

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 100388 Analyst Brandi Barnett Start Date 2/28/17

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 ILMO Lot 02915020A2 Exp 3/5/17
- ii. 0.040g/210L Mnf ILMO Lot 02915040A3 Exp 3/5/17
- iii. 0.080g/210L Mnf Airgas Lot AG608504 Exp 3/25/18
- iv. 0.100g/210L Mnf ILMO Lot 02915100A1 Exp 3/5/17
- v. 0.200g/210L Mnf Guth Lot 15130 Exp 5/11/17
 - 1. Simulator S/N DR5298 Date Calibrated 9/14/17 by BMB
- vi. 0.300g/210L Mnf Guth Lot 16210 Exp 8/22/18
 - 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 15220 Level 0.100 Exp 9/28/17
 - 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 3-1-17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100388

Date: 02/28/2017
Time: 10:12:09

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 45.9°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.75 V PASSED
(1.04 V - 2.42 V)
Cooler Voltage = 1.53 V PASSED
(0.95 V - 2.21 V)
Bias Voltage = 80 V PASSED
(47 V - 111 V)
Chopper Freq = 535 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.7 in

PUMP INFO

Flow Rate = 5.047 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 = 0.098 2.11% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100388

Date: 02/28/2017
Time: 12:20 PM

Temperatures (°C)

Sample Cell: 49.0°C
Breath Tube: 46.2°C

Current Barometer 29.5 in
Volume (Ltr) 1.58

Settings

Lamp: 1.75 V
Bias: 80 V
Cooler: 1.76 V
Chopper: 533 Hz

Voltages (V)

Flow: 1.05 V
Detector: -0.027 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100388

Date: 05/02/2011
Time: 14:23:26

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

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

Ca = 0.1000
CAL = 0.991067 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0054 0.0010 <= b2 < 0.0100
b3 = 0.0002 0.0000 <= b3 < 0.0040
Xq = 0.0956 0.0500 <= Xq < 0.2000
a21 = 1.153567 1.050 <= a21 < 1.300
a31 = 0.558289 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100388

Date: 02/28/2017
Time: 12:21:37

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

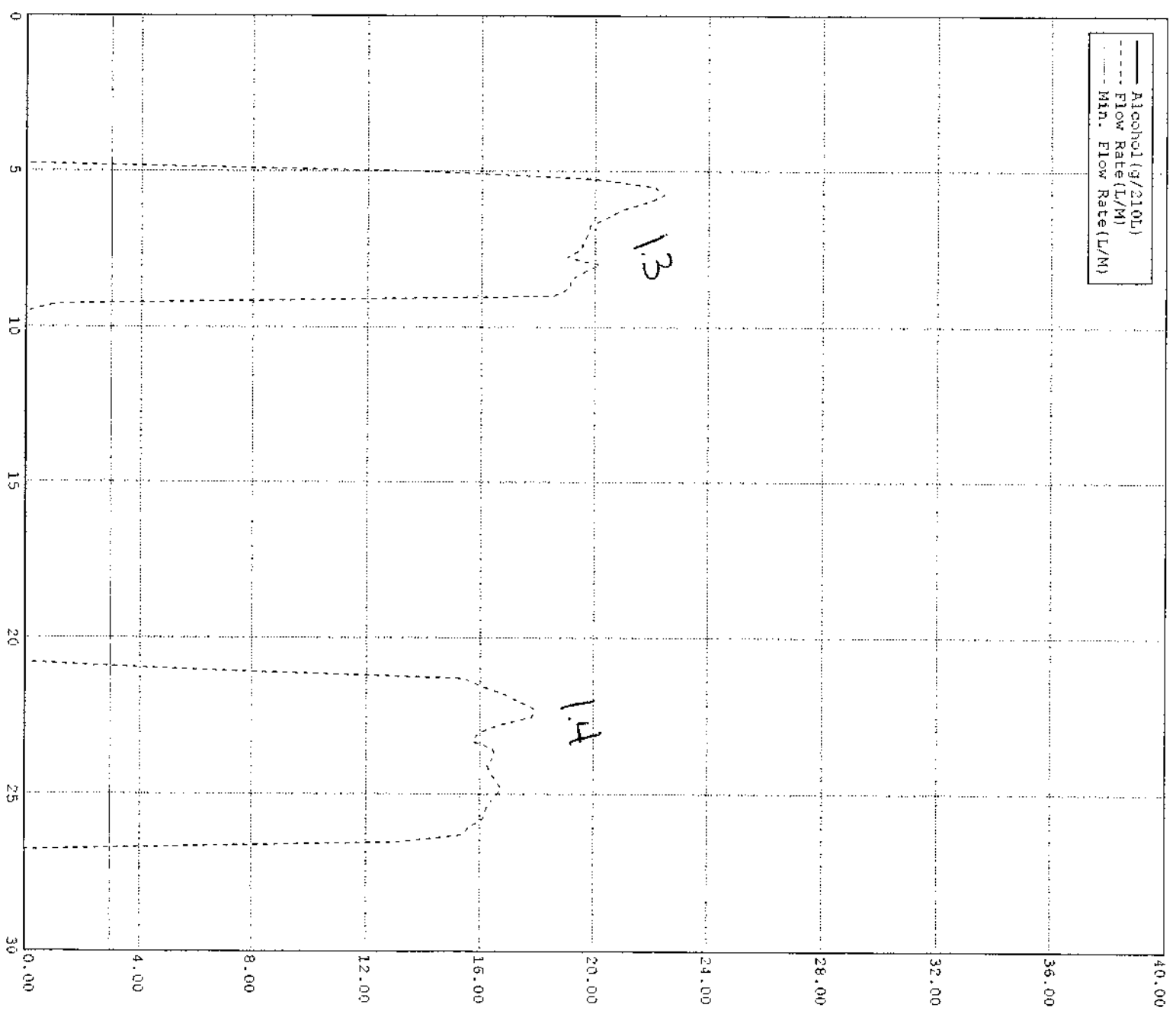
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.52: 0.079
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	12:22
BLANK TEST	0.000	12:22
INTERNAL STANDARD	VERIFIED	12:22
EXTERNAL STANDARD	0.079	12:23
BLANK TEST	0.000	12:24
SUBJECT SAMPLE (Vol=1.52L)	0.000	12:24
BLANK TEST	0.000	12:25
EXTERNAL STANDARD	0.078	12:25
BLANK TEST	0.000	12:26

ESMB



LINEARITY CHECK

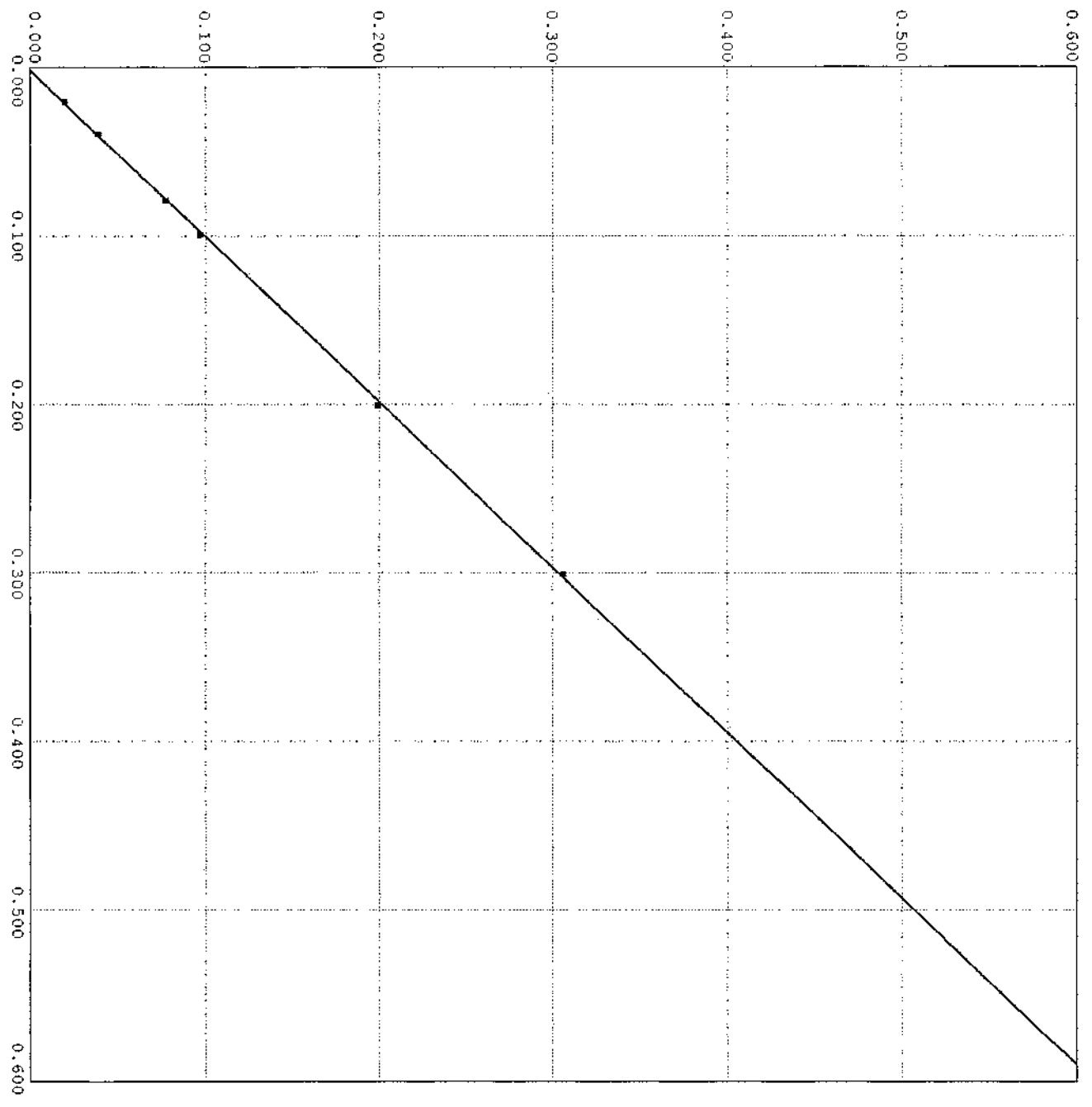
Alaska Department of Public Safety
DATAMASTER dmt: 100388

