

## Alaska Scientific Crime Detection Laboratory

## DataMaster Certification Form

Issued: 01/27/2012  
Effective: 01/27/2012

Version: DMCEF2012 R0  
Status: Active

Instrument S/N 100358  
Start Date 3/22/12

Analyst Brandi Barnett

Diagnostic Test (attached)

## 1. Voltage Checks

- a. Adjust voltages, if needed
- i. Lamp (2.6V Maximum)
- ii. Bias (80V)
- 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 1400 mL (1.3L to 1.7L)

## 4. Linearity Test (attached)

a. Levels Used 

- i. 0.020g/210L Mnf ILMO Lot 07611020A5 Exp 03/01/2013
- ii. 0.040g/210L Mnf ILMO Lot 02811040A2 Exp 02/01/2013
- iii. 0.080g/210L Mnf ILMO Lot 07511080A1 Exp 03/01/2013
- iv. 0.100g/210L Mnf ILMO Lot 07611100A3 Exp 03/01/2013
- v. 0.200g/210L Mnf Guth Lot 11120 Exp 7/19/2013
1. Simulator S/N SD1176 Date Calibrated 8/17/2011
- vi. 0.300g/210L Mnf Guth Lot 11110 Exp 7/13/13
1. Simulator S/N SD1202 Date Calibrated 08/17/2011

## 5. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference
- i. Acetone - Mnf Guth Lot 11200 Level 0.080 Exp 10/11/2013
1. Simulator S/N SD1199 Date Calibrated 01/11/2012
- ii. Isopropanol - Mnf Guth Lot 10280 Level 0.080 Exp 11/17/2012
1. Simulator S/N DR1226 Date Calibrated 01/10/2012
- d. RFI

6. Verify stylus is calibrated

7. Verify card reader is functional

8. Reset Options

9. Clear Memory

10. Verification of Calibration

11. Non-Drinking Subject Test (attached)

12. Upload

13. Update agency information and polling status in DM Host Calling Program N/A

End Date 3/27/12

## DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100358  
-----

Date: 03/22/2012  
Time: 14:04:17

## VERSIONS

DMT: 2.00  
PIC: 3.03  
Modem: 2.3  
Questions: 2.2

## TEMPERATURES

Sample Chamber = 48.9°C            PASSED  
Breath Tube     = 48.1°C            PASSED

## PUMP INFO

Flow Rate = 5.028 L/M            PASSED

## DETECTOR INFO

PUMP ON                            PASSED  
PUMP OFF                           PASSED

## FILTER INFO

Filter 1                            PASSED  
Filter 2                            PASSED  
Filter 3                            PASSED

INTERNAL STANDARD                PASSED

2/10/2012

Technician Screen

-----  
DATAMASTER dmt: 100358  
-----

Date: 03/22/2012

Time: 2:15 PM

Temperatures (°C)

Sample Cell: 49.0°C

Breath Tube: 47.6°C

Current Barometer 29.9 in

Volume (Ltr) 1.59

Settings

Lamp: 1.65 V

Bias: 80 V

Cooler: 1.71 V

Chopper: 538 Hz

Voltages (V)

Flow: 1.05 V

Detector: 0.038 V

*3/18/12 BMB*

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100358  
-----

Date: 03/12/2012  
Time: 14:59:49

OPERATOR NAME:  
BRANDI BARNETT  
CERTIFICATE #: 7038

|     |   |          |        |                |
|-----|---|----------|--------|----------------|
| Ca  | = | 0.1000   |        |                |
| CAL | = | 1.000382 | 0.800  | <= CAL < 1.200 |
| b1  | = | 0.0010   | 0.0000 | <= b1 < 0.0040 |
| b2  | = | 0.0084   | 0.0010 | <= b2 < 0.0100 |
| b3  | = | 0.0007   | 0.0000 | <= b3 < 0.0040 |
| Xq  | = | 0.0910   | 0.0500 | <= Xq < 0.2000 |
| a21 | = | 1.202186 | 1.050  | <= a21 < 1.300 |
| a31 | = | 0.425540 | 0.300  | <= a31 < 0.800 |

4/18/2012

SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100358

Date: 03/22/2012  
 Time: 14:18:42

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

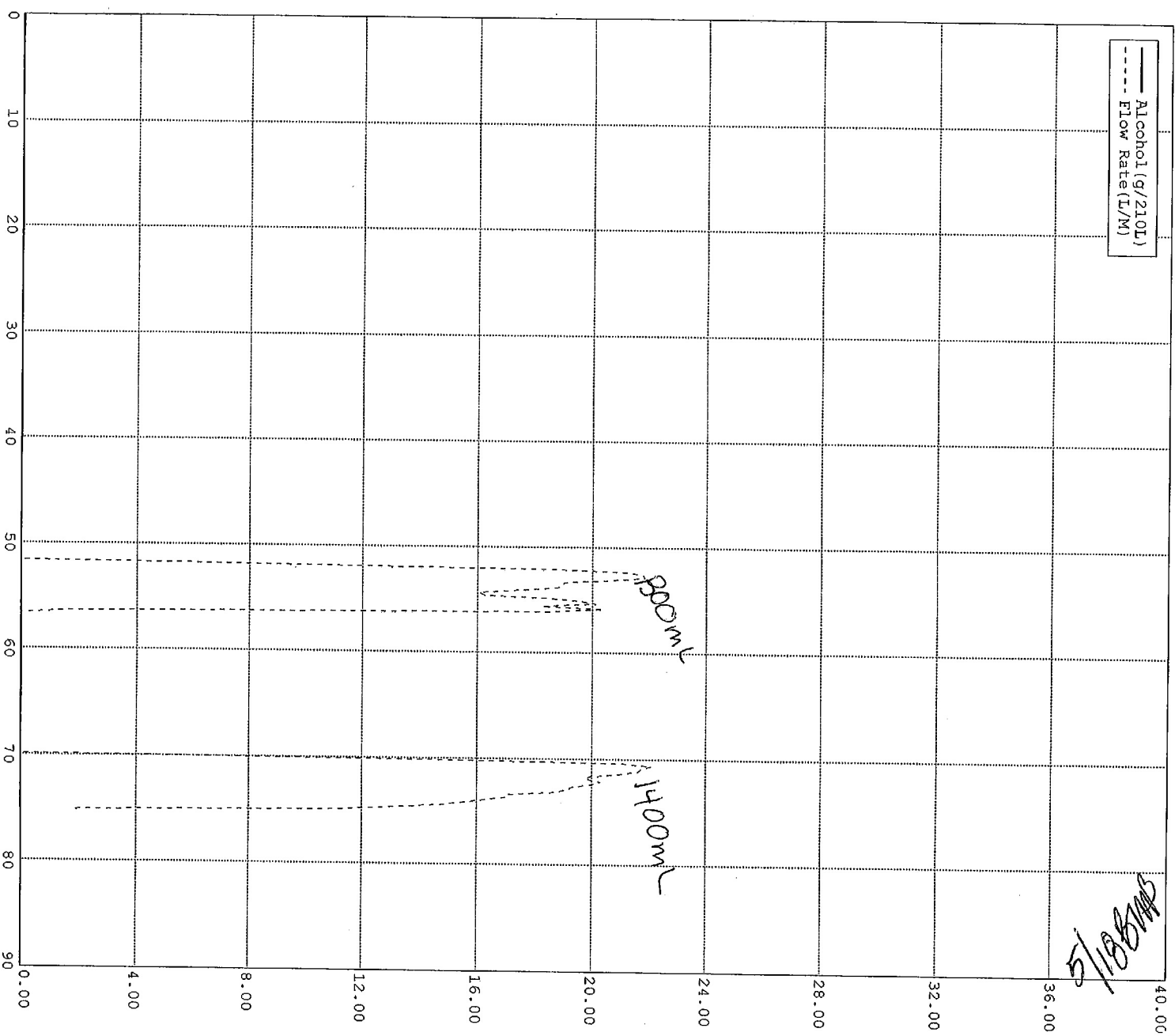
OPERATOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.93: 0.080  
 LOT #: 07511080A1  
 EXPIRATION: 03/01/2013

| DIAGNOSTIC CHECK  | PASSED   | 14:20 |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 14:20 |
| INTERNAL STANDARD | VERIFIED | 14:20 |
| EXTERNAL STANDARD | 0.080    | 14:20 |
| BLANK TEST        | 0.000    | 14:21 |
| SUBJECT SAMPLE    | 0.000    | 14:22 |
| BLANK TEST        | 0.000    | 14:23 |
| EXTERNAL STANDARD | 0.079    | 14:23 |
| BLANK TEST        | 0.000    | 14:24 |

