

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 100699 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 01315080A2 Exp 2/5/17
- iv. 0.100g/210L Mnf ILMO 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 DR1176 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: 100699

Date: 11/24/2015
Time: 12:01:15

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 = 44.7°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.53 V PASSED
(0.92 V - 2.14 V)
Cooler Voltage = 1.46 V PASSED
(0.88 V - 2.04 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 557 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.152 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 = 0.075 0.12% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100699

Date: 11/24/2015

Time: 12:07 PM

Temperatures (°C)

Sample Cell: 48.9°C

Breath Tube: 44.8°C

Current Barometer 29.7 in

Volume (Ltr) 1.58

Settings

Lamp: 1.56 V

Bias: 79 V

Cooler: 1.46 V

Chopper: 556 Hz

Voltages (V)

Flow: 1.05 V

Detector: 0.041 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 09/14/2015
Time: 14:16:03

OPERATOR NAME:
BRANDI BARNETT
CERTIFICATE #: 7038

Ca = 0.1000
CAL = 0.952416 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0053 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0746 0.0500 <= Xq < 0.2000
a21 = 1.147407 1.050 <= a21 < 1.300
a31 = 0.412118 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 11/24/2015
Time: 12:08:11

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

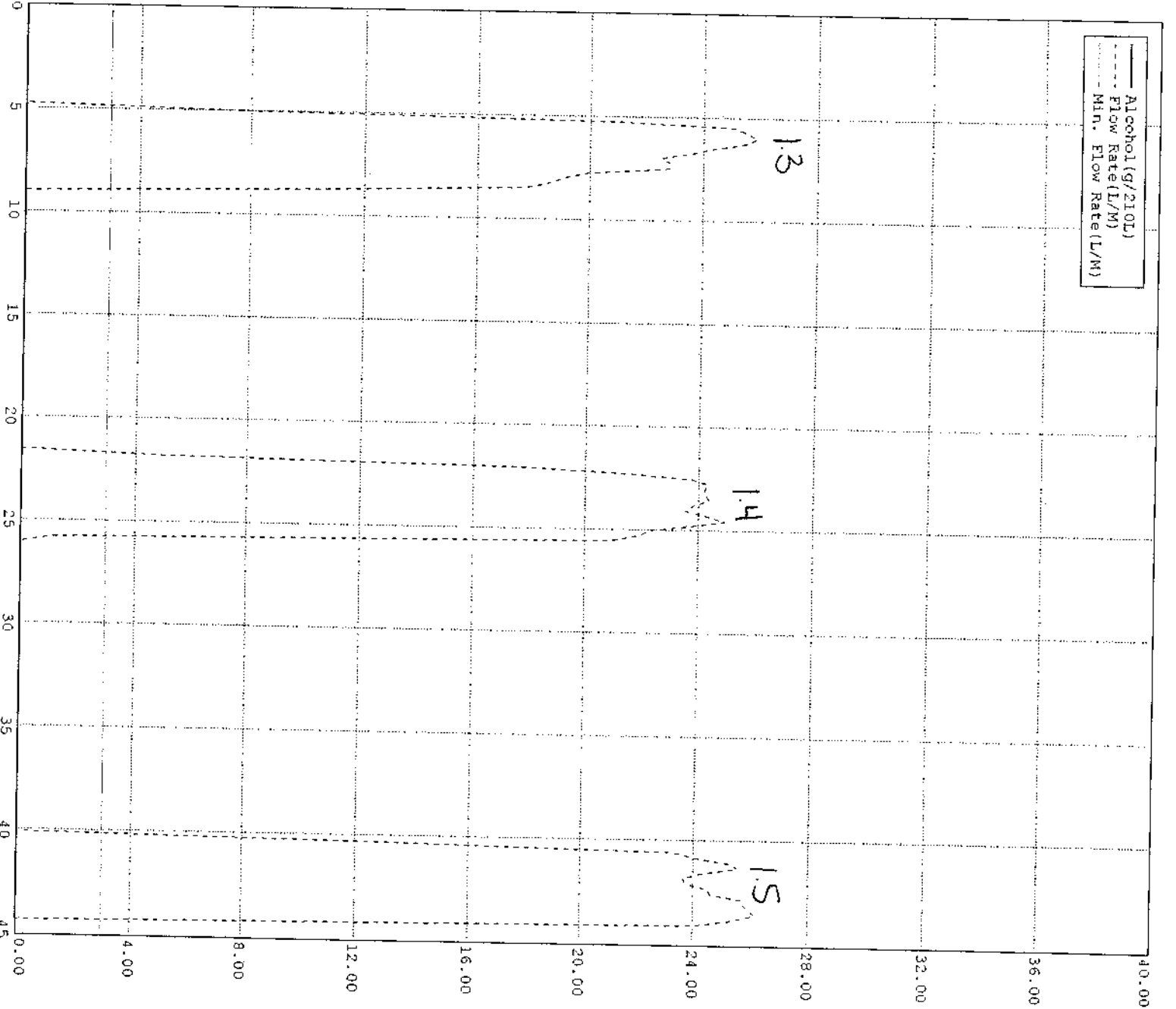
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.75: 0.080
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	12:09
BLANK TEST	0.000	12:10
INTERNAL STANDARD	VERIFIED	12:10
EXTERNAL STANDARD	0.077	12:10
BLANK TEST	0.000	12:11
SUBJECT SAMPLE (Vol=1.60L)	0.000	12:12
BLANK TEST	0.000	12:13
EXTERNAL STANDARD	0.077	12:13
BLANK TEST	0.000	12:14

BOMB



LINEARITY CHECK

Alaska Department of Public Safety
DATAMASTER dnt: 100699

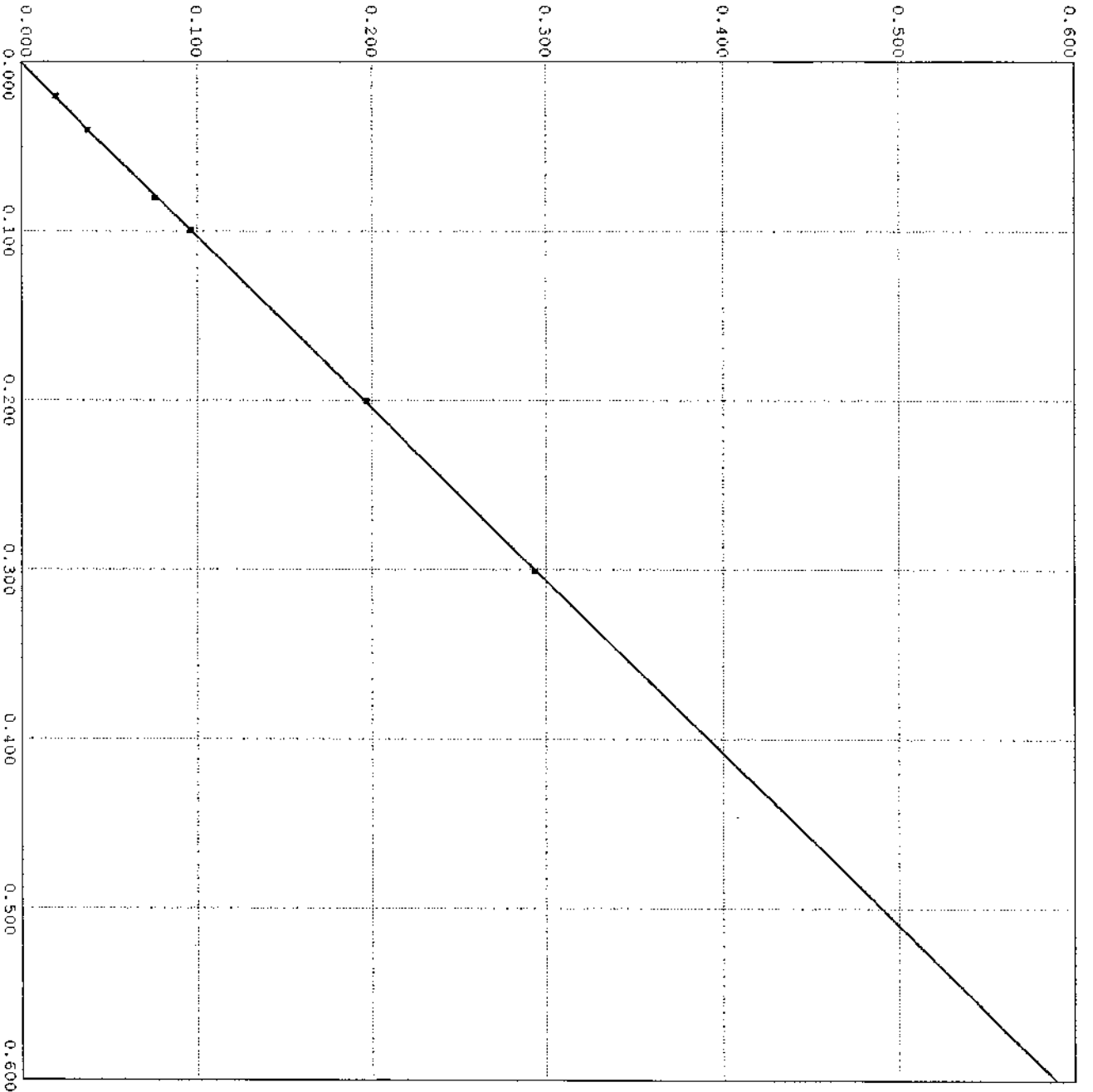
Date: 11/24/2015
Time: 12:42:16

SUPERVISOR NAME:
BRANDI BARRETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0202	0.0004
0.040	0.0390	0.0000
0.080	0.0770	0.0000
0.099	0.0972	0.0004
0.200	0.1976	0.0005
0.300	0.2944	0.0005

