

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 100353 Analyst CWF 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 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 8/27/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/26/2015
Time: 15:30:51

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 = 2.23 V PASSED
(1.24 V - 2.90 V)
Cooler Voltage = 1.97 V PASSED
(1.21 V - 2.83 V)
Bias Voltage = 80 V PASSED
(47 V - 111 V)
Chopper Freq = 538 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.755 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 = 0.094 0.09% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100353

Date: 08/26/2015

Time: 3:39 PM

Temperatures (°C)

Sample Cell: 48.9°C

Breath Tube: 47.9°C

Current Barometer 29.7 in

Volume (Ltr) 1.51

Settings

Lamp: 2.23 V

Bias: 80 V

Cooler: 1.97 V

Chopper: 539 Hz

Voltages (V)

Flow: 1.05 V

Detector: 0.039 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/12/2015
Time: 10:48:05

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

Ca = 0.1000
CAL = 0.960752 0.800 <= CAL < 1.200
b1 = 0.0004 0.0000 <= b1 < 0.0040
b2 = 0.0055 0.0010 <= b2 < 0.0100
b3 = 0.0005 0.0000 <= b3 < 0.0040
Xq = 0.0936 0.0500 <= Xq < 0.2000
a21 = 1.171771 1.050 <= a21 < 1.300
a31 = 0.523060 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/26/2015
Time: 15:47:29

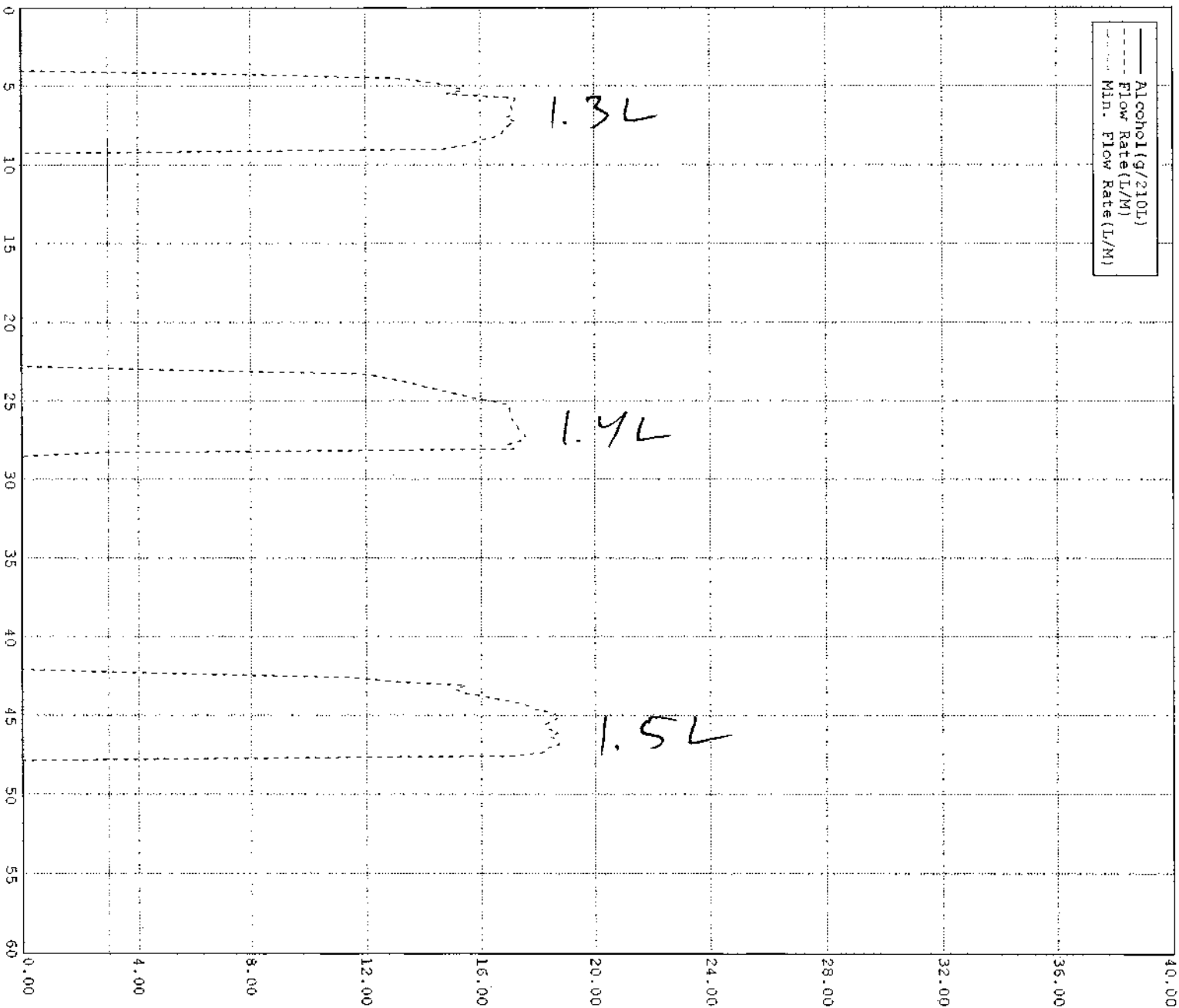
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MINIMUM VOLUME
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.67: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:58
BLANK TEST	0.000	15:58
INTERNAL STANDARD	VERIFIED	15:58
EXTERNAL STANDARD	0.079	15:58
BLANK TEST	0.000	16:00
SUBJECT SAMPLE (Vol=1.52L)	0.000	16:01
BLANK TEST	0.000	16:02
EXTERNAL STANDARD	0.077	16:02
BLANK TEST	0.000	16:03



LINEARITY CHECK

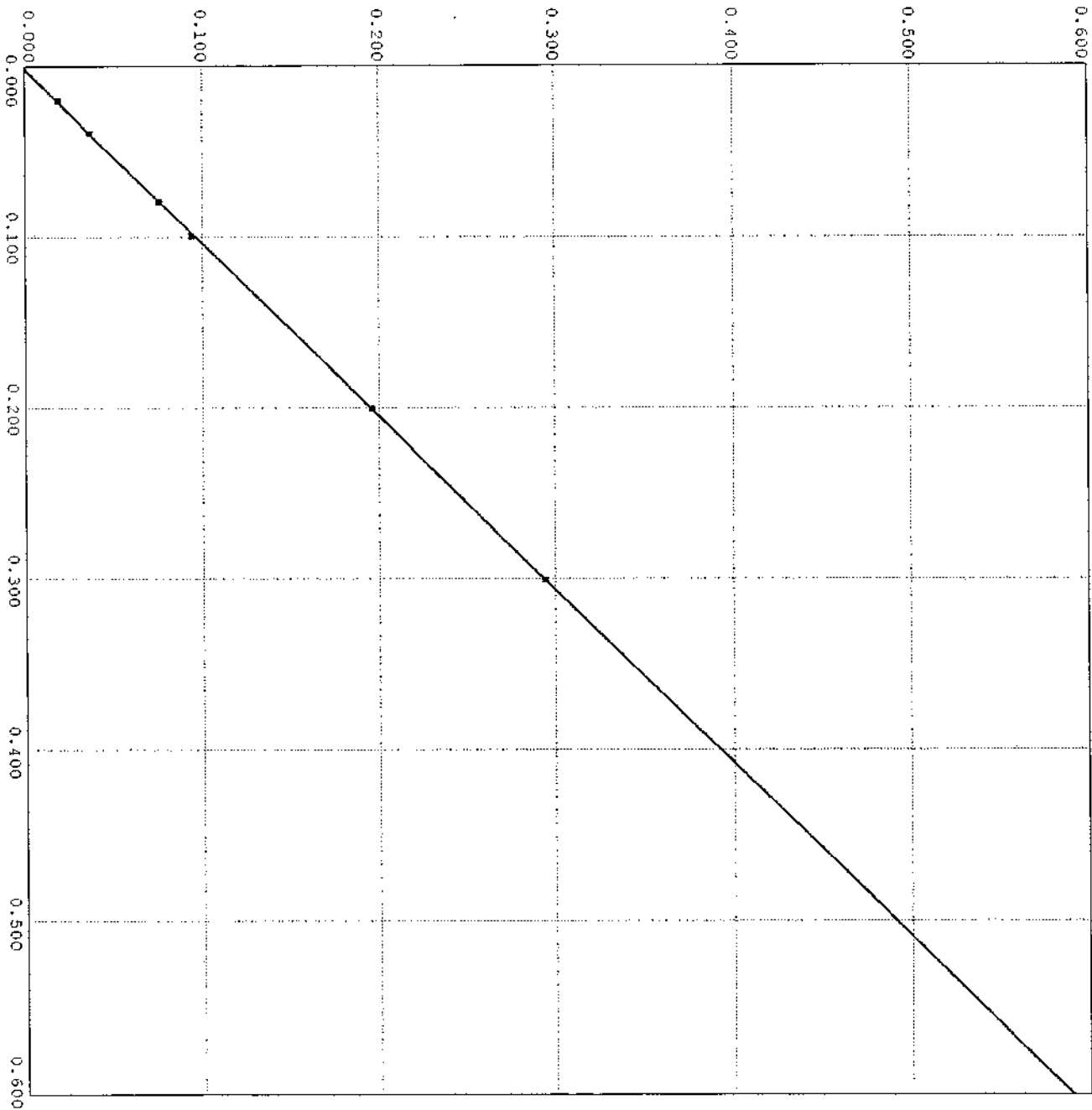
Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/27/2015
Time: 09:49:58

SUPERVISOR NAME:
CHARLES FOSTER
OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.020	0.0198	0.0004
0.039	0.0380	0.0000
0.079	0.0766	0.0005
0.099	0.0950	0.0000
0.200	0.1968	0.0008
0.300	0.2950	0.0007

