

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 1003 57 Analyst Brandi Barnett Start Date 2/12/19

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 1.7 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 SD1176 Date Calibrated 6/1/18

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 SD1200 Date Calibrated 6/1/18
- 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 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 2/14/19

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/12/2019
Time: 12:47:38

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 = 45.4°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.72 V PASSED
(1.07 V - 2.49 V)
Cooler Voltage = 1.76 V PASSED
(1.10 V - 2.58 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 531 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 4.388 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 = 0.090 (2.38%) (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100357

Date: 02/12/2019
Time: 1:35 PM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 44.3°C

Current Barometer 29.6 in
Volume (Ltr) 1.41

Settings

Lamp: 1.86 V
Bias: 79 V
Cooler: 1.79 V
Chopper: 528 Hz

Voltages (V)

Flow: 1.05 V
Detector: 0.068 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 09/30/2013
Time: 10:32:33

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

Ca = 0.1000
CAL = 0.963287 0.800 <= CAL < 1.200
b1 = 0.0001 0.0000 <= b1 < 0.0040
b2 = 0.0054 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0878 0.0500 <= Xq < 0.2000
a21 = 1.174329 1.050 <= a21 < 1.300
a31 = 0.514811 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/12/2019
Time: 13:36:38

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

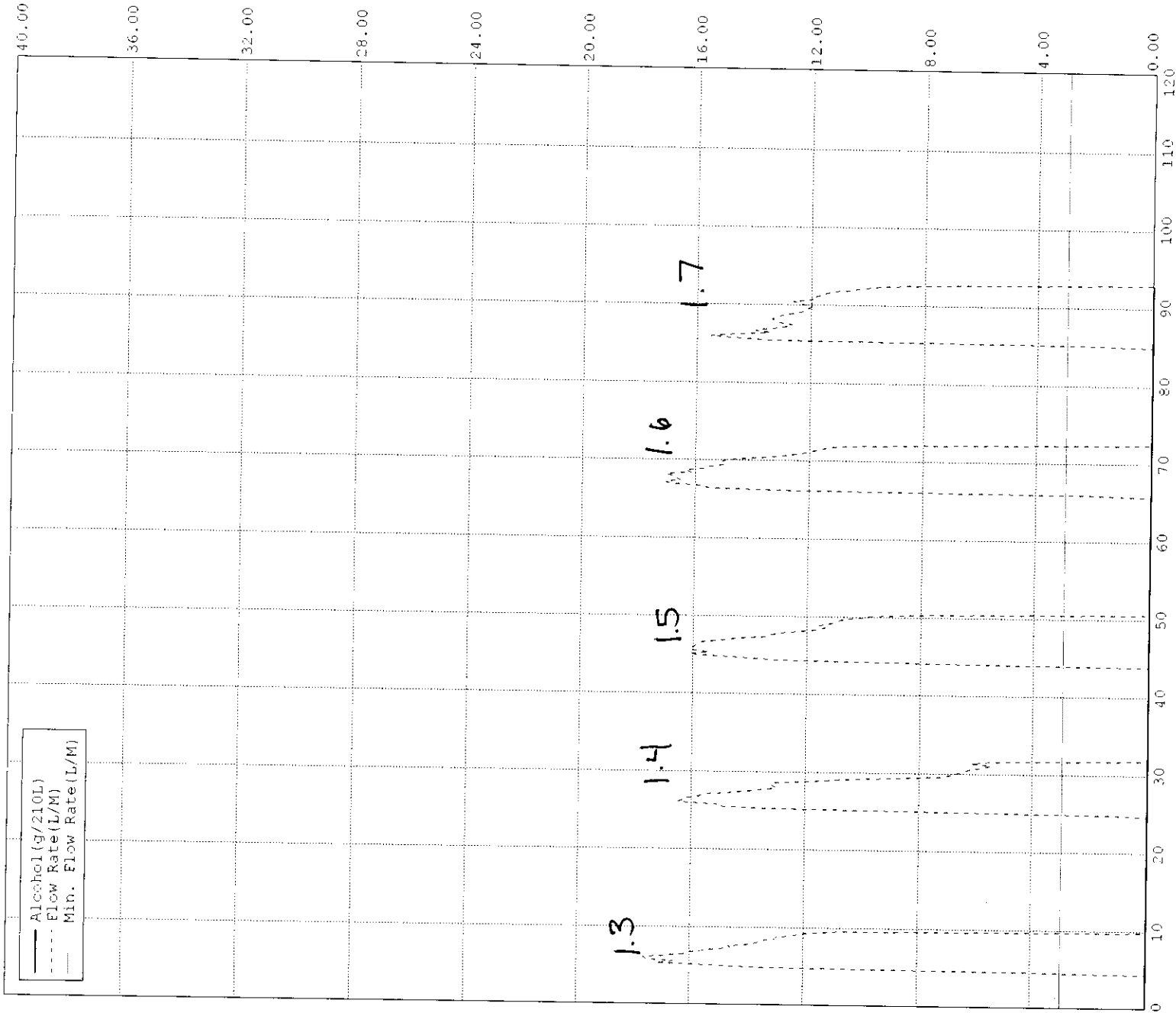
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.64: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	13:37
BLANK TEST	0.000	13:37
INTERNAL STANDARD	VERIFIED	13:37
EXTERNAL STANDARD	0.078	13:38
BLANK TEST	0.000	13:39
SUBJECT SAMPLE (Vol=1.56L)	0.000	13:40
BLANK TEST	0.000	13:41
EXTERNAL STANDARD	0.078	13:41
BLANK TEST	0.000	13:42



LINEARITY CHECK

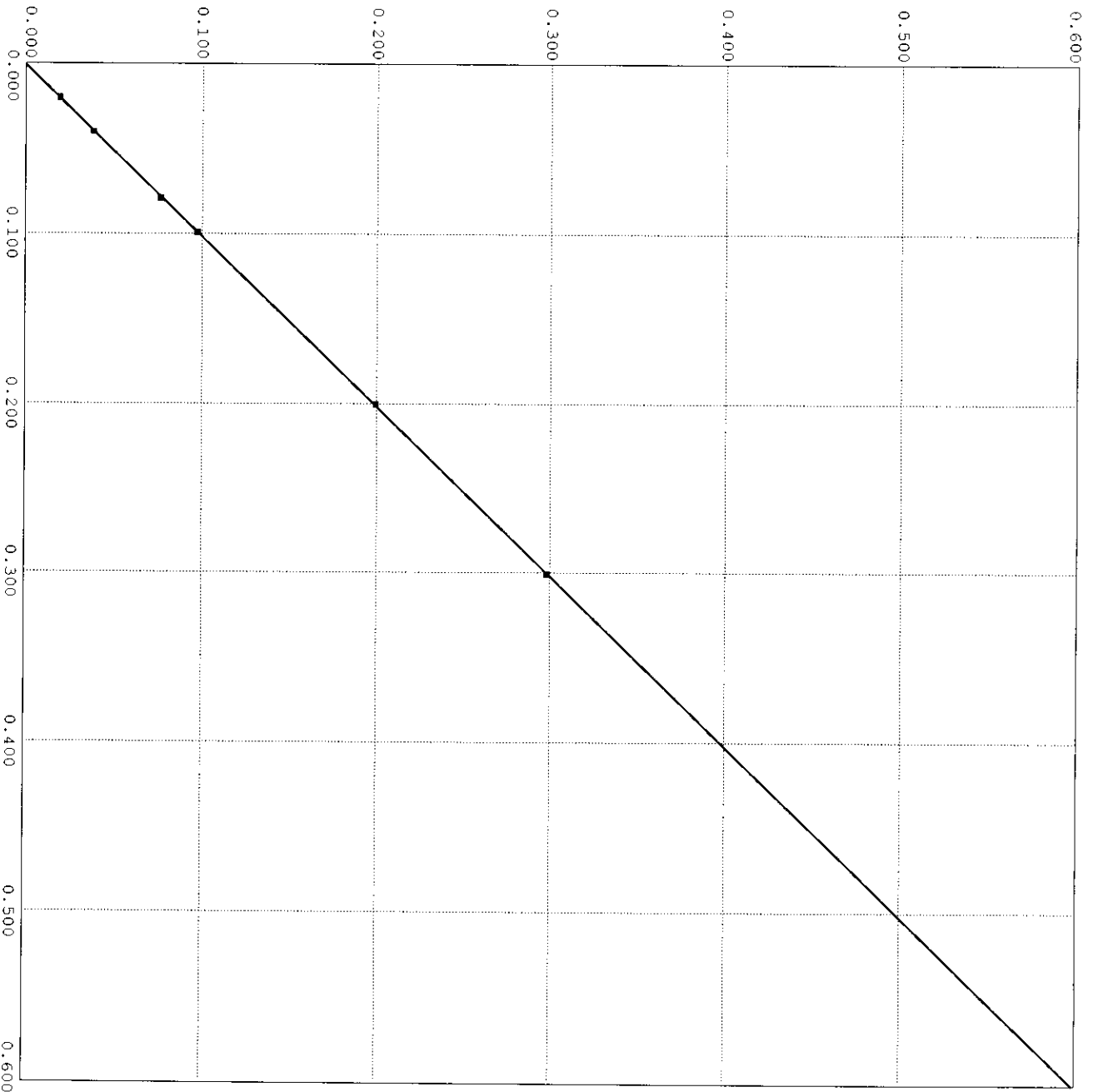
Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/13/2019
Time: 08:57:16

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0392	0.0004
0.079	0.0772	0.0004
0.099	0.0982	0.0004
0.200	0.2002	0.0004
0.300	0.2986	0.0009

