

# Alaska Scientific Crime Detection Laboratory

## DataMaster Certification Form

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

Version: DMCEF2012 R0  
Status: Active

Instrument S/N 100396

Analyst CRF

Start Date 3/7/12

Ran USB Fixer, updated software to 2.0, ensured back ventilation

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 07611020A5 Exp 3/1/13
  - ii. 0.040g/210L Mnf ILMO Lot 02811040A2 Exp 2/1/13
  - iii. 0.080g/210L Mnf ILMO Lot 07511080A1 Exp 3/1/13
  - iv. 0.100g/210L Mnf ILMO Lot 07611100A3 Exp 3/1/13
  - v. 0.200g/210L Mnf Guth Lot 11120 Exp 7/19/13
    - 1. Simulator S/N SD1176 Date Calibrated 8/17/11
  - vi. 0.300g/210L Mnf Guth Lot 11110 Exp 7/13/13
    - 1. Simulator S/N SD1202 Date Calibrated 8/17/11

5. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference 
  - i. Acetone - Mnf Guth Lot 11200 Level 0.080 Exp 10/11/13
    - 1. Simulator S/N SD1199 Date Calibrated 1/11/12
  - ii. Isopropanol - Mnf Guth Lot 10280 Level 0.080 Exp 5/24/12 11/17/12 WF
    - 1. Simulator S/N DR6267 Date Calibrated 1/10/12
- 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  A

End Date 3/8/12

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100346  
-----

Date: 03/07/2012  
Time: 09:39:46

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

TEMPERATURES

Sample Chamber = 48.7°C            PASSED  
Breath Tube       = 48.1°C           PASSED

PUMP INFO  
Flow Rate = 4.476 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

2/18 WF

Technician Screen

-----  
DATAMASTER dmt: 100346  
-----

Date: 03/07/2012  
Time: 10:03 AM

Temperatures (°C)

Sample Cell: 48.9°C  
Breath Tube: 48.1°C

Current Barometer 29.8 in  
Volume (Ltr) 1.48

Settings

Lamp: 1.64 V  
Bias: 80 V  
Cooler: 1.61 V  
Chopper: 538 Hz

Voltages (V)

Flow: 1.06 V  
Detector: -0.044 V

3/18 WF

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100346  
-----

Date: 09/29/2011  
Time: 12:03:26

Ca = 0.1010  
CAL = 0.996244    0.800 <= CAL < 1.200  
b1 = 0.0012    0.0000 <= b1 < 0.0040  
b2 = 0.0057    0.0010 <= b2 < 0.0100  
b3 = 0.0020    0.0000 <= b3 < 0.0040  
Xq = 0.1035    0.0500 <= Xq < 0.2000  
a21 = 1.188211    1.050 <= a21 < 1.300  
a31 = 0.410666    0.300 <= a31 < 0.800

4/18  
LF

SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100346

Date: 03/07/2012  
 Time: 10:35:35

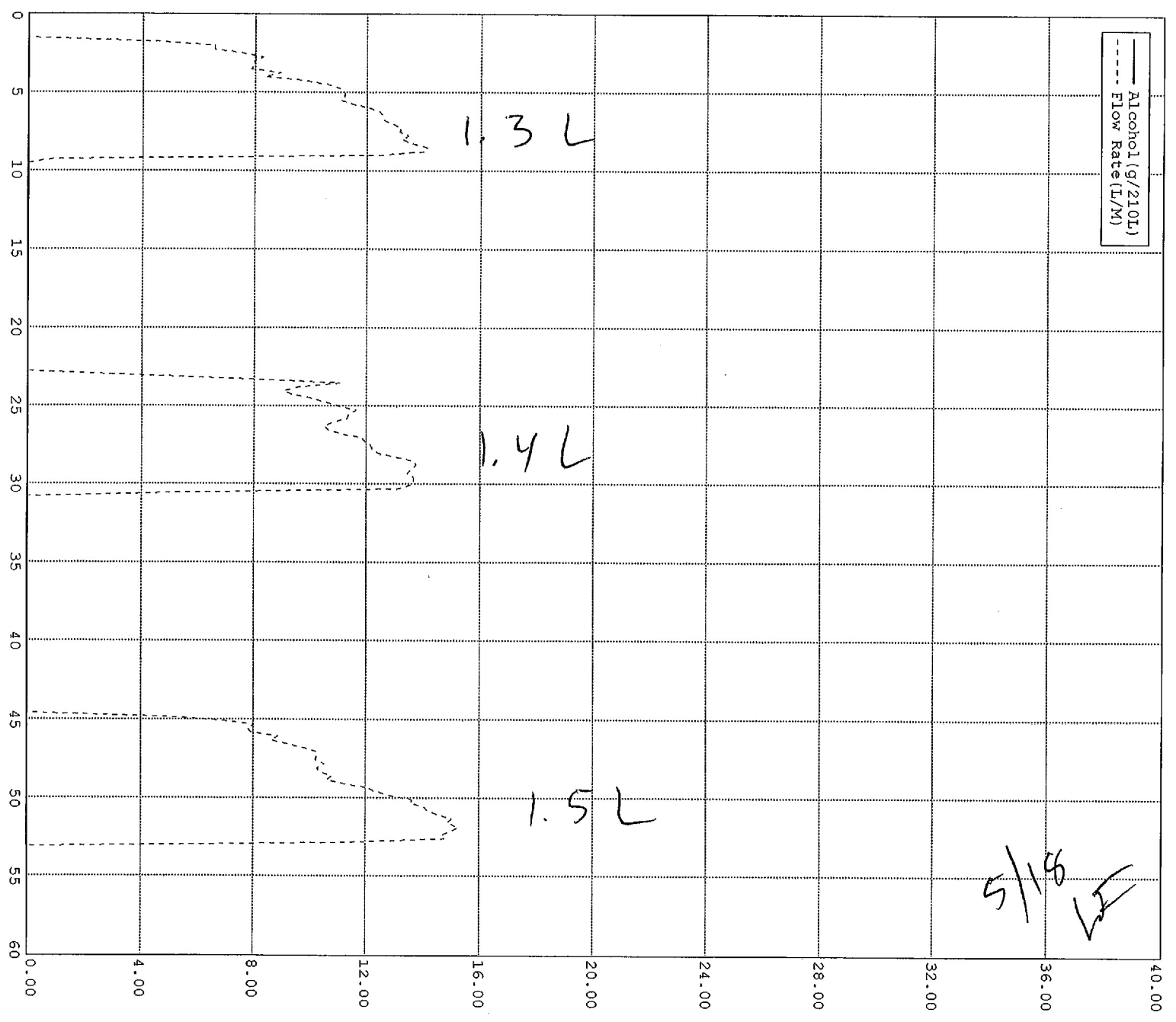
SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

OPERATOR NAME:  
 MINIMUM VOLUME  
 OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.79: 0.079  
 LOT #: 07511080A1  
 EXPIRATION: 03/01/2013

DIAGNOSTIC CHECK	PASSED	10:36
BLANK TEST	0.000	10:36
INTERNAL STANDARD	VERIFIED	10:36
EXTERNAL STANDARD	0.081	10:37
BLANK TEST	0.000	10:37
SUBJECT SAMPLE	0.000	10:38
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.082	10:40
BLANK TEST	0.000	10:40



