

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 100692 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: 100692

Date: 02/12/2019
Time: 12:48:03

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 = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.67 V PASSED
(1.00 V - 2.34 V)
Cooler Voltage = 1.53 V PASSED
(1.00 V - 2.34 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 548 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 4.071 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 PASSED
Xq = 0.092 1.25% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100692

Date: 02/12/2019
Time: 1:47 PM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 47.6°C

Current Barometer 29.6 in
Volume (Ltr) 1.45

Settings

Lamp: 1.80 V
Bias: 79 V
Cooler: 1.58 V
Chopper: 535 Hz

Voltages (V)

Flow: 1.04 V
Detector: 0.020 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100692

Date: 11/02/2011
Time: 08:49:23

Ca = 0.1000
CAL = 0.993327 0.800 <= CAL < 1.200
b1 = 0.0000 0.0000 <= b1 < 0.0040
b2 = 0.0036 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0906 0.0500 <= Xq < 0.2000
a21 = 1.191929 1.050 <= a21 < 1.300
a31 = 0.590430 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100692

Date: 02/12/2019
Time: 13:49:00

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

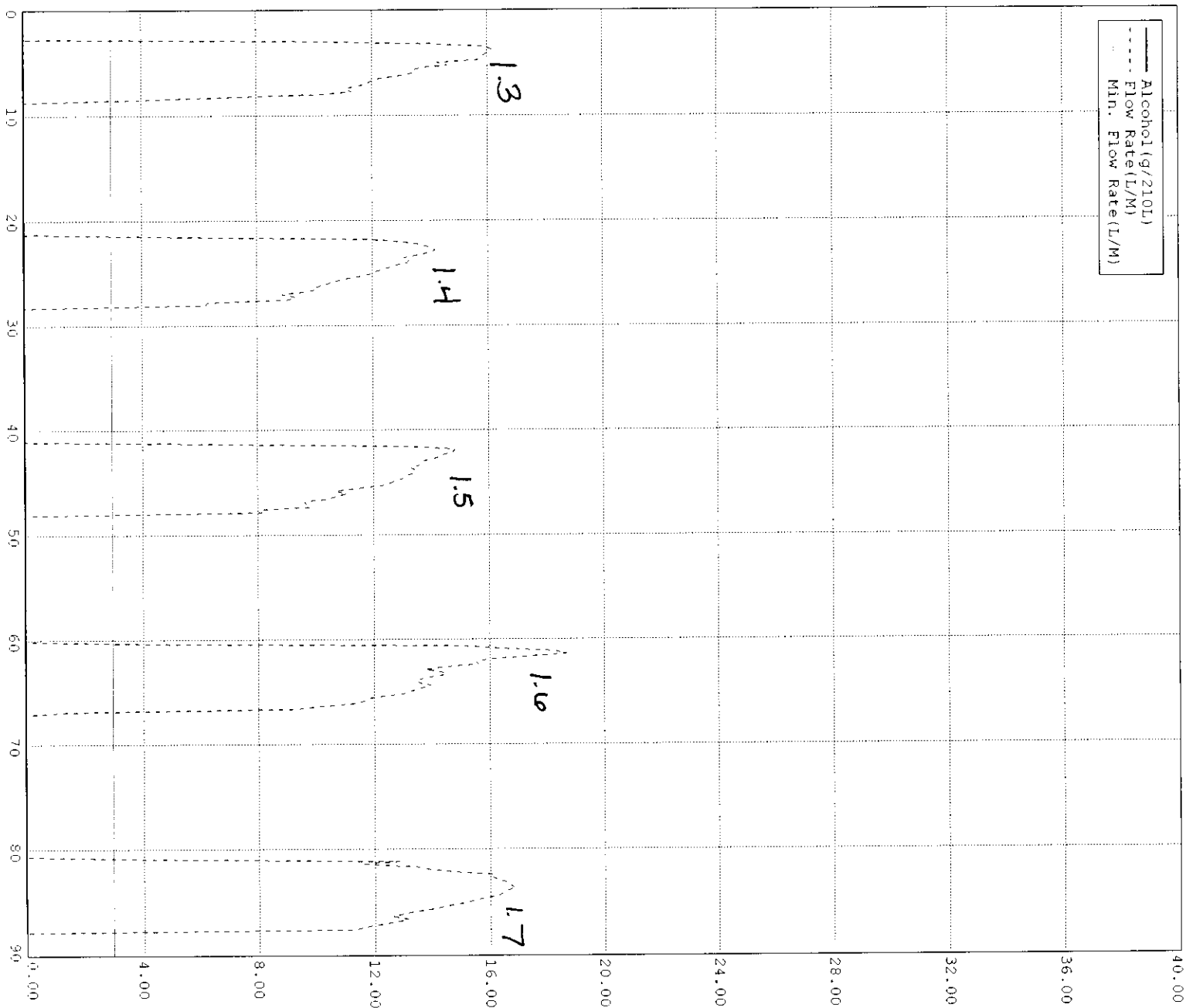
DEPT/AGENCY:
MINIMUM VOLUME
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	13:50
BLANK TEST	0.000	13:50
INTERNAL STANDARD	VERIFIED	13:50
EXTERNAL STANDARD	0.078	13:50
BLANK TEST	0.000	13:51
SUBJECT SAMPLE (Vol=1.64L)	0.000	13:53
BLANK TEST	0.000	13:53
EXTERNAL STANDARD	0.079	13:54
BLANK TEST	0.000	13:55

BRMB



LINEARITY CHECK

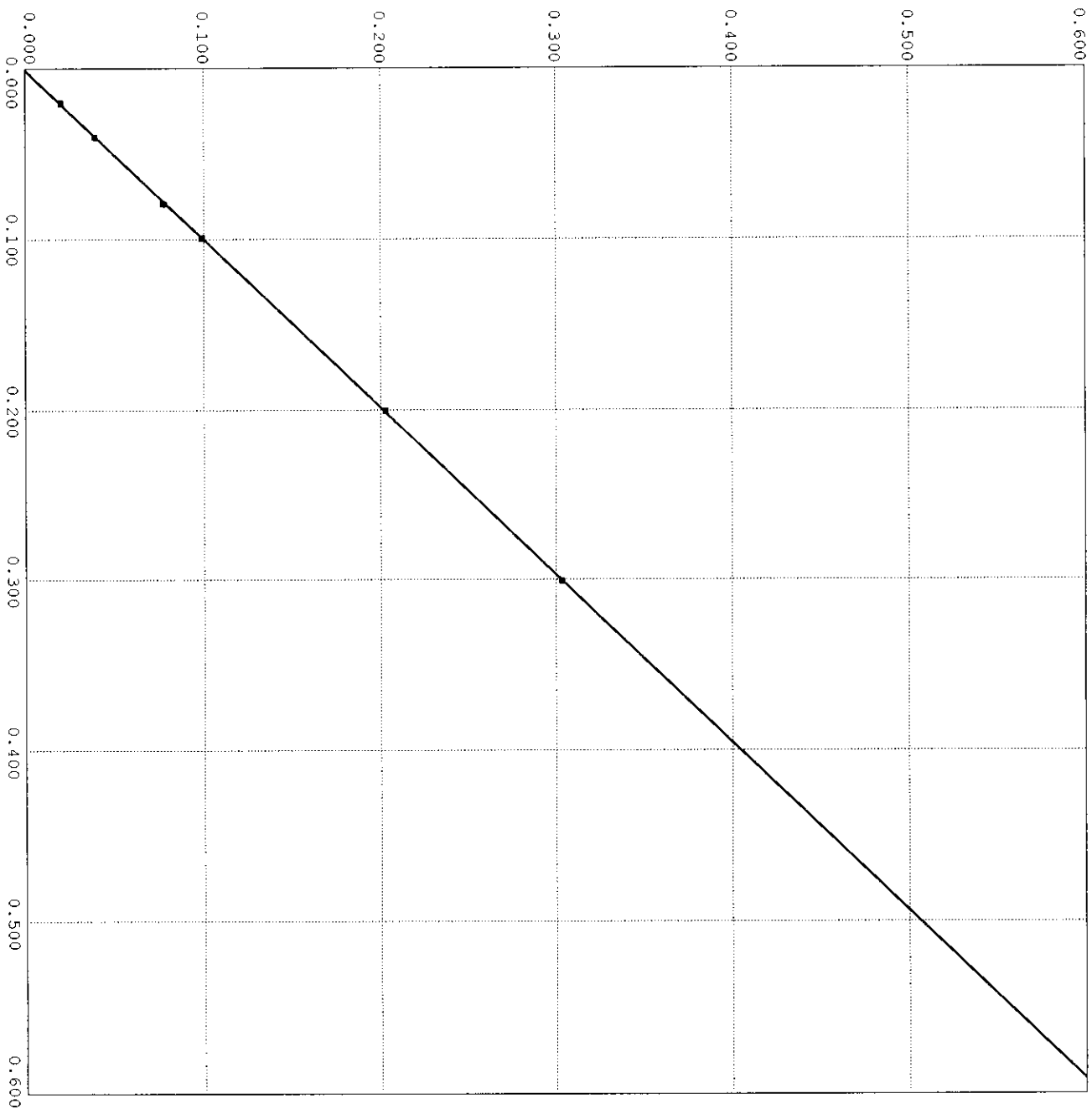
Alaska Department of Public Safety
DATAMASTER dmt: 100692

Date: 02/13/2019
Time: 09:05:33

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0206	0.0005
0.040	0.0396	0.0005
0.079	0.0784	0.0005
0.099	0.1000	0.0000
0.200	0.2036	0.0005
0.300	0.3040	0.0007

