

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 100397 Analyst CWF Start Date 8/31/15

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 1.6 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 09214080A2 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

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 9/1/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 08/31/2015
Time: 09:24:54

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 47.9°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.72 V PASSED
(1.03 V - 2.41 V)
Cooler Voltage = 1.74 V PASSED
(1.04 V - 2.44 V)
Bias Voltage = 81 V PASSED
(49 V - 113 V)
Chopper Freq = 538 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.3 in

PUMP INFO

Flow Rate = 3.893 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.006 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 = 0.094 0.38% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100397

Date: 08/31/2015
Time: 9:57 AM

Temperatures (°C)

Sample Cell: 49.0°C
Breath Tube: 48.0°C

Current Barometer 29.4 in
Volume (Ltr) 1.50

Settings

Lamp: 1.72 V
Bias: 81 V
Cooler: 1.74 V
Chopper: 537 Hz

Voltages (V)

Flow: 1.06 V
Detector: 0.046 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 05/18/2011
Time: 13:35:39

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

LOT #: GUTH100
BOTTLE #: 10260
EXPIRATION: 10/25/2010

Ca = 0.1000
CAL = 0.983031 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0079 0.0010 <= b2 < 0.0100
b3 = 0.0004 0.0000 <= b3 < 0.0040
Xq = 0.0932 0.0500 <= Xq < 0.2000
a21 = 1.208582 1.050 <= a21 < 1.300
a31 = 0.521034 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 08/31/2015
Time: 10:07:19

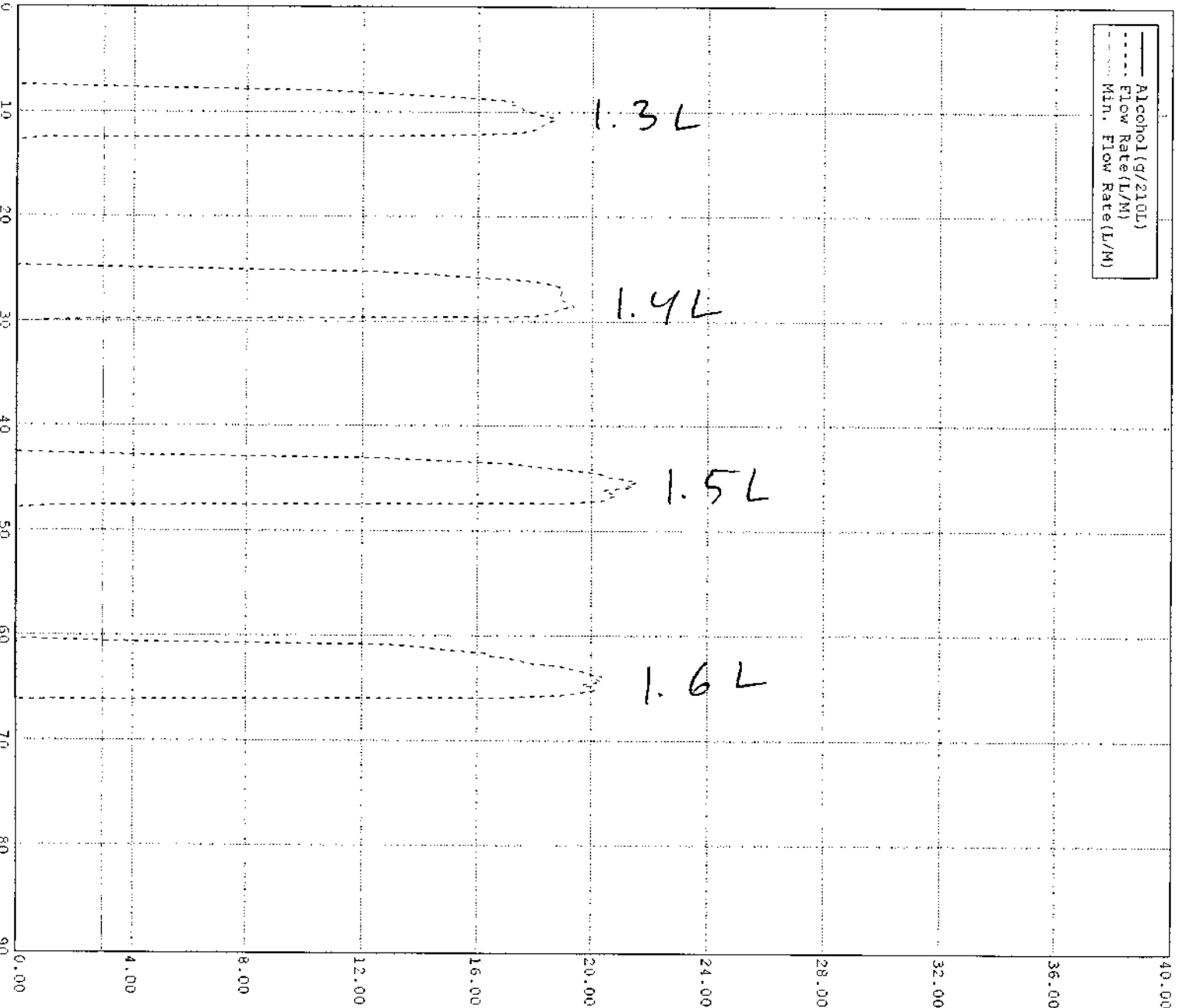
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MINIMUM VOLUME
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.37: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	10:13
BLANK TEST	0.000	10:13
INTERNAL STANDARD	VERIFIED	10:13
EXTERNAL STANDARD	0.077	10:13
BLANK TEST	0.000	10:14
SUBJECT SAMPLE (Vol=1.61L)	0.000	10:15
BLANK TEST	0.000	10:16
EXTERNAL STANDARD	0.078	10:16
BLANK TEST	0.000	10:17



LINEARITY CHECK

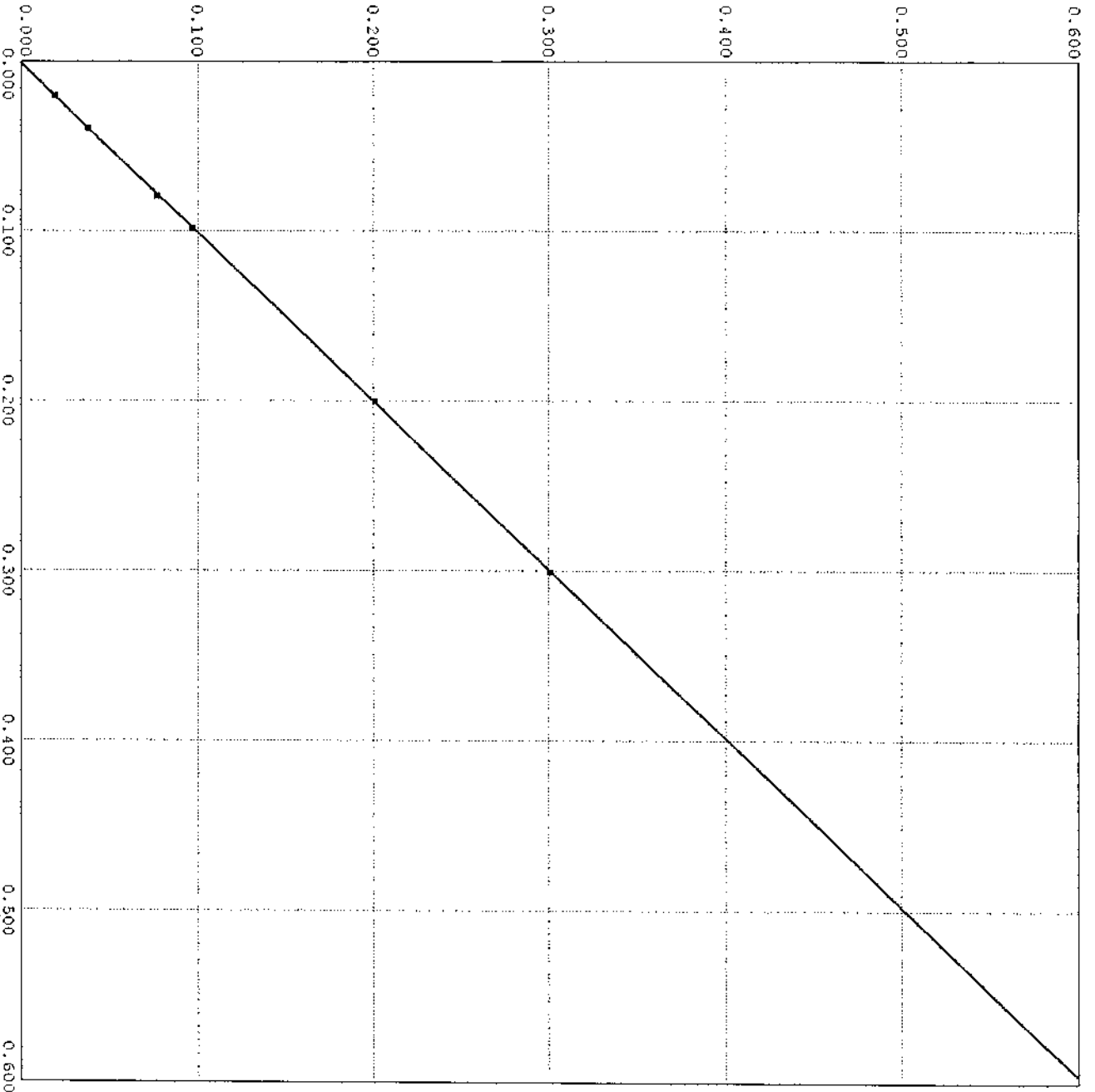
Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 08/31/2015
Time: 11:58:43

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	0.0778	0.0004
0.098	0.0978	0.0004
0.200	0.2018	0.0004
0.300	0.3018	0.0004

