

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 100695 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 1.6 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

9. Verification of Calibration

7. Reset Options

10. Non-Drinking Subject Test (attached)

8. Clear Memory

11. Upload

13. Remove tank prior to shut down

End Date 8/27/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 08/26/2015
Time: 14:01:33

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.76 V PASSED
(0.95 V - 2.23 V)
Cooler Voltage = 1.66 V PASSED
(0.95 V - 2.21 V)
Bias Voltage = 79 V PASSED
(49 V - 113 V)
Chopper Freq = 564 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.4 in

PUMP INFO

Flow Rate = 4.103 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.001 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 = 0.111 1.45% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100695

Date: 08/26/2015
Time: 3:37 PM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 47.8°C

Current Barometer 29.7 in
Volume (Ltr) 1.45

Settings

Lamp: 1.73 V
Bias: 79 V
Cooler: 1.71 V
Chopper: 564 Hz

Voltages (V)

Flow: 1.03 V
Detector: 0.002 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 11/03/2011
Time: 11:06:42

Ca = 0.1000
CAL = 0.983513 0.800 <= CAL < 1.200
b1 = 0.0004 0.0000 <= b1 < 0.0040
b2 = 0.0038 0.0010 <= b2 < 0.0100
b3 = 0.0001 0.0000 <= b3 < 0.0040
Xq = 0.1092 0.0500 <= Xq < 0.2000
a21 = 1.156617 1.050 <= a21 < 1.300
a31 = 0.538073 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

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

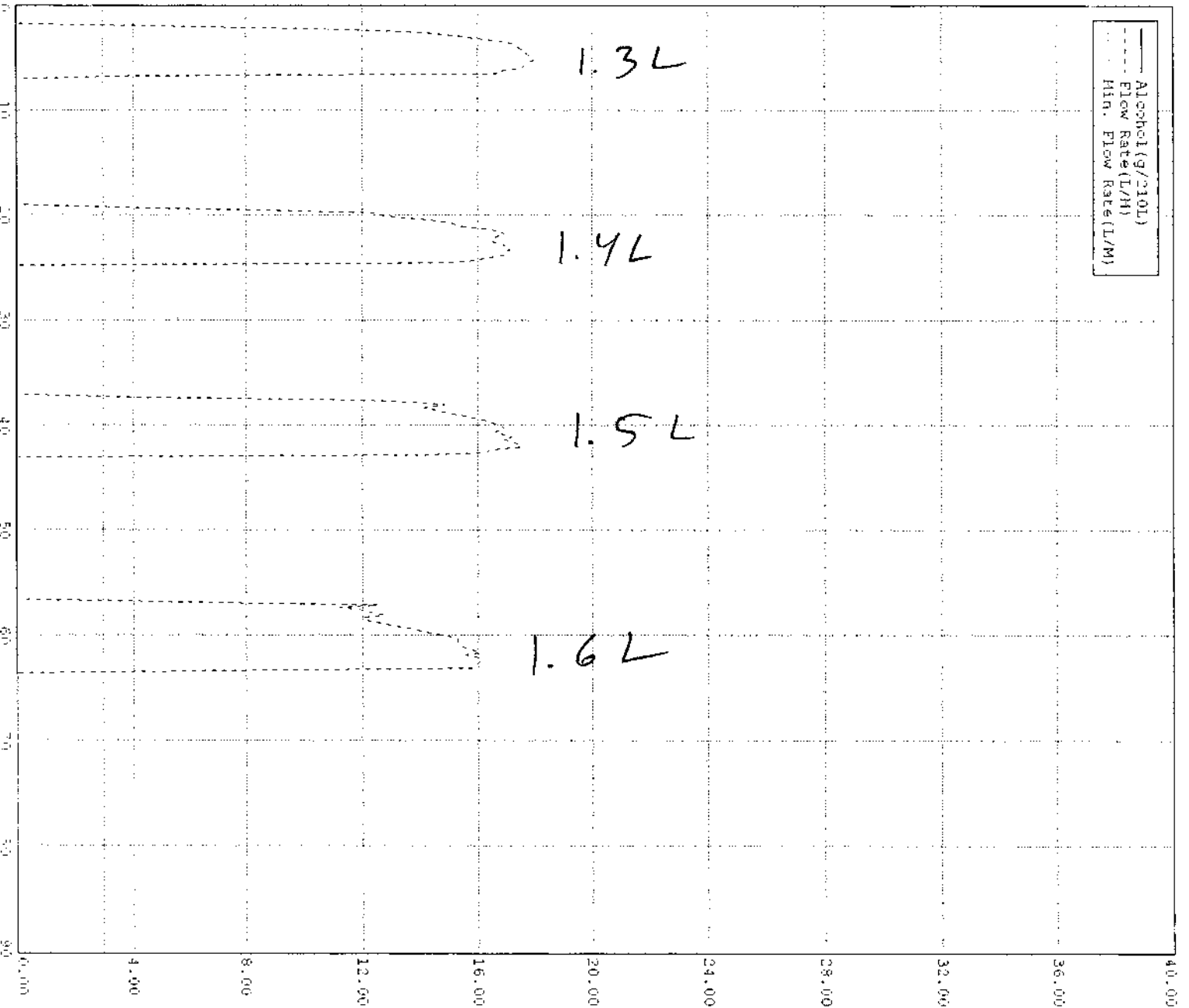
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MINIMUM VOLUME
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.68: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:54
BLANK TEST	0.000	15:55
INTERNAL STANDARD	VERIFIED	15:55
EXTERNAL STANDARD	0.079	15:55
BLANK TEST	0.000	15:56
SUBJECT SAMPLE (Vol=1.54L)	0.000	15:57
BLANK TEST	0.000	15:58
EXTERNAL STANDARD	0.079	15:58
BLANK TEST	0.000	15:59



LINEARITY CHECK

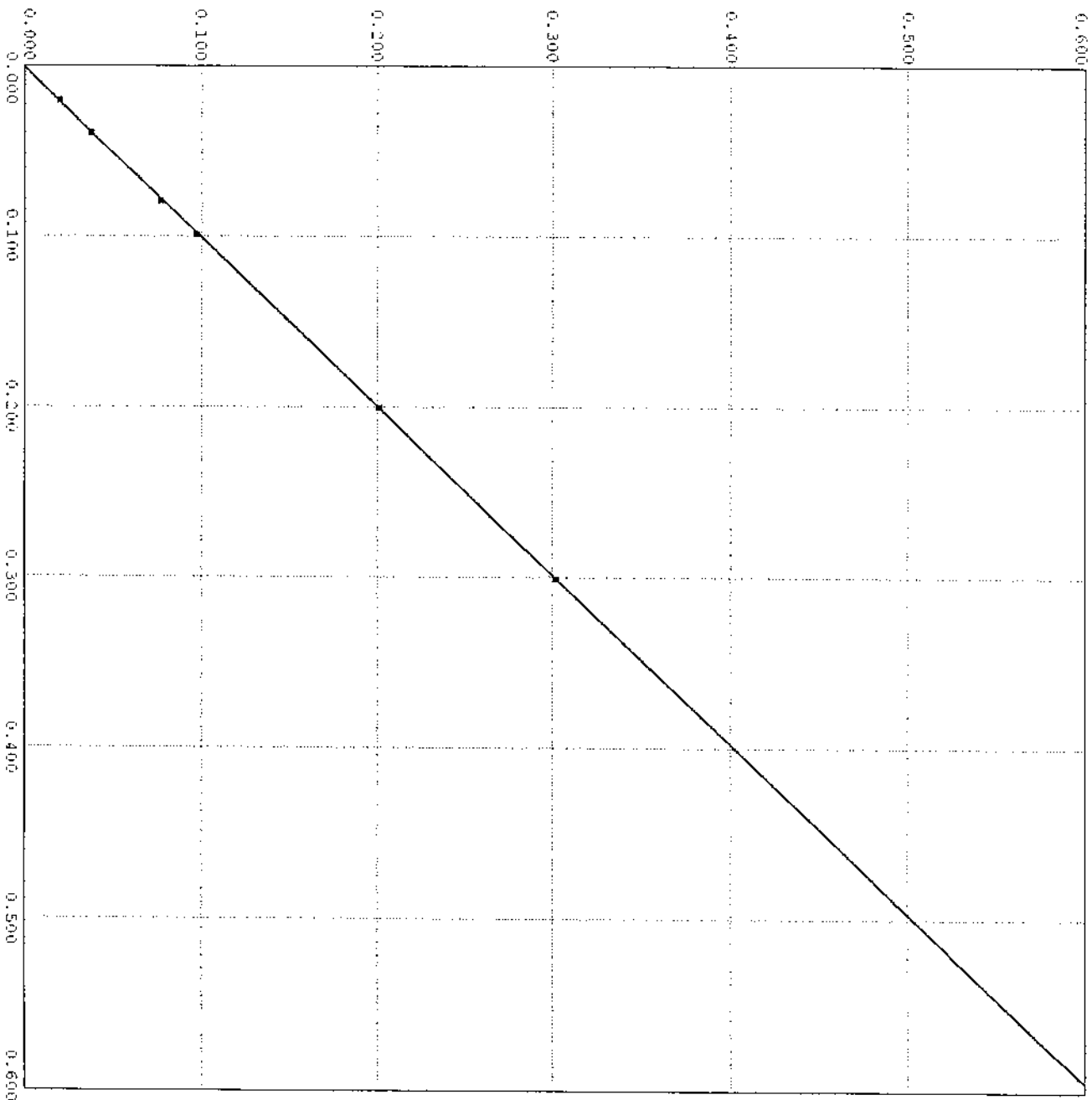
Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 08/27/2015
Time: 10:03:07

SUPERVISOR NAME:
CHARLES FOSTER
OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.020	0.0206	0.0005
0.039	0.0390	0.0000
0.079	0.0780	0.0000
0.099	0.0980	0.0000
0.200	0.2020	0.0000
0.300	0.3026	0.0009