LINEARITY CHECK

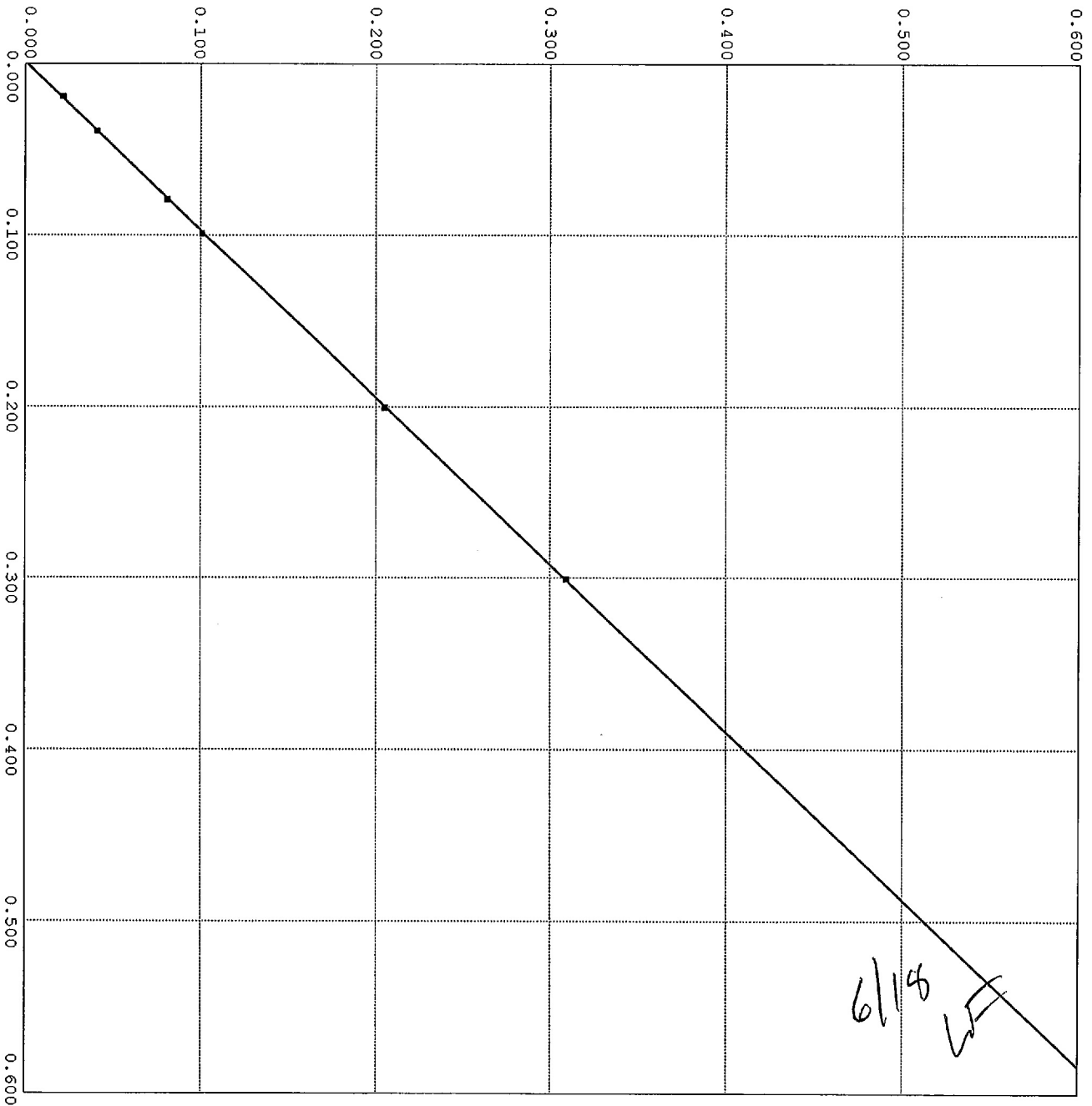
Alaska Department of Public Safety  
 DATAMASTER dnt: 100346

Date: 03/07/2012  
 Time: 10:47:35

SUPERVISOR NAME:  
 CHARLES FOSTER  
 OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.019	0.0219	0.0003
0.039	0.0414	0.0003
0.079	0.0819	0.0001
0.099	0.1019	0.0005
0.200	0.2058	0.0006
0.300	0.3098	0.0002

SLOPE = 1.025828  
 R<sup>2</sup> = 0.999944



LINEARITY CHECK: Control Test 1

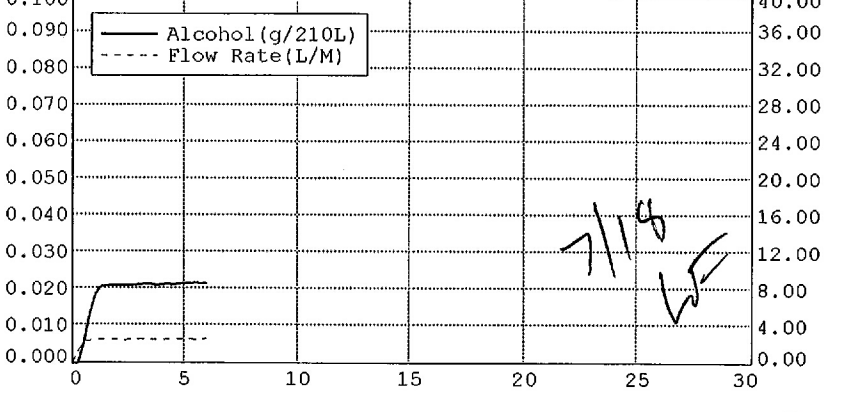
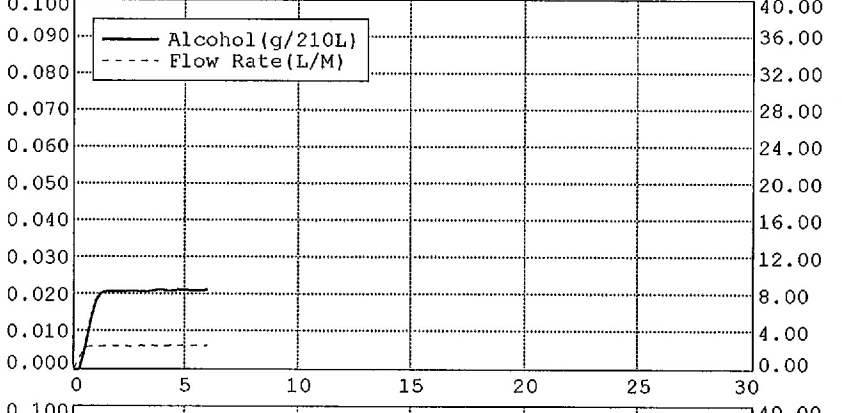
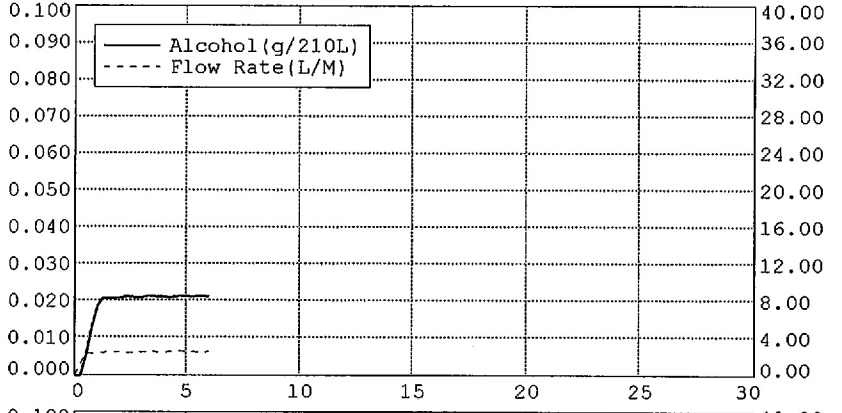
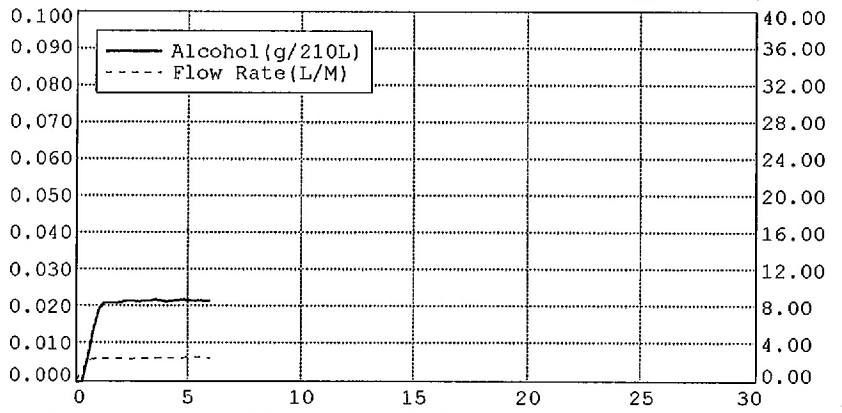
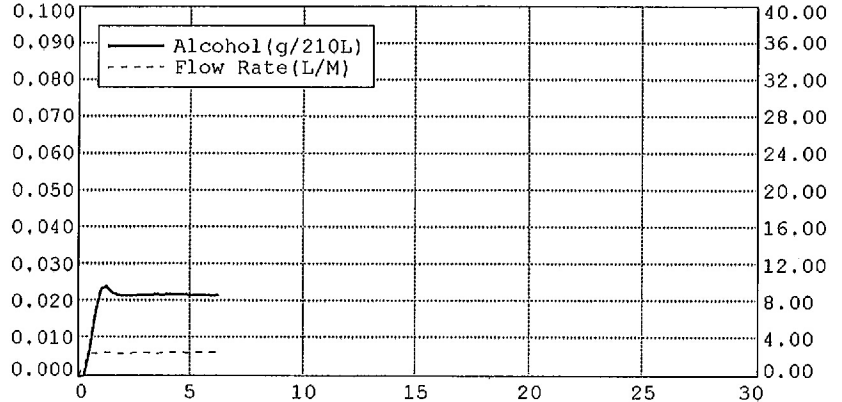
Alaska Department of Public Safety  
DATAMASTER dmt: 100346

Date: 03/07/2012  
Time: 10:47:36

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.020  
TARGET AT 29.78: 0.019  
LOT #: 07611020A5  
EXPIRATION: 03/01/2013

BLANK TEST	0.000	10:49
INTERNAL STANDARD	VERIFIED	10:49
EXTERNAL STANDARD	0.022	10:49
BLANK TEST	0.000	10:50
EXTERNAL STANDARD	0.022	10:51
BLANK TEST	0.000	10:51
EXTERNAL STANDARD	0.021	10:52
BLANK TEST	0.000	10:52
EXTERNAL STANDARD	0.021	10:53
BLANK TEST	0.000	10:54
EXTERNAL STANDARD	0.021	10:54
BLANK TEST	0.000	10:55

