

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 100398 Analyst Brandi Barnett Start Date 8/8/17

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 1.5 L (1.3L to 1.7L)

4. Linearity Test (attached)

a. Levels Used

- i. 0.020g/210L Mnf Airgas Lot AG616504 Exp 6/13/18
- ii. 0.040g/210L Mnf Airgas Lot AG63000101 ⁸⁹⁶ Exp 10/27/18
- iii. 0.080g/210L Mnf Airgas Lot AG634001 Exp 12/5/18
- iv. 0.100g/210L Mnf Airgas Lot AG629304 Exp 10/19/18
- v. 0.200g/210L Mnf Guth Lot 16190 Exp 8/15/18
 1. Simulator S/N DR5298 Date Calibrated 9/14/16
- vi. 0.300g/210L Mnf Guth Lot 16410 Exp 12/19/18
 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 16160 Level 0.100 Exp ~~7/19/18~~ 7/19/18
 1. Simulator S/N SD1199 Date Calibrated 9/13/16
- ii. Isopropanol - Mnf Guth Lot 16160 Level 0.100 Exp 7/19/18
 1. Simulator S/N SD1088 Date Calibrated 9/13/16
- iii. Negative Control - Mnf Guth Lot 16160 Level 0.100 Exp 7/19/18
 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 8/10/17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/08/2017
Time: 13:51:05

VERSIONS

DMT: 3.02
PIC: 3.02
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 = 1.79 V PASSED
(1.09 V - 2.55 V)
Cooler Voltage = 1.76 V PASSED
(1.06 V - 2.46 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 539 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 30.0 in

PUMP INFO

Flow Rate = 4.754 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
(0.002 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.096 0.92% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100398

Date: 08/09/2017
Time: 9:05 AM

Temperatures (°C)

Sample Cell: 49.1°C
Breath Tube: 48.1°C

Current Barometer 29.7 in
Volume (Ltr) 1.53

Settings

Lamp: 1.85 V
Bias: 80 V
Cooler: 1.76 V
Chopper: 535 Hz

Voltages (V)

Flow: 1.03 V
Detector: 0.070 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 05/01/2015
Time: 10:32:08

OPERATOR NAME:
CHARLES FOSTER
CERTIFICATE #: 7734

Ca = 0.1000
CAL = 0.977715 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0078 0.0010 <= b2 < 0.0100
b3 = 0.0003 0.0000 <= b3 < 0.0040
Xq = 0.0952 0.0500 <= Xq < 0.2000
a21 = 1.238166 1.050 <= a21 < 1.300
a31 = 0.474955 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/09/2017
Time: 09:08:32

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

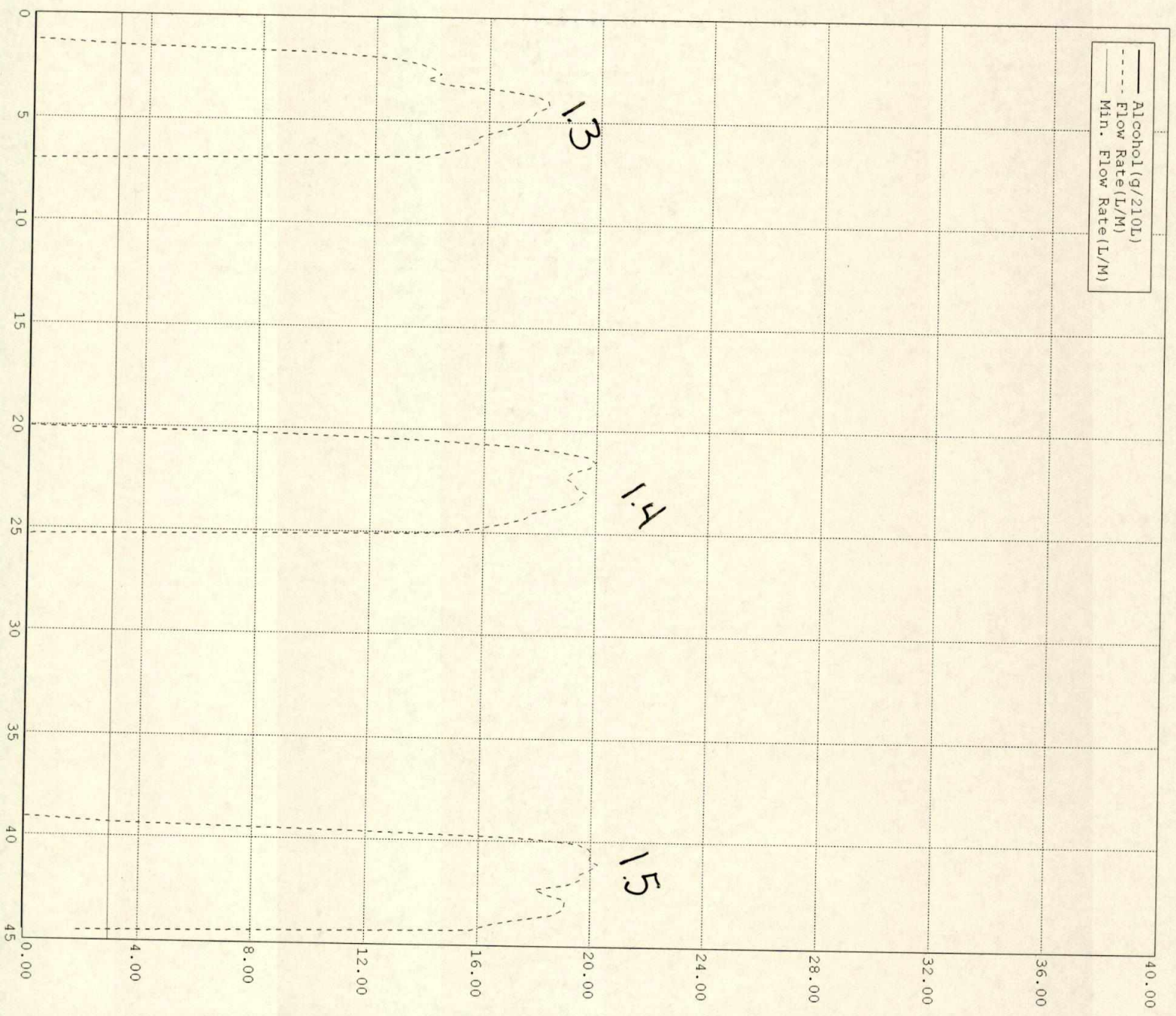
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.74: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:09
BLANK TEST	0.000	09:09
INTERNAL STANDARD	VERIFIED	09:10
EXTERNAL STANDARD	0.078	09:10
BLANK TEST	0.000	09:11
SUBJECT SAMPLE (Vol=1.55L)	0.000	09:12
BLANK TEST	0.000	09:12
EXTERNAL STANDARD	0.078	09:13
BLANK TEST	0.000	09:14

BMB



LINEARITY CHECK

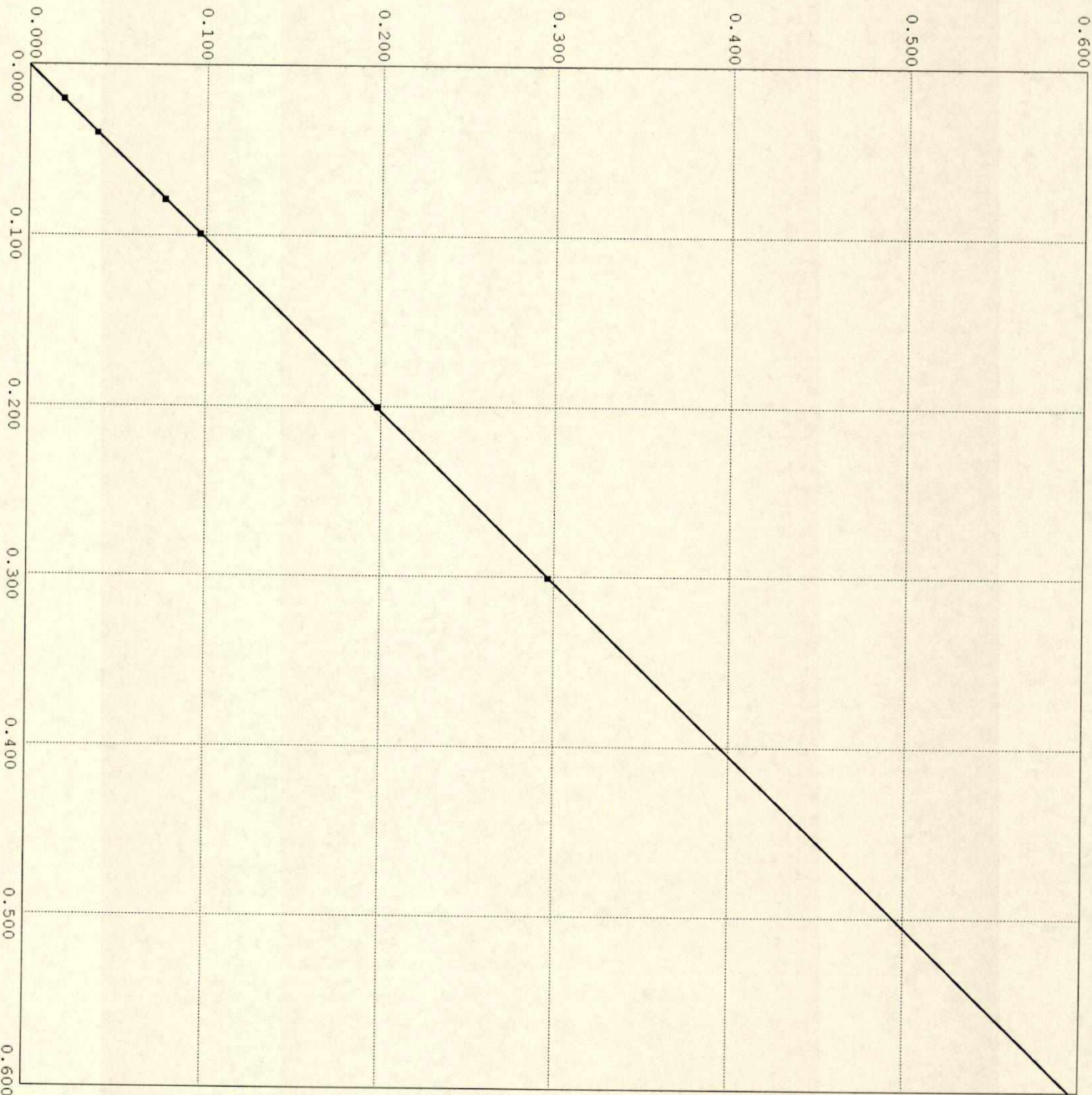
Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/09/2017
Time: 10:13:25

