

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 100665 Analyst Branch Barnett Start Date 2/28/17

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 1.4 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 Airgas Lot AG634001 Exp 7/2/18
- iv. 0.100g/210L Mnf TiNO Lot 02915100A1 Exp 3/5/17
- v. 0.200g/210L Mnf Guth Lot 15130 Exp 5/11/17
 - 1. Simulator S/N DR52918 Date Calibrated 9/13/16 ^{8WD}
- vi. 0.300g/210L Mnf Guth Lot 16210 Exp 8/22/18
 - 1. Simulator S/N SD1177 Date Calibrated 9/13/16

5. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference
- d. Exceeded attempts

- i. Acetone - Mnf Guth Lot 15220 Level 0.100 Exp 9/28/17
 - 1. Simulator S/N SD1199 Date Calibrated 9/13/16
- ii. Isopropanol - Mnf Guth Lot 15220 Level 0.100 Exp 9/28/17
 - 1. Simulator S/N SD1088 Date Calibrated 9/13/16
- iii. Negative Control - Mnf Guth Lot 15220 Level 0.100 Exp 9/28/17
 - 1. Simulator S/N DR4161 Date Calibrated 9/14/16

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 3-1-17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100665

Date: 02/28/2017
Time: 10:12:05

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 = 45.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.64 V PASSED
(0.98 V - 2.30 V)
Cooler Voltage = 1.70 V PASSED
(1.03 V - 2.41 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 557 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.5 in

PUMP INFO

Flow Rate = 5.299 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.001 V <= 0.010 V)
PUMP OFF PASSED
(0.001 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.129 0.07% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100665

Date: 02/28/2017
Time: 12:16 PM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 46.0°C

Current Barometer 29.5 in
Volume (Ltr) 1.59

Settings

Lamp: 1.73 V
Bias: 79 V
Cooler: 1.70 V
Chopper: 539 Hz

Voltages (V)

Flow: 1.06 V
Detector: -0.054 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100665

Date: 04/17/2012
Time: 04:30:06

Ca = 0.1000
CAL = 0.968497 0.800 <= CAL < 1.200
b1 = 0.0001 0.0000 <= b1 < 0.0040
b2 = 0.0054 0.0010 <= b2 < 0.0100
b3 = 0.0003 0.0000 <= b3 < 0.0040
Xq = 0.1289 0.0500 <= Xq < 0.2000
a21 = 1.229257 1.050 <= a21 < 1.300
a31 = 0.541082 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100665

Date: 02/28/2017
Time: 12:18:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

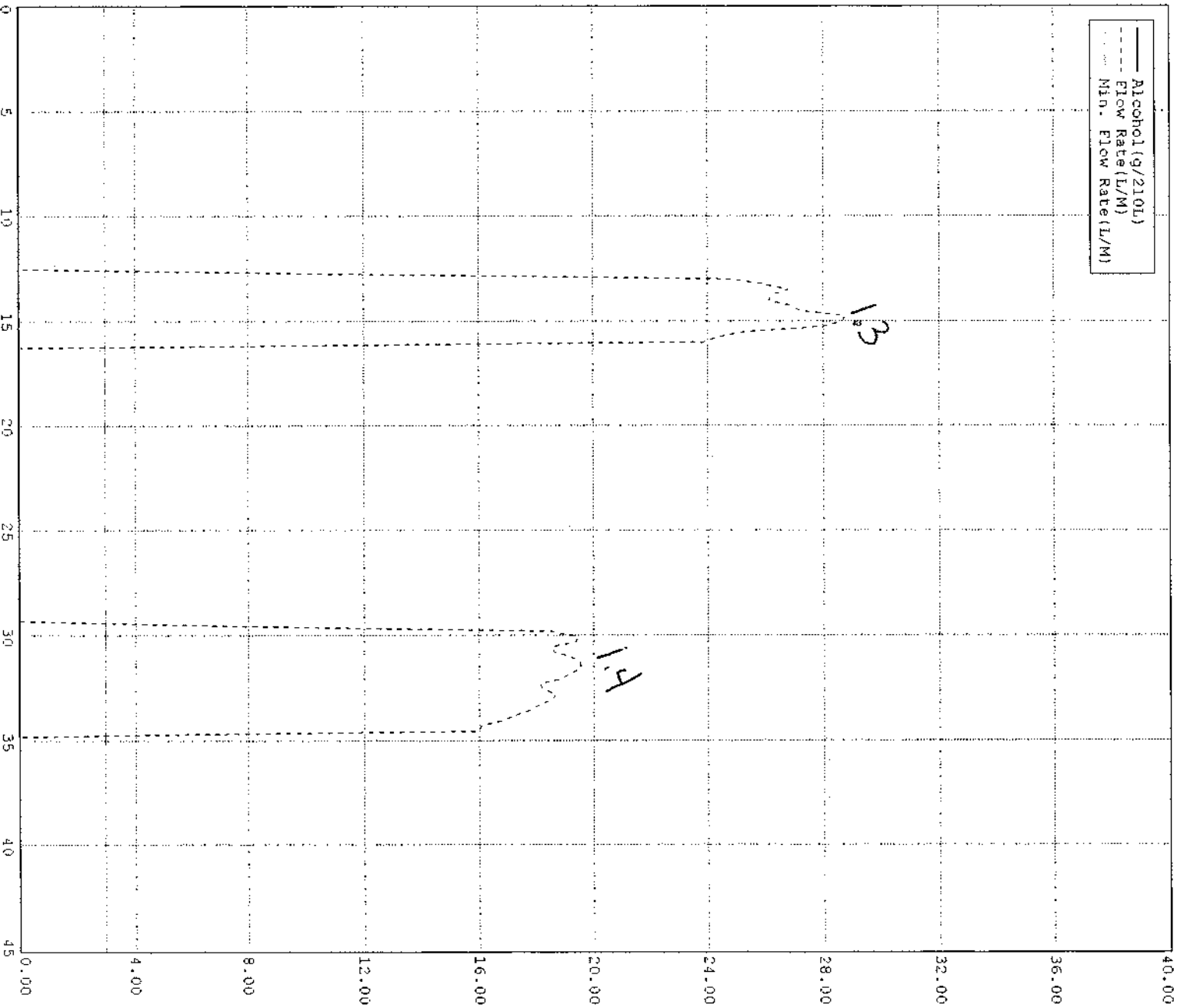
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.53: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	12:19
BLANK TEST	0.000	12:19
INTERNAL STANDARD	VERIFIED	12:19
EXTERNAL STANDARD	0.077	12:19
BLANK TEST	0.000	12:20
SUBJECT SAMPLE (Vol=1.56L)	0.000	12:21
BLANK TEST	0.000	12:22
EXTERNAL STANDARD	0.078	12:22
BLANK TEST	0.000	12:23

Handwritten signature/initials



LINEARITY CHECK

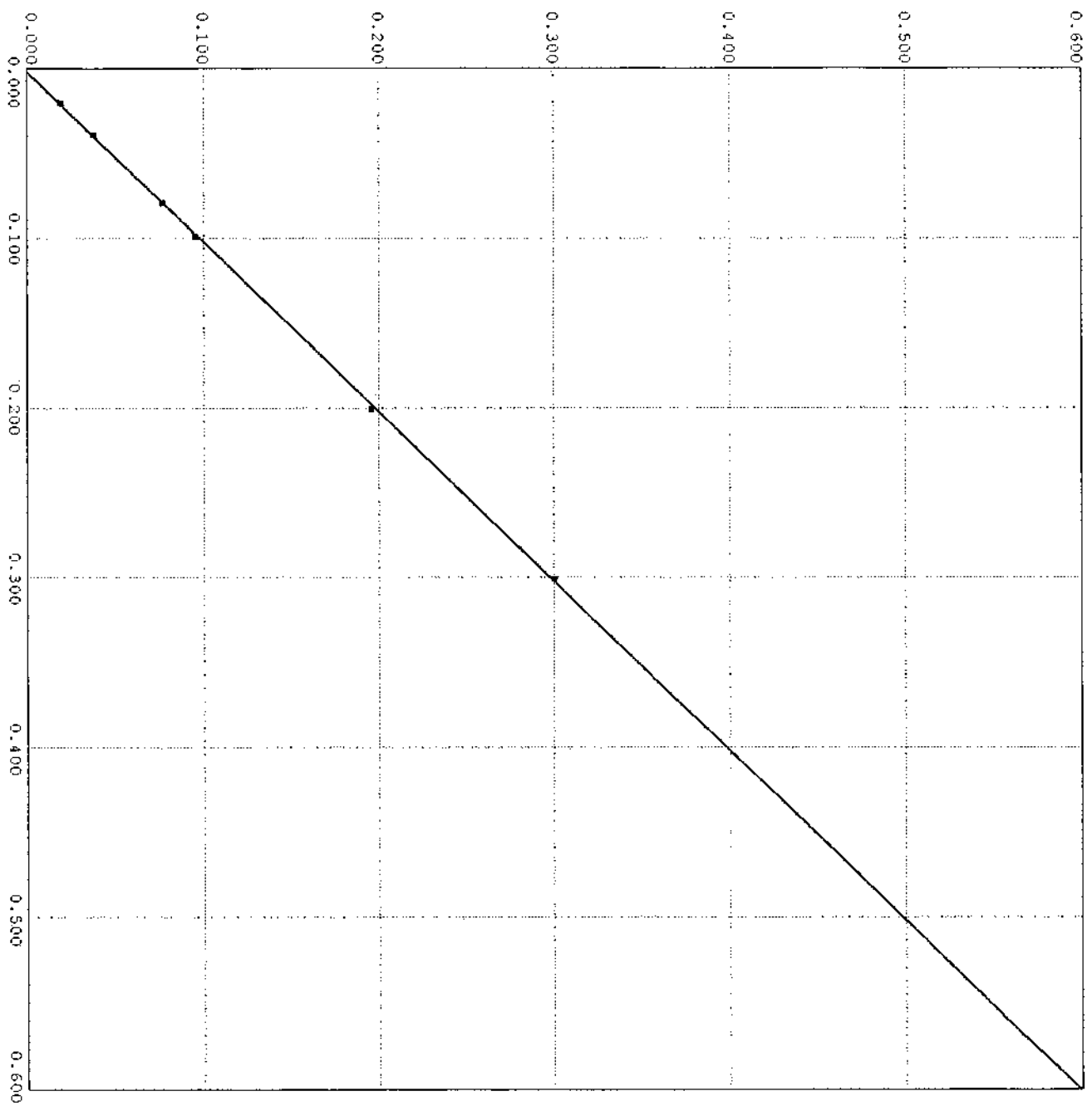
Alaska Department of Public Safety
DATA MASTER dmt: 100665

