

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 100377 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 1.6 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 10/27/18
- 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 2/14/19
 - 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
- 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: 100377

Date: 12/14/2017
Time: 11:25:49

VERSIONS

DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.67 V PASSED
(1.09 V - 2.53 V)
Cooler Voltage = 1.65 V PASSED
(1.03 V - 2.39 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 543 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.2 in

PUMP INFO

Flow Rate = 4.599 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 = 0.082 1.07% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100377

Date: 12/14/2017
Time: 1:06 PM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 47.8°C

Current Barometer 29.2 in
Volume (Ltr) 1.48

Settings

Lamp: 1.70 V
Bias: 80 V
Cooler: 1.75 V
Chopper: 544 Hz

Voltages (V)

Flow: 1.06 V
Detector: 0.068 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 03/02/2011
Time: 17:28:44

Ca = 0.1000
CAL = 0.980645 0.800 <= CAL < 1.200
b1 = 0.0001 0.0000 <= b1 < 0.0040
b2 = 0.0043 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0815 0.0500 <= Xq < 0.2000
a21 = 1.183888 1.050 <= a21 < 1.300
a31 = 0.379173 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 12/14/2017
Time: 13:35:45

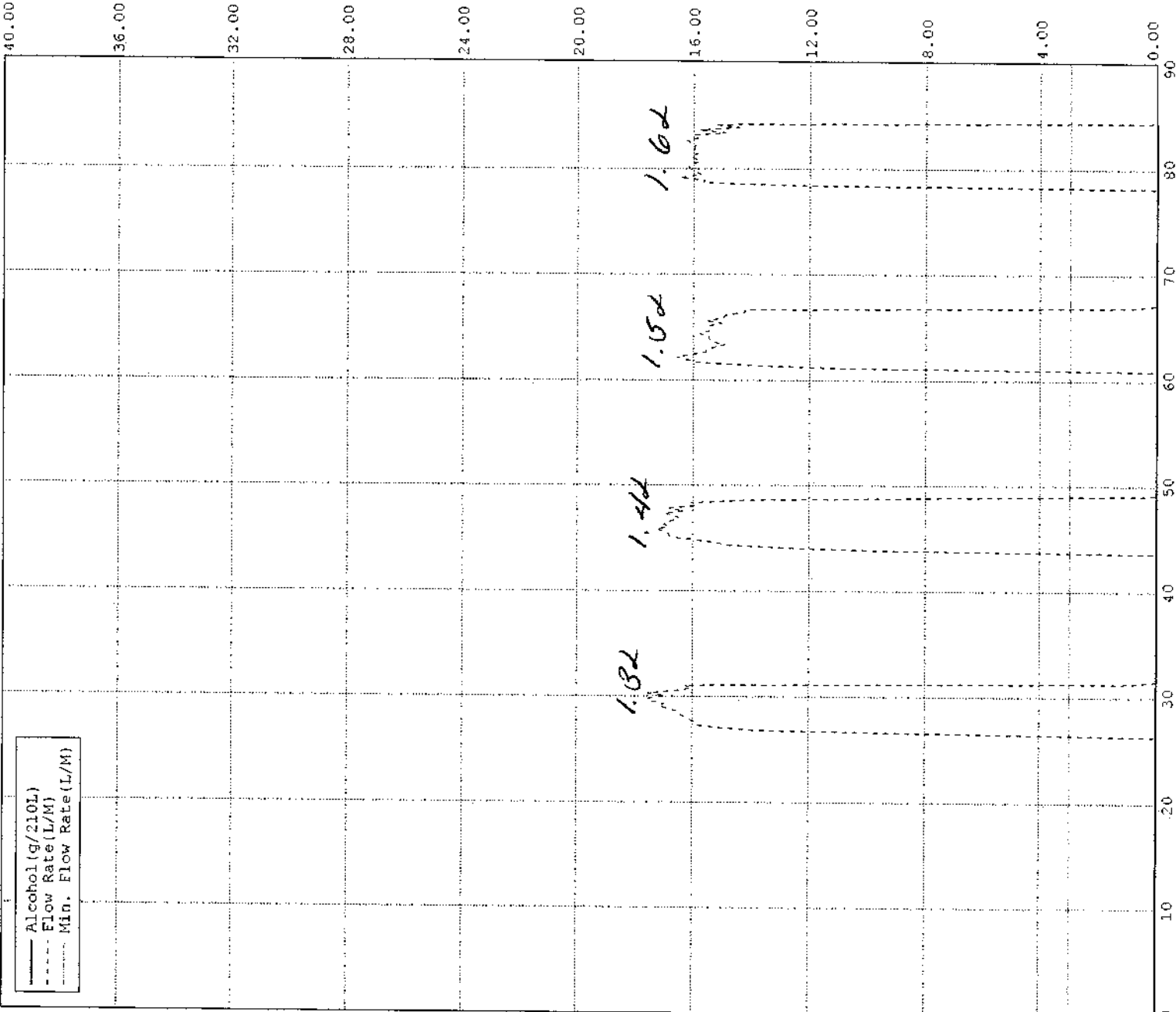
SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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 29.21: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	TIME
BLANK TEST	0.000	13:36
INTERNAL STANDARD	0.078	13:37
EXTERNAL STANDARD	0.078	13:37
BLANK TEST	0.000	13:38
SUBJECT SAMPLE (Vol=1.57L)	0.000	13:39
BLANK TEST	0.000	13:40
EXTERNAL STANDARD	0.079	13:40
BLANK TEST	0.000	13:41



LINEARITY CHECK

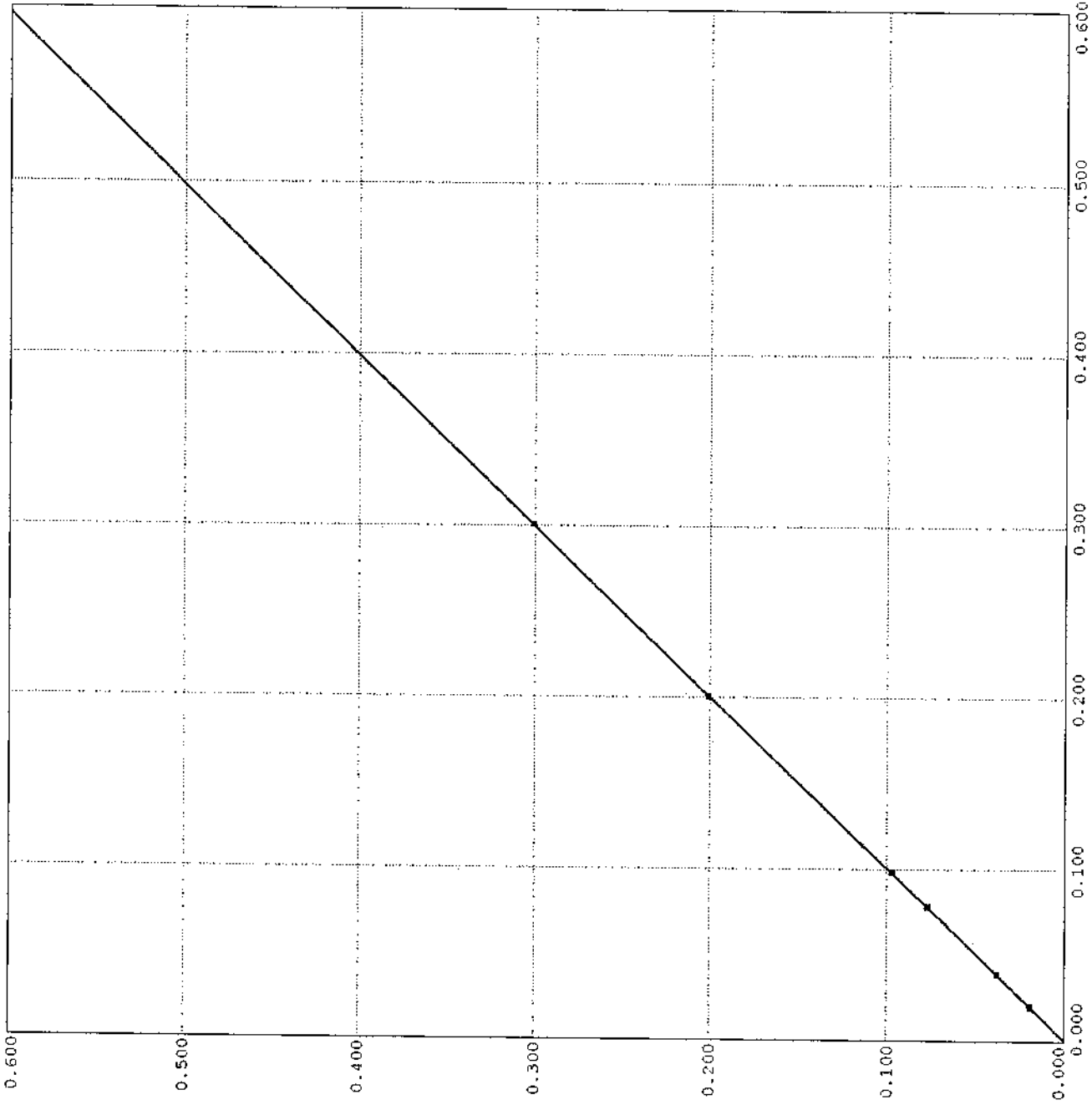
Alaska Department of Public Safety
 DATAMASTER dmt: 100377

Date: 12/14/2017
 Time: 13:44:25

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.039	0.0390	0.0000
0.078	0.0782	0.0004
0.098	0.0982	0.0004
0.200	0.2018	0.0015
0.300	0.3016	0.0005

