

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 100698 Analyst CWF Start Date 3/24/16

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 ~~0215020~~ ^{CWF} 3/24/16 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 DR5298 Date Calibrated 8/5/15
- vi. 0.300g/210L Mnf Guth Lot 15170 Exp 7/20/17
 - 1. Simulator S/N SD1198 Date Calibrated 8/5/15

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 SD1199 Date Calibrated 8/5/15
- ii. Isopropanol - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N SD1177 Date Calibrated 8/5/15
- iii. Negative Control - Mnf Guth Lot 15220 Level 0.100 Exp 9/28/17
 - 1. Simulator S/N DR4161 Date Calibrated 8/5/15

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 3/24/16

25 CWF 3/25/16

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 03/24/2016
Time: 10:42:50

VERSIONS

DMT: 3.02
PIC: 3.03
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 = 1.65 V PASSED
(0.99 V - 2.31 V)
Cooler Voltage = 1.67 V PASSED
(1.00 V - 2.34 V)
Bias Voltage = 81 V PASSED
(49 V - 113 V)
Chopper Freq = 534 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.5 in

PUMP INFO

Flow Rate = 4.861 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 = 0.115 0.31% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dnt: 100698

Date: 03/24/2016

Time: 10:57 AM

Temperatures (°C)

Sample Cell: 49.6°C

Breath Tube: 47.4°C

Current Barometer 29.5 in

Volume (Ltr) 1.52

Settings

Lamp: 1.65 V

Bias: 81 V

Cooler: 1.62 V

Chopper: 532 Hz

Voltages (V)

Flow: 1.03 V

Detector: -0.023 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 10/31/2011
Time: 11:31:50

Ca = 0.1000
CAL = 1.001976 0.800 <= CAL < 1.200
b1 = 0.0009 0.0000 <= b1 < 0.0040
b2 = 0.0051 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.1153 0.0500 <= Xq < 0.2000
a21 = 1.196919 1.050 <= a21 < 1.300
a31 = 0.369985 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 03/24/2016
Time: 12:00:54

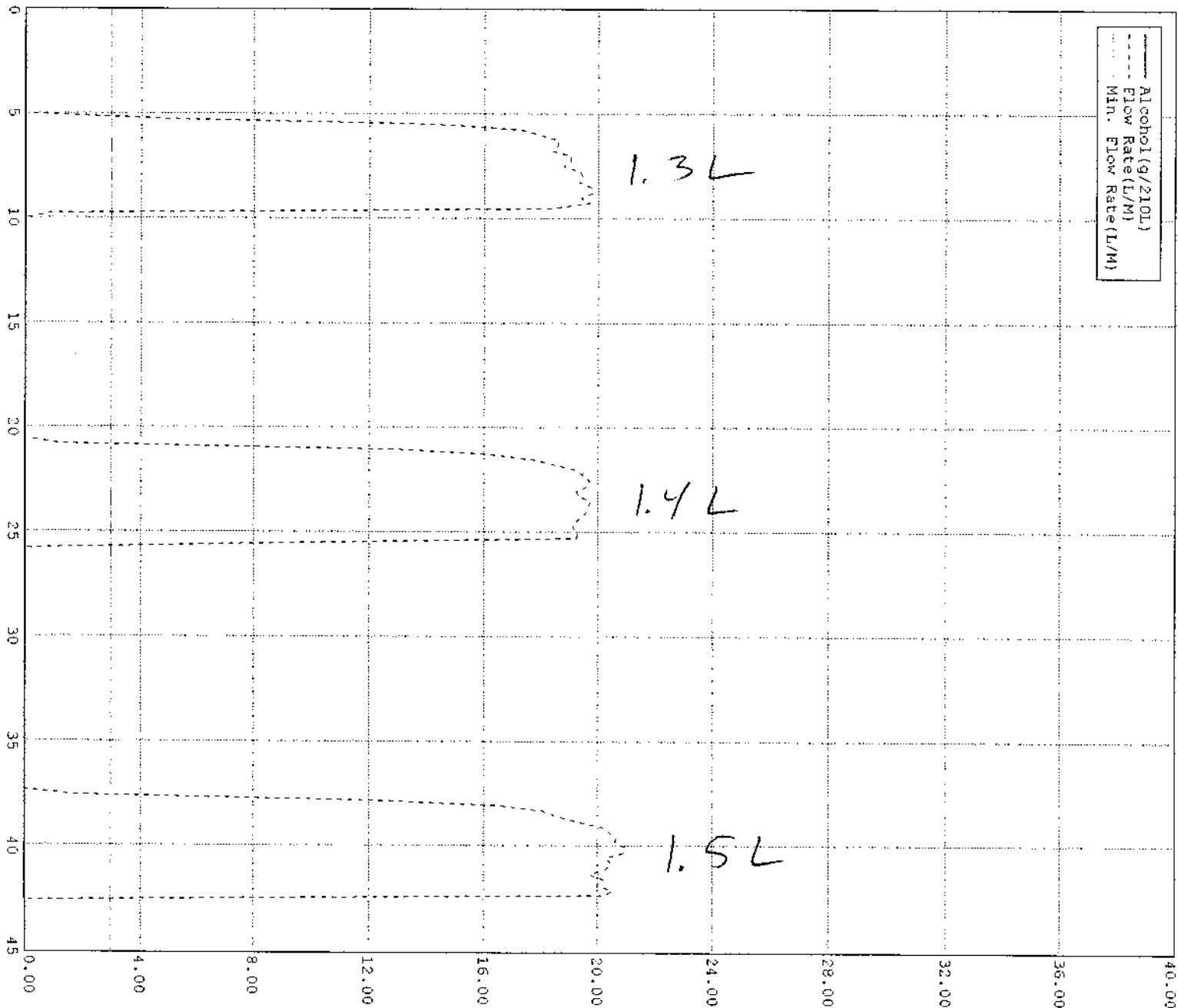
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MINIMUM VOLUME
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.51: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	12:05
INTERNAL STANDARD	0.000	12:06
EXTERNAL STANDARD	0.080	12:06
BLANK TEST	0.000	12:07
SUBJECT SAMPLE (Vol=1.54L)	0.000	12:08
BLANK TEST	0.000	12:09
EXTERNAL STANDARD	0.079	12:09
BLANK TEST	0.000	12:10



LINEARITY CHECK

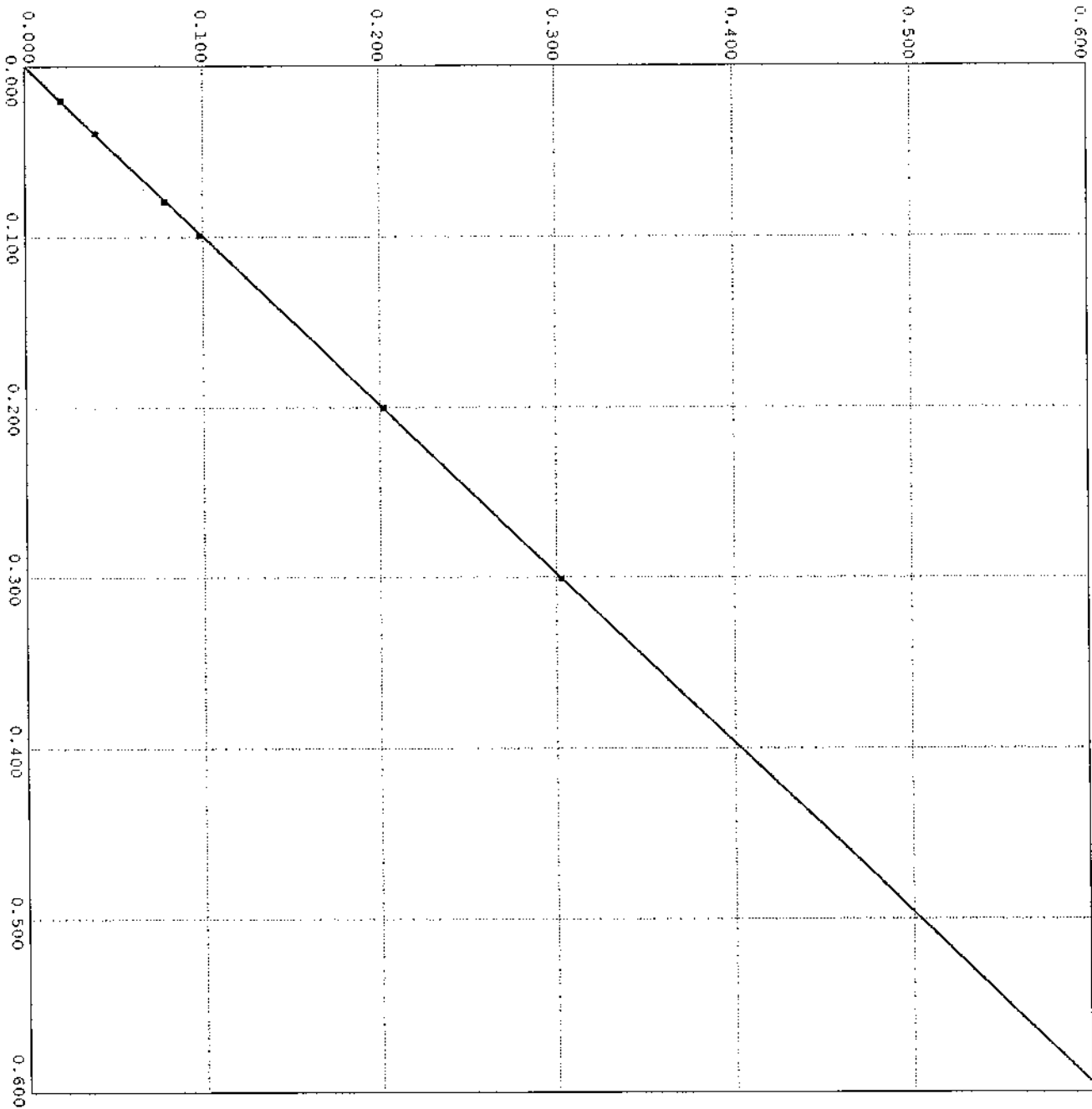
Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 03/24/2016
Time: 12:27:51

