

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 100671 Analyst C. O' Bryant 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) 1.5
3. Volume Test - Minimum 1.3 L (1.3L to 1.7L)
4. Linearity Test (attached) COB 10/3/17

- a. Levels Used
- i. 0.020g/210L Mnf Argas Lot AG 616504 Exp 6/13/18
 - ii. 0.040g/210L Mnf Argas Lot AG 630101 Exp 10/27/18
 - iii. 0.080g/210L Mnf Argas Lot AG 634001 Exp 12/5/18
 - iv. 0.100g/210L Mnf Argas Lot AG 629304 Exp 10/19/18
 - v. 0.200g/210L Mnf Guth Lot 10190 Exp 8/15/18
 - 1. Simulator S/N DR 4162 Date Calibrated 3/27/17
 - vi. 0.300g/210L Mnf Guth Lot 10410 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 Guth Lot 10160 Level 0.100 Exp 7/19/18
 - 1. Simulator S/N DR 4178 Date Calibrated 3/27/17
- ii. Isopropanol - Mnf Guth Lot 17060 Level 0.100 Exp 2/14/19
 - 1. Simulator S/N SD 1176 Date Calibrated 3/29/17
- iii. Negative Control - Mnf Guth Lot 10160 Level 0.100 Exp 7/19/18
 - 1. Simulator S/N DR 6267 Date Calibrated 3/27/17

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 9/21/17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 09/19/2017
Time: 14:29:56

VERSIONS

DMT: 3.02
PIC: 3.03
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 = 1.69 V PASSED
(1.01 V - 2.37 V)
Cooler Voltage = 1.63 V PASSED
(1.00 V - 2.32 V)
Bias Voltage = 80 V PASSED
(47 V - 111 V)
Chopper Freq = 546 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.592 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 PASSED

Xq = 0.101 1.87% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100671

Date: 09/19/2017
Time: 2:42 PM

Temperatures (°C)
Sample Cell: 48.6°C
Breath Tube: 47.7°C

Current Barometer 29.8 in
Volume (Ltr) 1.48

Settings
Lamp: 1.69 V
Bias: 80 V
Cooler: 1.68 V
Chopper: 545 Hz

Voltages (V)
Flow: 1.06 V
Detector: 0.096 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 04/09/2012
Time: 10:19:13

OPERATOR NAME:
CHARLES FOSTER
CERTIFICATE #: 7734

Ca = 0.1000
CAL = 0.981393 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0063 0.0010 <= b2 < 0.0100
b3 = 0.0001 0.0000 <= b3 < 0.0040
Xq = 0.0987 0.0500 <= Xq < 0.2000
a21 = 1.187324 1.050 <= a21 < 1.300
a31 = 0.451266 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 09/21/2017
Time: 15:41:59

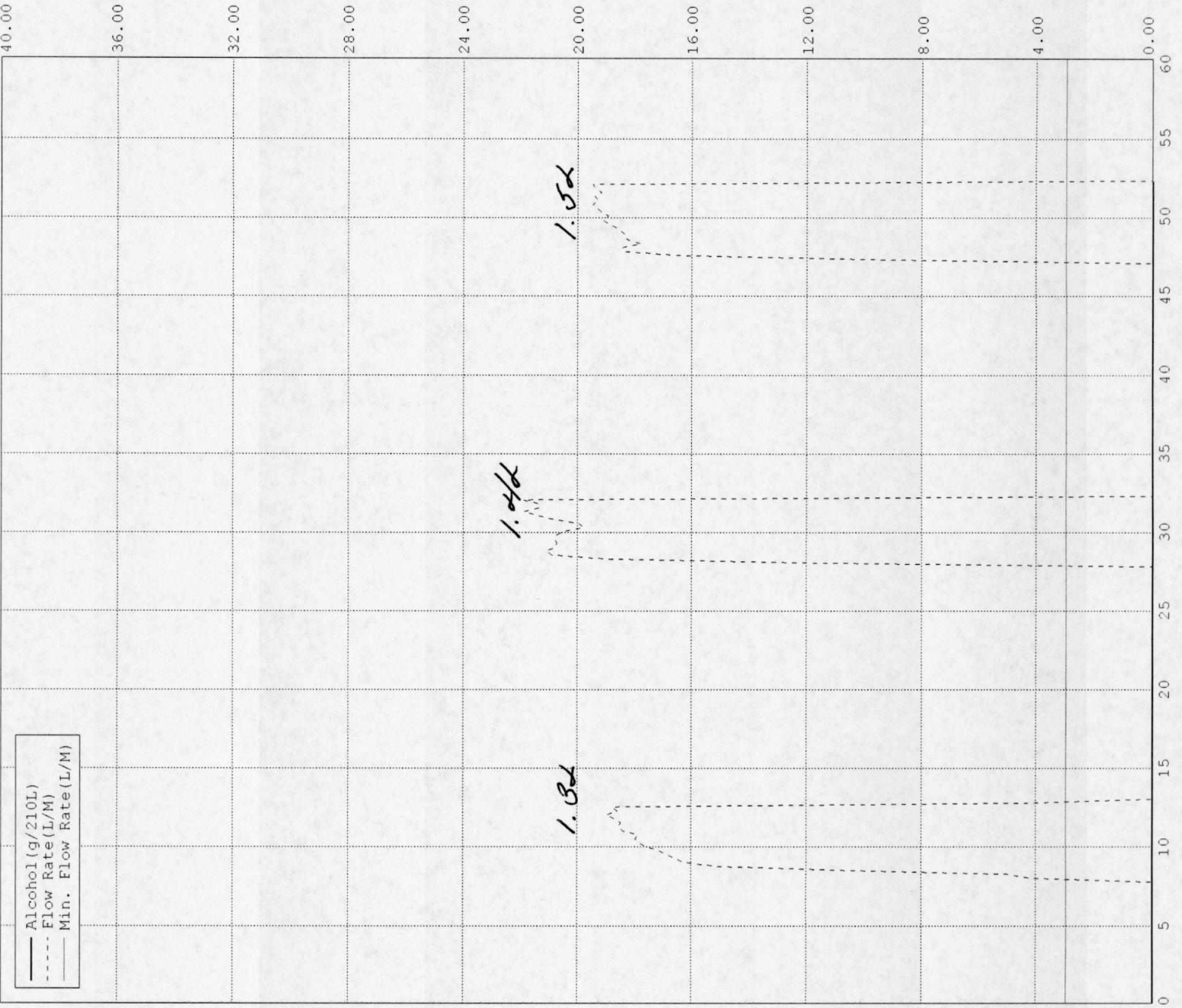
SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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

DIAGNOSTIC CHECK	PASSED	15:42
BLANK TEST	0.000	15:43
INTERNAL STANDARD	VERIFIED	15:43
EXTERNAL STANDARD	0.078	15:43
BLANK TEST	0.000	15:44
SUBJECT SAMPLE (Vol=1.53L)	0.000	15:45
EXTERNAL STANDARD	0.079	15:46
BLANK TEST	0.000	15:47



LINEARITY CHECK

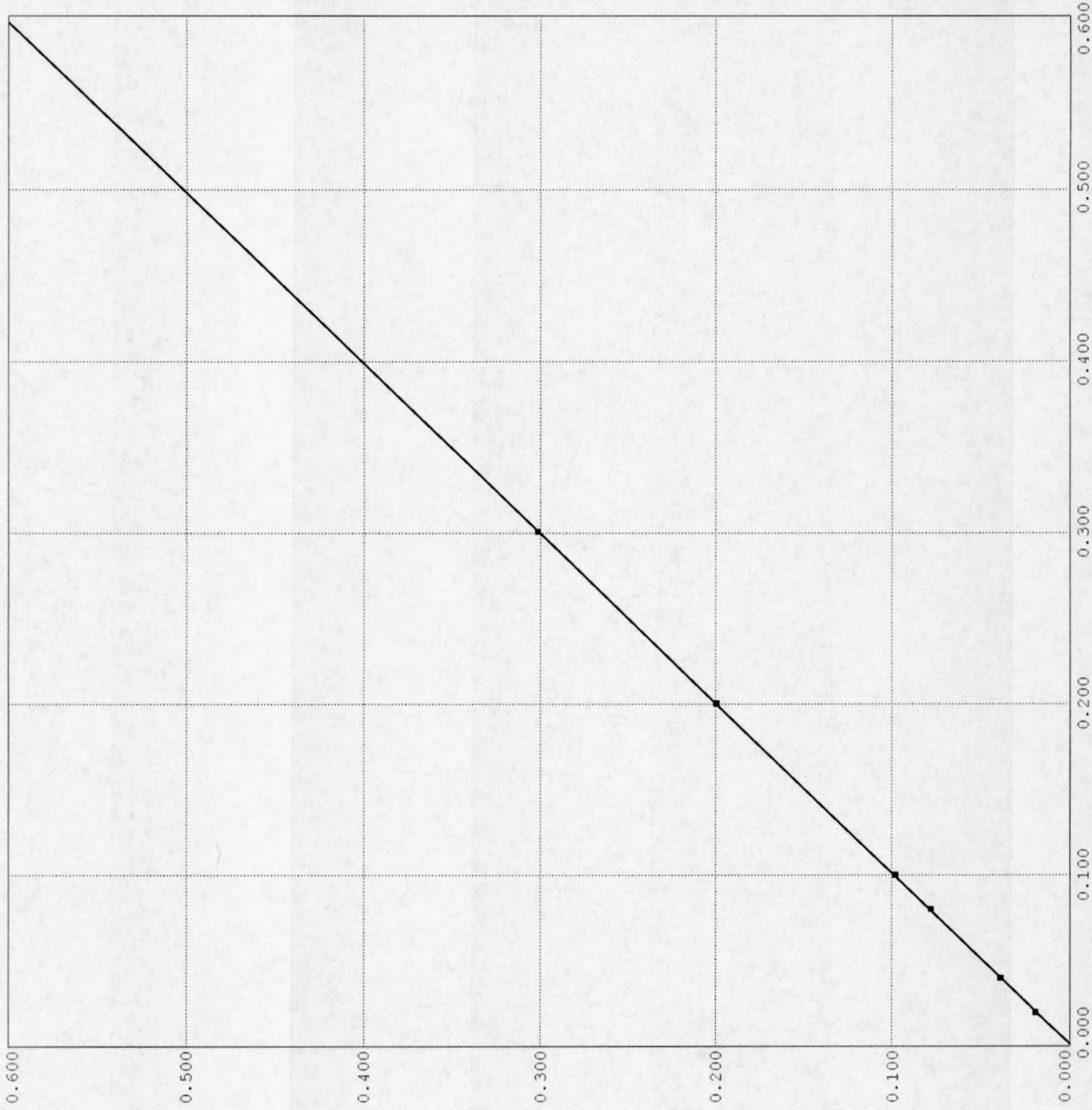
 Alaska Department of Public Safety
 DATAMASTER dmt: 100671

