

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 100368 Analyst Brandi Barnett Start Date 11/13/19

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 AG923401 Exp 8/22/21
- 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 DR4162 Date Calibrated 10/17/19
- vi. 0.300g/210L Mnf Guth Lot 19010 Exp 1/3/21
 - 1. Simulator S/N DR4178 Date Calibrated 10/4/19

8/22/21
BMB 12/10/19
BMB 8/21/21 11/20/19

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 11/13/19

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 11/13/2019
Time: 09:41:06

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.62 V PASSED
(0.97 V - 2.27 V)
Cooler Voltage = 1.73 V PASSED
(1.04 V - 2.42 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 541 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.2 in

PUMP INFO

Flow Rate = 4.515 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 = 0.075 0.11% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100368

Date: 11/13/2019
Time: 10:10 AM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 45.5°C

Current Barometer 29.2 in
Volume (Ltr) 1.53

Settings

Lamp: 1.67 V
Bias: 79 V
Cooler: 1.73 V
Chopper: 539 Hz

Voltages (V)

Flow: 1.07 V
Detector: -0.050 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 10/29/2019
Time: 12:53:17

OPERATOR NAME:
BRANDI BARNETT
CERTIFICATE #: 7038

Ca = 0.1000
CAL = 0.921878 0.800 <= CAL < 1.200
b1 = 0.0002 0.0000 <= b1 < 0.0040
b2 = 0.0050 0.0010 <= b2 < 0.0100
b3 = 0.0001 0.0000 <= b3 < 0.0040
Xq = 0.0754 0.0500 <= Xq < 0.2000
a21 = 1.197587 1.050 <= a21 < 1.300
a31 = 0.442055 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 11/13/2019
Time: 10:12:29

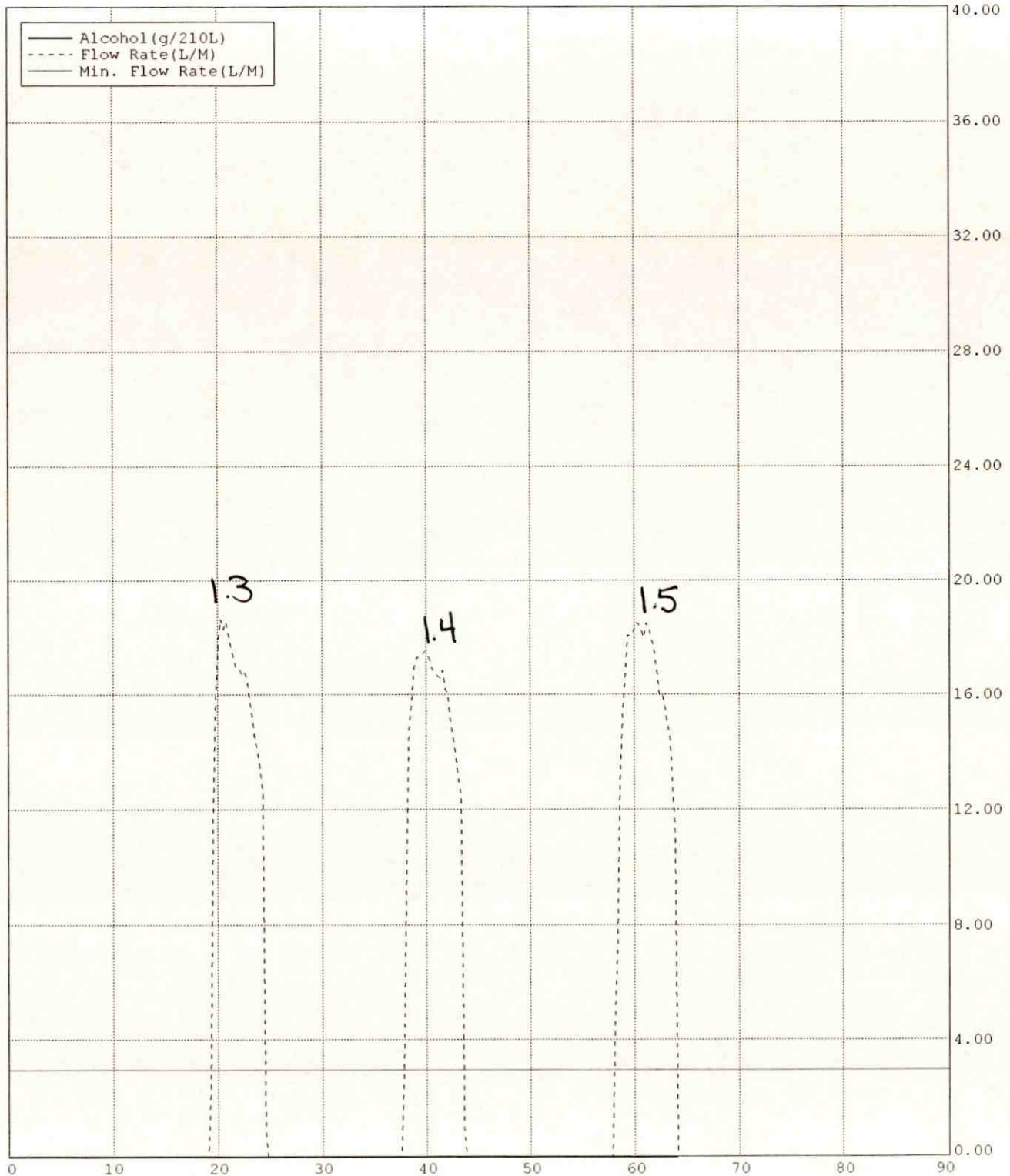
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 29.24: 0.078
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK	PASSED	10:14
BLANK TEST	0.000	10:14
INTERNAL STANDARD	VERIFIED	10:14
EXTERNAL STANDARD	0.076	10:14
BLANK TEST	0.000	10:15
SUBJECT SAMPLE (Vol=1.57L)	0.000	10:16
BLANK TEST	0.000	10:18
EXTERNAL STANDARD	0.077	10:18
BLANK TEST	0.000	10:19