SUPERVISOR NAME:
CHARLES FOSTER
OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.020	0.0210	0.0000
0.039	0.0410	0.0000
0.079	0.0794	0.0005
0.099	0.0990	0.0000
0.200	0.2032	0.0004
0.300	0.3034	0.0005

SLOPE = 1.009772
 R^2 = 0.999918



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100698

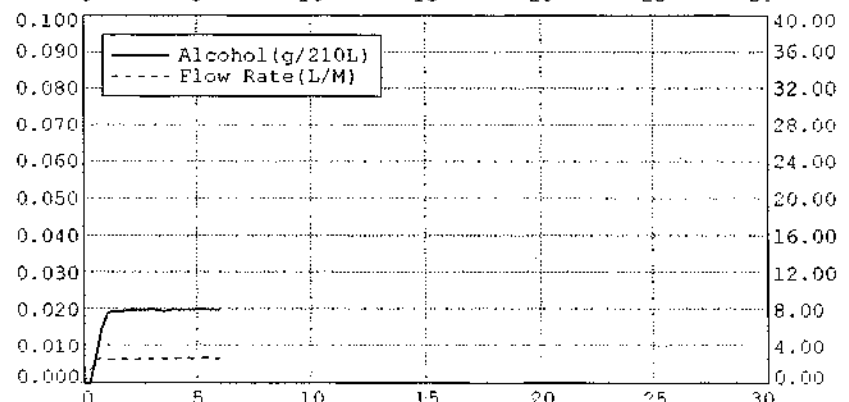
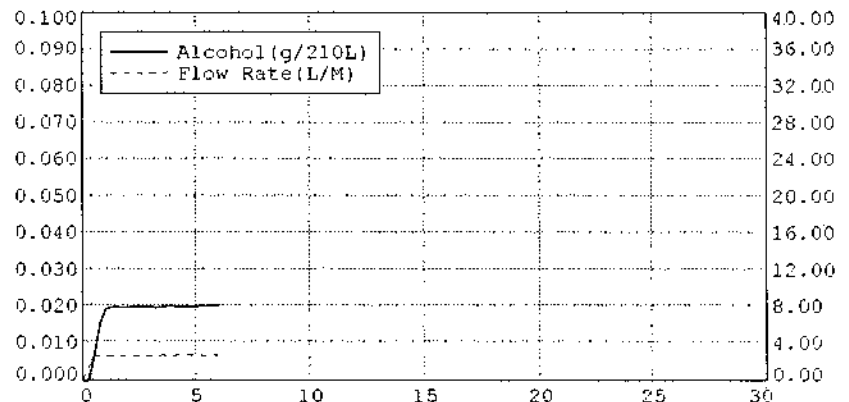
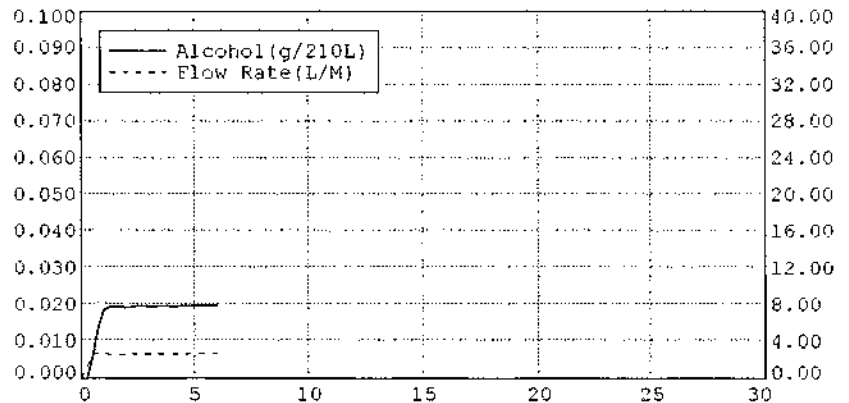
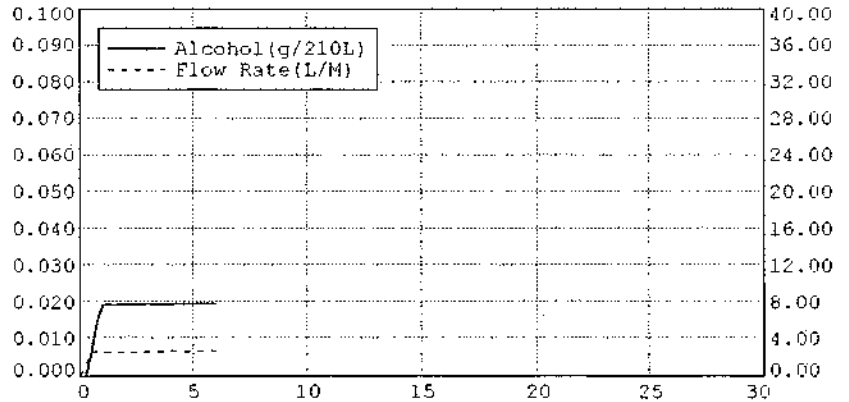
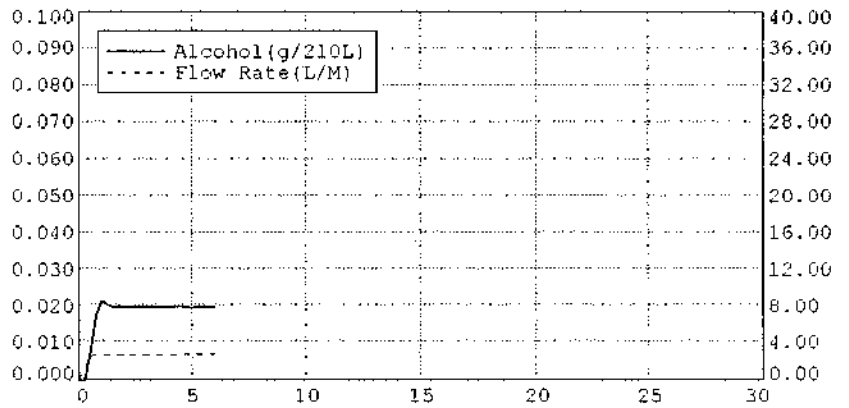
Date: 03/24/2016
 Time: 12:27:52

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.51: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 538 psi

BLANK TEST	0.000	12:29
INTERNAL STANDARD	VERIFIED	12:29
EXTERNAL STANDARD	0.021	12:29
BLANK TEST	0.000	12:30
EXTERNAL STANDARD	0.021	12:30
BLANK TEST	0.000	12:31
EXTERNAL STANDARD	0.021	12:31
BLANK TEST	0.000	12:32
EXTERNAL STANDARD	0.021	12:33
BLANK TEST	0.000	12:33
EXTERNAL STANDARD	0.021	12:34
BLANK TEST	0.000	12:35

