

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 100350 Analyst Colleen O'Bryen Start Date 9/19/17

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 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 Both Lot 16190 Exp 8/15/18

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

vi. 0.300g/210L Mnf Both Lot 16410 Exp 12/19/18

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

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 2/14/19

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

iii. Negative Control - Mnf Both Lot 16160 Level 0.100 Exp 7/19/18

1. Simulator S/N DR6267 Date Calibrated 3/27/17

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 9/21/17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/19/2017
Time: 14:24:30

VERSIONS

DMT: 3.02
PIC: 3.02
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 = 1.81 V PASSED
(1.09 V - 2.53 V)
Cooler Voltage = 1.82 V PASSED
(1.09 V - 2.55 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 528 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.434 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
(0.003 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.099 0.36% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100350

Date: 09/19/2017

Time: 2:34 PM

Temperatures (°C)

Sample Cell: 49.0°C

Breath Tube: 47.8°C

Current Barometer 29.8 in

Volume (Ltr) 1.52

Settings

Lamp: 1.81 V

Bias: 80 V

Cooler: 1.90 V

Chopper: 527 Hz

Voltages (V)

Flow: 1.04 V

Detector: 0.077 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/14/2017
Time: 12:31:53

OPERATOR NAME:
BRANDI BARNETT
CERTIFICATE #: 7038

Ca = 0.1000
CAL = 0.982587 0.800 <= CAL < 1.200
b1 = 0.0008 0.0000 <= b1 < 0.0040
b2 = 0.0040 0.0010 <= b2 < 0.0100
b3 = 0.0003 0.0000 <= b3 < 0.0040
Xq = 0.0987 0.0500 <= Xq < 0.2000
a21 = 1.151125 1.050 <= a21 < 1.300
a31 = 0.482170 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/19/2017
Time: 14:53:19

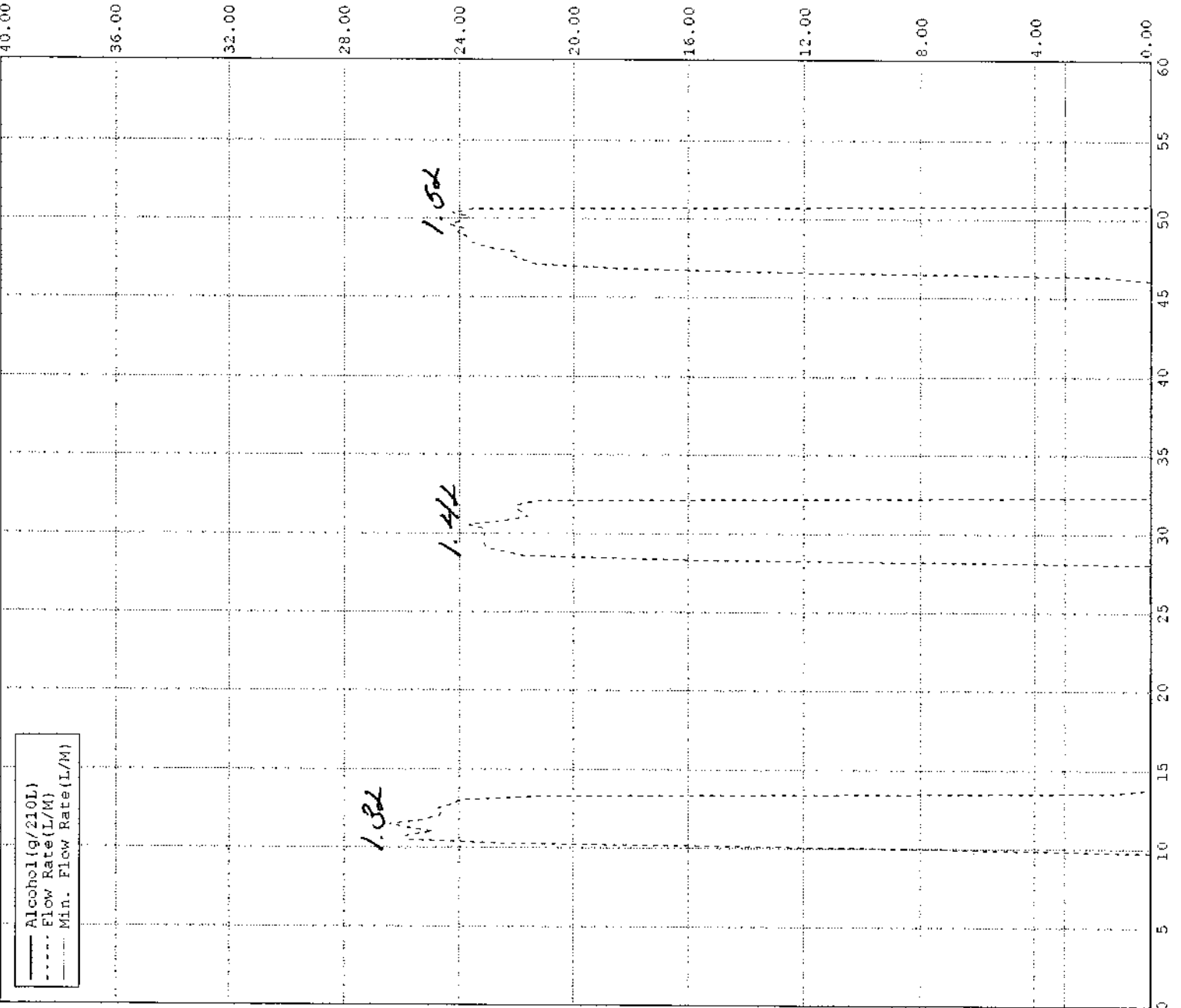
SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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 29.78: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 14:54
BLANK TEST 0.000 14:54
INTERNAL STANDARD VERIFIED 14:54
EXTERNAL STANDARD 0.079 14:54
BLANK TEST 0.000 14:55
SUBJECT SAMPLE (Vol=1.58L) 0.000 14:56
BLANK TEST 0.000 14:57
EXTERNAL STANDARD 0.079 14:57
BLANK TEST 0.000 14:58



LINEARITY CHECK

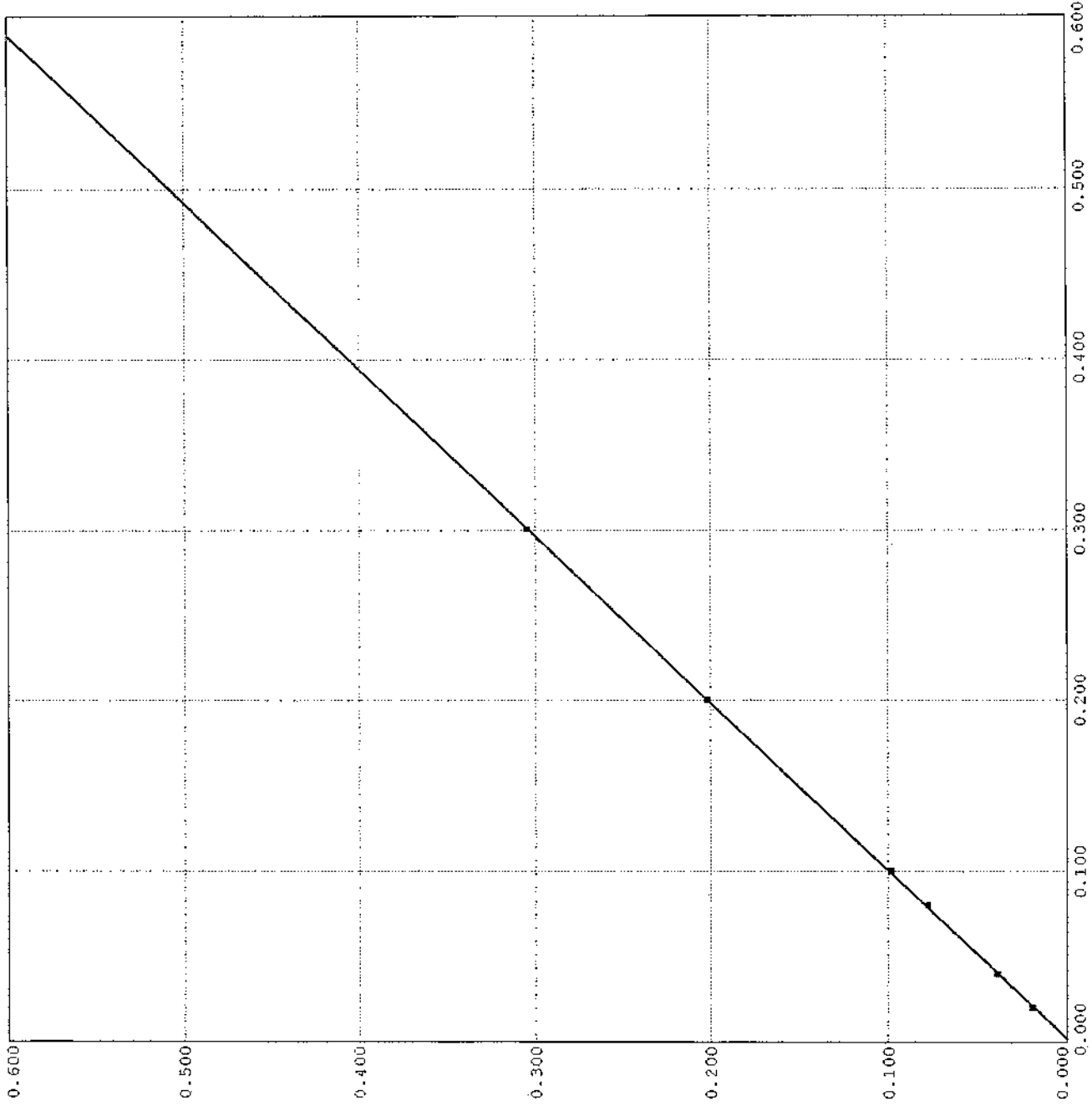
Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/19/2017
Time: 15:28:04

