

# 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 100370 Analyst Brandi Barnett Start Date 4/17/19

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 AG805804 Exp 2/27/20

ii. 0.040g/210L Mnf Airgas Lot AG733403 Exp 11/30/19

iii. 0.080g/210L Mnf Airgas Lot AG826101 Exp 9/18/20

iv. 0.100g/210L Mnf Airgas Lot AG805903 Exp 2/28/20

v. 0.200g/210L Mnf Guth Lot 17340 Exp 10/9/19

1. Simulator S/N DR4177 Date Calibrated 6/4/18

vi. 0.300g/210L Mnf Guth Lot 17350 Exp 10/11/19

1. Simulator S/N DR6267 Date Calibrated 6/4/18

5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

d. Exceeded attempts

i. Acetone - Mnf Guth Lot 18070 Level 0.100 Exp 2/26/20

1. Simulator S/N SD1198 Date Calibrated 3/16/19 3/6/19 <sup>8MB</sup> 5/31/19

ii. Isopropanol - Mnf Guth Lot 18070 Level 0.100 Exp 2/26/20

1. Simulator S/N DR4176 Date Calibrated 6/4/18

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

1. Simulator S/N DR4163 Date Calibrated 6/4/18

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 4/19/19

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100370  
-----

Date: 04/17/2019  
Time: 09:41:01

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 47.7°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.90 V PASSED  
(1.06 V - 2.48 V)  
Cooler Voltage = 1.76 V PASSED  
(1.06 V - 2.46 V)  
Bias Voltage = 79 V PASSED  
(48 V - 112 V)  
Chopper Freq = 539 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.3 in

PUMP INFO

Flow Rate = 4.605 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 = 0.090 1.08% (0.00% - 4.00%)

Technician Screen

-----  
DATAMASTER dmt: 100370  
-----

Date: 04/17/2019  
Time: 9:51 AM

Temperatures (°C)

Sample Cell: 48.9°C  
Breath Tube: 47.4°C

Current Barometer 29.3 in  
Volume (Ltr) 1.54

Settings

Lamp: 1.93 V  
Bias: 79 V  
Cooler: 1.76 V  
Chopper: 539 Hz

Voltages (V)

Flow: 1.05 V  
Detector: 0.038 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100370  
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Date: 09/13/2010  
Time: 17:02:07

Ca = 0.1000  
CAL = 0.985723    0.800 <= CAL < 1.200  
b1 = 0.0000    0.0000 <= b1 < 0.0040  
b2 = 0.0023    0.0010 <= b2 < 0.0100  
b3 = 0.0000    0.0000 <= b3 < 0.0040  
Xq = 0.0889    0.0500 <= Xq < 0.2000  
a21 = 1.164153    1.050 <= a21 < 1.300  
a31 = 0.465013    0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

Date: 04/17/2019  
Time: 09:54:08

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

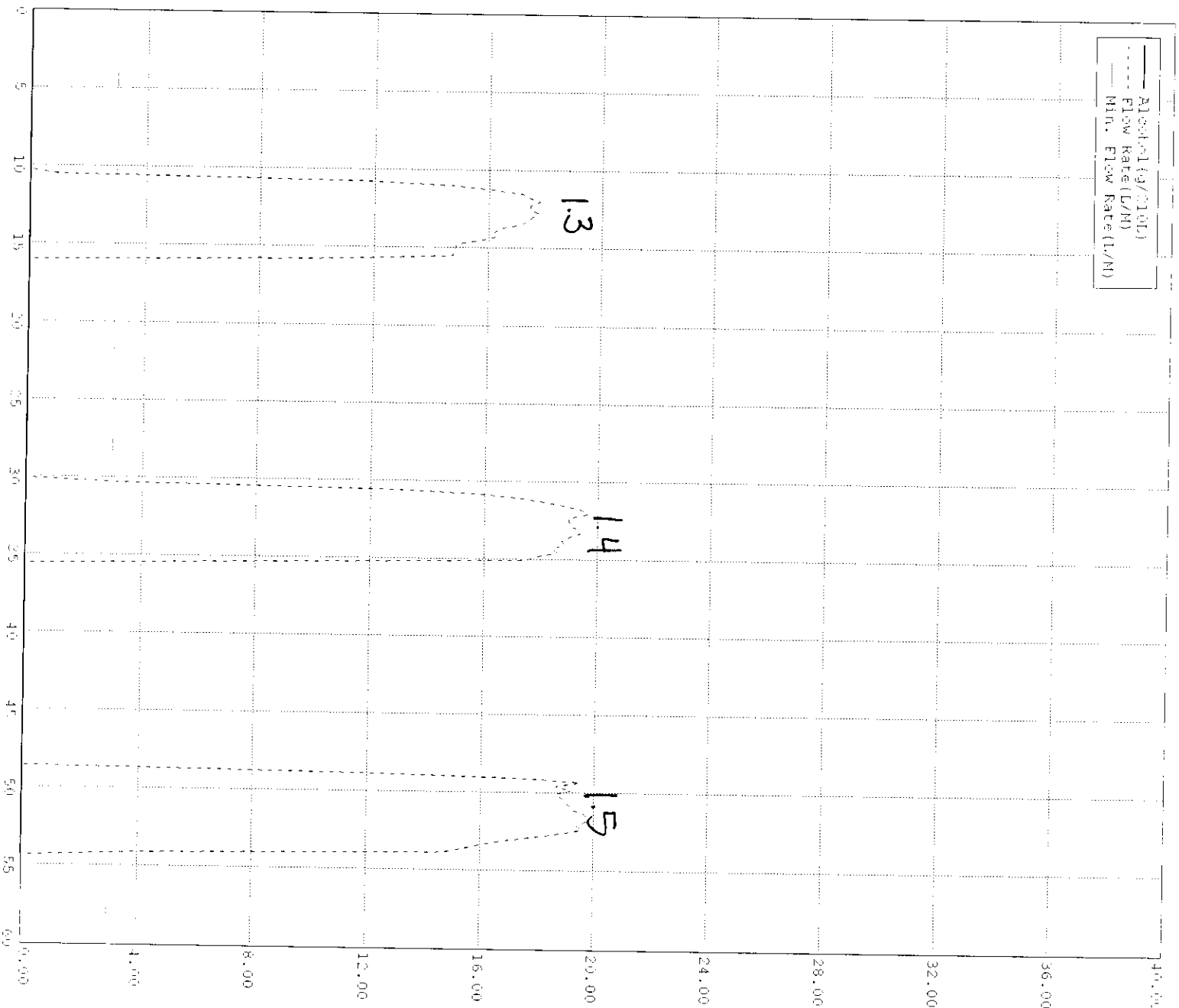
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

DEPT/AGENCY: Minimum volume  
~~MINIMUM VOLUME~~ BMB 5/2/19  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.32: 0.078  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	09:55
BLANK TEST	0.000	09:55
INTERNAL STANDARD	VERIFIED	09:55
EXTERNAL STANDARD	0.078	09:56
BLANK TEST	0.000	09:56
SUBJECT SAMPLE (Vol=1.60L)	0.000	09:57
BLANK TEST	0.000	09:58
EXTERNAL STANDARD	0.078	09:59
BLANK TEST	0.000	09:59

BMB



LINEARITY CHECK

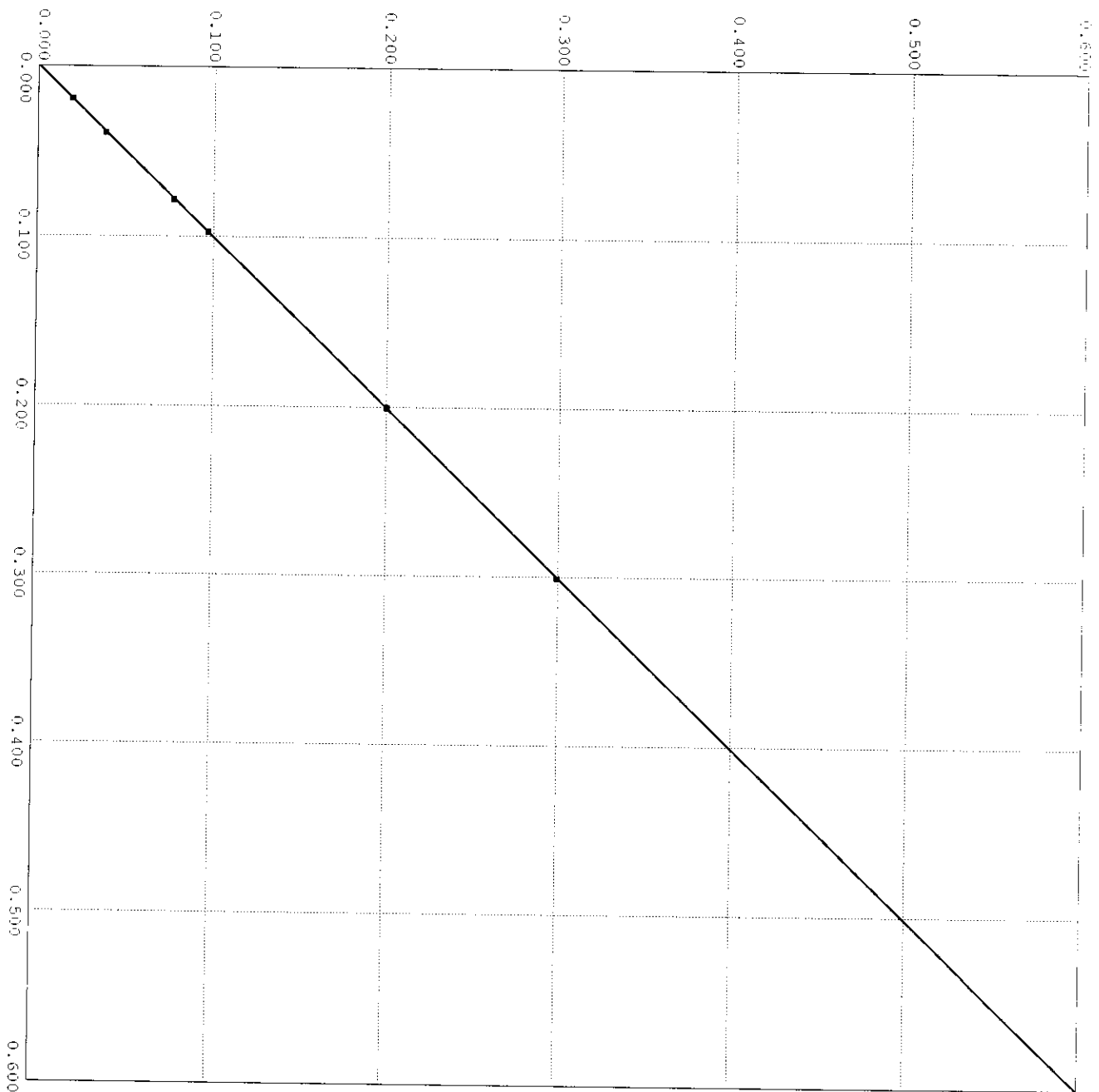
Alaska Department of Public Safety  
DATAMASTER dmt: 100370

