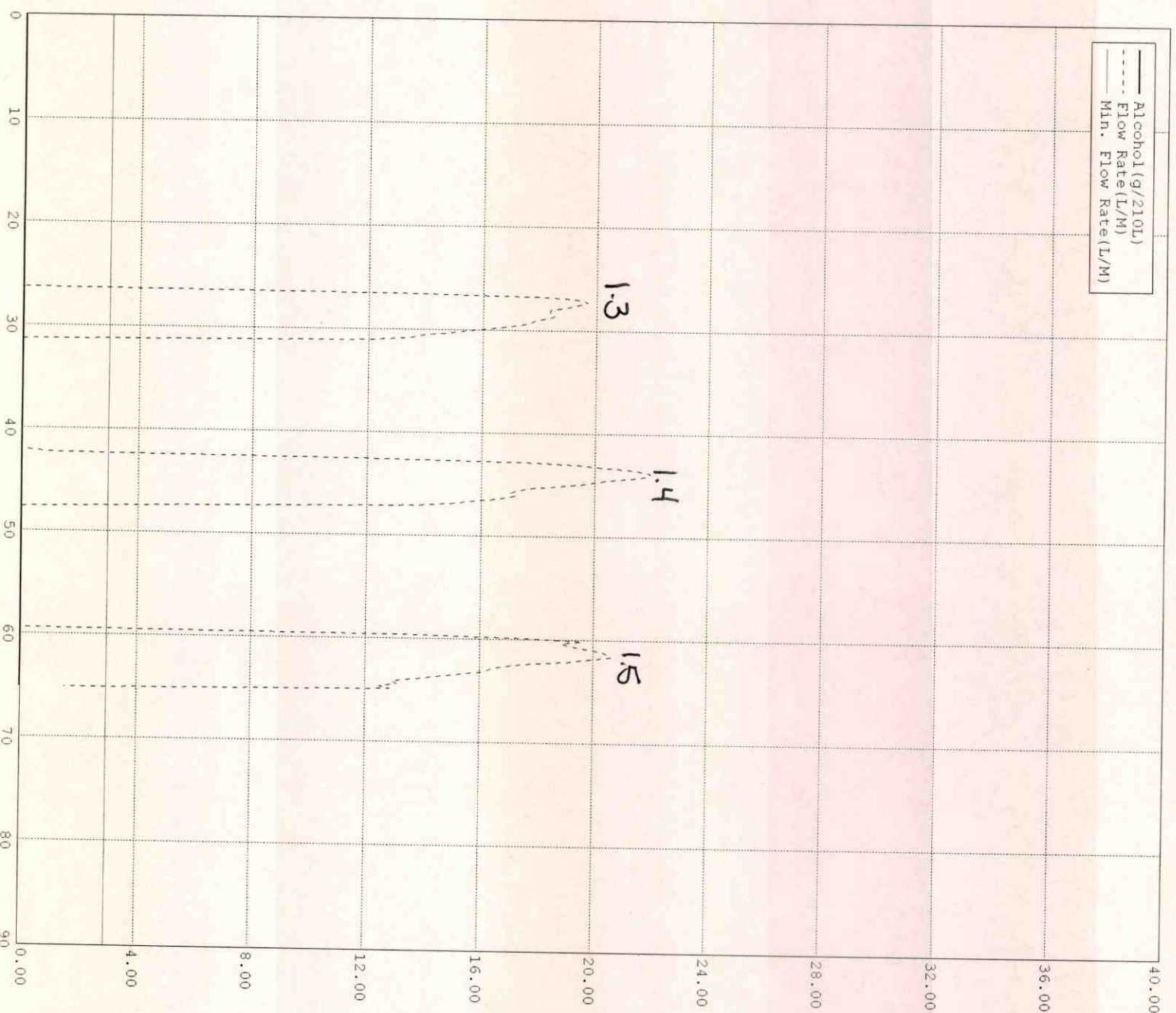
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.99: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	09:24
BLANK TEST	0.000	09:24
INTERNAL STANDARD	VERIFIED	09:24
EXTERNAL STANDARD	0.079	09:24
BLANK TEST	0.000	09:25
SUBJECT SAMPLE (Vol=1.55L)	0.000	09:25
BLANK TEST	0.000	09:26
EXTERNAL STANDARD	0.079	09:28
BLANK TEST	0.000	09:28

BMB



LINEARITY CHECK

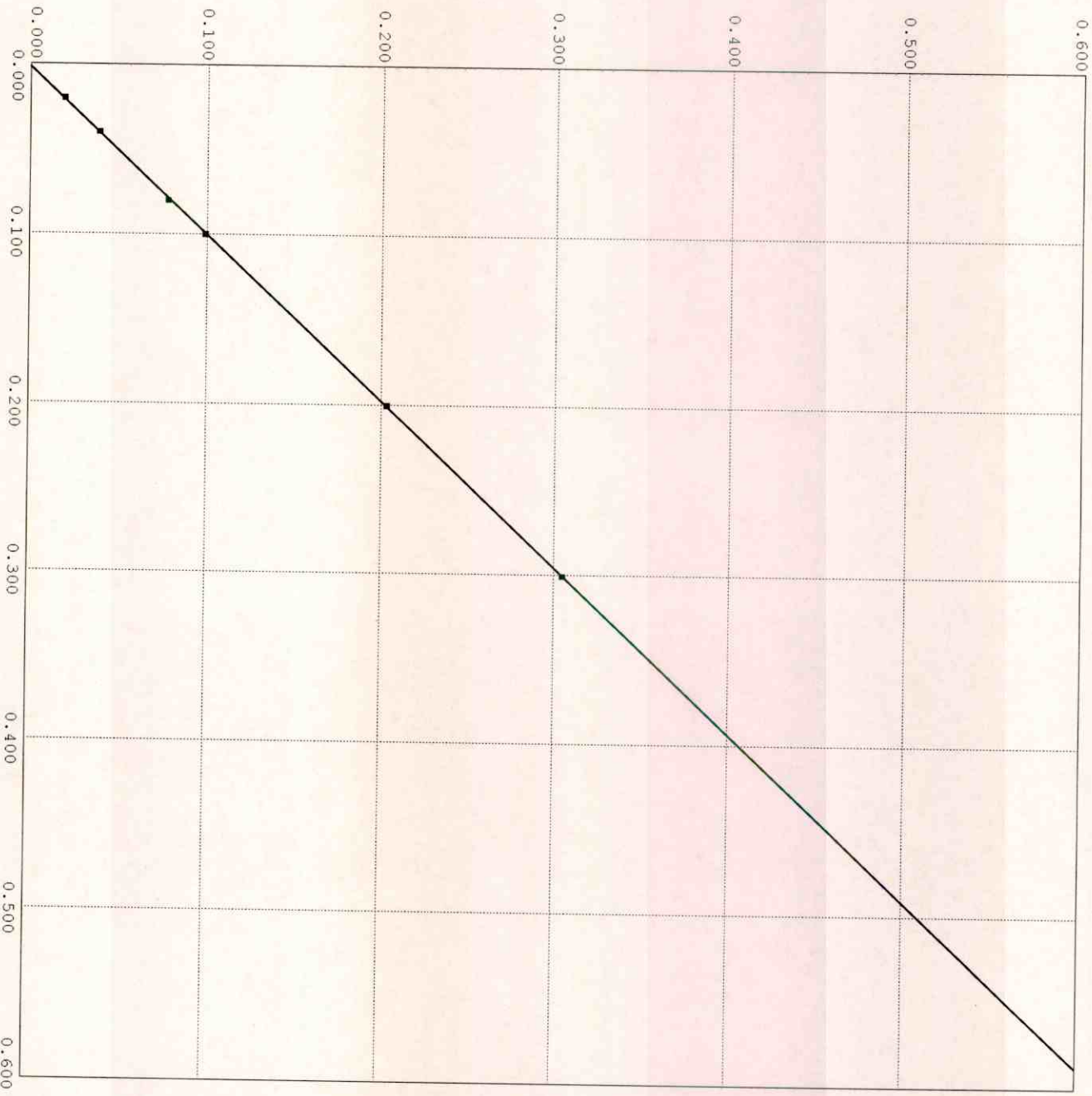
Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 07/29/2021
Time: 09:31:54

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0398	0.0004
0.080	0.0790	0.0000
0.100	0.1000	0.0000
0.200	0.2040	0.0010
0.300	0.3056	0.0011

