

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 100384 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 01315080A2 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: 100384

Date: 12/02/2015
Time: 10:13:08

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 = 1.62 V PASSED
(0.97 V - 2.27 V)
Cooler Voltage = 1.49 V PASSED
(0.89 V - 2.09 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 522 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.1 in

PUMP INFO

Flow Rate = 4.465 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 = 0.085 1.31% PASSED
(0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100384

Date: 12/02/2015
Time: 10:27 AM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 48.1°C

Current Barometer 29.2 in
Volume (Ltr) 1.46

Settings

Lamp: 1.68 V
Bias: 80 V
Cooler: 1.59 V
Chopper: 521 Hz

Voltages (V)

Flow: 1.06 V
Detector: -0.052 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100384

Date: 08/12/2015
Time: 12:59:33

OPERATOR NAME:
COLLEEN S O'BRYAN
CERTIFICATE #: 6237

Ca	=	0.1000		
CAL	=	0.945546	0.800 <=	CAL < 1.200
b1	=	0.0004	0.0000 <=	b1 < 0.0040
b2	=	0.0064	0.0010 <=	b2 < 0.0100
b3	=	0.0003	0.0000 <=	b3 < 0.0040
Xq	=	0.0862	0.0500 <=	Xq < 0.2000
a21	=	1.174741	1.050 <=	a21 < 1.300
a31	=	0.527980	0.300 <=	a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100384

Date: 12/02/2015
Time: 10:48:42

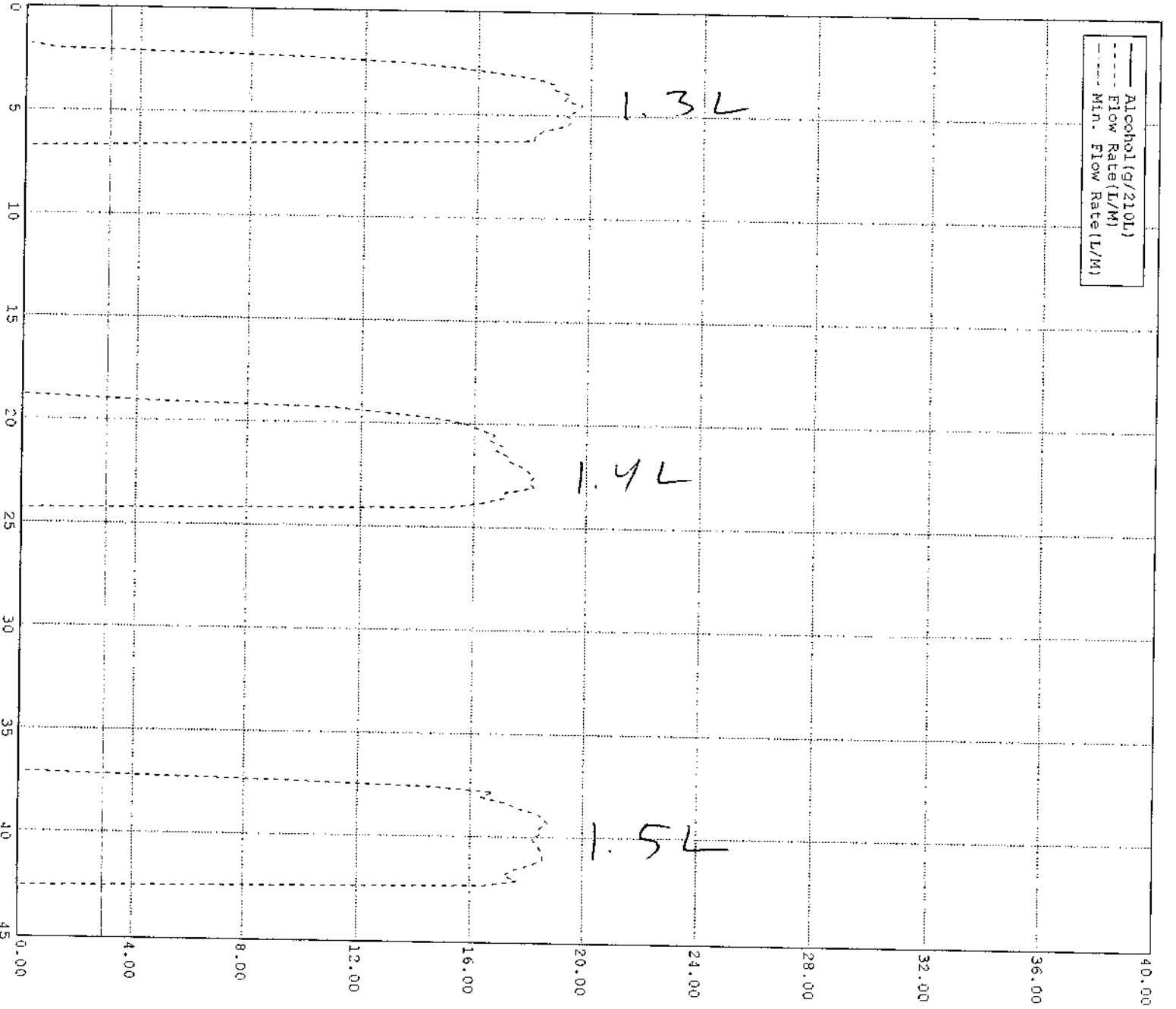
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:49
INTERNAL STANDARD	0.000	10:49
EXTERNAL STANDARD	0.075	10:50
INTERNAL STANDARD	0.000	10:51
EXTERNAL STANDARD	0.000	10:52
INTERNAL STANDARD	0.000	10:53



LINEARITY CHECK

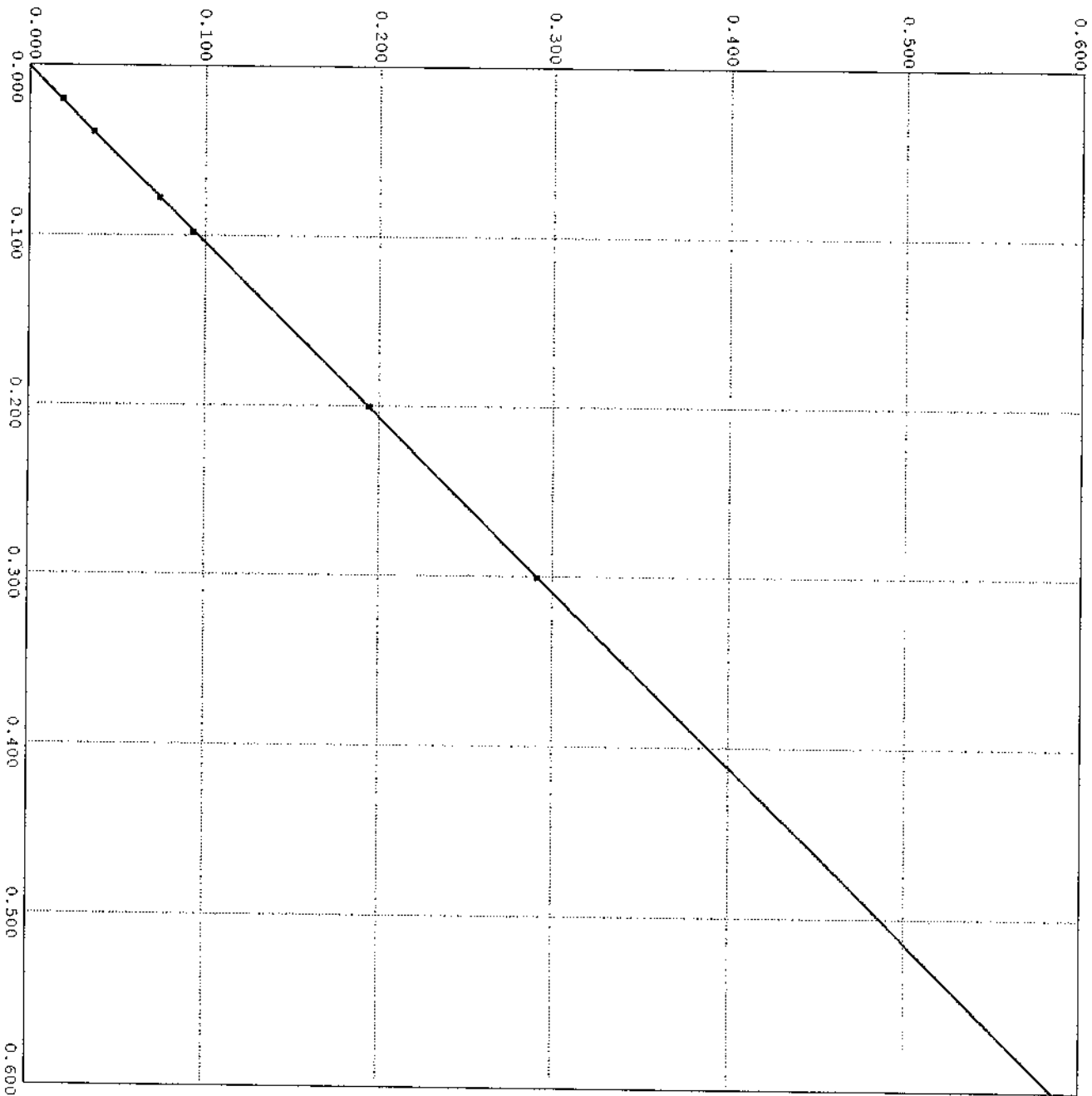
Alaska Department of Public Safety
DATAMASTER dmt: 100384

Date: 12/02/2015
Time: 12:15:44

SUPERVISOR NAME:
CHARLES FOSTER
OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.020	0.0196	0.0005
0.039	0.0380	0.0000
0.078	0.0750	0.0000
0.098	0.0940	0.0000
0.200	0.1952	0.0004
0.300	0.2924	0.0009

