

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 100354 Analyst Brandi Barnett Start Date 11/24/15

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 IUMO Lot 02915020A2 Exp 3/5/17

ii. 0.040g/210L Mnf IUMO Lot 02915040A3 Exp 3/5/17

iii. 0.080g/210L Mnf IUMO Lot 01315000A3 Exp 2/5/17

iv. 0.100g/210L Mnf IUMO Lot 0291500A1 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

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 11/25/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100354

Date: 11/24/2015
Time: 12:13:43

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.56 V PASSED
(0.95 V - 2.23 V)
Cooler Voltage = 1.58 V PASSED
(0.95 V - 2.21 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 545 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.712 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.003 V <= 0.010 V)
PUMP OFF PASSED
(0.005 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.096 0.37% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100354

Date: 11/24/2015
Time: 12:19 PM

Temperatures (°C)

Sample Cell: 48.7°C
Breath Tube: 47.9°C

Current Barometer 29.7 in
Volume (Ltr) 1.54

Settings

Lamp: 1.61 V
Bias: 79 V
Cooler: 1.58 V
Chopper: 545 Hz

Voltages (V)

Flow: 1.05 V
Detector: -0.068 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100354

Date: 09/27/2011
Time: 13:04:23

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

LOT #: GUTH100
BOTTLE #: 11050
EXPIRATION: 04/06/2013

Ca = 0.1000
CAL = 0.969216 0.800 <= CAL < 1.200
b1 = 0.0001 0.0000 <= b1 < 0.0040
b2 = 0.0049 0.0010 <= b2 < 0.0100
b3 = 0.0001 0.0000 <= b3 < 0.0040
Xq = 0.0953 0.0500 <= Xq < 0.2000
a21 = 1.175978 1.050 <= a21 < 1.300
a31 = 0.450287 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100354

Date: 11/24/2015
Time: 12:21:09

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

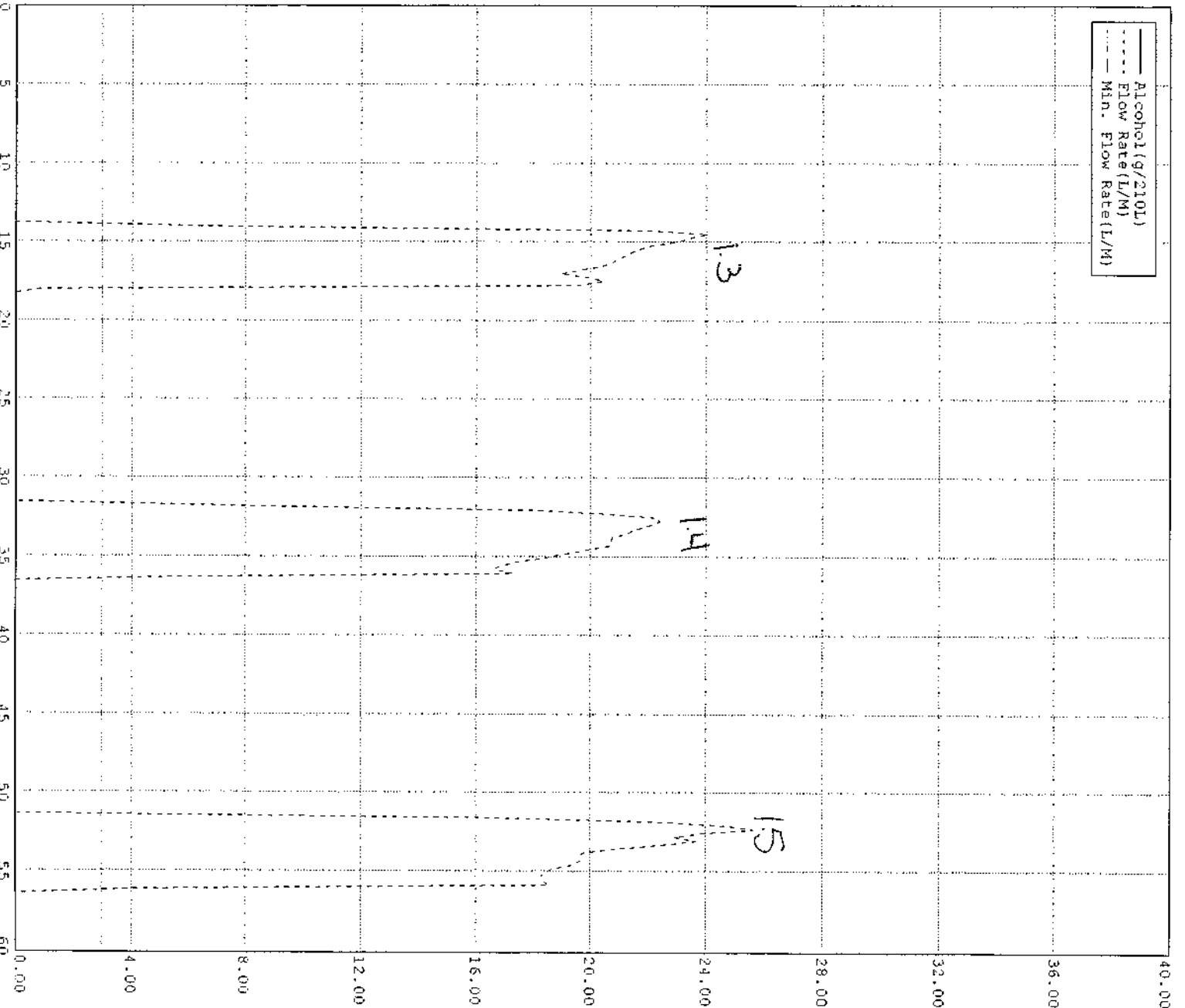
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.74: 0.080
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	12:22
BLANK TEST	0.000	12:22
INTERNAL STANDARD	VERIFIED	12:22
EXTERNAL STANDARD	0.078	12:22
BLANK TEST	0.000	12:23
SUBJECT SAMPLE (Vol=1.58L)	0.000	12:24
BLANK TEST	0.000	12:25
EXTERNAL STANDARD	0.079	12:25
BLANK TEST	0.000	12:26

BBMB



LINERARITY CHECK

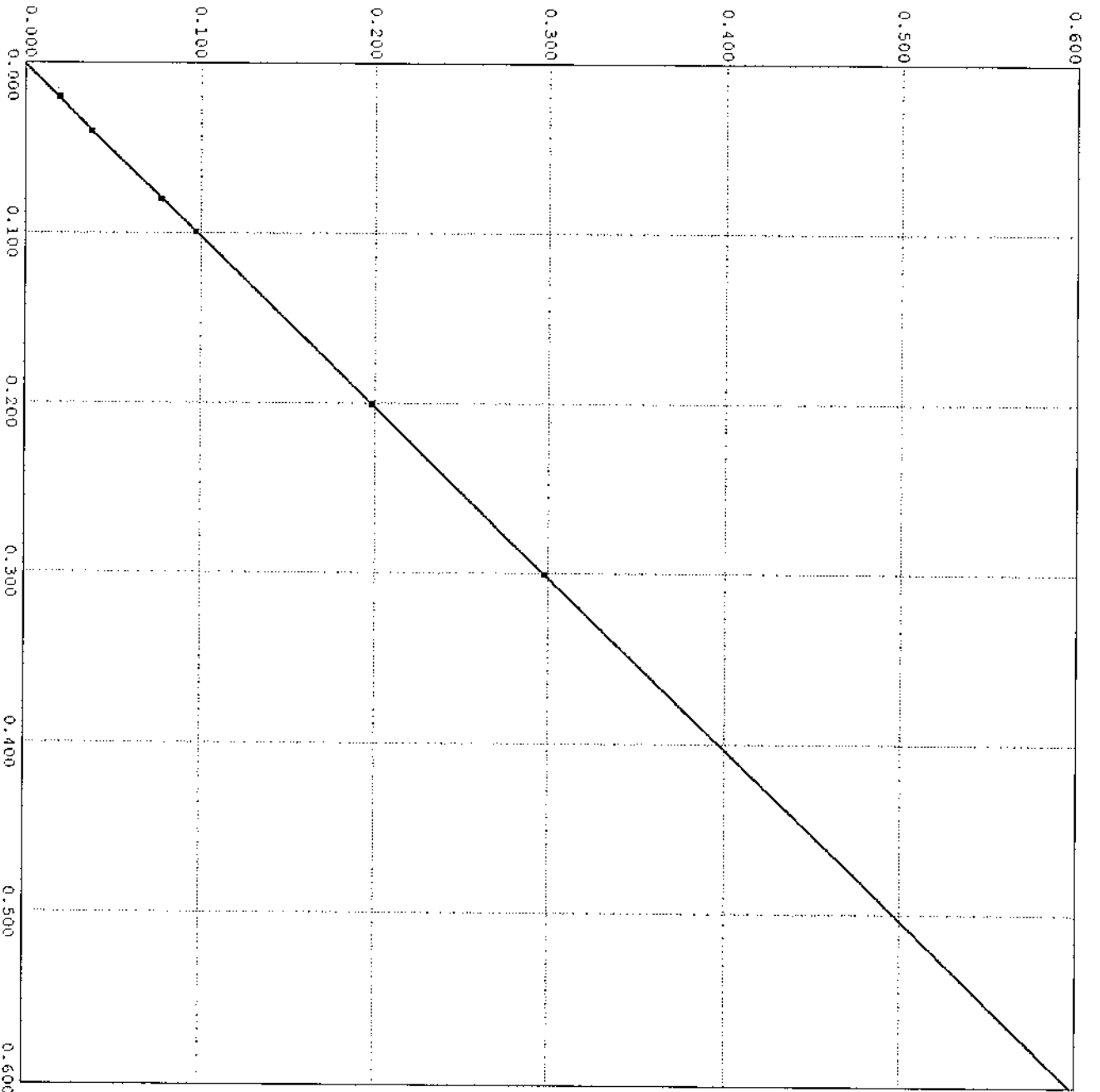
Alaska Department of Public Safety
DATAMASTER dnt: 100354

