

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 100366 Analyst CRF Start Date 10/13/15

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 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 10/13/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 10/13/2015
Time: 10:45:56

VERSIONS
DMT: 3.01
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 2.38 V PASSED
(1.46 V - 3.42 V)
Cooler Voltage = 1.99 V PASSED
(1.10 V - 2.58 V)
Bias Voltage = 81 V PASSED
(48 V - 112 V)
Chopper Freq = 565 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.5 in

PUMP INFO

Flow Rate = 4.594 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.003 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 = 0.100 0.09% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100366

Date: 10/13/2015
Time: 11:52 AM

Temperatures (°C)
Sample Cell: 49.0°C
Breath Tube: 48.0°C

Current Barometer 29.4 in
Volume (Ltr) 1.44

Settings
Lamp: 2.38 V
Bias: 81 V
Cooler: 1.99 V
Chopper: 565 Hz

Voltages (V)
Flow: 1.05 V
Detector: -0.060 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 03/22/2011
Time: 11:48:02

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

LOT #: GUTH100
BOTTLE #: 9380
EXPIRATION: 12/17/2011

Ca	=	0.1000		
CAL	=	0.985254	0.800	<= CAL < 1.200
b1	=	0.0000	0.0000	<= b1 < 0.0040
b2	=	0.0054	0.0010	<= b2 < 0.0100
b3	=	0.0000	0.0000	<= b3 < 0.0040
Xq	=	0.1000	0.0500	<= Xq < 0.2000
a21	=	1.200050	1.050	<= a21 < 1.300
a31	=	0.503220	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100366

Date: 10/13/2015
Time: 11:53:55

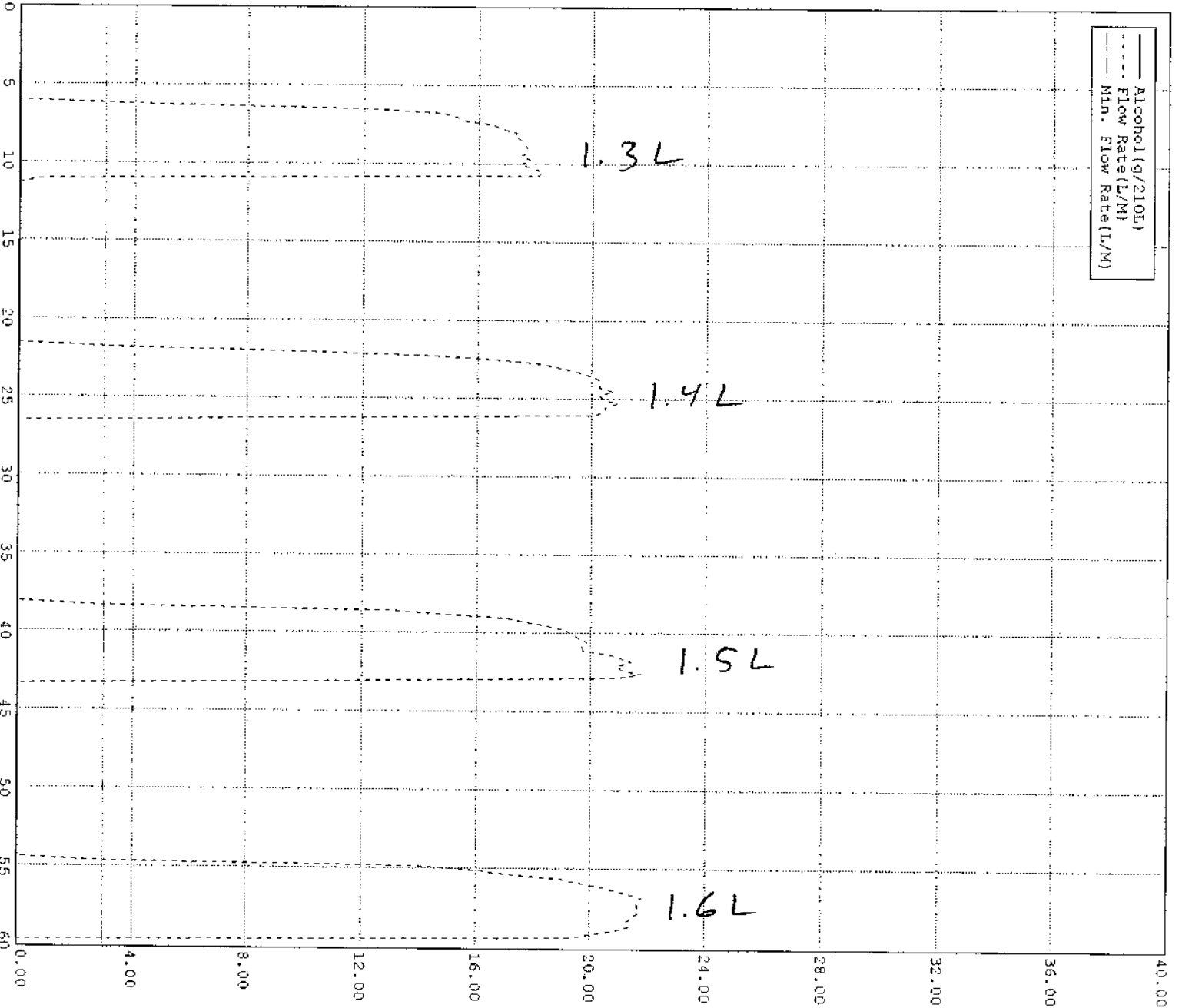
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MINIMUM VOLUME
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.40: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	11:55
BLANK TEST	0.000	11:56
INTERNAL STANDARD	VERIFIED	11:56
EXTERNAL STANDARD	0.077	11:56
BLANK TEST	0.000	11:57
SUBJECT SAMPLE (Vol=1.59L)	0.000	11:58
BLANK TEST	0.000	11:59
EXTERNAL STANDARD	0.076	11:59
BLANK TEST	0.000	12:00



LINEARITY CHECK

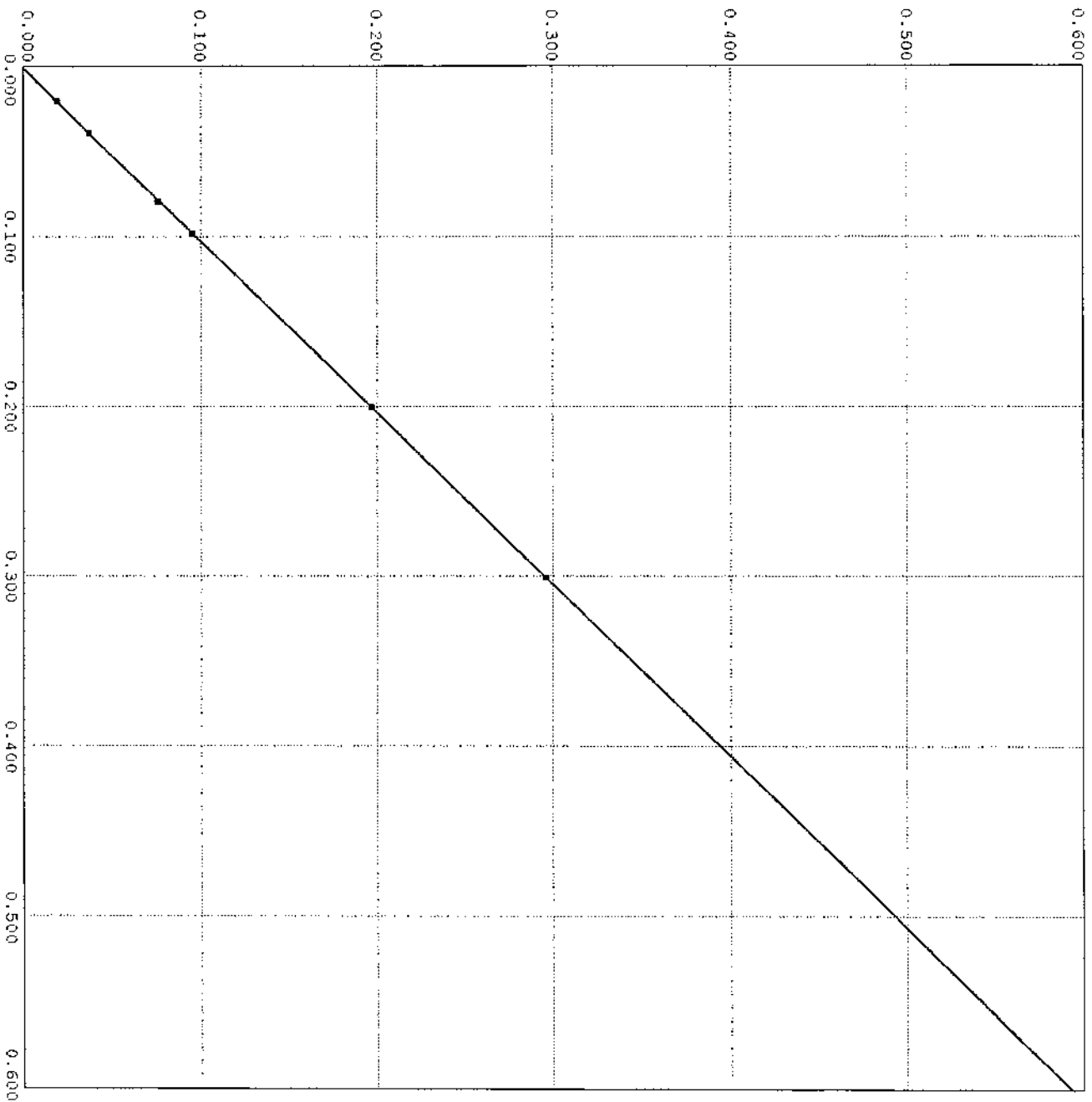
Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 10/13/2015
Time: 12:14:15