SLOPE = 0.976290
R² = 0.999955



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100384

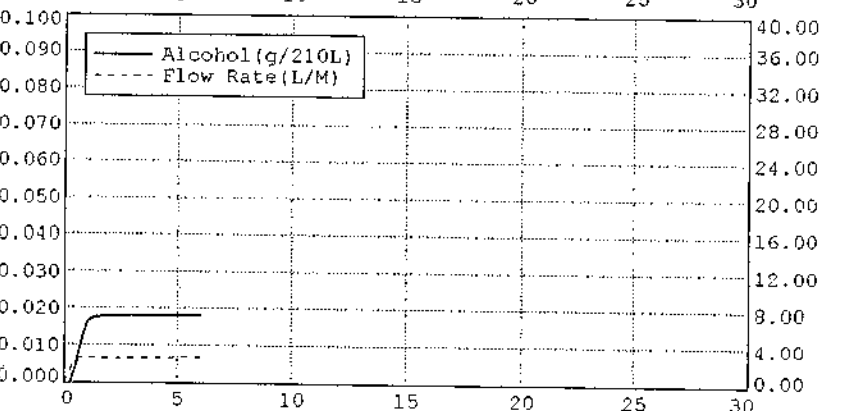
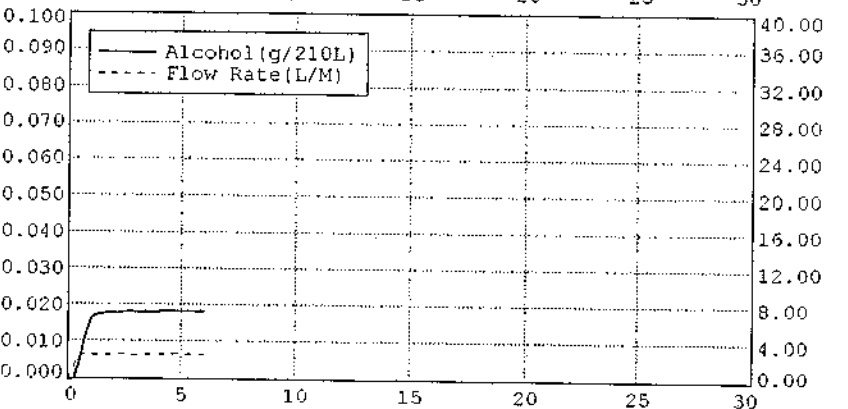
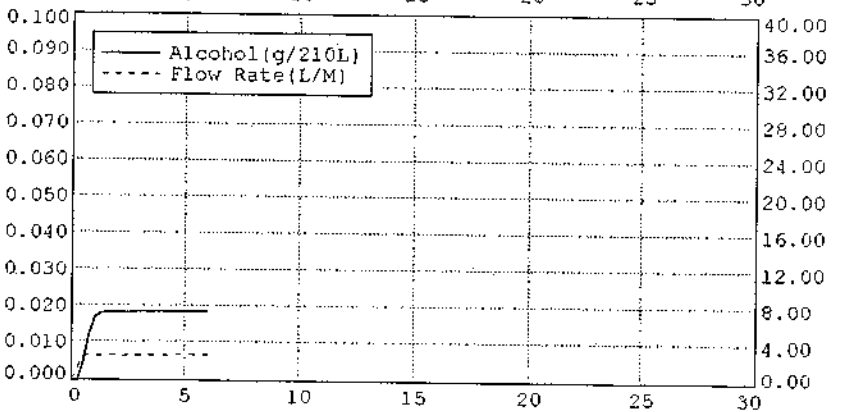
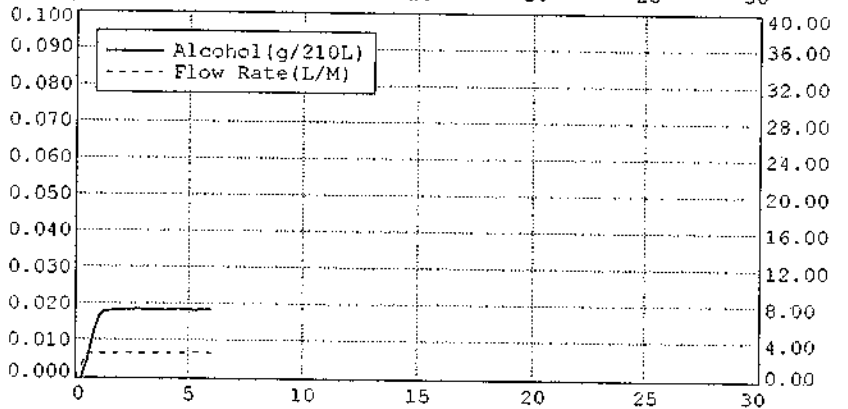
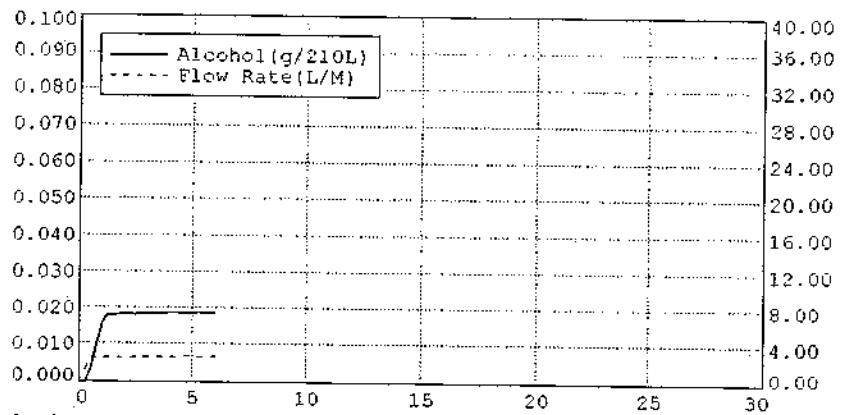
Date: 12/02/2015
 Time: 12:15:46

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.18: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 734 psi

BLANK TEST	0.000	12:17
INTERNAL STANDARD	VERIFIED	12:17
EXTERNAL STANDARD	0.020	12:17
BLANK TEST	0.000	12:18
EXTERNAL STANDARD	0.020	12:18
BLANK TEST	0.000	12:19
EXTERNAL STANDARD	0.020	12:19
BLANK TEST	0.000	12:20
EXTERNAL STANDARD	0.019	12:20
BLANK TEST	0.000	12:21
EXTERNAL STANDARD	0.019	12:21
BLANK TEST	0.000	12:22

Average = 0.0196
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100384

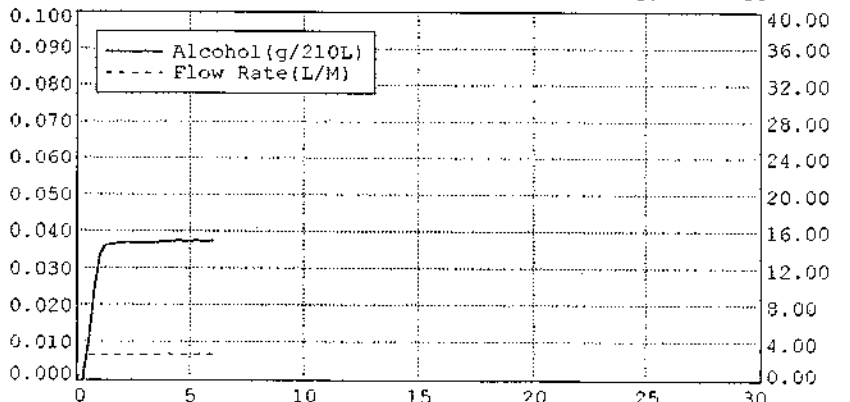
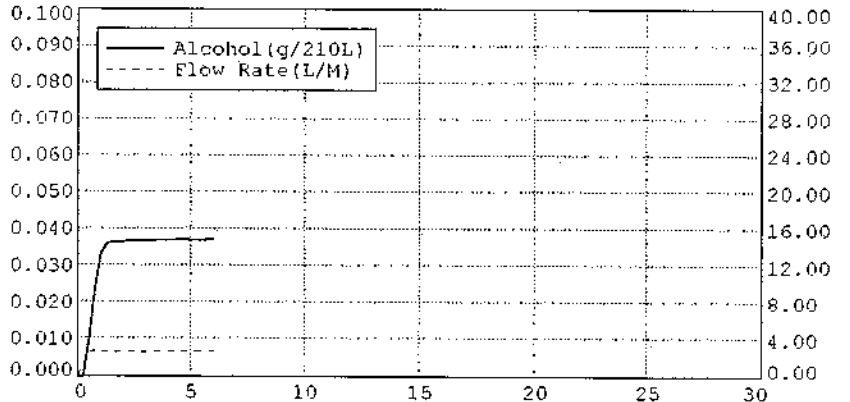
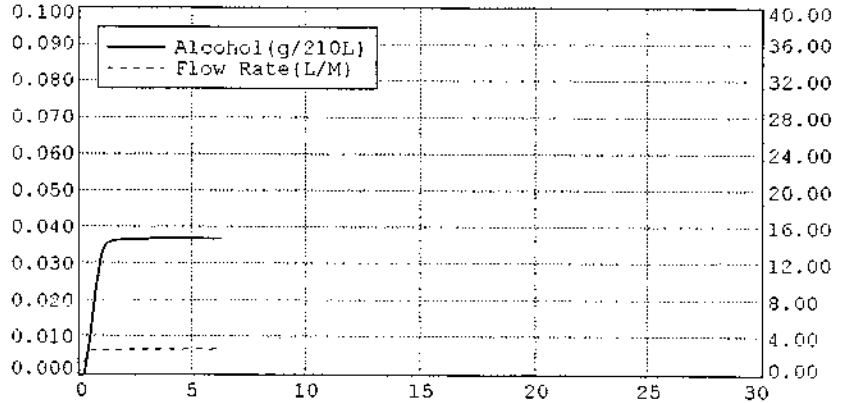
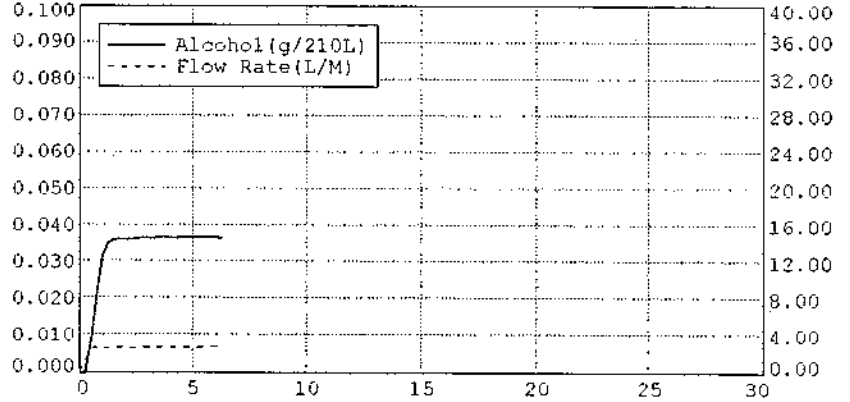
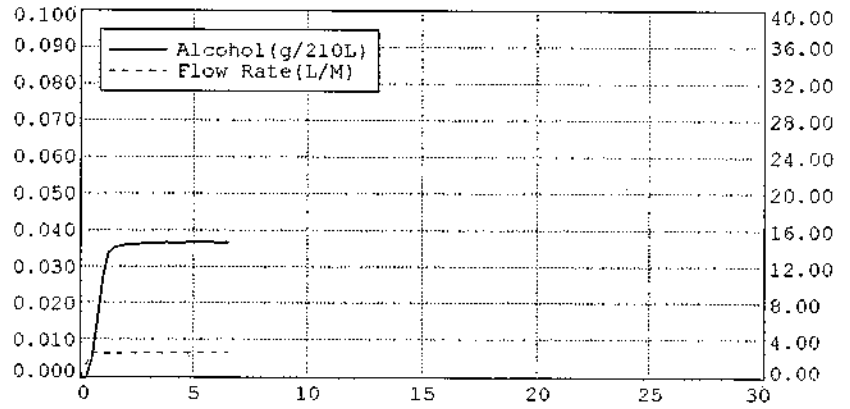
Date: 12/02/2015
 Time: 12:23:15

