

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 100359 Analyst Derck Watton Start Date 05/30/19

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 A6805804 Exp 02/27/20
- ii. 0.040g/210L Mnf Airgas Lot A6733403 Exp 11/30/19
- iii. 0.080g/210L Mnf Airgas Lot A6826101 Exp 09/18/20
- iv. 0.100g/210L Mnf Airgas Lot A6805903 Exp 02/28/20
- v. 0.200g/210L Mnf Watn Lot 17340 Exp 10/09/19
 - 1. Simulator S/N DR4177 Date Calibrated 06/04/18
- vi. 0.300g/210L Mnf DR Watn Lot 17350 Exp 10/11/19
 - 1. Simulator S/N DR6267 Date Calibrated 06/04/18

① DM 05/30/19

5. Functional Tests (attached)

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

- i. Acetone - Mnf Watn Lot 18370 Level 0.100 Exp 12/05/20
 - 1. Simulator S/N SD1199 Date Calibrated 03/06/19
- ii. Isopropanol - Mnf Watn Lot 18070 Level 0.100 Exp 02/26/20
 - 1. Simulator S/N DR4161 Date Calibrated 03/07/19
- iii. Negative Control - Mnf Watn 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 05/30/2019

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100359

Date: 05/30/2019
Time: 11:29:03

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 = 46.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.50 V PASSED
(0.90 V - 2.10 V)
Cooler Voltage = 1.48 V PASSED
(0.89 V - 2.07 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 531 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 4.541 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 PASSED

Xq = 0.100 (1.98%) (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100359

Date: 05/30/2019
Time: 11:51 AM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 45.5°C

Current Barometer 29.8 in
Volume (Ltr) 1.54

Settings

Lamp: 1.50 V
Bias: 80 V
Cooler: 1.51 V
Chopper: 524 Hz

Voltages (V)

Flow: 1.04 V
Detector: -0.001 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100359

Date: 05/02/2019
Time: 10:20:36

OPERATOR NAME:
INTOX I I
CERTIFICATE #: I

Ca = 0.2000
CAL = 0.985456 0.800 <= CAL < 1.200
b1 = 0.0005 0.0000 <= b1 < 0.0040
b2 = 0.0039 0.0010 <= b2 < 0.0100
b3 = 0.0006 0.0000 <= b3 < 0.0040
Xq = 0.1017 0.0500 <= Xq < 0.2000
a21 = 1.140567 1.050 <= a21 < 1.300
a31 = 0.401748 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100359

Date: 05/30/2019
Time: 11:52:18

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

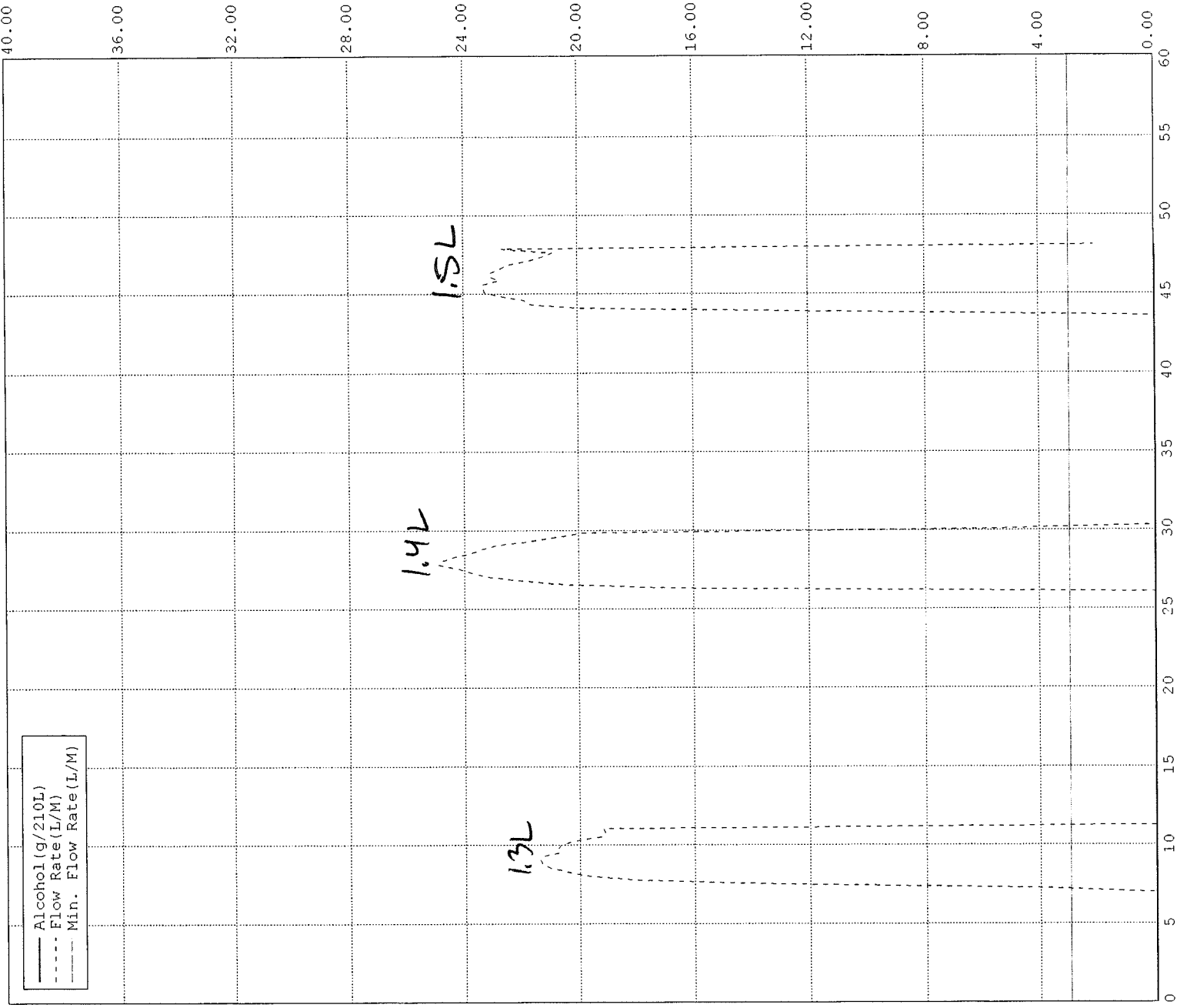
DEPT/AGENCY:
MINIMUM VOLUME
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.77: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	11:53
BLANK TEST	0.000	11:53
INTERNAL STANDARD	VERIFIED	11:53
EXTERNAL STANDARD	0.078	11:53
BLANK TEST	0.000	11:54
SUBJECT SAMPLE (Vol=1.53L)	0.000	11:55
BLANK TEST	0.000	11:56
EXTERNAL STANDARD	0.078	11:56
BLANK TEST	0.000	11:57

DW



LINEARITY CHECK

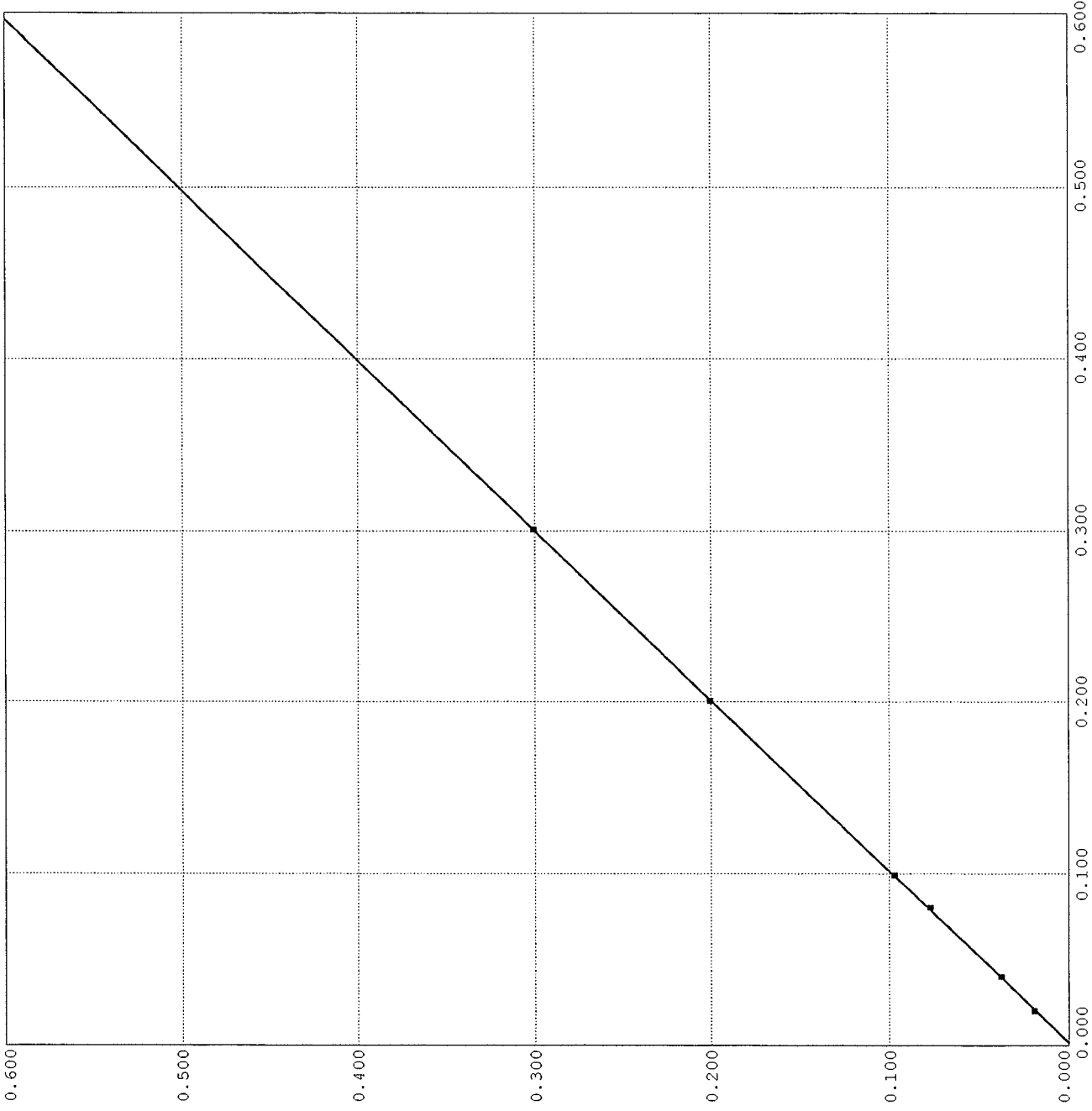
Alaska Department of Public Safety
DATAMASTER dmt: 100359