Date: 04/18/2019  
Time: 09:14:48

SUPERVISOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.019	0.0202	0.0004
0.039	0.0390	0.0007
0.078	0.0780	0.0000
0.097	0.0980	0.0000
0.200	0.2010	0.0007
0.300	0.3000	0.0000

SLOPE = 0.998770  
R<sup>2</sup> = 0.999971



*BMB*

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100370

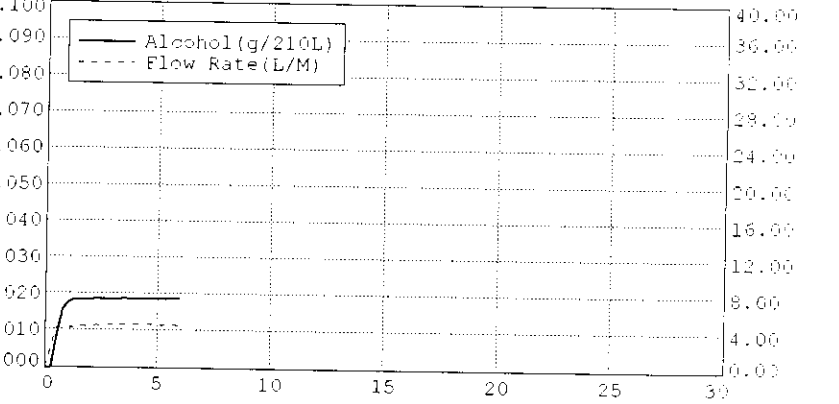
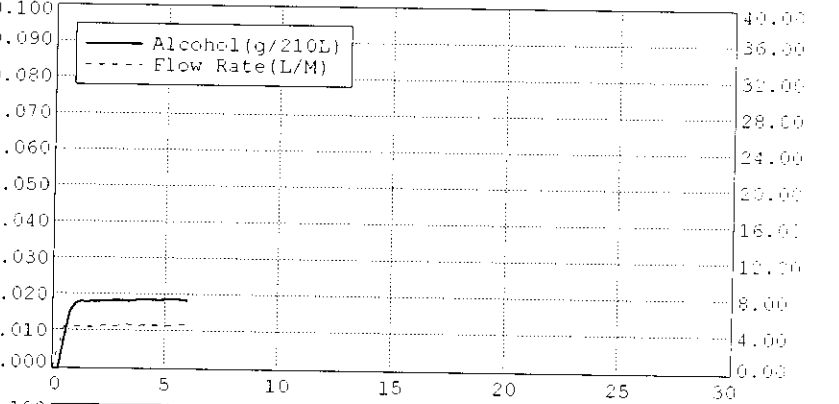
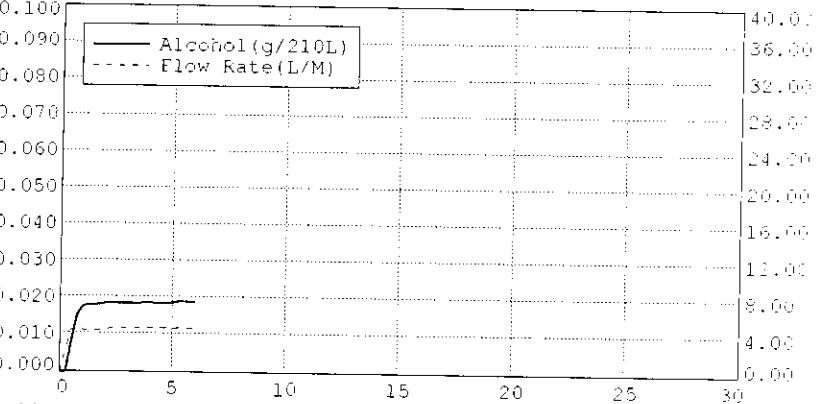
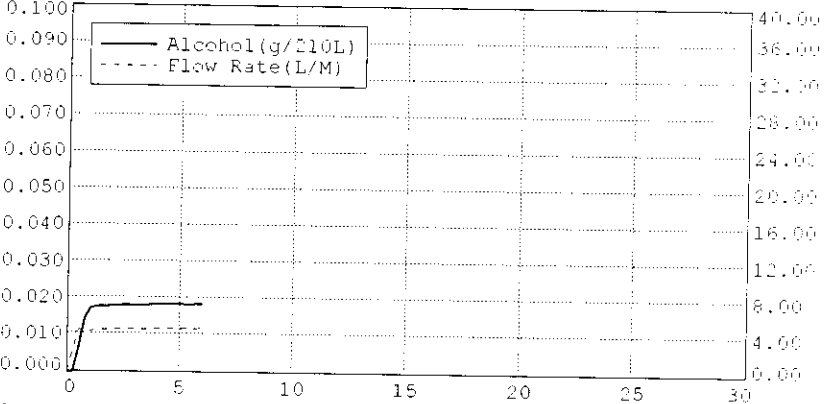
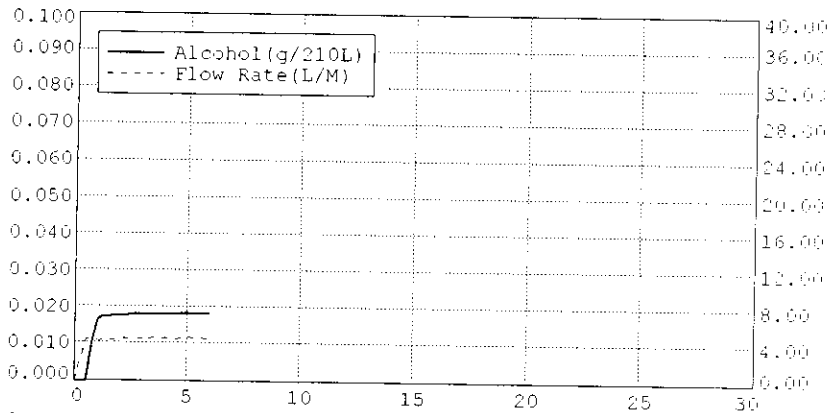
Date: 04/18/2019  
 Time: 09:14:51

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.15: 0.019  
 LOT #: AG805804  
 EXPIRATION: 02/27/2020  
 TANK PRESSURE: 765 psi

BLANK TEST	0.000	09:16
INTERNAL STANDARD	VERIFIED	09:16
EXTERNAL STANDARD	0.020	09:16
BLANK TEST	0.000	09:17
EXTERNAL STANDARD	0.020	09:17
BLANK TEST	0.000	09:18
EXTERNAL STANDARD	0.020	09:18
BLANK TEST	0.000	09:19
EXTERNAL STANDARD	0.020	09:19
BLANK TEST	0.000	09:20
EXTERNAL STANDARD	0.021	09:20
BLANK TEST	0.000	09:21