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0390	0.0000
0.079	0.0776	0.0005
0.099	0.0976	0.0005
0.200	0.1988	0.0004
0.300	0.2972	0.0004

SLOPE = 0.992844
 R^2 = 0.999980



BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100398

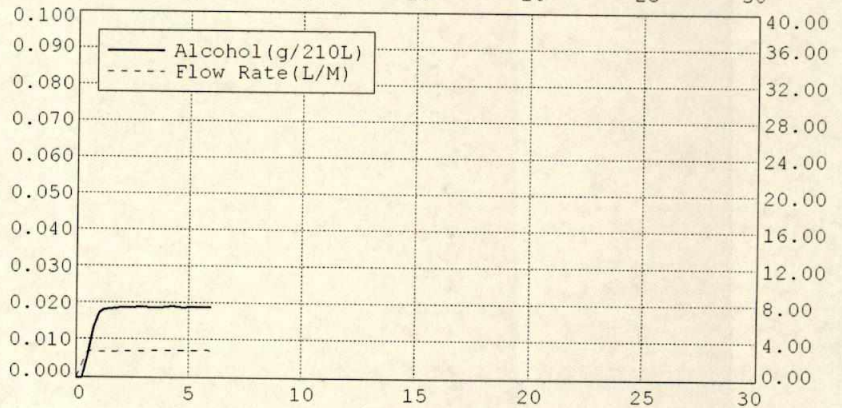
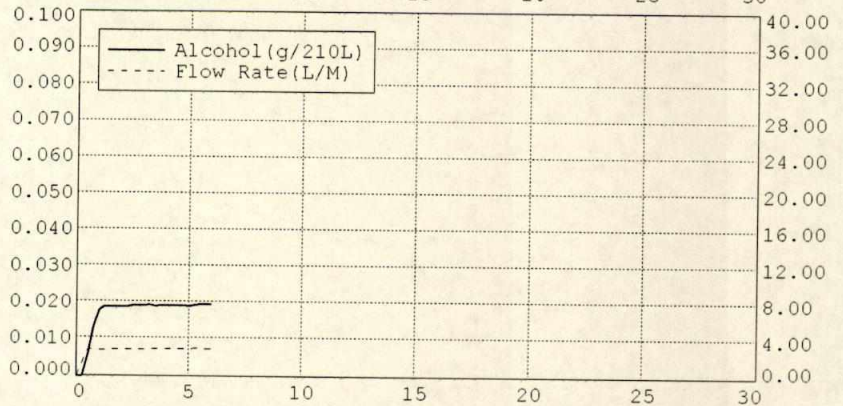
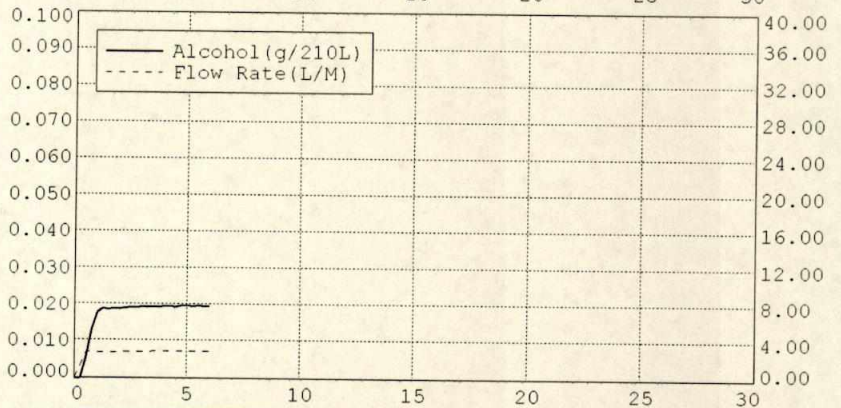
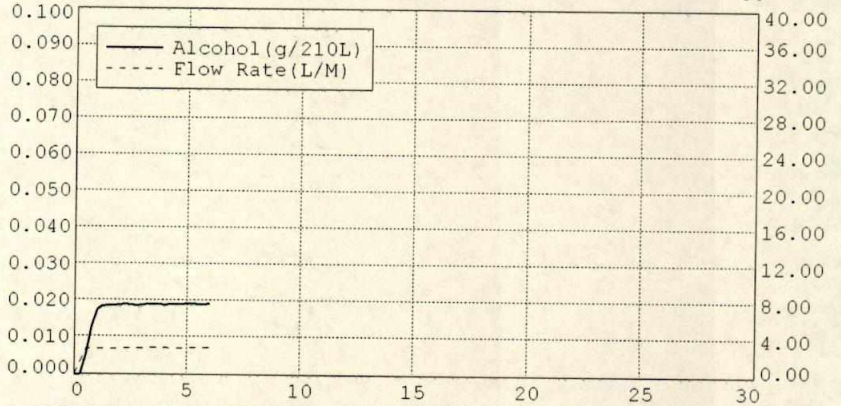
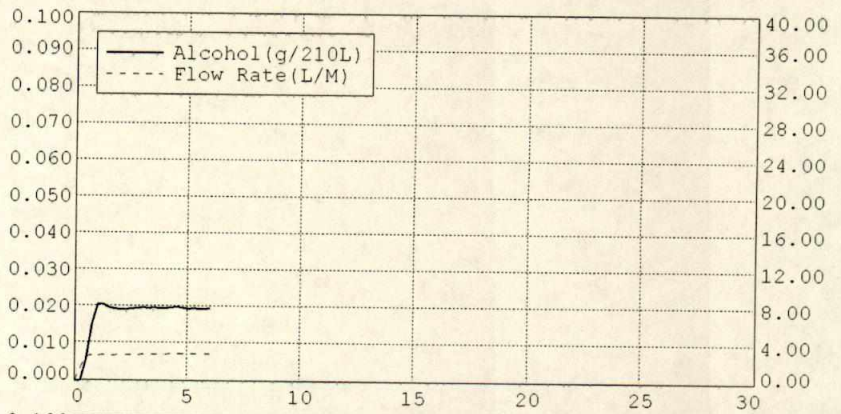
Date: 08/09/2017
 Time: 10:13:26

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.73: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 719 psi

BLANK TEST	0.000	10:14
INTERNAL STANDARD	VERIFIED	10:14
EXTERNAL STANDARD	0.020	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.020	10:15
BLANK TEST	0.000	10:16
EXTERNAL STANDARD	0.020	10:17
BLANK TEST	0.000	10:17
EXTERNAL STANDARD	0.020	10:18
BLANK TEST	0.000	10:19
EXTERNAL STANDARD	0.020	10:19
BLANK TEST	0.000	10:20