SLOPE = 0.983576
R² = 0.999925

BMB



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100699

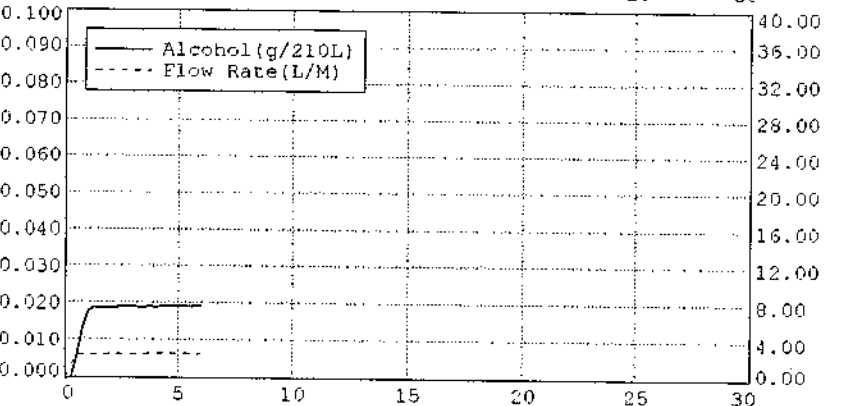
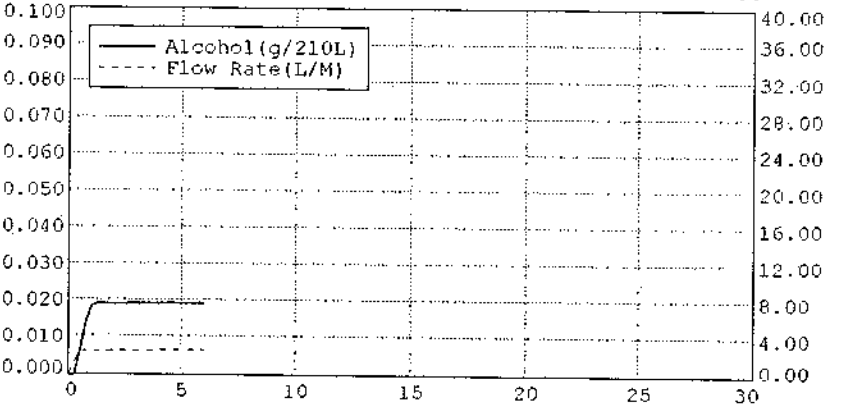
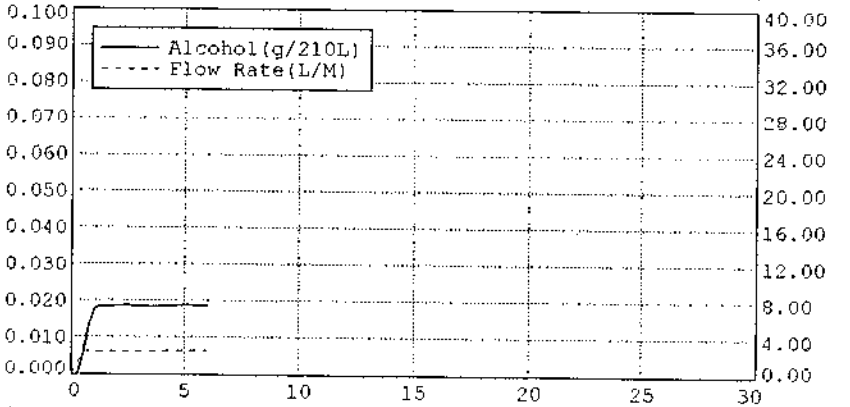
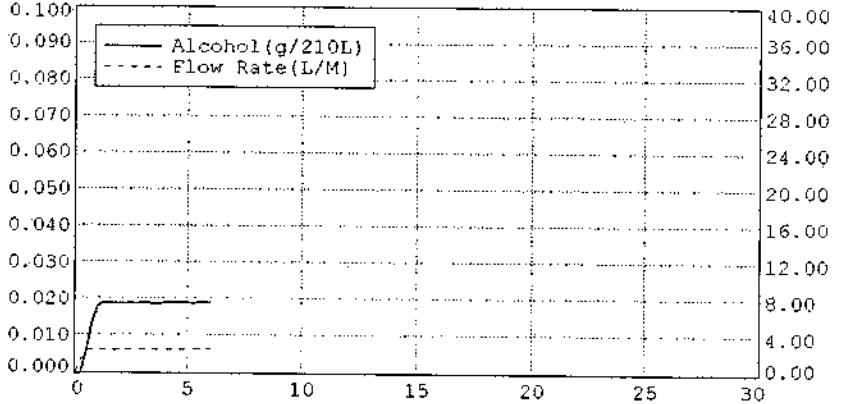
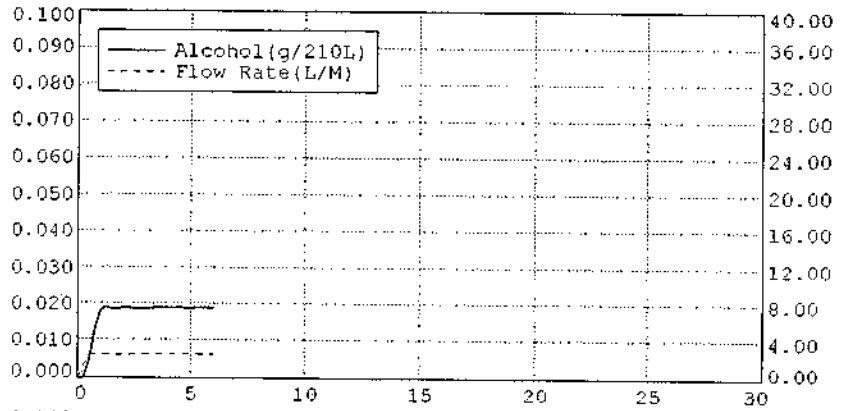
Date: 11/24/2015
Time: 12:42:17

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.74: 0.020
LOT #: 02915020A2
EXPIRATION: 03/05/2017
TANK PRESSURE: 788 psi

BLANK TEST	0.000	12:43
INTERNAL STANDARD	VERIFIED	12:43
EXTERNAL STANDARD	0.020	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.020	12:45
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.020	12:46
BLANK TEST	0.000	12:47
EXTERNAL STANDARD	0.020	12:47
BLANK TEST	0.000	12:48
EXTERNAL STANDARD	0.021	12:48
BLANK TEST	0.000	12:49

Average = 0.0202
Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

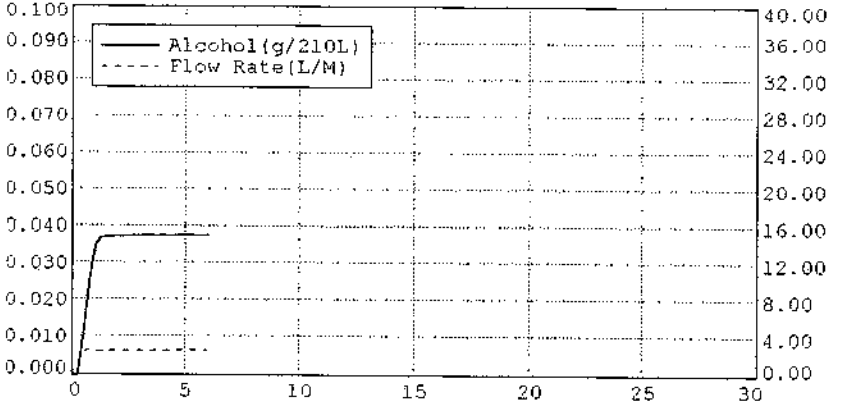
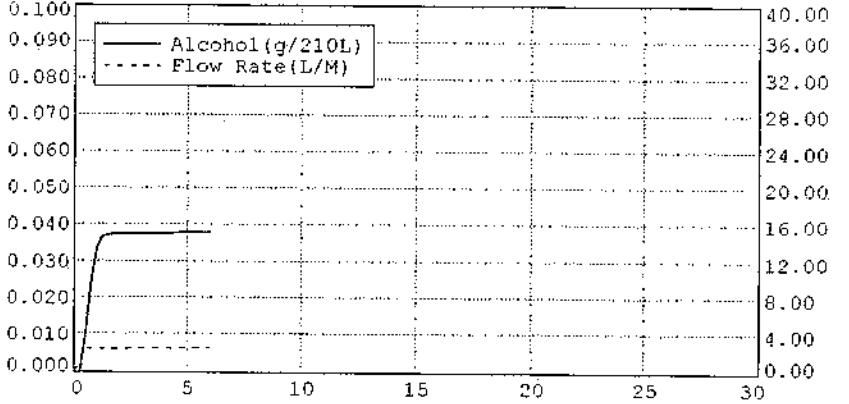
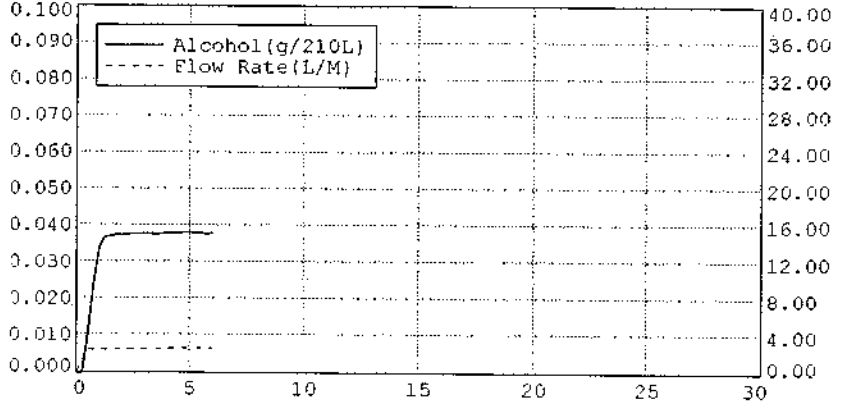
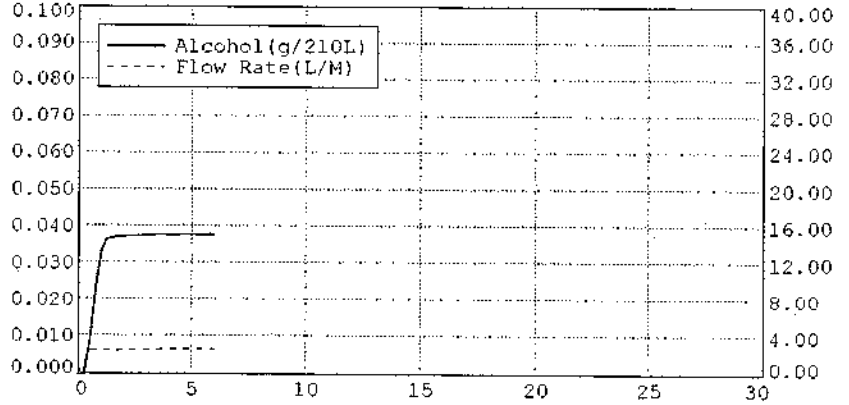
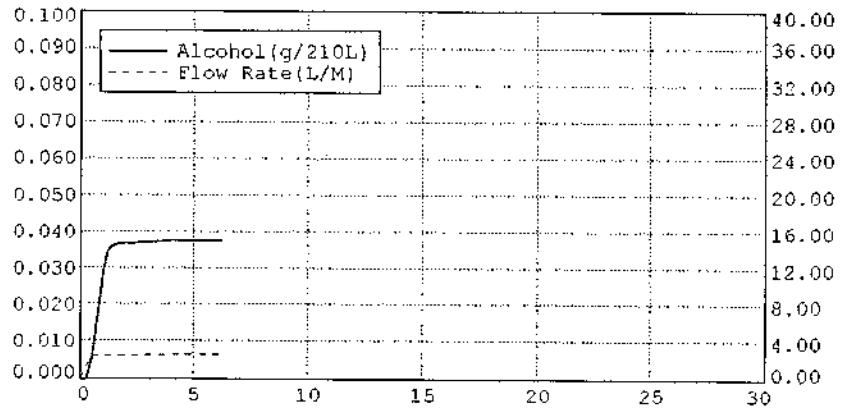
Alaska Department of Public Safety
 DATAMASTER dmt: 100699

