

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 100695 Analyst C. O'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 1.5 L (1.3L to 1.7L)

4. Linearity Test (attached)

a. Levels Used

- i. 0.020g/210L Mnf Aargas Lot AG616504 Exp 6/13/18
- ii. 0.040g/210L Mnf Aargas Lot AG630101 Exp 10/27/18
- iii. 0.080g/210L Mnf Aargas Lot AG608504 Exp 3/25/18
- iv. 0.100g/210L Mnf Aargas Lot AG629304 Exp 10/19/18
- v. 0.200g/210L Mnf Guth Lot 17090 Exp 2/24/19
 - 1. Simulator S/N SD1300 Date Calibrated 3/29/17
- vi. 0.300g/210L Mnf Guth 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 Guth Lot 16160 Level 0.100 Exp 7/19/18
 - 1. Simulator S/N DR4178 Date Calibrated 3/27/17
- ii. Isopropanol - Mnf Guth Lot 17060 Level 0.100 Exp 2/14/19
 - 1. Simulator S/N SD1176 Date Calibrated 3/29/17
- iii. Negative Control - Mnf Guth 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
- 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 12/18/17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 12/14/2017
Time: 12:28:38

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 = 47.6°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.70 V PASSED
(0.95 V - 2.23 V)
Cooler Voltage = 1.71 V PASSED
(0.95 V - 2.21 V)
Bias Voltage = 79 V PASSED
(49 V - 113 V)
Chopper Freq = 566 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.2 in

PUMP INFO

Flow Rate = 4.230 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

Xq = 0.111 1.21% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100695

Date: 12/14/2017

Time: 2:21 PM

Temperatures (°C)

Sample Cell: 48.8°C

Breath Tube: 47.6°C

Current Barometer 29.2 in

Volume (Ltr) 1.51

Settings

Lamp: 1.70 V

Bias: 80 V

Cooler: 1.74 V

Chopper: 566 Hz

Voltages (V)

Flow: 1.04 V

Detector: 0.085 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 11/03/2011
Time: 11:06:42

Ca = 0.1000
CAL = 0.983513 0.800 <= CAL < 1.200
b1 = 0.0004 0.0000 <= b1 < 0.0040
b2 = 0.0038 0.0010 <= b2 < 0.0100
b3 = 0.0001 0.0000 <= b3 < 0.0040
Xq = 0.1092 0.0500 <= Xq < 0.2000
a21 = 1.156617 1.050 <= a21 < 1.300
a31 = 0.538073 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 12/14/2017
Time: 14:22:57

SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

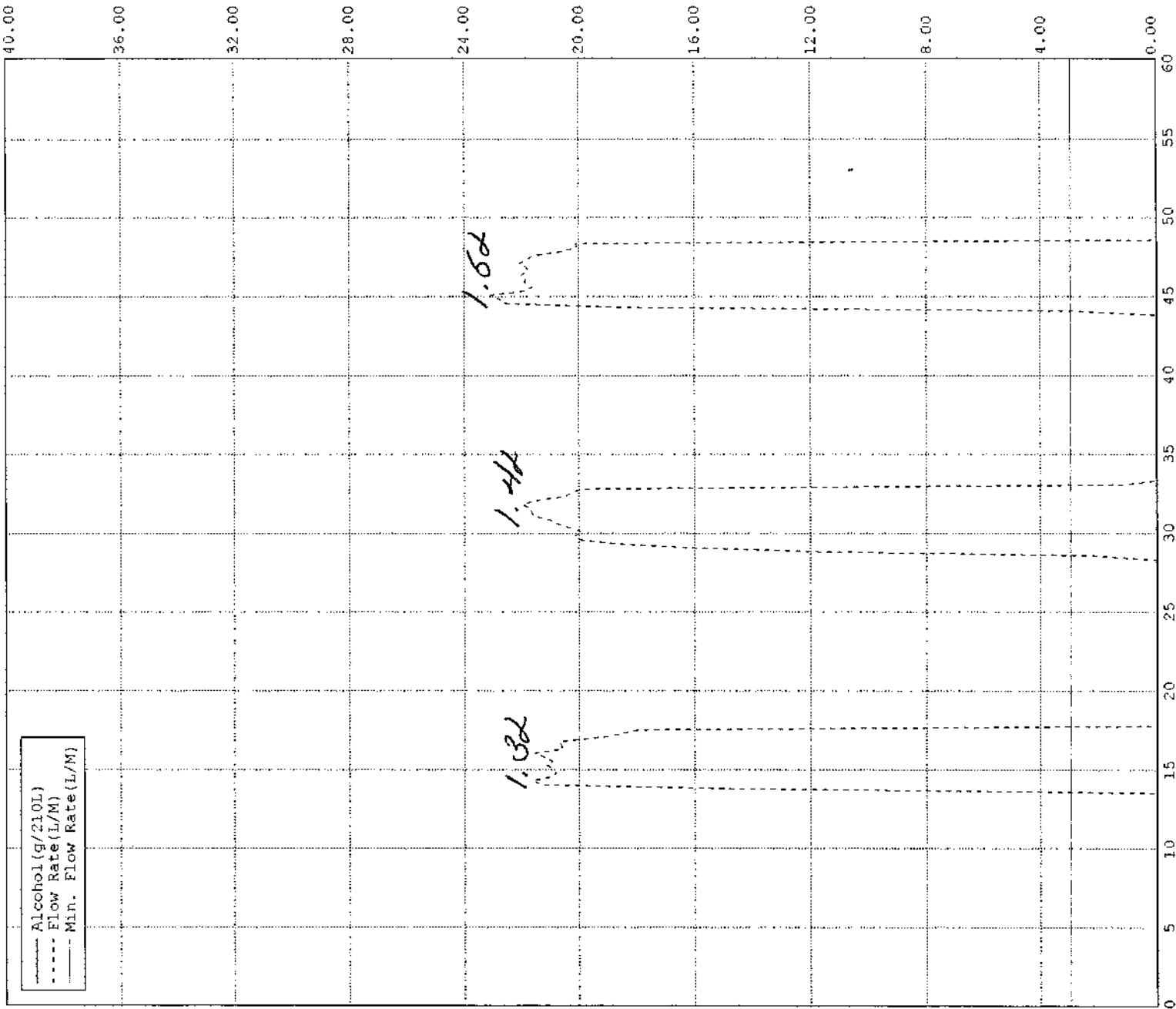
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.20: 0.078
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	14:24
BLANK TEST	0.000	14:25
INTERNAL STANDARD	VERIFIED	14:25
INTERNAL STANDARD	0.076	14:25
BLANK TEST	0.000	14:26
SUBJECT SAMPLE (Vol=1.53L)	0.000	14:27
BLANK TEST	0.000	14:28
EXTERNAL STANDARD	0.076	14:28
BLANK TEST	0.000	14:29

CS



LINEARITY CHECK

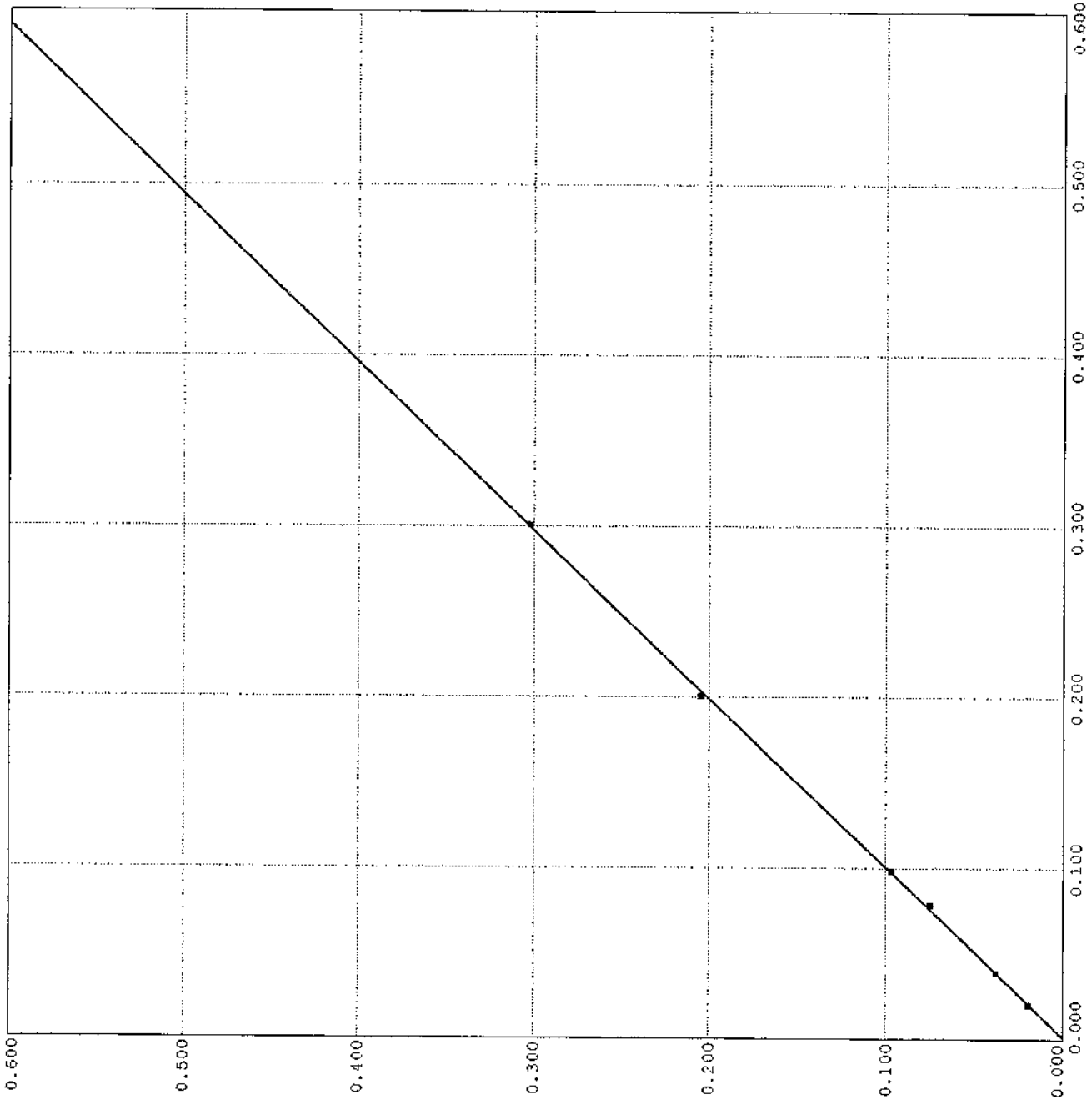
Alaska Department of Public Safety
 DATAMASTER dmt: 100695