*BBMB*



LINEARITY CHECK

Alaska Department of Public Safety  
 DATAMASTER dmt: 100358

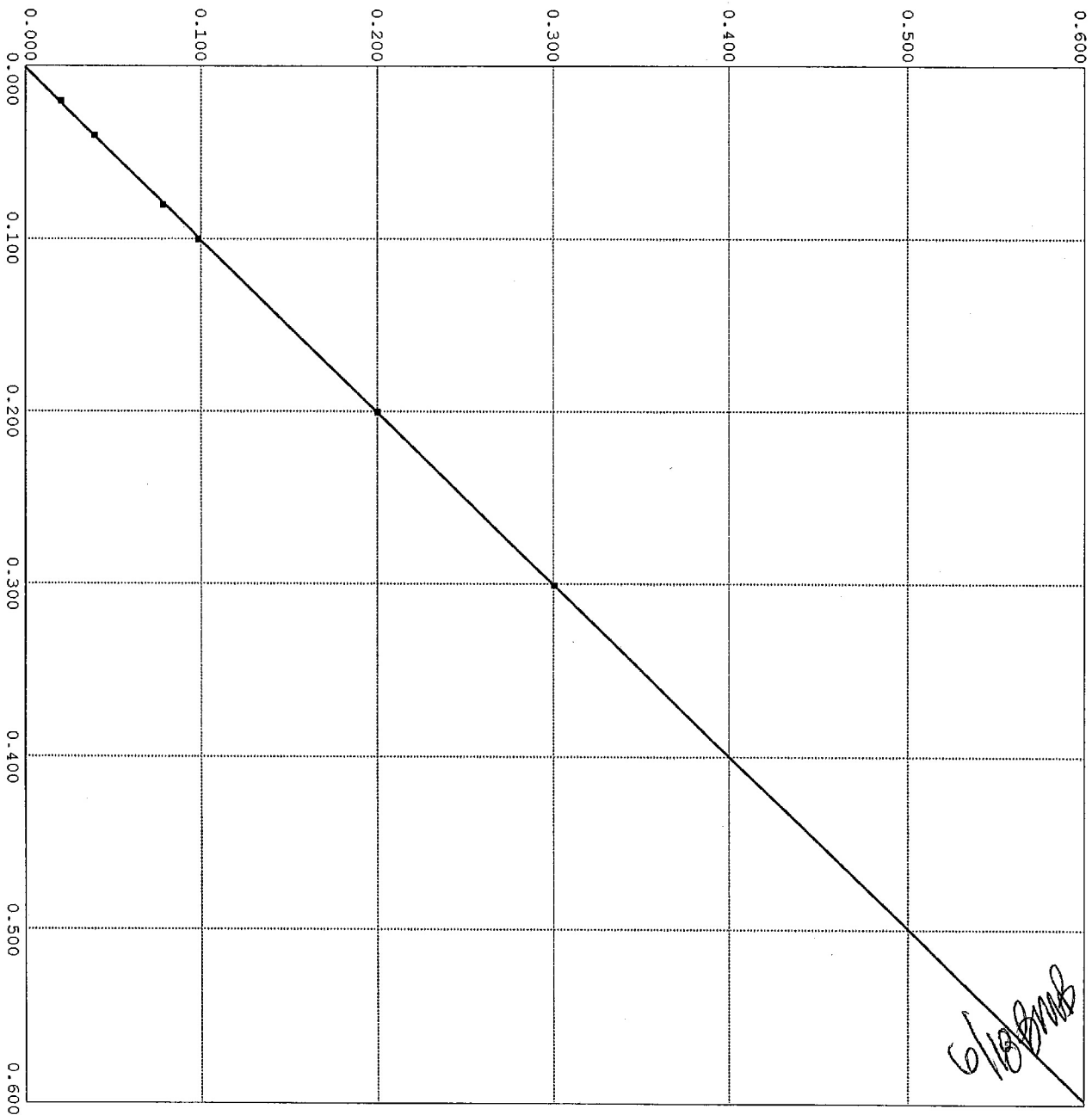
Date: 03/22/2012  
 Time: 14:29:33

SUPERVISOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 7038

| TARGET | AVERAGE | STD. DEV. |
|--------|---------|-----------|
| 0.020  | 0.0206  | 0.0001    |
| 0.040  | 0.0400  | 0.0002    |
| 0.080  | 0.0786  | 0.0004    |
| 0.100  | 0.0991  | 0.0003    |
| 0.200  | 0.2009  | 0.0006    |
| 0.300  | 0.3012  | 0.0004    |

SLOPE = 1.005065  
 R<sup>2</sup> = 0.999936

*BMB*



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100358

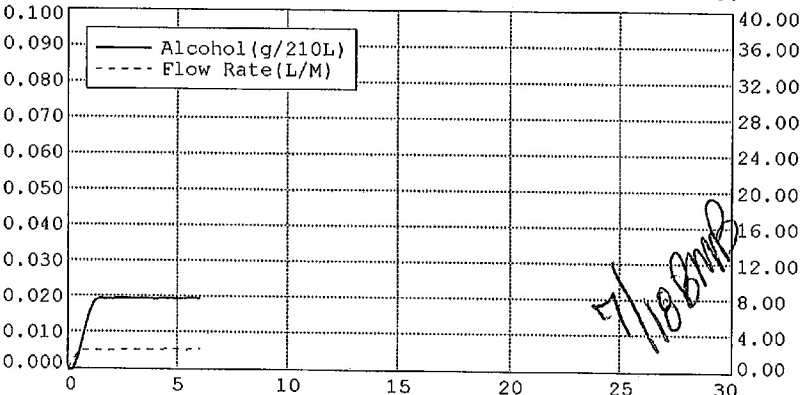
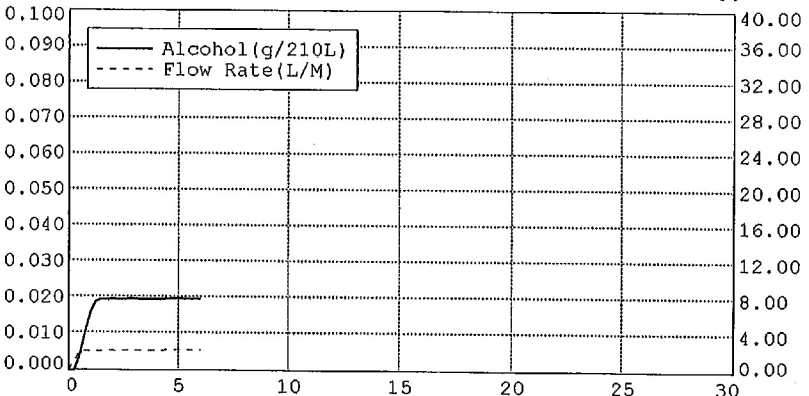
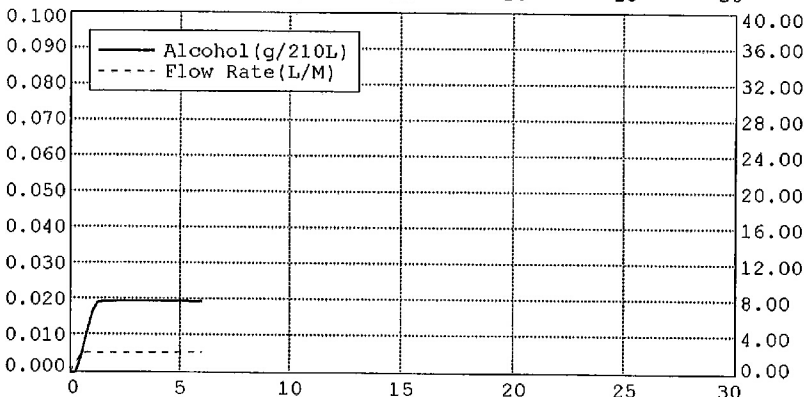
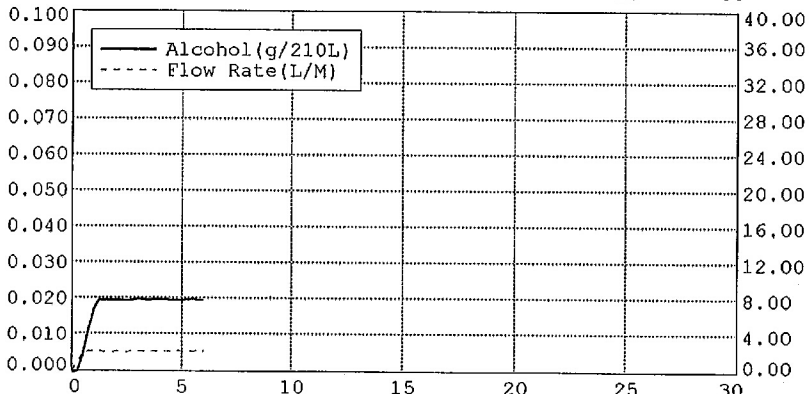
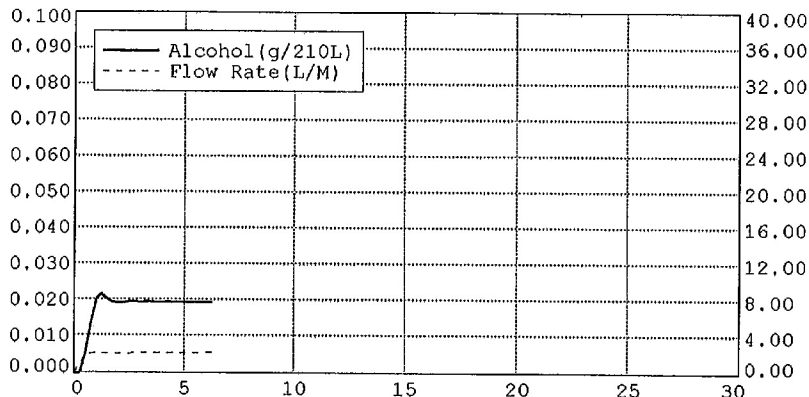
Date: 03/22/2012  
 Time: 14:29:35