Date: 11/24/2015
 Time: 12:51:47

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.040
 TARGET AT 29.75: 0.040
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 824 psi

BLANK TEST	0.000	12:53
INTERNAL STANDARD	VERIFIED	12:53
EXTERNAL STANDARD	0.039	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.039	12:54
BLANK TEST	0.000	12:55
EXTERNAL STANDARD	0.039	12:55
BLANK TEST	0.000	12:56
EXTERNAL STANDARD	0.039	12:56
BLANK TEST	0.000	12:57
EXTERNAL STANDARD	0.039	12:57
BLANK TEST	0.000	12:58

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100699

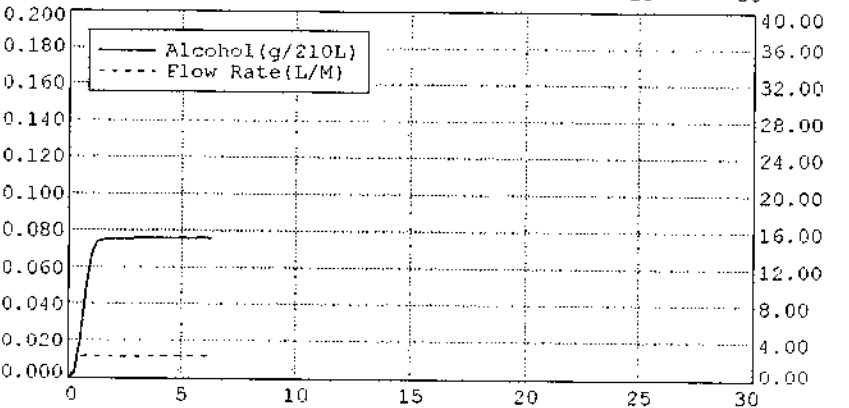
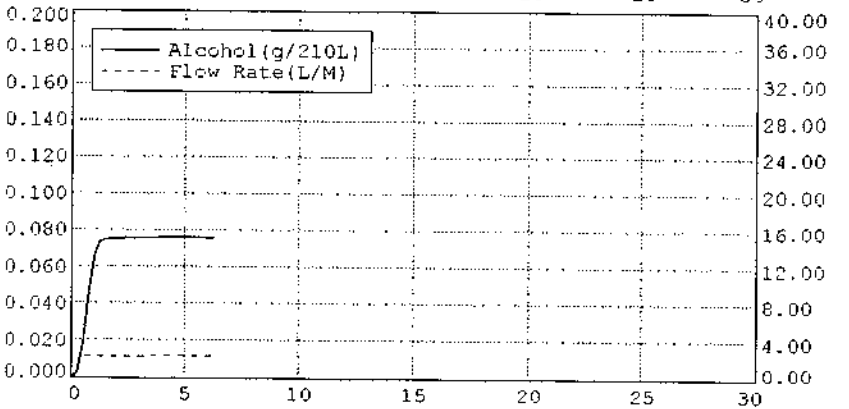
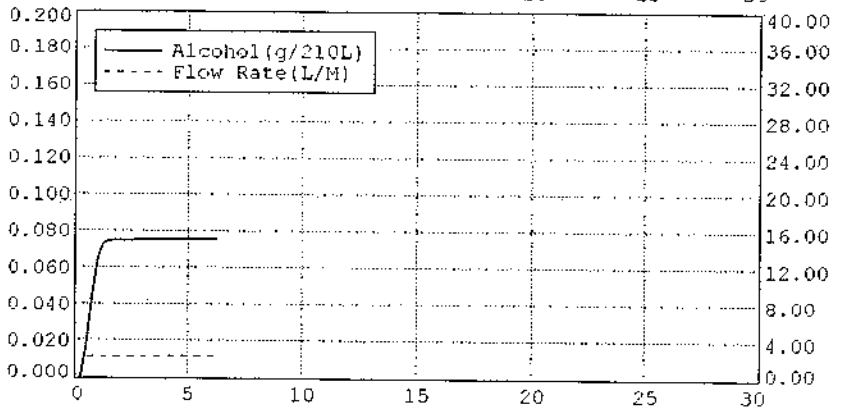
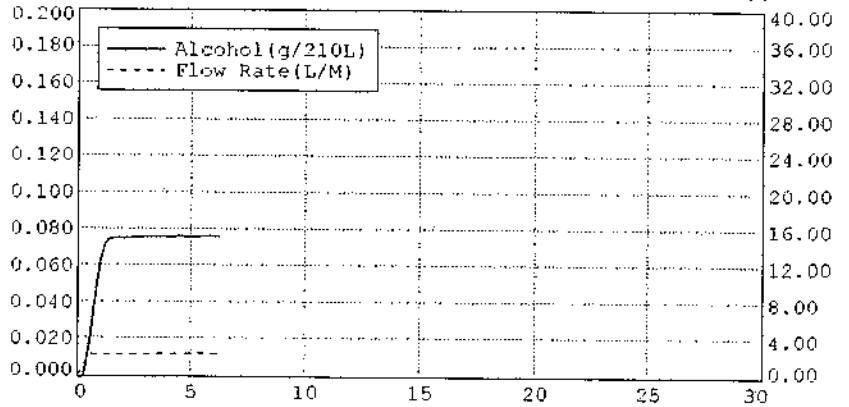
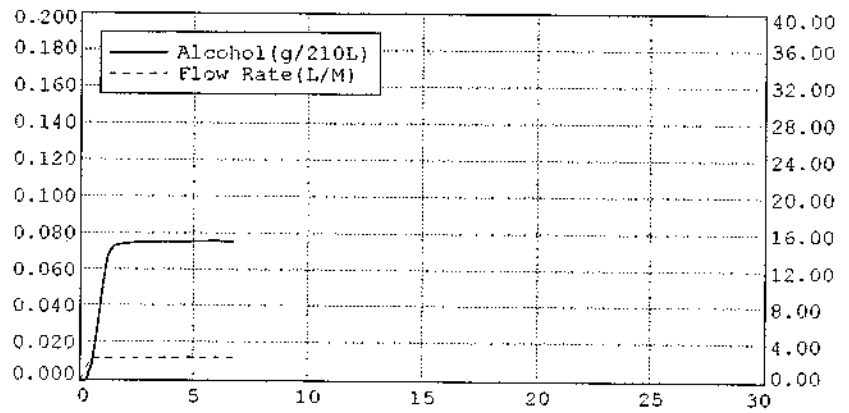
Date: 11/24/2015
 Time: 13:02:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.73: 0.080
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 525 psi

BLANK TEST	0.000	13:03
INTERNAL STANDARD	VERIFIED	13:03
EXTERNAL STANDARD	0.077	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.077	13:05
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.077	13:06
BLANK TEST	0.000	13:07
EXTERNAL STANDARD	0.077	13:07
BLANK TEST	0.000	13:08
EXTERNAL STANDARD	0.077	13:08
BLANK TEST	0.000	13:09