Date: 02/28/2017
Time: 12:36:20

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.039	0.0388	0.0004
0.079	0.0776	0.0005
0.099	0.0964	0.0005
0.200	0.1966	0.0005
0.300	0.3010	0.0007

SLOPE = 1.000956
R² = 0.999757



BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100665

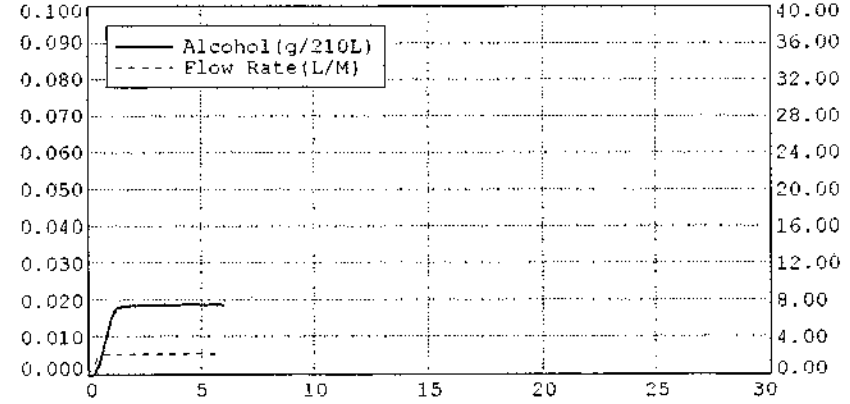
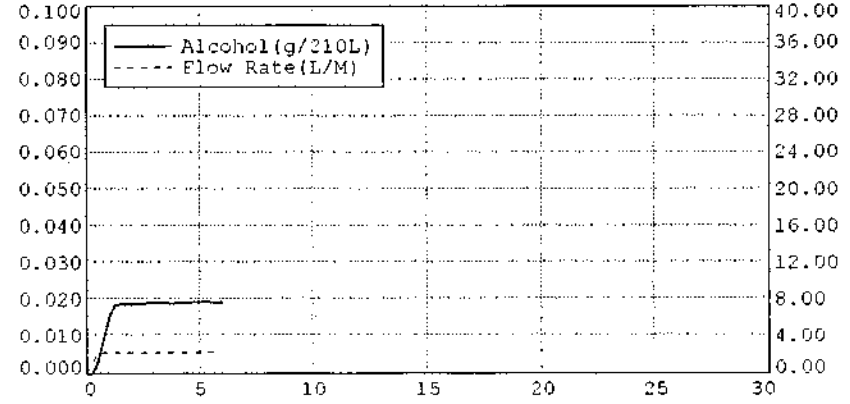
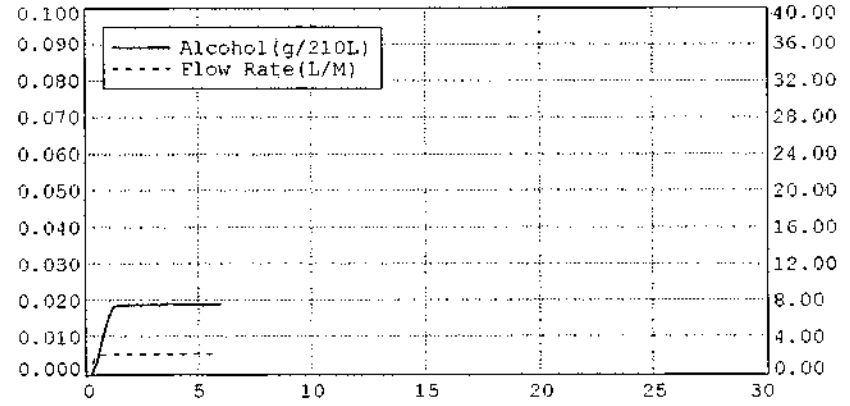
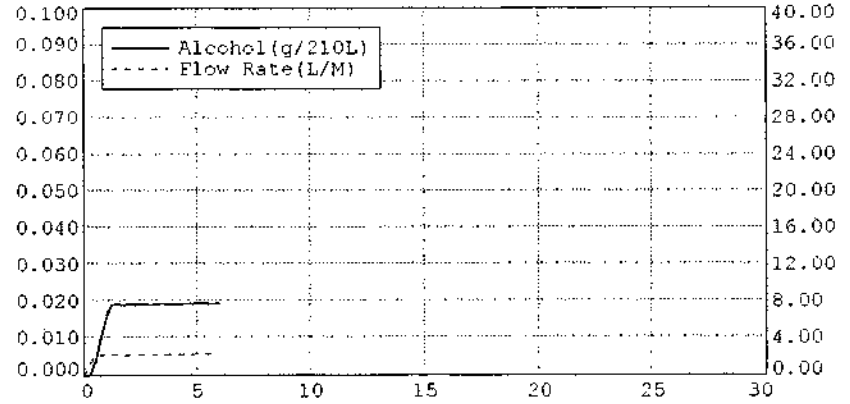
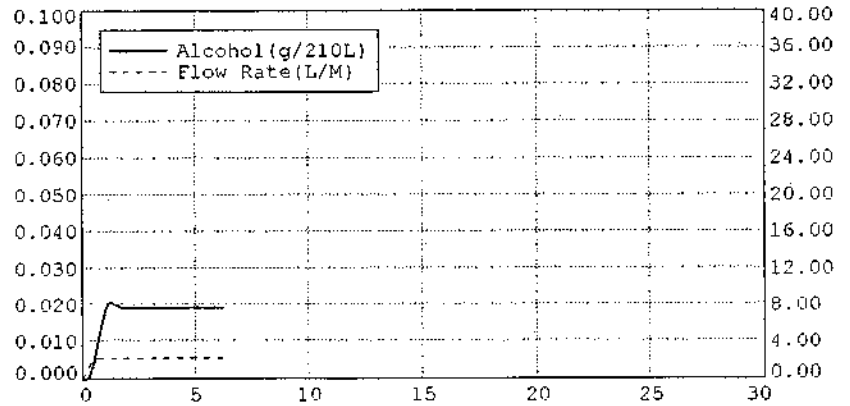
Date: 02/28/2017
Time: 12:36:22

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.52: 0.020
LOT #: 02915020A2
EXPIRATION: 03/05/2017
TANK PRESSURE: 1034 psi

BLANK TEST	0.000	12:38
INTERNAL STANDARD	VERIFIED	12:38
EXTERNAL STANDARD	0.020	12:38
BLANK TEST	0.000	12:39
EXTERNAL STANDARD	0.020	12:39
BLANK TEST	0.000	12:40
EXTERNAL STANDARD	0.020	12:40
BLANK TEST	0.000	12:41
EXTERNAL STANDARD	0.020	12:41
BLANK TEST	0.000	12:42
EXTERNAL STANDARD	0.020	12:43
BLANK TEST	0.000	12:43

