

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 100413 Analyst Brandi Barnett Start Date 8/8/17

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 1.4 L (1.3L to 1.7L)

4. Linearity Test (attached)

a. Levels Used

i. 0.020g/210L Mnf Airgas Lot AG 616504 Exp 6/13/18

ii. 0.040g/210L Mnf Airgas Lot AG 630101 Exp 10/27/18

iii. 0.080g/210L Mnf Airgas Lot AG 634001 Exp 12/5/18

iv. 0.100g/210L Mnf Airgas Lot AG 629304 Exp 10/19/18

v. 0.200g/210L Mnf Guth Lot 16190 Exp 8/15/18

1. Simulator S/N DR5298 Date Calibrated 9/14/16

vi. 0.300g/210L Mnf Guth Lot 16410 Exp 12/19/18

1. Simulator S/N SD1177 Date Calibrated 9/13/16

5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

d. Exceeded attempts

i. Acetone - Mnf Guth Lot 16160 Level 0.100 Exp 7/19/18

1. Simulator S/N SD1199 Date Calibrated 9/13/16

ii. Isopropanol - Mnf Guth Lot 16160 Level 0.100 Exp 7/19/18

1. Simulator S/N SD1088 Date Calibrated 9/13/16

iii. Negative Control - Mnf Guth Lot 16160 Level 0.100 Exp 7/19/18

1. Simulator S/N DR4161 Date Calibrated 9/14/16

e. RFI

6. Verify stylus is calibrated

9. Verification of Calibration

7. Reset Options

10. Non-Drinking Subject Test (attached)

8. Clear Memory

11. Upload

13. Remove tank prior to shut down

End Date 8/10/17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100413

Date: 08/08/2017
Time: 13:30:53

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 = 48.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.95 V PASSED
(1.08 V - 2.52 V)
Cooler Voltage = 1.84 V PASSED
(0.95 V - 2.23 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 540 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 30.0 in

PUMP INFO

Flow Rate = 5.272 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 = 0.094 0.65% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100413

Date: 08/08/2017
Time: 1:38 PM

Temperatures (°C)
Sample Cell: 48.9°C
Breath Tube: 47.8°C

Current Barometer 29.9 in
Volume (Ltr) 1.52

Settings
Lamp: 1.92 V
Bias: 79 V
Cooler: 1.84 V
Chopper: 539 Hz

Voltages (V)
Flow: 1.05 V
Detector: -0.006 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100413

Date: 09/14/2015
Time: 14:27:59

OPERATOR NAME:
BRANDI BARNETT
CERTIFICATE #: 7038

Ca = 0.1000
CAL = 0.979791 0.800 <= CAL < 1.200
b1 = 0.0001 0.0000 <= b1 < 0.0040
b2 = 0.0039 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0945 0.0500 <= Xq < 0.2000
a21 = 1.129336 1.050 <= a21 < 1.300
a31 = 0.441836 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100413

Date: 08/09/2017
Time: 08:44:03

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

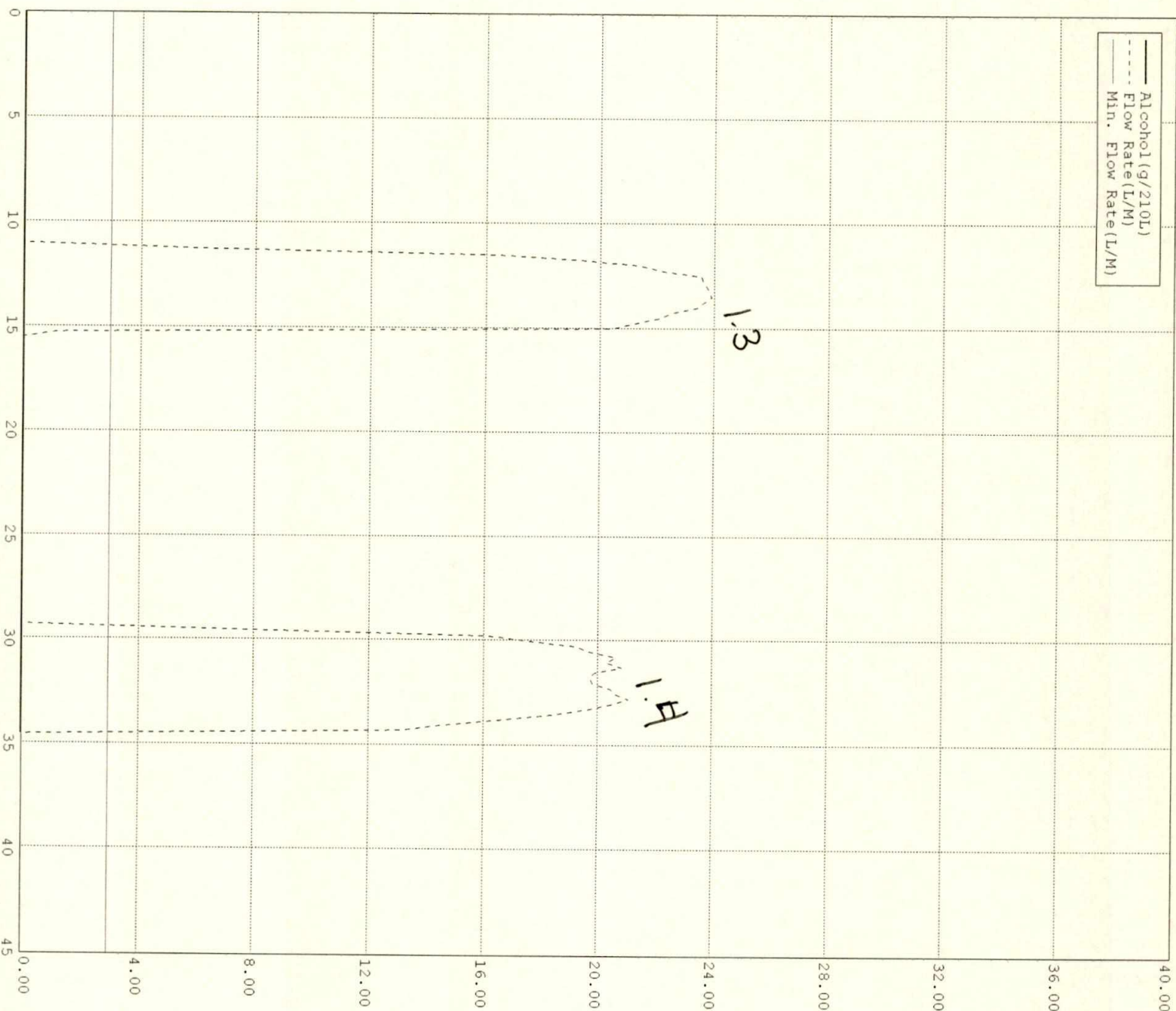
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.74: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	08:45
BLANK TEST	0.000	08:45
INTERNAL STANDARD	VERIFIED	08:45
EXTERNAL STANDARD	0.078	08:45
BLANK TEST	0.000	08:46
SUBJECT SAMPLE (Vol=1.53L)	0.000	08:47
BLANK TEST	0.000	08:48
EXTERNAL STANDARD	0.079	08:48
BLANK TEST	0.000	08:49

BMB



LINEARITY CHECK

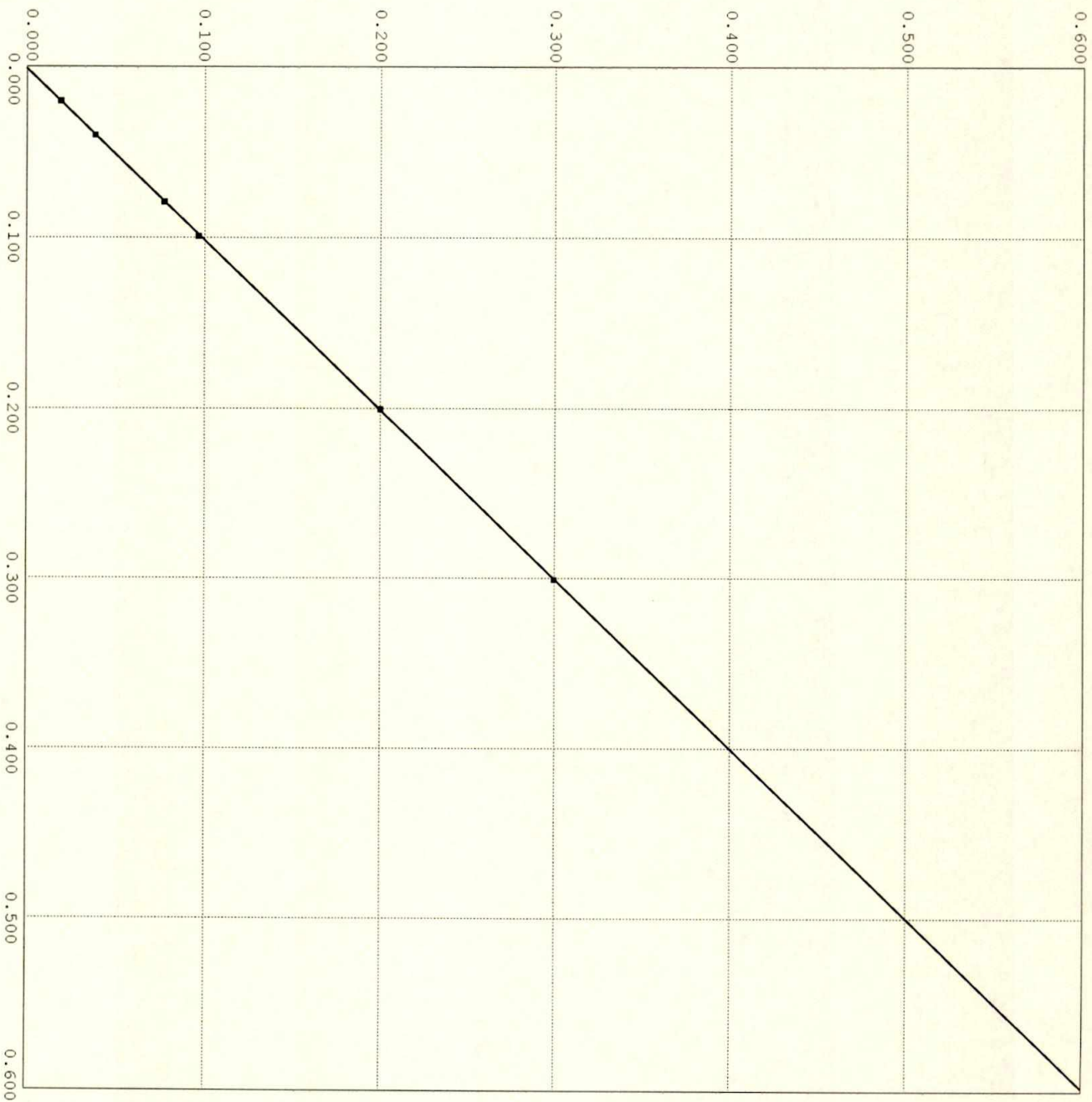
Alaska Department of Public Safety
DATAMASTER dmt: 100413