Date: 11/24/2015
Time: 13:16:06

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0204	0.0005
0.040	0.0390	0.0000
0.080	0.0784	0.0005
0.099	0.0980	0.0000
0.200	0.1992	0.0008
0.300	0.2986	0.0011

SLOPE = 0.996959
R² = 0.999966



Handwritten signature: BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100354

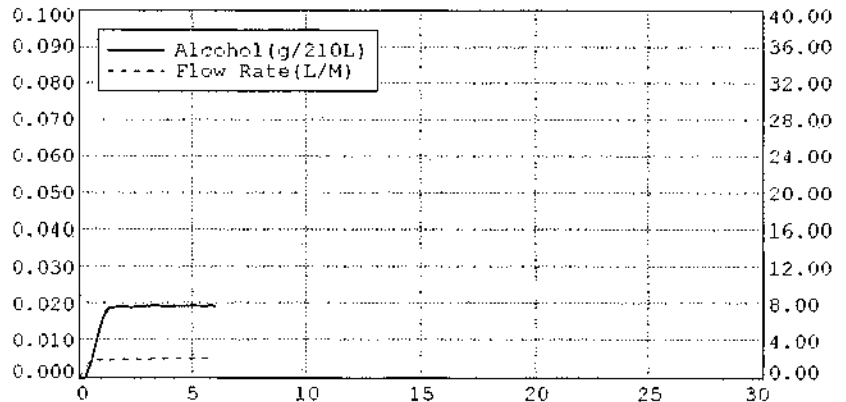
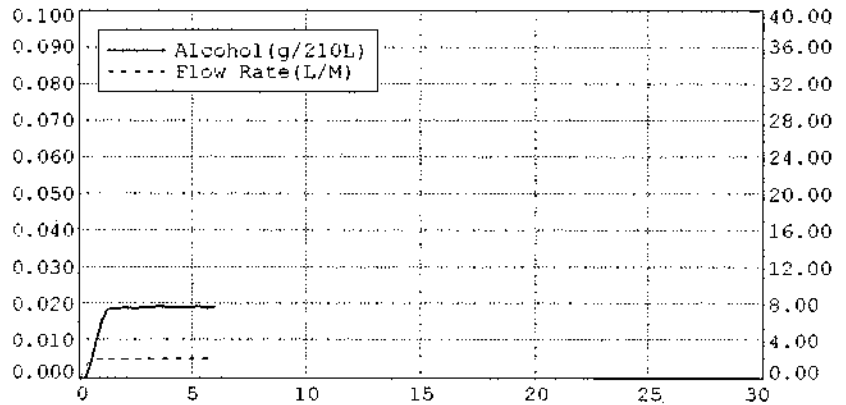
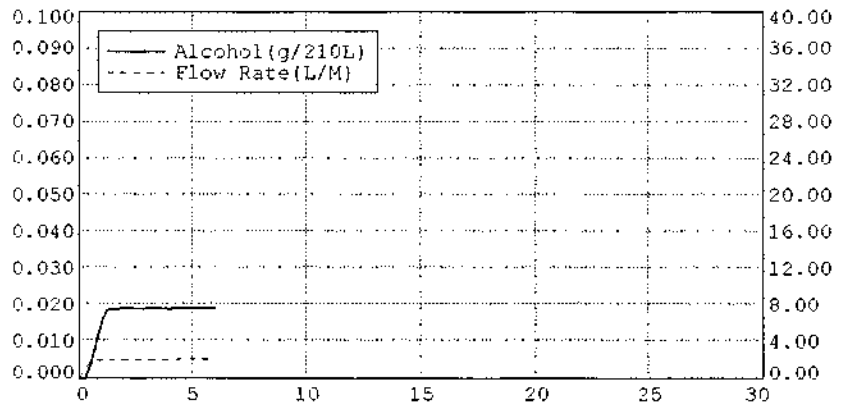
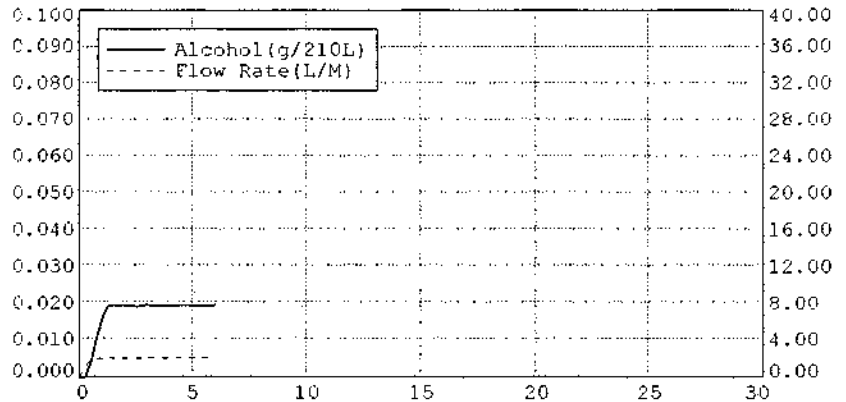
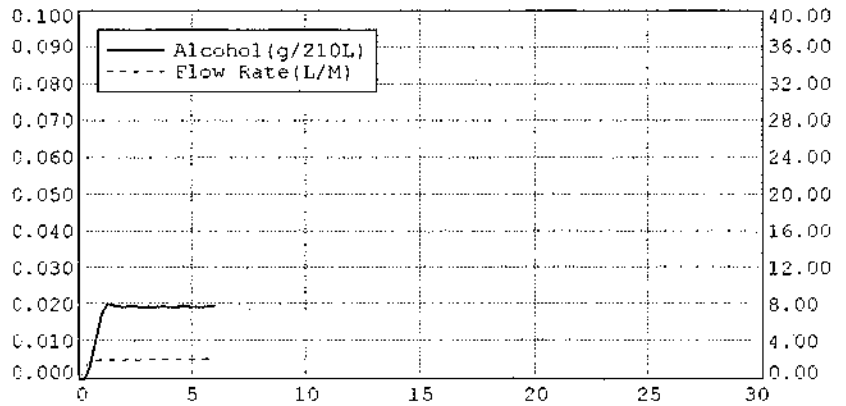
Date: 11/24/2015
 Time: 13:16:09

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.74: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 769 psi

BLANK TEST	0.000	13:17
INTERNAL STANDARD	VERIFIED	13:17
EXTERNAL STANDARD	0.021	13:18
BLANK TEST	0.000	13:18
EXTERNAL STANDARD	0.020	13:19
BLANK TEST	0.000	13:20
EXTERNAL STANDARD	0.020	13:20
BLANK TEST	0.000	13:21
EXTERNAL STANDARD	0.020	13:21
BLANK TEST	0.000	13:22
EXTERNAL STANDARD	0.021	13:22
BLANK TEST	0.000	13:23

Average = 0.0204
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100354

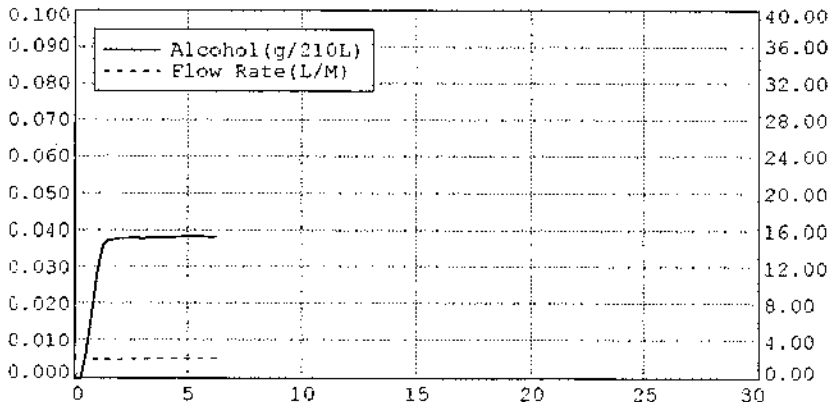
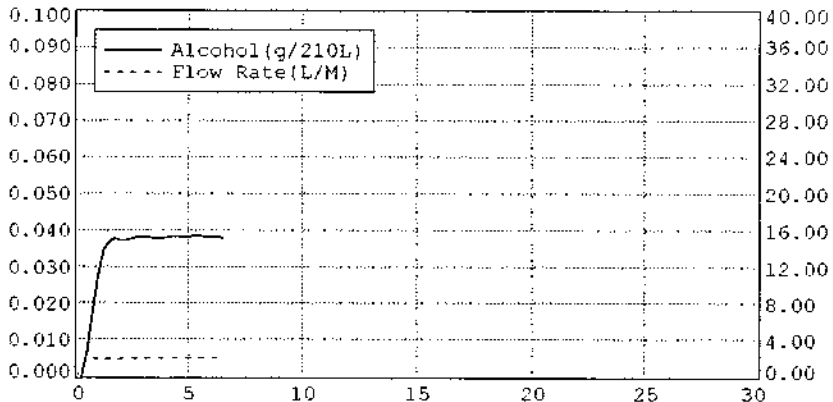
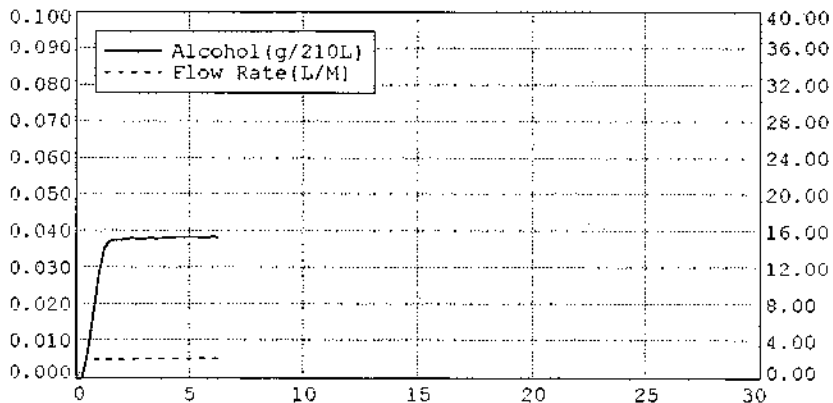
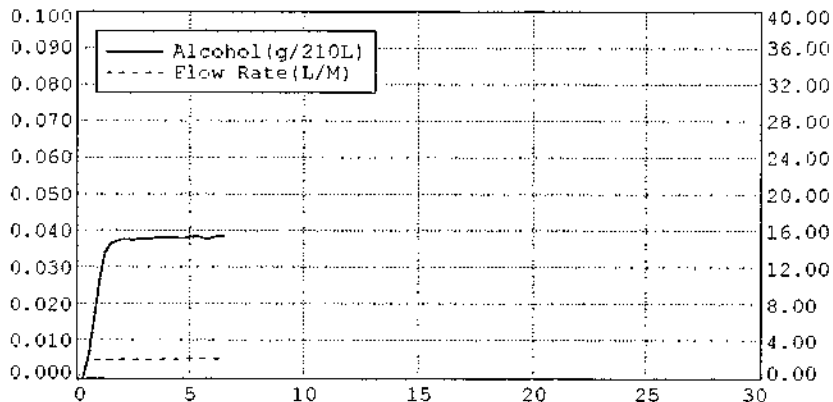
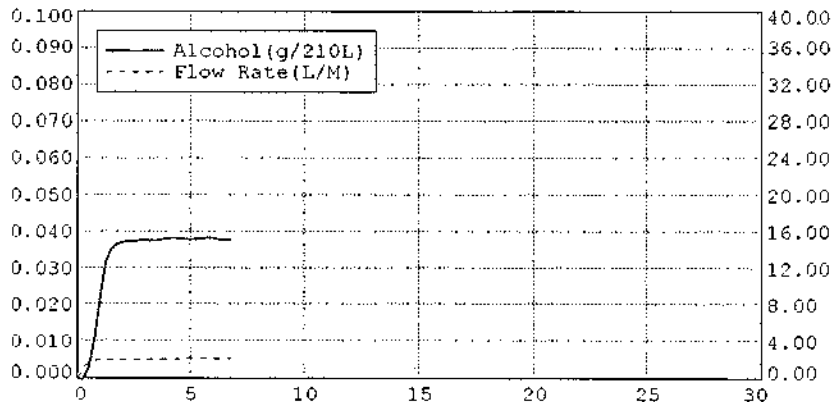
Date: 11/24/2015
 Time: 13:25:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.73: 0.040
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 806 psi

