

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 100693 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 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 01315080A3 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 DR16267 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
- 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 11/25/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 11/24/2015
Time: 11:59:50

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 47.5°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.58 V PASSED
(0.95 V - 2.23 V)
Cooler Voltage = 1.67 V PASSED
(1.00 V - 2.34 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 547 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.9 in

PUMP INFO

Flow Rate = 4.536 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
(0.003 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.088 0.40% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100693

Date: 11/24/2015
Time: 12:10 PM

Temperatures (°C)
Sample Cell: 48.7°C
Breath Tube: 47.1°C

Current Barometer 29.7 in
Volume (Ltr) 1.52

Settings
Lamp: 1.72 V
Bias: 80 V
Cooler: 1.67 V
Chopper: 546 Hz

Voltages (V)
Flow: 1.04 V
Detector: -0.083 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 11/02/2011
Time: 05:54:56

Ca = 0.1000
CAL = 1.001437 0.800 <= CAL < 1.200
b1 = 0.0005 0.0000 <= b1 < 0.0040
b2 = 0.0040 0.0010 <= b2 < 0.0100
b3 = 0.0003 0.0000 <= b3 < 0.0040
Xq = 0.0878 0.0500 <= Xq < 0.2000
a21 = 1.143251 1.050 <= a21 < 1.300
a31 = 0.401134 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 11/24/2015
Time: 12:11:31

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

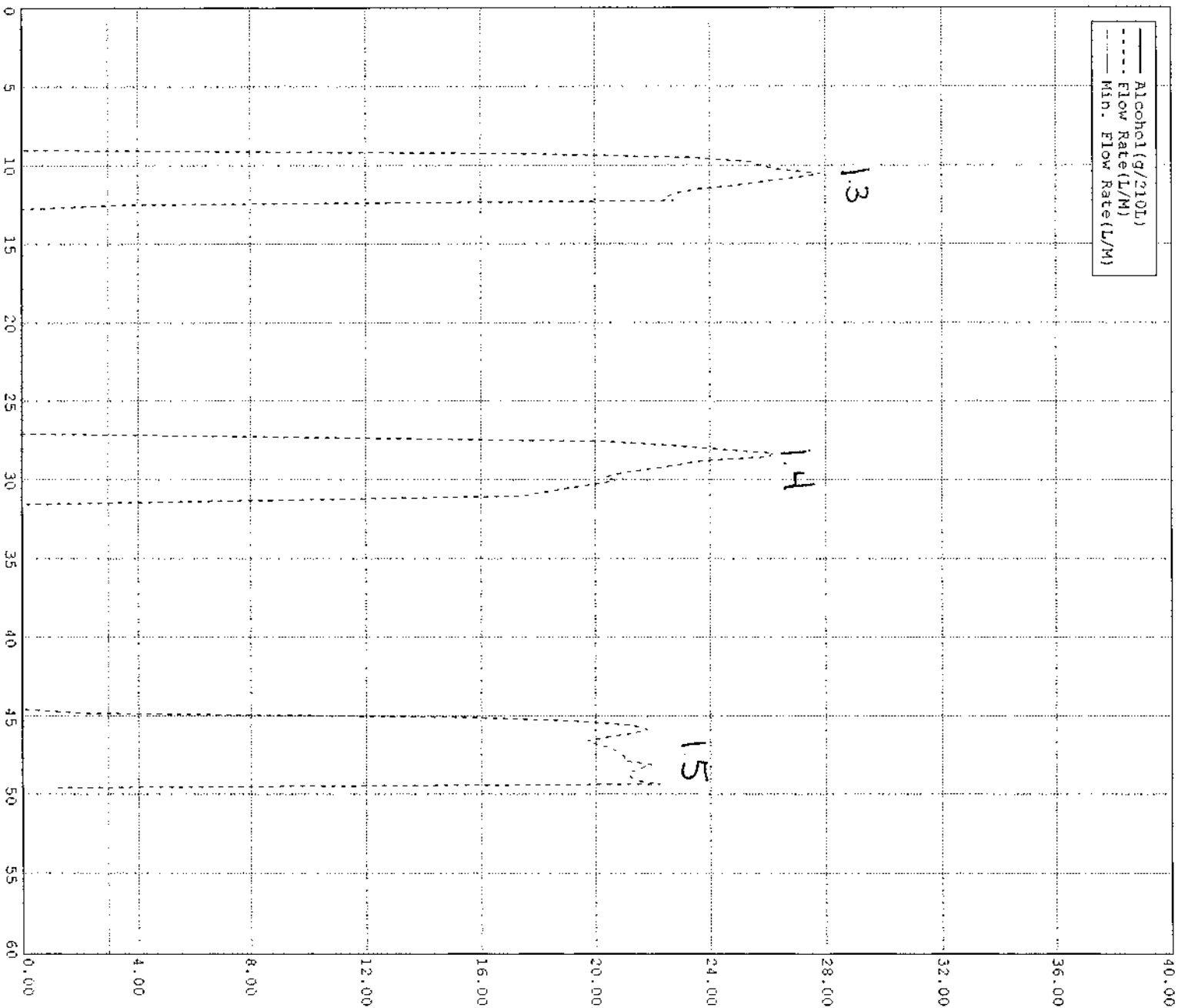
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.73: 0.080
LOF #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	12:13
BLANK TEST	0.000	12:13
INTERNAL STANDARD	VERIFIED	12:13
EXTERNAL STANDARD	0.078	12:14
BLANK TEST	0.000	12:15
SUBJECT SAMPLE (Vol=1.55L)	0.000	12:15
BLANK TEST	0.000	12:16
EXTERNAL STANDARD	0.079	12:17
BLANK TEST	0.000	12:17

BMB



LINEARITY CHECK

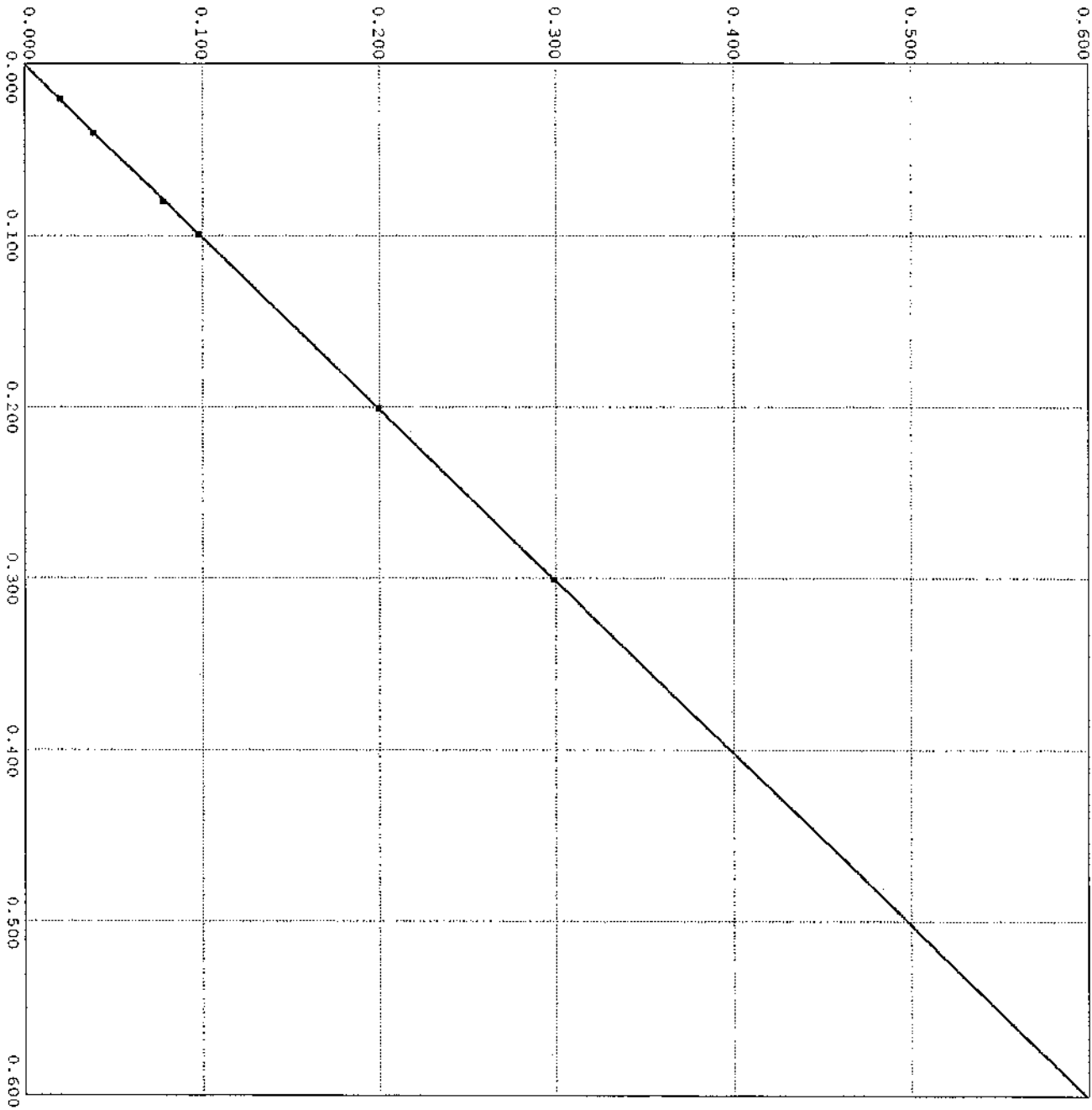
Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 11/24/2015
Time: 13:02:37

SUPERVISOR NAME:
BRANDI BARRETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0208	0.0004
0.040	0.0396	0.0005
0.080	0.0786	0.0005
0.099	0.0988	0.0008
0.200	0.2002	0.0004
0.300	0.2994	0.0005

