

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 100424 Analyst CTCF 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 1.6 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 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

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 3/25/16

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/24/2016
Time: 10:41:57

VERSIONS

DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 44.9°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.60 V PASSED
(0.99 V - 2.31 V)
Cooler Voltage = 1.73 V PASSED
(1.04 V - 2.42 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 525 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.5 in

PUMP INFO

Flow Rate = 3.744 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 = 0.080 1.07% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100424

Date: 03/24/2016
Time: 10:51 AM

Temperatures (°C)

Sample Cell: 49.1°C
Breath Tube: 43.7°C

Current Barometer 29.5 in
Volume (Ltr) 1.44

Settings

Lamp: 1.60 V
Bias: 79 V
Cooler: 1.78 V
Chopper: 525 Hz

Voltages (V)

Flow: 1.04 V
Detector: 0.048 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 01/24/2014
Time: 07:38:53

Ca = 0.1010
CAL = 0.996059 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0047 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0812 0.0500 <= Xq < 0.2000
a21 = 1.133555 1.050 <= a21 < 1.300
a31 = 0.391341 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/24/2016
Time: 12:00:02

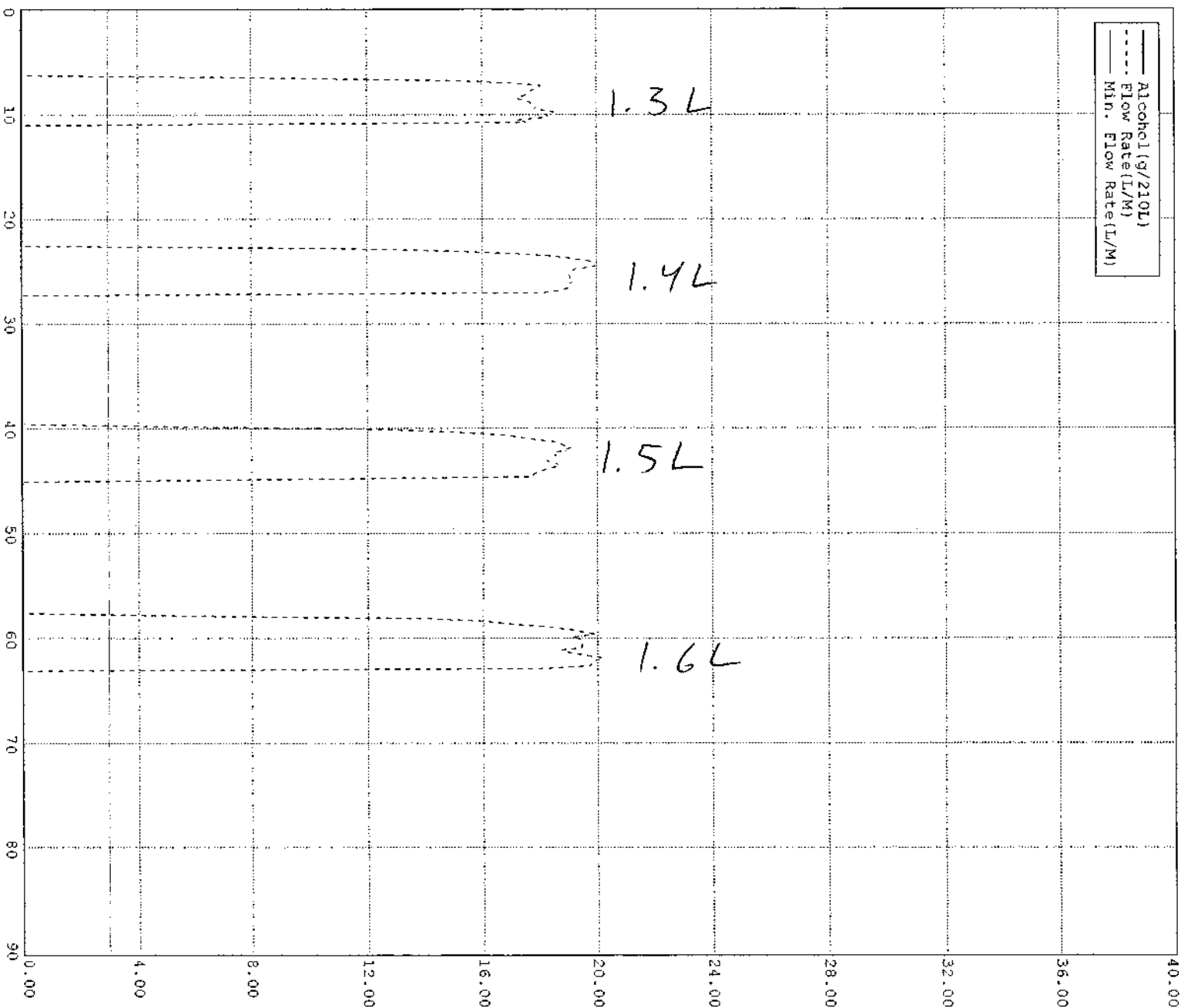
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MINIMUM VOLUME
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.51: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	12:02
BLANK TEST	0.000	12:02
INTERNAL STANDARD	VERIFIED	12:02
EXTERNAL STANDARD	0.078	12:02
BLANK TEST	0.000	12:03
SUBJECT SAMPLE (Vol=1.59L)	0.000	12:04
BLANK TEST	0.000	12:05
EXTERNAL STANDARD	0.078	12:05
BLANK TEST	0.000	12:06



LINEARITY CHECK

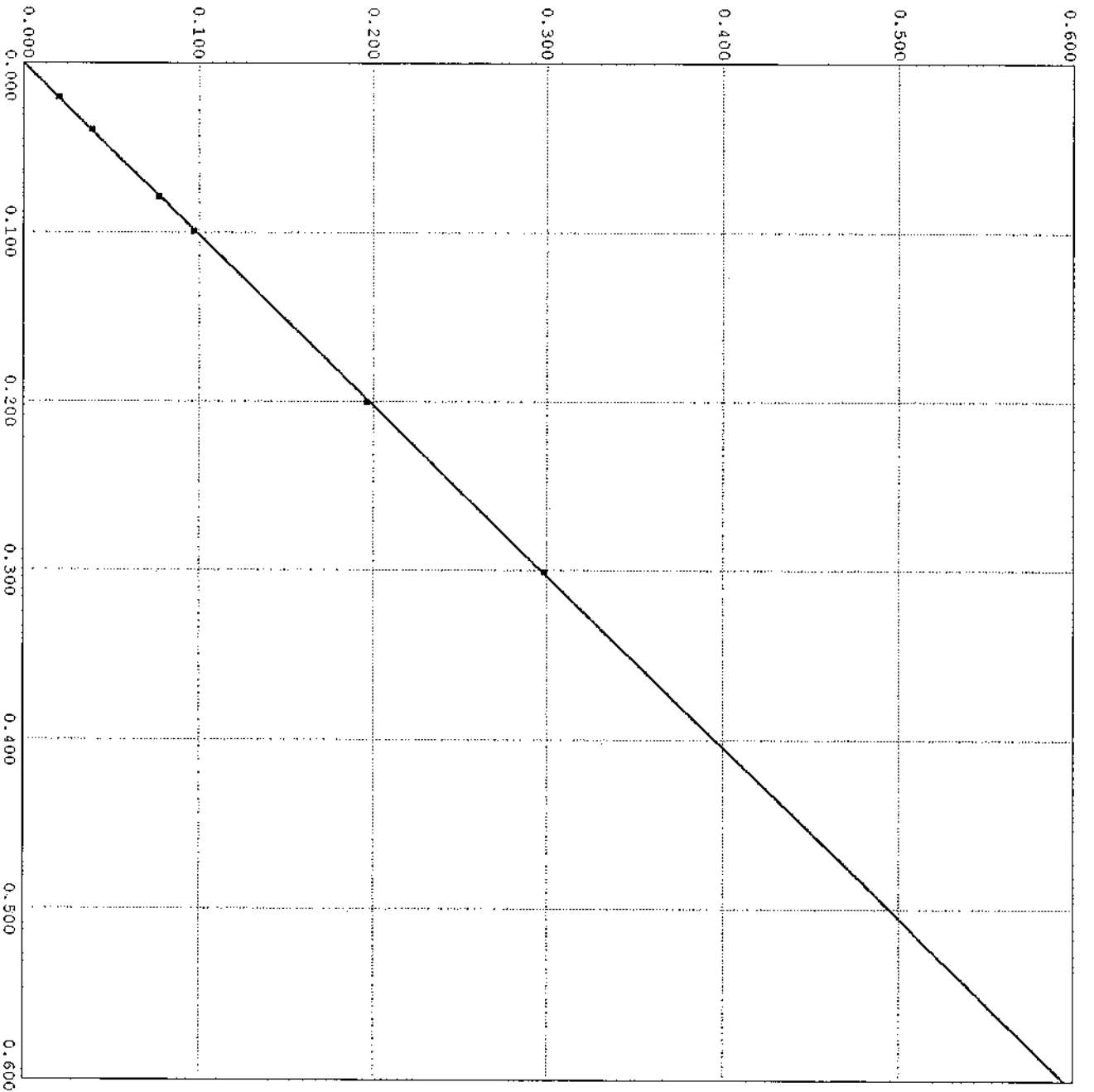
Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/24/2016
Time: 12:17:19

SUPERVISOR NAME:
CHARLES FOSTER
OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.020	0.0210	0.0000
0.039	0.0402	0.0004
0.079	0.0780	0.0000
0.099	0.0982	0.0004
0.200	0.1970	0.0000
0.300	0.2992	0.0008

