

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 100350 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 AG805804 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 1/03/21
 - 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: 100350

Date: 09/11/2019
Time: 13:19:40

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 45.7°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.91 V PASSED
(1.09 V - 2.53 V)
Cooler Voltage = 1.79 V PASSED
(1.12 V - 2.62 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 517 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 4.266 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 = 0.104 1.62% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100350

Date: 09/11/2019
Time: 1:23 PM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 45.2°C

Current Barometer 29.6 in
Volume (Ltr) 1.43

Settings

Lamp: 1.91 V
Bias: 79 V
Cooler: 1.79 V
Chopper: 517 Hz

Voltages (V)

Flow: 1.03 V
Detector: 0.070 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 04/04/2018
Time: 10:33:02

OPERATOR NAME:
BRANDI BARNETT
CERTIFICATE #: 7038

Ca = 0.1000
CAL = 0.961607 0.800 <= CAL < 1.200
b1 = 0.0006 0.0000 <= b1 < 0.0040
b2 = 0.0056 0.0010 <= b2 < 0.0100
b3 = 0.0009 0.0000 <= b3 < 0.0040
Xq = 0.1028 0.0500 <= Xq < 0.2000
a21 = 1.148061 1.050 <= a21 < 1.300
a31 = 0.485456 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/11/2019
Time: 13:24:31

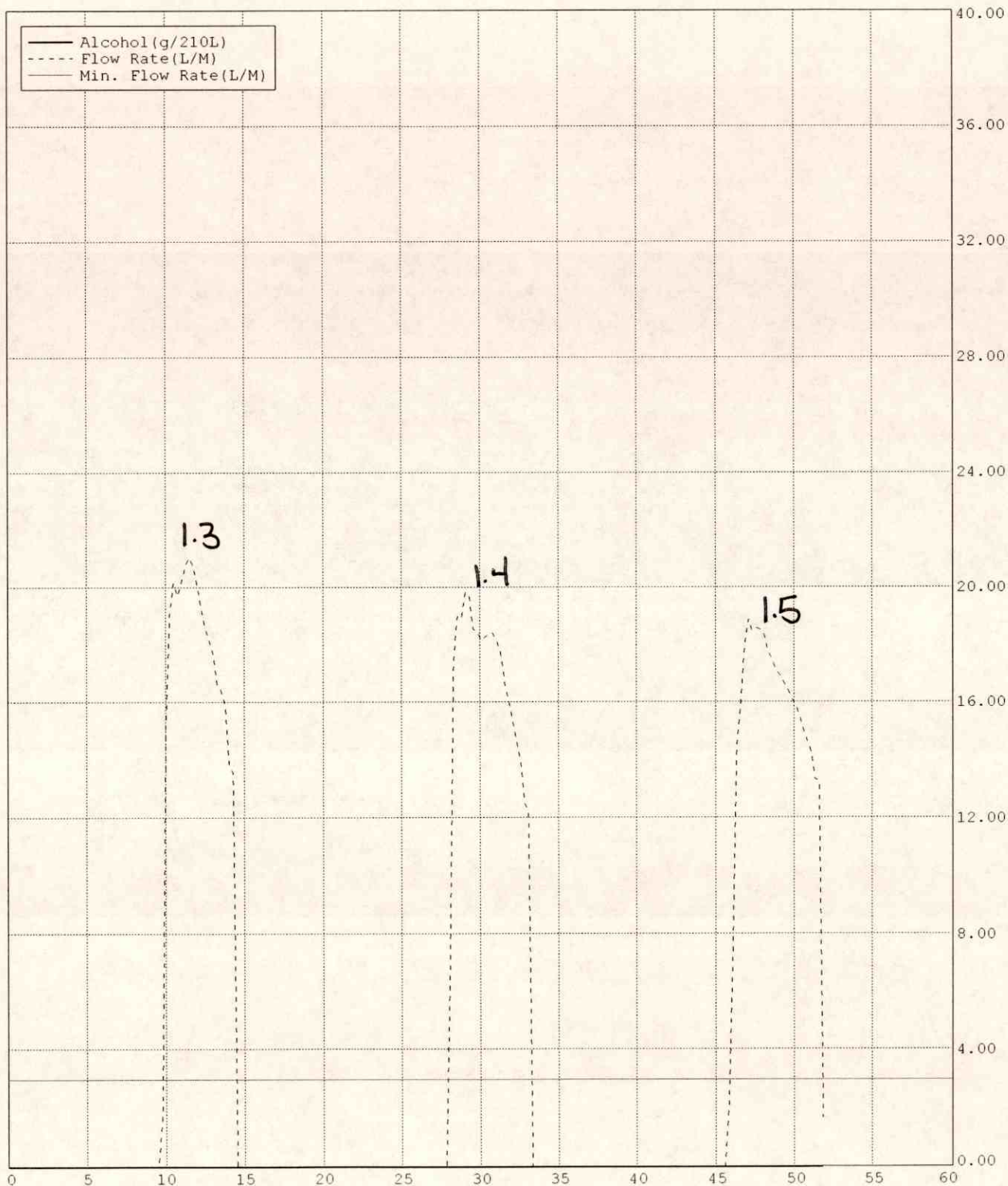
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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	13:26
BLANK TEST	0.000	13:26
INTERNAL STANDARD	VERIFIED	13:26
EXTERNAL STANDARD	0.078	13:26
BLANK TEST	0.000	13:27
SUBJECT SAMPLE (Vol=1.54L)	0.000	13:28
BLANK TEST	0.000	13:29
EXTERNAL STANDARD	0.077	13:29
BLANK TEST	0.000	13:30



LINEARITY CHECK

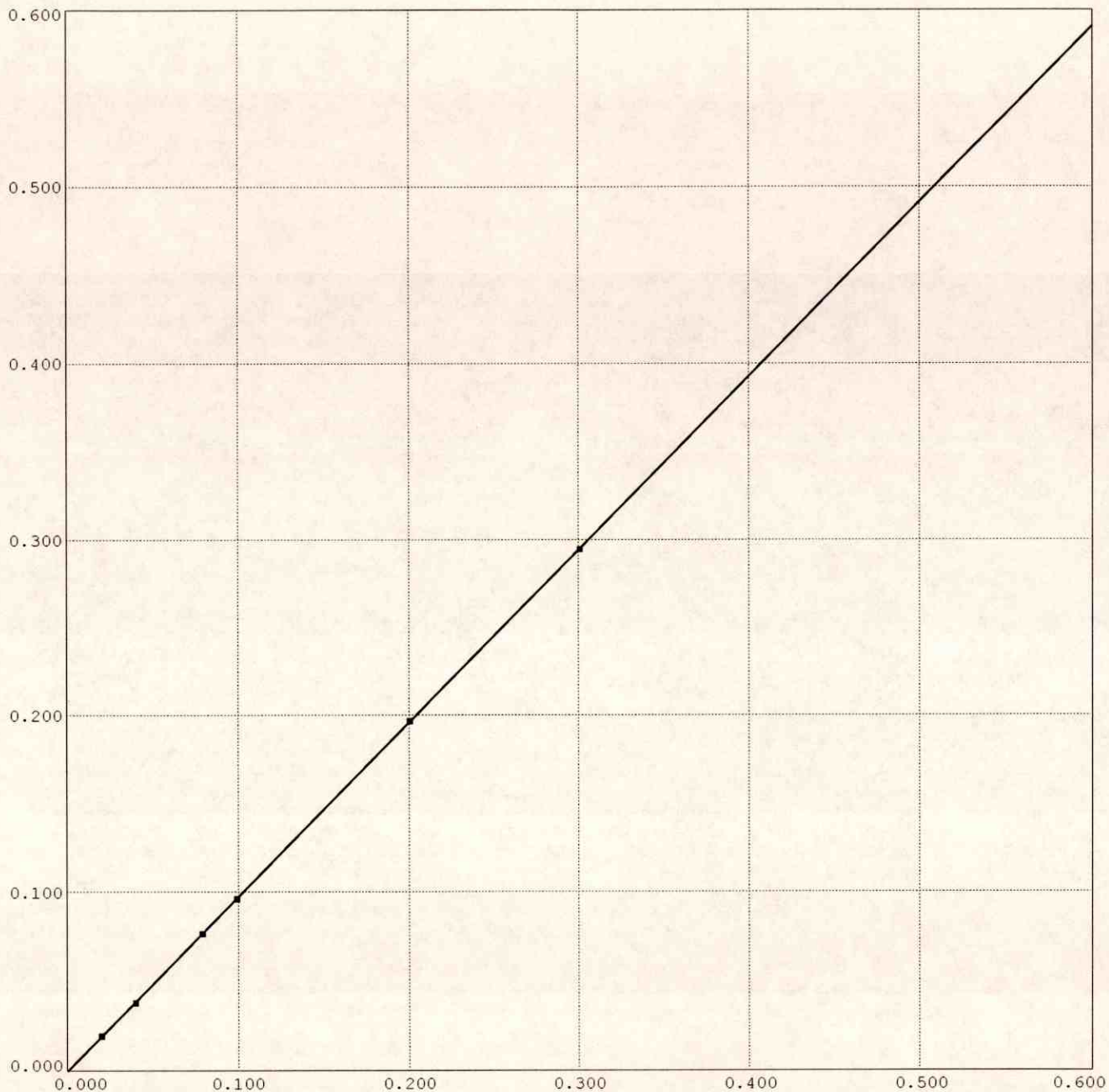
Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/11/2019
Time: 13:43:59

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0198	0.0004
0.040	0.0386	0.0005
0.079	0.0774	0.0005
0.099	0.0970	0.0000
0.200	0.1974	0.0005
0.300	0.2952	0.0004

