

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 100697 Analyst CHF Start Date 8/26/15

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 09214080A3 Exp 5/1/16

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 DR4162 Date Calibrated 1/19/15

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

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

5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

d. Exceeded attempts

i. Acetone - Mnf Guth Lot 14110 Level 0.100 Exp 5/1/16

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 SD1200 Date Calibrated 1/20/15

e. RFI

6. Verify stylus is calibrated

9. Verification of Calibration

7. Reset Options

10. Non-Drinking Subject Test (attached)

8. Clear Memory

11. Upload

13. Remove tank prior to shut down

End Date 8/27/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 08/26/2015
Time: 14:01:40

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.70 V PASSED
(1.01 V - 2.35 V)
Cooler Voltage = 1.68 V PASSED
(1.00 V - 2.32 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 524 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 4.373 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.001 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 PASSED
Xq = 0.086 0.81% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100697

Date: 08/26/2015

Time: 2:19 PM

Temperatures (°C)

Sample Cell: 48.7°C

Breath Tube: 47.9°C

Current Barometer 29.7 in

Volume (Ltr) 1.53

Settings

Lamp: 1.70 V

Bias: 79 V

Cooler: 1.68 V

Chopper: 524 Hz

Voltages (V)

Flow: 1.07 V

Detector: -0.084 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 09/18/2012
Time: 12:41:18

OPERATOR NAME:
BRANDI BARNETT
CERTIFICATE #: 7038

Ca = 0.1000
CAL = 1.000400 0.800 <= CAL < 1.200
b1 = 0.0006 0.0000 <= b1 < 0.0040
b2 = 0.0048 0.0010 <= b2 < 0.0100
b3 = 0.0007 0.0000 <= b3 < 0.0040
Xq = 0.0864 0.0500 <= Xq < 0.2000
a21 = 1.129466 1.050 <= a21 < 1.300
a31 = 0.479692 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100697

Date: 08/26/2015
Time: 15:47:04

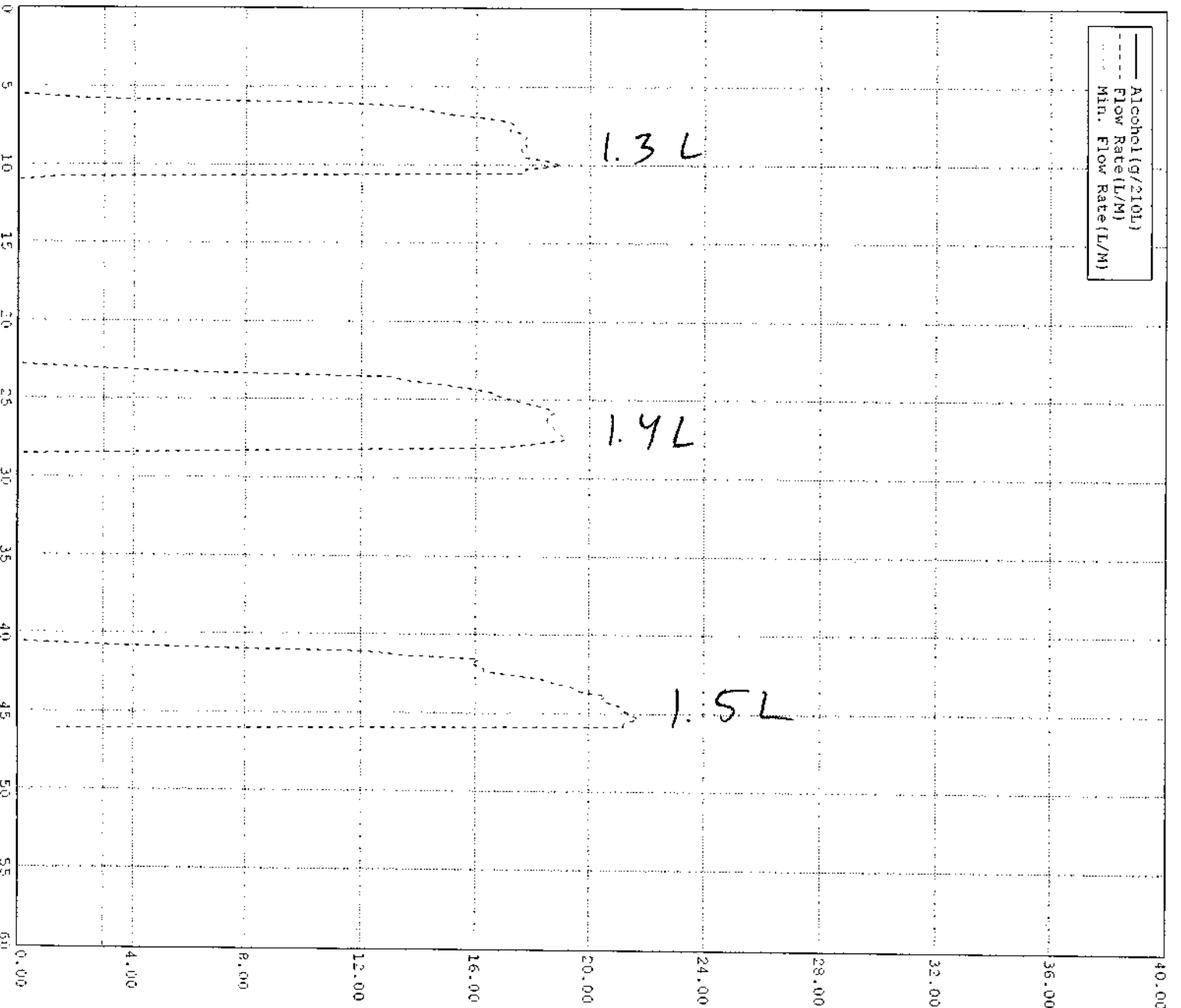
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MINIMUM VOLUME
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.69: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:48
BLANK TEST	0.000	15:49
INTERNAL STANDARD	VERIFIED	15:49
EXTERNAL STANDARD	0.078	15:49
BLANK TEST	0.000	15:50
SUBJECT SAMPLE (Vol=1.58L)	0.000	15:51
BLANK TEST	0.000	15:52
EXTERNAL STANDARD	0.078	15:52
BLANK TEST	0.000	15:53



LINEARITY CHECK

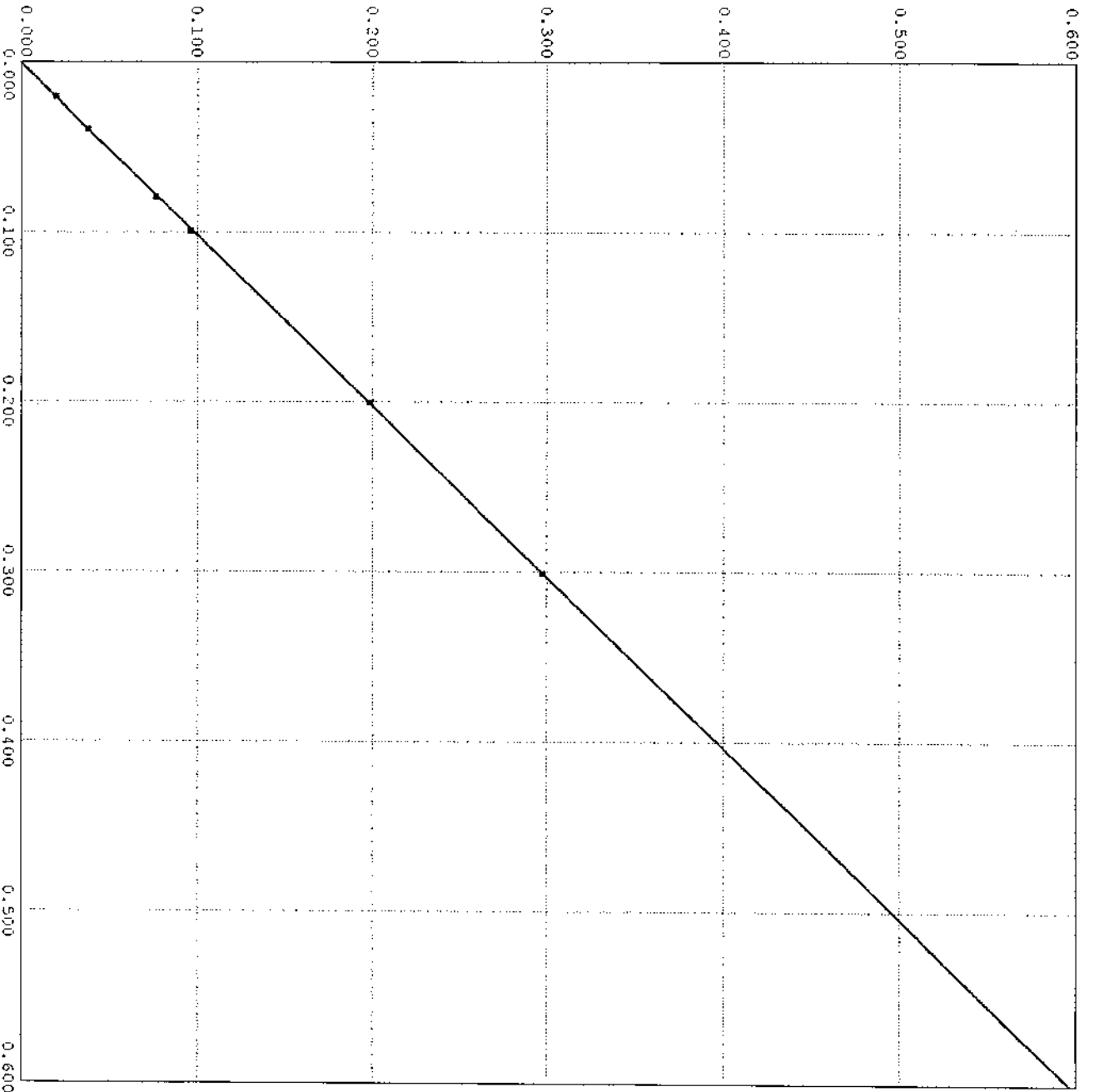
Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 08/27/2015
Time: 10:21:17

