

## Alaska Scientific Crime Detection Laboratory

## DataMaster Certification Form

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

Version: DMCEF2012 R1  
Status: Active

Instrument S/N 100359 Analyst CRF Start Date 1/15/13

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 1600 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 07611040A4 Exp 3/1/13

iii. 0.080g/210L Mnf ILMO Lot 02012090A1 Exp 3/1/14

iv. 0.100g/210L Mnf ILMO Lot 07611000A3 Exp 3/1/13

v. 0.200g/210L Mnf Guth Lot 11120 Exp 7/19/13

1. Simulator S/N DR4162 Date Calibrated 10/9/12

vi. 0.300g/210L Mnf Guth Lot 12050 Exp 3/21/14

1. Simulator S/N DR4176 Date Calibrated 2/21/12

## 5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

i. Acetone - Mnf Guth Lot 11100 Level 0.10 Exp 7/6/13

1. Simulator S/N DR5298 Date Calibrated 10/8/12

ii. Isopropanol - Mnf Guth Lot 11250 Level 0.10 Exp 12/6/13

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

End Date 1/17/13

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100359  
-----

Date: 01/15/2013  
Time: 09:28:29

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

TEMPERATURES

Sample Chamber = 48.9°C PASSED  
Breath Tube = 47.6°C PASSED

PUMP INFO  
Flow Rate = 4.358 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  
WF

Technician Screen

-----  
DATAMASTER dmt: 100359  
-----

Date: 01/15/2013  
Time: 9:41 AM

Temperatures (°C)

Sample Cell: 48.6°C  
Breath Tube: 47.8°C

Current Barometer 29.8 in  
Volume (Ltr) 1.44

Settings

Lamp: 1.90 V  
Bias: 80 V  
Cooler: 1.84 V  
Chopper: 533 Hz

Voltages (V)

Flow: 1.05 V  
Detector: 0.005 V

3/19  
LF

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100359  
-----

Date: 09/18/2012  
Time: 15:23:07

OPERATOR NAME:  
BRANDI BARNETT  
CERTIFICATE #: 7038

Ca = 0.1000  
CAL = 0.990036    0.800 <= CAL < 1.200  
b1 = 0.0009    0.0000 <= b1 < 0.0040  
b2 = 0.0053    0.0010 <= b2 < 0.0100  
b3 = 0.0006    0.0000 <= b3 < 0.0040  
Xq = 0.0795    0.0500 <= Xq < 0.2000  
a21 = 1.151754    1.050 <= a21 < 1.300  
a31 = 0.404180    0.300 <= a31 < 0.800

4/19  
WF

SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dmt: 100359

Date: 01/15/2013  
Time: 10:40:07

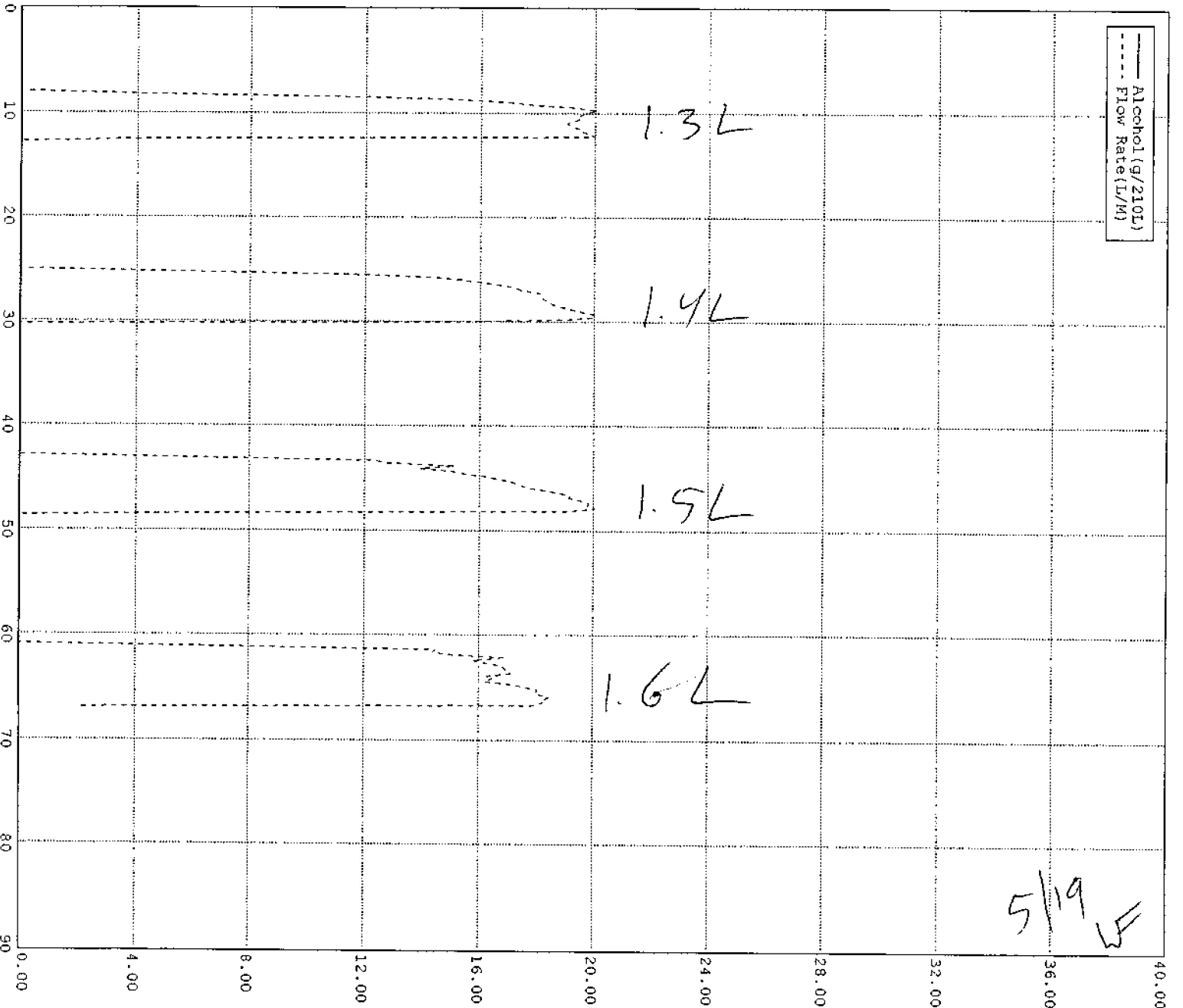
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
MINIMUM VOLUME  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AF 29.84: 0.079  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	10:45
BLANK TEST	0.000	10:45
INTERNAL STANDARD	VERIFIED	10:45
EXTERNAL STANDARD	0.079	10:45
BLANK TEST	0.000	10:46
SUBJECT SAMPLE	0.000	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.079	10:48
BLANK TEST	0.000	10:49



LINERITY CHECK

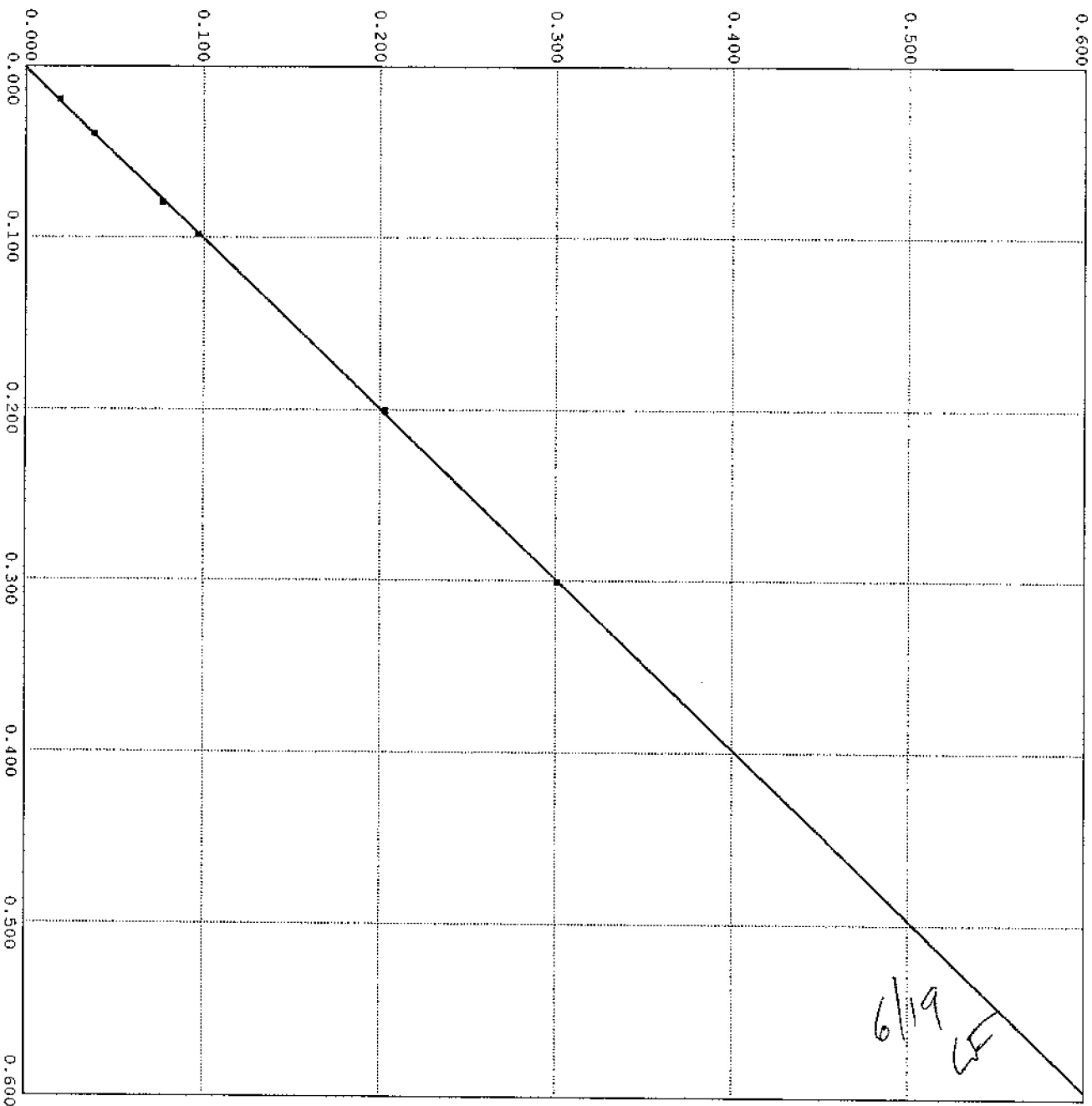
Alaska Department of Public Safety  
 DATAMASTER dmt: 100359

