

# 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 C. Bryant Start Date 12/14/17

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 Argas Lot AG616504 Exp 6/13/18

ii. 0.040g/210L Mnf Argas Lot AG630101 Exp 10/24/18

iii. 0.080g/210L Mnf Argas Lot AG634001 Exp 12/5/18

iv. 0.100g/210L Mnf Argas Lot AG629304 Exp 10/19/18

v. 0.200g/210L Mnf Both Lot 17090 Exp 2/24/19

1. Simulator S/N SD1200 Date Calibrated 3/29/17

vi. 0.300g/210L Mnf Both Lot 17140 Exp 5/15/19

1. Simulator S/N DR4162 Date Calibrated 3/27/17

5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

d. Exceeded attempts

i. Acetone - Mnf Both Lot 16160 Level 0.100 Exp 7/19/18

1. Simulator S/N DR4178 Date Calibrated 3/27/17

ii. Isopropanol - Mnf Both Lot 17060 Level 0.100 Exp 3/14/19

1. Simulator S/N SD1176 Date Calibrated 3/29/17

iii. Negative Control - Mnf Both Lot 17060 Level 0.100 Exp 2/14/19

1. Simulator S/N DR4177 Date Calibrated 3/28/17

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 12/18/17

DIAGNOSTIC RECORD

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

Date: 12/14/2017  
Time: 11:19:50

VERSIONS  
DMT: 3.02  
PIC: 5.02  
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 = 1.74 V PASSED  
(1.06 V - 2.48 V)  
Cooler Voltage = 1.74 V PASSED  
(1.06 V - 2.46 V)  
Bias Voltage = 80 V PASSED  
(48 V - 112 V)  
Chopper Freq = 543 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 28.8 in

PUMP INFO

Flow Rate = 4.597 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 PASSED

Xq = 0.091 2.16% (0.00% - 4.00%)

Technician Screen

-----  
DATAMASTER dmt: 100370  
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Date: 12/14/2017  
Time: 1:07 PM

Temperatures (°C)  
Sample Cell: 48.8°C  
Breath Tube: 47.5°C

Current Barometer 29.2 in  
Volume (Ltr) 1.57

Settings  
Lamp: 1.93 V  
Bias: 80 V  
Cooler: 1.79 V  
Chopper: 543 Hz

Voltages (V)  
Flow: 1.05 V  
Detector: -0.042 V

CALIBRATION FACTORS

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

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: 12/14/2017  
Time: 13:12:03

SUBJECT NAME:  
TEST TEST  
LICENSE #: VOLUME TEST

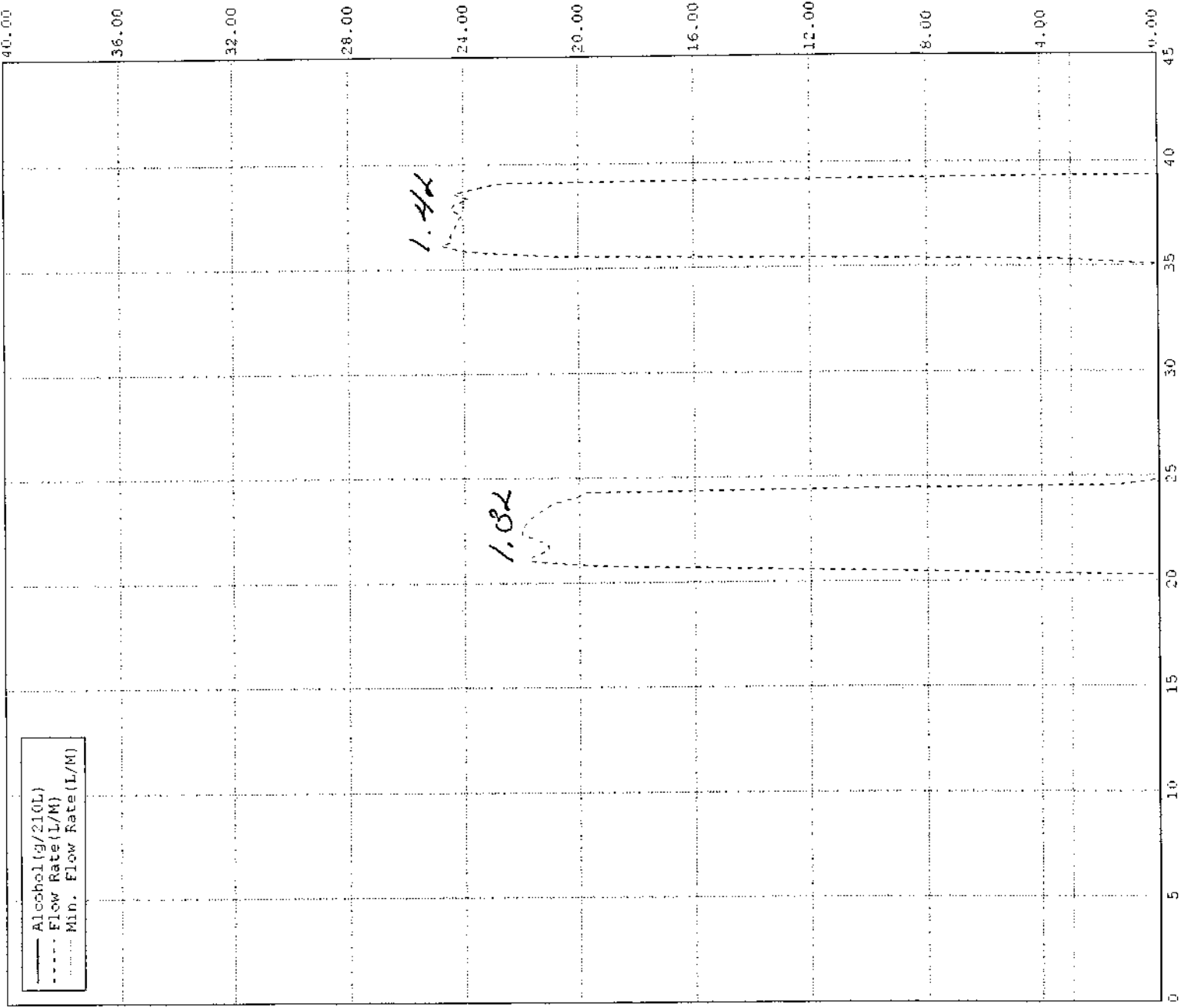
OPERATOR NAME:  
COLLEEN S OBRZYANT  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 17-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.19: 0.078  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:13
BLANK TEST	0.000	13:13
INTERNAL STANDARD	VERIFIED	13:13
EXTERNAL STANDARD	0.076	13:13
BLANK TEST	0.000	13:14
SUBJECT SAMPLE (Vol=1.51L)	0.000	13:15
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.077	13:16
BLANK TEST	0.000	13:17

CRB



LINEARITY CHECK

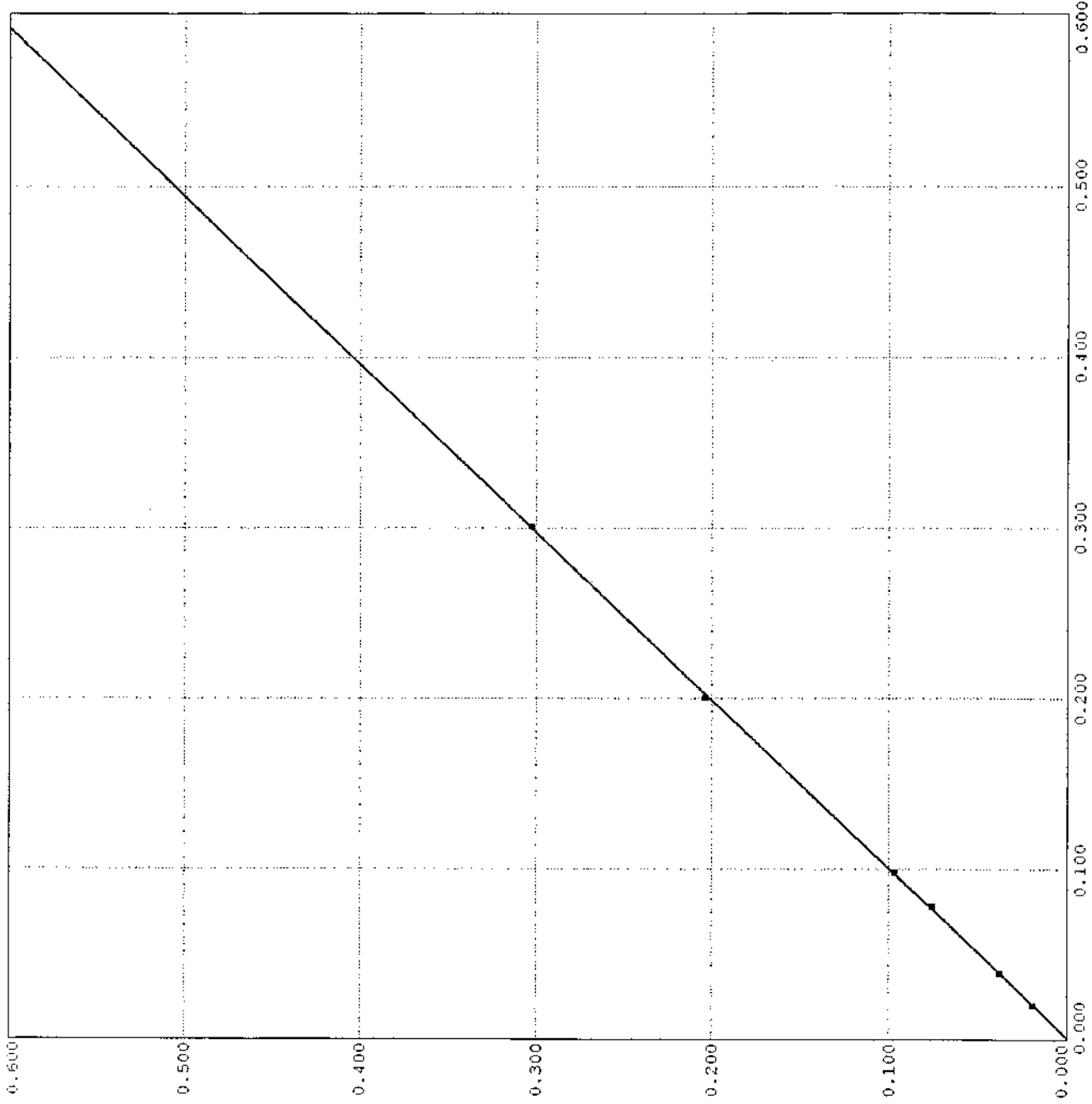
Alaska Department of Public Safety  
 DATAMASTER dmt: 100370