Average = 0.0202  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

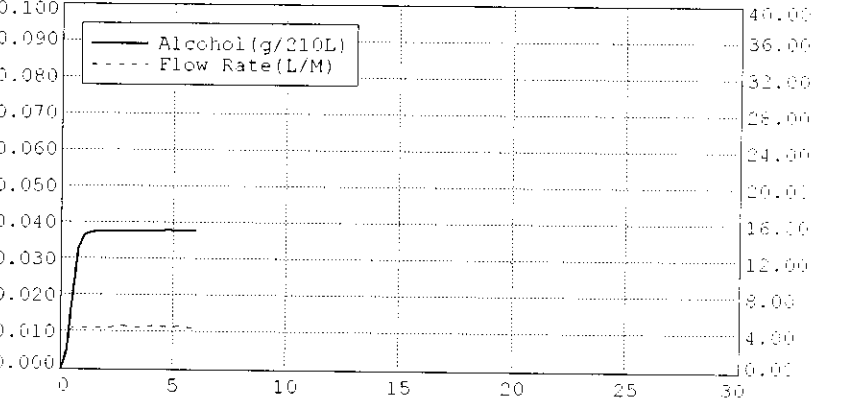
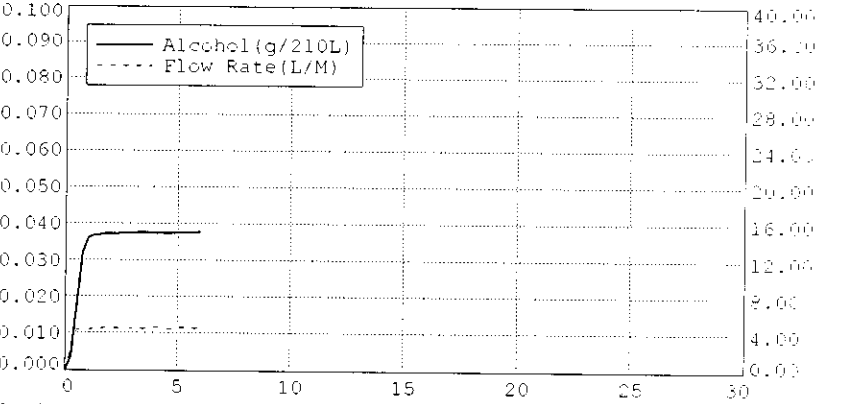
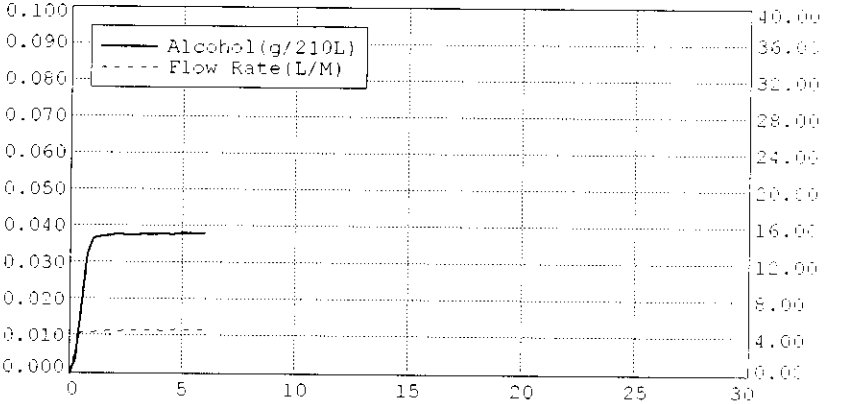
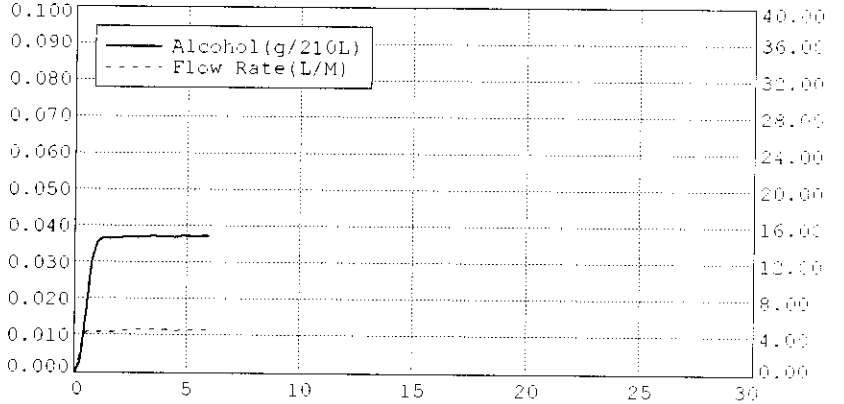
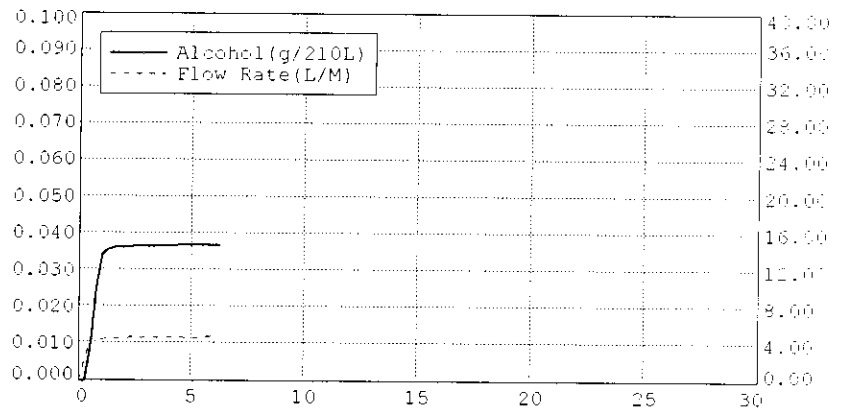
Date: 04/18/2019  
Time: 09:24:45

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
TARGET AT 29.15: 0.039  
LOT #: AG733403  
EXPIRATION: 11/30/2019  
TANK PRESSURE: 761 psi

BLANK TEST	0.000	09:26
INTERNAL STANDARD	VERIFIED	09:26
EXTERNAL STANDARD	0.038	09:26
BLANK TEST	0.000	09:27
EXTERNAL STANDARD	0.039	09:28
BLANK TEST	0.000	09:28
EXTERNAL STANDARD	0.039	09:29
BLANK TEST	0.000	09:30
EXTERNAL STANDARD	0.040	09:30
BLANK TEST	0.000	09:31
EXTERNAL STANDARD	0.039	09:31
BLANK TEST	0.000	09:32

Average = 0.0390  
Std Dev = 0.0007





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100370

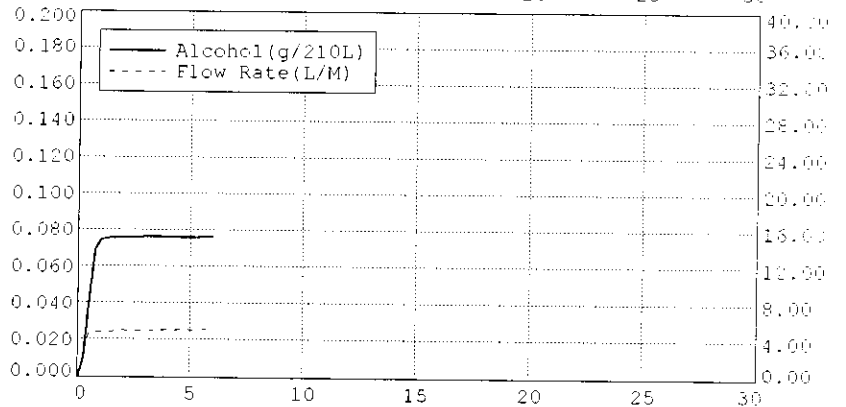
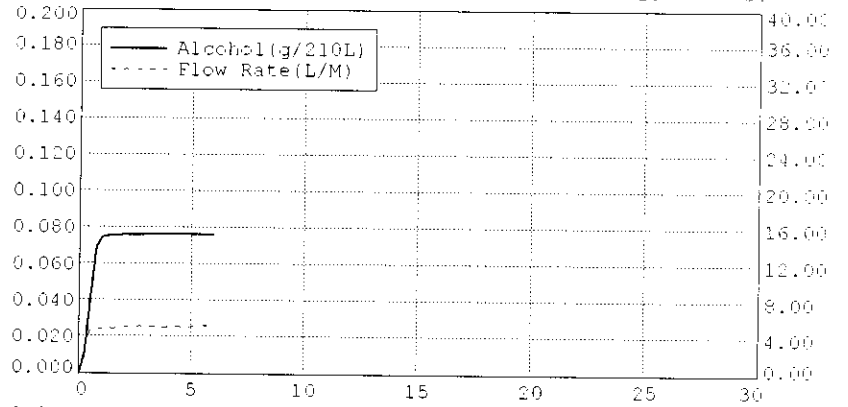
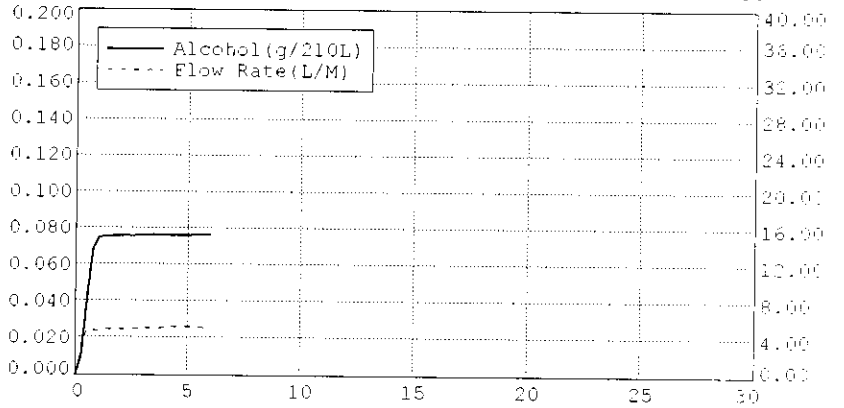
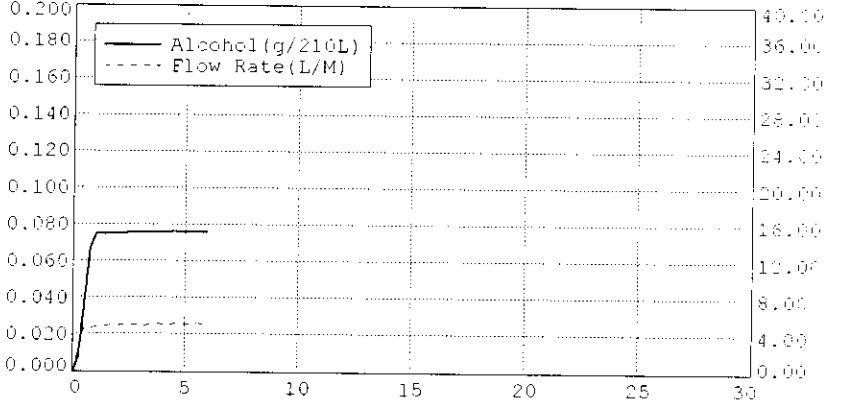
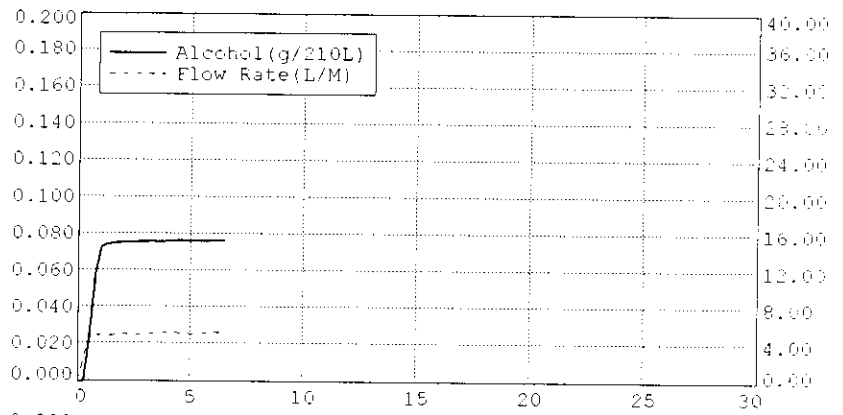
Date: 04/18/2019  
 Time: 09:38:24

