

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 100698 Analyst C. O'Byrne 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 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 Guth Lot 17090 Exp 2/24/19

1. Simulator S/N SD1200 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 3/14/19

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: 100698

Date: 12/14/2017
Time: 12:57:13

VERSIONS

DMT: 3.02
PIC: 9.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.65 V PASSED
(0.99 V - 2.31 V)
Cooler Voltage = 1.60 V PASSED
(1.00 V - 2.34 V)
Bias Voltage = 81 V PASSED
(49 V - 113 V)
Chopper Freq = 534 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.2 in

PUMP INFO

Flow Rate = 4.643 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
(0.001 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.116 0.92% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100698

Date: 12/14/2017
Time: 1:17 PM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 47.7°C

Current Barometer 29.2 in
Volume (Ltr) 1.52

Settings

Lamp: 1.65 V
Bias: 80 V
Cooler: 1.64 V
Chopper: 533 Hz

Voltages (V)

Flow: 1.03 V
Detector: -0.079 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 10/31/2011
Time: 11:31:50

Ca = 0.1000
CAL = 1.001976 0.800 <= CAL < 1.200
b1 = 0.0009 0.0000 <= b1 < 0.0040
b2 = 0.0051 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.1153 0.0500 <= Xq < 0.2000
a21 = 1.196919 1.050 <= a21 < 1.300
a31 = 0.369985 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 12/14/2017
Time: 13:37:30

SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

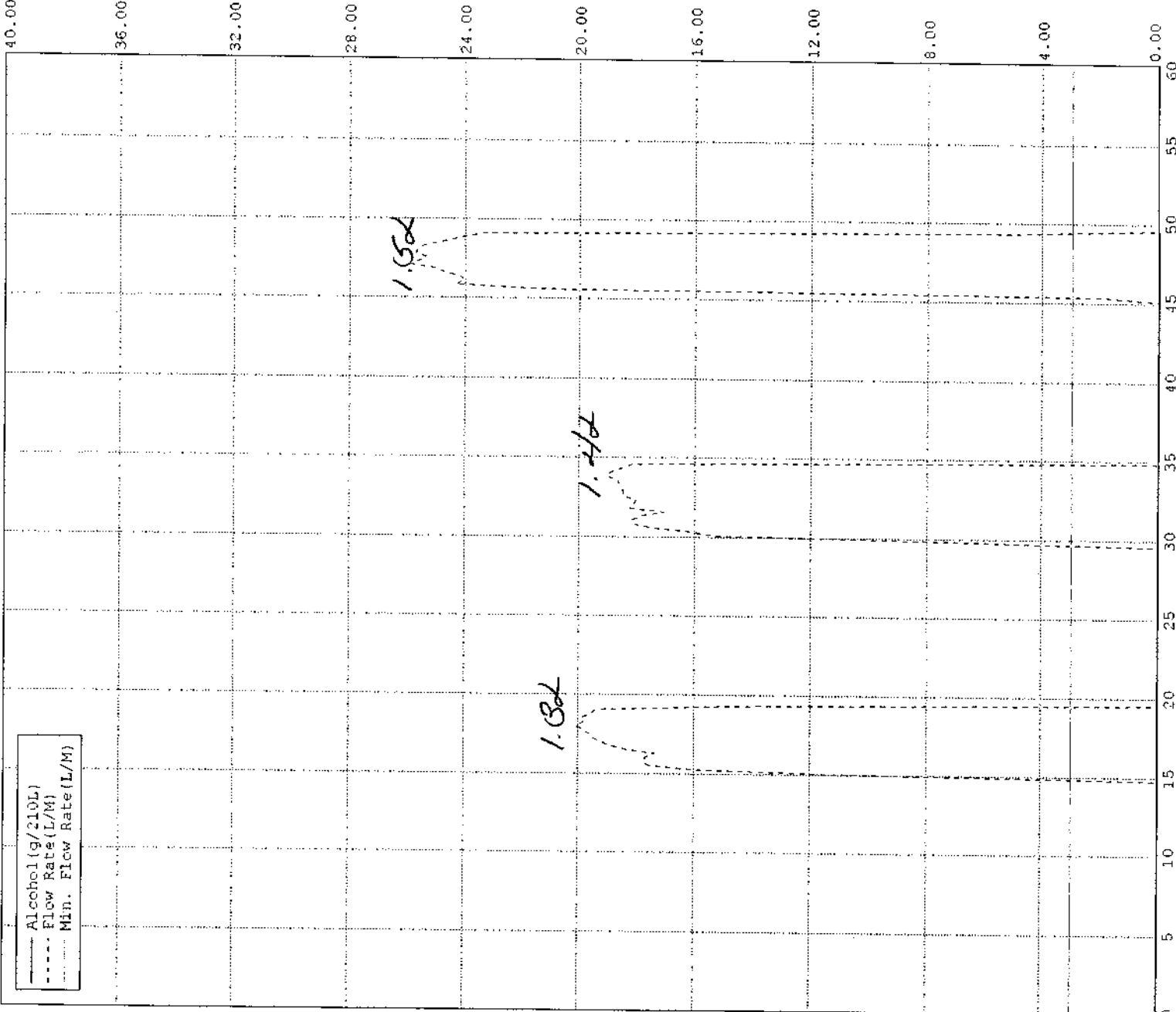
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.20: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:38
BLANK TEST	0.000	13:38
INTERNAL STANDARD	VERIFIED	13:38
EXTERNAL STANDARD	0.077	13:38
BLANK TEST	0.000	13:39
SUBJECT SAMPLE (Vol=1.56L)	0.000	13:40
BLANK TEST	0.000	13:41
EXTERNAL STANDARD	0.077	13:41
BLANK TEST	0.000	13:42



LINEARITY CHECK

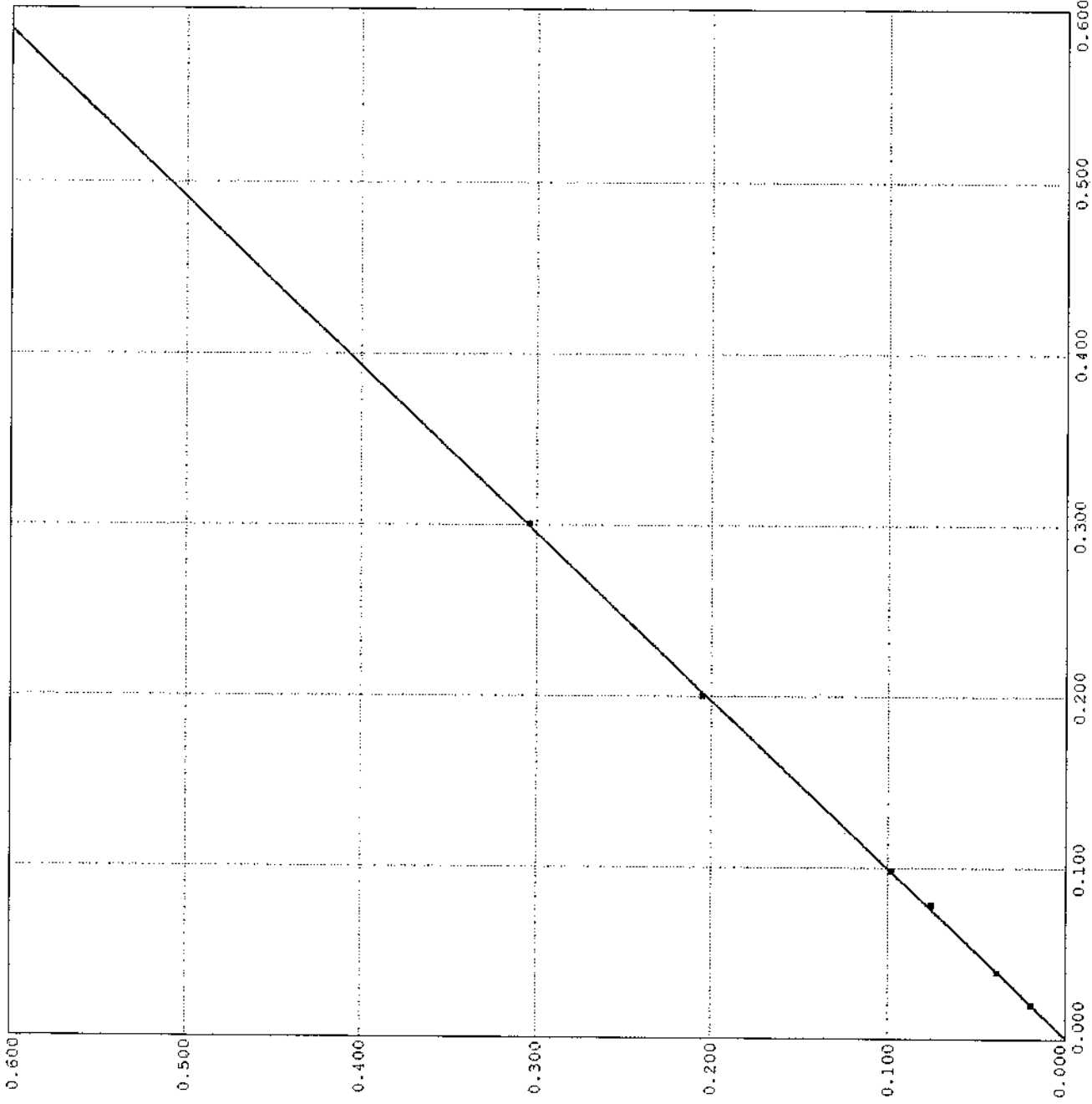
Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 12/14/2017
Time: 13:46:04

