

# Alaska Scientific Crime Detection Laboratory

## DataMaster Certification Form

Issued: 7/10/2015  
Effective: 7/10/2015

Version: DMCEF 2015 R1  
Status: Active

Instrument S/N 100383 Analyst CTF Start Date 12/2/15

1. Diagnostic Test (attached)  Internal Standard value  $\leq 3.00\%$  Yes

1. Voltage Checks

a. Adjust voltages, if needed

i. Lamp (2.6V Maximum)

ii. Bias

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 1.5 L (1.3L to 1.7L)

4. Linearity Test (attached)

a. Levels Used

i. 0.020g/210L Mnf ILMO Lot 02915020A2 Exp 3/5/17

ii. 0.040g/210L Mnf ILMO Lot 02915040A3 Exp 3/5/17

iii. 0.080g/210L Mnf ILMO Lot 01315080A3 Exp 2/5/17

iv. 0.100g/210L Mnf ILMO Lot 02915100A1 Exp 3/5/17

v. 0.200g/210L Mnf Guth Lot 15130 Exp 5/11/17

1. Simulator S/N DR6267 Date Calibrated 1/20/15

vi. 0.300g/210L Mnf Guth Lot 14270 Exp 12/2/16

1. Simulator S/N DR4162 Date Calibrated 1/19/15

5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

d. Exceeded attempts

i. Acetone - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17

1. Simulator S/N DR4163 Date Calibrated 1/19/15

ii. Isopropanol - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17

1. Simulator S/N SD1176 Date Calibrated 1/20/15

iii. Negative Control - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17

1. Simulator S/N DR4178 Date Calibrated 1/19/15

e. RFI

6. Verify stylus is calibrated

7. Reset Options

8. Clear Memory

9. Verification of Calibration

10. Non-Drinking Subject Test (attached)

11. Upload

13. Remove tank prior to shut down

End Date 12/2/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety  
DATAMASTER dmt: 100383

Date: 12/02/2015  
Time: 10:12:37

VERSIONS

DMT: 3.01  
PIC: 3.02  
Modem: 2.6  
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.8°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 48.1°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.64 V PASSED  
(1.03 V - 2.41 V)  
Cooler Voltage = 1.65 V PASSED  
(0.99 V - 2.31 V)  
Bias Voltage = 81 V PASSED  
(49 V - 113 V)  
Chopper Freq = 550 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.2 in

PUMP INFO

Flow Rate = 4.741 L/M PASSED  
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED  
(0.002 V <= 0.010 V)  
PUMP OFF PASSED  
(0.002 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED  
Filter 2 PASSED  
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.093 0.85% (0.00% - 4.00%) PASSED

Technician Screen

-----  
DATAMASTER dmt: 100383  
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Date: 12/02/2015  
Time: 10:34 AM

Temperatures (°C)  
Sample Cell: 48.7°C  
Breath Tube: 47.9°C

Current Barometer 29.1 in  
Volume (ltr) 1.48

Settings  
Lamp: 1.69 V  
Bias: 81 V  
Cooler: 1.70 V  
Chopper: 549 Hz

Voltages (V)  
Flow: 1.06 V  
Detector: -0.009 V

CALIBRATION FACTORS

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Alaska Department of Public Safety  
DATAMASTER dmt: 100383  
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Date: 03/08/2011  
Time: 13:06:25

Ca = 0.1000  
CAL = 0.978693    0.800 <= CAL < 1.200  
b1 = 0.0000    0.0000 <= b1 < 0.0040  
b2 = 0.0046    0.0010 <= b2 < 0.0100  
b3 = 0.0005    0.0000 <= b3 < 0.0040  
Xq = 0.0926    0.0500 <= Xq < 0.2000  
a21 = 1.169466    1.050 <= a21 < 1.300  
a31 = 0.423226    0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100383

Date: 12/02/2015  
Time: 10:44:44

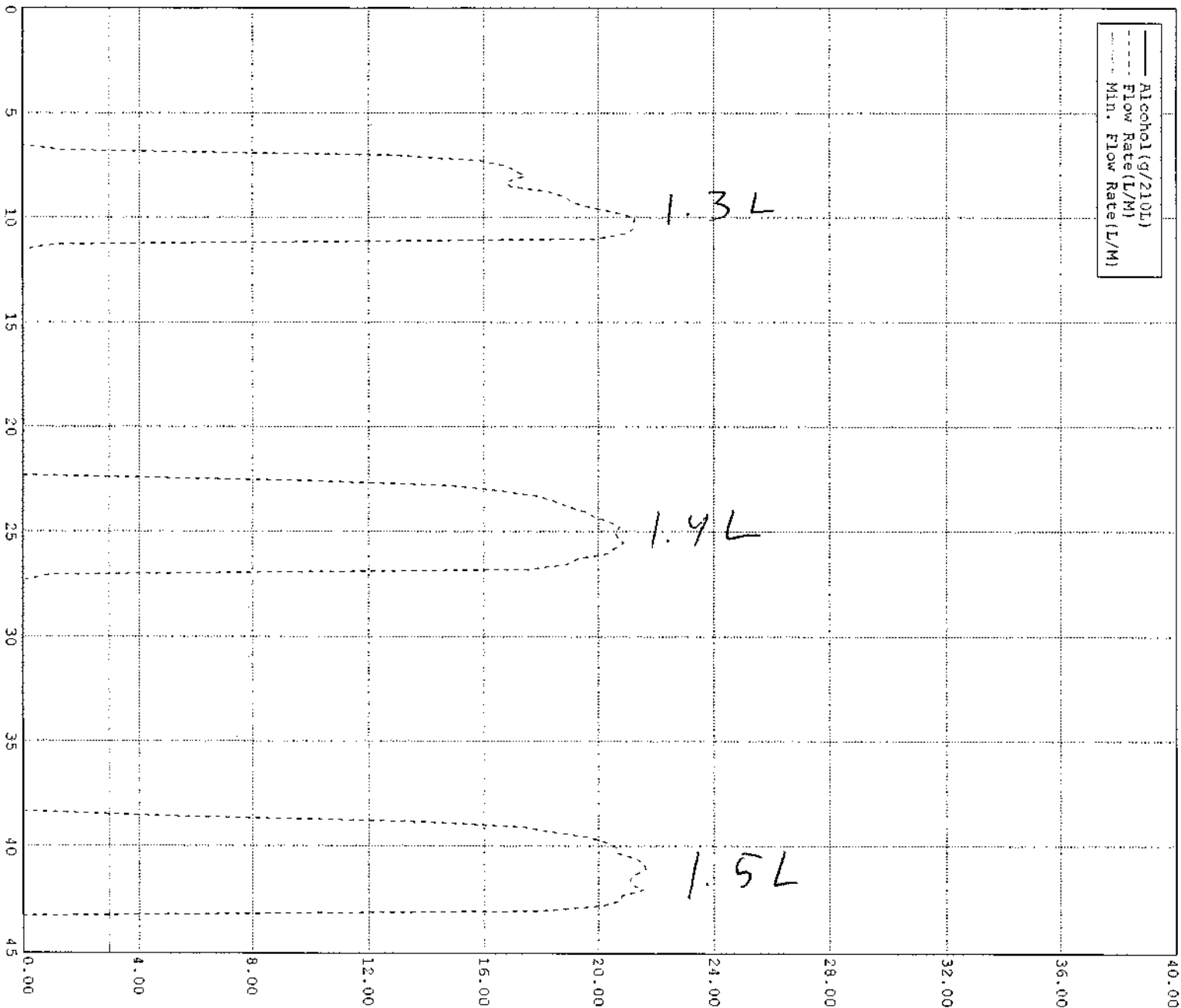
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
MINIMUM VOLUME  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.16: 0.078  
LOT #: 01315080A3  
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:45
BLANK TEST	0.000	10:45
INTERNAL STANDARD	VERIFIED	10:45
EXTERNAL STANDARD	0.077	10:46
BLANK TEST	0.000	10:47
SUBJECT SAMPLE (Vol=1.52L)	0.000	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.077	10:49
BLANK TEST	0.000	10:49



LINEARITY CHECK

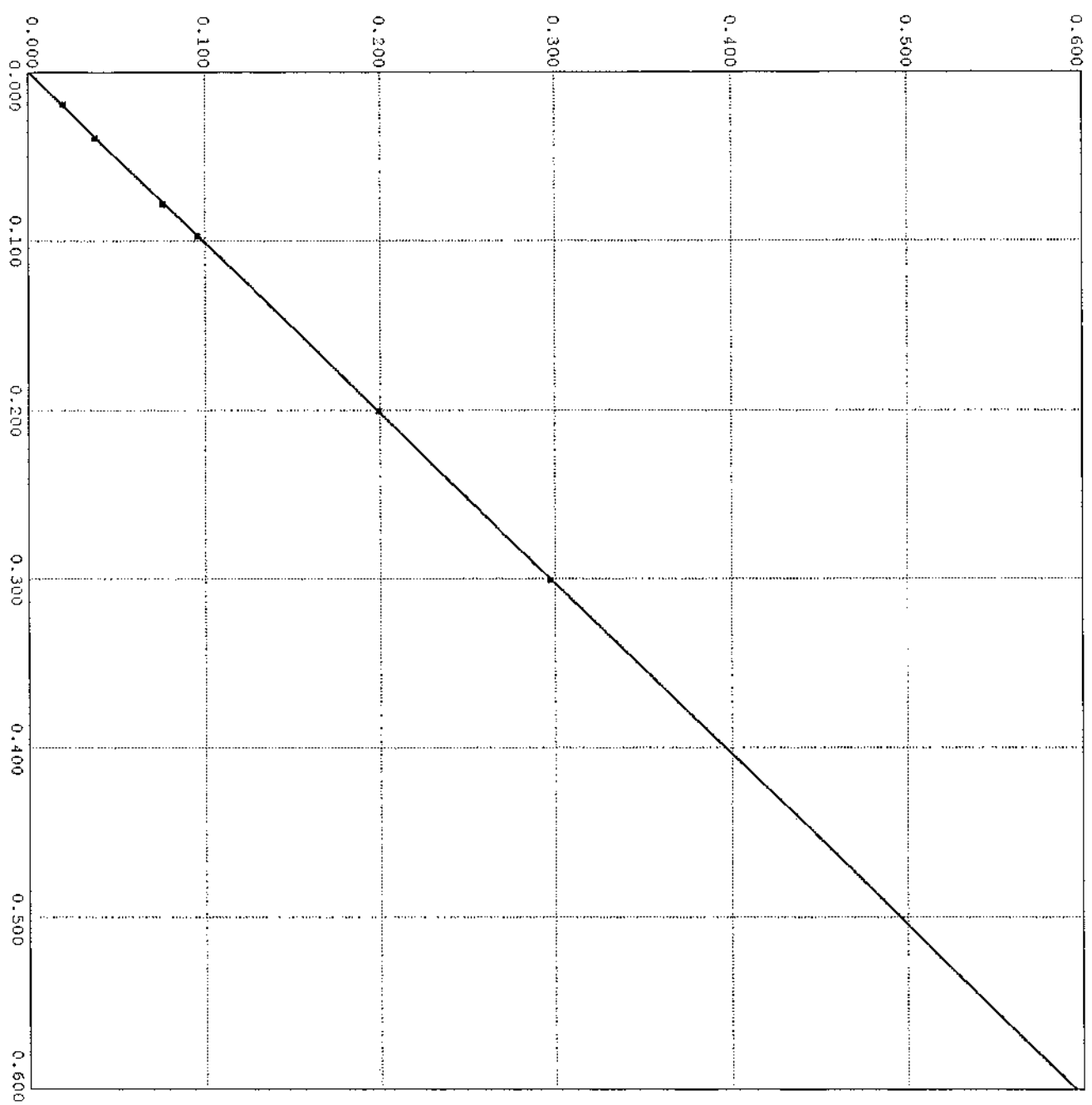
Alaska Department of Public Safety  
DATEMASTER dmt: 100383