Date: 09/19/2017
 Time: 15:31:08

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0398	0.0004
0.080	0.0790	0.0000
0.100	0.0990	0.0000
0.200	0.2004	0.0005
0.300	0.3022	0.0004

SLOPE = 1.008798
 R² = 0.999955



CS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100671

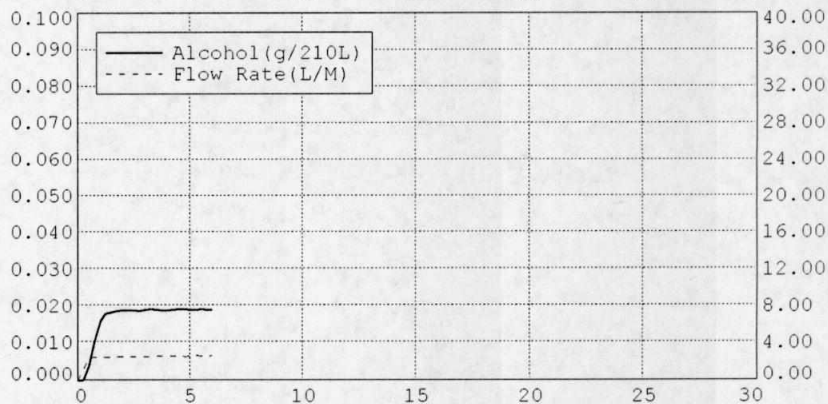
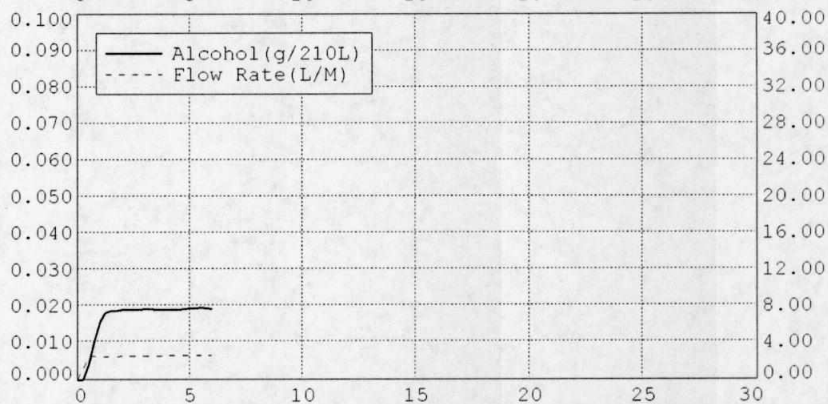
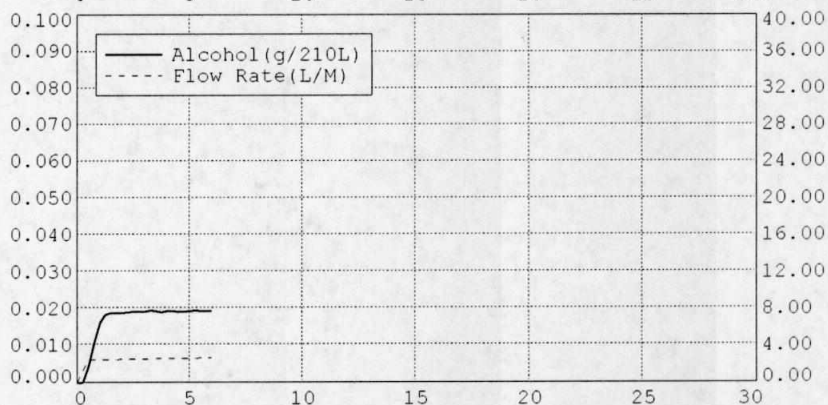
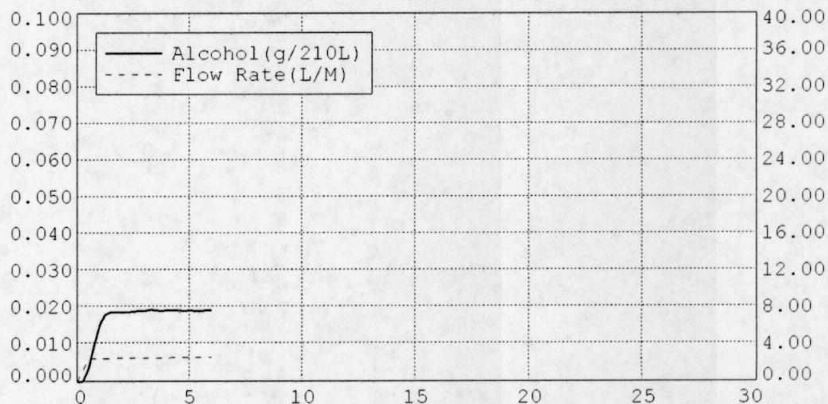
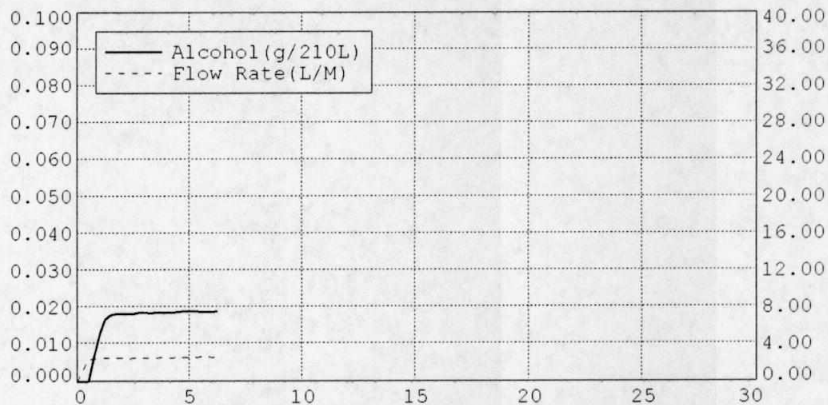
Date: 09/19/2017
Time: 15:31:10

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.78: 0.020
LOT #: AG616504
EXPIRATION: 06/13/2018
TANK PRESSURE: 673 psi

BLANK TEST	0.000	15:32
INTERNAL STANDARD	VERIFIED	15:32
EXTERNAL STANDARD	0.020	15:32
BLANK TEST	0.000	15:33
EXTERNAL STANDARD	0.020	15:33
BLANK TEST	0.000	15:34
EXTERNAL STANDARD	0.020	15:34
BLANK TEST	0.000	15:35
EXTERNAL STANDARD	0.020	15:35
BLANK TEST	0.000	15:36
EXTERNAL STANDARD	0.020	15:36
BLANK TEST	0.000	15:37

