

# Alaska Scientific Crime Detection Laboratory

## DataMaster Certification Form

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

Version: DMCEF2012 R1  
Status: Active

Instrument S/N 100381 Analyst CTF Start Date 8/1/12  
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 07611020AS Exp 3/1/13
  - ii. 0.040g/210L Mnf ILMO Lot 07611040A4 Exp 3/1/13
  - iii. 0.080g/210L Mnf ILMO Lot 07612080A1 Exp 3/1/14
  - iv. 0.100g/210L Mnf ILMO Lot 0761110043 Exp 3/1/13
  - v. 0.200g/210L Mnf Guth Lot 11120 Exp 7/19/13
    - 1. Simulator S/N SD1199 Date Calibrated 1/10/12
  - vi. 0.300g/210L Mnf Guth Lot 11110 Exp 7/13/13
    - 1. Simulator S/N SD1176 Date Calibrated 8/17/11

5. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference 
  - i. Acetone - Mnf Guth Lot 11250 Level 0.10 Exp 12/6/13
    - 1. Simulator S/N SD1199 Date Calibrated 1/11/12
  - ii. Isopropanol - Mnf Guth Lot 11100 Level 0.10 Exp 7/6/13
    - 1. Simulator S/N DEC267 Date Calibrated 1/10/12
  - iii. Negative Control - Mnf Guth Lot 11220 Level 0.100 Exp 10/24/13
    - 1. Simulator S/N SD202 Date Calibrated 8/17/11

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 8/2/12

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100381  
-----

Date: 08/01/2012  
Time: 10:56:04

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED  
Breath Tube = 47.9°C PASSED

PUMP INFO  
Flow Rate = 5.336 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

2/19  
LF

Technician Screen

-----  
DATAMASTER dmt: 100381  
-----

Date: 08/01/2012  
Time: 11:07 AM

Temperatures (°C)

Sample Cell: 49.2°C  
Breath Tube: 47.6°C

Current Barometer 29.7 in  
Volume (Ltr) 1.58

Settings

Lamp: 1.67 V  
Bias: 79 V  
Cooler: 1.65 V  
Chopper: 543 Hz

Voltages (V)

Flow: 1.07 V  
Detector: 0.076 V

3/19  
LF

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100381  
-----

Date: 04/26/2011  
Time: 08:49:42

OPERATOR NAME:  
COLLEEN S OBRYANT  
CERTIFICATE #: 6237

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

Ca = 0.1000  
CAL = 0.974069    0.800 <= CAL < 1.200  
b1 = 0.0000    0.0000 <= b1 < 0.0040  
b2 = 0.0029    0.0010 <= b2 < 0.0100  
b3 = 0.0000    0.0000 <= b3 < 0.0040  
Xq = 0.0904    0.0500 <= Xq < 0.2000  
a21 = 1.090518    1.050 <= a21 < 1.300  
a31 = 0.416583    0.300 <= a31 < 0.800

4/19  
LF

SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmc: 100381

Date: 08/01/2012  
 Time: 11:16:26

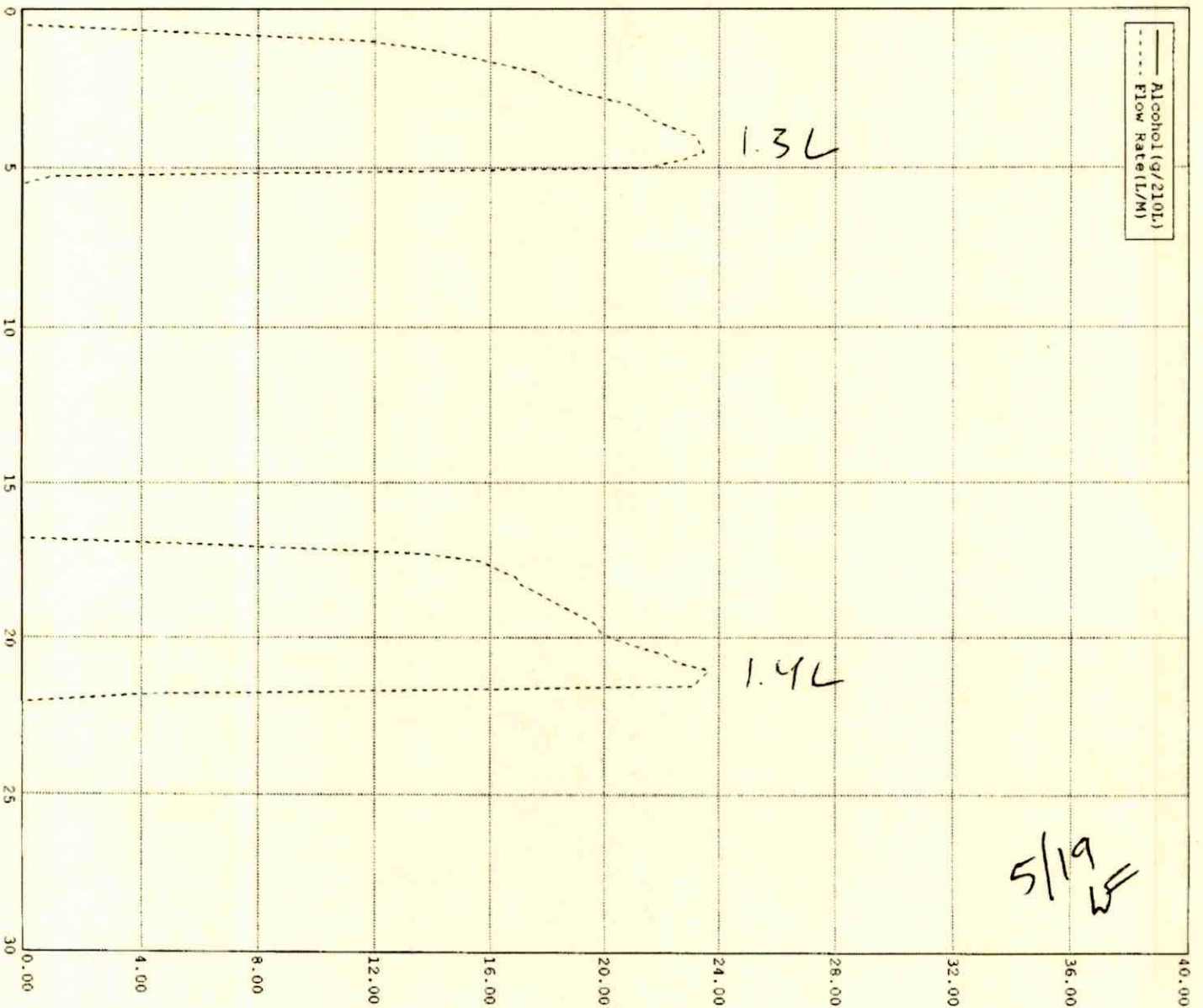
SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

OPERATOR NAME:  
 MINIMUM VOLUME  
 OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.64: 0.079  
 LOT #: 02012080A1  
 EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	11:27
BLANK TEST	0.000	11:28
INTERNAL STANDARD	VERIFIED	11:28
EXTERNAL STANDARD	0.078	11:28
BLANK TEST	0.000	11:29
SUBJECT SAMPLE	0.000	11:29
BLANK TEST	0.000	11:30
EXTERNAL STANDARD	0.079	11:30
BLANK TEST	0.000	11:31