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0202	0.0004
0.039	0.0396	0.0005
0.078	0.0770	0.0000
0.098	0.0994	0.0005
0.200	0.2060	0.0012
0.300	0.3050	0.0012

SLOPE = 1.022443
R² = 0.999825



CAS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100698

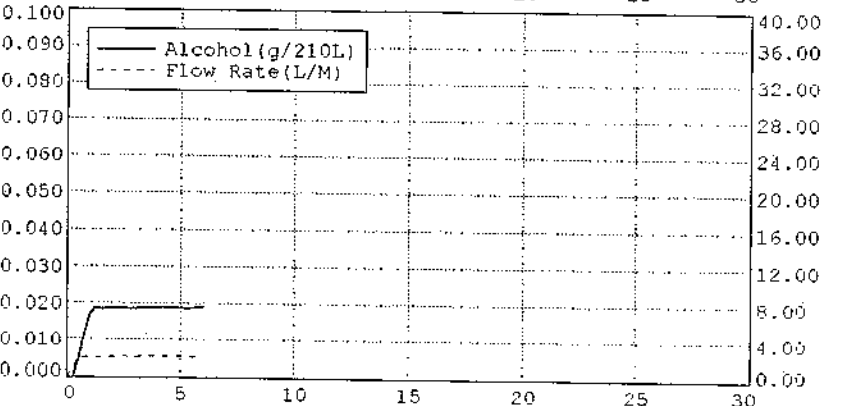
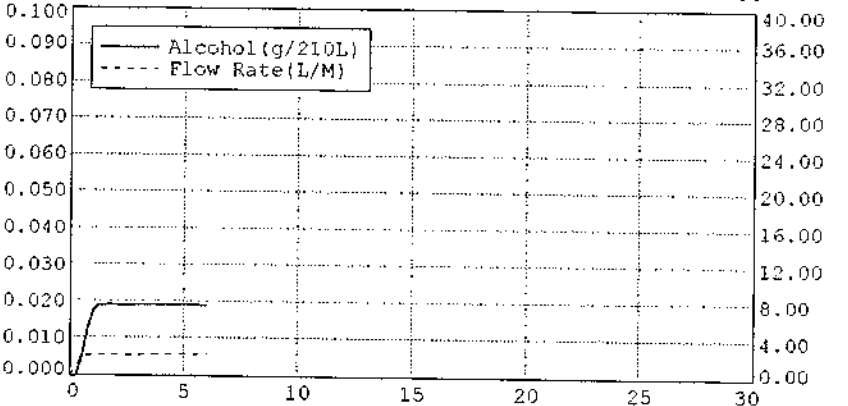
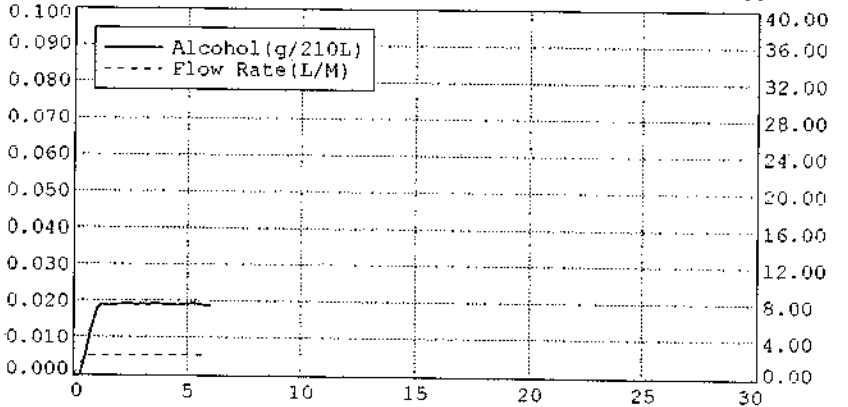
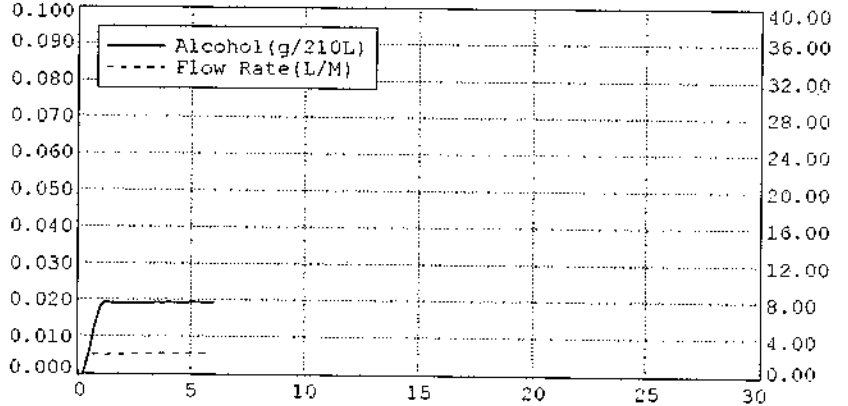
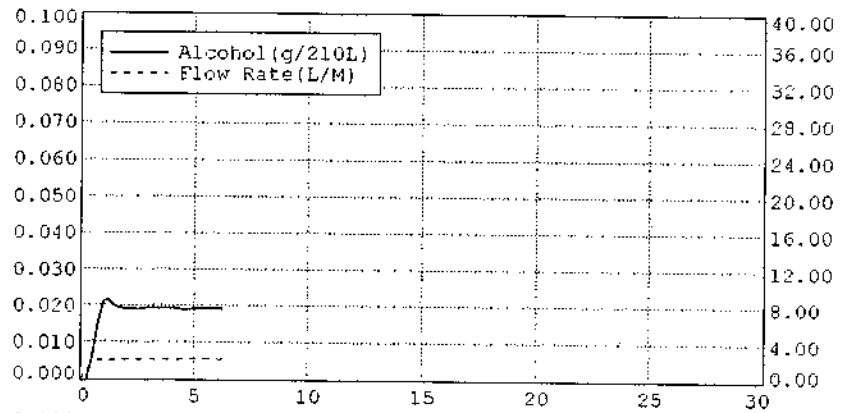
Date: 12/14/2017
 Time: 13:46:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.21: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 342 psi

BLANK TEST	0.000	14:05
INTERNAL STANDARD	VERIFIED	14:05
EXTERNAL STANDARD	0.020	14:06
BLANK TEST	0.000	14:07
EXTERNAL STANDARD	0.021	14:07
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.020	14:08
BLANK TEST	0.000	14:09
EXTERNAL STANDARD	0.020	14:09
BLANK TEST	0.000	14:10
EXTERNAL STANDARD	0.020	14:10
BLANK TEST	0.000	14:11

Average = 0.0202
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100698

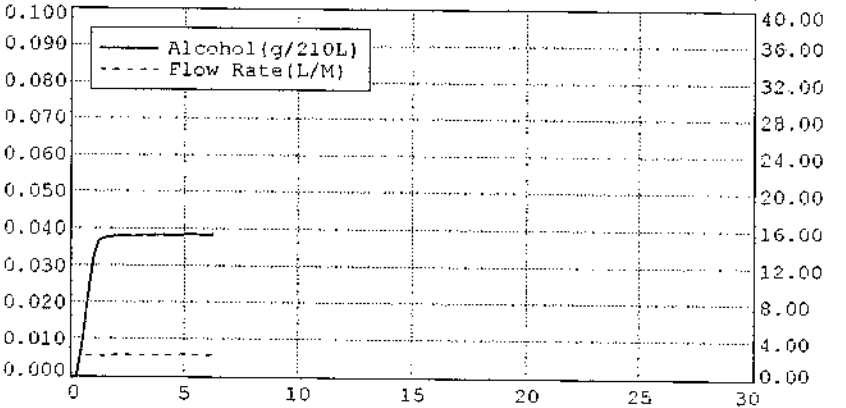
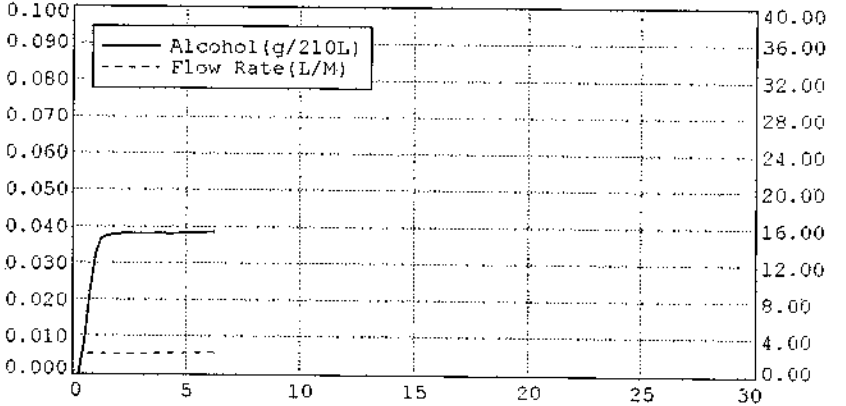
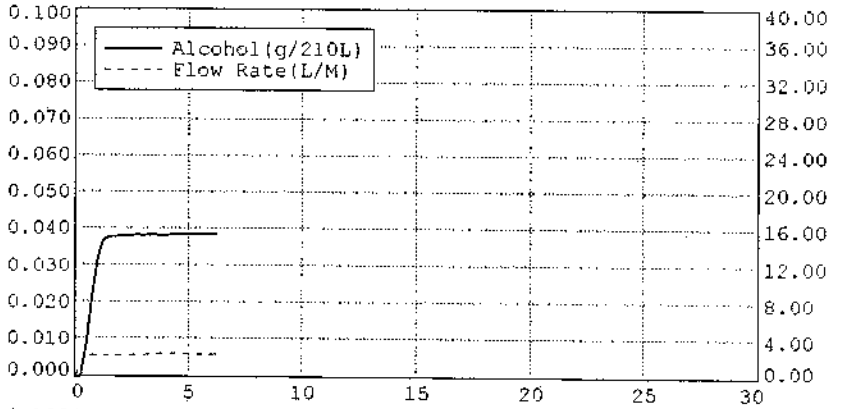
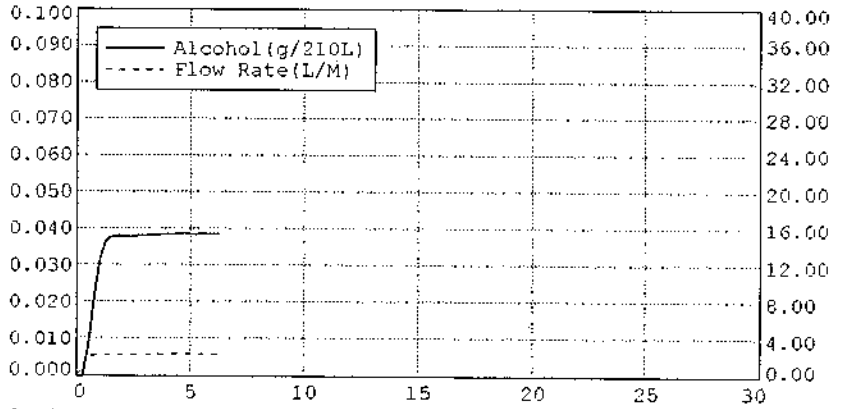
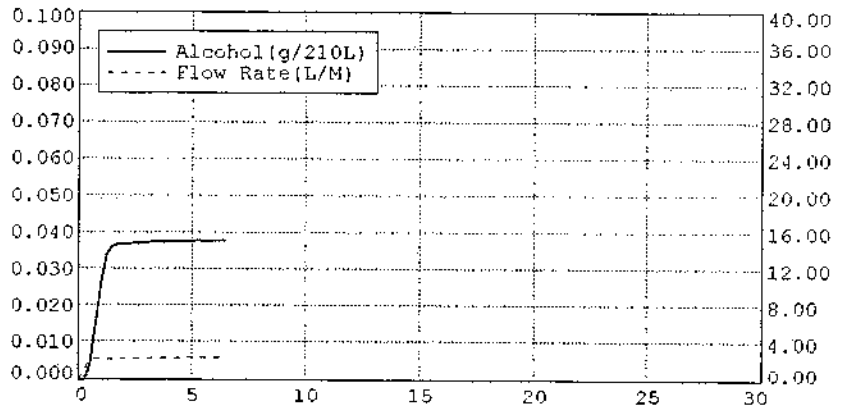
Date: 12/14/2017
Time: 14:14:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.21: 0.039
LOT #: AG630101
EXPIRATION: 10/27/2018
TANK PRESSURE: 415 psi