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0202	0.0004
0.040	0.0400	0.0000
0.080	0.0788	0.0004
0.100	0.0992	0.0004
0.200	0.2026	0.0009
0.300	0.3056	0.0009

SLOPE = 1.021680
R² = 0.999890



OK

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmat: 100350

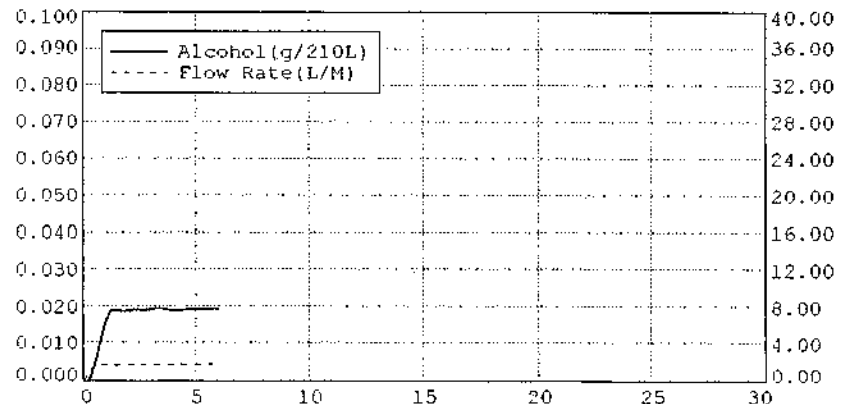
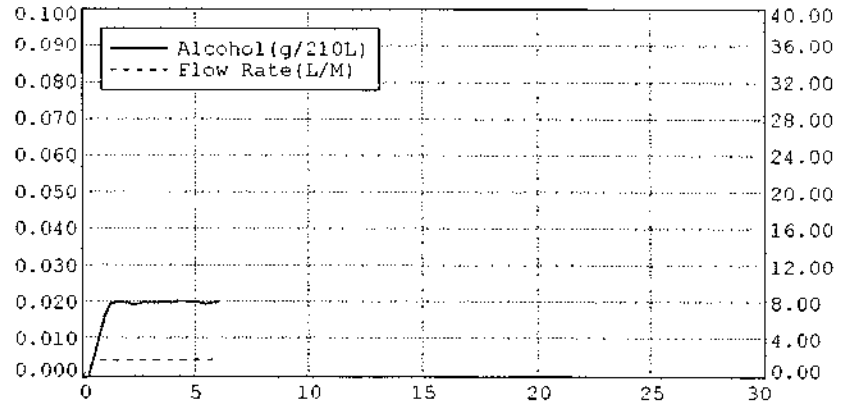
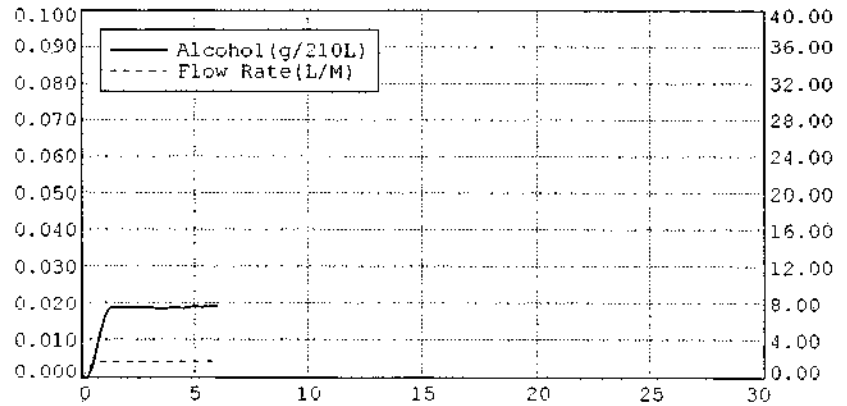
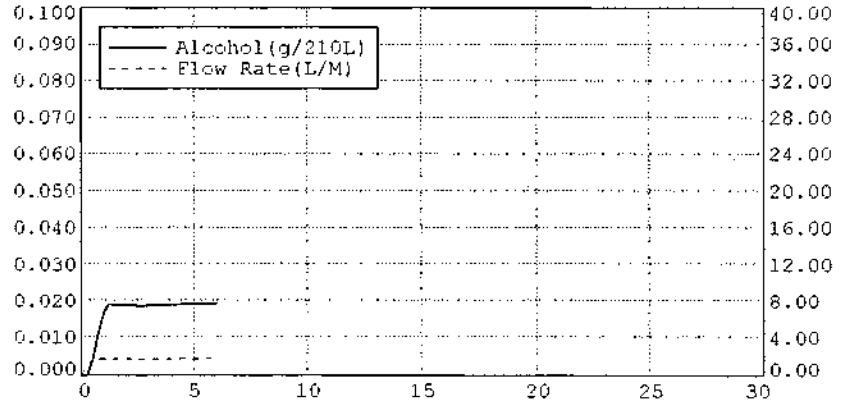
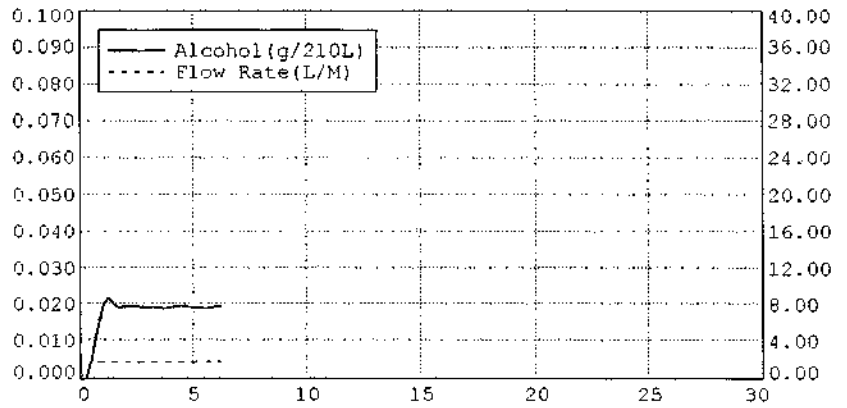
Date: 09/19/2017
 Time: 15:28:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.78: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 652 psi

BLANK TEST	0.000	15:45
INTERNAL STANDARD	VERIFIED	15:45
EXTERNAL STANDARD	0.020	15:45
BLANK TEST	0.000	15:46
EXTERNAL STANDARD	0.020	15:47
BLANK TEST	0.000	15:47
EXTERNAL STANDARD	0.020	15:48
BLANK TEST	0.000	15:49
EXTERNAL STANDARD	0.021	15:49
BLANK TEST	0.000	15:50
EXTERNAL STANDARD	0.020	15:50
BLANK TEST	0.000	15:51

Average = 0.0202
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100350

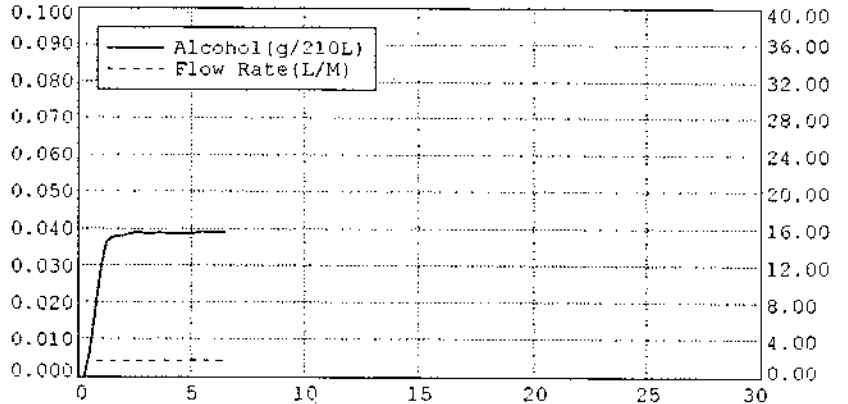
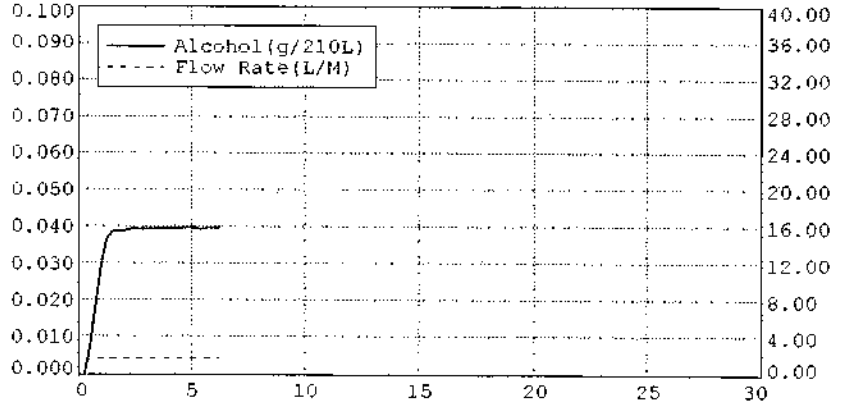
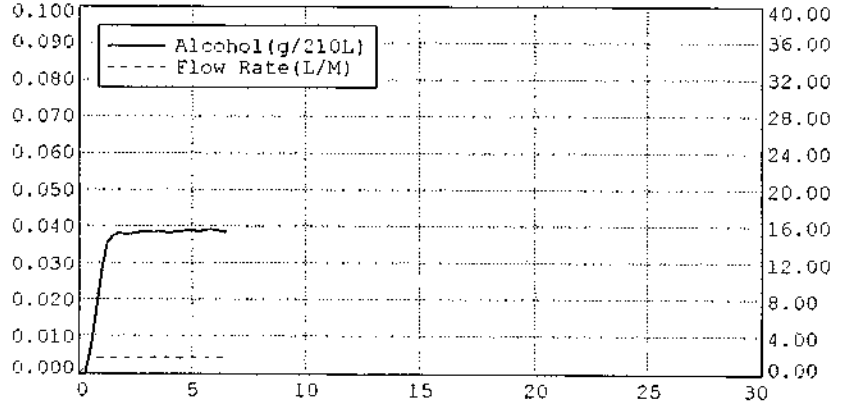
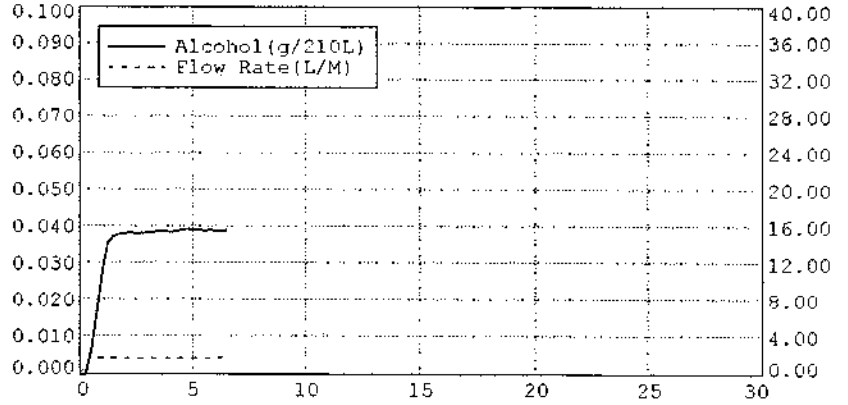
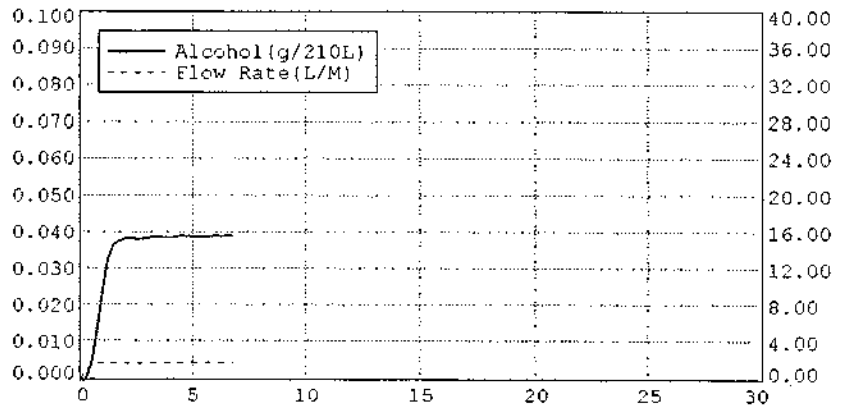
Date: 09/19/2017
 Time: 15:55:46

