

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 100687 Analyst CTF Start Date 12/11/15

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 12/14/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 12/11/2015
Time: 10:43:32

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 = 45.9°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.67 V PASSED
(1.00 V - 2.34 V)
Cooler Voltage = 1.61 V PASSED
(0.97 V - 2.25 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 532 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.0 in

PUMP INFO

Flow Rate = 4.151 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 = 0.140 0.06% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100687

Date: 12/11/2015
Time: 10:51 AM

Temperatures (°C)
Sample Cell: 48.8°C
Breath Tube: 46.7°C

Current Barometer 29.0 in
Volume (Ltr) 1.50

Settings
Lamp: 1.67 V
Bias: 80 V
Cooler: 1.61 V
Chopper: 532 Hz

Voltages (V)
Flow: 1.06 V
Detector: -0.046 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 09/21/2015
Time: 11:35:15

OPERATOR NAME:
NEAS N
CERTIFICATE #: GUTHC, G12921, 34.0C, 15040

Ca = 0.1010
CAL = 1.021706 0.800 <= CAL < 1.200
b1 = 0.0004 0.0000 <= b1 < 0.0040
b2 = 0.0043 0.0010 <= b2 < 0.0100
b3 = 0.0007 0.0000 <= b3 < 0.0040
Xq = 0.1399 0.0500 <= Xq < 0.2000
a21 = 1.156540 1.050 <= a21 < 1.300
a31 = 0.533758 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 12/11/2015
Time: 11:04:02

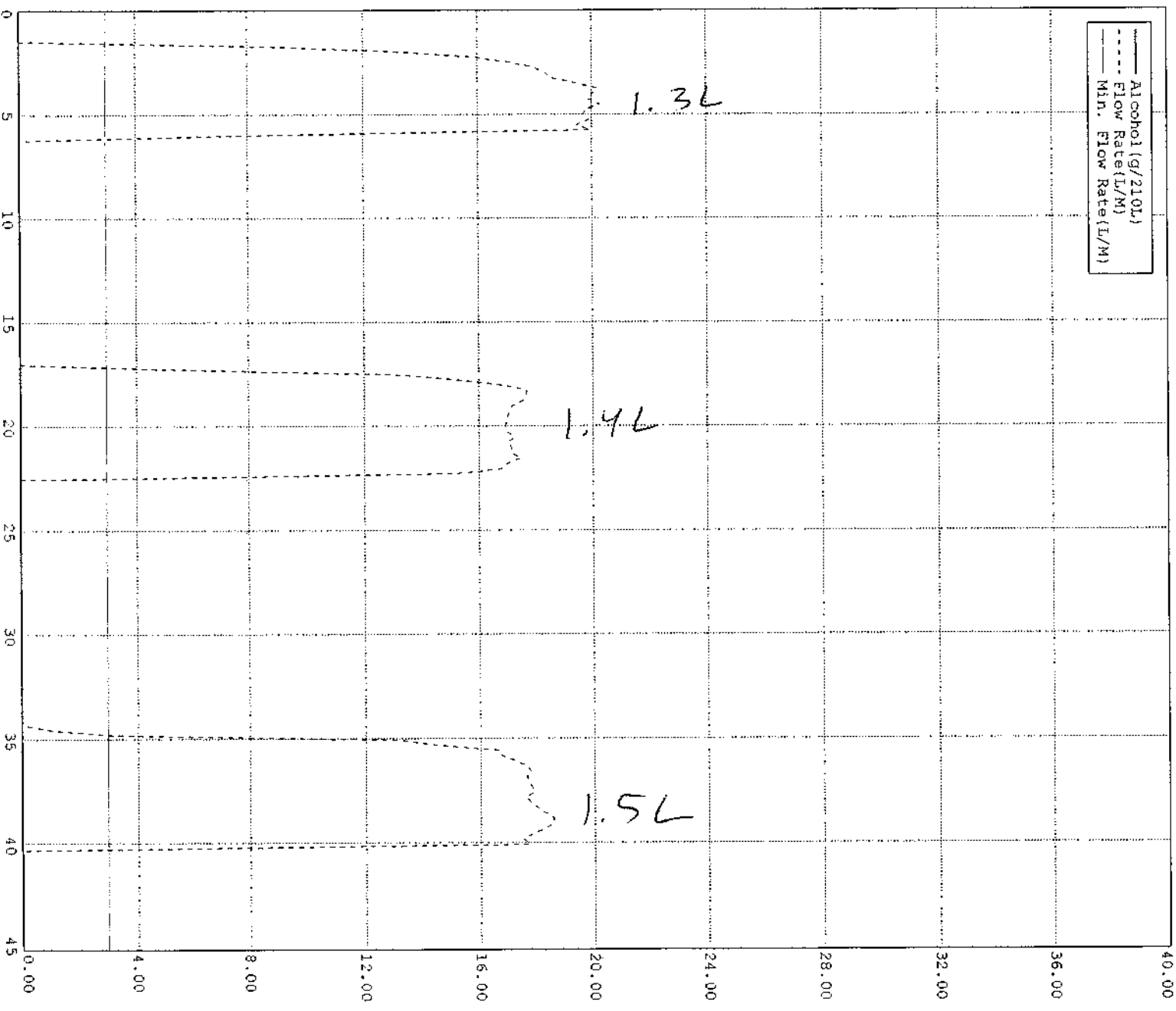
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MINIMUM VOLUME
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.02: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	11:05
BLANK TEST	0.000	11:05
INTERNAL STANDARD	VERIFIED	11:05
EXTERNAL STANDARD	0.076	11:05
BLANK TEST	0.000	11:06
SUBJECT SAMPLE (Vol=1.54L)	0.000	11:07
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.078	11:08
BLANK TEST	0.000	11:09



LINEARITY CHECK

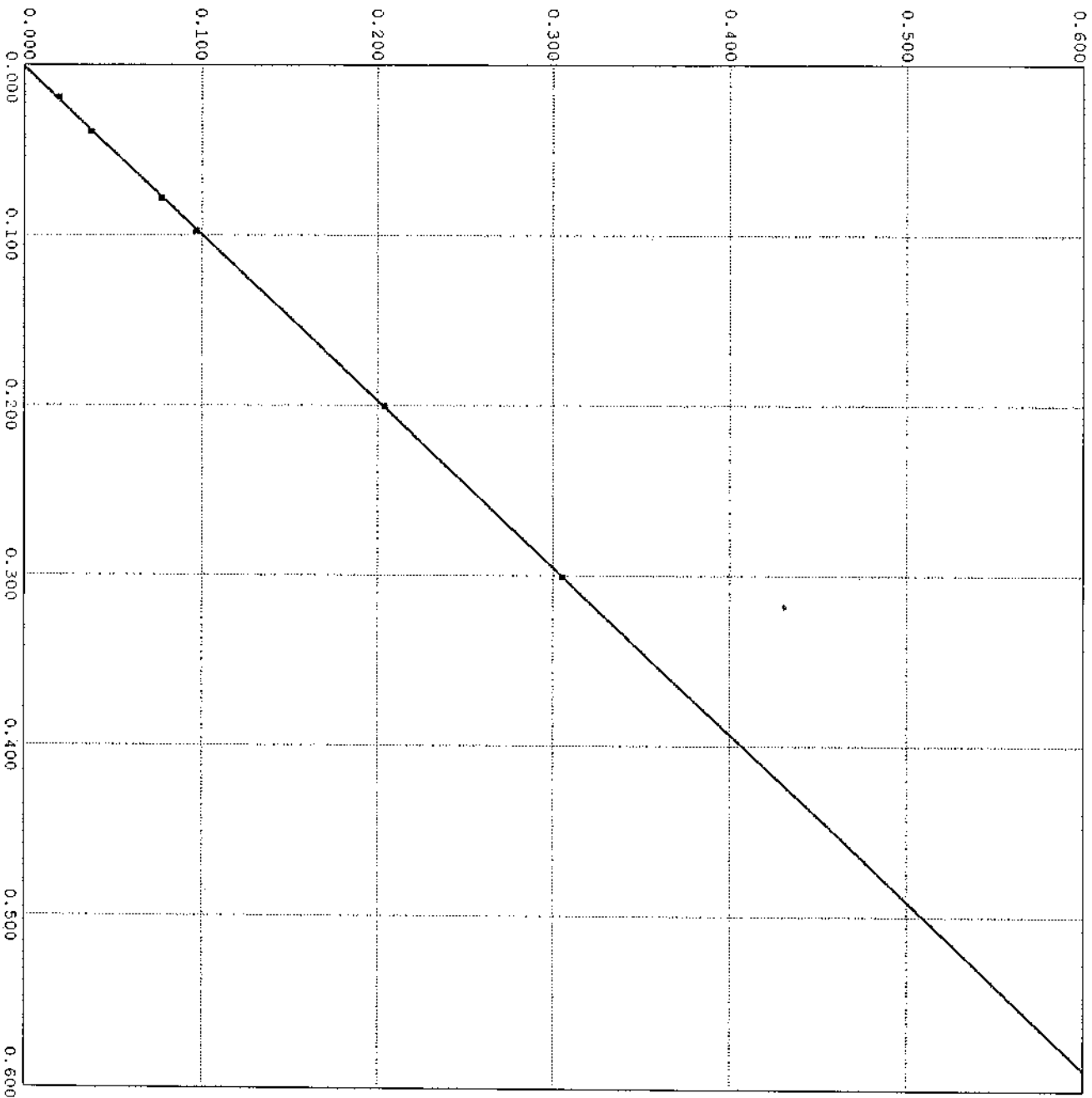
Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 12/11/2015
Time: 13:01:39

SUPERVISOR NAME:
CHARLES FOSTER
OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.019	0.0204	0.0005
0.039	0.0388	0.0004
0.078	0.0782	0.0004
0.097	0.0978	0.0004
0.200	0.2048	0.0011
0.300	0.3060	0.0007