BLANK TEST	0.000	13:27
INTERNAL STANDARD	VERIFIED	13:27
EXTERNAL STANDARD	0.039	13:27
BLANK TEST	0.000	13:28
EXTERNAL STANDARD	0.039	13:28
BLANK TEST	0.000	13:29
EXTERNAL STANDARD	0.039	13:29
BLANK TEST	0.000	13:30
EXTERNAL STANDARD	0.039	13:30
BLANK TEST	0.000	13:31
EXTERNAL STANDARD	0.039	13:31
BLANK TEST	0.000	13:32

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100354

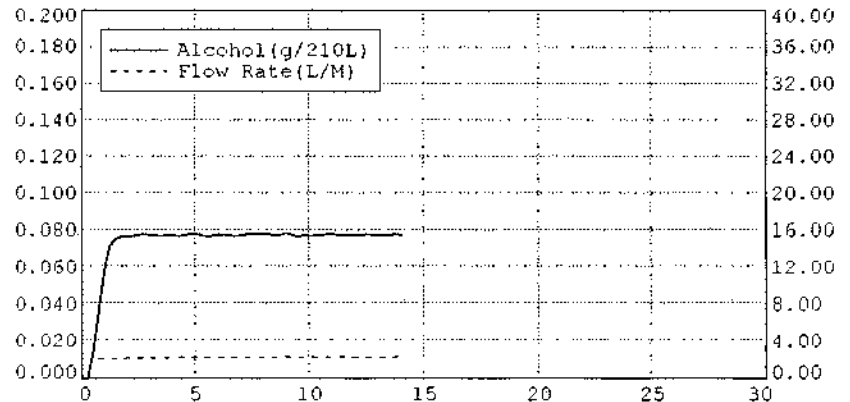
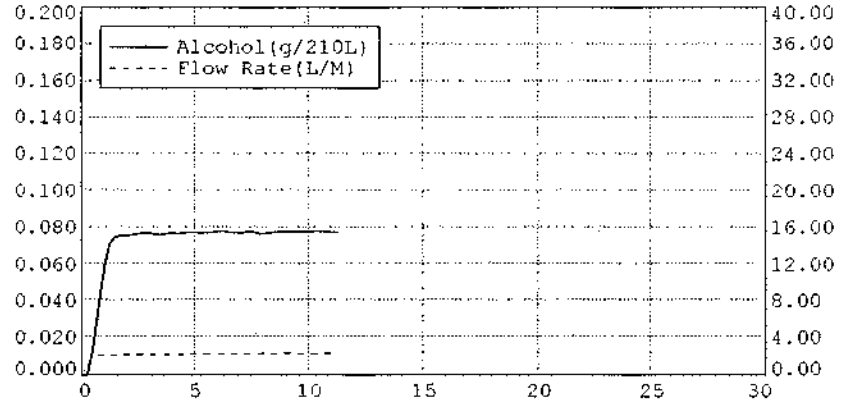
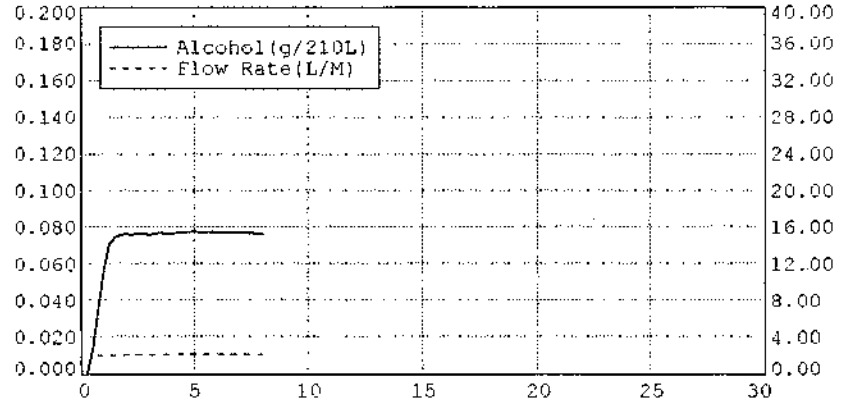
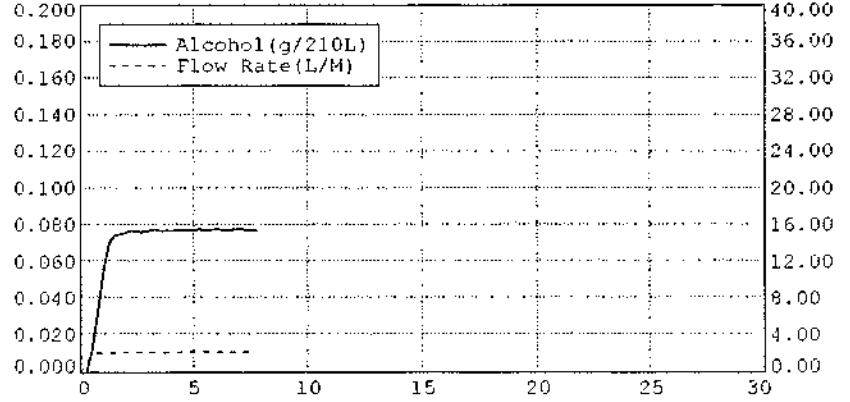
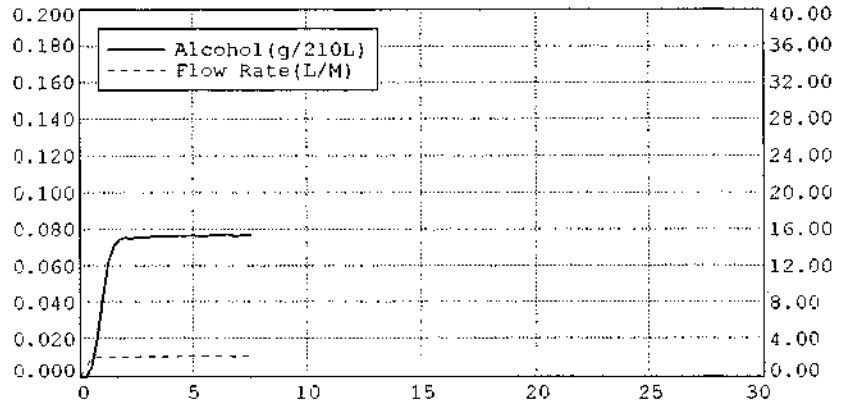
Date: 11/24/2015
Time: 13:35:32

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.73: 0.080
LOT #: 01315080A3
EXPIRATION: 02/05/2017
TANK PRESSURE: 889 psi

BLANK TEST	0.000	13:36
INTERNAL STANDARD	VERIFIED	13:36
EXTERNAL STANDARD	0.078	13:37
BLANK TEST	0.000	13:38
EXTERNAL STANDARD	0.078	13:38
BLANK TEST	0.000	13:39
EXTERNAL STANDARD	0.078	13:39
BLANK TEST	0.000	13:40
EXTERNAL STANDARD	0.079	13:40
BLANK TEST	0.080	13:41
EXTERNAL STANDARD	0.079	13:41
BLANK TEST	0.000	13:42