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.17: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 770 psi

BLANK TEST	0.000	12:24
INTERNAL STANDARD	VERIFIED	12:24
EXTERNAL STANDARD	0.038	12:24
BLANK TEST	0.000	12:25
EXTERNAL STANDARD	0.038	12:26
BLANK TEST	0.000	12:26
EXTERNAL STANDARD	0.038	12:27
BLANK TEST	0.000	12:28
EXTERNAL STANDARD	0.038	12:28
BLANK TEST	0.000	12:29
EXTERNAL STANDARD	0.038	12:29
BLANK TEST	0.000	12:30

Average = 0.0380
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100384

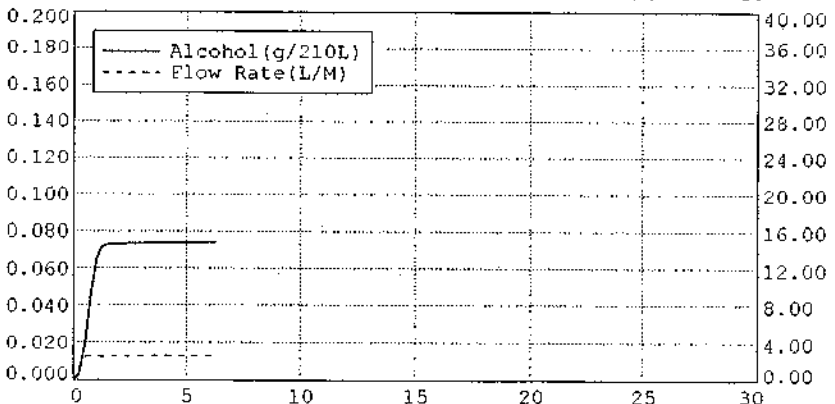
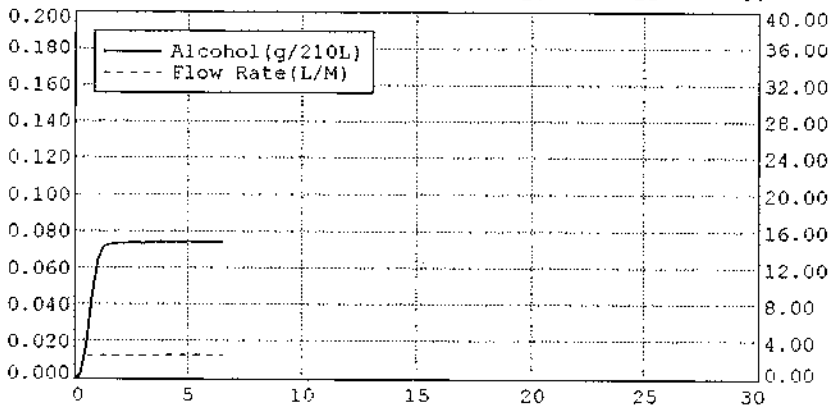
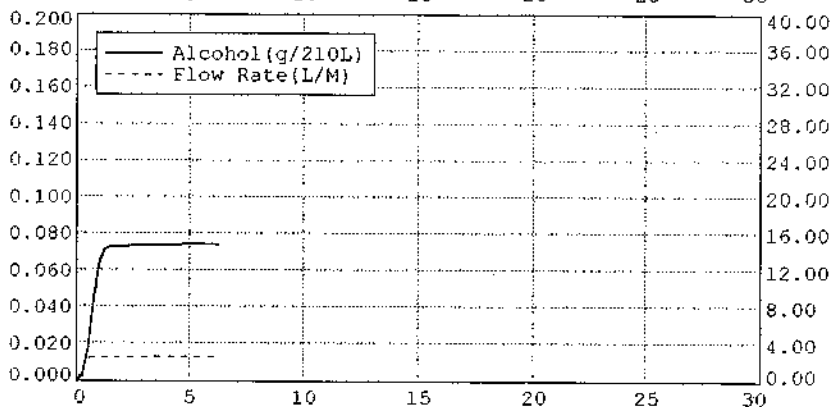
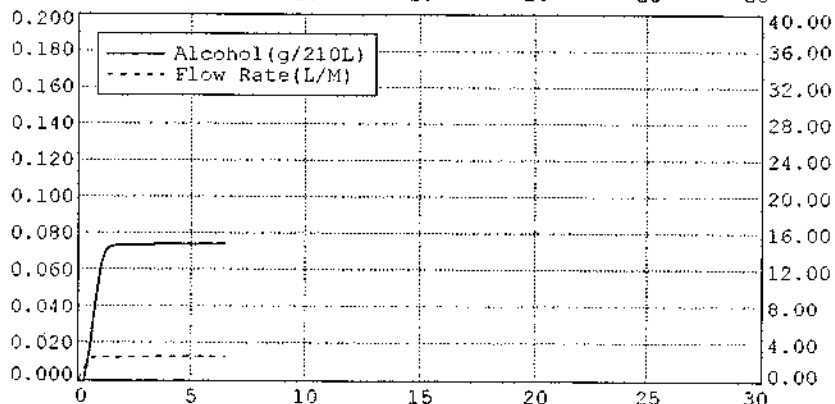
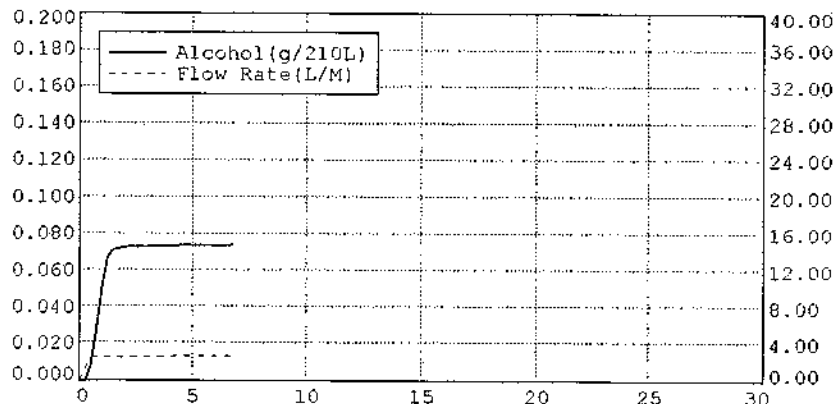
Date: 12/02/2015
 Time: 12:32:00

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.18: 0.078
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 441 psi

BLANK TEST	0.000	12:33
INTERNAL STANDARD	VERIFIED	12:33
EXTERNAL STANDARD	0.075	12:33
BLANK TEST	0.000	12:34
EXTERNAL STANDARD	0.075	12:34
BLANK TEST	0.000	12:35
EXTERNAL STANDARD	0.075	12:35
BLANK TEST	0.000	12:36
EXTERNAL STANDARD	0.075	12:37
BLANK TEST	0.000	12:37
EXTERNAL STANDARD	0.075	12:38
BLANK TEST	0.000	12:39

