

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 100377 Analyst Brandi Barnett Start Date 5/29/18

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 1.6 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 AG630101 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 17090 Exp 2/24/19

1. Simulator S/N DR5298 Date Calibrated 1/24/18

vi. 0.300g/210L Mnf Guth Lot 17140 Exp 5/5/19

1. Simulator S/N SD1202 Date Calibrated 1/24/18

5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

d. Exceeded attempts

i. Acetone - Mnf Guth Lot 17280 Level 0.100 Exp 9/11/19

1. Simulator S/N SD1177 Date Calibrated 1/24/18

ii. Isopropanol - Mnf Guth Lot 17280 Level 0.100 Exp 9/11/19

1. Simulator S/N SD1199 Date Calibrated 1/24/18

iii. Negative Control - Mnf Guth Lot 18070 Level 0.100 Exp 2/26/20

1. Simulator S/N DR4161 Date Calibrated 1/24/18

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 5/30/18

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 05/29/2018
Time: 08:59:00

VERSIONS
DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.68 V PASSED
(1.09 V - 2.53 V)
Cooler Voltage = 1.63 V PASSED
(1.03 V - 2.39 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 545 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.7 in

PUMP INFO

Flow Rate = 4.751 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 PASSED
Xq = 0.081 0.11% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100377

Date: 05/29/2018
Time: 9:19 AM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 46.8°C

Current Barometer 29.7 in
Volume (Ltr) 1.59

Settings

Lamp: 1.71 V
Bias: 79 V
Cooler: 1.69 V
Chopper: 532 Hz

Voltages (V)

Flow: 1.05 V
Detector: 0.015 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 03/02/2011
Time: 17:28:44

Ca	=	0.1000			
CAL	=	0.980645	0.800	<=	CAL < 1.200
b1	=	0.0001	0.0000	<=	b1 < 0.0040
b2	=	0.0043	0.0010	<=	b2 < 0.0100
b3	=	0.0000	0.0000	<=	b3 < 0.0040
Xq	=	0.0815	0.0500	<=	Xq < 0.2000
a21	=	1.183888	1.050	<=	a21 < 1.300
a31	=	0.379173	0.300	<=	a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 05/29/2018
Time: 09:20:59

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

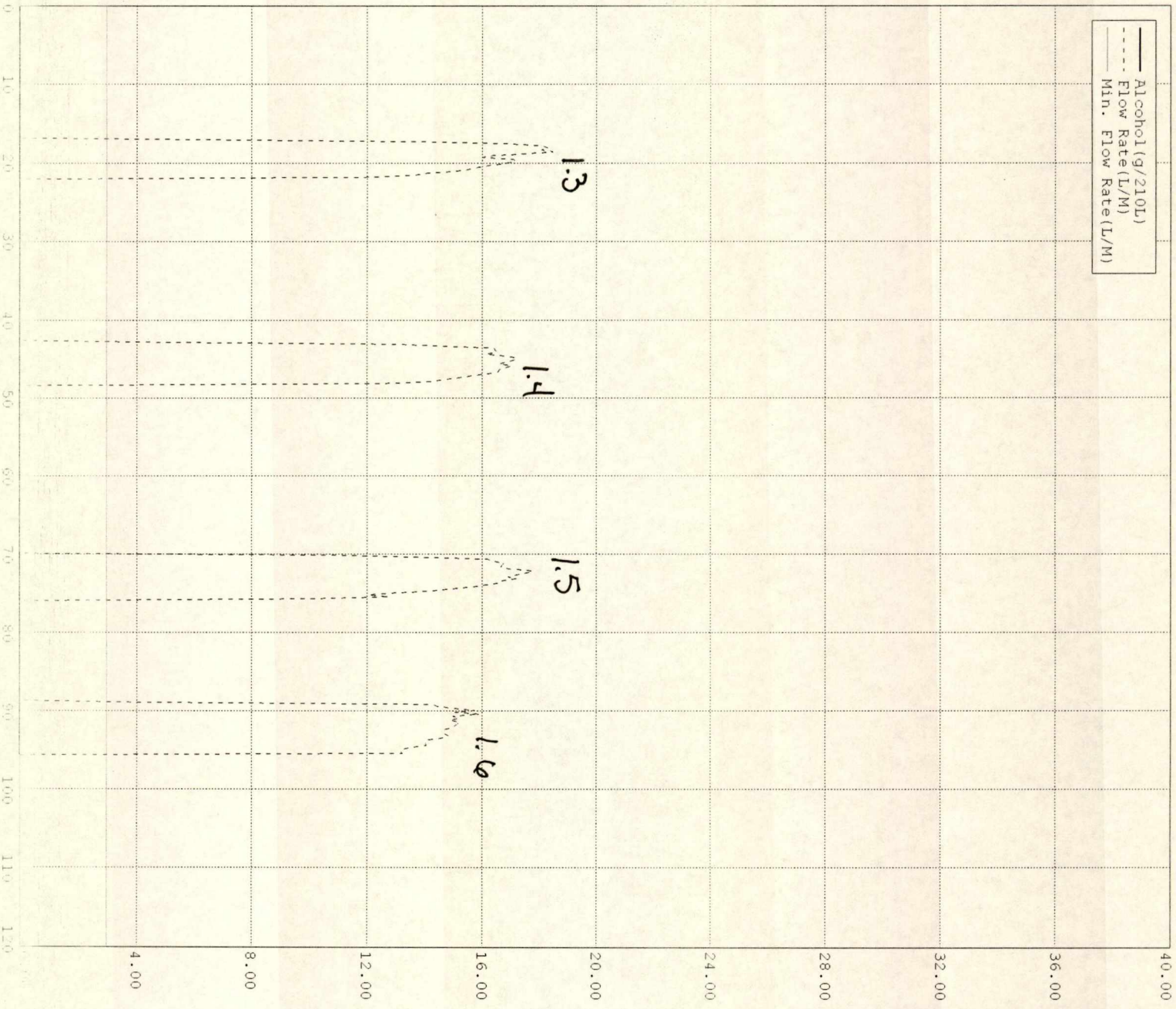
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK	PASSED	09:22
BLANK TEST	0.000	09:22
INTERNAL STANDARD	VERIFIED	09:22
EXTERNAL STANDARD	0.080	09:22
BLANK TEST	0.000	09:23
SUBJECT SAMPLE (Vol=1.60L)	0.000	09:26
BLANK TEST	0.000	09:27
EXTERNAL STANDARD	0.080	09:27
BLANK TEST	0.000	09:28

BRMB



LINEARITY CHECK

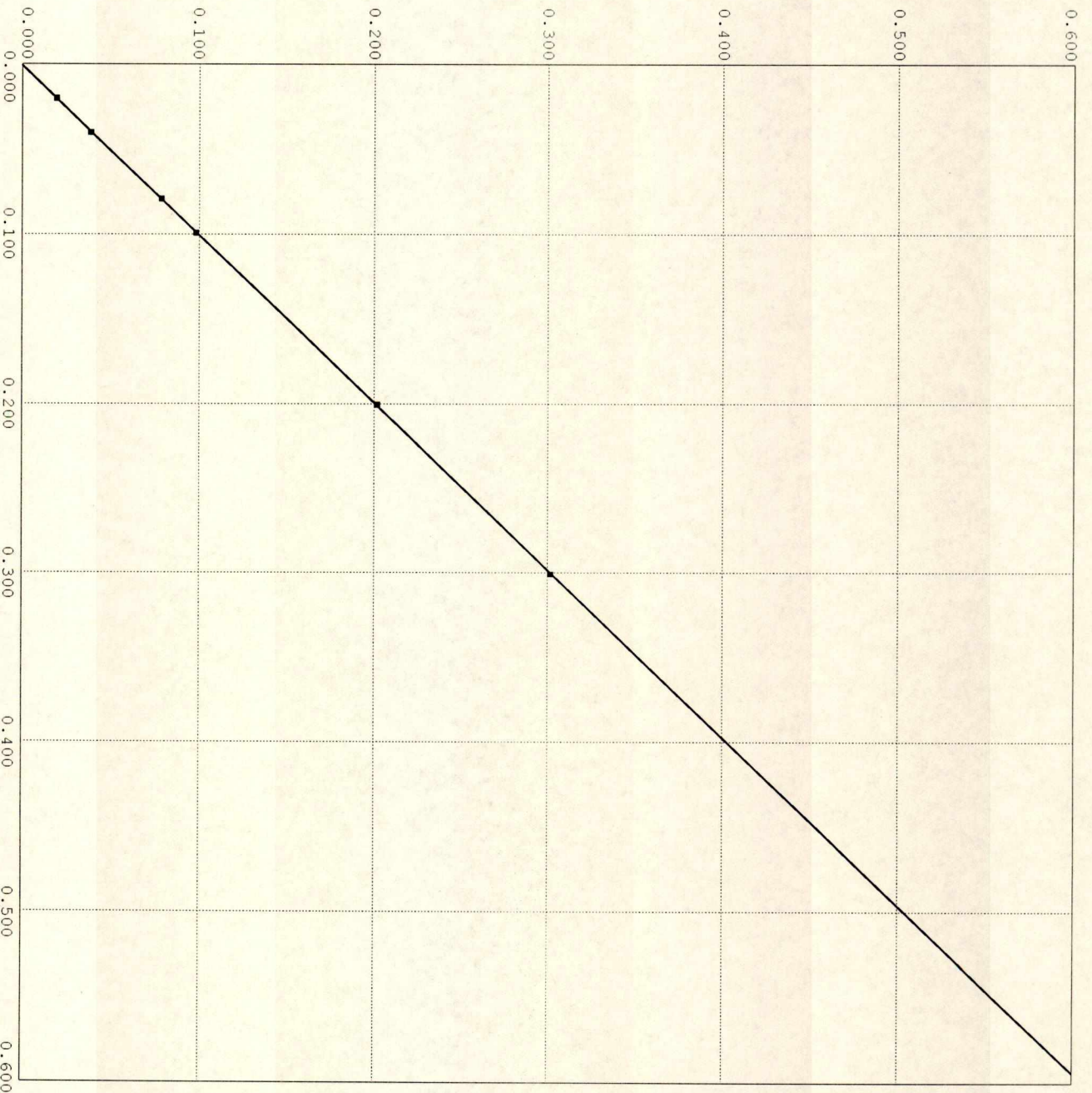
Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 05/29/2018
Time: 11:57:26