SLOPE = 1.010811
R² = 0.999920



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

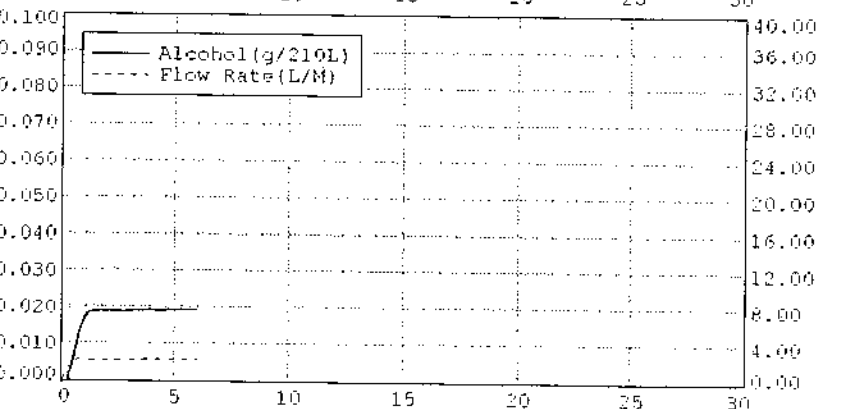
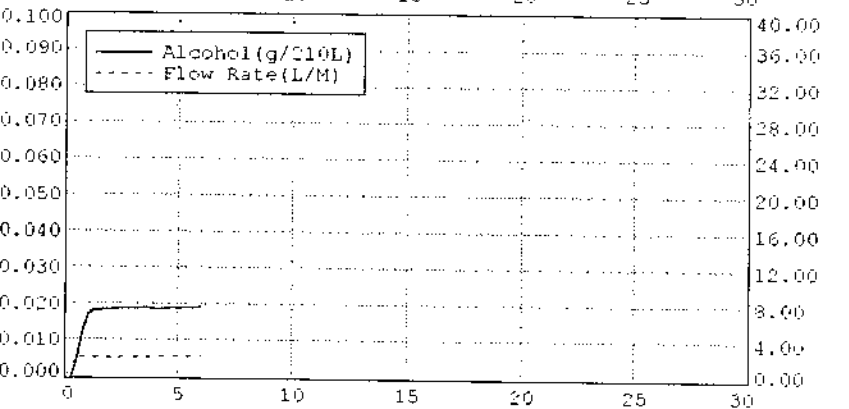
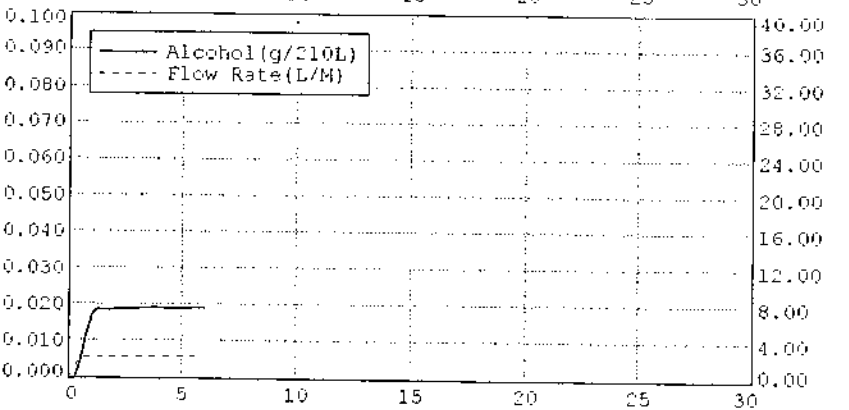
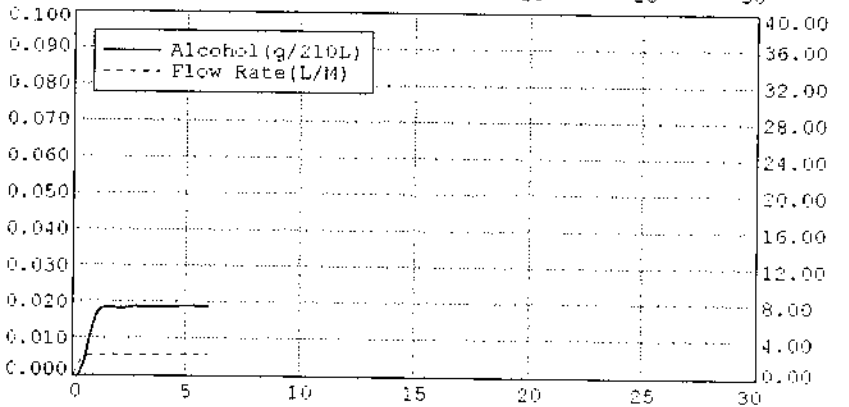
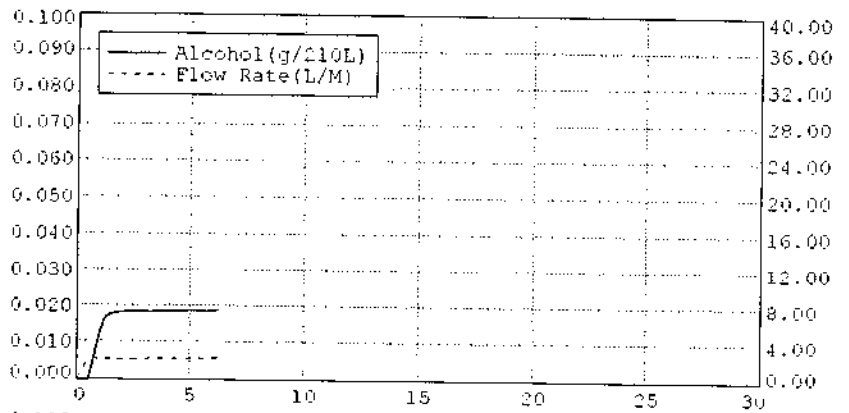
Date: 08/27/2015
 Time: 10:03:09

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.51: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 478 psi

BLANK TEST	0.000	10:04
INTERNAL STANDARD	VERIFIED	10:05
EXTERNAL STANDARD	0.020	10:05
BLANK TEST	0.000	10:06
EXTERNAL STANDARD	0.020	10:06
BLANK TEST	0.000	10:07
EXTERNAL STANDARD	0.021	10:07
BLANK TEST	0.000	10:08
EXTERNAL STANDARD	0.021	10:08
BLANK TEST	0.000	10:09
EXTERNAL STANDARD	0.021	10:09
BLANK TEST	0.000	10:10

Average = 0.0206
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

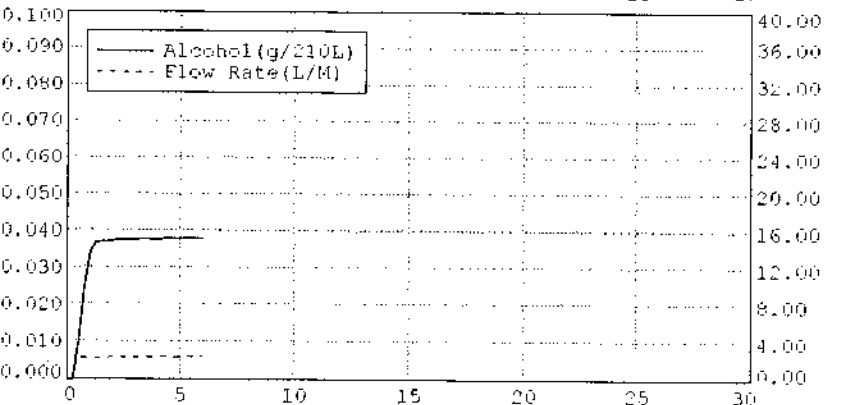
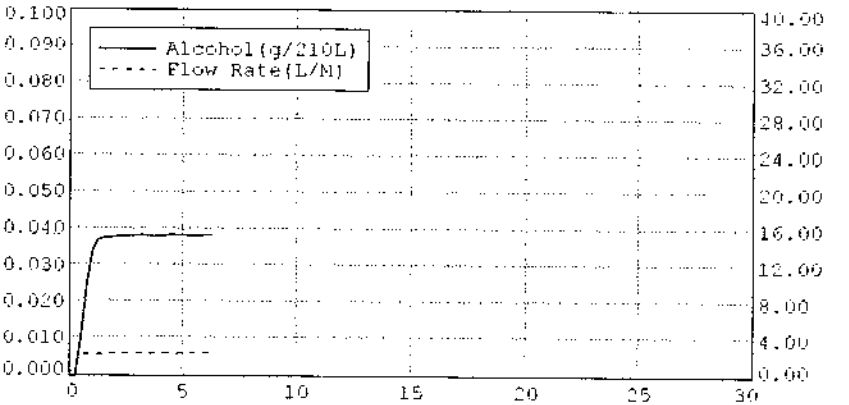
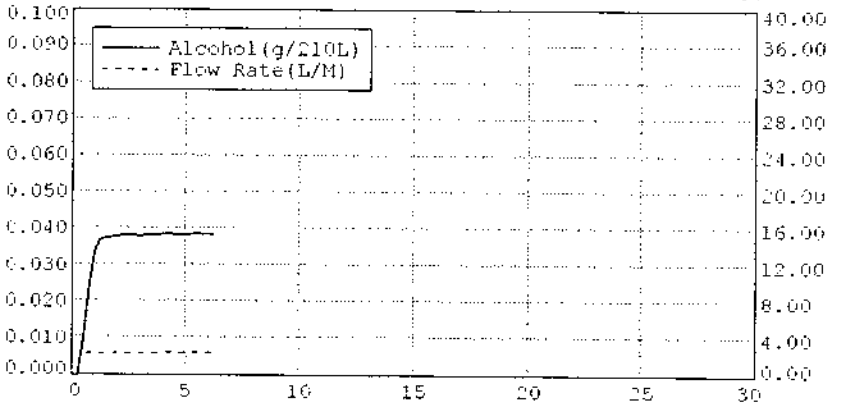
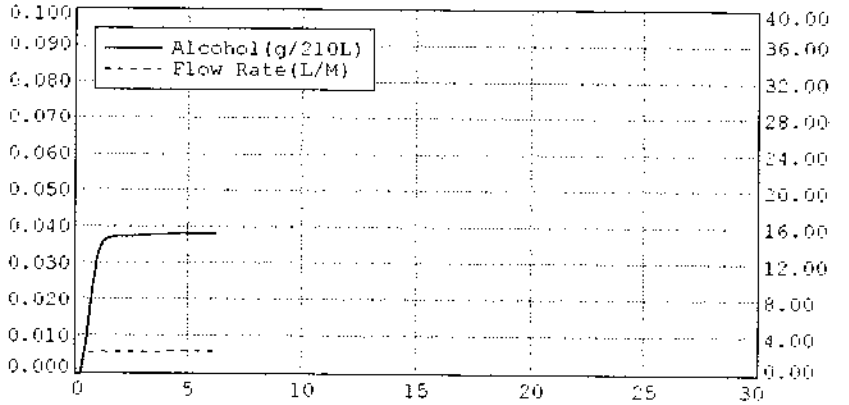
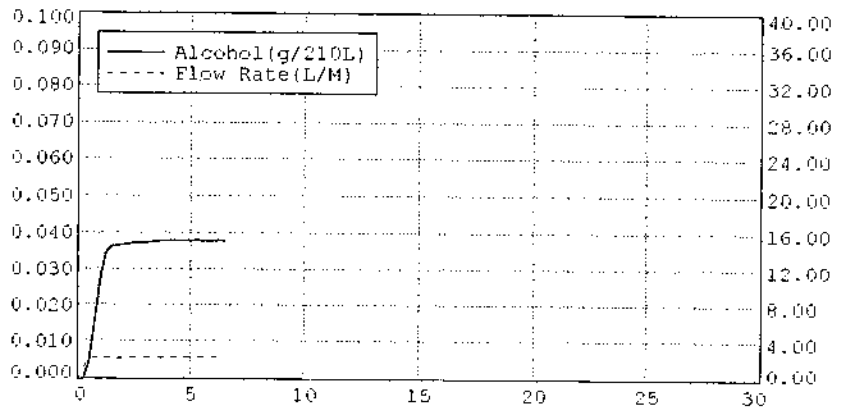
Date: 08/27/2015
 Time: 10:11:23