BLANK TEST	0.000	14:15
INTERNAL STANDARD	VERIFIED	14:15
EXTERNAL STANDARD	0.039	14:16
BLANK TEST	0.000	14:16
EXTERNAL STANDARD	0.040	14:17
BLANK TEST	0.000	14:18
EXTERNAL STANDARD	0.040	14:18
BLANK TEST	0.000	14:19
EXTERNAL STANDARD	0.040	14:19
BLANK TEST	0.000	14:20
EXTERNAL STANDARD	0.039	14:20
BLANK TEST	0.000	14:21

Average = 0.0396
Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100698

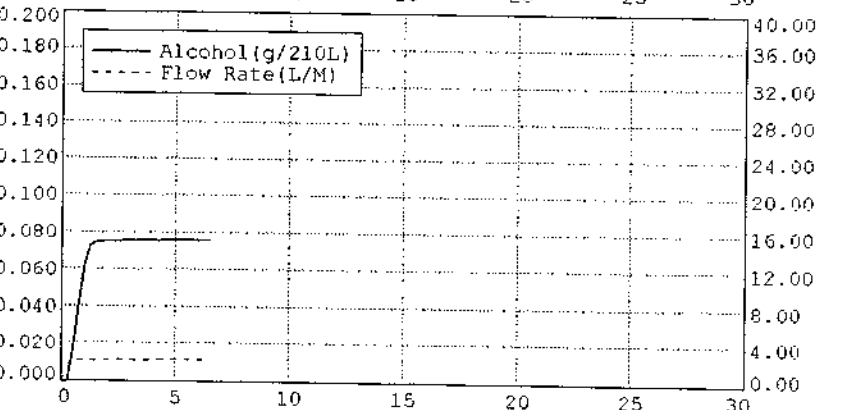
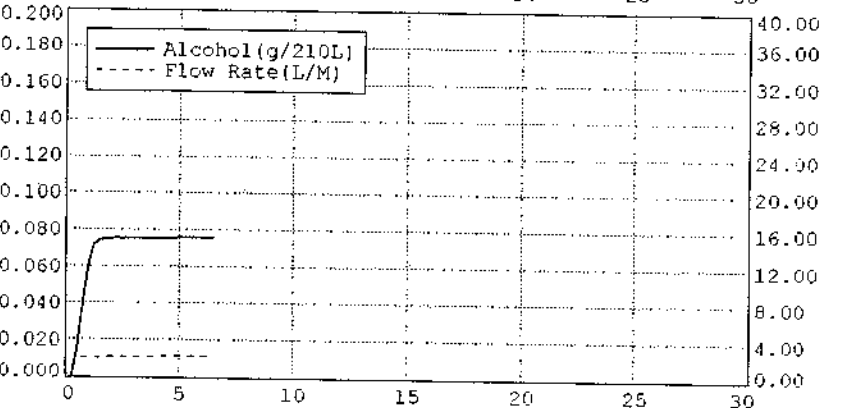
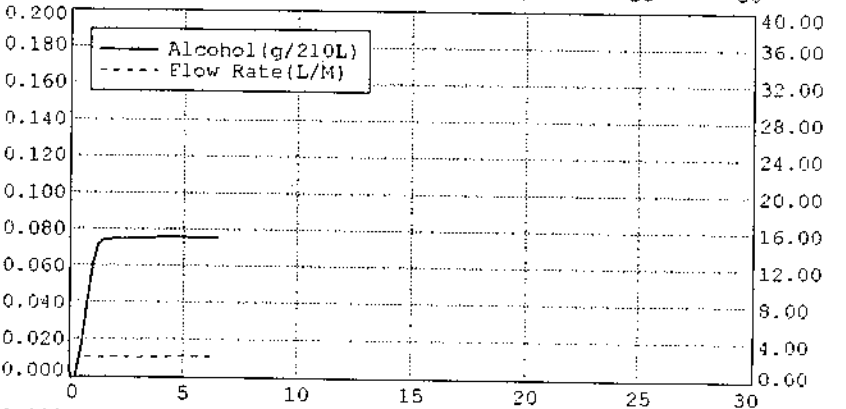
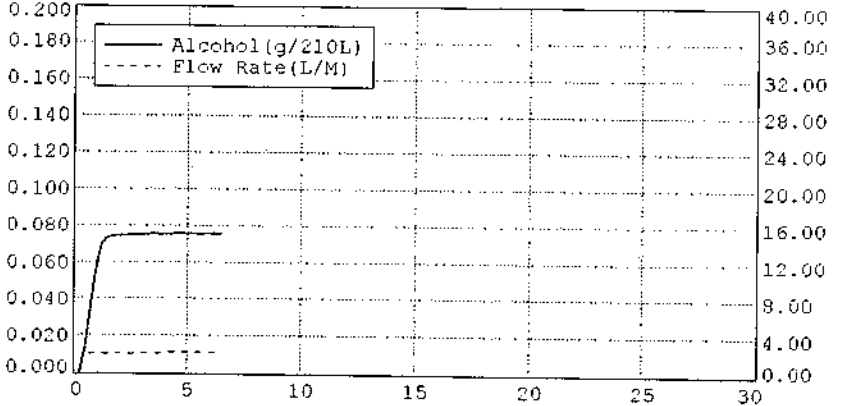
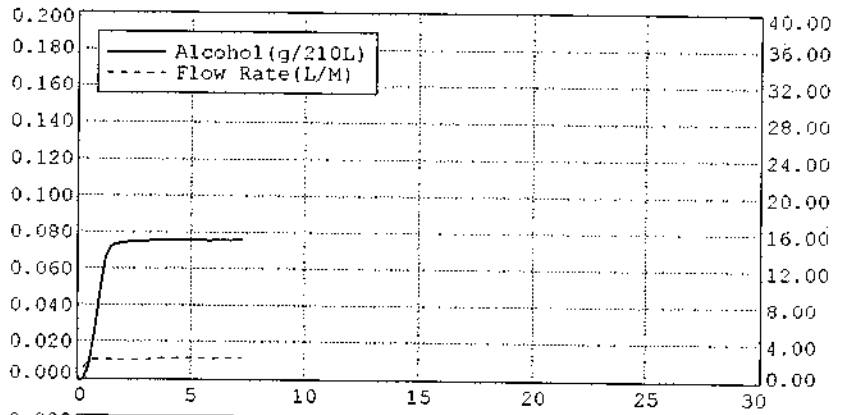
Date: 12/14/2017
 Time: 14:22:35

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.21: 0.078
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 317 psi