SLOPE = 1.007116
 R² = 0.999990



CRB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dnt: 100377

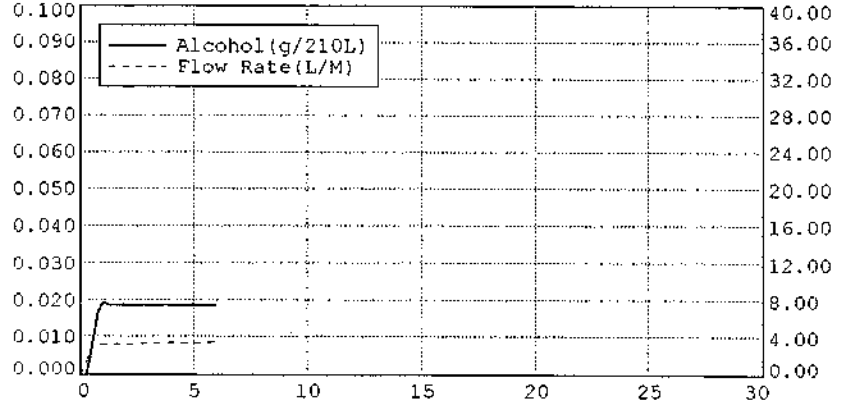
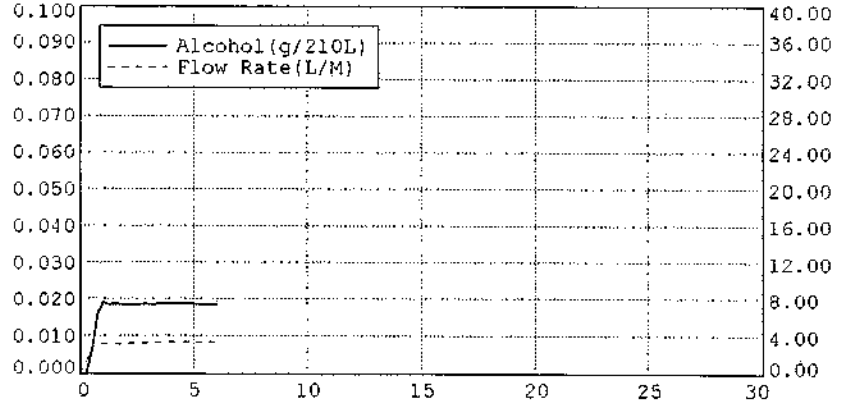
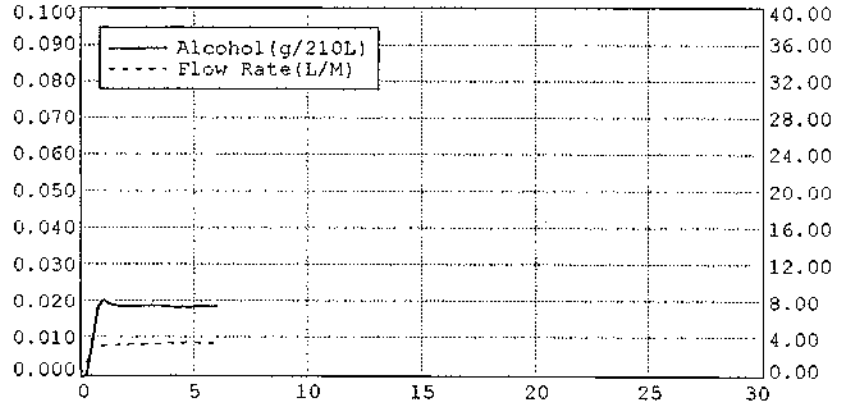
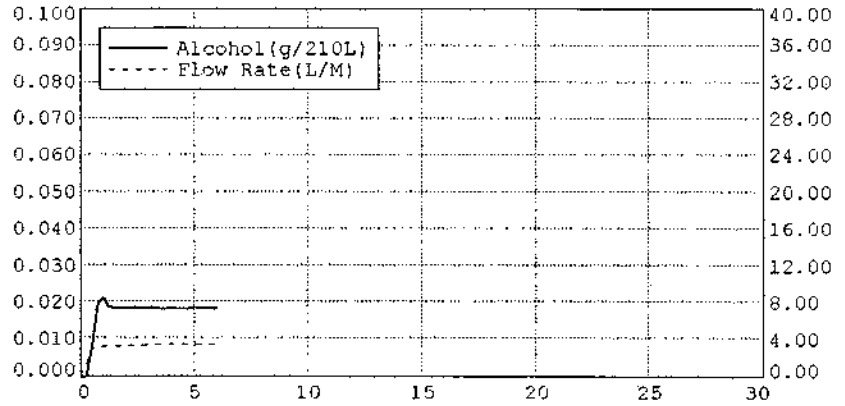
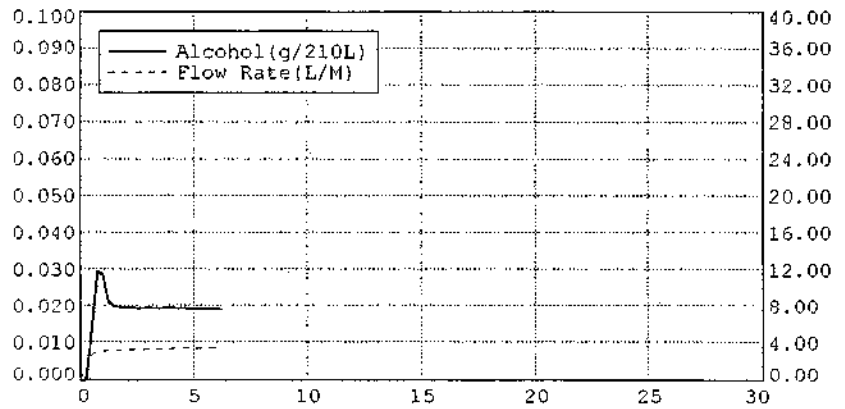
Date: 12/14/2017
Time: 13:44:27

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.21: 0.020
LOT #: AG616504
EXPIRATION: 06/13/2018
TANK PRESSURE: 395 psi

BLANK TEST	0.000	13:45
INTERNAL STANDARD	VERIFIED	13:45
EXTERNAL STANDARD	0.020	13:45
BLANK TEST	0.000	13:46
EXTERNAL STANDARD	0.020	13:47
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.020	13:48
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.020	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.020	13:50
BLANK TEST	0.000	13:51

Average = 0.0200
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100377

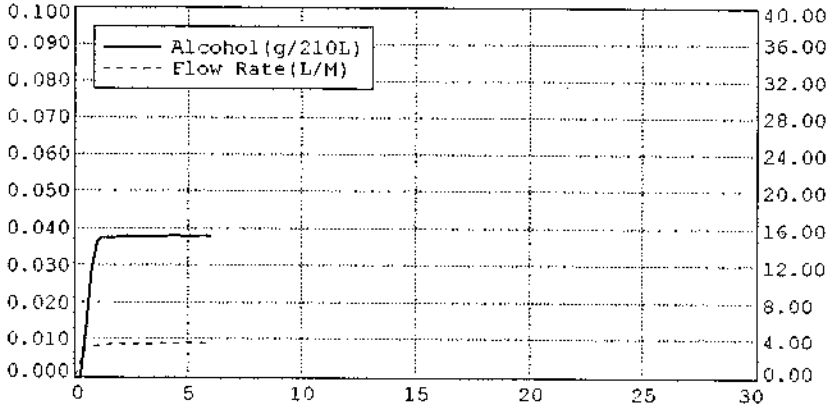
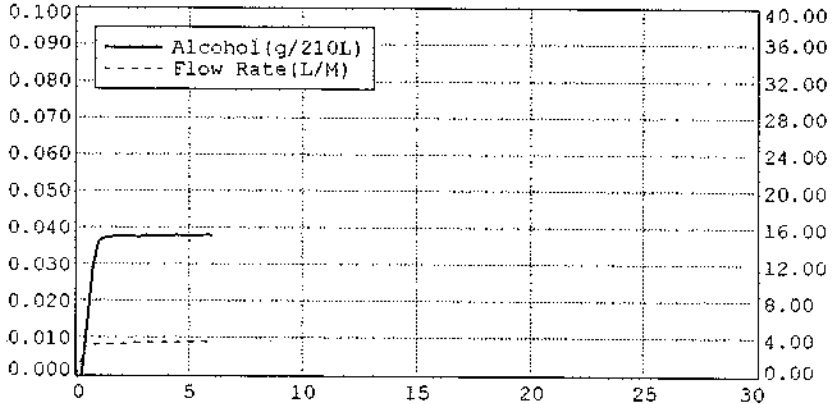
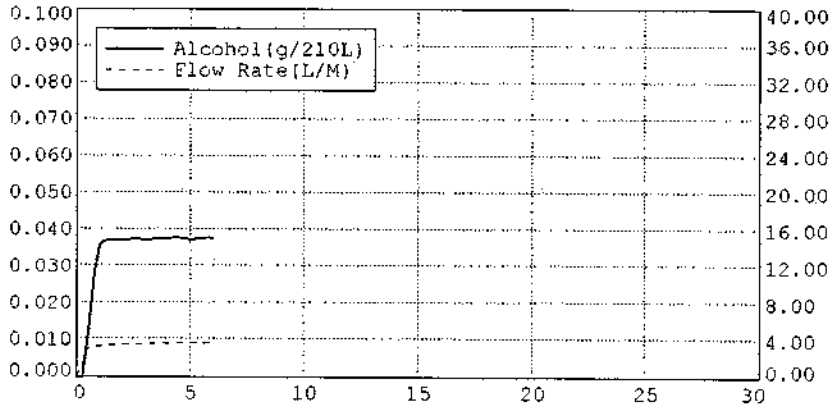
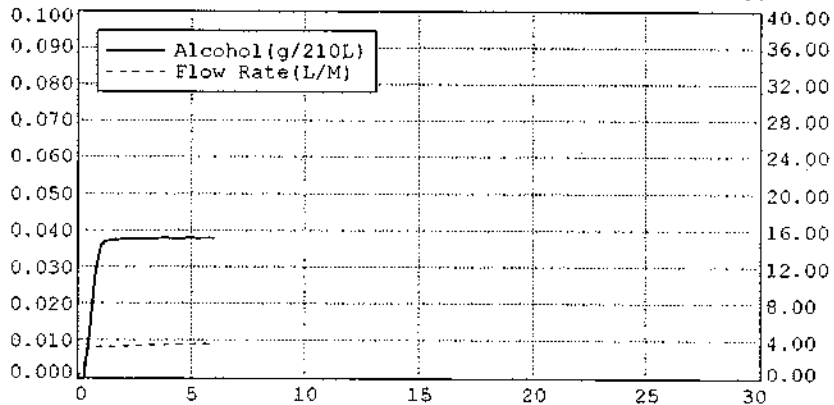
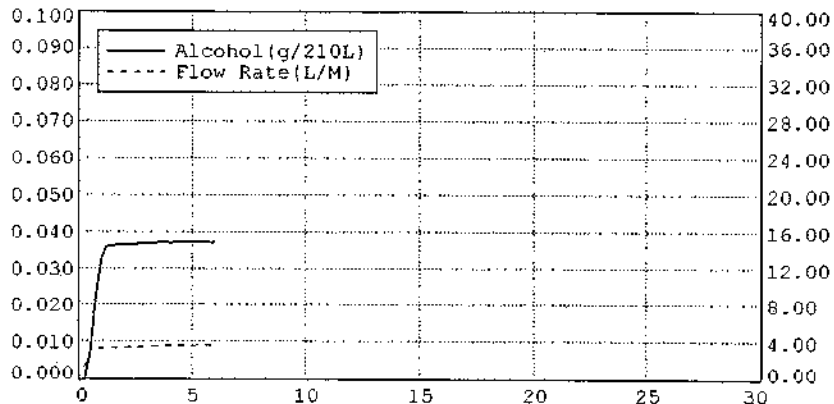
Date: 12/14/2017
Time: 13:52:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.21: 0.039
LOT #: AG630101
EXPIRATION: 10/27/2018
TANK PRESSURE: 471 psi