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.78: 0.040
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 638 psi

BLANK TEST	0.000	15:57
INTERNAL STANDARD	VERIFIED	15:57
EXTERNAL STANDARD	0.040	15:57
BLANK TEST	0.000	15:58
EXTERNAL STANDARD	0.040	15:58
BLANK TEST	0.000	15:59
EXTERNAL STANDARD	0.040	15:59
BLANK TEST	0.000	16:00
EXTERNAL STANDARD	0.040	16:00
BLANK TEST	0.000	16:01
EXTERNAL STANDARD	0.040	16:01
BLANK TEST	0.000	16:02

Average = 0.0400
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100350

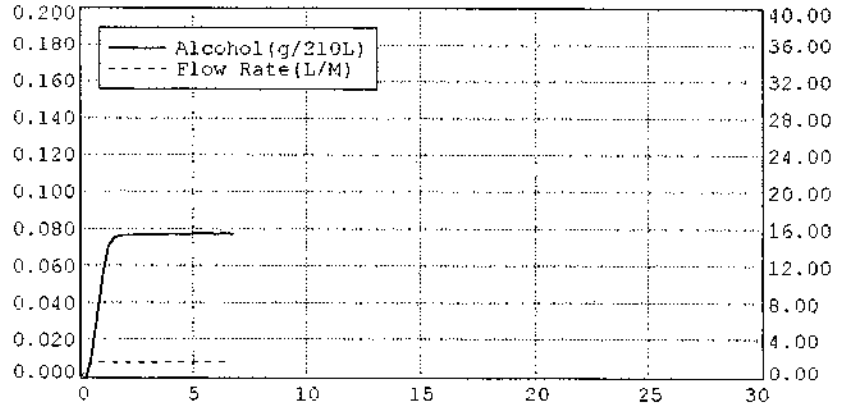
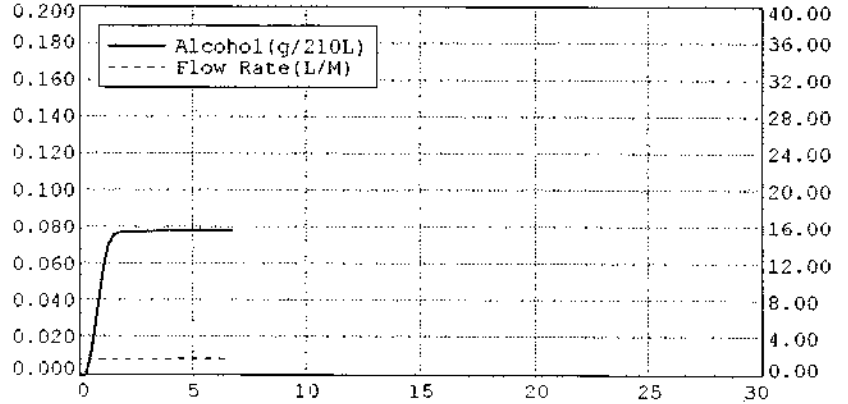
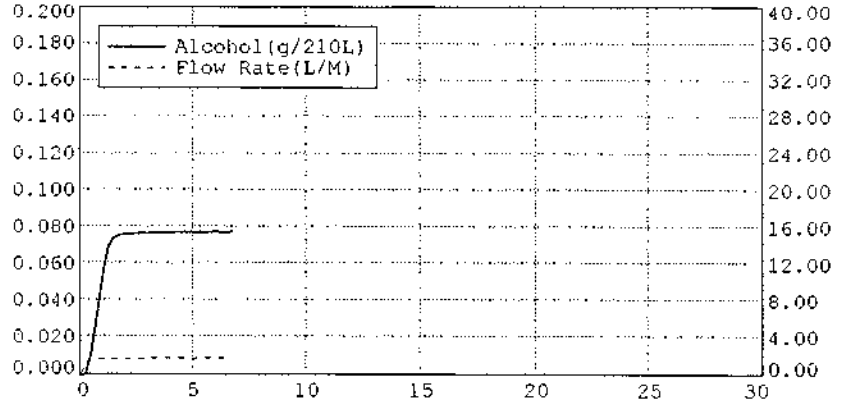
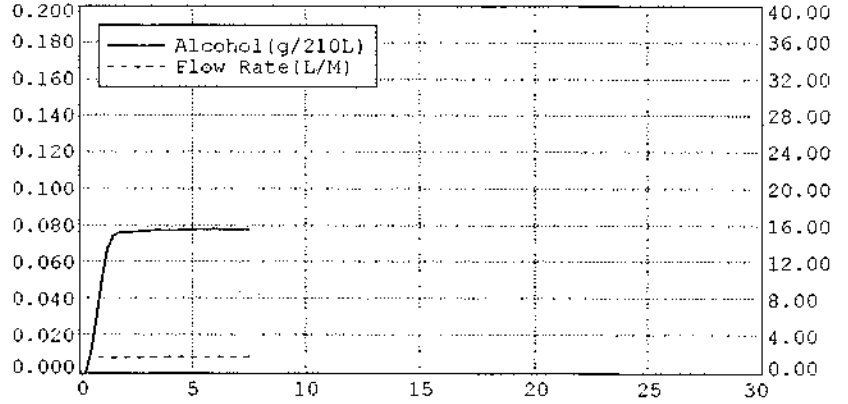
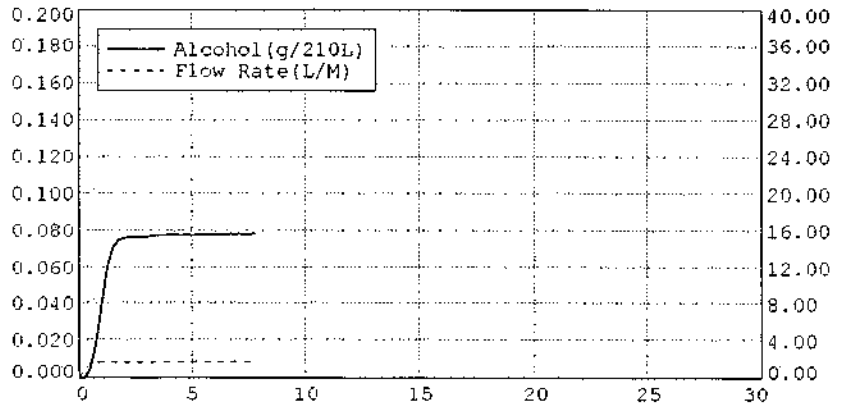
Date: 09/19/2017
 Time: 16:03:37

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.78: 0.080
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 439 psi

BLANK TEST	0.000	16:04
INTERNAL STANDARD	VERIFIED	16:04
EXTERNAL STANDARD	0.079	16:05
BLANK TEST	0.000	16:06
EXTERNAL STANDARD	0.079	16:06
BLANK TEST	0.000	16:07
EXTERNAL STANDARD	0.078	16:07
BLANK TEST	0.000	16:08
EXTERNAL STANDARD	0.079	16:08
BLANK TEST	0.000	16:09
EXTERNAL STANDARD	0.079	16:09
BLANK TEST	0.000	16:10

