

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 100369 Analyst Derek Walton Start Date 12/17/19

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 AG805804 Exp 02/27/20
- ii. 0.040g/210L Mnf Airgas Lot AG915607 Exp 06/05/21
- iii. 0.080g/210L Mnf Airgas Lot AG826101 Exp 09/18/20
- iv. 0.100g/210L Mnf Airgas Lot AG805903 Exp 02/28/20
- v. 0.200g/210L Mnf Wttn Lot 19040 Exp 01/29/21
 - 1. Simulator S/N DR4162 Date Calibrated 10/07/19
- vi. 0.300g/210L Mnf Wttn Lot 19010 Exp 01/03/21
 - 1. Simulator S/N DR4178 Date Calibrated 10/04/19

5. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference
- d. Exceeded attempts

i. Acetone - Mnf Wttn Lot 18370 Level 0.100 Exp 12/05/20

1. Simulator S/N SD1199 Date Calibrated 03/06/19

ii. Isopropanol - Mnf Wttn Lot 18370 Level 0.100 Exp 12/05/20

1. Simulator S/N DR4161 Date Calibrated 03/07/19

iii. Negative Control - Mnf Wttn Lot 18370 Level 0.100 Exp 12/05/20

1. Simulator S/N SD1202 Date Calibrated 03/05/19

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 12/17/19

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/17/2019
Time: 13:44:15

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 = 40.9°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.55 V PASSED
(0.93 V - 2.17 V)
Cooler Voltage = 1.66 V PASSED
(1.00 V - 2.32 V)
Bias Voltage = 78 V PASSED
(47 V - 109 V)
Chopper Freq = 537 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.0 in

PUMP INFO

Flow Rate = 5.229 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 = 0.084 0.21% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100369

Date: 12/17/2019
Time: 1:53 PM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 41.2°C

Current Barometer 29.1 in
Volume (Ltr) 1.59

Settings

Lamp: 1.58 V
Bias: 78 V
Cooler: 1.66 V
Chopper: 527 Hz

Voltages (V)

Flow: 1.04 V
Detector: 0.021 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/17/2019
Time: 13:08:22

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca = 0.1000
CAL = 0.971577 0.800 <= CAL < 1.200
b1 = 0.0006 0.0000 <= b1 < 0.0040
b2 = 0.0051 0.0010 <= b2 < 0.0100
b3 = 0.0004 0.0000 <= b3 < 0.0040
Xq = 0.0837 0.0500 <= Xq < 0.2000
a21 = 1.196816 1.050 <= a21 < 1.300
a31 = 0.486796 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/17/2019
Time: 13:59:02

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

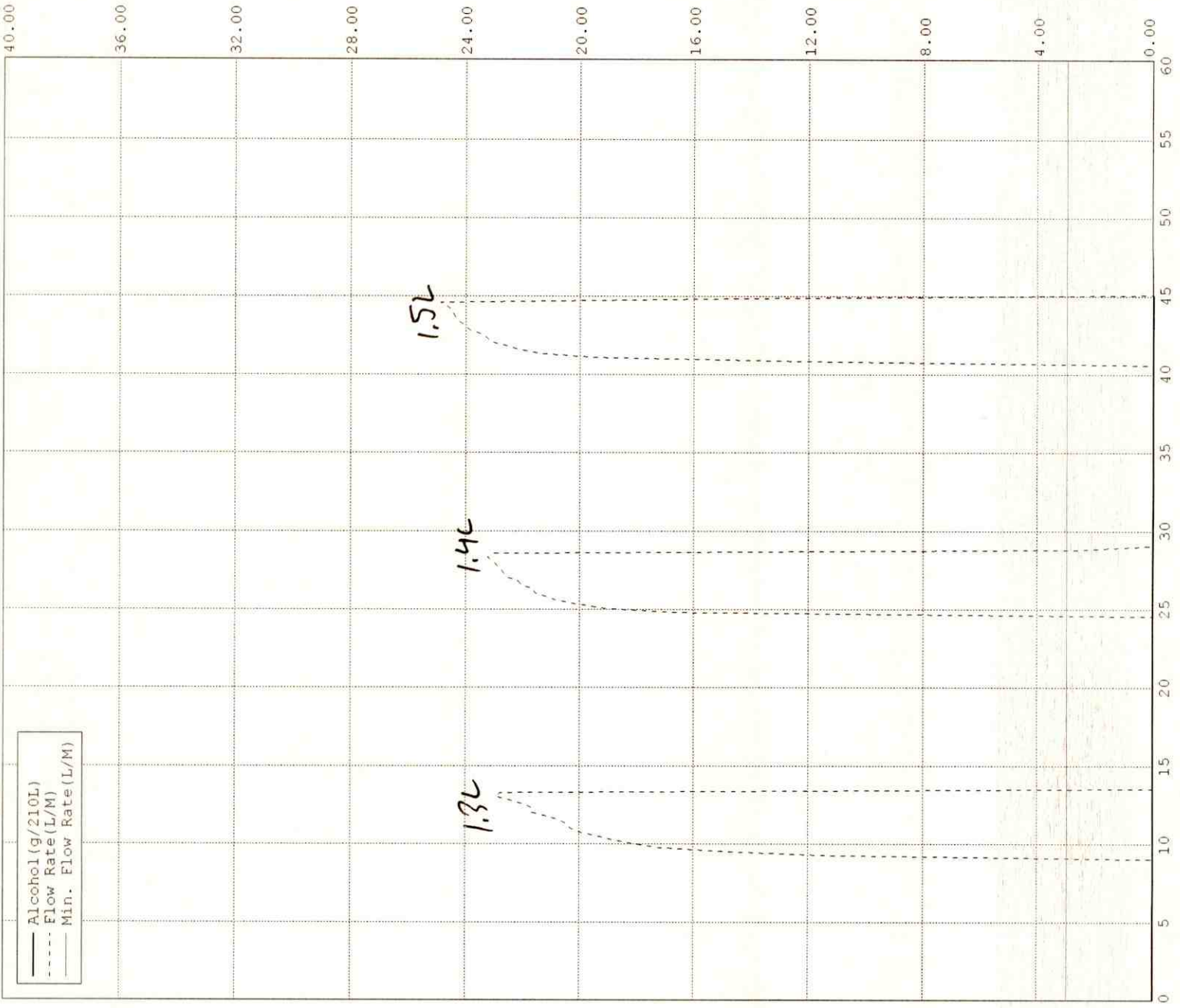
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
MINIMUM VOLUME
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.05: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	14:00
BLANK TEST	0.000	14:00
INTERNAL STANDARD	VERIFIED	14:00
EXTERNAL STANDARD	0.077	14:00
BLANK TEST	0.000	14:01
SUBJECT SAMPLE (Vol=1.57L)	0.000	14:02
BLANK TEST	0.000	14:03
EXTERNAL STANDARD	0.077	14:03
BLANK TEST	0.000	14:04



LINEARITY CHECK

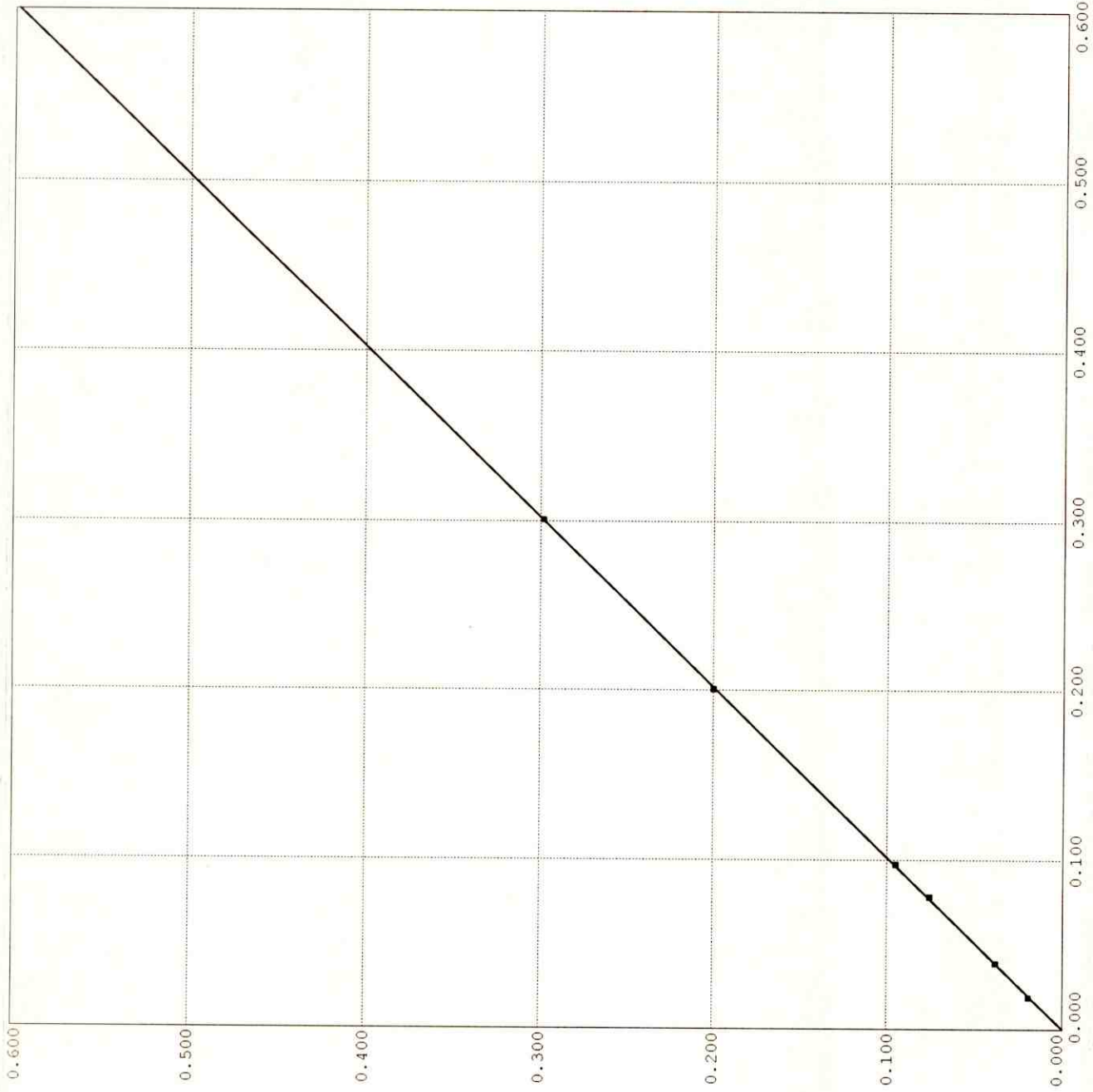
Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/17/2019
Time: 14:06:28

SUPERVISOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.019	0.0200	0.0000
0.039	0.0388	0.0004
0.078	0.0766	0.0005
0.097	0.0960	0.0000
0.200	0.2006	0.0005
0.300	0.2988	0.0004

SLOPE = 0.997125
R² = 0.999921



MW

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100369

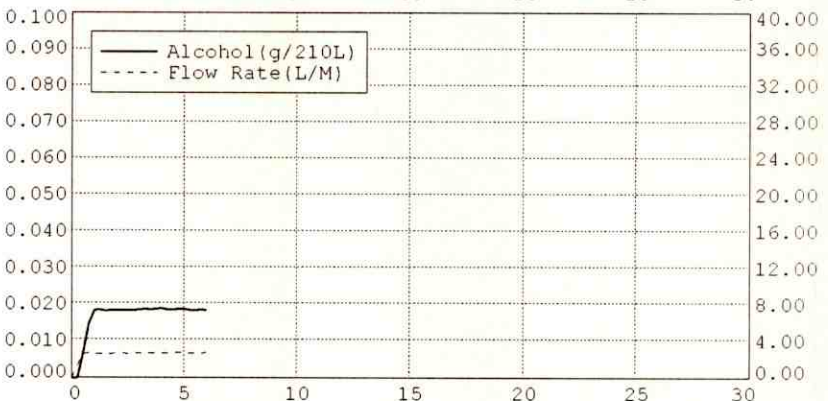
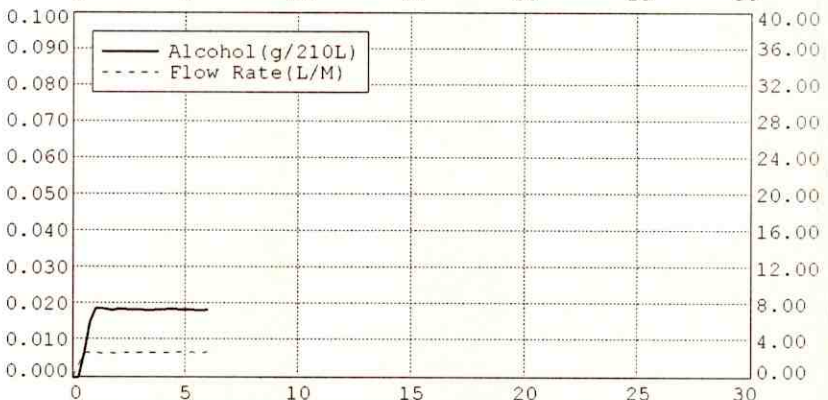
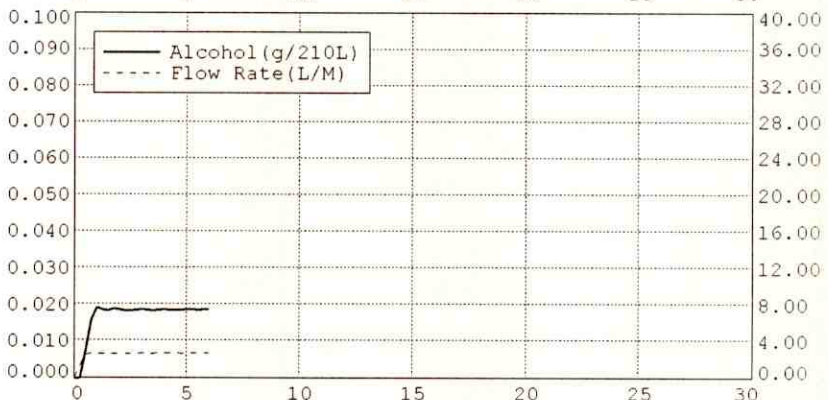
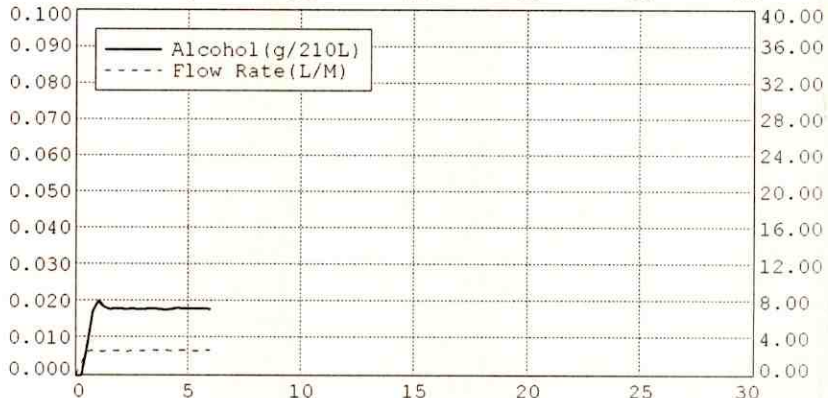
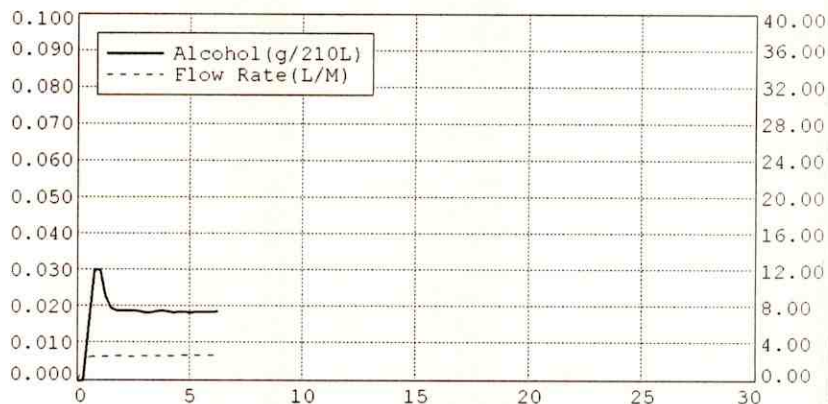
Date: 12/17/2019
 Time: 14:06:29

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.05: 0.019
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 237 psi

BLANK TEST	0.000	14:07
INTERNAL STANDARD	VERIFIED	14:07
EXTERNAL STANDARD	0.020	14:08
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.020	14:09
BLANK TEST	0.000	14:10
EXTERNAL STANDARD	0.020	14:10
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.020	14:11
BLANK TEST	0.000	14:12
EXTERNAL STANDARD	0.020	14:12
BLANK TEST	0.000	14:13