Date: 08/09/2017
Time: 09:28:04

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0196	0.0005
0.040	0.0390	0.0000
0.079	0.0782	0.0004
0.099	0.0976	0.0005
0.200	0.2008	0.0004
0.300	0.3004	0.0009

SLOPE = 1.005682
R² = 0.999970



BSMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100413

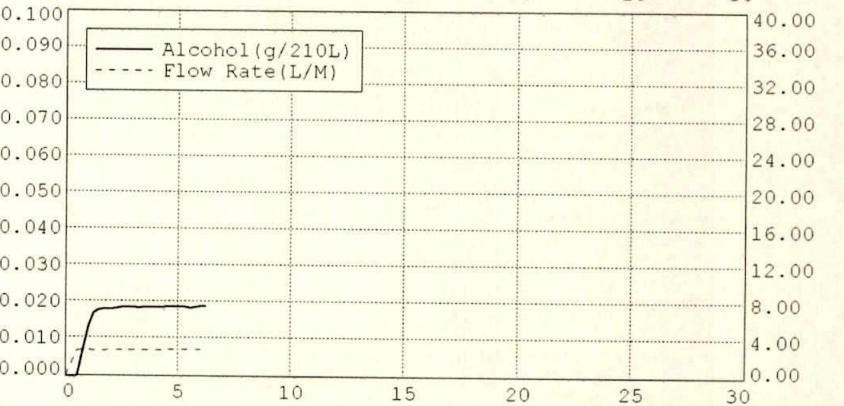
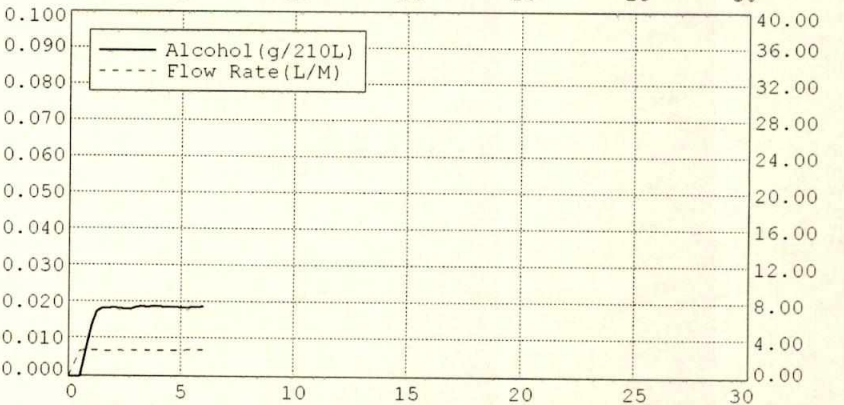
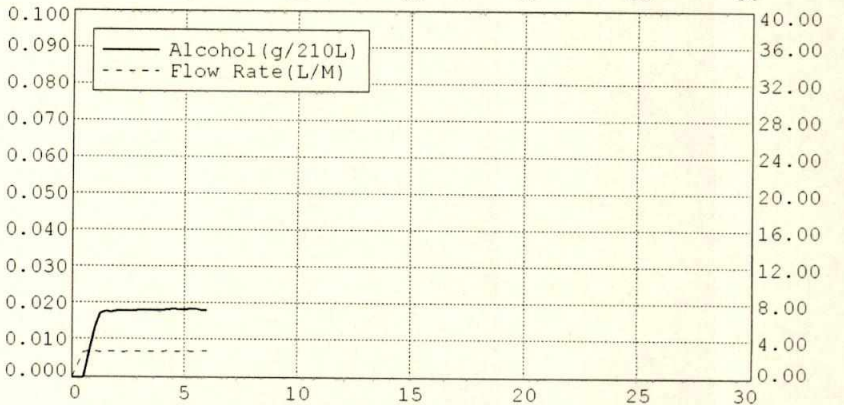
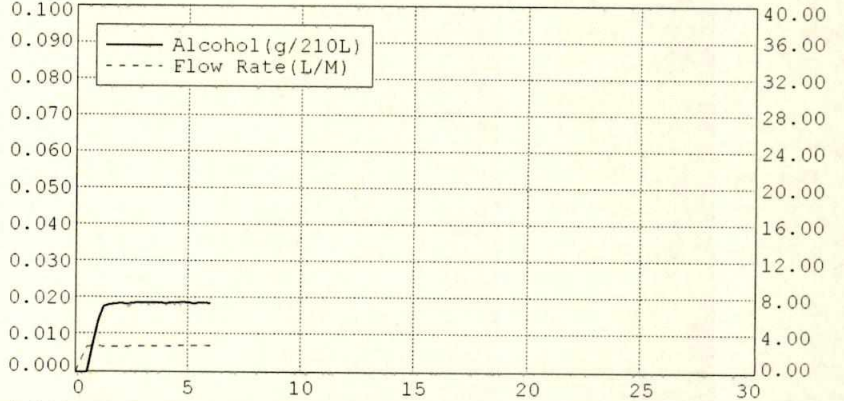
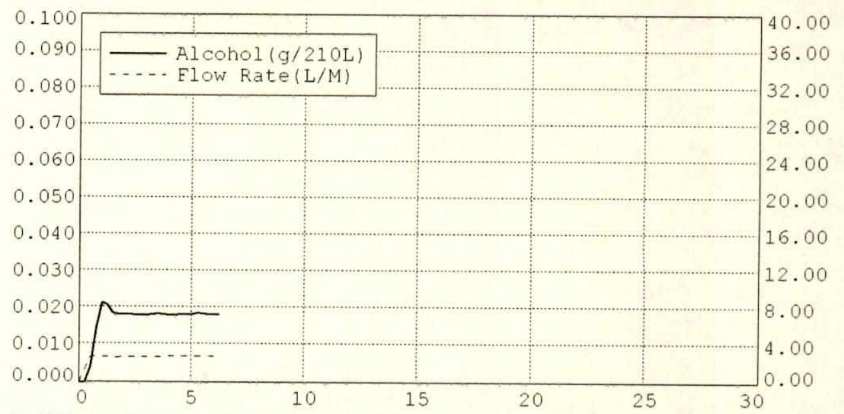
Date: 08/09/2017
 Time: 09:28:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.72: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 760 psi

BLANK TEST	0.000	09:29
INTERNAL STANDARD	VERIFIED	09:29
EXTERNAL STANDARD	0.019	09:29
BLANK TEST	0.000	09:30
EXTERNAL STANDARD	0.020	09:30
BLANK TEST	0.000	09:31
EXTERNAL STANDARD	0.019	09:31
BLANK TEST	0.000	09:32
EXTERNAL STANDARD	0.020	09:32
BLANK TEST	0.000	09:33
EXTERNAL STANDARD	0.020	09:33
BLANK TEST	0.000	09:34