SUPERVISOR NAME:
CHARLES FOSTER
OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.020	0.0198	0.0004
0.039	0.0384	0.0005
0.079	0.0766	0.0005
0.098	0.0962	0.0004
0.200	0.1978	0.0008
0.300	0.2966	0.0005

STOPE = 0.990378
R² = 0.999969



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100366

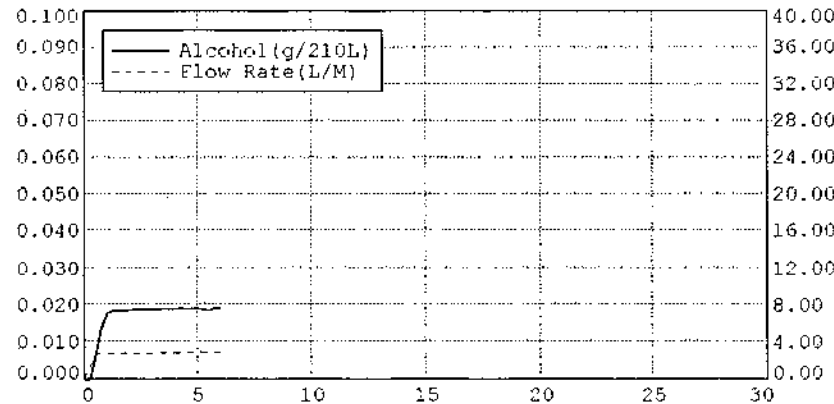
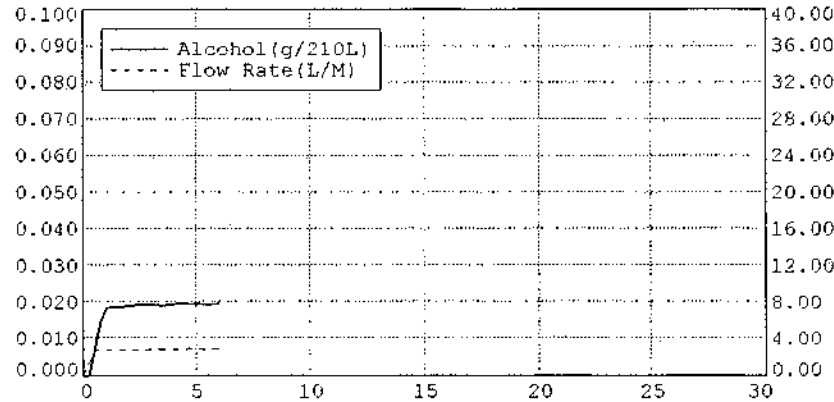
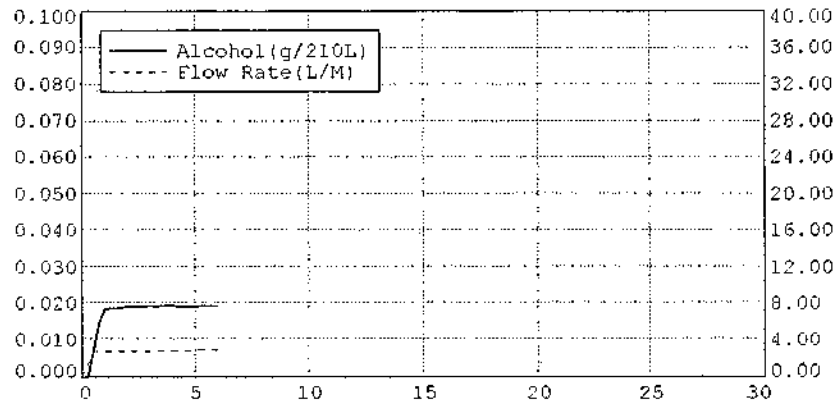
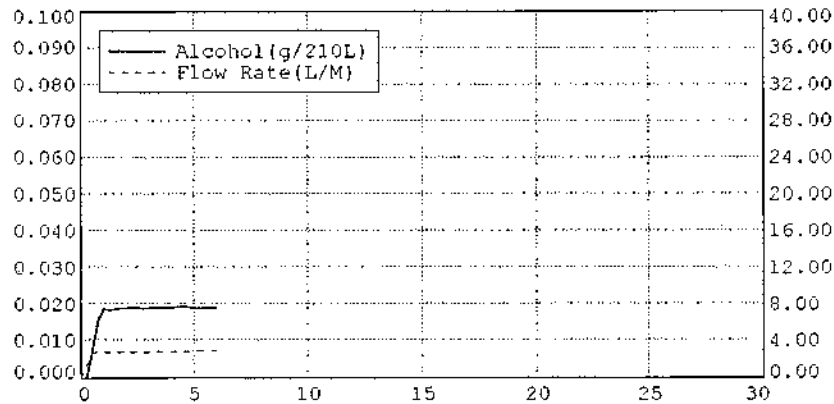
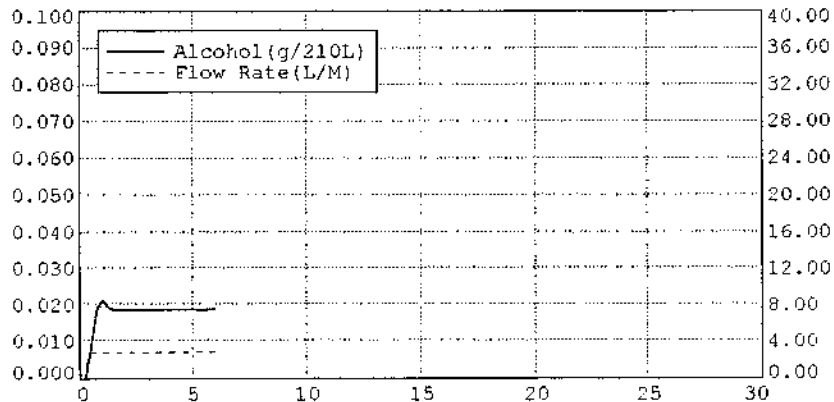
Date: 10/13/2015
 Time: 12:14:18

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.40: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 994 psi

BLANK TEST	0.000	12:15
INTERNAL STANDARD	VERIFIED	12:15
EXTERNAL STANDARD	0.019	12:16
BLANK TEST	0.000	12:16
EXTERNAL STANDARD	0.020	12:17
BLANK TEST	0.000	12:18
EXTERNAL STANDARD	0.020	12:18
BLANK TEST	0.000	12:19
EXTERNAL STANDARD	0.020	12:19
BLANK TEST	0.000	12:20
EXTERNAL STANDARD	0.020	12:20
BLANK TEST	0.000	12:21

Average = 0.0198
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100366

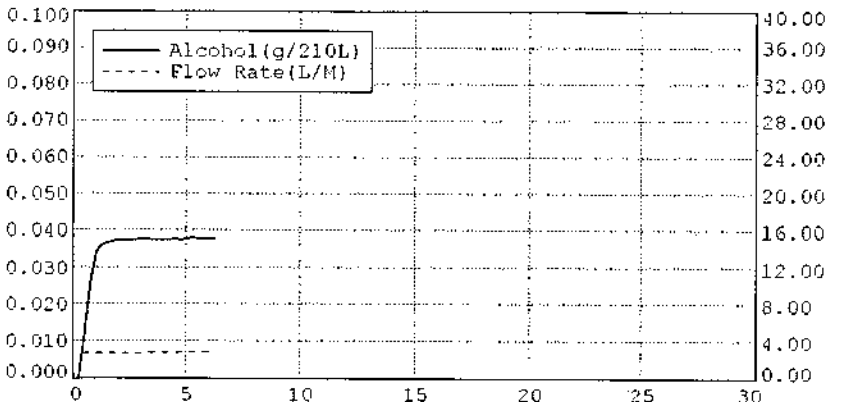
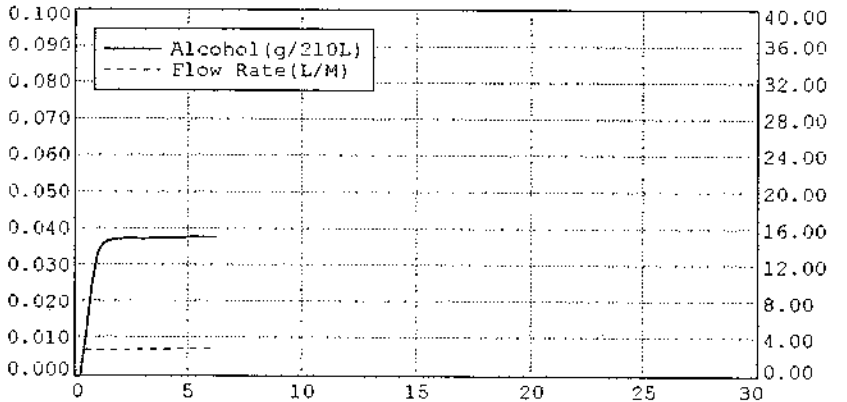
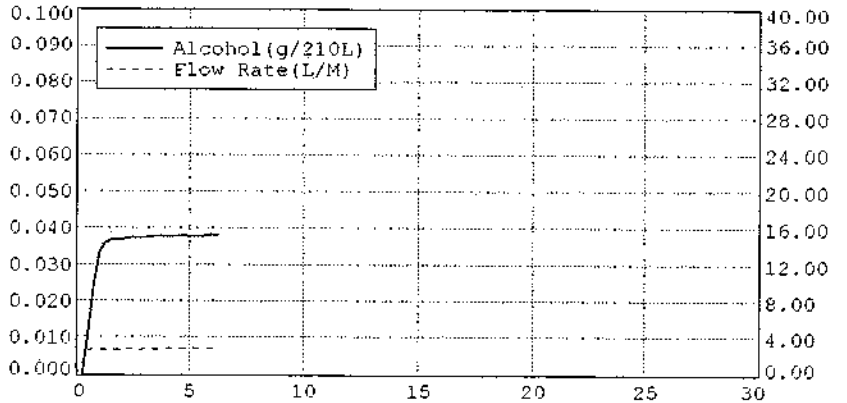
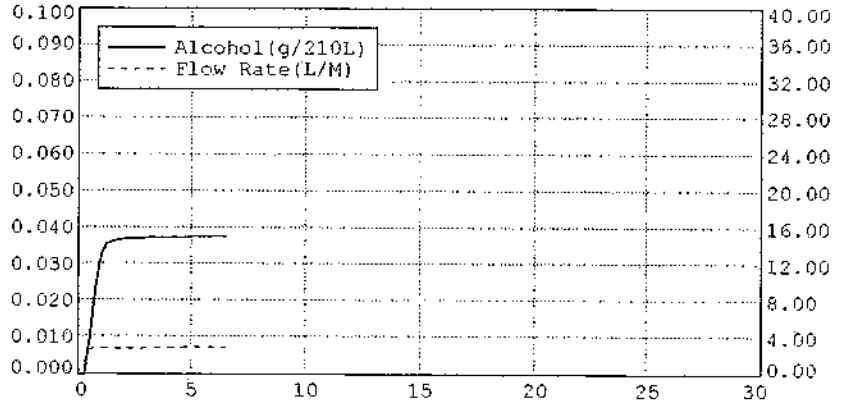
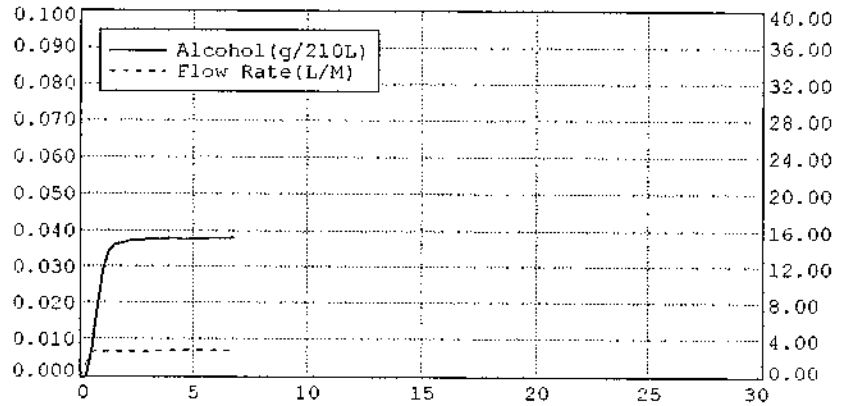
Date: 10/13/2015
 Time: 12:21:56