Date: 01/16/2013  
 Time: 12:28:39

SUPERVISOR NAME:  
 CHARLES FOSTER  
 OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.019	0.0200	0.0001
0.039	0.0394	0.0002
0.079	0.0780	0.0004
0.098	0.0975	0.0004
0.200	0.2038	0.0005
0.300	0.3016	0.0003

SLOPE = 1.008670  
 R<sup>2</sup> = 0.999820



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100359

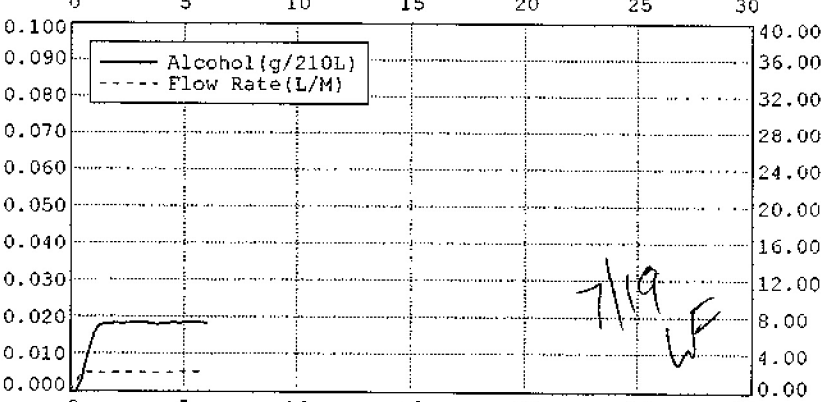
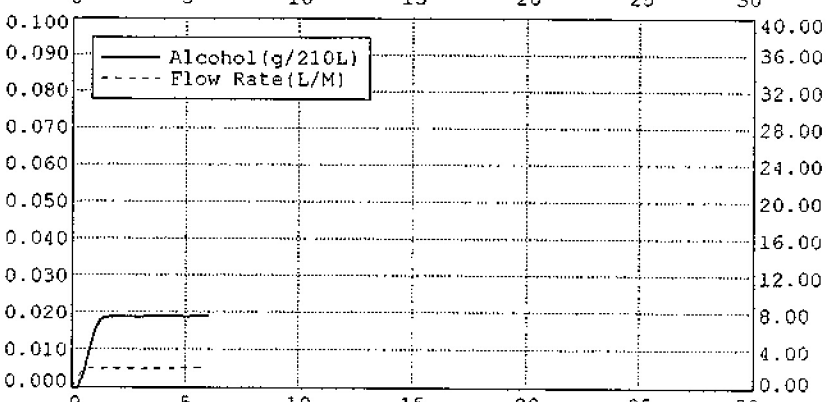
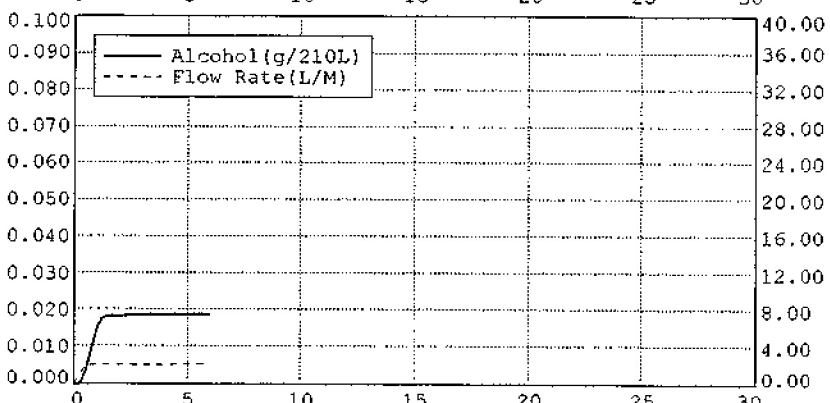
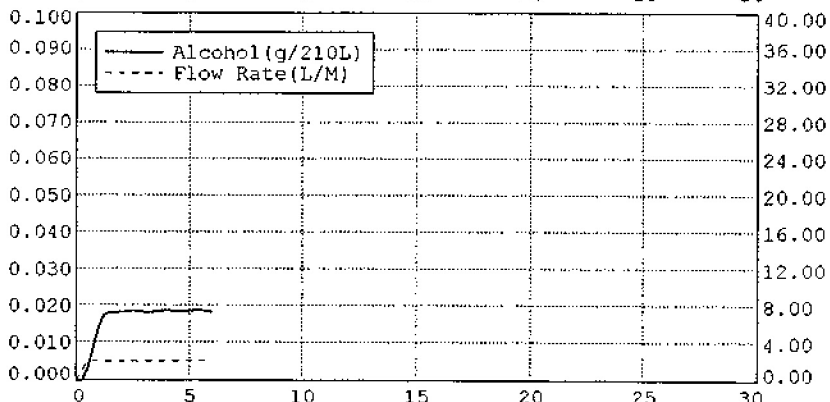
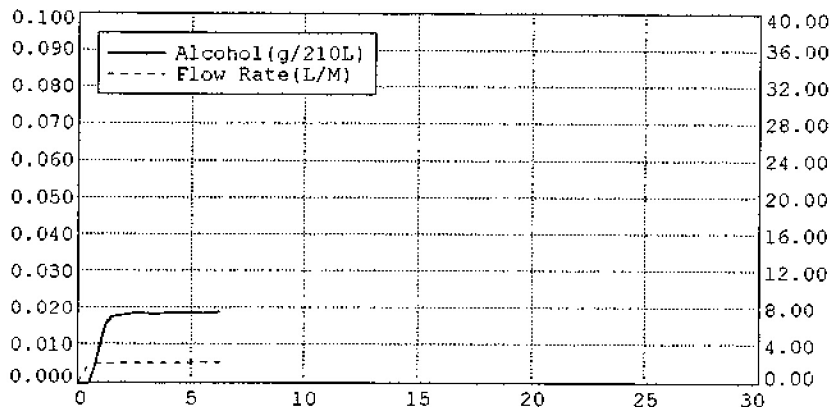
Date: 01/16/2013  
 Time: 12:28:41

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.59: 0.019  
 LOT #: 07611020A5  
 EXPIRATION: 03/01/2013

BLANK TEST	0.000	12:30
INTERNAL STANDARD	VERIFIED	12:30
EXTERNAL STANDARD	0.020	12:30
BLANK TEST	0.000	12:31
EXTERNAL STANDARD	0.019	12:31
BLANK TEST	0.000	12:32
EXTERNAL STANDARD	0.020	12:32
BLANK TEST	0.000	12:33
EXTERNAL STANDARD	0.020	12:34
BLANK TEST	0.000	12:34
EXTERNAL STANDARD	0.019	12:35
BLANK TEST	0.000	12:36