SLOPE = 1.008615
R² = 0.999953



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100397

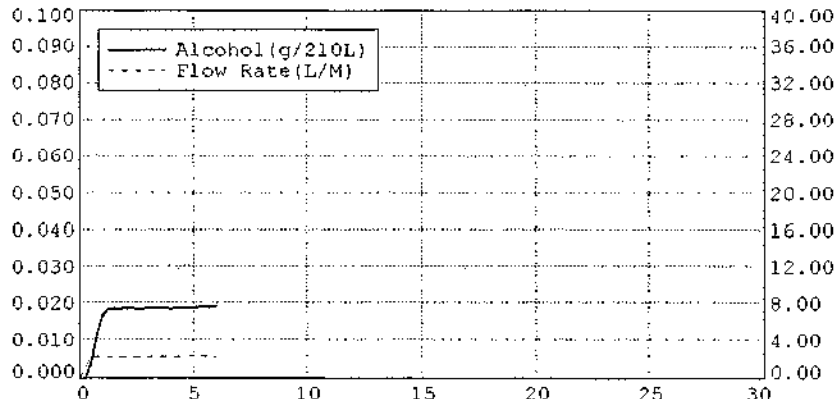
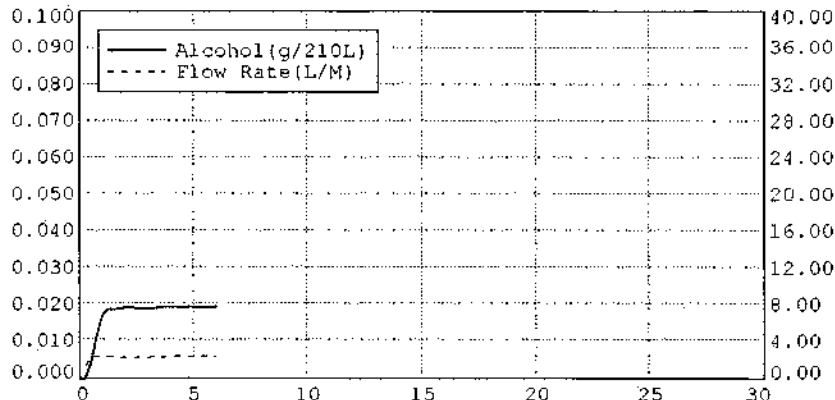
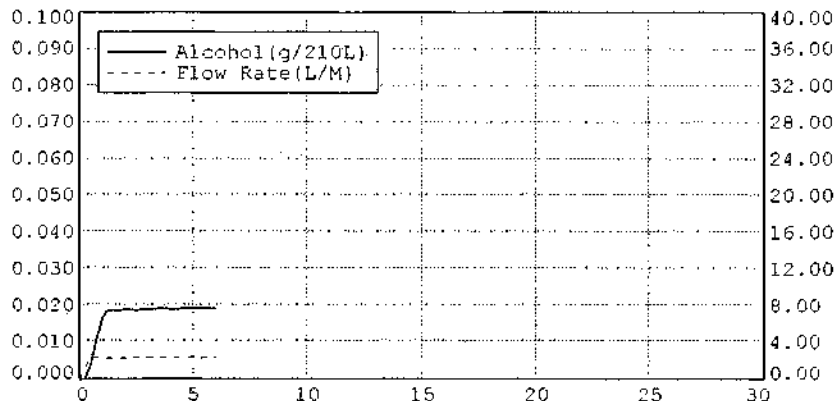
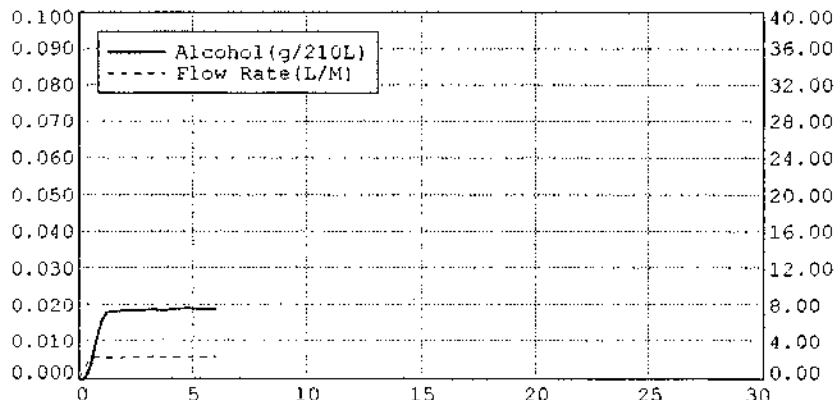
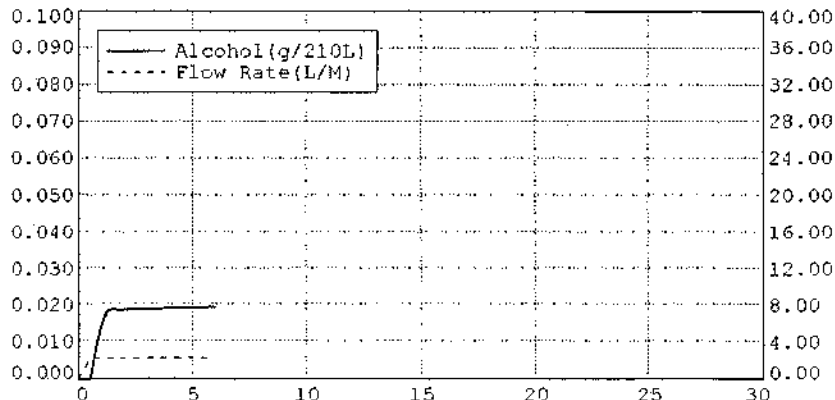
Date: 08/31/2015
Time: 11:58:45

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.38: 0.020
LOT #: 02915020A2
EXPIRATION: 03/05/2017
TANK PRESSURE: 400 psi

BLANK TEST	0.000	12:00
INTERNAL STANDARD	VERIFIED	12:00
EXTERNAL STANDARD	0.021	12:00
BLANK TEST	0.000	12:01
EXTERNAL STANDARD	0.020	12:01
BLANK TEST	0.000	12:02
EXTERNAL STANDARD	0.020	12:02
BLANK TEST	0.000	12:03
EXTERNAL STANDARD	0.020	12:03
BLANK TEST	0.000	12:04
EXTERNAL STANDARD	0.020	12:04
BLANK TEST	0.000	12:05

Average = 0.0202
Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100397

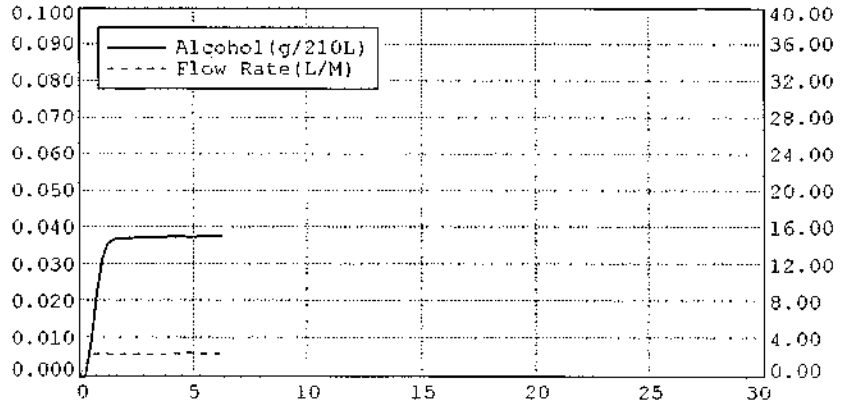
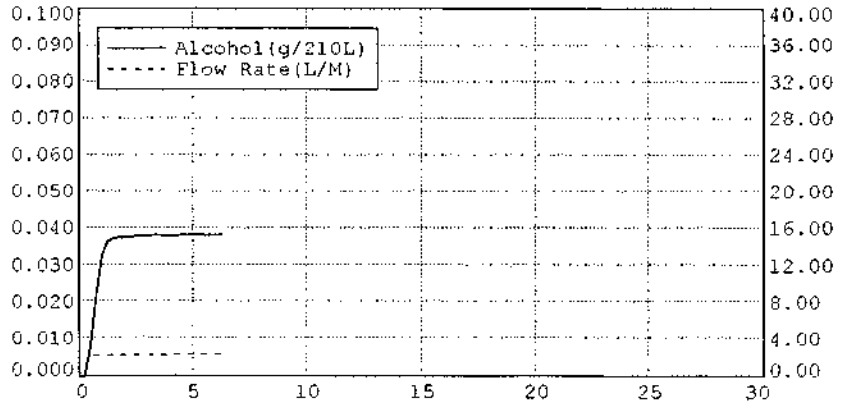
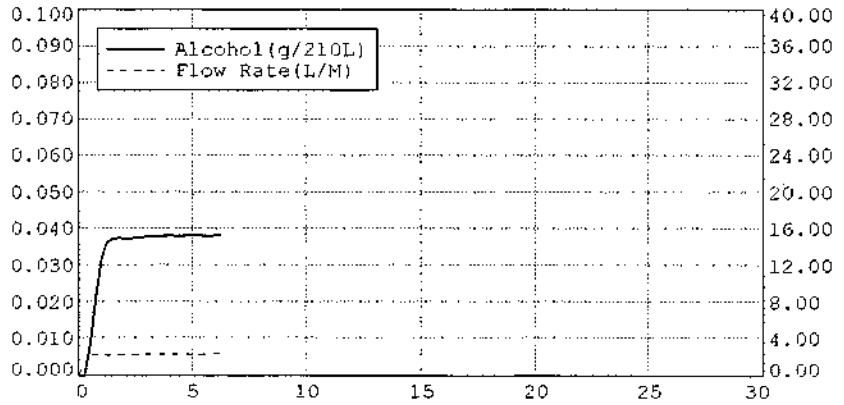
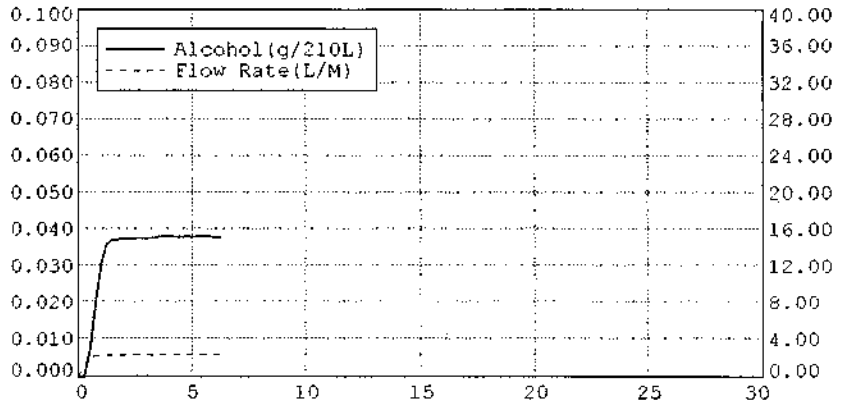
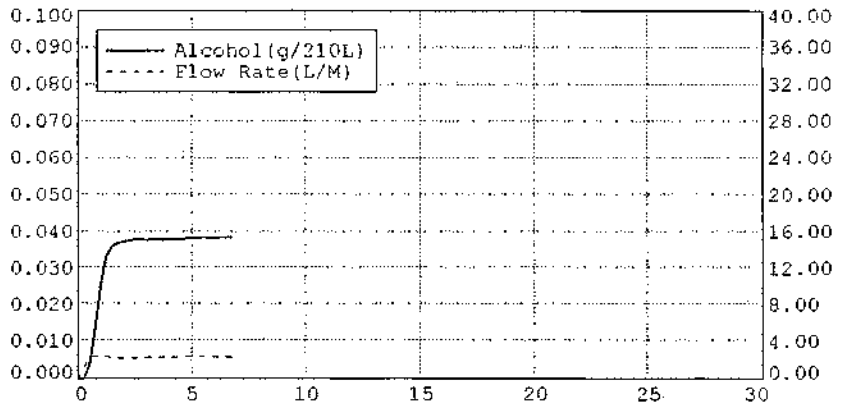
Date: 08/31/2015
 Time: 12:06:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.39: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 492 psi