BLANK TEST	0.000	13:54
INTERNAL STANDARD	VERIFIED	13:54
EXTERNAL STANDARD	0.039	13:54
BLANK TEST	0.000	13:55
EXTERNAL STANDARD	0.039	13:55
BLANK TEST	0.000	13:56
EXTERNAL STANDARD	0.039	13:56
BLANK TEST	0.000	13:57
EXTERNAL STANDARD	0.039	13:57
BLANK TEST	0.000	13:58
EXTERNAL STANDARD	0.039	13:58
BLANK TEST	0.000	13:59

Average = 0.0390
Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100377

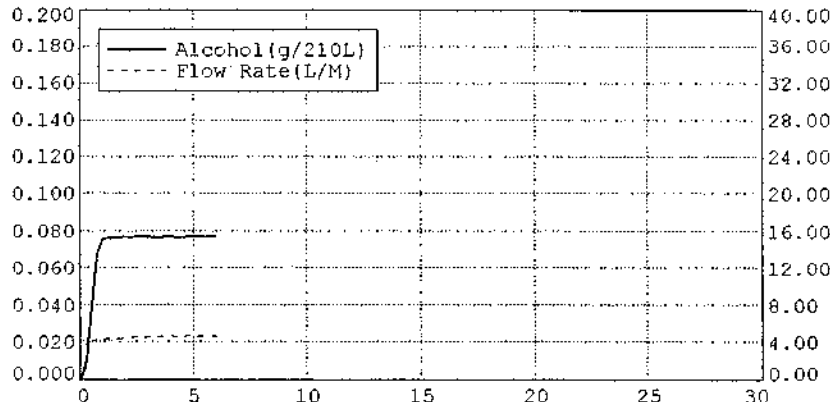
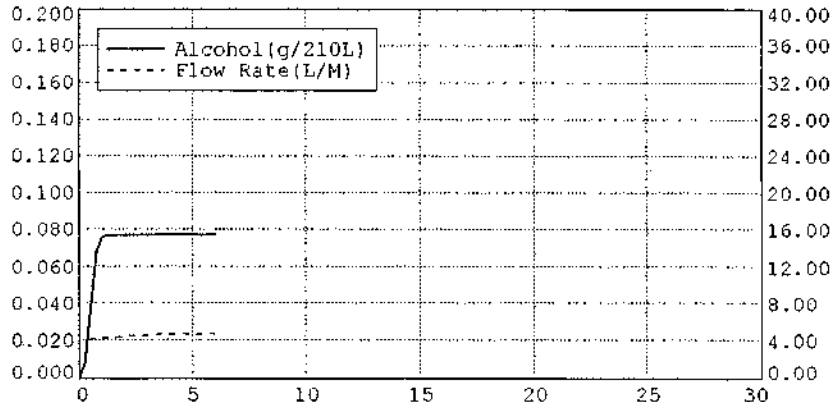
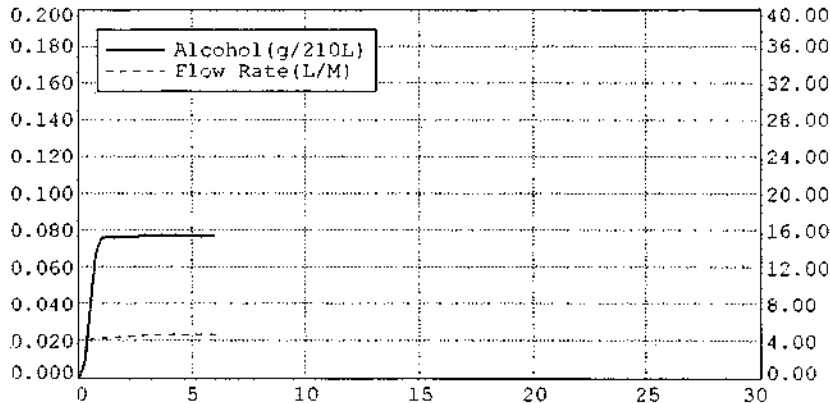
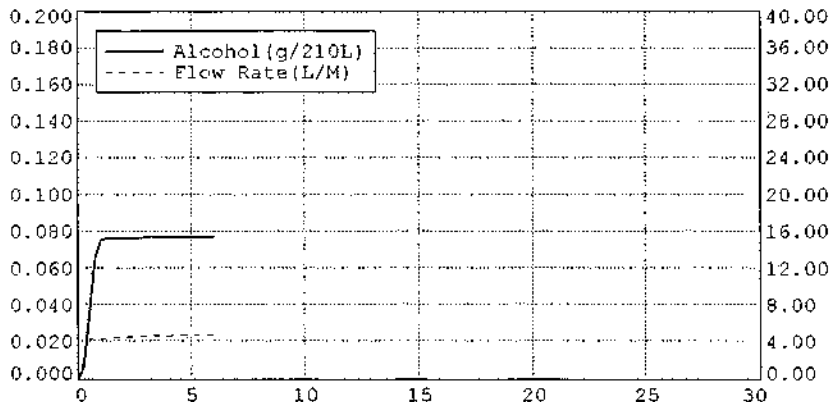
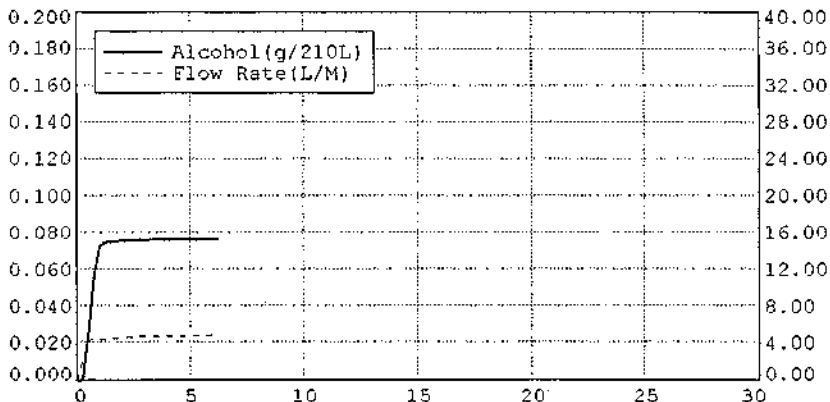
Date: 12/14/2017
Time: 14:00:05

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.21: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018
TANK PRESSURE: 1134 psi

BLANK TEST	0.000	14:01
INTERNAL STANDARD	VERIFIED	14:01
EXTERNAL STANDARD	0.078	14:01
BLANK TEST	0.000	14:02
EXTERNAL STANDARD	0.078	14:02
BLANK TEST	0.000	14:03
EXTERNAL STANDARD	0.079	14:03
BLANK TEST	0.000	14:04
EXTERNAL STANDARD	0.078	14:04
BLANK TEST	0.000	14:05
EXTERNAL STANDARD	0.078	14:06
BLANK TEST	0.000	14:06