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100369

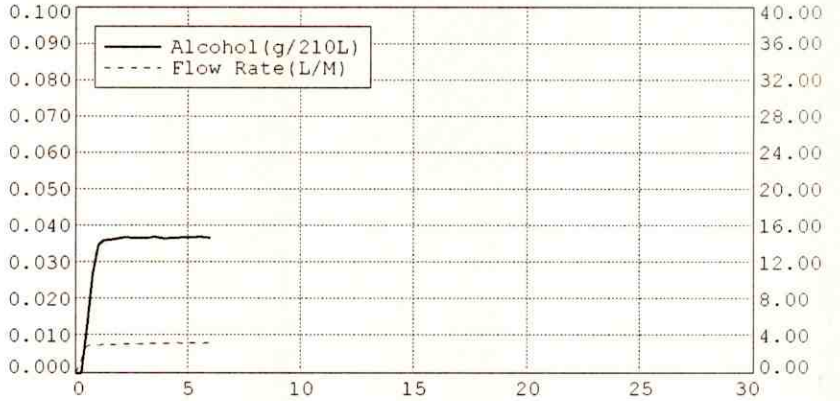
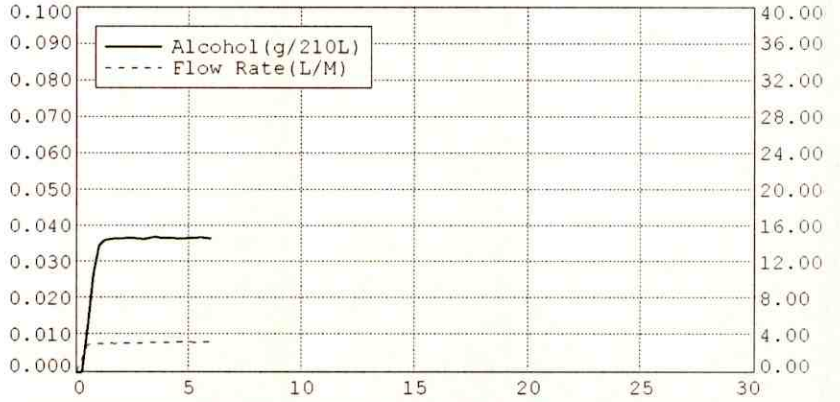
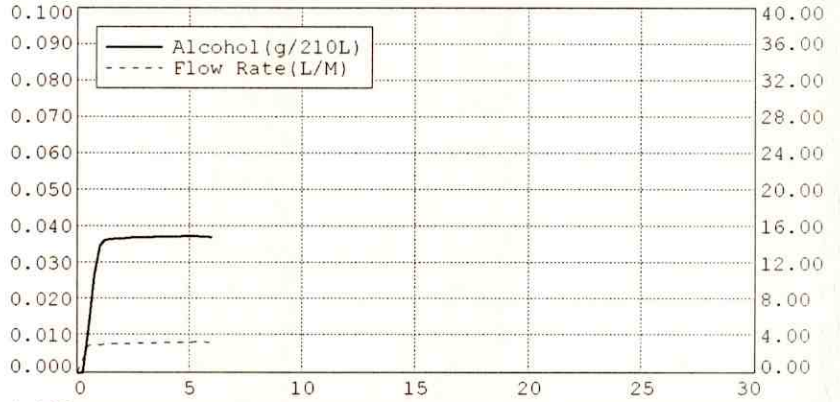
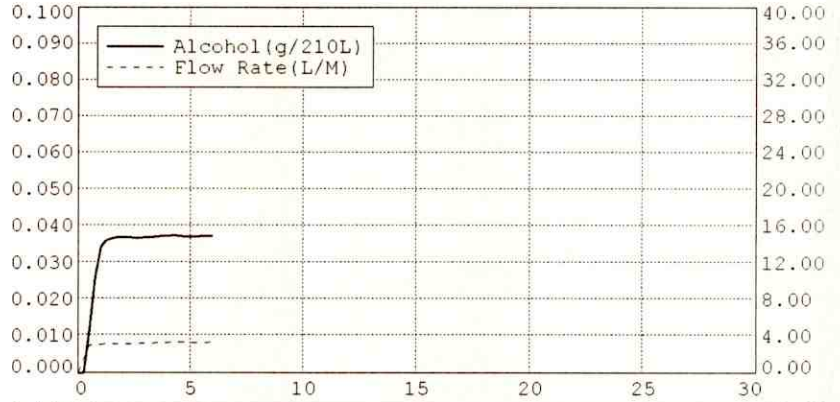
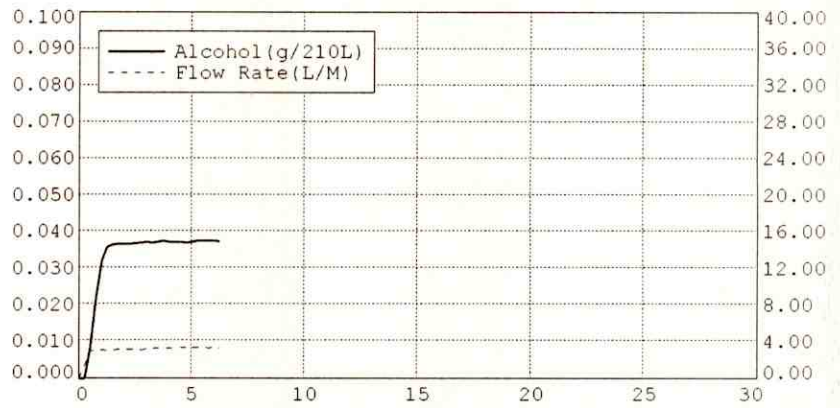
Date: 12/17/2019
Time: 14:13:48

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.04: 0.039
LOT #: AG915607
EXPIRATION: 06/05/2021
TANK PRESSURE: 1062 psi

BLANK TEST	0.000	14:14
INTERNAL STANDARD	VERIFIED	14:15
EXTERNAL STANDARD	0.039	14:15
BLANK TEST	0.000	14:16
EXTERNAL STANDARD	0.039	14:16
BLANK TEST	0.000	14:17
EXTERNAL STANDARD	0.039	14:17
BLANK TEST	0.000	14:18
EXTERNAL STANDARD	0.038	14:18
BLANK TEST	0.000	14:19
EXTERNAL STANDARD	0.039	14:19
BLANK TEST	0.000	14:20

Average = 0.0388
Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100369

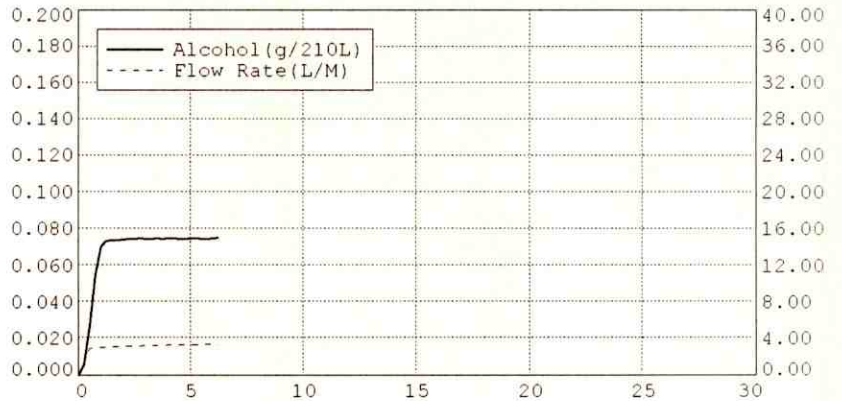
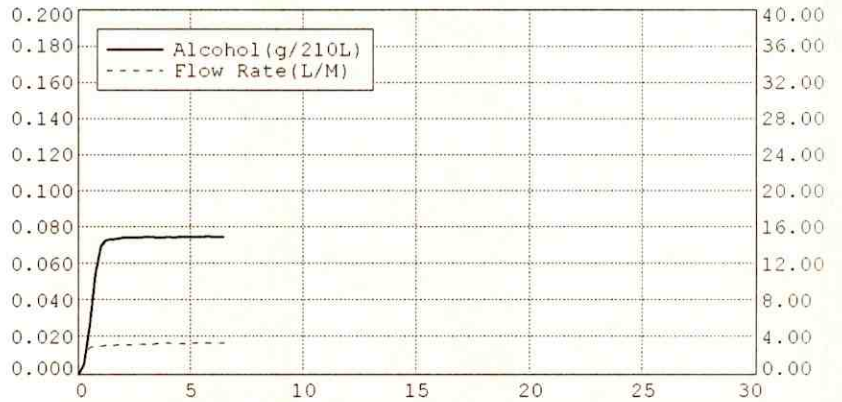
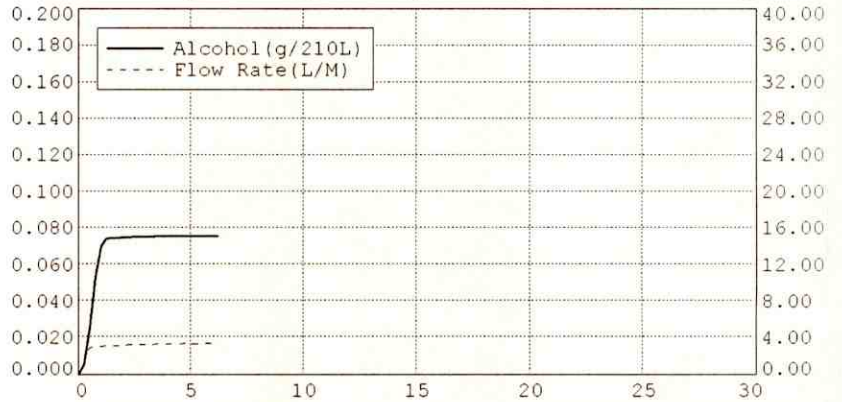
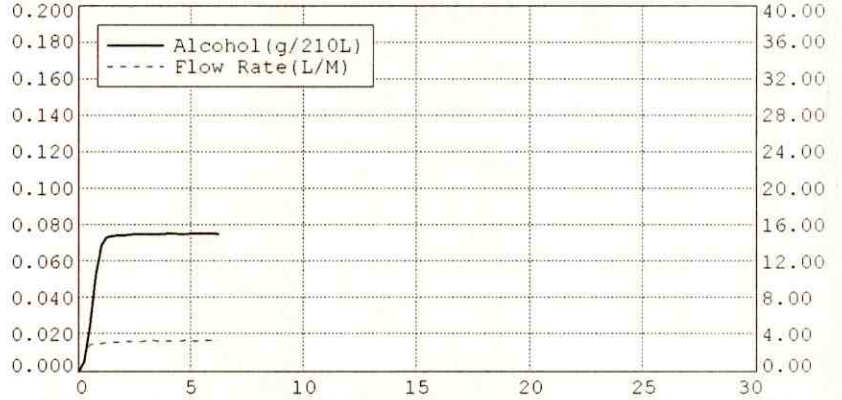
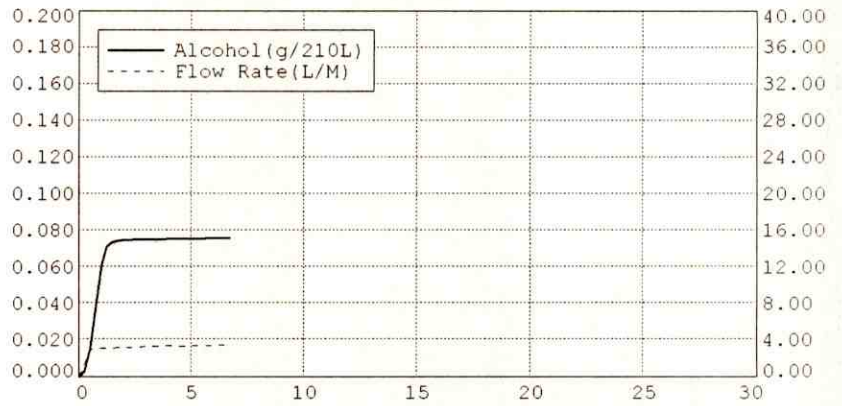
Date: 12/17/2019
Time: 14:22:20

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.04: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020
TANK PRESSURE: 1150 psi

BLANK TEST	0.000	14:23
INTERNAL STANDARD	VERIFIED	14:23
EXTERNAL STANDARD	0.077	14:23
BLANK TEST	0.000	14:24
EXTERNAL STANDARD	0.077	14:25
BLANK TEST	0.000	14:25
EXTERNAL STANDARD	0.077	14:26
BLANK TEST	0.000	14:27
EXTERNAL STANDARD	0.076	14:27
BLANK TEST	0.000	14:28
EXTERNAL STANDARD	0.076	14:28
BLANK TEST	0.000	14:29