Average = 0.0784
Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100354

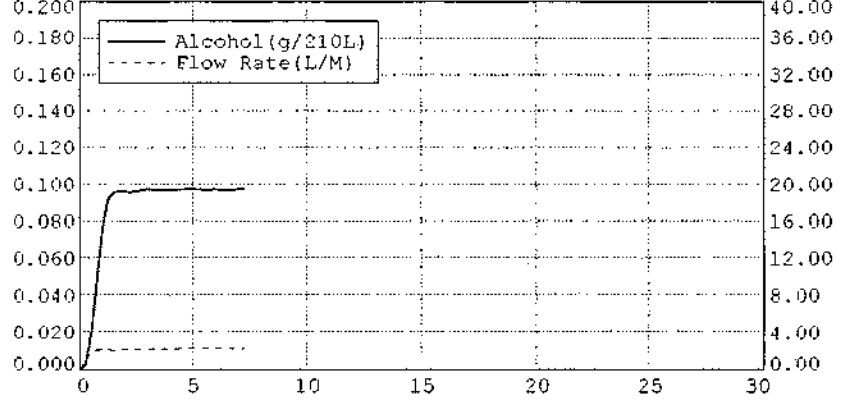
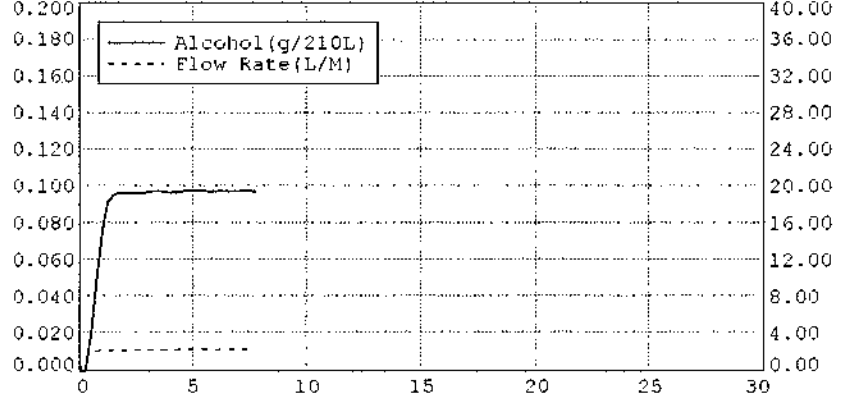
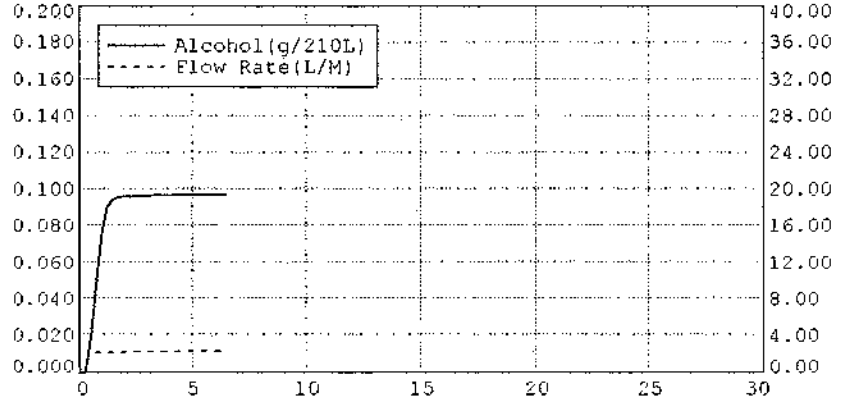
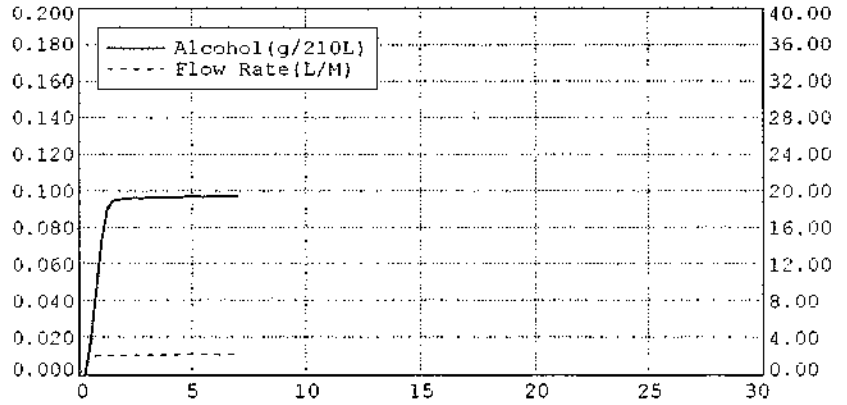
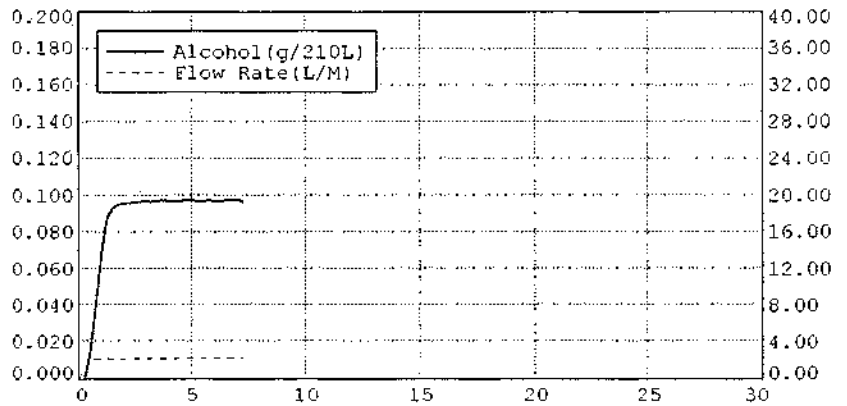
Date: 11/24/2015
 Time: 13:52:31

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.73: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1036 psi

BLANK TEST	0.000	13:53
INTERNAL STANDARD	VERIFIED	13:53
EXTERNAL STANDARD	0.098	13:54
BLANK TEST	0.000	13:54
EXTERNAL STANDARD	0.098	13:55
BLANK TEST	0.000	13:56
EXTERNAL STANDARD	0.098	13:56
BLANK TEST	0.000	13:57
EXTERNAL STANDARD	0.098	13:57
BLANK TEST	0.000	13:58
EXTERNAL STANDARD	0.098	13:58
BLANK TEST	0.000	13:59

Average = 0.0980
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100354

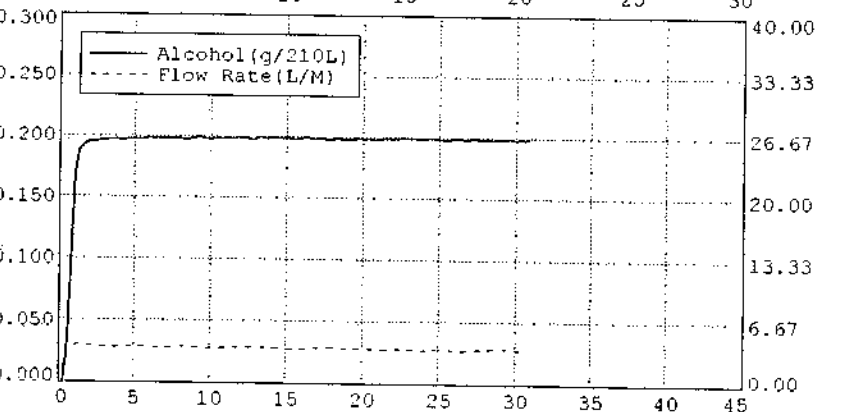
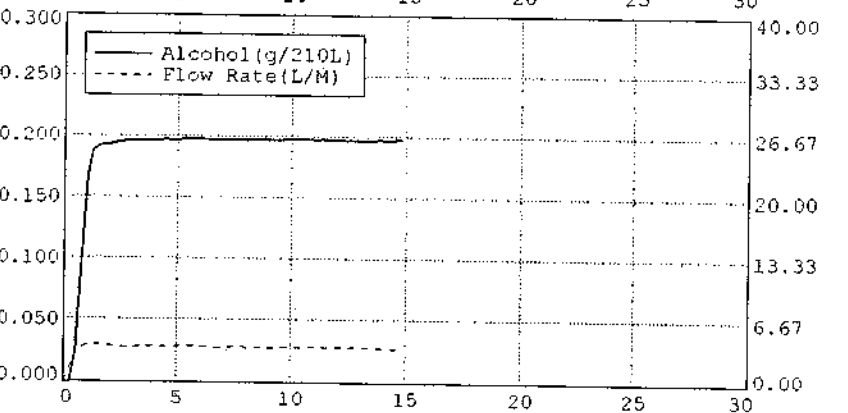
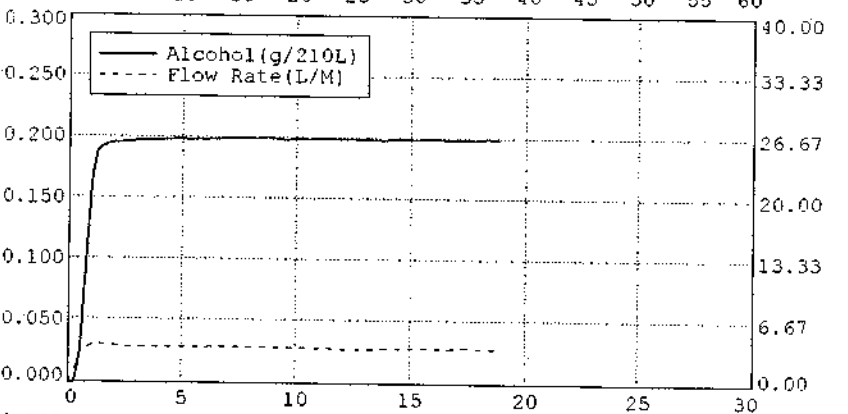
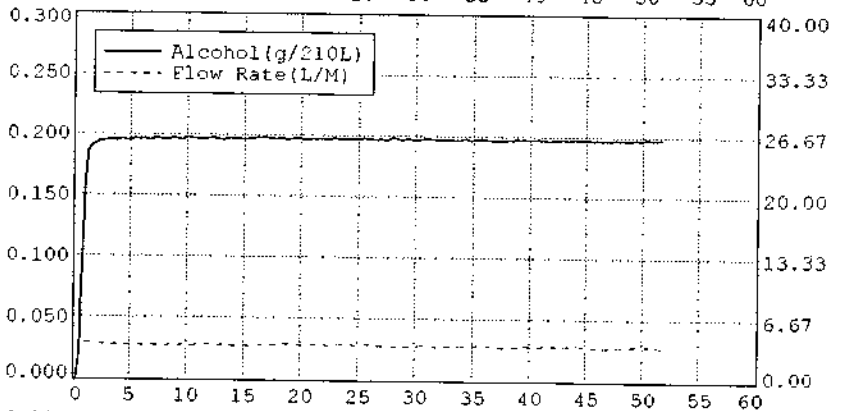
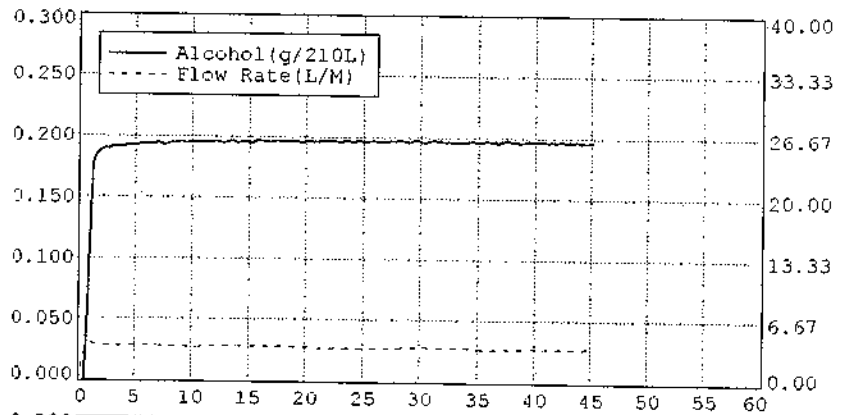
Date: 11/24/2015
 Time: 14:03:34