Average = 0.0788
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

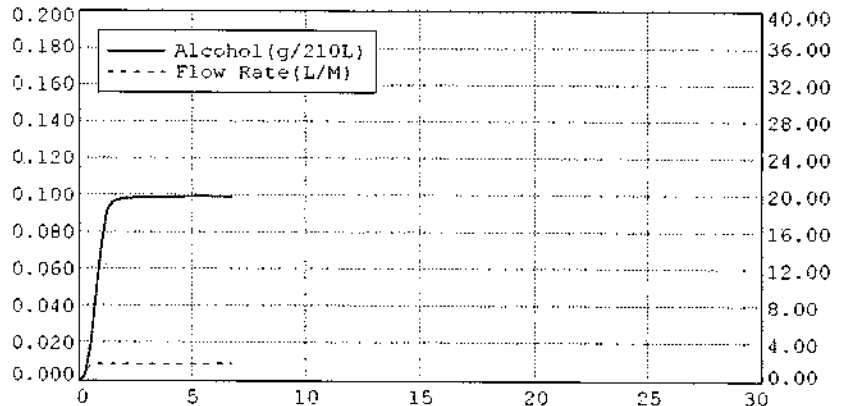
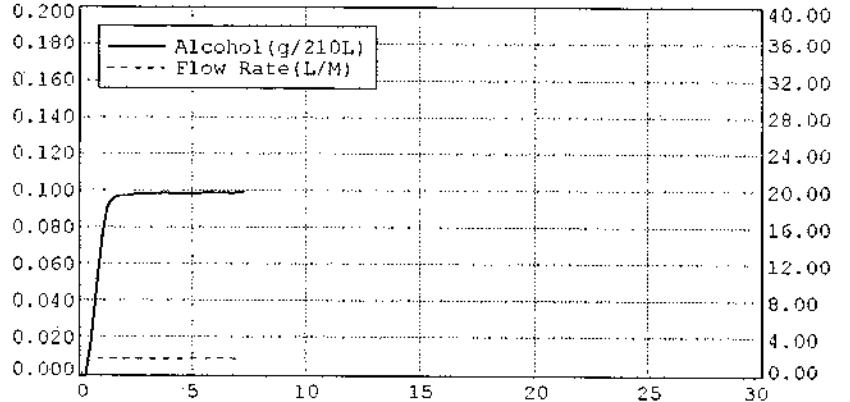
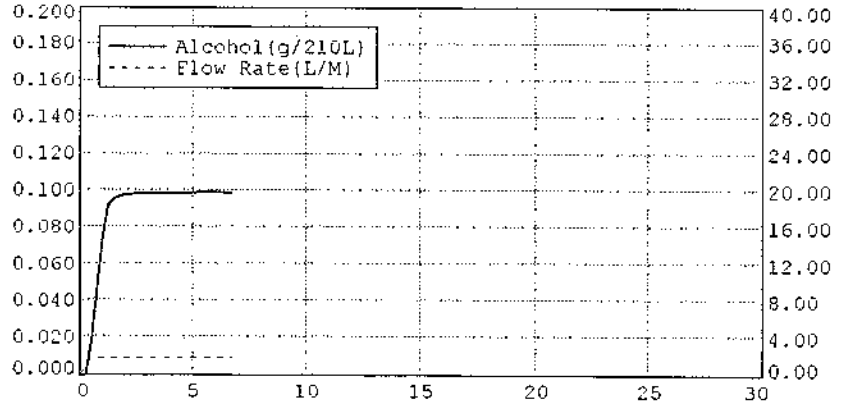
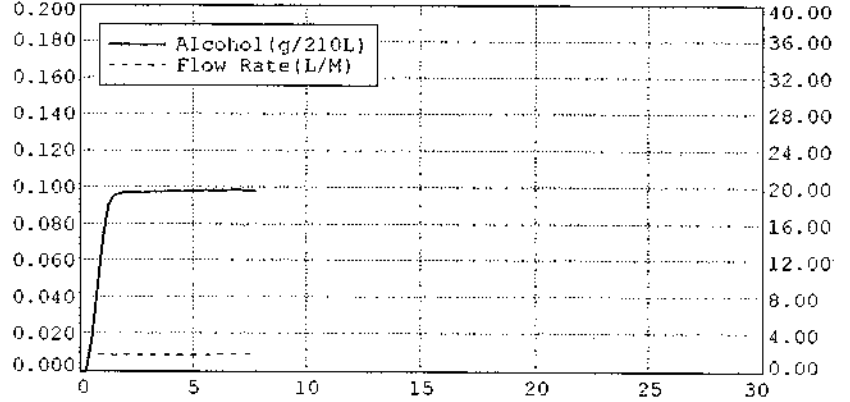
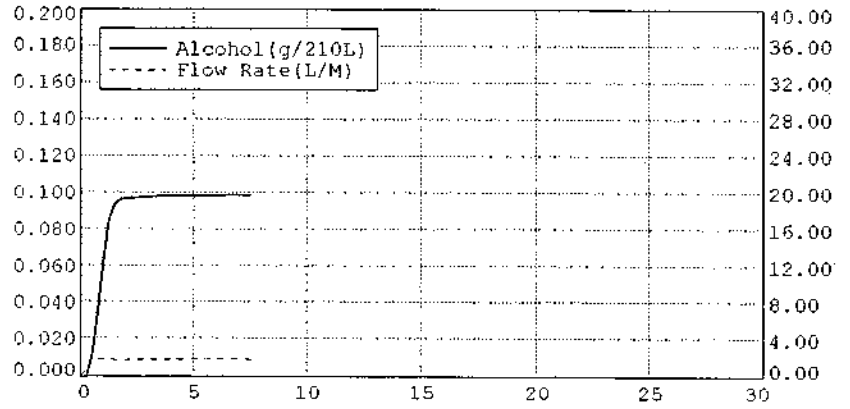
Alaska Department of Public Safety
 DATAMASTER dmt: 100350

Date: 09/19/2017
 Time: 16:11:53

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.100
 TARGET AT 29.78: 0.100
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 916 psi

BLANK TEST	0.000	16:13
INTERNAL STANDARD	VERIFIED	16:13
EXTERNAL STANDARD	0.099	16:13
BLANK TEST	0.000	16:14
EXTERNAL STANDARD	0.099	16:14
BLANK TEST	0.000	16:15
EXTERNAL STANDARD	0.099	16:15
BLANK TEST	0.000	16:16
EXTERNAL STANDARD	0.099	16:16
BLANK TEST	0.000	16:17
EXTERNAL STANDARD	0.100	16:18
BLANK TEST	0.000	16:18

Average = 0.0992
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100350

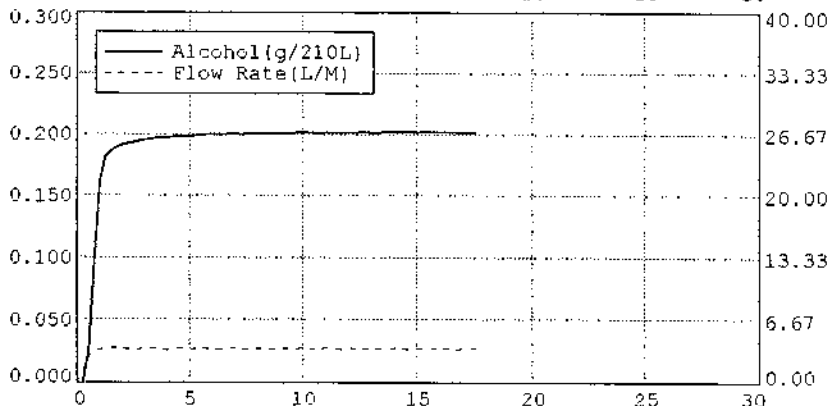
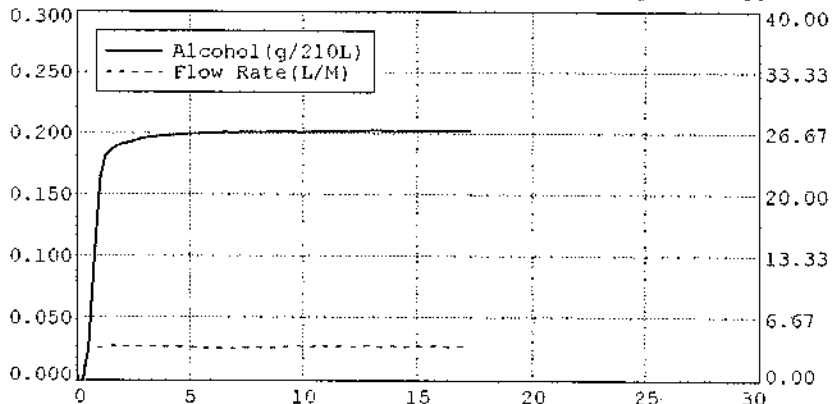
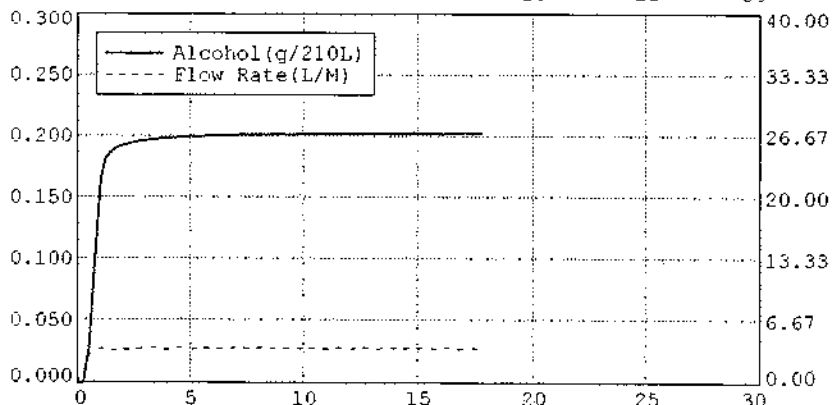
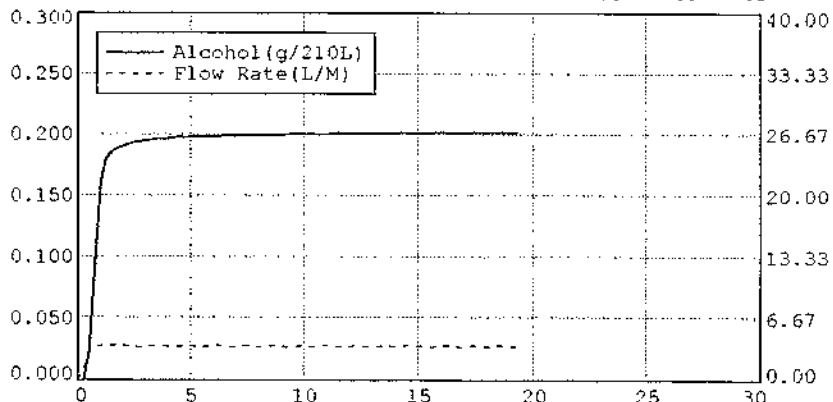
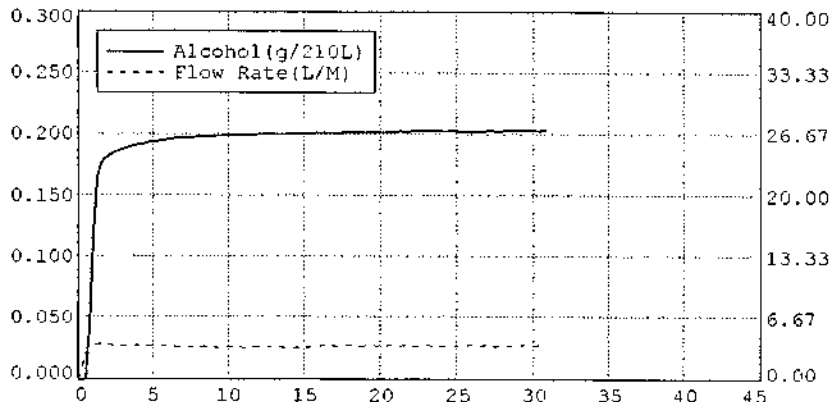
Date: 09/19/2017
 Time: 16:31:27