BLANK TEST	0.000	14:23
INTERNAL STANDARD	VERIFIED	14:23
EXTERNAL STANDARD	0.077	14:24
BLANK TEST	0.000	14:25
EXTERNAL STANDARD	0.077	14:25
BLANK TEST	0.000	14:26
EXTERNAL STANDARD	0.077	14:26
BLANK TEST	0.000	14:27
EXTERNAL STANDARD	0.077	14:27
BLANK TEST	0.000	14:28
EXTERNAL STANDARD	0.077	14:28
BLANK TEST	0.000	14:29

Average = 0.0770
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100698

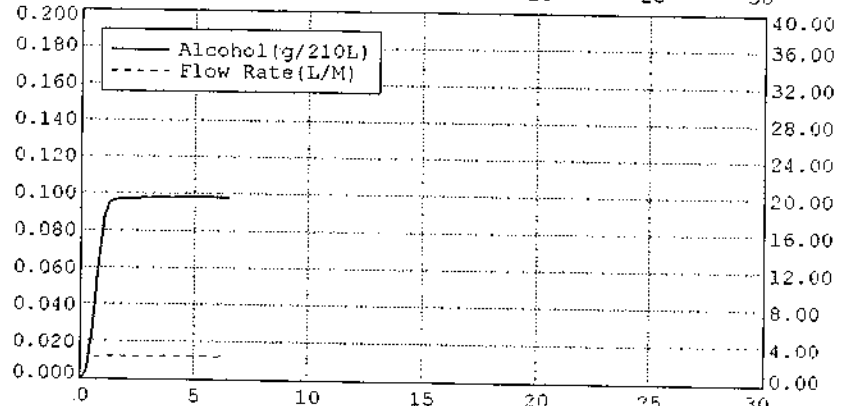
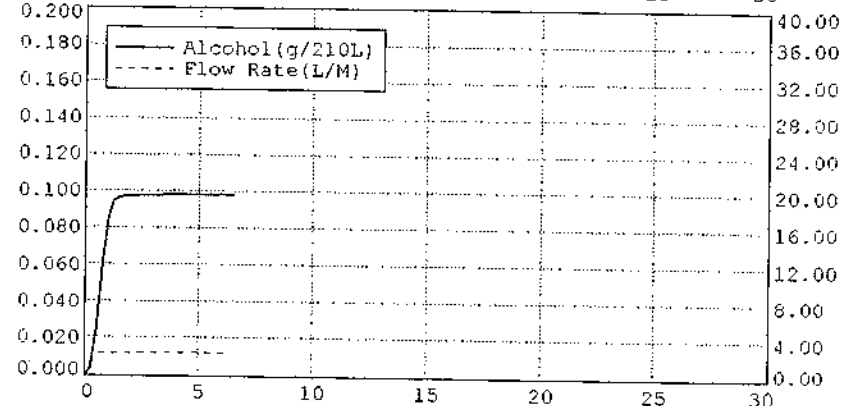
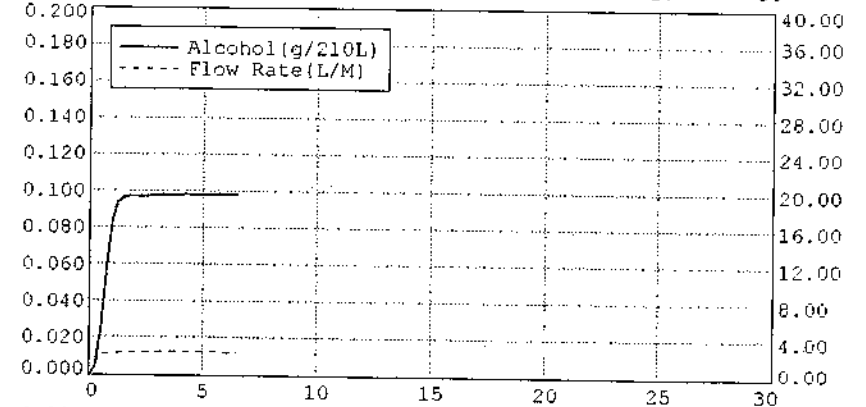
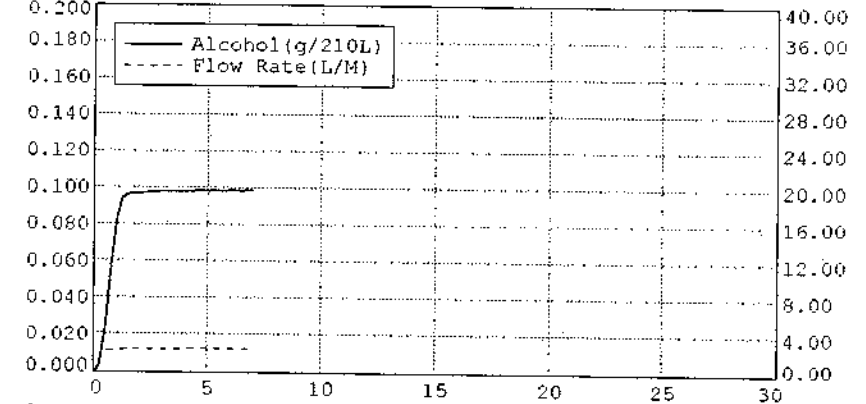
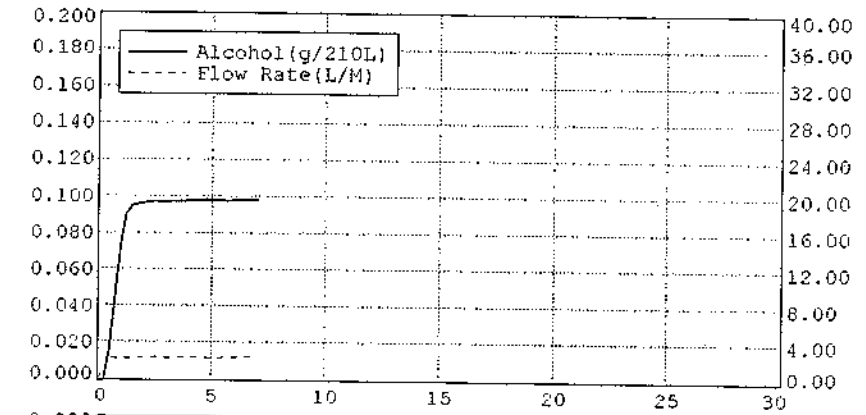
Date: 12/14/2017
 Time: 14:29:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.21: 0.098
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 553 psi

BLANK TEST	0.000	14:31
INTERNAL STANDARD	VERIFIED	14:31
EXTERNAL STANDARD	0.099	14:31
BLANK TEST	0.000	14:32
EXTERNAL STANDARD	0.100	14:32
BLANK TEST	0.000	14:33
EXTERNAL STANDARD	0.100	14:33
BLANK TEST	0.000	14:34
EXTERNAL STANDARD	0.099	14:34
BLANK TEST	0.000	14:35
EXTERNAL STANDARD	0.099	14:35
BLANK TEST	0.000	14:36