BLANK TEST	0.000	12:07
INTERNAL STANDARD	VERIFIED	12:08
EXTERNAL STANDARD	0.039	12:08
BLANK TEST	0.000	12:09
EXTERNAL STANDARD	0.039	12:09
BLANK TEST	0.000	12:10
EXTERNAL STANDARD	0.039	12:10
BLANK TEST	0.000	12:11
EXTERNAL STANDARD	0.039	12:11
BLANK TEST	0.000	12:12
EXTERNAL STANDARD	0.039	12:12
BLANK TEST	0.000	12:13

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100397

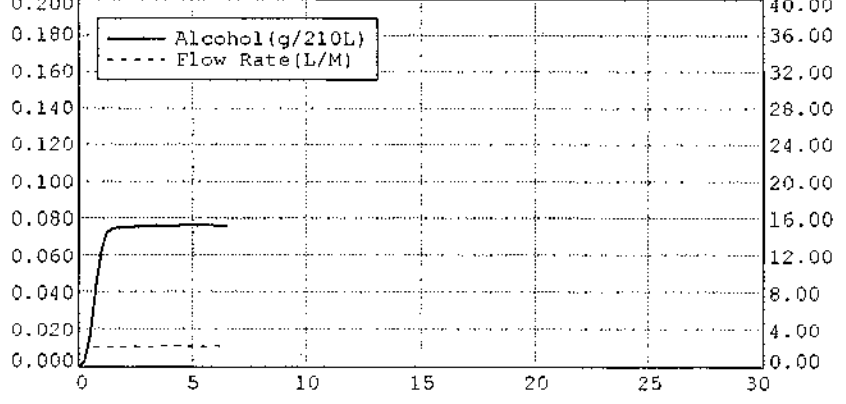
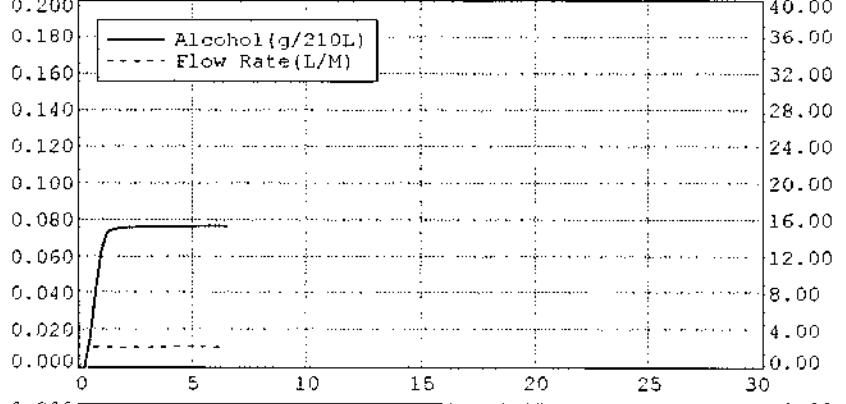
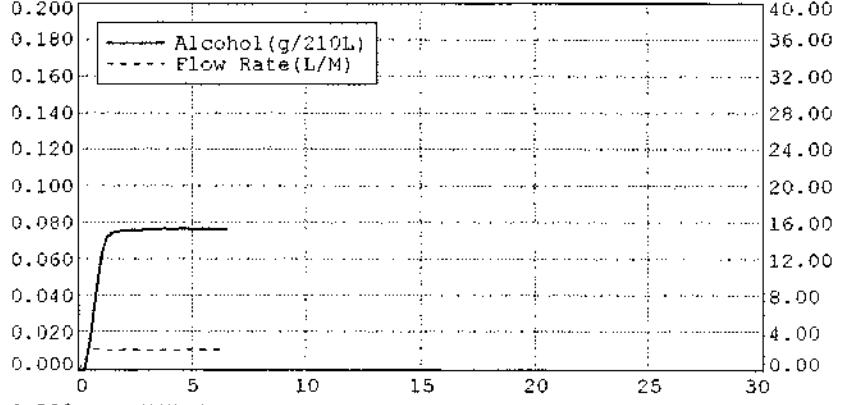
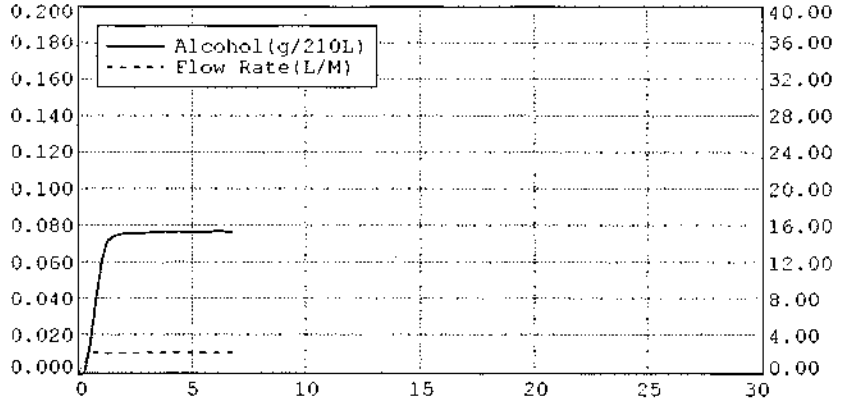
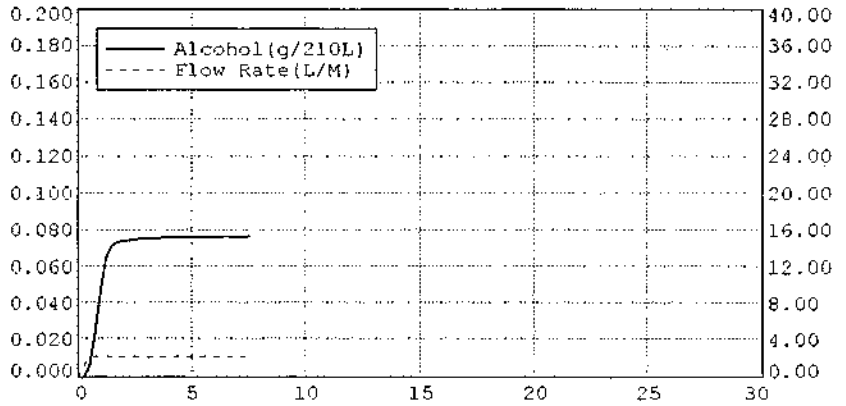
Date: 08/31/2015
 Time: 12:15:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.39: 0.079
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016
 TANK PRESSURE: 281 psi

BLANK TEST	0.000	12:17
INTERNAL STANDARD	VERIFIED	12:17
EXTERNAL STANDARD	0.077	12:17
BLANK TEST	0.000	12:18
EXTERNAL STANDARD	0.078	12:18
BLANK TEST	0.000	12:19
EXTERNAL STANDARD	0.078	12:19
BLANK TEST	0.000	12:20
EXTERNAL STANDARD	0.078	12:20
BLANK TEST	0.000	12:21
EXTERNAL STANDARD	0.078	12:21
BLANK TEST	0.000	12:22