Average = 0.0196
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

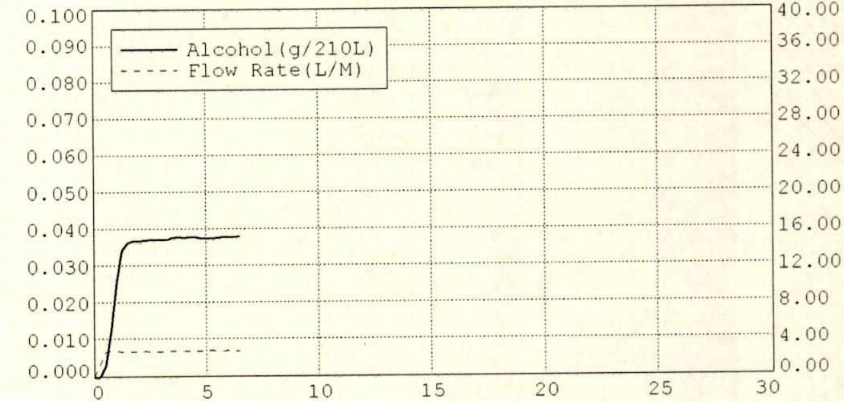
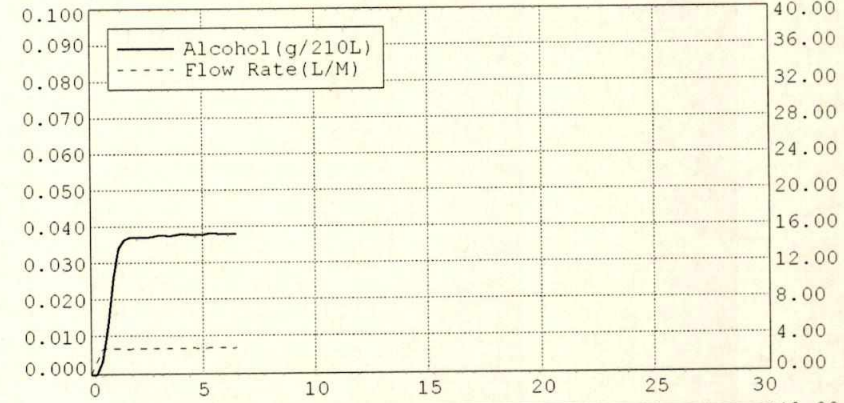
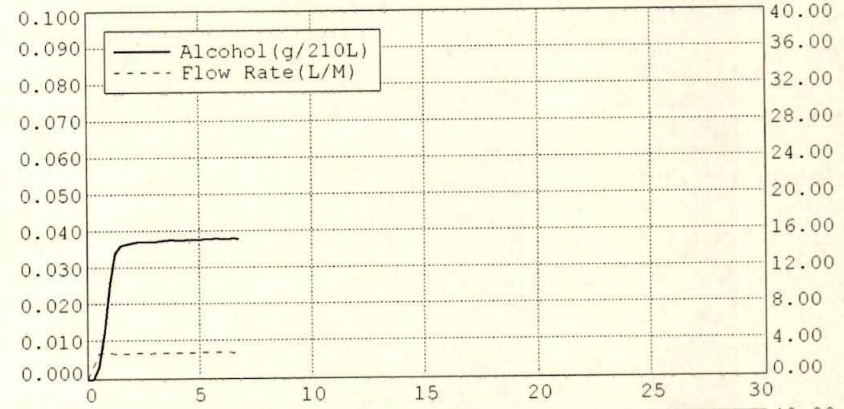
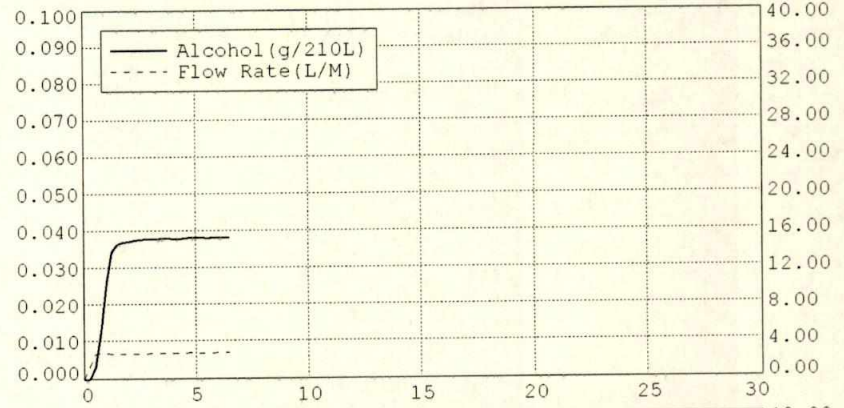
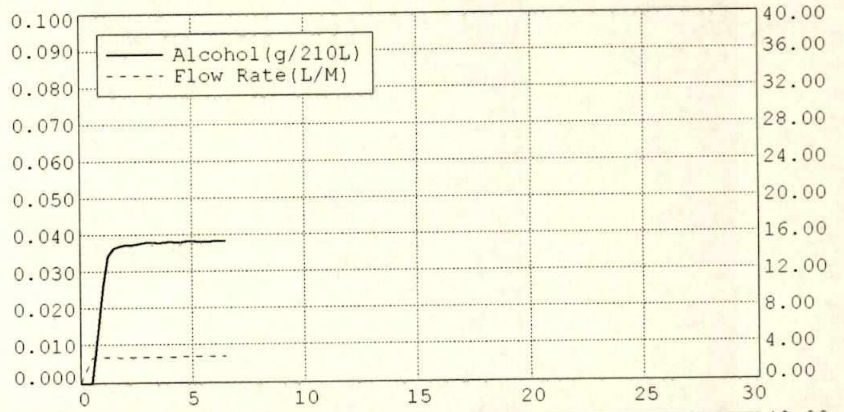
Alaska Department of Public Safety
 DATAMASTER dmt: 100413

Date: 08/09/2017
 Time: 09:41:16

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.040
 TARGET AT 29.72: 0.040
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 754 psi

BLANK TEST	0.000	09:43
INTERNAL STANDARD	VERIFIED	09:43
EXTERNAL STANDARD	0.039	09:44
BLANK TEST	0.000	09:44
EXTERNAL STANDARD	0.039	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.039	09:46
BLANK TEST	0.000	09:47
EXTERNAL STANDARD	0.039	09:47
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.039	09:48
BLANK TEST	0.000	09:49

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100413

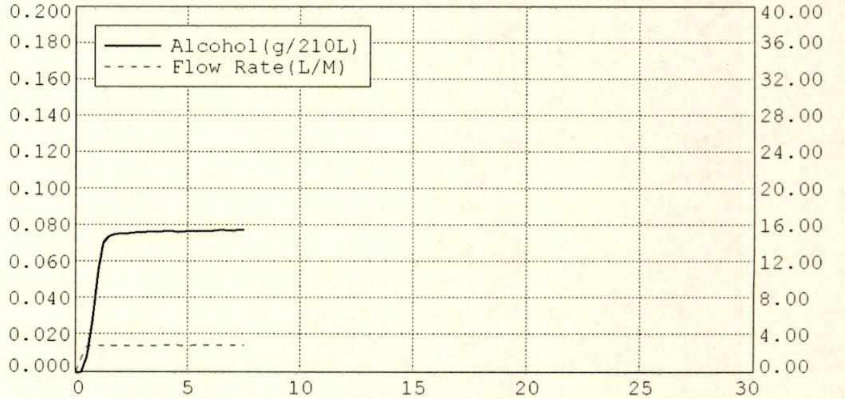
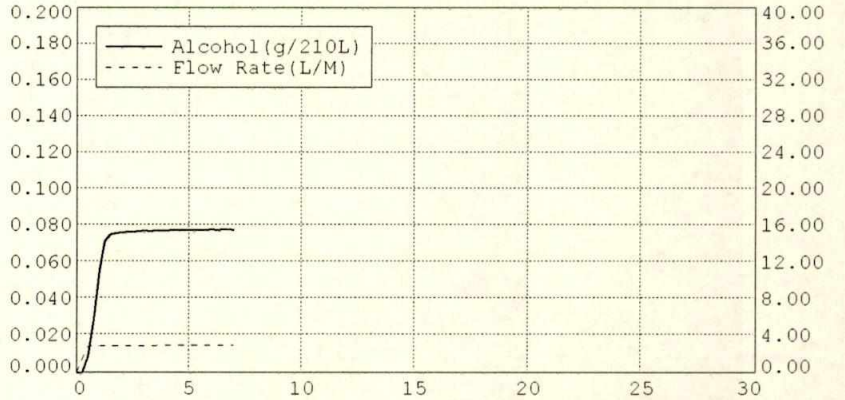
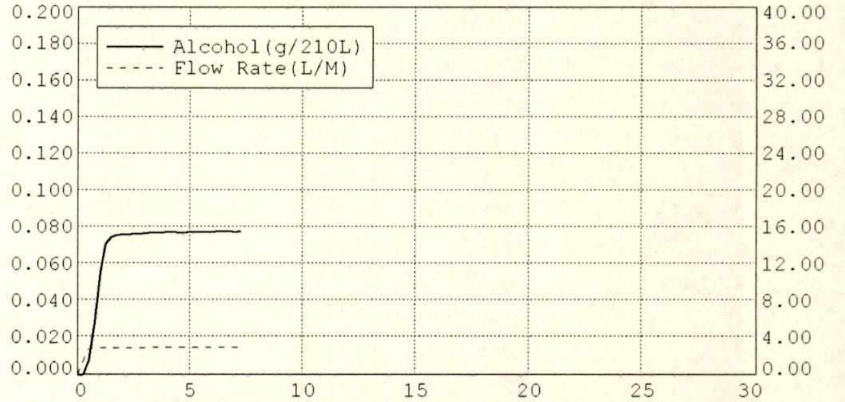
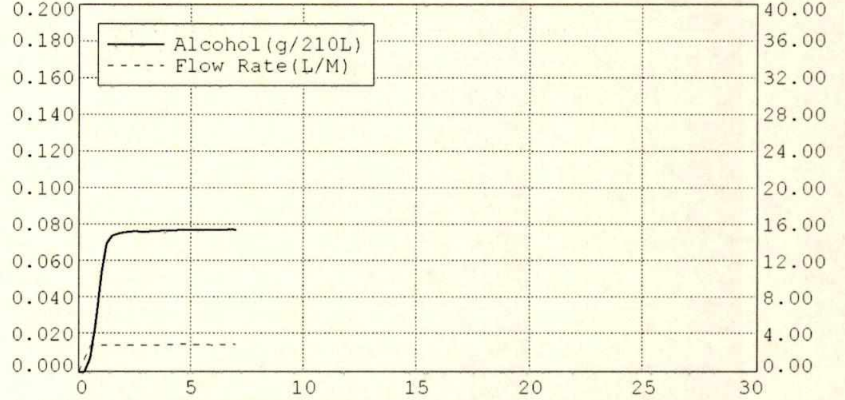
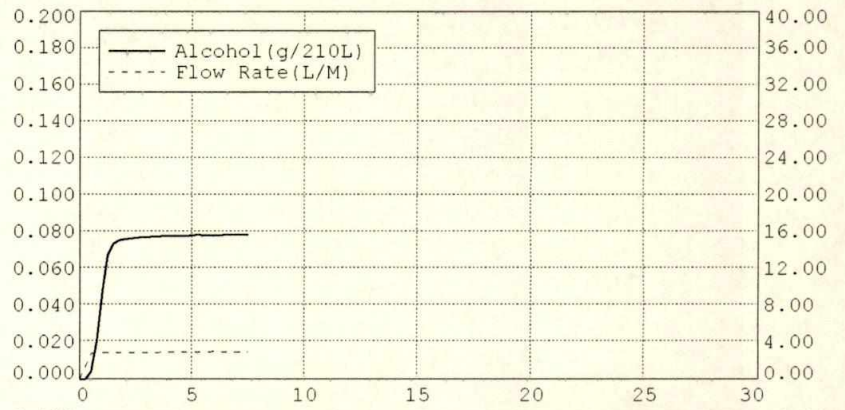
Date: 08/09/2017
 Time: 09:51:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.72: 0.079
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 1076 psi