SLOPE = 0.998693
R² = 0.999953



BB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100693

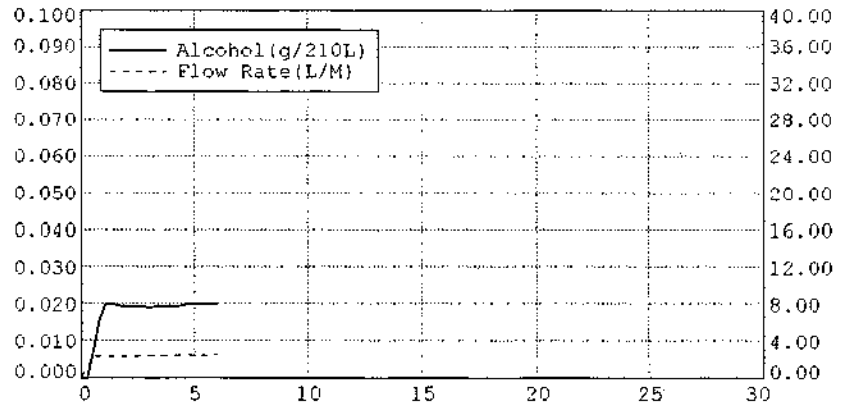
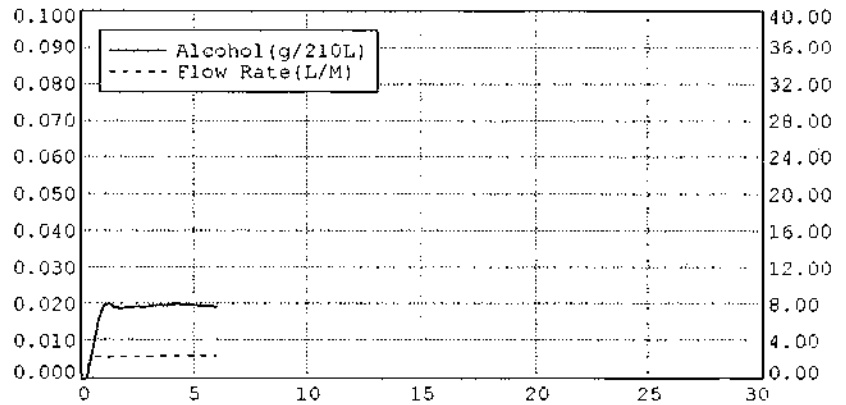
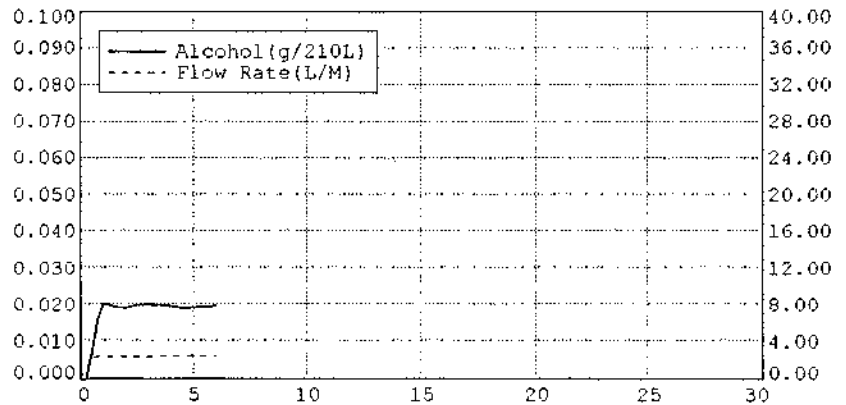
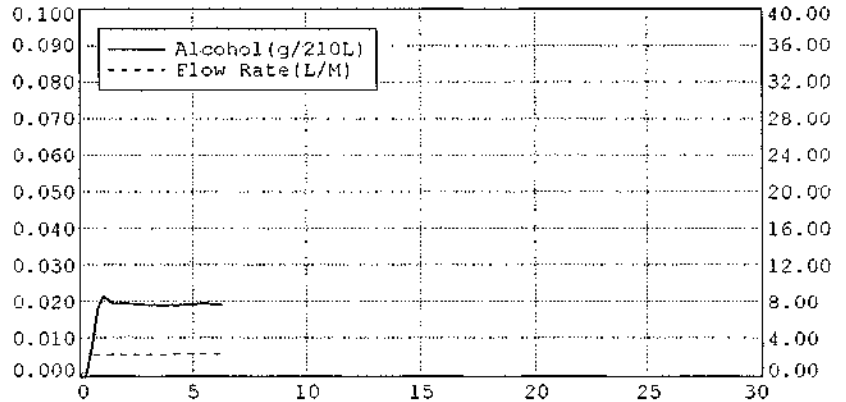
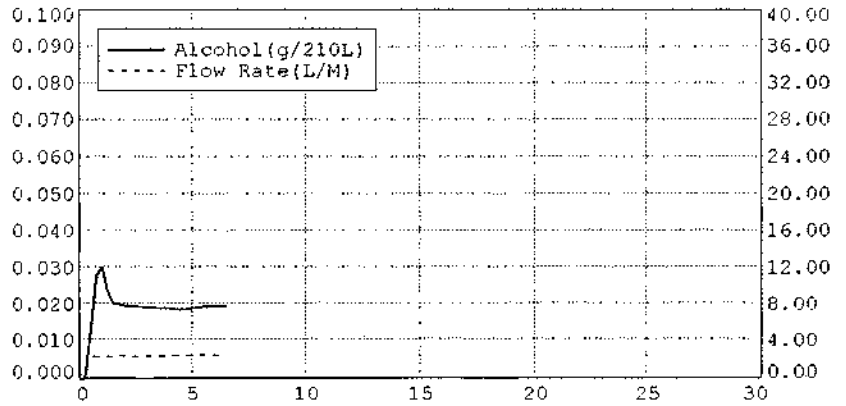
Date: 11/24/2015
 Time: 13:02:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.74: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 763 psi

BLANK TEST	0.000	13:04
INTERNAL STANDARD	VERIFIED	13:04
EXTERNAL STANDARD	0.020	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.021	13:05
BLANK TEST	0.000	13:06
EXTERNAL STANDARD	0.021	13:06
BLANK TEST	0.000	13:07
EXTERNAL STANDARD	0.021	13:07
BLANK TEST	0.000	13:08
EXTERNAL STANDARD	0.021	13:08
BLANK TEST	0.000	13:09

Average = 0.0208
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100693

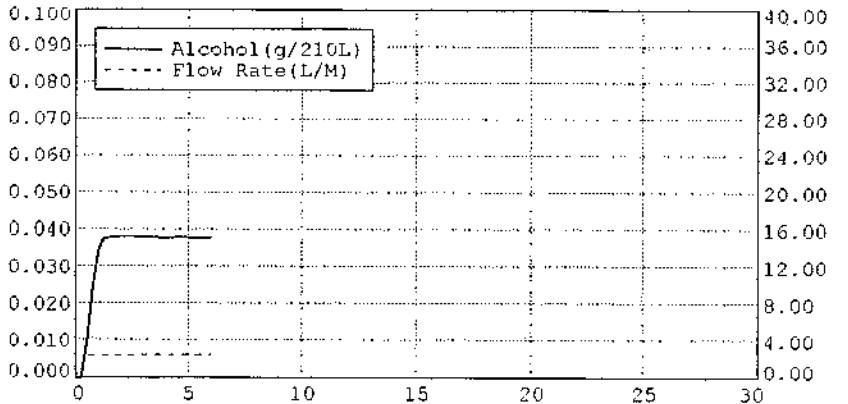
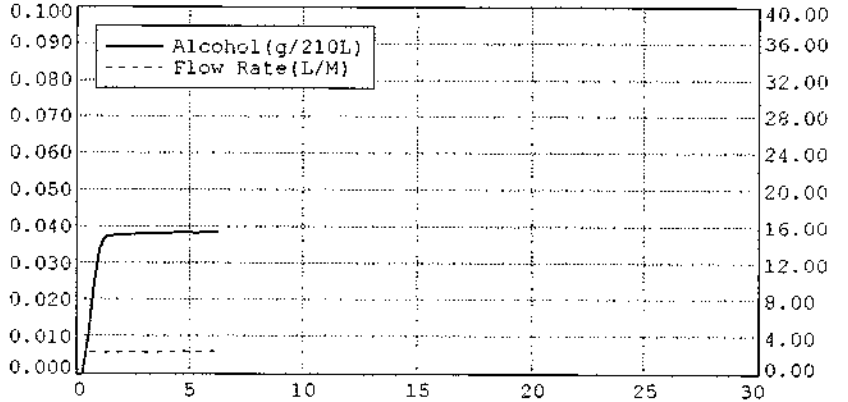
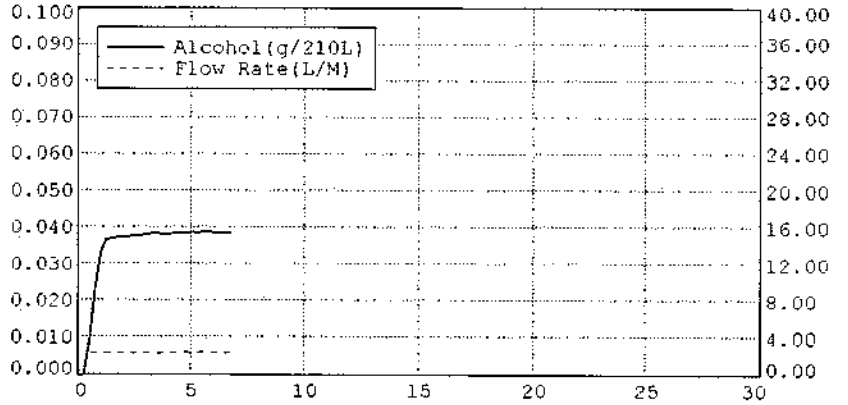
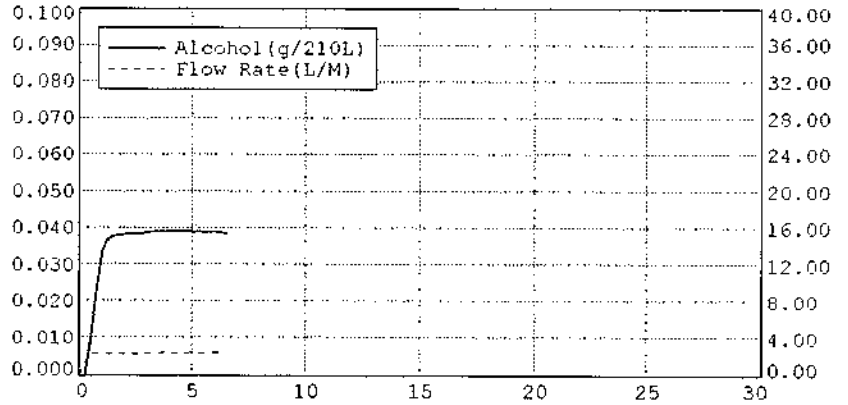
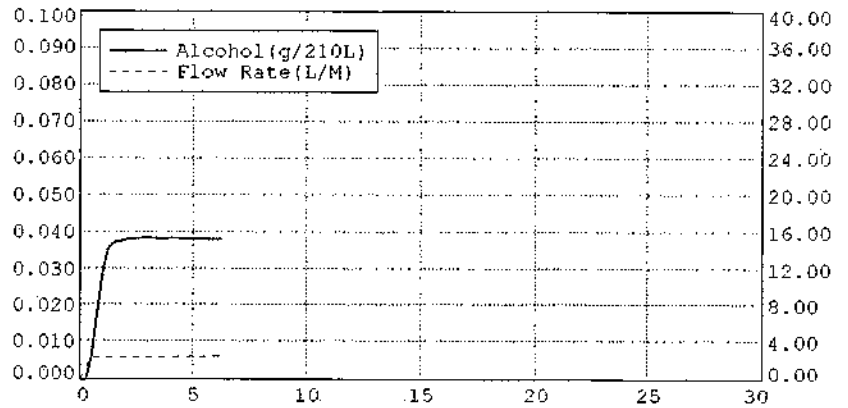
Date: 11/24/2015
 Time: 13:11:12