Average = 0.0200  
 Std Dev = 0.0001



LINEARITY CHECK: Control Test 2

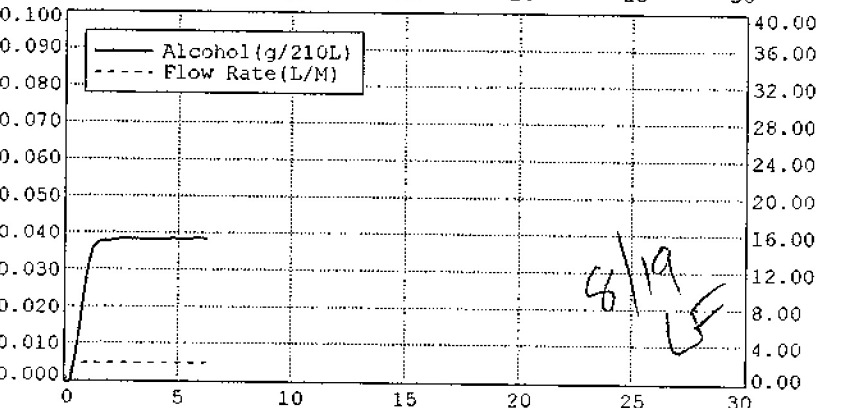
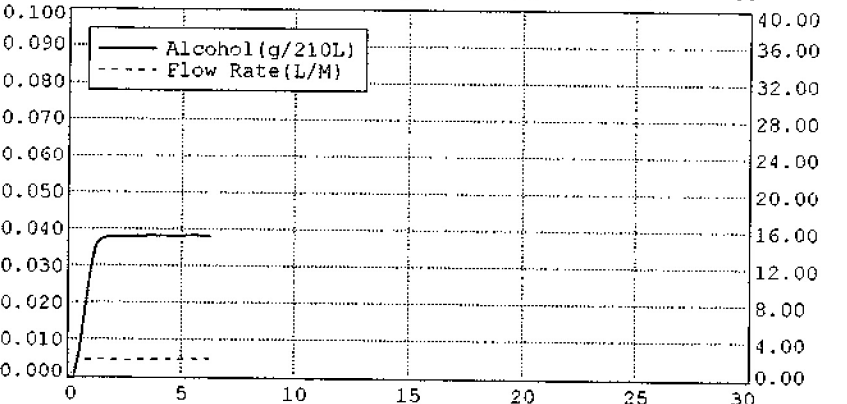
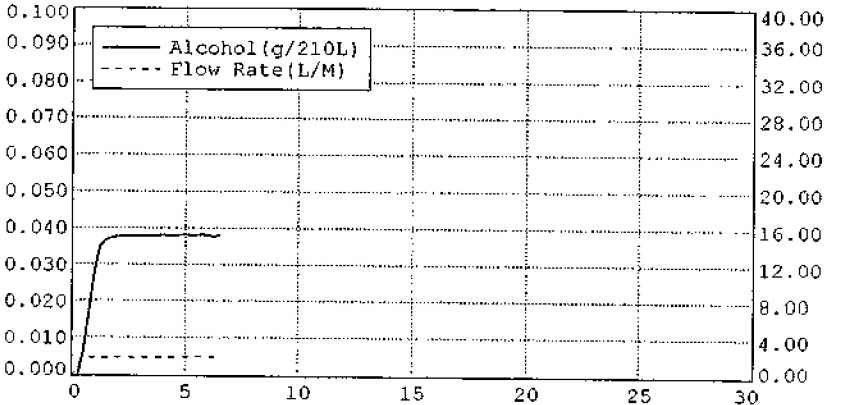
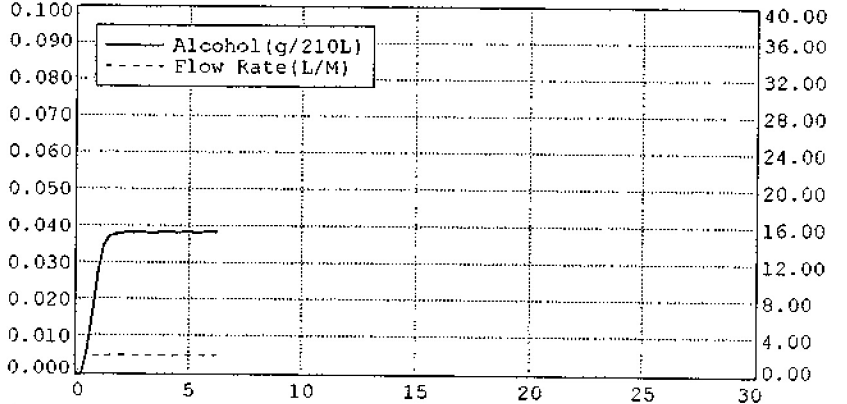
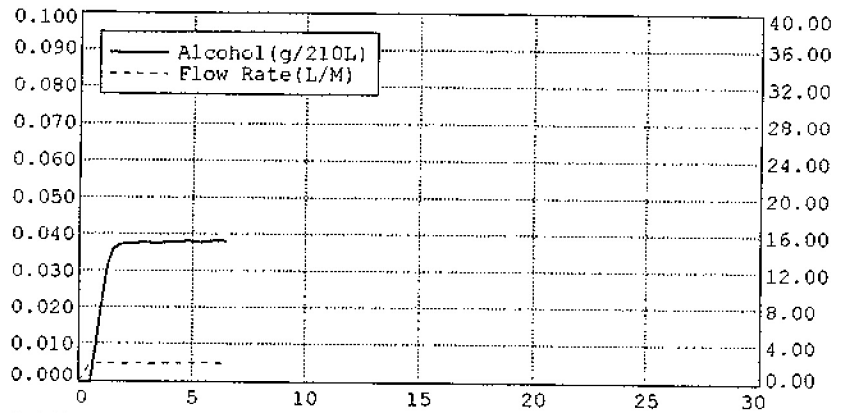
Alaska Department of Public Safety  
 DATAMASTER dmt: 100359

Date: 01/16/2013  
 Time: 12:38:11

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.040  
 TARGET AT 29.59: 0.039  
 LOT #: 07611040A4  
 EXPIRATION: 03/01/2013

BLANK TEST	0.000	12:39
INTERNAL STANDARD	VERIFIED	12:39
EXTERNAL STANDARD	0.039	12:40
BLANK TEST	0.000	12:40
EXTERNAL STANDARD	0.039	12:41
BLANK TEST	0.000	12:42
EXTERNAL STANDARD	0.039	12:42
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.039	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.039	12:44
BLANK TEST	0.000	12:45

Average = 0.0394  
 Std Dev = 0.0002





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100359

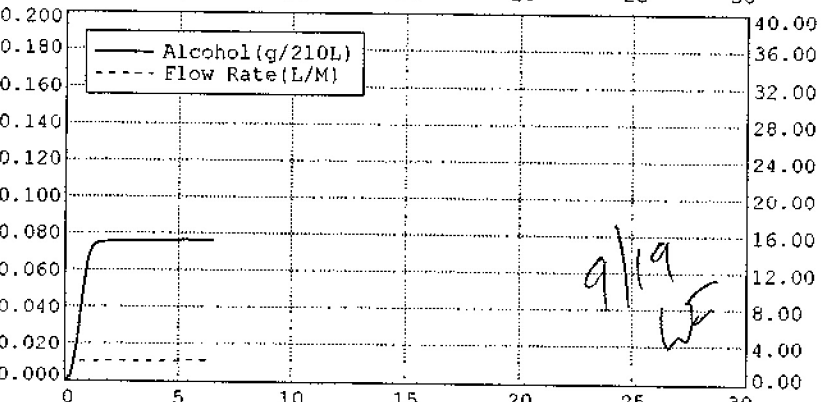
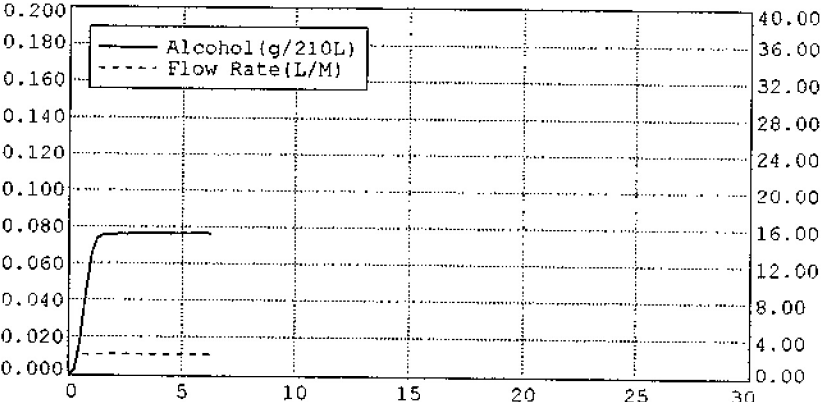
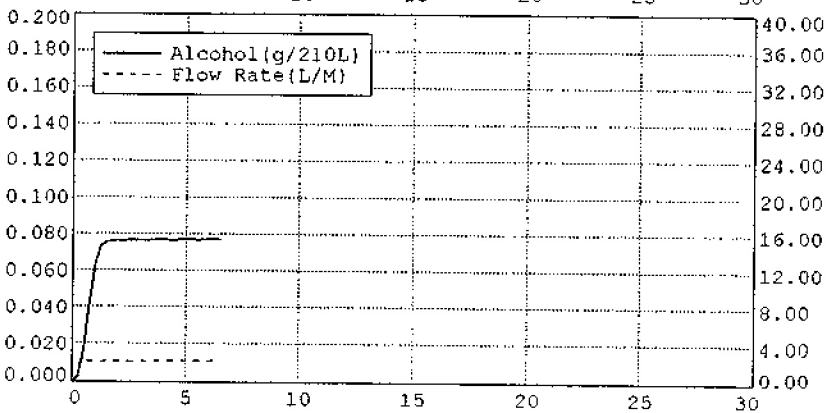
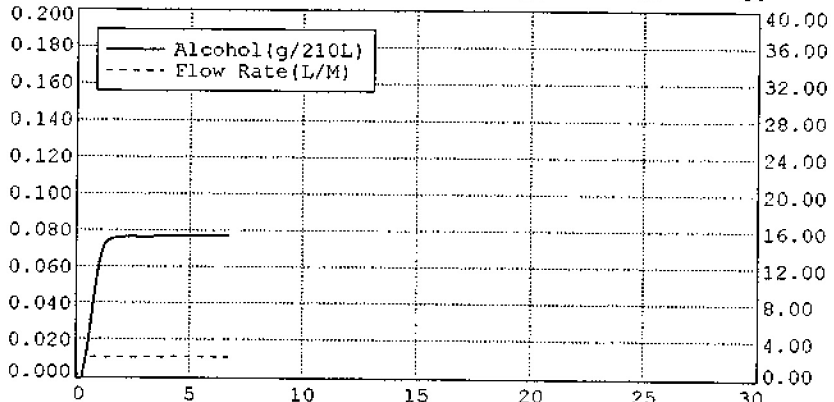
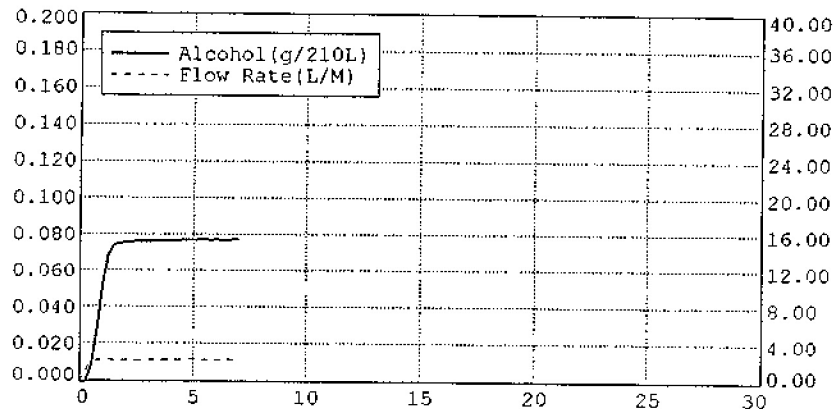
Date: 01/16/2013  
 Time: 12:46:04