SLOPE = 0.991055
R² = 0.999872



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100424

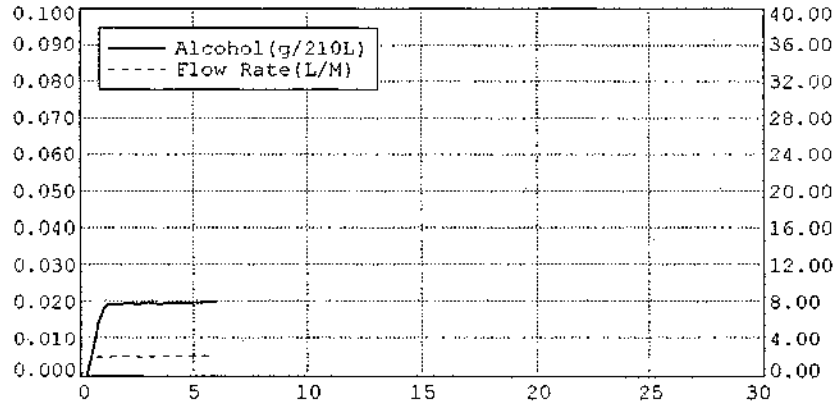
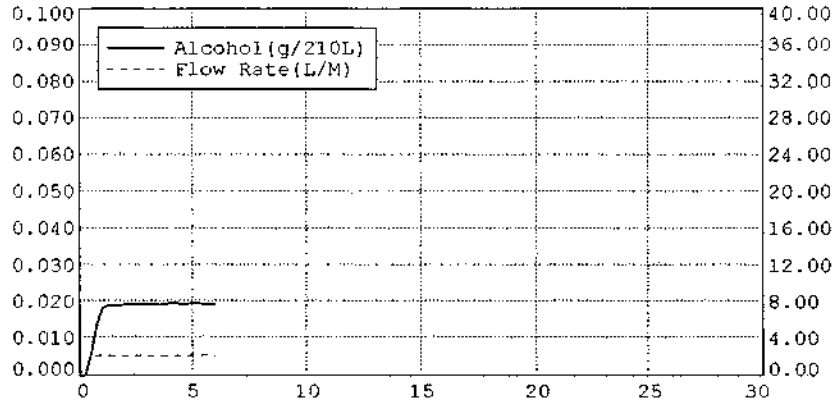
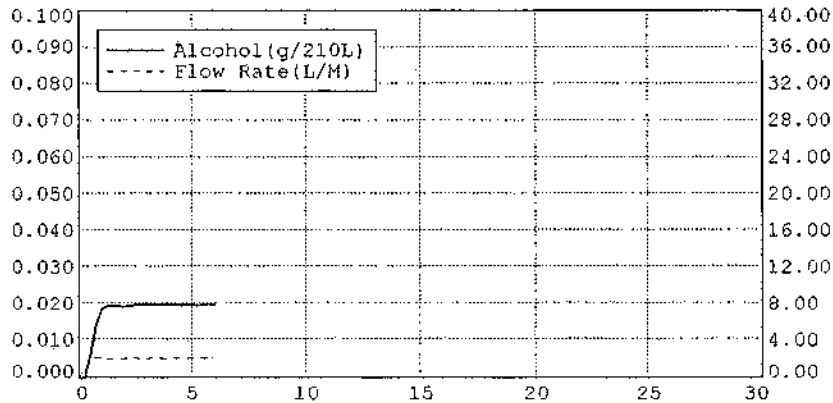
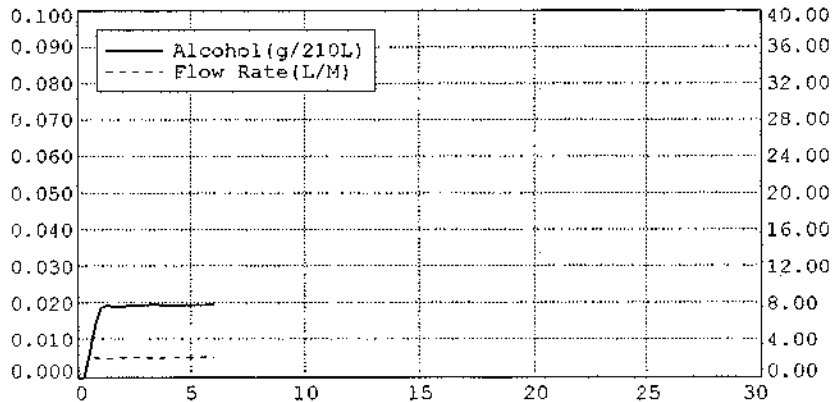
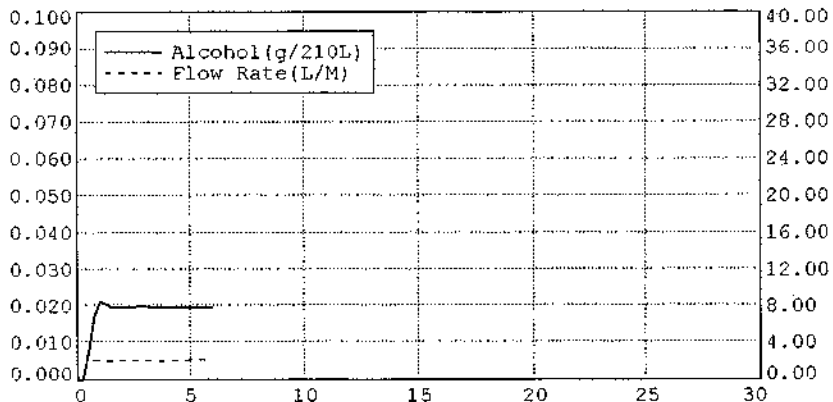
Date: 03/24/2016
 Time: 12:17:20

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.52: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 558 psi

BLANK TEST	0.000	12:18
INTERNAL STANDARD	VERIFIED	12:18
EXTERNAL STANDARD	0.021	12:19
BLANK TEST	0.000	12:19
EXTERNAL STANDARD	0.021	12:20
BLANK TEST	0.000	12:21
EXTERNAL STANDARD	0.021	12:21
BLANK TEST	0.000	12:22
EXTERNAL STANDARD	0.021	12:22
BLANK TEST	0.000	12:23
EXTERNAL STANDARD	0.021	12:23
BLANK TEST	0.000	12:24

Average = 0.0210
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100424

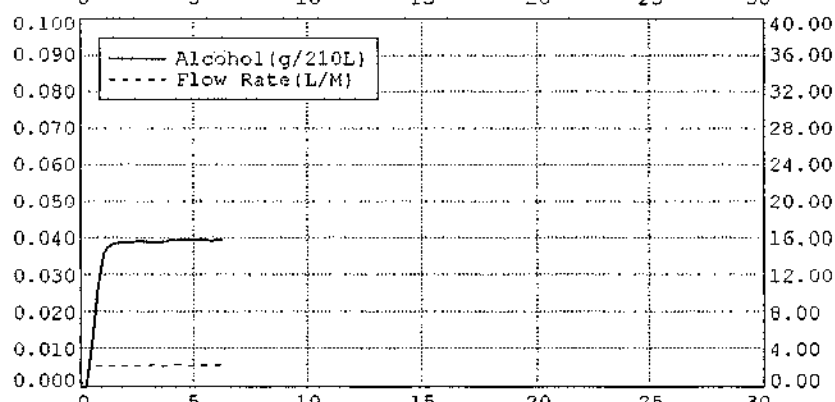
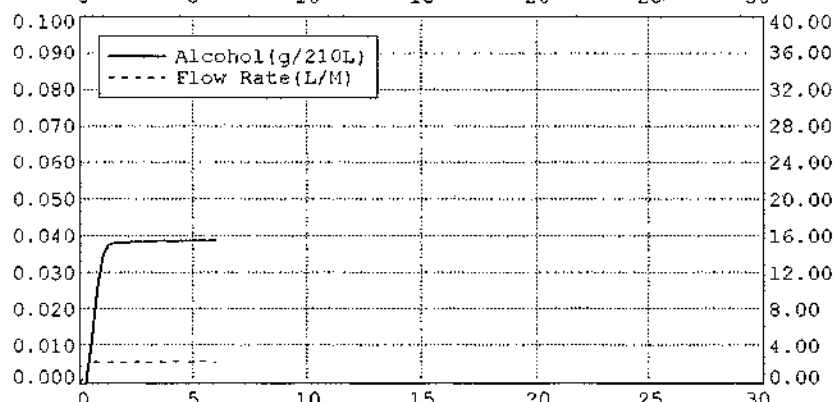
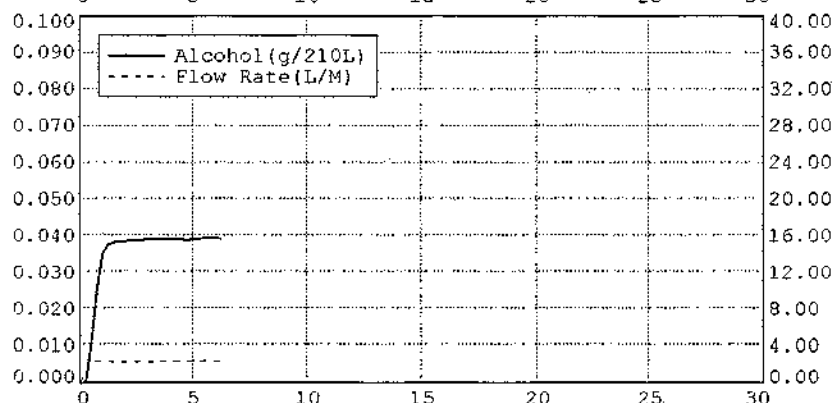
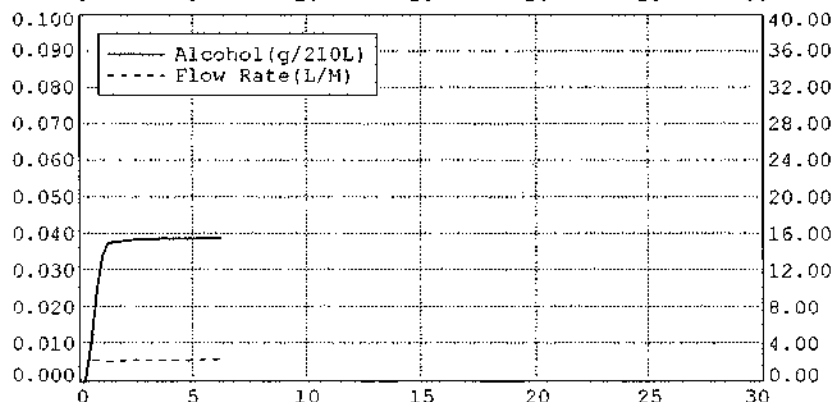
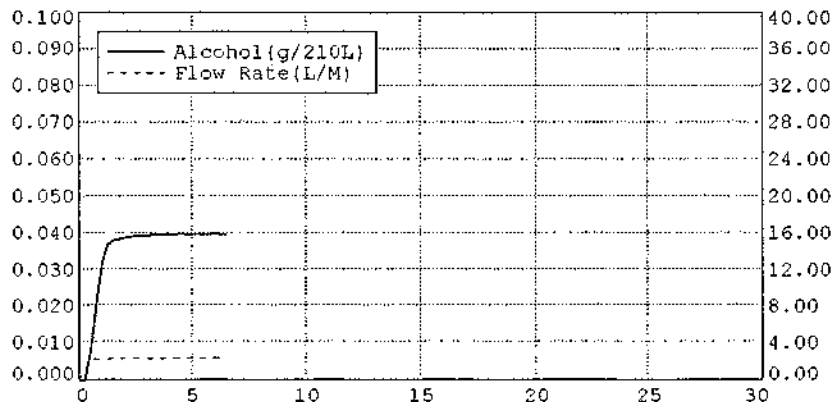
Date: 03/24/2016
Time: 12:26:20