SLOPE = 1.016746
R² = 0.999940



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100692

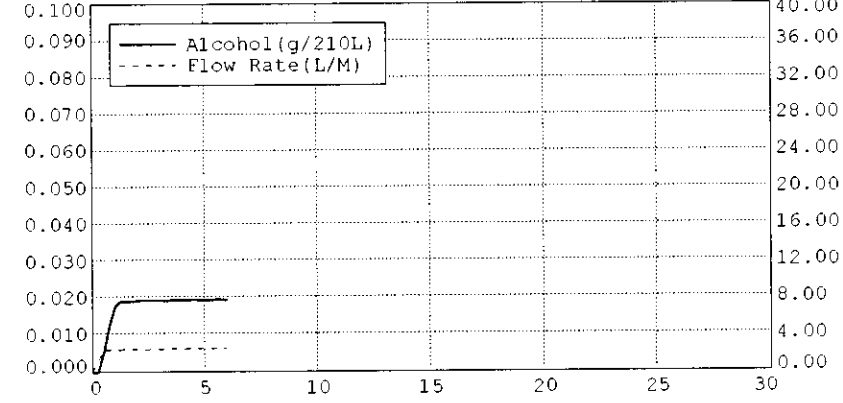
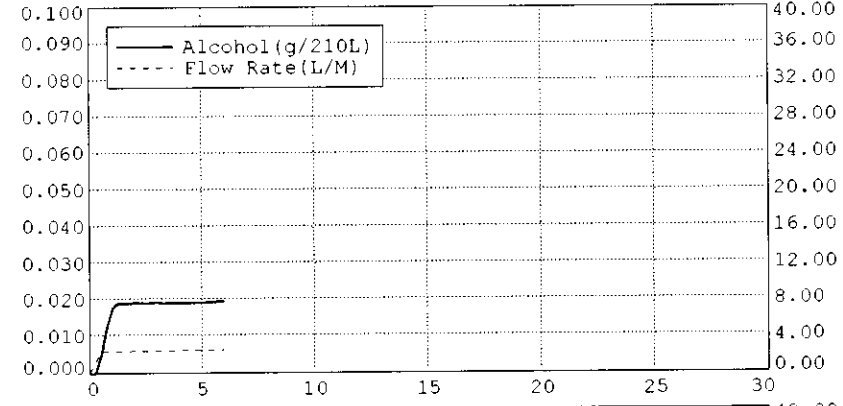
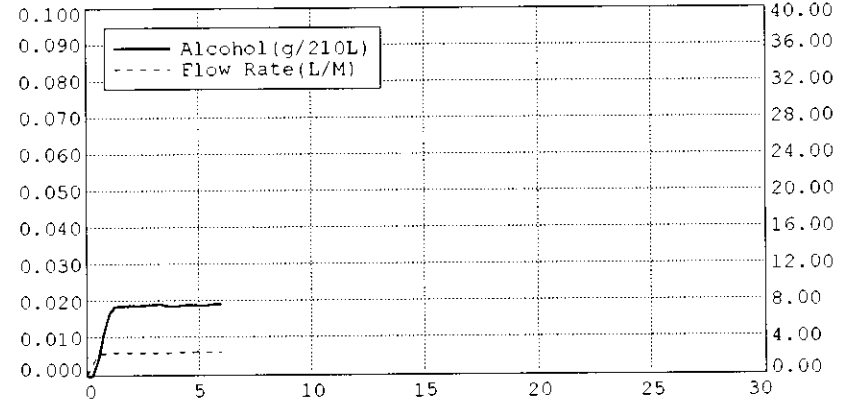
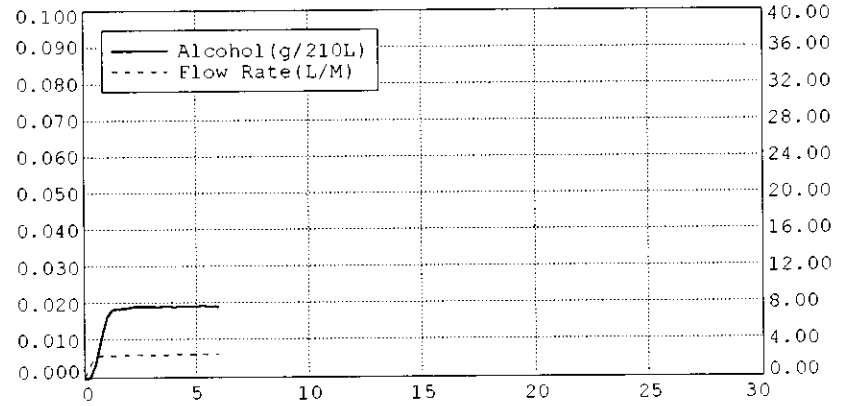
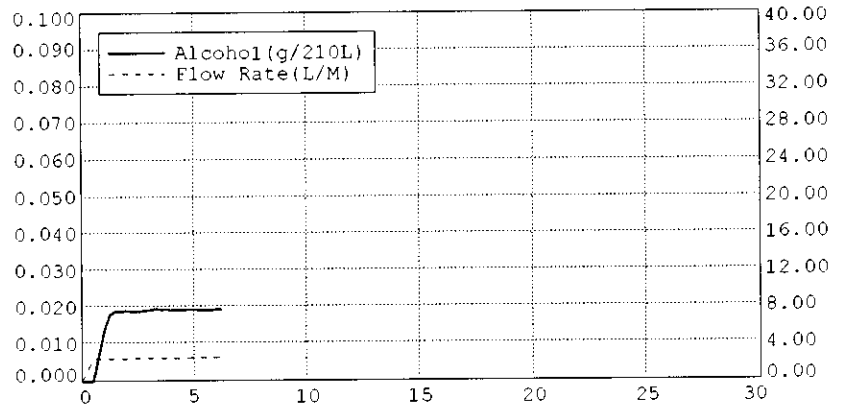
Date: 02/13/2019
Time: 09:05:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.56: 0.020
LOT #: AG805804
EXPIRATION: 02/27/2020
TANK PRESSURE: 923 psi

BLANK TEST	0.000	09:07
INTERNAL STANDARD	VERIFIED	09:07
EXTERNAL STANDARD	0.021	09:07
BLANK TEST	0.000	09:08
EXTERNAL STANDARD	0.021	09:09
BLANK TEST	0.000	09:09
EXTERNAL STANDARD	0.020	09:10
BLANK TEST	0.000	09:10
EXTERNAL STANDARD	0.021	09:11
BLANK TEST	0.000	09:12
EXTERNAL STANDARD	0.020	09:12
BLANK TEST	0.000	09:13

Average = 0.0206
Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

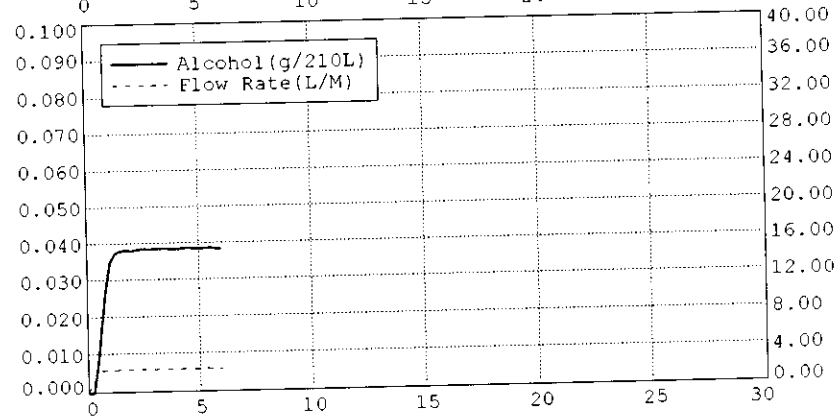
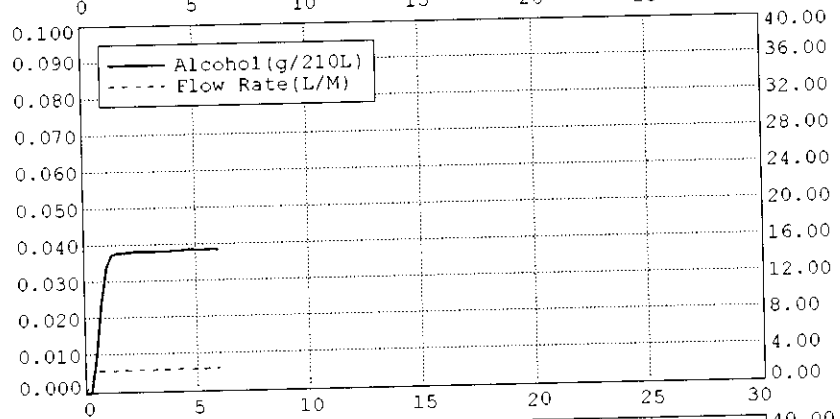
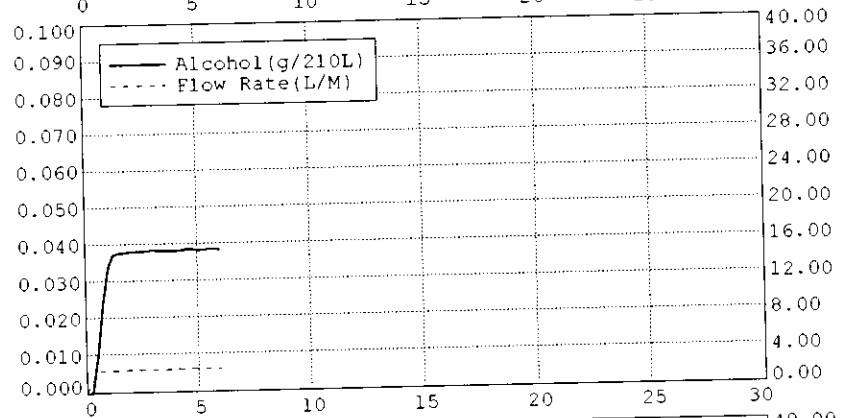
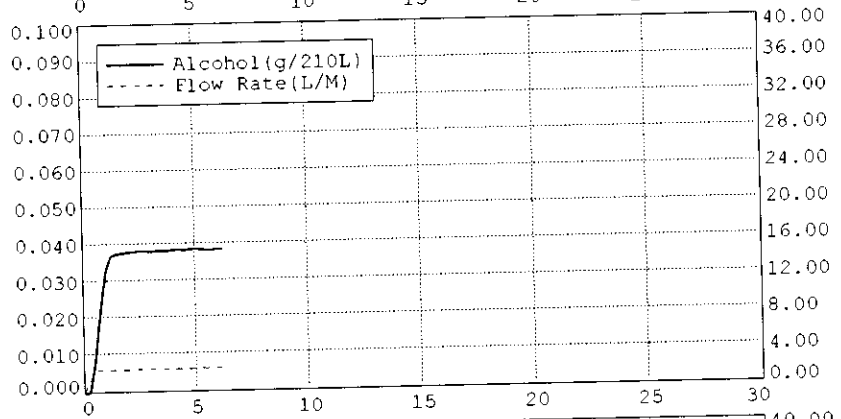
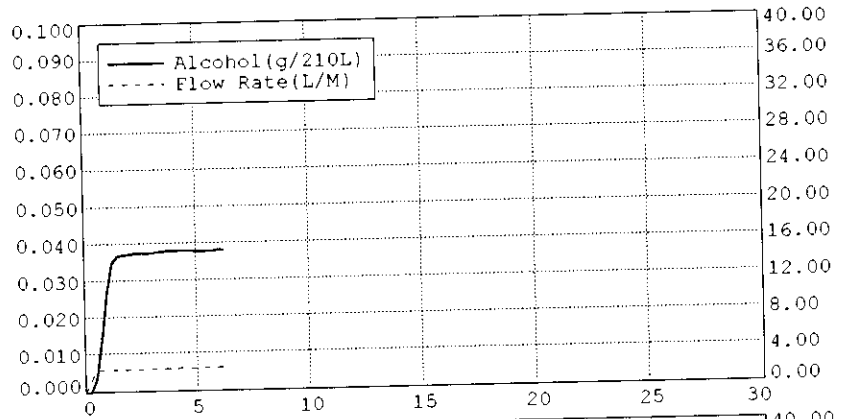
Alaska Department of Public Safety
 DATAMASTER dmt: 100692