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:04
INTERNAL STANDARD	VERIFIED	14:04
EXTERNAL STANDARD	0.198	14:05
BLANK TEST	0.000	14:06
EXTERNAL STANDARD	0.199	14:07
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.200	14:08
BLANK TEST	0.000	14:09
EXTERNAL STANDARD	0.199	14:10
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.200	14:11
BLANK TEST	0.000	14:12

Average = 0.1992
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100354

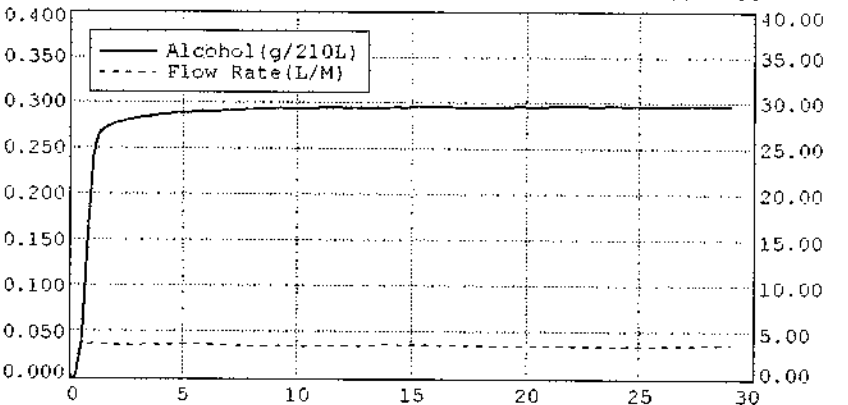
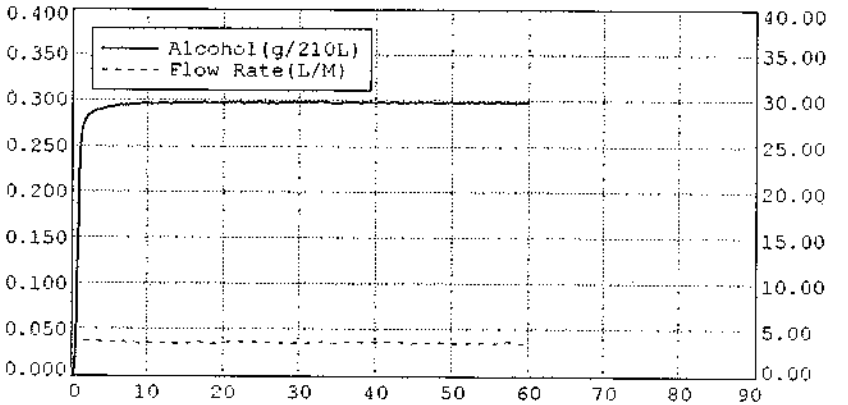
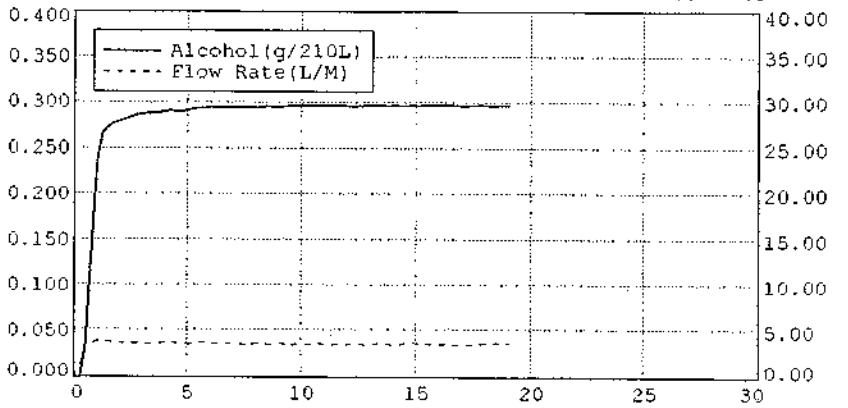
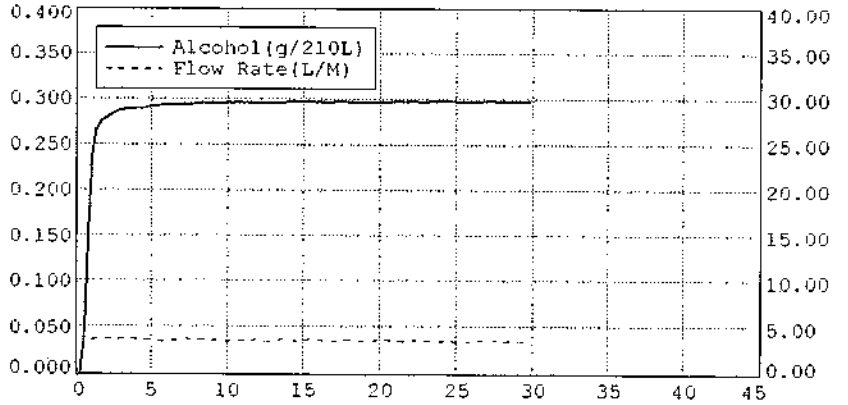
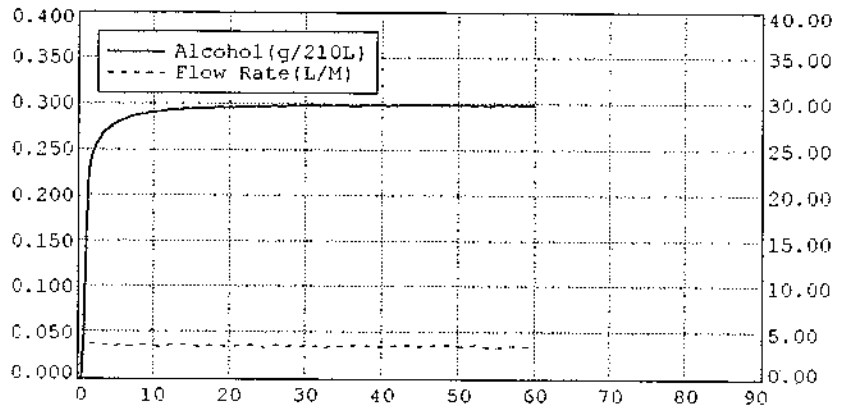
Date: 11/24/2015
 Time: 14:19:23

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:20
INTERNAL STANDARD	VERIFIED	14:20
EXTERNAL STANDARD	0.300	14:21
BLANK TEST	0.000	14:22
EXTERNAL STANDARD	0.299	14:23
BLANK TEST	0.000	14:24
EXTERNAL STANDARD	0.298	14:24
BLANK TEST	0.000	14:25
EXTERNAL STANDARD	0.299	14:26
BLANK TEST	0.000	14:27
EXTERNAL STANDARD	0.297	14:28
BLANK TEST	0.000	14:29