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.93; 0.020  
 LOT #: 07611020A5  
 EXPIRATION: 03/01/2013

|                   |          |       |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 14:30 |
| INTERNAL STANDARD | VERIFIED | 14:30 |
| EXTERNAL STANDARD | 0.020    | 14:31 |
| BLANK TEST        | 0.000    | 14:32 |
| EXTERNAL STANDARD | 0.020    | 14:32 |
| BLANK TEST        | 0.000    | 14:33 |
| EXTERNAL STANDARD | 0.020    | 14:33 |
| BLANK TEST        | 0.000    | 14:34 |
| EXTERNAL STANDARD | 0.020    | 14:34 |
| BLANK TEST        | 0.000    | 14:35 |
| EXTERNAL STANDARD | 0.020    | 14:35 |
| BLANK TEST        | 0.000    | 14:36 |

Average = 0.0206  
 Std Dev = 0.0001



LINEARITY CHECK: Control Test 2

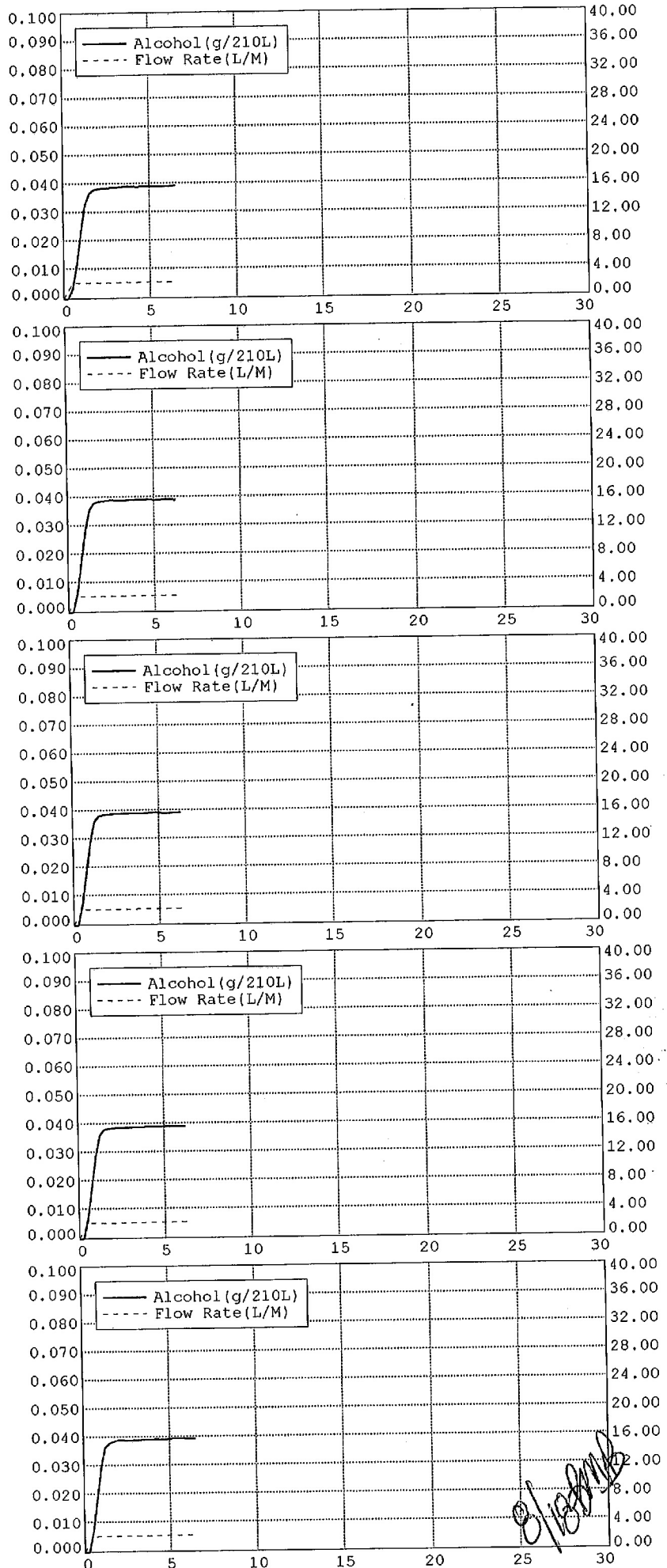
Alaska Department of Public Safety  
 DATAMASTER dmt: 100358

Date: 03/22/2012  
 Time: 14:41:09

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.040  
 TARGET AT 29.94: 0.040  
 LOT #: 02811040A2  
 EXPIRATION: 02/01/2013

|                   |          |       |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 14:43 |
| INTERNAL STANDARD | VERIFIED | 14:43 |
| EXTERNAL STANDARD | 0.039    | 14:43 |
| BLANK TEST        | 0.000    | 14:44 |
| EXTERNAL STANDARD | 0.040    | 14:44 |
| BLANK TEST        | 0.000    | 14:45 |
| EXTERNAL STANDARD | 0.039    | 14:45 |
| BLANK TEST        | 0.000    | 14:46 |
| EXTERNAL STANDARD | 0.039    | 14:46 |
| BLANK TEST        | 0.000    | 14:47 |
| EXTERNAL STANDARD | 0.040    | 14:48 |
| BLANK TEST        | 0.000    | 14:48 |

Average = 0.0400  
 Std Dev = 0.0002





LINEARITY CHECK: Control Test 3

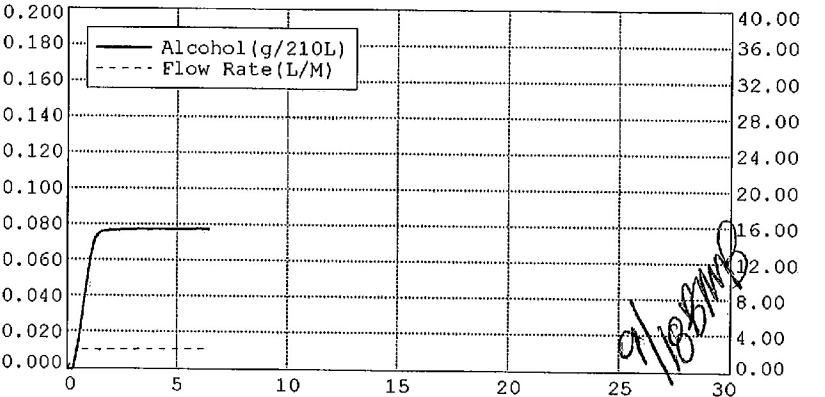
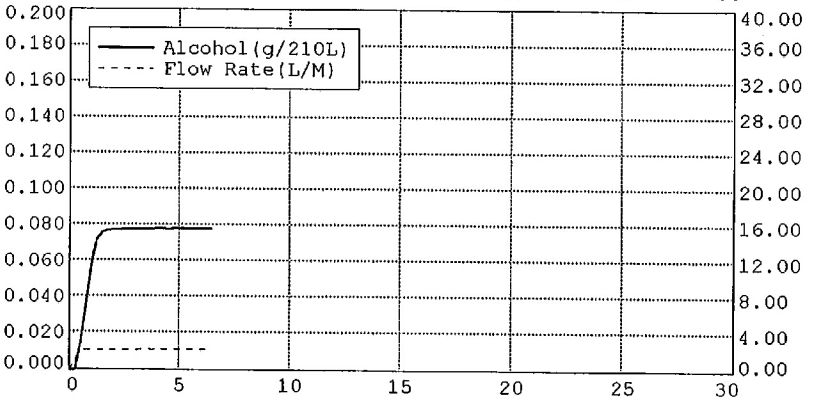
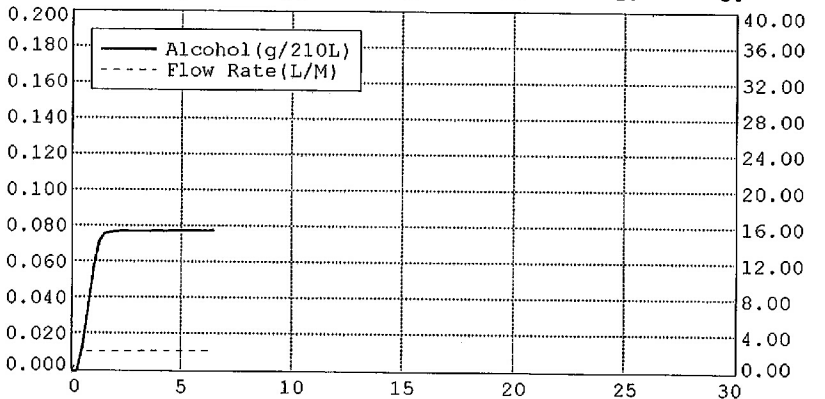
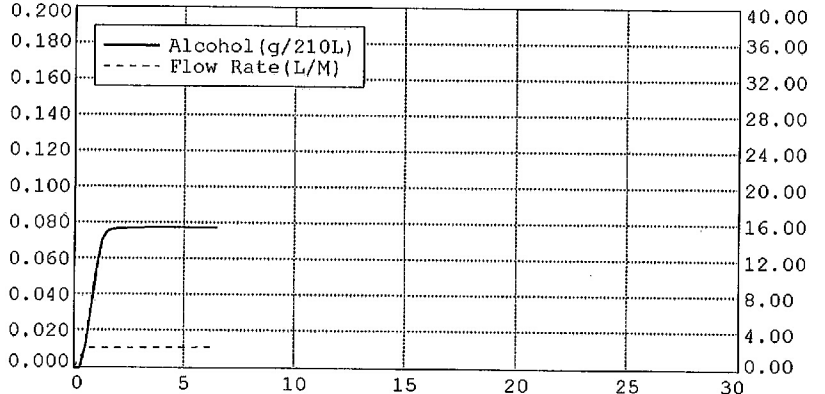
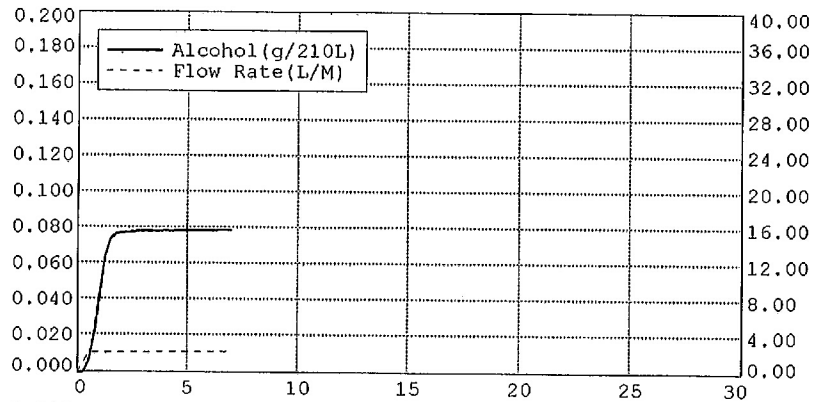
Alaska Department of Public Safety  
 DATAMASTER dmt: 100358