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.15: 0.078  
 LOT #: AG826101  
 EXPIRATION: 09/18/2020  
 TANK PRESSURE: 1004 psi

BLANK TEST	0.000	09:41
INTERNAL STANDARD	VERIFIED	09:42
EXTERNAL STANDARD	0.078	09:42
BLANK TEST	0.000	09:43
EXTERNAL STANDARD	0.078	09:43
BLANK TEST	0.000	09:44
EXTERNAL STANDARD	0.078	09:44
BLANK TEST	0.000	09:45
EXTERNAL STANDARD	0.078	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.078	09:46
BLANK TEST	0.000	09:47

Average = 0.0780  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100370

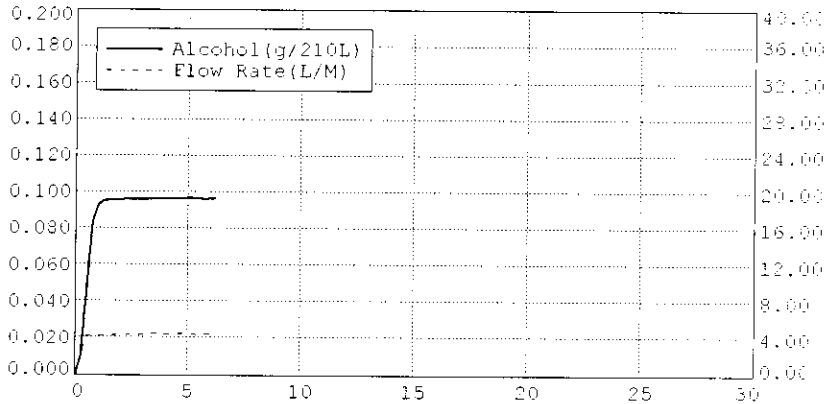
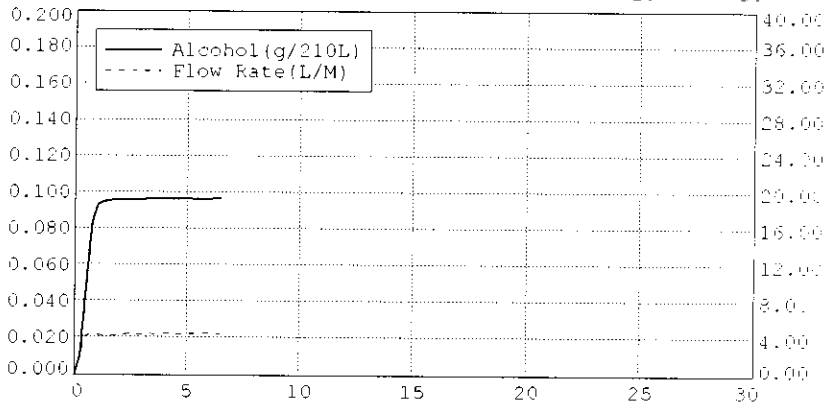
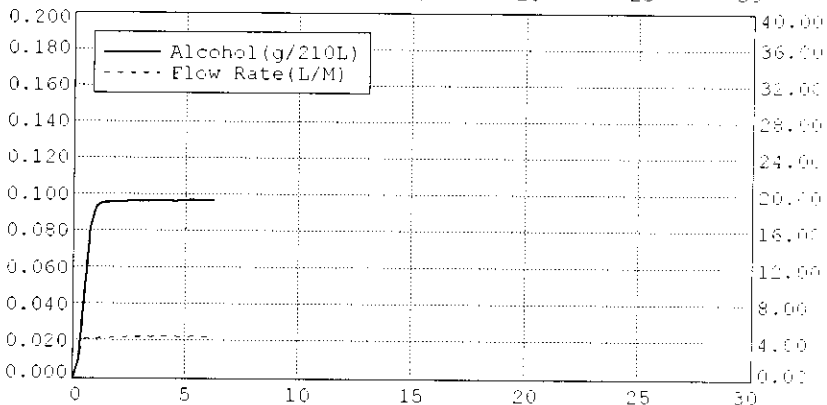
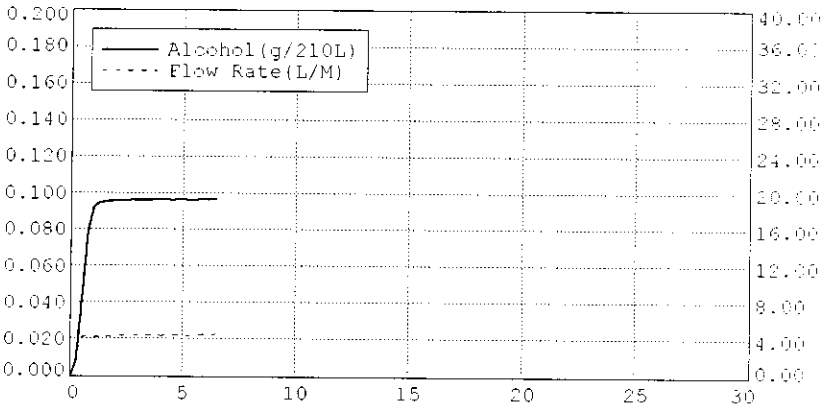
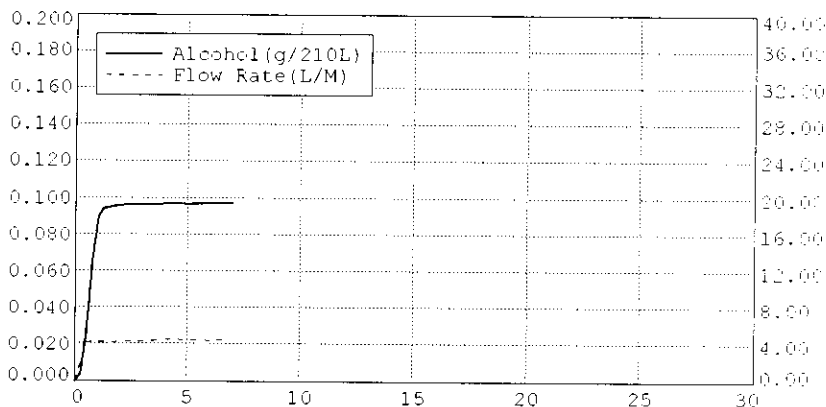
Date: 04/18/2019  
 Time: 09:59:42

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.16: 0.097  
 LOT #: AG805903  
 EXPIRATION: 02/28/2020  
 TANK PRESSURE: 697 psi

BLANK TEST	0.000	10:02
INTERNAL STANDARD	VERIFIED	10:03
EXTERNAL STANDARD	0.098	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.098	10:04
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.098	10:05
BLANK TEST	0.000	10:06
EXTERNAL STANDARD	0.098	10:06
BLANK TEST	0.000	10:07
EXTERNAL STANDARD	0.098	10:07
BLANK TEST	0.000	10:08

Average = 0.0980  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety  
 DATAMASTER dmt: 100370

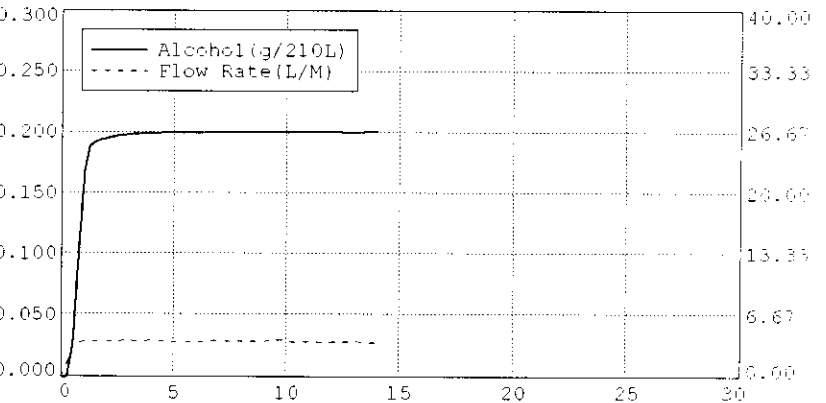
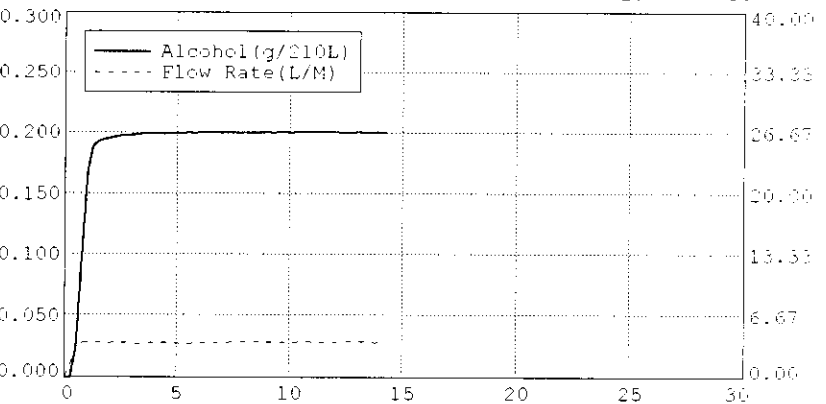
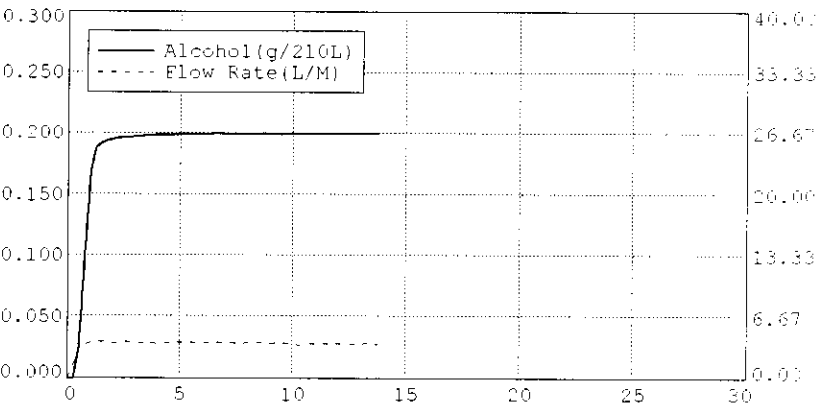
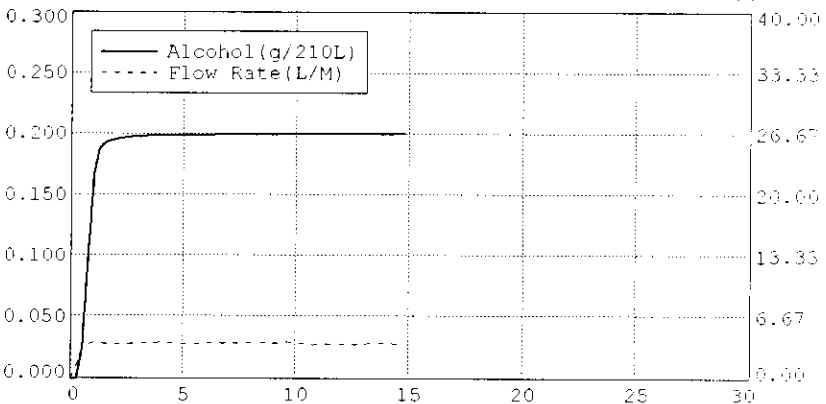
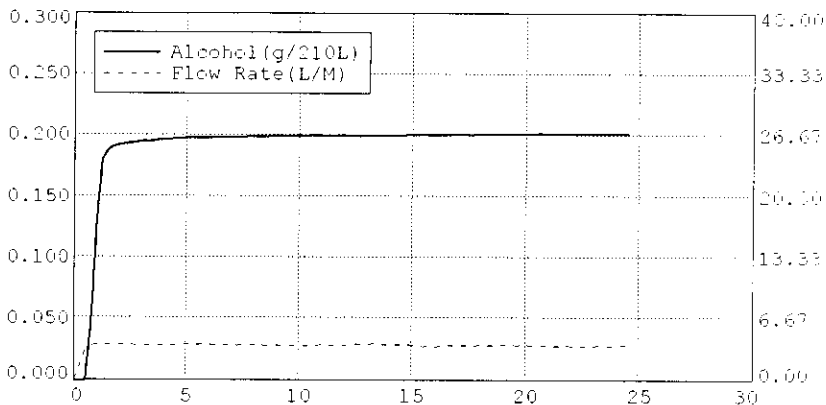
Date: 04/18/2019  
 Time: 10:10:31

