

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 100369 Analyst CRF 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: 100369

Date: 12/11/2015
Time: 10:44:17

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 45.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.58 V PASSED
(0.95 V - 2.21 V)
Cooler Voltage = 1.58 V PASSED
(0.95 V - 2.21 V)
Bias Voltage = 78 V PASSED
(47 V - 109 V)
Chopper Freq = 535 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.1 in

PUMP INFO

Flow Rate = 5.113 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
(0.001 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.083 0.42% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100369

Date: 12/11/2015
Time: 10:59 AM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 46.8°C

Current Barometer 29.0 in
Volume (Ltr) 1.52

Settings

Lamp: 1.58 V
Bias: 78 V
Cooler: 1.68 V
Chopper: 535 Hz

Voltages (V)

Flow: 1.05 V
Detector: -0.059 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/08/2015
Time: 14:45:05

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

Ca = 0.1000
CAL = 0.964425 0.800 <= CAL < 1.200
b1 = 0.0007 0.0000 <= b1 < 0.0040
b2 = 0.0079 0.0010 <= b2 < 0.0100
b3 = 0.0004 0.0000 <= b3 < 0.0040
Xq = 0.0831 0.0500 <= Xq < 0.2000
a21 = 1.175670 1.050 <= a21 < 1.300
a31 = 0.479133 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/11/2015
Time: 11:05:34

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 29.03: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	11:09
BLANK TEST	0.000	11:09
INTERNAL STANDARD	VERIFIED	11:09
EXTERNAL STANDARD	0.076	11:09
BLANK TEST	0.000	11:10
SUBJECT SAMPLE (Vol=1.53L)	0.000	11:11
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.076	11:12
BLANK TEST	0.000	11:13



LINEARITY CHECK

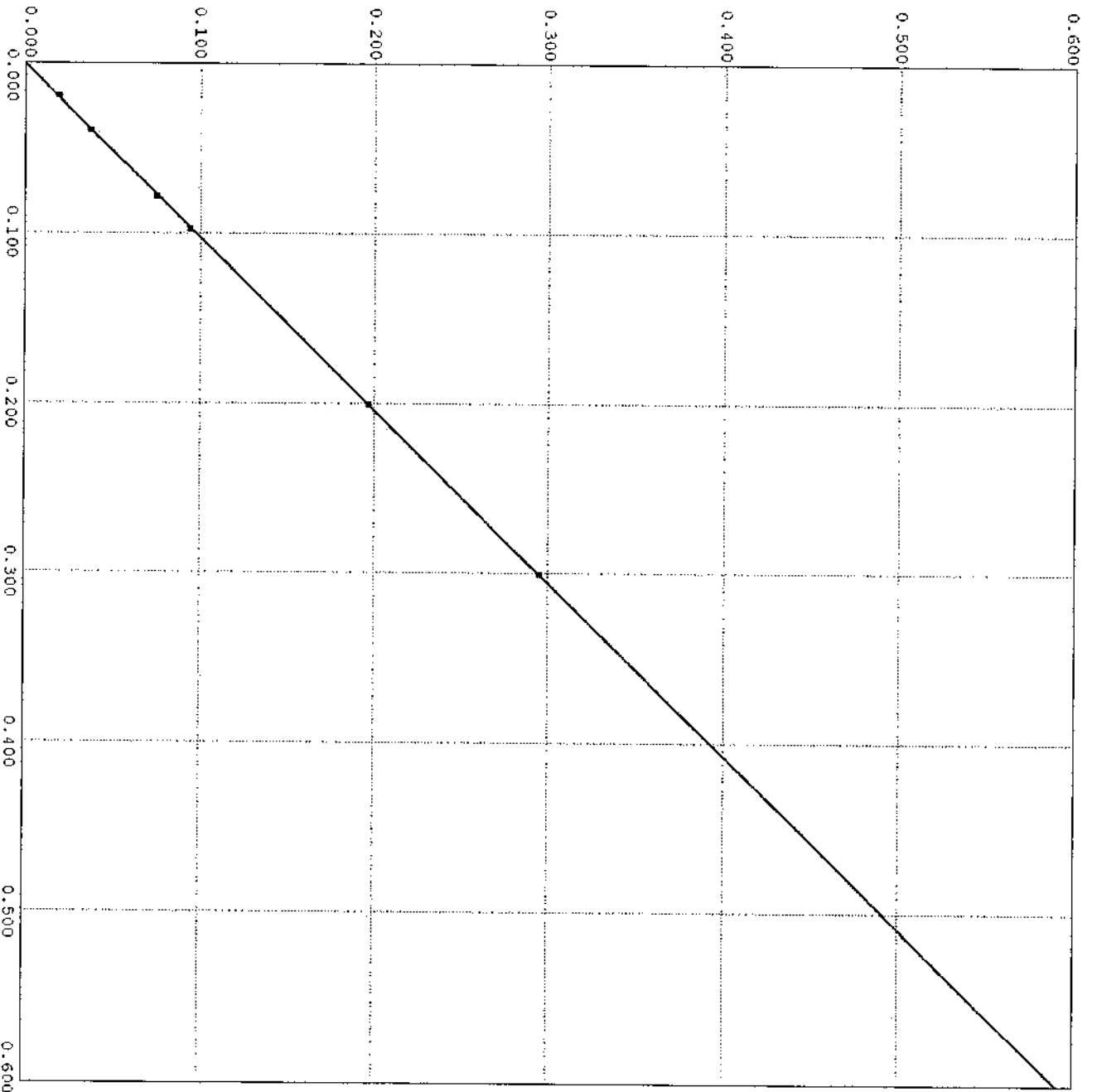
Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/11/2015
Time: 13:24:48

SUPERVISOR NAME:
CHARLES FOSTER
OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.019	0.0202	0.0004
0.039	0.0382	0.0004
0.078	0.0758	0.0004
0.097	0.0950	0.0000
0.200	0.1976	0.0005
0.300	0.2958	0.0008

SLOPE = 0.985414
R² = 0.999929



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100369

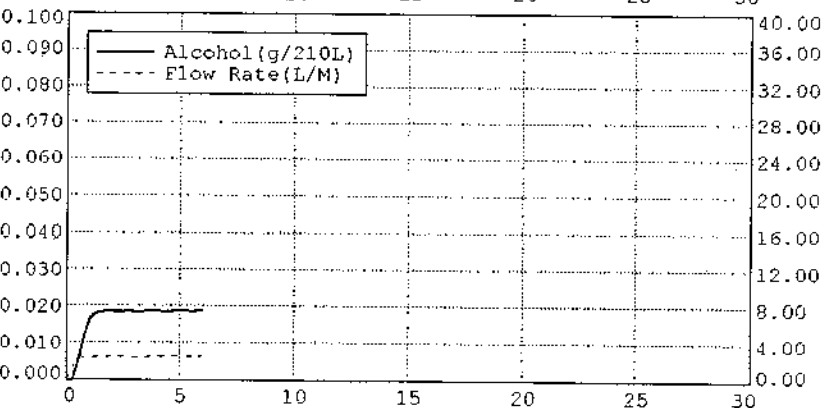
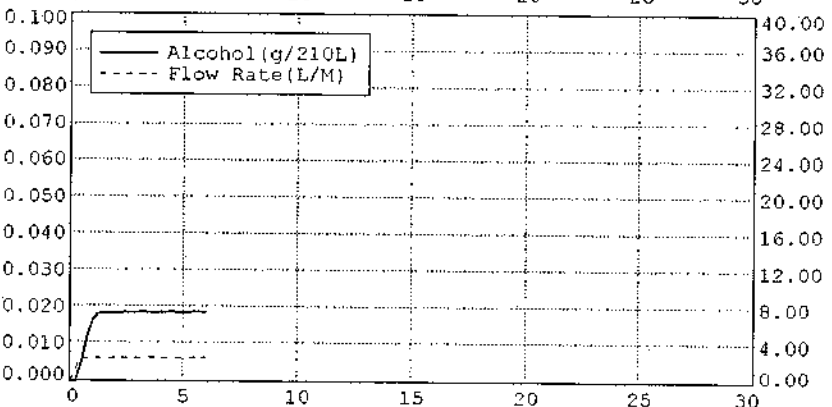
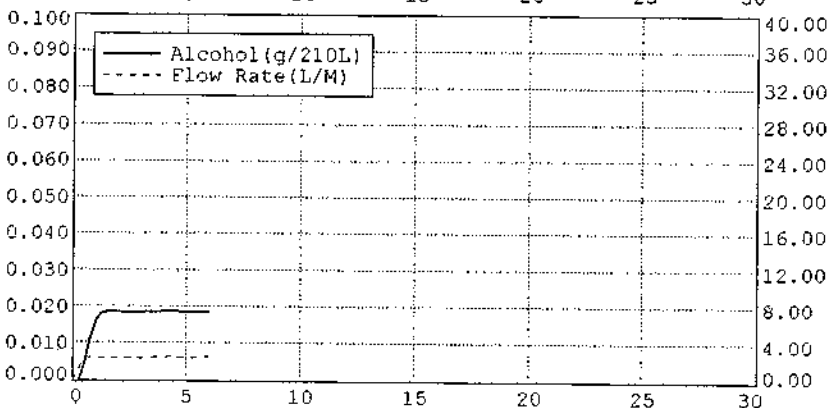
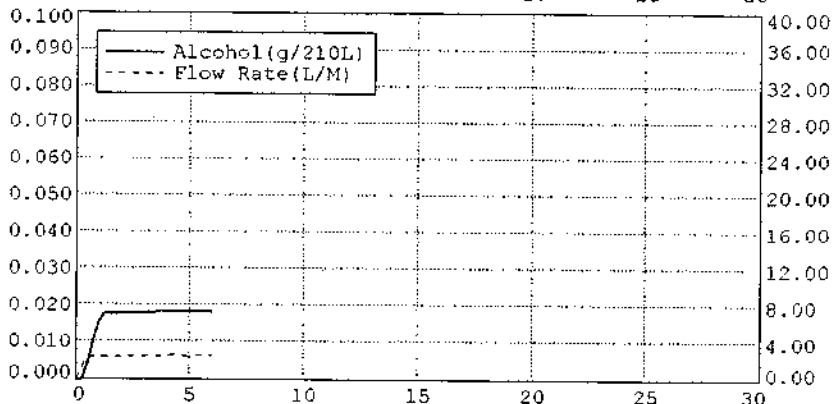
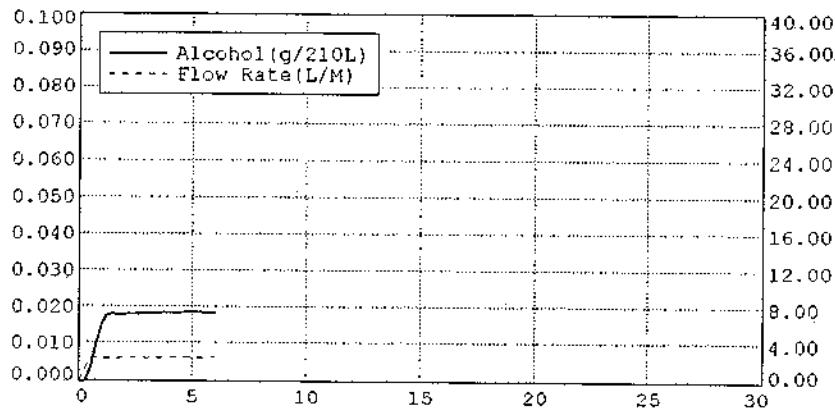
Date: 12/11/2015
 Time: 13:24:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.01: 0.019
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 661 psi