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.41: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1044 psi

BLANK TEST	0.000	12:23
INTERNAL STANDARD	VERIFIED	12:23
EXTERNAL STANDARD	0.039	12:23
BLANK TEST	0.000	12:24
EXTERNAL STANDARD	0.038	12:24
BLANK TEST	0.000	12:25
EXTERNAL STANDARD	0.038	12:25
BLANK TEST	0.000	12:26
EXTERNAL STANDARD	0.038	12:26
BLANK TEST	0.000	12:27
EXTERNAL STANDARD	0.039	12:28
BLANK TEST	0.000	12:28

Average = 0.0384
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100366

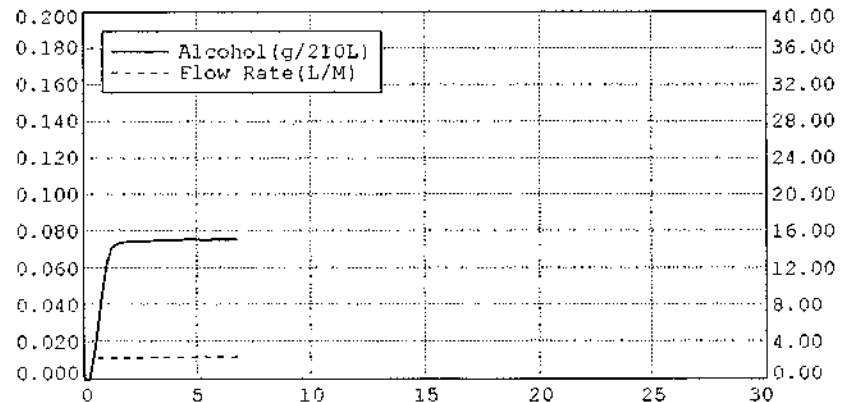
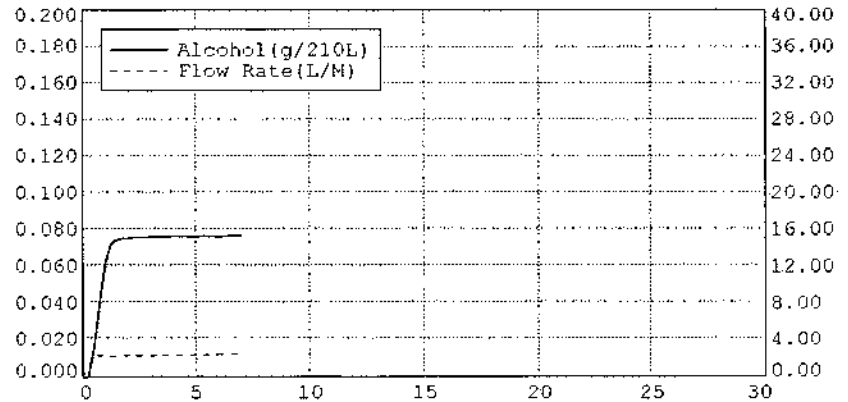
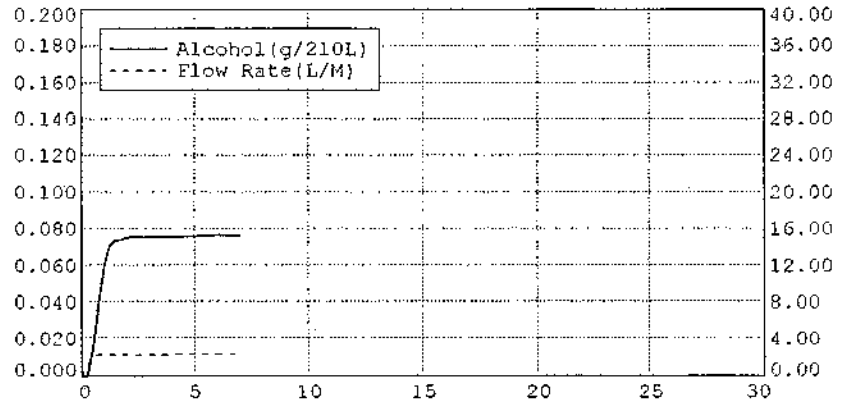
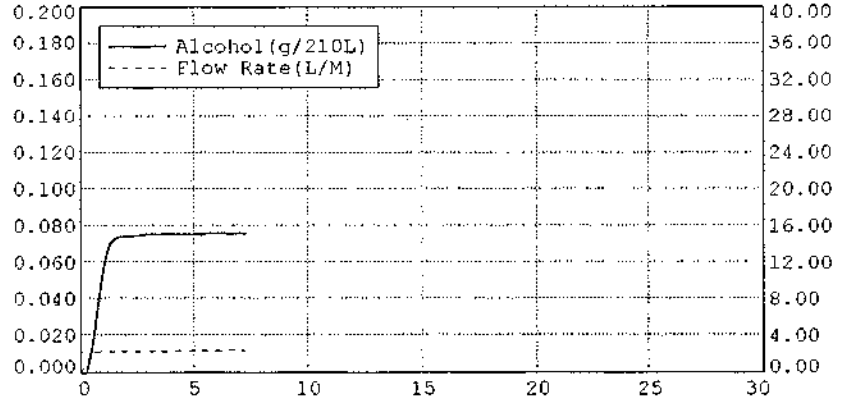
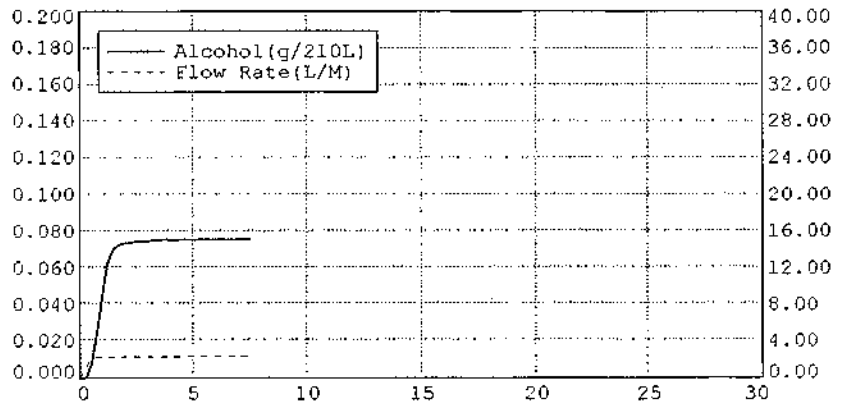
Date: 10/13/2015
 Time: 12:29:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.41: 0.079
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016
 TANK PRESSURE: 258 psi

BLANK TEST	0.000	12:30
INTERNAL STANDARD	VERIFIED	12:30
EXTERNAL STANDARD	0.076	12:31
BLANK TEST	0.000	12:32
EXTERNAL STANDARD	0.077	12:32
BLANK TEST	0.000	12:33
EXTERNAL STANDARD	0.077	12:33
BLANK TEST	0.000	12:34
EXTERNAL STANDARD	0.077	12:34
BLANK TEST	0.000	12:35
EXTERNAL STANDARD	0.076	12:35
BLANK TEST	0.000	12:36

