

# 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 100379 Analyst Brandi Barnett Start Date 6/18/21

- 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 10/9/21
- 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 924701 Exp 9/4/21
- v. 0.200g/210L Mnf Guth Lot 19200 Exp 8/6/21  
Simulator S/N DR6267 Date Calibrated 11/17/20
- vi. 0.300g/210L Mnf Guth Lot 19330 Exp 11/13/21  
Simulator S/N DR4177 Date Calibrated 11/17/20

### Functional Tests (attached)

- Incomplete  Invalid  
 Interference

- i. Acetone - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21  
Simulator S/N DR4178 Date Calibrated 11/18/20
- ii. Isopropanol - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21  
Simulator S/N DR 7176 Date Calibrated 11/18/20
- iii. Negative Control - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21  
Simulator S/N DR4163 Date Calibrated 11/17/20

- 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 6/23/21 6/23/21  
8/8 6/23/21

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100379  
-----

Date: 06/18/2021  
Time: 10:33:23

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 = 44.8°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.60 V PASSED  
(0.96 V - 2.24 V)  
Cooler Voltage = 1.58 V PASSED  
(0.95 V - 2.21 V)  
Bias Voltage = 80 V PASSED  
(48 V - 112 V)  
Chopper Freq = 517 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.428 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 = 0.096 0.73% (0.00% - 4.00%) PASSED

Technician Screen

-----  
DATAMASTER dmt: 100379  
-----

Date: 06/18/2021  
Time: 10:53 AM

Temperatures (°C)

Sample Cell: 48.9°C  
Breath Tube: 45.1°C

Current Barometer 29.8 in  
Volume (Ltr) 1.47

Settings

Lamp: 1.57 V  
Bias: 80 V  
Cooler: 1.50 V  
Chopper: 517 Hz

Voltages (V)

Flow: 1.06 V  
Detector: -0.007 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100379  
-----

Date: 05/27/2021  
Time: 08:57:25

OPERATOR NAME:  
ST LOUIS INTOX A TECH  
CERTIFICATE #: OU812

Ca	=	0.1000			
CAL	=	1.004933	0.800	<=	CAL < 1.200
b1	=	0.0002	0.0000	<=	b1 < 0.0040
b2	=	0.0013	0.0010	<=	b2 < 0.0100
b3	=	0.0002	0.0000	<=	b3 < 0.0040
Xq	=	0.0958	0.0500	<=	Xq < 0.2000
a21	=	1.145218	1.050	<=	a21 < 1.300
a31	=	0.439367	0.300	<=	a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100379

Date: 06/18/2021  
Time: 10:54:06

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

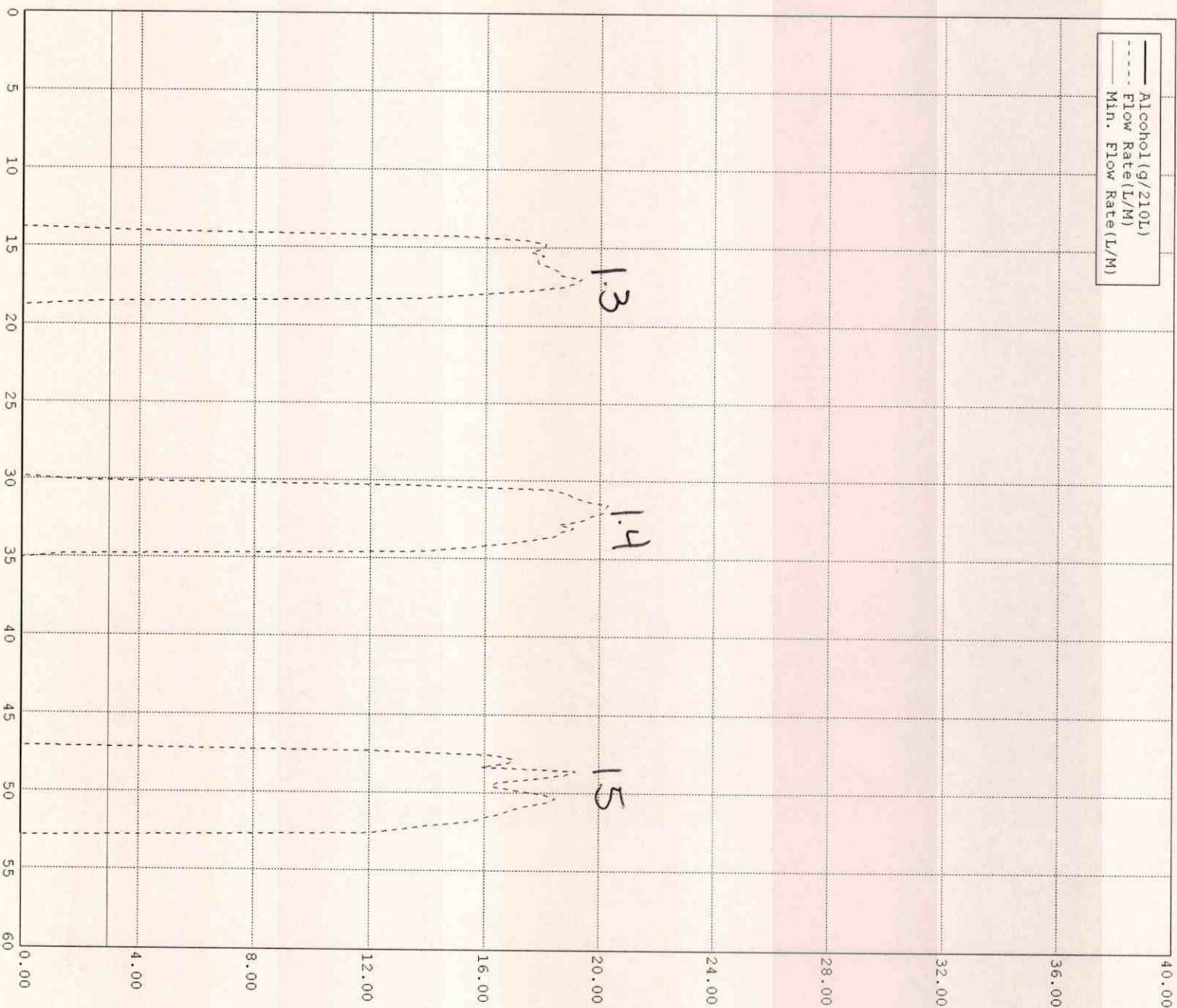
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.78: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	10:56
INTERNAL STANDARD	0.000	10:56
EXTERNAL STANDARD	0.079	10:57
INTERNAL STANDARD	0.000	10:57
EXTERNAL STANDARD	0.000	10:58
SUBJECT SAMPLE (Vol=1.50L)	0.000	10:59
INTERNAL STANDARD	0.000	11:00
EXTERNAL STANDARD	0.077	11:00
INTERNAL STANDARD	0.000	11:01
EXTERNAL STANDARD	0.000	11:01

*BBB*



LINEARITY CHECK

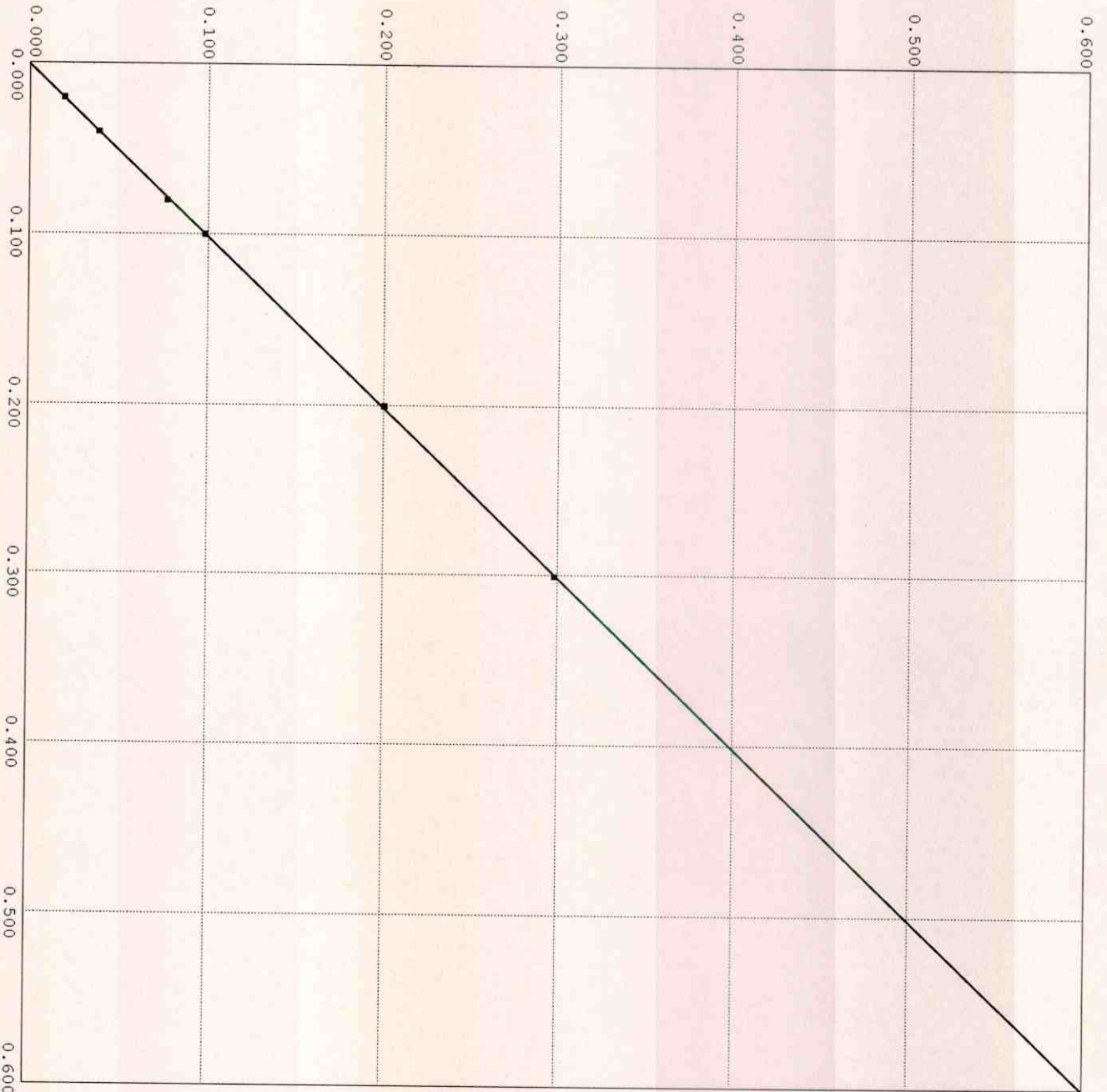
Alaska Department of Public Safety  
DATAMASTER dmt: 100379