Date: 12/02/2015  
Time: 12:06:48

SUPERVISOR NAME:  
CHARLES FOSTER  
OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.019	0.0204	0.0005
0.039	0.0390	0.0000
0.078	0.0772	0.0004
0.097	0.0968	0.0004
0.200	0.2000	0.0007
0.300	0.2980	0.0000

SLOPE = 0.992050  
R<sup>2</sup> = 0.999955



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100383

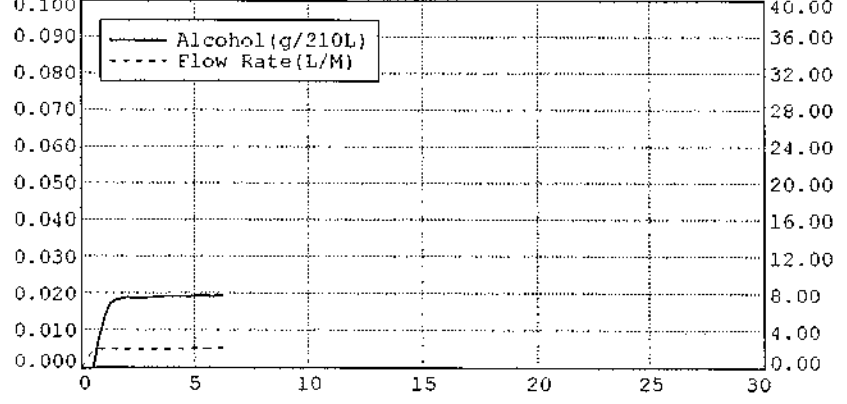
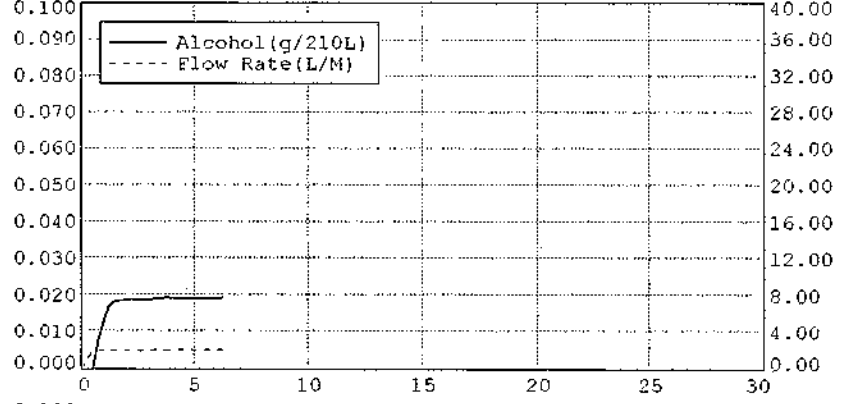
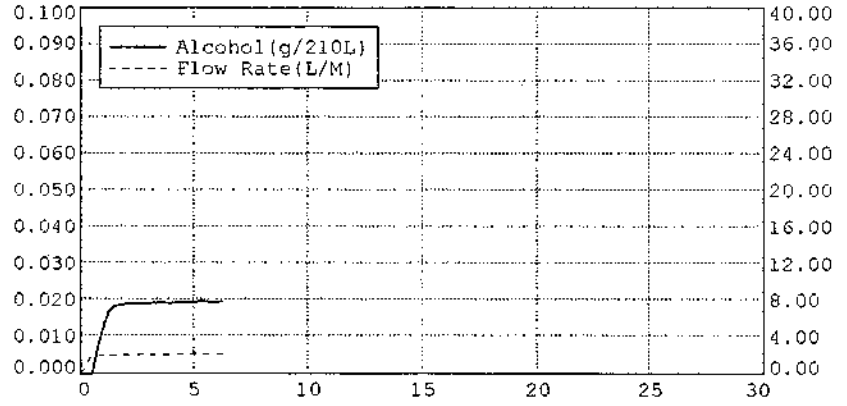
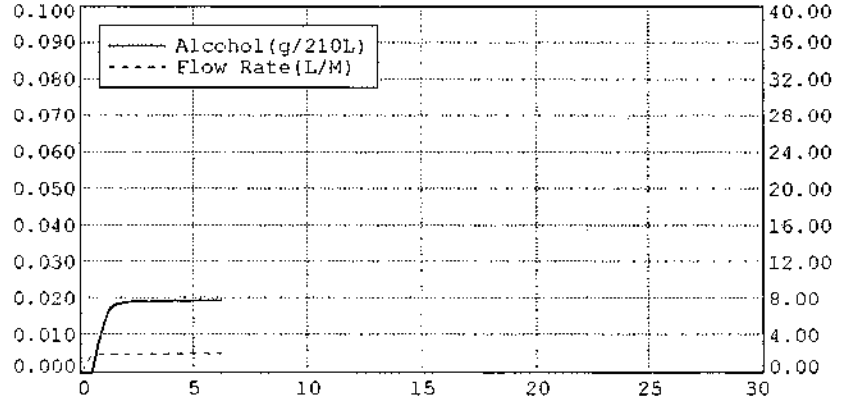
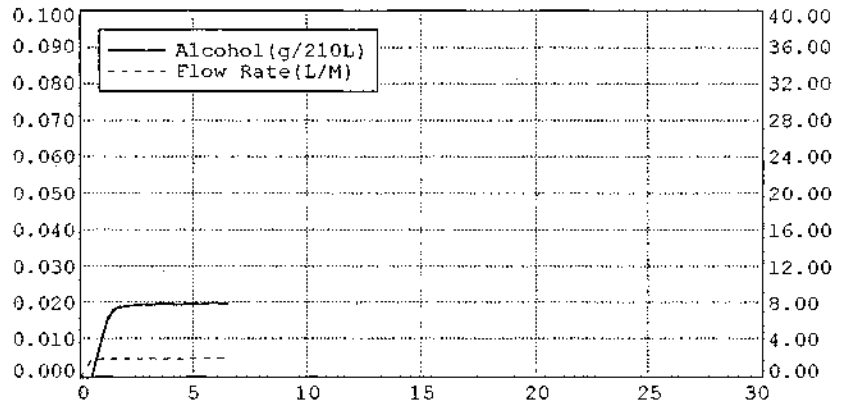
Date: 12/02/2015  
 Time: 12:06:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.16: 0.019  
 LOT #: 02915020A2  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 742 psi

BLANK TEST	0.000	12:08
INTERNAL STANDARD	VERIFIED	12:08
EXTERNAL STANDARD	0.021	12:08
BLANK TEST	0.000	12:09
EXTERNAL STANDARD	0.020	12:09
BLANK TEST	0.000	12:10
EXTERNAL STANDARD	0.021	12:10
BLANK TEST	0.000	12:11
EXTERNAL STANDARD	0.020	12:11
BLANK TEST	0.000	12:12
EXTERNAL STANDARD	0.020	12:12
BLANK TEST	0.000	12:13