Average = 0.0766
Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100369

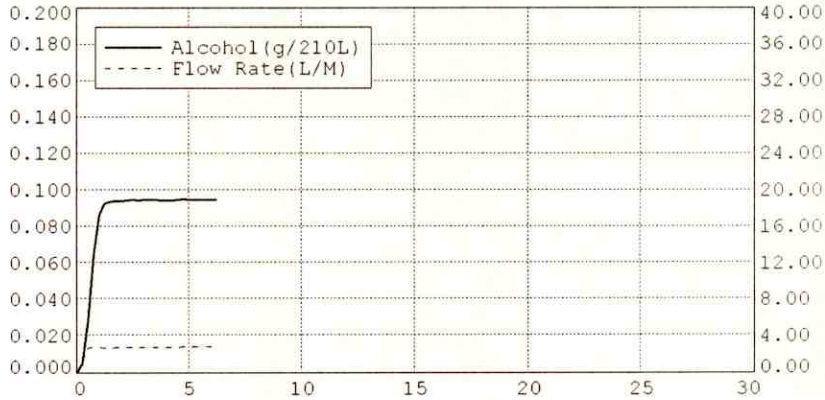
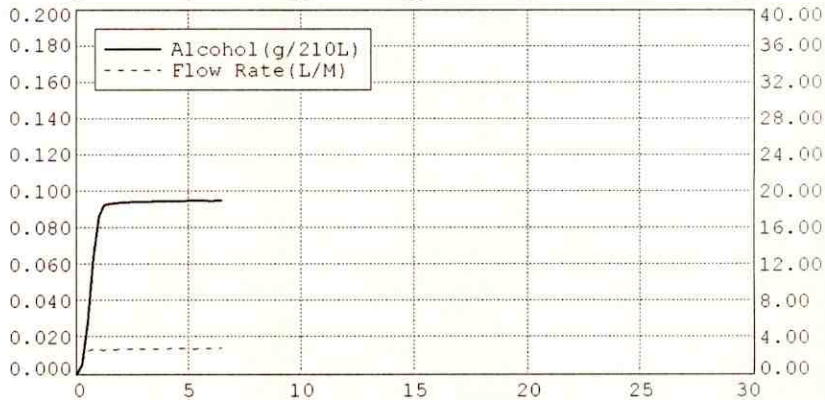
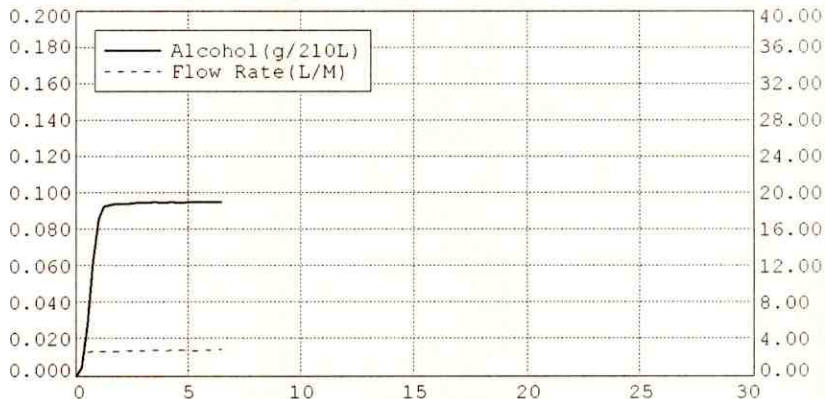
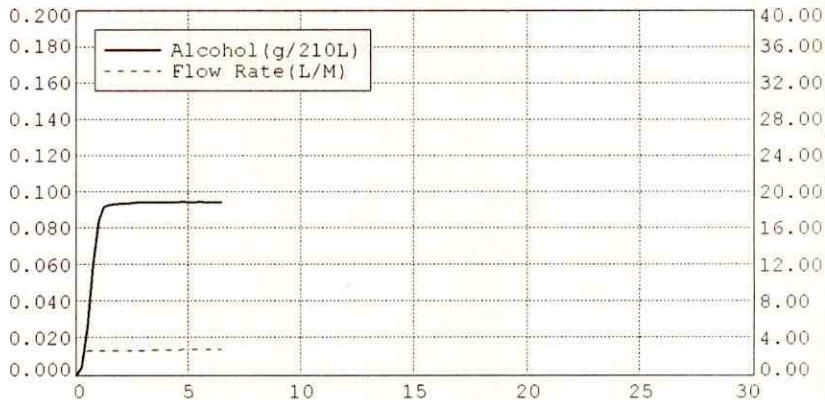
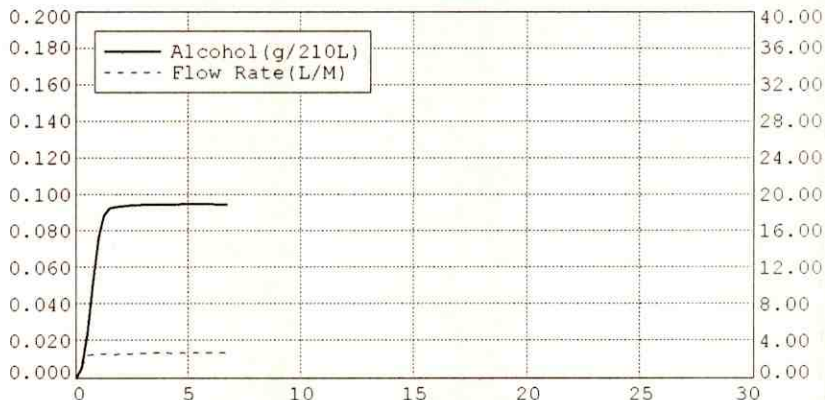
Date: 12/17/2019
 Time: 14:32:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.03: 0.097
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 592 psi

BLANK TEST	0.000	14:33
INTERNAL STANDARD	VERIFIED	14:33
EXTERNAL STANDARD	0.096	14:33
BLANK TEST	0.000	14:34
EXTERNAL STANDARD	0.096	14:34
BLANK TEST	0.000	14:35
EXTERNAL STANDARD	0.096	14:35
BLANK TEST	0.000	14:36
EXTERNAL STANDARD	0.096	14:37
BLANK TEST	0.000	14:37
EXTERNAL STANDARD	0.096	14:38
BLANK TEST	0.000	14:39

Average = 0.0960
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100369

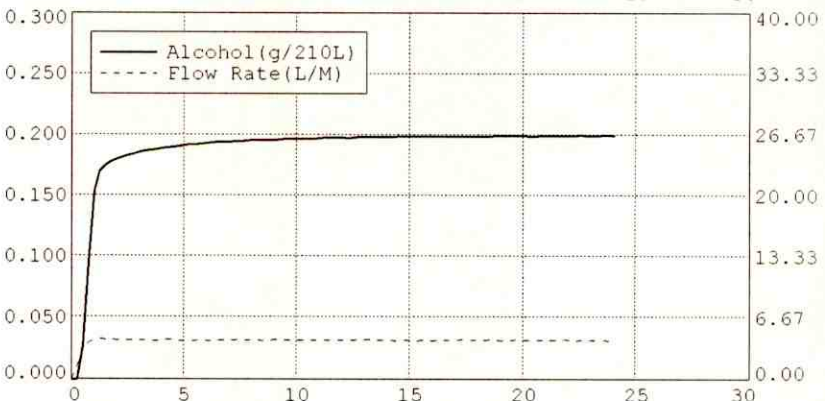
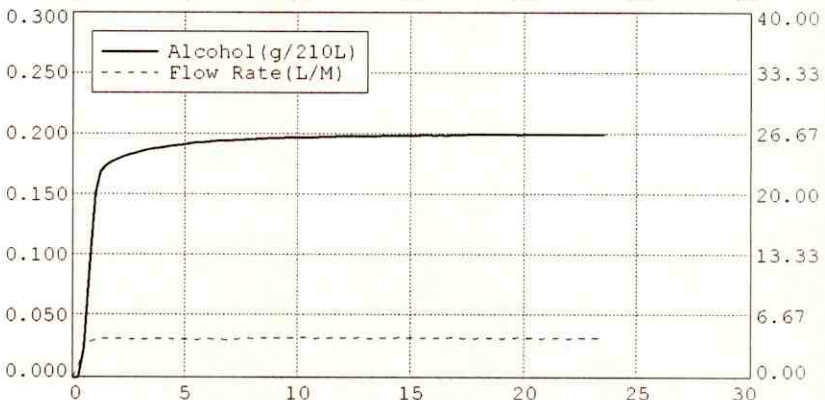
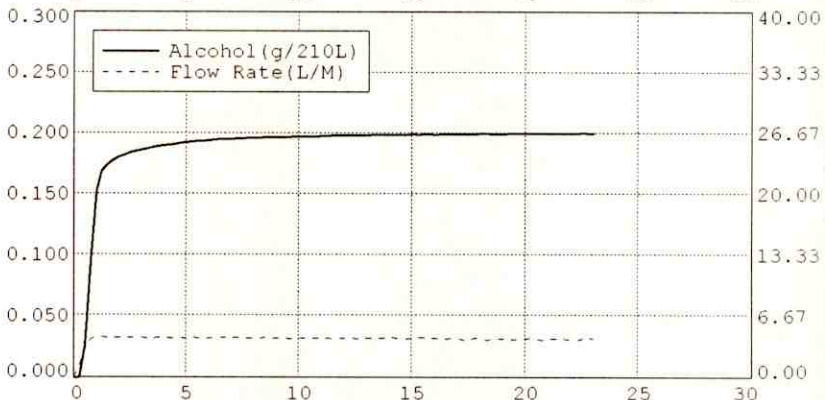
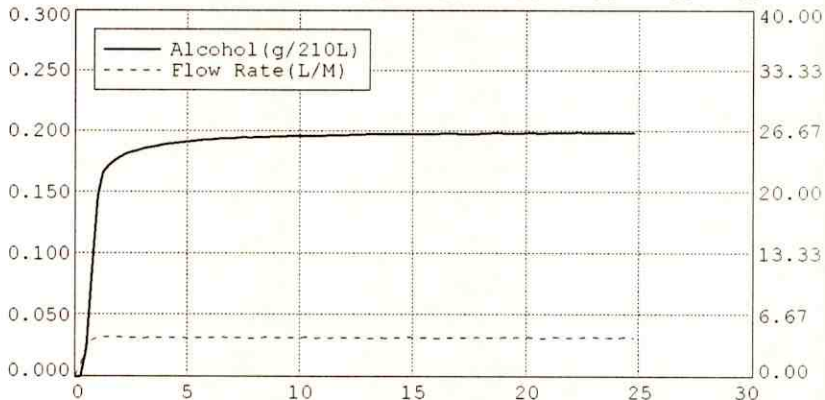
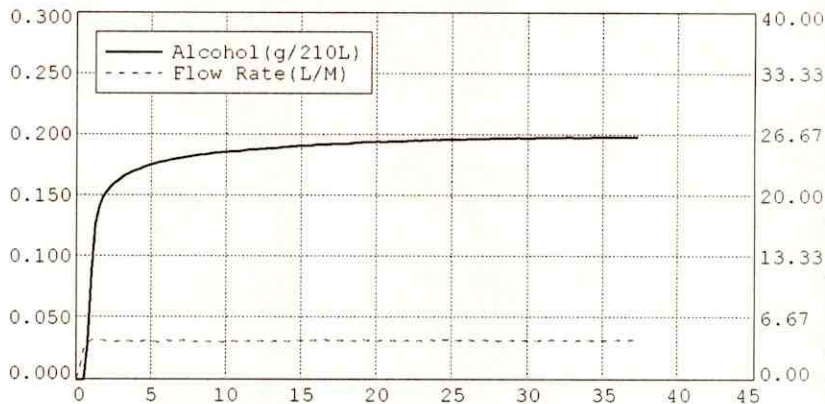
Date: 12/17/2019
 Time: 14:41:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: 19040
 EXPIRATION: 01/29/2021