LINEARITY CHECK

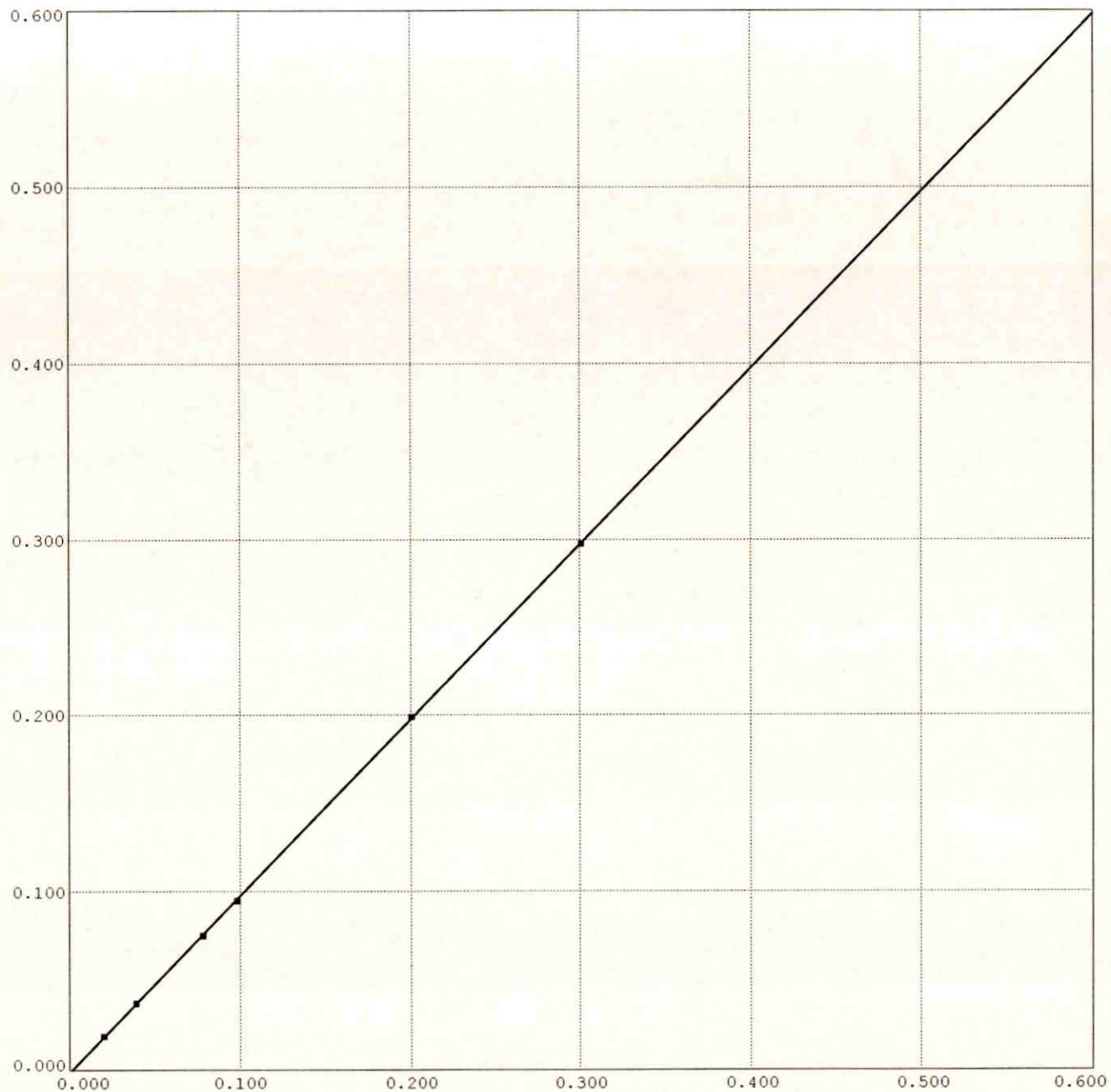
Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 11/13/2019
Time: 10:40:57

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0194	0.0005
0.039	0.0380	0.0000
0.078	0.0760	0.0000
0.098	0.0958	0.0004
0.200	0.1996	0.0005
0.300	0.2984	0.0005

SLOPE = 0.999529
R² = 0.999952



BB

LINEARITY CHECK: Control Test 1

 Alaska Department of Public Safety
 DATAMASTER dmt: 100368

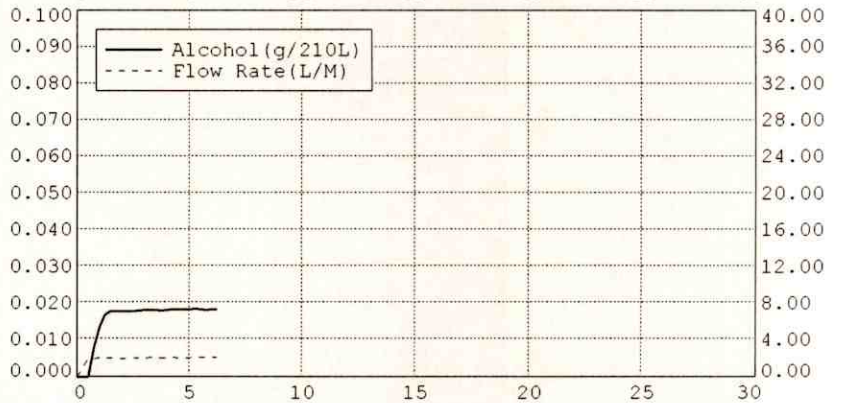
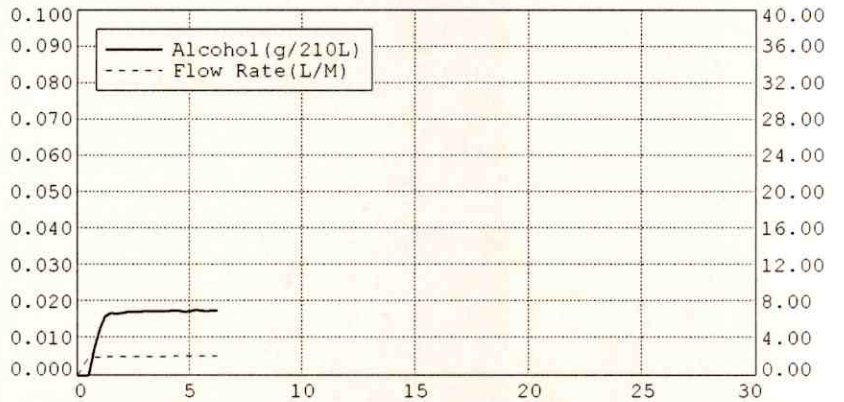
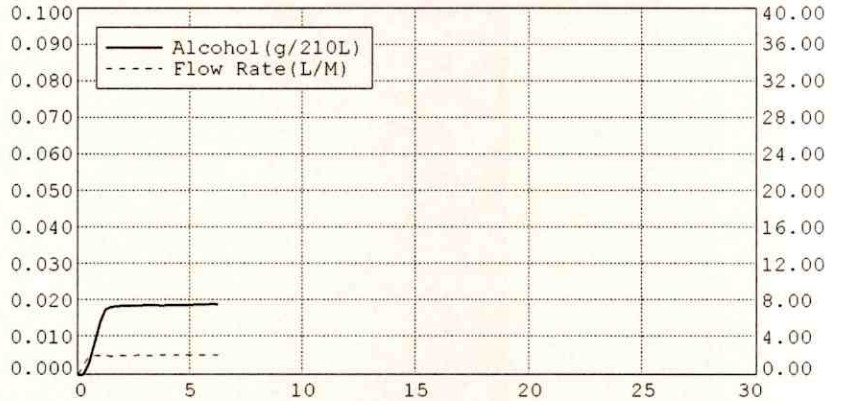
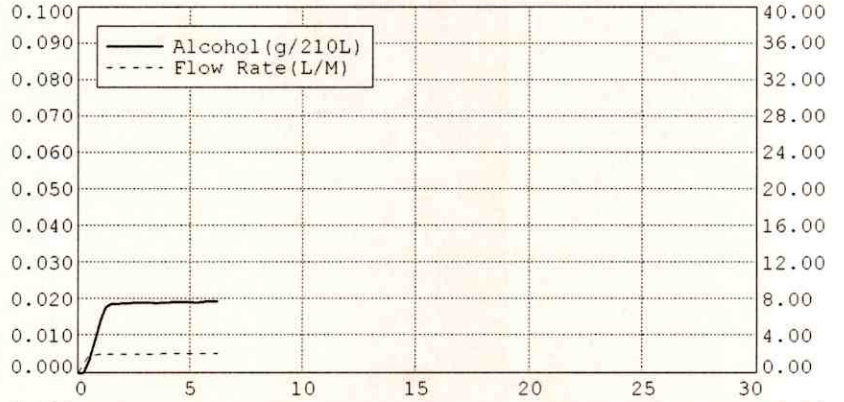
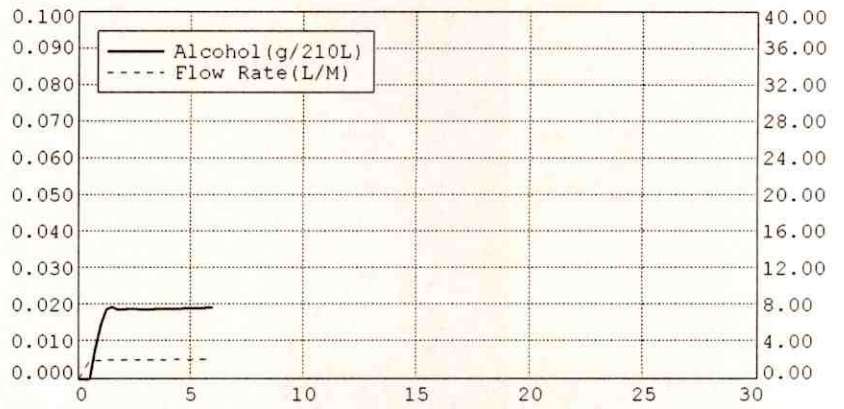
Date: 11/13/2019
 Time: 10:40:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.23: 0.020
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 315 psi