Average = 0.0782
Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100377

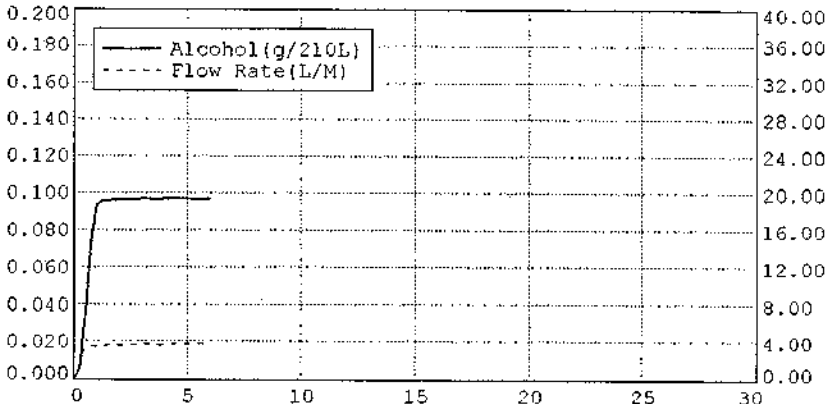
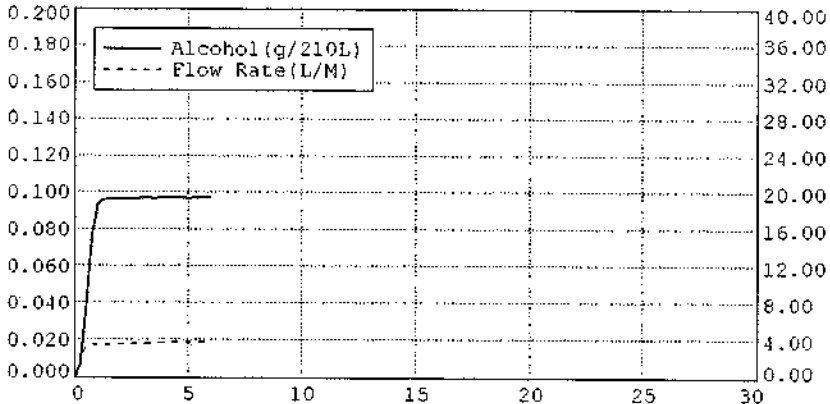
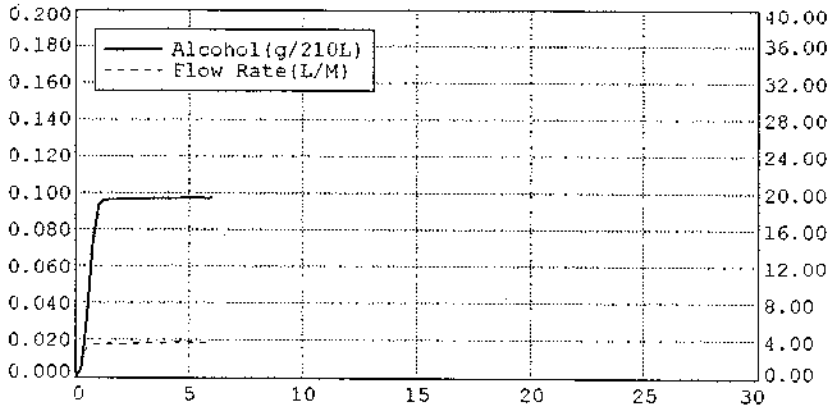
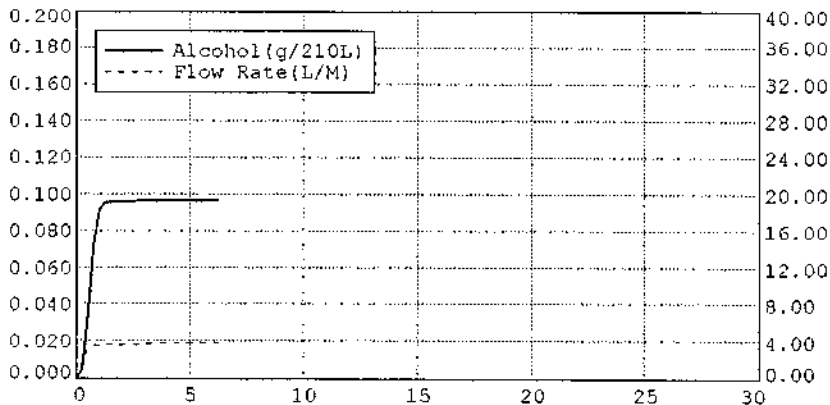
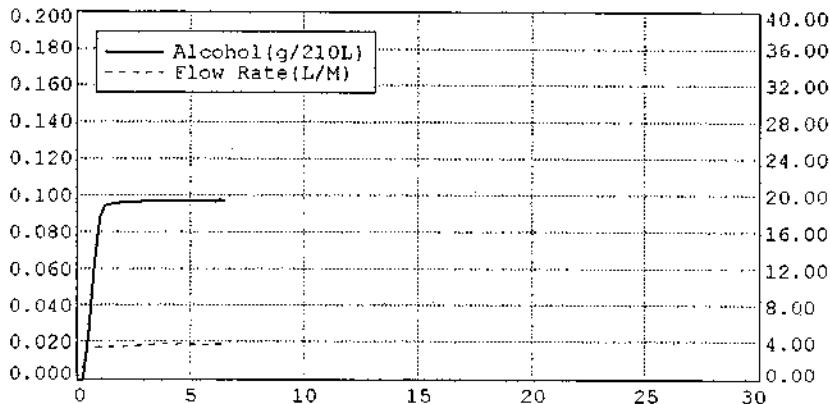
Date: 12/14/2017
 Time: 14:08:23

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.22: 0.098
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 599 psi

BLANK TEST	0.000	14:09
INTERNAL STANDARD	VERIFIED	14:09
EXTERNAL STANDARD	0.098	14:09
BLANK TEST	0.000	14:10
EXTERNAL STANDARD	0.098	14:11
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.099	14:12
BLANK TEST	0.000	14:13
EXTERNAL STANDARD	0.098	14:13
BLANK TEST	0.000	14:14
EXTERNAL STANDARD	0.098	14:14
BLANK TEST	0.000	14:15

Average = 0.0982
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100377

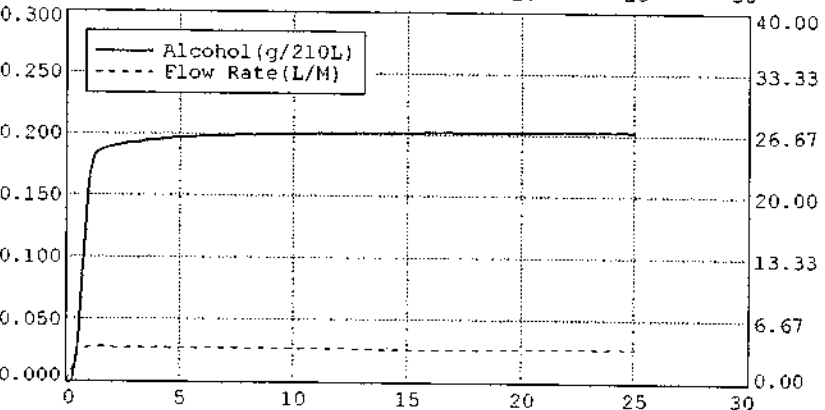
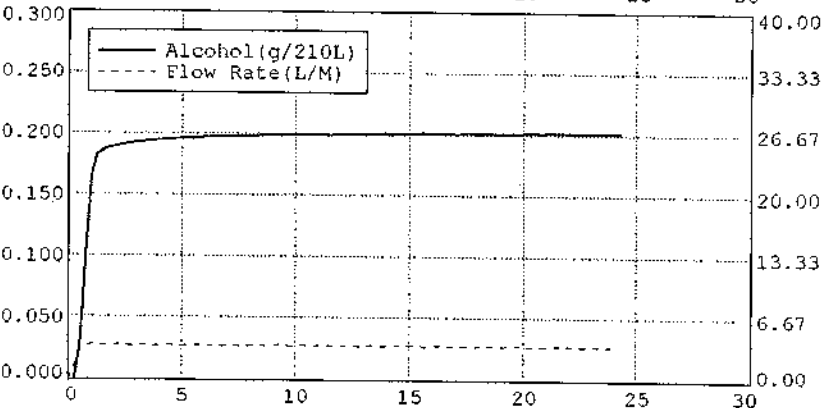
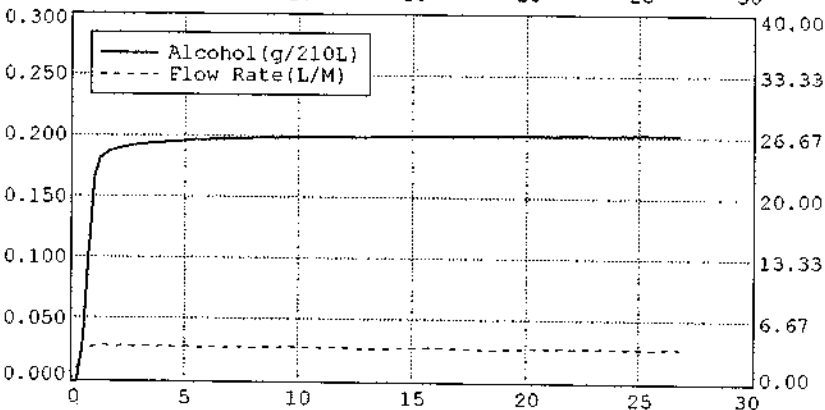
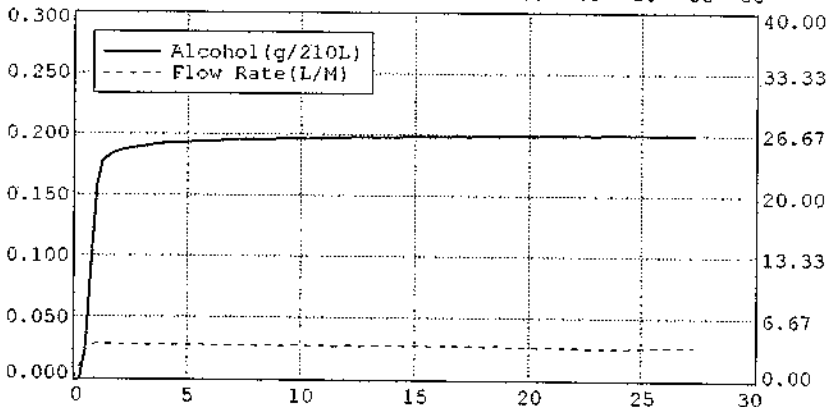
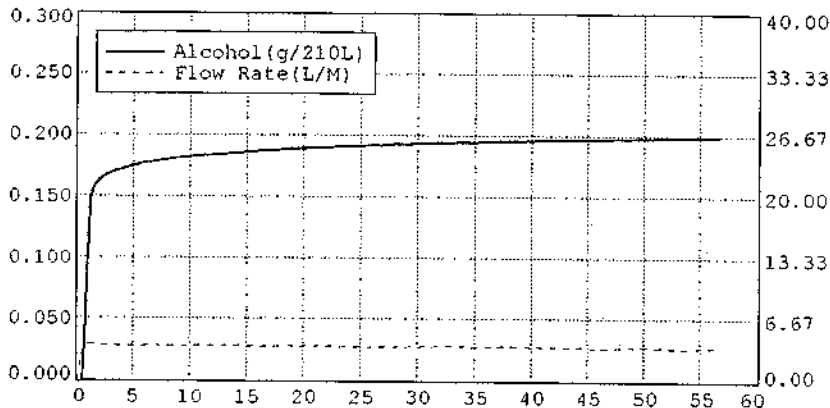
Date: 12/14/2017
 Time: 14:16:17