SLOPE = 0.998820
R² = 0.999949



BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100357

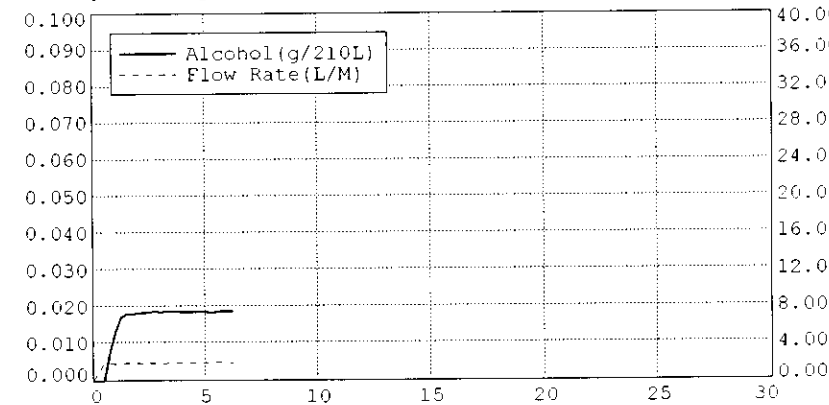
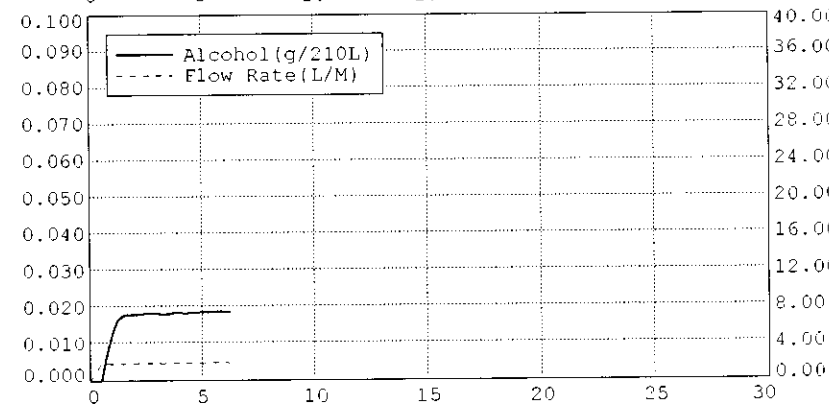
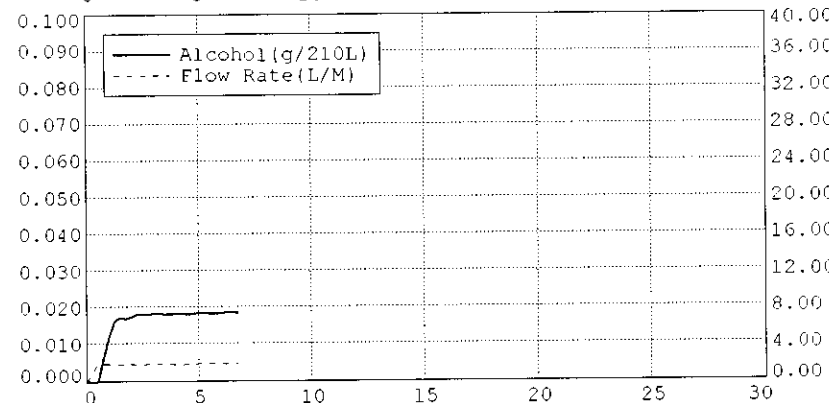
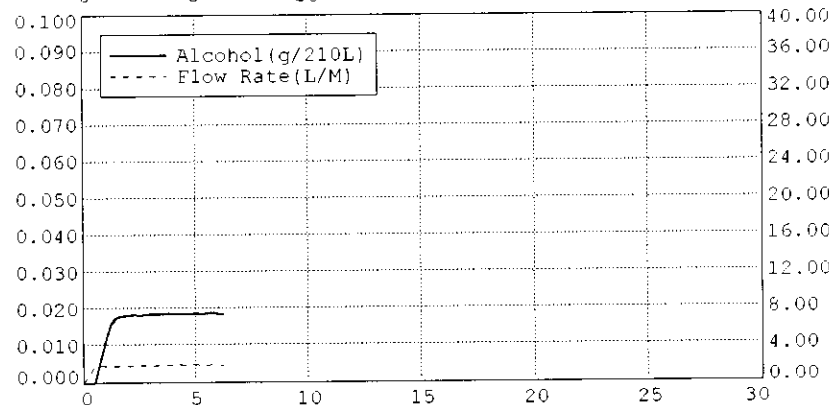
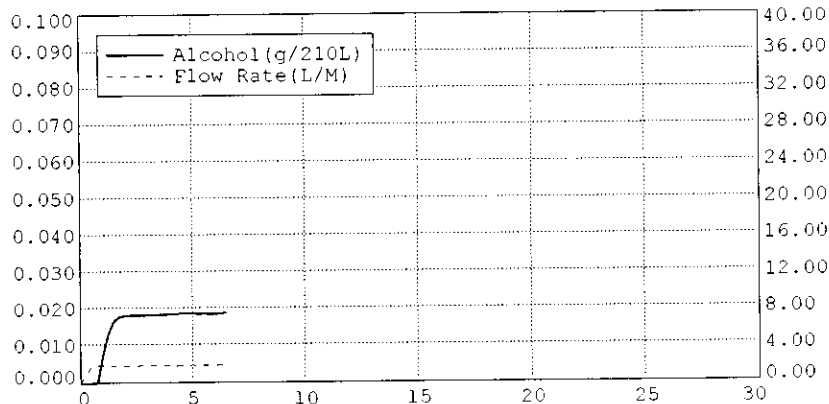
Date: 02/13/2019
 Time: 08:57:18

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.56: 0.020
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 957 psi

BLANK TEST	0.000	08:58
INTERNAL STANDARD	VERIFIED	08:58
EXTERNAL STANDARD	0.020	08:58
BLANK TEST	0.000	08:59
EXTERNAL STANDARD	0.020	09:00
BLANK TEST	0.000	09:00
EXTERNAL STANDARD	0.020	09:01
BLANK TEST	0.000	09:02
EXTERNAL STANDARD	0.020	09:02
BLANK TEST	0.000	09:03
EXTERNAL STANDARD	0.020	09:03
BLANK TEST	0.000	09:04

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100357

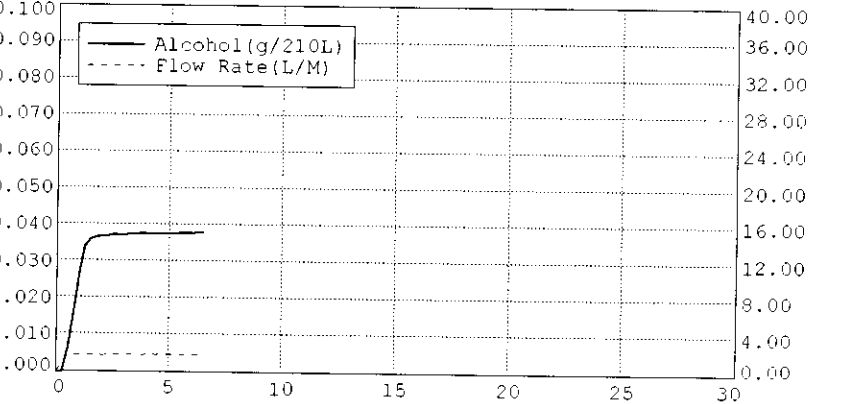
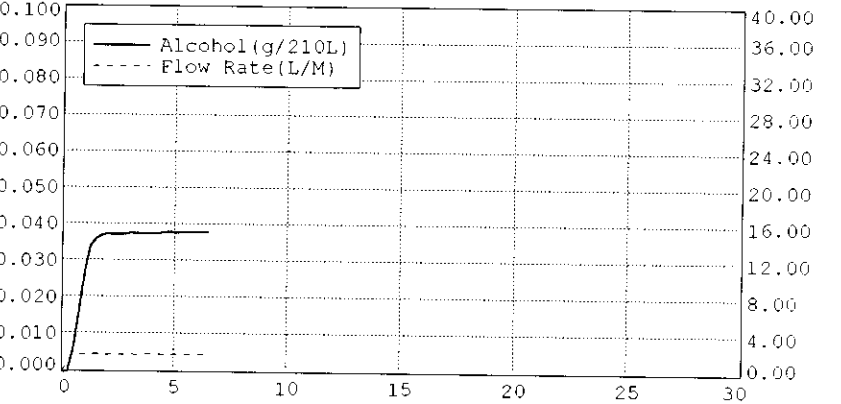
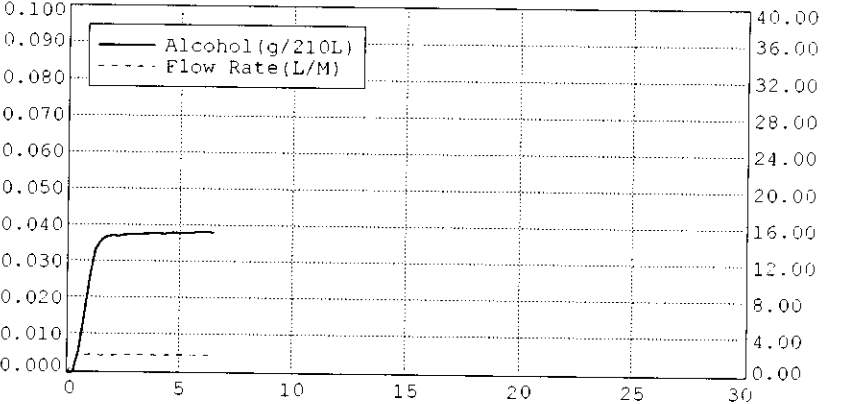
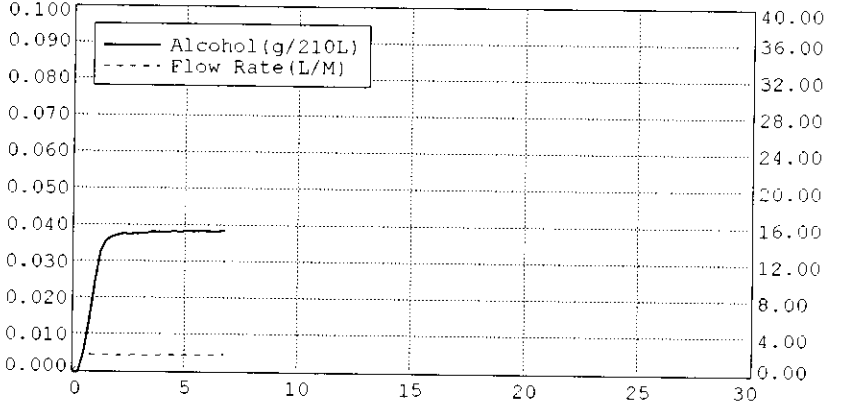
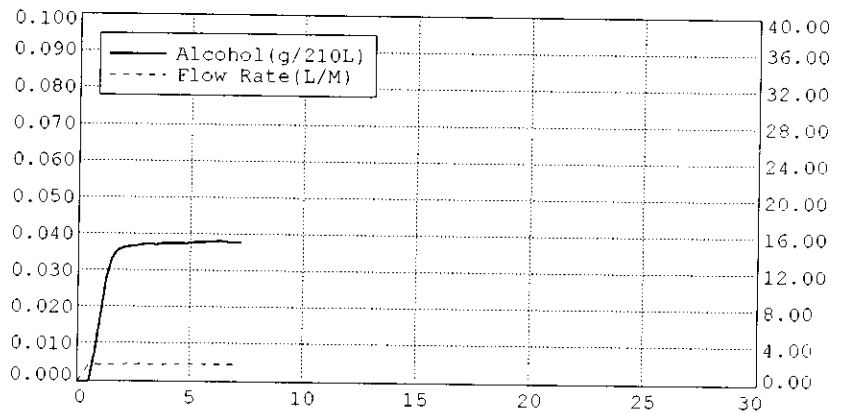
Date: 02/13/2019
 Time: 09:06:38