Average = 0.0210
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100698

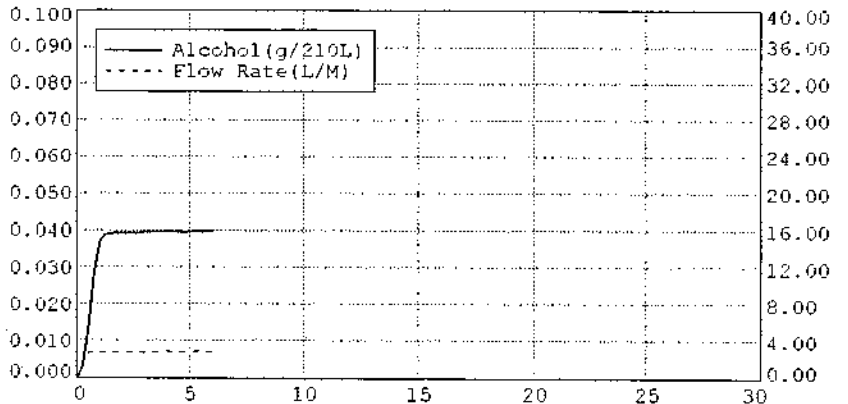
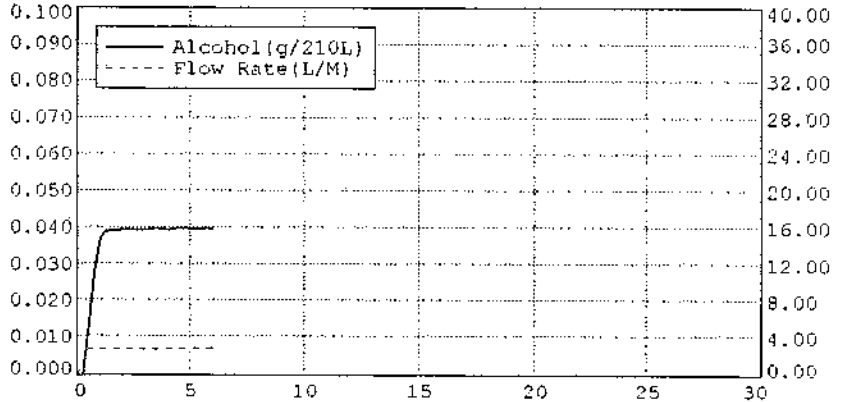
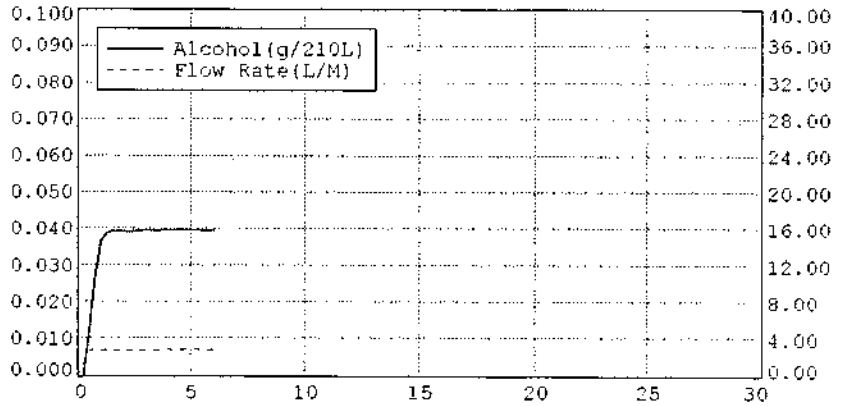
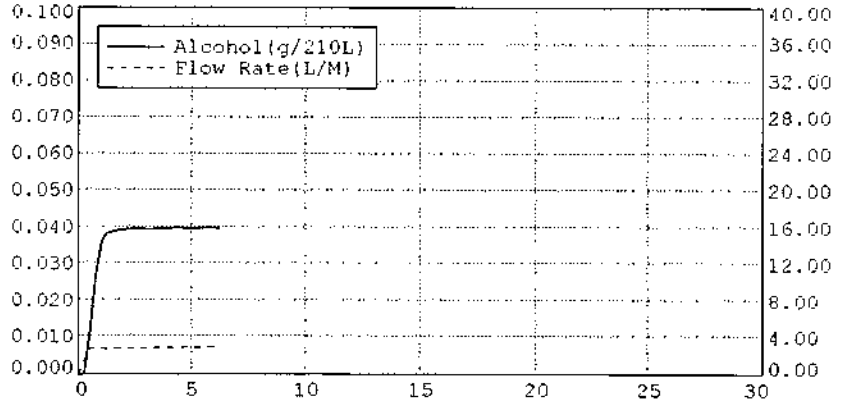
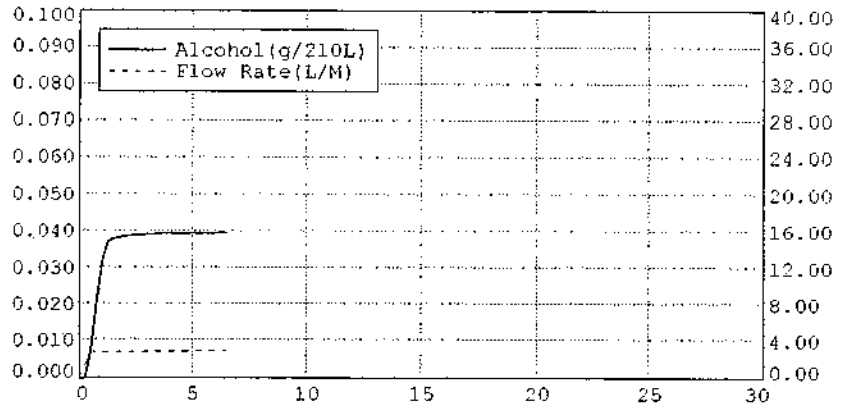
Date: 03/24/2016
 Time: 12:35:32

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.50: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 978 psi

BLANK TEST	0.000	12:37
INTERNAL STANDARD	VERIFIED	12:37
EXTERNAL STANDARD	0.041	12:37
BLANK TEST	0.000	12:38
EXTERNAL STANDARD	0.041	12:38
BLANK TEST	0.000	12:39
EXTERNAL STANDARD	0.041	12:39
BLANK TEST	0.000	12:40
EXTERNAL STANDARD	0.041	12:40
BLANK TEST	0.000	12:41
EXTERNAL STANDARD	0.041	12:41
BLANK TEST	0.000	12:42

Average = 0.0410
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100698

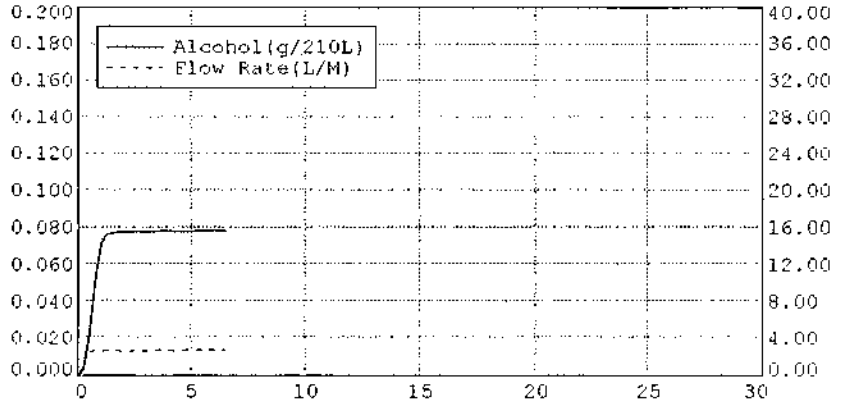
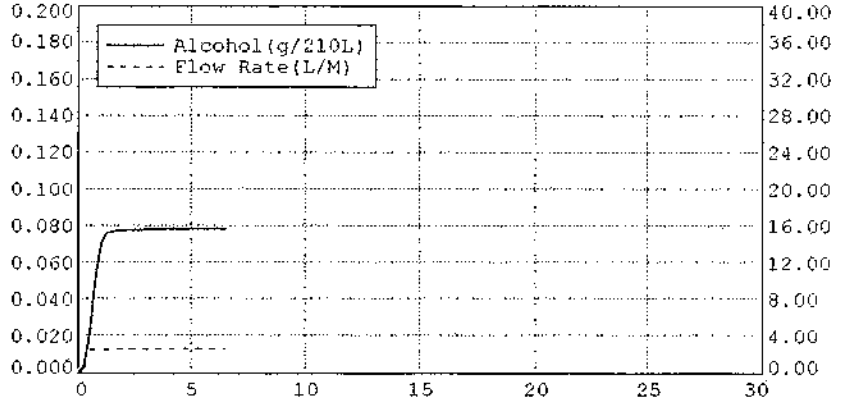
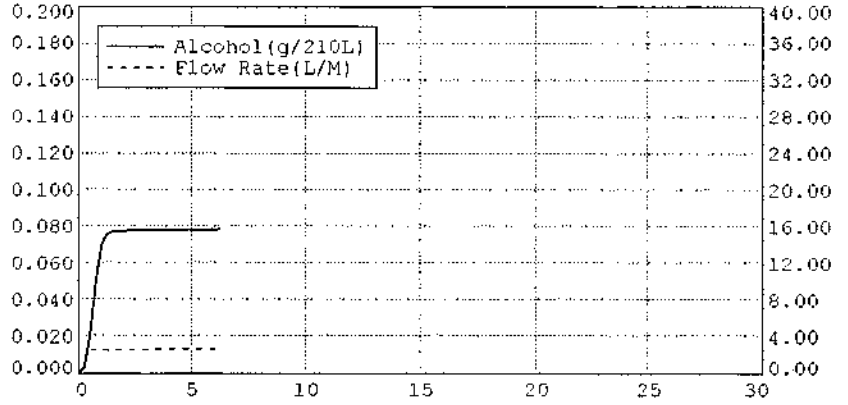
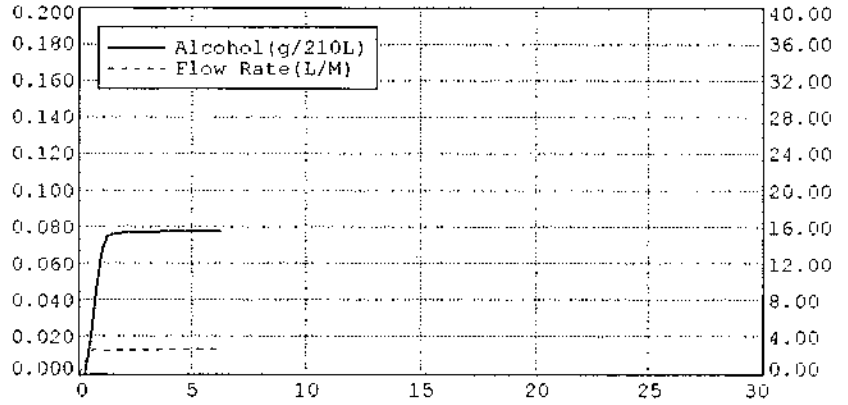
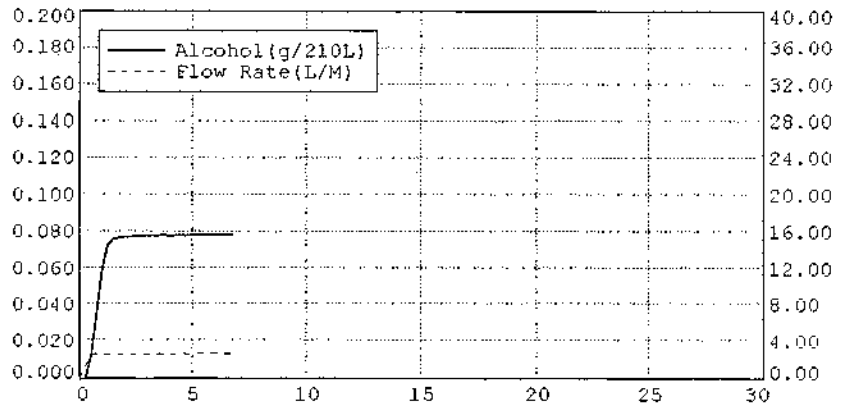
Date: 03/24/2016
 Time: 12:43:27

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.51: 0.079
 LOT #: 01315080A3
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 516 psi

BLANK TEST	0.000	12:44
INTERNAL STANDARD	VERIFIED	12:44
EXTERNAL STANDARD	0.080	12:45
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.079	12:46
BLANK TEST	0.000	12:47
EXTERNAL STANDARD	0.079	12:47
BLANK TEST	0.000	12:48
EXTERNAL STANDARD	0.080	12:48
BLANK TEST	0.000	12:49
EXTERNAL STANDARD	0.079	12:49
BLANK TEST	0.000	12:50