Average = 0.0200
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100671

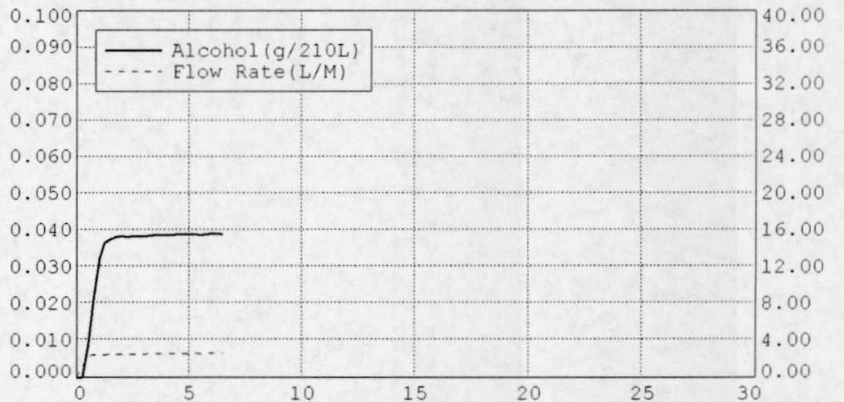
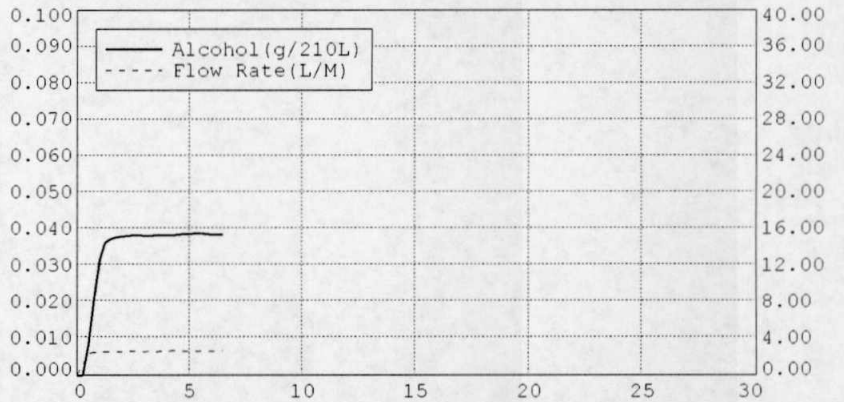
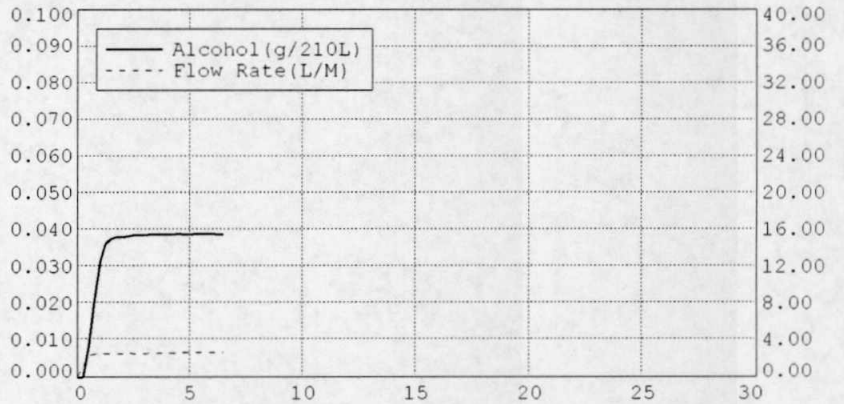
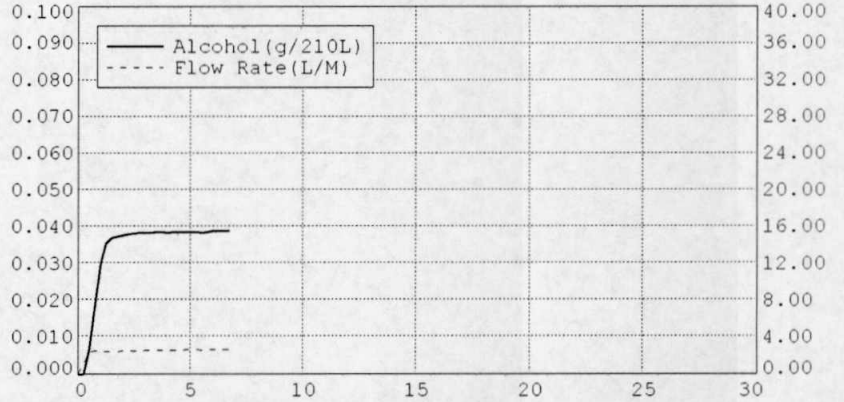
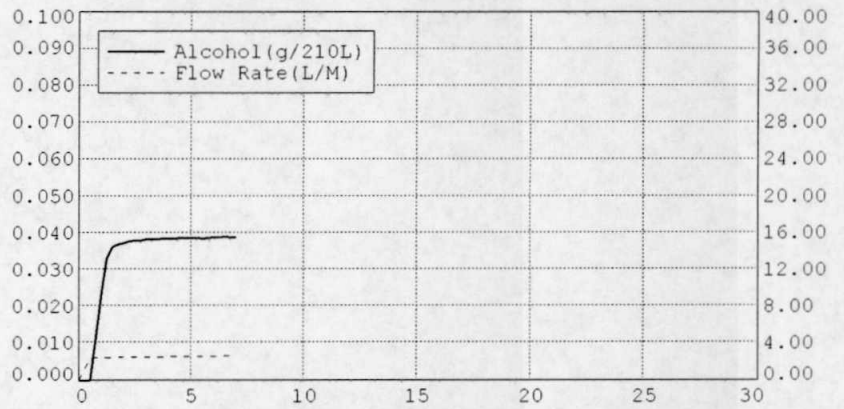
Date: 09/19/2017
 Time: 15:48:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.78: 0.040
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 659 psi

BLANK TEST	0.000	15:50
INTERNAL STANDARD	VERIFIED	15:50
EXTERNAL STANDARD	0.040	15:50
BLANK TEST	0.000	15:51
EXTERNAL STANDARD	0.040	15:51
BLANK TEST	0.000	15:52
EXTERNAL STANDARD	0.040	15:53
BLANK TEST	0.000	15:53
EXTERNAL STANDARD	0.039	15:54
BLANK TEST	0.000	15:55
EXTERNAL STANDARD	0.040	15:55
BLANK TEST	0.000	15:56

Average = 0.0398
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100671

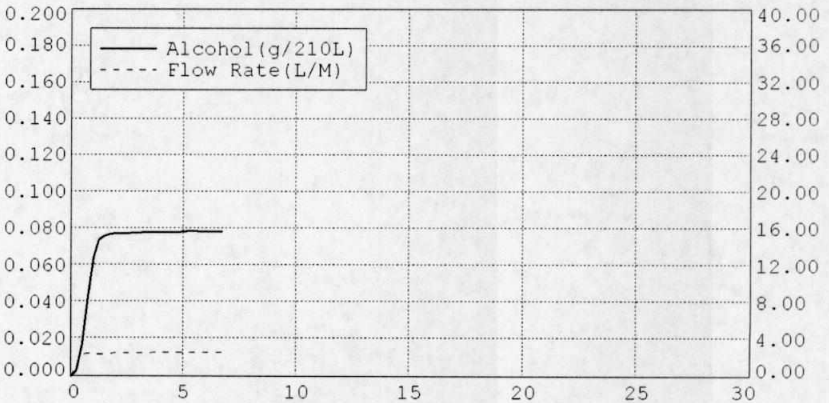
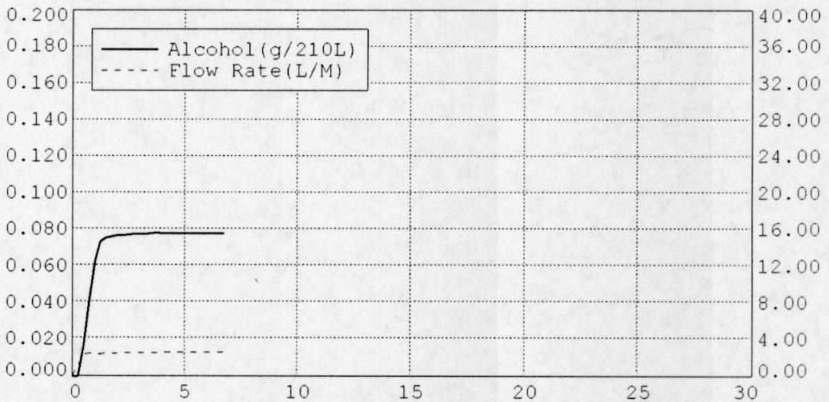
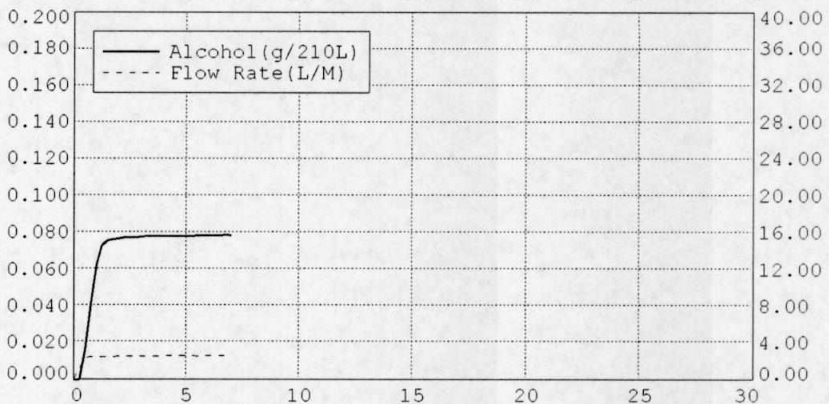
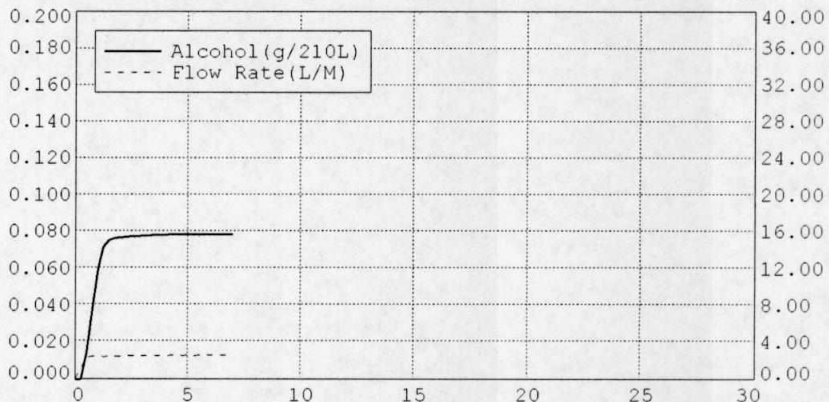
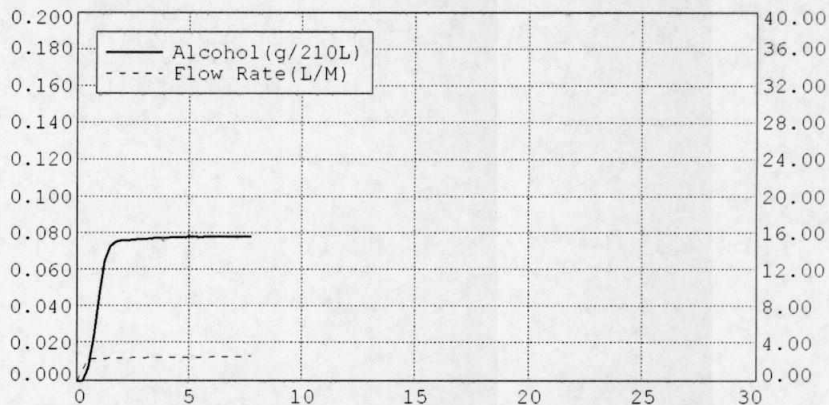
Date: 09/19/2017
 Time: 15:58:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.78: 0.080
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 548 psi