Date: 05/30/2019
Time: 12:14:04

SUPERVISOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0388	0.0004
0.080	0.0782	0.0004
0.099	0.0982	0.0004
0.200	0.2012	0.0004
0.300	0.3014	0.0011

SLOPE = 1.009384
R² = 0.999941



DM

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100359

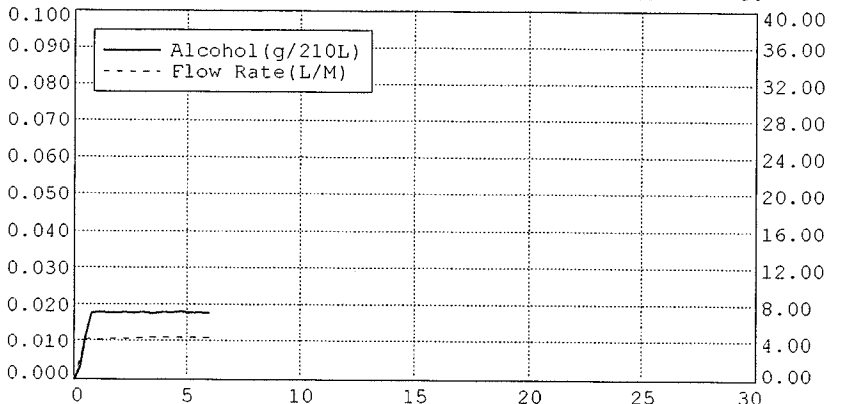
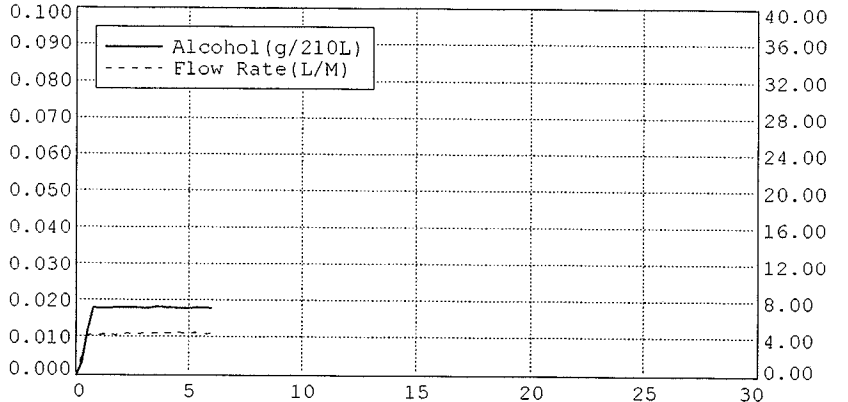
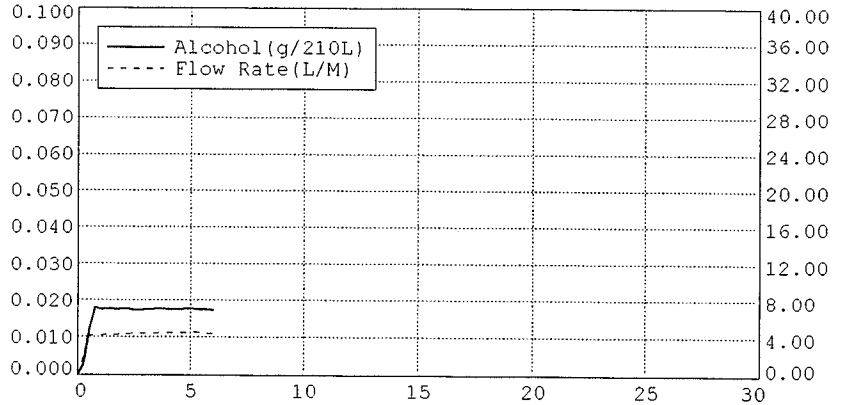
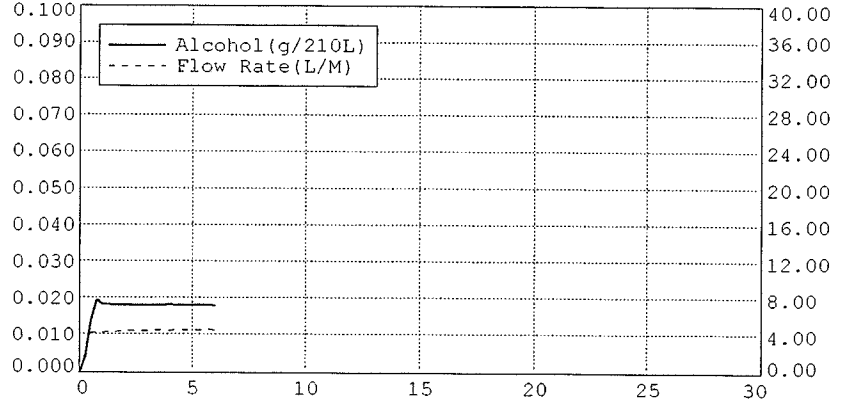
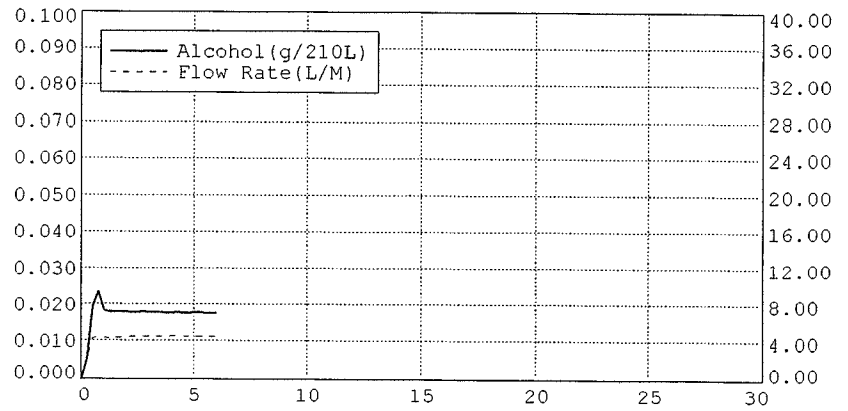
Date: 05/30/2019
 Time: 12:14:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.76: 0.020
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 672 psi

BLANK TEST	0.000	12:18
INTERNAL STANDARD	VERIFIED	12:18
EXTERNAL STANDARD	0.020	12:18
BLANK TEST	0.000	12:19
EXTERNAL STANDARD	0.020	12:19
BLANK TEST	0.000	12:20
EXTERNAL STANDARD	0.020	12:20
BLANK TEST	0.000	12:21
EXTERNAL STANDARD	0.020	12:22
BLANK TEST	0.000	12:22
EXTERNAL STANDARD	0.020	12:23
BLANK TEST	0.000	12:24