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0394	0.0005
0.079	0.0796	0.0005
0.099	0.0992	0.0004
0.200	0.2026	0.0005
0.300	0.3024	0.0005

SLOPE = 1.011238
R² = 0.999974



Handwritten signature

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100377

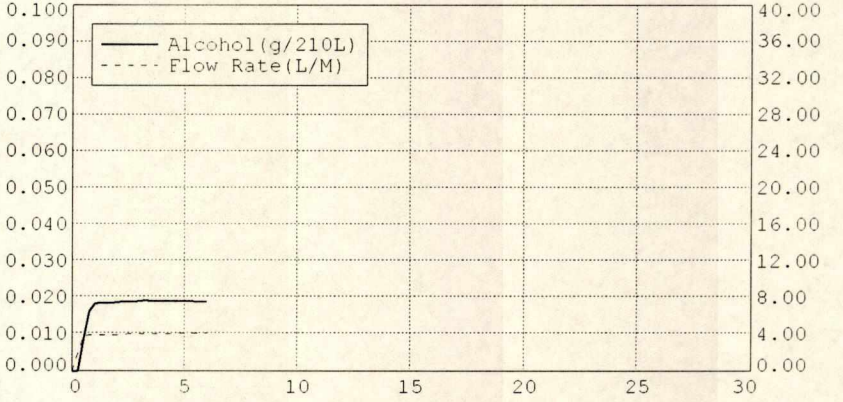
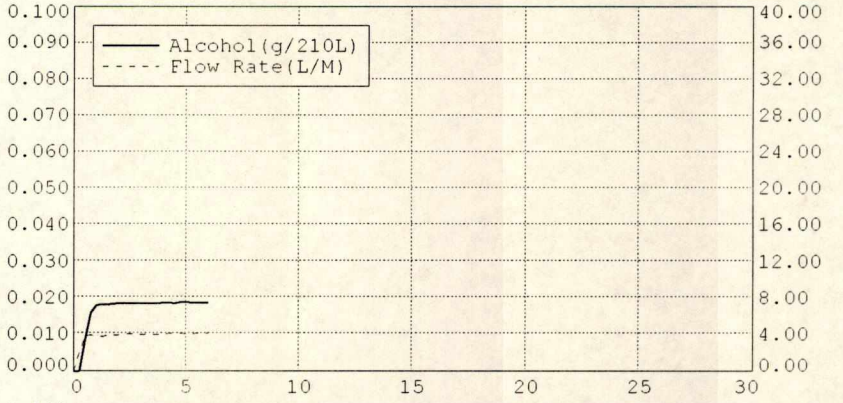
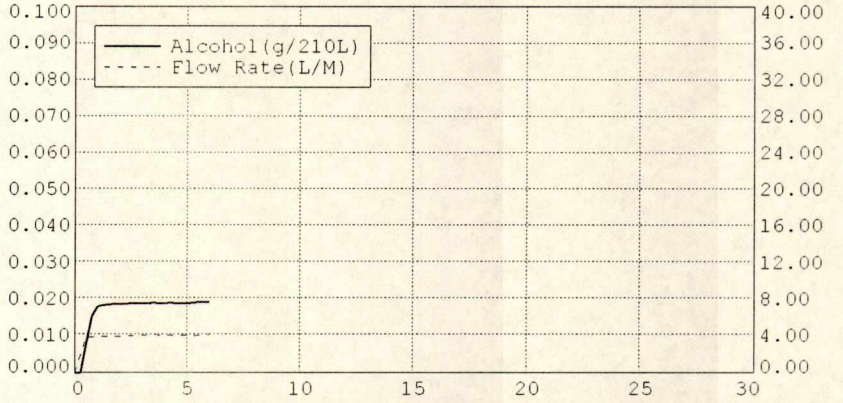
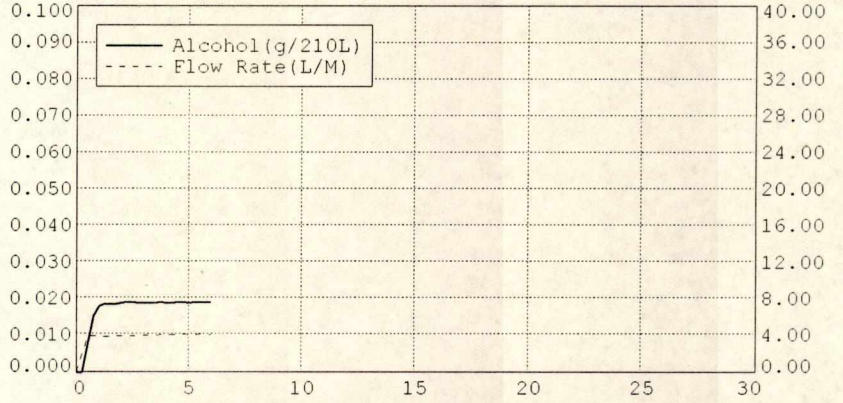
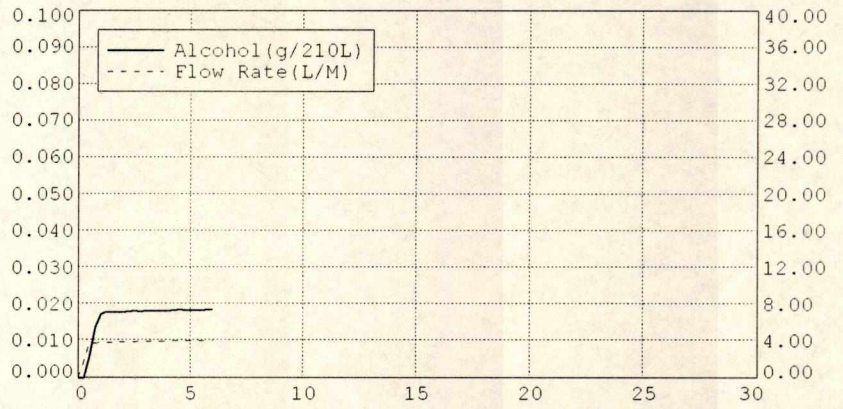
Date: 05/29/2018
Time: 11:57:28

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.71: 0.020
LOT #: AG616504
EXPIRATION: 06/13/2018
TANK PRESSURE: 1047 psi

BLANK TEST	0.000	11:58
INTERNAL STANDARD	VERIFIED	11:58
EXTERNAL STANDARD	0.020	11:58
BLANK TEST	0.000	11:59
EXTERNAL STANDARD	0.020	11:59
BLANK TEST	0.000	12:00
EXTERNAL STANDARD	0.020	12:01
BLANK TEST	0.000	12:01
EXTERNAL STANDARD	0.020	12:02
BLANK TEST	0.000	12:03
EXTERNAL STANDARD	0.020	12:03
BLANK TEST	0.000	12:04