LINEARITY CHECK

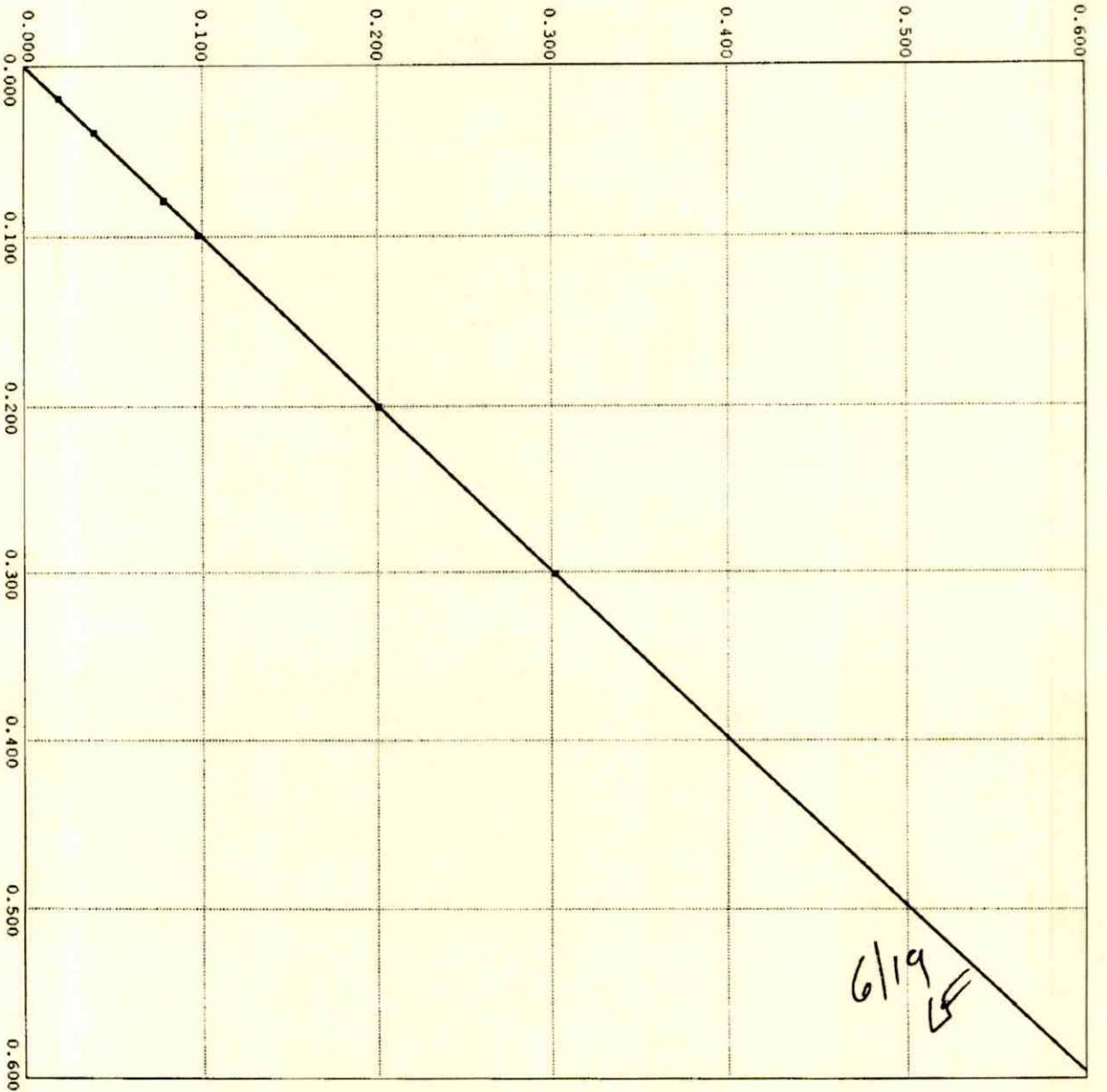
Alaska Department of Public Safety  
 DATAMASTER dmt: 100381

Date: 08/01/2012  
 Time: 12:58:17

SUPERVISOR NAME:  
 CHARLES FOSTER  
 OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.019	0.0201	0.0004
0.039	0.0400	0.0005
0.079	0.0790	0.0005
0.099	0.0986	0.0001
0.200	0.2014	0.0006
0.300	0.3028	0.0005

SLOPE = 1.007287  
 R<sup>2</sup> = 0.9999343



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100381

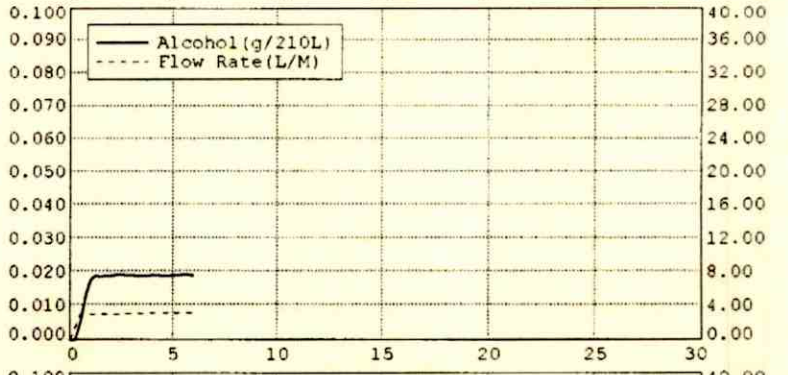
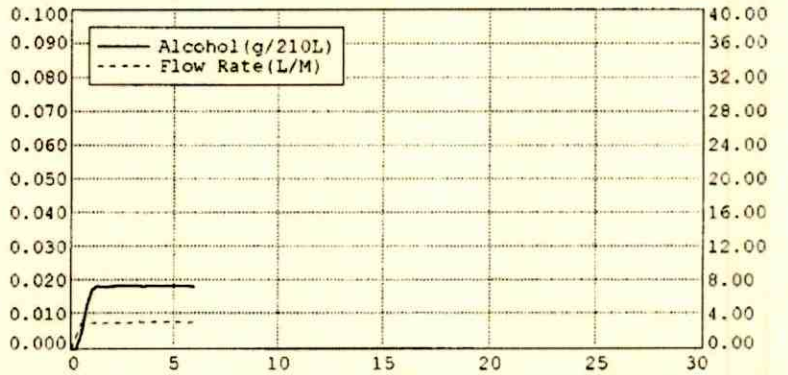
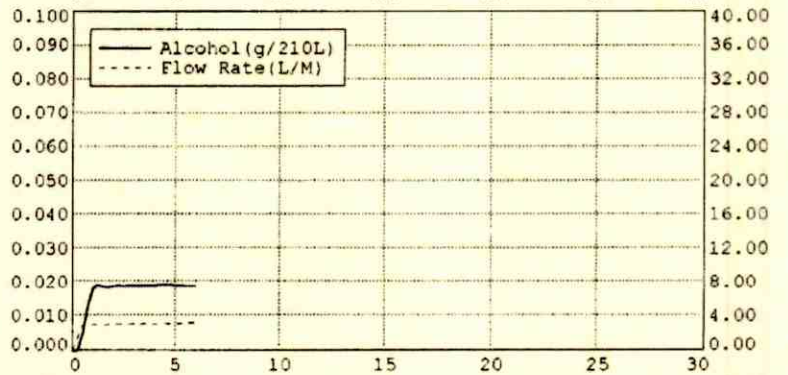
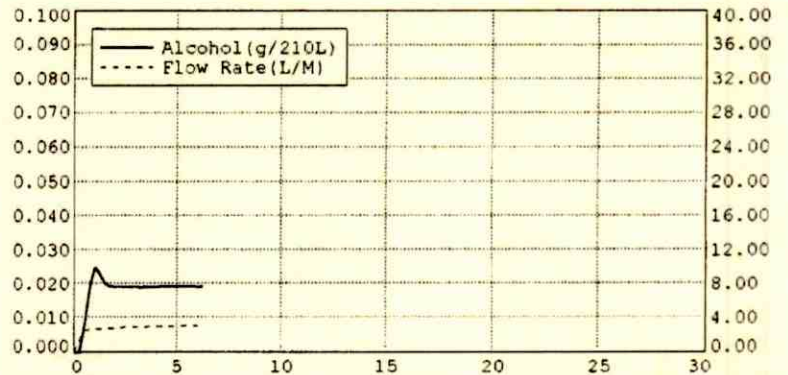
Date: 08/01/2012  
 Time: 12:58:18

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.64: 0.019  
 LOT #: 07611020A5  
 EXPIRATION: 03/01/2013

BLANK TEST	0.000	12:59
INTERNAL STANDARD	VERIFIED	12:59
EXTERNAL STANDARD	0.020	12:59
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.020	13:00
BLANK TEST	0.000	13:01
EXTERNAL STANDARD	0.019	13:02
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.019	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.020	13:04
BLANK TEST	0.000	13:05