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.51: 0.039
LOT #: 02915040A3
EXPIRATION: 03/05/2017
TANK PRESSURE: 998 psi

BLANK TEST	0.000	12:27
INTERNAL STANDARD	VERIFIED	12:27
EXTERNAL STANDARD	0.041	12:27
BLANK TEST	0.000	12:28
EXTERNAL STANDARD	0.040	12:29
BLANK TEST	0.000	12:29
EXTERNAL STANDARD	0.040	12:30
BLANK TEST	0.000	12:31
EXTERNAL STANDARD	0.040	12:31
BLANK TEST	0.000	12:32
EXTERNAL STANDARD	0.040	12:32
BLANK TEST	0.000	12:33

Average = 0.0402
Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100424

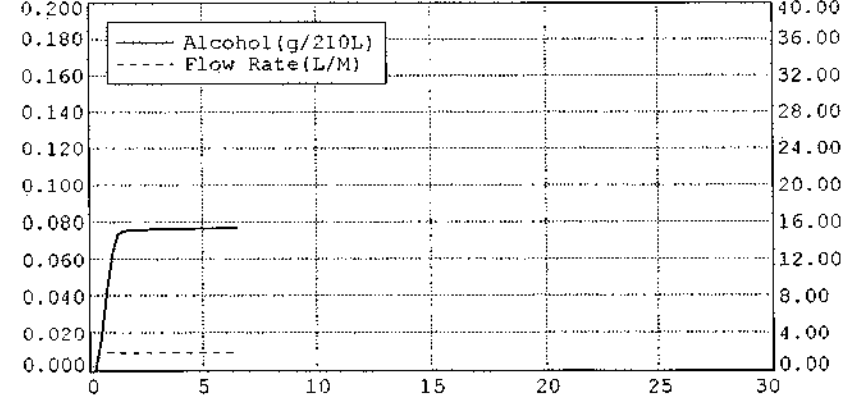
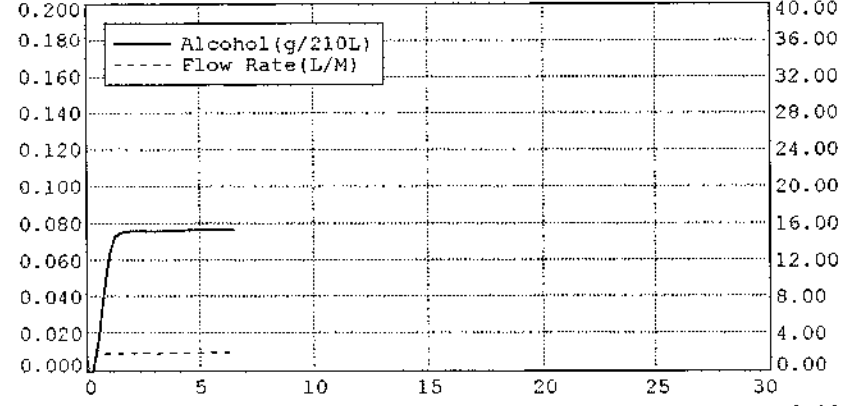
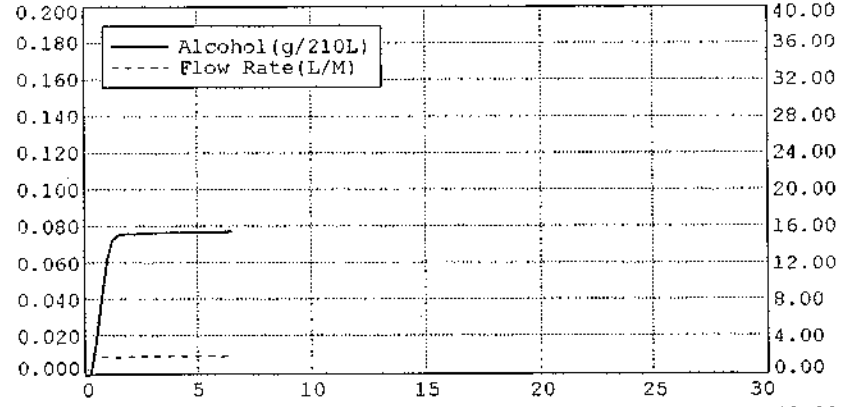
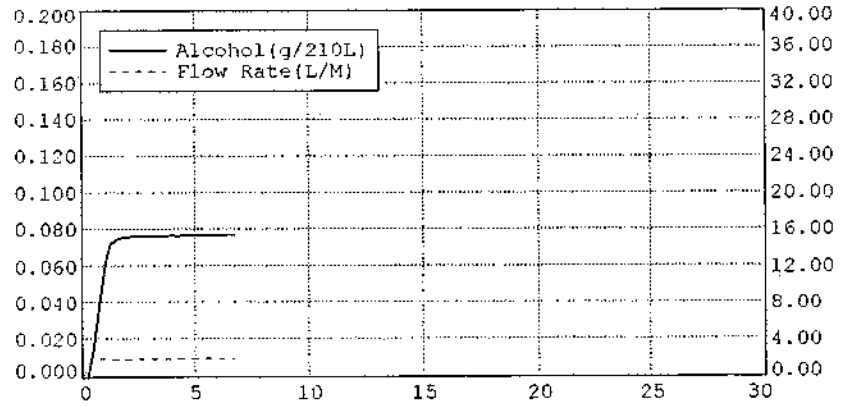
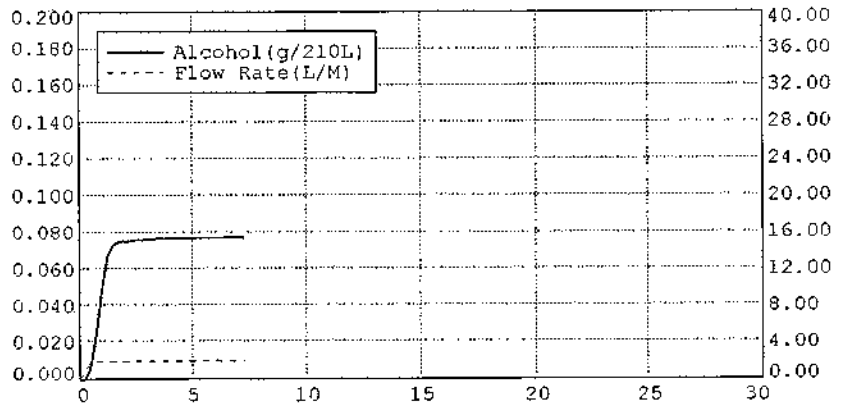
Date: 03/24/2016
 Time: 12:34:00

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.51: 0.079
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 336 psi

BLANK TEST	0.000	12:35
INTERNAL STANDARD	VERIFIED	12:35
EXTERNAL STANDARD	0.078	12:35
BLANK TEST	0.000	12:36
EXTERNAL STANDARD	0.078	12:36
BLANK TEST	0.000	12:37
EXTERNAL STANDARD	0.078	12:37
BLANK TEST	0.000	12:38
EXTERNAL STANDARD	0.078	12:38
BLANK TEST	0.000	12:39
EXTERNAL STANDARD	0.078	12:40
BLANK TEST	0.000	12:40

