

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 100392 Analyst Brandi Barnett Start Date 4/17/19

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 AG735001 Exp 12/16/19
- iv. 0.100g/210L Mnf Airgas Lot AG805903 Exp 2/28/20
- v. 0.200g/210L Mnf Guth Lot 17340 Exp 10/9/19
 - 1. Simulator S/N DR4177 Date Calibrated 6/4/18
- vi. 0.300g/210L Mnf Guth Lot 17350 Exp 10/11/19
 - 1. Simulator S/N DR6267 Date Calibrated 6/4/18

5. Functional Tests (attached)

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

i. Acetone - Mnf Guth Lot 18070 Level 0.100 Exp 2/26/20

- 1. Simulator S/N SD1198 Date Calibrated 3/16/19 ~~3/16/19~~ 5/2/19 ^{BMB}

^{BMB} 5/2/19 DR4176 ii. Isopropanol - Mnf Guth Lot 18070 Level 0.100 Exp 2/26/20

- 1. Simulator S/N DR4176 Date Calibrated 6/4/18

iii. Negative Control - Mnf Guth Lot 18070 Level 0.100 Exp 2/26/20

- 1. Simulator S/N DR6267 ^{BMB} ~~DR6267~~ DR4163 Date Calibrated 6/4/18

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 4/19/19

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 04/17/2019
Time: 09:40:28

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

TEMPERATURES

Sample Chamber = 49.1°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.65 V PASSED
(1.01 V - 2.35 V)
Cooler Voltage = 1.60 V PASSED
(0.97 V - 2.27 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 534 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.3 in

PUMP INFO

Flow Rate = 4.565 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.001 V <= 0.010 V)
PUMP OFF PASSED
(0.003 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.096 0.72% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100392

Date: 04/17/2019
Time: 9:53 AM

Temperatures (°C)

Sample Cell: 49.0°C
Breath Tube: 47.8°C

Current Barometer 29.3 in
Volume (Ltr) 1.48

Settings

Lamp: 1.71 V
Bias: 80 V
Cooler: 1.60 V
Chopper: 534 Hz

Voltages (V)

Flow: 1.06 V
Detector: 0.086 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 03/15/2011
Time: 07:58:03

Ca = 0.1000
CAL = 0.990755 0.800 <= CAL < 1.200
b1 = 0.0000 0.0000 <= b1 < 0.0040
b2 = 0.0037 0.0010 <= b2 < 0.0100
b3 = 0.0002 0.0000 <= b3 < 0.0040
Xq = 0.0967 0.0500 <= Xq < 0.2000
a21 = 1.157321 1.050 <= a21 < 1.300
a31 = 0.392902 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 04/17/2019
Time: 09:56:45

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

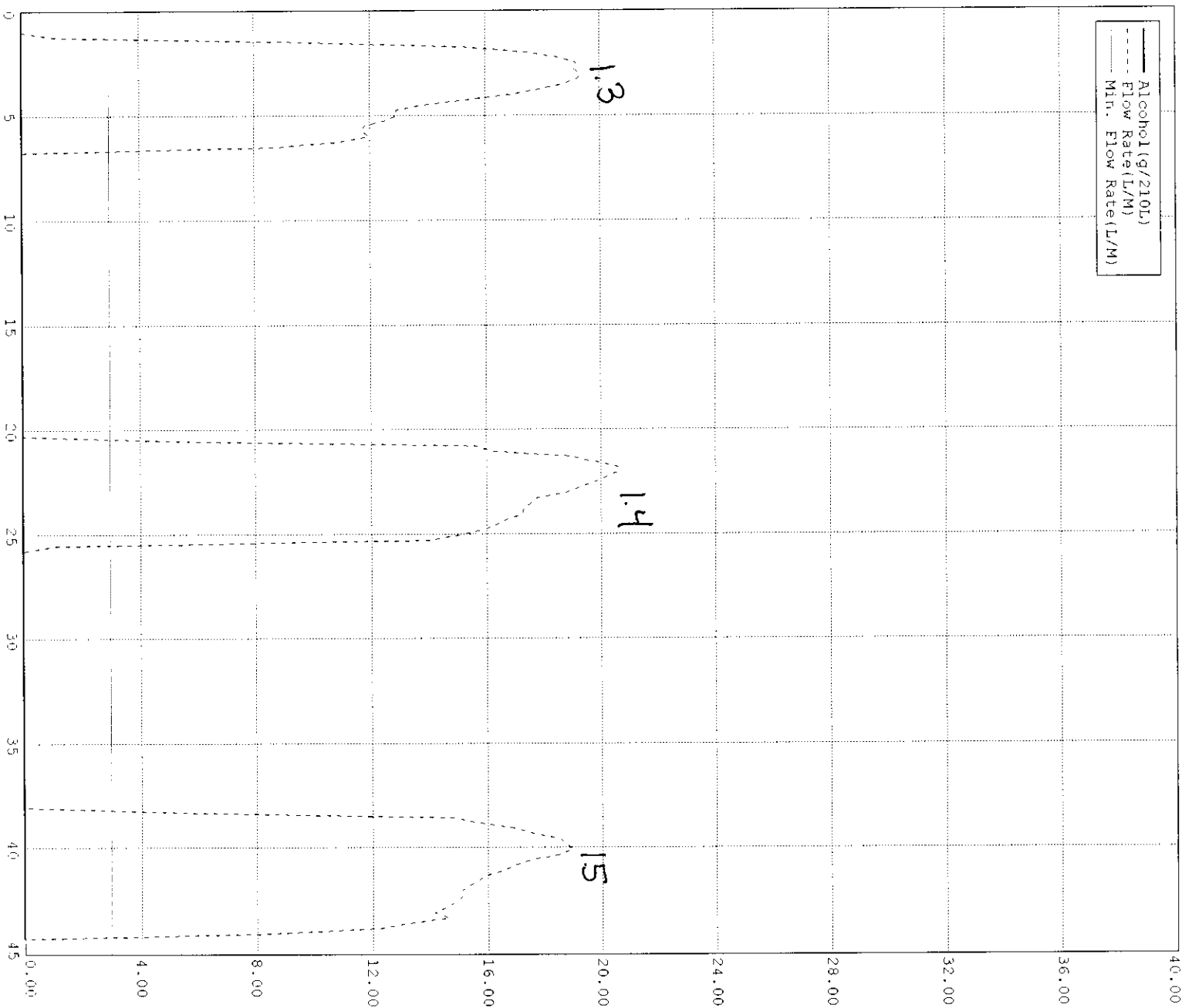
DEPT/AGENCY:
MINIMUM VOLUME
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.30: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	09:57
BLANK TEST	0.000	09:57
INTERNAL STANDARD	VERIFIED	09:57
EXTERNAL STANDARD	0.077	09:58
BLANK TEST	0.000	09:59
SUBJECT SAMPLE (Vol=1.53L)	0.000	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.077	10:01
BLANK TEST	0.000	10:02

BBB



LINEARITY CHECK

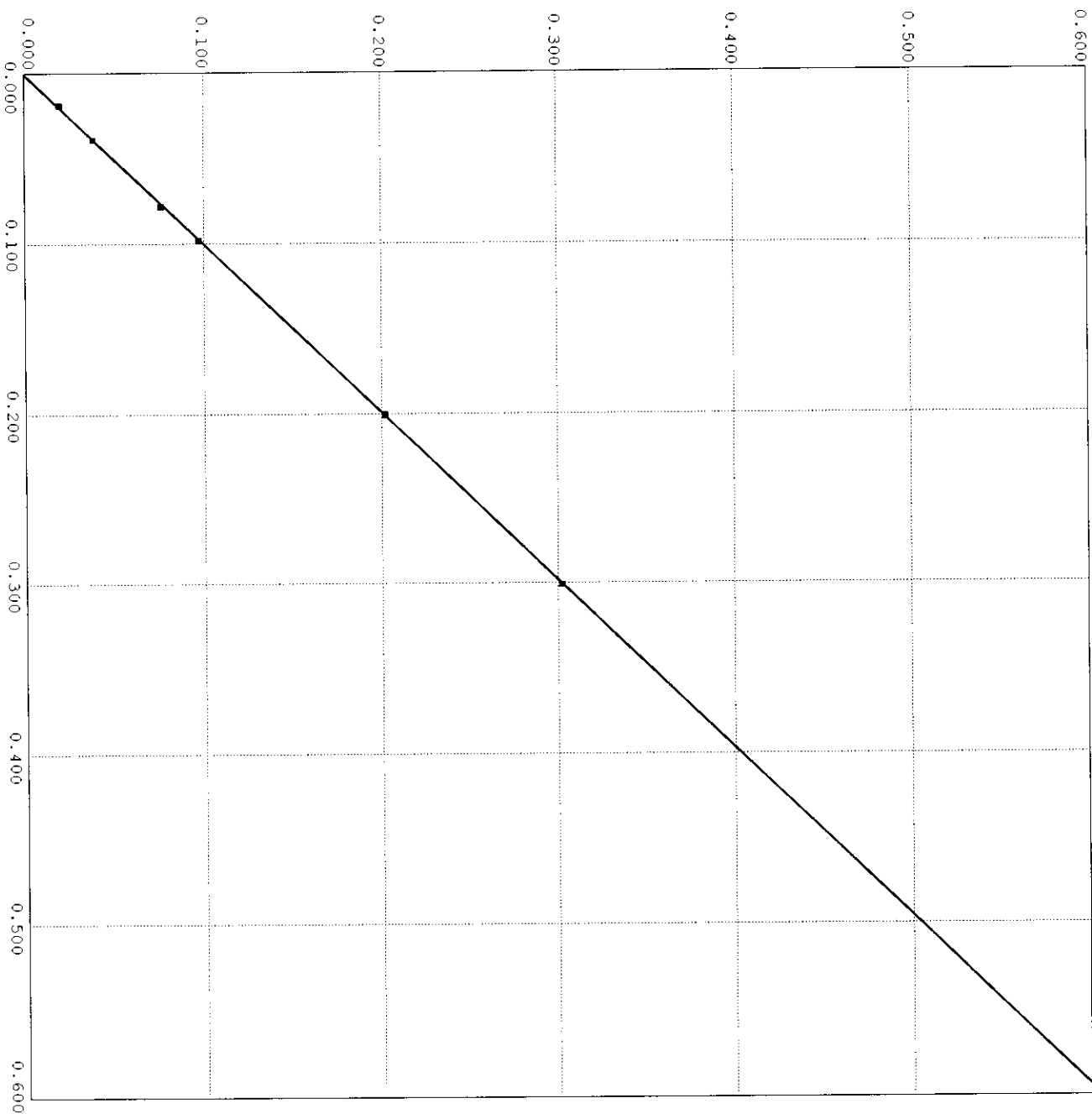
Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 04/18/2019
Time: 09:36:58