Date: 12/14/2017  
 Time: 14:19:52

SUPERVISOR NAME:  
 COLLEEN S O'BRYAN  
 OPERATOR'S #: 6237

TARGET	AVERAGE	STD. DEV.
0.020	0.0202	0.0004
0.039	0.0390	0.0000
0.078	0.0770	0.0000
0.098	0.0978	0.0004
0.200	0.2046	0.0015
0.300	0.3032	0.0011

SLOPE = 1.016560  
 R<sup>2</sup> = 0.999849



CS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100370

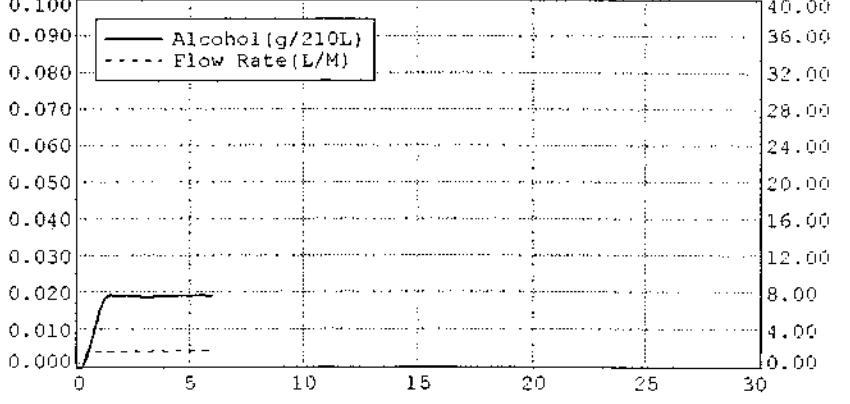
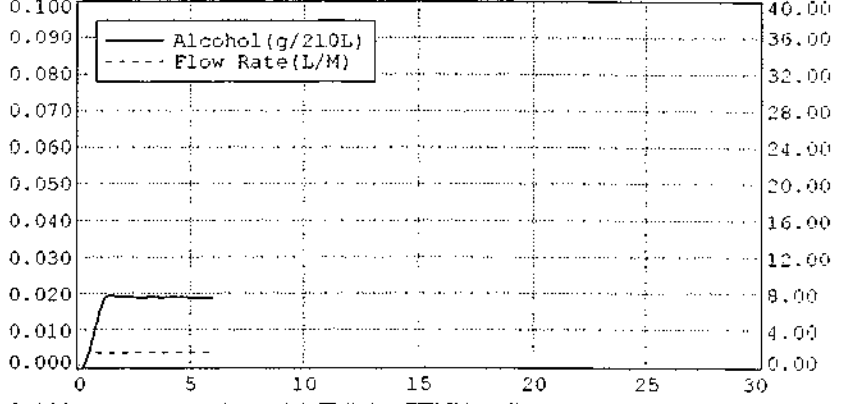
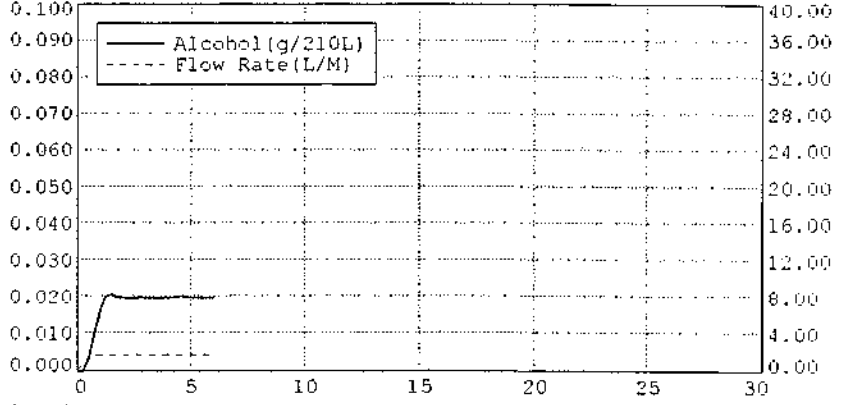
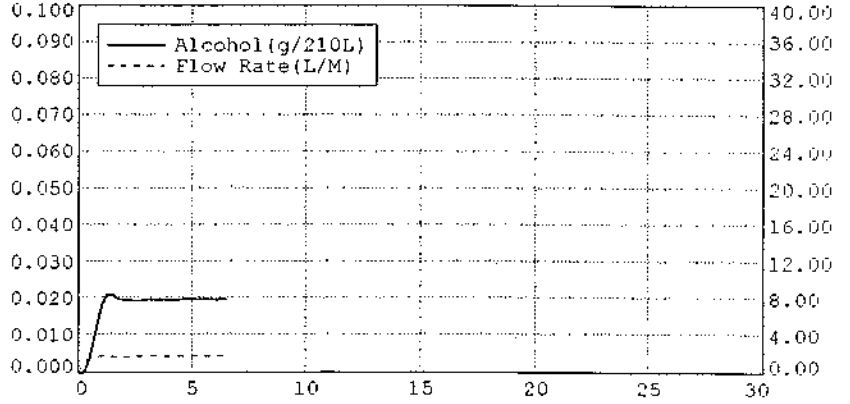
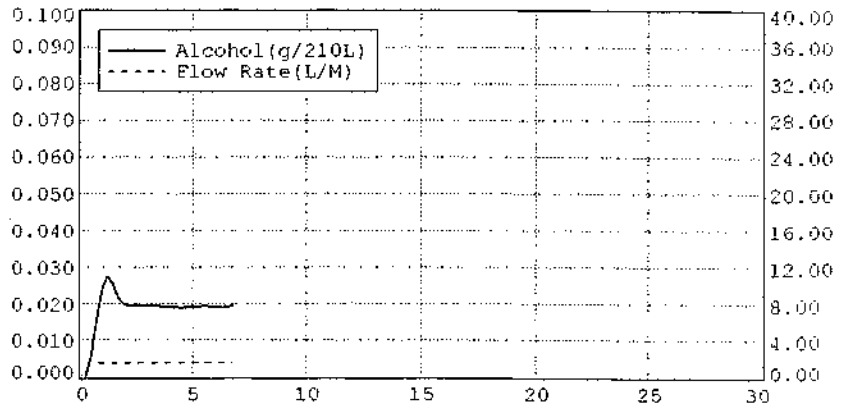
Date: 12/14/2017  
 Time: 14:19:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.20: 0.020  
 LOT #: AG616504  
 EXPIRATION: 06/13/2018  
 TANK PRESSURE: 337 psi

BLANK TEST	0.000	14:21
INTERNAL STANDARD	VERIFIED	14:21
EXTERNAL STANDARD	0.020	14:21
BLANK TEST	0.000	14:22
EXTERNAL STANDARD	0.020	14:22
BLANK TEST	0.000	14:23
EXTERNAL STANDARD	0.021	14:23
BLANK TEST	0.000	14:24
EXTERNAL STANDARD	0.020	14:24
BLANK TEST	0.000	14:25
EXTERNAL STANDARD	0.020	14:25
BLANK TEST	0.000	14:26