Average = 0.0794
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100698

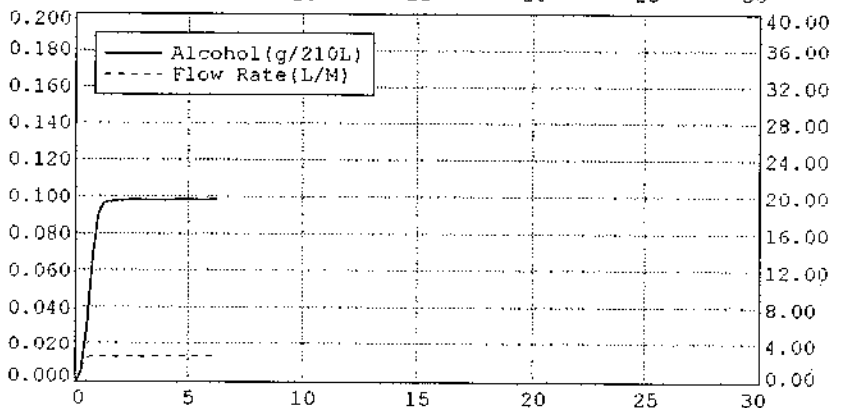
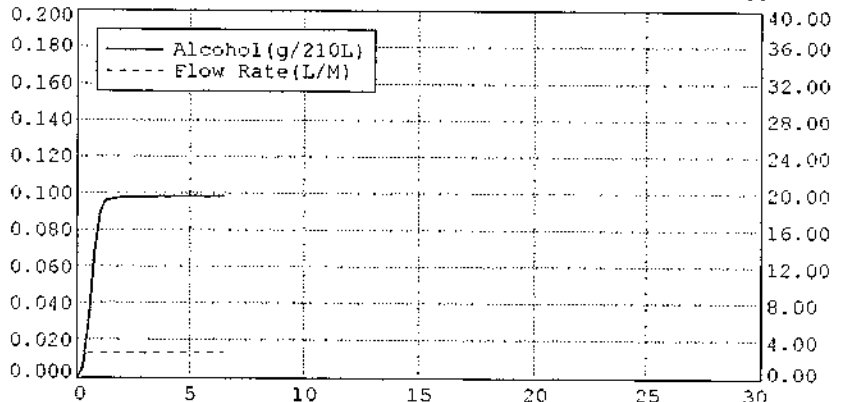
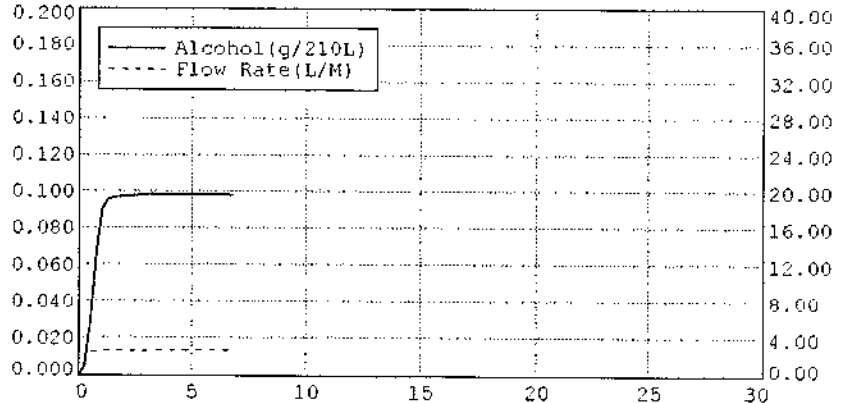
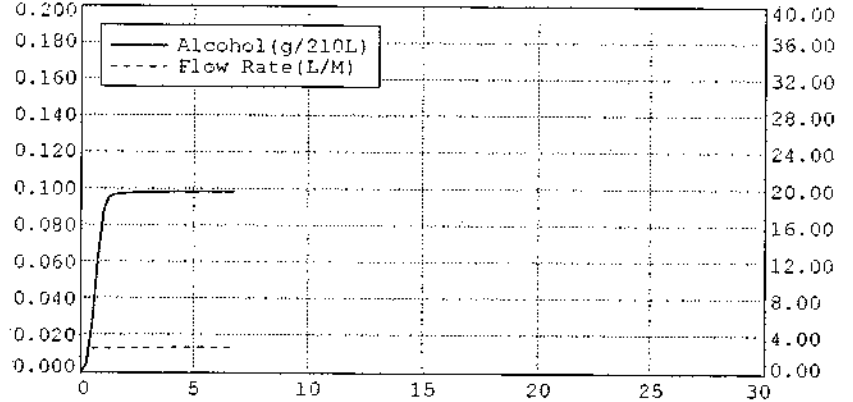
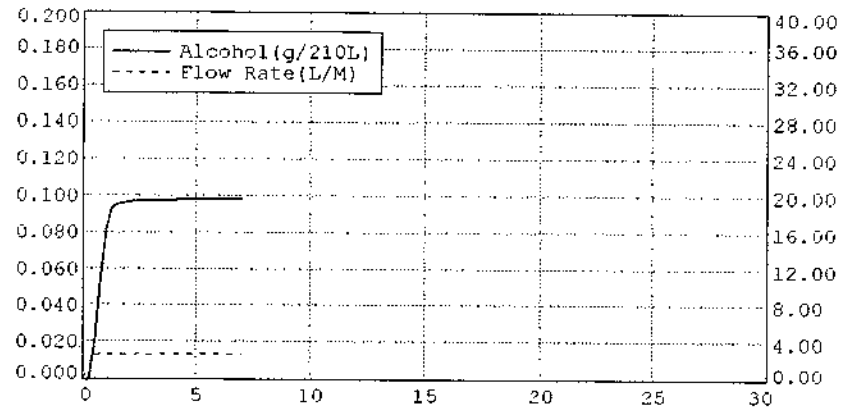
Date: 03/24/2016
 Time: 12:52:10

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.51: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 731 psi

BLANK TEST	0.000	12:53
INTERNAL STANDARD	VERIFIED	12:53
EXTERNAL STANDARD	0.099	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.099	12:54
BLANK TEST	0.000	12:55
EXTERNAL STANDARD	0.099	12:56
BLANK TEST	0.000	12:56
EXTERNAL STANDARD	0.099	12:57
BLANK TEST	0.000	12:58
EXTERNAL STANDARD	0.099	12:58
BLANK TEST	0.000	12:59

Average = 0.0990
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100698

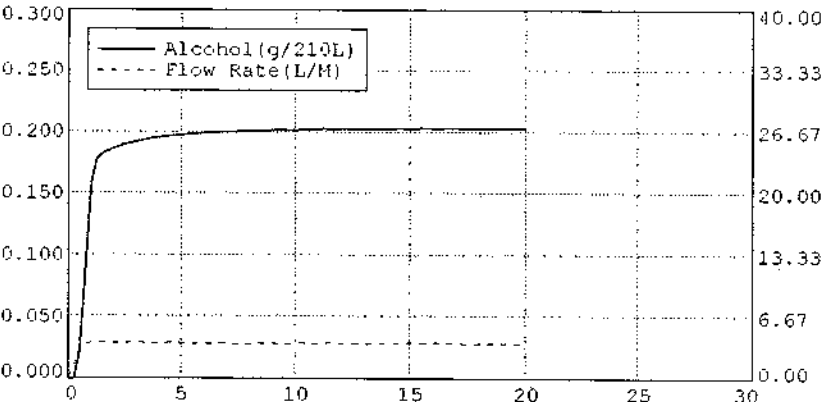
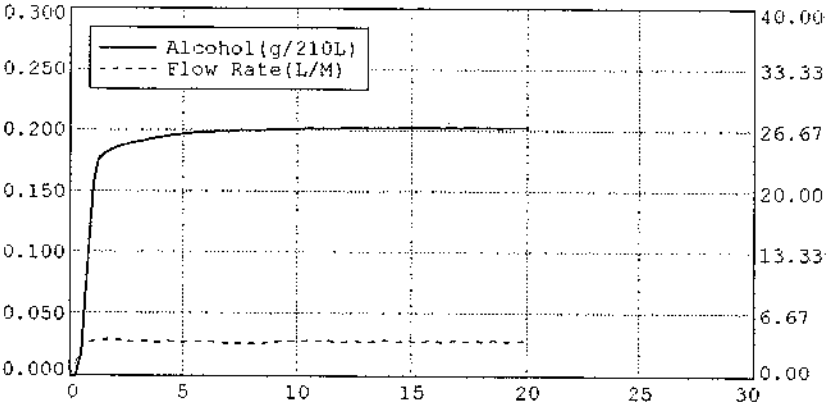
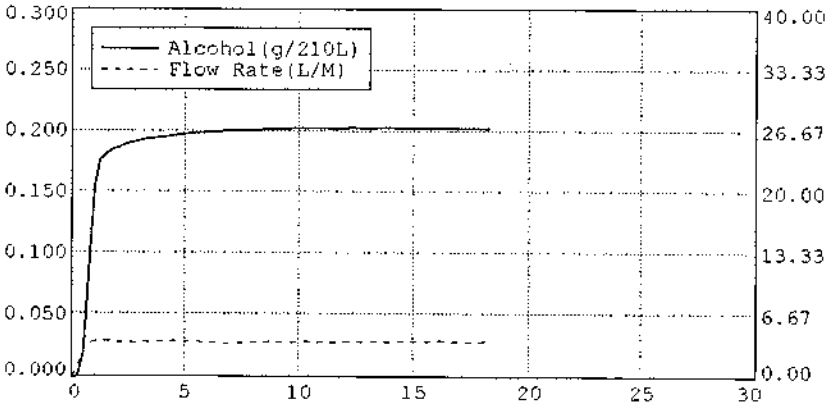
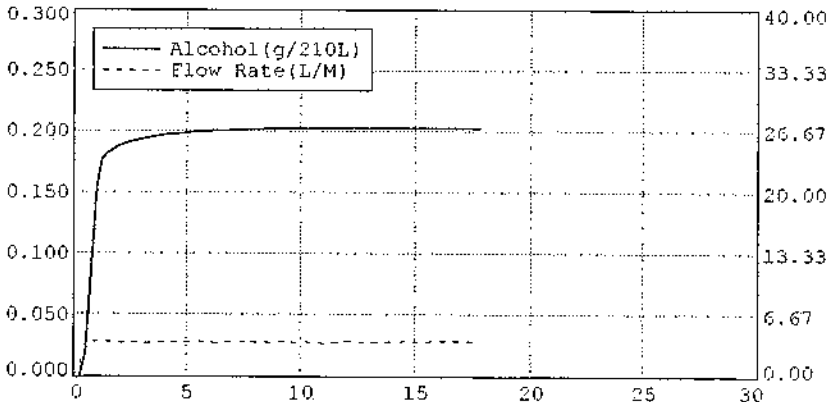
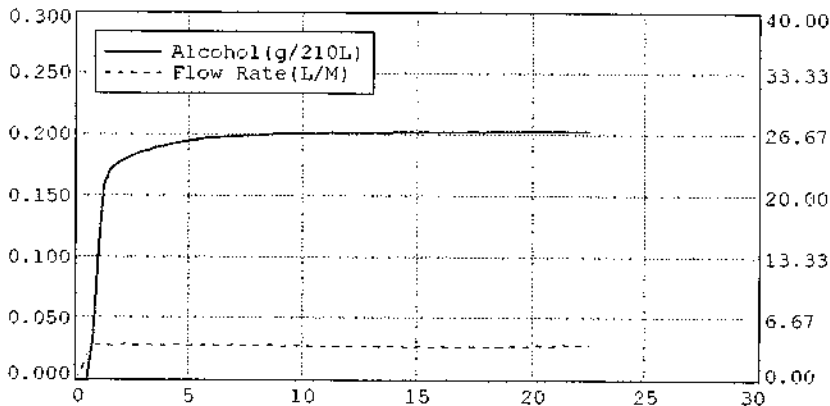
Date: 03/24/2016
 Time: 13:01:04