Average = 0.0200
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100377

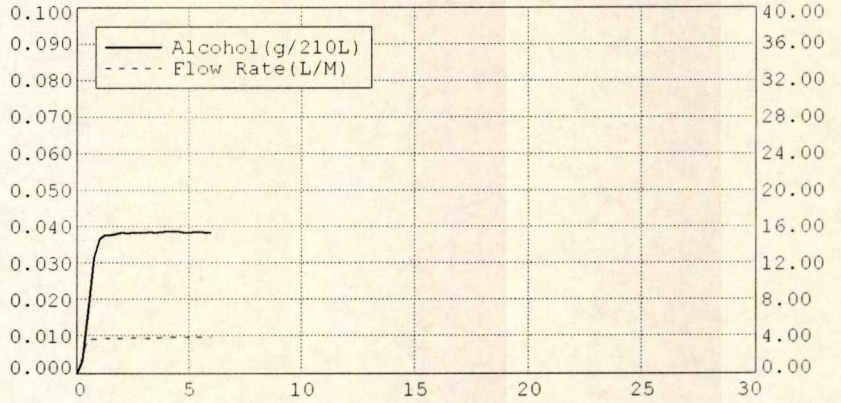
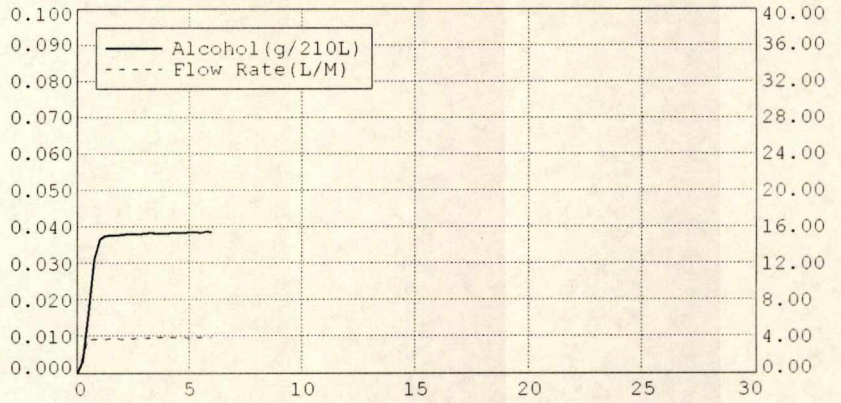
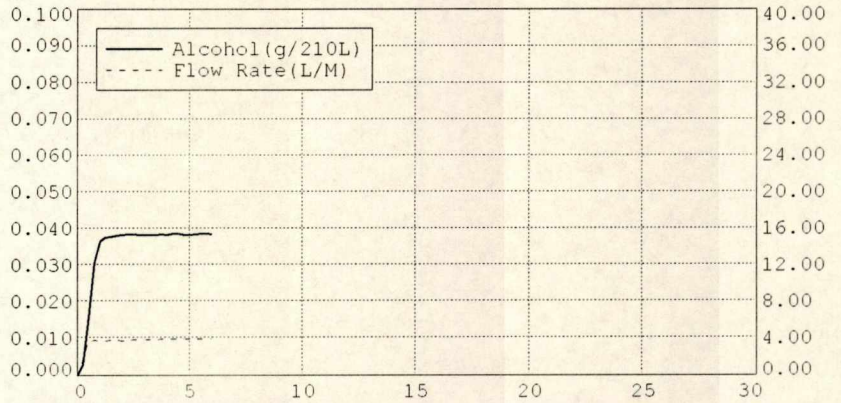
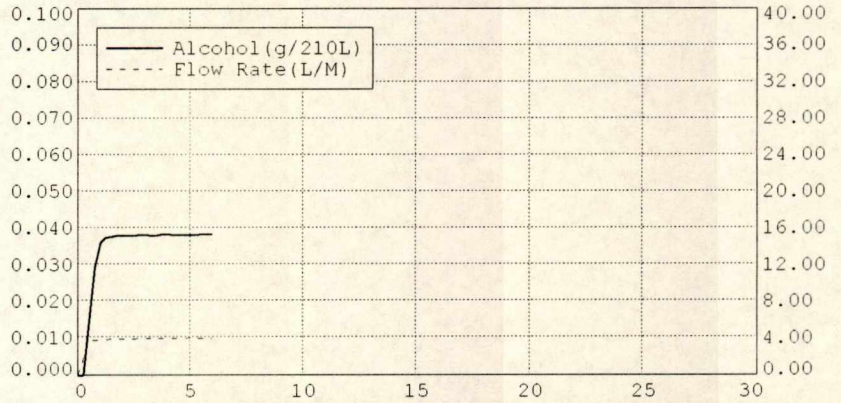
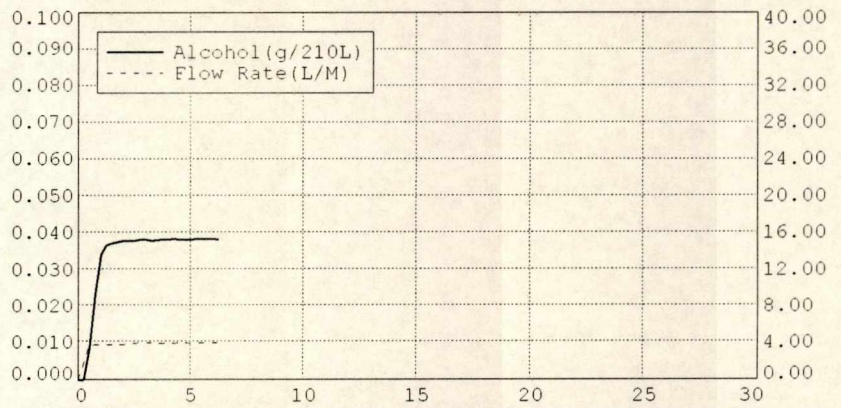
Date: 05/29/2018
Time: 12:06:44

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.72: 0.040
LOT #: AG630101
EXPIRATION: 10/27/2018
TANK PRESSURE: 972 psi

BLANK TEST	0.000	12:08
INTERNAL STANDARD	VERIFIED	12:08
EXTERNAL STANDARD	0.039	12:08
BLANK TEST	0.000	12:09
EXTERNAL STANDARD	0.039	12:09
BLANK TEST	0.000	12:10
EXTERNAL STANDARD	0.039	12:10
BLANK TEST	0.000	12:11
EXTERNAL STANDARD	0.040	12:11
BLANK TEST	0.000	12:12
EXTERNAL STANDARD	0.040	12:12
BLANK TEST	0.000	12:13

Average = 0.0394
Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100377

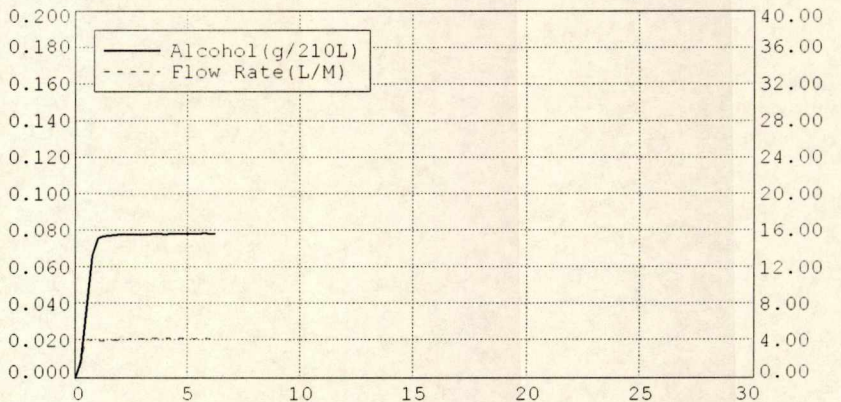
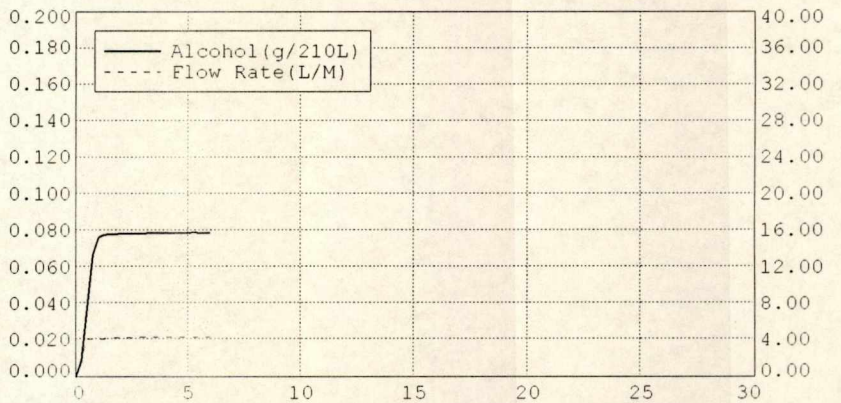
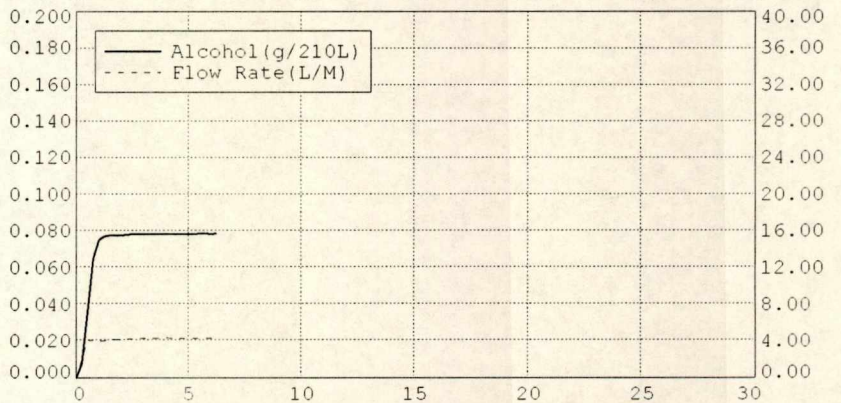
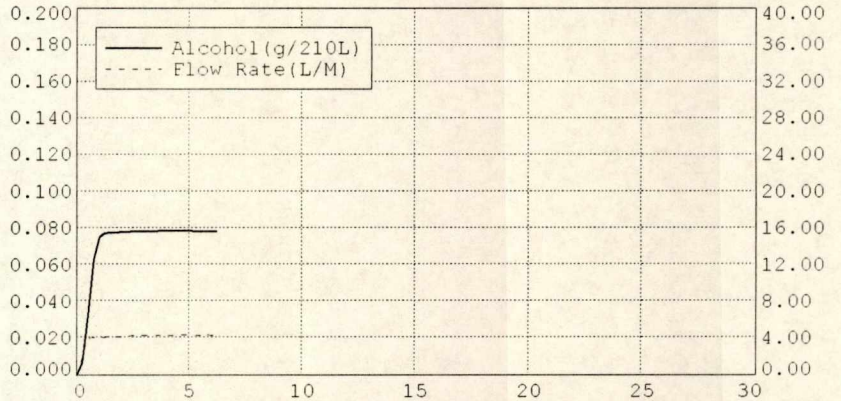
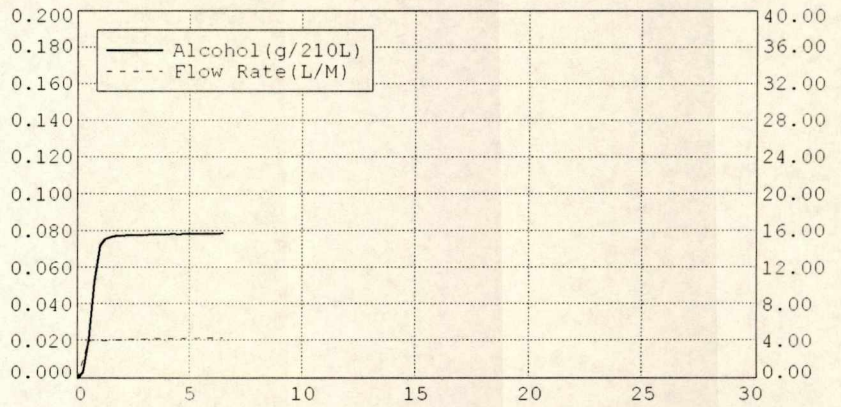
Date: 05/29/2018
Time: 12:16:16

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.72: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018
TANK PRESSURE: 1195 psi