SLOPE = 0.985587
R² = 0.999919



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100353

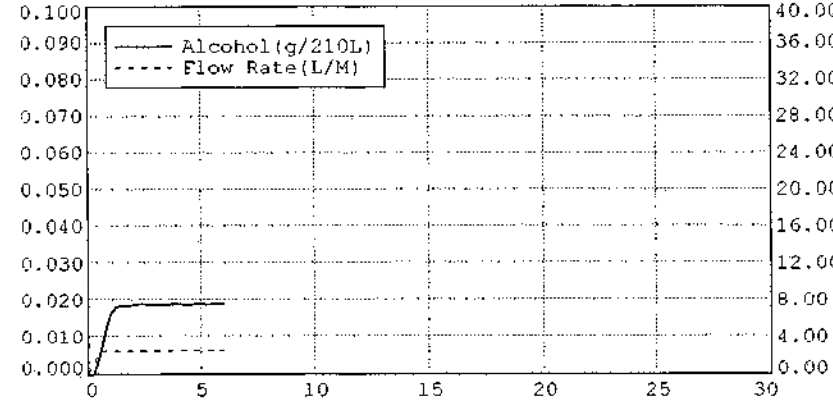
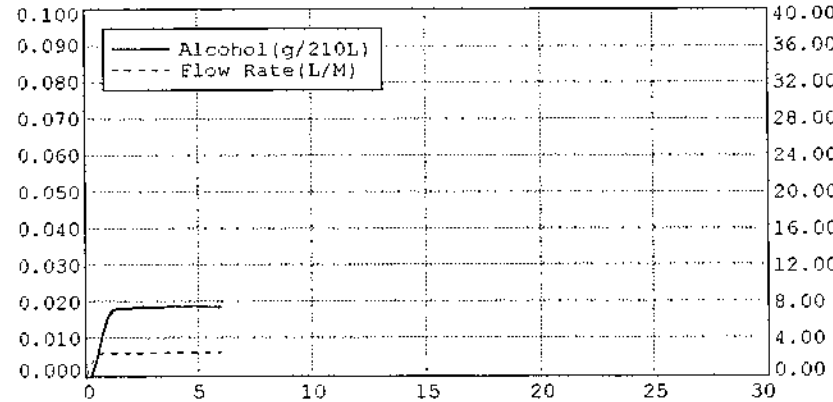
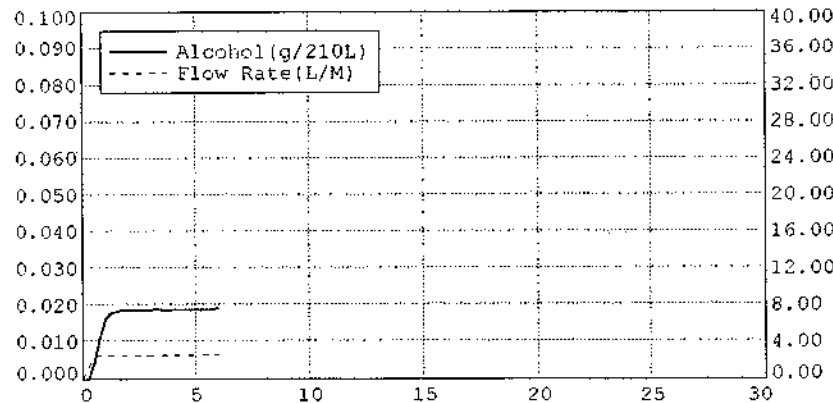
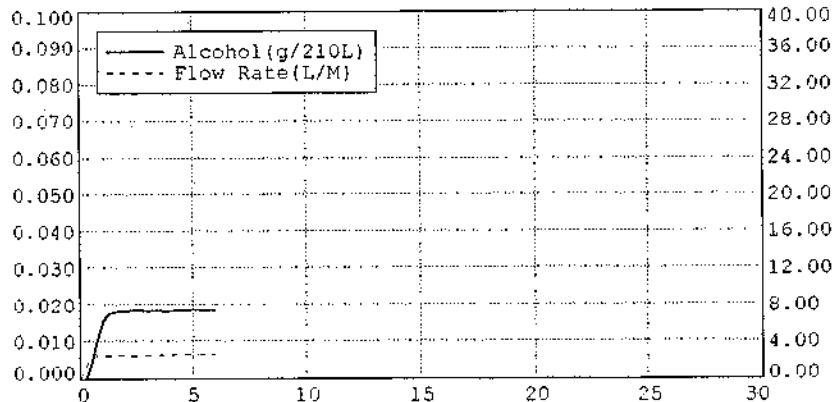
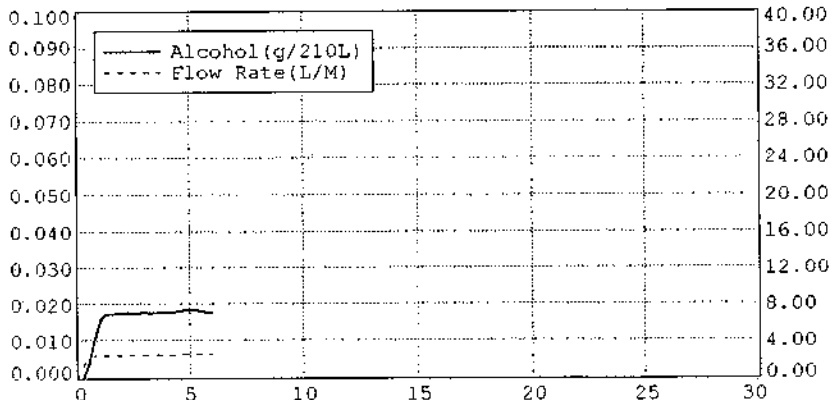
Date: 08/27/2015
 Time: 09:50:00

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.50: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 490 psi

BLANK TEST	0.000	09:51
INTERNAL STANDARD	VERIFIED	09:51
EXTERNAL STANDARD	0.019	09:51
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.020	09:52
BLANK TEST	0.000	09:53
EXTERNAL STANDARD	0.020	09:53
BLANK TEST	0.000	09:54
EXTERNAL STANDARD	0.020	09:54
BLANK TEST	0.000	09:55
EXTERNAL STANDARD	0.020	09:56
BLANK TEST	0.000	09:56

Average = 0.0198
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100353

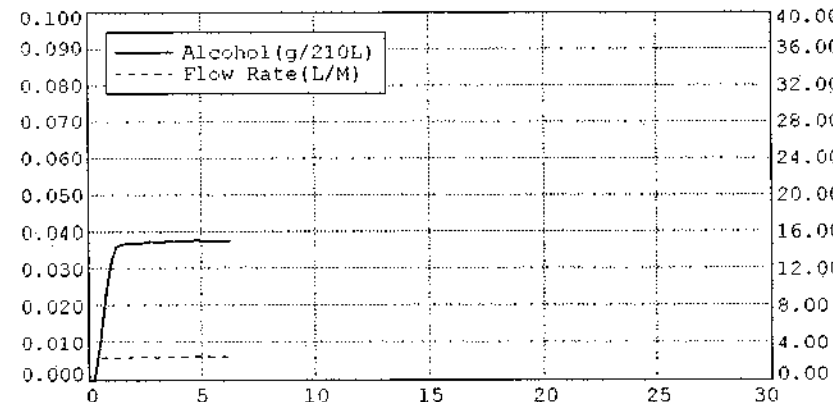
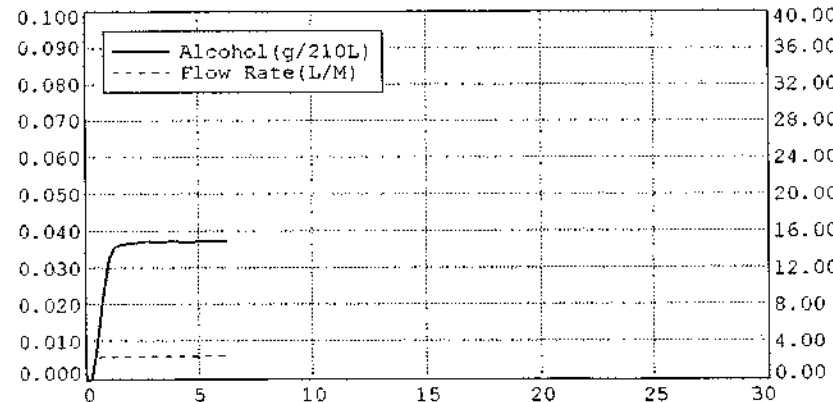
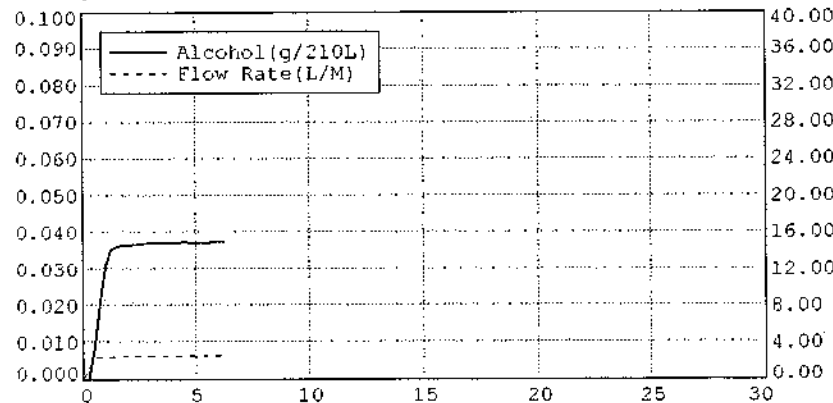
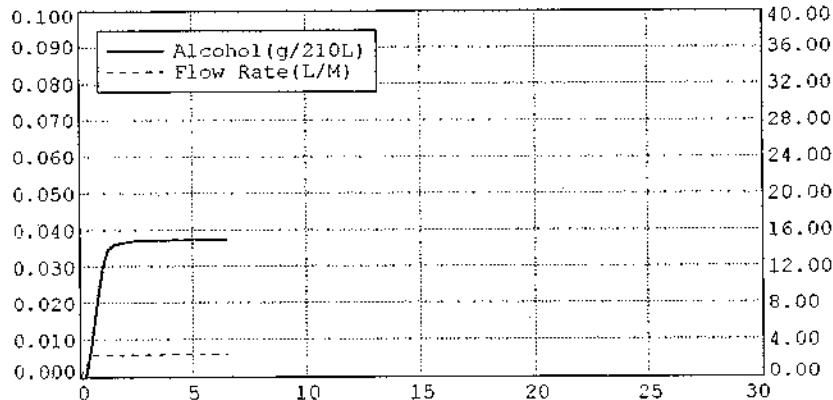
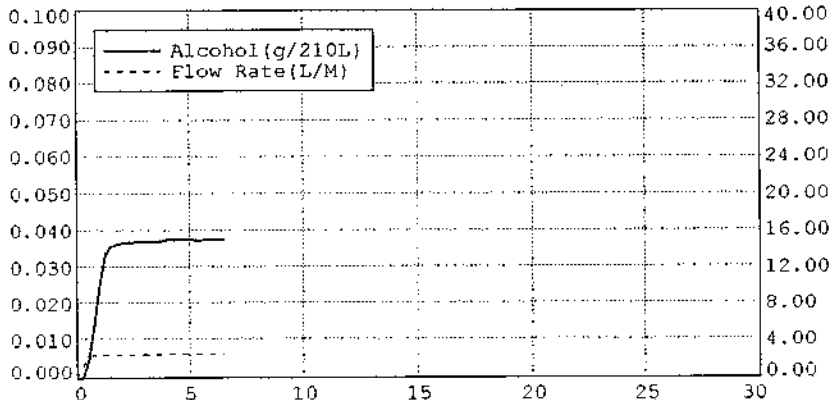
Date: 08/27/2015
 Time: 09:59:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.50: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 589 psi