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200  
 LOT #: GUTH 17340  
 EXPIRATION: 10/09/2019

BLANK TEST	0.000	10:13
INTERNAL STANDARD	VERIFIED	10:13
EXTERNAL STANDARD	0.202	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.201	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.200	10:16
BLANK TEST	0.000	10:17
EXTERNAL STANDARD	0.201	10:17
BLANK TEST	0.000	10:18
EXTERNAL STANDARD	0.201	10:18
BLANK TEST	0.000	10:19

Average = 0.2010  
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100370

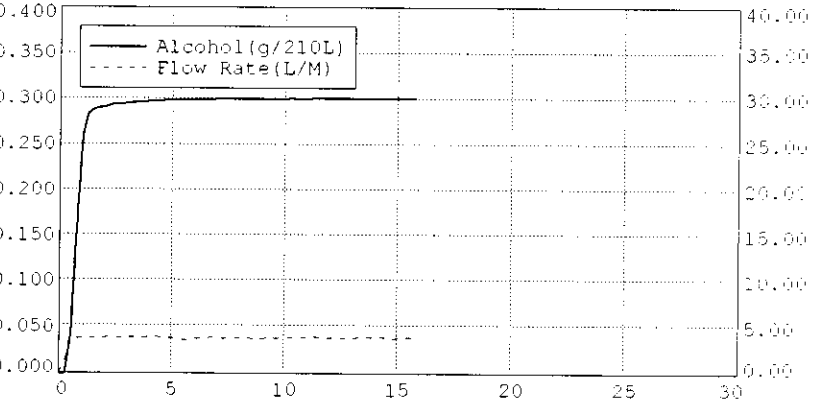
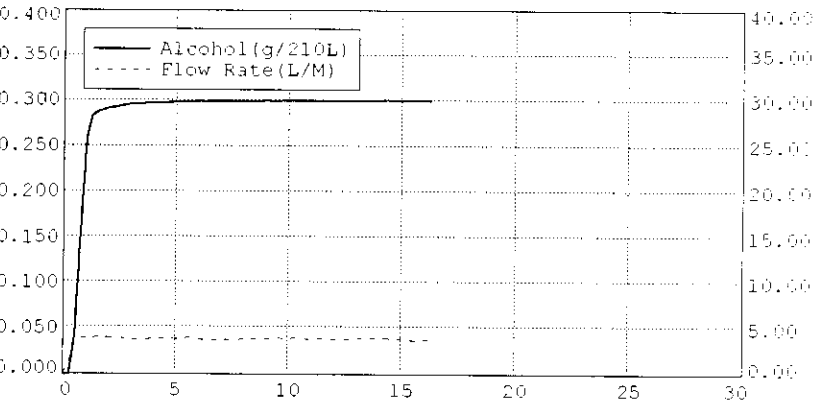
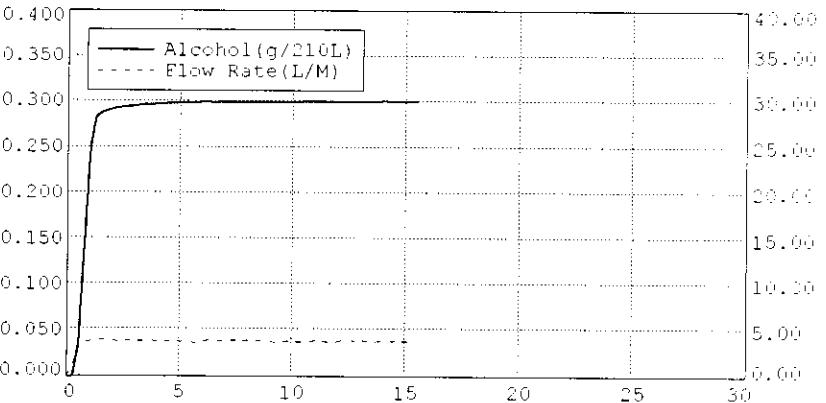
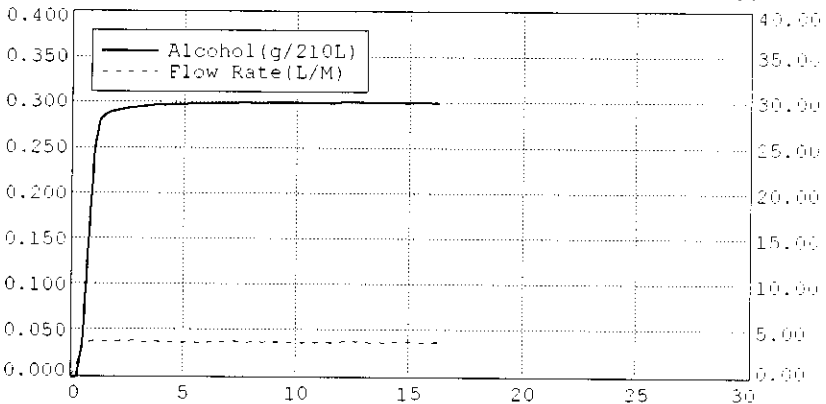
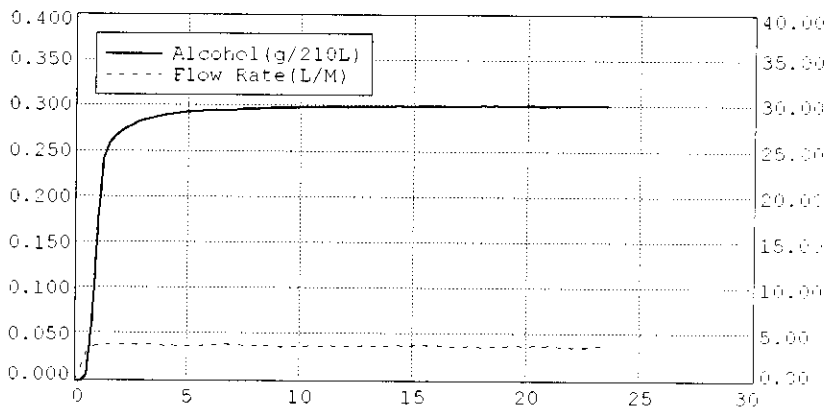
Date: 04/18/2019  
 Time: 10:23:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
 LOT #: GUTH 17350  
 EXPIRATION: 10/11/2019

BLANK TEST	0.000	10:25
INTERNAL STANDARD	VERIFIED	10:25
EXTERNAL STANDARD	0.300	10:25
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.300	10:27
BLANK TEST	0.000	10:27
EXTERNAL STANDARD	0.300	10:28
BLANK TEST	0.000	10:29
EXTERNAL STANDARD	0.300	10:29
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.300	10:30
BLANK TEST	0.000	10:31