BLANK TEST	0.000	14:42
INTERNAL STANDARD	VERIFIED	14:43
EXTERNAL STANDARD	0.200	14:43
BLANK TEST	0.000	14:44
EXTERNAL STANDARD	0.200	14:45
BLANK TEST	0.000	14:46
EXTERNAL STANDARD	0.201	14:46
BLANK TEST	0.000	14:47
EXTERNAL STANDARD	0.201	14:47
BLANK TEST	0.000	14:48
EXTERNAL STANDARD	0.201	14:49
BLANK TEST	0.000	14:50

Average = 0.2006
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100369

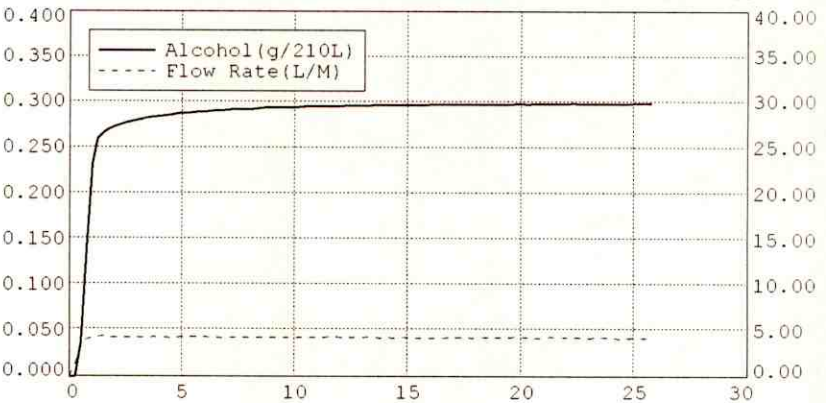
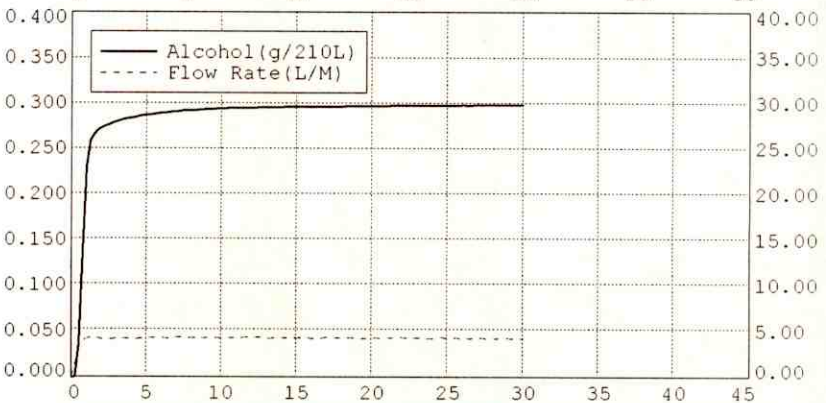
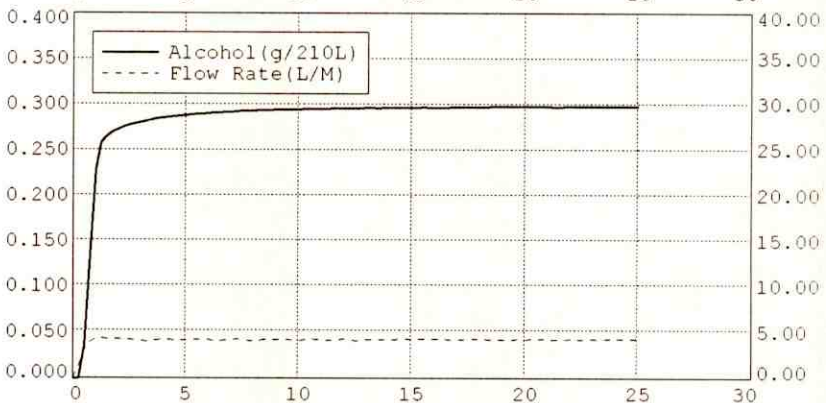
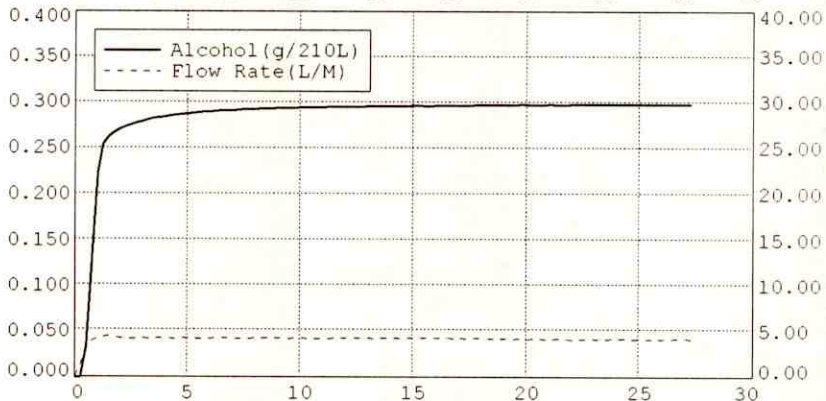
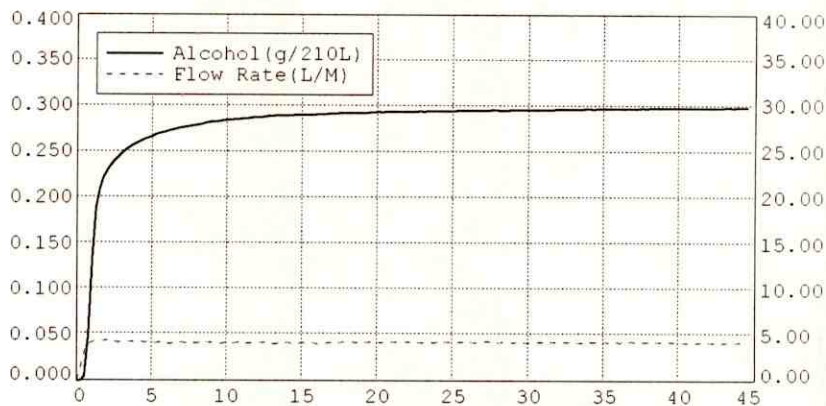
Date: 12/17/2019
 Time: 14:51:21

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 19010
 EXPIRATION: 01/03/2021

BLANK TEST	0.000	14:52
INTERNAL STANDARD	VERIFIED	14:53
EXTERNAL STANDARD	0.299	14:53
BLANK TEST	0.000	14:54
EXTERNAL STANDARD	0.299	14:55
BLANK TEST	0.000	14:56
EXTERNAL STANDARD	0.298	14:56
BLANK TEST	0.000	14:57
EXTERNAL STANDARD	0.299	14:58
BLANK TEST	0.000	14:59
EXTERNAL STANDARD	0.299	14:59
BLANK TEST	0.000	15:00

Average = 0.2988
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/17/2019
Time: 15:05:38