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.59: 0.079  
 LOT #: 02012080A1  
 EXPIRATION: 03/01/2014

BLANK TEST	0.000	12:47
INTERNAL STANDARD	VERIFIED	12:47
EXTERNAL STANDARD	0.078	12:47
BLANK TEST	0.000	12:48
EXTERNAL STANDARD	0.078	12:48
BLANK TEST	0.000	12:49
EXTERNAL STANDARD	0.078	12:49
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.078	12:51
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.077	12:52
BLANK TEST	0.000	12:53

Average = 0.0780  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100359

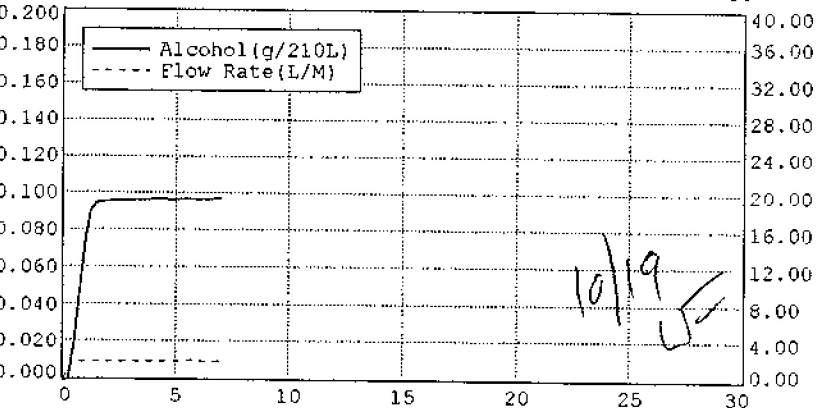
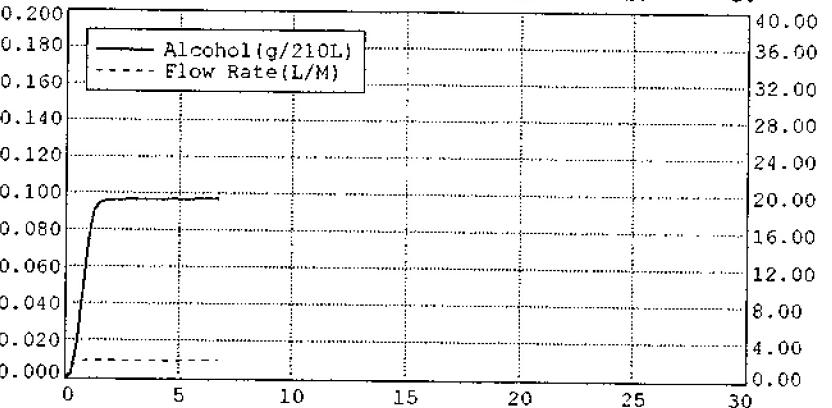
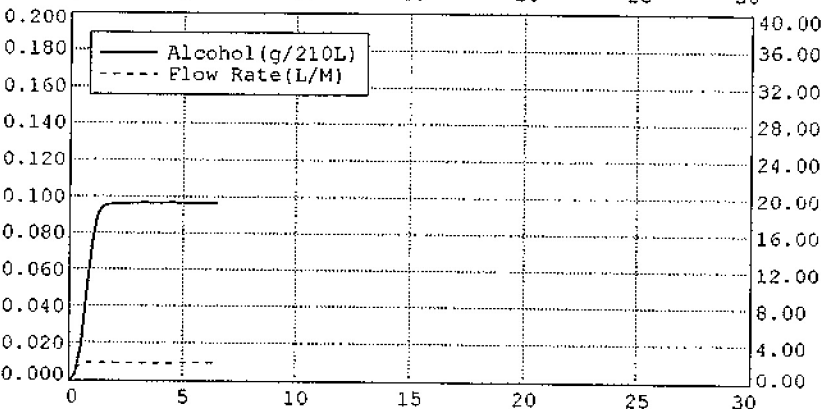
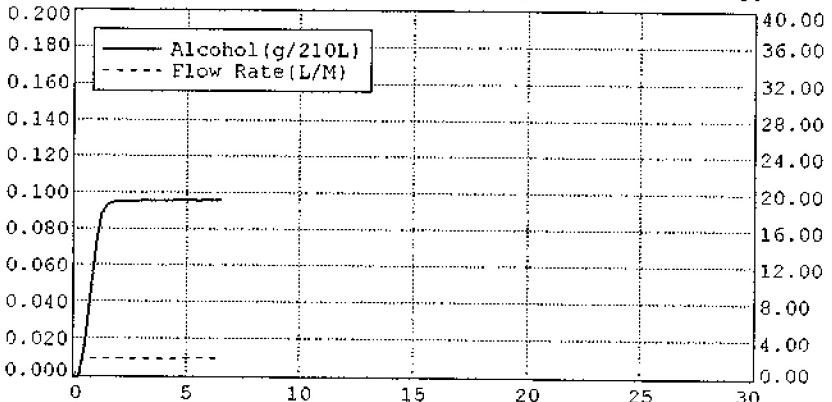
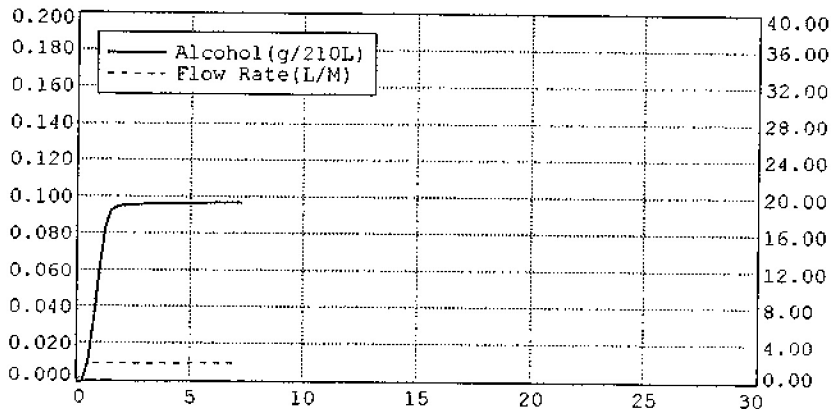
Date: 01/16/2013  
 Time: 12:55:30

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.59: 0.098  
 LOT #: 07611100A3  
 EXPIRATION: 03/01/2013

BLANK TEST	0.000	12:56
INTERNAL STANDARD	VERIFIED	12:57
EXTERNAL STANDARD	0.097	12:57
BLANK TEST	0.000	12:58
EXTERNAL STANDARD	0.096	12:58
BLANK TEST	0.000	12:59
EXTERNAL STANDARD	0.097	12:59
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.097	13:00
BLANK TEST	0.000	13:01
EXTERNAL STANDARD	0.097	13:01
BLANK TEST	0.000	13:02

Average = 0.0975  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety  
 DATAMASTER dmt: 100359

