

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 100350 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 AG616504 Exp 6/13/18
- ii. 0.040g/210L Mnf Airgas Lot AG630101 Exp 10/27/18
- iii. 0.080g/210L Mnf Airgas Lot AG634001 Exp 12/5/18
- iv. 0.100g/210L Mnf Airgas Lot AG629304 Exp 10/19/18
- v. 0.200g/210L Mnf Guth Lot 88A 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 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: 100350

Date: 03/31/2017.
Time: 10:41:37

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.6°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 47.7°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.78 V PASSED
(1.10 V - 2.56 V)
Cooler Voltage = 1.82 V PASSED
(1.01 V - 2.37 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 518 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.1 in

PUMP INFO

Flow Rate = 4.380 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

Xq = 0.099 1.31% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100350

Date: 03/31/2017
Time: 10:46 AM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 46.9°C

Current Barometer 29.0 in
Volume (Ltr) 1.60

Settings

Lamp: 1.83 V
Bias: 79 V
Cooler: 1.82 V
Chopper: 522 Hz

Voltages (V)

Flow: 1.04 V
Detector: 0.061 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 01/10/2011
Time: 16:26:03

Ca = 0.1000
CAL = 0.986277 0.800 <= CAL < 1.200
b1 = 0.0000 0.0000 <= b1 < 0.0040
b2 = 0.0022 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.1003 0.0500 <= Xq < 0.2000
a21 = 1.145944 1.050 <= a21 < 1.300
a31 = 0.463631 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100350

Date: 03/31/2017
Time: 11:58:51

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

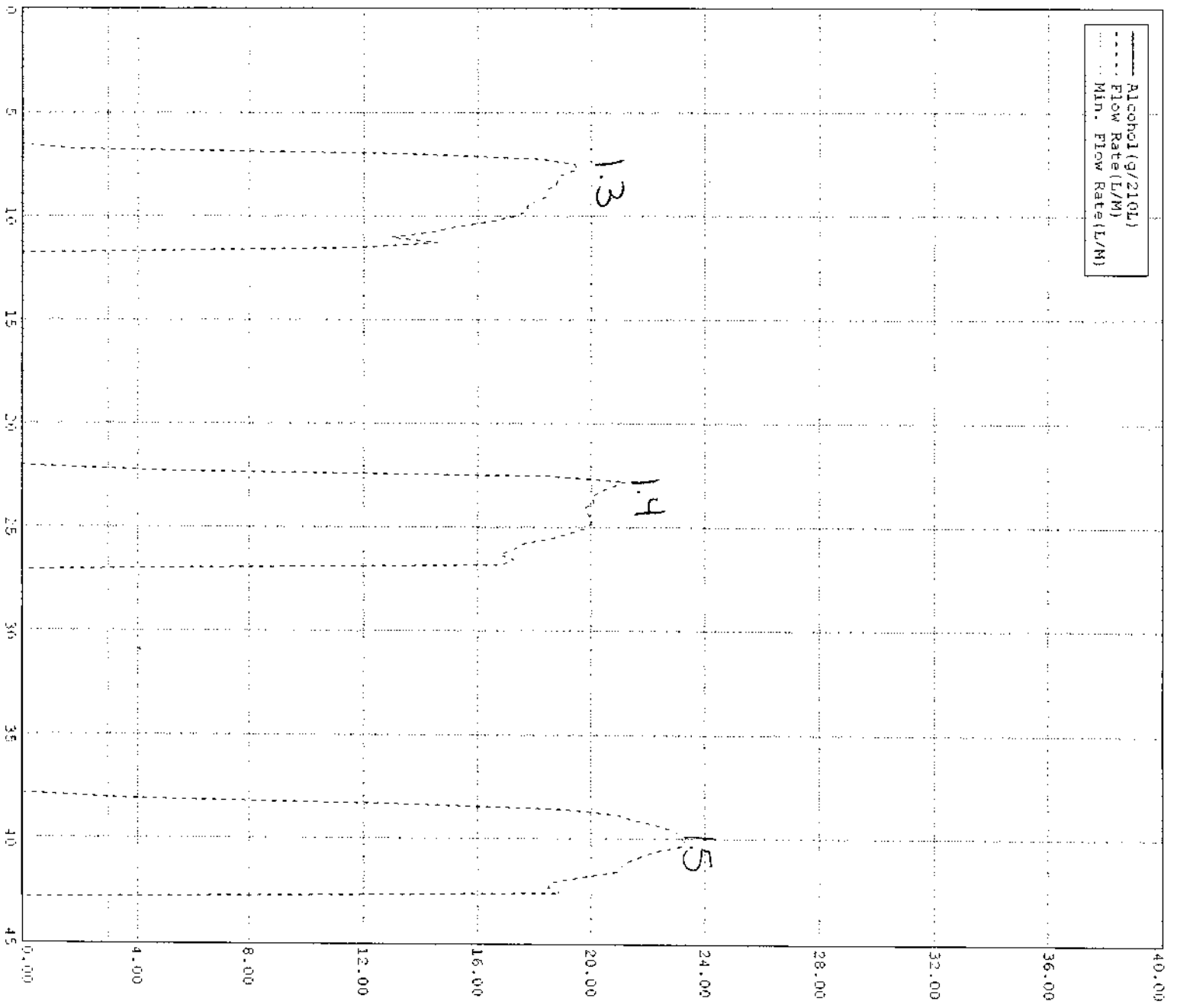
OPERATOR NAME:
BRANDI BARRETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 28.99: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	11:59
BLANK TEST	0.000	11:59
INTERNAL STANDARD	VERIFIED	12:00
EXTERNAL STANDARD	0.078	12:00
BLANK TEST	0.000	12:01
SUBJECT SAMPLE (Vol=1.57L)	0.000	12:02
BLANK TEST	0.000	12:03
EXTERNAL STANDARD	0.078	12:03
BLANK TEST	0.000	12:04

BOMB



LINEARITY CHECK

Alaska Department of Public Safety
DATAMASTER dmt: 100350

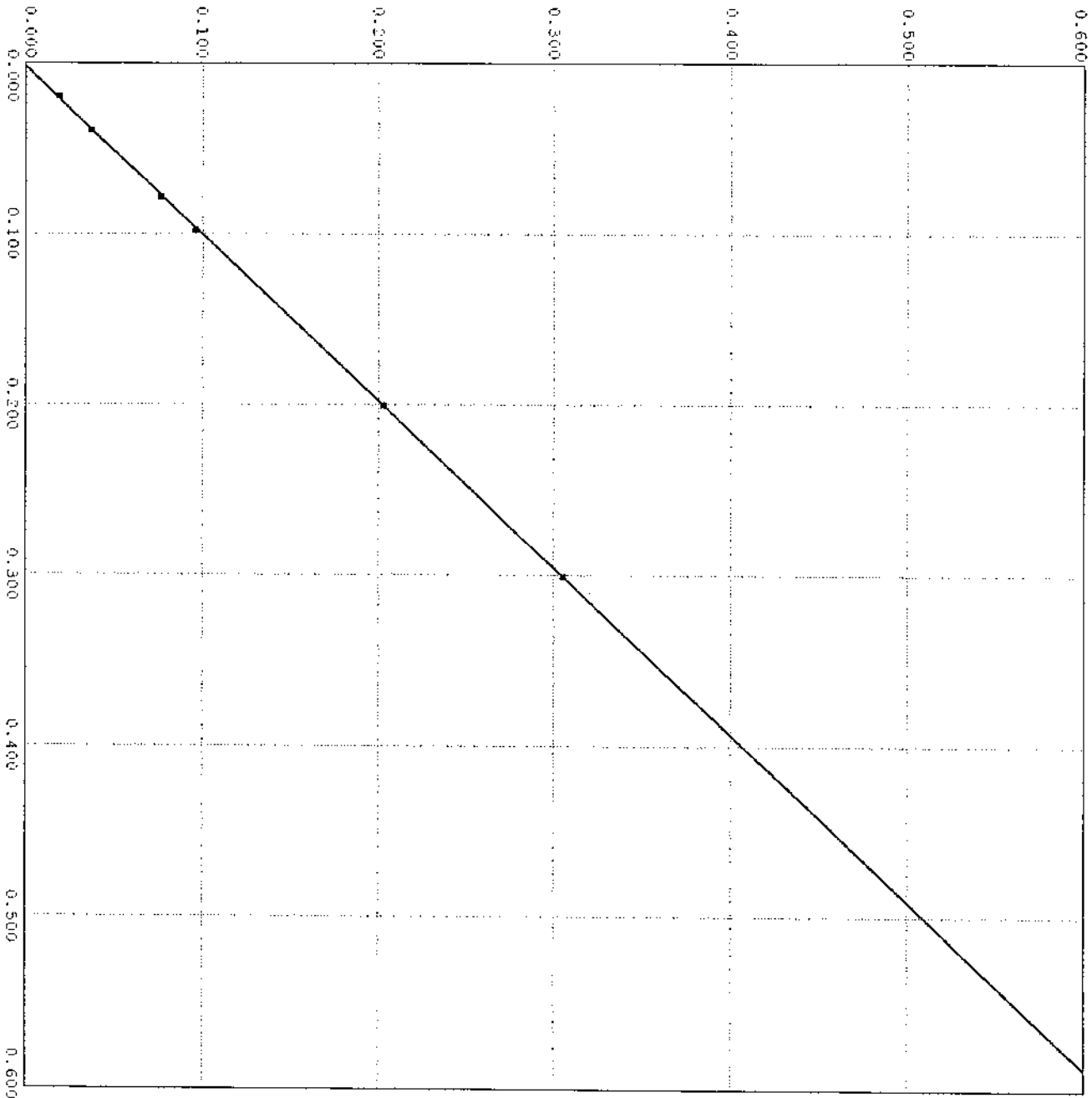
Date: 03/31/2017
Time: 12:06:32

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.019	0.0196	0.0005
0.039	0.0382	0.0004
0.078	0.0772	0.0004
0.097	0.0970	0.0000
0.200	0.2038	0.0004
0.300	0.3060	0.0000