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100359

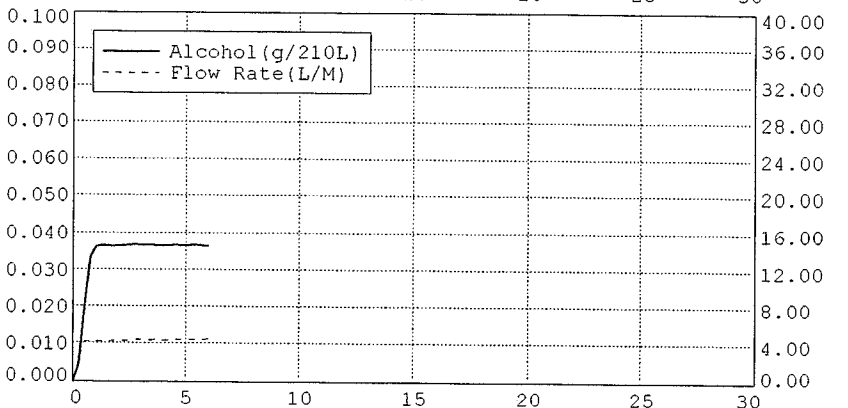
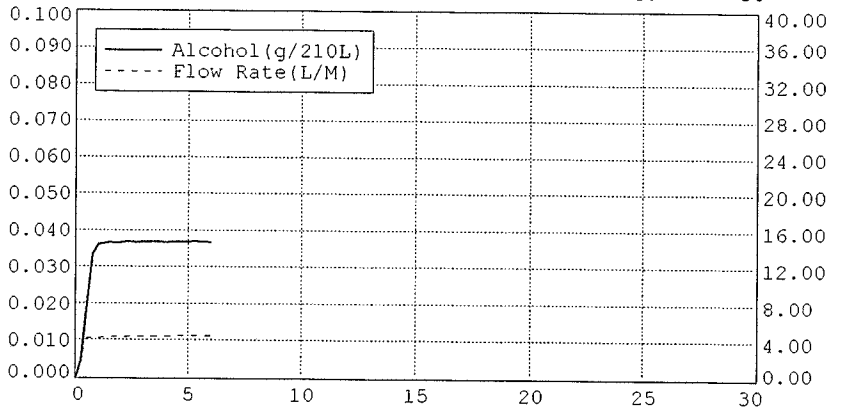
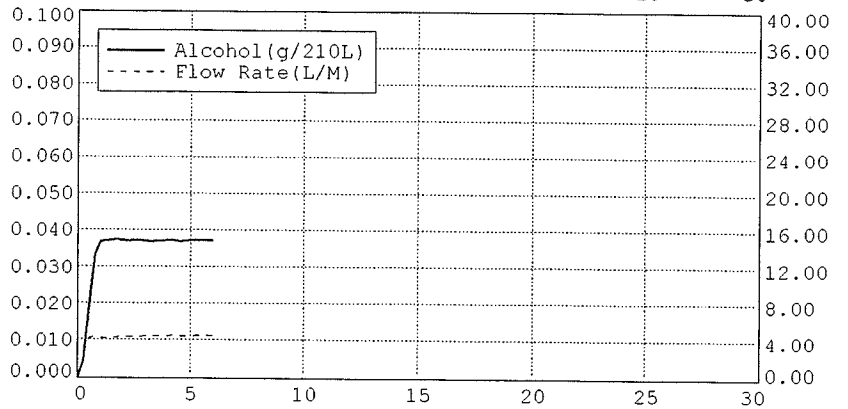
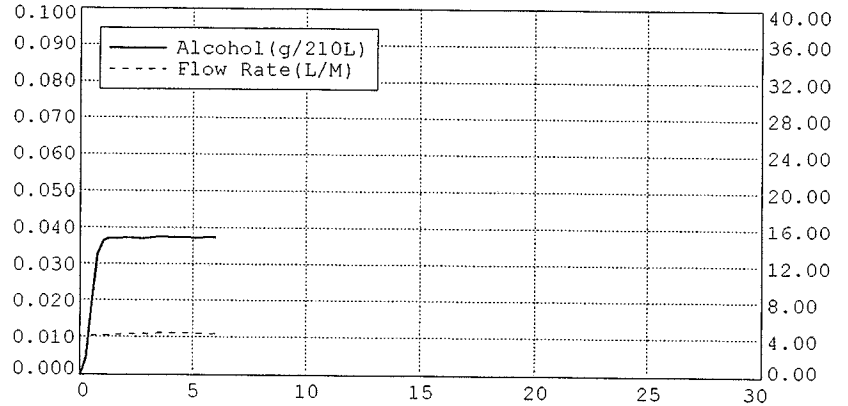
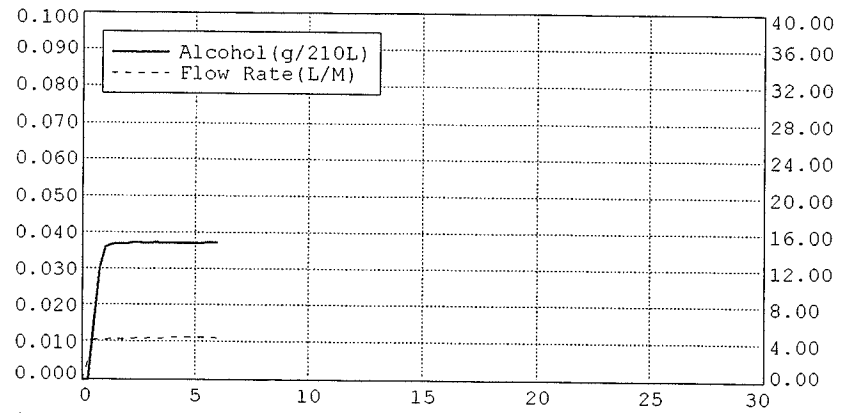
Date: 05/30/2019
 Time: 12:25:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.77: 0.040
 LOT #: AG733403
 EXPIRATION: 11/30/2019
 TANK PRESSURE: 661 psi

BLANK TEST	0.000	12:27
INTERNAL STANDARD	VERIFIED	12:27
EXTERNAL STANDARD	0.039	12:27
BLANK TEST	0.000	12:28
EXTERNAL STANDARD	0.039	12:28
BLANK TEST	0.000	12:29
EXTERNAL STANDARD	0.039	12:29
BLANK TEST	0.000	12:30
EXTERNAL STANDARD	0.039	12:30
BLANK TEST	0.000	12:31
EXTERNAL STANDARD	0.038	12:31
BLANK TEST	0.000	12:32

Average = 0.0388
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100359

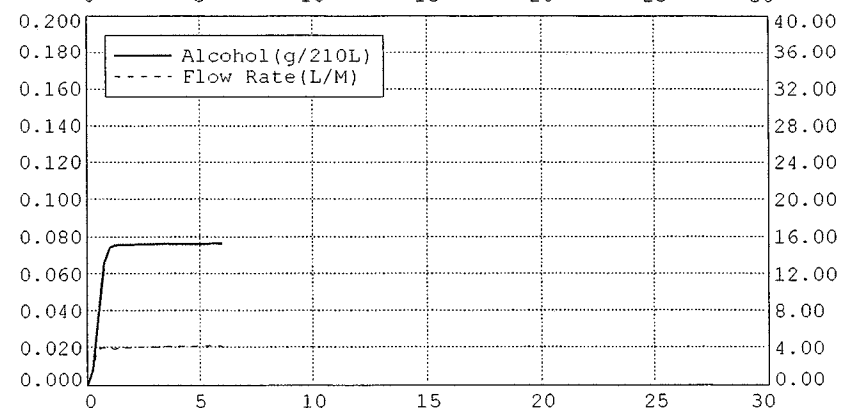
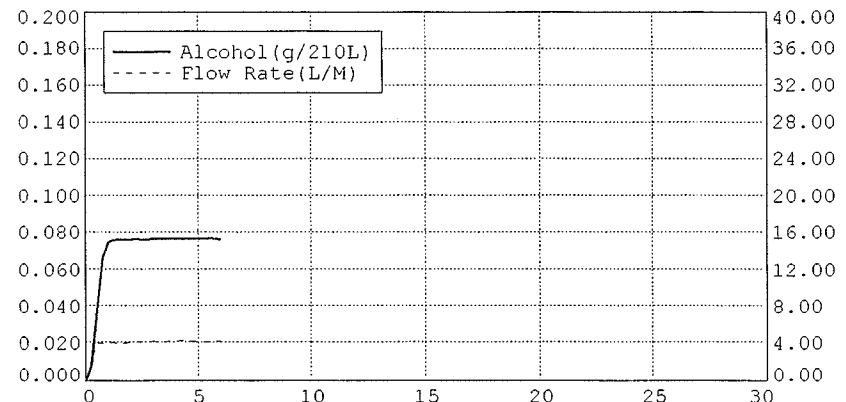
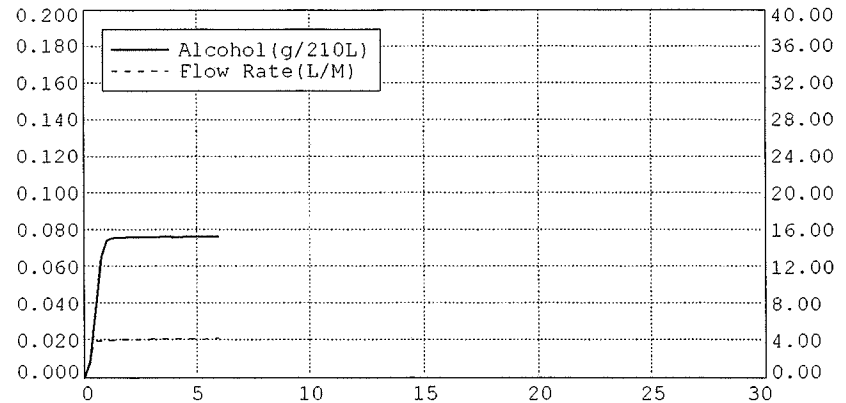
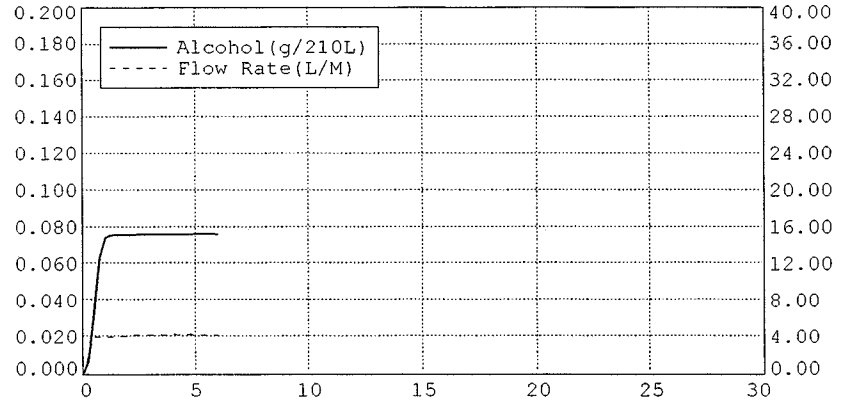
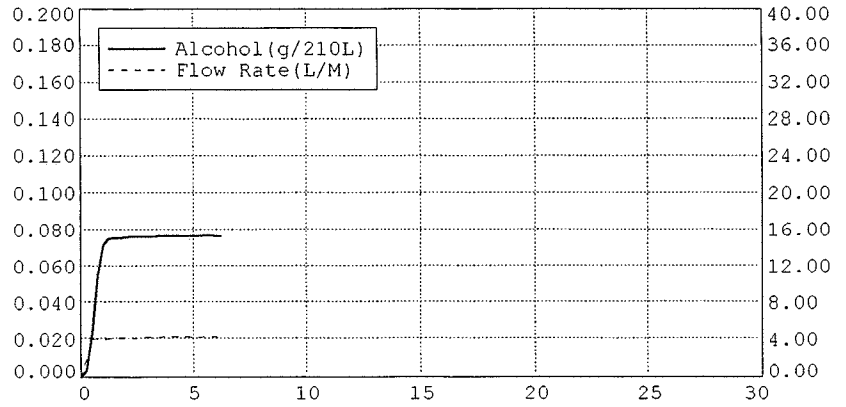
Date: 05/30/2019
 Time: 12:33:49

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.76: 0.080
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 507 psi

