

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 100373 Analyst CTF 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 01315080A2 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 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: 100373

Date: 10/13/2015
Time: 10:45:55

VERSIONS

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

TEMPERATURES

Sample Chamber = 49.0°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.74 V PASSED
(1.03 V - 2.39 V)
Cooler Voltage = 1.69 V PASSED
(0.97 V - 2.25 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 542 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.5 in

PUMP INFO

Flow Rate = 5.228 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 PASSED
Xq = 0.082 0.85% (0.00% - 4.00%)

Technician Screen

DATAMASTER dnt: 100373

Date: 10/13/2015
Time: 10:54 AM

Temperatures (°C)
Sample Cell: 49.4°C
Breath Tube: 48.1°C

Current Barometer 29.4 in
Volume (Ltr) 1.48

Settings
Lamp: 1.74 V
Bias: 79 V
Cooler: 1.69 V
Chopper: 541 Hz

Voltages (V)
Flow: 1.05 V
Detector: 0.025 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100373

Date: 04/12/2011
Time: 16:20:23

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

LOT #: GUTH100
BOTTLE #: 10260
EXPIRATION: 10/25/2012

Ca = 0.1000
CAL = 0.963237 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0051 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0814 0.0500 <= Xq < 0.2000
a21 = 1.168708 1.050 <= a21 < 1.300
a31 = 0.507741 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100373

Date: 10/13/2015
Time: 11:54:50

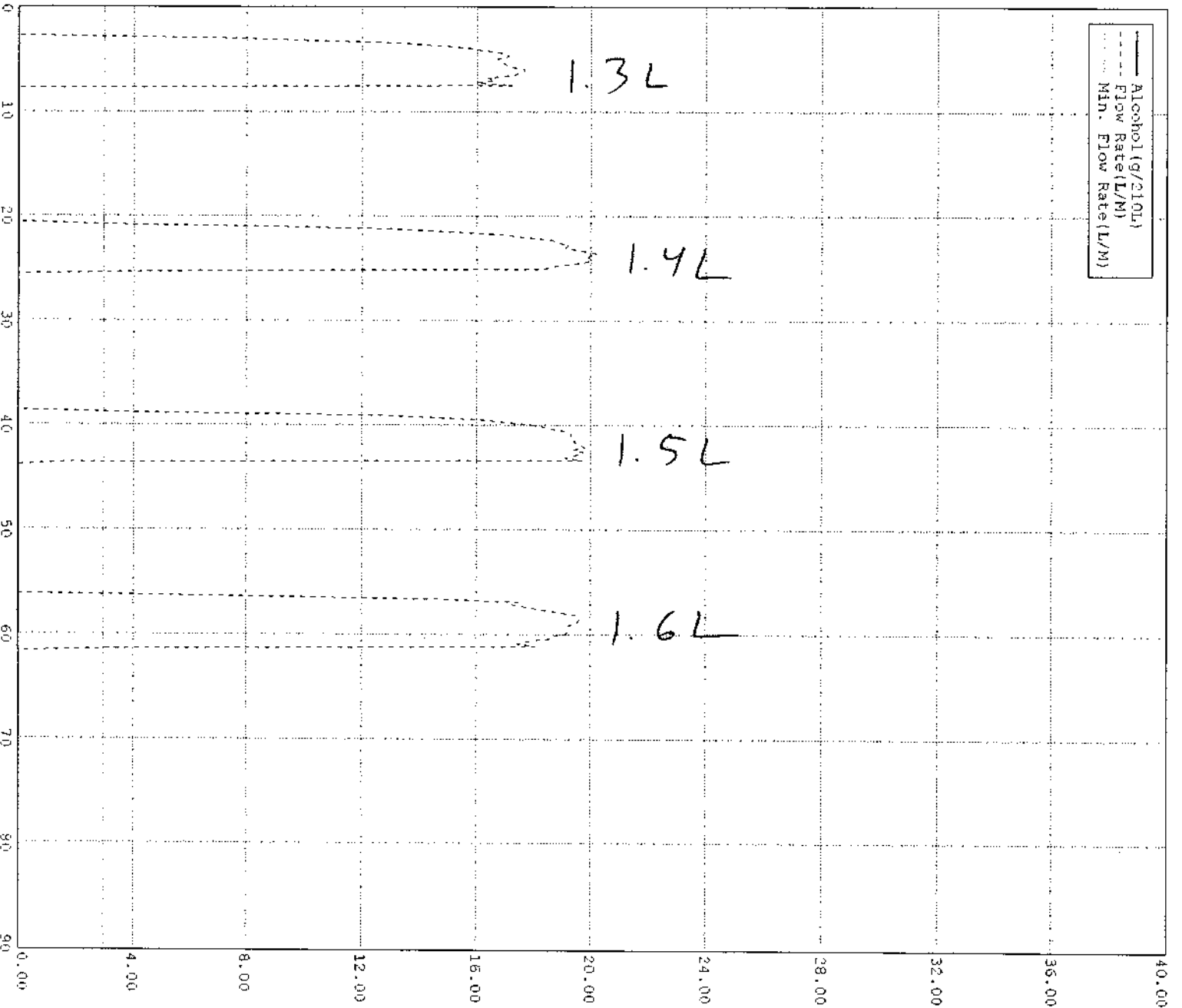
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 #: 01315080A2
EXPIRATION: 02/05/2017

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	12:05
BLANK TEST	0.000	12:05
INTERNAL STANDARD	VERIFIED	12:06
EXTERNAL STANDARD	0.077	12:06
BLANK TEST	0.000	12:07
SUBJECT SAMPLE (Vol=1.51L)	0.000	12:08
BLANK TEST	0.000	12:09
EXTERNAL STANDARD	0.078	12:09
BLANK TEST	0.000	12:10



LINEARITY CHECK

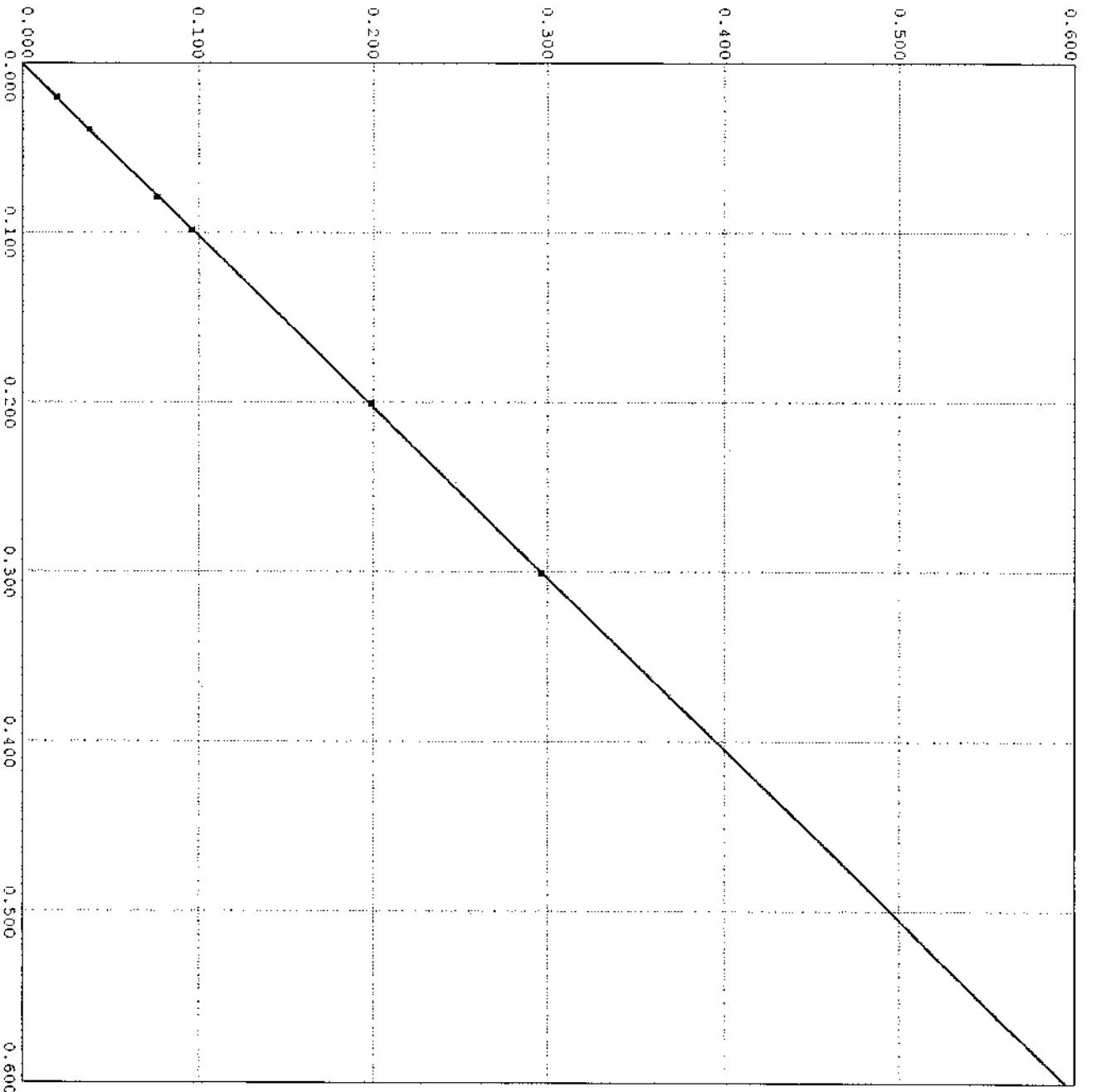
Alaska Department of Public Safety
DATAMASTER dnt: 100373

Date: 10/13/2015
Time: 12:17:11

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	0.0772	0.0004
0.098	0.0970	0.0000
0.200	0.1998	0.0004
0.300	0.2970	0.0007