Date: 02/13/2019
 Time: 09:19:36

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.040
 TARGET AT 29.57: 0.040
 LOT #: AG733403
 EXPIRATION: 11/30/2019
 TANK PRESSURE: 884 psi

BLANK TEST	0.000	09:21
INTERNAL STANDARD	VERIFIED	09:21
EXTERNAL STANDARD	0.039	09:21
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.039	09:22
BLANK TEST	0.000	09:23
EXTERNAL STANDARD	0.040	09:23
BLANK TEST	0.000	09:24
EXTERNAL STANDARD	0.040	09:24
BLANK TEST	0.000	09:25
EXTERNAL STANDARD	0.040	09:25
BLANK TEST	0.000	09:26

Average = 0.0396
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100692

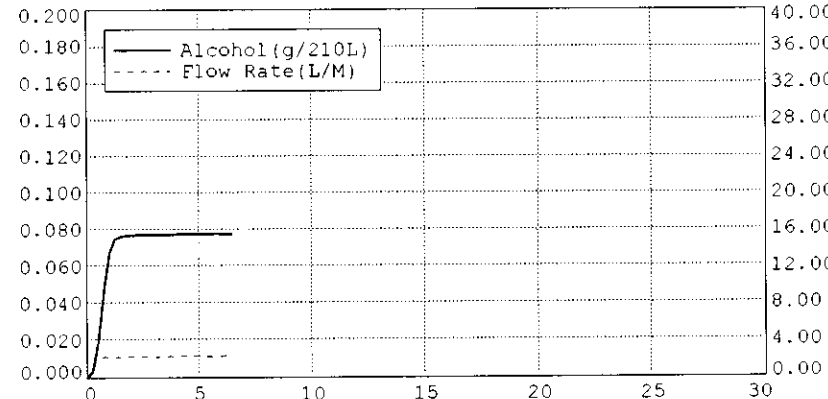
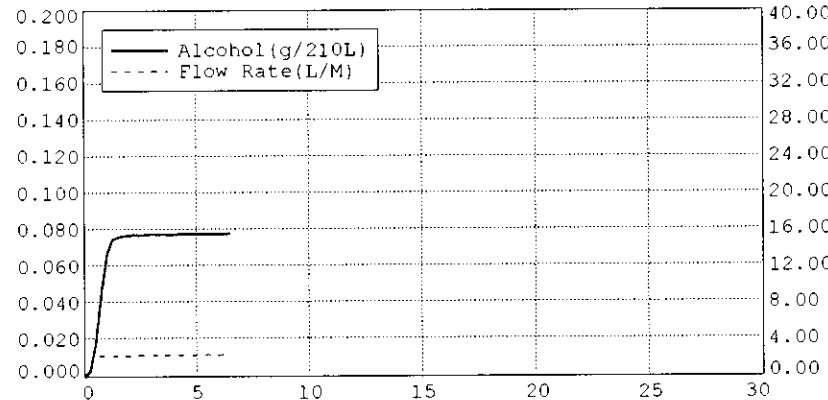
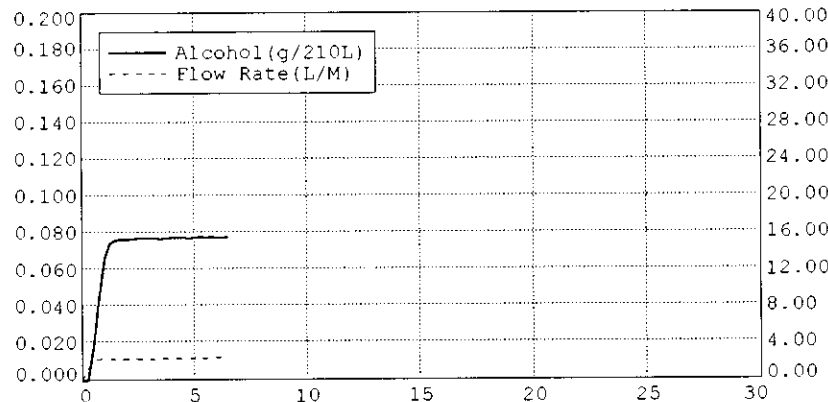
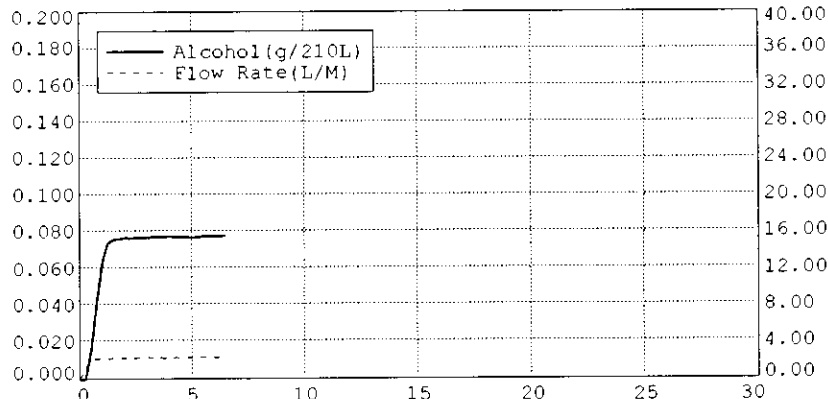
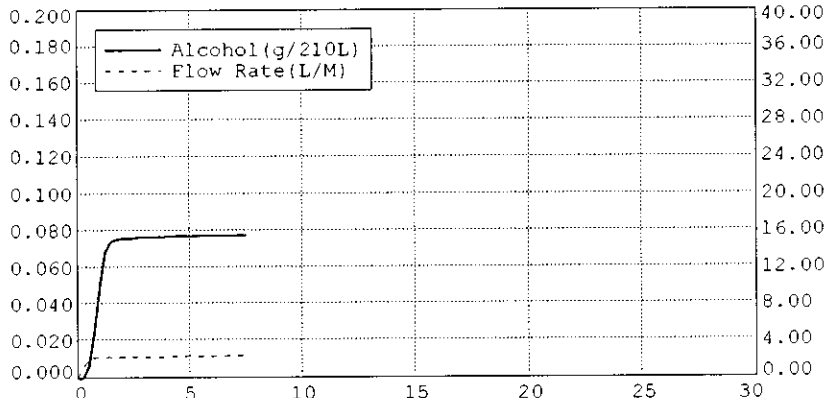
Date: 02/13/2019
 Time: 09:31:30

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.56: 0.079
 LOT #: AG735001
 EXPIRATION: 12/16/2019
 TANK PRESSURE: 531 psi

BLANK TEST	0.000	09:32
INTERNAL STANDARD	VERIFIED	09:33
EXTERNAL STANDARD	0.078	09:33
BLANK TEST	0.000	09:34
EXTERNAL STANDARD	0.078	09:34
BLANK TEST	0.000	09:35
EXTERNAL STANDARD	0.078	09:35
BLANK TEST	0.000	09:36
EXTERNAL STANDARD	0.079	09:36
BLANK TEST	0.000	09:37
EXTERNAL STANDARD	0.079	09:37
BLANK TEST	0.000	09:38