SLOPE = 1.024257
R² = 0.999915

BB



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100350

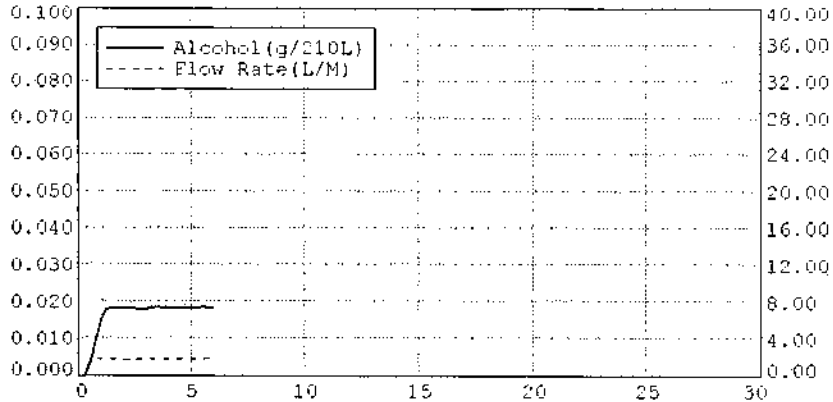
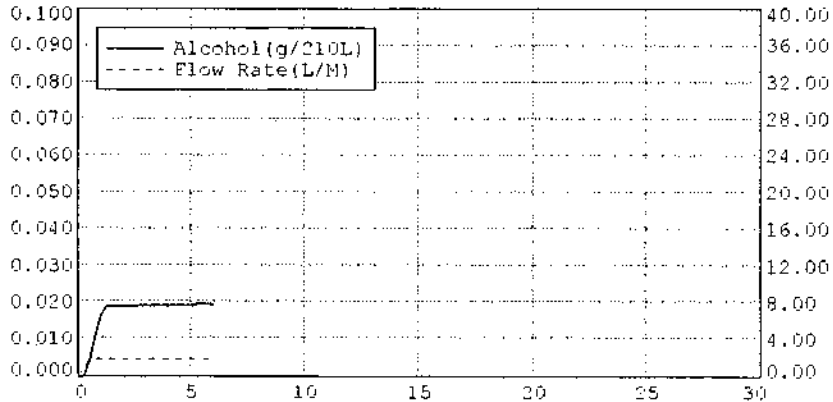
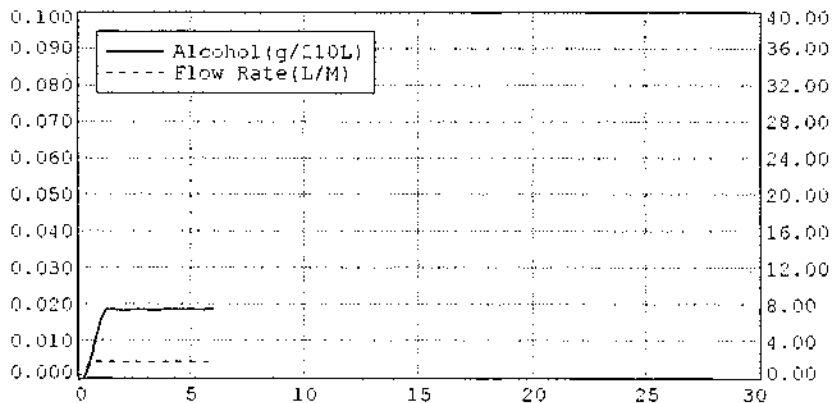
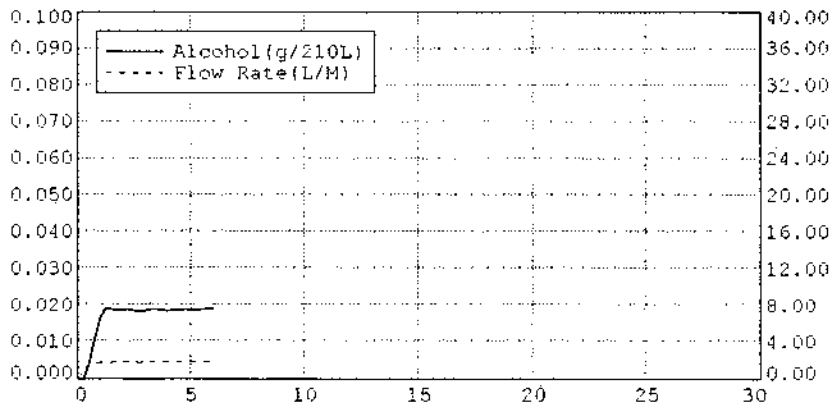
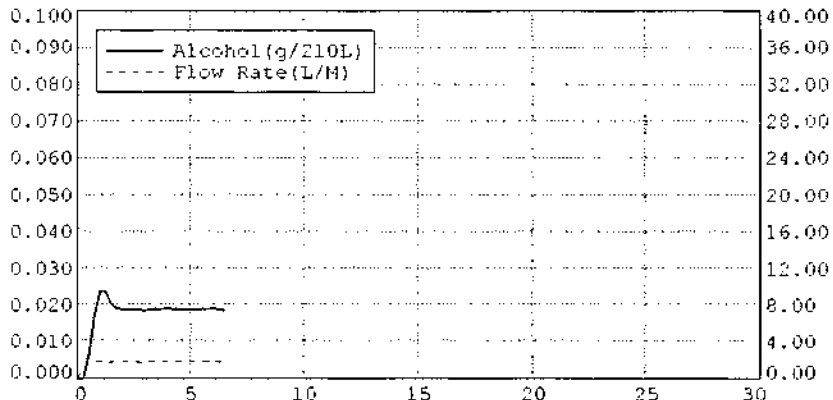
Date: 03/31/2017
 Time: 12:06:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 28.99: 0.019
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 956 psi

BLANK TEST	0.000	12:07
INTERNAL STANDARD	VERIFIED	12:07
EXTERNAL STANDARD	0.020	12:08
BLANK TEST	0.000	12:08
EXTERNAL STANDARD	0.019	12:09
BLANK TEST	0.000	12:10
EXTERNAL STANDARD	0.020	12:10
BLANK TEST	0.000	12:11
EXTERNAL STANDARD	0.020	12:11
BLANK TEST	0.000	12:12
EXTERNAL STANDARD	0.019	12:12
BLANK TEST	0.000	12:13

Average = 0.0196
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100350

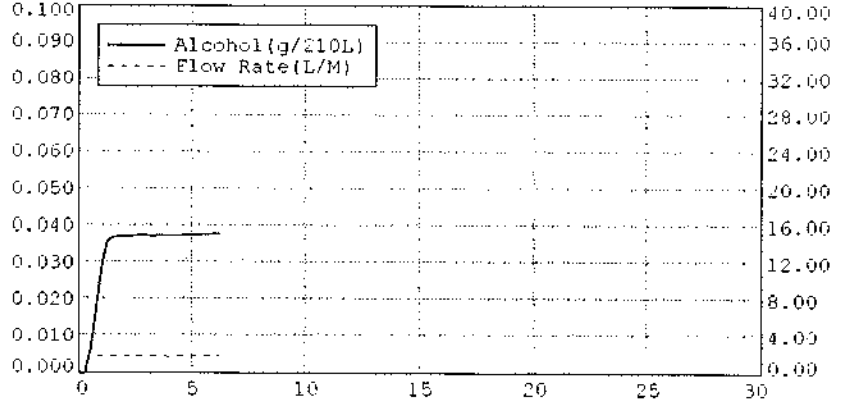
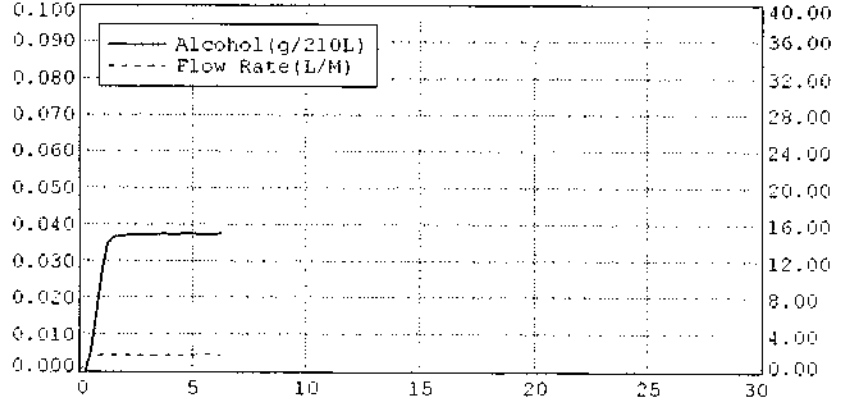
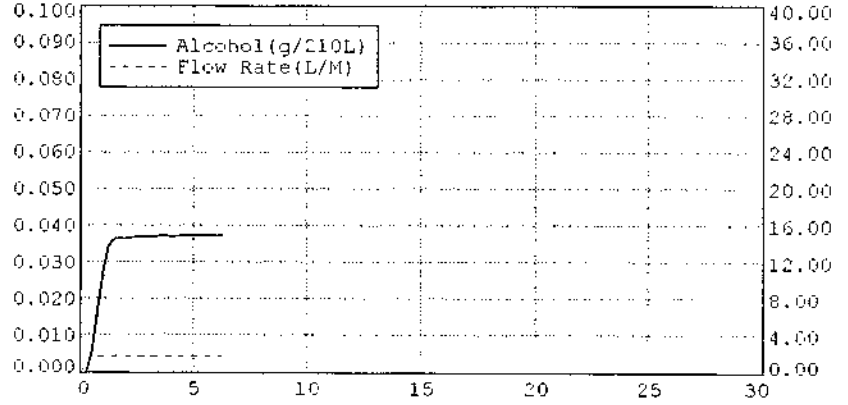
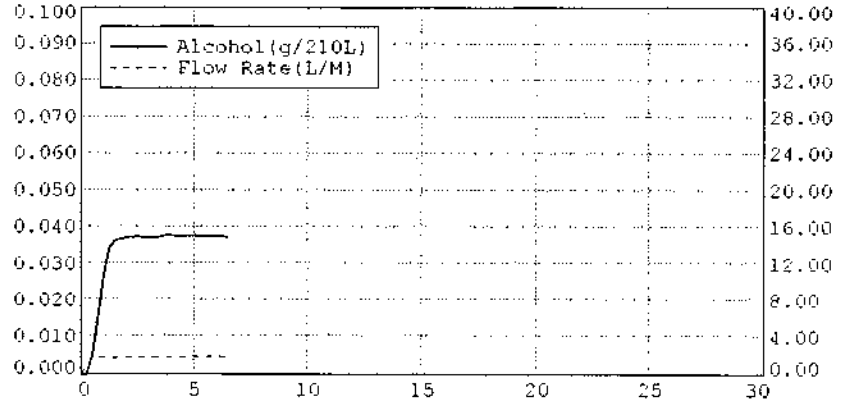
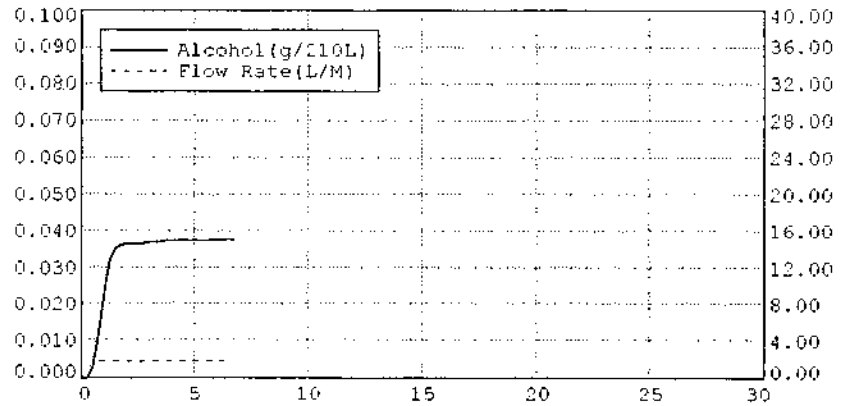
Date: 03/31/2017
 Time: 12:16:46

