

# 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 100375 Analyst Brandi Barnett Start Date 3/31/17

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 AG1616504 Exp 6/13/18

ii. 0.040g/210L Mnf Airgas Lot AG1630101 Exp 10/27/18

iii. 0.080g/210L Mnf Airgas Lot AG1608504 Exp 3/25/18

iv. 0.100g/210L Mnf Airgas Lot AG1629304 Exp 10/19/18

v. 0.200g/210L Mnf Guth Lot 17090 Exp 2/24/19

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 15220 Level 0.100 Exp 9/28/17

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

ii. Isopropanol - Mnf Guth Lot 15220 Level 0.100 Exp 9/28/17

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

iii. Negative Control - Mnf Guth Lot 17060 Level 0.100 Exp 2/14/19

1. Simulator S/N DR4161 Date Calibrated 09/14/16

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 3/31/17

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100375  
-----

Date: 03/31/2017  
Time: 10:12:13

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 47.9°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.52 V PASSED  
(0.92 V - 2.16 V)  
Cooler Voltage = 1.59 V PASSED  
(0.92 V - 2.16 V)  
Bias Voltage = 79 V PASSED  
(47 V - 111 V)  
Chopper Freq = 538 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.1 in

PUMP INFO

Flow Rate = 4.644 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 PASSED  
Xq = 0.090 0.96% (0.00% - 4.00%)

Technician Screen

-----  
DATAMASTER dmt: 100375  
-----

Date: 03/31/2017  
Time: 10:52 AM

Temperatures (°C)  
Sample Cell: 49.1°C  
Breath Tube: 47.4°C

Current Barometer 29.0 in  
Volume (Ltr) 1.58

Settings  
Lamp: 1.52 V  
Bias: 79 V  
Cooler: 1.59 V  
Chopper: 538 Hz

Voltages (V)  
Flow: 1.05 V  
Detector: 0.026 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100375  
-----

Date: 04/12/2011  
Time: 13:58:30

OPERATOR NAME:  
COLLEEN S OBRYANT  
CERTIFICATE #: 6237

LOT #: GUTH100  
BOTTLE #: 10260  
EXPIRATION: 10/25/2012

Ca = 0.1000  
CAL = 0.979715    0.800 <= CAL < 1.200  
b1 = 0.0001    0.0000 <= b1 < 0.0040  
b2 = 0.0041    0.0010 <= b2 < 0.0100  
b3 = 0.0003    0.0000 <= b3 < 0.0040  
Xq = 0.0913    0.0500 <= Xq < 0.2000  
a21 = 1.104953    1.050 <= a21 < 1.300  
a31 = 0.439751    0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 03/31/2017  
Time: 12:06:56

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

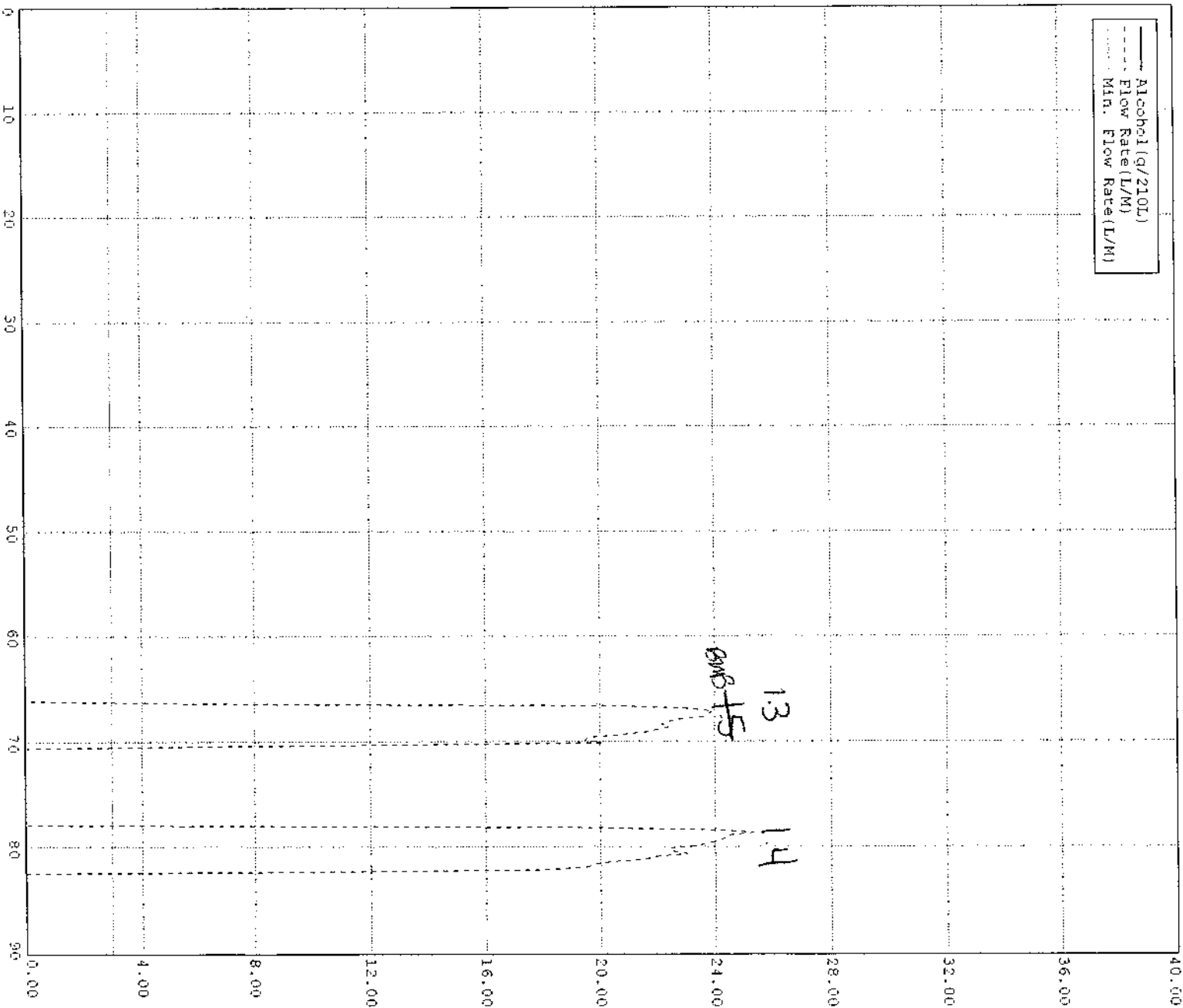
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.00: 0.078  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	12:08
BLANK TEST	0.000	12:08
INTERNAL STANDARD	VERIFIED	12:08
EXTERNAL STANDARD	0.078	12:08
BLANK TEST	0.000	12:09
SUBJECT SAMPLE (Vol=1.58L)	0.000	12:10
BLANK TEST	0.000	12:11
EXTERNAL STANDARD	0.078	12:12
BLANK TEST	0.000	12:12

*BMB*



LINEARITY CHECK

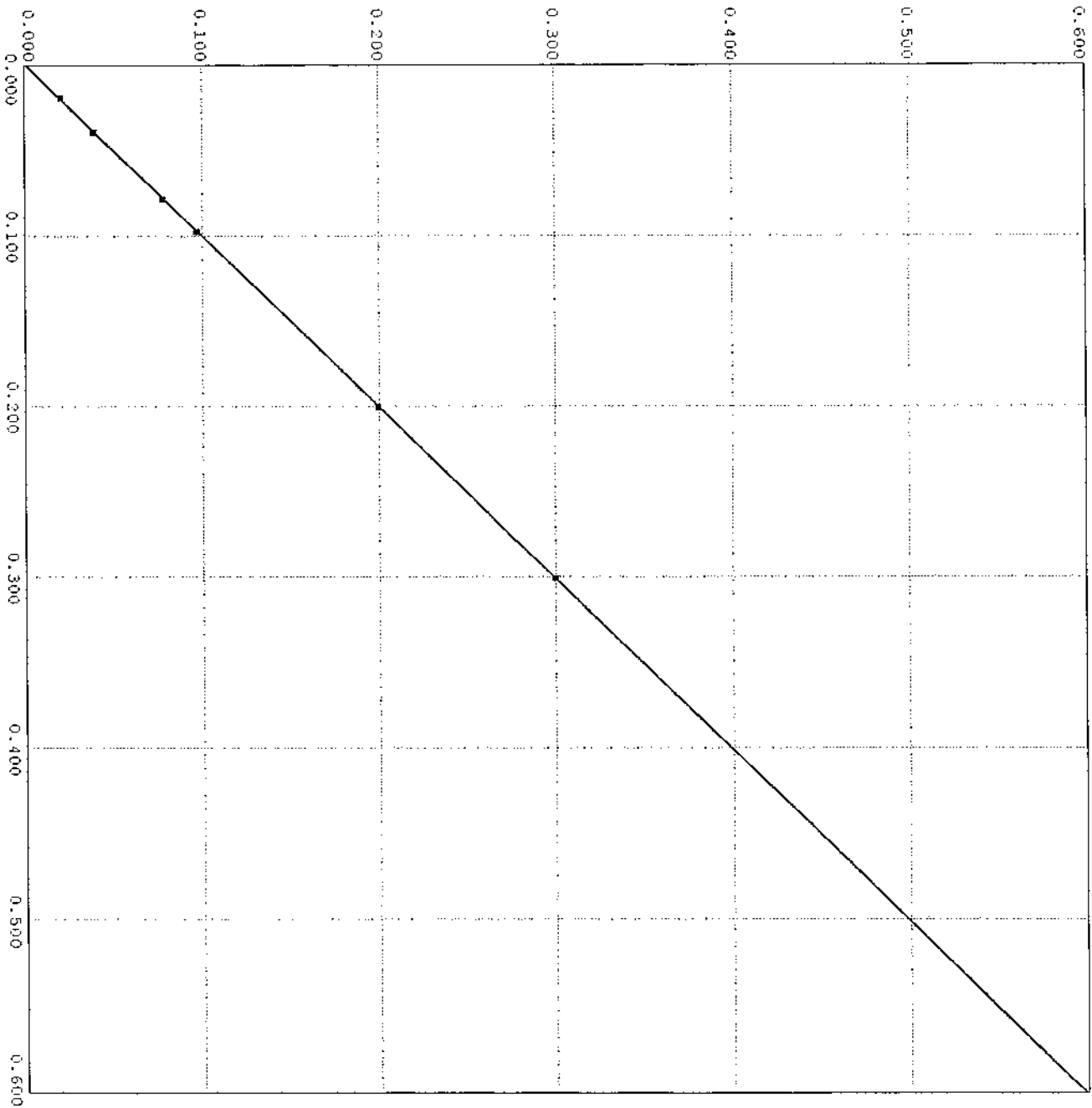
Alaska Department of Public Safety  
DYNAMASTER dmt: 100375