SLOPE = 1.022201
R² = 0.999916



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100687

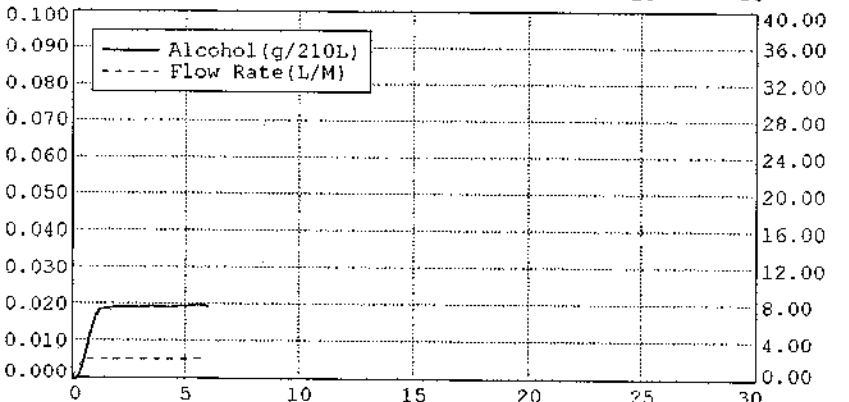
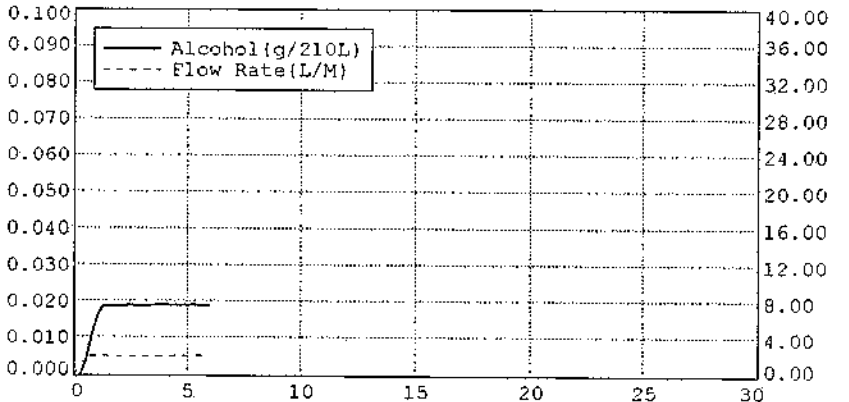
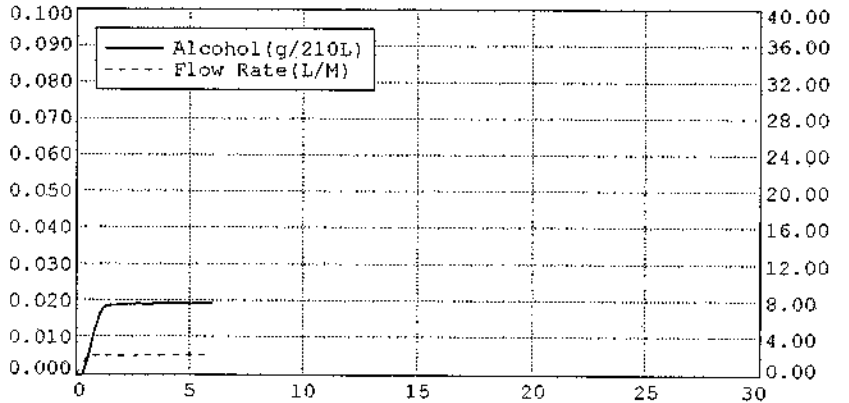
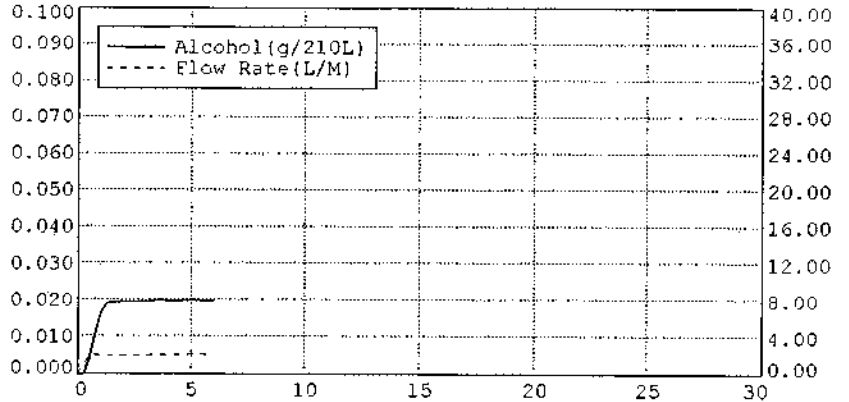
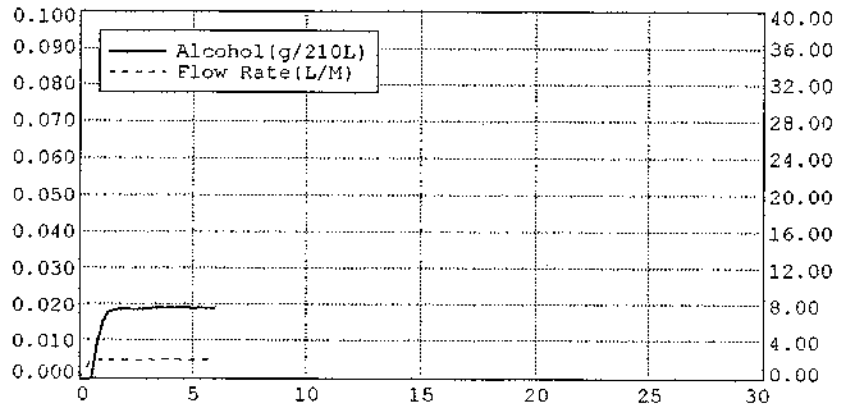
Date: 12/11/2015
 Time: 13:01:41

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.01: 0.019
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 683 psi

BLANK TEST	0.000	13:03
INTERNAL STANDARD	VERIFIED	13:03
EXTERNAL STANDARD	0.020	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.021	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.020	13:05
BLANK TEST	0.000	13:06
EXTERNAL STANDARD	0.020	13:06
BLANK TEST	0.000	13:07
EXTERNAL STANDARD	0.021	13:07
BLANK TEST	0.000	13:08

Average = 0.0204
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100687

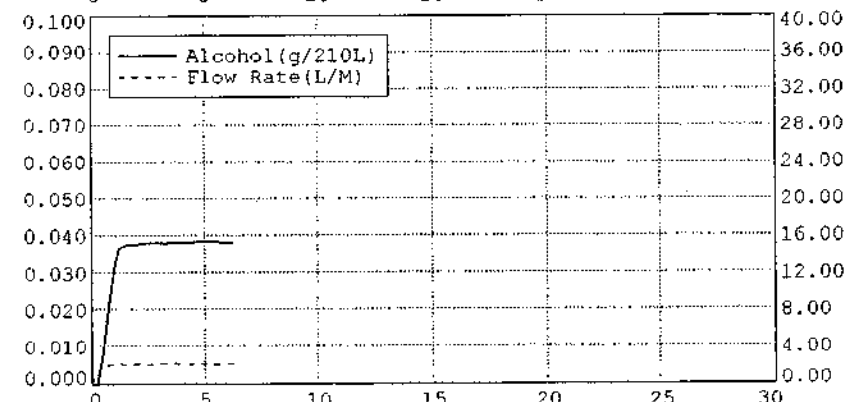
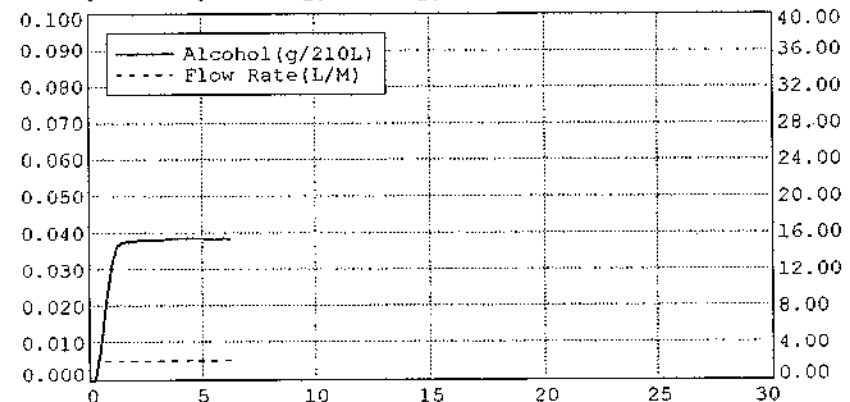
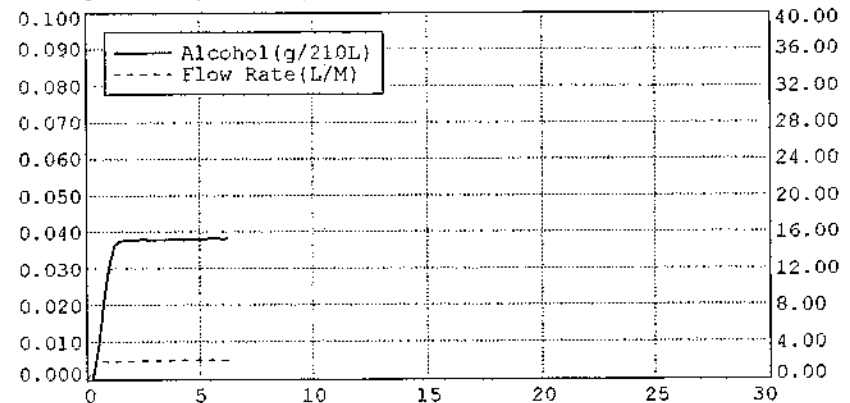
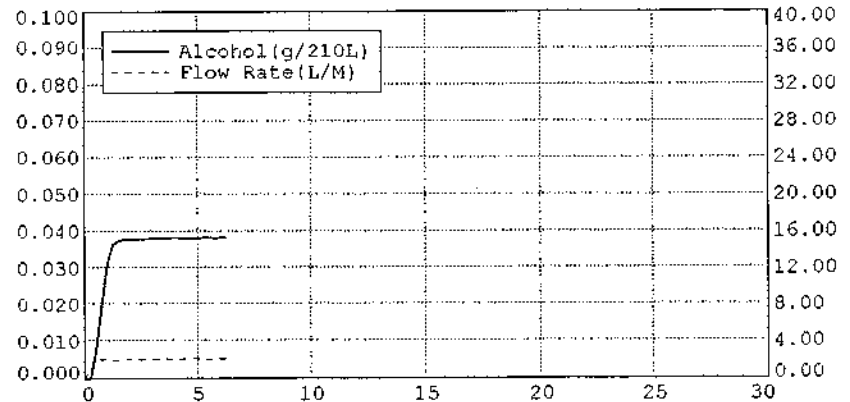
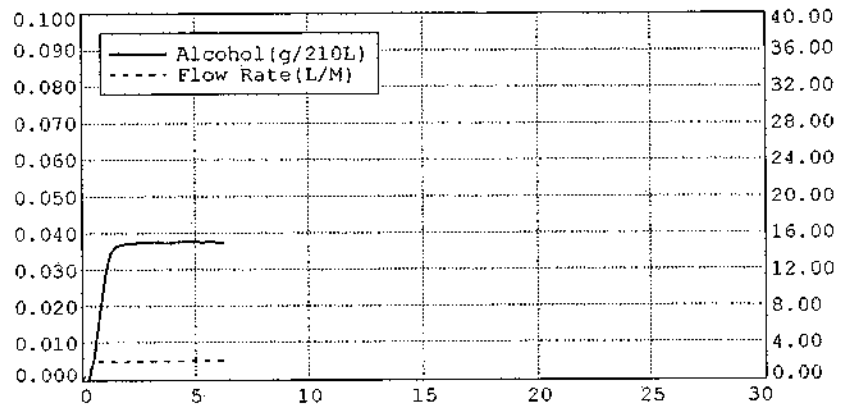
Date: 12/11/2015
 Time: 13:14:38