SLOPE = 0.986125
R² = 0.999984



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100350

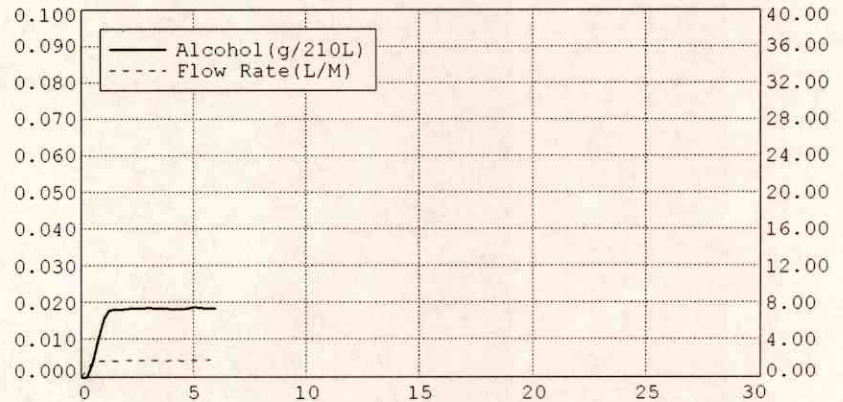
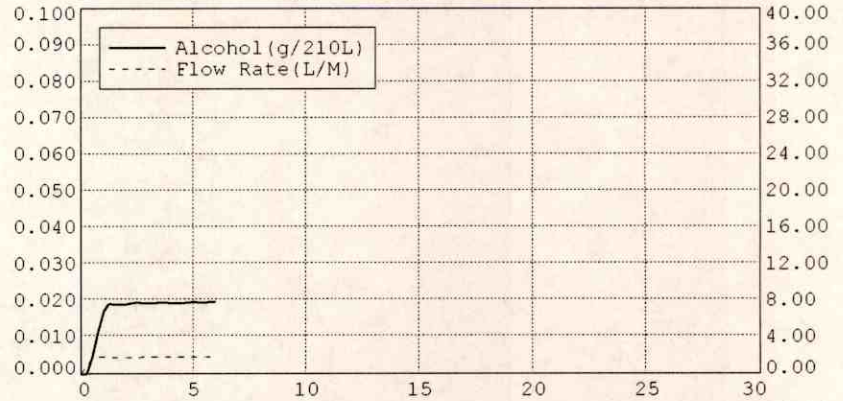
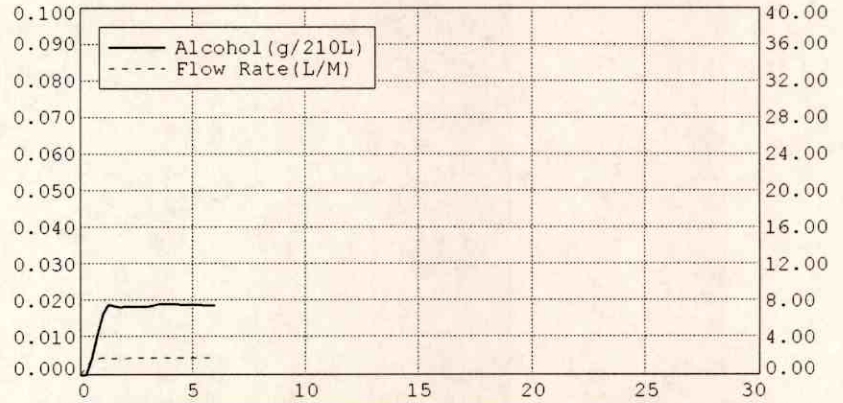
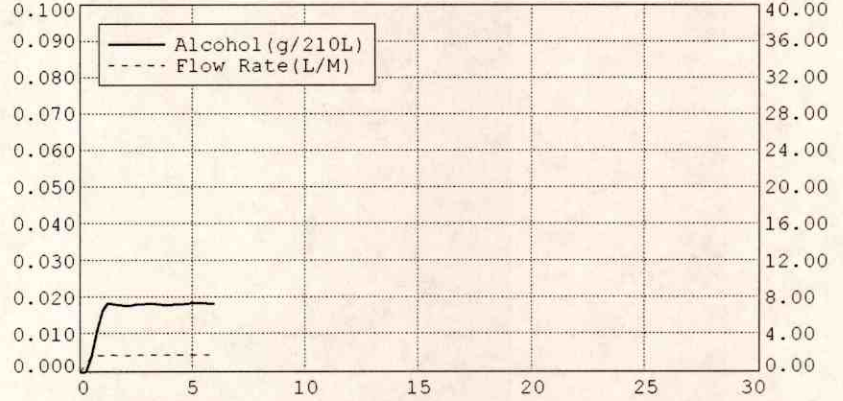
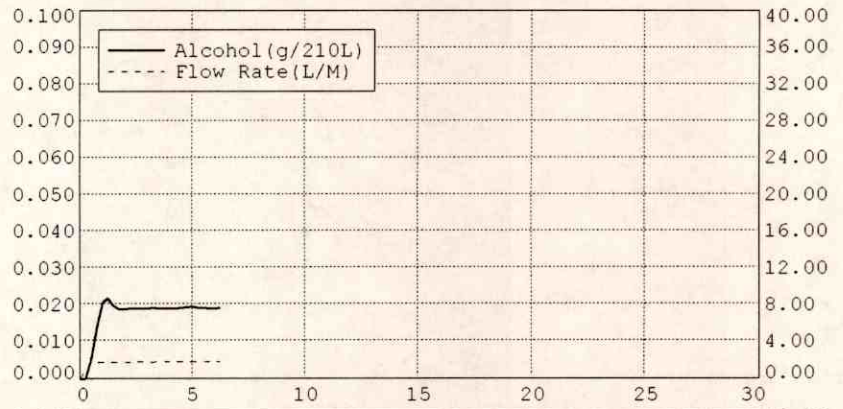
Date: 09/11/2019
 Time: 13:44:02

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.63: 0.020
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 577 psi

BLANK TEST	0.000	13:45
INTERNAL STANDARD	VERIFIED	13:45
EXTERNAL STANDARD	0.020	13:45
BLANK TEST	0.000	13:46
EXTERNAL STANDARD	0.019	13:46
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.020	13:47
BLANK TEST	0.000	13:48
EXTERNAL STANDARD	0.020	13:48
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.020	13:50
BLANK TEST	0.000	13:50

Average = 0.0198
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100350

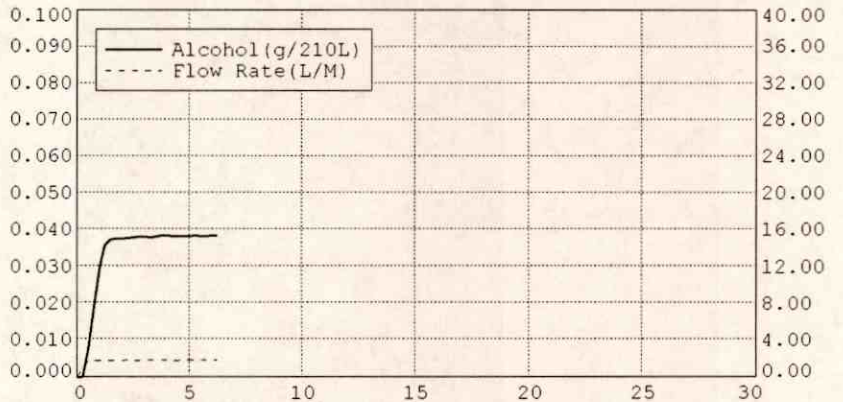
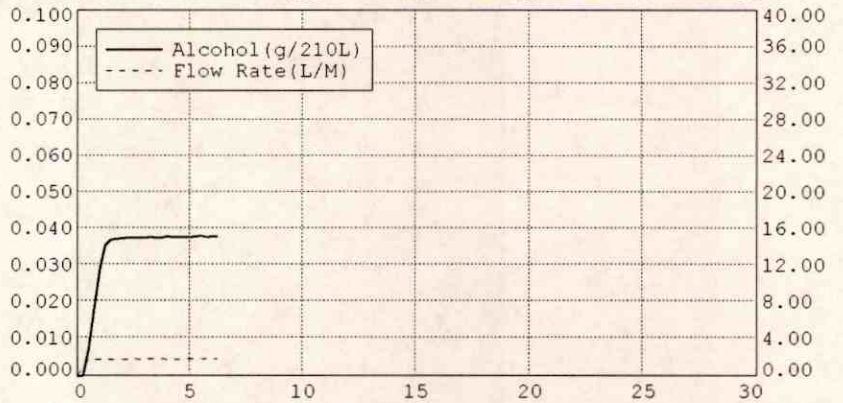
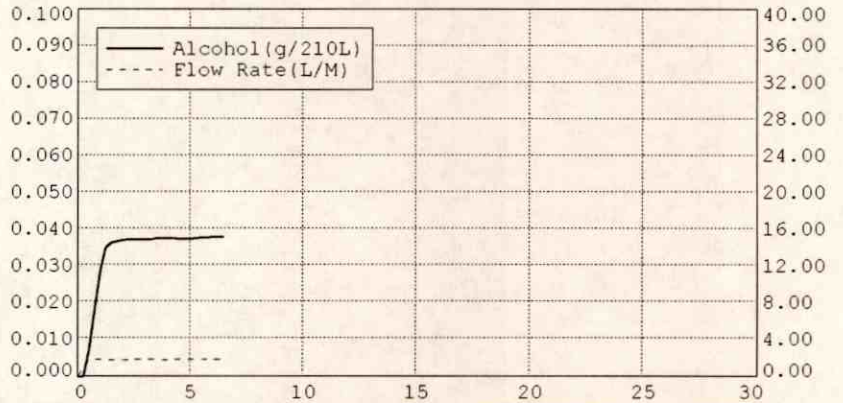
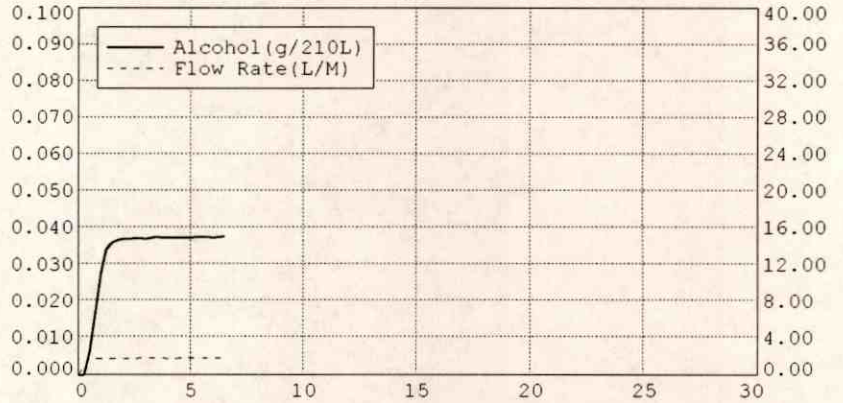
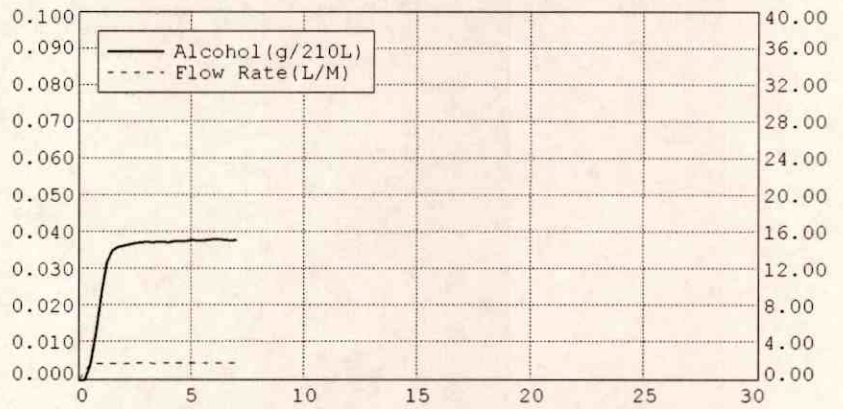
Date: 09/11/2019
Time: 13:53:13