Average = 0.0204  
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

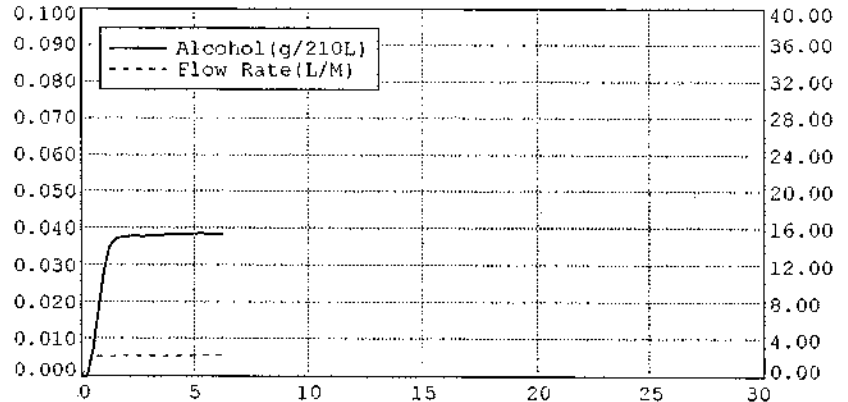
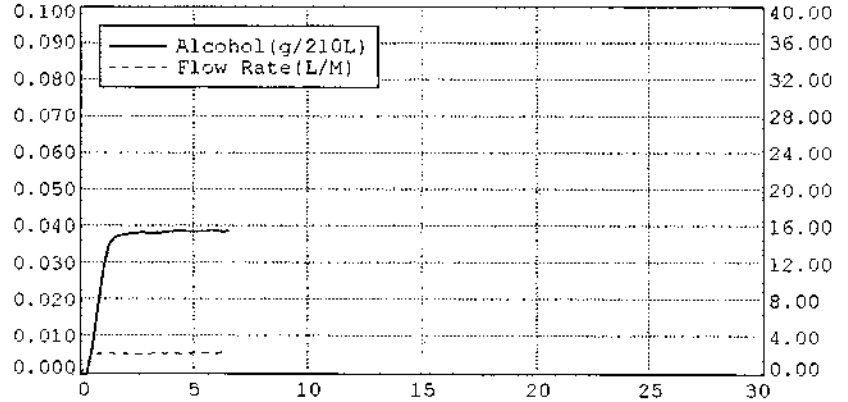
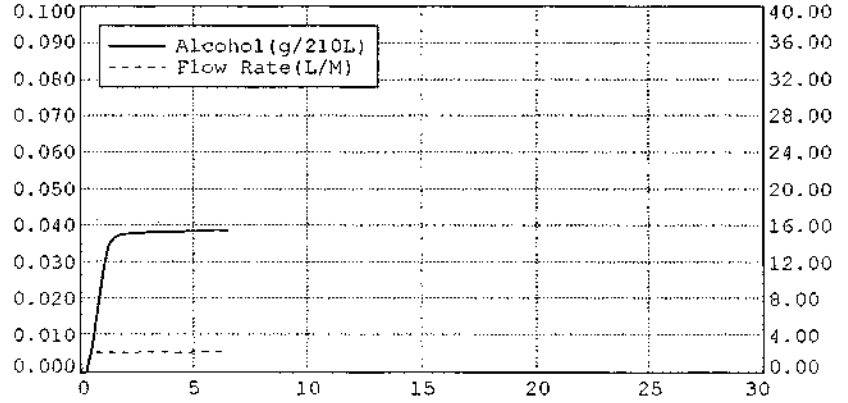
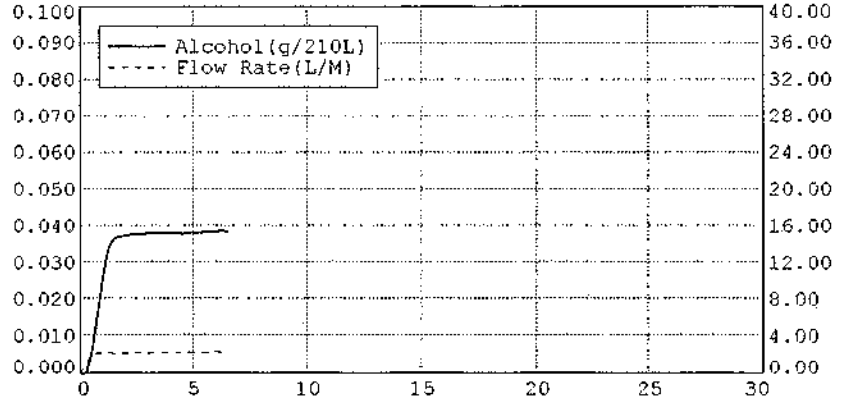
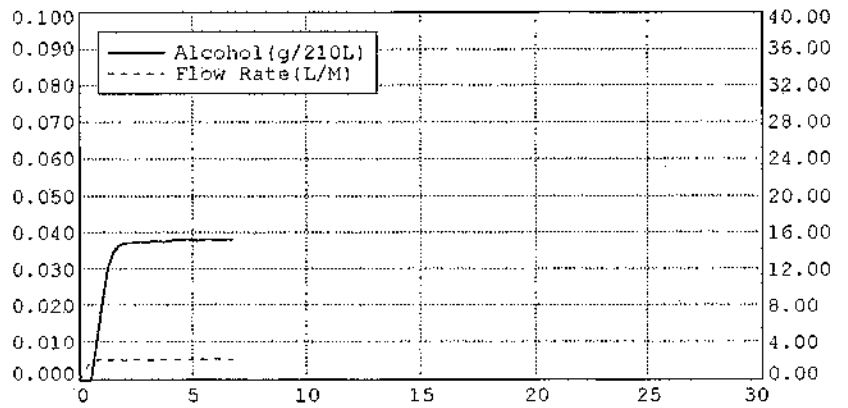
Alaska Department of Public Safety  
 DATAMASTER dmt: 100383

Date: 12/02/2015  
 Time: 12:14:20

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.040  
 TARGET AT 29.16: 0.039  
 LOT #: 02915040A3  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 777 psi

BLANK TEST	0.000	12:15
INTERNAL STANDARD	VERIFIED	12:15
EXTERNAL STANDARD	0.039	12:15
BLANK TEST	0.000	12:16
EXTERNAL STANDARD	0.039	12:17
BLANK TEST	0.000	12:17
EXTERNAL STANDARD	0.039	12:18
BLANK TEST	0.000	12:19
EXTERNAL STANDARD	0.039	12:19
BLANK TEST	0.000	12:20
EXTERNAL STANDARD	0.039	12:20
BLANK TEST	0.000	12:21

Average = 0.0390  
 Std Dev = 0.0000





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100383

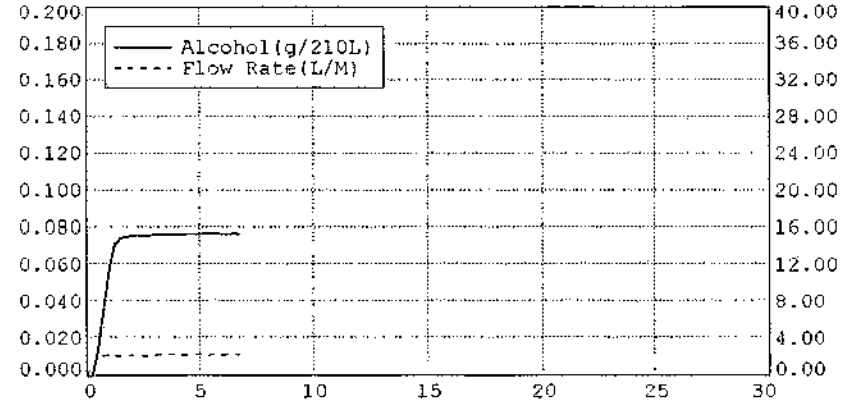
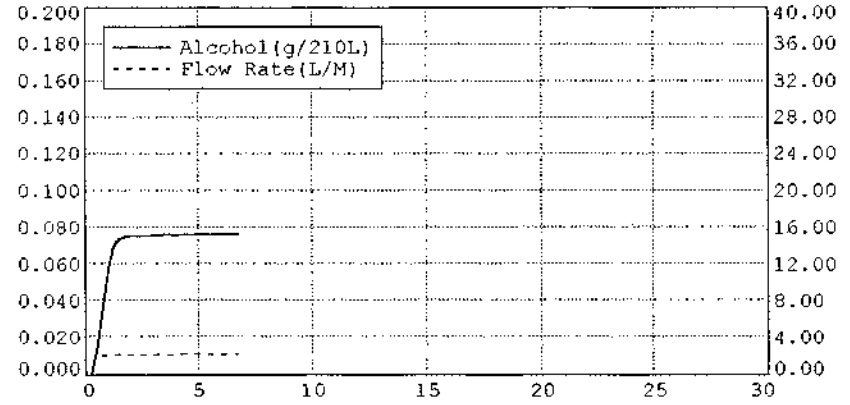
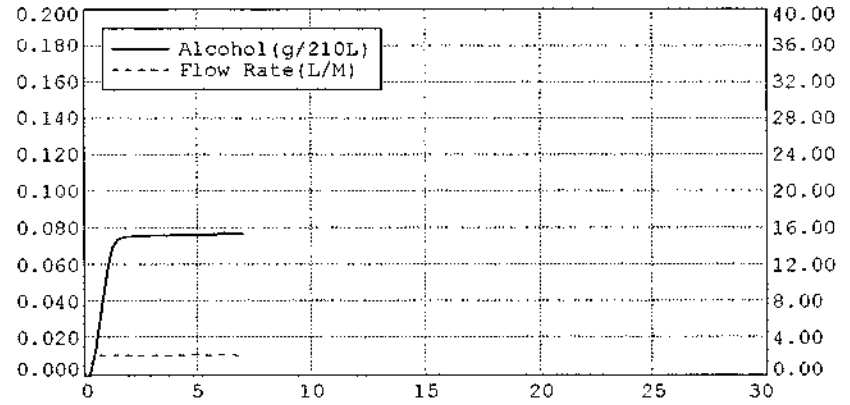
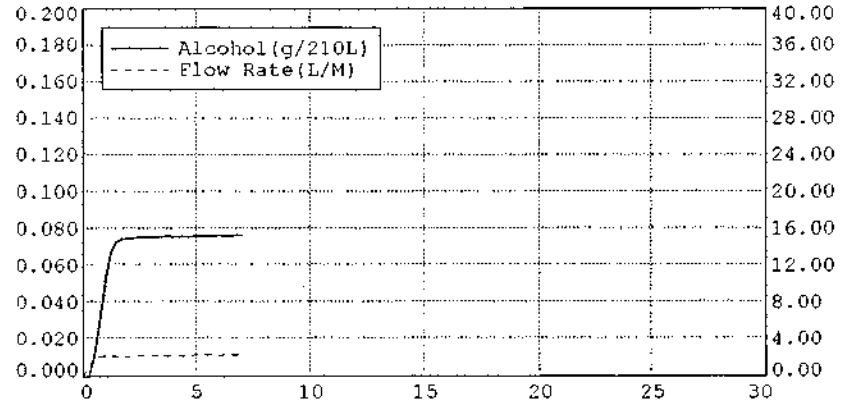
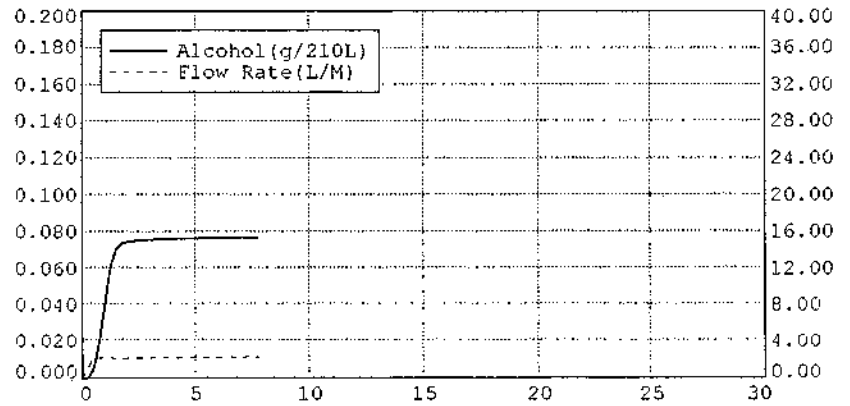
Date: 12/02/2015  
 Time: 12:21:44