BLANK TEST	0.000	12:35
INTERNAL STANDARD	VERIFIED	12:35
EXTERNAL STANDARD	0.079	12:35
BLANK TEST	0.000	12:36
EXTERNAL STANDARD	0.078	12:36
BLANK TEST	0.000	12:37
EXTERNAL STANDARD	0.078	12:37
BLANK TEST	0.000	12:38
EXTERNAL STANDARD	0.078	12:38
BLANK TEST	0.000	12:39
EXTERNAL STANDARD	0.078	12:39
BLANK TEST	0.000	12:40

Average = 0.0782
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100359

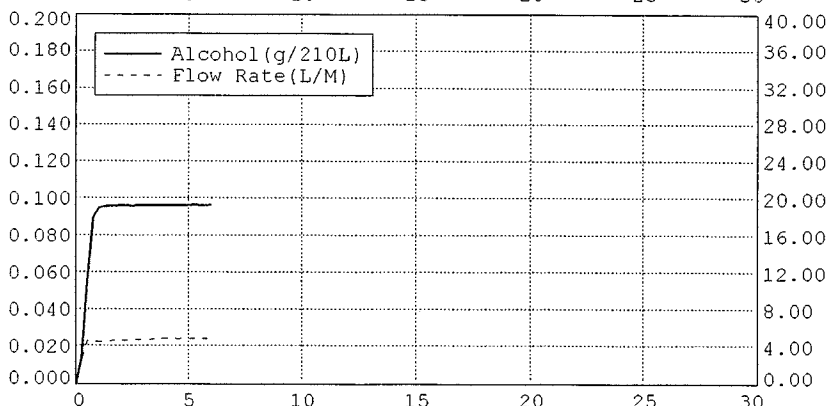
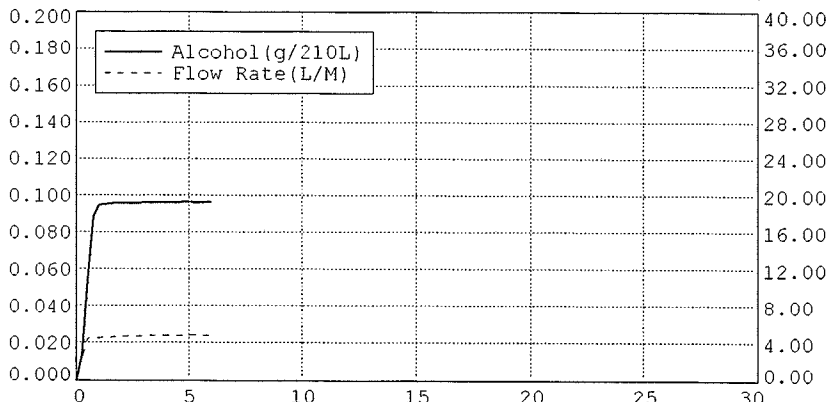
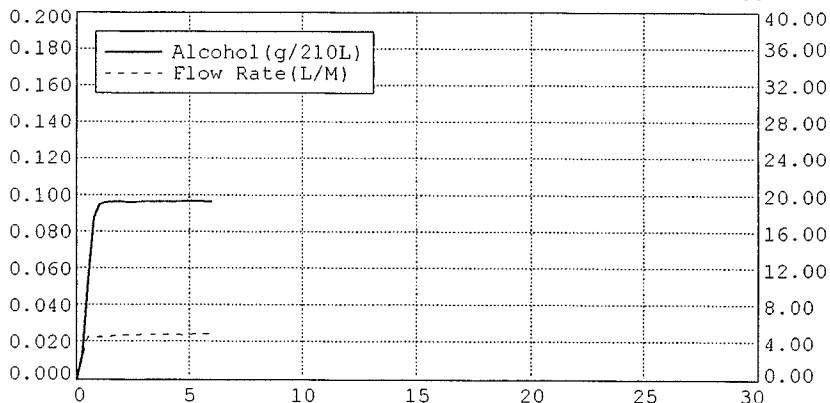
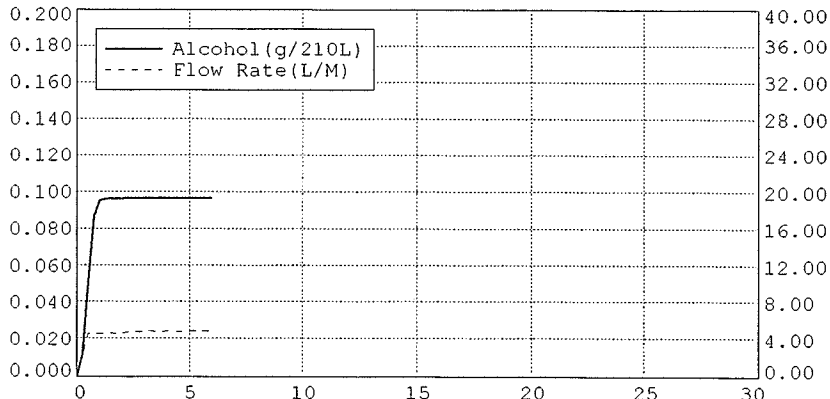
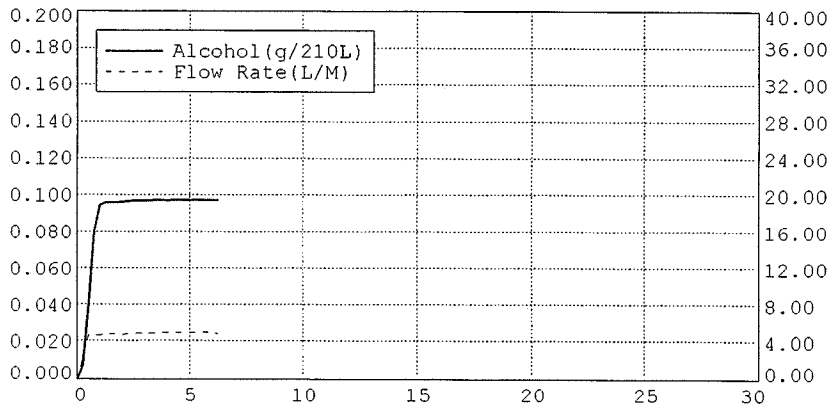
Date: 05/30/2019
Time: 12:46:38

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.76: 0.099
LOT #: AG805903
EXPIRATION: 02/28/2020
TANK PRESSURE: 962 psi

BLANK TEST	0.000	12:47
INTERNAL STANDARD	VERIFIED	12:48
EXTERNAL STANDARD	0.099	12:48
BLANK TEST	0.000	12:49
EXTERNAL STANDARD	0.098	12:49
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.098	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.098	12:51
BLANK TEST	0.000	12:52
EXTERNAL STANDARD	0.098	12:52
BLANK TEST	0.000	12:53

Average = 0.0982
Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100359

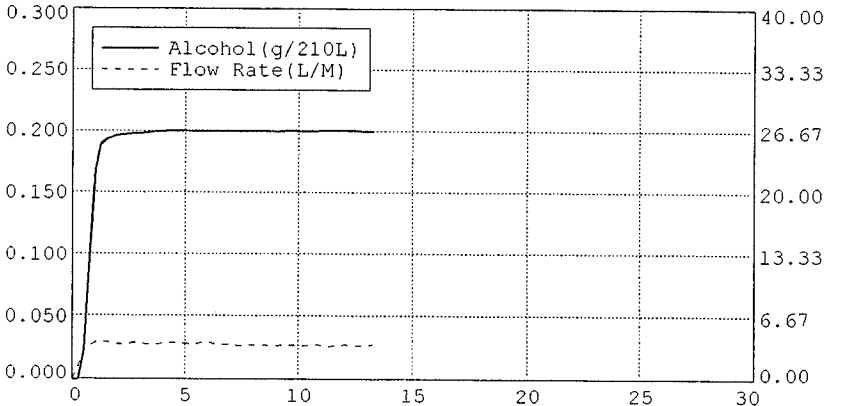
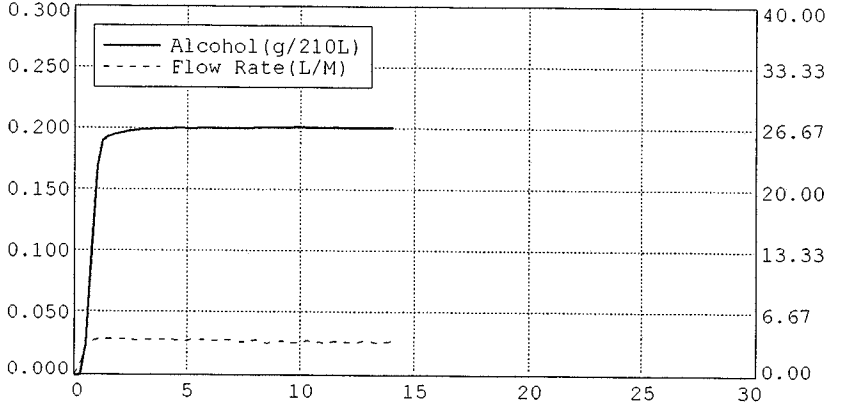
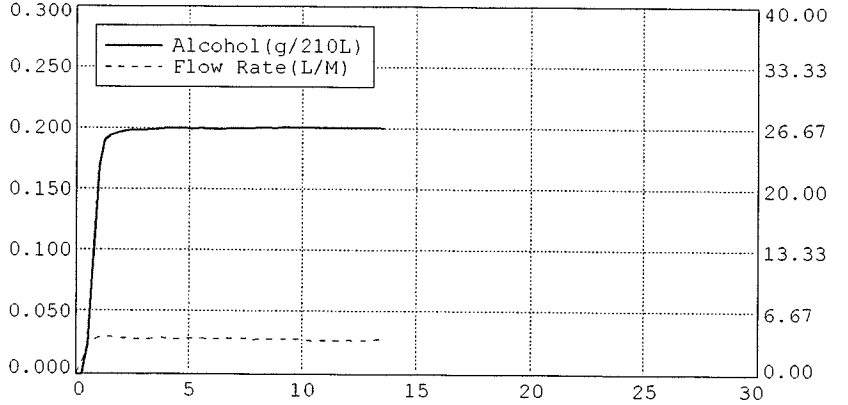
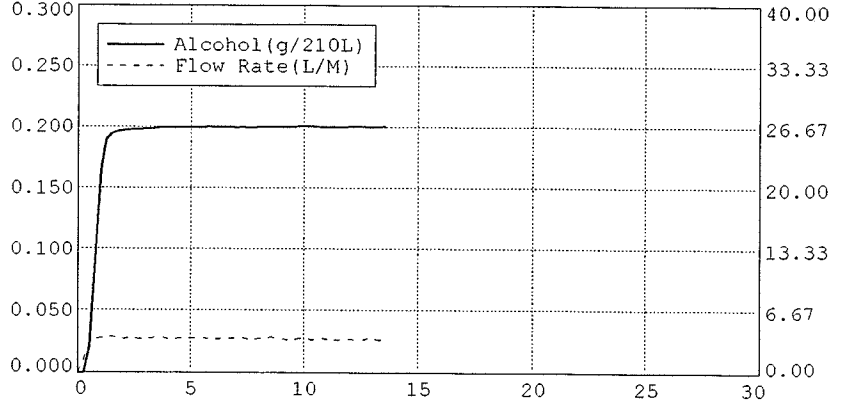
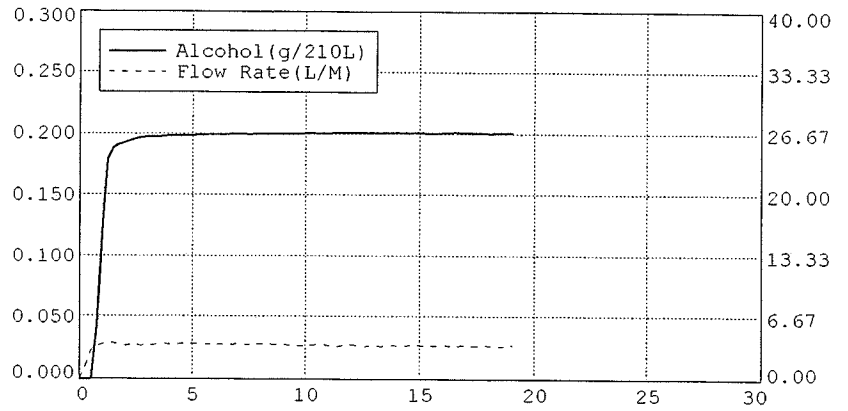
Date: 05/30/2019
 Time: 12:54:12