BLANK TEST	0.000	10:42
INTERNAL STANDARD	VERIFIED	10:42
EXTERNAL STANDARD	0.019	10:42
BLANK TEST	0.000	10:43
EXTERNAL STANDARD	0.020	10:43
BLANK TEST	0.000	10:44
EXTERNAL STANDARD	0.020	10:44
BLANK TEST	0.000	10:45
EXTERNAL STANDARD	0.019	10:45
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.019	10:46
BLANK TEST	0.000	10:47

Average = 0.0194
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100368

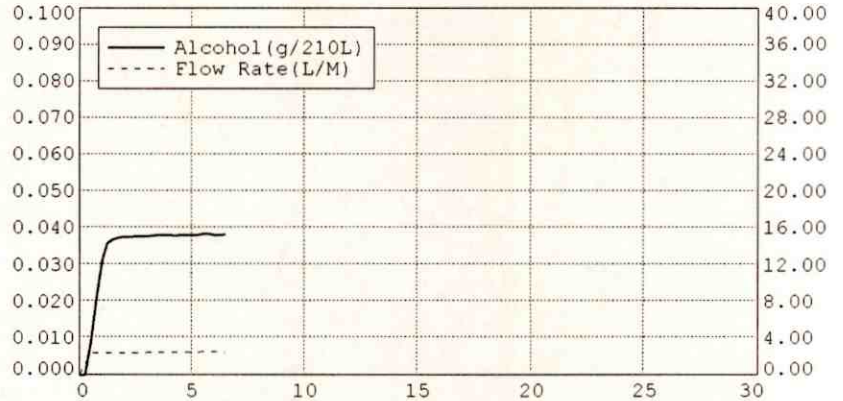
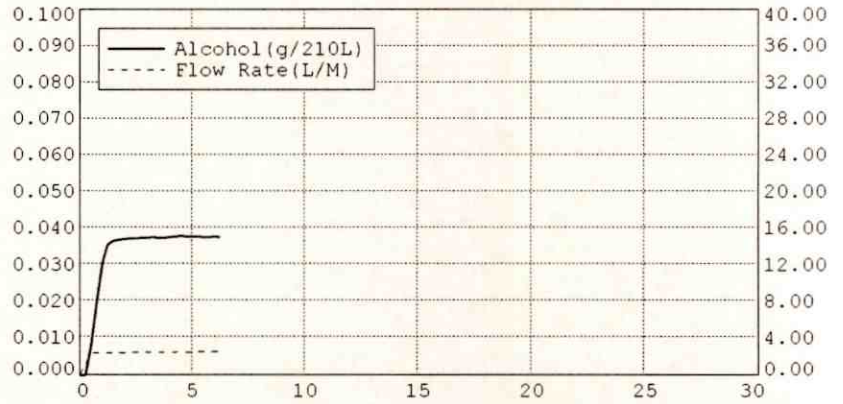
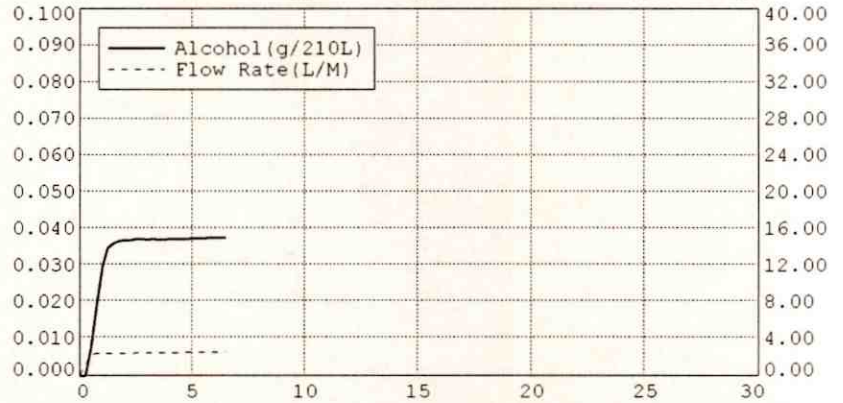
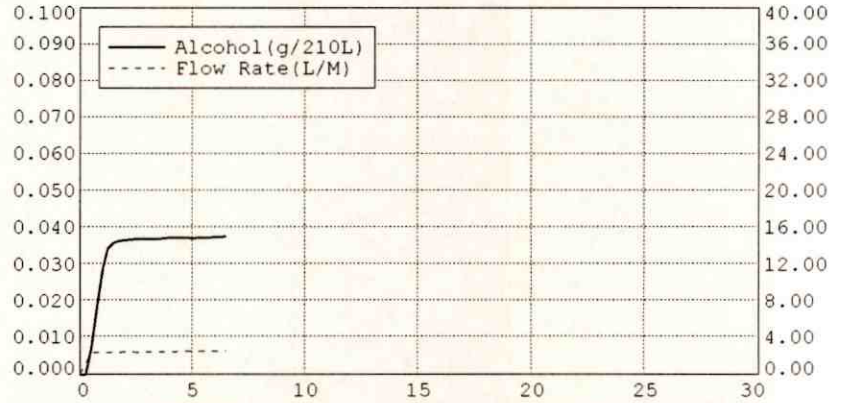
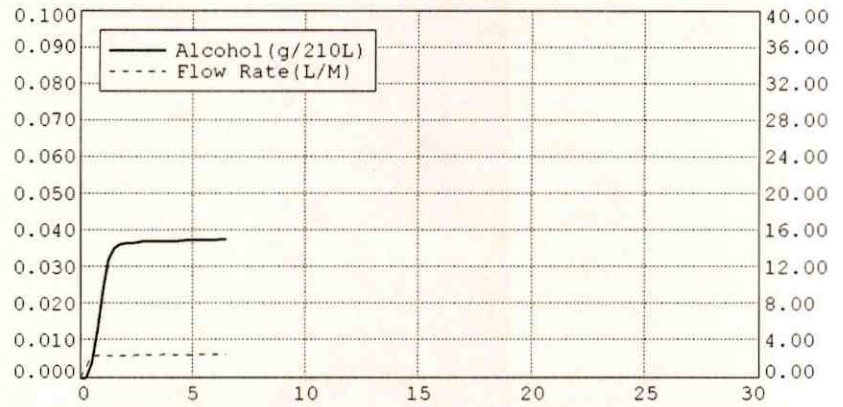
Date: 11/13/2019
 Time: 10:50:25

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.23: 0.039
 LOT #: AG733403
 EXPIRATION: 11/30/2019
 TANK PRESSURE: 892 psi

BLANK TEST	0.000	10:51
INTERNAL STANDARD	VERIFIED	10:51
EXTERNAL STANDARD	0.038	10:52
BLANK TEST	0.000	10:52
EXTERNAL STANDARD	0.038	10:53
BLANK TEST	0.000	10:54
EXTERNAL STANDARD	0.038	10:54
BLANK TEST	0.000	10:55
EXTERNAL STANDARD	0.038	10:55
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.038	10:56
BLANK TEST	0.000	10:57