Average = 0.0994
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100698

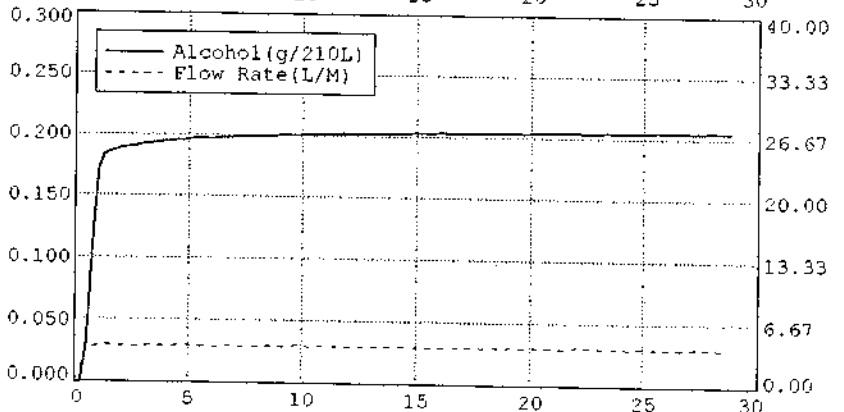
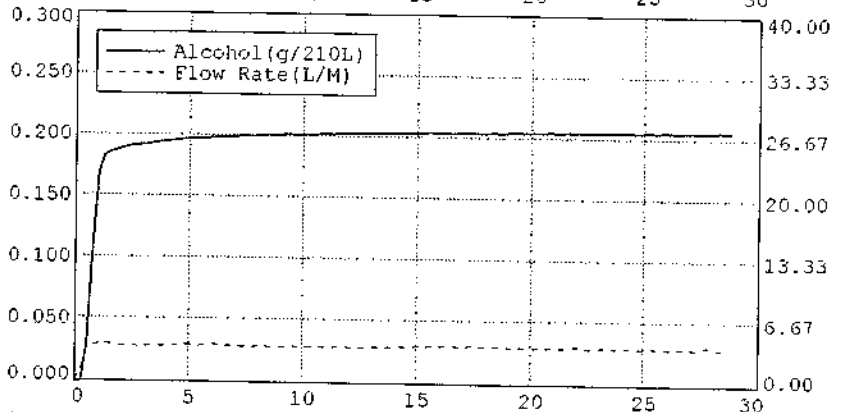
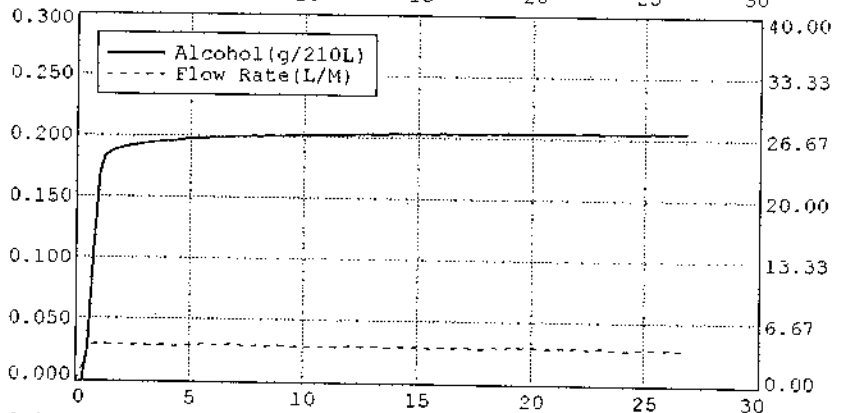
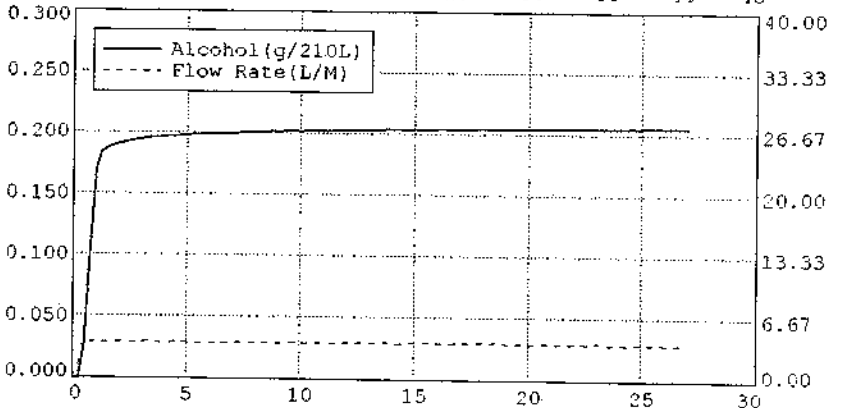
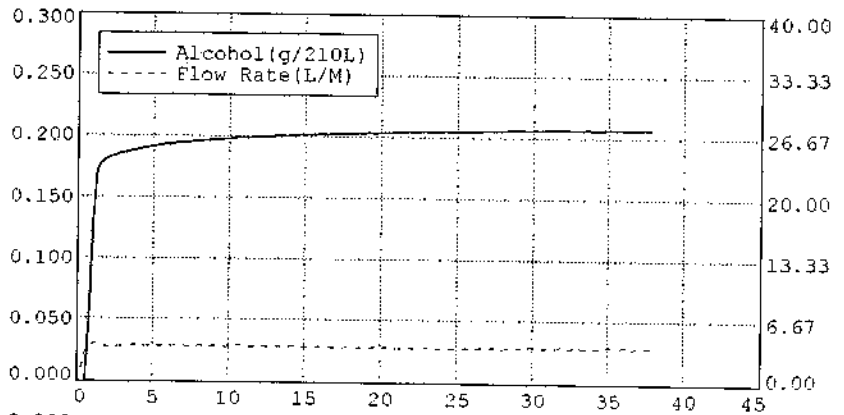
Date: 12/14/2017
 Time: 14:37:22

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:39
INTERNAL STANDARD	VERIFIED	14:39
EXTERNAL STANDARD	0.208	14:39
BLANK TEST	0.000	14:40
EXTERNAL STANDARD	0.206	14:41
BLANK TEST	0.000	14:42
EXTERNAL STANDARD	0.205	14:42
BLANK TEST	0.000	14:43
EXTERNAL STANDARD	0.206	14:44
BLANK TEST	0.000	14:45
EXTERNAL STANDARD	0.205	14:45
BLANK TEST	0.000	14:46

Average = 0.2060
 Std Dev = 0.0012



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100698

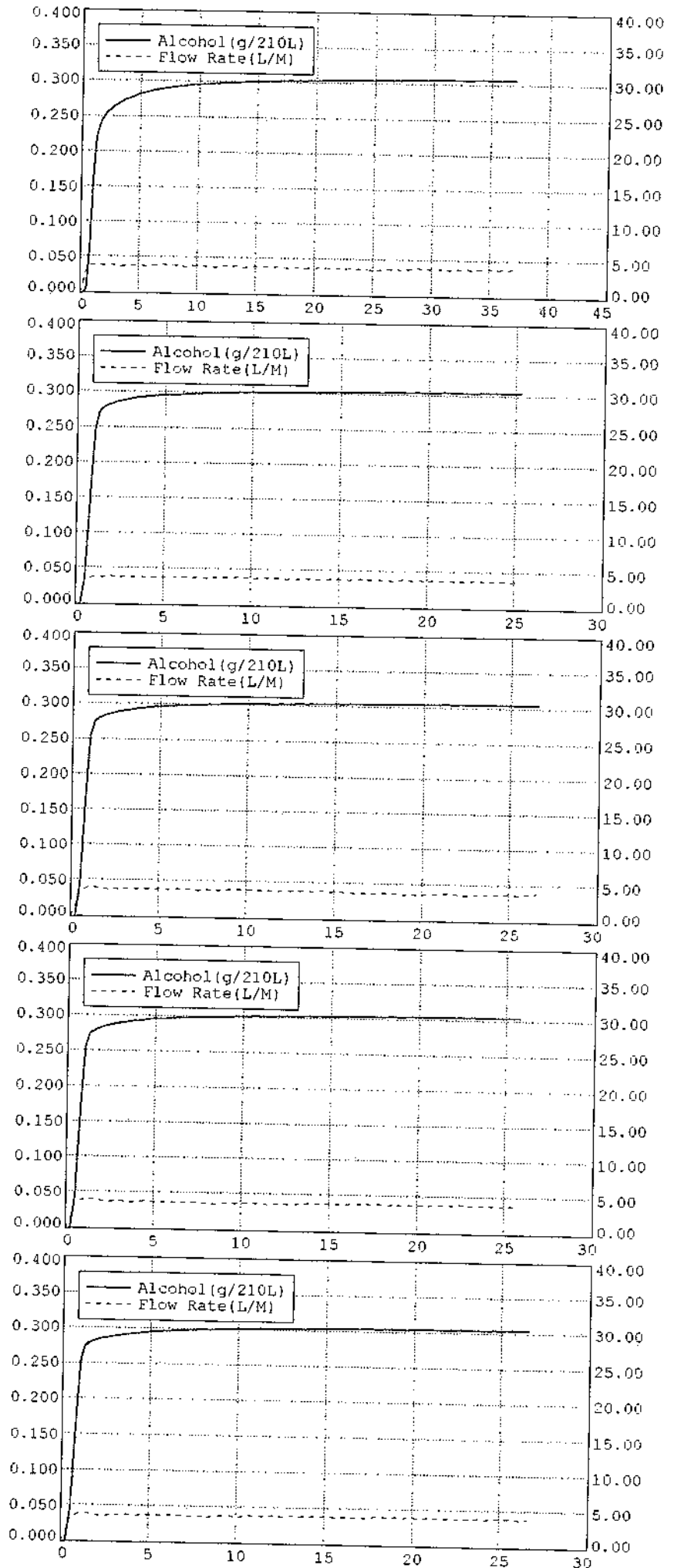
Date: 12/14/2017
 Time: 14:50:01

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:51
INTERNAL STANDARD	VERIFIED	14:51
EXTERNAL STANDARD	0.307	14:52
BLANK TEST	0.000	14:53
EXTERNAL STANDARD	0.304	14:54
BLANK TEST	0.000	14:55
EXTERNAL STANDARD	0.305	14:55
BLANK TEST	0.000	14:56
EXTERNAL STANDARD	0.304	14:57
BLANK TEST	0.000	14:57
EXTERNAL STANDARD	0.305	14:58
BLANK TEST	0.000	14:59

Average = 0.3050
 Std Dev = 0.0012



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 12/18/2017
Time: 09:59:58

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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

