

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 100421 Analyst Derek Walton 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 1.6 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 AG733403 Exp 11/30/19

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 Qwth Lot 17340 Exp 10/09/19

1. Simulator S/N DR4177 Date Calibrated 06/04/18

vi. 0.300g/210L Mnf Qwth Lot 17350 Exp 10/11/19

1. Simulator S/N DR6267 Date Calibrated 06/04/18

5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

d. Exceeded attempts

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

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

ii. Isopropanol - Mnf Qwth Lot 18070 Level 0.100 Exp 02/26/20

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

iii. Negative Control - Mnf Qwth 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

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 05/30/19

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 05/30/2019
Time: 08:26:50

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.77 V PASSED
(1.06 V - 2.48 V)
Cooler Voltage = 1.75 V PASSED
(1.05 V - 2.45 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 535 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.738 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 = 0.099 0.09% (0.00% - 4.00%) PASSED

Technician Screen

Joint Base Elmendorf - Richardson
DATAMASTER dmt: 100421

Date: 05/30/2019
Time: 8:46 AM

Temperatures (°C)

Sample Cell: 48.7°C
Breath Tube: 45.7°C

Current Barometer 29.8 in
Volume (Ltr) 1.51

Settings

Lamp: 1.71 V
Bias: 80 V
Cooler: 1.80 V
Chopper: 524 Hz

Voltages (V)

Flow: 1.08 V
Detector: 0.037 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 05/02/2019
Time: 07:30:16

OPERATOR NAME:
INTOX I I
CERTIFICATE #: I

Ca = 0.2000
CAL = 0.985310 0.800 <= CAL < 1.200
b1 = 0.0013 0.0000 <= b1 < 0.0040
b2 = 0.0035 0.0010 <= b2 < 0.0100
b3 = 0.0008 0.0000 <= b3 < 0.0040
Xq = 0.0992 0.0500 <= Xq < 0.2000
a21 = 1.125463 1.050 <= a21 < 1.300
a31 = 0.461934 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 05/30/2019
Time: 08:53:57

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

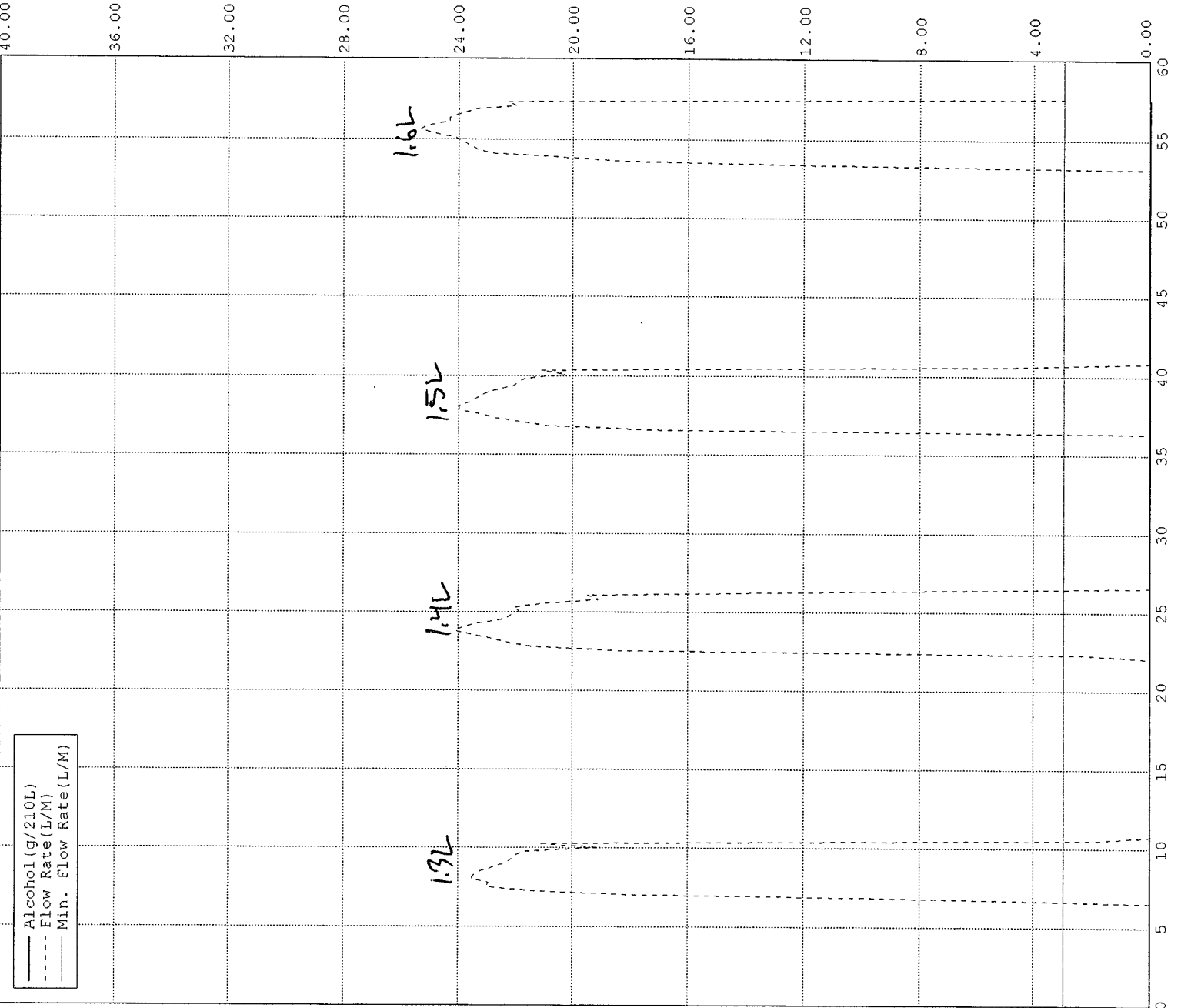
DEPT/AGENCY:
MINIMUM VOLUME
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	08:55
BLANK TEST	0.000	08:55
INTERNAL STANDARD	VERIFIED	08:55
EXTERNAL STANDARD	0.079	08:55
BLANK TEST	0.000	08:56
SUBJECT SAMPLE (Vol=1.60L)	0.000	08:57
BLANK TEST	0.000	08:58
EXTERNAL STANDARD	0.080	08:58
BLANK TEST	0.000	08:59