Date: 03/31/2017  
Time: 12:33:48

SUPERVISOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.019	0.0212	0.0004
0.039	0.0400	0.0000
0.078	0.0786	0.0005
0.097	0.0978	0.0004
0.200	0.2002	0.0004
0.300	0.3006	0.0005

SLOPE = 0.995945  
R<sup>2</sup> = 0.999975



BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100375

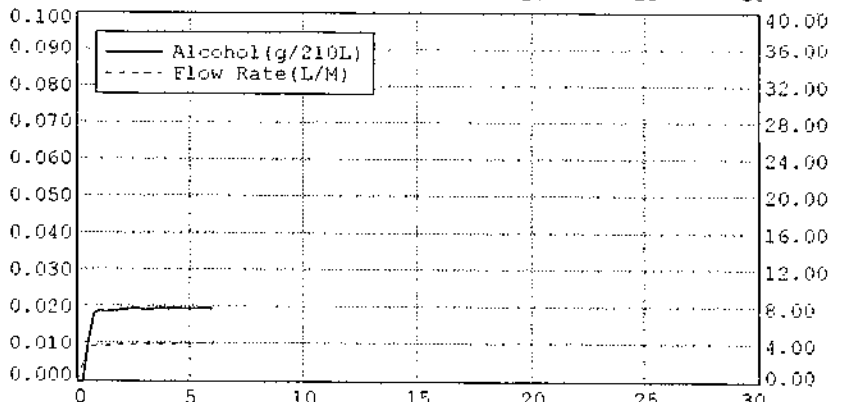
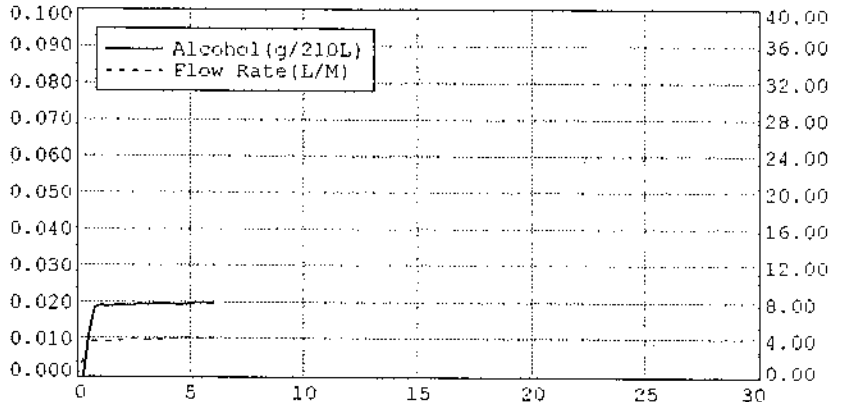
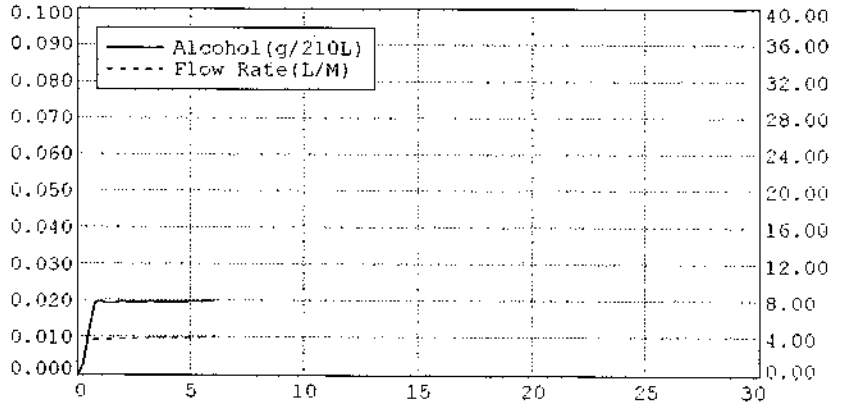
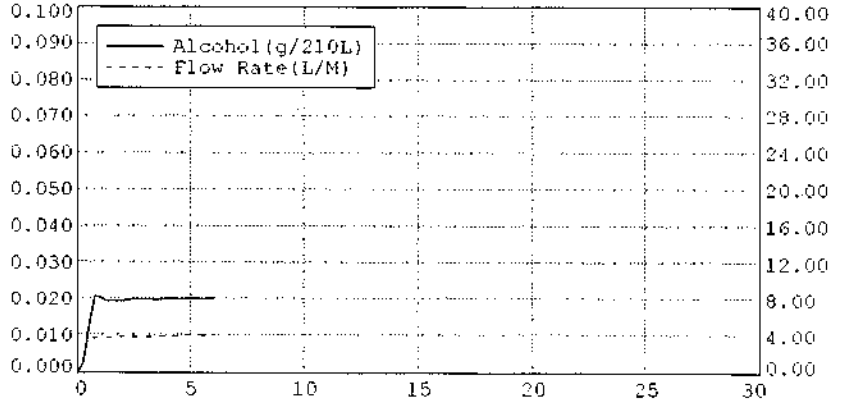
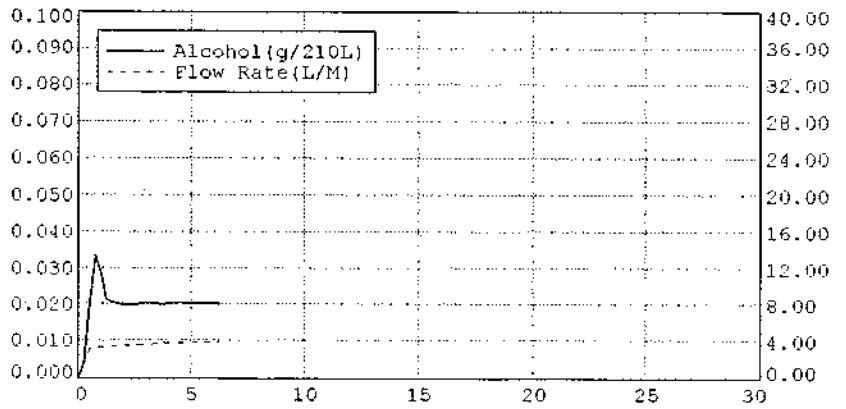
Date: 03/31/2017  
 Time: 12:33:49

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.00: 0.019  
 LOT #: AG616504  
 EXPIRATION: 06/13/2018  
 TANK PRESSURE: 946 psi

BLANK TEST	0.000	12:34
INTERNAL STANDARD	VERIFIED	12:34
EXTERNAL STANDARD	0.022	12:35
BLANK TEST	0.000	12:36
EXTERNAL STANDARD	0.021	12:36
BLANK TEST	0.000	12:37
EXTERNAL STANDARD	0.021	12:37
BLANK TEST	0.000	12:38
EXTERNAL STANDARD	0.021	12:38
BLANK TEST	0.000	12:39
EXTERNAL STANDARD	0.021	12:39
BLANK TEST	0.000	12:40