Average = 0.0200
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100665

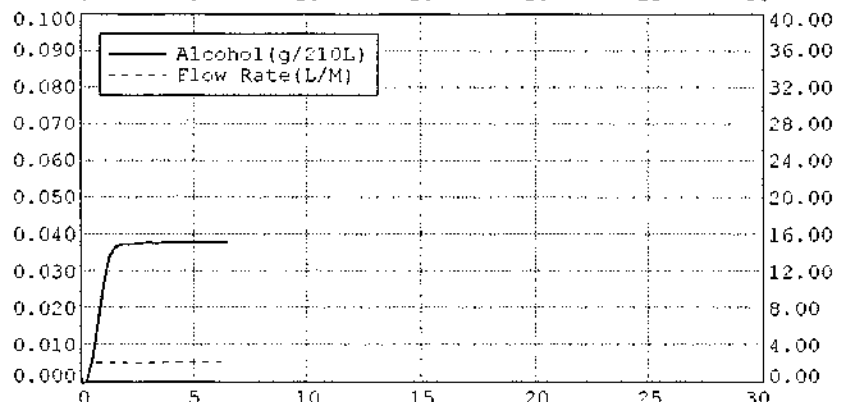
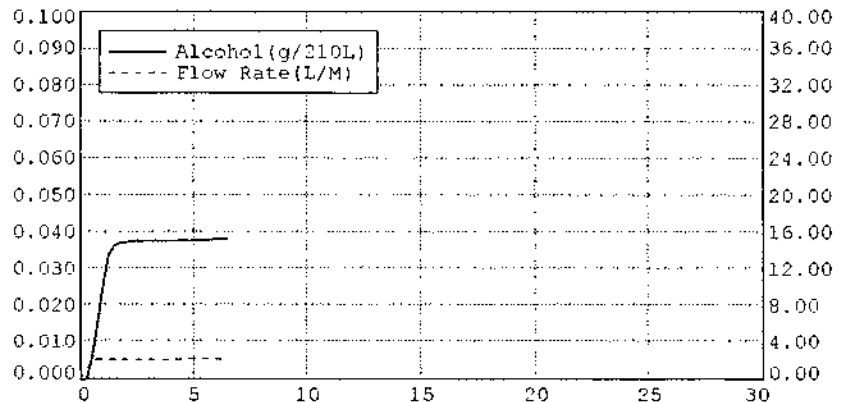
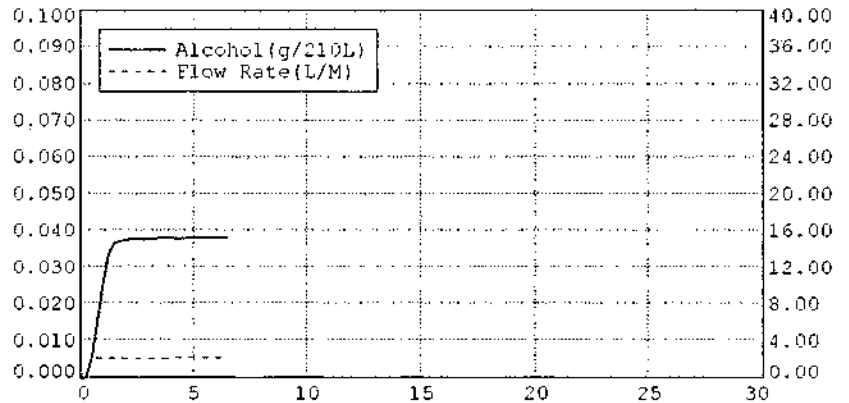
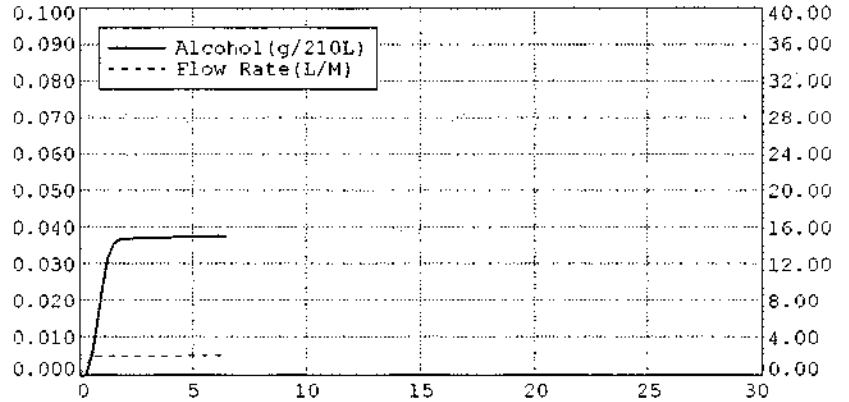
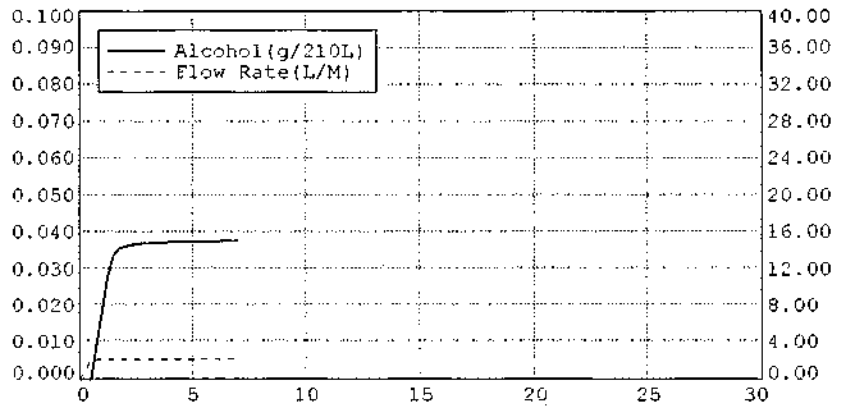
Date: 02/28/2017
 Time: 12:46:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.52: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 499 psi

BLANK TEST	0.000	12:47
INTERNAL STANDARD	VERIFIED	12:47
EXTERNAL STANDARD	0.038	12:47
BLANK TEST	0.000	12:48
EXTERNAL STANDARD	0.039	12:49
BLANK TEST	0.000	12:49
EXTERNAL STANDARD	0.039	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.039	12:51
BLANK TEST	0.000	12:52
EXTERNAL STANDARD	0.039	12:52
BLANK TEST	0.000	12:53

Average = 0.0388
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100665

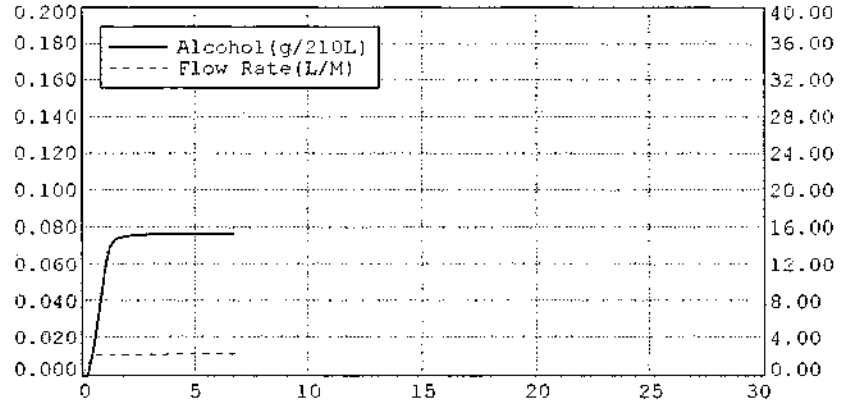
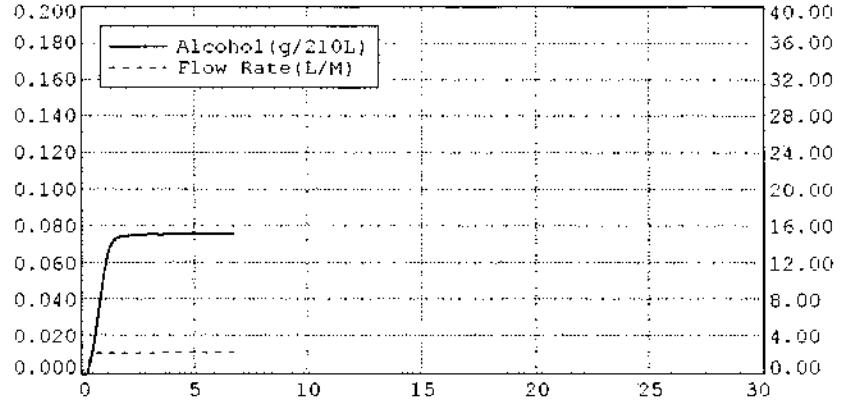
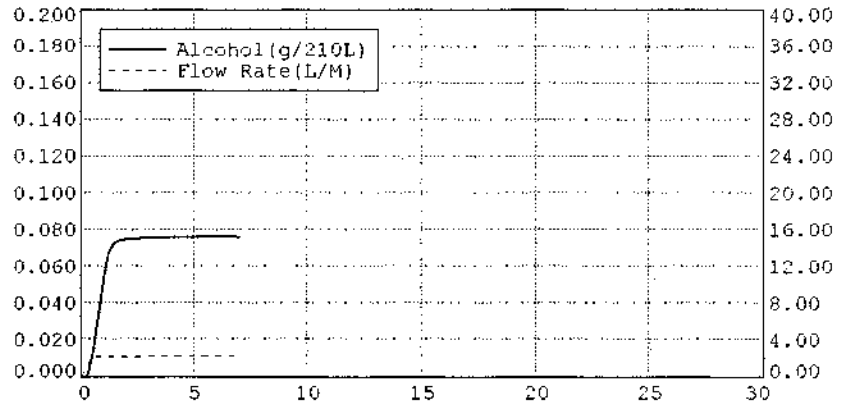
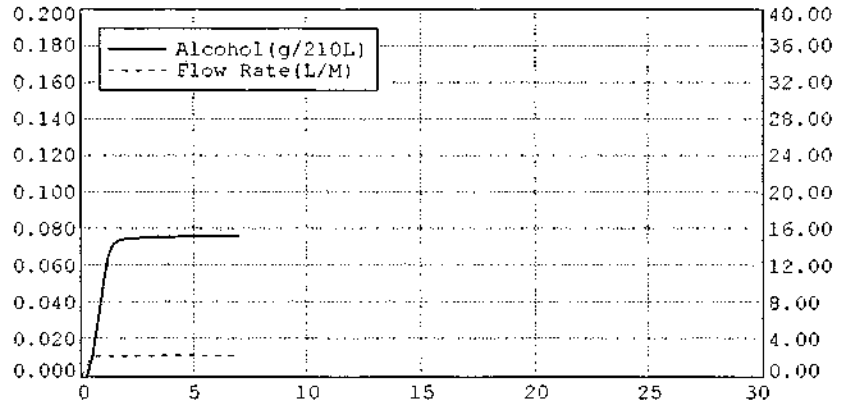
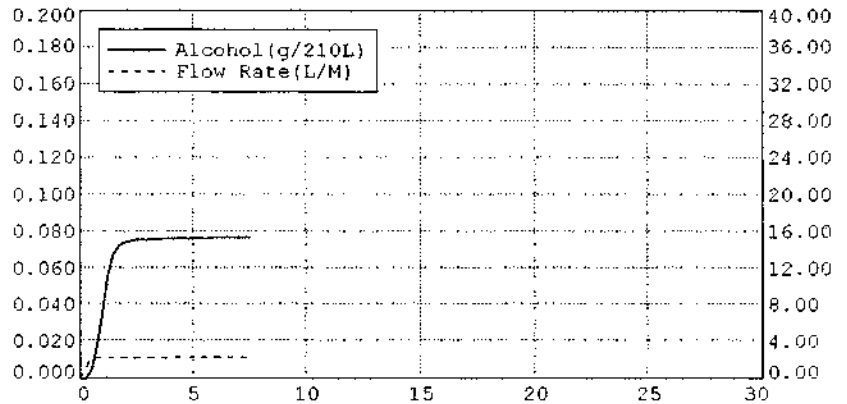
Date: 02/28/2017
 Time: 12:55:47

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.52: 0.079
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 1182 psi

BLANK TEST	0.000	12:57
INTERNAL STANDARD	VERIFIED	12:57
EXTERNAL STANDARD	0.078	12:57
BLANK TEST	0.000	12:58
EXTERNAL STANDARD	0.077	12:59
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.078	13:00
BLANK TEST	0.000	13:01
EXTERNAL STANDARD	0.077	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.078	13:02
BLANK TEST	0.000	13:03