DW



LINEARITY CHECK

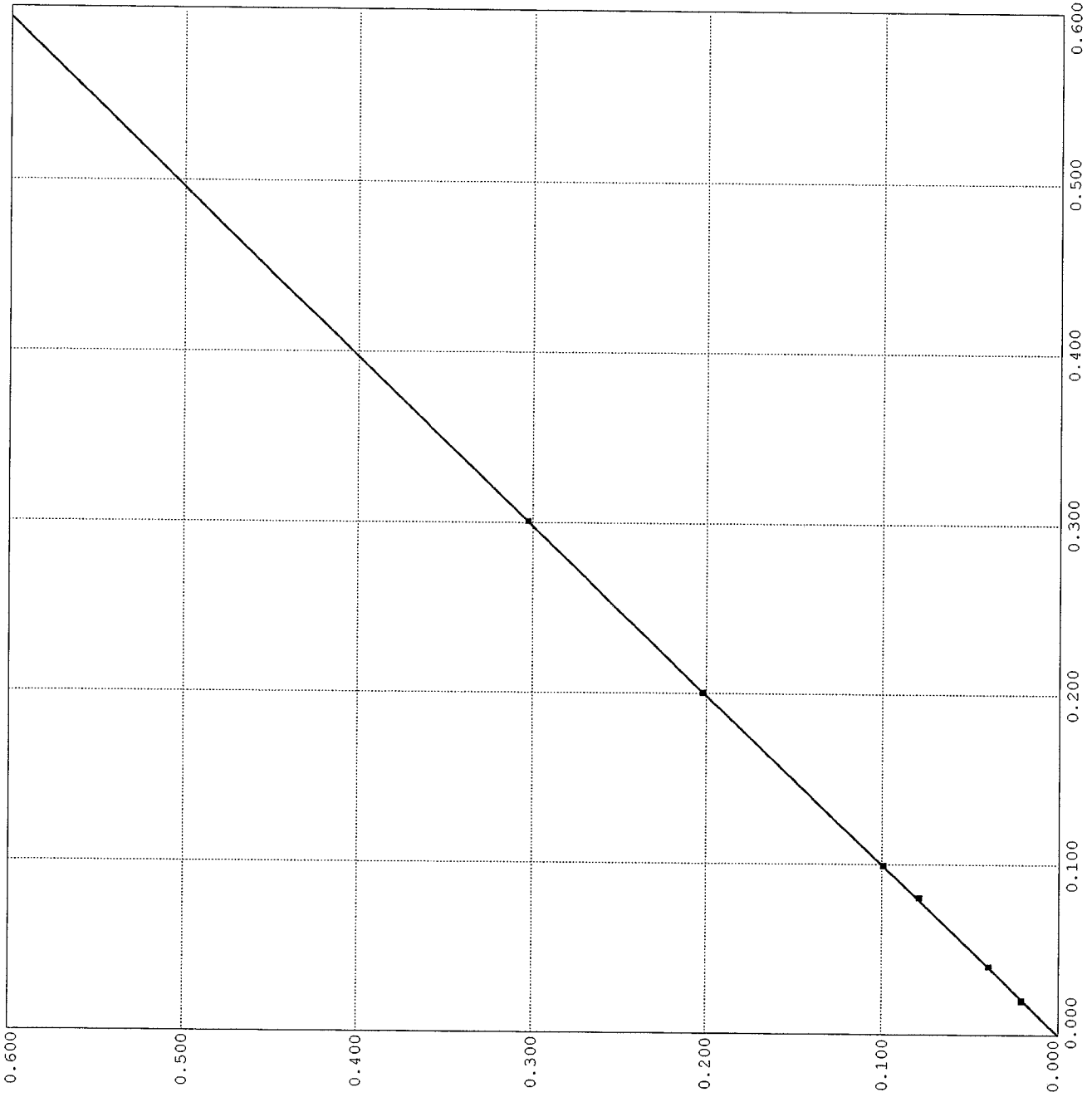
Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 05/30/2019
Time: 09:06:56

SUPERVISOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0216	0.0005
0.040	0.0406	0.0005
0.080	0.0800	0.0000
0.099	0.1002	0.0004
0.200	0.2028	0.0008
0.300	0.3034	0.0005

SLOPE = 1.010010
R² = 0.999954



DWT

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

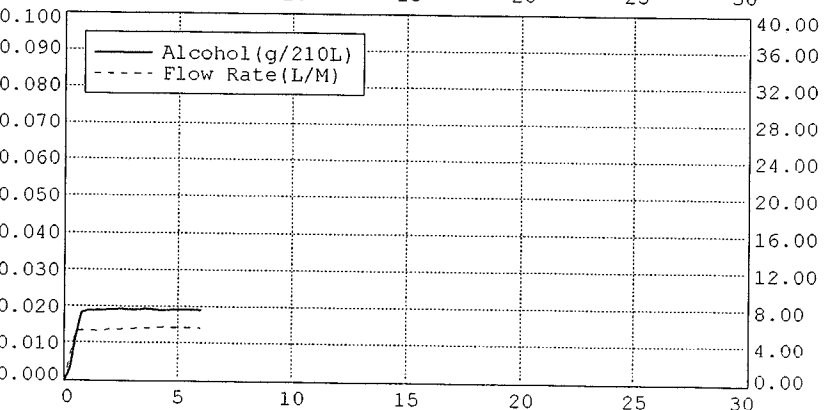
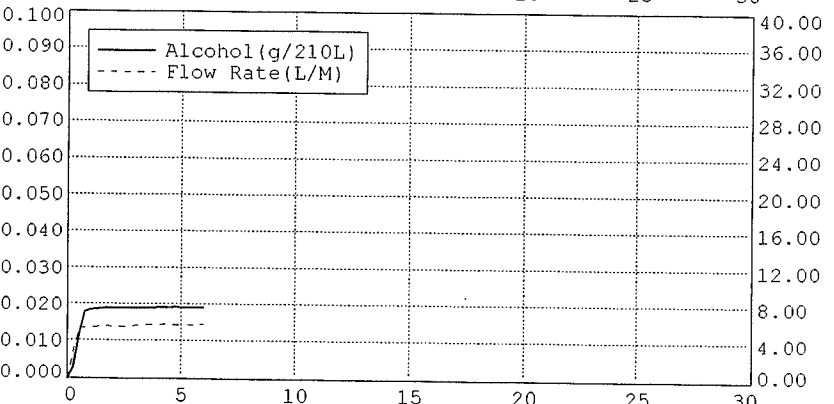
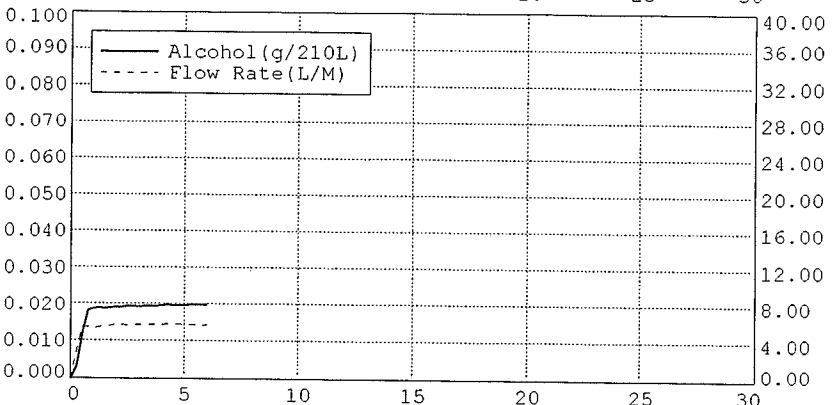
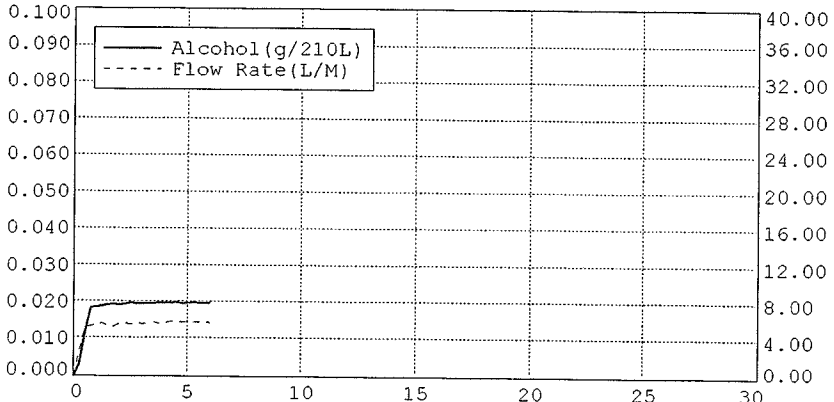
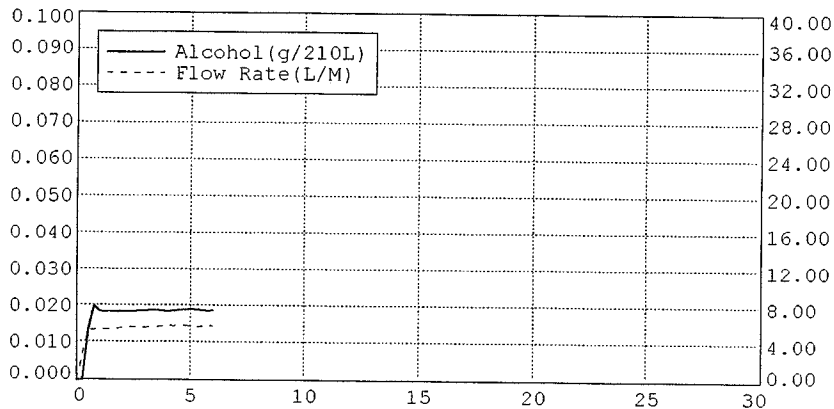
Date: 05/30/2019
 Time: 09:06:58