BLANK TEST	0.000	15:59
INTERNAL STANDARD	VERIFIED	15:59
EXTERNAL STANDARD	0.079	16:00
BLANK TEST	0.000	16:00
EXTERNAL STANDARD	0.079	16:01
BLANK TEST	0.000	16:02
EXTERNAL STANDARD	0.079	16:02
BLANK TEST	0.000	16:03
EXTERNAL STANDARD	0.079	16:03
BLANK TEST	0.000	16:04
EXTERNAL STANDARD	0.079	16:04
BLANK TEST	0.000	16:05

Average = 0.0790
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100671

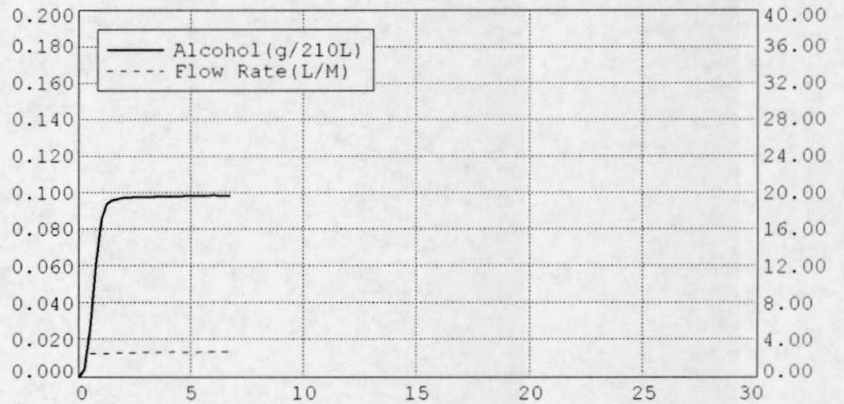
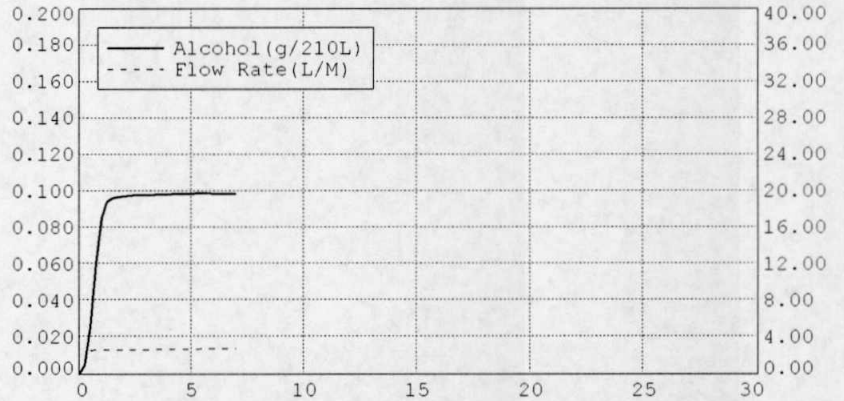
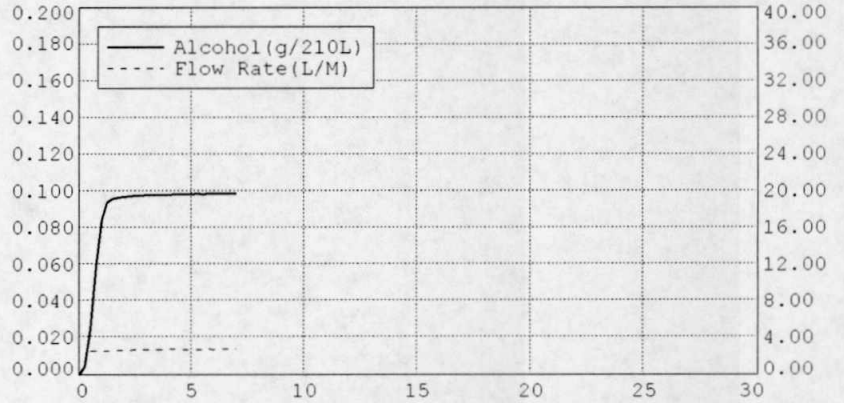
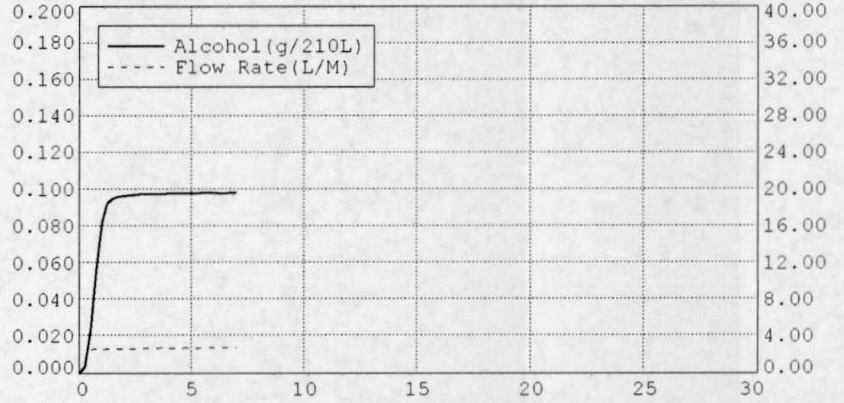
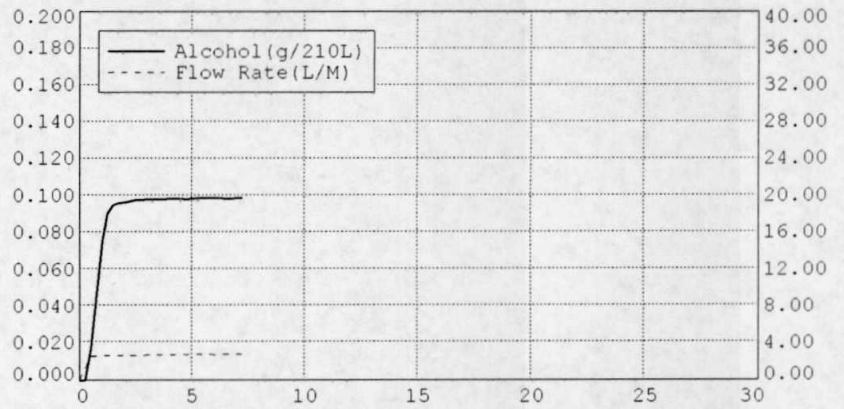
Date: 09/19/2017
 Time: 16:06:17

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.78: 0.100
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 944 psi