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 28.99: 0.039
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 955 psi

BLANK TEST	0.000	12:17
INTERNAL STANDARD	VERIFIED	12:17
EXTERNAL STANDARD	0.038	12:18
BLANK TEST	0.000	12:19
EXTERNAL STANDARD	0.038	12:19
BLANK TEST	0.000	12:20
EXTERNAL STANDARD	0.038	12:20
BLANK TEST	0.000	12:21
EXTERNAL STANDARD	0.038	12:21
BLANK TEST	0.000	12:22
EXTERNAL STANDARD	0.039	12:22
BLANK TEST	0.000	12:23

Average = 0.0382
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100350

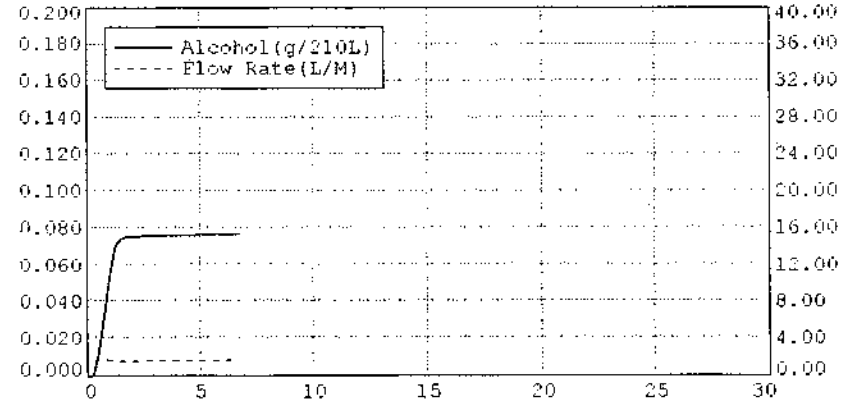
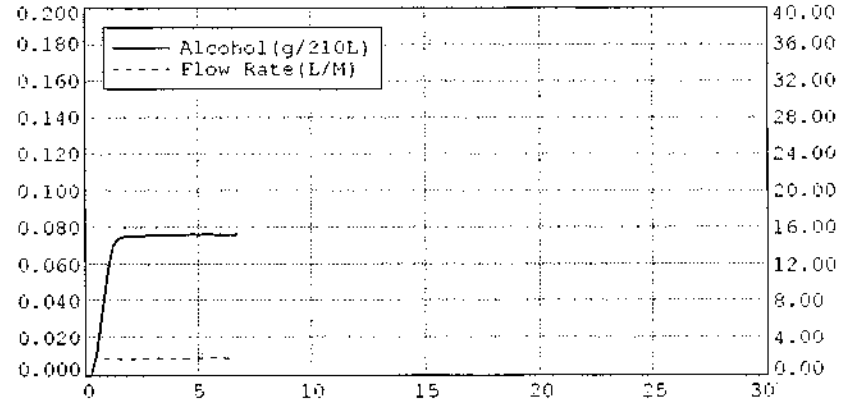
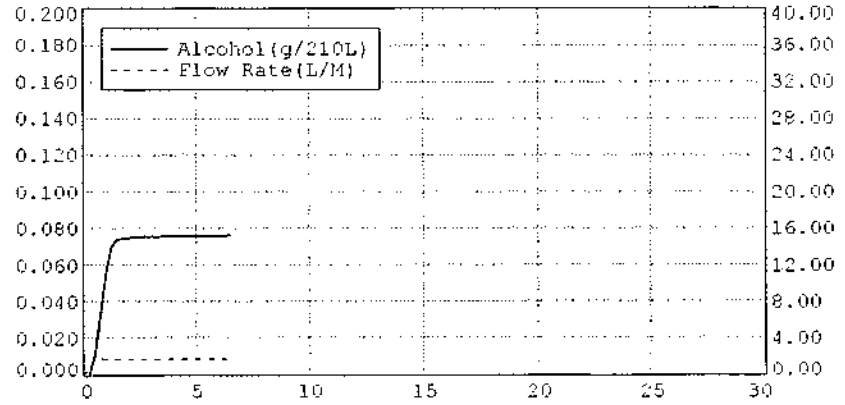
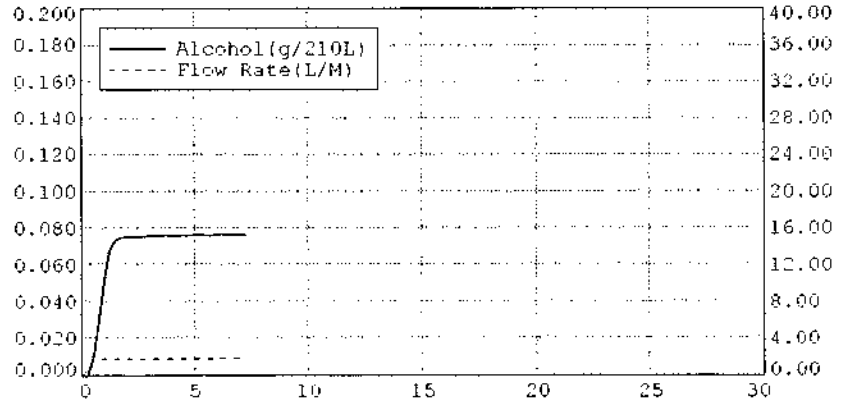
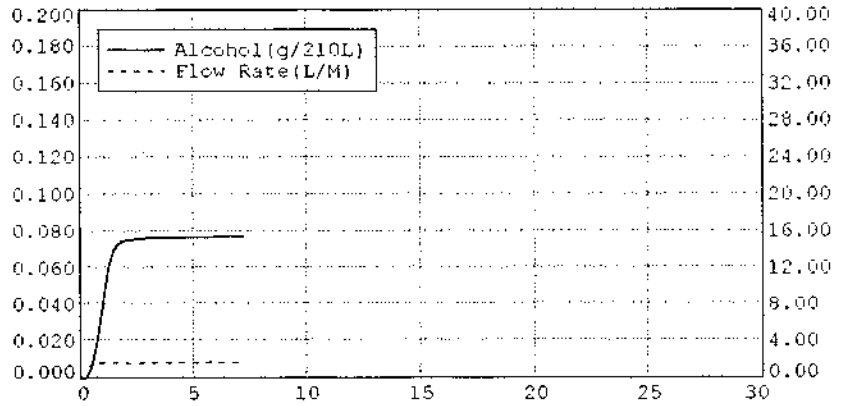
Date: 03/31/2017
 Time: 12:24:42

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 28.99: 0.078
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 958 psi

BLANK TEST	0.000	12:26
INTERNAL STANDARD	VERIFIED	12:26
EXTERNAL STANDARD	0.078	12:26
BLANK TEST	0.000	12:27
EXTERNAL STANDARD	0.077	12:27
BLANK TEST	0.000	12:28
EXTERNAL STANDARD	0.077	12:28
BLANK TEST	0.000	12:29
EXTERNAL STANDARD	0.077	12:30
BLANK TEST	0.000	12:30
EXTERNAL STANDARD	0.077	12:31
BLANK TEST	0.000	12:32