Average = 0.0201  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100381

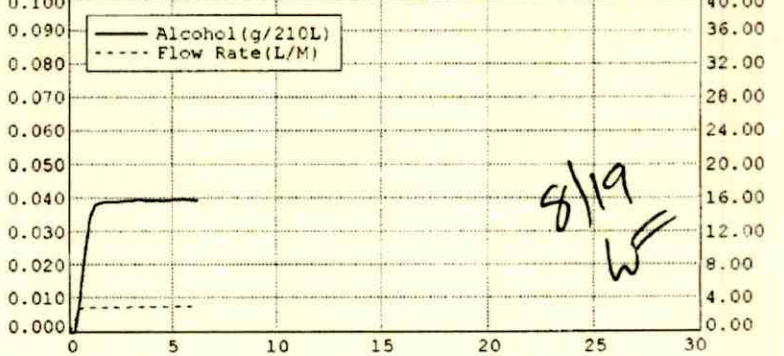
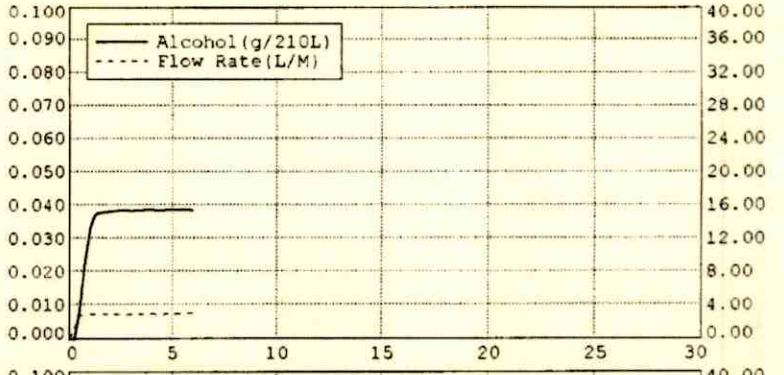
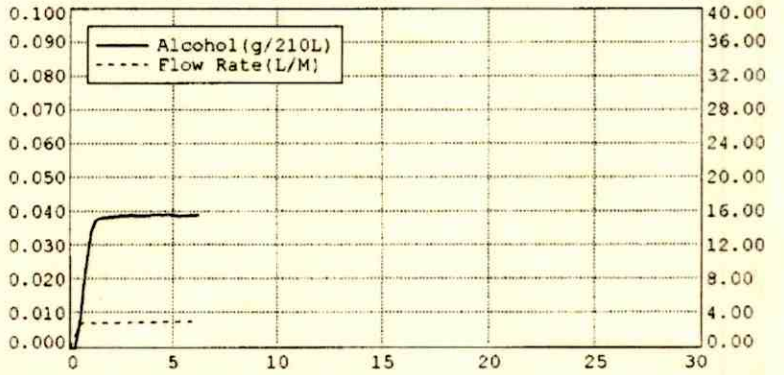
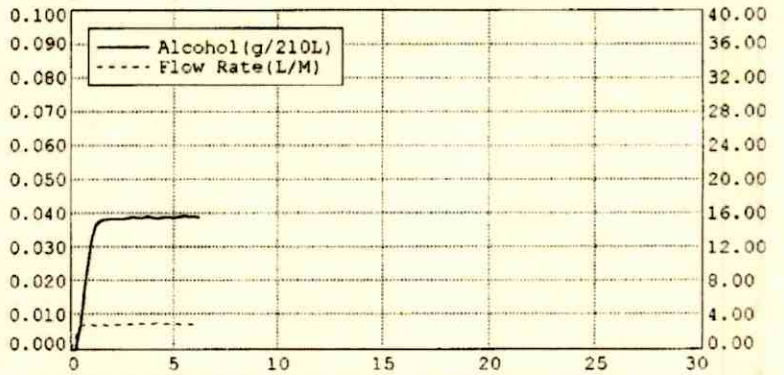
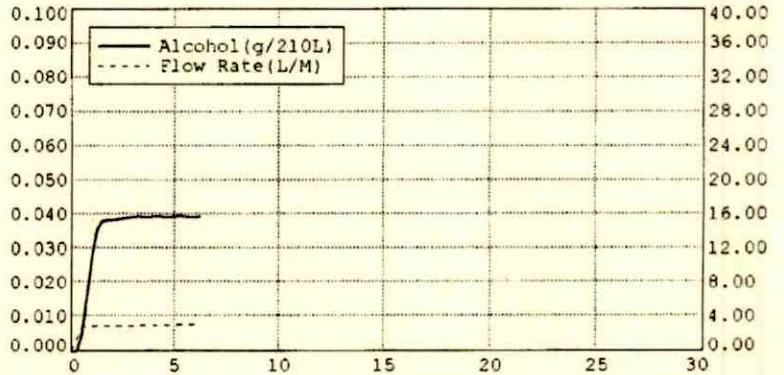
Date: 08/01/2012  
 Time: 13:06:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.64: 0.039  
 LOT #: 07611040A4  
 EXPIRATION: 03/01/2013

BLANK TEST	0.000	13:07
INTERNAL STANDARD	VERIFIED	13:07
EXTERNAL STANDARD	0.040	13:07
BLANK TEST	0.000	13:08
EXTERNAL STANDARD	0.039	13:08
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.040	13:10
BLANK TEST	0.000	13:10
EXTERNAL STANDARD	0.039	13:11
BLANK TEST	0.000	13:12
EXTERNAL STANDARD	0.040	13:12
BLANK TEST	0.000	13:13

Average = 0.0400  
 Std Dev = 0.0005





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100381

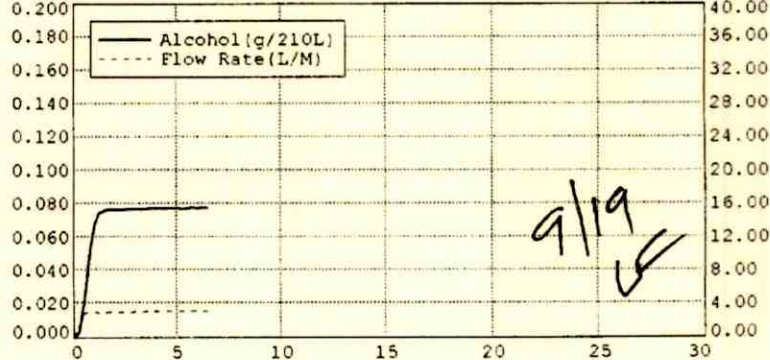
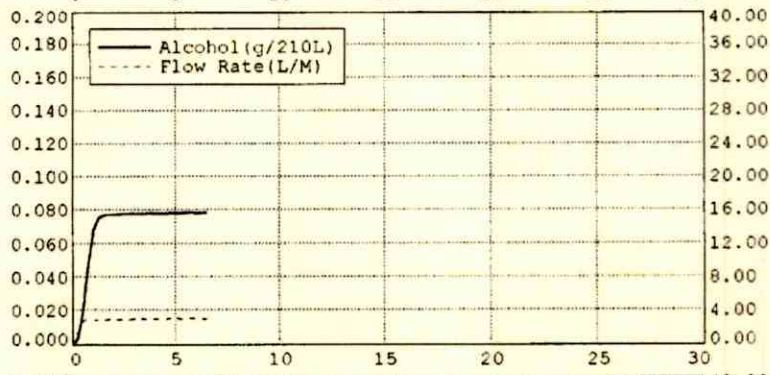
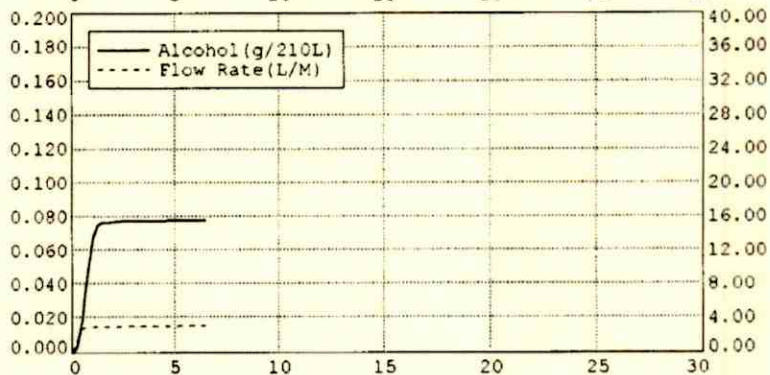
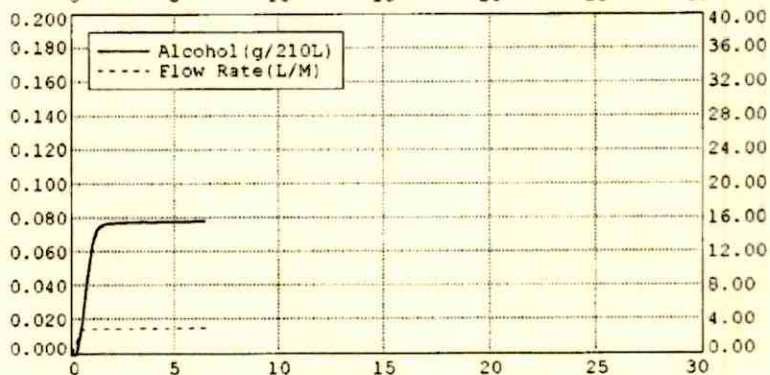
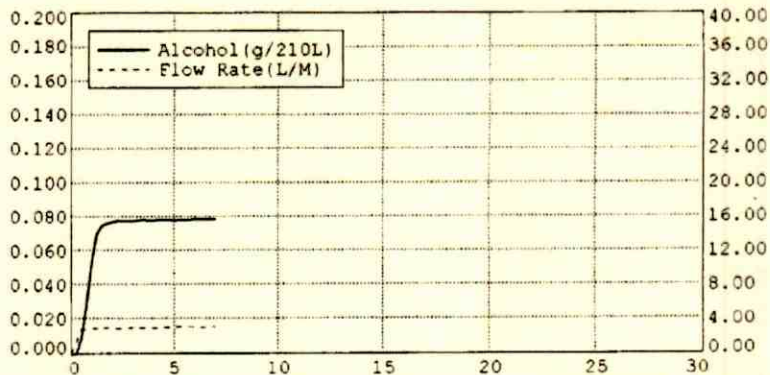
Date: 08/01/2012  
 Time: 13:15:12