Average = 0.0780
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100424

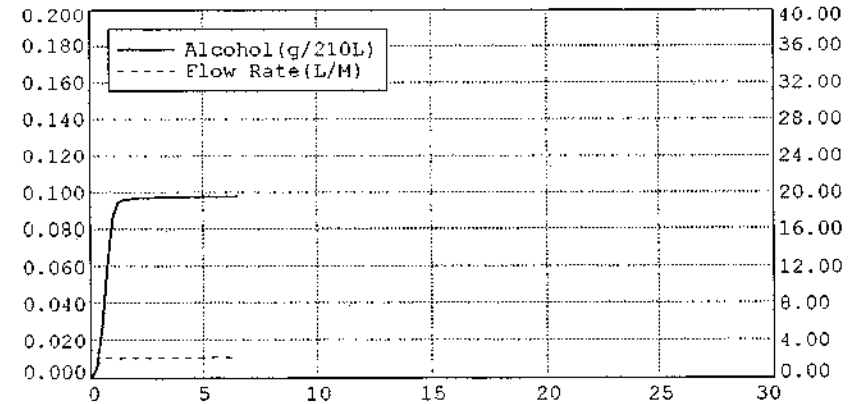
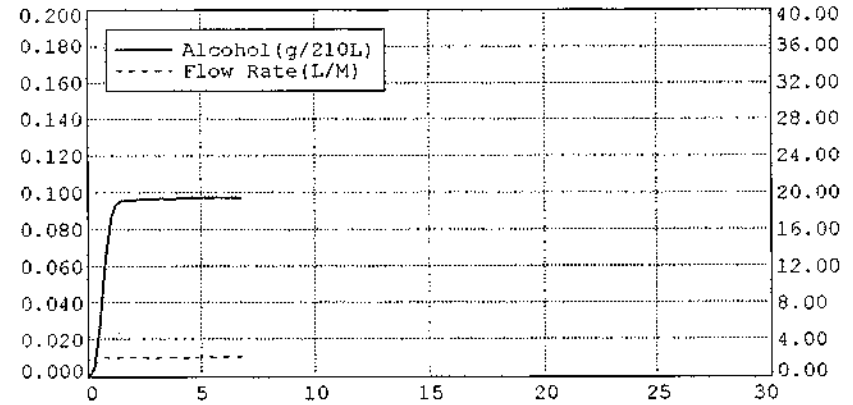
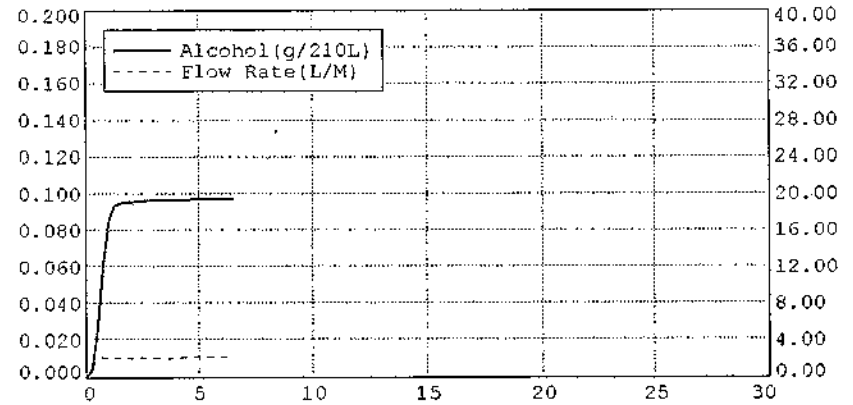
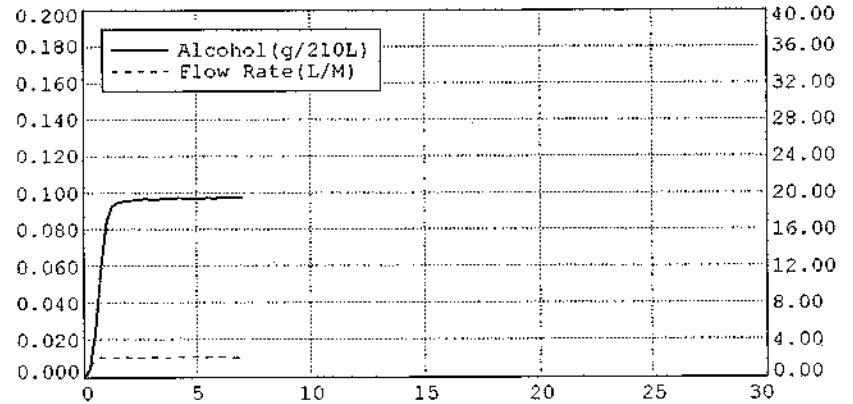
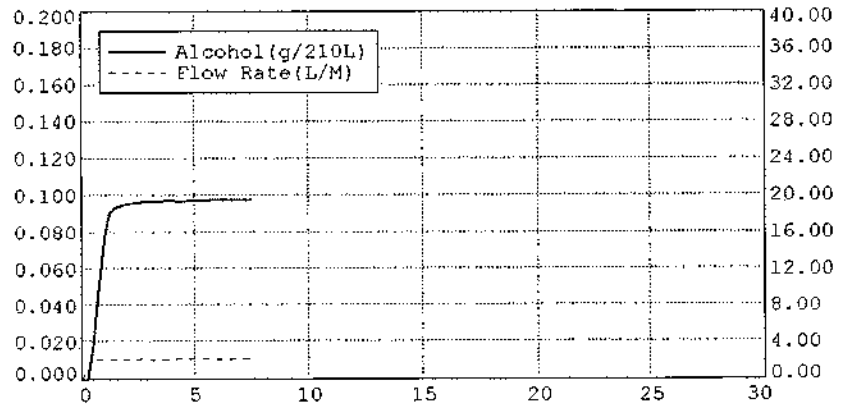
Date: 03/24/2016
 Time: 12:41:52

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.52: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 756 psi

BLANK TEST	0.000	12:43
INTERNAL STANDARD	VERIFIED	12:43
EXTERNAL STANDARD	0.098	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.098	12:44
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.098	12:45
BLANK TEST	0.000	12:46
EXTERNAL STANDARD	0.098	12:46
BLANK TEST	0.000	12:47
EXTERNAL STANDARD	0.099	12:47
BLANK TEST	0.000	12:48

Average = 0.0982
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

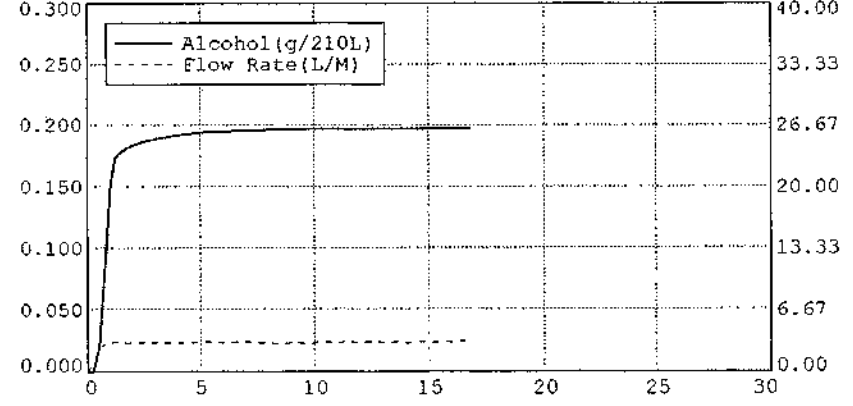
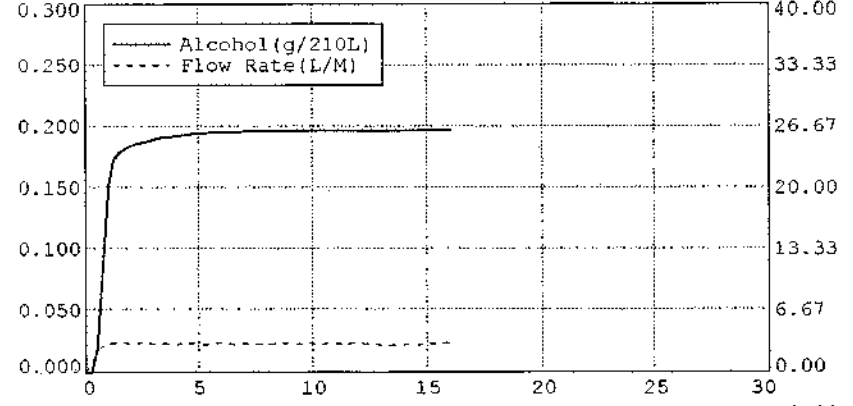
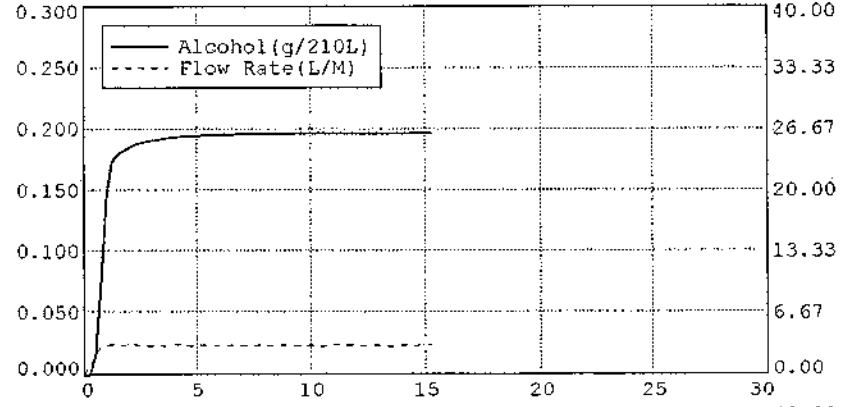
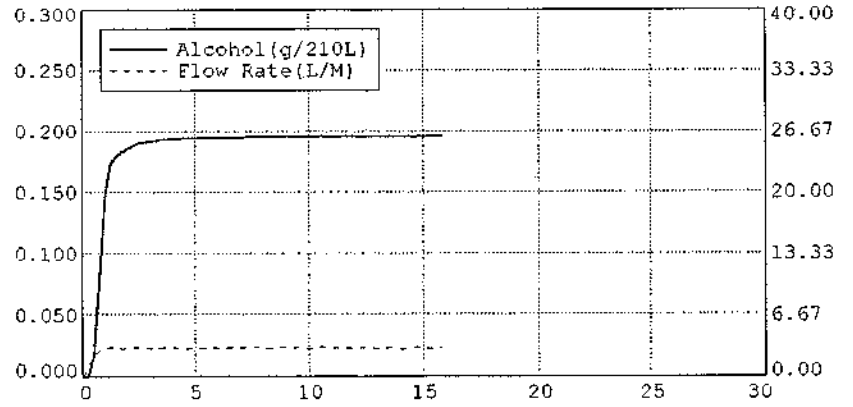
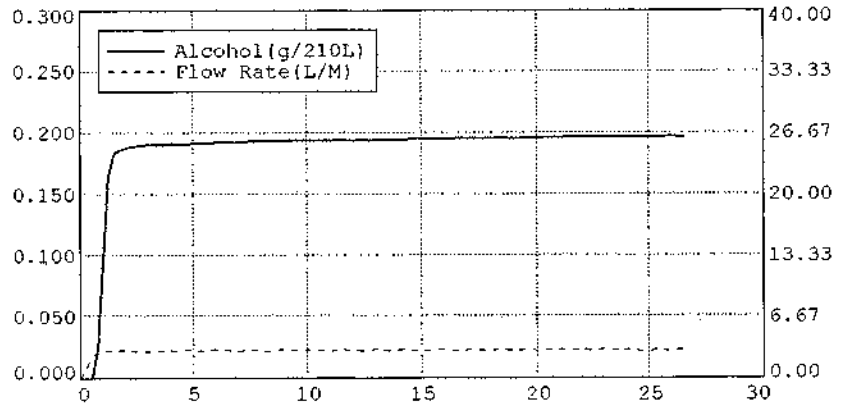
Alaska Department of Public Safety
 DATAMASTER dmt: 100424