Date: 06/18/2021  
Time: 11:04:46

SUPERVISOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0394	0.0005
0.080	0.0780	0.0000
0.100	0.0992	0.0004
0.200	0.2012	0.0004
0.300	0.2988	0.0004

SLOPE = 1.000618  
R<sup>2</sup> = 0.999896



BB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100379

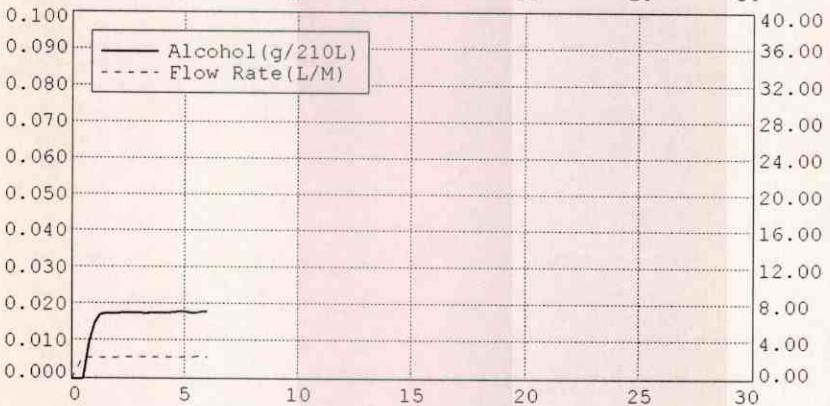
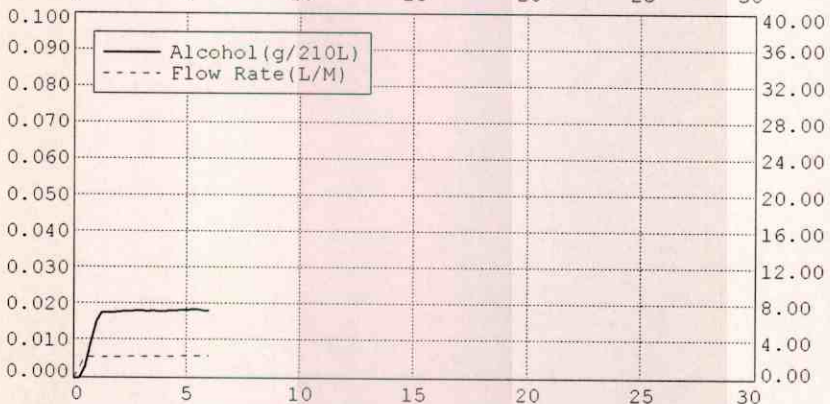
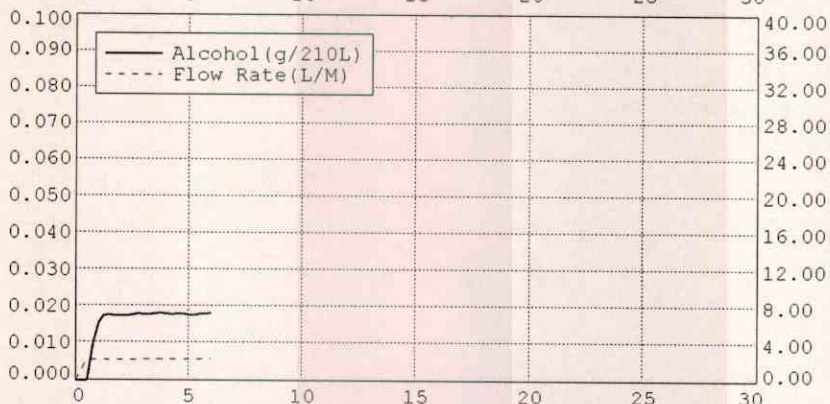
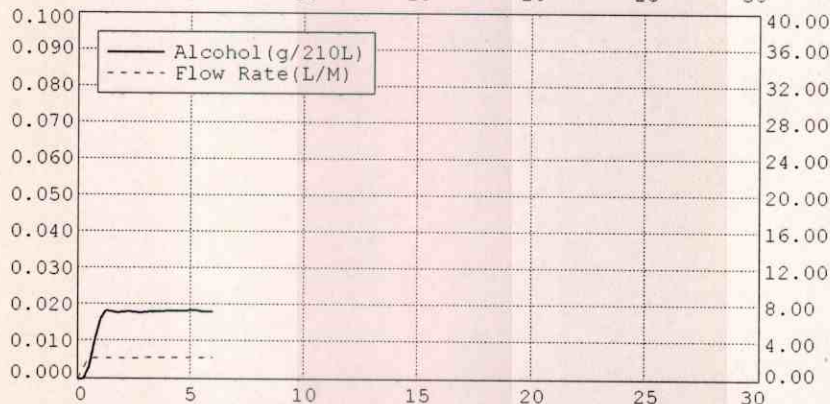
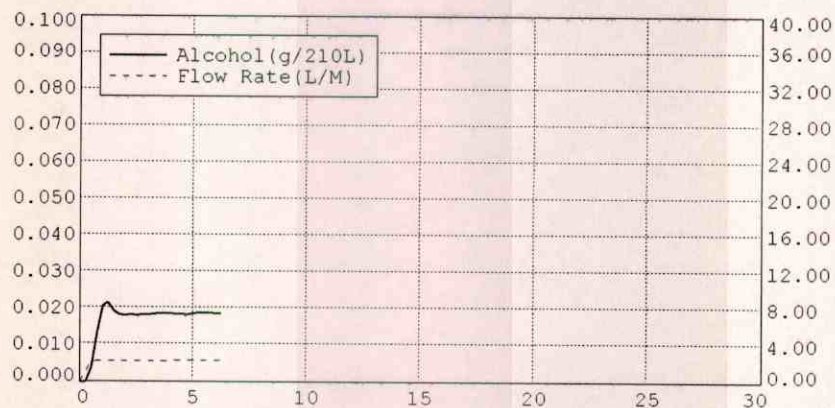
Date: 06/18/2021  
 Time: 11:04:48

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.77: 0.020  
 LOT #: AG928203  
 EXPIRATION: 10/09/2021  
 TANK PRESSURE: 389 psi

BLANK TEST	0.000	11:26
INTERNAL STANDARD	VERIFIED	11:26
EXTERNAL STANDARD	0.020	11:26
BLANK TEST	0.000	11:27
EXTERNAL STANDARD	0.020	11:27
BLANK TEST	0.000	11:28
EXTERNAL STANDARD	0.020	11:28
BLANK TEST	0.000	11:29
EXTERNAL STANDARD	0.020	11:29
BLANK TEST	0.000	11:30
EXTERNAL STANDARD	0.020	11:30
BLANK TEST	0.000	11:31

