

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 100396 Analyst CWF Start Date 3/24/16

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 DR5298 Date Calibrated 8/5/15

vi. 0.300g/210L Mnf Guth Lot 15170 Exp 7/20/17

1. Simulator S/N SD1198 Date Calibrated 8/5/15

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 SD1199 Date Calibrated 8/5/15

ii. Isopropanol - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17

1. Simulator S/N SD1177 Date Calibrated 8/5/15

iii. Negative Control - Mnf Guth Lot 15220 Level 0.100 Exp 9/28/17

1. Simulator S/N DR4161 Date Calibrated 8/5/15

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 3/25/16

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 03/24/2016
Time: 10:43:15

VERSIONS
DMT: 3.02
PIC: 3.02
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 = 1.83 V PASSED
(1.19 V - 2.77 V)
Cooler Voltage = 1.81 V PASSED
(1.07 V - 2.49 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 536 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 5.045 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 = 0.107 0.16% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100396

Date: 03/24/2016
Time: 11:07 AM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 47.0°C

Current Barometer 29.5 in
Volume (Ltr) 1.54

Settings

Lamp: 1.88 V
Bias: 80 V
Cooler: 1.81 V
Chopper: 536 Hz

Voltages (V)

Flow: 1.08 V
Detector: 0.022 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 04/28/2011
Time: 15:10:13

Ca = 0.1000
CAL = 1.000388 0.800 <= CAL < 1.200
b1 = 0.0000 0.0000 <= b1 < 0.0040
b2 = 0.0052 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.1073 0.0500 <= Xq < 0.2000
a21 = 1.177777 1.050 <= a21 < 1.300
a31 = 0.424440 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 03/24/2016
Time: 12:01:01

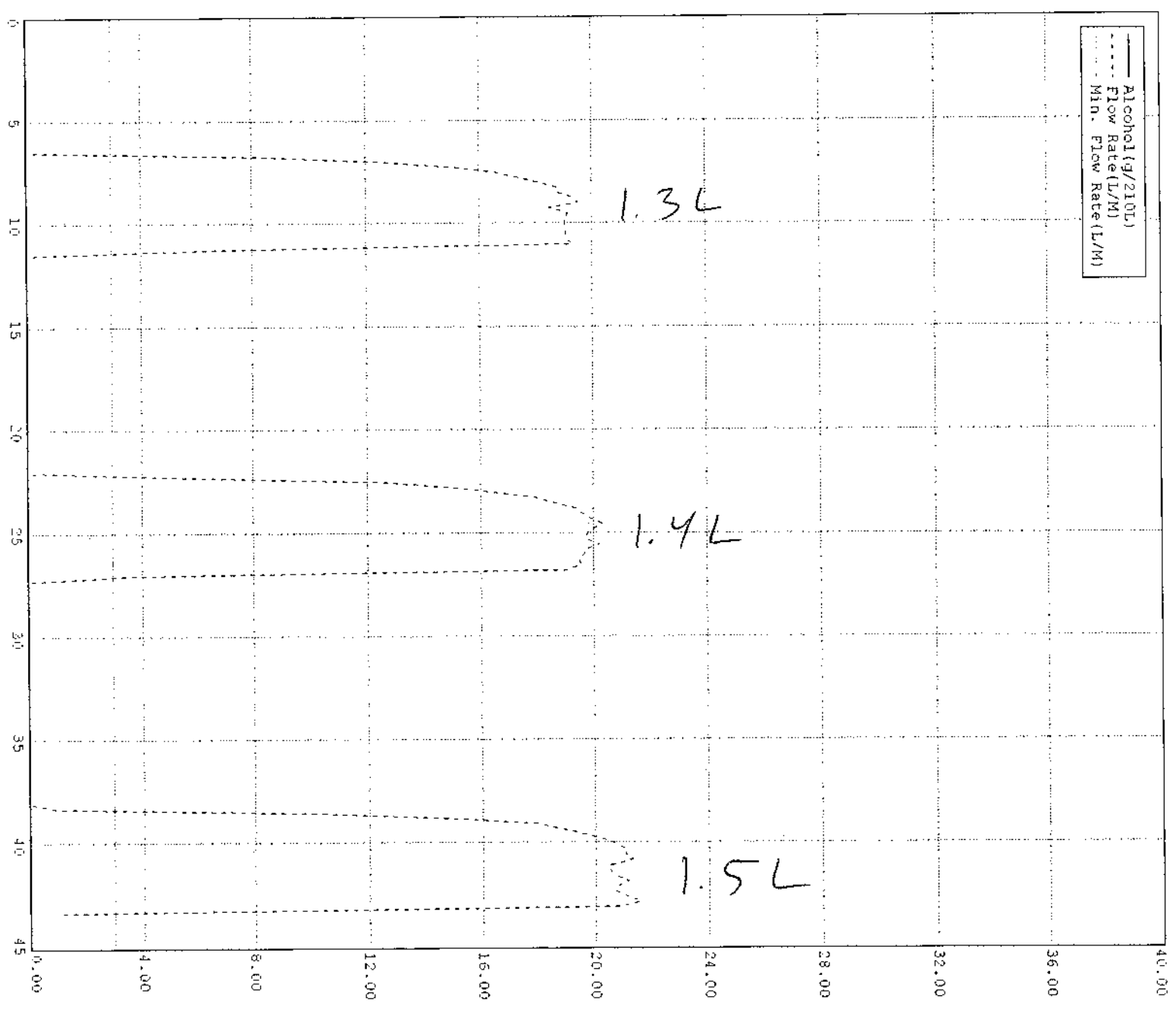
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MINIMUM VOLUME
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.52: 0.079
LOT #: 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	12:12
BLANK TEST	0.000	12:13
SUBJECT SAMPLE (Vol=1.56L)	0.000	12:13
BLANK TEST	0.000	12:14
EXTERNAL STANDARD	0.079	12:14
BLANK TEST	0.000	12:15



LINEARITY CHECK

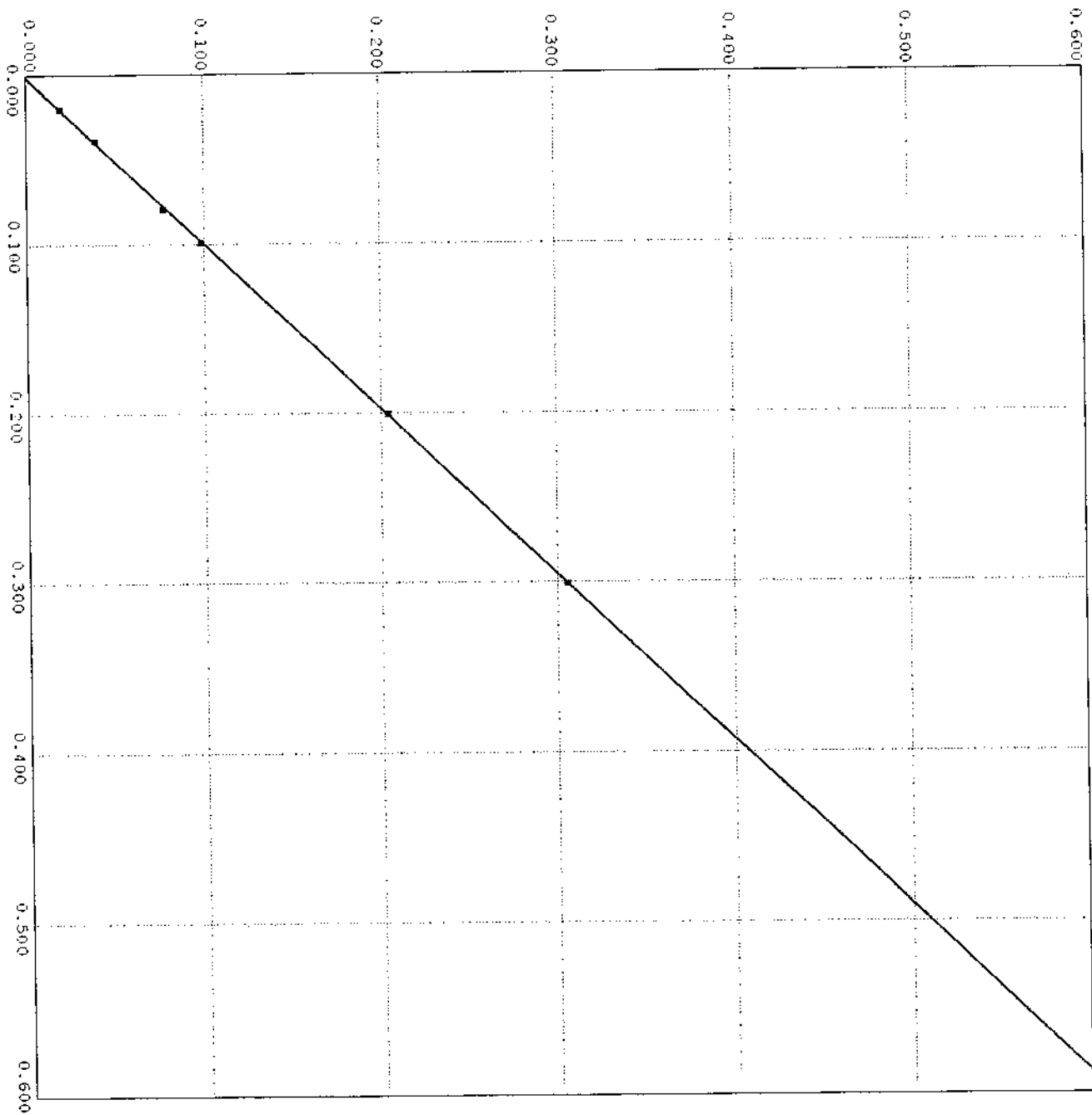
Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 03/24/2016
Time: 12:45:20