Date: 03/22/2012  
 Time: 14:52:55

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.94: 0.080  
 LOT #: 07511080A1  
 EXPIRATION: 03/01/2013

|                   |          |       |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 14:54 |
| INTERNAL STANDARD | VERIFIED | 14:54 |
| EXTERNAL STANDARD | 0.079    | 14:55 |
| BLANK TEST        | 0.000    | 14:55 |
| EXTERNAL STANDARD | 0.078    | 14:56 |
| BLANK TEST        | 0.000    | 14:57 |
| EXTERNAL STANDARD | 0.078    | 14:57 |
| BLANK TEST        | 0.000    | 14:58 |
| EXTERNAL STANDARD | 0.078    | 14:58 |
| BLANK TEST        | 0.000    | 14:59 |
| EXTERNAL STANDARD | 0.078    | 14:59 |
| BLANK TEST        | 0.000    | 15:00 |

Average = 0.0786  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100358

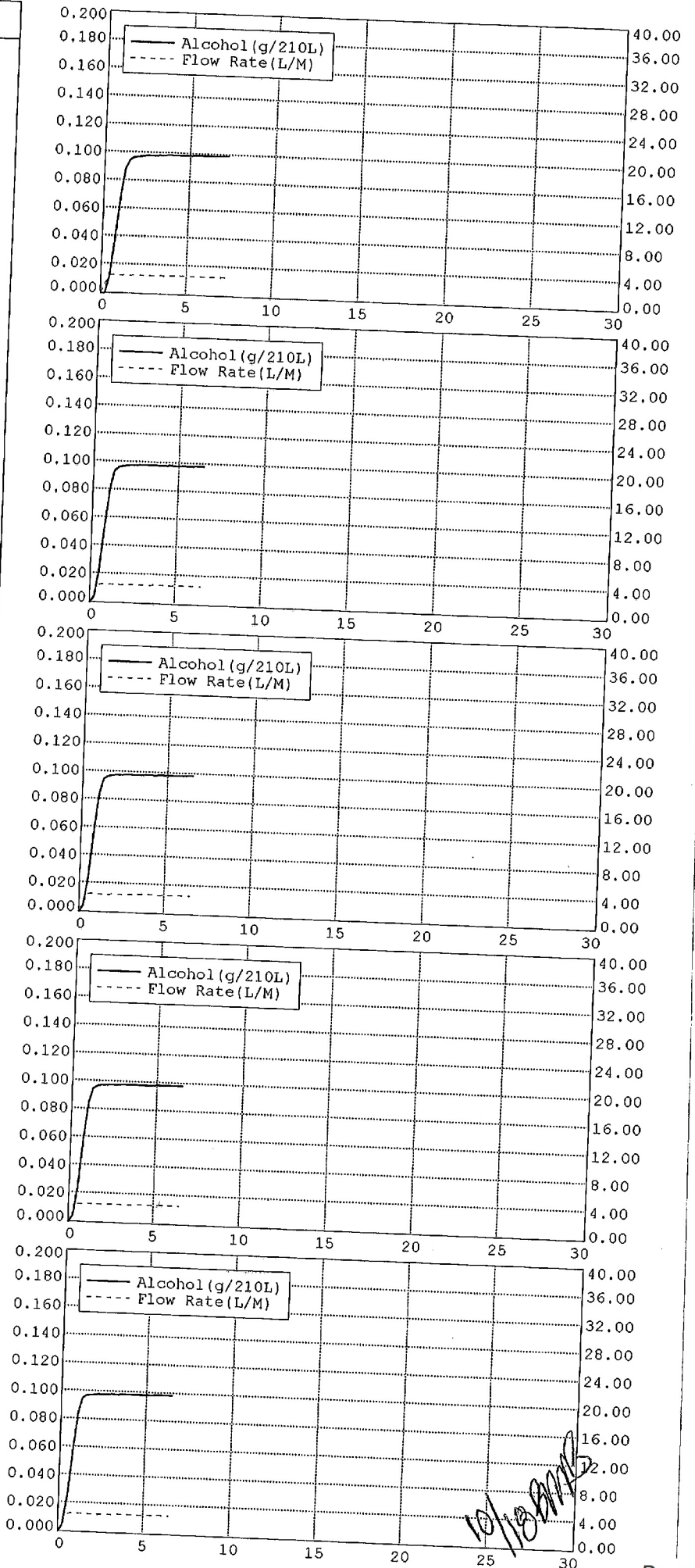
Date: 03/22/2012  
 Time: 15:10:04

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.94: 0.100  
 LOT #: 07611100A3  
 EXPIRATION: 03/01/2013

|                   |          |       |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 15:11 |
| INTERNAL STANDARD | VERIFIED | 15:11 |
| EXTERNAL STANDARD | 0.099    | 15:12 |
| BLANK TEST        | 0.000    | 15:13 |
| EXTERNAL STANDARD | 0.098    | 15:13 |
| BLANK TEST        | 0.000    | 15:14 |
| EXTERNAL STANDARD | 0.099    | 15:14 |
| BLANK TEST        | 0.000    | 15:15 |
| EXTERNAL STANDARD | 0.098    | 15:15 |
| BLANK TEST        | 0.000    | 15:16 |
| EXTERNAL STANDARD | 0.099    | 15:16 |
| BLANK TEST        | 0.000    | 15:17 |

Average = 0.0991  
 Std Dev = 0.0003



LINEARITY CHECK: Control Test 5

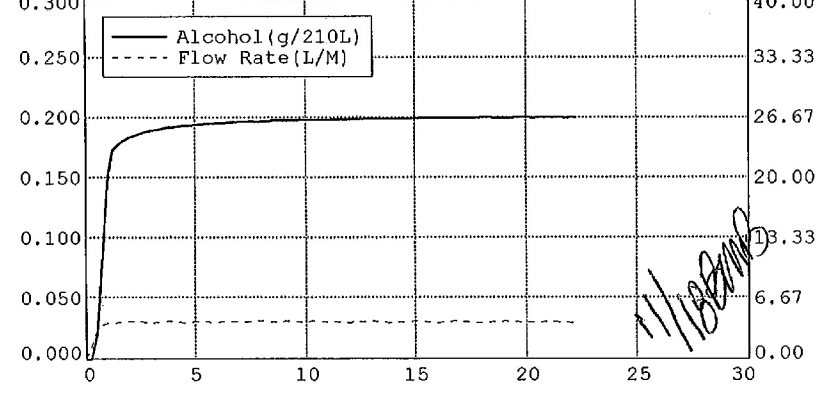
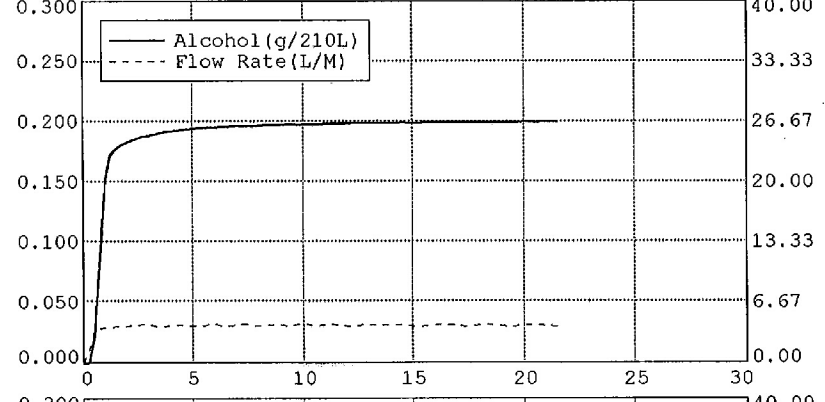
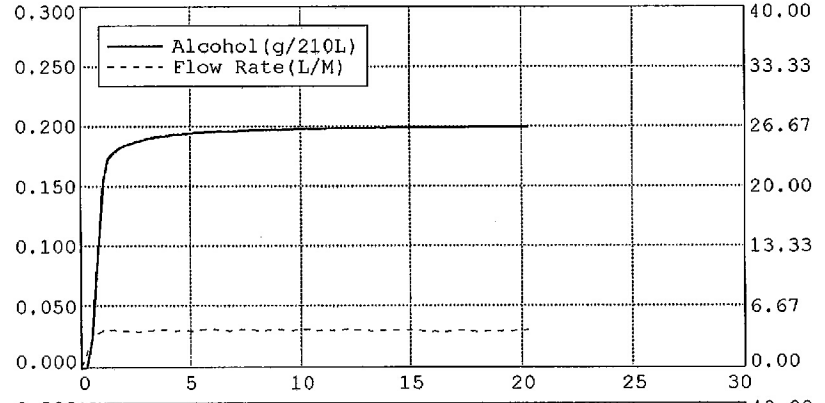
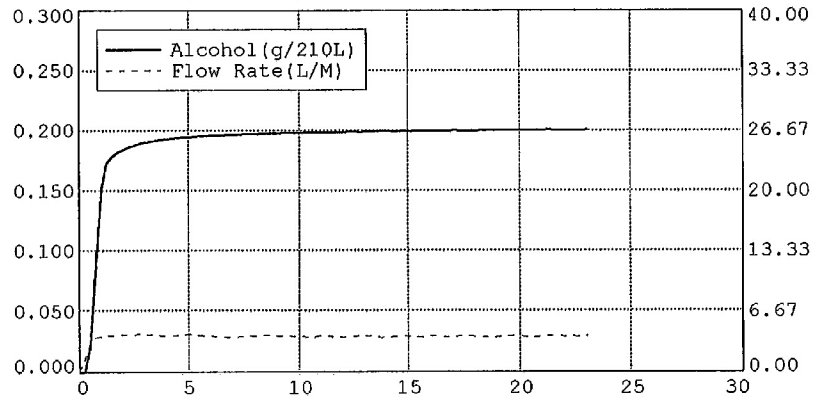
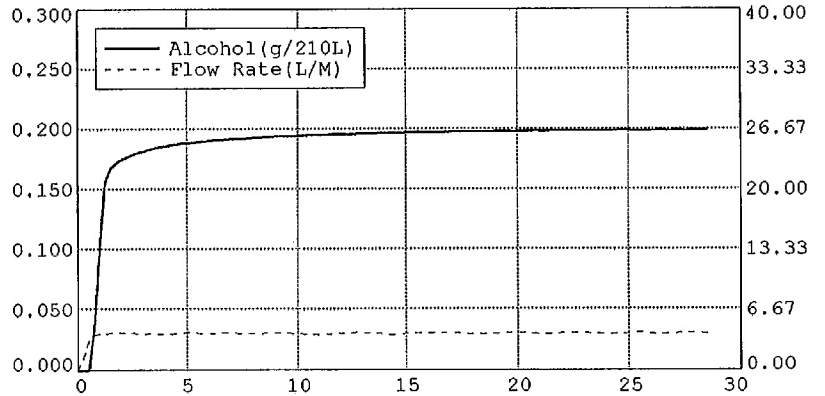
Alaska Department of Public Safety  
 DATAMASTER dmt; 100358