Average = 0.0200  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100379

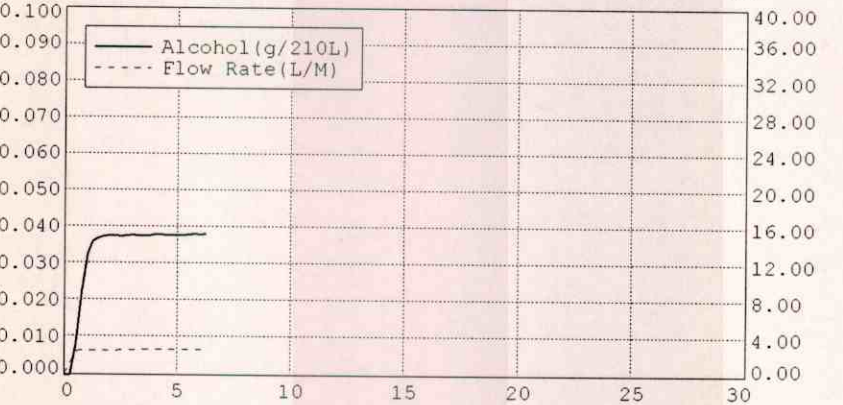
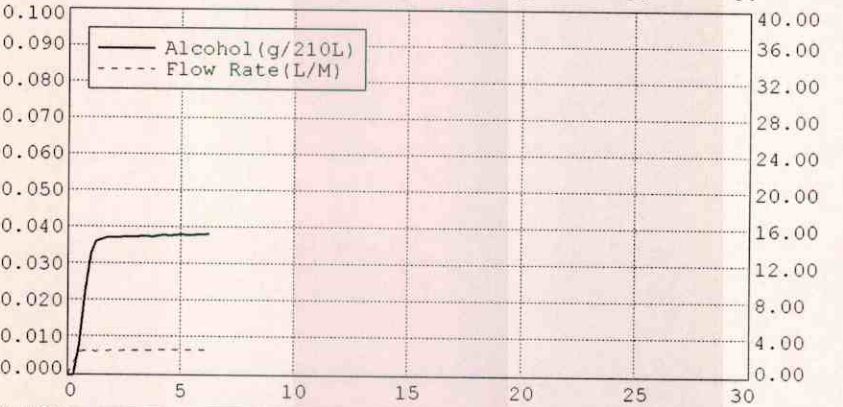
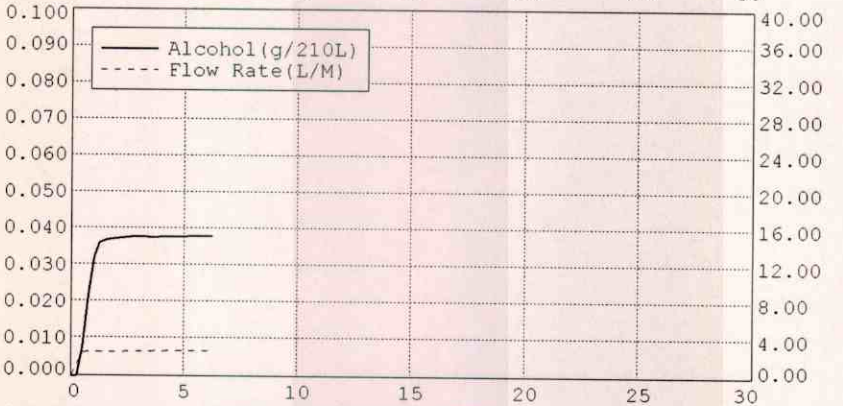
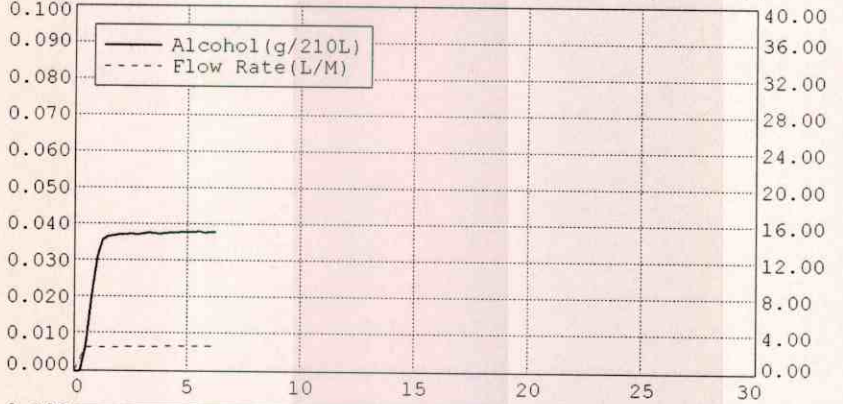
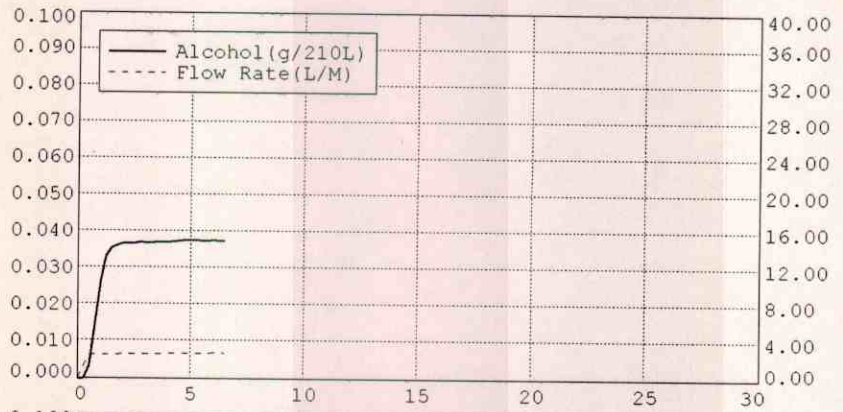
Date: 06/18/2021  
 Time: 11:37:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.77: 0.040  
 LOT #: AG111710  
 EXPIRATION: 04/27/2023  
 TANK PRESSURE: 1091 psi

BLANK TEST	0.000	11:39
INTERNAL STANDARD	VERIFIED	11:39
EXTERNAL STANDARD	0.039	11:39
BLANK TEST	0.000	11:40
EXTERNAL STANDARD	0.040	11:40
BLANK TEST	0.000	11:41
EXTERNAL STANDARD	0.040	11:41
BLANK TEST	0.000	11:42
EXTERNAL STANDARD	0.039	11:42
BLANK TEST	0.000	11:43
EXTERNAL STANDARD	0.039	11:43
BLANK TEST	0.000	11:44

Average = 0.0394  
 Std Dev = 0.0005





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100379

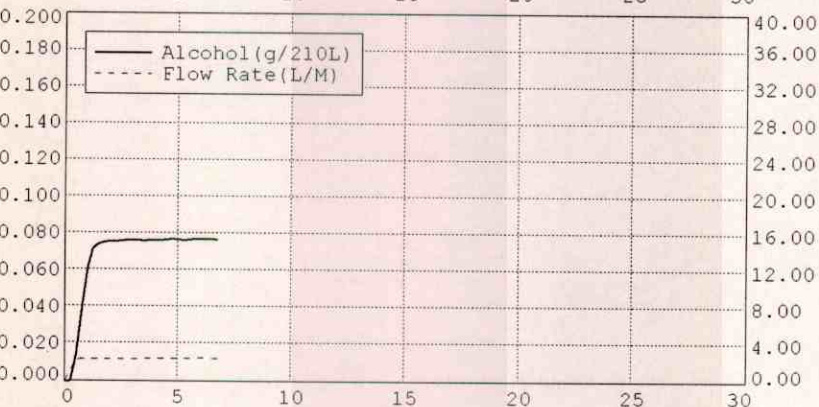
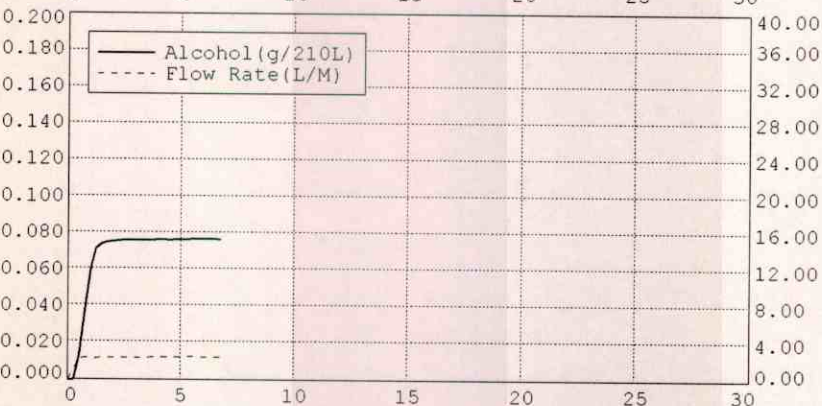
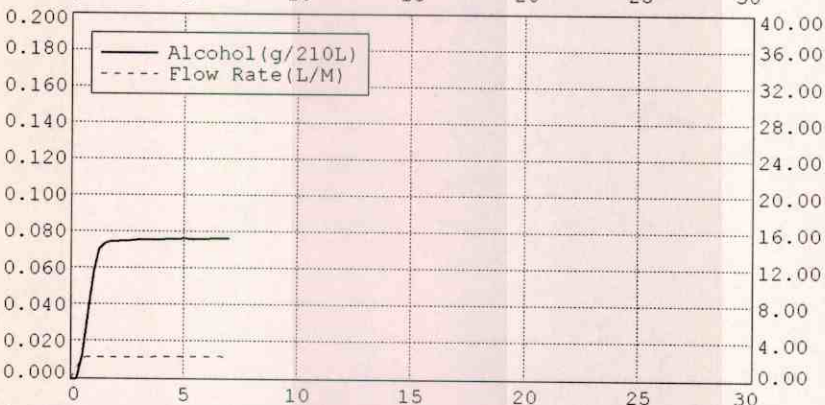
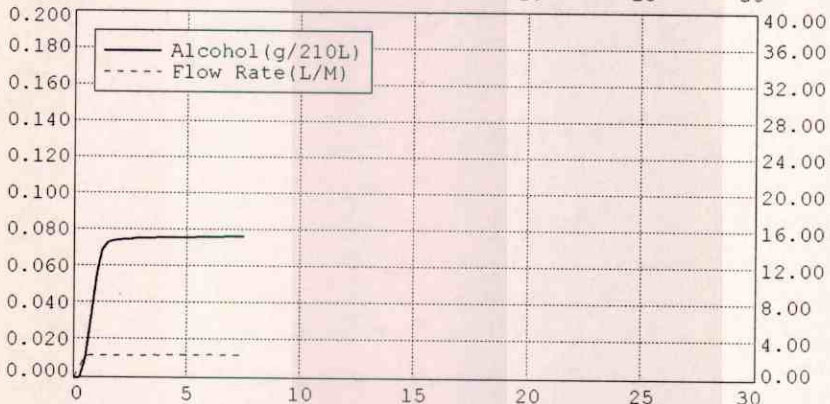
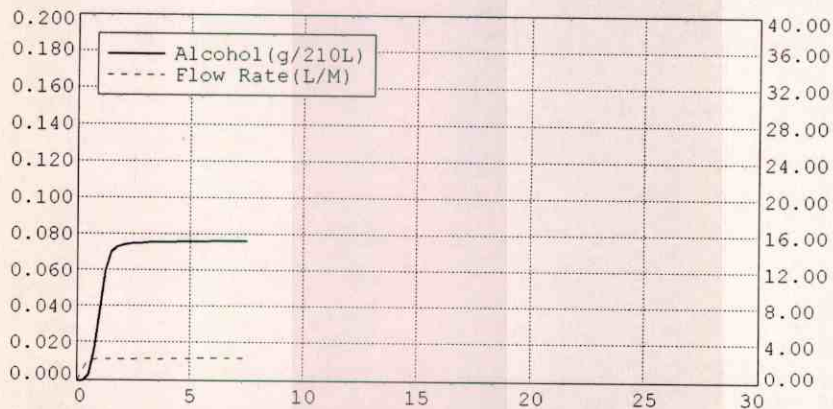
Date: 06/18/2021  
 Time: 12:42:24

