

Alaska Scientific Crime Detection Laboratory

DataMaster Certification Form

Issued: 7/10/2015
Effective: 7/10/2015

Version: DMCEF 2015 R1
Status: Active

Instrument S/N 100308 Analyst Brandi Barnett Start Date 9/11/19

1. Diagnostic Test (attached) Internal Standard value \leq 3.00% Yes
1. Voltage Checks
- a. 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)
 - b. Set RFI
 - c. Adjust barometer reading to match NIST traceable barometer
 - d. Adjust volume setting, if needed (1.5L +/- 0.1L)
 - e. Print Technician Screen (attached)

2. Print Calibration Factors (attached)

3. Volume Test - Minimum 1.5 L (1.3L to 1.7L)

4. Linearity Test (attached)

a. Levels Used

- i. 0.020g/210L Mnf Airgas Lot AG805804⁸¹⁸ Exp 2/27/20
- ii. 0.040g/210L Mnf Airgas Lot AG733403 Exp 11/30/19
- iii. 0.080g/210L Mnf Airgas Lot AG826101 Exp 9/18/20
- iv. 0.100g/210L Mnf Airgas Lot AG805903 Exp 2/28/20
- v. 0.200g/210L Mnf Guth Lot 19040 Exp 1/29/21
 - 1. Simulator S/N SD1177 Date Calibrated 3/5/19
- vi. 0.300g/210L Mnf Guth Lot 19010 Exp 1/3/21
 - 1. Simulator S/N SD1088 Date Calibrated 3/5/19

5. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference
- d. Exceeded attempts

i. Acetone - Mnf Guth Lot 18370 Level 0.100 Exp 12/5/20

- 1. Simulator S/N SD1199 Date Calibrated 3/6/19

ii. Isopropanol - Mnf Guth Lot 18370 Level 0.100 Exp 12/5/20

- 1. Simulator S/N DR4161 Date Calibrated 3/7/19

iii. Negative Control - Mnf Guth Lot 18370 Level 0.100 Exp 12/5/20

- 1. Simulator S/N SD1202 Date Calibrated 3/5/19

e. RFI

- 6. Verify stylus is calibrated
- 7. Reset Options
- 8. Clear Memory

- 9. Verification of Calibration
- 10. Non-Drinking Subject Test (attached)
- 11. Upload
- 13. Remove tank prior to shut down

End Date 9/12/19

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 09/11/2019
Time: 13:19:50

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 45.5°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.59 V PASSED
(0.94 V - 2.20 V)
Cooler Voltage = 1.76 V PASSED
(1.06 V - 2.46 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 560 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 4.766 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 = 0.075 0.70% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100368

Date: 09/11/2019
Time: 1:29 PM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 45.0°C

Current Barometer 29.6 in
Volume (Ltr) 1.54

Settings

Lamp: 1.64 V
Bias: 79 V
Cooler: 1.76 V
Chopper: 541 Hz

Voltages (V)

Flow: 1.07 V
Detector: 0.080 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 09/14/2015
Time: 14:09:33

OPERATOR NAME:
BRANDI BARNETT
CERTIFICATE #: 7038

Ca = 0.1000
CAL = 0.944301 0.800 <= CAL < 1.200
b1 = 0.0004 0.0000 <= b1 < 0.0040
b2 = 0.0058 0.0010 <= b2 < 0.0100
b3 = 0.0001 0.0000 <= b3 < 0.0040
Xq = 0.0748 0.0500 <= Xq < 0.2000
a21 = 1.179289 1.050 <= a21 < 1.300
a31 = 0.425043 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 09/11/2019
Time: 13:30:45

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

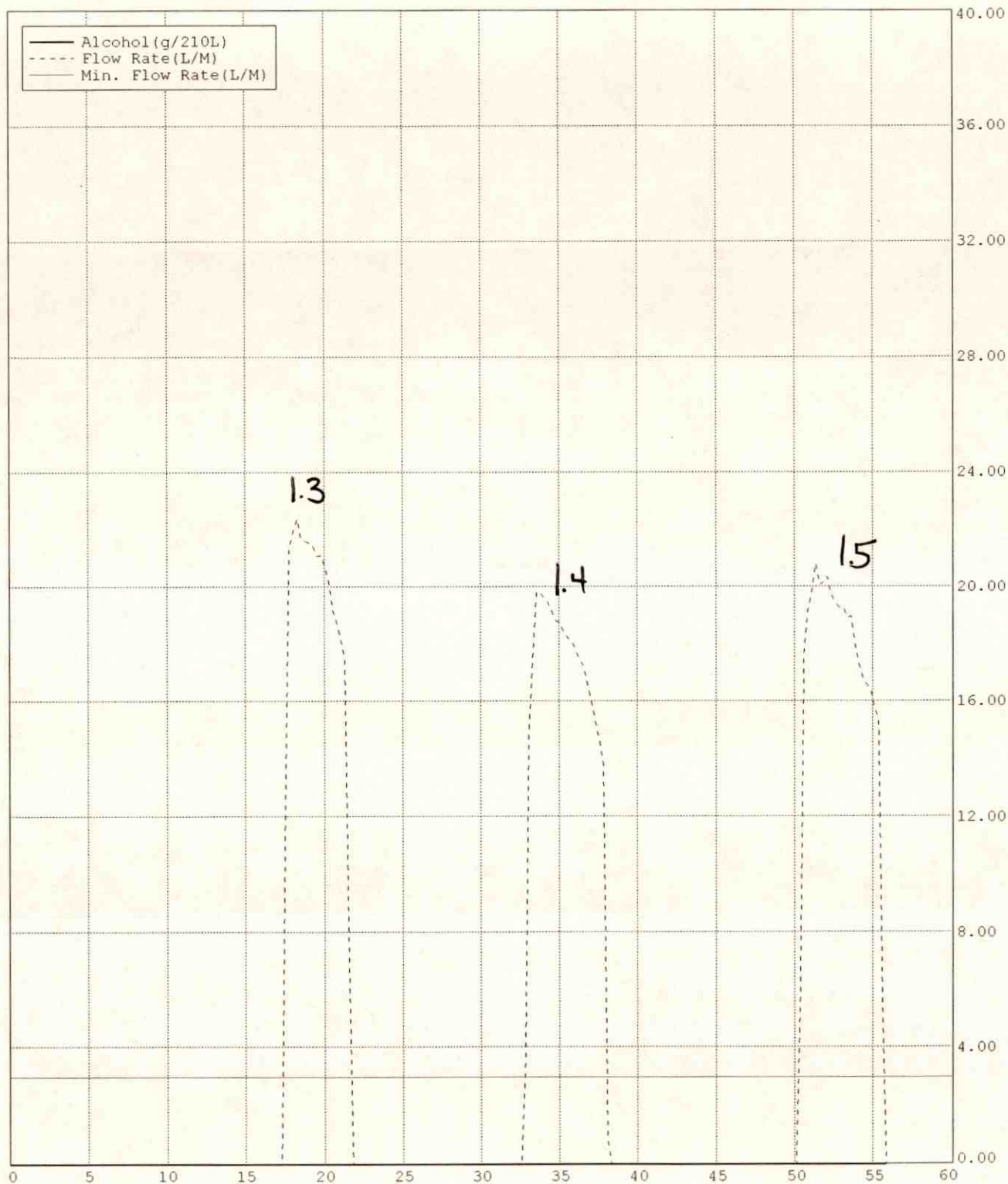
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.63: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	13:31
BLANK TEST	0.000	13:31
INTERNAL STANDARD	VERIFIED	13:32
EXTERNAL STANDARD	0.079	13:32
BLANK TEST	0.000	13:33
SUBJECT SAMPLE (Vol=1.59L)	0.000	13:34
BLANK TEST	0.000	13:35
EXTERNAL STANDARD	0.079	13:35
BLANK TEST	0.000	13:36

BMB



LINEARITY CHECK

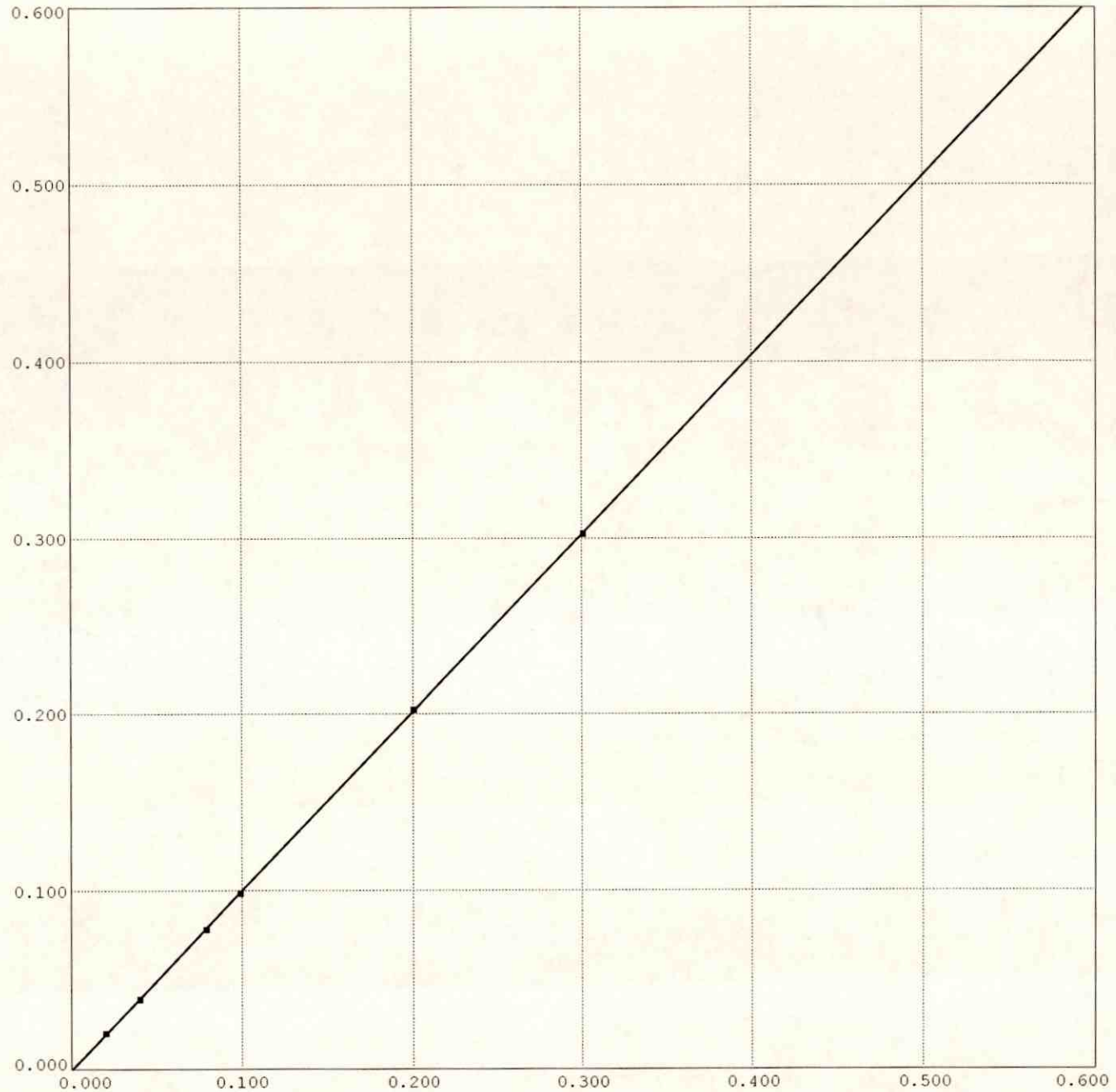
Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 09/11/2019
Time: 13:45:01