Average = 0.0219  
Std Dev = 0.0003



LINEARITY CHECK: Control Test 2

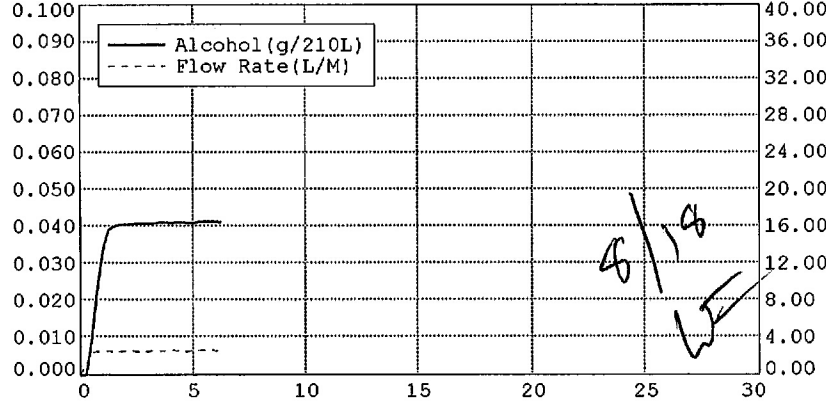
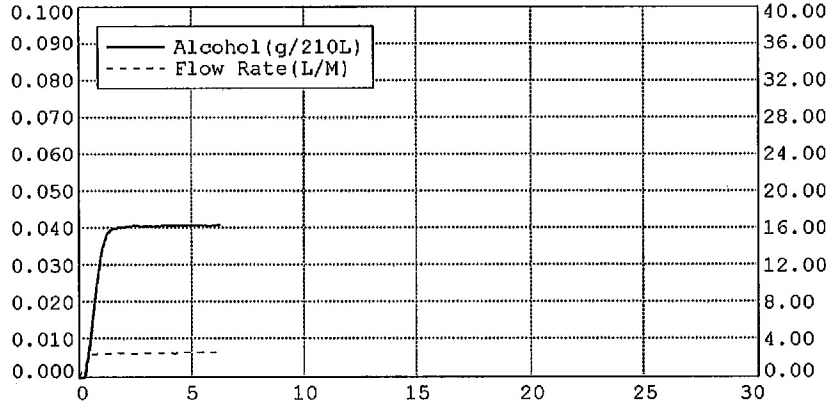
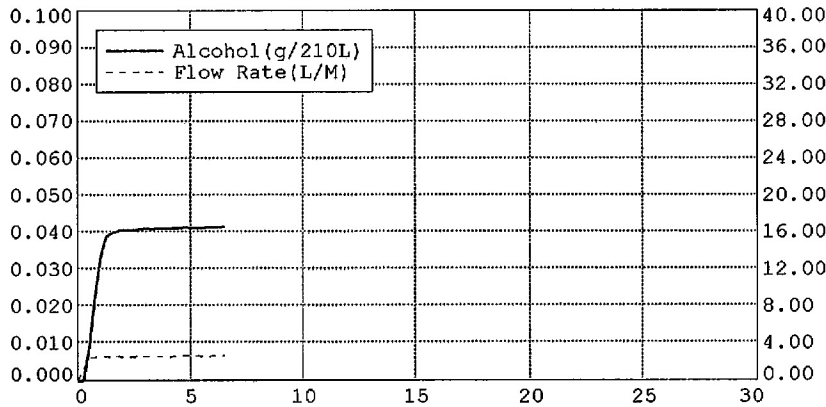
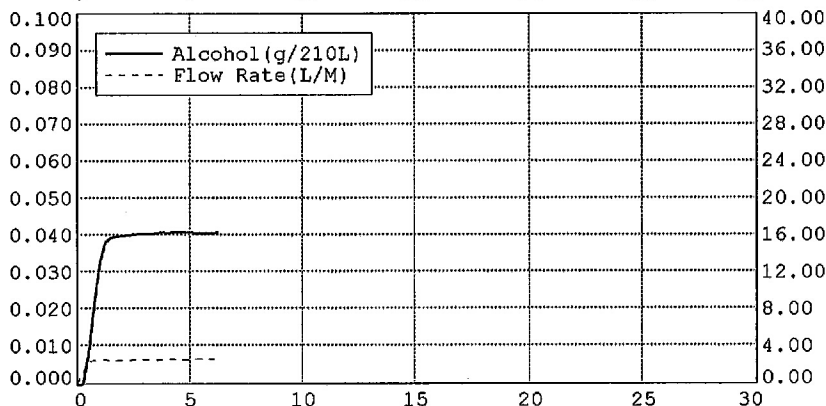
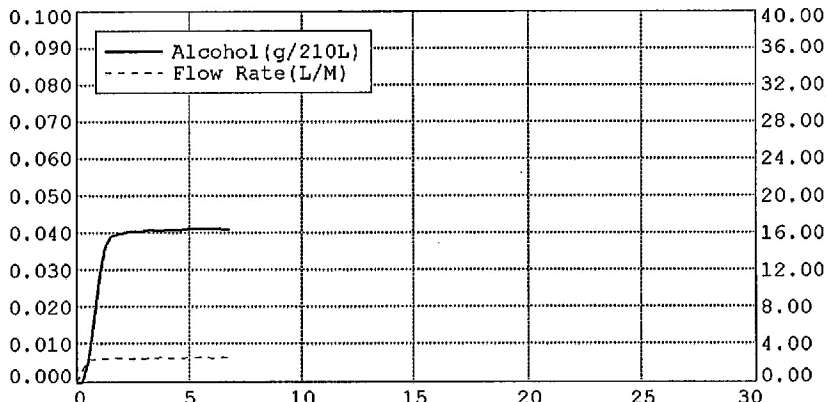
Alaska Department of Public Safety  
 DATAMASTER dmt: 100346

Date: 03/07/2012  
 Time: 10:55:44

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.040  
 TARGET AT 29.79; 0.039  
 LOT #: 02811040A2  
 EXPIRATION: 02/01/2013

BLANK TEST	0.000	10:56
INTERNAL STANDARD	VERIFIED	10:57
EXTERNAL STANDARD	0.041	10:57
BLANK TEST	0.000	10:58
EXTERNAL STANDARD	0.041	10:58
BLANK TEST	0.000	10:59
EXTERNAL STANDARD	0.041	10:59
BLANK TEST	0.000	11:00
EXTERNAL STANDARD	0.041	11:00
BLANK TEST	0.000	11:01
EXTERNAL STANDARD	0.041	11:01
BLANK TEST	0.000	11:02