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.56: 0.040
 LOT #: AG733403
 EXPIRATION: 11/30/2019
 TANK PRESSURE: 918 psi

BLANK TEST	0.000	09:08
INTERNAL STANDARD	VERIFIED	09:08
EXTERNAL STANDARD	0.039	09:08
BLANK TEST	0.000	09:09
EXTERNAL STANDARD	0.040	09:09
BLANK TEST	0.000	09:10
EXTERNAL STANDARD	0.039	09:10
BLANK TEST	0.000	09:11
EXTERNAL STANDARD	0.039	09:11
BLANK TEST	0.000	09:12
EXTERNAL STANDARD	0.039	09:12
BLANK TEST	0.000	09:13

Average = 0.0392
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

 Alaska Department of Public Safety
 DATAMASTER dmt: 100357

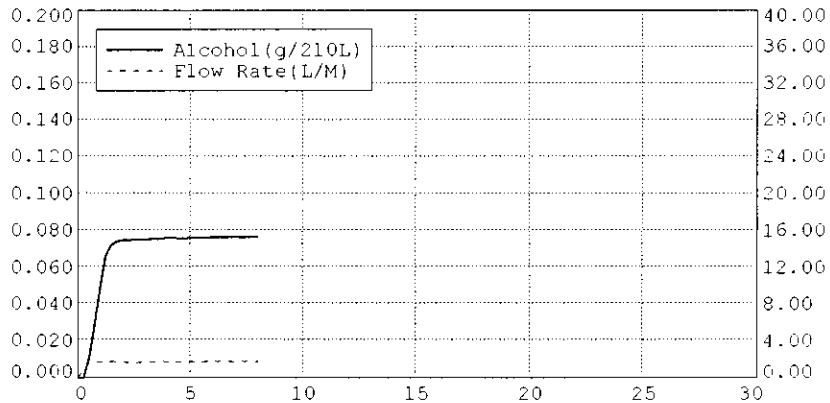
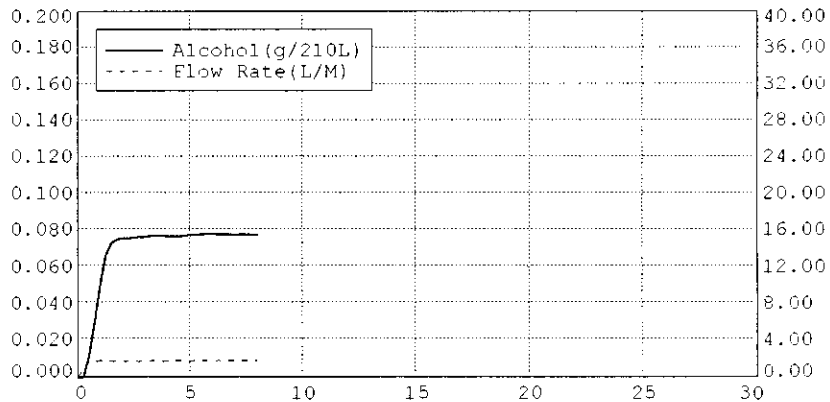
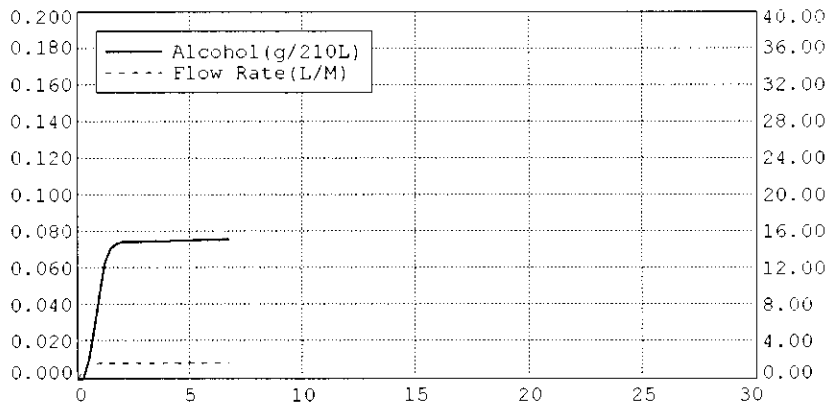
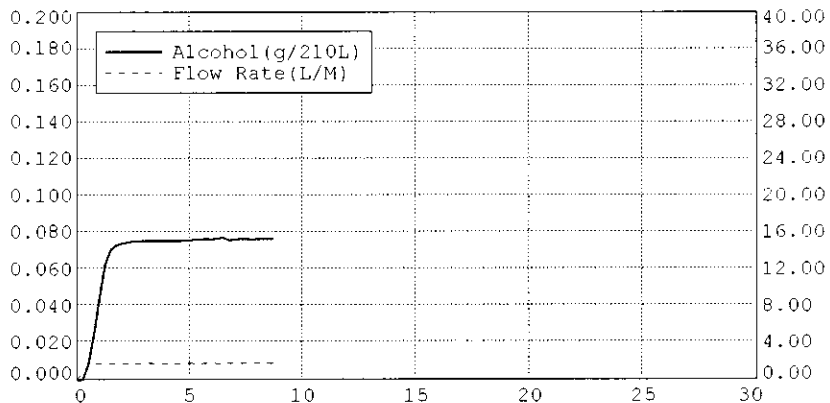
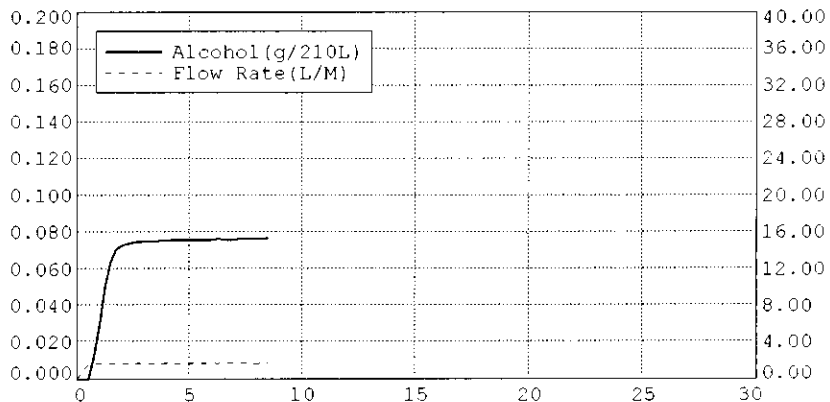
Date: 02/13/2019
 Time: 09:18:52

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.56: 0.079
 LOT #: AG735001
 EXPIRATION: 12/16/2019
 TANK PRESSURE: 514 psi

BLANK TEST	0.000	09:21
INTERNAL STANDARD	VERIFIED	09:21
EXTERNAL STANDARD	0.077	09:21
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.077	09:22
BLANK TEST	0.000	09:23
EXTERNAL STANDARD	0.077	09:23
BLANK TEST	0.000	09:24
EXTERNAL STANDARD	0.078	09:24
BLANK TEST	0.000	09:25
EXTERNAL STANDARD	0.077	09:26
BLANK TEST	0.000	09:27