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.019	0.0202	0.0004
0.039	0.0390	0.0000
0.078	0.0770	0.0000
0.098	0.0982	0.0004
0.200	0.2028	0.0008
0.300	0.3030	0.0010

SLOPE = 1.011526
R² = 0.999911



Handwritten signature: BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100392

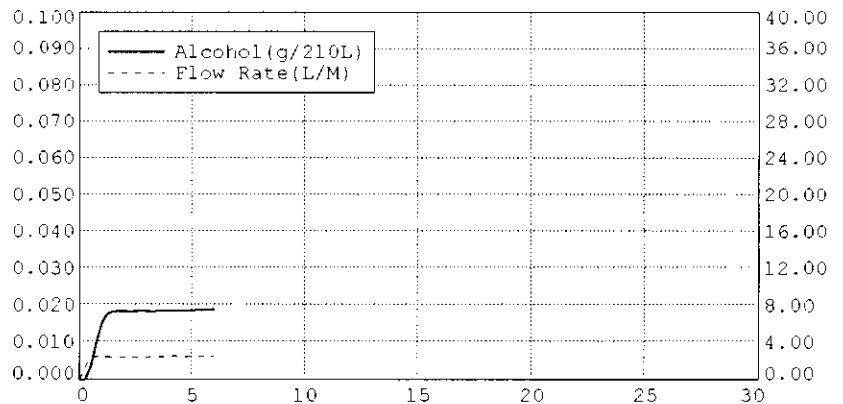
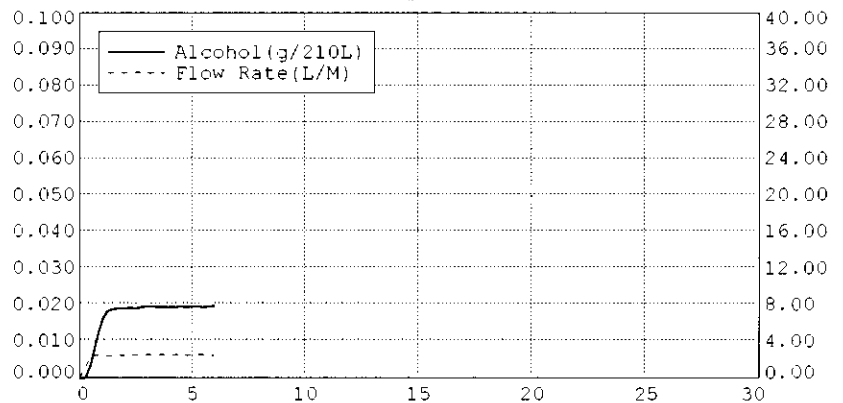
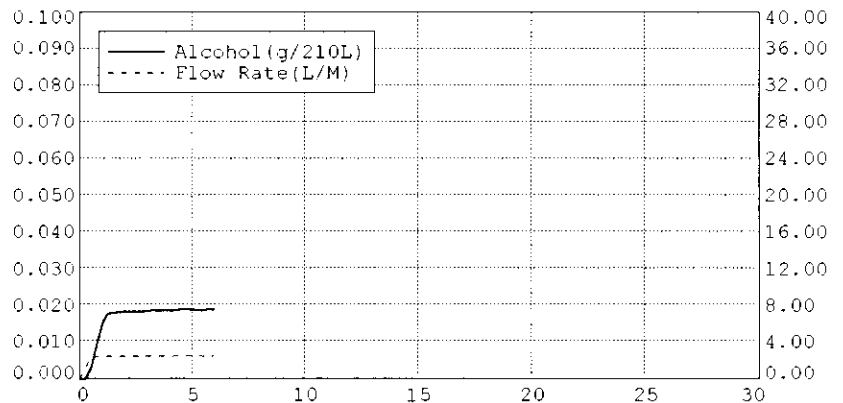
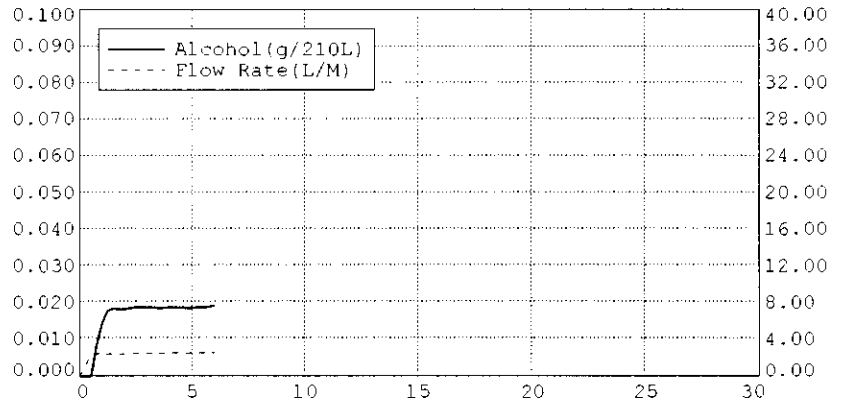
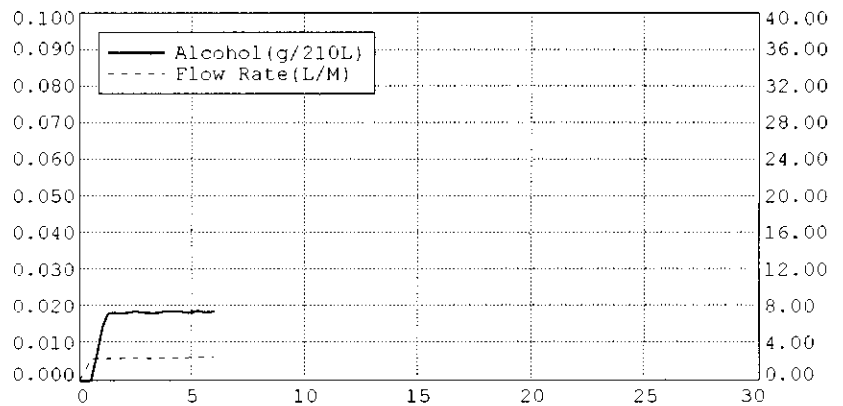
Date: 04/18/2019
 Time: 09:37:00

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.17: 0.019
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 732 psi

BLANK TEST	0.000	09:38
INTERNAL STANDARD	VERIFIED	09:38
EXTERNAL STANDARD	0.020	09:38
BLANK TEST	0.000	09:39
EXTERNAL STANDARD	0.020	09:39
BLANK TEST	0.000	09:40
EXTERNAL STANDARD	0.020	09:40
BLANK TEST	0.000	09:41
EXTERNAL STANDARD	0.021	09:41
BLANK TEST	0.000	09:42
EXTERNAL STANDARD	0.020	09:43
BLANK TEST	0.000	09:43