Average = 0.0212  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100375

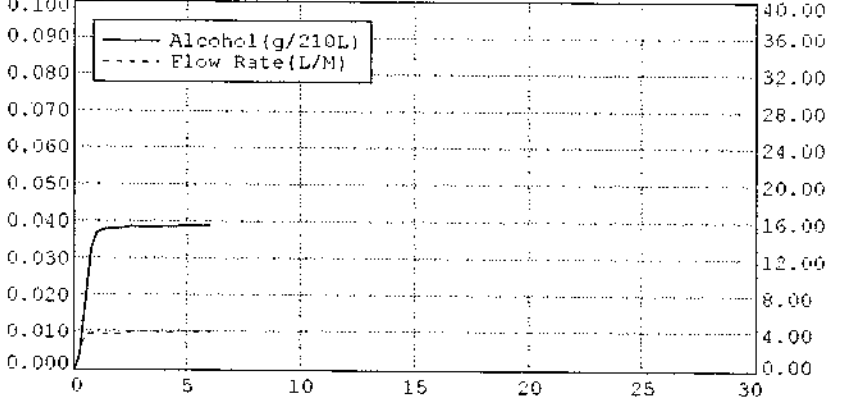
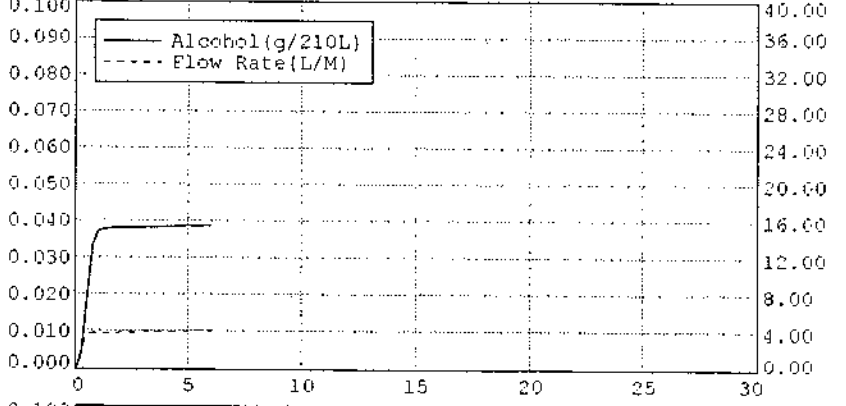
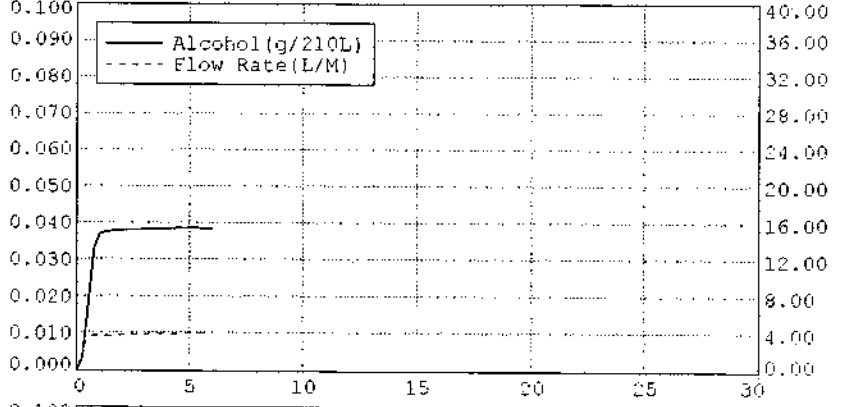
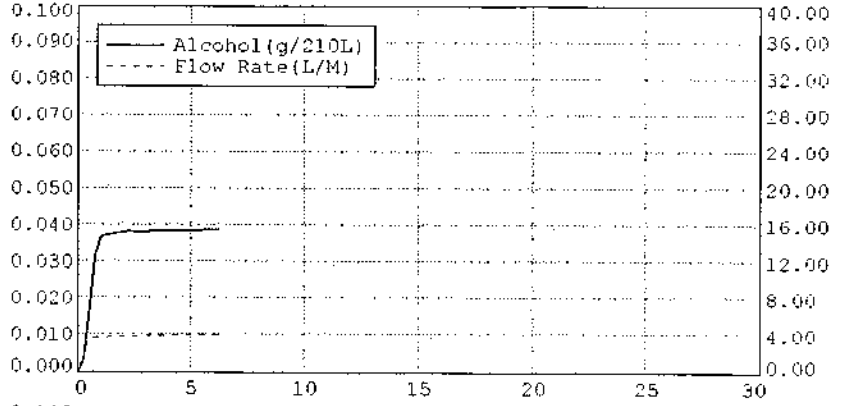
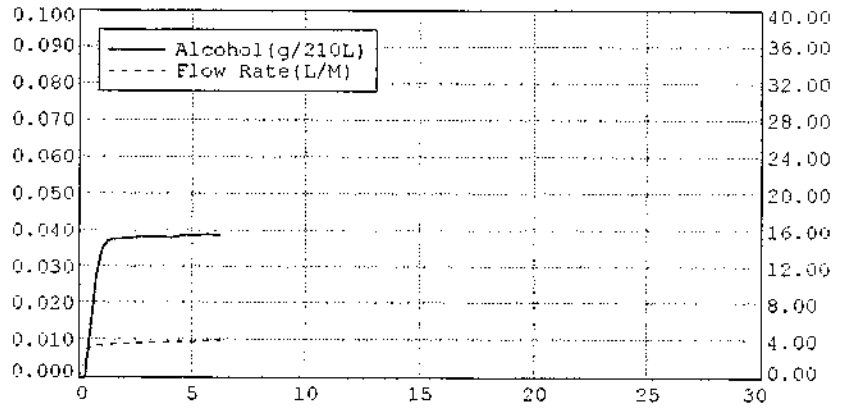
Date: 03/31/2017  
 Time: 12:44:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.00: 0.039  
 LOT #: AG630101  
 EXPIRATION: 10/27/2018  
 TANK PRESSURE: 946 psi

BLANK TEST	0.000	12:45
INTERNAL STANDARD	VERIFIED	12:45
EXTERNAL STANDARD	0.040	12:45
BLANK TEST	0.000	12:46
EXTERNAL STANDARD	0.040	12:46
BLANK TEST	0.000	12:47
EXTERNAL STANDARD	0.040	12:48
BLANK TEST	0.000	12:48
EXTERNAL STANDARD	0.040	12:49
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.040	12:50
BLANK TEST	0.000	12:51

Average = 0.0400  
 Std Dev = 0.0000





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

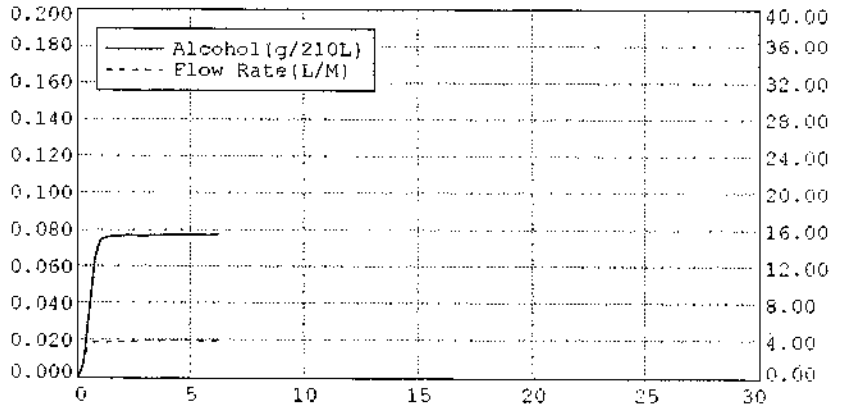
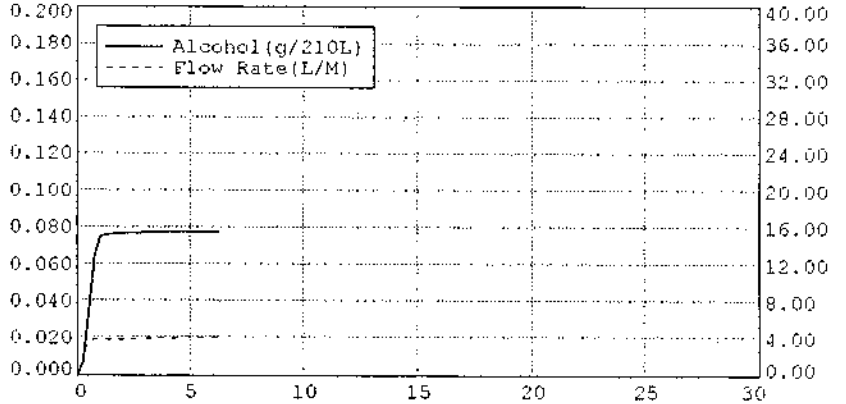
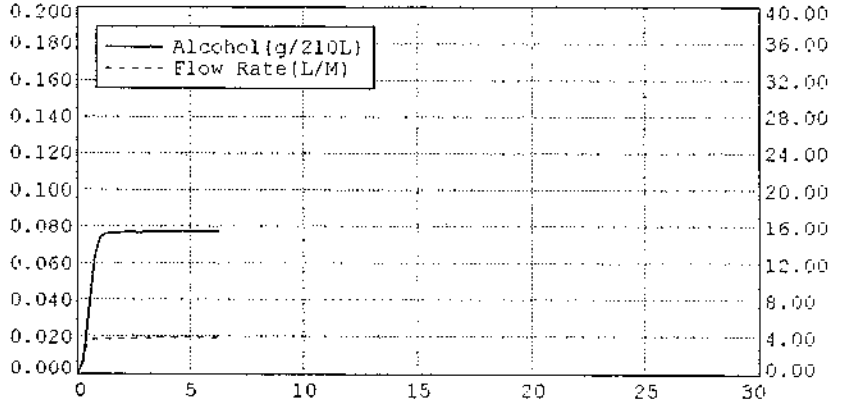
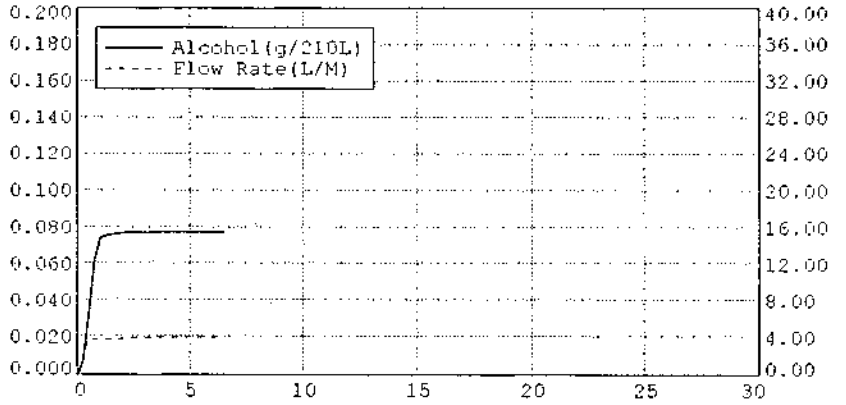
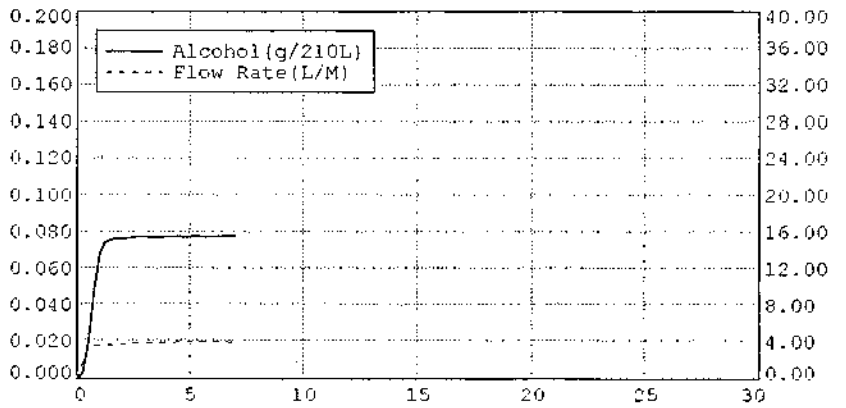
Date: 03/31/2017  
Time: 12:53:10