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

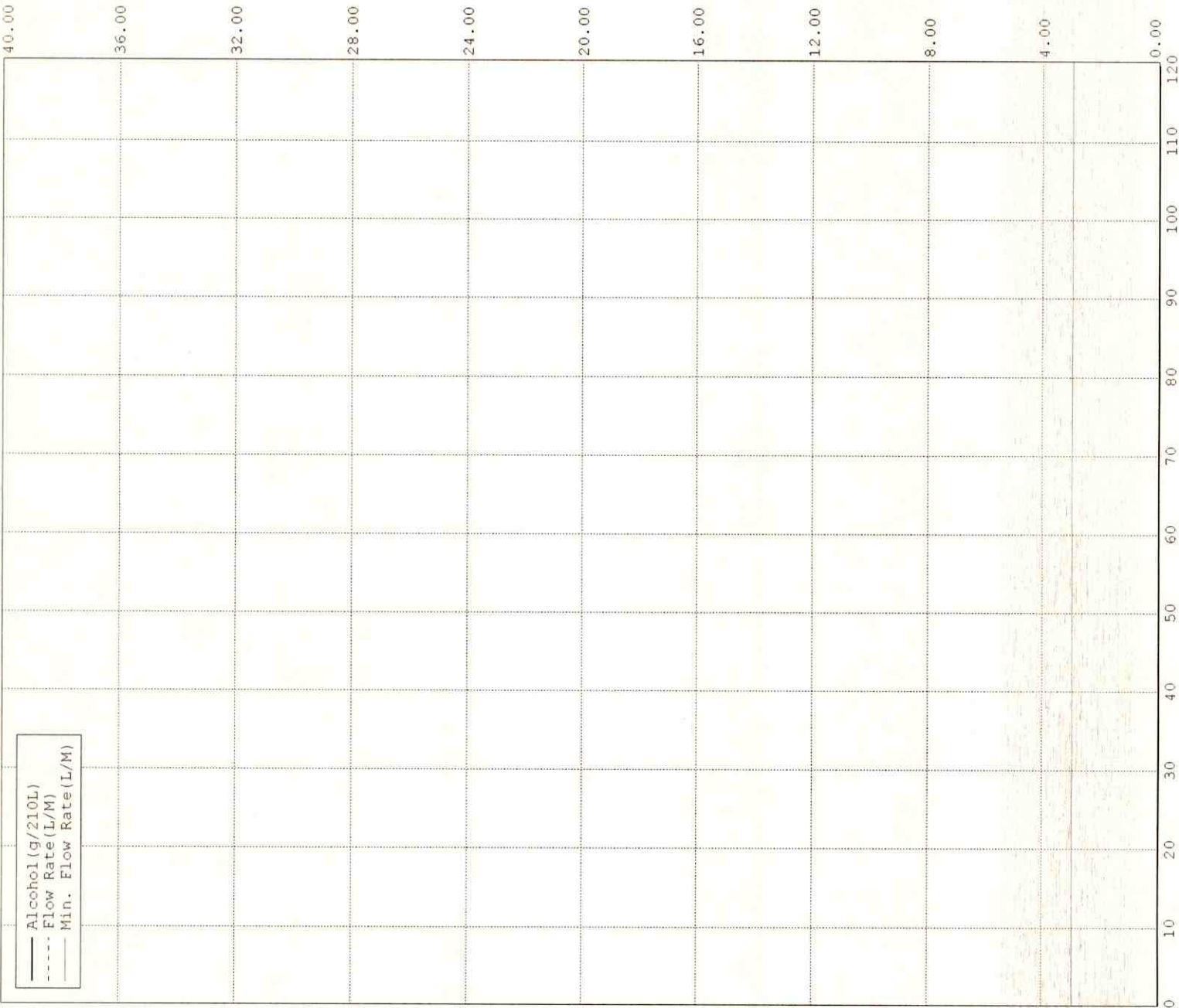
DEPT/AGENCY:
INCOMPLETE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.02: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 15:06
BLANK TEST 0.000 15:06
INTERNAL STANDARD VERIFIED 15:06
EXTERNAL STANDARD 0.077 15:07
BLANK TEST 0.000 15:08
SUBJECT SAMPLE INCOMPLETE 15:10

Handwritten signature



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/17/2019
Time: 15:19:37

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

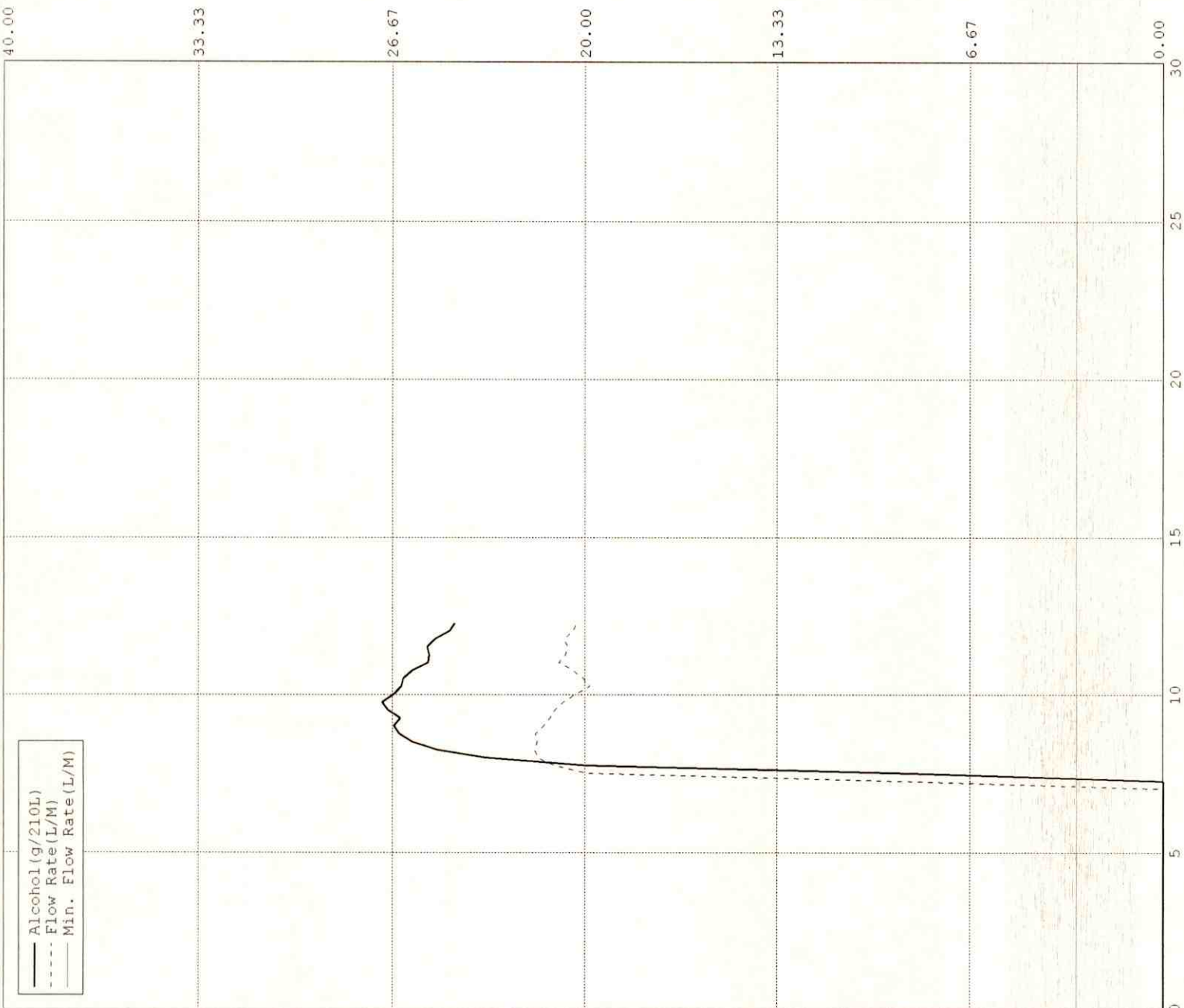
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
INVALID
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.03: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 15:20
BLANK TEST 0.000 15:20
INTERNAL STANDARD VERIFIED 15:20
EXTERNAL STANDARD 0.077 15:21
BLANK TEST 0.000 15:22
SUBJECT SAMPLE INVALID 15:22



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/17/2019
Time: 15:29:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
INTERFERENCE ACETONE
CASE/REPORT: XXXX
TEST TYPE: TEST