SUPERVISOR NAME:
CHARLES FOSTER
OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.020	0.0202	0.0004
0.039	0.0390	0.0000
0.079	0.0774	0.0005
0.099	0.0970	0.0000
0.200	0.1994	0.0005
0.300	0.2982	0.0004

SLOPE = 0.995334
R² = 0.999941



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100697

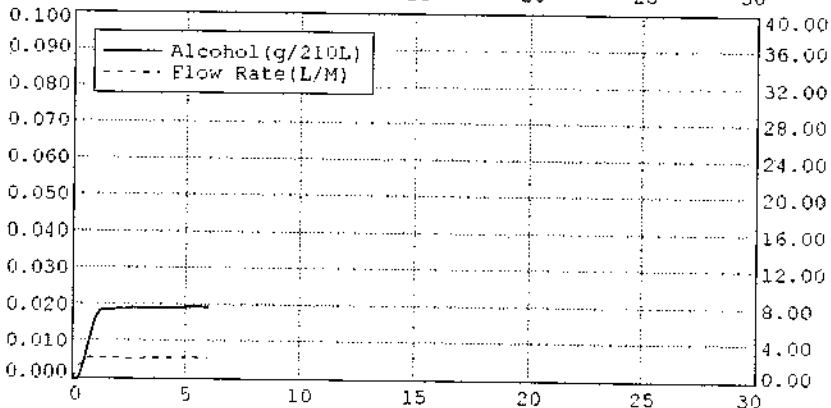
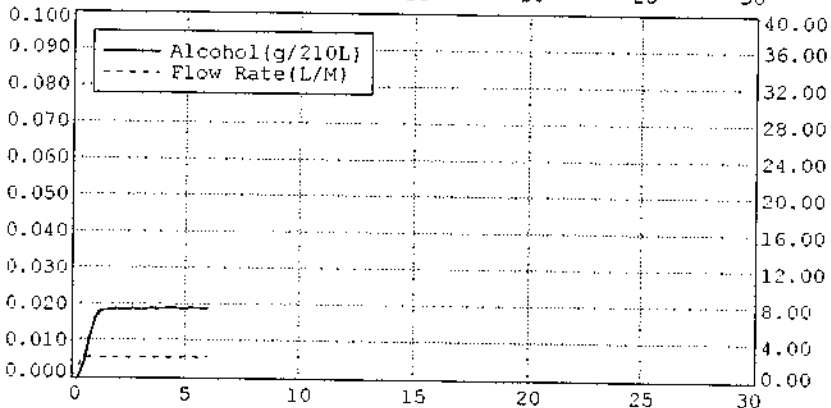
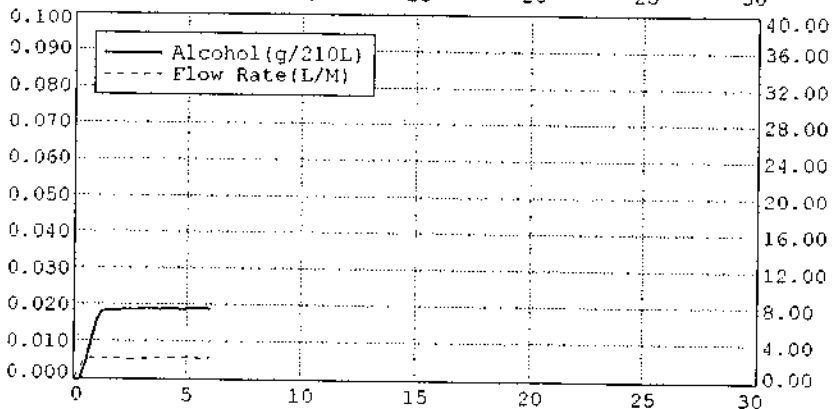
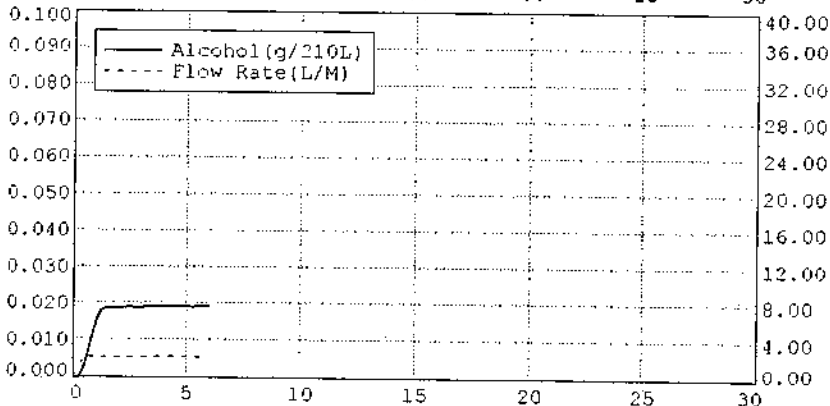
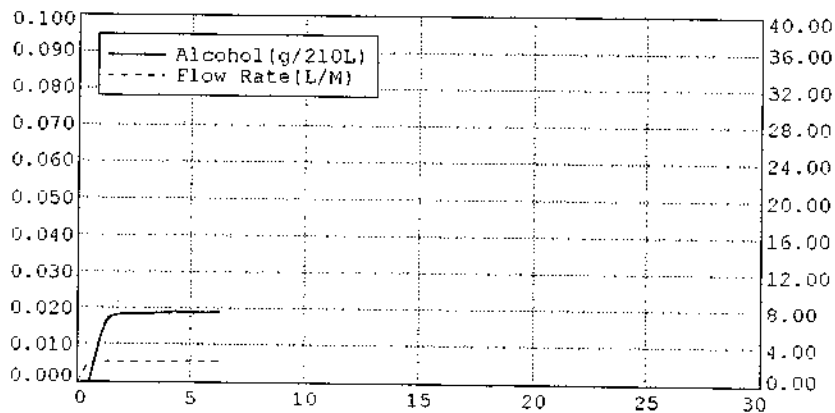
Date: 08/27/2015
 Time: 10:21:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.52: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 448 psi

BLANK TEST	0.000	10:22
INTERNAL STANDARD	VERIFIED	10:22
EXTERNAL STANDARD	0.020	10:22
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.020	10:23
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.020	10:25
BLANK TEST	0.000	10:25
EXTERNAL STANDARD	0.020	10:26
BLANK TEST	0.000	10:27
EXTERNAL STANDARD	0.021	10:27
BLANK TEST	0.000	10:28

Average = 0.0202
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100697

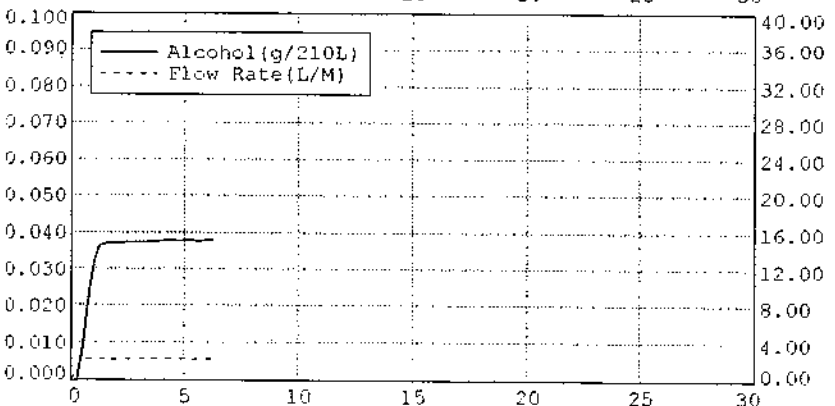
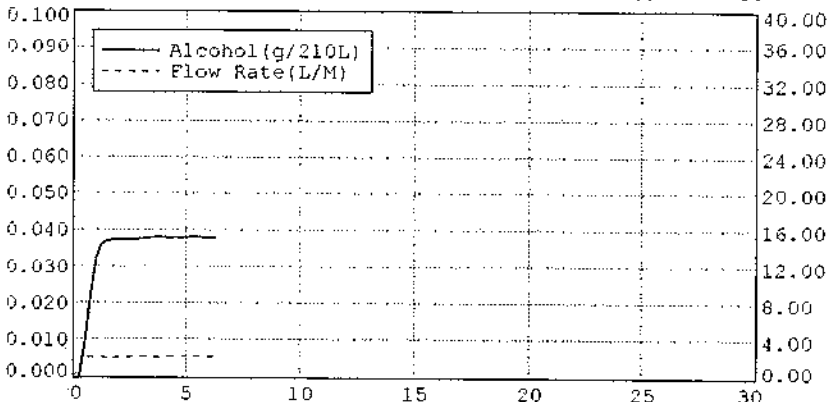
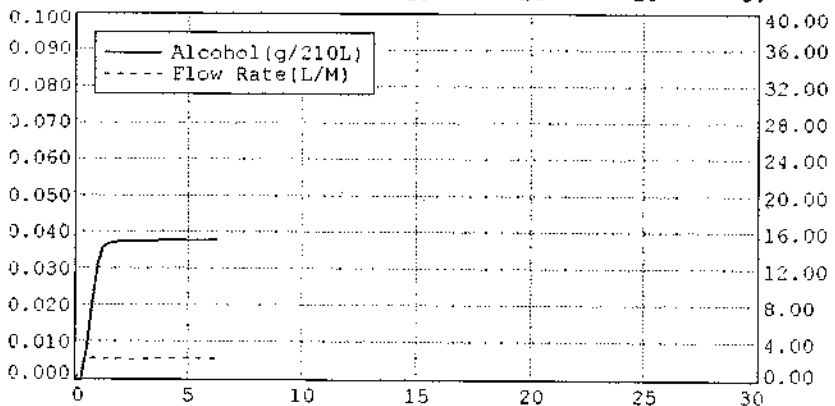
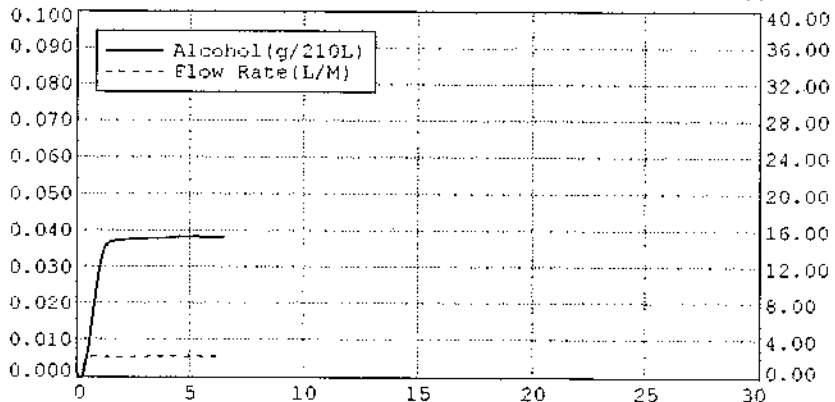
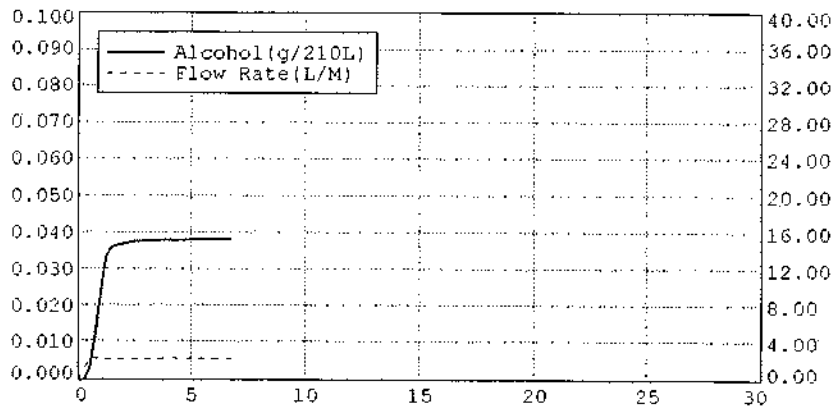
Date: 08/27/2015
 Time: 10:37:41