BLANK TEST	0.000	10:01
INTERNAL STANDARD	VERIFIED	10:02
EXTERNAL STANDARD	0.038	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.038	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.038	10:04
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.038	10:05
BLANK TEST	0.000	10:06
EXTERNAL STANDARD	0.038	10:06
BLANK TEST	0.000	10:07

Average = 0.0380
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

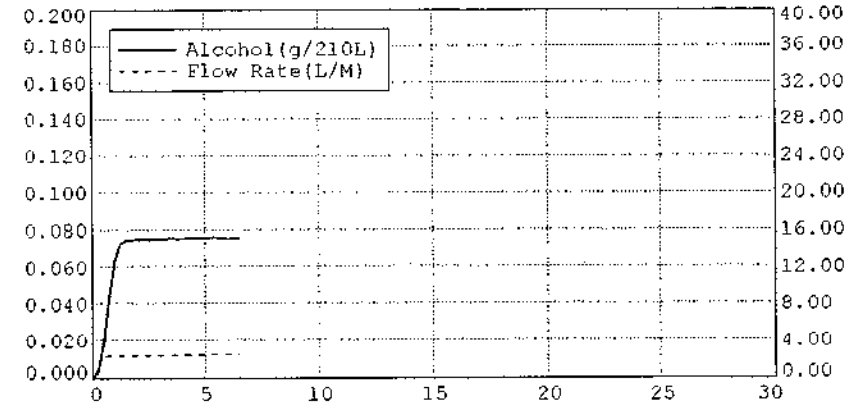
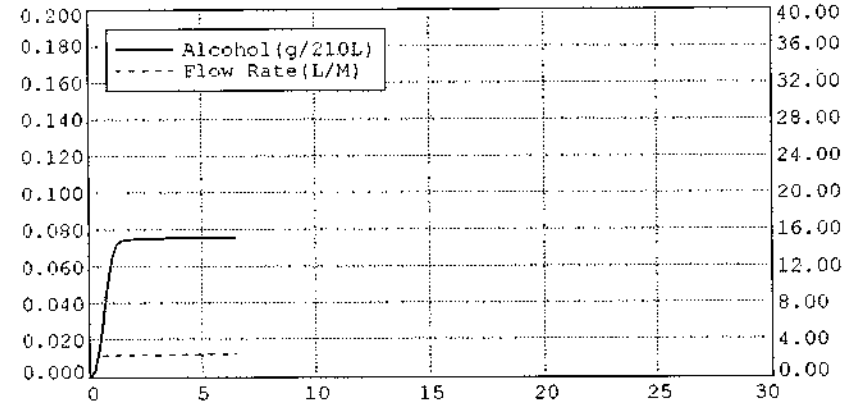
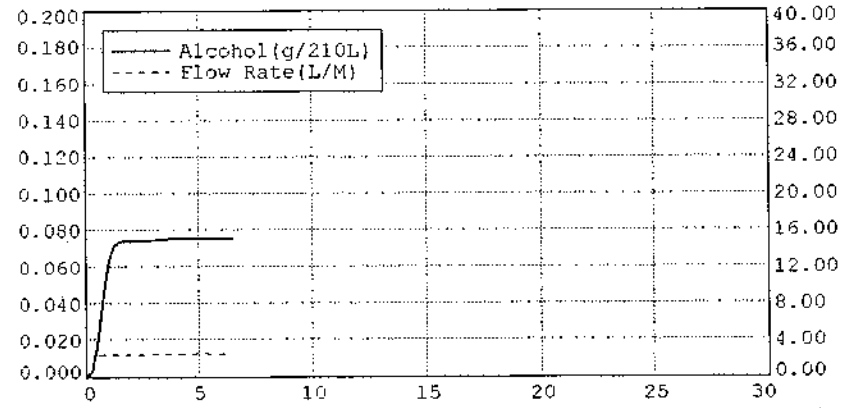
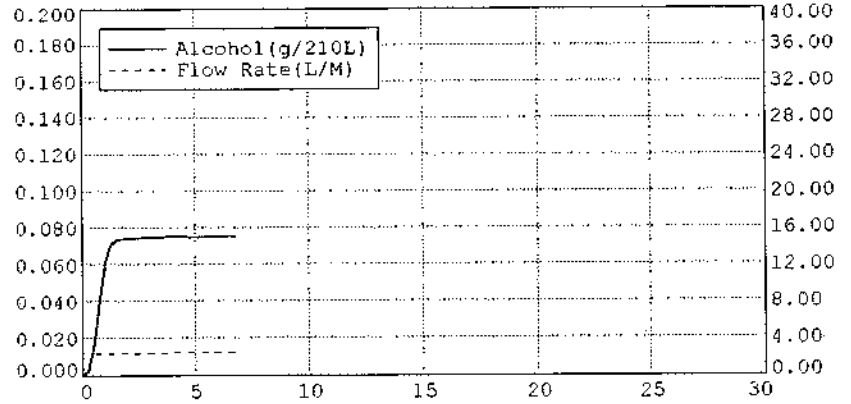
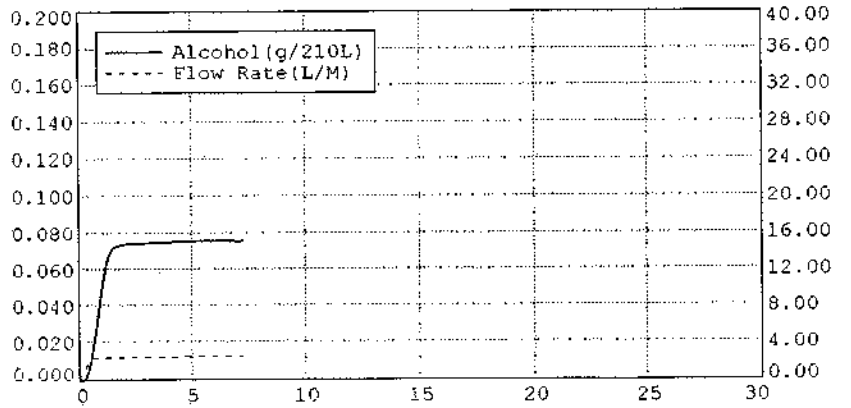
Alaska Department of Public Safety
 DATAMASTER dmt: 100353

Date: 08/27/2015
 Time: 10:09:54

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.50: 0.079
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016
 TANK PRESSURE: 696 psi

BLANK TEST	0.000	10:10
INTERNAL STANDARD	VERIFIED	10:11
EXTERNAL STANDARD	0.077	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.076	10:12
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.076	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.077	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.077	10:15
BLANK TEST	0.000	10:16