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.74: 0.040
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 802 psi

BLANK TEST	0.000	13:12
INTERNAL STANDARD	VERIFIED	13:12
EXTERNAL STANDARD	0.040	13:12
BLANK TEST	0.000	13:13
EXTERNAL STANDARD	0.040	13:13
BLANK TEST	0.000	13:14
EXTERNAL STANDARD	0.039	13:14
BLANK TEST	0.000	13:15
EXTERNAL STANDARD	0.040	13:16
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.039	13:17
BLANK TEST	0.000	13:18

Average = 0.0396
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100693

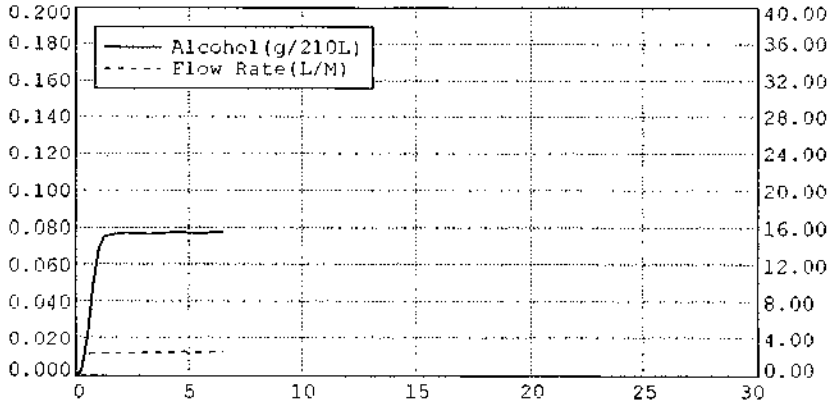
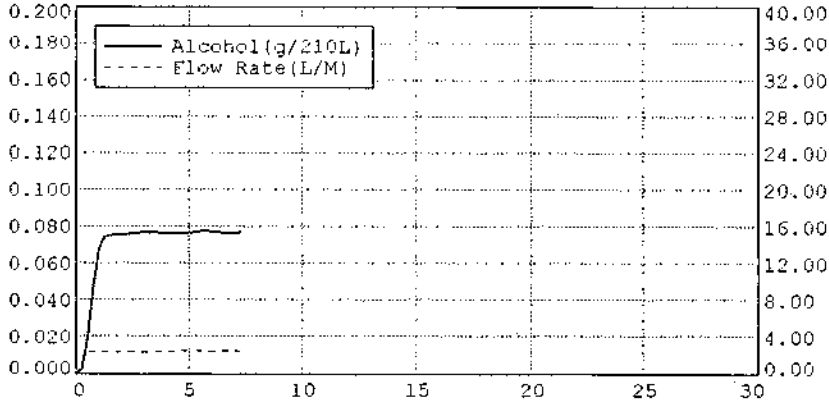
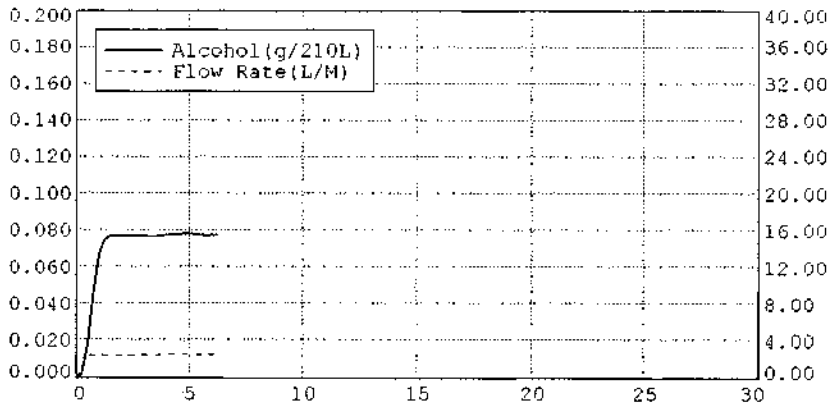
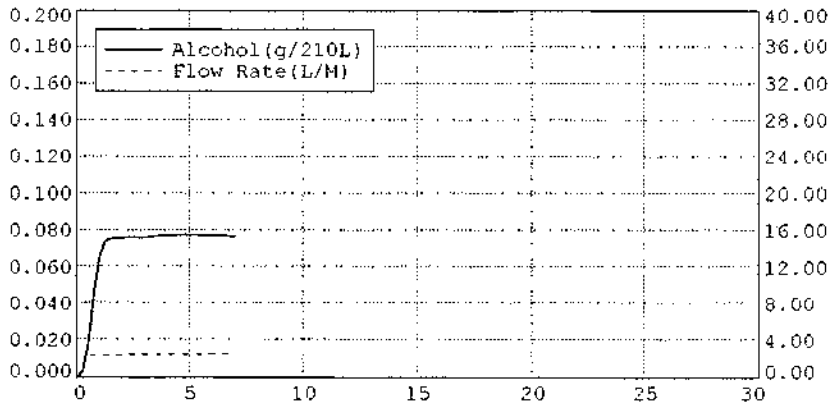
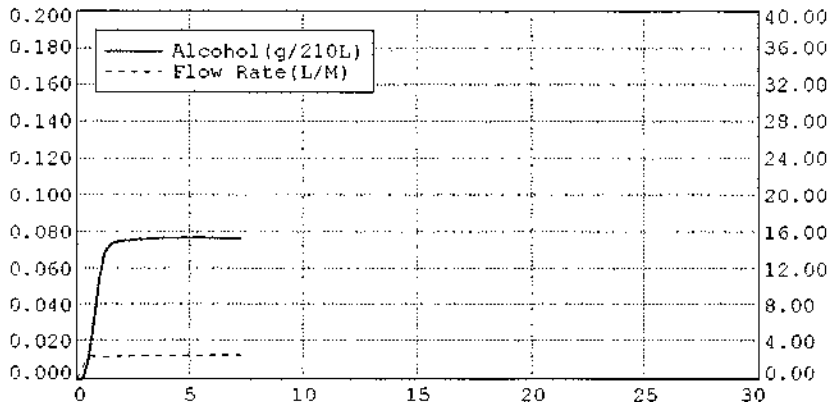
Date: 11/24/2015
 Time: 13:18:43

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.73: 0.080
 LOT #: 01315080A3
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 994 psi

BLANK TEST	0.000	13:20
INTERNAL STANDARD	VERIFIED	13:20
EXTERNAL STANDARD	0.078	13:20
BLANK TEST	0.000	13:21
EXTERNAL STANDARD	0.079	13:21
BLANK TEST	0.000	13:22
EXTERNAL STANDARD	0.079	13:22
BLANK TEST	0.000	13:23
EXTERNAL STANDARD	0.078	13:23
BLANK TEST	0.000	13:24
EXTERNAL STANDARD	0.079	13:24
BLANK TEST	0.000	13:25