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.52: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 544 psi

BLANK TEST	0.000	10:38
INTERNAL STANDARD	VERIFIED	10:39
EXTERNAL STANDARD	0.039	10:39
BLANK TEST	0.000	10:40
EXTERNAL STANDARD	0.039	10:40
BLANK TEST	0.000	10:41
EXTERNAL STANDARD	0.039	10:41
BLANK TEST	0.000	10:42
EXTERNAL STANDARD	0.039	10:42
BLANK TEST	0.000	10:43
EXTERNAL STANDARD	0.039	10:43
BLANK TEST	0.000	10:44

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100697

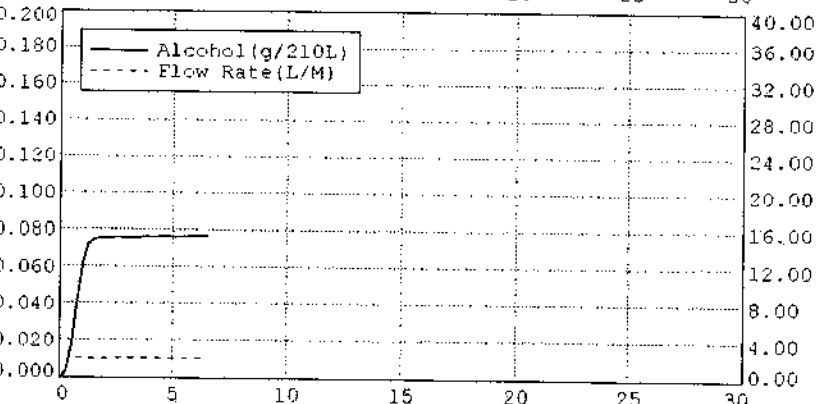
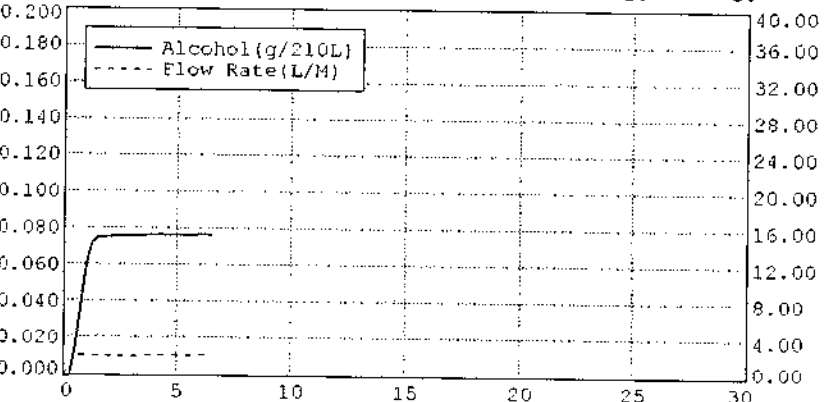
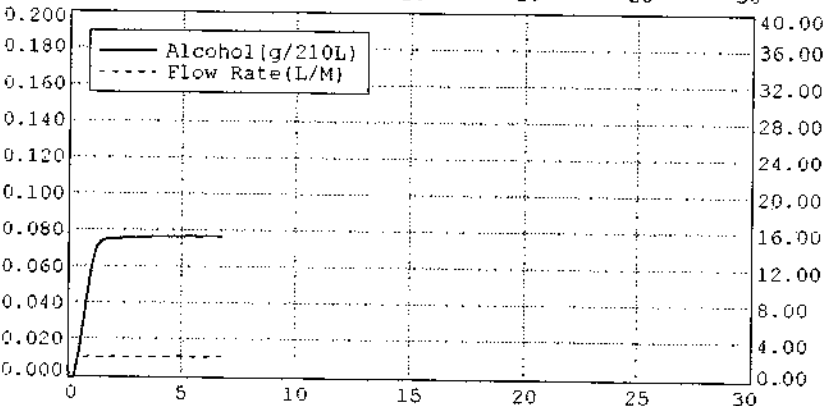
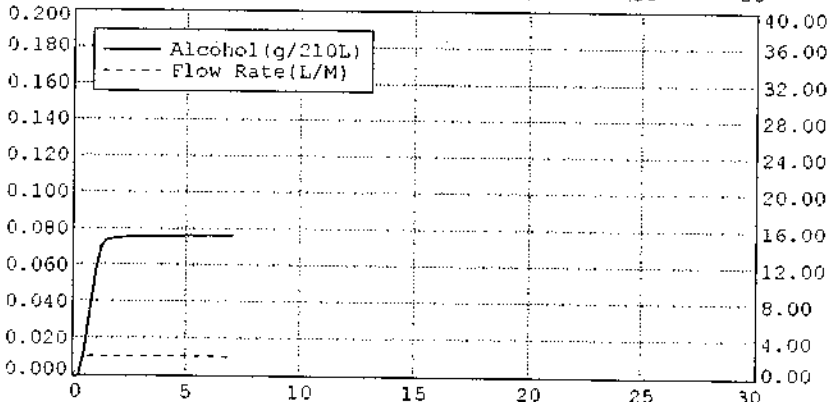
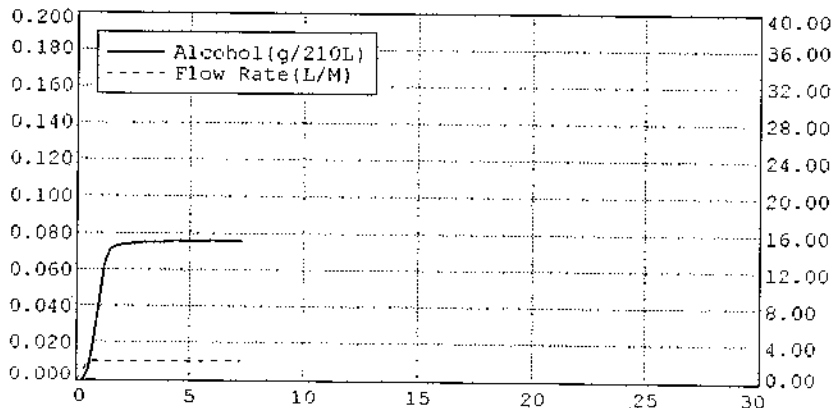
Date: 08/27/2015
 Time: 10:46:01

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.51: 0.079
 LOT #: 09214080A3
 EXPIRATION: 05/01/2016
 TANK PRESSURE: 273 psi

BLANK TEST	0.000	10:47
INTERNAL STANDARD	VERIFIED	10:47
EXTERNAL STANDARD	0.077	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.077	10:48
BLANK TEST	0.000	10:49
EXTERNAL STANDARD	0.078	10:49
BLANK TEST	0.000	10:50
EXTERNAL STANDARD	0.077	10:50
BLANK TEST	0.000	10:51
EXTERNAL STANDARD	0.078	10:52
BLANK TEST	0.000	10:52