BLANK TEST	0.000	16:07
INTERNAL STANDARD	VERIFIED	16:07
EXTERNAL STANDARD	0.099	16:07
BLANK TEST	0.000	16:08
EXTERNAL STANDARD	0.099	16:09
BLANK TEST	0.000	16:09
EXTERNAL STANDARD	0.099	16:10
BLANK TEST	0.000	16:11
EXTERNAL STANDARD	0.099	16:11
BLANK TEST	0.000	16:12
EXTERNAL STANDARD	0.099	16:12
BLANK TEST	0.000	16:13

Average = 0.0990
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

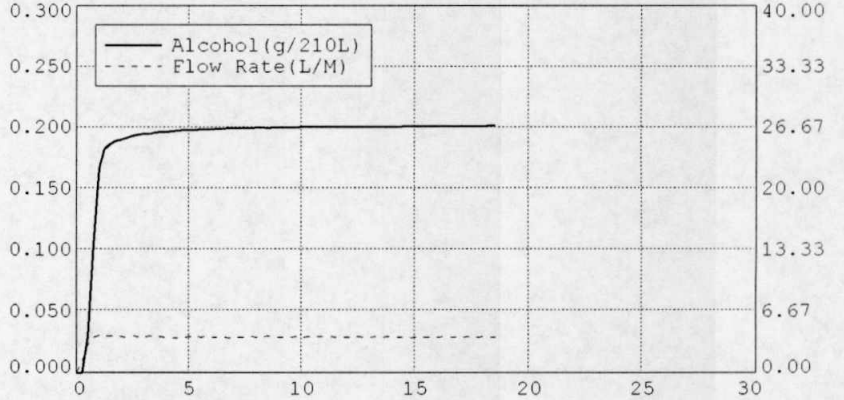
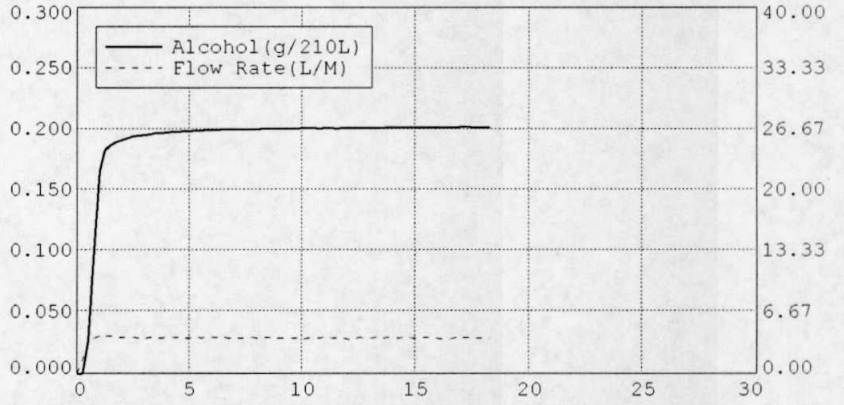
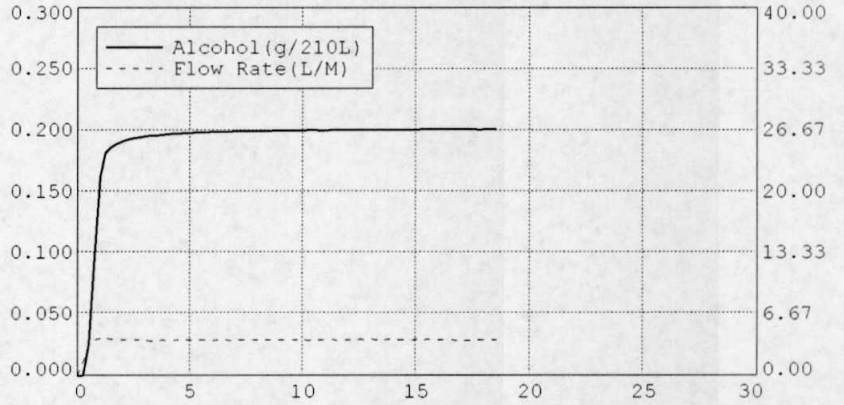
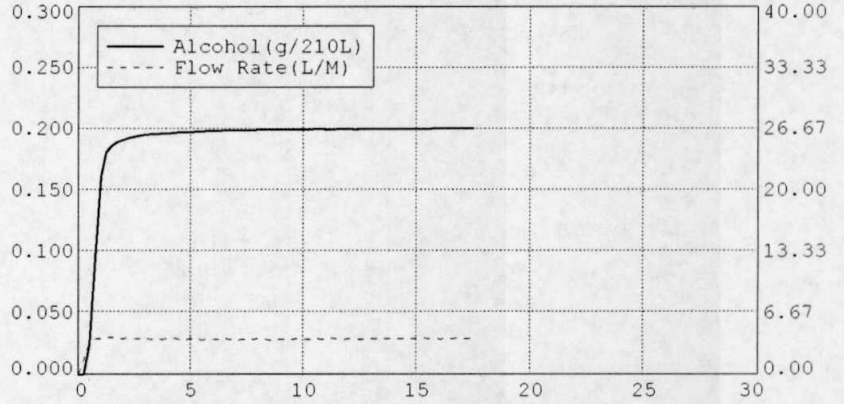
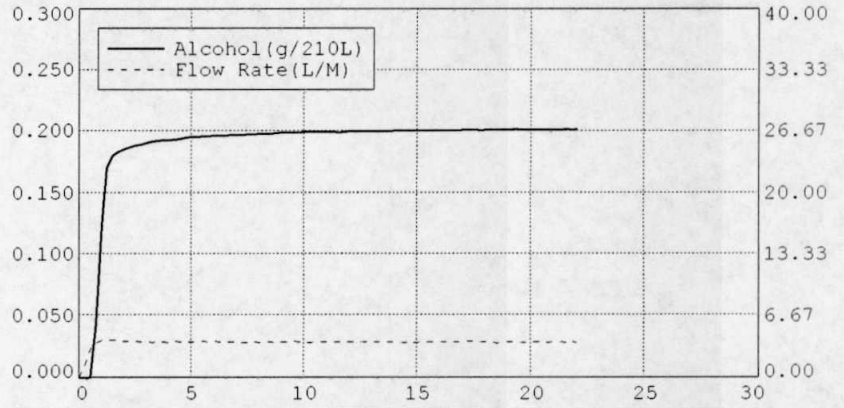
Alaska Department of Public Safety
 DATAMASTER dmt: 100671

Date: 09/19/2017
 Time: 16:24:51

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 16190
 EXPIRATION: 08/15/2018

BLANK TEST	0.000	16:25
INTERNAL STANDARD	VERIFIED	16:26
EXTERNAL STANDARD	0.200	16:26
BLANK TEST	0.000	16:27
EXTERNAL STANDARD	0.200	16:27
BLANK TEST	0.000	16:28
EXTERNAL STANDARD	0.200	16:29
BLANK TEST	0.000	16:30
EXTERNAL STANDARD	0.201	16:30
BLANK TEST	0.000	16:31
EXTERNAL STANDARD	0.201	16:31
BLANK TEST	0.000	16:32

