

## Alaska Scientific Crime Detection Laboratory

## DataMaster Certification Form

Issued: 04/04/2012  
Effective: 04/04/2012

Version: DMCEF2012 R1  
Status: Active

Instrument S/N 100386 Analyst Brandi Start Date 5/14/13

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 1500 mL (1.3L to 1.7L)

## 4. Linearity Test (attached)

- a. Levels Used
- i. 0.020g/210L Mnf ILMO Lot 00813020A1 Exp 03/01/15
  - ii. 0.040g/210L Mnf ILMO Lot 00813040A2 Exp 03/01/15
  - iii. 0.080g/210L Mnf ILMO Lot 02012080A1 Exp 03/01/14
  - iv. 0.100g/210L Mnf ILMO Lot 00813100A3 Exp 03/01/15
  - v. 0.200g/210L Mnf Guth Lot 1120 Exp 07/19/13
    - 1. Simulator S/N DR4162 Date Calibrated 10/09/12
  - vi. 0.300g/210L Mnf Guth Lot 12050 Exp 03/21/14
    - 1. Simulator S/N DR4163 Date Calibrated 10/08/12

## 5. Functional Tests (attached)

- a. Incomplete  b. Invalid
- c. Interference
- i. Acetone - Mnf Guth Lot 11220 Level 0.100 Exp 10/24/13
    - 1. Simulator S/N DR5298 Date Calibrated 10/8/12
  - ii. Isopropanol - Mnf Guth Lot 11220 Level 0.100 Exp 10/24/13
    - 1. Simulator S/N SD1202 Date Calibrated 10/9/12
  - iii. Negative Control - Mnf Guth Lot 11220 Level 0.100 Exp 10/24/13
    - 1. Simulator S/N SD1176 Date Calibrated 10/9/12

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 5/15/13

## DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dnt: 100386  
-----

Date: 05/14/2013  
Time: 09:10:52

## VERSIONS

DMT: 2.00  
PIC: 3.02  
Modem: 2.3  
Questions: 2.2

## TEMPERATURES

Sample Chamber = 48.8°C            PASSED  
Breath Tube     = 47.0°C           PASSED

## PUMP INFO

Flow Rate = 5.260 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

Technician Screen

-----  
DATAMASTER dmt: 100386  
-----

Date: 05/14/2013

Time: 9:29 AM

Temperatures (°C)

Sample Cell: 48.1°C

Breath Tube: 47.9°C

Current Barometer 29.1 in

Volume (Ltr) 1.52

Settings

Lamp: 1.64 V

Bias: 79 V

Cooler: 1.63 V

Chopper: 524 Hz

Voltages (V)

Flow: 1.06 V

Detector: -0.002 V

## CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dnt: 100386  
-----

Date: 03/09/2011  
Time: 12:13:41

Ca = 0.1000  
CAL = 0.983582    0.800 <= CAL < 1.200  
b1 = 0.0001    0.0000 <= b1 < 0.0040  
b2 = 0.0037    0.0010 <= b2 < 0.0100  
b3 = 0.0000    0.0000 <= b3 < 0.0040  
Xg = 0.0883    0.0500 <= Xg < 0.2000  
a21 = 1.174472    1.050 <= a21 < 1.300  
a31 = 0.564984    0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
 DATA MASTER date: 100386

Date: 05/14/2013  
 Time: 09:31:06

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

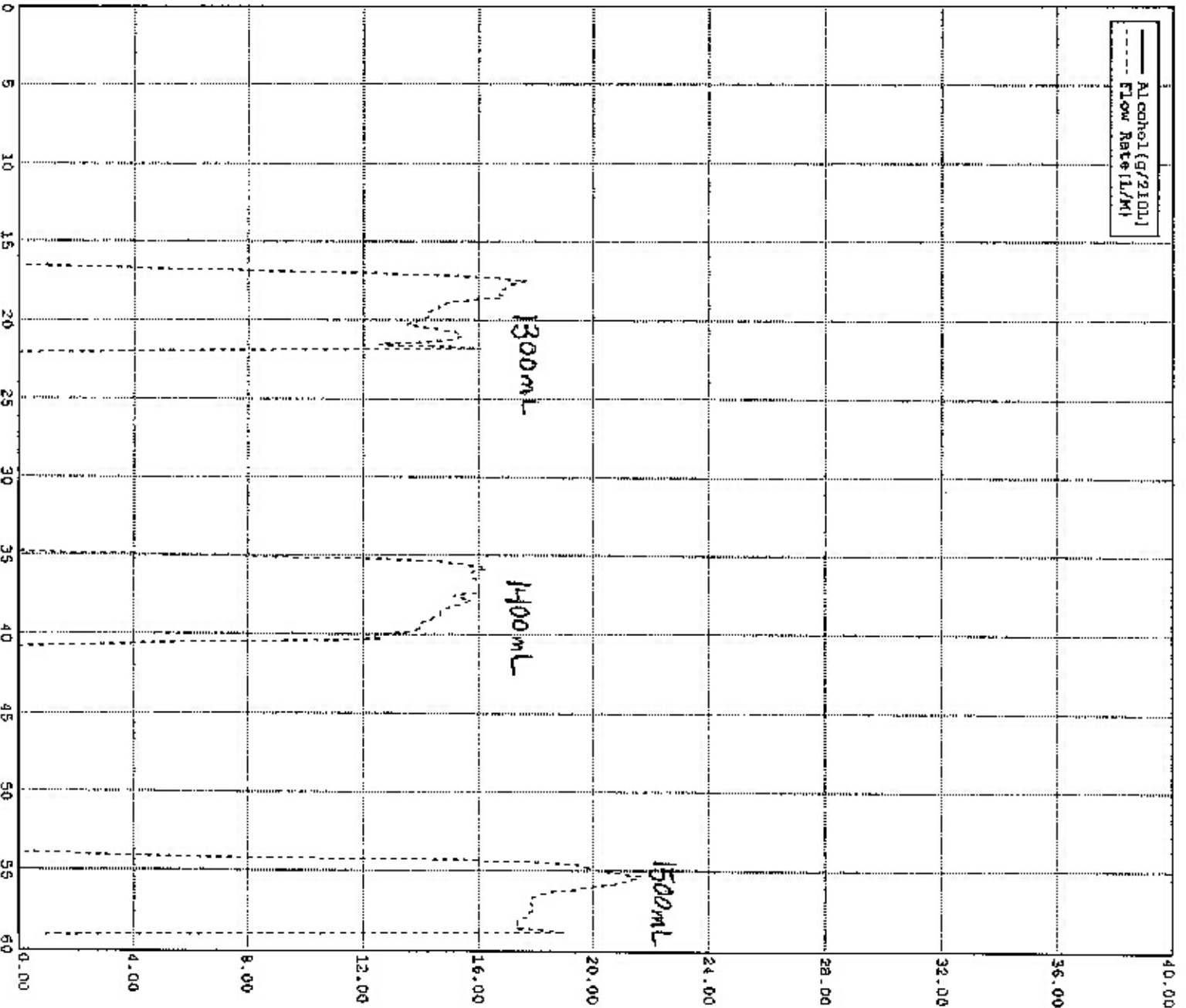
OPERATOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 7038

DEPT/AGENCY:  
 AAAA1  
 CASE/REPORT: MIN VOLUME  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.06: 0.077  
 LOT #: 02012080A1  
 EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	09:32
BLANK TEST	0.000	09:32
INTERNAL STANDARD	VERIFIED	09:32
EXTERNAL STANDARD	0.077	09:32
BLANK TEST	0.000	09:33
SUBJECT SAMPLE	0.000	09:34
BLANK TEST	0.000	09:35
EXTERNAL STANDARD	0.077	09:36
BLANK TEST	0.000	09:36

*BBB*



LINEARITY CHECK

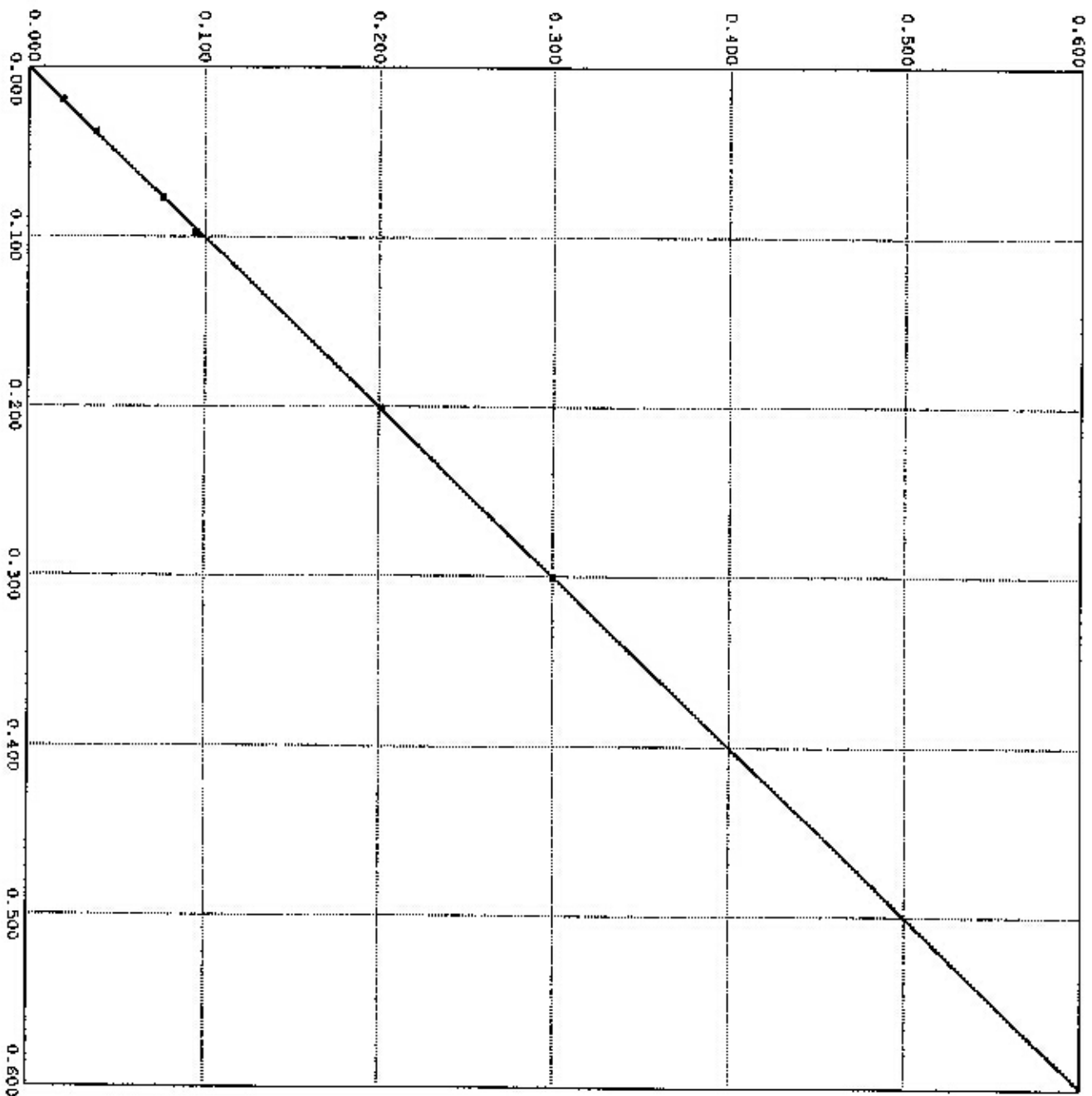
Alaska Department of Public Safety  
 DATAMASTER dmt: 100386