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:02
INTERNAL STANDARD	VERIFIED	13:02
EXTERNAL STANDARD	0.203	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.203	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.203	13:06
BLANK TEST	0.000	13:07
EXTERNAL STANDARD	0.203	13:07
BLANK TEST	0.000	13:08
EXTERNAL STANDARD	0.204	13:08
BLANK TEST	0.000	13:09

Average = 0.2032
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100698

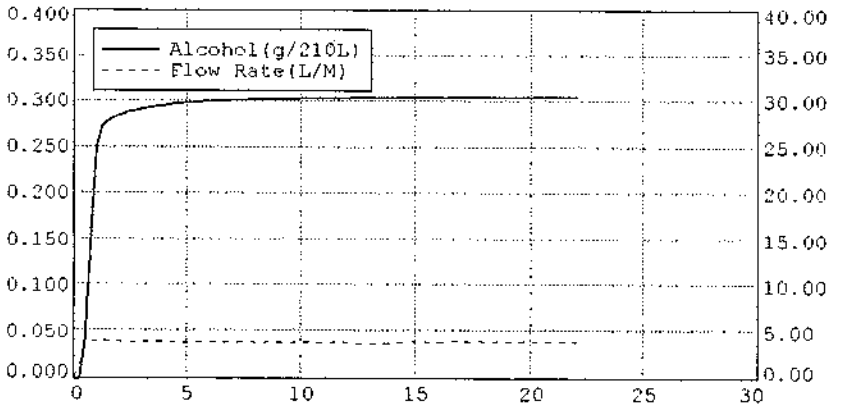
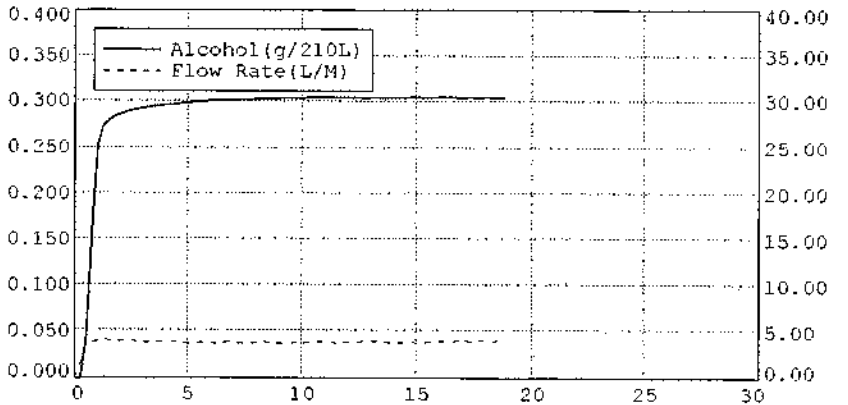
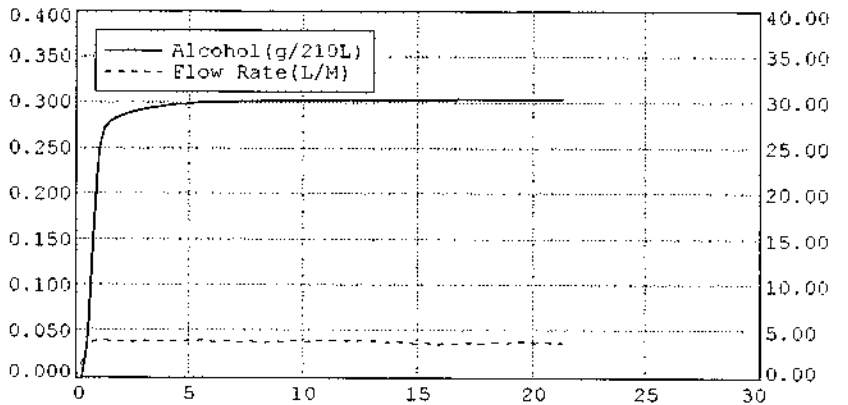
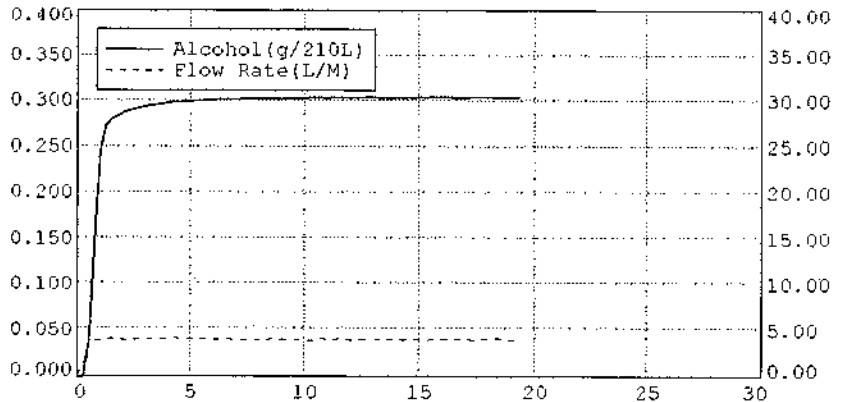
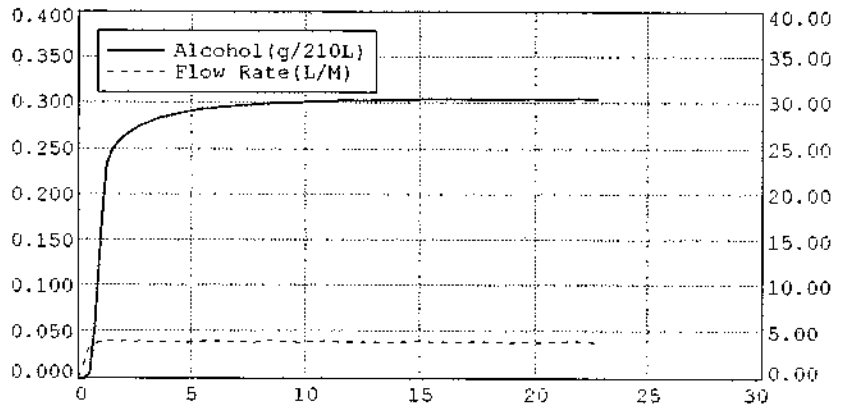
Date: 03/24/2016
 Time: 13:10:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 15170
 EXPIRATION: 07/20/2017

BLANK TEST	0.000	13:12
INTERNAL STANDARD	VERIFIED	13:12
EXTERNAL STANDARD	0.304	13:12
BLANK TEST	0.000	13:13
EXTERNAL STANDARD	0.303	13:14
BLANK TEST	0.000	13:15
EXTERNAL STANDARD	0.303	13:15
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.303	13:16
BLANK TEST	0.000	13:17
EXTERNAL STANDARD	0.304	13:18
BLANK TEST	0.000	13:19

Average = 0.3034
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 03/25/2016
Time: 09:37:45