Average = 0.0774
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100697

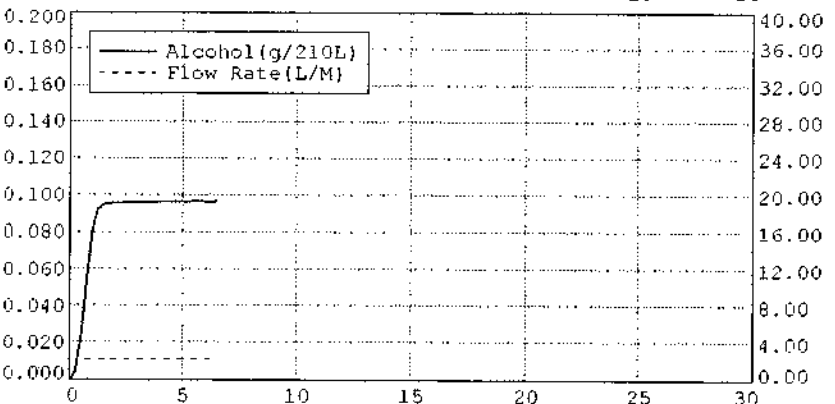
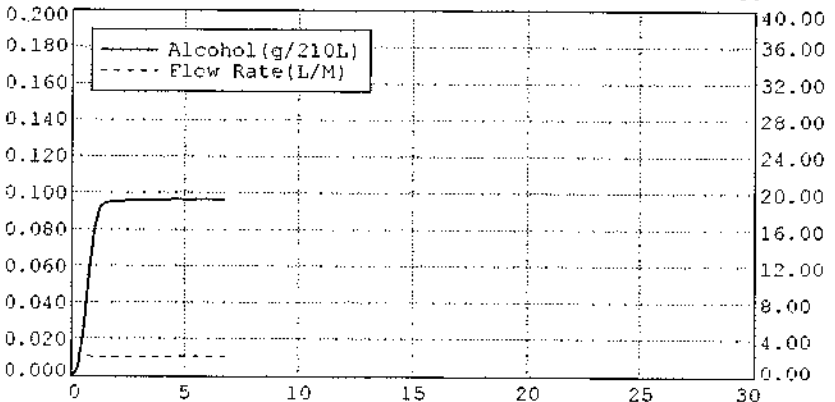
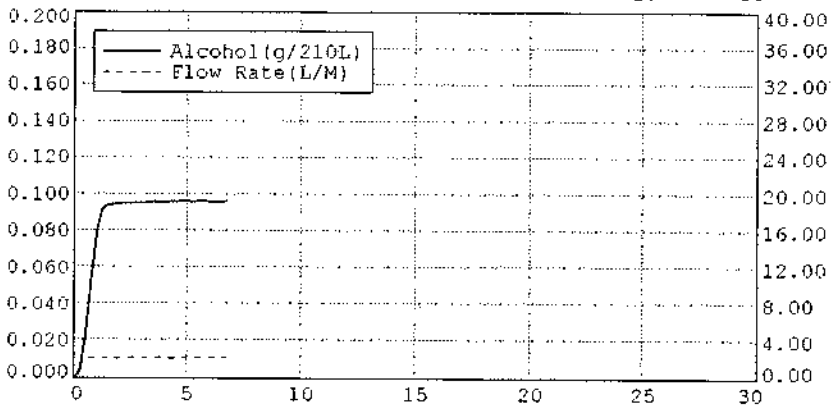
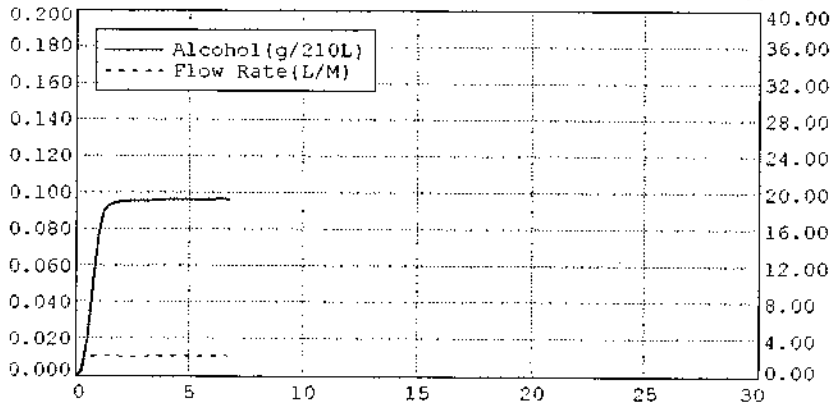
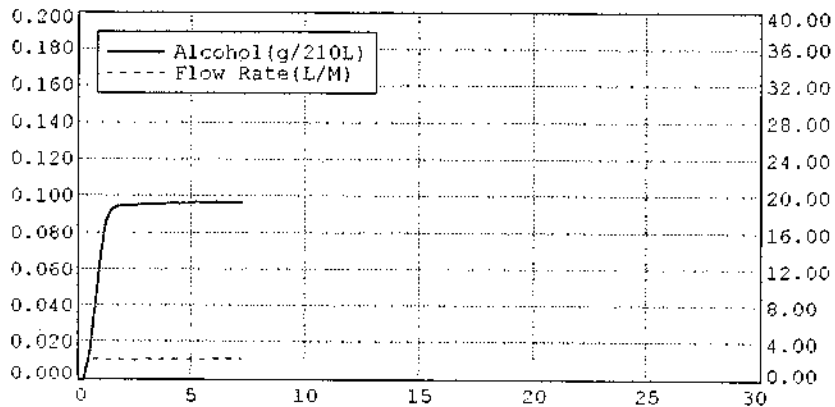
Date: 08/27/2015
 Time: 10:55:12

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.52: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 397 psi

BLANK TEST	0.000	10:56
INTERNAL STANDARD	VERIFIED	10:56
EXTERNAL STANDARD	0.097	10:56
BLANK TEST	0.000	10:57
EXTERNAL STANDARD	0.097	10:57
BLANK TEST	0.000	10:58
EXTERNAL STANDARD	0.097	10:59
BLANK TEST	0.000	10:59
EXTERNAL STANDARD	0.097	11:00
BLANK TEST	0.000	11:01
EXTERNAL STANDARD	0.097	11:01
BLANK TEST	0.000	11:02

Average = 0.0970
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

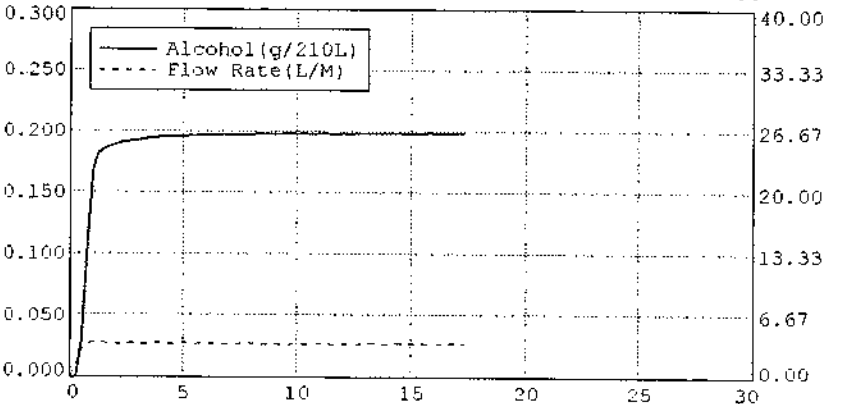
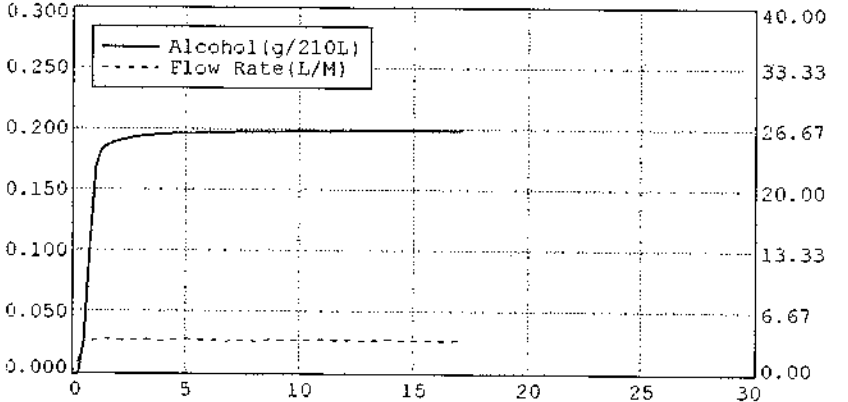
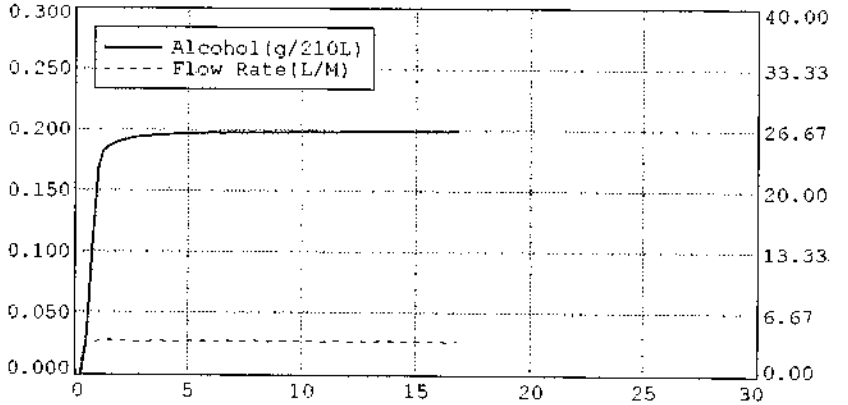
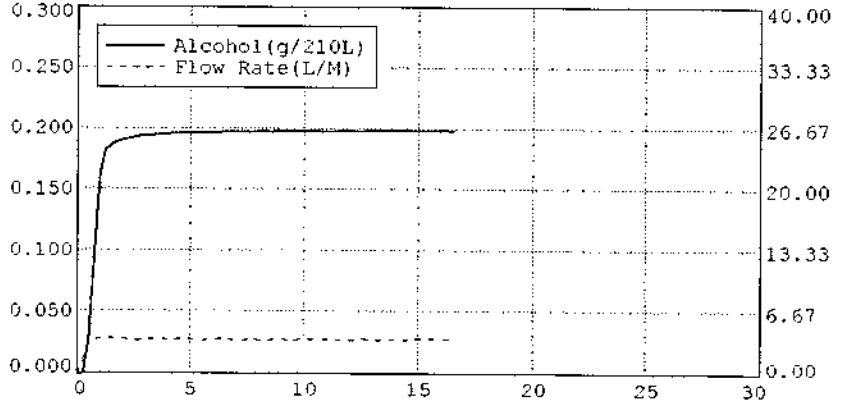
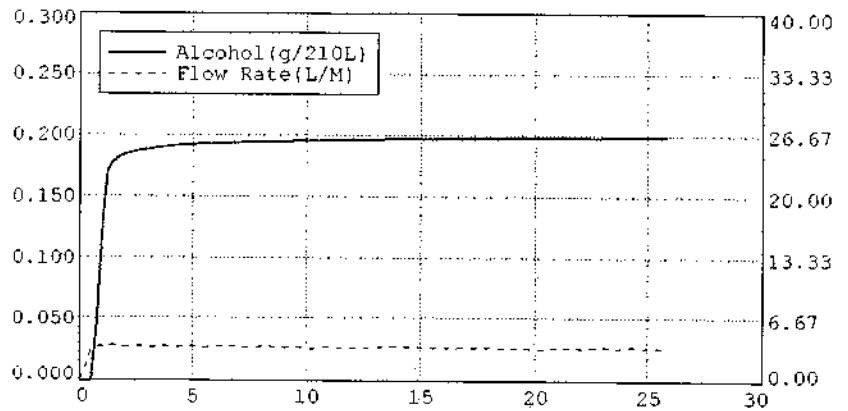
Alaska Department of Public Safety
 DATAMASTER dmt: 100697

