

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 100416 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 1.5 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 AG1634001 Exp 12/5/18
- 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 17000 Level 0.100 Exp 2/14/19

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

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 3/31/17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 03/31/2017
Time: 10:04:28

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 = 45.3°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.58 V PASSED
(0.96 V - 2.24 V)
Cooler Voltage = 1.64 V PASSED
(0.98 V - 2.30 V)
Bias Voltage = 82 V PASSED
(49 V - 115 V)
Chopper Freq = 528 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.0 in

PUMP INFO

Flow Rate = 4.619 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
(0.002 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD PASSED

Xq = 0.087 0.00% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100416

Date: 03/31/2017

Time: 10:53 AM

Temperatures (°C)

Sample Cell: 48.9°C

Breath Tube: 46.4°C

Current Barometer 29.0 in

Volume (Ltr) 1.60

Settings

Lamp: 1.60 V

Bias: 82 V

Cooler: 1.63 V

Chopper: 528 Hz

Voltages (V)

Flow: 1.07 V

Detector: 0.001 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 12/08/2015
Time: 14:10:05

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

Ca = 0.1000
CAL = 0.952391 0.800 <= CAL < 1.200
b1 = 0.0006 0.0000 <= b1 < 0.0040
b2 = 0.0084 0.0010 <= b2 < 0.0100
b3 = 0.0005 0.0000 <= b3 < 0.0040
Xq = 0.0873 0.0500 <= Xq < 0.2000
a21 = 1.165000 1.050 <= a21 < 1.300
a31 = 0.547468 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 03/31/2017
Time: 11:59:34

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

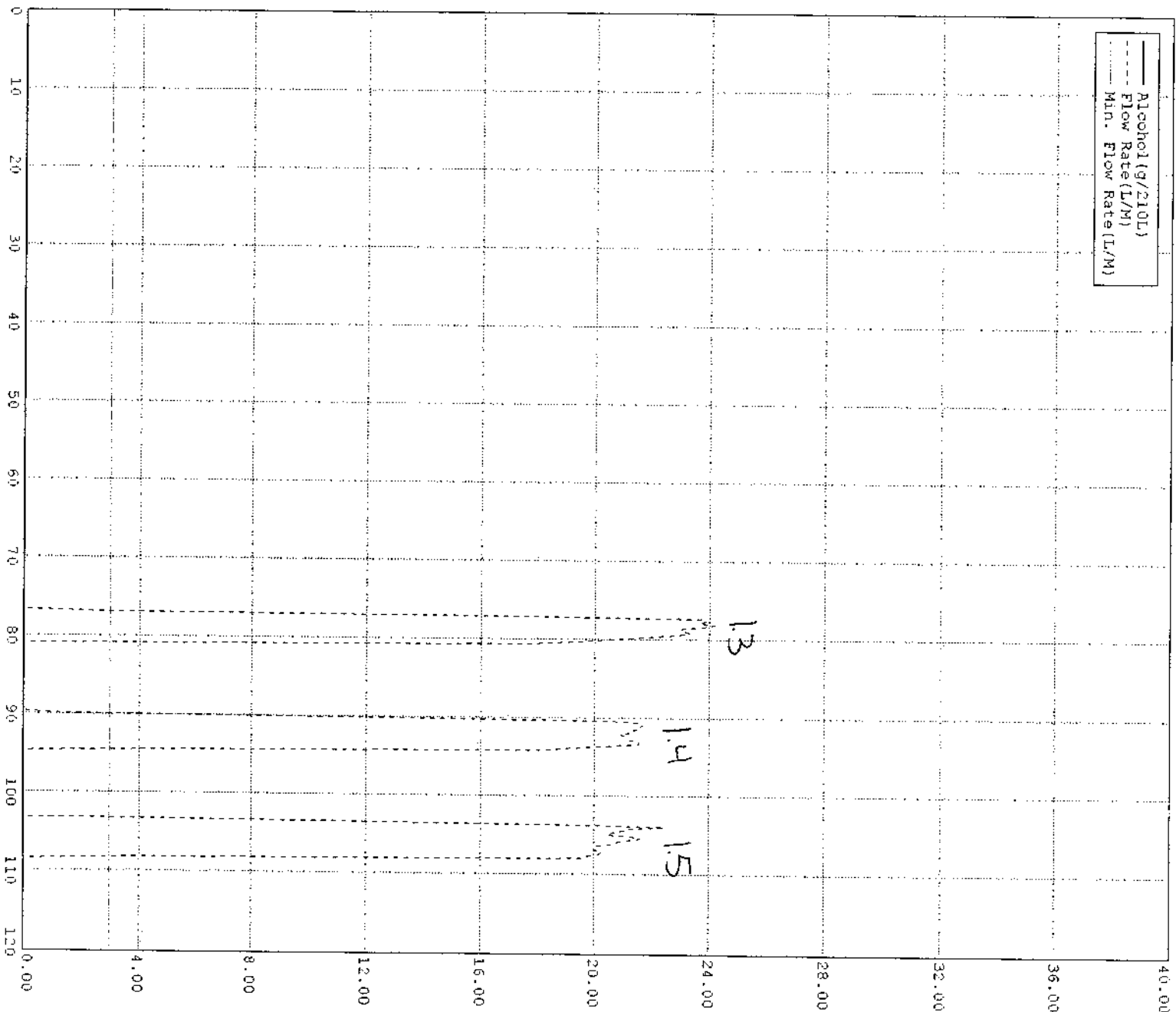
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.00: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	12:00
BLANK TEST	0.000	12:00
INTERNAL STANDARD	VERIFIED	12:00
EXTERNAL STANDARD	0.075	12:01
BLANK TEST	0.000	12:02
SUBJECT SAMPLE (Vol=1.61L)	0.000	12:03
BLANK TEST	0.000	12:04
EXTERNAL STANDARD	0.076	12:05
BLANK TEST	0.000	12:05

Handwritten signature: BMB



LINEARITY CHECK

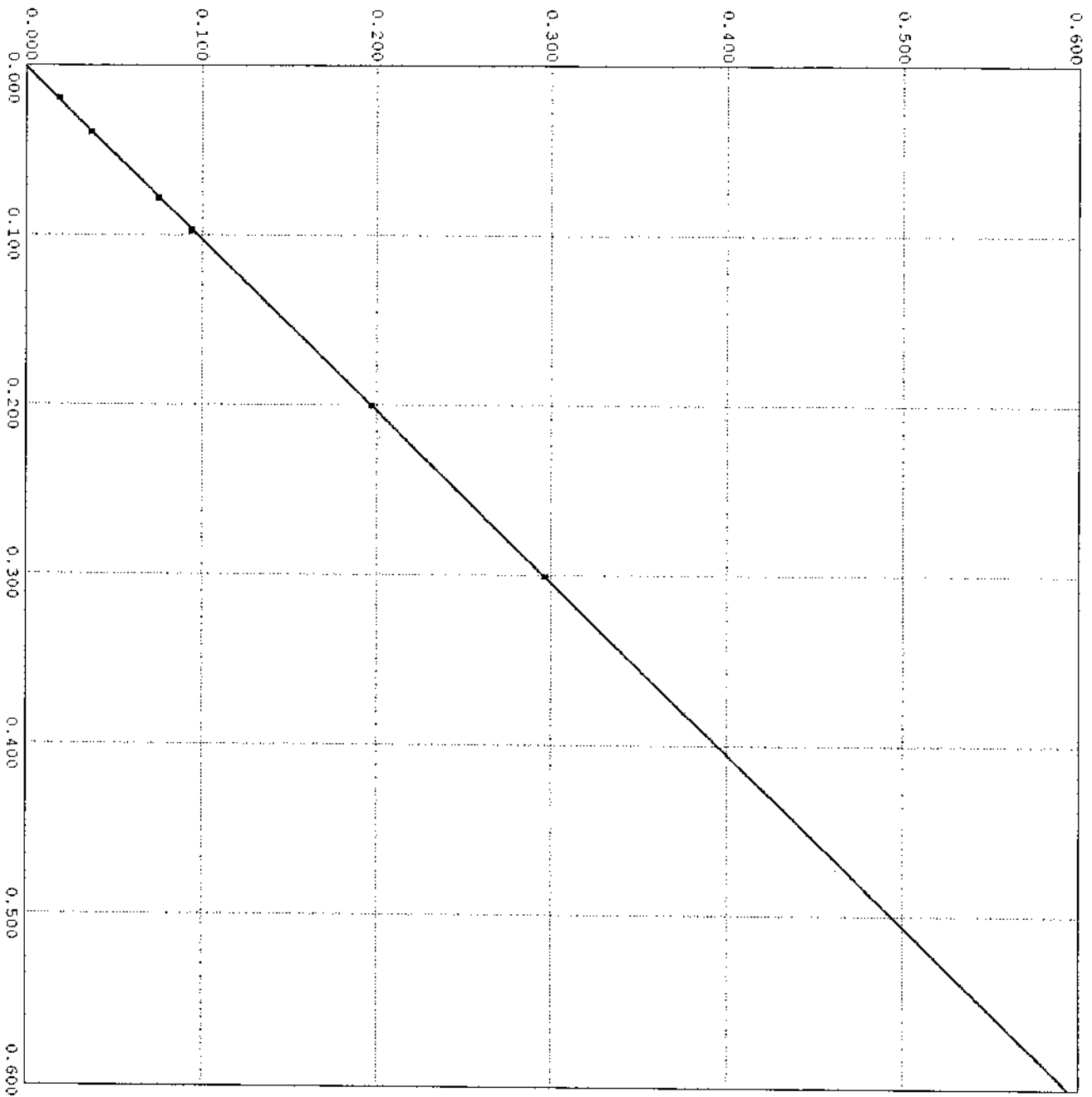
Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 03/31/2017
Time: 12:37:49