BLANK TEST	0.000	13:26
INTERNAL STANDARD	VERIFIED	13:26
EXTERNAL STANDARD	0.020	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.020	13:27
BLANK TEST	0.000	13:28
EXTERNAL STANDARD	0.020	13:28
BLANK TEST	0.000	13:29
EXTERNAL STANDARD	0.020	13:29
BLANK TEST	0.000	13:30
EXTERNAL STANDARD	0.021	13:30
BLANK TEST	0.000	13:31

Average = 0.0202
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100369

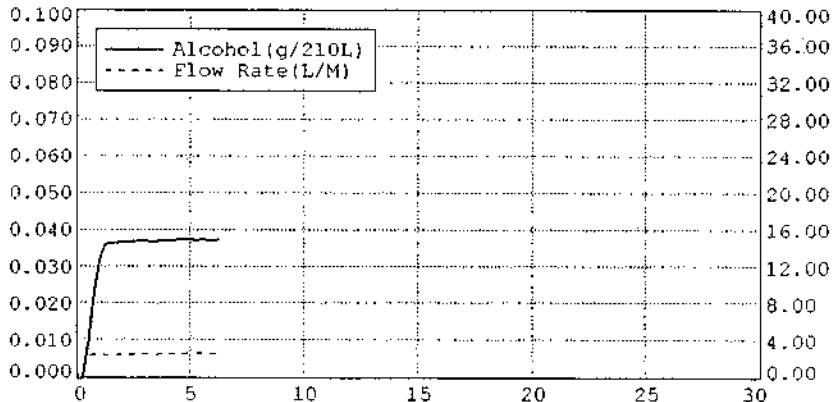
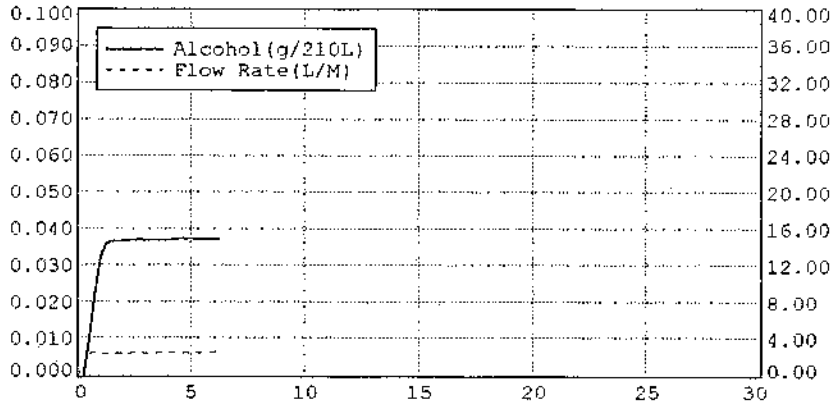
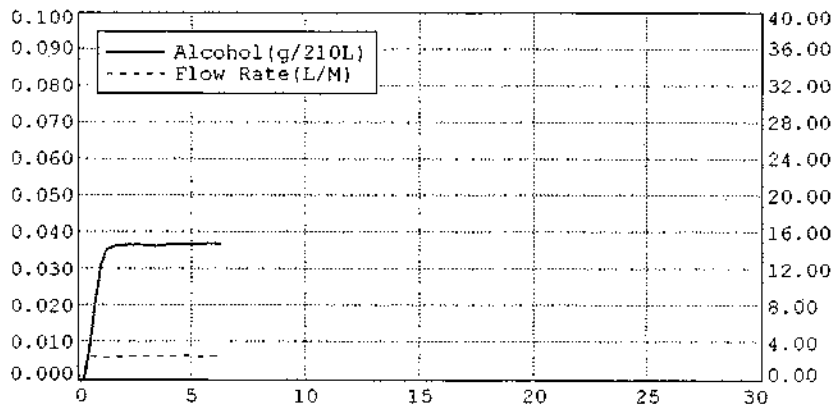
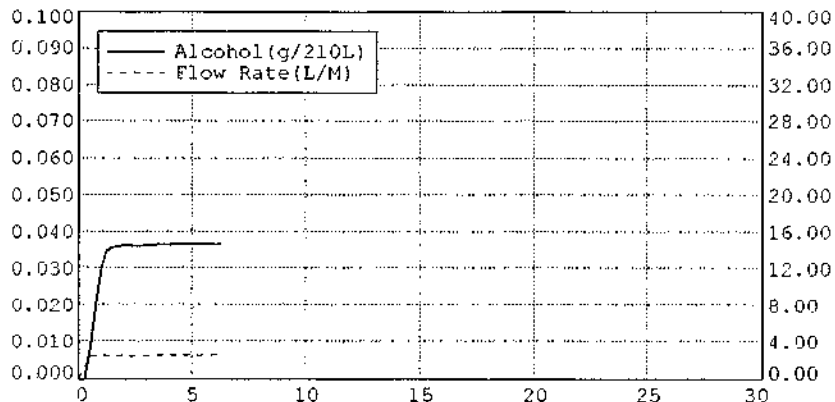
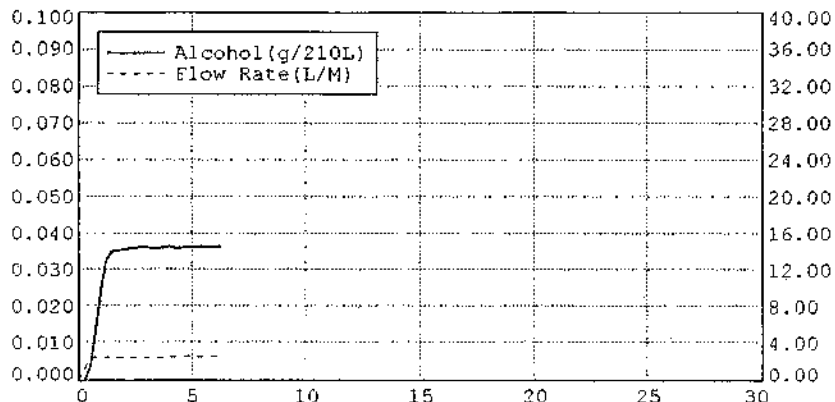
Date: 12/11/2015
 Time: 13:45:29

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.01: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 682 psi

BLANK TEST	0.000	13:46
INTERNAL STANDARD	VERIFIED	13:47
EXTERNAL STANDARD	0.038	13:47
BLANK TEST	0.000	13:48
EXTERNAL STANDARD	0.038	13:48
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.038	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.038	13:50
BLANK TEST	0.000	13:51
EXTERNAL STANDARD	0.039	13:51
BLANK TEST	0.000	13:52