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.63: 0.040
LOT #: AG733403
EXPIRATION: 11/30/2019
TANK PRESSURE: 567 psi

BLANK TEST	0.000	13:54
INTERNAL STANDARD	VERIFIED	13:54
EXTERNAL STANDARD	0.039	13:54
BLANK TEST	0.000	13:55
EXTERNAL STANDARD	0.038	13:55
BLANK TEST	0.000	13:56
EXTERNAL STANDARD	0.038	13:57
BLANK TEST	0.000	13:57
EXTERNAL STANDARD	0.039	13:58
BLANK TEST	0.000	13:59
EXTERNAL STANDARD	0.039	13:59
BLANK TEST	0.000	14:00

Average = 0.0386
Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100350

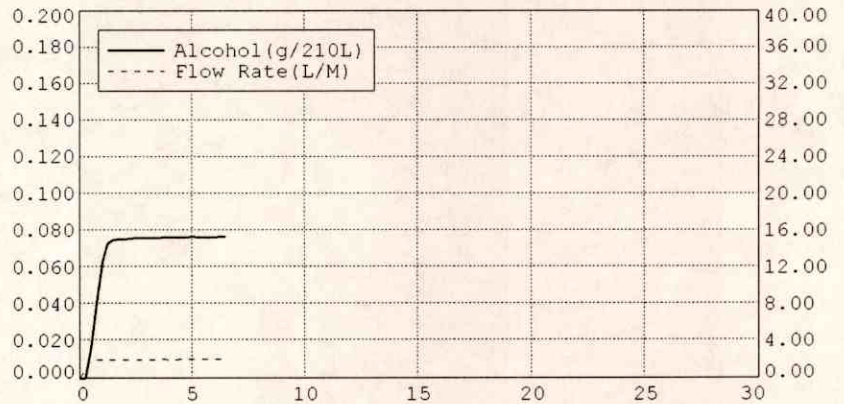
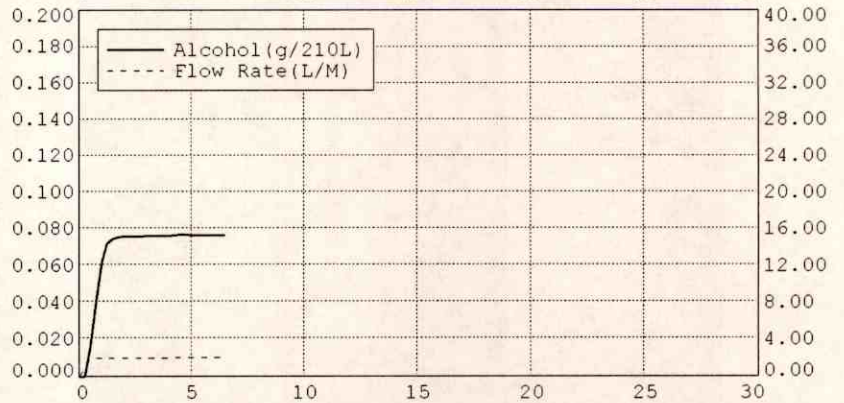
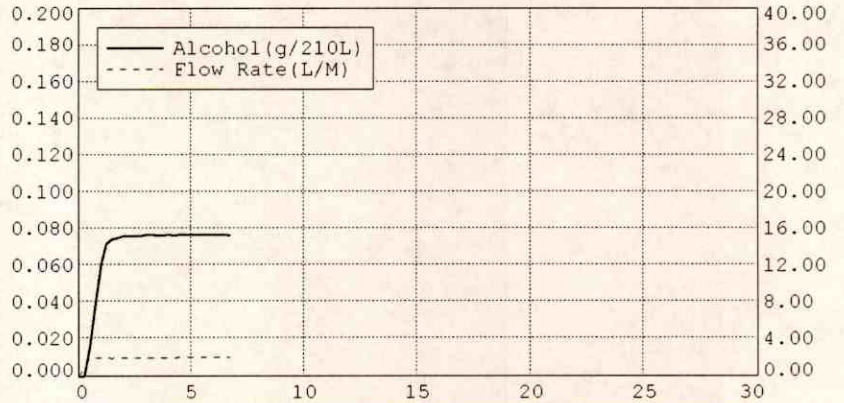
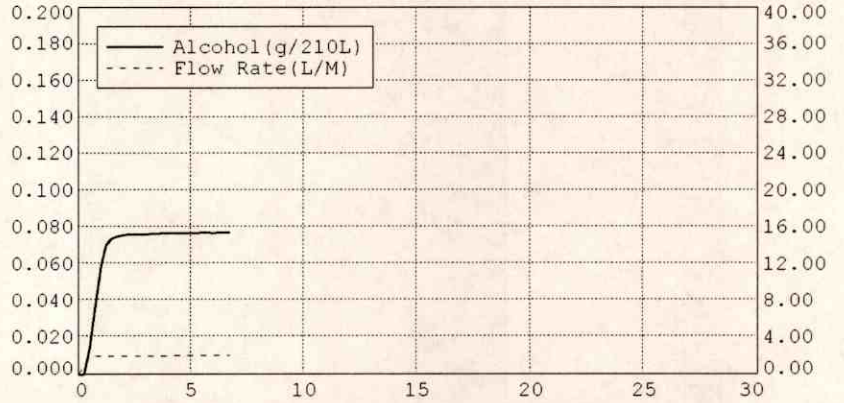
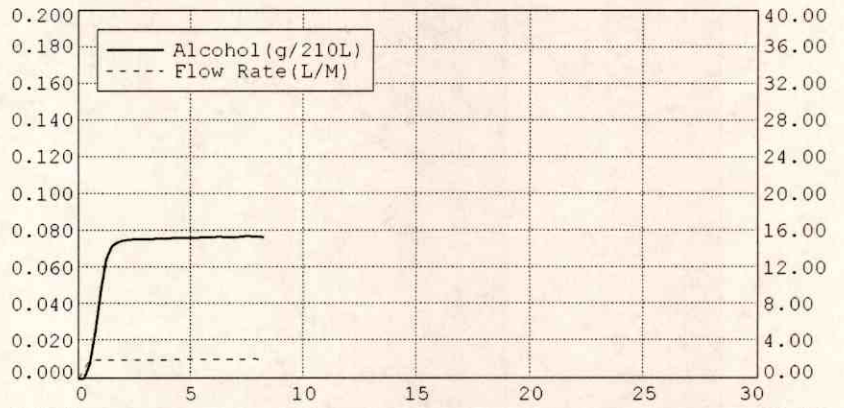
Date: 09/11/2019
Time: 14:01:13

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.63: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020
TANK PRESSURE: 1171 psi

BLANK TEST	0.000	14:02
INTERNAL STANDARD	VERIFIED	14:02
EXTERNAL STANDARD	0.078	14:02
BLANK TEST	0.000	14:03
EXTERNAL STANDARD	0.078	14:03
BLANK TEST	0.000	14:04
EXTERNAL STANDARD	0.077	14:04
BLANK TEST	0.000	14:05
EXTERNAL STANDARD	0.077	14:05
BLANK TEST	0.000	14:06
EXTERNAL STANDARD	0.077	14:07
BLANK TEST	0.000	14:08