Average = 0.0380
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100368

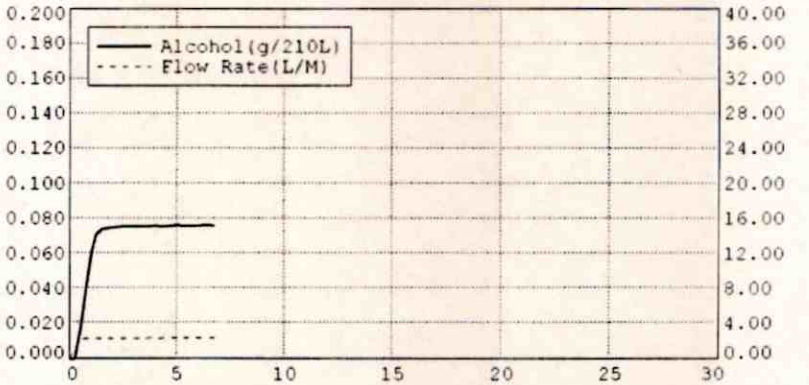
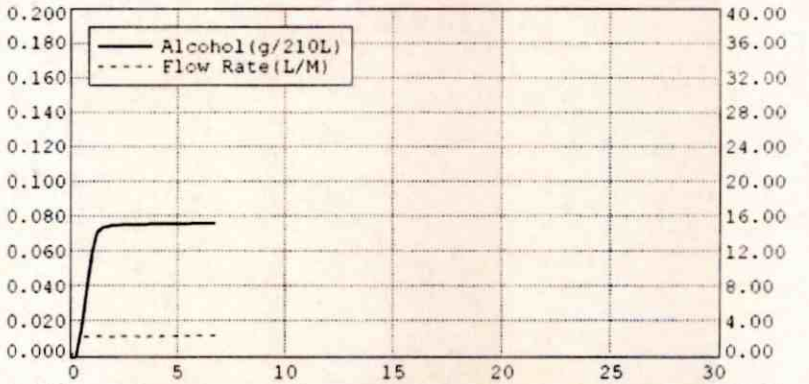
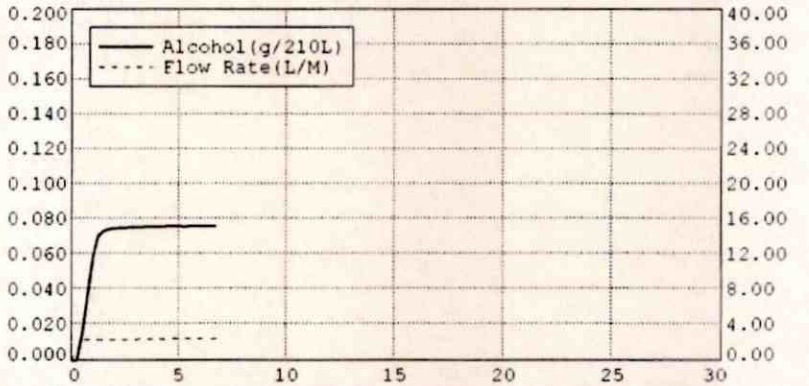
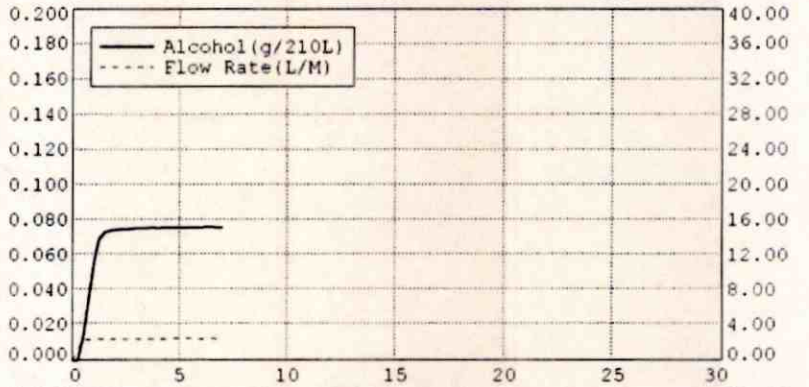
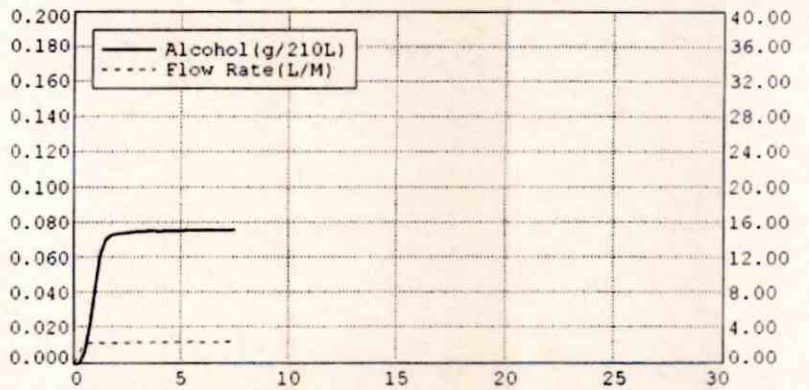
Date: 11/13/2019
Time: 10:59:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.23: 0.078
LOT #: AG923401
EXPIRATION: ~~08/22/2021~~ *8/21/2021* *8/26/19*
TANK PRESSURE: 699 psi *8/22/2021* *12/10/19*

BLANK TEST	0.000	11:00
INTERNAL STANDARD	VERIFIED	11:01
EXTERNAL STANDARD	0.076	11:01
BLANK TEST	0.000	11:02
EXTERNAL STANDARD	0.076	11:02
BLANK TEST	0.000	11:03
EXTERNAL STANDARD	0.076	11:03
BLANK TEST	0.000	11:04
EXTERNAL STANDARD	0.076	11:04
BLANK TEST	0.000	11:05
EXTERNAL STANDARD	0.076	11:05
BLANK TEST	0.000	11:06