Average = 0.0778
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100397

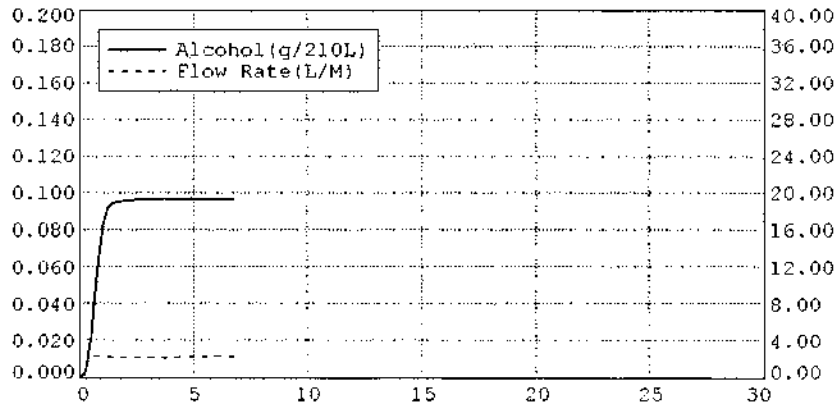
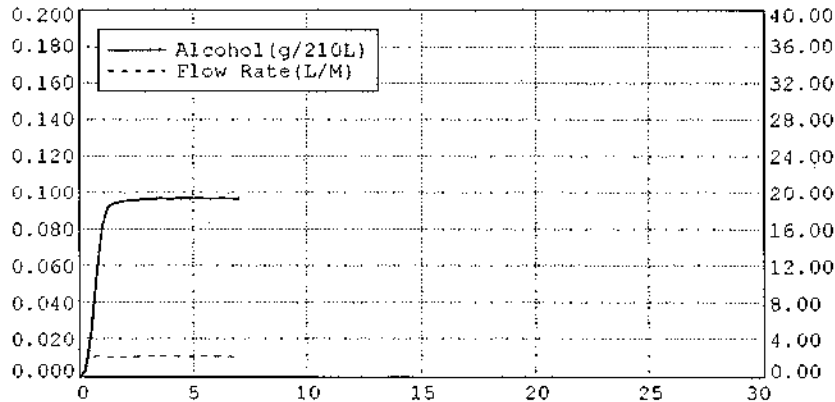
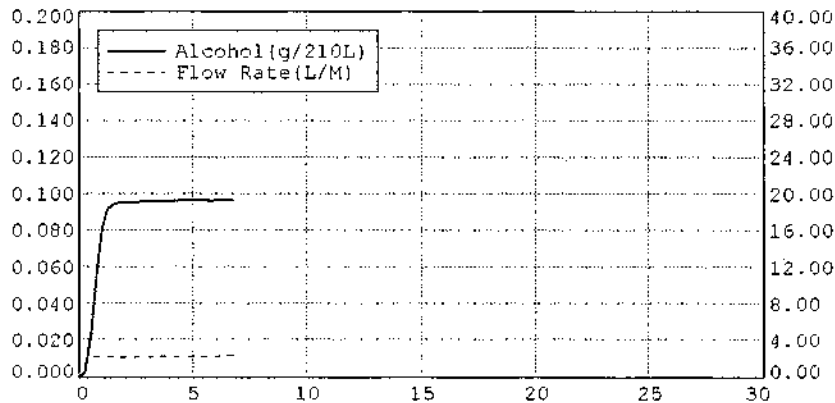
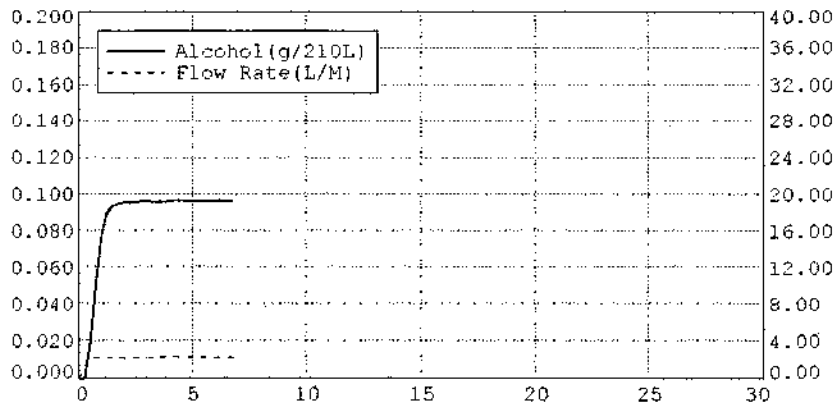
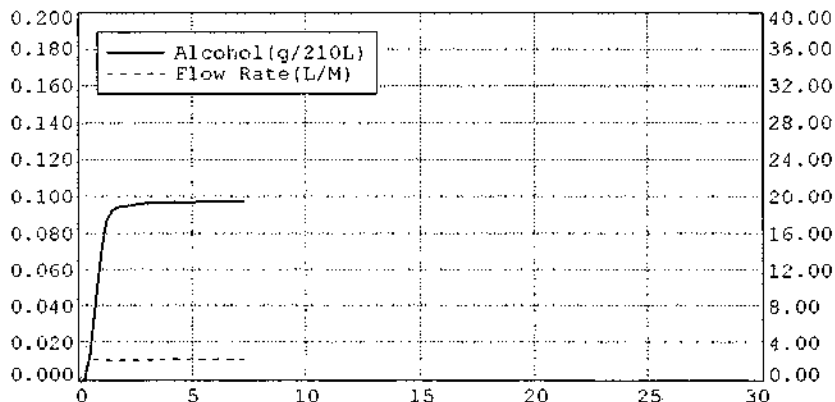
Date: 08/31/2015
Time: 12:24:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.39: 0.098
LOT #: 02915100A1
EXPIRATION: 03/05/2017
TANK PRESSURE: 341 psi

BLANK TEST	0.000	12:26
INTERNAL STANDARD	VERIFIED	12:26
EXTERNAL STANDARD	0.098	12:26
BLANK TEST	0.000	12:27
EXTERNAL STANDARD	0.098	12:27
BLANK TEST	0.000	12:28
EXTERNAL STANDARD	0.097	12:28
BLANK TEST	0.000	12:29
EXTERNAL STANDARD	0.098	12:29
BLANK TEST	0.000	12:30
EXTERNAL STANDARD	0.098	12:31
BLANK TEST	0.000	12:32

Average = 0.0978
Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100397

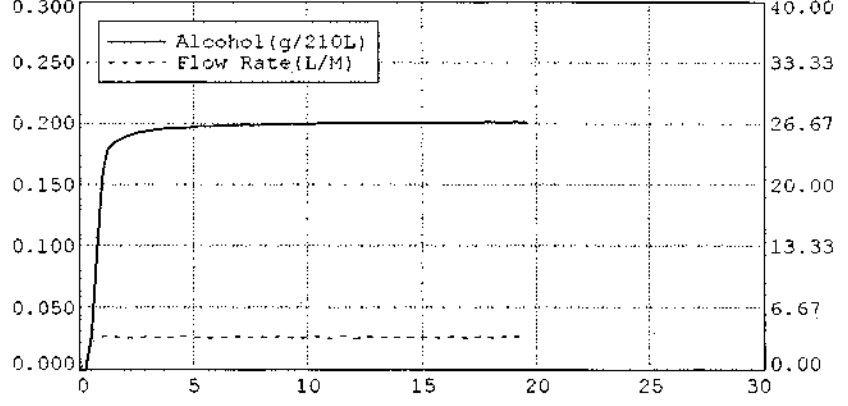
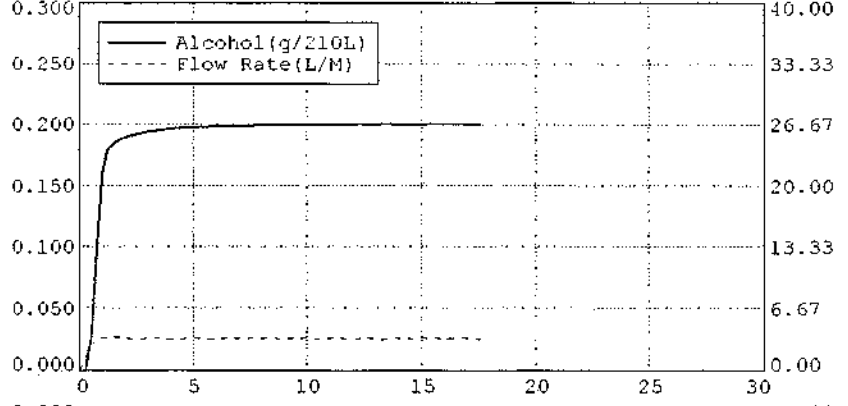
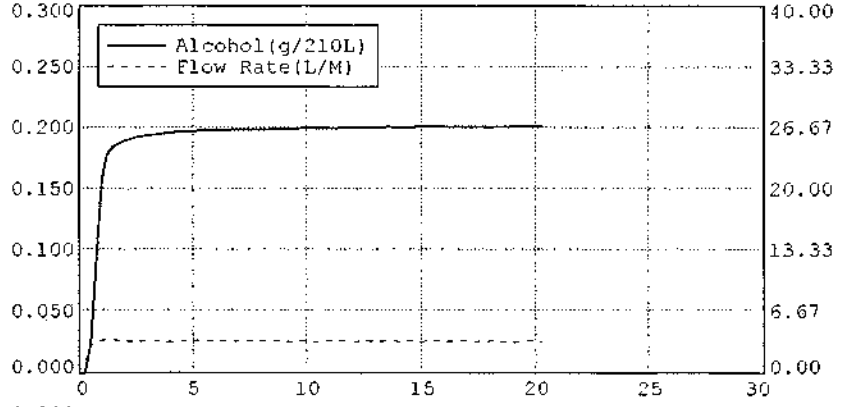
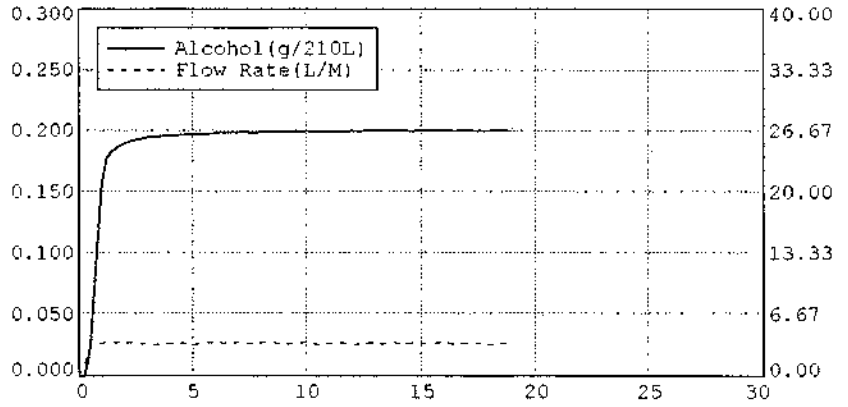
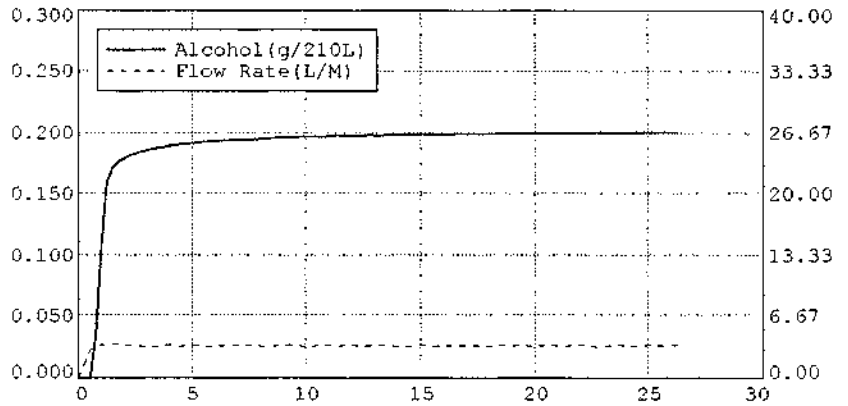
Date: 08/31/2015
 Time: 12:34:22