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.019	0.0196	0.0005
0.039	0.0380	0.0000
0.078	0.0760	0.0000
0.097	0.0950	0.0000
0.200	0.1978	0.0004
0.300	0.2972	0.0004

SLOPE = 0.991194
R² = 0.999950



BBMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100416

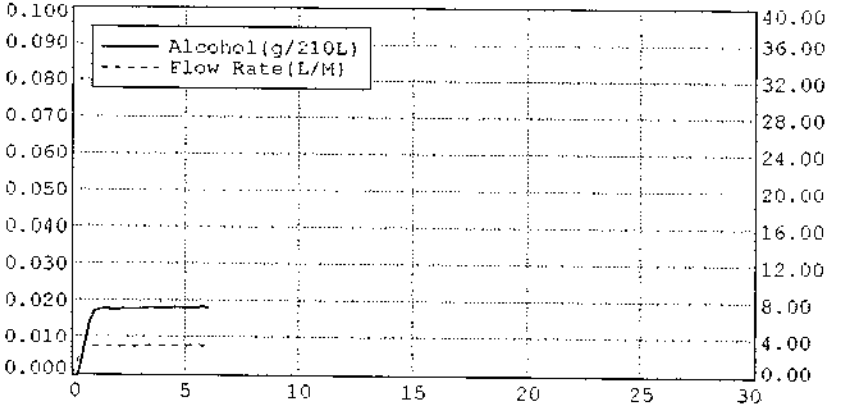
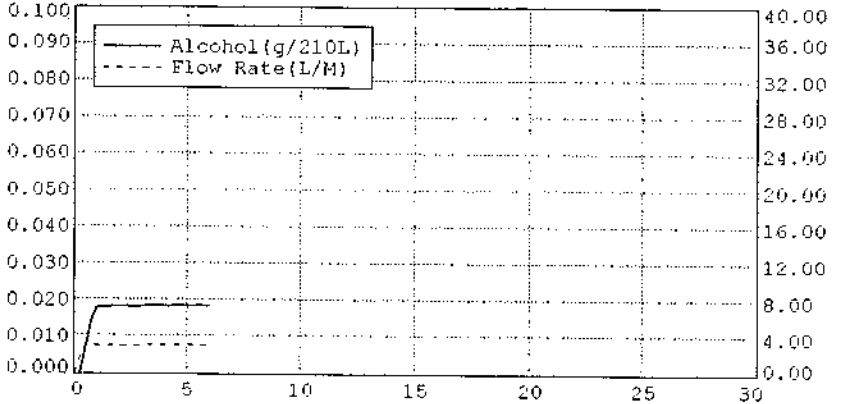
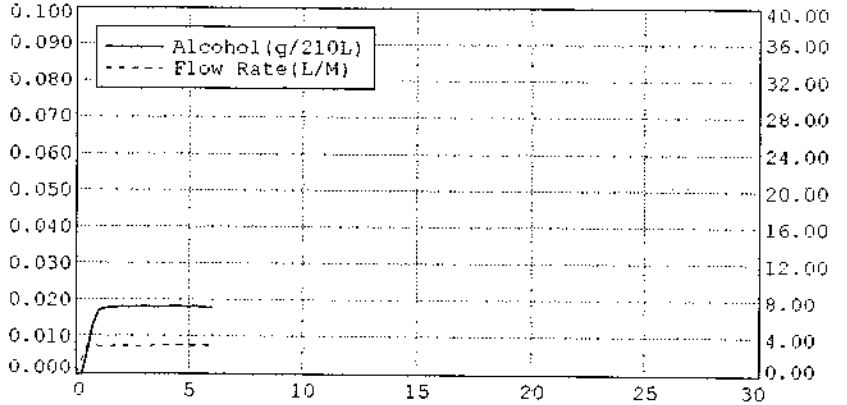
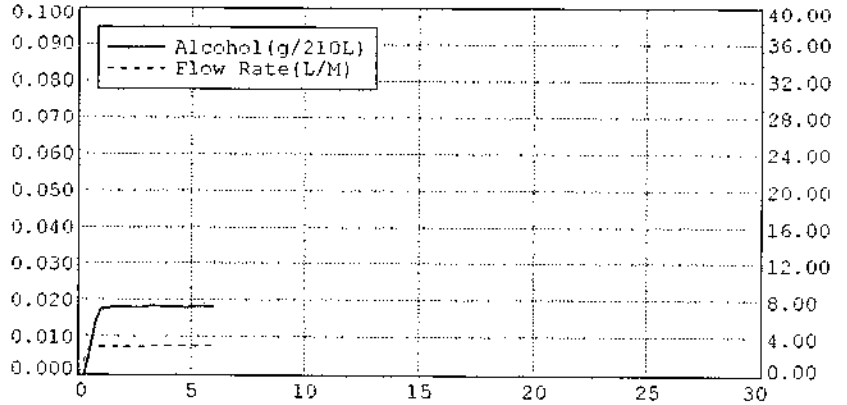
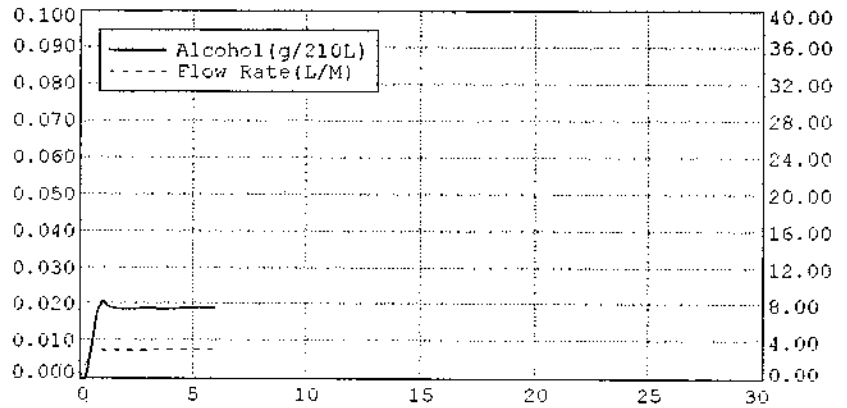
Date: 03/31/2017
 Time: 12:37:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 28.99: 0.019
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 921 psi

BLANK TEST	0.000	12:38
INTERNAL STANDARD	VERIFIED	12:39
EXTERNAL STANDARD	0.020	12:39
BLANK TEST	0.000	12:40
EXTERNAL STANDARD	0.020	12:40
BLANK TEST	0.000	12:41
EXTERNAL STANDARD	0.019	12:41
BLANK TEST	0.000	12:42
EXTERNAL STANDARD	0.020	12:42
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.019	12:43
BLANK TEST	0.000	12:44

Average = 0.0196
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100416

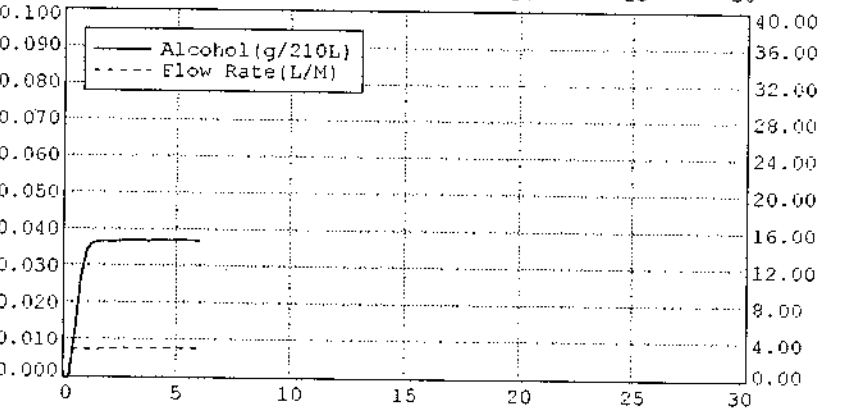
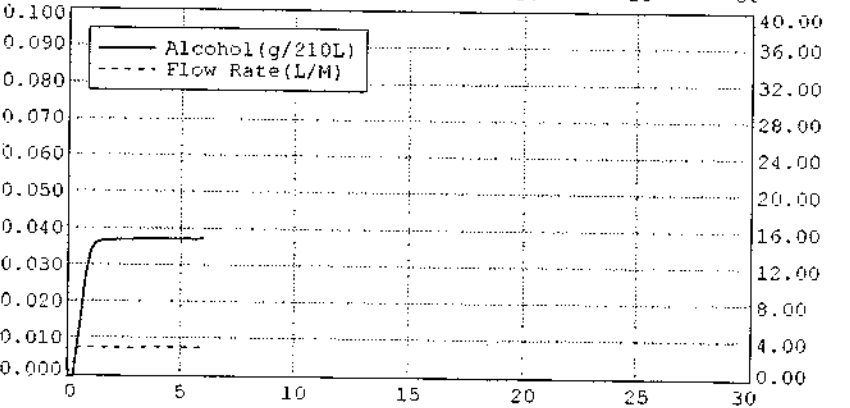
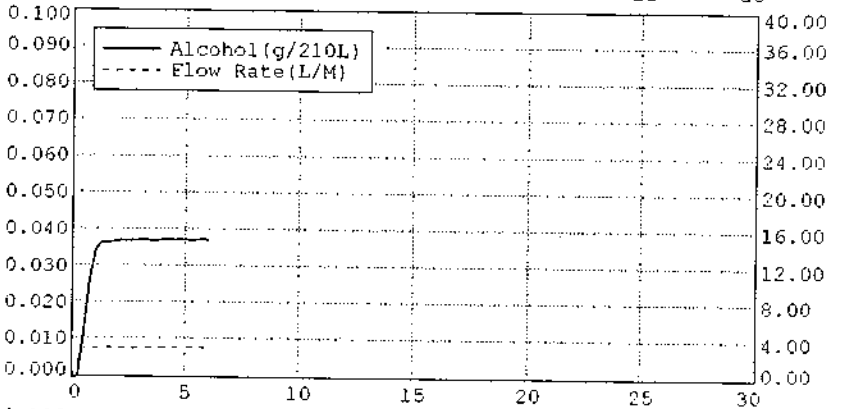
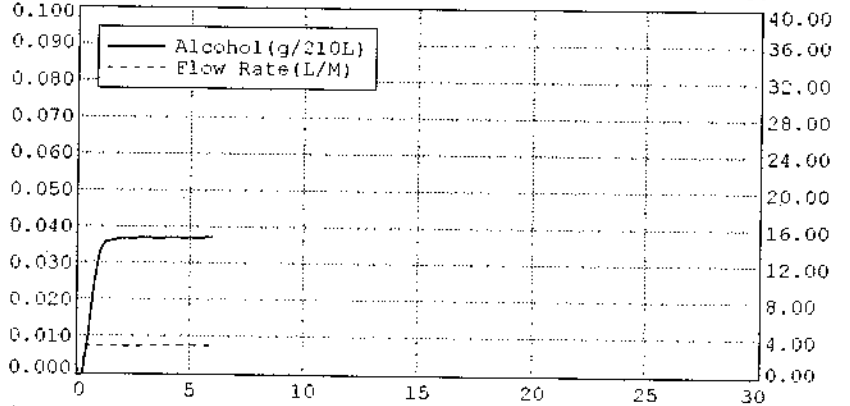
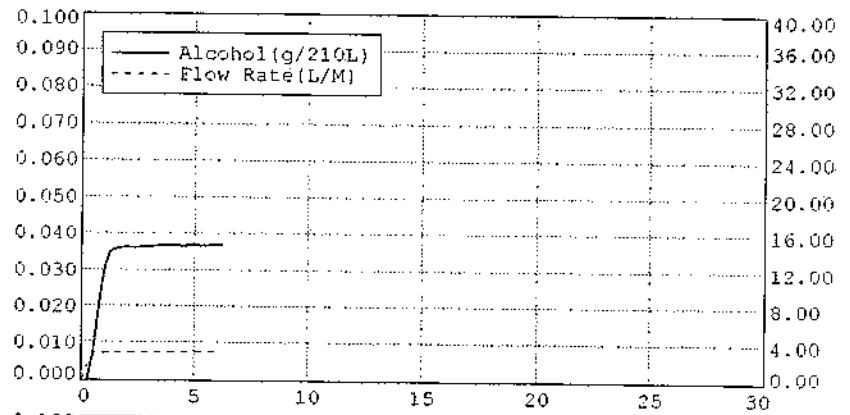
Date: 03/31/2017
 Time: 12:46:09