Average = 0.0760
Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100368

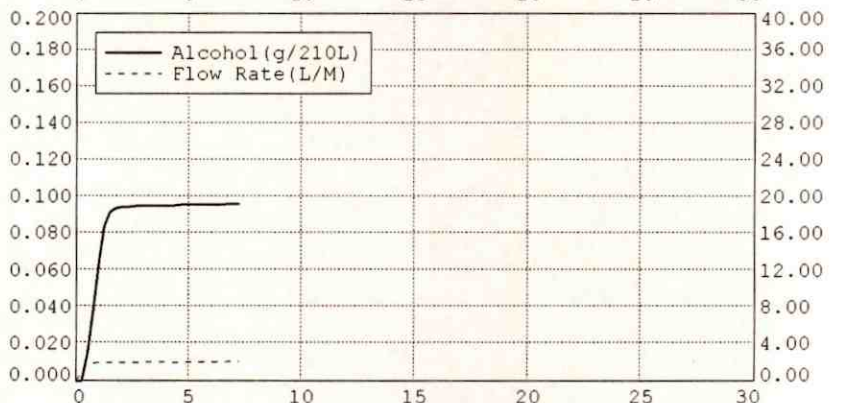
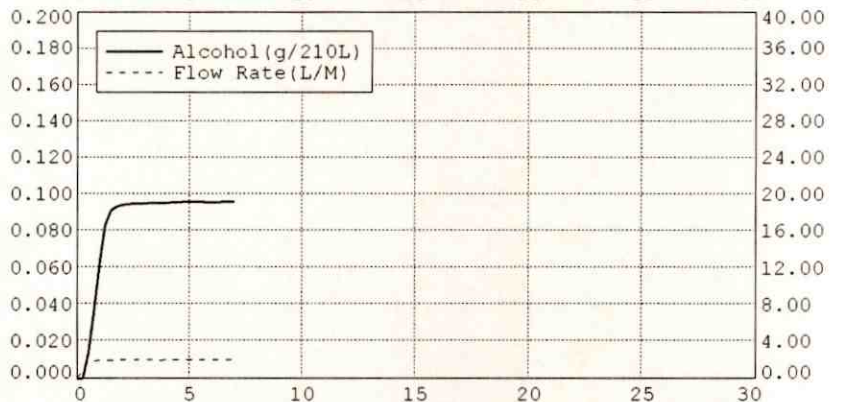
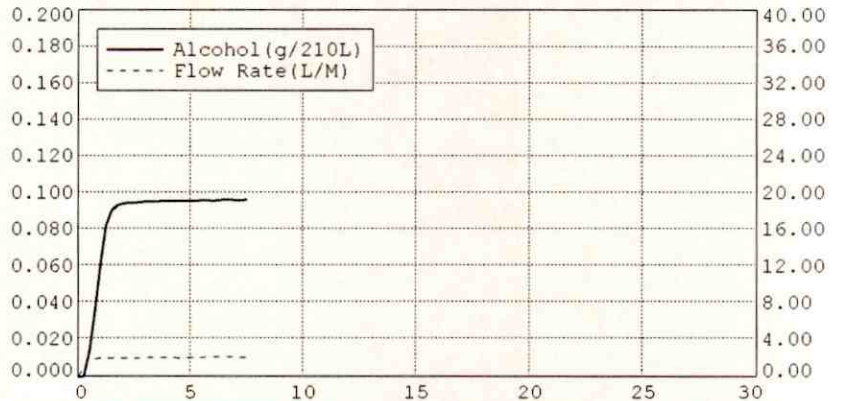
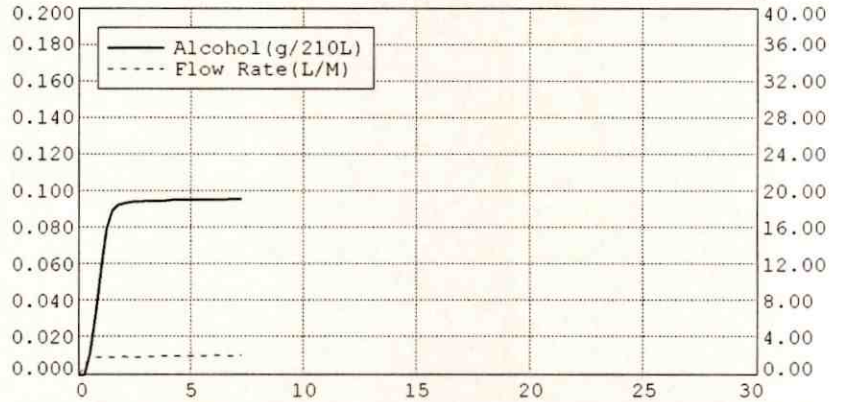
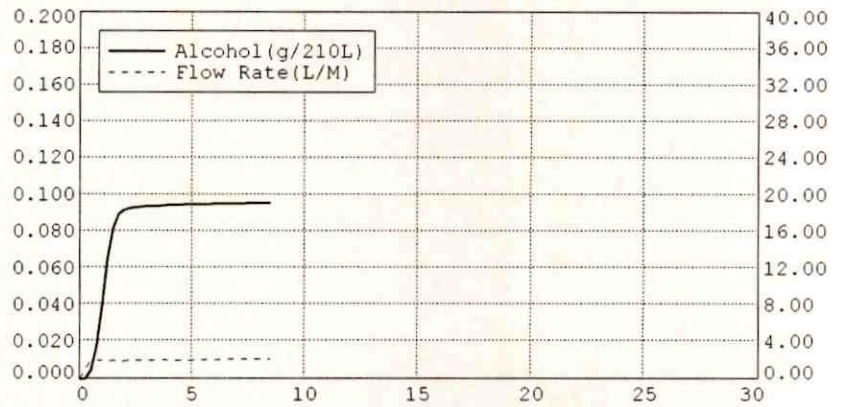
Date: 11/13/2019
 Time: 11:42:44

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.21: 0.098
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 265 psi

BLANK TEST	0.000	11:44
INTERNAL STANDARD	VERIFIED	11:44
EXTERNAL STANDARD	0.095	11:44
BLANK TEST	0.000	11:45
EXTERNAL STANDARD	0.096	11:45
BLANK TEST	0.000	11:46
EXTERNAL STANDARD	0.096	11:46
BLANK TEST	0.000	11:47
EXTERNAL STANDARD	0.096	11:48
BLANK TEST	0.000	11:48
EXTERNAL STANDARD	0.096	11:49
BLANK TEST	0.000	11:50

Average = 0.0958
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

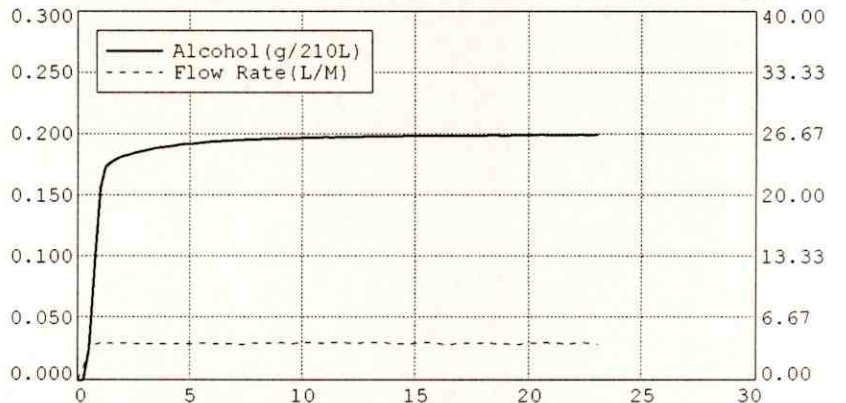
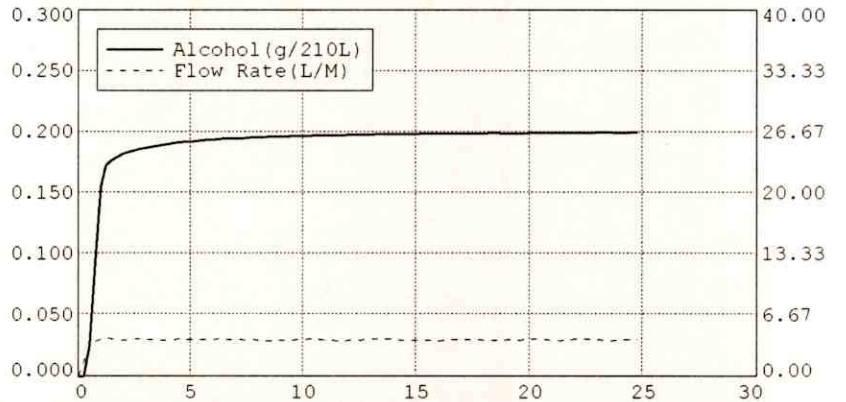
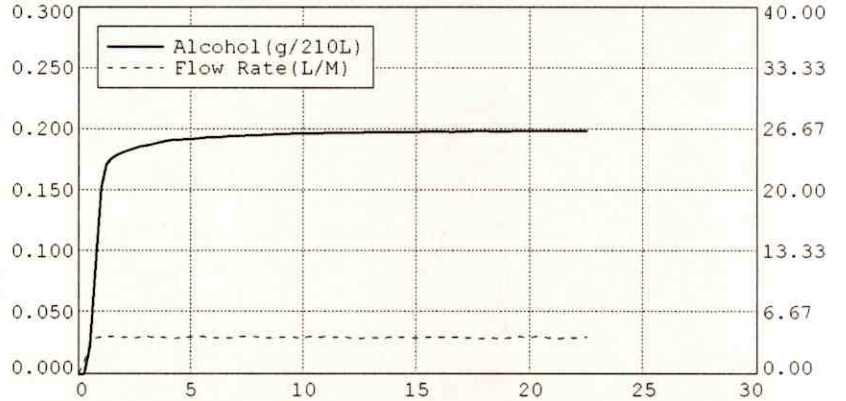
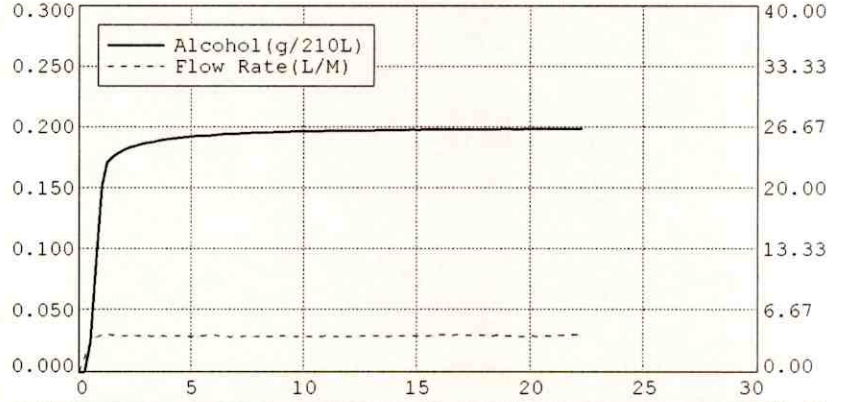
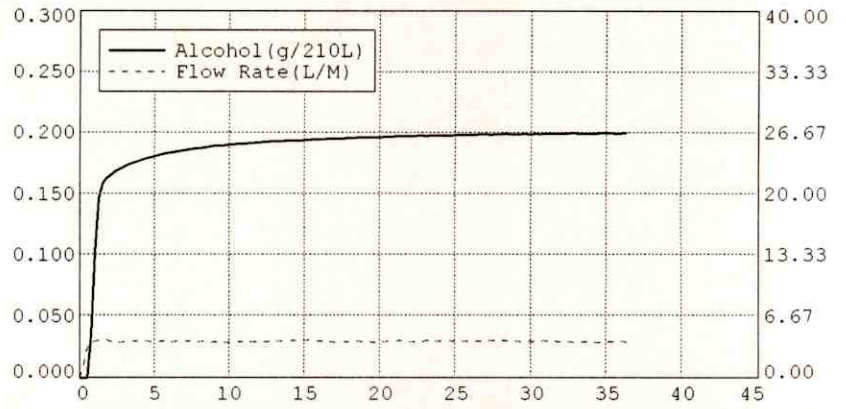
Alaska Department of Public Safety
 DATAMASTER dmt: 100368