Date: 02/28/2017
Time: 12:45:07

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0206	0.0005
0.039	0.0400	0.0000
0.079	0.0782	0.0004
0.099	0.0980	0.0000
0.200	0.2000	0.0007
0.300	0.3068	0.0004

SLOPE = 1.019467
R² = 0.999661



EDMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100388

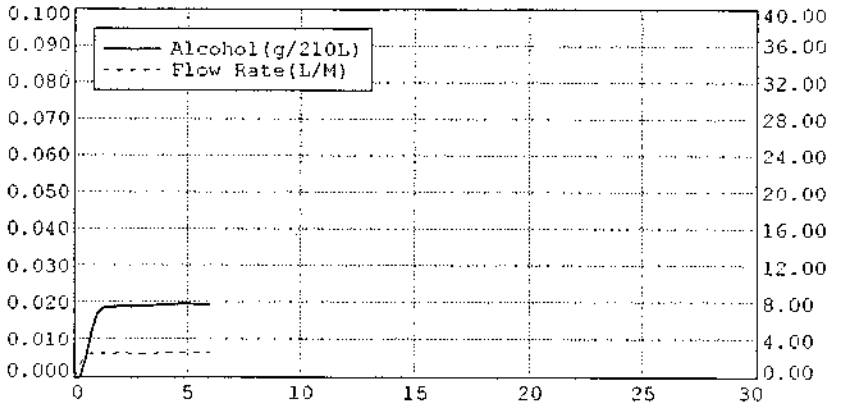
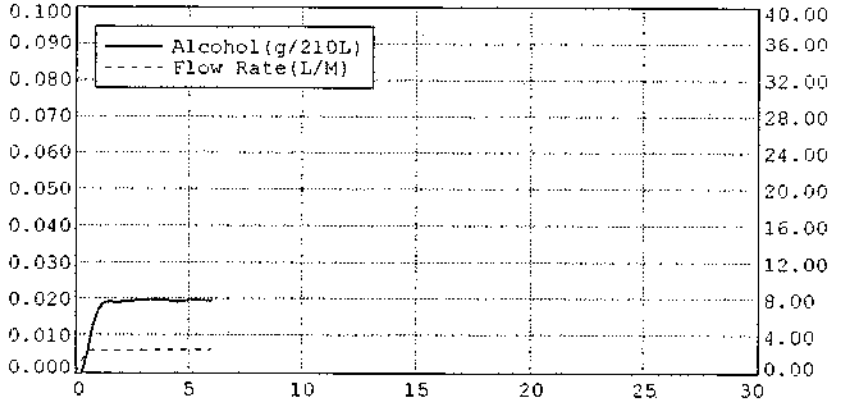
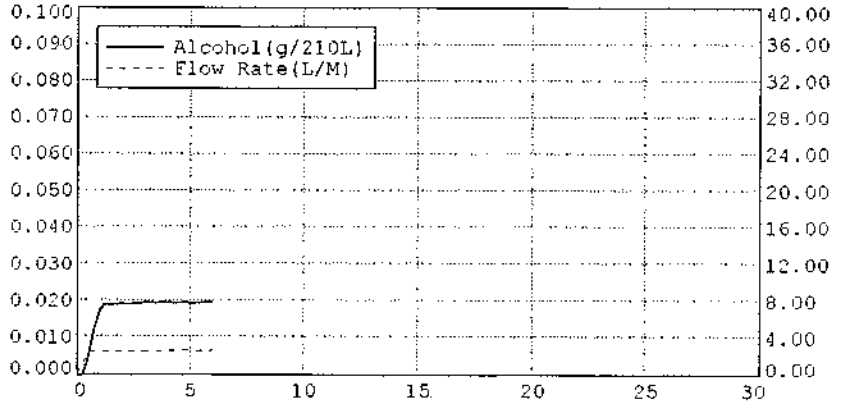
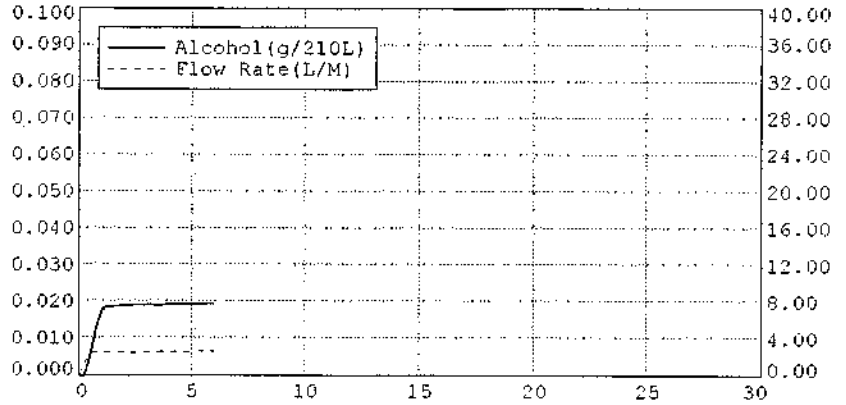
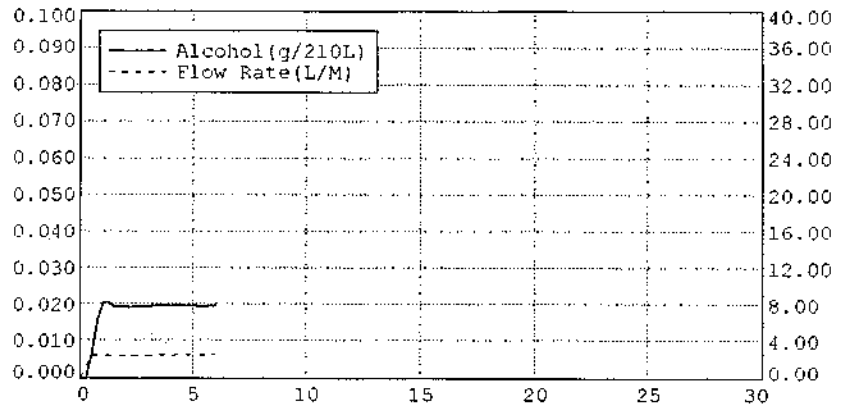
Date: 02/28/2017
 Time: 12:45:09

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.51: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1034 psi

BLANK TEST	0.000	12:46
INTERNAL STANDARD	VERIFIED	12:46
EXTERNAL STANDARD	0.021	12:47
BLANK TEST	0.000	12:48
EXTERNAL STANDARD	0.020	12:48
BLANK TEST	0.000	12:49
EXTERNAL STANDARD	0.021	12:49
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.021	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.020	12:51
BLANK TEST	0.000	12:52

Average = 0.0206
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100388

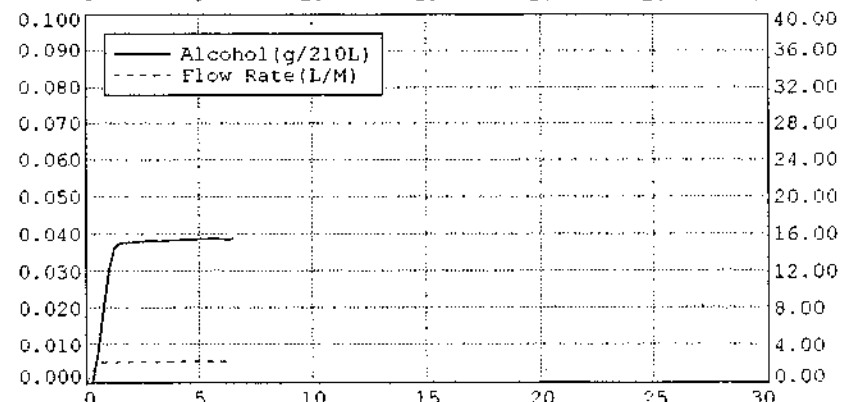
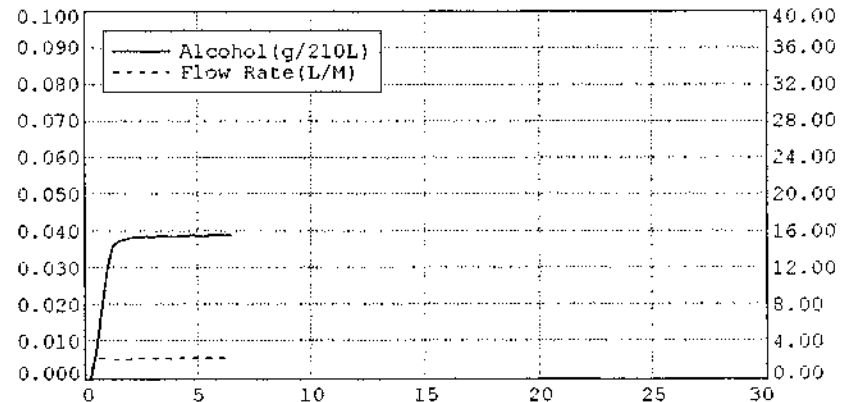
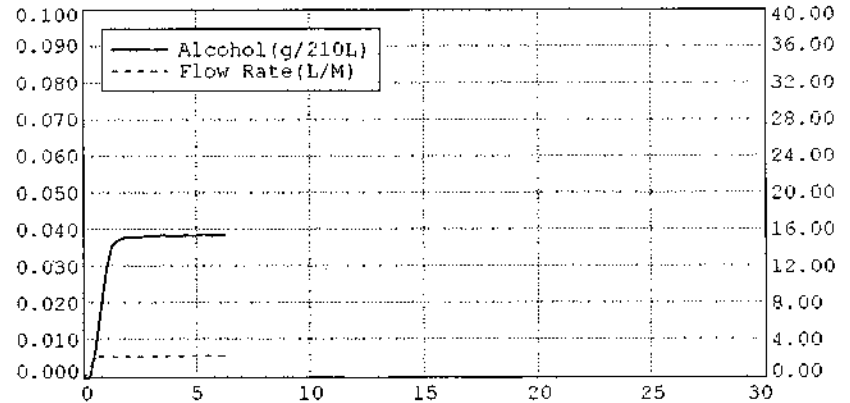
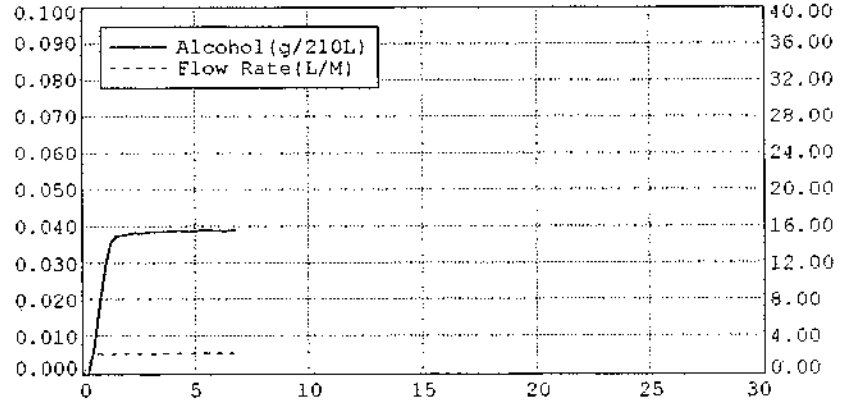
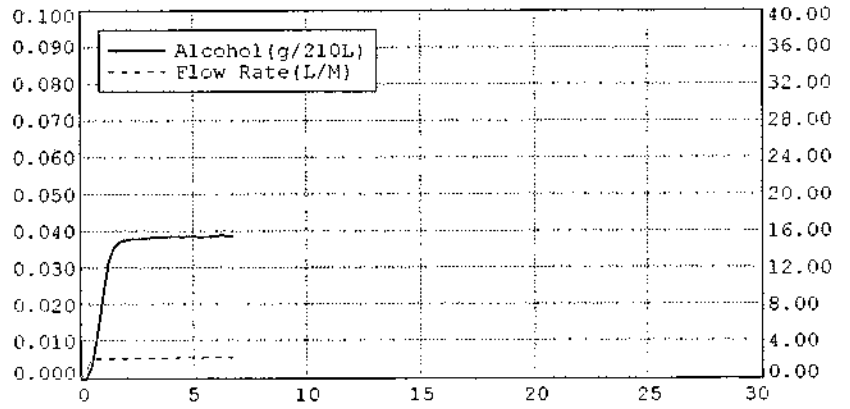
Date: 02/28/2017
 Time: 12:55:18