Average = 0.0202  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100370

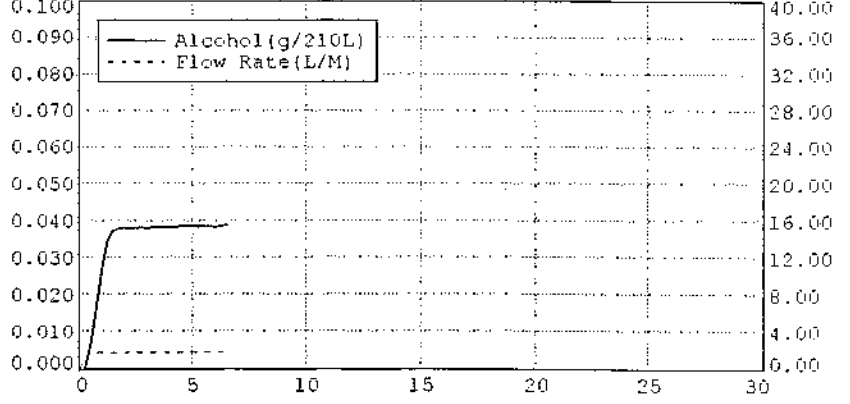
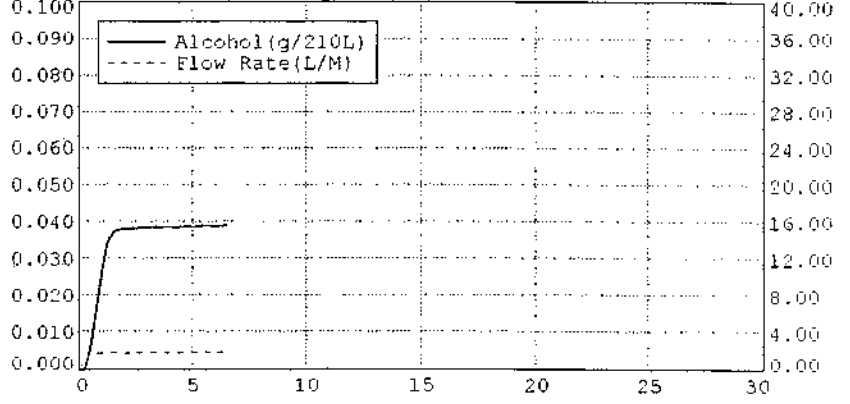
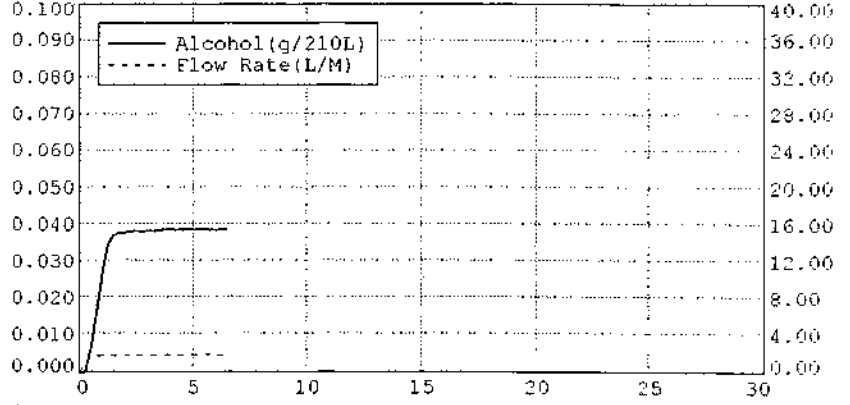
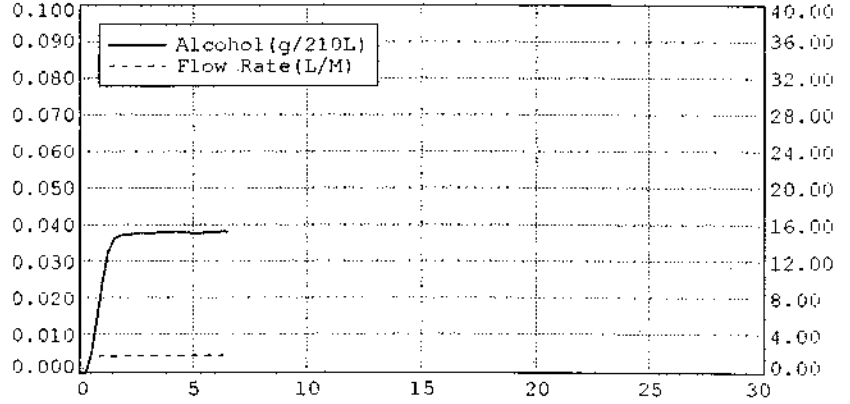
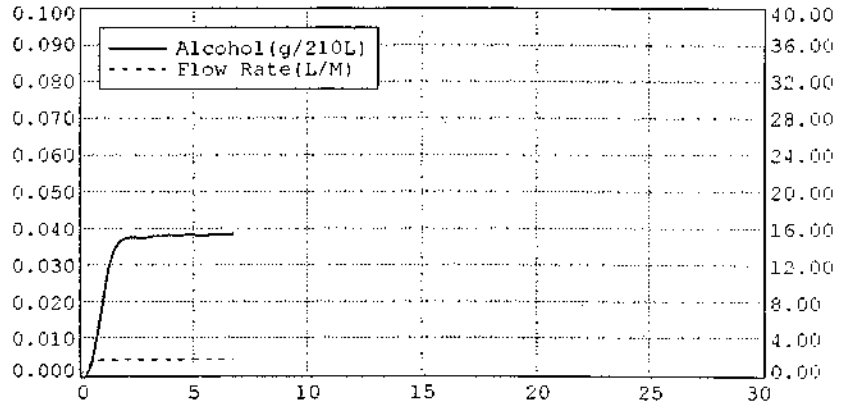
Date: 12/14/2017  
 Time: 14:27:31

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.20: 0.039  
 LOT #: AG630101  
 EXPIRATION: 10/27/2018  
 TANK PRESSURE: 406 psi

BLANK TEST	0.000	14:28
INTERNAL STANDARD	VERIFIED	14:28
EXTERNAL STANDARD	0.039	14:28
BLANK TEST	0.000	14:29
EXTERNAL STANDARD	0.039	14:30
BLANK TEST	0.000	14:30
EXTERNAL STANDARD	0.039	14:31
BLANK TEST	0.000	14:32
EXTERNAL STANDARD	0.039	14:32
BLANK TEST	0.000	14:33
EXTERNAL STANDARD	0.039	14:33
BLANK TEST	0.000	14:34

Average = 0.0390  
 Std Dev = 0.0000





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

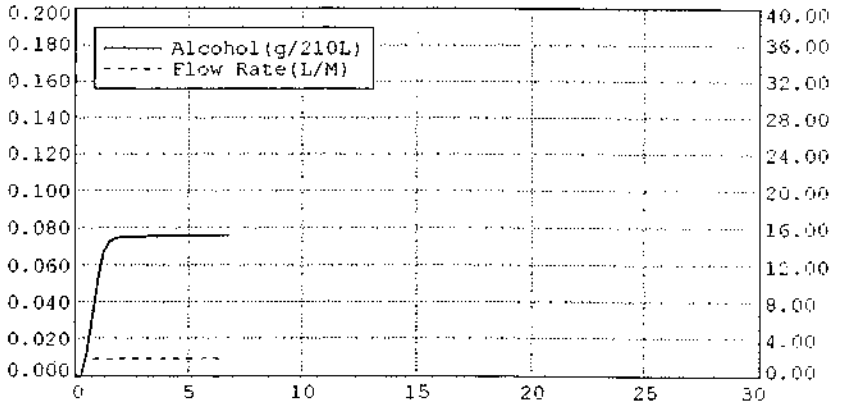
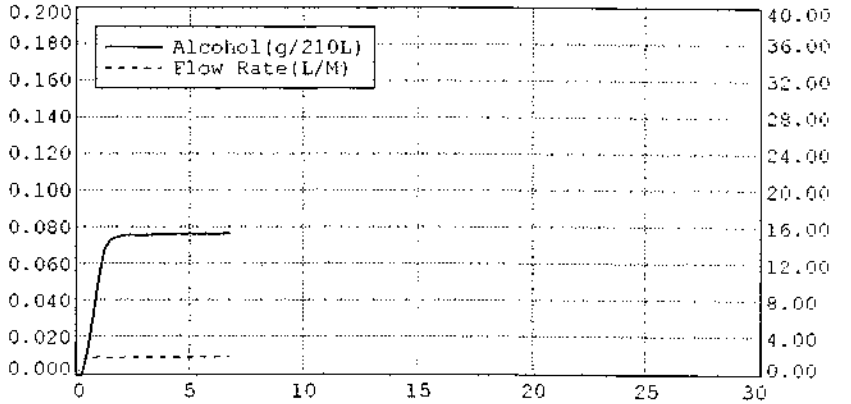
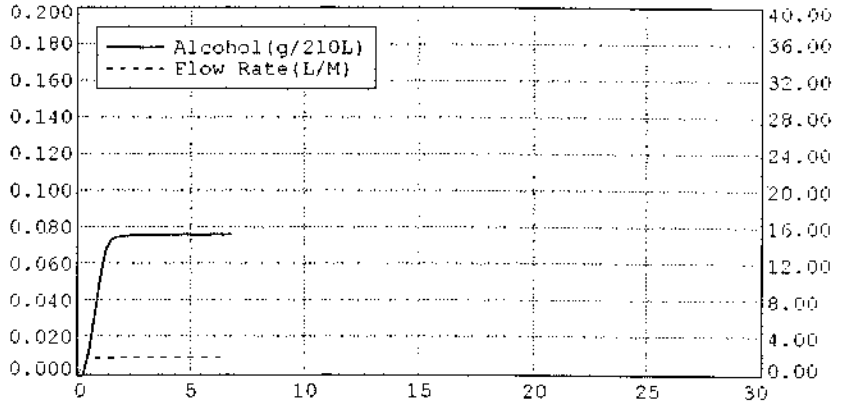
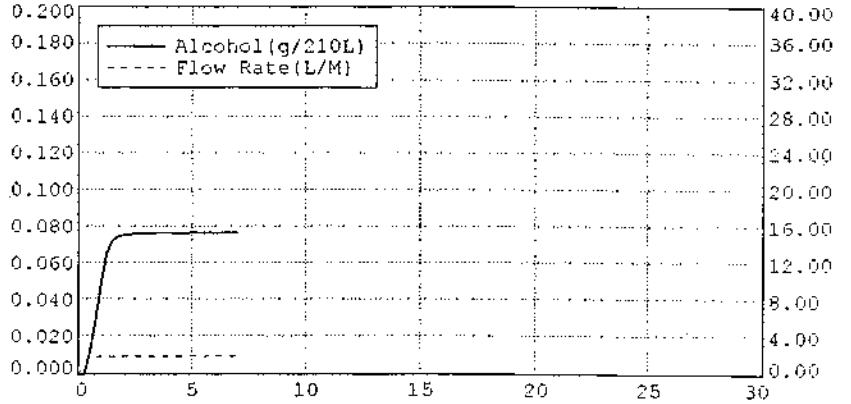
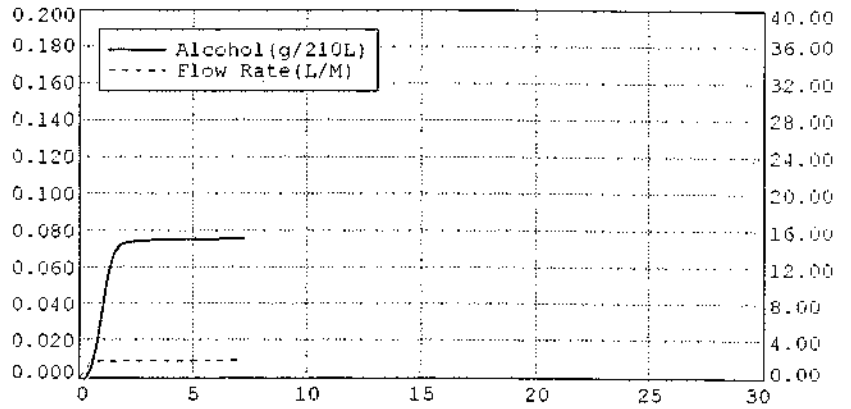
Date: 12/14/2017  
Time: 14:35:25