SLOPE = 1.023734
R² = 0.999926



BBB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100357

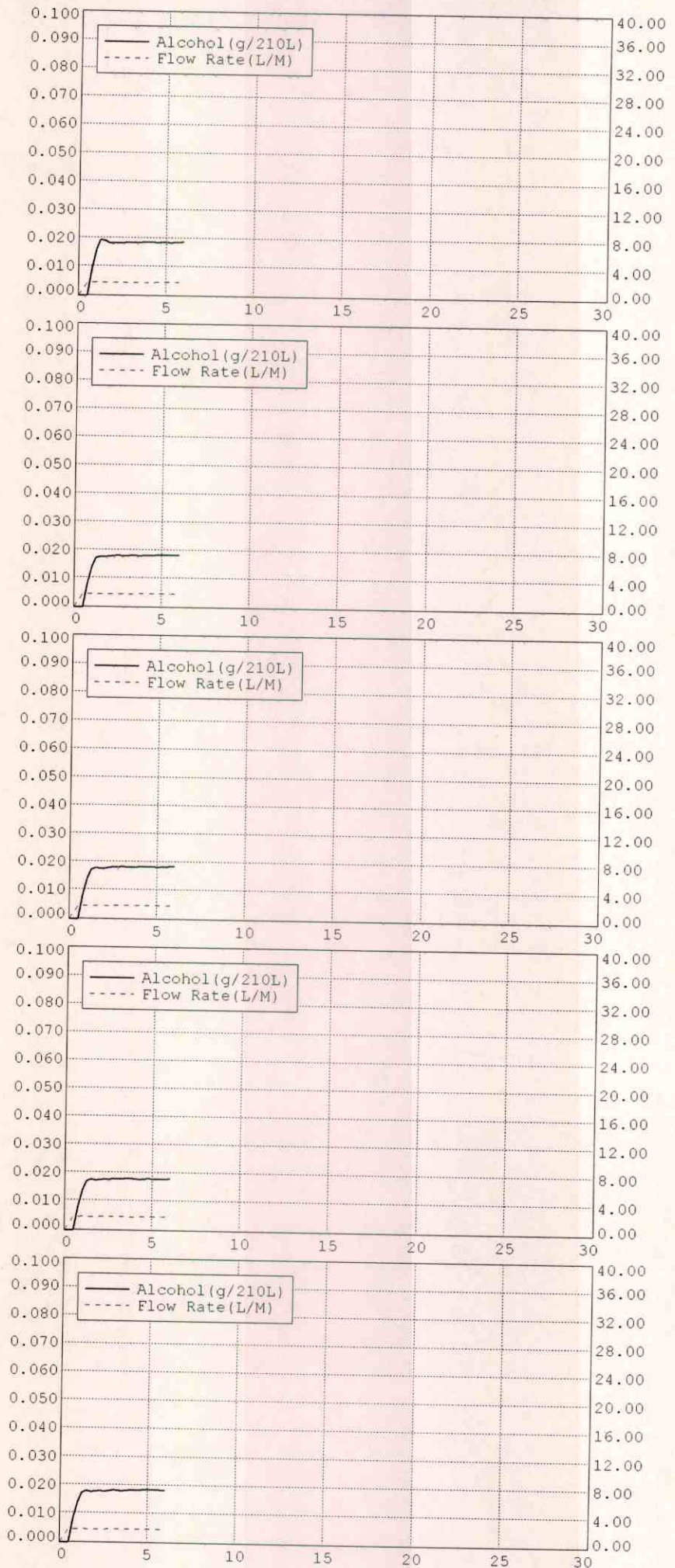
Date: 07/29/2021
 Time: 09:31:56

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 30.00: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 423 psi

BLANK TEST	0.000	09:43
INTERNAL STANDARD	VERIFIED	09:43
EXTERNAL STANDARD	0.020	09:43
BLANK TEST	0.000	09:44
EXTERNAL STANDARD	0.020	09:45
BLANK TEST	0.000	09:45
EXTERNAL STANDARD	0.020	09:46
BLANK TEST	0.000	09:47
EXTERNAL STANDARD	0.020	09:47
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.020	09:48
BLANK TEST	0.000	09:49

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100357

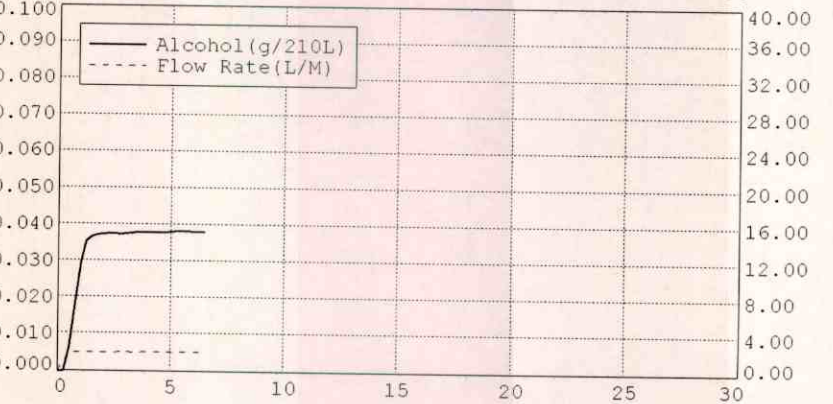
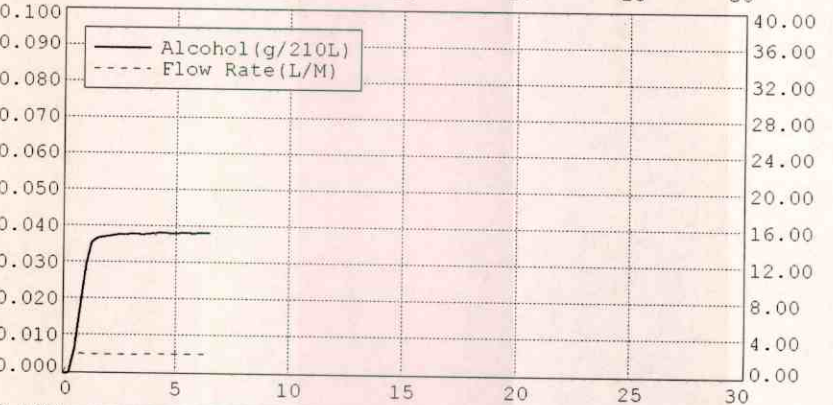
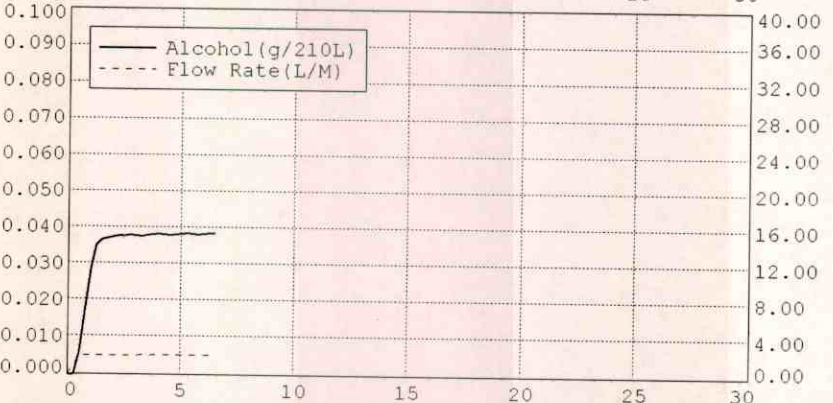
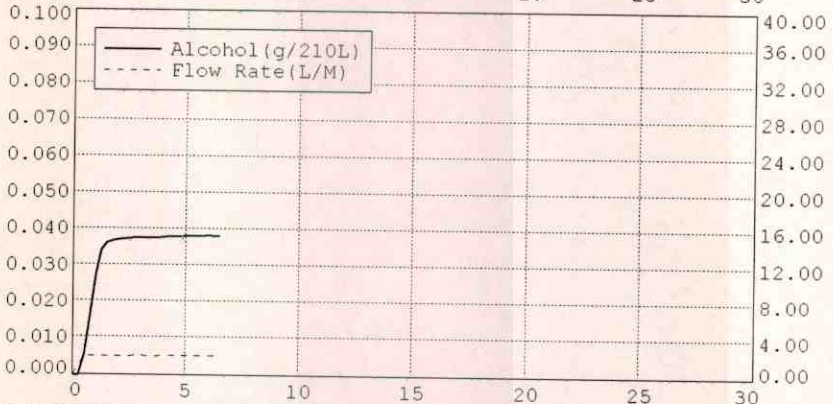
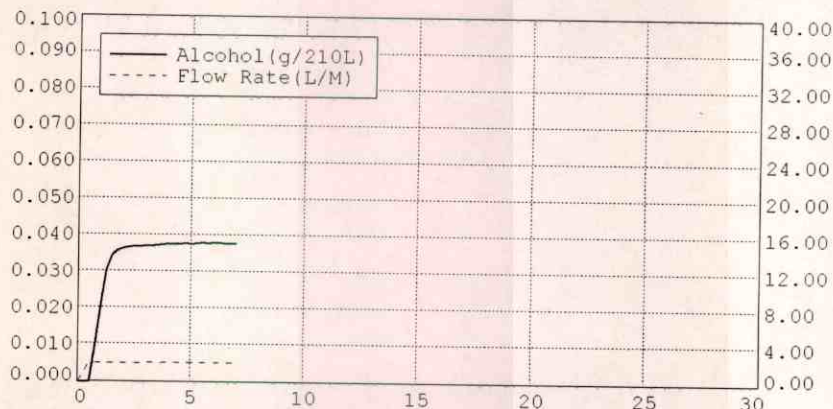
Date: 07/29/2021
 Time: 09:56:23