Average = 0.0770
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

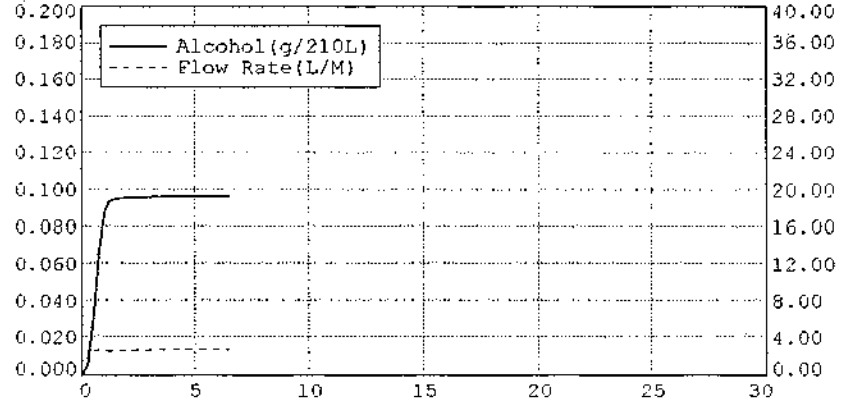
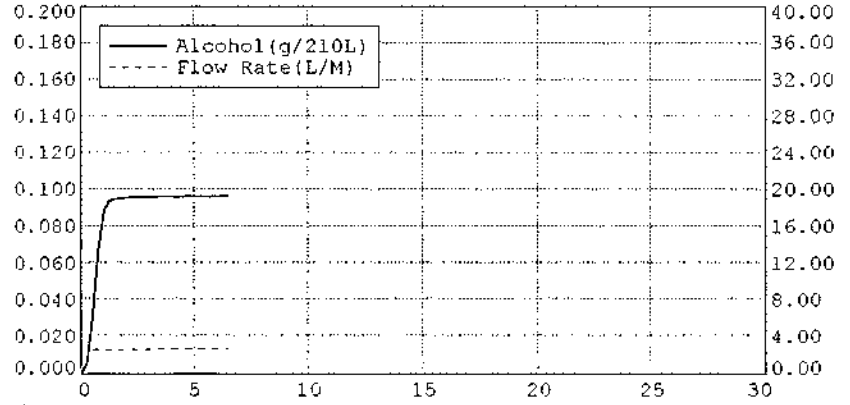
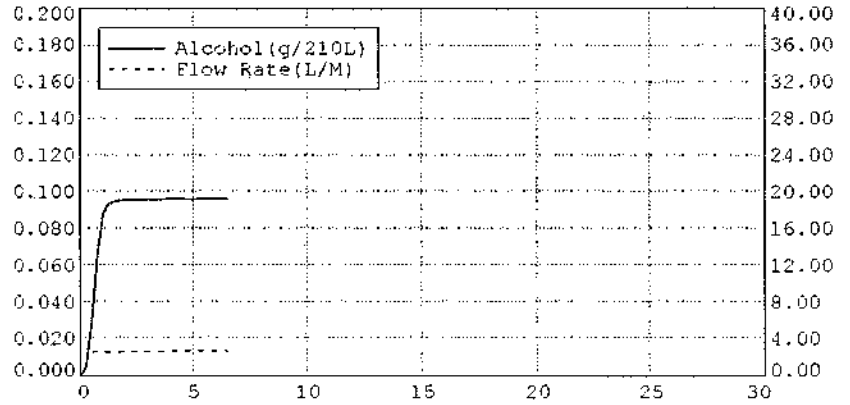
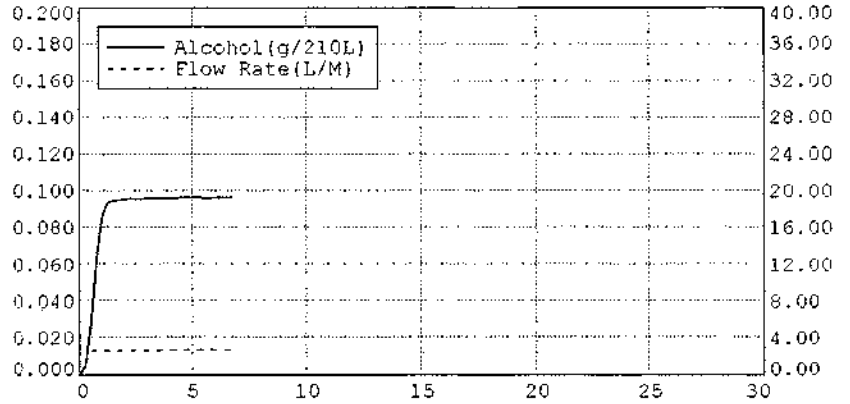
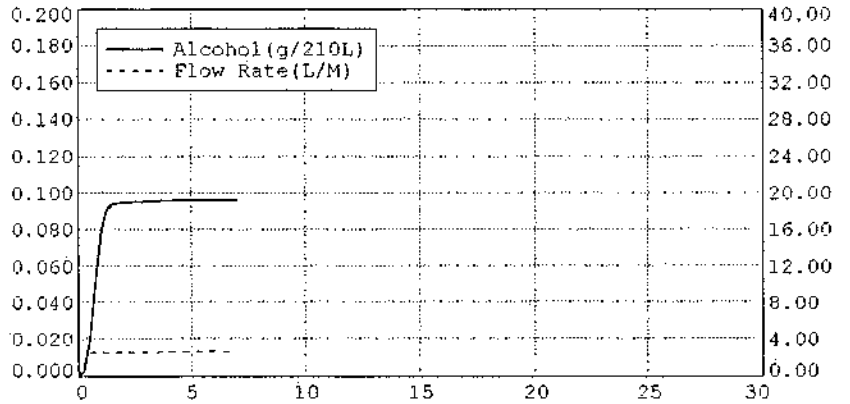
Alaska Department of Public Safety
 DATAMASTER dmt: 100699

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

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.100
 TARGET AT 29.74: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1056 psi

BLANK TEST	0.000	13:12
INTERNAL STANDARD	VERIFIED	13:12
EXTERNAL STANDARD	0.097	13:12
BLANK TEST	0.000	13:13
EXTERNAL STANDARD	0.097	13:13
BLANK TEST	0.000	13:14
EXTERNAL STANDARD	0.097	13:14
BLANK TEST	0.000	13:15
EXTERNAL STANDARD	0.097	13:16
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.098	13:17
BLANK TEST	0.000	13:18

Average = 0.0972
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100699

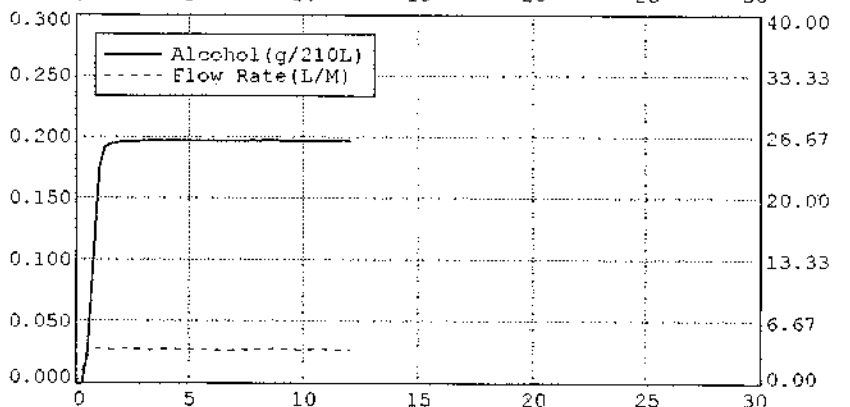
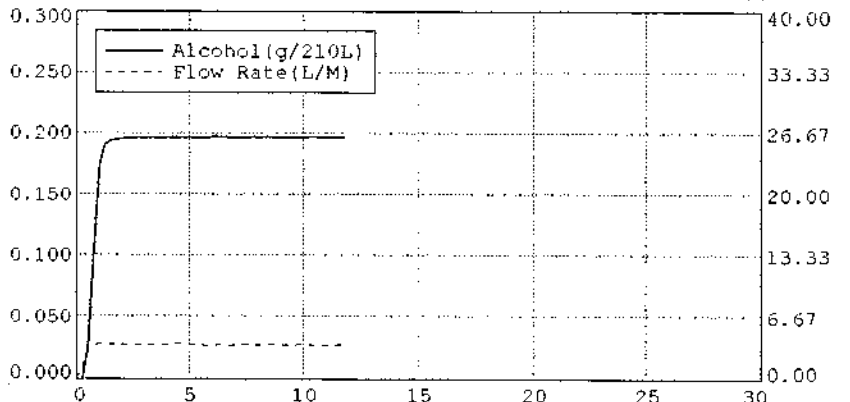
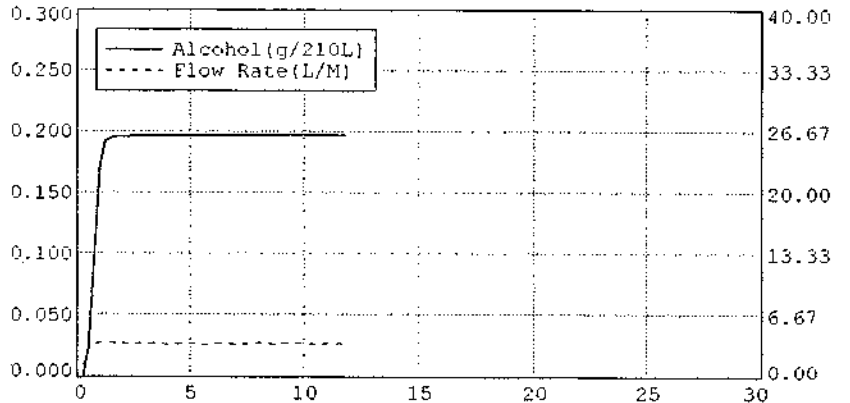
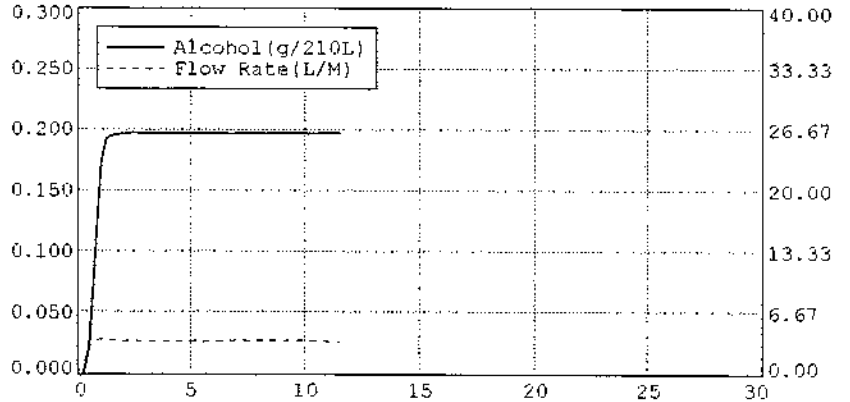
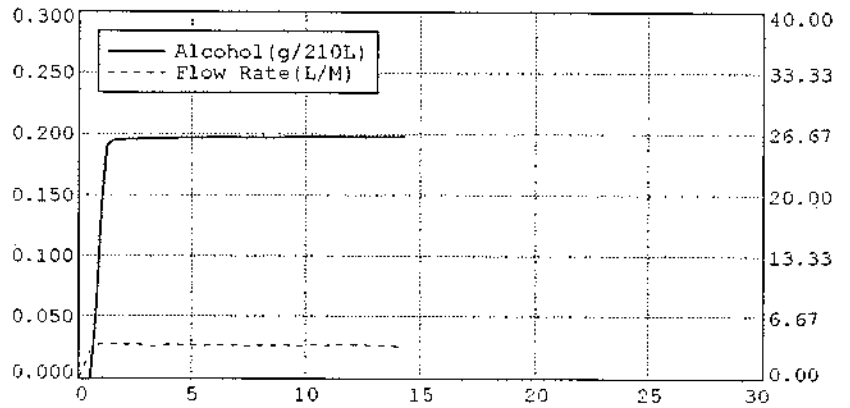
Date: 11/24/2015
 Time: 13:19:57