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.52: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 497 psi

BLANK TEST	0.000	12:57
INTERNAL STANDARD	VERIFIED	12:57
EXTERNAL STANDARD	0.040	12:58
BLANK TEST	0.000	12:58
EXTERNAL STANDARD	0.040	12:59
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.040	13:00
BLANK TEST	0.000	13:01
EXTERNAL STANDARD	0.040	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.040	13:02
BLANK TEST	0.000	13:03

Average = 0.0400
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100388

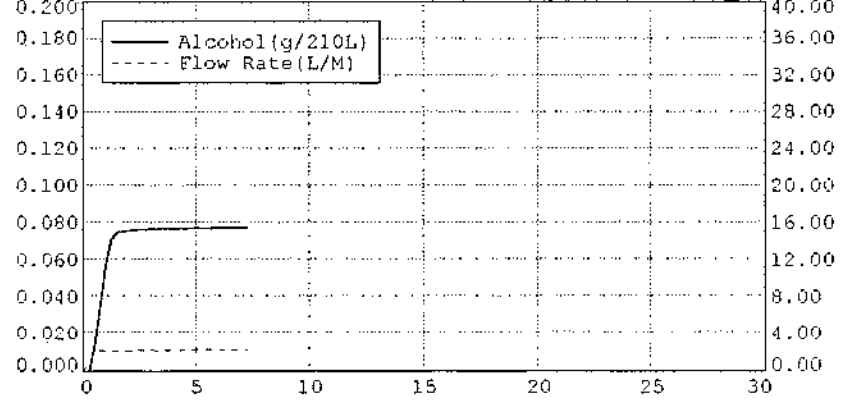
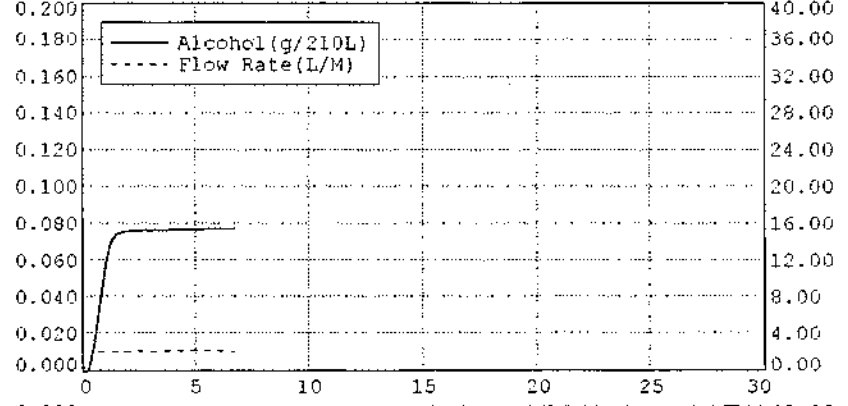
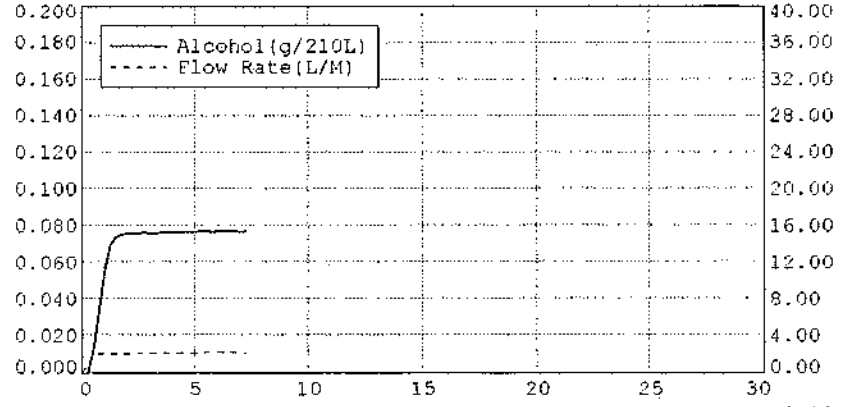
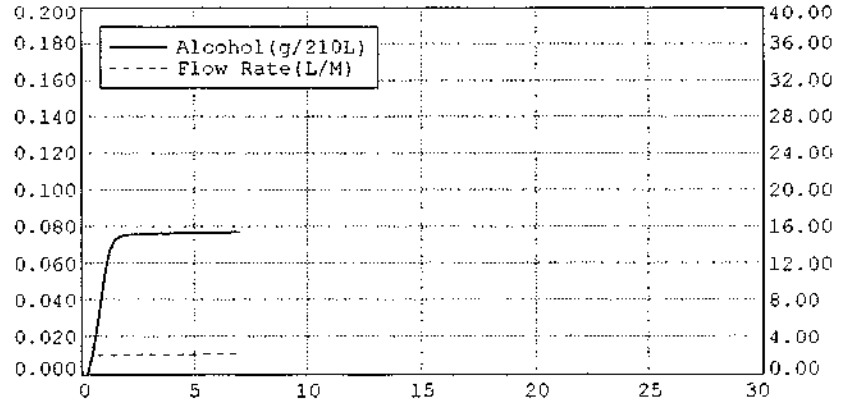
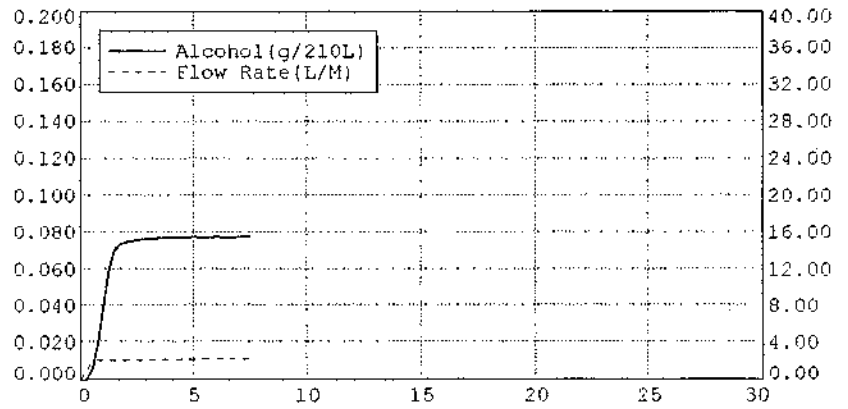
Date: 02/28/2017
 Time: 13:07:28

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.52: 0.079
 LOT #: AG608504
 EXPIRATION: 03/25/2018
 TANK PRESSURE: 391 psi

BLANK TEST	0.000	13:10
INTERNAL STANDARD	VERIFIED	13:10
EXTERNAL STANDARD	0.079	13:11
BLANK TEST	0.000	13:11
EXTERNAL STANDARD	0.078	13:12
BLANK TEST	0.000	13:13
EXTERNAL STANDARD	0.078	13:13
BLANK TEST	0.000	13:14
EXTERNAL STANDARD	0.078	13:14
BLANK TEST	0.000	13:15
EXTERNAL STANDARD	0.078	13:15
BLANK TEST	0.000	13:16