Date: 11/13/2019
 Time: 13:24:05

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

BLANK TEST	0.000	13:25
INTERNAL STANDARD	VERIFIED	13:25
EXTERNAL STANDARD	0.200	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.199	13:27
BLANK TEST	0.000	13:28
EXTERNAL STANDARD	0.199	13:29
BLANK TEST	0.000	13:30
EXTERNAL STANDARD	0.200	13:30
BLANK TEST	0.000	13:31
EXTERNAL STANDARD	0.200	13:32
BLANK TEST	0.000	13:33

Average = 0.1996
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

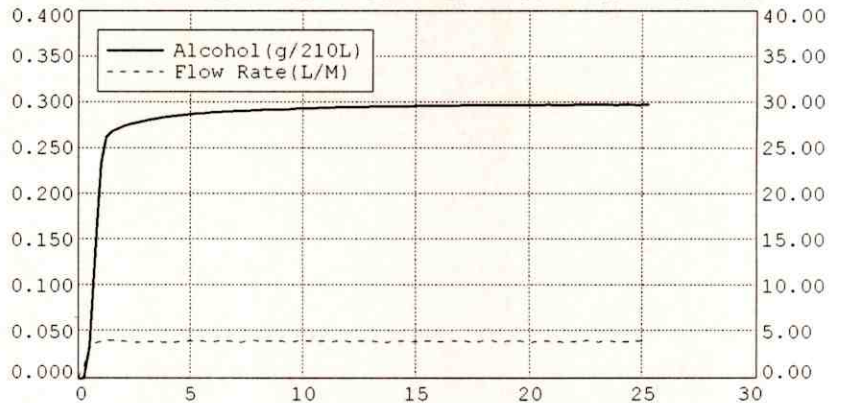
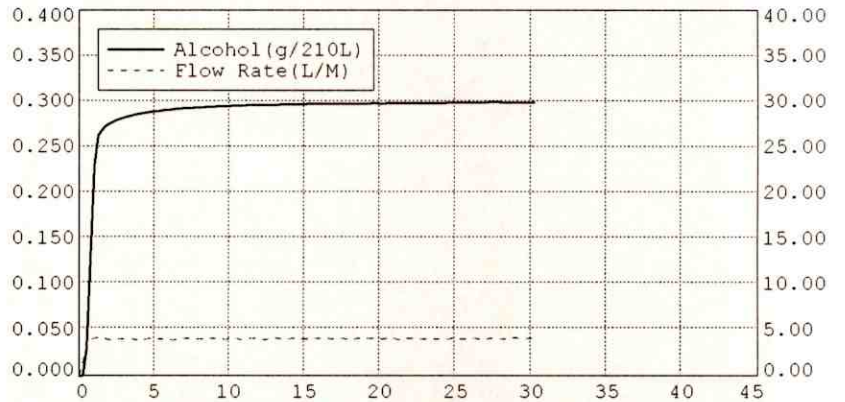
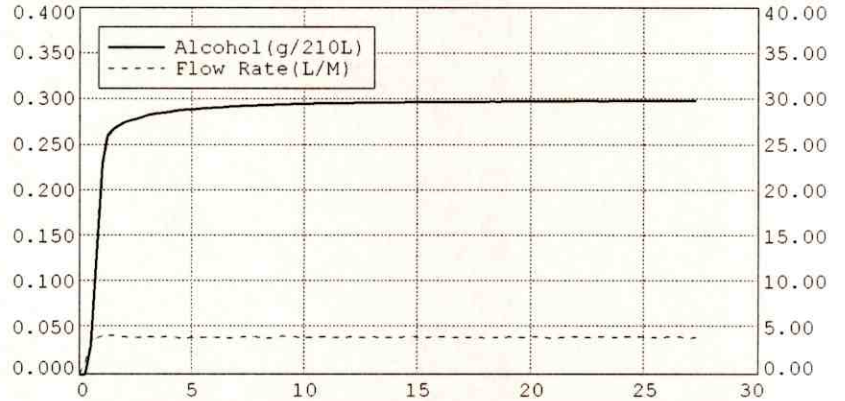
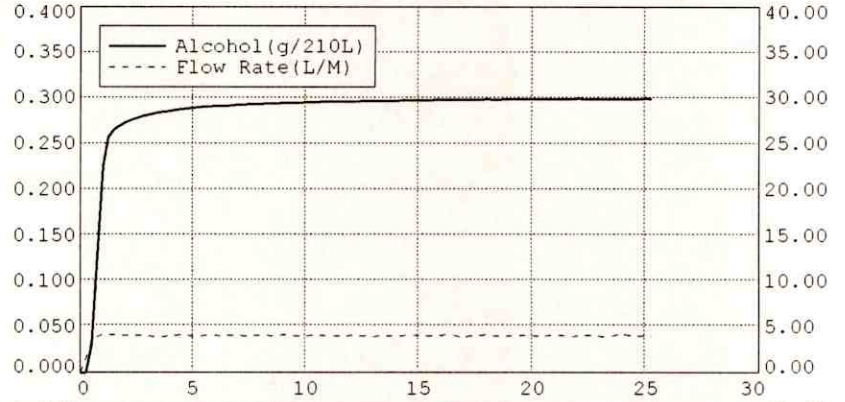
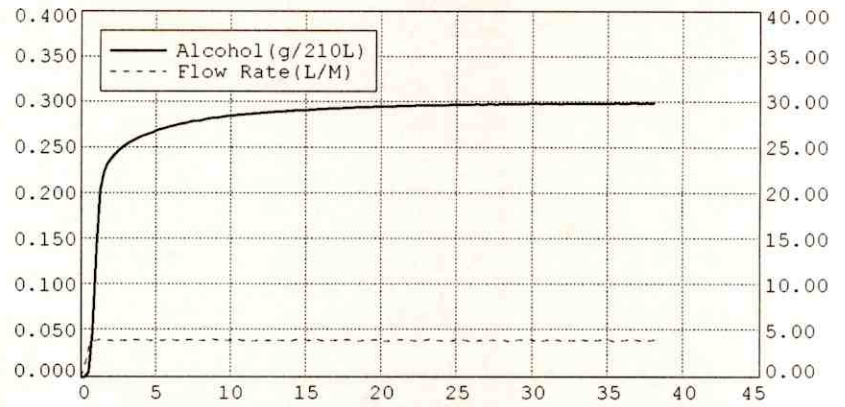
 Alaska Department of Public Safety
 DATAMASTER dmt: 100368