Date: 05/14/2013  
 Time: 10:18:16

SUPERVISOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 7938

TARGET	AVERAGE	STD. DEV.
0.019	0.0204	0.0005
0.038	0.0391	0.0002
0.077	0.0775	0.0003
0.097	0.0958	0.0005
0.209	0.2020	0.0006
0.300	0.3087	0.0002

SLOPE = 1.001023  
 R<sup>2</sup> = 0.999896



*BNB*

LINEARITY CHECK: Control Test 1

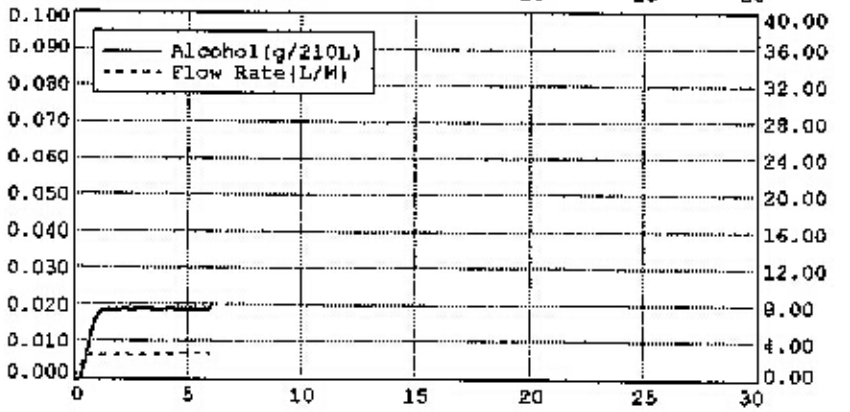
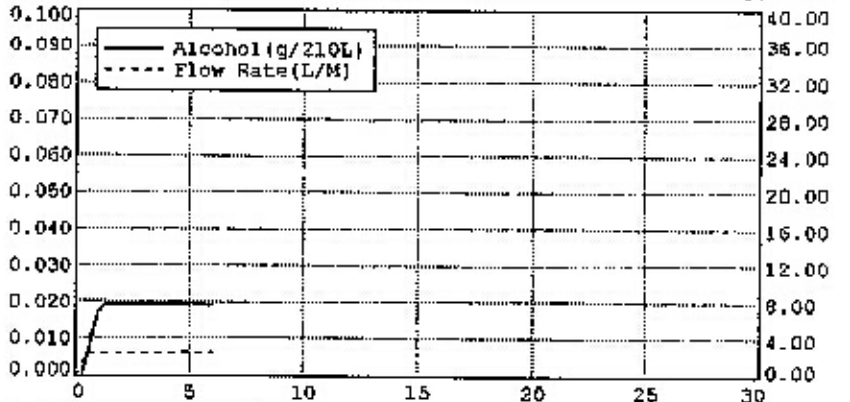
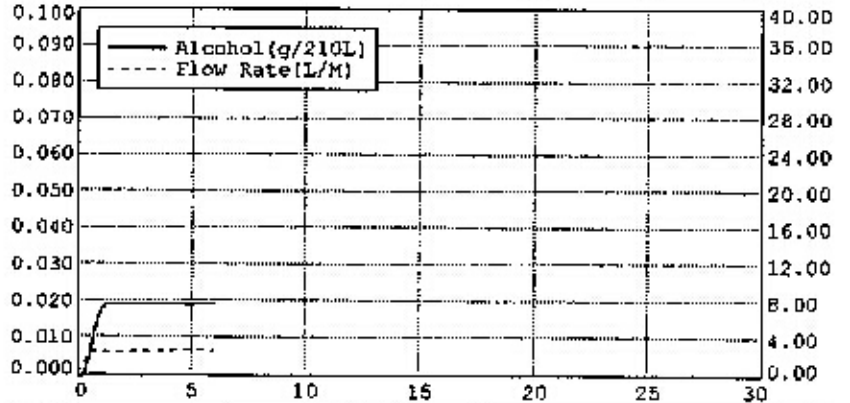
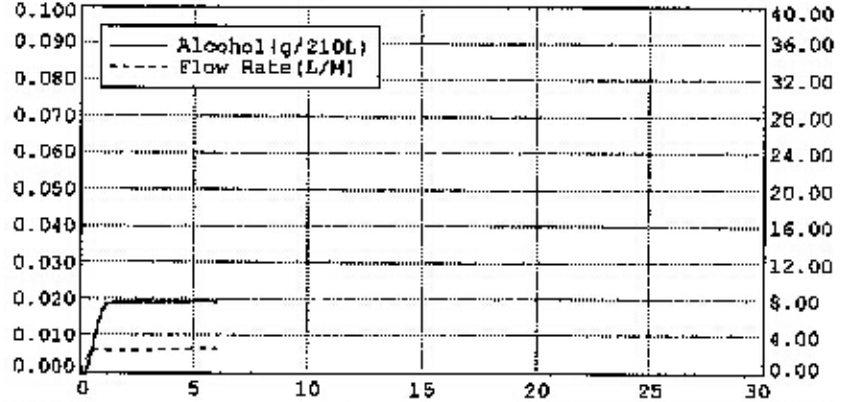
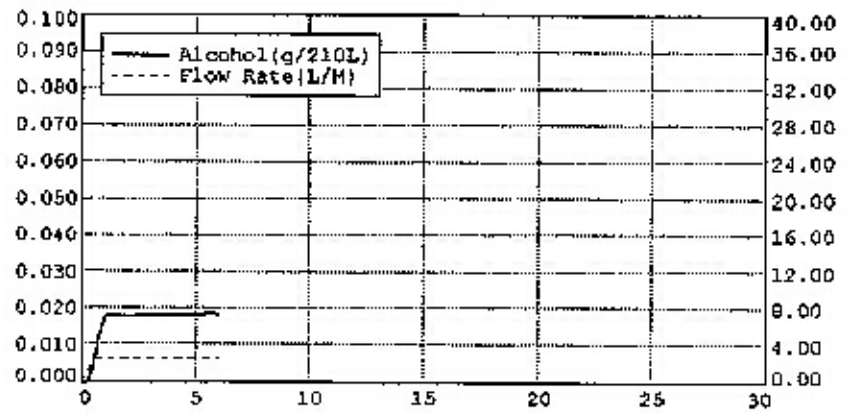
Alaska Department of Public Safety  
 DATAMASTER dmt: 100386

Date: 05/14/2013  
 Time: 10:19:32

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.020  
 TARGET AT 29.06: 0.019  
 LOT #: 00813020A1  
 EXPIRATION: 03/01/2015

BLANK TEST	0.000	10:20
INTERNAL STANDARD	VERIFIED	10:20
EXTERNAL STANDARD	0.019	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.020	10:22
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.020	10:23
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.020	10:24
BLANK TEST	0.000	10:25
EXTERNAL STANDARD	0.020	10:25
BLANK TEST	0.000	10:26