Average = 0.2986
 Std Dev = 0.0011



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100354

Date: 11/25/2015
Time: 09:10:39

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

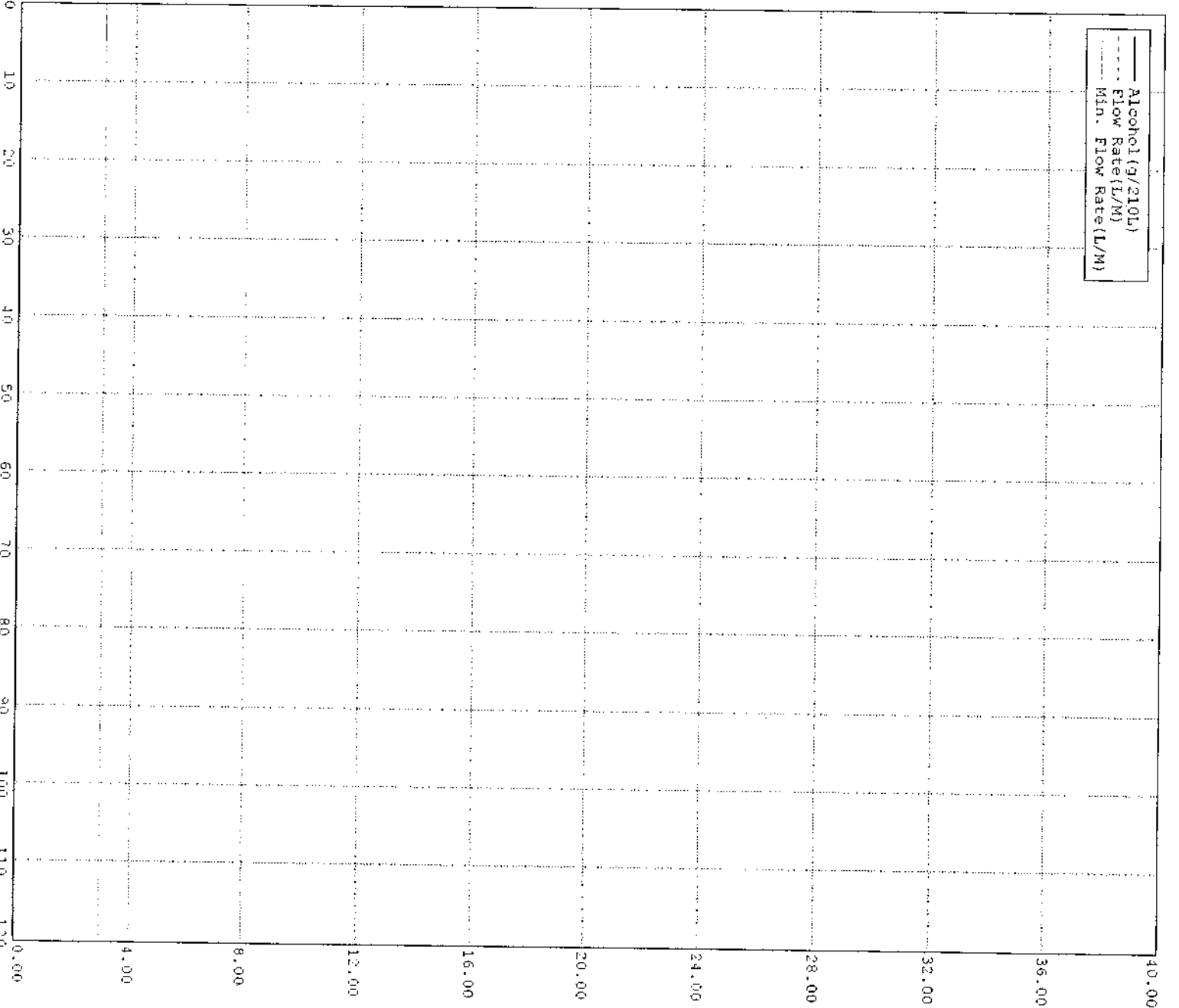
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:11
BLANK TEST	0.000	09:11
INTERNAL STANDARD	VERIFIED	09:11
EXTERNAL STANDARD	0.078	09:12
BLANK TEST	0.000	09:13
SUBJECT SAMPLE	INCOMPLETE	09:15

Alcohol (g/210L)
Flow Rate(L/M)
Min. Flow Rate(L/M)



Handwritten signature/initials

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100354

Date: 11/25/2015
Time: 09:17:02

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

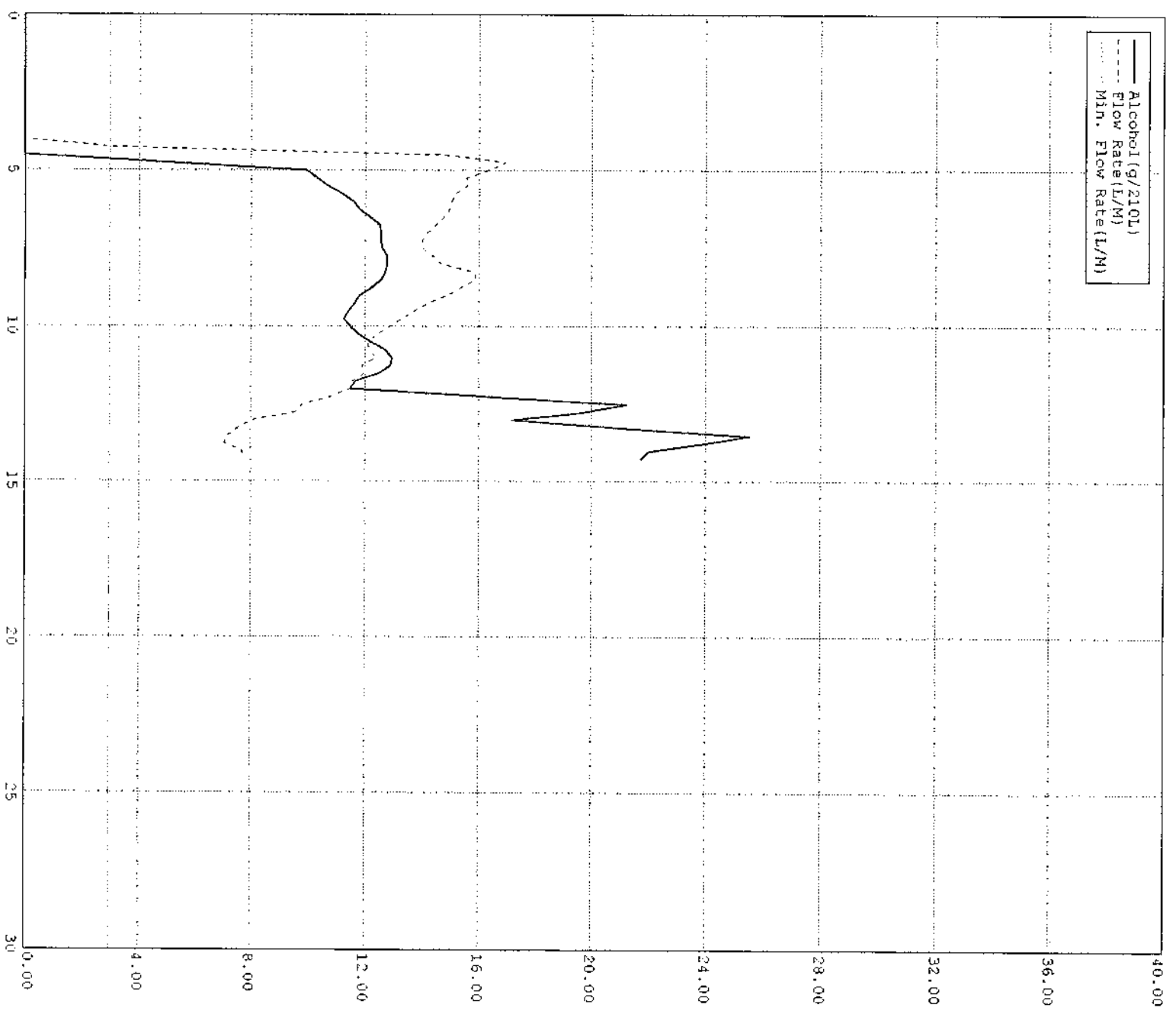
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
INVALID KNOWN MOUTH ALCOHOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:18
BLANK TEST	0.000	09:18
INTERNAL STANDARD	VERIFIED	09:18
EXTERNAL STANDARD	0.078	09:19
BLANK TEST	0.000	09:19
SUBJECT SAMPLE	INVALID	09:20

BMB



SUBJECT TEST

Alaska Department of Public Safety
DARAMASTER dmt: 100354

Date: 11/25/2015
Time: 09:40:47

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

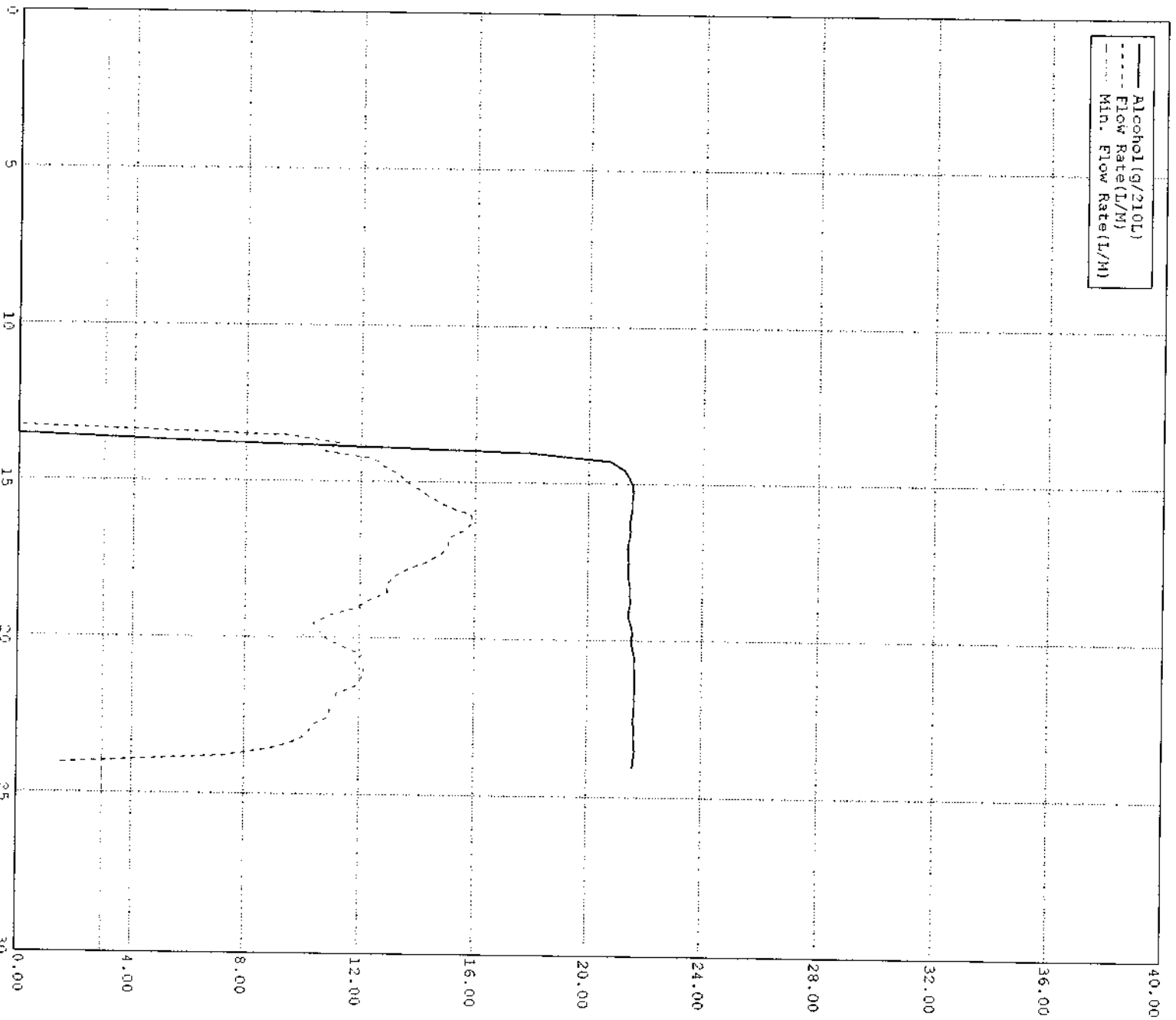
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:42
BLANK TEST	0.000	09:42
INTERNAL STANDARD	VERIFIED	09:42
Xq = 0.096 (0.46%)		
EXTERNAL STANDARD	0.078	09:42
X[1] = 0.0783 (-0.0006)	(0.0030)	
BLANK TEST	0.000	09:43
SUBJECT SAMPLE	XXX	09:43
X[1] = 0.1095 (-0.0186)	(0.0006)	