SLOPE = 0.991915
R² = 0.999930



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100373

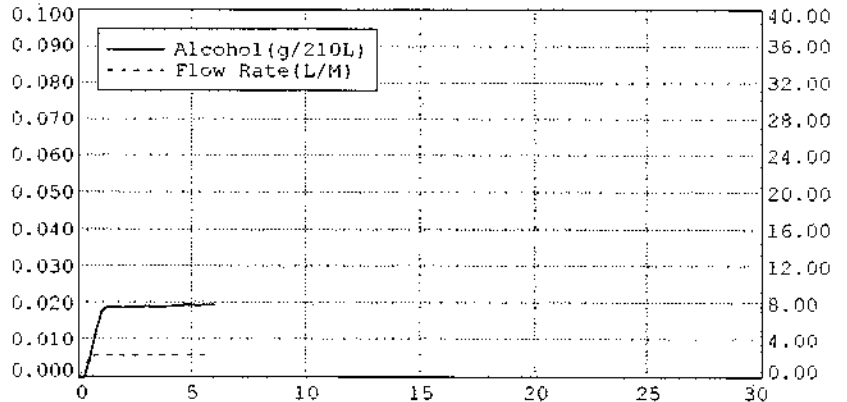
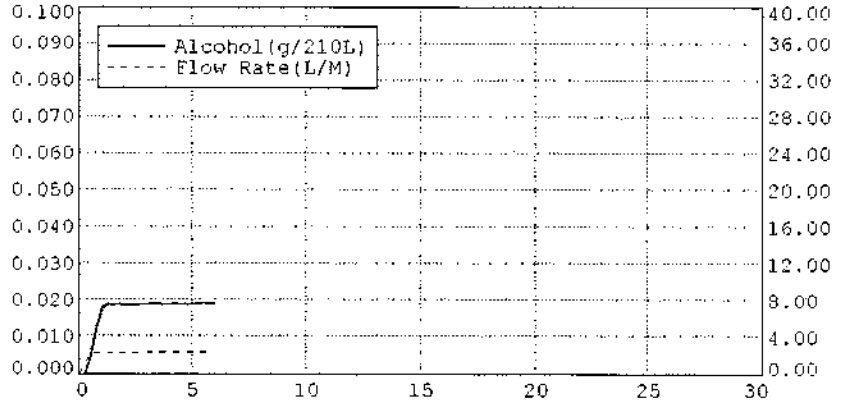
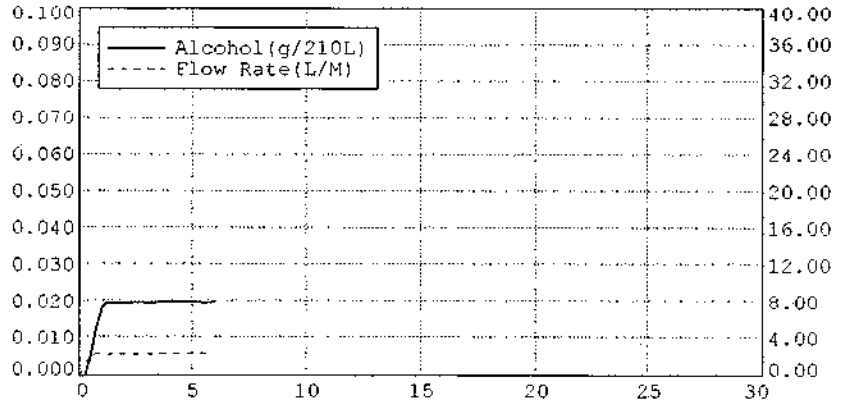
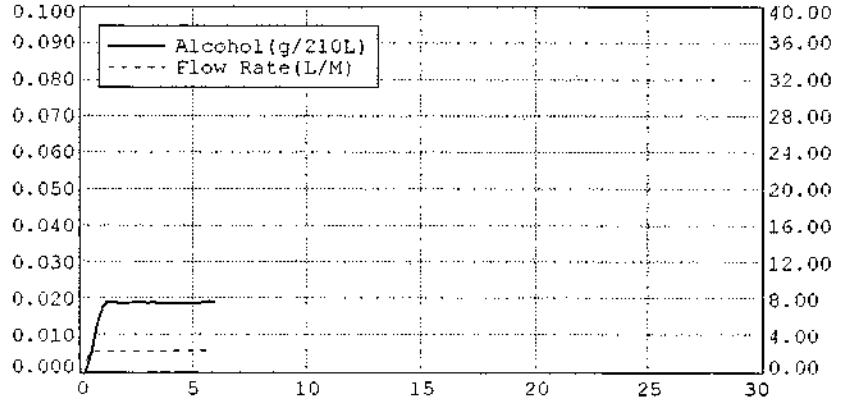
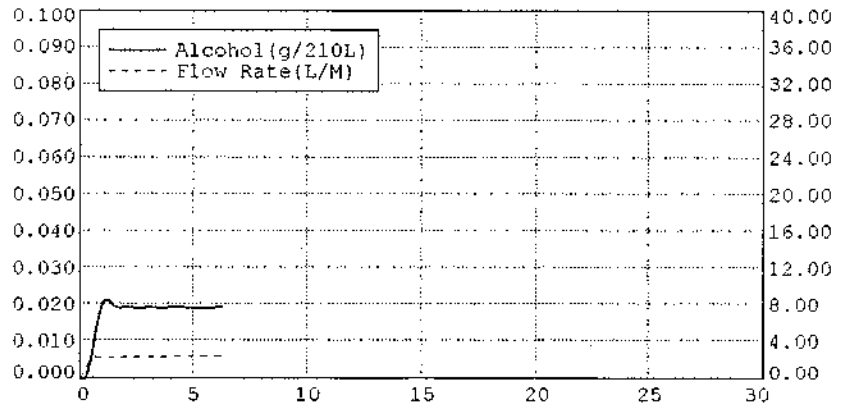
Date: 10/13/2015
 Time: 12:17:14

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.42: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 953 psi

BLANK TEST	0.000	12:42
INTERNAL STANDARD	VERIFIED	12:42
EXTERNAL STANDARD	0.020	12:42
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.020	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.021	12:44
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.020	12:45
BLANK TEST	0.000	12:46
EXTERNAL STANDARD	0.020	12:46
BLANK TEST	0.000	12:47

Average = 0.0202
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100373

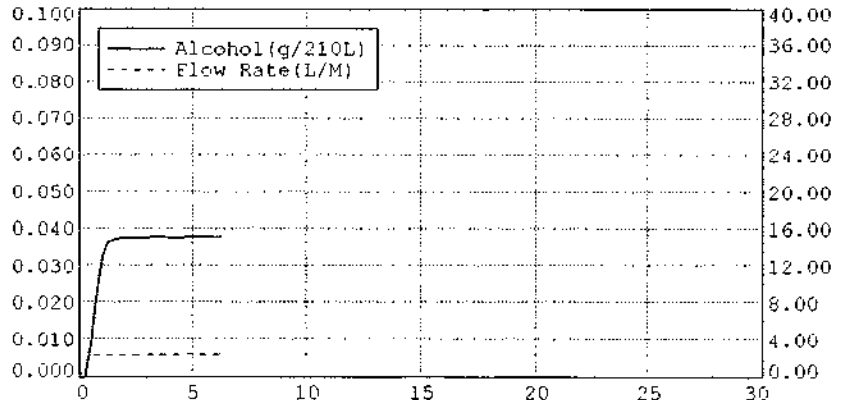
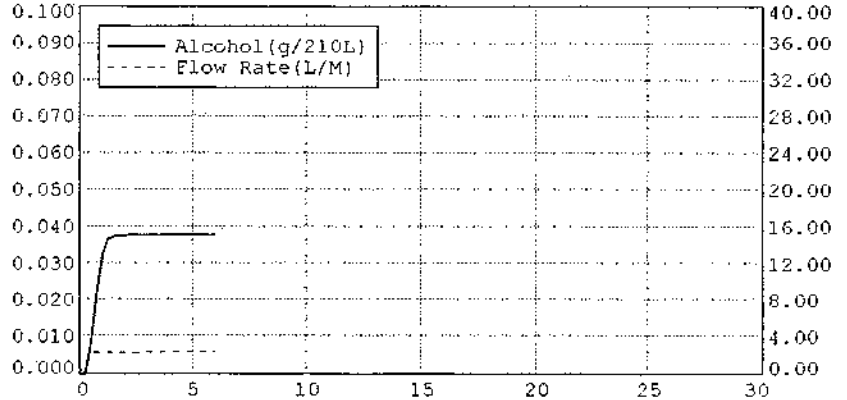
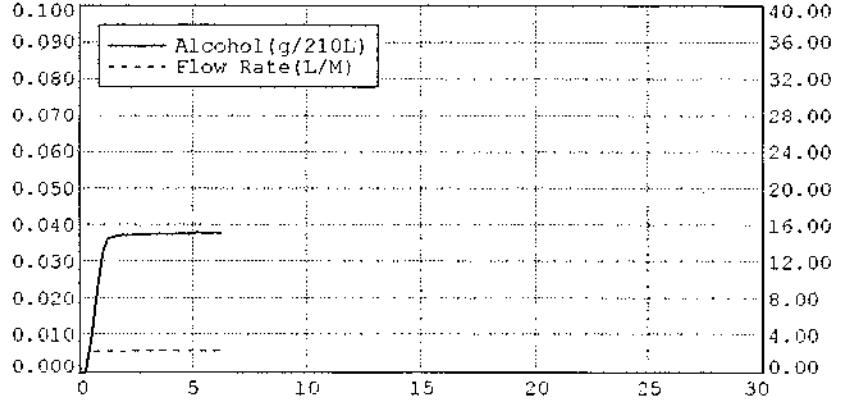
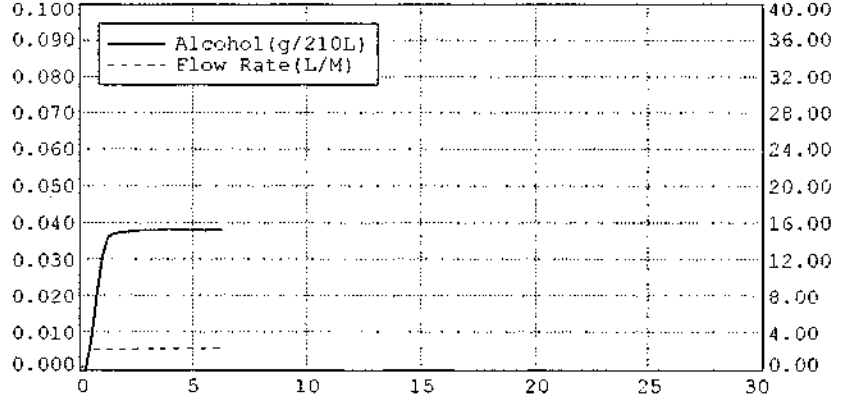
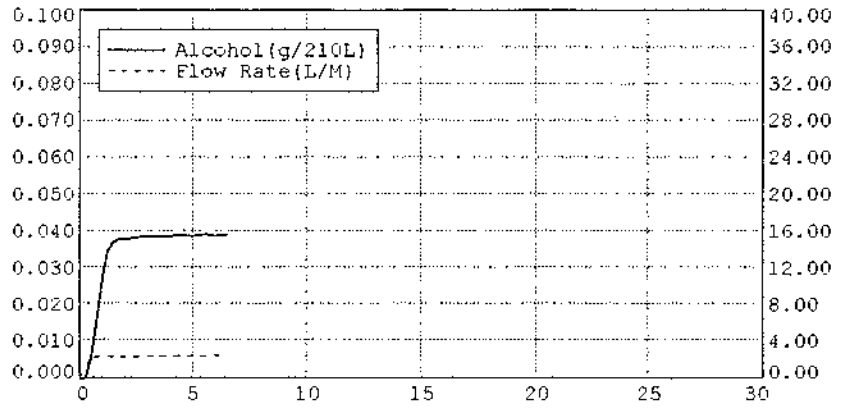
Date: 10/13/2015
 Time: 12:50:52