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.64: 0.079  
 LOT #: 02012080A1  
 EXPIRATION: 03/01/2014

BLANK TEST	0.000	13:16
INTERNAL STANDARD	VERIFIED	13:16
EXTERNAL STANDARD	0.079	13:16
BLANK TEST	0.000	13:17
EXTERNAL STANDARD	0.078	13:17
BLANK TEST	0.000	13:18
EXTERNAL STANDARD	0.078	13:19
BLANK TEST	0.000	13:19
EXTERNAL STANDARD	0.079	13:20
BLANK TEST	0.000	13:21
EXTERNAL STANDARD	0.078	13:21
BLANK TEST	0.000	13:22

Average = 0.0790  
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100381

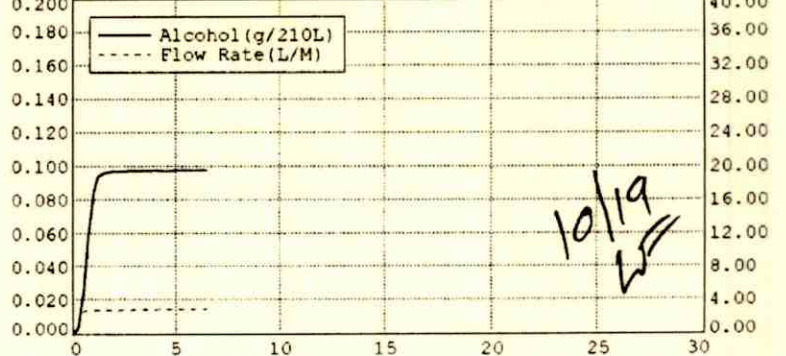
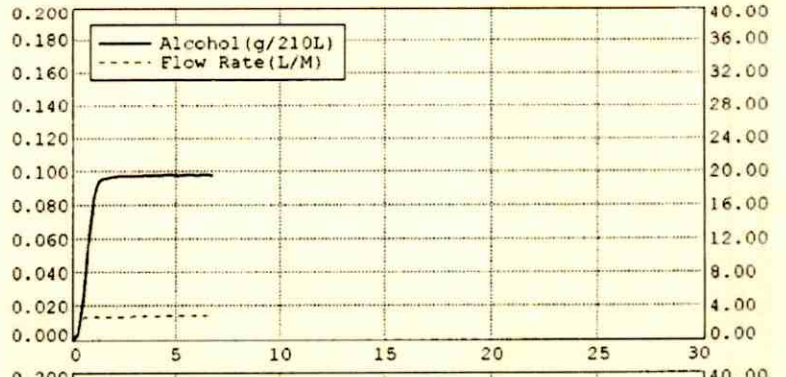
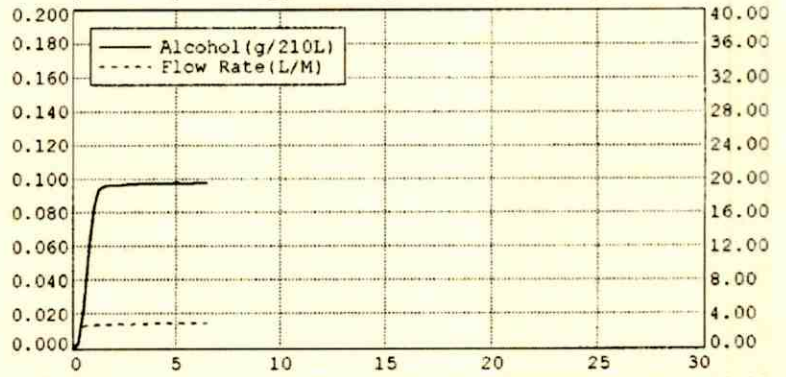
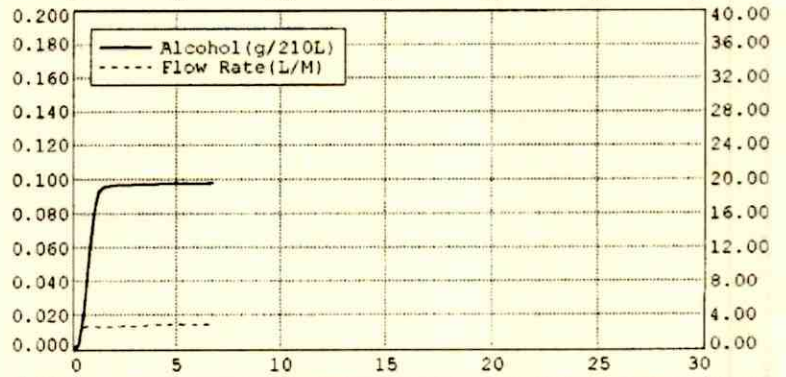
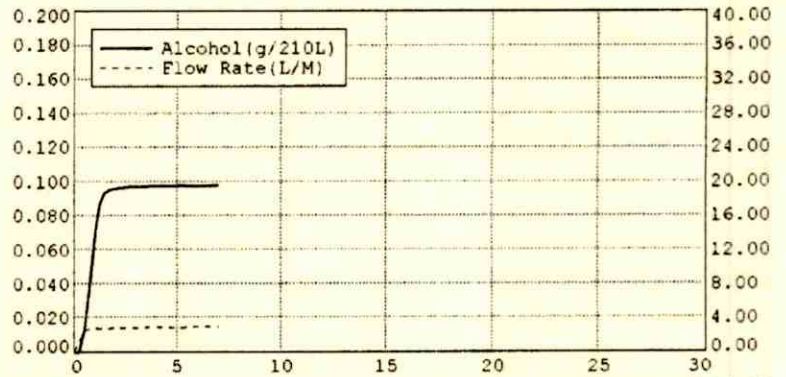
Date: 08/01/2012  
 Time: 13:25:02

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.64: 0.099  
 LOT #: 07611100A3  
 EXPIRATION: 03/01/2013

BLANK TEST	0.000	13:26
INTERNAL STANDARD	VERIFIED	13:26
EXTERNAL STANDARD	0.098	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.098	13:27
BLANK TEST	0.000	13:28
EXTERNAL STANDARD	0.098	13:28
BLANK TEST	0.000	13:29
EXTERNAL STANDARD	0.098	13:30
BLANK TEST	0.000	13:30
EXTERNAL STANDARD	0.098	13:31
BLANK TEST	0.000	13:32