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0206	0.0005
0.040	0.0398	0.0004
0.079	0.0790	0.0000
0.099	0.0992	0.0004
0.200	0.2032	0.0004
0.300	0.3032	0.0004

SLOPE = 1.013320
R² = 0.999956



Handwritten signature: BB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100368

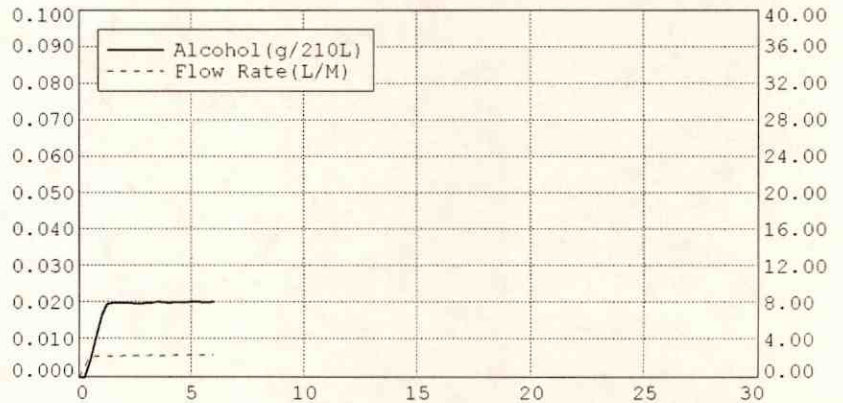
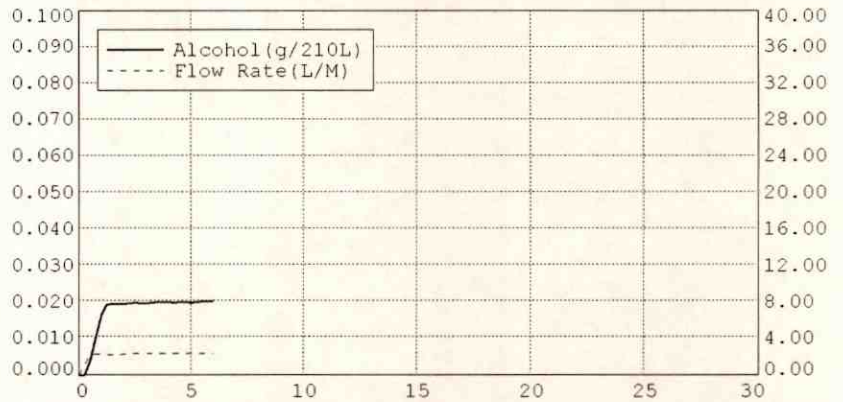
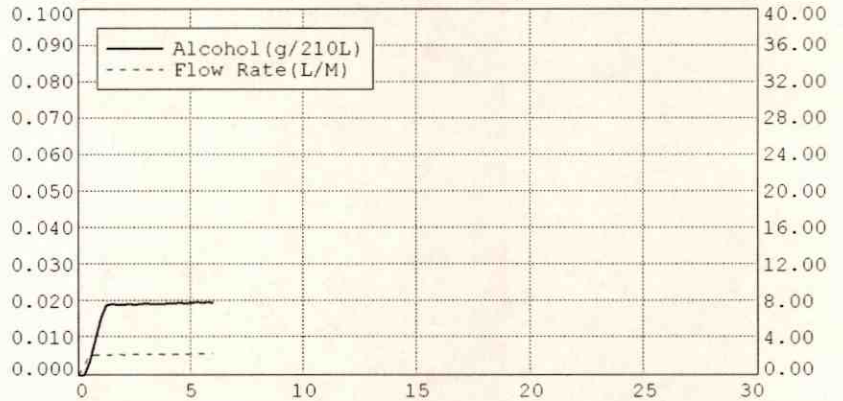
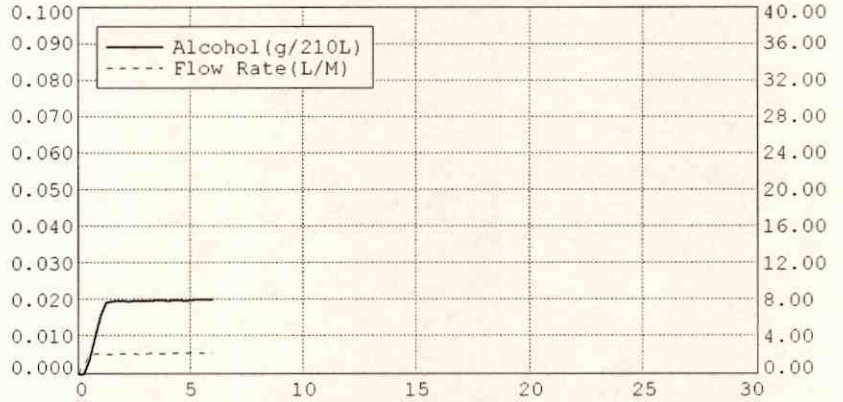
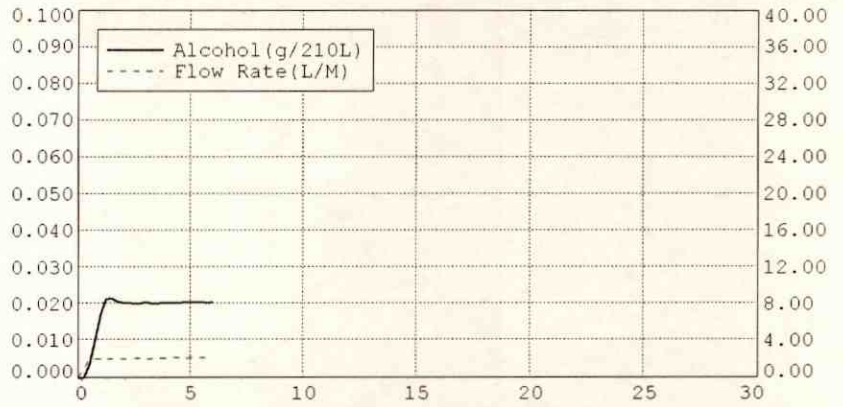
Date: 09/11/2019
 Time: 13:45:04

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.63: 0.020
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 562 psi

BLANK TEST	0.000	13:54
INTERNAL STANDARD	VERIFIED	13:54
EXTERNAL STANDARD	0.021	13:54
BLANK TEST	0.000	13:55
EXTERNAL STANDARD	0.021	13:55
BLANK TEST	0.000	13:56
EXTERNAL STANDARD	0.020	13:57
BLANK TEST	0.000	13:57
EXTERNAL STANDARD	0.020	13:58
BLANK TEST	0.000	13:59
EXTERNAL STANDARD	0.021	13:59
BLANK TEST	0.000	14:00