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.00: 0.078  
LOT #: AG608504  
EXPIRATION: 03/25/2018  
TANK PRESSURE: 839 psi

BLANK TEST	0.000	12:54
INTERNAL STANDARD	VERIFIED	12:54
EXTERNAL STANDARD	0.079	12:54
BLANK TEST	0.000	12:55
EXTERNAL STANDARD	0.079	12:55
BLANK TEST	0.000	12:56
EXTERNAL STANDARD	0.078	12:56
BLANK TEST	0.000	12:57
EXTERNAL STANDARD	0.078	12:57
BLANK TEST	0.000	12:58
EXTERNAL STANDARD	0.079	12:59
BLANK TEST	0.000	12:59

Average = 0.0786  
Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100375

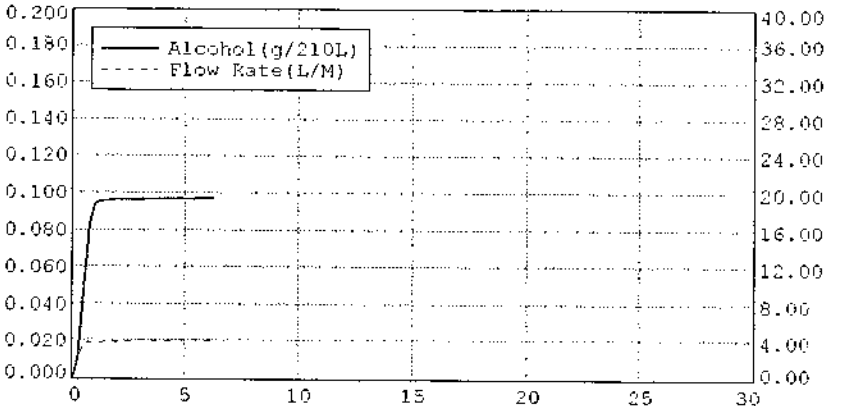
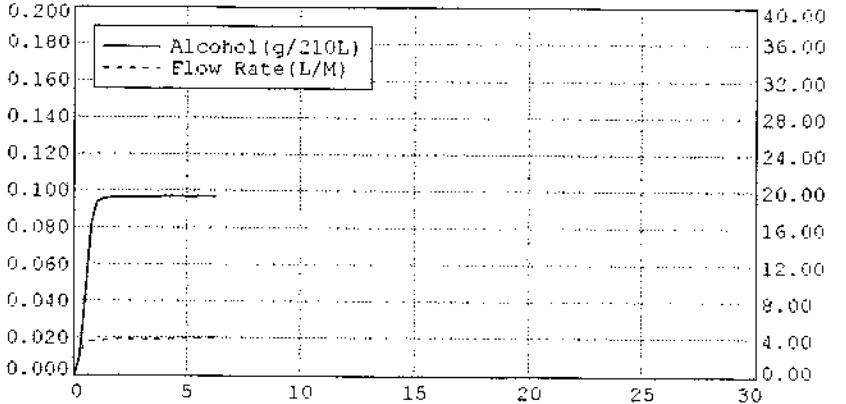
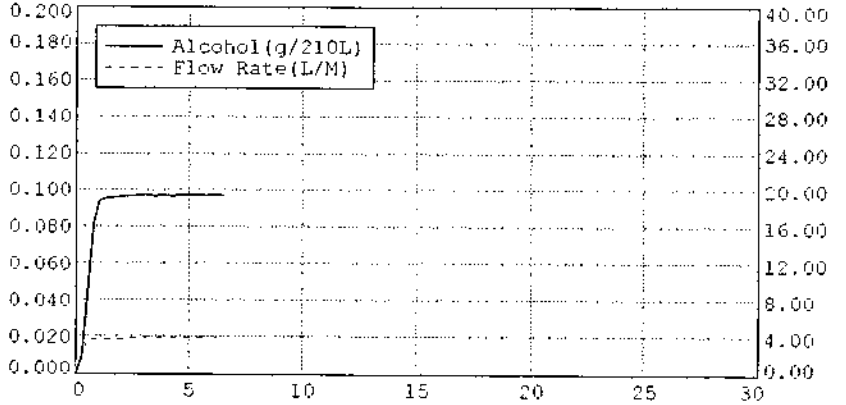
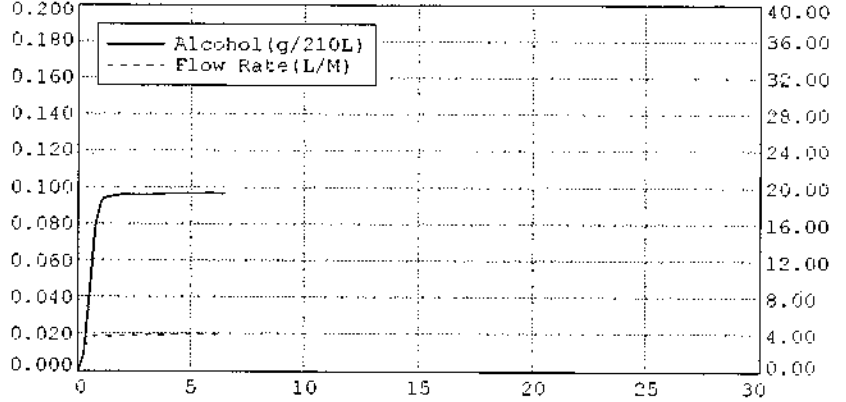
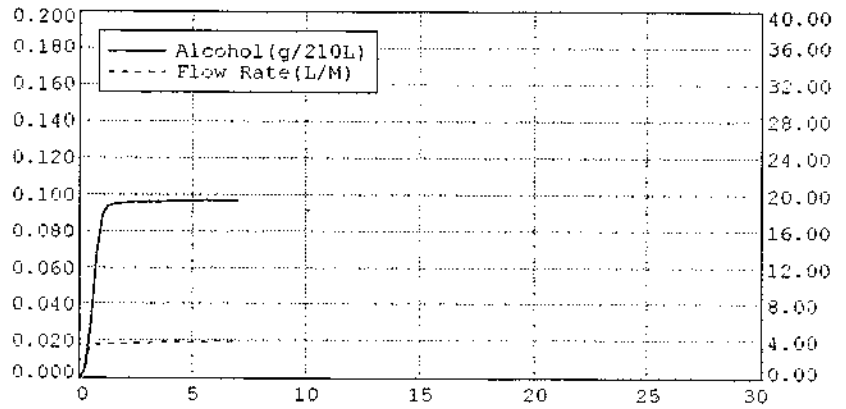
Date: 03/31/2017  
 Time: 13:03:30

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.00: 0.097  
 LOT #: AG629304  
 EXPIRATION: 10/19/2018  
 TANK PRESSURE: 888 psi

BLANK TEST	0.000	13:04
INTERNAL STANDARD	VERIFIED	13:04
EXTERNAL STANDARD	0.098	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.097	13:06
BLANK TEST	0.000	13:06
EXTERNAL STANDARD	0.098	13:07
BLANK TEST	0.000	13:08
EXTERNAL STANDARD	0.098	13:08
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.098	13:09
BLANK TEST	0.000	13:10

Average = 0.0978  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

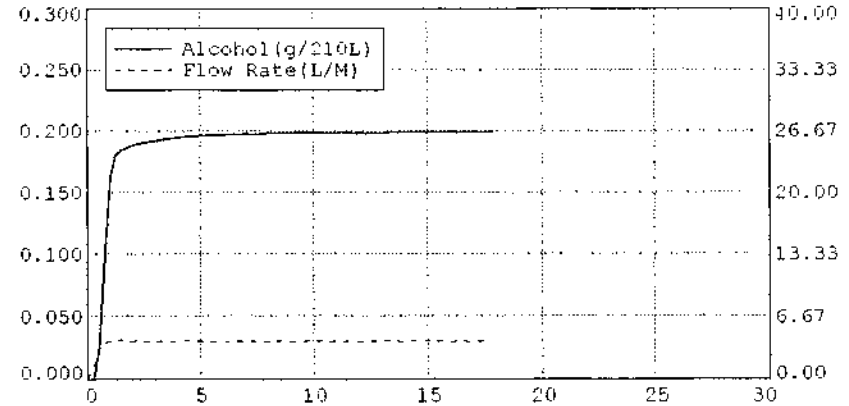
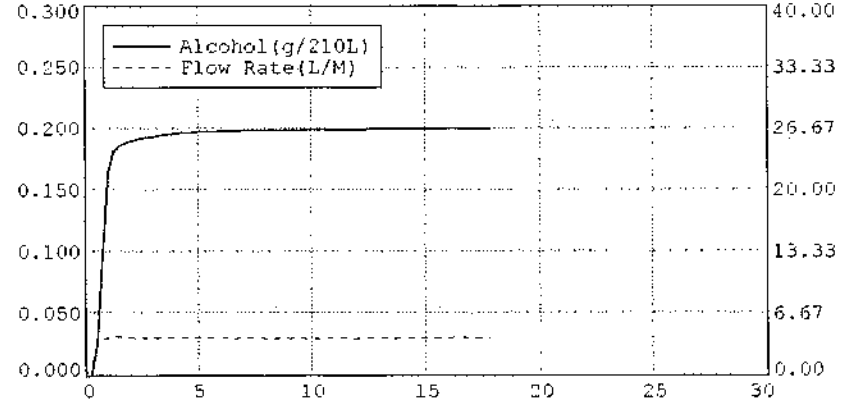
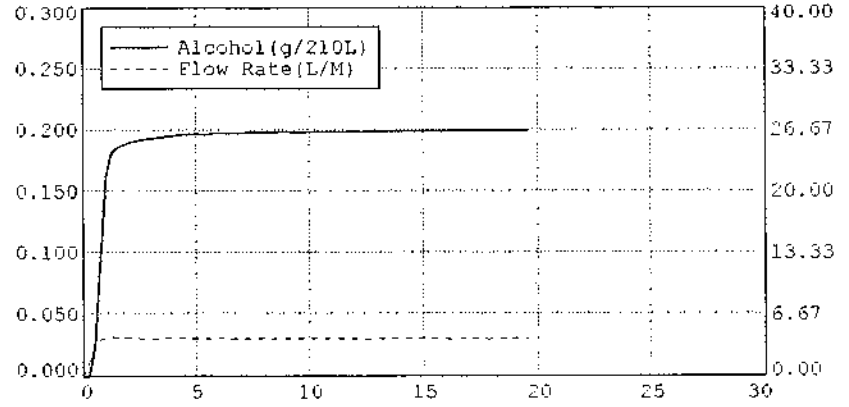
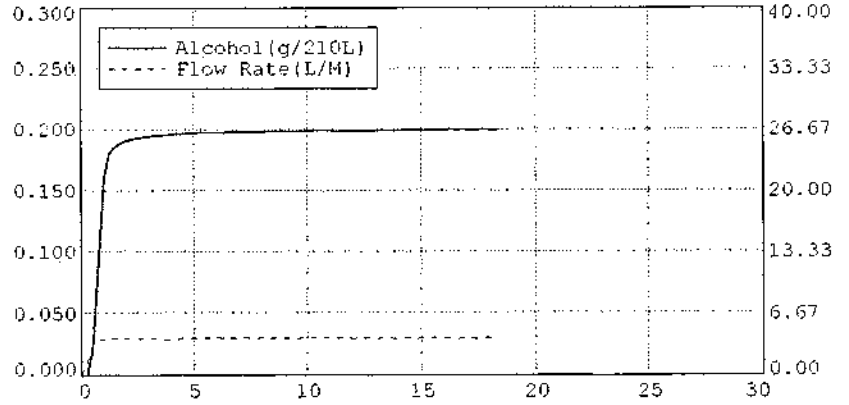
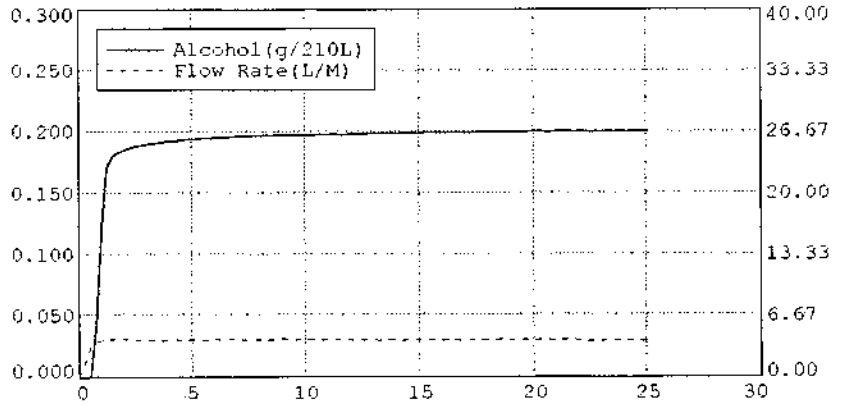
Alaska Department of Public Safety  
 DATAMASTER dmt: 100375