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.21: 0.078  
LOT #: AG634001  
EXPIRATION: 12/05/2018  
TANK PRESSURE: 466 psi

BLANK TEST	0.000	14:36
INTERNAL STANDARD	VERIFIED	14:36
EXTERNAL STANDARD	0.077	14:36
BLANK TEST	0.000	14:37
EXTERNAL STANDARD	0.077	14:38
BLANK TEST	0.000	14:39
EXTERNAL STANDARD	0.077	14:39
BLANK TEST	0.000	14:40
EXTERNAL STANDARD	0.077	14:40
BLANK TEST	0.000	14:41
EXTERNAL STANDARD	0.077	14:41
BLANK TEST	0.000	14:42

Average = 0.0770  
Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

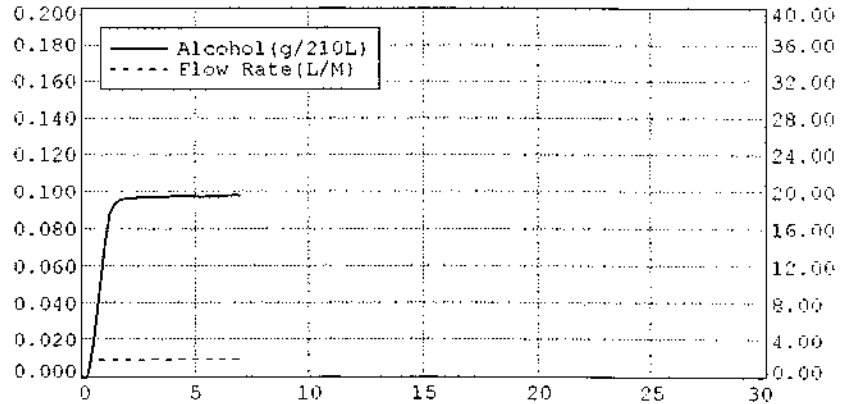
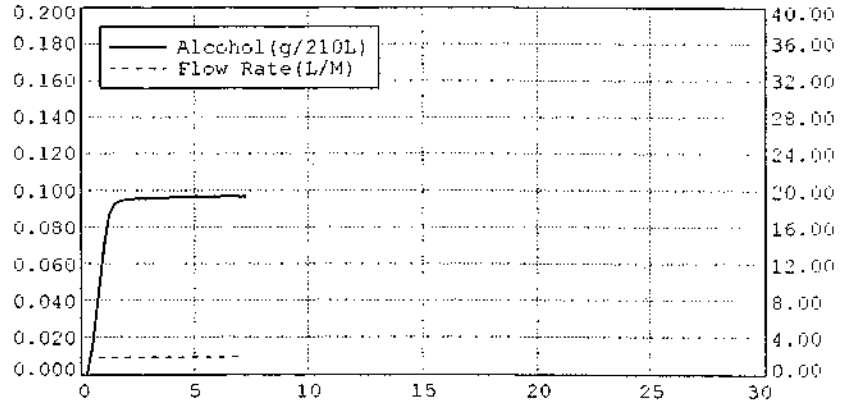
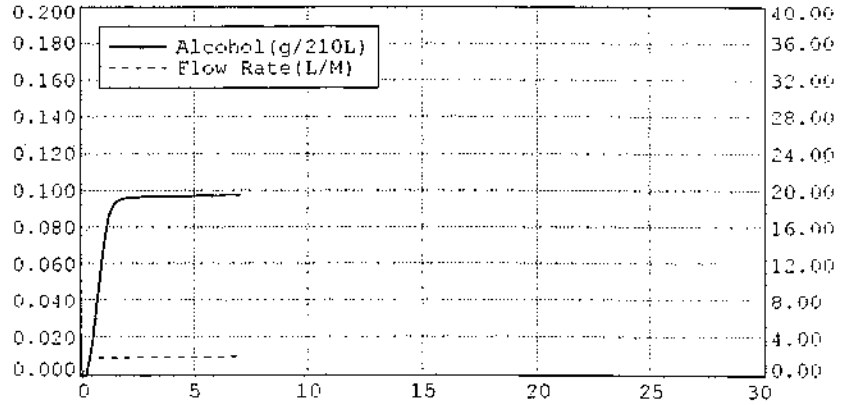
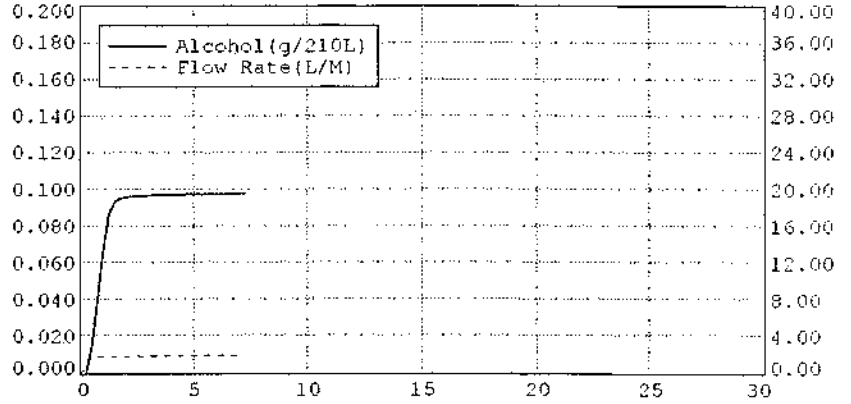
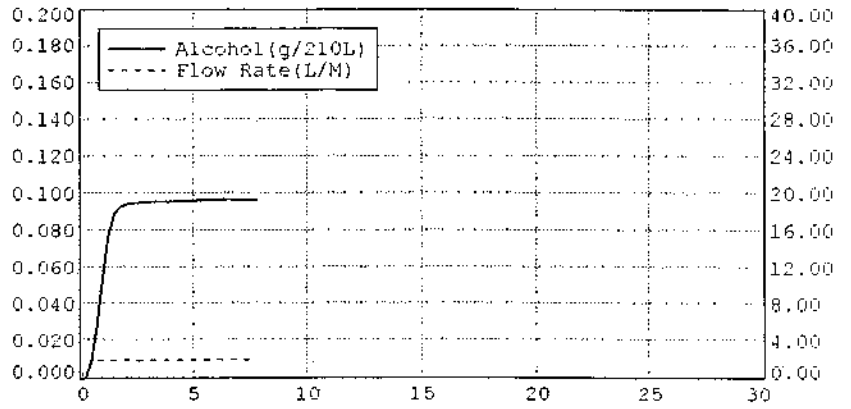
Date: 12/14/2017  
Time: 14:45:57

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
TARGET AT 29.20: 0.098  
LOT #: AG629304  
EXPIRATION: 10/19/2018  
TANK PRESSURE: 538 psi

BLANK TEST	0.000	14:47
INTERNAL STANDARD	VERIFIED	14:47
EXTERNAL STANDARD	0.097	14:47
BLANK TEST	0.000	14:48
EXTERNAL STANDARD	0.098	14:48
BLANK TEST	0.000	14:49
EXTERNAL STANDARD	0.098	14:49
BLANK TEST	0.000	14:50
EXTERNAL STANDARD	0.098	14:50
BLANK TEST	0.000	14:51
EXTERNAL STANDARD	0.098	14:52
BLANK TEST	0.000	14:52