Average = 0.0772
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100357

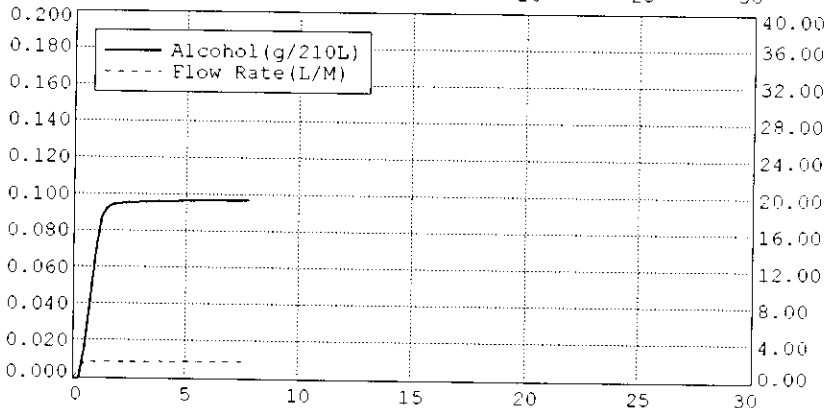
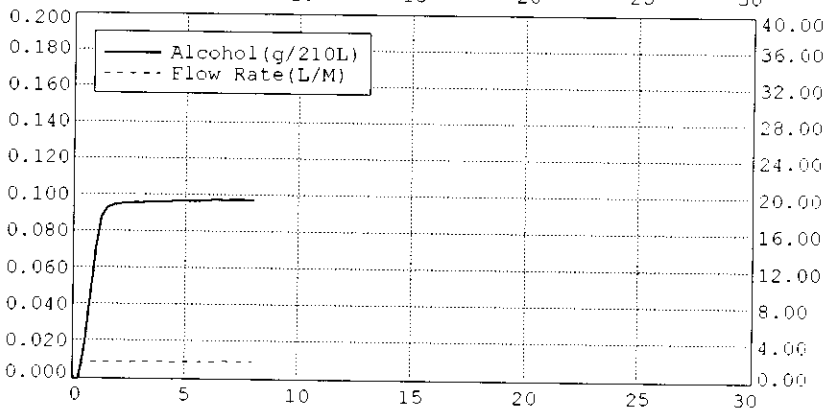
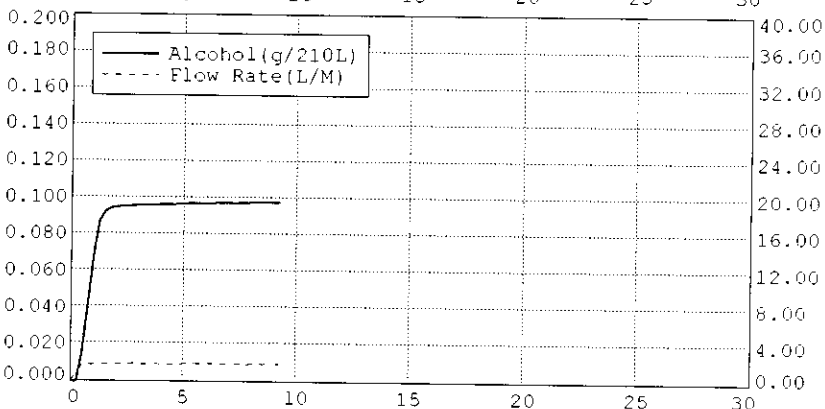
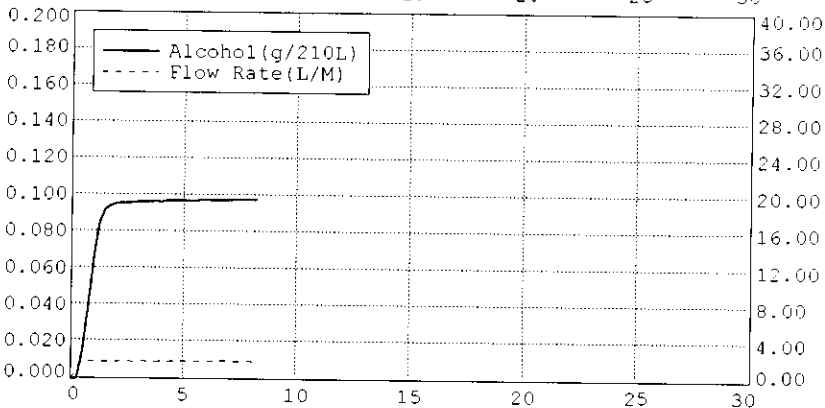
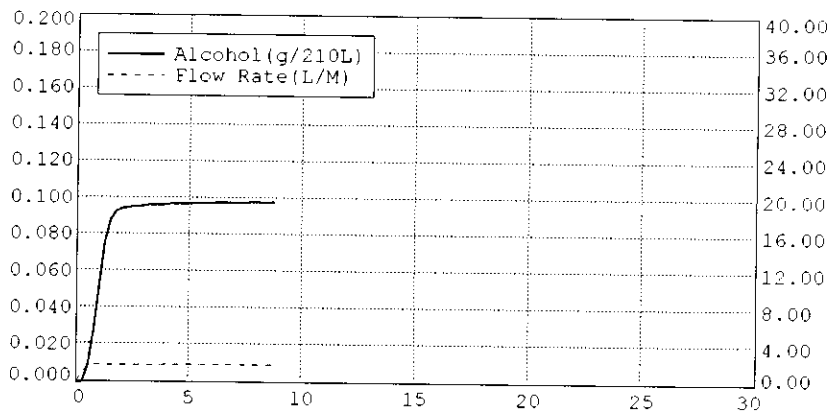
Date: 02/13/2019
 Time: 09:31:12

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.57: 0.099
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 918 psi

BLANK TEST	0.000	09:33
INTERNAL STANDARD	VERIFIED	09:33
EXTERNAL STANDARD	0.099	09:33
BLANK TEST	0.000	09:34
EXTERNAL STANDARD	0.098	09:34
BLANK TEST	0.000	09:35
EXTERNAL STANDARD	0.098	09:35
BLANK TEST	0.000	09:36
EXTERNAL STANDARD	0.098	09:36
BLANK TEST	0.000	09:37
EXTERNAL STANDARD	0.098	09:38
BLANK TEST	0.000	09:38

Average = 0.0982
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
DATAMASTER dmt: 100357

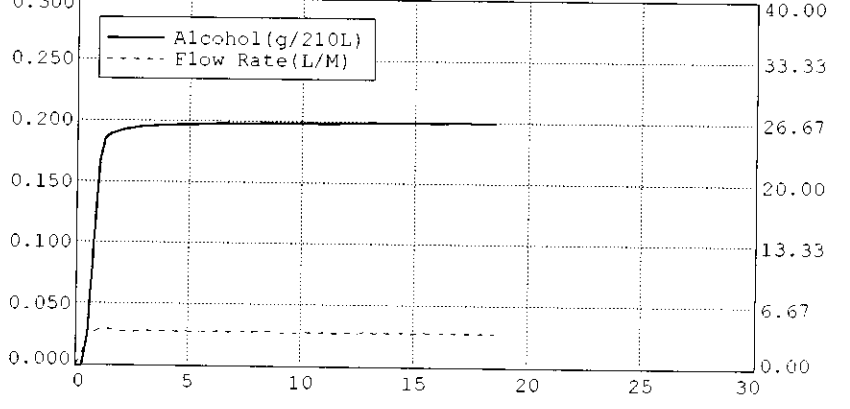
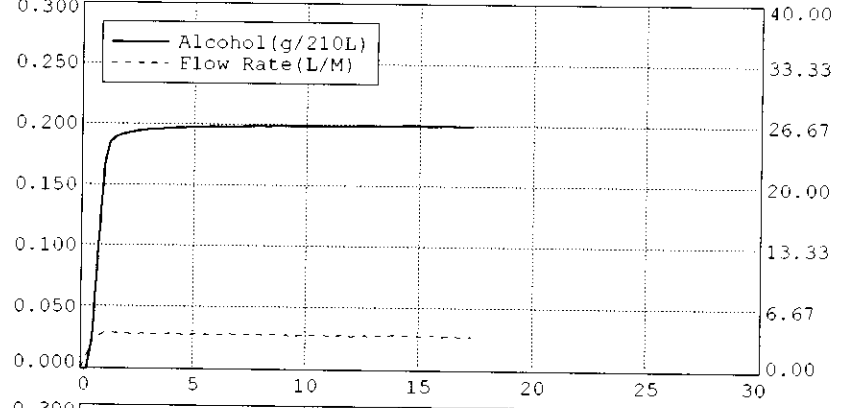
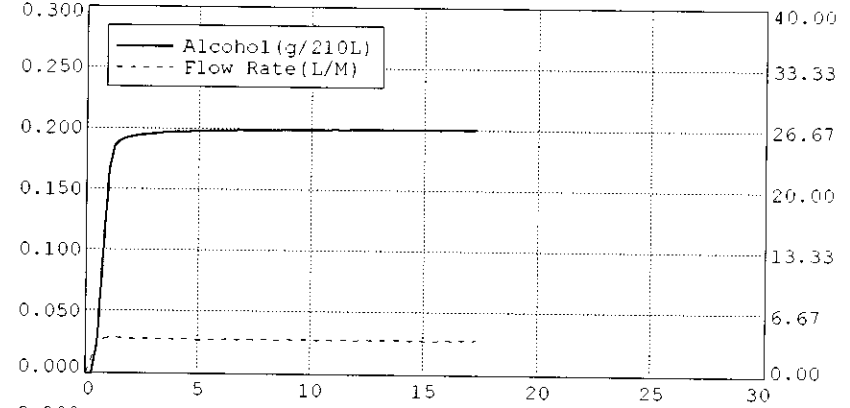
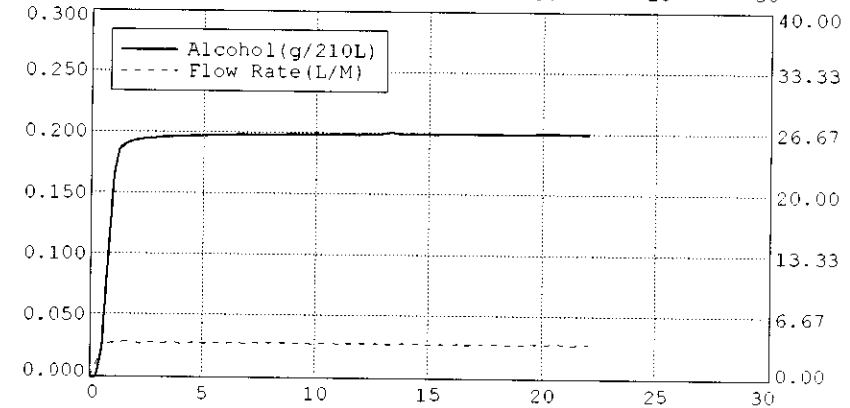
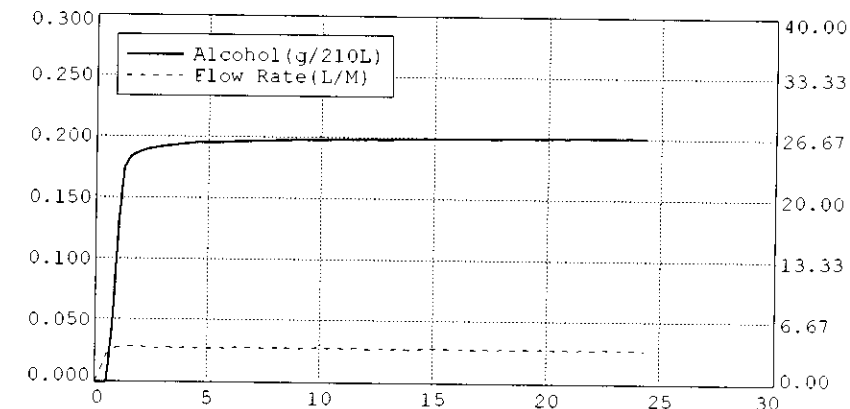
Date: 02/13/2019
Time: 09:40:20