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	12:36
INTERNAL STANDARD	VERIFIED	12:36
EXTERNAL STANDARD	0.202	12:36
BLANK TEST	0.000	12:37
EXTERNAL STANDARD	0.201	12:38
BLANK TEST	0.000	12:39
EXTERNAL STANDARD	0.202	12:39
BLANK TEST	0.000	12:40
EXTERNAL STANDARD	0.202	12:40
BLANK TEST	0.000	12:41
EXTERNAL STANDARD	0.202	12:42
BLANK TEST	0.000	12:43

Average = 0.2018
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100397

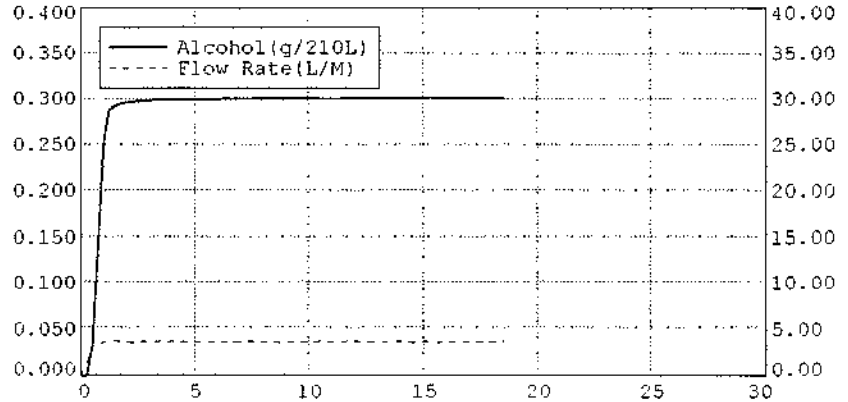
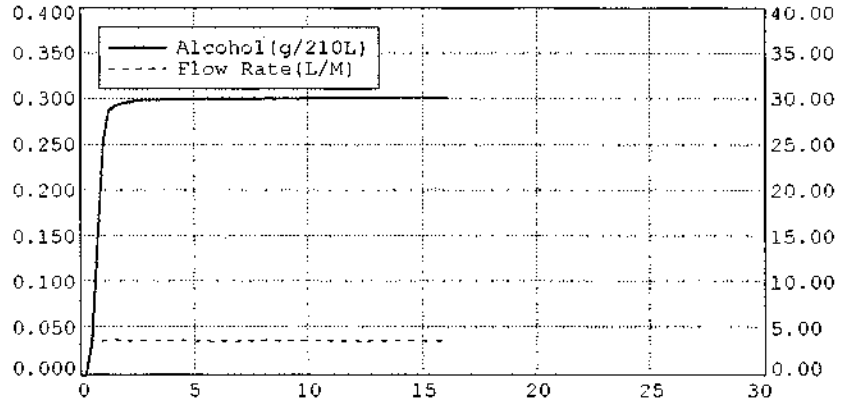
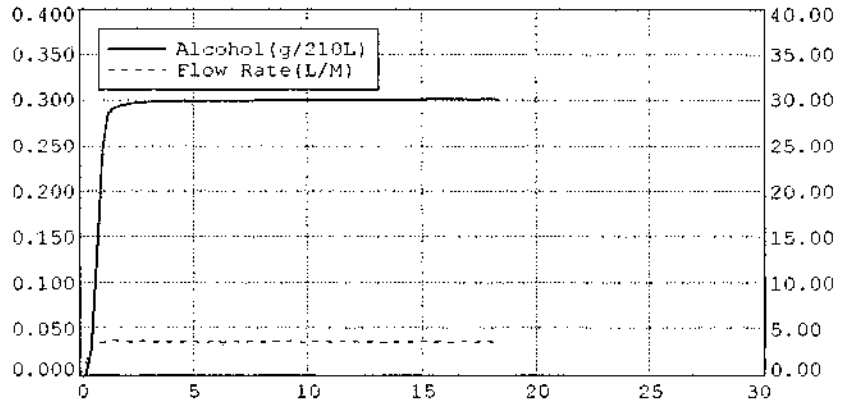
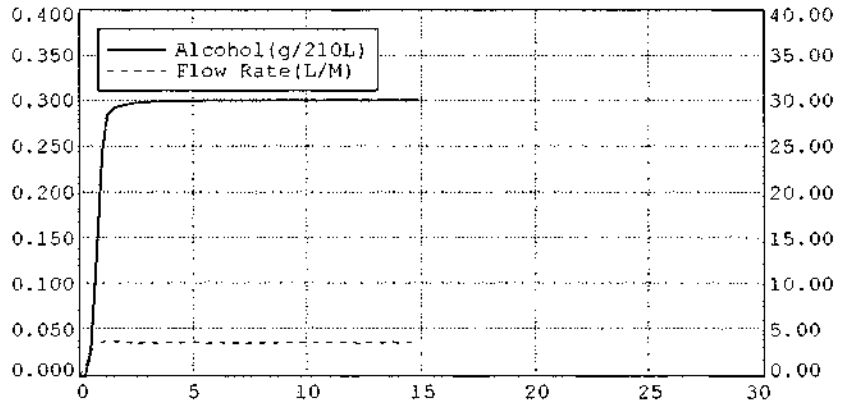
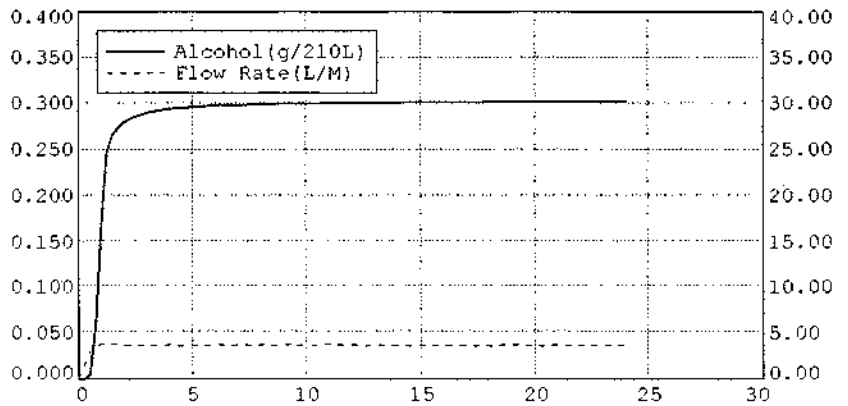
Date: 08/31/2015
 Time: 12:44:47

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	12:46
INTERNAL STANDARD	VERIFIED	12:46
EXTERNAL STANDARD	0.302	12:46
BLANK TEST	0.000	12:47
EXTERNAL STANDARD	0.301	12:48
BLANK TEST	0.000	12:49
EXTERNAL STANDARD	0.302	12:49
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.302	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.302	12:52
BLANK TEST	0.000	12:53

Average = 0.3018
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 09/01/2015
Time: 11:44:34