Average = 0.3000  
 Std Dev = 0.0000



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

Date: 04/19/2019  
Time: 12:37:14

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

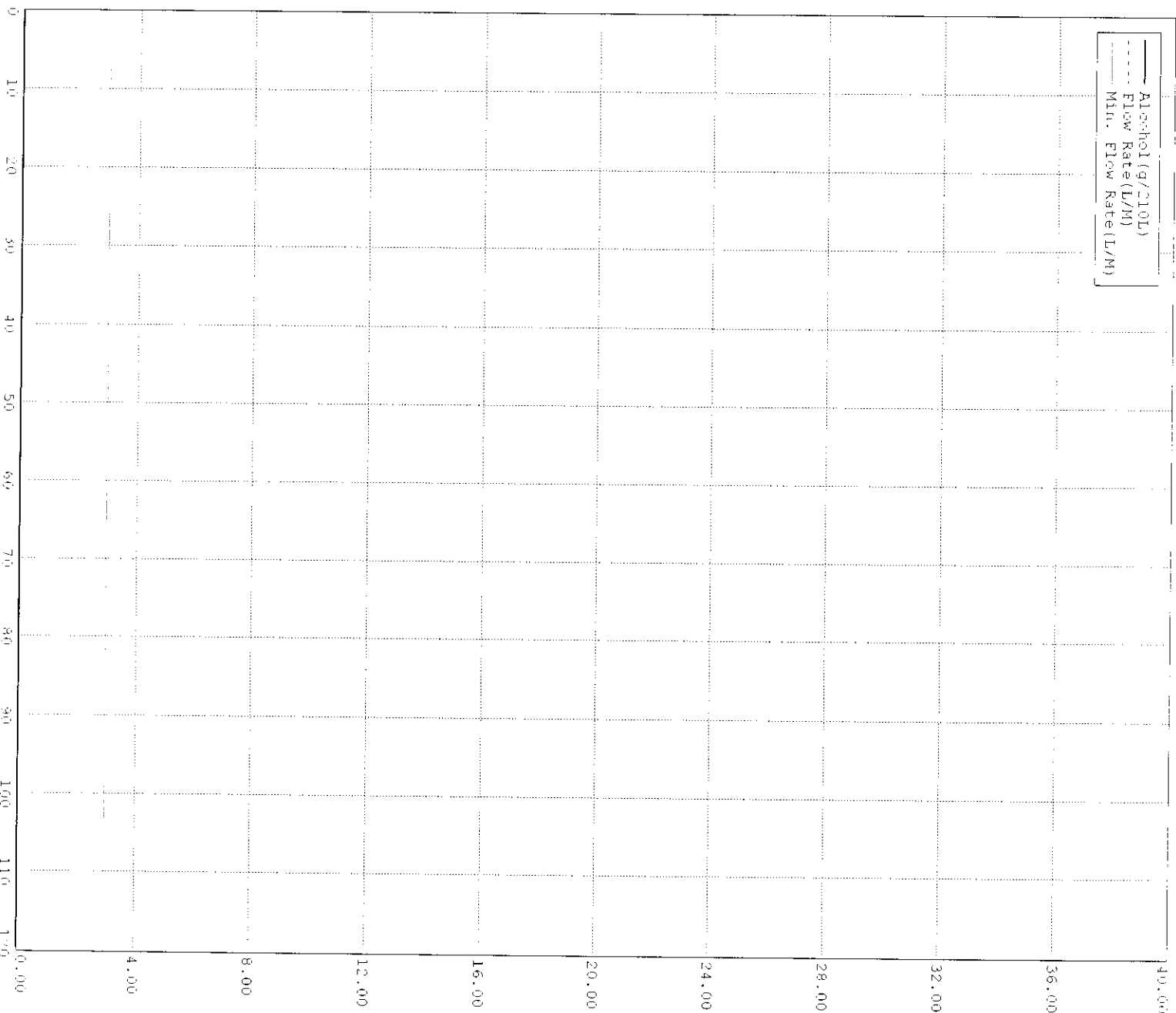
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.52: 0.079  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:38
BLANK TEST	0.000	12:38
INTERNAL STANDARD	VERIFIED	12:39
EXTERNAL STANDARD	0.079	12:39
BLANK TEST	0.000	12:40
SUBJECT SAMPLE	INCOMPLETE	12:42

*Handwritten signature: BME*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

Date: 04/19/2019  
Time: 12:45:50

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

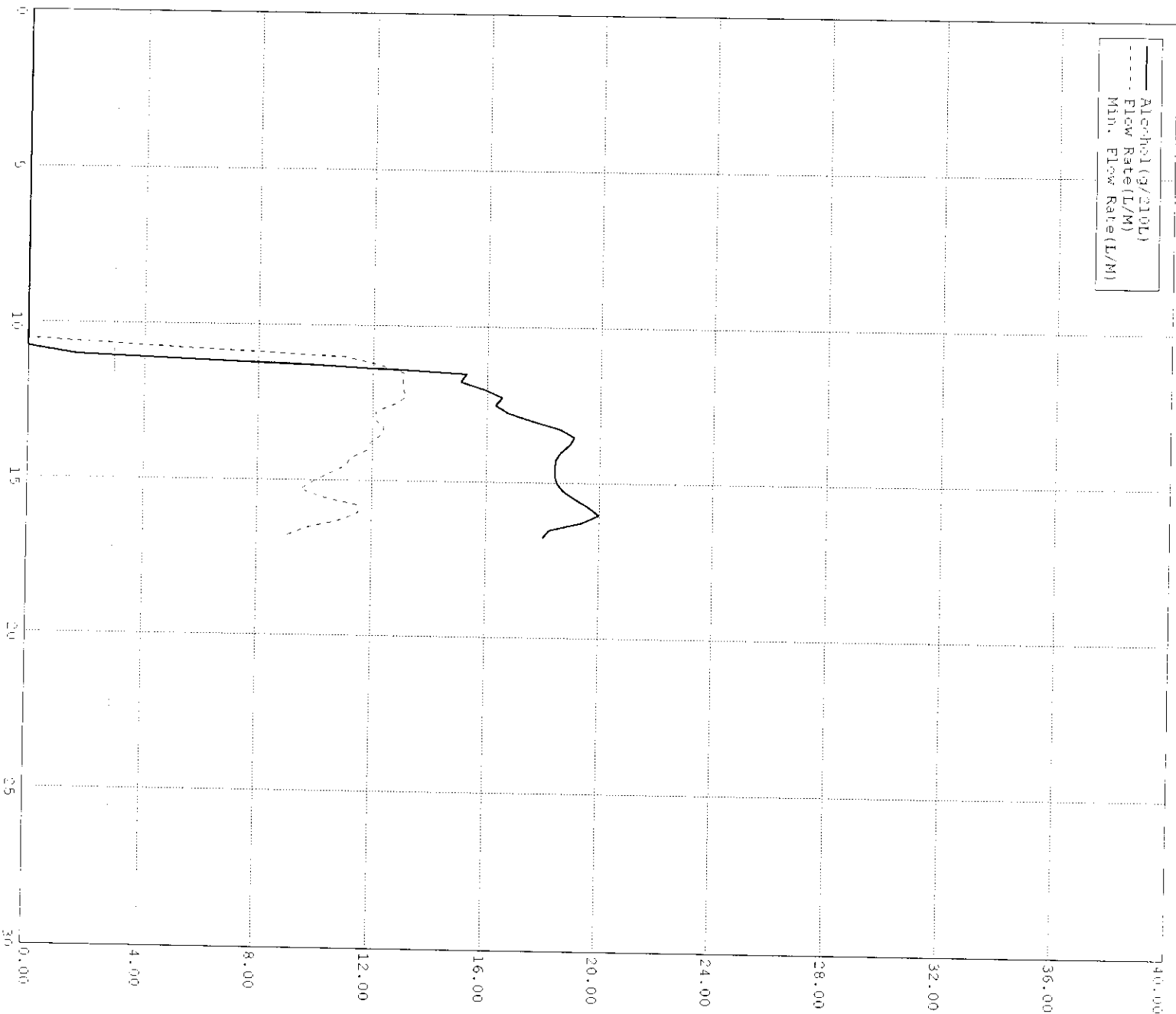
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.51: 0.079  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:46
BLANK TEST	0.000	12:46
INTERNAL STANDARD	VERIFIED	12:47
EXTERNAL STANDARD	0.079	12:47
BLANK TEST	0.000	12:48
SUBJECT SAMPLE	INVALID	12:48

EMB



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

Date: 04/19/2019  
Time: 12:52:15

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

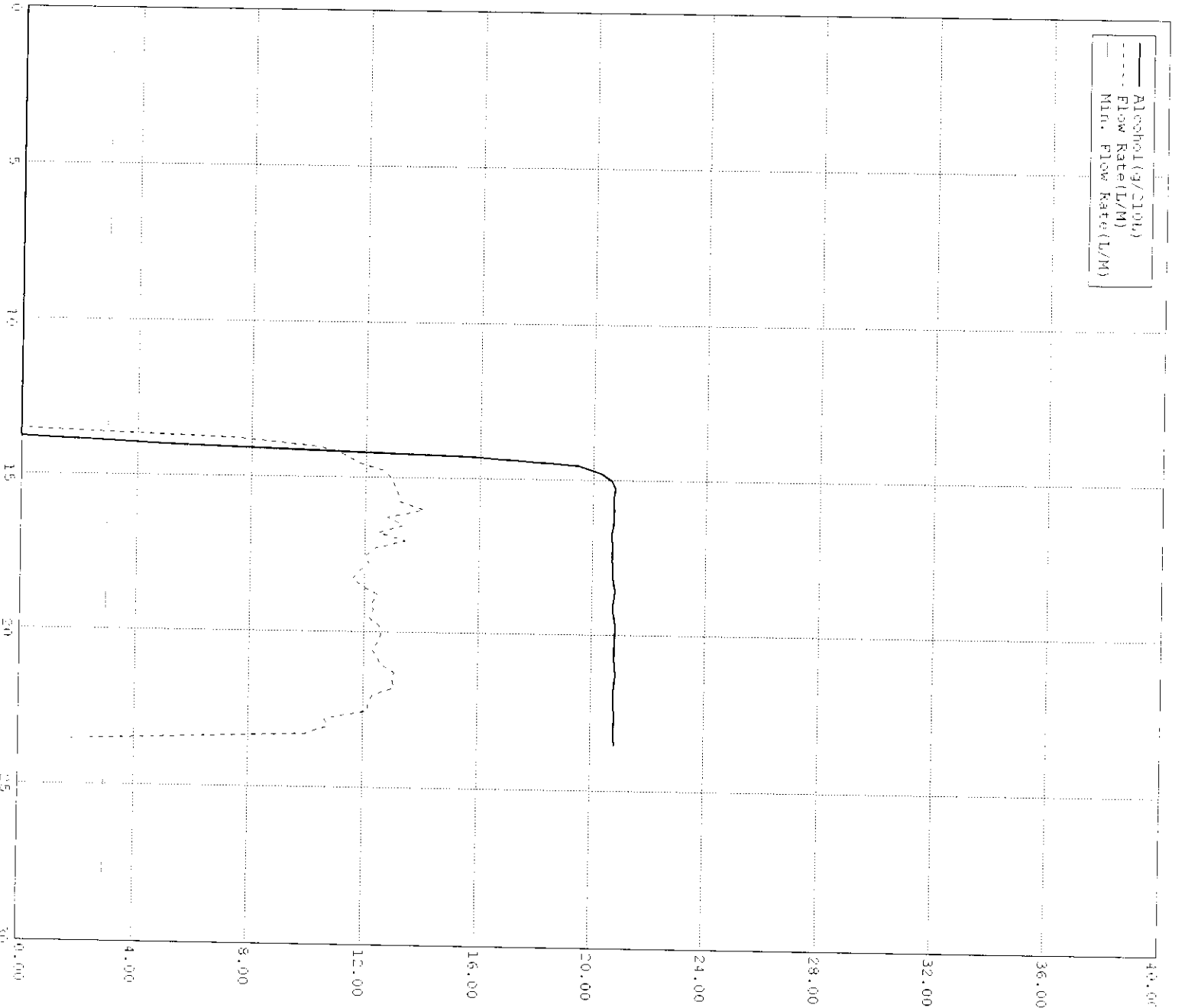
DEPT/AGENCY:  
INTERFERENCE ACETONE  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.52: 0.079  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:54
BLANK TEST	0.000	12:54
INTERNAL STANDARD	VERIFIED	12:54
Xq = 0.090 (1.67%)		
EXTERNAL STANDARD	0.079	12:54
X[1] = 0.0793 (0.0008)	(0.0016)	
BLANK TEST	0.000	12:55
SUBJECT SAMPLE	XXX	12:56
X[1] = 0.1051 (-0.0171)	(-0.0009)	