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:21
INTERNAL STANDARD	VERIFIED	13:21
EXTERNAL STANDARD	0.198	13:21
BLANK TEST	0.000	13:22
EXTERNAL STANDARD	0.197	13:22
BLANK TEST	0.000	13:23
EXTERNAL STANDARD	0.198	13:23
BLANK TEST	0.000	13:24
EXTERNAL STANDARD	0.197	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.198	13:26
BLANK TEST	0.000	13:27

Average = 0.1976
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100699

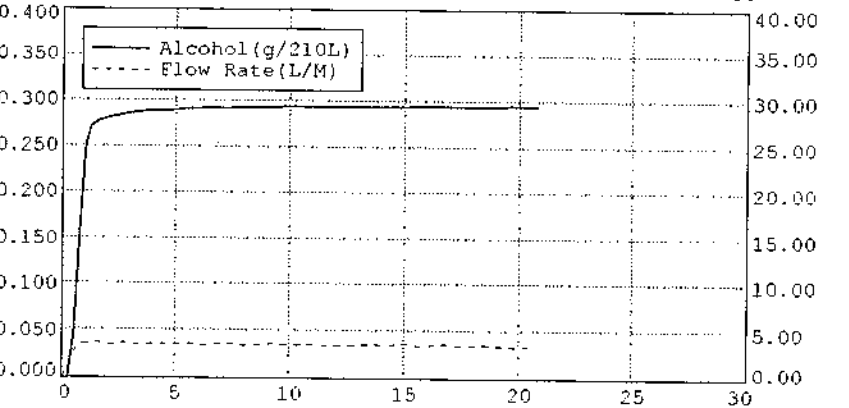
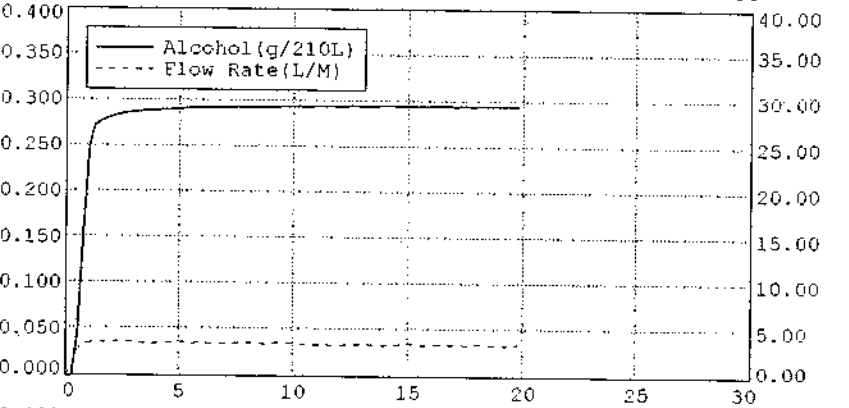
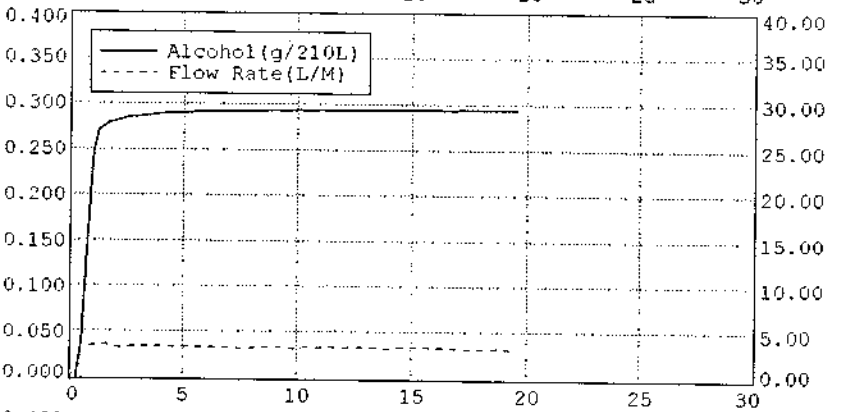
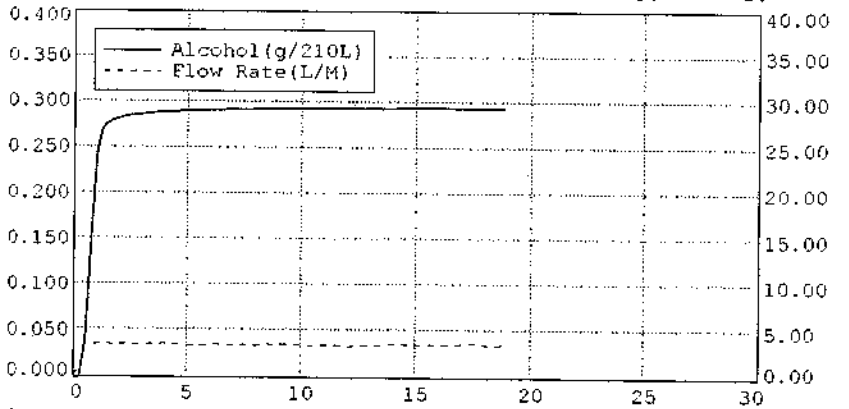
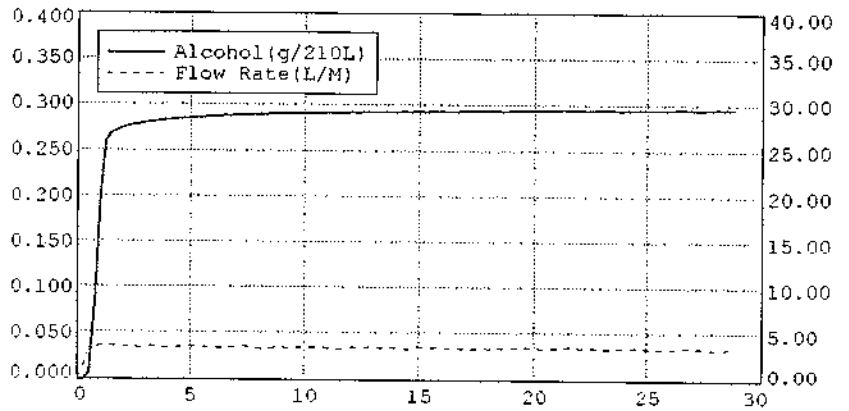
Date: 11/24/2015
 Time: 13:43:08

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:44
INTERNAL STANDARD	VERIFIED	13:44
EXTERNAL STANDARD	0.295	13:44
BLANK TEST	0.000	13:45
EXTERNAL STANDARD	0.294	13:46
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.294	13:47
BLANK TEST	0.000	13:48
EXTERNAL STANDARD	0.294	13:48
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.295	13:50
BLANK TEST	0.000	13:51

Average = 0.2944
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 11/25/2015
Time: 09:04:52