Average = 0.0772
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100350

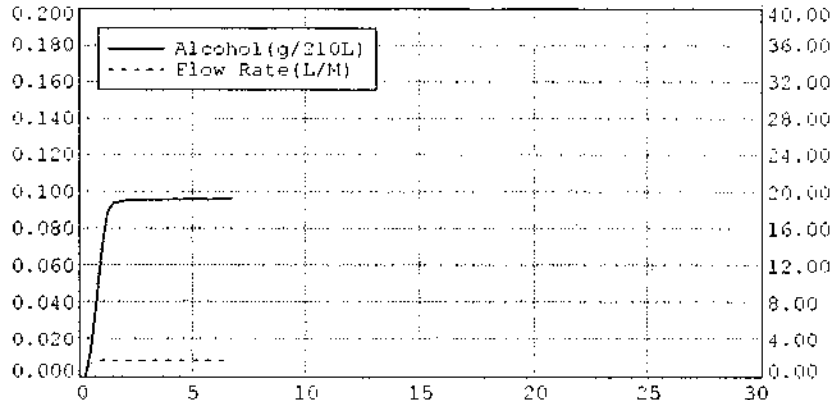
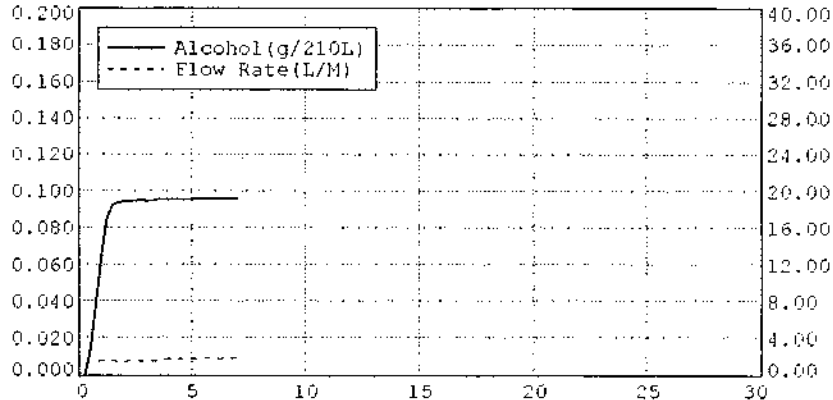
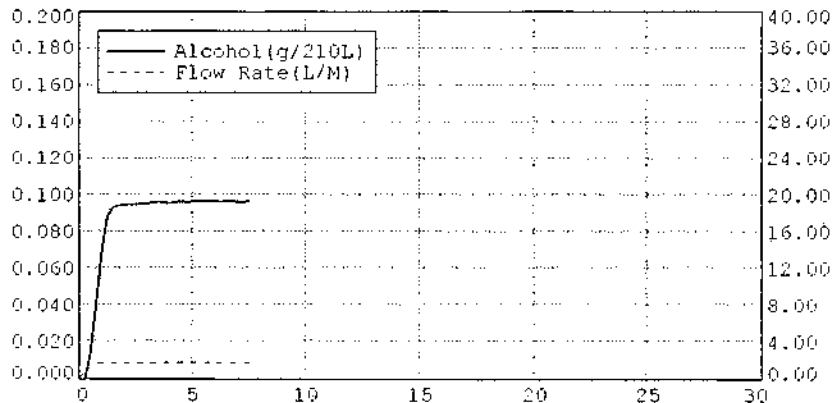
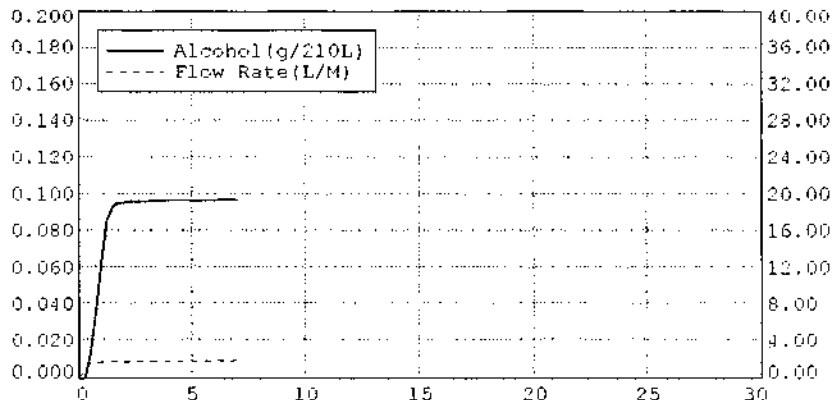
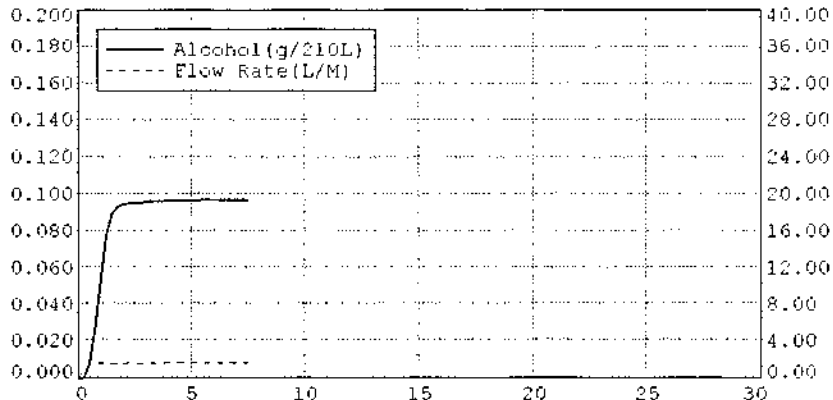
Date: 03/31/2017
 Time: 12:35:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 28.99: 0.097
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 902 psi

BLANK TEST	0.000	12:37
INTERNAL STANDARD	VERIFIED	12:37
EXTERNAL STANDARD	0.097	12:37
BLANK TEST	0.000	12:38
EXTERNAL STANDARD	0.097	12:38
BLANK TEST	0.000	12:39
EXTERNAL STANDARD	0.097	12:39
BLANK TEST	0.000	12:40
EXTERNAL STANDARD	0.097	12:40
BLANK TEST	0.000	12:41
EXTERNAL STANDARD	0.097	12:42
BLANK TEST	0.000	12:43

Average = 0.0970
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100350

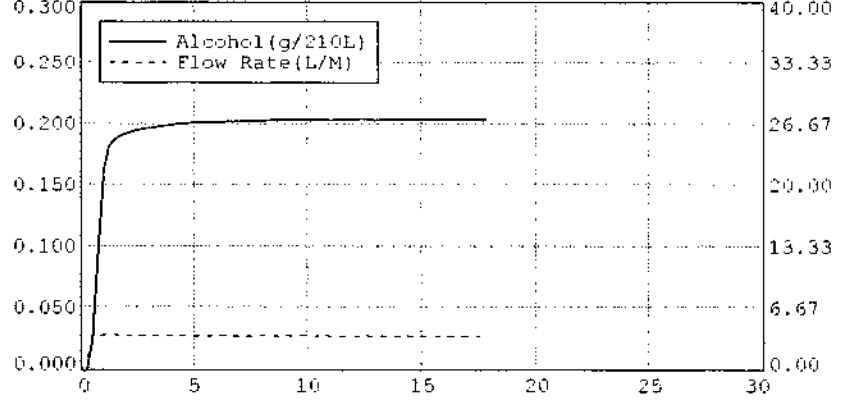
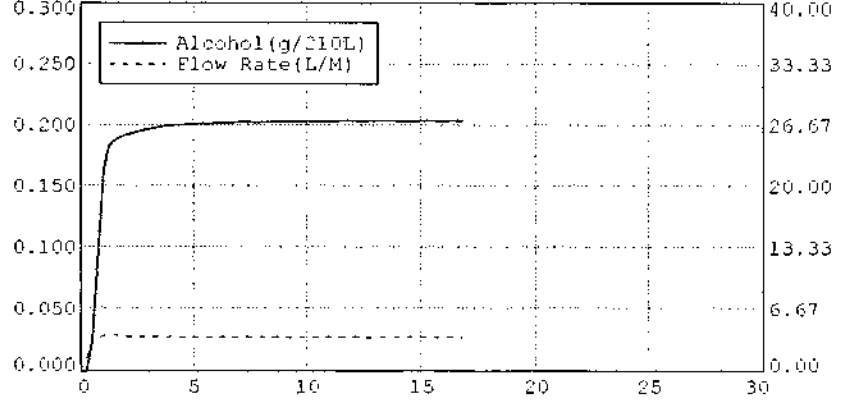
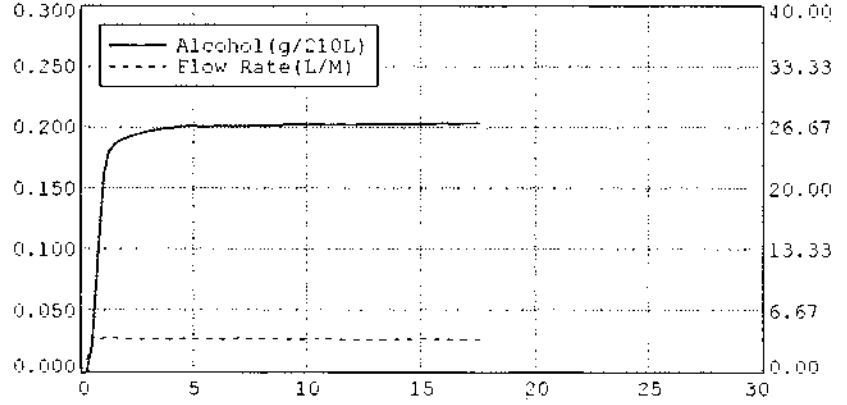
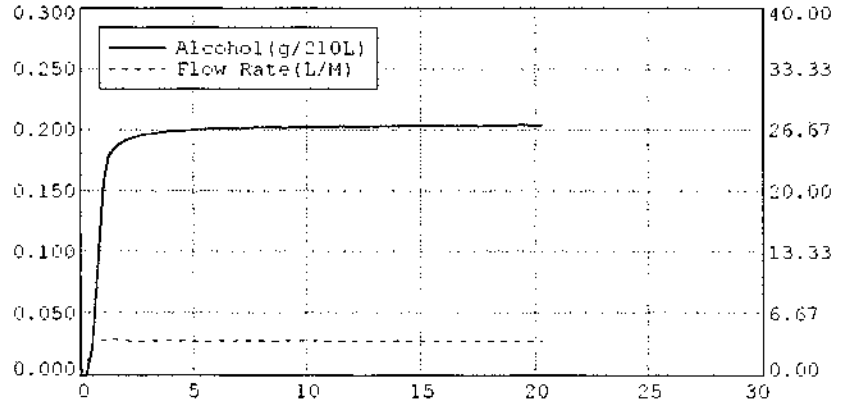
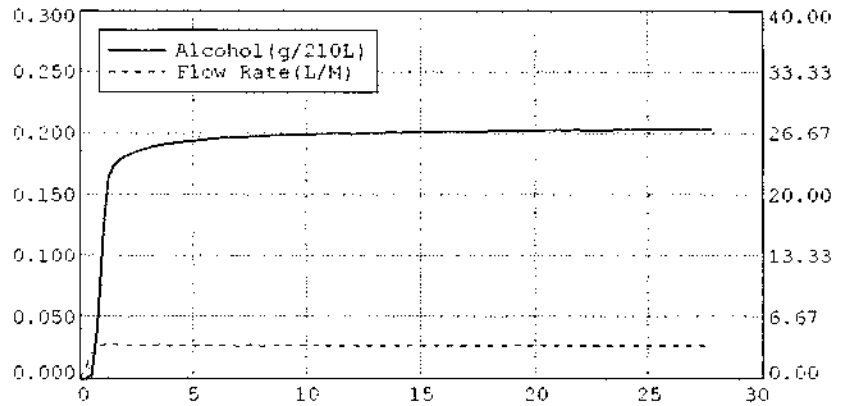
Date: 03/31/2017
 Time: 12:44:09