SUPERVISOR NAME:
CHARLES FOSTER
OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.020	0.0202	0.0004
0.039	0.0402	0.0004
0.079	0.0782	0.0004
0.099	0.0992	0.0004
0.200	0.2050	0.0000
0.300	0.3062	0.0004

SLOPE = 1.024261
R² = 0.999871



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100396

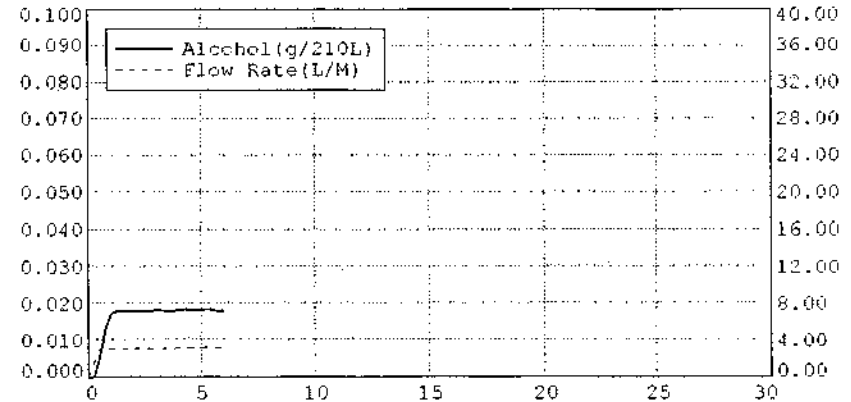
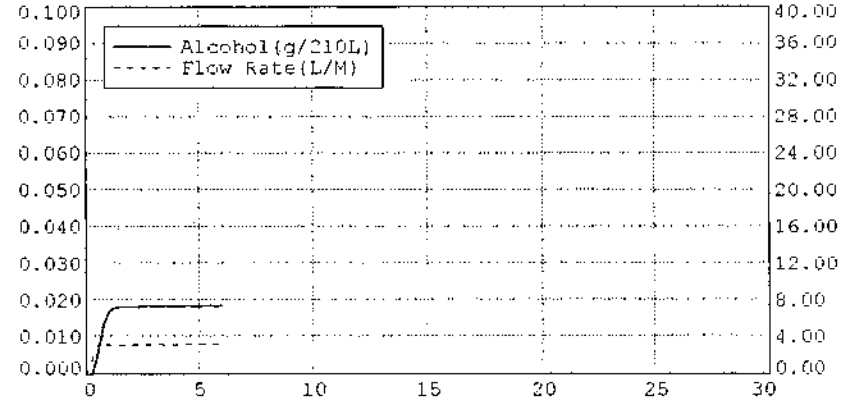
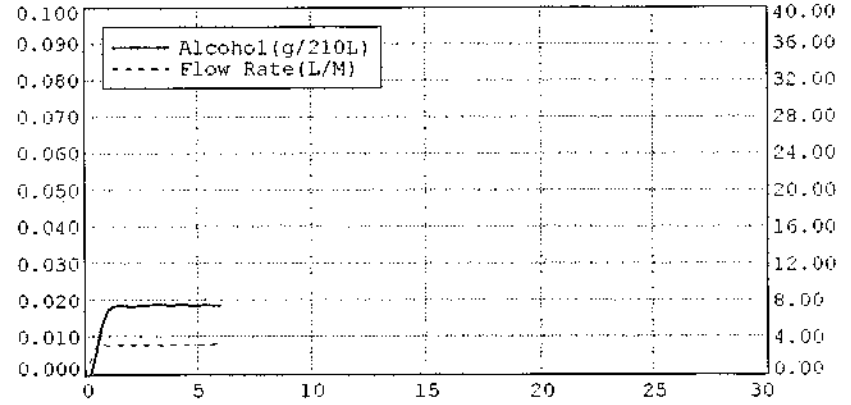
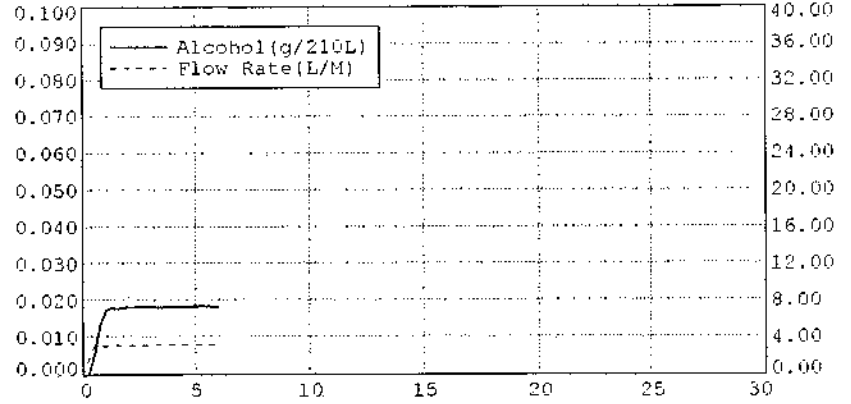
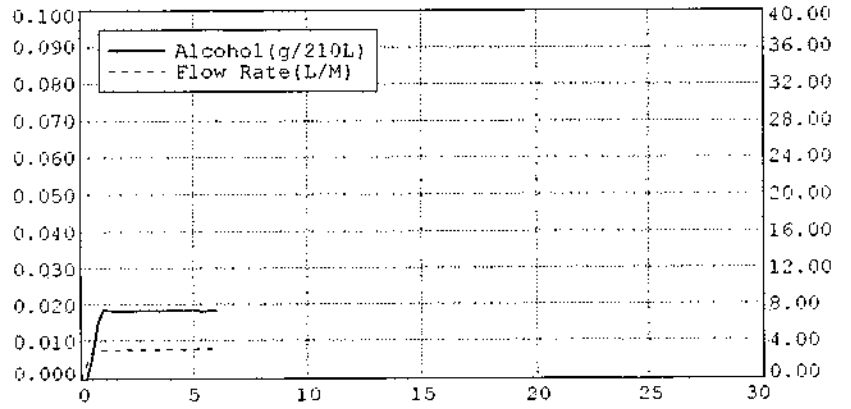
Date: 03/24/2016
Time: 12:45:21

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.52: 0.020
LOT #: 02915020A2
EXPIRATION: 03/05/2017
TANK PRESSURE: 506 psi

BLANK TEST	0.000	12:46
INTERNAL STANDARD	VERIFIED	12:46
EXTERNAL STANDARD	0.020	12:46
BLANK TEST	0.000	12:47
EXTERNAL STANDARD	0.020	12:48
BLANK TEST	0.000	12:48
EXTERNAL STANDARD	0.021	12:49
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.020	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.020	12:51
BLANK TEST	0.000	12:52

Average = 0.0202
Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100396

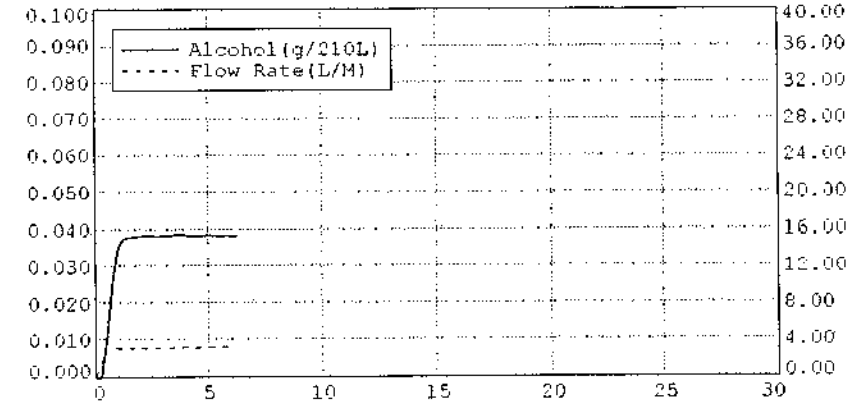
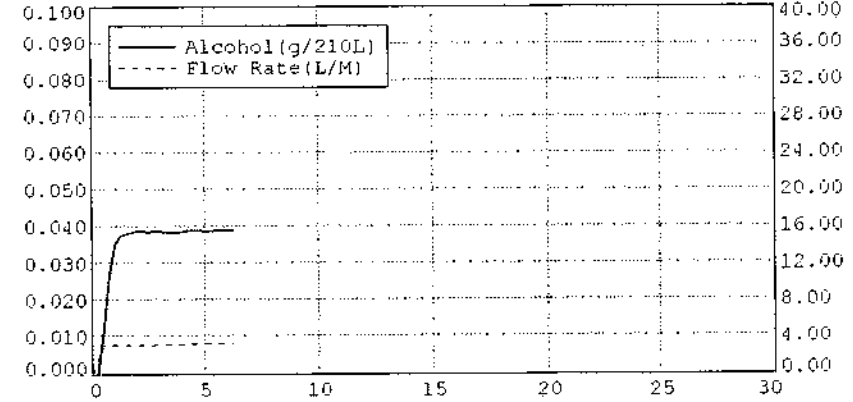
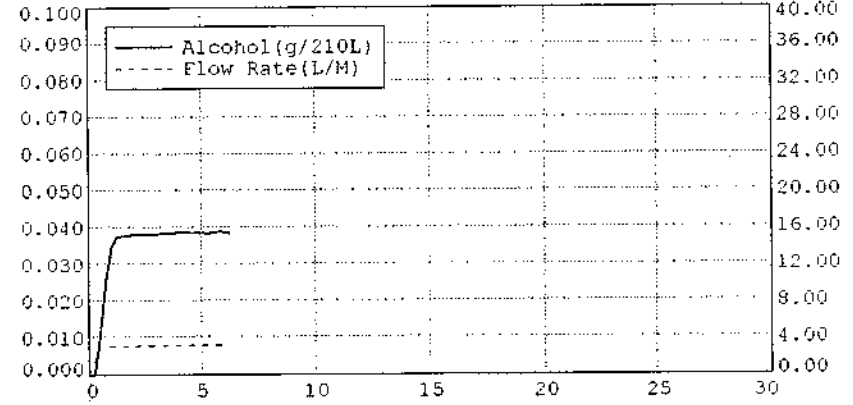
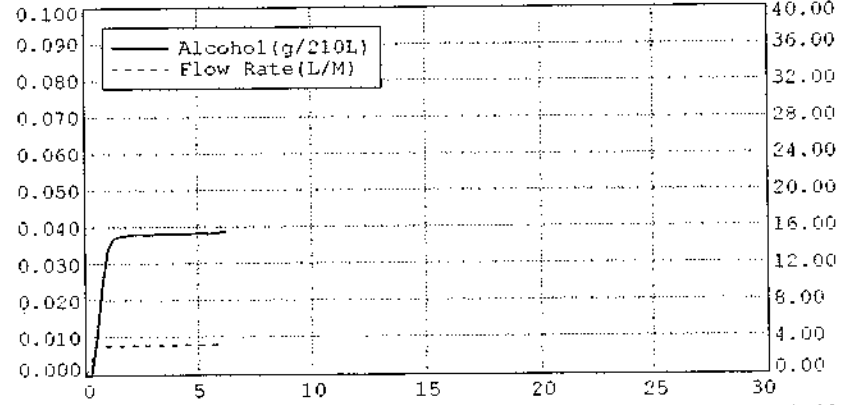
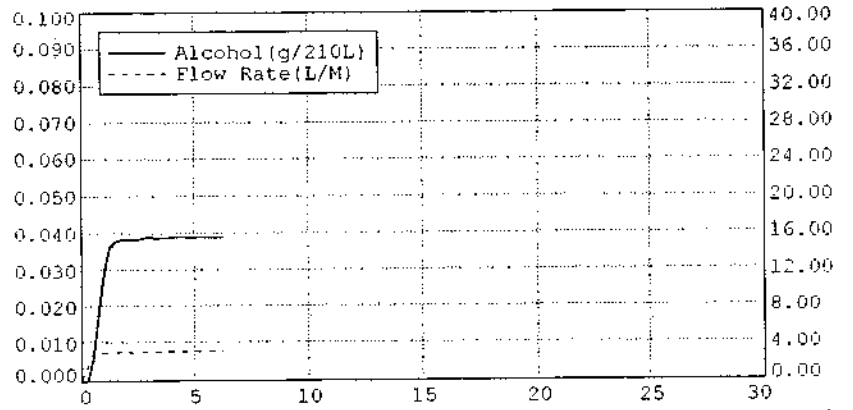
Date: 03/24/2016
 Time: 12:53:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.52: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 942 psi