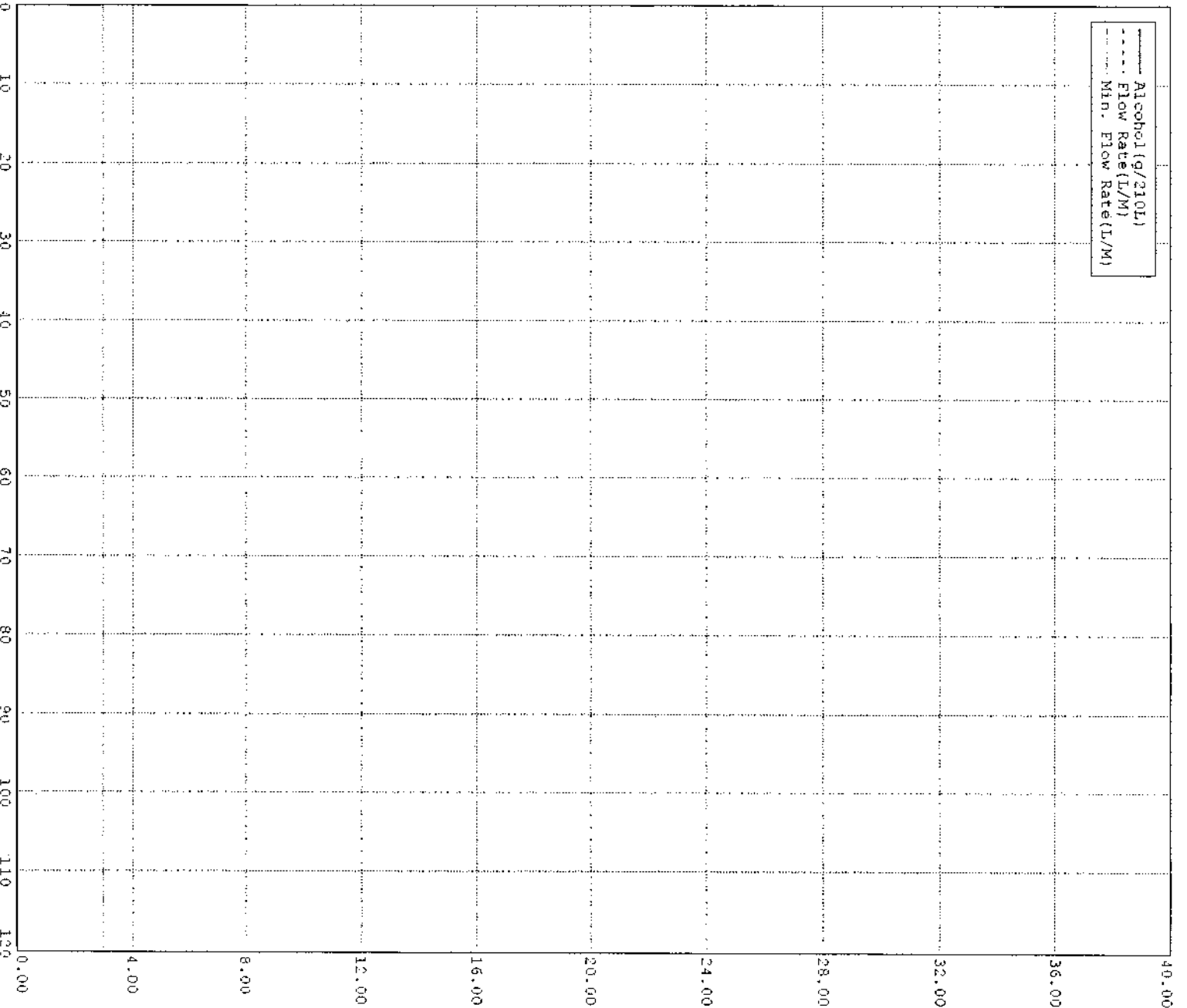
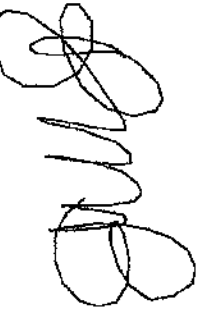
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.60: 0.079
LOF #: 01315080A2
EXPIRATION: 02/05/2017

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	09:07
BLANK TEST	0.000	09:07
INTERNAL STANDARD	VERIFIED	09:07
EXTERNAL STANDARD	0.077	09:08
BLANK TEST	0.000	09:08
SUBJECT SAMPLE	INCOMPLETE	09:11



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100699

Date: 11/25/2015
Time: 09:13:10

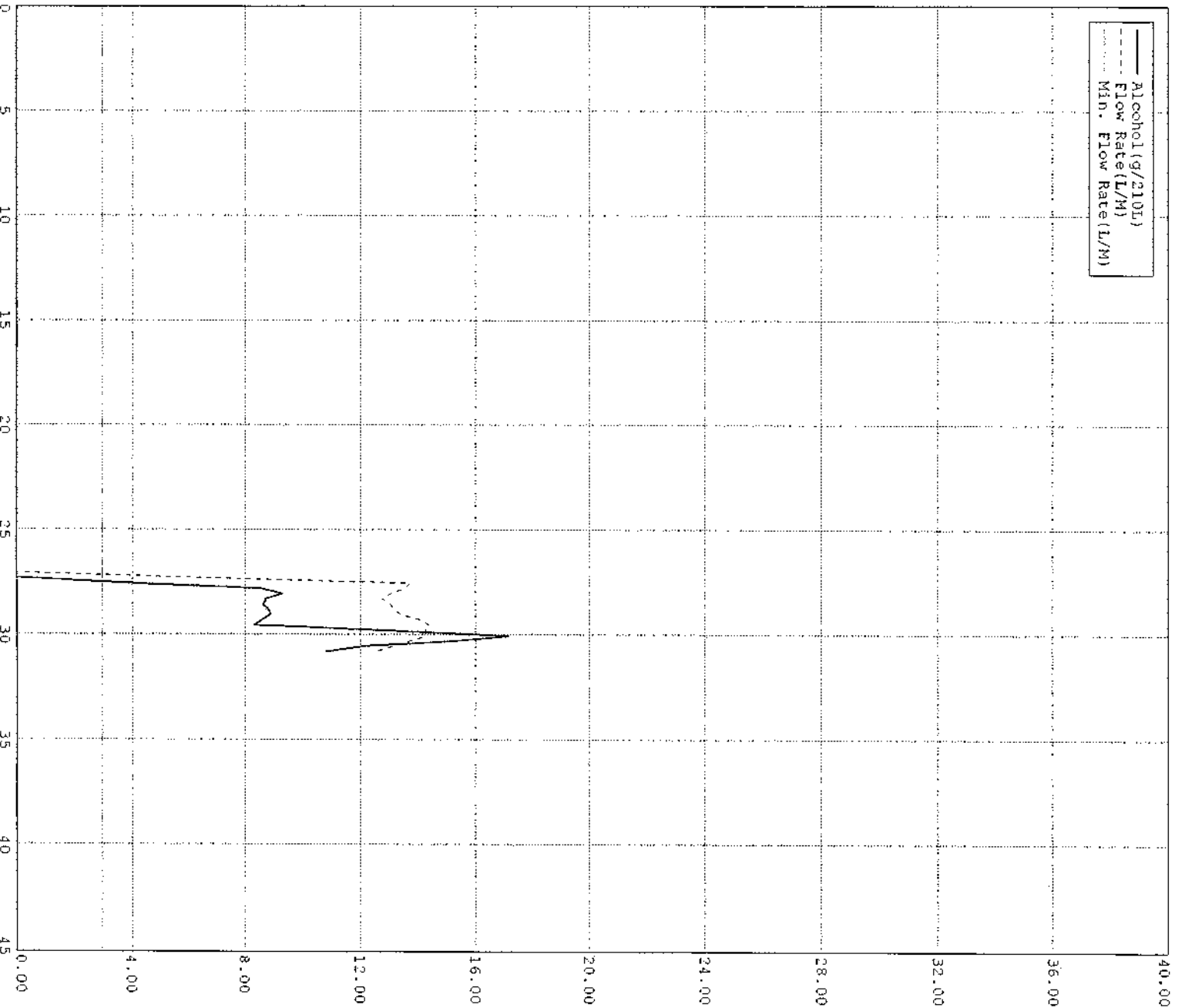
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.60: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:14
BLANK TEST	0.000	09:14
INTERNAL STANDARD	VERIFIED	09:14
EXTERNAL STANDARD	0.077	09:14
BLANK TEST	0.000	09:15
SUBJECT SAMPLE	INVALID	09:16

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 11/25/2015
Time: 09:31:11

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

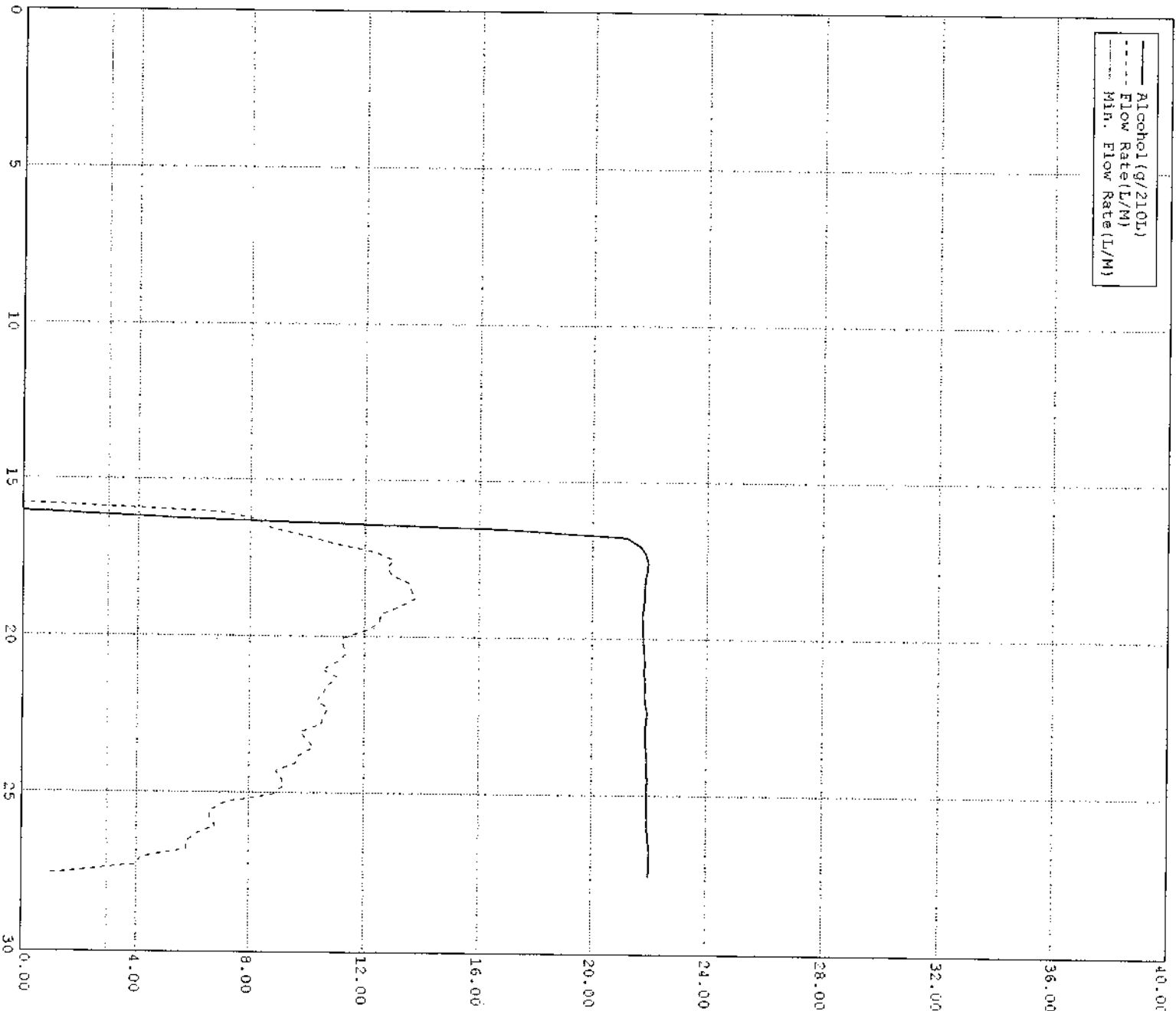
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK
BLANK TEST PASSED 09:35
INTERNAL STANDARD VERIFIED 09:35
Xq = 0.075 (0.58%)
EXTERNAL STANDARD 0.077 09:35
X[1] = 0.0770 (-0.0019) (0.0011)
BLANK TEST 0.000 09:36
SUBJECT SAMPLE XXX 09:37
X[1] = 0.1108 (-0.0163) (0.0001)