BLANK TEST	0.000	09:55
INTERNAL STANDARD	VERIFIED	09:55
EXTERNAL STANDARD	0.079	09:55
BLANK TEST	0.000	09:56
EXTERNAL STANDARD	0.078	09:56
BLANK TEST	0.000	09:57
EXTERNAL STANDARD	0.078	09:57
BLANK TEST	0.000	09:58
EXTERNAL STANDARD	0.078	09:59
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.078	10:00
BLANK TEST	0.000	10:01

Average = 0.0782
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100413

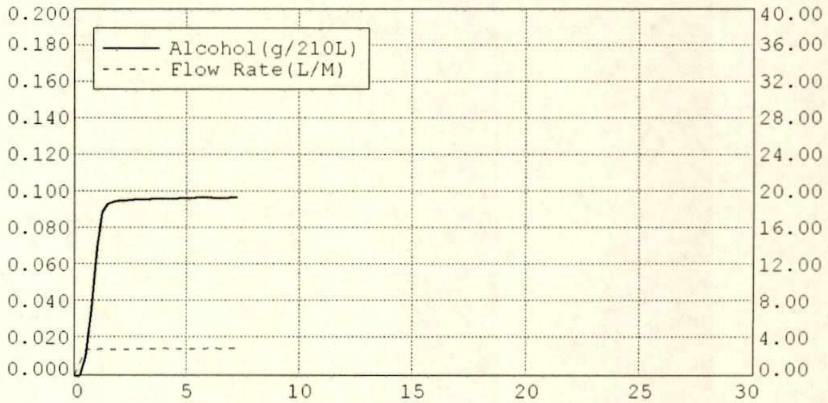
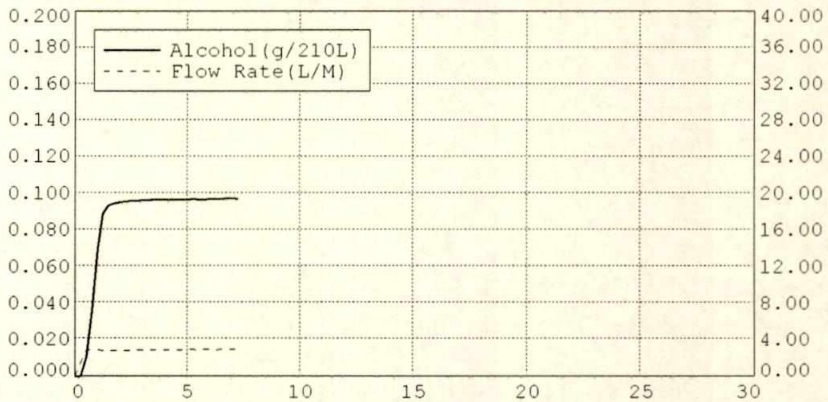
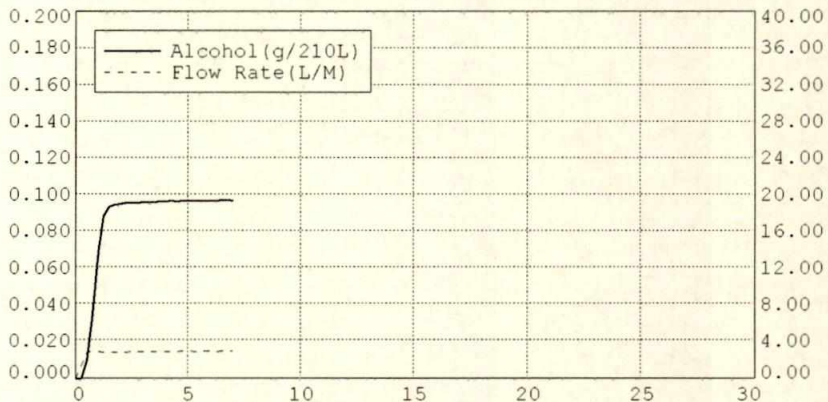
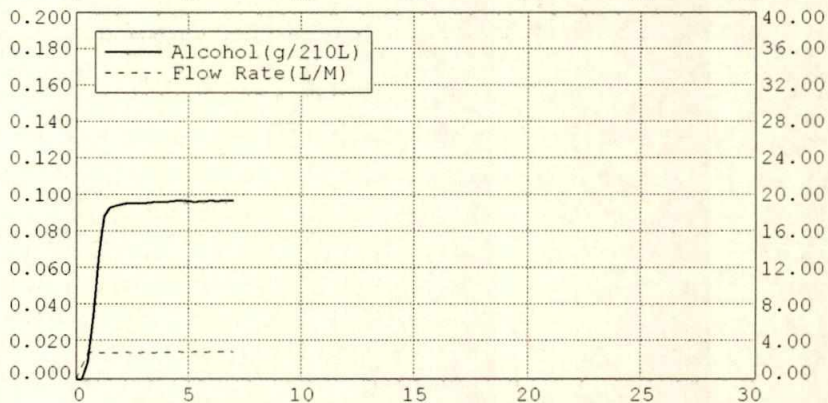
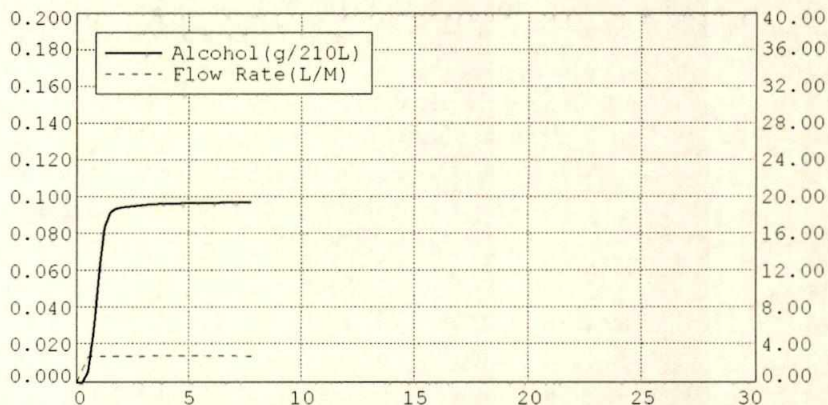
Date: 08/09/2017
 Time: 12:20:40

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.69: 0.099
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 1061 psi

BLANK TEST	0.000	12:23
INTERNAL STANDARD	VERIFIED	12:24
EXTERNAL STANDARD	0.098	12:24
BLANK TEST	0.000	12:25
EXTERNAL STANDARD	0.098	12:25
BLANK TEST	0.000	12:26
EXTERNAL STANDARD	0.097	12:26
BLANK TEST	0.000	12:27
EXTERNAL STANDARD	0.098	12:27
BLANK TEST	0.000	12:28
EXTERNAL STANDARD	0.097	12:29
BLANK TEST	0.000	12:29

Average = 0.0976
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

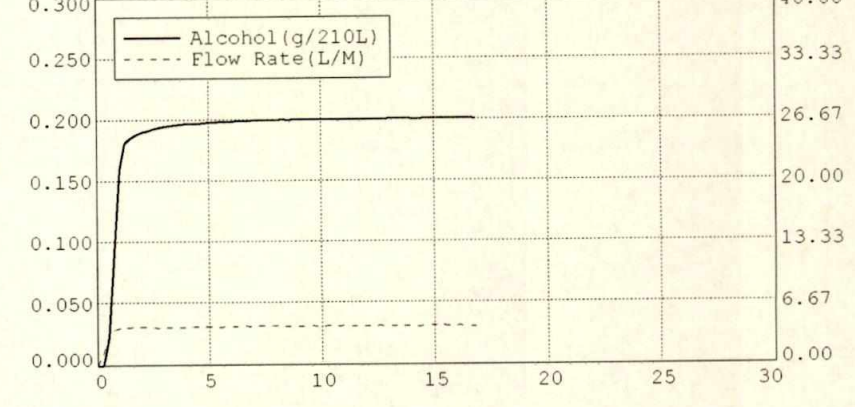
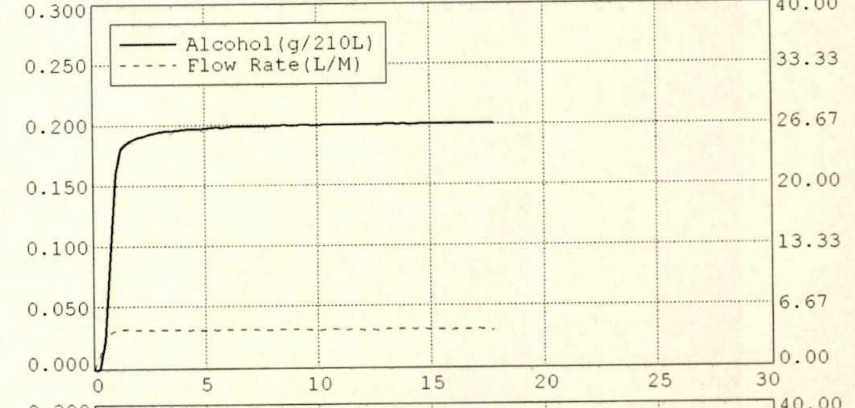
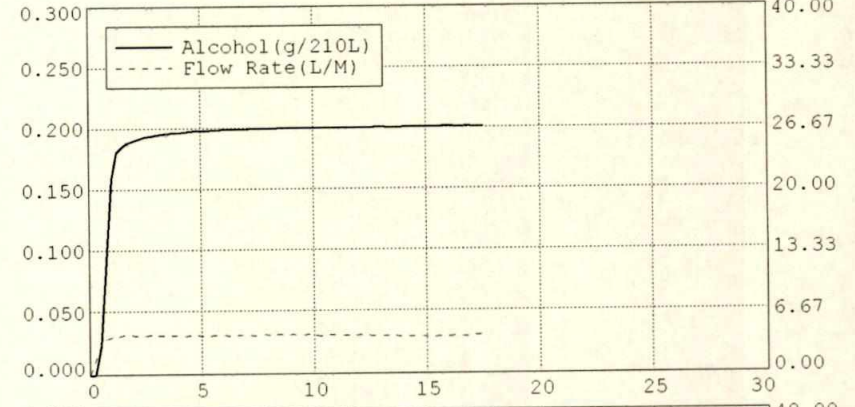
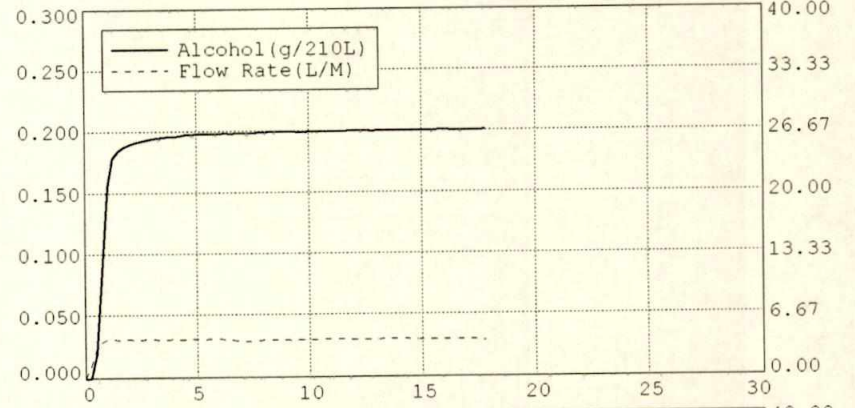
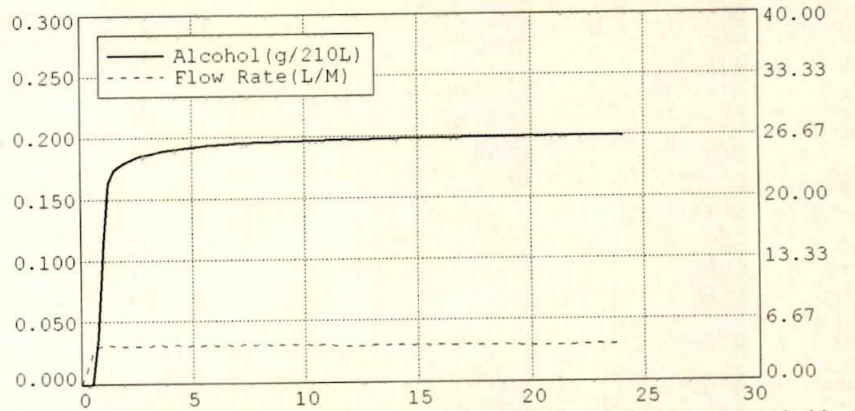
Alaska Department of Public Safety
 DATAMASTER dmt: 100413