Date: 11/13/2019
 Time: 13:35:17

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

BLANK TEST	0.000	13:36
INTERNAL STANDARD	VERIFIED	13:36
EXTERNAL STANDARD	0.299	13:37
BLANK TEST	0.000	13:38
EXTERNAL STANDARD	0.299	13:39
BLANK TEST	0.000	13:40
EXTERNAL STANDARD	0.298	13:40
BLANK TEST	0.000	13:41
EXTERNAL STANDARD	0.298	13:42
BLANK TEST	0.000	13:43
EXTERNAL STANDARD	0.298	13:43
BLANK TEST	0.000	13:44

Average = 0.2984
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 11/13/2019
Time: 13:55:24

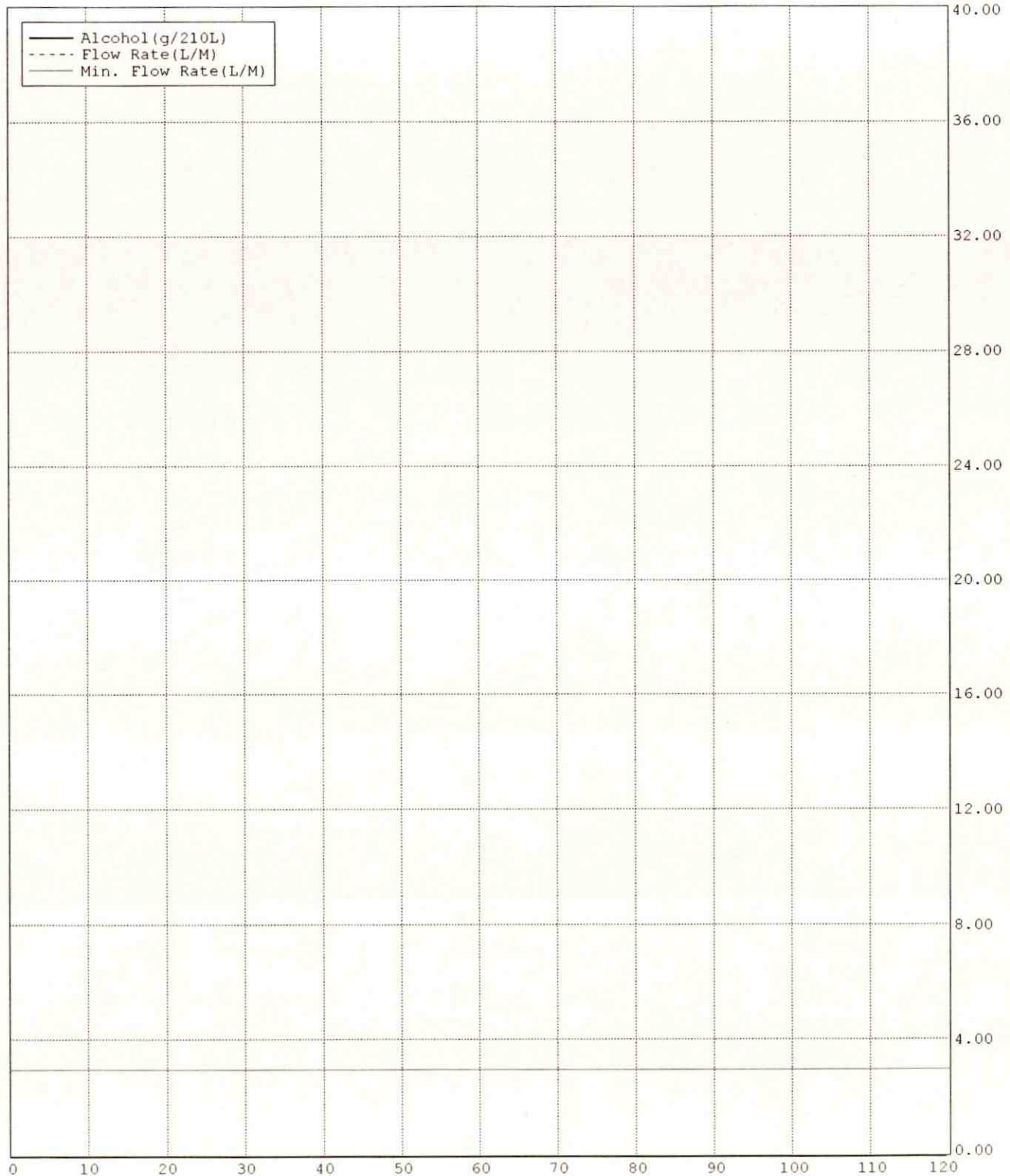
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.12: 0.078
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK	PASSED	13:56
BLANK TEST	0.000	13:56
INTERNAL STANDARD	VERIFIED	13:56
EXTERNAL STANDARD	0.076	13:56
BLANK TEST	0.000	13:57
SUBJECT SAMPLE	INCOMPLETE	13:59



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 11/13/2019
Time: 14:41:39

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 29.11: 0.078
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK	PASSED	14:42
BLANK TEST	0.000	14:42
INTERNAL STANDARD	VERIFIED	14:42
EXTERNAL STANDARD	0.075	14:43
BLANK TEST	0.000	14:44
SUBJECT SAMPLE	INVALID	14:45



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 11/13/2019
Time: 14:54:18

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 29.10: 0.078
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK	PASSED	14:55
BLANK TEST	0.000	14:55
INTERNAL STANDARD	VERIFIED	14:55
Xq = 0.075 (0.00%)		
EXTERNAL STANDARD	0.076	14:55
X[1] = 0.0763 (-0.0002) (0.0021)		
BLANK TEST	0.000	14:56
SUBJECT SAMPLE	XXX	14:57
X[1] = 0.1063 (-0.0188) (0.0012)		

Interference Detected

Filter 2 Avg: -0.0003
Filter 3 Avg: 0.0022



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 11/13/2019
Time: 14:59:55

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.10: 0.078
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK	PASSED	15:01
BLANK TEST	0.000	15:02
INTERNAL STANDARD	VERIFIED	15:02
Xq = 0.076 (0.34%)		
EXTERNAL STANDARD	0.076	15:02
X[1] = 0.0763 (-0.0003) (0.0024)		
BLANK TEST	0.000	15:03
SUBJECT SAMPLE	XXX	15:04
X[1] = 0.1195 (-0.0305) (0.0018)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 11/13/2019
Time: 15:06:51

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 29.10: 0.078
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK	PASSED	15:09
BLANK TEST	0.000	15:09
INTERNAL STANDARD	VERIFIED	15:09
Xq = 0.076 (0.57%)		
EXTERNAL STANDARD	0.076	15:09
X[1] = 0.0762 (-0.0003) (0.0022)		
BLANK TEST	0.000	15:11
SUBJECT SAMPLE (Vol=1.88L)	0.092	15:11
X[1] = 0.0929 (0.0003) (0.0013)		
BLANK TEST	0.000	15:12
EXTERNAL STANDARD	0.076	15:12
X[1] = 0.0761 (-0.0003) (0.0021)		
BLANK TEST	0.000	15:13