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.16: 0.078  
 LOT #: 01315080A3  
 EXPIRATION: 02/05/2017  
 TANK PRESSURE: 911 psi

BLANK TEST	0.000	12:23
INTERNAL STANDARD	VERIFIED	12:23
EXTERNAL STANDARD	0.078	12:23
BLANK TEST	0.000	12:24
EXTERNAL STANDARD	0.077	12:24
BLANK TEST	0.000	12:25
EXTERNAL STANDARD	0.077	12:25
BLANK TEST	0.000	12:26
EXTERNAL STANDARD	0.077	12:26
BLANK TEST	0.000	12:27
EXTERNAL STANDARD	0.077	12:27
BLANK TEST	0.000	12:28

Average = 0.0772  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100383

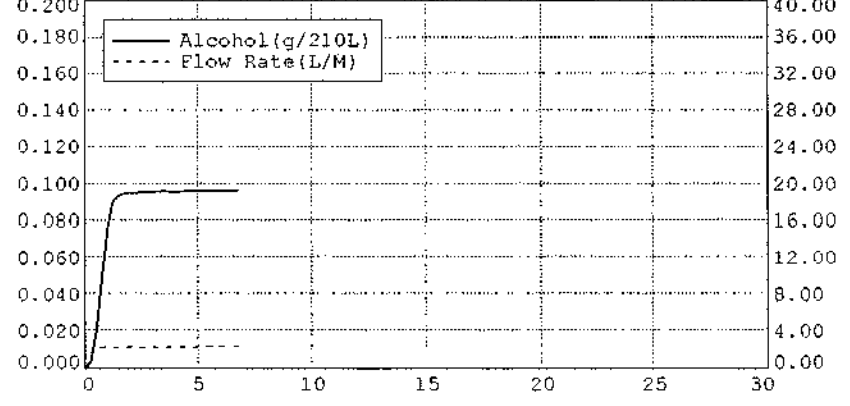
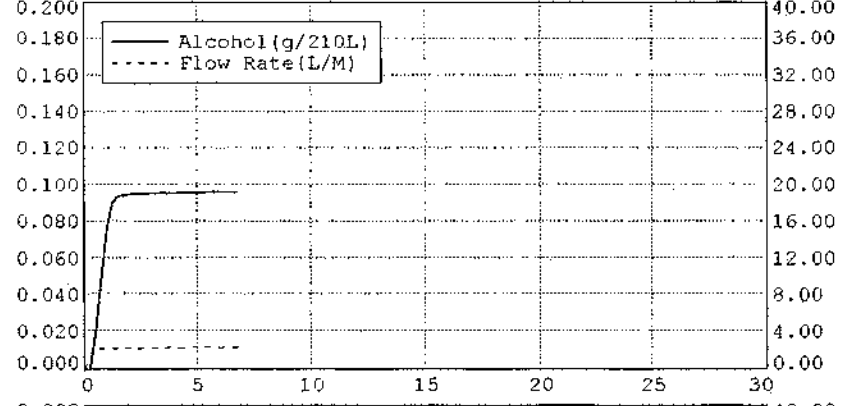
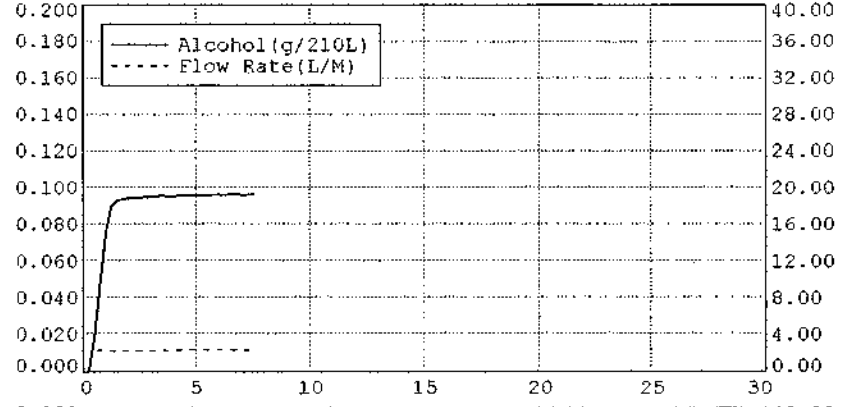
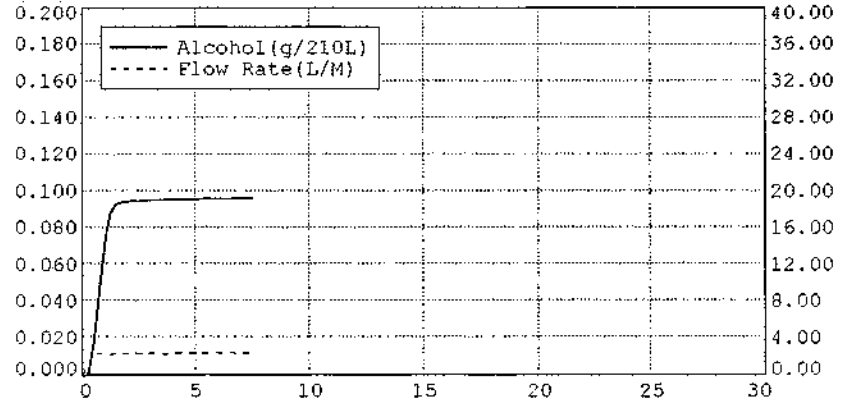
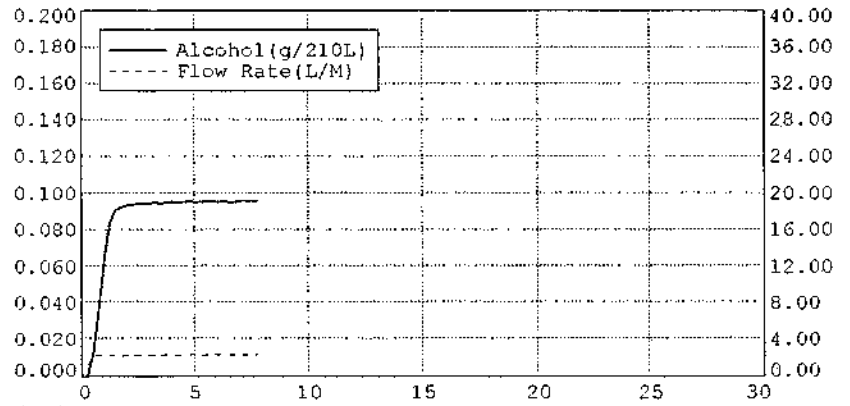
Date: 12/02/2015  
 Time: 12:30:37

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.16: 0.097  
 LOT #: 02915100A1  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 1065 psi

BLANK TEST	0.000	12:32
INTERNAL STANDARD	VERIFIED	12:32
EXTERNAL STANDARD	0.096	12:32
BLANK TEST	0.000	12:33
EXTERNAL STANDARD	0.097	12:33
BLANK TEST	0.000	12:34
EXTERNAL STANDARD	0.097	12:34
BLANK TEST	0.000	12:35
EXTERNAL STANDARD	0.097	12:35
BLANK TEST	0.000	12:36
EXTERNAL STANDARD	0.097	12:36
BLANK TEST	0.000	12:37

Average = 0.0968  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

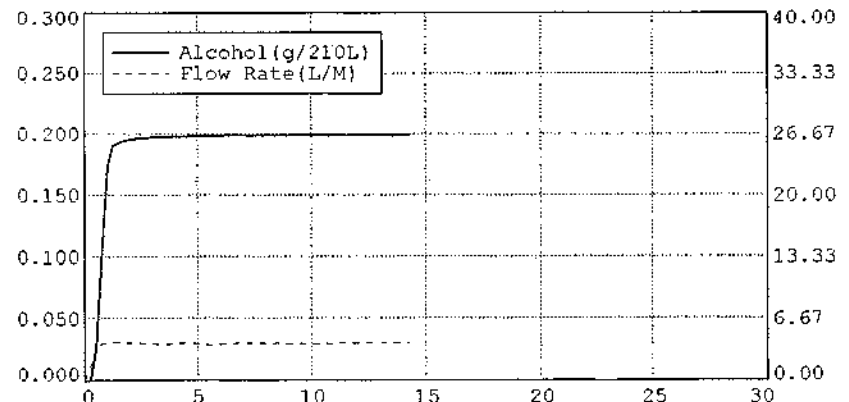
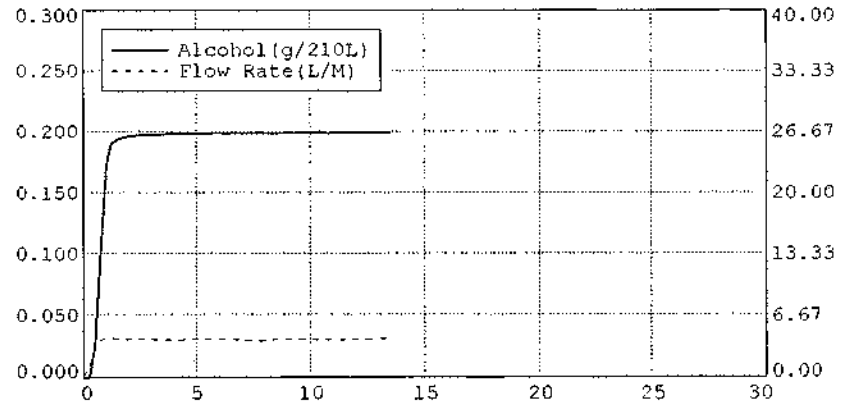
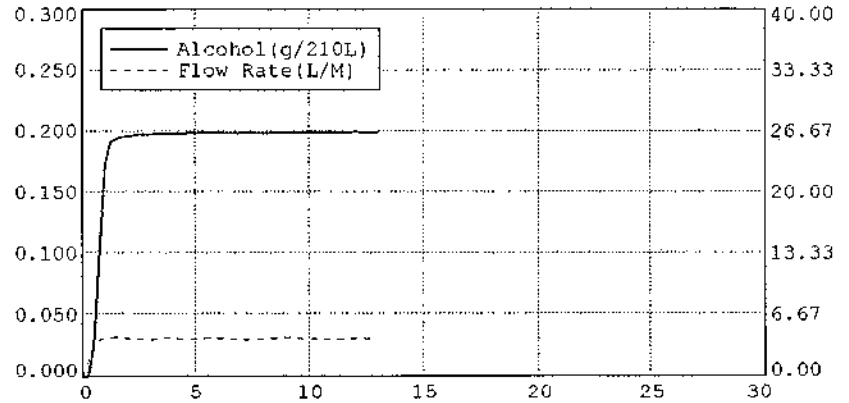
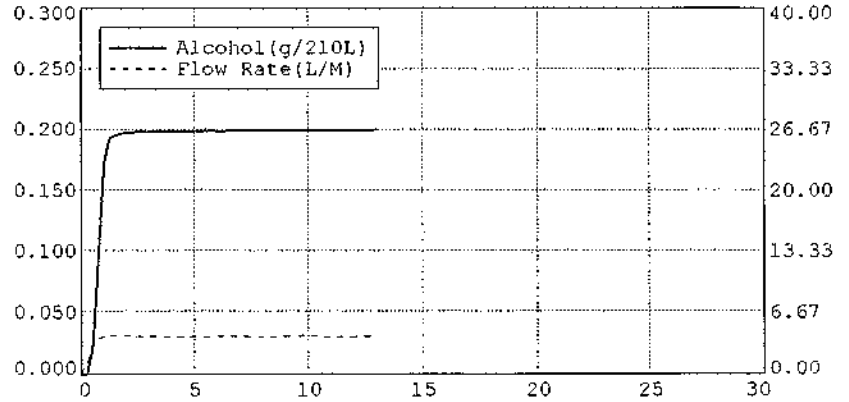
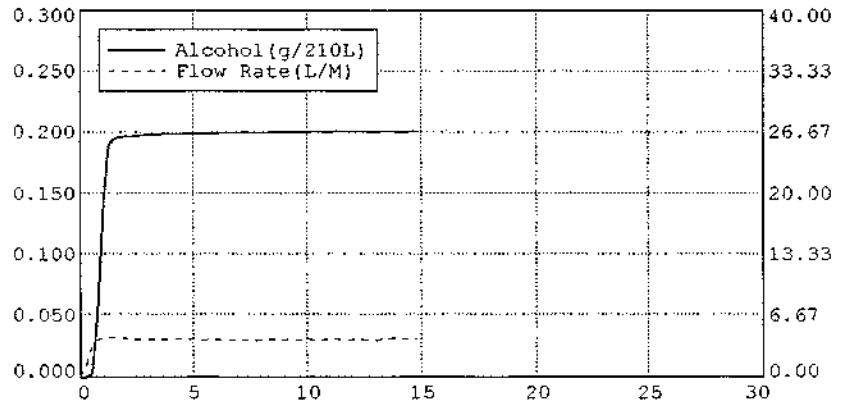
Alaska Department of Public Safety  
 DATAMASTER dmt: 100383