Date: 03/22/2012  
 Time: 15:29:42

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.200  
 LOT #: 11120  
 EXPIRATION: 07/19/2013

|                   |          |       |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 15:30 |
| INTERNAL STANDARD | VERIFIED | 15:30 |
| EXTERNAL STANDARD | 0.200    | 15:31 |
| BLANK TEST        | 0.000    | 15:32 |
| EXTERNAL STANDARD | 0.201    | 15:32 |
| BLANK TEST        | 0.000    | 15:33 |
| EXTERNAL STANDARD | 0.200    | 15:34 |
| BLANK TEST        | 0.000    | 15:35 |
| EXTERNAL STANDARD | 0.200    | 15:35 |
| BLANK TEST        | 0.000    | 15:36 |
| EXTERNAL STANDARD | 0.201    | 15:37 |
| BLANK TEST        | 0.000    | 15:37 |

Average = 0.2009  
 Std Dev = 0.0006



## LINEARITY CHECK: Control Test 6

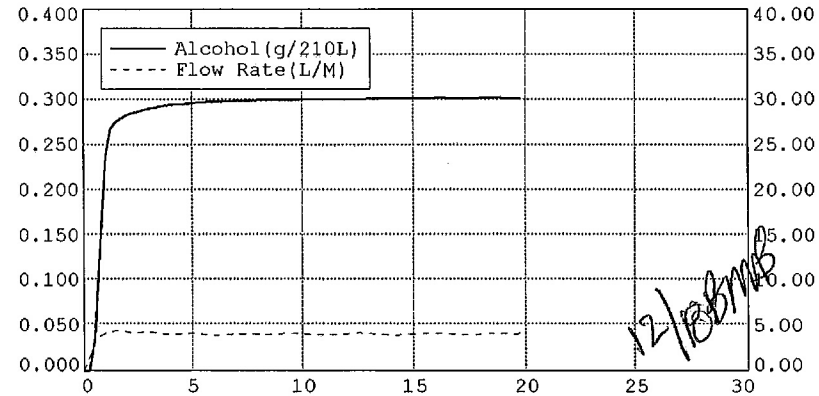
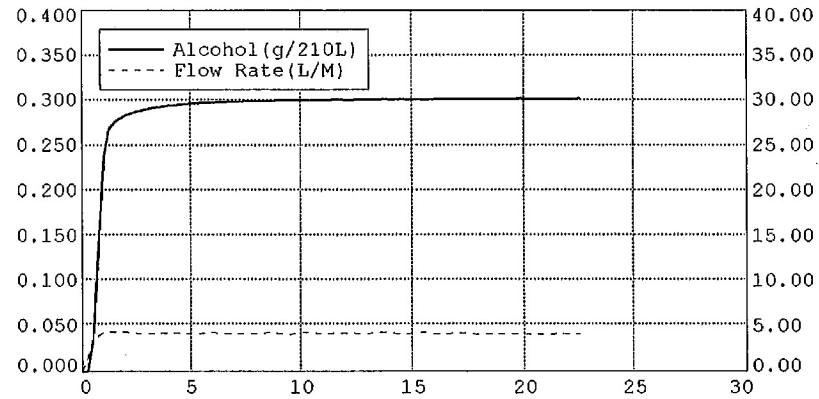
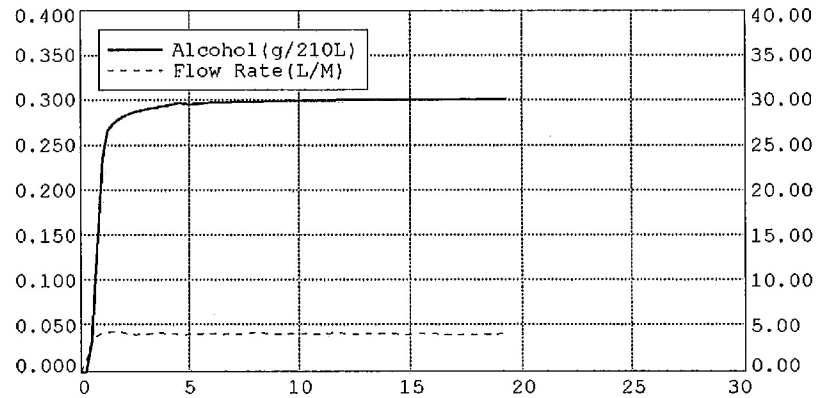
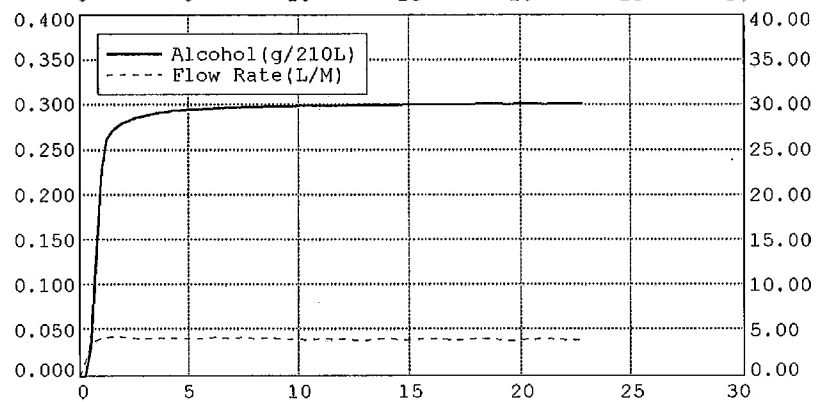
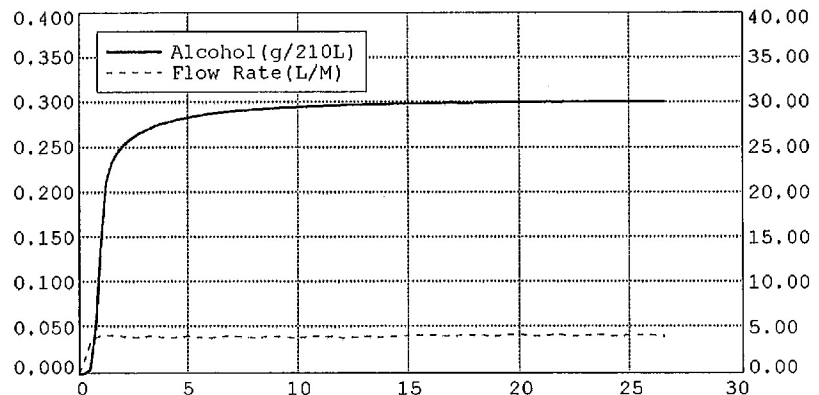
Alaska Department of Public Safety  
DATAMASTER dmt: 100358