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: 16190
 EXPIRATION: 08/15/2018

BLANK TEST	0.000	16:32
INTERNAL STANDARD	VERIFIED	16:33
EXTERNAL STANDARD	0.204	16:33
BLANK TEST	0.000	16:34
EXTERNAL STANDARD	0.202	16:35
BLANK TEST	0.000	16:35
EXTERNAL STANDARD	0.203	16:36
BLANK TEST	0.000	16:37
EXTERNAL STANDARD	0.202	16:37
BLANK TEST	0.000	16:38
EXTERNAL STANDARD	0.202	16:39
BLANK TEST	0.000	16:39

Average = 0.2026
 Std Dev = 0.0009



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100350

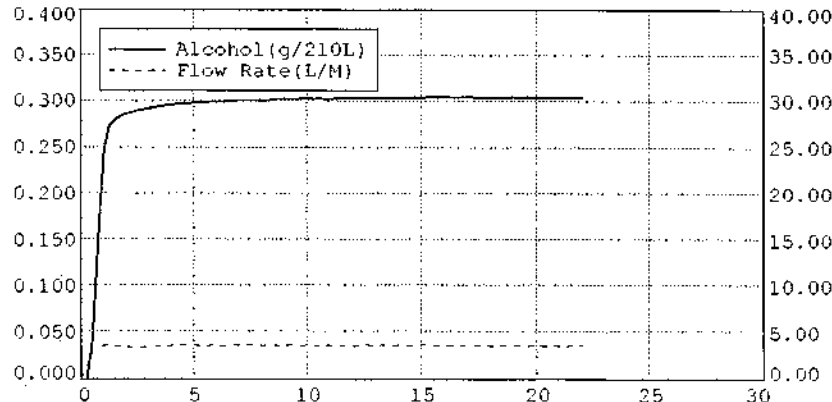
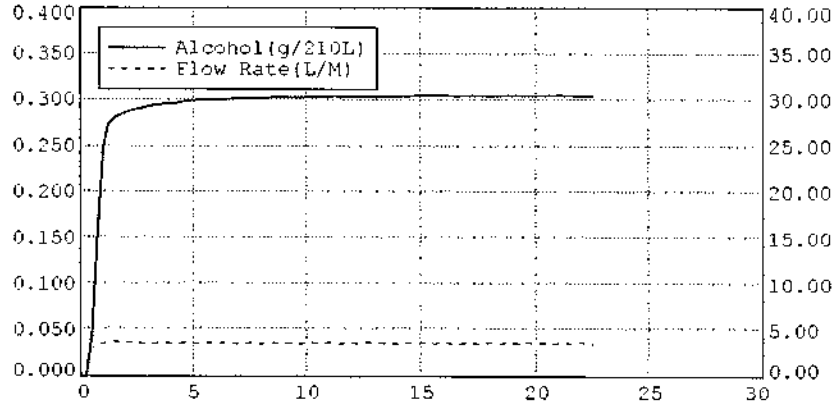
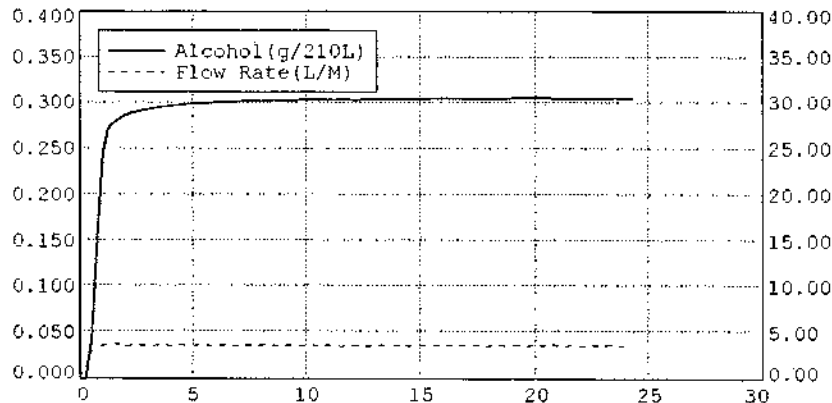
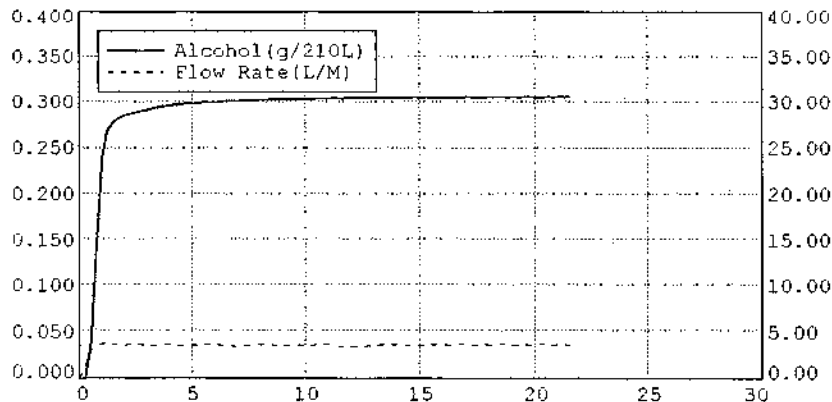
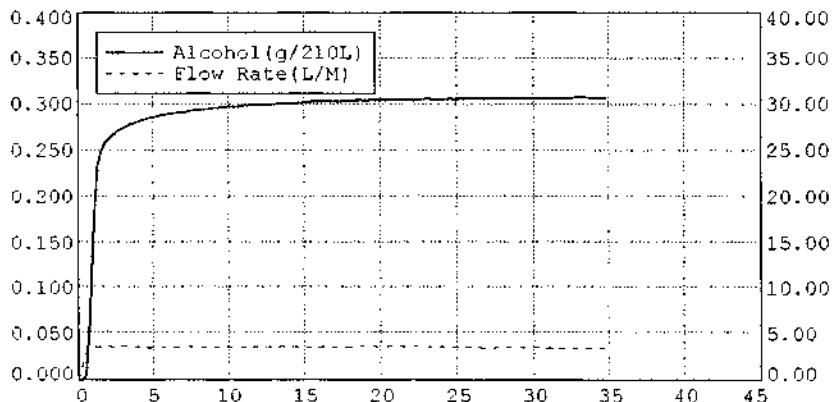
Date: 09/19/2017
 Time: 16:43:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 16410
 EXPIRATION: 12/19/2018

BLANK TEST	0.000	16:45
INTERNAL STANDARD	VERIFIED	16:45
EXTERNAL STANDARD	0.307	16:45
BLANK TEST	0.000	16:46
EXTERNAL STANDARD	0.306	16:47
BLANK TEST	0.000	16:48
EXTERNAL STANDARD	0.305	16:48
BLANK TEST	0.000	16:49
EXTERNAL STANDARD	0.305	16:50
BLANK TEST	0.000	16:51
EXTERNAL STANDARD	0.305	16:51
BLANK TEST	0.000	16:52

Average = 0.3056
 Std Dev = 0.0009



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/21/2017
Time: 08:20:58

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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