Average = 0.0206
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100368

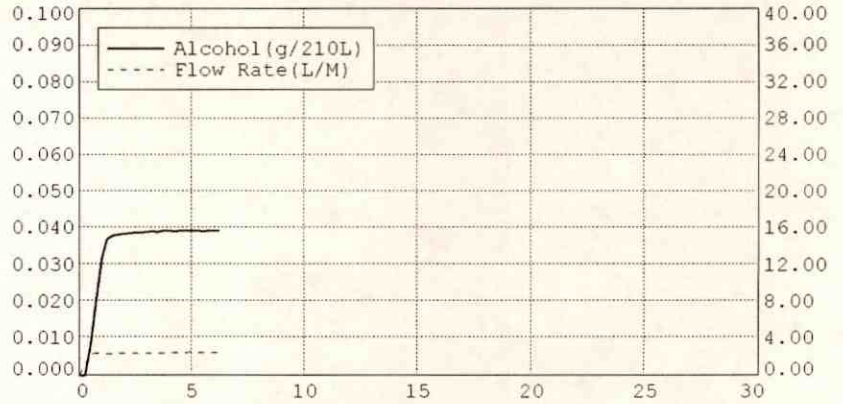
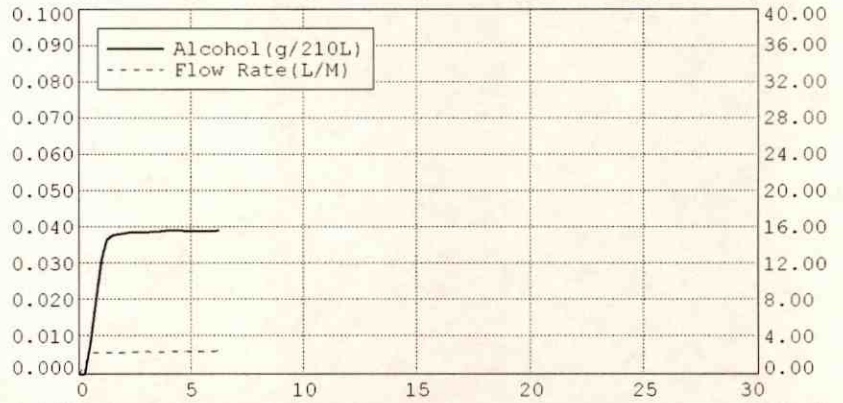
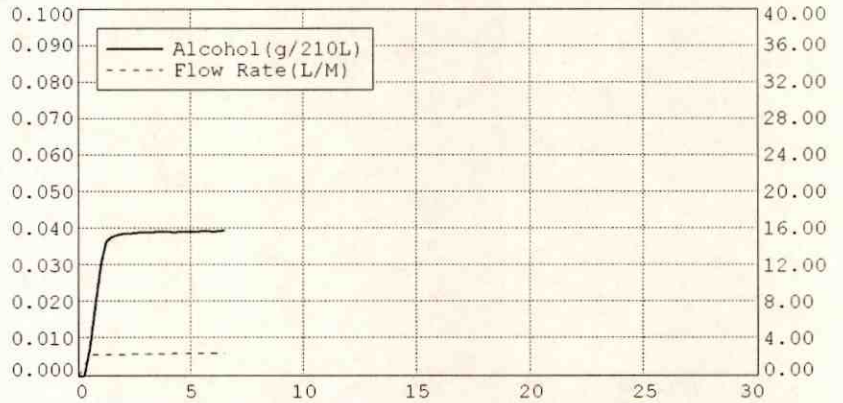
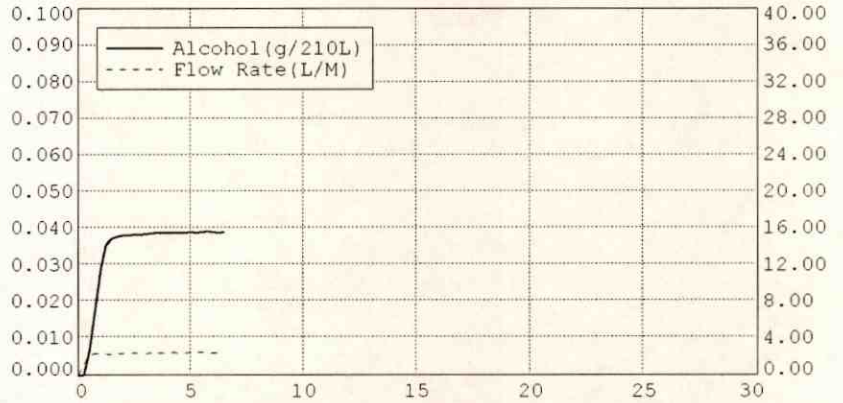
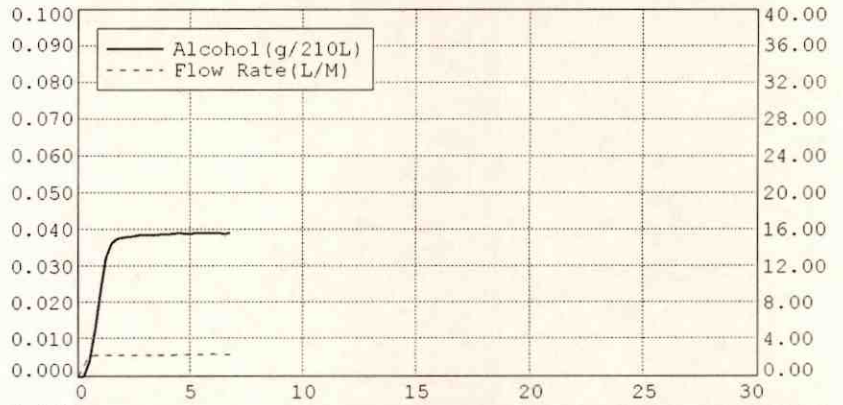
Date: 09/11/2019
Time: 14:01:37

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.63: 0.040
LOT #: AG733403
EXPIRATION: 11/30/2019
TANK PRESSURE: 550 psi

BLANK TEST	0.000	14:02
INTERNAL STANDARD	VERIFIED	14:02
EXTERNAL STANDARD	0.040	14:03
BLANK TEST	0.000	14:04
EXTERNAL STANDARD	0.039	14:04
BLANK TEST	0.000	14:05
EXTERNAL STANDARD	0.040	14:05
BLANK TEST	0.000	14:06
EXTERNAL STANDARD	0.040	14:06
BLANK TEST	0.000	14:07
EXTERNAL STANDARD	0.040	14:07
BLANK TEST	0.000	14:08

Average = 0.0398
Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100368

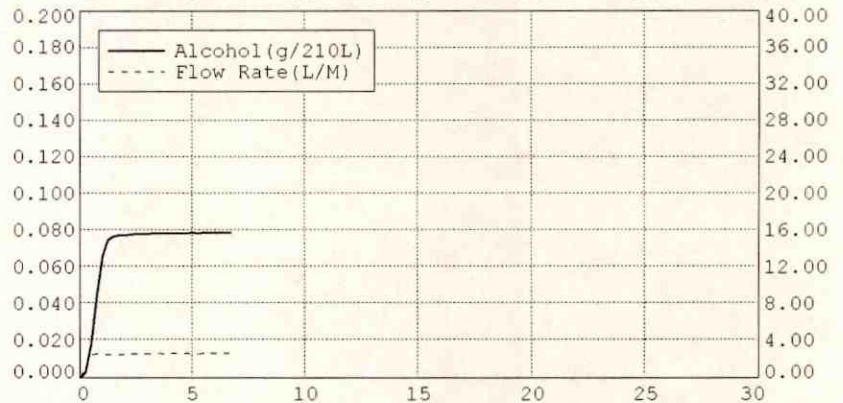
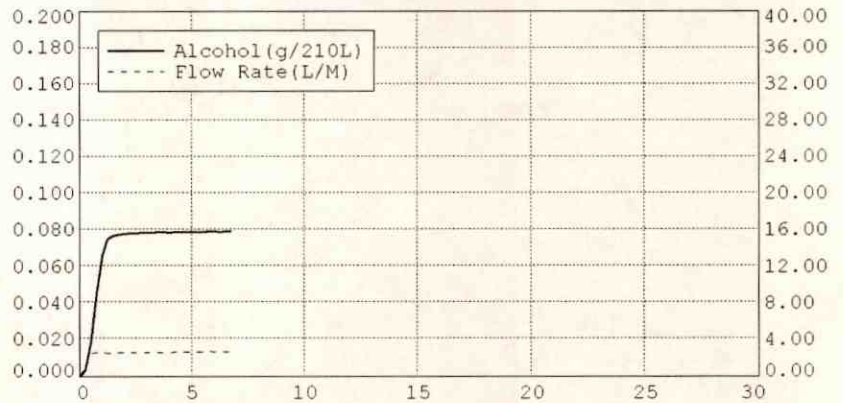
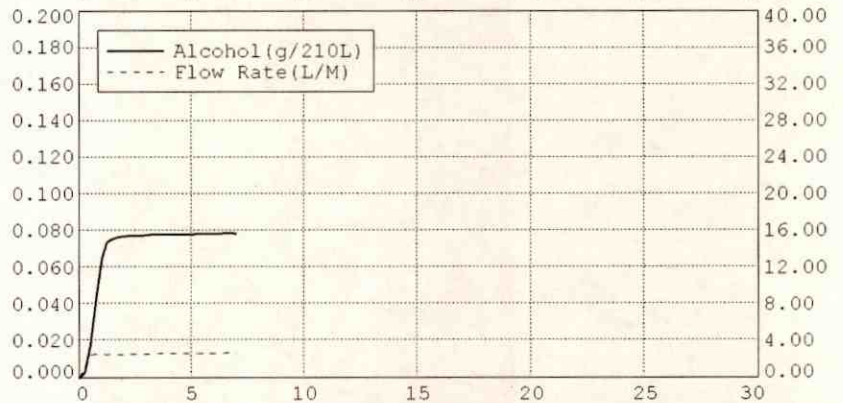
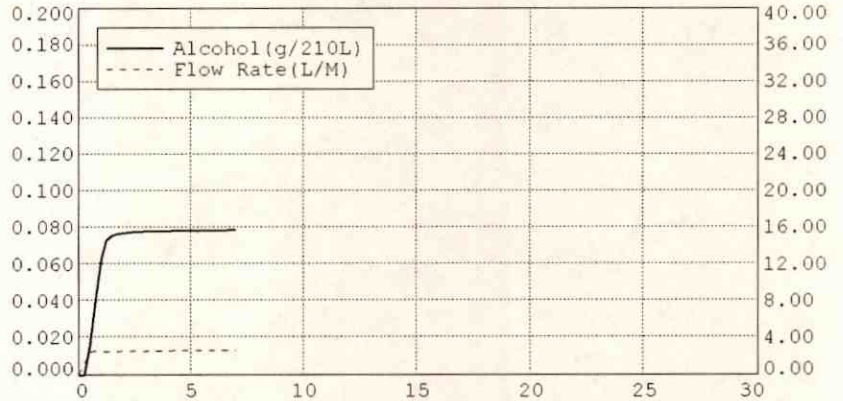
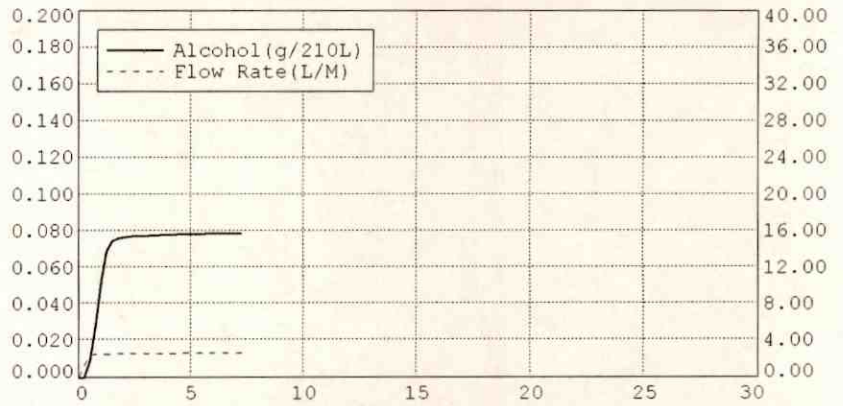
Date: 09/11/2019
 Time: 14:09:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.63: 0.079
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 922 psi