BLANK TEST	0.000	12:17
INTERNAL STANDARD	VERIFIED	12:17
EXTERNAL STANDARD	0.080	12:17
BLANK TEST	0.000	12:18
EXTERNAL STANDARD	0.080	12:19
BLANK TEST	0.000	12:19
EXTERNAL STANDARD	0.079	12:20
BLANK TEST	0.000	12:21
EXTERNAL STANDARD	0.080	12:21
BLANK TEST	0.000	12:22
EXTERNAL STANDARD	0.079	12:22
BLANK TEST	0.000	12:23

Average = 0.0796
Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100377

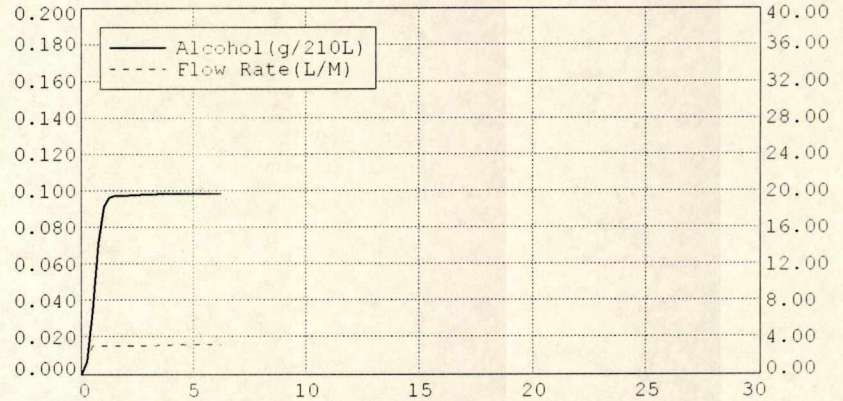
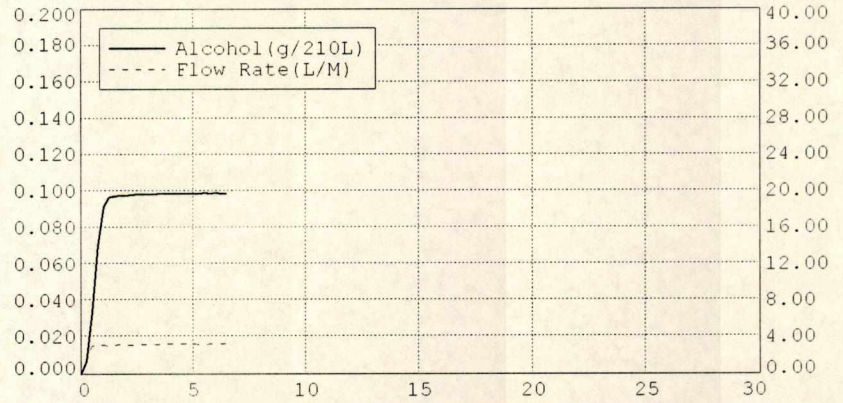
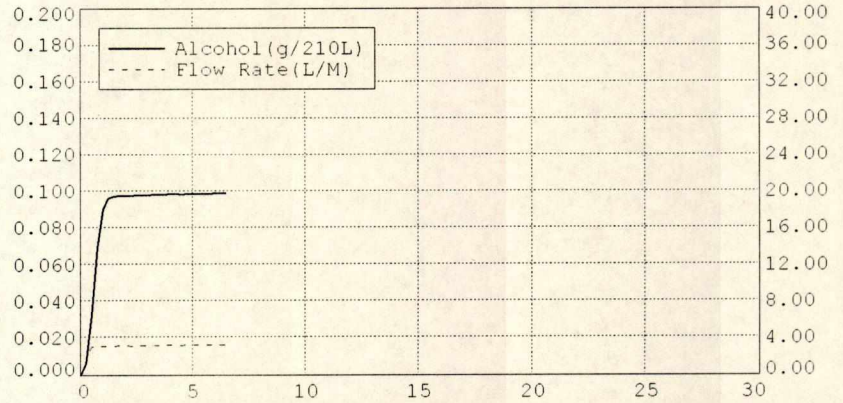
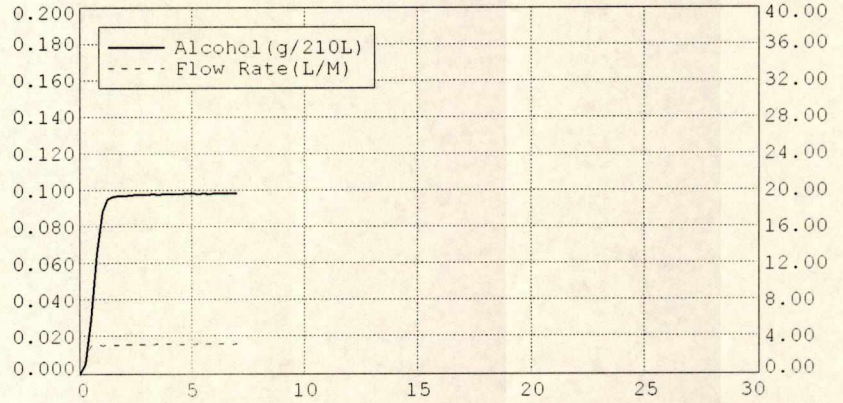
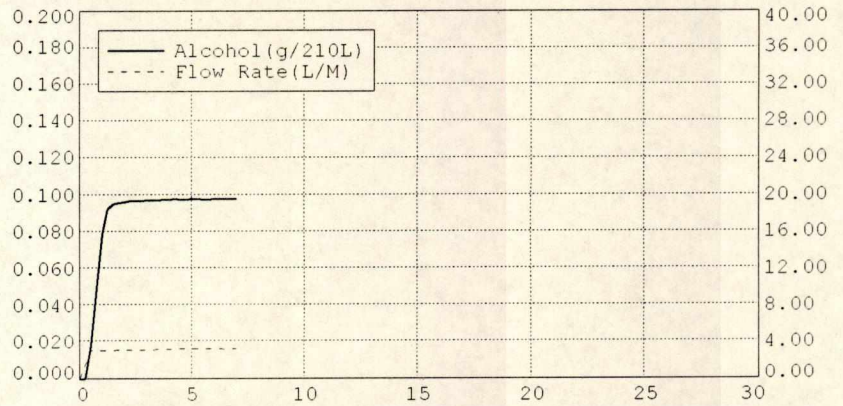
Date: 05/29/2018
Time: 12:28:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.71: 0.099
LOT #: AG629304
EXPIRATION: 10/19/2018
TANK PRESSURE: 539 psi

BLANK TEST	0.000	12:30
INTERNAL STANDARD	VERIFIED	12:30
EXTERNAL STANDARD	0.099	12:30
BLANK TEST	0.000	12:31
EXTERNAL STANDARD	0.099	12:31
BLANK TEST	0.000	12:32
EXTERNAL STANDARD	0.099	12:32
BLANK TEST	0.000	12:33
EXTERNAL STANDARD	0.100	12:33
BLANK TEST	0.000	12:34
EXTERNAL STANDARD	0.099	12:35
BLANK TEST	0.000	12:36

Average = 0.0992
Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100377

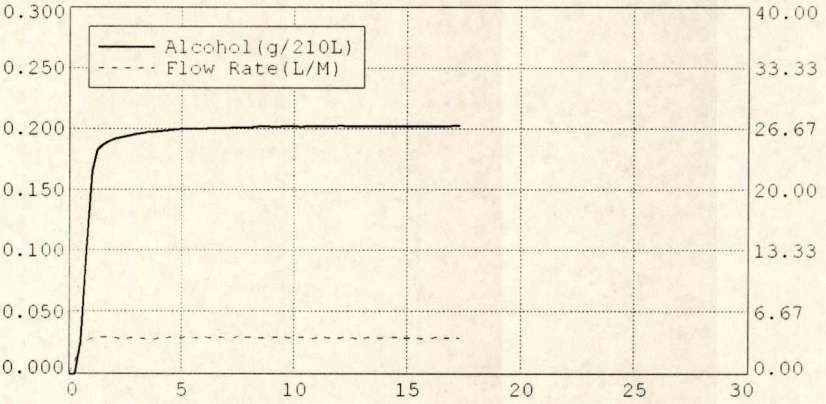
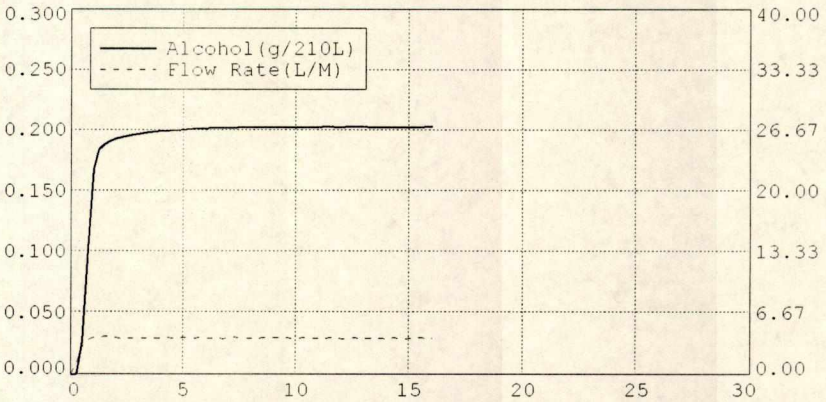
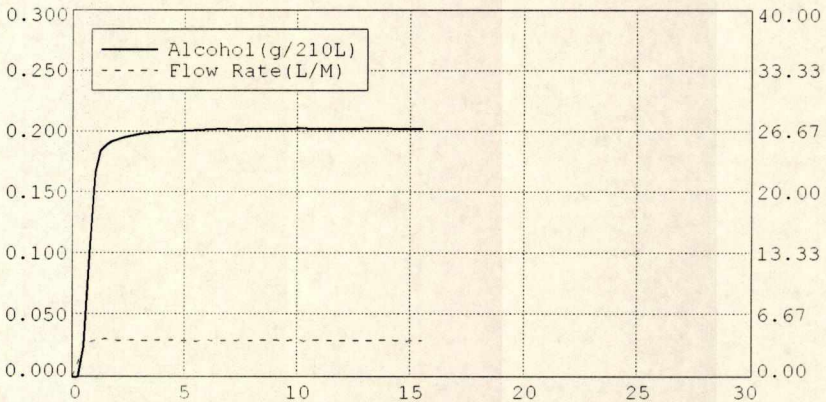
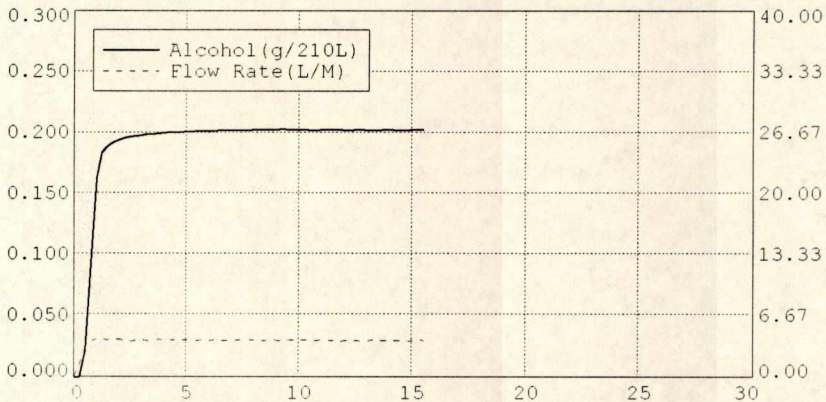
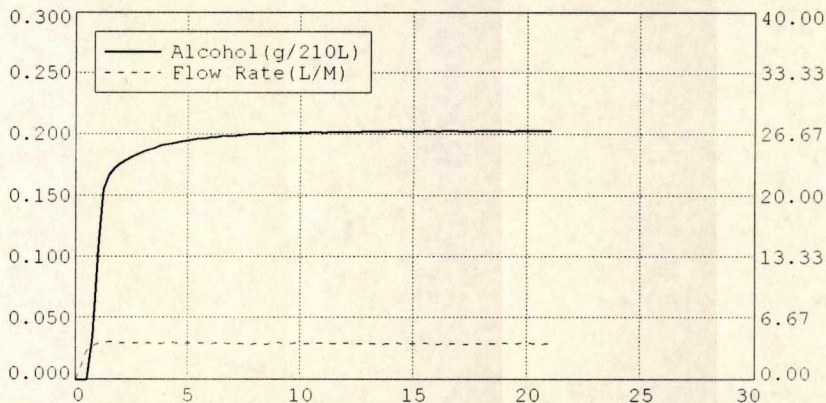
Date: 05/29/2018
 Time: 12:39:14