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.76: 0.080  
 LOT #: AG018102  
 EXPIRATION: 06/29/2022  
 TANK PRESSURE: 530 psi

BLANK TEST	0.000	12:43
INTERNAL STANDARD	VERIFIED	12:43
EXTERNAL STANDARD	0.078	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.078	12:44
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.078	12:46
BLANK TEST	0.000	12:46
EXTERNAL STANDARD	0.078	12:47
BLANK TEST	0.000	12:48
EXTERNAL STANDARD	0.078	12:48
BLANK TEST	0.000	12:49

Average = 0.0780  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100379

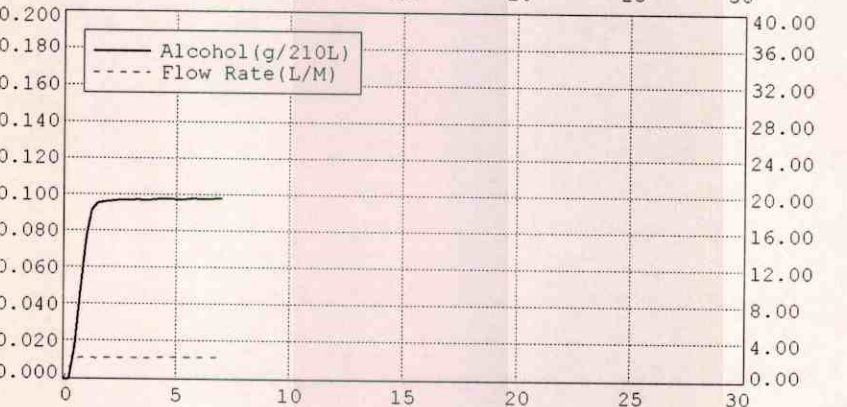
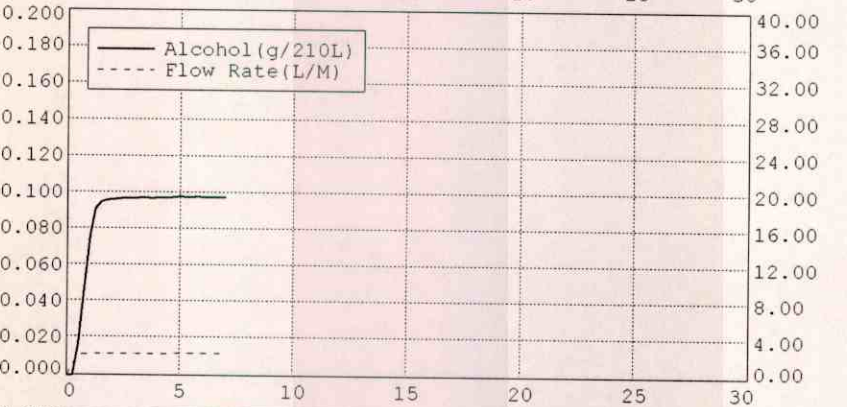
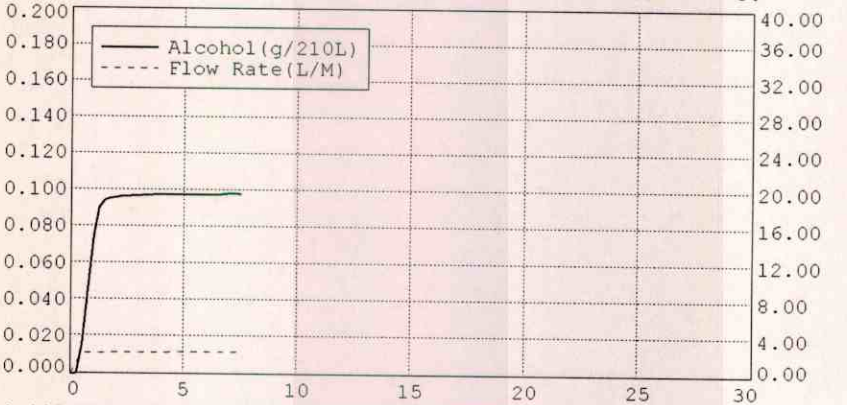
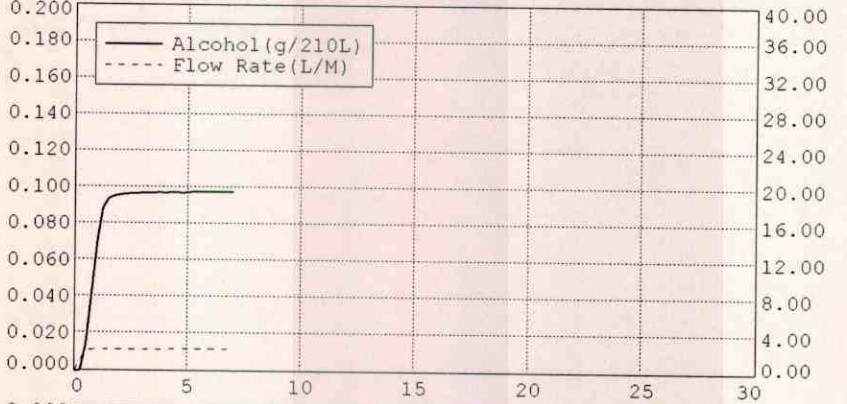
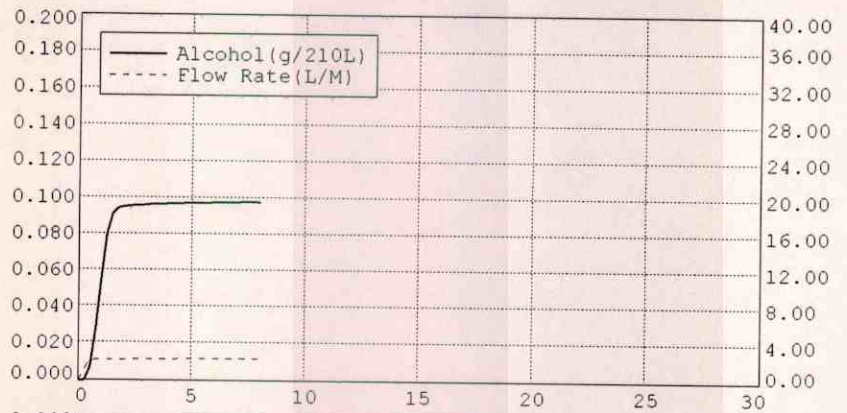
Date: 06/18/2021  
 Time: 12:58:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.77: 0.100  
 LOT #: AG924701  
 EXPIRATION: 09/04/2021  
 TANK PRESSURE: 410 psi

BLANK TEST	0.000	12:59
INTERNAL STANDARD	VERIFIED	12:59
EXTERNAL STANDARD	0.099	13:00
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.099	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.099	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.099	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.100	13:04
BLANK TEST	0.000	13:05

Average = 0.0992  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

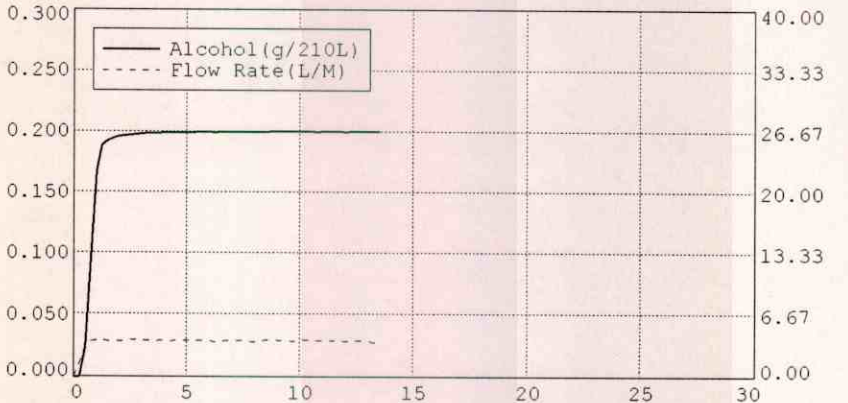
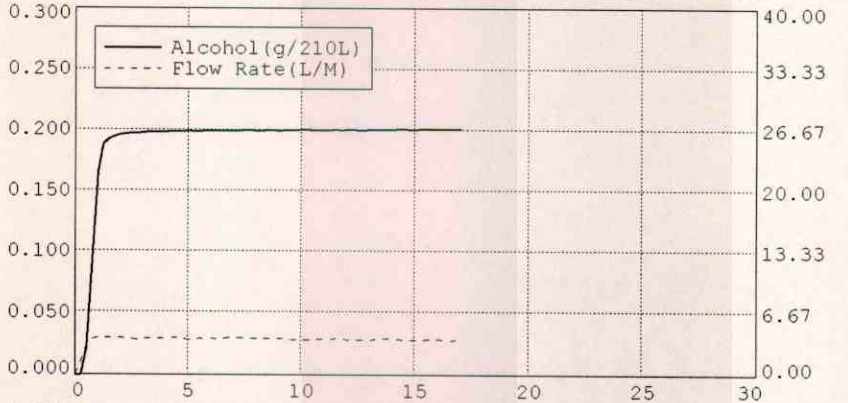
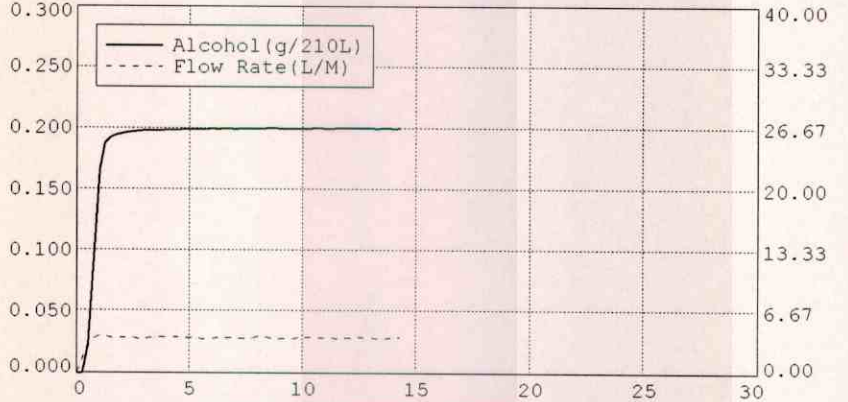
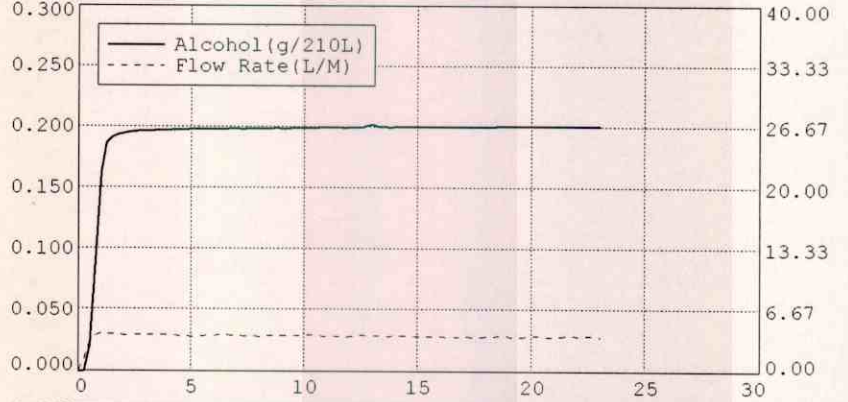
Alaska Department of Public Safety  
 DATAMASTER dmt: 100379