Date: 12/14/2017
 Time: 14:49:14

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	0.0760	0.0000
0.098	0.0980	0.0000
0.200	0.2056	0.0015
0.300	0.3026	0.0009

SLOPE = 1.016744
 R² = 0.999678



CUB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

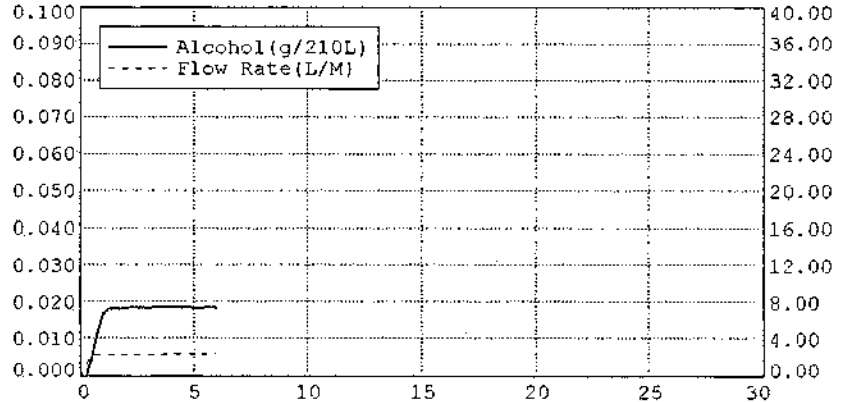
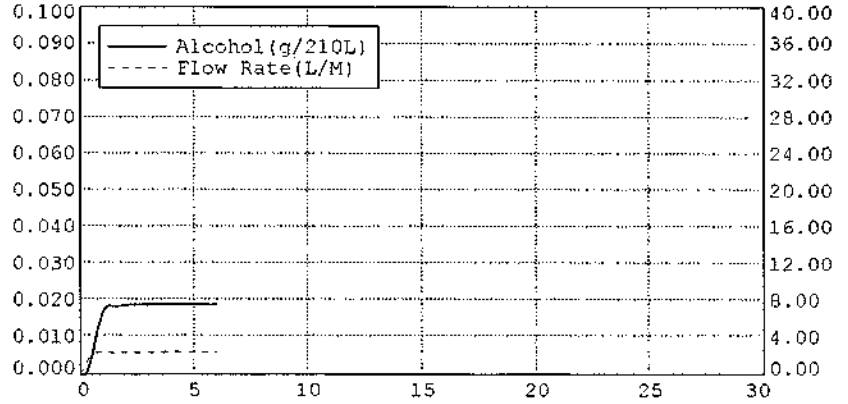
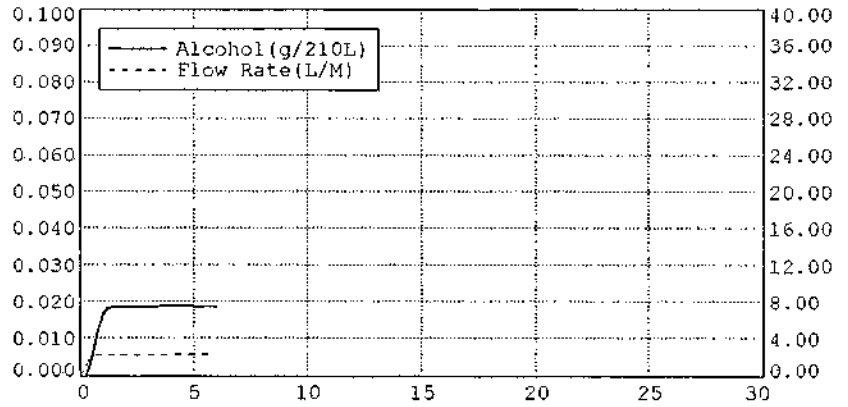
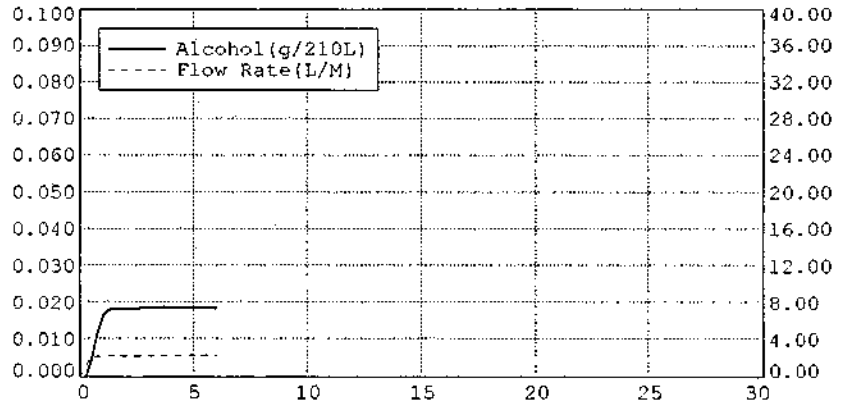
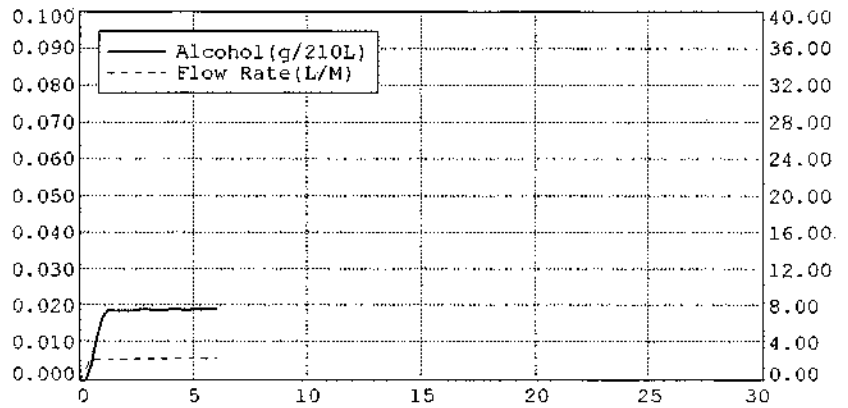
Date: 12/14/2017
 Time: 14:49:16

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.21: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 360 psi

BLANK TEST	0.000	15:04
INTERNAL STANDARD	VERIFIED	15:04
EXTERNAL STANDARD	0.021	15:04
BLANK TEST	0.000	15:05
EXTERNAL STANDARD	0.020	15:05
BLANK TEST	0.000	15:06
EXTERNAL STANDARD	0.020	15:06
BLANK TEST	0.000	15:07
EXTERNAL STANDARD	0.020	15:08
BLANK TEST	0.000	15:08
EXTERNAL STANDARD	0.020	15:09
BLANK TEST	0.000	15:10