Average = 0.0786
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100693

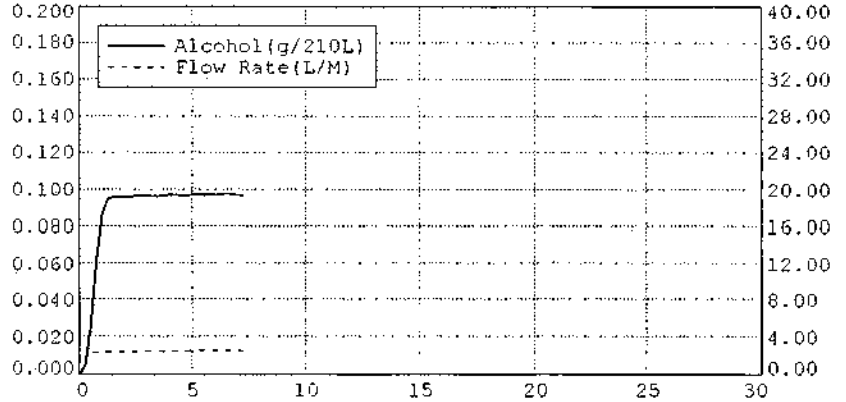
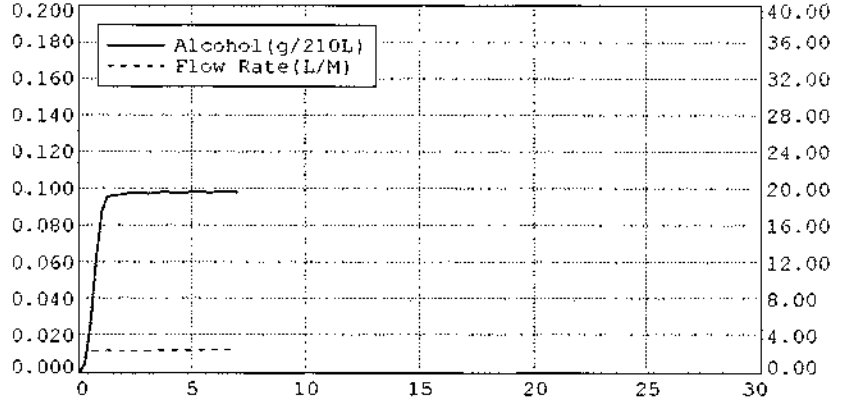
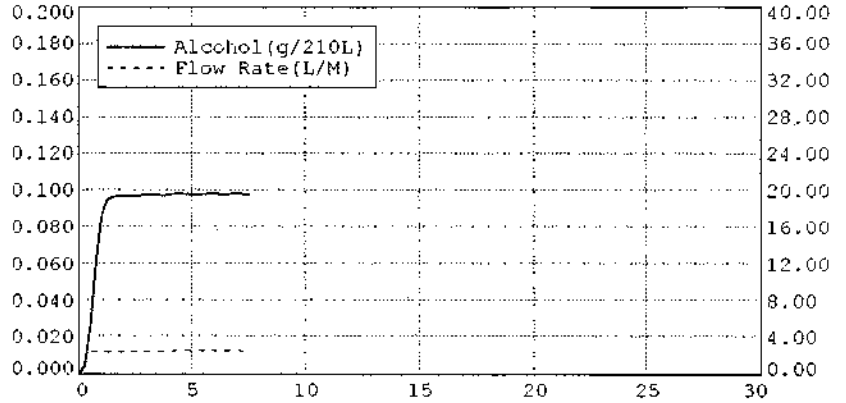
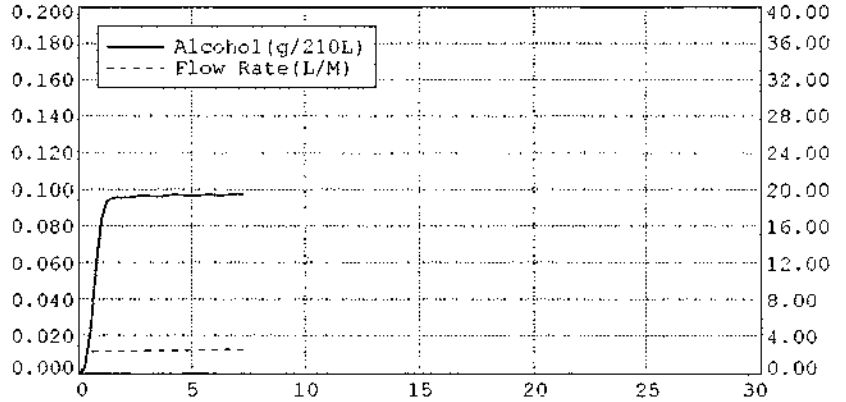
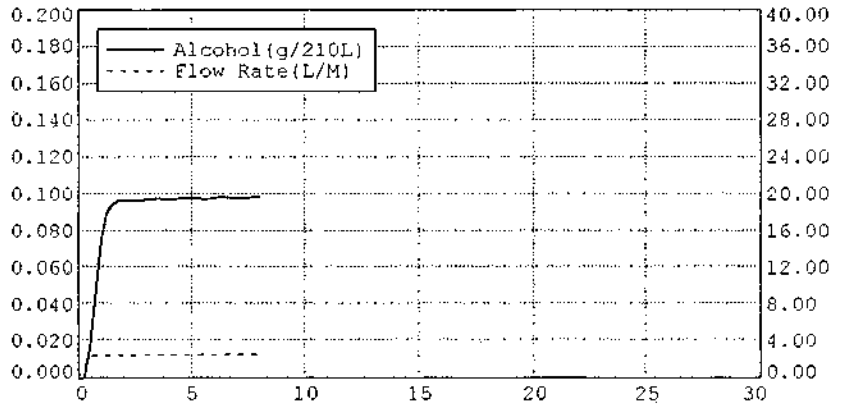
Date: 11/24/2015
 Time: 13:28:05

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.74: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1031 psi

BLANK TEST	0.000	13:29
INTERNAL STANDARD	VERIFIED	13:29
EXTERNAL STANDARD	0.099	13:30
BLANK TEST	0.000	13:30
EXTERNAL STANDARD	0.098	13:31
BLANK TEST	0.000	13:32
EXTERNAL STANDARD	0.099	13:32
BLANK TEST	0.000	13:33
EXTERNAL STANDARD	0.100	13:33
BLANK TEST	0.000	13:34
EXTERNAL STANDARD	0.098	13:34
BLANK TEST	0.000	13:35

Average = 0.0988
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100693

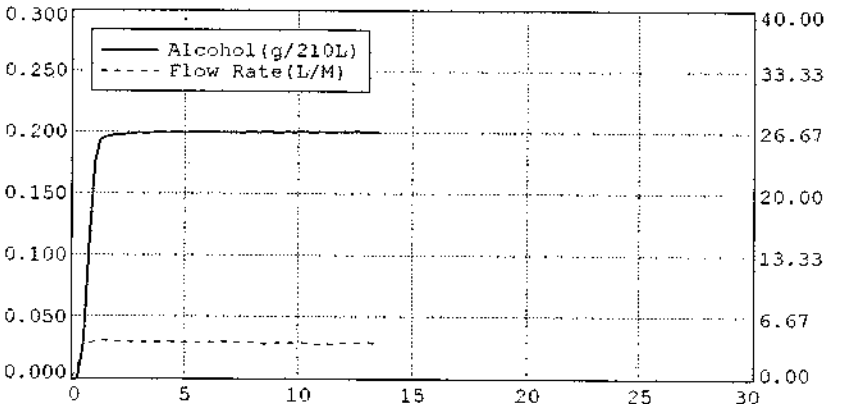
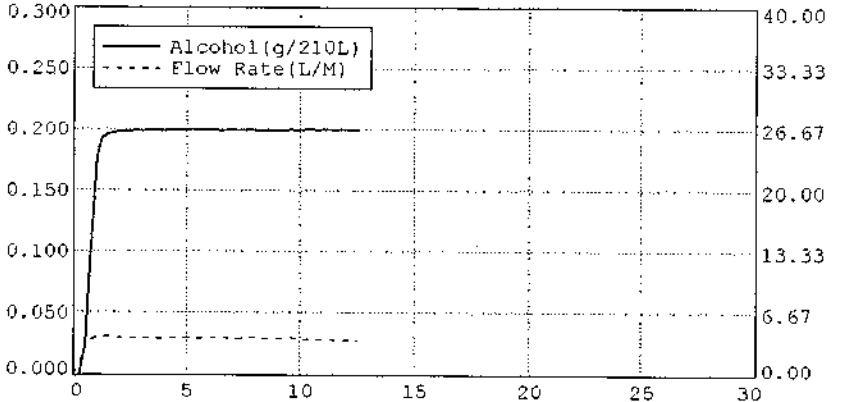
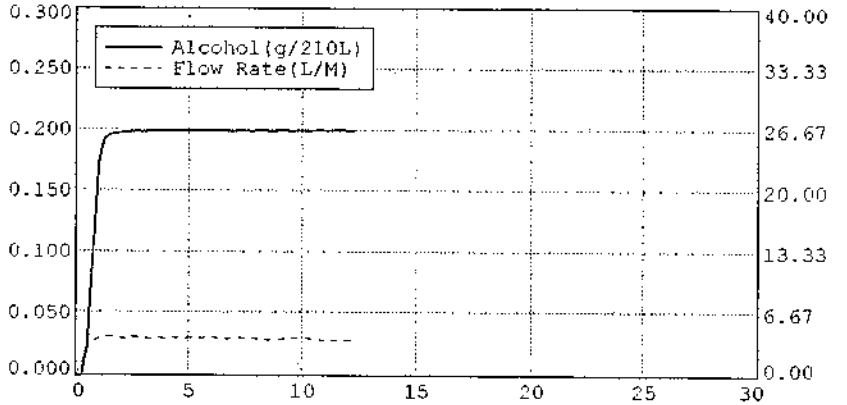
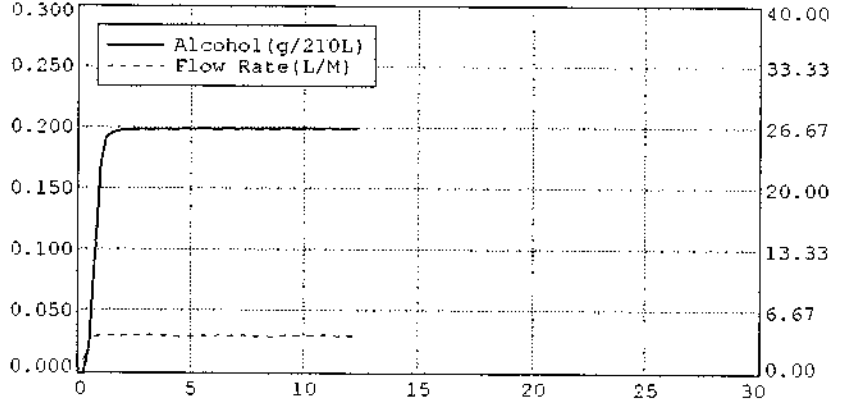
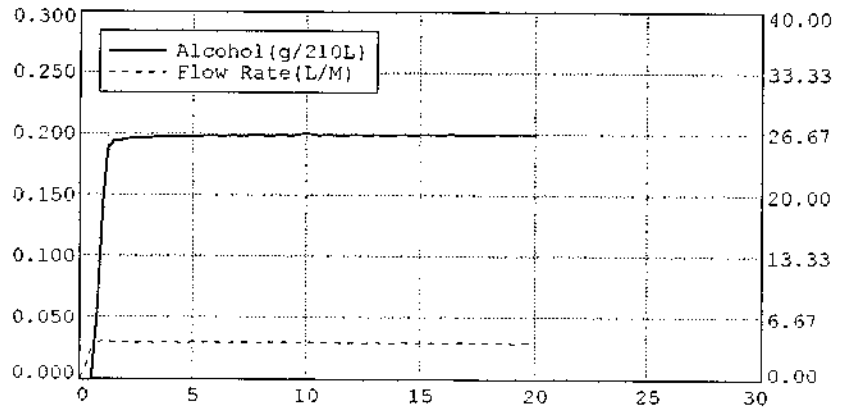
Date: 11/24/2015
 Time: 13:42:27