Date: 08/27/2015
 Time: 11:04:23

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

BLANK TEST	0.000	11:06
INTERNAL STANDARD	VERIFIED	11:06
EXTERNAL STANDARD	0.199	11:06
BLANK TEST	0.000	11:07
EXTERNAL STANDARD	0.199	11:07
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.200	11:09
BLANK TEST	0.000	11:10
EXTERNAL STANDARD	0.200	11:10
BLANK TEST	0.000	11:11
EXTERNAL STANDARD	0.199	11:11
BLANK TEST	0.000	11:12

Average = 0.1994
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100697

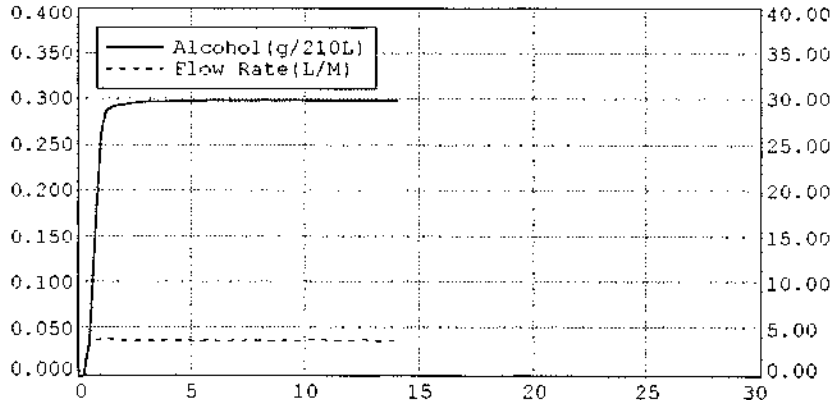
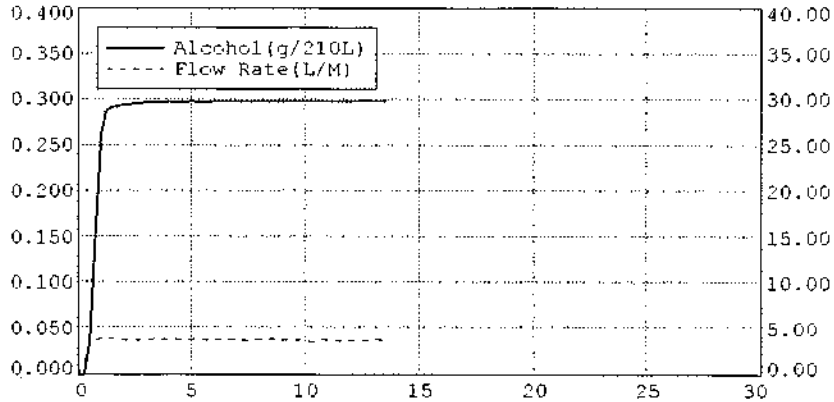
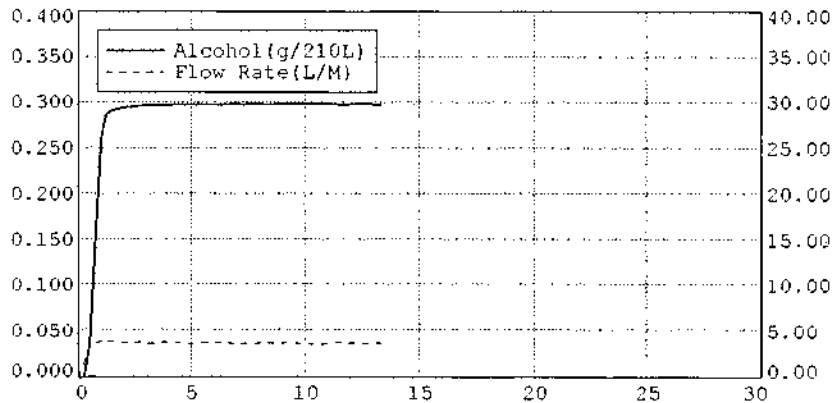
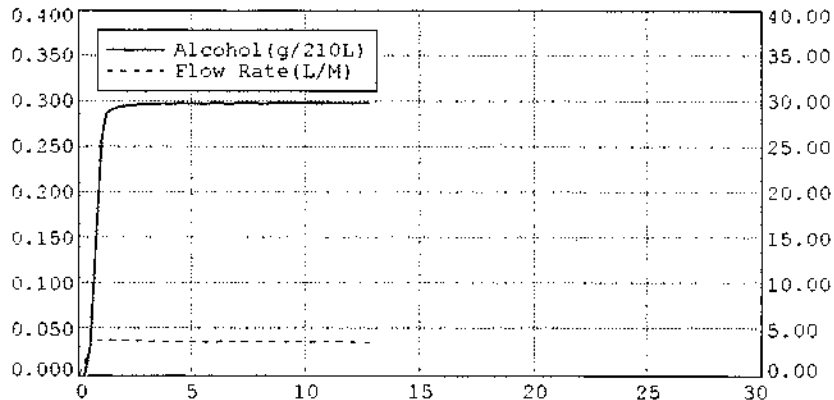
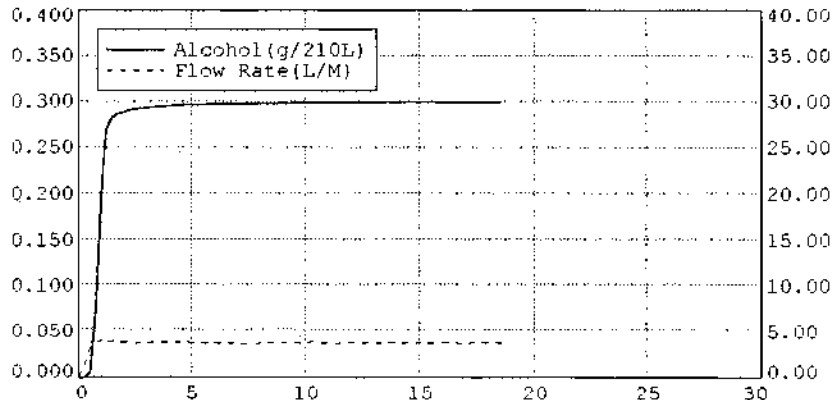
Date: 08/27/2015
 Time: 11:14:10

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	11:15
INTERNAL STANDARD	VERIFIED	11:15
EXTERNAL STANDARD	0.299	11:15
BLANK TEST	0.000	11:16
EXTERNAL STANDARD	0.298	11:17
BLANK TEST	0.000	11:18
EXTERNAL STANDARD	0.298	11:18
BLANK TEST	0.000	11:19
EXTERNAL STANDARD	0.298	11:19
BLANK TEST	0.000	11:20
EXTERNAL STANDARD	0.298	11:20
BLANK TEST	0.000	11:21