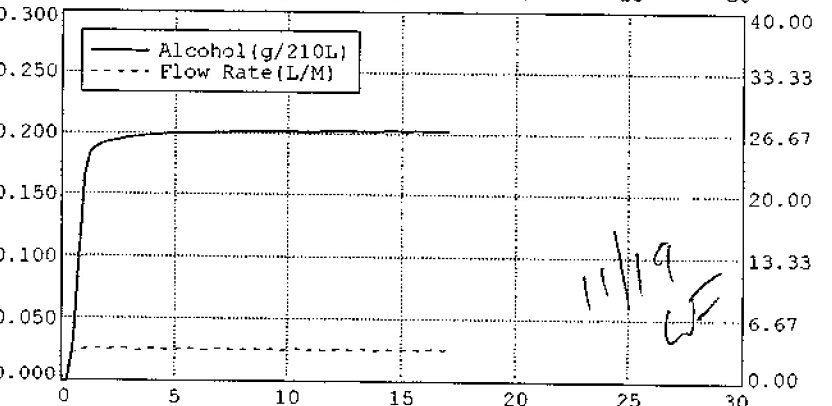
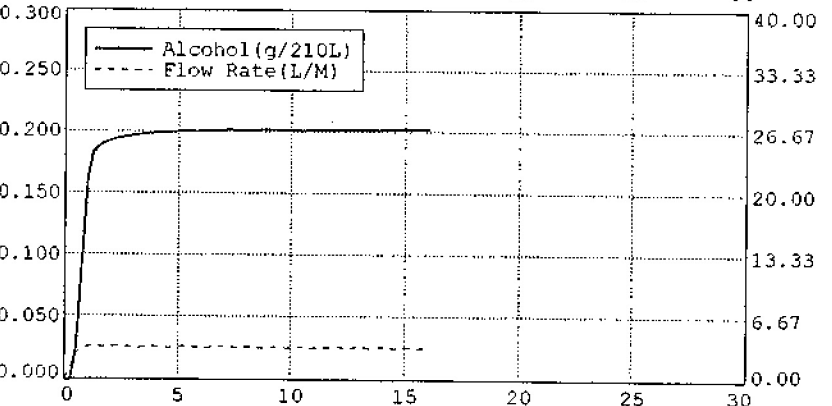
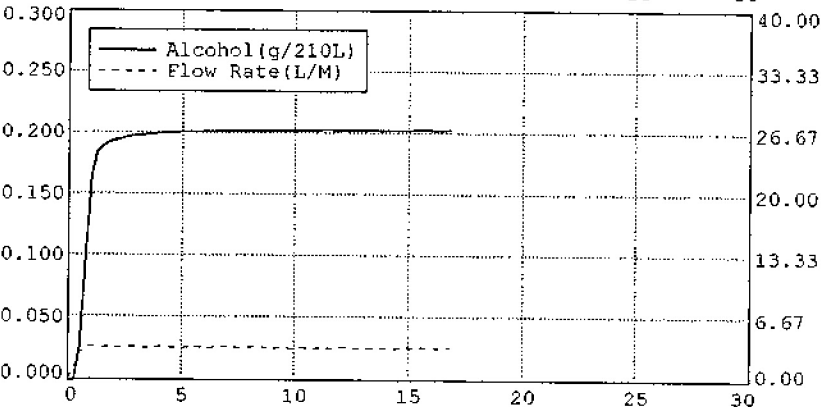
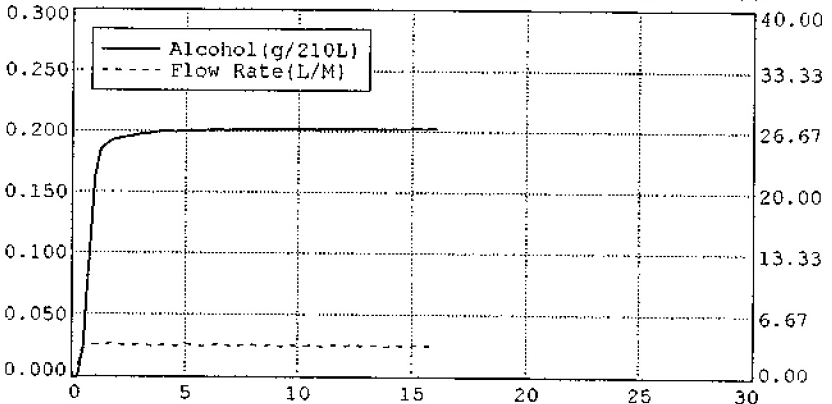
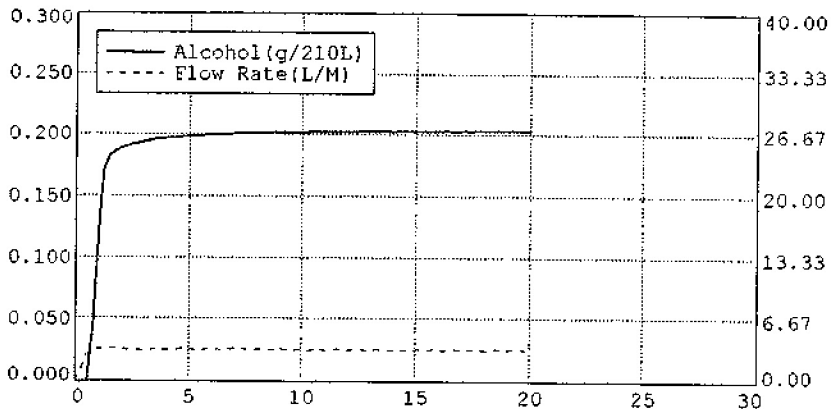
Date: 01/16/2013  
 Time: 13:03:24

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:05
INTERNAL STANDARD	VERIFIED	13:05
EXTERNAL STANDARD	0.204	13:05
BLANK TEST	0.000	13:06
EXTERNAL STANDARD	0.203	13:07
BLANK TEST	0.000	13:08
EXTERNAL STANDARD	0.203	13:08
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.203	13:09
BLANK TEST	0.000	13:10
EXTERNAL STANDARD	0.203	13:11
BLANK TEST	0.000	13:12

Average = 0.2038  
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100359

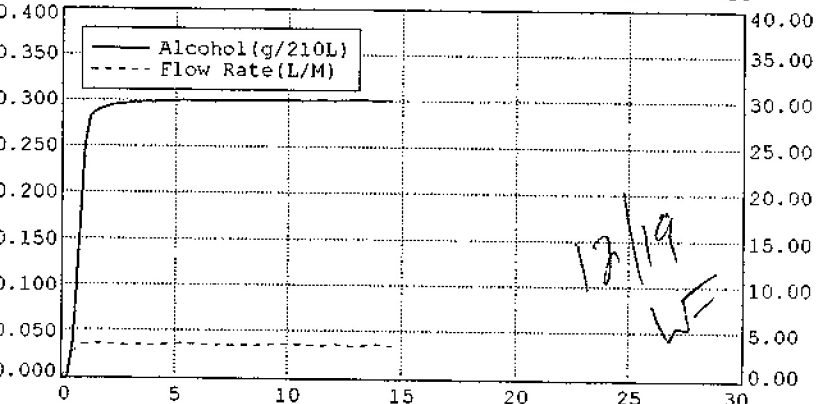
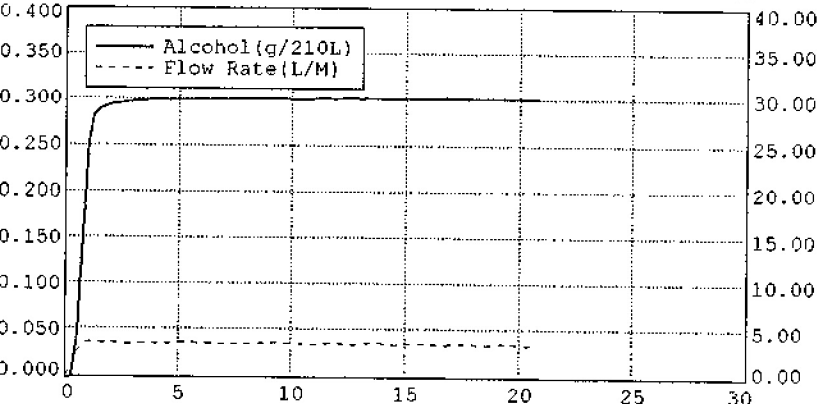
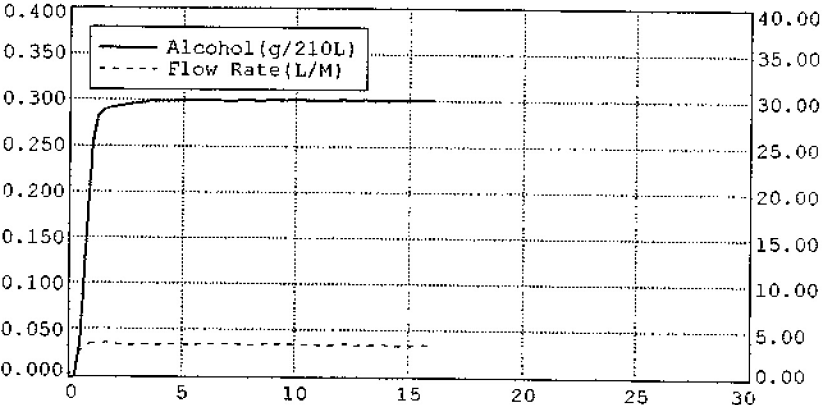
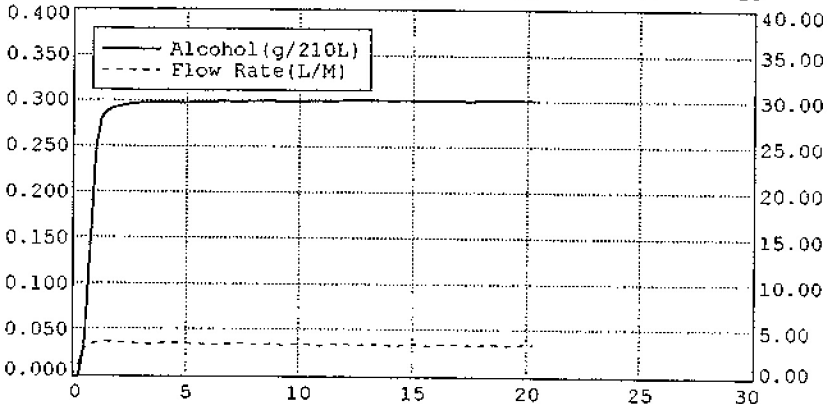
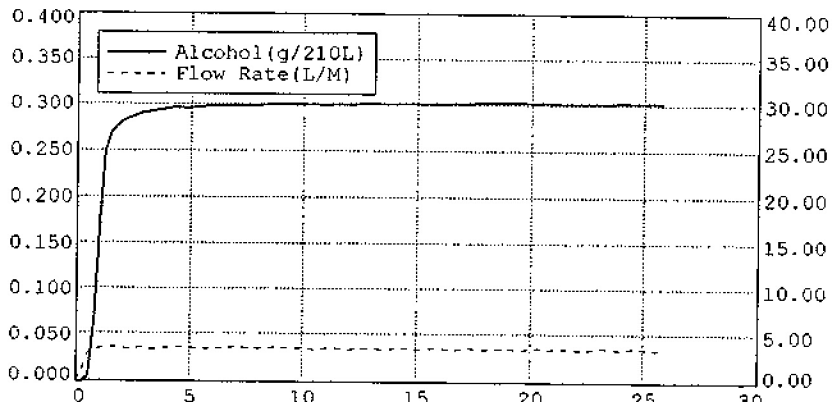
Date: 01/16/2013  
 Time: 13:17:44