Average = 0.0382
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100369

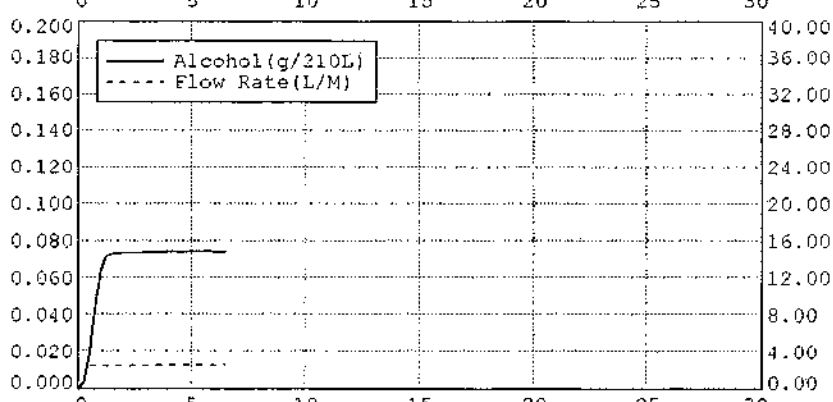
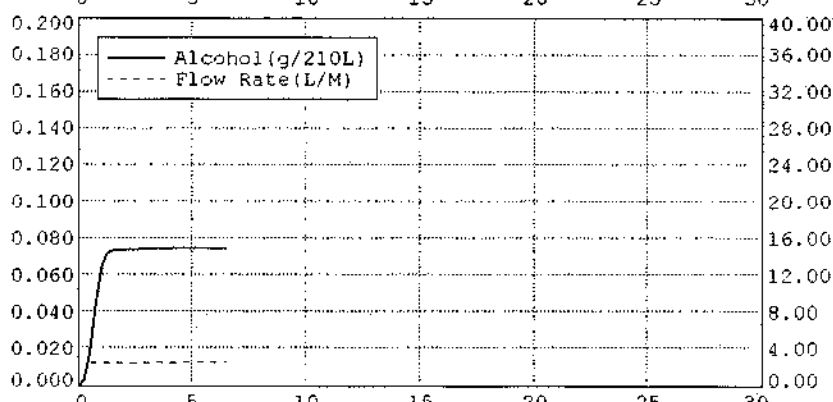
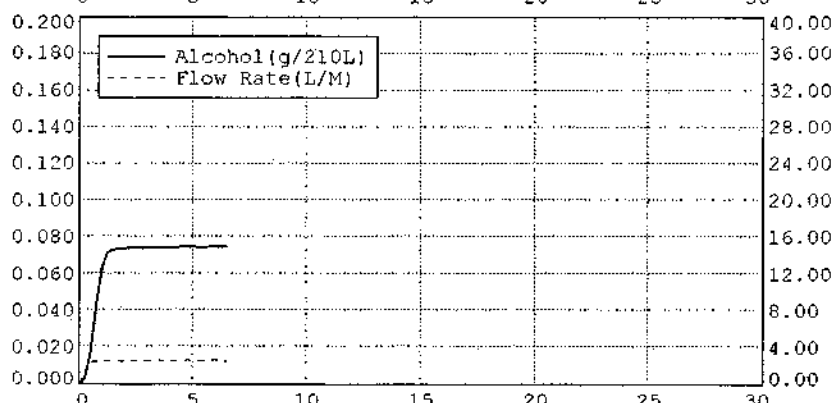
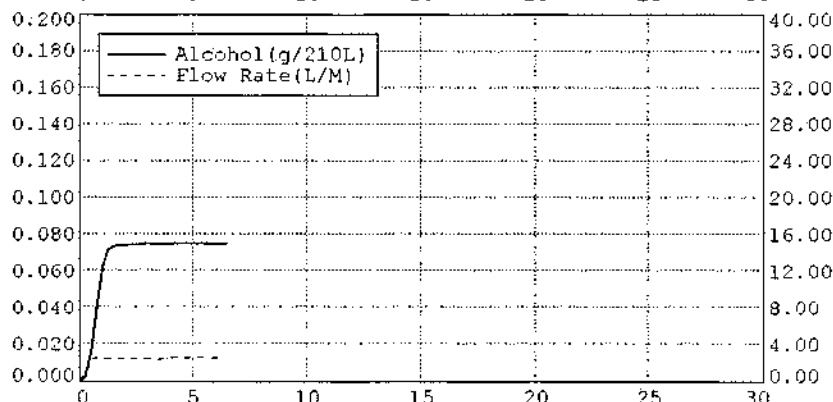
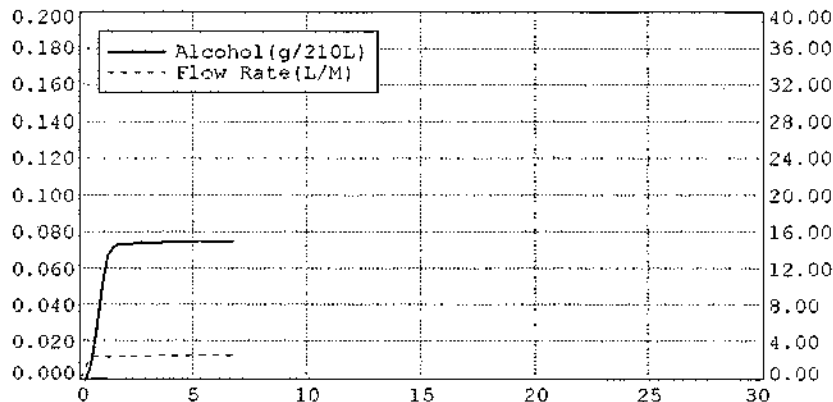
Date: 12/11/2015
 Time: 13:55:31

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.01: 0.078
 LOT #: 01315080A3
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 636 psi

BLANK TEST	0.000	13:56
INTERNAL STANDARD	VERIFIED	13:56
EXTERNAL STANDARD	0.076	13:57
BLANK TEST	0.000	13:57
EXTERNAL STANDARD	0.076	13:58
BLANK TEST	0.000	13:59
EXTERNAL STANDARD	0.076	13:59
BLANK TEST	0.000	14:00
EXTERNAL STANDARD	0.076	14:00
BLANK TEST	0.000	14:01
EXTERNAL STANDARD	0.075	14:01
BLANK TEST	0.000	14:02

Average = 0.0758
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100369

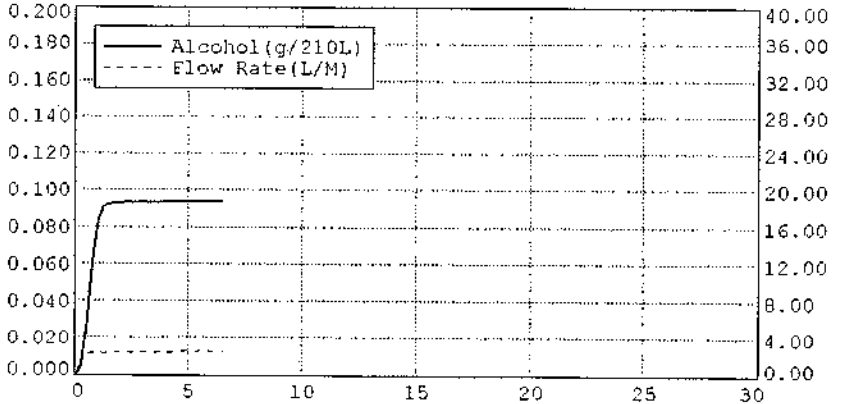
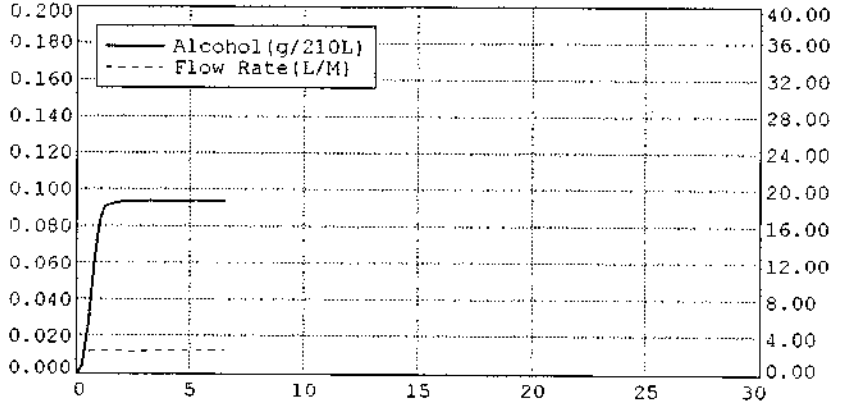
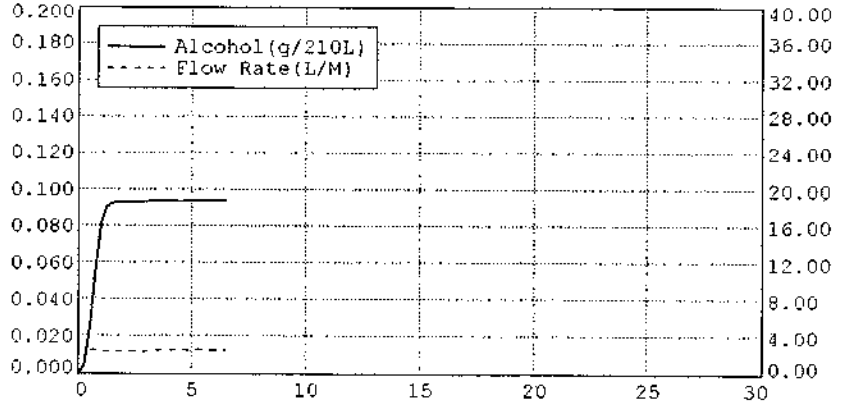
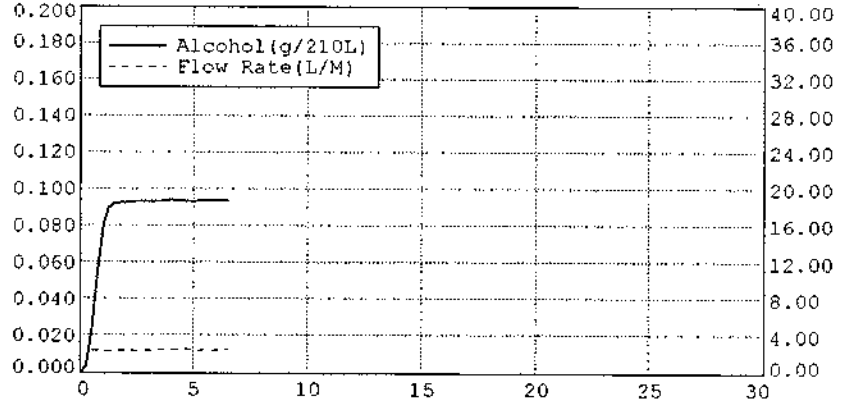
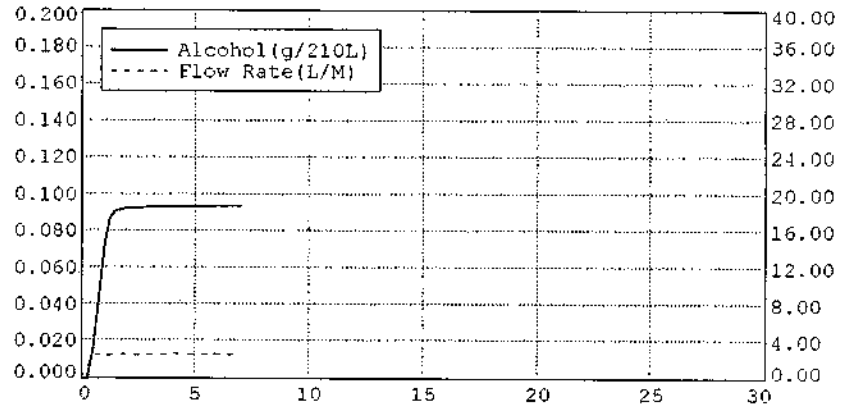
Date: 12/11/2015
 Time: 14:04:04