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.01: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 714 psi

BLANK TEST	0.000	13:15
INTERNAL STANDARD	VERIFIED	13:15
EXTERNAL STANDARD	0.038	13:16
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.039	13:17
BLANK TEST	0.000	13:18
EXTERNAL STANDARD	0.039	13:18
BLANK TEST	0.000	13:19
EXTERNAL STANDARD	0.039	13:19
BLANK TEST	0.000	13:20
EXTERNAL STANDARD	0.039	13:20
BLANK TEST	0.000	13:21

Average = 0.0388
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100687

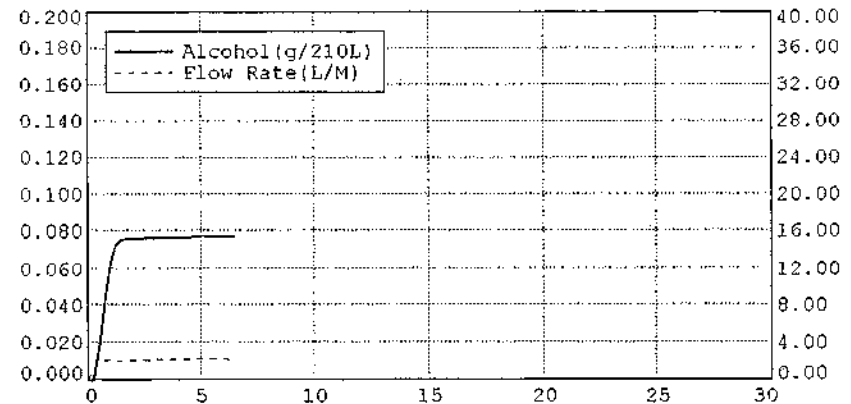
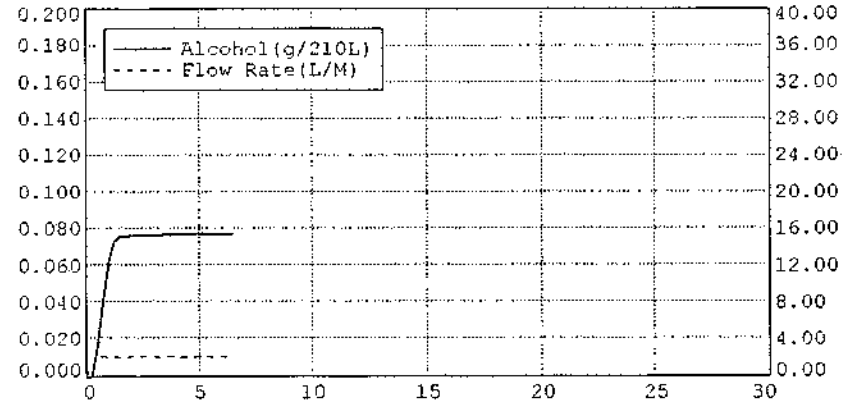
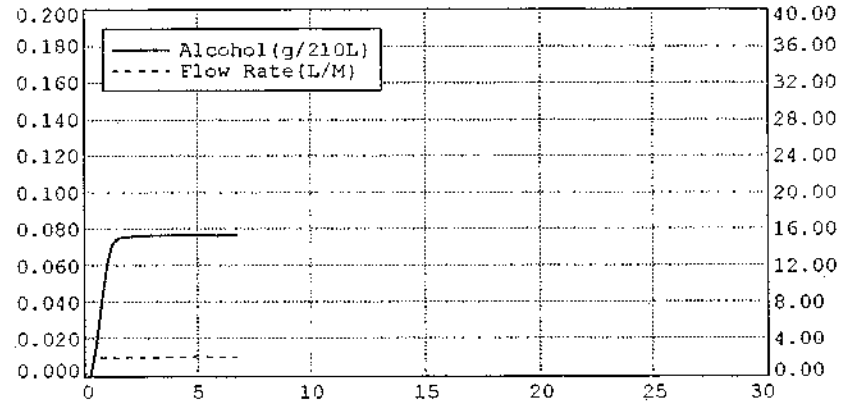
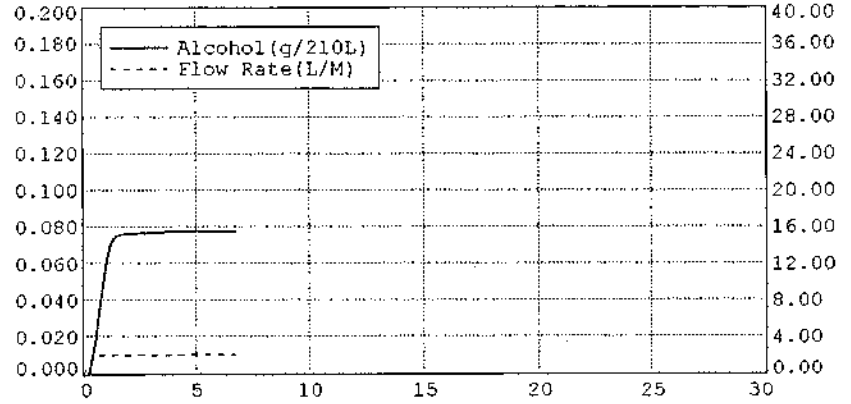
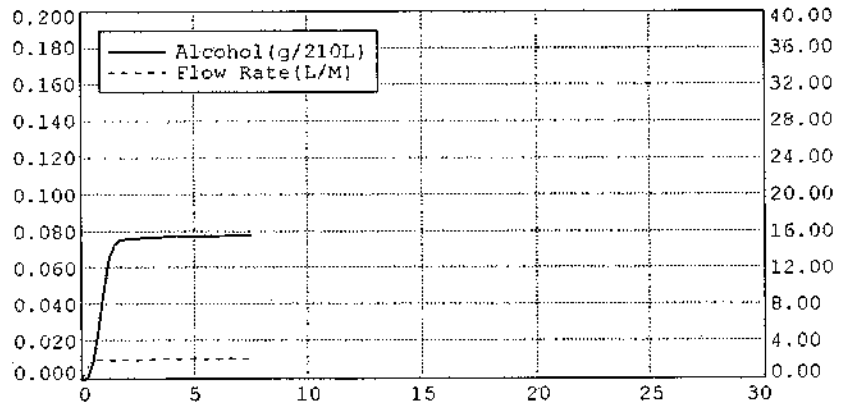
Date: 12/11/2015
 Time: 13:22:01

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.01: 0.078
 LOT #: 01315080A3
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 827 psi

BLANK TEST	0.000	13:23
INTERNAL STANDARD	VERIFIED	13:23
EXTERNAL STANDARD	0.079	13:23
BLANK TEST	0.000	13:24
EXTERNAL STANDARD	0.078	13:24
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.078	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.078	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.078	13:27
BLANK TEST	0.000	13:28