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:43
INTERNAL STANDARD	VERIFIED	13:43
EXTERNAL STANDARD	0.200	13:44
BLANK TEST	0.000	13:45
EXTERNAL STANDARD	0.200	13:45
BLANK TEST	0.000	13:46
EXTERNAL STANDARD	0.200	13:46
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.200	13:47
BLANK TEST	0.000	13:48
EXTERNAL STANDARD	0.201	13:49
BLANK TEST	0.000	13:49

Average = 0.2002
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100693

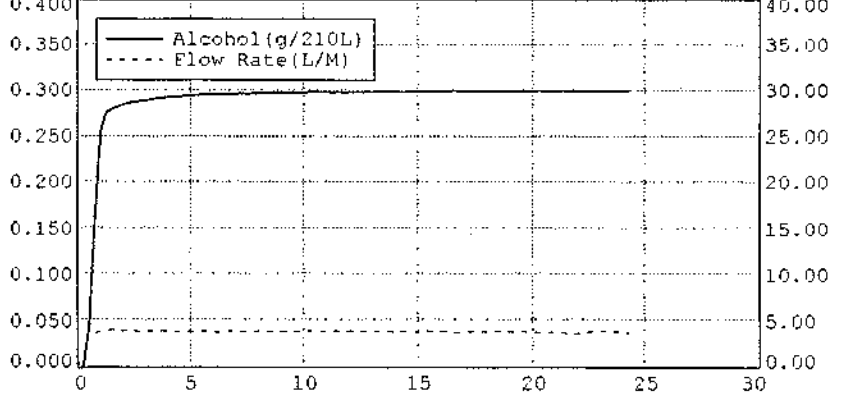
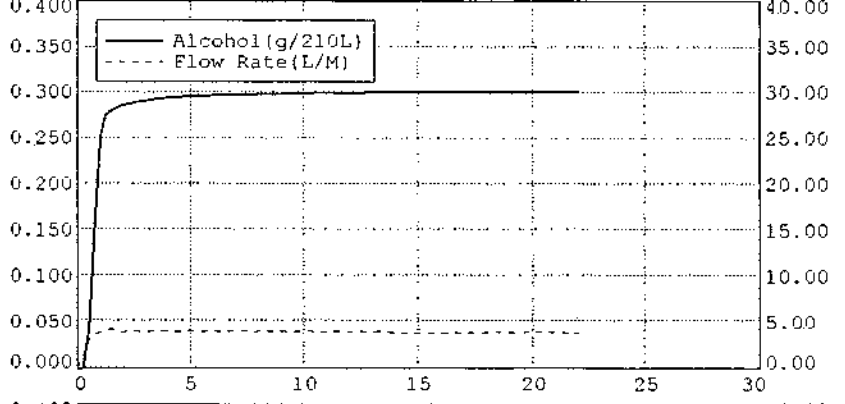
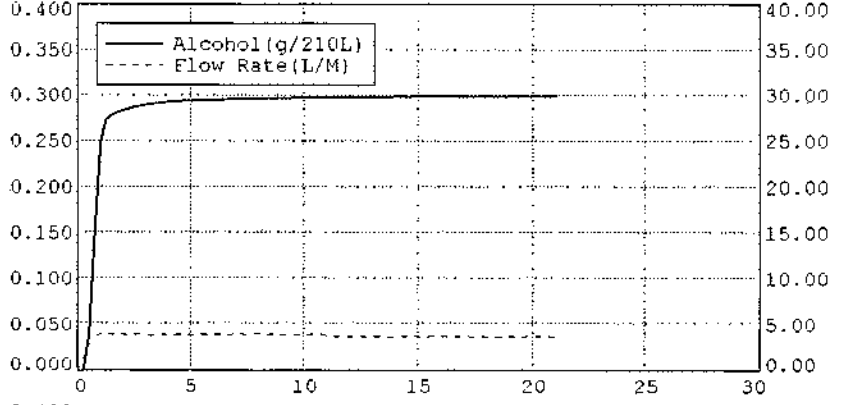
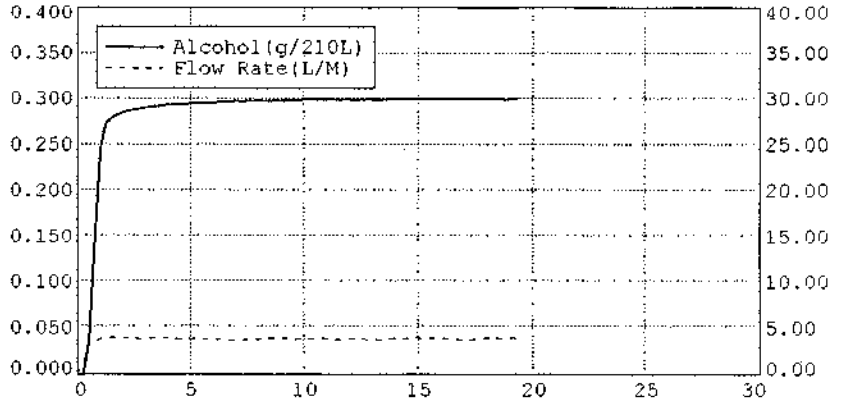
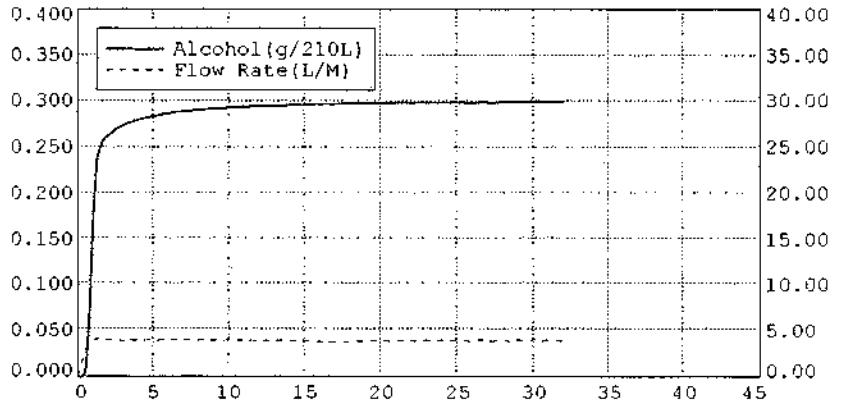
Date: 11/24/2015
 Time: 13:55:43

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: GUTH 14270
 EXPIRATION: 12/02/2017
2016 BMB 12/1/15

BLANK TEST	0.000	13:56
INTERNAL STANDARD	VERIFIED	13:57
EXTERNAL STANDARD	0.299	13:57
BLANK TEST	0.000	13:58
EXTERNAL STANDARD	0.299	13:58
BLANK TEST	0.000	13:59
EXTERNAL STANDARD	0.299	14:00
BLANK TEST	0.000	14:01
EXTERNAL STANDARD	0.300	14:01
BLANK TEST	0.000	14:02
EXTERNAL STANDARD	0.300	14:03
BLANK TEST	0.000	14:04

Average = 0.2994
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dat: 100693