BLANK TEST	0.000	14:10
INTERNAL STANDARD	VERIFIED	14:10
EXTERNAL STANDARD	0.079	14:10
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.079	14:11
BLANK TEST	0.000	14:12
EXTERNAL STANDARD	0.079	14:12
BLANK TEST	0.000	14:13
EXTERNAL STANDARD	0.079	14:14
BLANK TEST	0.000	14:14
EXTERNAL STANDARD	0.079	14:15
BLANK TEST	0.000	14:16

Average = 0.0790
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100368

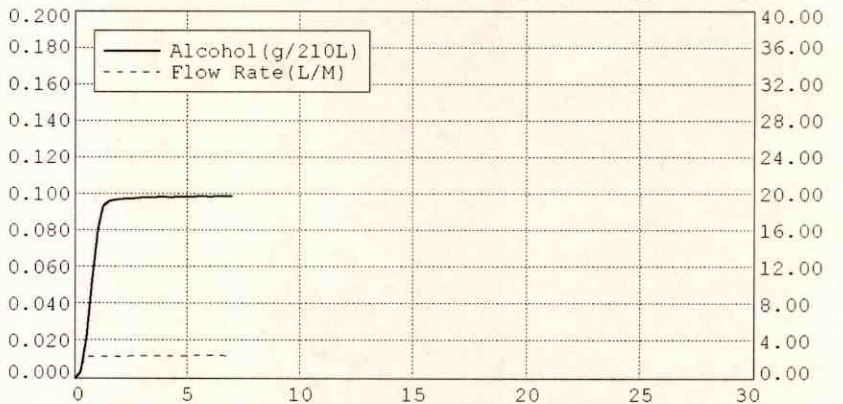
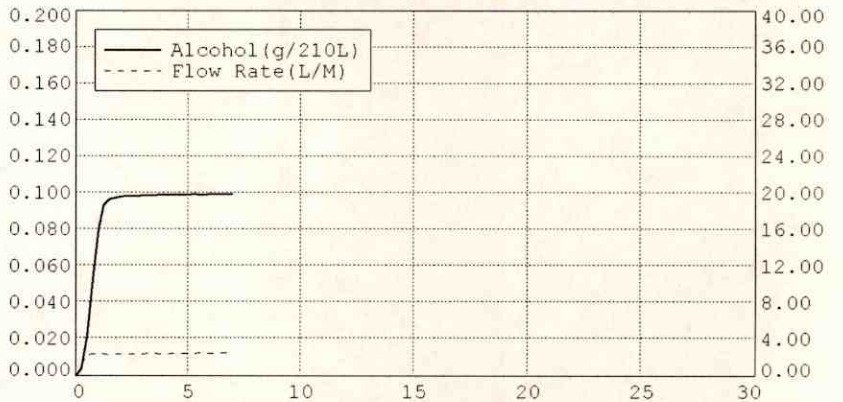
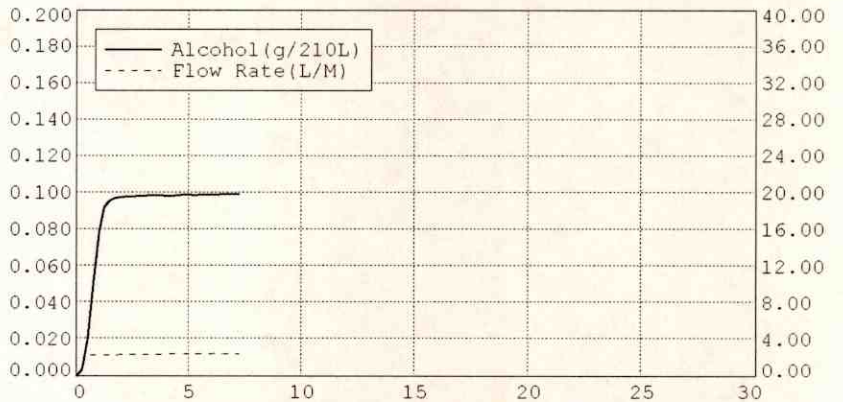
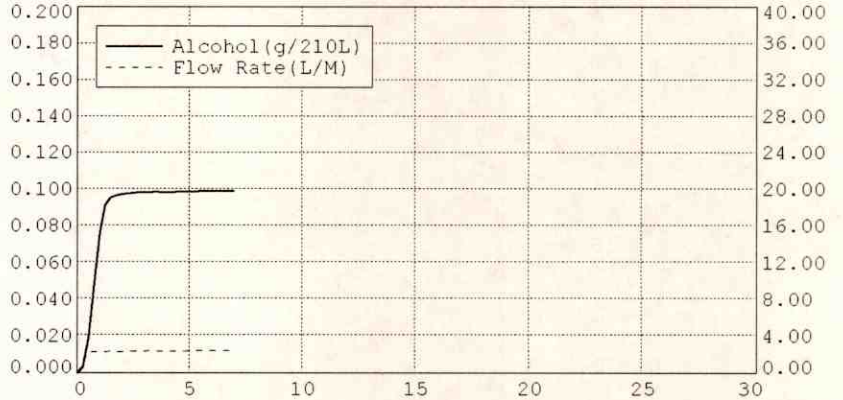
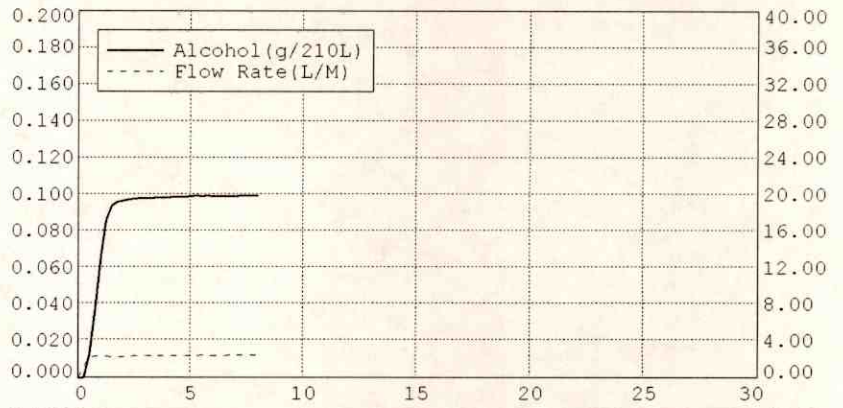
Date: 09/11/2019
 Time: 14:17:14

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.64: 0.099
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 450 psi

BLANK TEST	0.000	14:18
INTERNAL STANDARD	VERIFIED	14:18
EXTERNAL STANDARD	0.100	14:18
BLANK TEST	0.000	14:19
EXTERNAL STANDARD	0.099	14:19
BLANK TEST	0.000	14:20
EXTERNAL STANDARD	0.099	14:20
BLANK TEST	0.000	14:21
EXTERNAL STANDARD	0.099	14:22
BLANK TEST	0.000	14:22
EXTERNAL STANDARD	0.099	14:23
BLANK TEST	0.000	14:24