Date: 08/09/2017
 Time: 12:39:02

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: GUTH 16190
 EXPIRATION: 08/15/2018

BLANK TEST	0.000	12:40
INTERNAL STANDARD	VERIFIED	12:40
EXTERNAL STANDARD	0.200	12:40
BLANK TEST	0.000	12:41
EXTERNAL STANDARD	0.201	12:42
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.201	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.201	12:44
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.201	12:46
BLANK TEST	0.000	12:46

Average = 0.2008
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

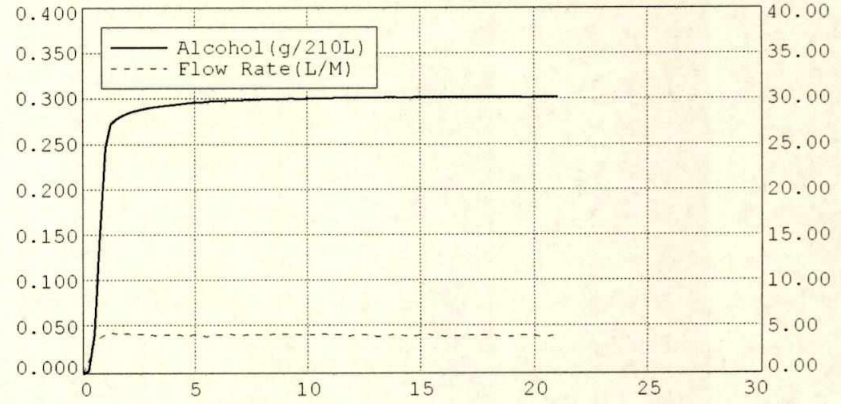
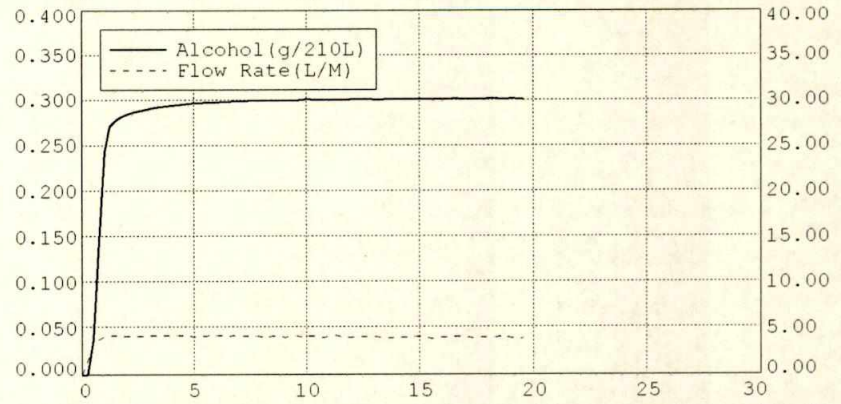
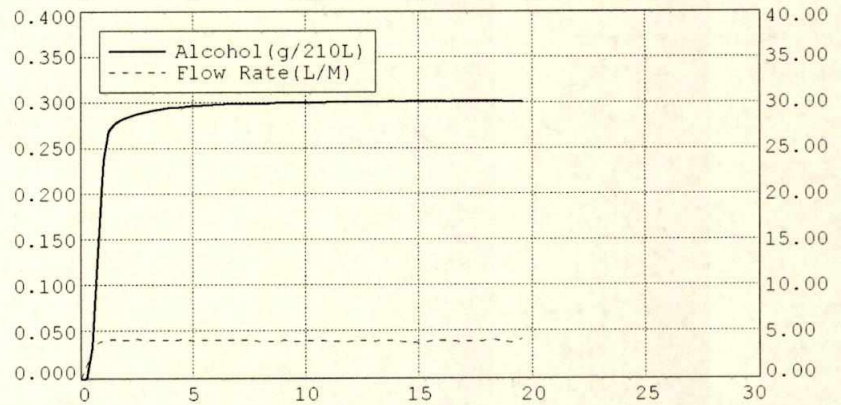
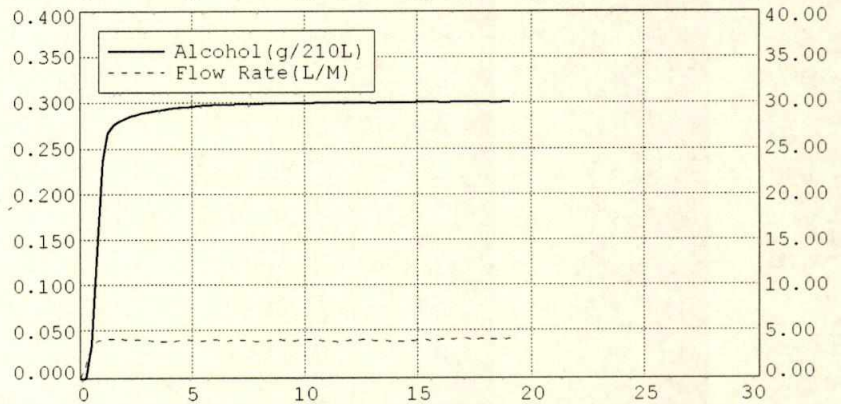
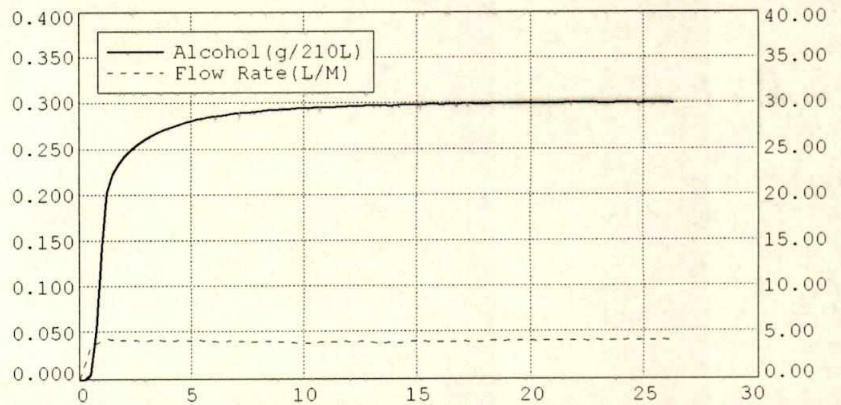
Alaska Department of Public Safety
 DATAMASTER dmt: 100413

Date: 08/09/2017
 Time: 12:53:03

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: GUTH 16410
 EXPIRATION: 12/19/2018

BLANK TEST	0.000	12:54
INTERNAL STANDARD	VERIFIED	12:54
EXTERNAL STANDARD	0.299	12:54
BLANK TEST	0.000	12:55
EXTERNAL STANDARD	0.300	12:56
BLANK TEST	0.000	12:57
EXTERNAL STANDARD	0.301	12:57
BLANK TEST	0.000	12:58
EXTERNAL STANDARD	0.301	12:58
BLANK TEST	0.000	12:59
EXTERNAL STANDARD	0.301	13:00
BLANK TEST	0.000	13:01