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.51: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 577 psi

BLANK TEST	0.000	10:12
INTERNAL STANDARD	VERIFIED	10:12
EXTERNAL STANDARD	0.039	10:13
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.039	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.039	10:15
BLANK TEST	0.000	10:16
EXTERNAL STANDARD	0.039	10:16
BLANK TEST	0.000	10:17
EXTERNAL STANDARD	0.039	10:17
BLANK TEST	0.000	10:18

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

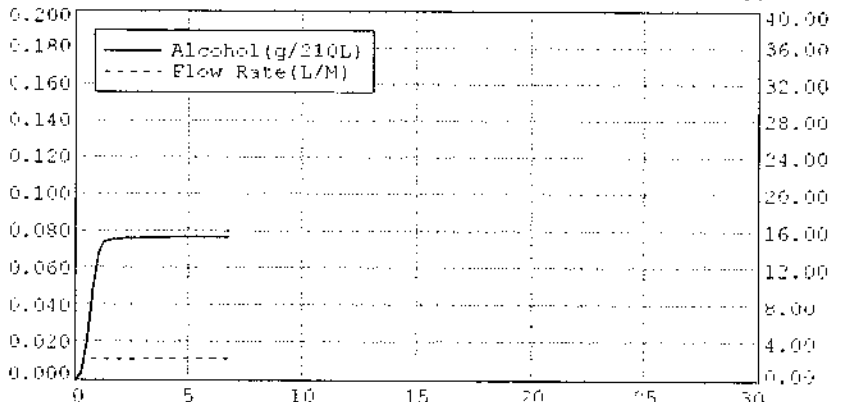
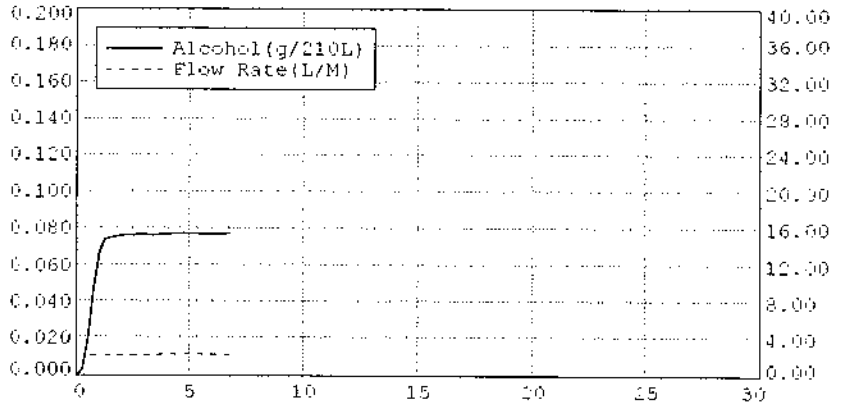
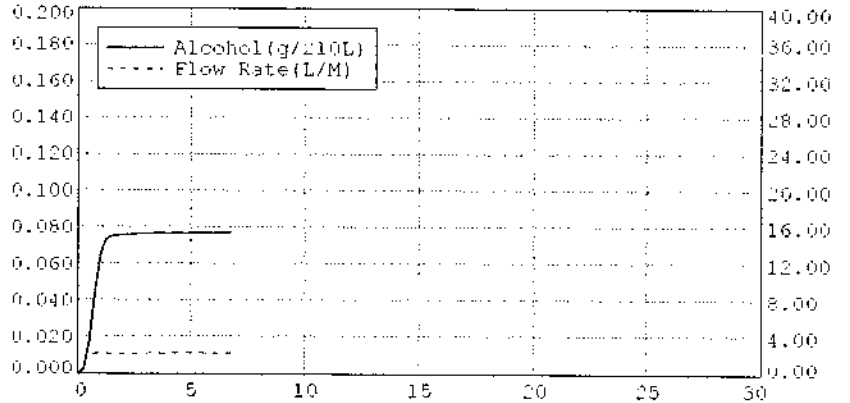
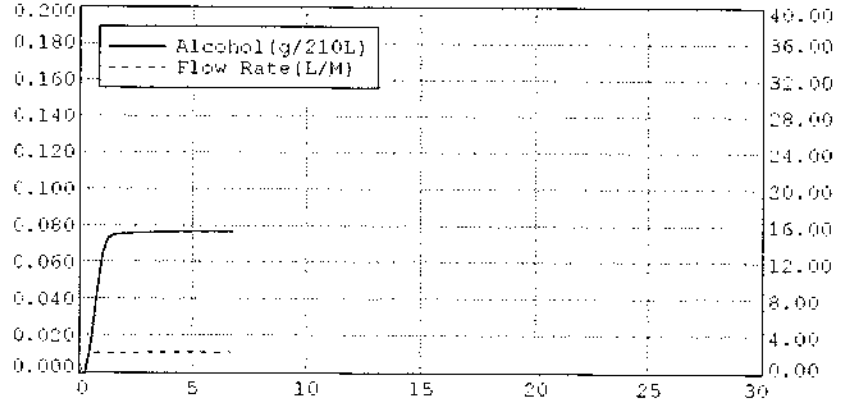
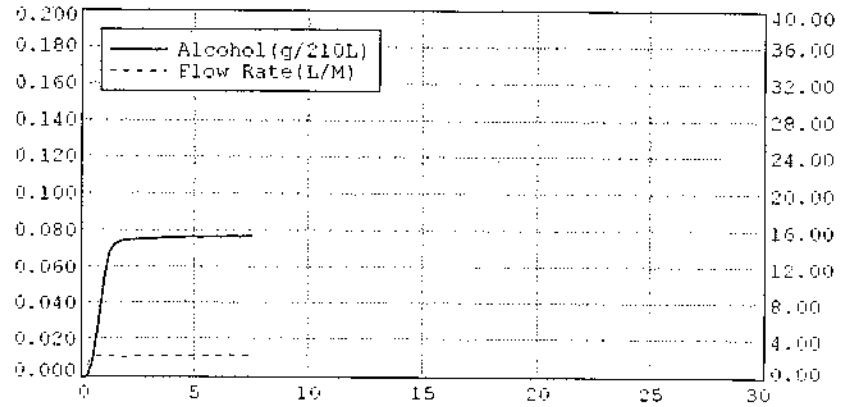
Date: 08/27/2015
 Time: 10:18:48

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.51: 0.079
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016
 TANK PRESSURE: 378 psi

BLANK TEST	0.000	10:20
INTERNAL STANDARD	VERIFIED	10:20
EXTERNAL STANDARD	0.078	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.078	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.078	10:22
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.078	10:23
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.078	10:24
BLANK TEST	0.000	10:25