BLANK TEST	0.000	12:54
INTERNAL STANDARD	VERIFIED	12:54
EXTERNAL STANDARD	0.041	12:55
BLANK TEST	0.000	12:56
EXTERNAL STANDARD	0.040	12:56
BLANK TEST	0.000	12:57
EXTERNAL STANDARD	0.040	12:57
BLANK TEST	0.000	12:58
EXTERNAL STANDARD	0.040	12:58
BLANK TEST	0.000	12:59
EXTERNAL STANDARD	0.040	12:59
BLANK TEST	0.000	13:00

Average = 0.0402
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100396

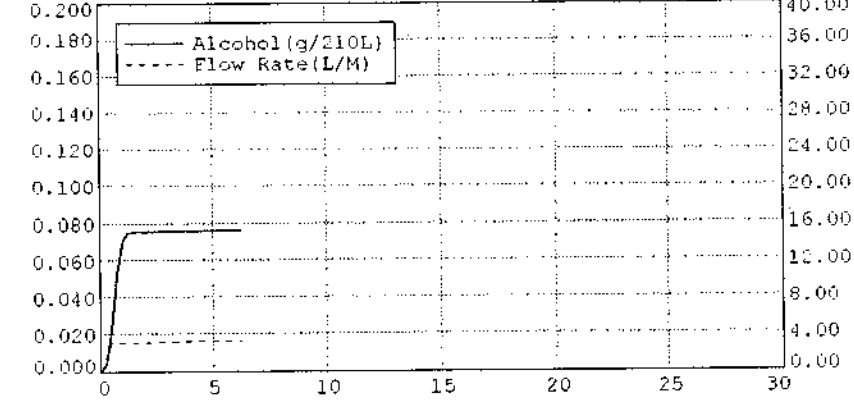
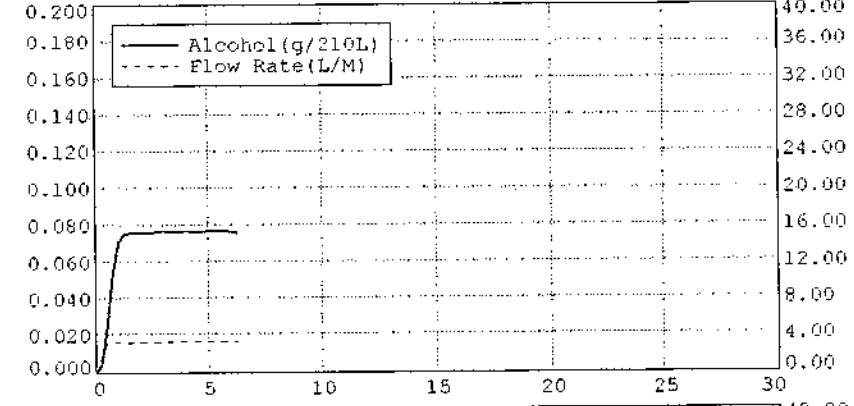
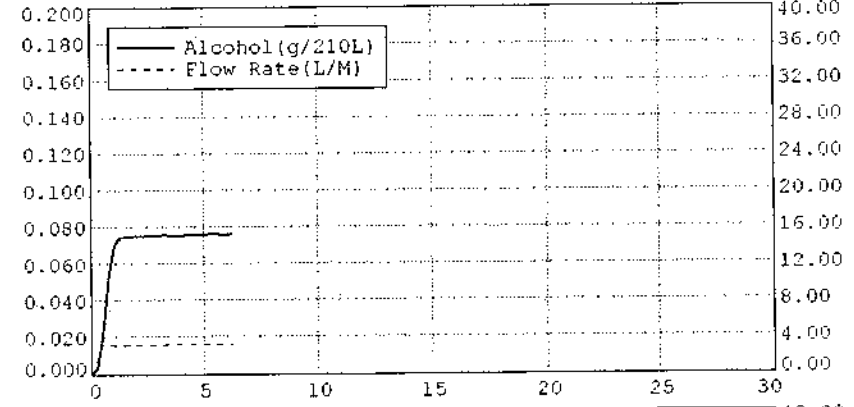
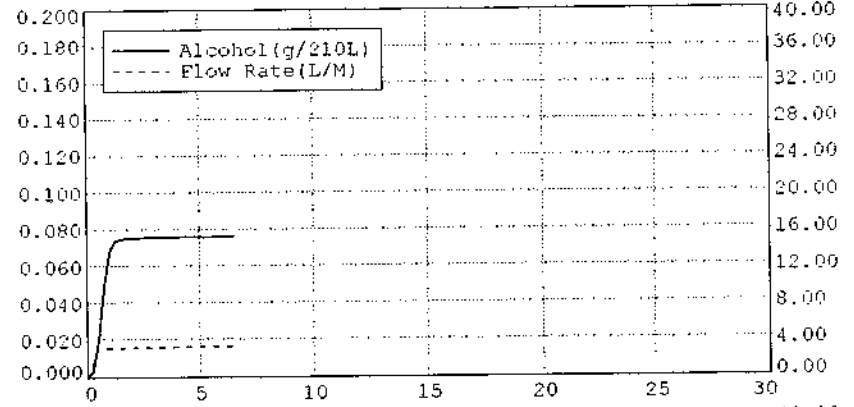
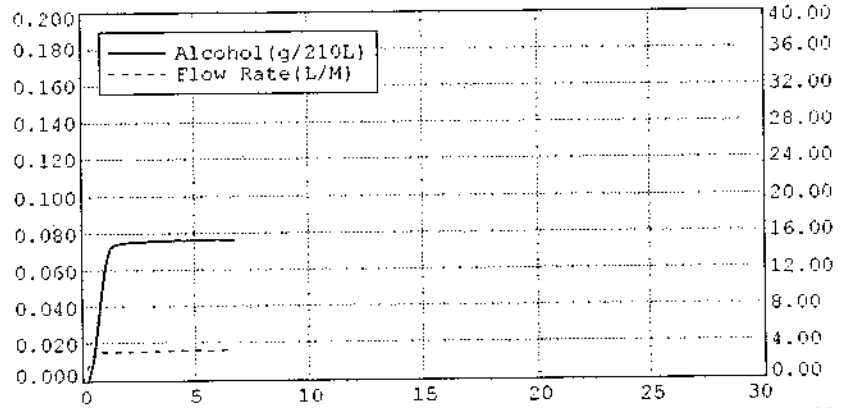
Date: 03/24/2016
 Time: 13:03:10

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.52: 0.079
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016
 TANK PRESSURE: 562 psi

BLANK TEST	0.000	13:04
INTERNAL STANDARD	VERIFIED	13:04
EXTERNAL STANDARD	0.079	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.078	13:06
BLANK TEST	0.000	13:06
EXTERNAL STANDARD	0.078	13:07
BLANK TEST	0.000	13:08
EXTERNAL STANDARD	0.078	13:08
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.078	13:09
BLANK TEST	0.000	13:10