Average = 0.0202
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100392

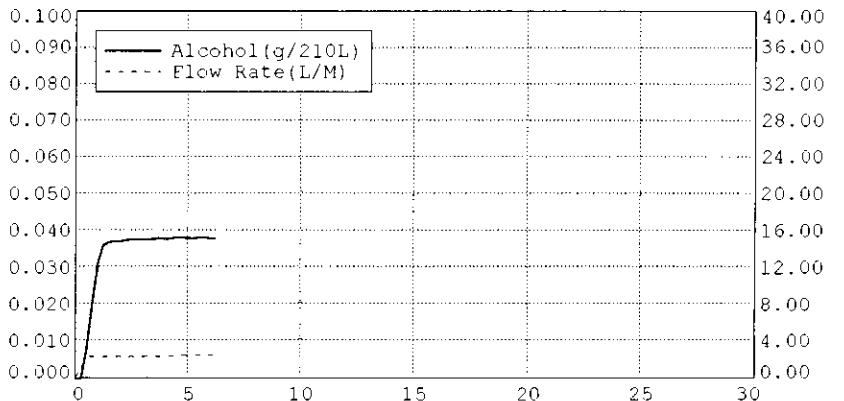
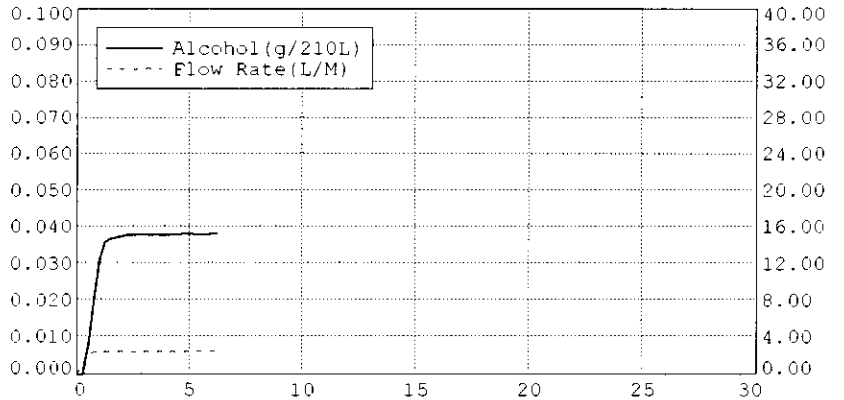
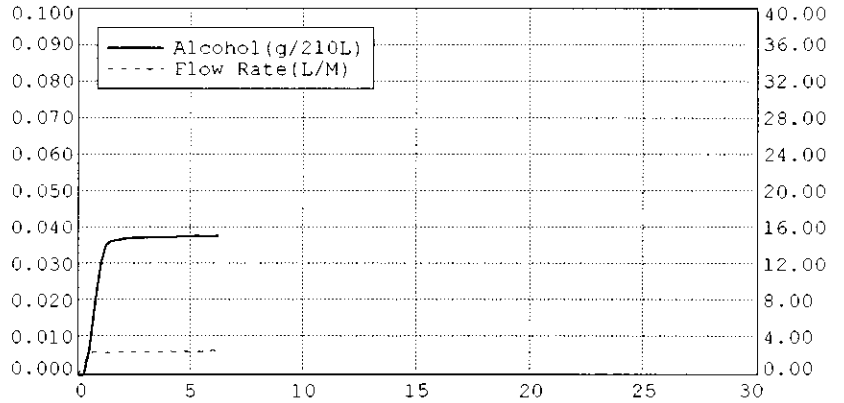
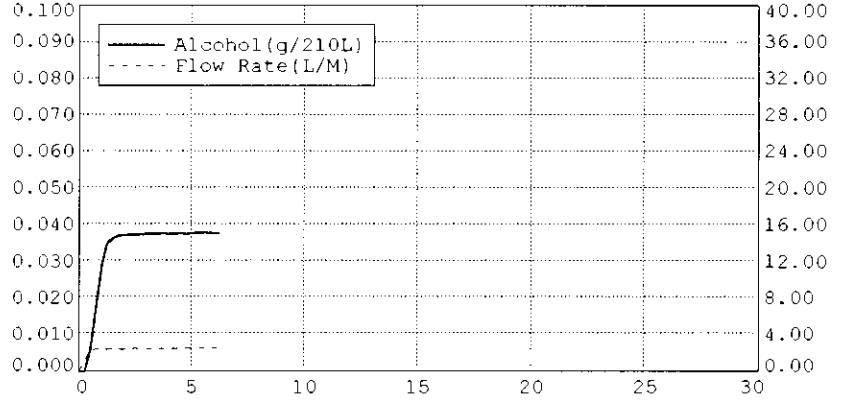
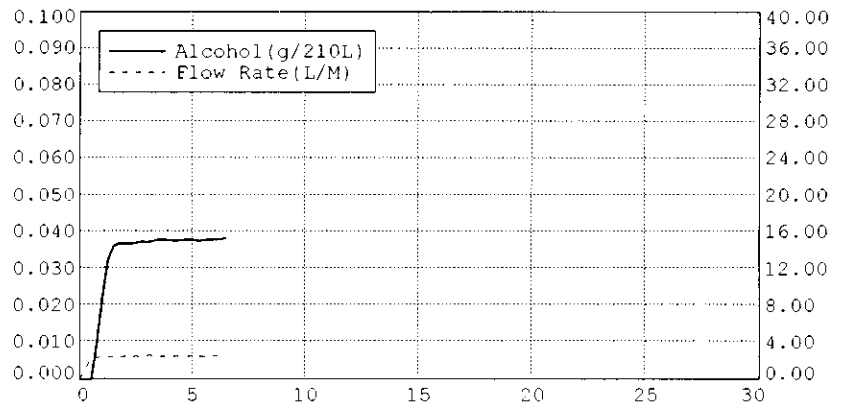
Date: 04/18/2019
Time: 09:54:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.17: 0.039
LOT #: AG733403
EXPIRATION: 11/30/2019
TANK PRESSURE: 724 psi

BLANK TEST	0.000	10:00
INTERNAL STANDARD	VERIFIED	10:00
EXTERNAL STANDARD	0.039	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.039	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.039	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.039	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.039	10:04
BLANK TEST	0.000	10:05

Average = 0.0390
Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100392

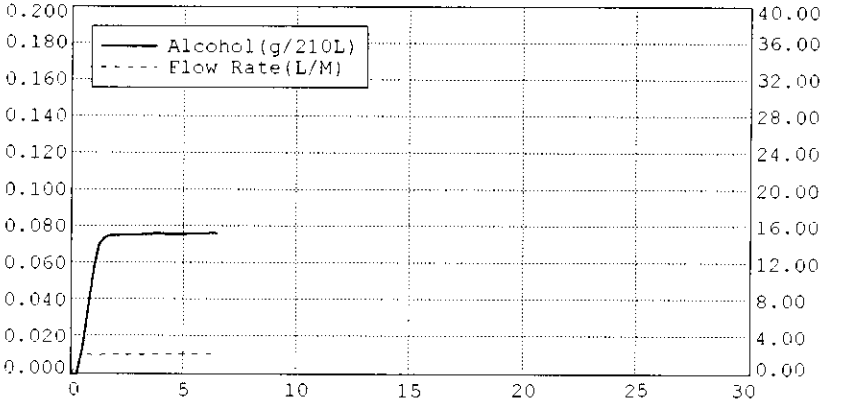
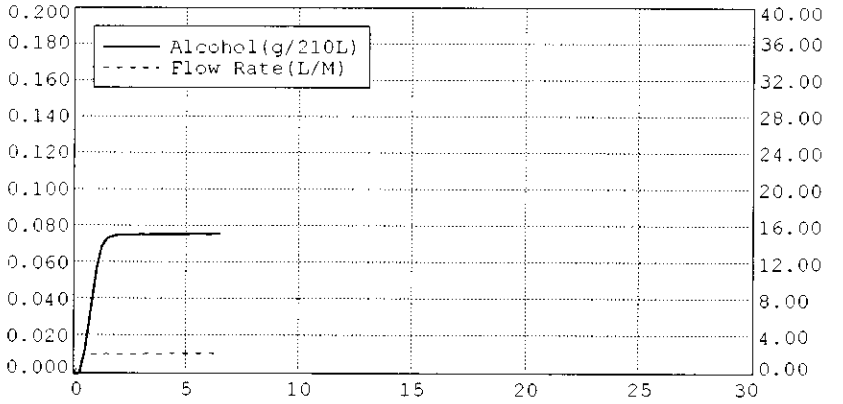
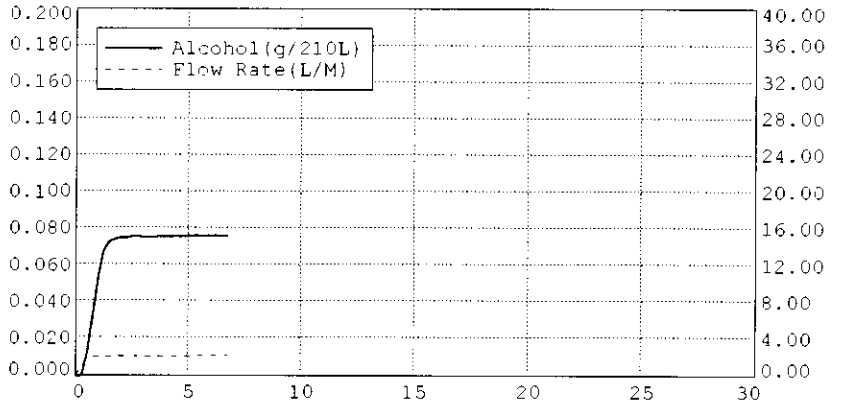
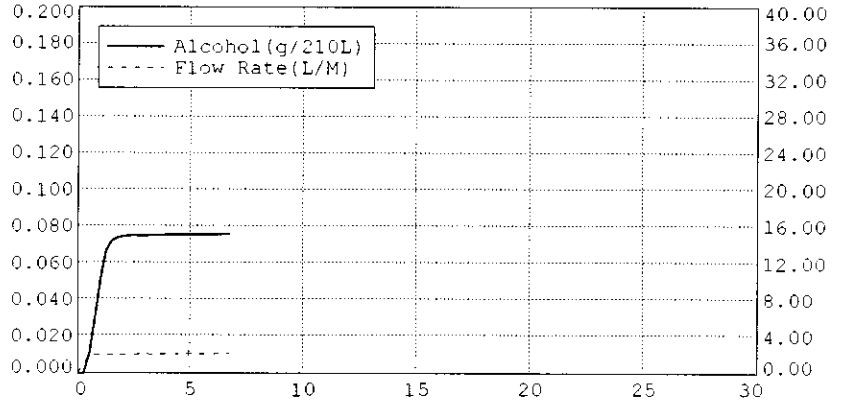
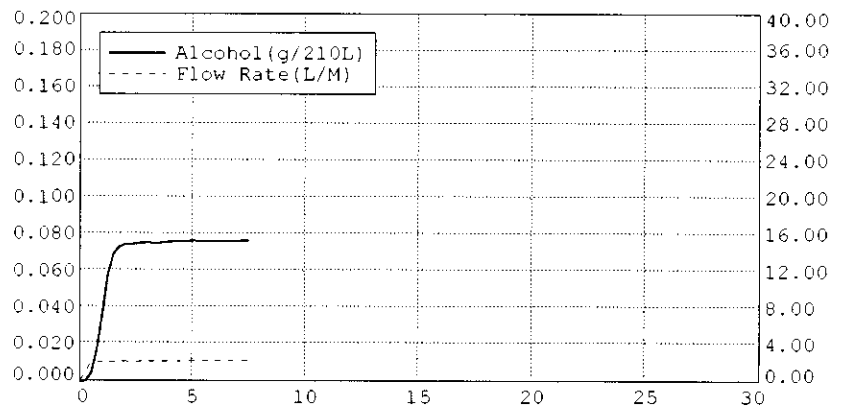
Date: 04/18/2019
 Time: 10:09:41

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.18: 0.078
 LOT #: AG735001
 EXPIRATION: 12/16/2019
 TANK PRESSURE: 285 psi