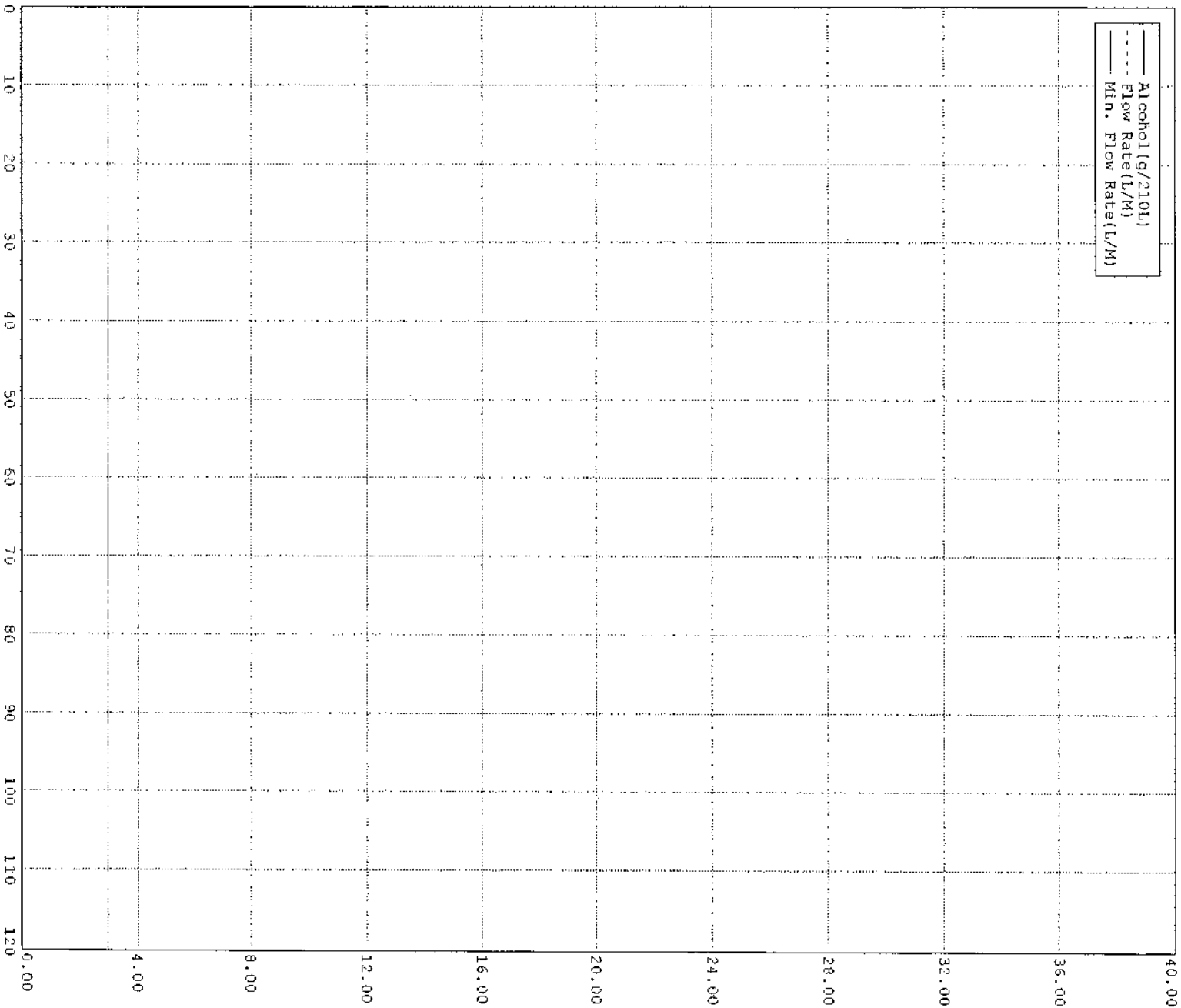
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INCOMPLETE XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.77: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	11:45
BLANK TEST	0.000	11:45
INTERNAL STANDARD	VERIFIED	11:45
EXTERNAL STANDARD	0.078	11:46
BLANK TEST	0.000	11:47
SUBJECT SAMPLE	INCOMPLETE	11:49



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 09/01/2015
Time: 12:10:19

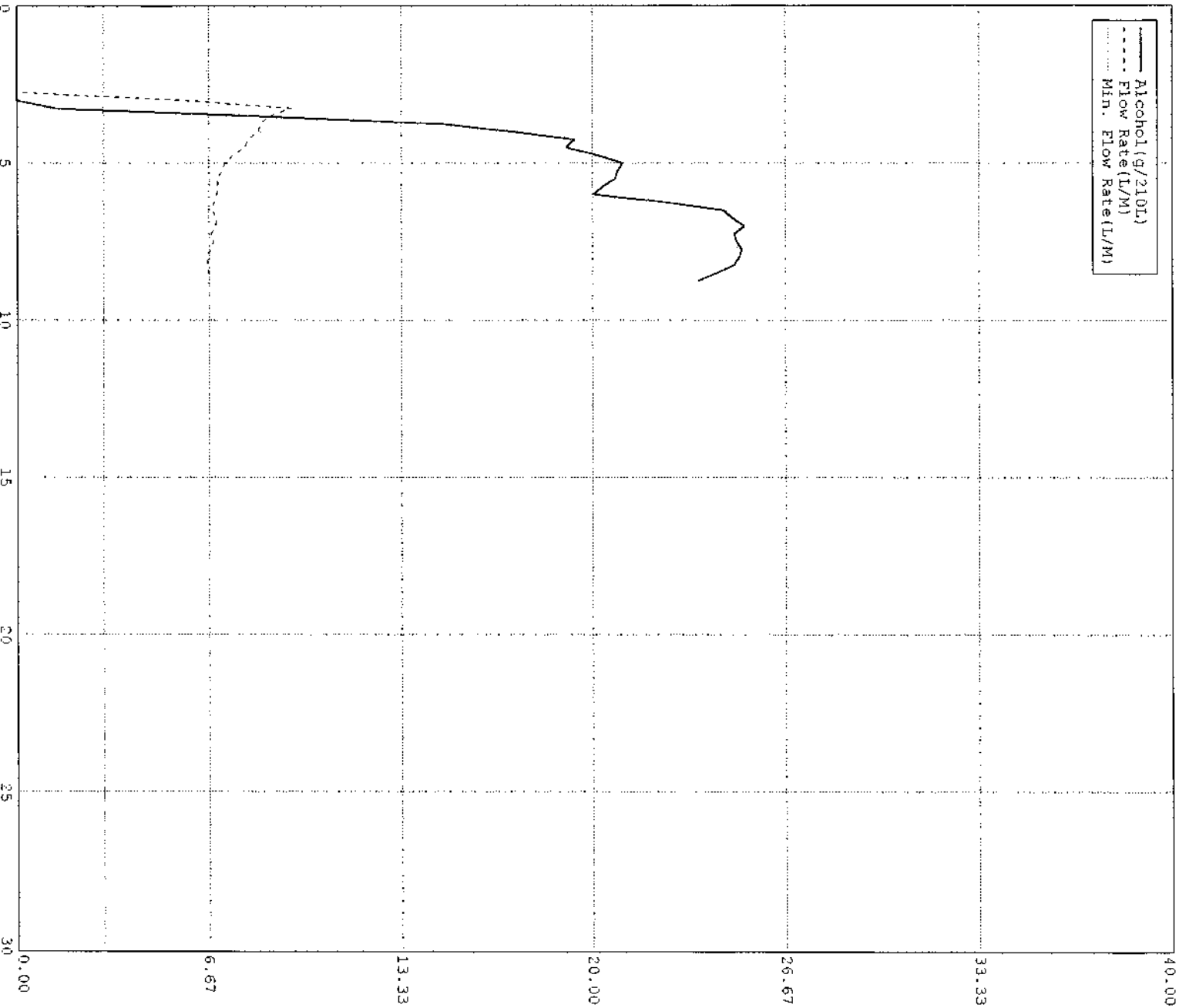
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INVALID XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.77: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK
BLANK TEST PASSED 12:14
INTERNAL STANDARD VERIFIED 12:14
EXTERNAL STANDARD 0.079 12:14
BLANK TEST 0.000 12:15
SUBJECT SAMPLE INVALID 12:15



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 09/01/2015
Time: 12:24:38

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 29.77: 0.080
LOF #: 09214080A2
EXPIRATION: 05/01/2016

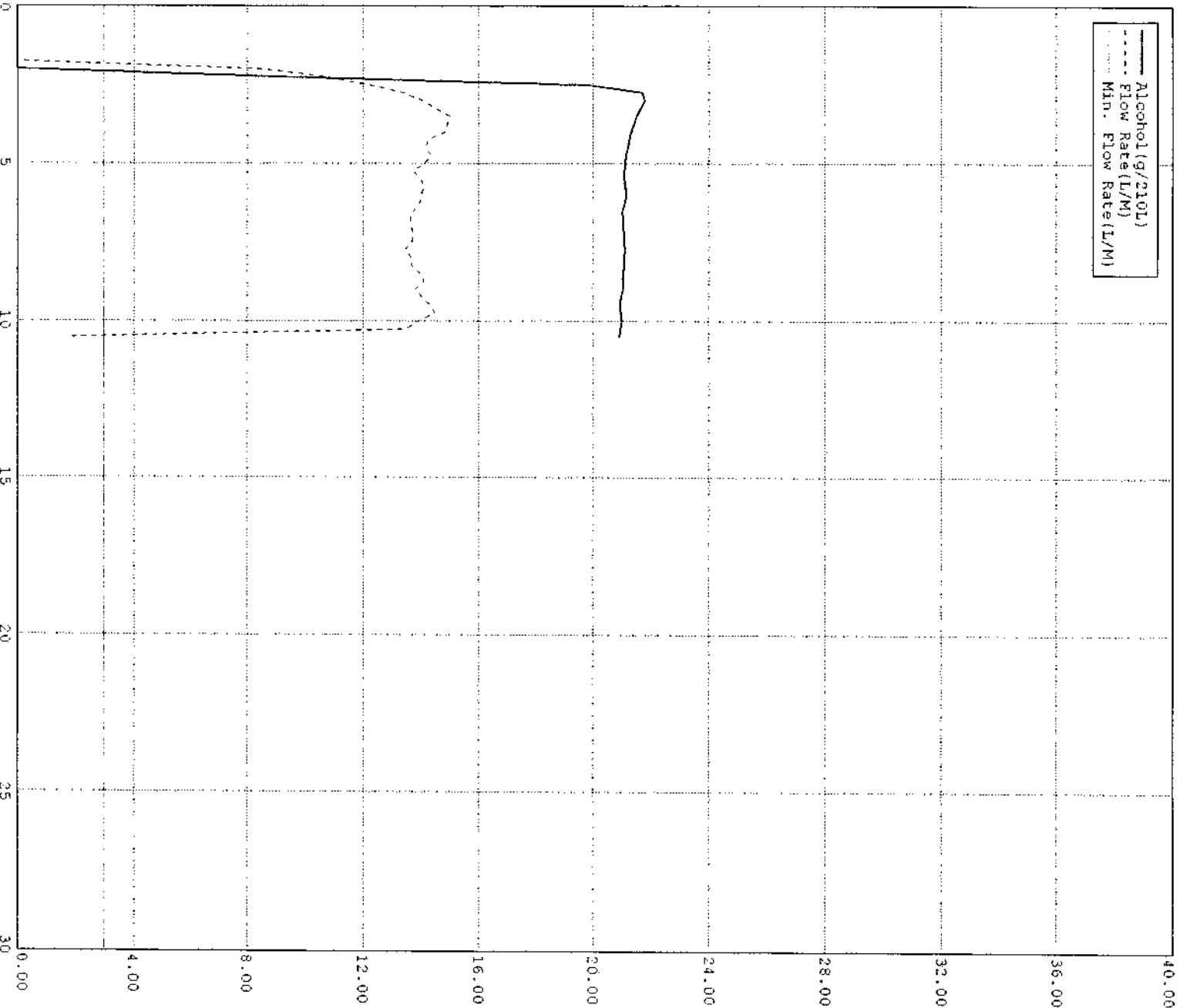
DIAGNOSTIC CHECK	PASSED	12:27
BLANK TEST	0.000	12:28
INTERNAL STANDARD	VERIFIED	12:28
Xq = 0.093 (0.19%)		
EXTERNAL STANDARD	0.079	12:28
X[1] = 0.0786 (-0.0028)	(0.0015)	
BLANK TEST	0.000	12:29
SUBJECT SAMPLE	XXX	12:29
X[1] = 0.1055 (-0.0142)	(0.0008)	