Average = 0.0782
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100396

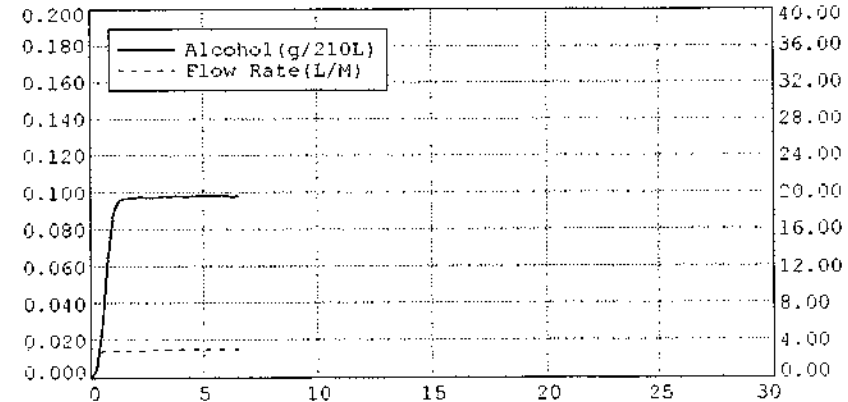
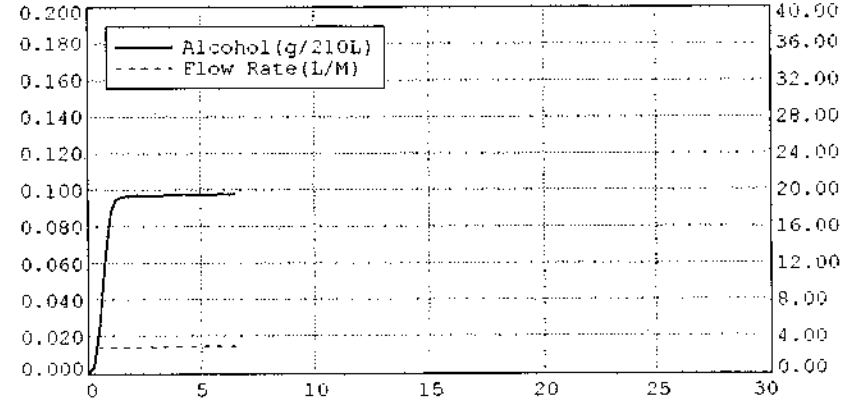
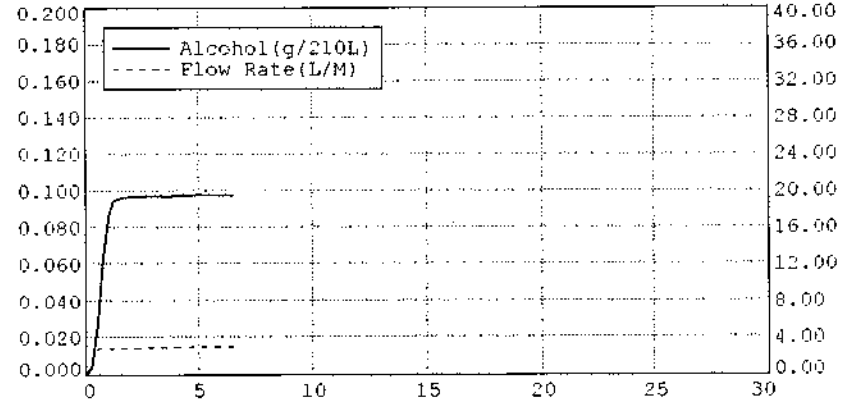
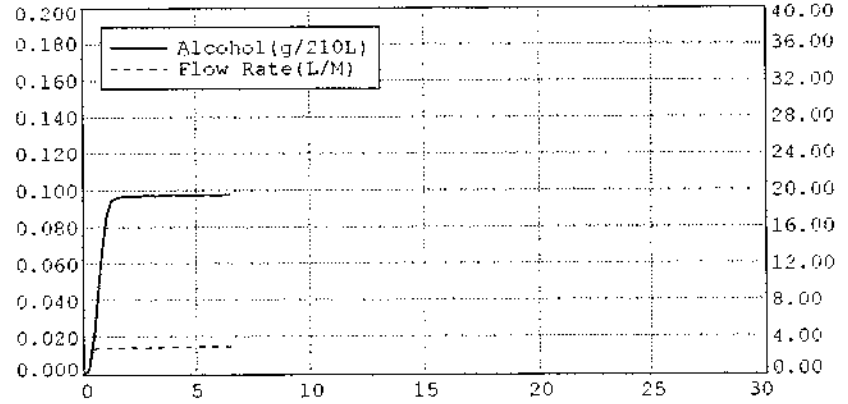
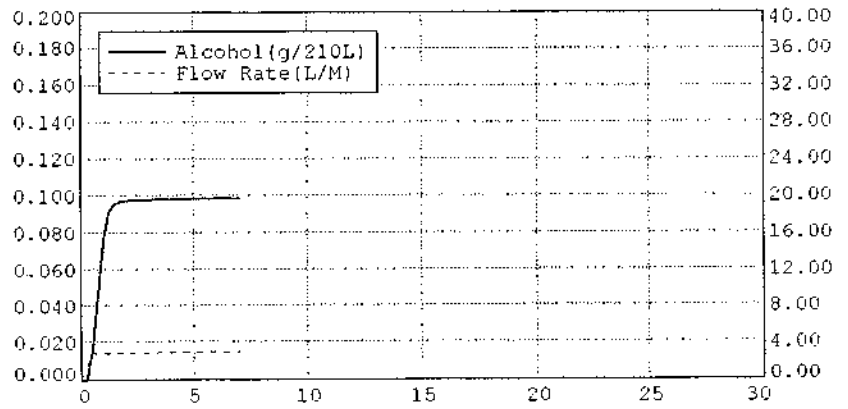
Date: 03/24/2016
Time: 13:12:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.52: 0.099
LOT #: 02915100A1
EXPIRATION: 03/05/2017
TANK PRESSURE: 694 psi

BLANK TEST	0.000	13:13
INTERNAL STANDARD	VERIFIED	13:14
EXTERNAL STANDARD	0.100	13:14
BLANK TEST	0.000	13:15
EXTERNAL STANDARD	0.099	13:15
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.099	13:16
BLANK TEST	0.000	13:17
EXTERNAL STANDARD	0.099	13:17
BLANK TEST	0.000	13:18
EXTERNAL STANDARD	0.099	13:18
BLANK TEST	0.000	13:19

Average = 0.0992
Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

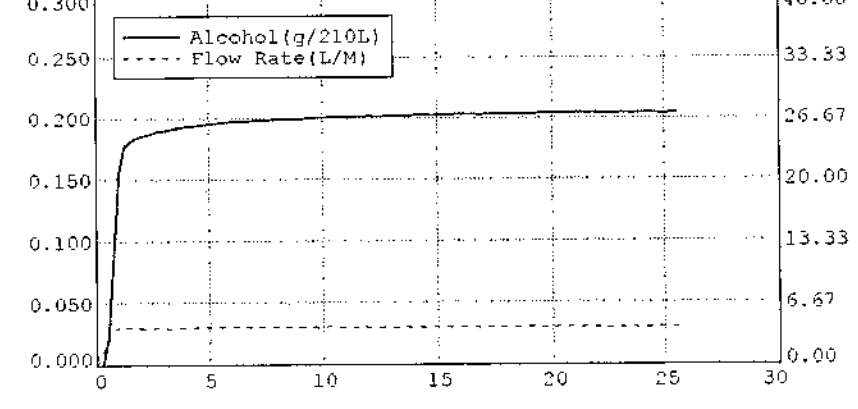
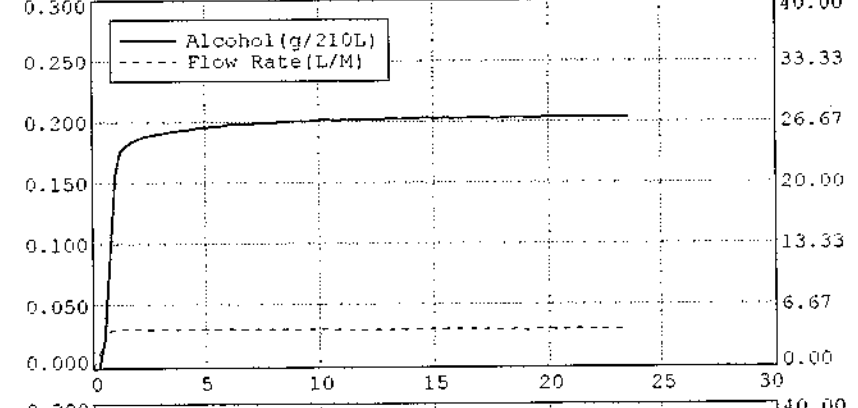
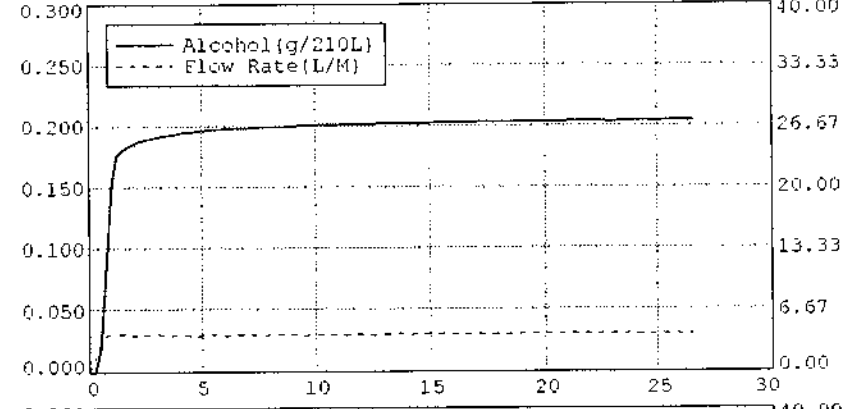
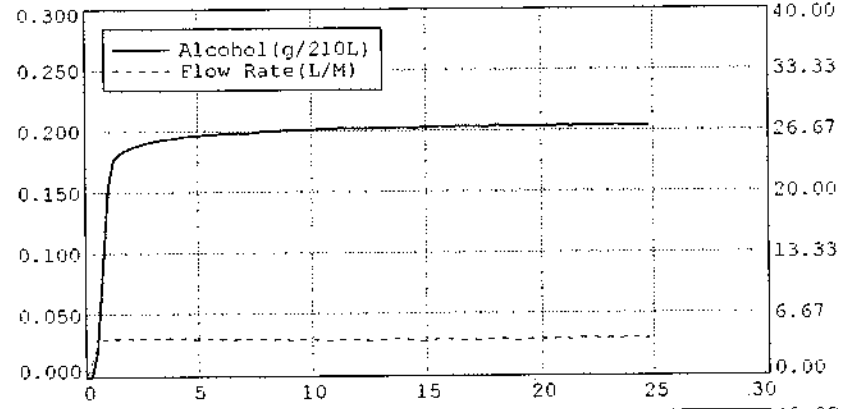
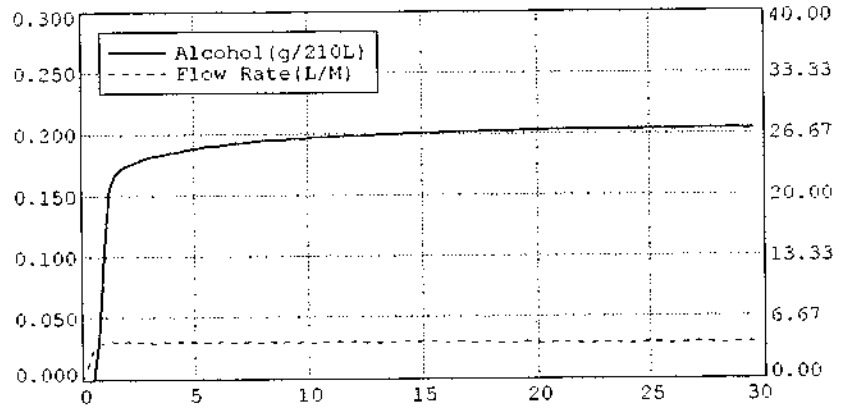
Alaska Department of Public Safety
 DATAMASTER dmt: 100396