Date: 03/24/2016
 Time: 12:50:09

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

BLANK TEST	0.000	12:51
INTERNAL STANDARD	VERIFIED	12:51
EXTERNAL STANDARD	0.197	12:52
BLANK TEST	0.000	12:53
EXTERNAL STANDARD	0.197	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.197	12:55
BLANK TEST	0.000	12:56
EXTERNAL STANDARD	0.197	12:56
BLANK TEST	0.000	12:57
EXTERNAL STANDARD	0.197	12:57
BLANK TEST	0.000	12:58

Average = 0.1970
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

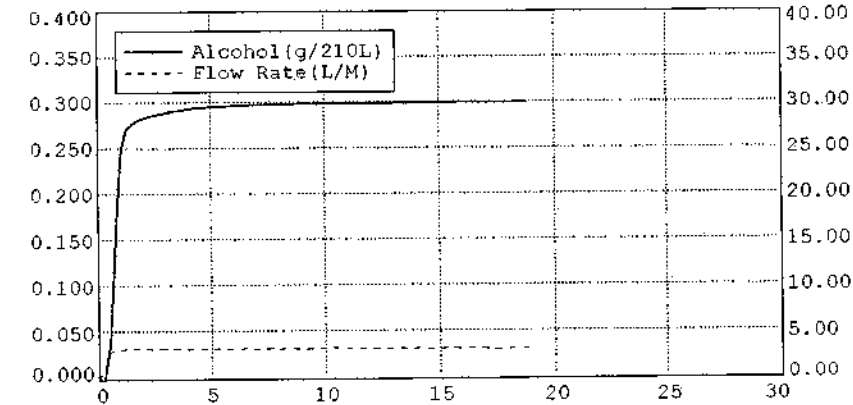
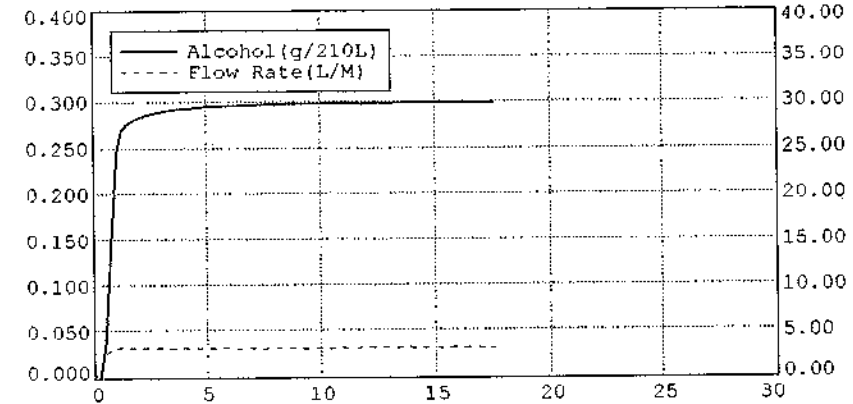
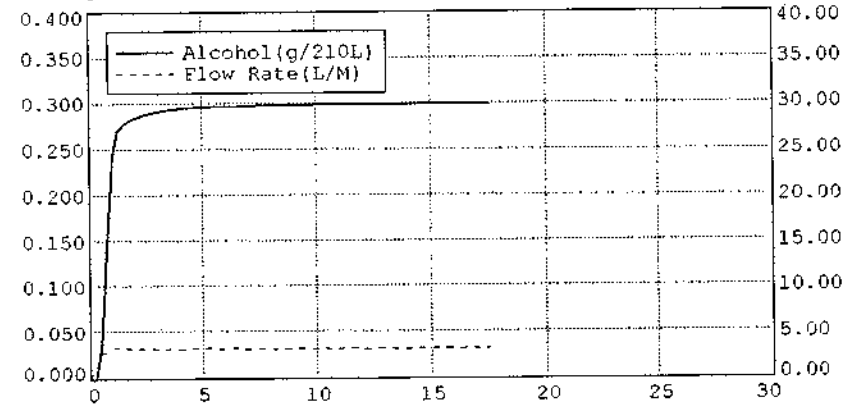
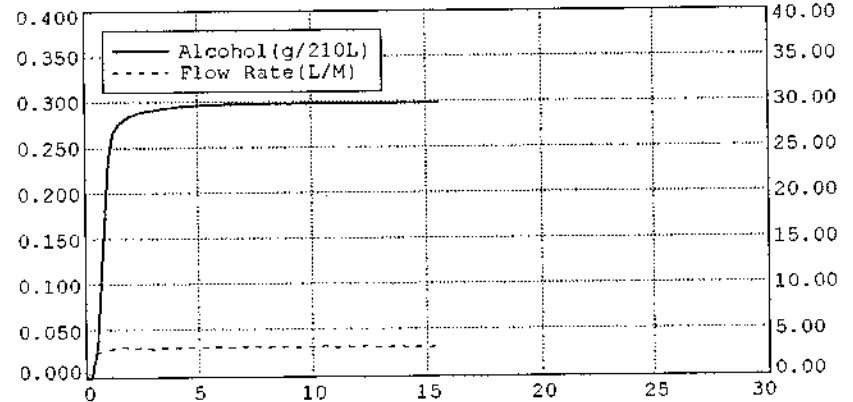
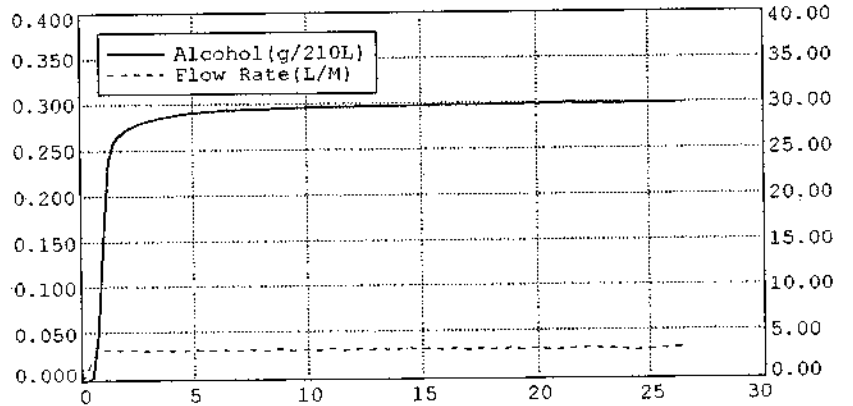
Alaska Department of Public Safety
 DATAMASTER dmt: 100424

Date: 03/24/2016
 Time: 12:59:44

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

BLANK TEST	0.000	13:01
INTERNAL STANDARD	VERIFIED	13:01
EXTERNAL STANDARD	0.300	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.298	13:03
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.299	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.299	13:05
BLANK TEST	0.000	13:06
EXTERNAL STANDARD	0.300	13:07
BLANK TEST	0.000	13:07