Average = 0.0780
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

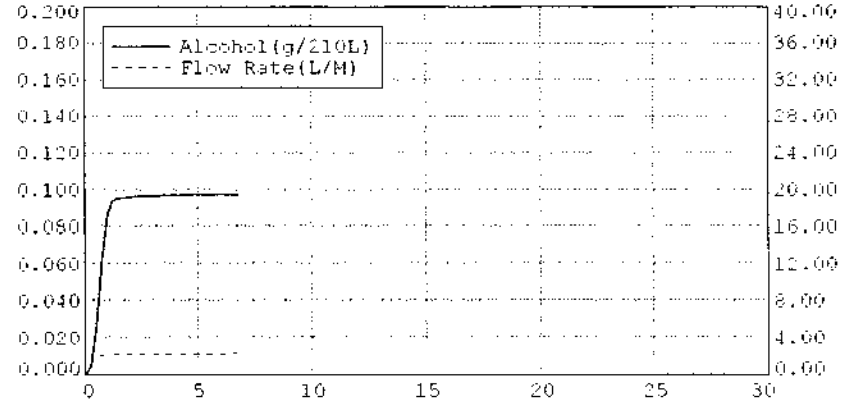
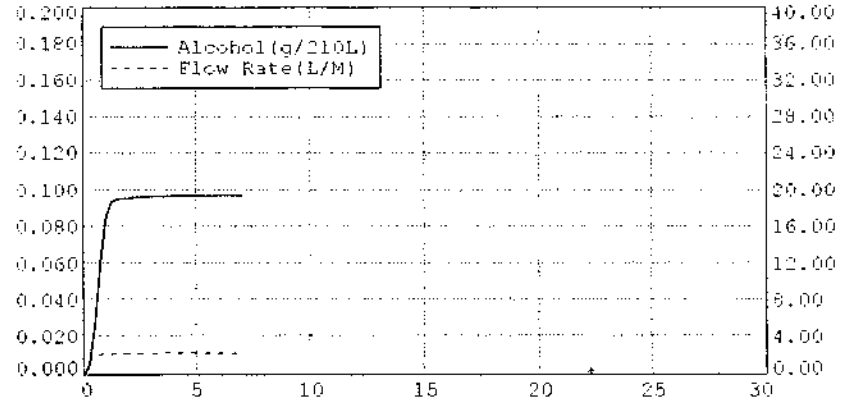
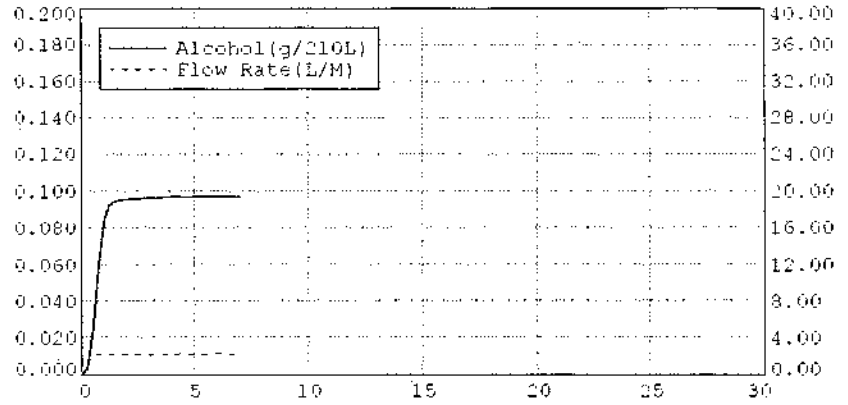
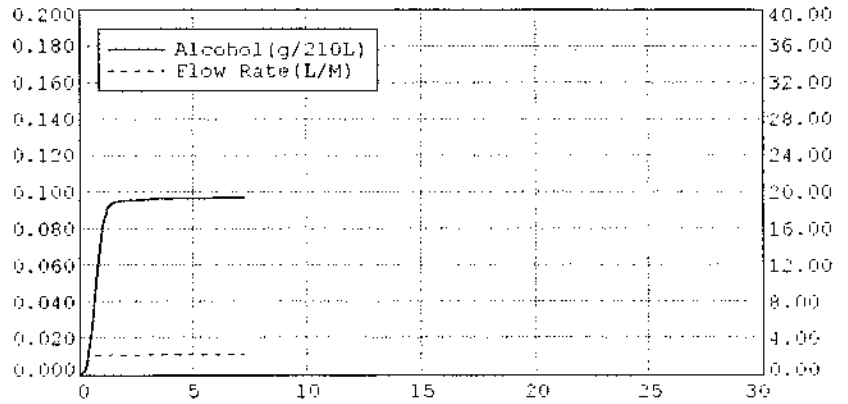
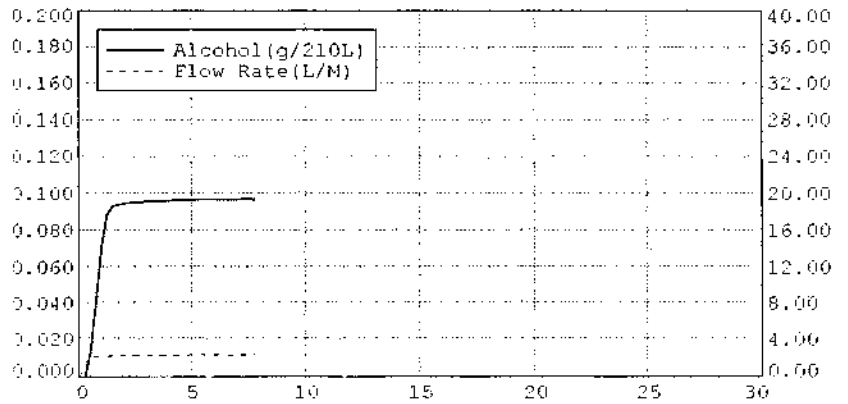
Date: 08/27/2015
 Time: 10:35:30

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.50: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 433 psi

BLANK TEST	0.000	10:36
INTERNAL STANDARD	VERIFIED	10:36
EXTERNAL STANDARD	0.098	10:37
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.098	10:38
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.098	10:39
BLANK TEST	0.000	10:40
EXTERNAL STANDARD	0.098	10:40
BLANK TEST	0.000	10:41
EXTERNAL STANDARD	0.098	10:41
BLANK TEST	0.000	10:42

Average = 0.0980
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

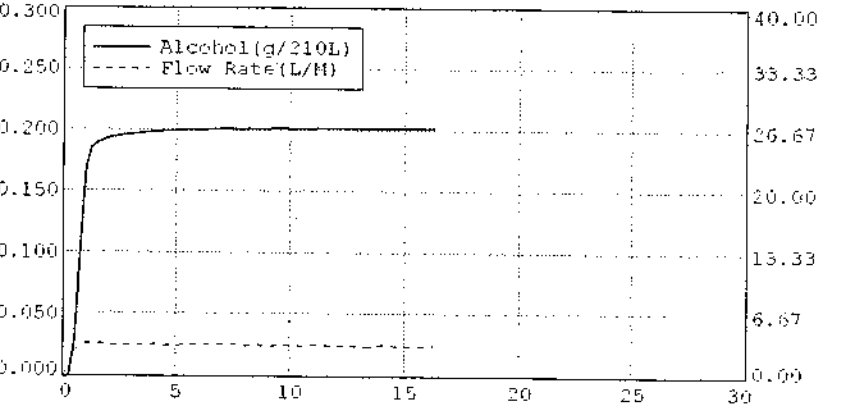
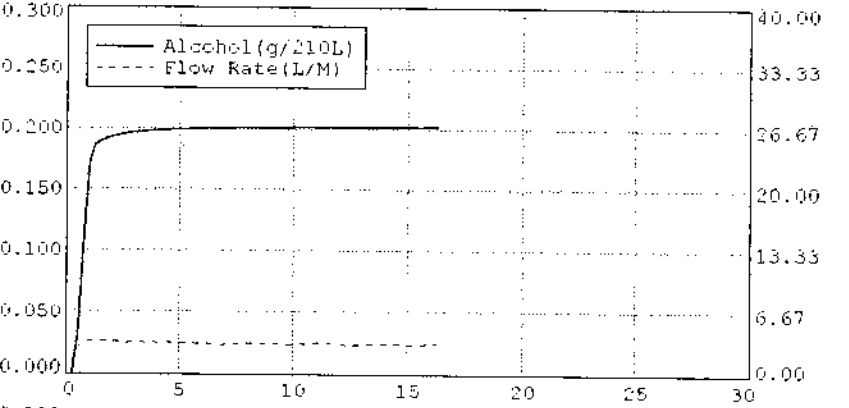
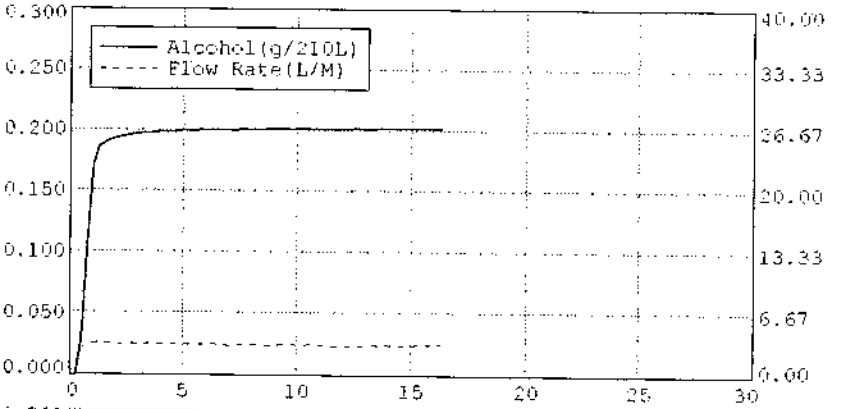
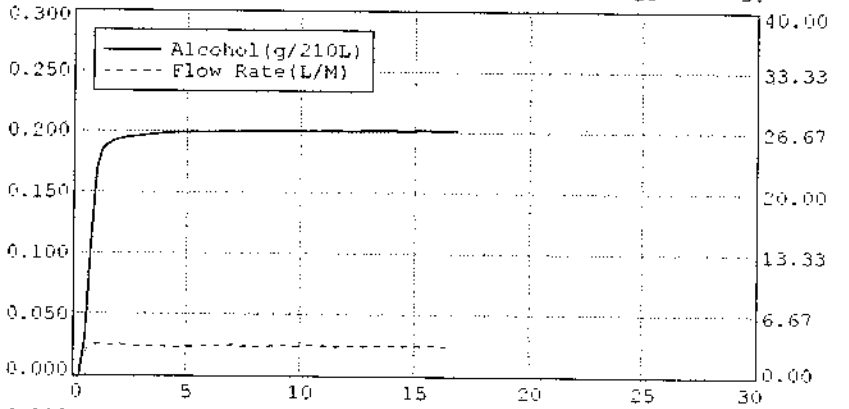
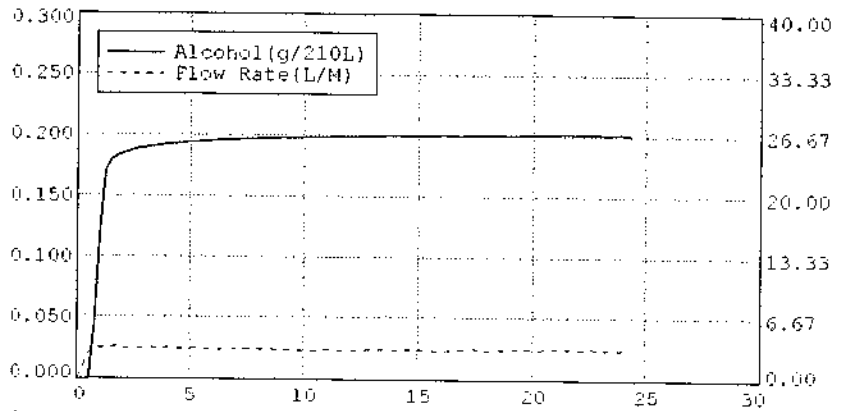
Date: 08/27/2015
 Time: 10:43:23