Date: 03/31/2017  
 Time: 13:12:51

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.200  
 LOT #: GUTH 17090  
 EXPIRATION: 02/24/2019

BLANK TEST	0.000	13:14
INTERNAL STANDARD	VERIFIED	13:14
EXTERNAL STANDARD	0.201	13:15
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.200	13:16
BLANK TEST	0.000	13:17
EXTERNAL STANDARD	0.200	13:17
BLANK TEST	0.000	13:18
EXTERNAL STANDARD	0.200	13:19
BLANK TEST	0.000	13:20
EXTERNAL STANDARD	0.200	13:20
BLANK TEST	0.000	13:21

Average = 0.2002  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100375

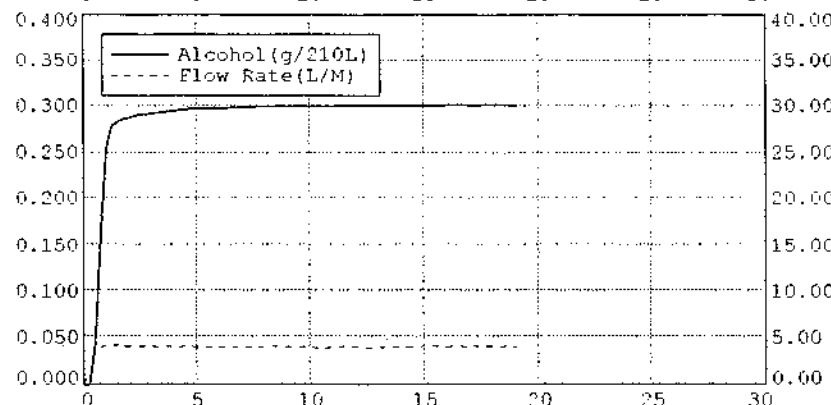
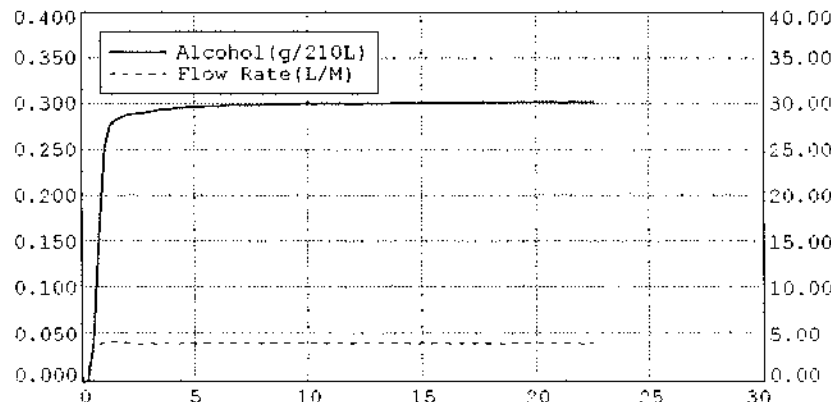
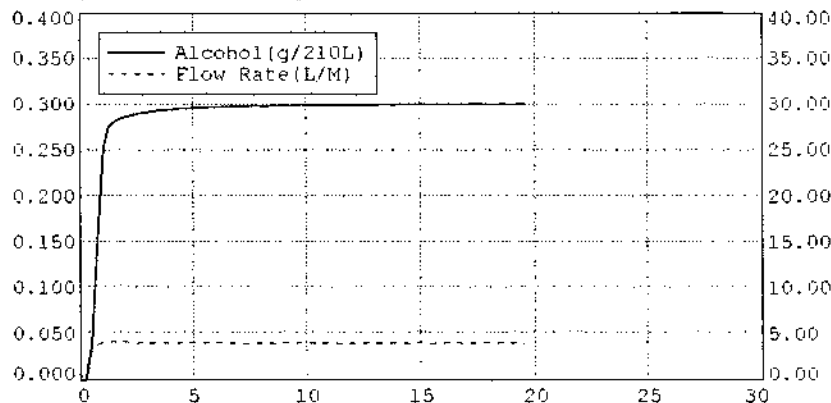
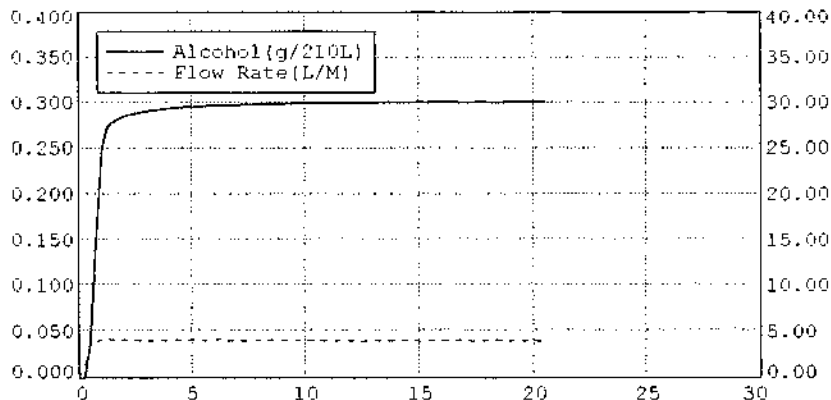
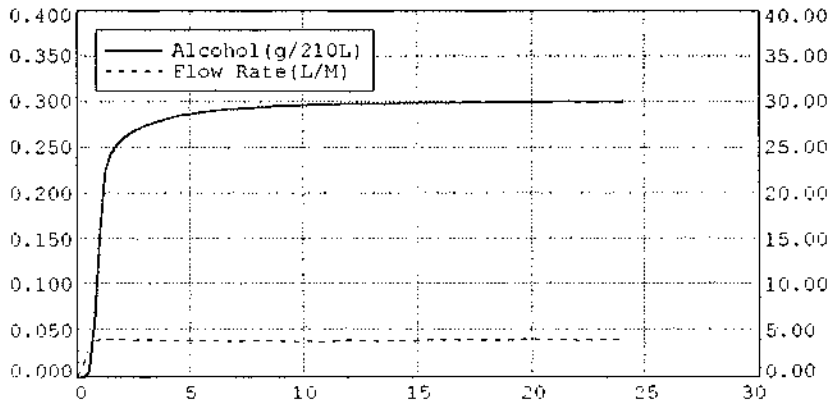
Date: 03/31/2017  
 Time: 13:23:24

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:24
INTERNAL STANDARD	VERIFIED	13:24
EXTERNAL STANDARD	0.300	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.301	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.300	13:27
BLANK TEST	0.000	13:28
EXTERNAL STANDARD	0.301	13:29
BLANK TEST	0.000	13:30
EXTERNAL STANDARD	0.301	13:30
BLANK TEST	0.000	13:31

Average = 0.3006  
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 03/31/2017  
Time: 13:35:50