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.77: 0.020
 LOT #: AG805804
 EXPIRATION: ~~02/28/2020~~ 02/27/2020 06/03/19
 TANK PRESSURE: 695 psi

BLANK TEST	0.000	09:08
INTERNAL STANDARD	VERIFIED	09:08
EXTERNAL STANDARD	0.021	09:08
BLANK TEST	0.000	09:09
EXTERNAL STANDARD	0.021	09:09
BLANK TEST	0.000	09:10
EXTERNAL STANDARD	0.022	09:10
BLANK TEST	0.000	09:11
EXTERNAL STANDARD	0.022	09:12
BLANK TEST	0.000	09:12
EXTERNAL STANDARD	0.022	09:13
BLANK TEST	0.000	09:14

Average = 0.0216
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

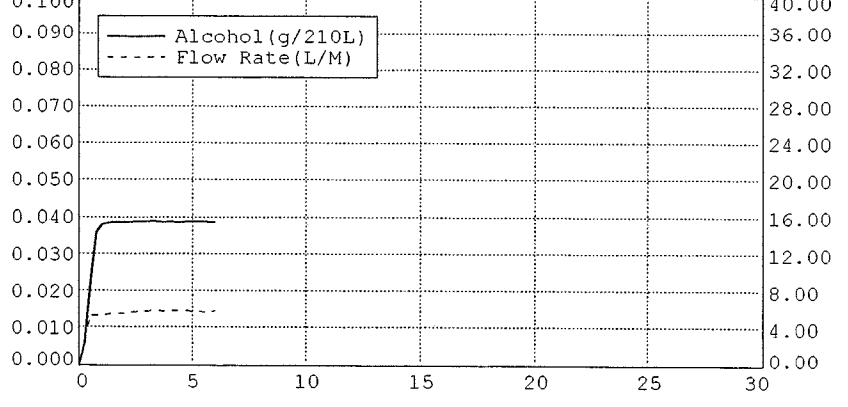
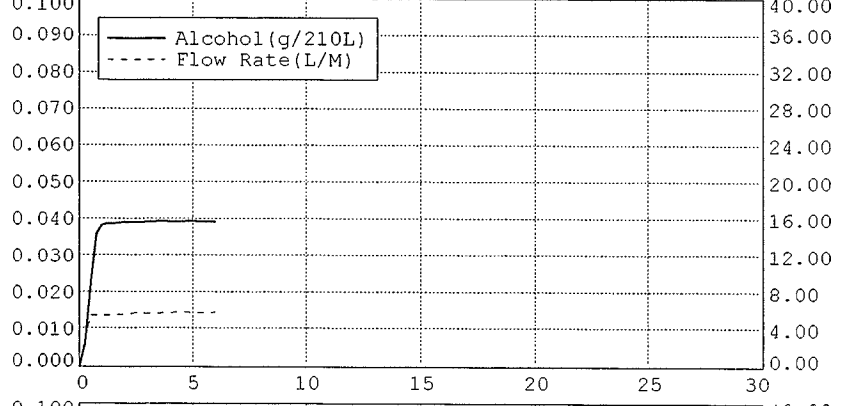