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:19
INTERNAL STANDARD	VERIFIED	13:19
EXTERNAL STANDARD	0.302	13:19
BLANK TEST	0.000	13:20
EXTERNAL STANDARD	0.301	13:21
BLANK TEST	0.000	13:22
EXTERNAL STANDARD	0.301	13:22
BLANK TEST	0.000	13:23
EXTERNAL STANDARD	0.301	13:23
BLANK TEST	0.000	13:24
EXTERNAL STANDARD	0.301	13:25
BLANK TEST	0.000	13:25

Average = 0.3016  
 Std Dev = 0.0003



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100359

Date: 01/16/2013  
Time: 13:47:03

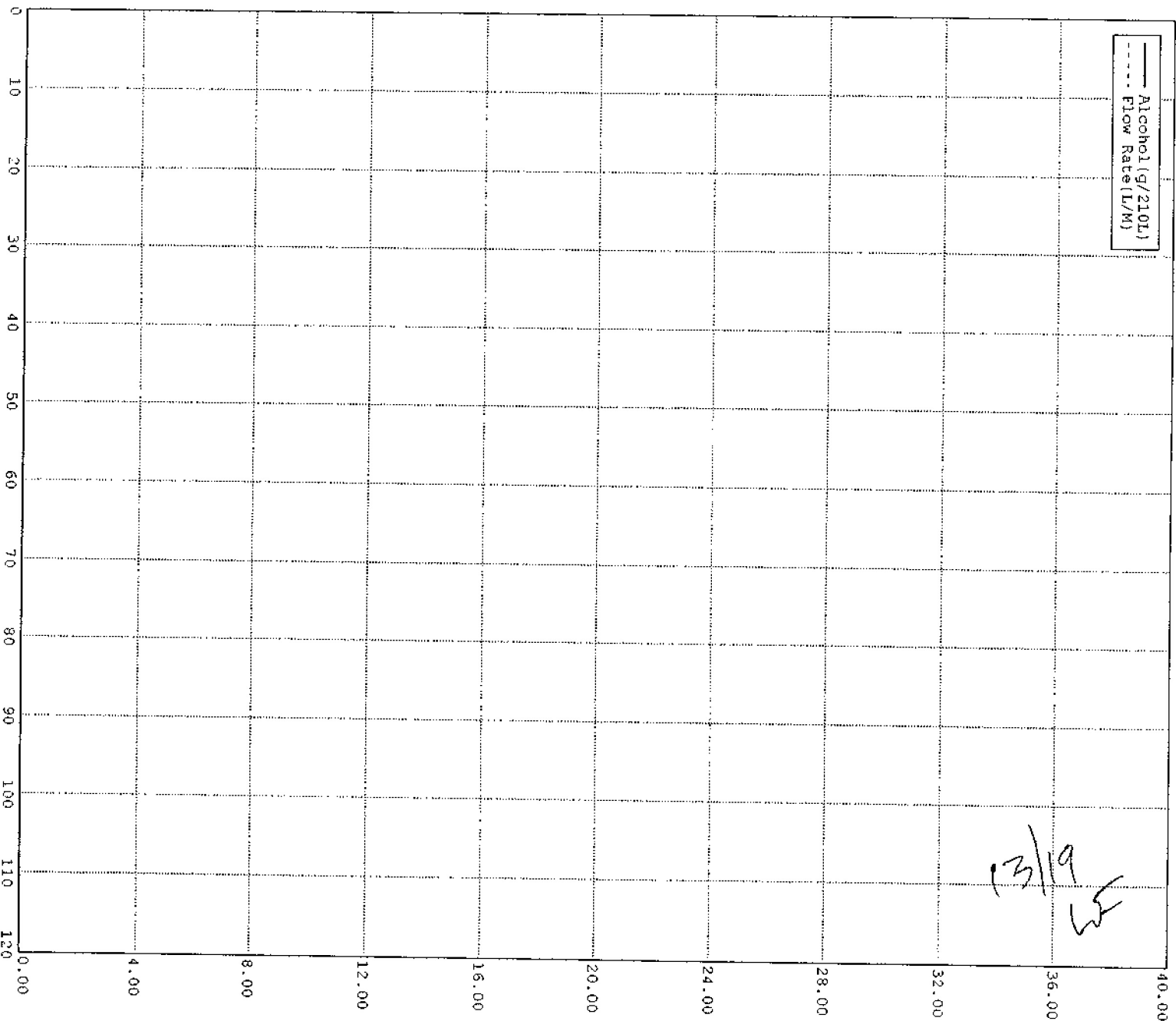
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
INCOMPLETE XXXX  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.55: 0.079  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	14:03
BLANK TEST	0.000	14:04
INTERNAL STANDARD	VERIFIED	14:04
EXTERNAL STANDARD	0.077	14:04
BLANK TEST	0.000	14:05
SUBJECT SAMPLE	INCOMPLETE	14:07



SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dnt: 100359

Date: 01/16/2013  
Time: 14:11:52

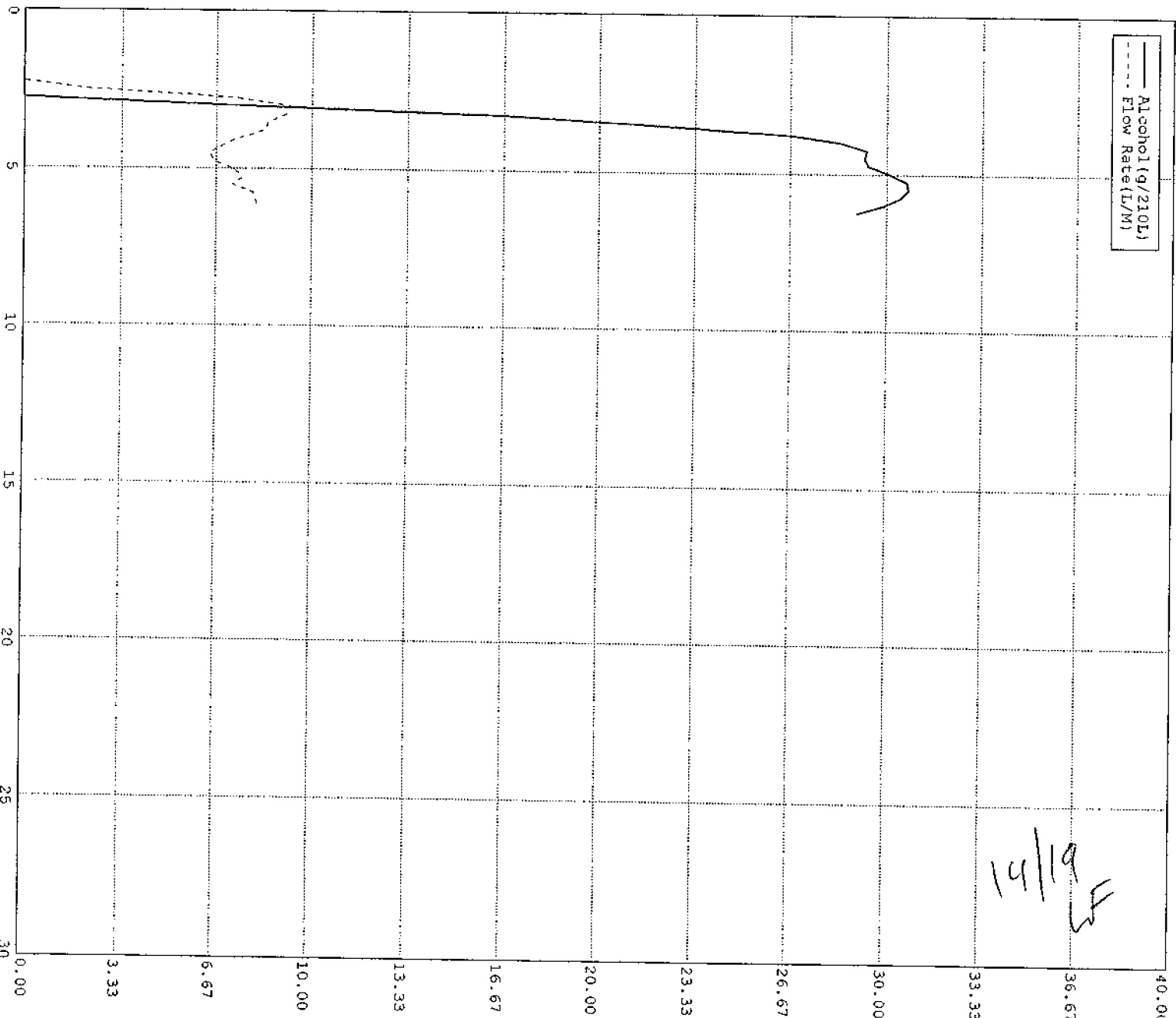
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