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

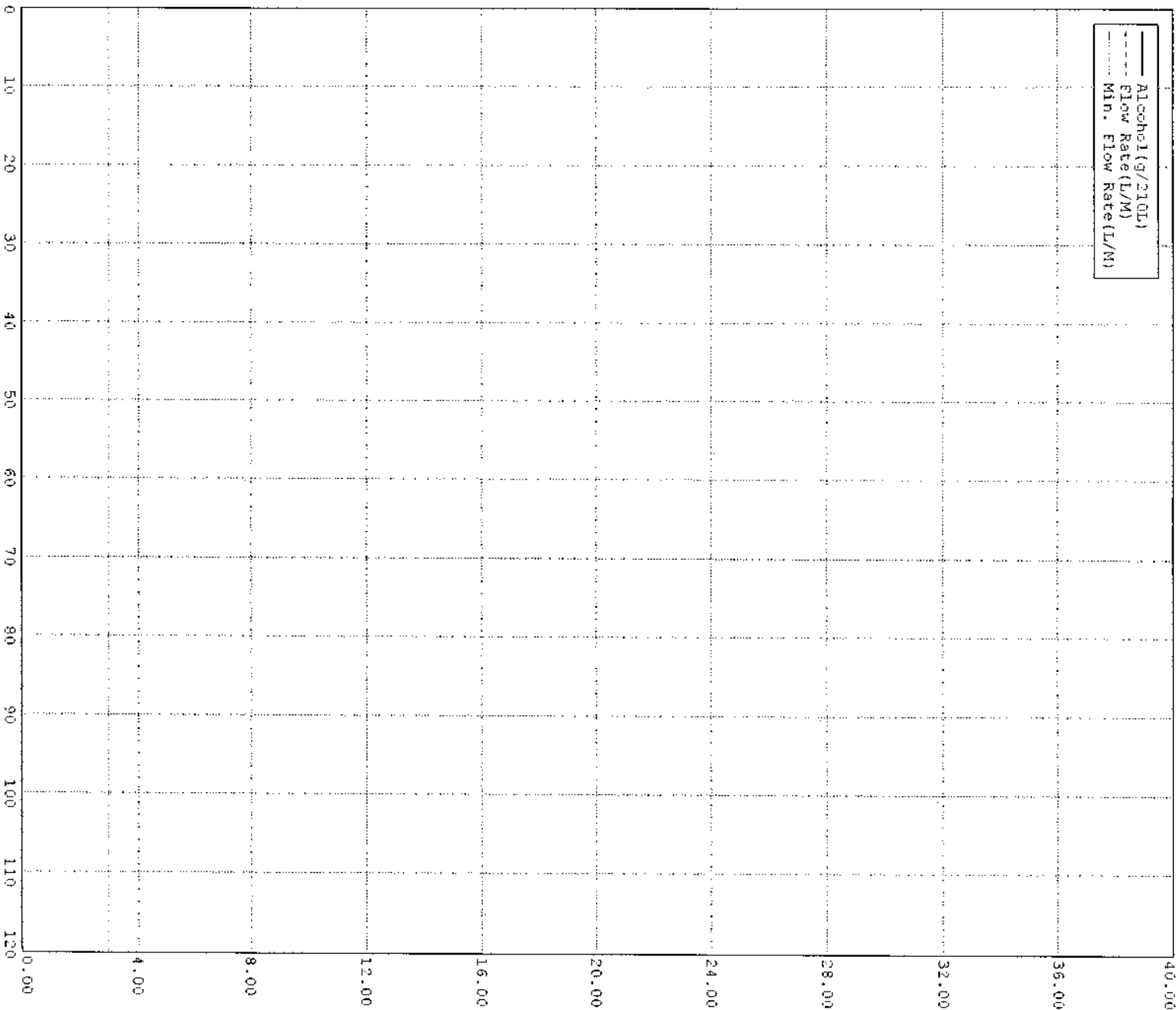
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.01: 0.078  
LOT #: AG608504  
EXPIRATION: 03/25/2018

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	INCOMPLETE	13:41

BMB



SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dmt: 100375

Date: 03/31/2017  
Time: 14:12:19

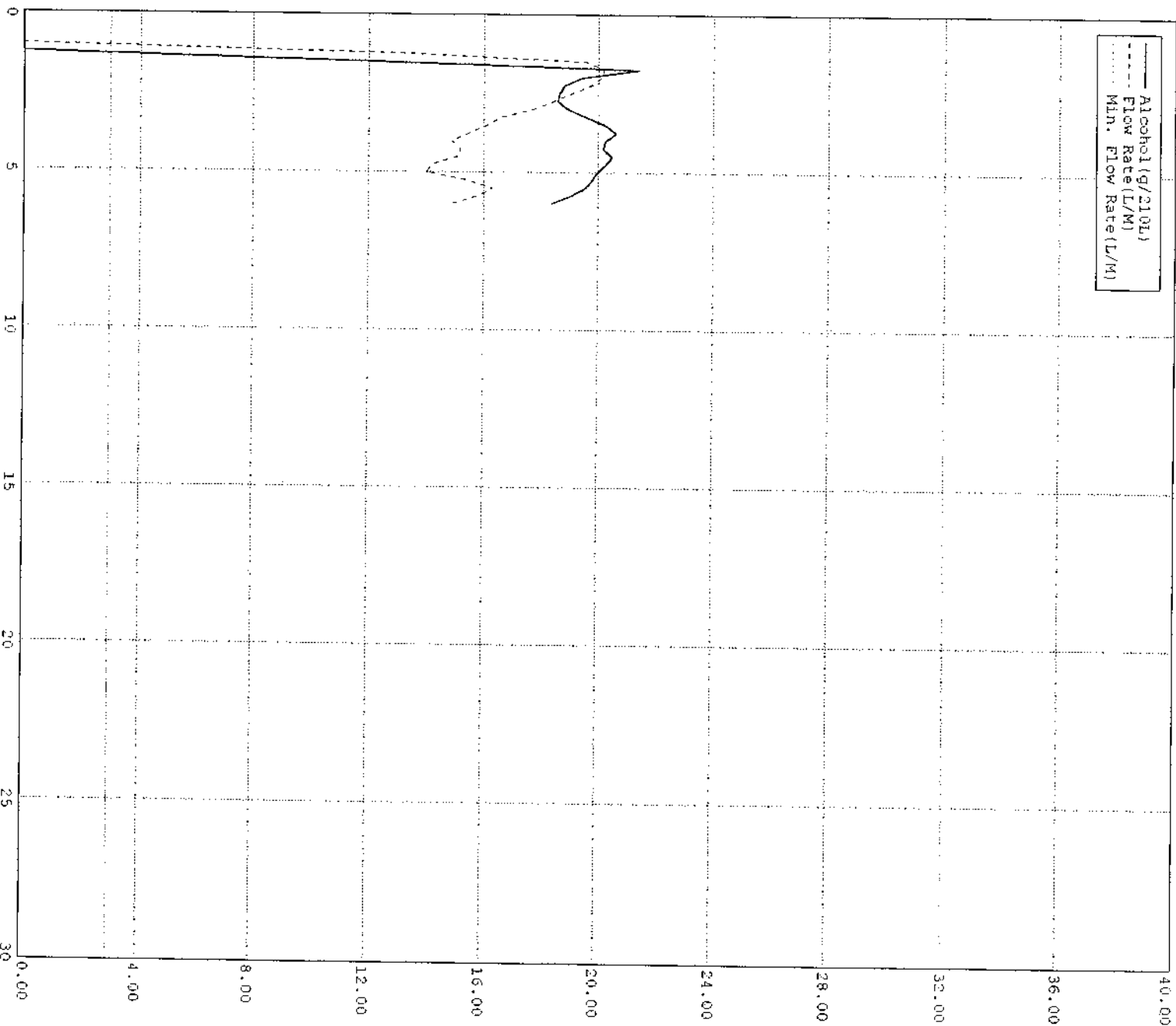
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.00: 0.078  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	14:13
BLANK TEST	0.000	14:13
INTERNAL STANDARD	VERIFIED	14:14
EXTERNAL STANDARD	0.078	14:14
BLANK TEST	0.000	14:15
SUBJECT SAMPLE	INVALID	14:15



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 03/31/2017  
Time: 13:53:58

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

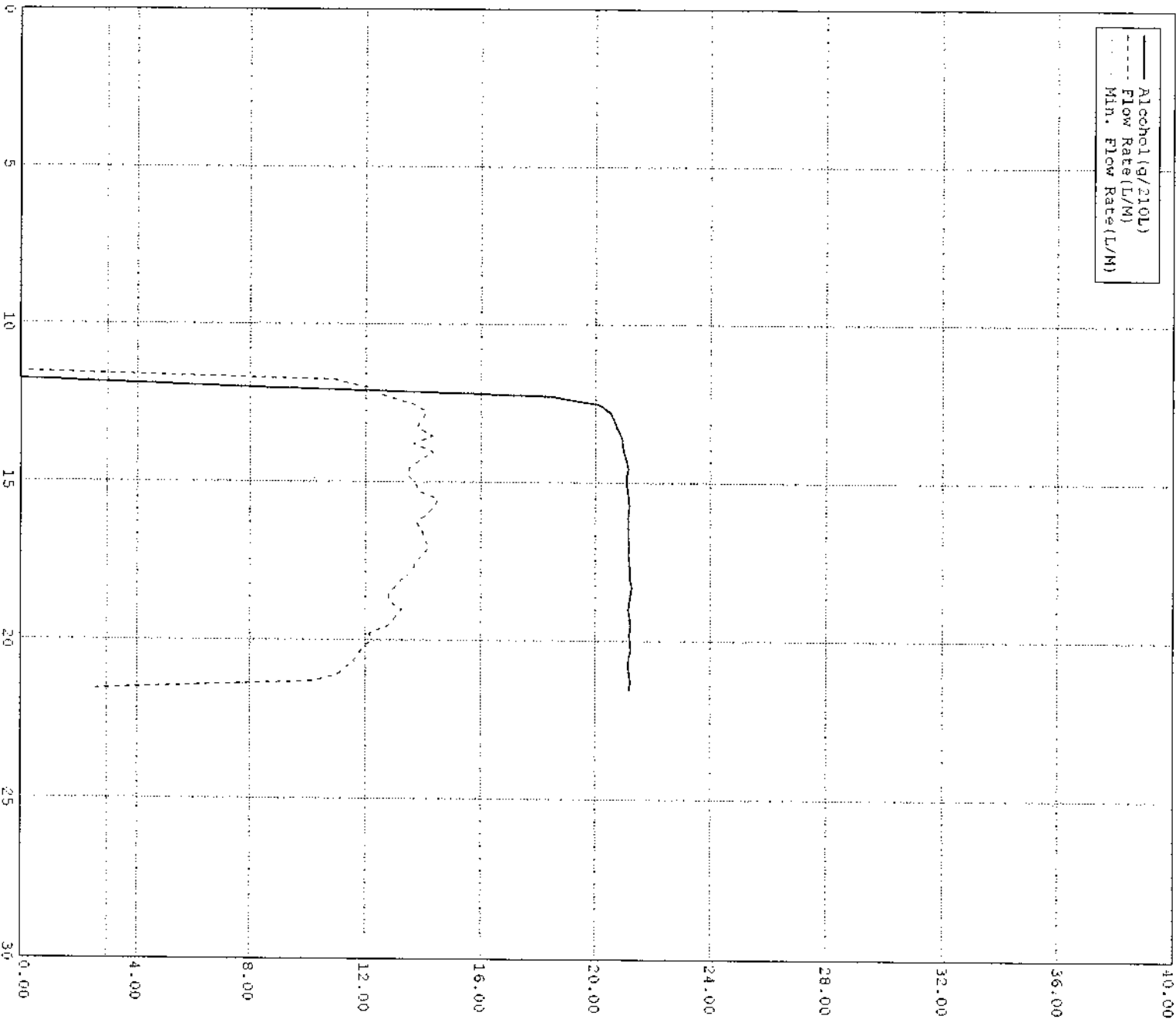
EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.02: 0.078  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	13:54
BLANK TEST	0.000	13:55
INTERNAL STANDARD	VERIFIED	13:55
Xq = 0.090 (1.05%)		
EXTERNAL STANDARD	0.078	13:55
X[1] = 0.0780 (-0.0004)	(0.0019)	
BLANK TEST	0.000	13:56
SUBJECT SAMPLE	XXX	13:56
X[1] = 0.1064 (-0.0164)	(0.0008)	