Average = 0.0750
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100384

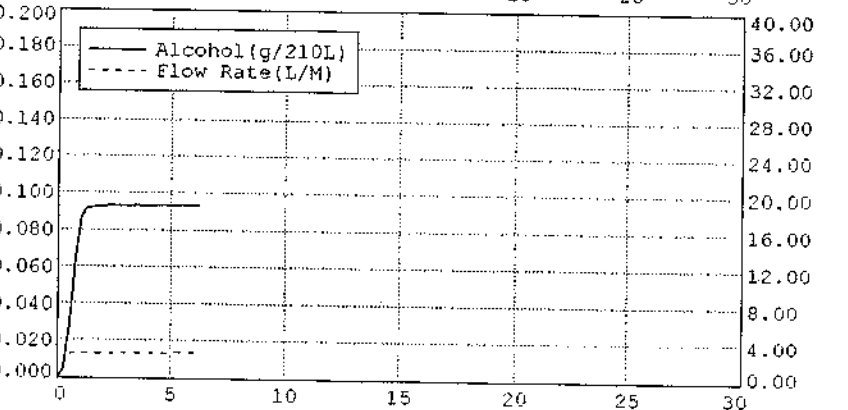
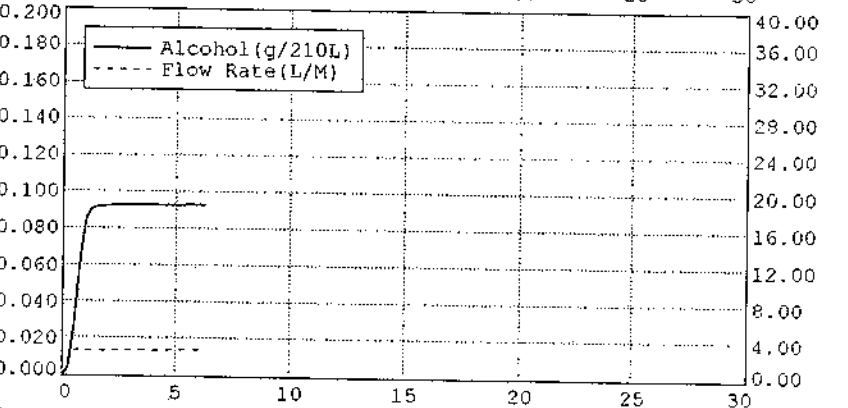
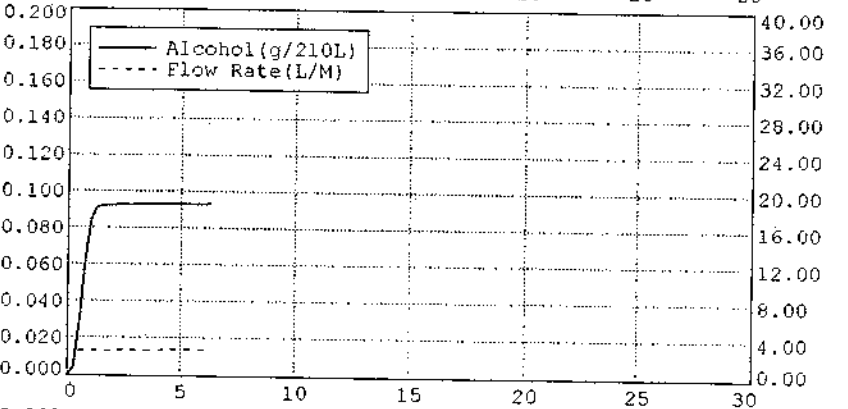
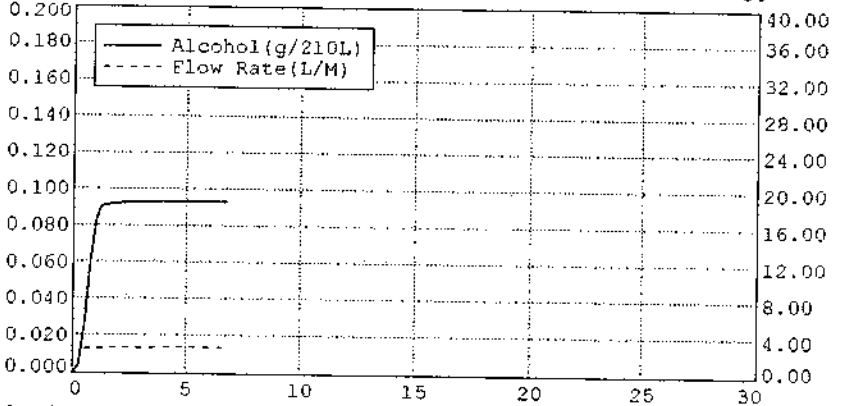
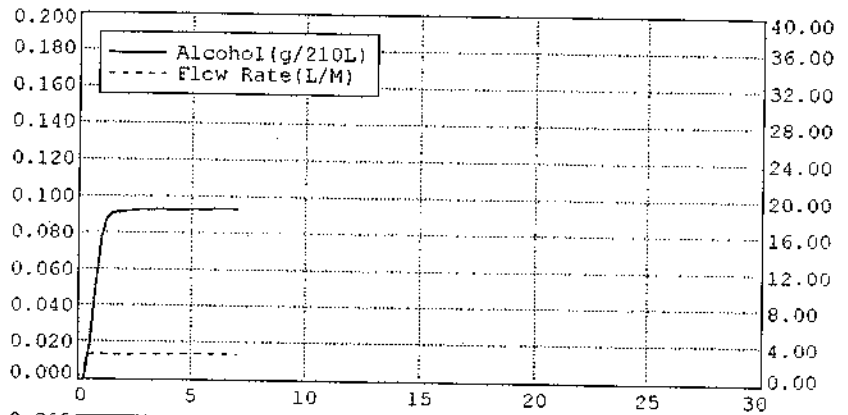
Date: 12/02/2015
 Time: 12:40:08

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.18: 0.098
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1061 psi

BLANK TEST	0.000	12:41
INTERNAL STANDARD	VERIFIED	12:41
EXTERNAL STANDARD	0.094	12:41
BLANK TEST	0.000	12:42
EXTERNAL STANDARD	0.094	12:42
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.094	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.094	12:45
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.094	12:46
BLANK TEST	0.000	12:47

Average = 0.0940
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100384

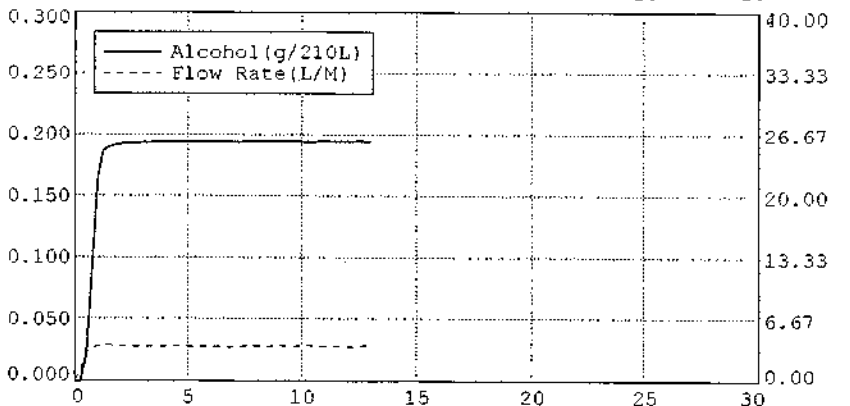
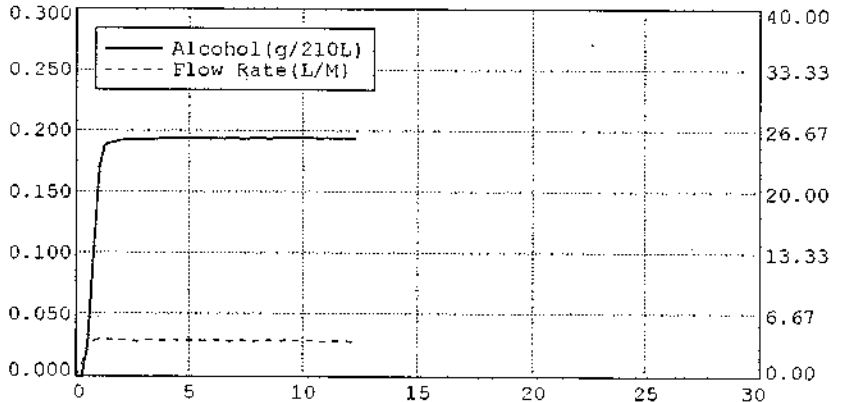
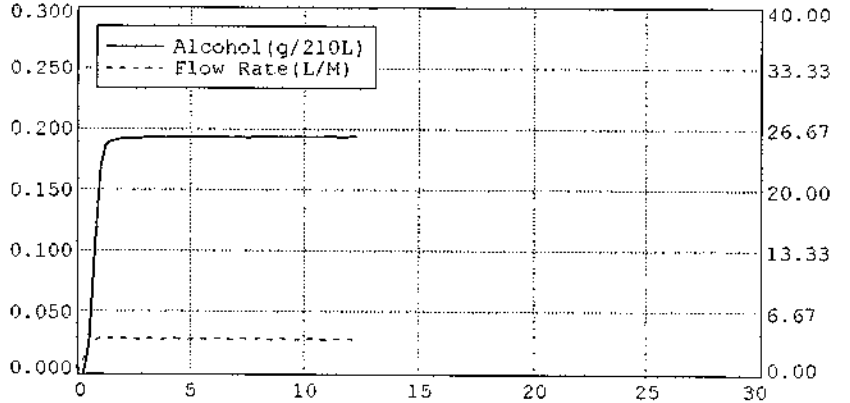
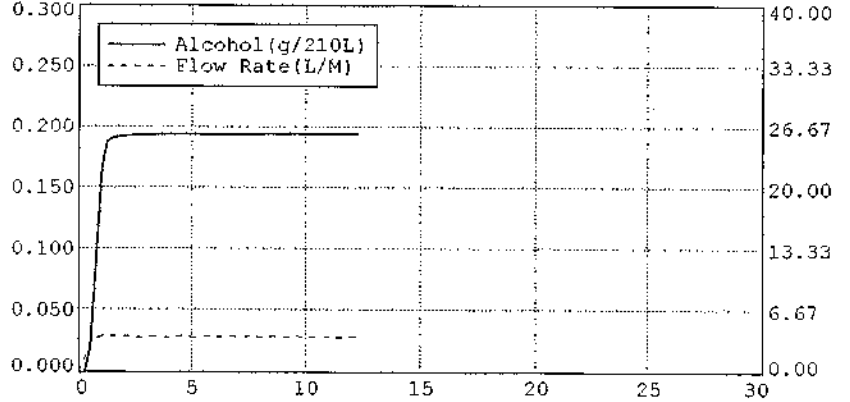
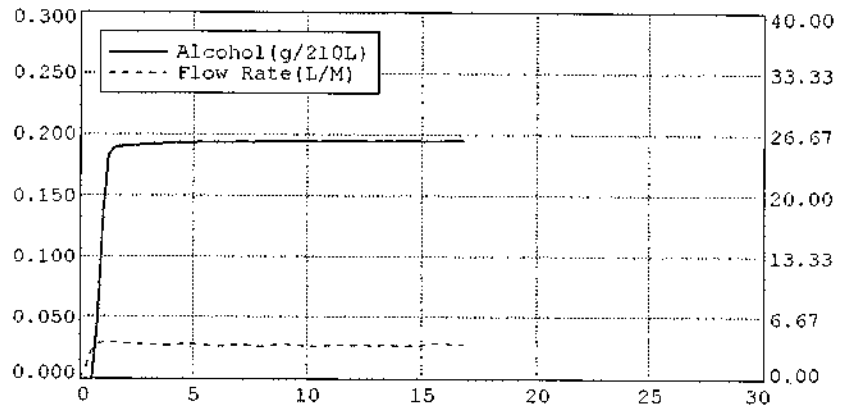
Date: 12/02/2015
 Time: 12:47:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: 15130
 EXPIRATION: 05/11/2017