Average = 0.0204  
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100386

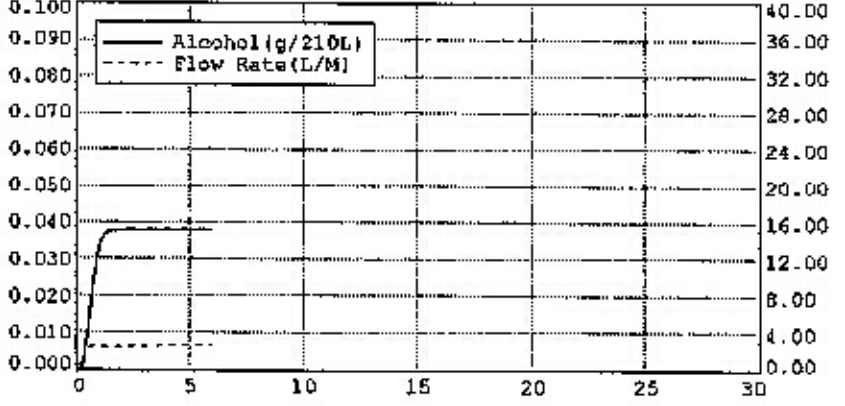
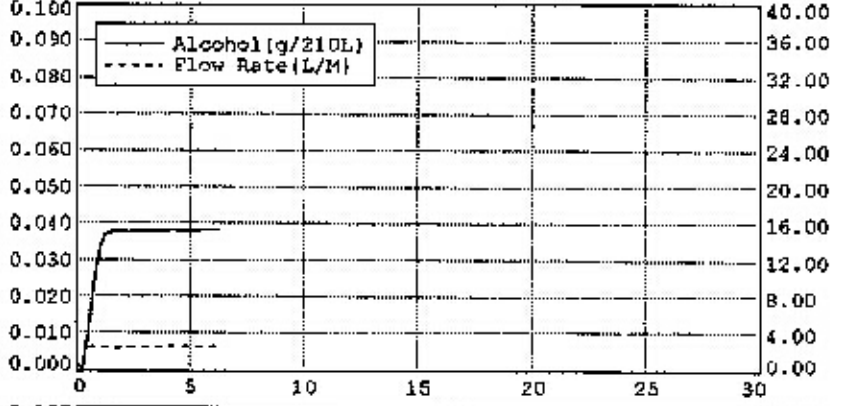
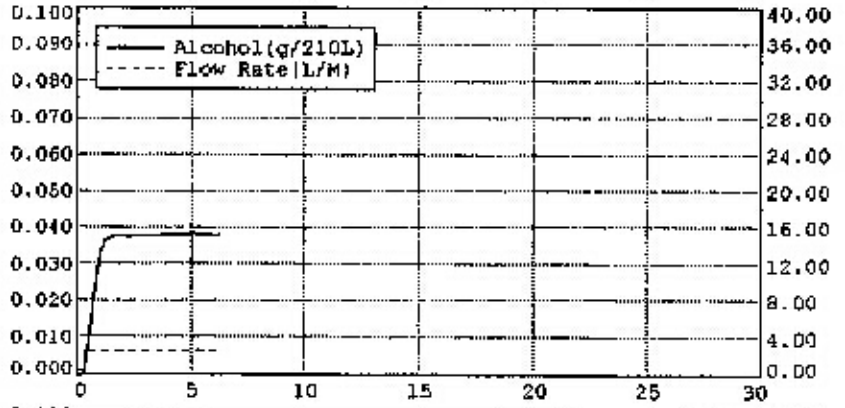
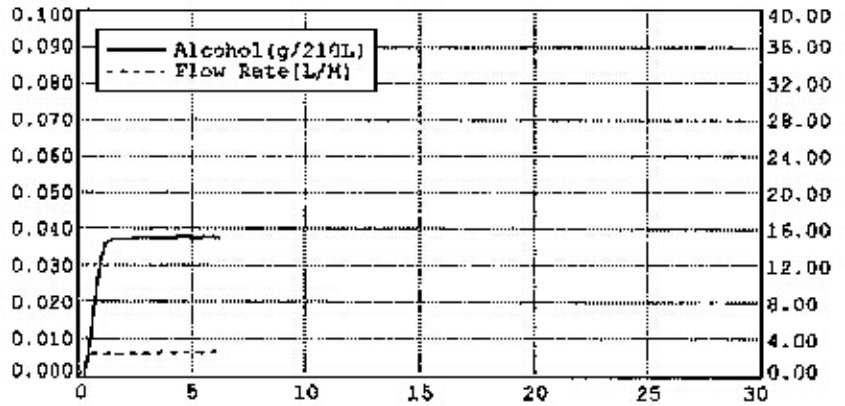
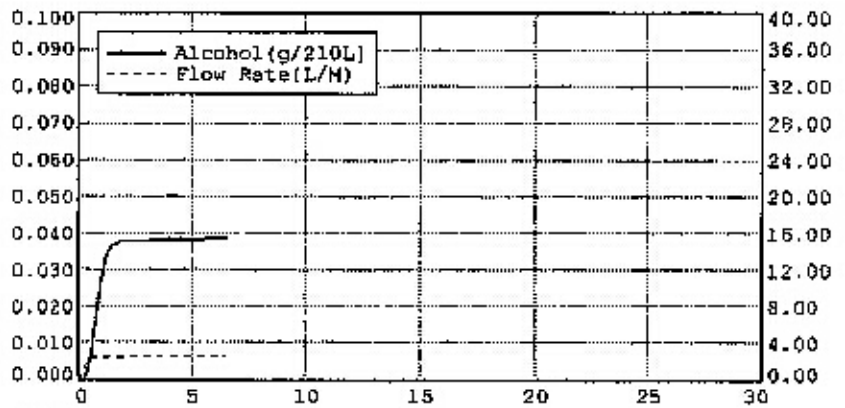
Date: 05/14/2013  
 Time: 10:28:25

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.06: 0.038  
 LOT #: 00813040A2  
 EXPIRATION: 03/01/2015

BLANK TEST	0.000	10:29
INTERNAL STANDARD	VERIFIED	10:29
EXTERNAL STANDARD	0.039	10:29
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.039	10:30
BLANK TEST	0.000	10:31
EXTERNAL STANDARD	0.039	10:32
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.039	10:33
BLANK TEST	0.000	10:34
EXTERNAL STANDARD	0.039	10:34
BLANK TEST	0.000	10:35

Average = 0.0391  
 Std Dev = 0.0002





## LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
DATAMASTER dmt: 100386

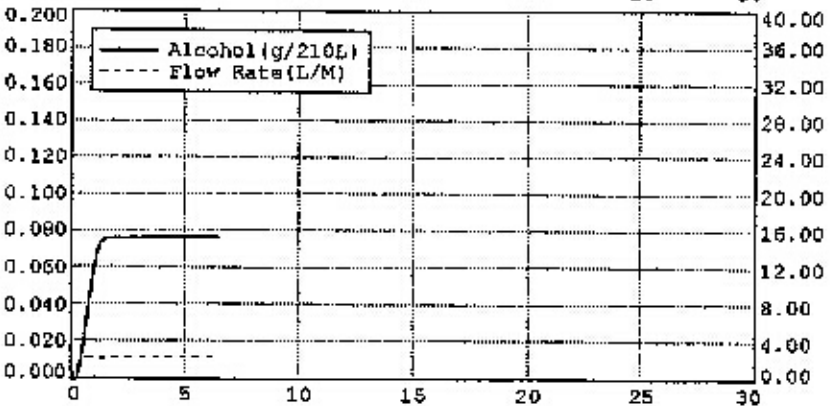
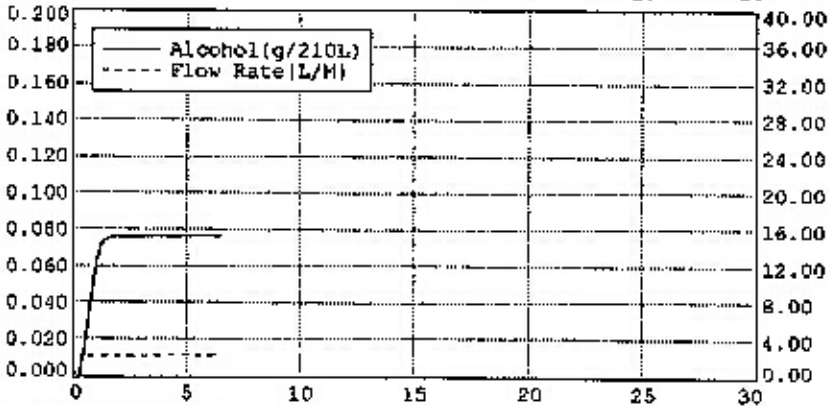
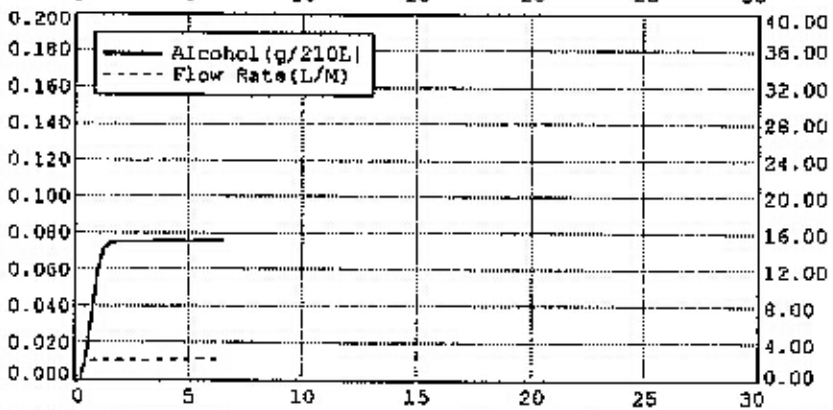
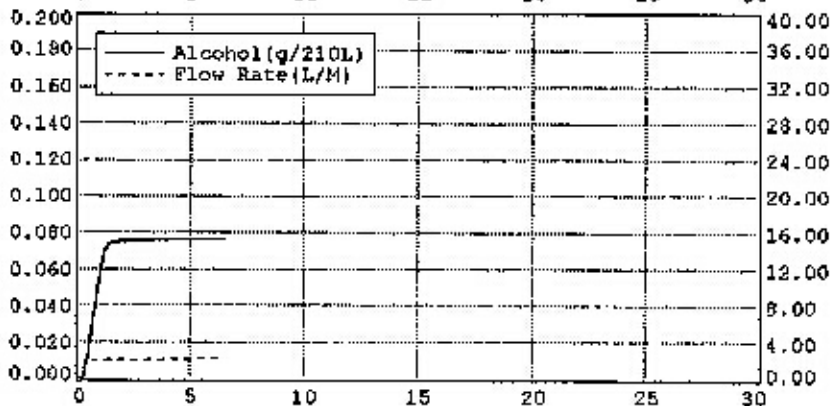
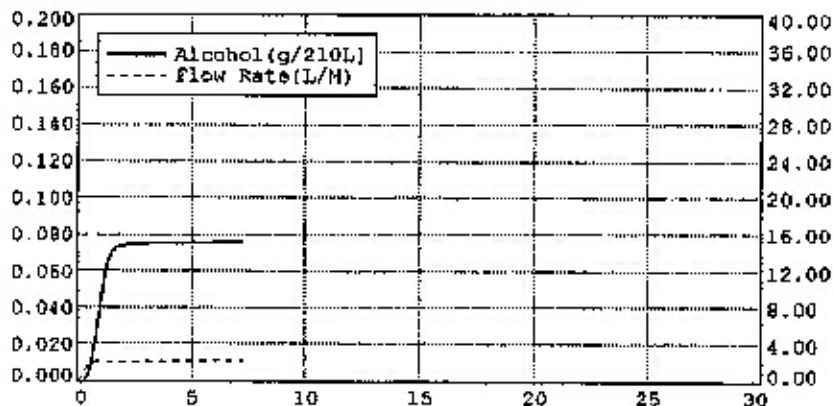
Date: 05/14/2013  
Time: 10:35:49

## EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.06: 0.077  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

BLANK TEST	0.000	10:36
INTERNAL STANDARD	VERIFIED	10:36
EXTERNAL STANDARD	0.077	10:37
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.077	10:38
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.077	10:39
BLANK TEST	0.000	10:40
EXTERNAL STANDARD	0.077	10:40
BLANK TEST	0.000	10:41
EXTERNAL STANDARD	0.077	10:41
BLANK TEST	0.000	10:42

Average = 0.0775  
Std Dev = 0.0003



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dnt: 100386

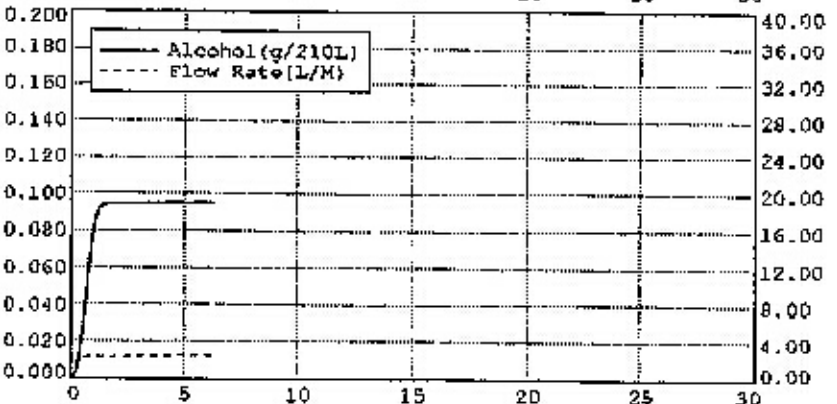
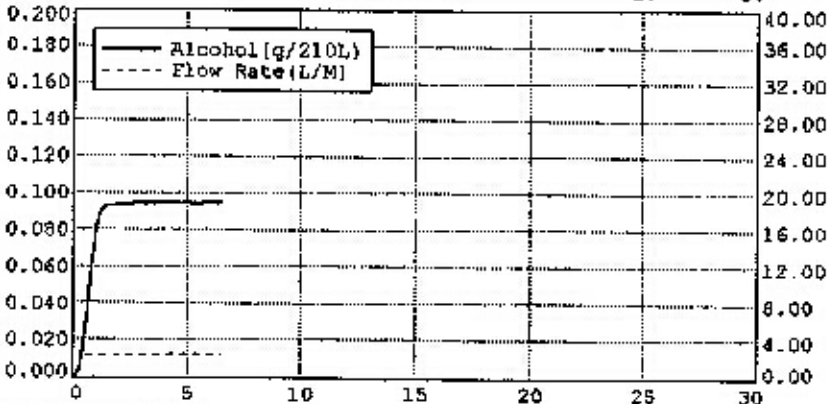
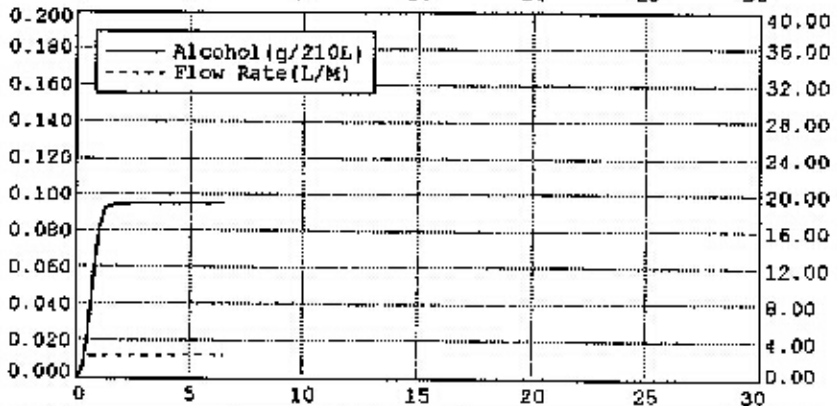
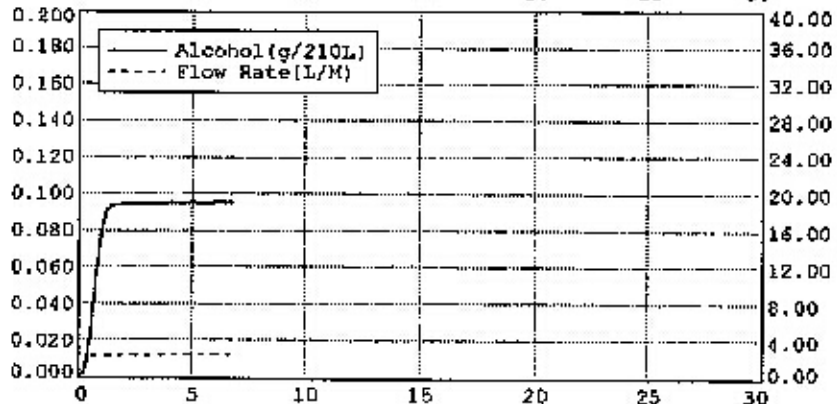
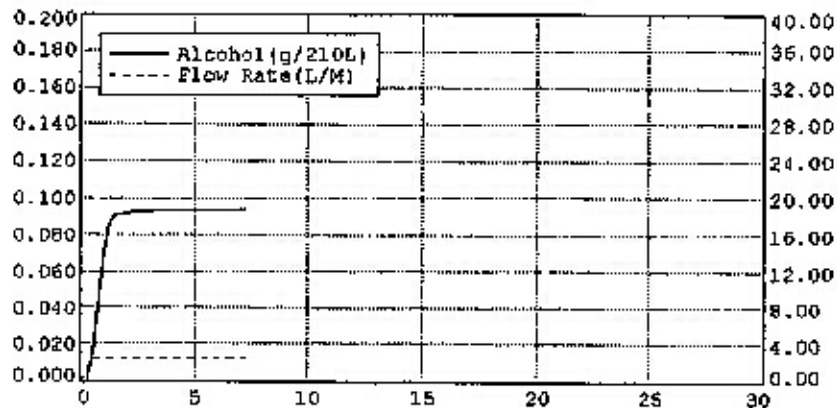
Date: 05/14/2013  
 Time: 10:44:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.06: 0.097  
 LOT #: 00813100A3  
 EXPIRATION: 03/01/2015

BLANK TEST	0.000	10:45
INTERNAL STANDARD	VERIFIED	10:45
EXTERNAL STANDARD	0.094	10:46
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.096	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.096	10:48
BLANK TEST	0.000	10:49
EXTERNAL STANDARD	0.095	10:49
BLANK TEST	0.000	10:50
EXTERNAL STANDARD	0.096	10:50
BLANK TEST	0.000	10:51

Average = 0.0958  
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety  
 DATAMASTER dat: 100386

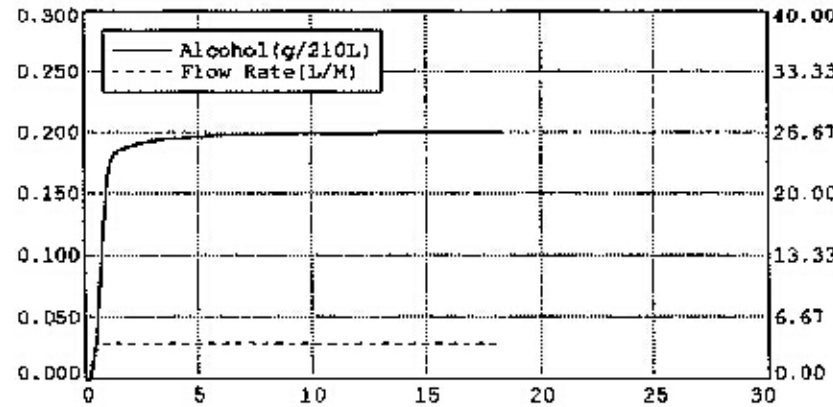
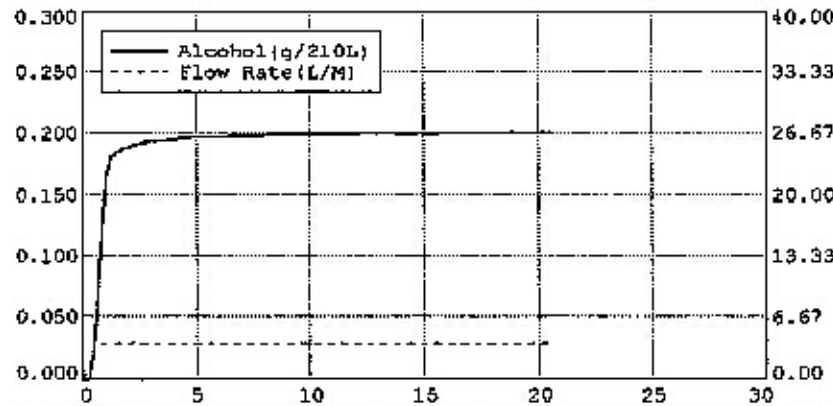
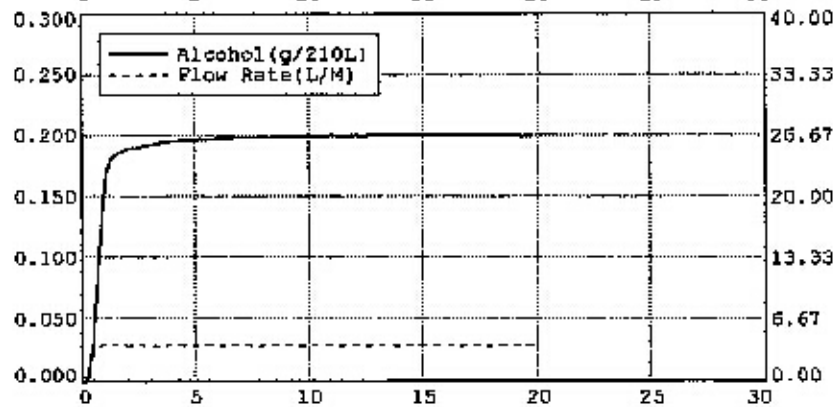
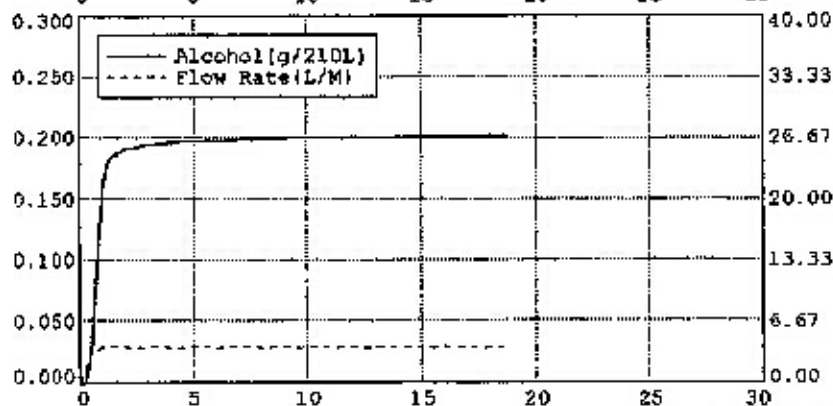
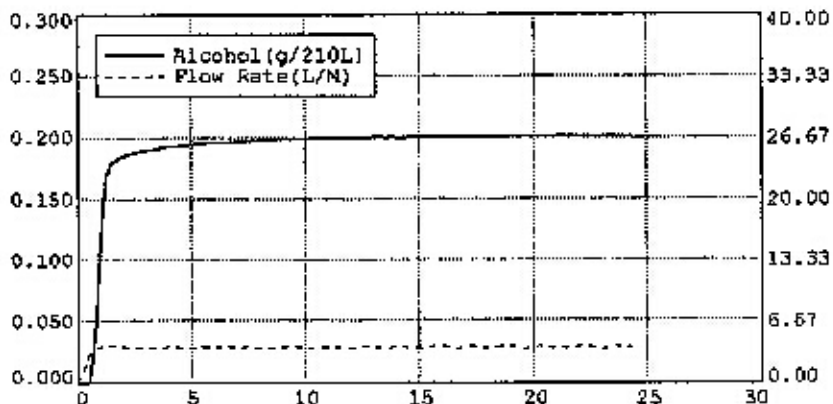
Date: 05/14/2013  
 Time: 11:01:52