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100398

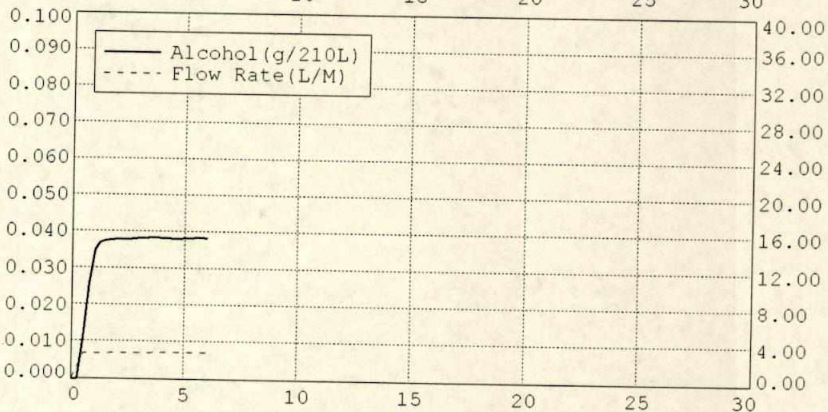
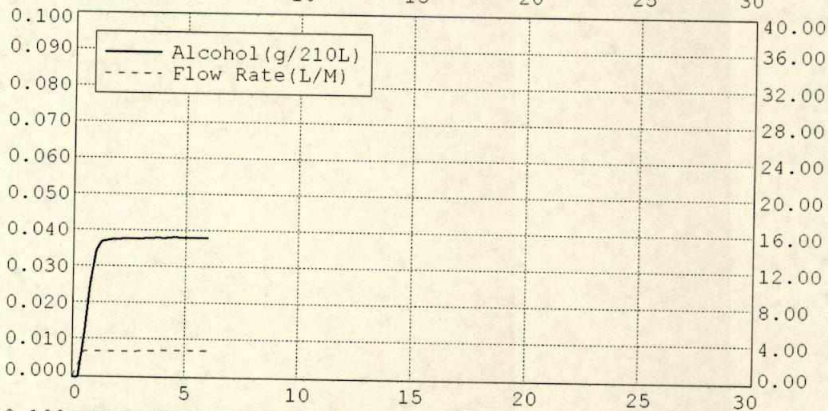
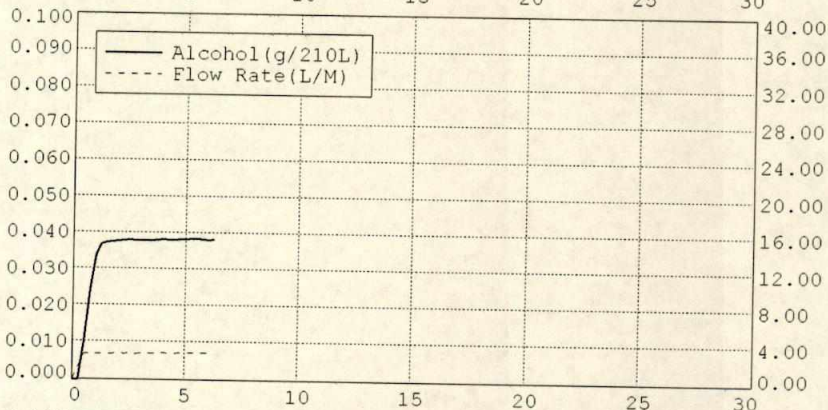
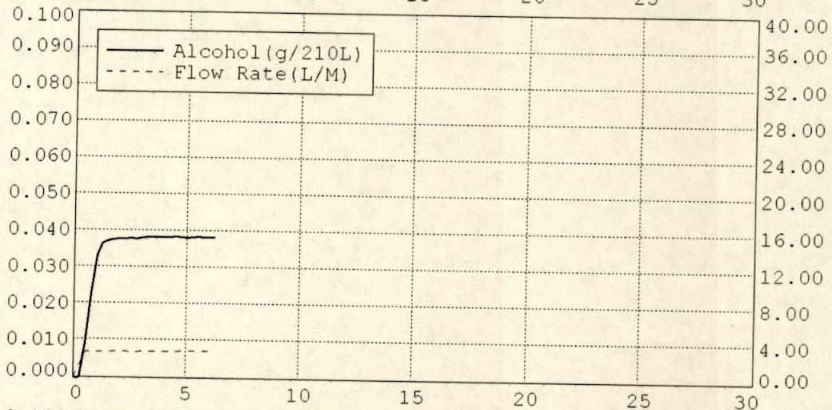
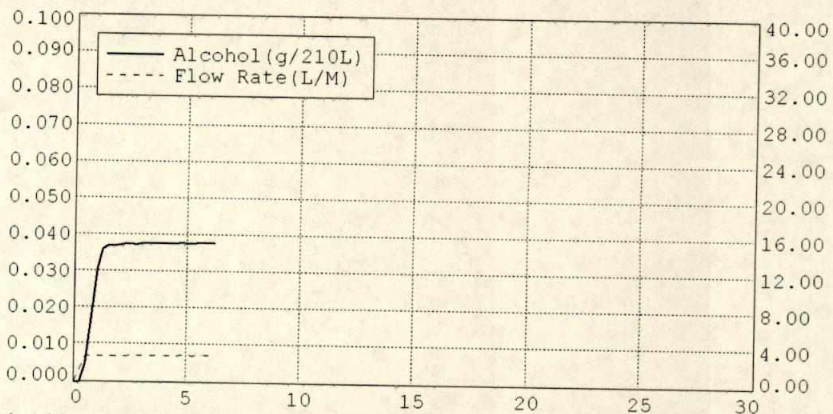
Date: 08/09/2017
 Time: 12:42:13

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.70: 0.040
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 712 psi

BLANK TEST	0.000	12:43
INTERNAL STANDARD	VERIFIED	12:43
EXTERNAL STANDARD	0.039	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.039	12:44
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.039	12:45
BLANK TEST	0.000	12:46
EXTERNAL STANDARD	0.039	12:47
BLANK TEST	0.000	12:47
EXTERNAL STANDARD	0.039	12:48
BLANK TEST	0.000	12:49

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100398

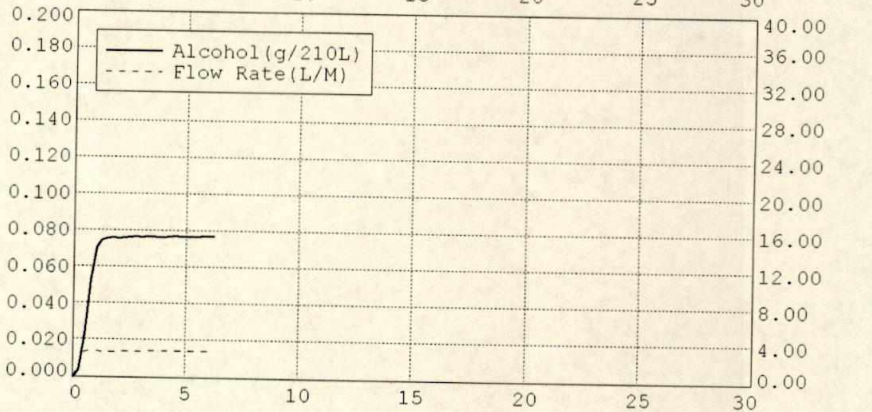
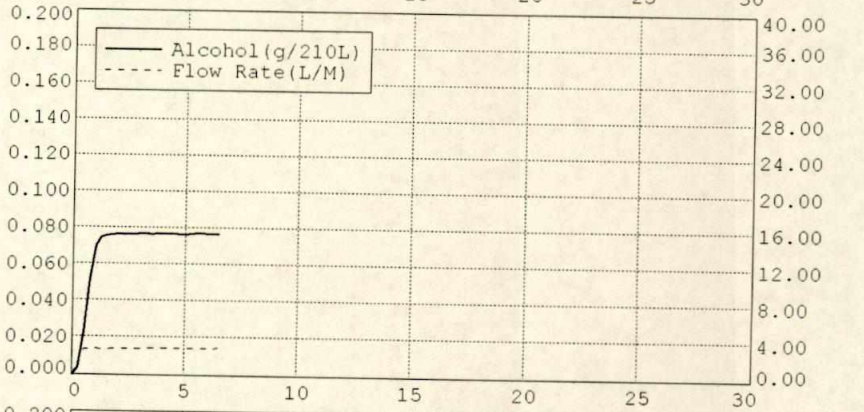
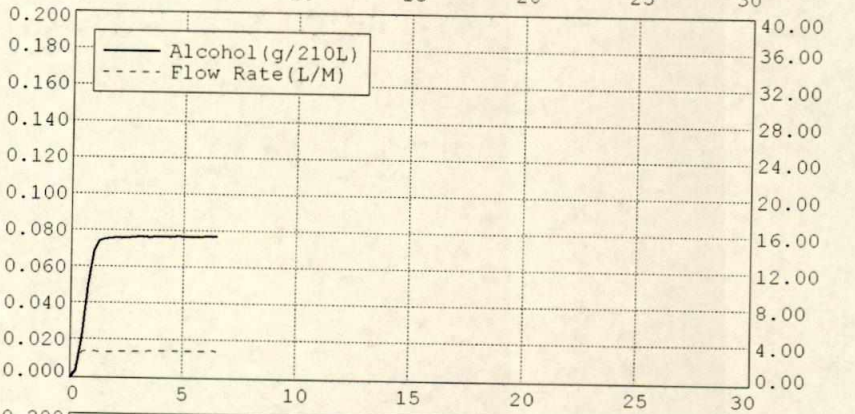
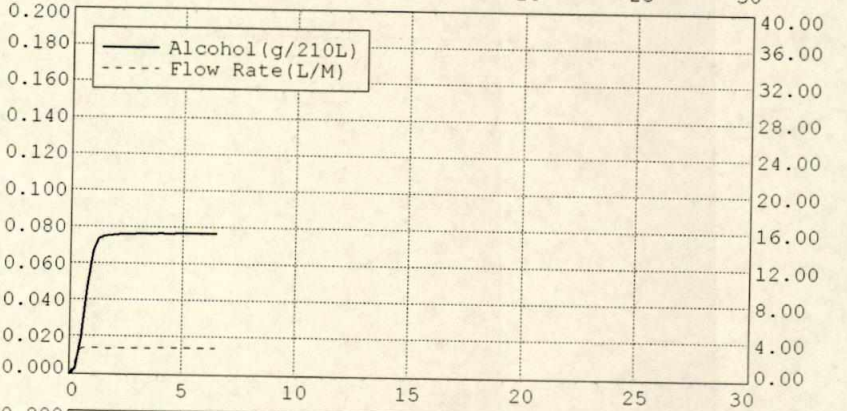
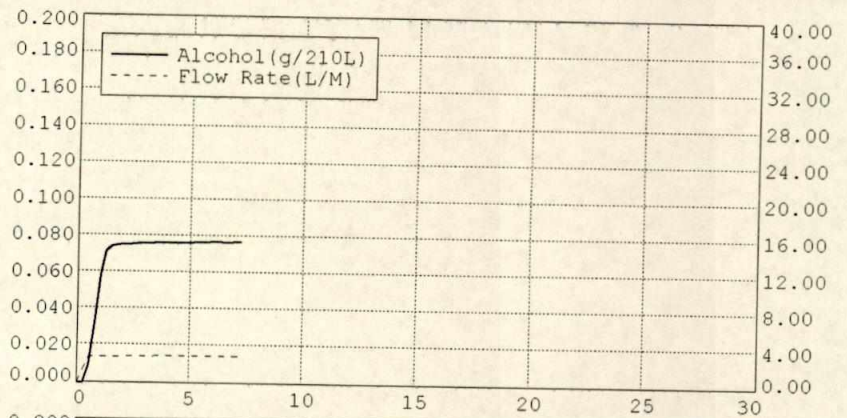
Date: 08/09/2017
 Time: 12:56:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.70: 0.079
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 669 psi

BLANK TEST	0.000	12:59
INTERNAL STANDARD	VERIFIED	12:59
EXTERNAL STANDARD	0.077	12:59
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.077	13:01
BLANK TEST	0.000	13:01
EXTERNAL STANDARD	0.078	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.078	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.078	13:04
BLANK TEST	0.000	13:05