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	09:42
INTERNAL STANDARD	VERIFIED	09:42
EXTERNAL STANDARD	0.201	09:43
BLANK TEST	0.000	09:44
EXTERNAL STANDARD	0.200	09:44
BLANK TEST	0.000	09:45
EXTERNAL STANDARD	0.200	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.200	09:47
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.200	09:48
BLANK TEST	0.000	09:49

Average = 0.2002
Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100357

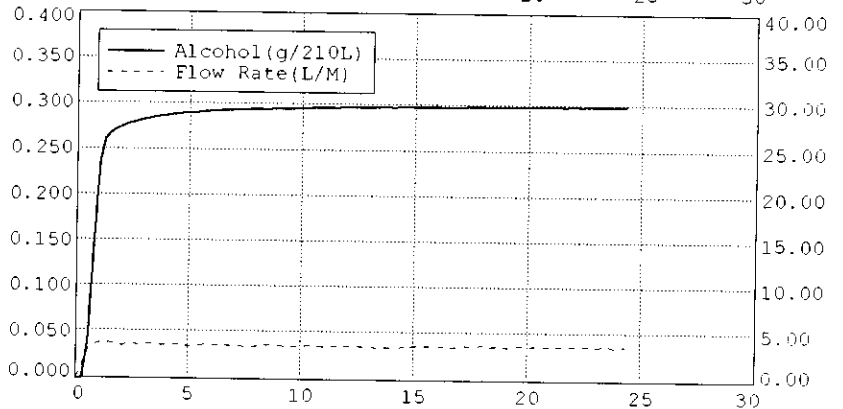
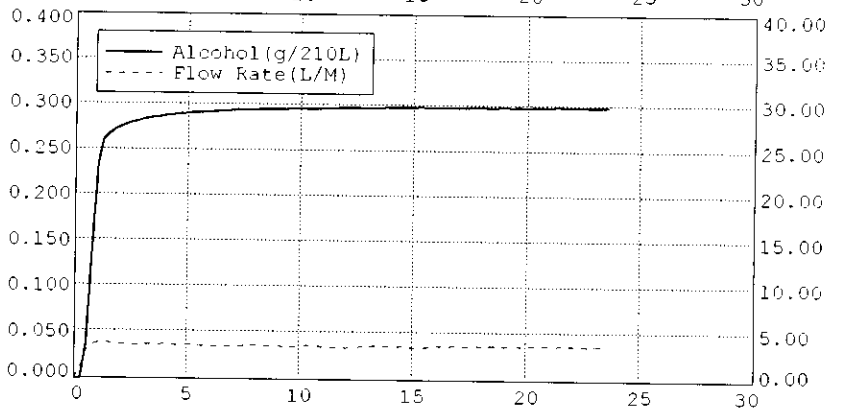
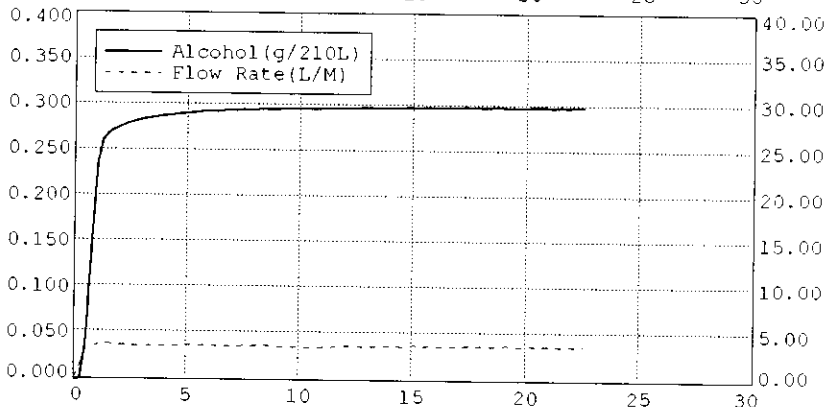
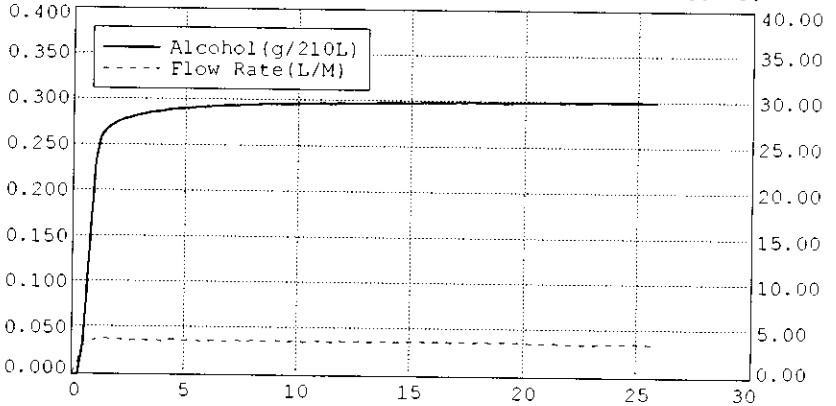
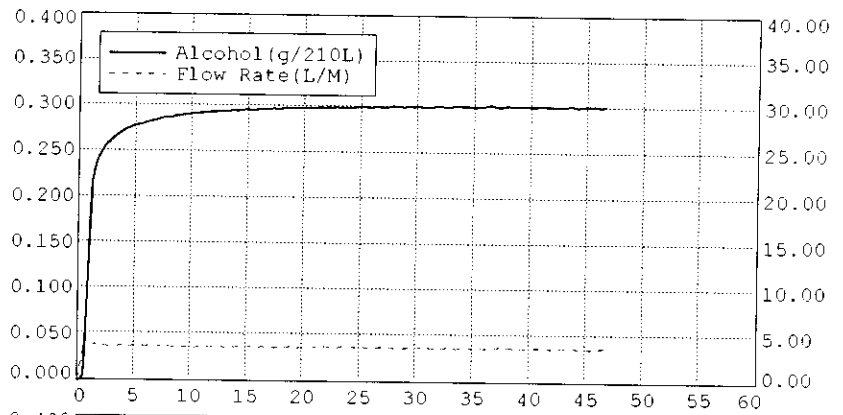
Date: 02/13/2019
 Time: 09:52:50

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	09:53
INTERNAL STANDARD	VERIFIED	09:54
EXTERNAL STANDARD	0.300	09:54
BLANK TEST	0.000	09:55
EXTERNAL STANDARD	0.299	09:56
BLANK TEST	0.000	09:57
EXTERNAL STANDARD	0.298	09:57
BLANK TEST	0.000	09:58
EXTERNAL STANDARD	0.298	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.298	10:00
BLANK TEST	0.000	10:01

Average = 0.2986
 Std Dev = 0.0009



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/14/2019
Time: 08:46:11

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

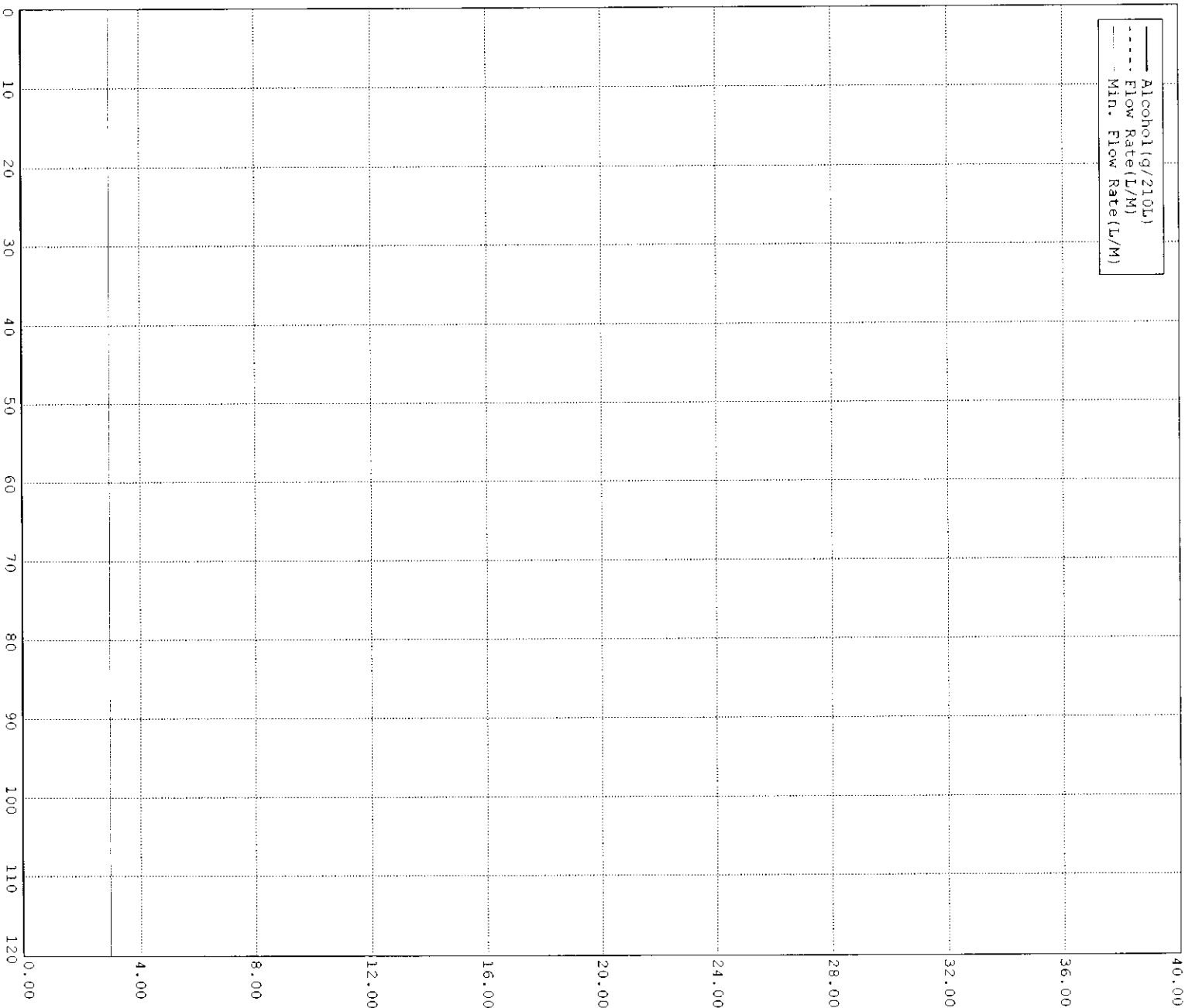
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.80: 0.080
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	08:47
BLANK TEST	0.000	08:47
INTERNAL STANDARD	VERIFIED	08:48
EXTERNAL STANDARD	0.078	08:48
BLANK TEST	0.000	08:49
SUBJECT SAMPLE	INCOMPLETE	08:51

BRMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/14/2019
Time: 08:54:07

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

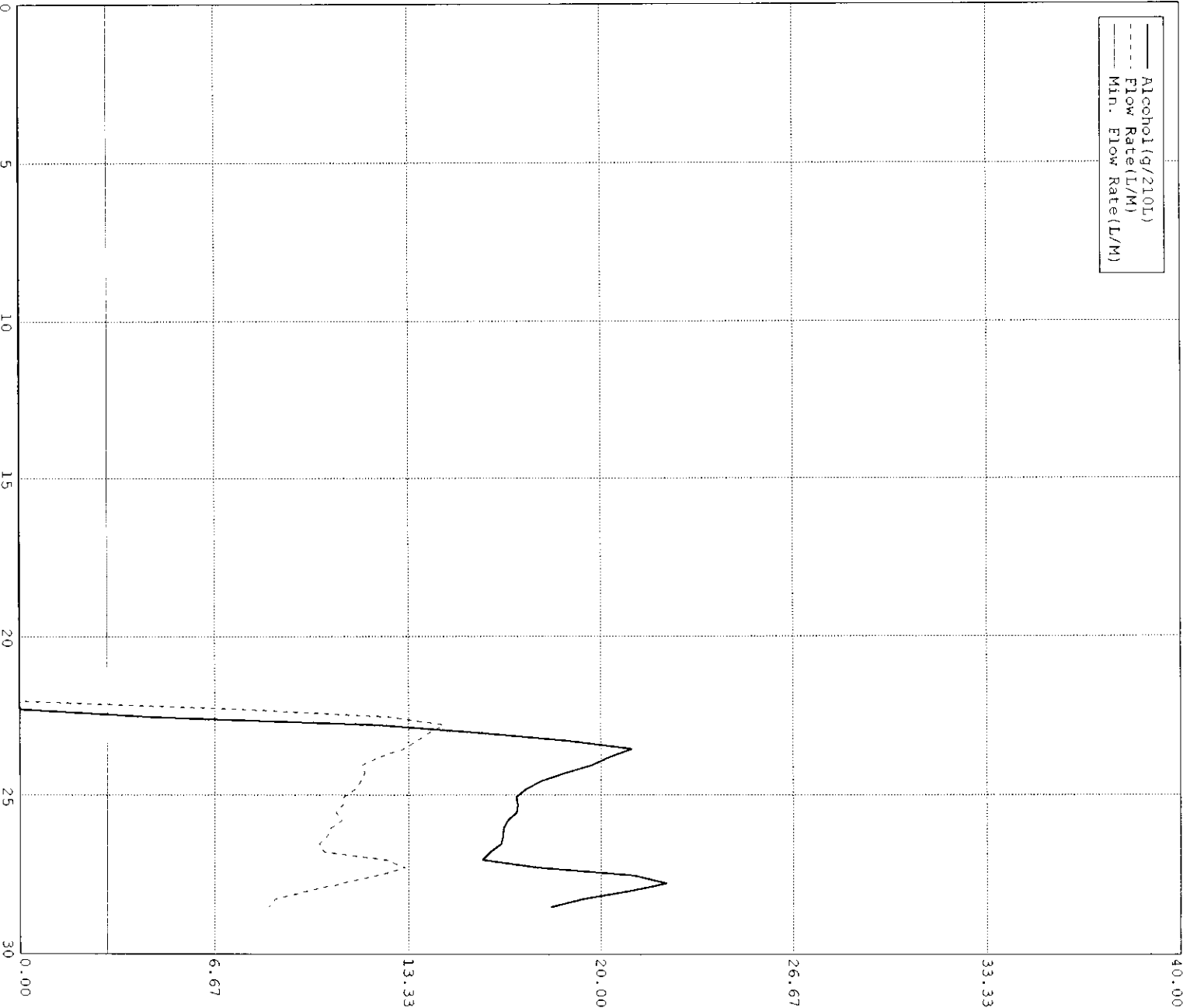
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.80: 0.080
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	08:55
BLANK TEST	0.000	08:55
INTERNAL STANDARD	VERIFIED	08:55
EXTERNAL STANDARD	0.078	08:56
BLANK TEST	0.000	08:57
SUBJECT SAMPLE	INVALID	08:58

BOMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/14/2019
Time: 09:02:32

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

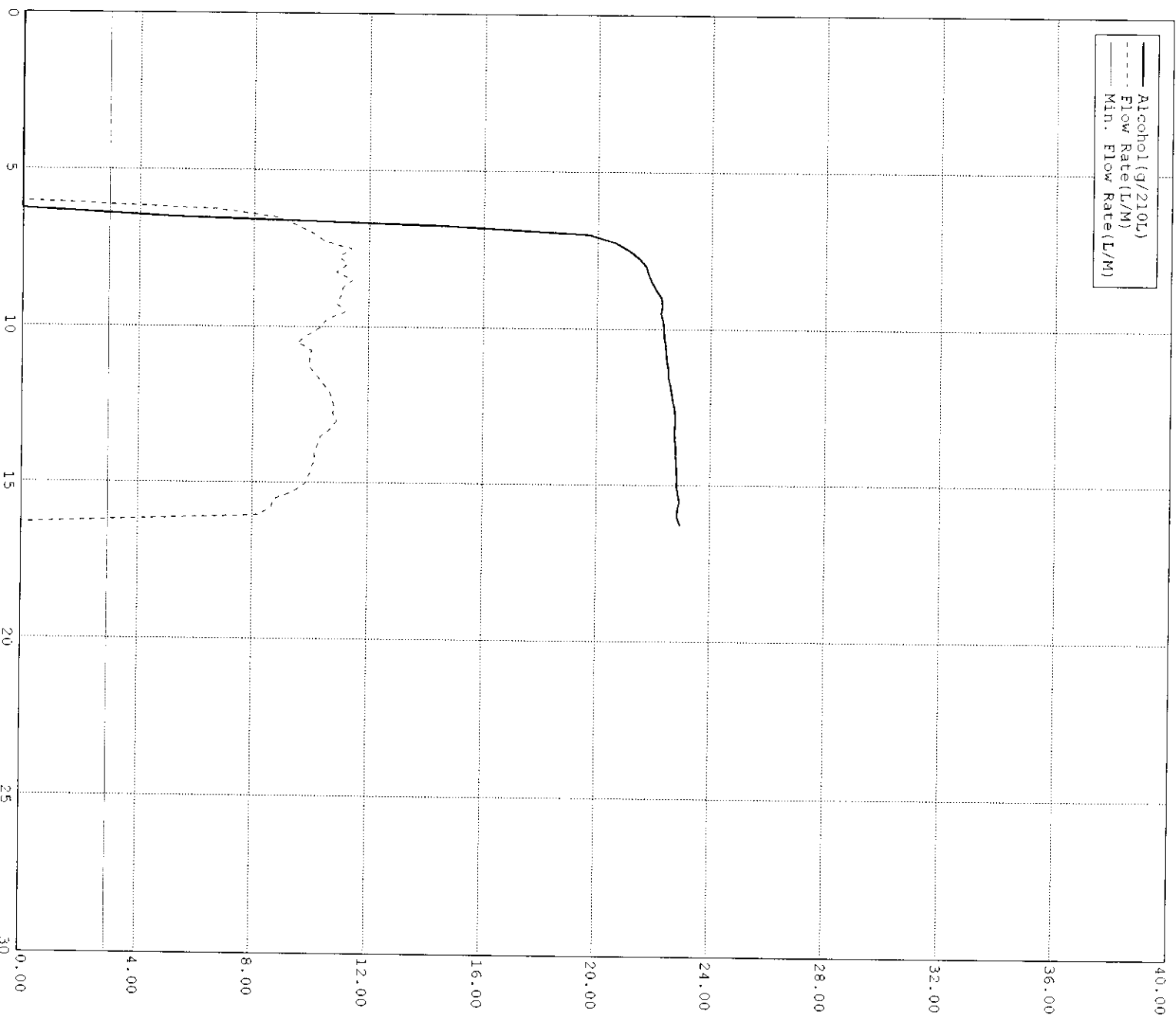
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	09:04
BLANK TEST	0.000	09:04
INTERNAL STANDARD	VERIFIED	09:04
Xq = 0.090 (2.38%)		
EXTERNAL STANDARD	0.078	09:04
X[1] = 0.0776 (-0.0023)	(0.0008)	
BLANK TEST	0.000	09:05
SUBJECT SAMPLE	XXX	09:05
X[1] = 0.1139 (-0.0128)	(0.0012)	