Interference Detected

Filter 2 Avg: $\frac{-0.0012}{-0.0013}$ *BMB* 11/25/15
 Filter 3 Avg: 0.0022
BMB 11/25/15

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100354

Date: 11/25/2015
Time: 09:45:48

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

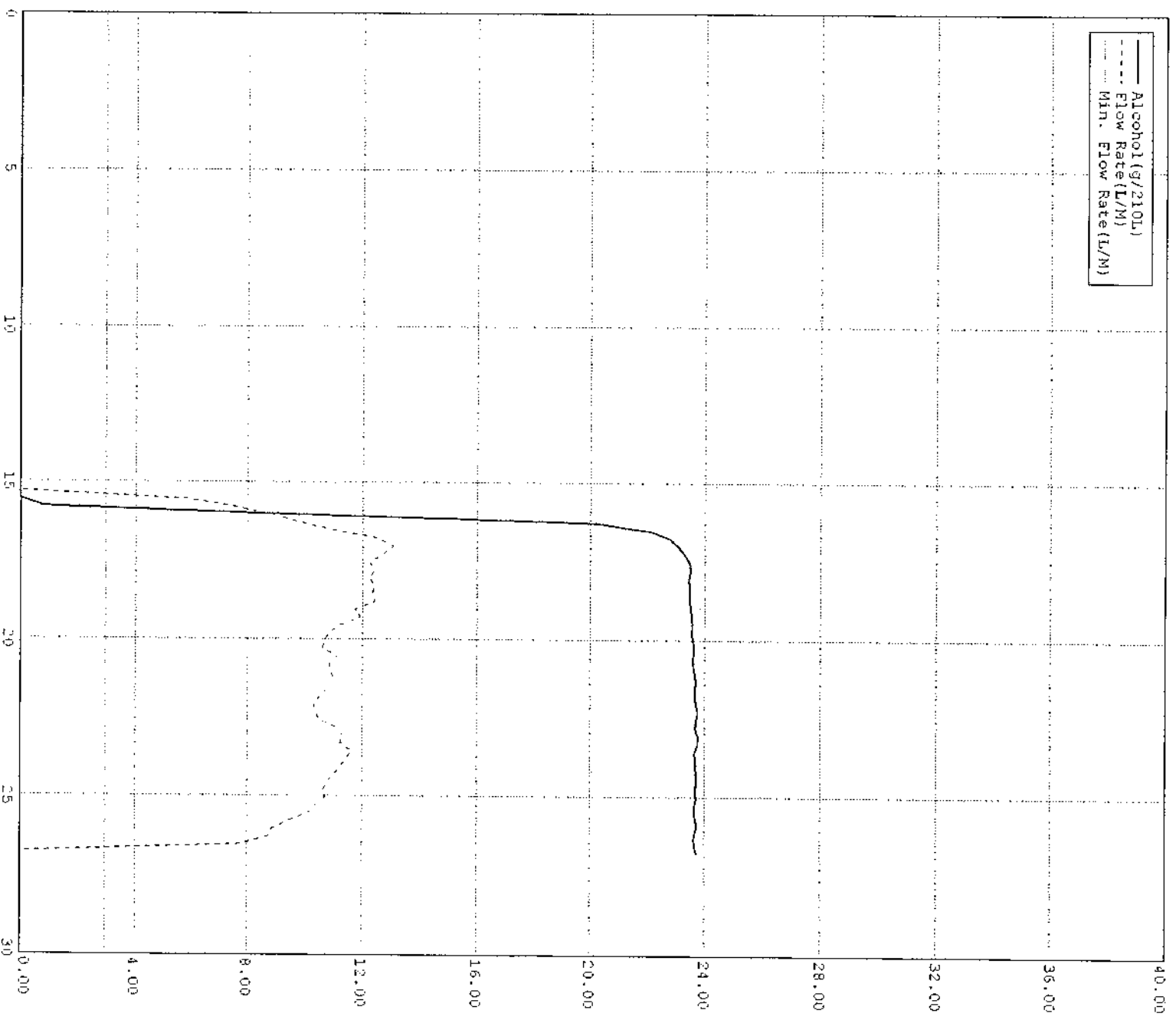
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK
BLANK TEST PASSED 09:48
INTERNAL STANDARD 0.000 09:48
INTERNAL STANDARD VERIFIED 09:48
Xq = 0.095 (0.18%)
EXTERNAL STANDARD 0.078 09:49
X[1] = 0.0779 (-0.0014) (0.0019)
BLANK TEST 0.000 09:50
SUBJECT SAMPLE XXXX 09:50
X[1] = 0.1194 (-0.0247) (0.0021)

Interference Detected

BBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100354

Date: 11/25/2015
Time: 09:52:24

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

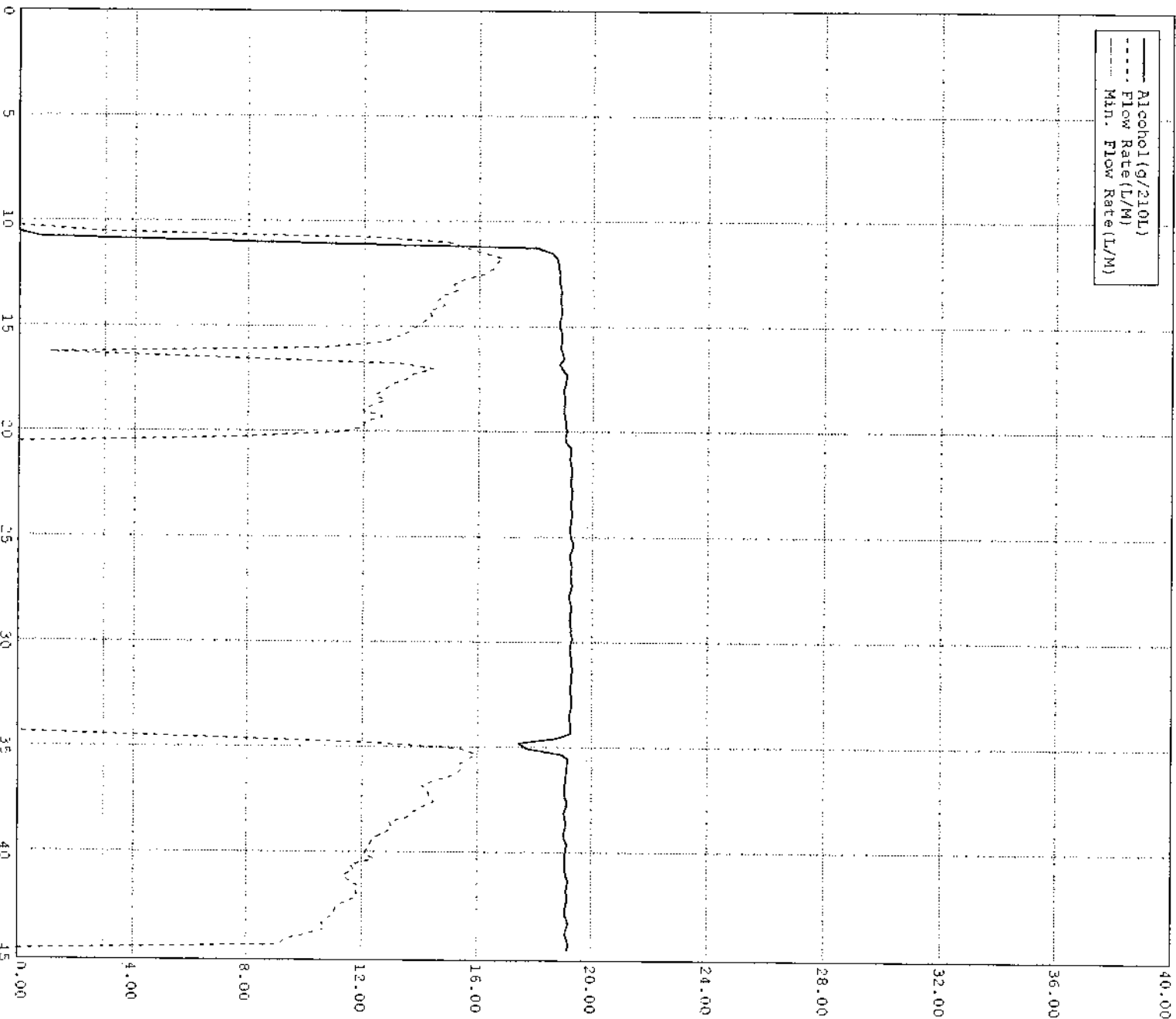
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
INTERFERENCE NEGATIVE CONTROL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	09:54
BLANK TEST	0.000	09:54
INTERNAL STANDARD	VERIFIED	09:54
Xg = 0.095 (0.00%)		
EXTERNAL STANDARD	0.078	09:54
X[1] = 0.0779 (-0.0012)	(0.0023)	
BLANK TEST	0.000	09:55
SUBJECT SAMPLE (Vol=2.10L)	0.096	09:56
X[1] = 0.0969 (-0.0010)	(0.0013)	
BLANK TEST	0.000	09:57
EXTERNAL STANDARD	0.077	09:57
X[1] = 0.0775 (-0.0017)	(0.0015)	
BLANK TEST	0.000	09:58