Date: 03/24/2016
 Time: 13:21:52

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

BLANK TEST	0.000	13:23
INTERNAL STANDARD	VERIFIED	13:23
EXTERNAL STANDARD	0.205	13:24
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.205	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.205	13:27
BLANK TEST	0.000	13:28
EXTERNAL STANDARD	0.205	13:28
BLANK TEST	0.000	13:29
EXTERNAL STANDARD	0.205	13:30
BLANK TEST	0.000	13:31

Average = 0.2050
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

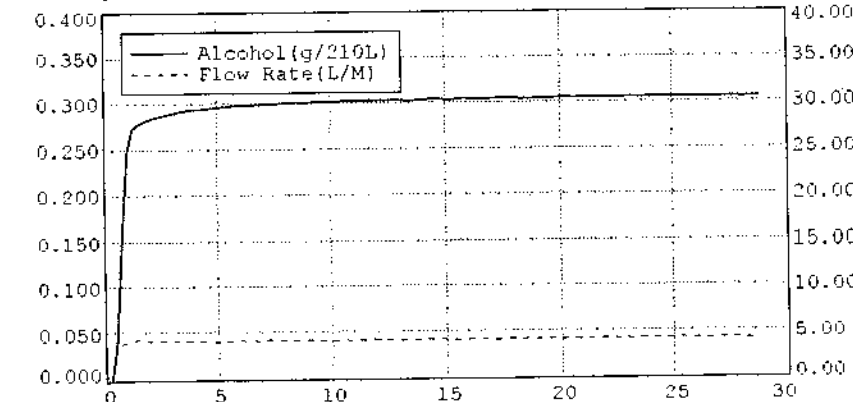
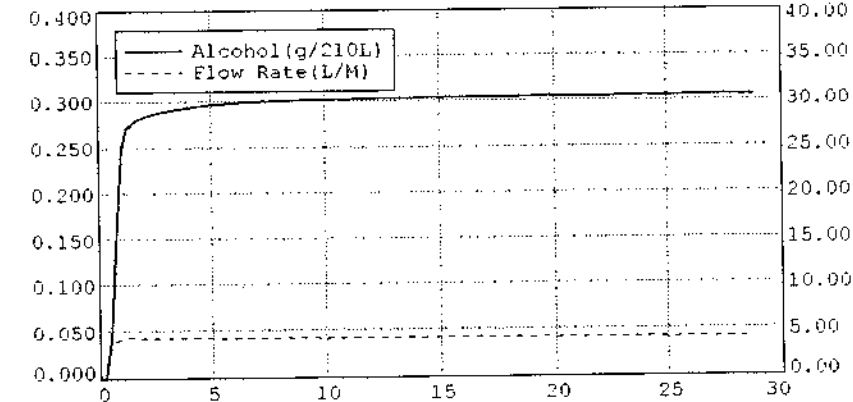
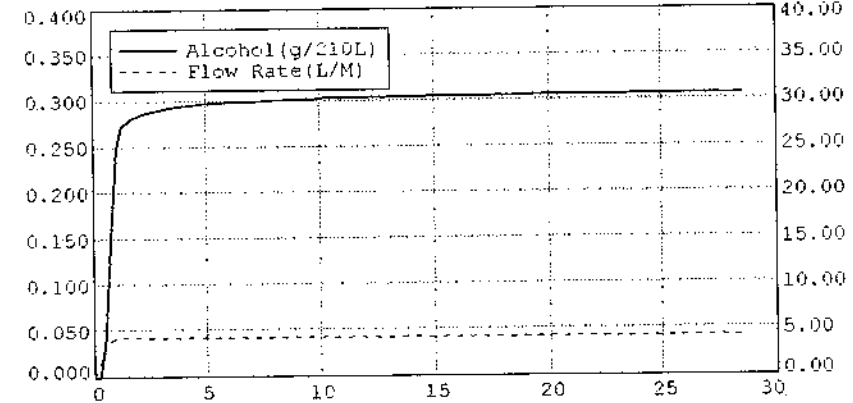
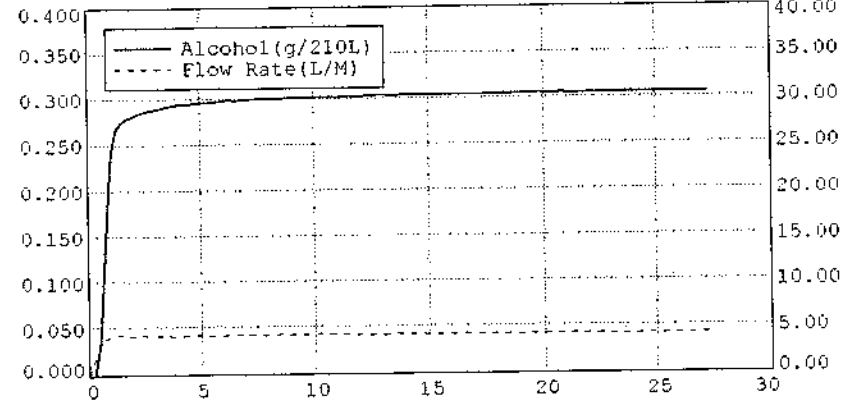
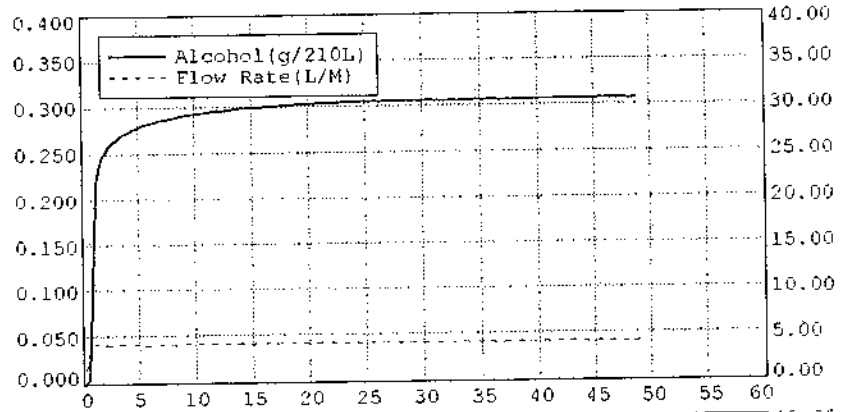
Alaska Department of Public Safety
 DATAMASTER dmt: 100396

Date: 03/24/2016
 Time: 13:32:43

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 15170
 EXPIRATION: 07/20/2017

BLANK TEST	0.000	13:36
INTERNAL STANDARD	VERIFIED	13:36
EXTERNAL STANDARD	0.307	13:37
BLANK TEST	0.000	13:38
EXTERNAL STANDARD	0.306	13:39
BLANK TEST	0.000	13:40
EXTERNAL STANDARD	0.306	13:40
BLANK TEST	0.000	13:41
EXTERNAL STANDARD	0.306	13:42
BLANK TEST	0.000	13:43
EXTERNAL STANDARD	0.306	13:43
BLANK TEST	0.000	13:44

Average = 0.3062
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 03/25/2016
Time: 09:37:56