Average = 0.2004
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

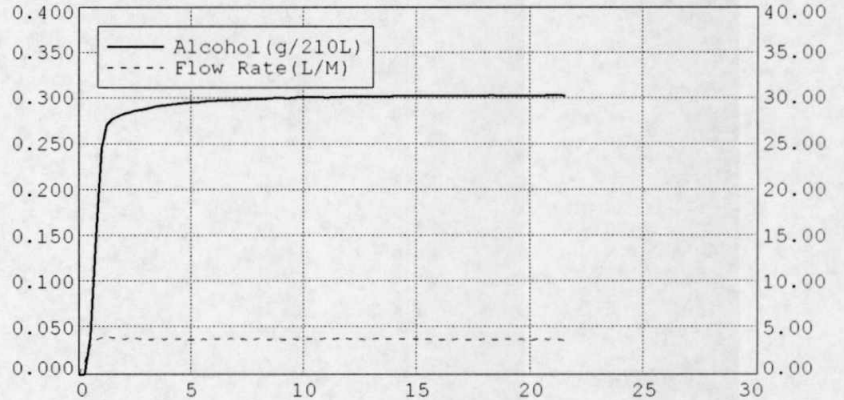
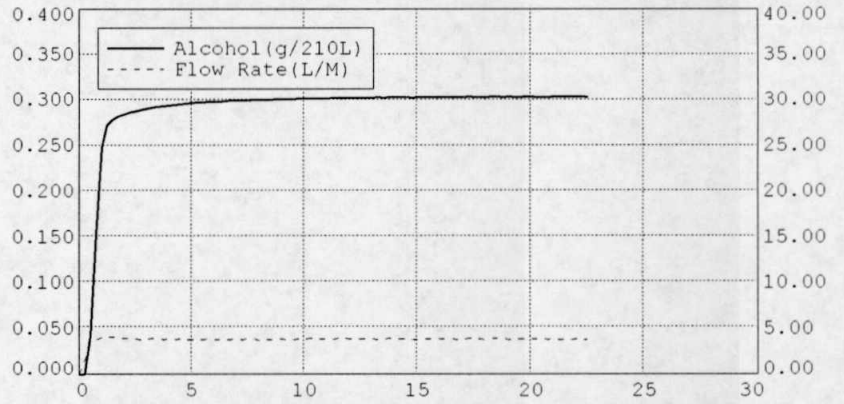
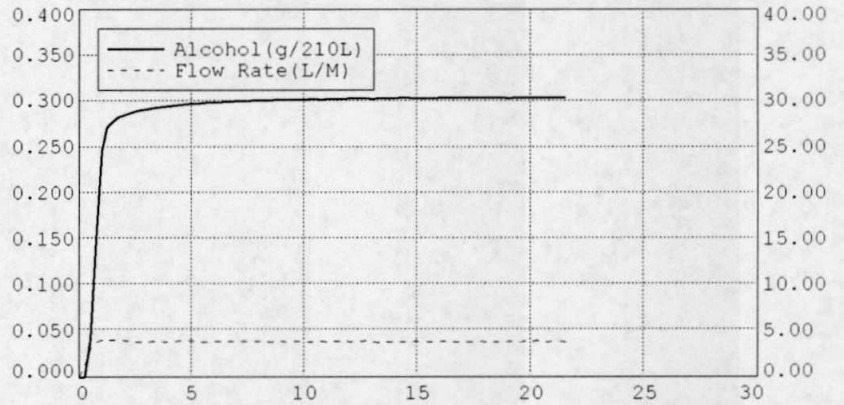
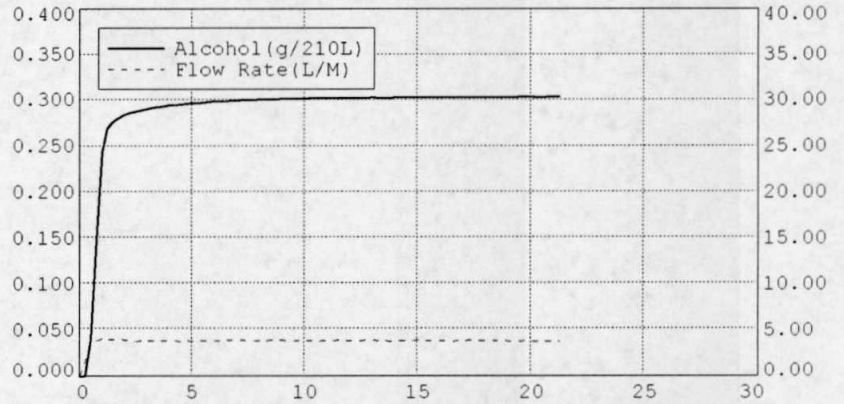
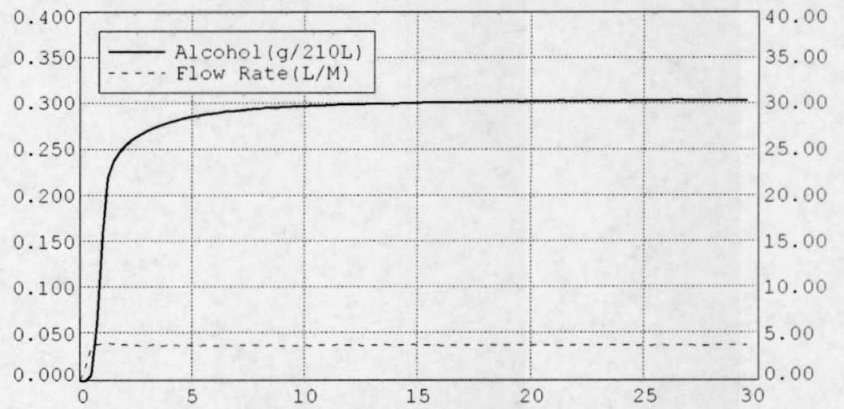
Alaska Department of Public Safety
 DATAMASTER dmt: 100671

Date: 09/19/2017
 Time: 16:36:24

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 16410
 EXPIRATION: 12/19/2018

BLANK TEST	0.000	16:37
INTERNAL STANDARD	VERIFIED	16:37
EXTERNAL STANDARD	0.303	16:38
BLANK TEST	0.000	16:39
EXTERNAL STANDARD	0.302	16:39
BLANK TEST	0.000	16:40
EXTERNAL STANDARD	0.302	16:41
BLANK TEST	0.000	16:42
EXTERNAL STANDARD	0.302	16:42
BLANK TEST	0.000	16:43
EXTERNAL STANDARD	0.302	16:43
BLANK TEST	0.000	16:44

Average = 0.3022
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 09/21/2017
Time: 08:25:55

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

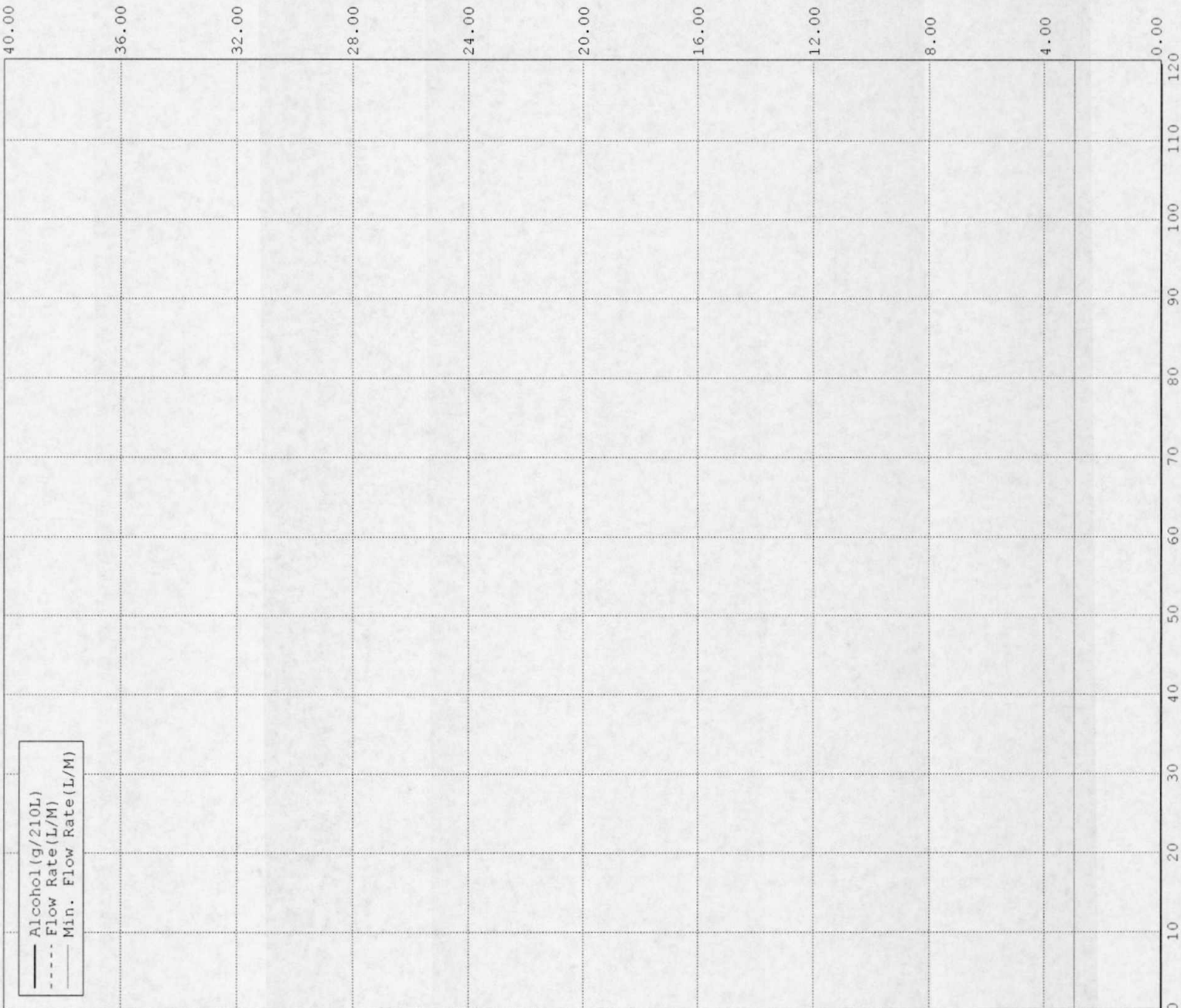
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.60: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 08:29
BLANK TEST 0.000 08:29
INTERNAL STANDARD VERIFIED 08:30
EXTERNAL STANDARD 0.078 08:30
BLANK TEST 0.000 08:31
SUBJECT SAMPLE INCOMPLETE 08:33

CSB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 09/21/2017
Time: 13:29:29