Average = 0.0776
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100665

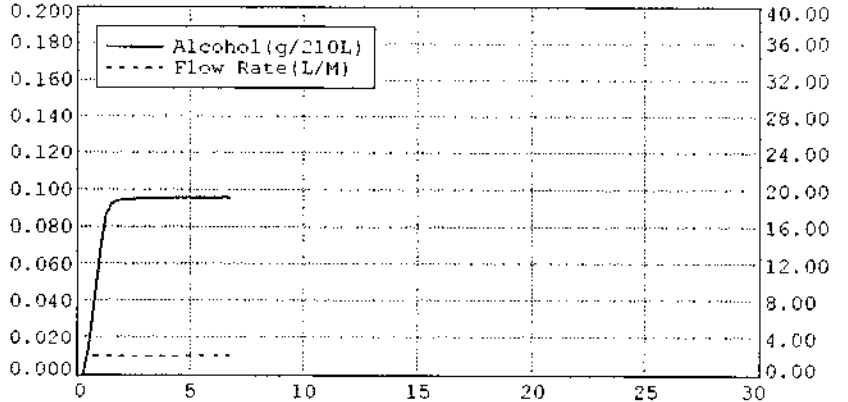
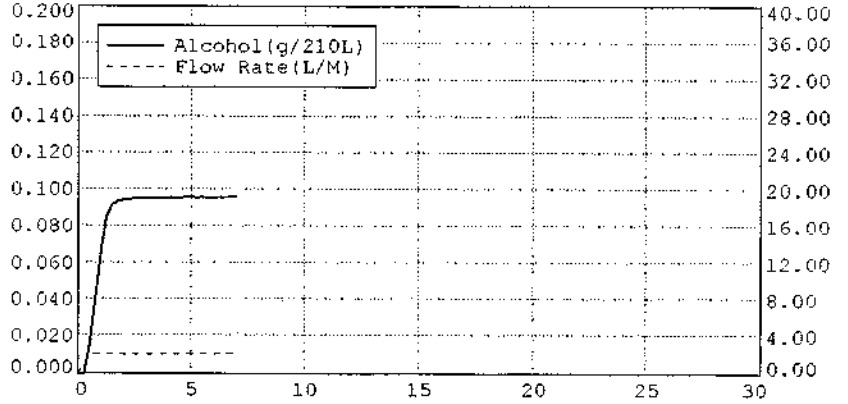
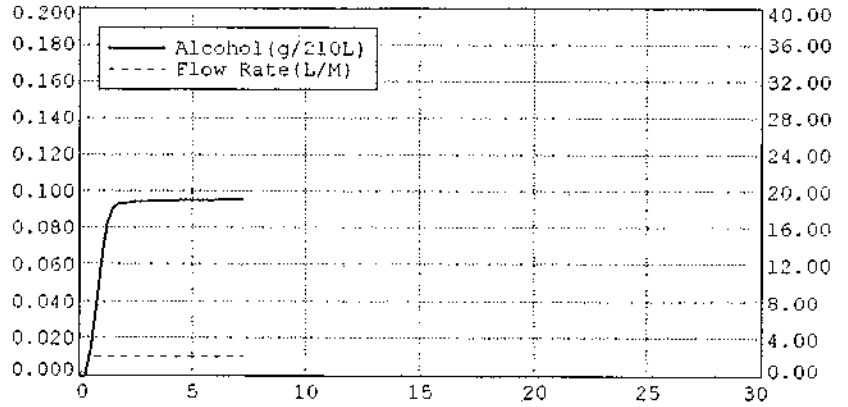
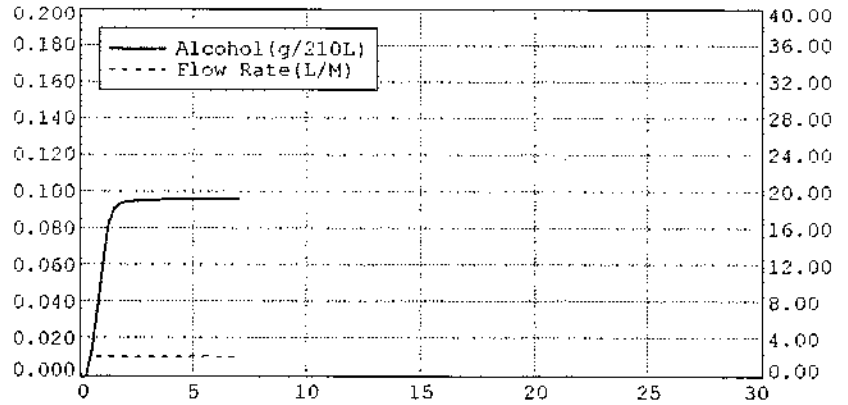
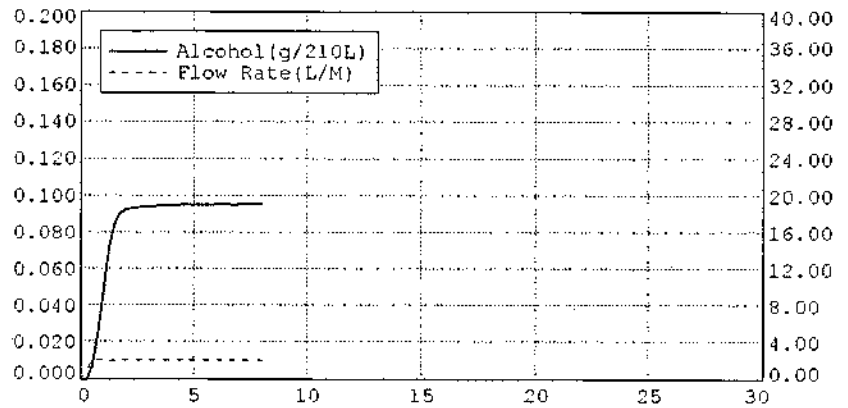
Date: 02/28/2017
 Time: 13:09:58

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.52: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 473 psi

BLANK TEST	0.000	13:11
INTERNAL STANDARD	VERIFIED	13:11
EXTERNAL STANDARD	0.096	13:11
BLANK TEST	0.000	13:12
EXTERNAL STANDARD	0.097	13:12
BLANK TEST	0.000	13:13
EXTERNAL STANDARD	0.096	13:13
BLANK TEST	0.000	13:14
EXTERNAL STANDARD	0.096	13:14
BLANK TEST	0.000	13:15
EXTERNAL STANDARD	0.097	13:15
BLANK TEST	0.000	13:16

Average = 0.0964
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100665

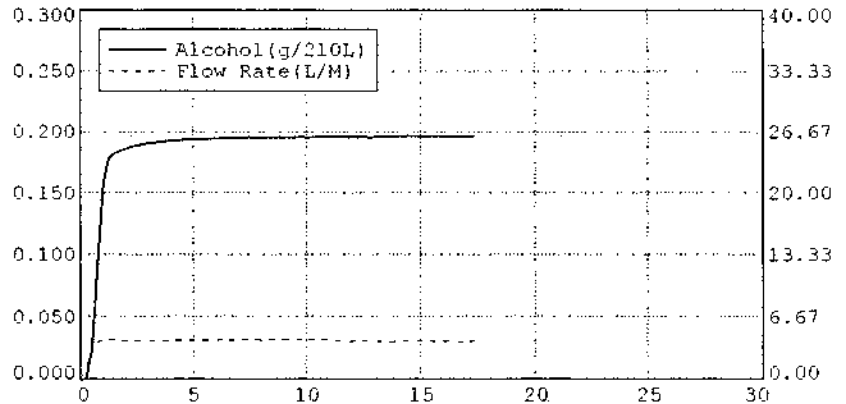
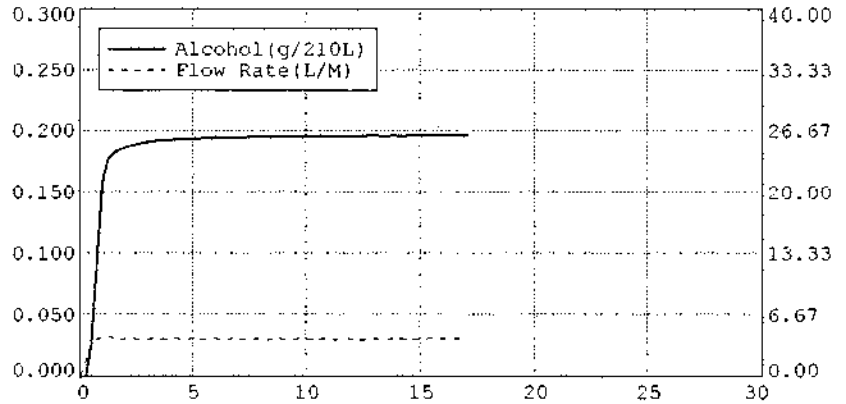
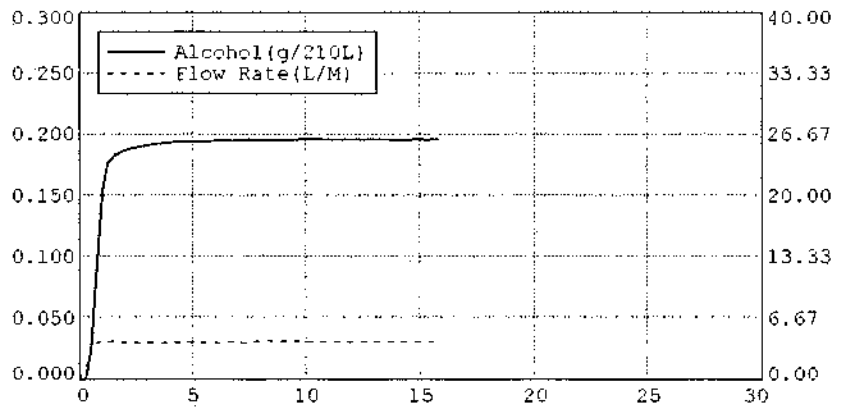
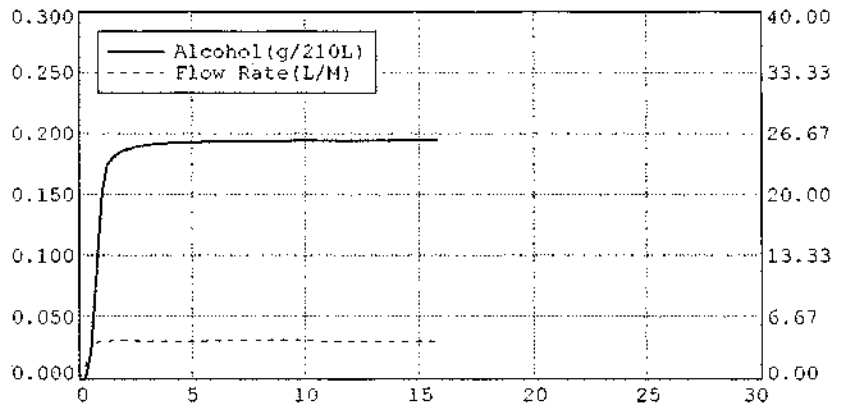
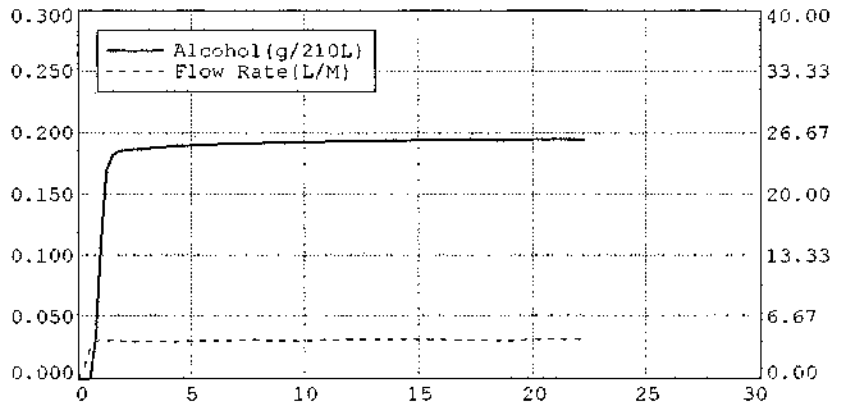
Date: 02/28/2017
 Time: 13:20:59