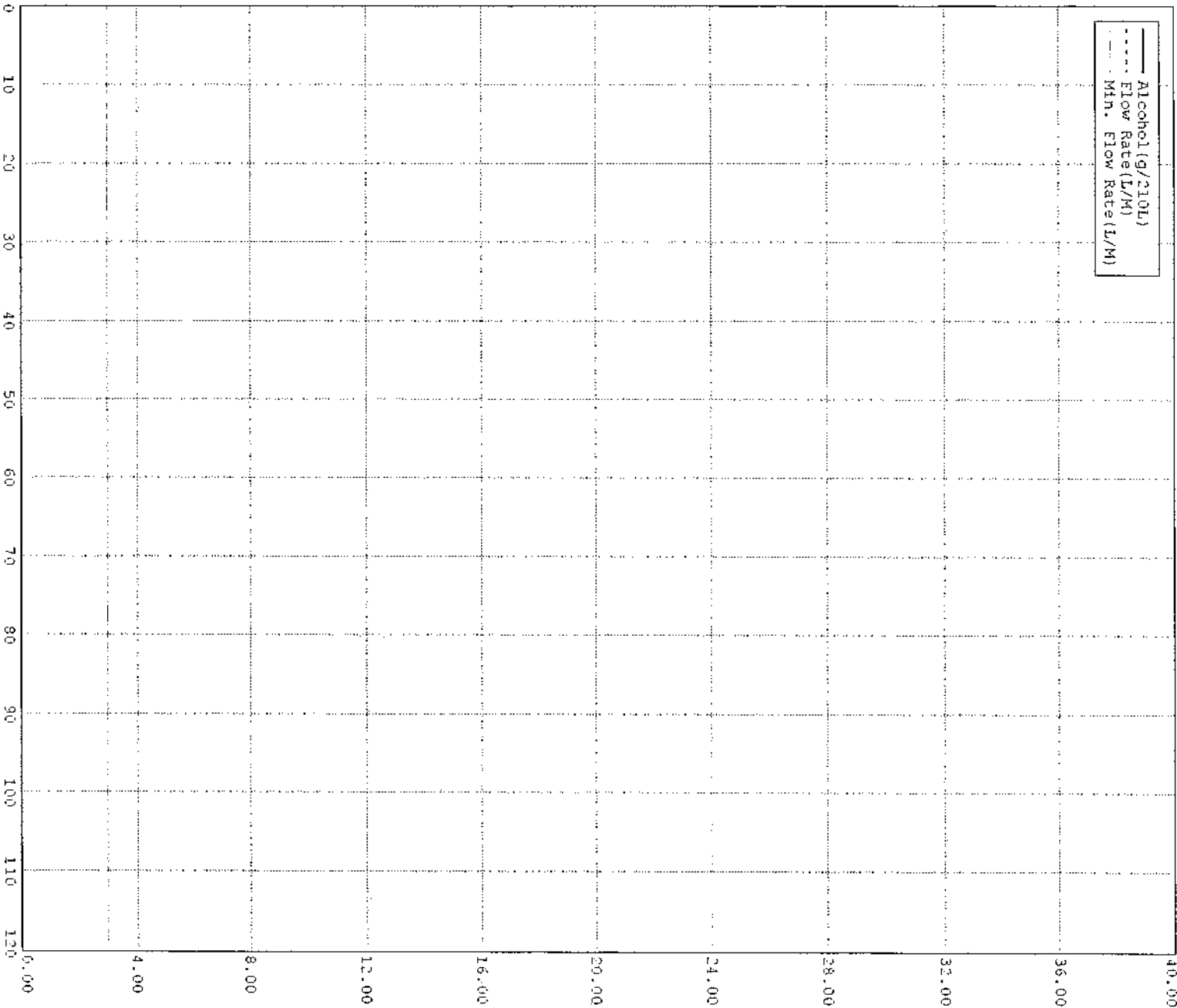
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INCOMPLETE XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.45: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:39
BLANK TEST	0.000	09:39
INTERNAL STANDARD	VERIFIED	09:39
EXTERNAL STANDARD	0.079	09:39
BLANK TEST	0.000	09:40
SUBJECT SAMPLE	INCOMPLETE	09:42



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 03/25/2016
Time: 09:56:12

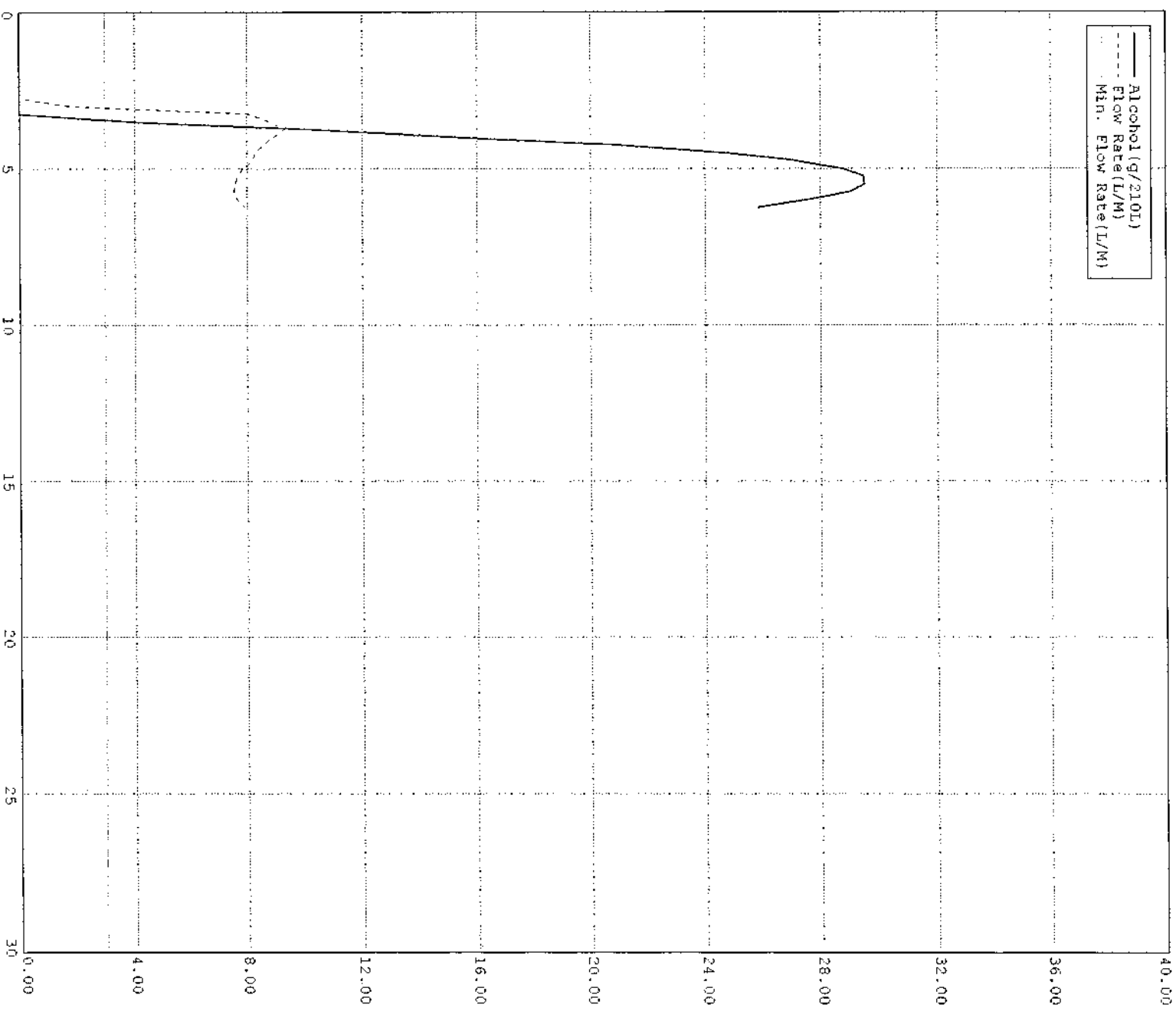
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INVALID XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.45: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:59
BLANK TEST	0.000	09:59
INTERNAL STANDARD	VERIFIED	09:59
EXTERNAL STANDARD	0.080	10:00
BLANK TEST	0.000	10:00
SUBJECT SAMPLE	INVALID	10:01



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 03/25/2016
Time: 10:04:14

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 29.45: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

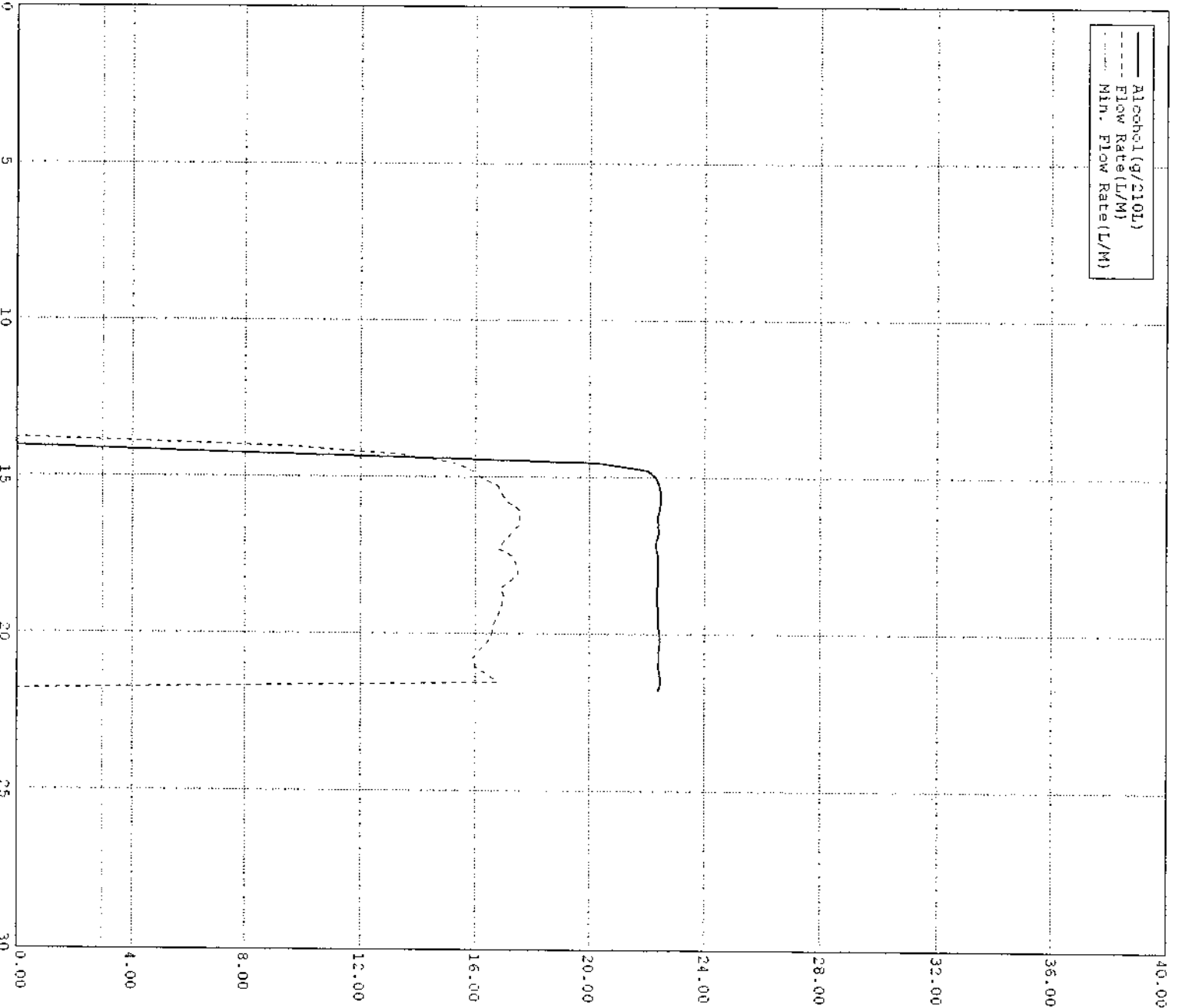
DIAGNOSTIC CHECK	PASSED	10:06
BLANK TEST	0.000	10:07
INTERNAL STANDARD	VERIFIED	10:07
Xq = 0.116 (0.38%)		
EXTERNAL STANDARD	0.080	10:07
X[1] = 0.0798 (0.0008)	(0.0018)	
BLANK TEST	0.000	10:08
SUBJECT SAMPLE	XXX	10:08
X[1] = 0.1121 (-0.0216)	(-0.0020)	