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.01: 0.097
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 664 psi

BLANK TEST	0.000	14:05
INTERNAL STANDARD	VERIFIED	14:05
EXTERNAL STANDARD	0.095	14:05
BLANK TEST	0.000	14:06
EXTERNAL STANDARD	0.095	14:06
BLANK TEST	0.000	14:07
EXTERNAL STANDARD	0.095	14:07
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.095	14:08
BLANK TEST	0.000	14:09
EXTERNAL STANDARD	0.095	14:10
BLANK TEST	0.000	14:10

Average = 0.0950
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

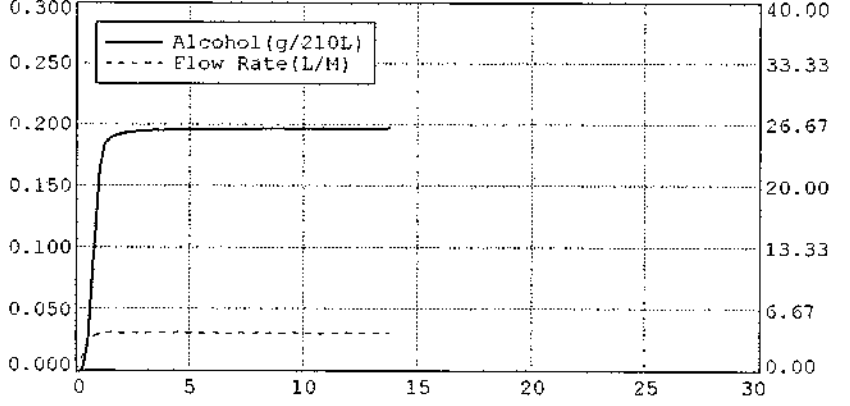
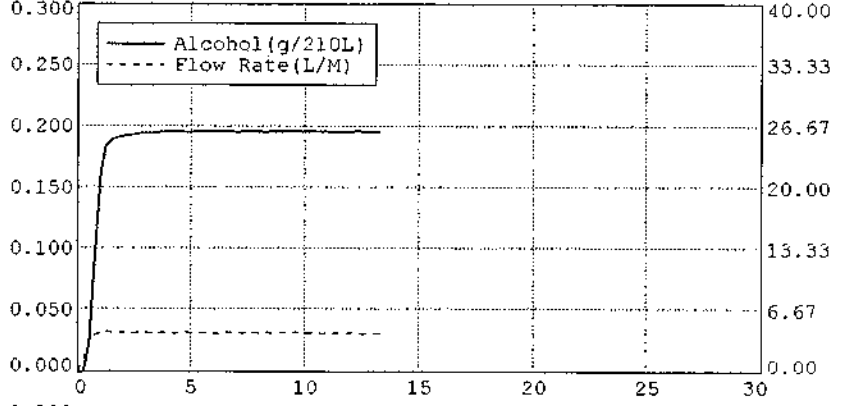
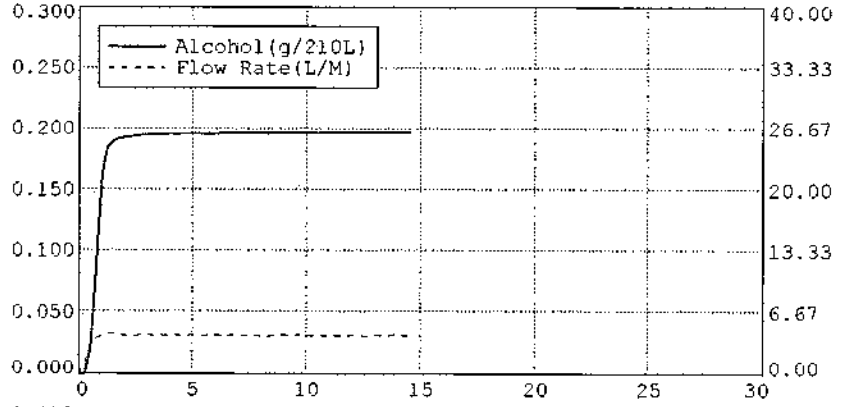
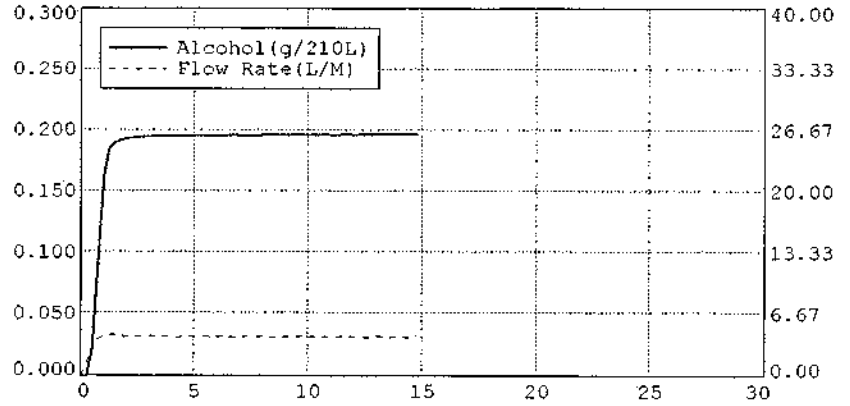
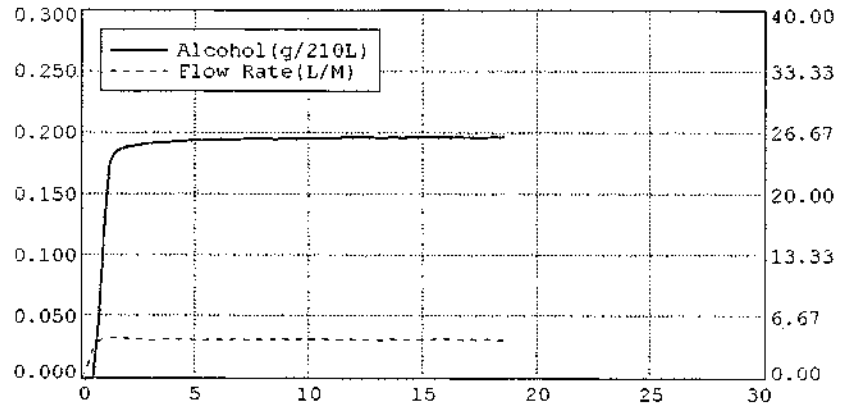
Alaska Department of Public Safety
 DATAMASTER dmt: 100369

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

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

BLANK TEST	0.000	14:14
INTERNAL STANDARD	VERIFIED	14:14
EXTERNAL STANDARD	0.198	14:14
BLANK TEST	0.000	14:15
EXTERNAL STANDARD	0.198	14:16
BLANK TEST	0.000	14:17
EXTERNAL STANDARD	0.198	14:17
BLANK TEST	0.000	14:18
EXTERNAL STANDARD	0.197	14:18
BLANK TEST	0.000	14:19
EXTERNAL STANDARD	0.197	14:19
BLANK TEST	0.000	14:20