BLANK TEST	0.000	12:49
INTERNAL STANDARD	VERIFIED	12:49
EXTERNAL STANDARD	0.196	12:49
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.195	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.195	12:52
BLANK TEST	0.000	12:53
EXTERNAL STANDARD	0.195	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.195	12:54
BLANK TEST	0.000	12:55

Average = 0.1952
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100384

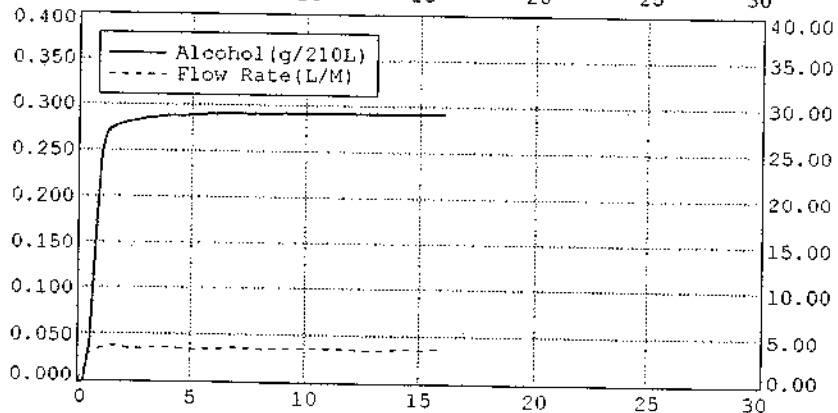
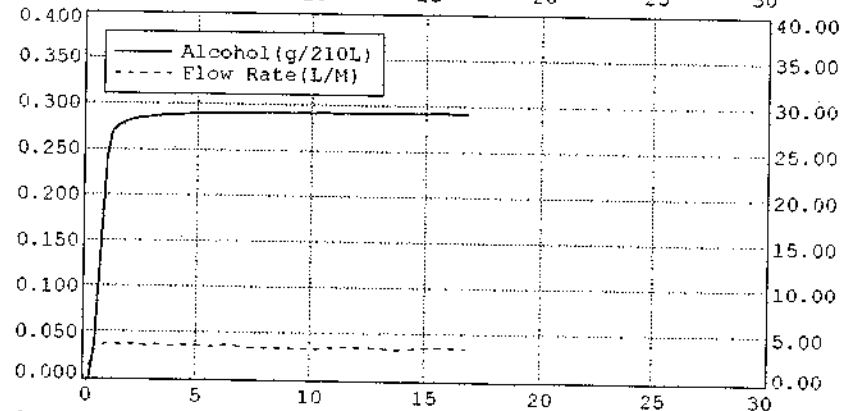
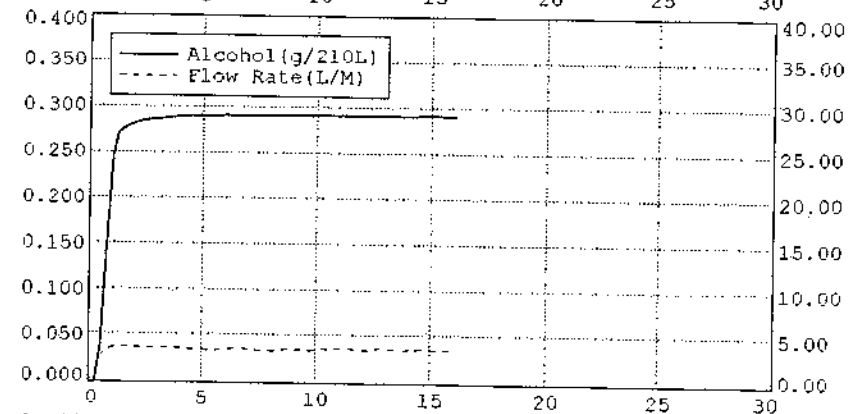
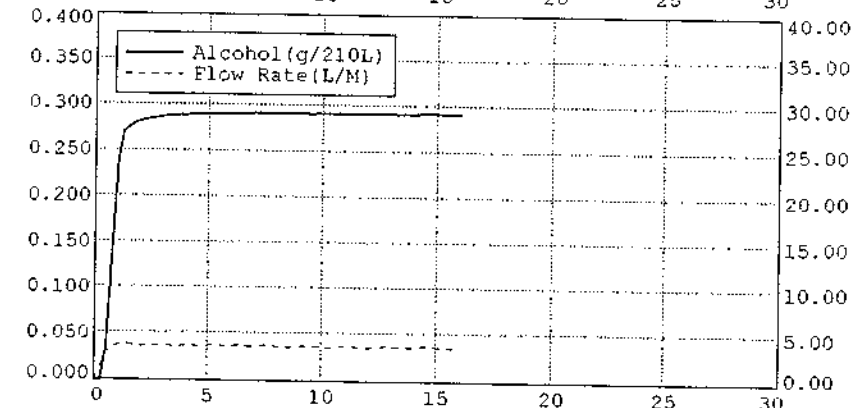
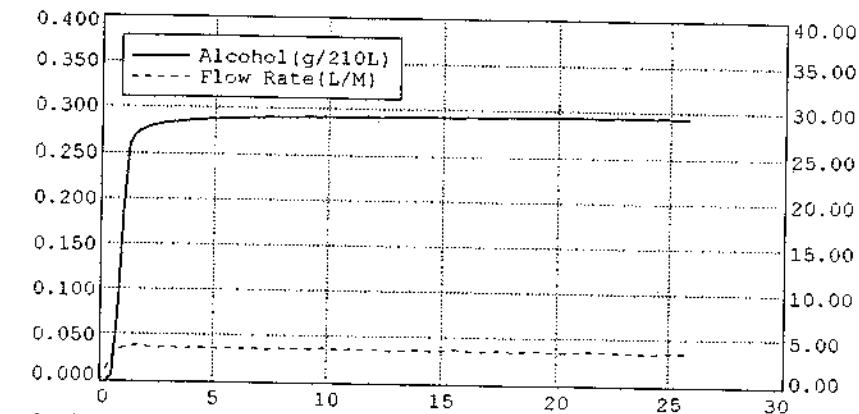
Date: 12/02/2015
 Time: 12:57:54

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	12:59
INTERNAL STANDARD	VERIFIED	12:59
EXTERNAL STANDARD	0.294	12:59
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.292	13:01
BLANK TEST	0.000	13:01
EXTERNAL STANDARD	0.292	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.292	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.292	13:04
BLANK TEST	0.000	13:05