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:44
INTERNAL STANDARD	VERIFIED	10:45
EXTERNAL STANDARD	0.202	10:45
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.202	10:46
BLANK TEST	0.000	10:47
EXTERNAL STANDARD	0.202	10:48
BLANK TEST	0.000	10:49
EXTERNAL STANDARD	0.202	10:49
BLANK TEST	0.000	10:50
EXTERNAL STANDARD	0.202	10:50
BLANK TEST	0.000	10:51

Average = 0.2020
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

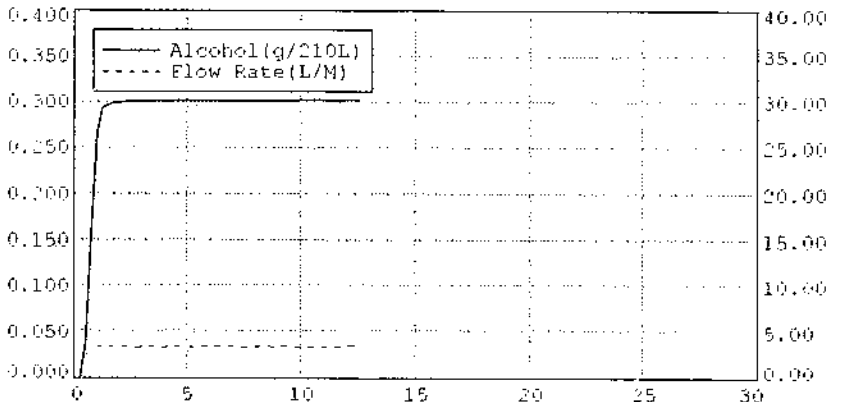
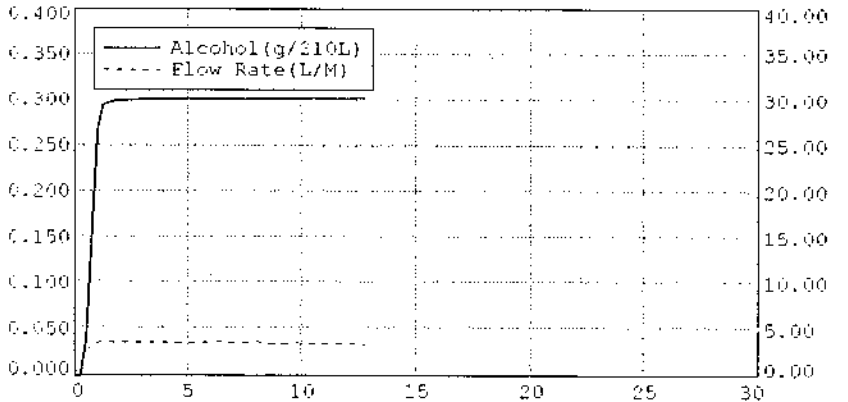
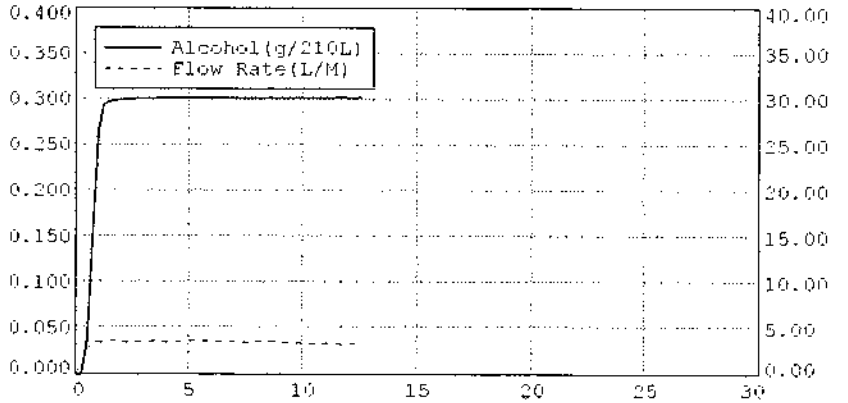
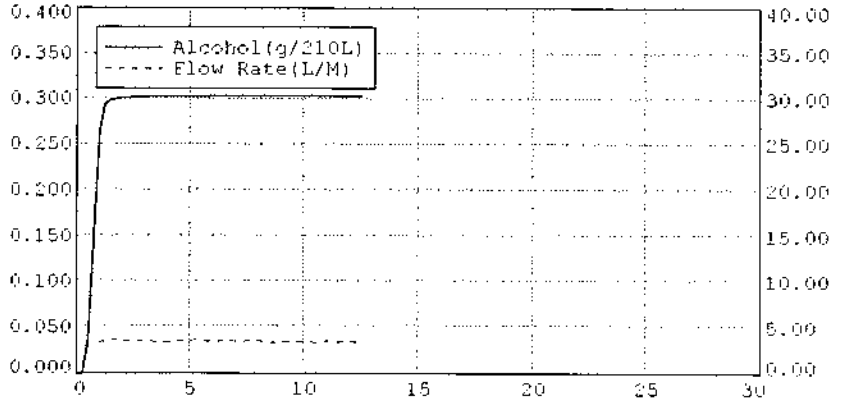
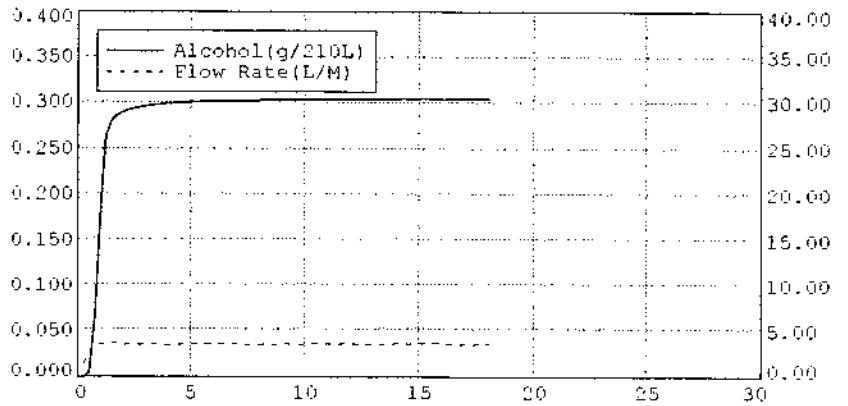
Date: 08/27/2015
 Time: 10:52:54

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:54
INTERNAL STANDARD	VERIFIED	10:54
EXTERNAL STANDARD	0.304	10:54
BLANK TEST	0.000	10:55
EXTERNAL STANDARD	0.303	10:55
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.302	10:57
BLANK TEST	0.000	10:57
EXTERNAL STANDARD	0.302	10:58
BLANK TEST	0.000	10:59
EXTERNAL STANDARD	0.302	10:59
BLANK TEST	0.000	11:00