Average = 0.0202
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

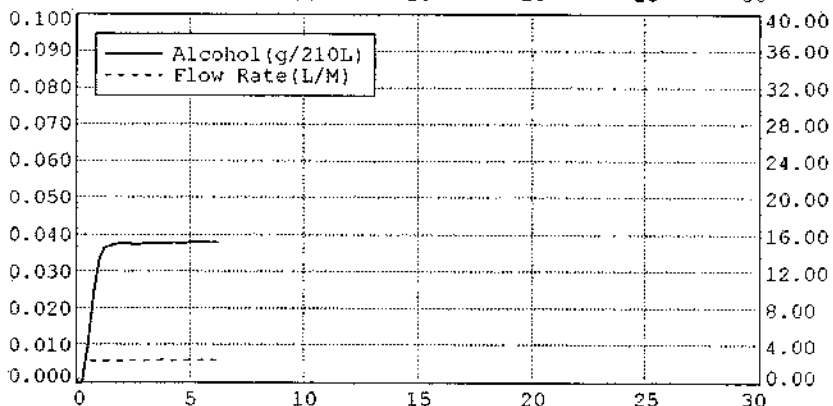
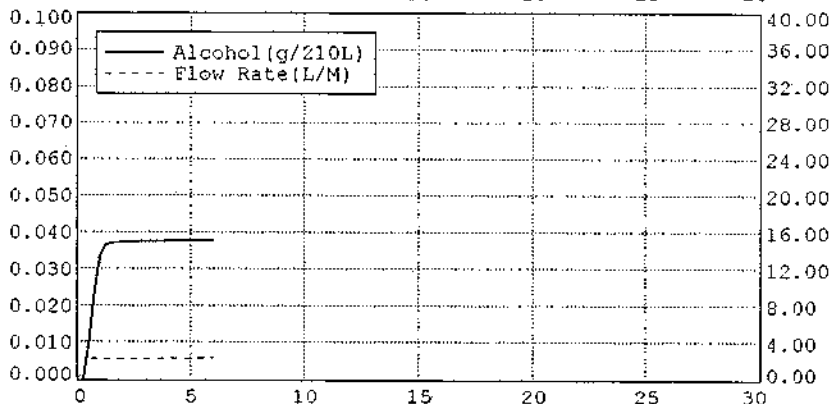
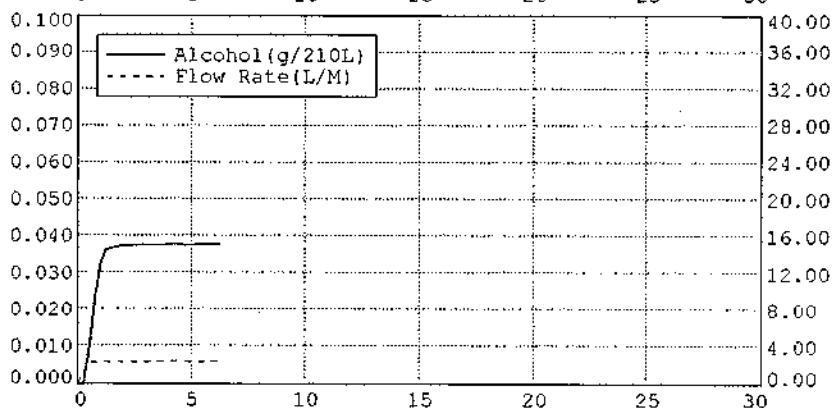
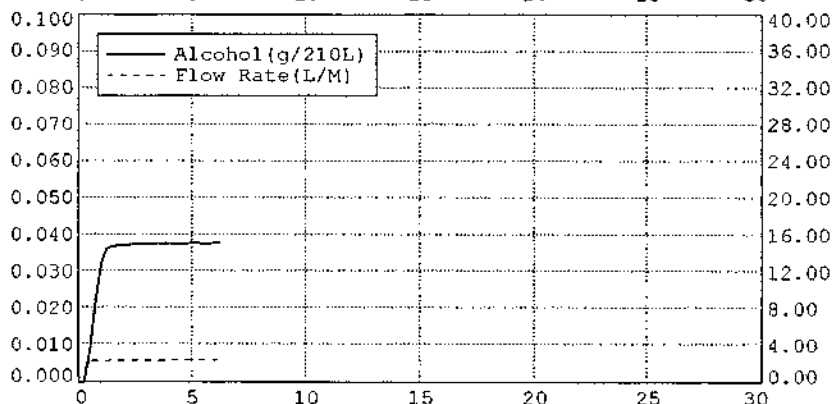
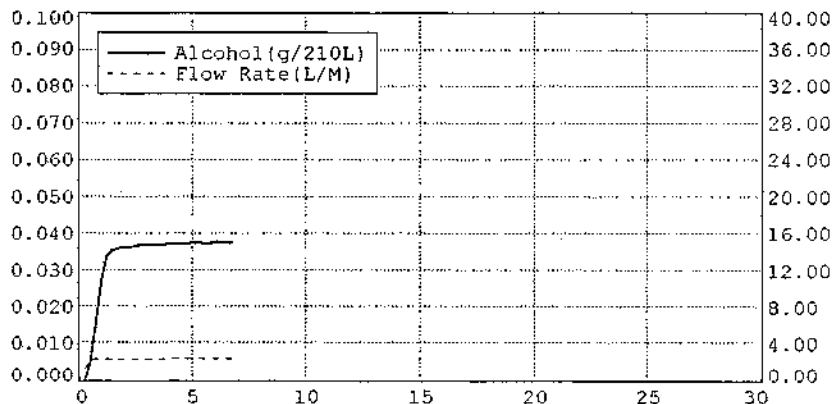
Date: 12/14/2017
 Time: 15:12:02

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.21: 0.039
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 440 psi

BLANK TEST	0.000	15:13
INTERNAL STANDARD	VERIFIED	15:13
EXTERNAL STANDARD	0.039	15:13
BLANK TEST	0.000	15:14
EXTERNAL STANDARD	0.039	15:14
BLANK TEST	0.000	15:15
EXTERNAL STANDARD	0.039	15:15
BLANK TEST	0.000	15:16
EXTERNAL STANDARD	0.039	15:16
BLANK TEST	0.000	15:17
EXTERNAL STANDARD	0.039	15:17
BLANK TEST	0.000	15:18

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

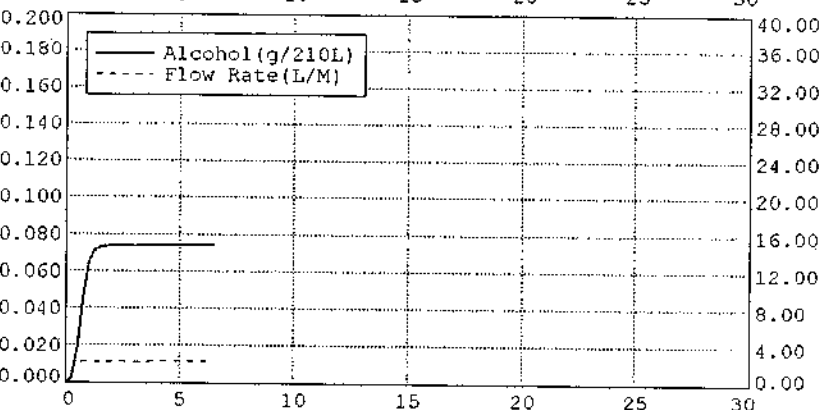
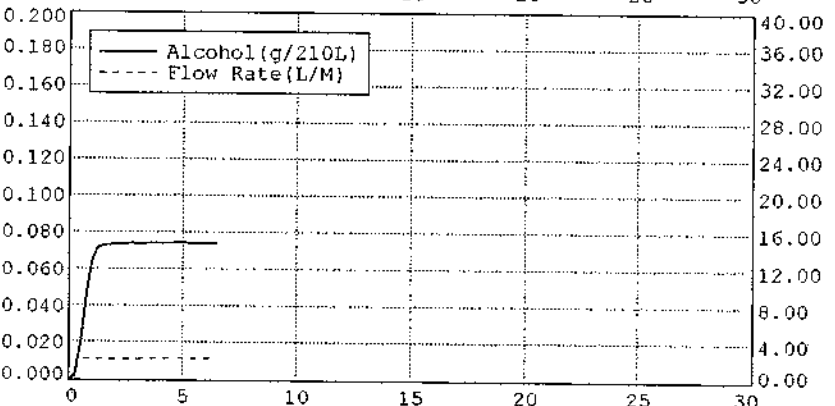
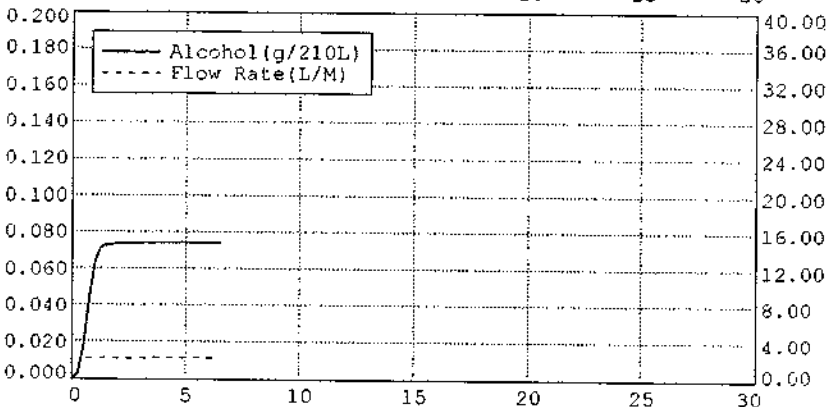
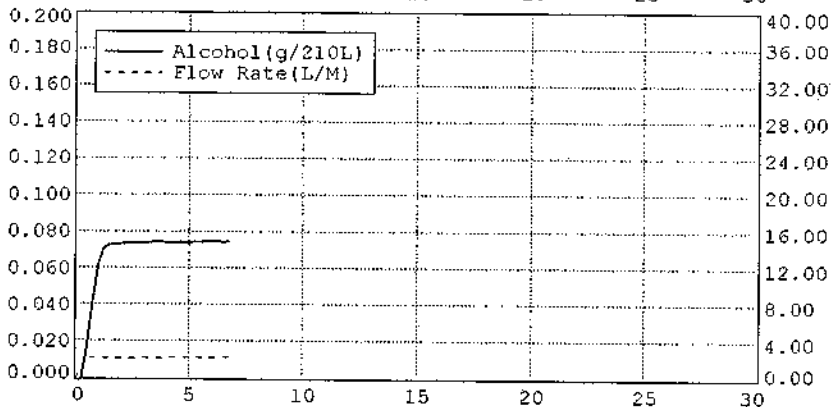
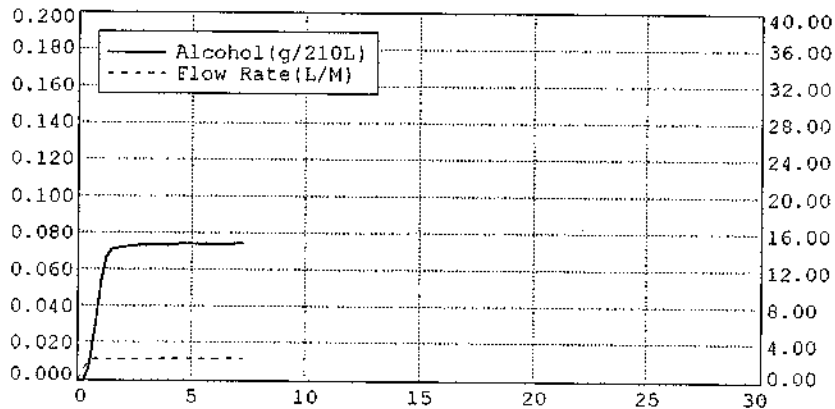
Date: 12/14/2017
 Time: 15:21:41

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.21: 0.078
 LOT #: AG608504
 EXPIRATION: 03/25/2018
 TANK PRESSURE: 371 psi

BLANK TEST	0.000	15:22
INTERNAL STANDARD	VERIFIED	15:22
EXTERNAL STANDARD	0.076	15:23
BLANK TEST	0.000	15:24
EXTERNAL STANDARD	0.076	15:24
BLANK TEST	0.000	15:25
EXTERNAL STANDARD	0.076	15:25
BLANK TEST	0.000	15:26
EXTERNAL STANDARD	0.076	15:26
BLANK TEST	0.000	15:27
EXTERNAL STANDARD	0.076	15:27
BLANK TEST	0.000	15:28