Average = 0.2924
 Std Dev = 0.0009



SUBJECT TEST

Alaska Department of Public Safety
DATAWASTER dnt: 100384

Date: 12/02/2015
Time: 13:31:29

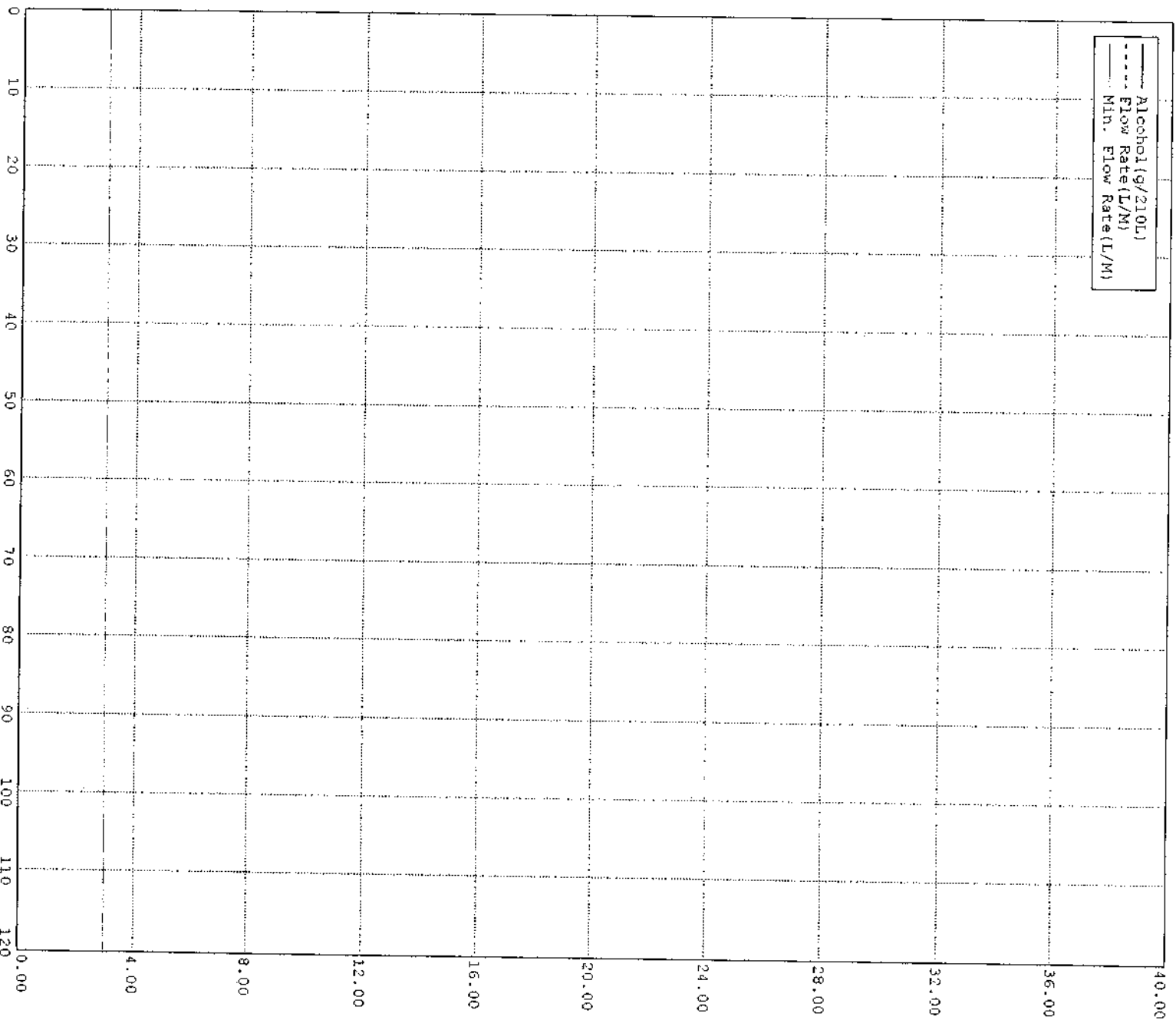
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INCOMPLETE XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	13:33
BLANK TEST	0.000	13:33
INTERNAL STANDARD	VERIFIED	13:33
EXTERNAL STANDARD	0.075	13:33
BLANK TEST	0.000	13:34
SUBJECT SAMPLE	INCOMPLETE	13:36



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100384

Date: 12/02/2015
Time: 13:58:37

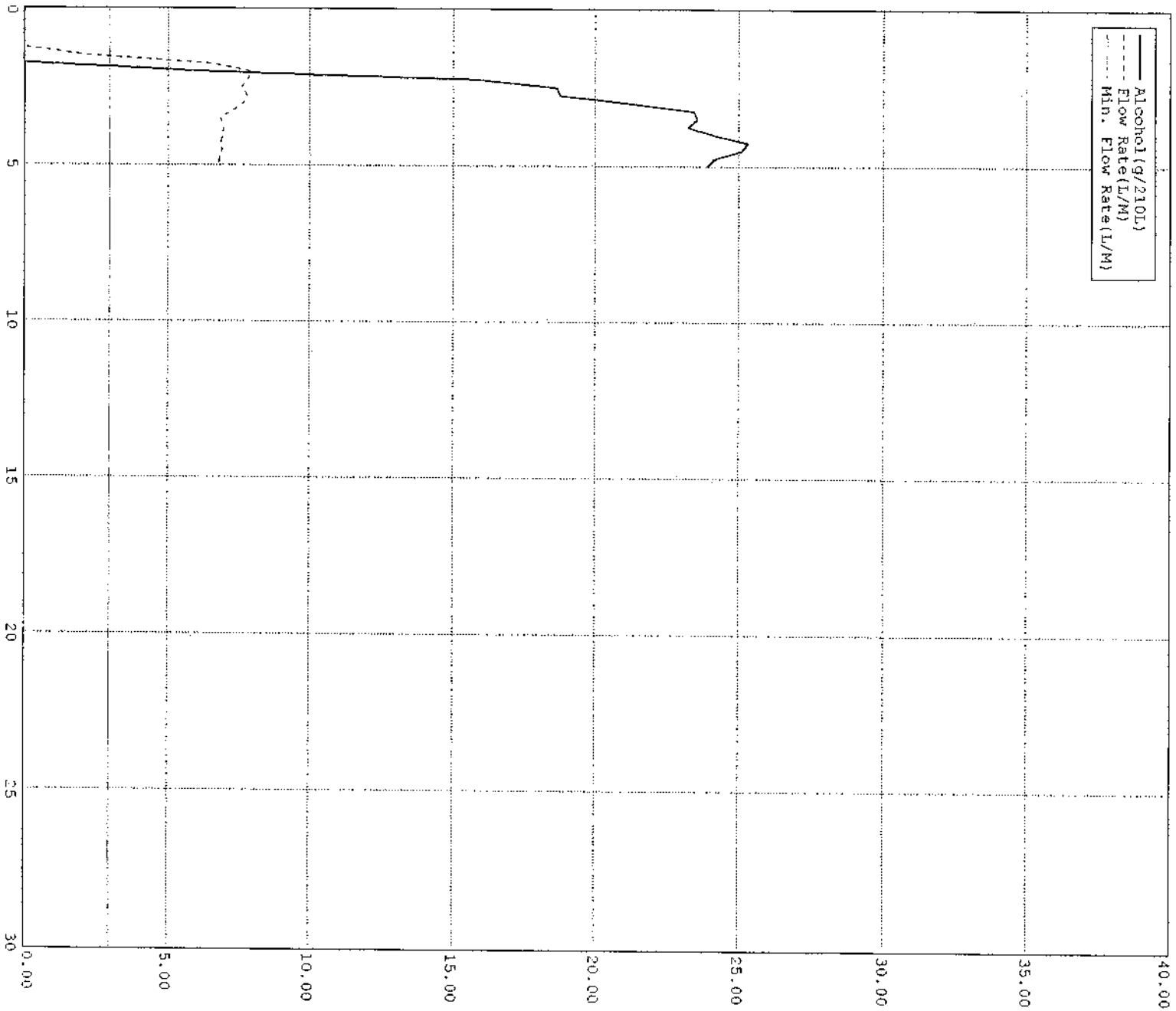
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MOUTH ETOH
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AP 29.18: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	14:01
BLANK TEST	0.000	14:01
INTERNAL STANDARD	VERIFIED	14:01
EXTERNAL STANDARD	0.075	14:02
BLANK TEST	0.000	14:03
SUBJECT SAMPLE	INVALID	14:03



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100384

Date: 12/02/2015
Time: 14:07:24

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE ACETONE
OPERATOR'S #: XXXX

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

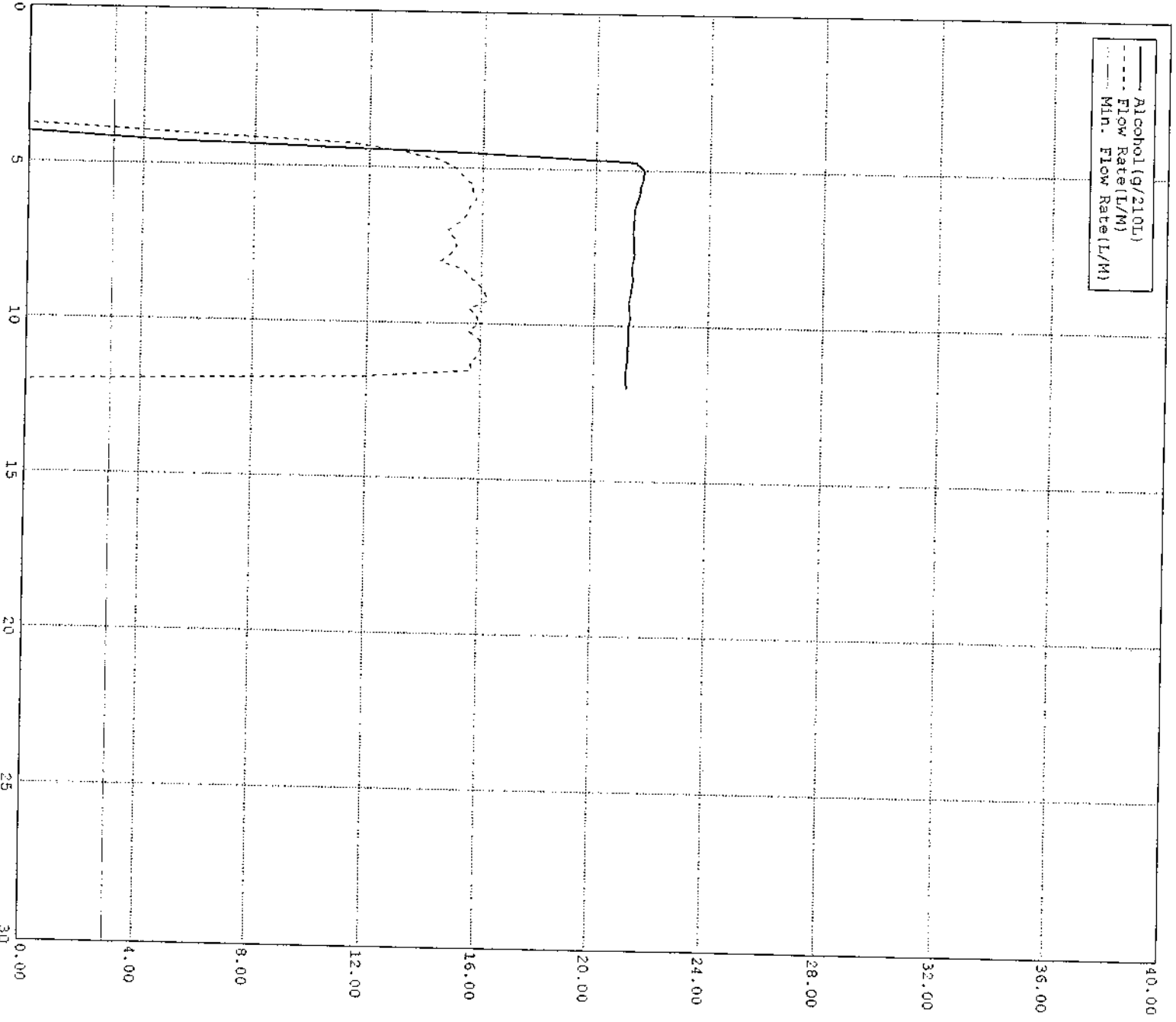
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK
BLANK TEST PASSED 14:10
INTERNAL STANDARD 0.000 14:10
Xq = 0.086 (0.00%) VERIFIED 14:10
EXTERNAL STANDARD 0.075 14:11
X[1] = 0.0749 (-0.0024) (0.0026)
BLANK TEST 0.000 14:11
SUBJECT SAMPLE XXX 14:12
X[1] = 0.1063 (-0.0158) (0.0026)