Average = 0.0774
Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100350

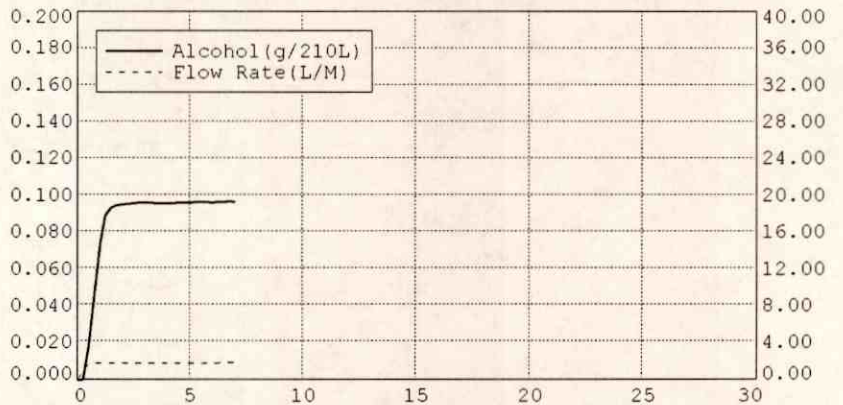
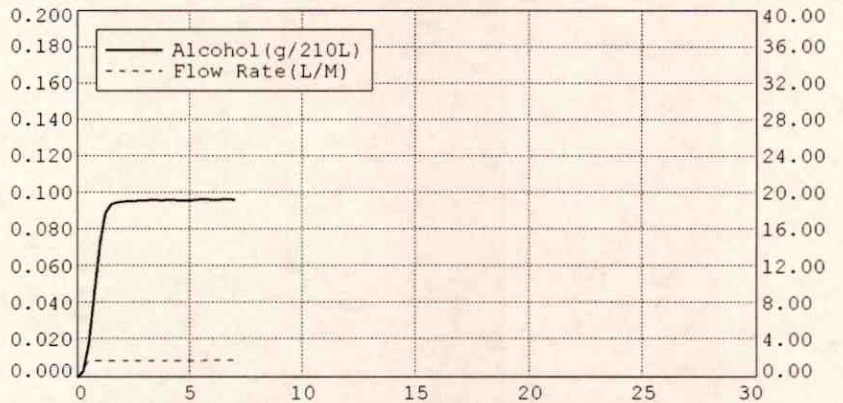
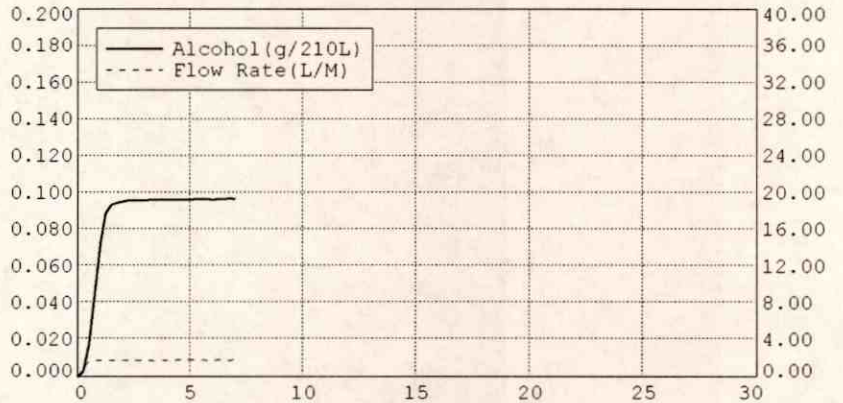
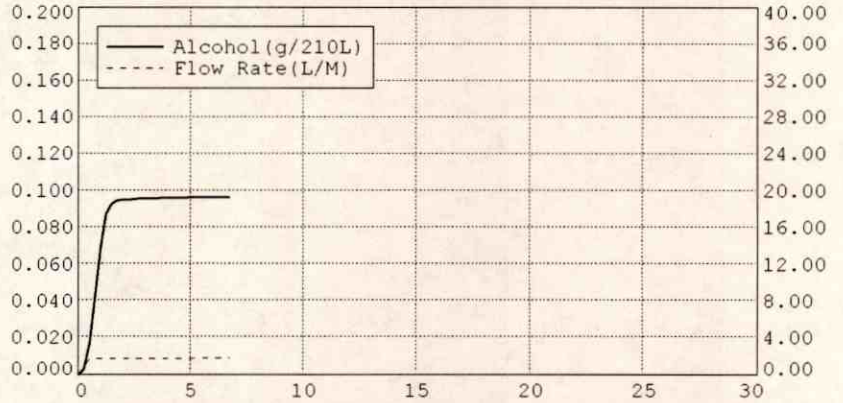
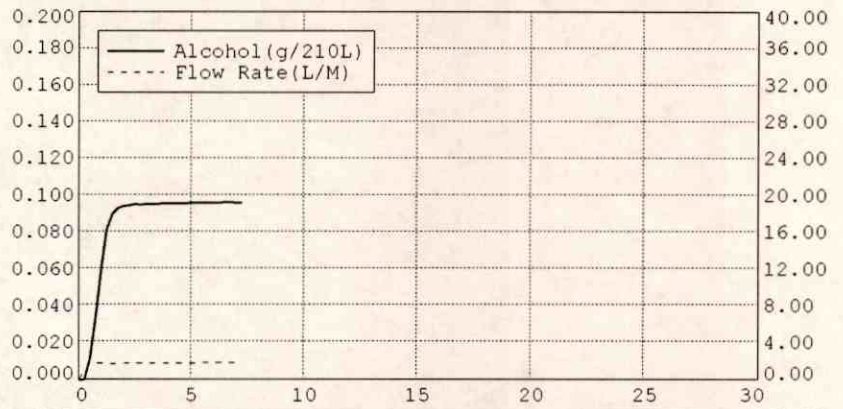
Date: 09/11/2019
Time: 14:08:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.63: 0.099
LOT #: AG805903
EXPIRATION: 02/28/2020
TANK PRESSURE: 468 psi

BLANK TEST	0.000	14:10
INTERNAL STANDARD	VERIFIED	14:10
EXTERNAL STANDARD	0.097	14:10
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.097	14:11
BLANK TEST	0.000	14:12
EXTERNAL STANDARD	0.097	14:12
BLANK TEST	0.000	14:13
EXTERNAL STANDARD	0.097	14:13
BLANK TEST	0.000	14:14
EXTERNAL STANDARD	0.097	14:14
BLANK TEST	0.000	14:15

Average = 0.0970
Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

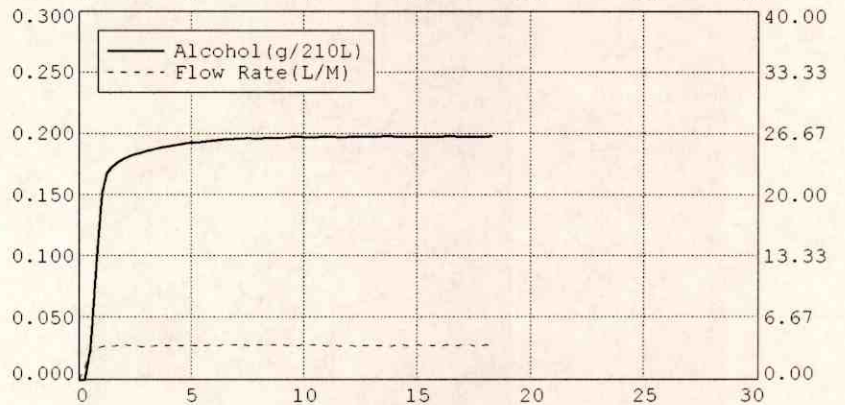
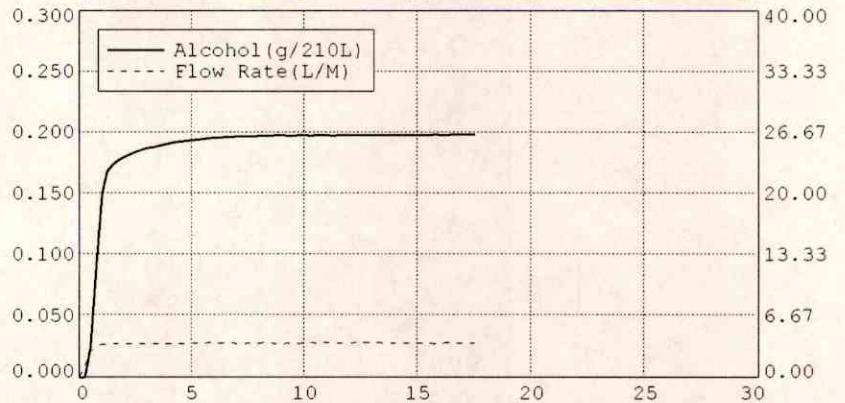
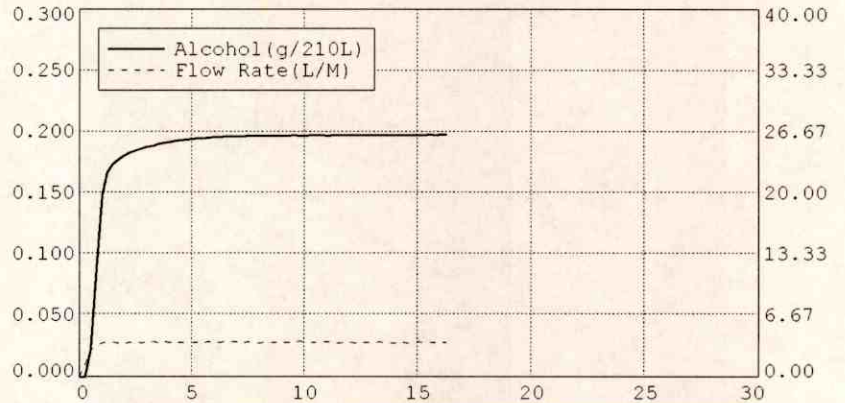
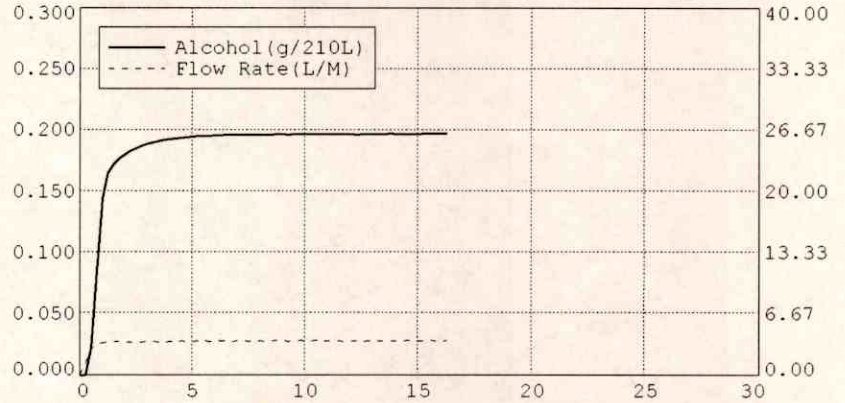
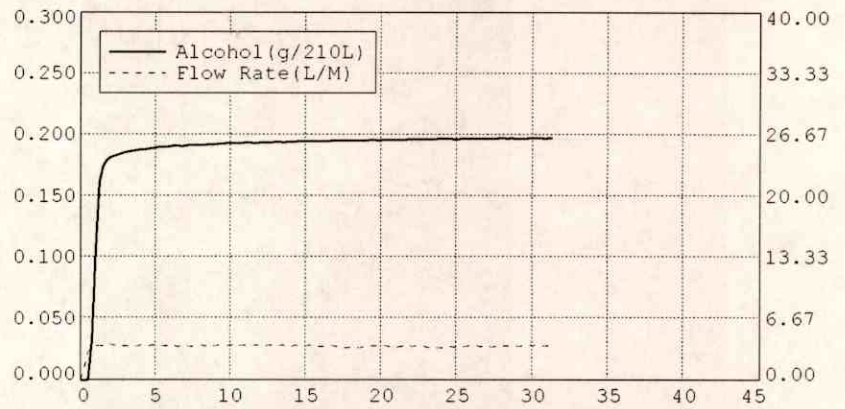
Alaska Department of Public Safety
 DATAMASTER dmt: 100350