BLANK TEST	0.000	10:11
INTERNAL STANDARD	VERIFIED	10:11
EXTERNAL STANDARD	0.077	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.077	10:12
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.077	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.077	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.077	10:15
BLANK TEST	0.000	10:16

Average = 0.0770
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100392

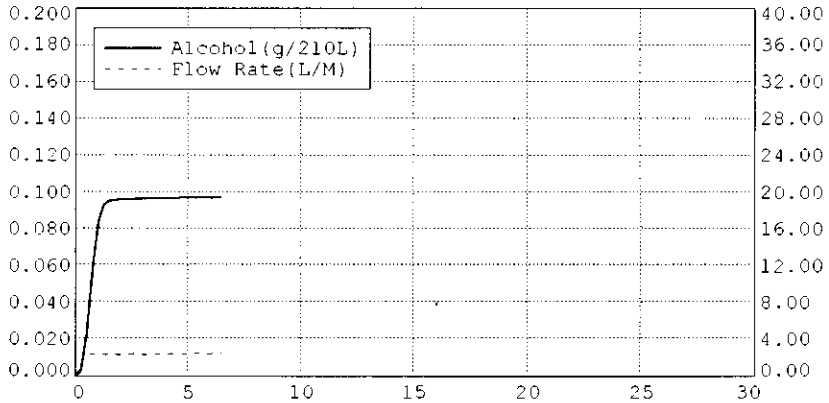
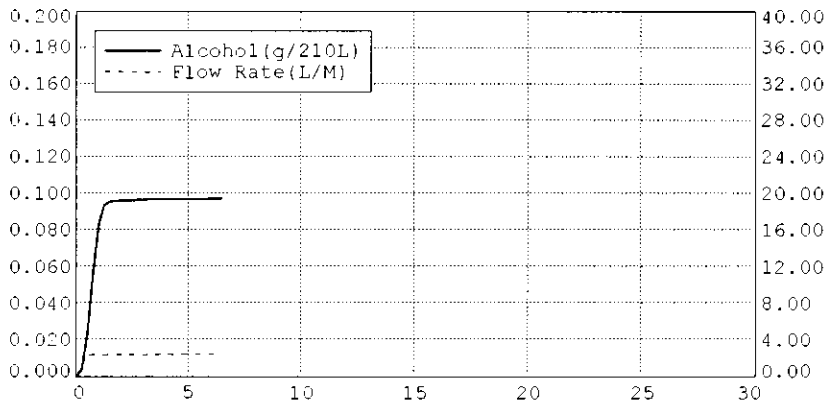
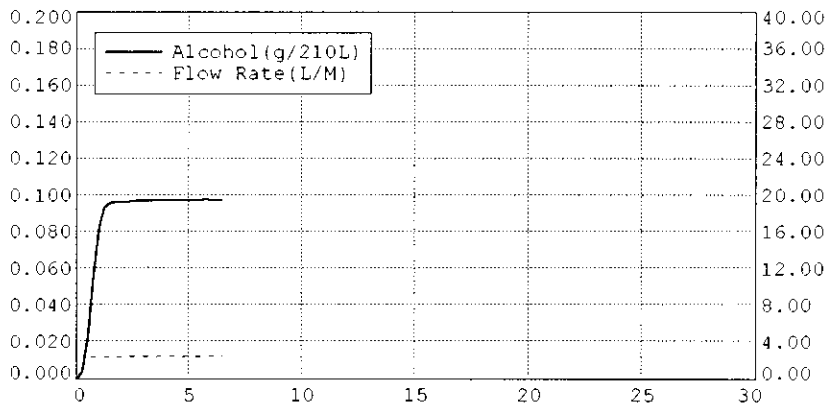
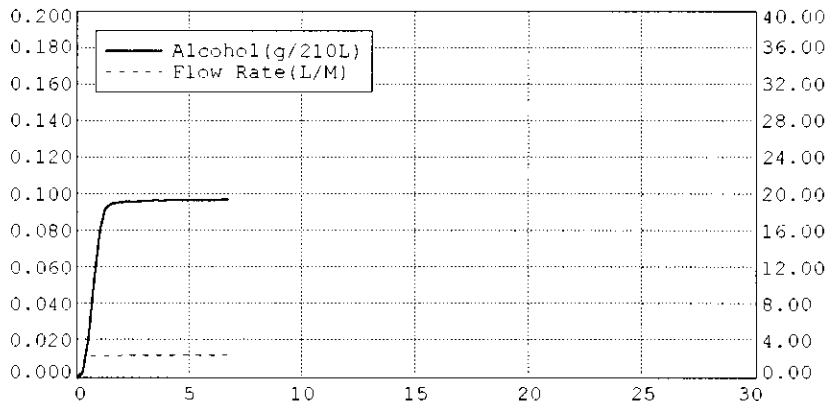
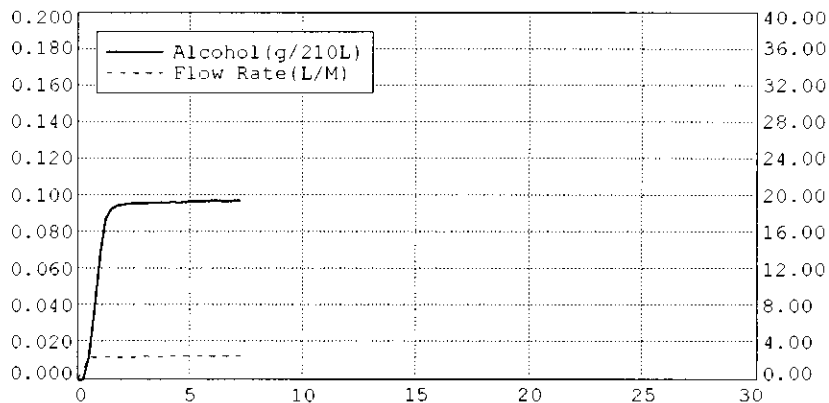
Date: 04/18/2019
 Time: 10:19:42

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.17: 0.098
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 653 psi

BLANK TEST	0.000	10:21
INTERNAL STANDARD	VERIFIED	10:21
EXTERNAL STANDARD	0.098	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.098	10:23
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.099	10:24
BLANK TEST	0.000	10:25
EXTERNAL STANDARD	0.098	10:25
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.098	10:26
BLANK TEST	0.000	10:27

Average = 0.0982
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

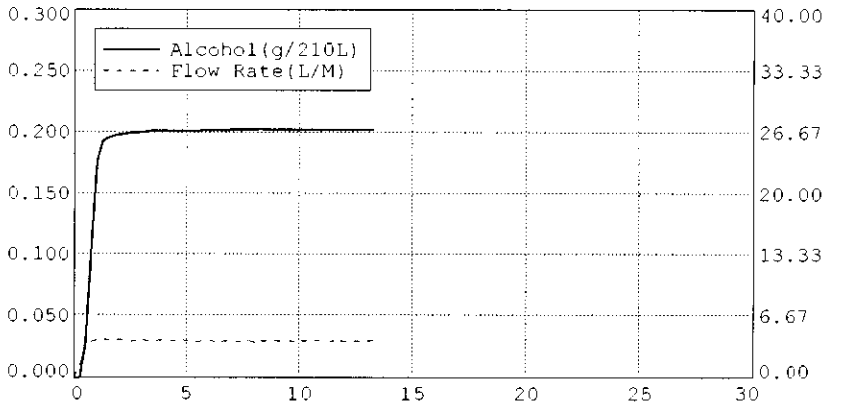
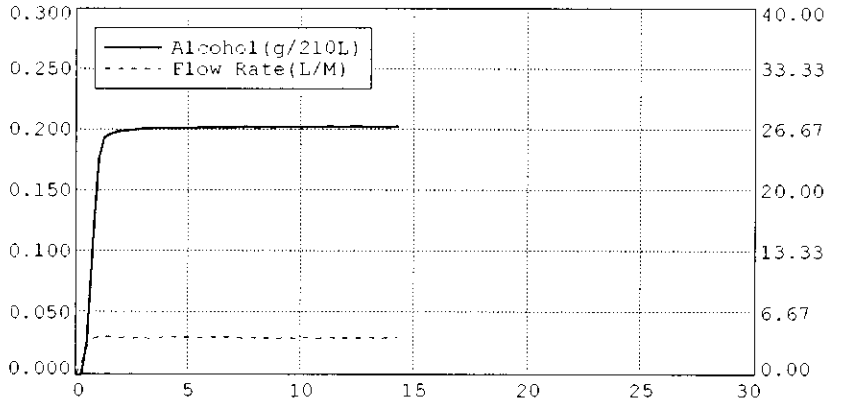
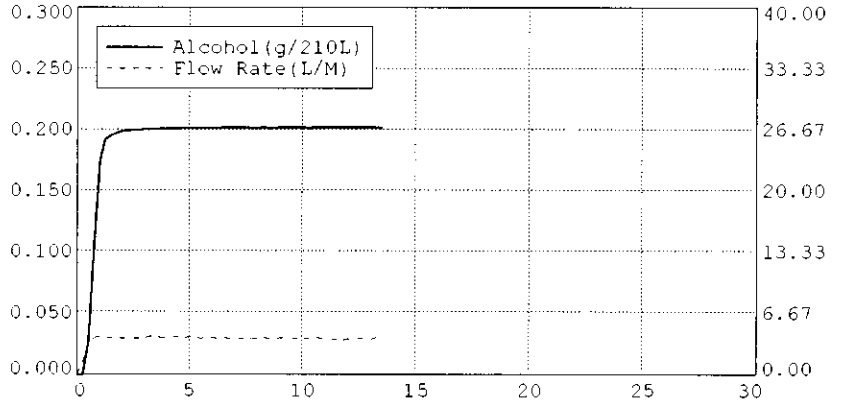
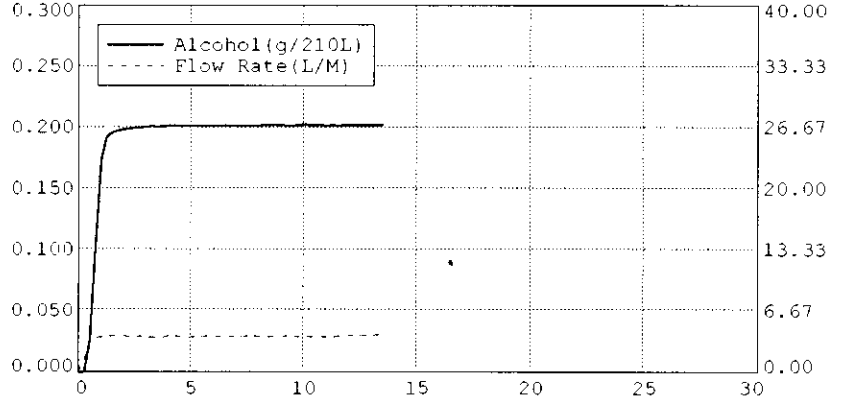
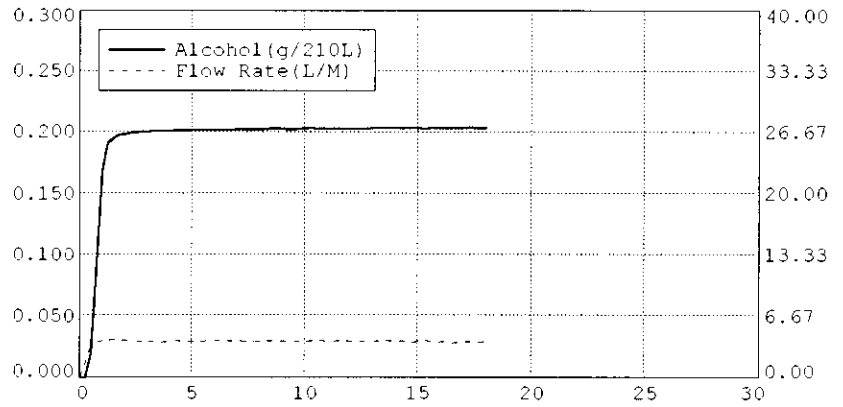
Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 04/18/2019
Time: 10:33:44