Average = 0.0782
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100687

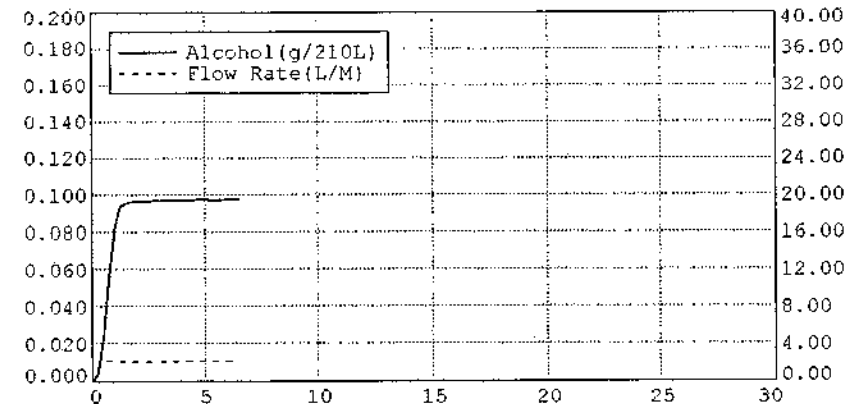
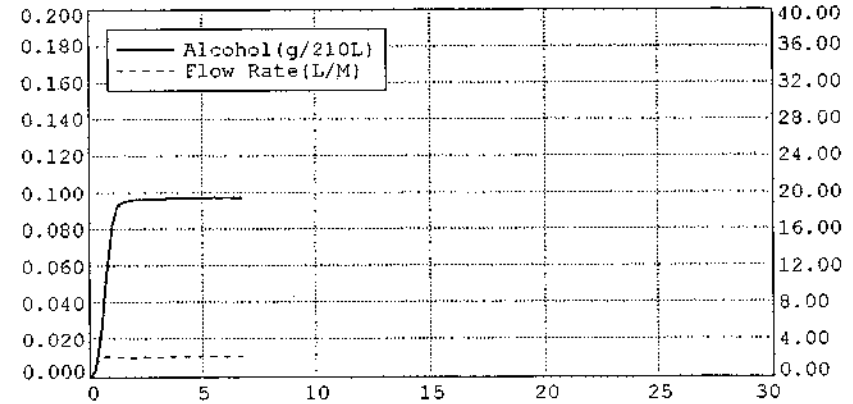
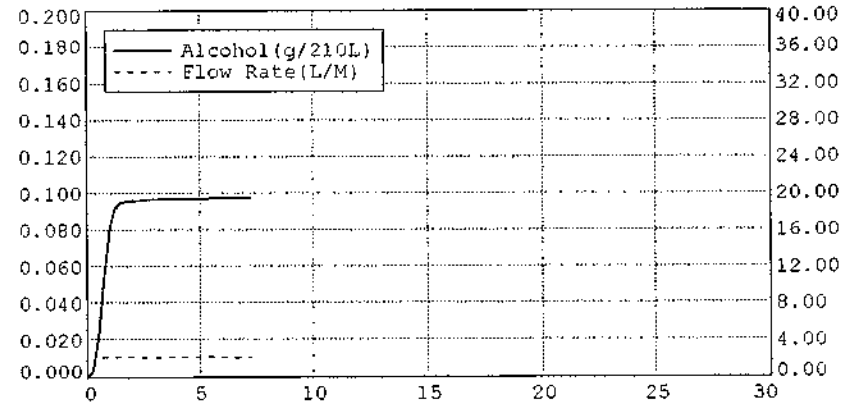
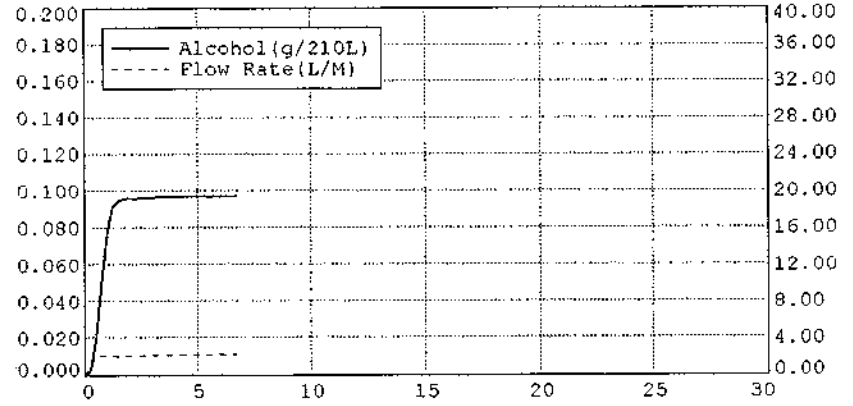
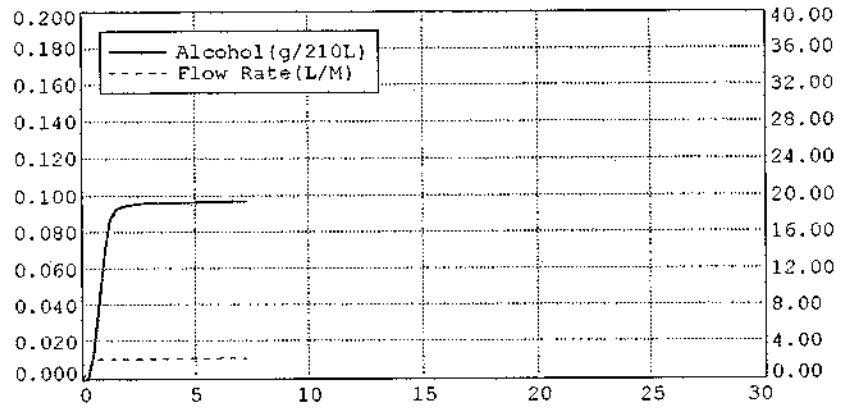
Date: 12/11/2015
 Time: 13:29:22

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.01: 0.097
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 996 psi

BLANK TEST	0.000	13:30
INTERNAL STANDARD	VERIFIED	13:30
EXTERNAL STANDARD	0.097	13:31
BLANK TEST	0.000	13:31
EXTERNAL STANDARD	0.098	13:32
BLANK TEST	0.000	13:33
EXTERNAL STANDARD	0.098	13:33
BLANK TEST	0.000	13:34
EXTERNAL STANDARD	0.098	13:34
BLANK TEST	0.000	13:35
EXTERNAL STANDARD	0.098	13:35
BLANK TEST	0.000	13:36

Average = 0.0978
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

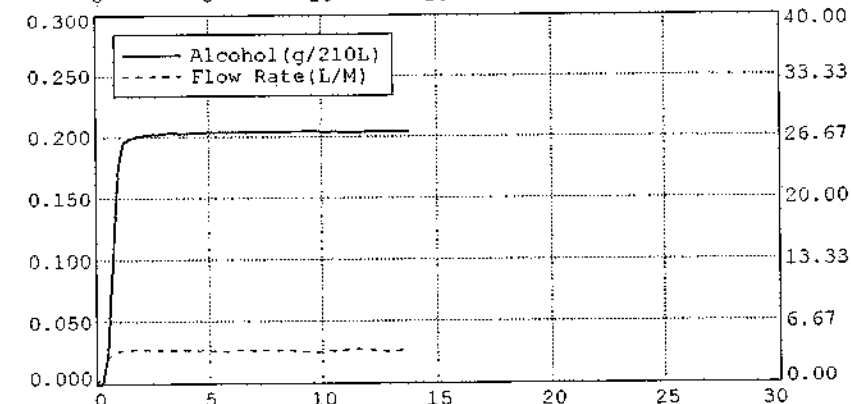
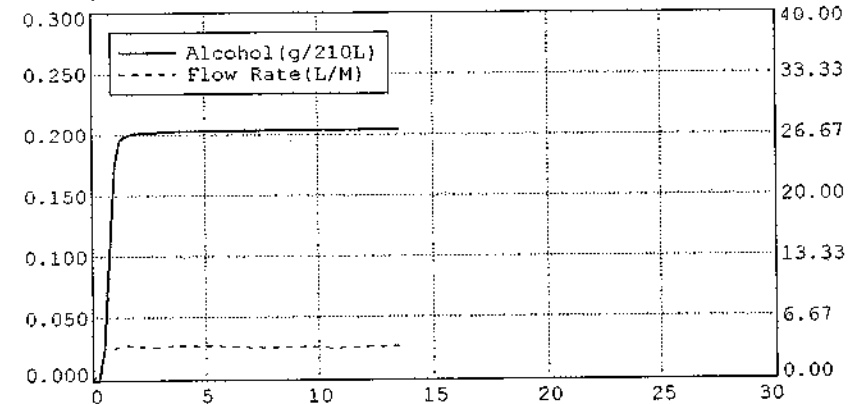
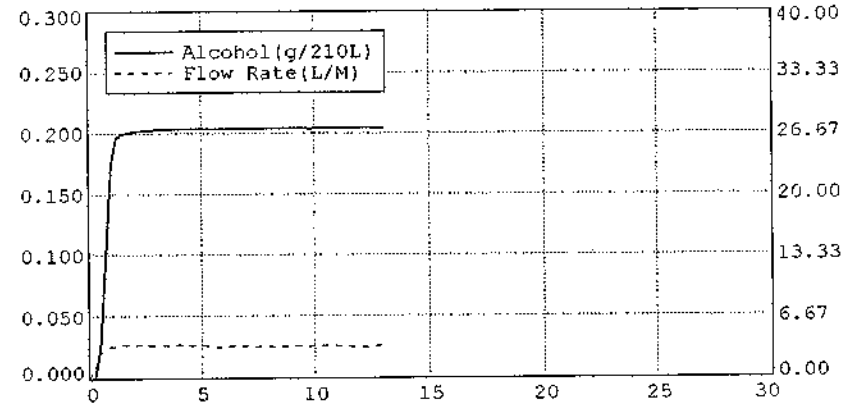
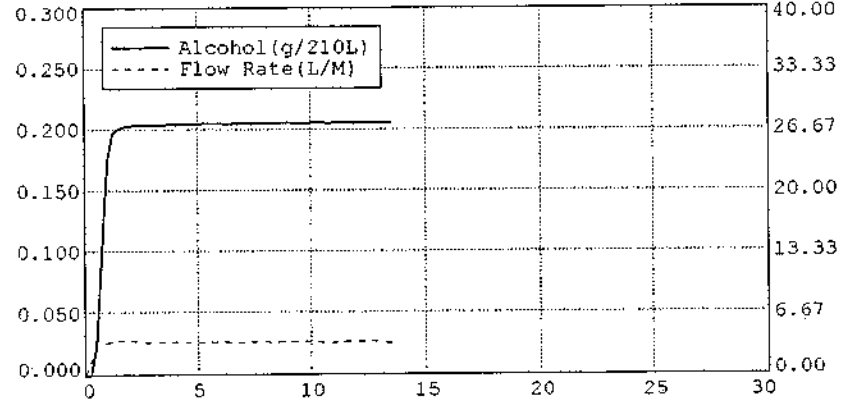
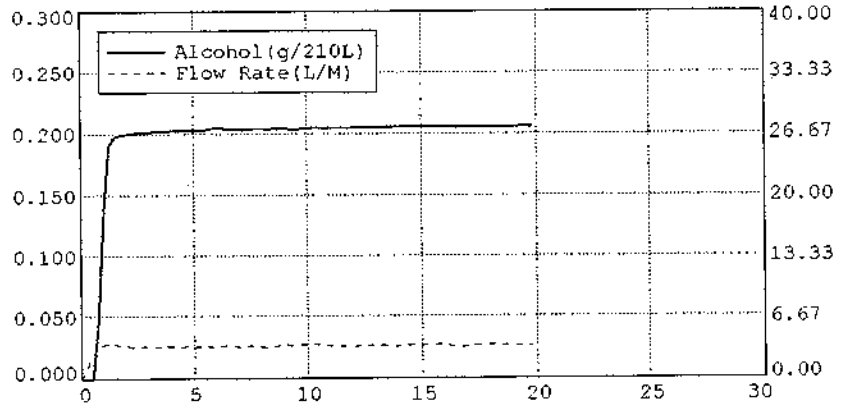
Alaska Department of Public Safety
 DATAMASTER dnt: 100687