Date: 09/11/2019
 Time: 14:16:58

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

BLANK TEST	0.000	14:18
INTERNAL STANDARD	VERIFIED	14:18
EXTERNAL STANDARD	0.197	14:18
BLANK TEST	0.000	14:19
EXTERNAL STANDARD	0.197	14:20
BLANK TEST	0.000	14:21
EXTERNAL STANDARD	0.197	14:21
BLANK TEST	0.000	14:22
EXTERNAL STANDARD	0.198	14:22
BLANK TEST	0.000	14:23
EXTERNAL STANDARD	0.198	14:24
BLANK TEST	0.000	14:25

Average = 0.1974
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

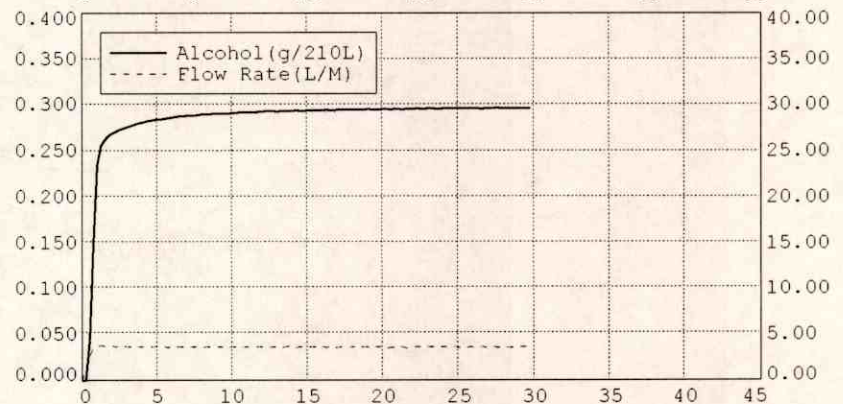
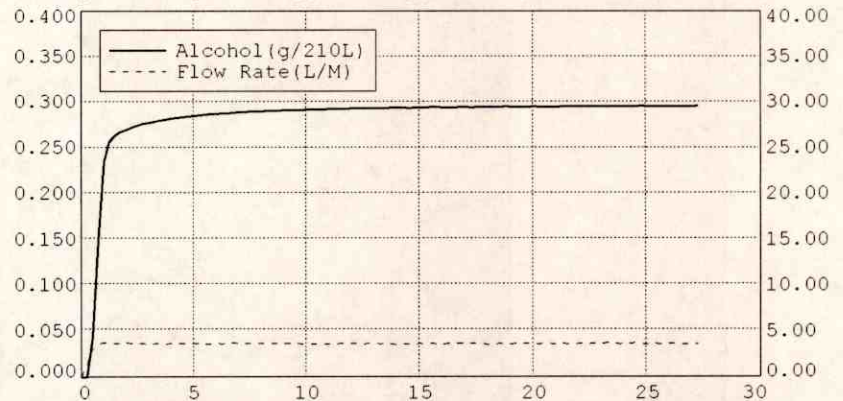
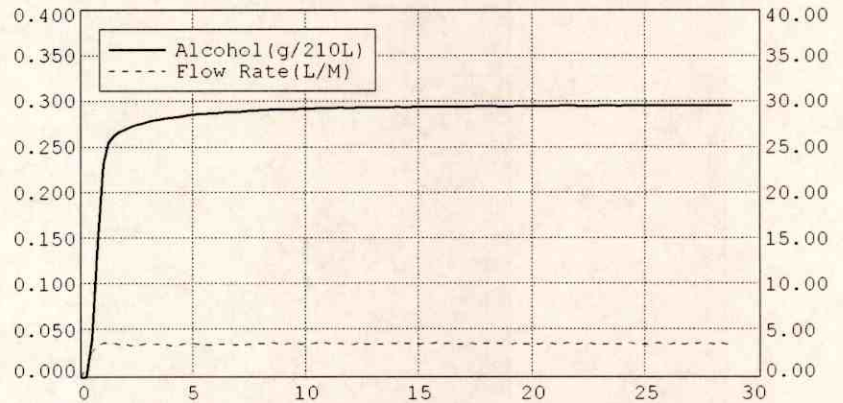
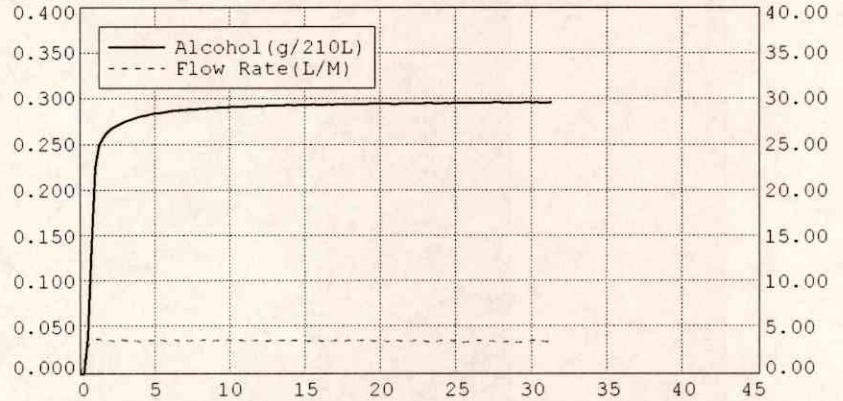
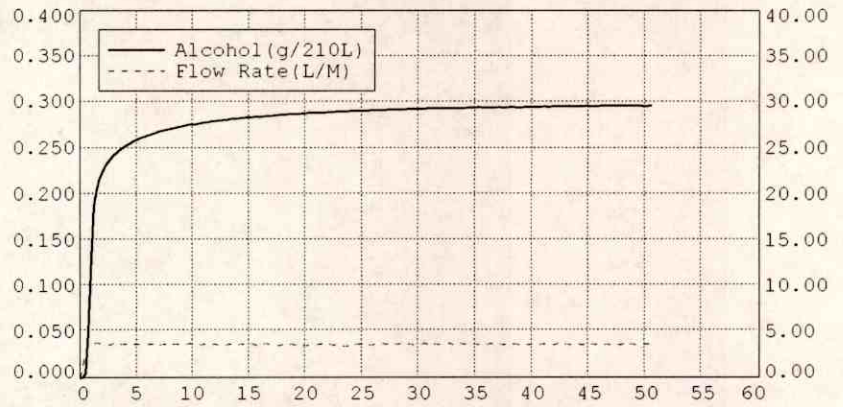
Alaska Department of Public Safety
 DATAMASTER dmt: 100350

Date: 09/11/2019
 Time: 14:27:16

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: GUTH 19010
 EXPIRATION: 01/03/2021

BLANK TEST	0.000	14:28
INTERNAL STANDARD	VERIFIED	14:28
EXTERNAL STANDARD	0.295	14:29
BLANK TEST	0.000	14:30
EXTERNAL STANDARD	0.295	14:31
BLANK TEST	0.000	14:31
EXTERNAL STANDARD	0.296	14:32
BLANK TEST	0.000	14:33
EXTERNAL STANDARD	0.295	14:34
BLANK TEST	0.000	14:34
EXTERNAL STANDARD	0.295	14:35
BLANK TEST	0.000	14:36

Average = 0.2952
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/12/2019
Time: 07:33:59