Interference Detected

Filter 2 Avg = -0.0016
Filter 3 Avg = 0.0025

CNF 12/2/15



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100384

Date: 12/02/2015
Time: 14:19:49

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

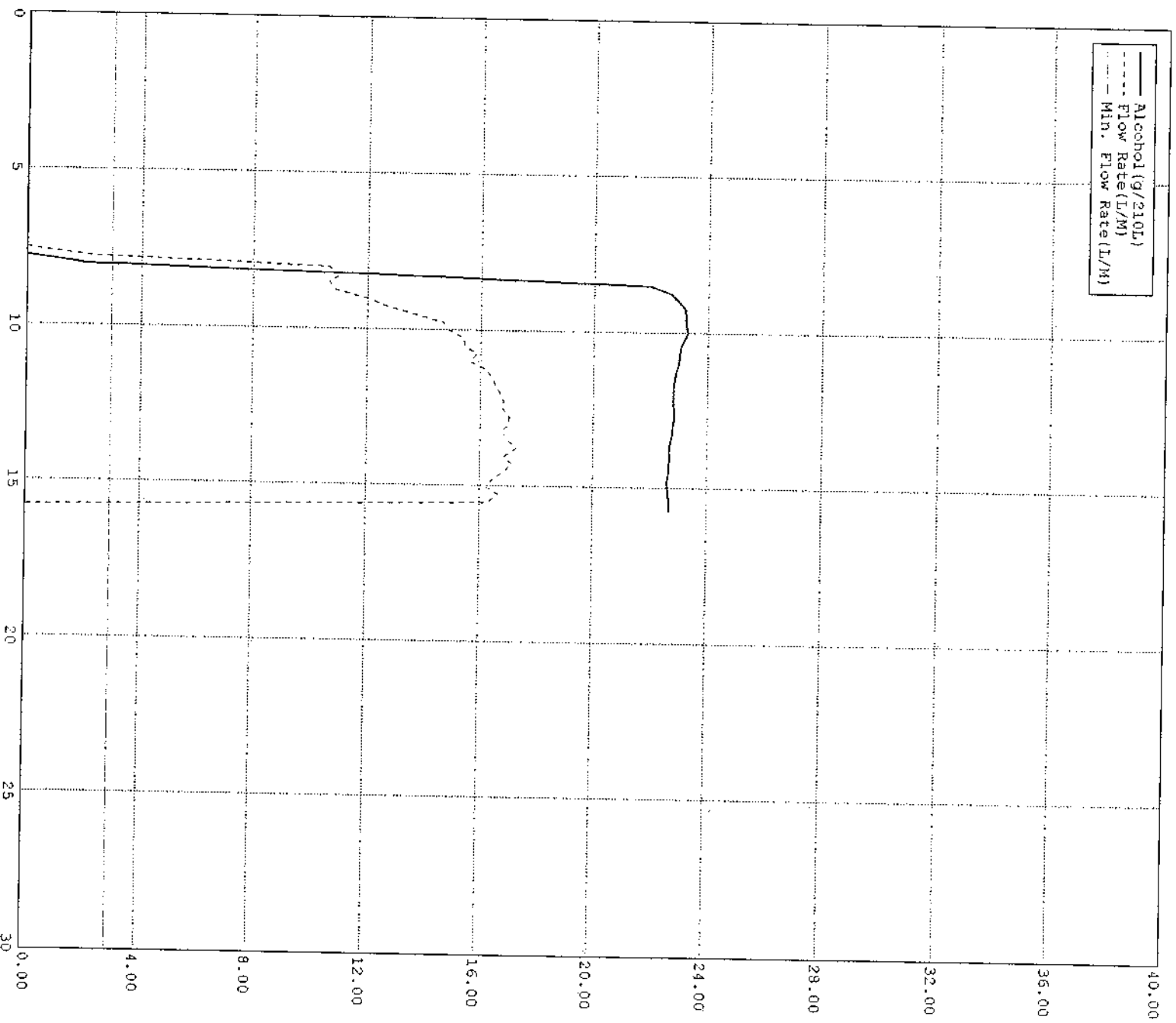
OPERATOR NAME:
INTERFERENCE IPA
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK
BLANK TEST PASSED 14:23
INTERNAL STANDARD 0.000 14:23
Xq = 0.086 (0.40%) VERIFIED 14:23
EXTERNAL STANDARD 0.075 14:23
X[1] = 0.0749 (-0.0020) (0.0024)
BLANK TEST 0.000 14:24
SUBJECT SAMPLE XXX 14:24
X[1] = 0.1133 (-0.0252) (0.0016)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100384

Date: 12/02/2015
Time: 14:30:10

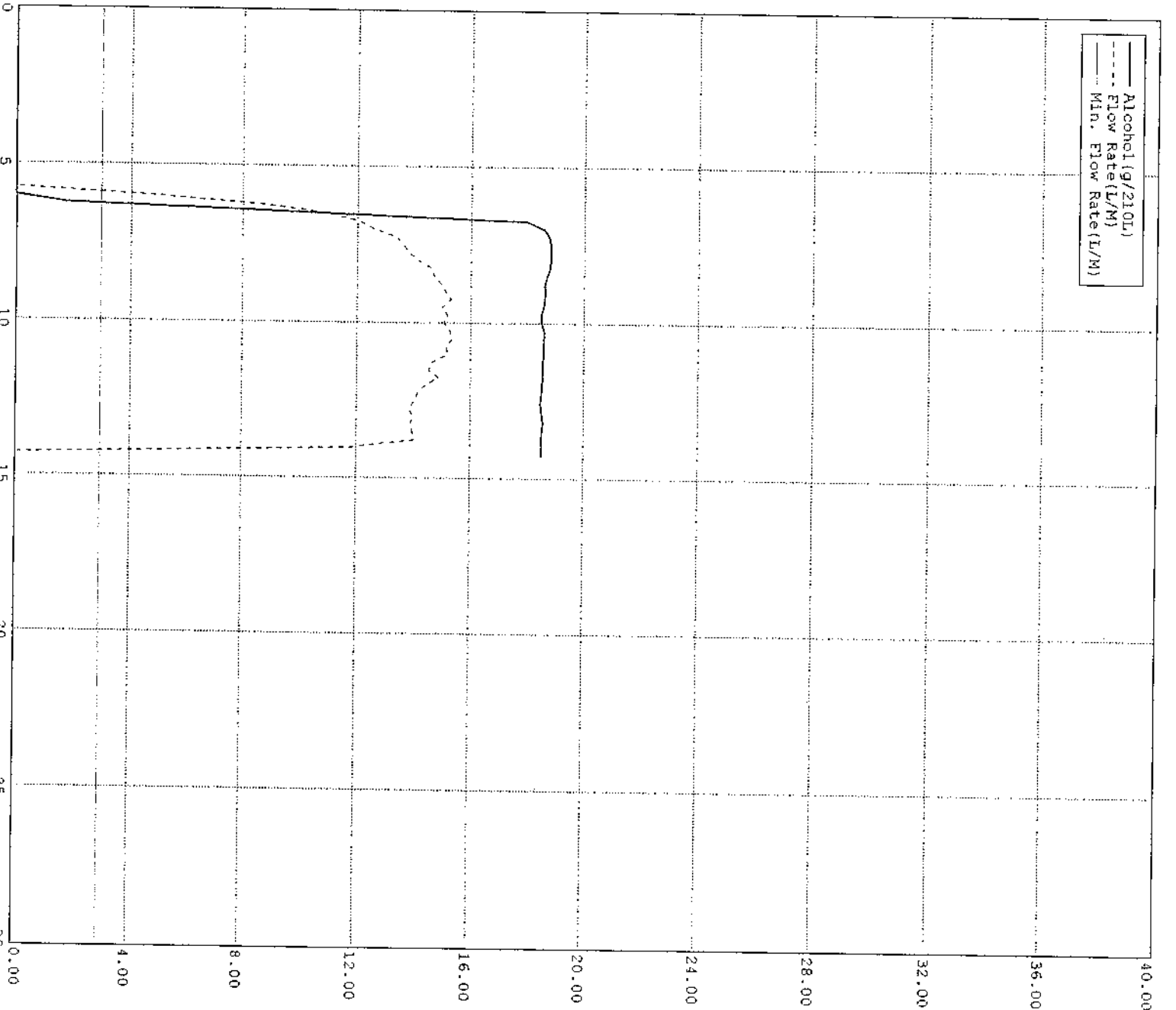
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE NEGATIVE
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	14:33
BLANK TEST	0.000	14:33
INTERNAL STANDARD	VERIFIED	14:33
Xq = 0.087 (0.308)		
EXTERNAL STANDARD	0.075	14:33
X[1] = 0.0754 (-0.0010)	(0.0032)	
BLANK TEST	0.000	14:34
SUBJECT SAMPLE (Vol=1.89L)	0.093	14:34
X[1] = 0.0930 (0.0003)	(0.0017)	
BLANK TEST	0.000	14:35
EXTERNAL STANDARD	0.075	14:36
X[1] = 0.0750 (-0.0011)	(0.0017)	
BLANK TEST	0.000	14:36