Average = 0.0414  
 Std Dev = 0.0003





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100346

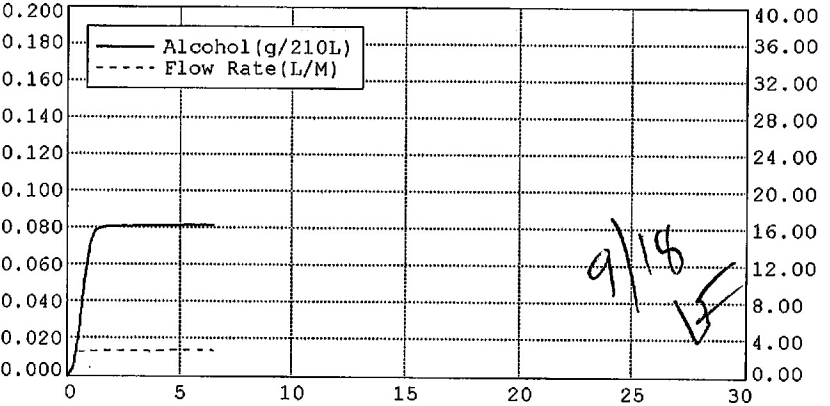
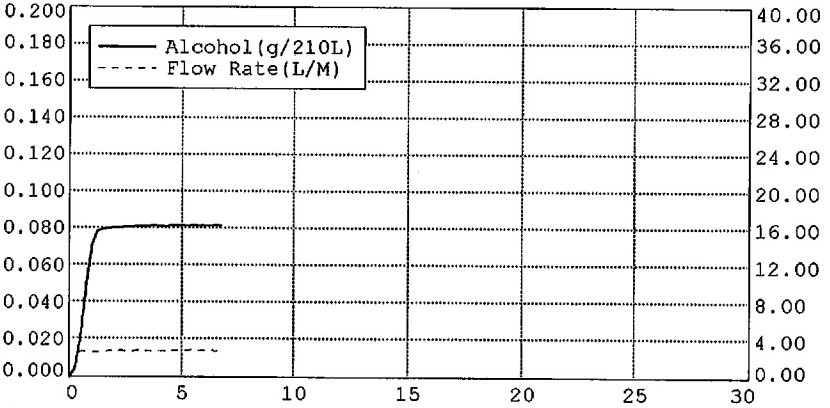
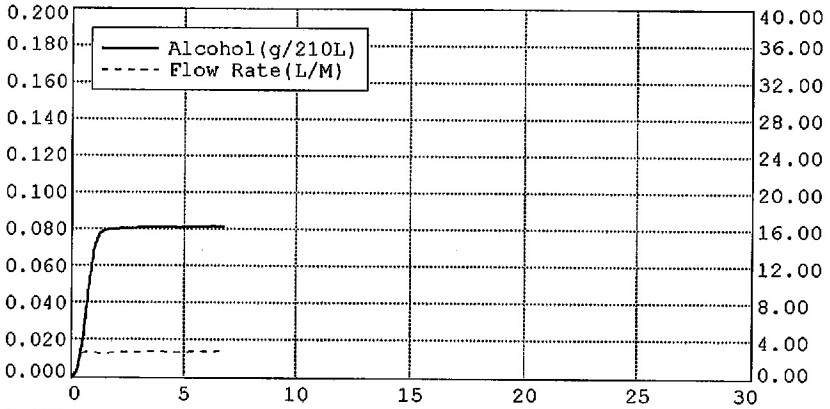
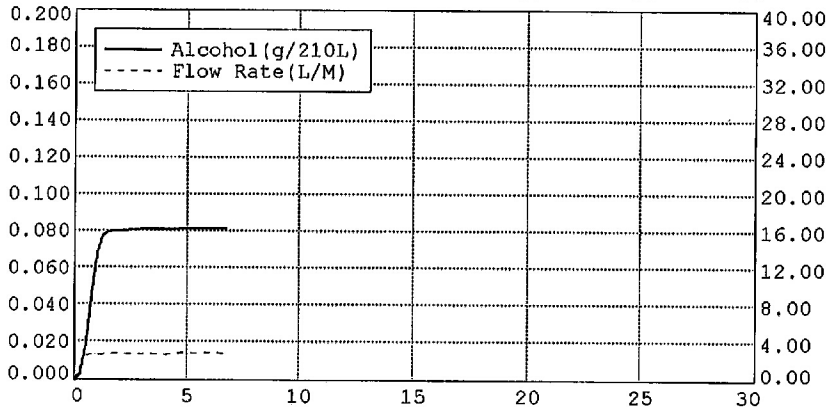
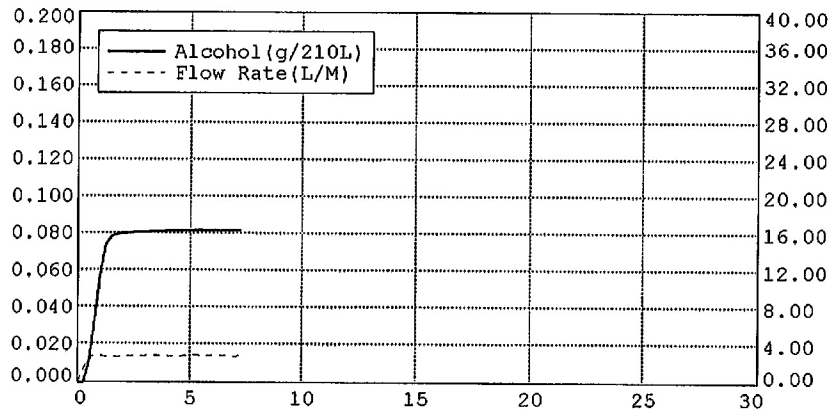
Date: 03/07/2012  
 Time: 11:03:14

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.79: 0.079  
 LOT #: 07511080A1  
 EXPIRATION: 03/01/2013

BLANK TEST	0.000	11:04
INTERNAL STANDARD	VERIFIED	11:04
EXTERNAL STANDARD	0.082	11:04
BLANK TEST	0.000	11:05
EXTERNAL STANDARD	0.081	11:05
BLANK TEST	0.000	11:06
EXTERNAL STANDARD	0.081	11:07
BLANK TEST	0.000	11:07
EXTERNAL STANDARD	0.081	11:08
BLANK TEST	0.000	11:09
EXTERNAL STANDARD	0.081	11:09
BLANK TEST	0.000	11:10

Average = 0.0819  
 Std Dev = 0.0001



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100346

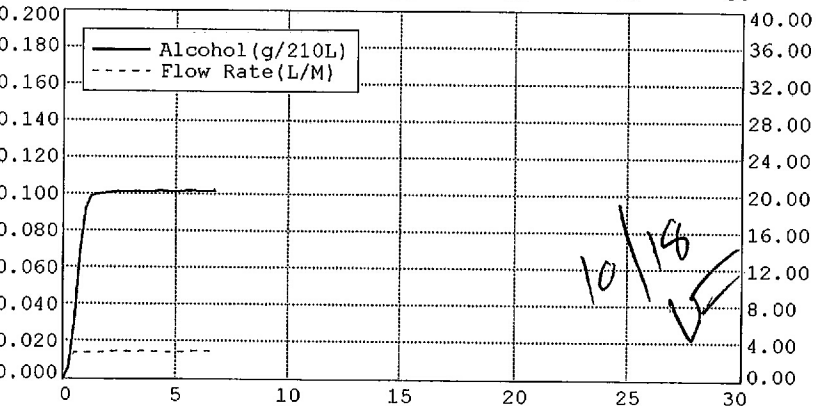
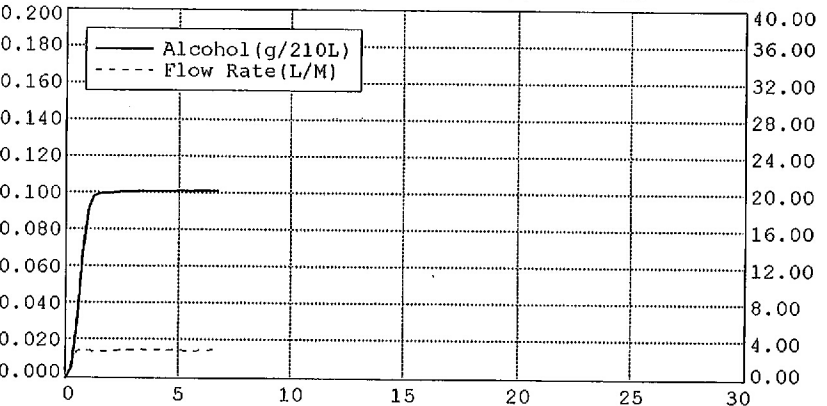
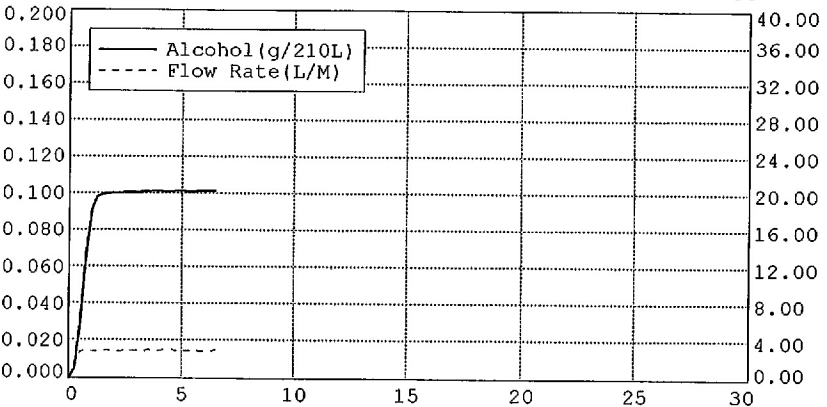
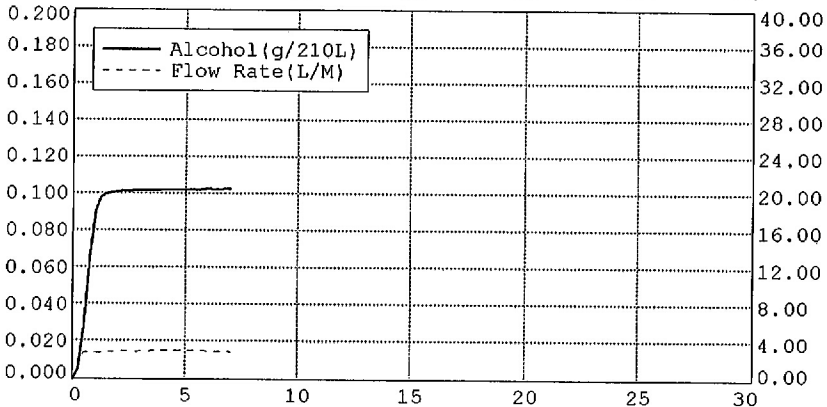
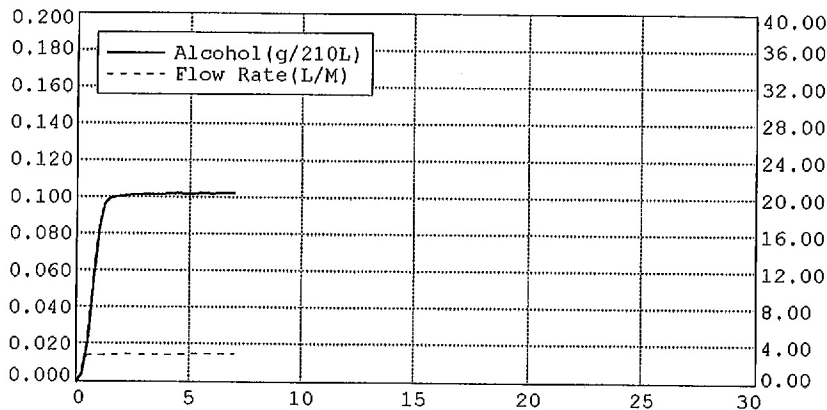
Date: 03/07/2012  
 Time: 11:10:41