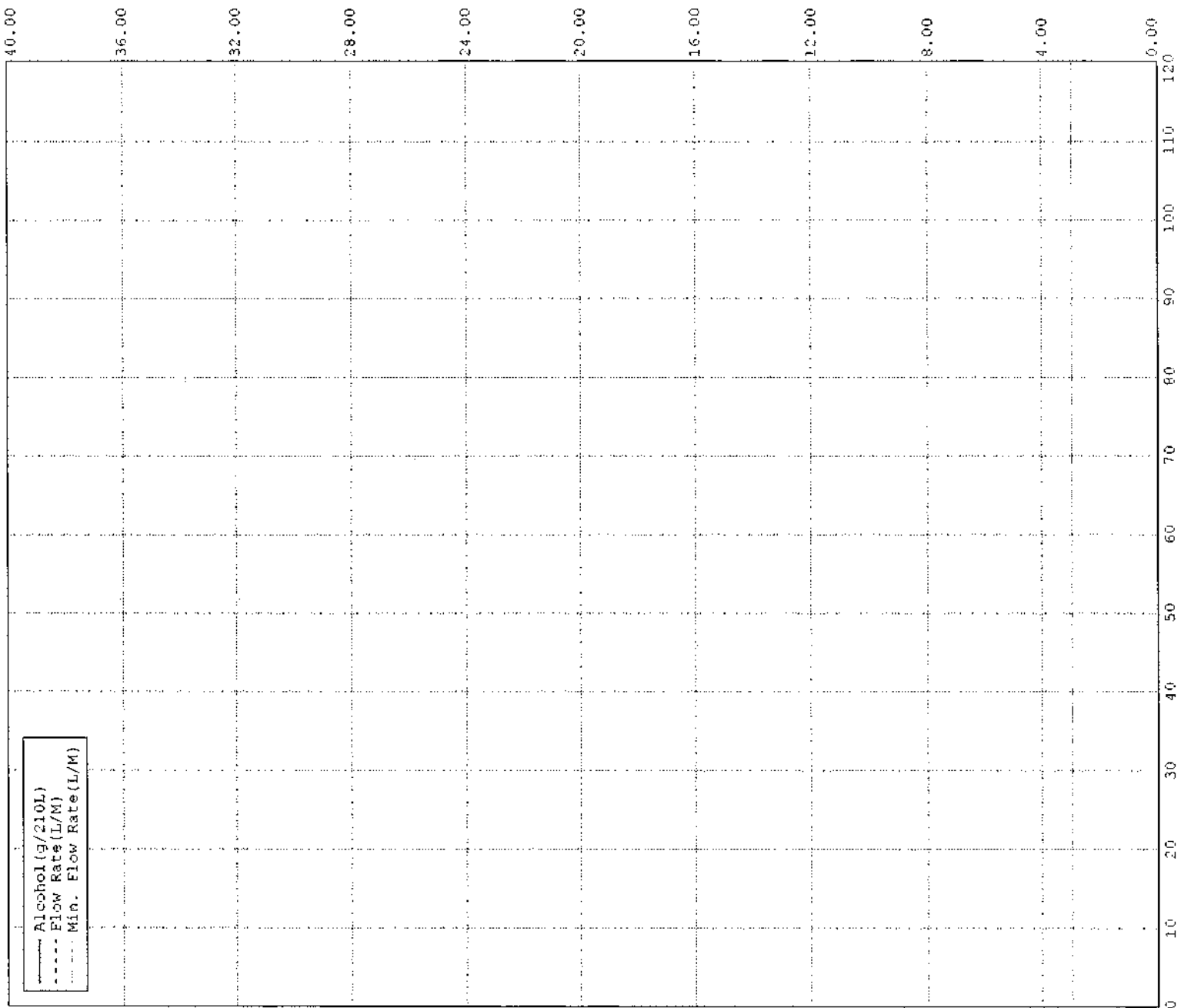
DEPT/AGENCY:
AAA1

CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: AG534001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	08:25
BLANK TEST	0.000	08:25
INTERNAL STANDARD	VERIFIED	08:25
EXTERNAL STANDARD	0.078	08:25
BLANK TEST	0.000	08:26
SUBJECT SAMPLE	INCOMPLETE	08:28



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/21/2017
Time: 13:25:10

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

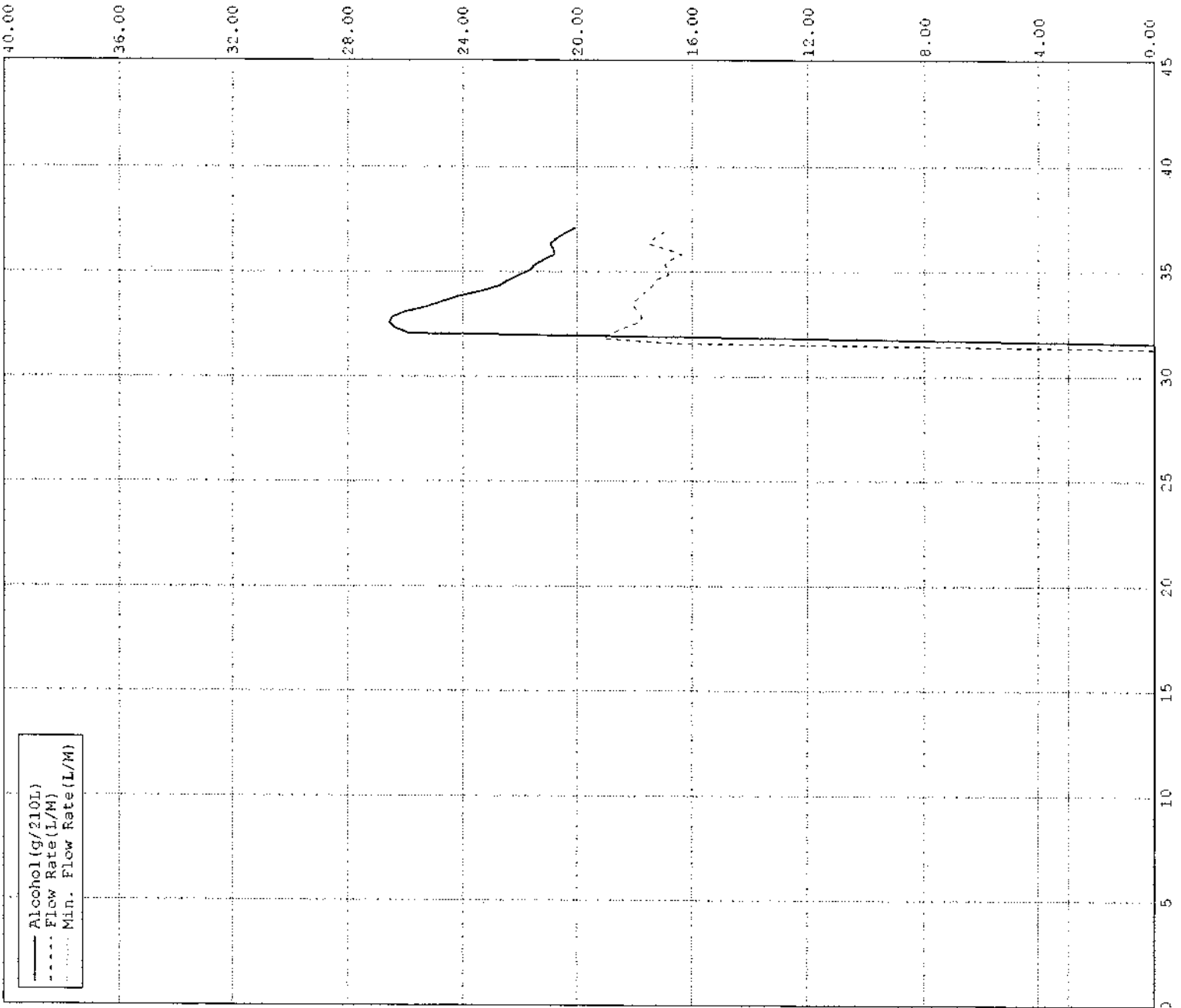
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.54: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:26
BLANK TEST	0.000	13:26
INTERNAL STANDARD	VERIFIED	13:26
EXTERNAL STANDARD	0.078	13:26
BLANK TEST	0.000	13:27
SUBJECT SAMPLE	INVALID	13:28



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/21/2017
Time: 13:37:23

SUBJECT NAME:

TEST TEST
LICENSE #: INT -ACETONE

OPERATOR NAME:

COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:

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

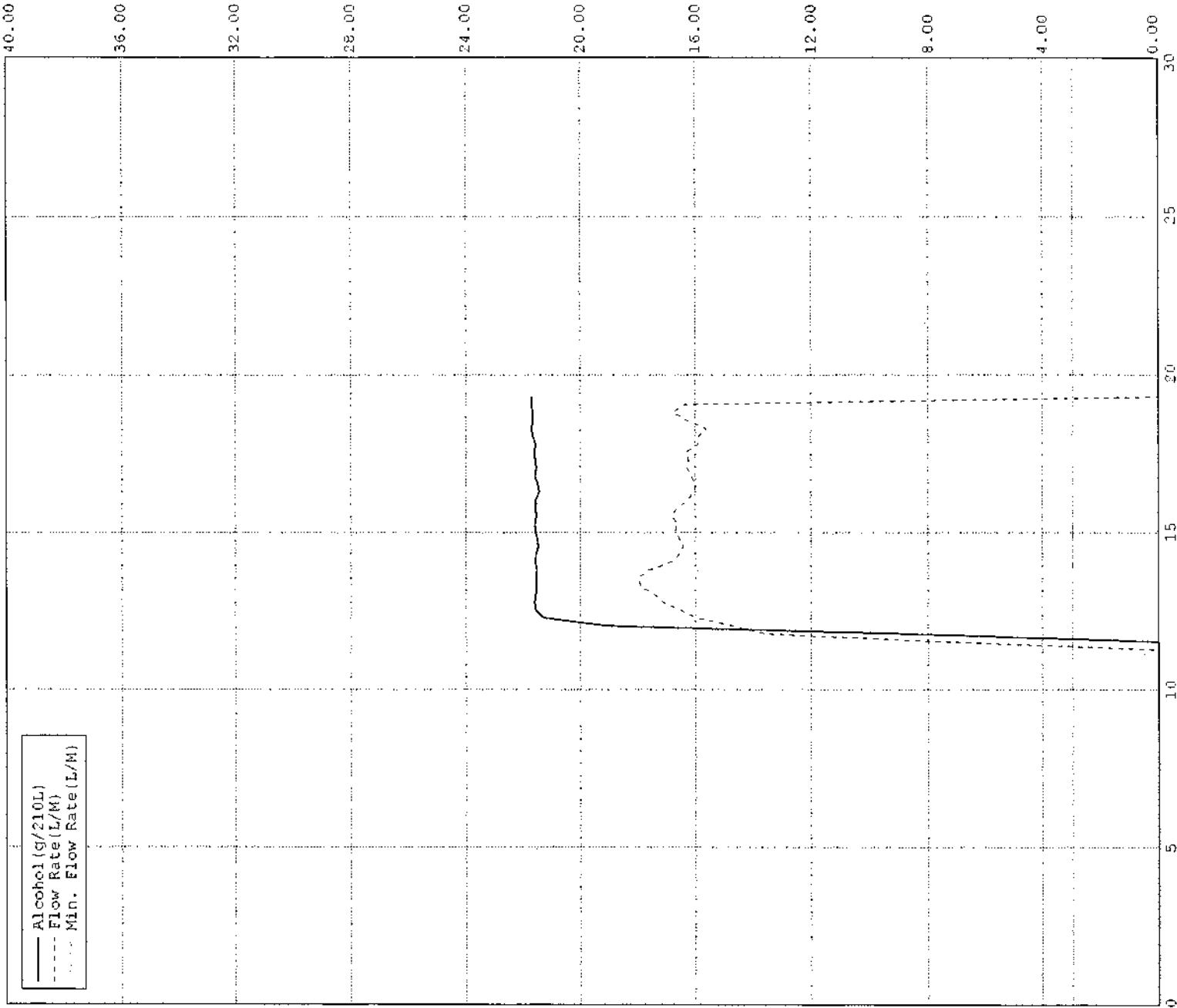
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.54: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK

PASSED 13:40
BLANK TEST 0.000 13:40
INTERNAL STANDARD VERIFIED 13:40
Xq = 0.098 (0.18%)
EXTERNAL STANDARD 0.079 13:40
X[1] = 0.0787 (0.0094) (0.0016)
BLANK TEST 0.000 13:41
SUBJECT SAMPLE XXX 13:42
X[1] = 0.1090 (-0.0183) (0.0001)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/21/2017
Time: 13:45:06

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

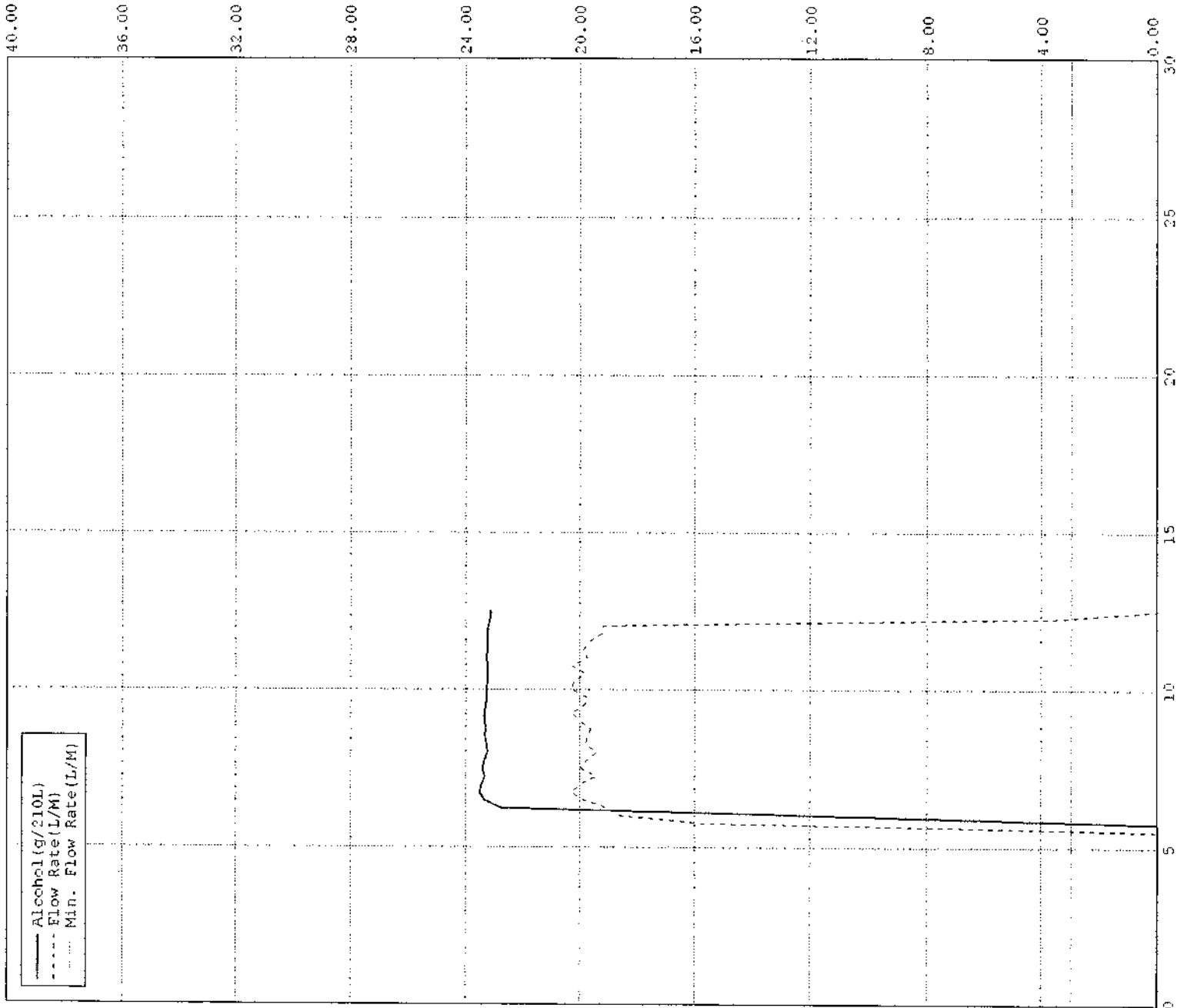
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.54: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 13:46
BLANK TEST 0.000 13:46
INTERNAL STANDARD VERIFIED 13:46
Xq = 0.099 (0.27%)
EXTERNAL STANDARD 0.078 13:46
X[1] = 0.0777 (0.0002) (0.0029)
BLANK TEST 0.000 13:47
SUBJECT SAMPLE XXX 13:48
X[1] = 0.1163 (-0.0192) (0.0010)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/21/2017
Time: 13:50:46

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

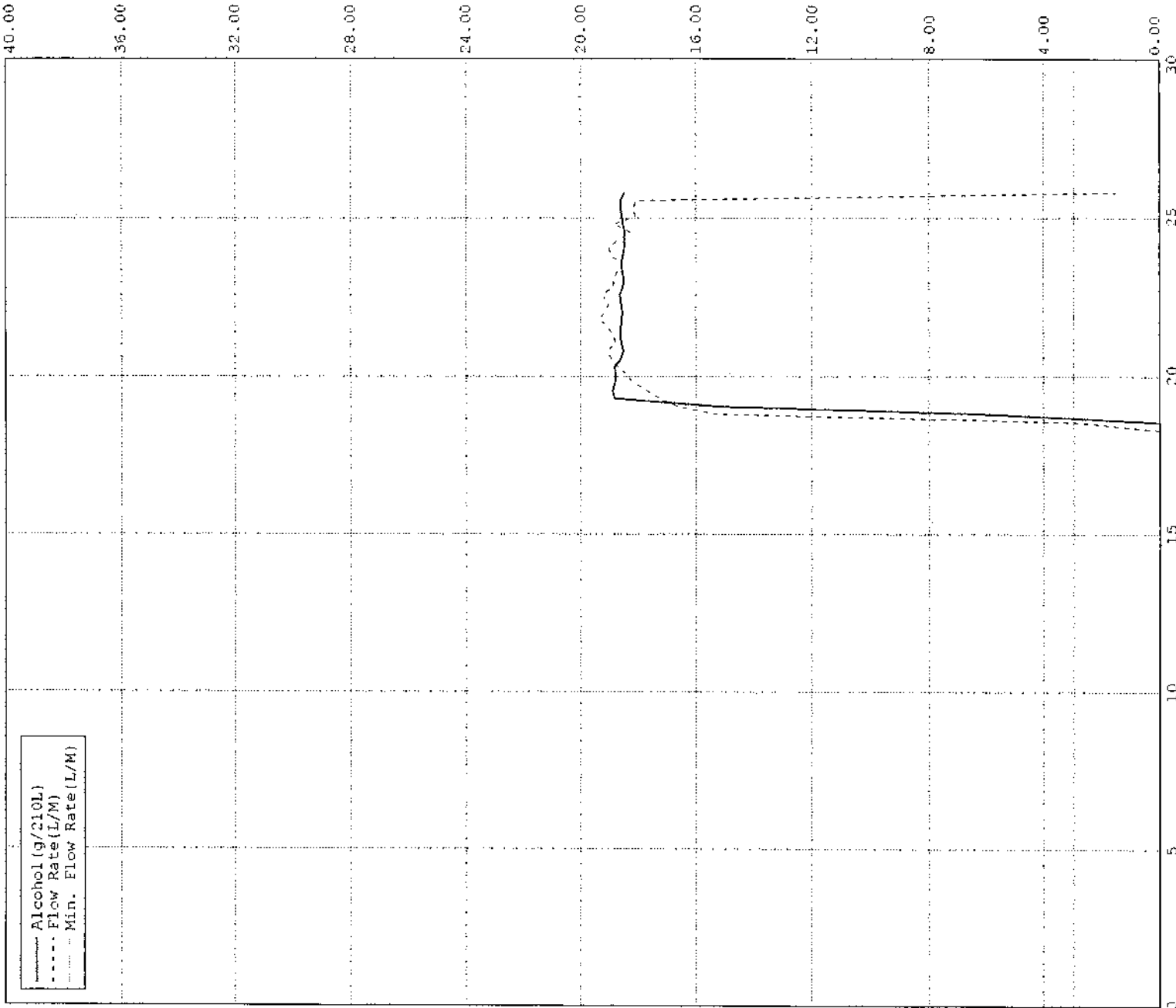
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.54: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:52
BLANK TEST	0.000	13:52
INTERNAL STANDARD	VERIFIED	13:52
Xq = 0.099 (0.36%)		
EXTERNAL STANDARD	0.078	13:52
X[1] = 0.0779 (-0.0001) (0.0015)		
BLANK TEST	0.000	13:53
SUBJECT SAMPLE (Vol=2.16L)	0.093	13:54
X[1] = 0.0931 (0.0001) (-0.0001)		
BLANK TEST	0.000	13:55
EXTERNAL STANDARD	0.077	13:55
X[1] = 0.0774 (0.0009) (0.0012)		
BLANK TEST	0.000	13:56