Average = 0.0986  
 Std Dev = 0.0001



LINEARITY CHECK: Control Test 5

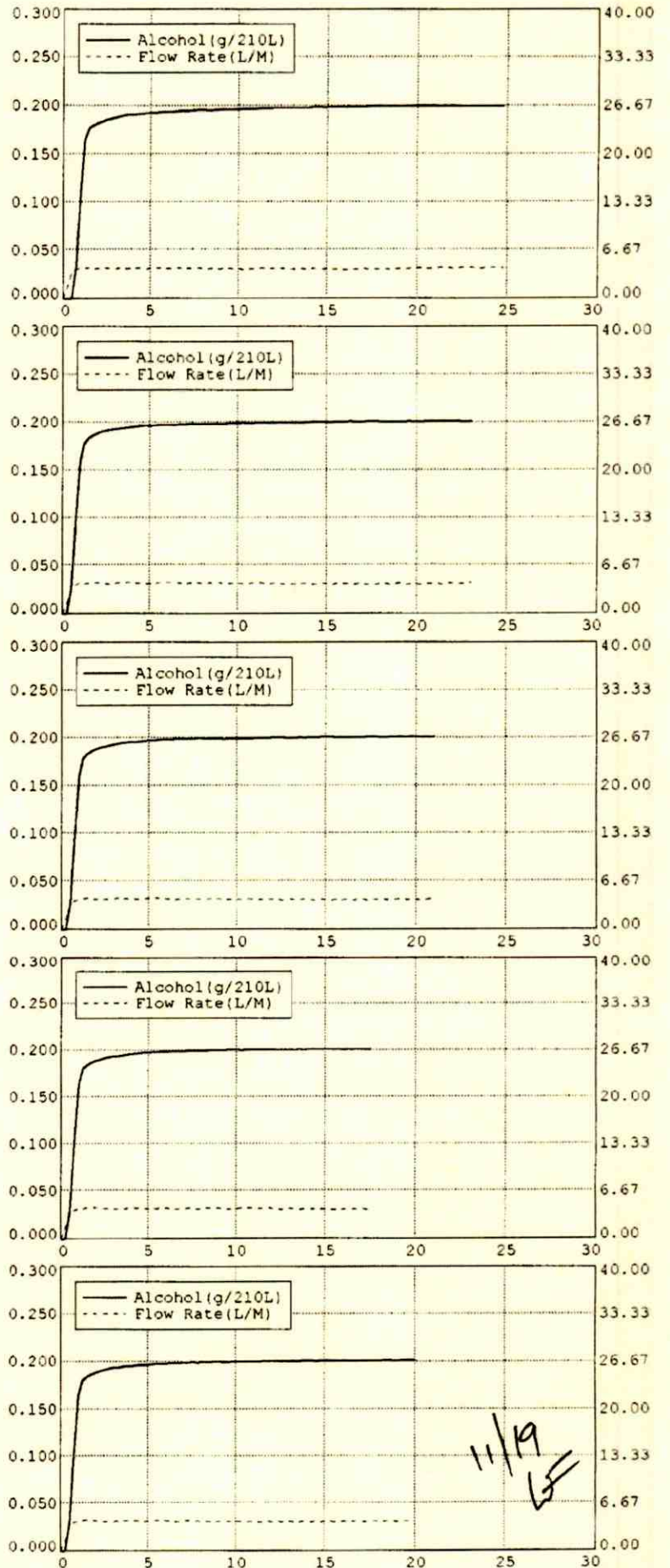
Alaska Department of Public Safety  
 DATAMASTER dmt: 100381

Date: 08/01/2012  
 Time: 13:34:03

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

BLANK TEST	0.000	13:35
INTERNAL STANDARD	VERIFIED	13:35
EXTERNAL STANDARD	0.200	13:36
BLANK TEST	0.000	13:37
EXTERNAL STANDARD	0.201	13:37
BLANK TEST	0.000	13:38
EXTERNAL STANDARD	0.201	13:39
BLANK TEST	0.000	13:39
EXTERNAL STANDARD	0.201	13:40
BLANK TEST	0.000	13:41
EXTERNAL STANDARD	0.201	13:41
BLANK TEST	0.000	13:42

Average = 0.2014  
 Std Dev = 0.0006



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100381

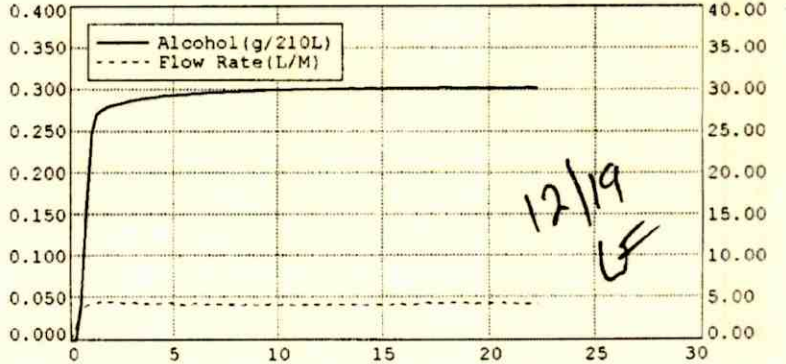
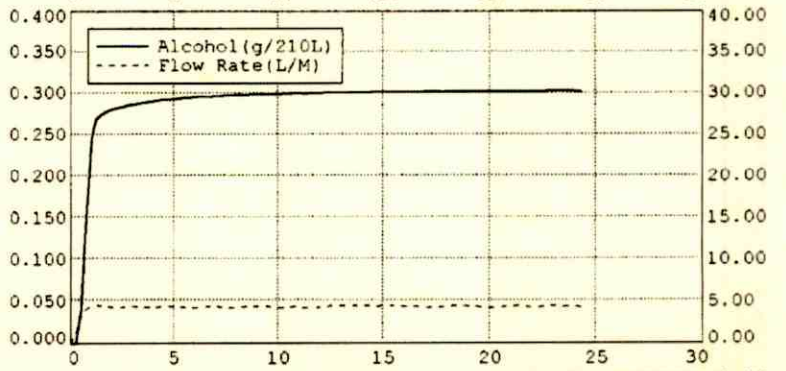
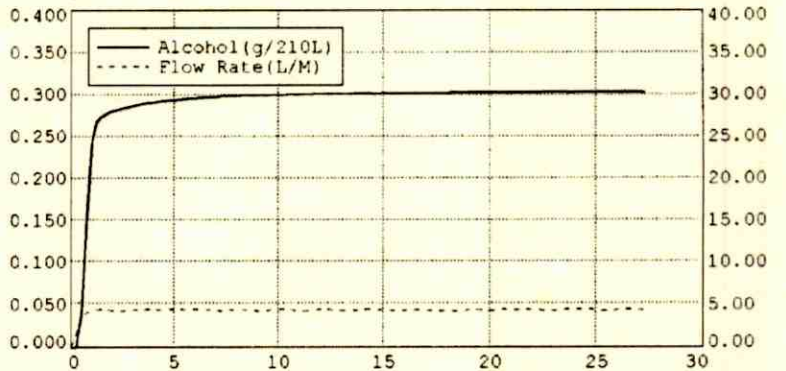
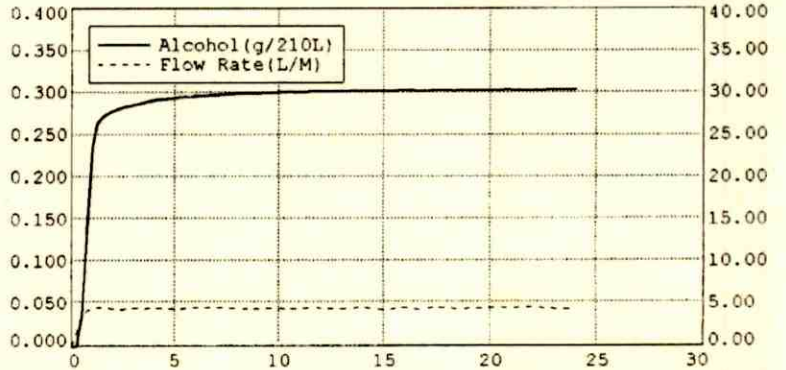
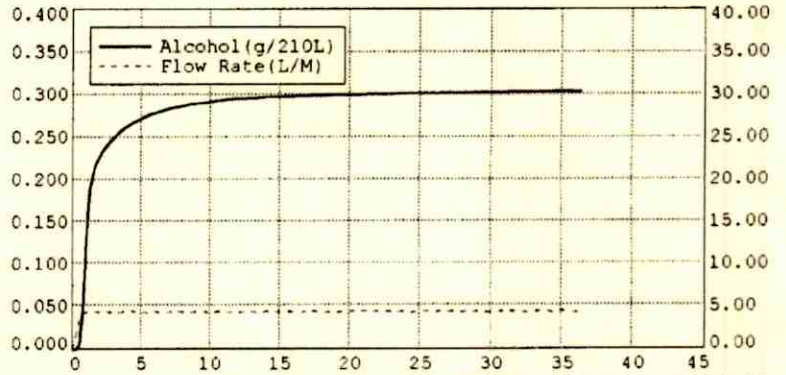
Date: 08/01/2012  
 Time: 13:47:22

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
 LOT #: 11110  
 EXPIRATION: 07/13/2013

BLANK TEST	0.000	13:48
INTERNAL STANDARD	VERIFIED	13:48
EXTERNAL STANDARD	0.303	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.303	13:51
BLANK TEST	0.000	13:52
EXTERNAL STANDARD	0.303	13:52
BLANK TEST	0.000	13:53
EXTERNAL STANDARD	0.302	13:53
BLANK TEST	0.000	13:54
EXTERNAL STANDARD	0.302	13:55
BLANK TEST	0.000	13:56