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.00: 0.039
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 920 psi

BLANK TEST	0.000	12:47
INTERNAL STANDARD	VERIFIED	12:47
EXTERNAL STANDARD	0.038	12:47
BLANK TEST	0.000	12:48
EXTERNAL STANDARD	0.038	12:48
BLANK TEST	0.000	12:49
EXTERNAL STANDARD	0.038	12:49
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.038	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.038	12:51
BLANK TEST	0.000	12:52

Average = 0.0380
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100416

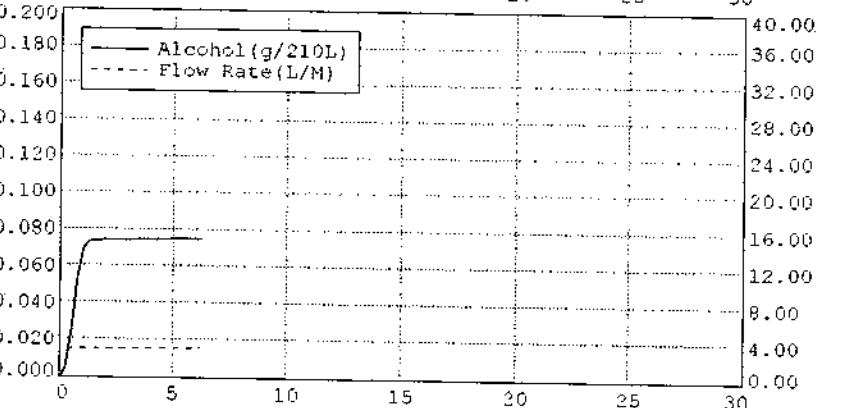
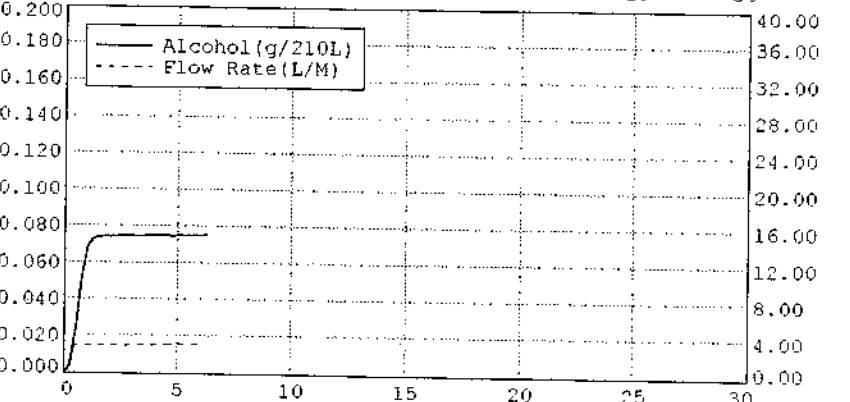
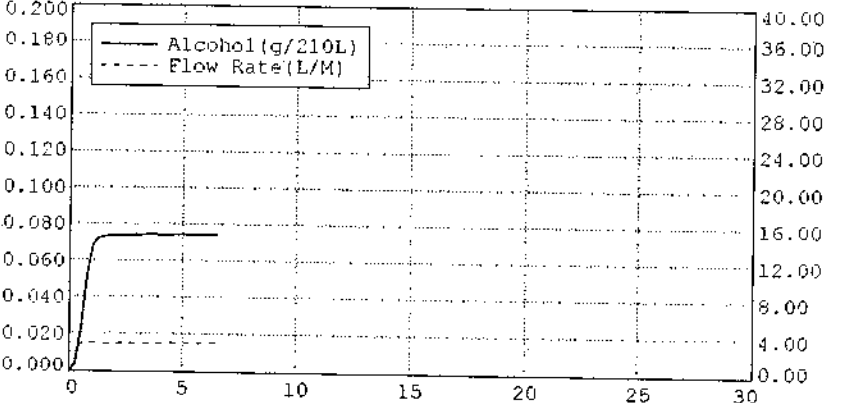
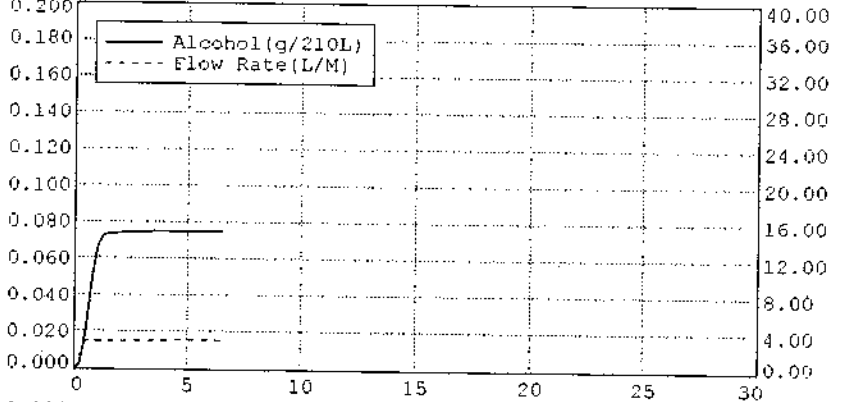
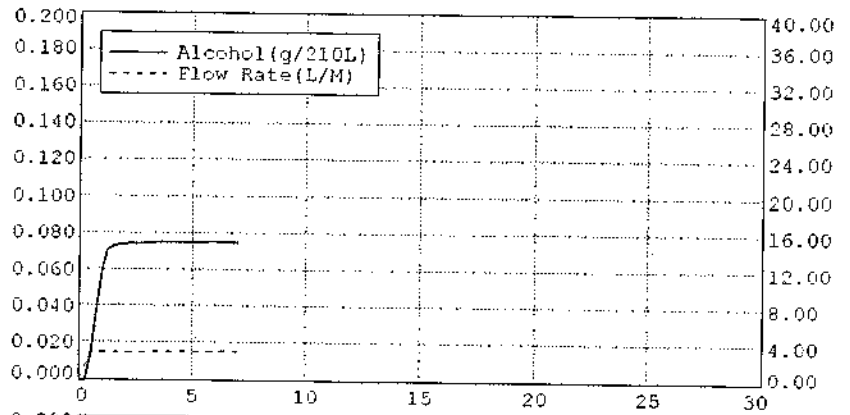
Date: 03/31/2017
 Time: 12:56:21

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.00: 0.078
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 983 psi

BLANK TEST	0.000	12:57
INTERNAL STANDARD	VERIFIED	12:57
EXTERNAL STANDARD	0.076	12:57
BLANK TEST	0.000	12:58
EXTERNAL STANDARD	0.076	12:58
BLANK TEST	0.000	12:59
EXTERNAL STANDARD	0.076	13:00
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.076	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.076	13:02
BLANK TEST	0.000	13:03