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

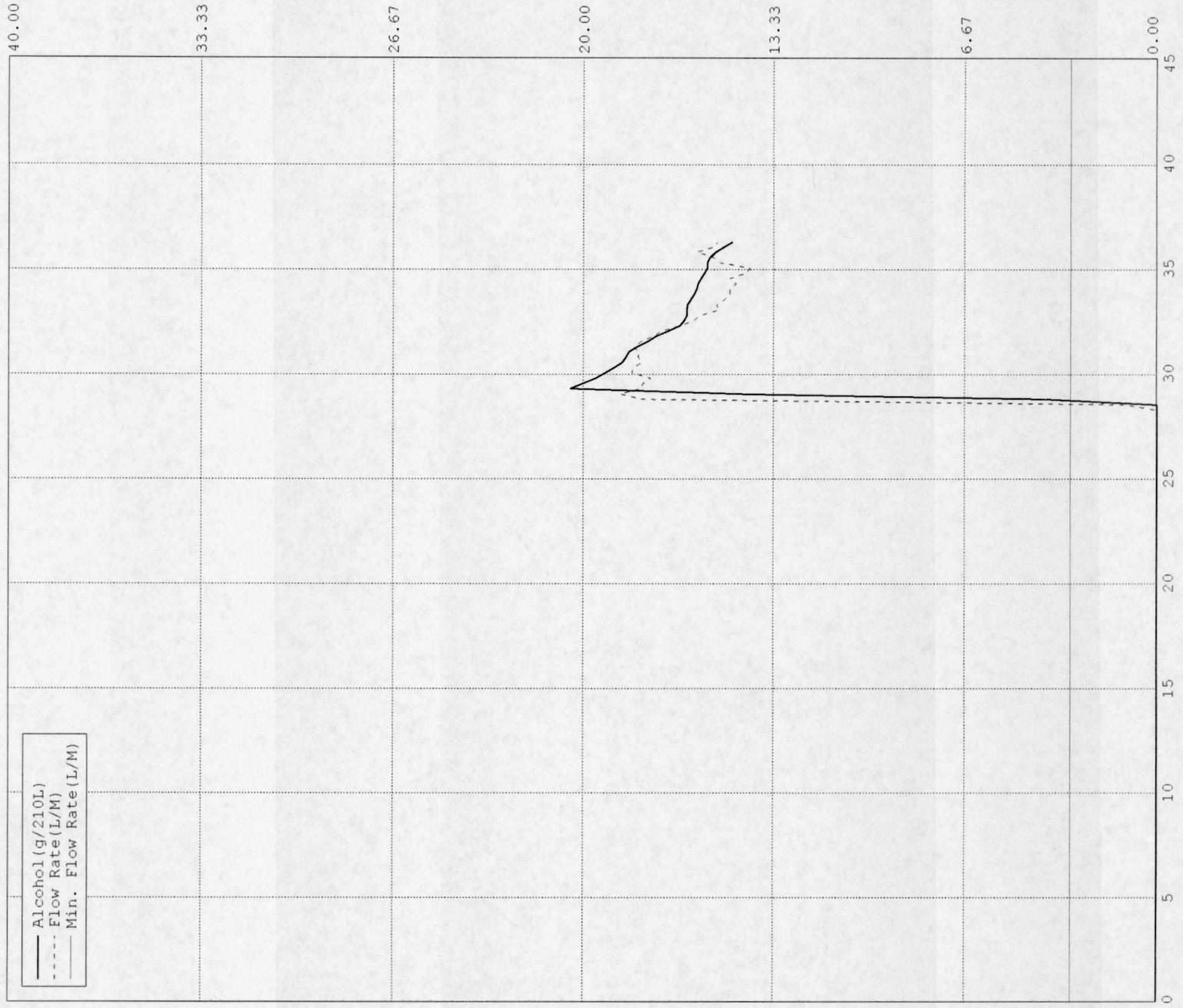
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.55: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK
PASSED 13:30
BLANK TEST 0.000 13:30
INTERNAL STANDARD VERIFIED 13:30
EXTERNAL STANDARD 0.078 13:31
BLANK TEST 0.000 13:31
SUBJECT SAMPLE INVALID 13:32

CAB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 09/21/2017
Time: 13:35:52

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

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

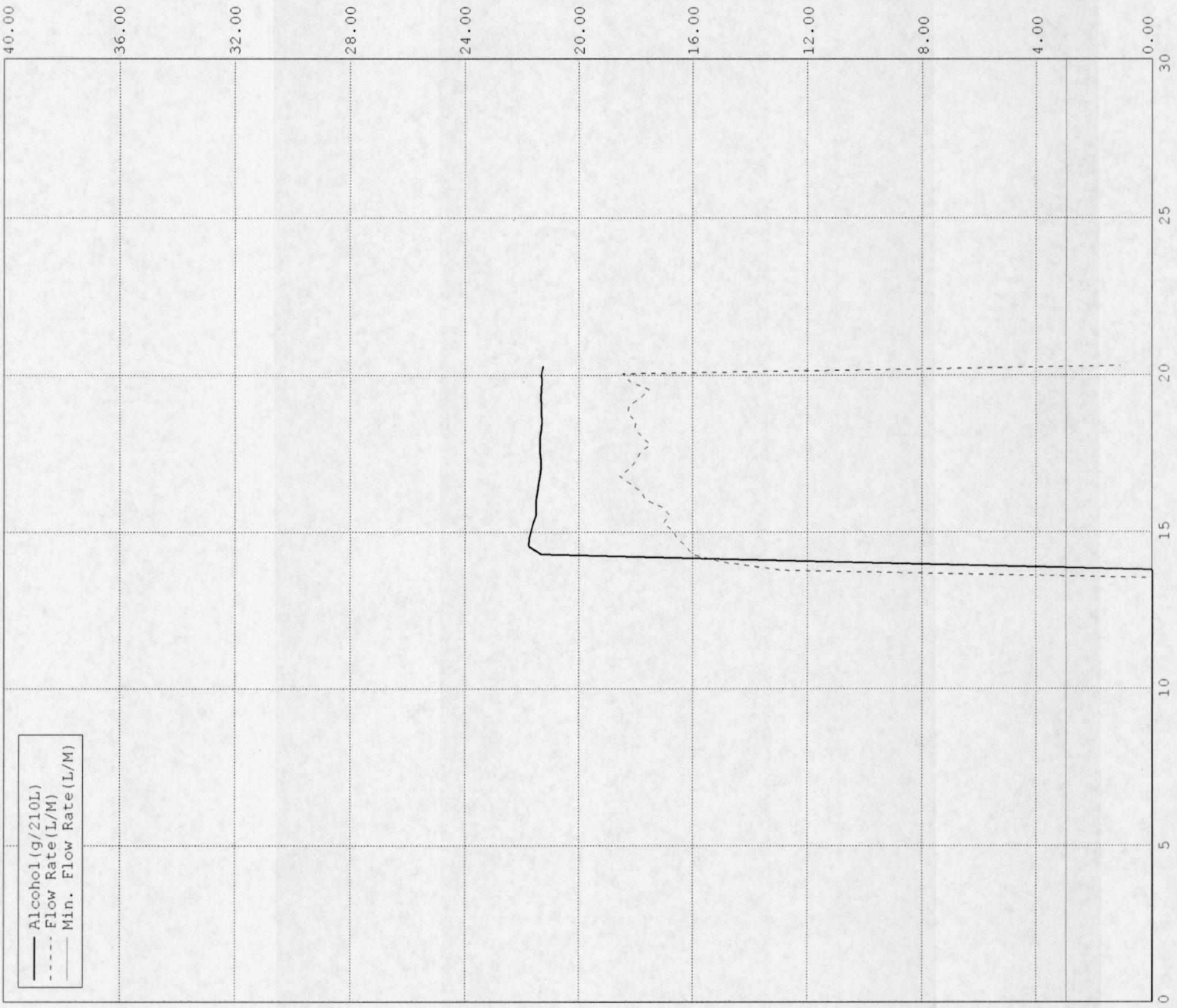
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

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

DIAGNOSTIC CHECK PASSED 13:39
BLANK TEST 0.000 13:39
INTERNAL STANDARD VERIFIED 13:39
Xg = 0.100 (1.78%)
EXTERNAL STANDARD 0.078 13:39
X[1] = 0.0781 (-0.0013) (0.0013)
BLANK TEST 0.000 13:40
SUBJECT SAMPLE XXX 13:40
X[1] = 0.1064 (-0.0179) (-0.0012)

Interference Detected

CS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 09/21/2017
Time: 13:44:28