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: GUTH 17090
 EXPIRATION: 02/24/2019

BLANK TEST	0.000	12:41
INTERNAL STANDARD	VERIFIED	12:41
EXTERNAL STANDARD	0.203	12:41
BLANK TEST	0.000	12:42
EXTERNAL STANDARD	0.202	12:42
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.203	12:44
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.203	12:45
BLANK TEST	0.000	12:46
EXTERNAL STANDARD	0.202	12:46
BLANK TEST	0.000	12:47

Average = 0.2026
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

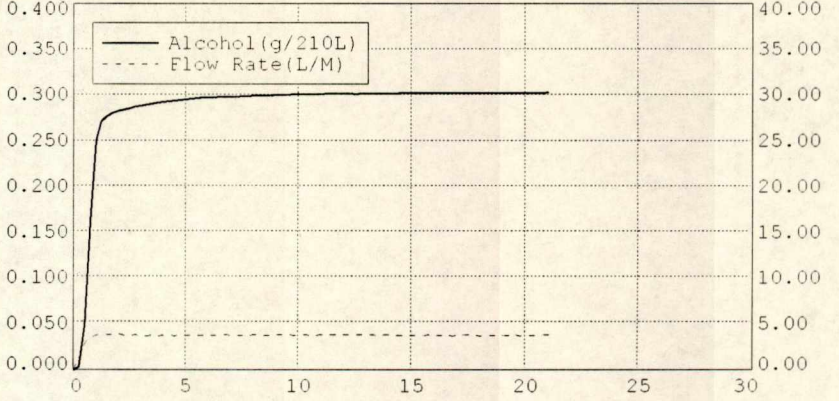
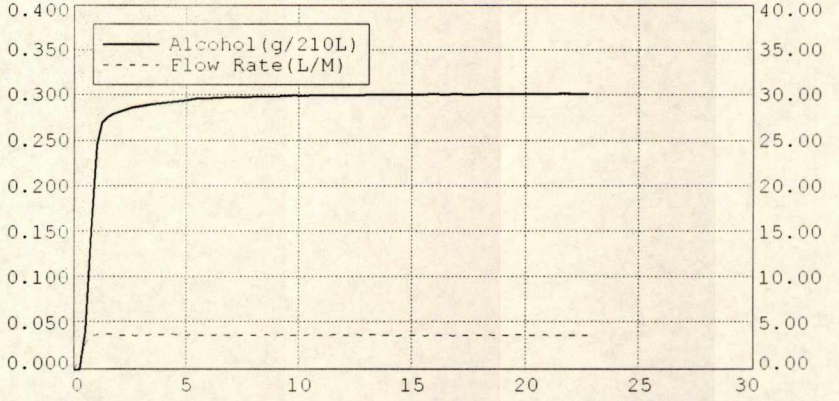
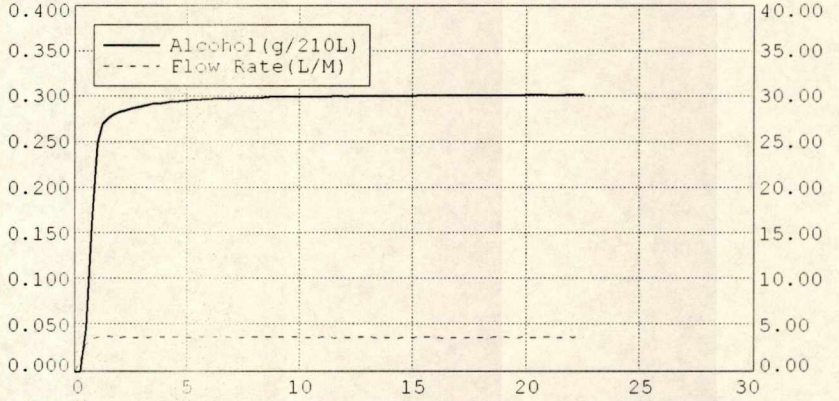
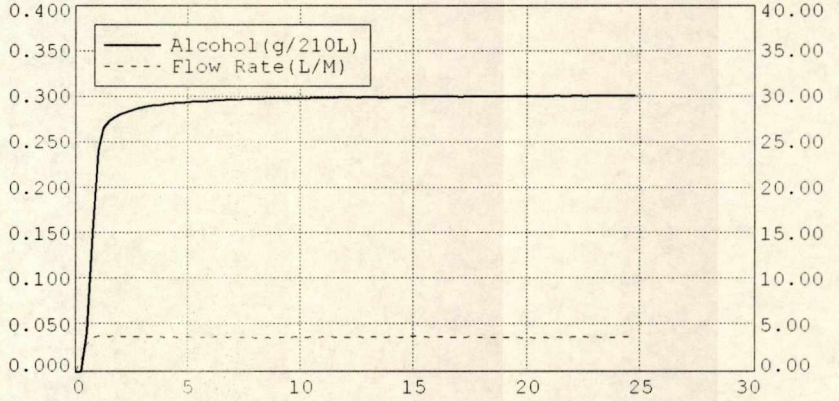
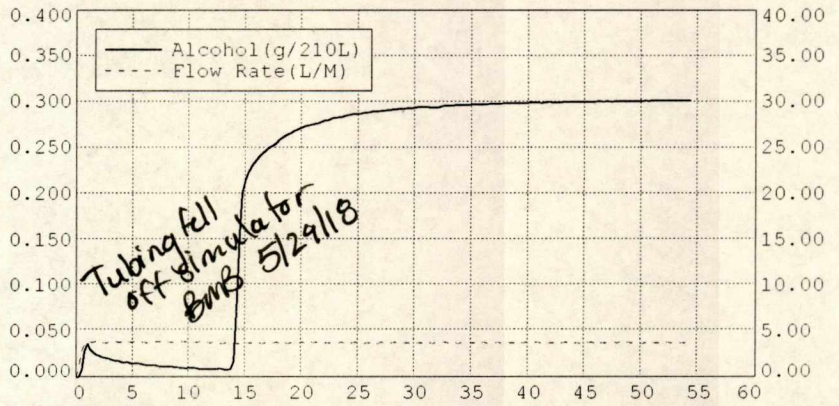
Alaska Department of Public Safety
 DATAMASTER dmt: 100377

Date: 05/29/2018
 Time: 12:58:51

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: GUTH 17140
 EXPIRATION: 05/15/2019

BLANK TEST	0.000	12:59
INTERNAL STANDARD	VERIFIED	13:00
EXTERNAL STANDARD	0.302	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.302	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.303	13:04
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.302	13:05
BLANK TEST	0.000	13:06
EXTERNAL STANDARD	0.303	13:06
BLANK TEST	0.000	13:07

Average = 0.3024
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 05/30/2018
Time: 08:11:05