Interference Detected

Filter 2 Avg: 0.0009  
Filter 3 Avg: 0.0019  
BMB 4/19/19



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

Date: 04/19/2019  
Time: 12:59:45

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

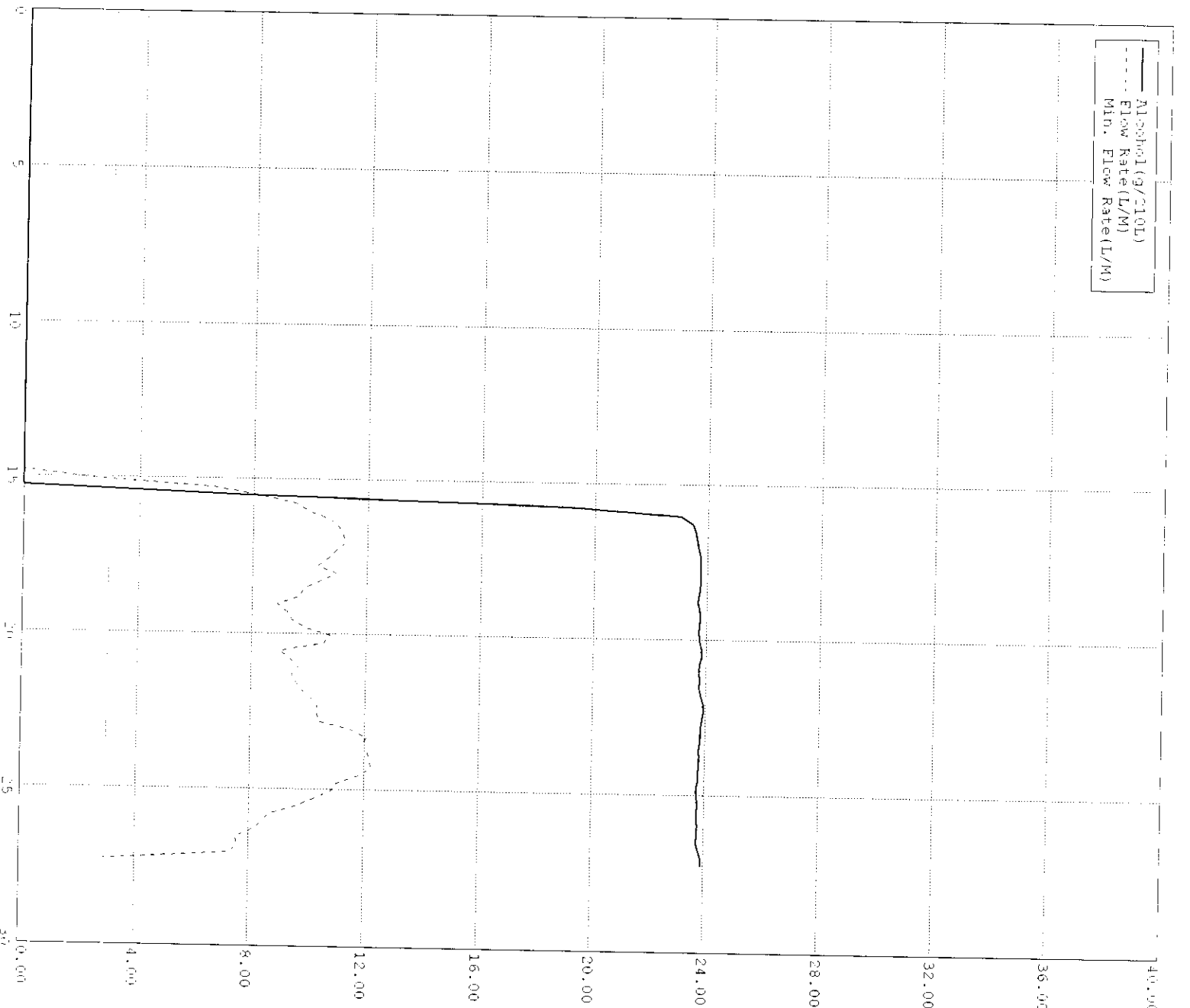
DEPT/AGENCY:  
INTERFERENCE ISOPROPANOL  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.51: 0.079  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	13:00
BLANK TEST	0.000	13:01
INTERNAL STANDARD	VERIFIED	13:01
Xq = 0.090 (1.47%)		
EXTERNAL STANDARD	0.079	13:01
X[1] = 0.0790 (0.0008)	(0.0019)	
BLANK TEST	0.000	13:02
SUBJECT SAMPLE	XXX	13:02
X[1] = 0.1205 (-0.0241)	(0.0003)	

Interference Detected

BMB





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

Date: 04/19/2019  
Time: 13:07:46

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

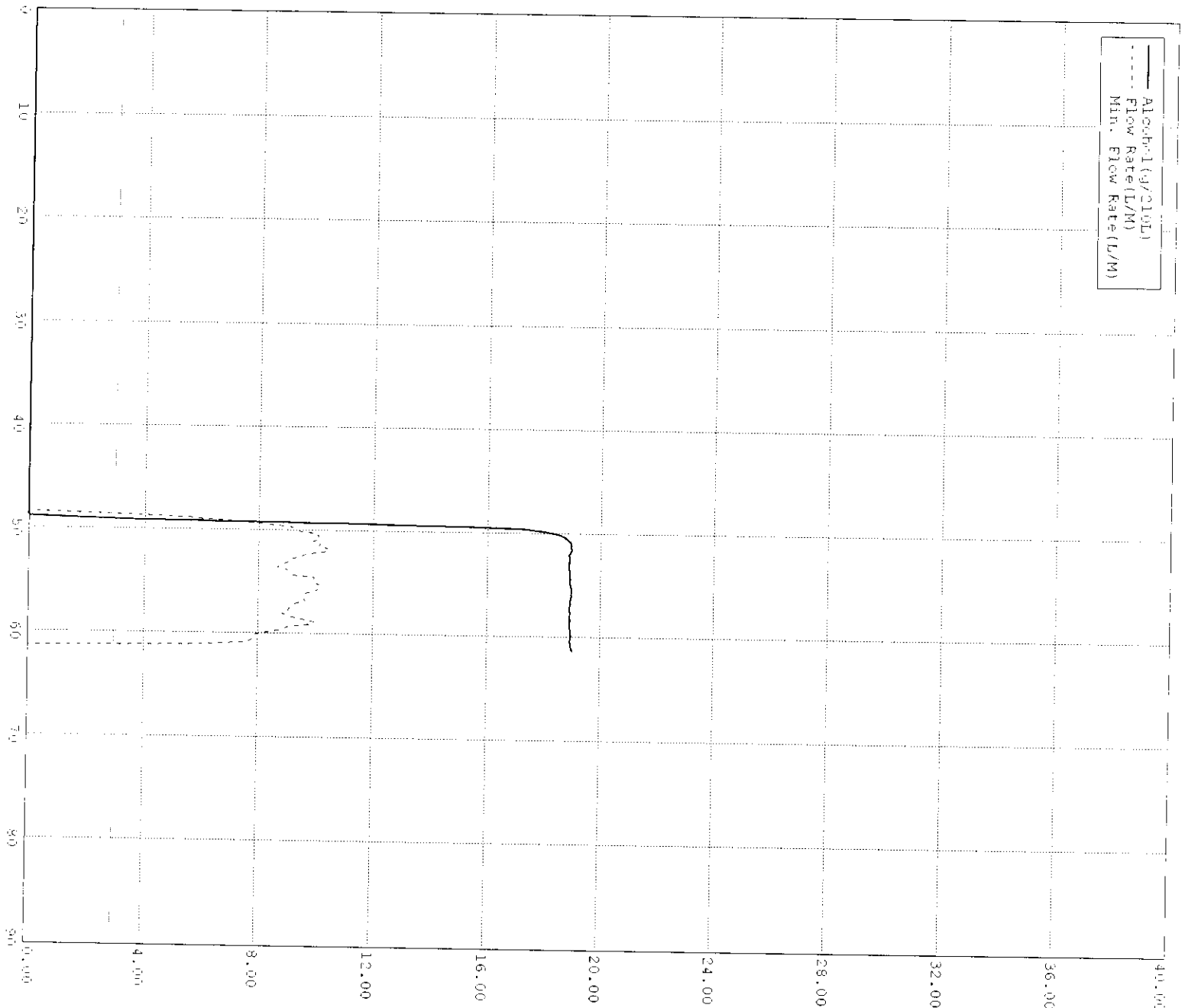
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.51: 0.079  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	13:08
BLANK TEST	0.000	13:09
INTERNAL STANDARD	VERIFIED	13:09
Xq = 0.090 (1.28%)	0.079	13:09
EXTERNAL STANDARD	X[1] = 0.0789 (0.0010) (0.0021)	
BLANK TEST	0.000	13:10
SUBJECT SAMPLE (Vol=1.93L)	0.096	13:11
X[1] = 0.0960 (-0.0010) (0.0003)		
BLANK TEST	0.000	13:12
EXTERNAL STANDARD	0.078	13:12
X[1] = 0.0785 (0.0009) (0.0018)		
BLANK TEST	0.000	13:13