Interference Detected

Filter 2 Avg: -0.0018
Filter 3 Avg: 0.0015
BMB 11/25/15

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 11/25/2015
Time: 09:40:18

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

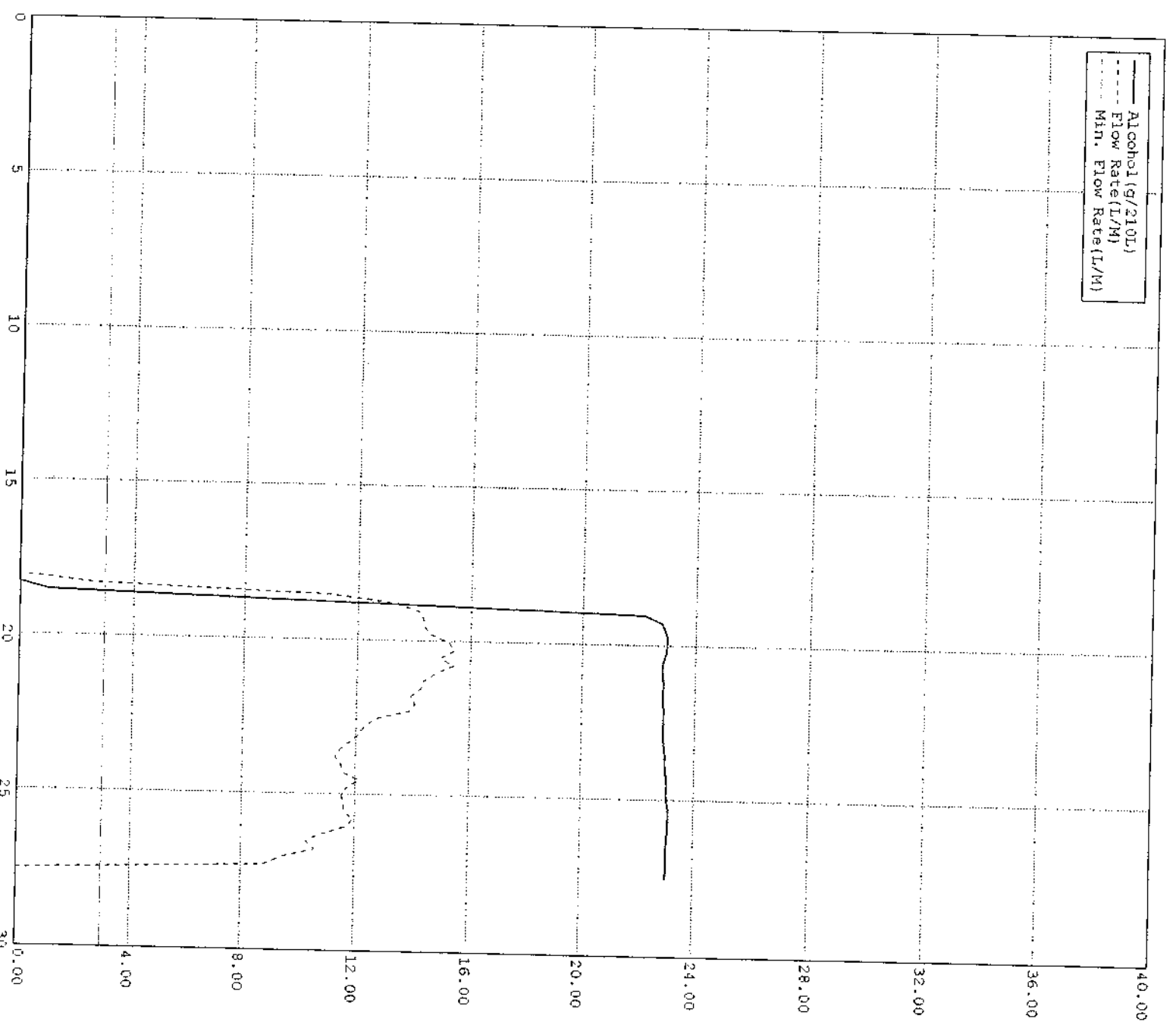
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOF #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:42
BLANK TEST	0.000	09:42
INTERNAL STANDARD	VERIFIED	09:42
Xq = 0.075 (-0.35%)		
EXTERNAL STANDARD	0.077	09:42
X[1] = 0.0768 (-0.0017)	(0.0020)	
BLANK TEST	0.000	09:43
SUBJECT SAMPLE	XXX	09:43
X[1] = 0.1159 (-0.0254)	(0.0006)	

Interference Detected

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 11/25/2015
Time: 09:46:00

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

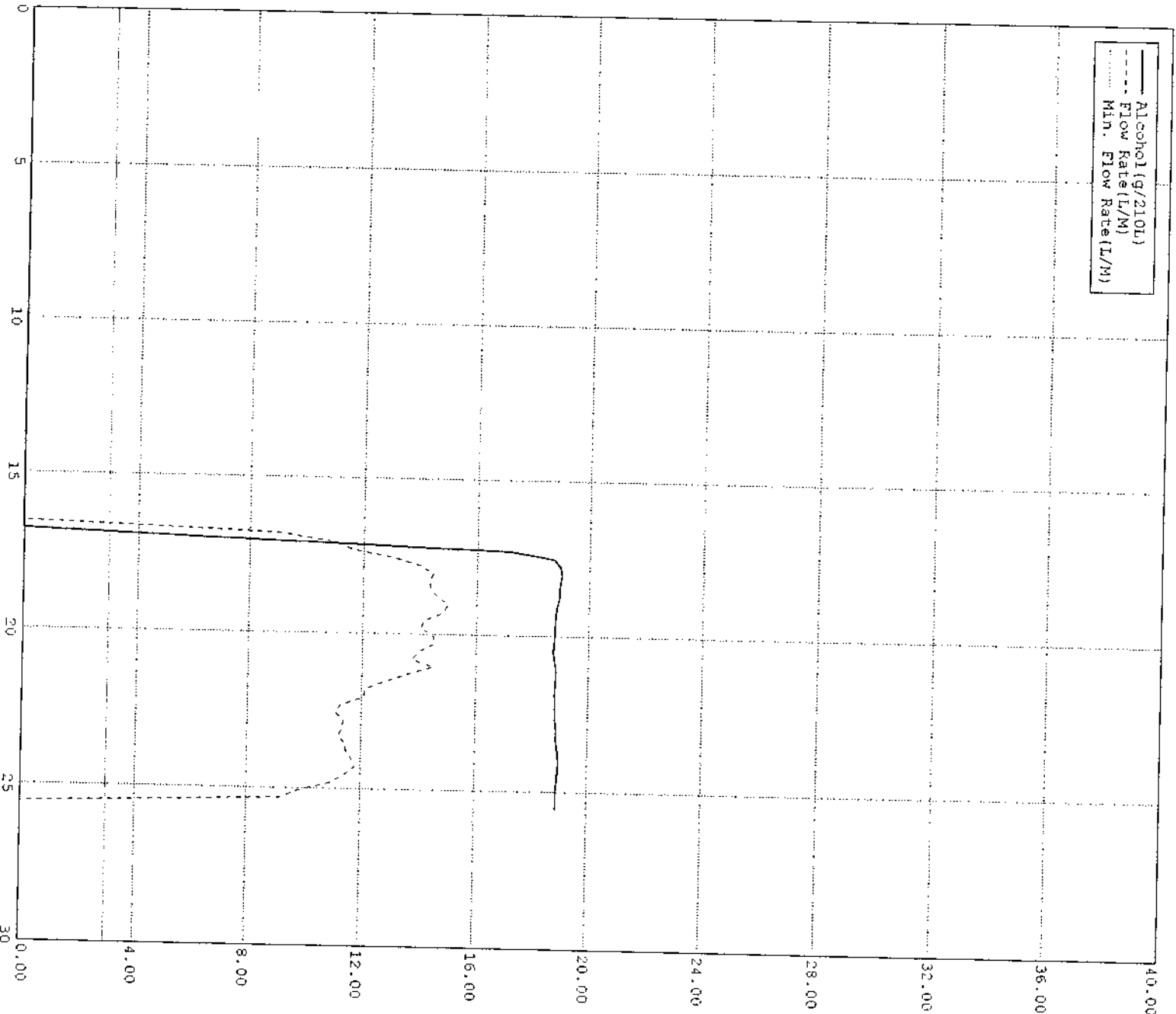
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.58: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:48
BLANK TEST	0.000	09:48
INTERNAL STANDARD	VERIFIED	09:49
Xq = 0.074 (0.818)		
EXTERNAL STANDARD	0.076	09:49
X[1] = 0.0764 (-0.0017)	(0.0016)	
BLANK TEST	0.000	09:50
SUBJECT SAMPLE (Vol=1.84L)	0.095	09:50
X[1] = 0.0951 (-0.0011)	(-0.0001)	
BLANK TEST	0.000	09:51
EXTERNAL STANDARD	0.076	09:51
X[1] = 0.0765 (-0.0018)	(0.0013)	
BLANK TEST	0.000	09:52