Average = 0.0766
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100366

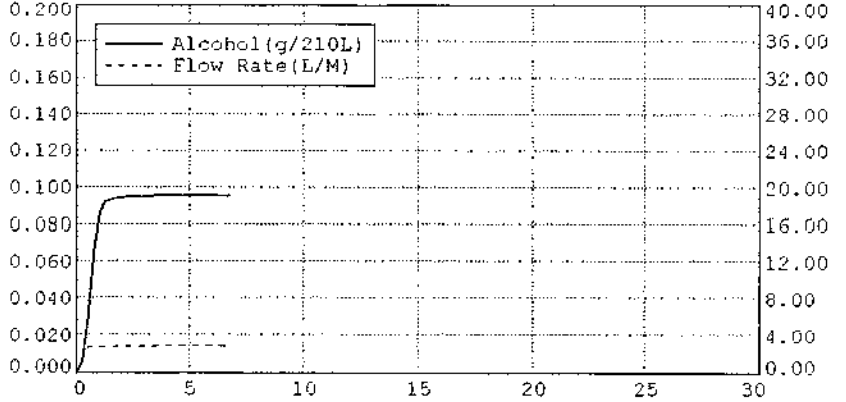
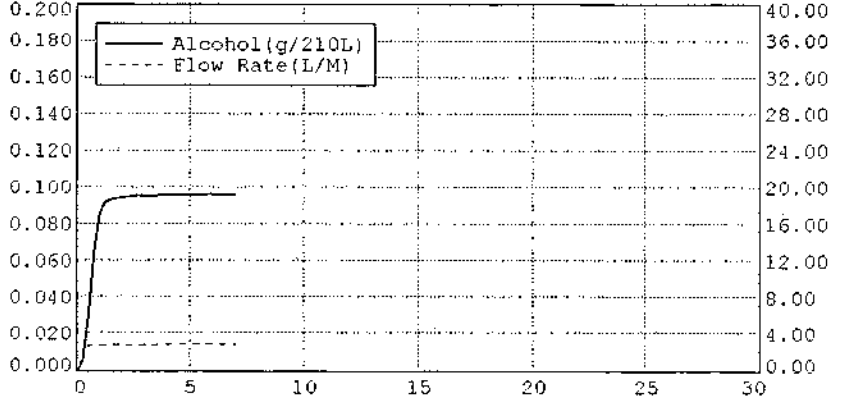
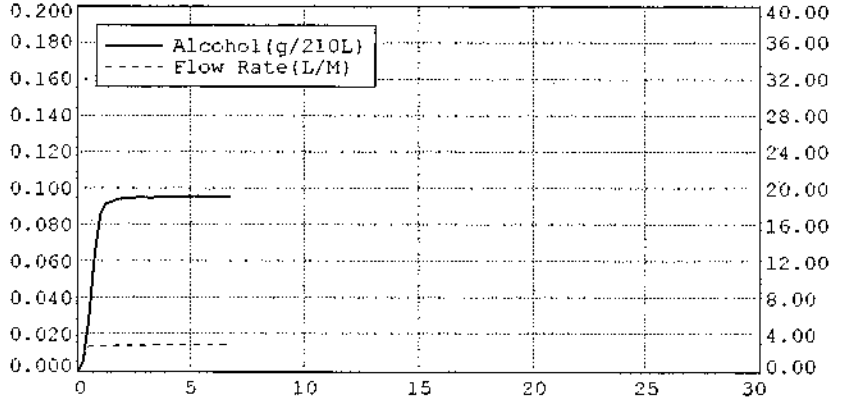
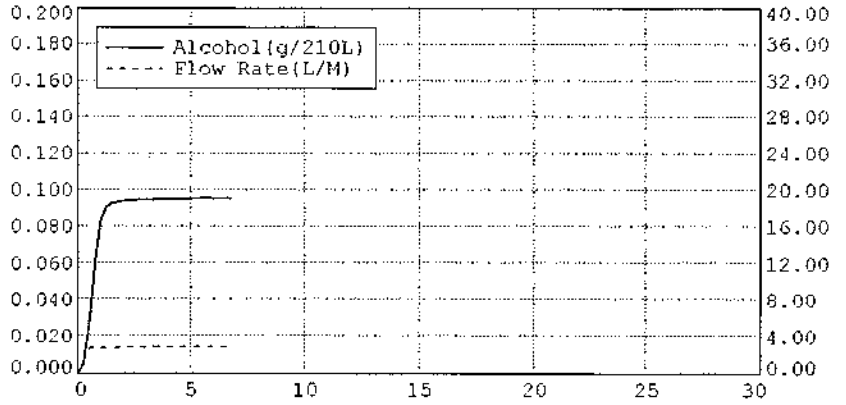
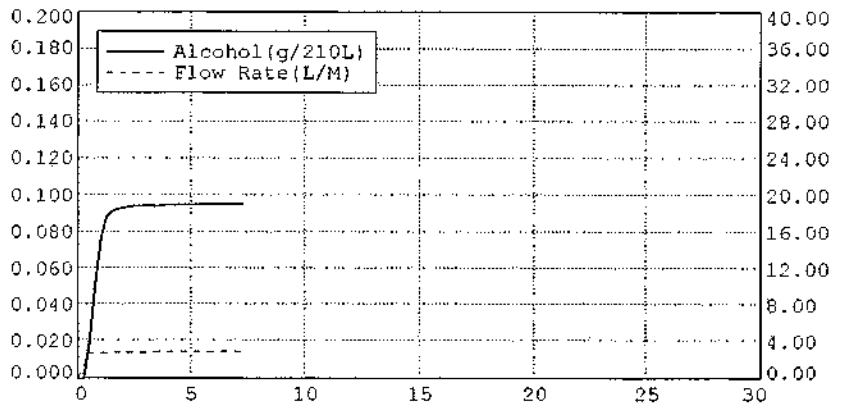
Date: 10/13/2015
 Time: 12:38:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.41: 0.098
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1029 psi

BLANK TEST	0.000	12:39
INTERNAL STANDARD	VERIFIED	12:40
EXTERNAL STANDARD	0.096	12:40
BLANK TEST	0.000	12:41
EXTERNAL STANDARD	0.096	12:41
BLANK TEST	0.000	12:42
EXTERNAL STANDARD	0.096	12:42
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.096	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.097	12:44
BLANK TEST	0.000	12:45

Average = 0.0962
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

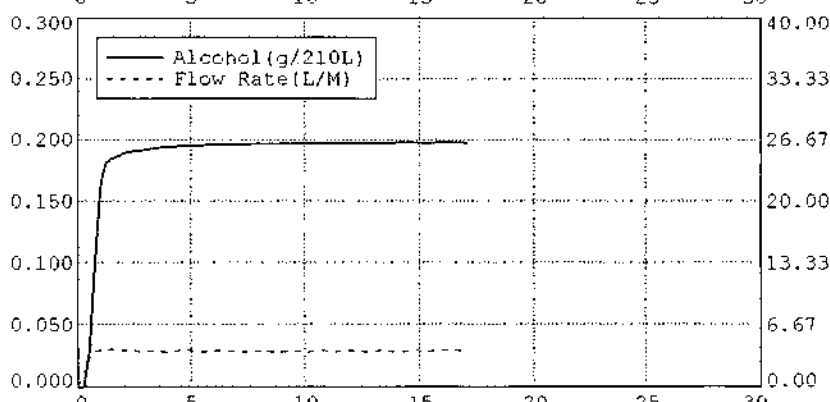
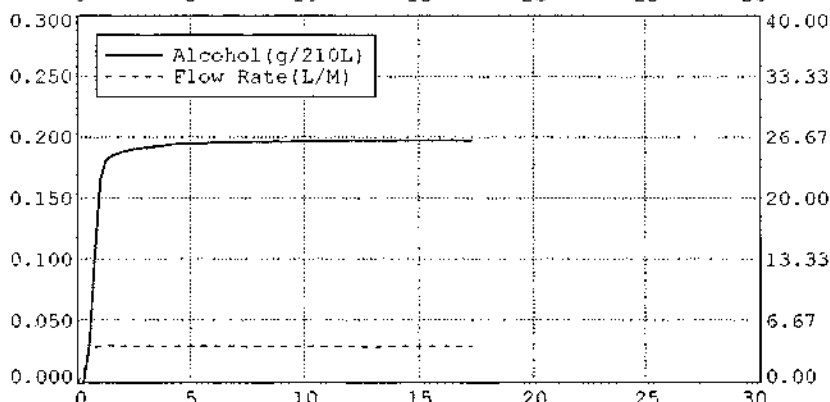
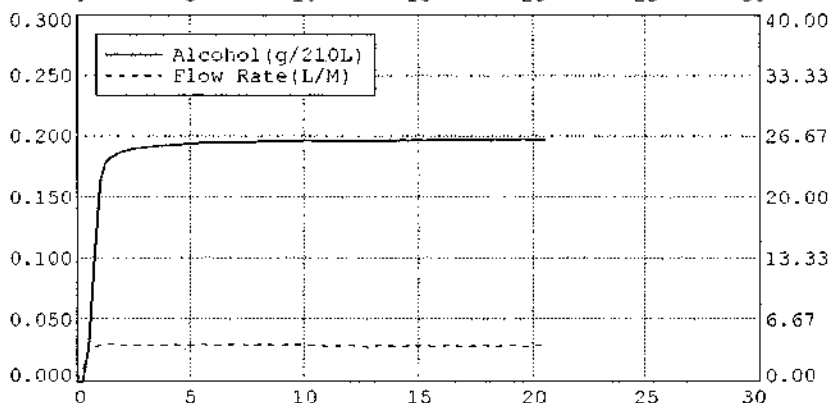
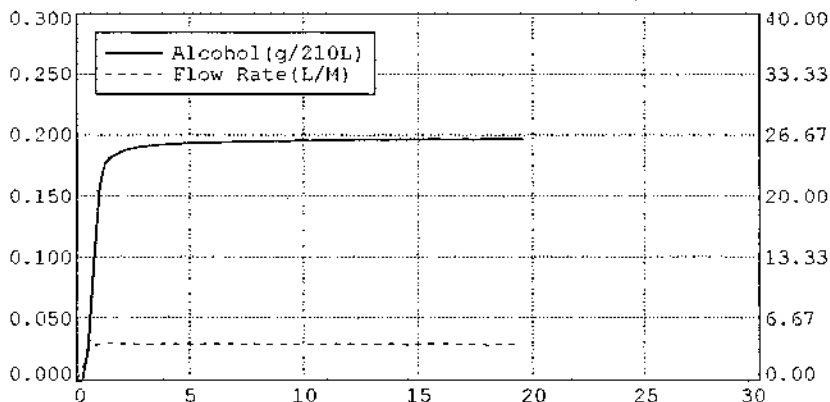
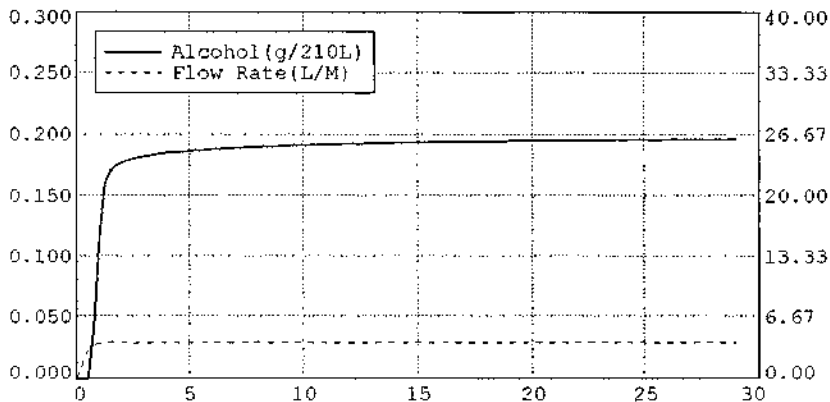
Alaska Department of Public Safety
 DATAMASTER dmt: 100366