Average = 0.0776
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100398

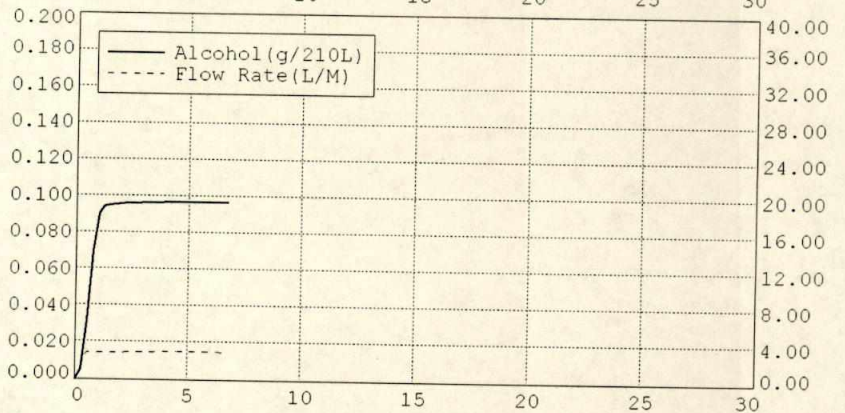
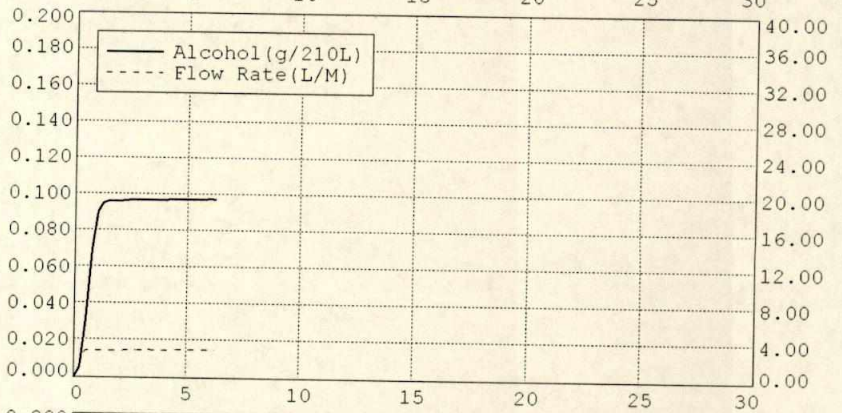
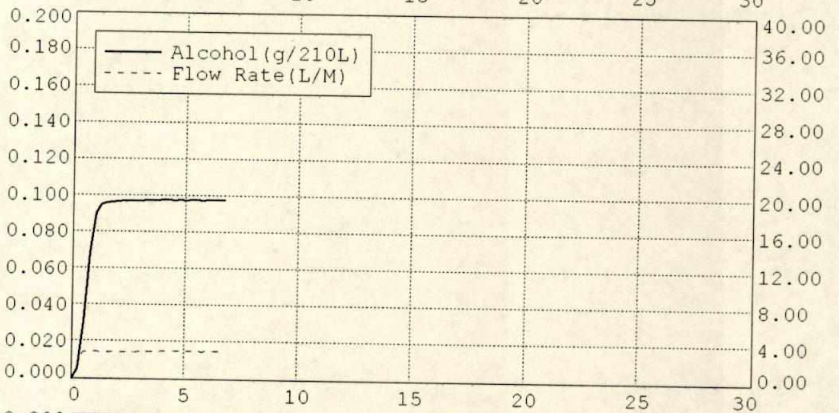
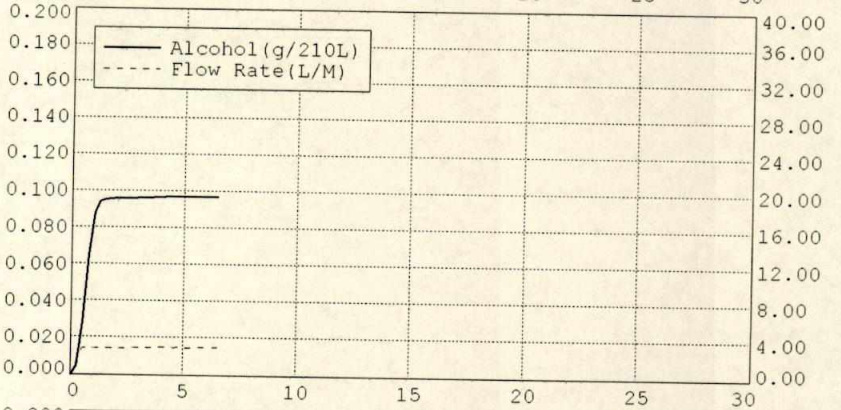
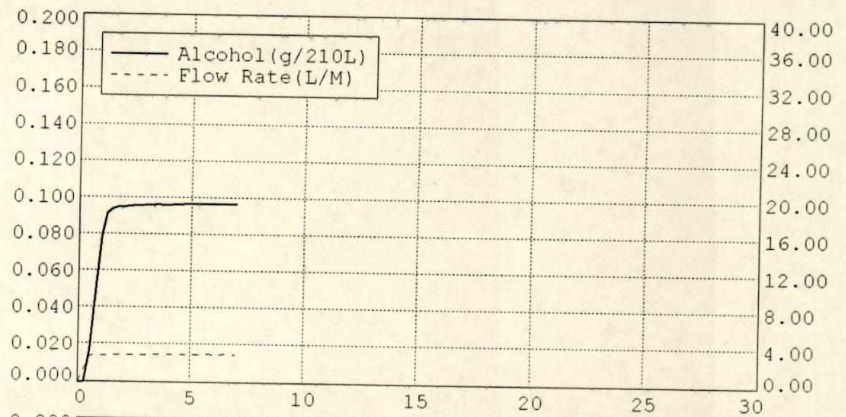
Date: 08/09/2017
 Time: 13:11:15

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.70: 0.099
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 1001 psi

BLANK TEST	0.000	13:13
INTERNAL STANDARD	VERIFIED	13:13
EXTERNAL STANDARD	0.097	13:14
BLANK TEST	0.000	13:14
EXTERNAL STANDARD	0.098	13:15
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.098	13:16
BLANK TEST	0.000	13:17
EXTERNAL STANDARD	0.098	13:17
BLANK TEST	0.000	13:18
EXTERNAL STANDARD	0.097	13:18
BLANK TEST	0.000	13:19

Average = 0.0976
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

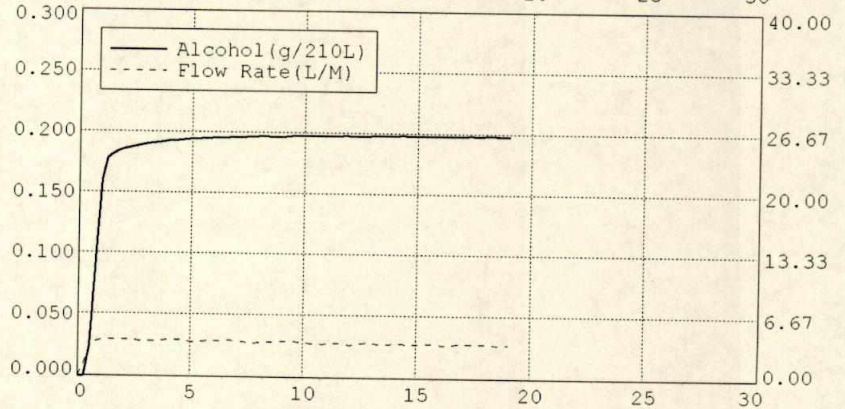
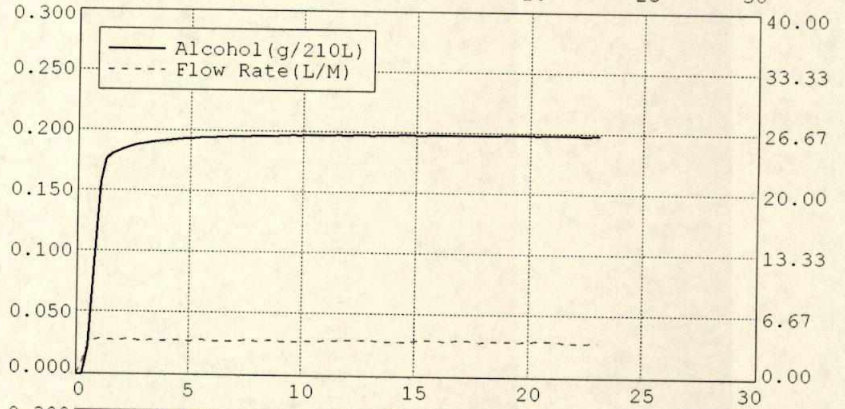
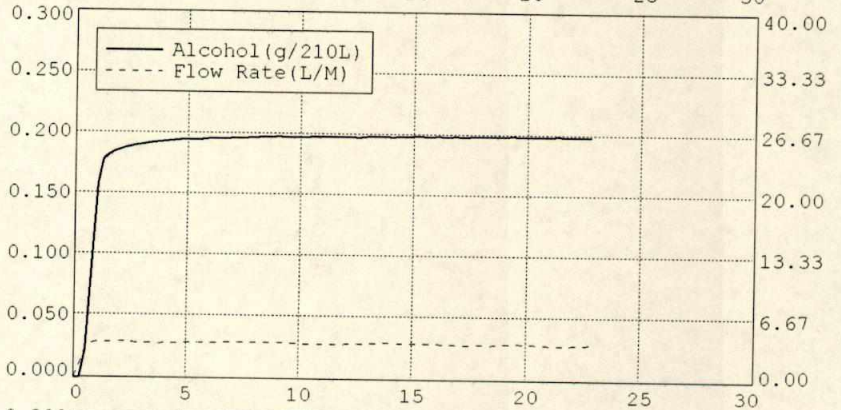
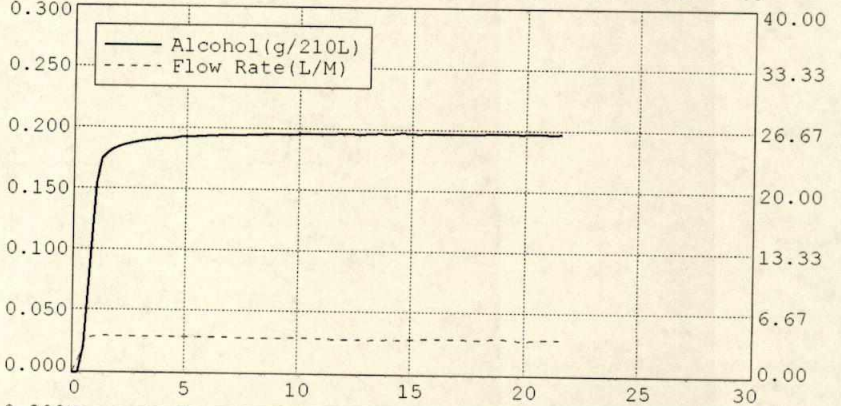
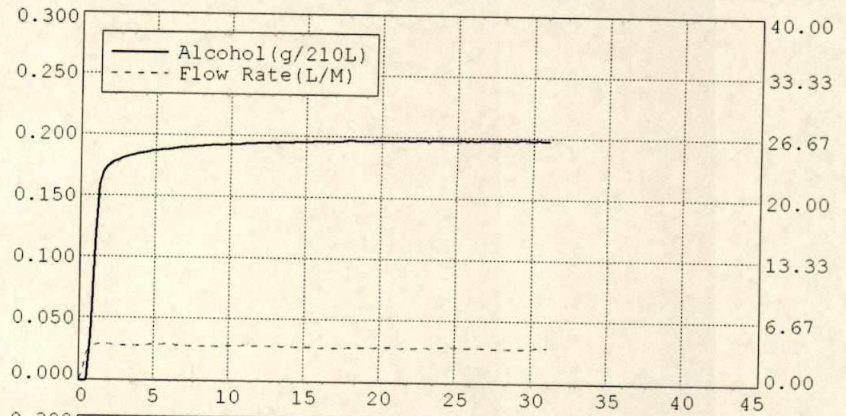
Alaska Department of Public Safety
 DATAMASTER dmt: 100398