Average = 0.2992
 Std Dev = 0.0088



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/25/2016
Time: 09:36:52

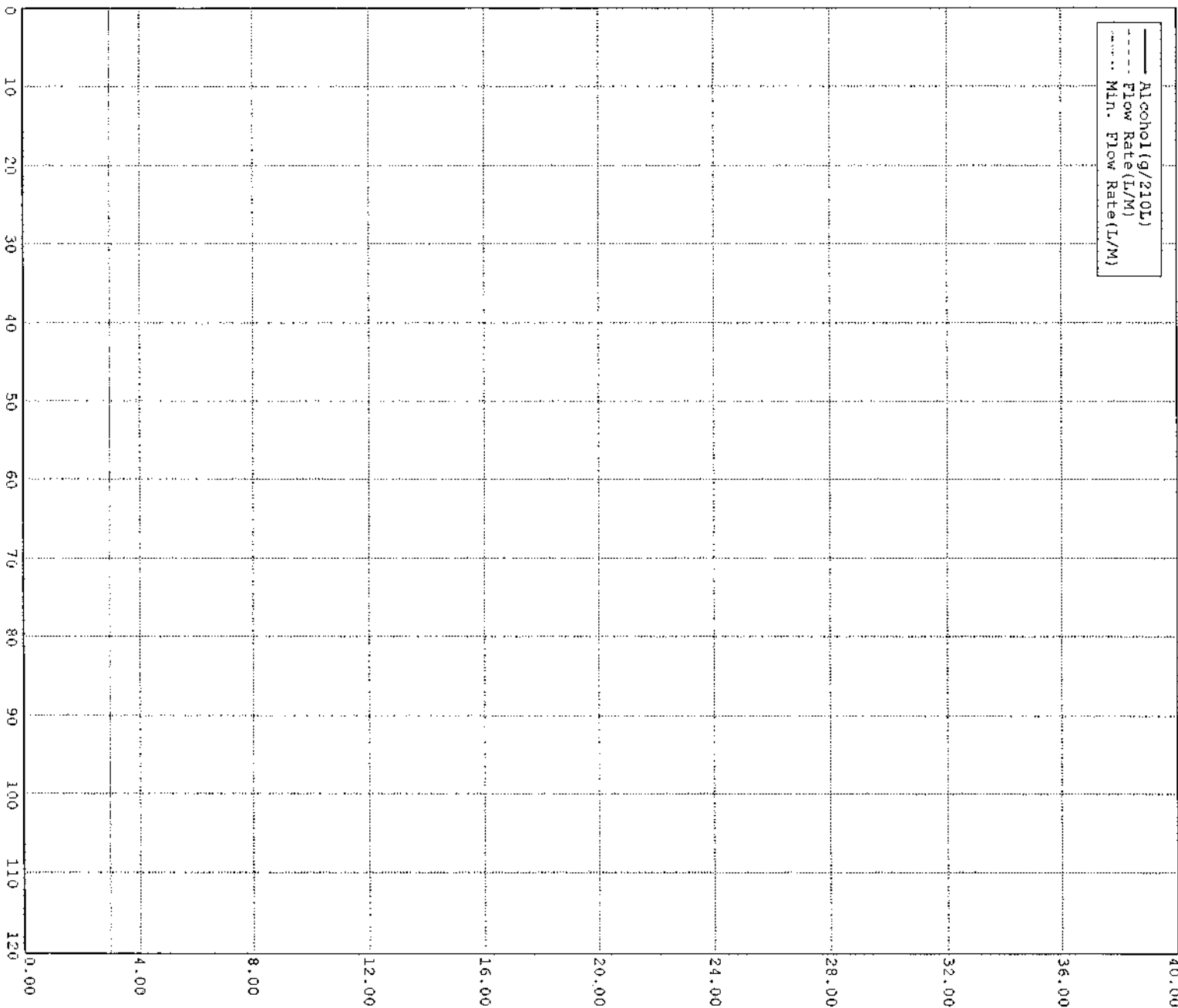
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INCOMPLETE XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.45: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:38
BLANK TEST	0.000	09:39
INTERNAL STANDARD	VERIFIED	09:39
EXTERNAL STANDARD	0.077	09:39
BLANK TEST	0.000	09:40
SUBJECT SAMPLE	INCOMPLETE	09:42



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/25/2016
Time: 09:55:15

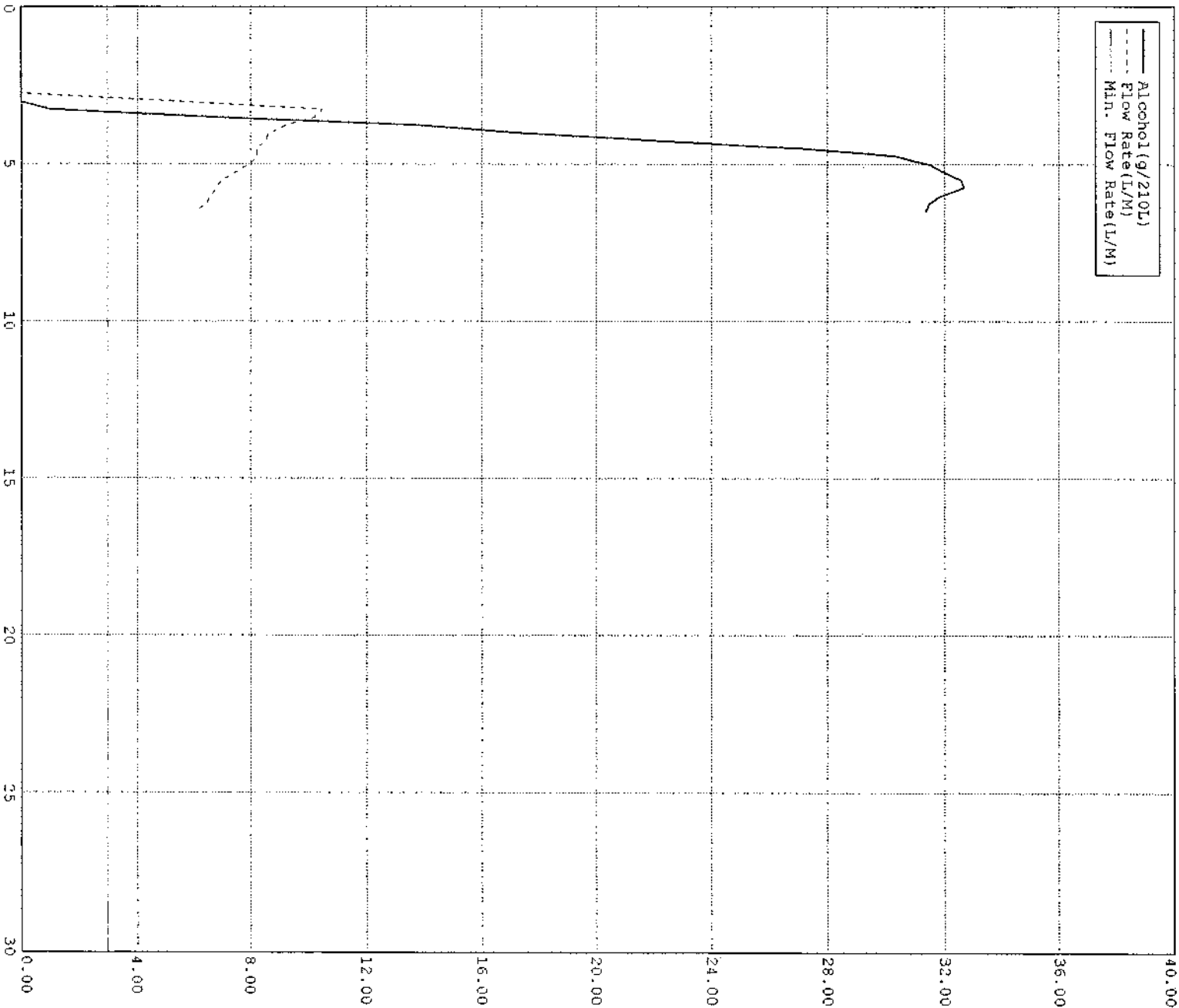
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INVALID XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AF 29.45: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:58
BLANK TEST	0.000	09:58
INTERNAL STANDARD	VERIFIED	09:58
EXTERNAL STANDARD	0.077	09:58
BLANK TEST	0.000	09:59
SUBJECT SAMPLE	INVALID	10:00



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

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

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 #: 01315080A2
EXPIRATION: 02/05/2017

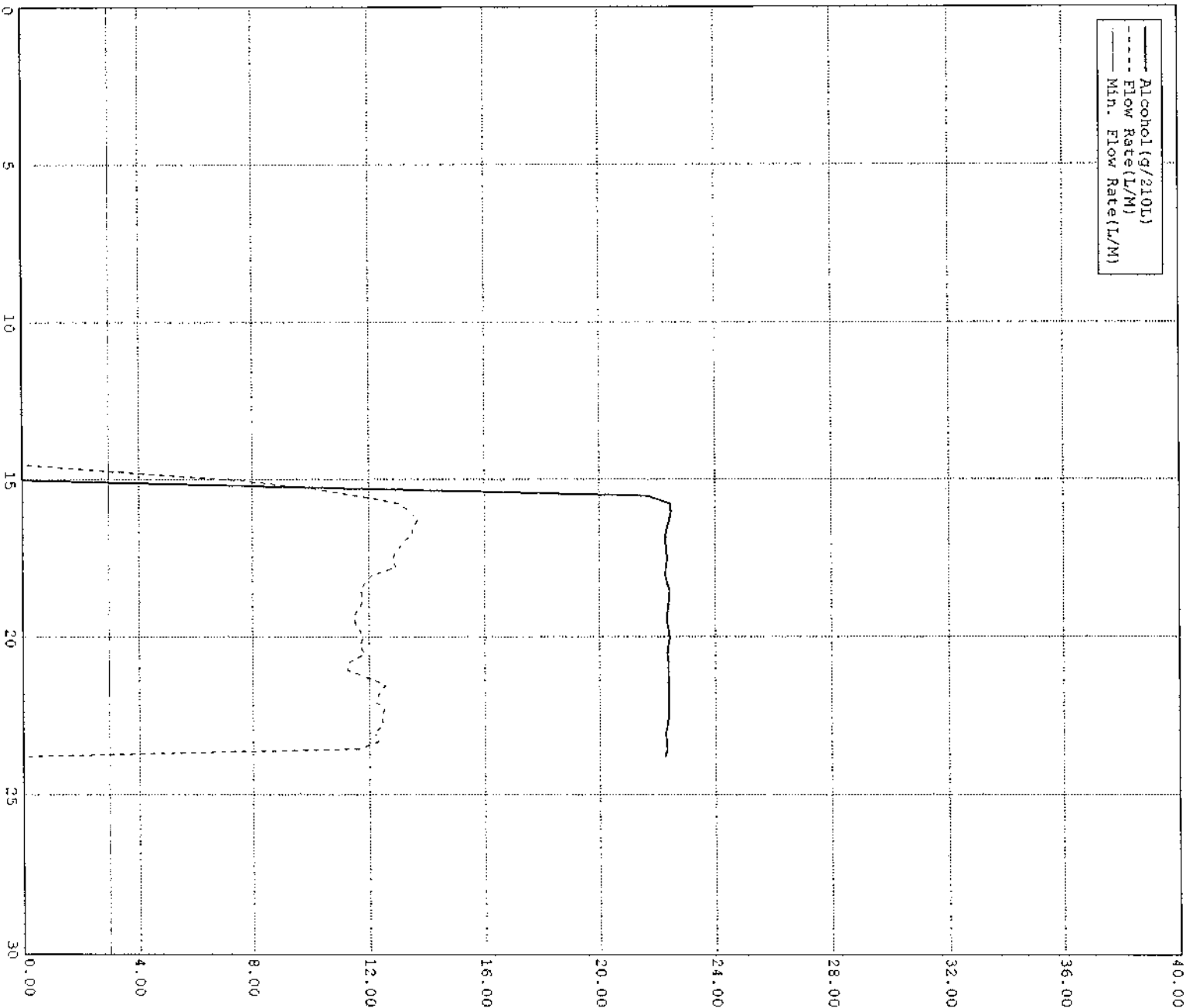
DIAGNOSTIC CHECK	PASSED	10:05
BLANK TEST	0.000	10:05
INTERNAL STANDARD	VERIFIED	10:05
Xq = 0.080 (1.93%)		
EXTERNAL STANDARD	0.077	10:05
X[1] = 0.0769 (-0.0020) (0.0005)		
BLANK TEST	0.000	10:06
SUBJECT SAMPLE	XXX	10:07
X[1] = 0.1117 (-0.0228) (-0.0022)		