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

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.55: 0.079  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	14:16
BLANK TEST	0.000	14:16
INTERNAL STANDARD	VERIFIED	14:16
EXTERNAL STANDARD	0.077	14:16
BLANK TEST	0.000	14:17
SUBJECT SAMPLE	INVALID	14:17



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100359

Date: 01/16/2013  
Time: 14:58:37

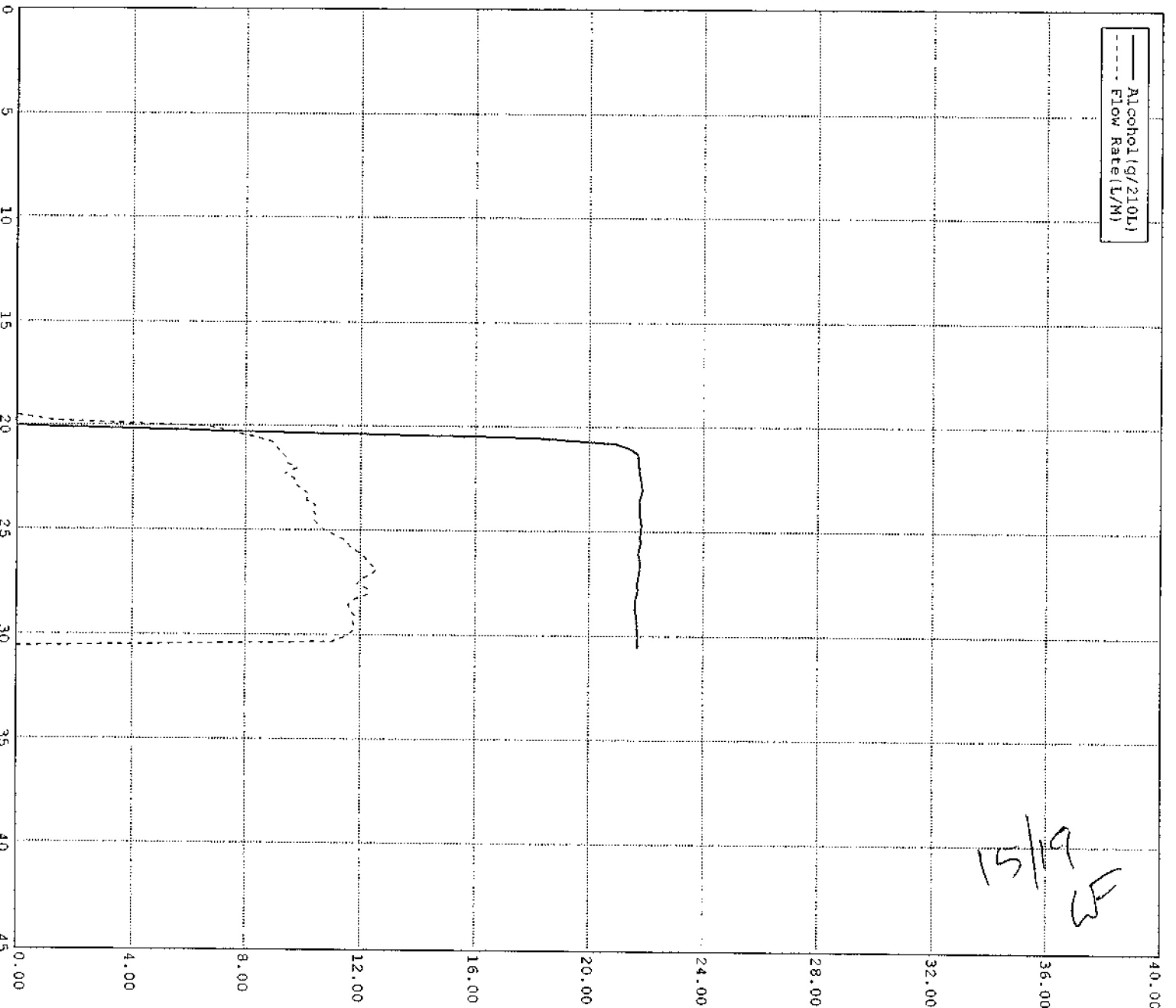
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

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

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.54: 0.078  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	14:59
BLANK TEST	0.000	14:59
INTERNAL STANDARD	VERIFIED	14:59
Xq = 0.079 (0.228)		
EXTERNAL STANDARD	0.077	15:00
X[1] = 0.0773 (0.0006)	0.0039	
BLANK TEST	0.000	15:01
SUBJECT SAMPLE	INTERFERENCE	15:01
X[1] = 0.1094 (-0.0125)	(0.0021)	



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100359

Date: 01/16/2013  
Time: 15:23:02

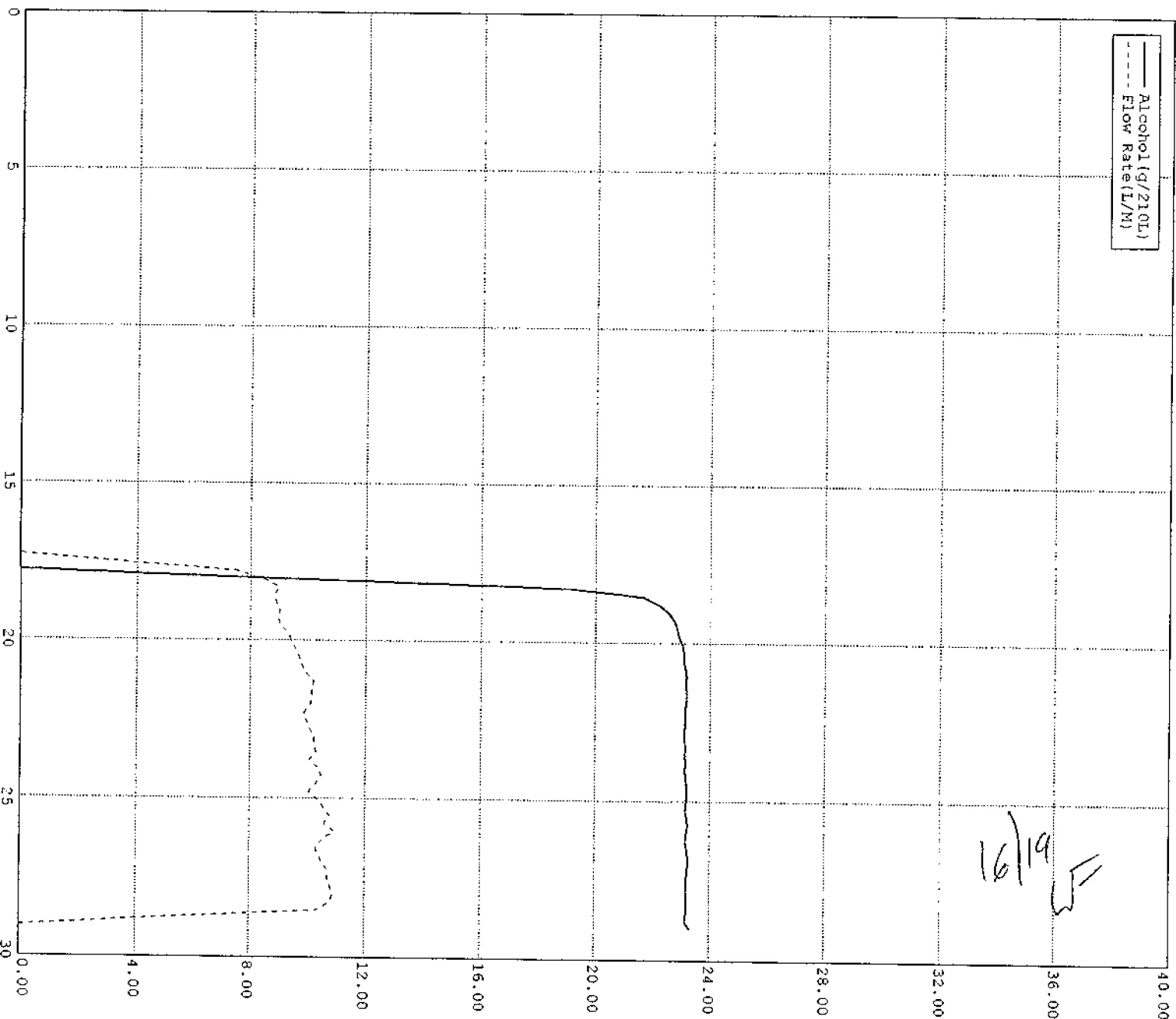
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

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 29.53: 0.078  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	15:24
BLANK TEST	0.000	15:24
INTERNAL STANDARD	VERIFIED	15:24
Xq = 0.080 (0.11%)	0.077	15:24
EXTERNAL STANDARD	X[1] = 0.0772 (0.0000)	(0.0028)
BLANK TEST	0.000	15:25
SUBJECT SAMPLE	INTERFERENCE	15:26
X[1] = 0.1167 (-0.0220)	(0.0023)	