Average = 0.3004
 Std Dev = 0.0009



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100413

Date: 08/10/2017
Time: 08:21:08

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

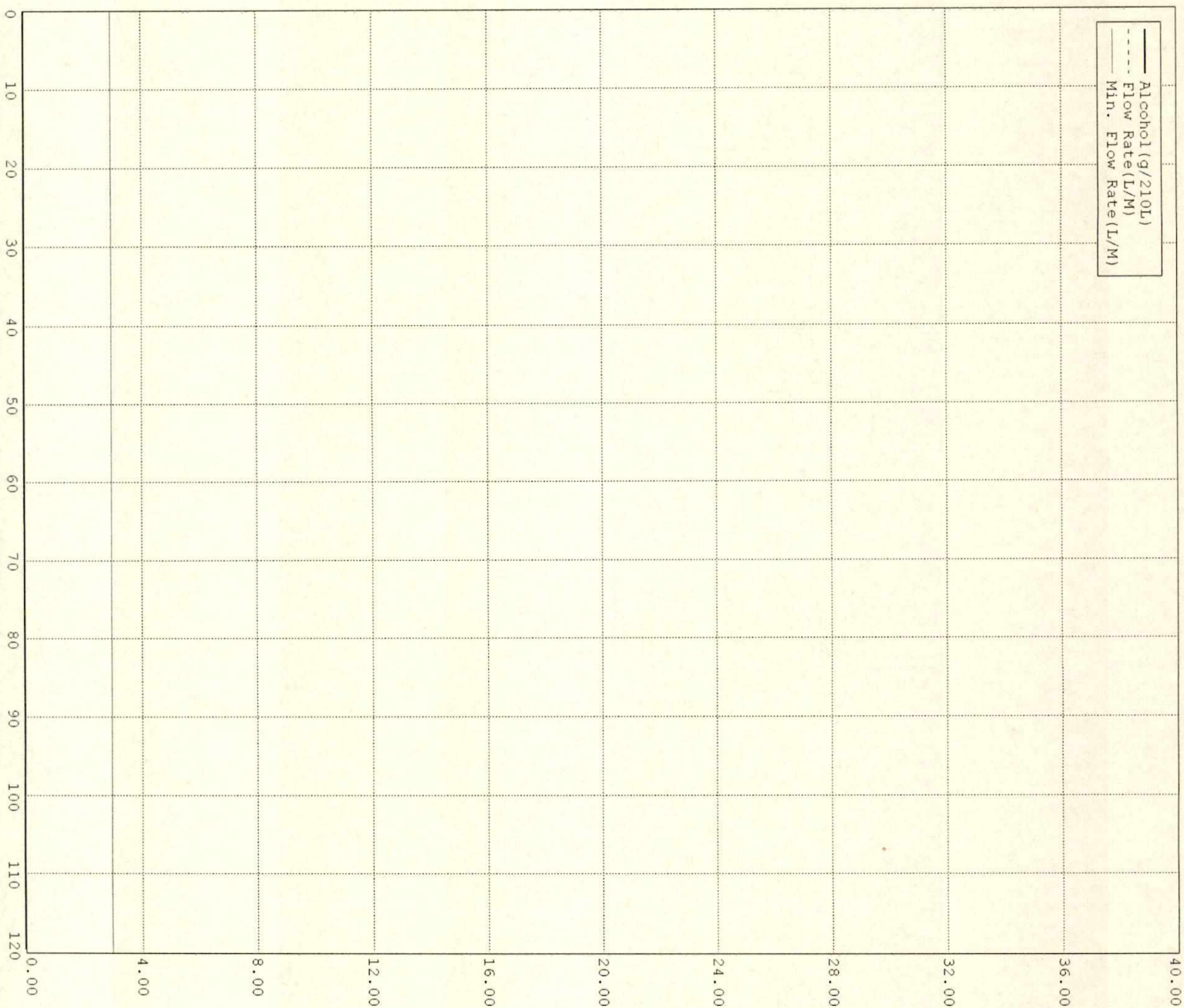
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.72: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	08:22
BLANK TEST	0.000	08:22
INTERNAL STANDARD	VERIFIED	08:23
EXTERNAL STANDARD	0.078	08:23
BLANK TEST	0.000	08:24
SUBJECT SAMPLE	INCOMPLETE	08:26

BBB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100413

Date: 08/10/2017
Time: 08:29:49

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

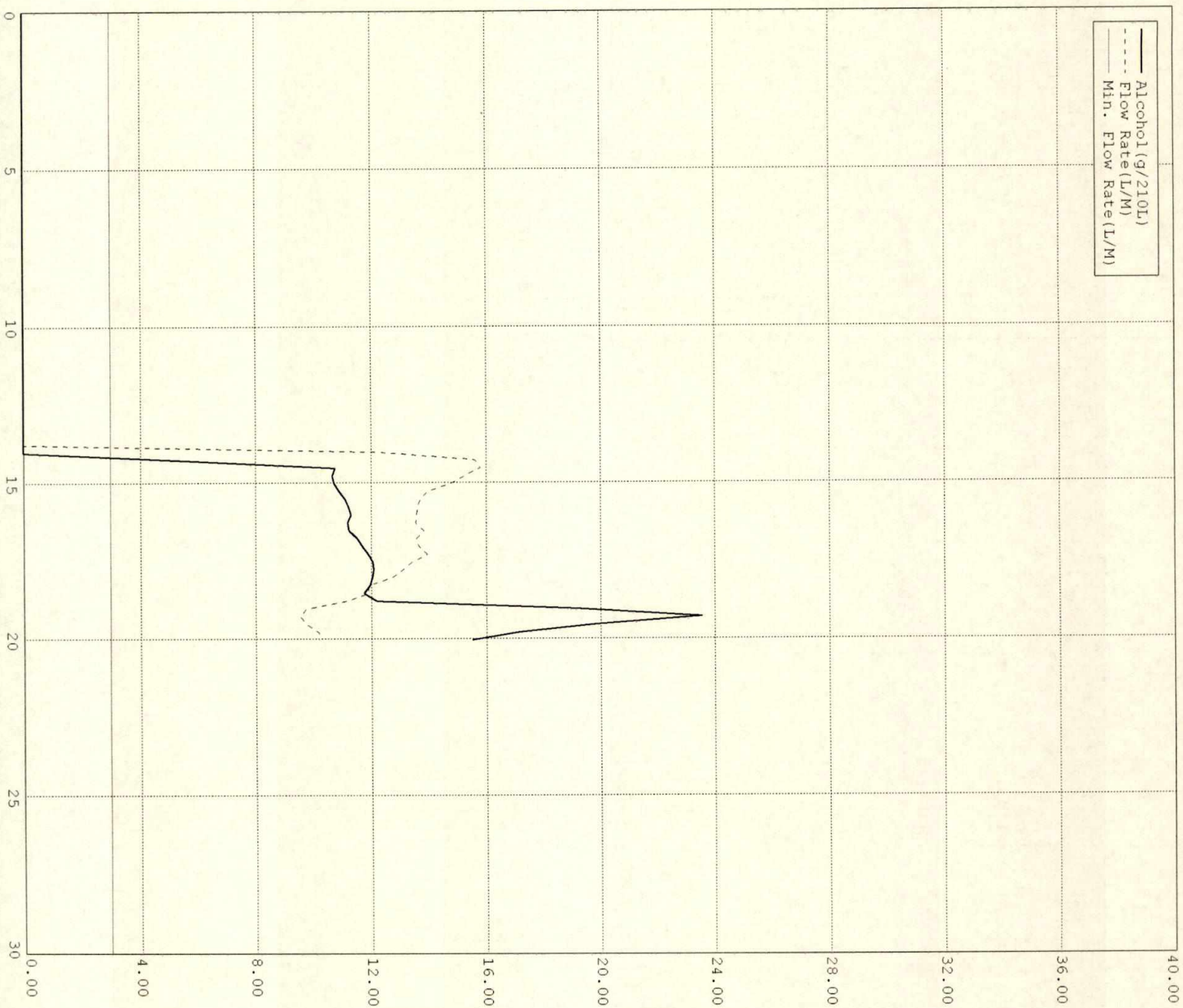
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	08:33
BLANK TEST	0.000	08:34
INTERNAL STANDARD	VERIFIED	08:34
EXTERNAL STANDARD	0.078	08:34
BLANK TEST	0.000	08:35
SUBJECT SAMPLE	INVALID	08:36

BNB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100413

Date: 08/10/2017
Time: 08:59:06

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 29.71: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