Average = 0.0766
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100353

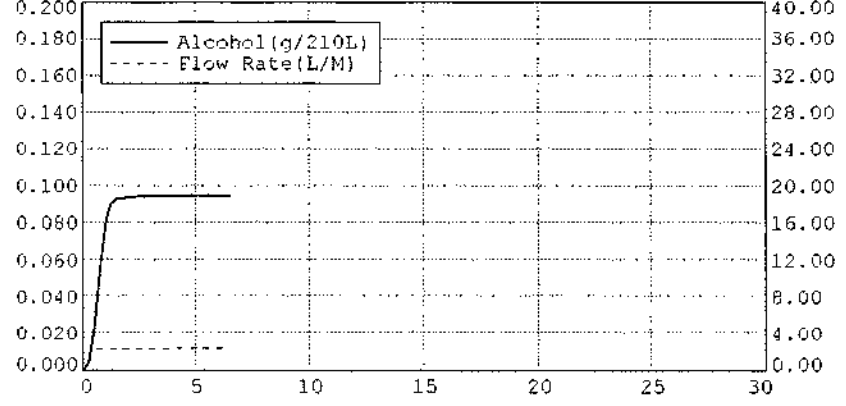
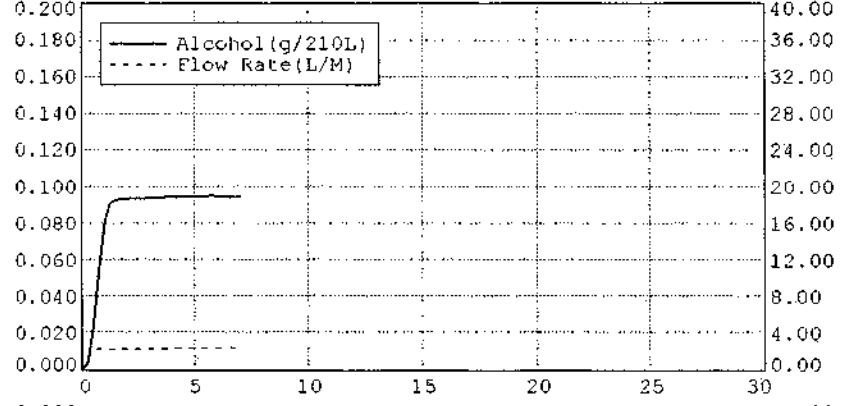
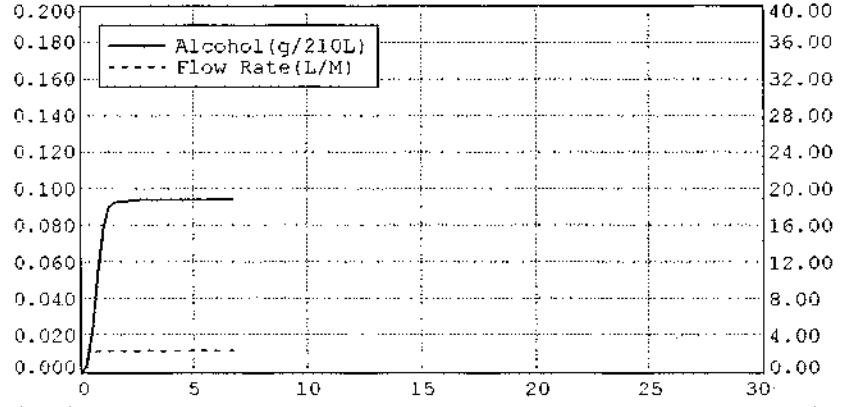
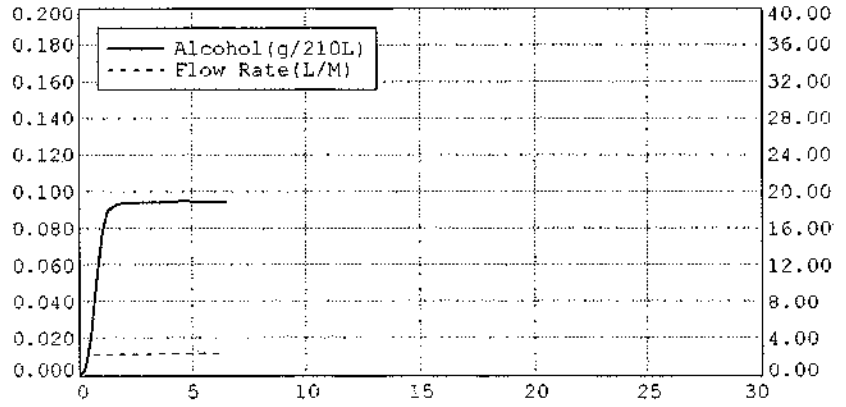
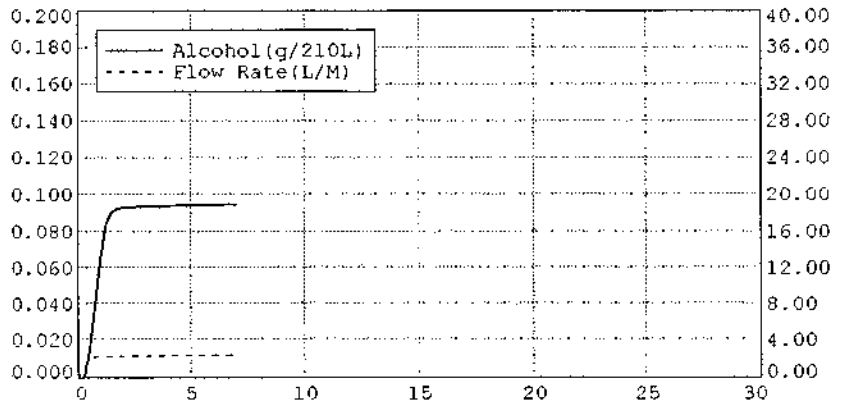
Date: 08/27/2015
 Time: 10:17:22

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.50: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 446 psi

BLANK TEST	0.000	10:18
INTERNAL STANDARD	VERIFIED	10:18
EXTERNAL STANDARD	0.095	10:18
BLANK TEST	0.000	10:19
EXTERNAL STANDARD	0.095	10:20
BLANK TEST	0.000	10:20
EXTERNAL STANDARD	0.095	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.095	10:22
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.095	10:23
BLANK TEST	0.000	10:24

Average = 0.0950
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100353

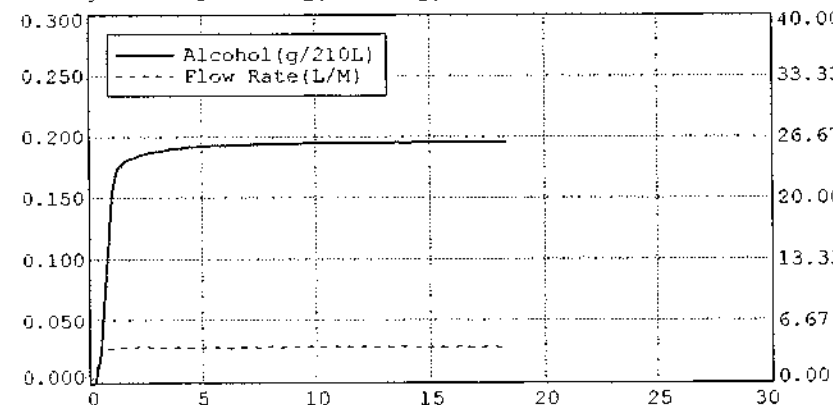
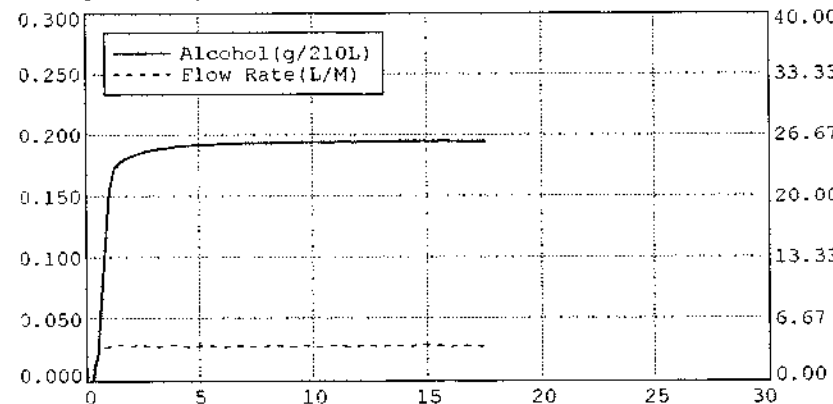
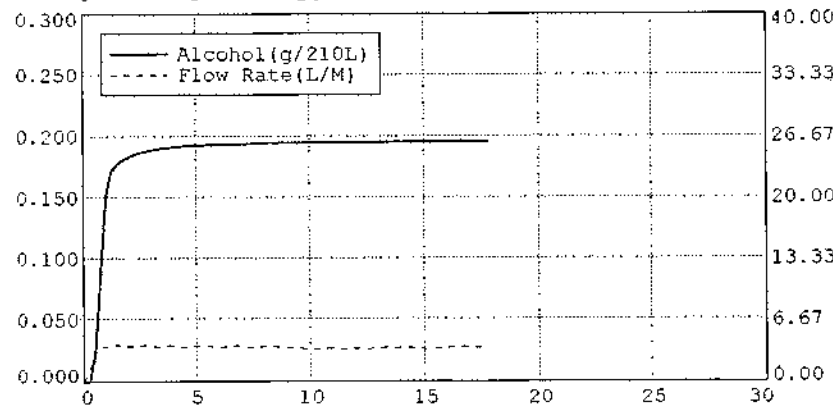
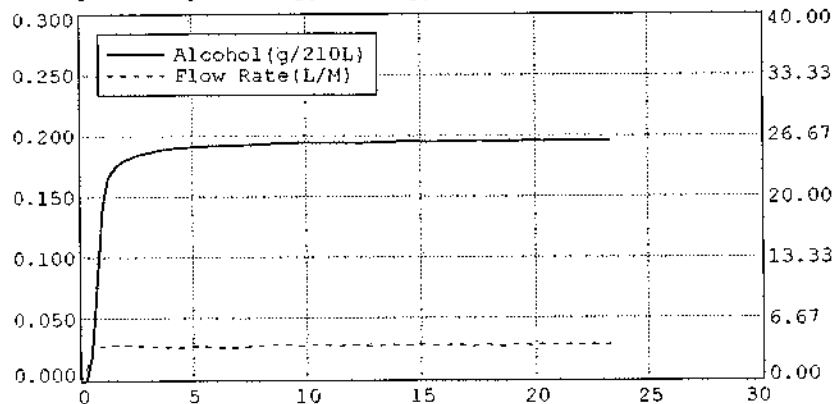
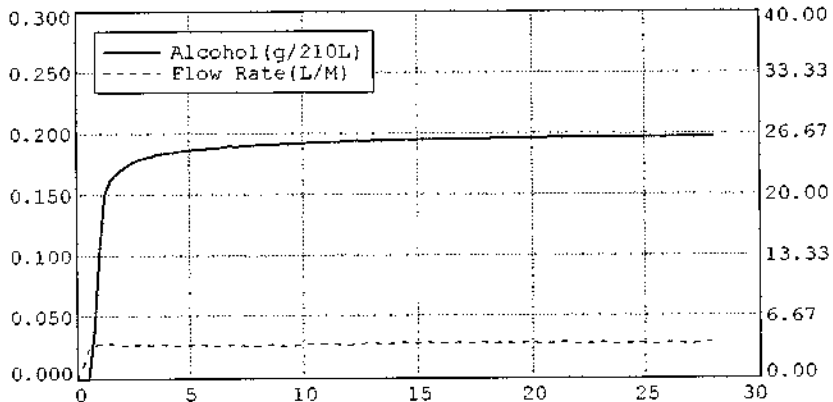
Date: 08/27/2015
 Time: 10:25:40