Average = 0.0760
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

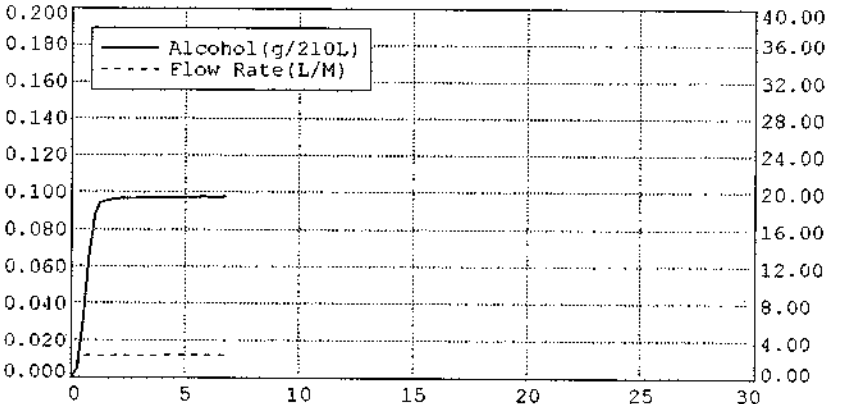
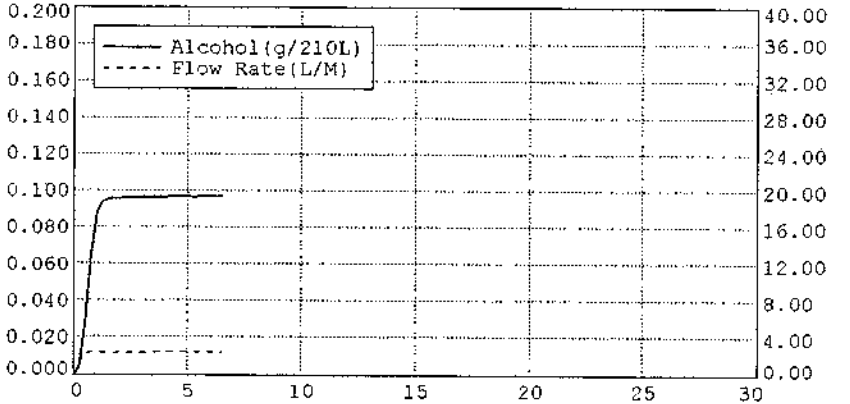
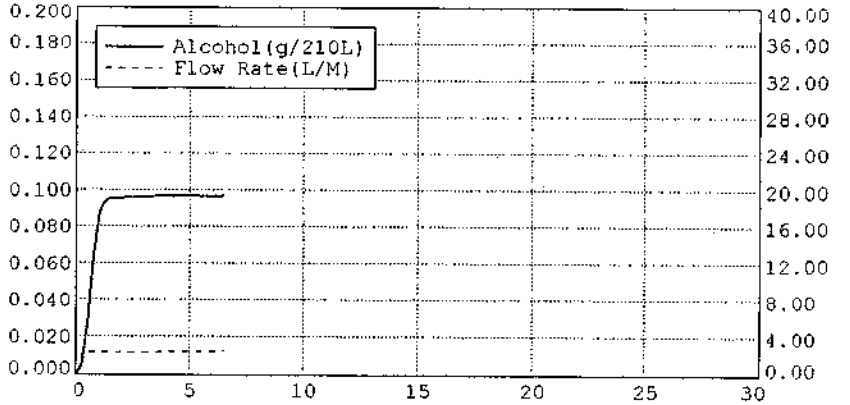
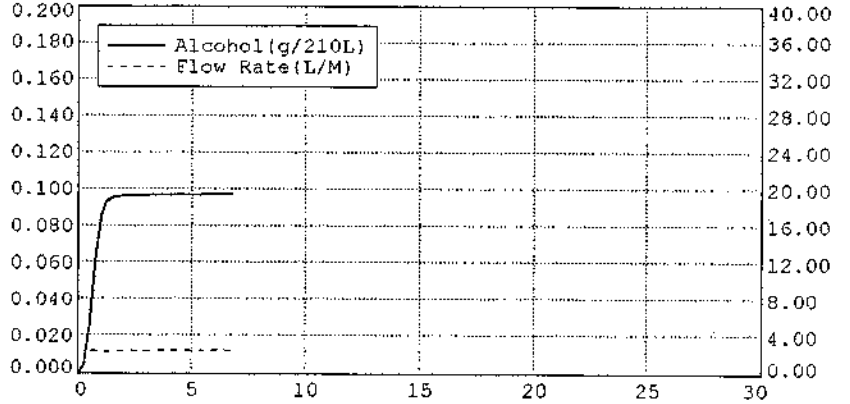
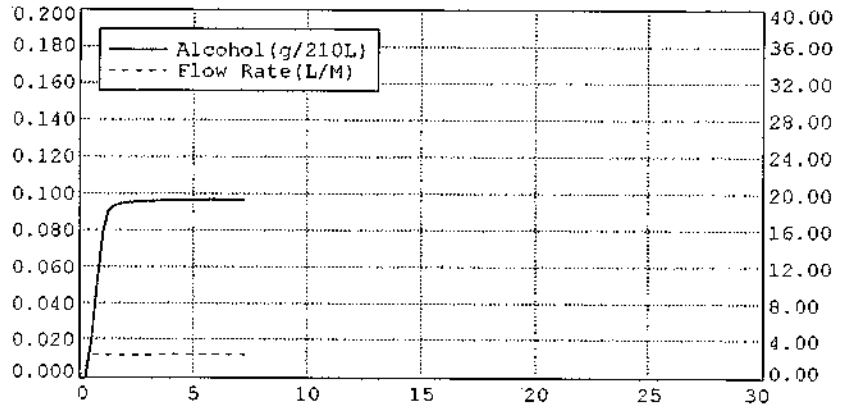
Date: 12/14/2017
 Time: 15:29:18

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.21: 0.098
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 579 psi

BLANK TEST	0.000	15:30
INTERNAL STANDARD	VERIFIED	15:30
EXTERNAL STANDARD	0.098	15:30
BLANK TEST	0.000	15:31
EXTERNAL STANDARD	0.098	15:31
BLANK TEST	0.000	15:32
EXTERNAL STANDARD	0.098	15:32
BLANK TEST	0.000	15:33
EXTERNAL STANDARD	0.098	15:34
BLANK TEST	0.000	15:35
EXTERNAL STANDARD	0.098	15:35
BLANK TEST	0.000	15:36

Average = 0.0980
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

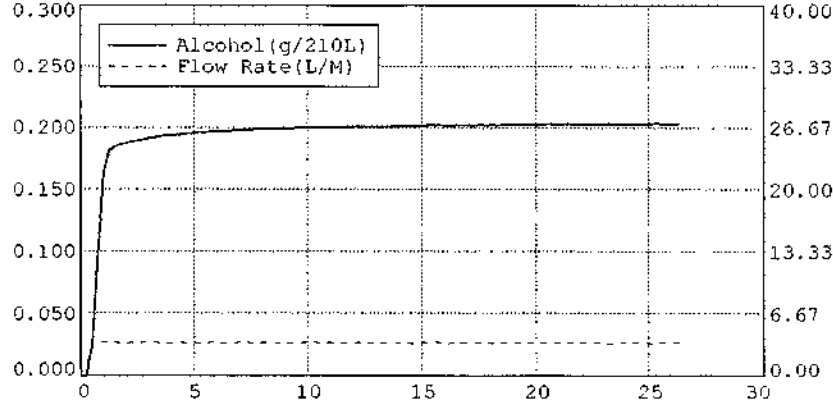
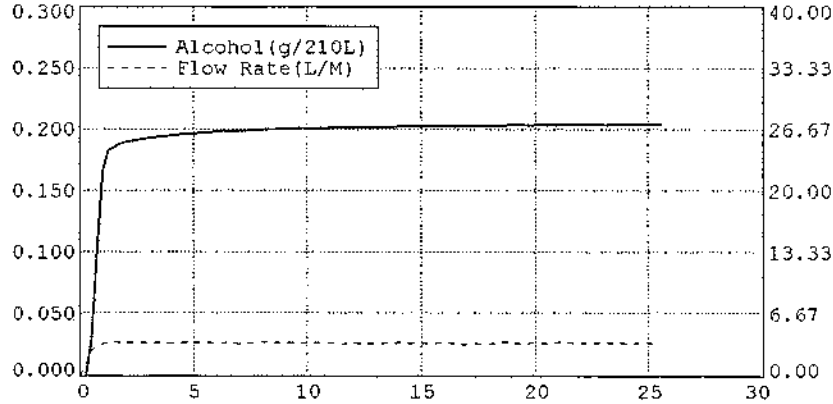
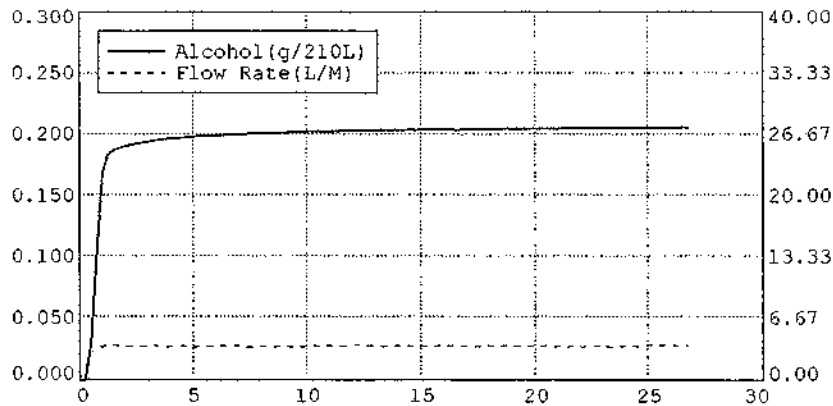
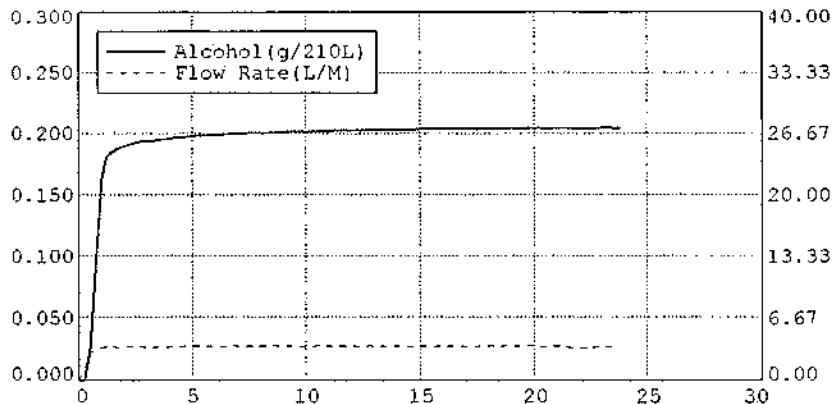
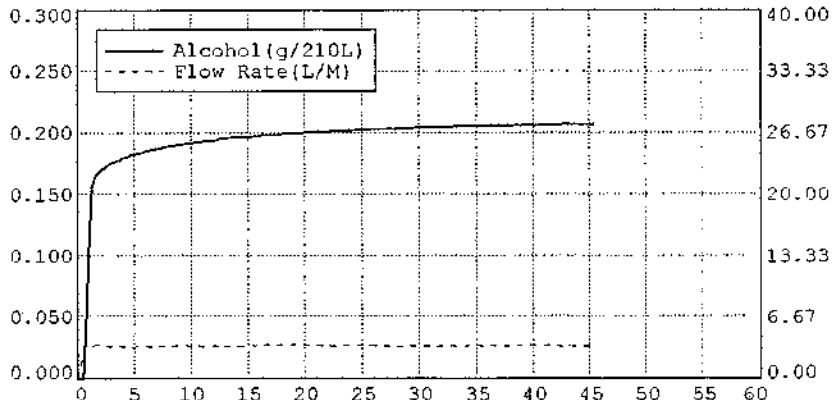
Date: 12/14/2017
 Time: 15:36:45