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:17
INTERNAL STANDARD	VERIFIED	14:17
EXTERNAL STANDARD	0.200	14:18
BLANK TEST	0.000	14:19
EXTERNAL STANDARD	0.201	14:20
BLANK TEST	0.000	14:21
EXTERNAL STANDARD	0.202	14:21
BLANK TEST	0.000	14:22
EXTERNAL STANDARD	0.202	14:23
BLANK TEST	0.000	14:23
EXTERNAL STANDARD	0.204	14:24
BLANK TEST	0.000	14:25

Average = 0.2018
 Std Dev = 0.0015



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100377

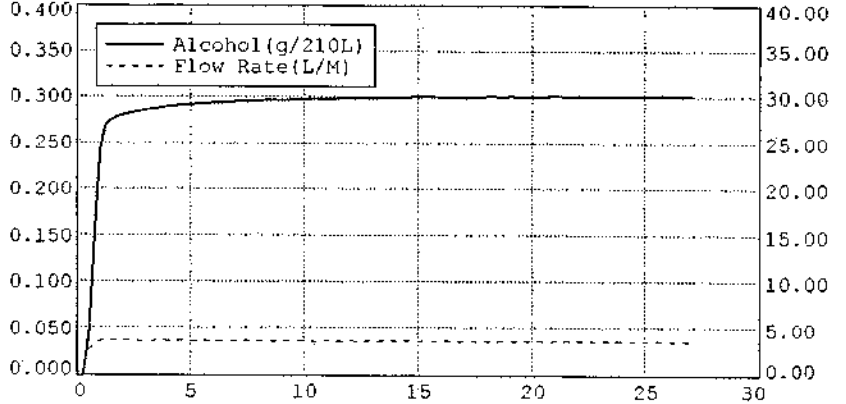
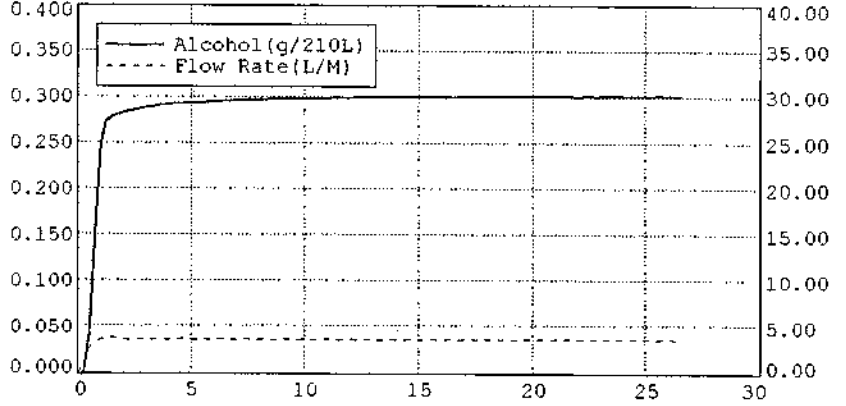
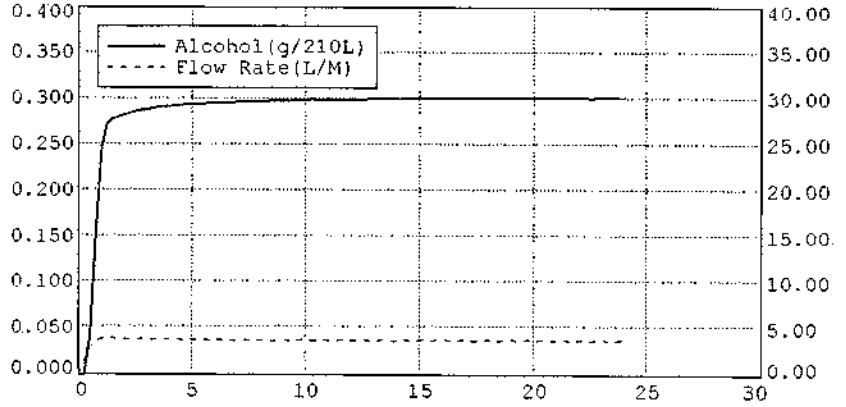
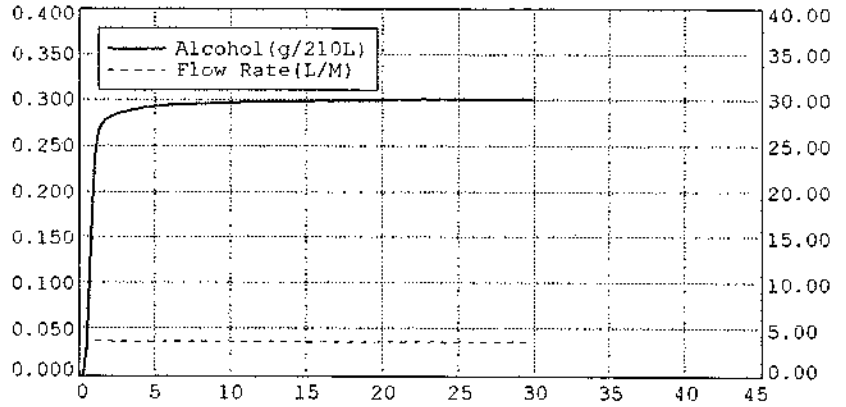
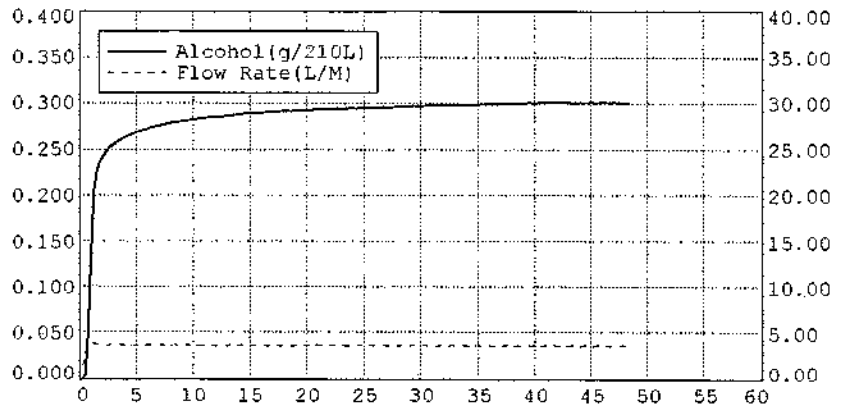
Date: 12/14/2017
 Time: 14:28:26

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:29
INTERNAL STANDARD	VERIFIED	14:29
EXTERNAL STANDARD	0.302	14:30
BLANK TEST	0.000	14:31
EXTERNAL STANDARD	0.301	14:32
BLANK TEST	0.000	14:33
EXTERNAL STANDARD	0.301	14:33
BLANK TEST	0.000	14:34
EXTERNAL STANDARD	0.302	14:34
BLANK TEST	0.000	14:35
EXTERNAL STANDARD	0.302	14:36
BLANK TEST	0.000	14:37

Average = 0.3016
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 12/18/2017
Time: 10:04:07