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

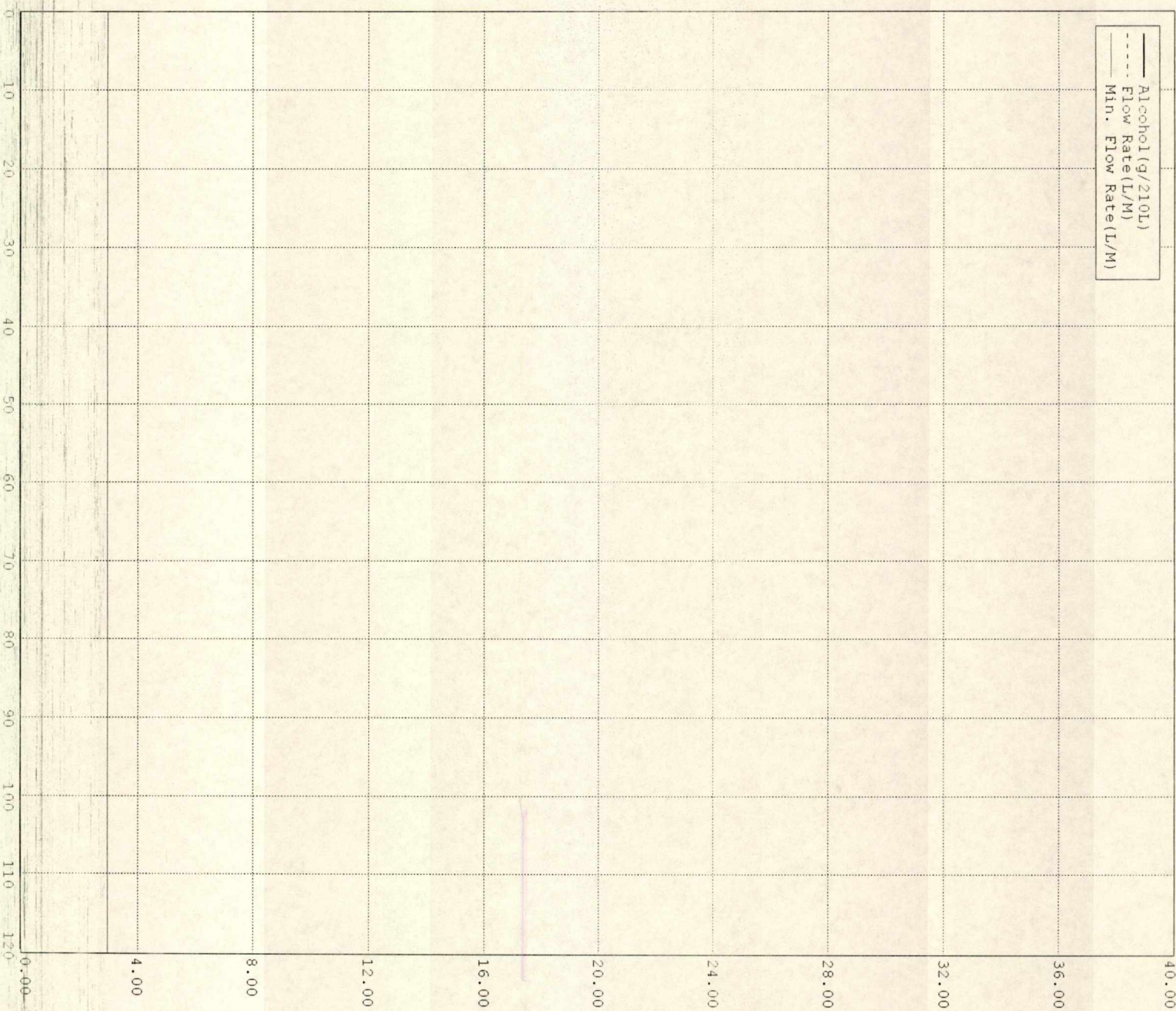
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	08:12
BLANK TEST	0.000	08:12
INTERNAL STANDARD	VERIFIED	08:12
EXTERNAL STANDARD	0.079	08:12
BLANK TEST	0.000	08:13
SUBJECT SAMPLE	INCOMPLETE	08:15

BBB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 05/30/2018
Time: 08:17:54

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

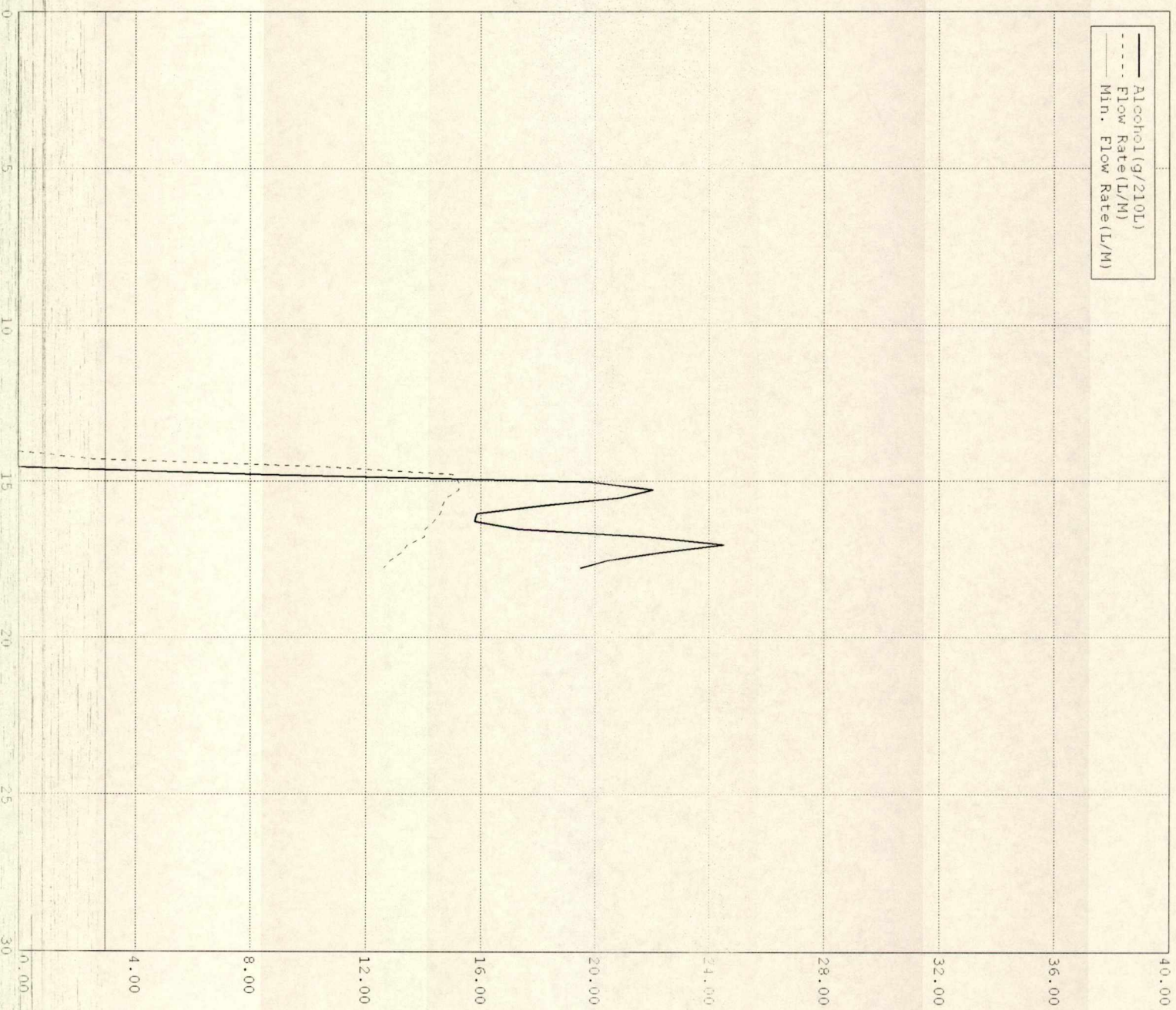
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK	PASSED	08:19
BLANK TEST	0.000	08:19
INTERNAL STANDARD	VERIFIED	08:19
EXTERNAL STANDARD	0.080	08:19
BLANK TEST	0.000	08:20
SUBJECT SAMPLE	INVALID	08:21

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 05/30/2018
Time: 08:23:43

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

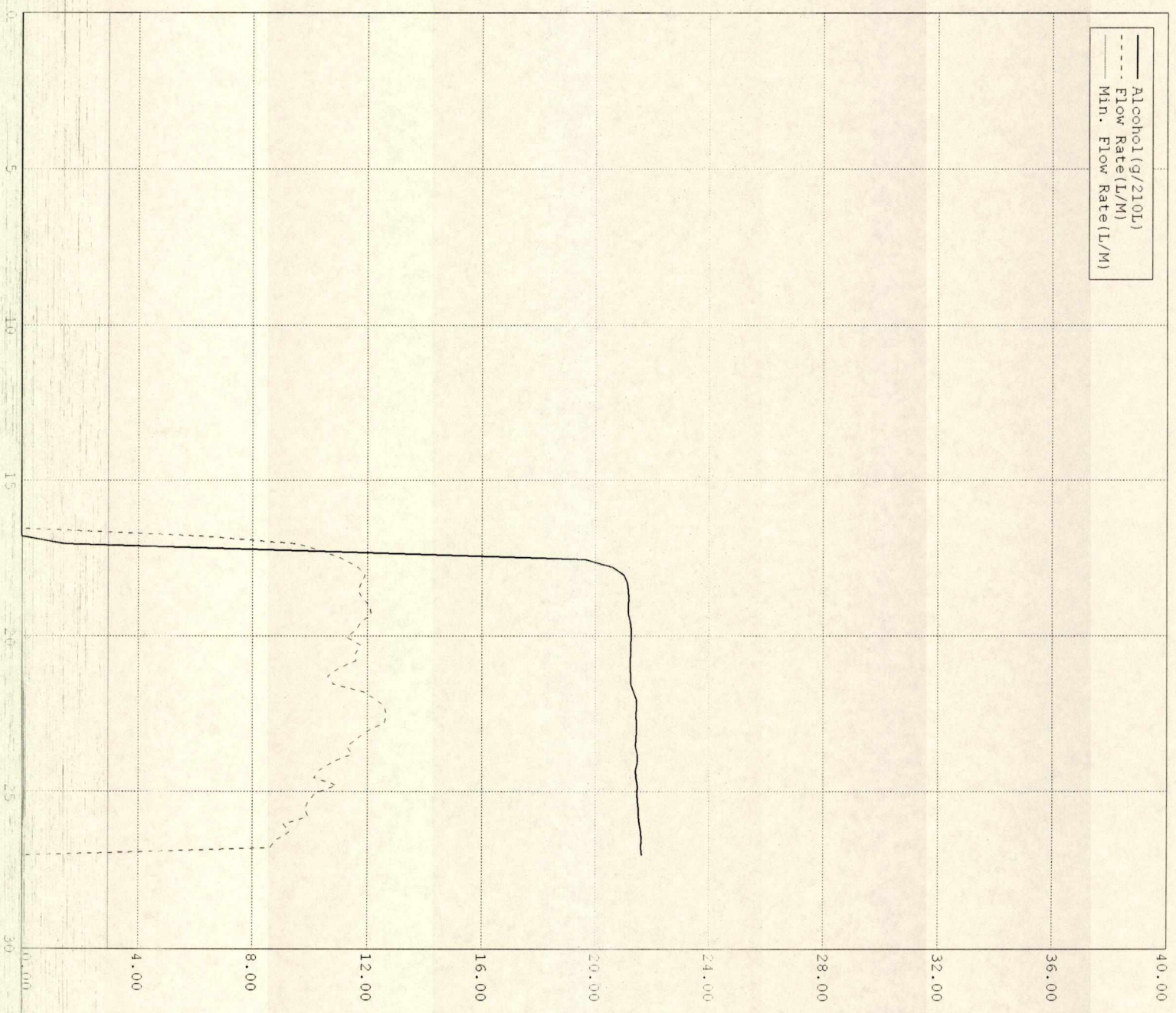
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.73: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	08:25
BLANK TEST	0.000	08:25
INTERNAL STANDARD	VERIFIED	08:25
Xq = 0.081 (0.43%)		
EXTERNAL STANDARD	0.080	08:25
X[1] = 0.0796 (0.0001)	(0.0002)	
BLANK TEST	0.000	08:26
SUBJECT SAMPLE	XXX	08:26
X[1] = 0.1088 (-0.0138)	(-0.0009)	