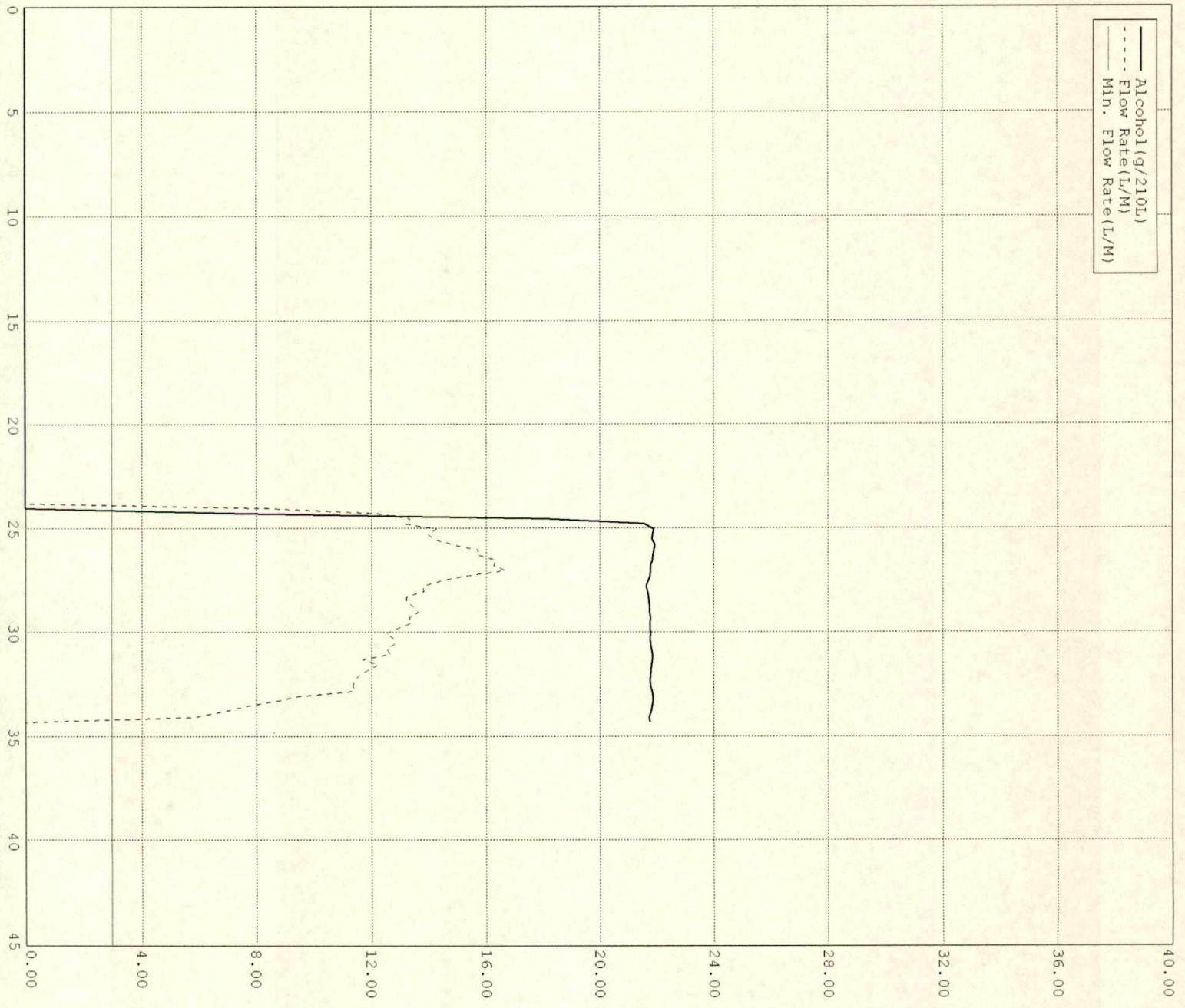
DIAGNOSTIC CHECK	PASSED	09:00
BLANK TEST	0.000	09:00
INTERNAL STANDARD	VERIFIED	09:00
Xq = 0.094 (0.74%)		
EXTERNAL STANDARD	0.078	09:01
X[1] = 0.0775 (-0.0017)	(0.0020)	
BLANK TEST	0.000	09:01
SUBJECT SAMPLE	XXX	09:02
X[1] = 0.1093 (-0.0187)	(-0.0006)	

Interference Detected

Filter 2 Avg: -0.0008
Filter 3 Avg: 0.0021

BMB 8/10/17

(Handwritten signature)



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100413

Date: 08/10/2017
Time: 09:07:20

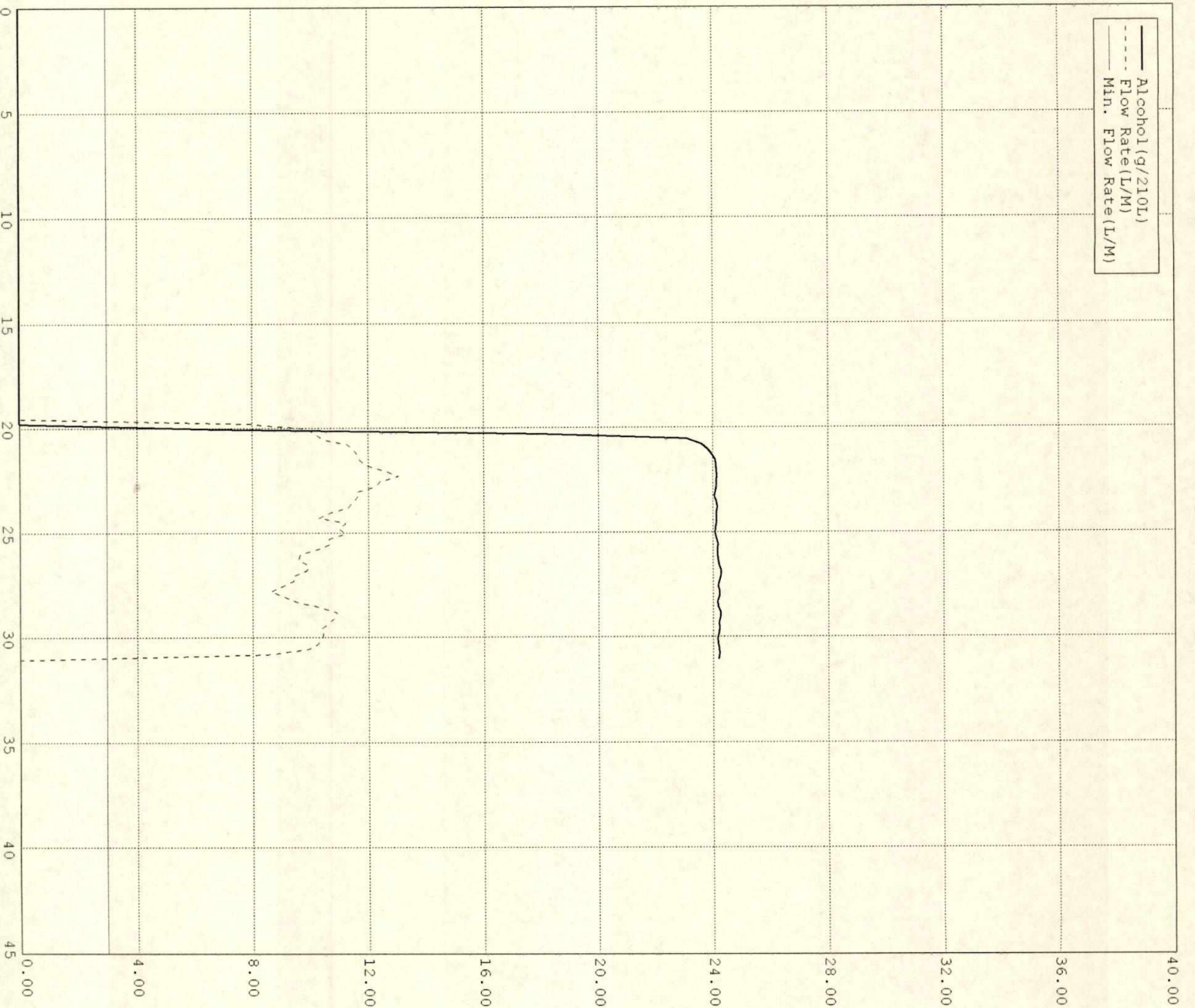
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.72: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:08
BLANK TEST	0.000	09:09
INTERNAL STANDARD	VERIFIED	09:09
Xq = 0.094 (0.46%)	0.078	09:09
EXTERNAL STANDARD	X[1] = 0.0778 (0.0000)	(0.0017)
BLANK TEST	0.000	09:10
SUBJECT SAMPLE	X[1] = 0.1215 (-0.0218)	(0.0021)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100413

Date: 08/10/2017
Time: 09:14:53

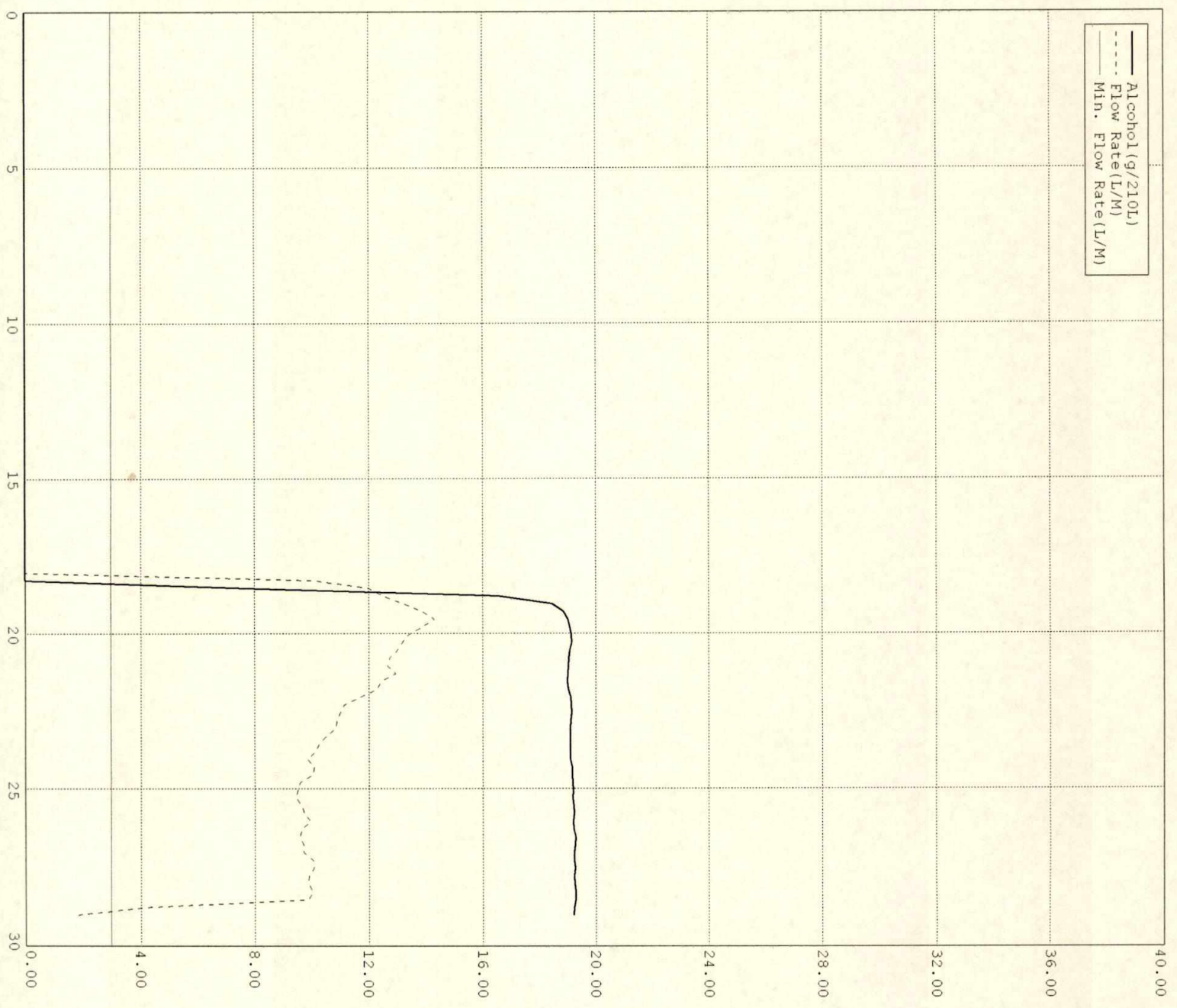
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 29.71: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:16
INTERNAL STANDARD	0.000	09:16
INTERNAL STANDARD	VERIFIED	09:17
Xq = 0.094 (0.19%)		
EXTERNAL STANDARD	0.078	09:17
X[1] = 0.0783 (-0.0008) (0.0030)		
BLANK TEST	0.000	09:18
SUBJECT SAMPLE (Vol=1.96L)	0.096	09:18
X[1] = 0.0967 (0.0000) (0.0003)		
BLANK TEST	0.000	09:19
EXTERNAL STANDARD	0.078	09:20
X[1] = 0.0781 (-0.0006) (0.0018)		
BLANK TEST	0.000	09:21