Date: 08/09/2017
 Time: 13:22:11

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: GUTH 16190
 EXPIRATION: 08/15/2018

BLANK TEST	0.000	13:24
INTERNAL STANDARD	VERIFIED	13:24
EXTERNAL STANDARD	0.199	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.198	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.199	13:28
BLANK TEST	0.000	13:28
EXTERNAL STANDARD	0.199	13:29
BLANK TEST	0.000	13:30
EXTERNAL STANDARD	0.199	13:30
BLANK TEST	0.000	13:31

Average = 0.1988
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100398

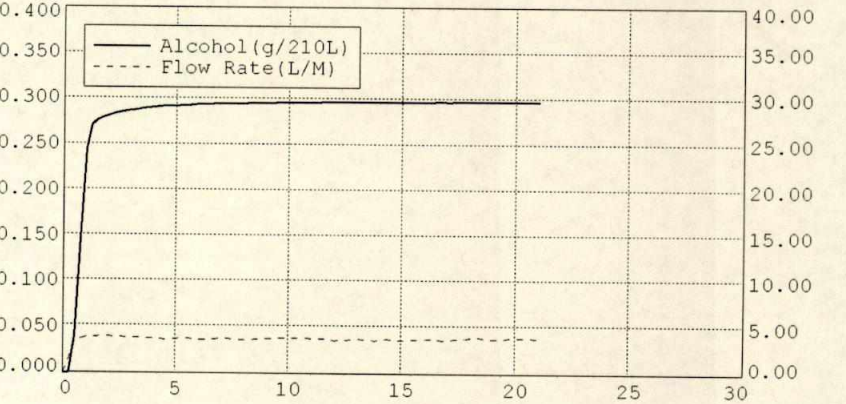
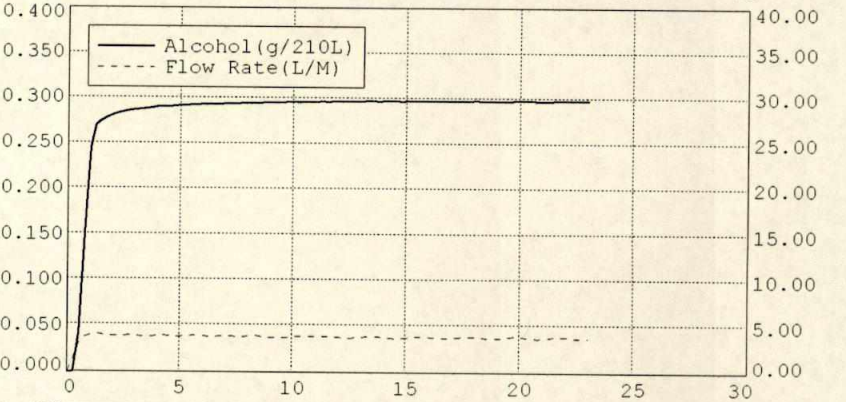
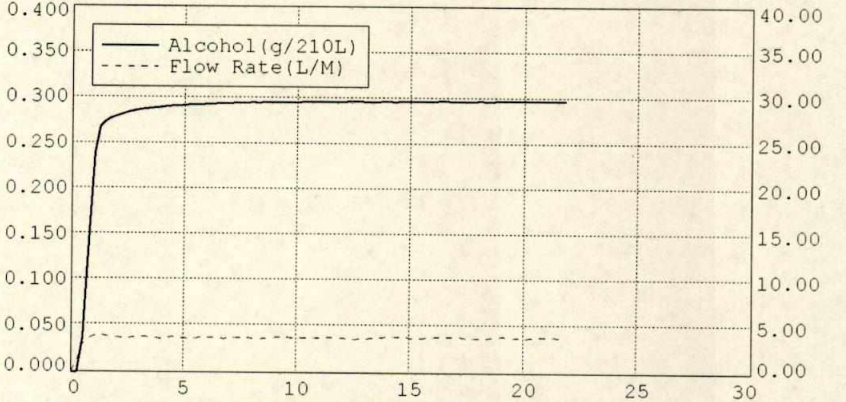
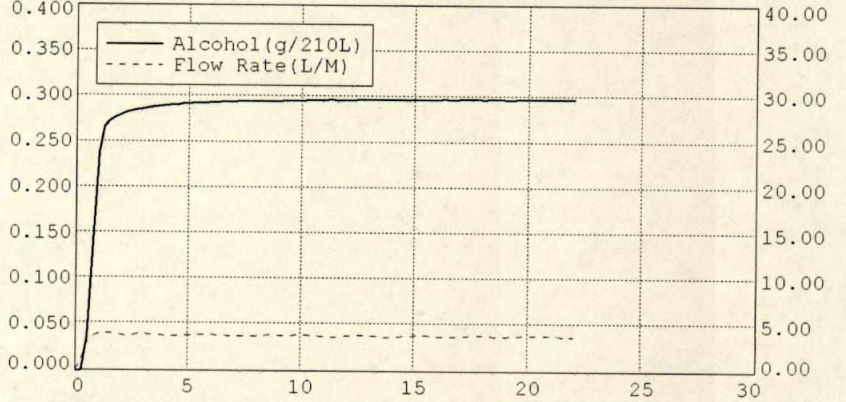
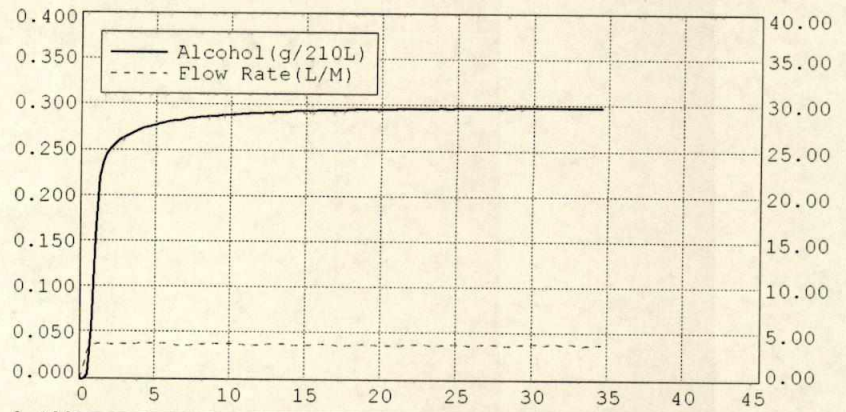
Date: 08/09/2017
 Time: 13:33:57

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: GUTH 16410
 EXPIRATION: 12/19/2018

BLANK TEST	0.000	13:35
INTERNAL STANDARD	VERIFIED	13:35
EXTERNAL STANDARD	0.298	13:35
BLANK TEST	0.000	13:36
EXTERNAL STANDARD	0.297	13:37
BLANK TEST	0.000	13:38
EXTERNAL STANDARD	0.297	13:38
BLANK TEST	0.000	13:39
EXTERNAL STANDARD	0.297	13:40
BLANK TEST	0.000	13:41
EXTERNAL STANDARD	0.297	13:41
BLANK TEST	0.000	13:42

Average = 0.2972
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/10/2017
Time: 08:41:09