Average = 0.0782
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100388

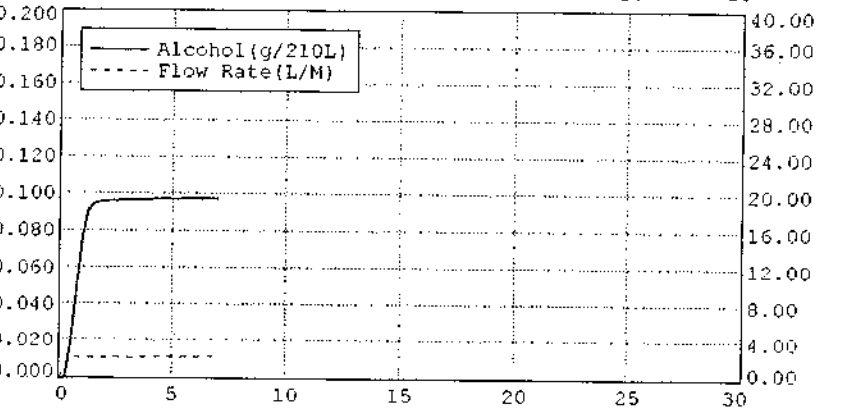
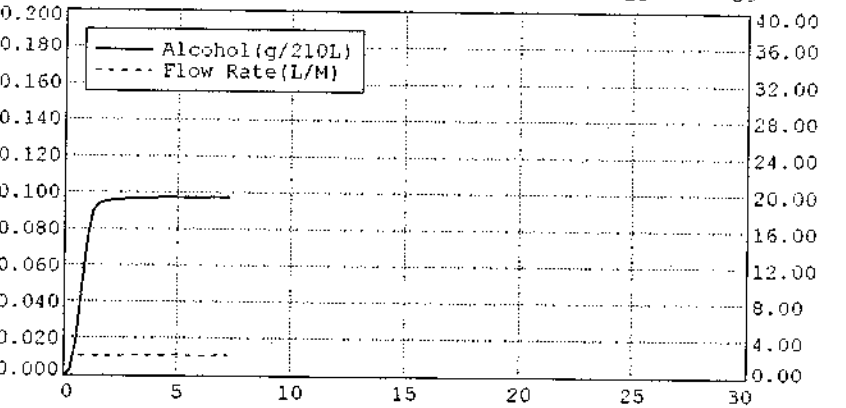
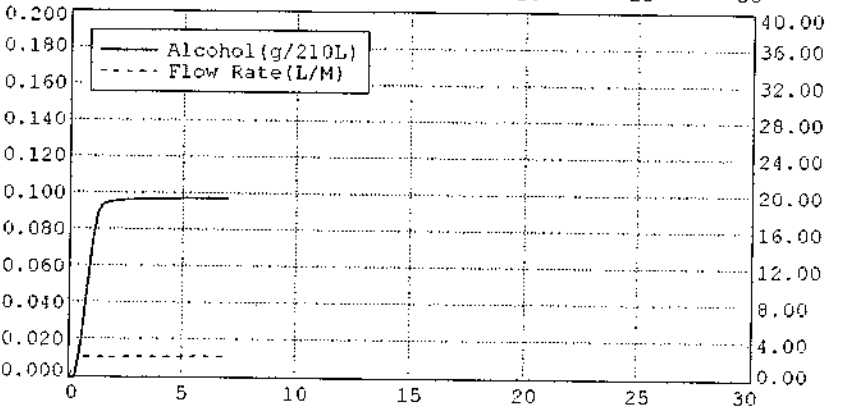
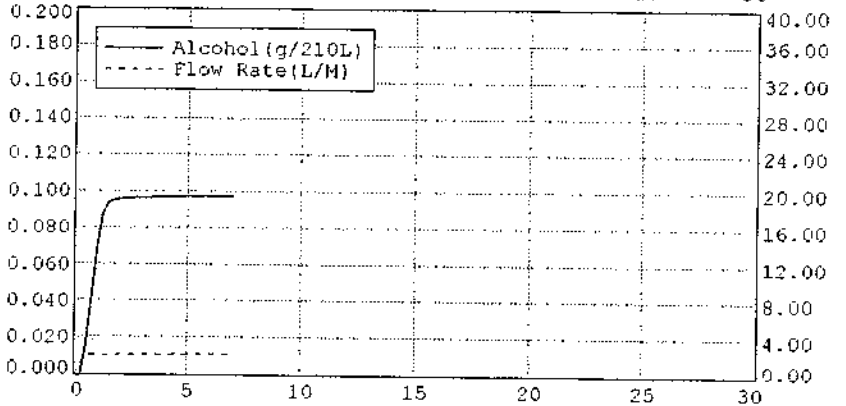
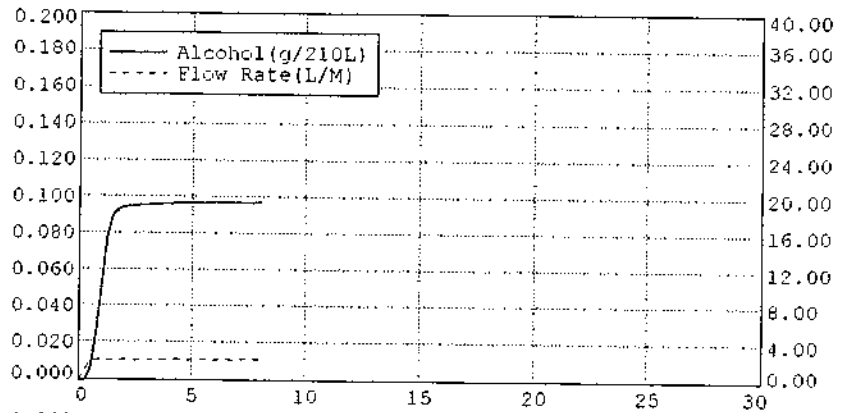
Date: 02/28/2017
 Time: 13:41:30

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.51: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 466 psi

BLANK TEST	0.000	13:42
INTERNAL STANDARD	VERIFIED	13:42
EXTERNAL STANDARD	0.098	13:43
BLANK TEST	0.000	13:44
EXTERNAL STANDARD	0.098	13:44
BLANK TEST	0.000	13:45
EXTERNAL STANDARD	0.098	13:45
BLANK TEST	0.000	13:46
EXTERNAL STANDARD	0.098	13:46
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.098	13:47
BLANK TEST	0.000	13:48

Average = 0.0980
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100388

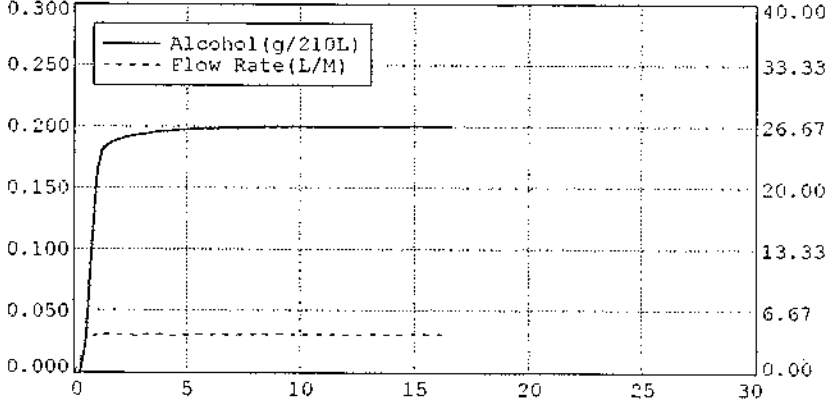
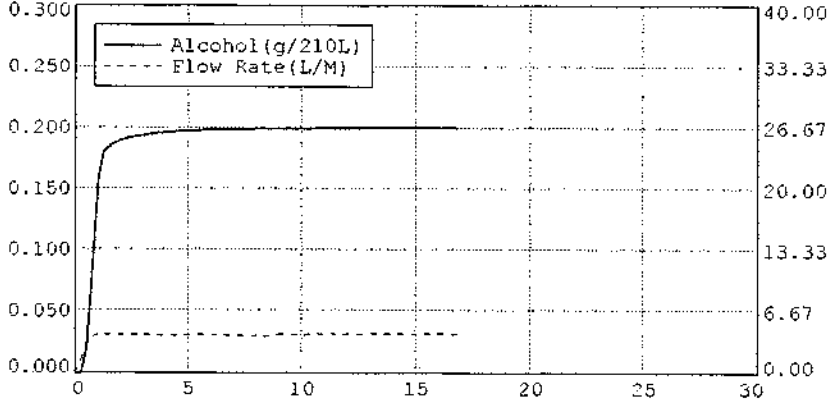
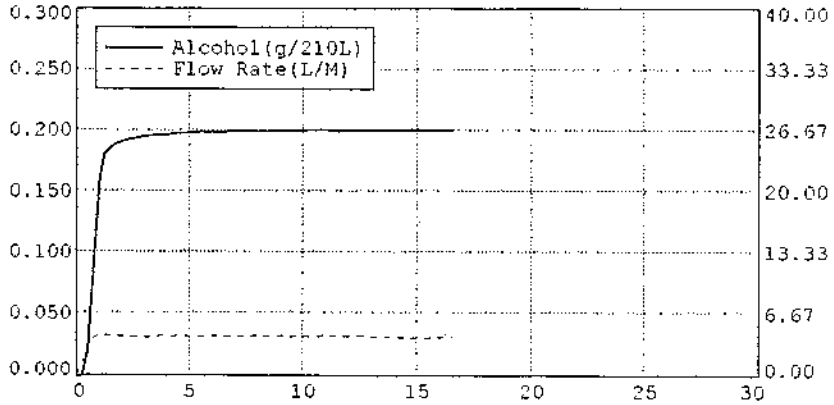
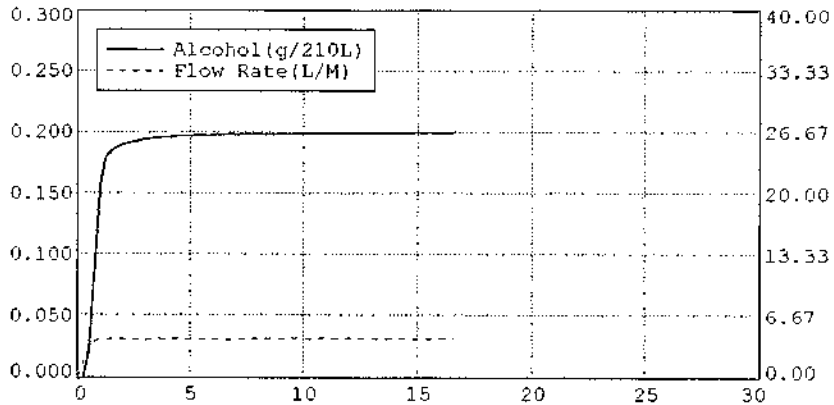
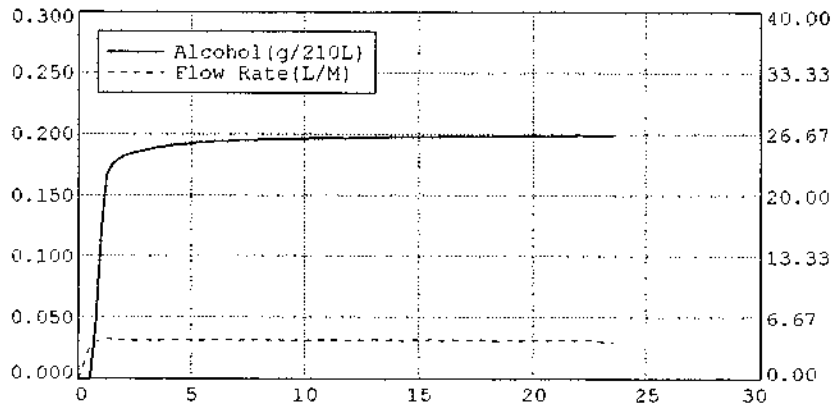
Date: 02/28/2017
 Time: 13:59:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: 15130
 EXPIRATION: 05/11/2017