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	12:45
INTERNAL STANDARD	VERIFIED	12:45
EXTERNAL STANDARD	0.204	12:46
BLANK TEST	0.000	12:47
EXTERNAL STANDARD	0.204	12:47
BLANK TEST	0.000	12:48
EXTERNAL STANDARD	0.203	12:49
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.204	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.204	12:51
BLANK TEST	0.000	12:52

Average = 0.2038
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100350

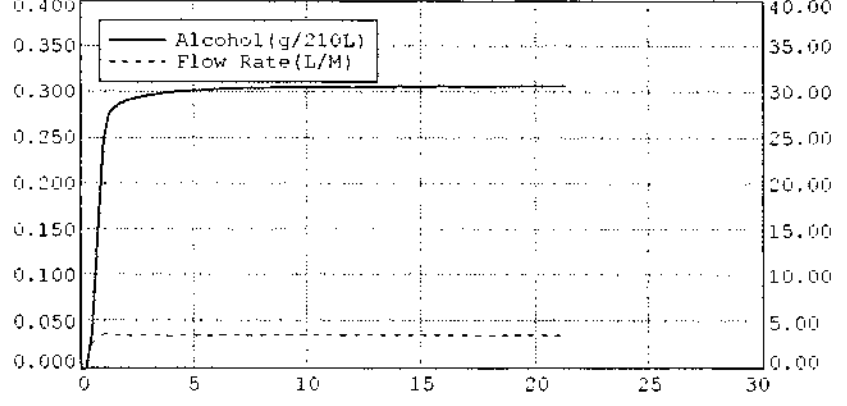
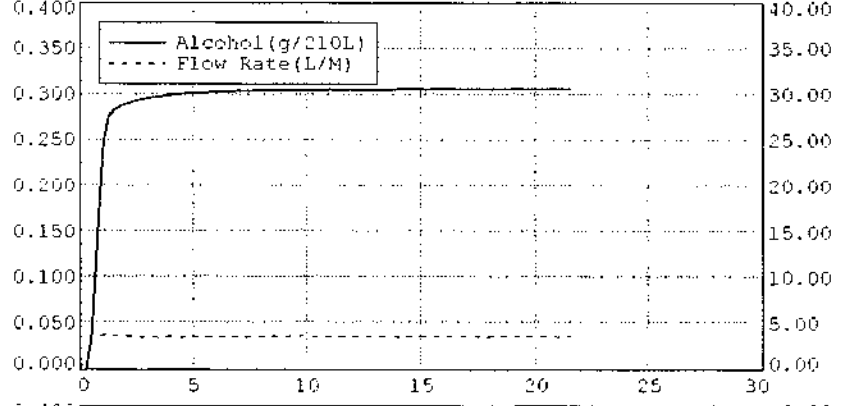
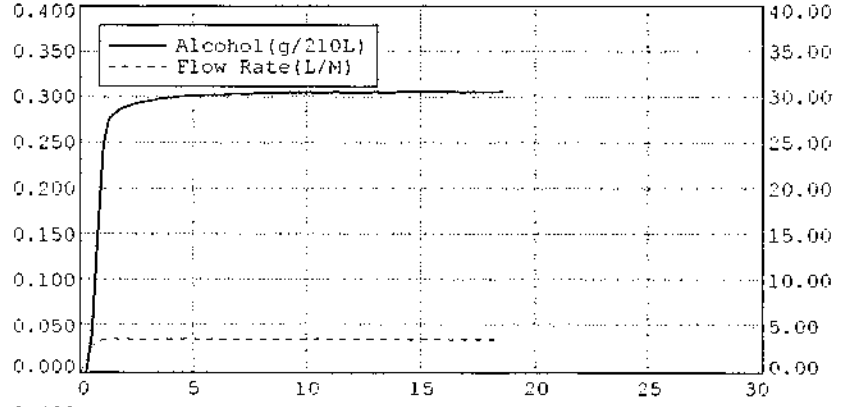
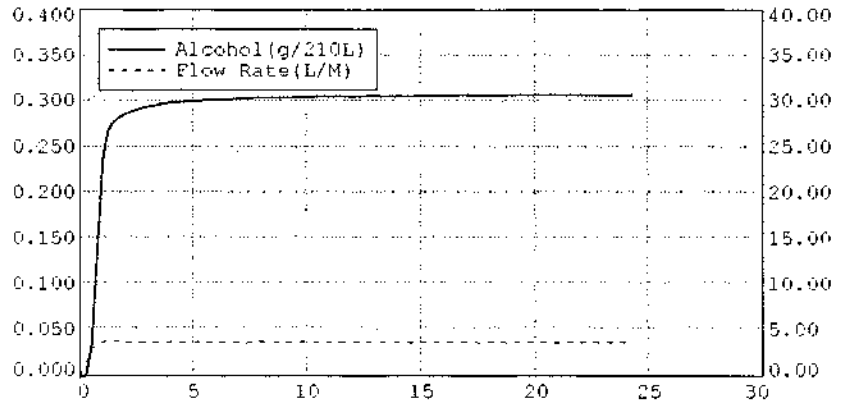
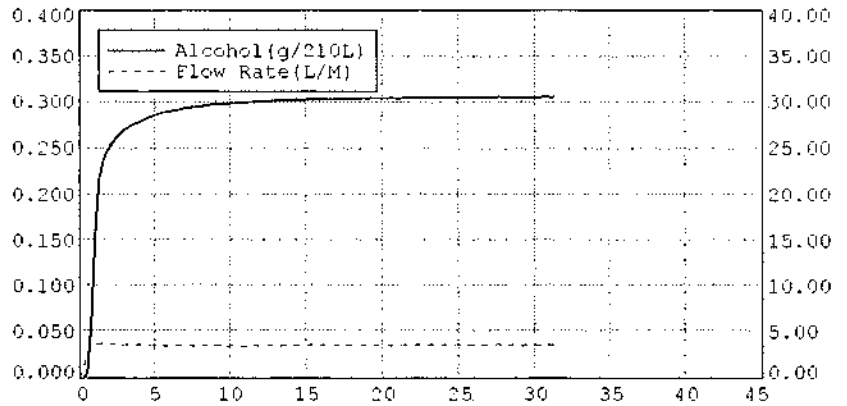
Date: 03/31/2017
 Time: 12:55:17

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	12:56
INTERNAL STANDARD	VERIFIED	12:57
EXTERNAL STANDARD	0.306	12:57
BLANK TEST	0.000	12:58
EXTERNAL STANDARD	0.306	12:59
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.306	13:00
BLANK TEST	0.000	13:01
EXTERNAL STANDARD	0.306	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.306	13:03
BLANK TEST	0.000	13:04