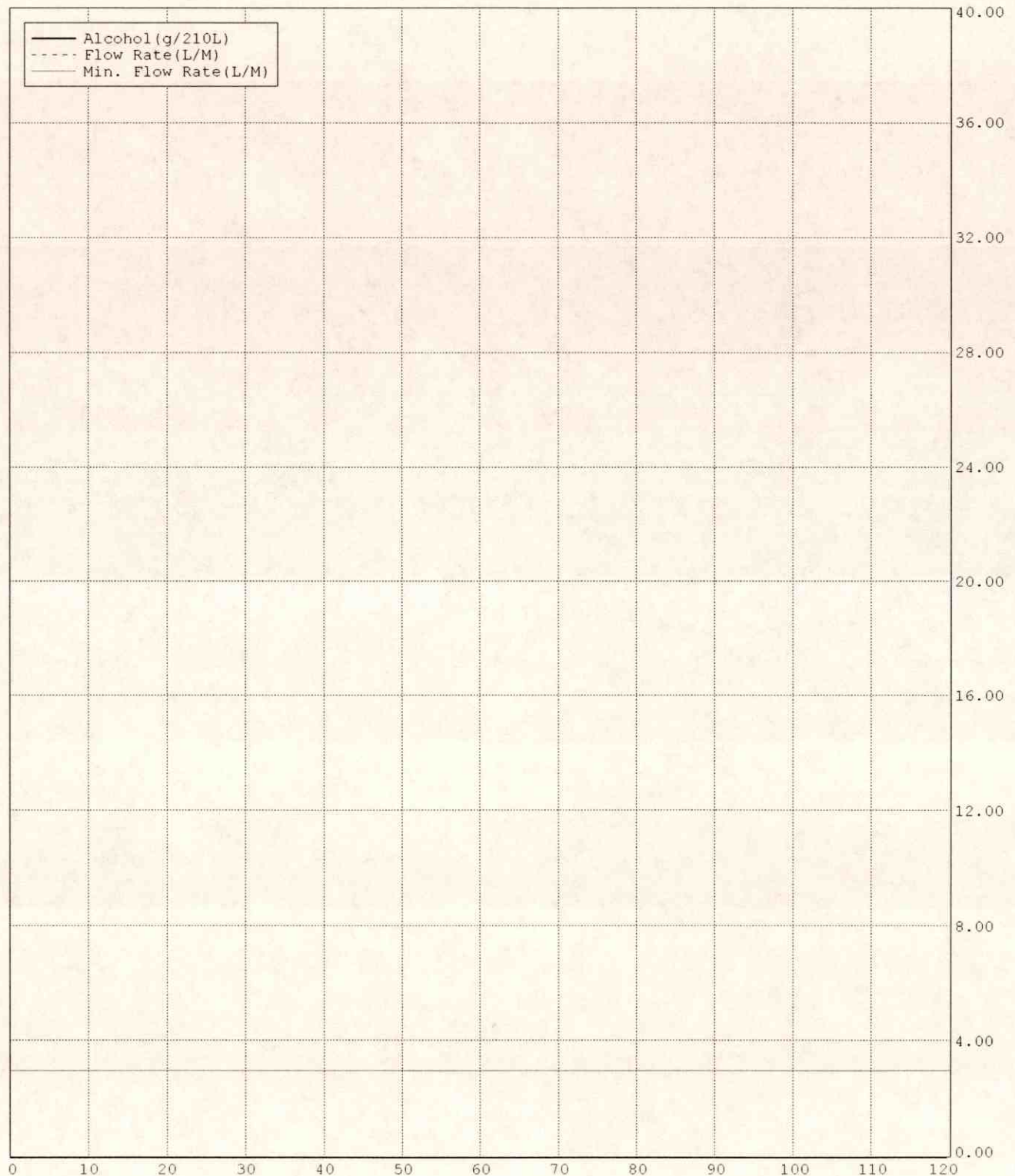
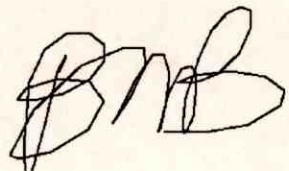
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
INCOMPETE
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	07:35
INTERNAL STANDARD	VERIFIED	07:35
EXTERNAL STANDARD	0.077	07:35
BLANK TEST	0.000	07:36
SUBJECT SAMPLE	INCOMPLETE	07:38



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/12/2019
Time: 07:40:07

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

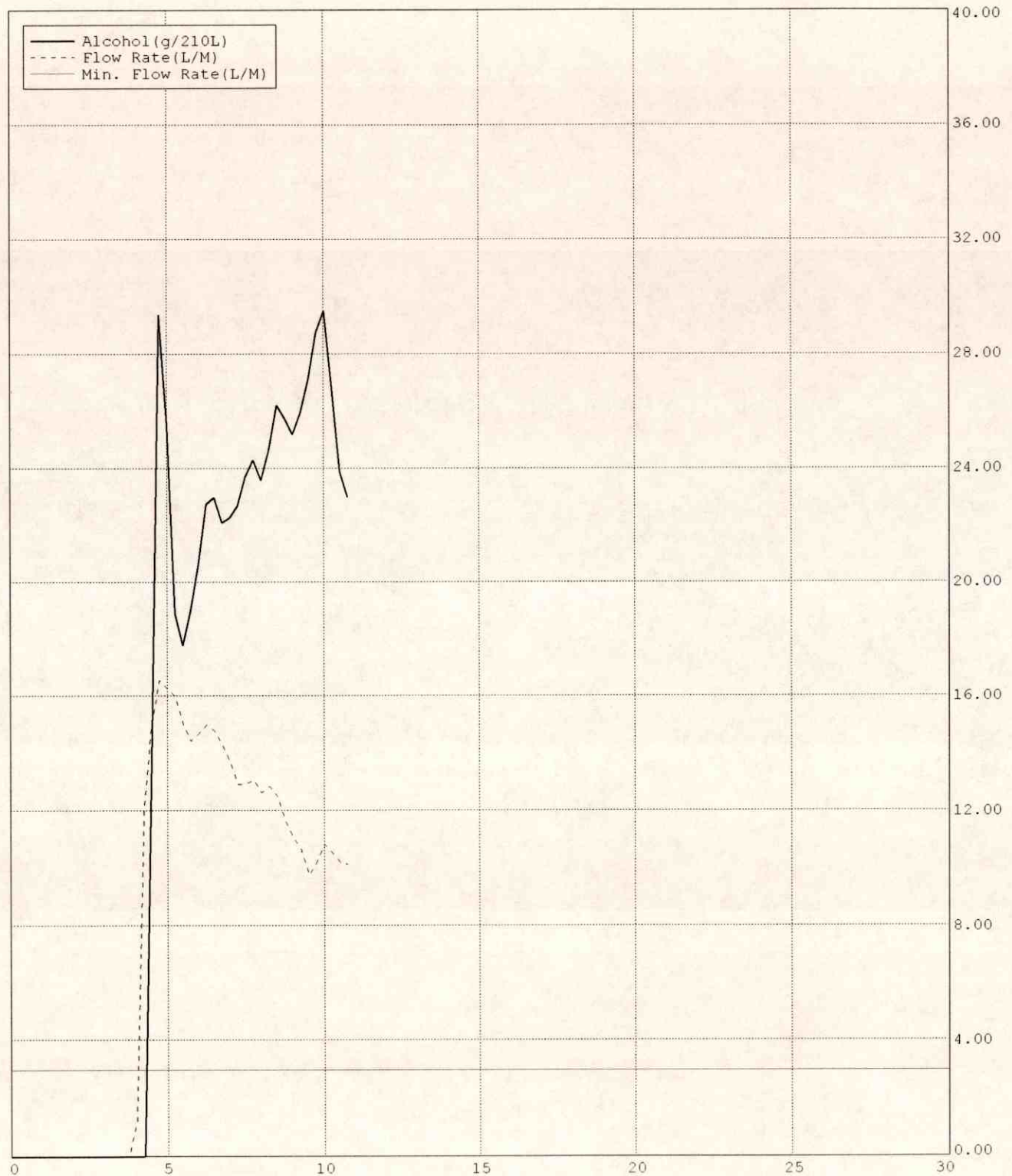
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK	PASSED	07:41
BLANK TEST	0.000	07:41
INTERNAL STANDARD	VERIFIED	07:41
EXTERNAL STANDARD	0.076	07:41
BLANK TEST	0.000	07:42
SUBJECT SAMPLE	INVALID	07:43

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/12/2019
Time: 07:46:07

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

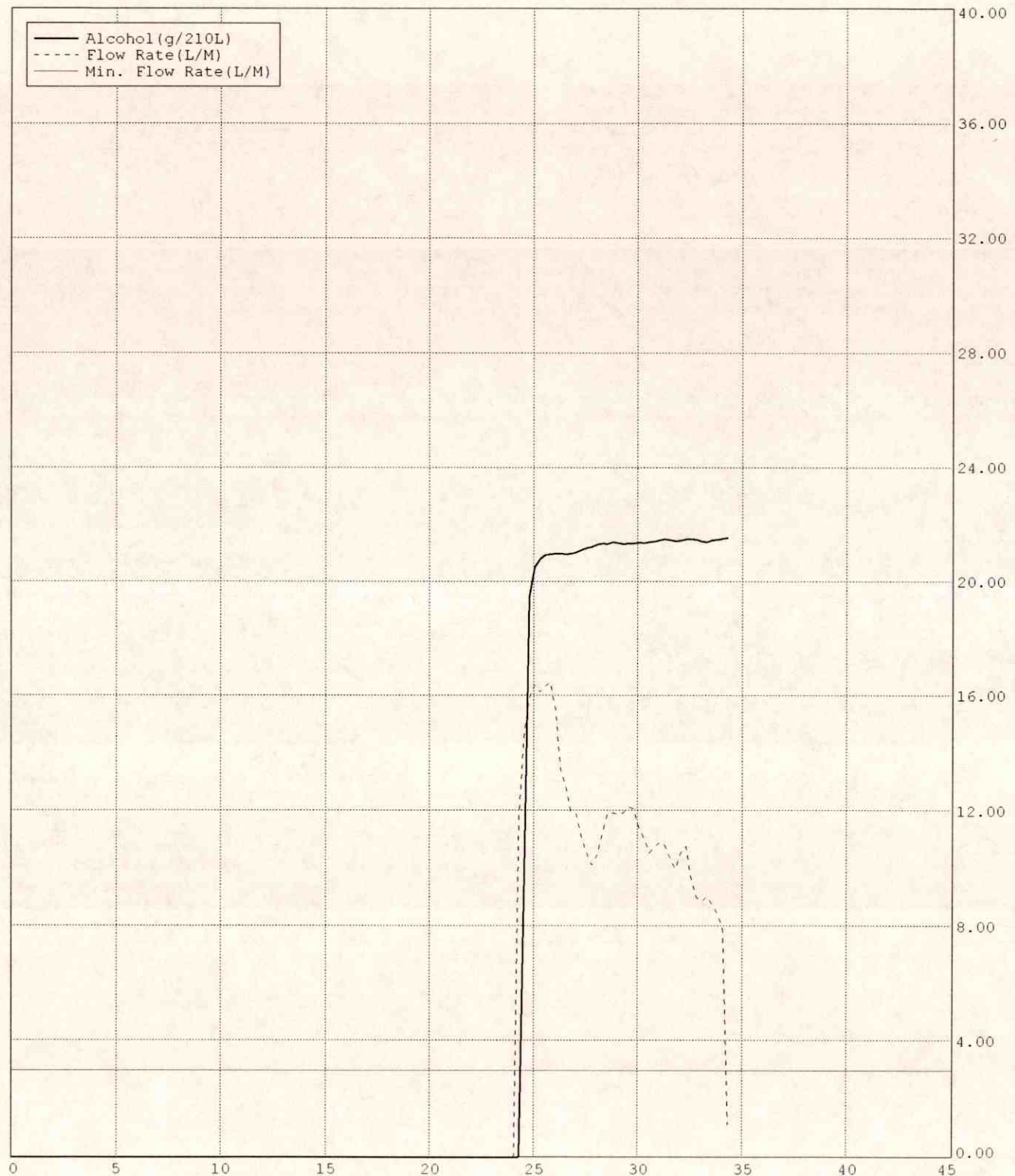
DEPT/AGENCY:
INTERFERE ACETONE
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	07:48
BLANK TEST	0.000	07:48
INTERNAL STANDARD	VERIFIED	07:48
Xq = 0.104 (1.20%)		
EXTERNAL STANDARD	0.076	07:49
X[1] = 0.0764 (-0.0007) (0.0010)		
BLANK TEST	0.000	07:50
SUBJECT SAMPLE	XXX	07:50
X[1] = 0.1080 (-0.0182) (0.0007)		