Average = 0.0760
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100416

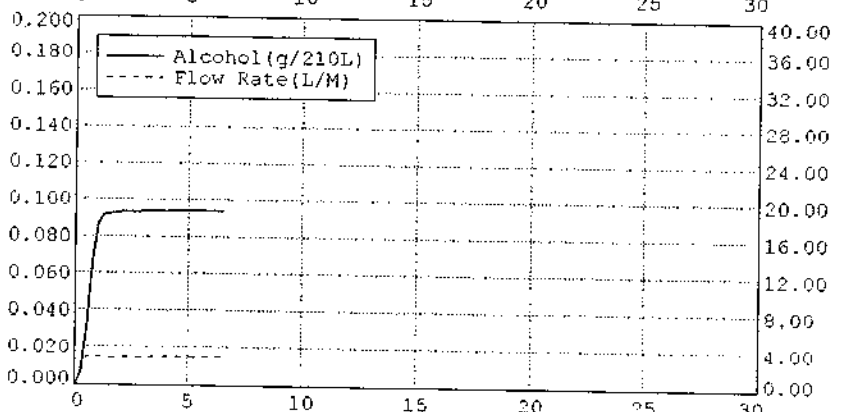
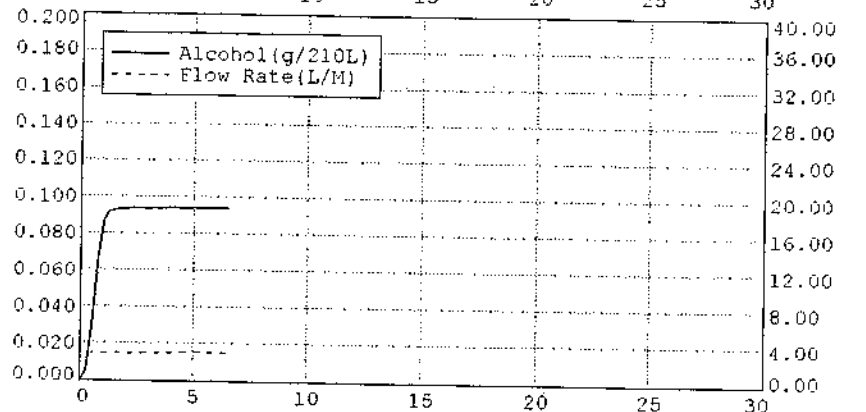
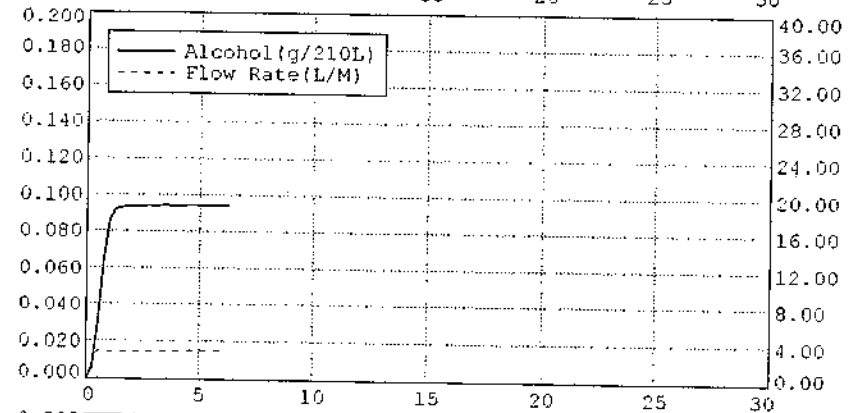
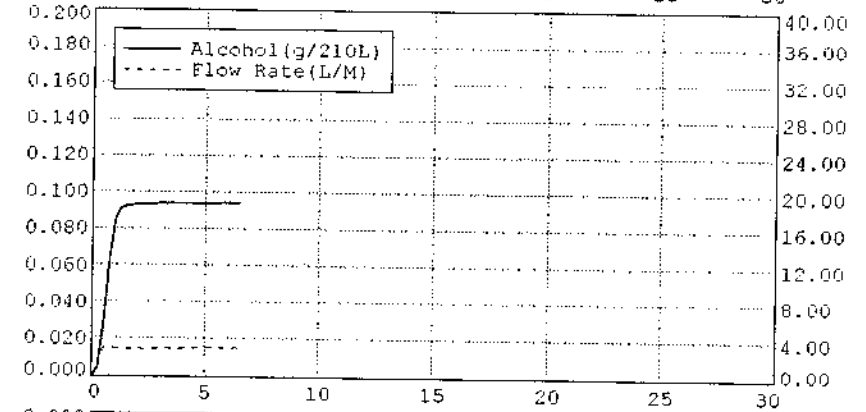
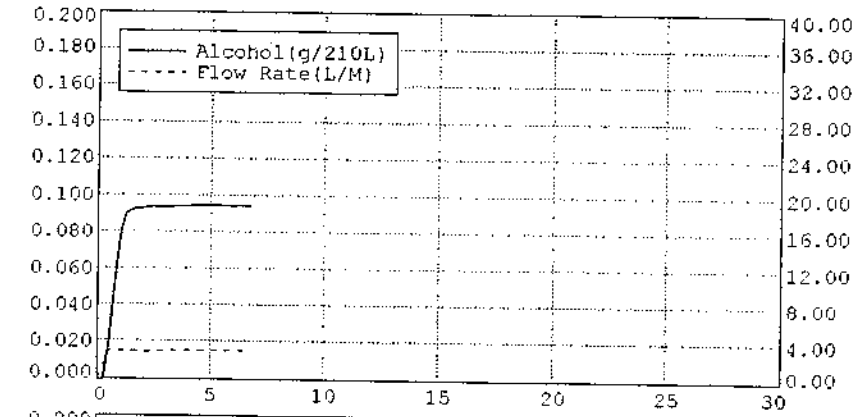
Date: 03/31/2017
 Time: 13:06:45

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.00: 0.097
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 861 psi

BLANK TEST	0.000	13:07
INTERNAL STANDARD	VERIFIED	13:07
EXTERNAL STANDARD	0.095	13:08
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.095	13:09
BLANK TEST	0.000	13:10
EXTERNAL STANDARD	0.095	13:10
BLANK TEST	0.000	13:11
EXTERNAL STANDARD	0.095	13:11
BLANK TEST	0.000	13:12
EXTERNAL STANDARD	0.095	13:12
BLANK TEST	0.000	13:13

Average = 0.0950
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100416

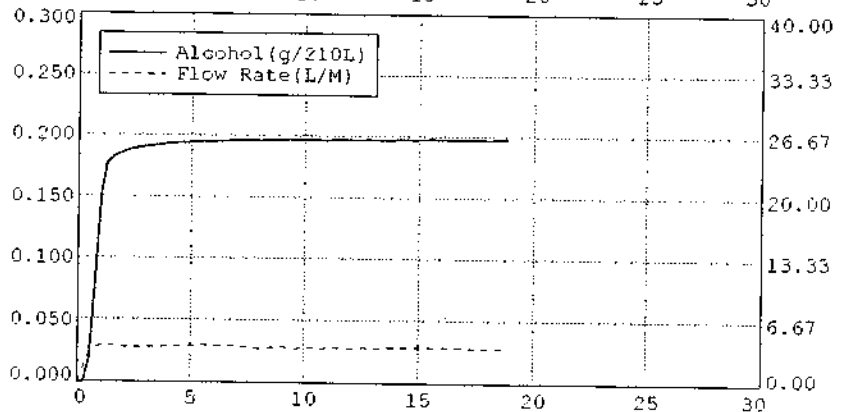
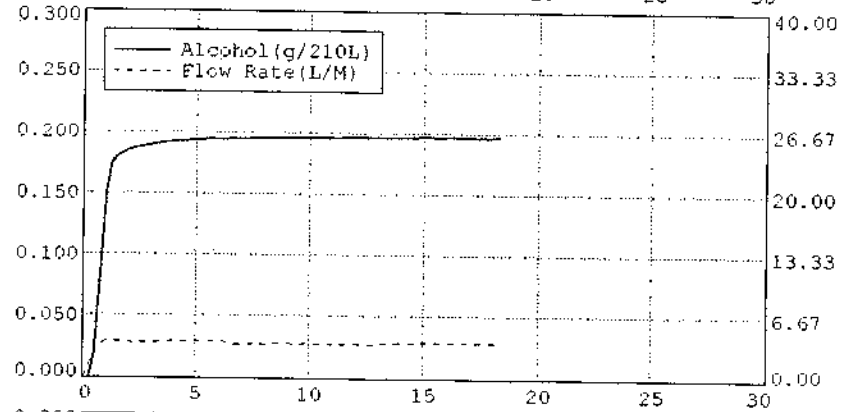
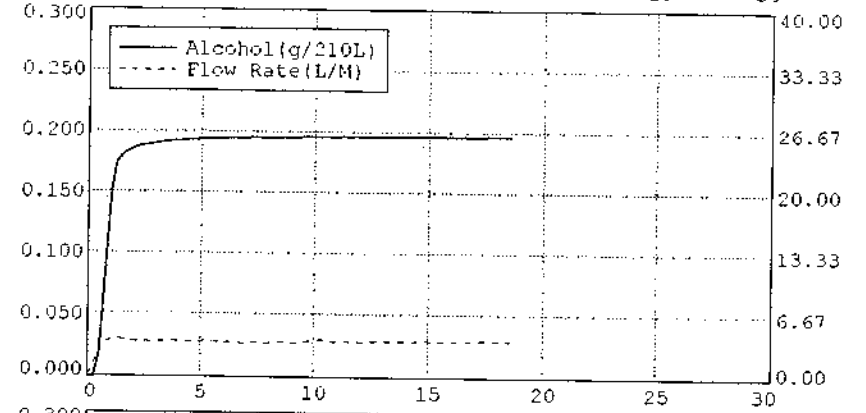
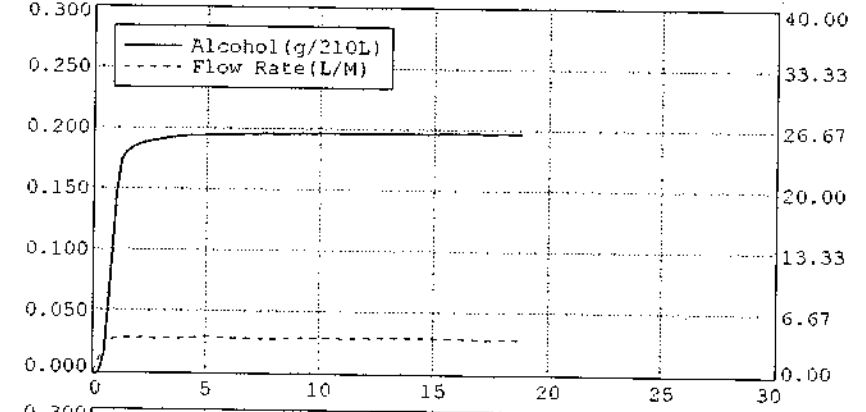
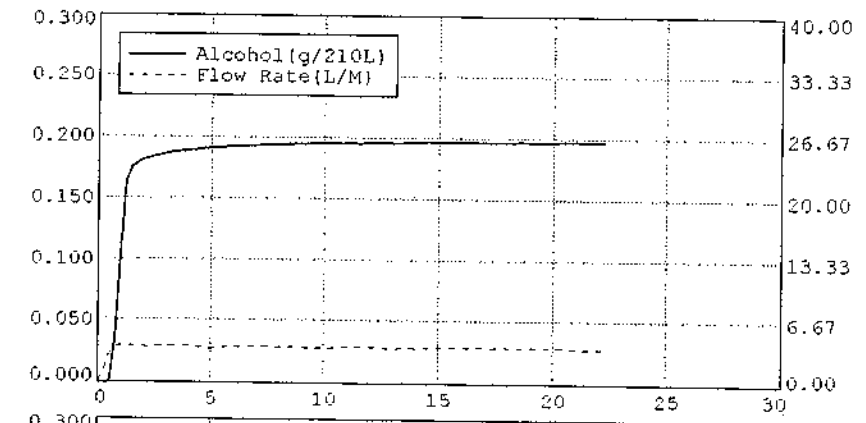
Date: 03/31/2017
 Time: 13:14:57