Average = 0.2982
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100697

Date: 08/27/2015
Time: 12:10:36

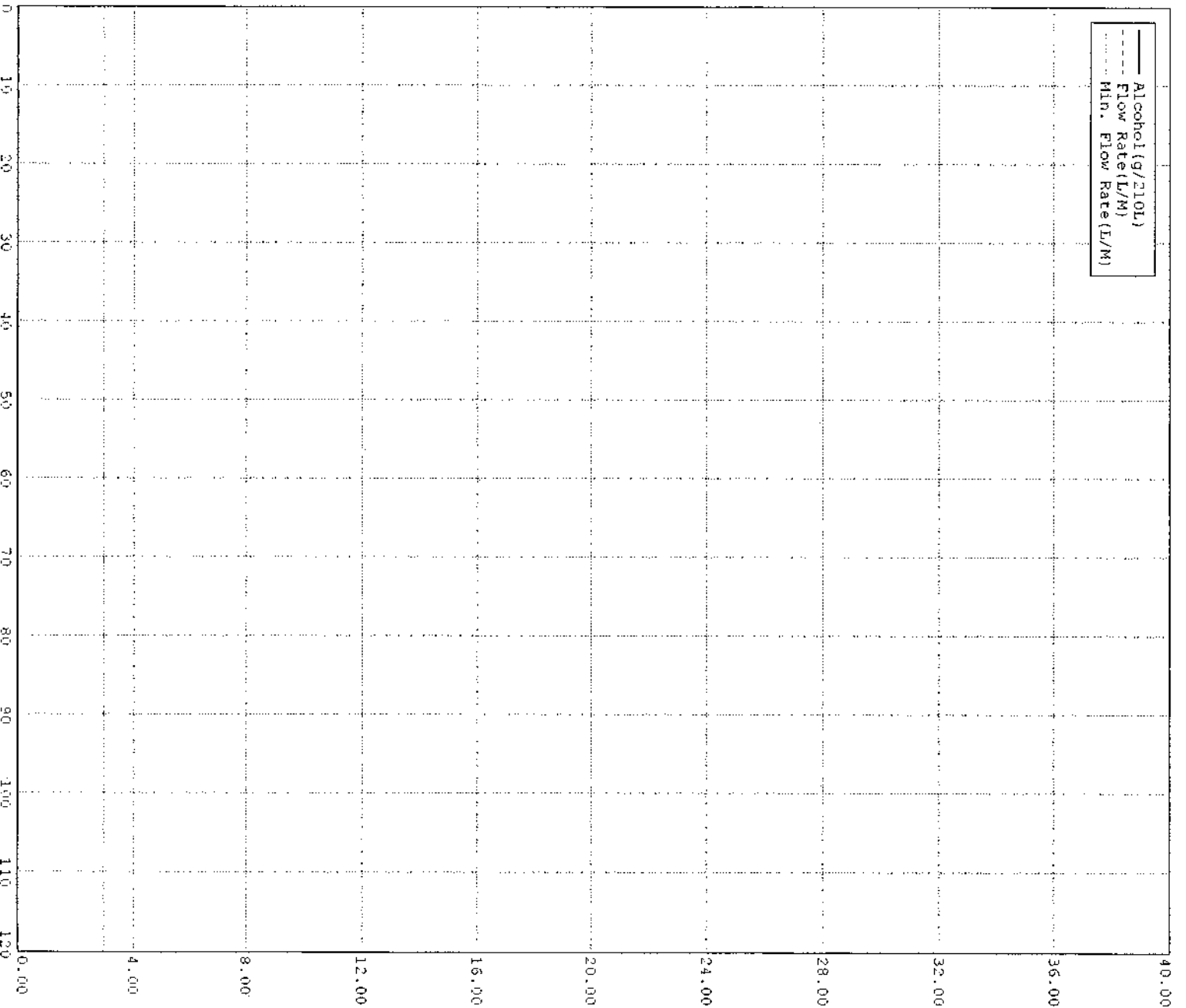
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INCOMPLETE XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.51: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	12:11
BLANK TEST	0.000	12:11
INTERNAL STANDARD	VERIFIED	12:11
EXTERNAL STANDARD	0.077	12:12
BLANK TEST	0.000	12:13
SUBJECT SAMPLE	INCOMPLETE	12:15



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100697

Date: 08/27/2015
Time: 12:22:06

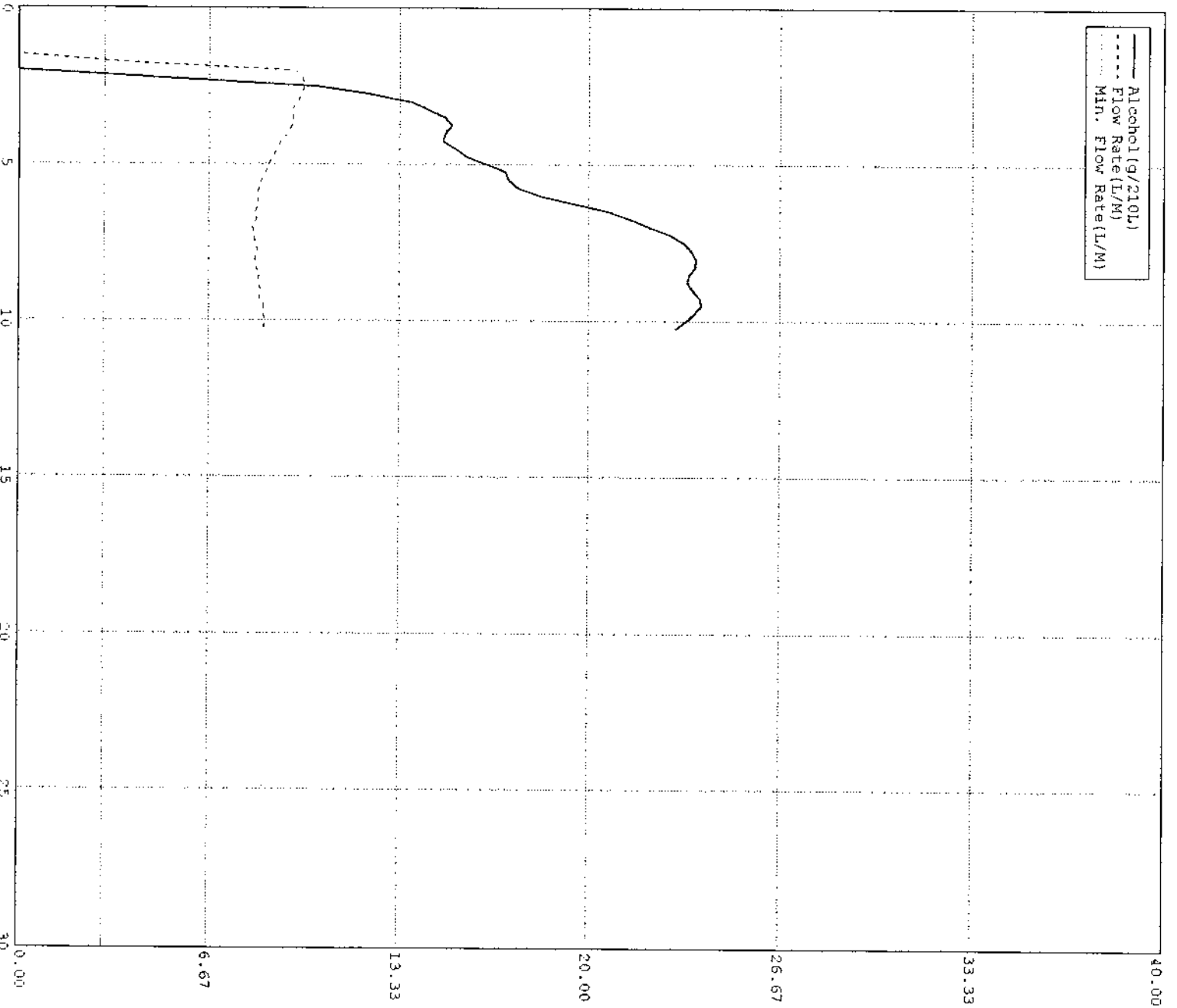
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INVALID XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.51: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK
BLANK TEST PASSED 12:25
INTERNAL STANDARD VERIFIED 12:25
EXTERNAL STANDARD 0.078 12:26
BLANK TEST 0.000 12:27
SUBJECT SAMPLE INVALID 12:27



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100697

Date: 08/27/2015
Time: 12:30:44

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 29.50: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

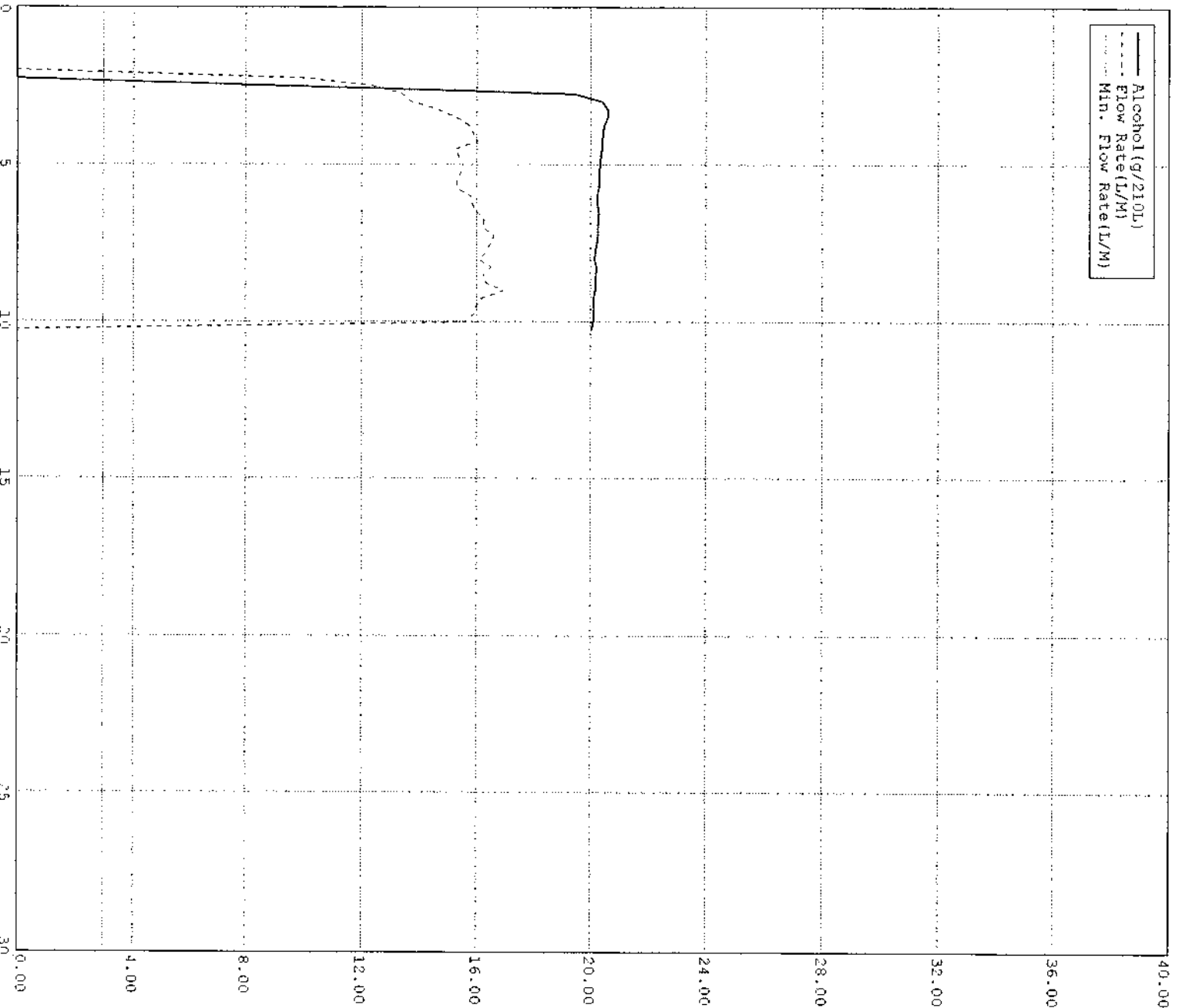
DIAGNOSTIC CHECK	PASSED	12:35
BLANK TEST	0.000	12:35
INTERNAL STANDARD	VERIFIED	12:35
X _q = 0.086 (0.20%)		
EXTERNAL STANDARD	0.078	12:35
X[1] = 0.0776 (-0.0003)	(0.0010)	
BLANK TEST	0.000	12:36
SUBJECT SAMPLE	XXX	12:36
X[1] = 0.1009 (-0.0160)	(-0.0011)	