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.200
LOT #: GUTH 17340
EXPIRATION: 10/09/2019

BLANK TEST	0.000	10:34
INTERNAL STANDARD	VERIFIED	10:34
EXTERNAL STANDARD	0.204	10:35
BLANK TEST	0.000	10:36
EXTERNAL STANDARD	0.202	10:36
BLANK TEST	0.000	10:37
EXTERNAL STANDARD	0.202	10:37
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.203	10:39
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.203	10:40
BLANK TEST	0.000	10:41

Average = 0.2028
Std Dev = 0.0008



LINEARITY CHECK: Control Test 6

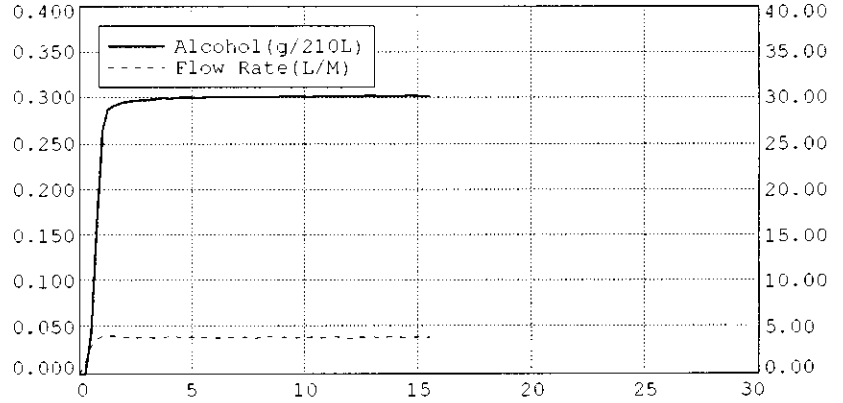
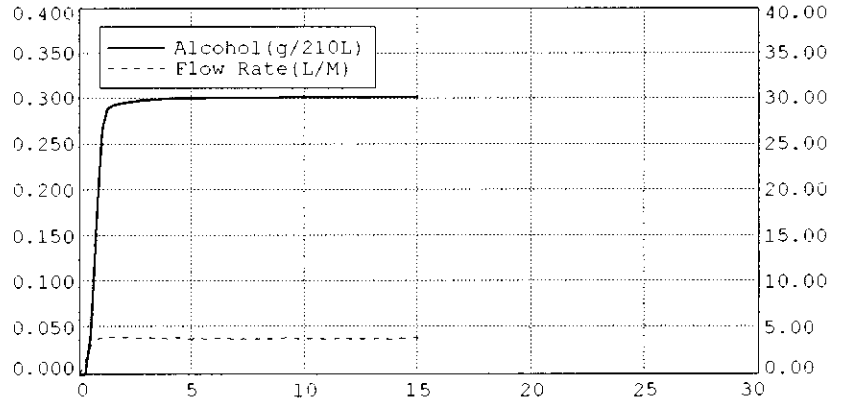
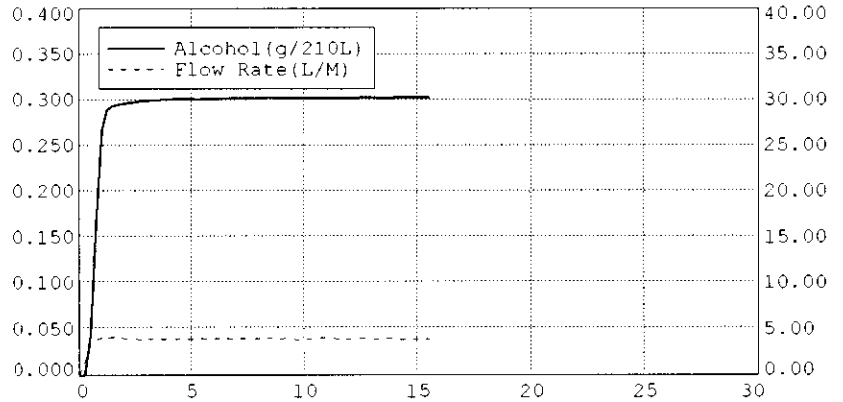
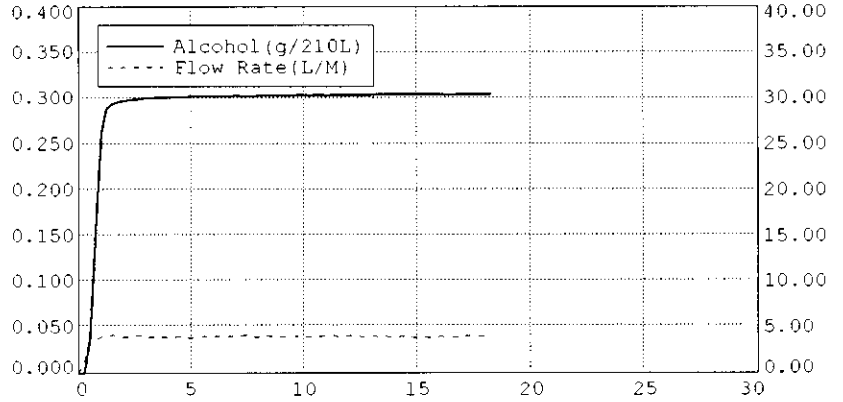
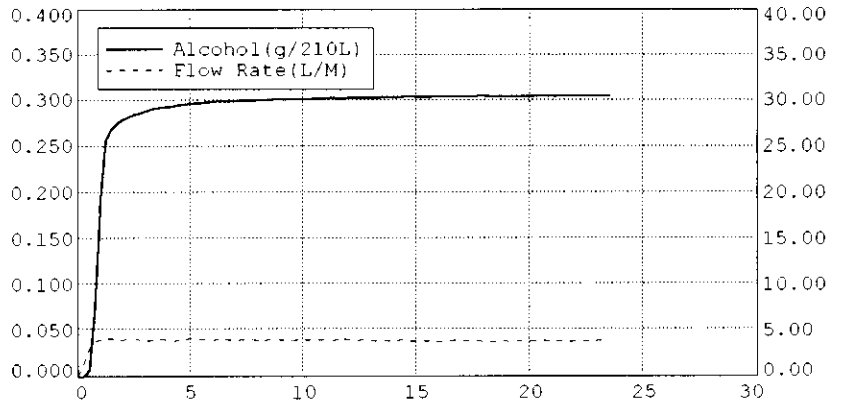
Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 04/18/2019
Time: 10:42:53

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.300
LOT #: GUTH 17350
EXPIRATION: 10/11/2019

BLANK TEST	0.000	10:44
INTERNAL STANDARD	VERIFIED	10:44
EXTERNAL STANDARD	0.304	10:45
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.304	10:46
BLANK TEST	0.000	10:47
EXTERNAL STANDARD	0.303	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.302	10:49
BLANK TEST	0.000	10:49
EXTERNAL STANDARD	0.302	10:50
BLANK TEST	0.000	10:51