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:16
INTERNAL STANDARD	VERIFIED	13:16
EXTERNAL STANDARD	0.198	13:16
BLANK TEST	0.000	13:17
EXTERNAL STANDARD	0.198	13:18
BLANK TEST	0.000	13:19
EXTERNAL STANDARD	0.197	13:19
BLANK TEST	0.000	13:20
EXTERNAL STANDARD	0.198	13:20
BLANK TEST	0.000	13:21
EXTERNAL STANDARD	0.198	13:22
BLANK TEST	0.000	13:23

Average = 0.1978
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100416

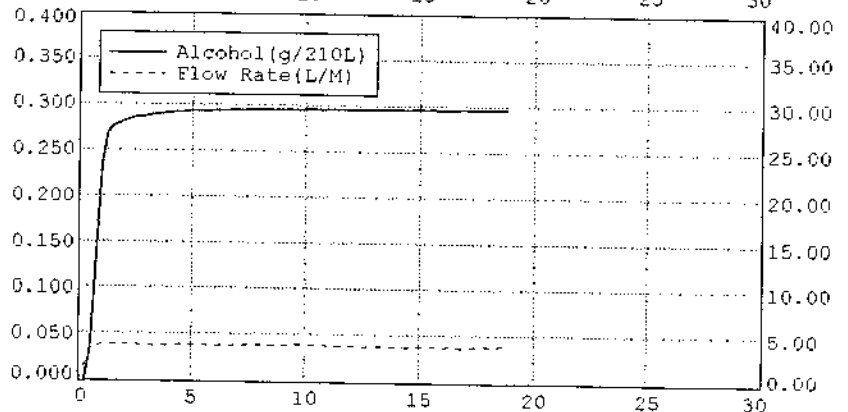
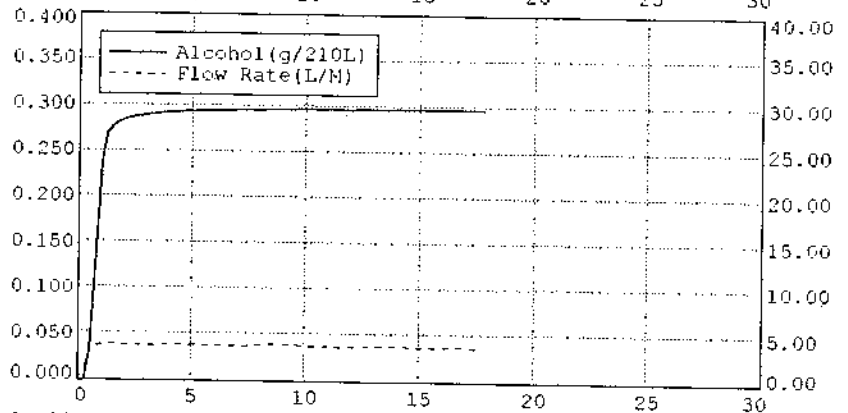
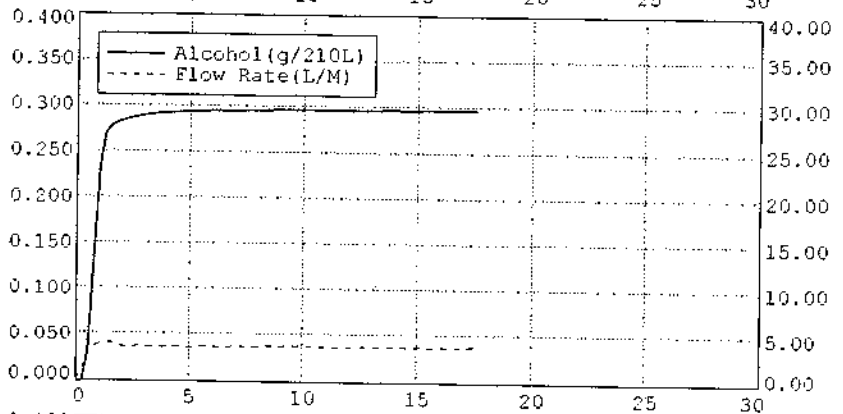
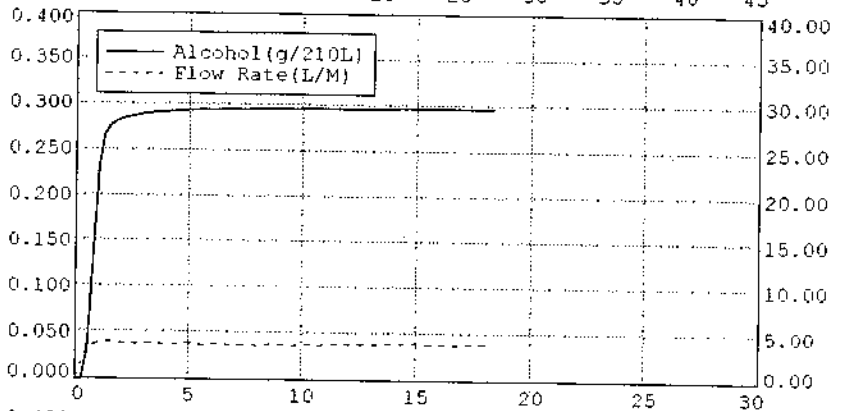
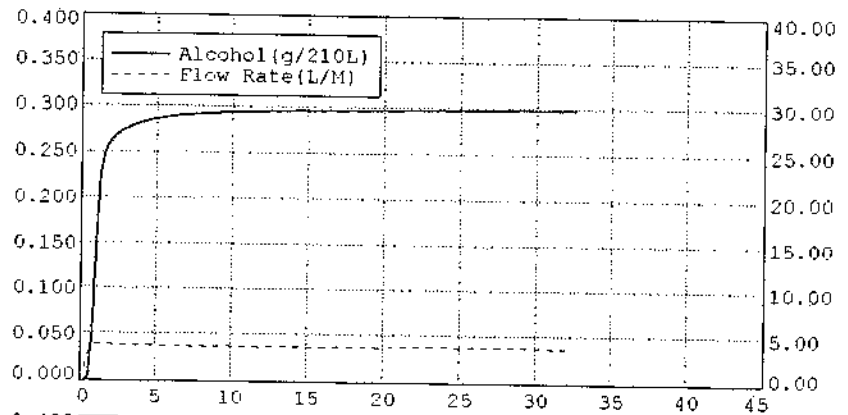
Date: 03/31/2017
 Time: 13:24:37

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:25
INTERNAL STANDARD	VERIFIED	13:25
EXTERNAL STANDARD	0.298	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.297	13:27
BLANK TEST	0.000	13:28
EXTERNAL STANDARD	0.297	13:29
BLANK TEST	0.000	13:30
EXTERNAL STANDARD	0.297	13:30
BLANK TEST	0.000	13:31
EXTERNAL STANDARD	0.297	13:31
BLANK TEST	0.000	13:32

Average = 0.2972
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dml: 100416