Handwritten signature: BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 11/25/2015
Time: 09:24:59

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

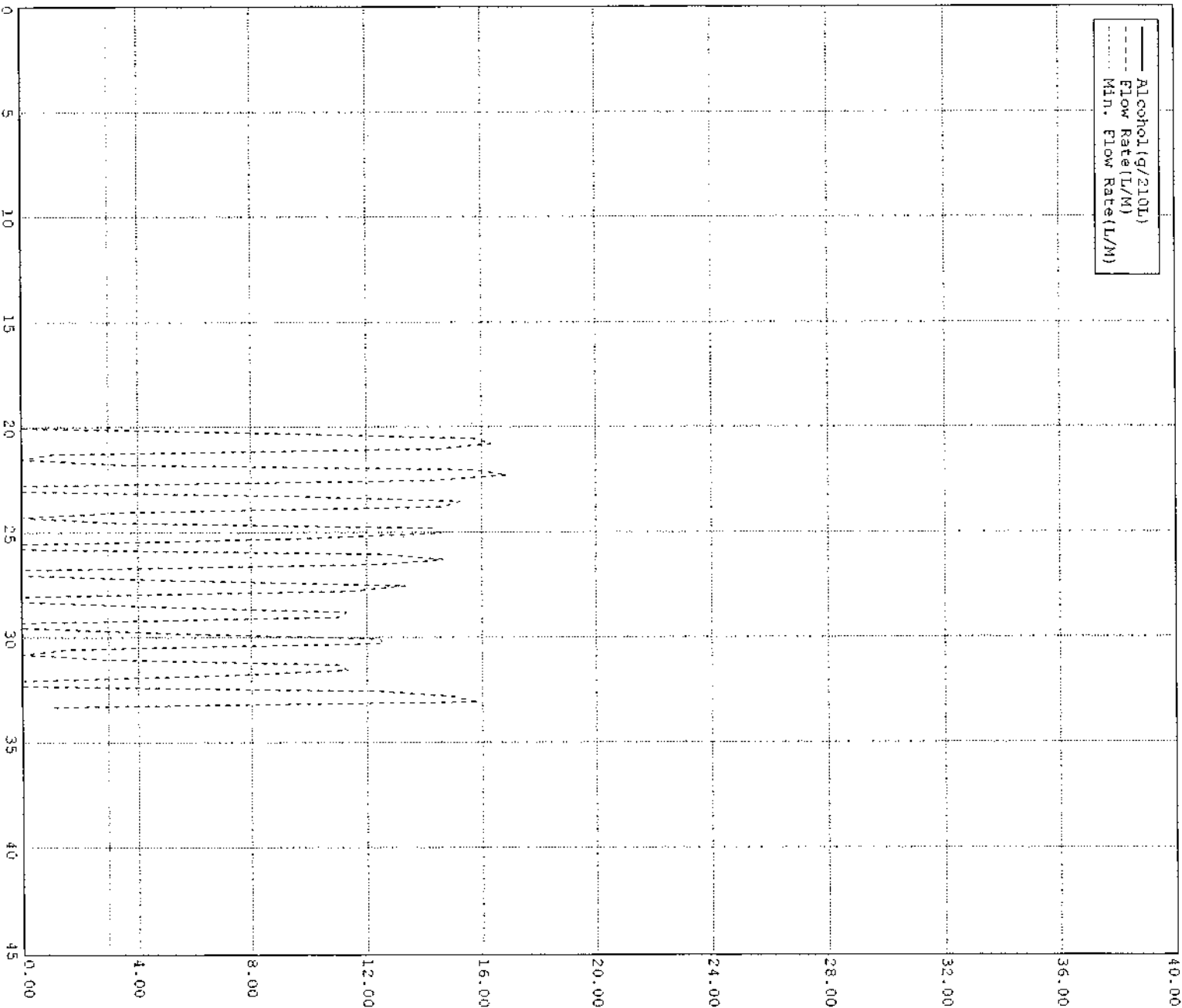
DEPT/AGENCY:
EXCEEDED ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:26
BLANK TEST	0.000	09:26
INTERNAL STANDARD	VERIFIED	09:26
EXTERNAL STANDARD	0.077	09:26
BLANK TEST	0.000	09:27
SUBJECT SAMPLE	XXX	09:28

Maximum Attempts Exceeded

BRMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 11/25/2015
Time: 09:18:08

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

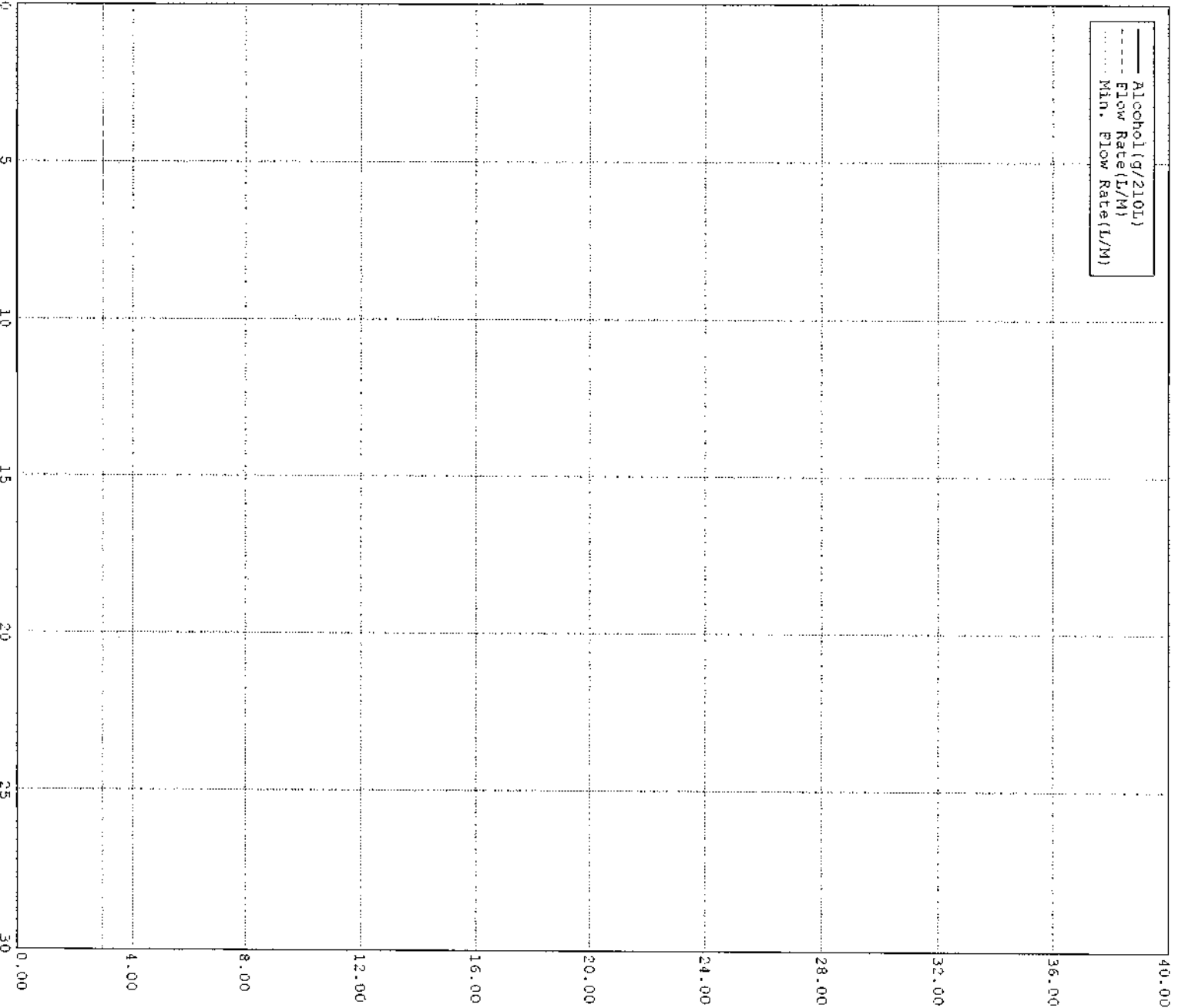
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.60: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 09:19
BLANK TEST 0.000 09:19
INTERNAL STANDARD VERIFIED 09:19
EXTERNAL STANDARD 0.077 09:20
BLANK TEST 0.000 09:21

RFI DETECTED

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 11/25/2015
Time: 10:09:56

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 29.58: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:11
BLANK TEST	0.000	10:11
INTERNAL STANDARD	0.077	10:11
EXTERNAL STANDARD	0.000	10:11
BLANK TEST	0.000	10:11
SUBJECT SAMPLE (Vol=1.76L)	0.000	10:13
BLANK TEST	0.077	10:13
EXTERNAL STANDARD	0.000	10:14
BLANK TEST	0.000	10:15

BMB