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 30.01: 0.040
 LOT #: AG111710
 EXPIRATION: 04/27/2023
 TANK PRESSURE: 1035 psi

BLANK TEST	0.000	09:57
INTERNAL STANDARD	VERIFIED	09:57
EXTERNAL STANDARD	0.039	09:58
BLANK TEST	0.000	09:58
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
EXTERNAL STANDARD	0.040	10:02
BLANK TEST	0.000	10:03

Average = 0.0398
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100357

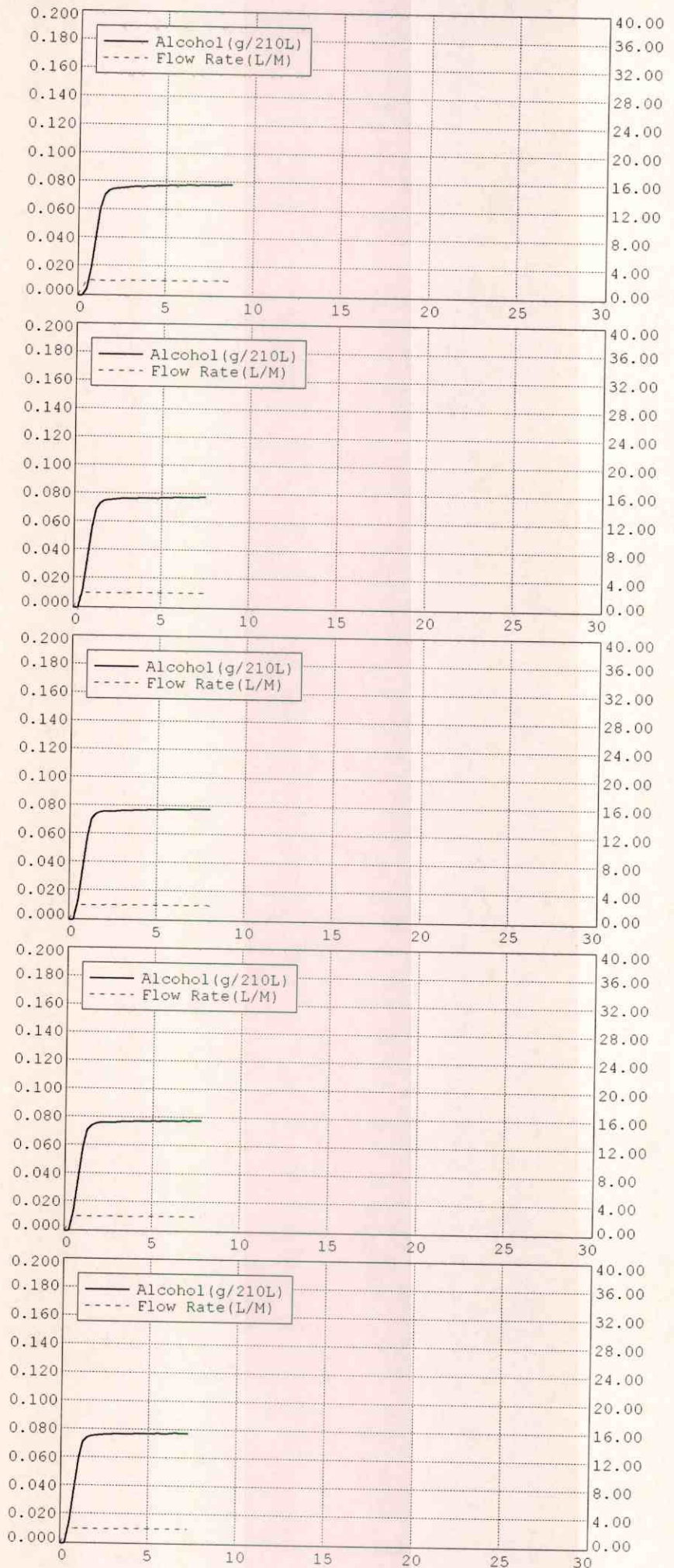
Date: 07/29/2021
 Time: 10:07:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 30.01: 0.080
 LOT #: AG018102
 EXPIRATION: 06/29/2022
 TANK PRESSURE: 1006 psi

BLANK TEST	0.000	10:08
INTERNAL STANDARD	VERIFIED	10:09
EXTERNAL STANDARD	0.079	10:09
BLANK TEST	0.000	10:10
EXTERNAL STANDARD	0.079	10:10
BLANK TEST	0.000	10:11
EXTERNAL STANDARD	0.079	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.079	10:12
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.079	10:13
BLANK TEST	0.000	10:14

Average = 0.0790
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100357

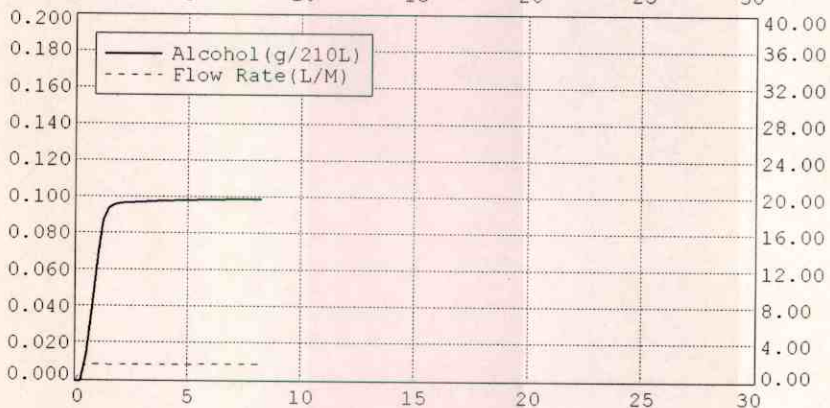
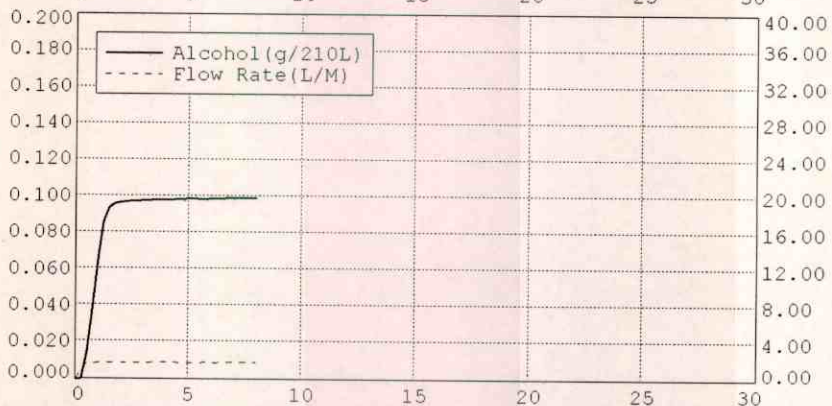
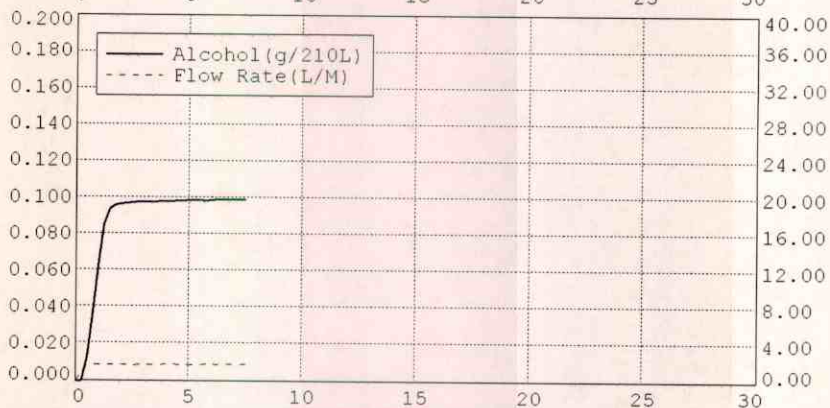
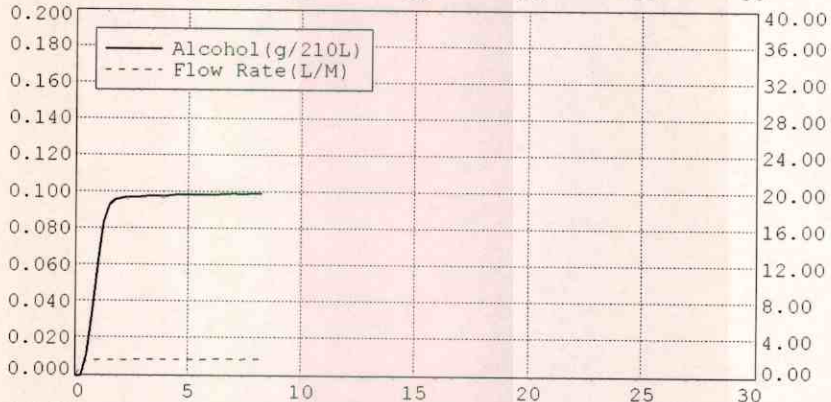
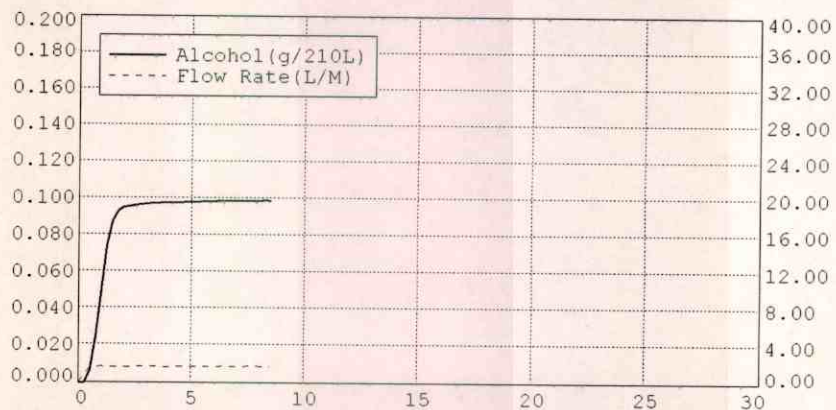
Date: 07/29/2021
 Time: 10:16:04