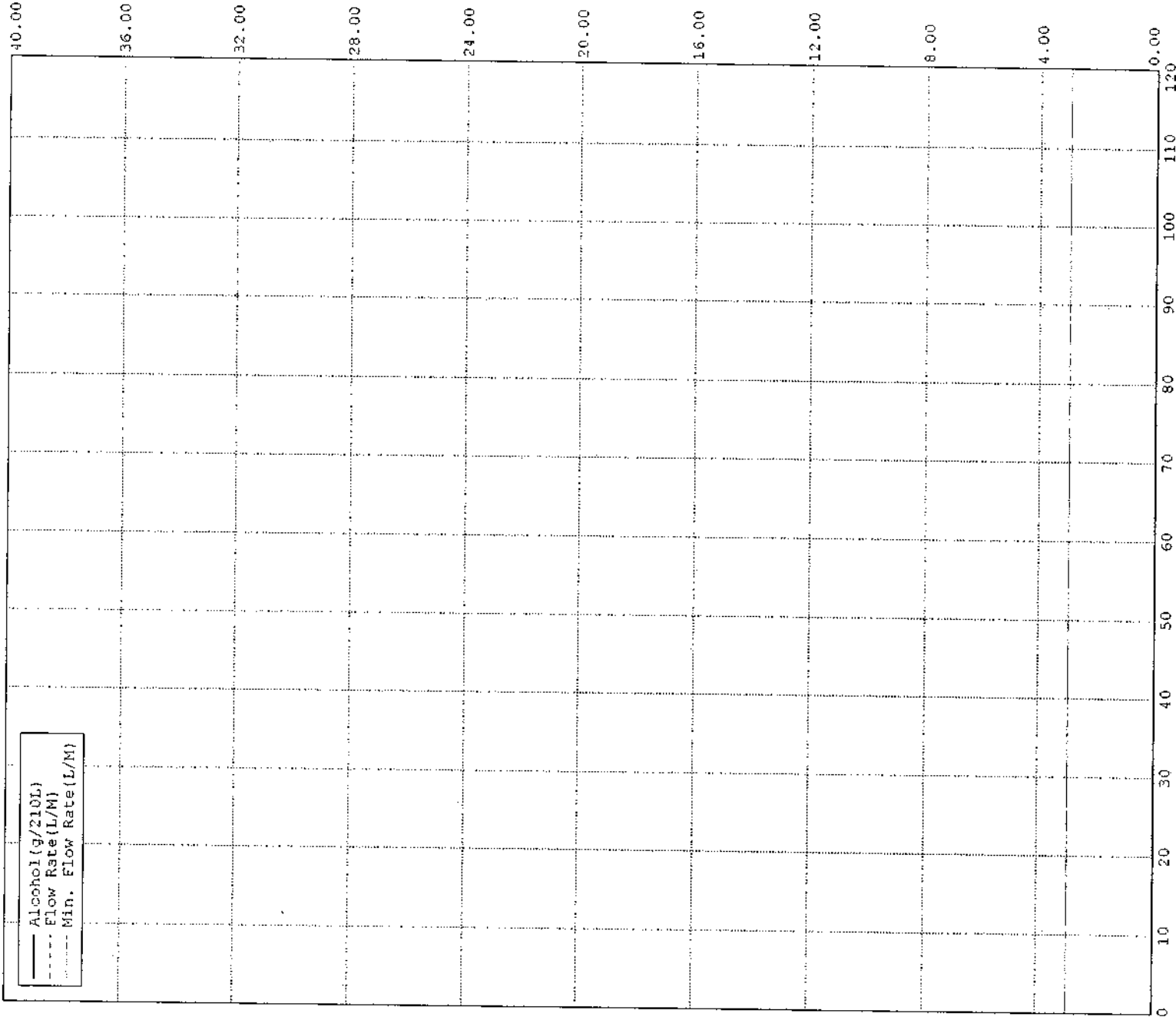
DEPT/AGENCY:
AAA1

CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.85: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 10:00
BLANK TEST 0.000 10:01
INTERNAL STANDARD VERIFIED 10:01
EXTERNAL STANDARD 0.078 10:01
BLANK TEST 0.000 10:02
SUBJECT SAMPLE INCOMPLETE 10:04



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 12/18/2017
Time: 13:32:33

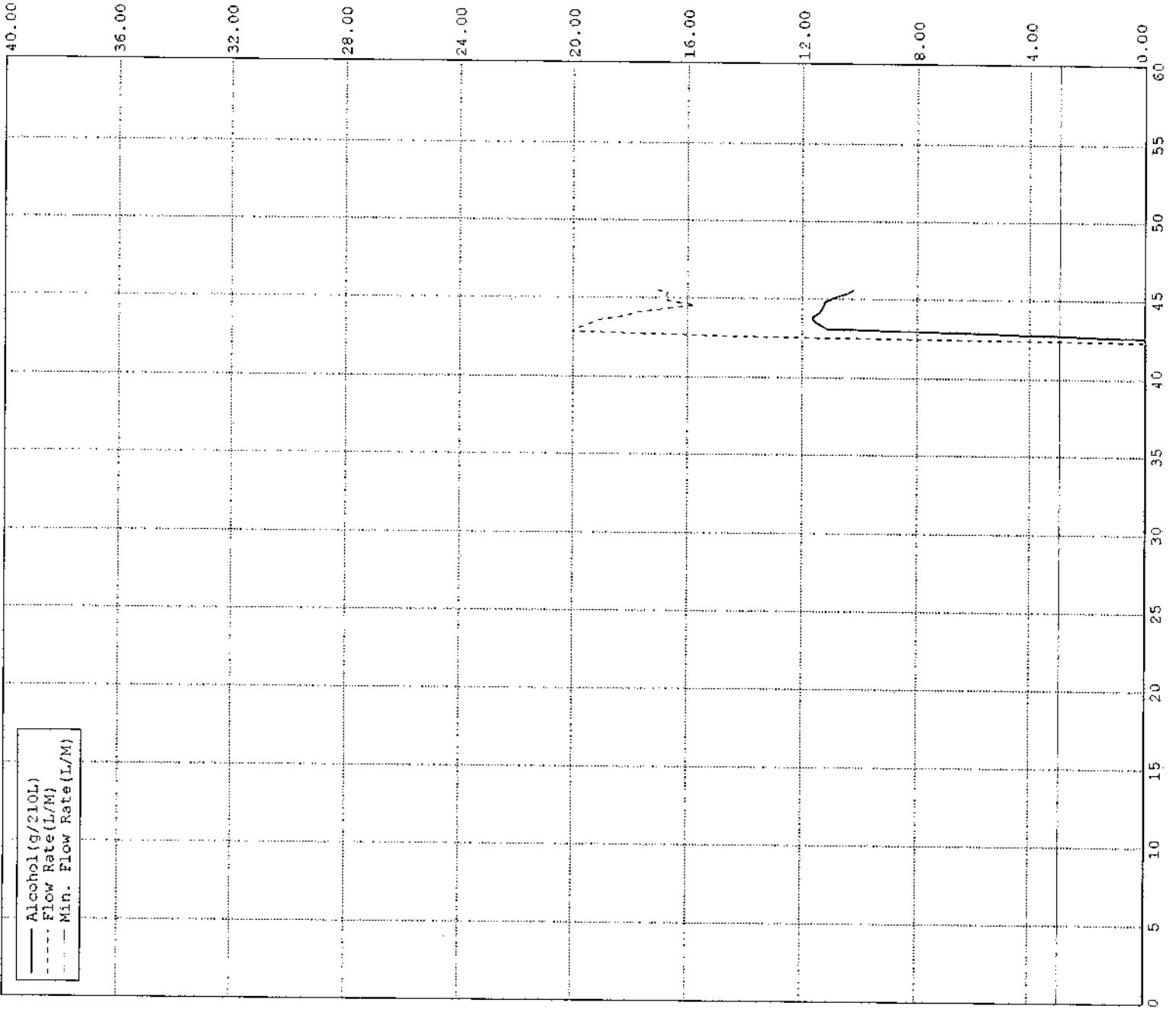
SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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 29.93: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 13:33
BLANK TEST 0.000 13:33
INTERNAL STANDARD VERIFIED 13:33
EXTERNAL STANDARD 0.079 13:34
BLANK TEST 0.000 13:34
SUBJECT SAMPLE INVALID 13:35



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 12/18/2017
Time: 13:39:24

SUBJECT NAME:

TEST TEST

LICENSE #: INT-~~INVALID~~ *12/16/17 COB*
9re tone

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 13:42

BLANK TEST

0.000 13:42

INTERNAL STANDARD

VERIFIED 13:42

$X_q = 0.117$ (1.69%)

EXTERNAL STANDARD

0.079 13:42

$X\{1\} = 0.0792$ (0.0008) (0.0027)

BLANK TEST

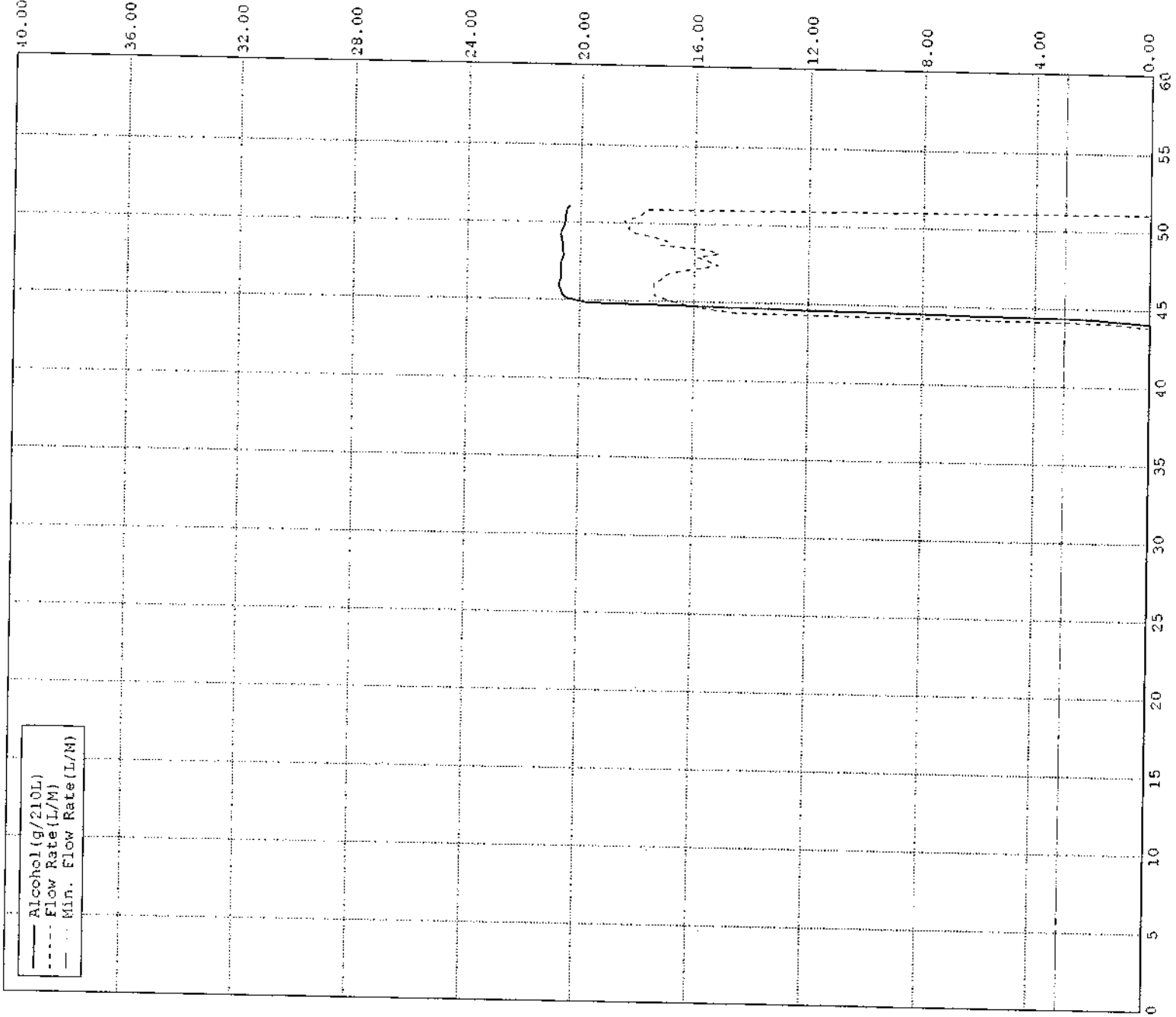
0.000 13:43

SUBJECT SAMPLE

XXX 13:44

$X\{1\} = 0.1020$ (-0.0147) (-0.0015)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 12/18/2017
Time: 13:46:59