Average = 0.3030
Std Dev = 0.0010



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 04/19/2019
Time: 12:34:17

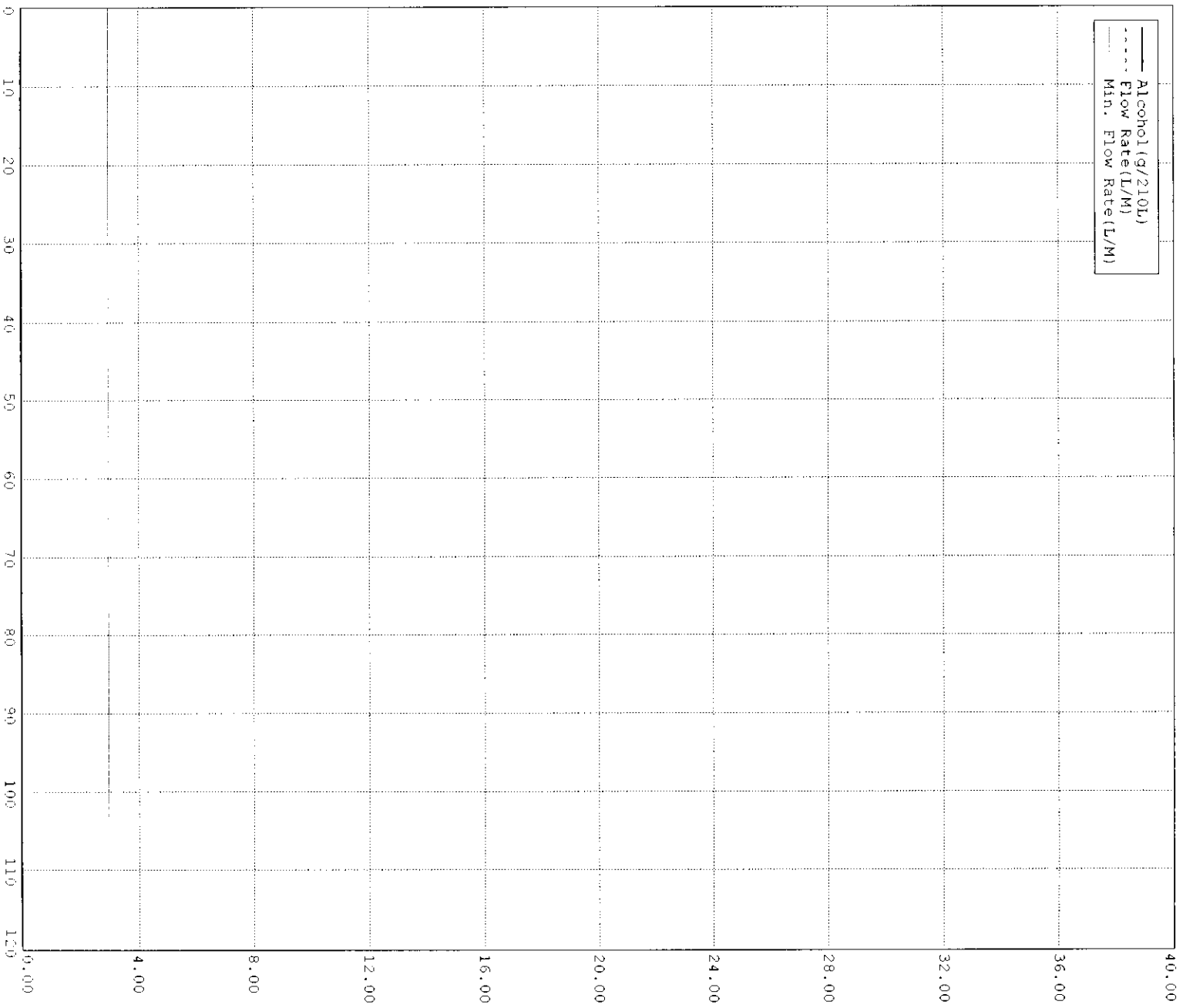
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.52: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	12:35
BLANK TEST	0.000	12:35
INTERNAL STANDARD	VERIFIED	12:35
EXTERNAL STANDARD	0.077	12:35
BLANK TEST	0.000	12:36
SUBJECT SAMPLE	INCOMPLETE	12:38



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 04/19/2019
Time: 12:41:57

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

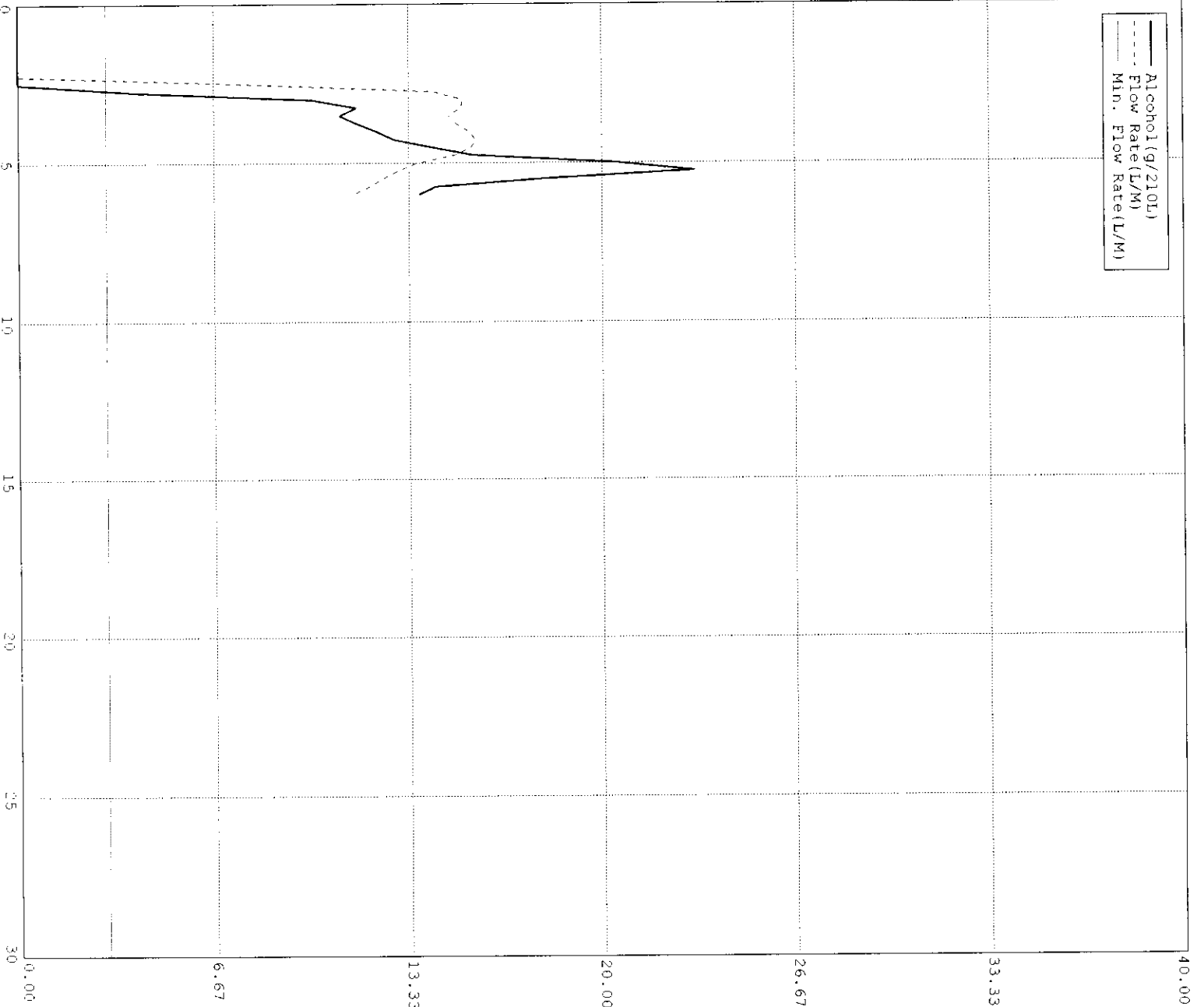
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.52: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	12:42
BLANK TEST	0.000	12:43
INTERNAL STANDARD	VERIFIED	12:43
EXTERNAL STANDARD	0.078	12:43
BLANK TEST	0.000	12:44
SUBJECT SAMPLE	INVALID	12:44

BBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 04/19/2019
Time: 12:49:37

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

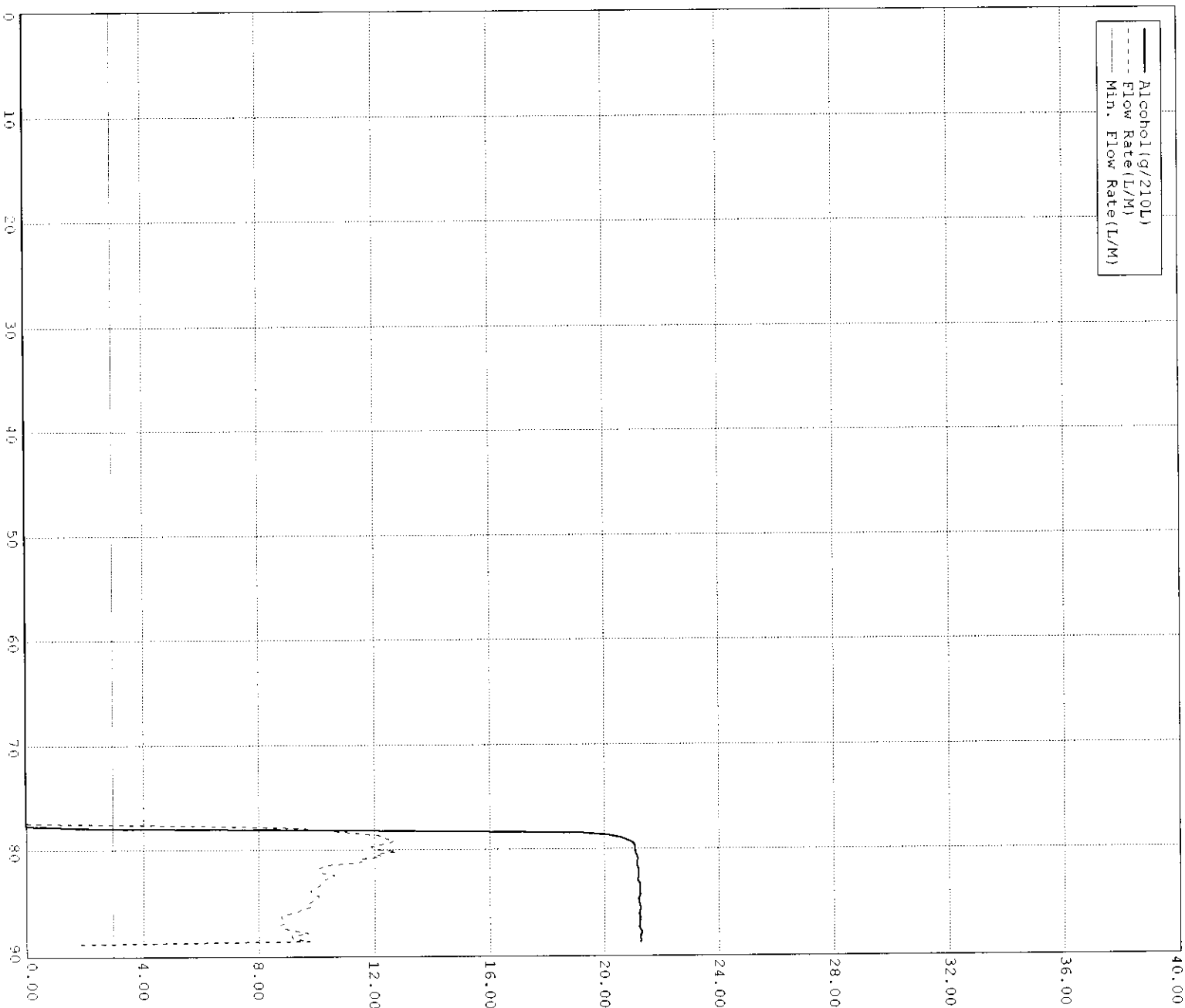
NOMINAL: 0.080
TARGET AT 29.52: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	12:50
BLANK TEST	0.000	12:50
INTERNAL STANDARD	VERIFIED	12:51
Xq = 0.097 (0.00%)		
EXTERNAL STANDARD	0.078	12:51
X[1] = 0.0776 (0.0004)	(0.0025)	
BLANK TEST	0.000	12:52
SUBJECT SAMPLE	XXX	12:53
X[1] = 0.1072 (-0.0160)	(0.0003)	