Date: 12/02/2015  
 Time: 12:38:49

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.200  
 LOT #: 15130  
 EXPIRATION: 05/11/2017

BLANK TEST	0.000	12:40
INTERNAL STANDARD	VERIFIED	12:40
EXTERNAL STANDARD	0.201	12:40
BLANK TEST	0.000	12:41
EXTERNAL STANDARD	0.200	12:41
BLANK TEST	0.000	12:42
EXTERNAL STANDARD	0.200	12:43
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.199	12:44
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.200	12:45
BLANK TEST	0.000	12:46

Average = 0.2000  
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100383

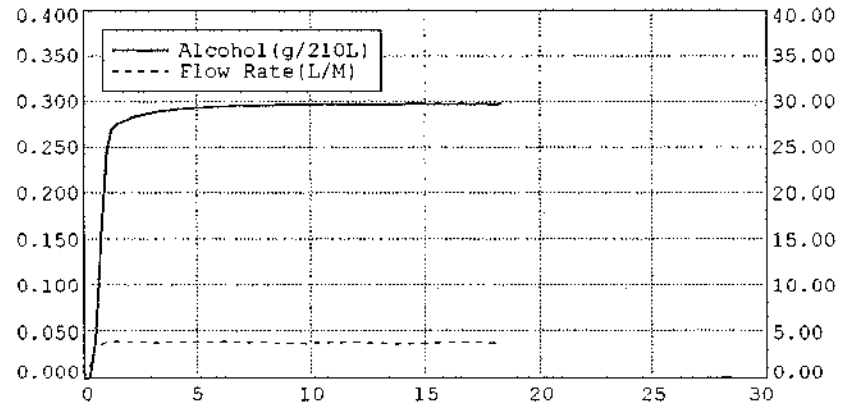
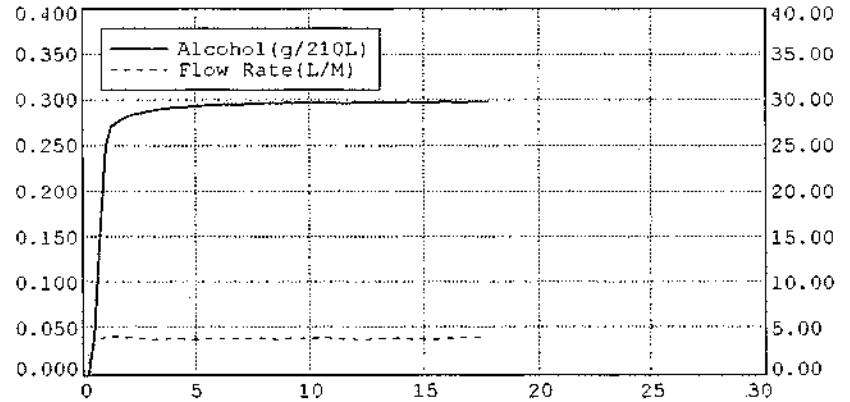
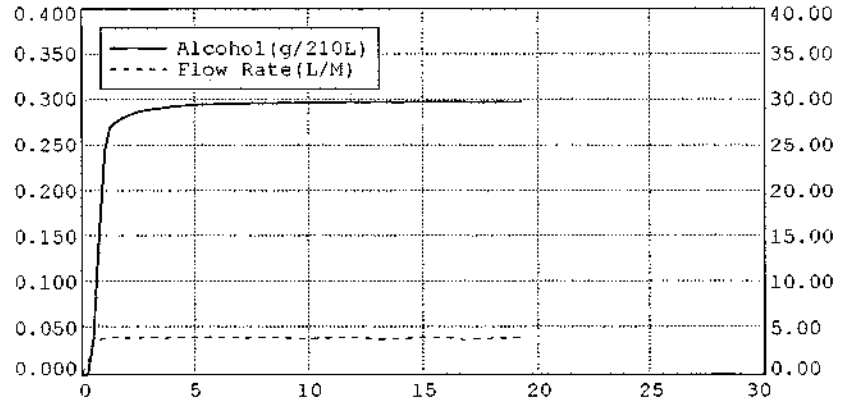
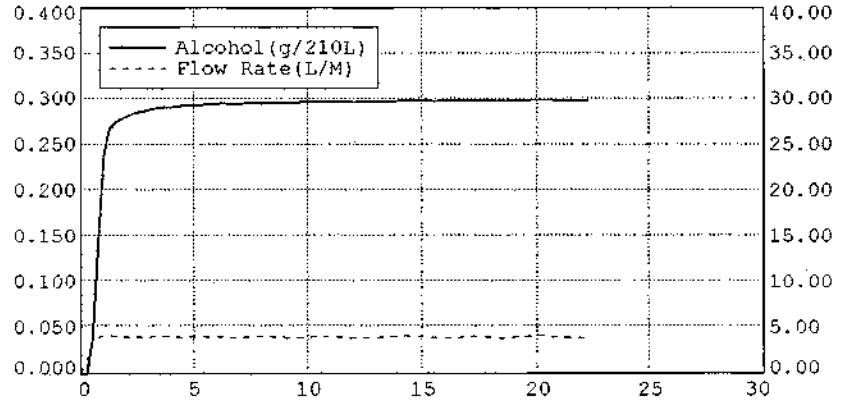
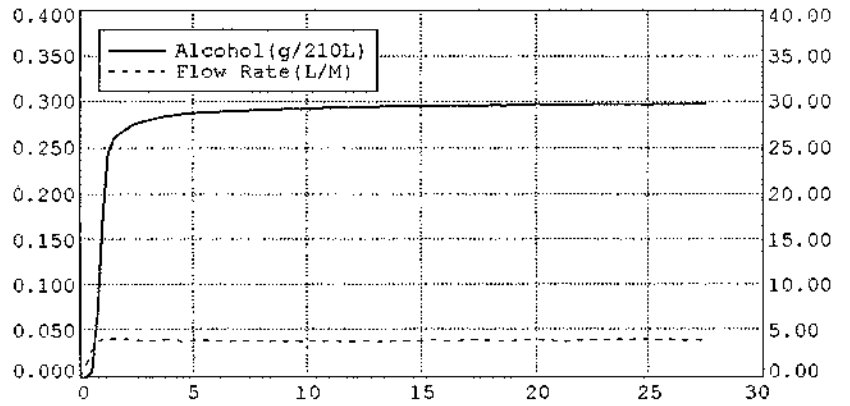
Date: 12/02/2015  
 Time: 12:48:29

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
 LOT #: 14270  
 EXPIRATION: 12/02/2016

BLANK TEST	0.000	12:49
INTERNAL STANDARD	VERIFIED	12:49
EXTERNAL STANDARD	0.298	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.298	12:51
BLANK TEST	0.000	12:52
EXTERNAL STANDARD	0.298	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.298	12:54
BLANK TEST	0.000	12:55
EXTERNAL STANDARD	0.298	12:55
BLANK TEST	0.000	12:56