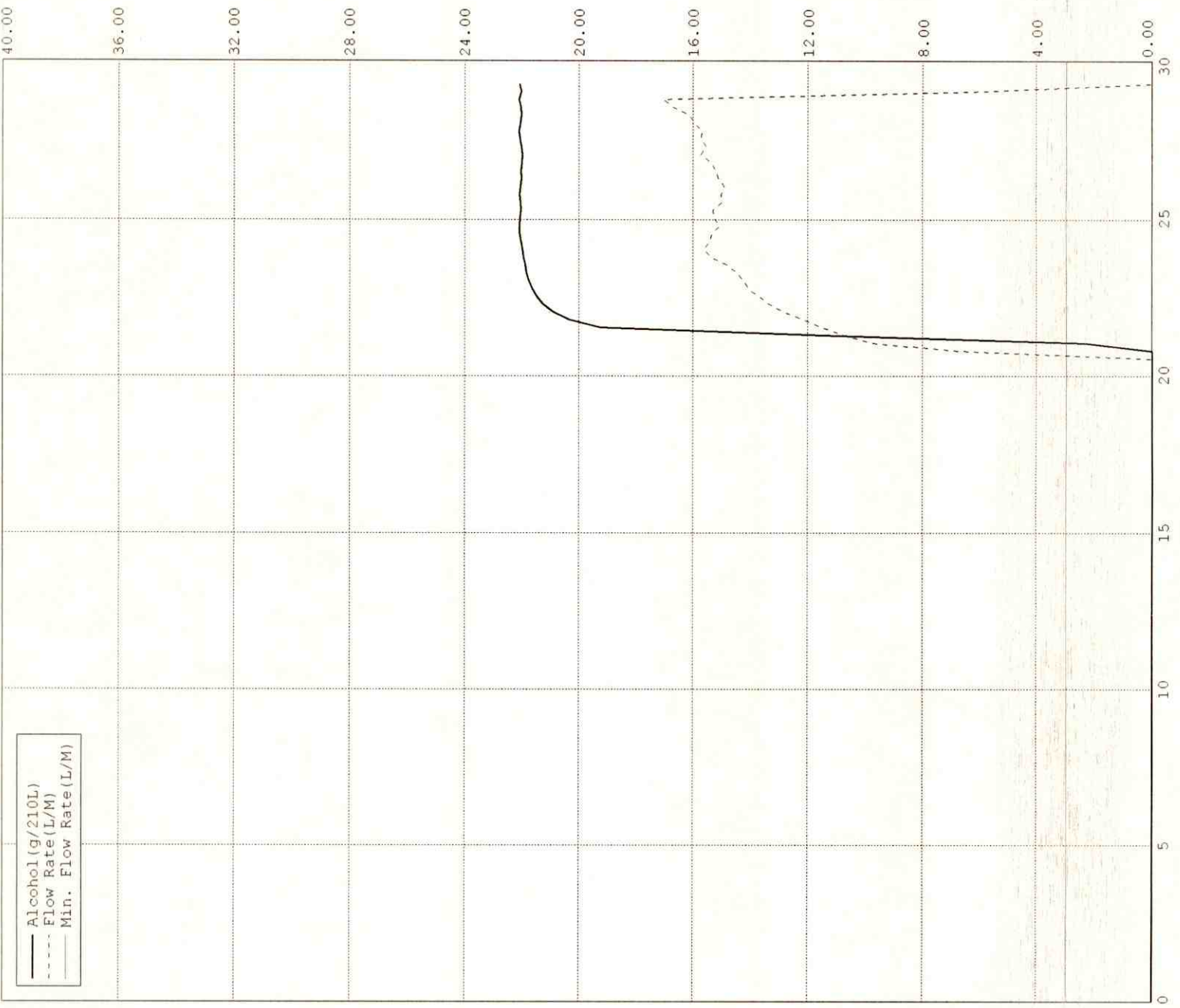
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.03: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	15:30
BLANK TEST	0.000	15:30
INTERNAL STANDARD	VERIFIED	15:30
Xg = 0.084 (0.21%)		
EXTERNAL STANDARD	0.076	15:30
X[1] = 0.0765 (0.0002) (0.0040)		
BLANK TEST	0.000	15:31
SUBJECT SAMPLE	XXX	15:32
X[1] = 0.1111 (-0.0166) (0.0035)		

Interference Detected

Filter 2 Avg: 0.0003
Filter 3 Avg: 0.0033



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/17/2019
Time: 15:33:49

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

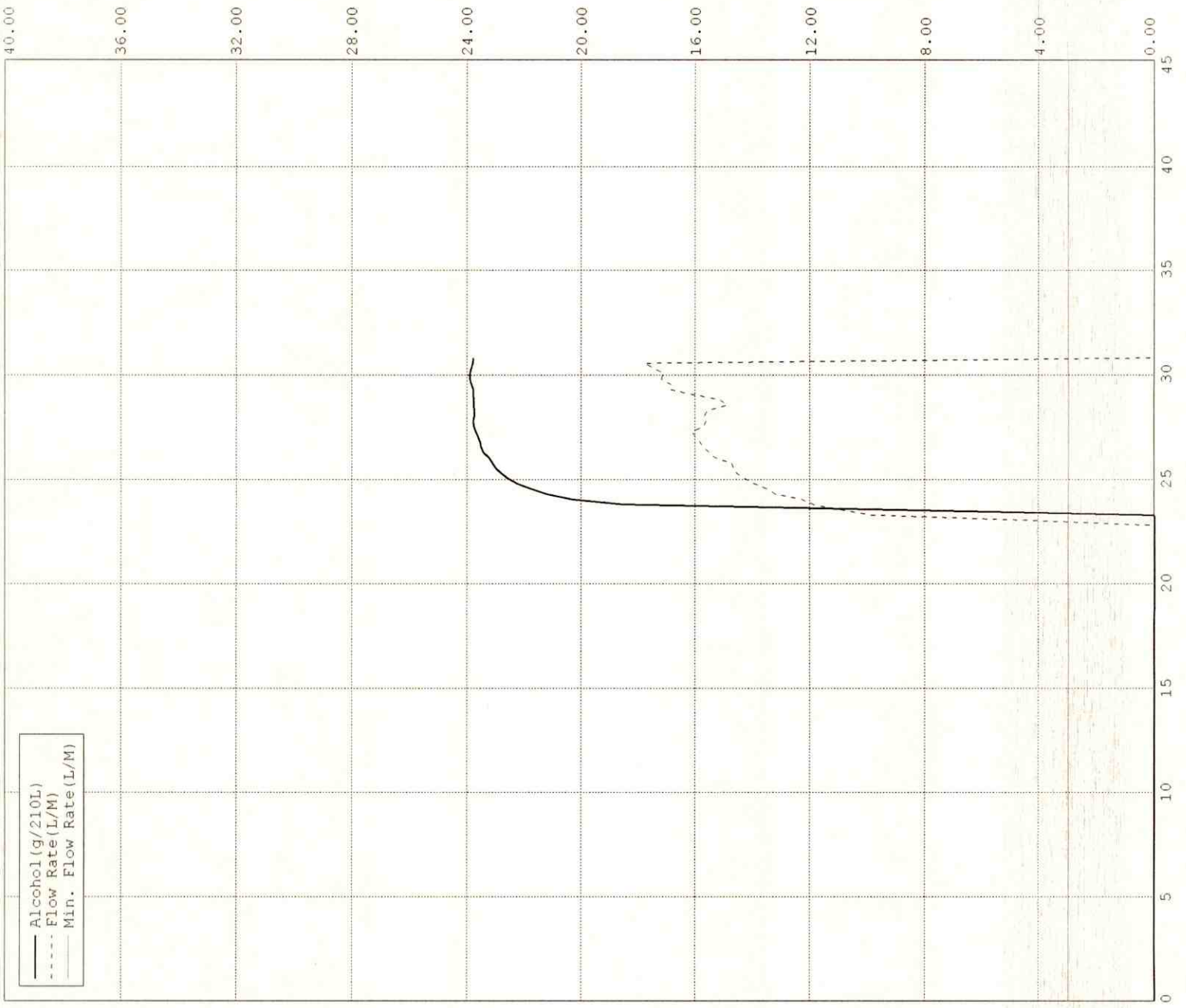
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.02: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	15:34
BLANK TEST	0.000	15:34
INTERNAL STANDARD	VERIFIED	15:35
Xg = 0.084 (0.10%)		
EXTERNAL STANDARD	0.076	15:35
X[1] = 0.0764 (0.0003) (0.0032)		
BLANK TEST	0.000	15:36
SUBJECT SAMPLE	XXX	15:36
X[1] = 0.1199 (-0.0283) (0.0027)		

Interference Detected

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/17/2019
Time: 15:39:31

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

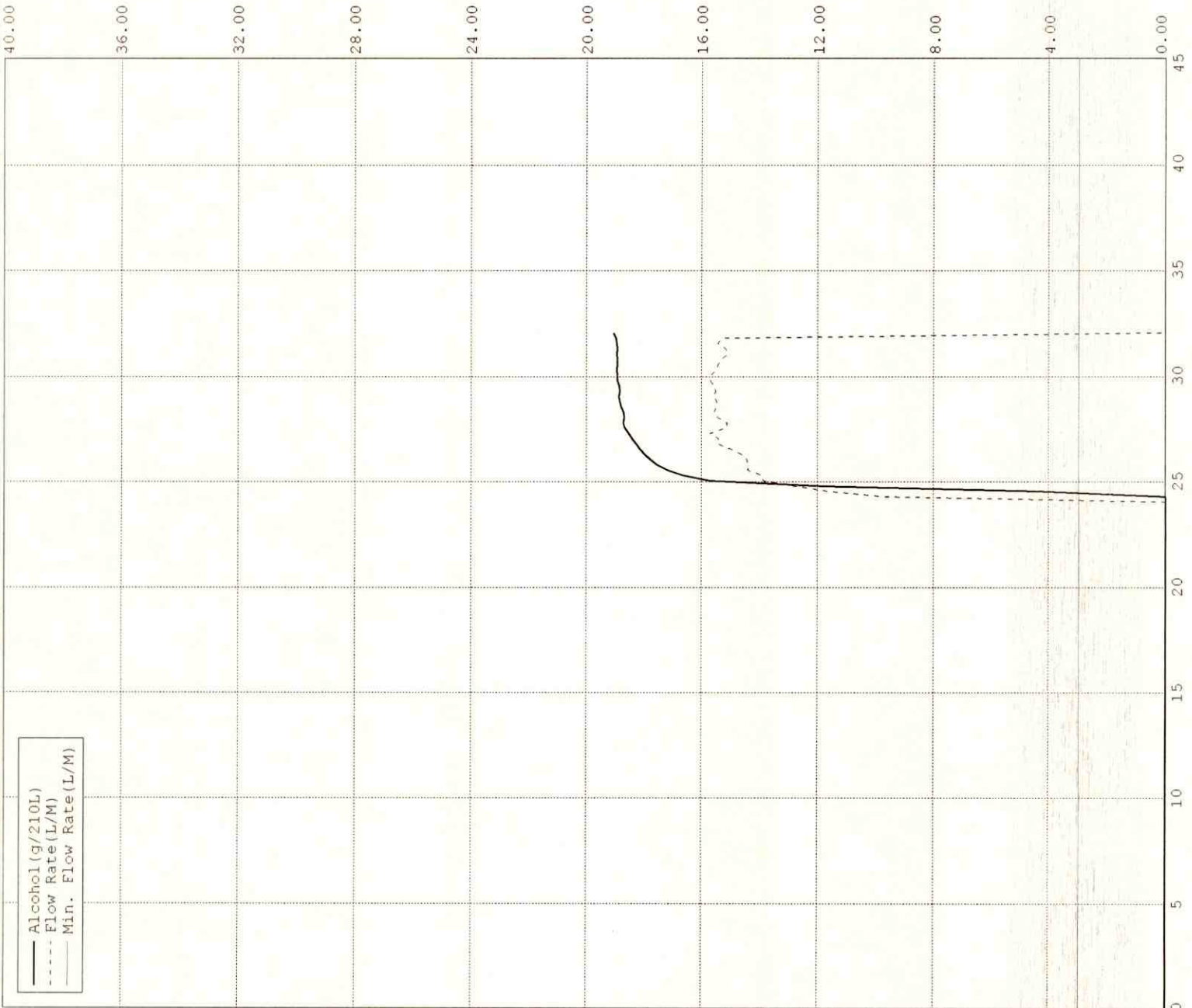
DEPT/AGENCY:
INTERFERENCE NEGATIVE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.02: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	15:40
BLANK TEST	0.000	15:40
INTERNAL STANDARD	VERIFIED	15:40
Xq = 0.083 (0.52%)		
EXTERNAL STANDARD	0.077	15:40
X[1] = 0.0767 (0.0004) (0.0035)		
BLANK TEST	0.000	15:41
SUBJECT SAMPLE (Vol=1.92L)	0.096	15:42
X[1] = 0.0962 (0.0013) (0.0020)		
BLANK TEST	0.000	15:43
EXTERNAL STANDARD	0.076	15:43
X[1] = 0.0763 (0.0001) (0.0025)		
BLANK TEST	0.000	15:44