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

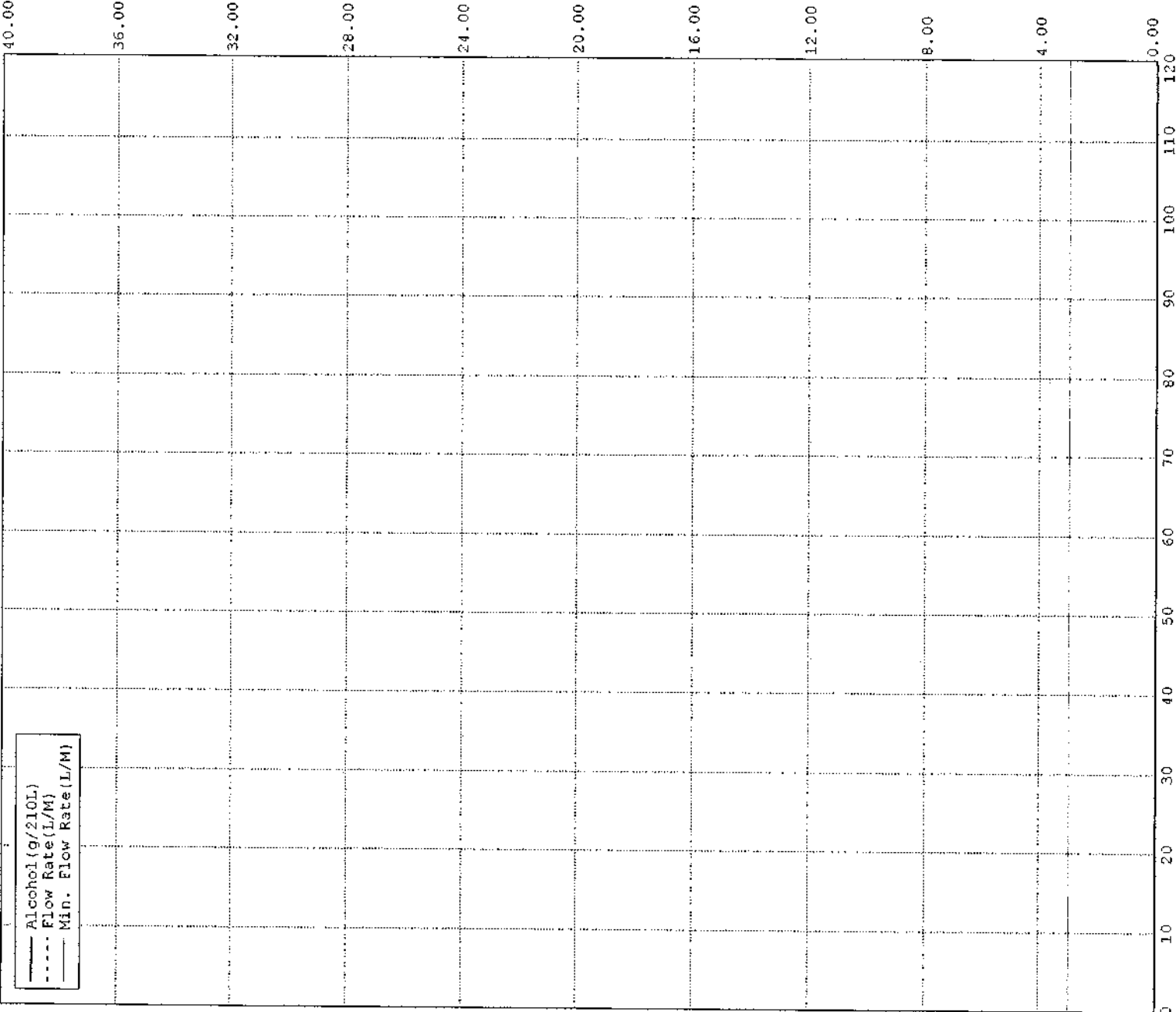
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

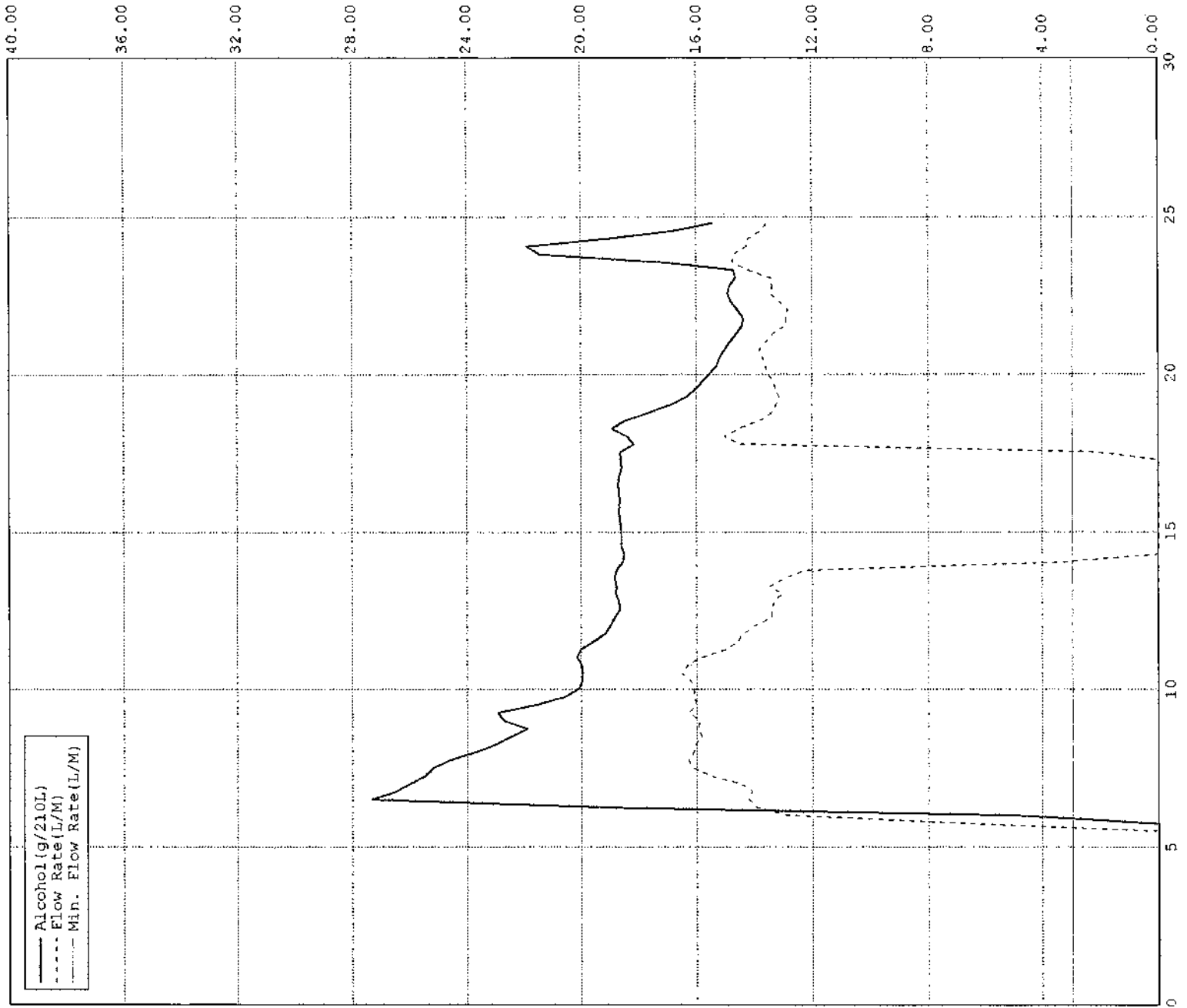
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.89: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 10:05
BLANK TEST 0.000 10:06
INTERNAL STANDARD VERIFIED 10:06
EXTERNAL STANDARD 0.080 10:06
BLANK TEST 0.000 10:07
SUBJECT SAMPLE INCOMPLETE 10:09

Alcohol (g/210L)
Flow Rate (L/M)
Min. Flow Rate (L/M)





SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100377

 Date: 12/18/2017
 Time: 13:36:33

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 29.94: 0.080
 LOT #: AG634001
 EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:38
BLANK TEST	0.000	13:38
INTERNAL STANDARD	VERIFIED	13:38
EXTERNAL STANDARD	0.080	13:38
BLANK TEST	0.000	13:39
SUBJECT SAMPLE	INVALID	13:40

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 12/18/2017
Time: 13:43:24

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

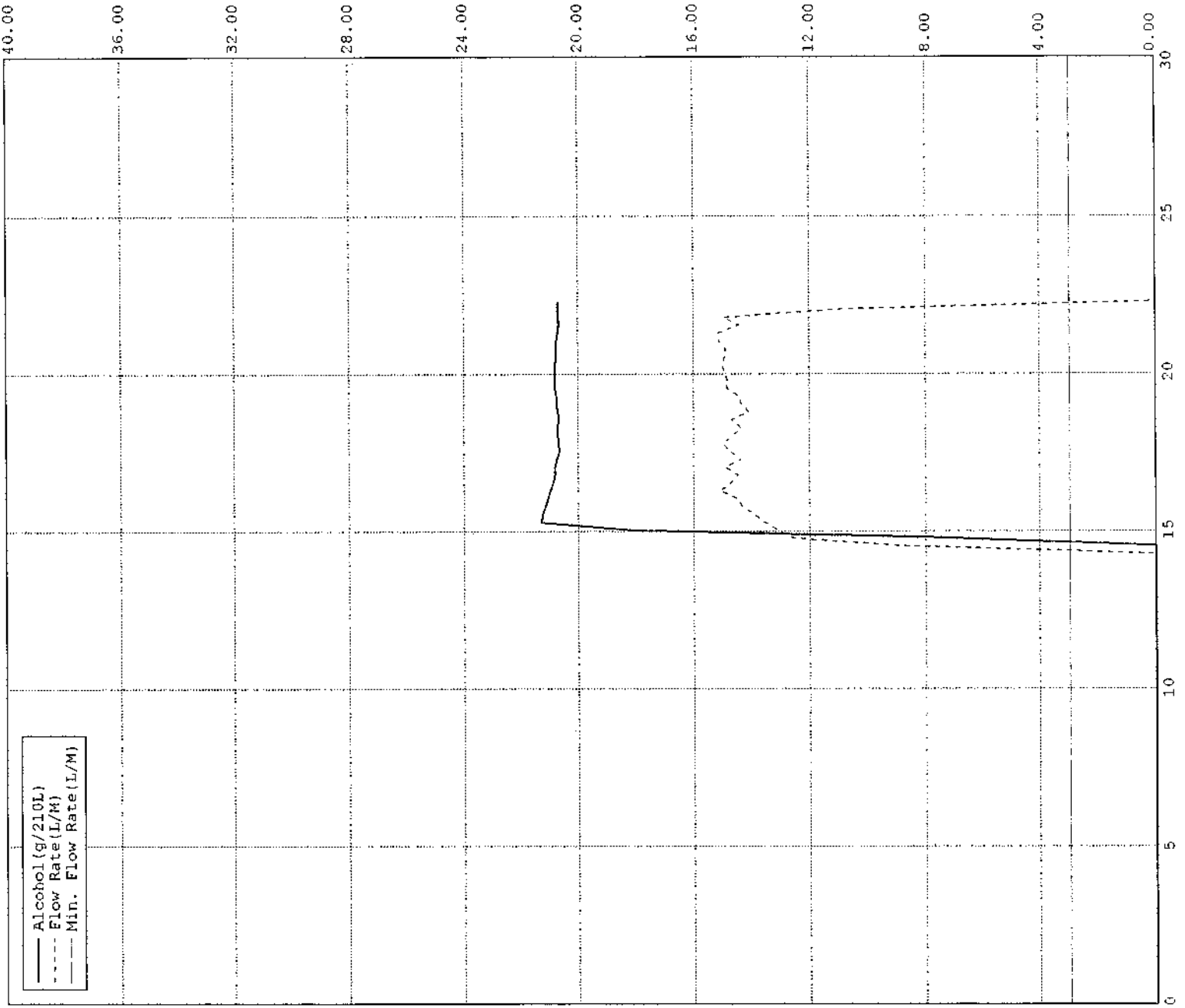
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.94: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 13:44
BLANK TEST 0.000 13:44
INTERNAL STANDARD VERIFIED 13:44
Xq = 0.083 (1.39%)
EXTERNAL STANDARD 0.080 13:44
X[1] = 0.0804 (-0.0004) (0.0004)
BLANK TEST 0.000 13:45
SUBJECT SAMPLE XXX 13:46
X[1] = 0.1039 (-0.0137) (-0.0013)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 12/18/2017
Time: 13:48:51