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:26
INTERNAL STANDARD	VERIFIED	10:26
EXTERNAL STANDARD	0.198	10:27
BLANK TEST	0.000	10:28
EXTERNAL STANDARD	0.197	10:29
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.197	10:30
BLANK TEST	0.000	10:31
EXTERNAL STANDARD	0.196	10:32
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.196	10:33
BLANK TEST	0.000	10:34

Average = 0.1968
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 6

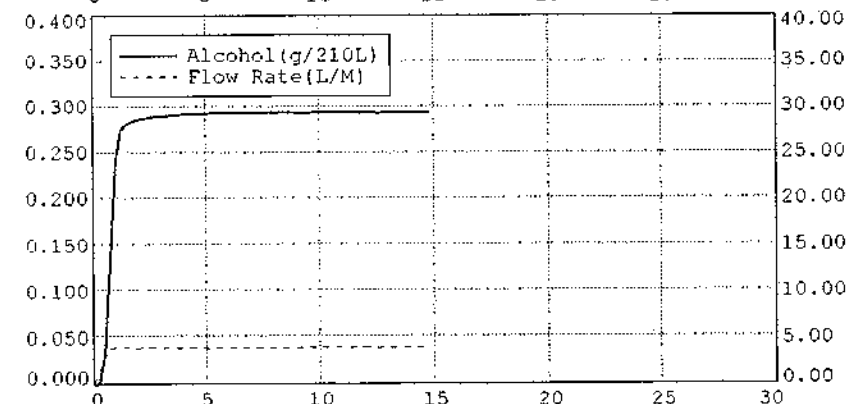
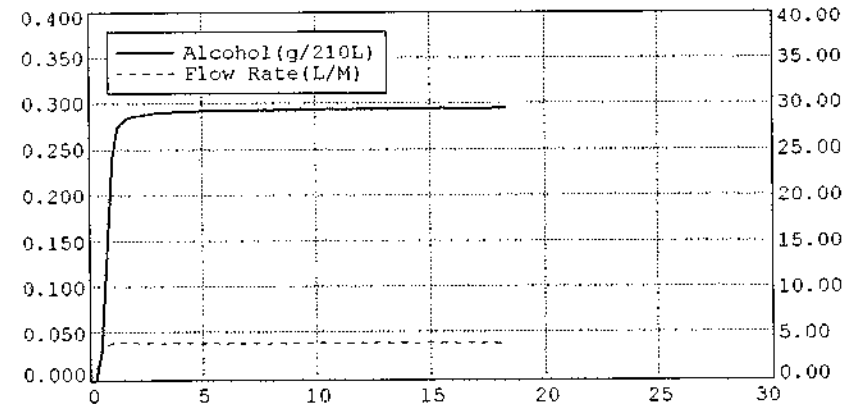
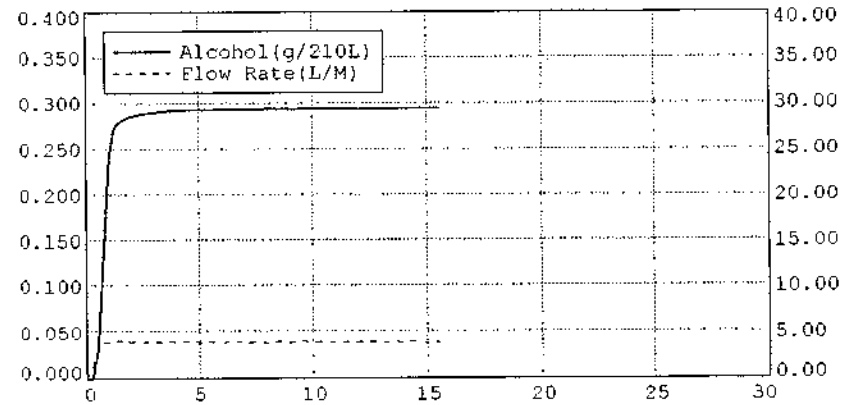
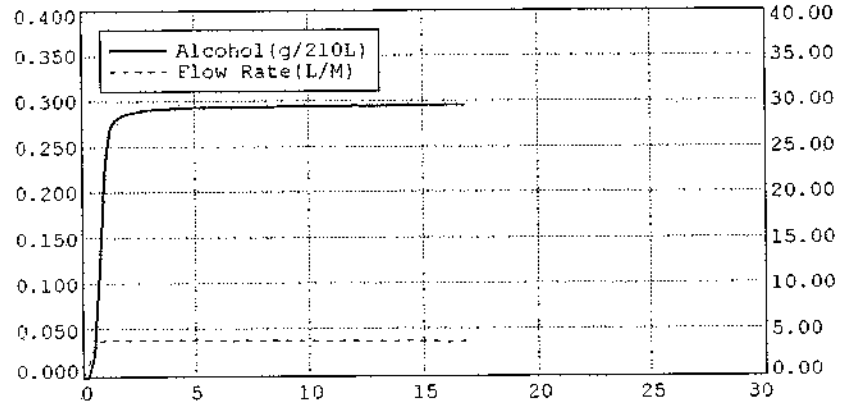
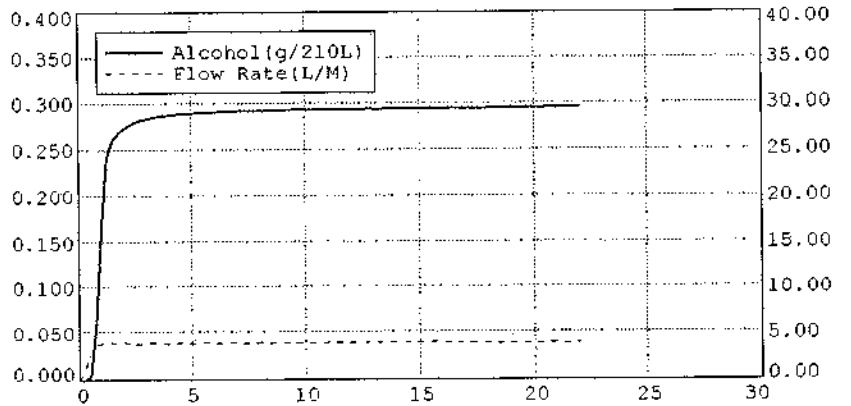
Alaska Department of Public Safety
 DATAMASTER dmt: 100353

Date: 08/27/2015
 Time: 10:41:50

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 14270
 EXPIRATION: 12/02/2016

BLANK TEST	0.000	10:43
INTERNAL STANDARD	VERIFIED	10:43
EXTERNAL STANDARD	0.296	10:43
BLANK TEST	0.000	10:44
EXTERNAL STANDARD	0.295	10:45
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.295	10:46
BLANK TEST	0.000	10:47
EXTERNAL STANDARD	0.295	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.294	10:49
BLANK TEST	0.000	10:50