Interference Detected

Filter 2 Avg: 0.0006

Filter 3 Avg: 0.0015

CWF 3/25/16



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 03/25/2016
Time: 10:13:19

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

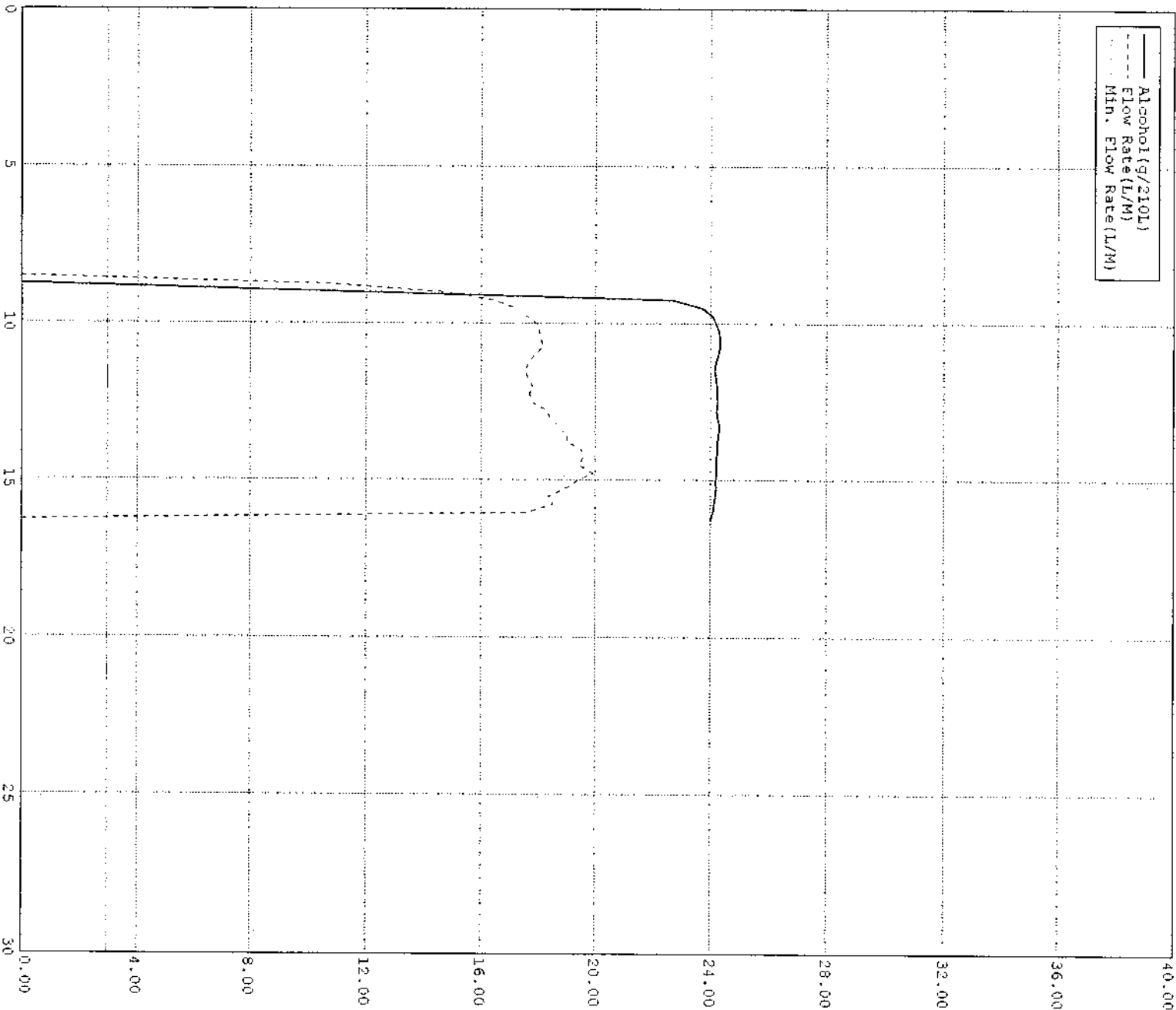
OPERATOR NAME:
INTERFERENCE IPA
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.45: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:15
BLANK TEST	0.000	10:16
INTERNAL STANDARD	VERIFIED	10:16
Xq = 0.116 (0.46%)		
EXTERNAL STANDARD	0.079	10:16
X[1] = 0.0788 (0.0001)	(0.0011)	
BLANK TEST	0.000	10:17
SUBJECT SAMPLE	XXX	10:17
X[1] = 0.1199 (-0.0260)	(-0.0002)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100698

Date: 03/25/2016
Time: 10:23:01

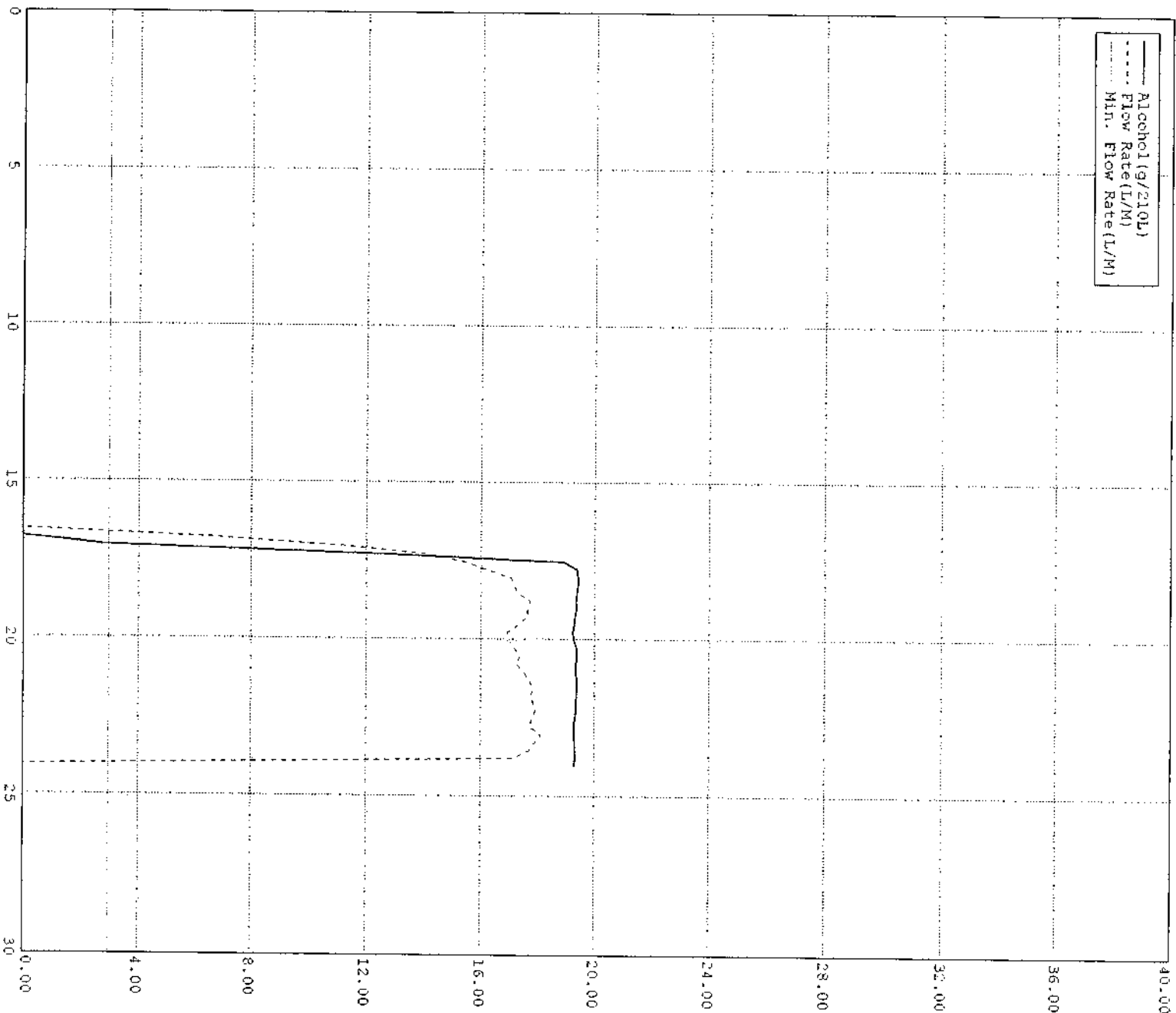
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE NEGATIVE
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.44: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:28
BLANK TEST	0.000	10:28
INTERNAL STANDARD	VERIFIED	10:28
Xq = 0.115 (0.23%)		
EXTERNAL STANDARD	0.079	10:28
X[1] = 0.0794 (0.0005) (0.0015)		
BLANK TEST	0.000	10:29
SUBJECT SAMPLE (Vol=2.02L)	0.096	10:29
X[1] = 0.0968 (0.0010) (-0.0001)		
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.078	10:31
X[1] = 0.0785 (0.0010) (0.0016)		
BLANK TEST	0.000	10:32