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

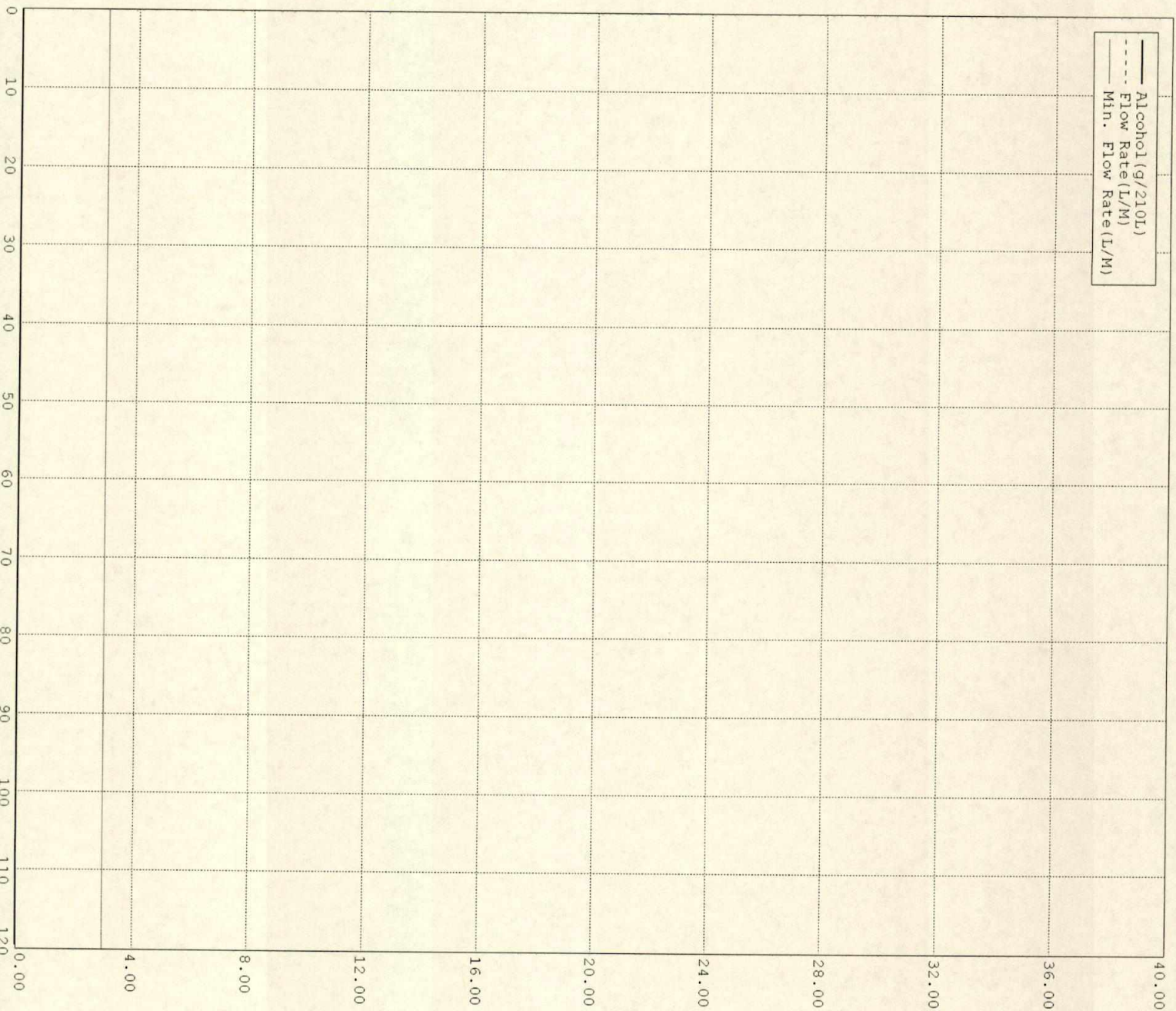
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	08:42
BLANK TEST	0.000	08:42
INTERNAL STANDARD	VERIFIED	08:42
EXTERNAL STANDARD	0.078	08:42
BLANK TEST	0.000	08:43
SUBJECT SAMPLE	INCOMPLETE	08:45

BBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/10/2017
Time: 08:49:20

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

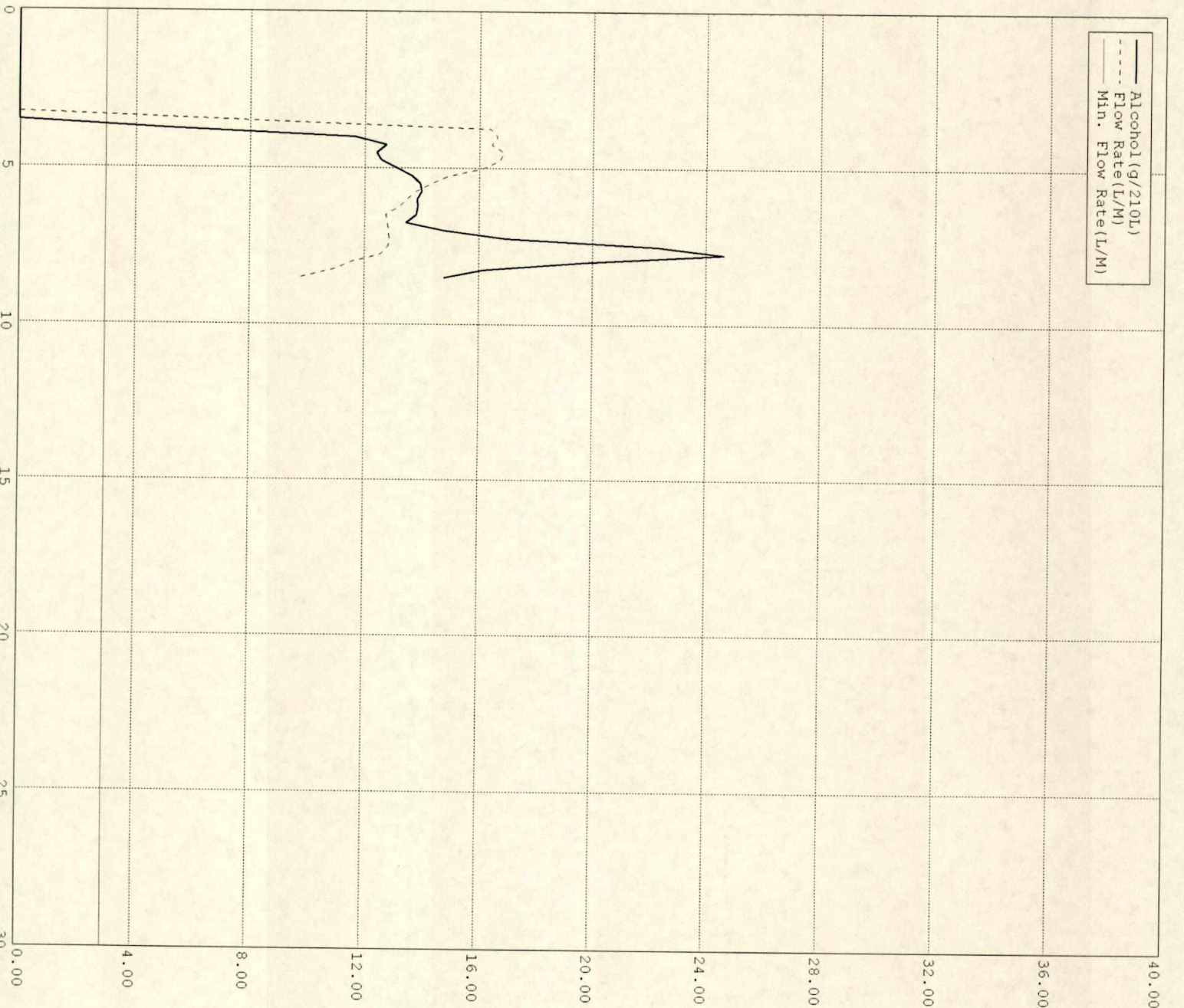
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	08:53
BLANK TEST	0.000	08:53
INTERNAL STANDARD	0.077	08:53
EXTERNAL STANDARD	0.000	08:54
BLANK TEST	0.000	08:54
SUBJECT SAMPLE	INVALID	08:55

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/10/2017
Time: 09:21:35

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

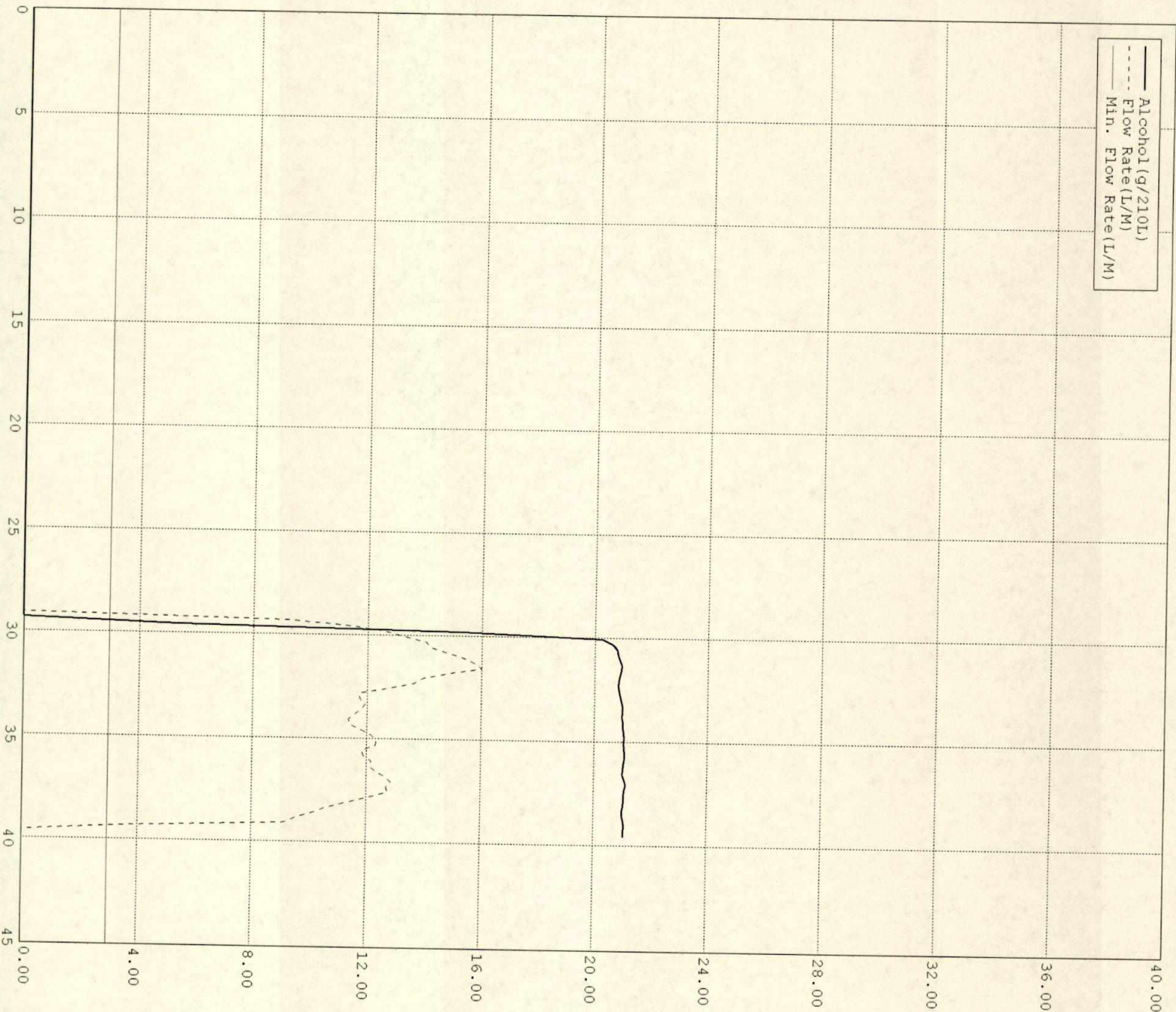
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:23
BLANK TEST	0.000	09:23
INTERNAL STANDARD	VERIFIED	09:23
Xq = 0.097 (2.02%)		
EXTERNAL STANDARD	0.078	09:23
X[1] = 0.0776 (-0.0007)	(0.0021)	
BLANK TEST	0.000	09:24
SUBJECT SAMPLE	XXX	09:25
X[1] = 0.1057 (-0.0174)	(0.0002)	