Date: 03/31/2017
Time: 13:36:50

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

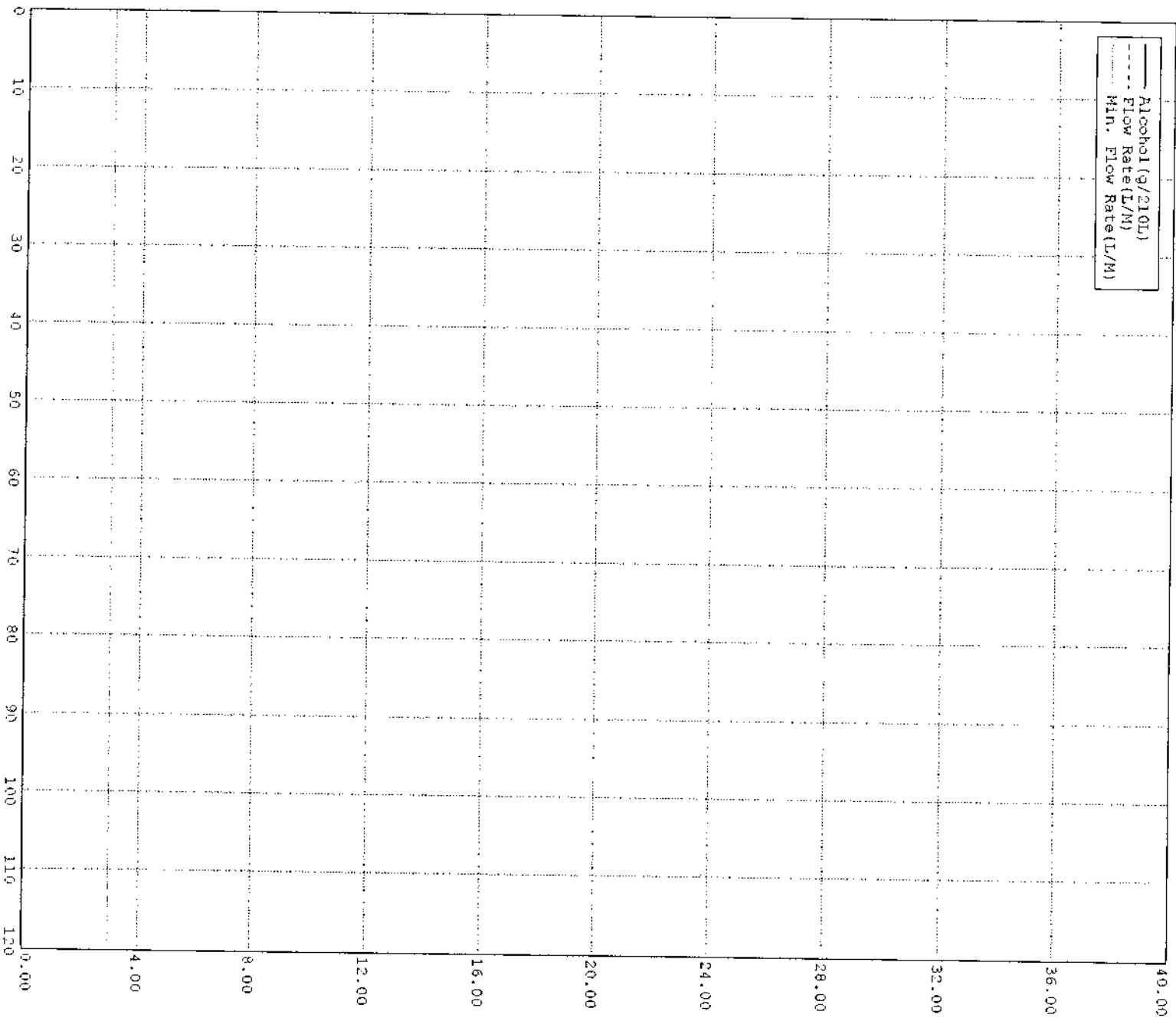
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.01: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:37
BLANK TEST	0.000	13:37
INTERNAL STANDARD	VERIFIED	13:38
EXTERNAL STANDARD	0.076	13:38
BLANK TEST	0.000	13:39
SUBJECT SAMPLE	INCOMPLETE	13:41

EMP



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 03/31/2017
Time: 14:08:22

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

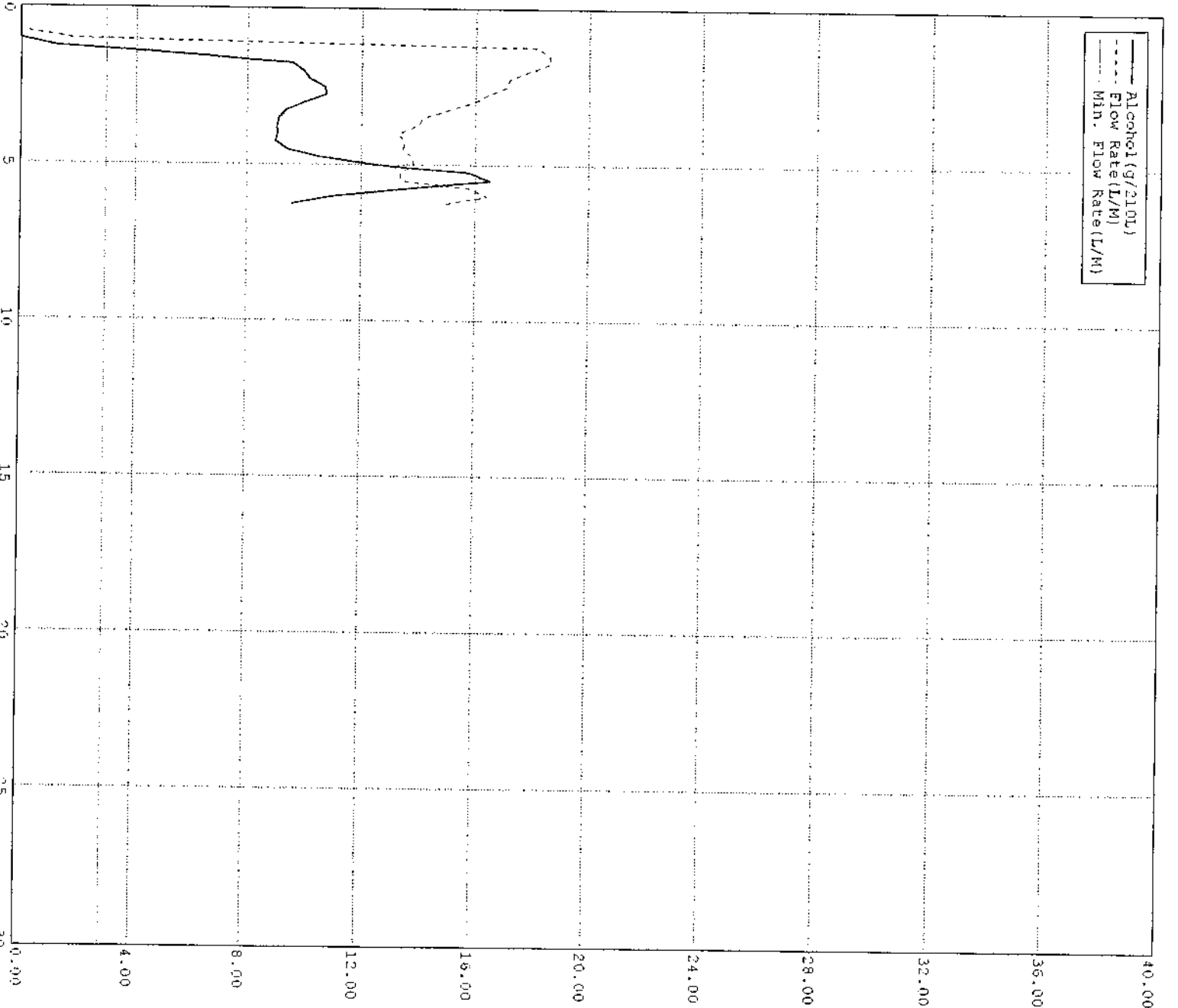
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.01: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:09
BLANK TEST	0.000	14:09
INTERNAL STANDARD	VERIFIED	14:09
EXTERNAL STANDARD	0.076	14:09
BLANK TEST	0.000	14:10
SUBJECT SAMPLE	INVALID	14:10

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 03/31/2017
Time: 13:48:23

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

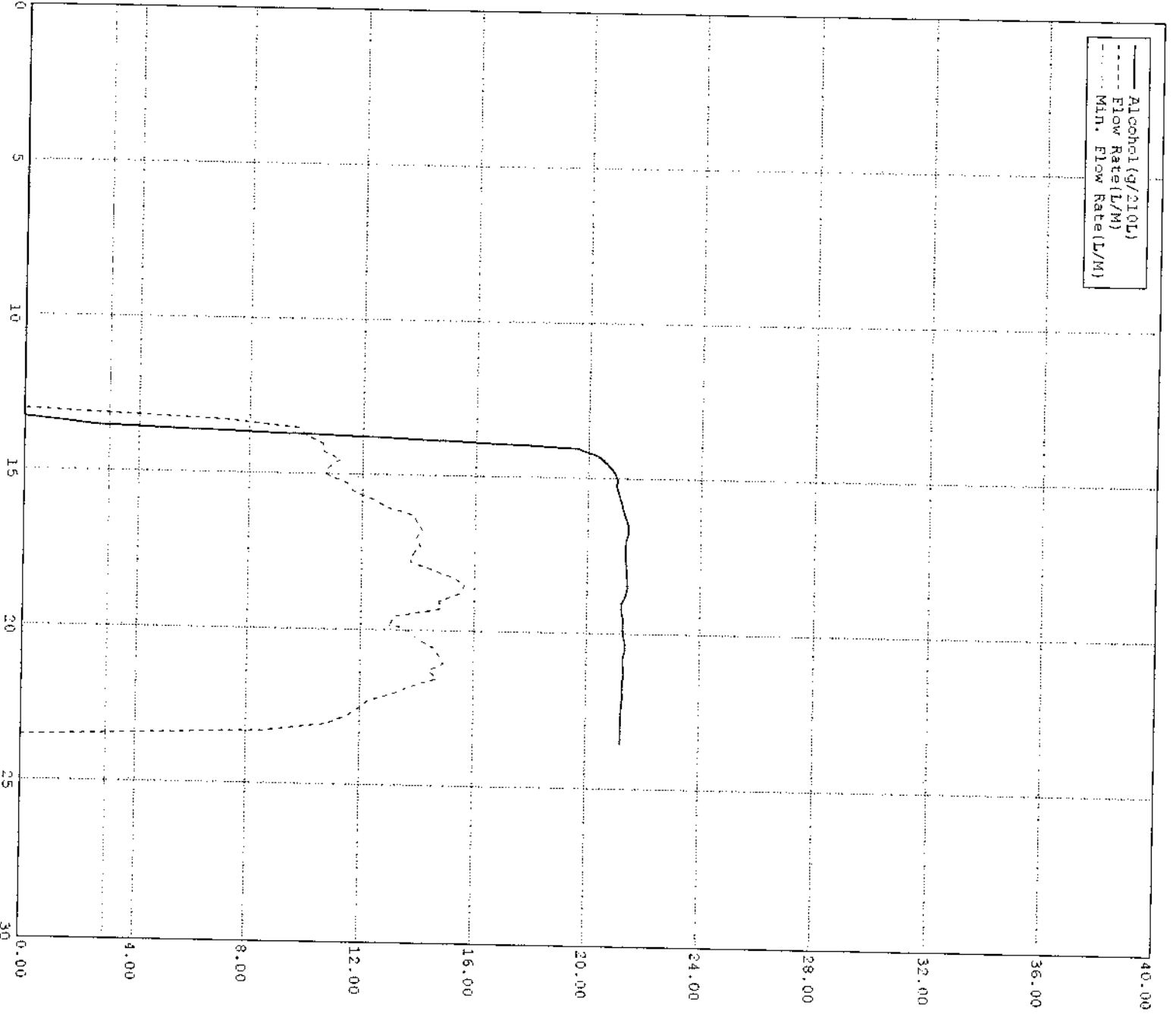
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.01: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:49
BLANK TEST	0.000	13:49
INTERNAL STANDARD	VERIFIED	13:49
Xg = 0.087 (0.50%)		
EXTERNAL STANDARD	0.076	13:49
X[1] = 0.0760 (-0.0032)	(0.0023)	
BLANK TEST	0.000	13:50
SUBJECT SAMPLE	XXX	13:51
X[1] = 0.1067 (-0.0118)	(0.0029)	