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	15:37
INTERNAL STANDARD	VERIFIED	15:38
EXTERNAL STANDARD	0.208	15:38
BLANK TEST	0.000	15:39
EXTERNAL STANDARD	0.205	15:40
BLANK TEST	0.000	15:41
EXTERNAL STANDARD	0.206	15:41
BLANK TEST	0.000	15:42
EXTERNAL STANDARD	0.205	15:43
BLANK TEST	0.000	15:44
EXTERNAL STANDARD	0.204	15:44
BLANK TEST	0.000	15:45

Average = 0.2056
 Std Dev = 0.0015



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

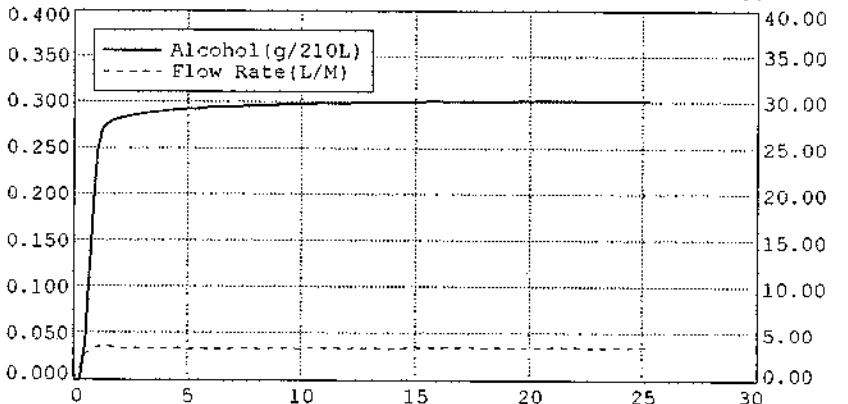
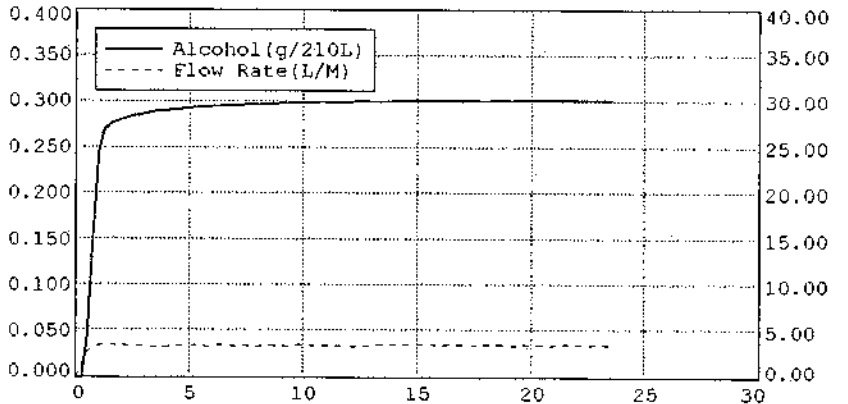
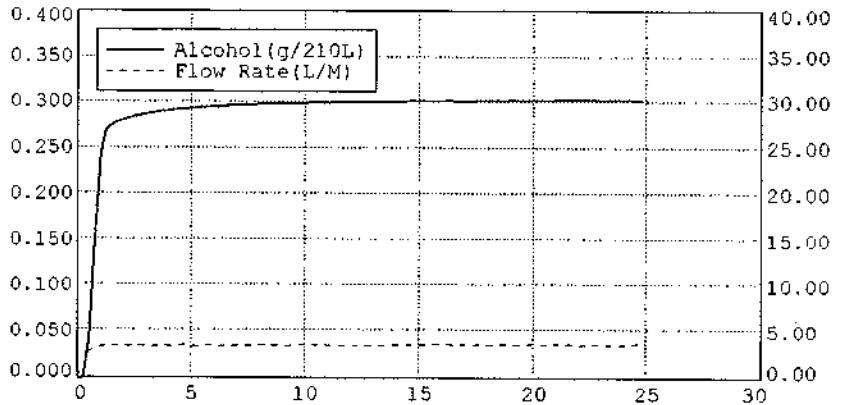
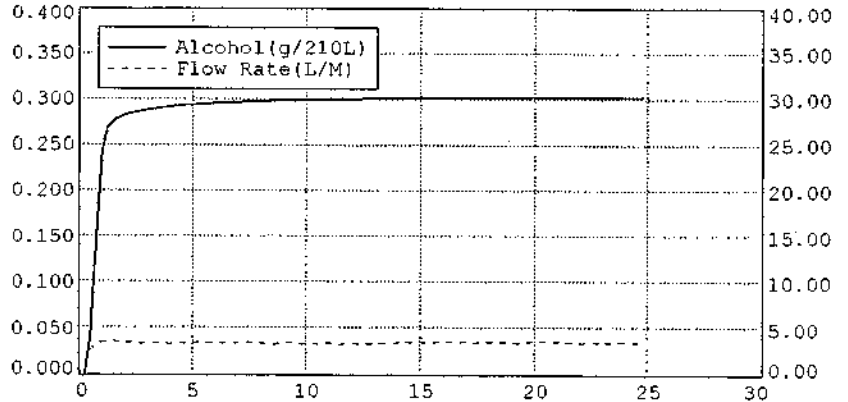
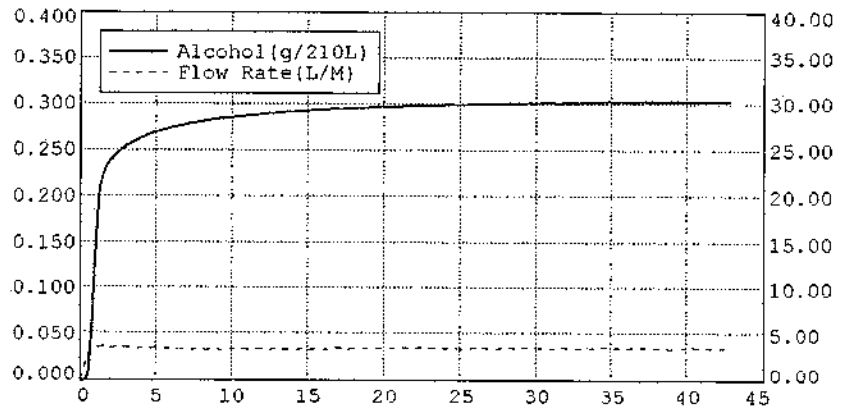
Date: 12/14/2017
 Time: 15:48:59