Average = 0.2950
 Std Dev = 0.0007



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100353

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

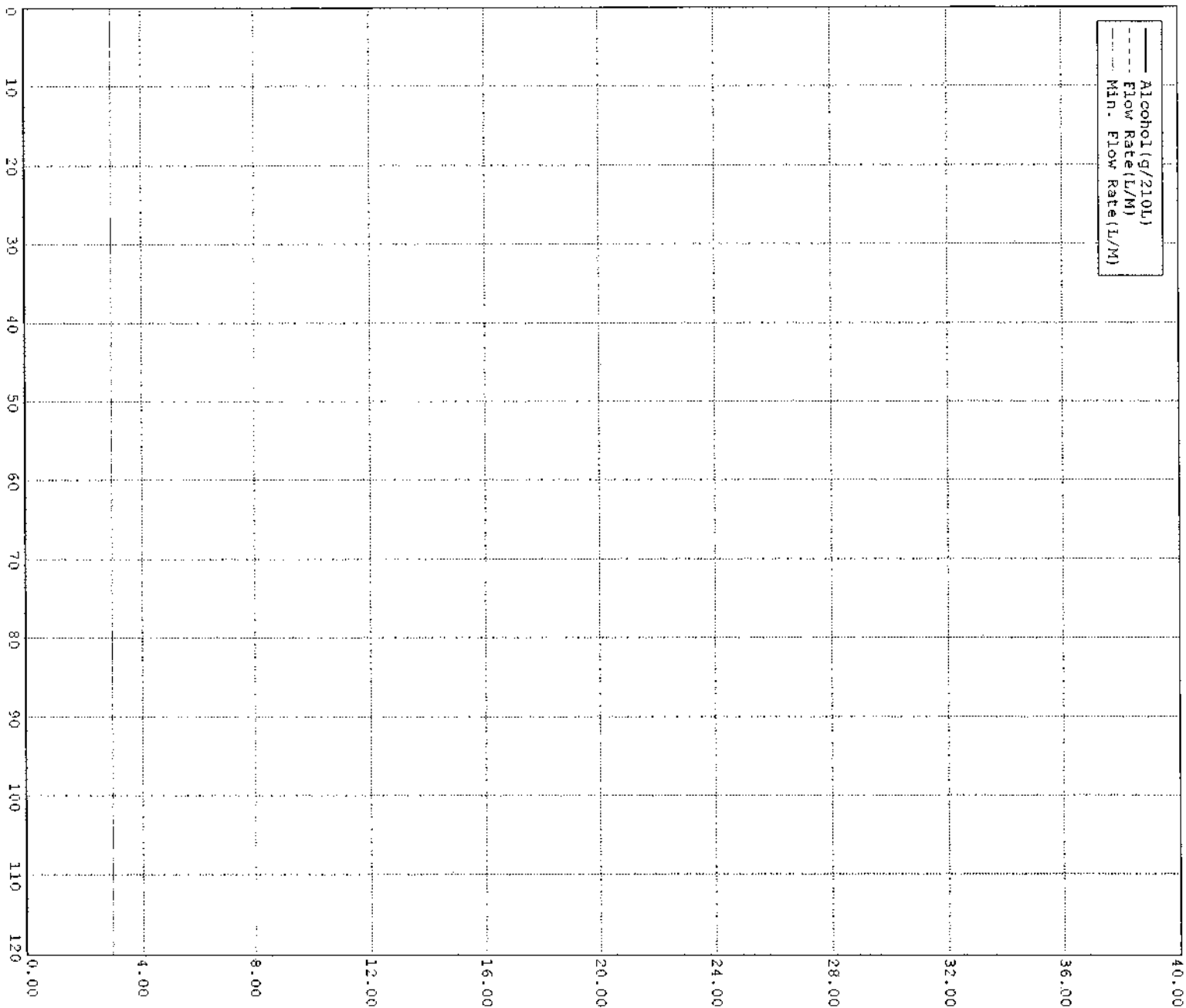
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INCOMPLETE XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.49: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	12:10
BLANK TEST	0.000	12:11
INTERNAL STANDARD	VERIFIED	12:11
EXTERNAL STANDARD	0.077	12:11
BLANK TEST	0.000	12:12
SUBJECT SAMPLE	INCOMPLETE	12:14



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100353

Date: 08/27/2015
Time: 12:20:27

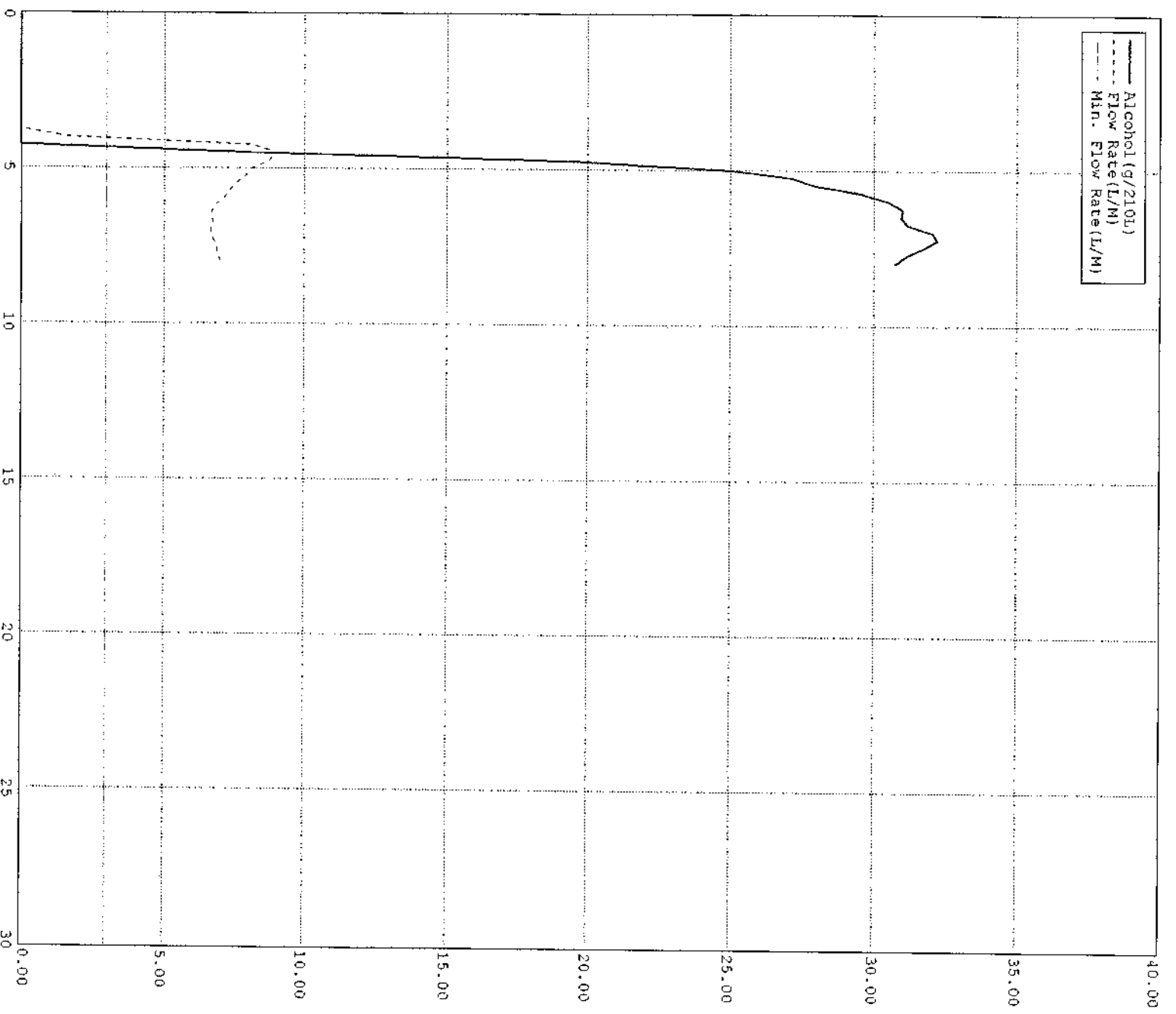
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INVALID XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.49: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	12:23
BLANK TEST	0.000	12:23
INTERNAL STANDARD	VERIFIED	12:23
EXTERNAL STANDARD	0.077	12:23
BLANK TEST	0.000	12:24
SUBJECT SAMPLE	INVALID	12:24



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/27/2015
Time: 12:28:54

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 AF 29.48: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

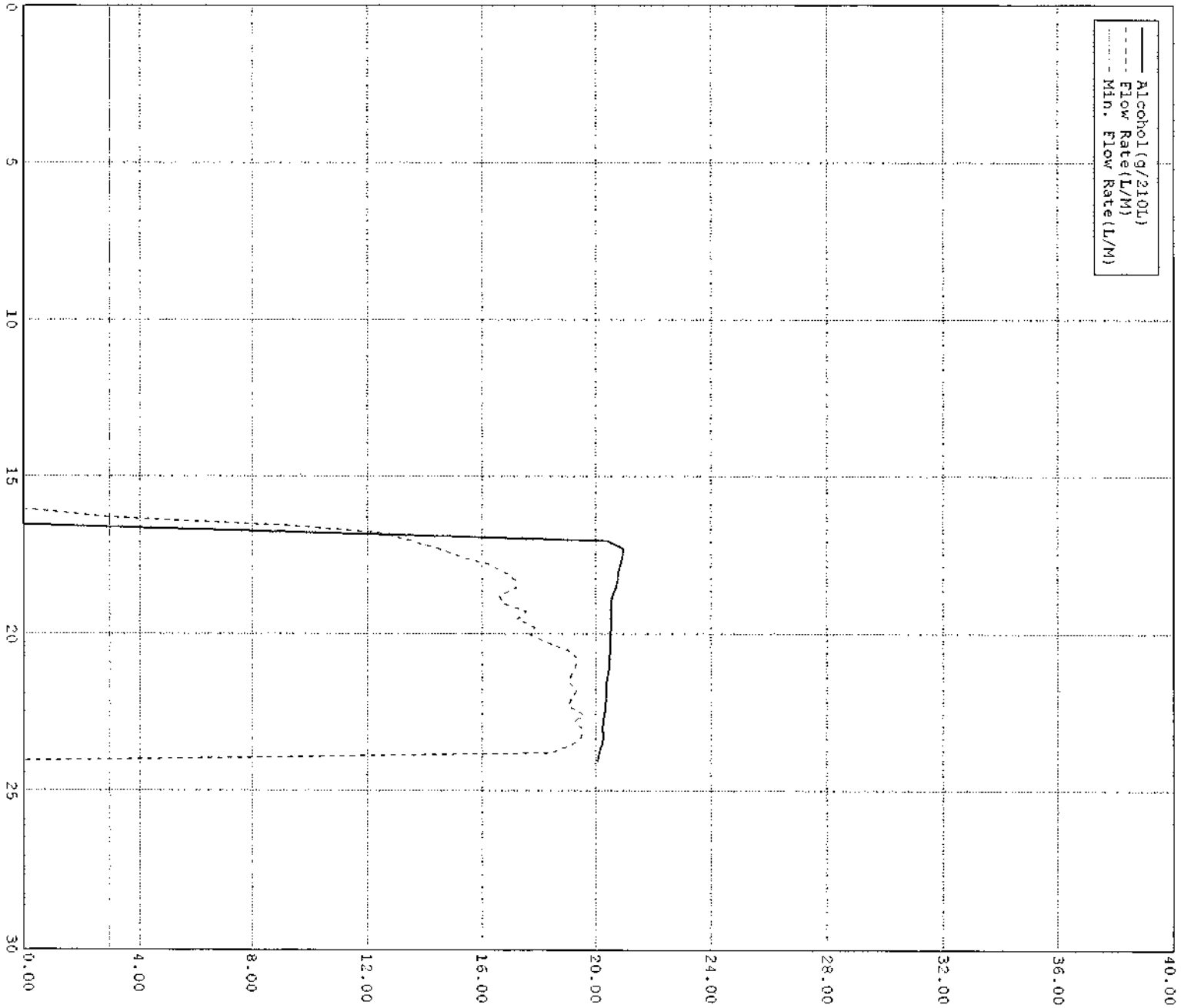
DIAGNOSTIC CHECK	PASSED	12:31
BLANK TEST	0.000	12:31
INTERNAL STANDARD	VERIFIED	12:31
Xg = 0.094 (0.19%)		
EXTERNAL STANDARD	0.076	12:31
X[1] = 0.0763 (-0.0005)	(0.0021)	
BLANK TEST	0.000	12:32
SUBJECT SAMPLE	XXX	12:32
X[1] = 0.1002 (-0.0141)	(0.0015)	