Interference Detected

Filter 2 Avg: -0.0020
Filter 3 Avg: 0.0013
BMB 2/15/19

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/14/2019
Time: 09:10:36

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

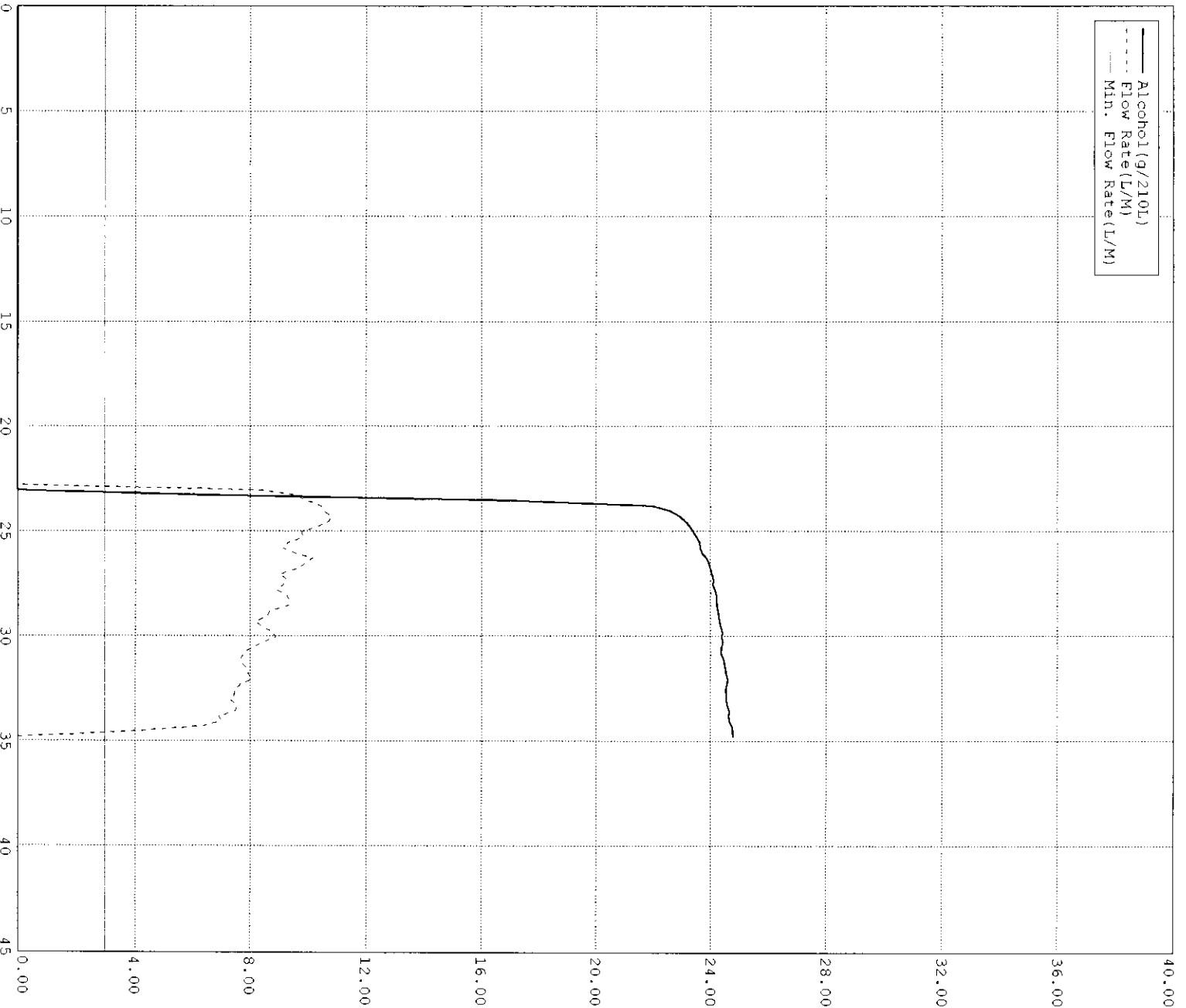
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK PASSED 09:12
BLANK TEST 0.000 09:12
INTERNAL STANDARD VERIFIED 09:12
Xq = 0.090 (2.19%)
EXTERNAL STANDARD 0.078 09:12
X[1] = 0.0784 (-0.0024) (0.0017)
BLANK TEST 0.000 09:13
SUBJECT SAMPLE XXX 09:14
X[1] = 0.1225 (-0.0263) (-0.0011)

Interference Detected

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100357

Date: 02/14/2019
Time: 09:18:45

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

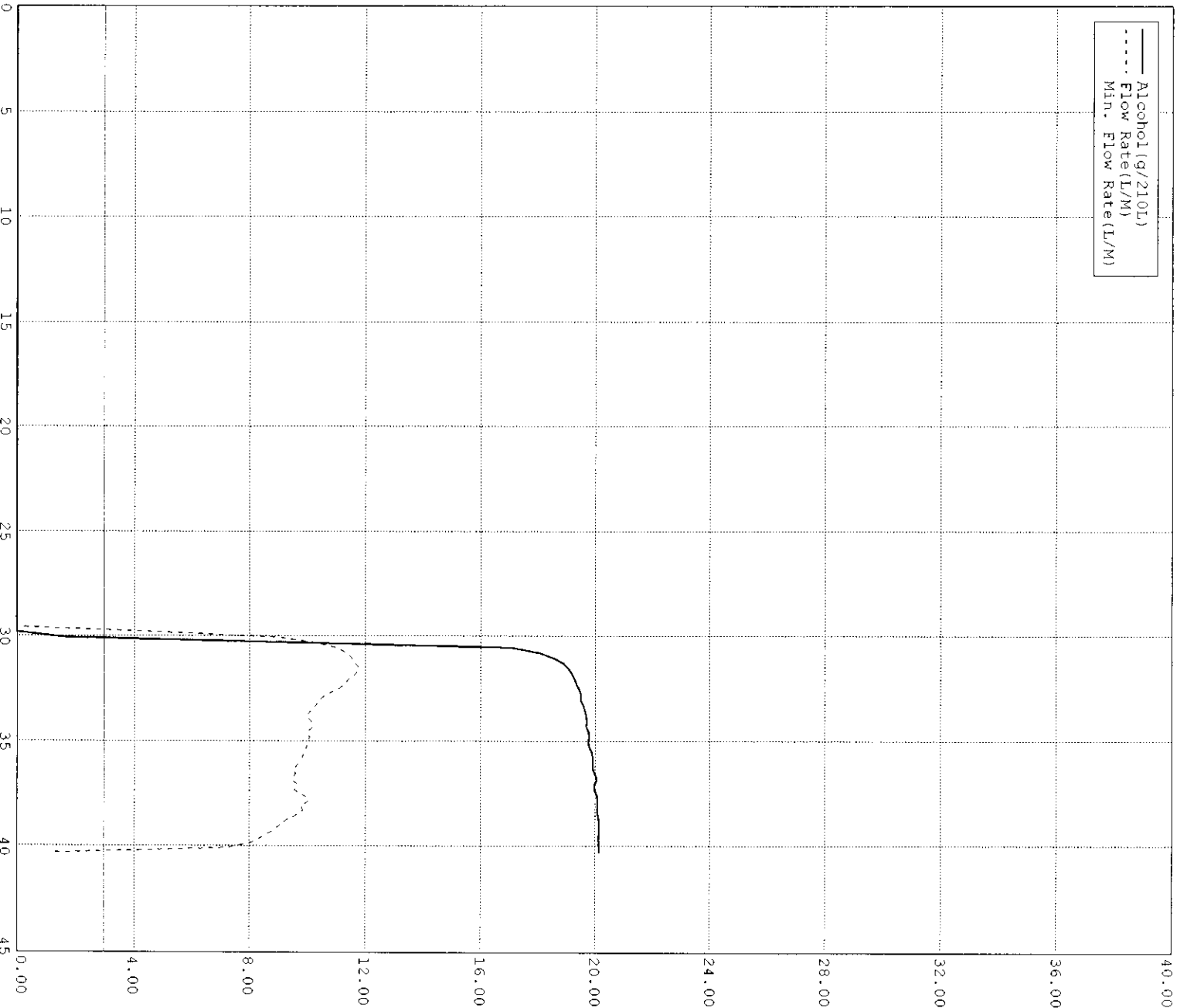
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK PASSED 09:19
BLANK TEST 0.000 09:19
INTERNAL STANDARD VERIFIED 09:20
Xq = 0.089 (1.29%)
EXTERNAL STANDARD 0.078 09:20
X[1] = 0.0777 (-0.0014) (0.0014)
BLANK TEST 0.000 09:21
SUBJECT SAMPLE (Vol=1.74L) 0.100 09:21
X[1] = 0.1002 (0.0008) (-0.0001)
BLANK TEST 0.000 09:22
EXTERNAL STANDARD 0.078 09:23
X[1] = 0.0777 (-0.0019) (0.0012)
BLANK TEST 0.000 09:24

BBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/14/2019
Time: 09:30:30

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

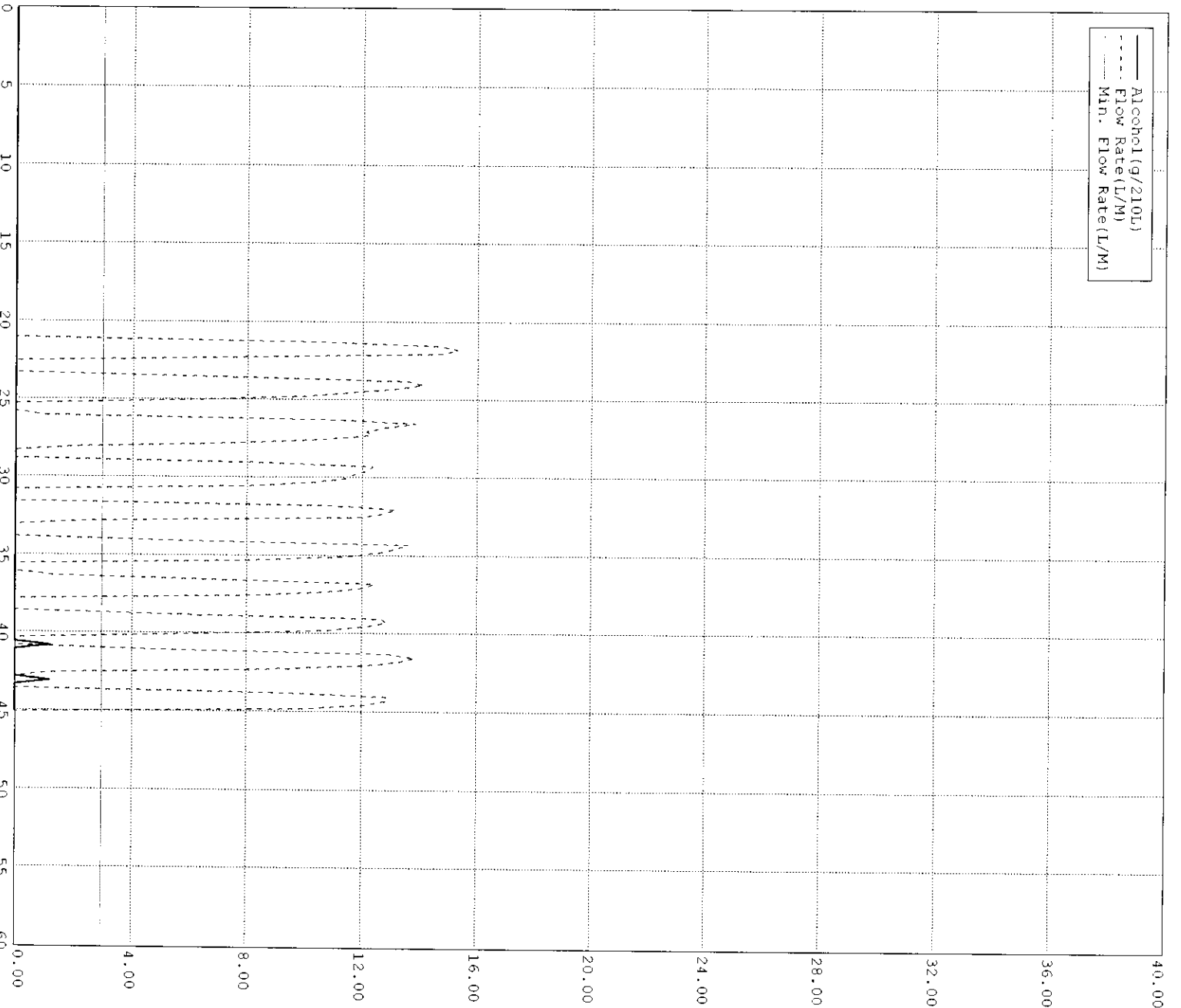
DEPT/AGENCY:
EXCEEDED ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	09:32
BLANK TEST	0.000	09:33
INTERNAL STANDARD	VERIFIED	09:33
EXTERNAL STANDARD	0.078	09:33
BLANK TEST	0.000	09:34
SUBJECT SAMPLE	XXX	09:35