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.42: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1002 psi

BLANK TEST	0.000	12:52
INTERNAL STANDARD	VERIFIED	12:52
EXTERNAL STANDARD	0.039	12:52
BLANK TEST	0.000	12:53
EXTERNAL STANDARD	0.039	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.039	12:54
BLANK TEST	0.000	12:55
EXTERNAL STANDARD	0.039	12:55
BLANK TEST	0.000	12:56
EXTERNAL STANDARD	0.039	12:56
BLANK TEST	0.000	12:57

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100373

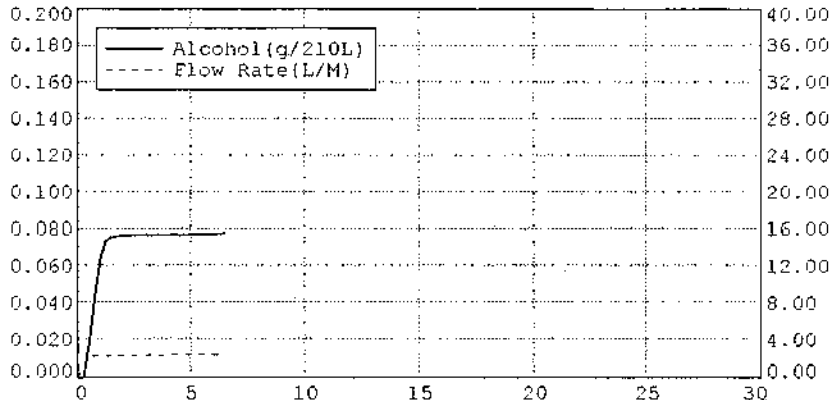
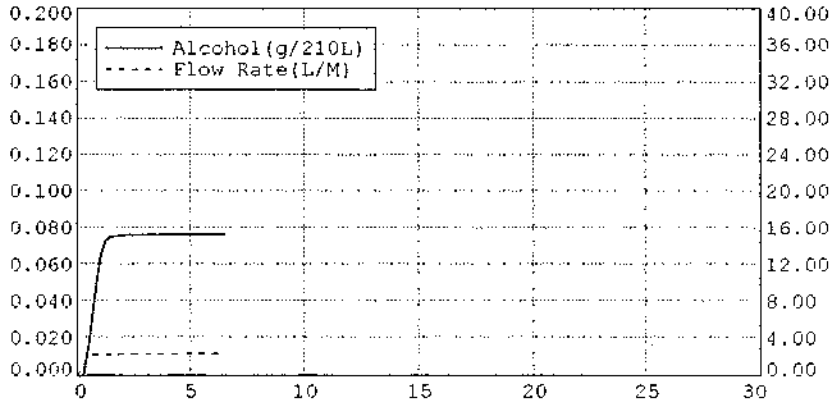
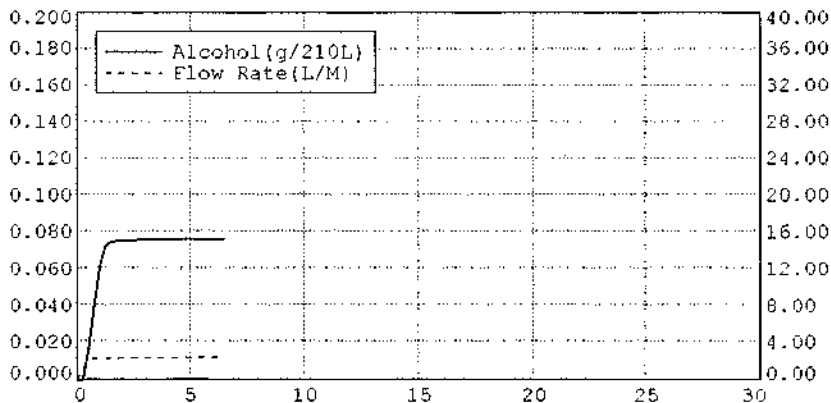
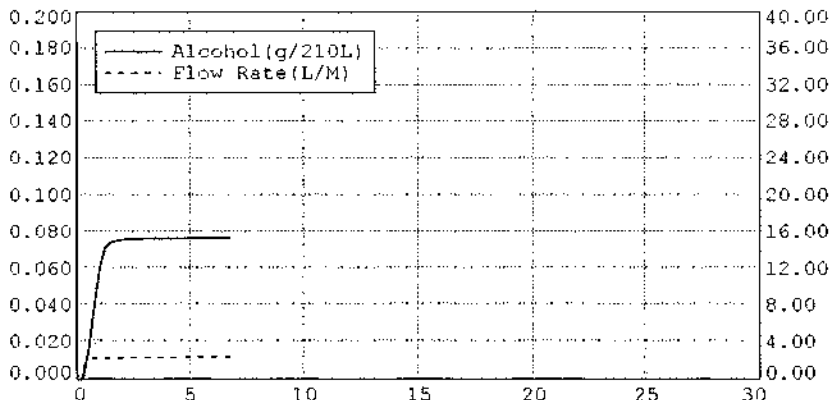
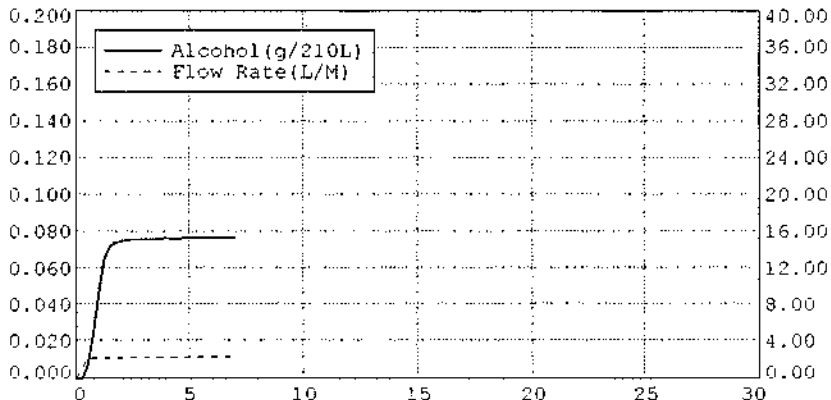
Date: 10/13/2015
 Time: 13:00:43

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.43: 0.079
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 817 psi

BLANK TEST	0.000	13:02
INTERNAL STANDARD	VERIFIED	13:02
EXTERNAL STANDARD	0.077	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.077	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.077	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.077	13:05
BLANK TEST	0.000	13:06
EXTERNAL STANDARD	0.078	13:06
BLANK TEST	0.000	13:07