Interference Detected

Filter 2 Avg: -0.0004
Filter 3 Avg: 0.0017
BMB 9/12/19



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/12/2019
Time: 07:54:10

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

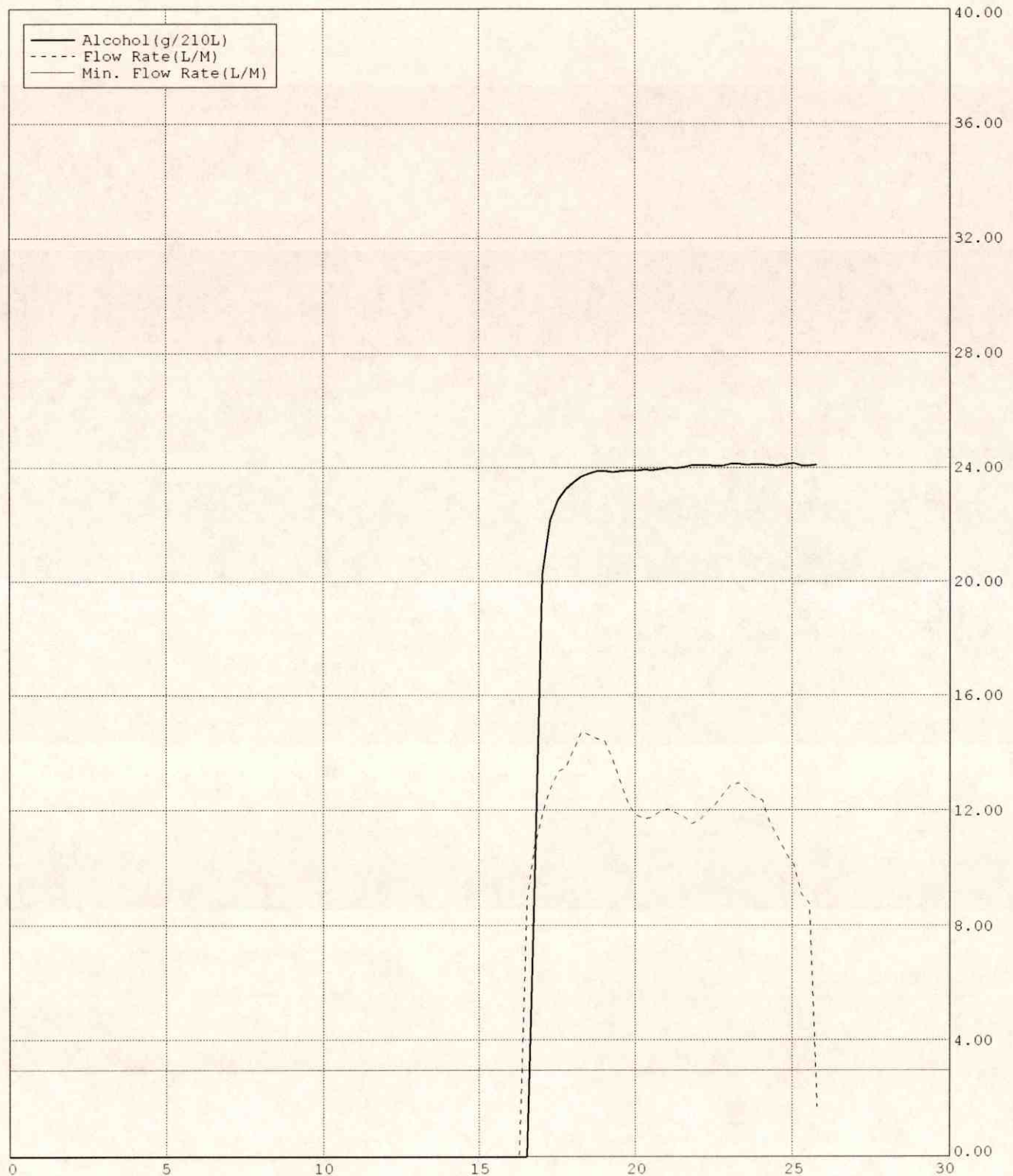
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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	07:55
BLANK TEST	0.000	07:55
INTERNAL STANDARD	VERIFIED	07:55
Xq = 0.104 (1.37%)		
EXTERNAL STANDARD	0.077	07:55
X[1] = 0.0769 (-0.0005) (0.0020)		
BLANK TEST	0.000	07:56
SUBJECT SAMPLE	XXX	07:57
X[1] = 0.1206 (-0.0233) (0.0021)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/12/2019
Time: 08:01:36

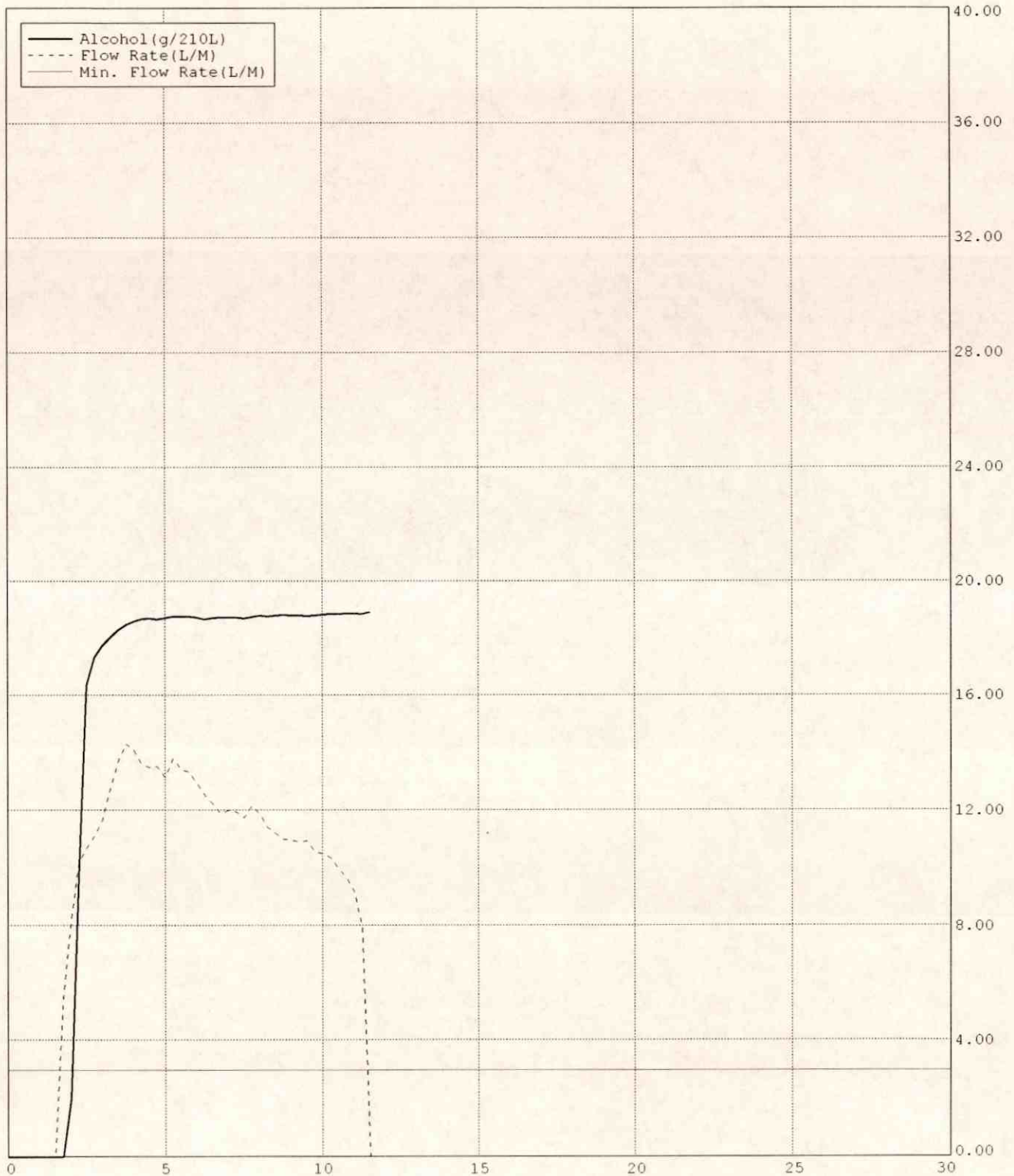
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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	08:02
BLANK TEST	0.000	08:02
INTERNAL STANDARD	VERIFIED	08:02
Xq = 0.104 (1.62%)		
EXTERNAL STANDARD	0.077	08:03
X[1] = 0.0766 (0.0002) (0.0021)		
BLANK TEST	0.000	08:04
SUBJECT SAMPLE (Vol=1.88L)	0.094	08:04
X[1] = 0.0948 (0.0016) (0.0009)		
BLANK TEST	0.000	08:05
EXTERNAL STANDARD	0.076	08:05
X[1] = 0.0761 (-0.0005) (0.0018)		
BLANK TEST	0.000	08:06