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 30.01: 0.100
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 253 psi

BLANK TEST	0.000	10:18
INTERNAL STANDARD	VERIFIED	10:18
EXTERNAL STANDARD	0.100	10:18
BLANK TEST	0.000	10:19
EXTERNAL STANDARD	0.100	10:19
BLANK TEST	0.000	10:20
EXTERNAL STANDARD	0.100	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.100	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.100	10:22
BLANK TEST	0.000	10:23

Average = 0.1000
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

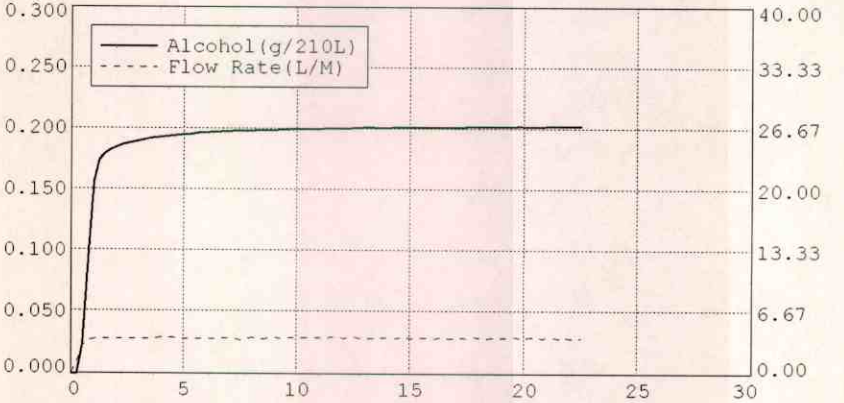
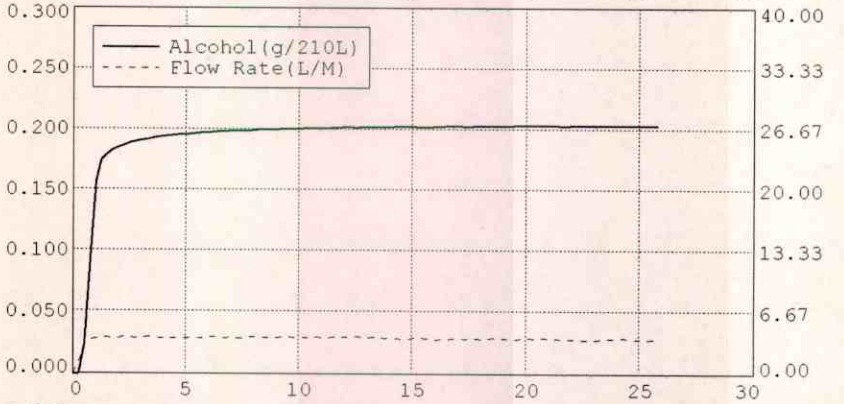
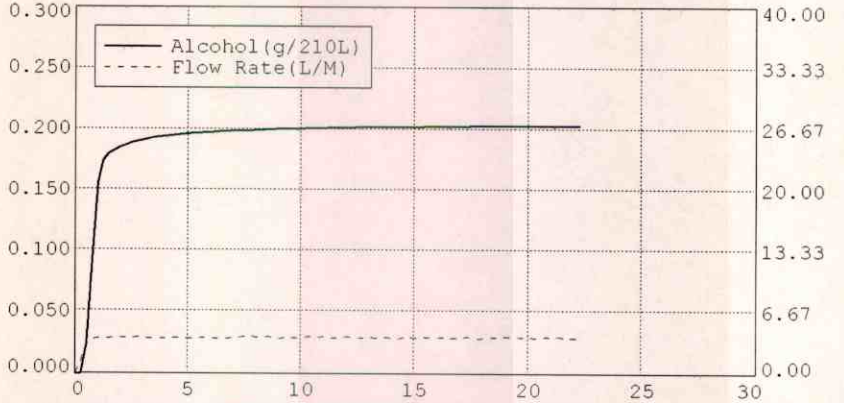
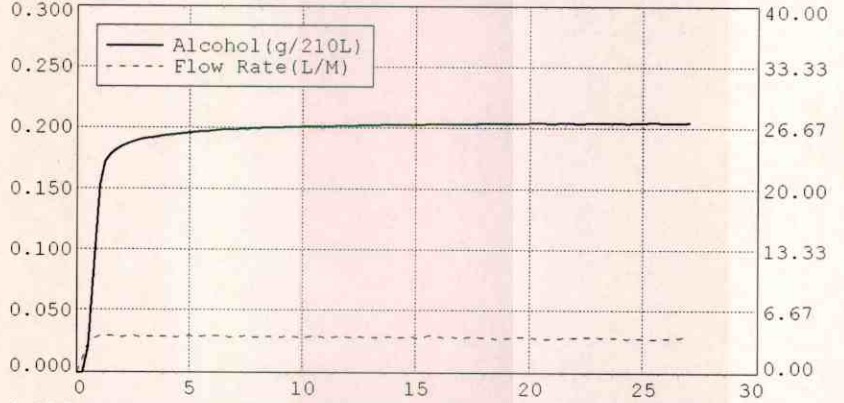
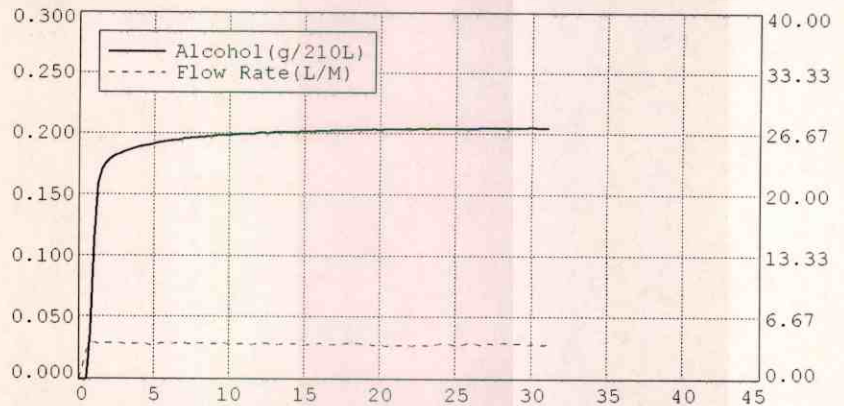
Alaska Department of Public Safety
 DATAMASTER dmt: 100357

Date: 07/29/2021
 Time: 10:57:04

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

BLANK TEST	0.000	11:05
INTERNAL STANDARD	VERIFIED	11:05
EXTERNAL STANDARD	0.205	11:06
BLANK TEST	0.000	11:07
EXTERNAL STANDARD	0.205	11:08
BLANK TEST	0.000	11:09
EXTERNAL STANDARD	0.203	11:09
BLANK TEST	0.000	11:10
EXTERNAL STANDARD	0.204	11:11
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.203	11:12
BLANK TEST	0.000	11:13