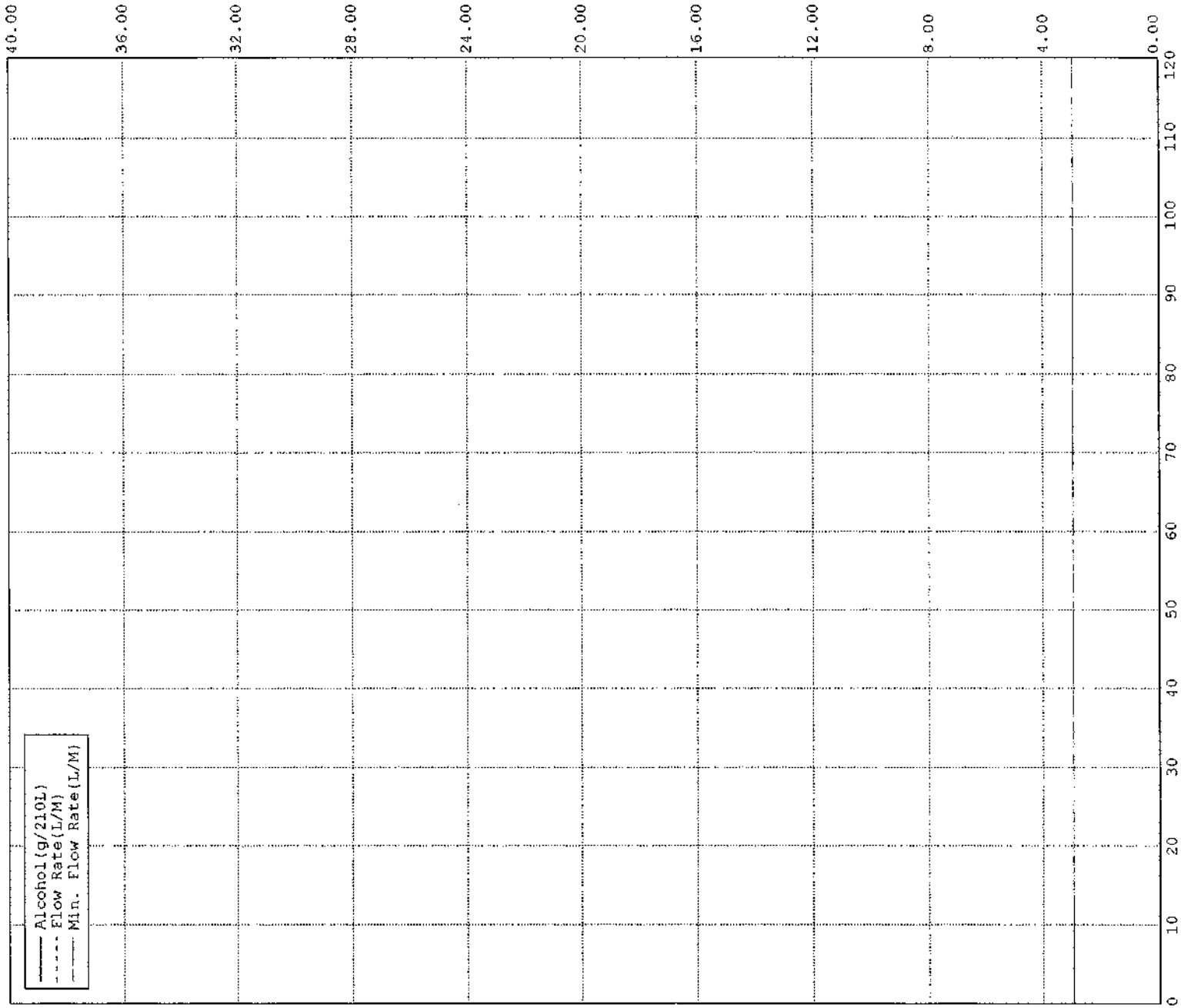
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 17140
 EXPIRATION: 05/15/2019

BLANK TEST	0.000	15:50
INTERNAL STANDARD	VERIFIED	15:50
EXTERNAL STANDARD	0.304	15:51
BLANK TEST	0.000	15:51
EXTERNAL STANDARD	0.303	15:52
BLANK TEST	0.000	15:53
EXTERNAL STANDARD	0.302	15:53
BLANK TEST	0.000	15:54
EXTERNAL STANDARD	0.302	15:55
BLANK TEST	0.000	15:56
EXTERNAL STANDARD	0.302	15:56
BLANK TEST	0.000	15:57

Average = 0.3026
 Std Dev = 0.0009





SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100695

 Date: 12/18/2017
 Time: 11:07:17

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 #: AG608504
 EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 11:08
 BLANK TEST 0.000 11:08
 INTERNAL STANDARD VERIFIED 11:08
 EXTERNAL STANDARD 0.077 11:08
 BLANK TEST 0.000 11:09
 SUBJECT SAMPLE INCOMPLETE 11:11

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 12/18/2017
Time: 14:39:52

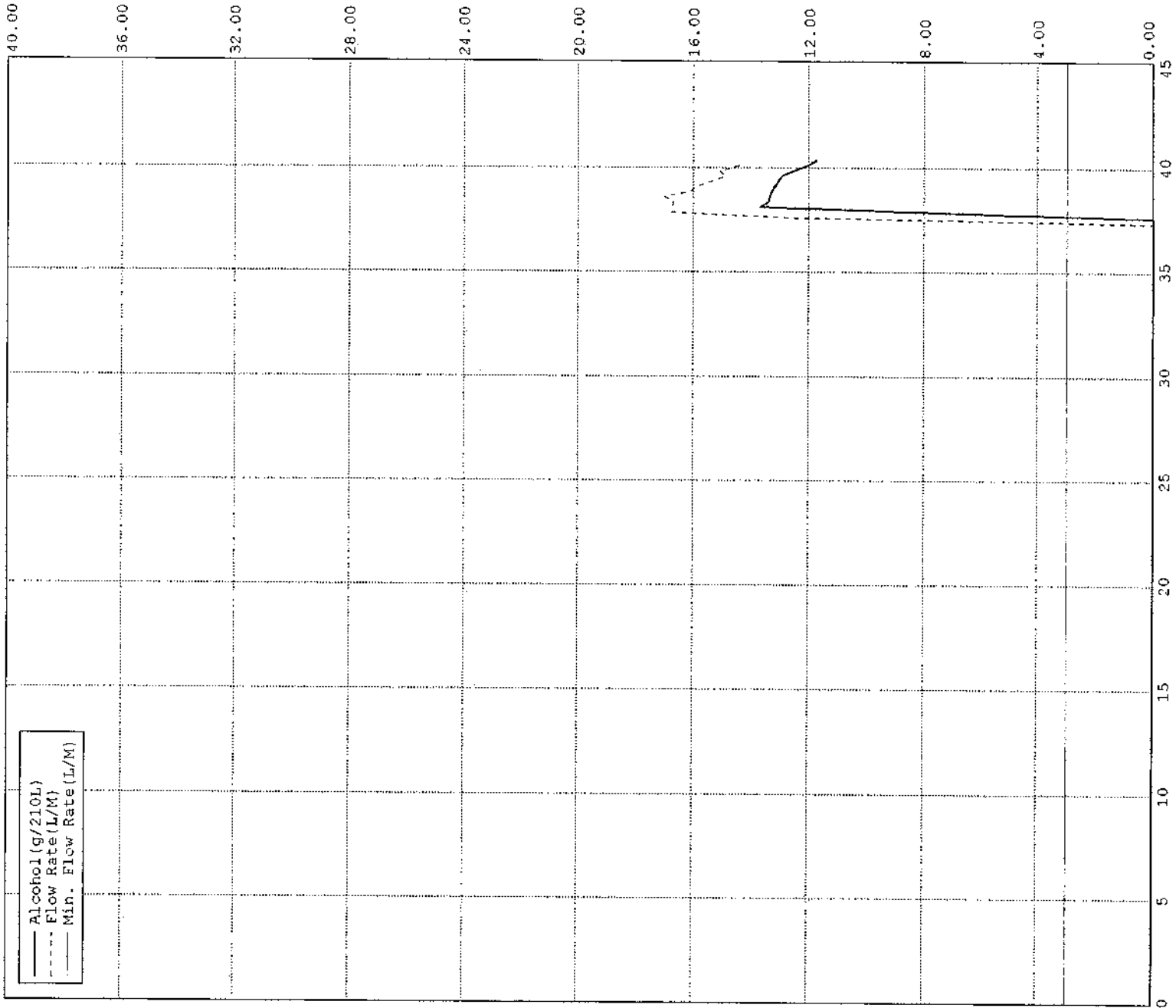
SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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 #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 14:41
BLANK TEST 0.000 14:41
INTERNAL STANDARD VERIFIED 14:41
EXTERNAL STANDARD 0.078 14:41
BLANK TEST 0.000 14:42
SUBJECT SAMPLE INVALID 14:43



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 12/18/2017
Time: 14:46:46

SUBJECT NAME: *COB 12/18/17*
TEST TEST
LICENSE #: INT-~~INVALID~~ *Acetone*

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

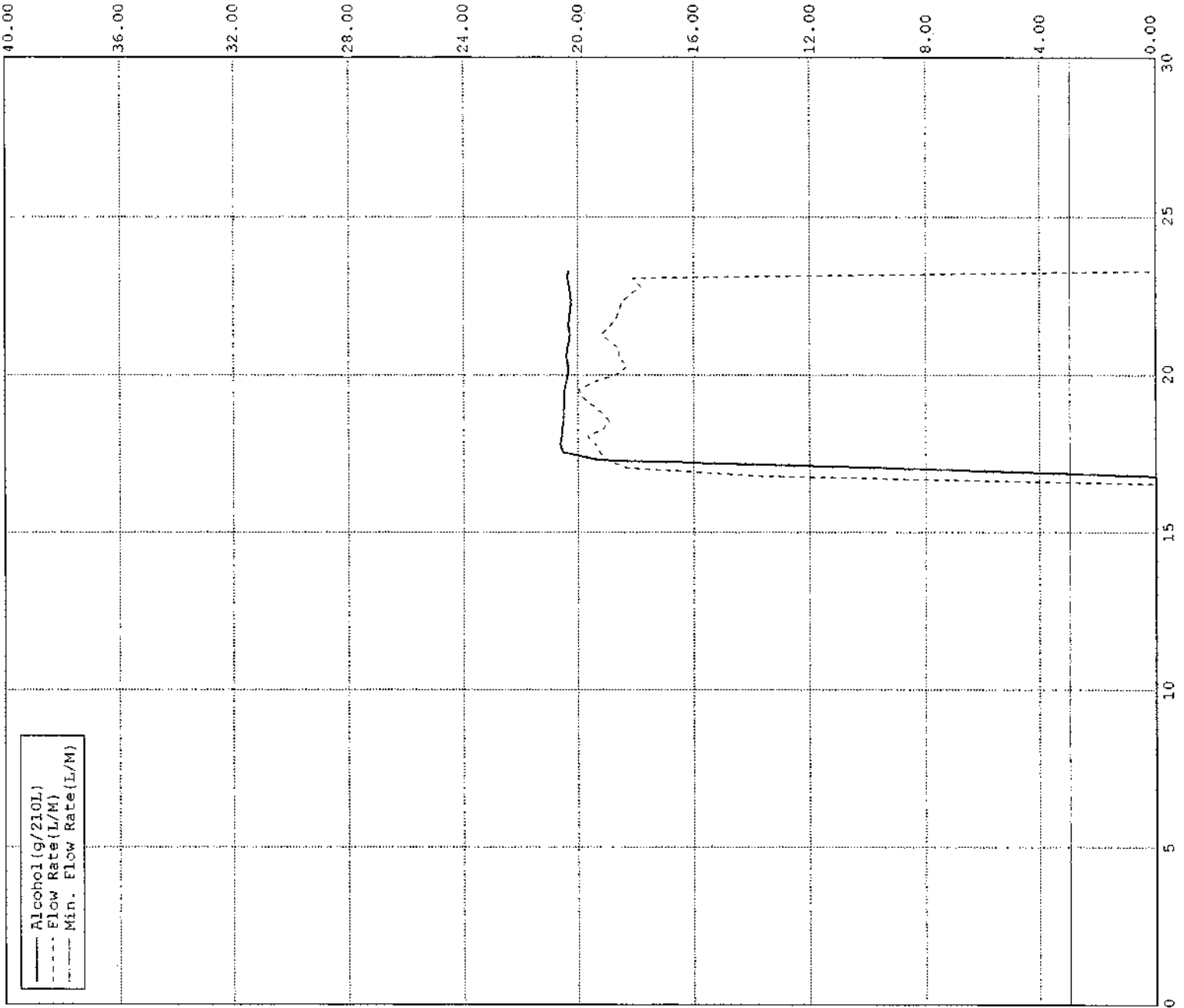
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.92: 0.080
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	14:49
BLANK TEST	0.000	14:49
INTERNAL STANDARD	VERIFIED	14:49
$X_q = 0.111$ (1.37%)		
EXTERNAL STANDARD	0.078	14:49
$X[1] = 0.0777$ (0.0001) (0.0026)		
BLANK TEST	0.000	14:50
SUBJECT SAMPLE	XXX	14:50
$X[1] = 0.1020$ (-0.0151) (0.0010)		