Average = 0.2980  
 Std Dev = 0.0000



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100383

Date: 12/02/2015  
Time: 13:30:40

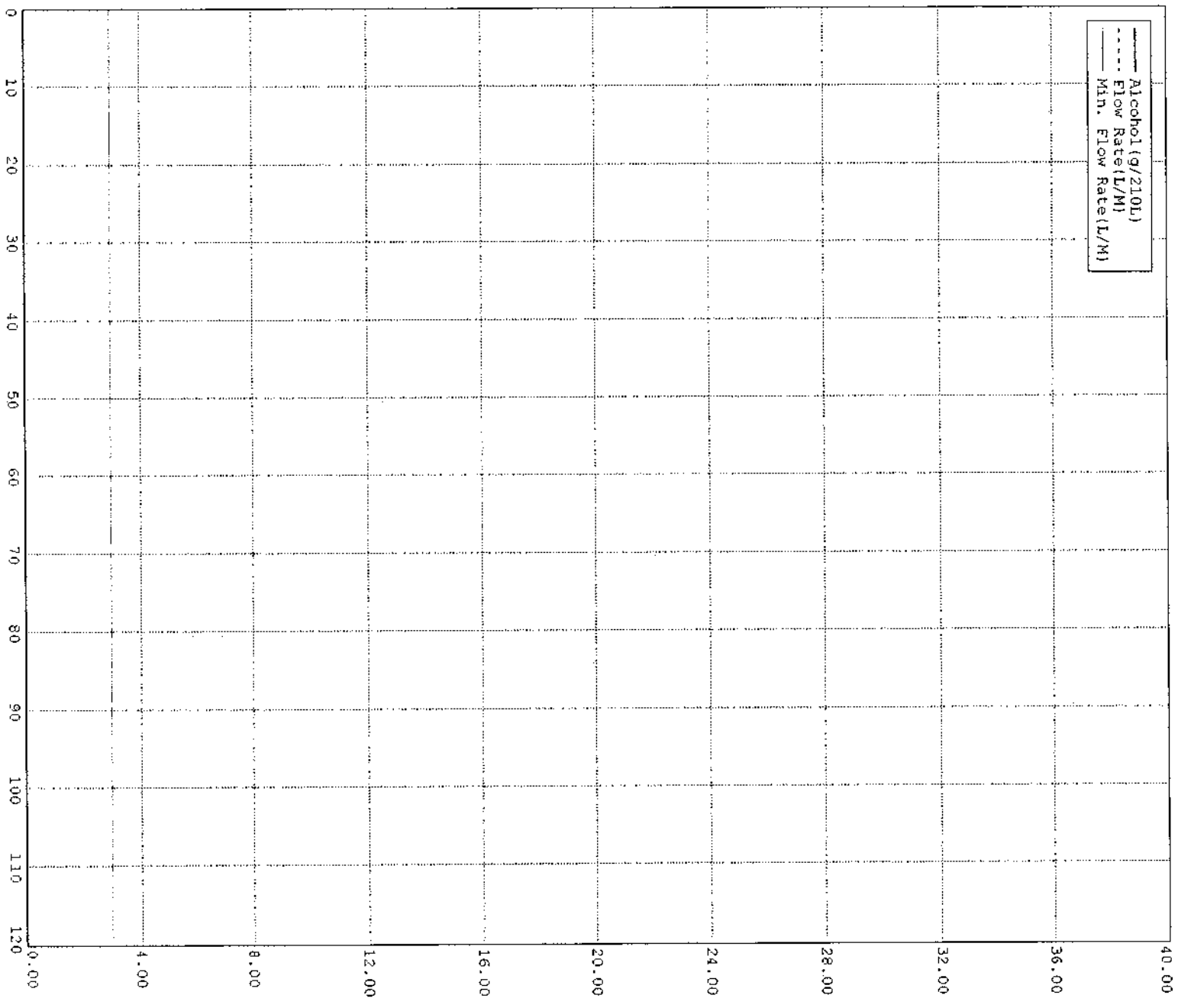
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
INCOMPLETE XXXX  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.16: 0.078  
LOT #: 01315080A3  
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	13:32
BLANK TEST	0.000	13:32
INTERNAL STANDARD	VERIFIED	13:33
EXTERNAL STANDARD	0.077	13:33
BLANK TEST	0.000	13:34
SUBJECT SAMPLE	INCOMPLETE	13:36



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100383

Date: 12/02/2015

Time: 13:57:58

SUBJECT NAME:

TEST TEST

LICENSE #: XXXX

OPERATOR NAME:

MOUETH ETOH

OPERATOR'S #: XXXX

DEPT/AGENCY:

XXXX

CASE/REPORT: XXXX

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.16: 0.078

LOT #: 01315080A3

EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK

BLANK TEST

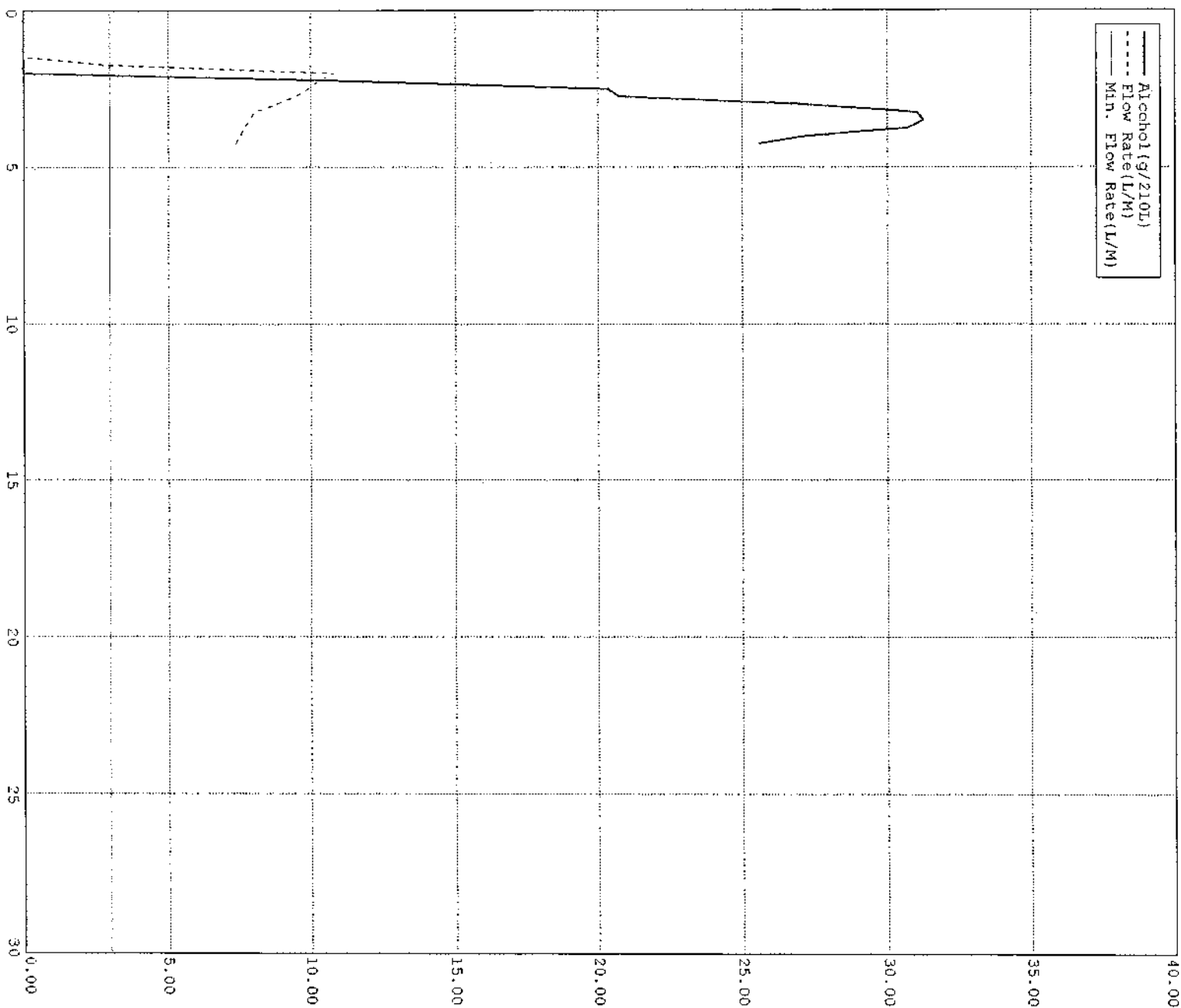
INTERNAL STANDARD

EXTERNAL STANDARD

BLANK TEST

SUBJECT SAMPLE

TEST TYPE	RESULT	TIME
PASSED	0.000	14:00
INTERNAL STANDARD	0.000	14:00
EXTERNAL STANDARD	0.077	14:01
BLANK TEST	0.000	14:02
SUBJECT SAMPLE	INVALID	14:02



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100383

Date: 12/02/2015  
Time: 14:12:00

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
INTERFERENCE ACETONE  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.16: 0.078  
LOT #: 01315080A3  
EXPIRATION: 02/05/2017