Average = 0.1976
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

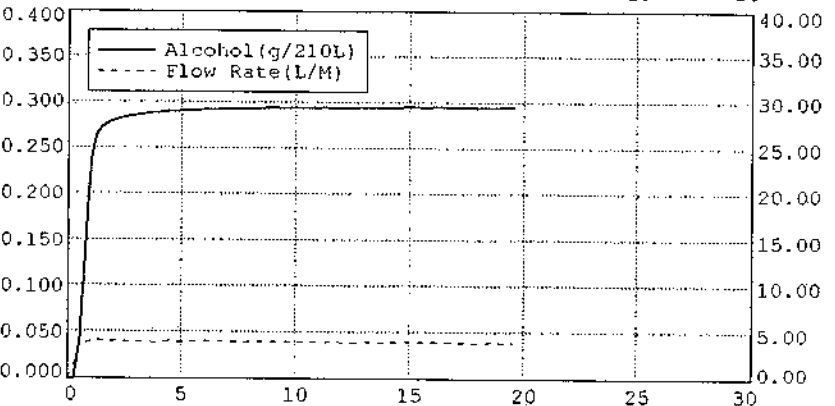
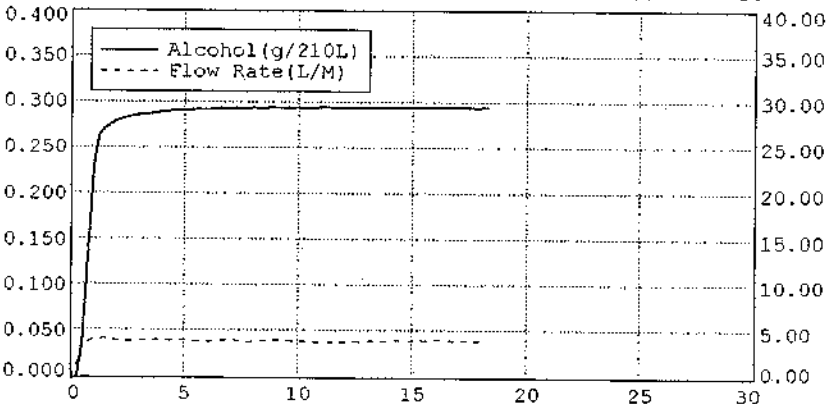
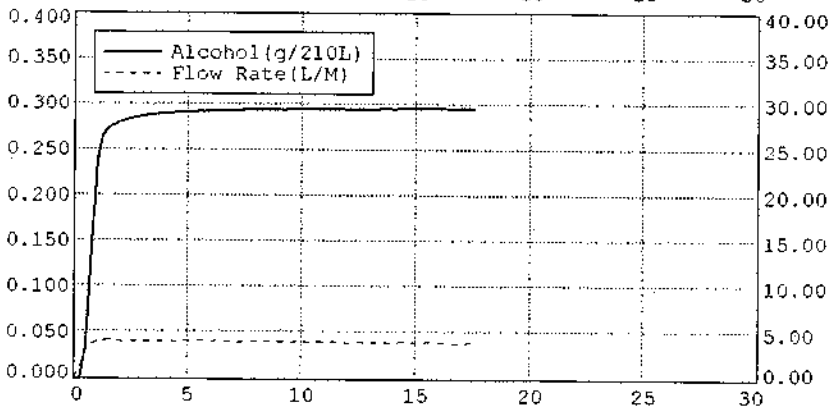
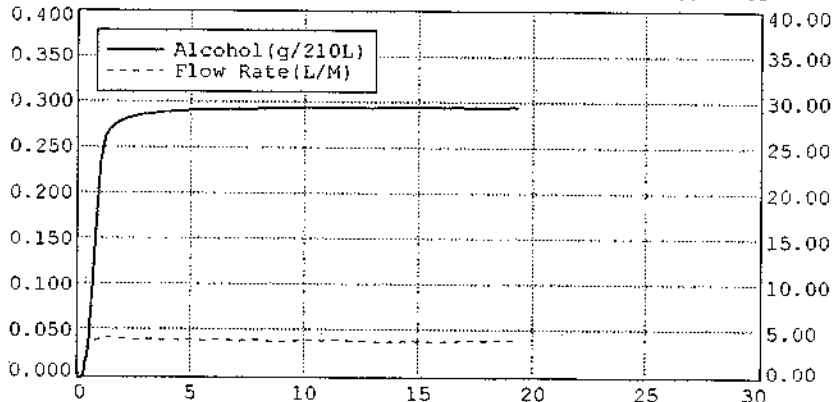
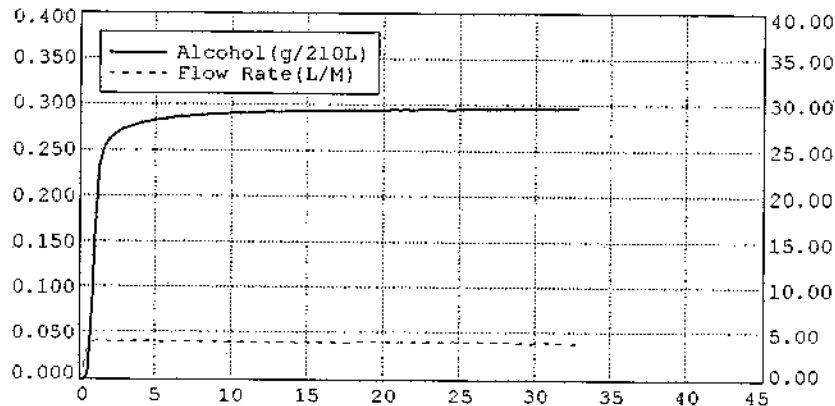
Alaska Department of Public Safety
 DATAMASTER dmt: 100369

Date: 12/11/2015
 Time: 14:23:05

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

BLANK TEST	0.000	14:24
INTERNAL STANDARD	VERIFIED	14:24
EXTERNAL STANDARD	0.297	14:24
BLANK TEST	0.000	14:25
EXTERNAL STANDARD	0.295	14:26
BLANK TEST	0.000	14:27
EXTERNAL STANDARD	0.296	14:27
BLANK TEST	0.000	14:28
EXTERNAL STANDARD	0.295	14:28
BLANK TEST	0.000	14:29
EXTERNAL STANDARD	0.296	14:30
BLANK TEST	0.000	14:31

Average = 0.2958
 Std Dev = 0.0008



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/14/2015
Time: 10:00:52

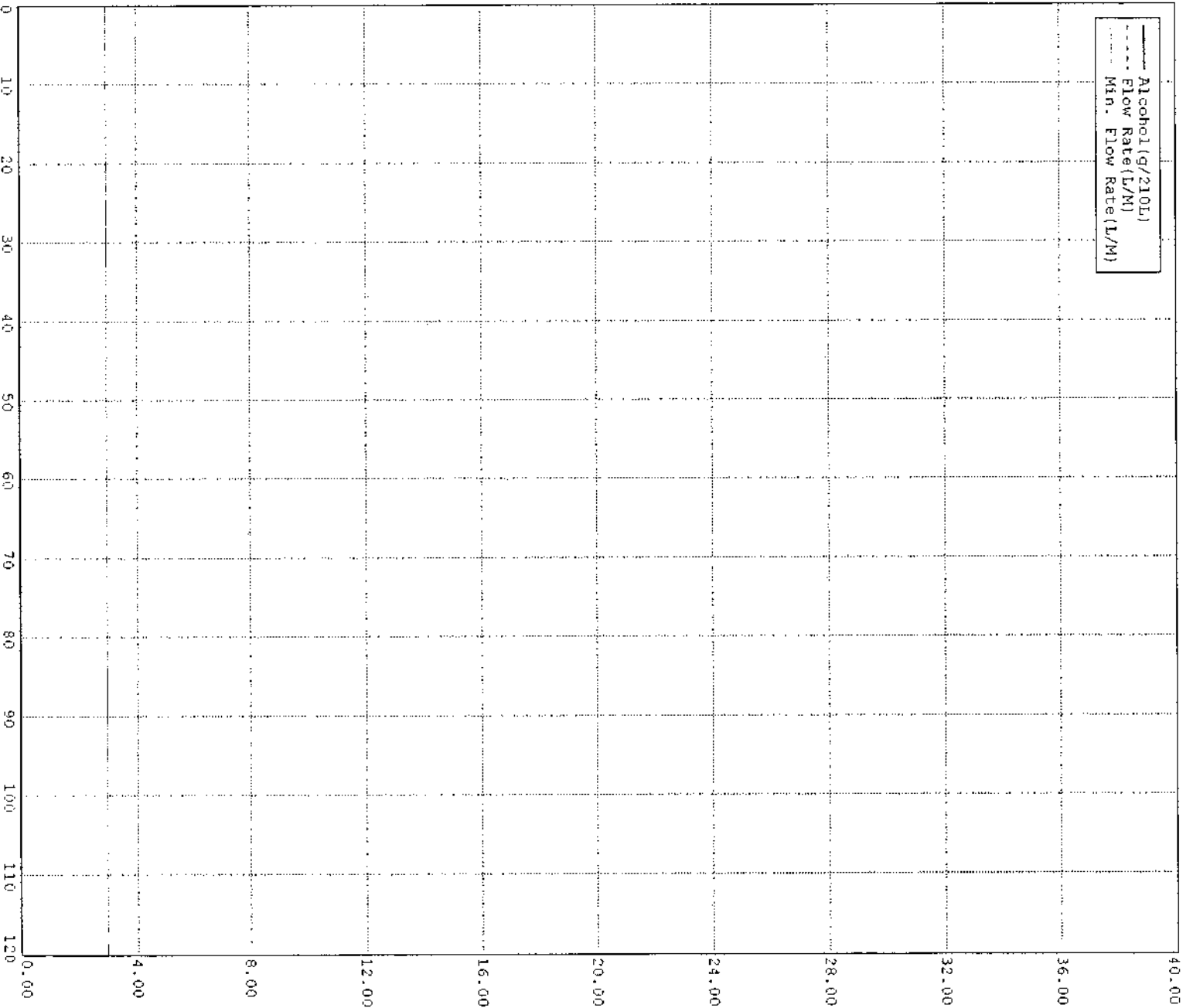
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INCOMPLETE XXXX
OPERATOR S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.29: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:01
BLANK TEST	0.000	10:02
INTERNAL STANDARD	VERIFIED	10:02
EXTERNAL STANDARD	0.076	10:02
BLANK TEST	0.000	10:03
SUBJECT SAMPLE	INCOMPLETE	10:05