Average = 0.2040
 Std Dev = 0.0010



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100357

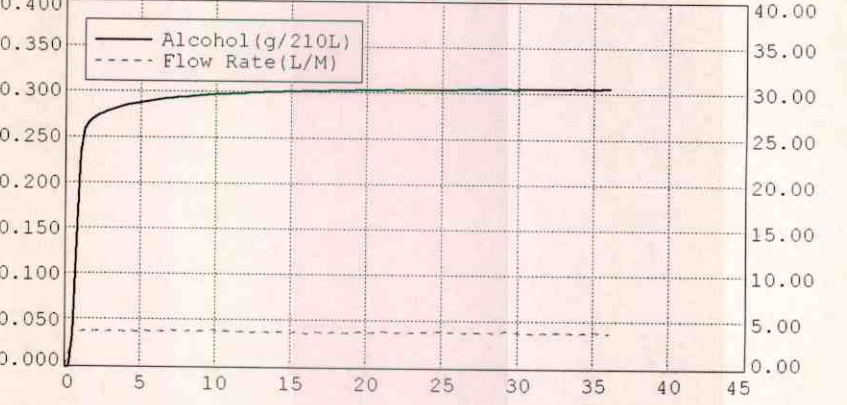
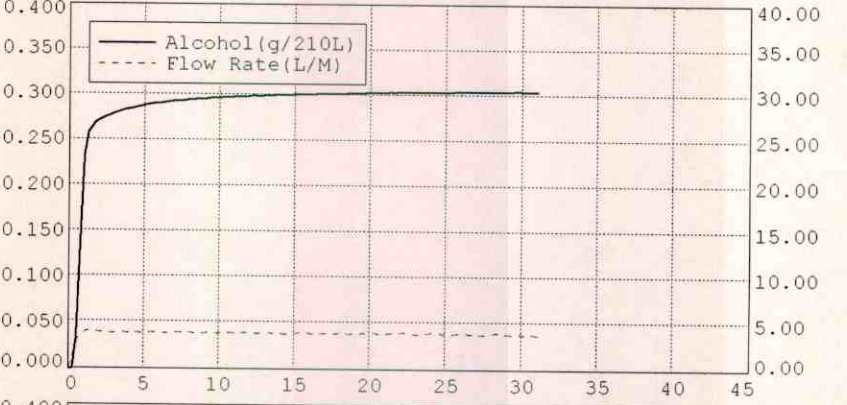
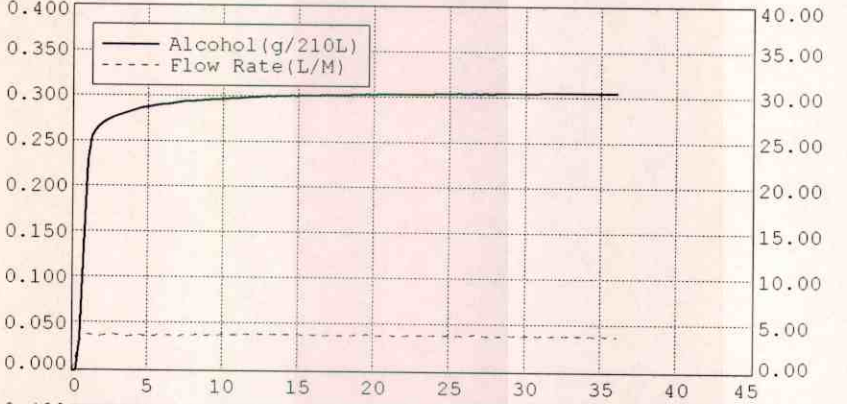
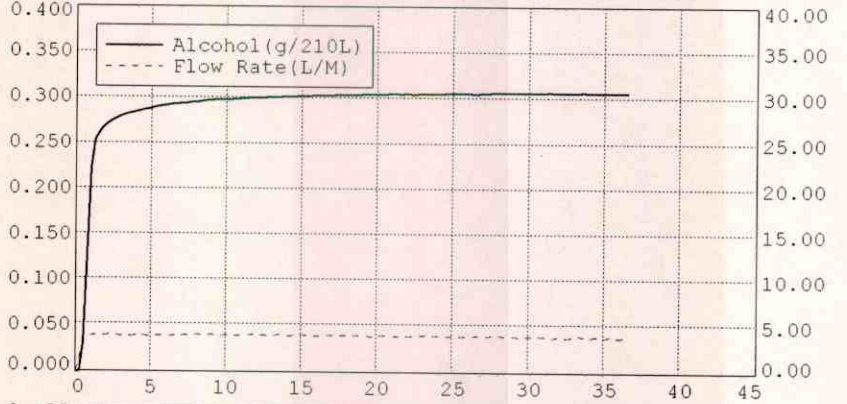
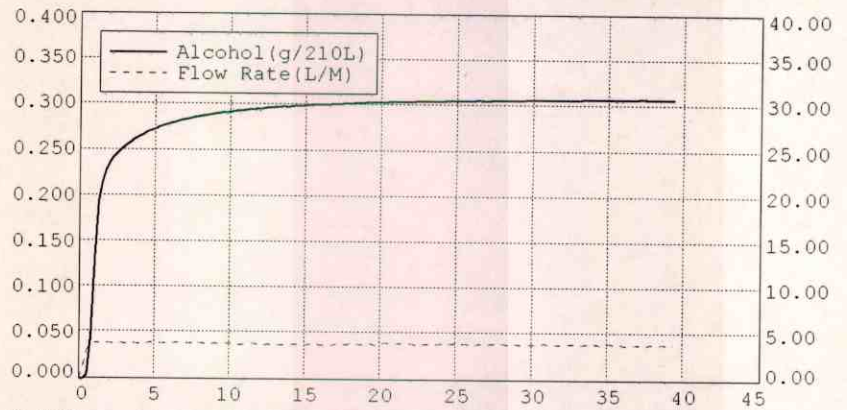
Date: 07/29/2021
 Time: 11:15:06

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	11:16
INTERNAL STANDARD	VERIFIED	11:16
EXTERNAL STANDARD	0.307	11:17
BLANK TEST	0.000	11:18
EXTERNAL STANDARD	0.306	11:18
BLANK TEST	0.000	11:20
EXTERNAL STANDARD	0.305	11:20
BLANK TEST	0.000	11:21
EXTERNAL STANDARD	0.304	11:22
BLANK TEST	0.000	11:23
EXTERNAL STANDARD	0.306	11:24
BLANK TEST	0.000	11:24

Average = 0.3056
 Std Dev = 0.0011



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 07/29/2021
Time: 11:33:41

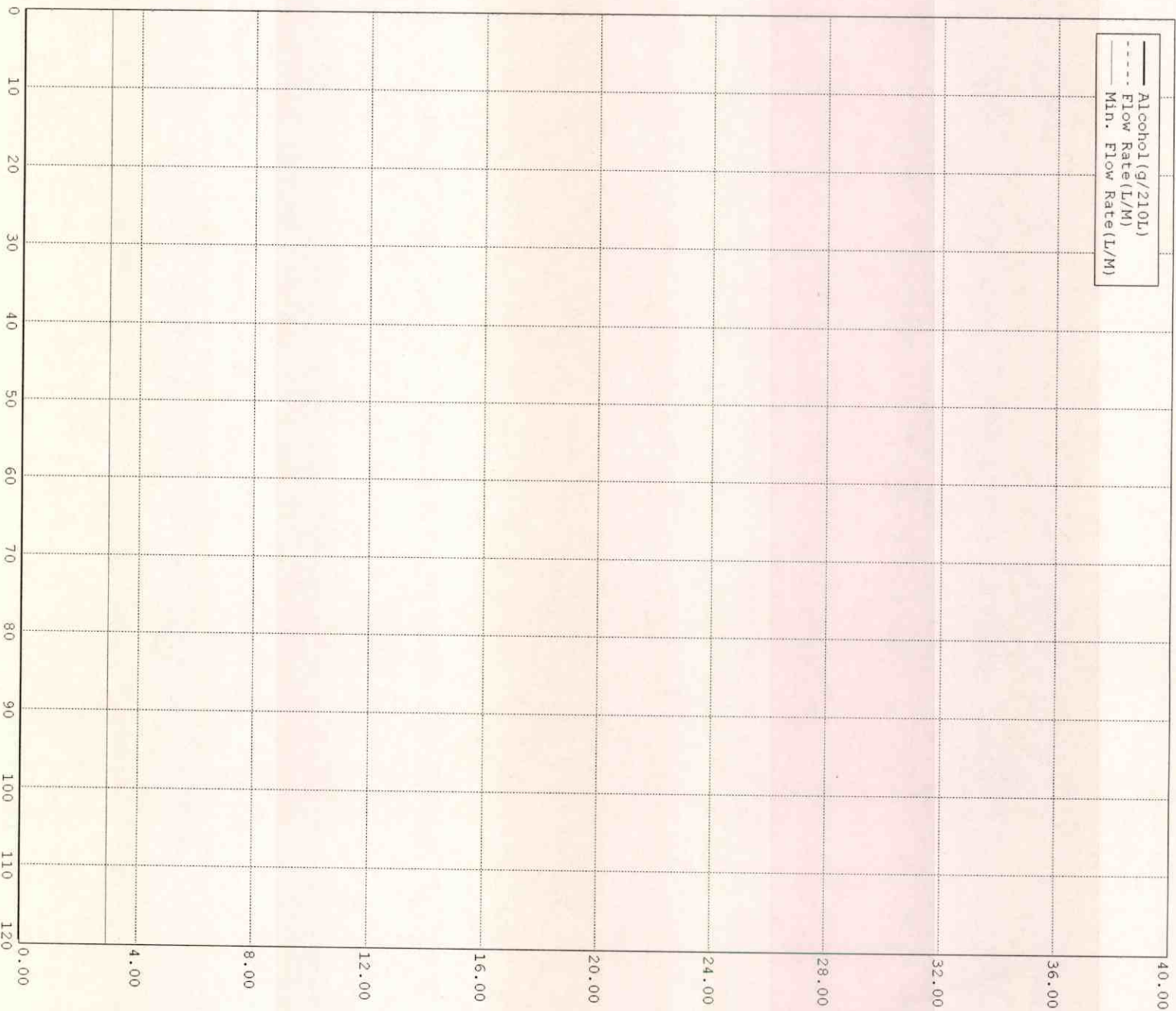
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.99: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	11:35
BLANK TEST	0.000	11:35
INTERNAL STANDARD	VERIFIED	11:35
EXTERNAL STANDARD	0.079	11:35
BLANK TEST	0.000	11:36
SUBJECT SAMPLE	INCOMPLETE	11:38