Average = 0.3026
 Std Dev = 0.0009



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 09/27/2015
Time: 12:09:28

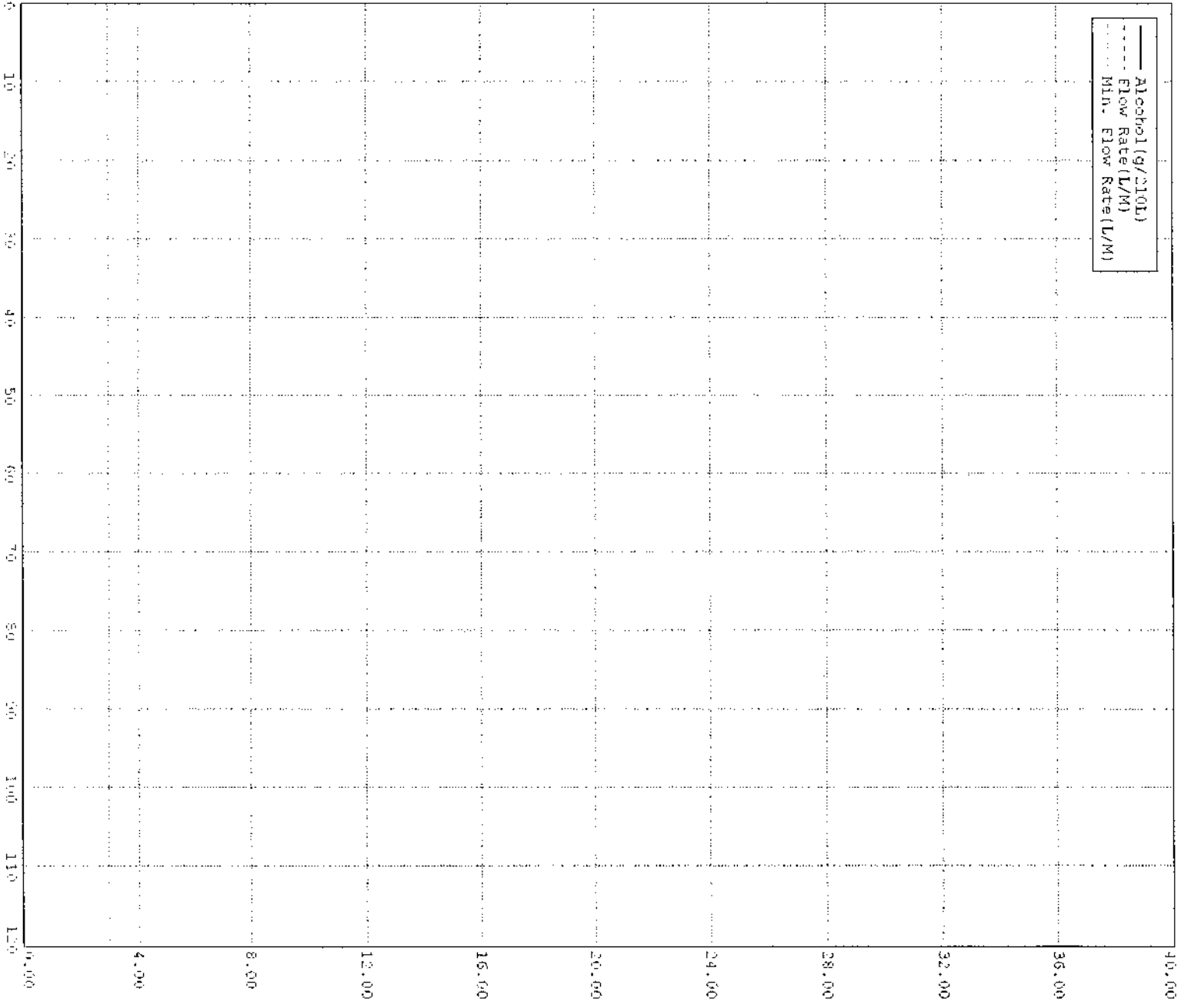
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INCOMPLETE XXXX
OPERATOR'S #: XXXX

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

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

DIAGNOSTIC CHECK	PASSED	12:11
BLANK TEST	0.000	12:11
INTERNAL STANDARD	VERIFIED	12:11
EXTERNAL STANDARD	0.078	12:11
BLANK TEST	0.000	12:12
SUBJECT SAMPLE	INCOMPLETE	12:14



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 08/27/2015
Time: 12:21:03

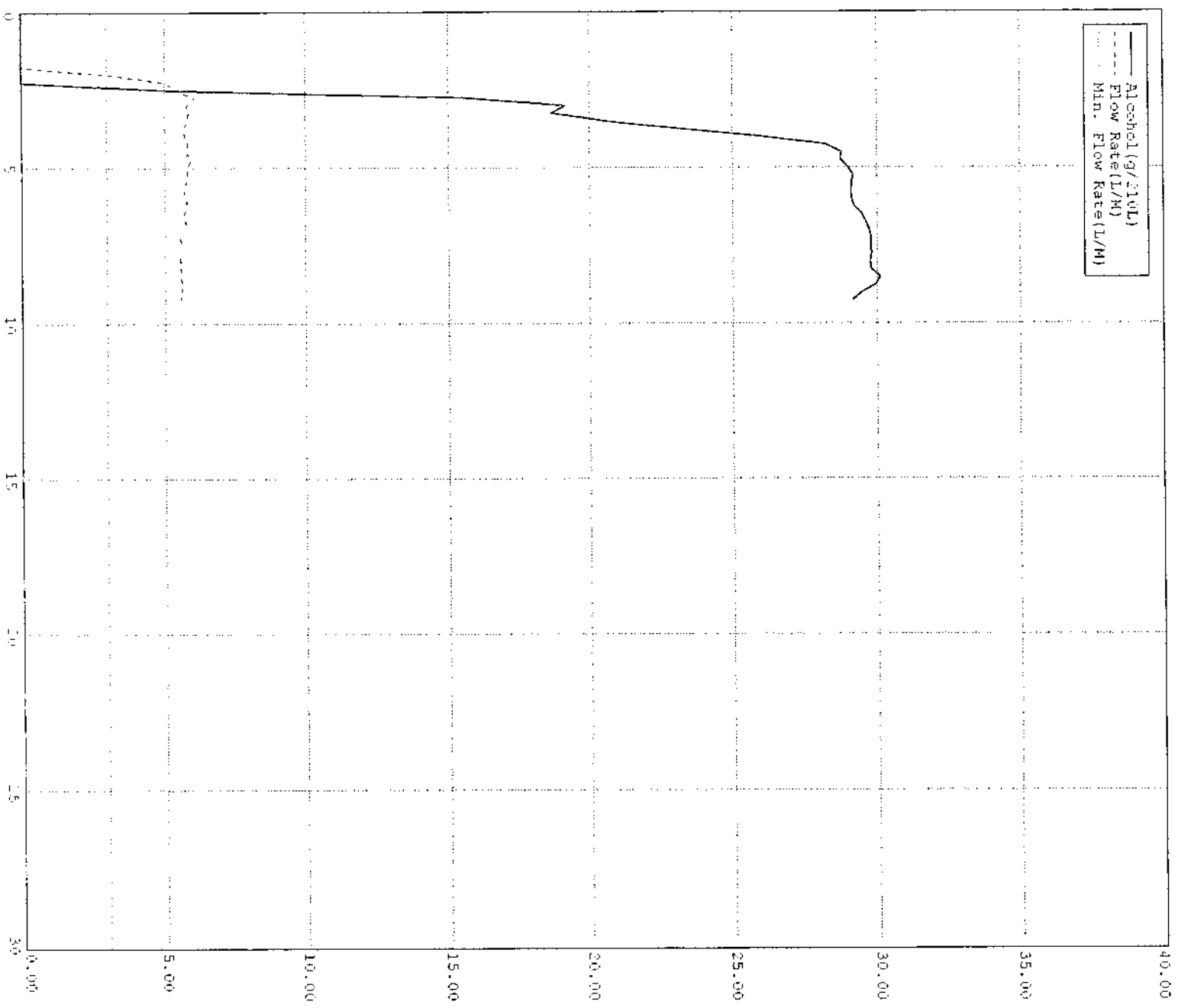
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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	12:24
BLANK TEST	0.000	12:24
INTERNAL STANDARD	VERIFIED	12:24
EXTERNAL STANDARD	0.078	12:24
BLANK TEST	0.000	12:25
SUBJECT SAMPLE	INVALID	12:25



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 08/27/2015
Time: 12:29:32

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

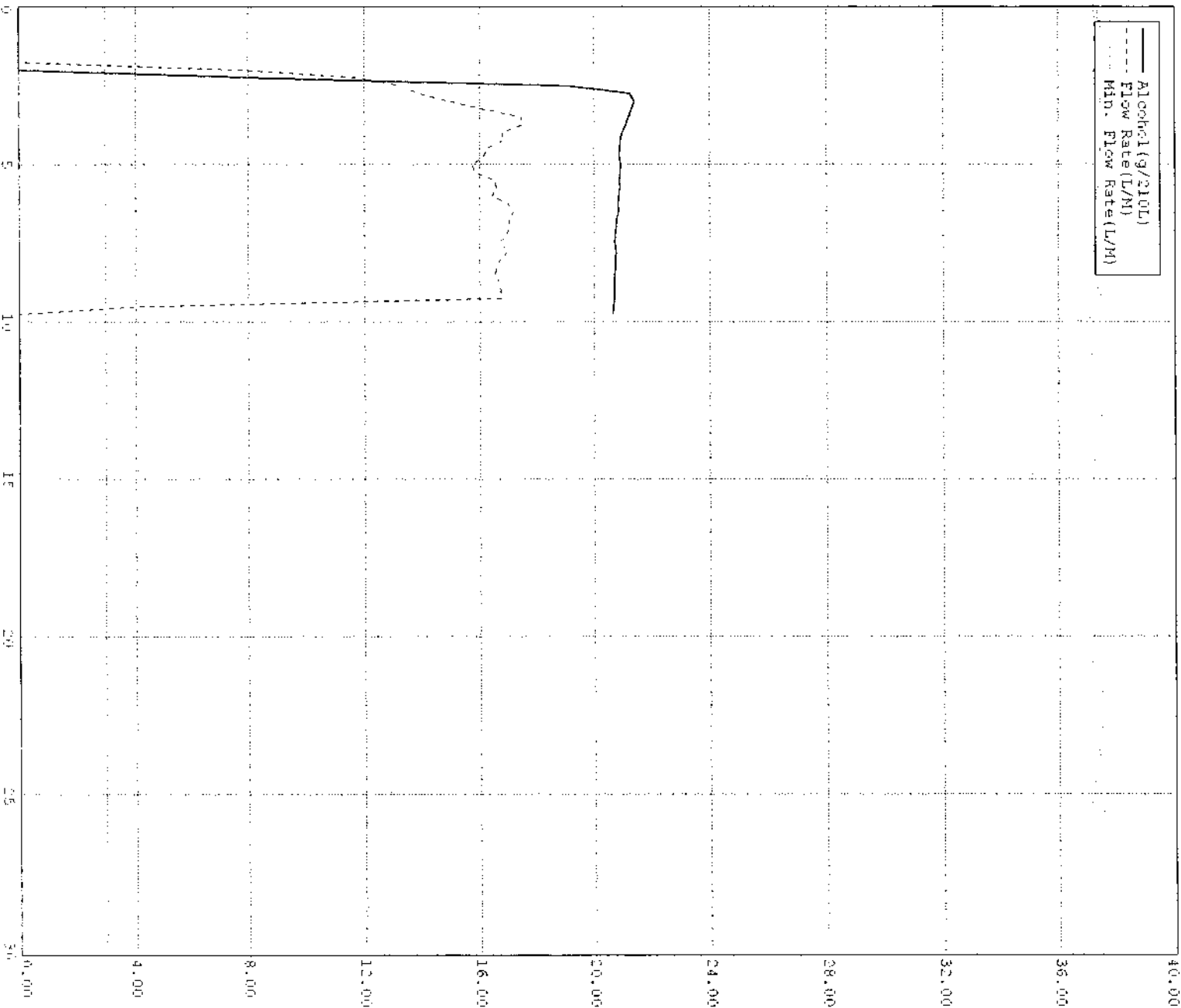
DIAGNOSTIC CHECK	PASSED	12:32
BLANK TEST	0.000	12:32
INTERNAL STANDARD	VERIFIED	12:32
Xg = 0.111 (1.86%)		
EXTERNAL STANDARD	0.078	12:32
X[1] = 0.0783 (0.0014) (0.0033)		
BLANK TEST	0.000	12:33
SUBJECT SAMPLE	XXX	12:33
X[1] = 0.1041 (-0.0144) (0.0019)		