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

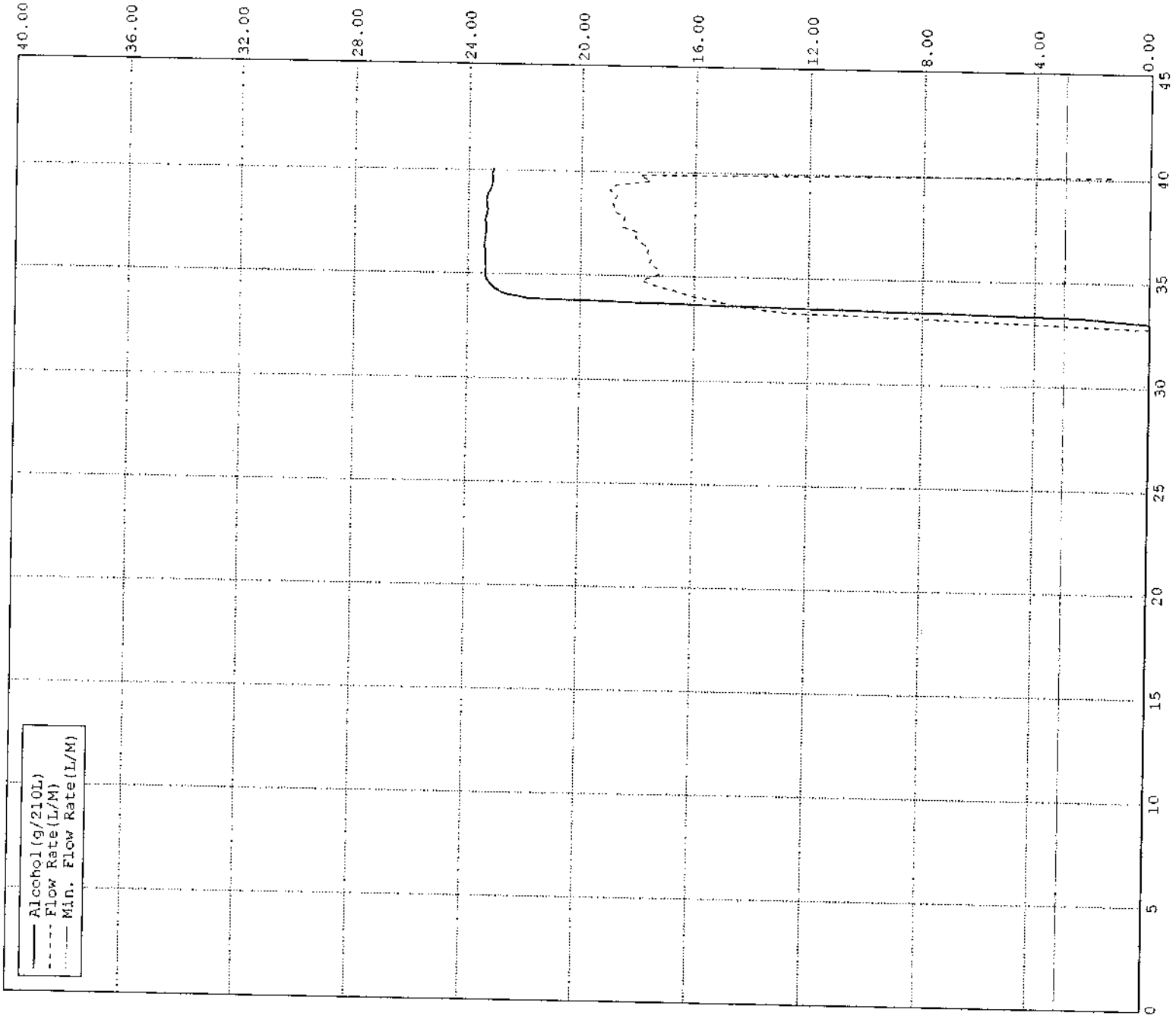
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	13:48
BLANK TEST	0.000	13:48
INTERNAL STANDARD	VERIFIED	13:48
Xq = 0.117 (1.61%)		
EXTERNAL STANDARD	0.079	13:49
X[1] = 0.0792 (-0.0002) (0.0018)		
BLANK TEST	0.000	13:49
SUBJECT SAMPLE	XXX	13:50
X[1] = 0.1155 (-0.0230) (0.0001)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 12/18/2017
Time: 13:53:29

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

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

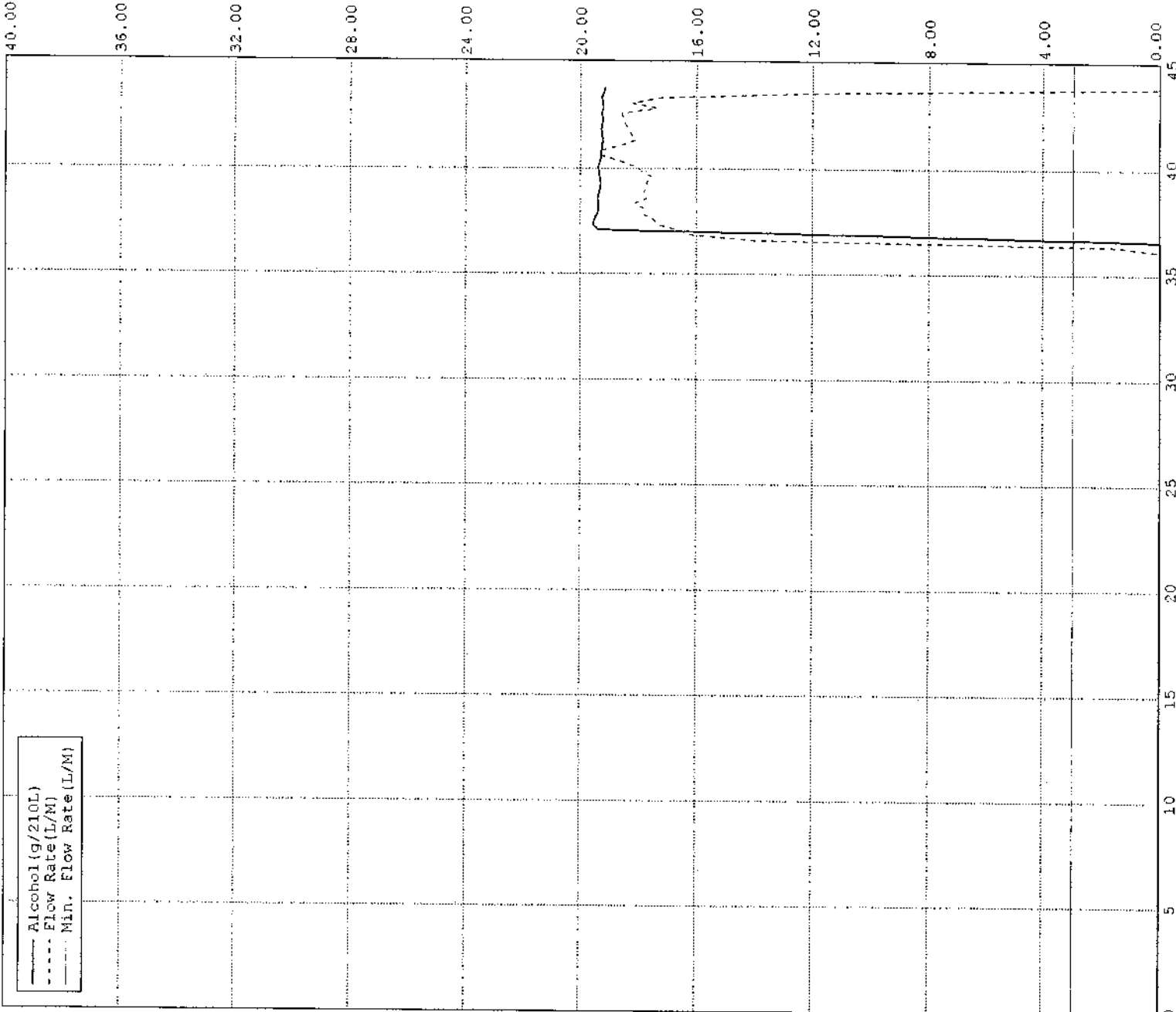
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.91: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:54
BLANK TEST	0.000	13:54
INTERNAL STANDARD	VERIFIED	13:54
Xg = 0.117 (1.69%)		
EXTERNAL STANDARD	0.079	13:54
X[1] = 0.0789 (0.0002)	(0.0016)	
BLANK TEST	0.000	13:55
SUBJECT SAMPLE (Vol=2.13L)	0.096	13:56
X[1] = 0.0960 (-0.0004)	(-0.0004)	
BLANK TEST	0.000	13:57
EXTERNAL STANDARD	0.079	13:57
X[1] = 0.0787 (0.0004)	(0.0021)	
BLANK TEST	0.000	13:58