Date: 11/25/2015
Time: 09:03:24

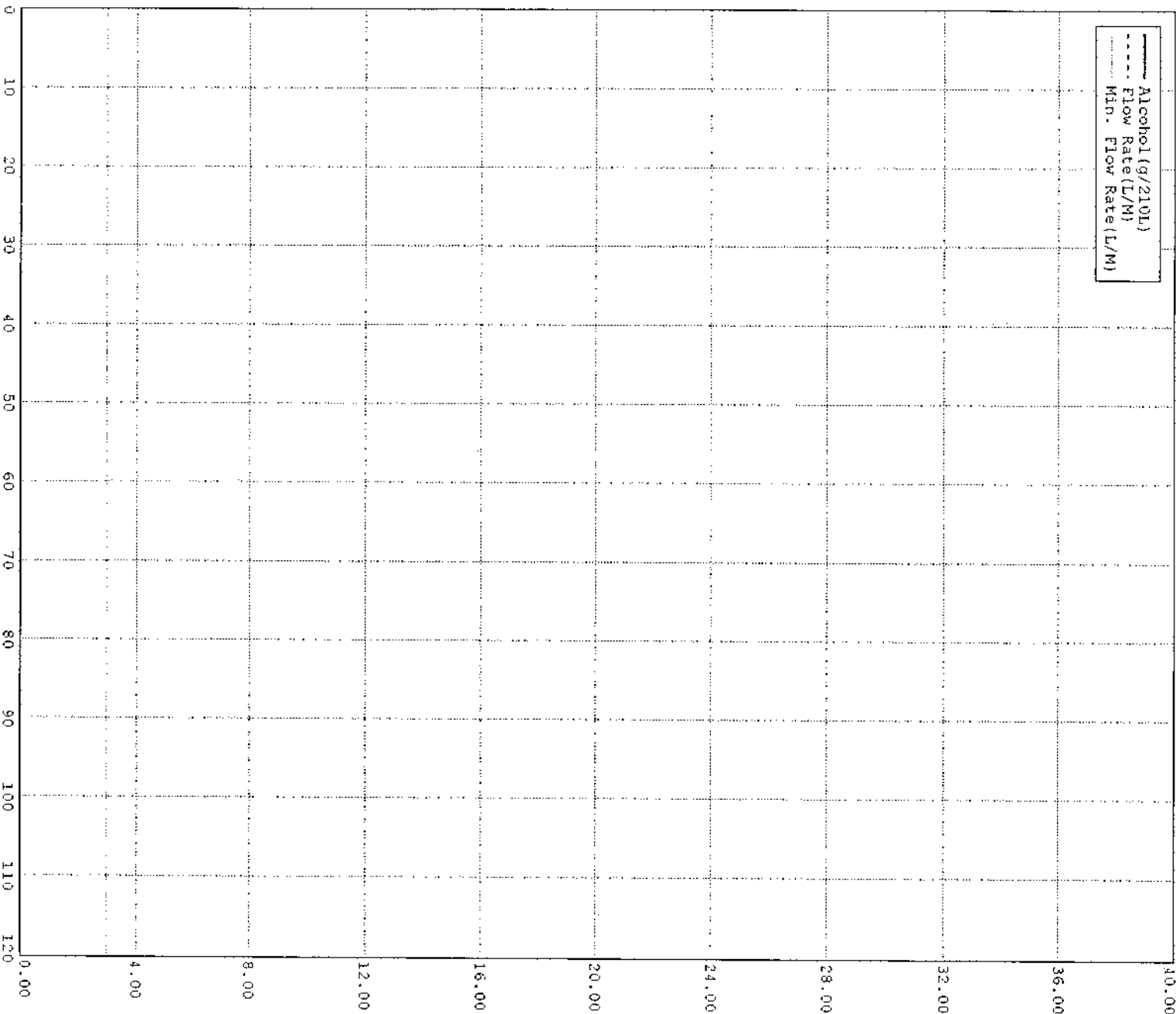
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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	09:05
BLANK TEST	0.000	09:05
INTERNAL STANDARD	VERIFIED	09:05
EXTERNAL STANDARD	0.078	09:06
BLANK TEST	0.000	09:07
SUBJECT SAMPLE	INCOMPLETE	09:09



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100693

Date: 11/25/2015
Time: 09:11:04

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

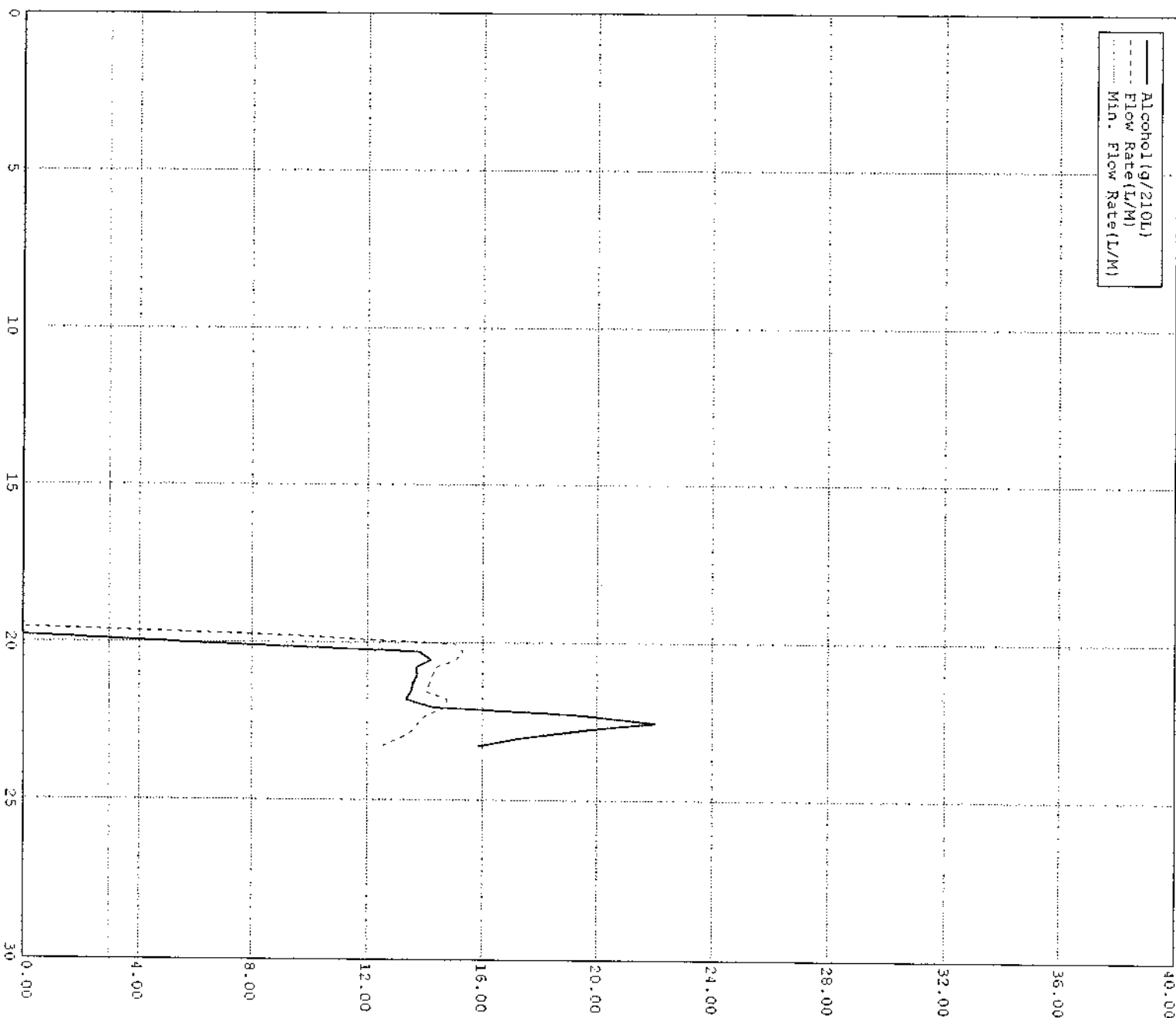
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.62: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:12
BLANK TEST	0.000	09:12
INTERNAL STANDARD	VERIFIED	09:12
EXTERNAL STANDARD	0.079	09:12
BLANK TEST	0.000	09:13
SUBJECT SAMPLE	INVALID	09:14

DNB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 11/25/2015
Time: 09:28:51

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

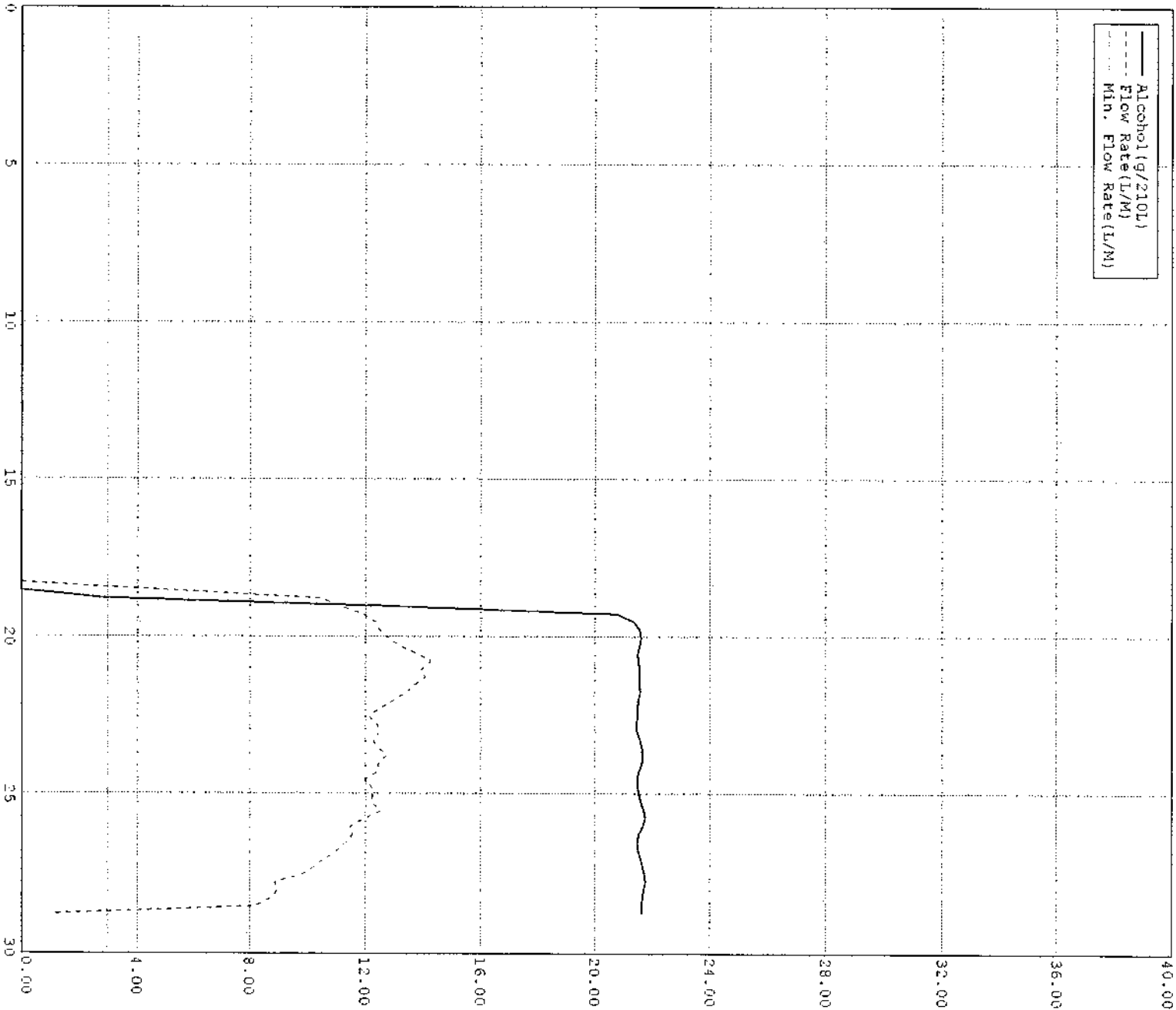
DEPT/AGENCY:
INTERFERENCE ACETONE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.62: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:34
BLANK TEST	0.000	09:34
INTERNAL STANDARD	VERIFIED	09:34
Xq = 0.090 (2.58%)	0.079	09:35
EXTERNAL STANDARD	X[1] = 0.0789 (0.0002)	(0.0031)
BLANK TEST	0.000	09:36
SUBJECT SAMPLE	XXX	09:36
X[1] = 0.1095 (-0.0188)	(0.0004)	