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

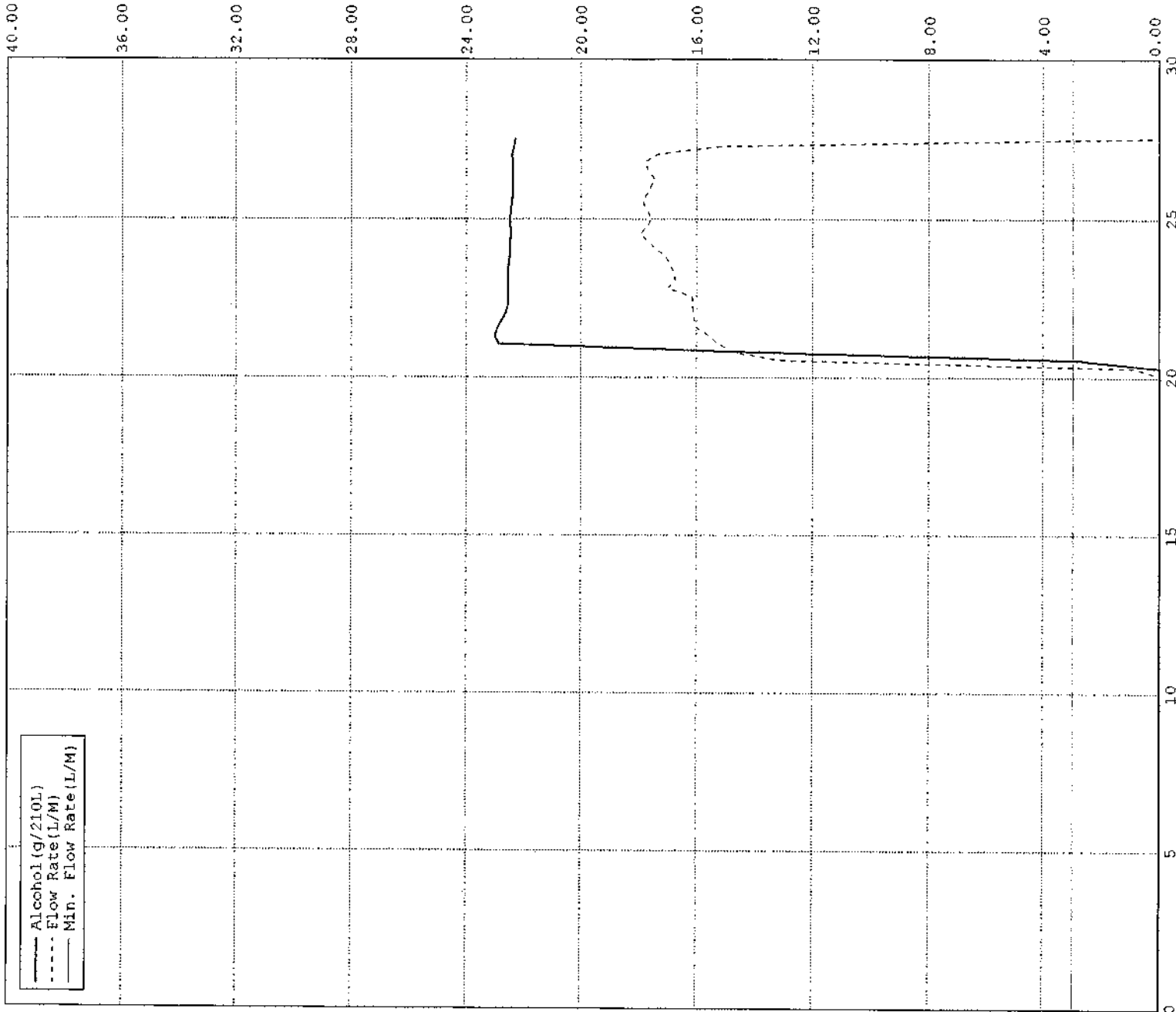
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.94: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 13:50
BLANK TEST 0.000 13:50
INTERNAL STANDARD VERIFIED 13:50
Xq = 0.083 (1.28%)
EXTERNAL STANDARD 0.080 13:51
X[1] = 0.0799 (-0.0005) (0.0003)
BLANK TEST 0.000 13:51
SUBJECT SAMPLE XXX 13:52
X[1] = 0.1120 (-0.0256) (-0.0008)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 12/18/2017
Time: 14:01:23

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

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

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

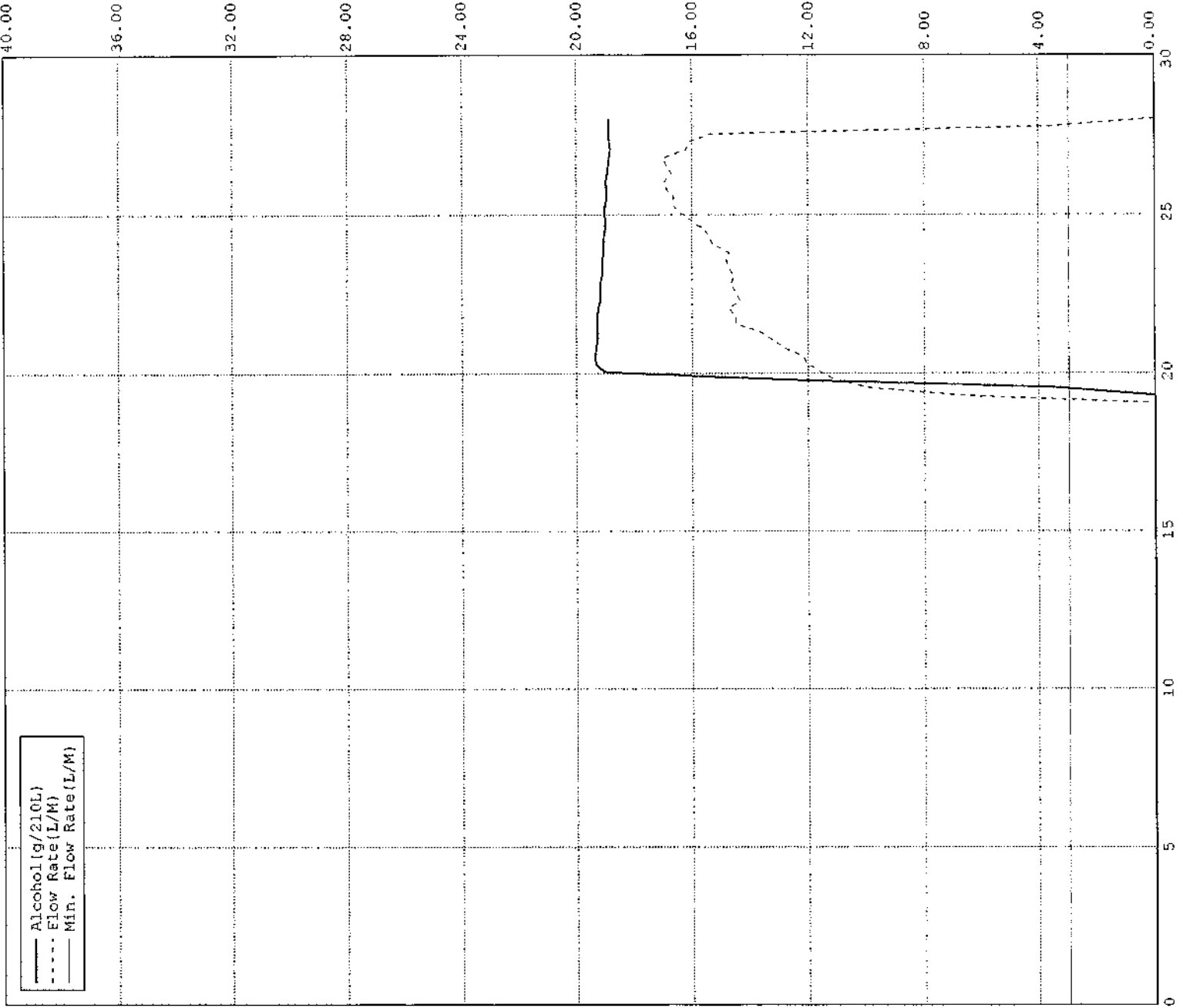
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.93: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:02
BLANK TEST	0.000	14:02
INTERNAL STANDARD	VERIFIED	14:02
Xg = 0.083 (1.81%)		
EXTERNAL STANDARD	0.081	14:03
X[1] = 0.0808 (-0.0001)	(0.0008)	
BLANK TEST	0.000	14:04
SUBJECT SAMPLE (Vol=2.08L)	0.094	14:04
X[1] = 0.0947 (-0.0013)	(-0.0017)	
BLANK TEST	0.000	14:05
EXTERNAL STANDARD	0.080	14:05
X[1] = 0.0798 (-0.0007)	(0.0002)	
BLANK TEST	0.000	14:06