Average = 0.0992
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

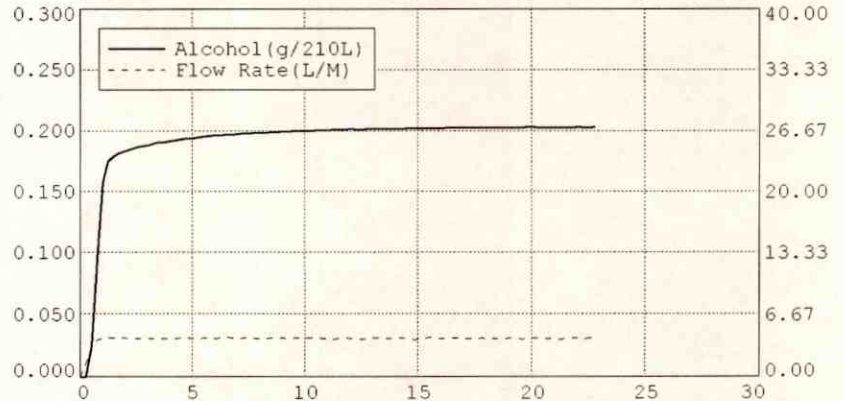
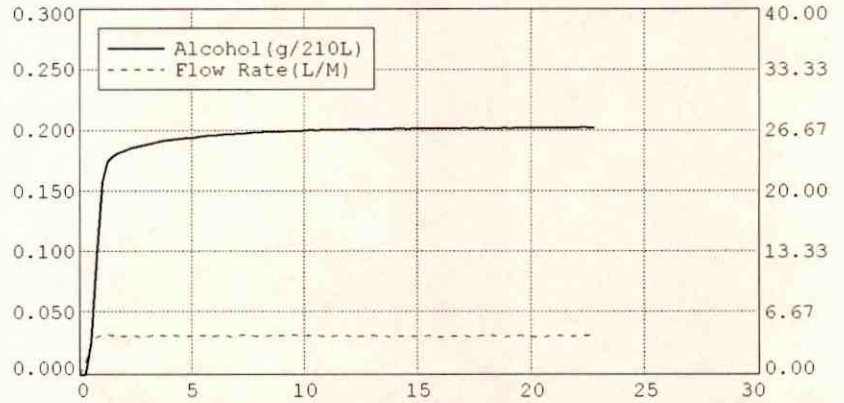
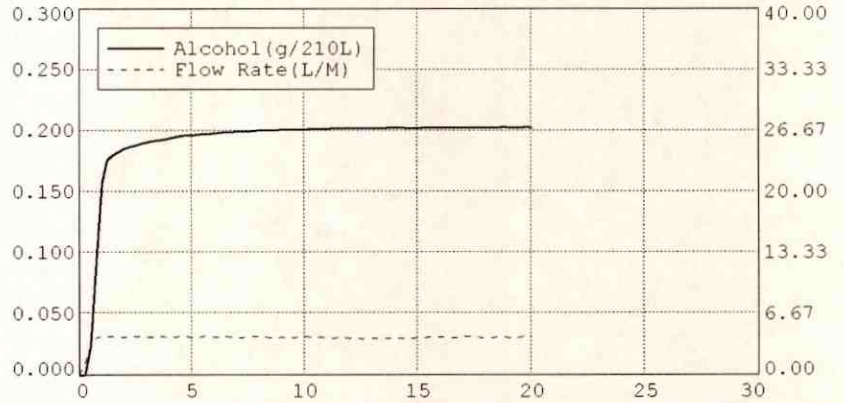
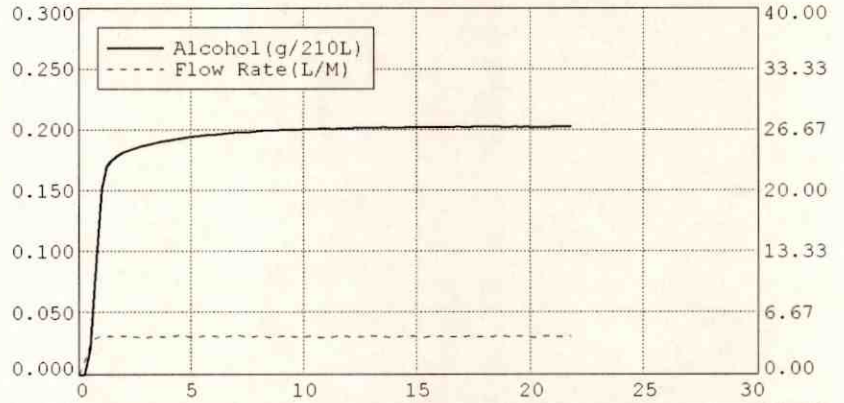
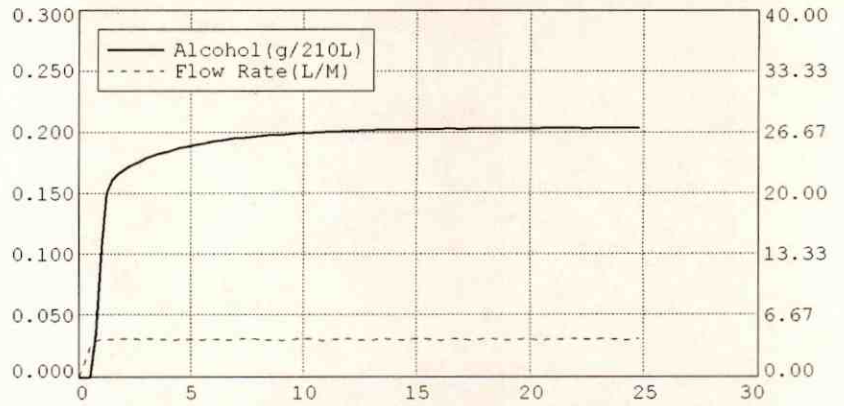
Alaska Department of Public Safety
 DATAMASTER dmt: 100368

Date: 09/11/2019
 Time: 14:25:19

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: GUTH 19040
 EXPIRATION: 01/29/2021

BLANK TEST	0.000	14:27
INTERNAL STANDARD	VERIFIED	14:27
EXTERNAL STANDARD	0.204	14:27
BLANK TEST	0.000	14:28
EXTERNAL STANDARD	0.203	14:29
BLANK TEST	0.000	14:30
EXTERNAL STANDARD	0.203	14:30
BLANK TEST	0.000	14:31
EXTERNAL STANDARD	0.203	14:32
BLANK TEST	0.000	14:33
EXTERNAL STANDARD	0.203	14:33
BLANK TEST	0.000	14:34

Average = 0.2032
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

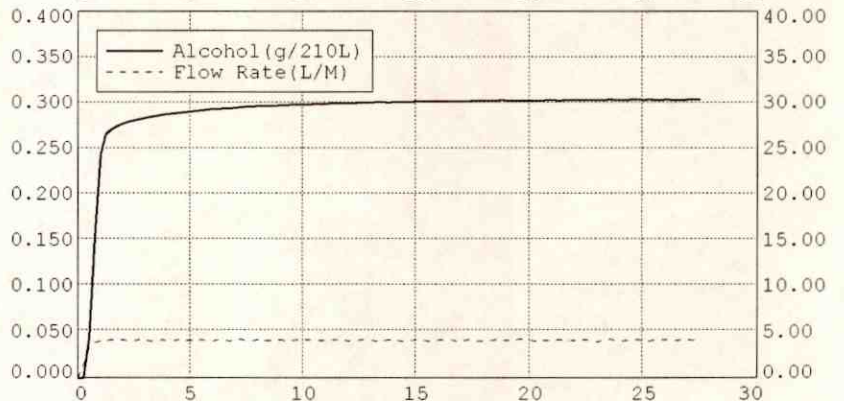
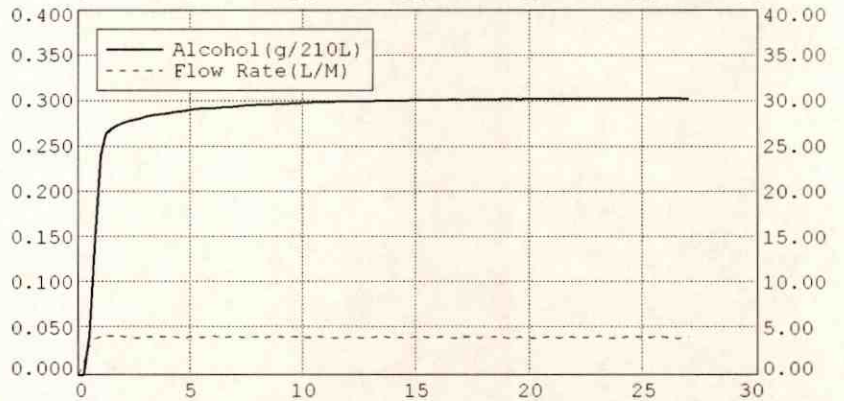
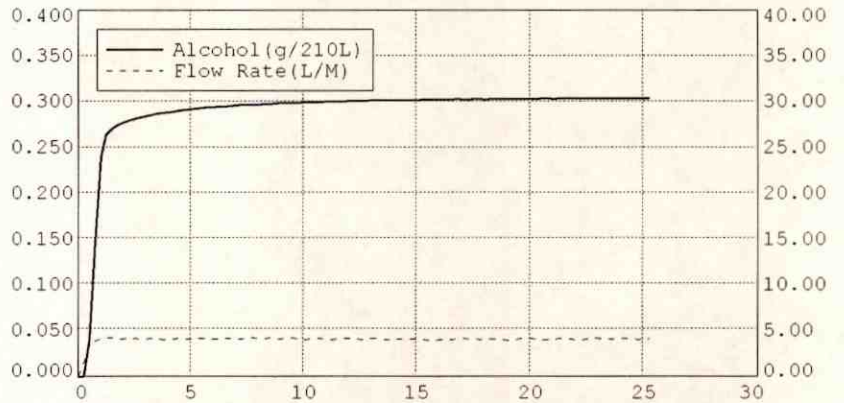
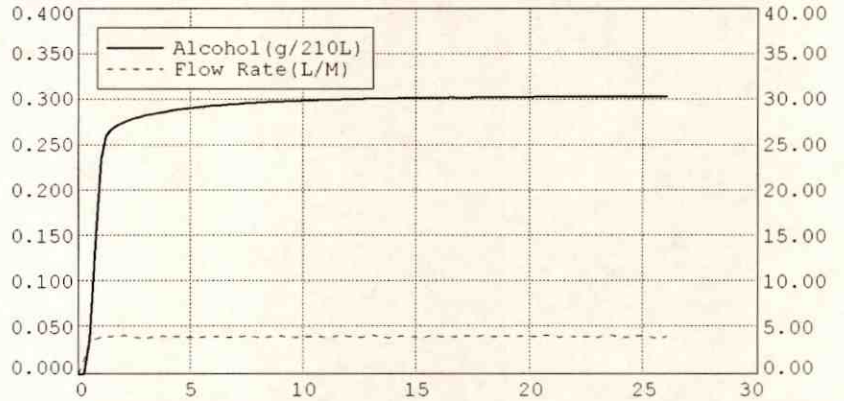
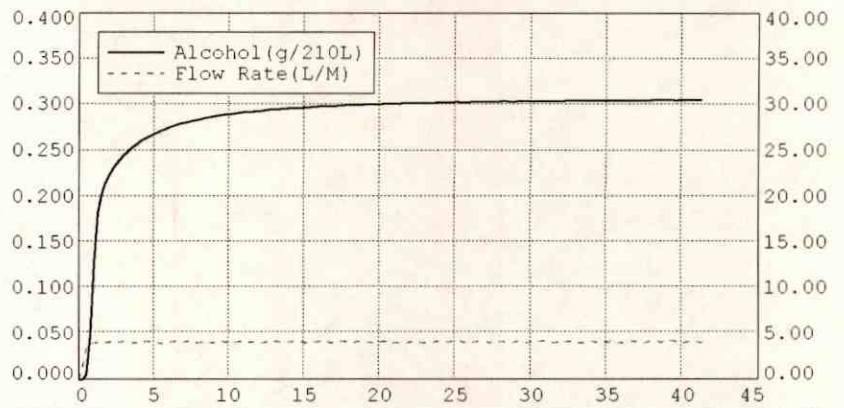
Alaska Department of Public Safety
 DATAMASTER dmt: 100368

Date: 09/11/2019
 Time: 14:37:54

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300 *Guth Bmb*
 LOT #: ~~GITH~~ 19010 *9/19/19*
 EXPIRATION: 01/03/2021

BLANK TEST	0.000	14:38
INTERNAL STANDARD	VERIFIED	14:39
EXTERNAL STANDARD	0.304	14:39
BLANK TEST	0.000	14:40
EXTERNAL STANDARD	0.303	14:41
BLANK TEST	0.000	14:42
EXTERNAL STANDARD	0.303	14:42
BLANK TEST	0.000	14:43
EXTERNAL STANDARD	0.303	14:44
BLANK TEST	0.000	14:45
EXTERNAL STANDARD	0.303	14:45
BLANK TEST	0.000	14:46