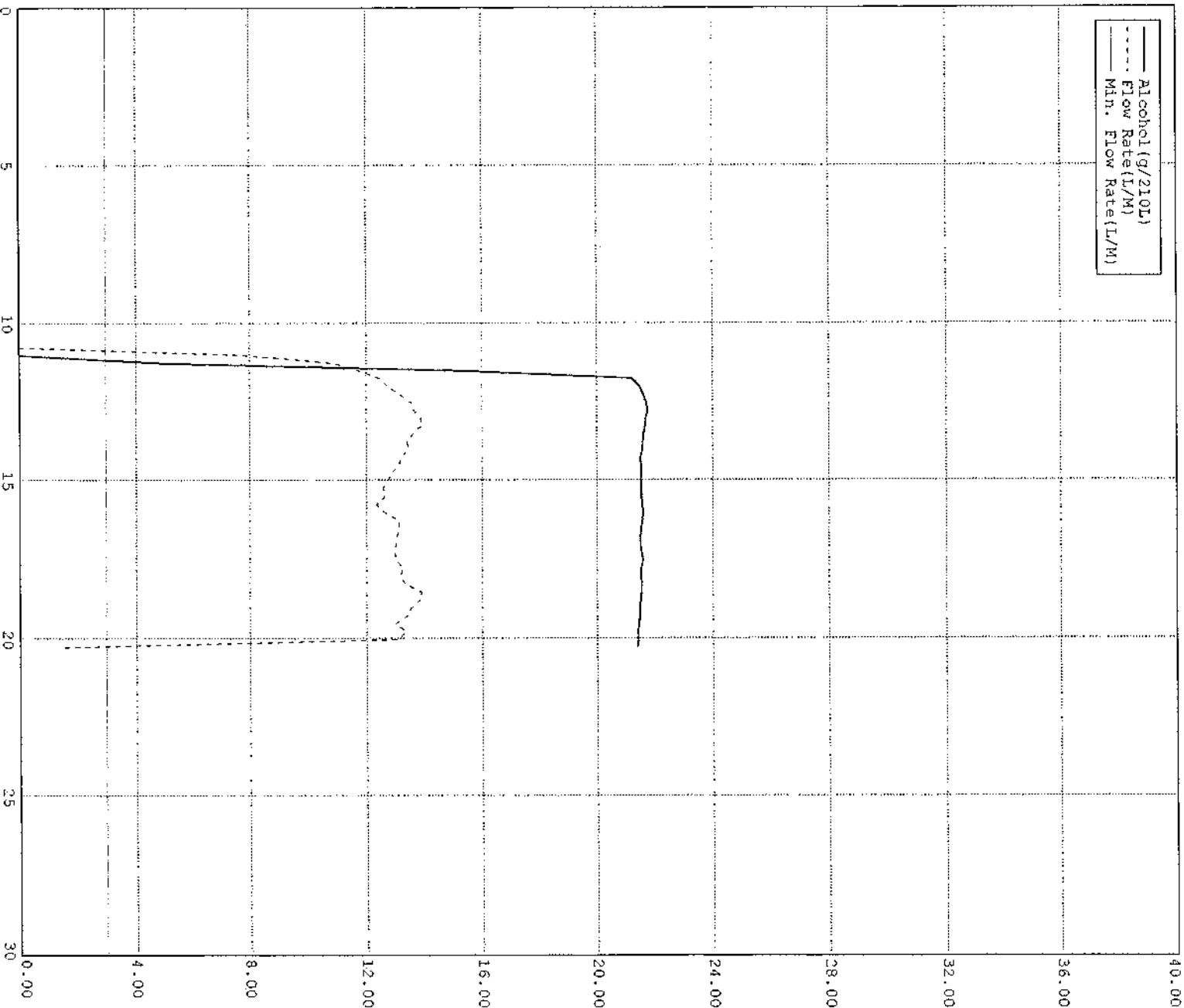
DIAGNOSTIC CHECK	PASSED	14:13
BLANK TEST	0.000	14:13
INTERNAL STANDARD	VERIFIED	14:13
Xq = 0.094 (1.23%)		
EXTERNAL STANDARD	0.077	14:13
X[1] = 0.0772 (-0.0003) (0.0020)		
BLANK TEST	0.000	14:14
SUBJECT SAMPLE	XXX	14:14
X[1] = 0.1074 (-0.0188) (0.0015)		

Interference Detected

Filter 2 Avg = -0.0004

Filter 3 Avg = 0.0020

CME 12/2/15



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100383

Date: 12/02/2015  
Time: 14:19:16

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

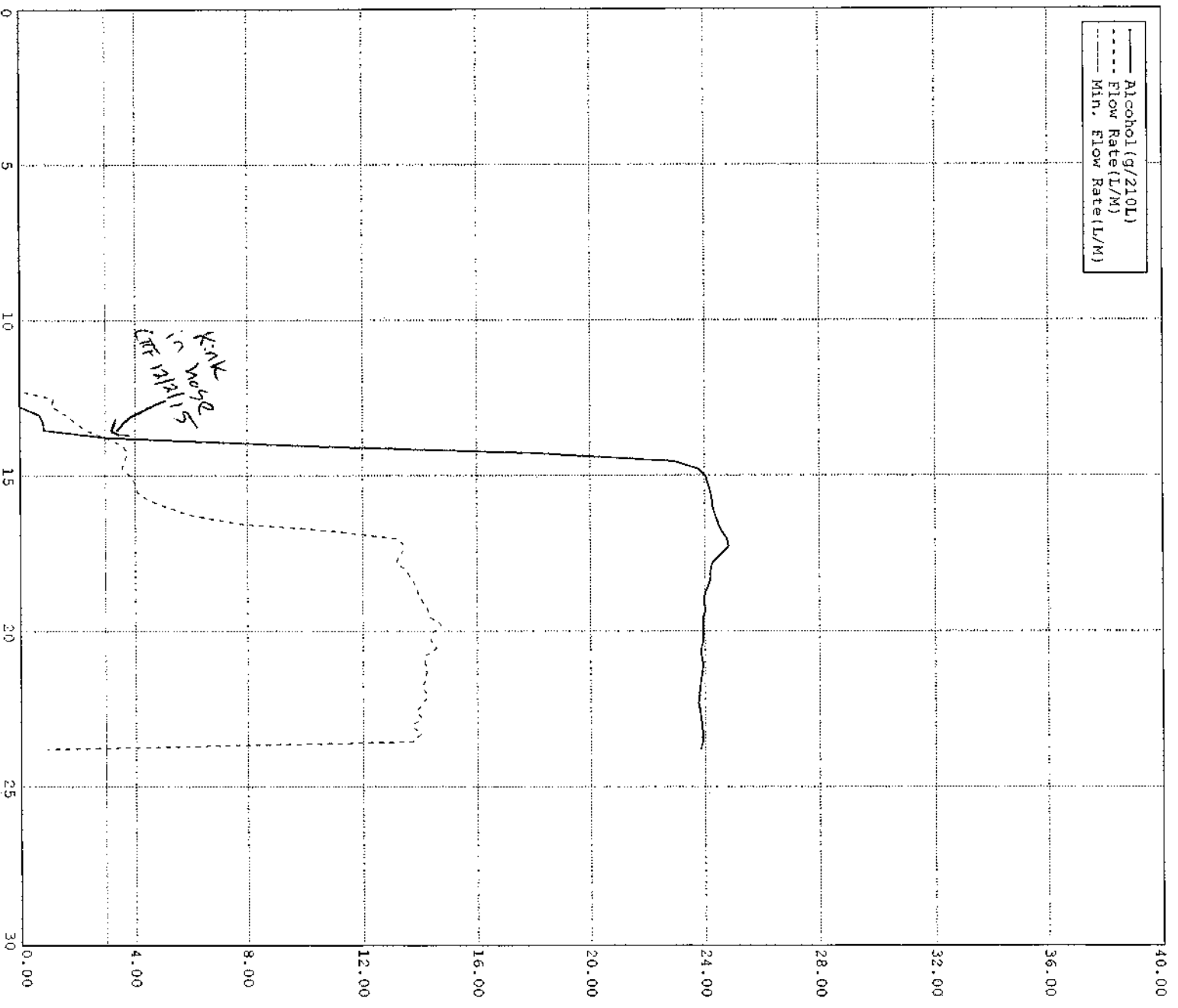
OPERATOR NAME:  
INTERFERENCE IPA  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.16: 0.078  
LOT #: 01315080A3  
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	14:21
BLANK TEST	0.000	14:21
INTERNAL STANDARD	VERIFIED	14:21
X <sub>T</sub> = 0.095 (2.17%)		
EXTERNAL STANDARD	0.078	14:21
X[1] = 0.0780 (0.0000)	(0.0025)	
BLANK TEST	0.000	14:22
SUBJECT SAMPLE	XXX	14:23
X[1] = 0.1194 (-0.0247)	(0.0034)	

Inference Detected





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100383

Date: 12/02/2015  
Time: 14:29:37

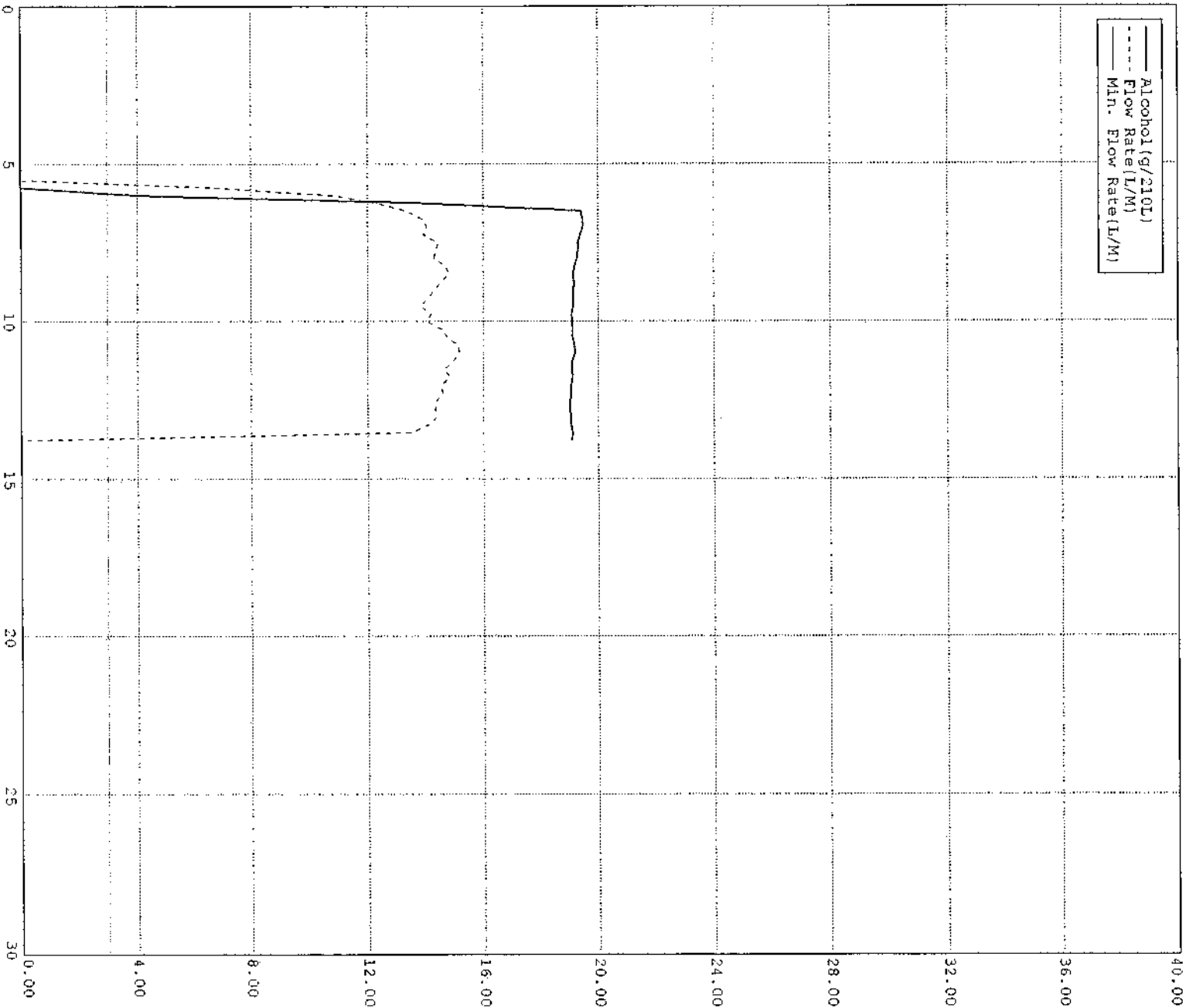
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
INTERFERENCE NEGATIVE  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.16: 0.078  
LOT #: 01315080A3  
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	14:31
BLANK TEST	0.000	14:31
INTERNAL STANDARD	VERIFIED	14:31
Xg = 0.094 (1.51%)		
EXTERNAL STANDARD	0.077	14:31
X[1] = 0.0772 (0.0001)	(0.0025)	
BLANK TEST	0.000	14:32
SUBJECT SAMPLE (Vol=1.87L)	0.095	14:32
X[1] = 0.0955 (-0.0014)	(0.0019)	
BLANK TEST	0.000	14:33
EXTERNAL STANDARD	0.077	14:33
X[1] = 0.0769 (-0.0012)	(0.0010)	
BLANK TEST	0.000	14:34