Average = 0.0784
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100692

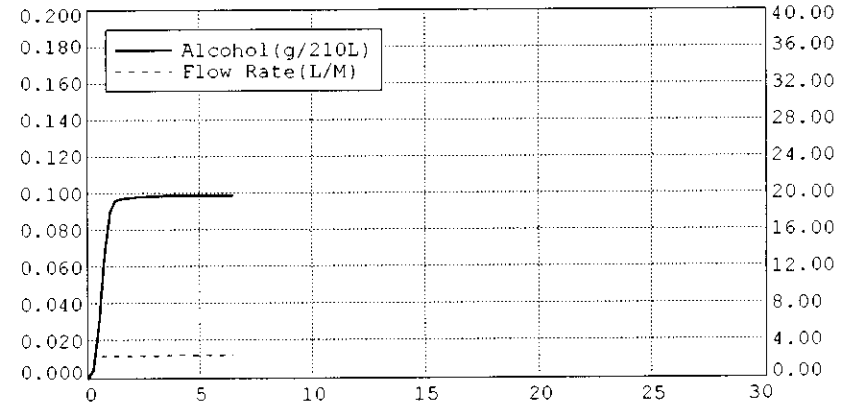
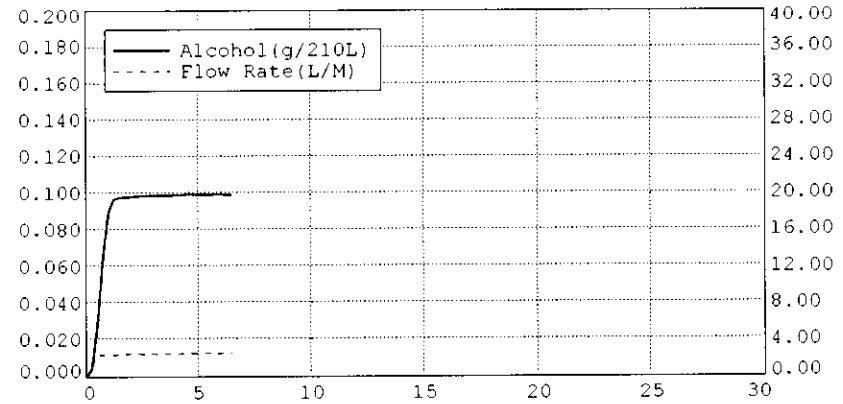
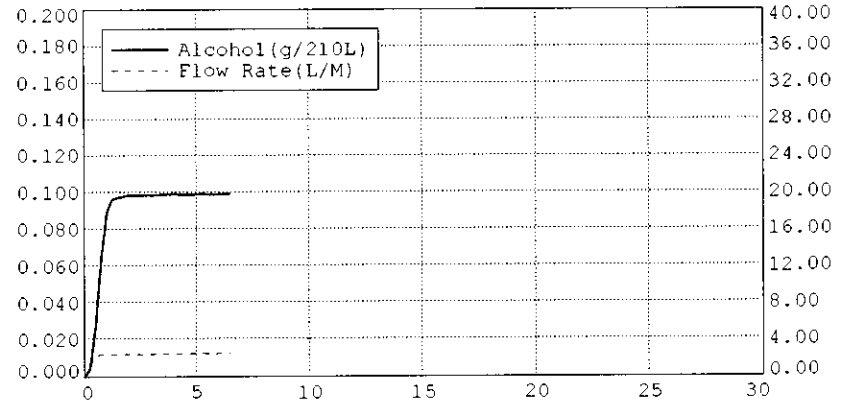
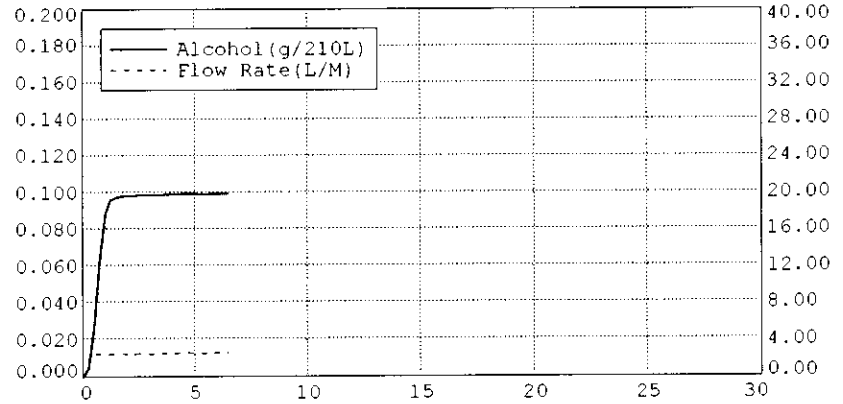
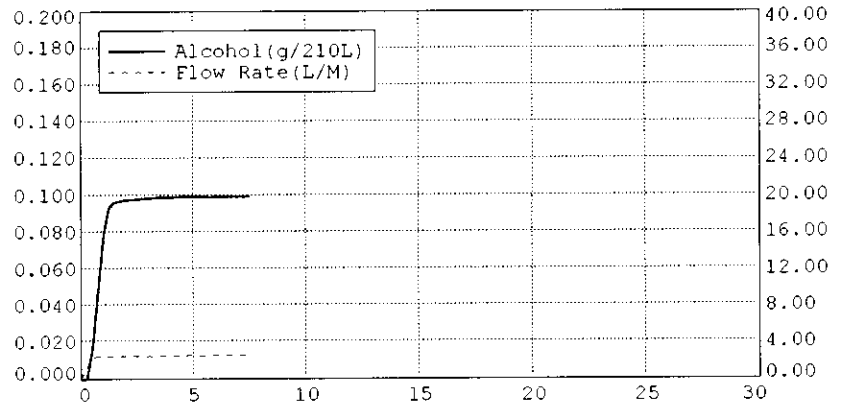
Date: 02/13/2019
 Time: 09:43:21

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.57: 0.099
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 876 psi

BLANK TEST	0.000	09:45
INTERNAL STANDARD	VERIFIED	09:45
EXTERNAL STANDARD	0.100	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.100	09:46
BLANK TEST	0.000	09:47
EXTERNAL STANDARD	0.100	09:47
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.100	09:48
BLANK TEST	0.000	09:49
EXTERNAL STANDARD	0.100	09:49
BLANK TEST	0.000	09:50

Average = 0.1000
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

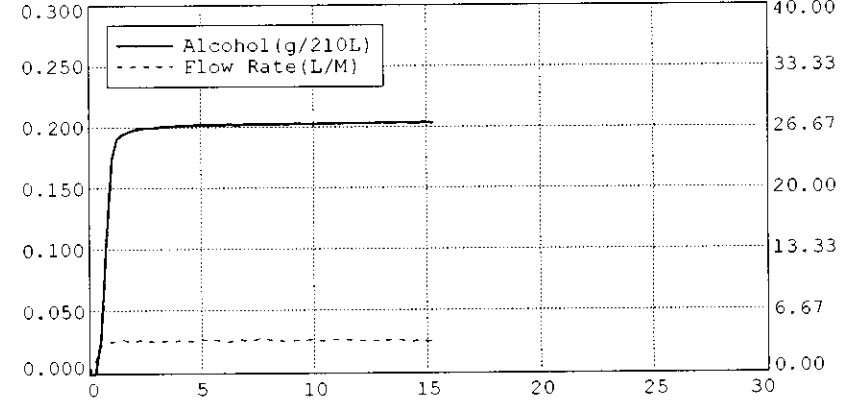
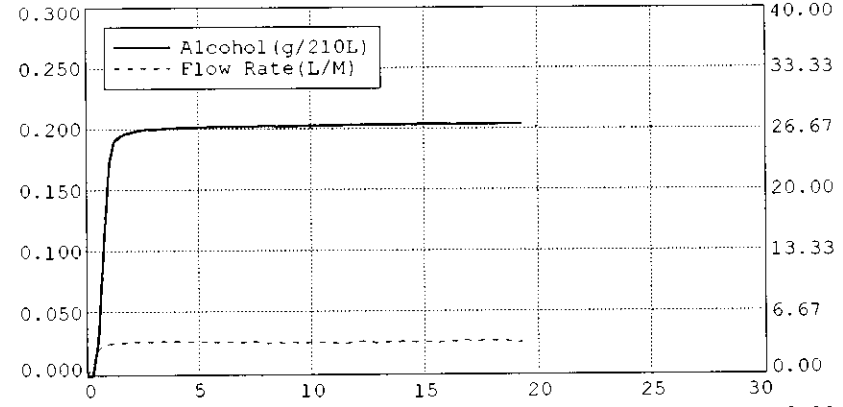
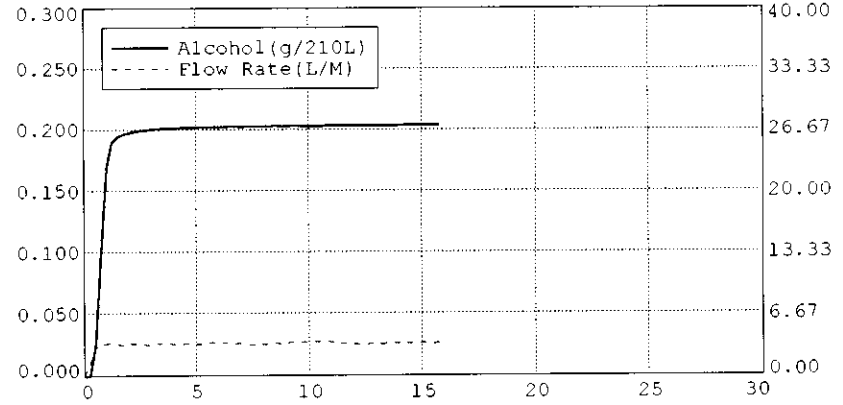
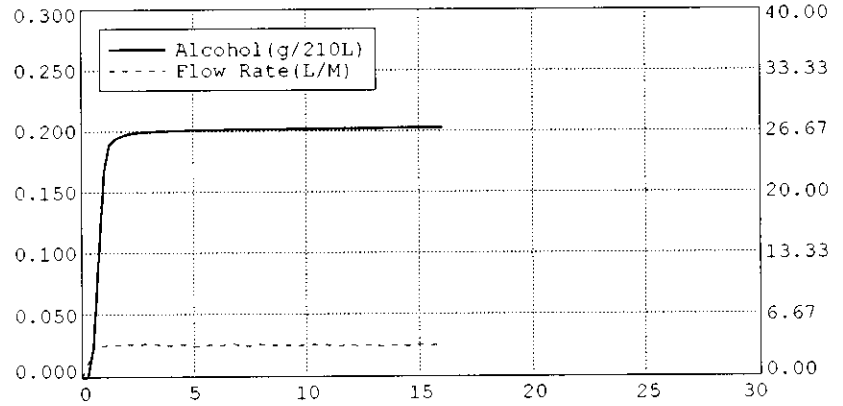
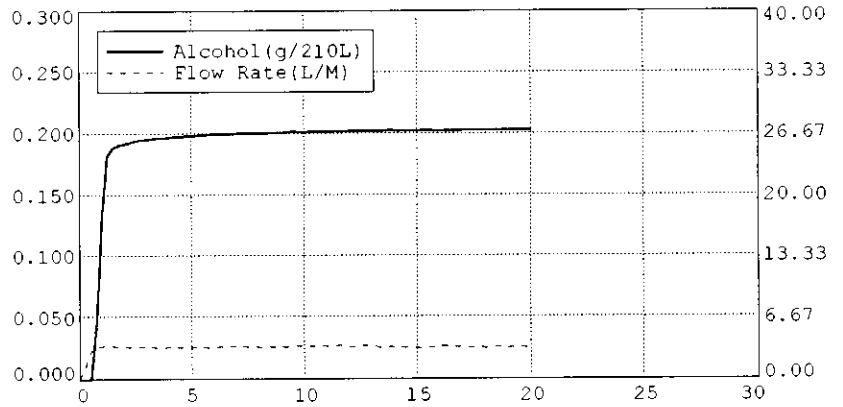
Alaska Department of Public Safety
 DATAMASTER dmt: 100692