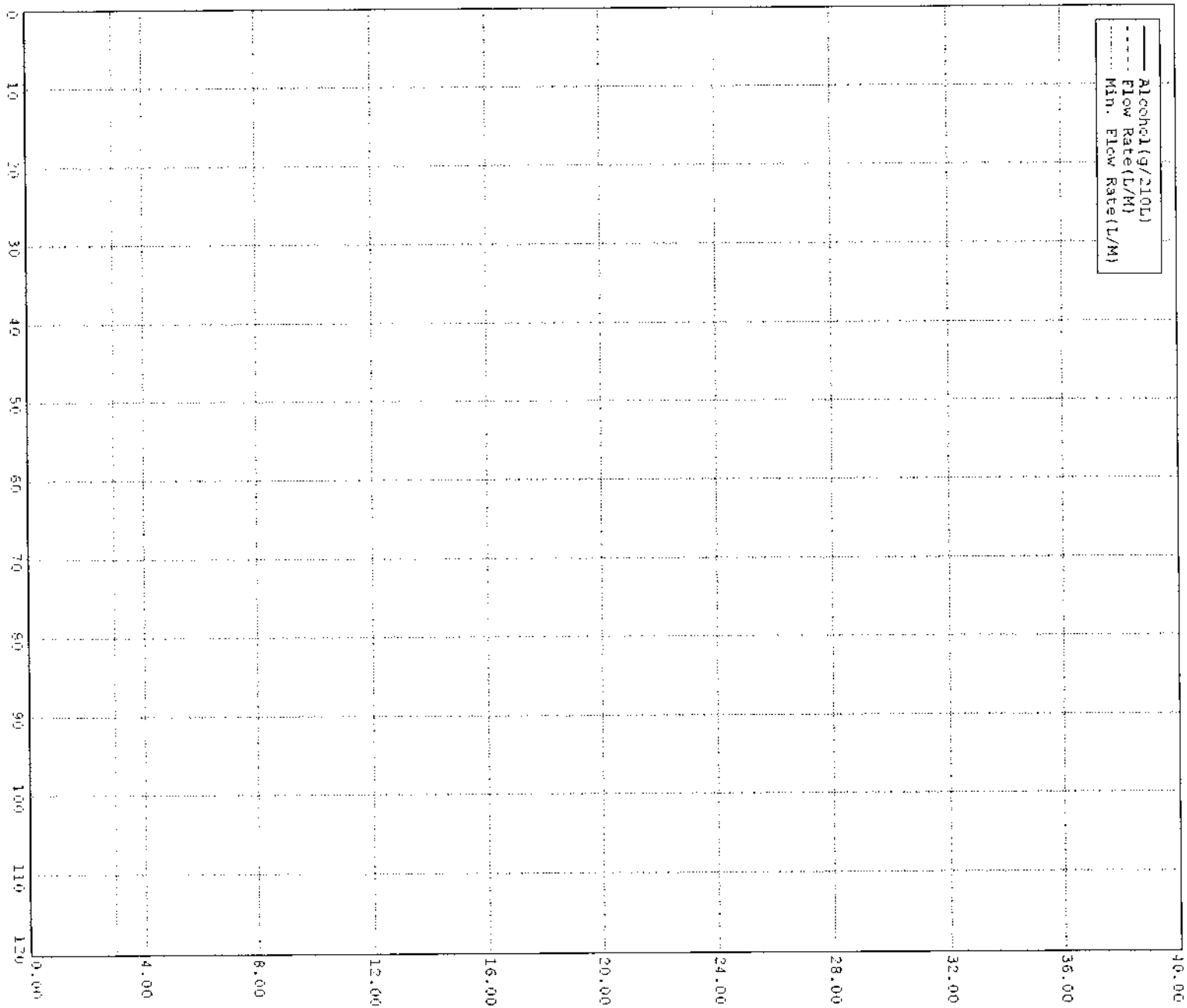
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	09:38
BLANK TEST	0.000	09:39
INTERNAL STANDARD	VERIFIED	09:39
EXTERNAL STANDARD	0.078	09:39
BLANK TEST	0.000	09:40
SUBJECT SAMPLE	INCOMPLETE	09:42



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 03/25/2016
Time: 09:56:21

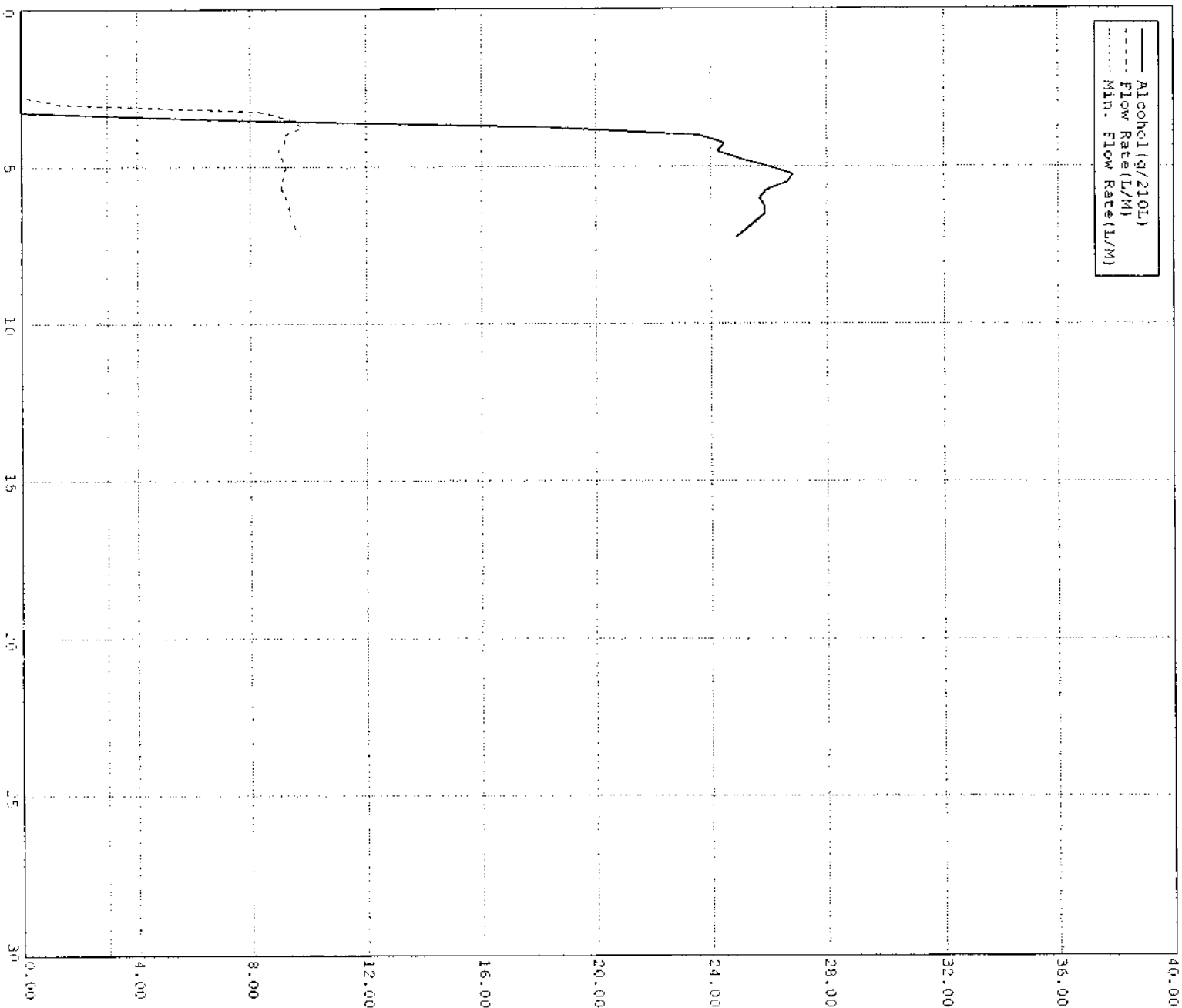
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INVALID XXXX
OPERATOR'S #: XXXX

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

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

DIAGNOSTIC CHECK
BLANK TEST PASSED 09:59
INTERNAL STANDARD VERIFIED 10:00
EXTERNAL STANDARD 0.078 10:00
BLANK TEST 0.000 10:01
SUBJECT SAMPLE INVALID 10:01



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 03/25/2016
Time: 10:04:12

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

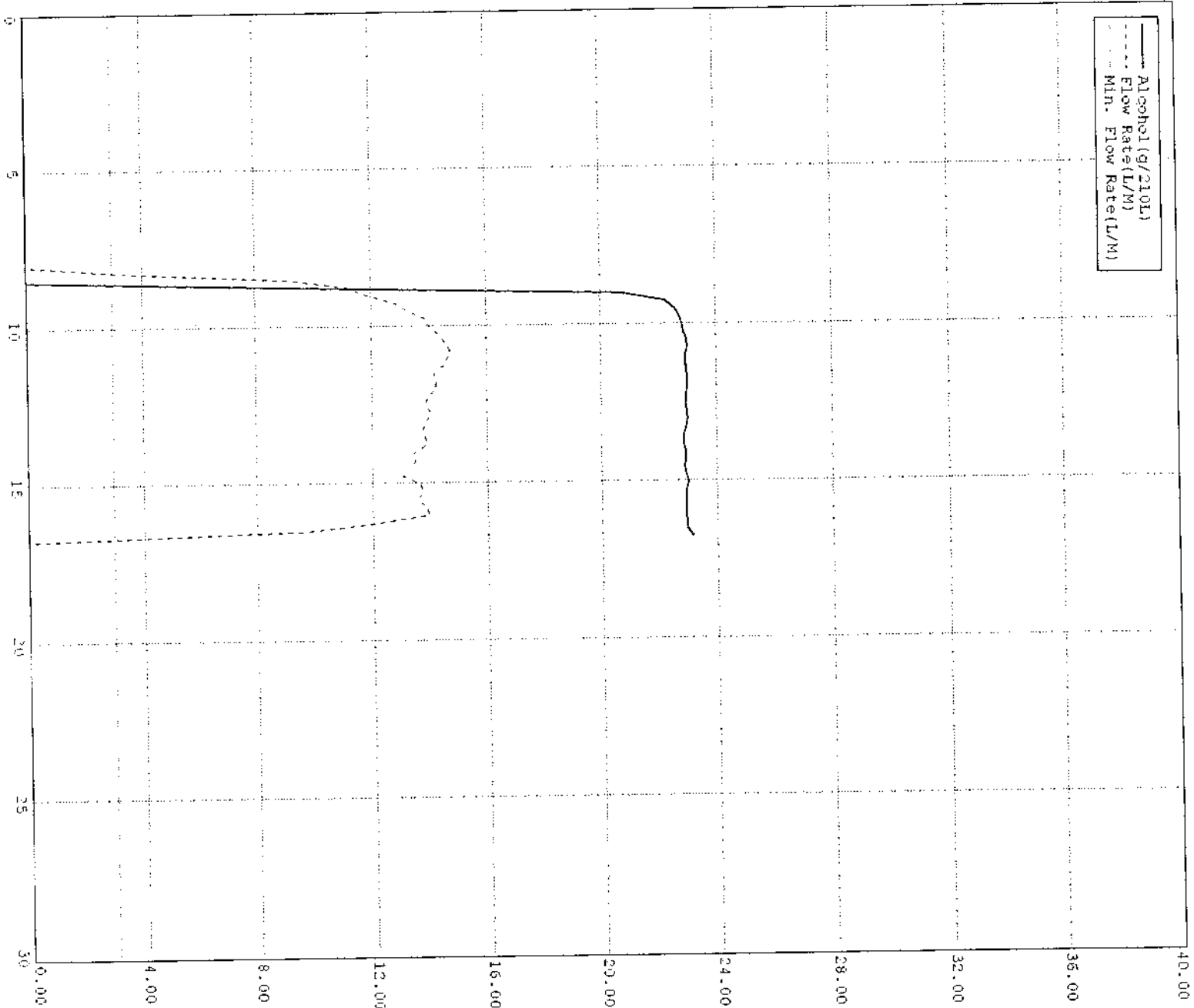
DIAGNOSTIC CHECK	PASSED	10:09
BLANK TEST	0.000	10:09
INTERNAL STANDARD	VERIFIED	10:09
XG = 0.107 (0.08%)	0.078	10:09
EXTERNAL STANDARD	X[1] = 0.0779 (-0.0022)	(0.0009)
BLANK TEST	0.000	10:10
SUBJECT SAMPLE	XXX	10:10
X[1] = 0.1165 (-0.0165)	(-0.0002)	