Date: 03/22/2012  
Time: 15:40:43

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.300  
LOT #: 11110  
EXPIRATION: 07/13/2013

|                   |          |       |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 15:41 |
| INTERNAL STANDARD | VERIFIED | 15:42 |
| EXTERNAL STANDARD | 0.300    | 15:42 |
| BLANK TEST        | 0.000    | 15:43 |
| EXTERNAL STANDARD | 0.301    | 15:44 |
| BLANK TEST        | 0.000    | 15:44 |
| EXTERNAL STANDARD | 0.301    | 15:45 |
| BLANK TEST        | 0.000    | 15:46 |
| EXTERNAL STANDARD | 0.301    | 15:46 |
| BLANK TEST        | 0.000    | 15:47 |
| EXTERNAL STANDARD | 0.301    | 15:48 |
| BLANK TEST        | 0.000    | 15:49 |

Average = 0.3012  
Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100358

Date: 03/23/2012  
Time: 11:15:12

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

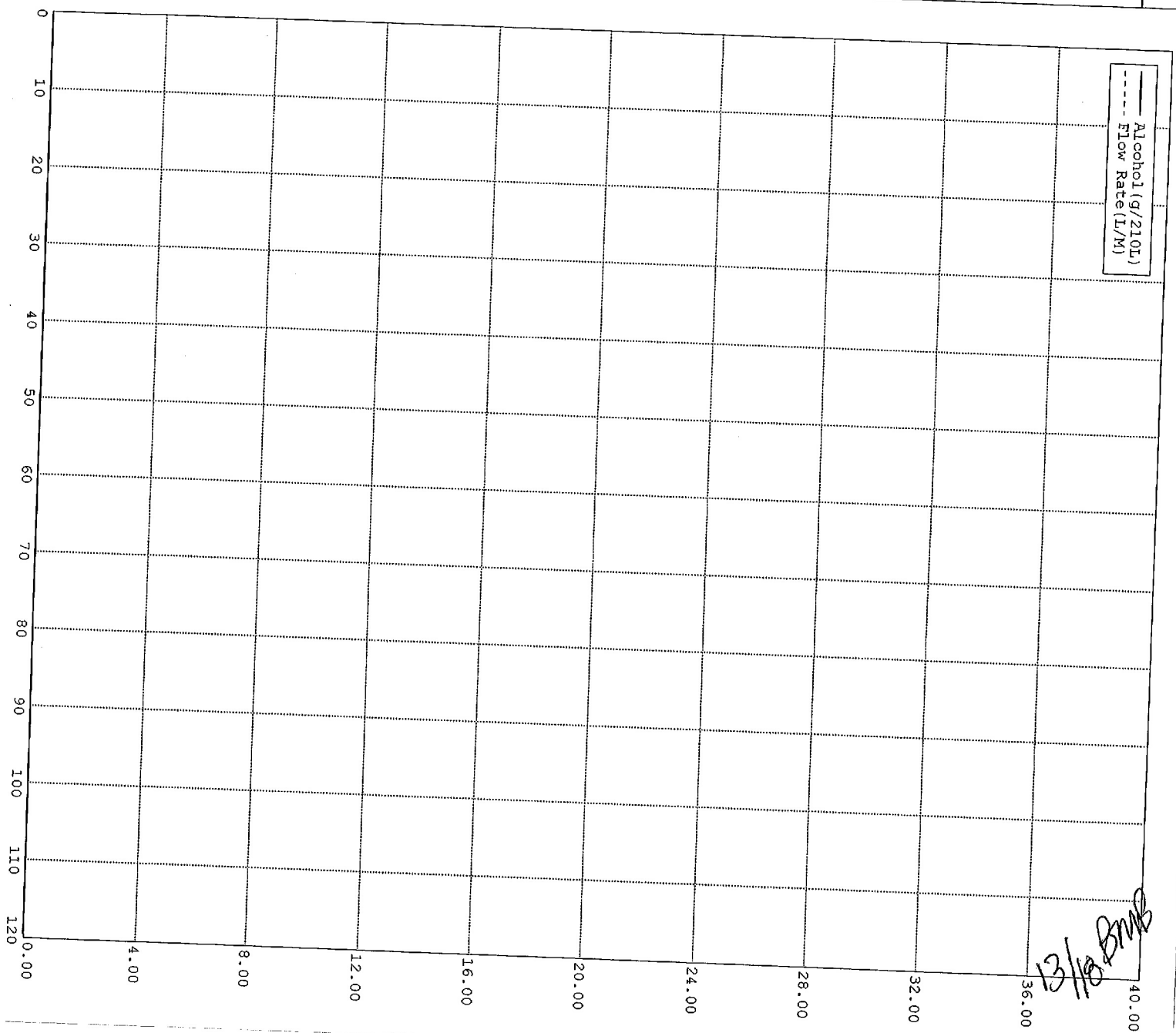
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.91: 0.079  
LOT #: 07511080A1  
EXPIRATION: 03/01/2013

| DIAGNOSTIC CHECK  | PASSED     | 11:16 |
|-------------------|------------|-------|
| BLANK TEST        | 0.000      | 11:16 |
| INTERNAL STANDARD | VERIFIED   | 11:16 |
| EXTERNAL STANDARD | 0.078      | 11:16 |
| BLANK TEST        | 0.000      | 11:17 |
| SUBJECT SAMPLE    | INCOMPLETE | 11:19 |

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*Handwritten signature: BMB*  
13/10

SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dmt: 100358

Date: 03/23/2012  
Time: 12:17:35

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

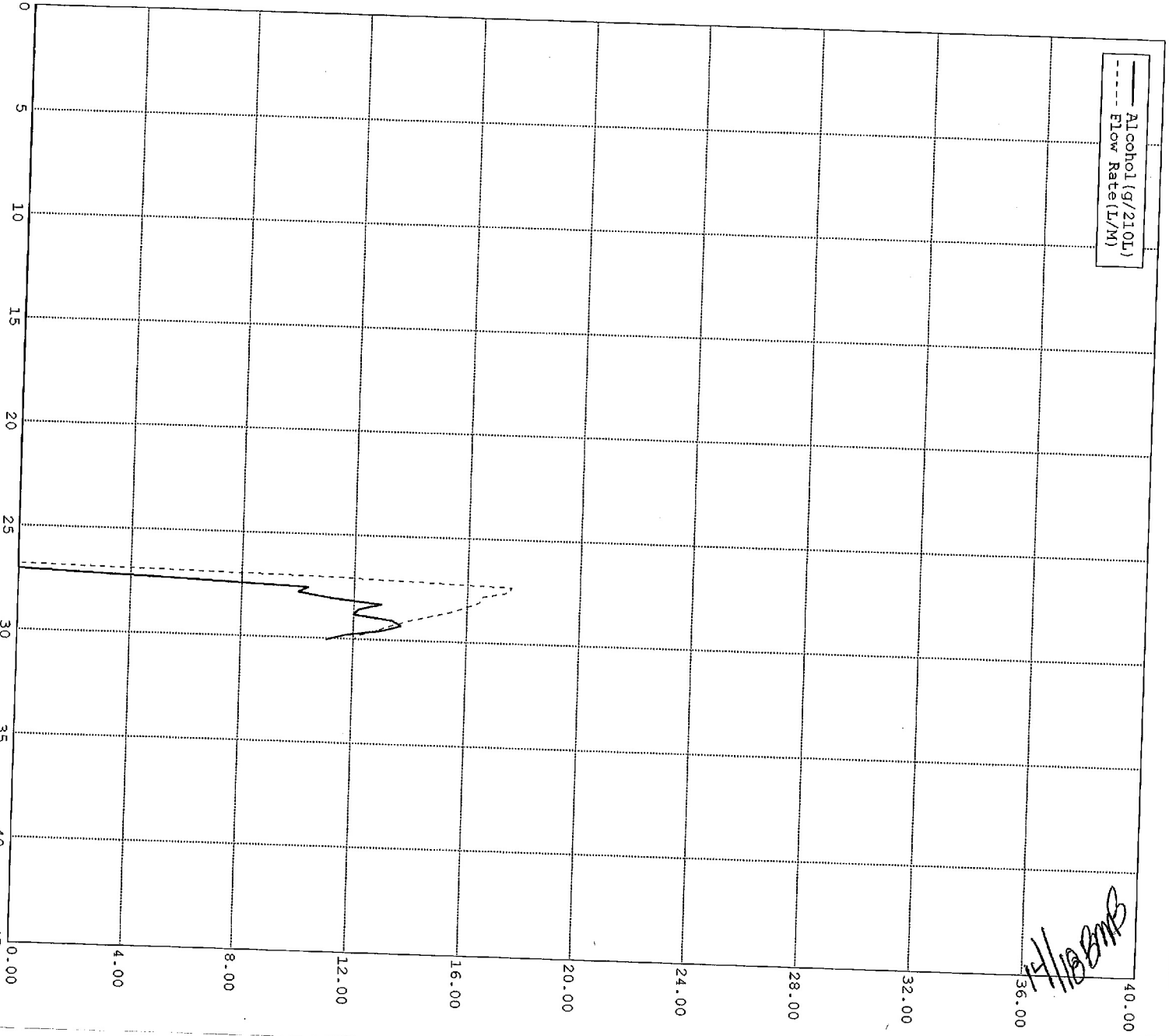
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.91: 0.079  
LOT #: 07511080A1  
EXPIRATION: 03/01/2013

| DIAGNOSTIC CHECK  | PASSED   | 12:19 |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 12:19 |
| INTERNAL STANDARD | VERIFIED | 12:19 |
| EXTERNAL STANDARD | 0.078    | 12:19 |
| BLANK TEST        | 0.000    | 12:20 |
| SUBJECT SAMPLE    | INVALID  | 12:21 |