Date: 02/13/2019
 Time: 09:53:59

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

BLANK TEST	0.000	09:55
INTERNAL STANDARD	VERIFIED	09:55
EXTERNAL STANDARD	0.203	09:56
BLANK TEST	0.000	09:56
EXTERNAL STANDARD	0.203	09:57
BLANK TEST	0.000	09:58
EXTERNAL STANDARD	0.204	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.204	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.204	10:01
BLANK TEST	0.000	10:02

Average = 0.2036
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

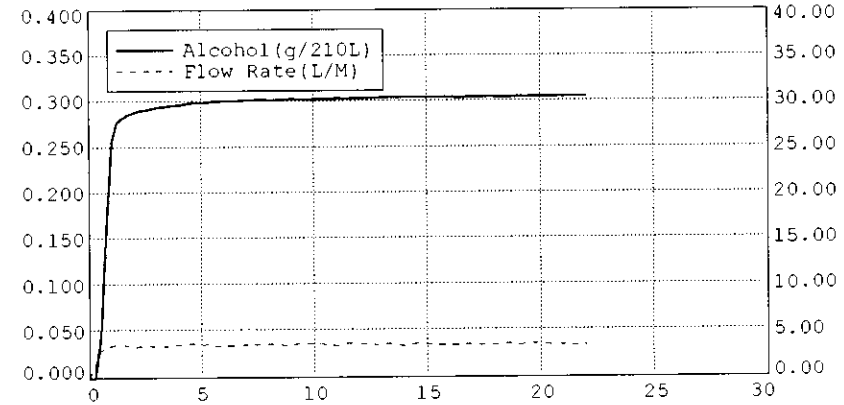
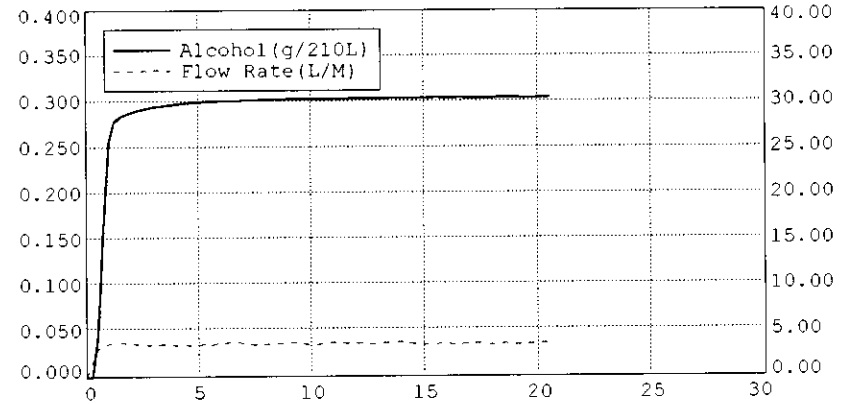
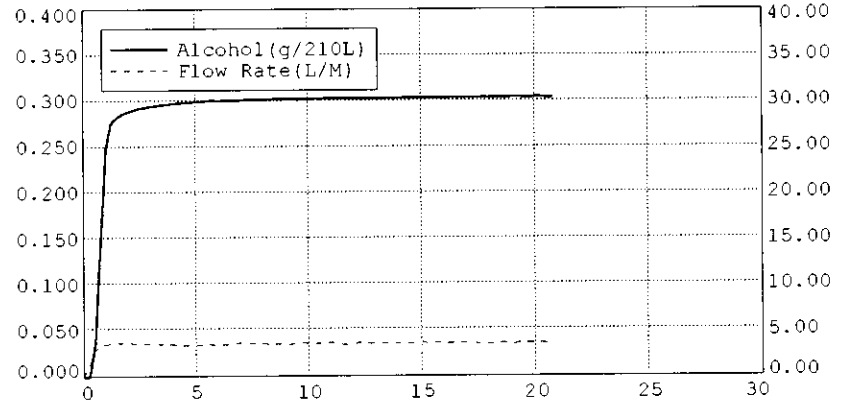
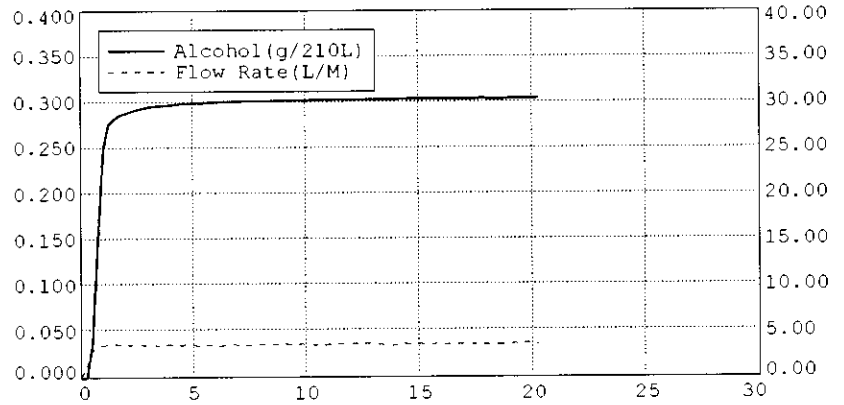
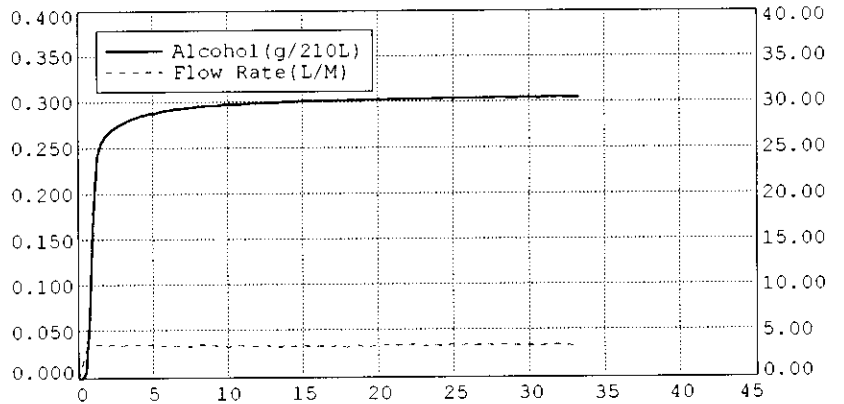
Alaska Department of Public Safety
DATAMASTER dmt: 100692

Date: 02/13/2019
Time: 10:05:35

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

BLANK TEST	0.000	10:06
INTERNAL STANDARD	VERIFIED	10:06
EXTERNAL STANDARD	0.305	10:07
BLANK TEST	0.000	10:08
EXTERNAL STANDARD	0.304	10:08
BLANK TEST	0.000	10:09
EXTERNAL STANDARD	0.303	10:10
BLANK TEST	0.000	10:11
EXTERNAL STANDARD	0.304	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.304	10:13
BLANK TEST	0.000	10:13