BLANK TEST	0.000	14:00
INTERNAL STANDARD	VERIFIED	14:00
EXTERNAL STANDARD	0.199	14:01
BLANK TEST	0.000	14:02
EXTERNAL STANDARD	0.200	14:02
BLANK TEST	0.000	14:03
EXTERNAL STANDARD	0.200	14:03
BLANK TEST	0.000	14:04
EXTERNAL STANDARD	0.200	14:05
BLANK TEST	0.000	14:06
EXTERNAL STANDARD	0.201	14:06
BLANK TEST	0.000	14:07

Average = 0.2000
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 6

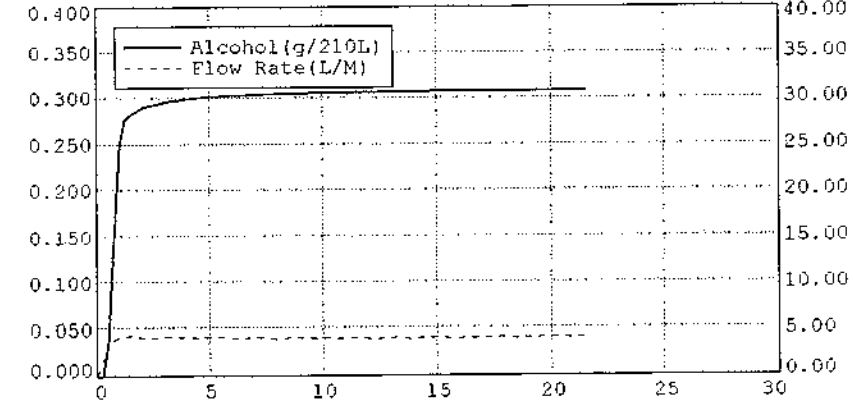
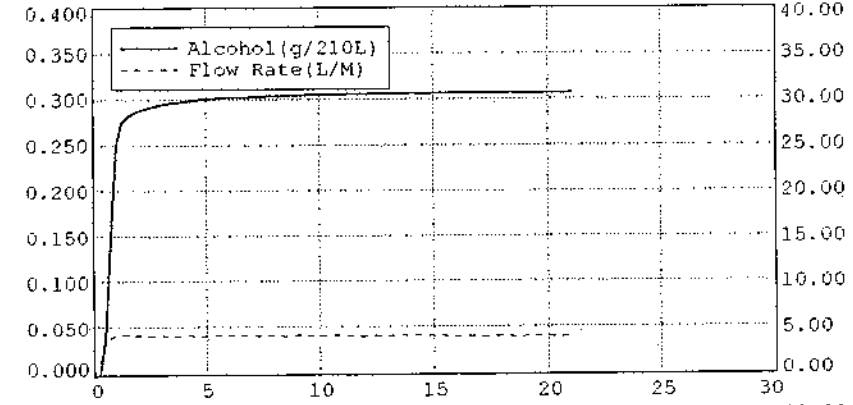
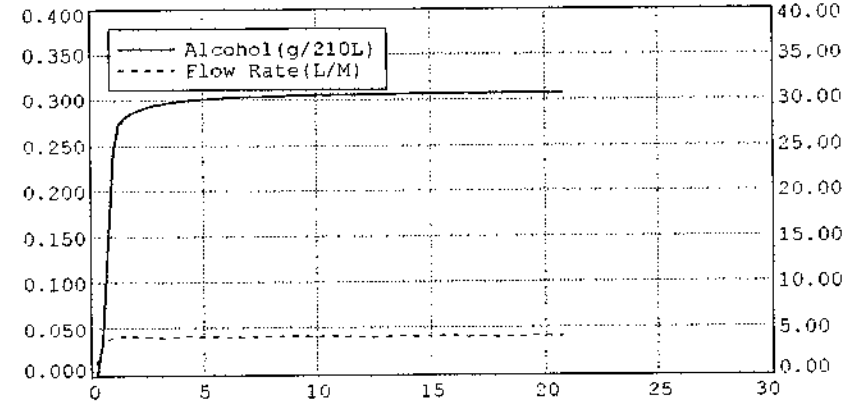
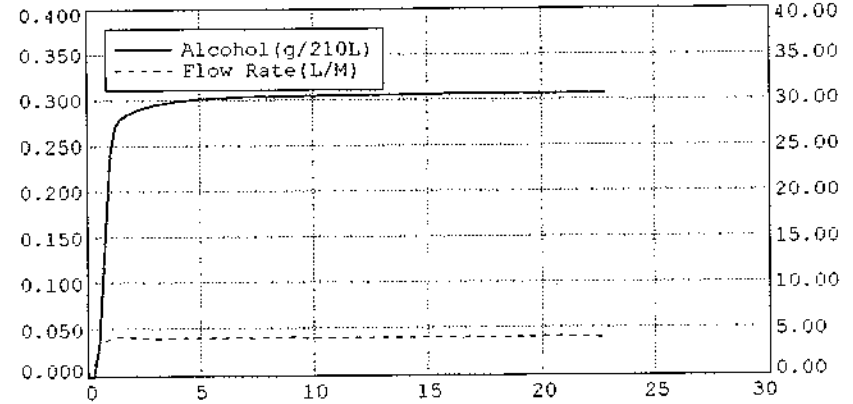
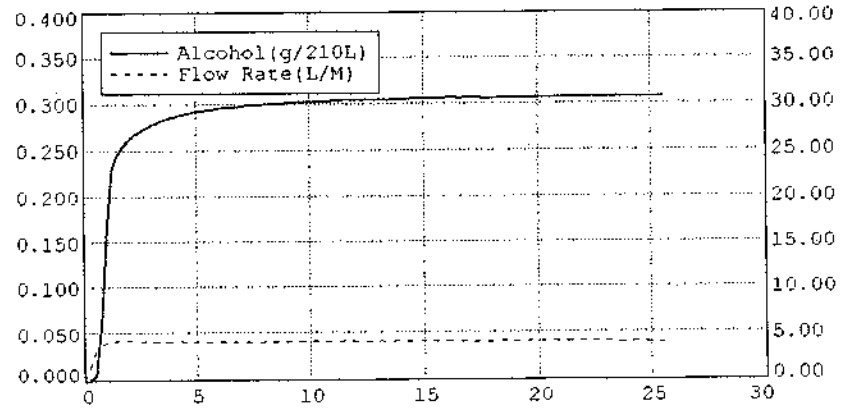
Alaska Department of Public Safety
 DATAMASTER dmt: 100388

Date: 02/28/2017
 Time: 14:08:56

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: GUTH 16210
 EXPIRATION: 08/22/2018

BLANK TEST	0.000	14:09
INTERNAL STANDARD	VERIFIED	14:10
EXTERNAL STANDARD	0.307	14:10
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.307	14:12
BLANK TEST	0.000	14:13
EXTERNAL STANDARD	0.307	14:13
BLANK TEST	0.000	14:14
EXTERNAL STANDARD	0.306	14:14
BLANK TEST	0.000	14:15
EXTERNAL STANDARD	0.307	14:16
BLANK TEST	0.000	14:17

Average = 0.3068
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmtc: 100388