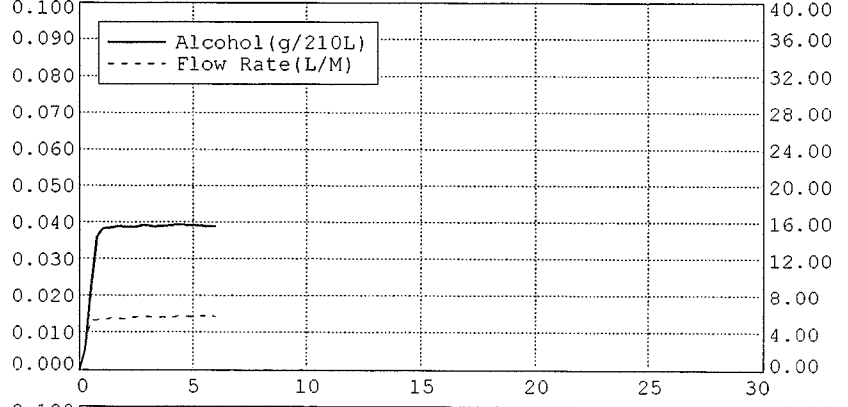
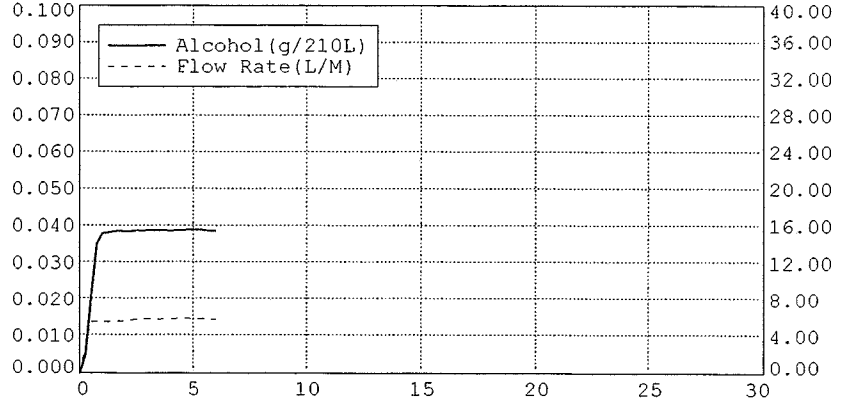
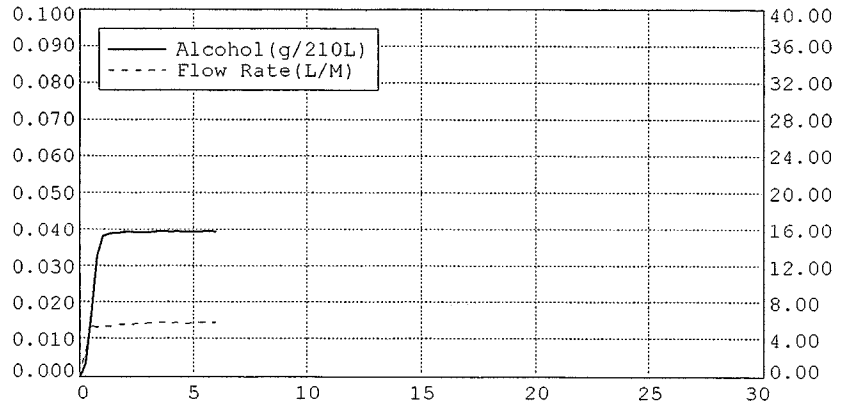
Date: 05/30/2019
 Time: 09:14:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.76: 0.040
 LOT #: AG733403
 EXPIRATION: 11/30/2019
 TANK PRESSURE: 685 psi

BLANK TEST	0.000	09:16
INTERNAL STANDARD	VERIFIED	09:16
EXTERNAL STANDARD	0.041	09:16
BLANK TEST	0.000	09:17
EXTERNAL STANDARD	0.040	09:17
BLANK TEST	0.000	09:18
EXTERNAL STANDARD	0.041	09:18
BLANK TEST	0.000	09:19
EXTERNAL STANDARD	0.041	09:19
BLANK TEST	0.000	09:20
EXTERNAL STANDARD	0.040	09:20
BLANK TEST	0.000	09:21