Interference Detected

Filter 2 Avg: 0.0002
Filter 3 Avg: 0.0029
BmB 11/25/15



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 11/25/2015
Time: 09:38:13

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

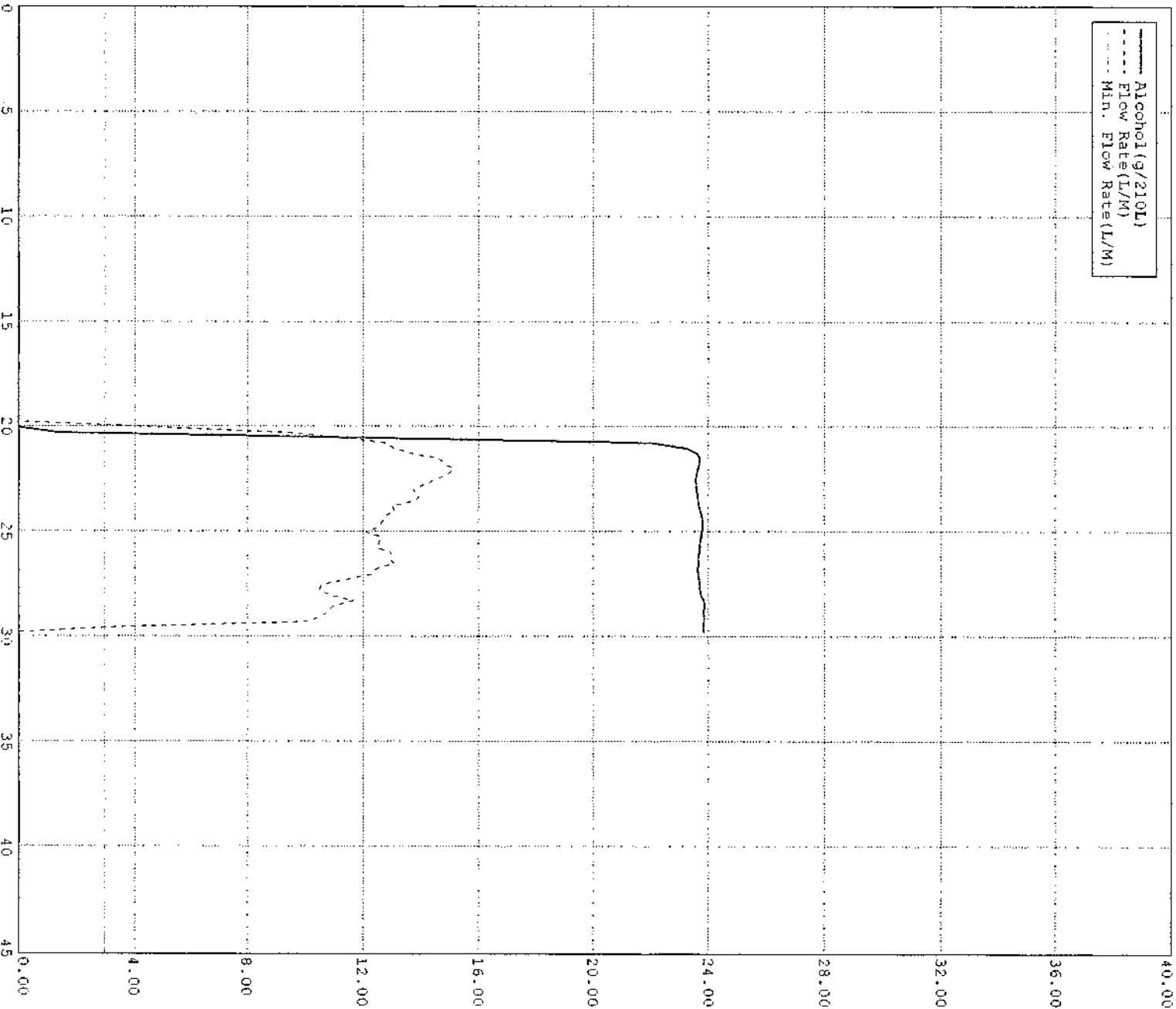
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	09:40
BLANK TEST	0.000	09:40
INTERNAL STANDARD	VERIFIED	09:40
Xq = 0.090 (2.78%)		
EXTERNAL STANDARD	0.079	09:41
X[1] = 0.0786 (-0.0004)	(0.0022)	
BLANK TEST	0.000	09:42
SUBJECT SAMPLE	XXX	09:42
X[1] = 0.1198 (-0.0200)	(0.0023)	

Interference Detected

Handwritten signature: BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 11/25/2015
Time: 09:44:56

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

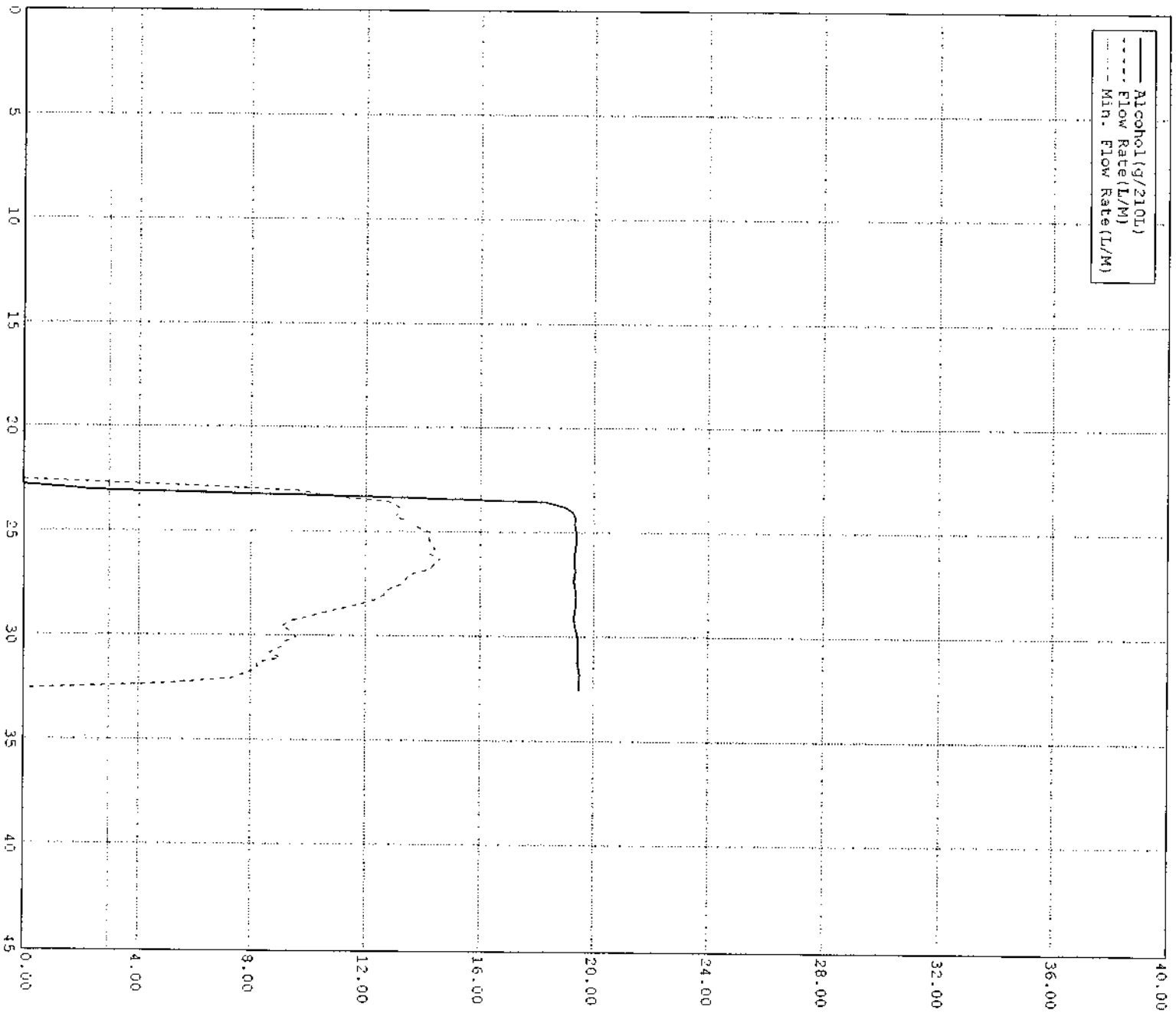
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK	PASSED	09:47
BLANK TEST	0.000	09:47
INTERNAL STANDARD	VERIFIED	09:47
Xq = 0.090 (2.78%)	0.079	09:47
EXTERNAL STANDARD	X[1] = 0.0790 (0.0009)	(0.0032) 09:48
BLANK TEST	0.000	09:48
SUBJECT SAMPLE (Vol=1.84L)	0.098	09:49
X[1] = 0.0981 (0.0004)	(0.0024)	09:50
BLANK TEST	0.000	09:50
EXTERNAL STANDARD	0.078	09:50
X[1] = 0.0783 (0.0000)	(0.0029)	09:51
BLANK TEST	0.000	09:51

BBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 11/25/2015
Time: 09:22:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

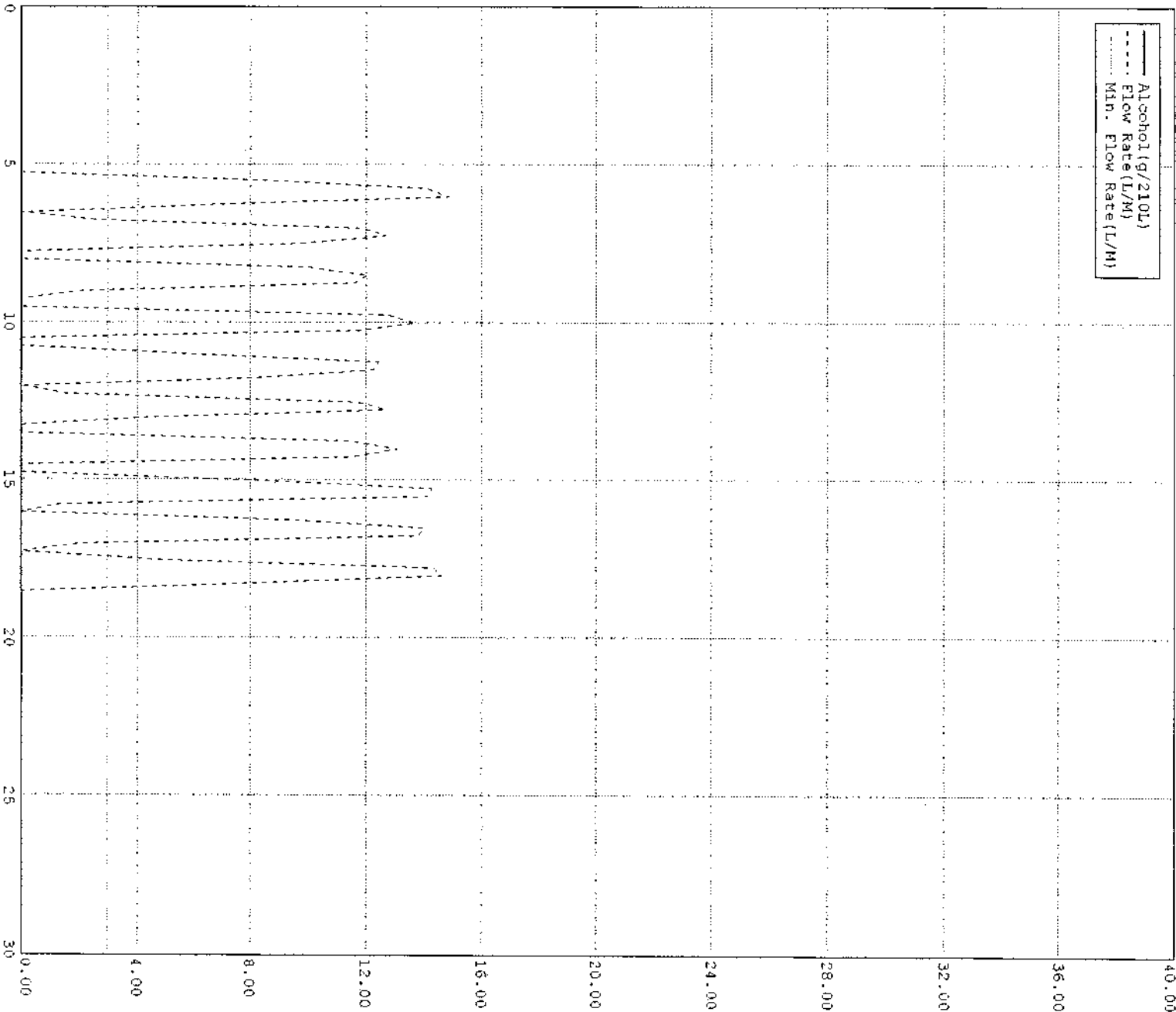
DEPT/AGENCY:
EXCEEDED ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.62: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

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

Maximum Attempts Exceeded

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 11/25/2015
Time: 09:16:05

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

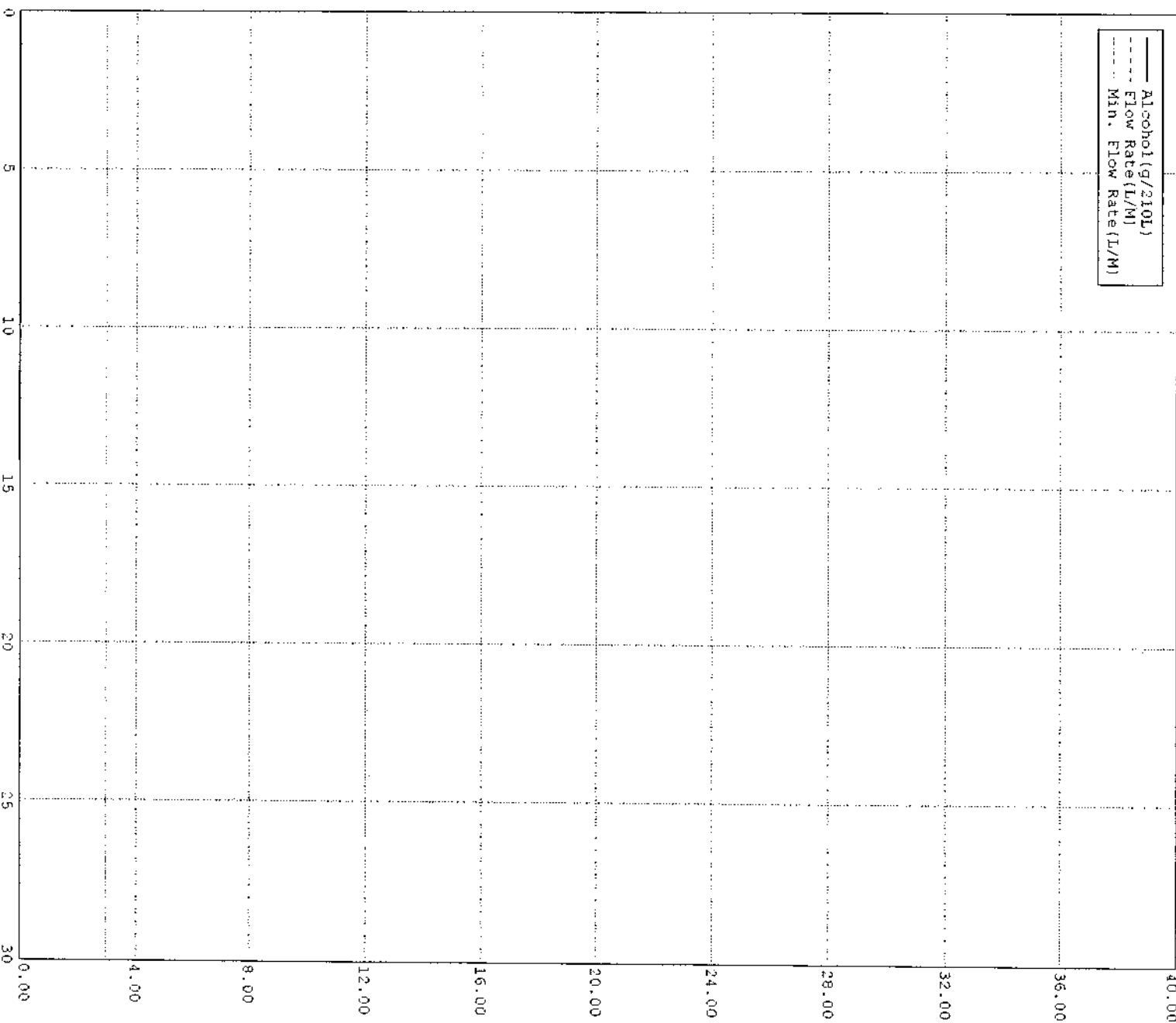
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AP 29.62: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK
BLANK TEST PASSED 09:17
INTERNAL STANDARD VERIFIED 09:17
EXTERNAL STANDARD 0.078 09:18
BLANK TEST 0.000 09:19

RFI DETECTED

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 11/25/2015
Time: 10:08:20

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 AP 29.61: 0.079
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:09
BLANK TEST	0.000	10:09
INTERNAL STANDARD	VERIFIED	10:09
EXTERNAL STANDARD	0.079	10:09
BLANK TEST	0.000	10:10
SUBJECT SAMPLE (Vol=1.71L)	0.000	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.078	10:12
BLANK TEST	0.000	10:13

Handwritten signature: BMB