Average = 0.3028  
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100381

Date: 08/01/2012  
Time: 14:01:23

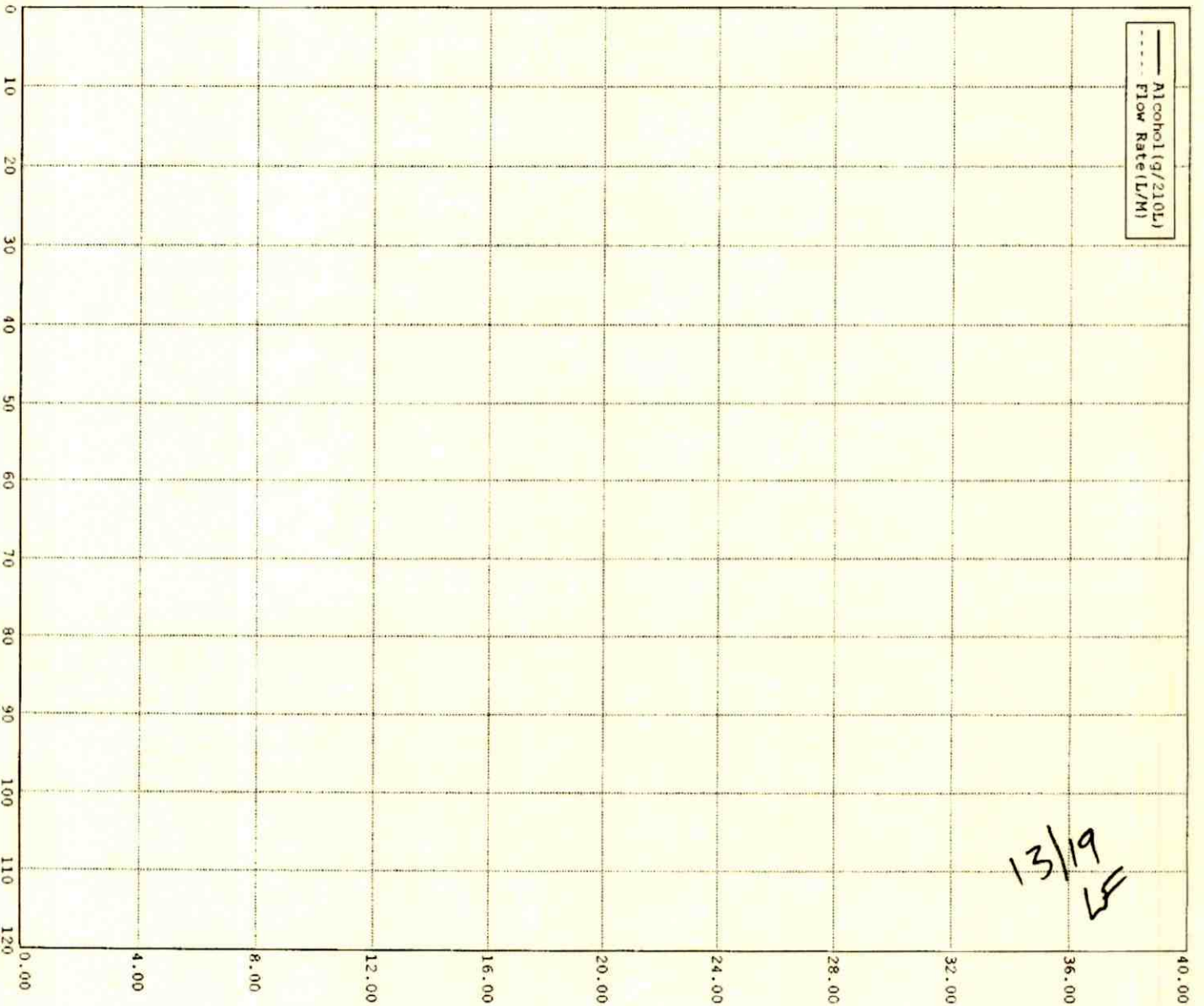
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
INCOMPLETE XXXX  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.63: 0.079  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	14:02
BLANK TEST	0.000	14:02
INTERNAL STANDARD	VERIFIED	14:02
EXTERNAL STANDARD	0.079	14:02
BLANK TEST	0.000	14:03
SUBJECT SAMPLE	INCOMPLETE	14:05



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100381

Date: 08/01/2012  
Time: 14:32:06

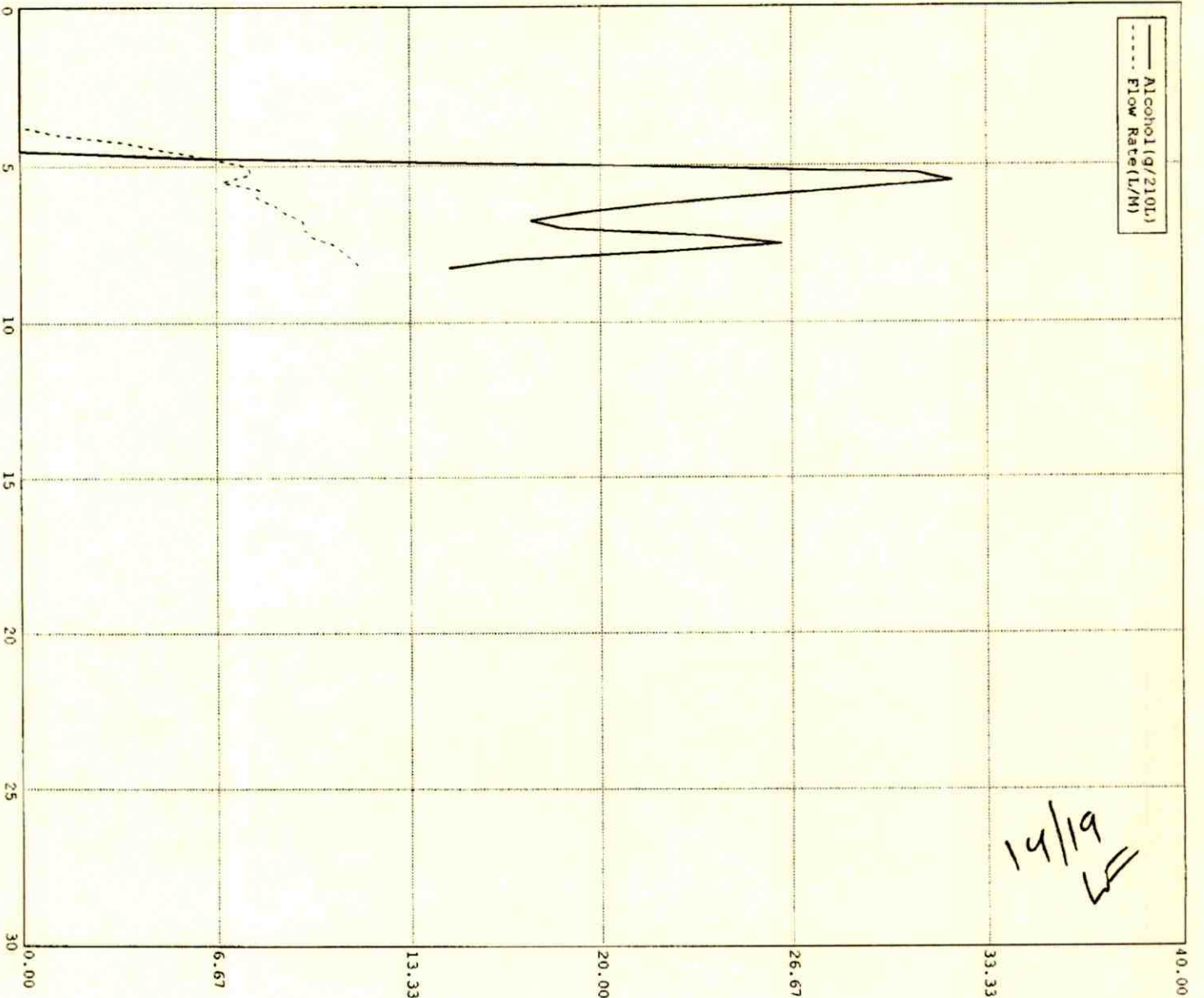
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

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

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.62: 0.079  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	14:35
BLANK TEST	0.000	14:35
INTERNAL STANDARD	VERIFIED	14:35
EXTERNAL STANDARD	0.078	14:35
BLANK TEST	0.000	14:36
SUBJECT SAMPLE	INVALID	14:37



SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100381

Date: 08/01/2012  
 Time: 14:41:25

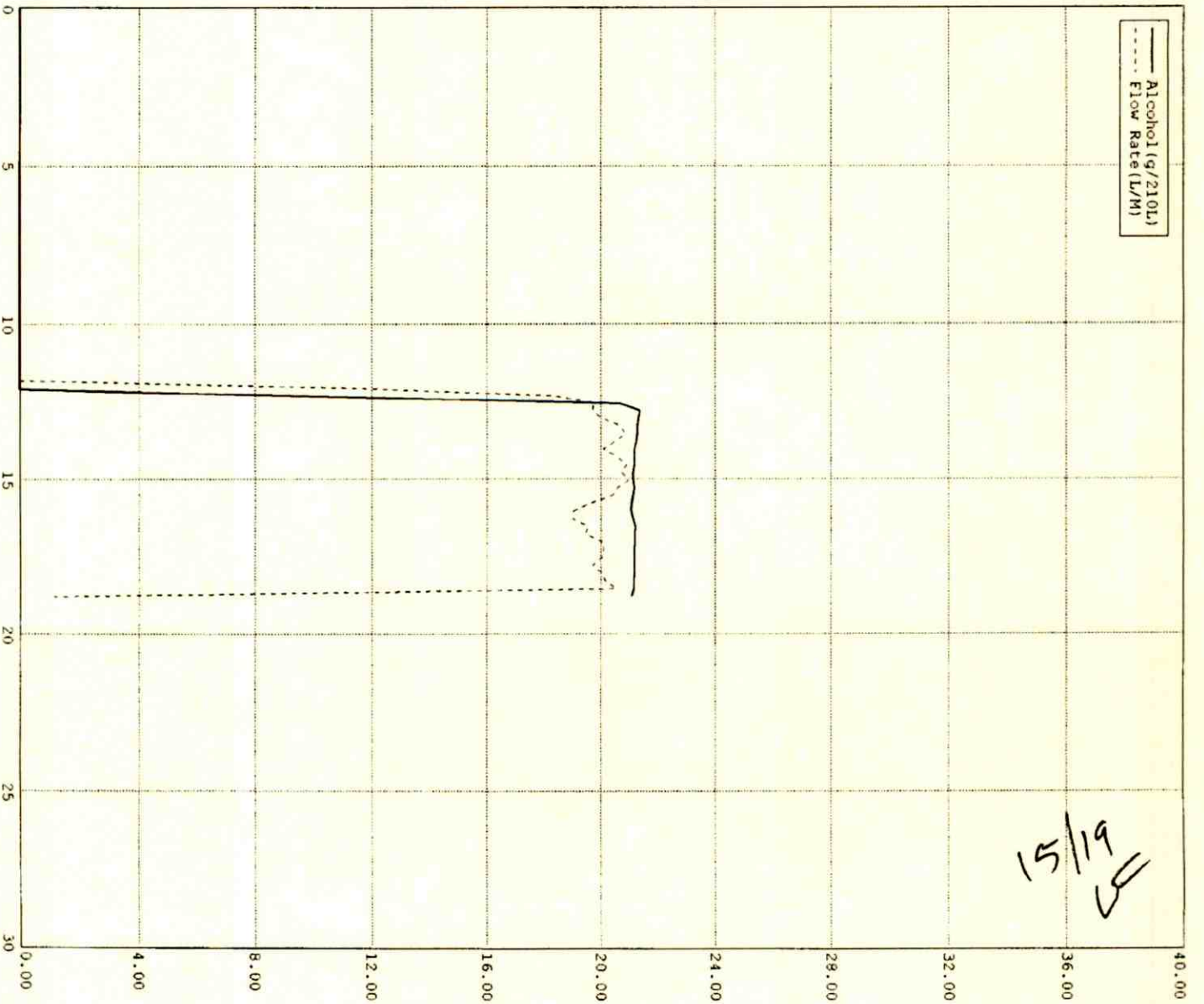
SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

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 29.62: 0.079  
 LOT #: 02012080A1  
 EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	14:44
BLANK TEST	0.000	14:44
INTERNAL STANDARD	VERIFIED	14:44
Xg = 0.090 (0.29%)		
EXTERNAL STANDARD	0.079	14:44
X[1] = 0.0790 (0.0001)	(0.0022)	
BLANK TEST	0.000	14:45
SUBJECT SAMPLE	INTERFERENCE	14:46
X[1] = 0.1061 (-0.0127)	(0.0016)	



SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100381

Date: 08/01/2012  
 Time: 14:48:53

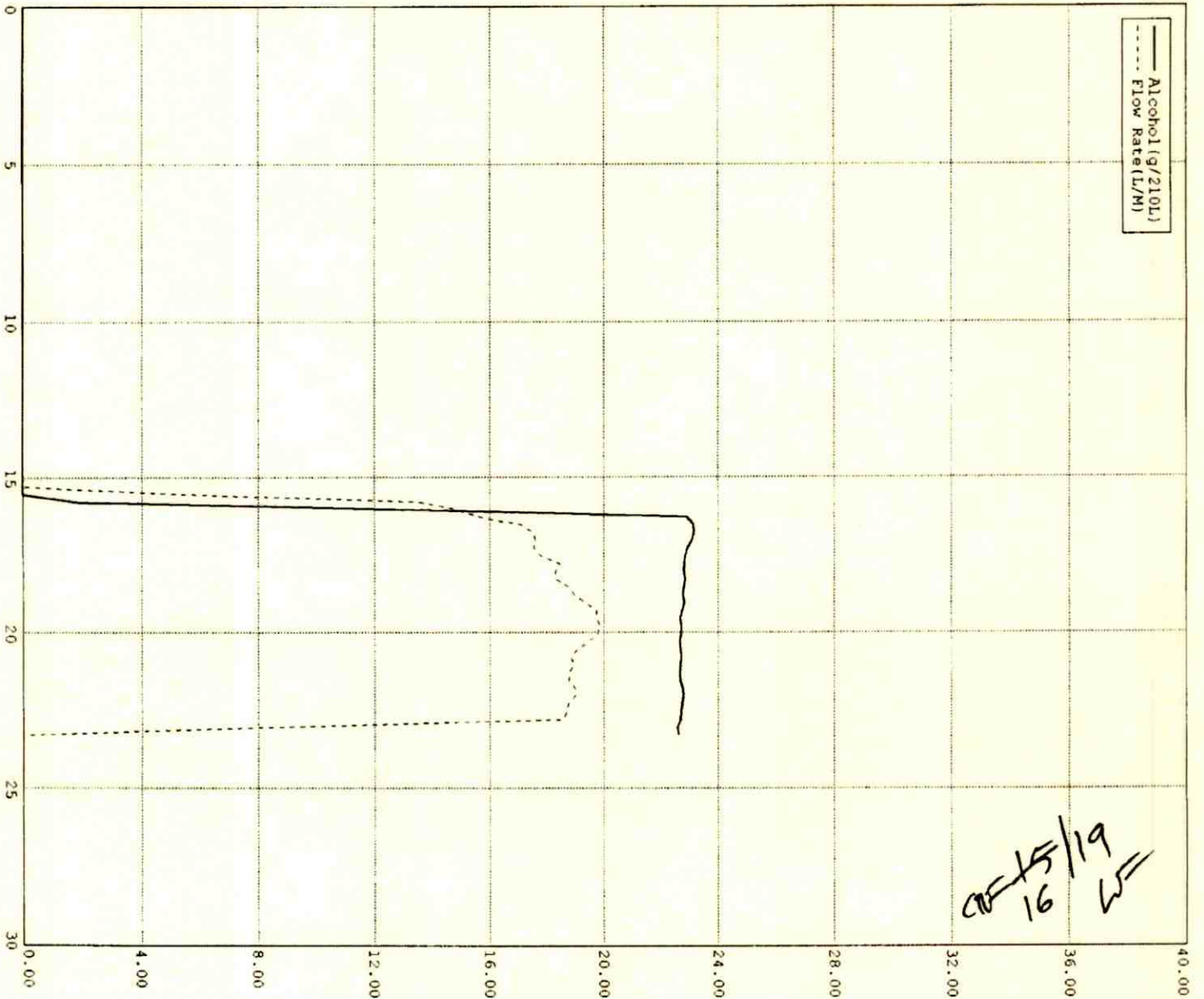
SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

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 29.61: 0.079  
 LOT #: 02012080A1  
 EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	14:52
BLANK TEST	0.000	14:52
INTERNAL STANDARD	VERIFIED	14:52
Xq = 0.091 (0.10%)		
EXTERNAL STANDARD	0.078	14:52
X[1] = 0.0785 (0.0001) (0.0018)		
BLANK TEST	0.000	14:53
SUBJECT SAMPLE	INTERFERENCE	14:53
X[1] = 0.1136 (-0.0179) (0.0018)		