Interference Detected

Filter 2 Average = -0.0005

Filter 3 Average = 0.0026

CVF 8/27/15



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/27/2015
Time: 12:38:15

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

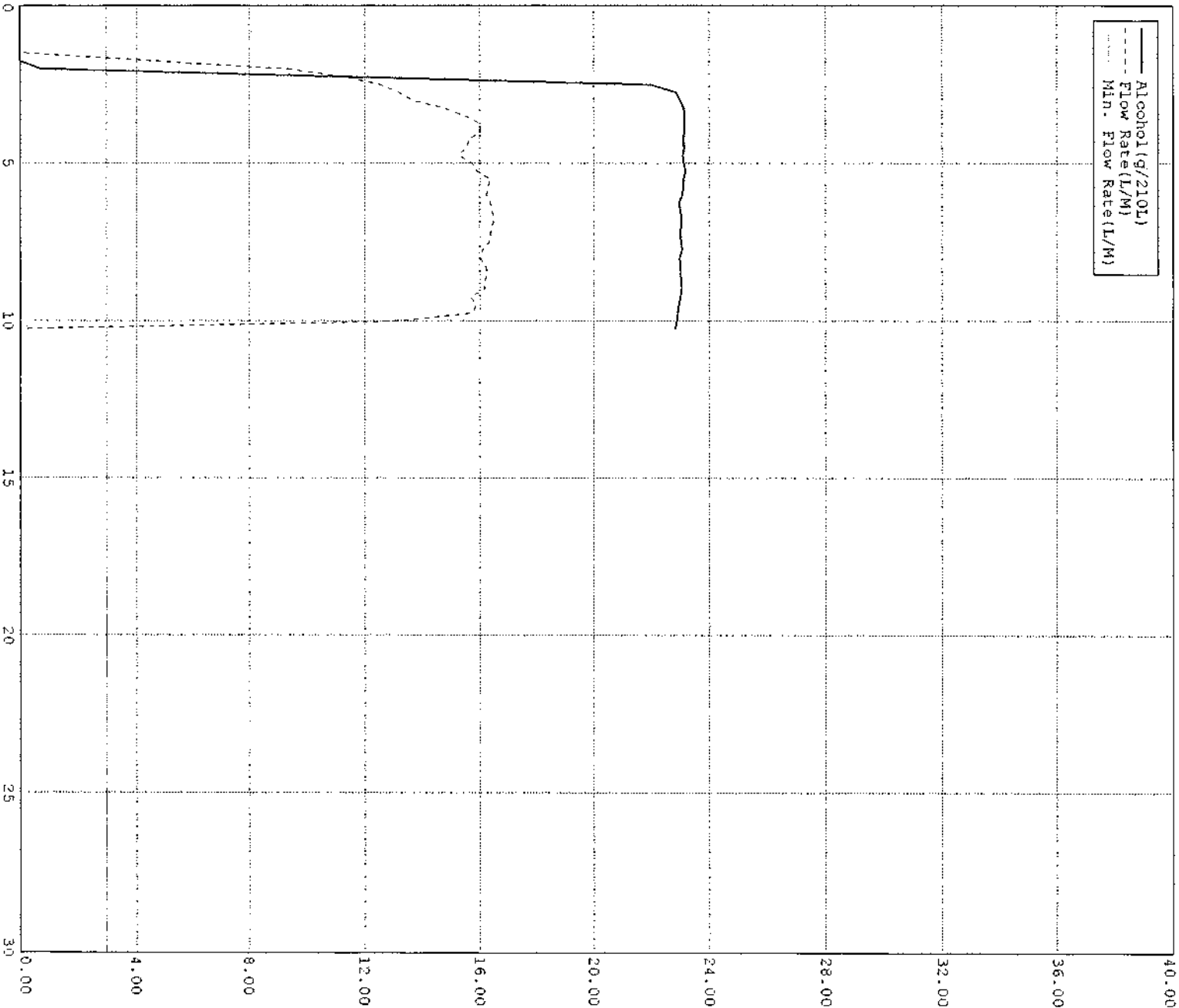
OPERATOR NAME:
INTERFERENCE IPA
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.48: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	12:39
BLANK TEST	0.000	12:39
INTERNAL STANDARD	VERIFIED	12:40
Xq = 0.094 (0.37%)	0.076	12:40
EXTERNAL STANDARD	X[1] = 0.0026 (0.0011)	12:41
BLANK TEST	0.000	12:41
SUBJECT SAMPLE	XXX	12:41
X[1] = 0.1145 (-0.0233)	(0.0019)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/27/2015
Time: 12:45:31

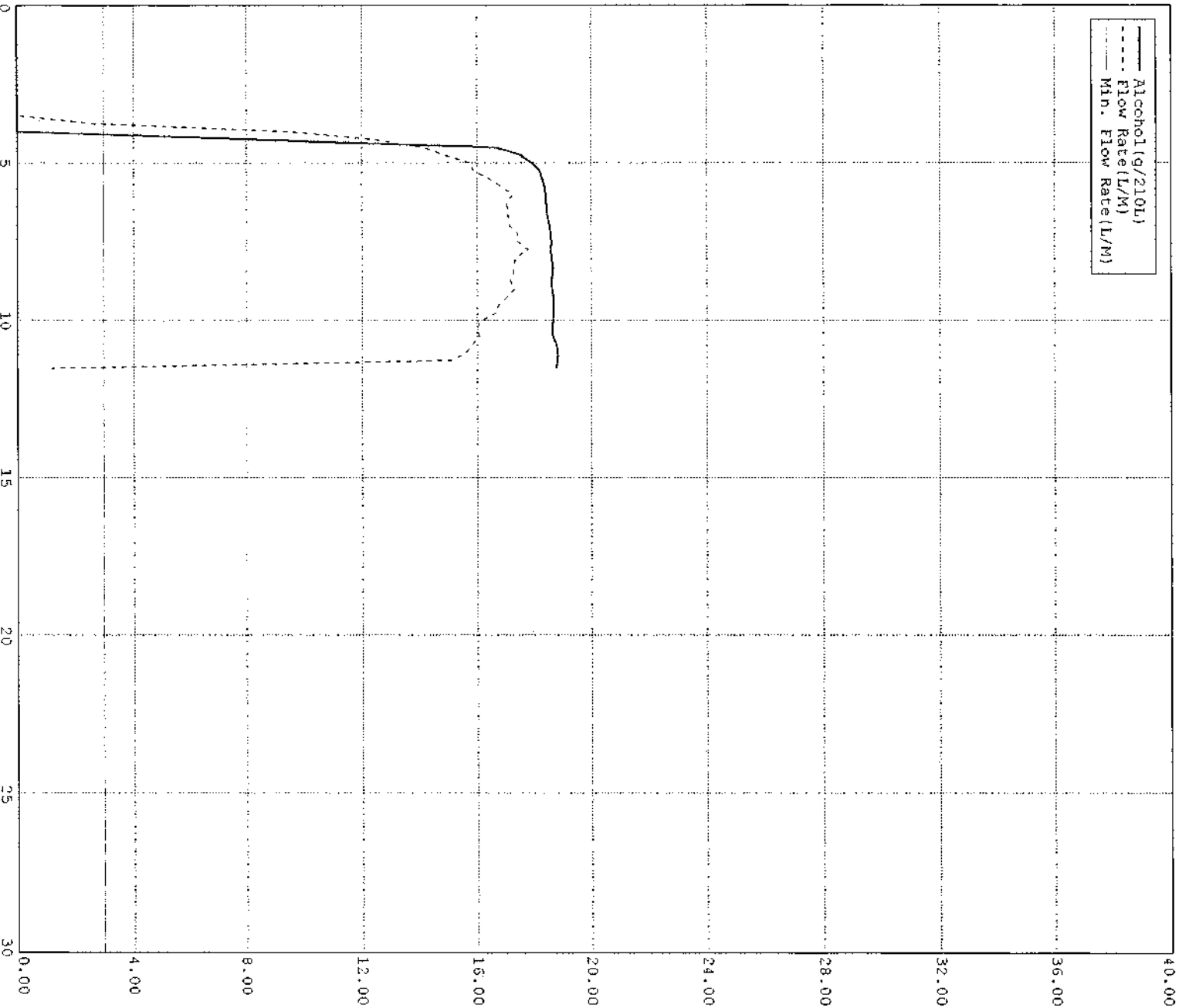
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE NEGATIVE
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.47: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	12:46
BLANK TEST	0.000	12:47
INTERNAL STANDARD	VERIFIED	12:47
Xq = 0.094 (0.288)	0.077	12:47
EXTERNAL STANDARD	X[1] = 0.0766 (-0.0002)	(0.0034)
BLANK TEST	0.000	12:48
SUBJECT SAMPLE (Vol=2.03L)	0.093	12:48
X[1] = 0.0937 (0.0000)	(0.0009)	
BLANK TEST	0.000	12:49
EXTERNAL STANDARD	0.076	12:49
X[1] = 0.0756 (-0.0003)	(0.0022)	
BLANK TEST	0.000	12:50