Average = 0.0978  
Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

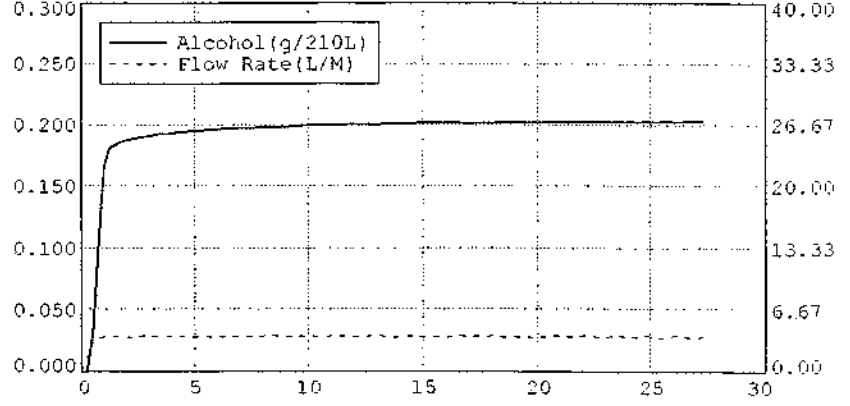
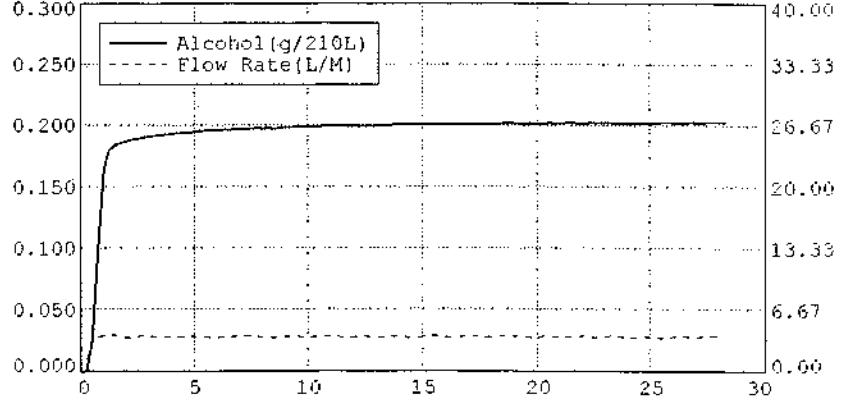
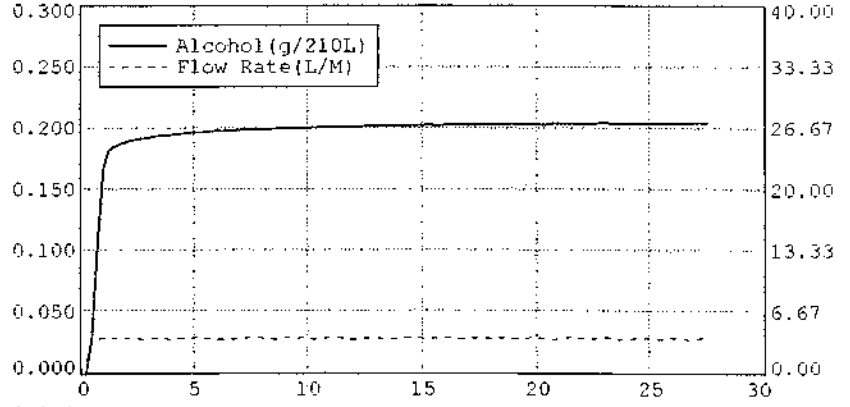
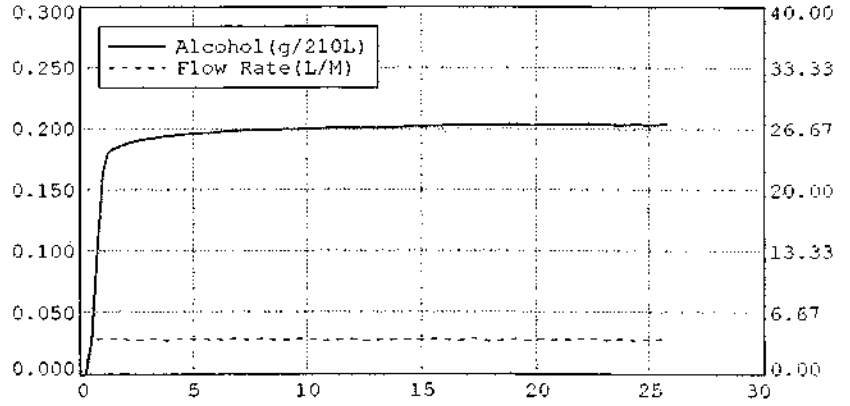
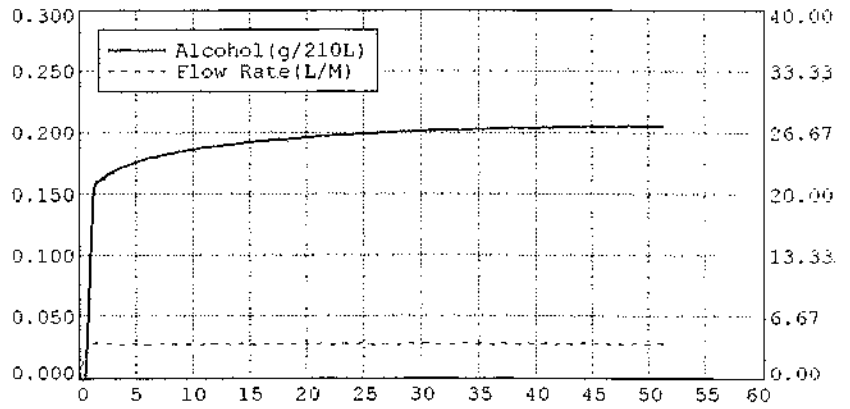
Alaska Department of Public Safety  
 DATAMASTER dmt: 100370

Date: 12/14/2017  
 Time: 14:53:53

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.200  
 LOT #: 17090  
 EXPIRATION: 02/24/2019

BLANK TEST	0.000	14:54
INTERNAL STANDARD	VERIFIED	14:55
EXTERNAL STANDARD	0.207	14:56
BLANK TEST	0.000	14:57
EXTERNAL STANDARD	0.204	14:57
BLANK TEST	0.000	14:58
EXTERNAL STANDARD	0.205	14:59
BLANK TEST	0.000	14:59
EXTERNAL STANDARD	0.203	15:00
BLANK TEST	0.000	15:01
EXTERNAL STANDARD	0.204	15:01
BLANK TEST	0.000	15:02

Average = 0.2046  
 Std Dev = 0.0015



LINEARITY CHECK: Control Test 6

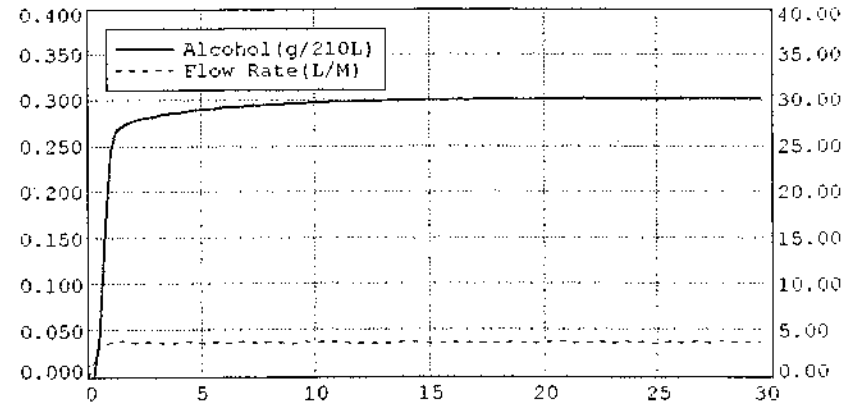
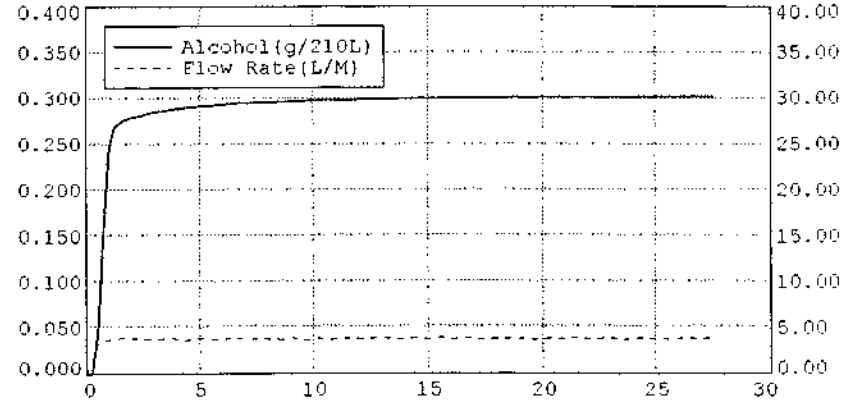
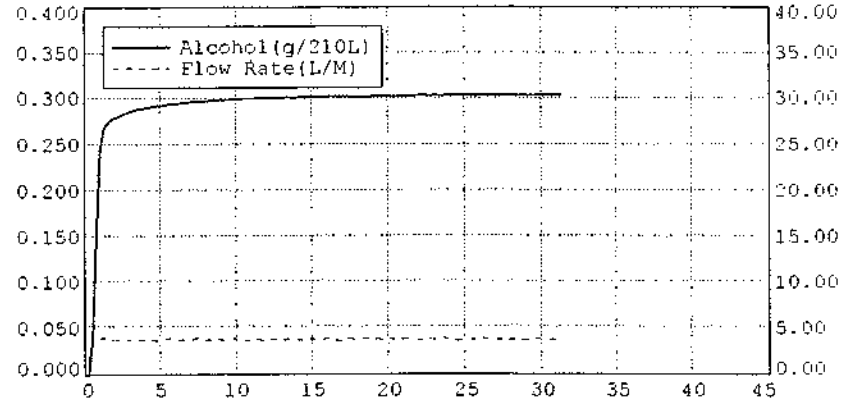
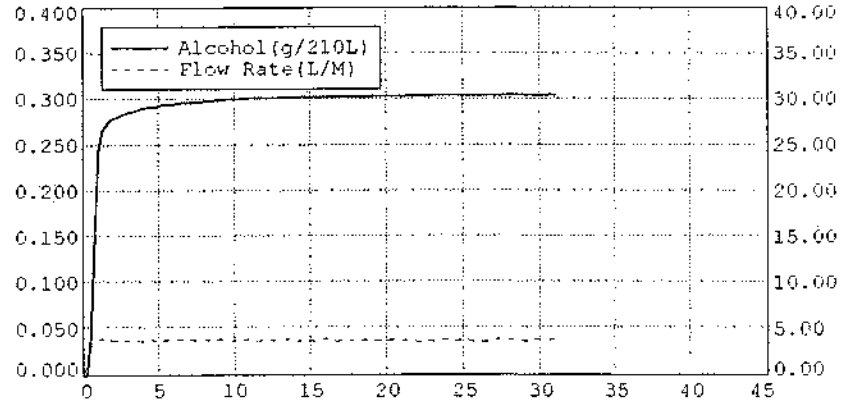
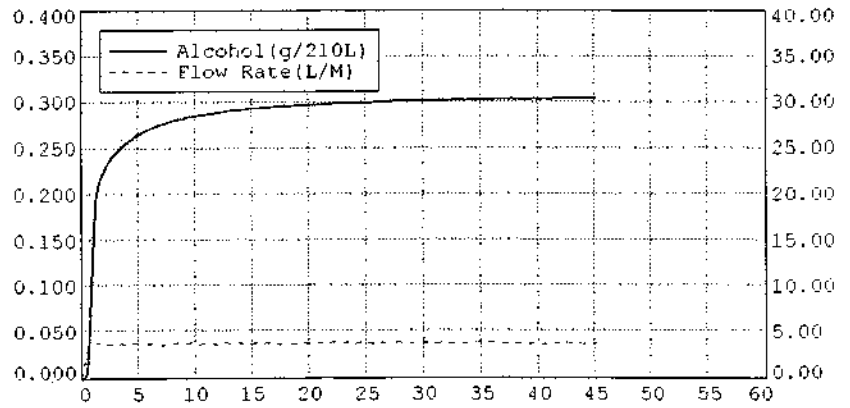
Alaska Department of Public Safety  
 DATAMASTER dmt: 100370