Date: 12/11/2015
 Time: 13:48:35

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

BLANK TEST	0.000	13:50
INTERNAL STANDARD	VERIFIED	13:50
EXTERNAL STANDARD	0.206	13:50
BLANK TEST	0.000	13:51
EXTERNAL STANDARD	0.206	13:51
BLANK TEST	0.000	13:52
EXTERNAL STANDARD	0.204	13:53
BLANK TEST	0.000	13:54
EXTERNAL STANDARD	0.204	13:54
BLANK TEST	0.000	13:55
EXTERNAL STANDARD	0.204	13:55
BLANK TEST	0.000	13:56

Average = 0.2048
 Std Dev = 0.0011



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100687

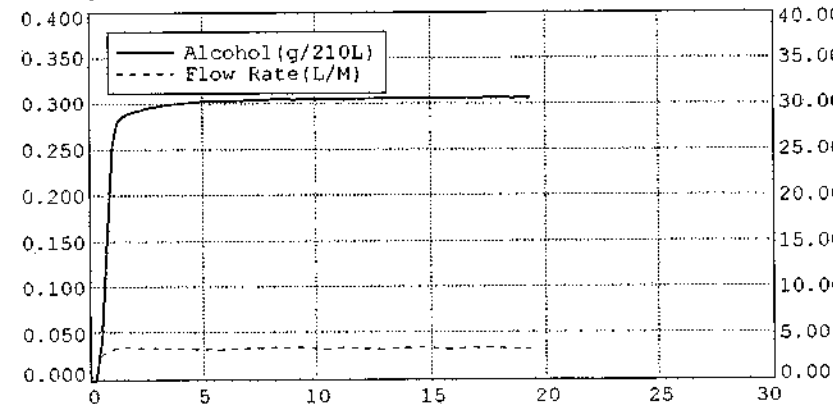
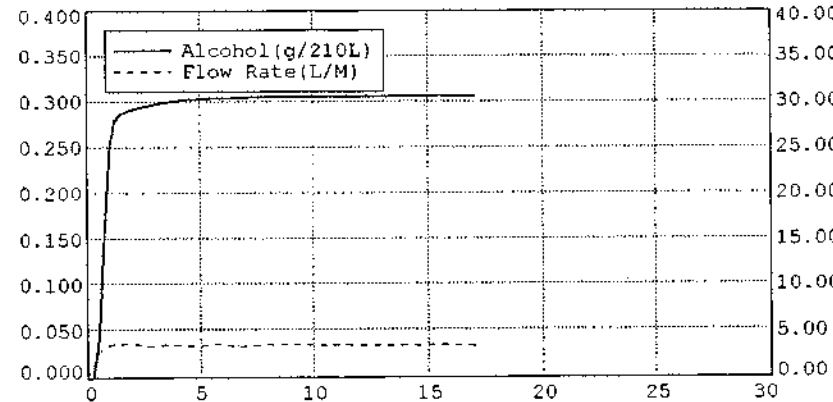
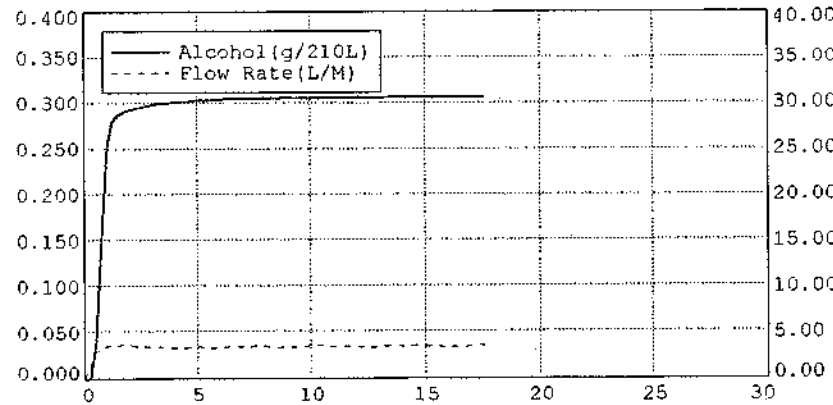
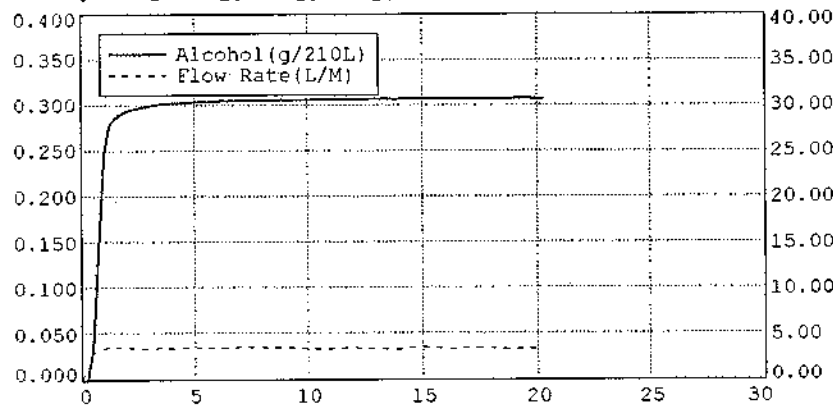
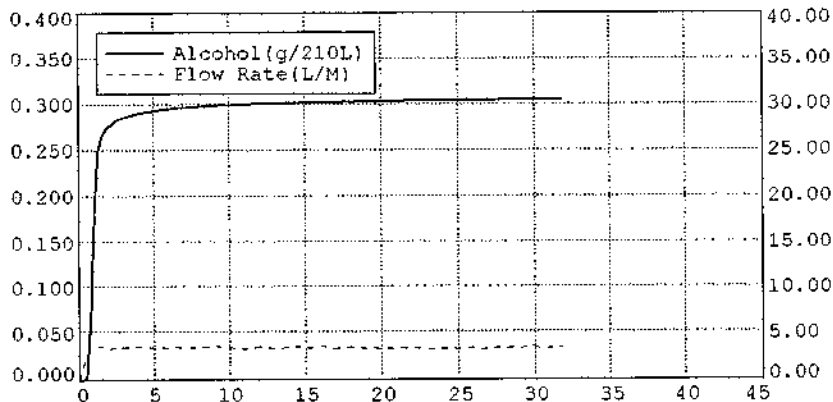
Date: 12/11/2015
 Time: 14:02:48

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:03
INTERNAL STANDARD	VERIFIED	14:04
EXTERNAL STANDARD	0.305	14:04
BLANK TEST	0.000	14:05
EXTERNAL STANDARD	0.307	14:06
BLANK TEST	0.000	14:07
EXTERNAL STANDARD	0.306	14:07
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.306	14:08
BLANK TEST	0.000	14:09
EXTERNAL STANDARD	0.306	14:10
BLANK TEST	0.000	14:11