Date: 10/13/2015
 Time: 12:47:38

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

BLANK TEST	0.000	12:48
INTERNAL STANDARD	VERIFIED	12:48
EXTERNAL STANDARD	0.197	12:49
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.197	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.198	12:52
BLANK TEST	0.000	12:53
EXTERNAL STANDARD	0.198	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.199	12:54
BLANK TEST	0.000	12:55

Average = 0.1978
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100366

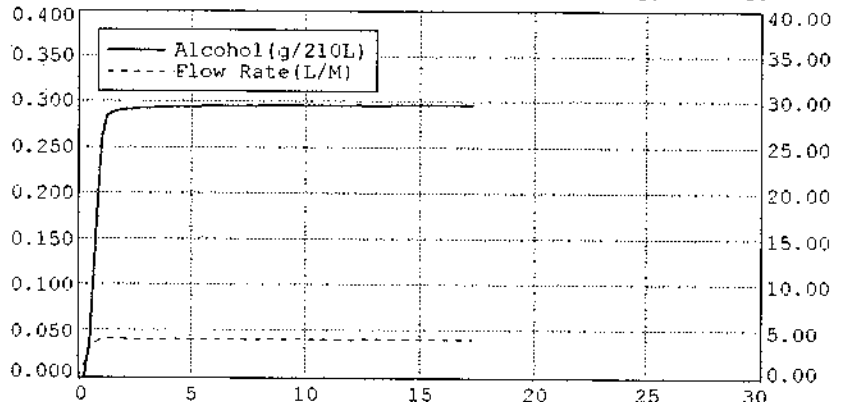
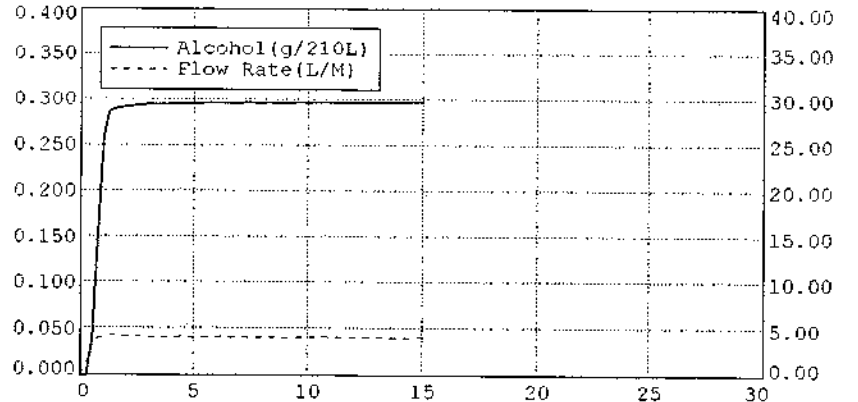
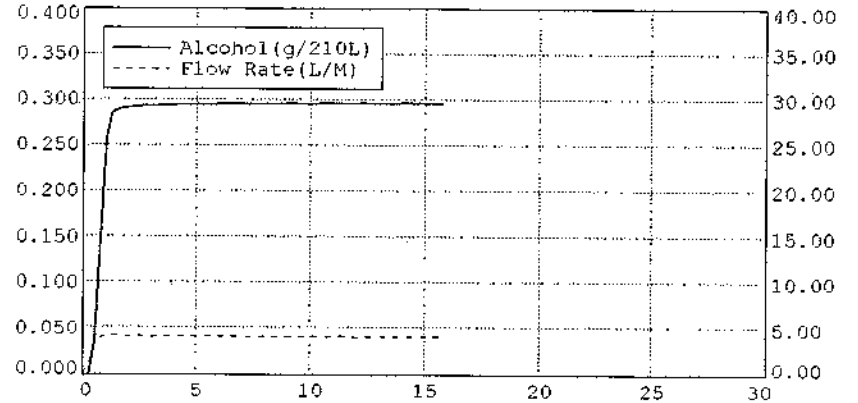
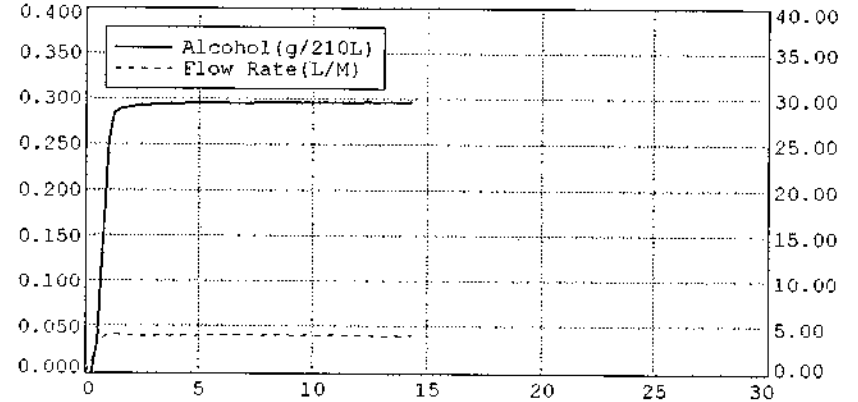
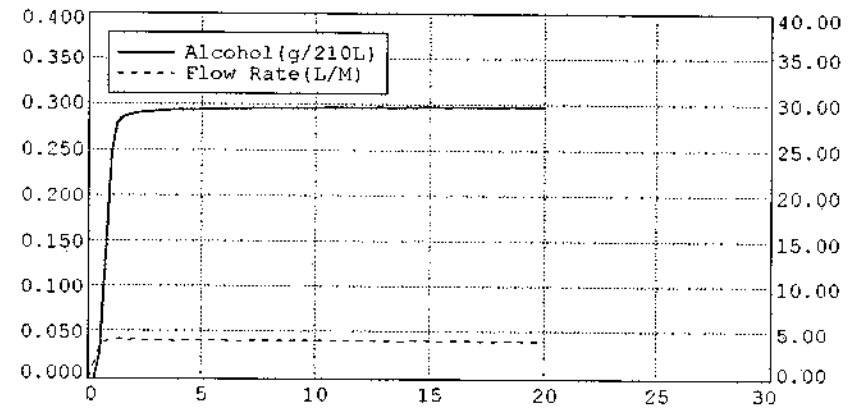
Date: 10/13/2015
 Time: 13:04:44

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:05
INTERNAL STANDARD	VERIFIED	13:05
EXTERNAL STANDARD	0.297	13:06
BLANK TEST	0.000	13:07
EXTERNAL STANDARD	0.296	13:07
BLANK TEST	0.000	13:08
EXTERNAL STANDARD	0.297	13:09
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.297	13:10
BLANK TEST	0.000	13:11
EXTERNAL STANDARD	0.296	13:11
BLANK TEST	0.000	13:12

Average = 0.2966
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 10/13/2015
Time: 13:52:35