Average = 0.0406
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

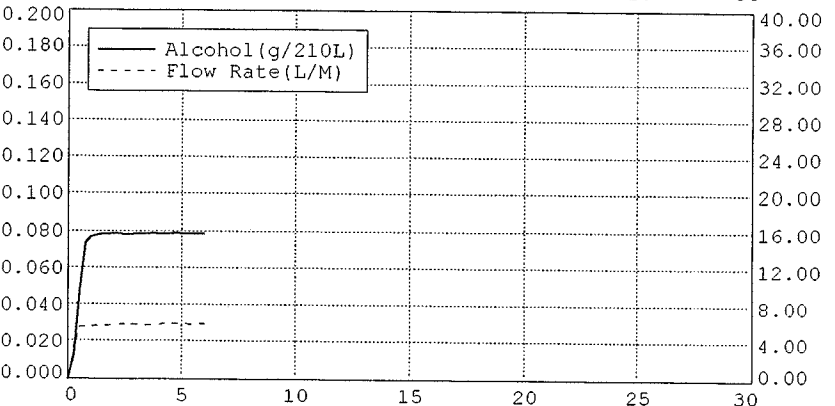
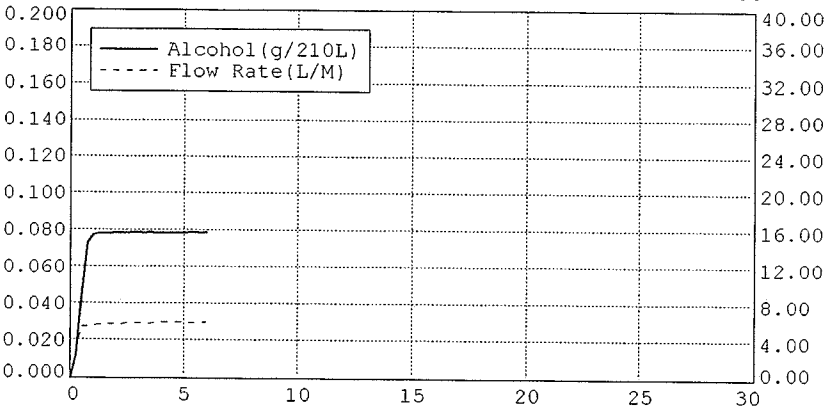
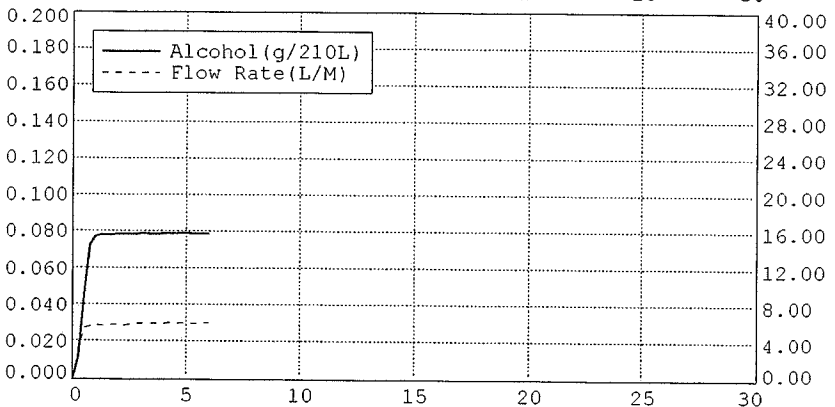
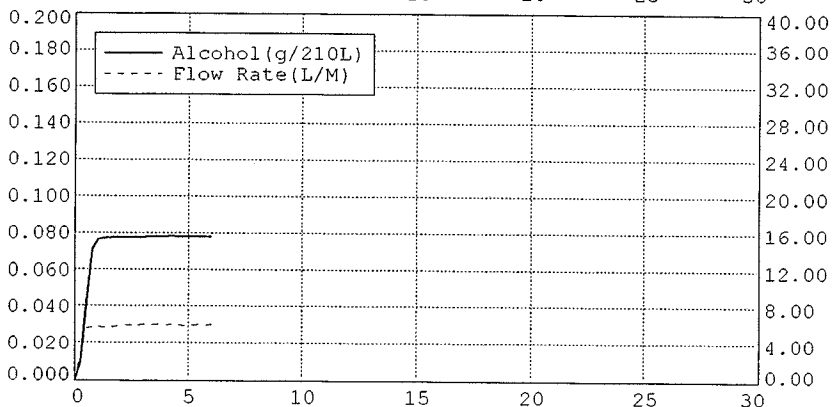
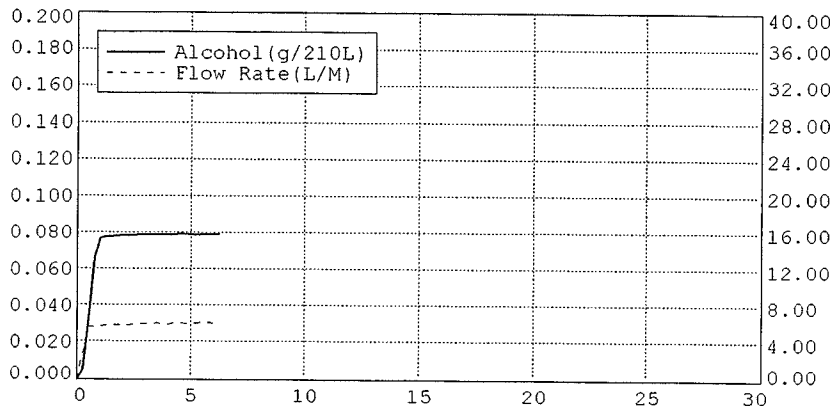
Date: 05/30/2019
 Time: 09:22:27

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.75: 0.080
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 812 psi

BLANK TEST	0.000	09:23
INTERNAL STANDARD	VERIFIED	09:24
EXTERNAL STANDARD	0.080	09:24
BLANK TEST	0.000	09:25
EXTERNAL STANDARD	0.080	09:25
BLANK TEST	0.000	09:26
EXTERNAL STANDARD	0.080	09:26
BLANK TEST	0.000	09:27
EXTERNAL STANDARD	0.080	09:27
BLANK TEST	0.000	09:28
EXTERNAL STANDARD	0.080	09:28
BLANK TEST	0.000	09:29