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/14/2015
Time: 10:09:12

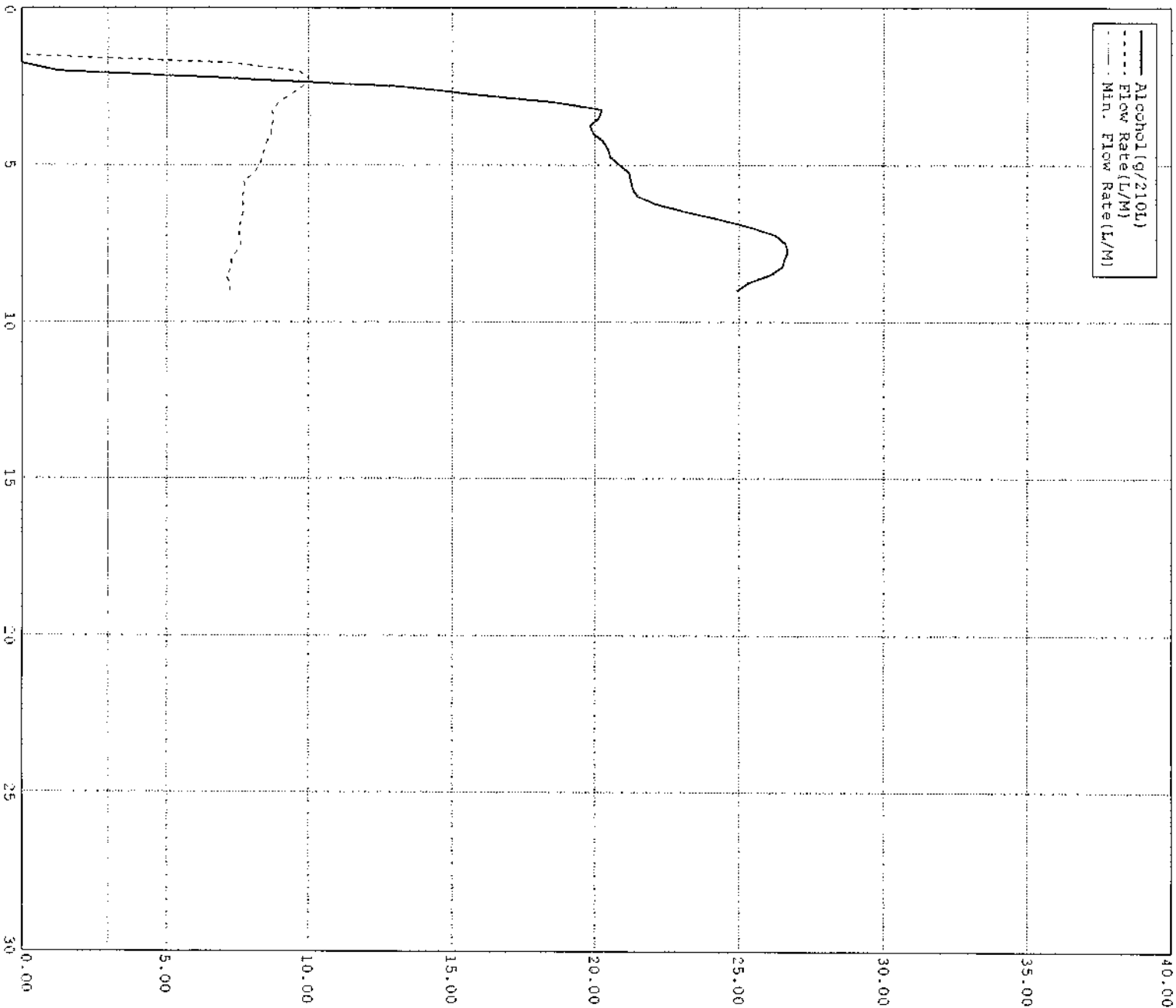
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MOUTH EPOCH
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.28: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:12
BLANK TEST	0.000	10:12
INTERNAL STANDARD	VERIFIED	10:12
EXTERNAL STANDARD	0.077	10:12
BLANK TEST	0.000	10:13
SUBJECT SAMPLE	INVALID	10:13



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/14/2015
Time: 10:16:35

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 AP 29.28: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

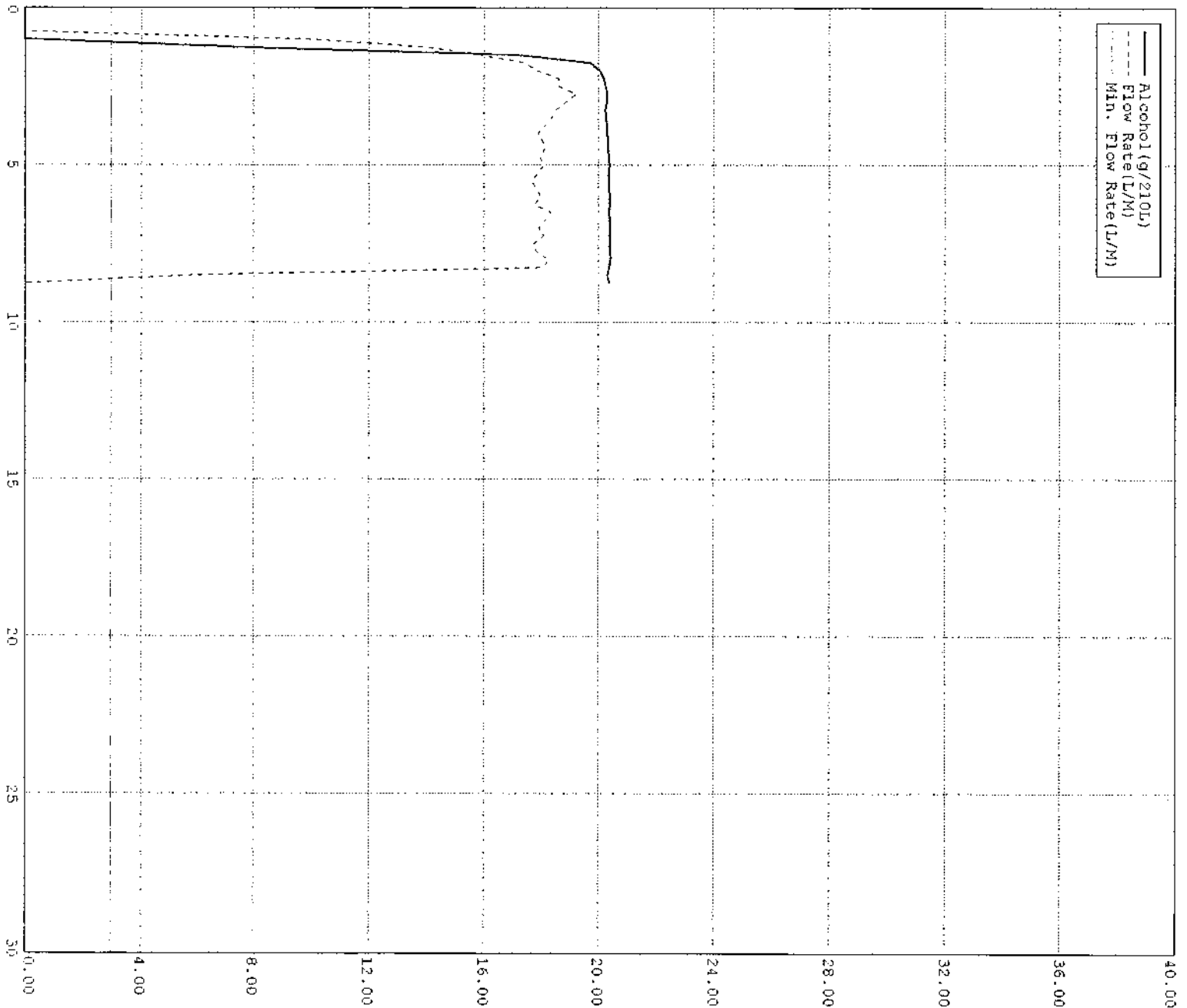
DIAGNOSTIC CHECK	PASSED	10:18
BLANK TEST	0.000	10:18
INTERNAL STANDARD	VERIFIED	10:19
Xq = 0.083 (0.00%)		
EXTERNAL STANDARD	0.076	10:19
X[1] = 0.0765 (-0.0031)	(0.0014)	
BLANK TEST	0.000	10:20
SUBJECT SAMPLE	XXX	10:20
X[1] = 0.1030 (-0.0125)	(0.0004)	