Interference Detected

Filter 2 Avg: -0.0007
Filter 3 Avg: 0.0022
BMB 8/10/17

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/10/2017
Time: 09:28:19

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

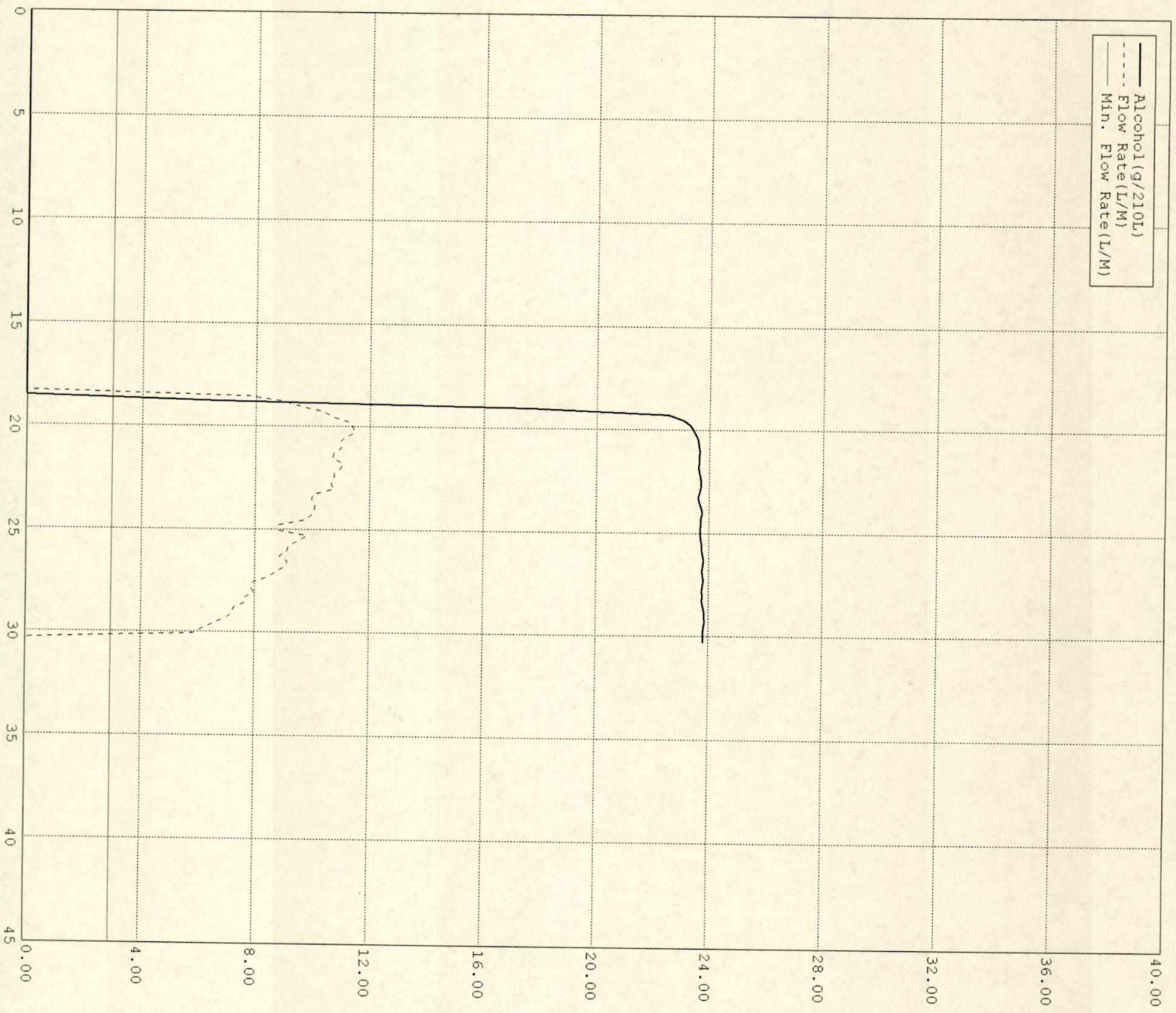
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:29
BLANK TEST	0.000	09:29
INTERNAL STANDARD	VERIFIED	09:29
Xq = 0.097 (2.11%)		
EXTERNAL STANDARD	0.078	09:29
X[1] = 0.0776 (-0.0005)	(0.0028)	
BLANK TEST	0.000	09:30
SUBJECT SAMPLE	XXX	09:31
X[1] = 0.1194 (-0.0289)	(0.0017)	

Interference Detected

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/10/2017
Time: 09:34:30

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

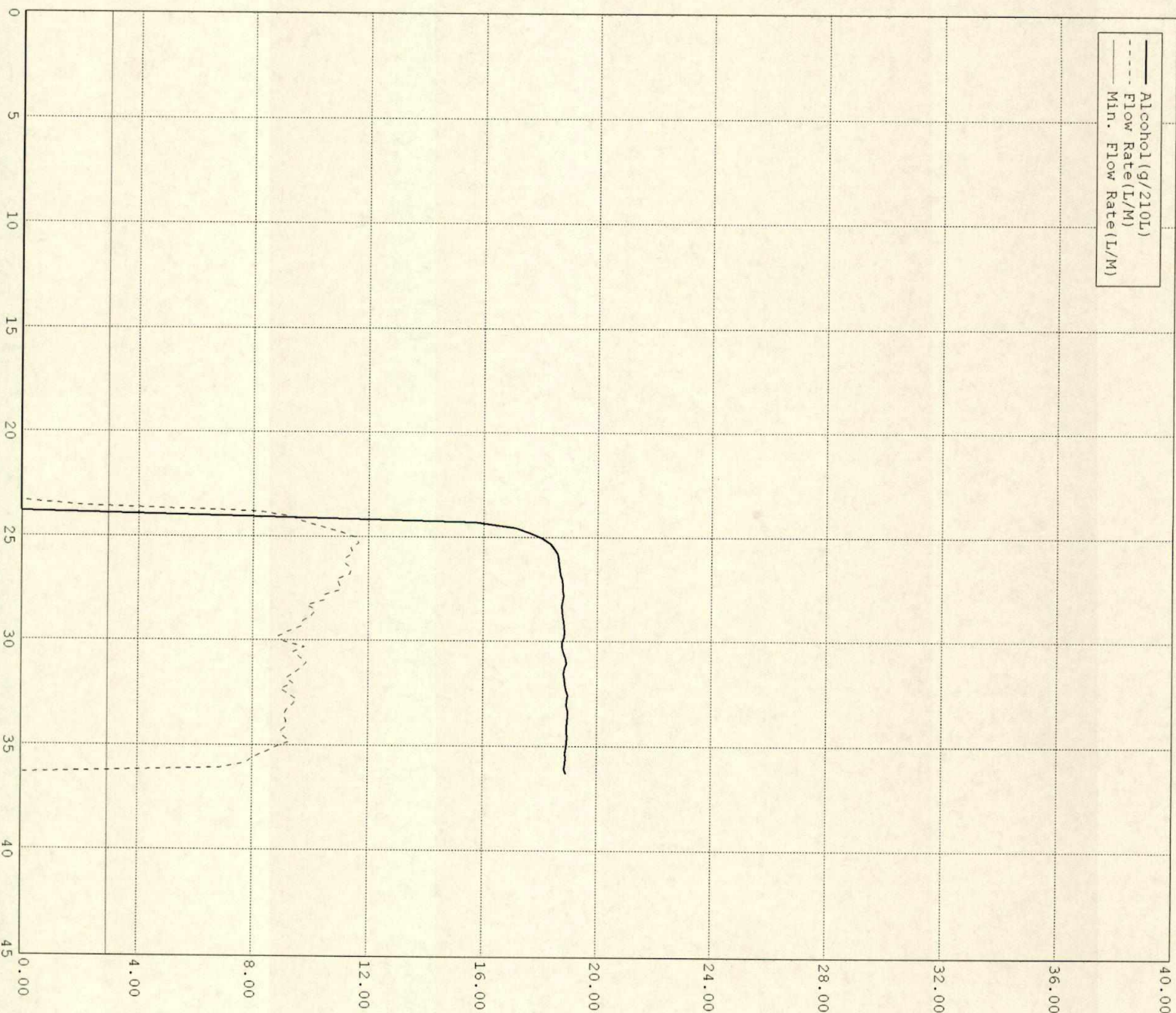
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:39
BLANK TEST	0.000	09:39
INTERNAL STANDARD	VERIFIED	09:39
Xq = 0.097 (1.38%)	0.077	09:39
EXTERNAL STANDARD	X[1] = 0.0772 (-0.0007) (0.0023)	09:40
BLANK TEST	0.000	09:41
SUBJECT SAMPLE (Vol=2.04L)	0.095	09:42
X[1] = 0.0952 (0.0027) (0.0006)	0.000	09:42
EXTERNAL STANDARD	0.077	09:42
X[1] = 0.0771 (-0.0007) (0.0017)	0.000	09:43
BLANK TEST	0.000	09:43