Interference Detected

COB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100695

Date: 12/18/2017
Time: 14:53:22

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

DEPT/AGENCY:
AAAI

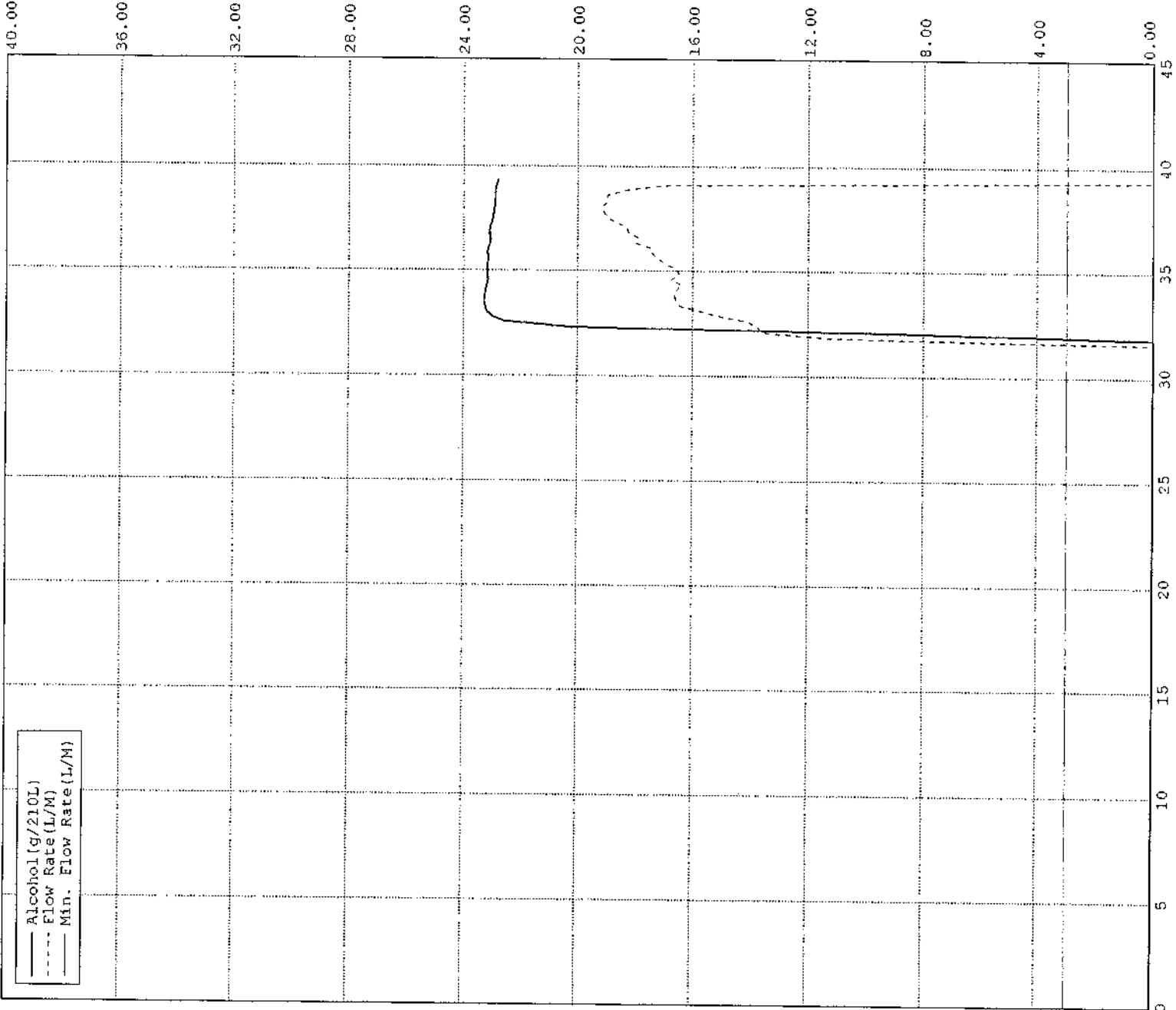
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.92: 0.080
LOF #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 14:54
BLANK TEST 0.000 14:54
INTERNAL STANDARD VERIFIED 14:54
Xq = 0.111 (1.94%)
EXTERNAL STANDARD 0.078 14:54
X[1] = 0.0779 (0.0006) (0.0028)
BLANK TEST 0.000 14:55
SUBJECT SAMPLE XXX 14:56
X[1] = 0.1144 (-0.0194) (0.0014)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 12/18/2017
Time: 14:59:35

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

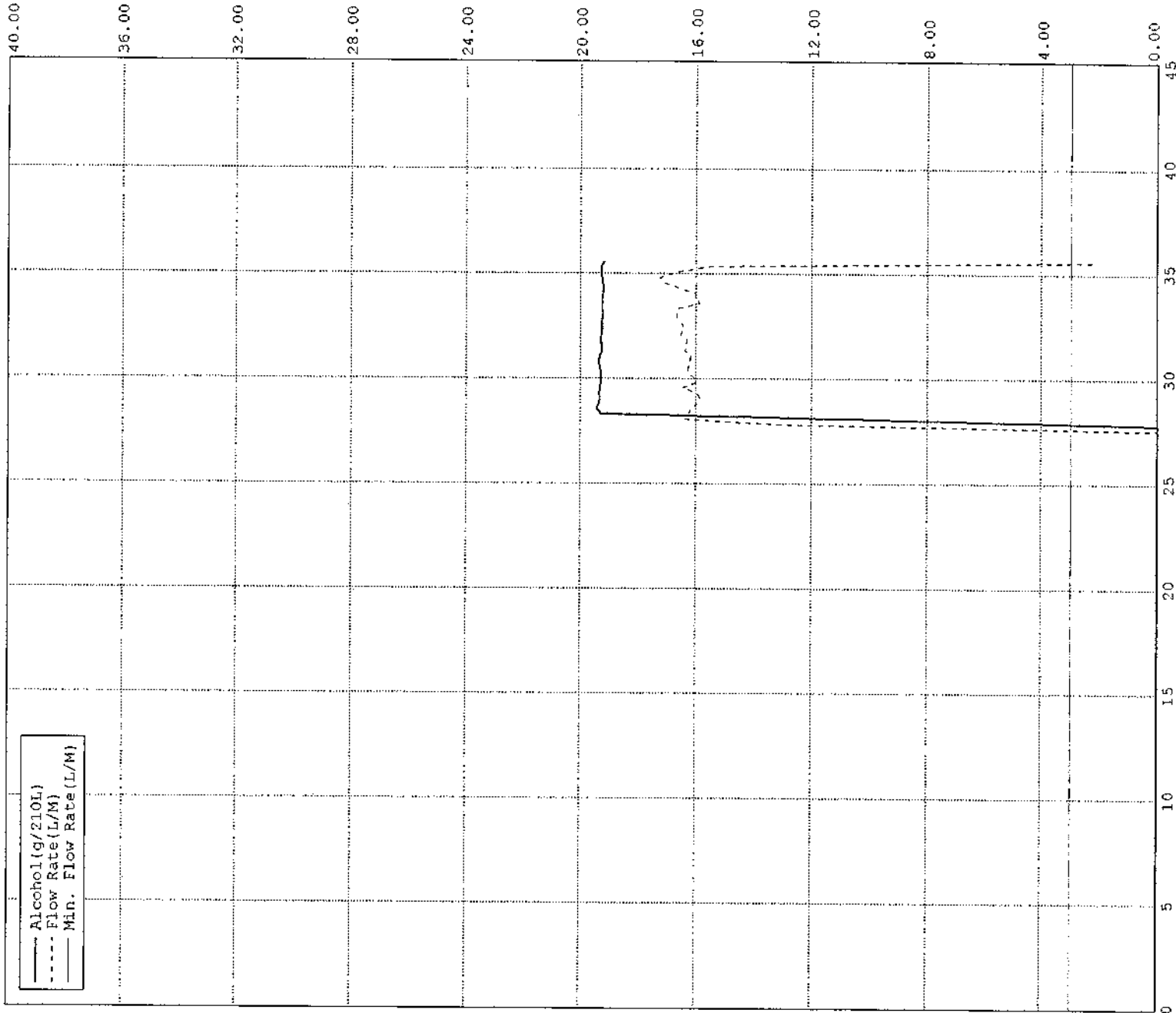
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.91: 0.080
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	15:00
BLANK TEST	0.000	15:00
INTERNAL STANDARD	VERIFIED	15:00
Xq = 0.111 (1.45%)		
EXTERNAL STANDARD	0.077	15:01
X[1] = 0.0773 (0.0004) (0.0031)		
BLANK TEST	0.000	15:02
SUBJECT SAMPLE (Vol=2.10L)	0.096	15:02
X[1] = 0.0965 (-0.0002) (0.0008)		
BLANK TEST	0.000	15:03
EXTERNAL STANDARD	0.077	15:03
X[1] = 0.0767 (-0.0004) (0.0026)		
BLANK TEST	0.000	15:04