Interference Detected

Filter 2 Avg: 0.0000
Filter 3 Avg: 0.6602
BMB 5/31/18

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 05/30/2018
Time: 08:29:56

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

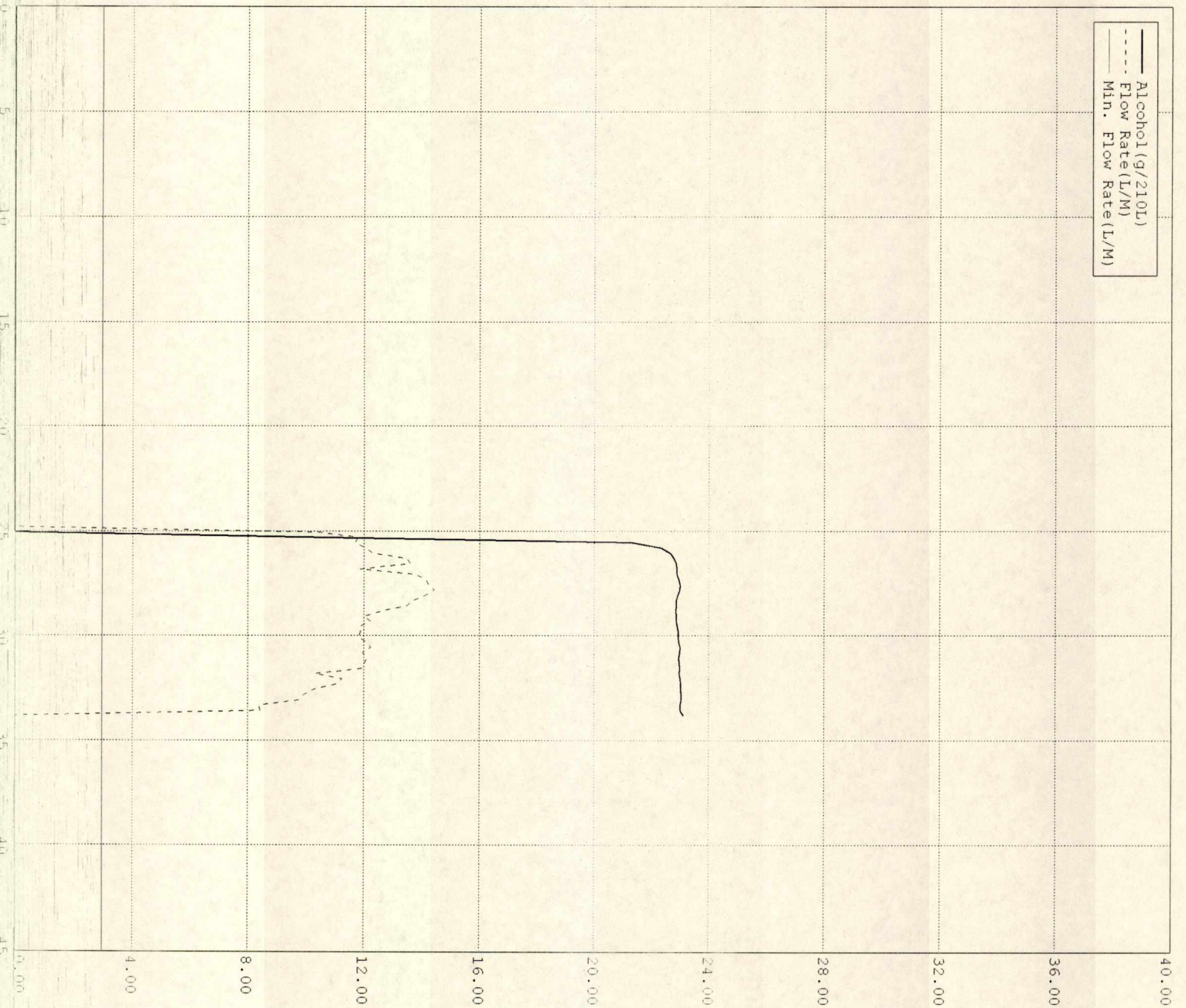
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.73: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	08:31
BLANK TEST	0.000	08:31
INTERNAL STANDARD	VERIFIED	08:31
Xq = 0.082 (1.07%)		
EXTERNAL STANDARD	0.079	08:31
X[1] = 0.0795 (-0.0002) (0.0001)		
BLANK TEST	0.000	08:32
SUBJECT SAMPLE	XXX	08:33
X[1] = 0.1162 (-0.0265) (-0.0003)		

Interference Detected

BBB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 05/30/2018
Time: 08:37:25

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

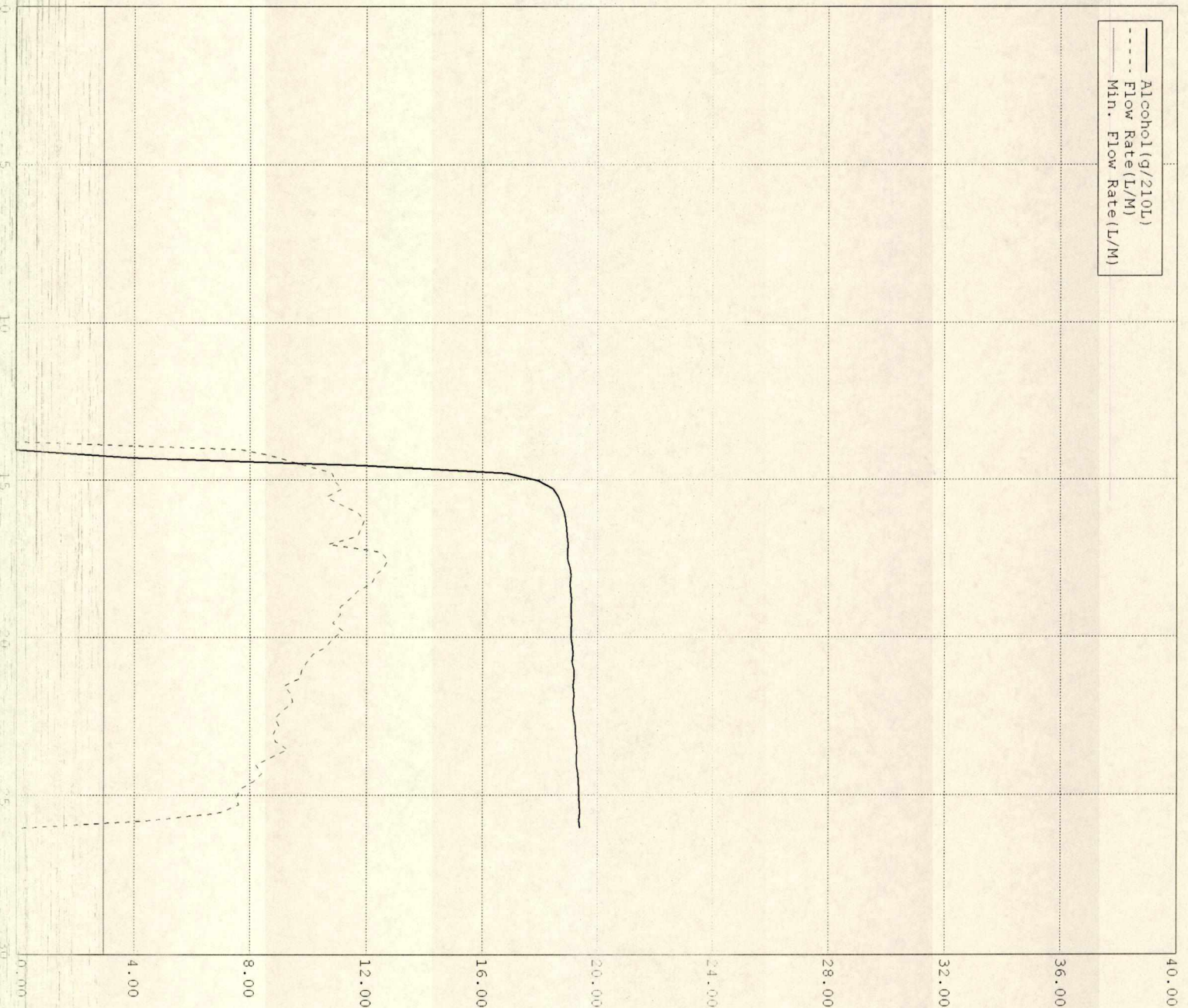
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.73: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	08:41
BLANK TEST	0.000	08:41
INTERNAL STANDARD	VERIFIED	08:41
Xq = 0.082 (0.43%)		
EXTERNAL STANDARD	0.080	08:41
X[1] = 0.0797 (0.0003)	(0.0001)	
BLANK TEST	0.000	08:42
SUBJECT SAMPLE (Vol=2.01L)	0.097	08:43
X[1] = 0.0977 (0.0004)	(-0.0014)	
BLANK TEST	0.000	08:43
EXTERNAL STANDARD	0.079	08:44
X[1] = 0.0790 (-0.0002)	(0.0003)	
BLANK TEST	0.000	08:45