Interference Detected

Filter 2 Avg: -0.0032
Filter 3 Avg: 0.0023
BMB 3/31/17

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100416

Date: 03/31/2017
Time: 13:53:07

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

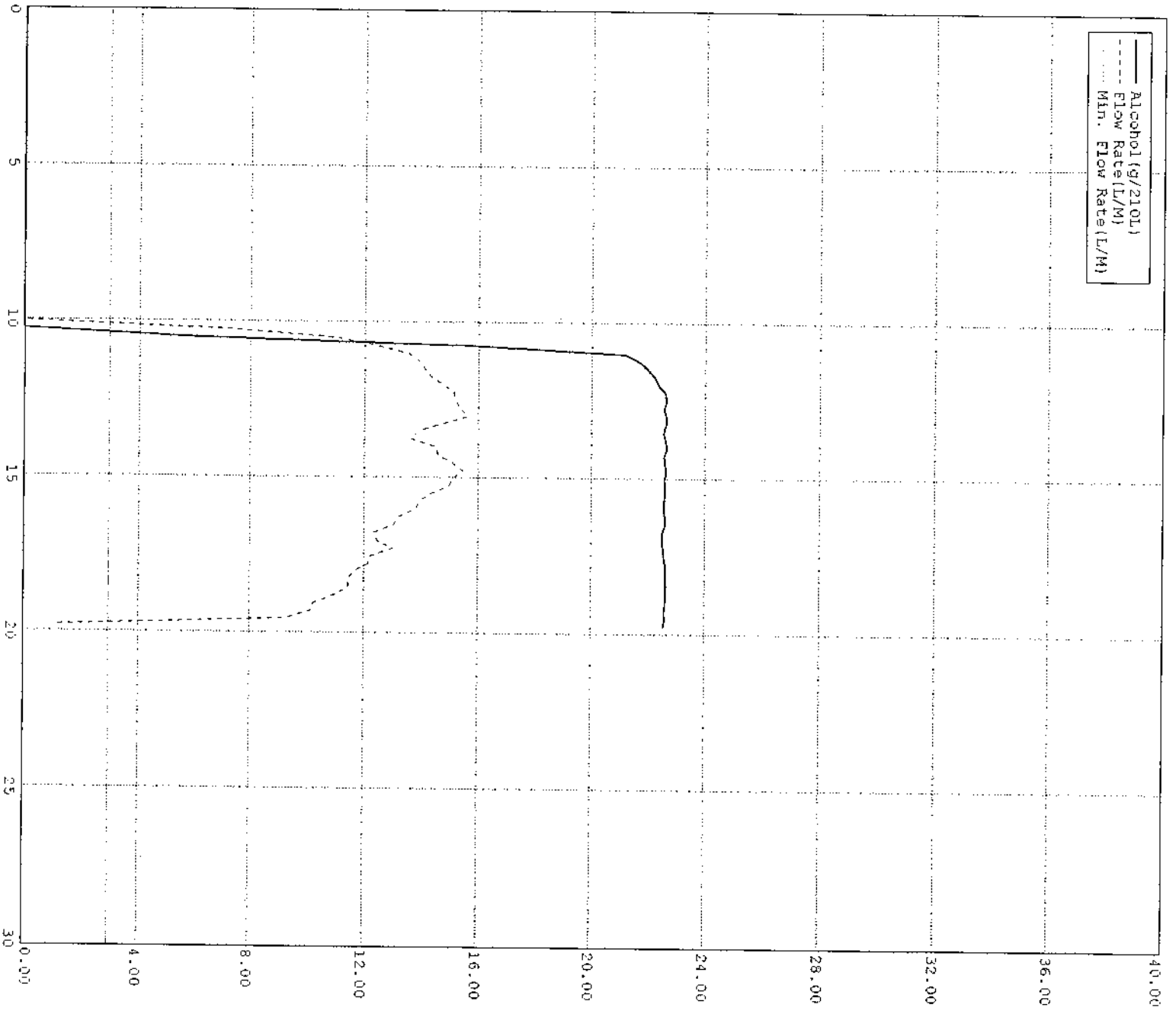
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.02: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:54
BLANK TEST	0.000	13:54
INTERNAL STANDARD	VERIFIED	13:54
Xq = 0.087 (0.10%)		
EXTERNAL STANDARD	0.076	13:54
X[1] = 0.0762 (-0.0034)	(0.0024)	
BLANK TEST	0.000	13:55
SUBJECT SAMPLE	XXX	13:55
X[1] = 0.1134 (-0.0243)	(0.0015)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100416

Date: 03/31/2017
Time: 13:57:38

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

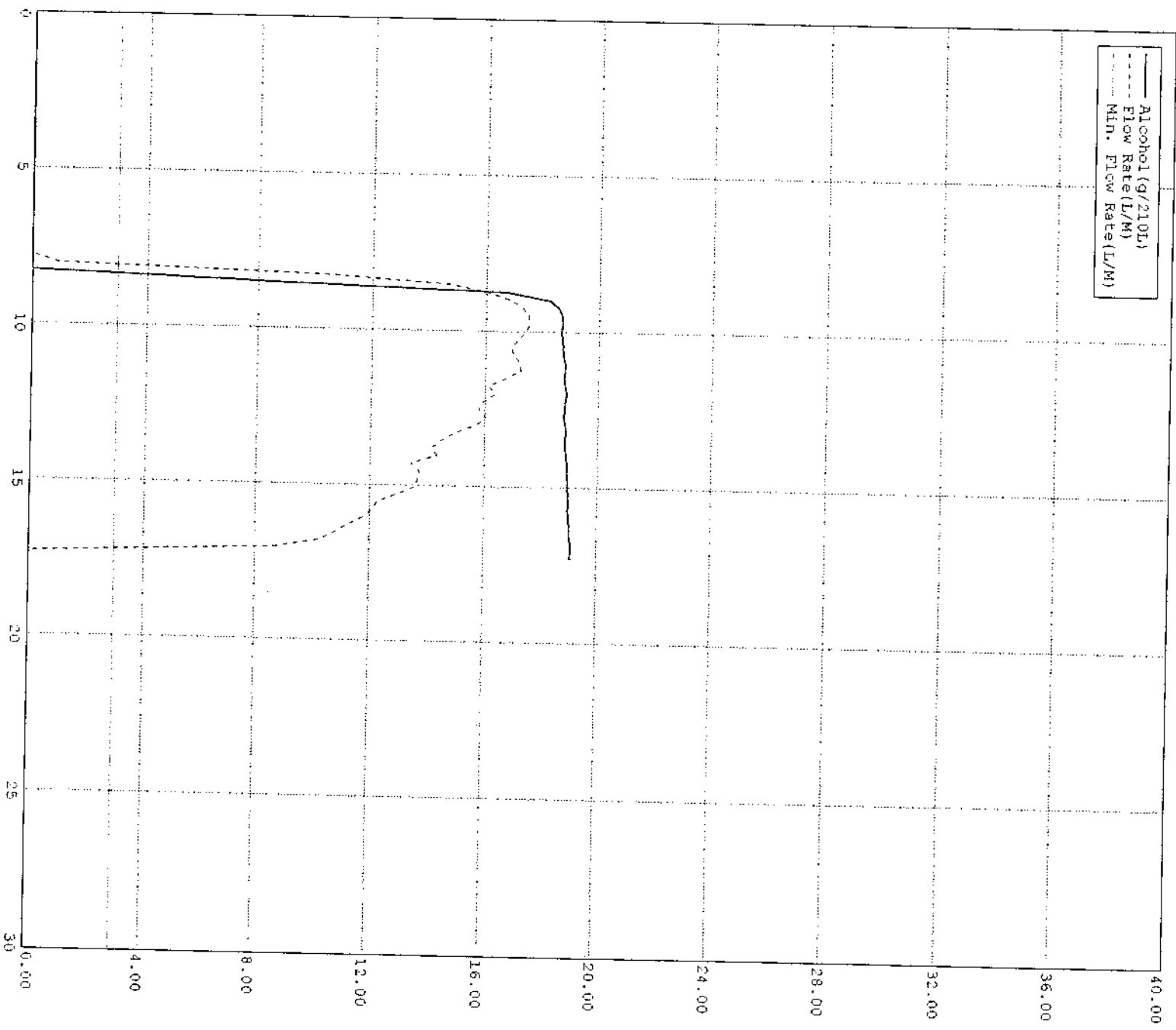
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.01: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:58
BLANK TEST	0.000	13:58
INTERNAL STANDARD	VERIFIED	13:58
Xq = 0.087 (0.30%)		
EXTERNAL STANDARD	0.076	13:59
X[1] = 0.0757 (-0.0031)	(0.0026)	
BLANK TEST	0.000	14:00
SUBJECT SAMPLE (Vol=2.21L)	0.095	14:00
X[1] = 0.0959 (0.0009)	(0.0015)	
BLANK TEST	0.000	14:01
EXTERNAL STANDARD	0.075	14:01
X[1] = 0.0754 (-0.0029)	(0.0019)	
BLANK TEST	0.000	14:02