Average = 0.3060
 Std Dev = 0.0007



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 12/14/2015
Time: 09:59:41

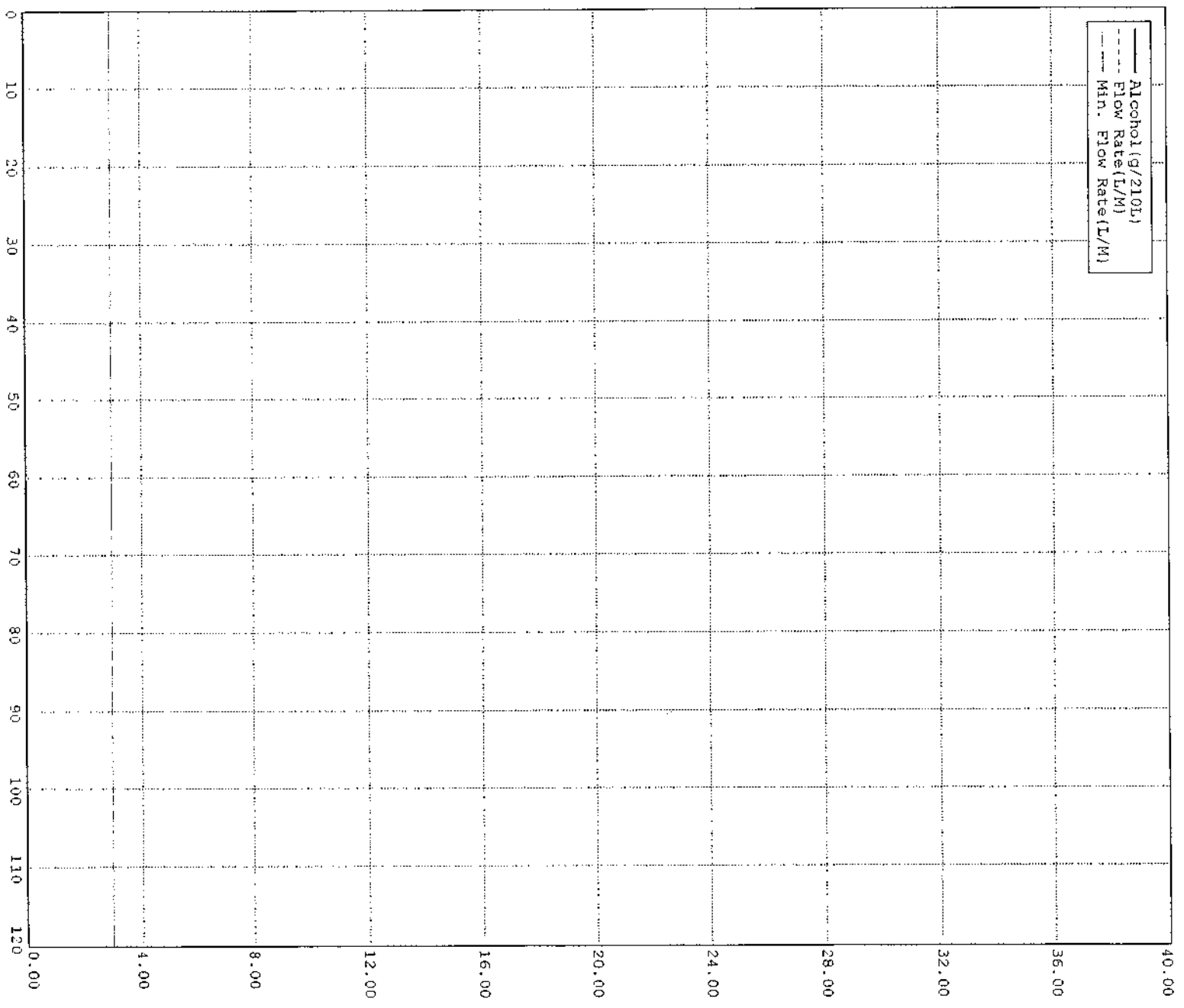
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INCOMPLETE XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.30: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:01
BLANK TEST	0.000	10:01
INTERNAL STANDARD	VERIFIED	10:01
EXTERNAL STANDARD	0.078	10:02
BLANK TEST	0.000	10:02
SUBJECT SAMPLE	INCOMPLETE	10:04



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 12/14/2015
Time: 10:08:02

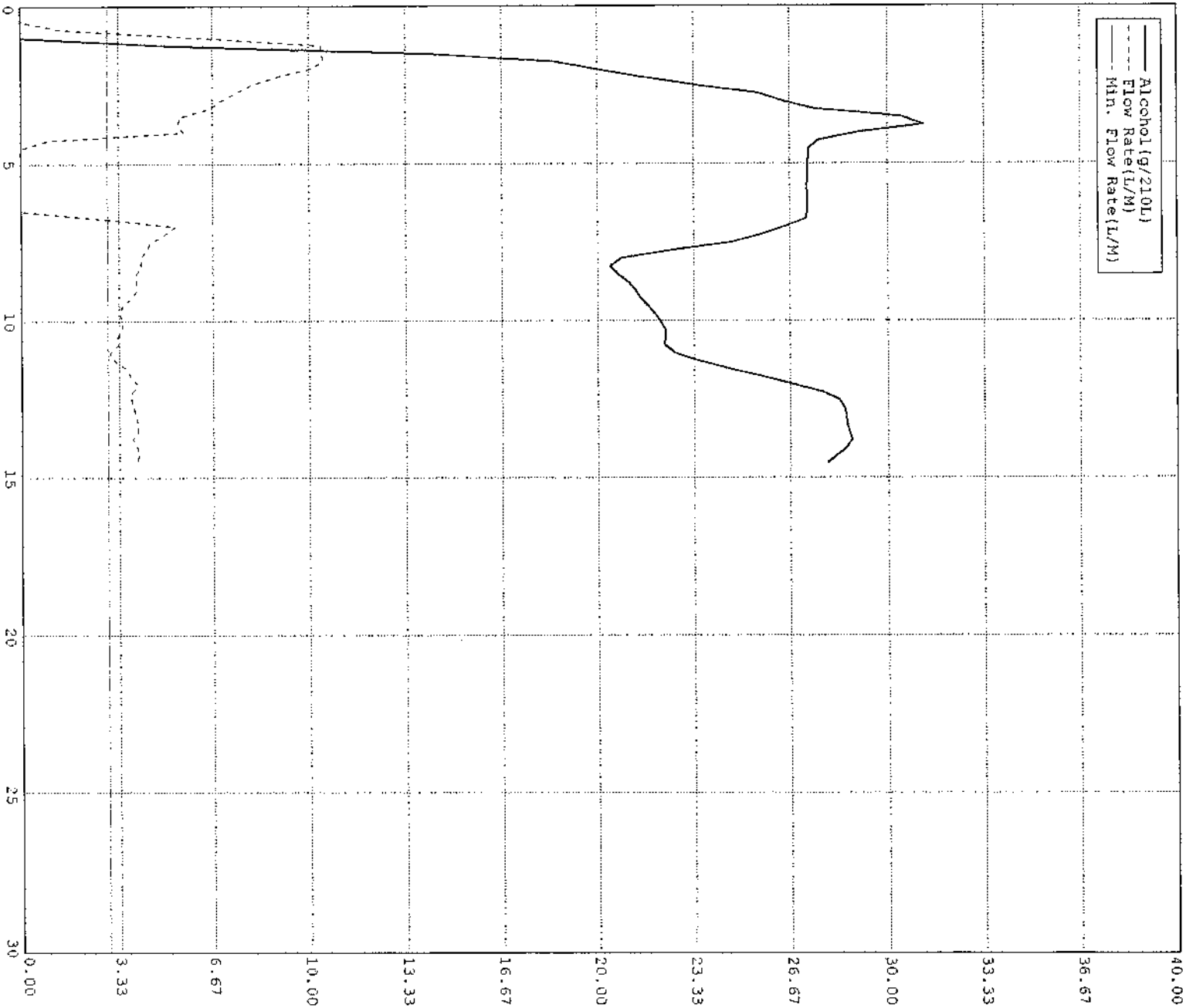
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MOUTH ETOH
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.30: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK
BLANK TEST PASSED 10:10
INTERNAL STANDARD VERIFIED 10:11
EXTERNAL STANDARD 0.079 10:11
BLANK TEST 0.000 10:12
SUBJECT SAMPLE INVALID 10:12



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 12/14/2015
Time: 10:15:32

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 29.31: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:17
BLANK TEST	0.000	10:17
INTERNAL STANDARD	VERIFIED	10:17
Xq = 0.139 (0.32%)		
EXTERNAL STANDARD	0.078	10:17
X[1] = 0.0781 (-0.0004)	(0.0018)	
BLANK TEST	0.000	10:18
SUBJECT SAMPLE	XXX	10:18
X[1] = 0.1039 (-0.0201)	(-0.0001)	