Interference Detected

Filter 2 Avg: -0.0002  
Filter 3 Avg: 0.0016  
BMB 3/31/17

BMB



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 03/31/2017  
Time: 13:58:30

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

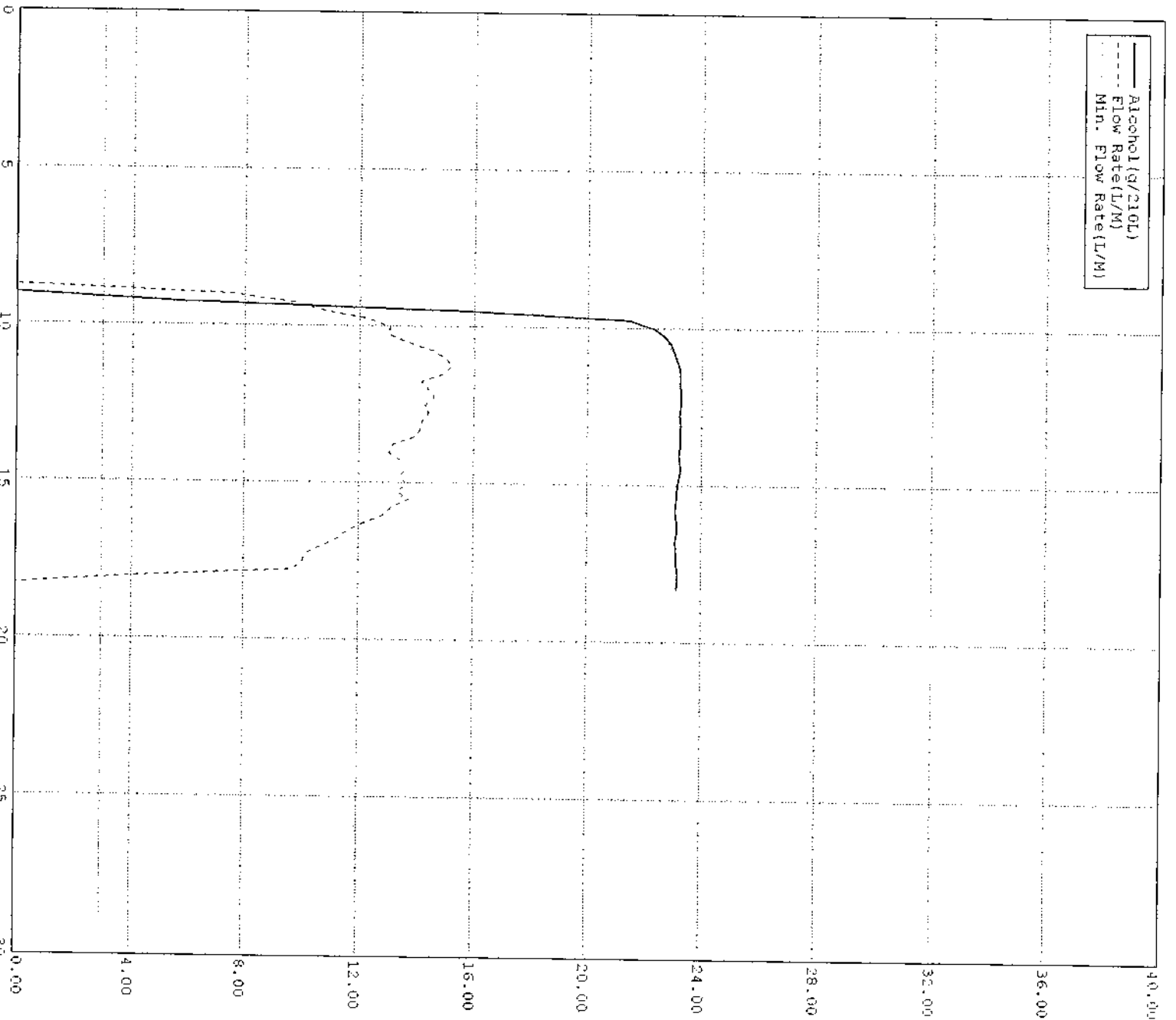
DEPT/AGENCY:  
INTERFERENCE ISOPROPYL  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.02: 0.078  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	13:59
BLANK TEST	0.000	13:59
INTERNAL STANDARD	VERIFIED	14:00
Xq = 0.091 (0.38%)		
EXTERNAL STANDARD	0.078	14:00
X[1] = 0.0782 (0.0003)	(0.0014)	
BLANK TEST	0.000	14:01
SUBJECT SAMPLE	XXX	14:01
X[1] = 0.1161 (-0.0156)	(0.0029)	

Interference Detected

BMB





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 03/31/2017  
Time: 14:03:16

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

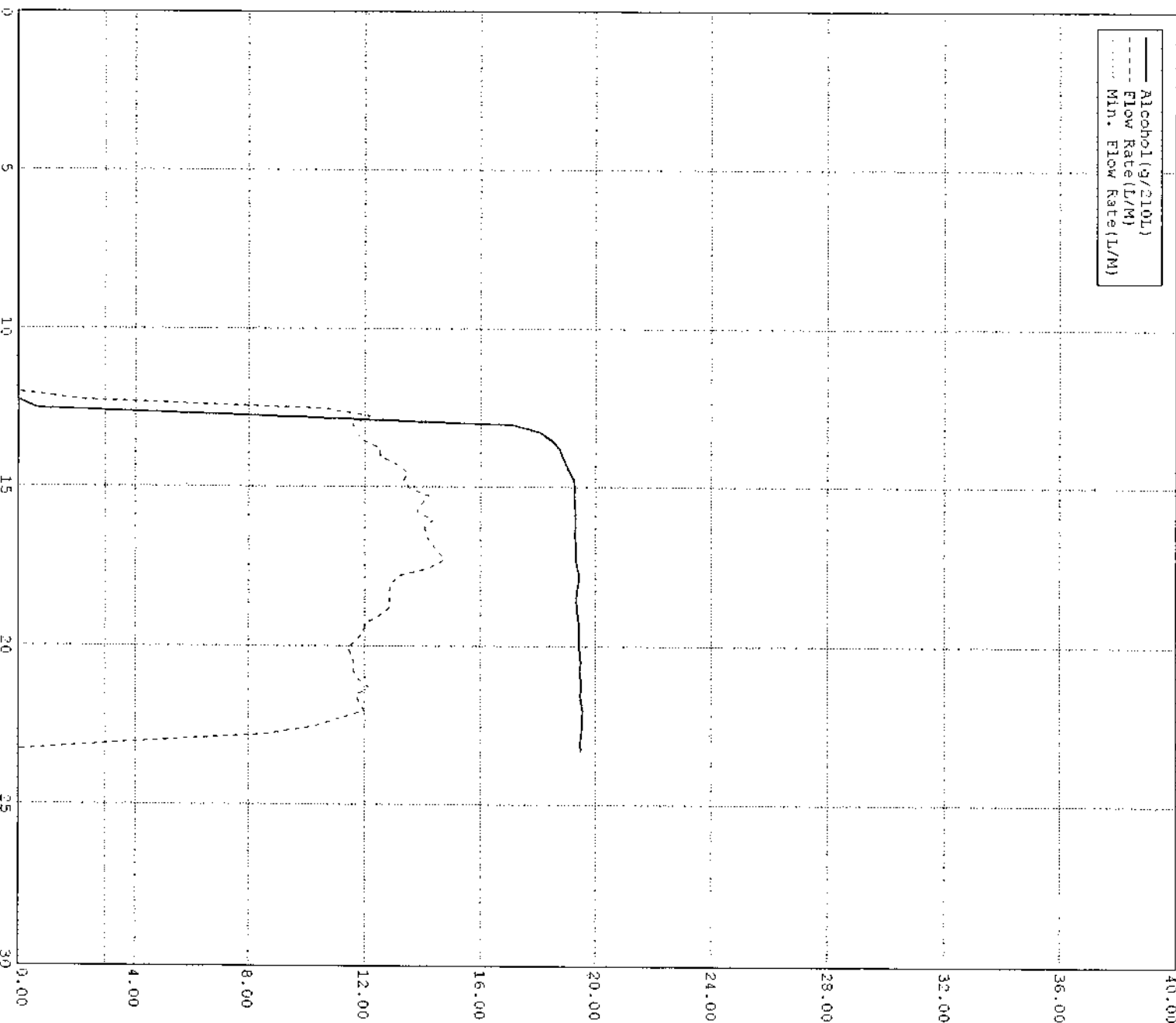
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.01: 0.078  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	14:04
BLANK TEST	0.000	14:04
INTERNAL STANDARD	VERIFIED	14:04
Xq = 0.091 (0.29%)		
EXTERNAL STANDARD	0.078	14:04
X[1] = 0.0782 (-0.0003)	(0.0015)	
BLANK TEST	0.000	14:05
SUBJECT SAMPLE (Vcl=2.22L)	0.097	14:06
X[1] = 0.0978 (0.0006)	(0.0007)	
BLANK TEST	0.000	14:07
EXTERNAL STANDARD	0.078	14:07
X[1] = 0.0777 (-0.0004)	(0.0014)	
BLANK TEST	0.000	14:08