Average = 0.0772
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100373

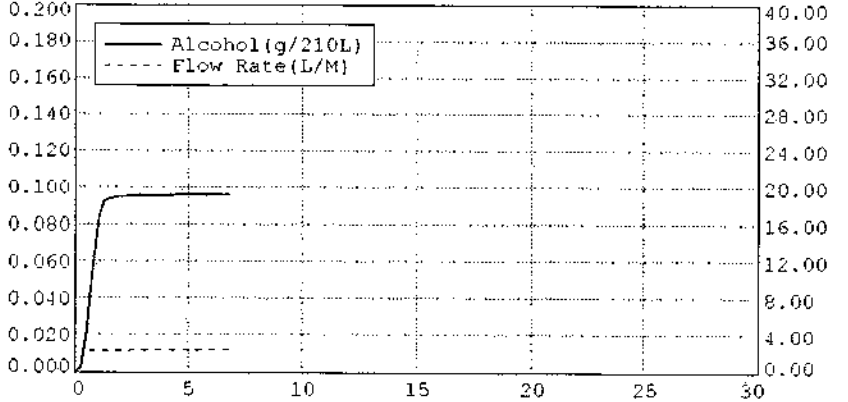
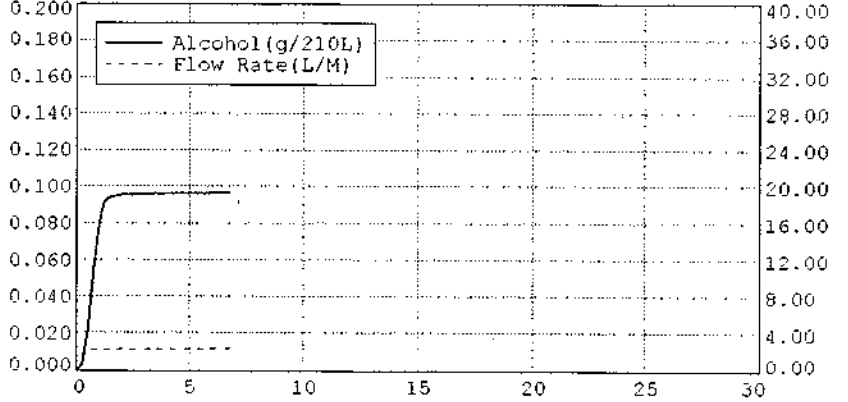
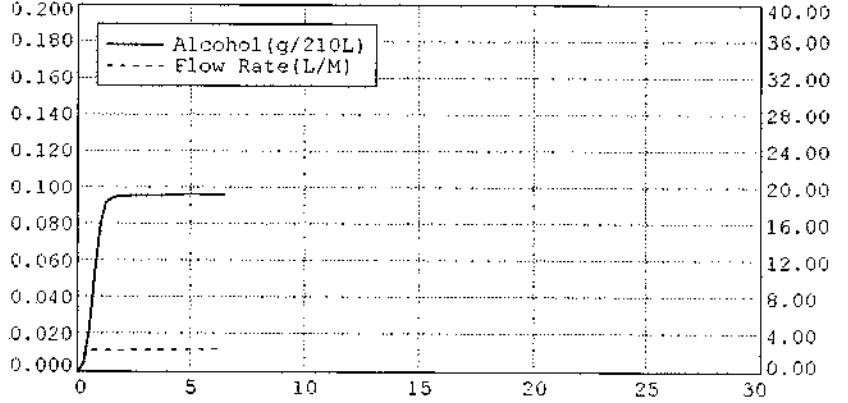
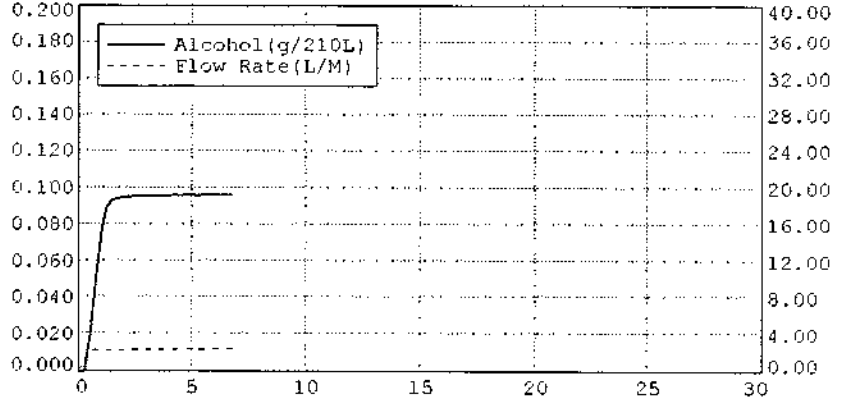
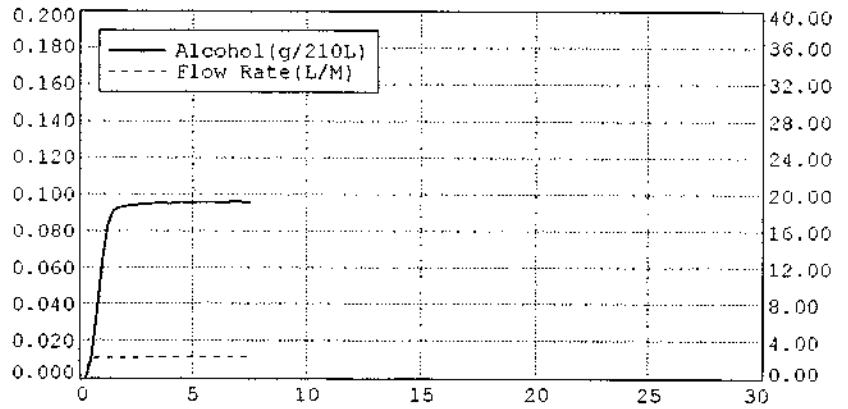
Date: 10/13/2015
Time: 13:22:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.43: 0.098
LOT #: 02915100A1
EXPIRATION: 03/05/2017
TANK PRESSURE: 986 psi

BLANK TEST	0.000	13:24
INTERNAL STANDARD	VERIFIED	13:24
EXTERNAL STANDARD	0.097	13:24
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.097	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.097	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.097	13:28
BLANK TEST	0.000	13:28
EXTERNAL STANDARD	0.097	13:29
BLANK TEST	0.000	13:30

Average = 0.0970
Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

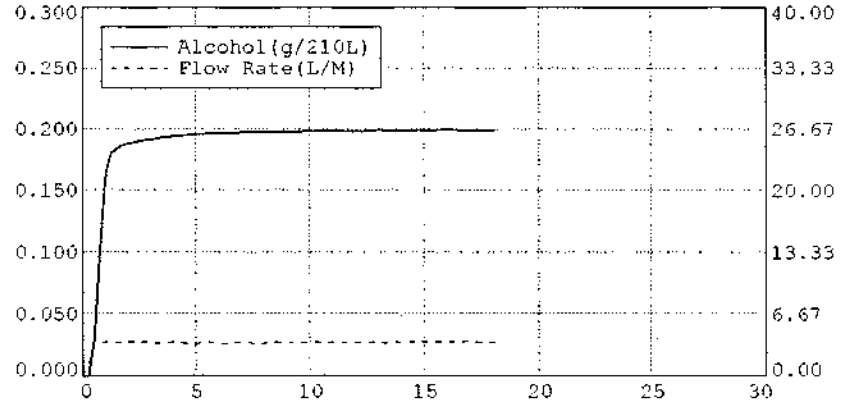
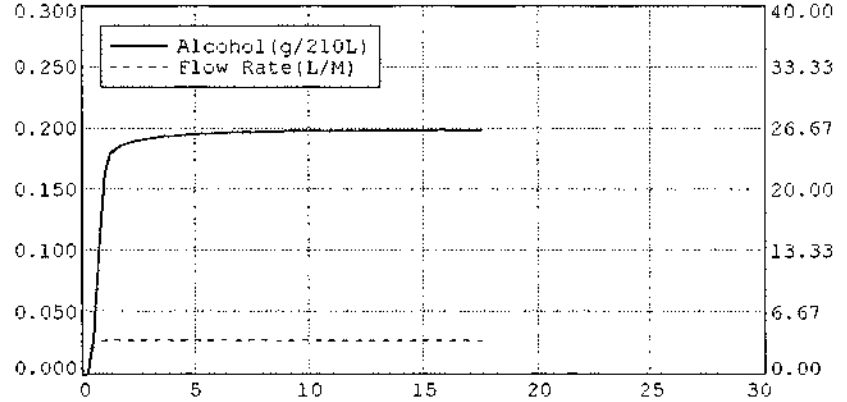
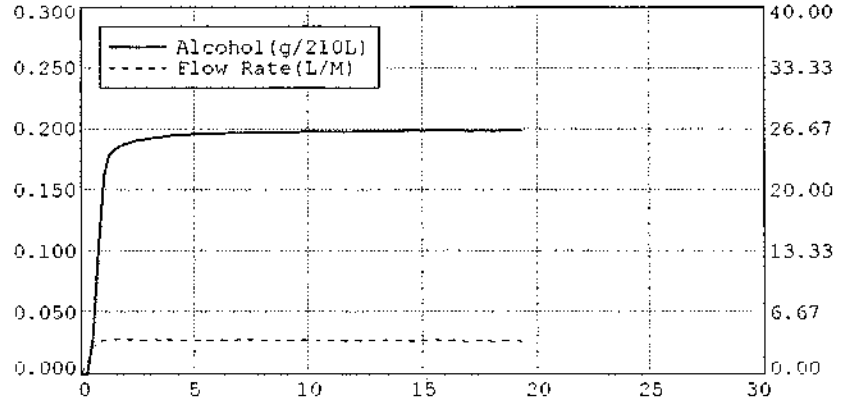
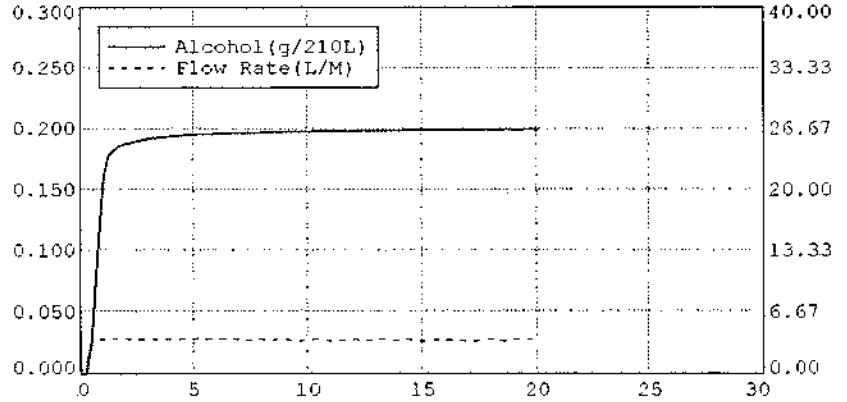
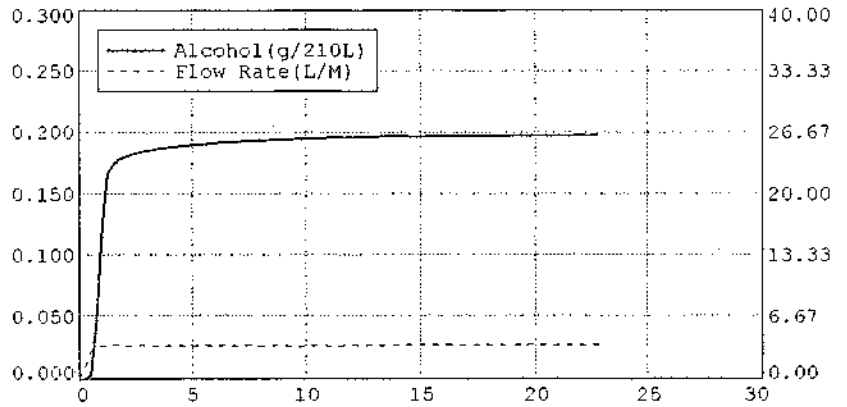
Alaska Department of Public Safety
 DATAMASTER dmt: 100373