Interference Detected

Filter 2 Average = -0.0027

Filter 3 Average = 0.0020

CRF 9/1/15



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 09/01/2015
Time: 12:32:11

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

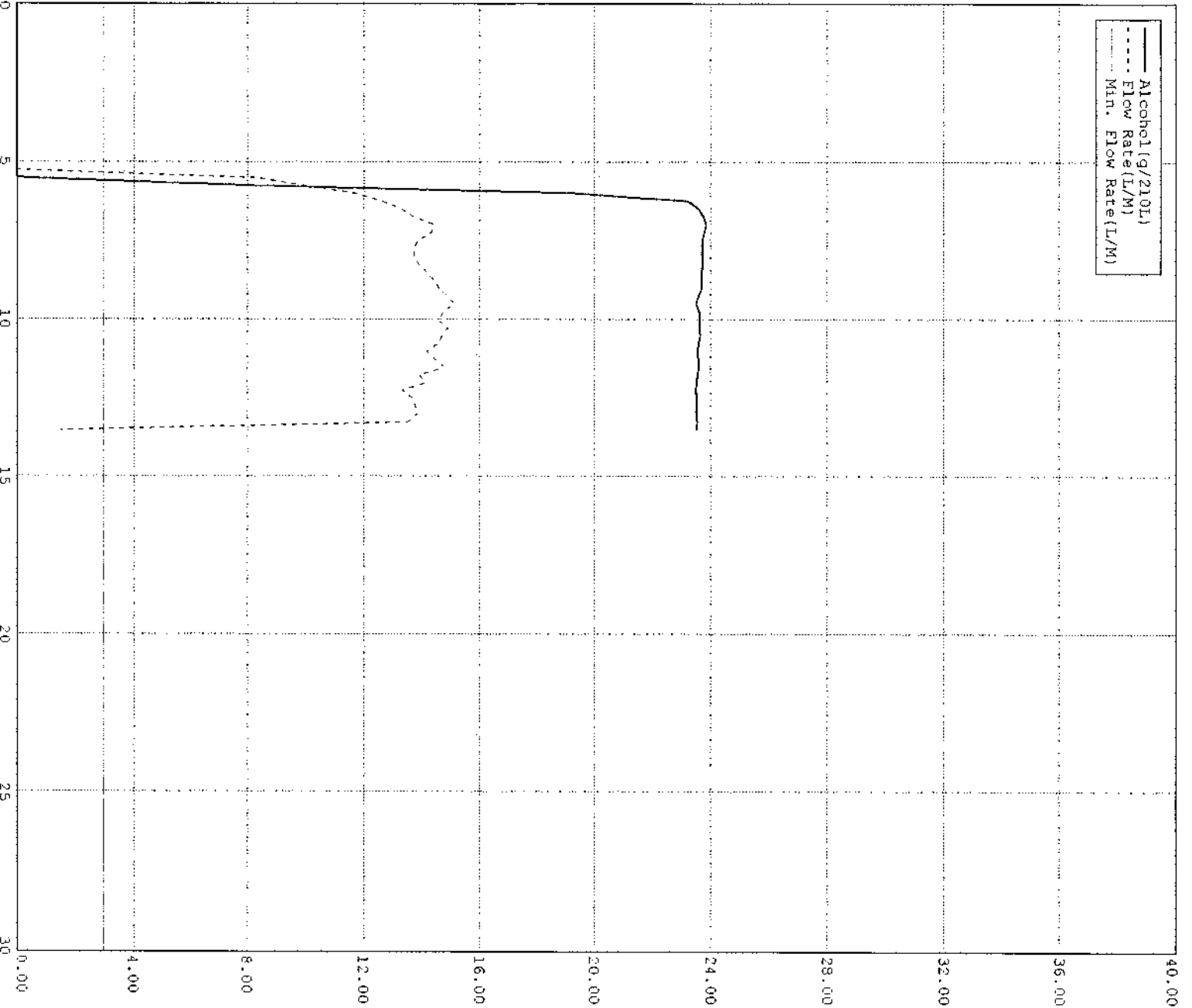
OPERATOR NAME:
INTERFERENCE IPA
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.77: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 12:34
BLANK TEST 0.000 12:34
INTERNAL STANDARD VERIFIED 12:34
Xq = 0.093 (0.09%) 0.079 12:34
EXTERNAL STANDARD X[1] = 0.0785 (-0.0020) (0.0021)
BLANK TEST 0.000 12:35
SUBJECT SAMPLE XXX 12:35
X[1] = 0.1180 (-0.0278) (0.0016)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 09/01/2015
Time: 12:40:13

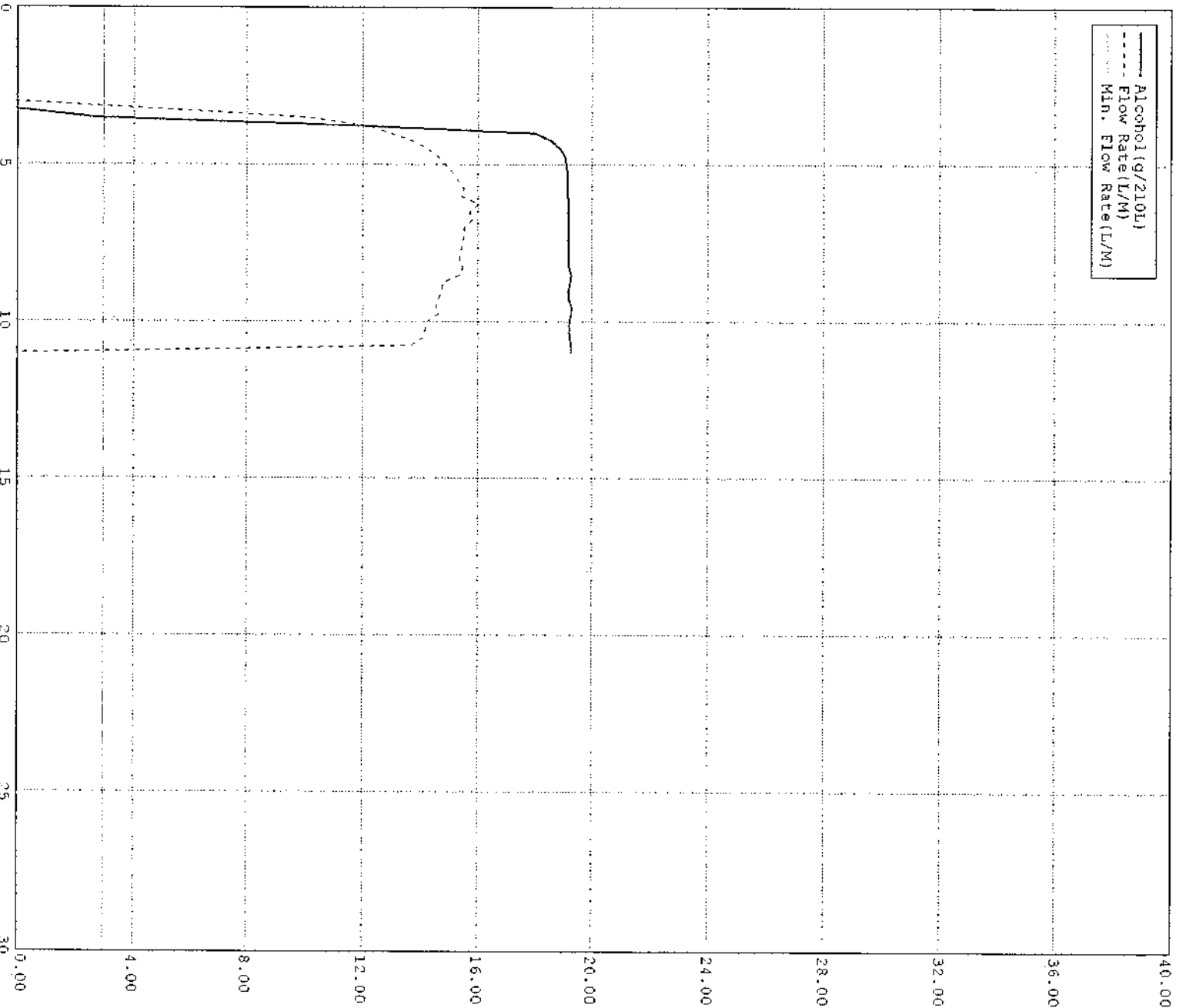
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE NEGATIVE
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.78: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	12:42
INTERNAL STANDARD	0.000	12:42
EXTERNAL STANDARD	0.079	12:42
Xq = 0.093 (0.19%)		
X[1] = 0.0786 (-0.0032)	(0.0019)	
INTERNAL STANDARD	0.000	12:43
SUBJECT SAMPLE (Vol=1.86L)	0.096	12:43
X[1] = 0.0969 (-0.0008)	(0.0008)	
INTERNAL STANDARD	0.000	12:44
EXTERNAL STANDARD	0.079	12:44
X[1] = 0.0786 (-0.0026)	(0.0025)	
INTERNAL STANDARD	0.000	12:45