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:23
INTERNAL STANDARD	VERIFIED	13:23
EXTERNAL STANDARD	0.196	13:24
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.196	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.197	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.197	13:28
BLANK TEST	0.000	13:29
EXTERNAL STANDARD	0.197	13:29
BLANK TEST	0.000	13:30

Average = 0.1966
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
DATAMASTER dmt: 100665

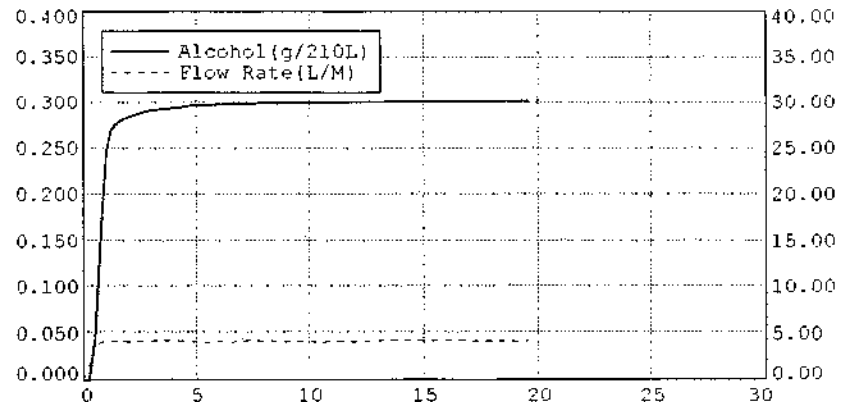
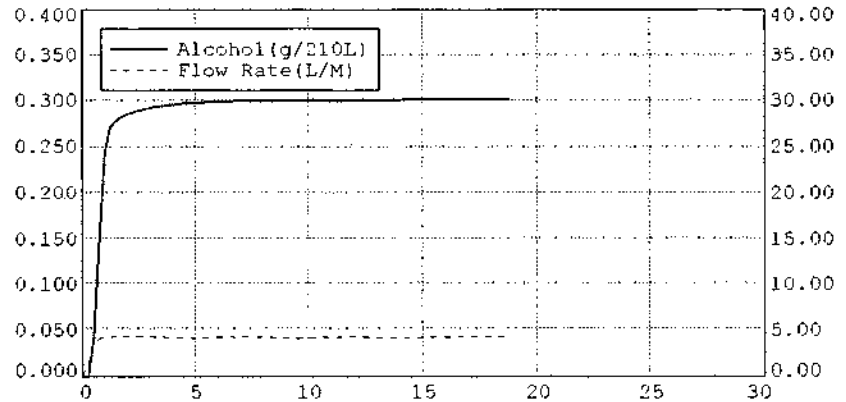
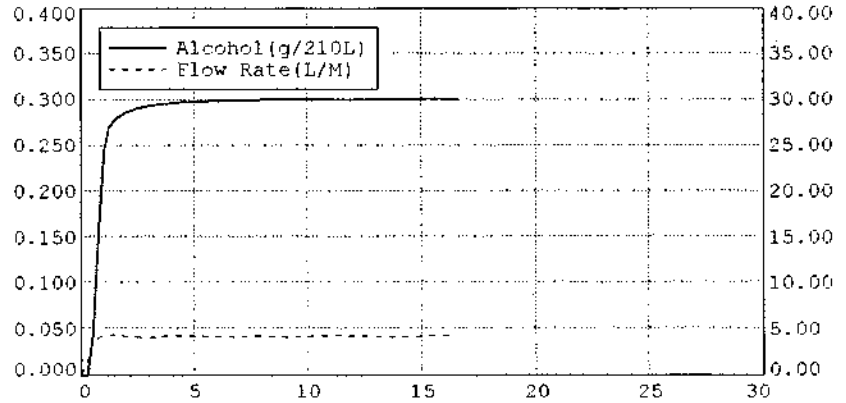
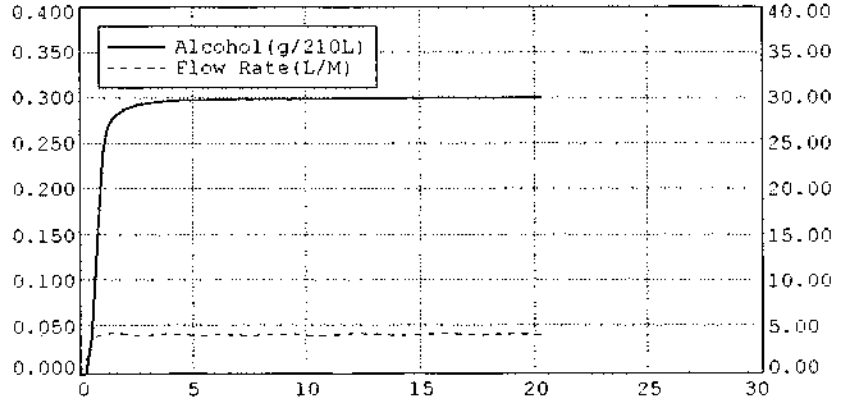
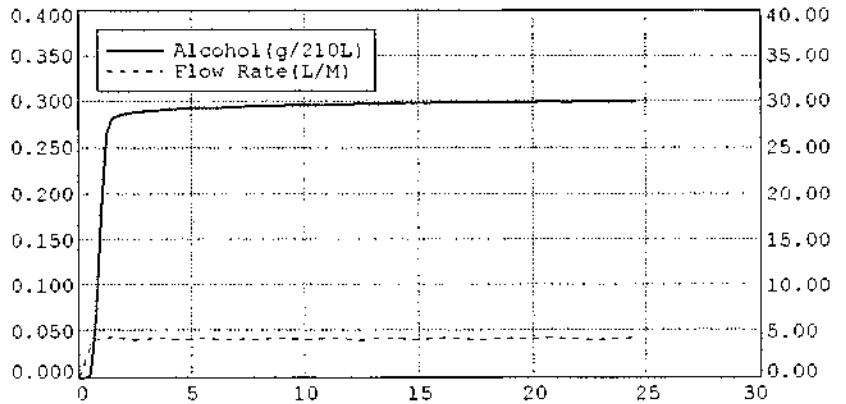
Date: 02/28/2017
Time: 13:56:22

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
LOT #: GUTH 16210
EXPIRATION: 08/22/2018

BLANK TEST	0.000	13:57
INTERNAL STANDARD	VERIFIED	13:57
EXTERNAL STANDARD	0.300	13:58
BLANK TEST	0.000	13:59
EXTERNAL STANDARD	0.301	13:59
BLANK TEST	0.000	14:00
EXTERNAL STANDARD	0.301	14:01
BLANK TEST	0.000	14:02
EXTERNAL STANDARD	0.301	14:02
BLANK TEST	0.000	14:03
EXTERNAL STANDARD	0.302	14:03
BLANK TEST	0.000	14:04