Interference Detected

Filter 2 Avg: 0.0001
Filter 3 Avg: 0.0025
BMB 4/19/19

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 04/19/2019
Time: 12:57:22

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

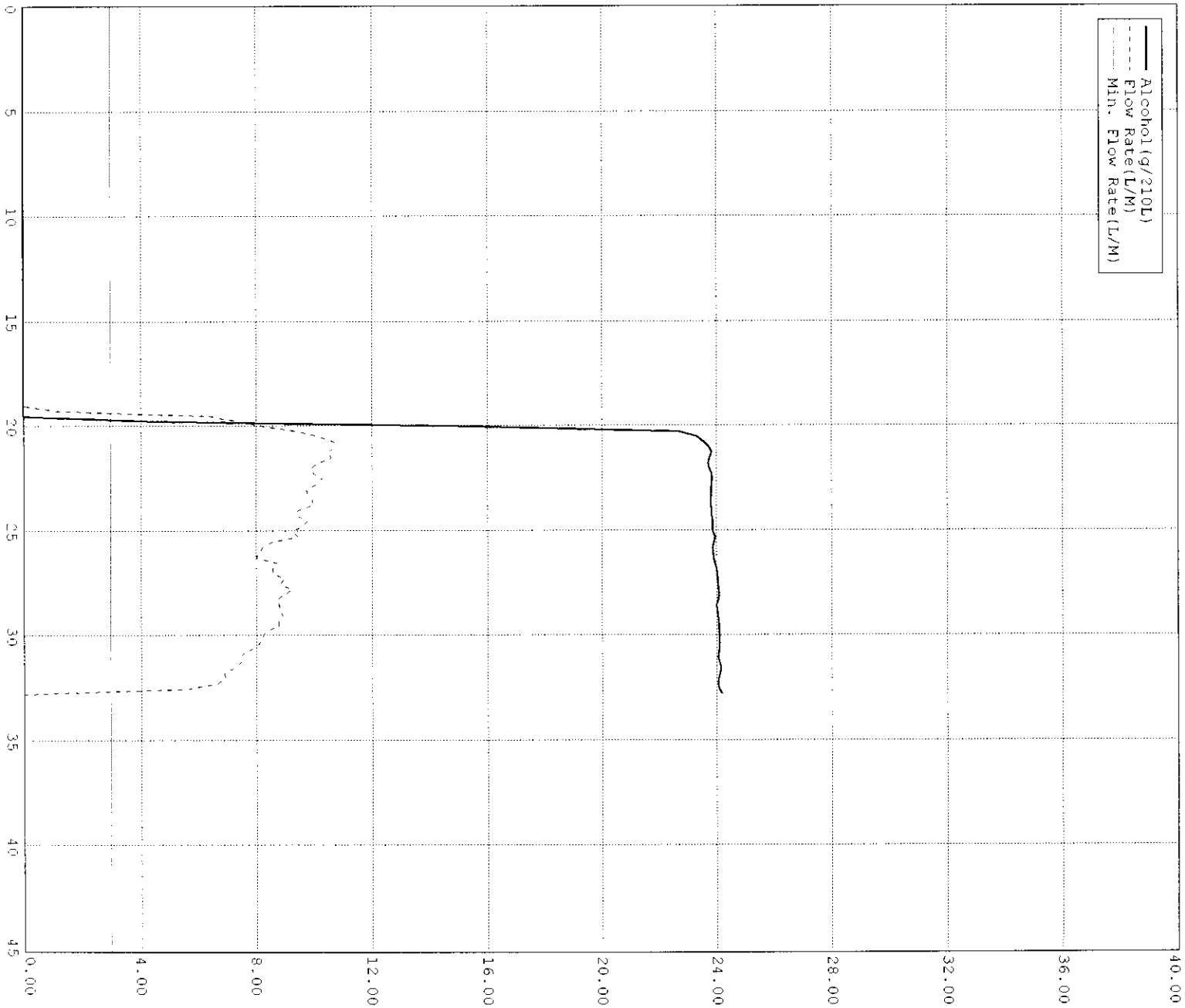
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.53: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK PASSED 12:58
BLANK TEST 0.000 12:58
INTERNAL STANDARD VERIFIED 12:58
Xq = 0.097 (0.09%)
EXTERNAL STANDARD 0.078 12:59
X[1] = 0.0776 (0.0002) (0.0023)
BLANK TEST 0.000 13:00
SUBJECT SAMPLE XXX 13:00
X[1] = 0.1215 (-0.0222) (0.0015)

Interference Detected

BBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 04/19/2019
Time: 13:05:14

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

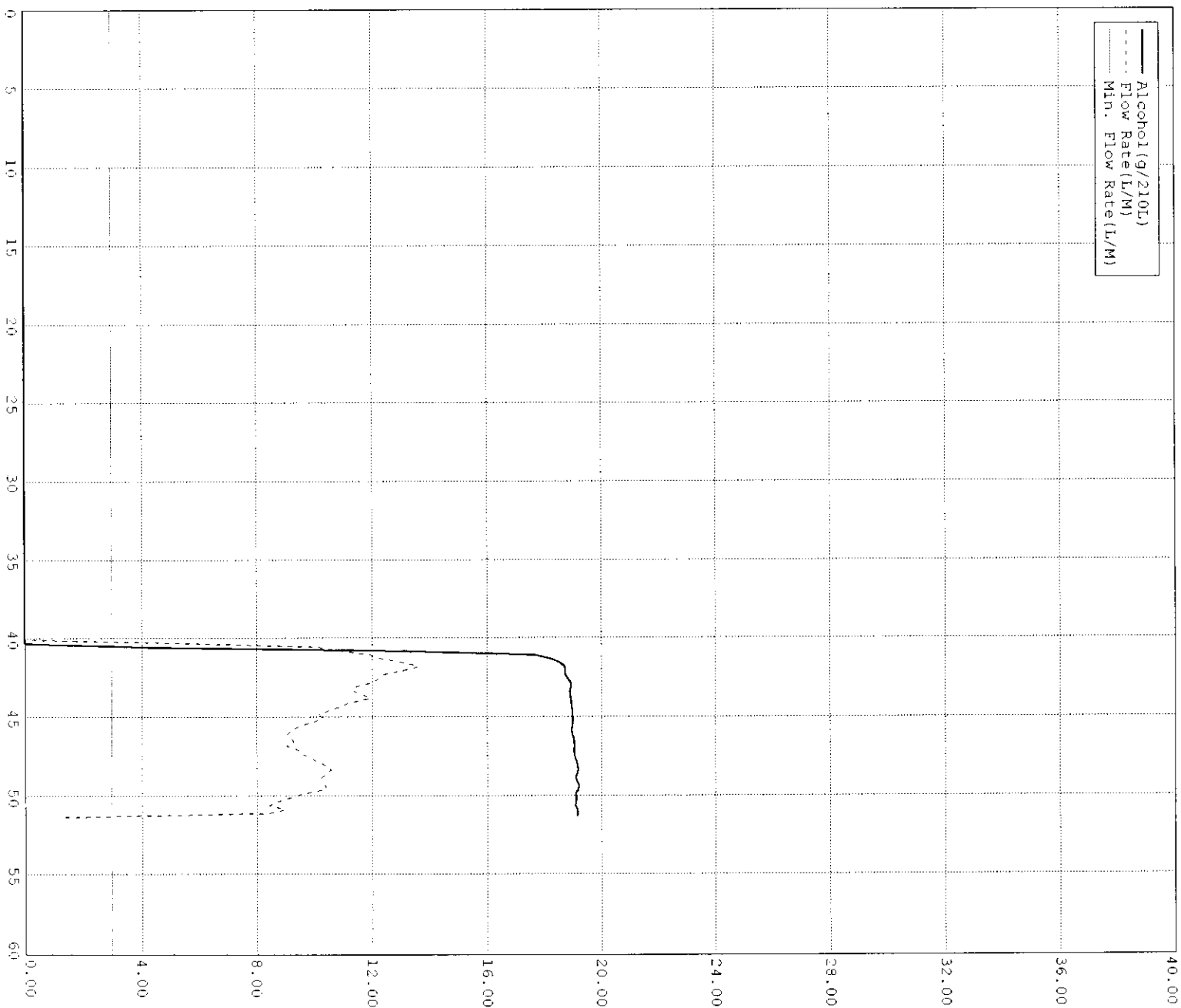
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.53: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	13:06
INTERNAL STANDARD	0.000	13:06
INTERNAL STANDARD	VERIFIED	13:06
Xq = 0.097 (0.18%)		
EXTERNAL STANDARD	0.078	13:07
X[1] = 0.0778 (0.0001) (0.0033)		
BLANK TEST	0.000	13:08
SUBJECT SAMPLE (Vol=1.91L)	0.096	13:09
X[1] = 0.0969 (-0.0006) (0.0009)		
BLANK TEST	0.000	13:10
EXTERNAL STANDARD	0.077	13:10
X[1] = 0.0774 (-0.0002) (0.0017)		
BLANK TEST	0.000	13:11