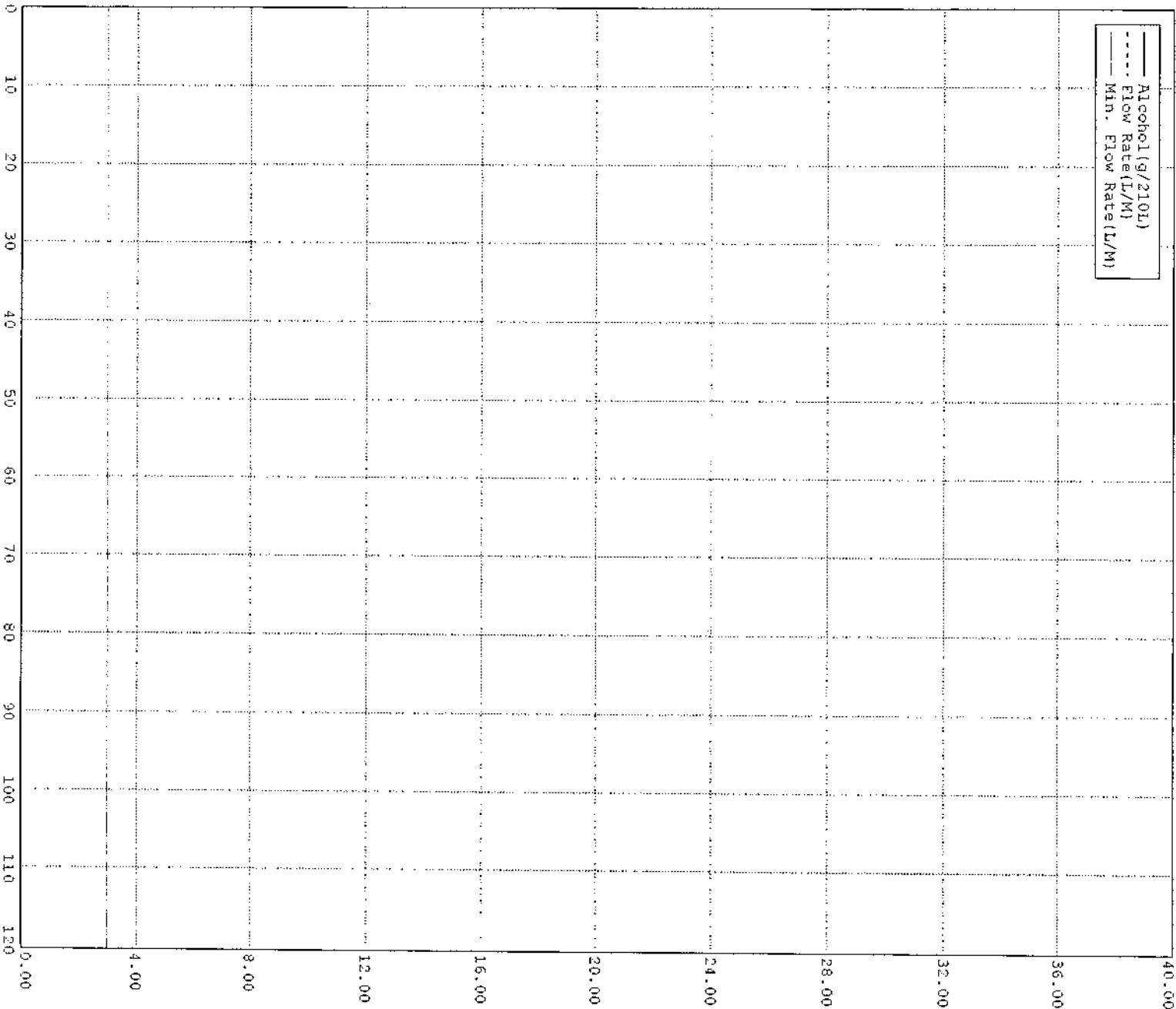
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INCOMPLETE XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.44: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:55
BLANK TEST	0.000	13:55
INTERNAL STANDARD	VERIFIED	13:56
EXTERNAL STANDARD	0.076	13:56
BLANK TEST	0.000	13:57
SUBJECT SAMPLE	INCOMPLETE	13:59



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 10/13/2015
Time: 14:02:32

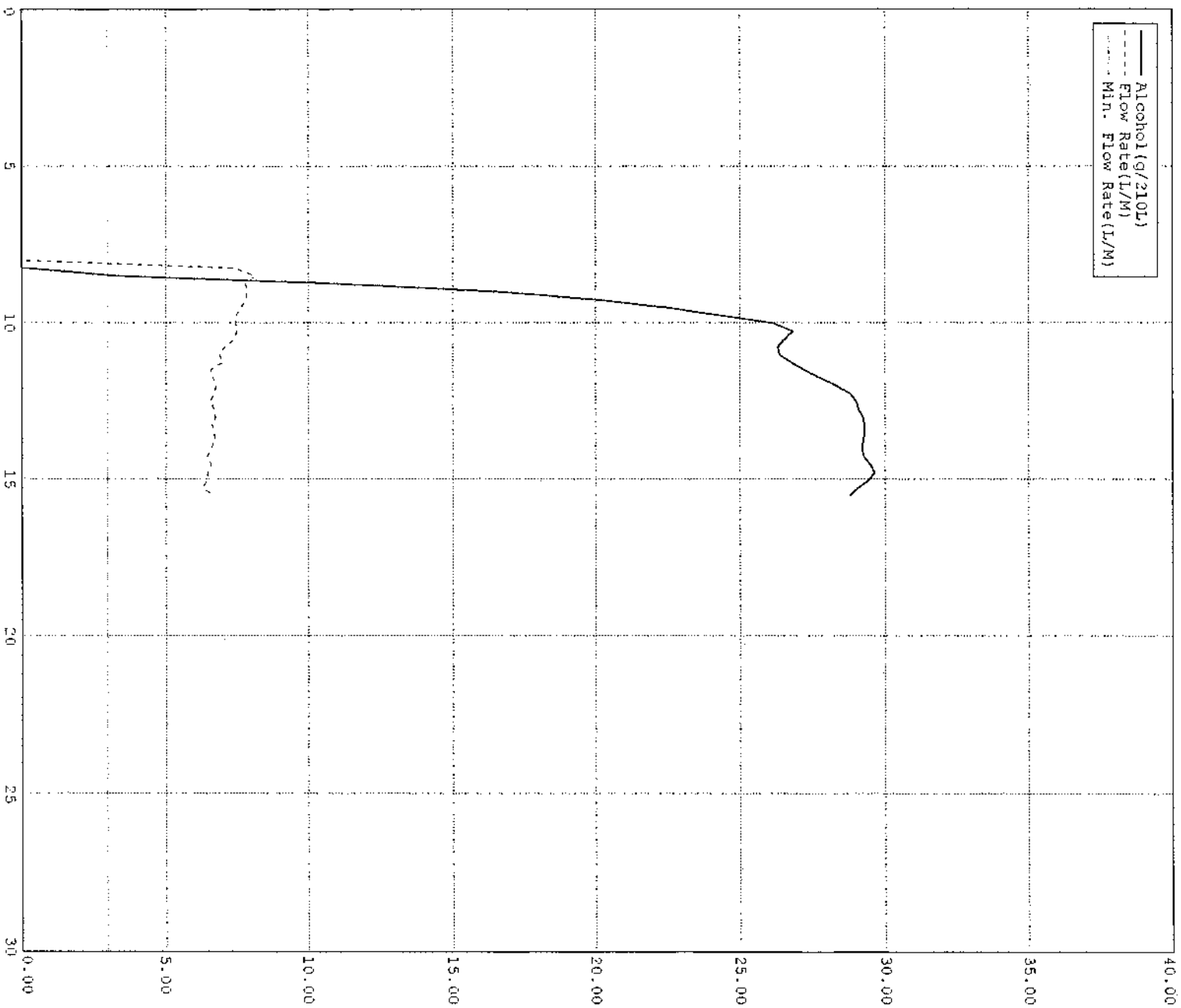
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MOUTH BTOH
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	PASSED	14:06
BLANK TEST	0.000	14:06
INTERNAL STANDARD	VERIFIED	14:07
EXTERNAL STANDARD	0.077	14:07
BLANK TEST	0.000	14:08
SUBJECT SAMPLE	INVALID	14:08



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 10/13/2015
Time: 14:12:22

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE ACETONE
OPERATOR'S #: XXXX

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

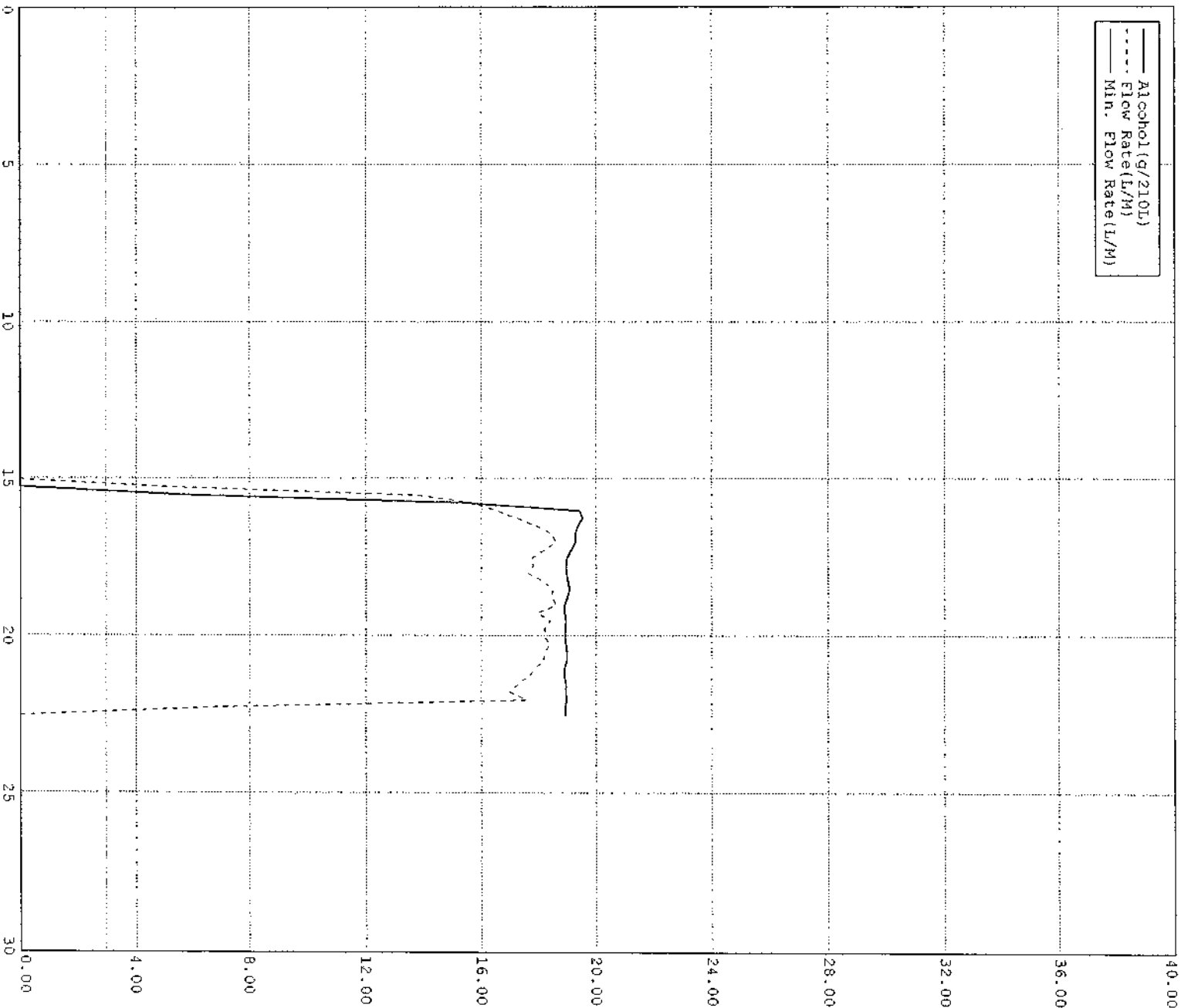
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.45: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	14:13
BLANK TEST	0.000	14:13
INTERNAL STANDARD	VERIFIED	14:13
Xq = 0.101 (0.88%)		
EXTERNAL STANDARD	0.077	14:13
X[1] = 0.0765 (-0.0005)	(0.0033)	
BLANK TEST	0.000	14:14
SUBJECT SAMPLE	XXX	14:15
X[1] = 0.0947 (-0.0125)	(0.0009)	