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmc: 100383

Date: 12/02/2015  
Time: 15:04:59

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

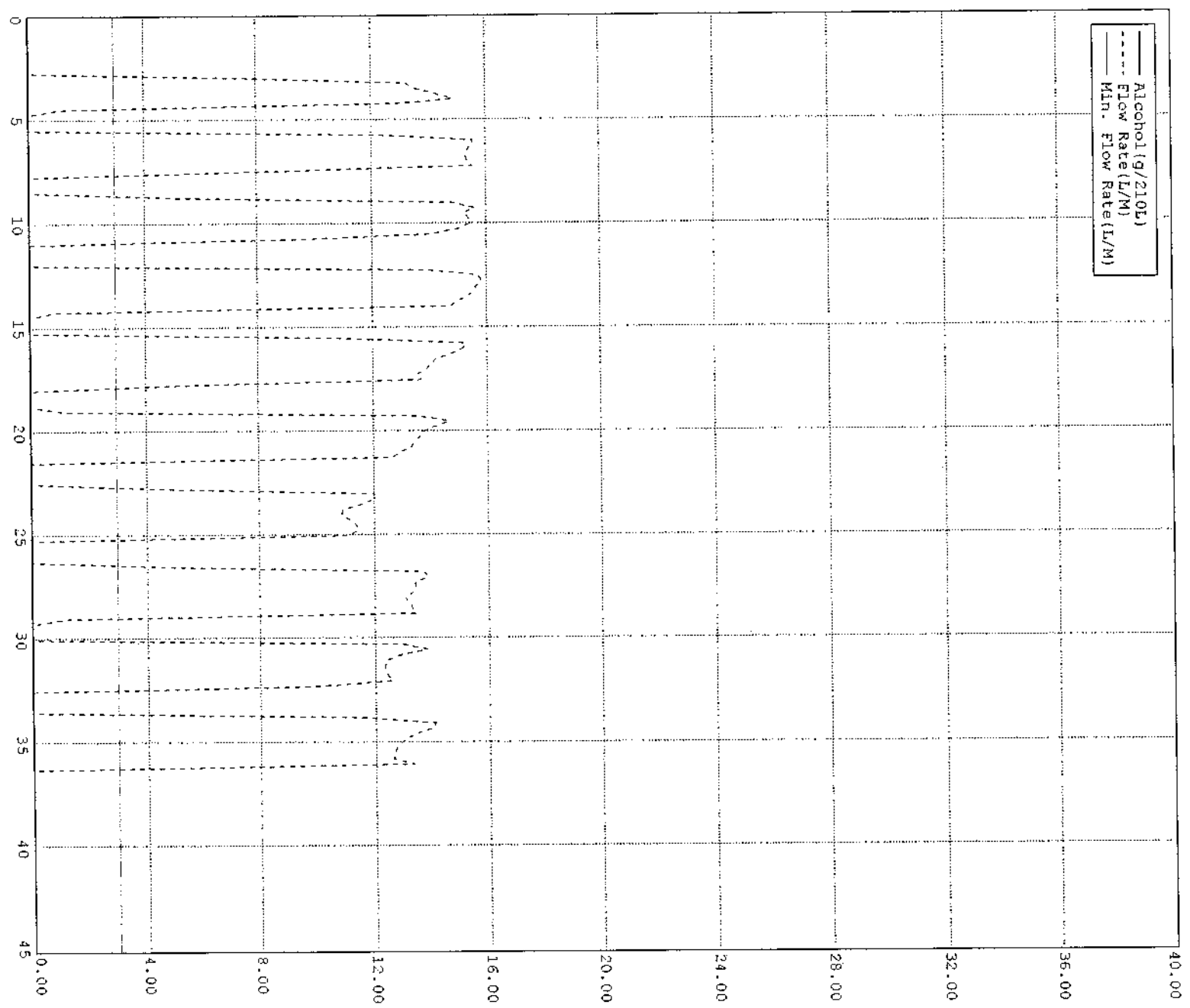
OPERATOR NAME:  
EXCEEDED ATTEMPTS  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.16: 0.078  
LOT #: 01315080A3  
EXPIRATION: 02/05/2017

TEST TYPE	PASSED	15:07
DIAGNOSTIC CHECK	0.000	15:07
BLANK TEST	0.000	15:07
INTERNAL STANDARD	0.077	15:07
EXTERNAL STANDARD	0.000	15:08
BLANK TEST	XXX	15:09

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmc: 100383

Date: 12/02/2015  
Time: 15:27:18

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

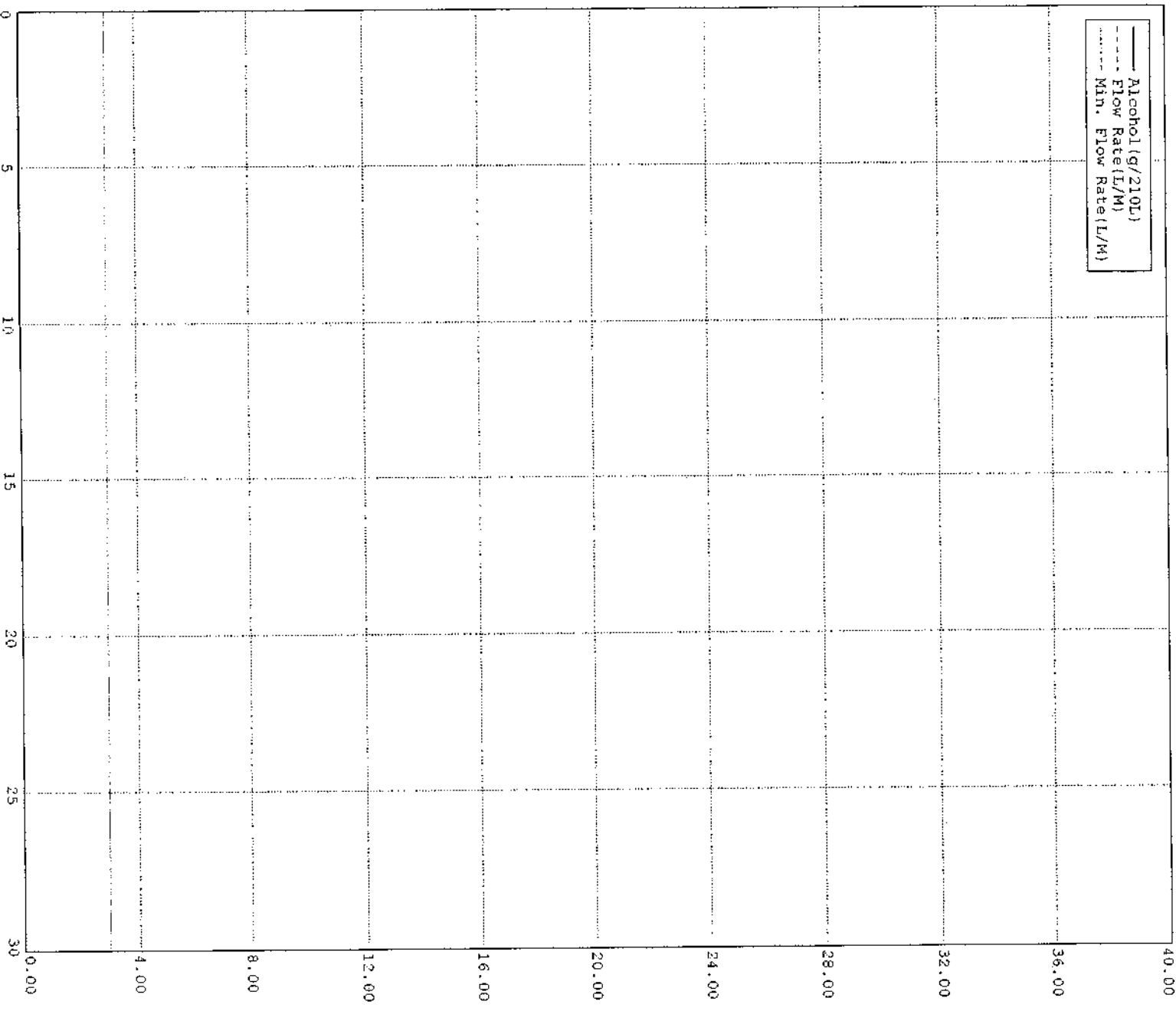
OPERATOR NAME:  
RPT XXXX  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.15: 0.078  
LOT #: 01315080A3  
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 15:29  
BLANK TEST 0.000 15:29  
INTERNAL STANDARD VERIFIED 15:29  
EXTERNAL STANDARD 0.077 15:29  
BLANK TEST 0.000 15:30

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100383

Date: 12/02/2015  
Time: 15:43:59

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 29.16: 0.078  
LOT #: 01315080A3  
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	15:45
BLANK TEST	0.000	15:46
INTERNAL STANDARD	VERIFIED	15:46
EXTERNAL STANDARD	0.077	15:46
BLANK TEST	0.000	15:47
SUBJECT SAMPLE (Vol=2.34L)	0.000	15:47
BLANK TEST	0.000	15:48
EXTERNAL STANDARD	0.078	15:48
BLANK TEST	0.000	15:49