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 07/30/2021
Time: 11:00:45

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

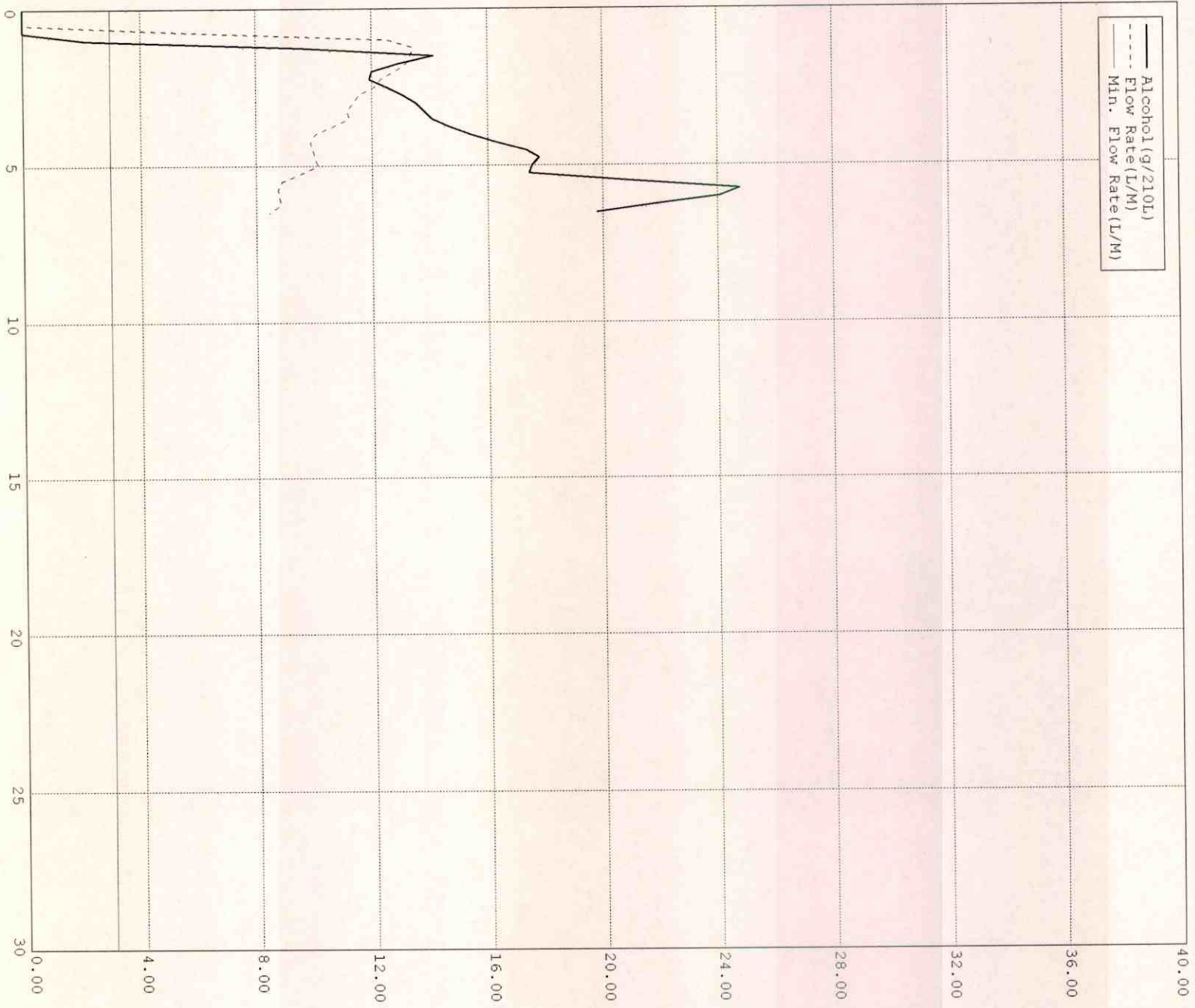
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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	0.079	11:02
EXTERNAL STANDARD	0.000	11:03
BLANK TEST	INVALID	11:03
SUBJECT SAMPLE	INVALID	11:03

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 07/30/2021
Time: 11:22:50

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

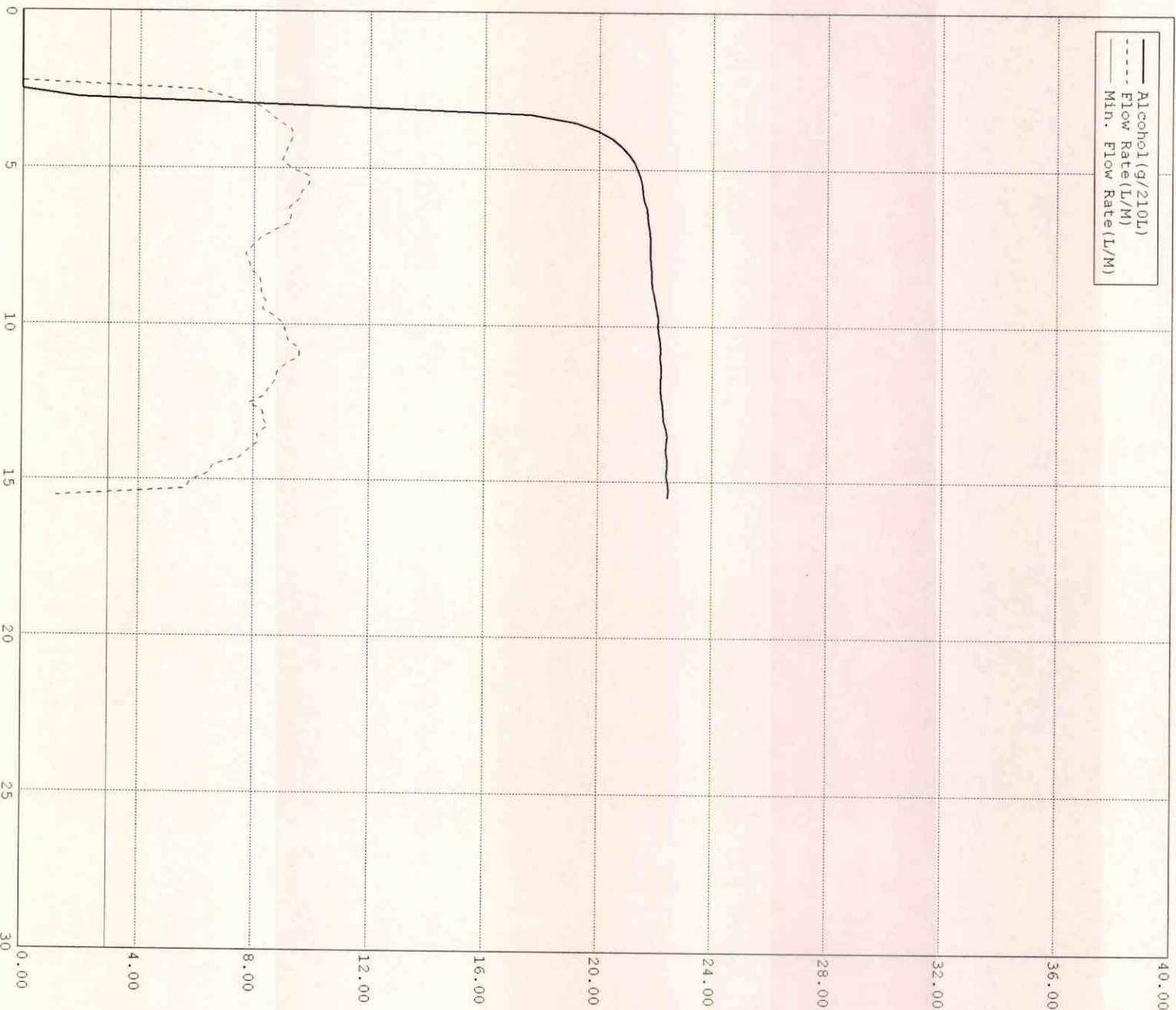
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.94: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 11:23
BLANK TEST 0.000 11:23
INTERNAL STANDARD VERIFIED 11:24
Xq = 0.086 (0.30%)
EXTERNAL STANDARD 0.079 11:24
X[1] = 0.0793 (-0.0001) (0.0031)
BLANK TEST 0.000 11:25
SUBJECT SAMPLE XXX 11:25
X[1] = 0.1129 (-0.0137) (0.0032)