Interference Detected

Filter 2 Average = -0.0005
Filter 3 Average = 0.0030

CRF 10/13/15



SUBJECT TEST

Alaska Department of Public Safety
DATABASE dmt: 100366

Date: 10/13/2015
Time: 14:21:00

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

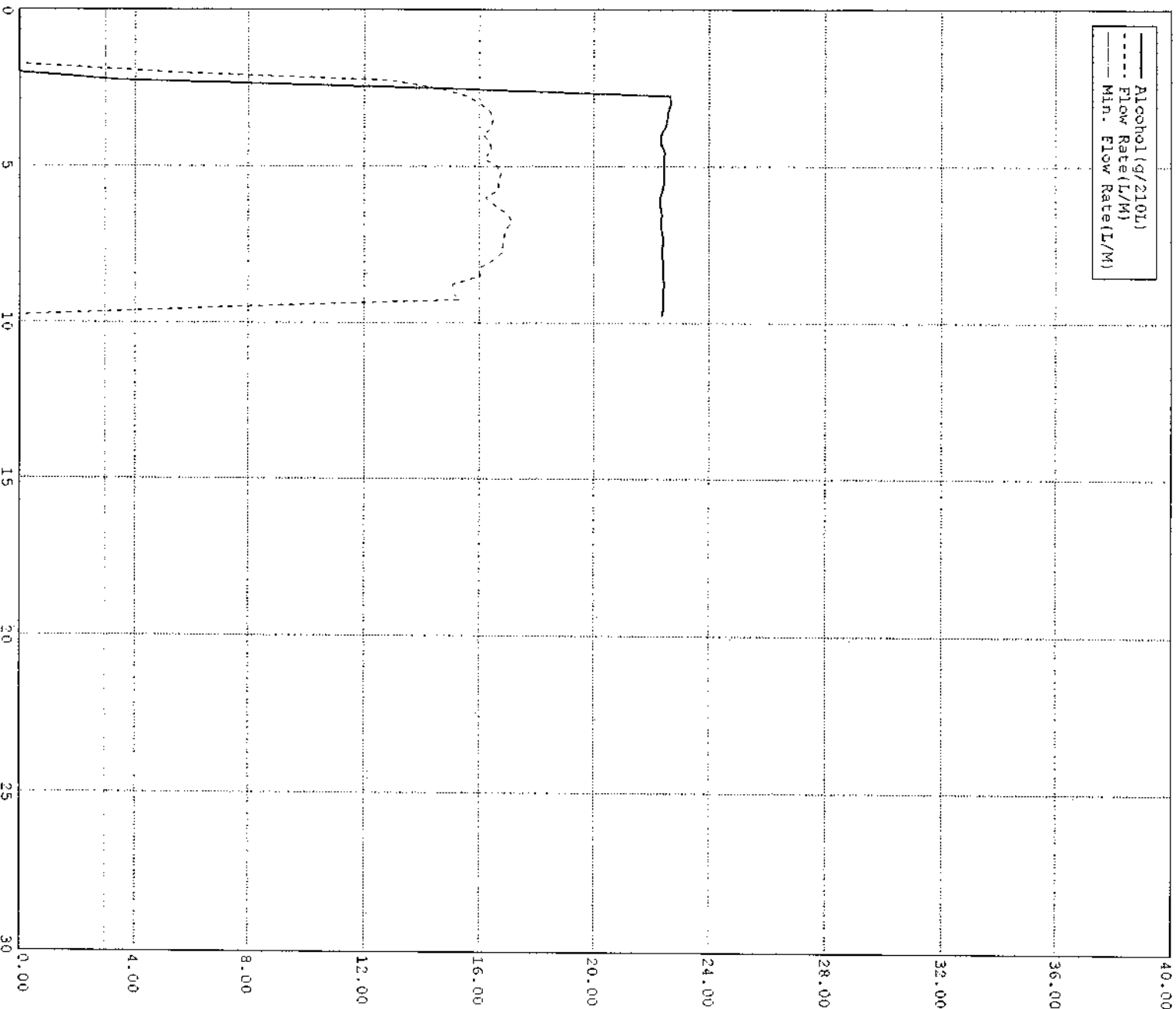
OPERATOR NAME:
INTERFERENCE IPA
OPERATOR'S #: XXXX

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

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

DIAGNOSTIC CHECK	PASSED	14:22
BLANK TEST	0.000	14:22
INTERNAL STANDARD	VERIFIED	14:22
Xq = 0.100 (0.448)		
EXTERNAL STANDARD	0.077	14:23
X[1] = 0.0766 (-0.0004)	(0.0033)	
BLANK TEST	0.000	14:23
SUBJECT SAMPLE	XXX	14:24
X[1] = 0.1120 (-0.0220)	(0.0025)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 10/13/2015
Time: 14:28:33

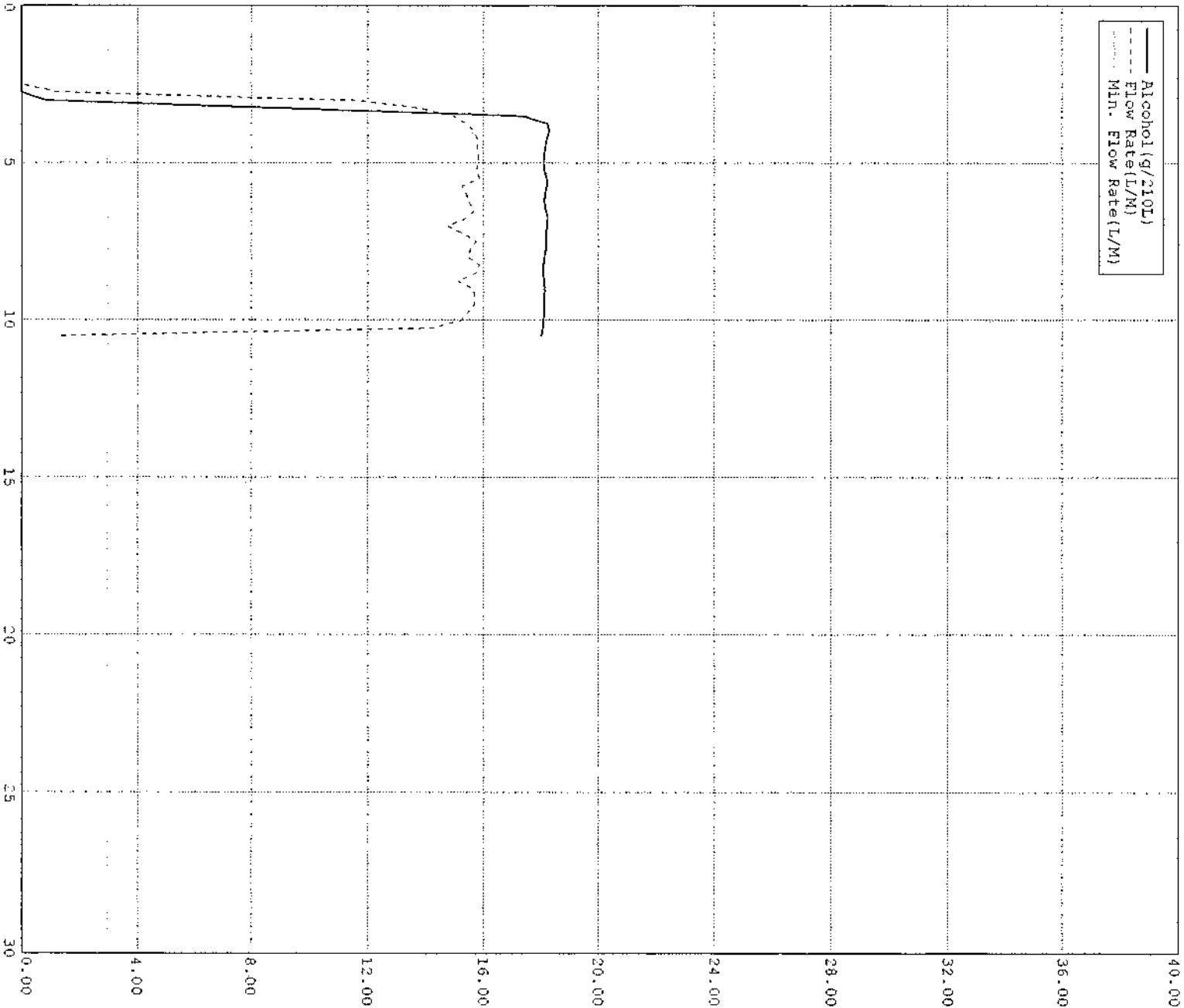
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE NEGATIVE
OPERATOR'S #: XXXX