Date: 03/01/2017
Time: 11:08:51

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

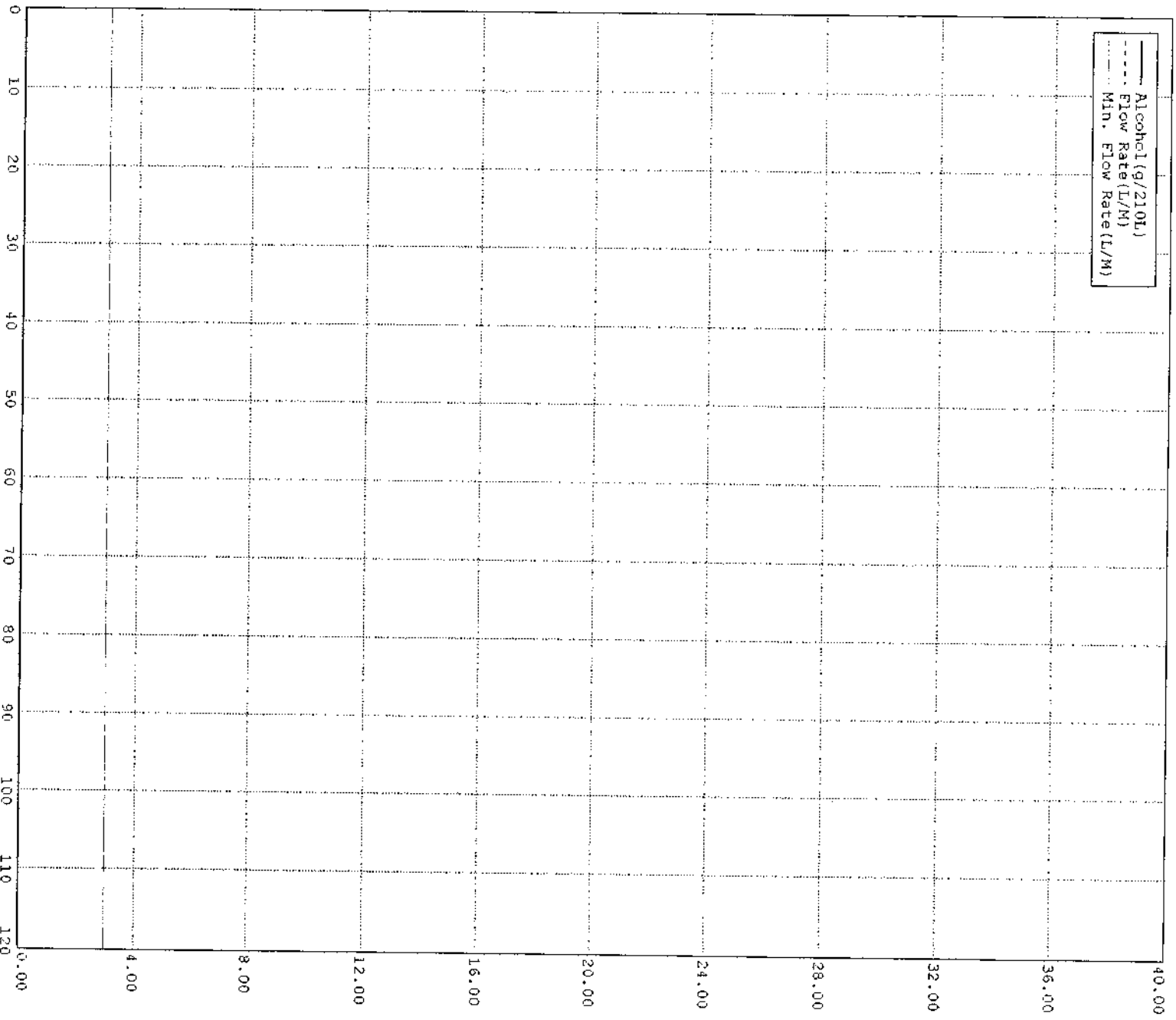
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	11:10
BLANK TEST	0.000	11:10
INTERNAL STANDARD	VERIFIED	11:10
EXTERNAL STANDARD	0.078	11:10
BLANK TEST	0.000	11:11
SUBJECT SAMPLE	INCOMPLETE	11:13

BBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100388

Date: 03/01/2017
Time: 11:50:17

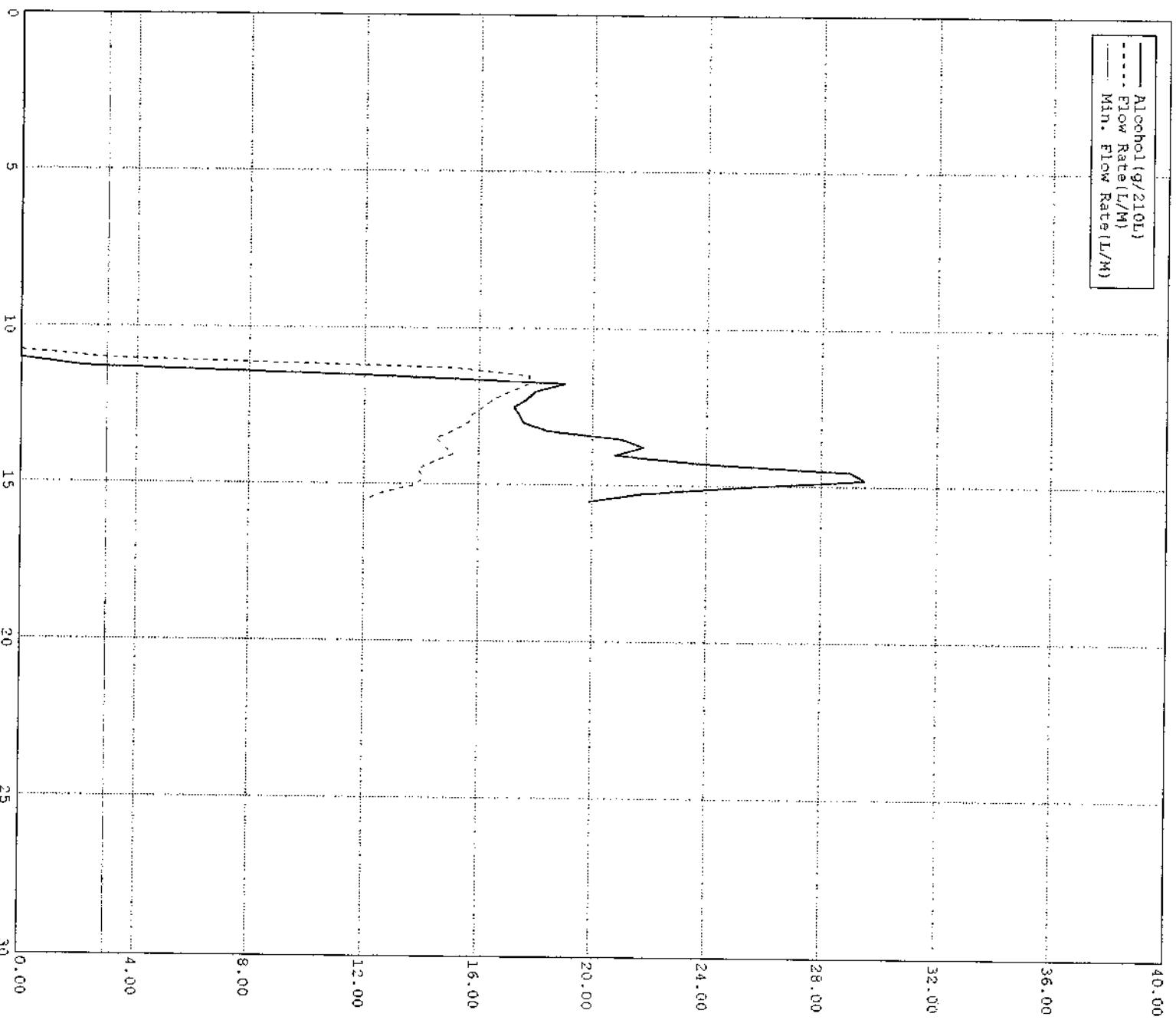
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
INVALID KNOWN MOUTH ALCOHOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	11:52
BLANK TEST	0.000	11:52
INTERNAL STANDARD	VERIFIED	11:52
EXTERNAL STANDARD	0.079	11:52
BLANK TEST	0.000	11:53
SUBJECT SAMPLE	INVALID	11:54

BRMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100388

Date: 03/01/2017
Time: 12:09:01

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

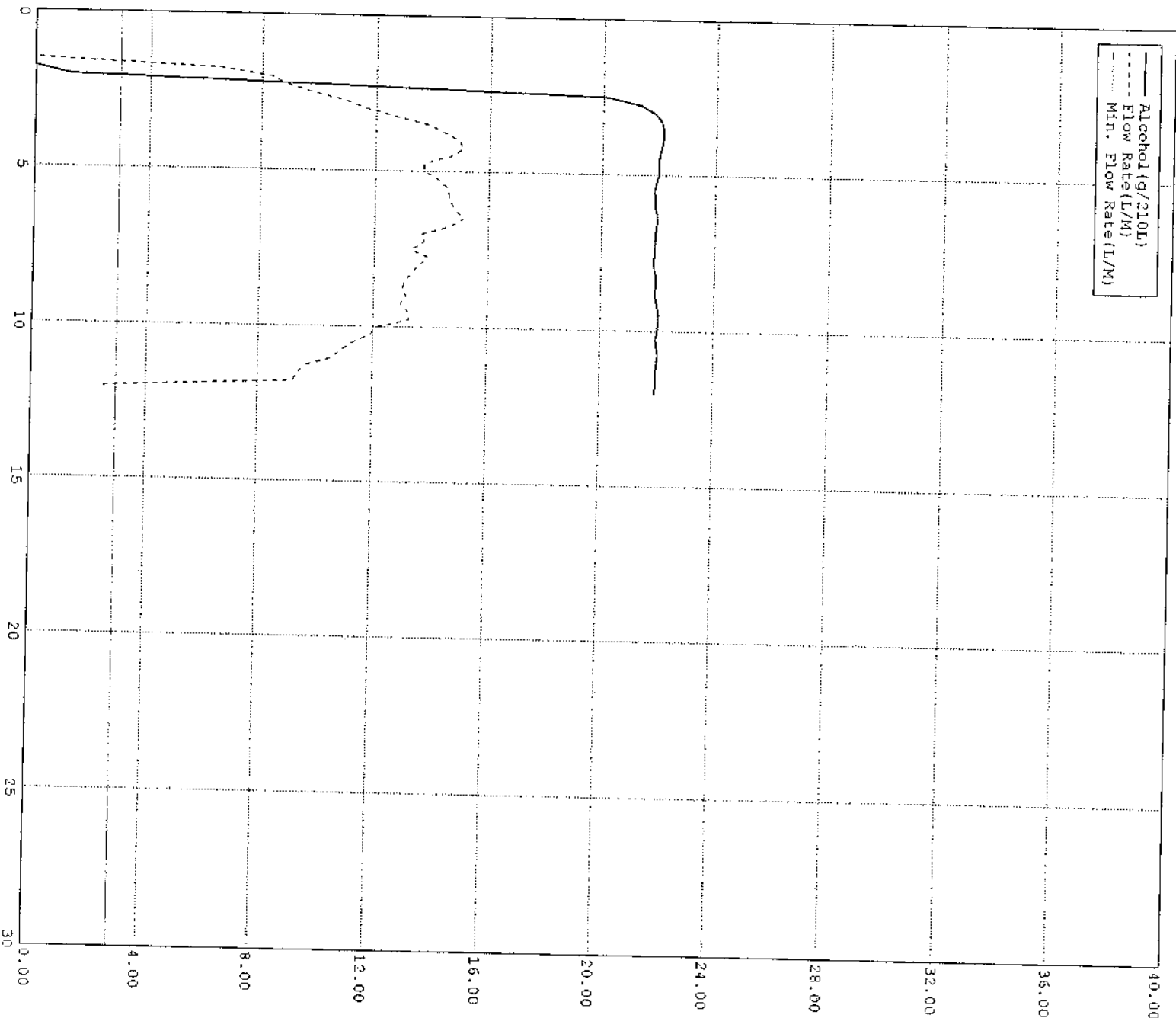
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	12:10
BLANK TEST	0.000	12:10
INTERNAL STANDARD	VERIFIED	12:11
Xg = 0.098 (2.11%)		
EXTERNAL STANDARD	0.078	12:11
X[1] = 0.0782 (-0.0015)	(0.0030)	
BLANK TEST	0.000	12:12
SUBJECT SAMPLE	XXX	12:12
X[1] = 0.1109 (-0.0188)	(0.0020)	