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 09/01/2015
Time: 13:11:46

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

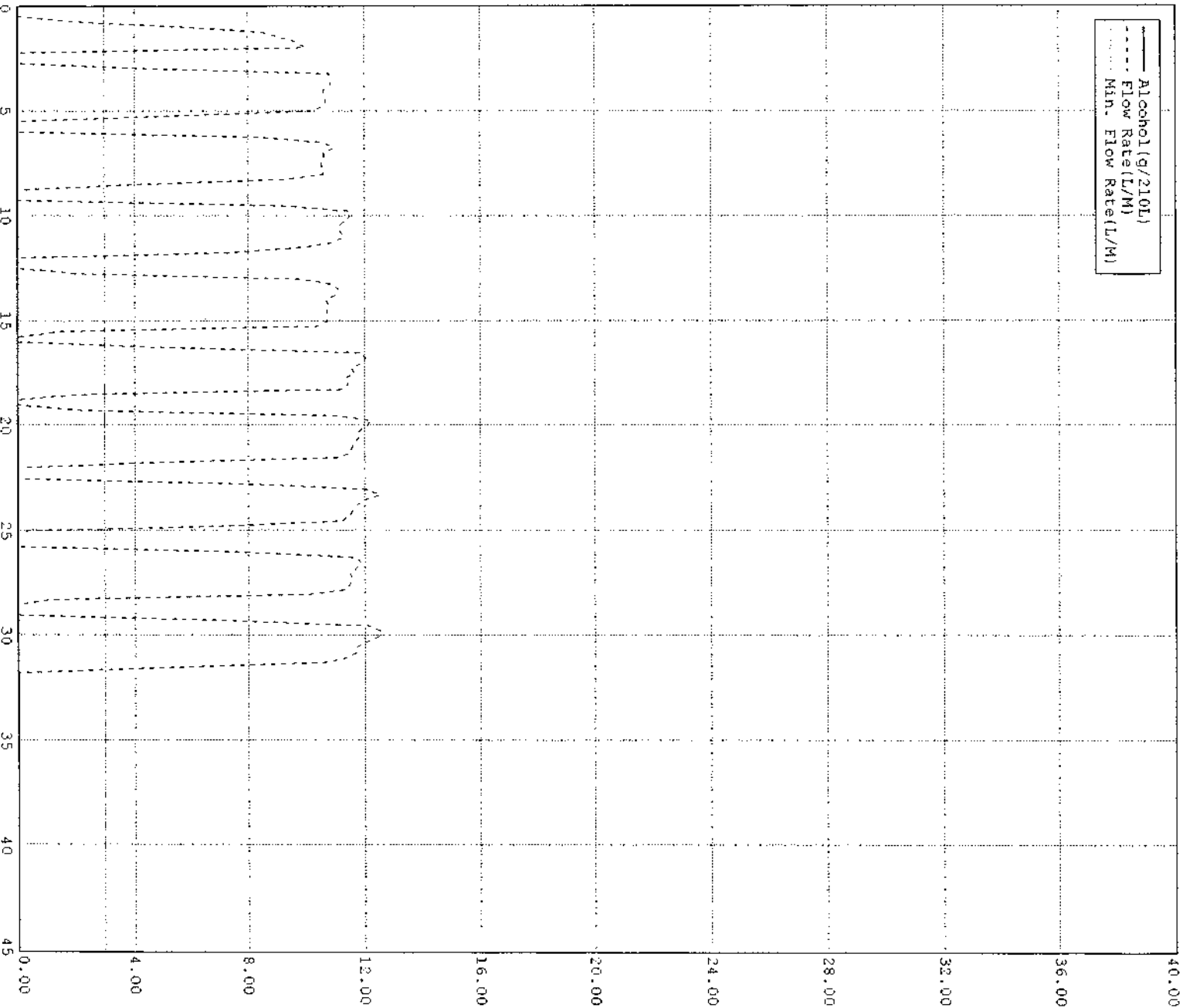
OPERATOR NAME:
EXCEEDED ATTEMPTS
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.78: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:14
BLANK TEST	0.000	13:14
INTERNAL STANDARD	VERIFIED	13:14
EXTERNAL STANDARD	0.079	13:15
BLANK TEST	0.000	13:16
SUBJECT SAMPLE	XXX	13:16

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100397

Date: 09/01/2015
Time: 13:20:34

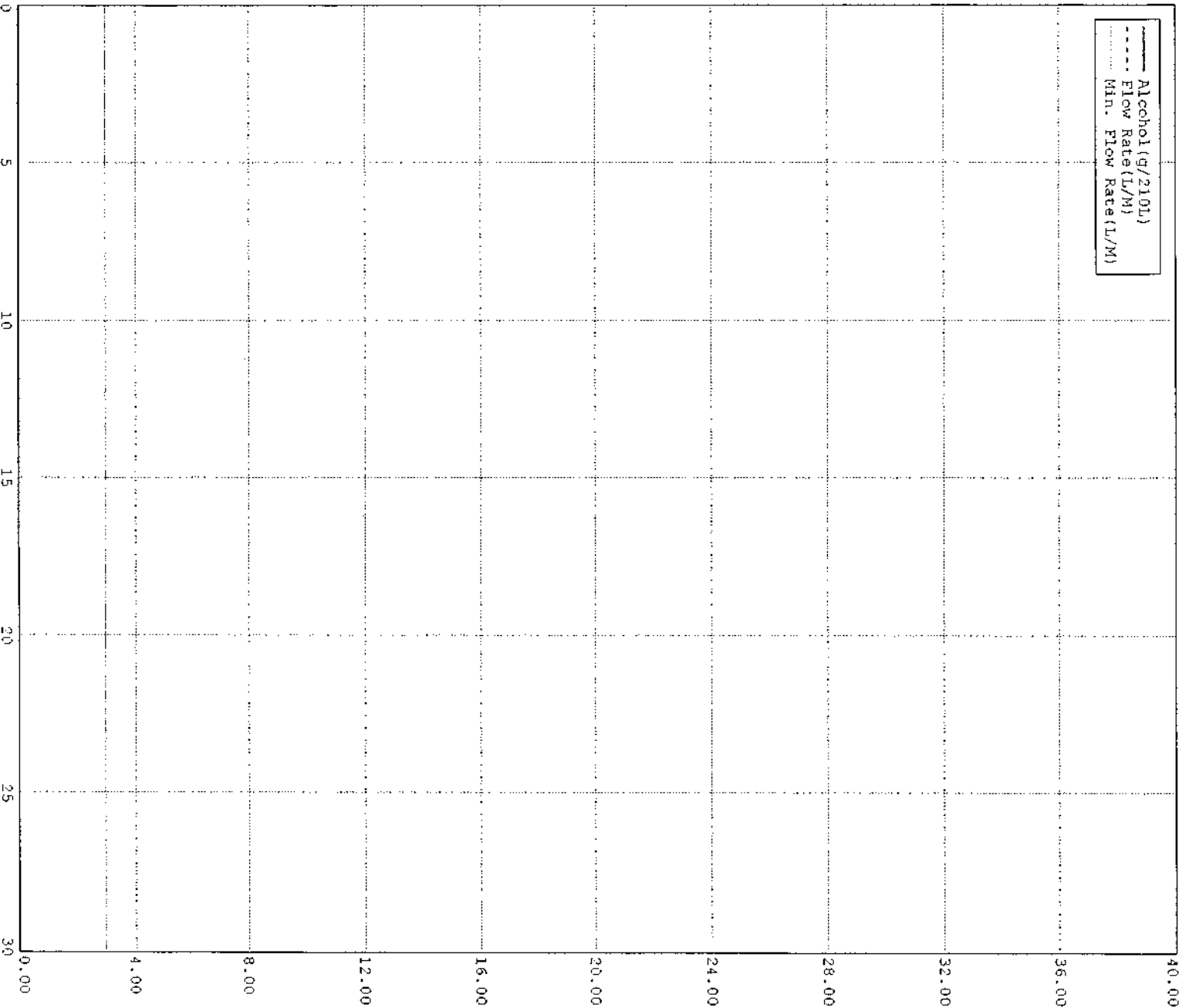
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
RFI XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.78: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK
BLANK TEST PASSED 13:21
INTERNAL STANDARD VERIFIED 13:22
EXTERNAL STANDARD 0.079 13:22
BLANK TEST 0.000 13:23
RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100397

Date: 09/01/2015
Time: 13:37:36

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 29.78: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:40
BLANK TEST	0.000	13:40
INTERNAL STANDARD	VERIFIED	13:40
EXTERNAL STANDARD	0.079	13:40
BLANK TEST	0.000	13:41
SUBJECT SAMPLE (Vol=2.21L)	0.000	13:42
BLANK TEST	0.000	13:43
EXTERNAL STANDARD	0.079	13:43
BLANK TEST	0.000	13:44