Average = 0.3032
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 09/12/2019
Time: 07:32:59

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

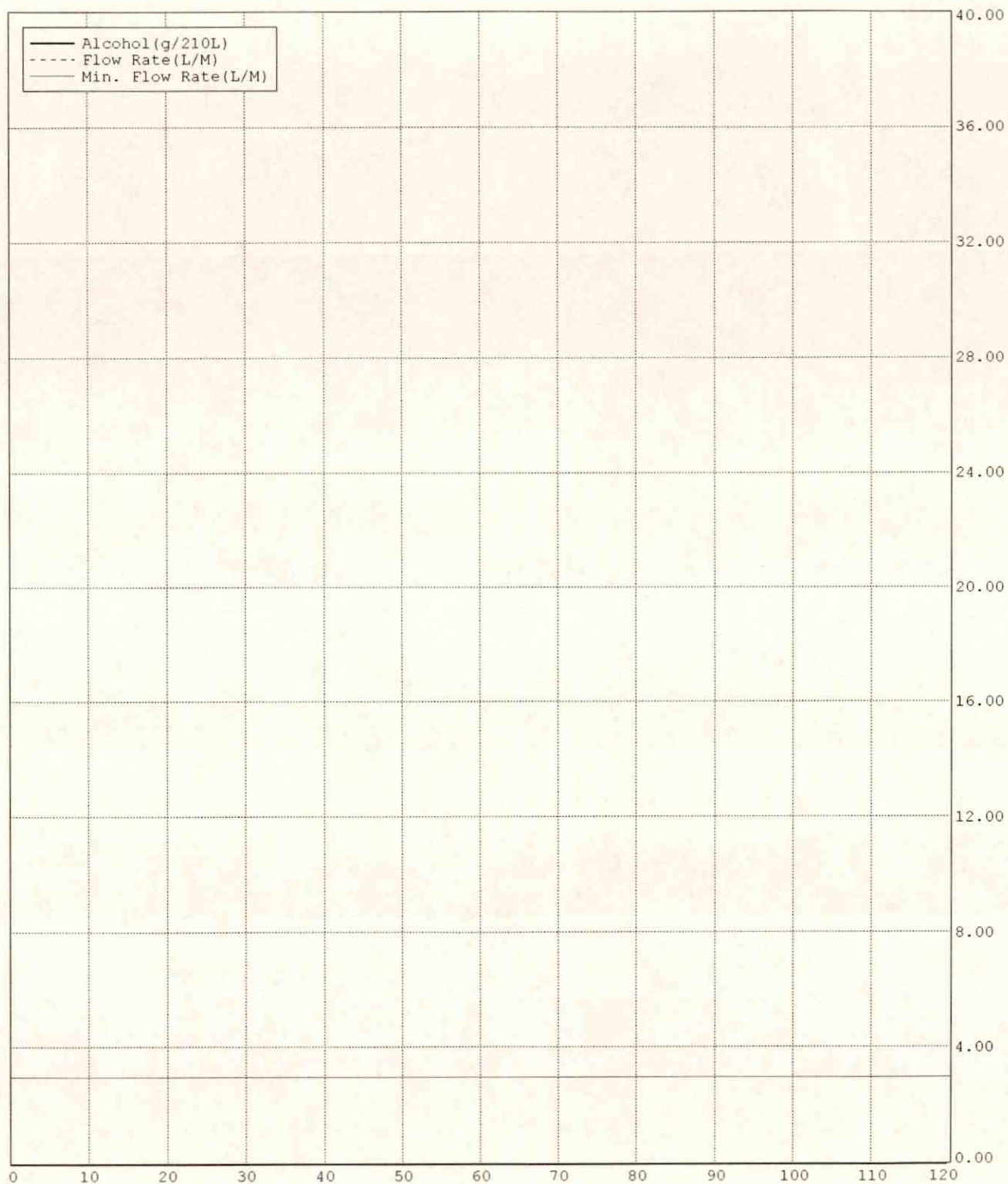
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.28: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	07:34
BLANK TEST	0.000	07:34
INTERNAL STANDARD	VERIFIED	07:34
EXTERNAL STANDARD	0.078	07:34
BLANK TEST	0.000	07:35
SUBJECT SAMPLE	INCOMPLETE	07:37

BMAB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 09/12/2019
Time: 07:39:38

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

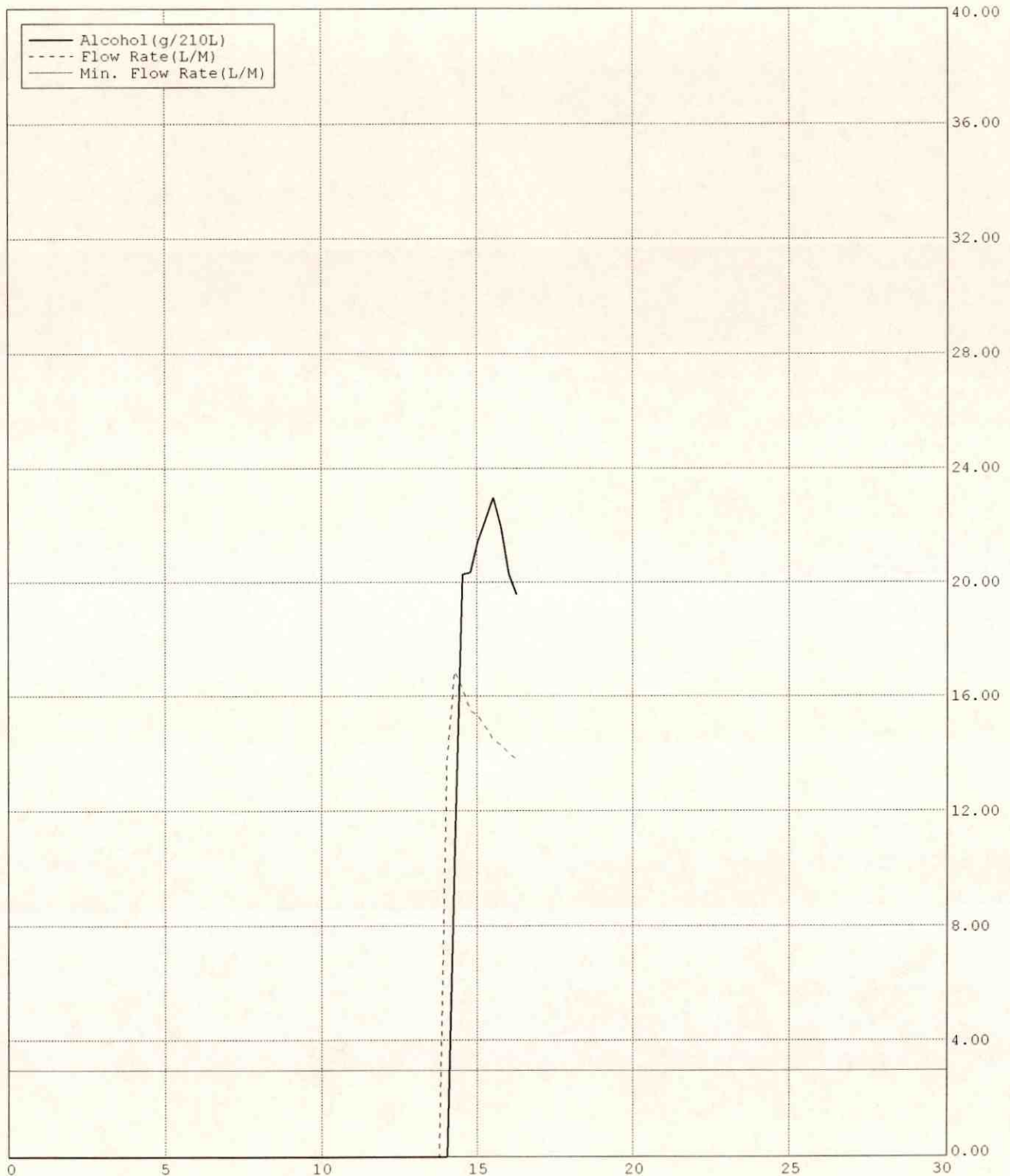
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.27: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	07:40
BLANK TEST	0.000	07:40
INTERNAL STANDARD	VERIFIED	07:41
EXTERNAL STANDARD	0.078	07:41
BLANK TEST	0.000	07:42
SUBJECT SAMPLE	INVALID	07:42

Handwritten signature: BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 09/12/2019
Time: 07:45:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