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

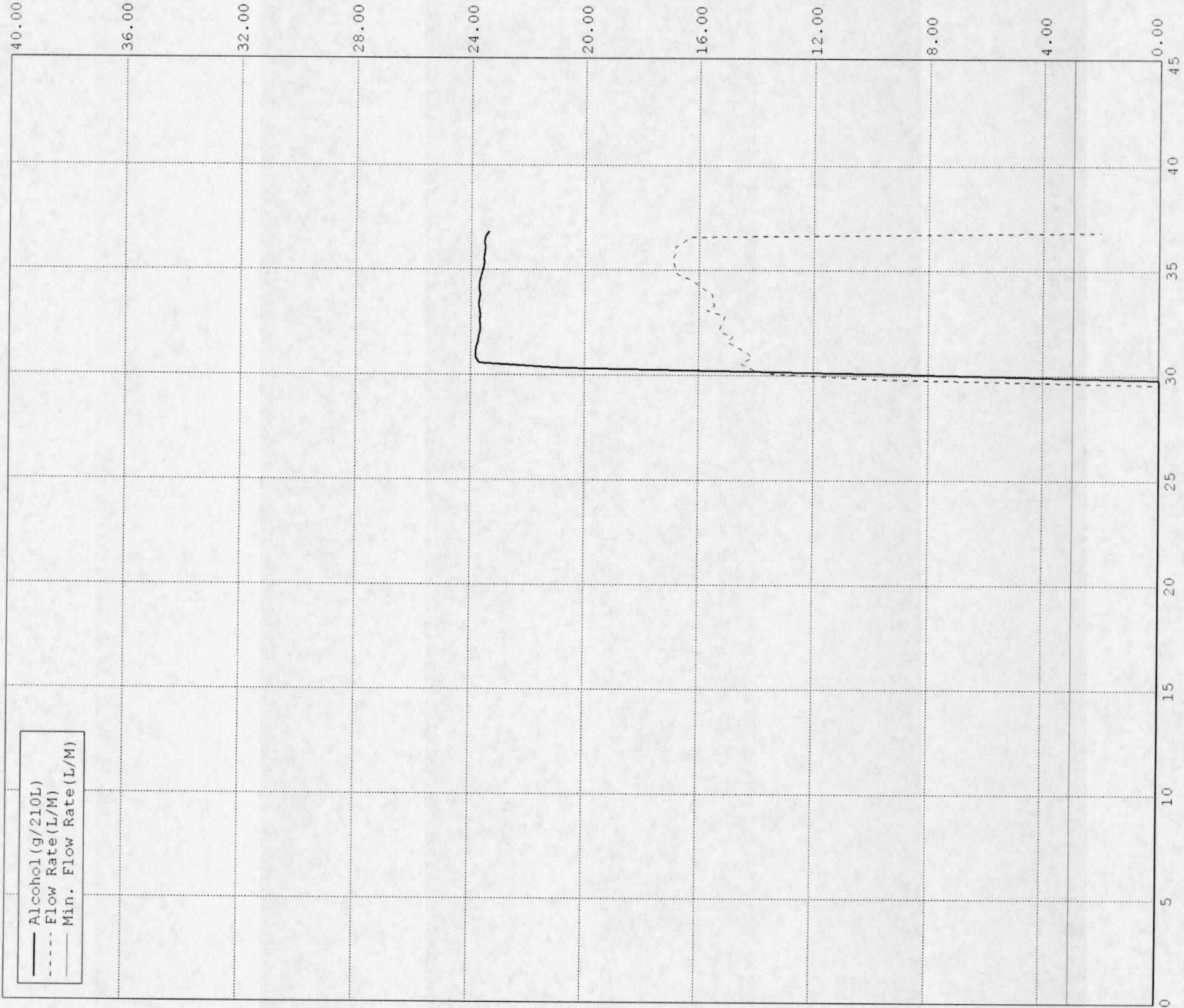
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	13:47
BLANK TEST	0.000	13:47
INTERNAL STANDARD	VERIFIED	13:47
Xq = 0.100 (1.69%)		
EXTERNAL STANDARD	0.078	13:47
X[1] = 0.0785 (-0.0010) (0.0014)		
BLANK TEST	0.000	13:48
SUBJECT SAMPLE	XXX	13:49
X[1] = 0.1173 (-0.0242) (0.0010)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 09/21/2017
Time: 13:53:09

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 29.54: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:54
BLANK TEST	0.000	13:54
INTERNAL STANDARD	VERIFIED	13:54
Xq = 0.101 (1.87%)		
EXTERNAL STANDARD	0.078	13:54
X[1] = 0.0781 (-0.0010) (0.0015)		
BLANK TEST	0.000	13:55
SUBJECT SAMPLE (Vol=2.02L)	0.093	13:56
X[1] = 0.0936 (0.0000) (0.0006)		
BLANK TEST	0.000	13:57
EXTERNAL STANDARD	0.078	13:57
X[1] = 0.0783 (-0.0015) (0.0015)		
BLANK TEST	0.000	13:58

Filter 2 avg = -0.0012

Filter 3 avg = 0.0014



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 09/21/2017
Time: 14:04:12

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

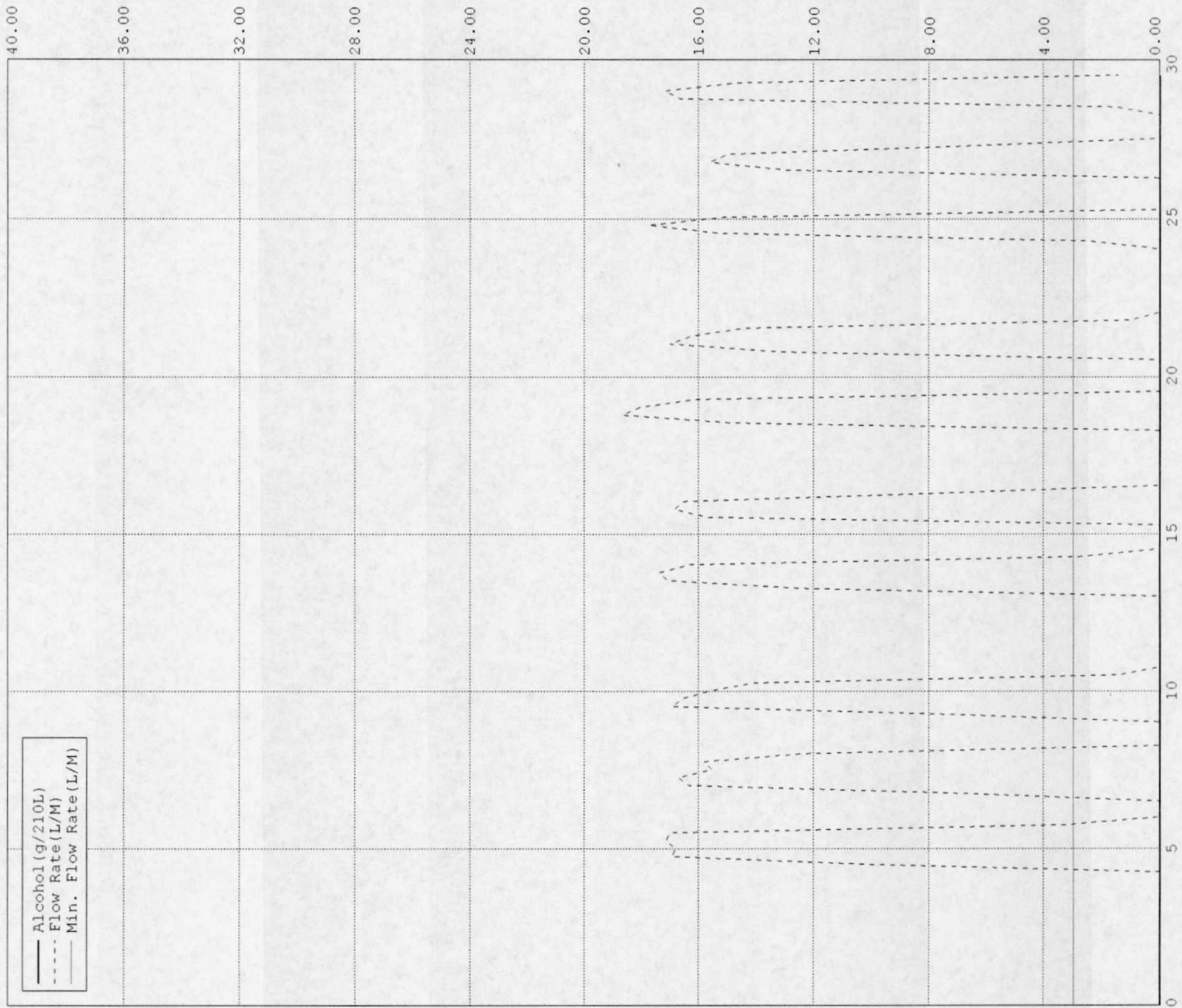
OPERATOR NAME:
COLLEEN S OBRYANT
OPERATOR'S #: 6237

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

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

DIAGNOSTIC CHECK PASSED 14:05
BLANK TEST 0.000 14:05
INTERNAL STANDARD VERIFIED 14:05
EXTERNAL STANDARD 0.078 14:06
BLANK TEST 0.000 14:07
SUBJECT SAMPLE XXX 14:07

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 09/21/2017
Time: 14:09:13

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 29.53: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 14:10
BLANK TEST 0.000 14:10
INTERNAL STANDARD VERIFIED 14:10
EXTERNAL STANDARD 0.079 14:10
BLANK TEST 0.000 14:11

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 09/21/2017
Time: 14:24:03

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

DIAGNOSTIC CHECK	PASSED	14:25
BLANK TEST	0.000	14:25
INTERNAL STANDARD	VERIFIED	14:25
EXTERNAL STANDARD	0.078	14:25
BLANK TEST	0.000	14:26
SUBJECT SAMPLE (Vol=2.92L)	0.000	14:26
BLANK TEST	0.000	14:27
EXTERNAL STANDARD	0.079	14:27
BLANK TEST	0.000	14:28