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

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

DIAGNOSTIC CHECK	PASSED	14:30
BLANK TEST	0.000	14:30
INTERNAL STANDARD	VERIFIED	14:30
Xq = 0.101 (0.708)	0.077	14:30
EXTERNAL STANDARD	X[1] = 0.0767 (-0.0004)	(0.0033)
BLANK TEST	0.000	14:31
SUBJECT SAMPLE (Vol=1.92L)	0.090	14:31
X[1] = 0.0903 (0.0010)	(0.0009)	
BLANK TEST	0.000	14:32
EXTERNAL STANDARD	0.077	14:33
X[1] = 0.0766 (-0.0007)	(0.0020)	
BLANK TEST	0.000	14:34



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 10/13/2015
Time: 14:59:15

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

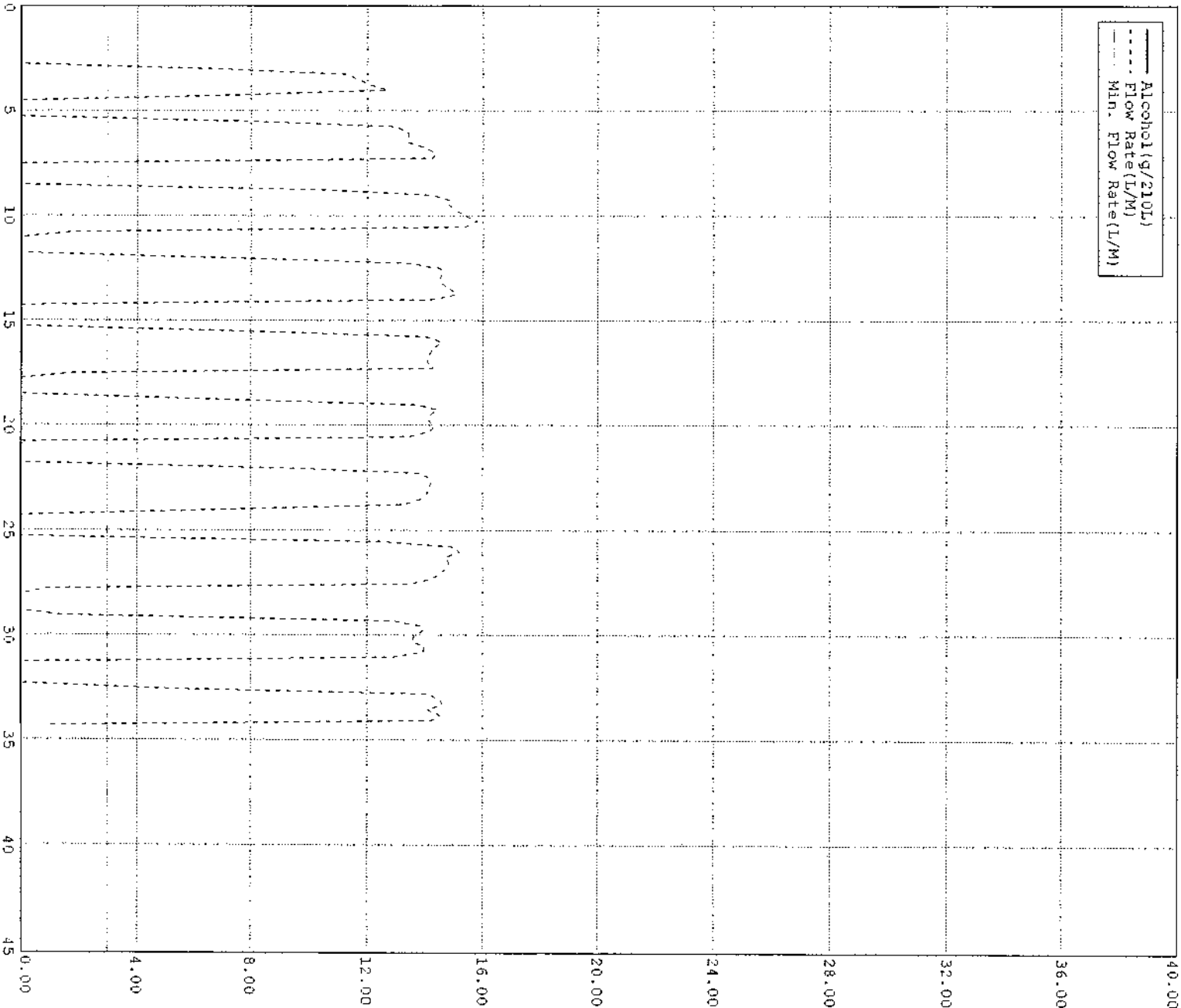
OPERATOR NAME:
EXCEEDED ATTEMPTS
OPERATOR'S #: XXXX

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

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

DIAGNOSTIC CHECK	PASSED	15:01
BLANK TEST	0.000	15:01
INTERNAL STANDARD	VERIFIED	15:01
EXTERNAL STANDARD	0.076	15:02
BLANK TEST	0.000	15:03
SUBJECT SAMPLE	XXX	15:03

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 10/13/2015
Time: 15:12:08

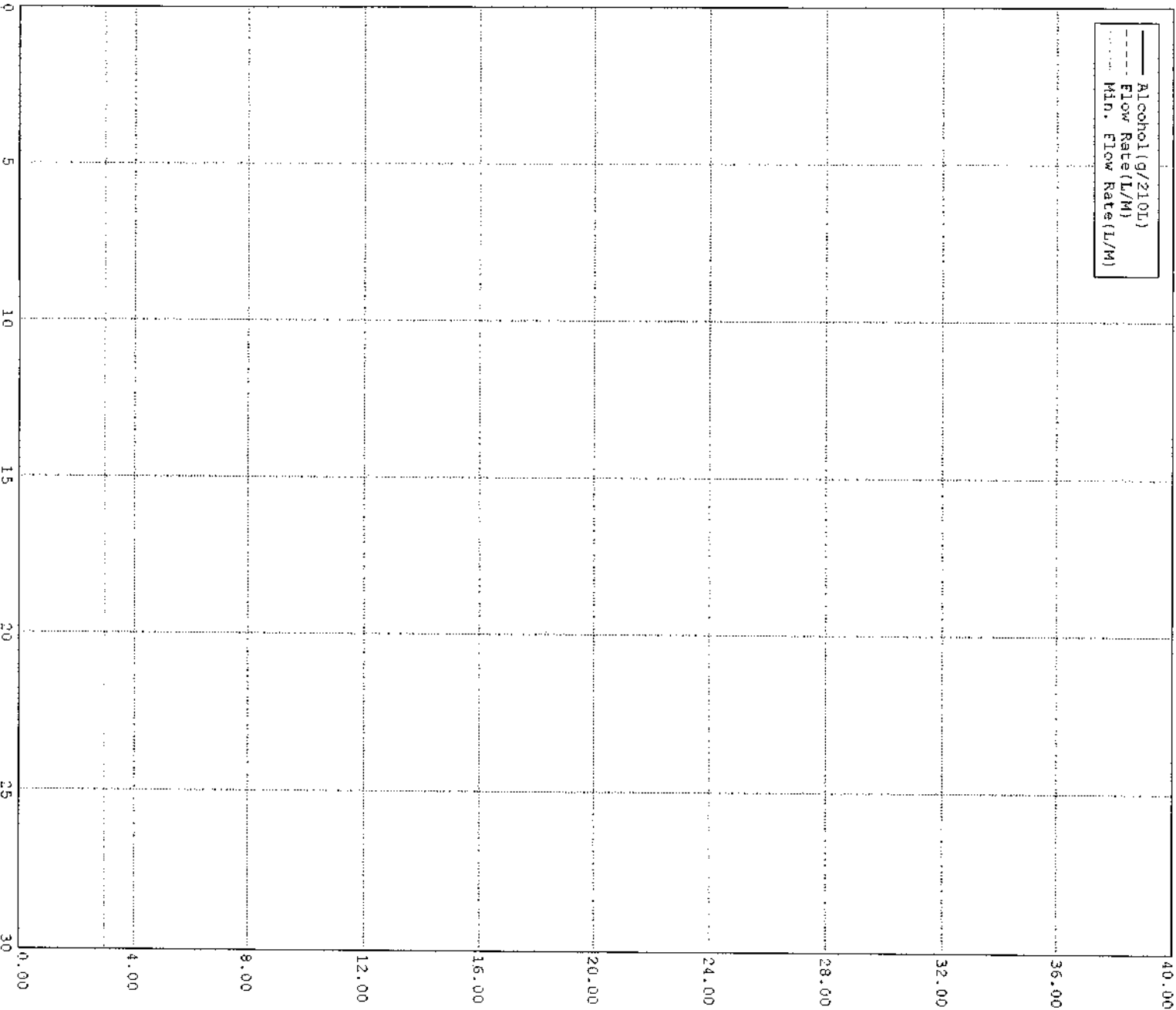
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
RFI XXXX
OPERATOR'S #: XXXX

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

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

DIAGNOSTIC CHECK
BLANK TEST PASSED 15:14
INTERNAL STANDARD VERIFIED 15:14
EXTERNAL STANDARD 0.077 15:14
BLANK TEST 0.000 15:15
RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100366

Date: 10/13/2015
Time: 15:28:25

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 #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:30
BLANK TEST	0.000	15:30
INTERNAL STANDARD	VERIFIED	15:31
EXTERNAL STANDARD	0.077	15:31
BLANK TEST	0.000	15:32
SUBJECT SAMPLE (VOL=2.57L)	0.000	15:32
BLANK TEST	0.000	15:33
EXTERNAL STANDARD	0.077	15:33
BLANK TEST	0.000	15:34