Date: 06/18/2021  
 Time: 13:11:21

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

BLANK TEST	0.000	13:13
INTERNAL STANDARD	VERIFIED	13:14
EXTERNAL STANDARD	0.201	13:14
BLANK TEST	0.000	13:15
EXTERNAL STANDARD	0.202	13:16
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.201	13:17
BLANK TEST	0.000	13:18
EXTERNAL STANDARD	0.201	13:18
BLANK TEST	0.000	13:19
EXTERNAL STANDARD	0.201	13:19
BLANK TEST	0.000	13:20

Average = 0.2012  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100379

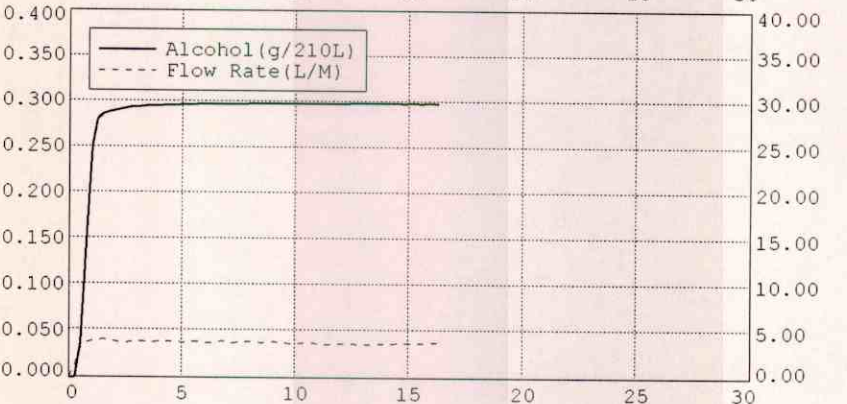
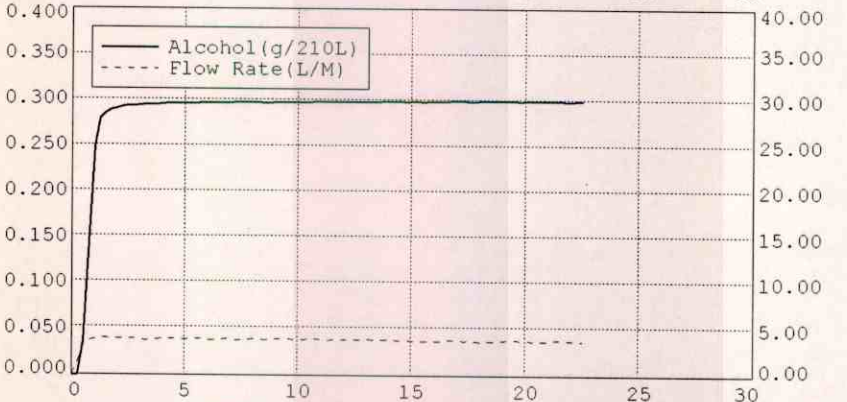
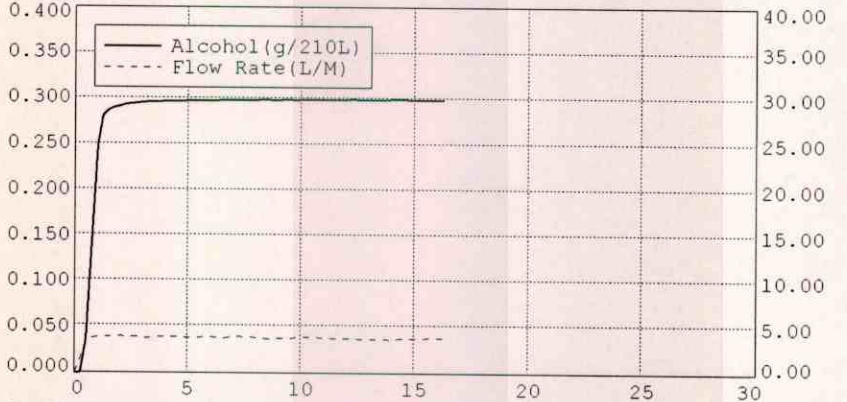
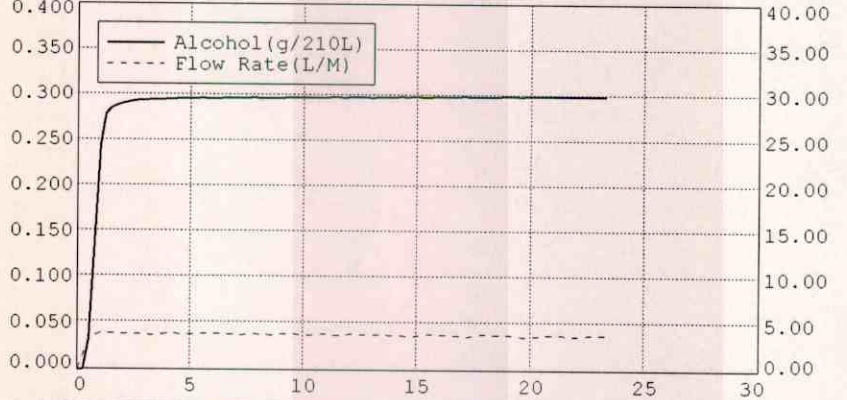
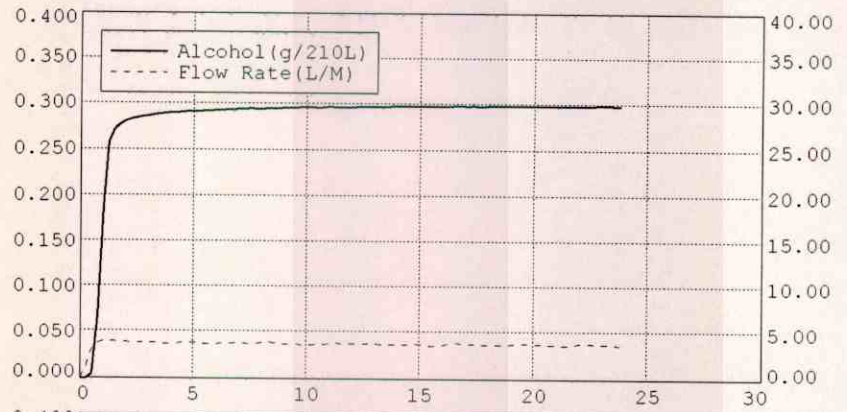
Date: 06/18/2021  
 Time: 13:25:39

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:30
INTERNAL STANDARD	VERIFIED	13:30
EXTERNAL STANDARD	0.299	13:31
BLANK TEST	0.000	13:32
EXTERNAL STANDARD	0.299	13:32
BLANK TEST	0.000	13:33
EXTERNAL STANDARD	0.299	13:34
BLANK TEST	0.000	13:35
EXTERNAL STANDARD	0.299	13:35
BLANK TEST	0.000	13:36
EXTERNAL STANDARD	0.298	13:36
BLANK TEST	0.000	13:37