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/27/2015
Time: 13:33:53

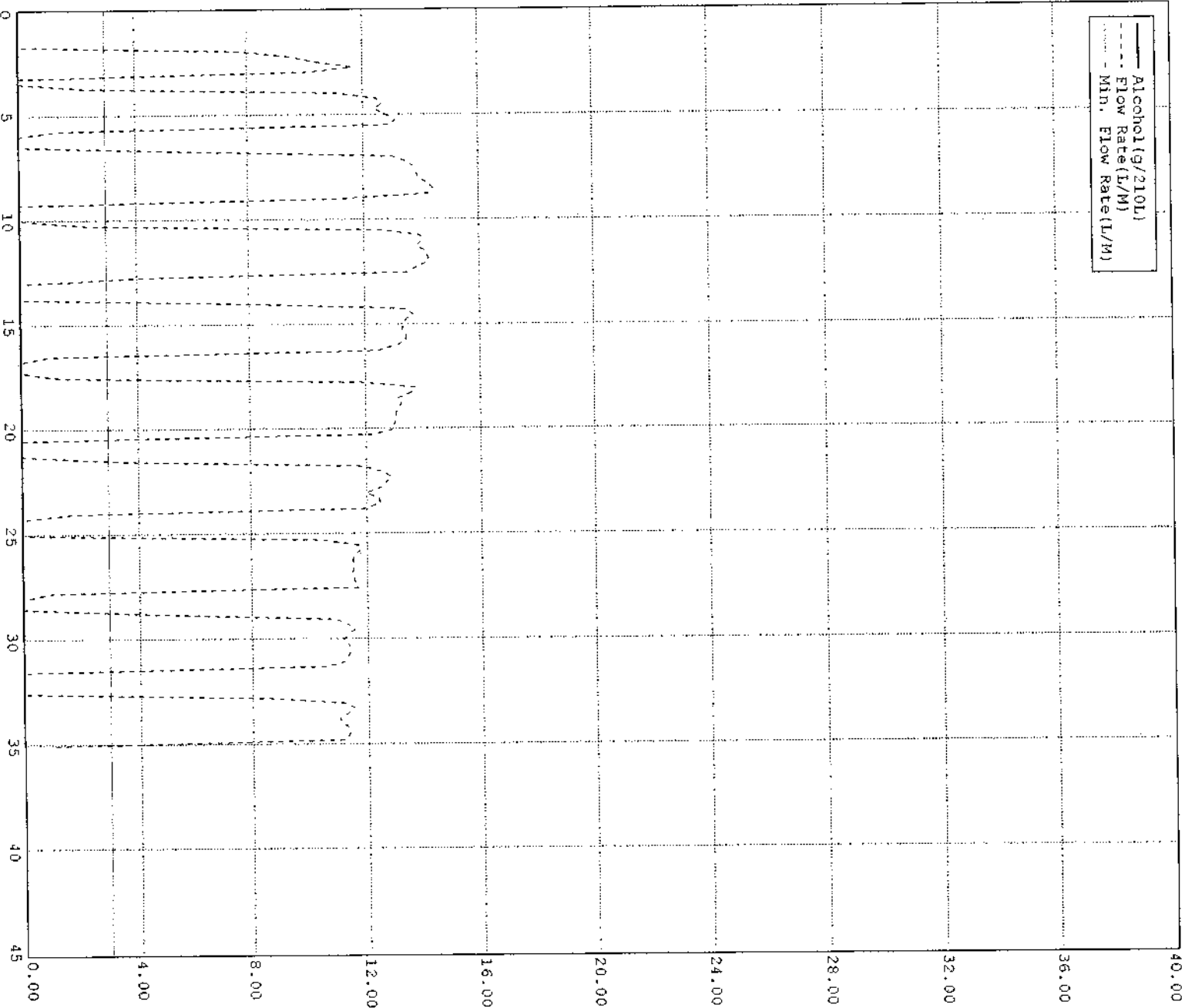
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX
OPERATOR NAME:
EXCEEDED ATTEMPTS
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.46: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:34
BLANK TEST	0.000	13:35
INTERNAL STANDARD	VERIFIED	13:35
EXTERNAL STANDARD	0.076	13:35
BLANK TEST	0.000	13:36
SUBJECT SAMPLE	XXX	13:36

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/27/2015
Time: 13:39:15

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

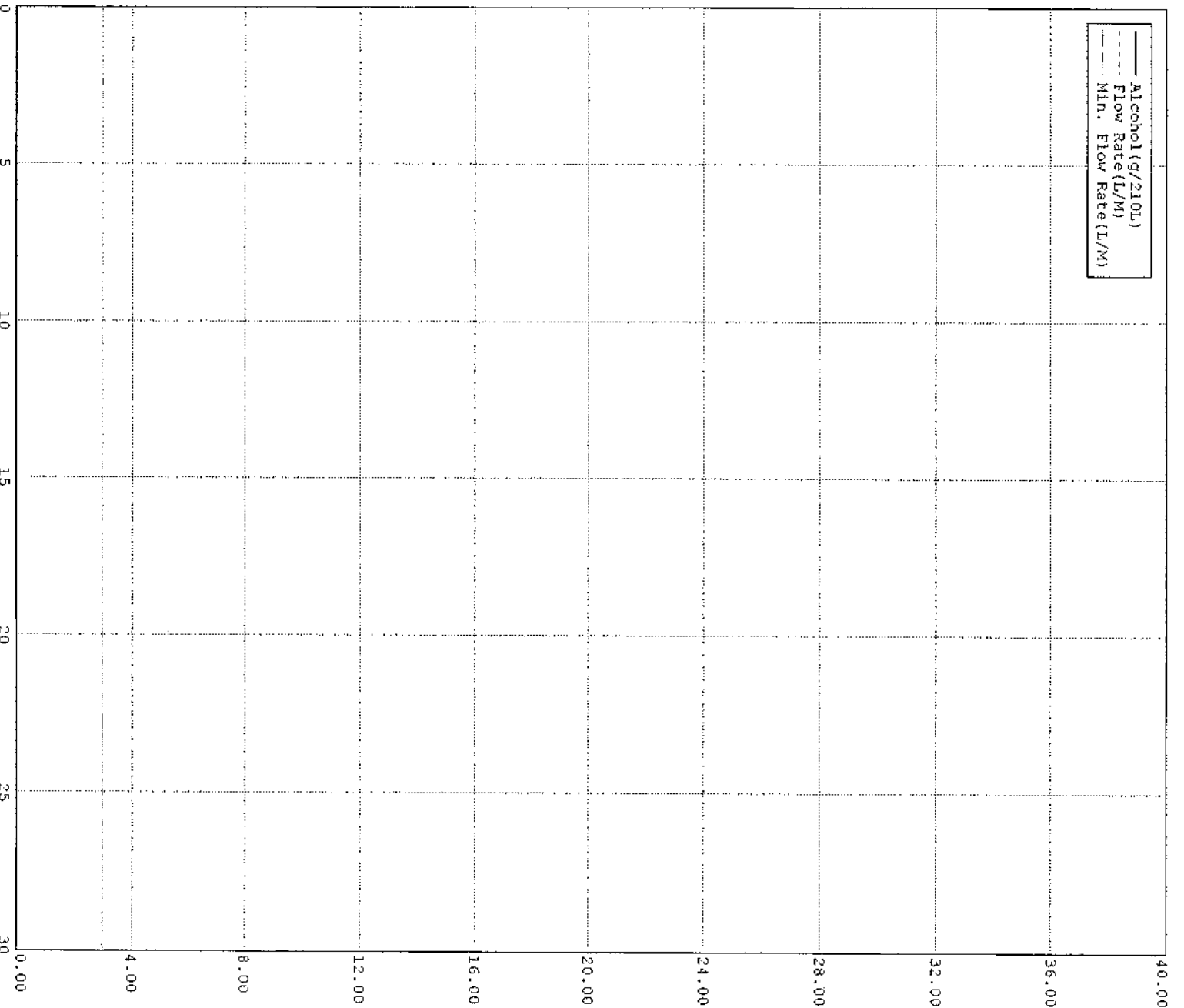
OPERATOR NAME:
RFI XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.45: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK
BLANK TEST PASSED 13:41
INTERNAL STANDARD VERIFIED 13:41
EXTERNAL STANDARD 0.076 13:41
BLANK TEST 0.000 13:42

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100353

Date: 08/27/2015
Time: 14:00:39

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 29.45: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	14:02
BLANK TEST	0.000	14:02
INTERNAL STANDARD	VERIFIED	14:02
EXTERNAL STANDARD	0.077	14:03
BLANK TEST	0.000	14:04
SUBJECT SAMPLE (Vol=1.78L)	0.000	14:04
BLANK TEST	0.000	14:05
EXTERNAL STANDARD	0.076	14:05
BLANK TEST	0.000	14:06