Interference Detected

Filter 2 Avg: 0.0002
Filter 3 Avg: 0.0024
BMB 7/30/21

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

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

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

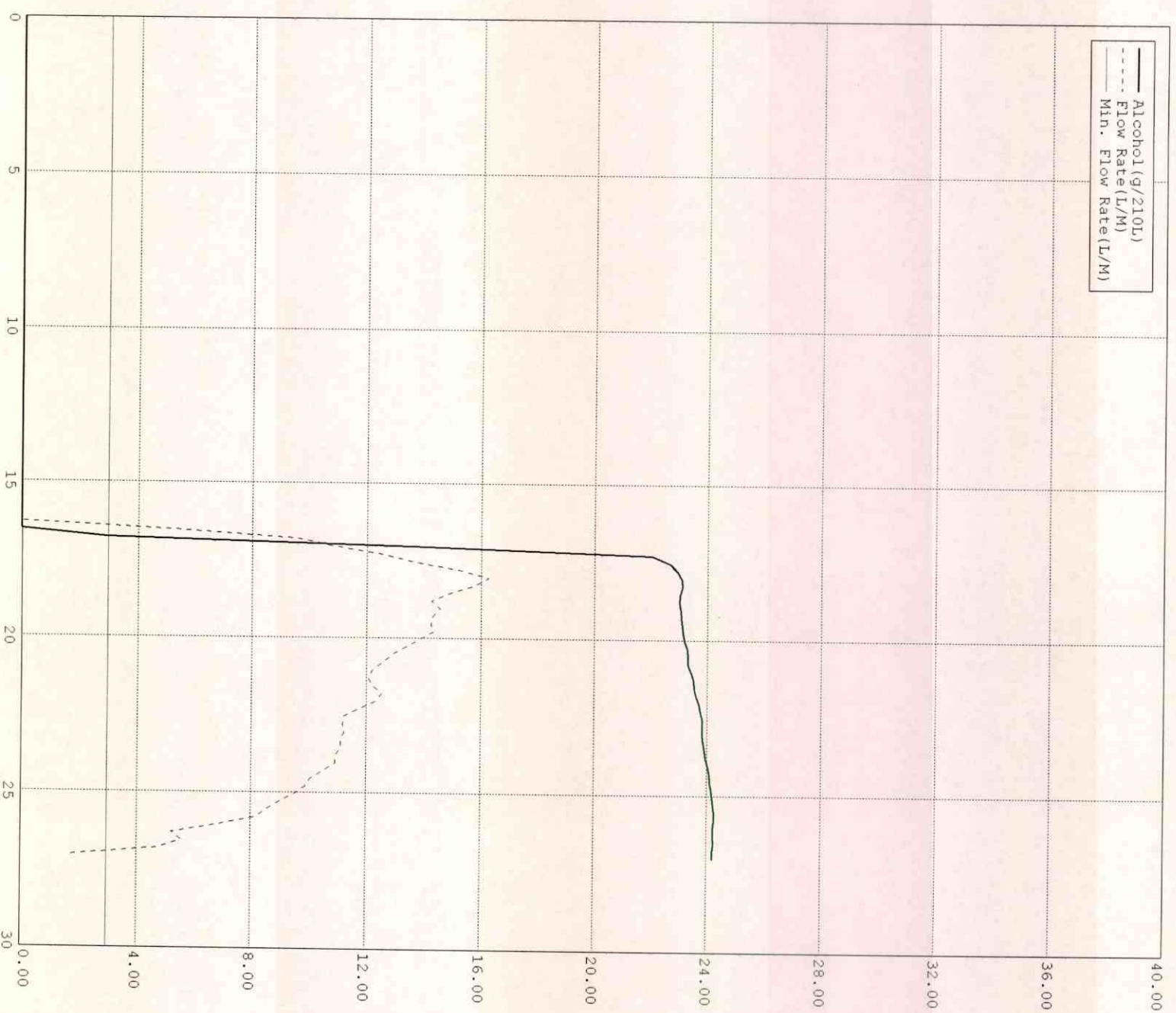
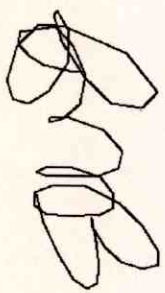
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK	PASSED	11:31
BLANK TEST	0.000	11:31
INTERNAL STANDARD	VERIFIED	11:31
Xg = 0.086 (0.20%)		
EXTERNAL STANDARD	0.079	11:31
X[1] = 0.0789 (0.0000)	(0.0023)	
BLANK TEST	0.000	11:32
SUBJECT SAMPLE	XXX	11:33
X[1] = 0.1213 (-0.0287)	(0.0018)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 07/30/2021
Time: 11:36:39

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

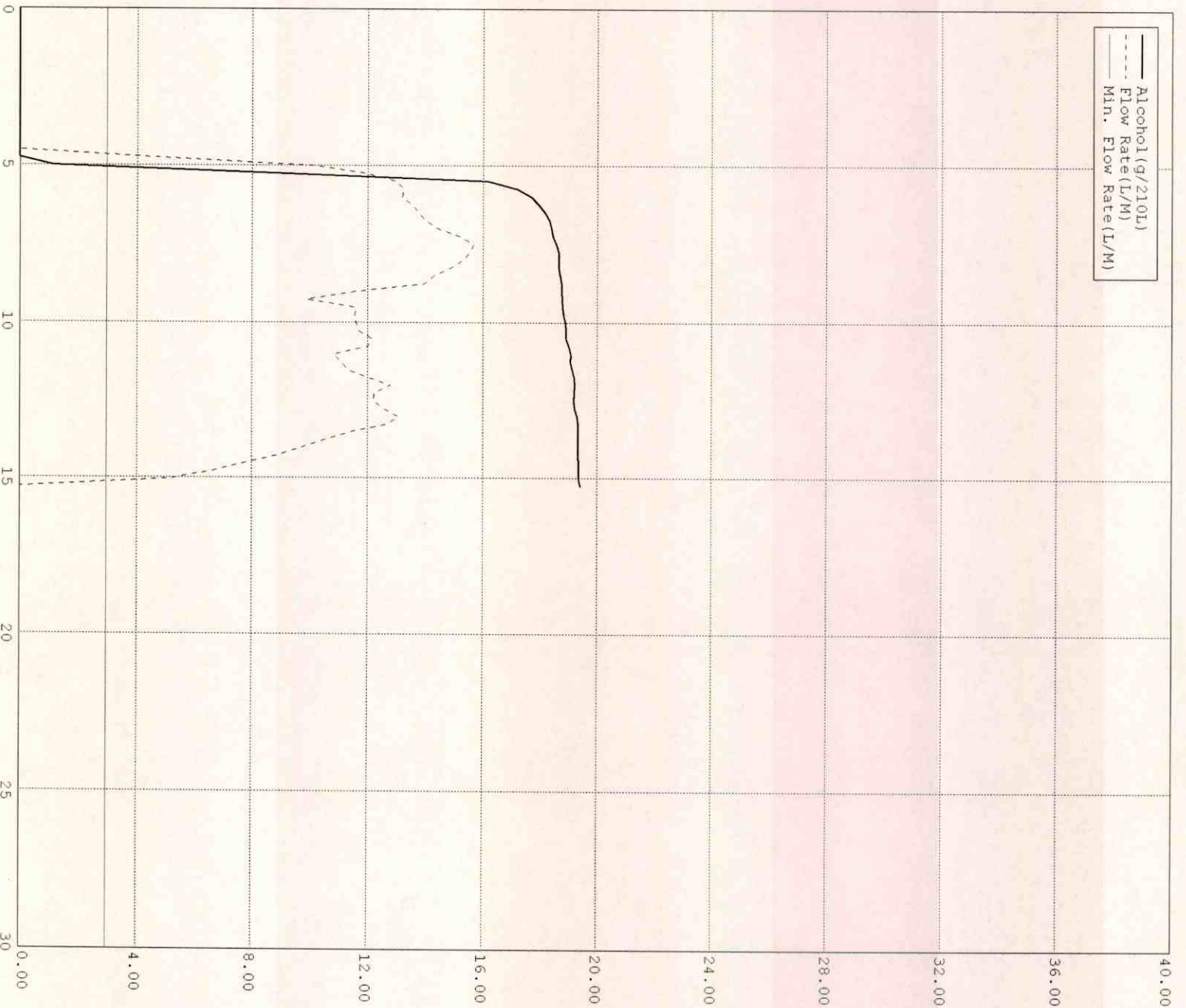
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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	11:37
BLANK TEST	0.000	11:38
INTERNAL STANDARD	VERIFIED	11:38
Xq = 0.087 (0.91%)		
EXTERNAL STANDARD	0.080	11:38
X[1] = 0.0797 (0.0008)	(0.0026)	
BLANK TEST	0.000	11:39
SUBJECT SAMPLE (Vol=2.09L)	0.097	11:39
X[1] = 0.0975 (0.0002)	(0.0011)	
BLANK TEST	0.000	11:40
EXTERNAL STANDARD	0.079	11:41
X[1] = 0.0788 (0.0002)	(0.0017)	
BLANK TEST	0.000	11:41