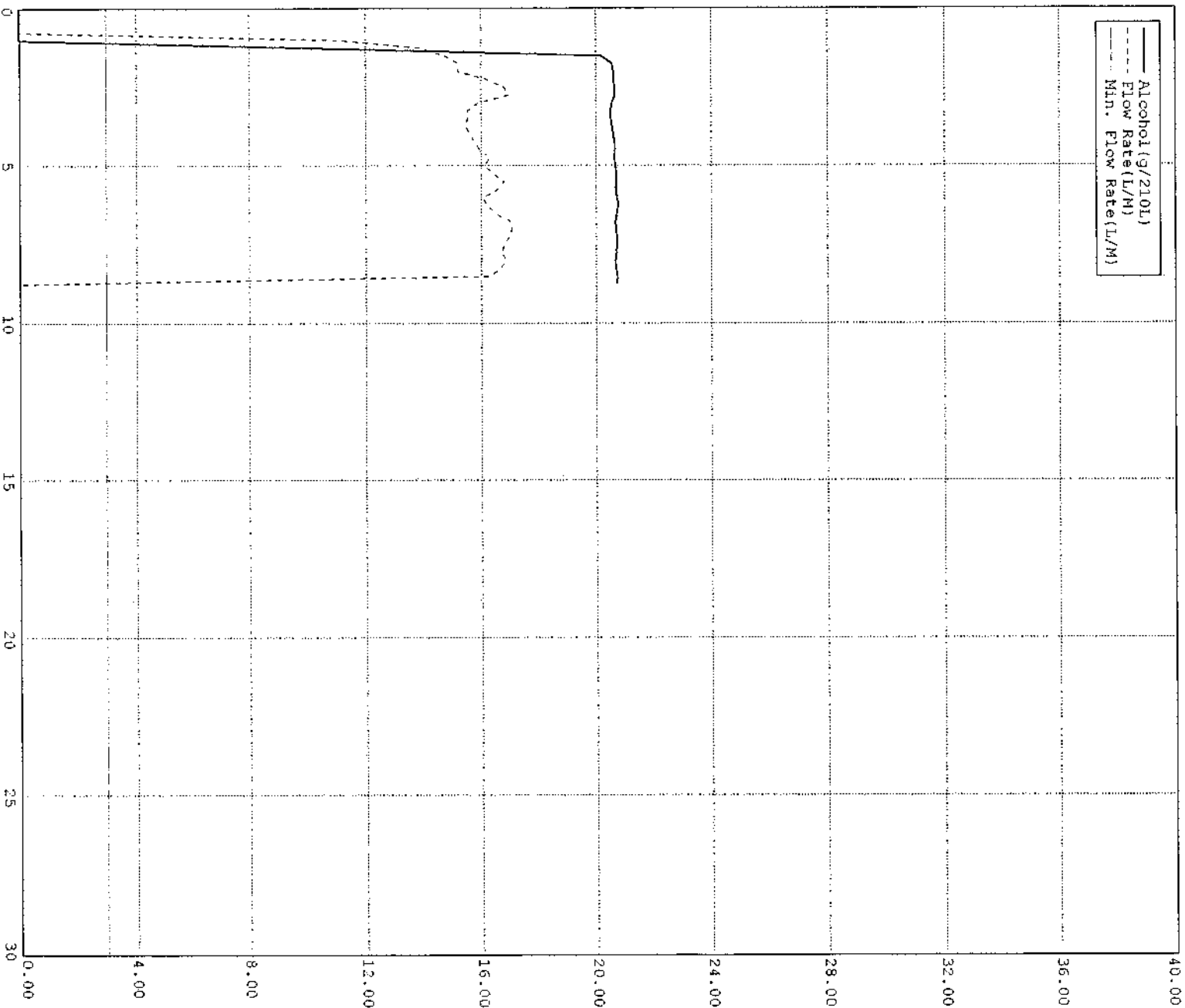
Interference Detected

CWF 12/14/15

Filter 2 Avg = -0.0004

Filter 3 Avg = 0.0023

CWF 12/14/15



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 12/14/2015
Time: 10:21:30

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE IPA
OPERATOR'S #: XXXX

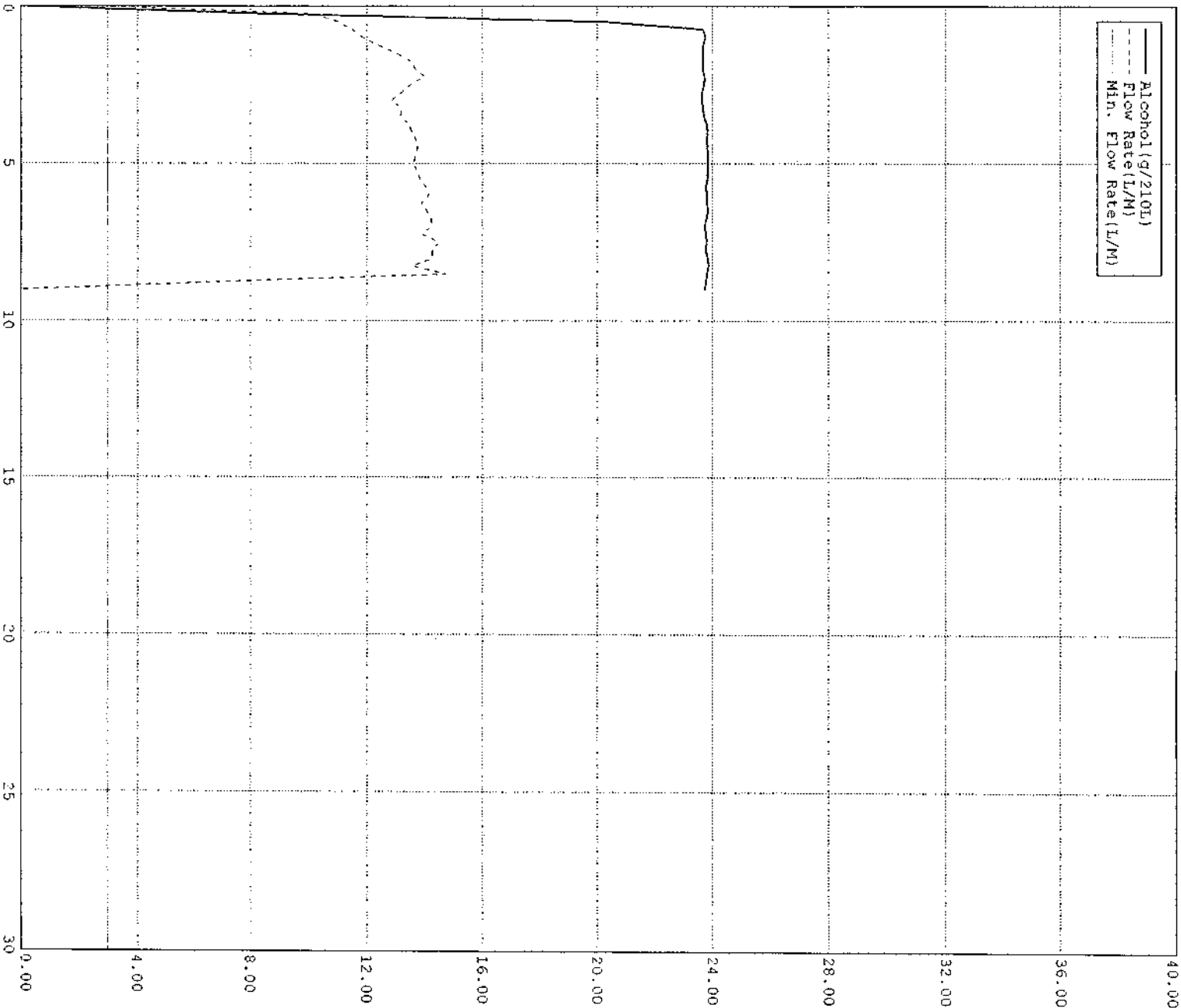
DEPT/AGENCY:
XXXX
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.31: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:23
BLANK TEST	0.060	10:23
INTERNAL STANDARD	VERIFIED	10:23
Xq = 0.142 (1.15%)		
EXTERNAL STANDARD	0.081	10:23
X[1] = 0.0805 (0.0001)	(0.0032)	
BLANK TEST	0.000	10:24
SUBJECT SAMPLE	XXX	10:25
X[1] = 0.1192 (-0.0218)	(0.0017)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 12/14/2015
Time: 10:27:48

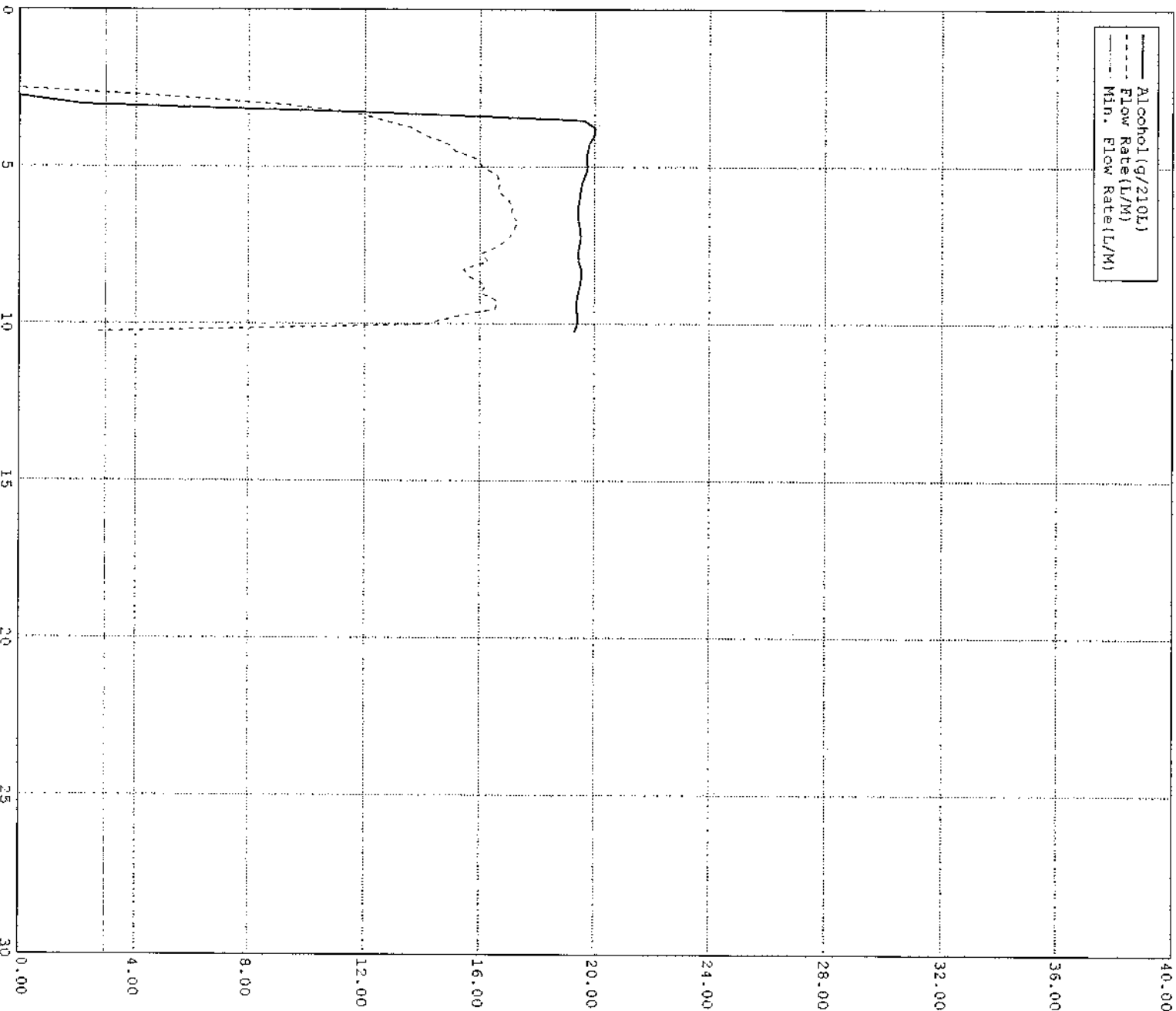
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE NEGATIVE
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.31: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	10:29
INTERNAL STANDARD	0.000	10:29
INTERNAL STANDARD	VERIFIED	10:29
INTERNAL STANDARD	Xq = 0.140 (0.26%)	
EXTERNAL STANDARD	0.079	10:29
EXTERNAL STANDARD	X[1] = 0.0792 (-0.0003) (0.0017)	
BLANK TEST	0.000	10:30
SUBJECT SAMPLE (Vol=1.90L)	0.097	10:31
SUBJECT SAMPLE	X[1] = 0.0972 (0.0000) (0.0012)	
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.078	10:32
EXTERNAL STANDARD	X[1] = 0.0785 (-0.0011) (0.0024)	
BLANK TEST	0.000	10:33