*BBMB*



*BBMB*  
3/27/12

SUBJECT TEST

Alaska Department of Public Safety  
 DATA MASTER dmt: 100358

Date: 03/23/2012  
 Time: 12:30:28

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: INTERFERE

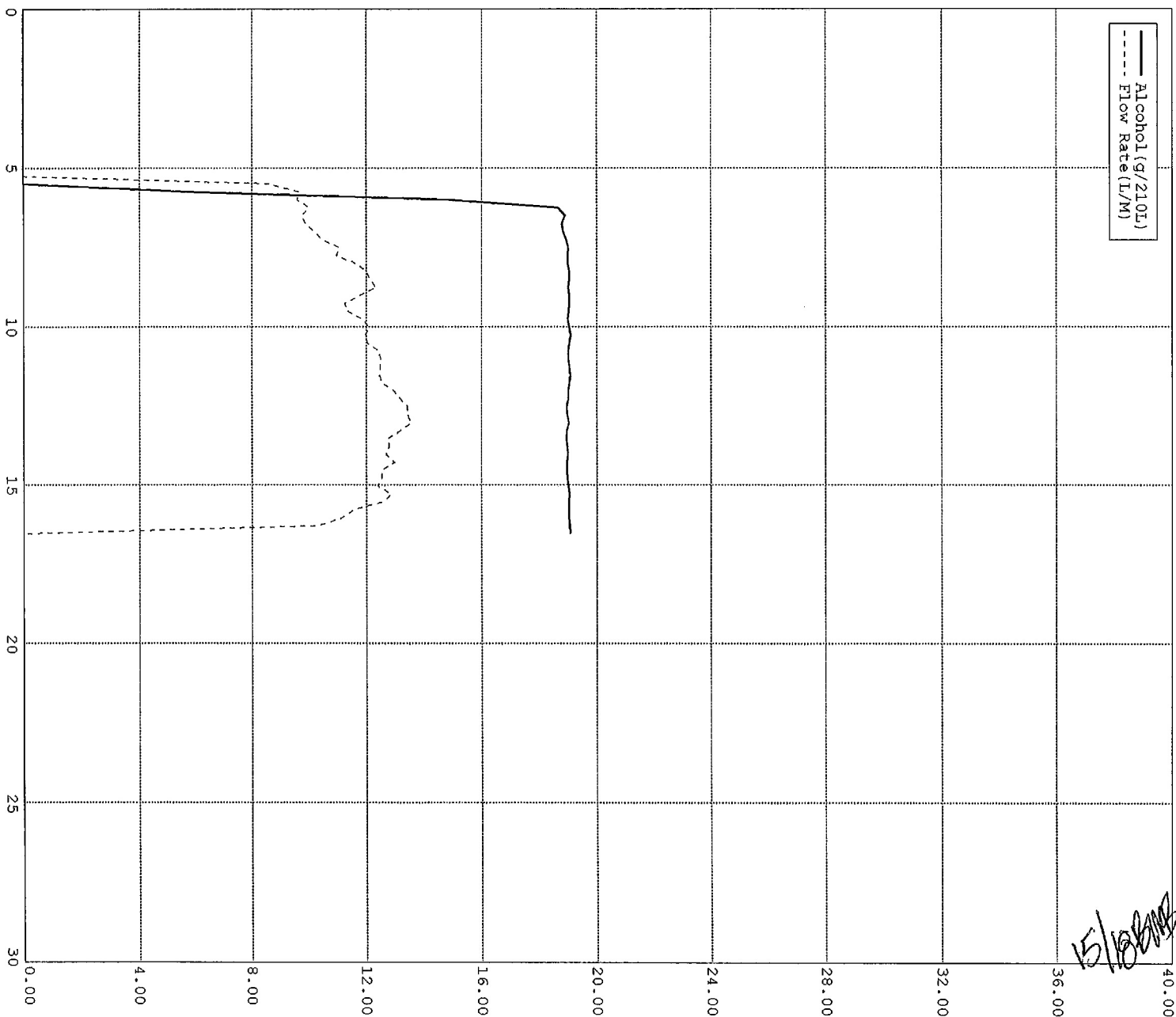
OPERATOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 7038

DEPT/AGENCY:  
 ISOPROPANOL AND ETOH  
 CASE/REPORT: XXXX  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.91: 0.079  
 LOT #: 07511080A1  
 EXPIRATION: 03/01/2013

| DIAGNOSTIC CHECK  | PASSED       | 12:32 |
|-------------------|--------------|-------|
| BLANK TEST        | 0.000        | 12:32 |
| INTERNAL STANDARD | VERIFIED     | 12:32 |
| EXTERNAL STANDARD | 0.078        | 12:33 |
| BLANK TEST        | 0.000        | 12:34 |
| SUBJECT SAMPLE    | INTERFERENCE | 12:34 |

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*Handwritten signature and date: 15/10/2012 BMB*

SUBJECT TEST

Alaska Department of Public Safety  
 DATA MASTER dmt: 100358

Date: 03/23/2012  
 Time: 12:36:07

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: INTERFERE

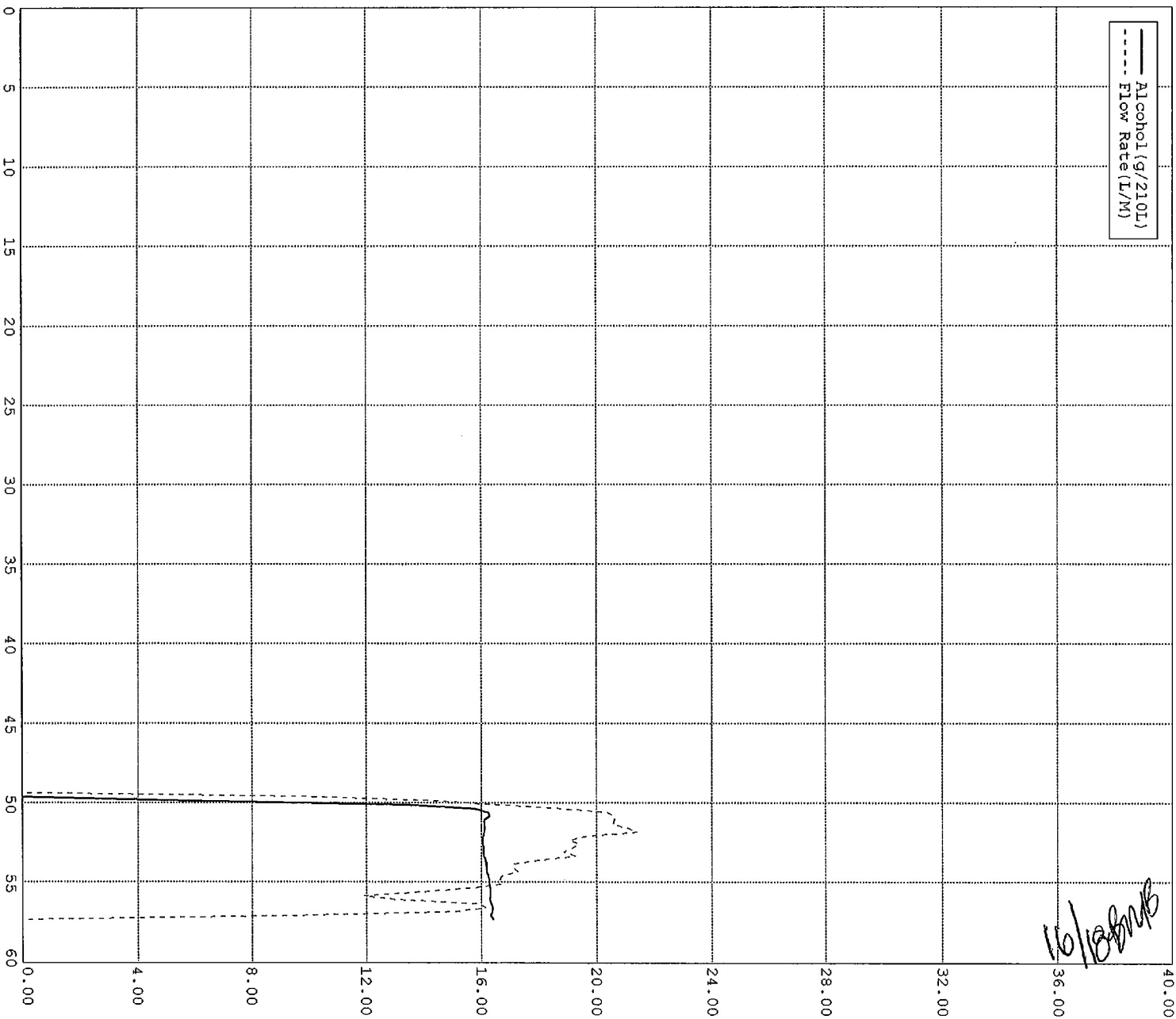
OPERATOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 7038

DEPT/AGENCY:  
 ACETONE AND ETOH  
 CASE/REPORT: XXXX  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.91: 0.079  
 LOT #: 07511080A1  
 EXPIRATION: 03/01/2013

| DIAGNOSTIC CHECK  | PASSED       | 12:37 |
|-------------------|--------------|-------|
| BLANK TEST        | 0.000        | 12:37 |
| INTERNAL STANDARD | VERIFIED     | 12:37 |
| EXTERNAL STANDARD | 0.079        | 12:37 |
| BLANK TEST        | 0.000        | 12:38 |
| SUBJECT SAMPLE    | INTERFERENCE | 12:39 |