BNB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/10/2017
Time: 09:13:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

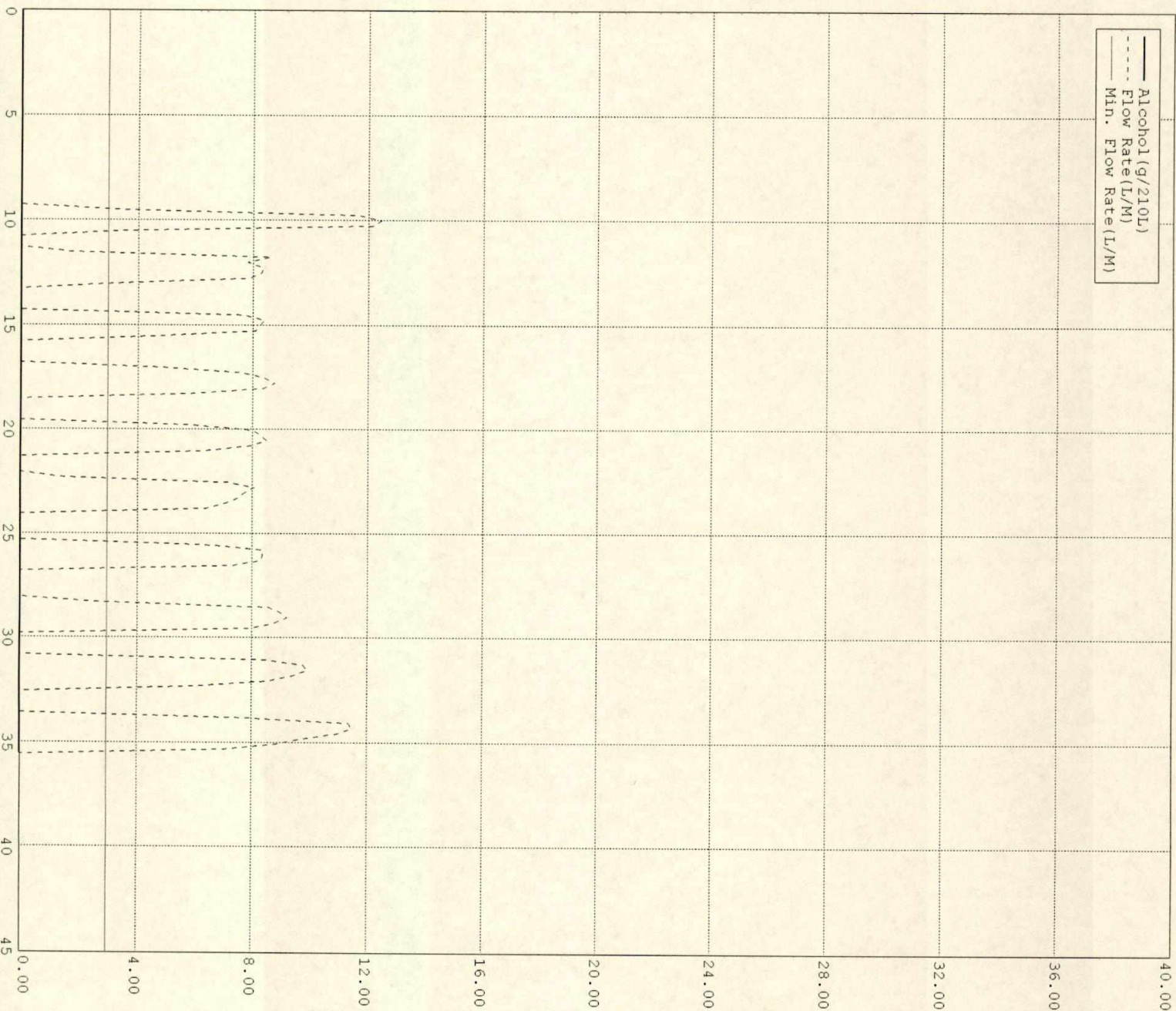
DEPT/AGENCY:
EXCEEDED ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:14
BLANK TEST	0.000	09:14
INTERNAL STANDARD	VERIFIED	09:14
EXTERNAL STANDARD	0.078	09:14
BLANK TEST	0.000	09:15
SUBJECT SAMPLE	XXX	09:16

Maximum Attempts Exceeded

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/10/2017
Time: 08:57:46

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

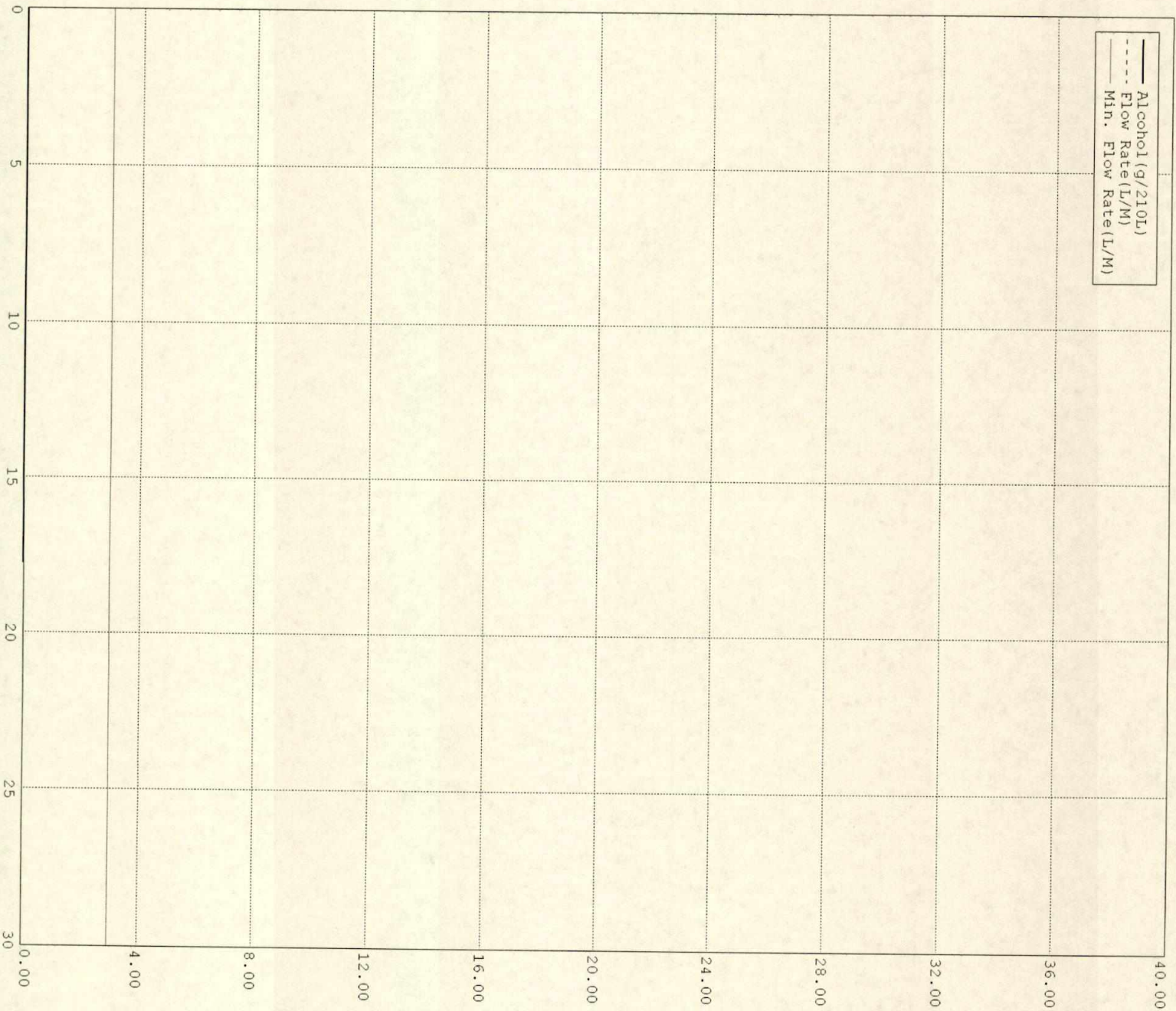
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	08:58
BLANK TEST	0.000	08:58
INTERNAL STANDARD	VERIFIED	08:59
EXTERNAL STANDARD	0.078	08:59
BLANK TEST	0.000	09:00

RFI DETECTED

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/10/2017
Time: 09:59:34

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.72: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	10:00
BLANK TEST	0.000	10:00
INTERNAL STANDARD	VERIFIED	10:00
EXTERNAL STANDARD	0.078	10:01
BLANK TEST	0.000	10:02
SUBJECT SAMPLE (Vol=1.98L)	0.000	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.078	10:04
BLANK TEST	0.000	10:05

BMB