Date: 10/13/2015
 Time: 13:32:30

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

BLANK TEST	0.000	13:34
INTERNAL STANDARD	VERIFIED	13:34
EXTERNAL STANDARD	0.199	13:34
BLANK TEST	0.000	13:35
EXTERNAL STANDARD	0.200	13:36
BLANK TEST	0.000	13:37
EXTERNAL STANDARD	0.200	13:37
BLANK TEST	0.000	13:38
EXTERNAL STANDARD	0.200	13:38
BLANK TEST	0.000	13:39
EXTERNAL STANDARD	0.200	13:40
BLANK TEST	0.000	13:41

Average = 0.1998
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

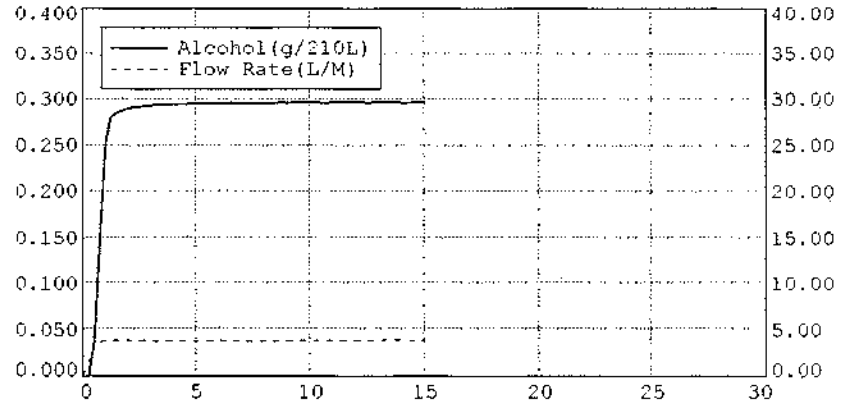
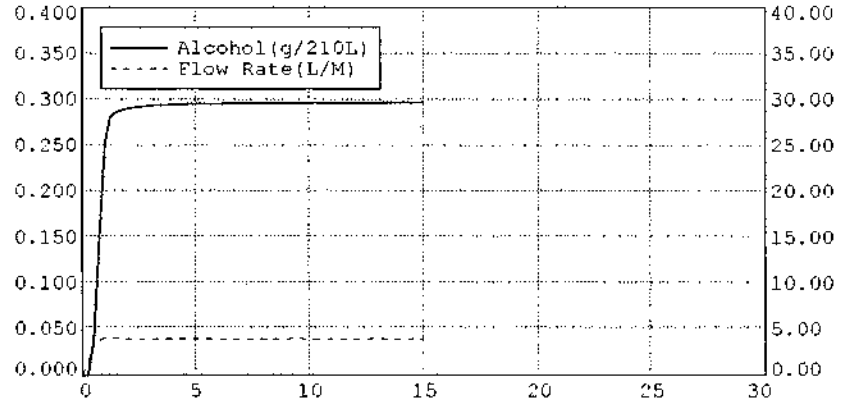
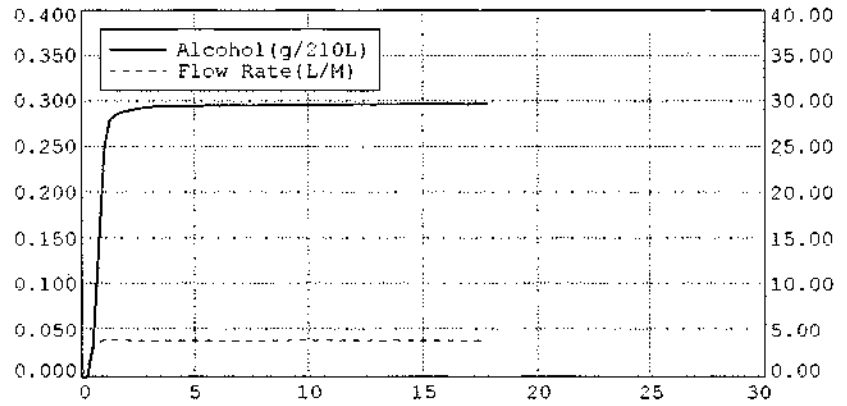
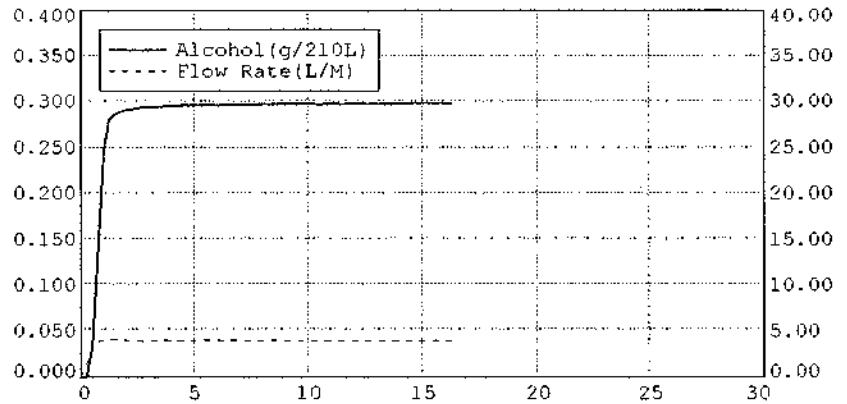
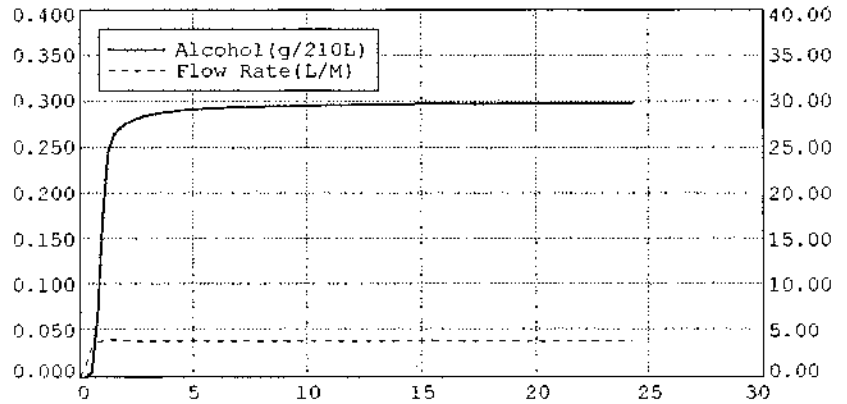
Alaska Department of Public Safety
 DATAMASTER dmt: 100373

Date: 10/13/2015
 Time: 13:42:32

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

BLANK TEST	0.000	13:43
INTERNAL STANDARD	VERIFIED	13:43
EXTERNAL STANDARD	0.298	13:44
BLANK TEST	0.000	13:45
EXTERNAL STANDARD	0.297	13:45
BLANK TEST	0.000	13:46
EXTERNAL STANDARD	0.297	13:47
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.297	13:48
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.296	13:49
BLANK TEST	0.000	13:50