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 12/14/2015
Time: 11:51:40

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

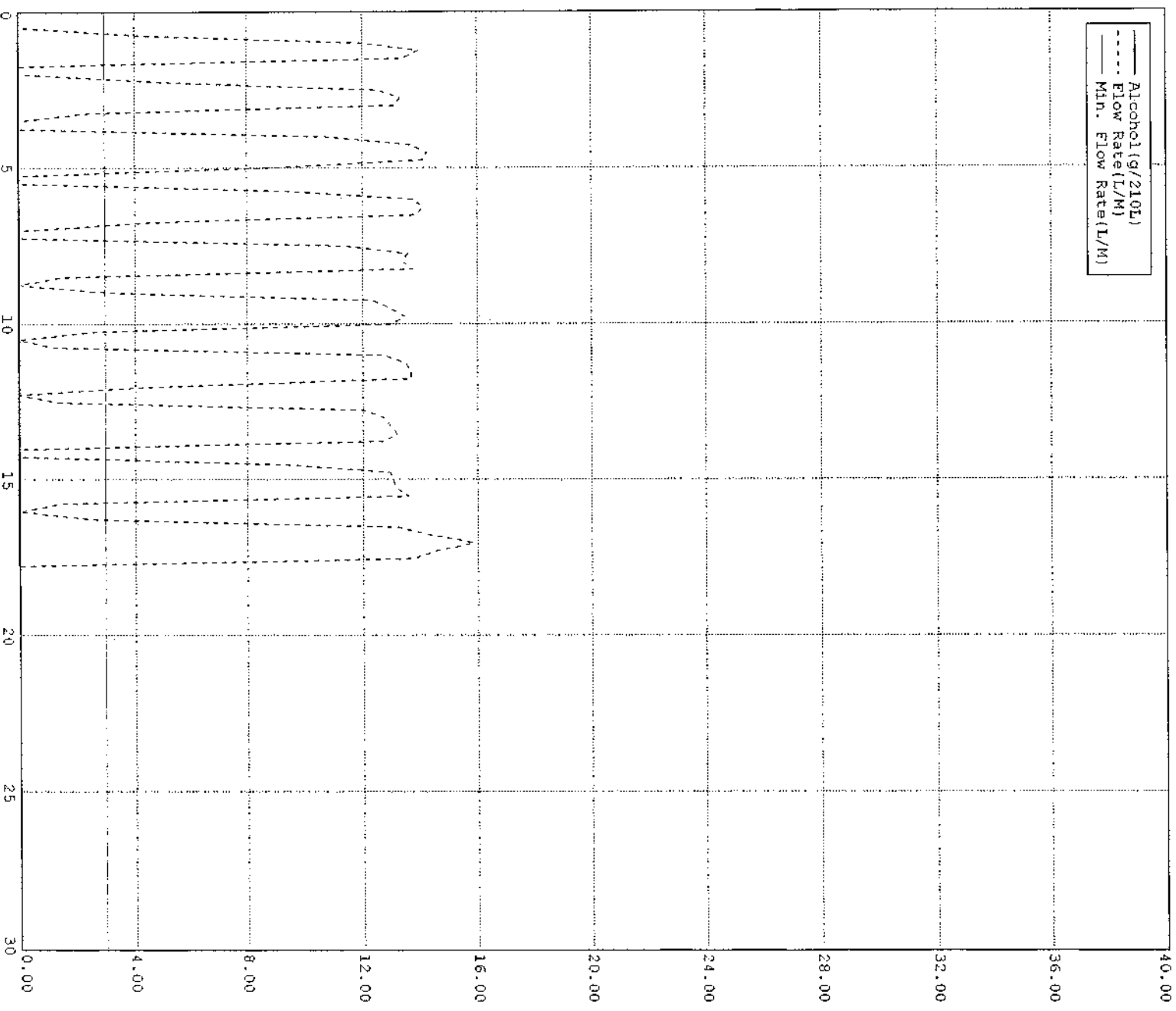
OPERATOR NAME:
EXCEEDED ATTEMPTS
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.35: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASS/	TIME
BLANK TEST	0.000	11:53
INTERNAL STANDARD	VERIFIED	11:53
EXTERNAL STANDARD	0.078	11:53
BLANK TEST	0.000	11:54
SUBJECT SAMPLE	XXX	11:55

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 12/14/2015
Time: 11:58:09

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

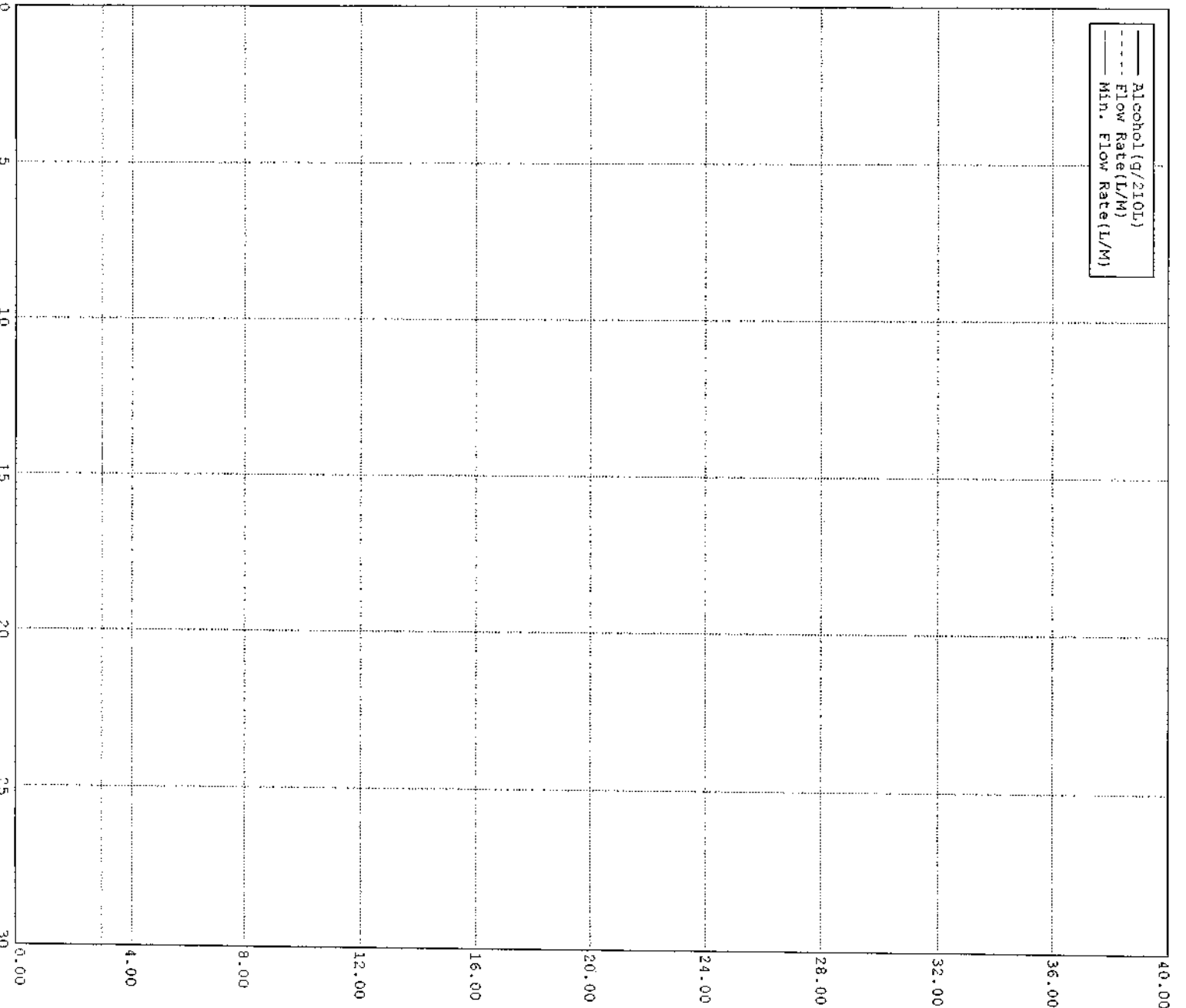
OPERATOR NAME:
RFI XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.36: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 11:59
BLANK TEST 0.000 11:59
INTERNAL STANDARD VERIFIED 12:00
EXTERNAL STANDARD 0.080 12:00
BLANK TEST 0.000 12:01

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DARAMASRTR dmt: 100687

Date: 12/14/2015
Time: 12:16:03

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 29.36: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	12:17
BLANK TEST	0.000	12:18
INTERNAL STANDARD	VERIFIED	12:18
EXTERNAL STANDARD	0.079	12:18
BLANK TEST	0.000	12:19
SUBJECT SAMPLE (Vol=2.53L)	0.000	12:19
BLANK TEST	0.000	12:20
EXTERNAL STANDARD	0.080	12:20
BLANK TEST	0.000	12:21