SUBJECT TEST

Alaska Department of Public Safety  
 DATA MASTER dmt: 100381

Date: 08/01/2012  
 Time: 14:56:46

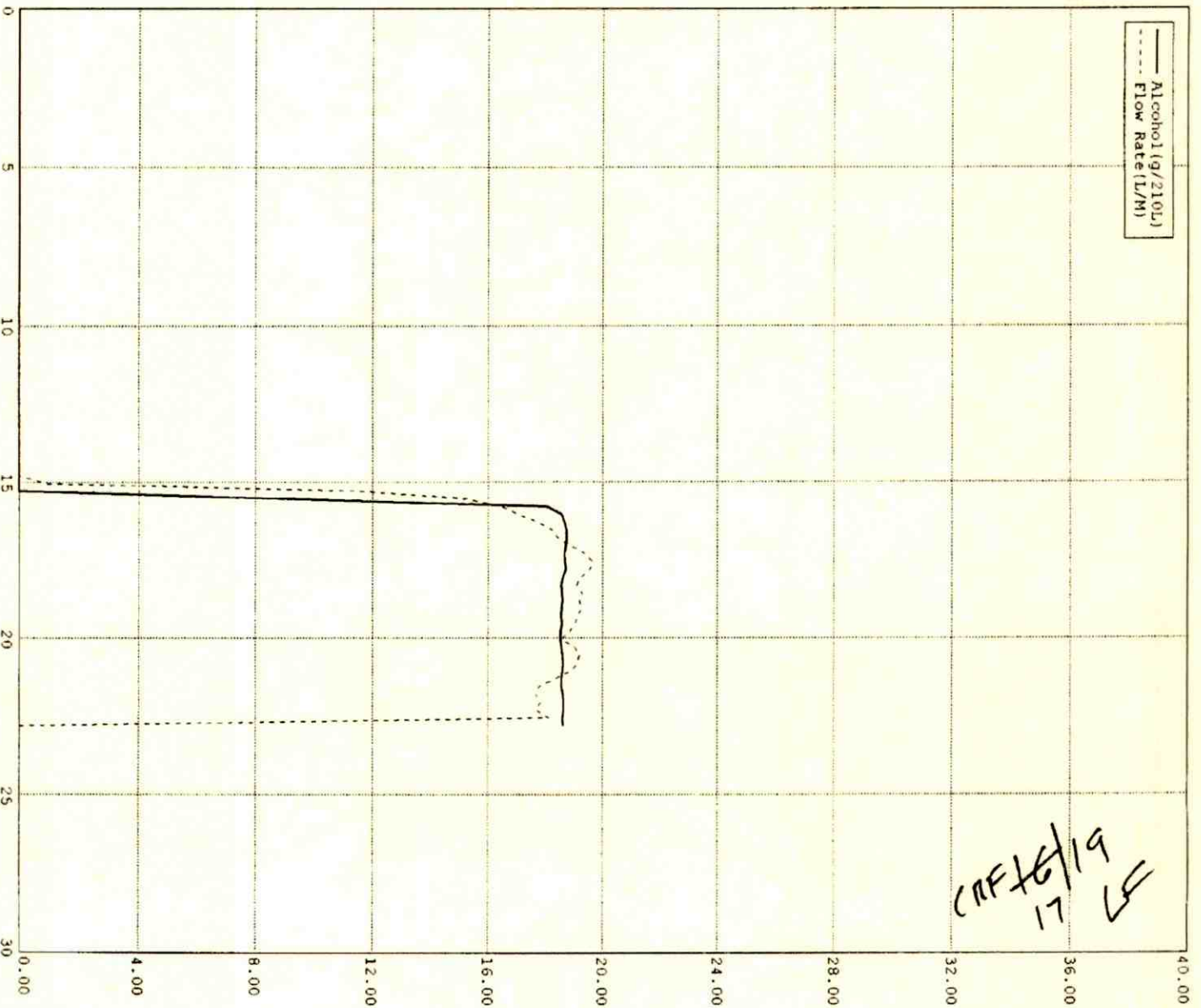
SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

OPERATOR NAME:  
 INTERFERENCE ETOH ONLY  
 OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.62: 0.079  
 LOT #: 02012080A1  
 EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	14:59
BLANK TEST	0.000	14:59
INTERNAL STANDARD	VERIFIED	14:59
Xq = 0.090 (0.39%)		
EXTERNAL STANDARD	0.078	14:59
X[1] = 0.0789 (-0.0003)	(0.0020)	
BLANK TEST	0.000	15:00
SUBJECT SAMPLE (Vol=2.29L)	0.093	15:01
X[1] = 0.0935 (-0.0001)	(0.0009)	
BLANK TEST	0.000	15:02
EXTERNAL STANDARD	0.078	15:02
X[1] = 0.0789 (0.0001)	(0.0011)	
BLANK TEST	0.000	15:03



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100381

Date: 08/01/2012  
Time: 15:25:51

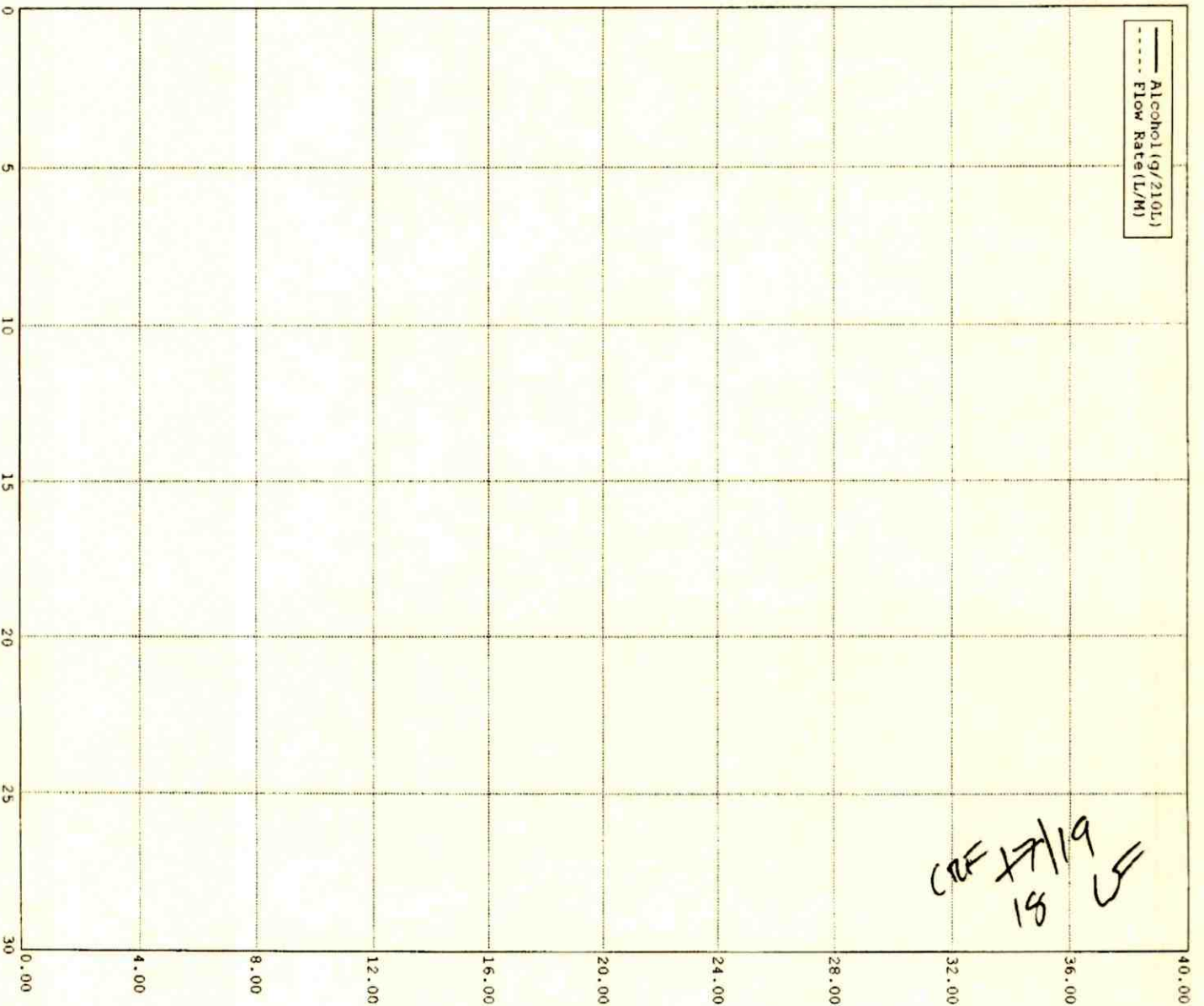
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
RFI XXXX  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.62: 0.079  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK  
BLANK TEST PASSED 15:26  
INTERNAL STANDARD VERIFIED 15:27  
EXTERNAL STANDARD VERIFIED 15:27  
BLANK TEST 0.000 15:28  
RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100381

Date: 08/02/2012  
 Time: 08:12:50

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 29.58: 0.079  
 LOT #: 02012080A1  
 EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	08:15
BLANK TEST	0.000	08:15
INTERNAL STANDARD	VERIFIED	08:15
EXTERNAL STANDARD	0.078	08:15
BLANK TEST	0.000	08:16
SUBJECT SAMPLE	0.000	08:16
BLANK TEST	0.000	08:17
EXTERNAL STANDARD	0.078	08:18
BLANK TEST	0.000	08:18