Average = 0.2970
 Std Dev = 0.0007



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100373

Date: 10/13/2015
Time: 13:54:37

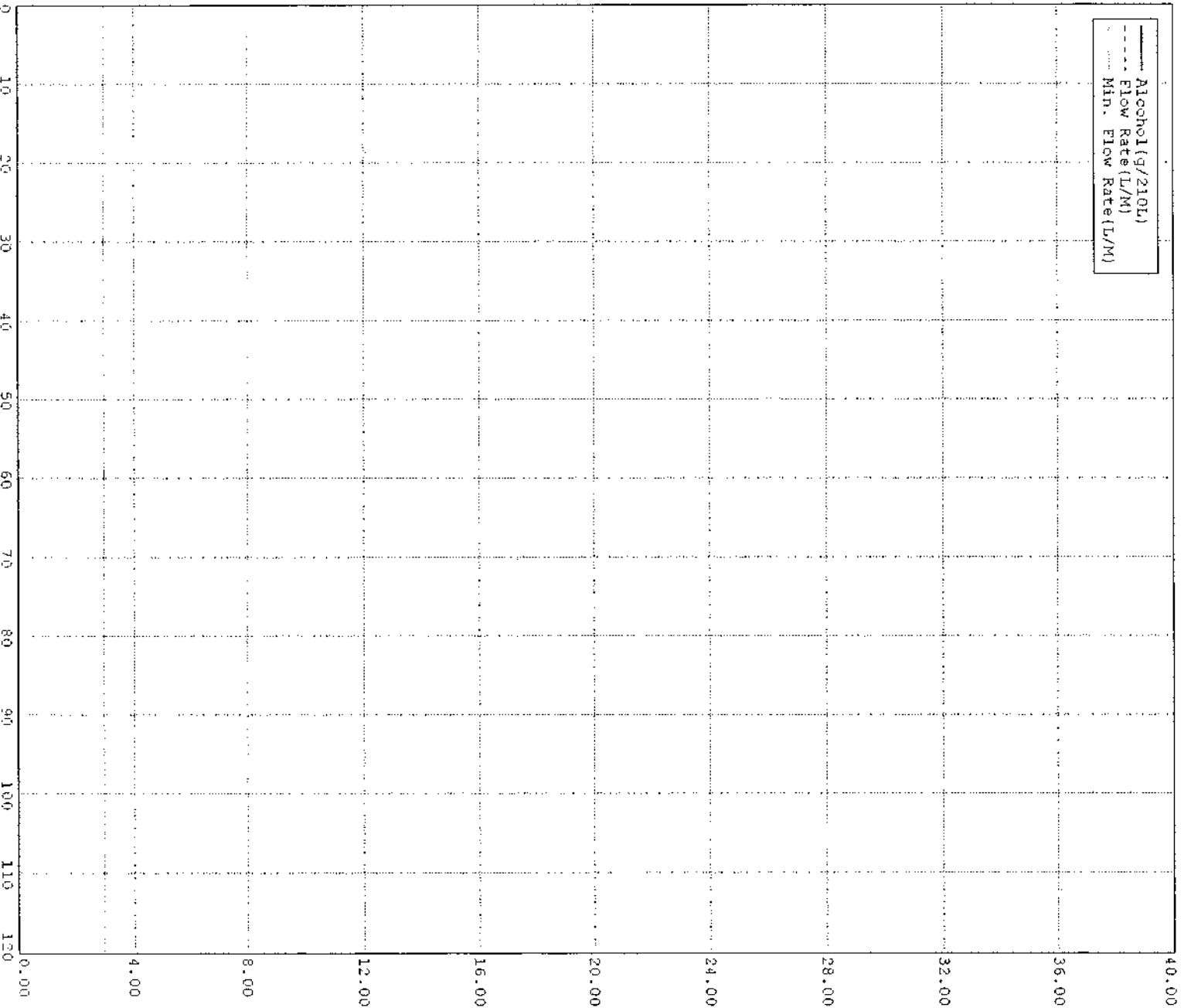
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	13:55
BLANK TEST	0.000	13:55
INTERNAL STANDARD	VERIFIED	13:55
EXTERNAL STANDARD	0.077	13:56
BLANK TEST	0.000	13:57
SUBJECT SAMPLE	INCOMPLETE	13:59



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100373

Date: 10/13/2015
Time: 14:03:16

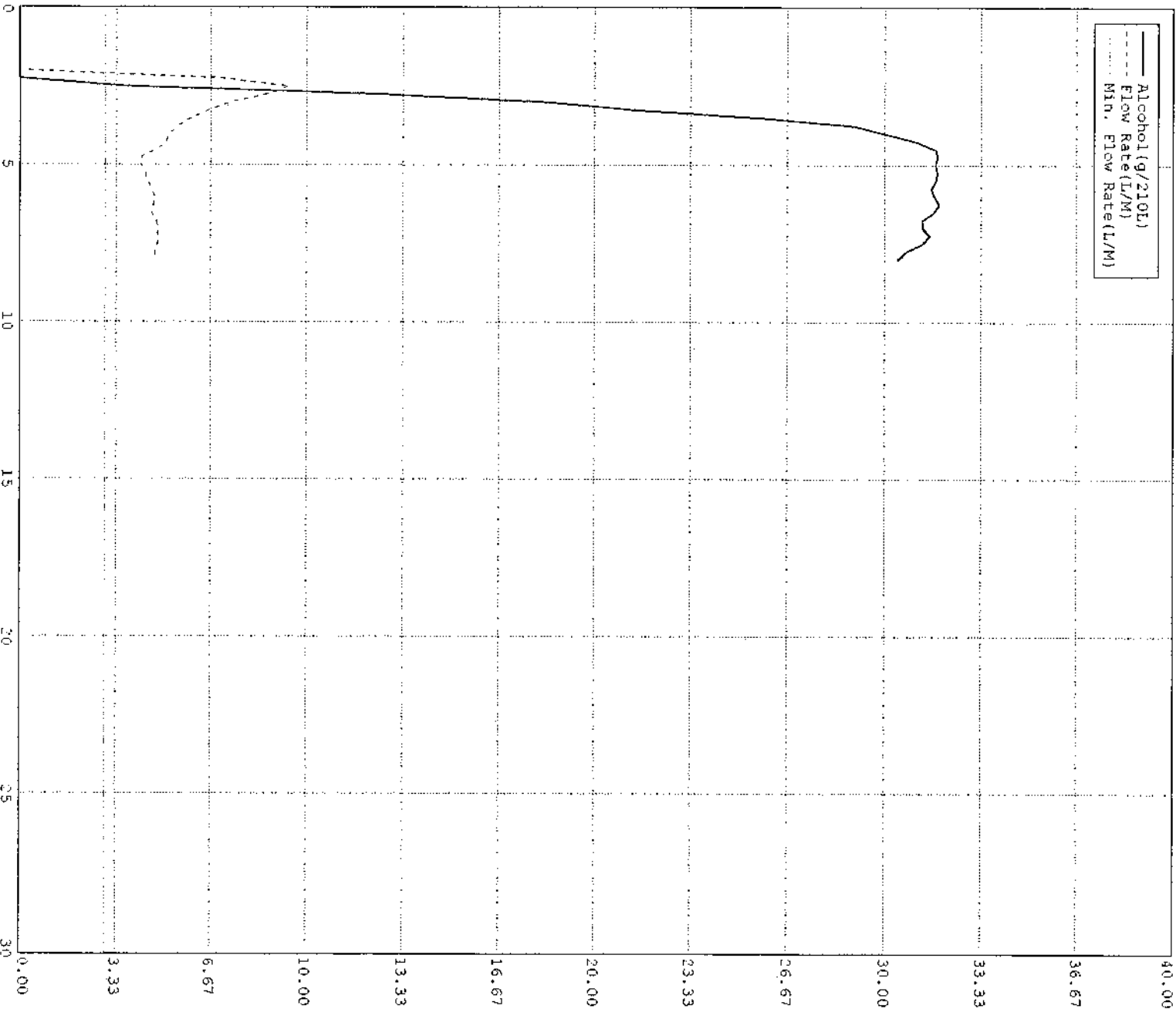
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MOUTH ETCH
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 #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	14:05
BLANK TEST	0.000	14:05
INTERNAL STANDARD	VERIFIED	14:05
EXTERNAL STANDARD	0.077	14:05
BLANK TEST	0.000	14:06
SUBJECT SAMPLE	INVALID	14:06



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100373

Date: 10/13/2015
Time: 14:11:09

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE ACETONE
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.46: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

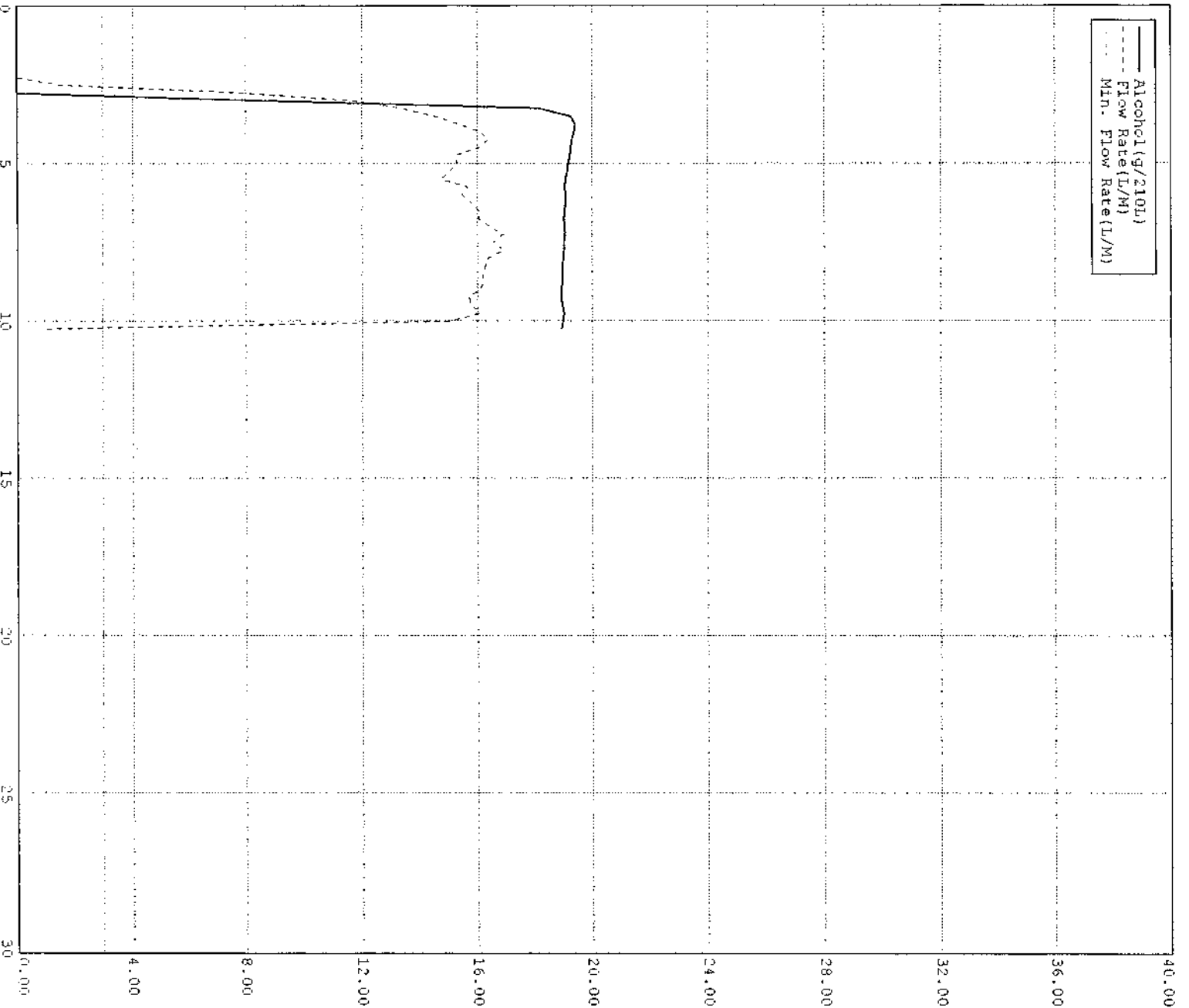
TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	14:17
BLANK TEST	0.000	14:17
INTERNAL STANDARD	VERIFIED	14:17
Xq = 0.083 (2.14%)		
EXTERNAL STANDARD	0.077	14:18
X[1] = 0.0773 (-0.0007)	(0.0033)	
BLANK TEST	0.000	14:19
SUBJECT SAMPLE	XXX	14:19
X[1] = 0.0946 (-0.0117)	(0.0012)	