Average = 0.3060
 Std Dev = 0.0000



SUBJECT TEST

Alaska Department of Public Safety
DAMMASTER dmt: 100350

Date: 03/31/2017
Time: 13:11:19

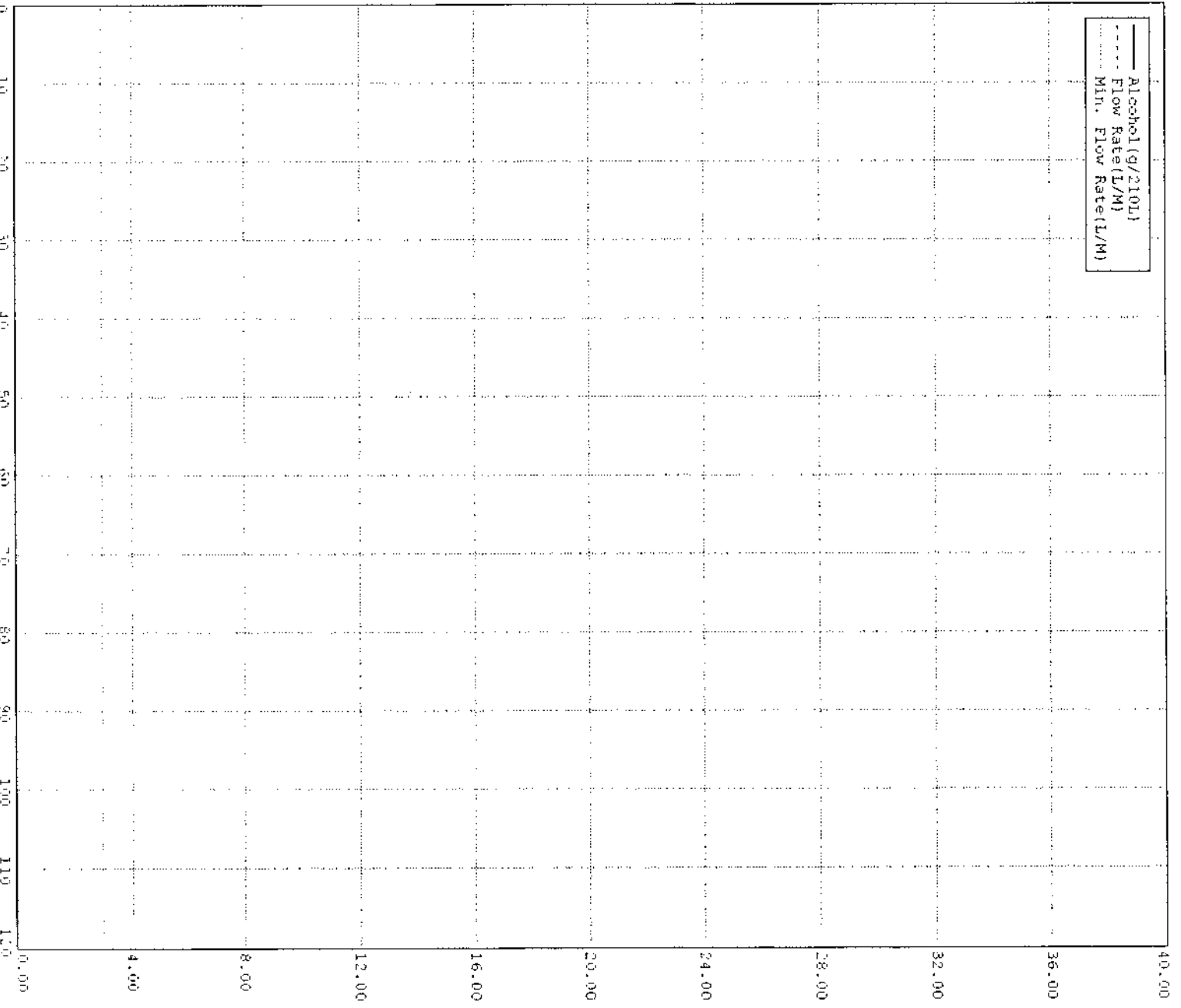
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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	13:15
BLANK TEST	0.000	13:15
INTERNAL STANDARD	VERIFIED	13:15
EXTERNAL STANDARD	0.077	13:15
BLANK TEST	0.000	13:16
SUBJECT SAMPLE	INCOMPLETE	13:18



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100350

Date: 03/31/2017
Time: 14:11:23

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

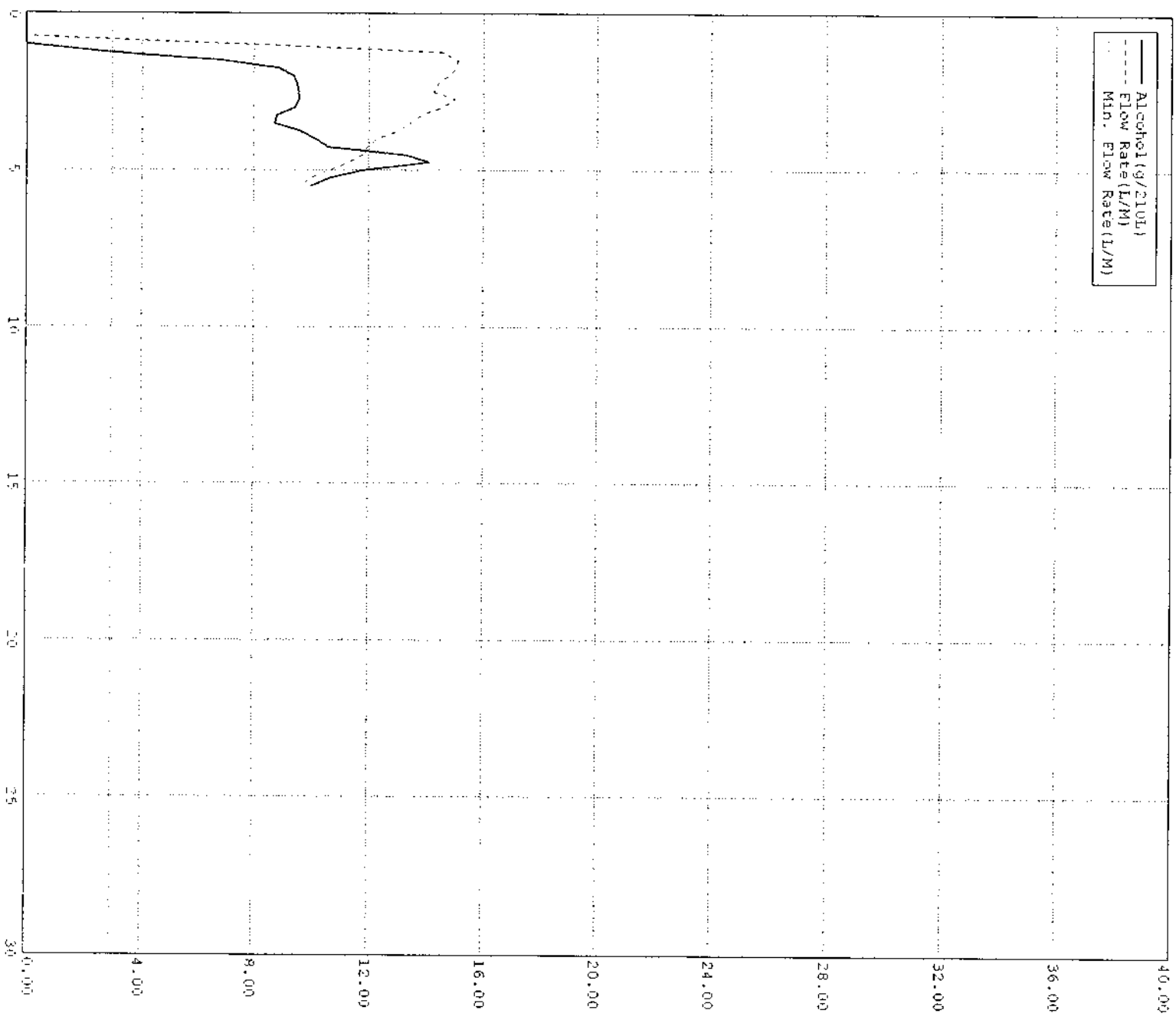
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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	14:12
BLANK TEST	0.000	14:12
INTERNAL STANDARD	VERIFIED	14:12
EXTERNAL STANDARD	0.077	14:12
BLANK TEST	0.000	14:13
SUBJECT SAMPLE	INVALID	14:14

Handwritten signature: BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 03/31/2017
Time: 13:28:28

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

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

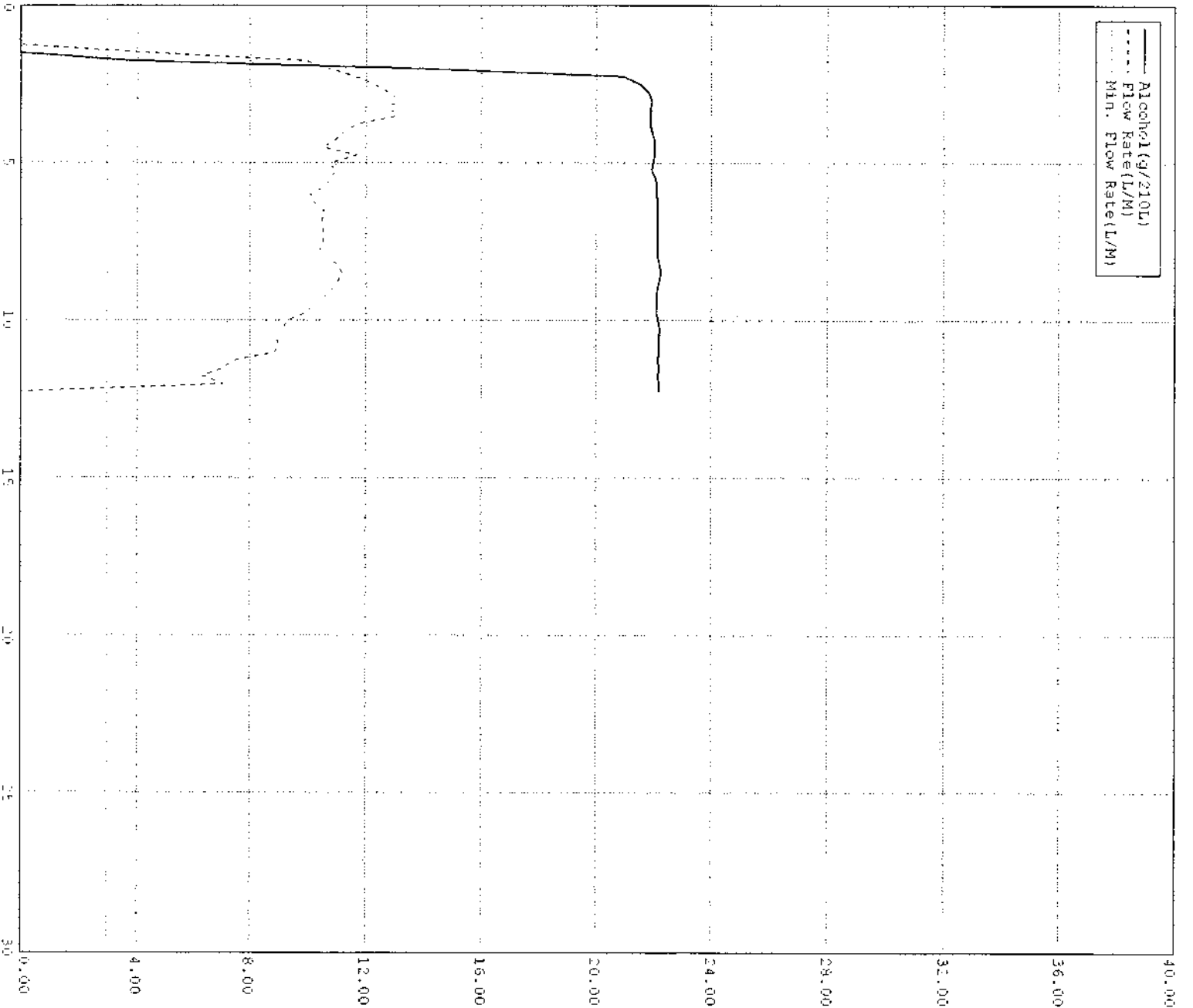
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.02: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:29
BLANK TEST	0.000	13:29
INTERNAL STANDARD	VERIFIED	13:29
Xg = 0.100 (0.79%)		
EXTERNAL STANDARD	0.078	13:29
X[1] = 0.0781 (0.0017) (0.0021)		
BLANK TEST	0.000	13:30
SUBJECT SAMPLE	XXX	13:31
X[1] = 0.1109 (-0.0184) (-0.0006)		