Interference Detected

Filter 2 Avg = -0.0029

Filter 3 Avg = 0.0016

CV = 12/14/15



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/14/2015
Time: 10:22:46

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

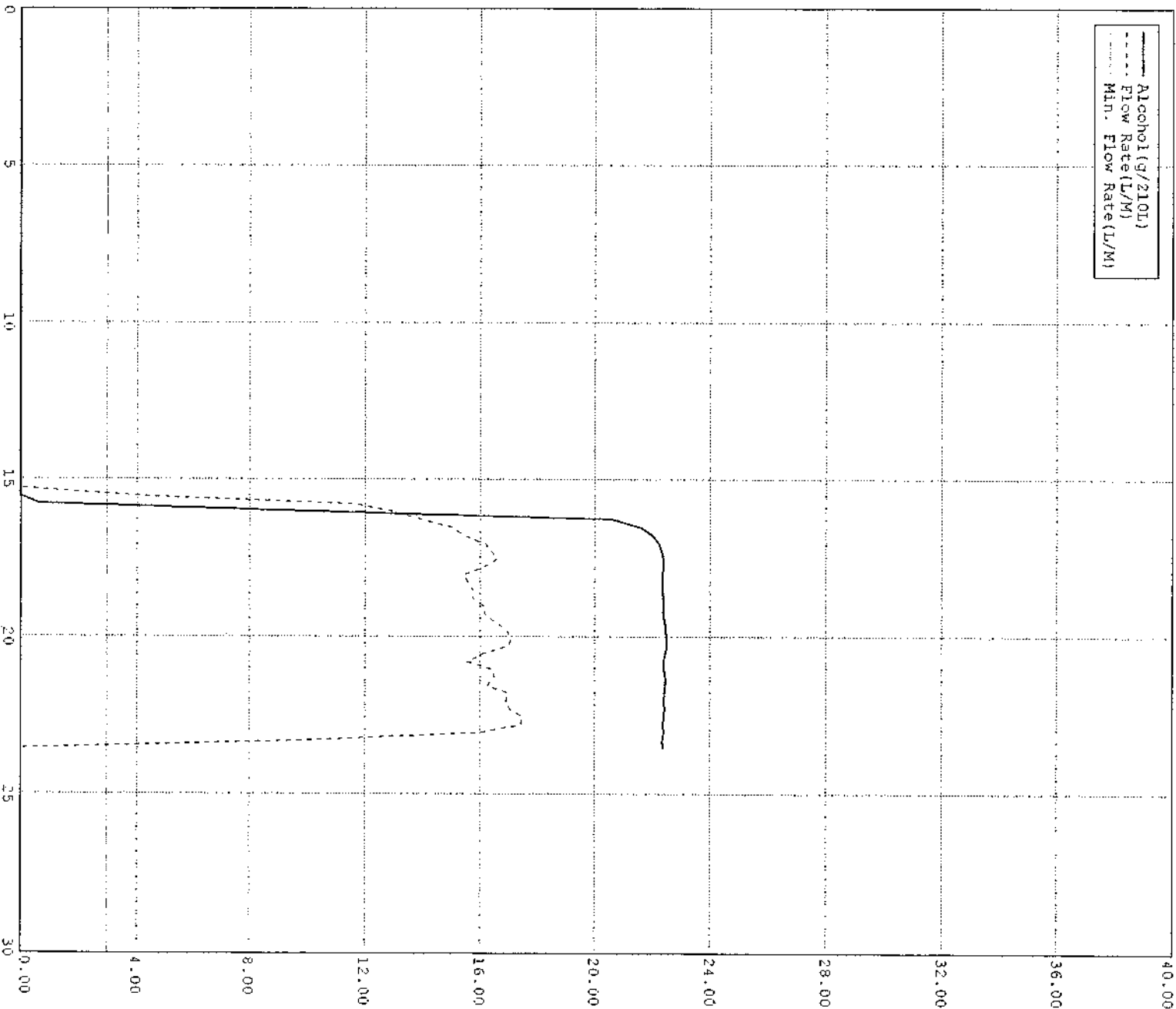
OPERATOR NAME:
INTERFERENCE IPA
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AP 29.29: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 10:24
BLANK TEST 0.000 10:24
INTERNAL STANDARD VERIFIED 10:25
Xq = 0.083 (0.21%)
EXTERNAL STANDARD 0.077 10:25
X[1] = 0.0769 (-0.0028) (0.0016)
BLANK TEST 0.000 10:26
SUBJECT SAMPLE XXX 10:26
X[1] = 0.1129 (-0.0244) (0.0007)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/14/2015
Time: 10:28:57

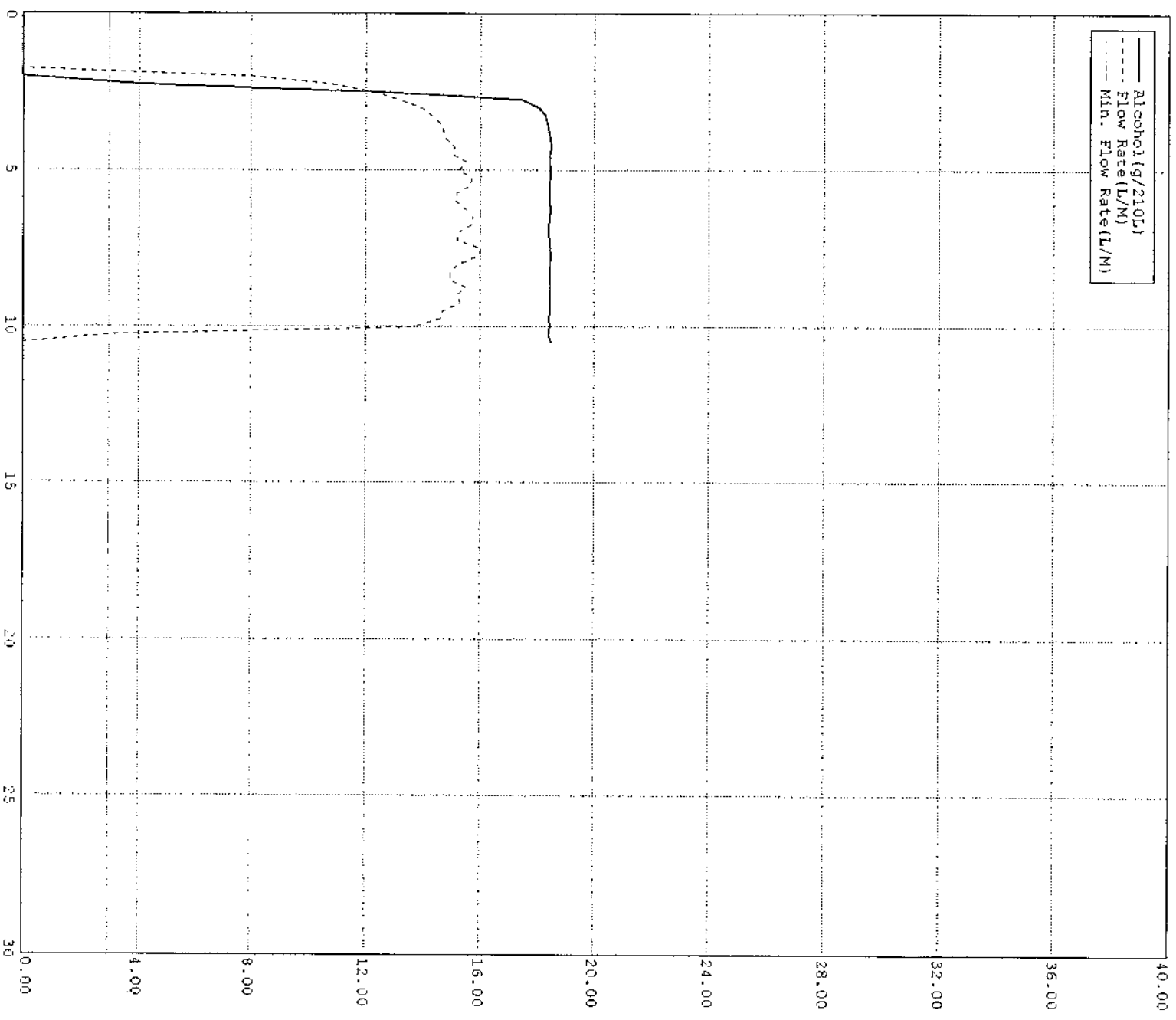
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE NEGATIVE
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.29: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:31
BLANK TEST	0.000	10:31
INTERNAL STANDARD	VERIFIED	10:31
Xq = 0.084 (0.52%)		
EXTERNAL STANDARD	0.077	10:31
X[1] = 0.0768 (-0.0026)	(0.0018)	
BLANK TEST	0.000	10:32
SUBJECT SAMPLE (Vol=2.03L)	0.093	10:32
X[1] = 0.0934 (0.0005)	(0.0002)	
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.076	10:33
X[1] = 0.0762 (-0.0031)	(0.0014)	
BLANK TEST	0.000	10:34