Average = 0.0800
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

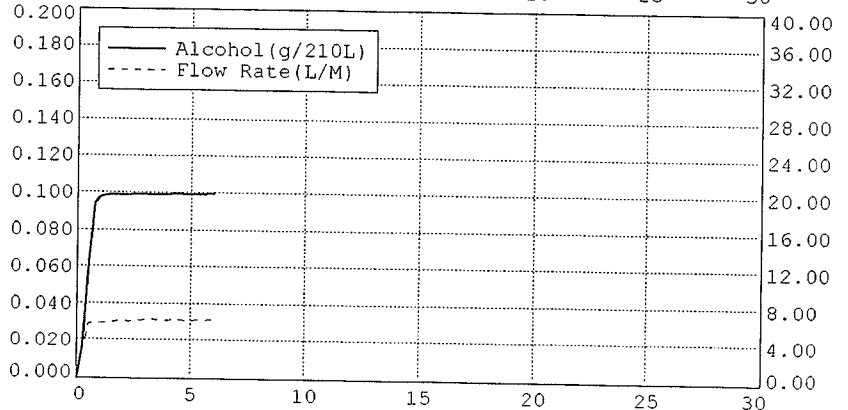
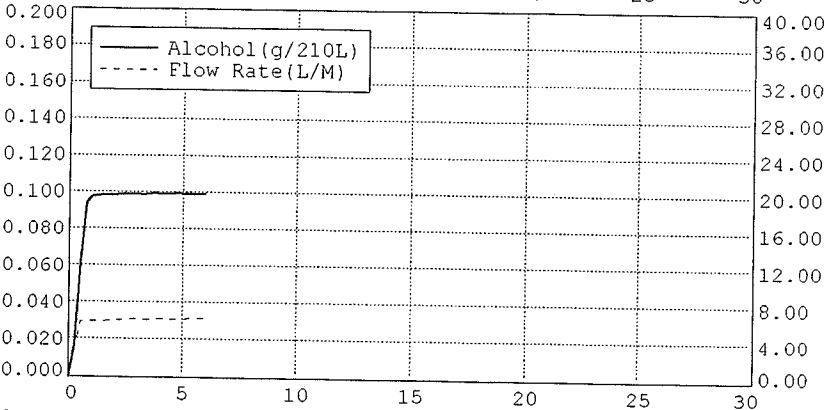
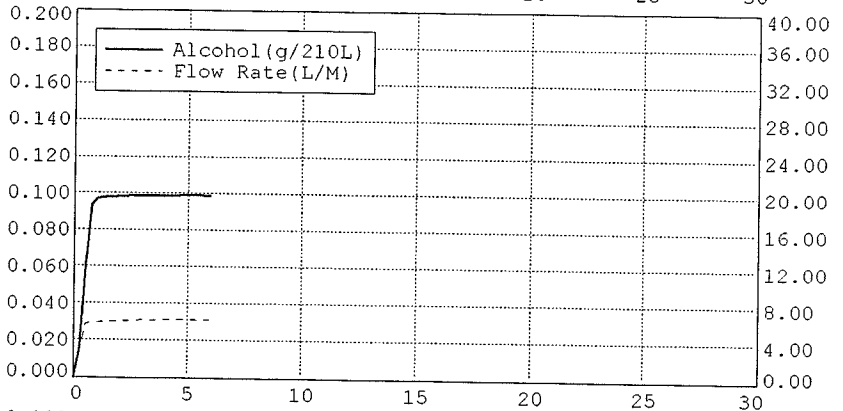
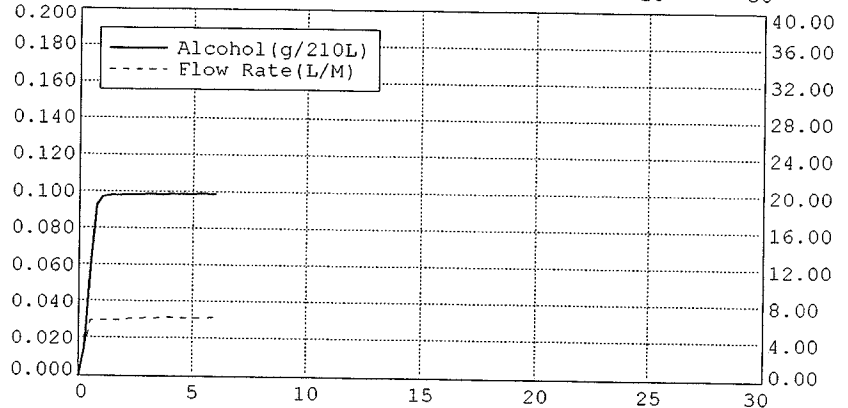
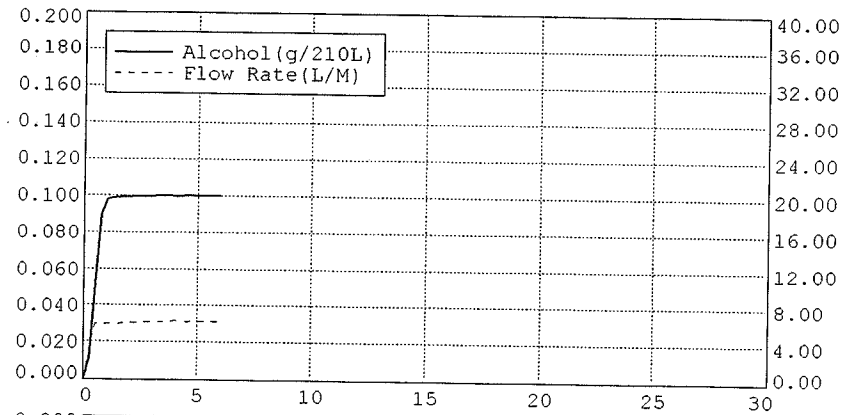
Date: 05/30/2019
 Time: 09:30:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.75: 0.099
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 985 psi