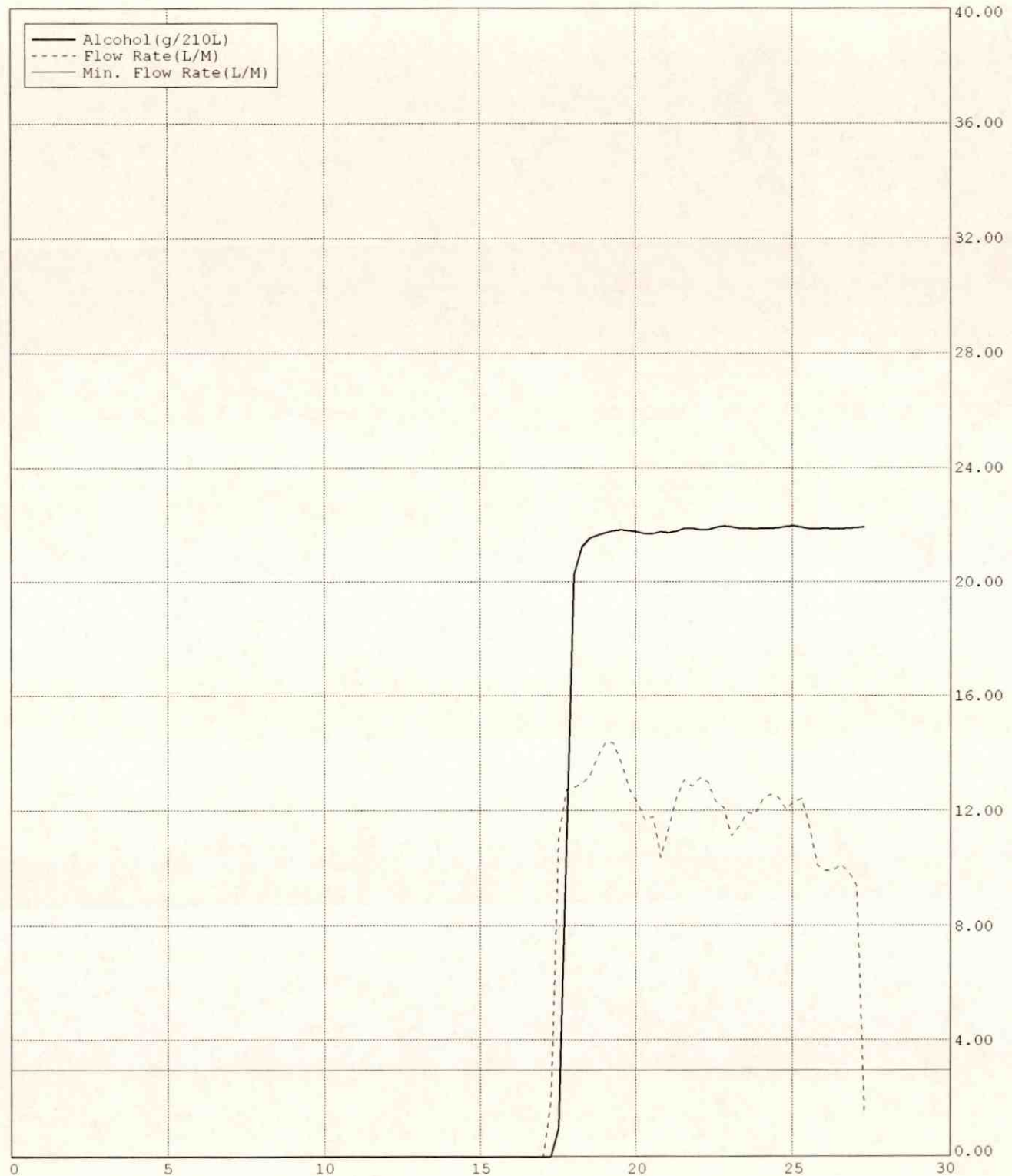
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.28: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	07:47
BLANK TEST	0.000	07:47
INTERNAL STANDARD	VERIFIED	07:47
Xg = 0.076 (1.51%)		
EXTERNAL STANDARD	0.079	07:48
X[1] = 0.0786 (-0.0005) (0.0002)		
BLANK TEST	0.000	07:49
SUBJECT SAMPLE	XXX	07:49
X[1] = 0.1103 (-0.0201) (-0.0018)		

Interference Detected

Filter 2 Avg: -0.0006
Filter 3 Avg: 0.0008
BMB 9/12/19

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 09/12/2019
Time: 07:53:07

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

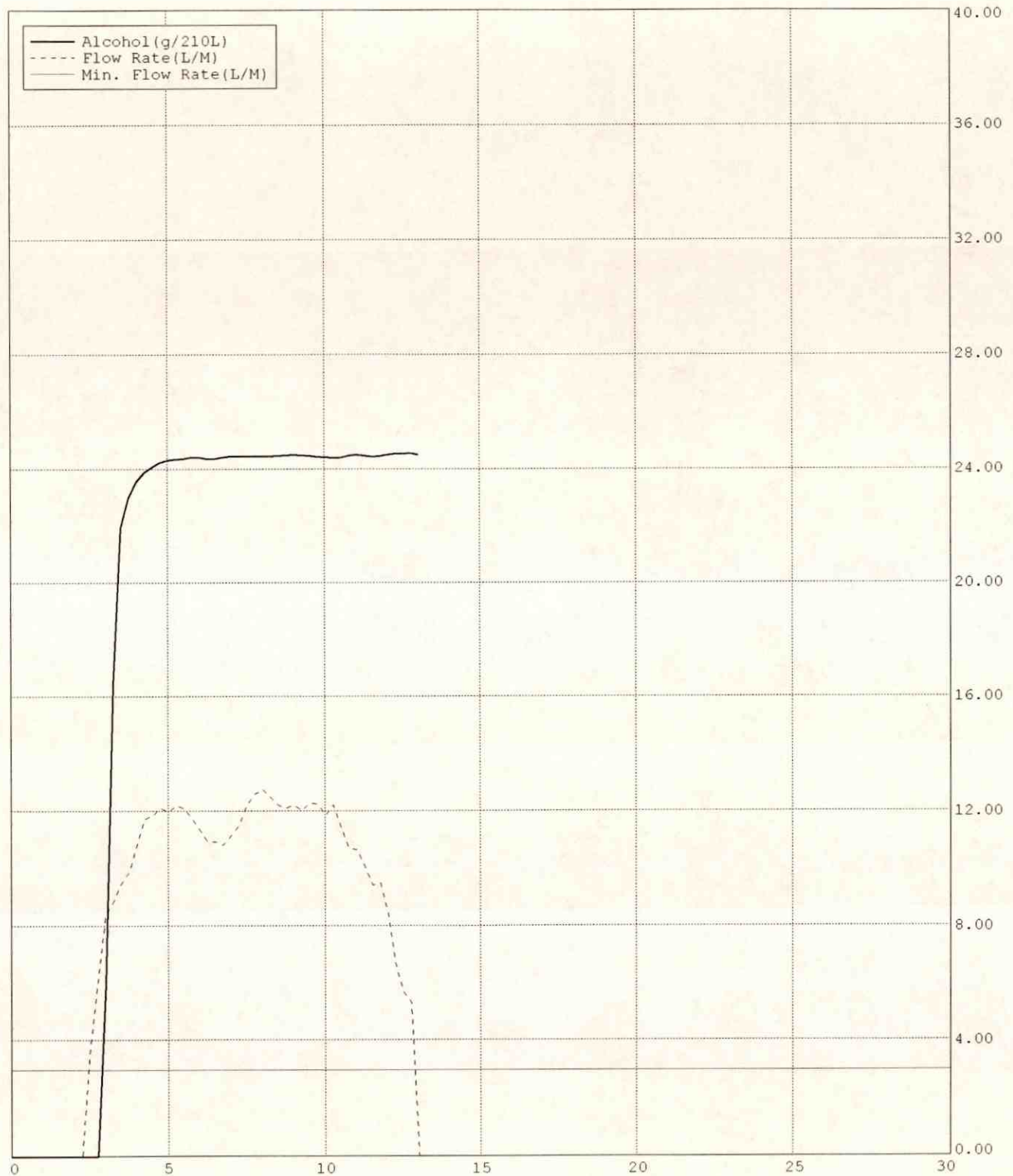
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
INTERFERE ISOPROPNOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.28: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	07:54
BLANK TEST	0.000	07:54
INTERNAL STANDARD	VERIFIED	07:54
Xq = 0.076 (1.62%)		
EXTERNAL STANDARD	0.078	07:54
X[1] = 0.0783 (-0.0006) (0.0009)		
BLANK TEST	0.000	07:55
SUBJECT SAMPLE	XXX	07:55
X[1] = 0.1227 (-0.0323) (-0.0008)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 09/12/2019
Time: 07:59:15

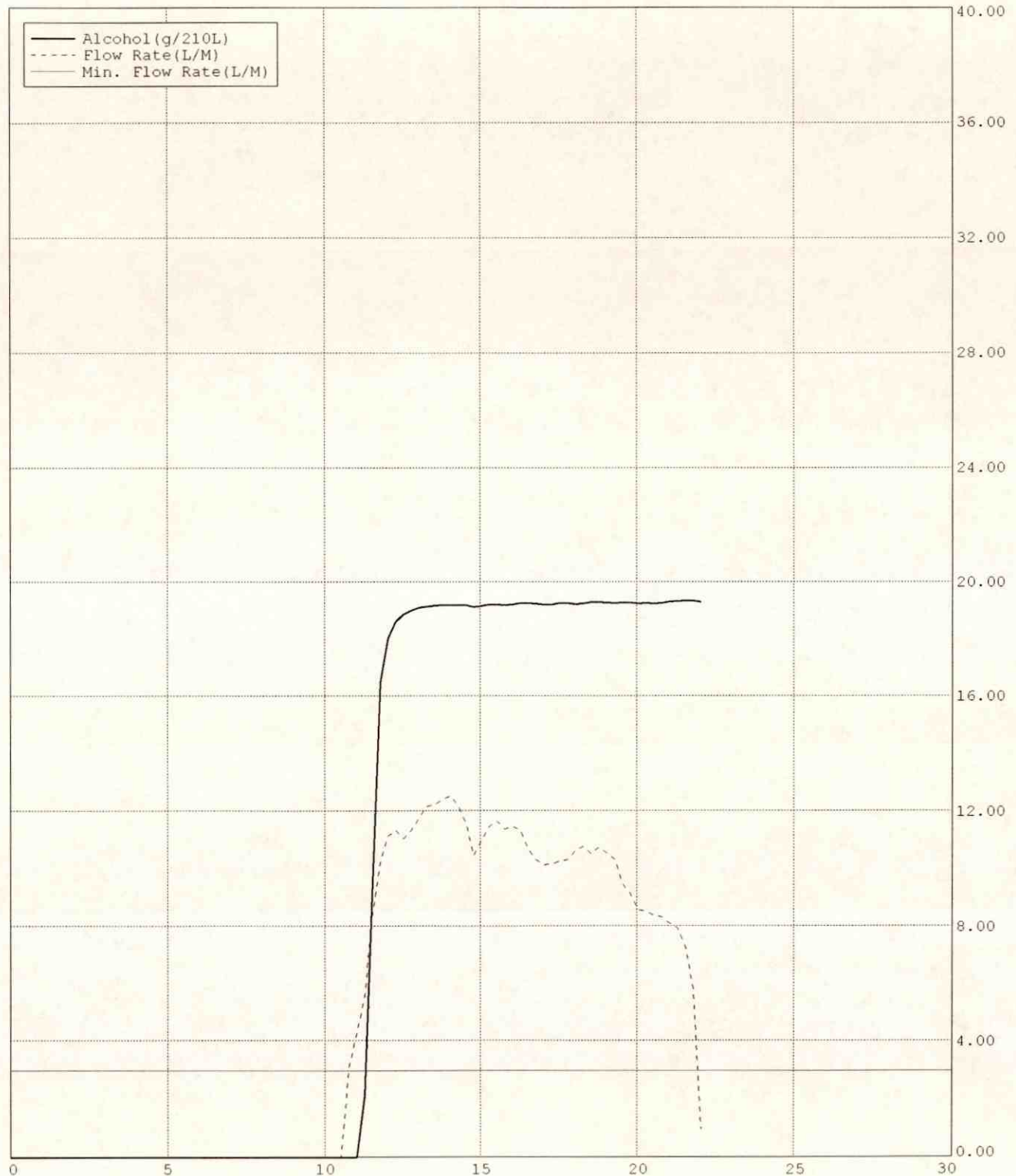
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.28: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	08:00
BLANK TEST	0.000	08:00
INTERNAL STANDARD	VERIFIED	08:00
Xq = 0.076 (1.51%)		
EXTERNAL STANDARD	0.079	08:00
X[1] = 0.0785 (-0.0006) (0.0014)		
BLANK TEST	0.000	08:01
SUBJECT SAMPLE (Vol=1.87L)	0.096	08:02
X[1] = 0.0969 (-0.0001) (-0.0011)		
BLANK TEST	0.000	08:03
EXTERNAL STANDARD	0.078	08:03
X[1] = 0.0779 (-0.0008) (0.0005)		
BLANK TEST	0.000	08:04