Interference Detected

Filter 2 Avg: -0.0016

Filter 3 Avg: 0.0010

CWF 3/25/16



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 03/25/2016
Time: 10:13:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

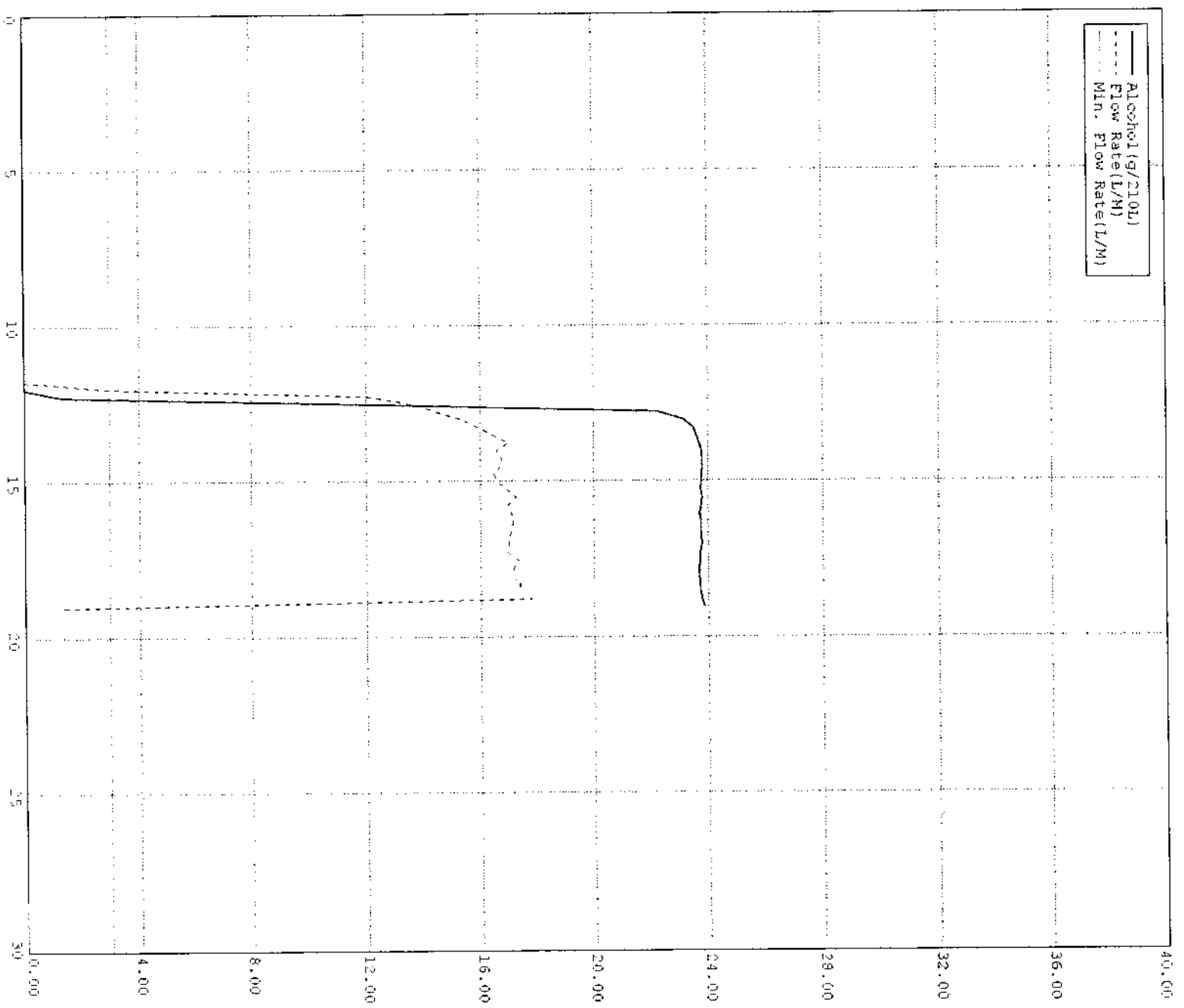
OPERATOR NAME:
INTERFERENCE IPA
OPERATOR'S #: XXXX

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 10:18
BLANK TEST 0.000 10:19
INTERNAL STANDARD VERIFIED 10:19
Xq = 0.108 (0.98%)
EXTERNAL STANDARD 0.078 10:19
X[1] = 0.0785 (-0.0011) (0.0015)
BLANK TEST 0.000 10:20
SUBJECT SAMPLE XXX 10:20
X[1] = 0.1205 (-0.0294) (-0.0007)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 03/25/2016
Time: 10:22:59

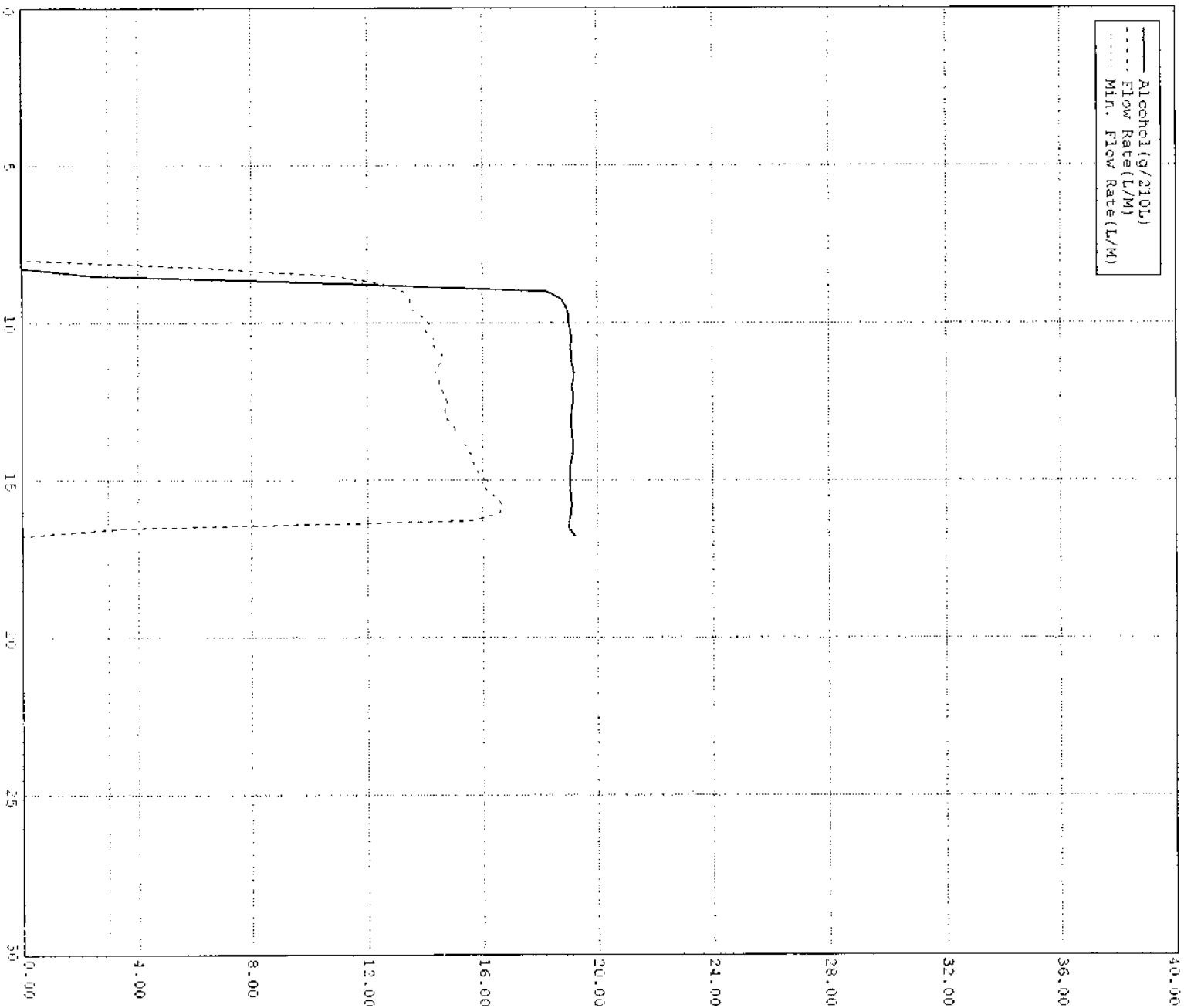
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE NEGATIVE
OPERATOR'S #: XXXX