*BBMB*



*10/10/BBMB*



SUBJECT TEST

Alaska Department of Public Safety  
 DATA MASTER dmt: 100358

Date: 03/23/2012  
 Time: 12:24:10

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

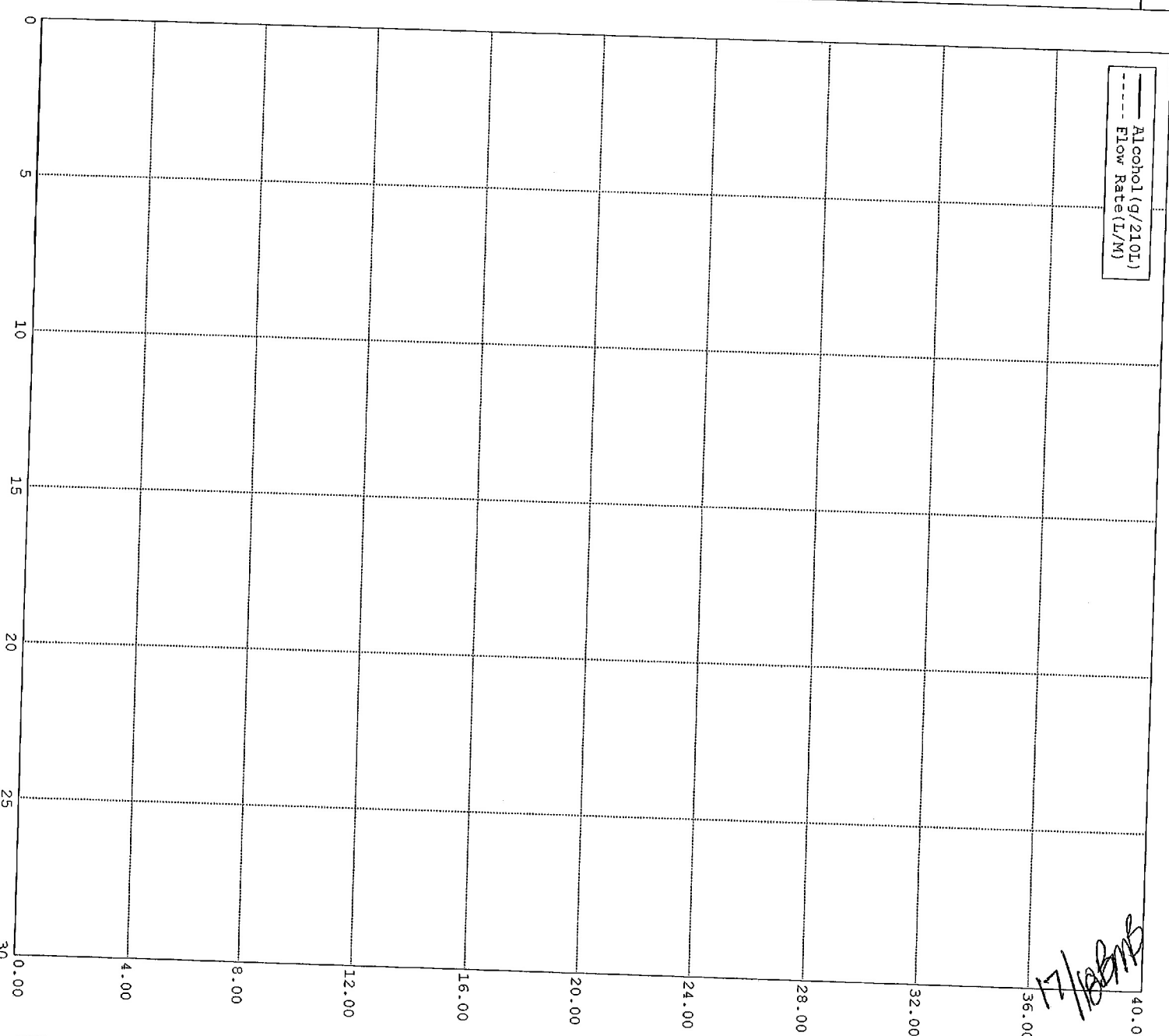
OPERATOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 7038

DEPT/AGENCY:  
 RADIO FREQUENCY INTERFERE  
 CASE/REPORT: XXXX  
 TEST TYPE: TEST

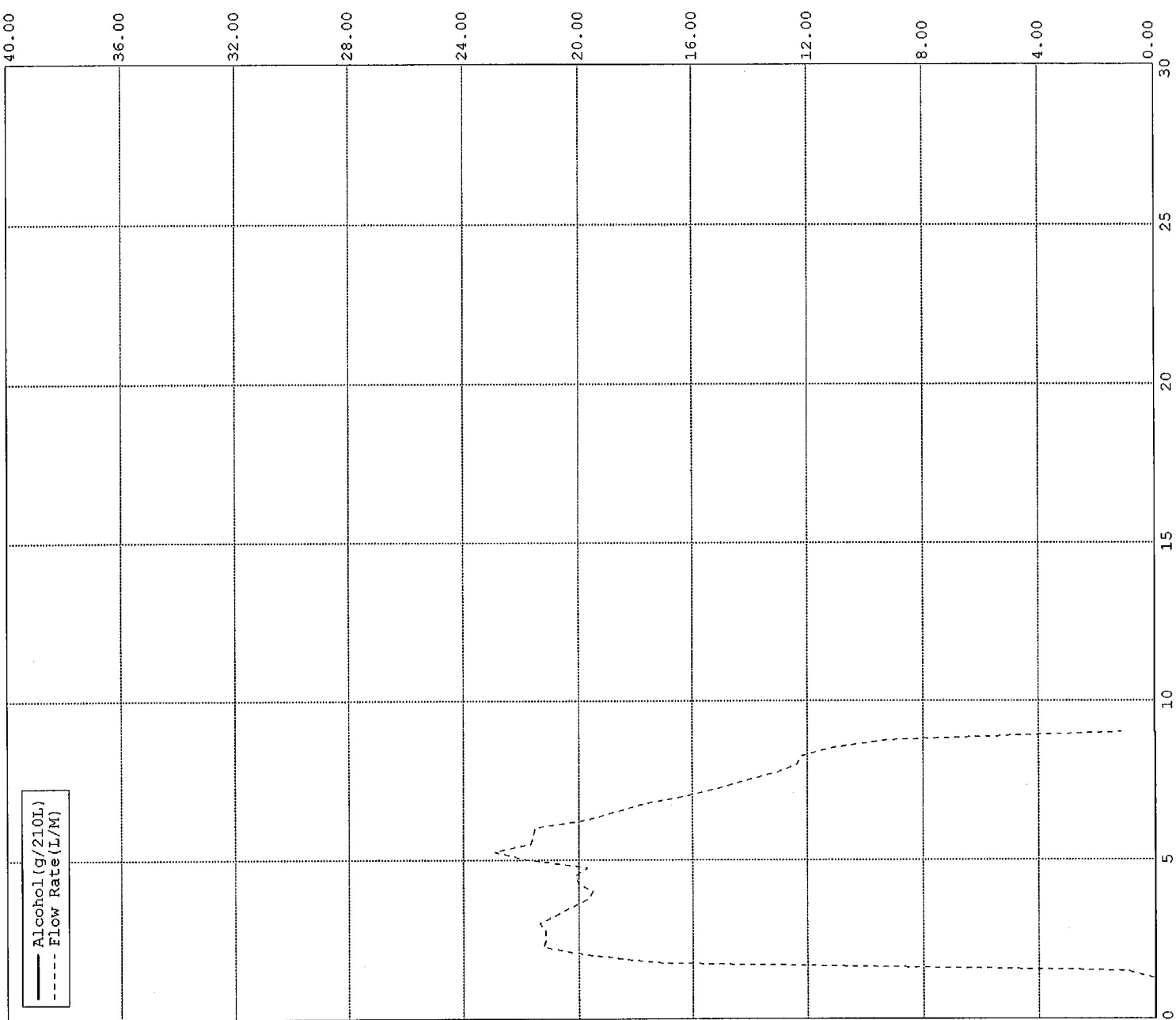
EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.91: 0.079  
 LOT #: 07511080A1  
 EXPIRATION: 03/01/2013

|                   |          |       |
|-------------------|----------|-------|
| DIAGNOSTIC CHECK  | PASSED   | 12:25 |
| BLANK TEST        | 0.000    | 12:25 |
| INTERNAL STANDARD | VERIFIED | 12:25 |
| EXTERNAL STANDARD | 0.078    | 12:26 |
| BLANK TEST        | 0.000    | 12:27 |

RFI DETECTED



*Handwritten signature and date:*  
 12/18/11



SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100358

Date: 03/23/2012  
 Time: 13:14:01

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 29.89: 0.079  
 LOT #: 07511080A1  
 EXPIRATION: 03/01/2013

|                   |          |       |
|-------------------|----------|-------|
| DIAGNOSTIC CHECK  | PASSED   | 13:15 |
| BLANK TEST        | 0.000    | 13:15 |
| INTERNAL STANDARD | VERIFIED | 13:15 |
| EXTERNAL STANDARD | 0.078    | 13:15 |
| BLANK TEST        | 0.000    | 13:16 |
| SUBJECT SAMPLE    | 0.000    | 13:16 |
| BLANK TEST        | 0.000    | 13:17 |
| EXTERNAL STANDARD | 0.079    | 13:18 |
| BLANK TEST        | 0.000    | 13:18 |

10/18/2012