Filter 2 avg = 0.0004

Filter 3 avg = 0.0018



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/21/2017
Time: 13:59:23

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

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

DEPT/AGENCY:
AAA1

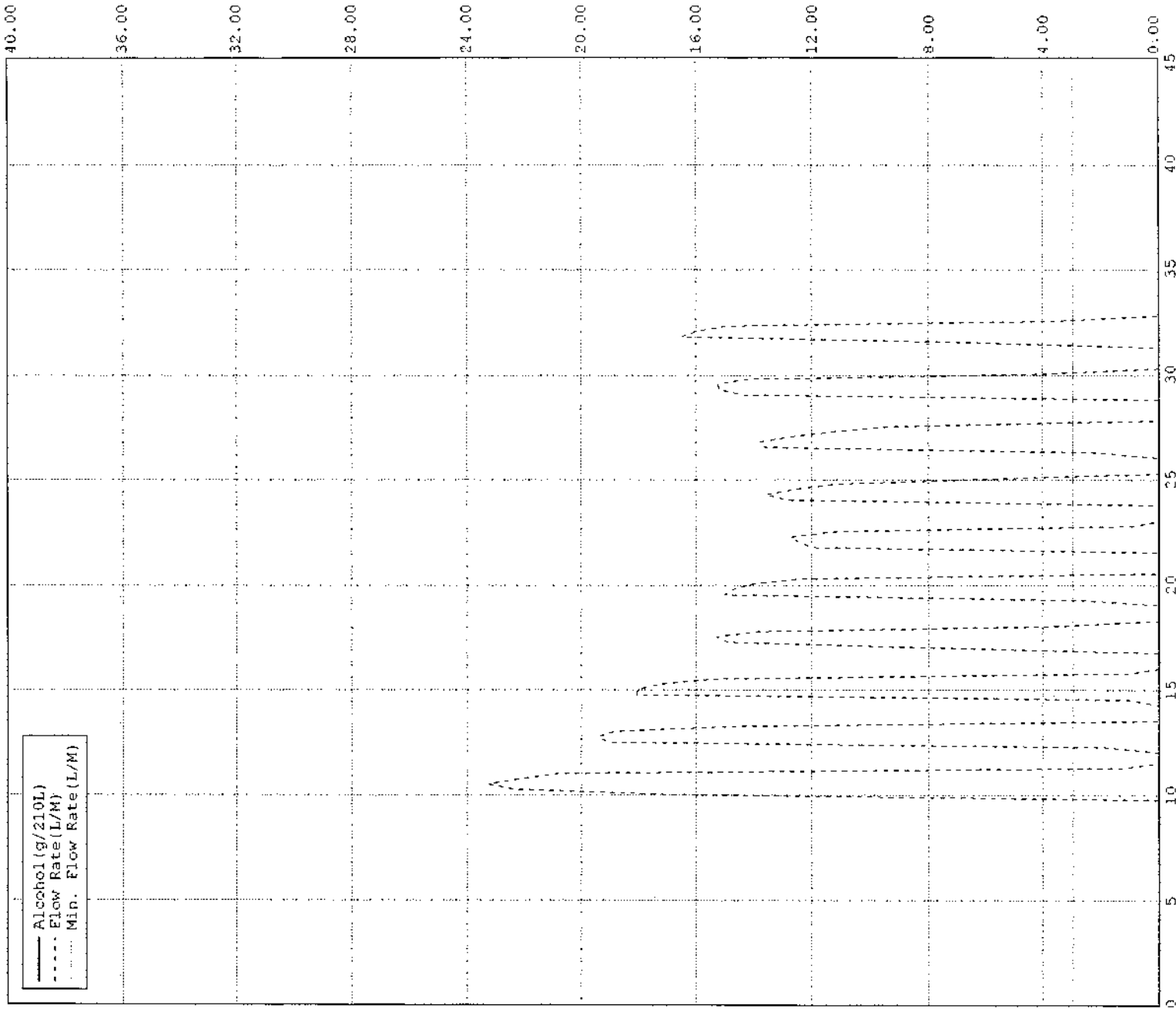
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.54: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 14:00
BLANK TEST 0.000 14:00
INTERNAL STANDARD VERIFIED 14:00
EXTERNAL STANDARD 0.078 14:00
BLANK TEST 0.000 14:01
SUBJECT SAMPLE XXX 14:02

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/21/2017
Time: 14:04:08

SUBJECT NAME:
TEST TEST
LICENSE #: REI

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

DEPT/AGENCY:
AAA1

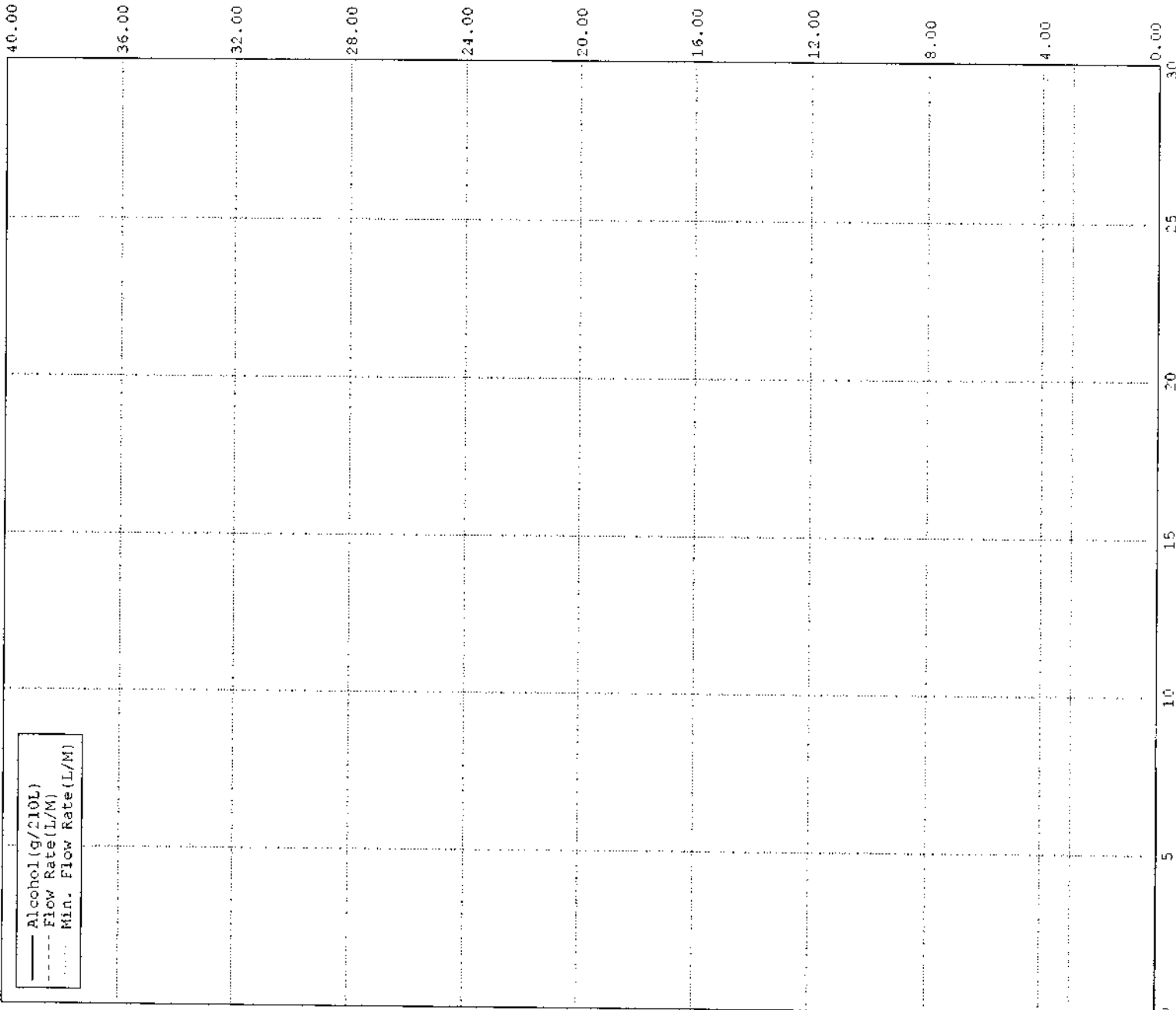
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.53: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 14:05
BLANK TEST 0.000 14:06
INTERNAL STANDARD VERIFIED 14:06
EXTERNAL STANDARD 0.079 14:06
BLANK TEST 0.000 14:07

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 09/21/2017
Time: 14:18:26

SUBJECT NAME:
TEST TEST
LICENSE #: NONDRINKING

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 29.51: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:20
BLANK TEST	0.000	14:20
INTERNAL STANDARD	VERIFIED	14:20
EXTERNAL STANDARD	0.078	14:21
BLANK TEST	0.000	14:21
SUBJECT SAMPLE (Vol=2.70L)	0.000	14:22
BLANK TEST	0.000	14:23
EXTERNAL STANDARD	0.079	14:23
BLANK TEST	0.000	14:24