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: 17340
 EXPIRATION: 10/09/2019

BLANK TEST	0.000	12:59
INTERNAL STANDARD	VERIFIED	12:59
EXTERNAL STANDARD	0.202	13:00
BLANK TEST	0.000	13:01
EXTERNAL STANDARD	0.201	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.201	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.201	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.201	13:05
BLANK TEST	0.000	13:05

Average = 0.2012
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100359

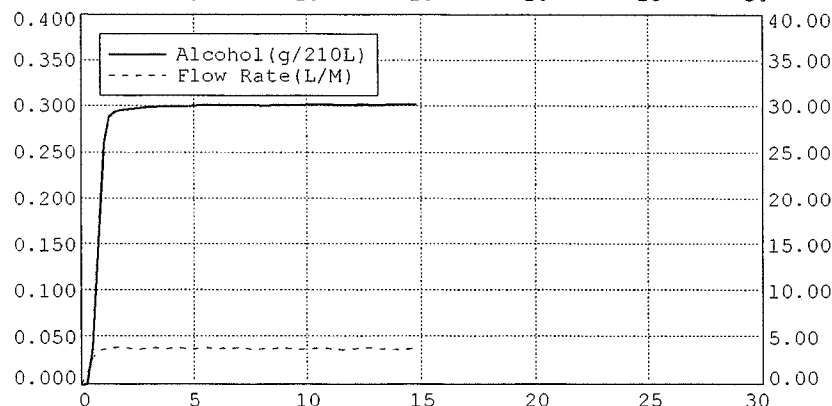
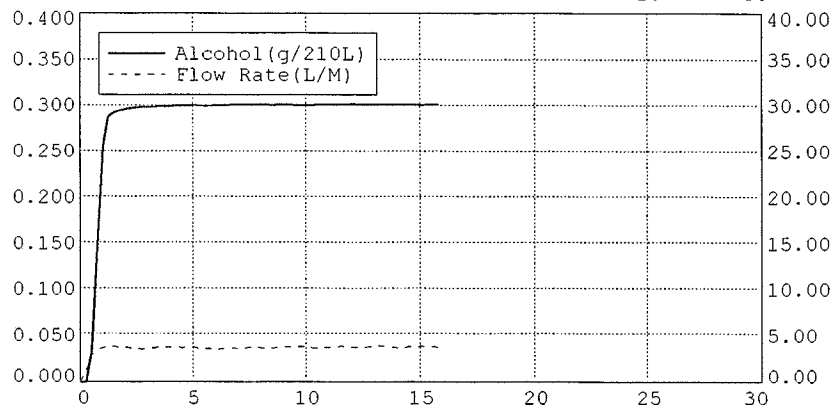
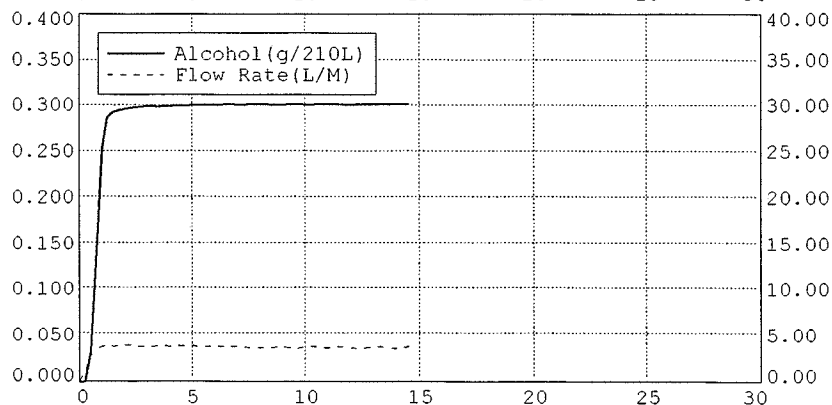
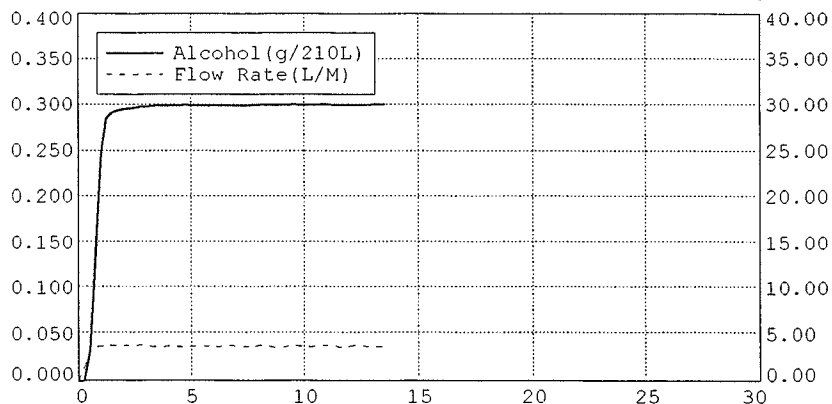
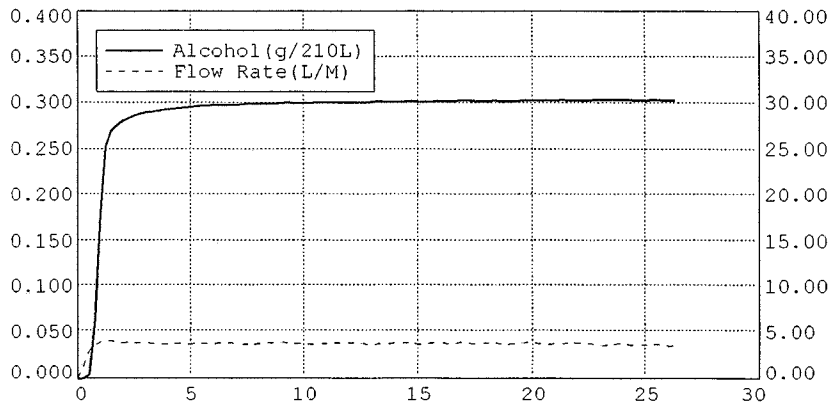
Date: 05/30/2019
 Time: 13:10:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 17350
 EXPIRATION: 10/11/2019

BLANK TEST	0.000	13:11
INTERNAL STANDARD	VERIFIED	13:11
EXTERNAL STANDARD	0.303	13:12
BLANK TEST	0.000	13:13
EXTERNAL STANDARD	0.300	13:13
BLANK TEST	0.000	13:14
EXTERNAL STANDARD	0.301	13:14
BLANK TEST	0.000	13:15
EXTERNAL STANDARD	0.301	13:16
BLANK TEST	0.000	13:17
EXTERNAL STANDARD	0.302	13:17
BLANK TEST	0.000	13:18