Interference Detected

Filter 2 Avg: 0.0011
Filter 3 Avg: 0.0024
BMB 3/31/17

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100350

Date: 03/31/2017
Time: 13:34:47

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

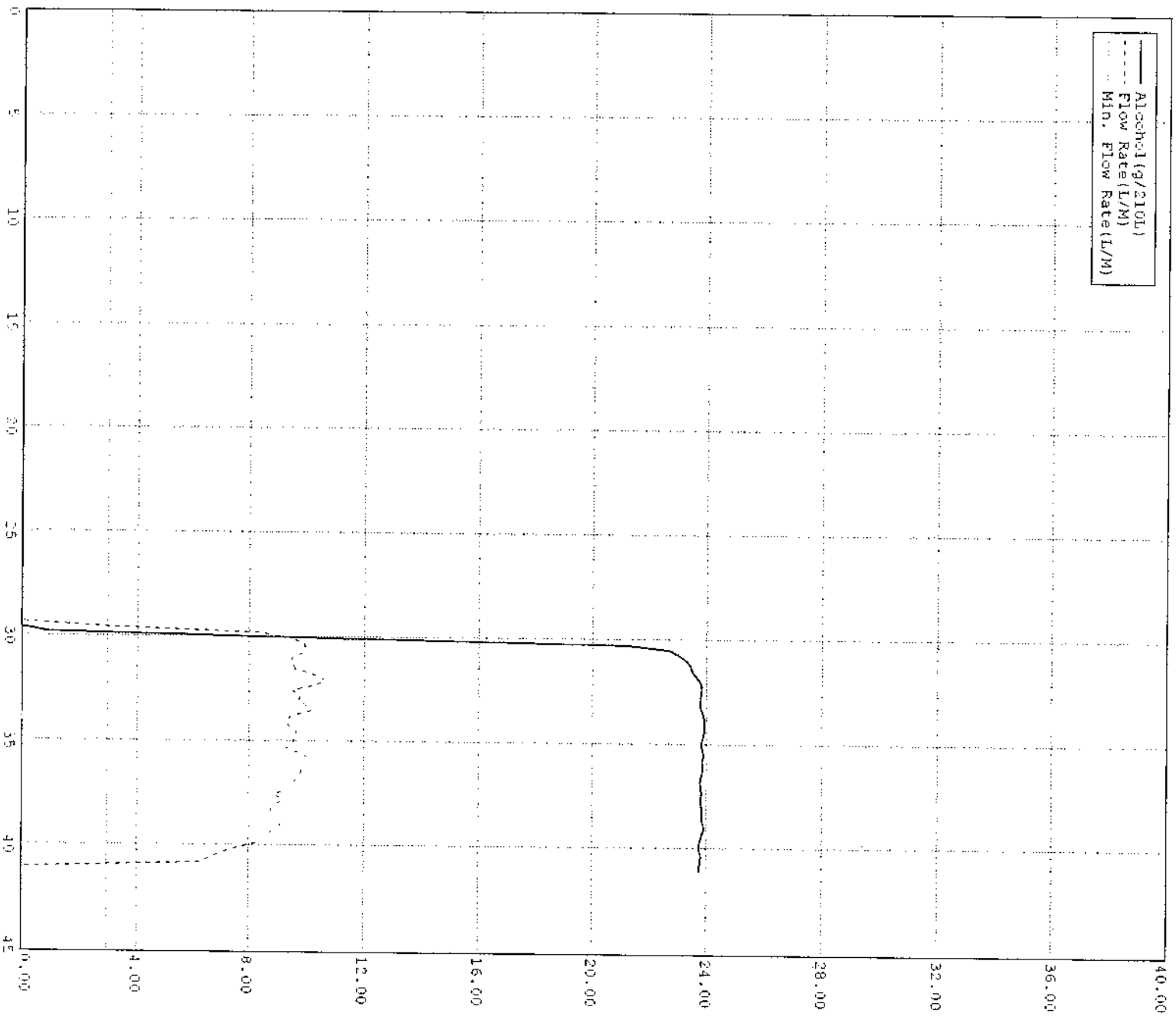
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	13:35
BLANK TEST	0.000	13:35
INTERNAL STANDARD	VERIFIED	13:36
Xq = 0.099 (1.22%)		
EXTERNAL STANDARD	0.077	13:36
X[1] = 0.0773 (0.0004)	0.0024)	
BLANK TEST	0.000	13:37
SUBJECT SAMPLE	XXX	13:37
X[1] = 0.1187 (-0.0209)	(0.0002)	

Interference Detected

BMMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

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

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

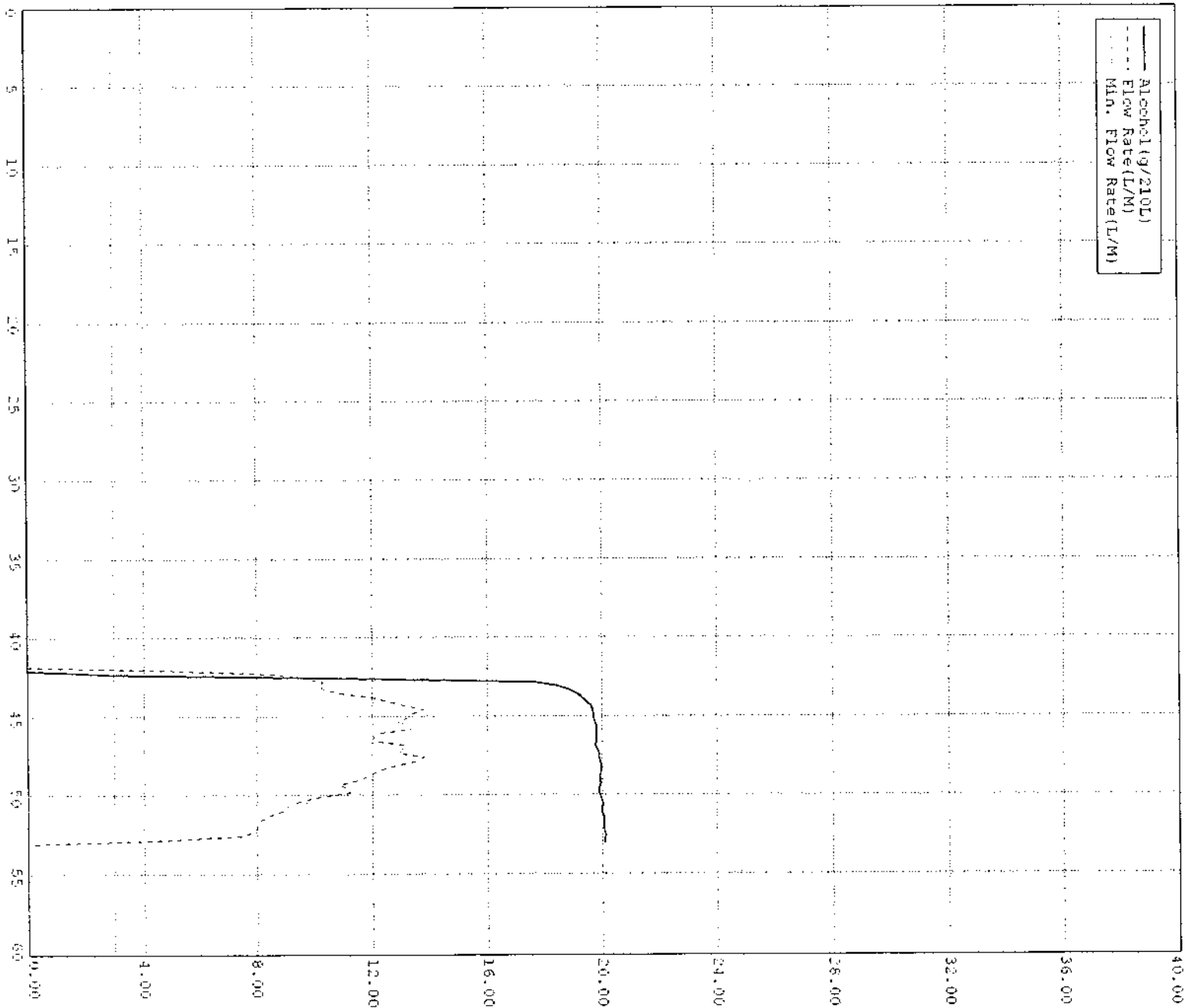
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK	PASSED	13:43
BLANK TEST	0.000	13:43
INTERNAL STANDARD	VERIFIED	13:43
Xq = 0.099 (1.228)		
EXTERNAL STANDARD	0.077	13:43
X[1] = 0.0774 (0.0013) (0.0026)		
BLANK TEST	0.000	13:44
SUBJECT SAMPLE (Vol=2.00L)	0.100	13:45
X[1] = 0.1005 (-0.0005) (0.0000)		
BLANK TEST	0.000	13:46
EXTERNAL STANDARD	0.077	13:46
X[1] = 0.0772 (0.0010) (0.0023)		
BLANK TEST	0.000	13:47