BBB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100354

Date: 11/25/2015
Time: 09:34:25

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

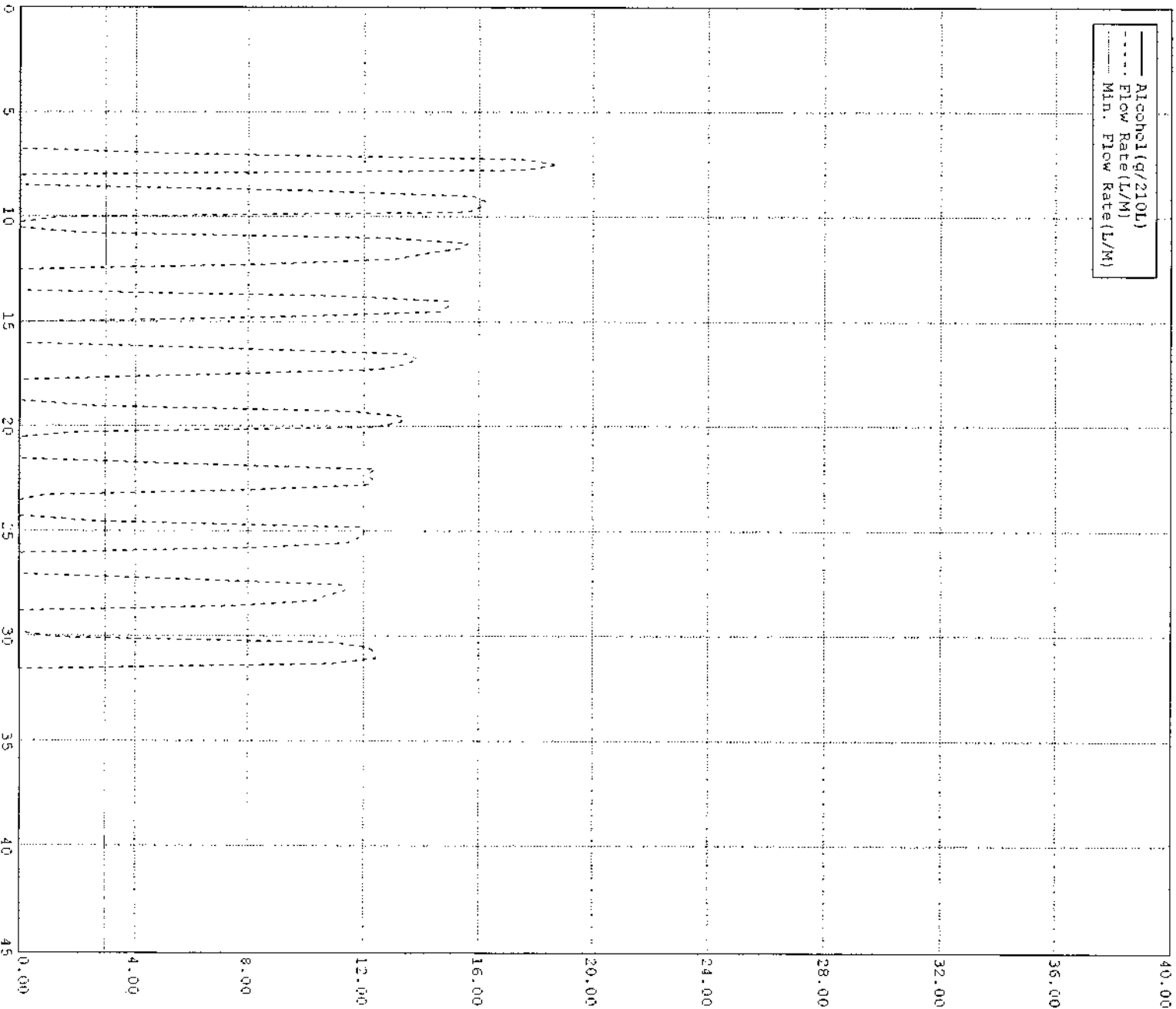
DEPT/AGENCY:
EXCEEDED ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:36
BLANK TEST	0.000	09:36
INTERNAL STANDARD	VERIFIED	09:36
EXTERNAL STANDARD	0.078	09:36
BLANK TEST	0.000	09:37
SUBJECT SAMPLE	XXX	09:38

Maximum Attempts Exceeded

Handwritten signature: BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100354

Date: 11/25/2015
Time: 09:22:05

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

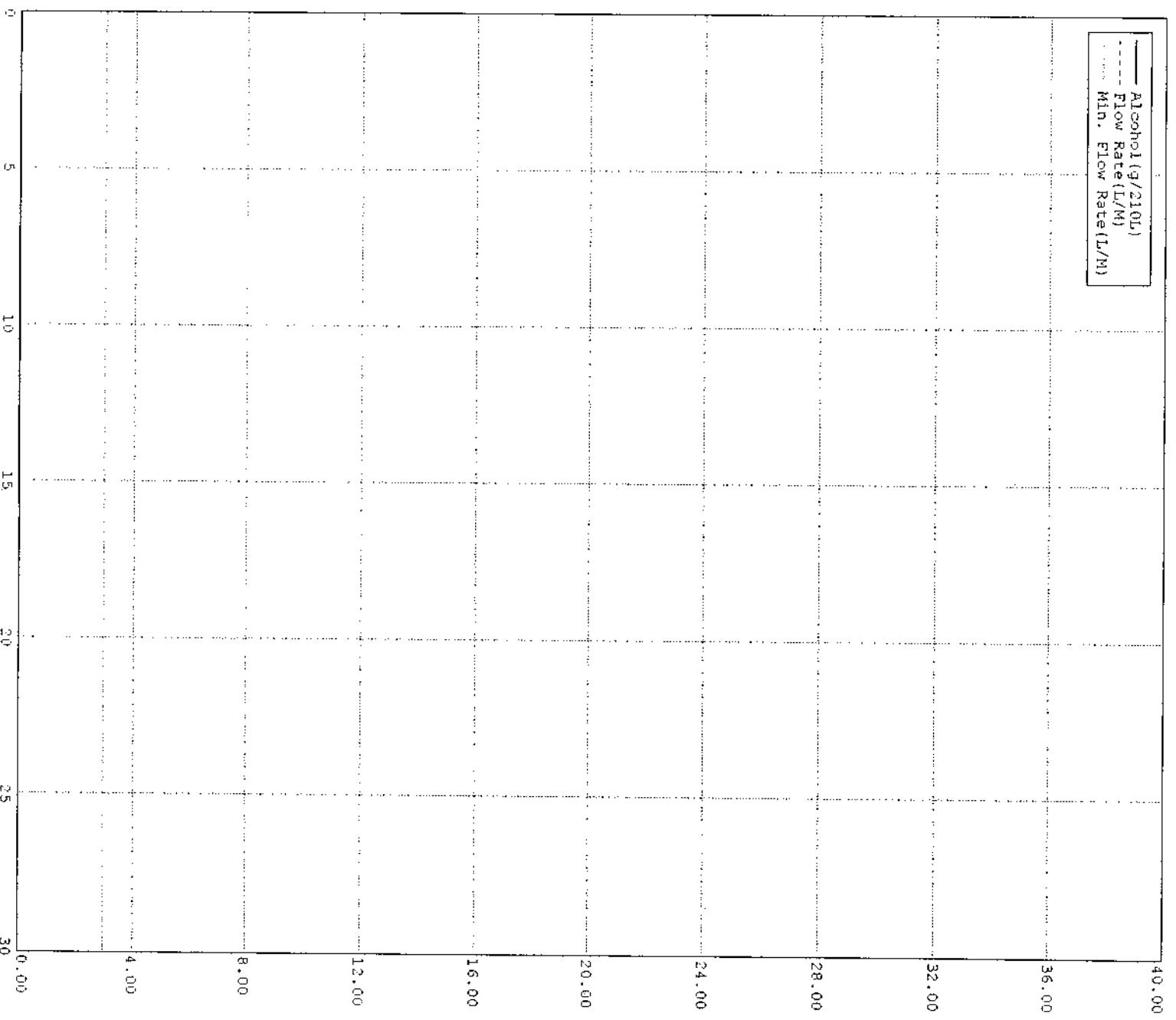
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:23
BLANK TEST	0.000	09:23
INTERNAL STANDARD	VERIFIED	09:23
EXTERNAL STANDARD	0.078	09:24
BLANK TEST	0.000	09:25

RFI DETECTED

BBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100354

Date: 11/25/2015
Time: 10:14:47

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
NON DRINKING SUBJECT
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.57: 0.079
LOI #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:15
BLANK TEST	0.000	10:15
INTERNAL STANDARD	VERIFIED	10:16
EXTERNAL STANDARD	0.078	10:16
BLANK TEST	0.000	10:17
SUBJECT SAMPLE (Vol=1.78L)	0.000	10:17
BLANK TEST	0.000	10:18
EXTERNAL STANDARD	0.079	10:18
BLANK TEST	0.000	10:19