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100359

Date: 01/16/2013  
Time: 15:34:27

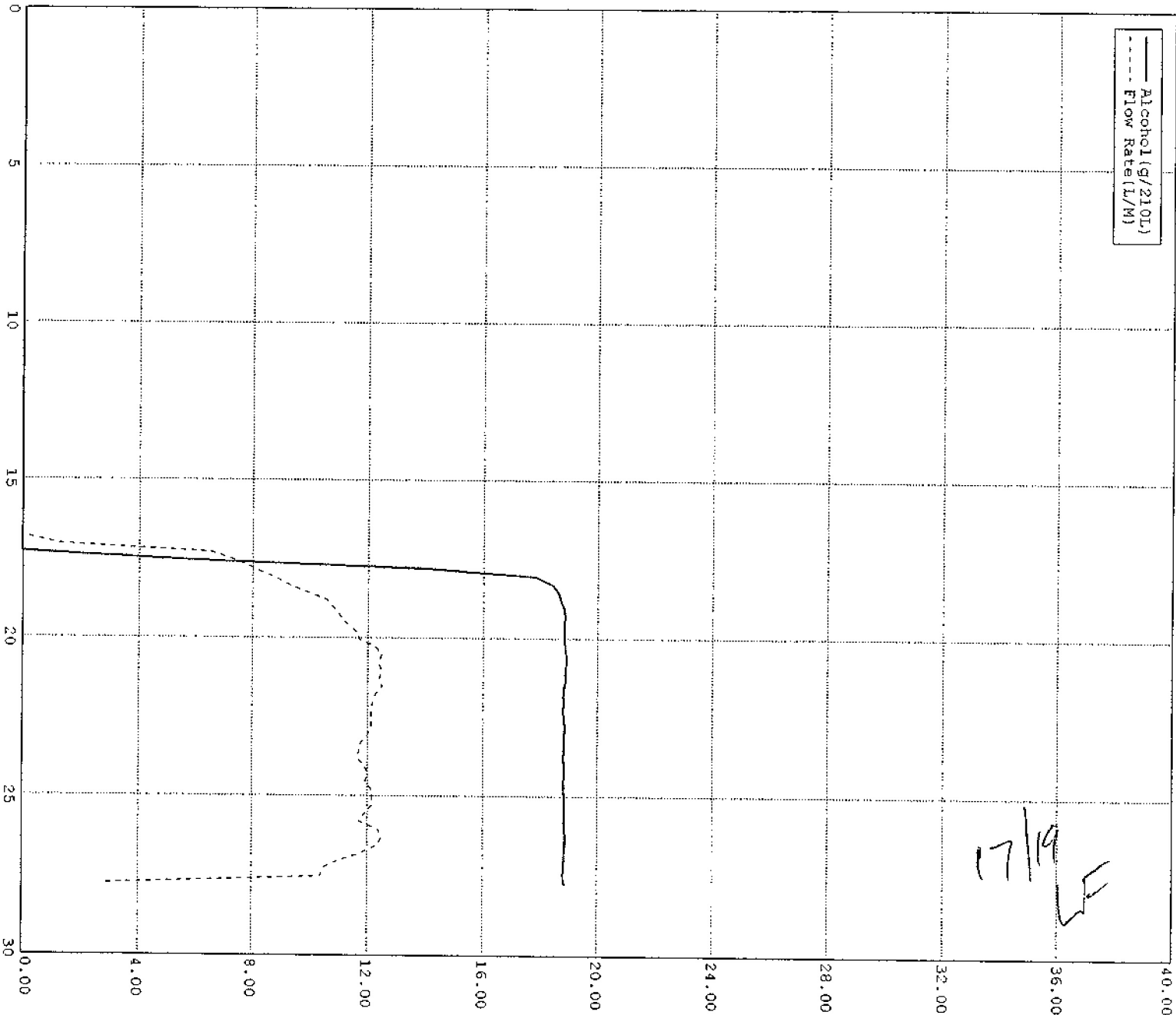
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

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

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

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

DIAGNOSTIC CHECK	PASSED	15:37
BLANK TEST	0.000	15:38
INTERNAL STANDARD	VERIFIED	15:38
Xq = 0.080 (0.44%)		
EXTERNAL STANDARD	0.078	15:38
X[1] = 0.0785 (-0.0003) (0.0023)		
BLANK TEST	0.000	15:39
SUBJECT SAMPLE (Vol=1.99L)	0.095	15:39
X[1] = 0.0950 (0.0012) (0.0010)		
BLANK TEST	0.000	15:40
EXTERNAL STANDARD	0.077	15:41
X[1] = 0.0779 (-0.0001) (0.0028)		
BLANK TEST	0.000	15:42



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100359

Date: 01/17/2013  
Time: 08:33:25

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

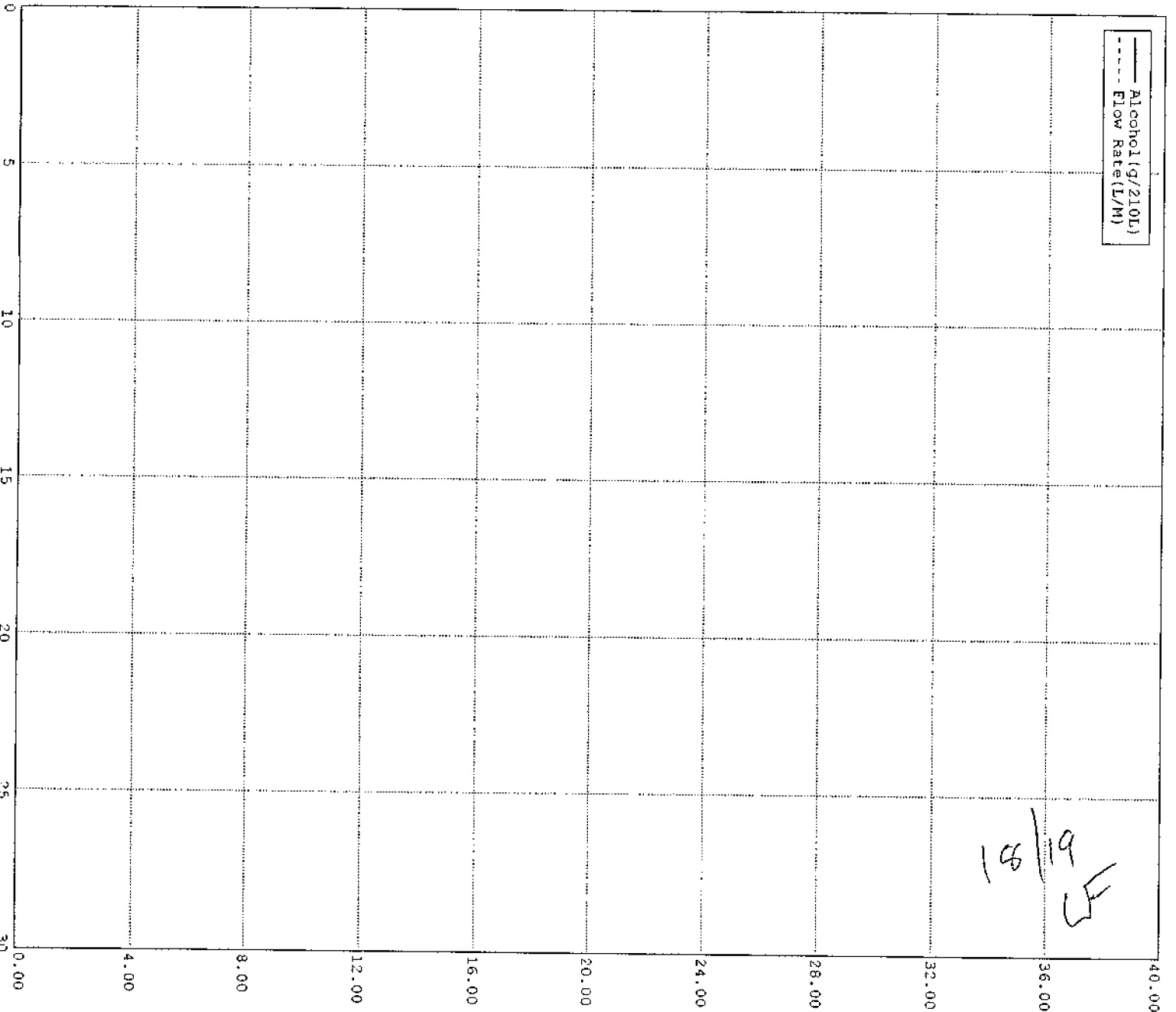
OPERATOR NAME:  
RFI XXXX  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.31: 0.078  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	08:34
BLANK TEST	0.000	08:35
INTERNAL STANDARD	VERIFIED	08:35
EXTERNAL STANDARD	0.077	08:35
BLANK TEST	0.000	08:36

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100359

Date: 01/17/2013  
Time: 09:19:25

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 29.32: 0.078  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	09:20
BLANK TEST	0.000	09:20
INTERNAL STANDARD	VERIFIED	09:20
EXTERNAL STANDARD	0.077	09:20
BLANK TEST	0.000	09:21
SUBJECT SAMPLE	0.000	09:22
BLANK TEST	0.000	09:23
EXTERNAL STANDARD	0.078	09:23
BLANK TEST	0.000	09:24