Filter 2 avg = 0.0003
Filter 3 avg = 0.0001



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 12/18/2017
Time: 14:01:16

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

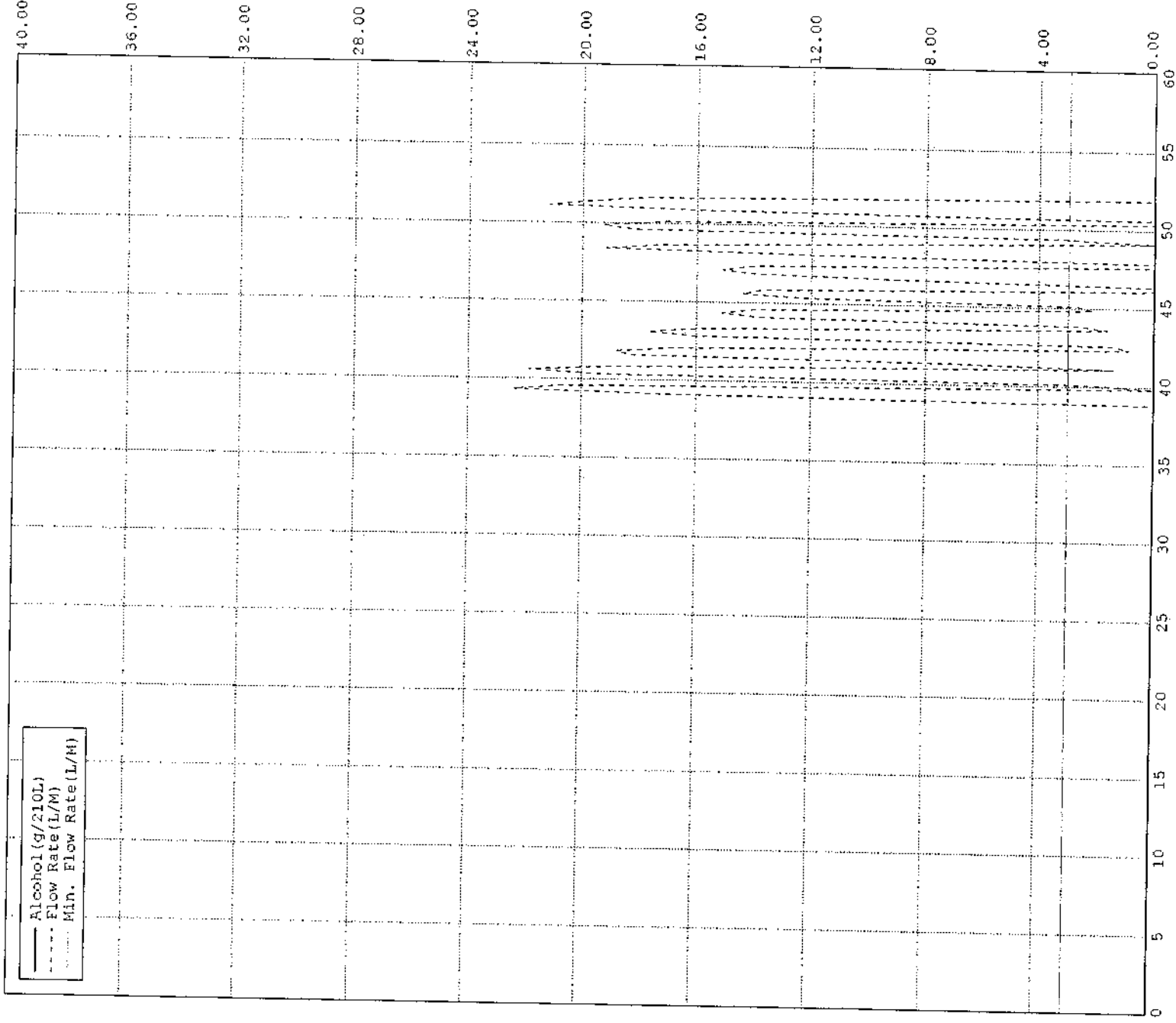
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.91: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:02
BLANK TEST	0.000	14:02
INTERNAL STANDARD	VERIFIED	14:02
EXTERNAL STANDARD	0.080	14:02
BLANK TEST	0.000	14:03
SUBJECT SAMPLE	XXX	14:04

Maximum Attempts Exceeded

CM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 12/18/2017
Time: 14:06:58

SUBJECT NAME:
TEST TEST
LICENSE #: RFI
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

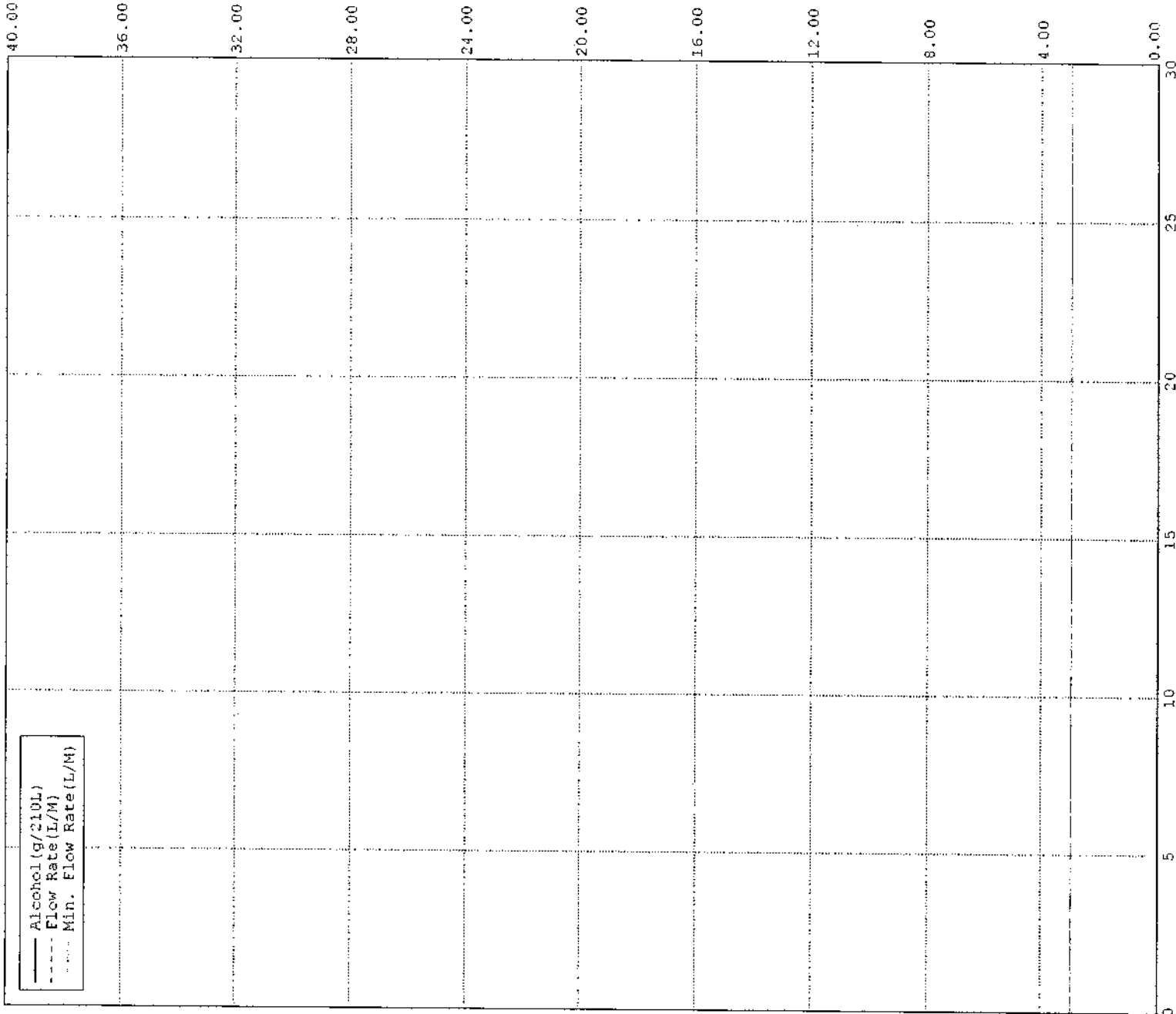
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.90: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 14:08
BLANK TEST 0.000 14:08
INTERNAL STANDARD VERIFIED 14:08
EXTERNAL STANDARD 0.079 14:08
BLANK TEST 0.000 14:09

RFI DETECTED

COB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100698

Date: 12/18/2017
Time: 14:23:10

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	14:25
BLANK TEST	0.000	14:25
INTERNAL STANDARD	VERIFIED	14:25
EXTERNAL STANDARD	0.080	14:26
BLANK TEST	0.000	14:27
SUBJECT SAMPLE (Vol=2.31L)	0.000	14:27
BLANK TEST	0.000	14:28
EXTERNAL STANDARD	0.079	14:28
BLANK TEST	0.000	14:29