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.79: 0.099  
 LOT #: 07611100A3  
 EXPIRATION: 03/01/2013

BLANK TEST	0.000	11:12
INTERNAL STANDARD	VERIFIED	11:12
EXTERNAL STANDARD	0.102	11:12
BLANK TEST	0.000	11:13
EXTERNAL STANDARD	0.102	11:13
BLANK TEST	0.000	11:14
EXTERNAL STANDARD	0.101	11:14
BLANK TEST	0.000	11:15
EXTERNAL STANDARD	0.101	11:15
BLANK TEST	0.000	11:16
EXTERNAL STANDARD	0.101	11:16
BLANK TEST	0.000	11:17

Average = 0.1019  
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

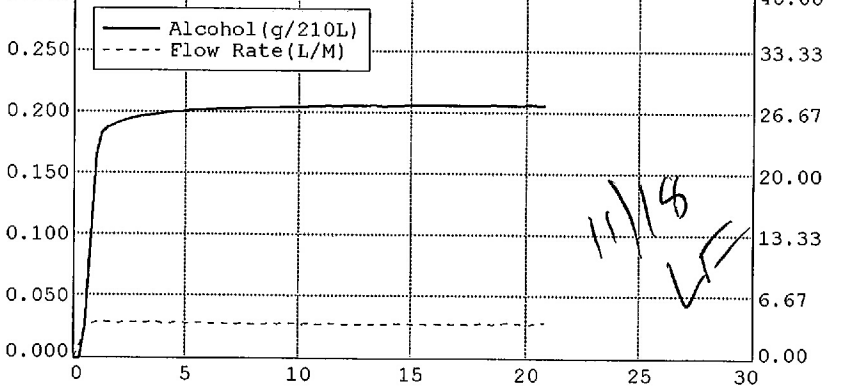
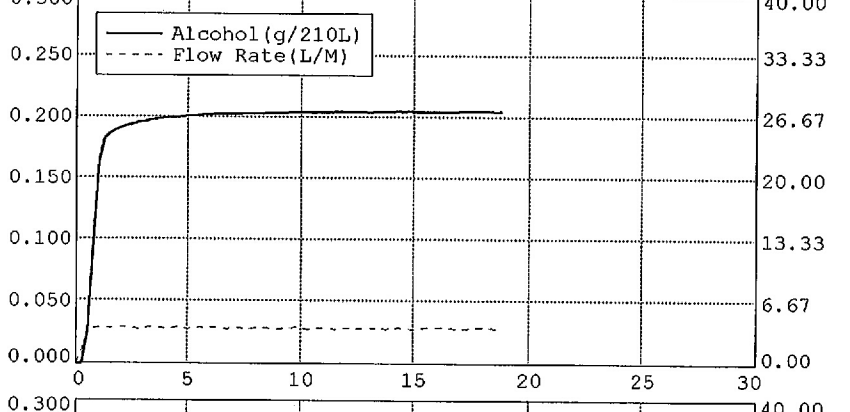
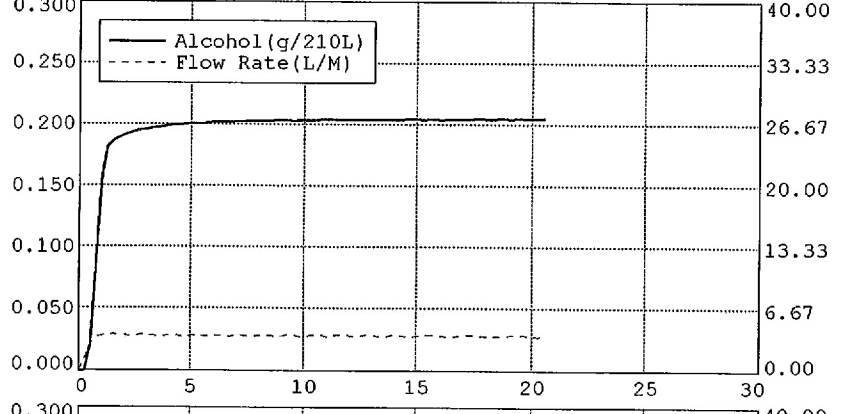
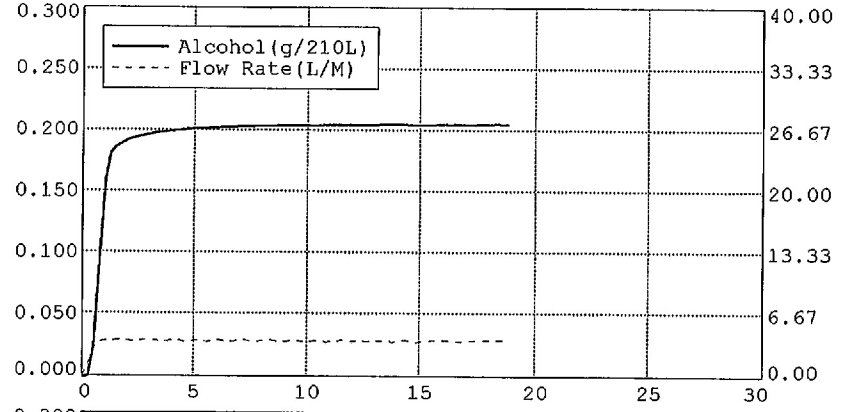
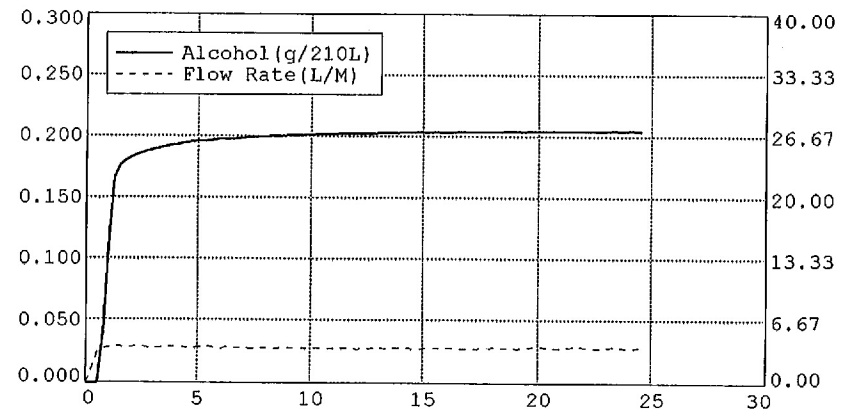
Alaska Department of Public Safety  
 DATAMASTER dmt: 100346

Date: 03/07/2012  
 Time: 11:28:06

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

BLANK TEST	0.000	11:29
INTERNAL STANDARD	VERIFIED	11:29
EXTERNAL STANDARD	0.205	11:29
BLANK TEST	0.000	11:30
EXTERNAL STANDARD	0.205	11:31
BLANK TEST	0.000	11:32
EXTERNAL STANDARD	0.205	11:32
BLANK TEST	0.000	11:33
EXTERNAL STANDARD	0.205	11:33
BLANK TEST	0.000	11:34
EXTERNAL STANDARD	0.206	11:35
BLANK TEST	0.000	11:36