Average = 0.3040
Std Dev = 0.0007



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100692

Date: 02/14/2019
Time: 08:45:58

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

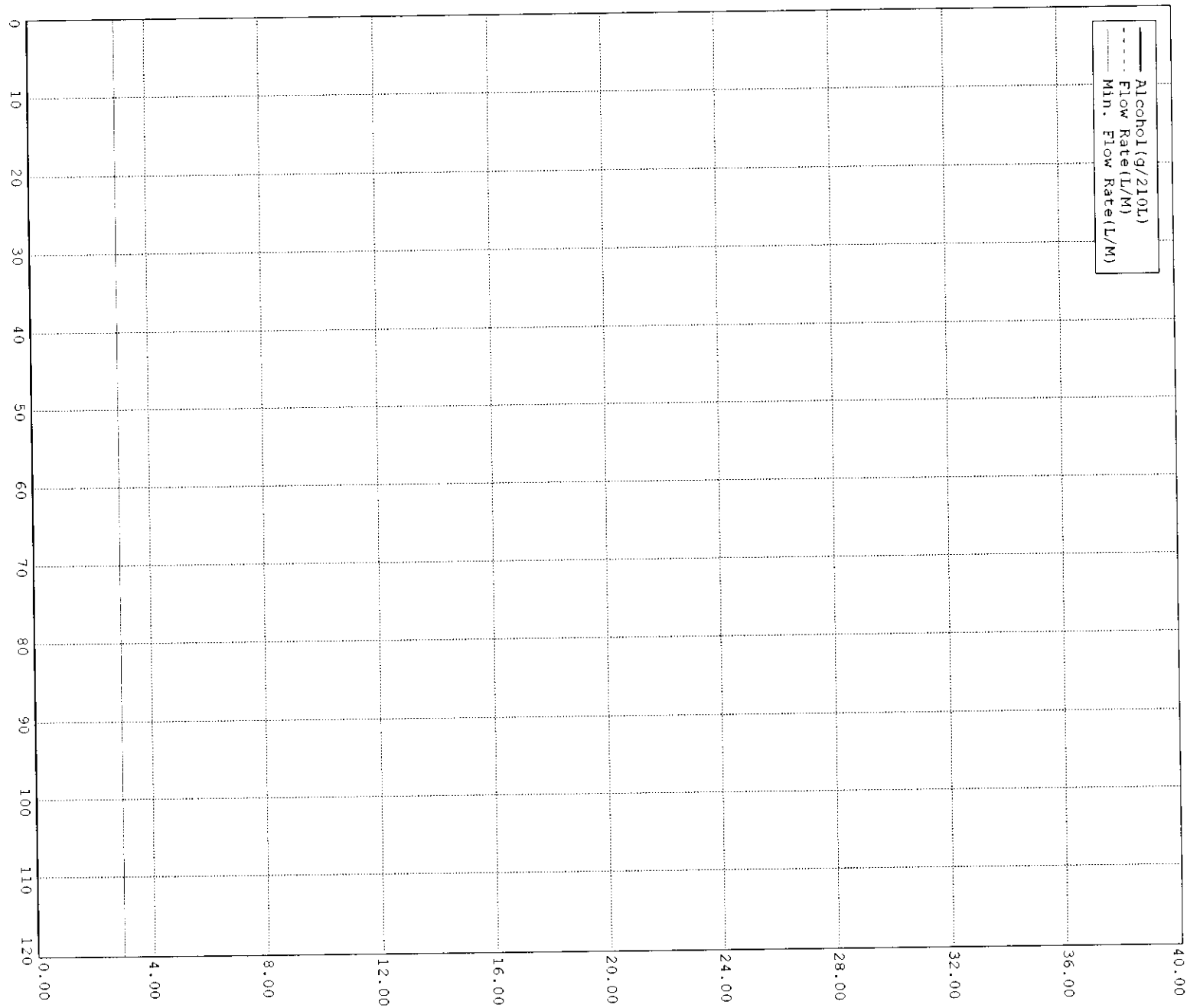
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	08:47
BLANK TEST	0.000	08:47
INTERNAL STANDARD	VERIFIED	08:48
EXTERNAL STANDARD	0.079	08:48
BLANK TEST	0.000	08:49
SUBJECT SAMPLE	INCOMPLETE	08:51

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100692

Date: 02/14/2019
Time: 08:54:15

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

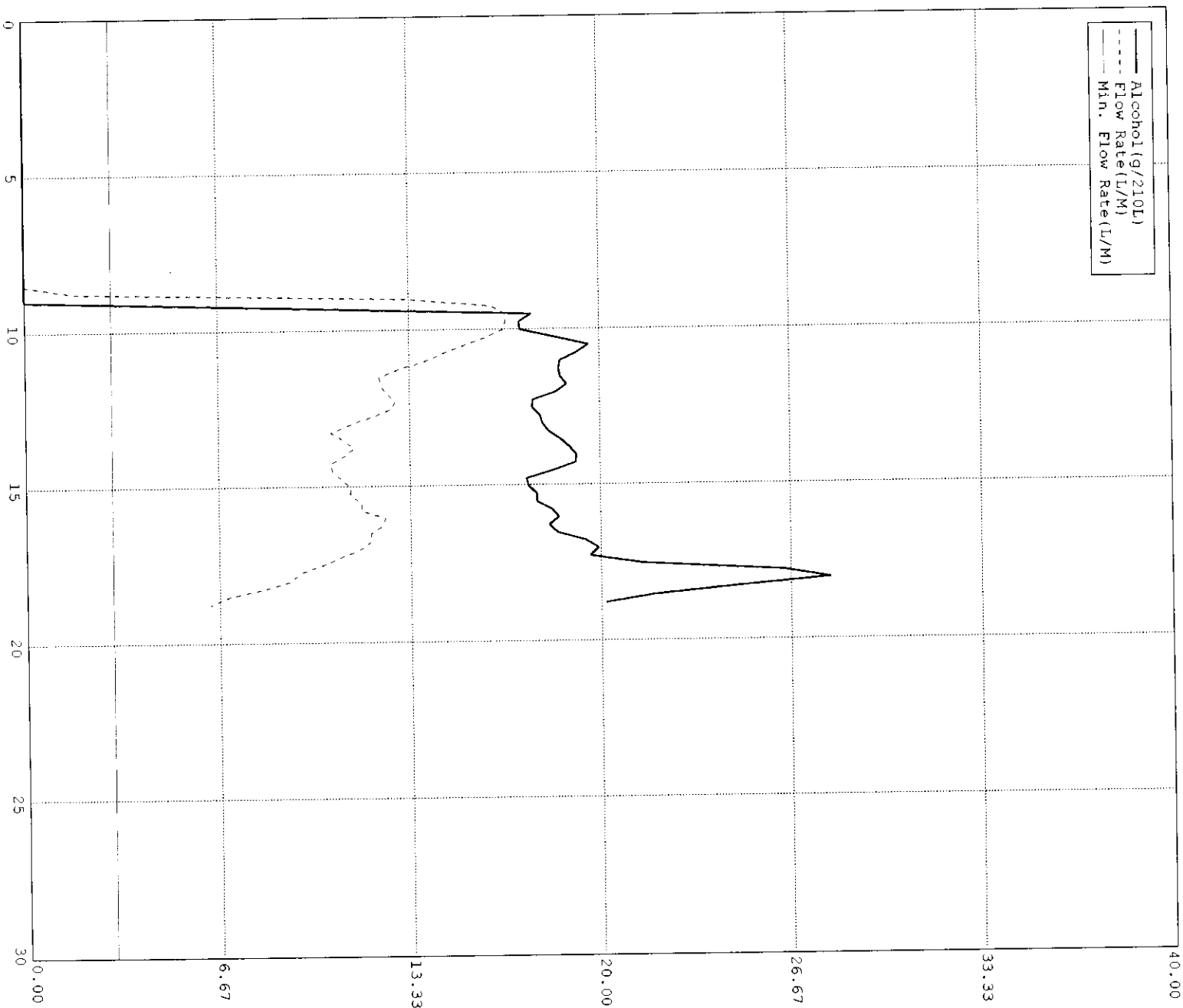
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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	0.079	08:56
BLANK TEST	0.000	08:57
SUBJECT SAMPLE	INVALID	08:57

Handwritten signature



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100692

Date: 02/14/2019
Time: 09:03:23

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

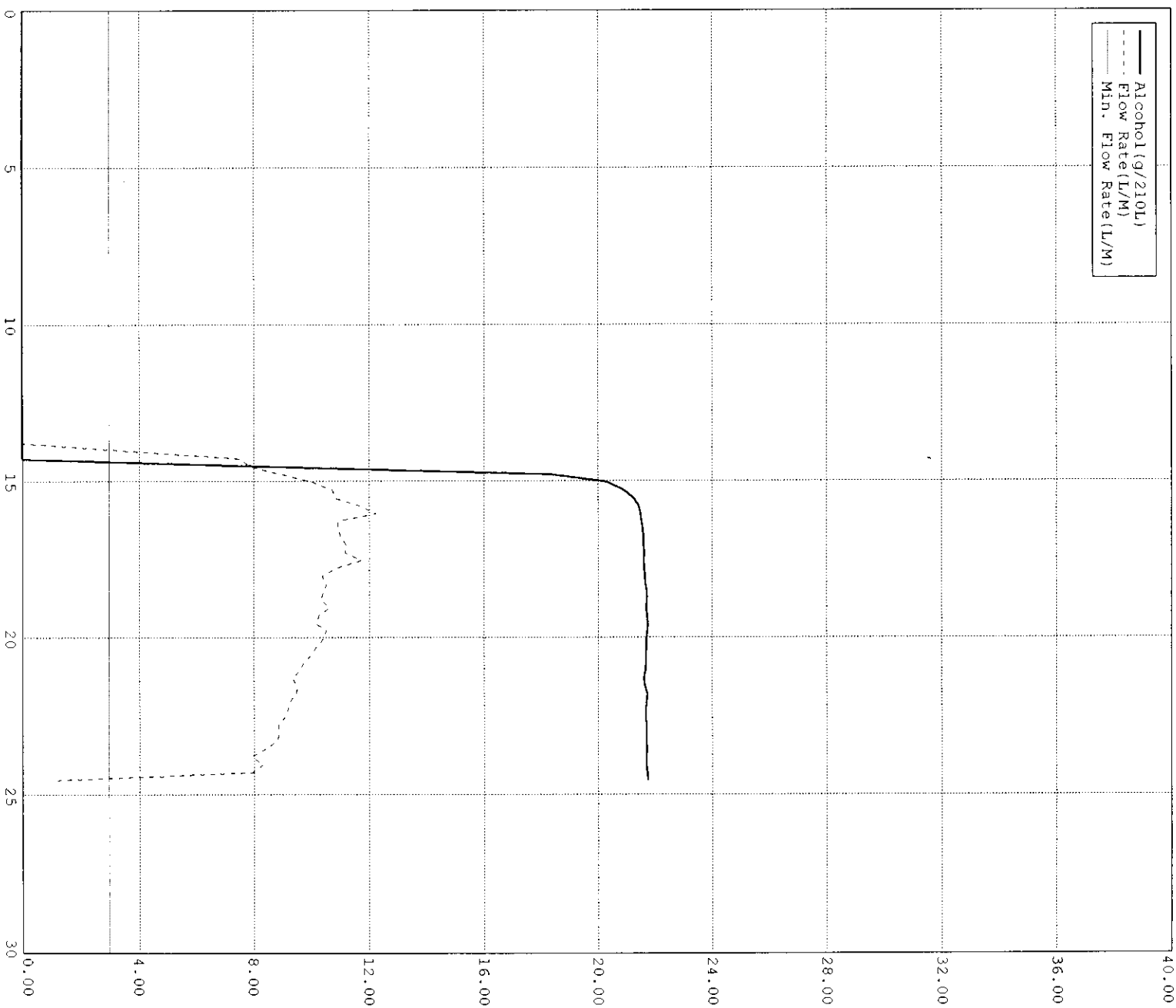
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK PASSED 09:04
BLANK TEST 0.000 09:04
INTERNAL STANDARD VERIFIED 09:05
Xq = 0.092 (1.54%)
EXTERNAL STANDARD 0.079 09:05
X[1] = 0.0789 (0.0006) (0.0022)
BLANK TEST 0.000 09:06
SUBJECT SAMPLE XXX 09:06
X[1] = 0.1096 (-0.0166) (0.0019)