Average = 0.3010
Std Dev = 0.0007



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100665

Date: 03/01/2017
Time: 11:08:30

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

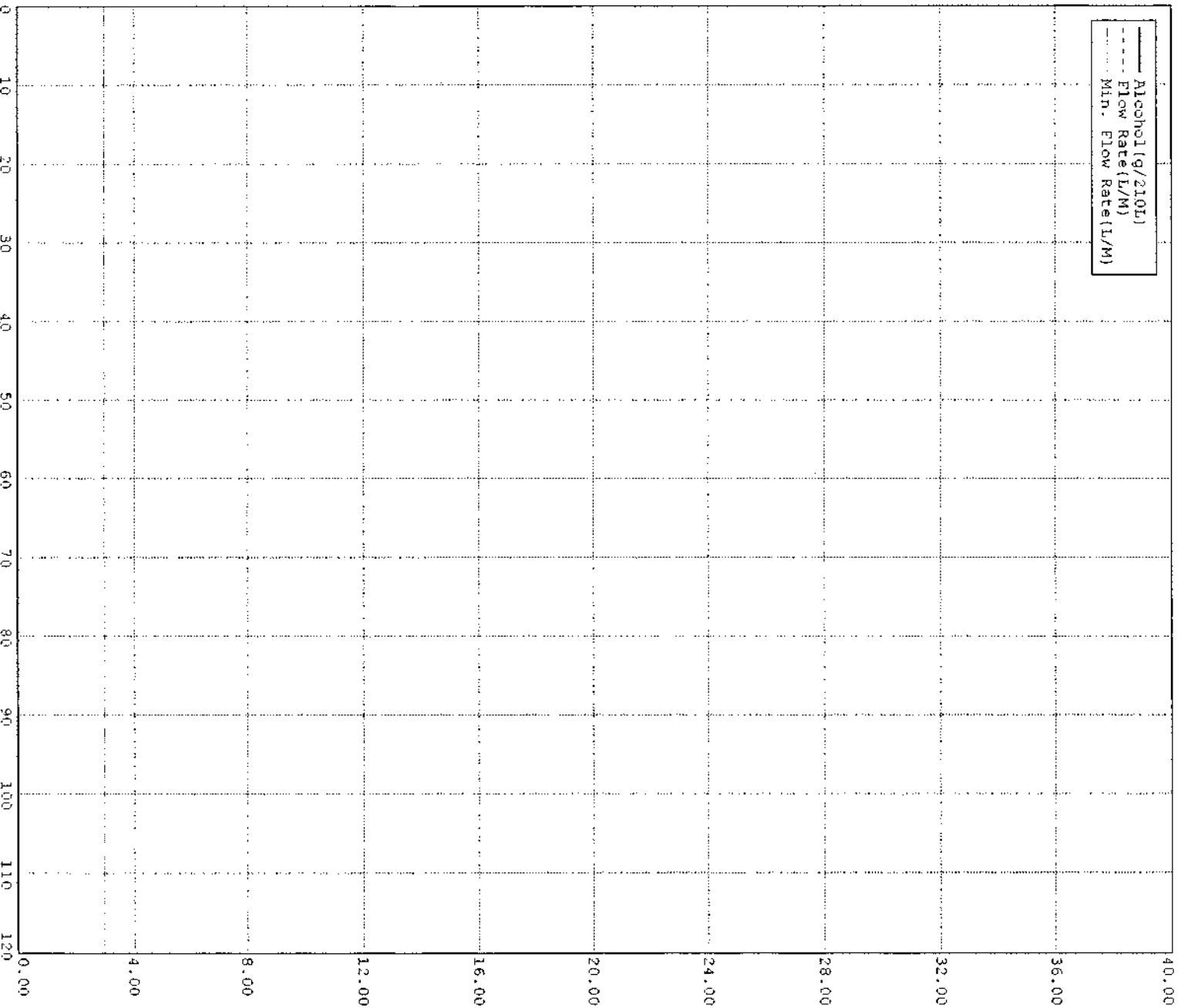
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	11:10
BLANK TEST	0.000	11:10
INTERNAL STANDARD	VERIFIED	11:10
EXTERNAL STANDARD	0.077	11:10
BLANK TEST	0.000	11:11
SUBJECT SAMPLE	INCOMPLETE	11:13

BBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100665

Date: 03/01/2017
Time: 11:49:52

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

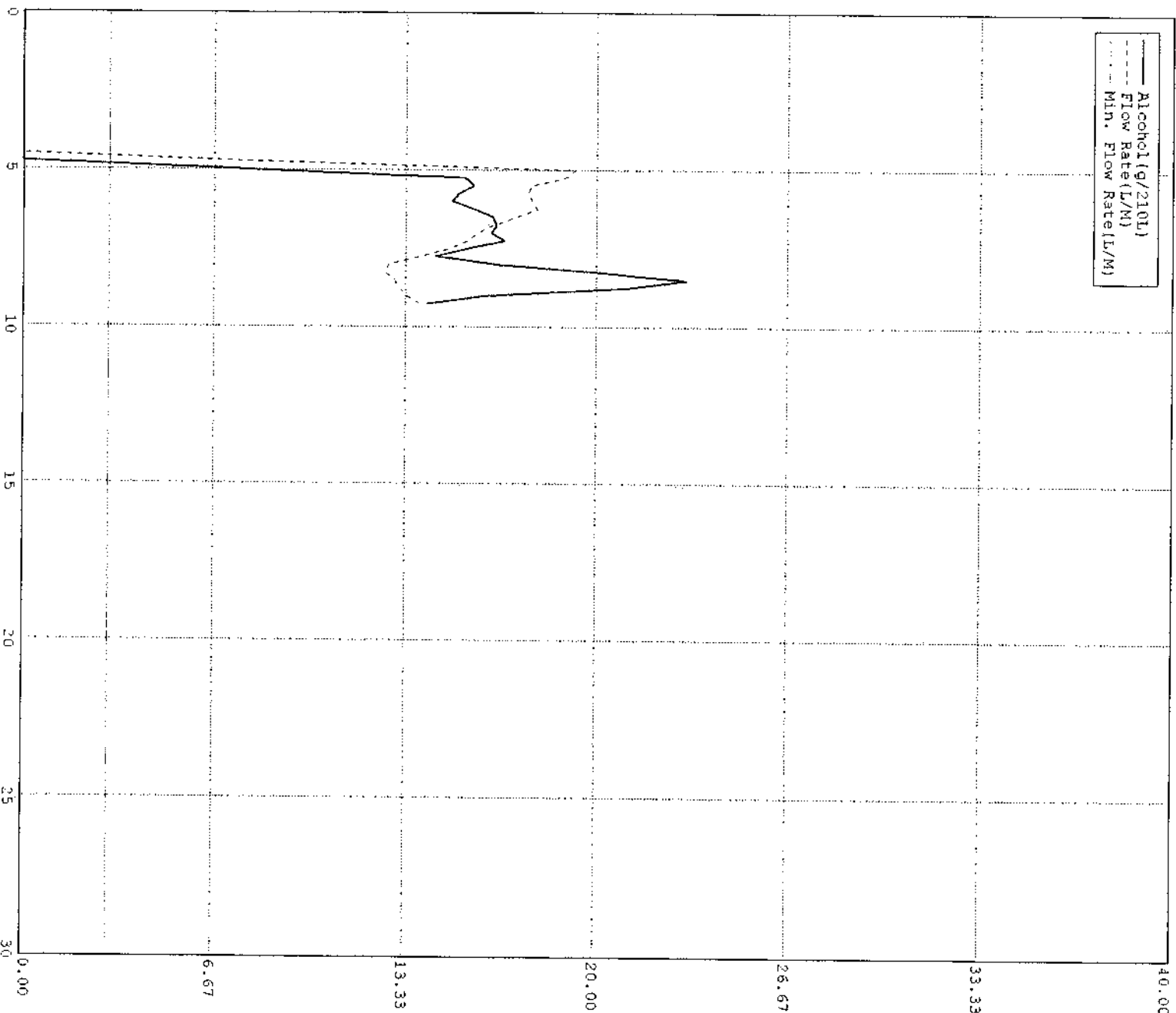
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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 #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	11:52
BLANK TEST	0.000	11:52
INTERNAL STANDARD	VERIFIED	11:52
EXTERNAL STANDARD	0.078	11:52
BLANK TEST	0.000	11:53
SUBJECT SAMPLE	INVALID	11:54

JB



SUBJECT TEST

Alaska Department of Public Safety
DATEMASTER dmt: 100665

Date: 03/01/2017
Time: 12:08:29

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

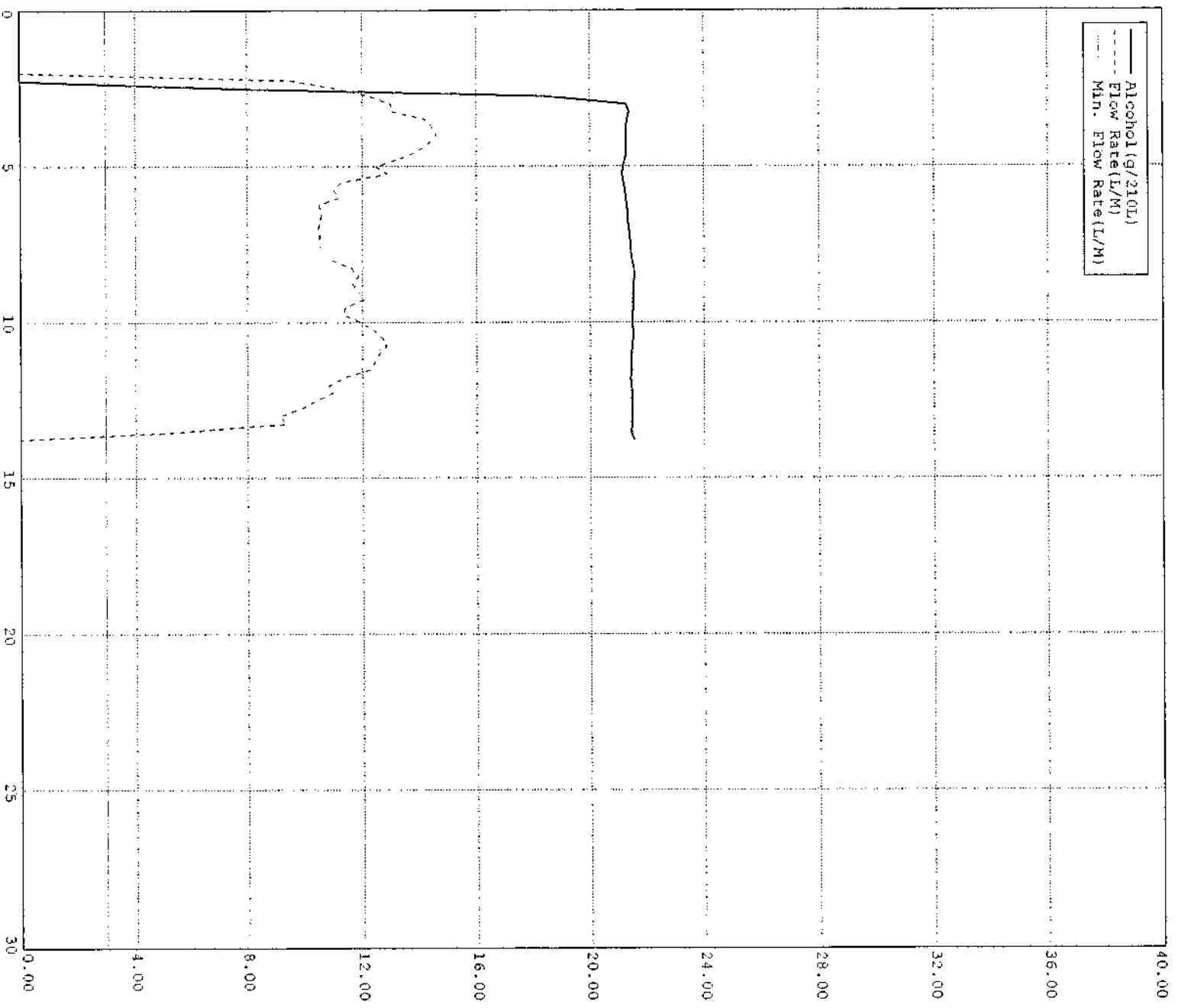
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	12:09
BLANK TEST	0.000	12:09
INTERNAL STANDARD	VERIFIED	12:09
Xq = 0.129 (0.00%)		
EXTERNAL STANDARD	0.078	12:10
X[1] = 0.0779 (-0.0002)	(0.0032)	
BLANK TEST	0.000	12:10
SUBJECT SAMPLE	XXX	12:11
X[1] = 0.1085 (-0.0191)	(0.0011)	