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200  
 LOT #: 11120  
 EXPIRATION: 07/19/2013

BLANK TEST	0.000	11:02
INTERNAL STANDARD	VERIFIED	11:03
EXTERNAL STANDARD	0.202	11:03
BLANK TEST	0.000	11:04
EXTERNAL STANDARD	0.202	11:04
BLANK TEST	0.000	11:05
EXTERNAL STANDARD	0.201	11:06
BLANK TEST	0.000	11:07
EXTERNAL STANDARD	0.201	11:07
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.201	11:09
BLANK TEST	0.000	11:09

Average = 0.2020  
 Std Dev = 0.0006



## LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
DATAMASTER dmt: 100386

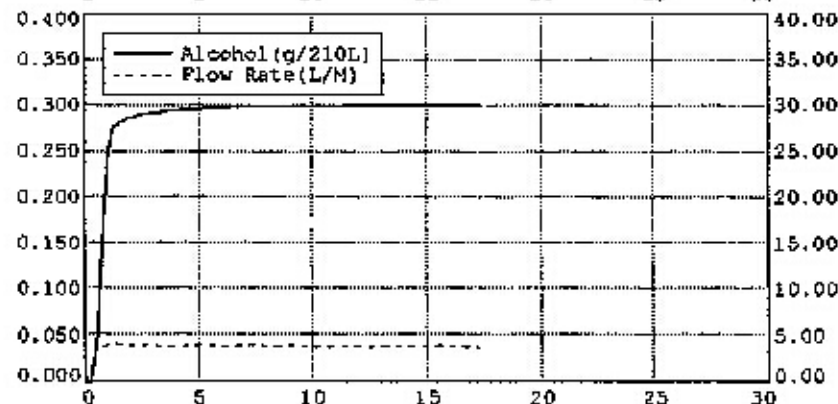
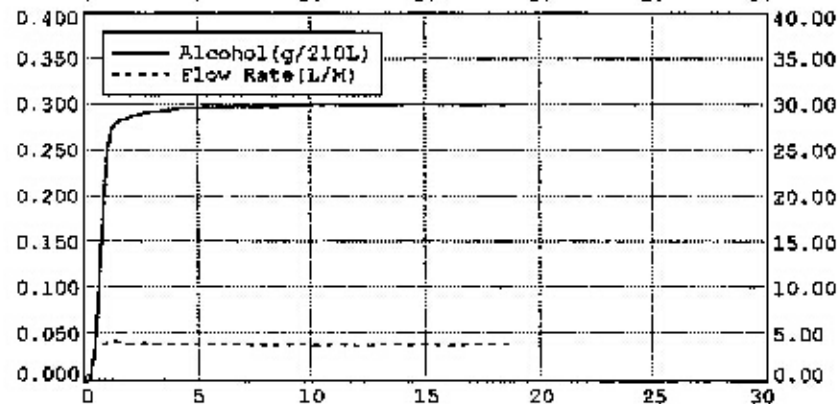
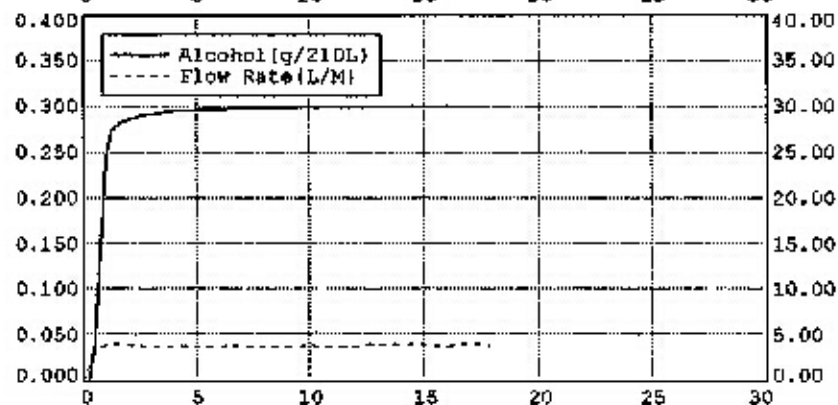
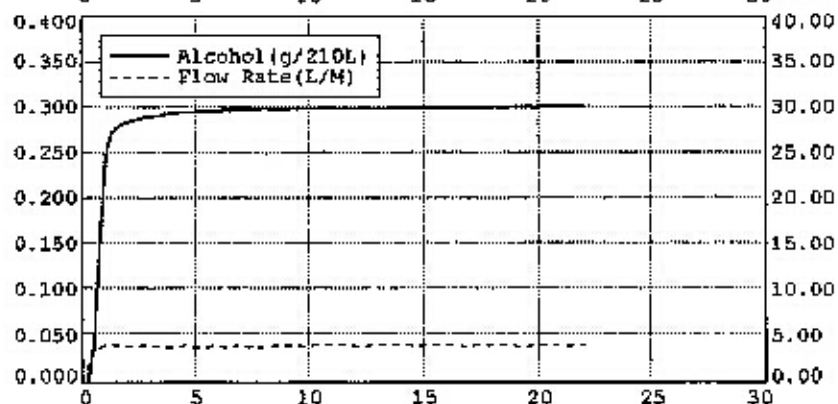
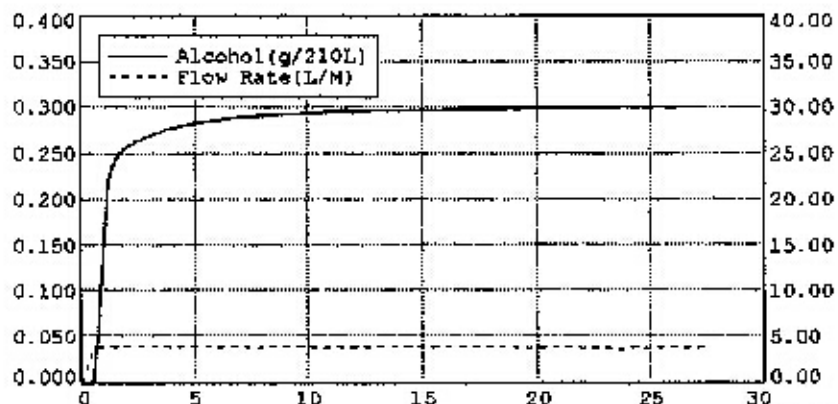
Date: 05/14/2013  
Time: 12:44:20

## EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
LOT #: 12050  
EXPIRATION: 03/21/2014

BLANK TEST	0.000	12:45
INTERNAL STANDARD	VERIFIED	12:45
EXTERNAL STANDARD	0.300	12:46
BLANK TEST	0.000	12:47
EXTERNAL STANDARD	0.300	12:47
BLANK TEST	0.000	12:48
EXTERNAL STANDARD	0.300	12:48
BLANK TEST	0.000	12:49
EXTERNAL STANDARD	0.301	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.300	12:51
BLANK TEST	0.000	12:52