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/14/2015
Time: 11:52:53

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

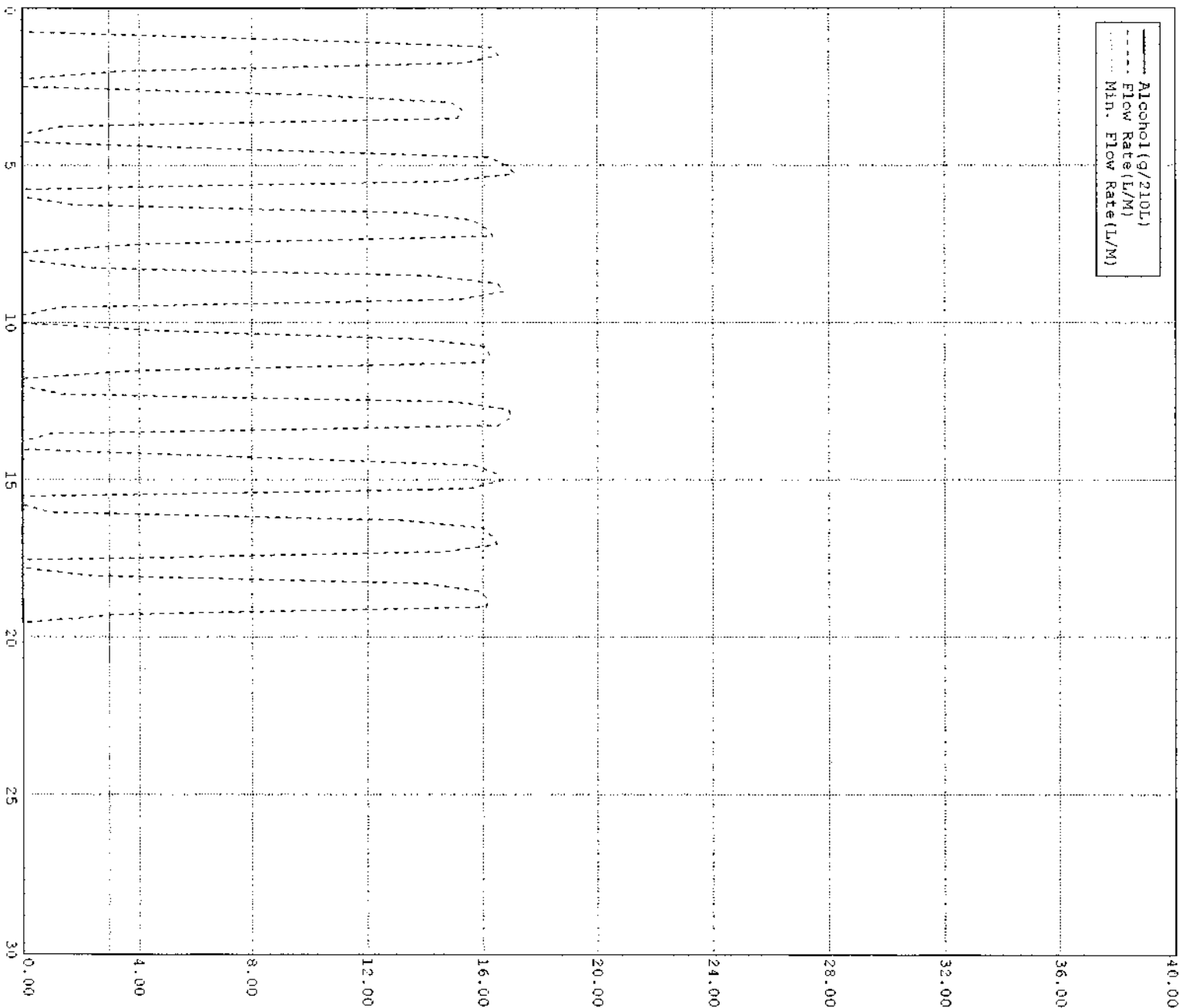
OPERATOR NAME:
EXCEEDED ATTEMPTS
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AP 29.33: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK
BLANK TEST PASSED 11:55
INTERNAL STANDARD VERIFIED 11:56
EXTERNAL STANDARD 0.077 11:56
BLANK TEST 0.000 11:57
SUBJECT SAMPLE XXXX 11:57

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/14/2015
Time: 11:59:13

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

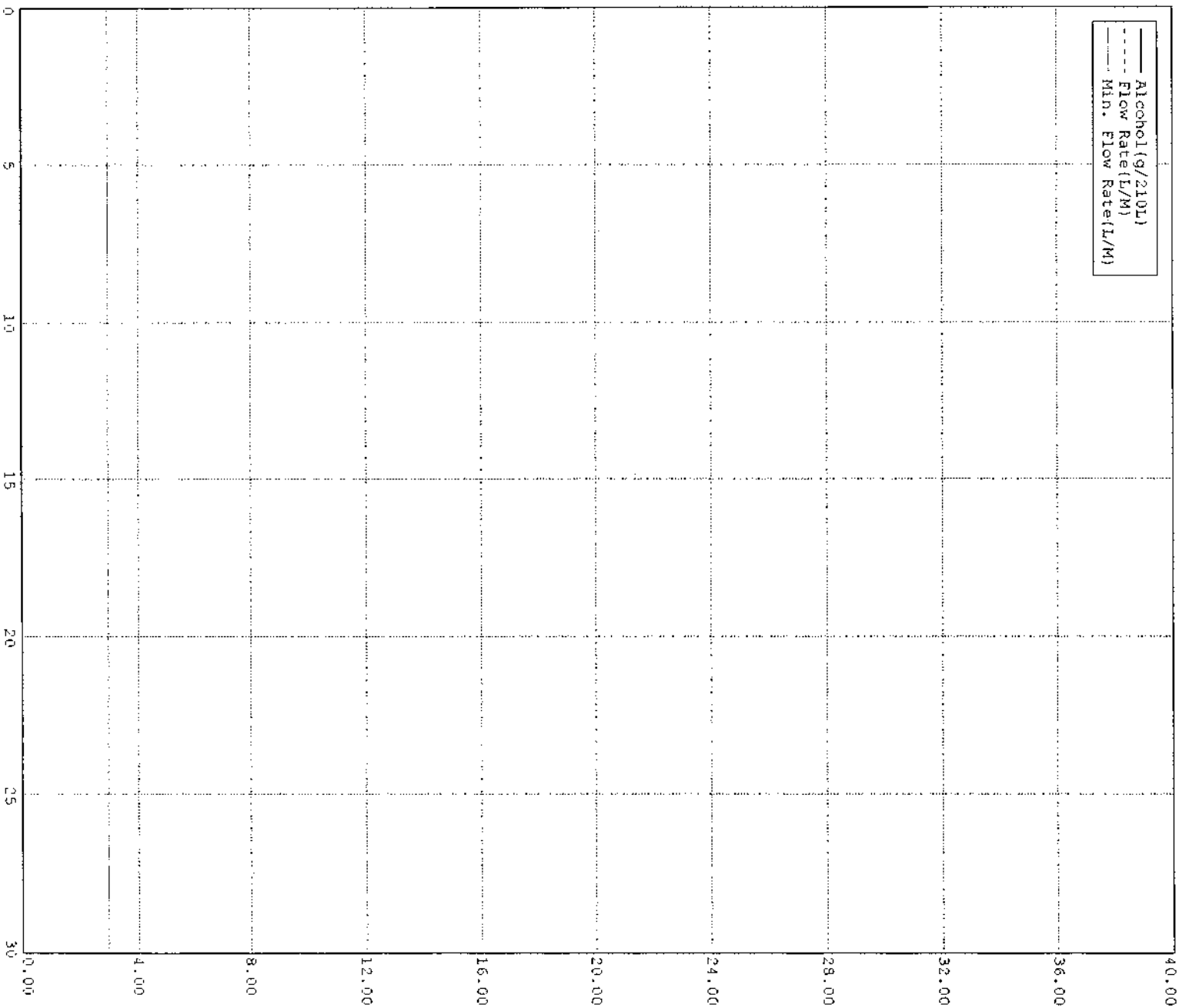
OPERATOR NAME:
RFI XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.32: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 12:00
BLANK TEST 0.000 12:00
INTERNAL STANDARD VERIFIED 12:00
EXTERNAL STANDARD 0.077 12:00
BLANK TEST 0.000 12:01

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100369

Date: 12/14/2015
Time: 12:17:32

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 29.34: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	12:19
BLANK TEST	0.000	12:19
INTERNAL STANDARD	VERIFIED	12:19
EXTERNAL STANDARD	0.077	12:19
BLANK TEST	0.000	12:20
SUBJECT SAMPLE (Vol=2.05L)	0.000	12:21
BLANK TEST	0.000	12:21
EXTERNAL STANDARD	0.078	12:22
BLANK TEST	0.000	12:23