BMB



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 03/31/2017  
Time: 13:42:55

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

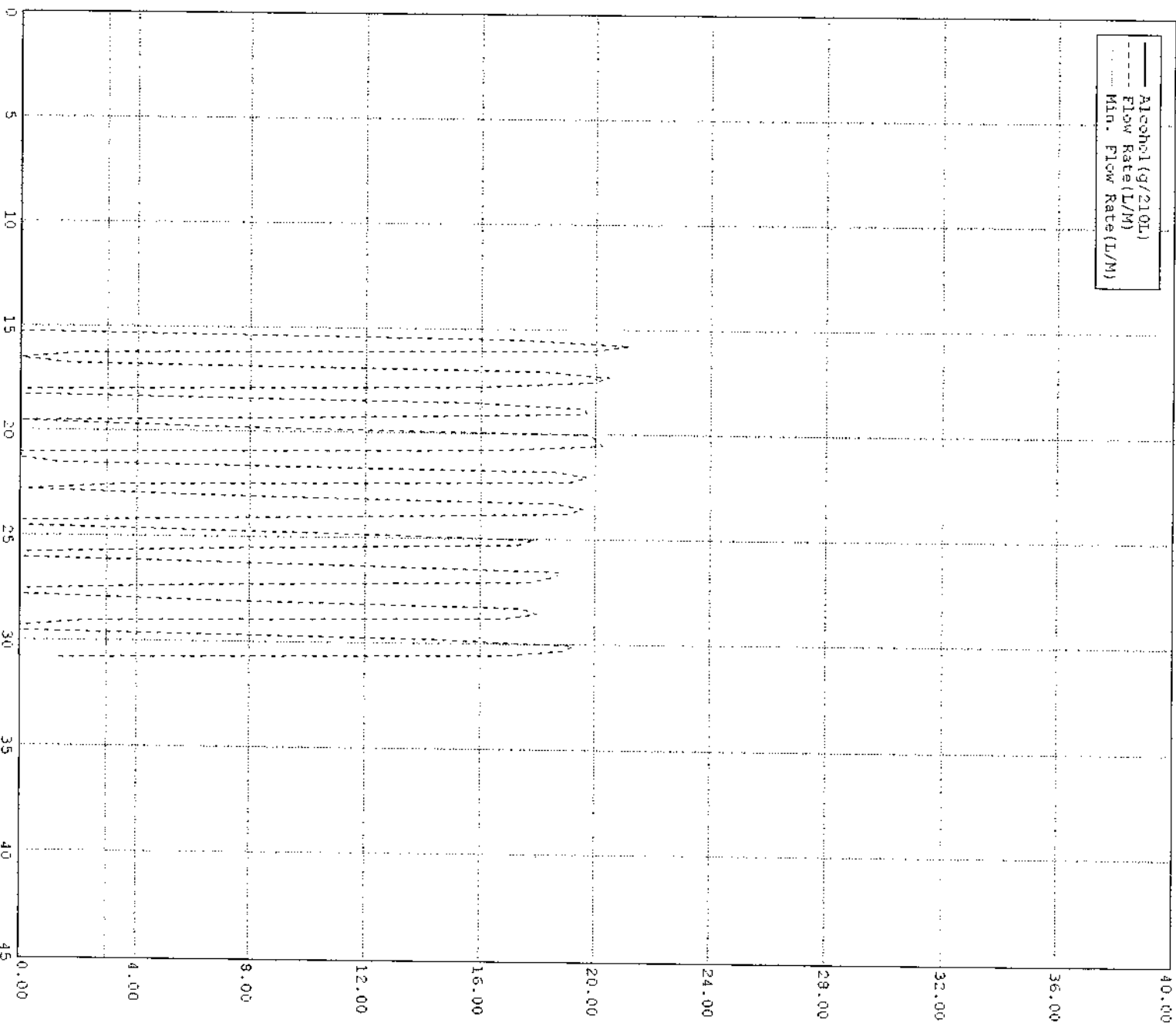
DEPT/AGENCY:  
MAXIMUM ATTEMPTS EXCEEDED  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.01: 0.078  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	13:44
BLANK TEST	0.000	13:44
INTERNAL STANDARD	VERIFIED	13:44
EXTERNAL STANDARD	0.078	13:44
BLANK TEST	0.000	13:45
SUBJECT SAMPLE	XXX	13:46

Maximum Attempts Exceeded

BMB



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 03/31/2017  
Time: 14:22:38

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

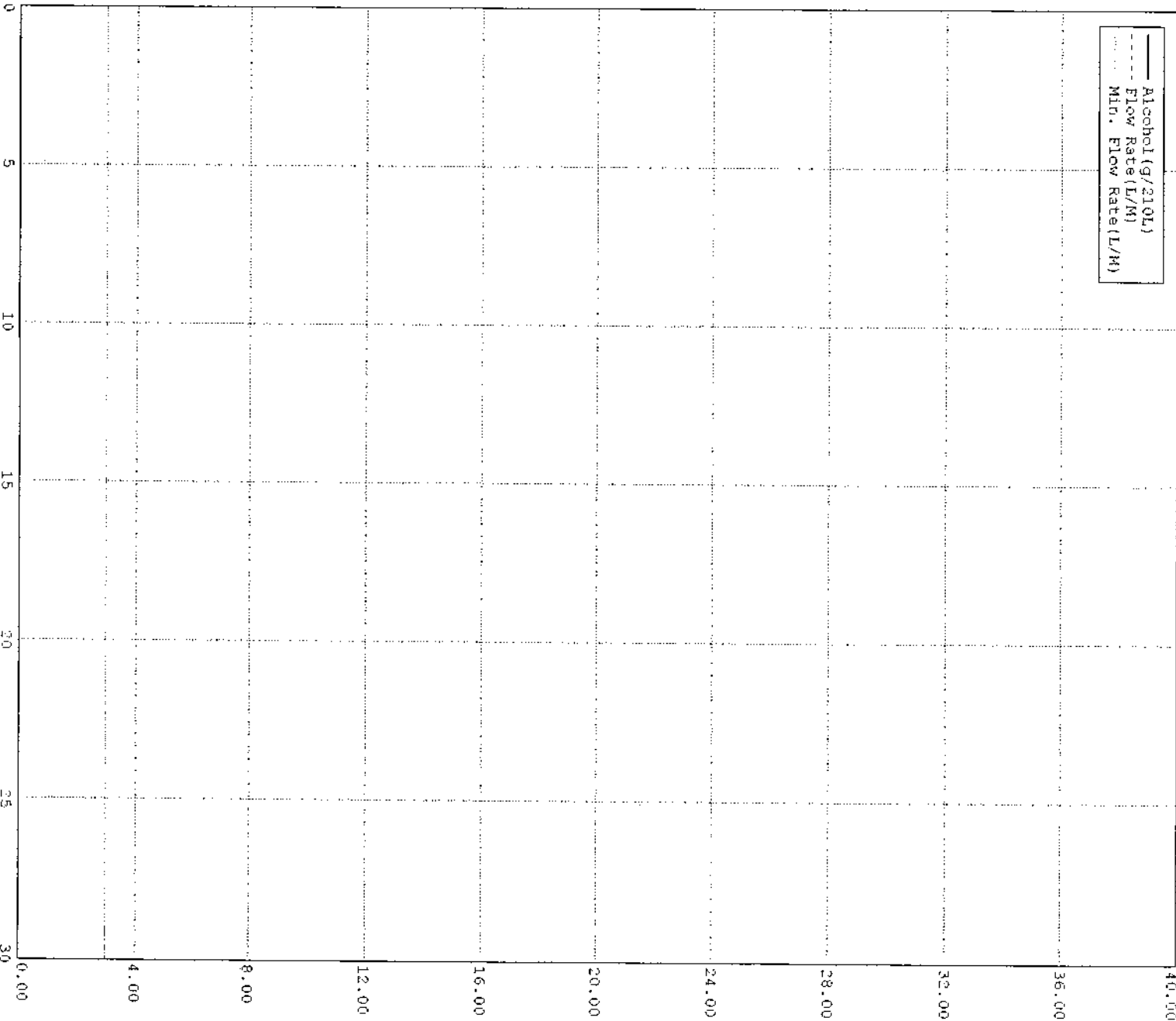
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.01: 0.078  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK  
BLANK TEST PASSED 14:23  
INTERNAL STANDARD VERIFIED 14:23  
EXTERNAL STANDARD 0.078 14:24  
BLANK TEST 0.000 14:25

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100375

Date: 03/31/2017  
Time: 14:36:41

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 29.00: 0.078  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	14:38
BLANK TEST	0.000	14:38
INTERNAL STANDARD	VERIFIED	14:38
EXTERNAL STANDARD	0.079	14:38
BLANK TEST	0.000	14:39
SUBJECT SAMPLE (Vol=2.24L)	0.000	14:39
BLANK TEST	0.000	14:40
EXTERNAL STANDARD	0.078	14:40
BLANK TEST	0.000	14:41

BRN