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/12/2019
Time: 08:19:56

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

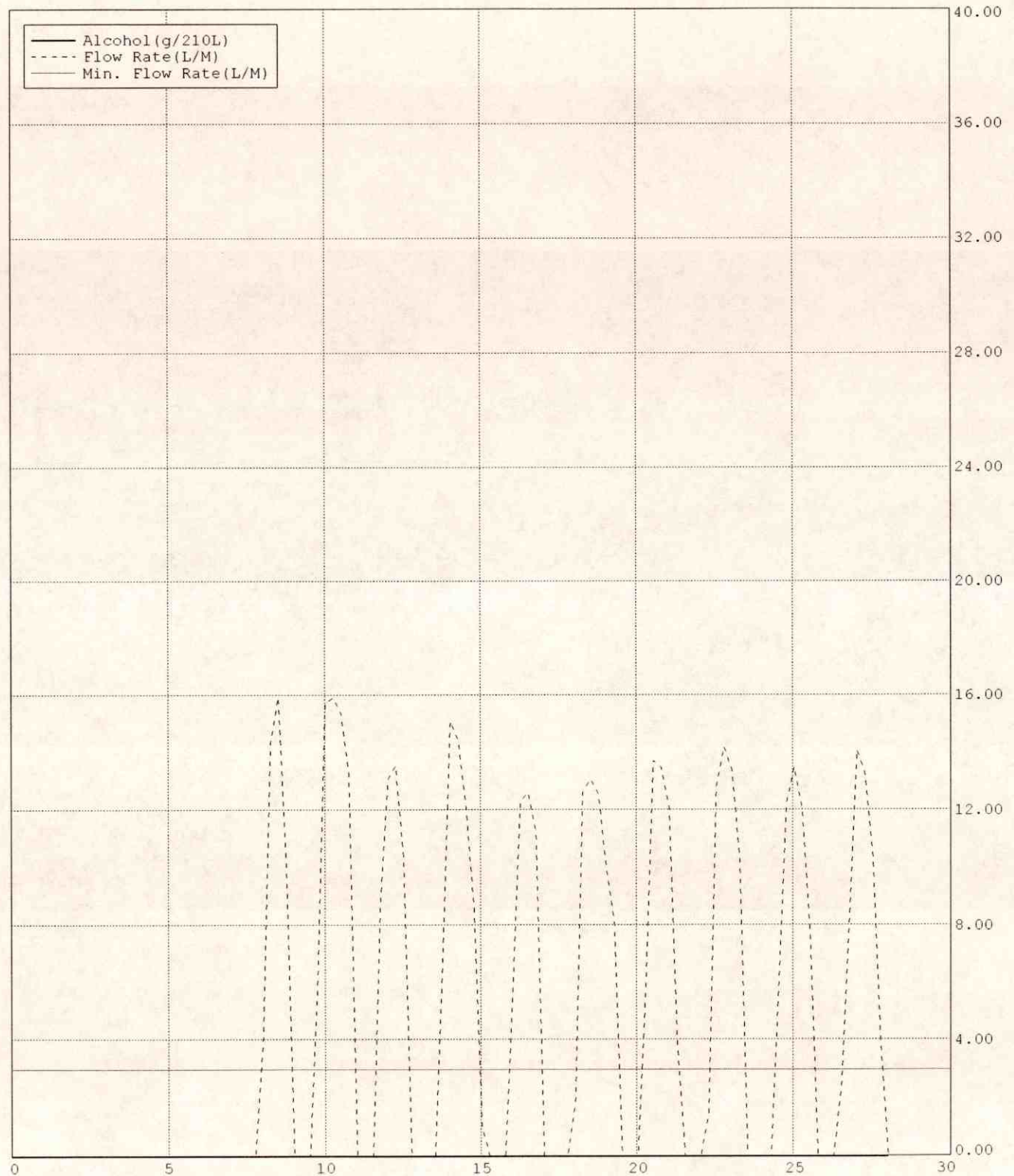
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK	PASSED	08:21
BLANK TEST	0.000	08:21
INTERNAL STANDARD	VERIFIED	08:21
EXTERNAL STANDARD	0.076	08:21
BLANK TEST	0.000	08:22
SUBJECT SAMPLE	XXX	08:22

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/12/2019
Time: 08:25:27

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

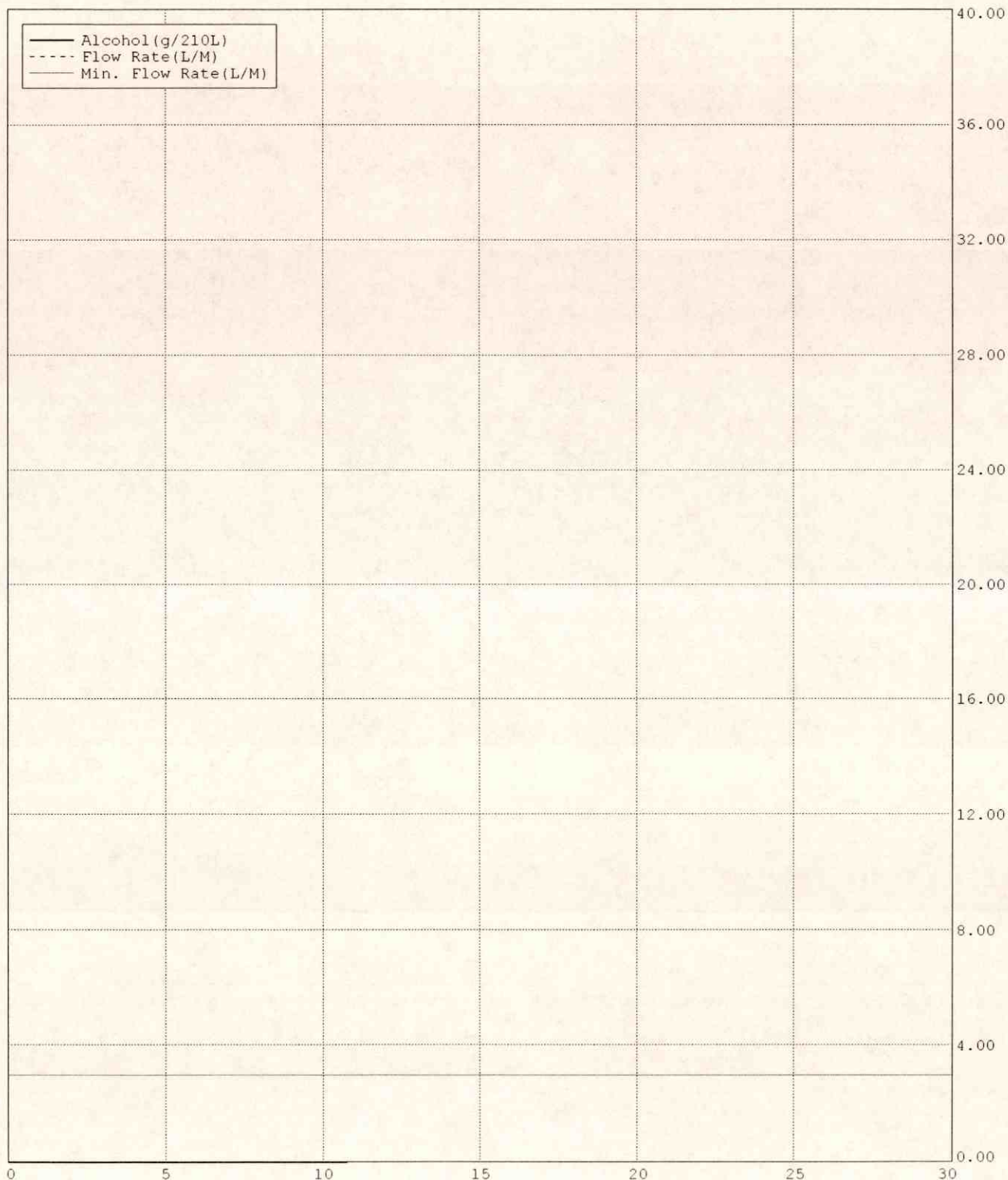
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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	08:26
BLANK TEST	0.000	08:26
INTERNAL STANDARD	VERIFIED	08:26
EXTERNAL STANDARD	0.077	08:26
BLANK TEST	0.000	08:27

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/12/2019
Time: 08:43:39

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 29.26: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	08:44
BLANK TEST	0.000	08:44
INTERNAL STANDARD	VERIFIED	08:45
EXTERNAL STANDARD	0.077	08:45
BLANK TEST	0.000	08:46
SUBJECT SAMPLE (Vol=1.99L)	0.000	08:46
BLANK TEST	0.000	08:47
EXTERNAL STANDARD	0.077	08:47
BLANK TEST	0.000	08:48

BMB