Maximum Attempts Exceeded

BRMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/14/2019
Time: 14:44:06

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

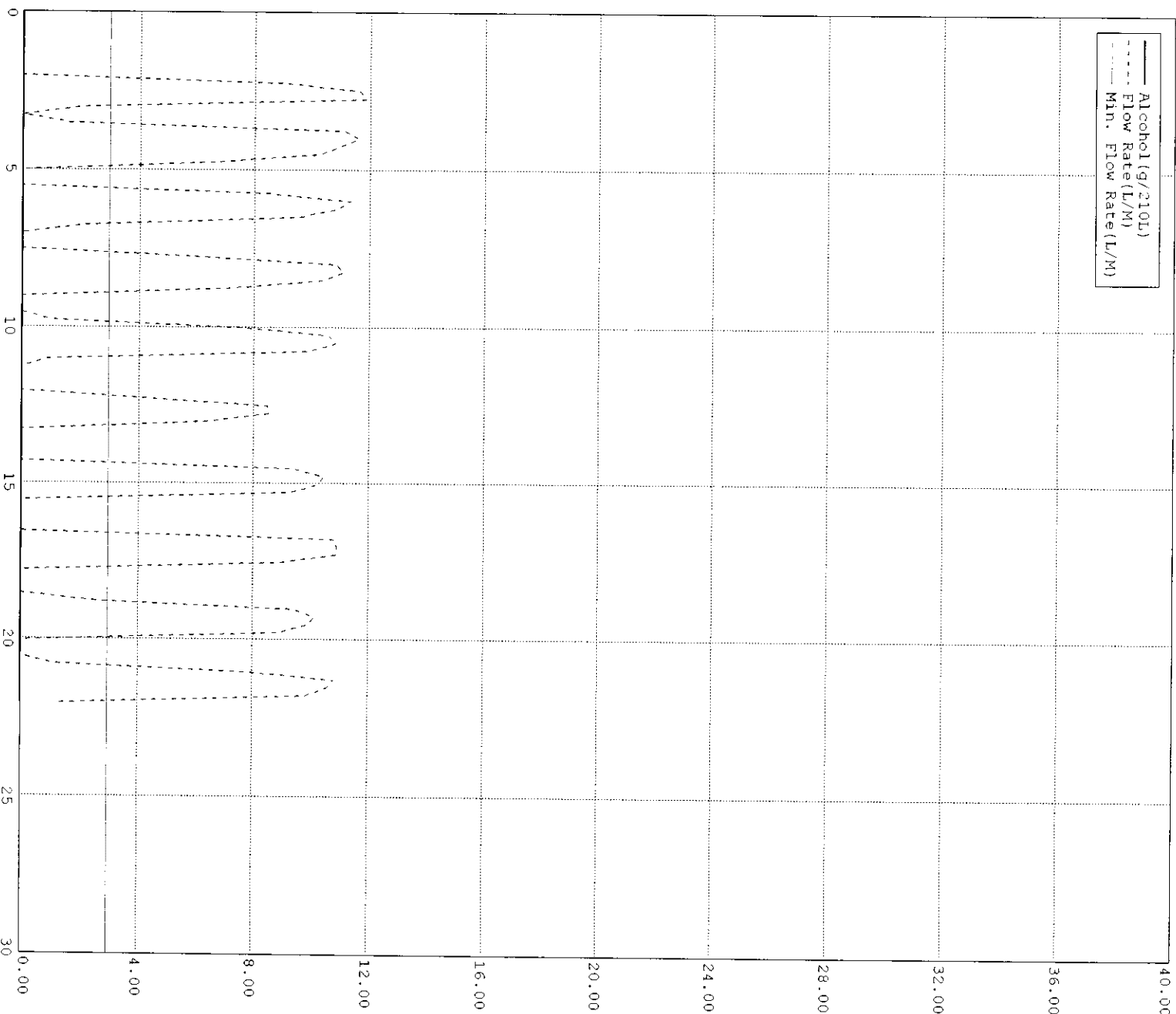
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.79: 0.080
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	14:45
BLANK TEST	0.000	14:45
INTERNAL STANDARD	VERIFIED	14:45
EXTERNAL STANDARD	0.078	14:46
BLANK TEST	0.000	14:47
SUBJECT SAMPLE	XXX	14:47

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/14/2019
Time: 09:38:31

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

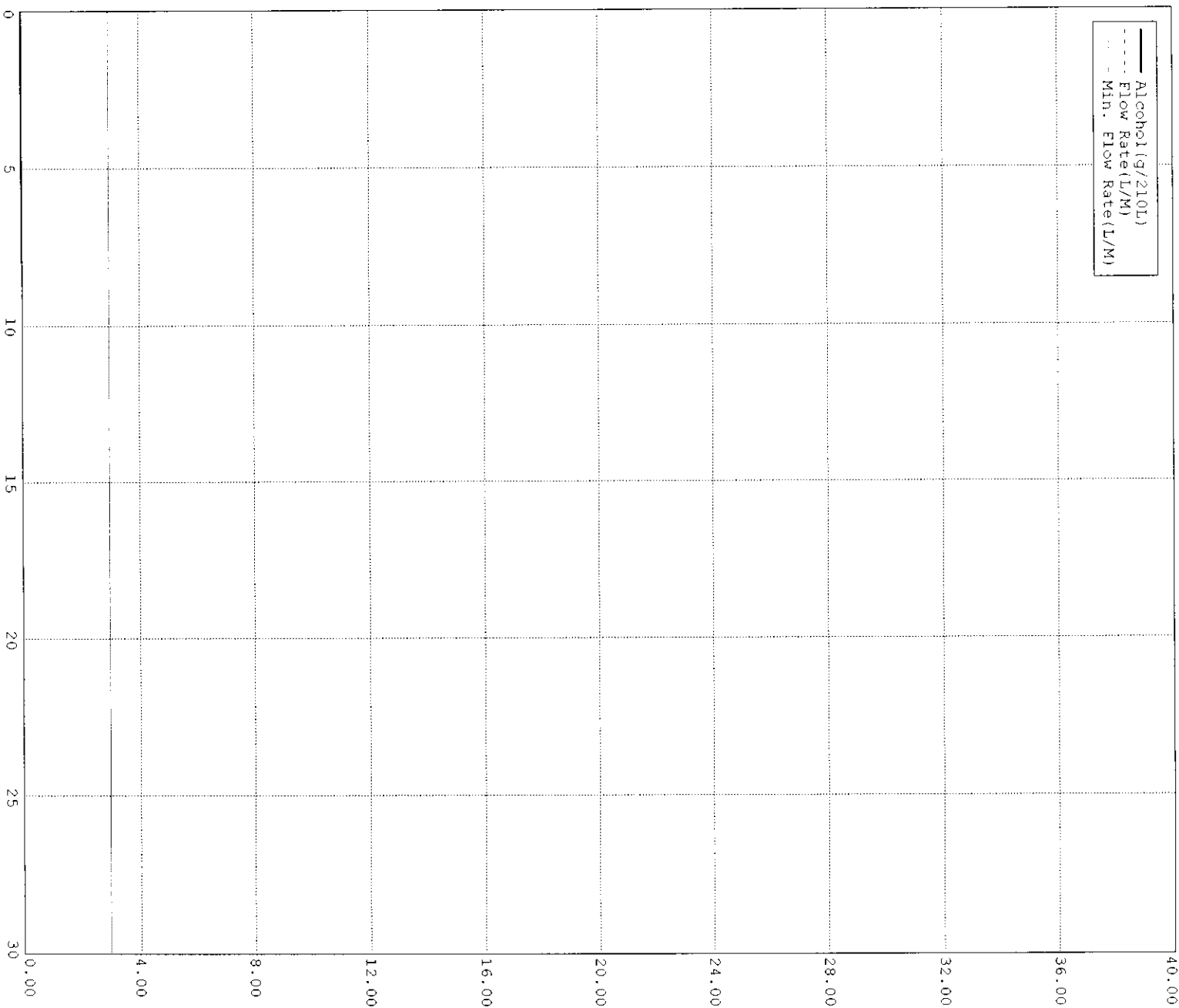
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK
BLANK TEST PASSED 09:39
INTERNAL STANDARD VERIFIED 09:40
EXTERNAL STANDARD 0.078 09:40
BLANK TEST 0.000 09:41

RFI DETECTED

BNB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/14/2019
Time: 09:54:18

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 29.81: 0.080
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	09:56
BLANK TEST	0.000	09:56
INTERNAL STANDARD	VERIFIED	09:56
EXTERNAL STANDARD	0.078	09:56
BLANK TEST	0.000	09:57
SUBJECT SAMPLE (Vol=1.57L)	0.003	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.078	09:59
BLANK TEST	0.000	10:00

BMB