Date: 12/14/2017  
 Time: 15:04:55

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

BLANK TEST	0.000	15:06
INTERNAL STANDARD	VERIFIED	15:06
EXTERNAL STANDARD	0.304	15:07
BLANK TEST	0.000	15:08
EXTERNAL STANDARD	0.304	15:08
BLANK TEST	0.000	15:09
EXTERNAL STANDARD	0.304	15:10
BLANK TEST	0.000	15:11
EXTERNAL STANDARD	0.302	15:11
BLANK TEST	0.000	15:12
EXTERNAL STANDARD	0.302	15:13
BLANK TEST	0.000	15:14

Average = 0.3032  
 Std Dev = 0.0011



SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dmt: 100370

Date: 12/18/2017  
Time: 09:58:15

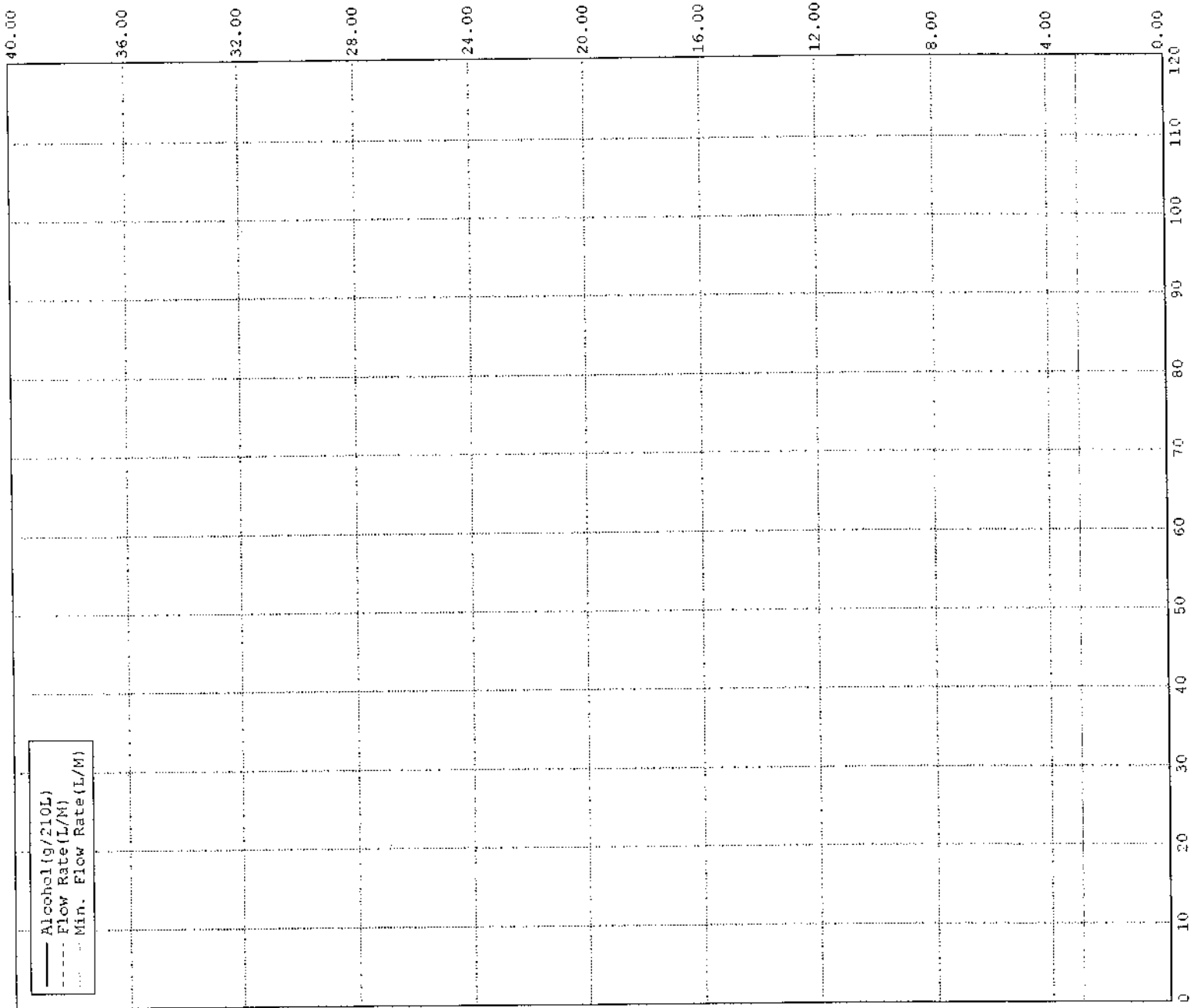
SUBJECT NAME:  
TEST TEST  
LICENSE #: INCOMPLETE

OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 17-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.86: 0.080  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 09:59  
BLANK TEST 0.000 09:59  
INTERNAL STANDARD VERIFIED 09:59  
EXTERNAL STANDARD 0.078 10:00  
BLANK TEST 0.000 10:01  
SUBJECT SAMPLE INCOMPLETE 10:03



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

Date: 12/18/2017  
Time: 13:30:35

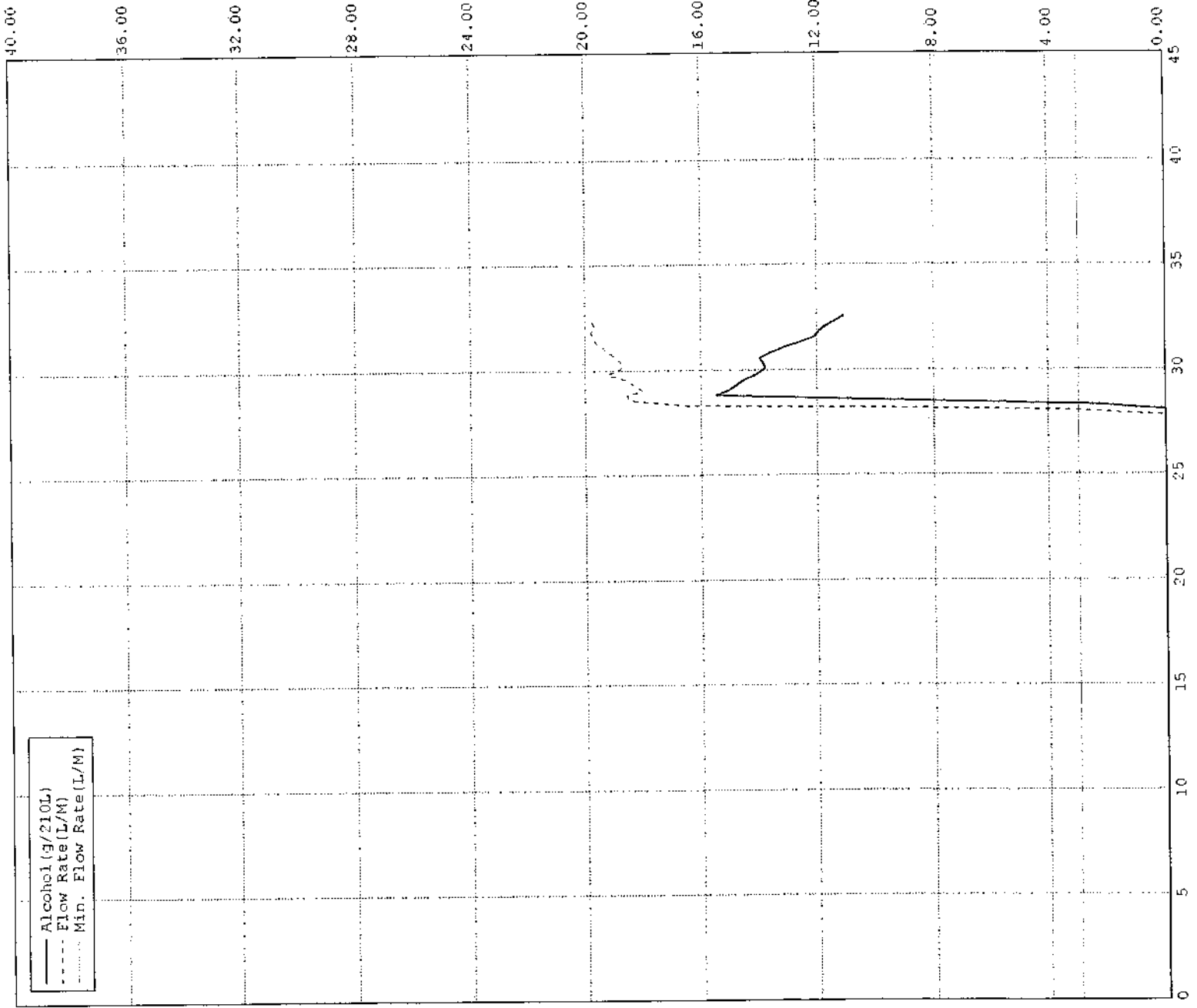
SUBJECT NAME:  
TEST TEST  
LICENSE #: INVALID

OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 17-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.92: 0.080  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 13:32  
BLANK TEST 0.000 13:32  
INTERNAL STANDARD VERIFIED 13:32  
EXTERNAL STANDARD 0.078 13:32  
BLANK TEST 0.000 13:33  
SUBJECT SAMPLE INVALID 13:34



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

Date: 12/18/2017  
Time: 13:37:47

SUBJECT NAME: *CAS 12/06/17*  
TEST TEST  
LICENSE #: INT-~~INVALID~~ *Acetone*

OPERATOR NAME:  
COLLEEN S OBRYANT  
OPERATOR'S #: 6237

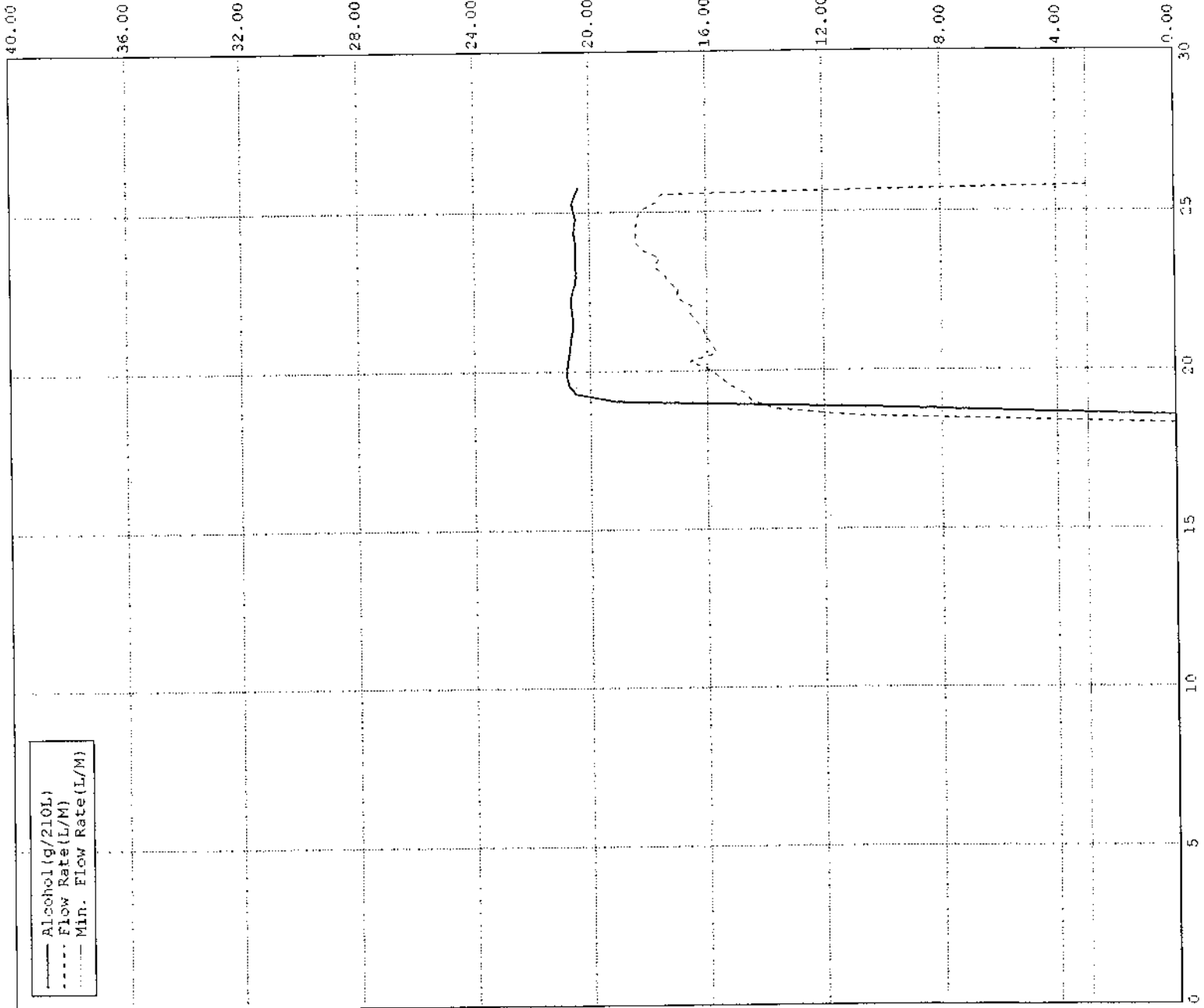
DEPT/AGENCY:  
AAA1  
CASE/REPORT: 17-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.92: 0.080  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 13:39  
BLANK TEST 0.000 13:39  
INTERNAL STANDARD VERIFIED 13:39  
Xq = 0.091 (2.36%) 0.079 13:39  
EXTERNAL STANDARD X[1] = 0.0785 (0.0004) (0.0013) 0.000 13:40  
BLANK TEST XXX 13:41  
SUBJECT SAMPLE X[1] = 0.1023 (-0.0172) (-0.0008)

Interference Detected

*CAS*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

Date: 12/18/2017  
Time: 13:44:23

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-IPA

OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 17-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.92: 0.080  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:45
BLANK TEST	0.000	13:45
INTERNAL STANDARD	VERIFIED	13:45
$X_q = 0.091$ (2.55%)		
EXTERNAL STANDARD	0.079	13:45
$X[1] = 0.0792$ (0.0009)	(0.0019)	
BLANK TEST	0.000	13:46
SUBJECT SAMPLE	XXX	13:47
$X[1] = 0.1139$ (-0.0219)	(0.0004)	

Interference Detected

CO2





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

Date: 12/18/2017  
Time: 13:49:59

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-NEGATIVE

OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 17-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

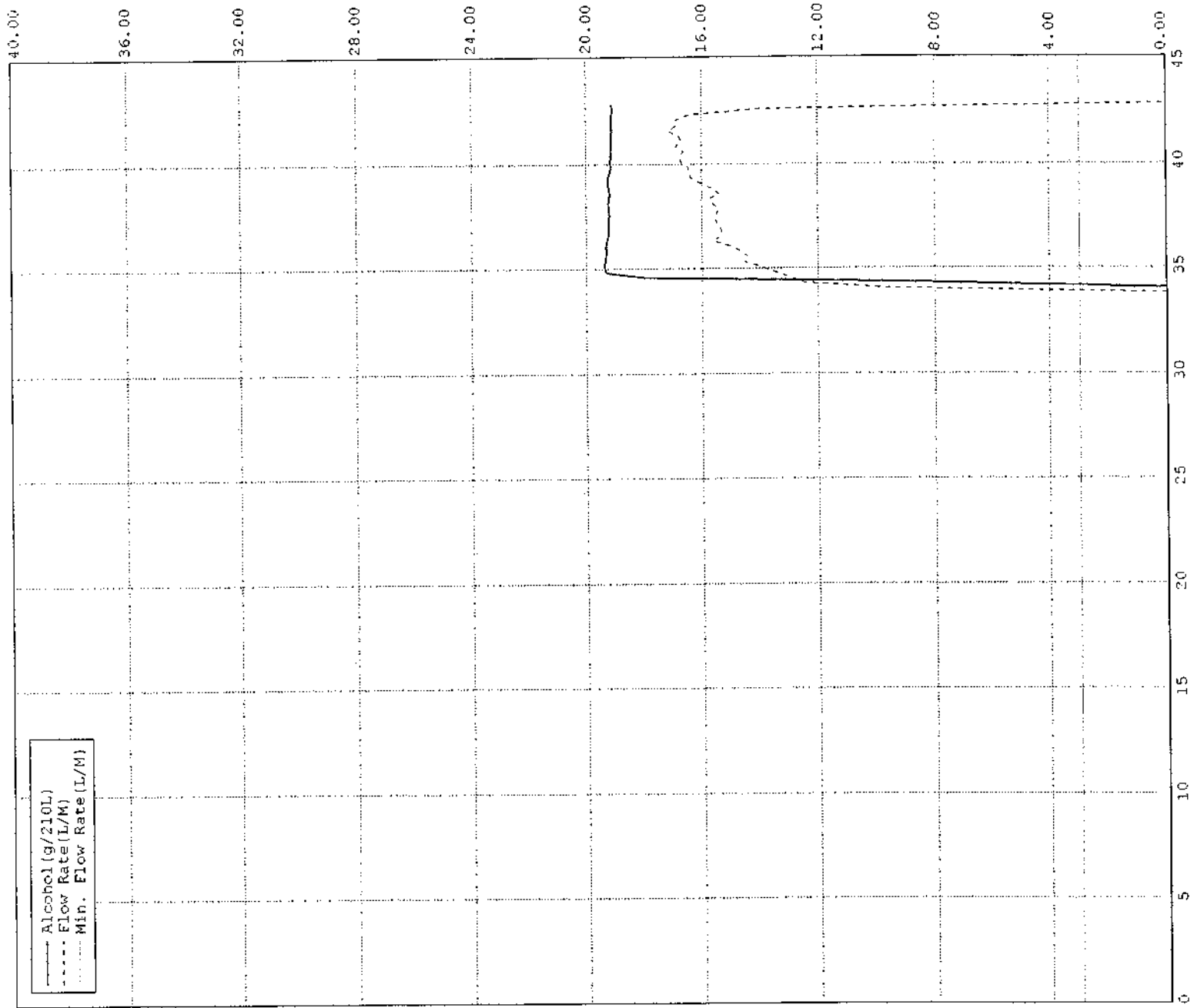
NOMINAL: 0.080  
TARGET AT 29.92: 0.080  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:51
BLANK TEST	0.000	13:51
INTERNAL STANDARD	VERIFIED	13:51
Xq = 0.091 (2.26%)		
EXTERNAL STANDARD	0.079	13:51
X[1] = 0.0786 (0.0011) (0.0021)		
BLANK TEST	0.000	13:52
SUBJECT SAMPLE (Vol=2.25L)	0.096	13:53
X[1] = 0.0960 (-0.0029) (-0.0008)		
BLANK TEST	0.000	13:54
EXTERNAL STANDARD	0.078	13:54
X[1] = 0.0783 (0.0009) (0.0012)		
BLANK TEST	0.000	13:55