Interference Detected

Filter 2 Average = 0.0014

Filter 3 Average = 0.0035

CWF 8/27/15



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 08/27/2015
Time: 12:38:42

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

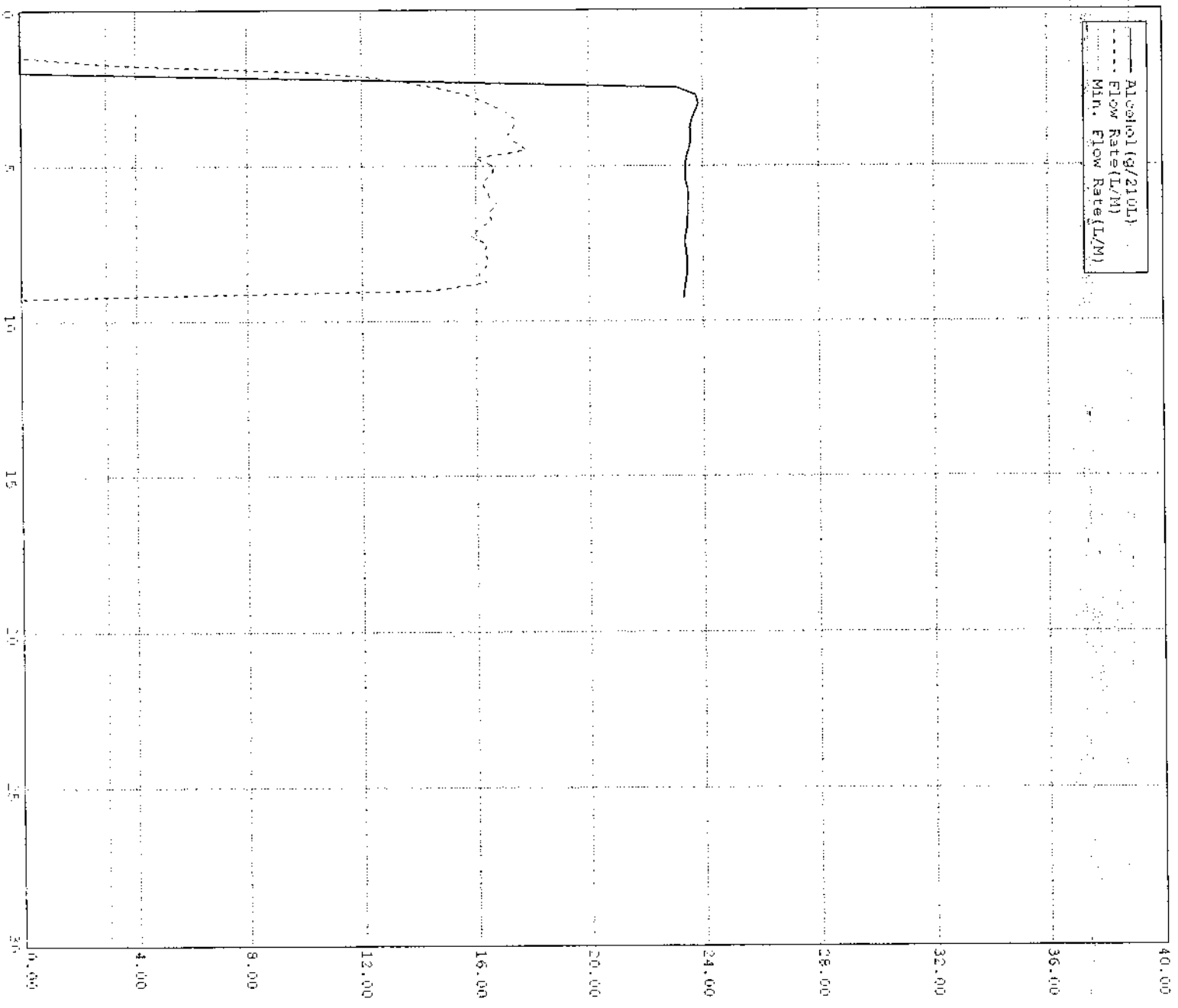
OPERATOR NAME:
INTERFERENCE IPA
OPERATOR'S #: XXXX

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	12:41
BLANK TEST	0.000	12:41
INTERNAL STANDARD	VERIFIED	12:41
Xq = 0.111 (1.53%)	0.078	12:41
EXTERNAL STANDARD	X[1] = 0.0784 (0.0015)	(0.0039)
BLANK TEST	0.000	12:42
SUBJECT SAMPLE	XXX	12:42
X[1] = 0.1169 (-0.0192)	(0.0027)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 08/27/2015
Time: 12:45:56

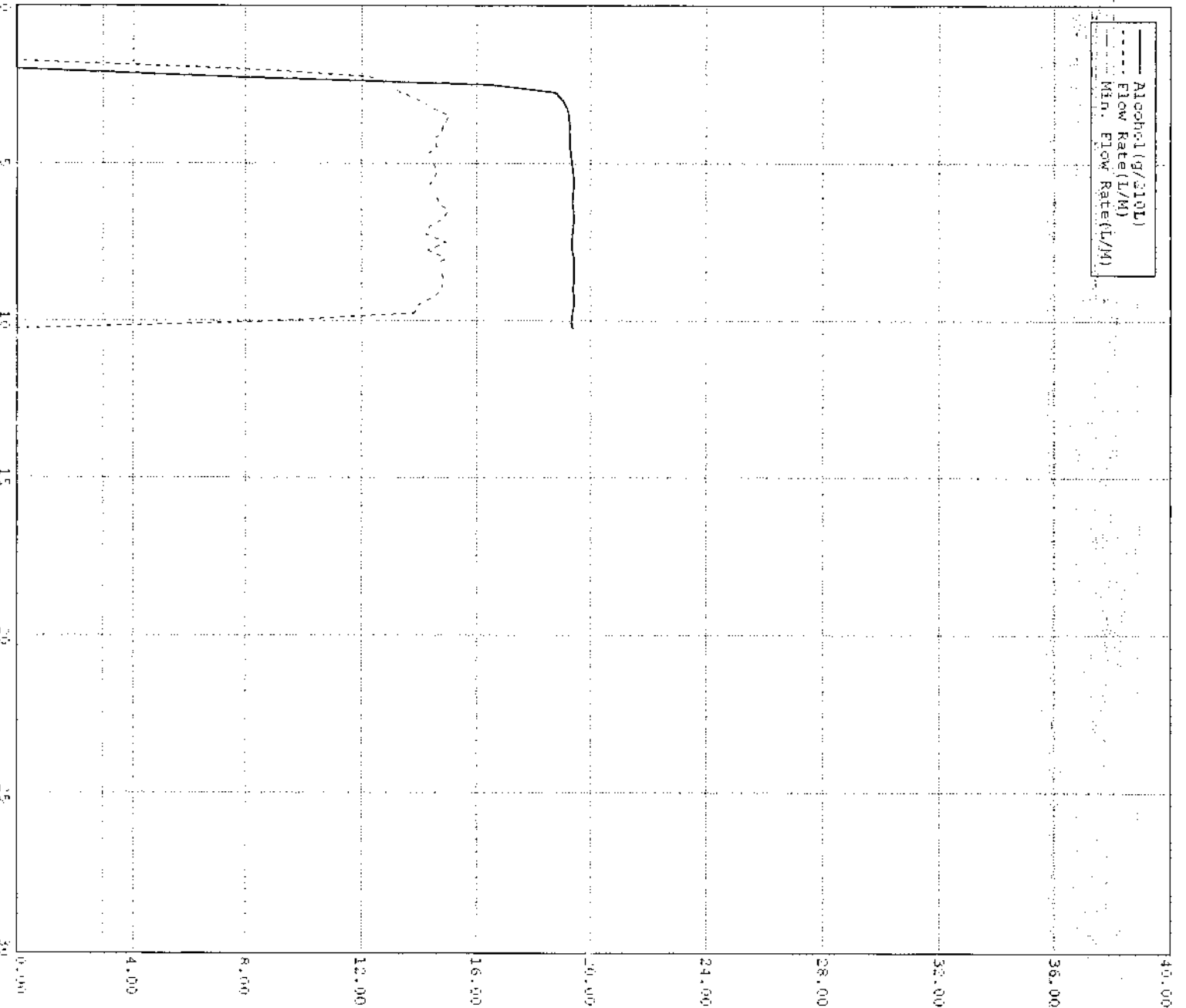
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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	12:48
BLANK TEST	0.000	12:48
INTERNAL STANDARD	VERIFIED	12:48
Xq = 0.111 (1.53%)		
EXTERNAL STANDARD	0.078	12:48
X[1] = 0.0781 (0.0014)	(0.0037)	
BLANK TEST	0.000	12:49
SUBJECT SAMPLE (Vol=1.93L)	0.097	12:49
X[1] = 0.0974 (0.0009)	(0.0016)	
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.078	12:51
X[1] = 0.0781 (0.0011)	(0.0029)	
BLANK TEST	0.000	12:51