Handwritten signature



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/17/2019
Time: 15:14:56

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

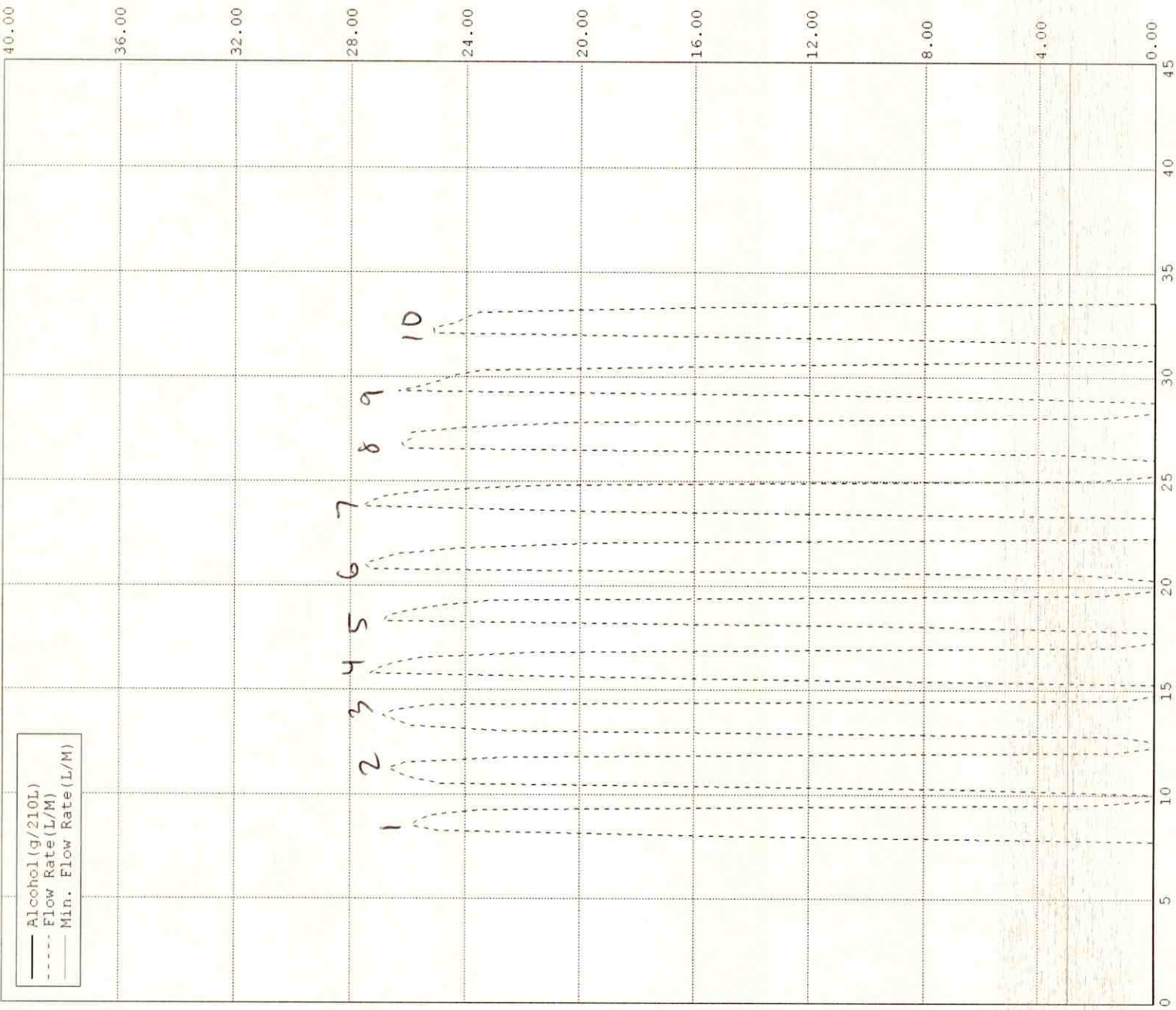
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.02: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

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

Maximum Attempts Exceeded

JW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/17/2019
Time: 15:23:52

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

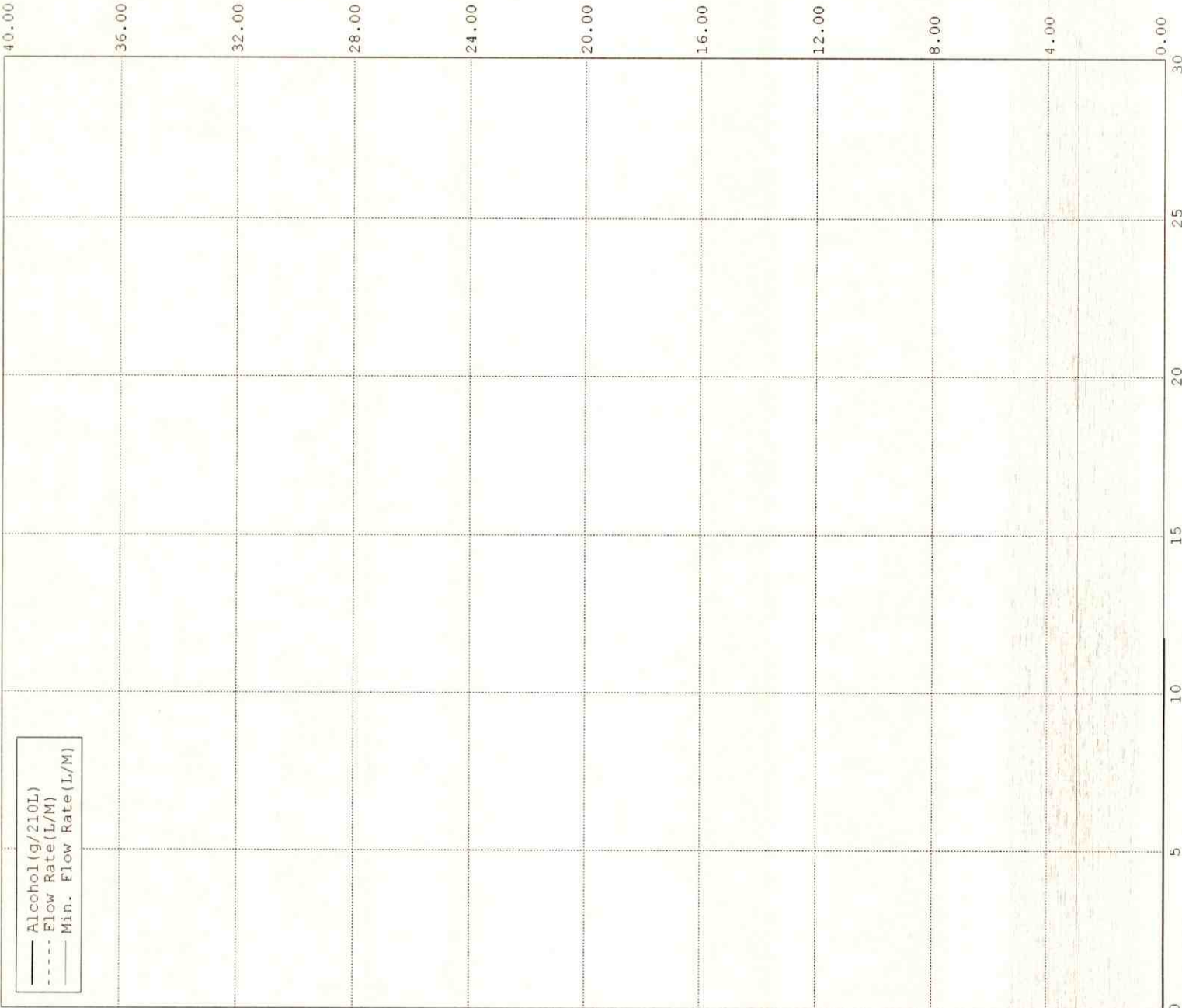
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.03: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 15:24
BLANK TEST 0.000 15:25
INTERNAL STANDARD VERIFIED 15:25
EXTERNAL STANDARD 0.077 15:25
BLANK TEST 0.000 15:26

RFI DETECTED

Handwritten signature



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100369

Date: 12/17/2019
Time: 15:57:06

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
NON-DRINKING SUBJECT
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.01: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	15:58
BLANK TEST	0.000	15:58
INTERNAL STANDARD	VERIFIED	15:58
EXTERNAL STANDARD	0.077	15:58
BLANK TEST	0.000	15:59
SUBJECT SAMPLE (Vol=3.07L)	0.000	15:59
BLANK TEST	0.000	16:00
EXTERNAL STANDARD	0.078	16:00
BLANK TEST	0.000	16:01

DW