Average = 0.3007  
Std Dev = 0.0002



SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmc: 100386

Date: 05/14/2013  
 Time: 14:00:50

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: NDCX

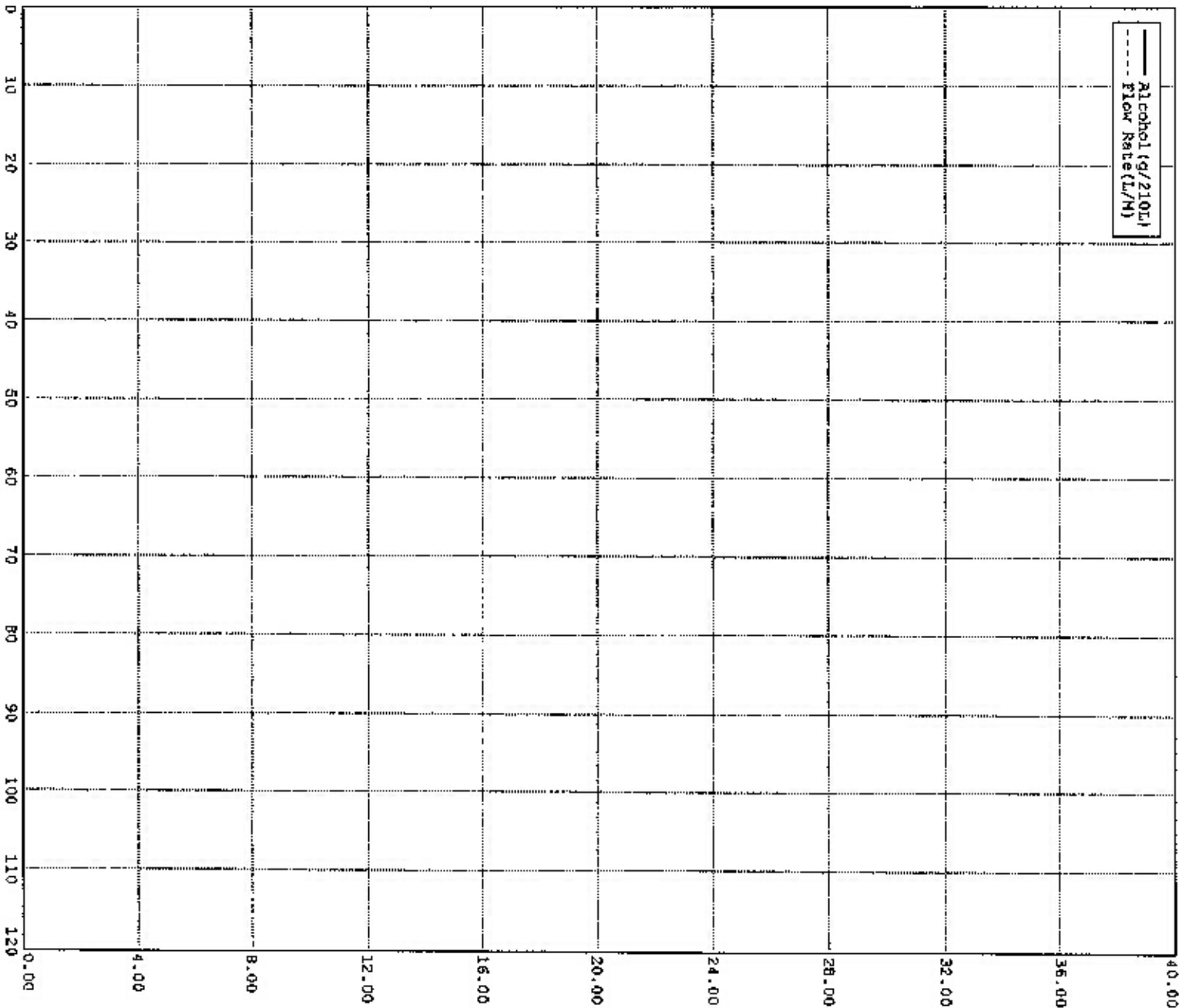
OPERATOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 7038

DEPT/AGENCY:  
 AA1  
 CASE/REPORT: INCOMPLETE  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.08: 0.077  
 LOT #: 02012680A1  
 EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	14:02
BLANK TEST	0.000	14:02
INTERNAL STANDARD	VERIFIED	14:02
EXTERNAL STANDARD	0.077	14:03
BLANK TEST	0.000	14:04
SUBJECT SAMPLE	INCOMPLETE	14:05

BMB



SUBJECT TEST

Alaska Department of Public Safety  
 LABORATORY Unit: 100386

Date: 05/14/2013  
 Time: 14:11:40

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

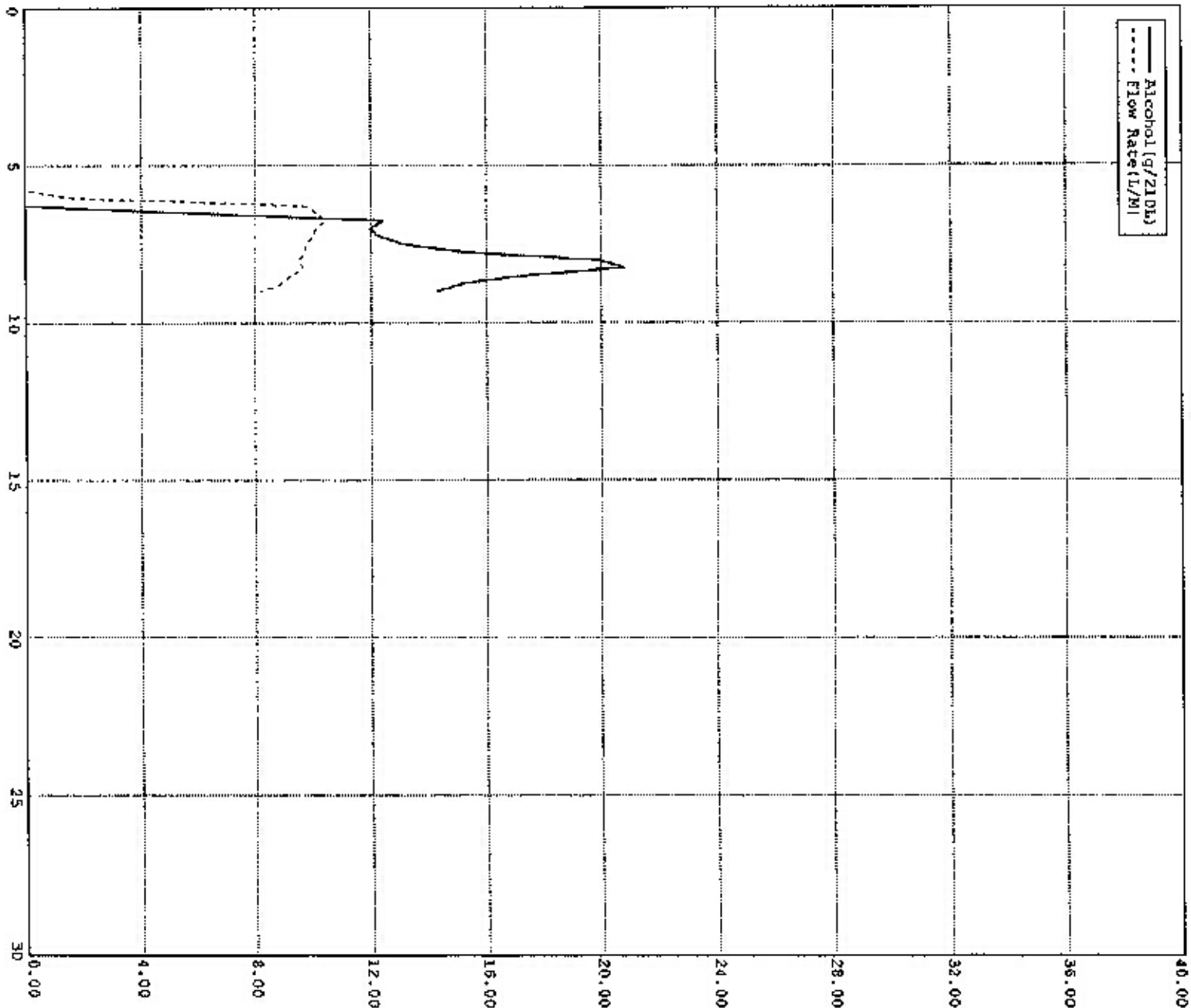
OPERATOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.060  
 TARGET AT 29.08: 0.077  
 LOT #: D2012080A1  
 EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	14:13
BLANK TEST	0.000	14:13
INTERNAL STANDARD	VERIFIED	14:13
EXTERNAL STANDARD	0.076	14:13
BLANK TEST	0.000	14:13
SUBJECT SAMPLE	INVALID	14:13

*BBMB*



SUBJECT TEST

Alaska Department of Public Safety  
 DATA MASTER date: 100386

Date: 05/15/2013  
 Time: 09:26:08

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: KXXX

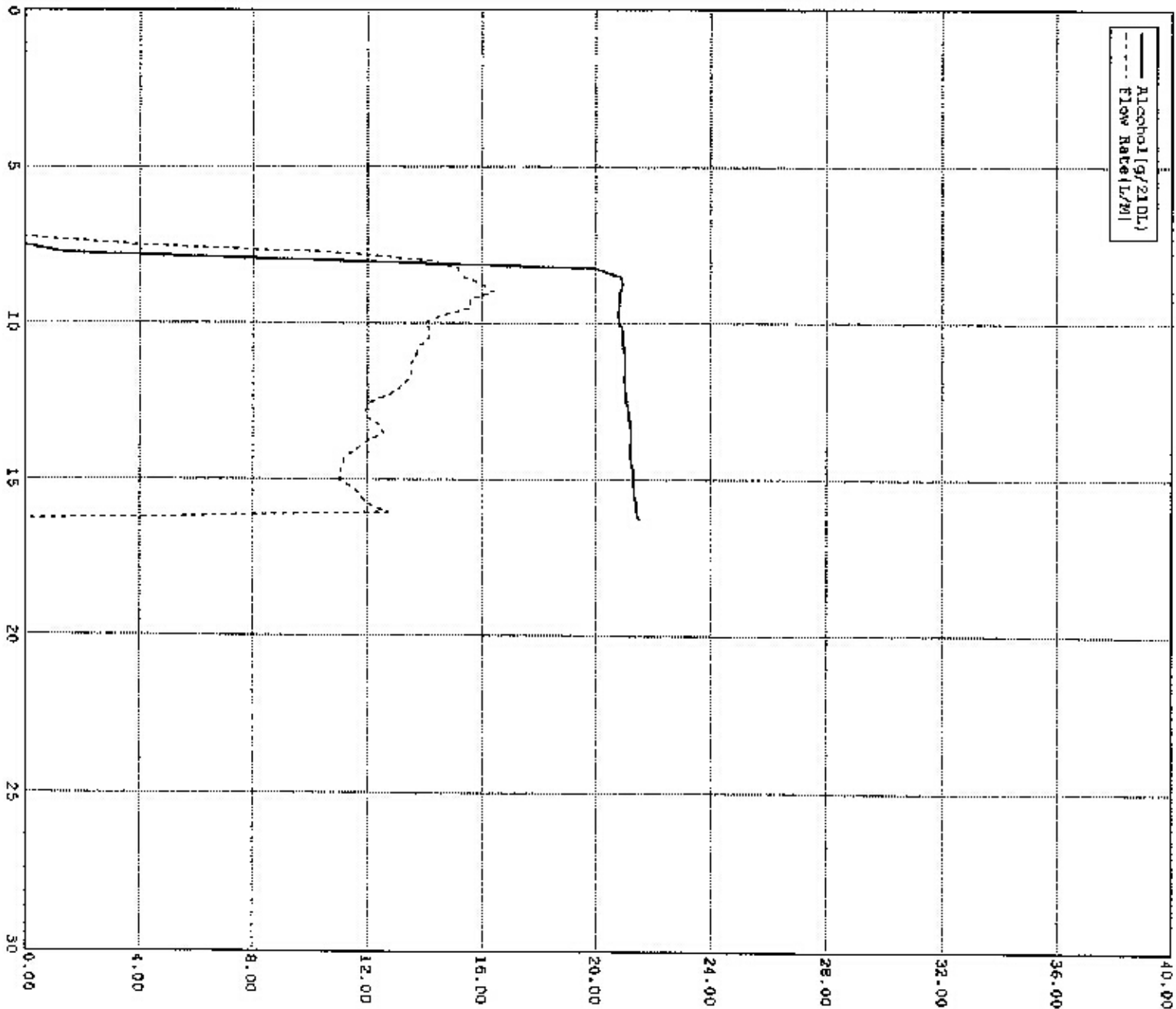
OPERATOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 703B