Average = 0.2988  
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100379

Date: 06/18/2021  
Time: 13:42:46

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

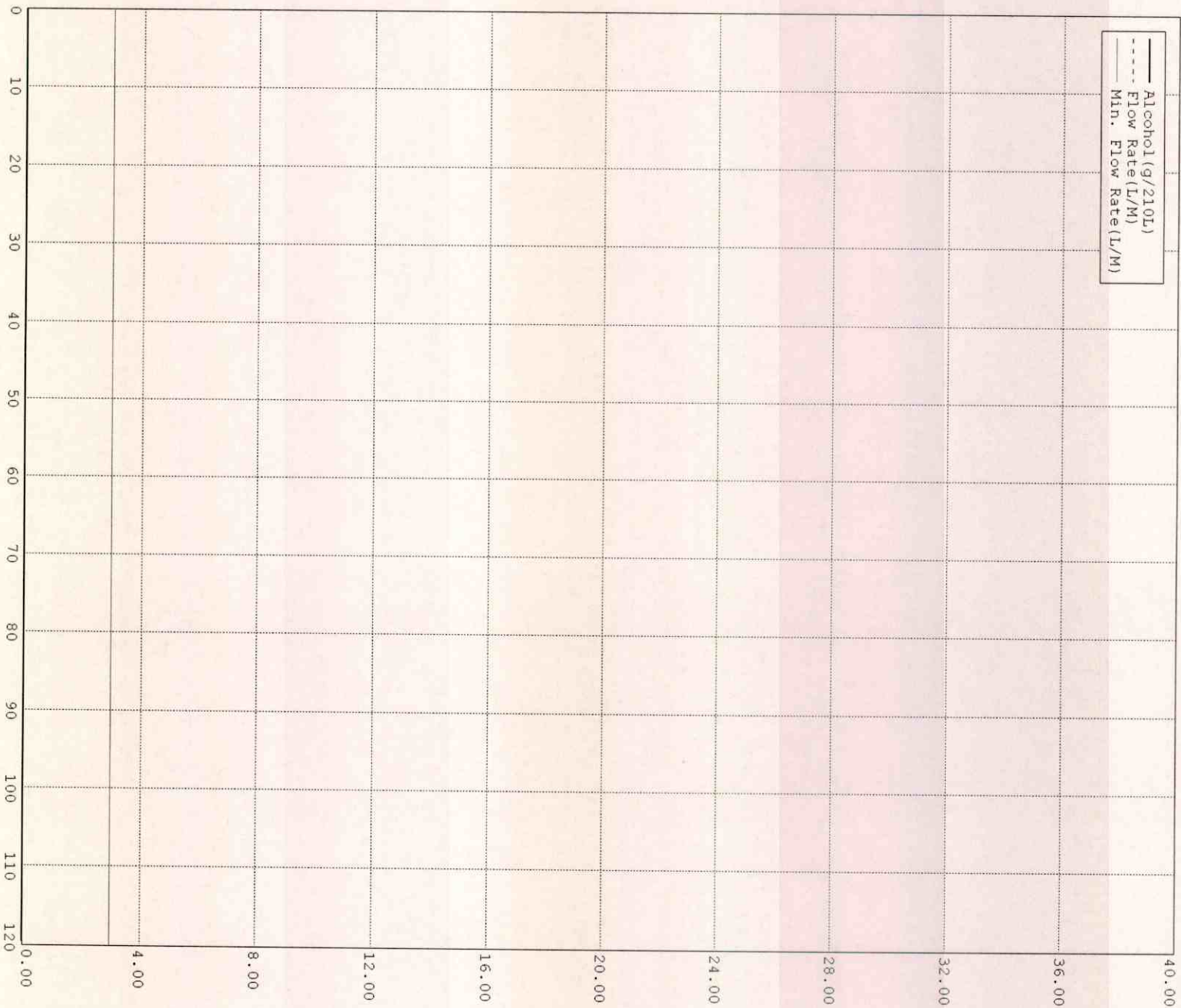
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.77: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	13:43
BLANK TEST	0.000	13:43
INTERNAL STANDARD	VERIFIED	13:44
EXTERNAL STANDARD	0.077	13:44
BLANK TEST	0.000	13:45
SUBJECT SAMPLE	INCOMPLETE	13:47

*BRMB*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100379

Date: 06/18/2021  
Time: 13:49:39

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

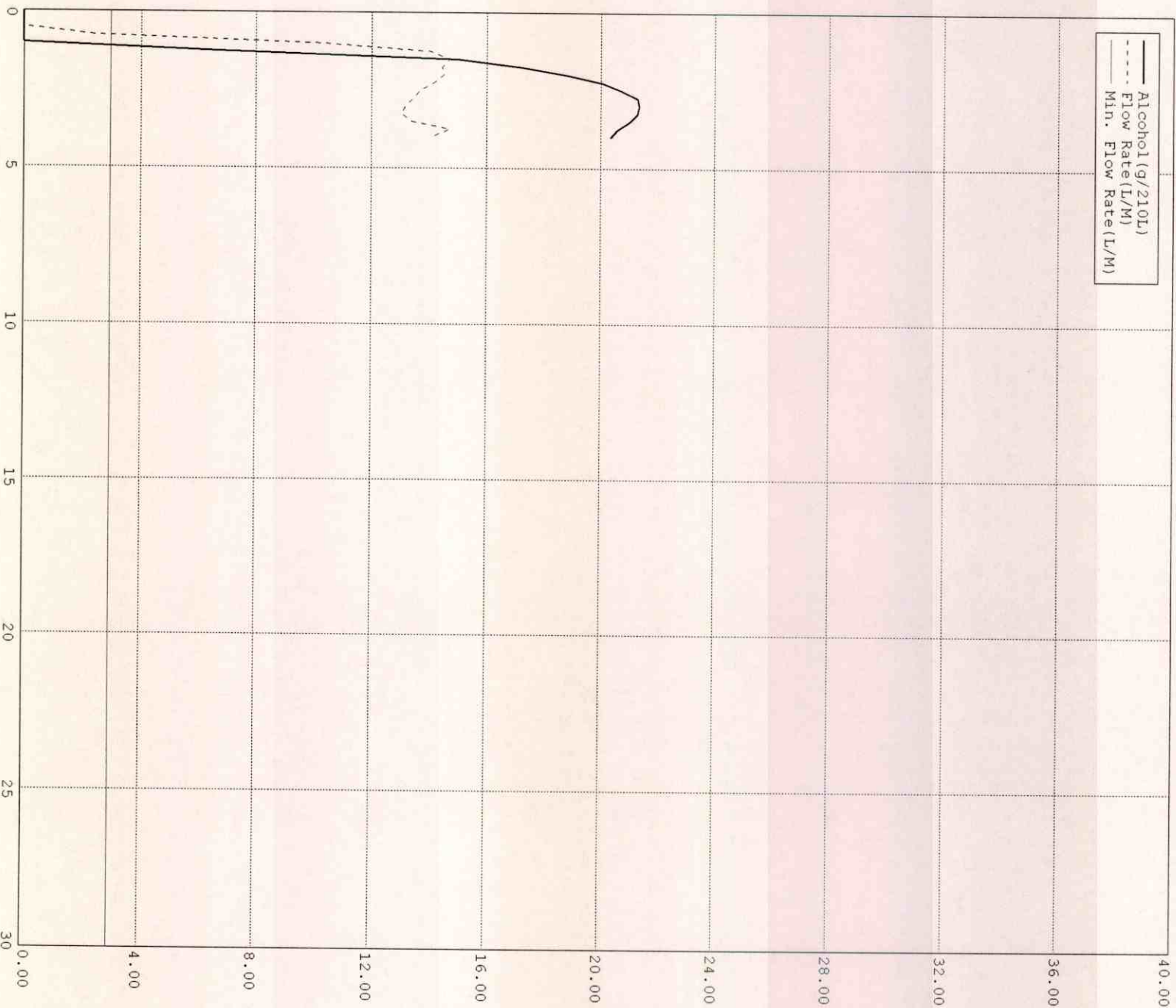
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.77: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	13:50
BLANK TEST	0.000	13:51
INTERNAL STANDARD	VERIFIED	13:51
EXTERNAL STANDARD	0.078	13:51
BLANK TEST	0.000	13:52
SUBJECT SAMPLE	INVALID	13:52

BRIB



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100379

Date: 06/23/2021  
Time: 14:03:04

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

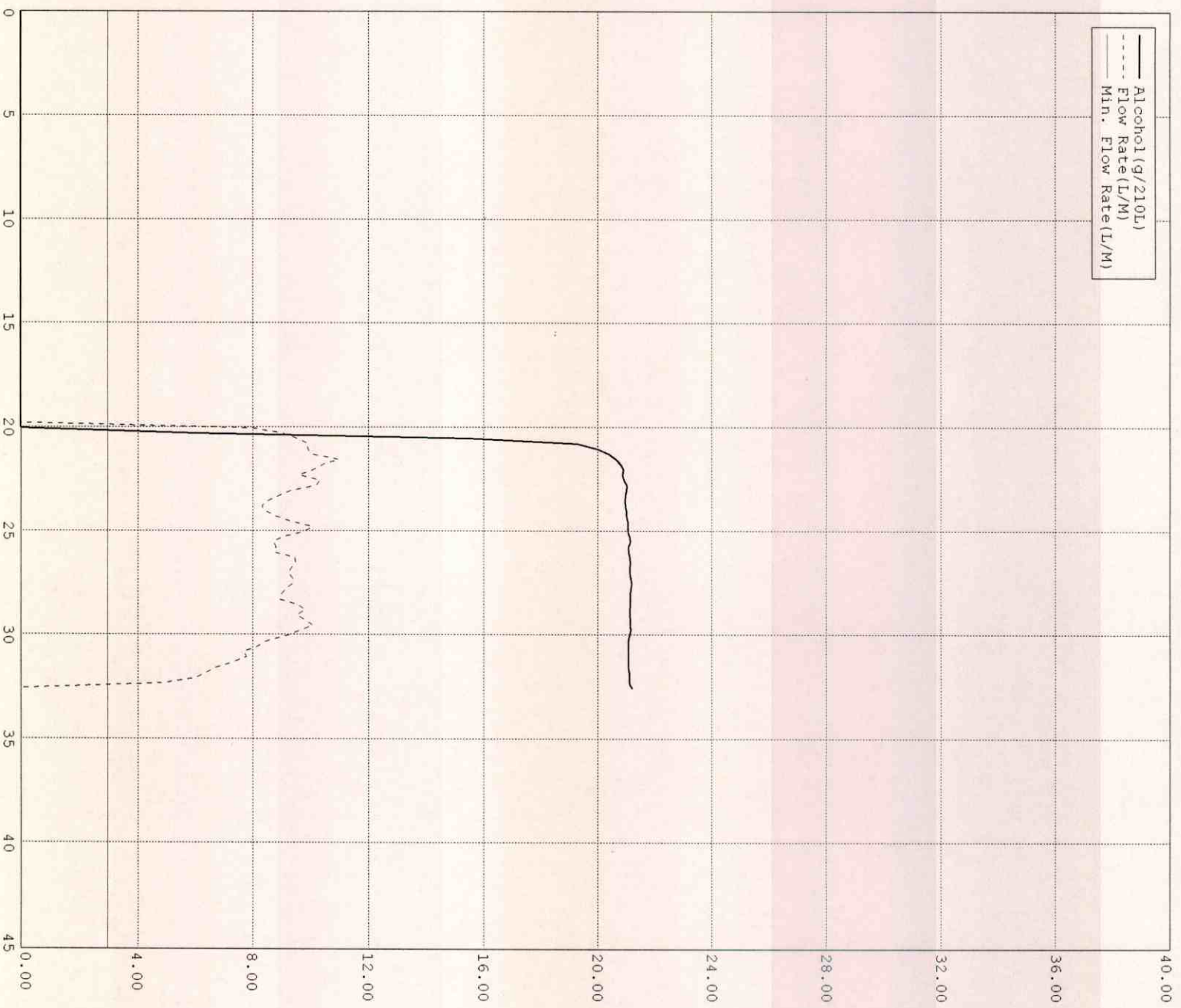
EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.35: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK  
BLANK TEST PASSED 14:04  
INTERNAL STANDARD VERIFIED 14:04  
EXTERNAL STANDARD 0.076 14:04  
Xq = 0.096 (0.27%)  
X[1] = 0.0761 (0.0013)  
BLANK TEST 0.000 14:05  
SUBJECT SAMPLE XXX 14:06  
X[1] = 0.1070 (-0.0216) (-0.0020)