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 08/27/2015
Time: 13:19:56

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

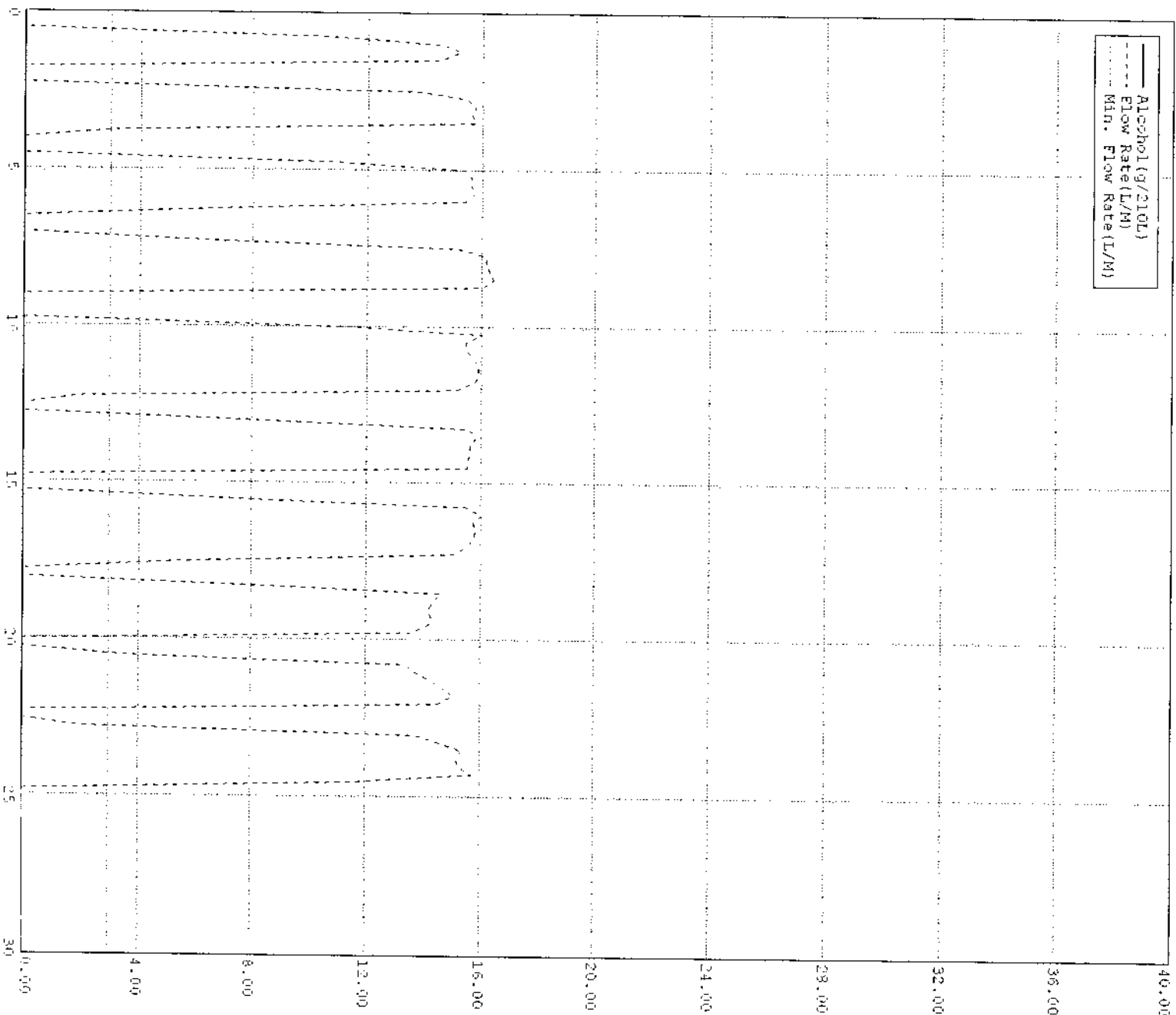
OPERATOR NAME:
EXCEEDED ATTEMPTS
OPERATOR'S #: XXXX

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

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	13:22
BLANK TEST	0.000	13:22
INTERNAL STANDARD	VERIFIED	13:23
EXTERNAL STANDARD	0.078	13:23
BLANK TEST	0.000	13:24
SUBJECT SAMPLE	XXX	13:24

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 08/27/2015
Time: 13:39:54

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

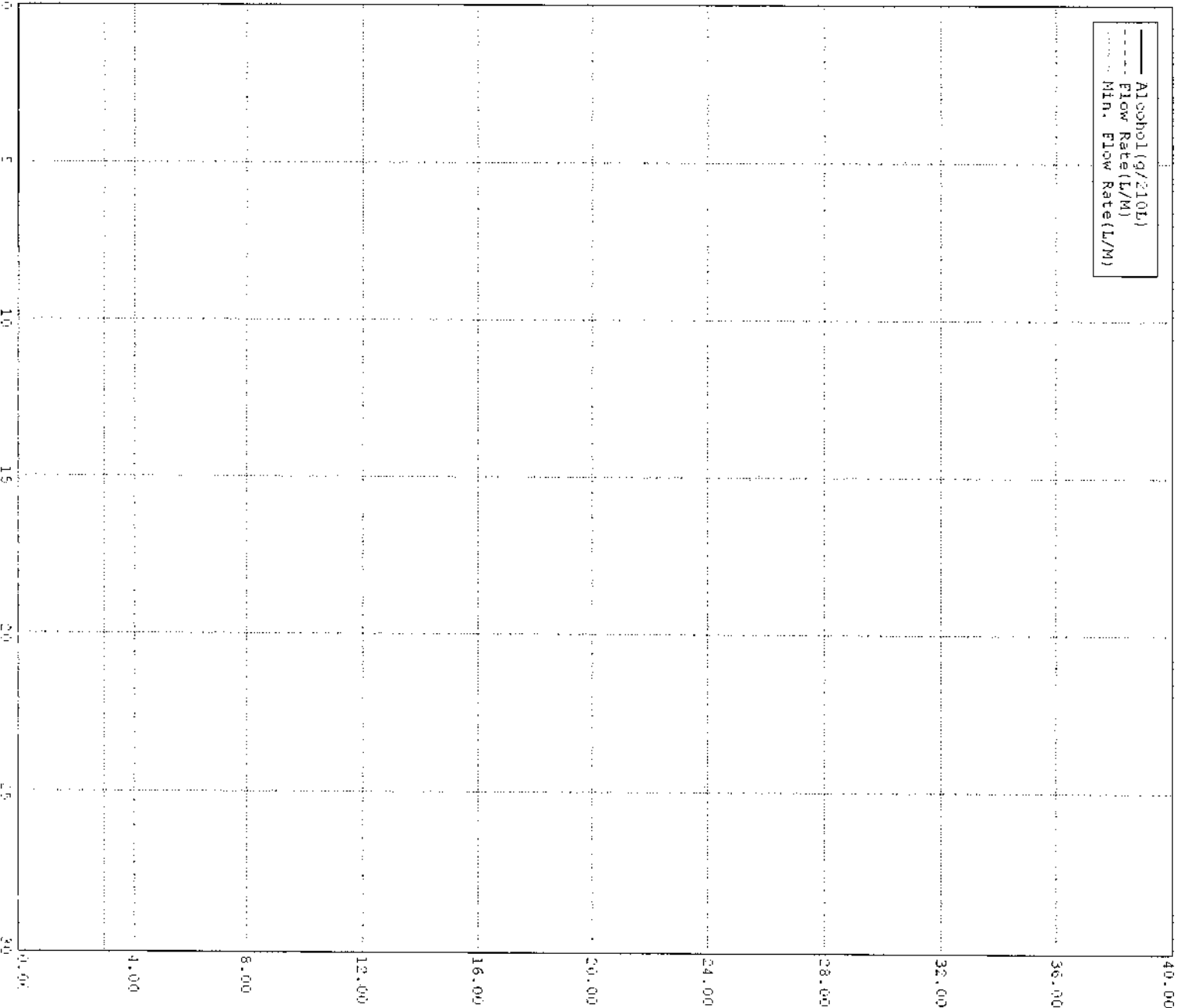
OPERATOR NAME:
RFI XXXX
OPERATOR'S #: XXXX

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

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

DIAGNOSTIC CHECK
BLANK TEST PASSED 13:41
INTERNAL STANDARD VERIFIED 13:41
EXTERNAL STANDARD 0.078 13:42
BLANK TEST 0.000 13:43

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 08/27/2015
Time: 14:01:13

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 29.46: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	14:03
BLANK TEST	0.000	14:03
INTERNAL STANDARD	VERIFIED	14:03
EXTERNAL STANDARD	0.079	14:04
BLANK TEST	0.000	14:05
SUBJECT SAMPLE (Vol=2.56L)	0.000	14:05
BLANK TEST	0.000	14:06
EXTERNAL STANDARD	0.078	14:06
BLANK TEST	0.000	14:07