Average = 0.2058  
 Std Dev = 0.0006



LINEARITY CHECK: Control Test 6

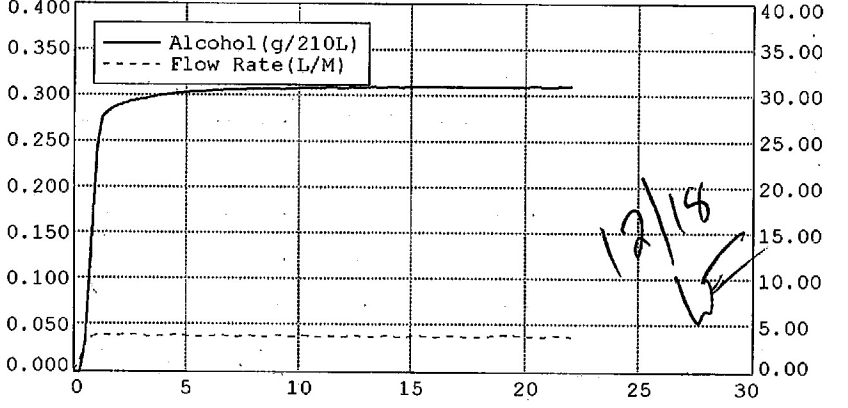
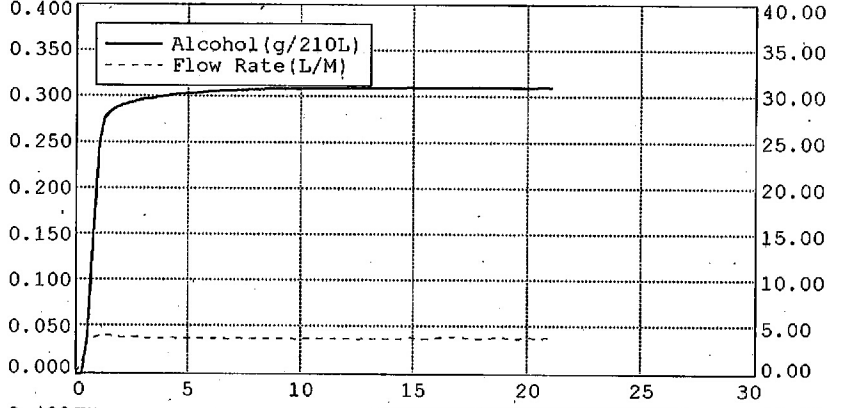
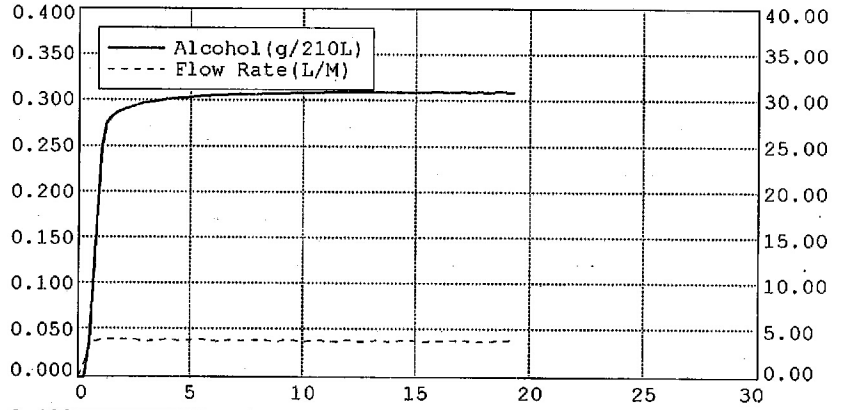
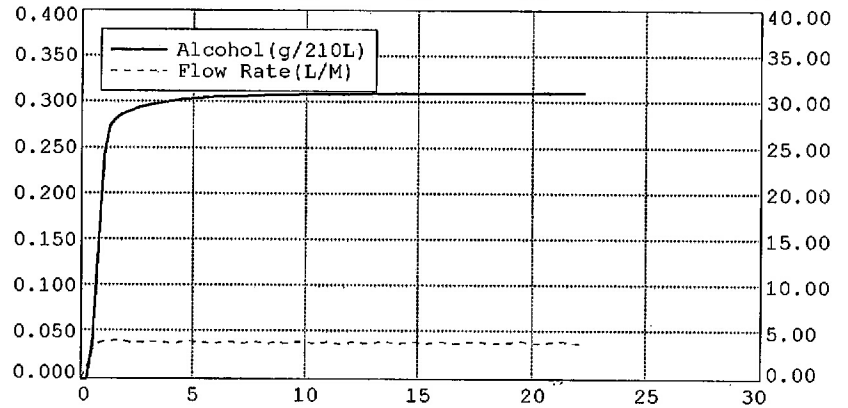
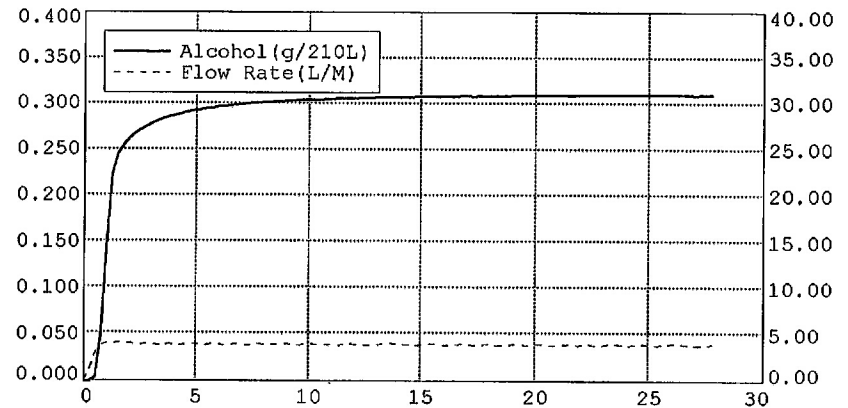
Alaska Department of Public Safety  
 DATAMASTER dmt: 100346

Date: 03/07/2012  
 Time: 11:39:18

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

BLANK TEST	0.000	11:40
INTERNAL STANDARD	VERIFIED	11:41
EXTERNAL STANDARD	0.309	11:41
BLANK TEST	0.000	11:42
EXTERNAL STANDARD	0.310	11:43
BLANK TEST	0.000	11:43
EXTERNAL STANDARD	0.309	11:44
BLANK TEST	0.000	11:45
EXTERNAL STANDARD	0.310	11:45
BLANK TEST	0.000	11:46
EXTERNAL STANDARD	0.309	11:47
BLANK TEST	0.000	11:48

Average = 0.3098  
 Std Dev = 0.0002



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100346

Date: 03/07/2012  
Time: 15:16:40

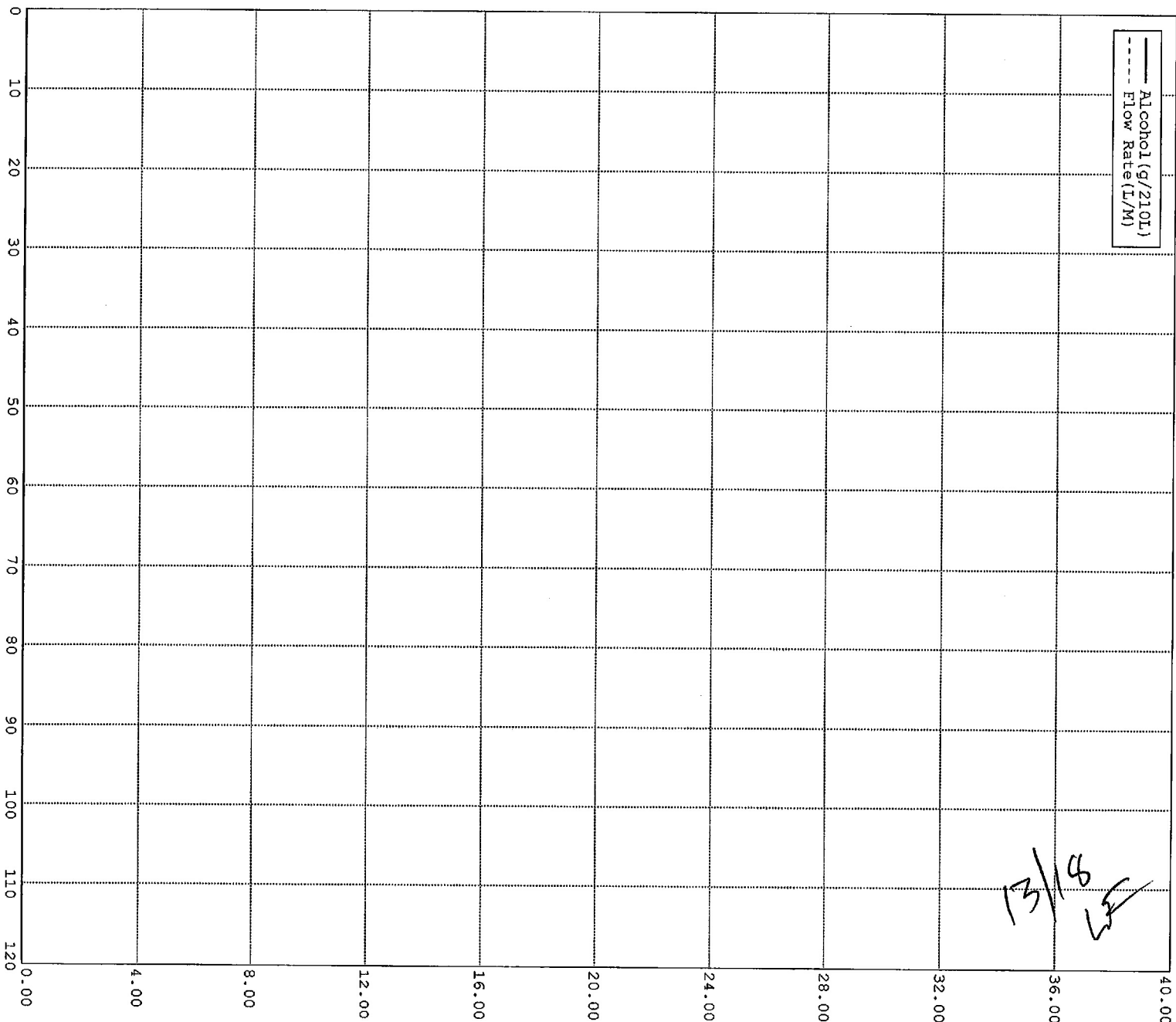
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
INCOMPLETE XXXX  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.79: 0.079  
LOT #: 07511080A1  
EXPIRATION: 03/01/2013

DIAGNOSTIC CHECK	PASSED	15:17
BLANK TEST	0.000	15:17
INTERNAL STANDARD	VERIFIED	15:17
EXTERNAL STANDARD	0.081	15:18
BLANK TEST	0.000	15:19
SUBJECT SAMPLE	INCOMPLETE	15:21



SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dmt: 100346

Date: 03/07/2012  
Time: 15:24:42

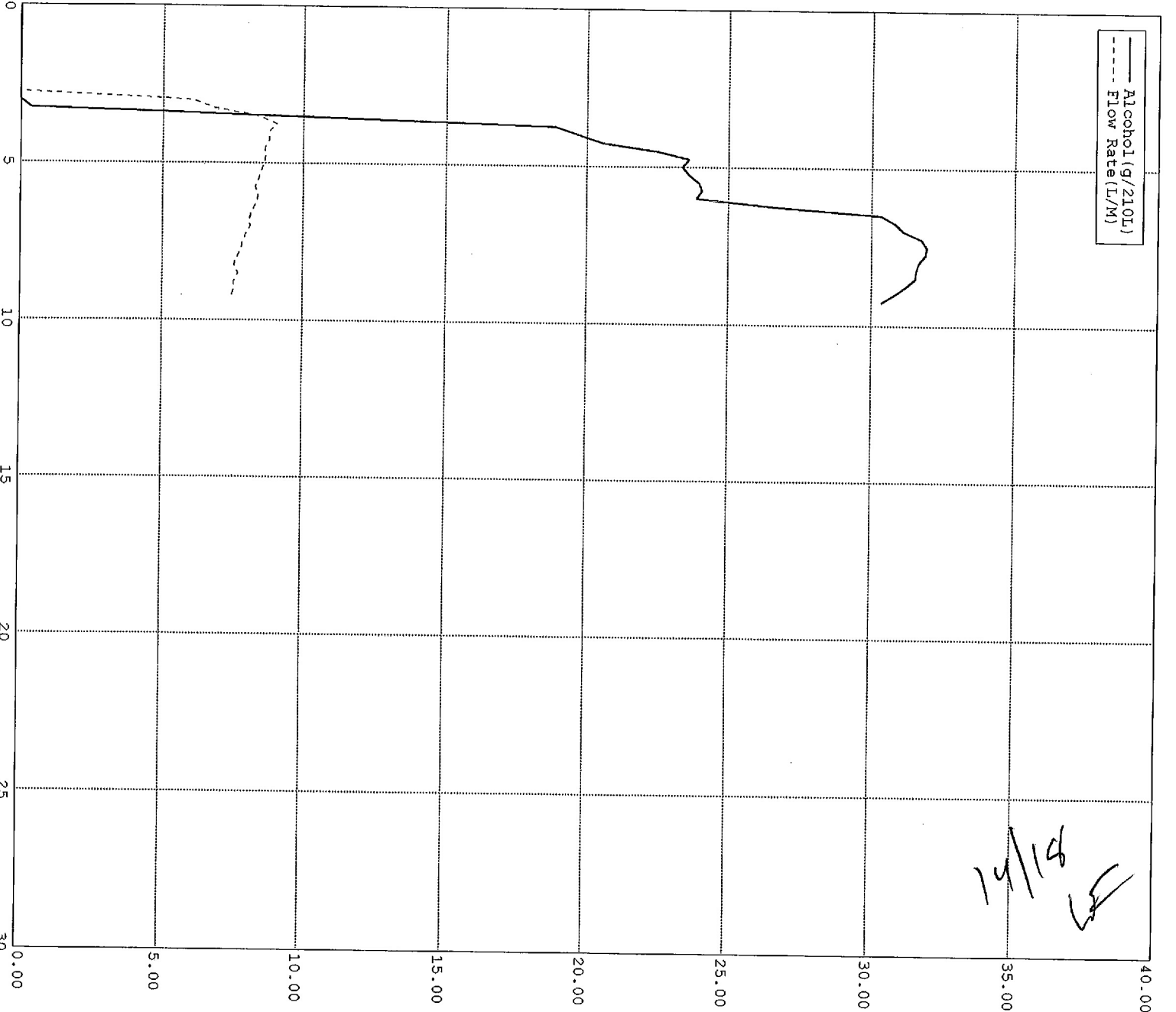
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
INVALID MOUTH ETOH  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.79: 0.079  
LOT #: 07511080A1  
EXPIRATION: 03/01/2013

DIAGNOSTIC CHECK	PASSED	15:27
BLANK TEST	0.000	15:27
INTERNAL STANDARD	VERIFIED	15:28
EXTERNAL STANDARD	0.082	15:28
BLANK TEST	0.000	15:29
SUBJECT SAMPLE	INVALID	15:29



SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100346

Date: 03/07/2012  
 Time: 15:41:14

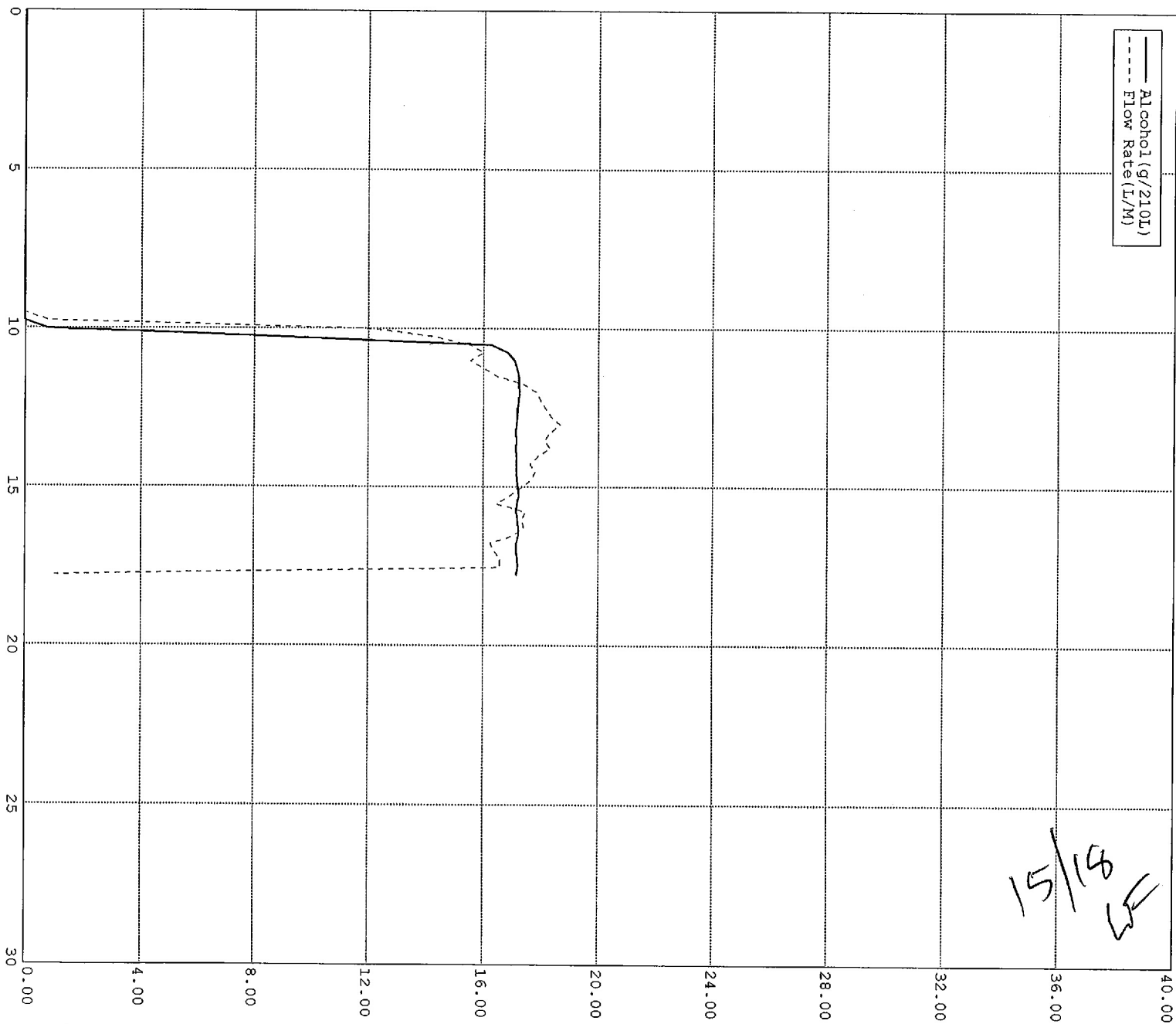
SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

OPERATOR NAME:  
 INTERFERENCE ETOH AND ACETONE  
 OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.78: 0.079  
 LOT #: 07511080A1  
 EXPIRATION: 03/01/2013

DIAGNOSTIC CHECK	PASSED	15:46
BLANK TEST	0.000	15:46
INTERNAL STANDARD	VERIFIED	15:46
EXTERNAL STANDARD	0.082	15:47
BLANK TEST	0.000	15:48
SUBJECT SAMPLE	INTERFERENCE	15:48



SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100346

Date: 03/07/2012  
 Time: 15:52:51

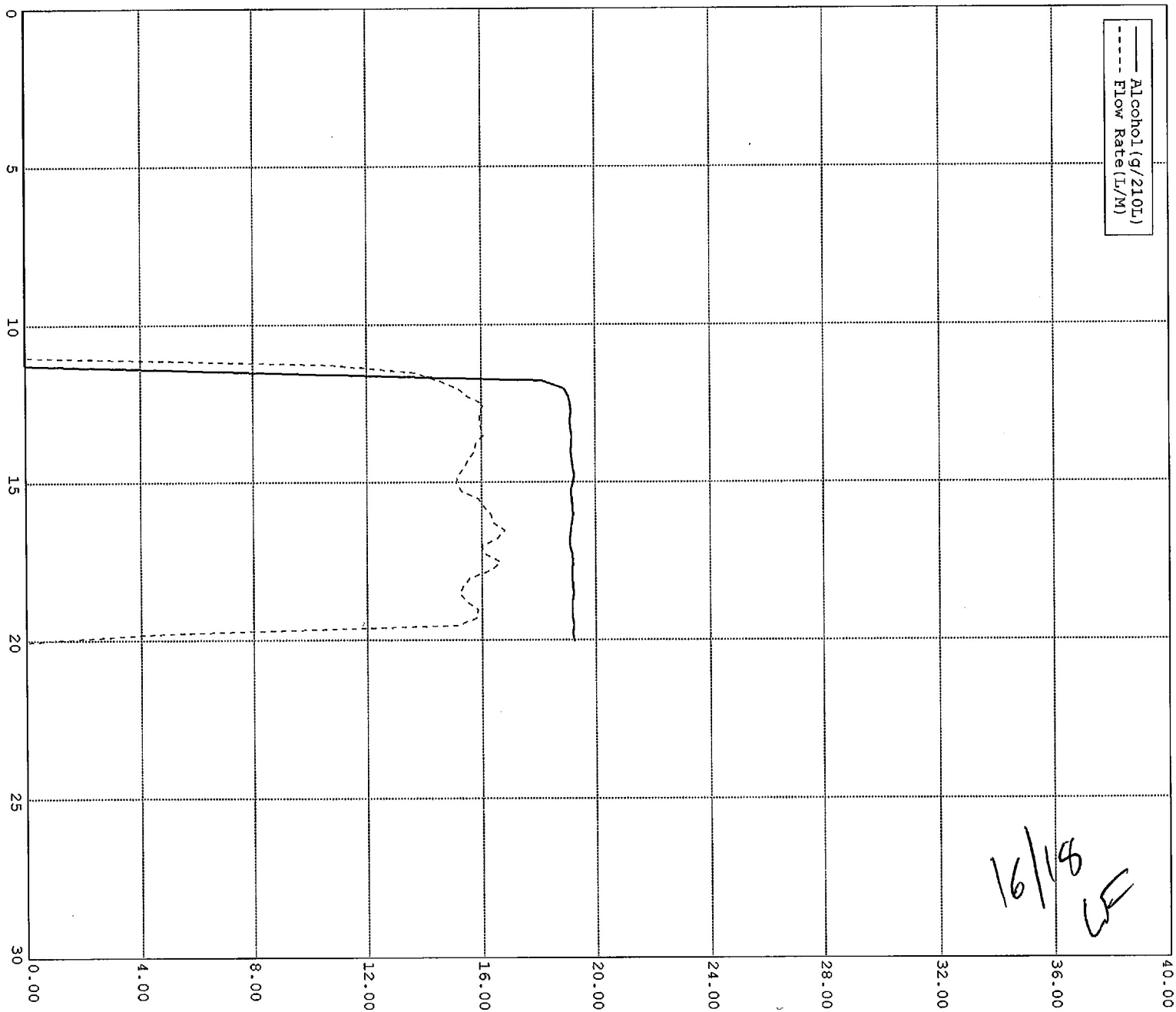
SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

OPERATOR NAME:  
 INTERFERENCE ETOH AND IPA  
 OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.77: 0.079  
 LOT #: 07511080A1  
 EXPIRATION: 03/01/2013

DIAGNOSTIC CHECK	PASSED	15:55
BLANK TEST	0.000	15:55
INTERNAL STANDARD	VERIFIED	15:55
EXTERNAL STANDARD	0.081	15:55
BLANK TEST	0.000	15:56
SUBJECT SAMPLE	INTERFERENCE	15:57





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100346

Date: 03/07/2012  
Time: 16:03:45

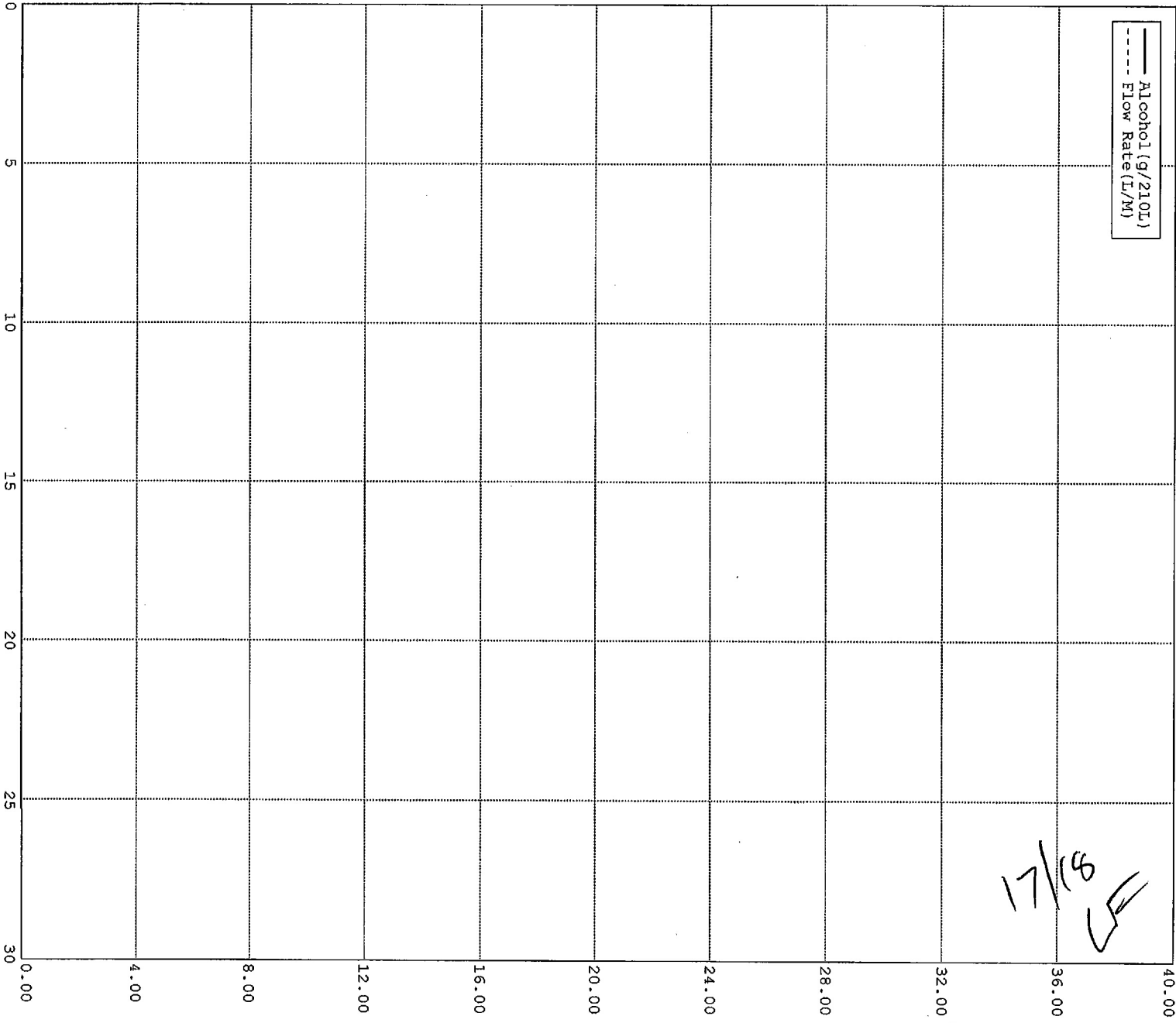
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
RFI XXXX  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.78: 0.079  
LOT #: 07511080A1  
EXPIRATION: 03/01/2013

DIAGNOSTIC CHECK  
BLANK TEST PASSED 16:15  
INTERNAL STANDARD VERIFIED 16:16  
EXTERNAL STANDARD 0.081 16:16  
BLANK TEST 0.000 16:17  
RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100346

Date: 03/08/2012  
Time: 09:08:25

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
CHARLES FOSTER  
OPERATOR'S #: 7734

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.49: 0.078  
LOT #: 07511080A1  
EXPIRATION: 03/01/2013

DIAGNOSTIC CHECK	PASSED	09:09
BLANK TEST	0.000	09:09
INTERNAL STANDARD	0.081	09:10
EXTERNAL STANDARD	0.000	09:10
BLANK TEST	0.000	09:11
SUBJECT SAMPLE	0.000	09:11
BLANK TEST	0.000	09:12
EXTERNAL STANDARD	0.081	09:12
BLANK TEST	0.000	09:13