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 09/12/2019
Time: 08:18:48

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038`

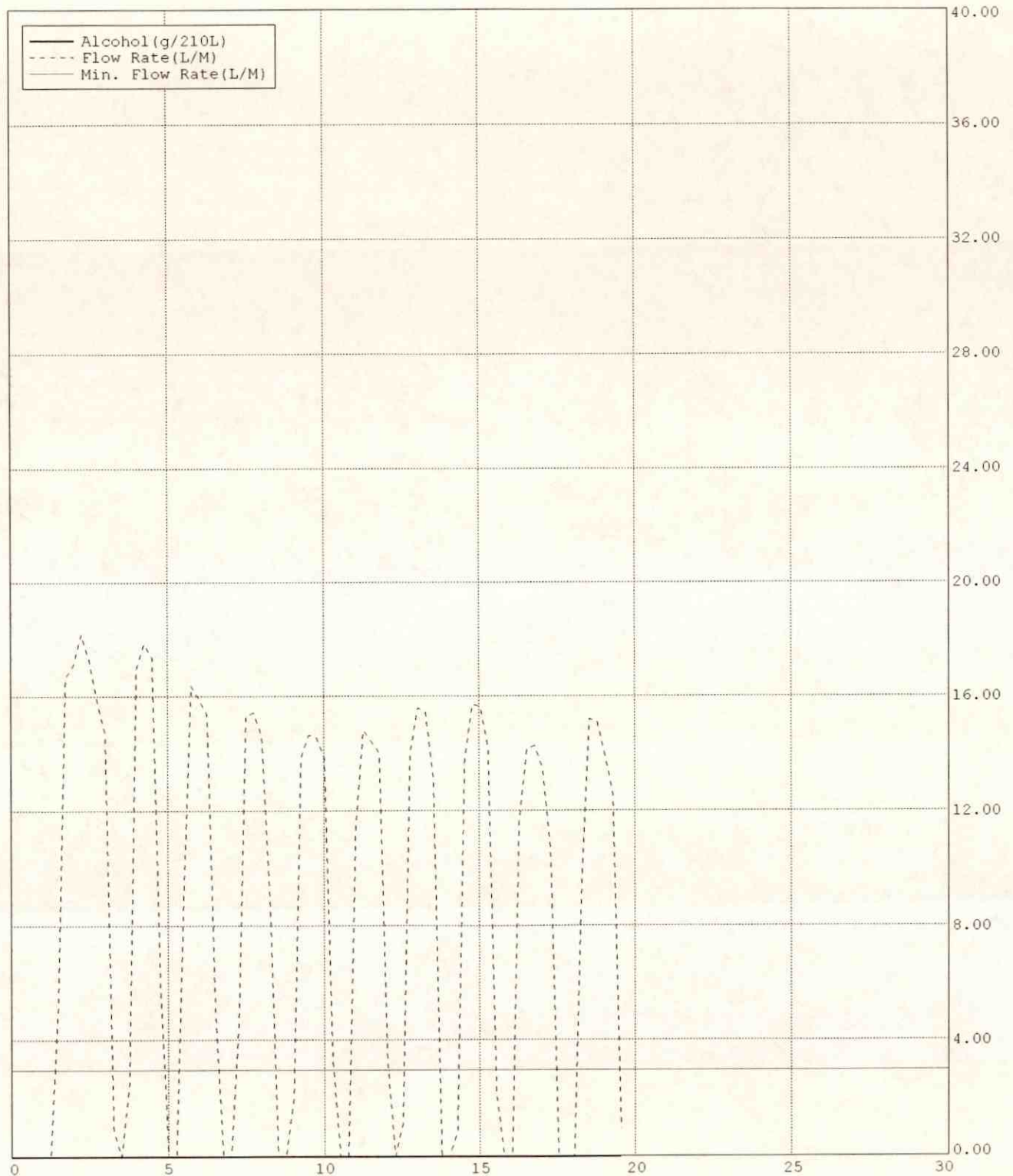
DEPT/AGENCY:
EXCEEDED ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.27: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	08:20
BLANK TEST	0.000	08:20
INTERNAL STANDARD	VERIFIED	08:20
EXTERNAL STANDARD	0.078	08:20
BLANK TEST	0.000	08:21
SUBJECT SAMPLE	XXX	08:21

Maximum Attempts Exceeded

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 09/12/2019
Time: 08:24:43

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

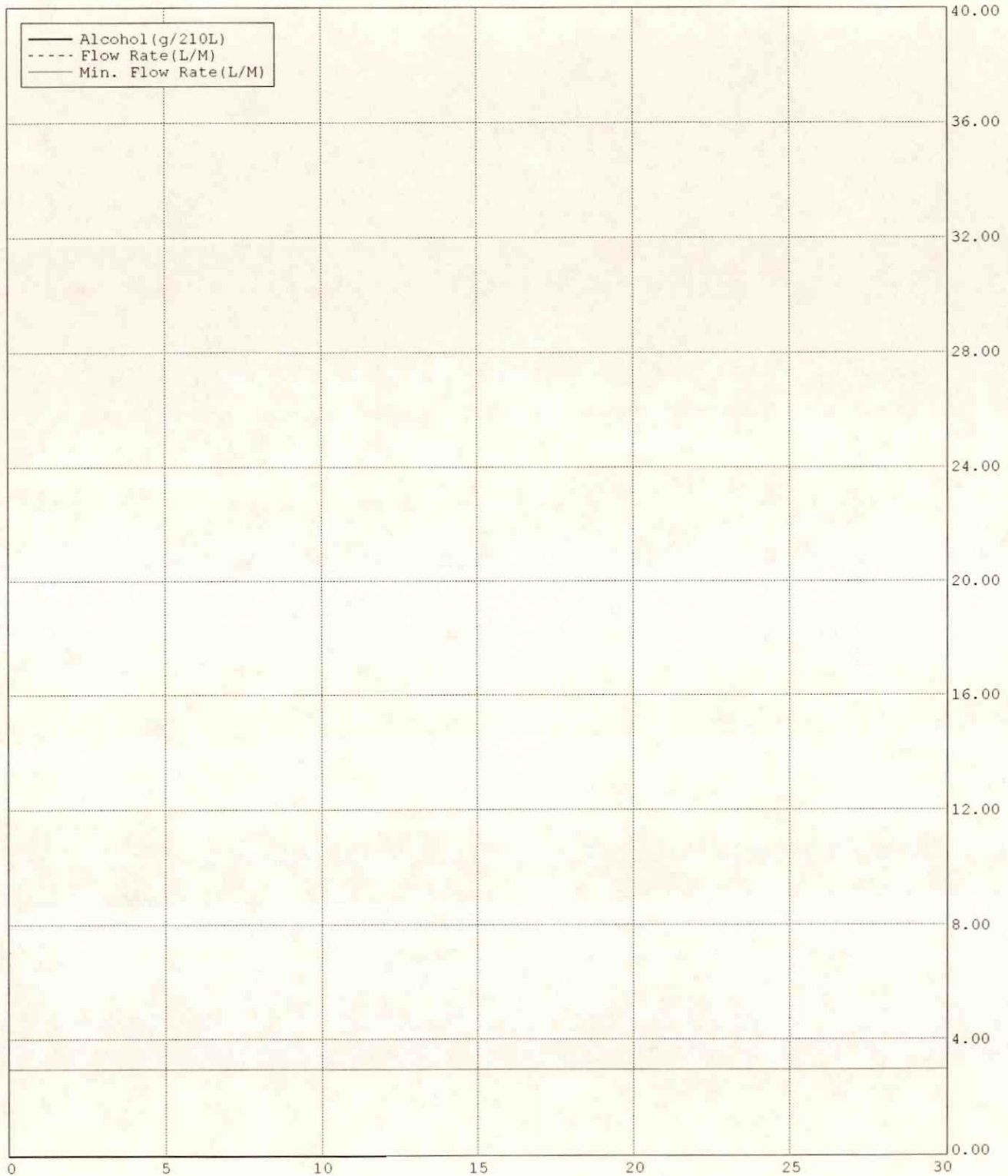
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.28: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	08:25
BLANK TEST	0.000	08:25
INTERNAL STANDARD	VERIFIED	08:26
EXTERNAL STANDARD	0.078	08:26
BLANK TEST	0.000	08:27

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 09/12/2019
Time: 08:43:42

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 29.27: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	08:45
BLANK TEST	0.000	08:45
INTERNAL STANDARD	VERIFIED	08:45
EXTERNAL STANDARD	0.079	08:45
BLANK TEST	0.000	08:46
SUBJECT SAMPLE (Vol=2.16L)	0.000	08:46
BLANK TEST	0.000	08:47
EXTERNAL STANDARD	0.079	08:48
BLANK TEST	0.000	08:49

Handwritten signature: BMB