Average = 0.3014
 Std Dev = 0.0011



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100359

Date: 05/30/2019
Time: 13:23:40

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

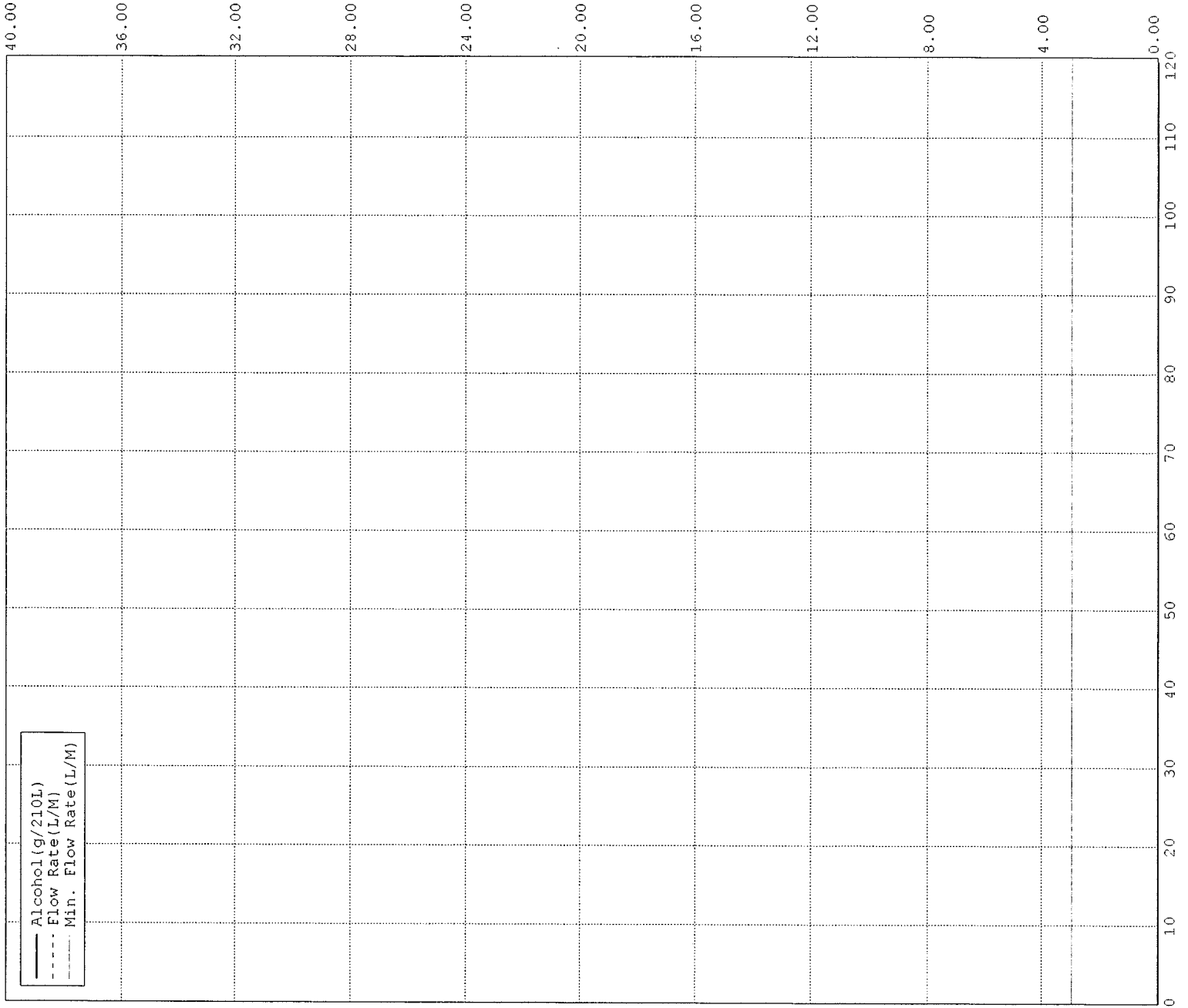
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.75: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:24
BLANK TEST 0.000 13:24
INTERNAL STANDARD VERIFIED 13:24
EXTERNAL STANDARD 0.078 13:25
BLANK TEST 0.000 13:26
SUBJECT SAMPLE INCOMPLETE 13:28



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100359

Date: 05/30/2019

Time: 13:51:15

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 29.74: 0.079

LOT #: AG826101

EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK

BLANK TEST

INTERNAL STANDARD

EXTERNAL STANDARD

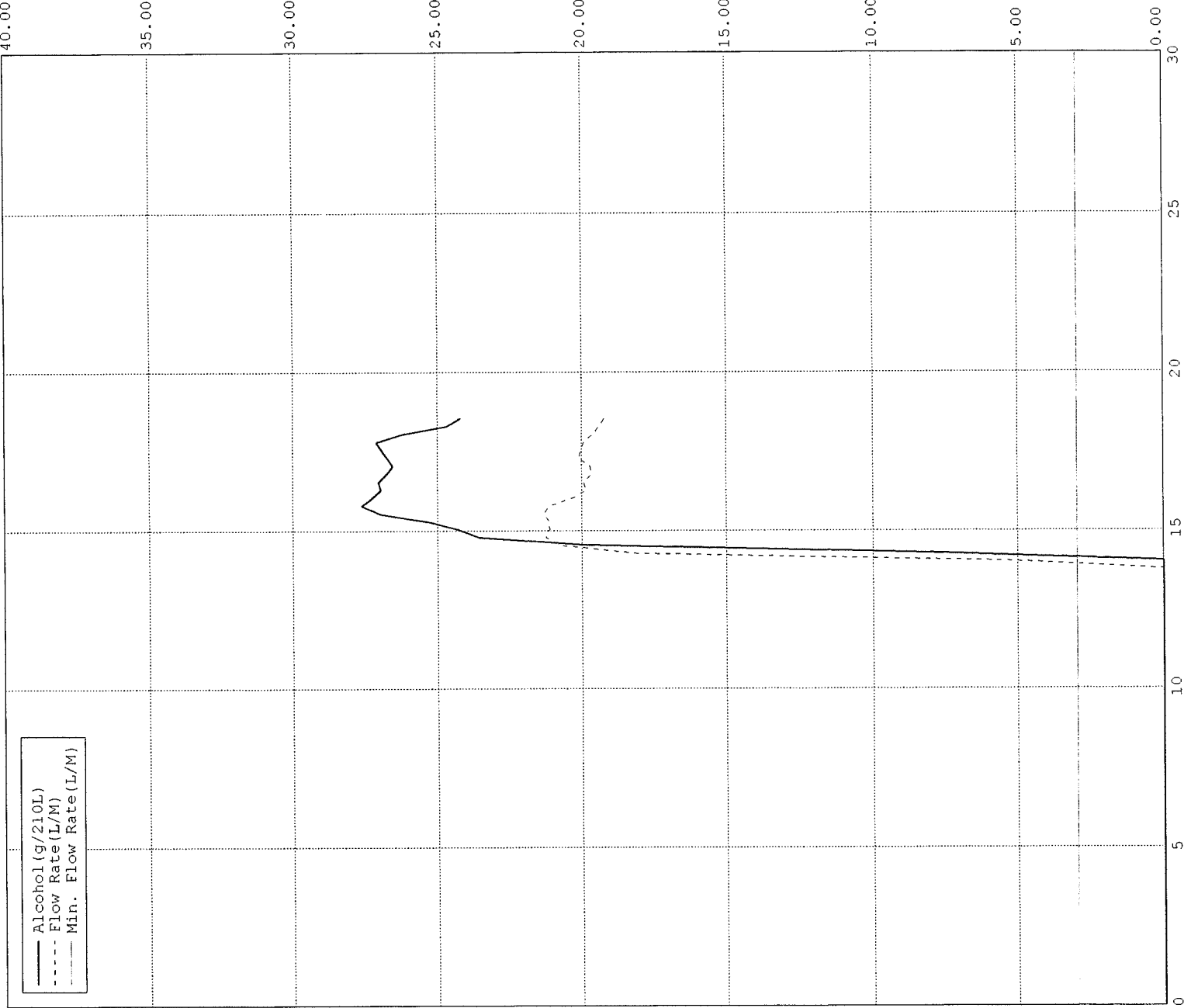
BLANK TEST

SUBJECT SAMPLE

PASSED 13:53
0.000 13:53

VERIFIED 13:54
0.078 13:54

0.000 13:55
INVALID 13:55



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100359

Date: 05/30/2019
Time: 14:06:30

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

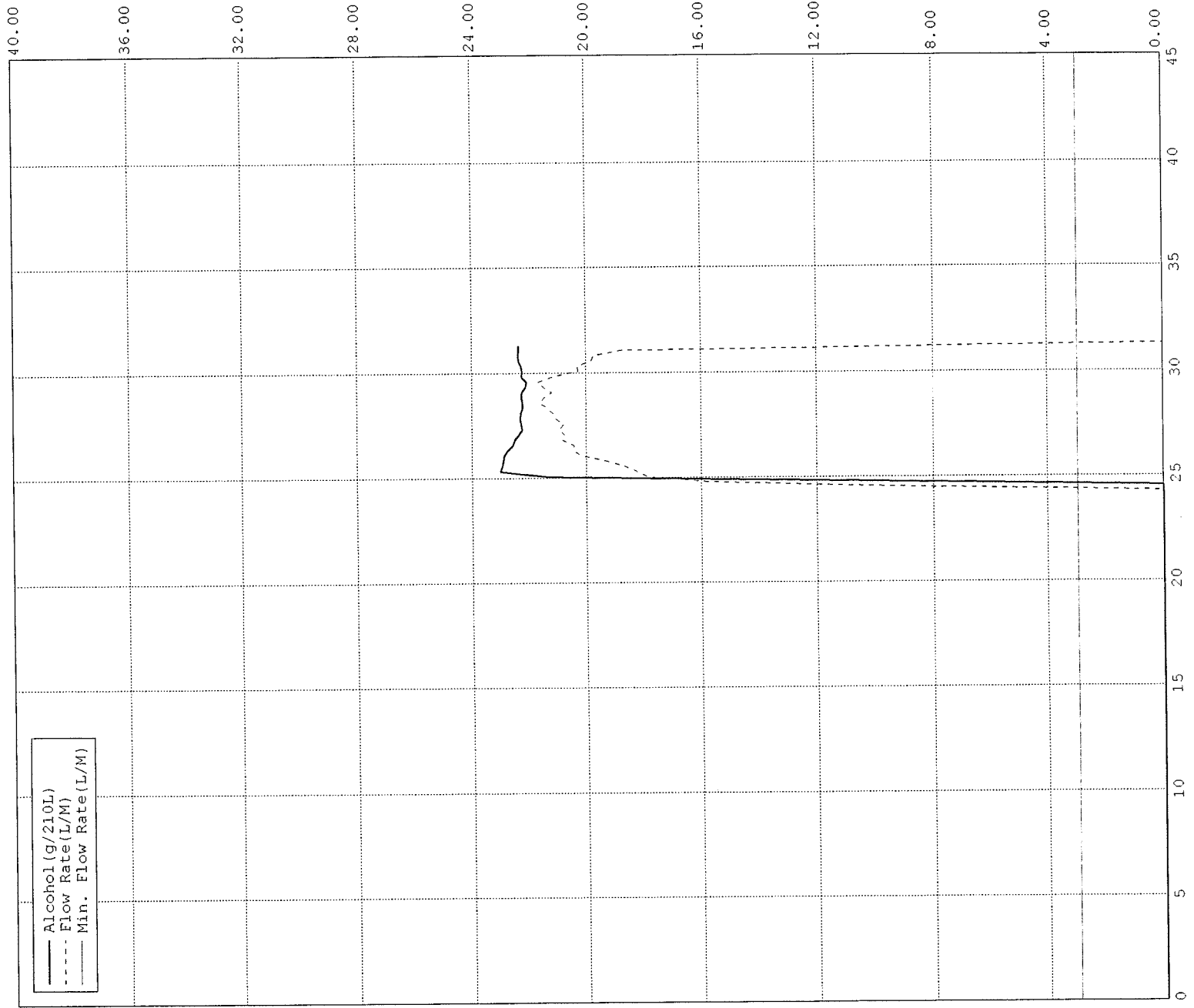
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.73: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	14:08
BLANK TEST	0.000	14:08
INTERNAL STANDARD	VERIFIED	14:08
Xq = 0.102 (0.17%)		
EXTERNAL STANDARD	0.078	14:08
X[1] = 0.0784 (0.0008)	(0.0026)	
BLANK TEST	0.000	14:09
SUBJECT SAMPLE	XXX	14:10
X[1] = 0.1120 (-0.0157)	(0.0018)	