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100416

Date: 03/31/2017
Time: 13:44:03

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

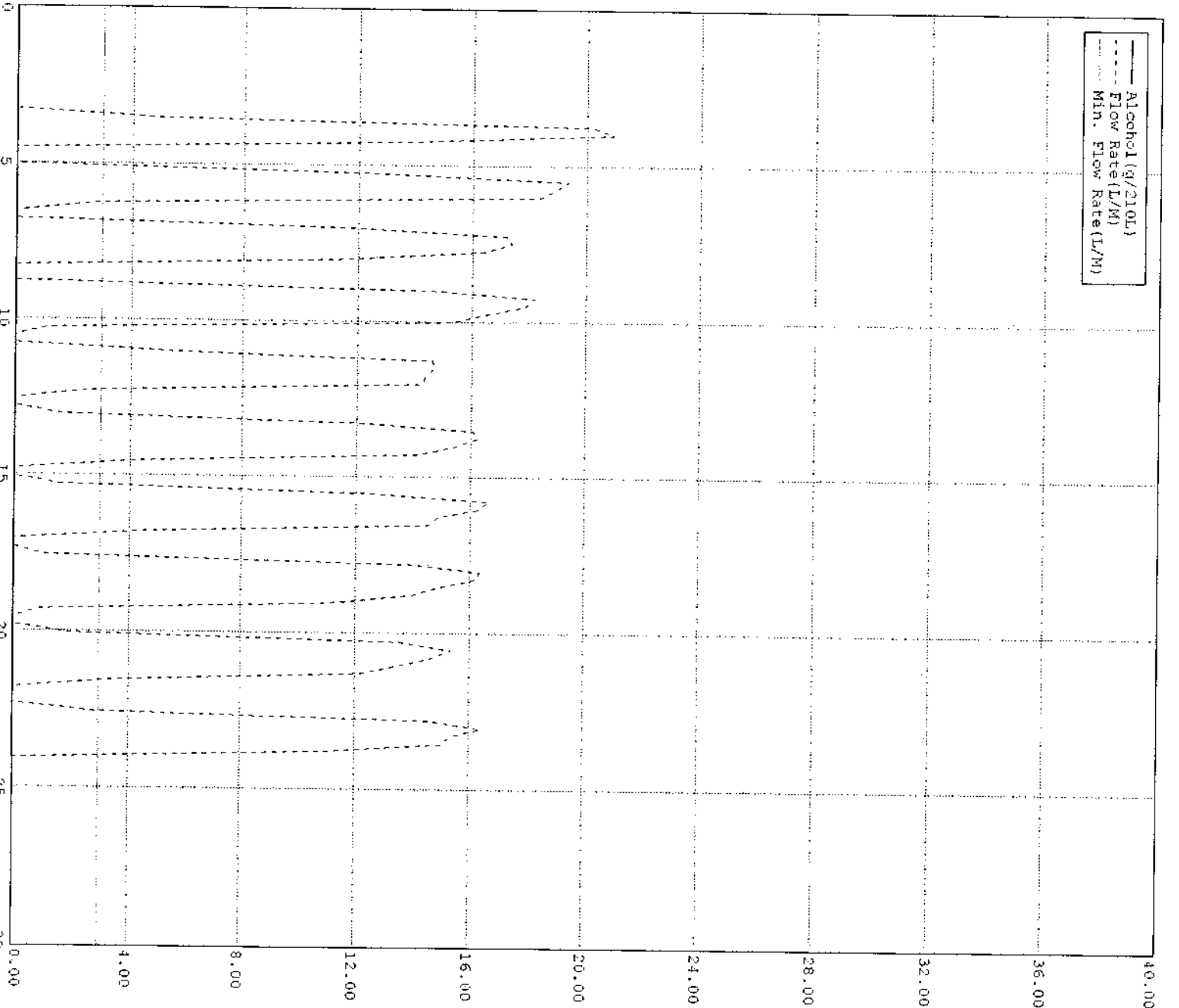
DEPT/AGENCY:
MAXIMUM ATTEMPTS EXCEEDED
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.02: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:45
BLANK TEST	0.000	13:45
INTERNAL STANDARD	VERIFIED	13:45
EXTERNAL STANDARD	0.076	13:45
BLANK TEST	0.000	13:46
SUBJECT SAMPLE	XXX	13:46

Maximum Attempts Exceeded

BNB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100416

Date: 03/31/2017
Time: 14:14:57

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

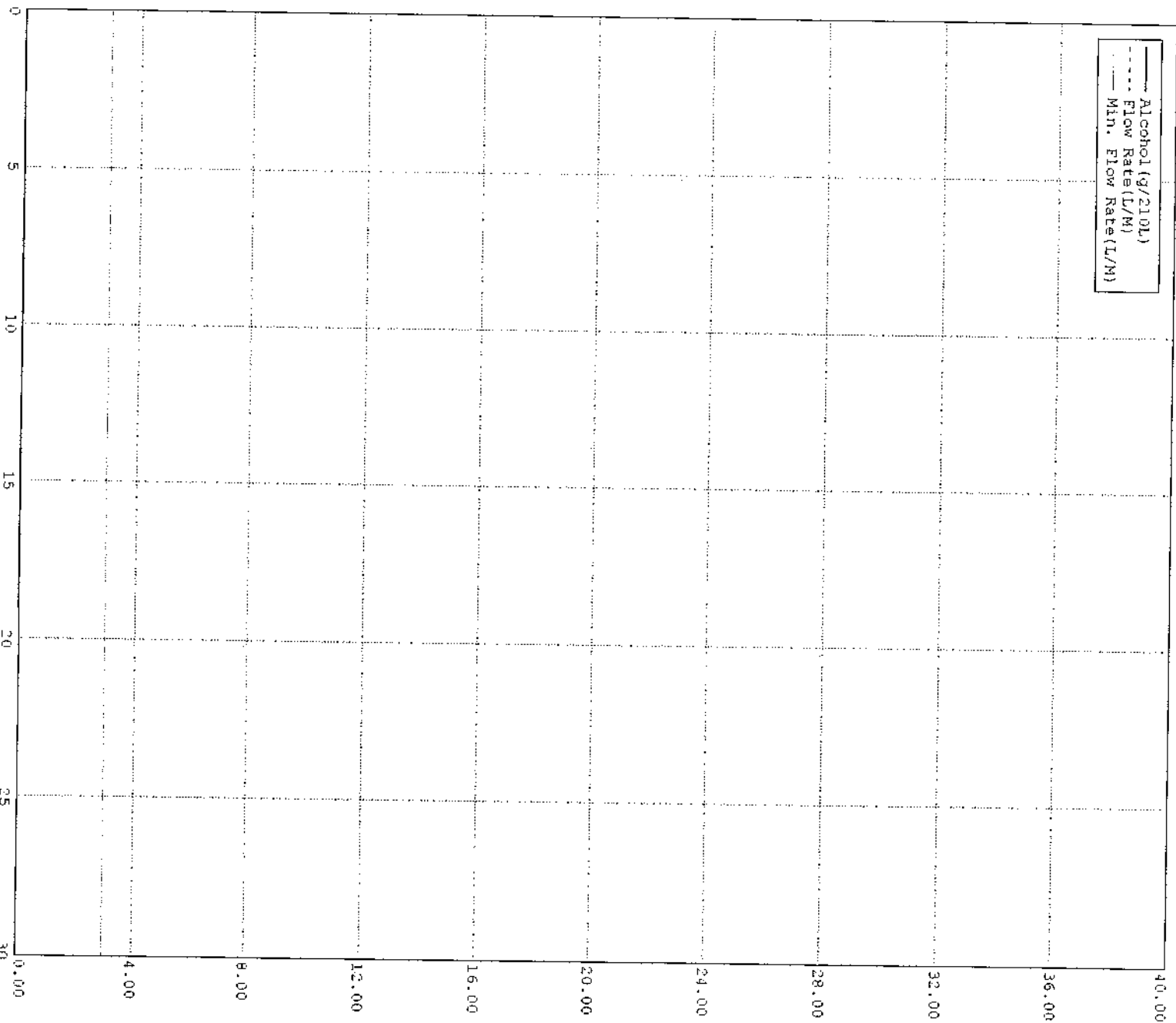
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.01: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:16
BLANK TEST	0.000	14:16
INTERNAL STANDARD	0.076	14:16
EXTERNAL STANDARD	0.000	14:17

RFI DETECTED

RFI



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 03/31/2017
Time: 14:29:33

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 #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:30
BLANK TEST	0.000	14:30
INTERNAL STANDARD	VERIFIED	14:30
EXTERNAL STANDARD	0.076	14:30
BLANK TEST	0.000	14:31
SUBJECT SAMPLE (Vol=2.03L)	0.000	14:32
BLANK TEST	0.000	14:33
EXTERNAL STANDARD	0.077	14:33
BLANK TEST	0.000	14:34

BBMB