Interference Detected

Filter 2 Average = -0.0008

Filter 3 Average = 0.0013

CNE 8/27/15



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100697

Date: 08/27/2015
Time: 12:39:23

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

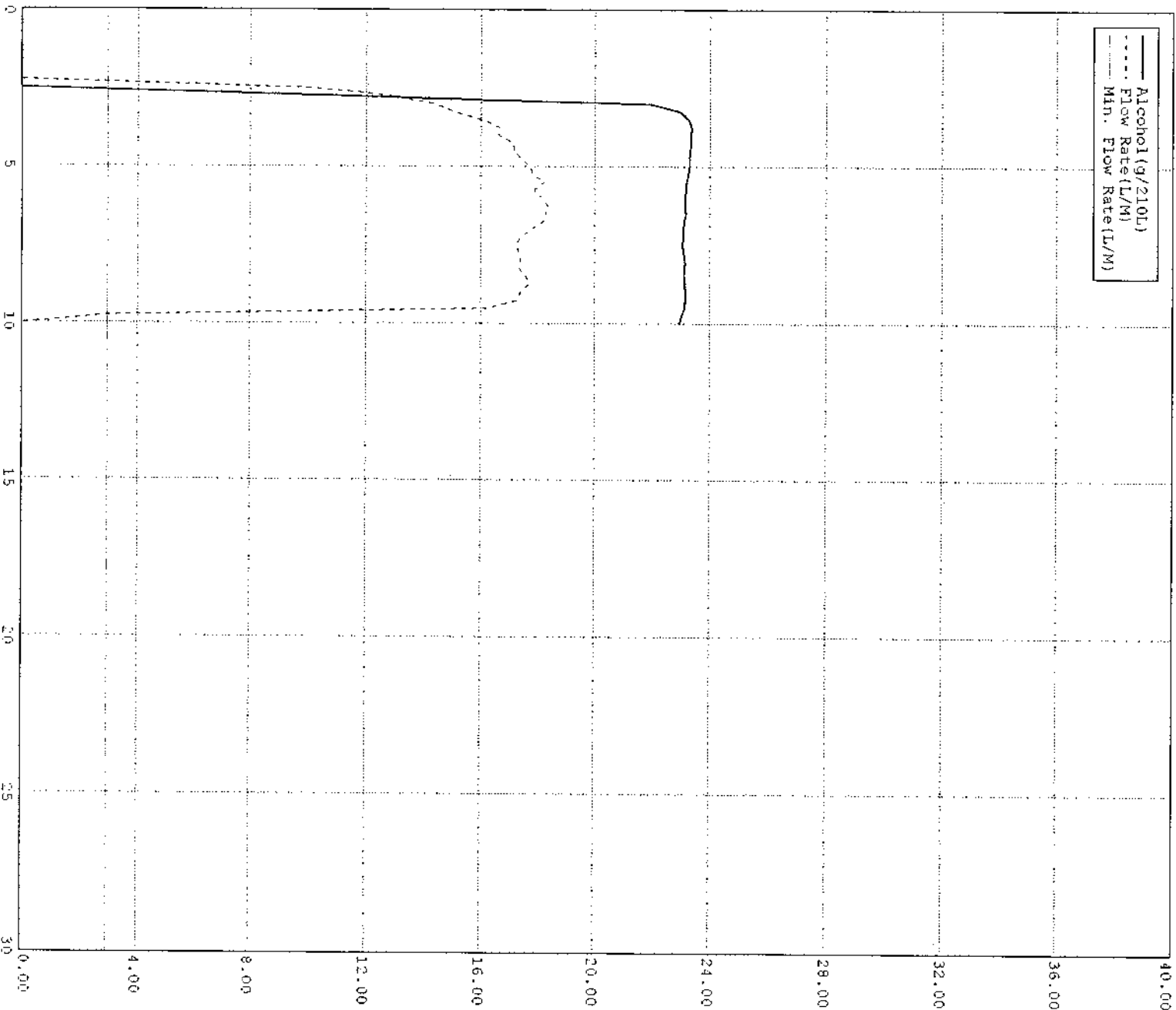
OPERATOR NAME:
INTERFERENCE IPA
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.50: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	12:43
BLANK TEST	0.000	12:43
INTERNAL STANDARD	VERIFIED	12:43
Xq = 0.087 (0.10%)		
EXTERNAL STANDARD	0.078	12:43
X[1] = 0.0783 (-0.0002)	(0.0014)	
BLANK TEST	0.000	12:44
SUBJECT SAMPLE	XXX	12:44
X[1] = 0.1151 (-0.0161)	(0.0007)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 08/27/2015
Time: 12:46:36

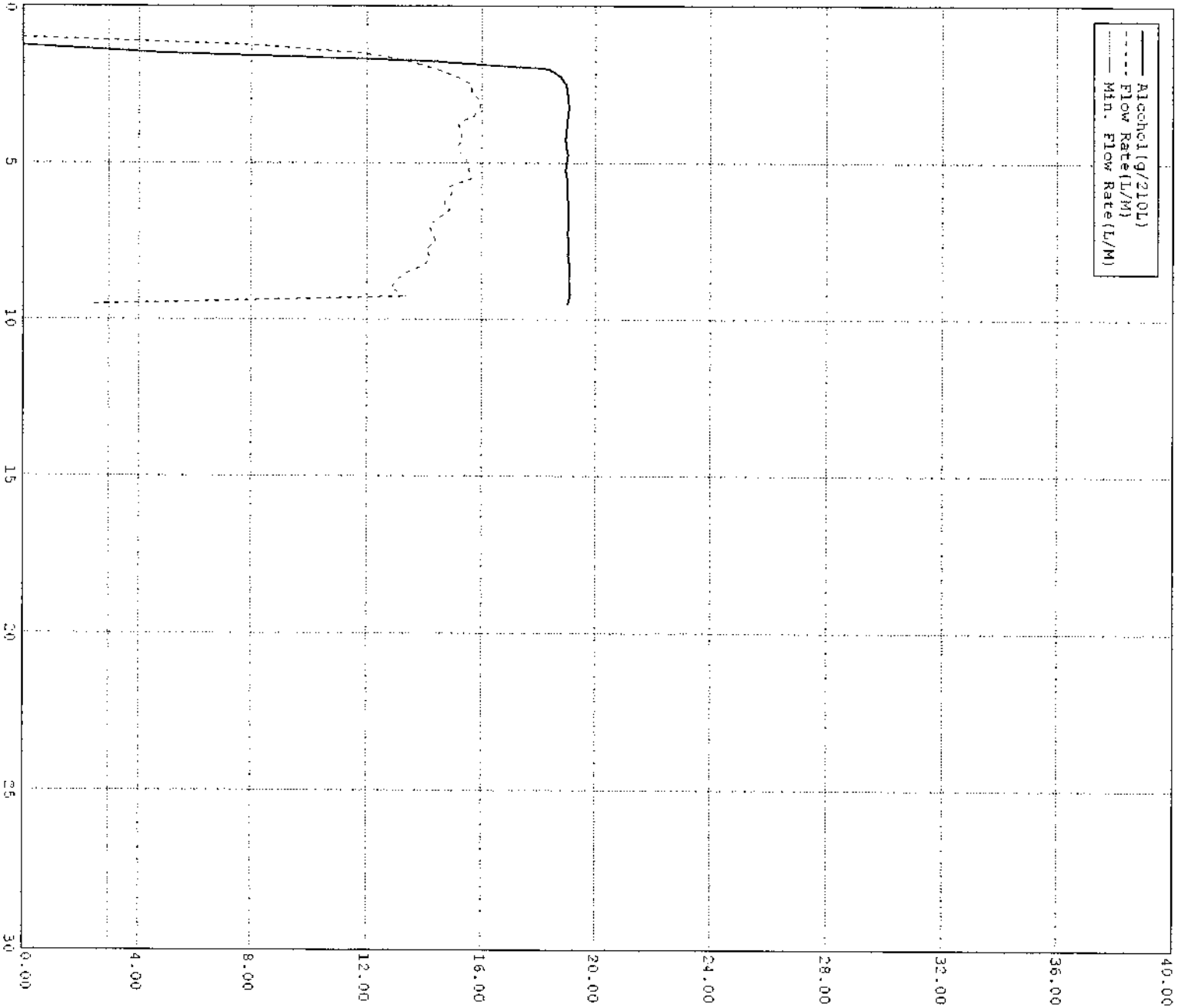
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE NEGATIVE
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.49: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 12:50
BLANK TEST 0.000 12:50
INTERNAL STANDARD VERIFIED 12:50
Xq = 0.086 (0.30%)
EXTERNAL STANDARD 0.077 12:50
X[1] = 0.0775 (-0.0008) (0.0015)
BLANK TEST 0.000 12:51
SUBJECT SAMPLE (Vol=1.99L) 0.095 12:51
X[1] = 0.0958 (-0.0003) (0.0001)
BLANK TEST 0.000 12:52
EXTERNAL STANDARD 0.077 12:53
X[1] = 0.0766 (-0.0018) (0.0012)
BLANK TEST 0.000 12:54