Interference Detected

Filter 2 Avg: -0.0003
Filter 3 Avg: 0.0024
BMB 3/1/17

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100665

Date: 03/01/2017
Time: 12:14:41

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

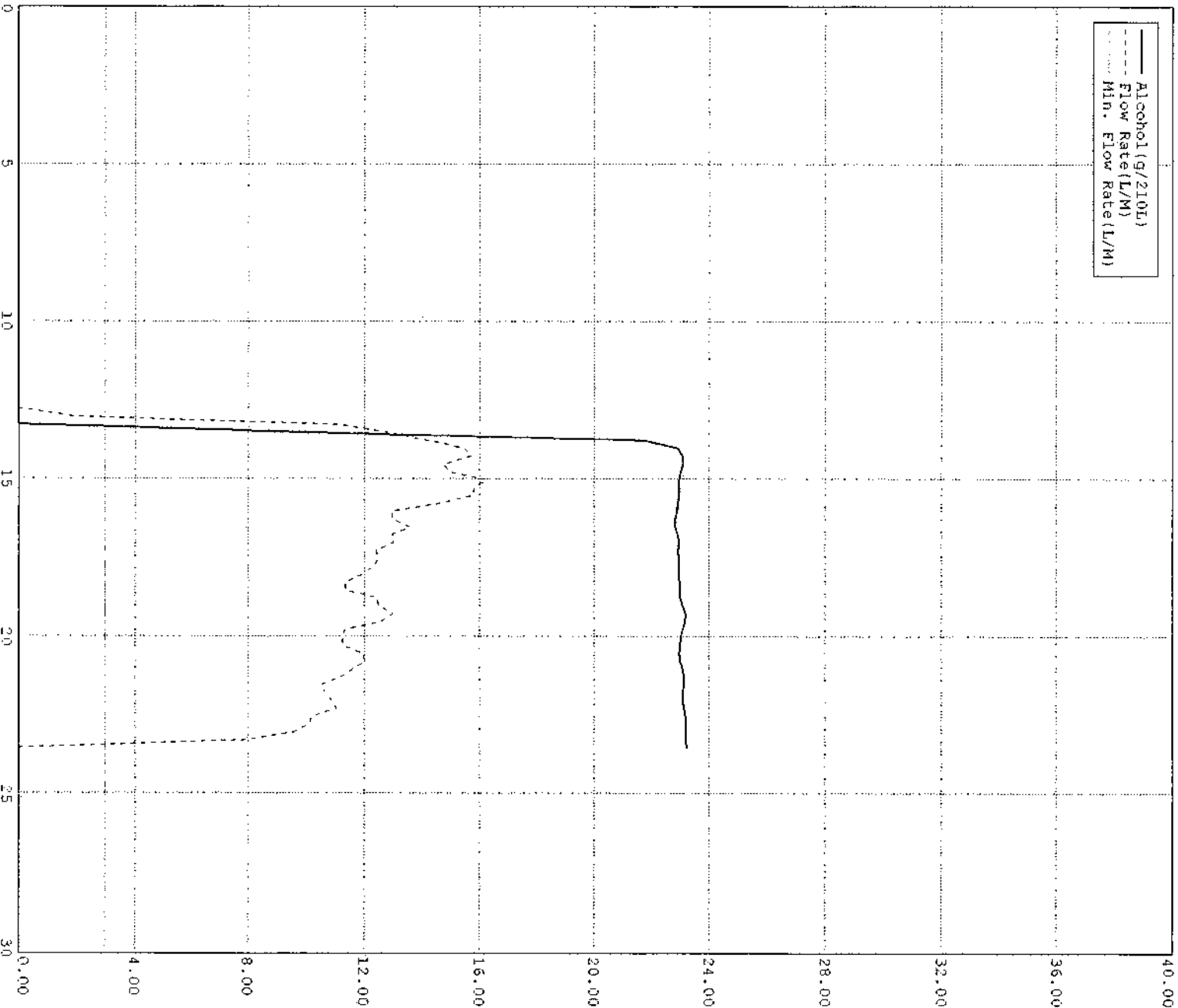
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.62: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 12:16
BLANK TEST 0.000 12:16
INTERNAL STANDARD VERIFIED 12:16
Xq = 0.129 (0.07%)
EXTERNAL STANDARD 0.078 12:17
X[1] = 0.0781 (-0.0002) (0.0020)
BLANK TEST 0.000 12:18
SUBJECT SAMPLE XXX 12:18
X[1] = 0.1170 (-0.0294) (0.0011)

Interference Detected

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100665

Date: 03/01/2017
Time: 12:21:46

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

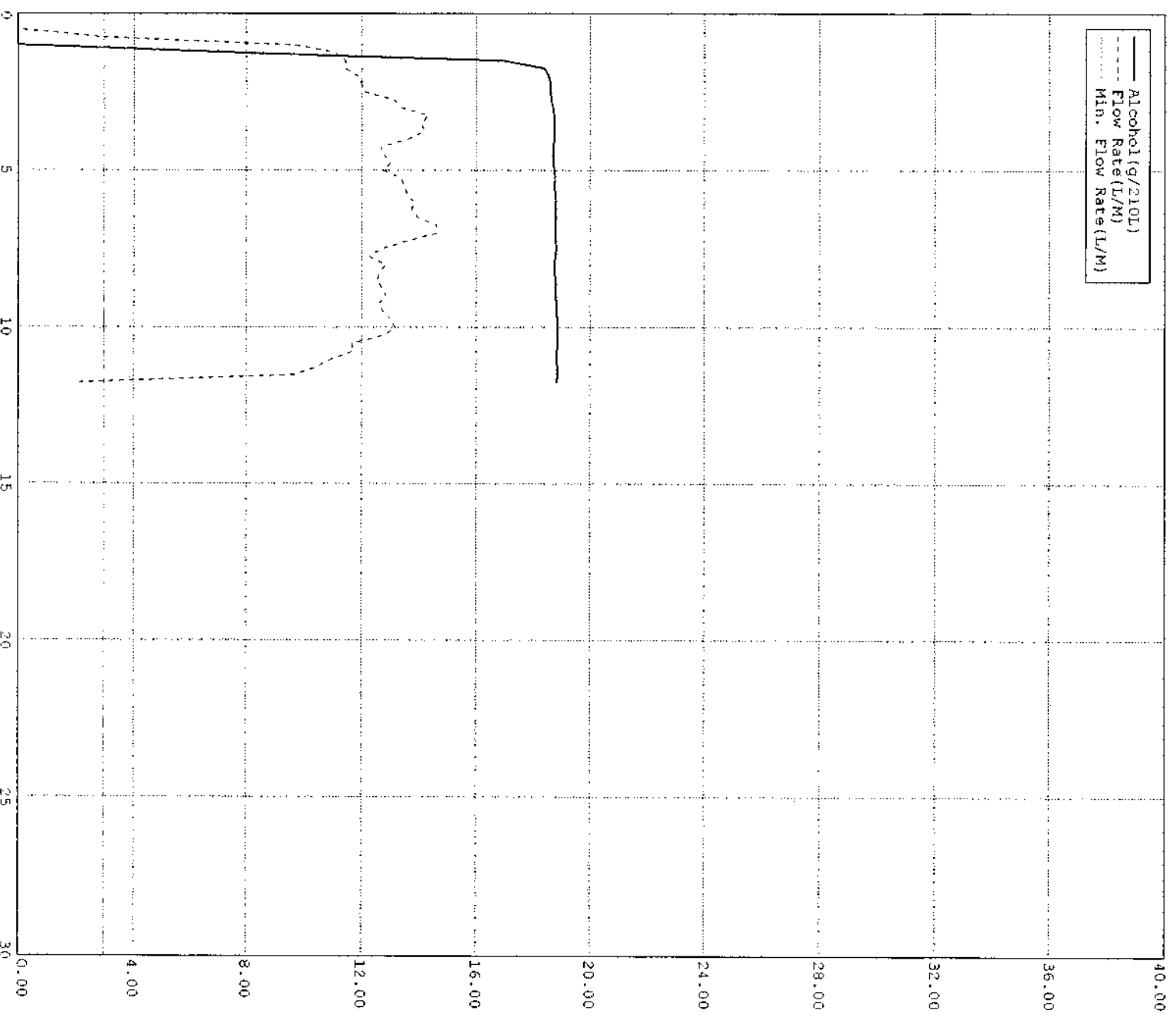
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
IOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	12:22
BLANK TEST	0.000	12:22
INTERNAL STANDARD	VERIFIED	12:23
Xq = 0.129 (0.21%)		
EXTERNAL STANDARD	0.078	12:23
X[1] = 0.0777 (-0.0003)	(0.0025)	
BLANK TEST	0.000	12:24
SUBJECT SAMPLE (Vol=2.29L)	0.095	12:24
X[1] = 0.0952 (-0.0003)	(0.0007)	
BLANK TEST	0.000	12:25
EXTERNAL STANDARD	0.078	12:25
X[1] = 0.0775 (-0.0004)	(0.0018)	
BLANK TEST	0.000	12:26

RBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100665

Date: 03/01/2017
Time: 11:44:59

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

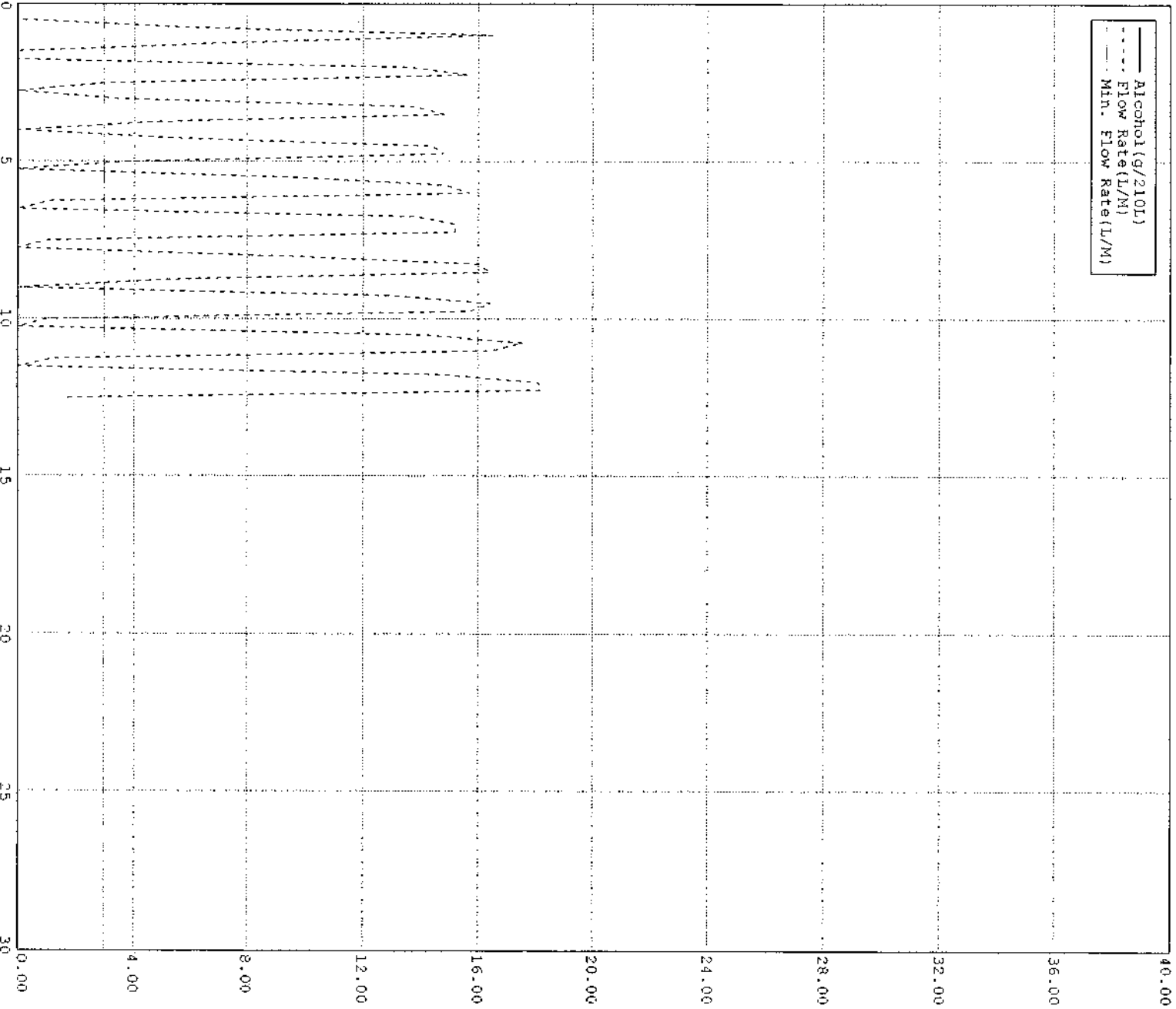
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	11:46
BLANK TEST	0.000	11:46
INTERNAL STANDARD	VERIFIED	11:46
EXTERNAL STANDARD	0.078	11:46
BLANK TEST	0.000	11:47
SUBJECT SAMPLE	XXX	11:48

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100665

Date: 03/01/2017
Time: 11:36:52

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

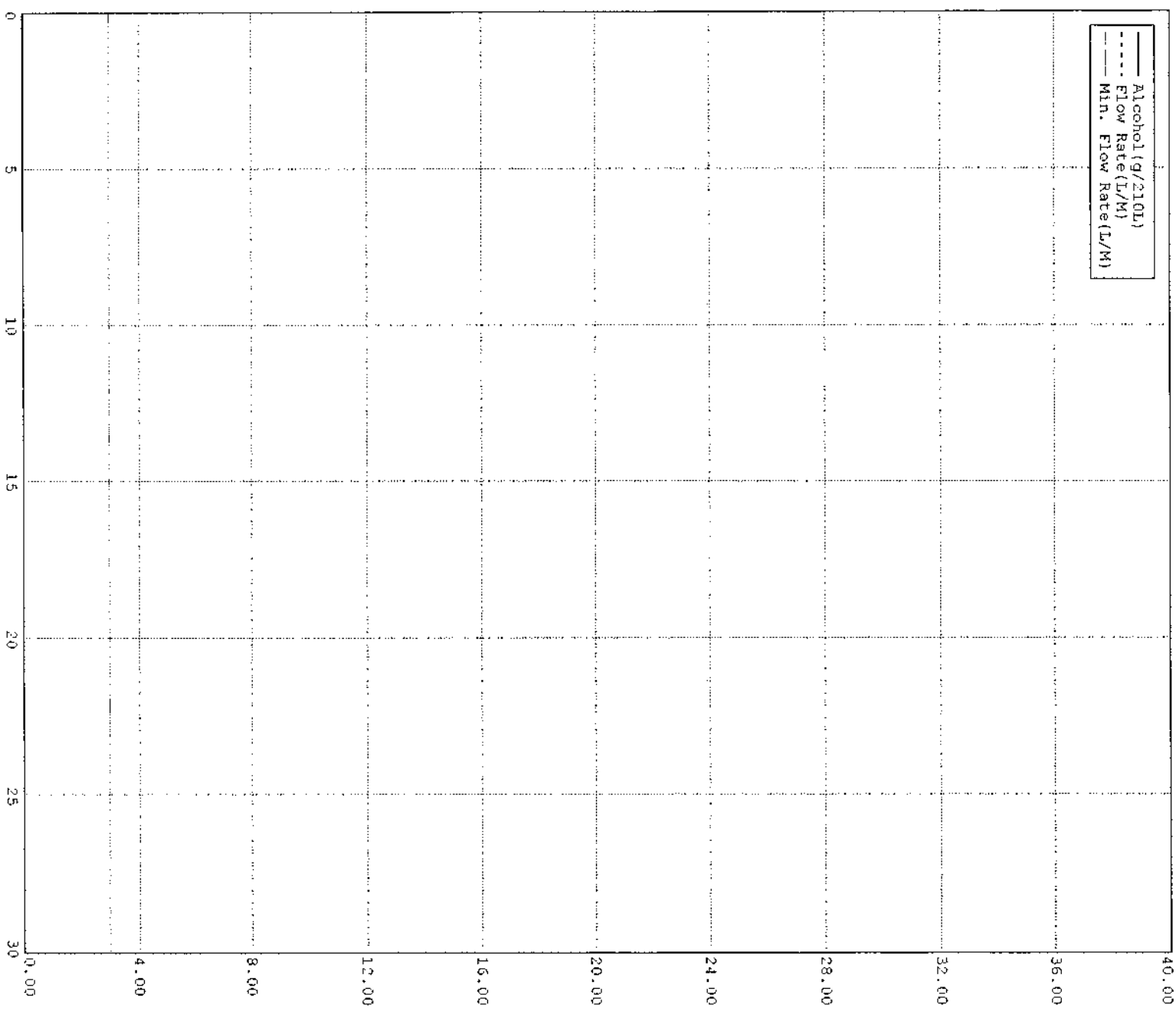
DEPT/AGENCY:
RPI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.62: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK
BLANK TEST PASSED 11:37
INTERNAL STANDARD VERIFIED 11:38
EXTERNAL STANDARD 0.077 11:38
BLANK TEST 0.000 11:39

RPI DETECTED

EBMB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100665

Date: 03/01/2017
Time: 13:39:07

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 29.63: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	13:40
BLANK TEST	0.000	13:40
INTERNAL STANDARD	VERIFIED	13:40
EXTERNAL STANDARD	0.077	13:40
BLANK TEST	0.000	13:41
SUBJECT SAMPLE (Vol=2.07L)	0.000	13:41
BLANK TEST	0.000	13:42
EXTERNAL STANDARD	0.078	13:42
BLANK TEST	0.000	13:43

BMB