BRB



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

Date: 04/19/2019  
Time: 13:15:30

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

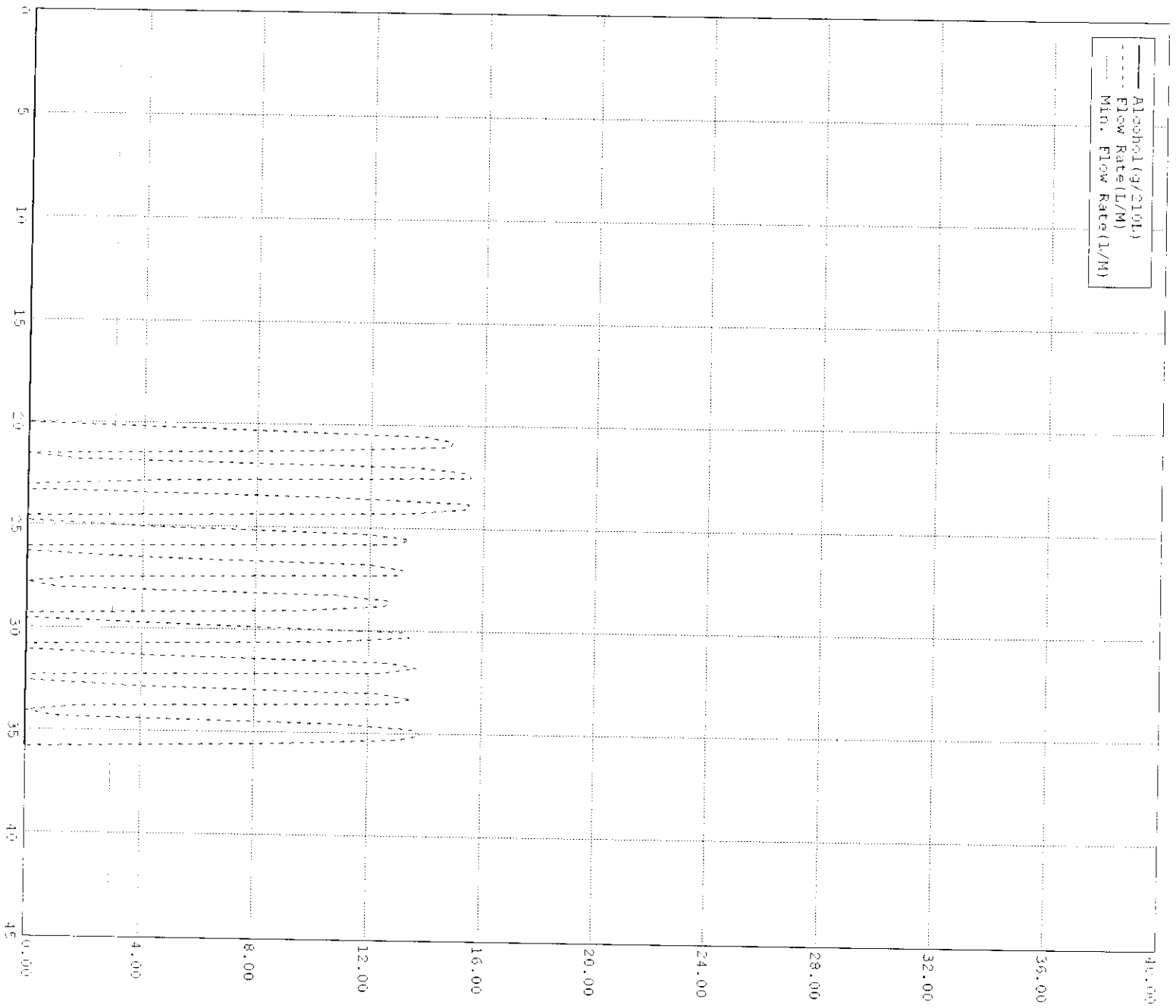
DEPT/AGENCY:  
EXCEEDED ATTEMPTS  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.51: 0.079  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	13:17
BLANK TEST	0.000	13:17
INTERNAL STANDARD	0.079	13:17
EXTERNAL STANDARD	0.000	13:18
BLANK TEST	XXX	13:19

Maximum Attempts Exceeded

*BRMB*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

Date: 04/19/2019  
Time: 13:22:49

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

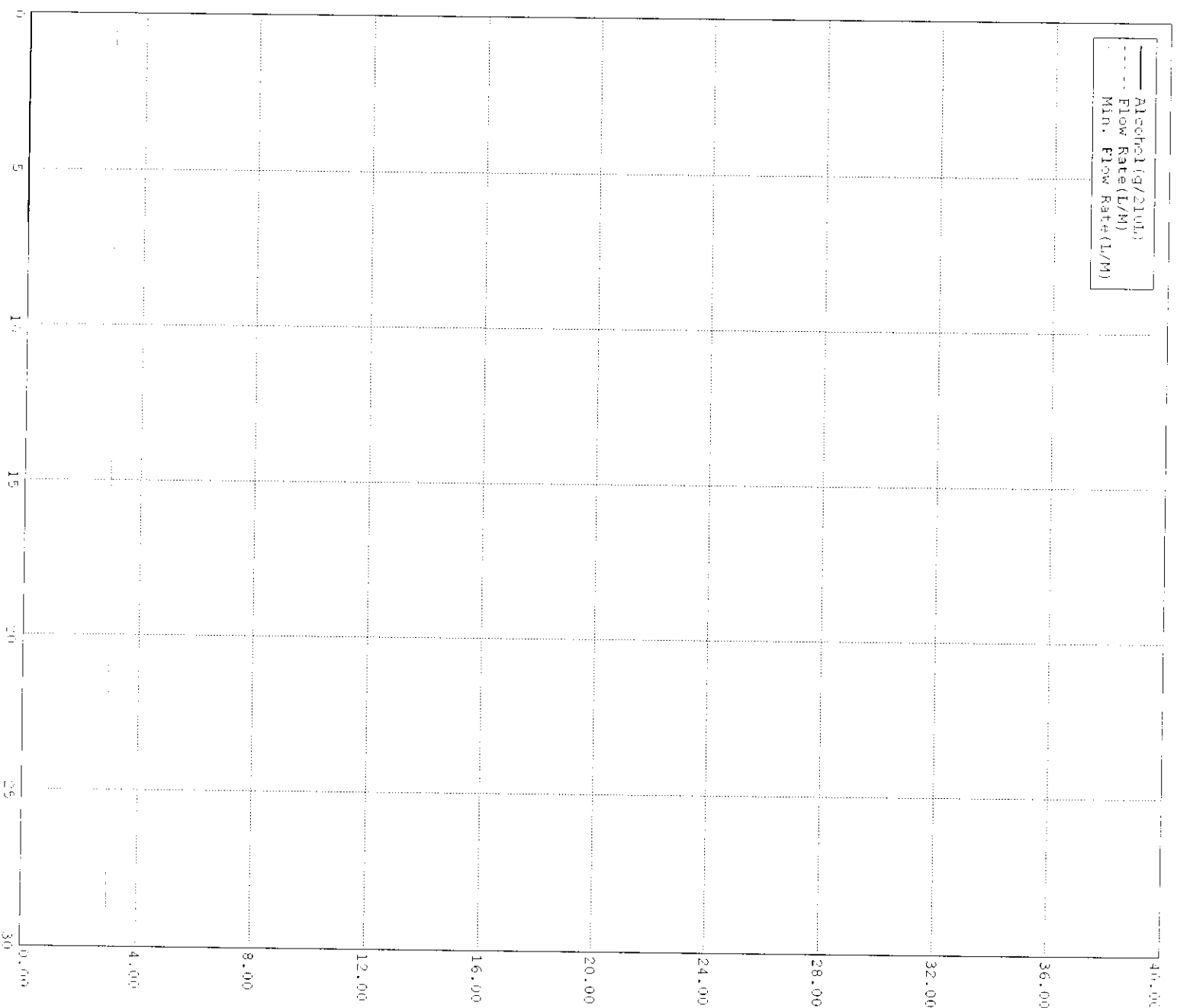
DEPT/AGENCY:  
RFI  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.52: 0.079  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	13:27
BLANK TEST	0.000	13:27
INTERNAL STANDARD	0.079	13:27
EXTERNAL STANDARD	0.000	13:28

RFI DETECTED

*BMB*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

Date: 04/19/2019  
Time: 13:54:25

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 29.52: 0.079  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	13:56
BLANK TEST	0.000	13:56
INTERNAL STANDARD	VERIFIED	13:56
EXTERNAL STANDARD	0.080	13:56
BLANK TEST	0.000	13:57
SUBJECT SAMPLE (Vol=1.88L)	0.000	13:58
BLANK TEST	0.000	13:59
EXTERNAL STANDARD	0.079	13:59
BLANK TEST	0.000	14:00

BMB