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100413

Date: 08/10/2017
Time: 08:49:50

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

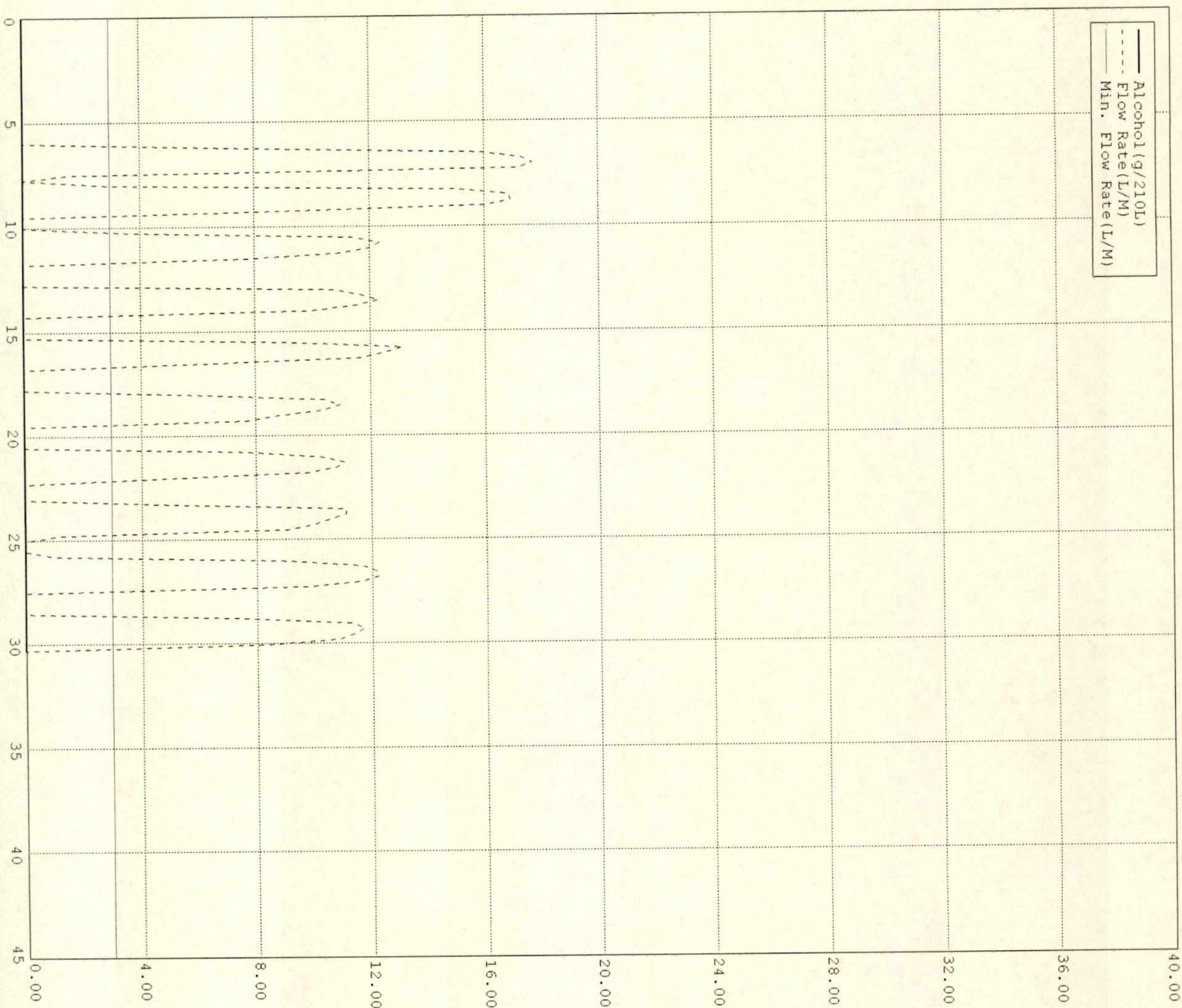
DEPT/AGENCY:
EXCEEDED ATTEMPT
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	08:51
BLANK TEST	0.000	08:51
INTERNAL STANDARD	VERIFIED	08:51
EXTERNAL STANDARD	0.078	08:51
BLANK TEST	0.000	08:52
SUBJECT SAMPLE	XXX	08:53

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100413

Date: 08/10/2017
Time: 08:38:06

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

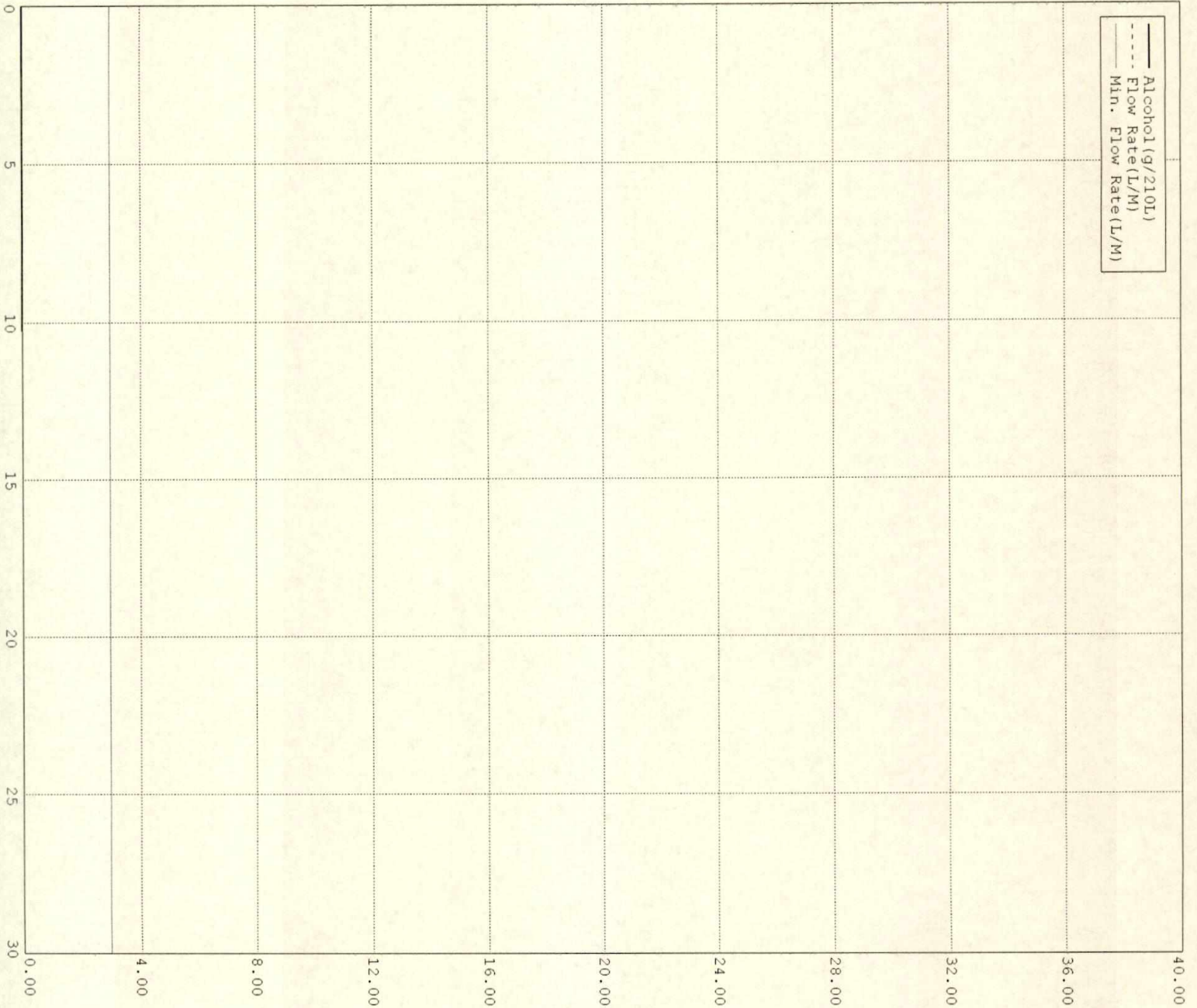
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	08:39
BLANK TEST	0.000	08:39
INTERNAL STANDARD	VERIFIED	08:39
EXTERNAL STANDARD	0.078	08:39
BLANK TEST	0.000	08:40

RFI DETECTED

Handwritten signature: BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100413

Date: 08/10/2017
Time: 09:38:56

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 29.71: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:41
BLANK TEST	0.000	09:41
INTERNAL STANDARD	VERIFIED	09:41
EXTERNAL STANDARD	0.079	09:41
BLANK TEST	0.000	09:41
SUBJECT SAMPLE (Vol=1.84L)	0.000	09:42
BLANK TEST	0.000	09:43
EXTERNAL STANDARD	0.078	09:44
BLANK TEST	0.000	09:45