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

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

DIAGNOSTIC CHECK	PASSED	10:30
BLANK TEST	0.000	10:30
INTERNAL STANDARD	VERIFIED	10:30
Xq = 0.108 (0.98%)		
EXTERNAL STANDARD	0.078	10:30
X[1] = 0.0784 (-0.0019)	(0.0009)	
BLANK TEST	0.000	10:31
SUBJECT SAMPLE (Vol=2.01L)	0.097	10:32
X[1] = 0.0975 (-0.0003)	(-0.0005)	
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.078	10:33
X[1] = 0.0776 (-0.0010)	(0.0007)	
BLANK TEST	0.000	10:34



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100396

Date: 03/25/2016
Time: 12:19:14

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
EXCEEDED ATTEMPTS
OPERATOR'S #: XXXX

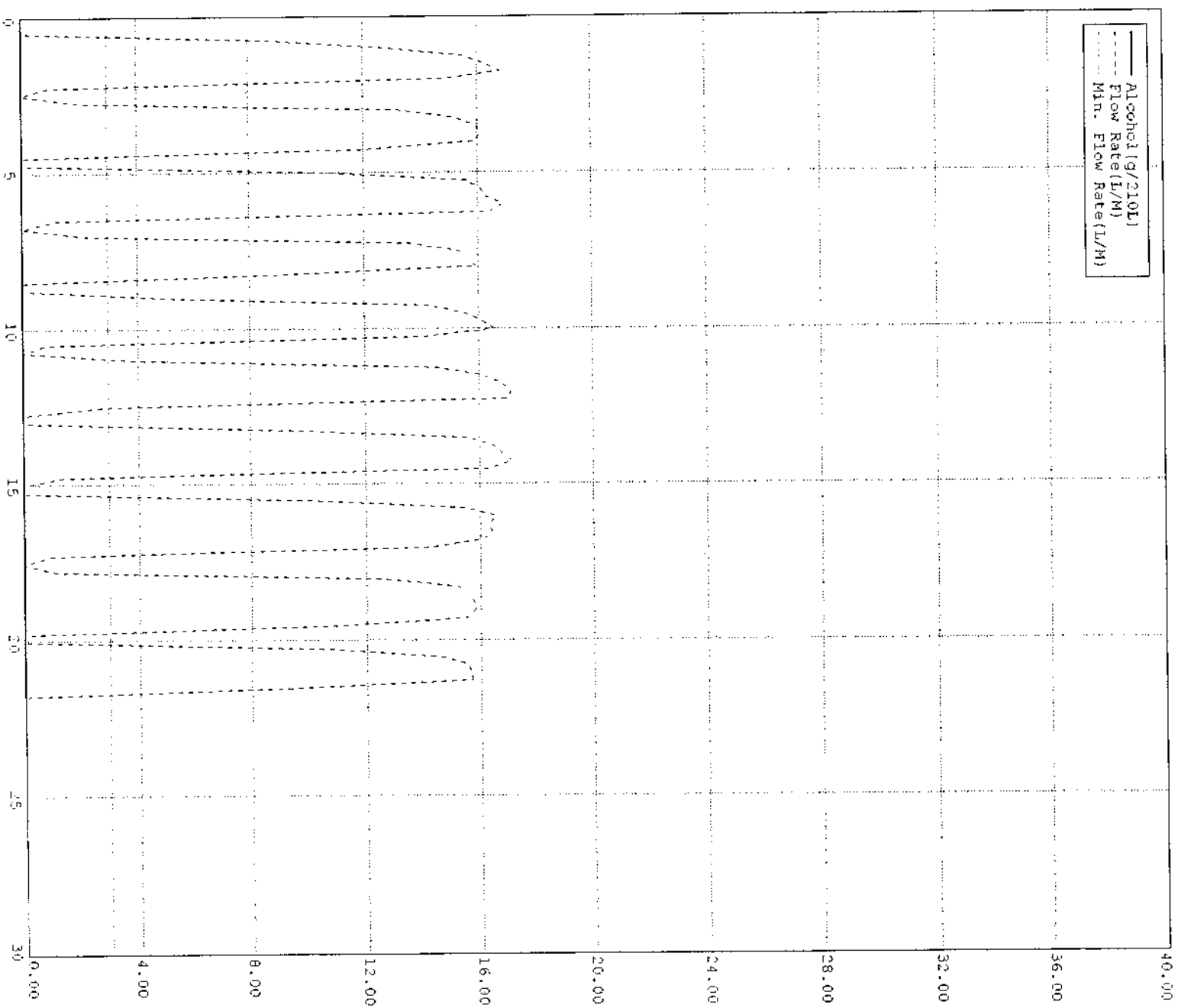
DEPT/AGENCY:
XXXX
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	12:24
BLANK TEST	0.000	12:24
INTERNAL STANDARD	VERIFIED	12:24
EXTERNAL STANDARD	0.078	12:25
BLANK TEST	0.000	12:25
SUBJECT SAMPLE	XXX	12:26

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 03/25/2016
Time: 12:29:57

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

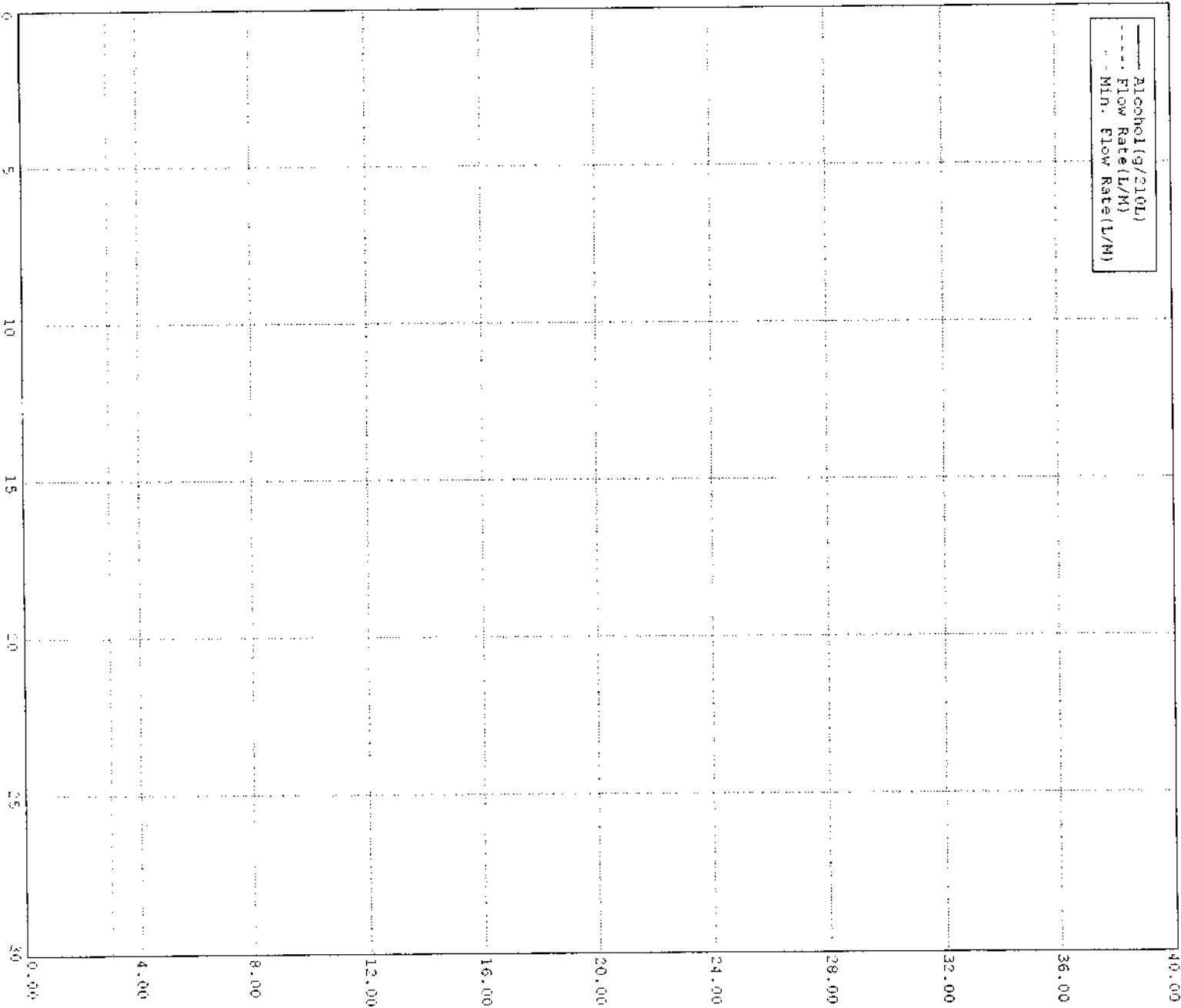
OPERATOR NAME:
RFI XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.41: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	12:40
BLANK TEST	0.000	12:40
INTERNAL STANDARD	VERIFIED	12:40
EXTERNAL STANDARD	0.078	12:40
BLANK TEST	0.000	12:41

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100396

Date: 03/25/2016
Time: 12:59:04

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 29.41: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:02
BLANK TEST	0.000	13:02
INTERNAL STANDARD	VERIFIED	13:02
EXTERNAL STANDARD	0.078	13:02
BLANK TEST	0.000	13:03
SUBJECT SAMPLE (Vol=2.82L)	0.000	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.078	13:05
BLANK TEST	0.000	13:06