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 03/25/2016
Time: 12:18:58

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

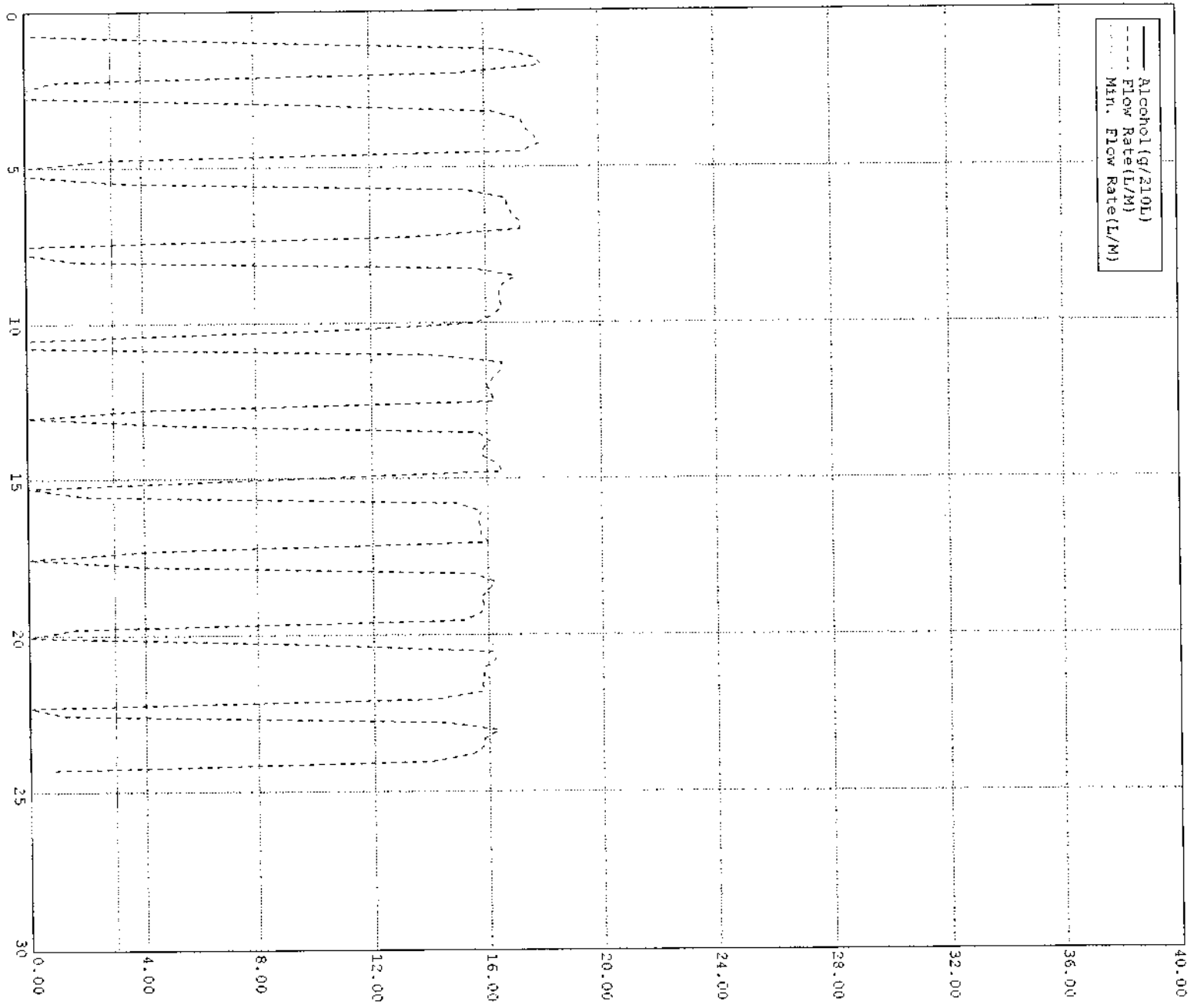
OPERATOR NAME:
EXCEEDED ATTEMPTS
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AF 29.42: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	12:22
BLANK TEST	0.000	12:22
INTERNAL STANDARD	VERIFIED	12:22
EXTERNAL STANDARD	0.079	12:22
BLANK TEST	0.000	12:23
SUBJECT SAMPLE	XXX	12:24

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 03/25/2016
Time: 12:29:55

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

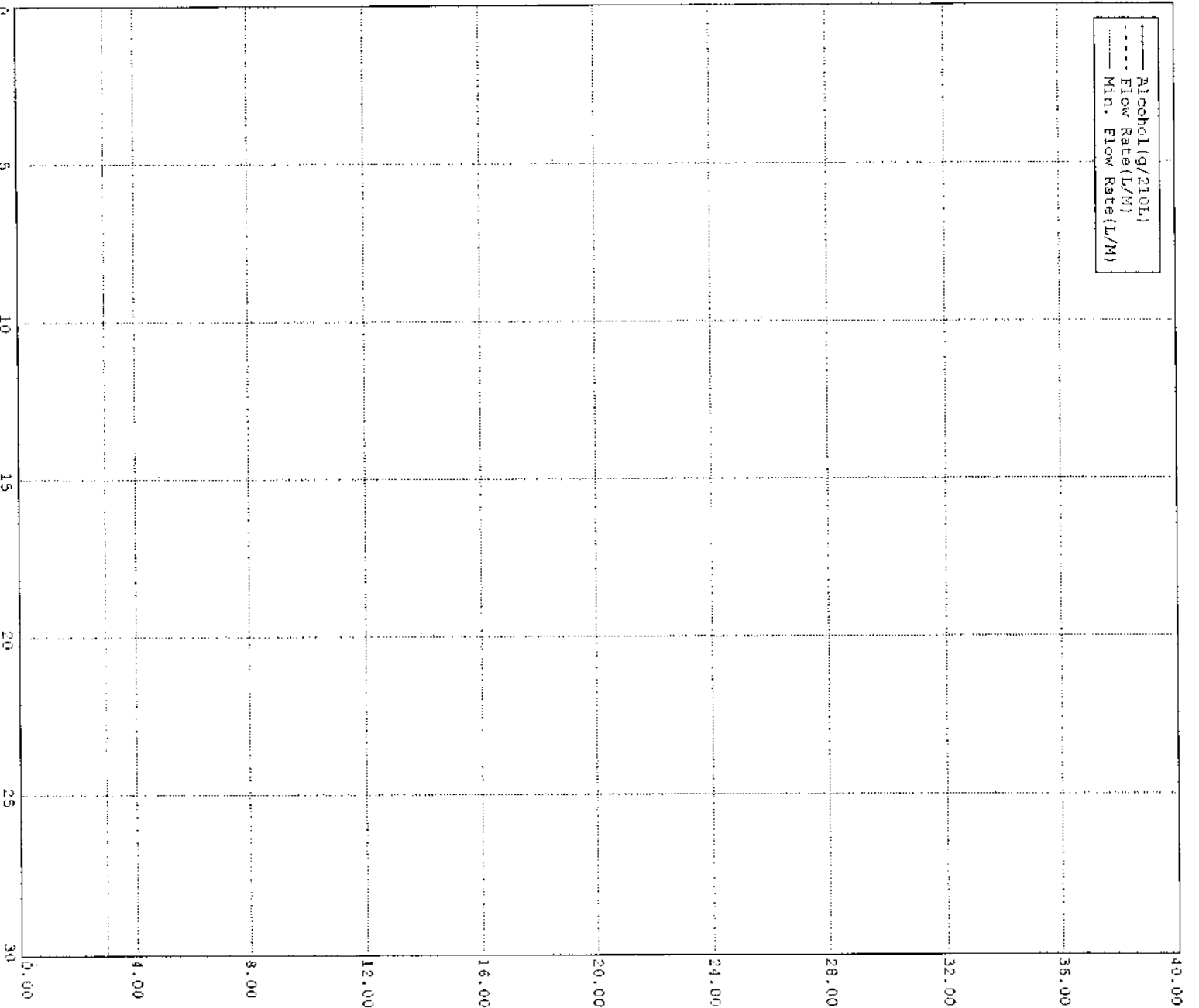
OPERATOR NAME:
RFI XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.41: 0.079
LOE #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	12:40
BLANK TEST	0.000	12:40
INTERNAL STANDARD	VERIFIED	12:41
EXTERNAL STANDARD	0.079	12:41
BLANK TEST	0.000	12:42

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 03/25/2016
Time: 13:04:11

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 29.41: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	13:05
BLANK TEST	0.000	13:05
INTERNAL STANDARD	VERIFIED	13:05
EXTERNAL STANDARD	0.079	13:05
BLANK TEST	0.000	13:06
SUBJECT SAMPLE (Vol=2.23L)	0.000	13:06
BLANK TEST	0.000	13:07
EXTERNAL STANDARD	0.079	13:08
BLANK TEST	0.000	13:08