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 11/13/2019
Time: 15:23:18

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

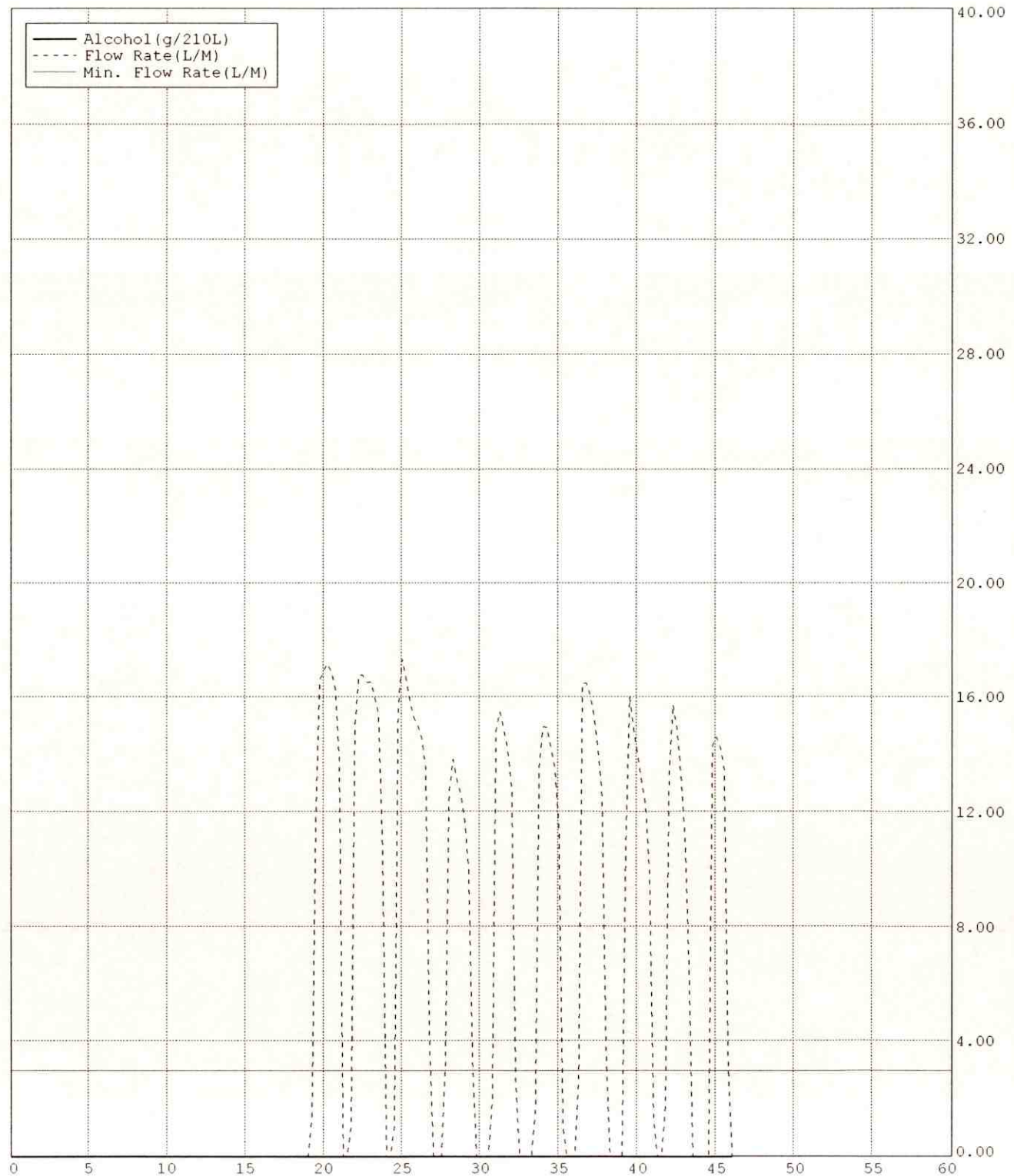
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.08: 0.078
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK	PASSED	15:24
BLANK TEST	0.000	15:25
INTERNAL STANDARD	VERIFIED	15:25
EXTERNAL STANDARD	0.076	15:25
BLANK TEST	0.000	15:26
SUBJECT SAMPLE	XXX	15:27

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 11/13/2019
Time: 14:47:57

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

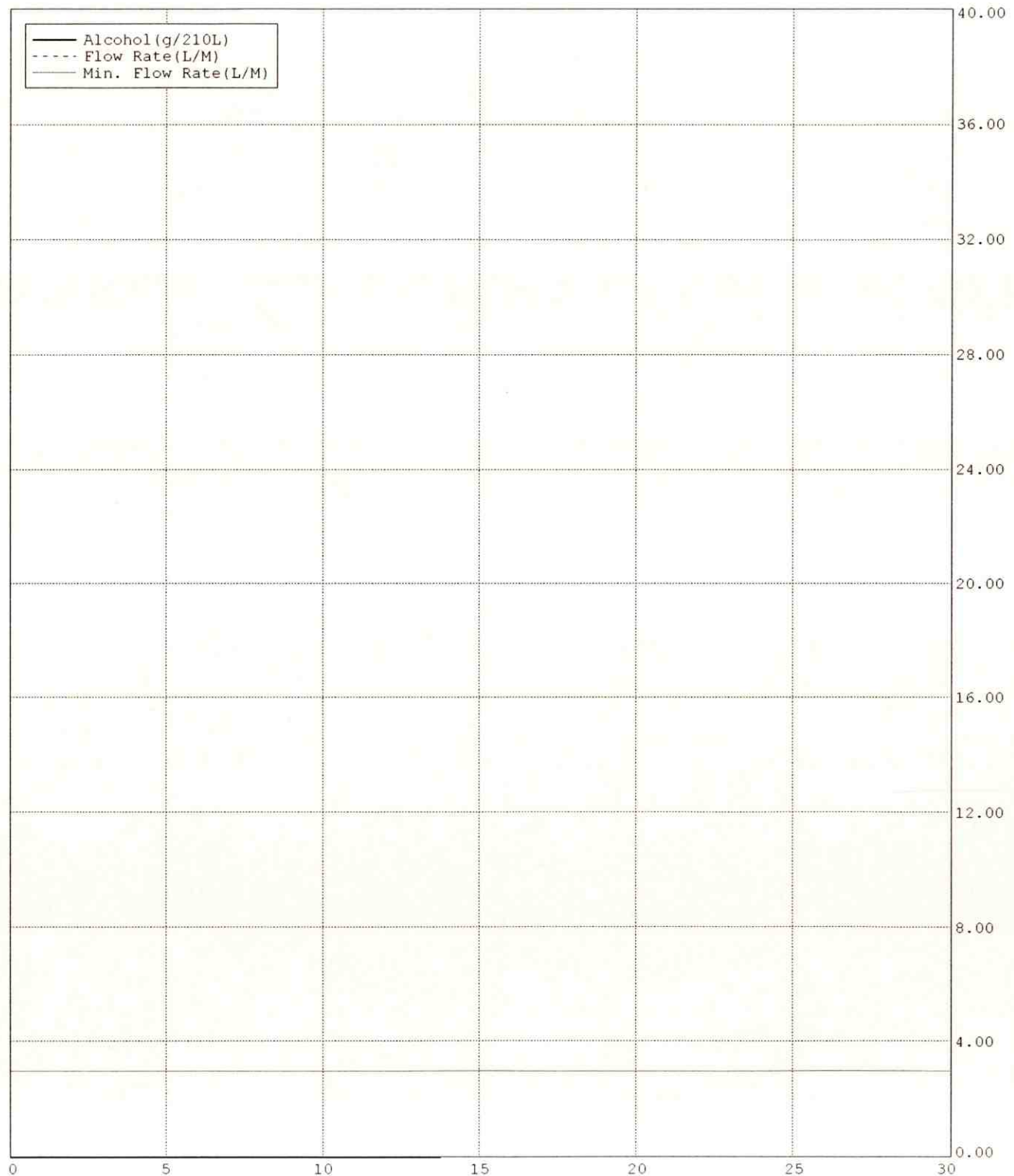
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.10: 0.078
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK	PASSED	14:50
BLANK TEST	0.000	14:50
INTERNAL STANDARD	VERIFIED	14:50
EXTERNAL STANDARD	0.076	14:51
BLANK TEST	0.000	14:52

RFI DETECTED

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100368

Date: 11/13/2019
Time: 15:43:12

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 29.07: 0.078
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK	PASSED	15:44
BLANK TEST	0.000	15:44
INTERNAL STANDARD	VERIFIED	15:44
EXTERNAL STANDARD	0.077	15:45
BLANK TEST	0.000	15:46
SUBJECT SAMPLE (Vol=1.91L)	0.000	15:46
BLANK TEST	0.000	15:47
EXTERNAL STANDARD	0.076	15:47
BLANK TEST	0.000	15:48

GBB