Interference Detected

Filter 2 Avg: 0.0007

Filter 3 Avg: 0.0022



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100359

Date: 05/30/2019
Time: 14:13:34

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

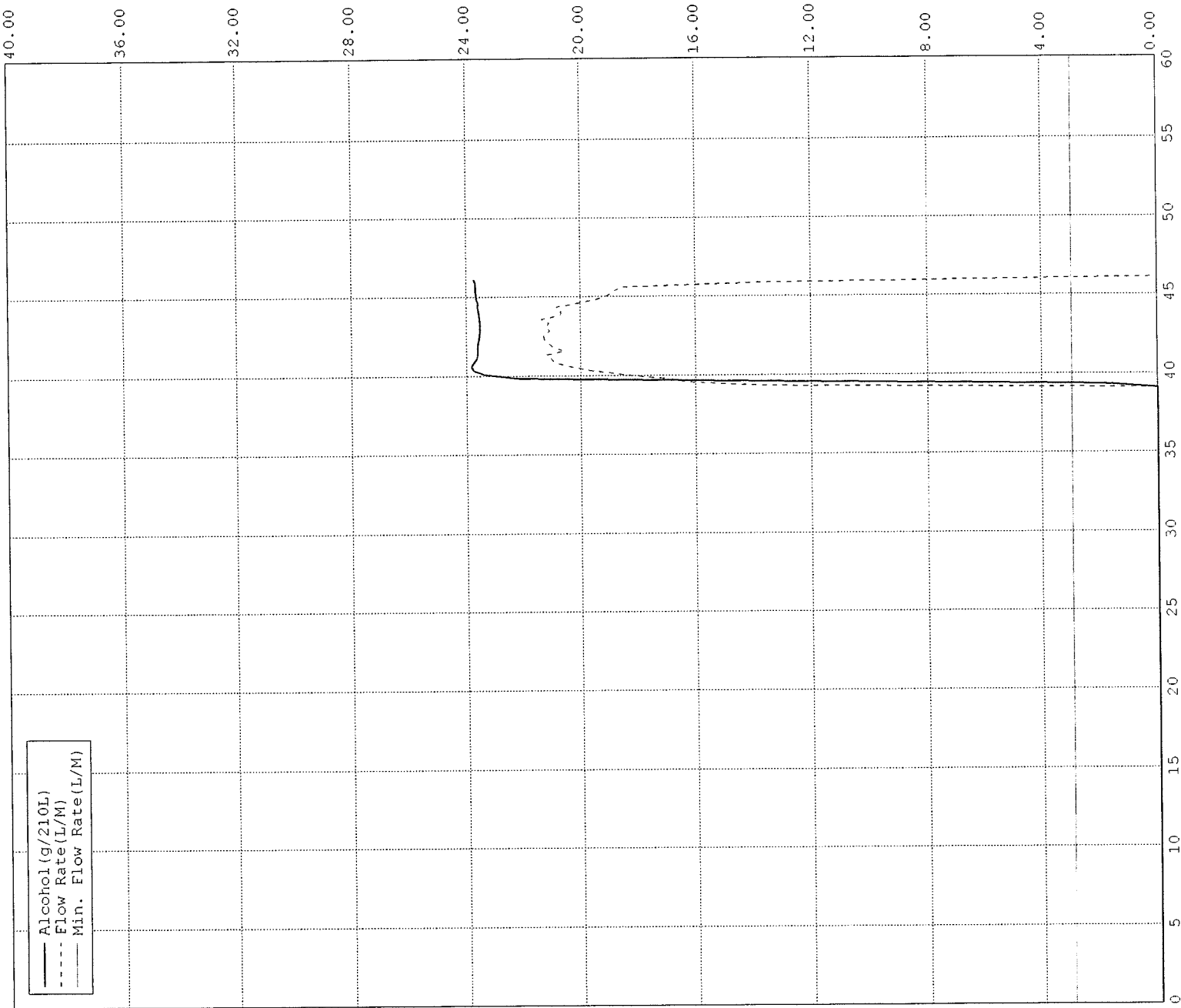
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.73: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 14:16
BLANK TEST 0.000 14:16
INTERNAL STANDARD VERIFIED 14:16
Xq = 0.102 (0.52%) 0.078 14:16
EXTERNAL STANDARD X[1] = 0.0784 (0.0010) (0.0018) 0.000 14:17
BLANK TEST XXX 14:18
SUBJECT SAMPLE X[1] = 0.1189 (-0.0239) (0.0020)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100359

Date: 05/30/2019
Time: 14:21:19

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

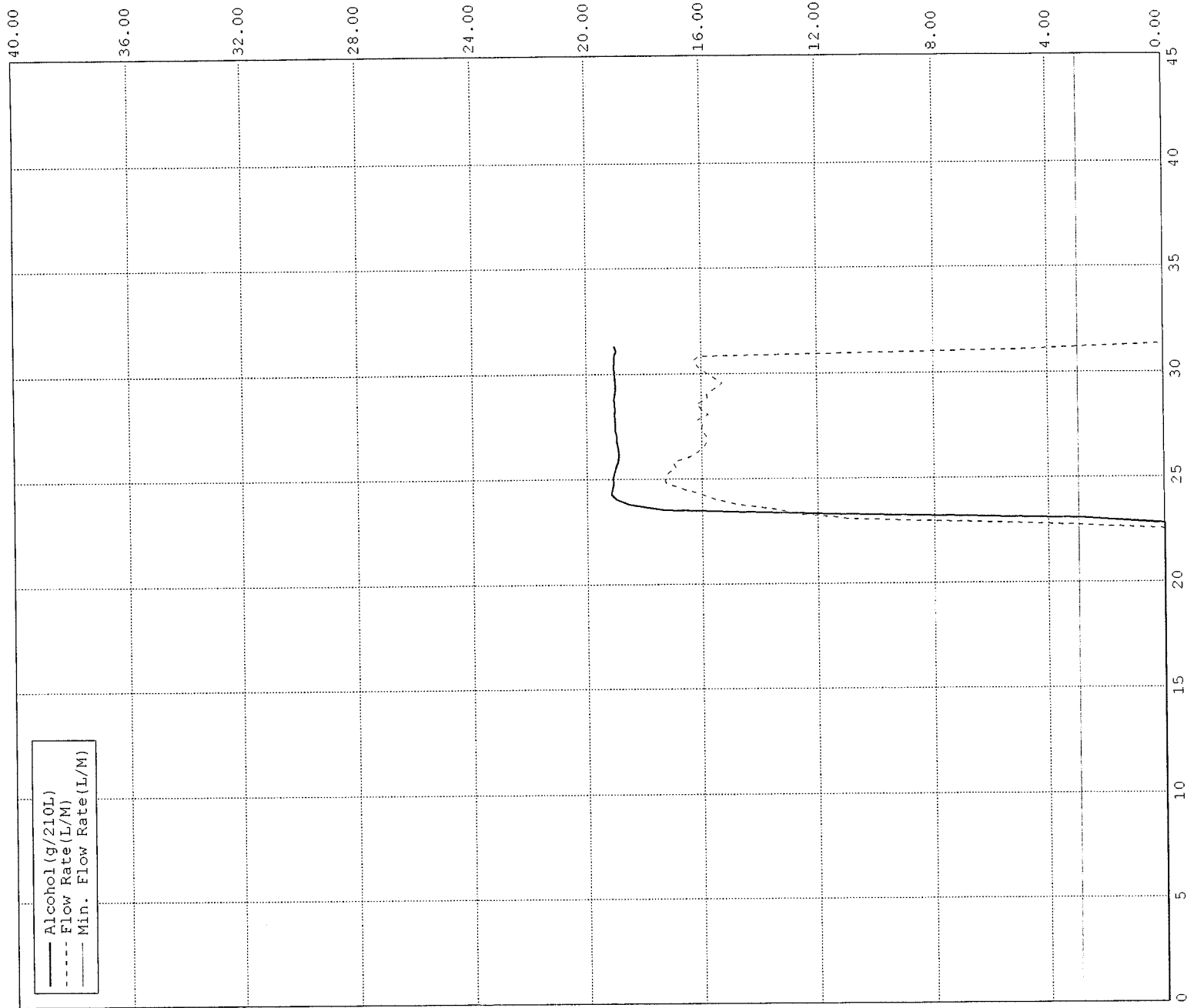
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.73: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	14:22
BLANK TEST	0.000	14:23
INTERNAL STANDARD	VERIFIED	14:23
$X_q = 0.102 (0.52\%)$		
EXTERNAL STANDARD	0.079	14:23
$X[1] = 0.0785 (0.0009) (0.0024)$		
BLANK TEST	0.000	14:24
SUBJECT SAMPLE (Vol=2.14L)	0.095	14:24
$X[1] = 0.0956 (0.0002) (0.0010)$		
BLANK TEST	0.000	14:25
EXTERNAL STANDARD	0.078	14:26
$X[1] = 0.0778 (0.0001) (0.0018)$		
BLANK TEST	0.000	14:27