Interference Detected

Filter 2 Average = -0.0008

Filter 3 Average = 0.0031

CTF 10/13/15



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100373

Date: 10/13/2015
Time: 14:21:27

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

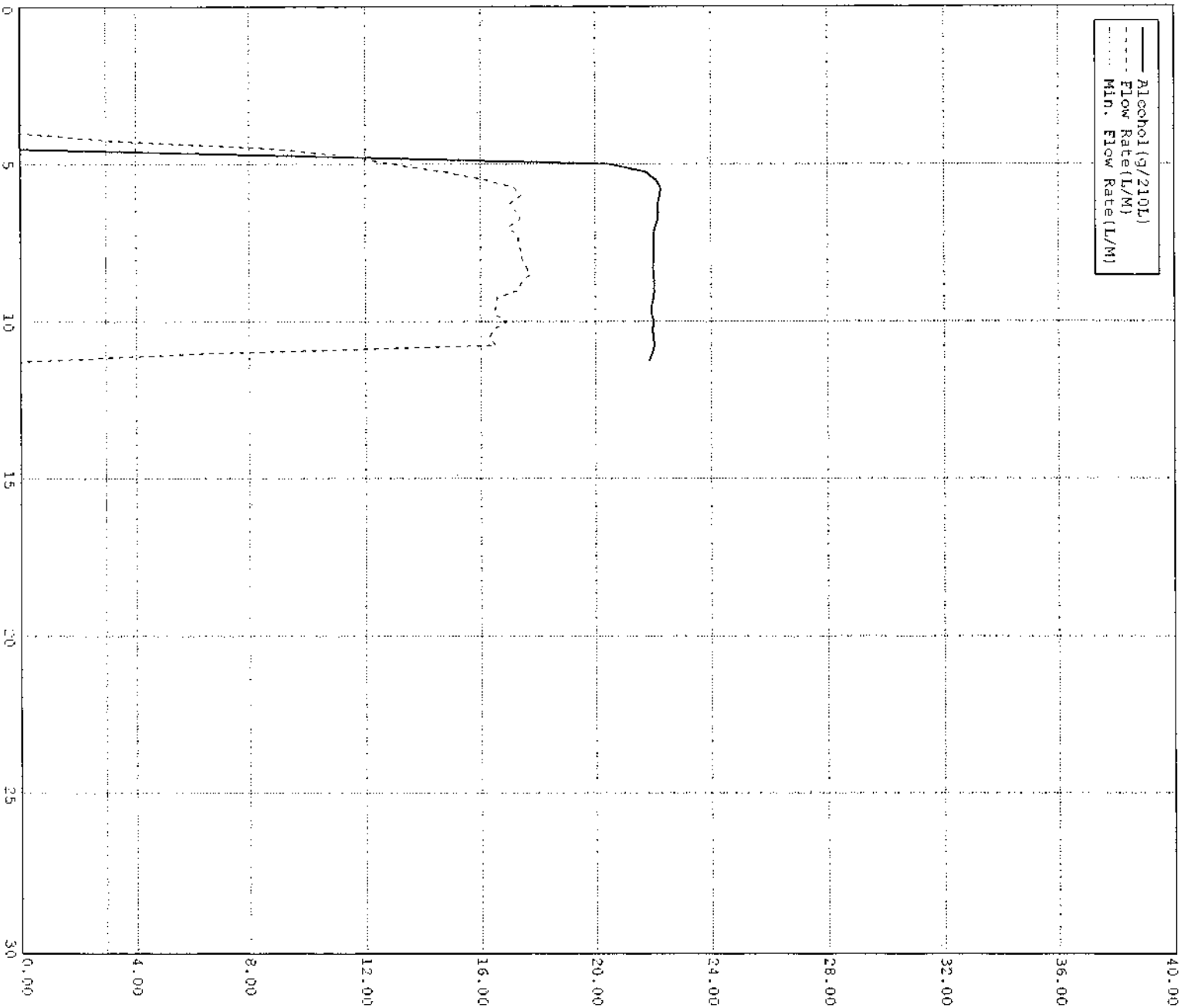
OPERATOR NAME:
INTERFERENCE IPA
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.46: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	14:25
BLANK TEST	0.000	14:25
INTERNAL STANDARD	VERIFIED	14:25
Xq = 0.083 (2.35%)	0.078	14:25
EXTERNAL STANDARD	X[1] = 0.0776 (-0.0011)	(0.0032)
BLANK TEST	0.000	14:26
SUBJECT SAMPLE	X[1] = 0.1095 (-0.0209)	(0.0017)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100373

Date: 10/13/2015
Time: 14:29:06

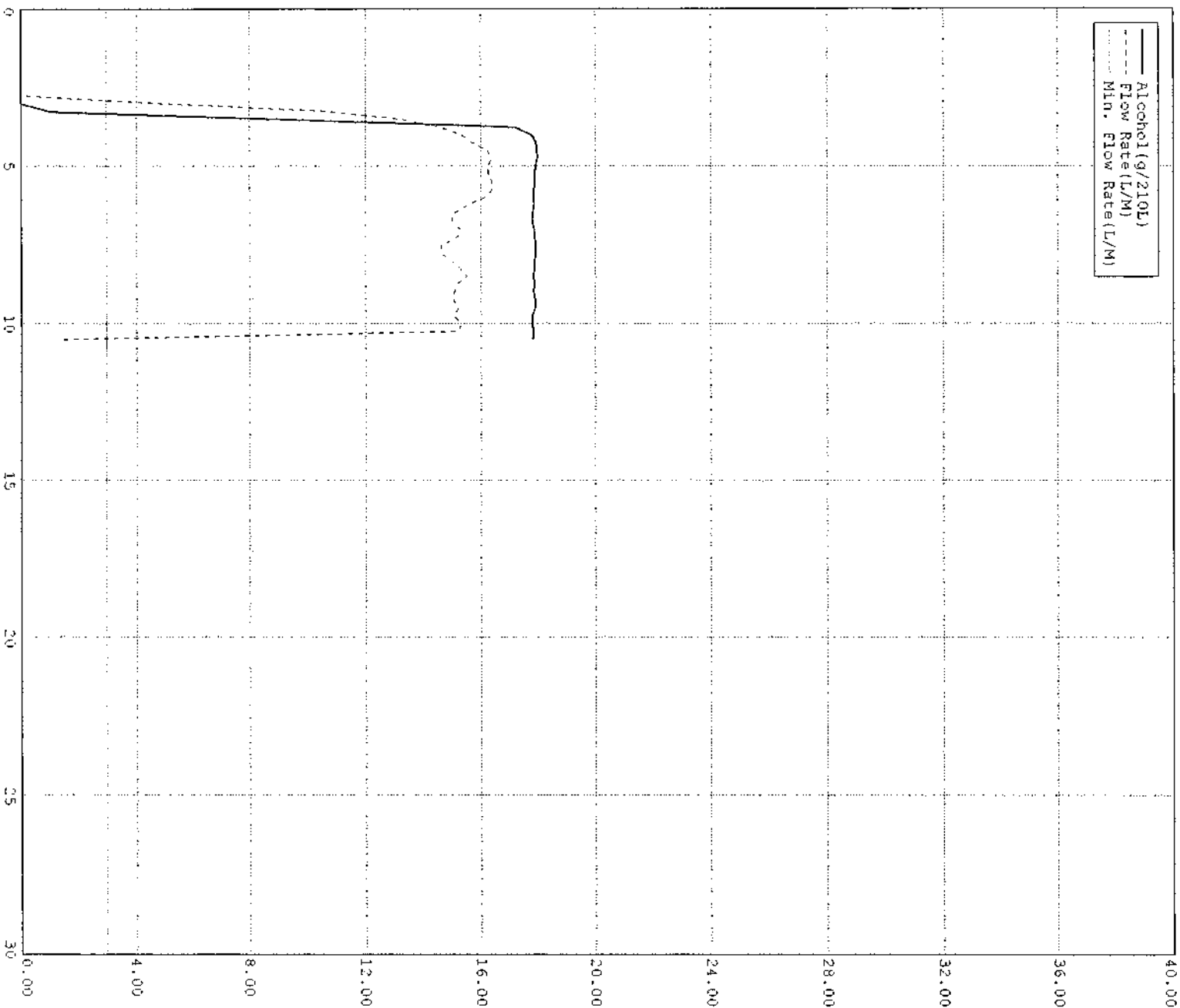
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	14:32		
BLANK TEST	0.000	14:32		
INTERNAL STANDARD	VERIFIED	14:33		
Xq = 0.083 (2.56%)	0.077	14:33		
EXTERNAL STANDARD	X[1] = 0.0773 (-0.0008)	(0.0032)	0.000	14:34
BLANK TEST	0.000	14:34		
SUBJECT SAMPLE (Vol=1.86L)	0.089	14:34		
X[1] = 0.0891 (-0.0003)	(0.0016)	0.000	14:35	
BLANK TEST	0.000	14:35		
EXTERNAL STANDARD	X[1] = 0.0767 (-0.0006)	(0.0028)	0.000	14:36
BLANK TEST	0.000	14:36		