BRB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 07/30/2021
Time: 11:12:09

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

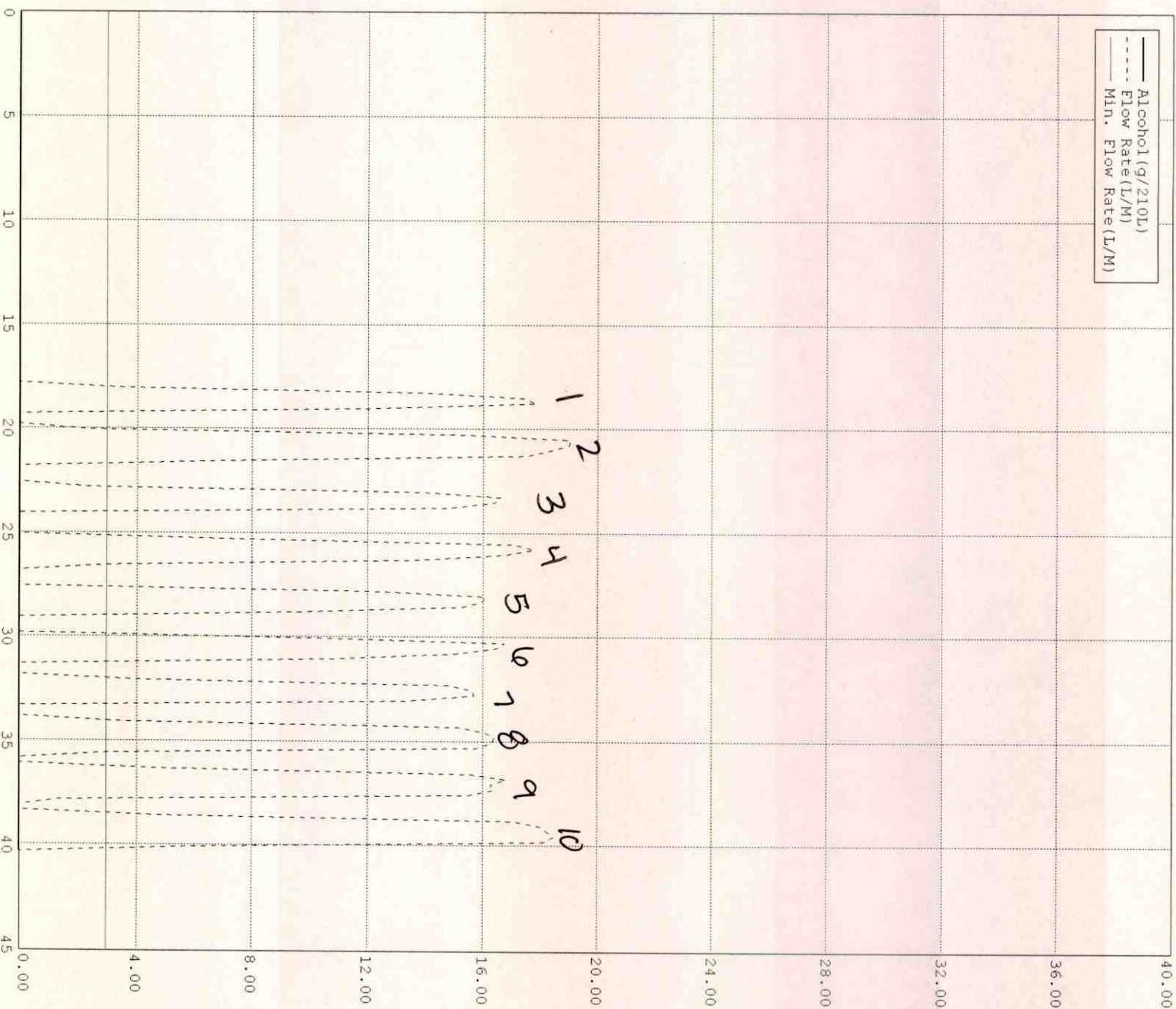
DEPT/AGENCY:
EXCEEDED ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	11:13
BLANK TEST	0.000	11:13
INTERNAL STANDARD	0.079	11:13
EXTERNAL STANDARD	0.079	11:13
BLANK TEST	0.000	11:14
SUBJECT SAMPLE	XXX	11:15

Maximum Attempts Exceeded

BB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 07/30/2021
Time: 11:05:15

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

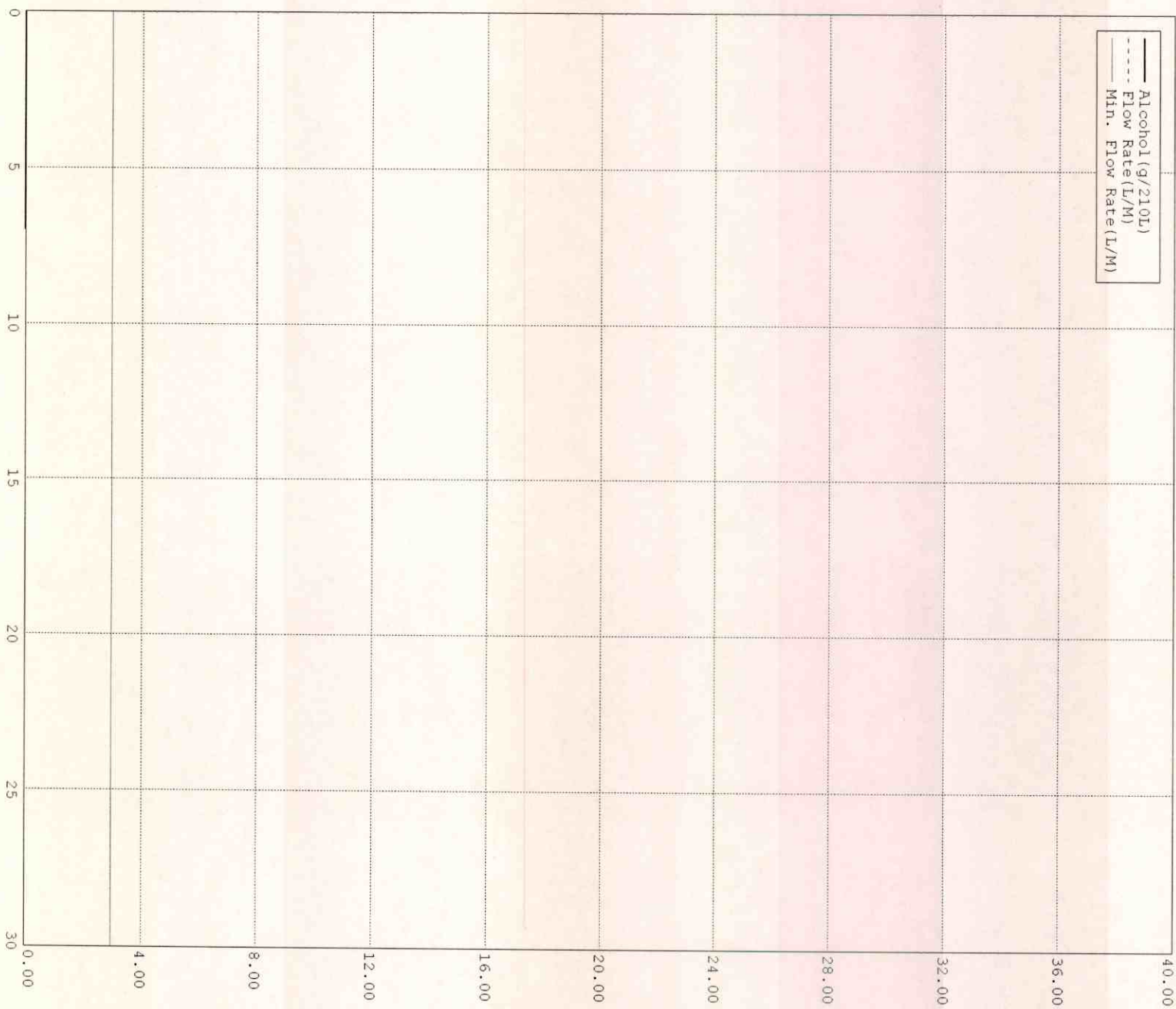
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	11:06
BLANK TEST	0.000	11:06
INTERNAL STANDARD	VERIFIED	11:06
EXTERNAL STANDARD	0.079	11:07
BLANK TEST	0.000	11:08

RFI DETECTED

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 07/30/2021
Time: 12:15:19

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	12:17
BLANK TEST	0.000	12:17
INTERNAL STANDARD	VERIFIED	12:17
EXTERNAL STANDARD	0.079	12:17
BLANK TEST	0.000	12:18
BLANK TEST	0.000	12:18
SUBJECT SAMPLE (Vol=2.51L)	0.000	12:19
BLANK TEST	0.000	12:19
EXTERNAL STANDARD	0.079	12:20
BLANK TEST	0.000	12:21

BMP