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100384

Date: 12/02/2015
Time: 15:05:48

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

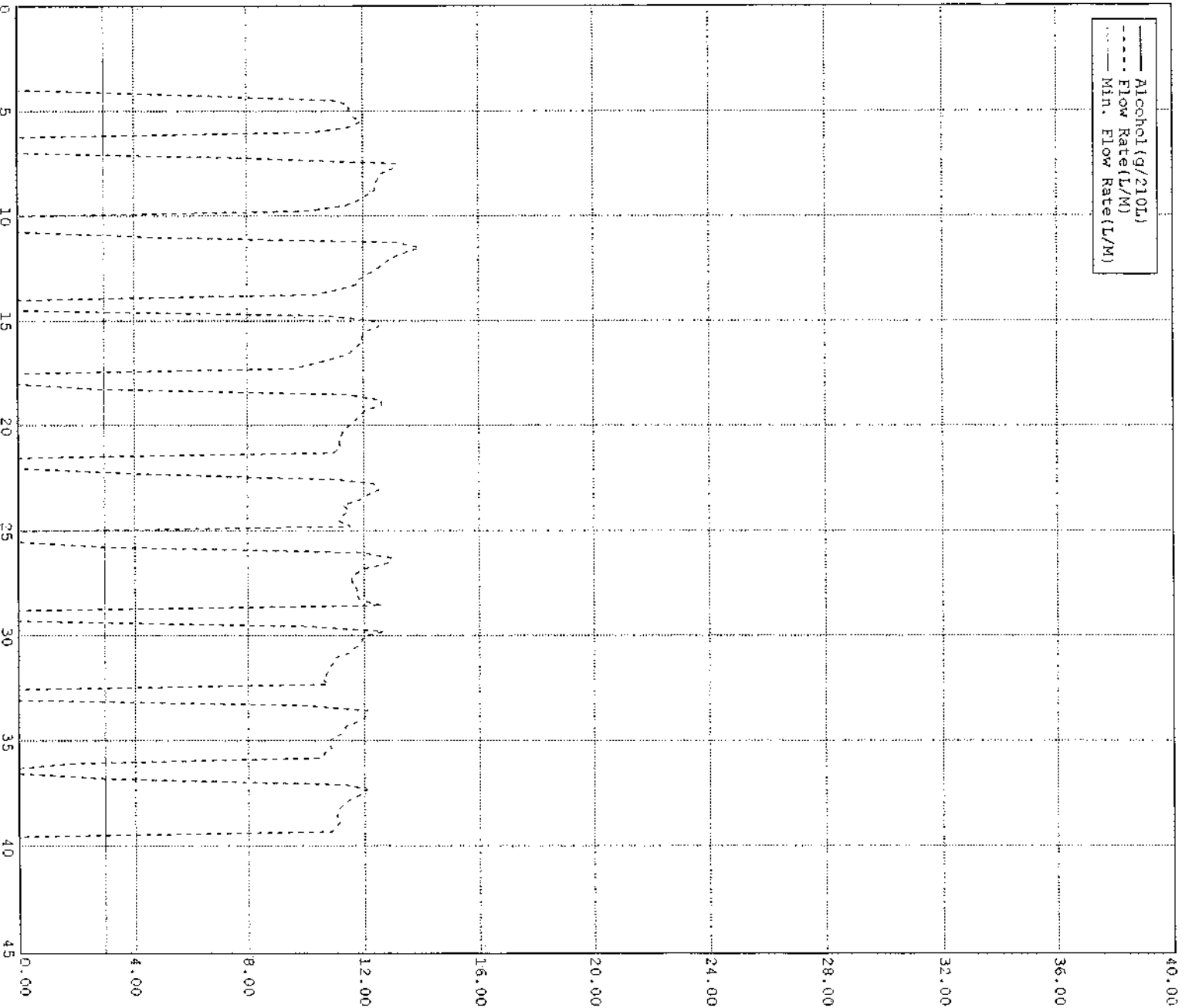
OPERATOR NAME:
EXCEEDED ATTEMPTS
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.17: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	15:09
BLANK TEST	0.000	15:09
INTERNAL STANDARD	VERIFIED	15:09
EXTERNAL STANDARD	0.075	15:09
BLANK TEST	0.000	15:10
SUBJECT SAMPLE	XXX	15:11

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100384

Date: 12/02/2015
Time: 15:27:54

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

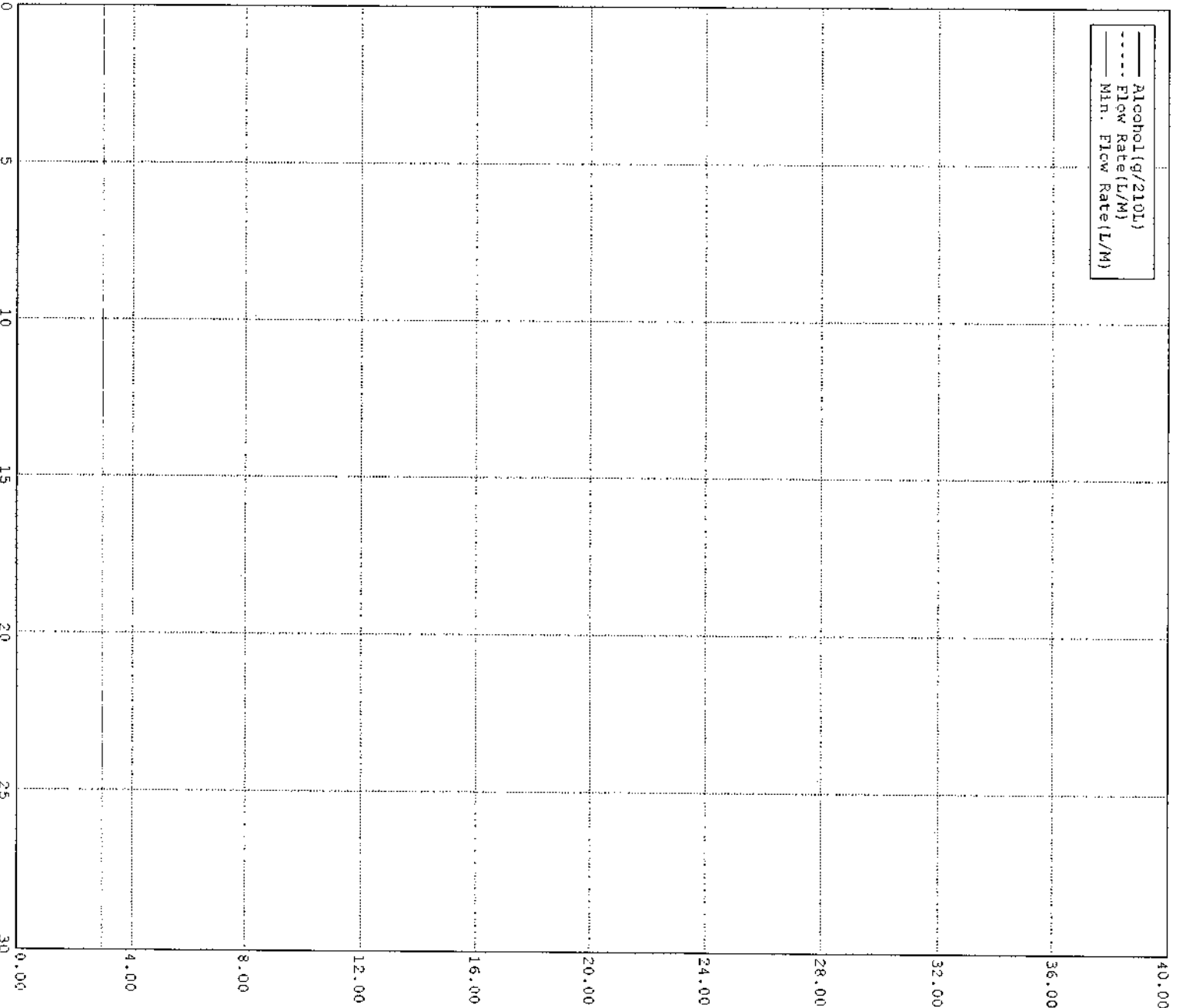
OPERATOR NAME:
RFI XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	15:29
BLANK TEST	0.000	15:29
INTERNAL STANDARD	VERIFIED	15:29
EXTERNAL STANDARD	0.075	15:30
BLANK TEST	0.000	15:31

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100384

Date: 12/02/2015
Time: 15:44:40

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 29.18: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	15:46
BLANK TEST	0.000	15:47
INTERNAL STANDARD	VERIFIED	15:47
EXTERNAL STANDARD	0.075	15:47
BLANK TEST	0.000	15:48
SUBJECT SAMPLE (Vol=2.54L)	0.000	15:48
BLANK TEST	0.000	15:49
EXTERNAL STANDARD	0.075	15:49
BLANK TEST	0.000	15:50