Interference Detected

Filter 2 Avg: -0.0019

Filter 3 Avg: 0.0008

CWF 3/25/16



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/25/2016
Time: 10:12:39

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

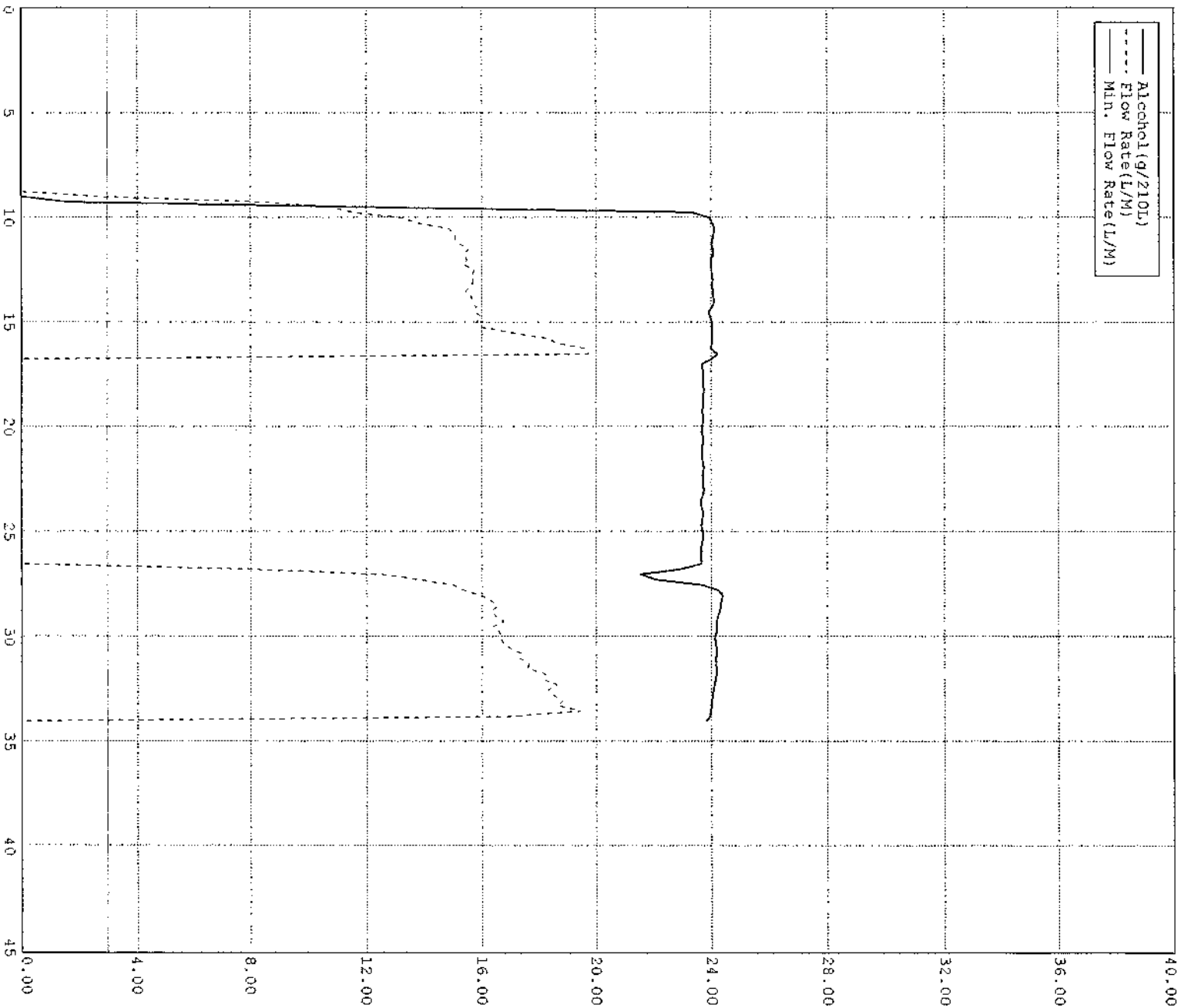
OPERATOR NAME:
INTERFERENCE IPA
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.45: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 10:14
BLANK TEST 0.000 10:14
INTERNAL STANDARD VERIFIED 10:14
Xq = 0.080 (1.28%)
EXTERNAL STANDARD 0.077 10:14
X[1] = 0.0772 (-0.0021) (0.0015)
BLANK TEST 0.000 10:15
SUBJECT SAMPLE XXX 10:16
X[1] = 0.1189 (-0.0238) (-0.0013)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

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

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

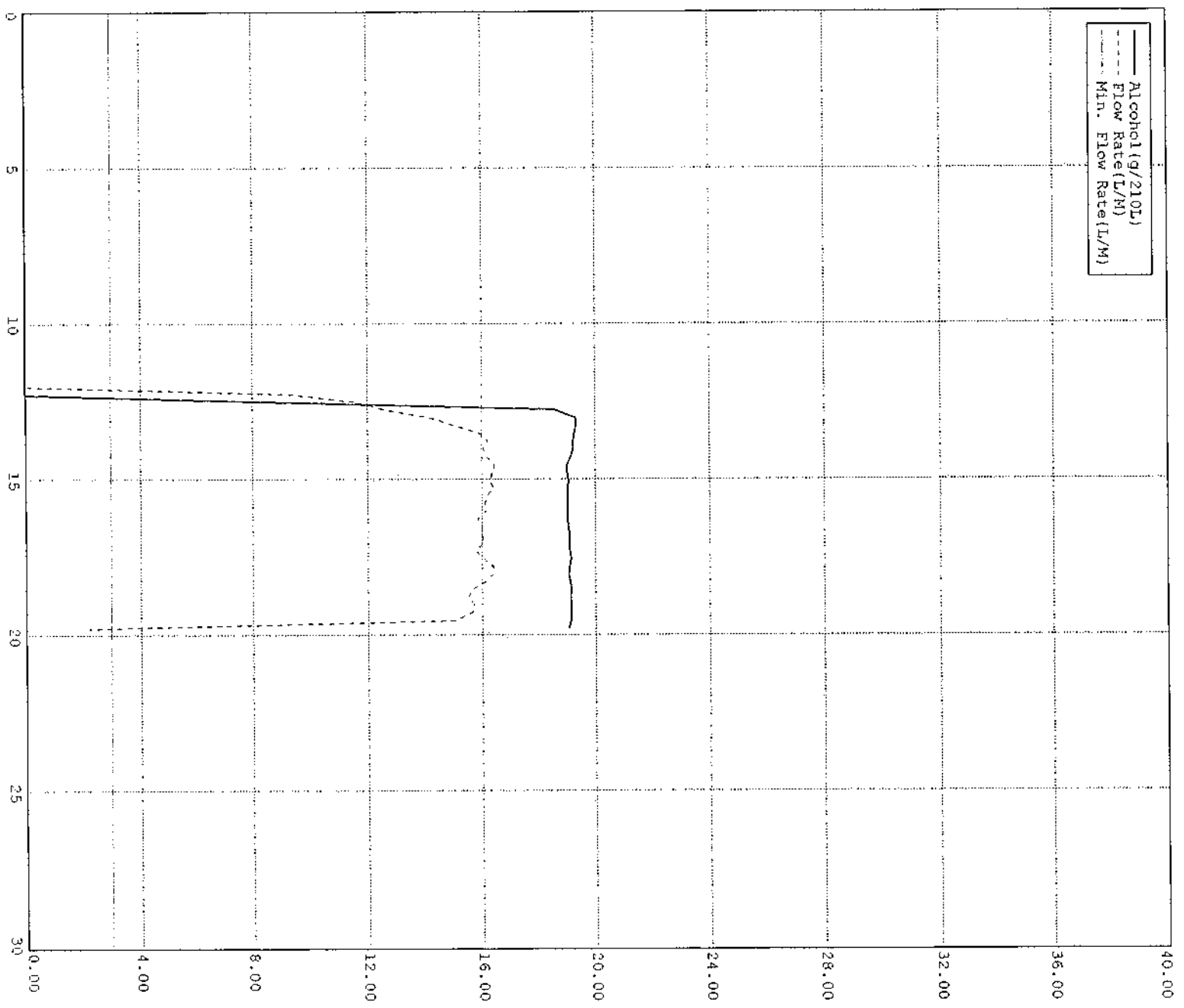
OPERATOR NAME:
INTERFERENCE NEGATIVE
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.45: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	10:25
BLANK TEST	0.000	10:25
INTERNAL STANDARD	VERIFIED	10:26
Xq = 0.081 (0.21%)		
EXTERNAL STANDARD	0.078	10:26
X[1] = 0.0780 (-0.0011) (0.0009)		
BLANK TEST	0.000	10:27
SUBJECT SAMPLE (Vol=1.93L)	0.095	10:27
X[1] = 0.0956 (-0.0008) (-0.0017)		
BLANK TEST	0.000	10:28
EXTERNAL STANDARD	0.078	10:28
X[1] = 0.0776 (-0.0022) (0.0004)		
BLANK TEST	0.000	10:29