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 03/31/2017
Time: 13:22:58

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

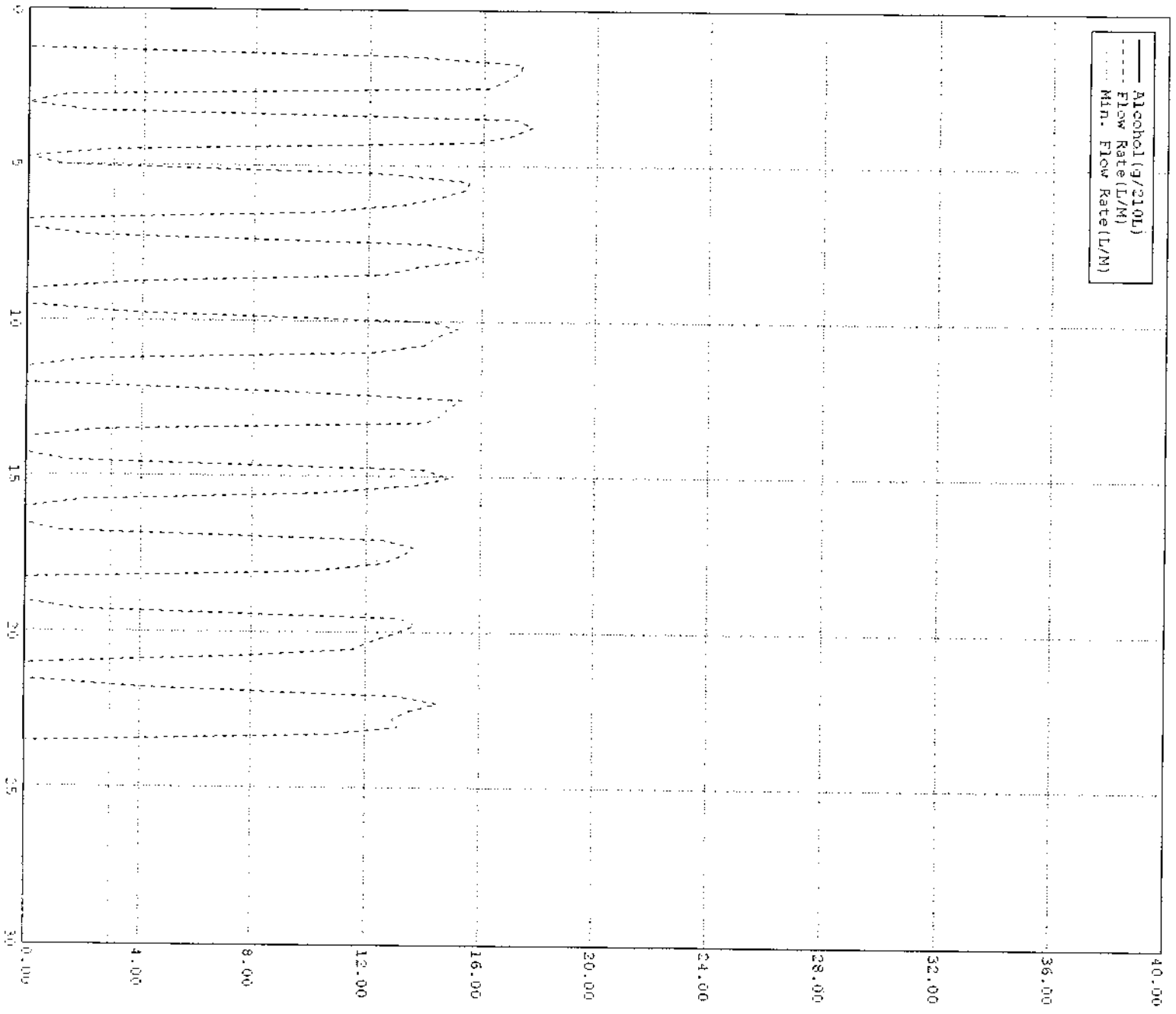
DEPT/AGENCY:
MAXIMUM ATTEMPTS EXCEEDED
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	13:24
BLANK TEST	0.000	13:24
INTERNAL STANDARD	VERIFIED	13:25
EXTERNAL STANDARD	0.078	13:25
BLANK TEST	0.000	13:26
SUBJECT SAMPLE	XXX	13:26

Maximum Attempts Exceeded

BSMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 03/31/2017
Time: 14:15:13

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

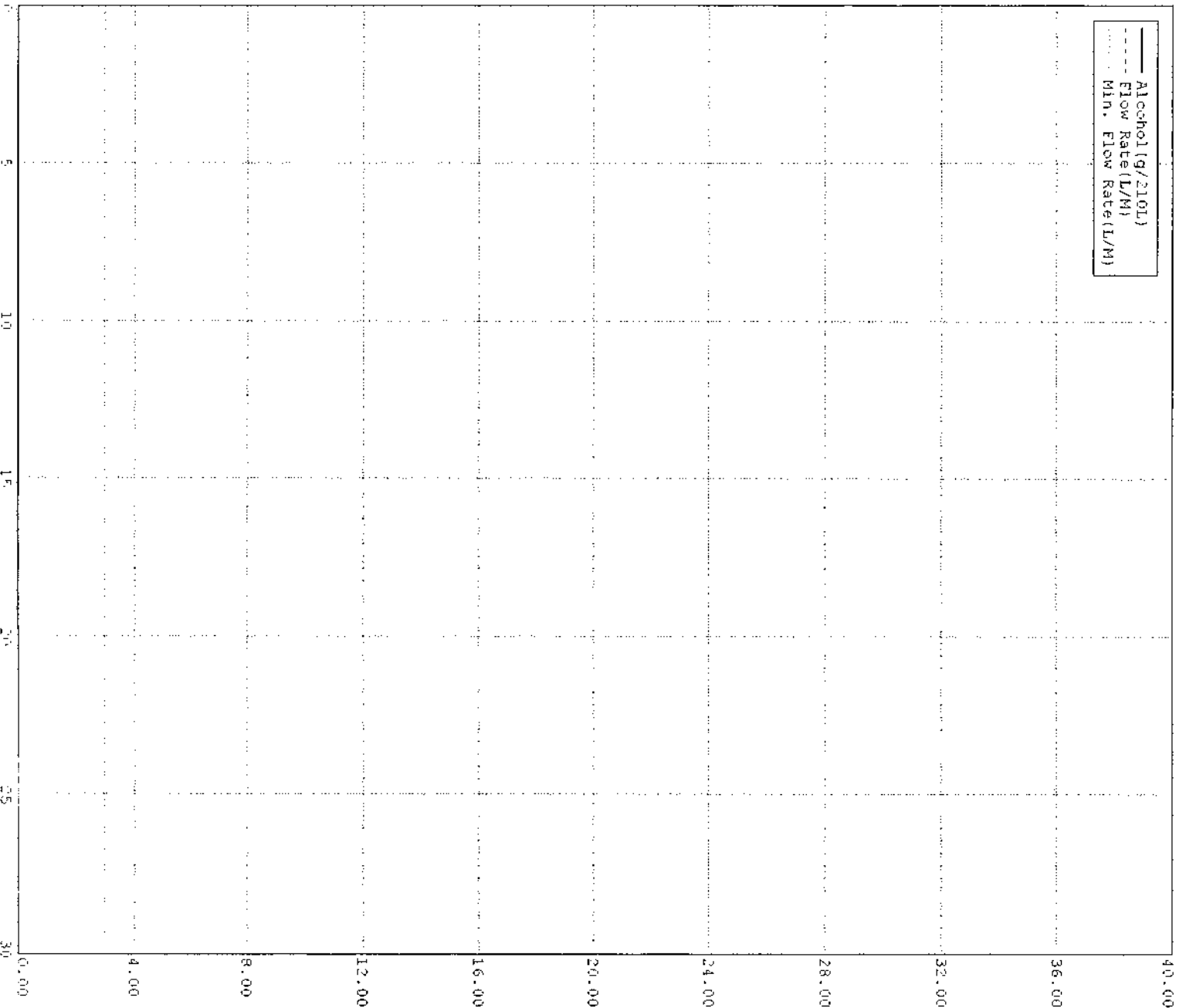
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	14:16
BLANK TEST	0.000	14:16
INTERNAL STANDARD	VERIFIED	14:16
EXTERNAL STANDARD	0.078	14:16
BLANK TEST	0.000	14:17

RFI DETECTED

RFI B



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 03/31/2017
Time: 14:28:51

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 29.01: 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	0.078	14:31
BLANK TEST	0.000	14:31
SUBJECT SAMPLE (Vol=2.01L)	0.000	14:32
BLANK TEST	0.000	14:33
EXTERNAL STANDARD	0.078	14:33
BLANK TEST	0.000	14:34

BRB