DEPT/AGENCY:  
 AAAL  
 CASE/REPORT: INTERFERE ACETONE  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.23: 0.078  
 LOT #: 02012080A1  
 EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	09:27
BLANK TEST	0.000	09:27
INTERNAL STANDARD	VERIFIED	09:27
XQ = 0.088 (0.30%)		
EXTERNAL STANDARD	0.077	09:27
X[1] = 0.0776 (0.0002)	(0.0033)	
BLANK TEST	0.000	09:28
SUBJECT SAMPLE	INTERFERENCE	09:28
X[1] = 0.1077 (-0.0150)	(0.0039)	

*BBMB*



SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER Unit: 100386

Date: 05/15/2013  
 Time: 09:30:46

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

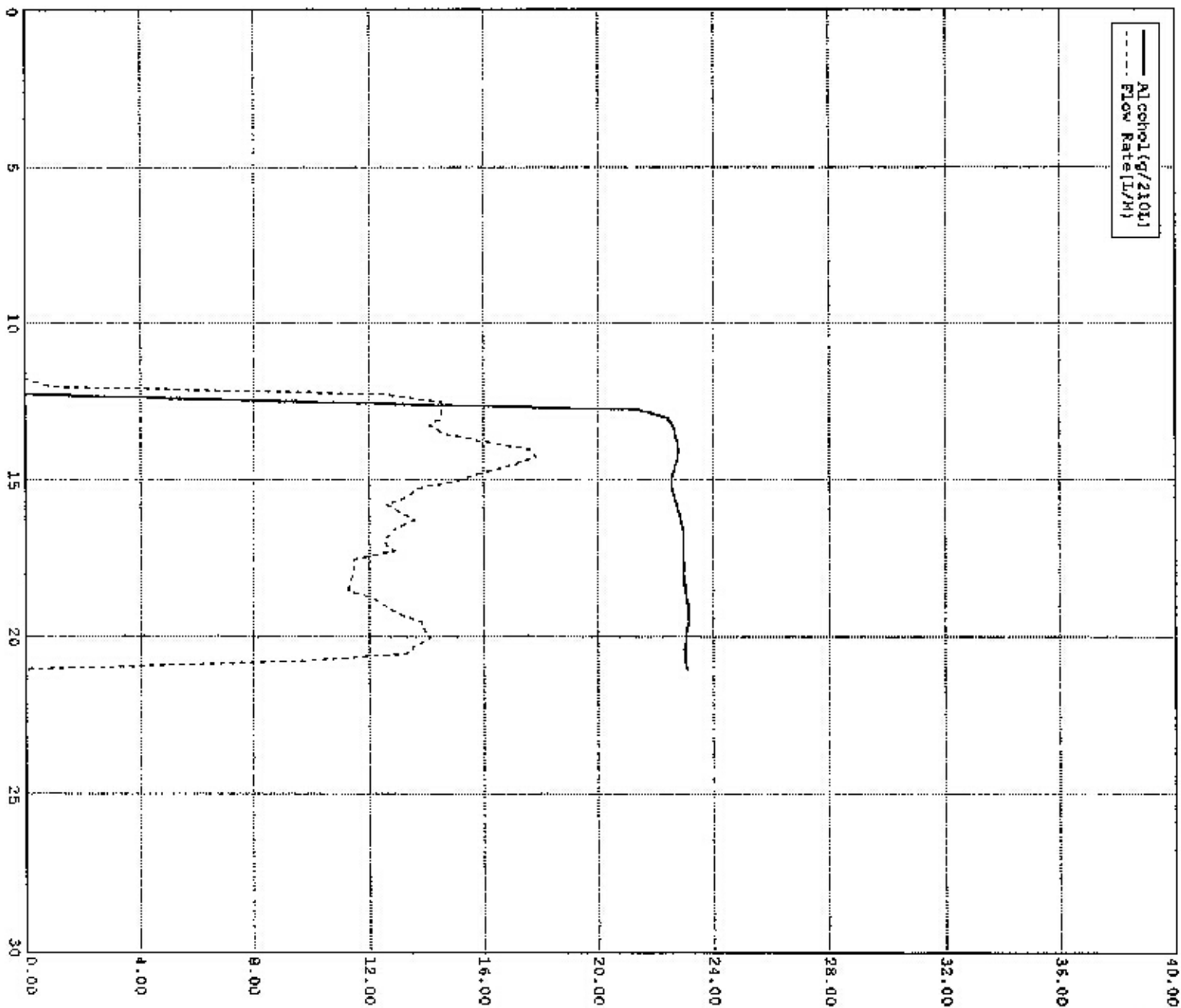
OPERATOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 7038

DEPT/AGENCY:  
 AAA1  
 CASE/REPORT: INTERFERE ISOPROP  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.23: 0.078  
 LOT #: 02012080A1  
 EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	09:31
BLANK TEST	0.000	09:31
INTERNAL STANDARD	VERIFIED	09:32
Xq = 0.089 (0.39%)		
EXTERNAL STANDARD	0.078	09:32
X[1] = 0.0781 (0.0011) (0.0012)		
BLANK TEST	0.000	09:33
SUBJECT SAMPLE	INTERFERENCES	09:33
X[1] = 0.1159 (-0.0274) (0.0000)		

*BBB*





SUBJECT TEST

Alaska Department of Public Safety  
 DYNAMASTER dnt: 100386

Date: 05/15/2013  
 Time: 09:39:47

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

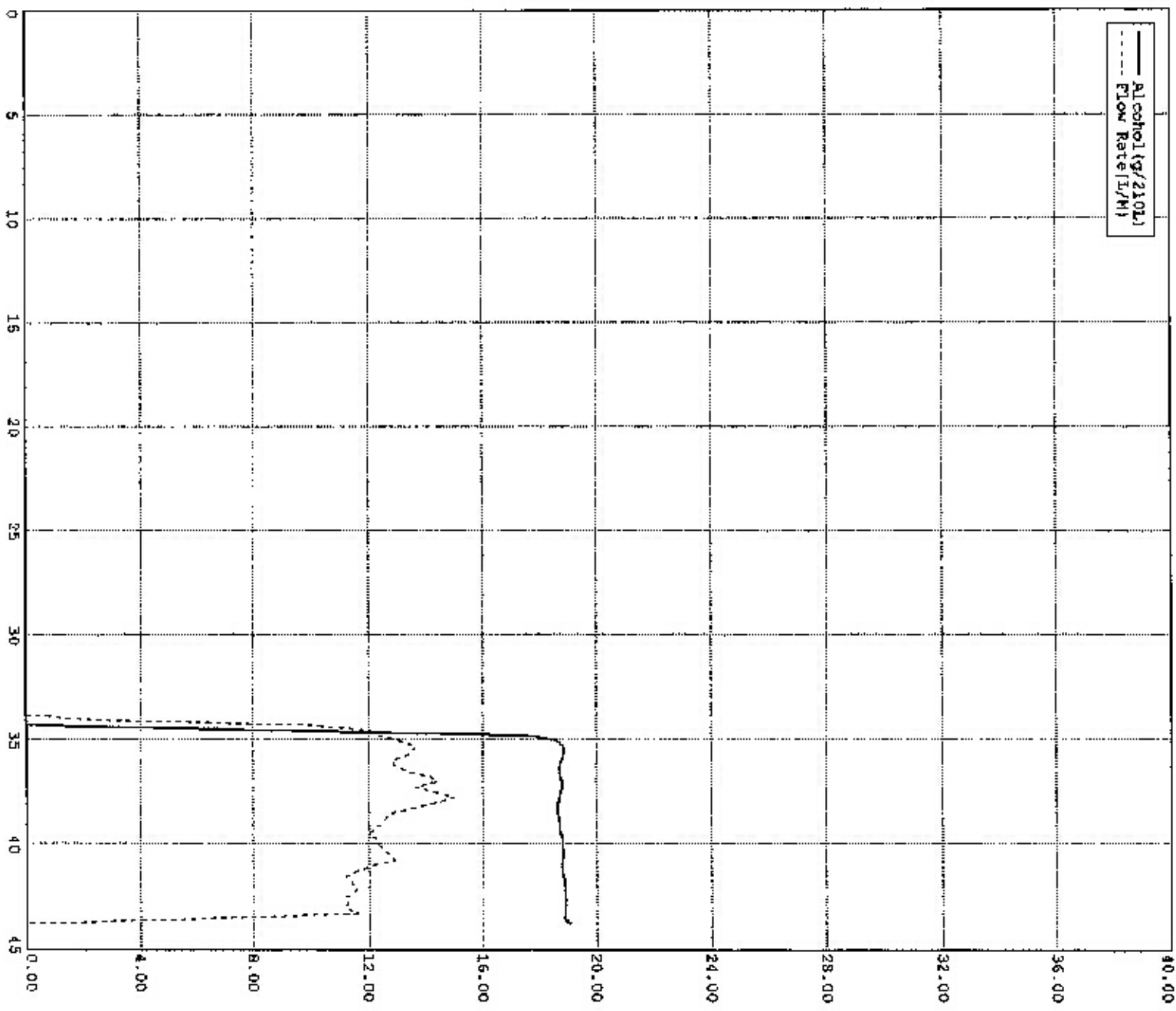
OPERATOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 7038