Interference Detected

Filter 2 Avg: 0.0003
Filter 3 Avg: 0.0023
BWB 2/15/19

BWB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100692

Date: 02/14/2019
Time: 09:11:09

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

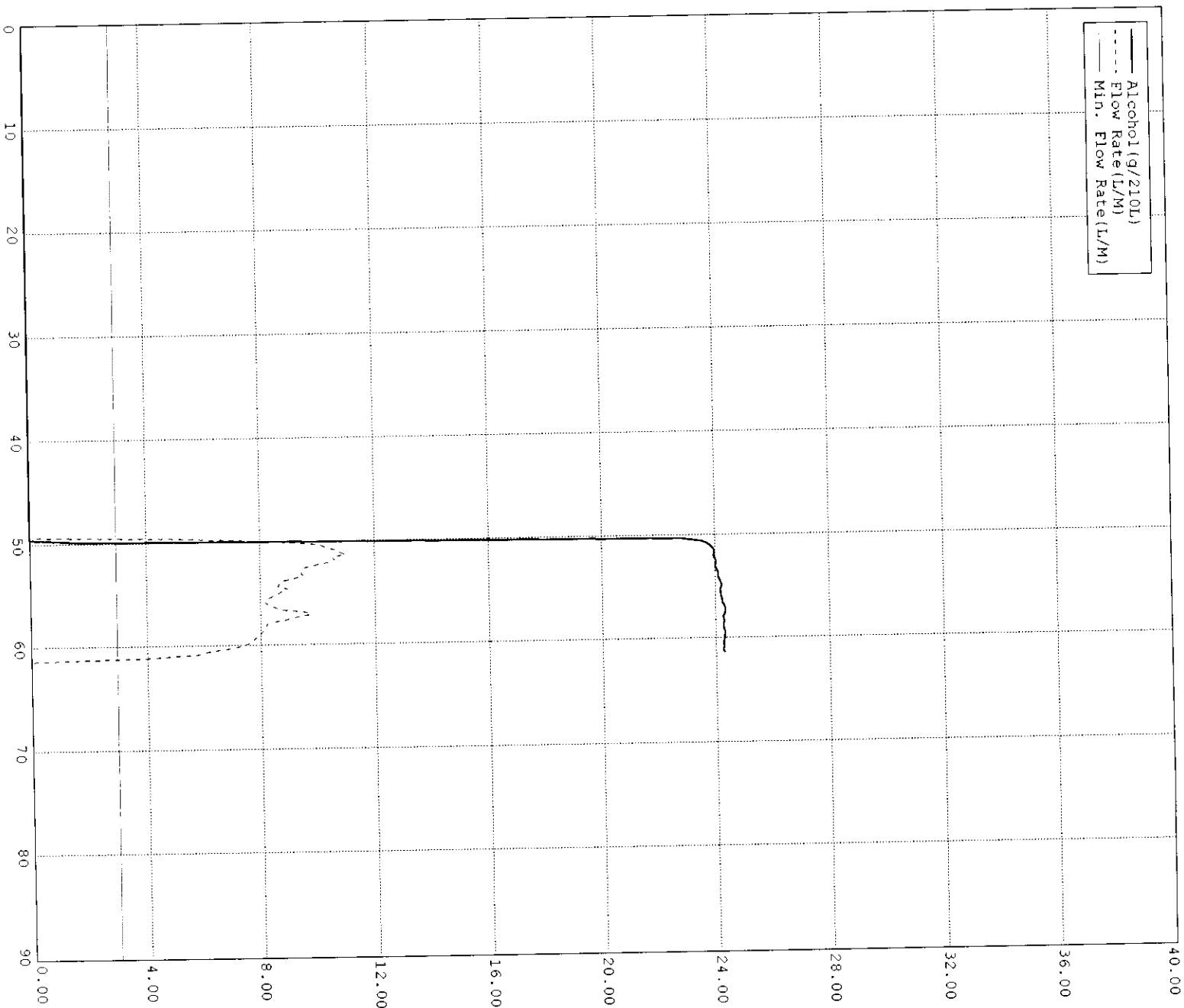
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.80: 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 = 0.092 (1.74%)	0.079	09:13
EXTERNAL STANDARD	X[1] = 0.0789 (0.0001)	(0.0023)
BLANK TEST	0.000	09:13
SUBJECT SAMPLE	XXX	09:15
X[1] = 0.1221 (-0.0249)	(0.0007)	

Interference Detected

BBB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100692

Date: 02/14/2019
Time: 09:19:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

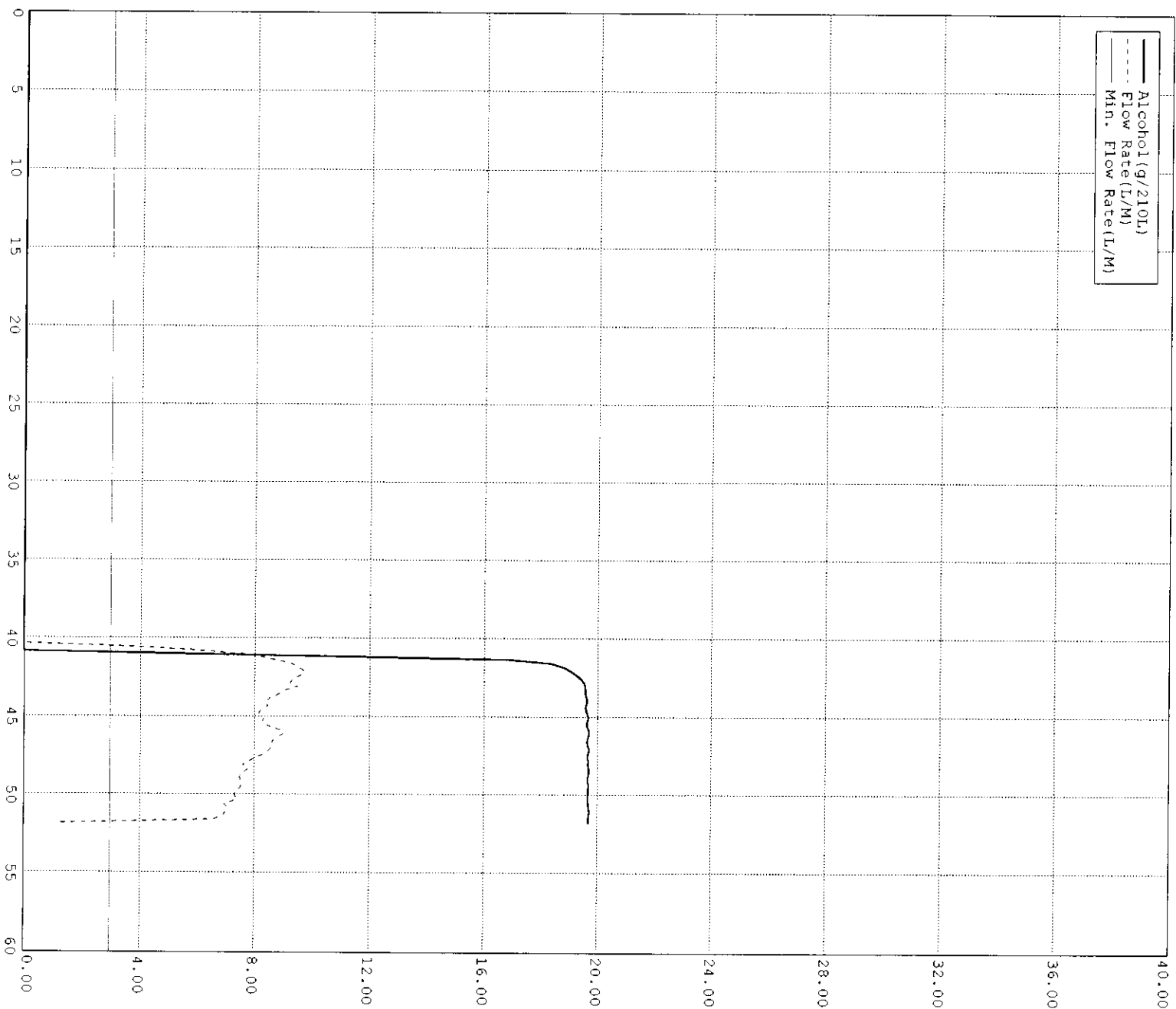
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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	09:20
BLANK TEST	0.000	09:20
INTERNAL STANDARD	VERIFIED	09:20
Xq = 0.092 (1.64%)	0.079	09:20
EXTERNAL STANDARD	X[1] = 0.0789 (0.0006)	(0.0028)
BLANK TEST	0.000	09:21
SUBJECT SAMPLE (Vol=1.53L)	0.099	09:22
X[1] = 0.0993 (0.0003)	(0.0007)	
BLANK TEST	0.000	09:23
EXTERNAL STANDARD	0.078	09:23
X[1] = 0.0785 (-0.0002)	(0.0018)	
BLANK TEST	0.000	09:24

EMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100692

Date: 02/14/2019
Time: 09:31:05

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

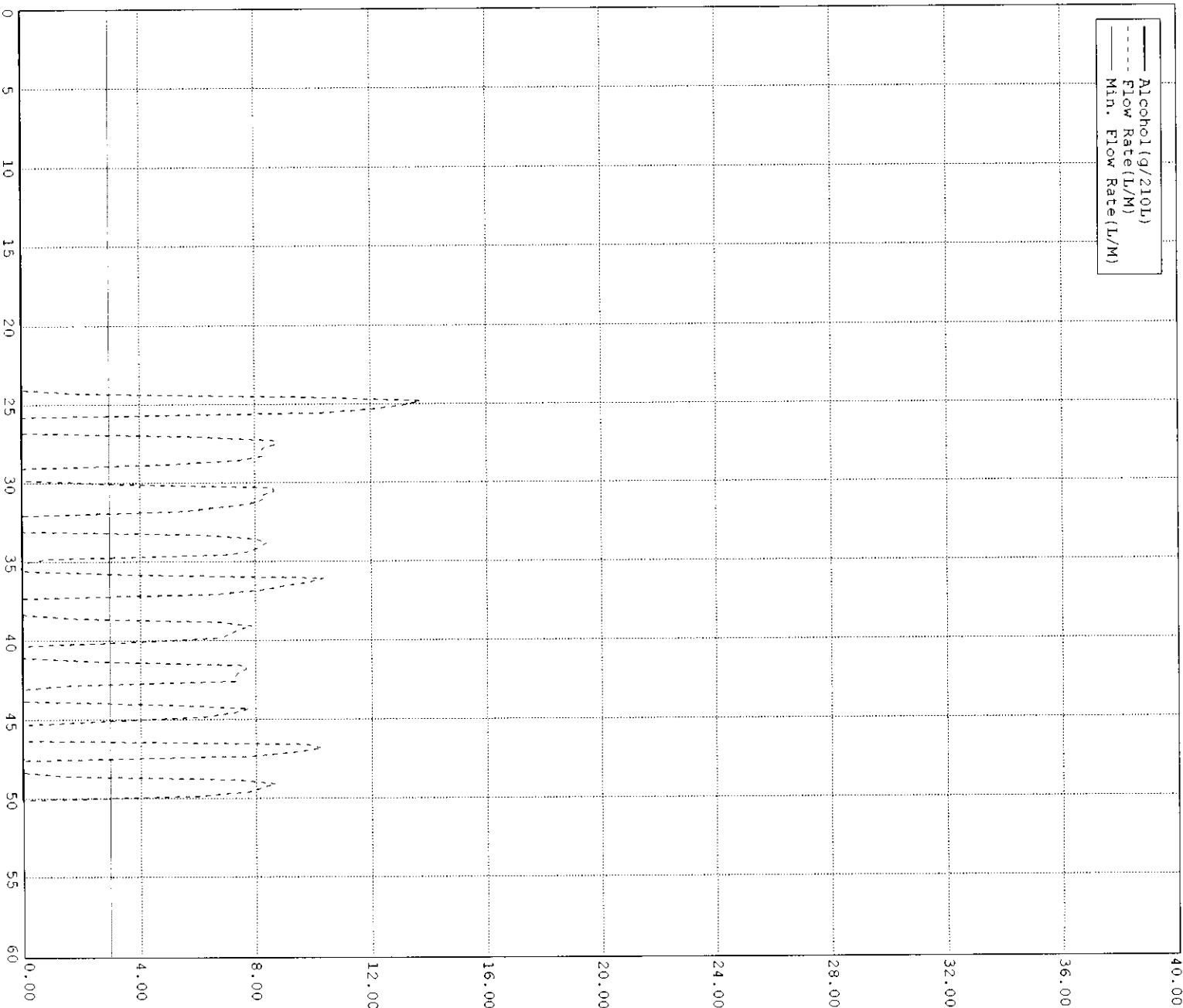
DEPT/AGENCY:
EXCEEDED ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	09:33
BLANK TEST	0.000	09:33
INTERNAL STANDARD	VERIFIED	09:33
EXTERNAL STANDARD	0.079	09:33
BLANK TEST	0.000	09:34
SUBJECT SAMPLE	XXX	09:35

Maximum Attempts Exceeded

Handwritten signature/initials



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmtc: 100692

Date: 02/14/2019
Time: 09:38:55

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

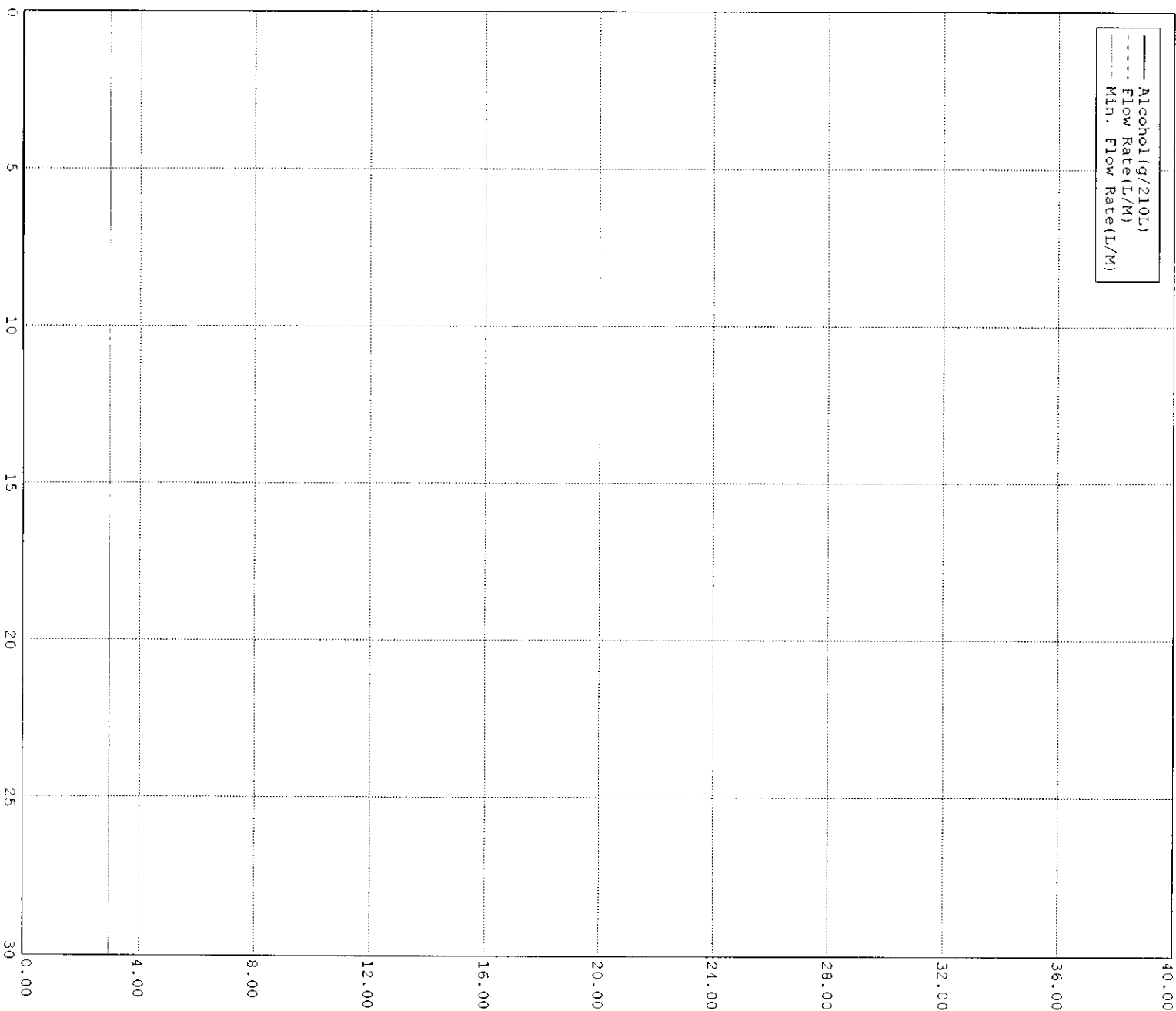
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
RPI
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 09:40
INTERNAL STANDARD VERIFIED 09:40
EXTERNAL STANDARD 0.079 09:40
BLANK TEST 0.000 09:41
RFI DETECTED

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100692

Date: 02/14/2019
Time: 09:53:58

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 29.79: 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	0.079	09:56
BLANK TEST	0.000	09:57
SUBJECT SAMPLE (Vol=1.94L)	0.000	09:57
BLANK TEST	0.000	09:58
EXTERNAL STANDARD	0.080	09:58
BLANK TEST	0.000	09:59

BBMB