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/25/2016
Time: 12:18:05

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

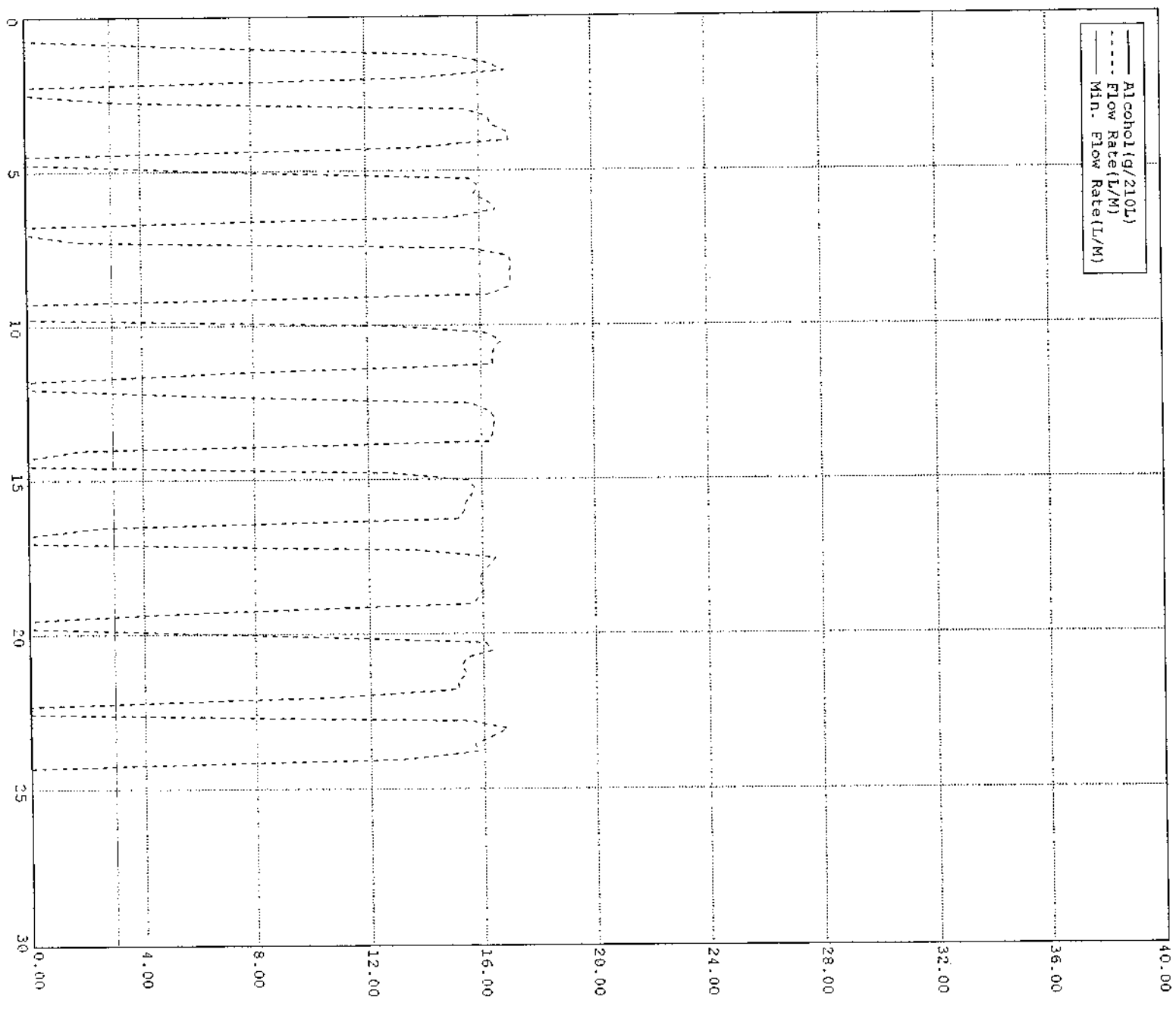
OPERATOR NAME:
EXCEEDED ATTEMPTS
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.42: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	12:20
BLANK TEST	0.000	12:20
INTERNAL STANDARD	0.077	12:20
EXTERNAL STANDARD	0.000	12:21
BLANK TEST	XXX	12:22

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/25/2016
Time: 12:39:11

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

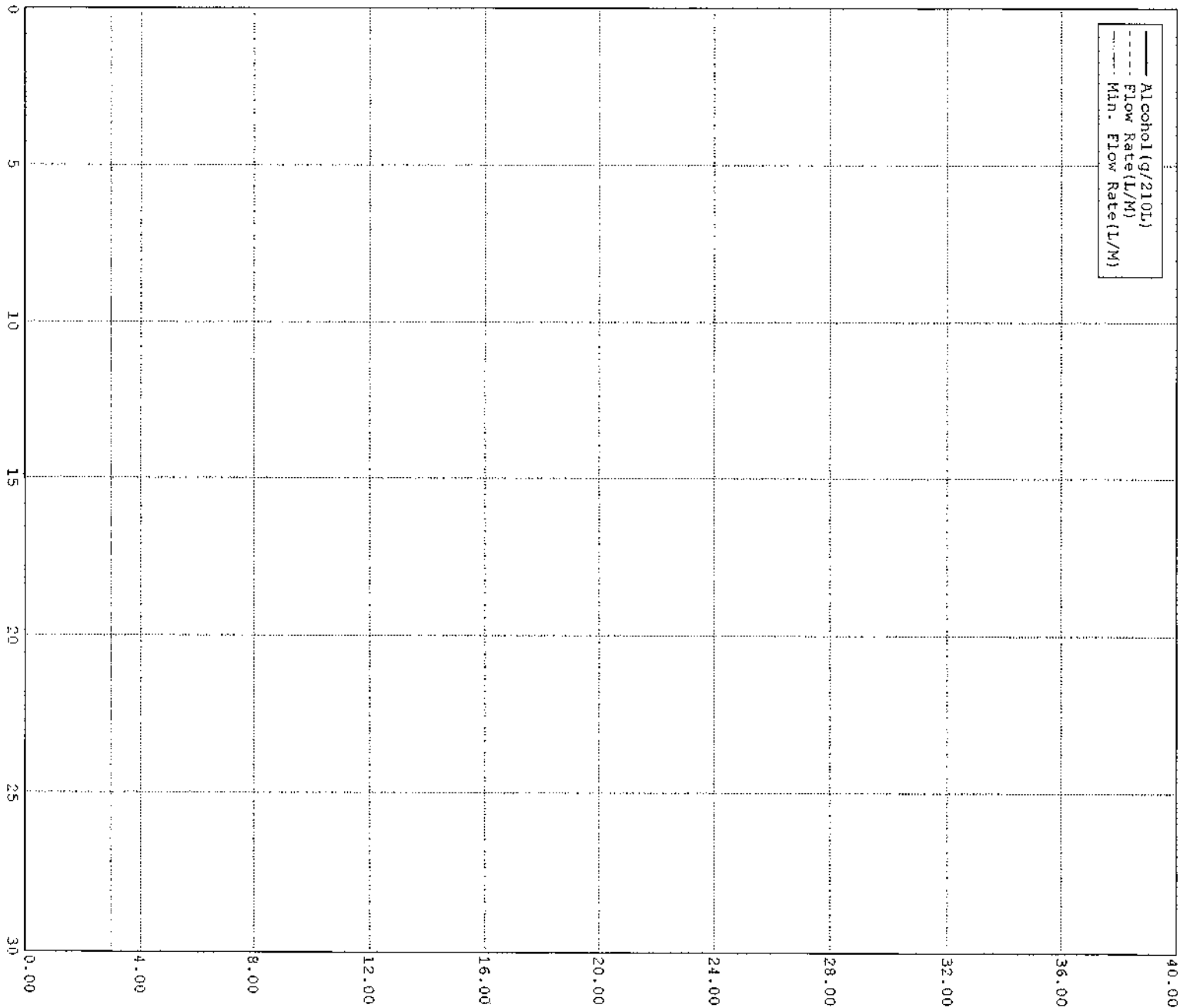
OPERATOR NAME:
RFI XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.42: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

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

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/25/2016
Time: 12:57:17

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 #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	13:00
BLANK TEST	0.000	13:00
INTERNAL STANDARD	VERIFIED	13:00
EXTERNAL STANDARD	0.078	13:01
BLANK TEST	0.000	13:02
SUBJECT SAMPLE (Vol=2.01L)	0.000	13:02
BLANK TEST	0.900	13:03
EXTERNAL STANDARD	0.078	13:03
BLANK TEST	0.000	13:04