BBB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100392

Date: 04/19/2019
Time: 13:18:09

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

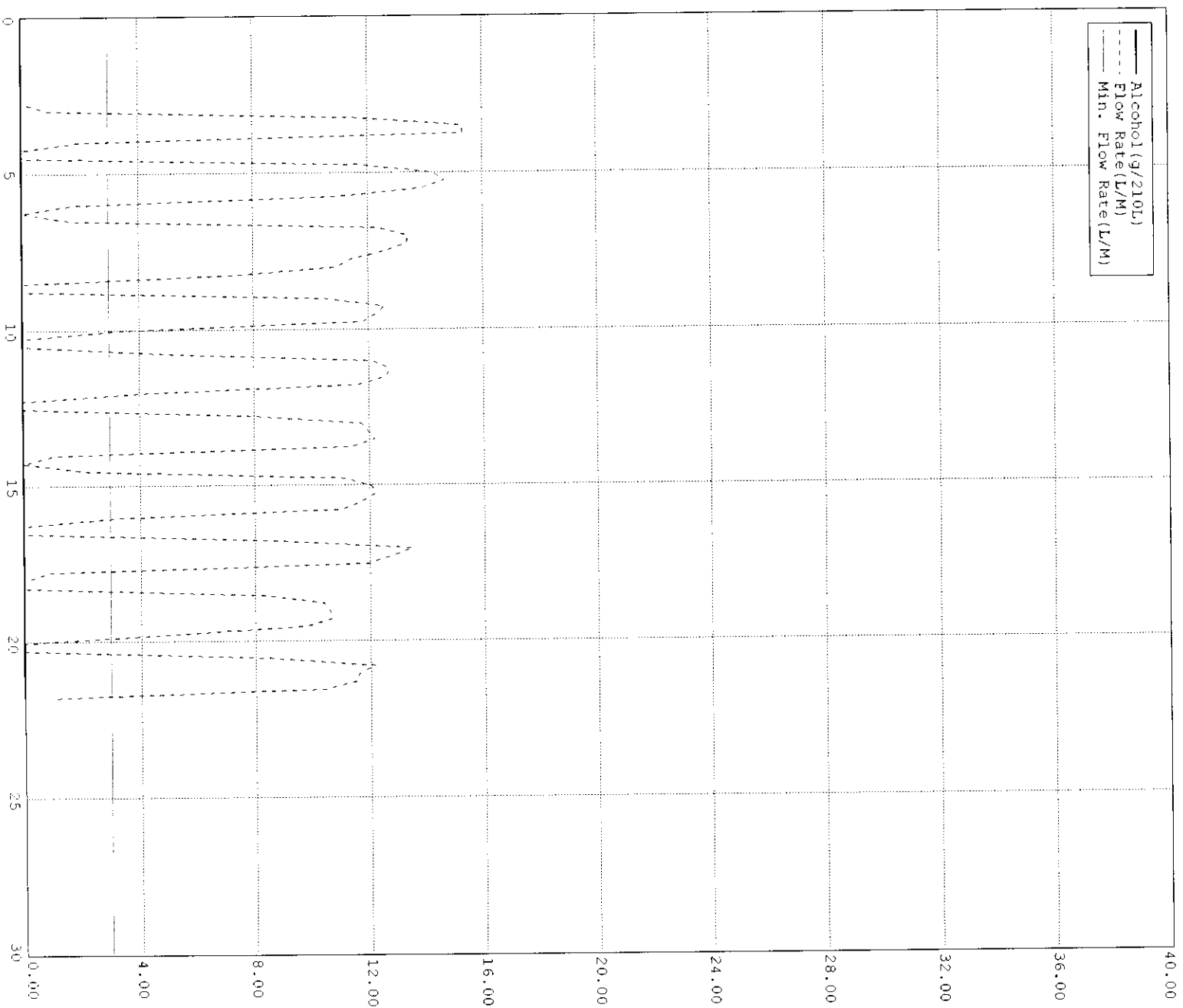
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.53: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

TEST TYPE	PASSED	VERIFIED	TIME
DIAGNOSTIC CHECK	0.000	0.078	13:19
BLANK TEST	0.000	0.000	13:19
INTERNAL STANDARD	0.000	0.000	13:19
EXTERNAL STANDARD	0.000	0.000	13:20
BLANK TEST	0.000	0.000	13:21

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100392

Date: 04/19/2019
Time: 13:22:40

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

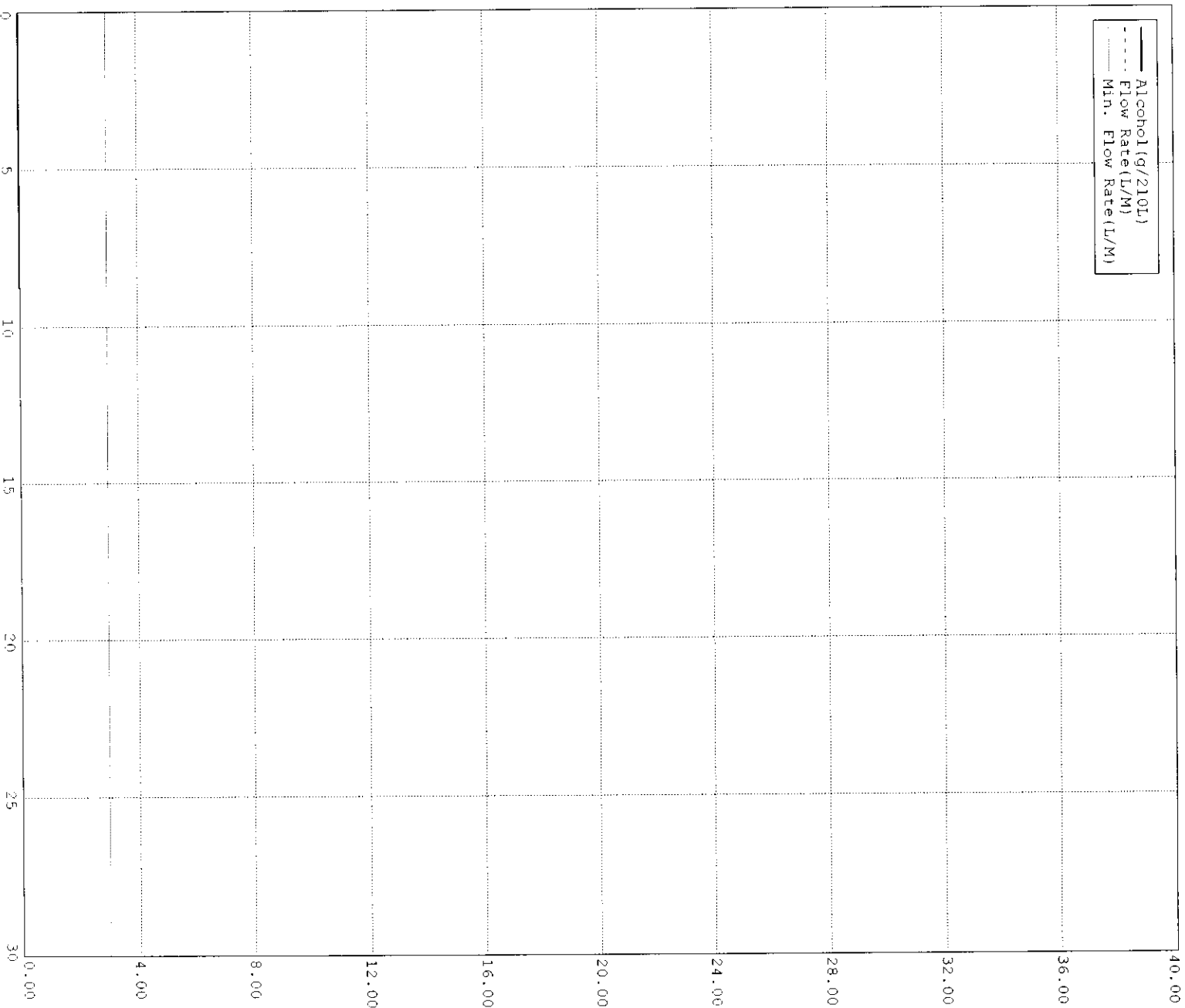
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.53: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	13:23
BLANK TEST	0.000	13:23
INTERNAL STANDARD	VERIFIED	13:23
EXTERNAL STANDARD	0.078	13:24
BLANK TEST	0.000	13:25

RFI DETECTED

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 04/19/2019
Time: 13:51:32

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 29.53: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	13:52
BLANK TEST	0.000	13:52
INTERNAL STANDARD	VERIFIED	13:52
EXTERNAL STANDARD	0.078	13:53
BLANK TEST	0.000	13:54
SUBJECT SAMPLE (Vol=1.82L)	0.000	13:54
BLANK TEST	0.000	13:55
EXTERNAL STANDARD	0.078	13:56
BLANK TEST	0.000	13:57

Handwritten signature: BMB