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 08/27/2015
Time: 13:21:10

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

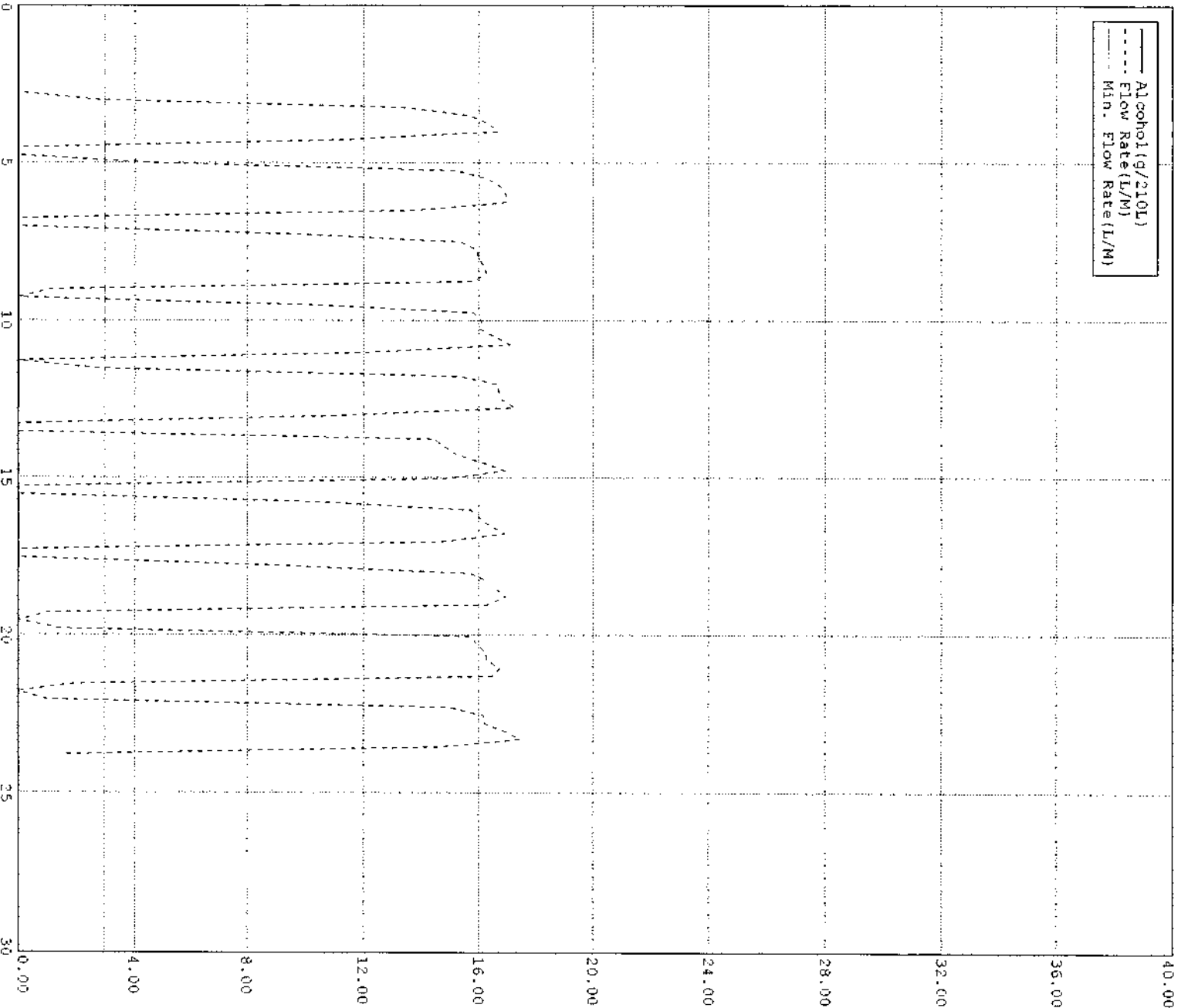
OPERATOR NAME:
EXCEEDED ATTEMPTS
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.47: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 13:26
BLANK TEST 0.000 13:26
INTERNAL STANDARD VERIFIED 13:26
EXTERNAL STANDARD 0.078 13:26
BLANK TEST 0.000 13:27
SUBJECT SAMPLE XXX 13:28

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 08/27/2015
Time: 13:40:56

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

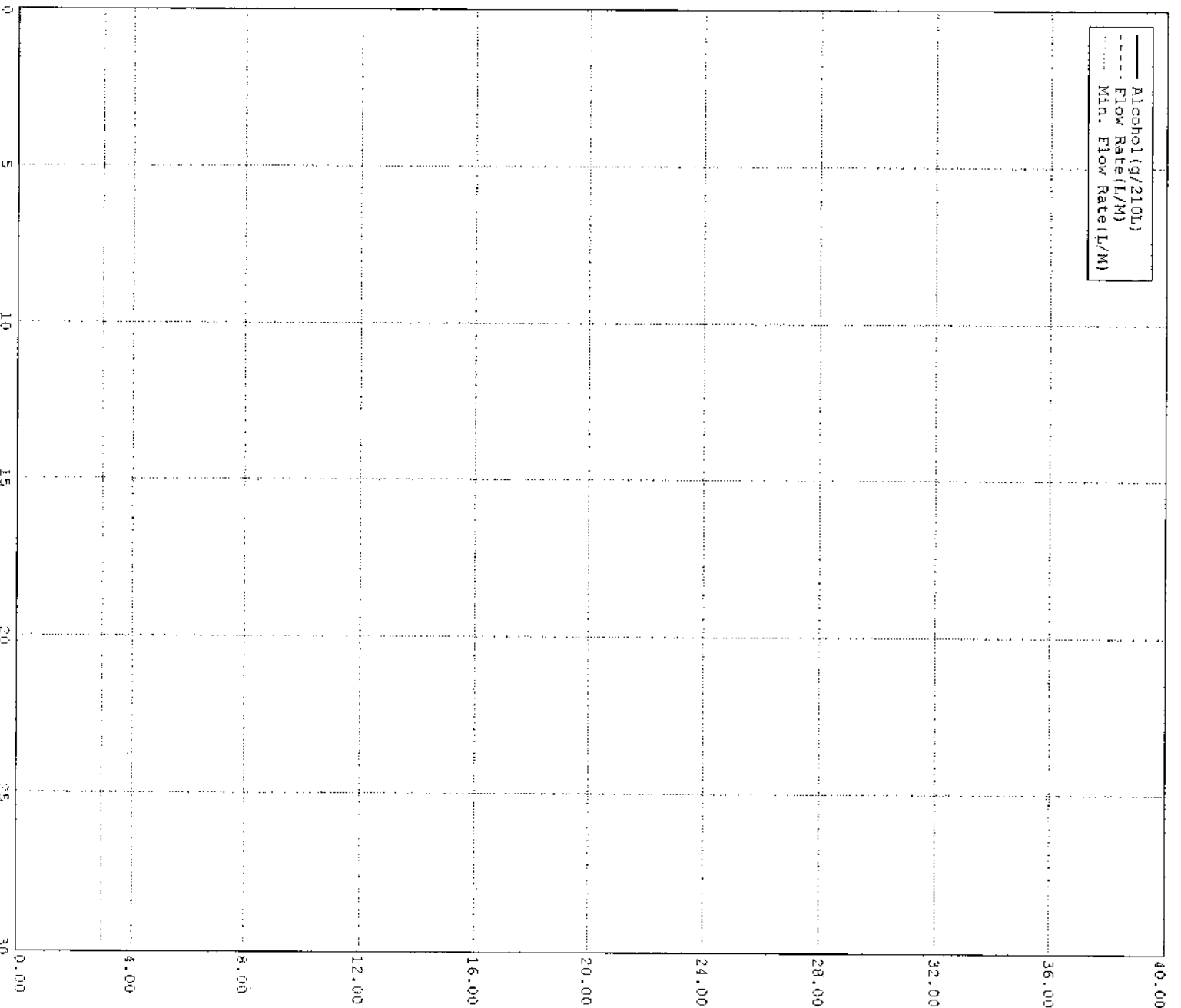
OPERATOR NAME:
RFI XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.48: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:42
BLANK TEST	0.000	13:42
INTERNAL STANDARD	VERIFIED	13:42
EXTERNAL STANDARD	0.077	13:42
BLANK TEST	0.000	13:43

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 08/27/2015
Time: 14:02:09

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 29.48: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	14:05
INTERNAL STANDARD	0.000	14:05
EXTERNAL STANDARD	0.078	14:05
INTERNAL STANDARD	0.000	14:06
EXTERNAL STANDARD	0.000	14:06
SUBJECT SAMPLE (Vol=2.29L)	0.000	14:07
INTERNAL STANDARD	0.078	14:08
EXTERNAL STANDARD	0.000	14:08