Interference Detected

Filter 2 Avg: 0.0022  
Filter 3 Avg: 0.0007  
BMB 6/23/21

BMB



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100379

Date: 06/23/2021  
Time: 14:08:55

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

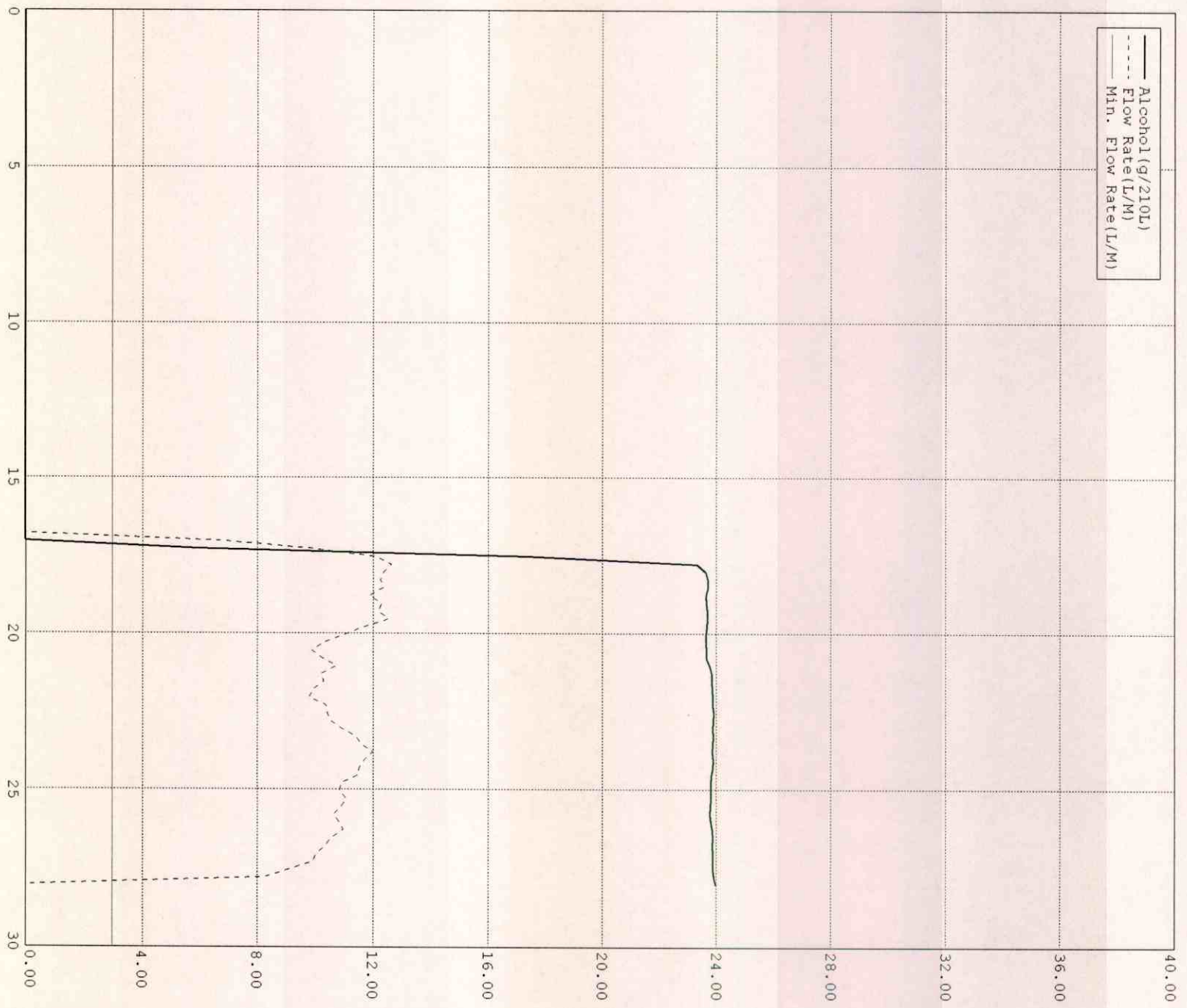
DEPT/AGENCY:  
INTERFERENCE ISOPROPANOL  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.35: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	14:10
BLANK TEST	0.000	14:10
INTERNAL STANDARD	VERIFIED	14:10
Xq = 0.097 (1.28%)		
EXTERNAL STANDARD	0.077	14:10
X[1] = 0.0766 (0.0023)	(0.0009)	
BLANK TEST	0.000	14:11
SUBJECT SAMPLE	XXX	14:12
X[1] = 0.1210 (-0.0194)	(0.0005)	

Interference Detected

*Handwritten signature/initials*





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100379

Date: 06/23/2021  
Time: 14:14:58

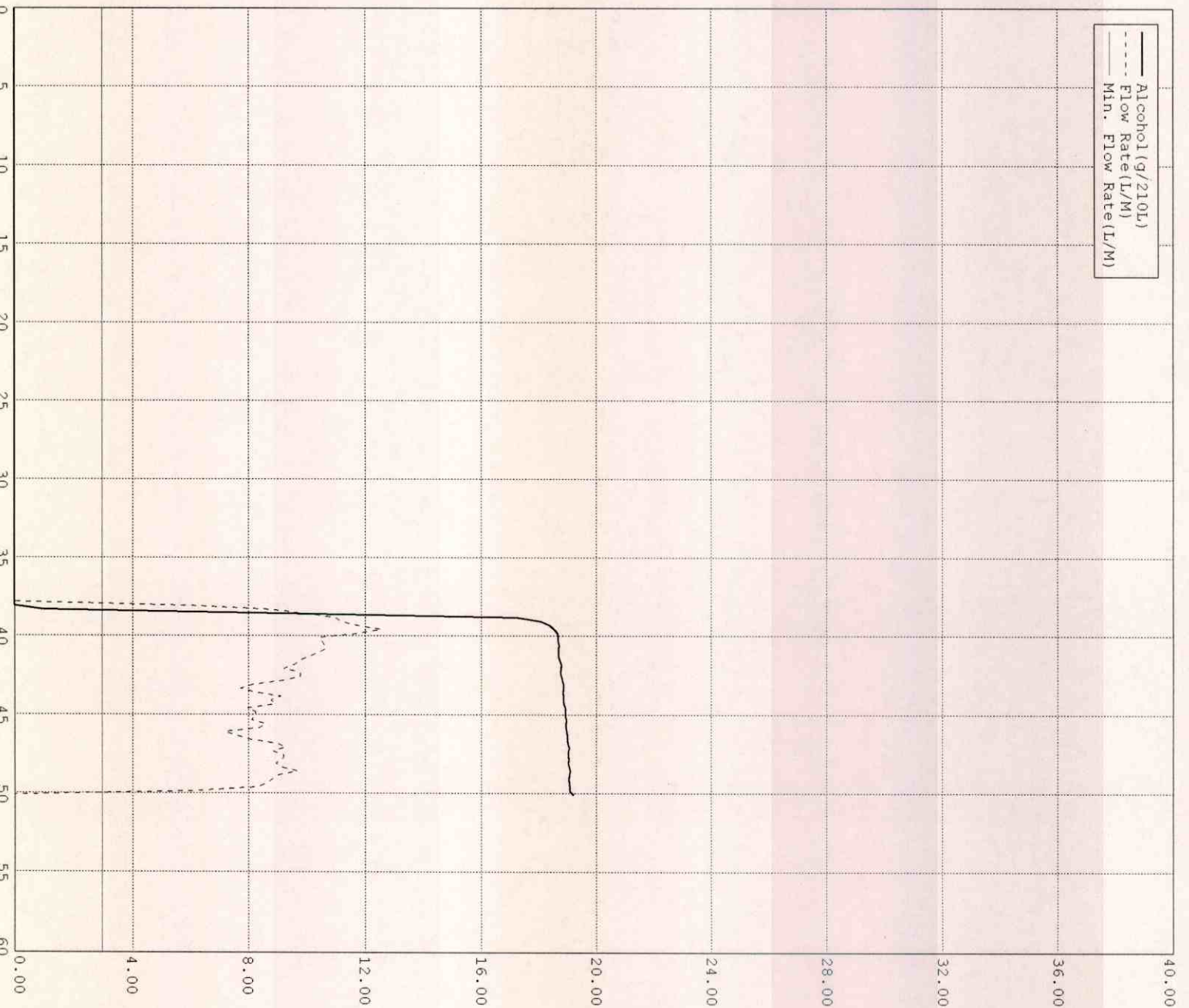
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