*Filter 2 avg = 0.0008*

*Filter 3 avg = 0.0016*

*CBS*



SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dmt: 100370

Date: 12/18/2017  
Time: 13:59:27

SUBJECT NAME:  
TEST TEST  
LICENSE #: MAX ATTEMPTS

OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1

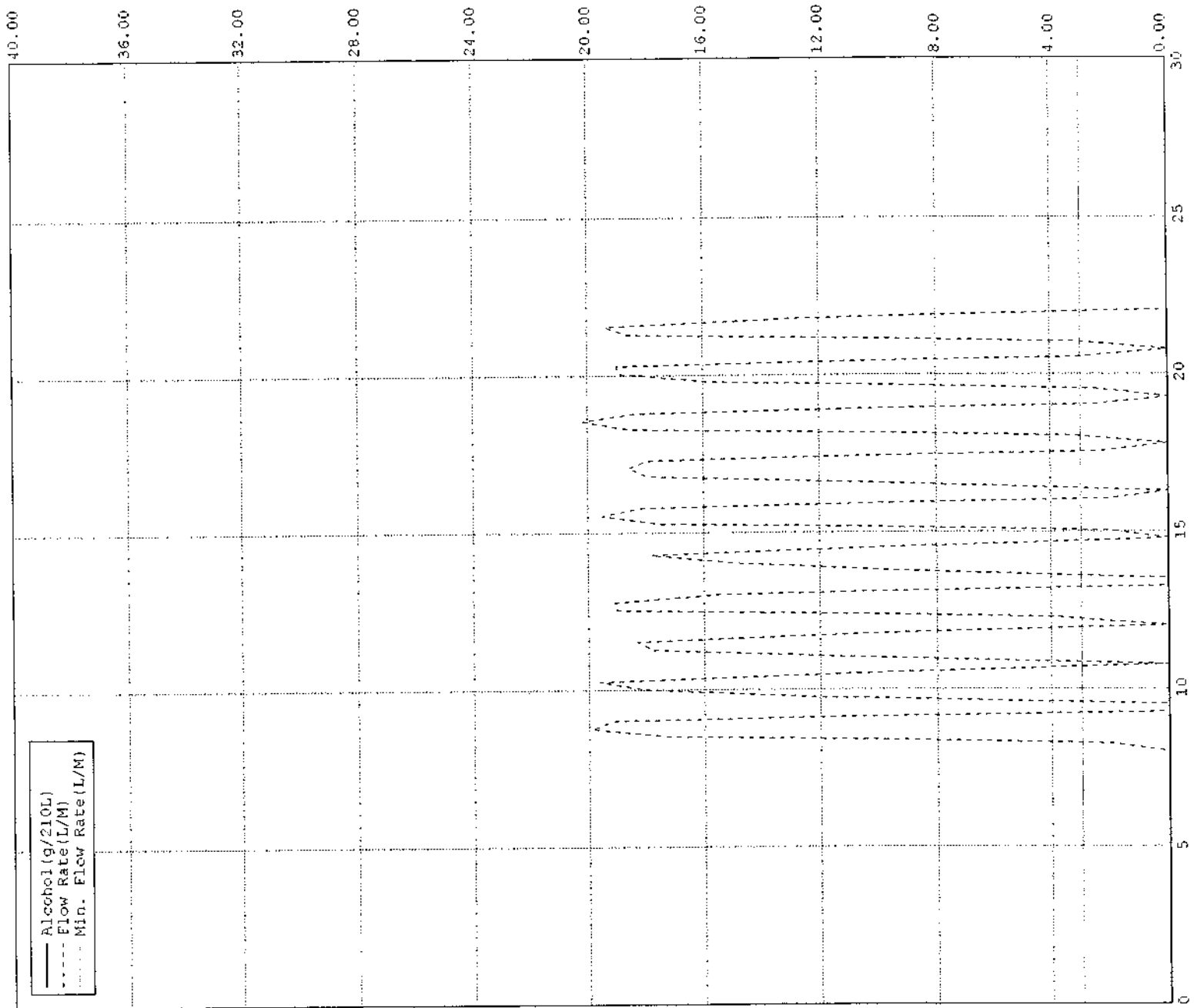
CASE/REPORT: 17-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.92: 0.080  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 14:00  
BLANK TEST 0.000 14:01  
INTERNAL STANDARD VERIFIED 14:01  
EXTERNAL STANDARD 0.079 14:01  
BLANK TEST 0.000 14:02  
SUBJECT SAMPLE XXX 14:02

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100370

Date: 12/18/2017  
Time: 14:05:35

SUBJECT NAME:  
TEST TEST  
LICENSE #: RFI

OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

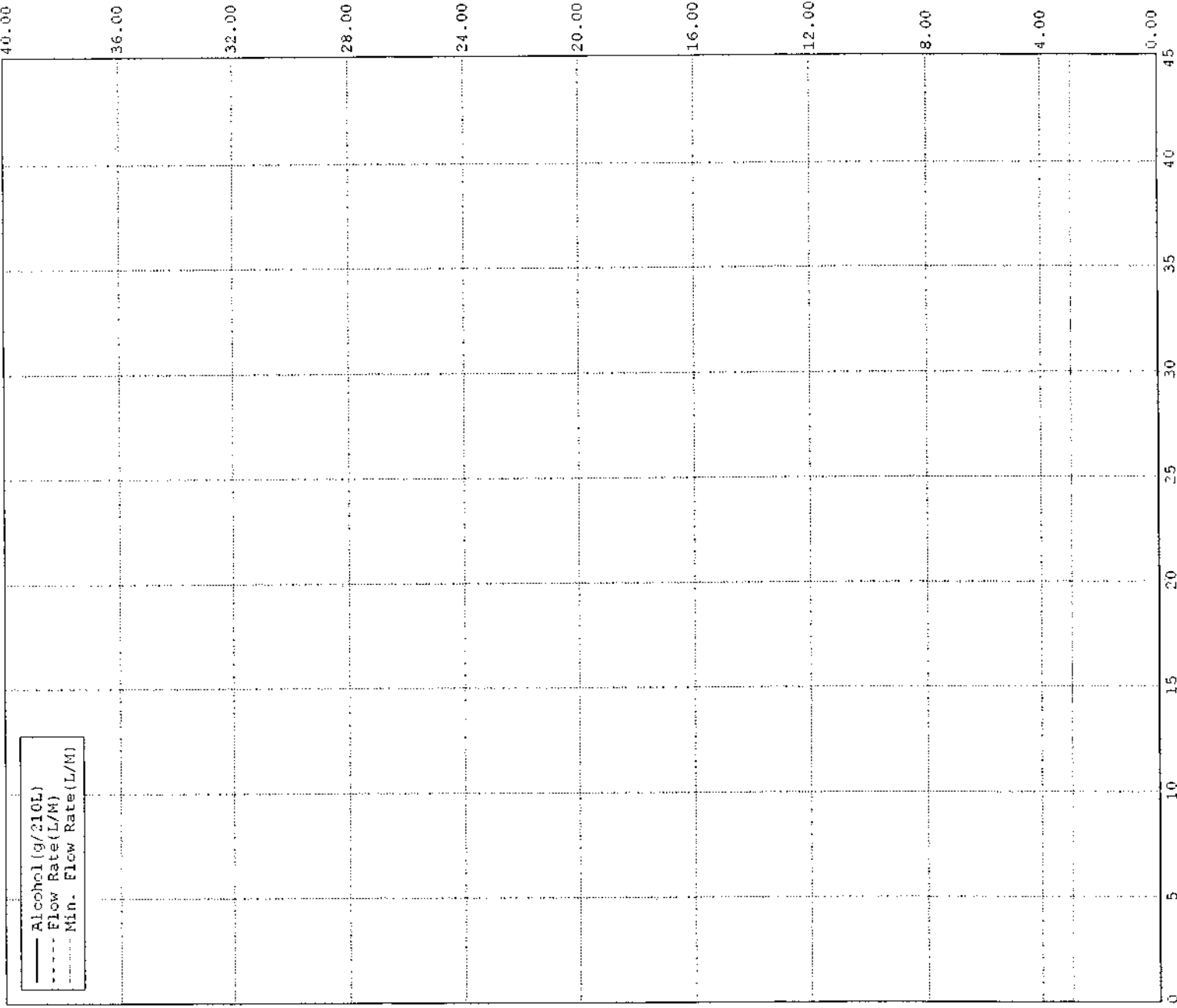
DEPT/AGENCY:  
AAA1  
CASE/REPORT: 17-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.92: 0.080  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 14:07  
BLANK TEST 0.000 14:07  
INTERNAL STANDARD VERIFIED 14:07  
EXTERNAL STANDARD 0.079 14:07  
BLANK TEST 0.000 14:08

RFI DETECTED

*CB*



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100370

Date: 12/18/2017  
Time: 14:21:04

SUBJECT NAME:  
TEST TEST  
LICENSE #: NONDRINKING

OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 17-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.92: 0.080  
LOT #: AG634001  
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:22
BLANK TEST	0.000	14:22
INTERNAL STANDARD	VERIFIED	14:22
EXTERNAL STANDARD	0.079	14:22
BLANK TEST	0.000	14:23
SUBJECT SAMPLE (Vol=2.06L)	0.000	14:23
BLANK TEST	0.000	14:24
EXTERNAL STANDARD	0.080	14:24
BLANK TEST	0.000	14:25