Interference Detected

Filter 2 Avg: -0.0018
Filter 3 Avg: 0.0027
BMB 3/1/17

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100388

Date: 03/01/2017
Time: 12:15:55

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

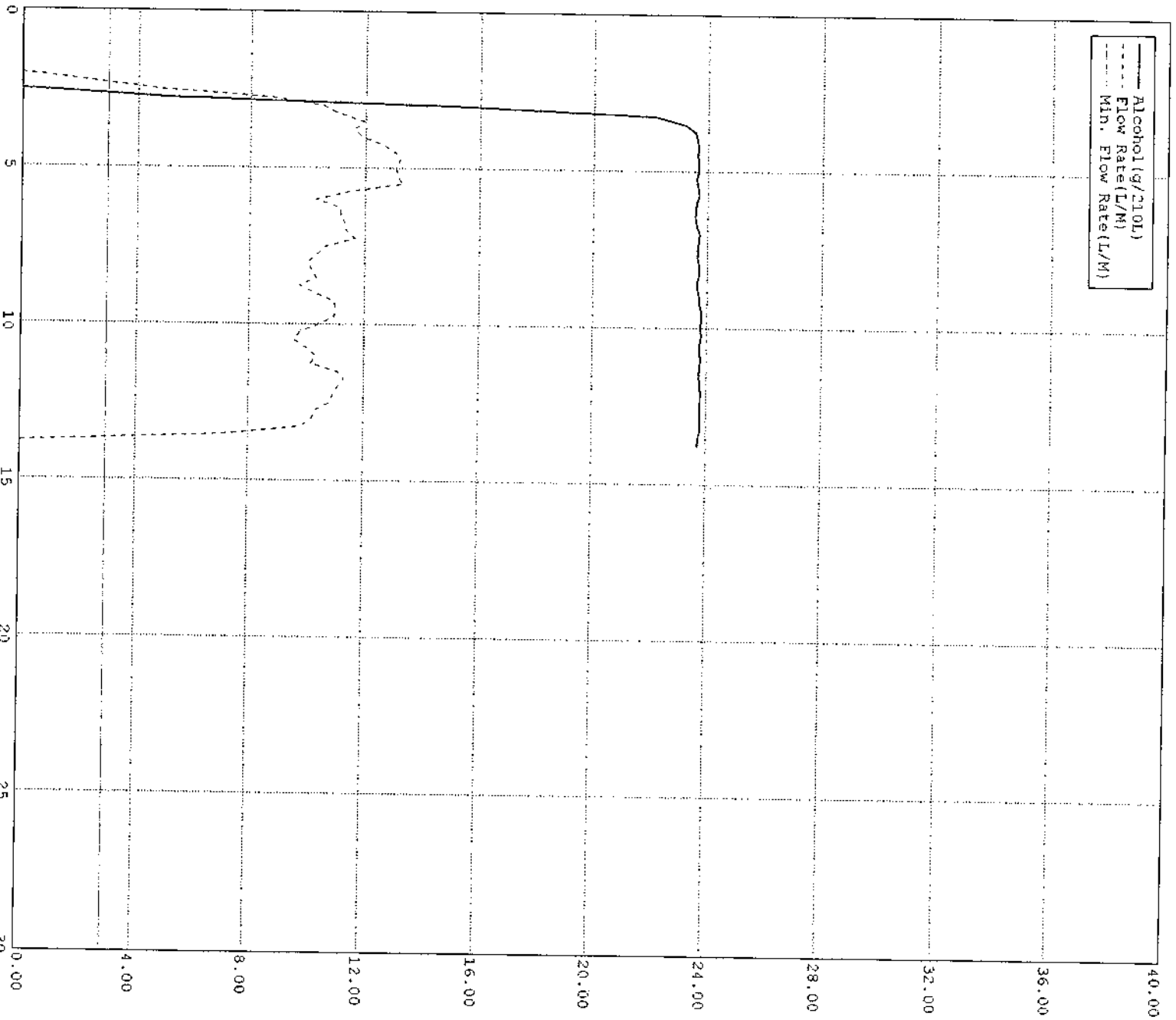
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	12:18
BLANK TEST	0.000	12:18
INTERNAL STANDARD	VERIFIED	12:18
Xq = 0.098 (2.57%)		
EXTERNAL STANDARD	0.078	12:18
X[1] = 0.0783 (-0.0020)	(0.0024)	
BLANK TEST	0.000	12:19
SUBJECT SAMPLE	XXX	12:19
X[1] = 0.1191 (-0.0251)	(0.0010)	

Interference Detected

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100388

Date: 03/01/2017
Time: 12:23:22

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

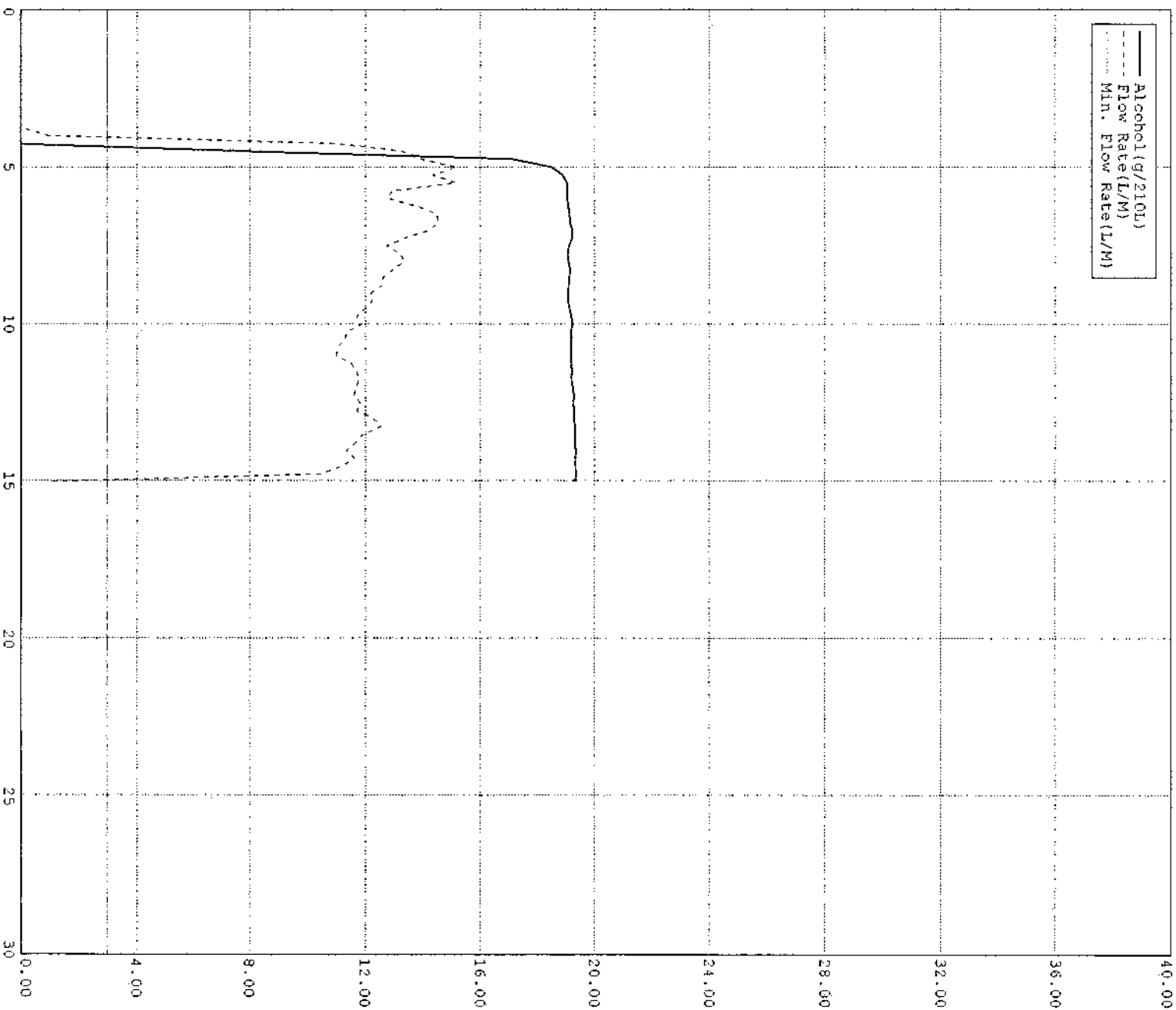
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.58: 0.079
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	12:24
BLANK TEST	0.000	12:24
INTERNAL STANDARD	VERIFIED	12:24
Xq = 0.098 (2.20%)		
EXTERNAL STANDARD	0.078	12:25
X[1] = 0.0782 (-0.0020)	(0.0027)	
BLANK TEST	0.000	12:26
SUBJECT SAMPLE (Vol=2.24l)	0.097	12:26
X[1] = 0.0972 (-0.0008)	(0.0011)	
BLANK TEST	0.000	12:27
EXTERNAL STANDARD	0.078	12:27
X[1] = 0.0779 (-0.0018)	(0.0025)	
BLANK TEST	0.000	12:28

BBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100388

Date: 03/01/2017
Time: 11:45:31

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

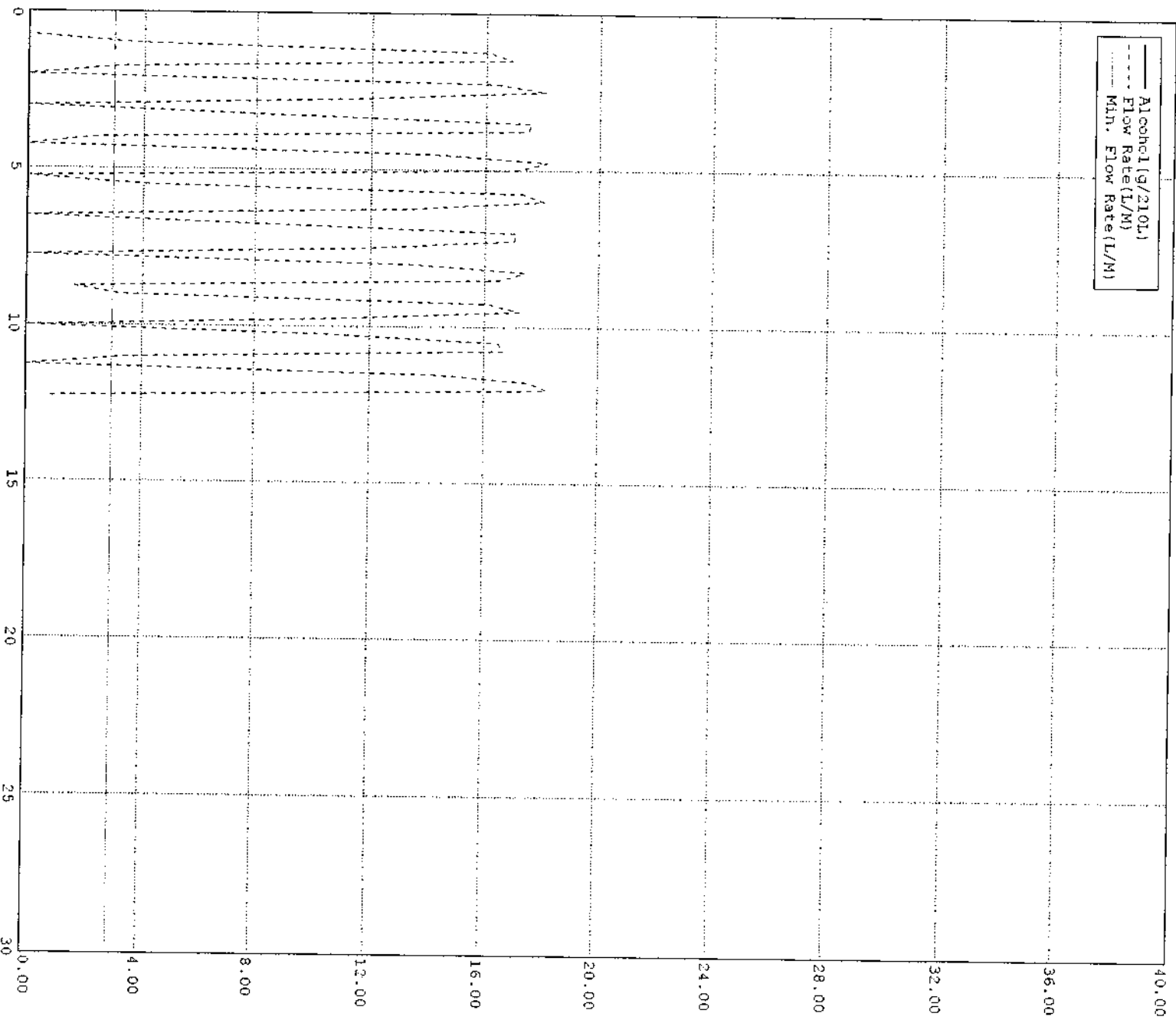
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	11:46
BLANK TEST	0.000	11:47
INTERNAL STANDARD	VERIFIED	11:47
EXTERNAL STANDARD	0.078	11:47
BLANK TEST	0.000	11:48
SUBJECT SAMPLE	XXX	11:48

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100388

Date: 03/01/2017
Time: 11:36:36

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

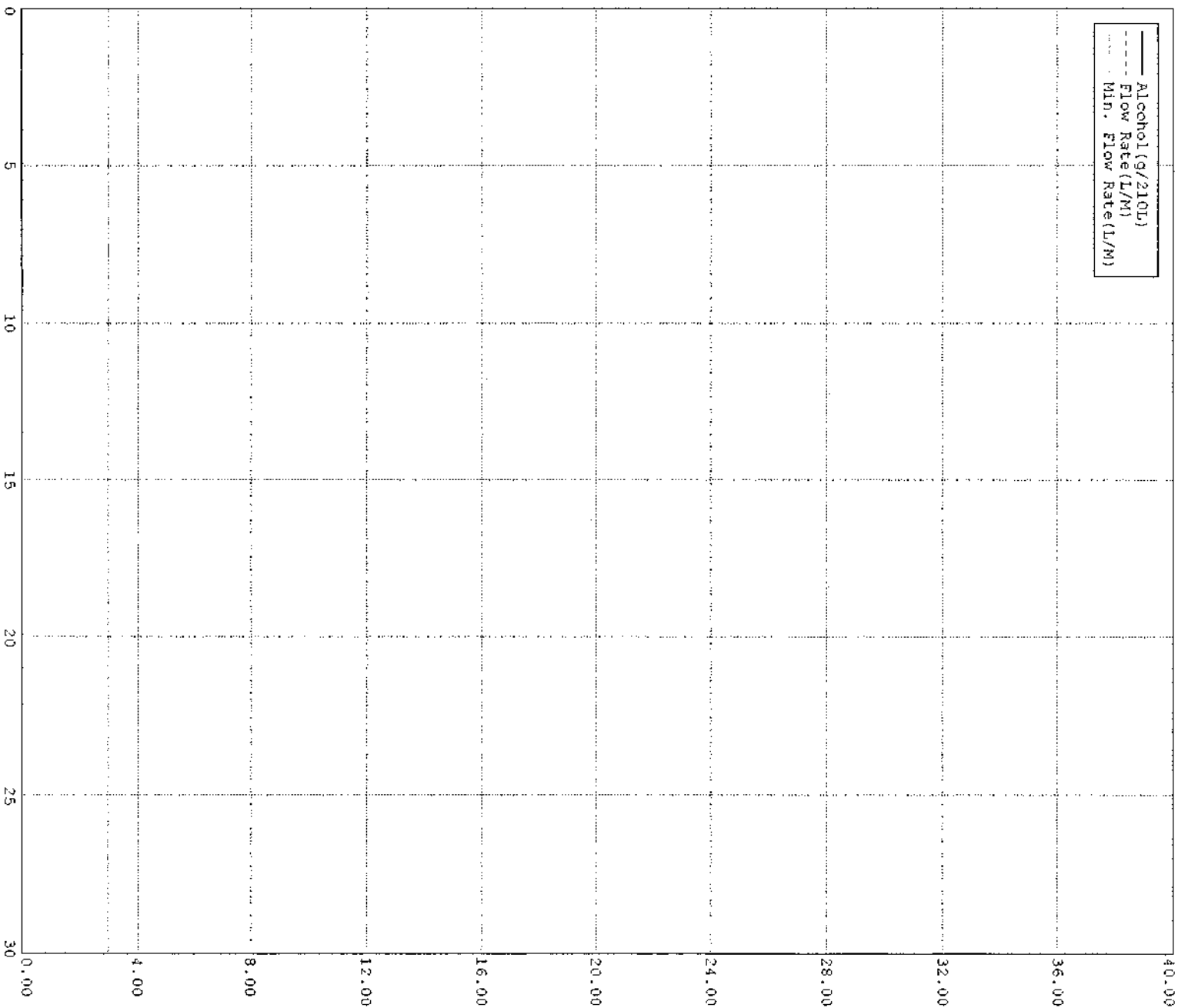
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK
BLANK TEST PASSED 11:37
INTERNAL STANDARD VERIFIED 11:38
EXTERNAL STANDARD 0.078 11:38
BLANK TEST 0.000 11:39

RFI DETECTED

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100388

Date: 03/01/2017
Time: 13:39:30

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
NON DRINKING SUBJECT
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	13:40
BLANK TEST	0.000	13:40
INTERNAL STANDARD	VERIFIED	13:40
EXTERNAL STANDARD	0.078	13:41
BLANK TEST	0.000	13:42
SUBJECT SAMPLE (Vol=2.02L)	0.000	13:42
BLANK TEST	0.000	13:43
EXTERNAL STANDARD	0.079	13:43
BLANK TEST	0.000	13:44

BNB