Filter 2 avg = -0.0004

Filter 3 avg = 0.0004

CS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 12/18/2017
Time: 14:08:22

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

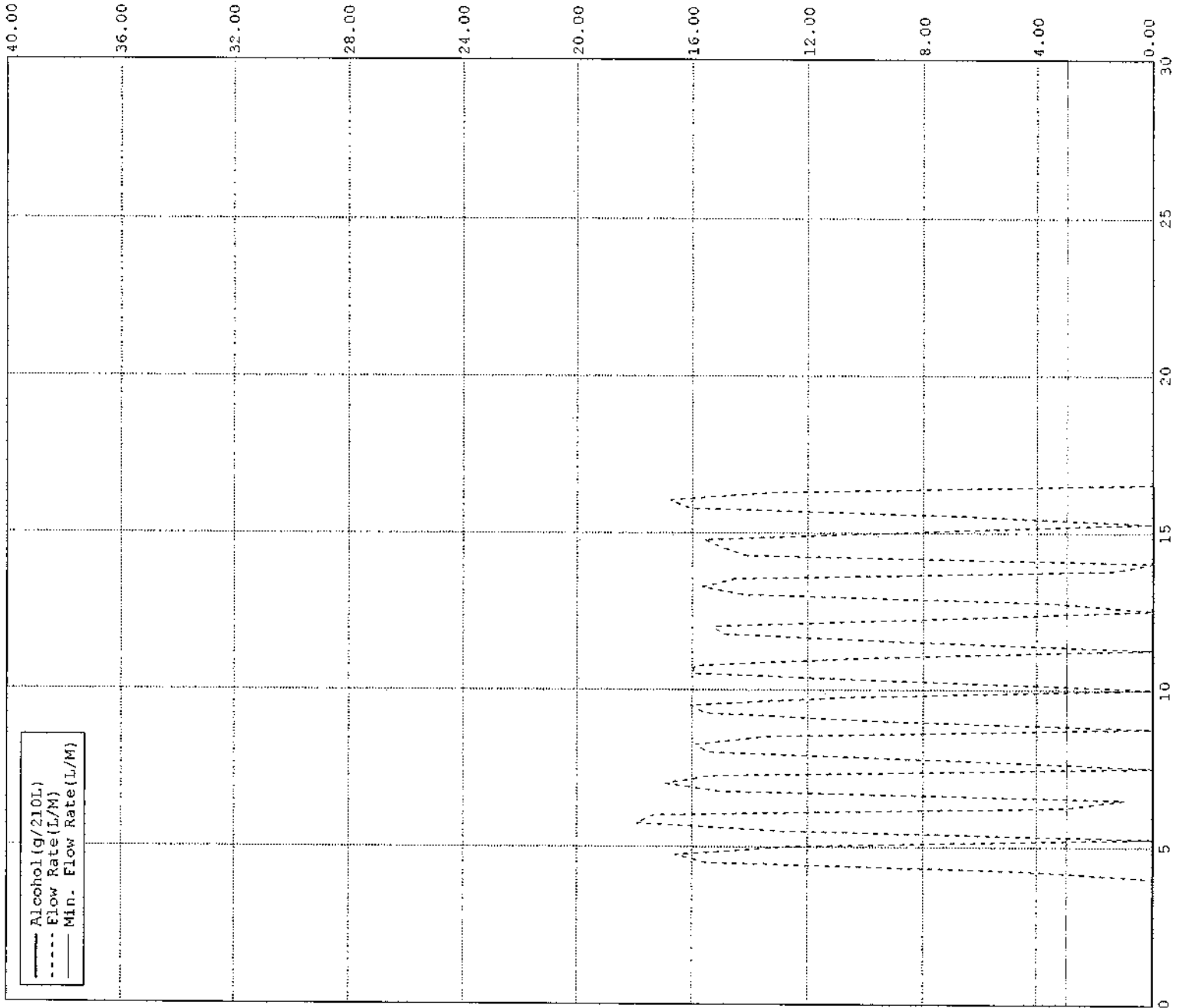
EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK PASSED 14:09
BLANK TEST 0.000 14:09
INTERNAL STANDARD VERIFIED 14:09
EXTERNAL STANDARD 0.080 14:09
BLANK TEST 0.000 14:10
SUBJECT SAMPLE XXX 14:11

Maximum Attempts Exceeded

MS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 12/18/2017
Time: 14:12:30

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

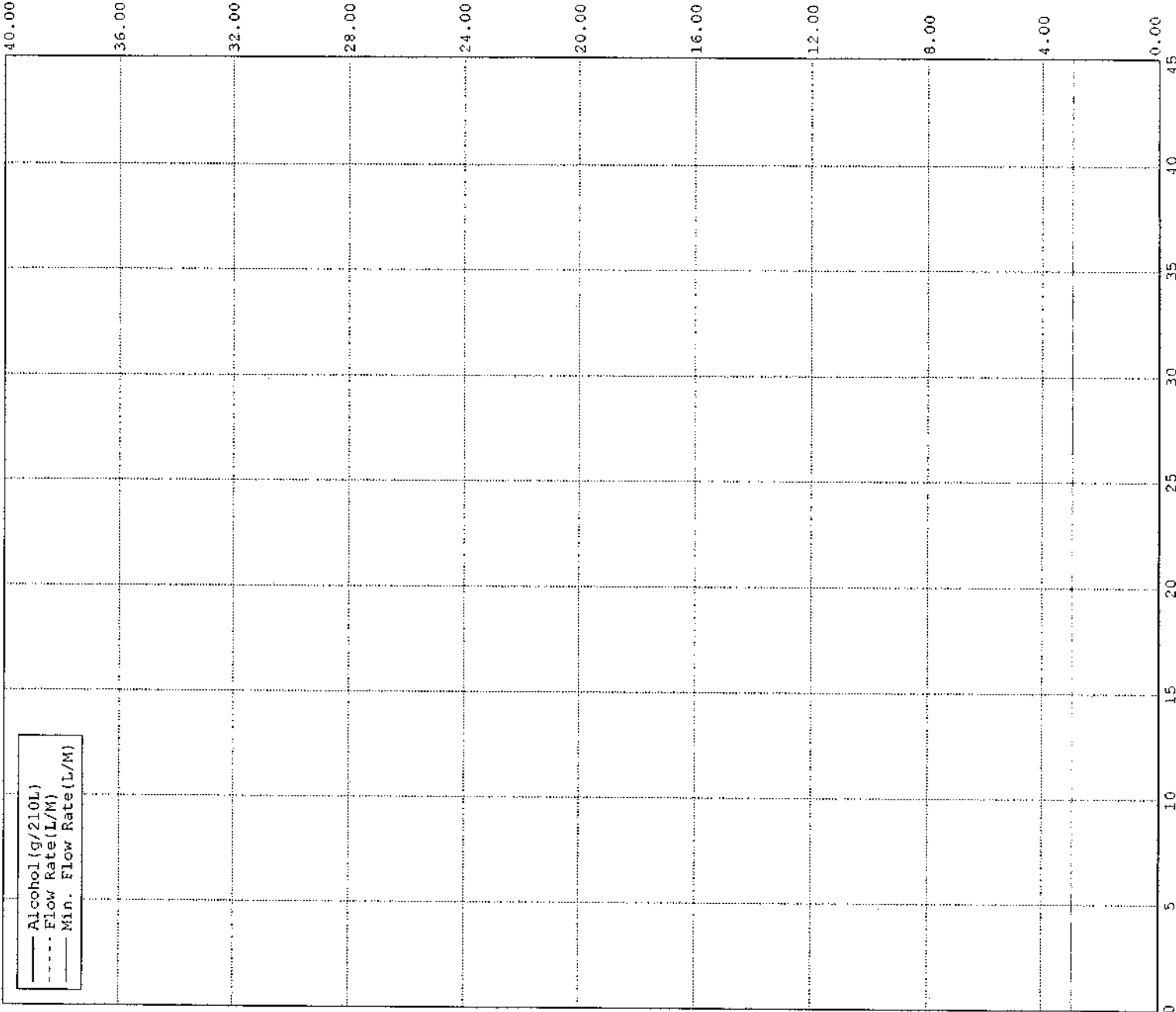
EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK PASSED 14:13
BLANK TEST 0.000 14:13
INTERNAL STANDARD VERIFIED 14:13
EXTERNAL STANDARD 0.080 14:13
BLANK TEST 0.000 14:14

RFI DETECTED

CR



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100377

Date: 12/18/2017
Time: 14:26:55

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 29.94: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:27
BLANK TEST	0.000	14:28
INTERNAL STANDARD	VERIFIED	14:28
EXTERNAL STANDARD	0.080	14:28
BLANK TEST	0.000	14:29
SUBJECT SAMPLE (Vol=1.92L)	0.000	14:29
BLANK TEST	0.000	14:30
EXTERNAL STANDARD	0.080	14:30
BLANK TEST	0.000	14:31