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100373

Date: 10/13/2015
Time: 15:00:38

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

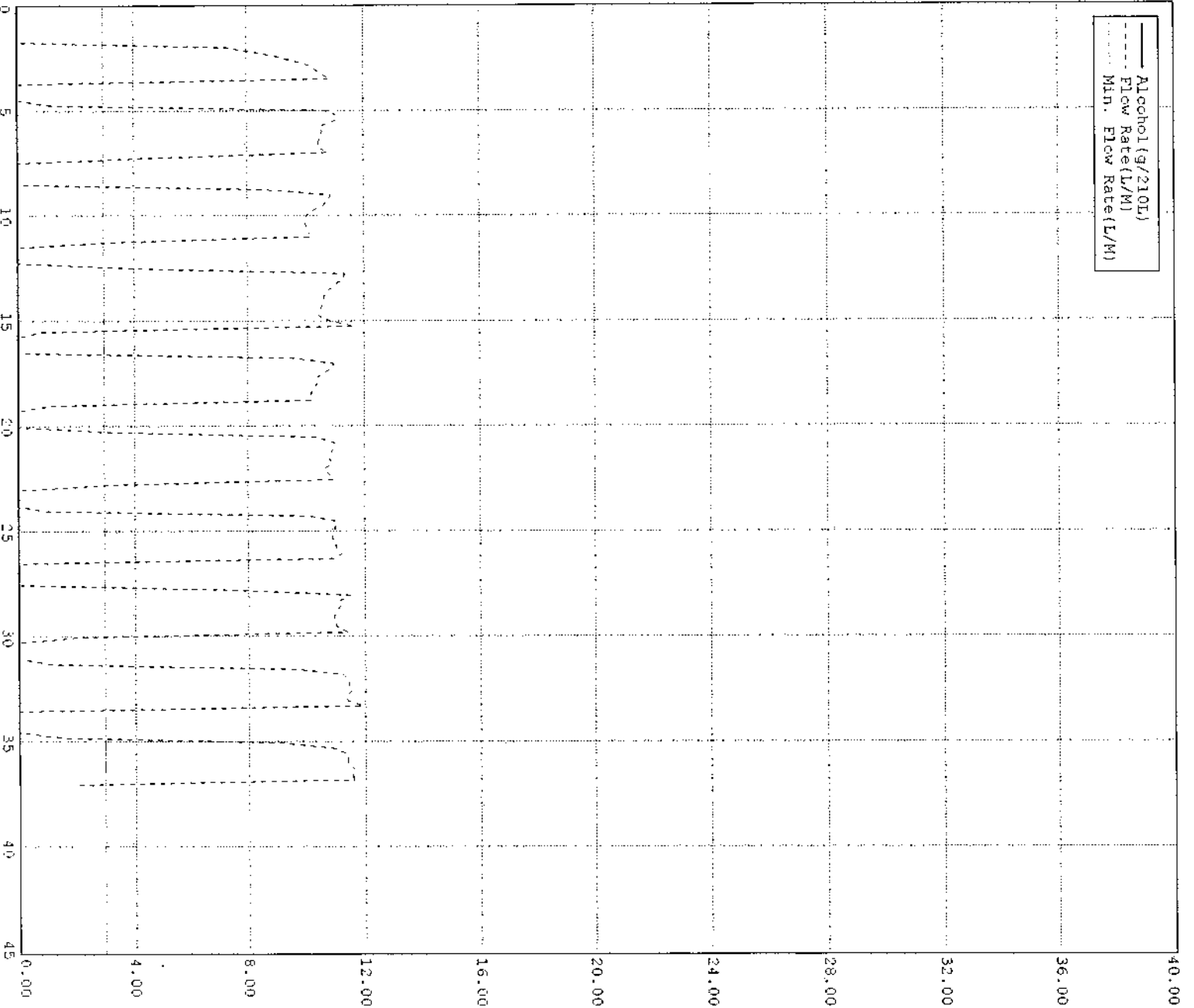
OPERATOR NAME:
EXCEEDED ATTEMPTS
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.47: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	15:06
BLANK TEST	0.000	15:06
INTERNAL STANDARD	VERIFIED	15:06
EXTERNAL STANDARD	0.078	15:07
BLANK TEST	0.000	15:08
SUBJECT SAMPLE	XXX	15:08

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100373

Date: 10/13/2015
Time: 15:12:53

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

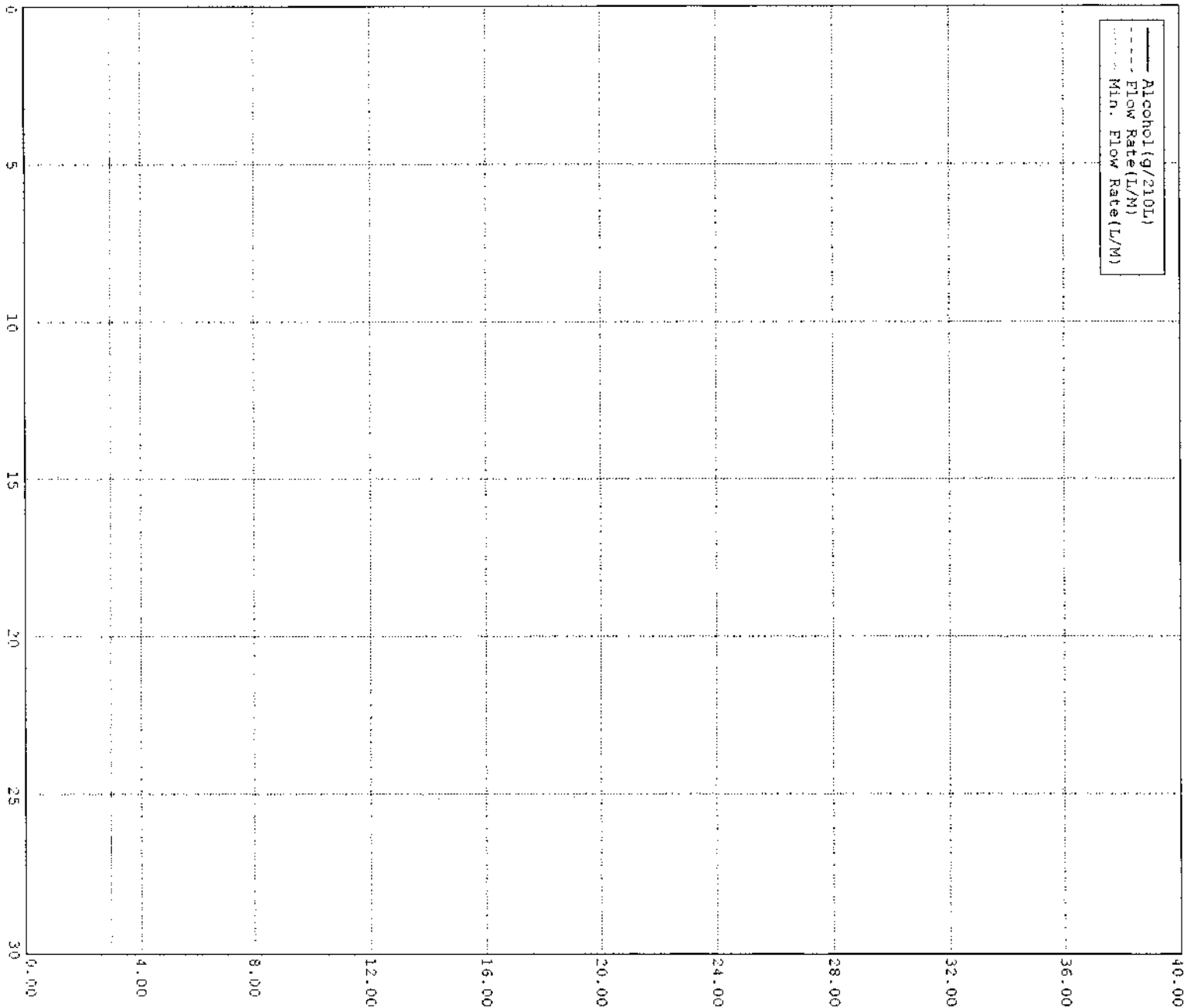
OPERATOR NAME:
RFI XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.47: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK
BLANK TEST PASSED 15:13
INTERNAL STANDARD VERIFIED 15:14
EXTERNAL STANDARD 0.078 15:14
BLANK TEST 0.000 15:15

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100373

Date: 10/13/2015
Time: 15:29:29

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 #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	15:32
BLANK TEST	0.000	15:32
INTERNAL STANDARD	VERIFIED	15:32
EXTERNAL STANDARD	0.078	15:32
BLANK TEST	0.000	15:33
SUBJECT SAMPLE (Vol=2.49L)	0.000	15:33
BLANK TEST	0.000	15:34
EXTERNAL STANDARD	0.078	15:35
BLANK TEST	0.000	15:35