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100359

Date: 05/30/2019
Time: 13:37:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

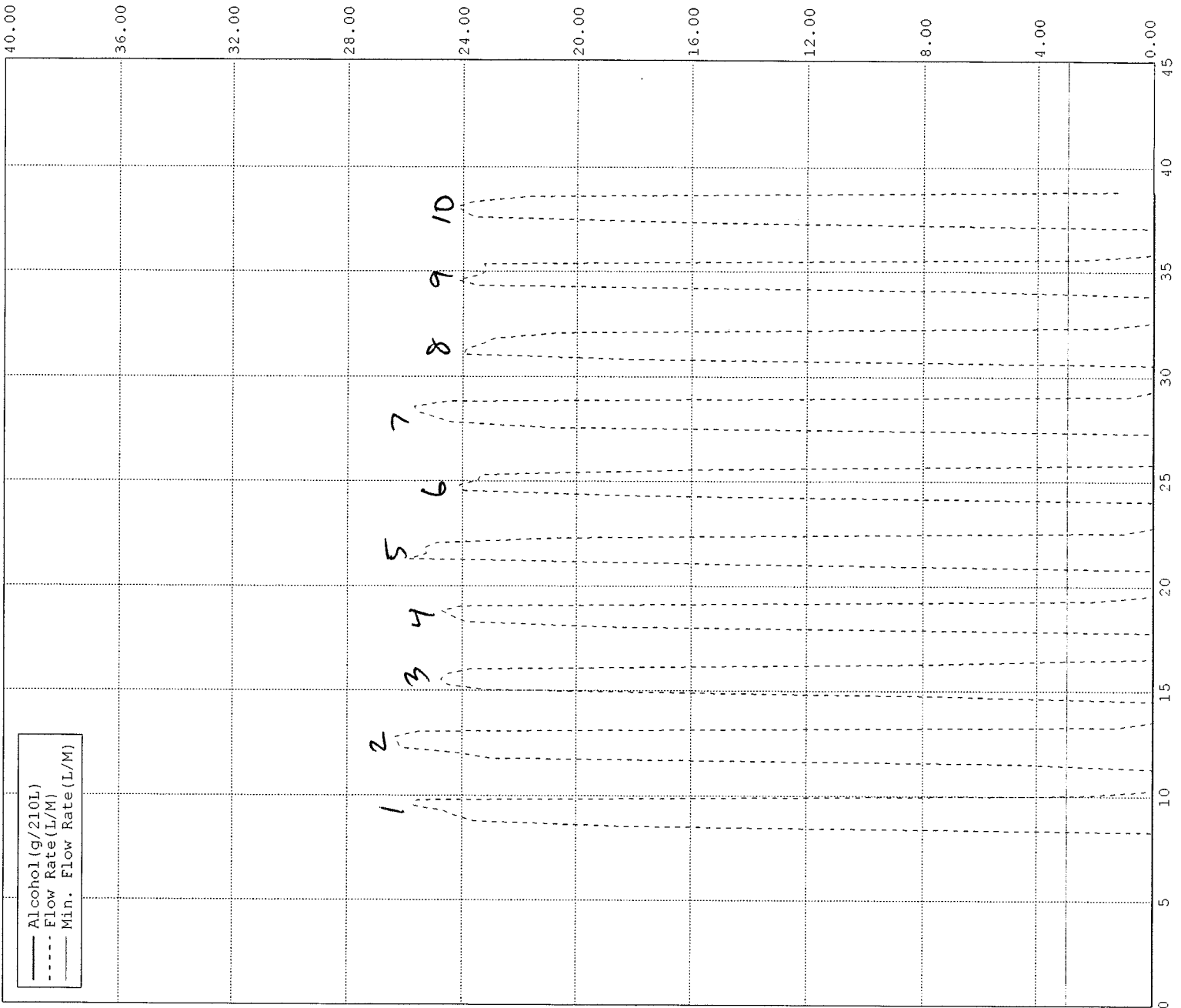
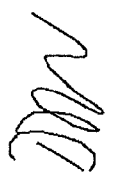
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.74: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:39
BLANK TEST 0.000 13:39
INTERNAL STANDARD VERIFIED 13:39
EXTERNAL STANDARD 0.078 13:40
BLANK TEST 0.000 13:41
SUBJECT SAMPLE XXX 13:41

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100359

Date: 05/30/2019
Time: 14:00:25

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

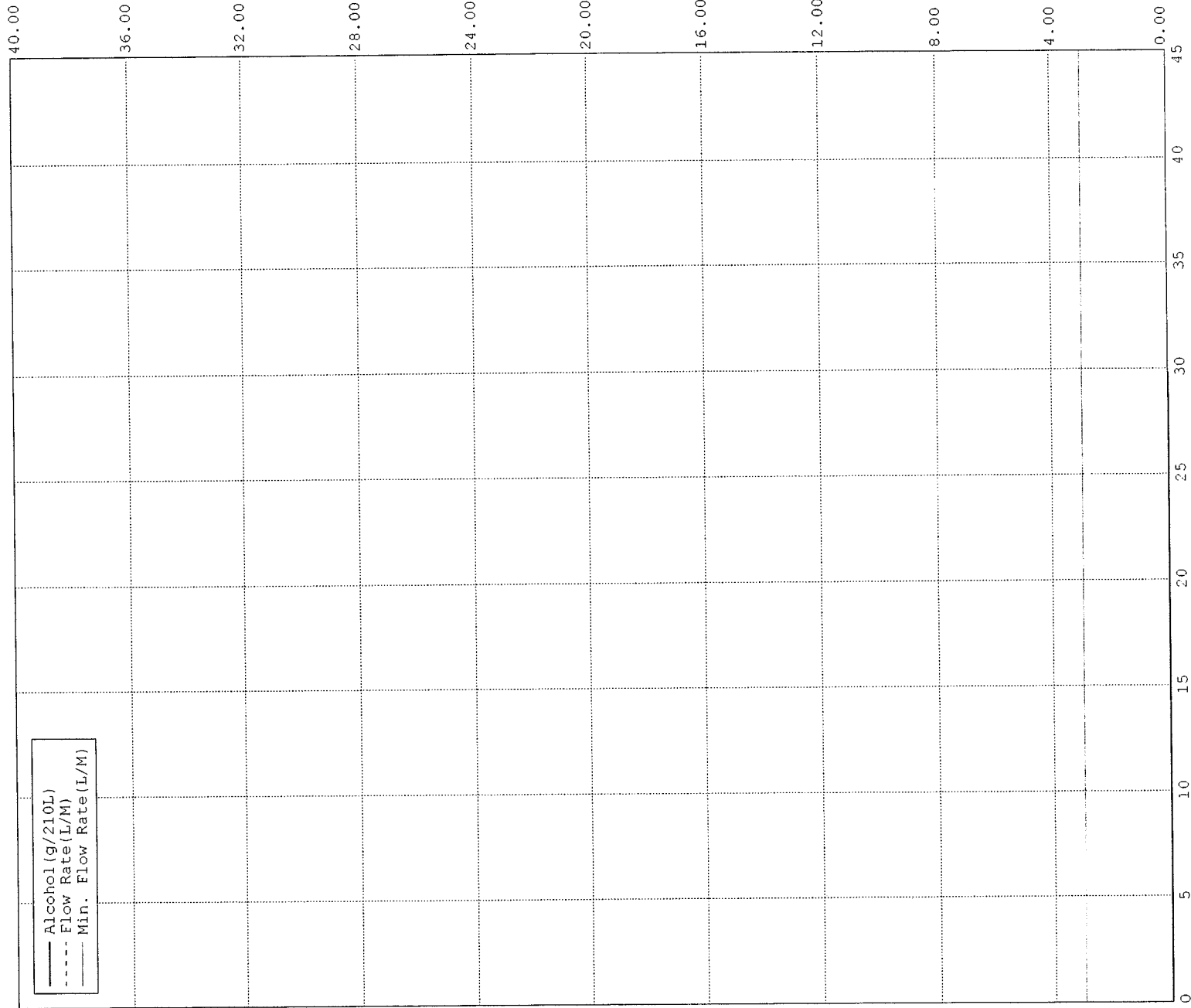
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.74: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK
BLANK TEST PASSED 14:01
INTERNAL STANDARD VERIFIED 14:01
EXTERNAL STANDARD 0.078 14:02
BLANK TEST 0.000 14:02

RFI DETECTED

MW

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



40.00

36.00

32.00

28.00

24.00

20.00

16.00

12.00

8.00

4.00

0.00

0 5 10 15 20 25 30 35 40 45

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100359

Date: 05/30/2019
Time: 14:48:45

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 29.71: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	14:49
BLANK TEST	0.000	14:49
INTERNAL STANDARD	VERIFIED	14:50
EXTERNAL STANDARD	0.079	14:50
BLANK TEST	0.000	14:51
SUBJECT SAMPLE (Vol=2.90L)	0.000	14:51
BLANK TEST	0.000	14:52
EXTERNAL STANDARD	0.079	14:52
BLANK TEST	0.000	14:53