DEPT/AGENCY:  
 AAJ  
 CASE/REPORT: INTERFERE NEG  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.23: 0.078  
 LOT #: 02012080A1  
 EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK PASSED 09:40  
 BLANK TEST 0.000 09:41  
 INTERVAL STANDARD VERIFIED 09:41  
 Xq = 0.089 (0.208) 0.077 09:41  
 EXTERNAL STANDARD  
 X[1] = 0.0776 (0.0006) (0.0036) 0.000 09:42  
 BLANK TEST 0.000 09:43  
 SUBJECT SAMPLE (Vol=1.97L) 0.095 09:43  
 X[1] = 0.0955 (-0.0011) (0.0006) 0.000 09:44  
 BLANK TEST 0.000 09:44  
 EXTERNAL STANDARD 0.077 09:44  
 X[1] = 0.0772 (-0.0003) (0.0022) 0.000 09:45  
 BLANK TEST 0.000 09:45

*BMB*



SUBJECT TEST

Alaska Department of Public Safety  
 DATA MASTER dmt: 100386

Date: 05/14/2013  
 Time: 14:07:30

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

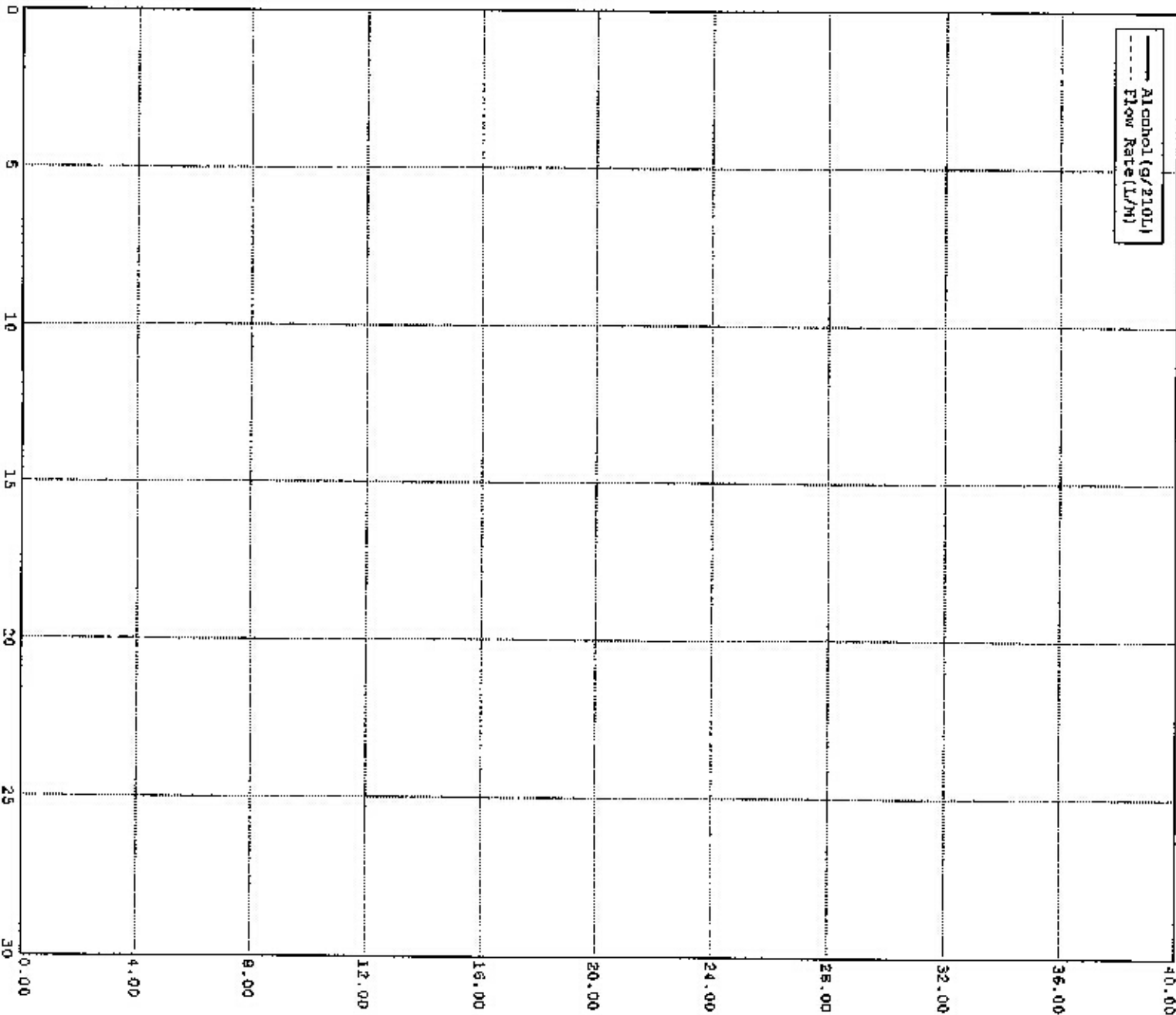
OPERATOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 7038

DEPT/AGENCY:  
 AAAl  
 CASE/REPORT: RET  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.09: 0.077  
 LOT #: 02012080A1  
 EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	14:08
BLANK TEST	0.000	14:08
INTERNAL STANDARD	0.077	14:09
EXTERNAL STANDARD	0.000	14:09

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety  
 DATA MASTER dmt: 100386

Date: 05/15/2013  
 Time: 10:01:49

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

OPERATOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 7038

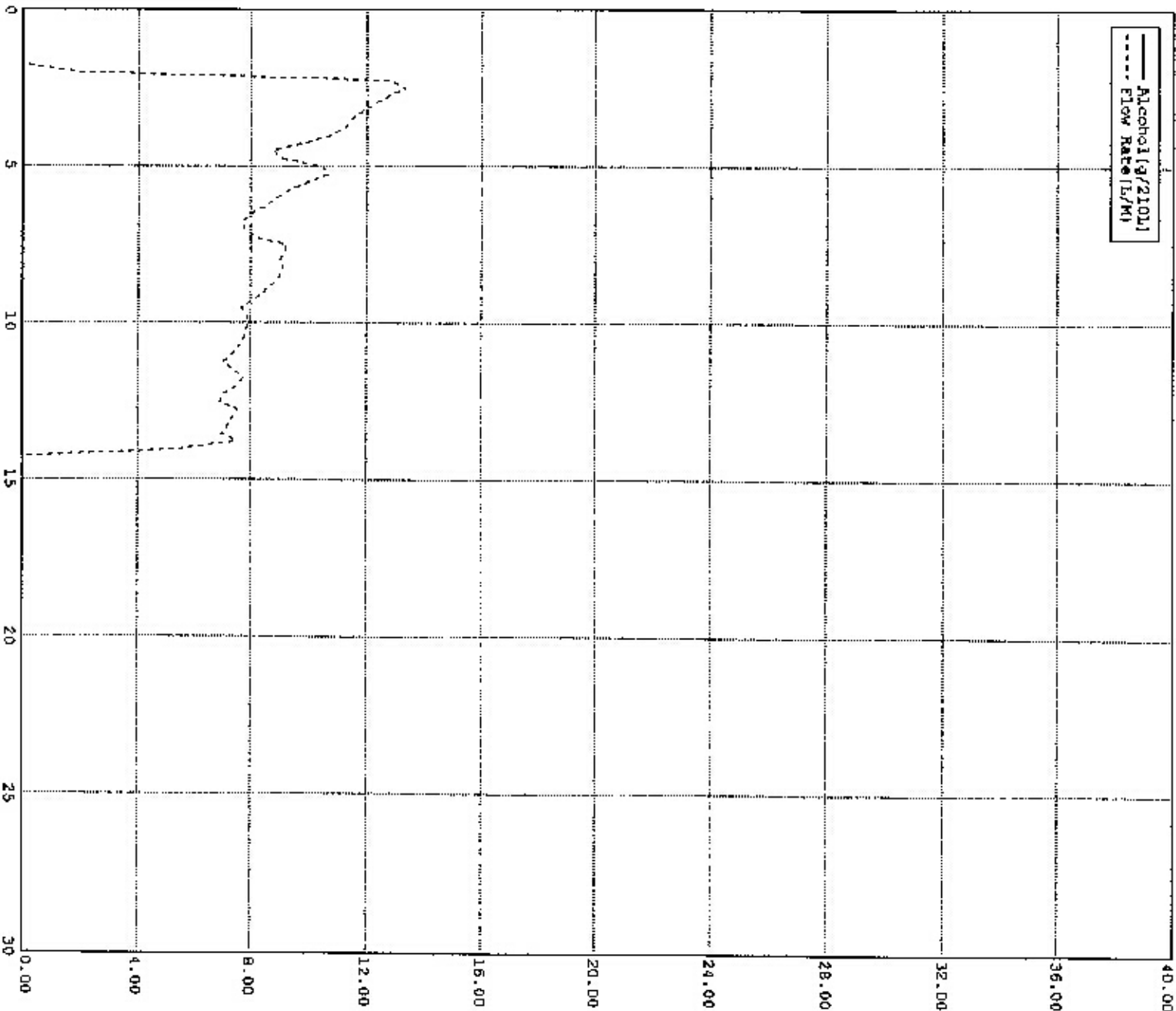
DEPT/AGENCY:

AAA1  
 CASE/REPORT: MOW DRINKING SUB  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.53: 0.078  
 LOT #: 02012080A1  
 EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	10:02
BLANK TEST	0.000	10:03
INTERNAL STANDARD	VERIFIED	10:03
EXTERNAL STANDARD	0.077	10:03
BLANK TEST	0.000	10:04
SUBJECT SAMPLE	0.000	10:04
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.078	10:05
BLANK TEST	0.000	10:06

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Final page for report

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7/3/2014