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 05/30/2018
Time: 08:52:49

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

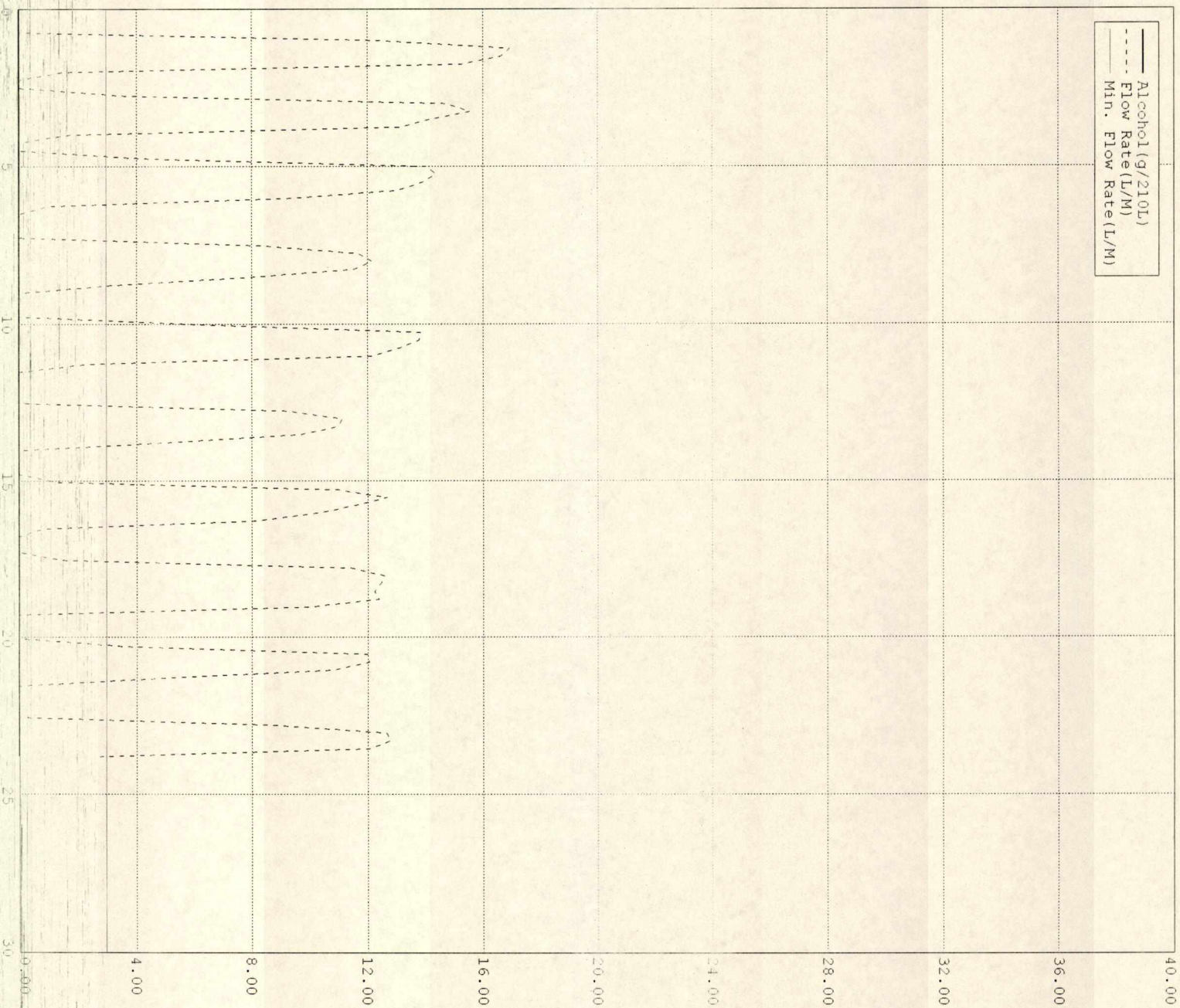
DEPT/AGENCY:
EXCEEDED ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.73: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	08:54
BLANK TEST	0.000	08:54
INTERNAL STANDARD	VERIFIED 0.080	08:54
EXTERNAL STANDARD	0.080	08:54
BLANK TEST	0.000	08:55
SUBJECT SAMPLE	XXX	08:56

Maximum Attempts Exceeded

Handwritten signature



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 05/30/2018
Time: 09:02:53

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

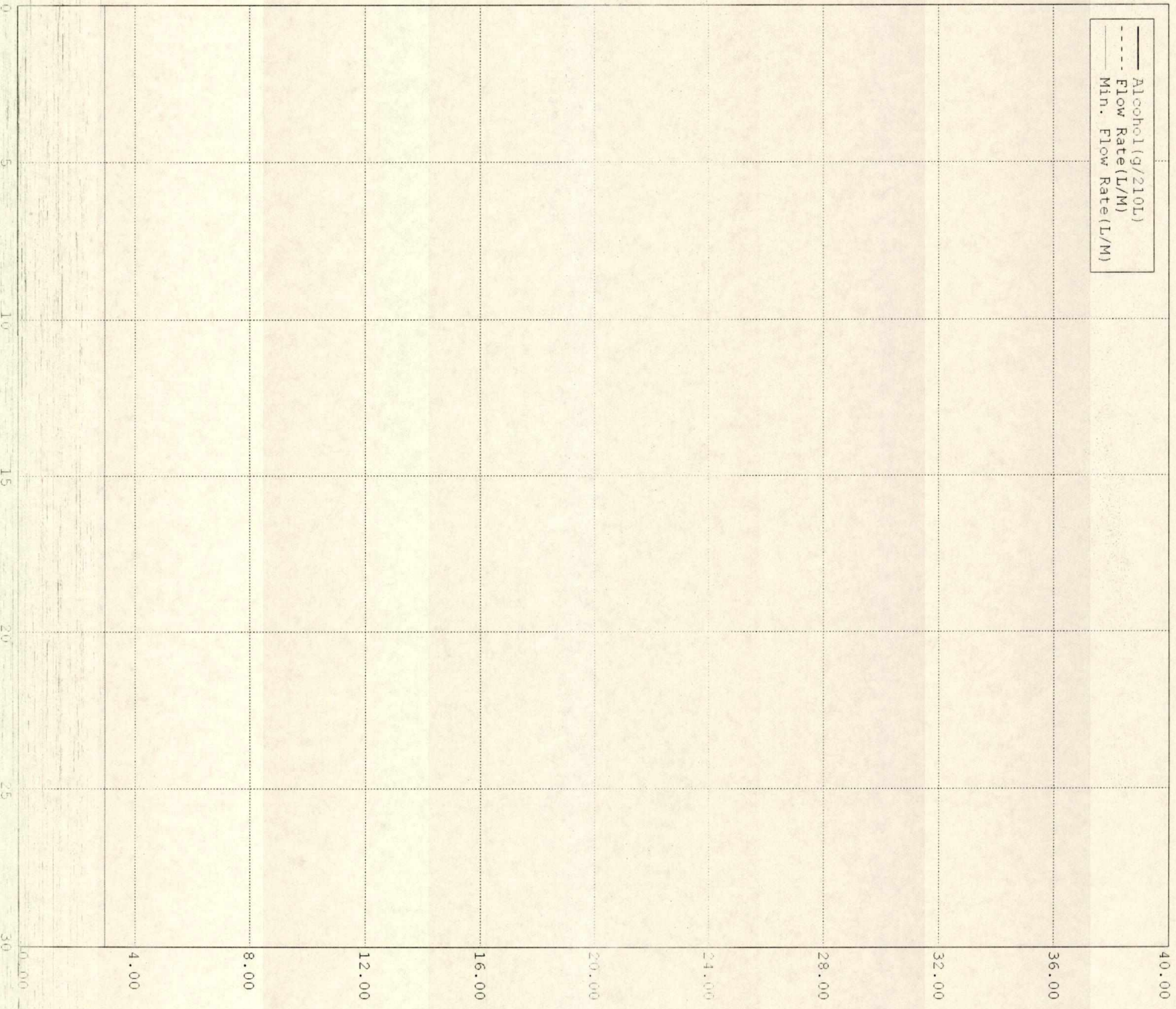
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	09:04
BLANK TEST	0.000	09:04
INTERNAL STANDARD	VERIFIED	09:04
EXTERNAL STANDARD	0.079	09:04
BLANK TEST	0.000	09:05

RFI DETECTED

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 05/30/2018
Time: 09:17:57

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 29.72: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:19
INTERNAL STANDARD	0.000	09:19
EXTERNAL STANDARD	0.080	09:19
BLANK TEST	0.000	09:20
SUBJECT SAMPLE (Vol=2.17L)	0.000	09:21
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.080	09:22
BLANK TEST	0.000	09:23