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 29.34: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	14:16
BLANK TEST	0.000	14:16
INTERNAL STANDARD	VERIFIED	14:16
Xq = 0.096 (0.73%)	0.076	14:16
EXTERNAL STANDARD	X[1] = 0.0762 (0.0021)	(0.0008)
BLANK TEST	0.000	14:17
SUBJECT SAMPLE (Vol=1.84L)	0.097	14:18
X[1] = 0.0970 (-0.0007)	(-0.0012)	
BLANK TEST	0.000	14:19
EXTERNAL STANDARD	0.077	14:19
X[1] = 0.0765 (0.0027)	(-0.0001)	
BLANK TEST	0.000	14:20



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100379

Date: 06/18/2021  
Time: 14:08:42

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

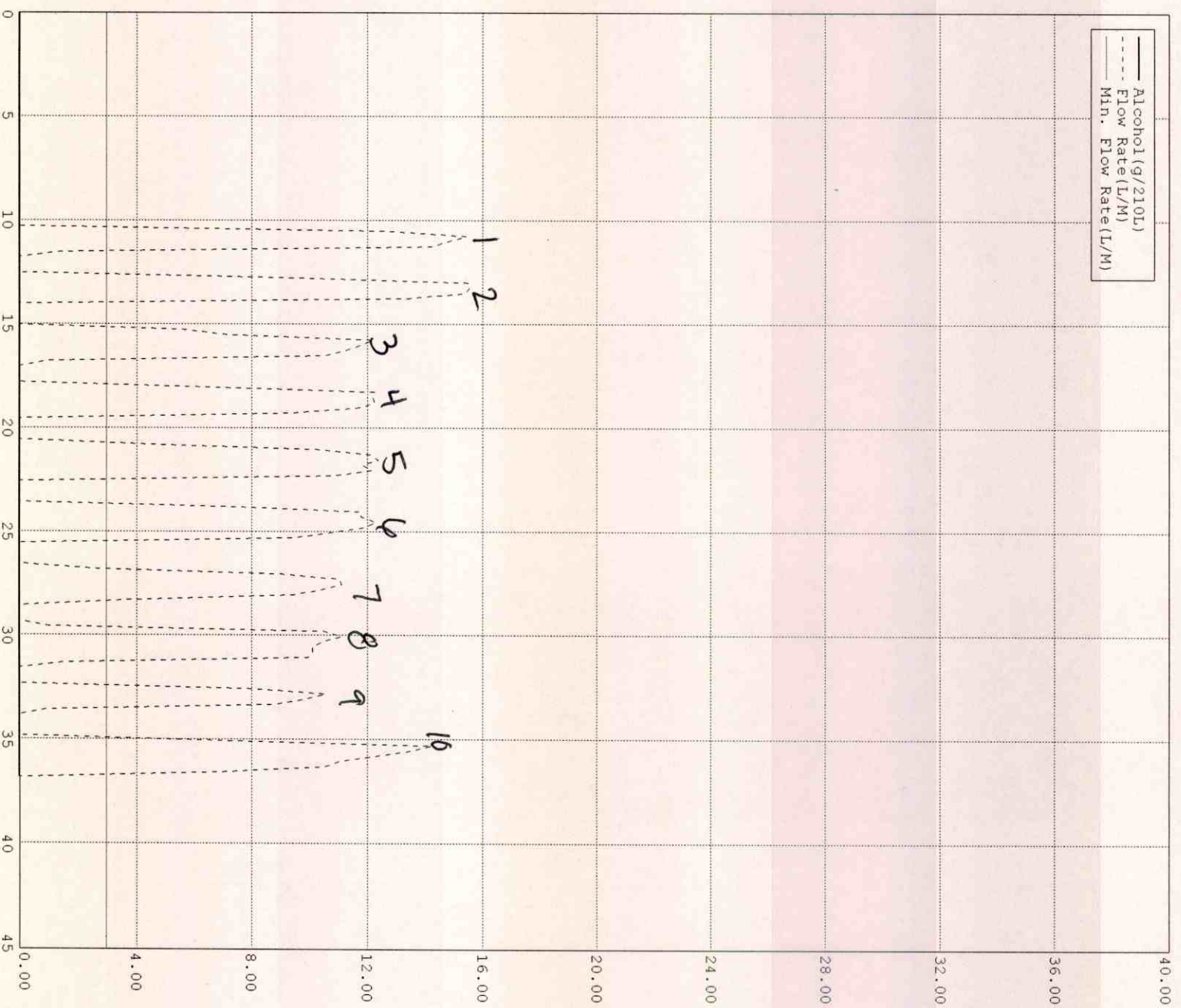
DEPT/AGENCY:  
EXCEEDED ATTEMPTS  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.78: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	14:09
BLANK TEST	0.000	14:09
INTERNAL STANDARD	VERIFIED	14:09
EXTERNAL STANDARD	0.078	14:10
BLANK TEST	0.000	14:11
SUBJECT SAMPLE	XXX	14:11

Maximum Attempts Exceeded

EMB



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100379

Date: 06/18/2021  
Time: 13:53:55

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

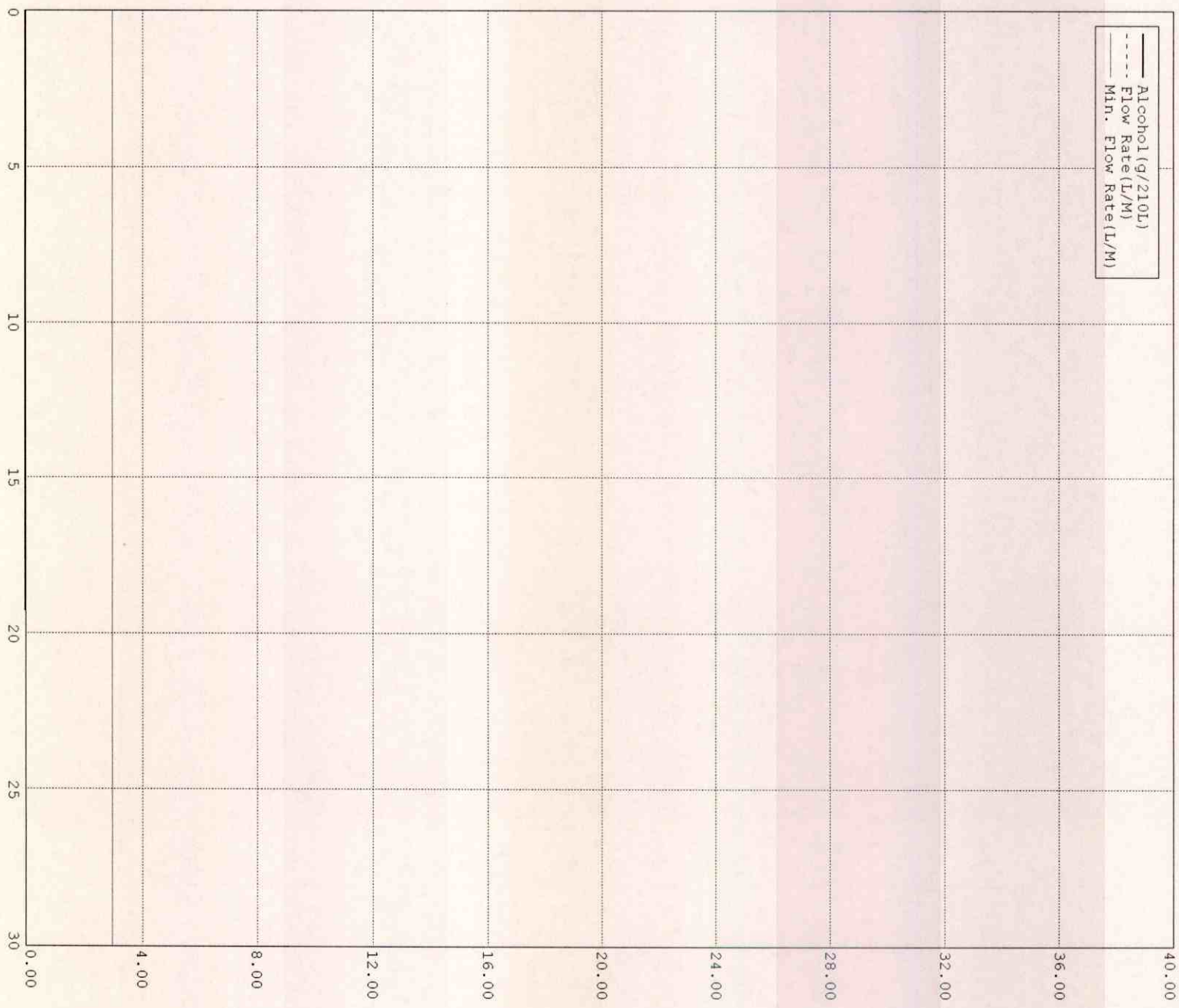
DEPT/AGENCY:  
RFI  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.77: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK  
BLANK TEST PASSED 13:54  
INTERNAL STANDARD VERIFIED 13:55  
EXTERNAL STANDARD 0.078 13:55  
BLANK TEST 0.000 13:56

RFI DETECTED

*BMB*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100379

Date: 06/23/2021  
Time: 14:37:39

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.34: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK  
BLANK TEST PASSED 14:39  
INTERNAL STANDARD VERIFIED 14:39  
EXTERNAL STANDARD 0.077 14:39  
BLANK TEST 0.000 14:40  
SUBJECT SAMPLE (Vol=1.86L) 0.000 14:40  
BLANK TEST 0.000 14:41  
EXTERNAL STANDARD 0.077 14:41  
BLANK TEST 0.000 14:42