Filter 2 avg = 0.0002

Filter 3 avg = 0.0008

MS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 12/18/2017
Time: 15:08:25

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

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

DEPT/AGENCY:
AAAI

CASE/REPORT: 17-123
TEST TYPE: TEST

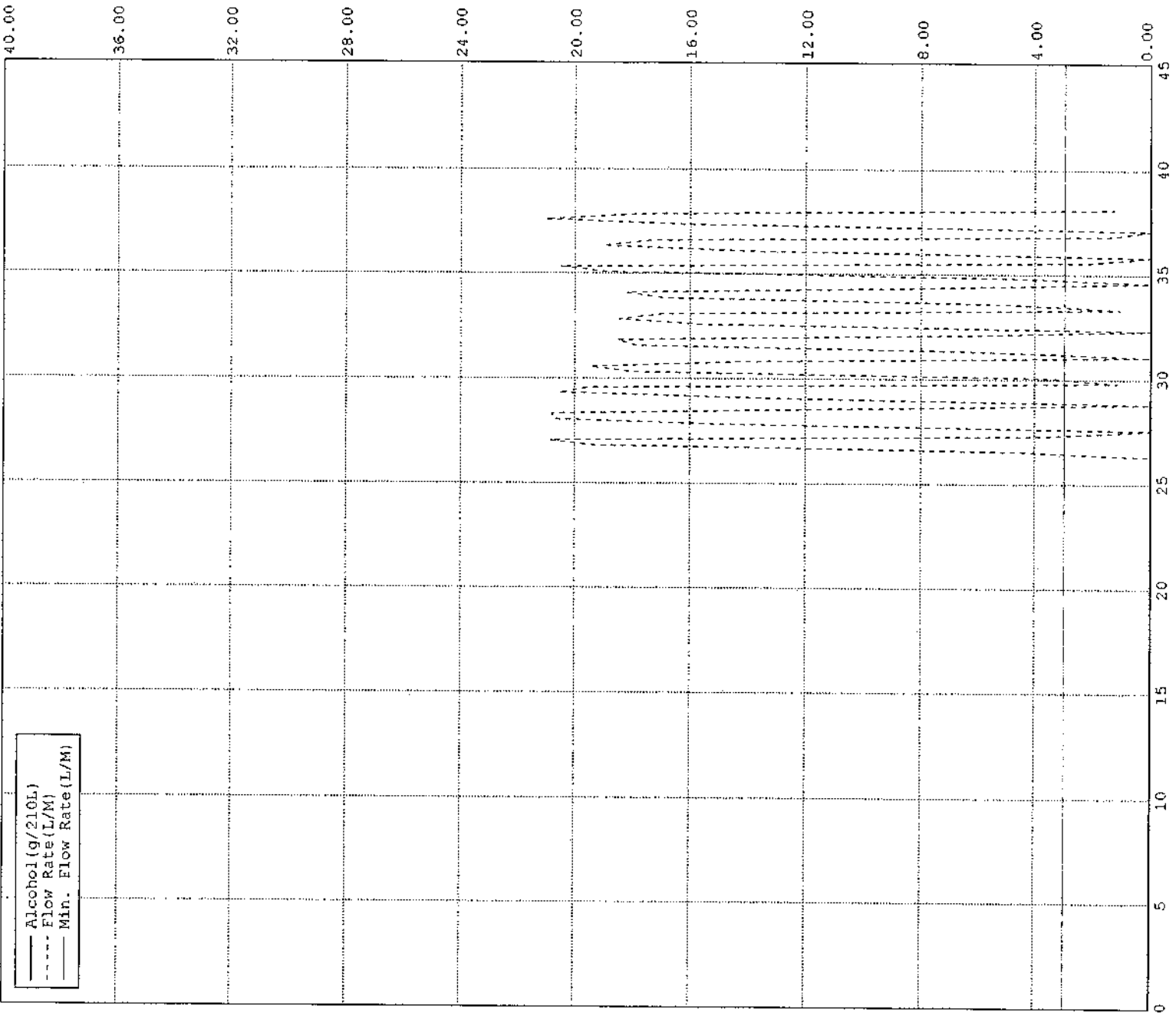
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.91: 0.080
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 15:09
BLANK TEST 0.000 15:09
INTERNAL STANDARD VERIFIED 15:10
EXTERNAL STANDARD 0.077 15:10
BLANK TEST 0.000 15:11
SUBJECT SAMPLE XXX 15:11

Maximum Attempts Exceeded

CMS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 12/18/2017
Time: 15:14:26

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 17-123
TEST TYPE: TEST

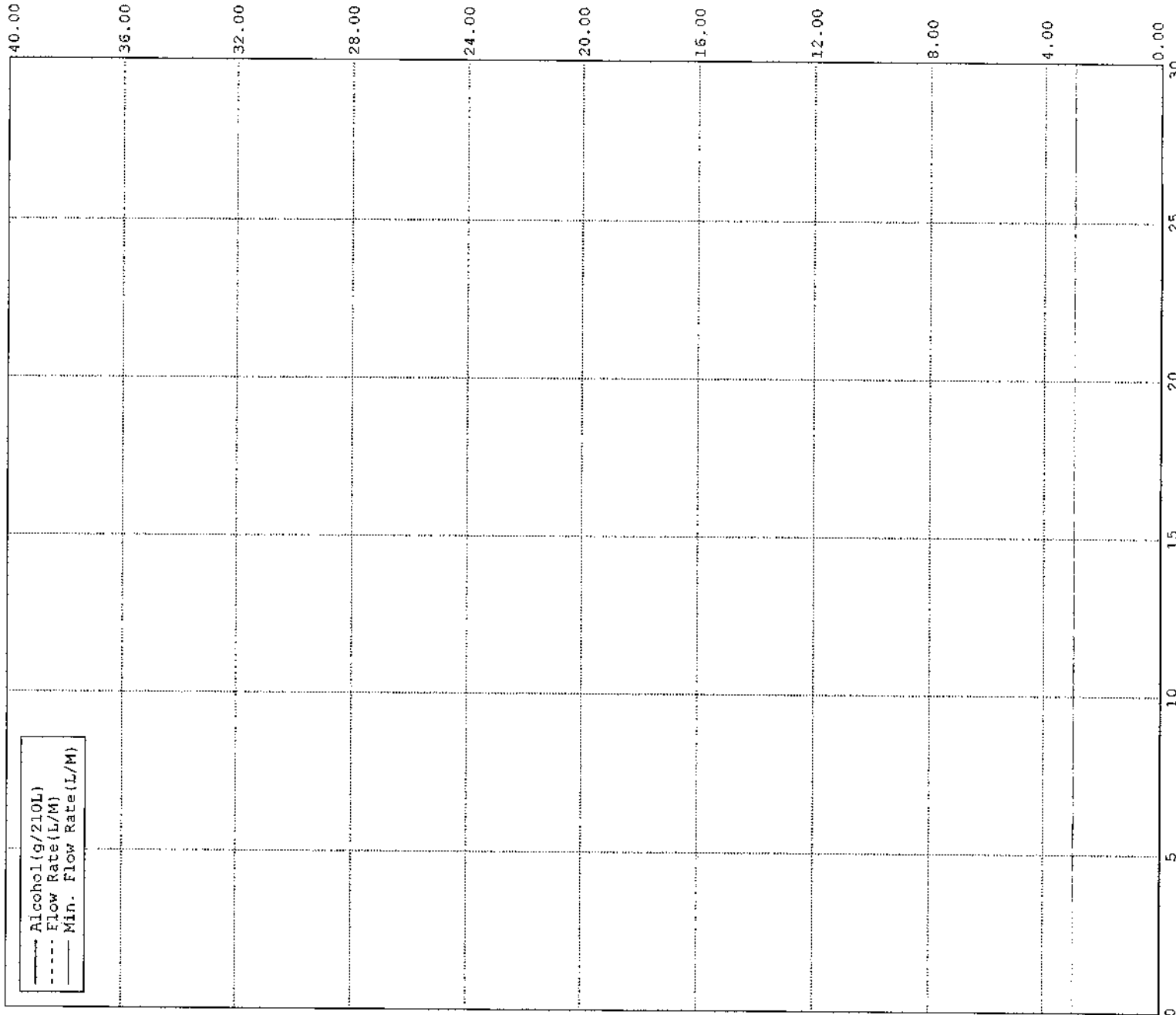
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.90: 0.080
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 15:16
BLANK TEST 0.000 15:16
INTERNAL STANDARD VERIFIED 15:16
EXTERNAL STANDARD 0.077 15:16
BLANK TEST 0.000 15:17

RFI DETECTED

CB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 12/18/2017
Time: 15:30:27

SUBJECT NAME:
TEST TEST
LICENSE #: NONDRINKING

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 17-123
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.92: 0.080
LOT #: AG608504
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	15:31
BLANK TEST	0.000	15:31
INTERNAL STANDARD	VERIFIED	15:31
EXTERNAL STANDARD	0.078	15:31
BLANK TEST	0.000	15:32
SUBJECT SAMPLE (Vol=2.06L)	0.000	15:33
BLANK TEST	0.000	15:34
EXTERNAL STANDARD	0.078	15:34
BLANK TEST	0.000	15:35

CS