BLANK TEST	0.000	09:32
INTERNAL STANDARD	VERIFIED	09:32
EXTERNAL STANDARD	0.101	09:32
BLANK TEST	0.000	09:33
EXTERNAL STANDARD	0.100	09:33
BLANK TEST	0.000	09:34
EXTERNAL STANDARD	0.100	09:34
BLANK TEST	0.000	09:35
EXTERNAL STANDARD	0.100	09:35
BLANK TEST	0.000	09:36
EXTERNAL STANDARD	0.100	09:37
BLANK TEST	0.000	09:37

Average = 0.1002
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

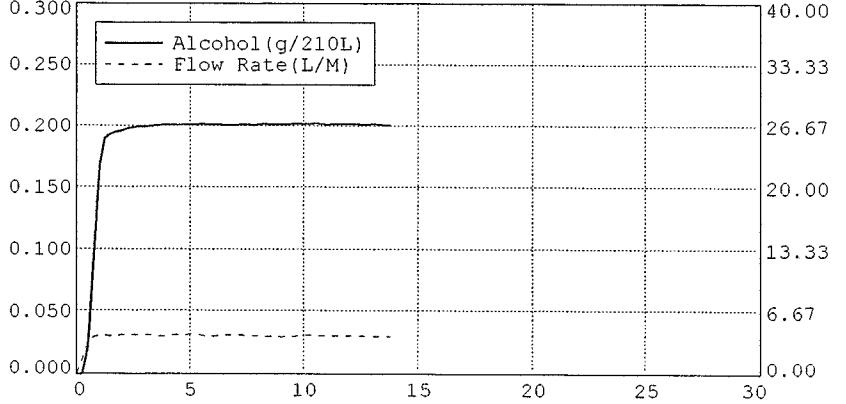
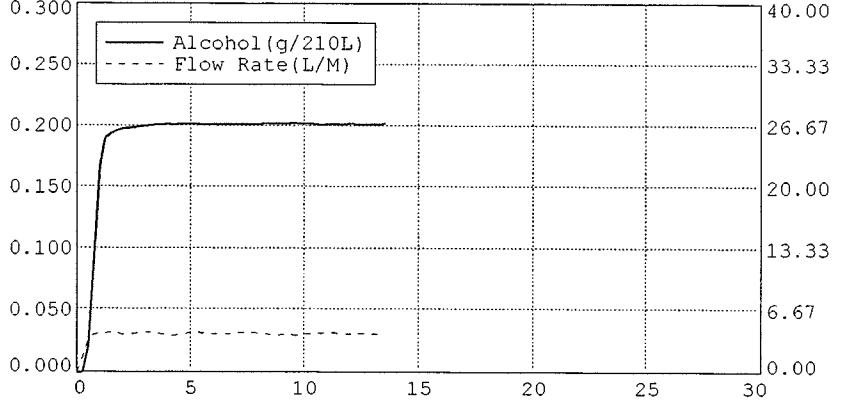
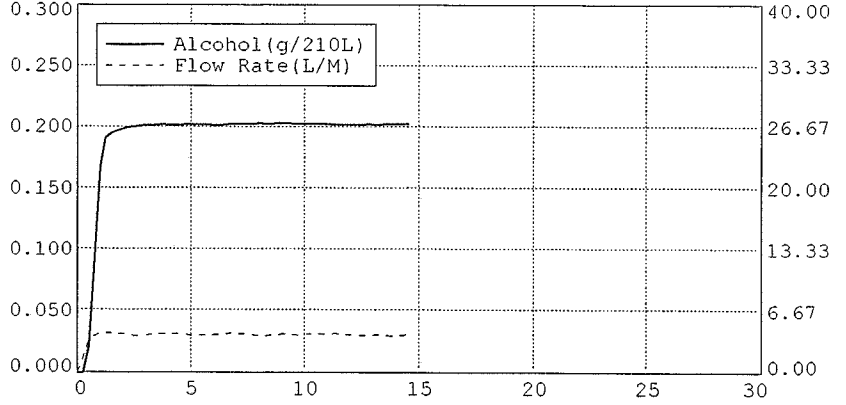
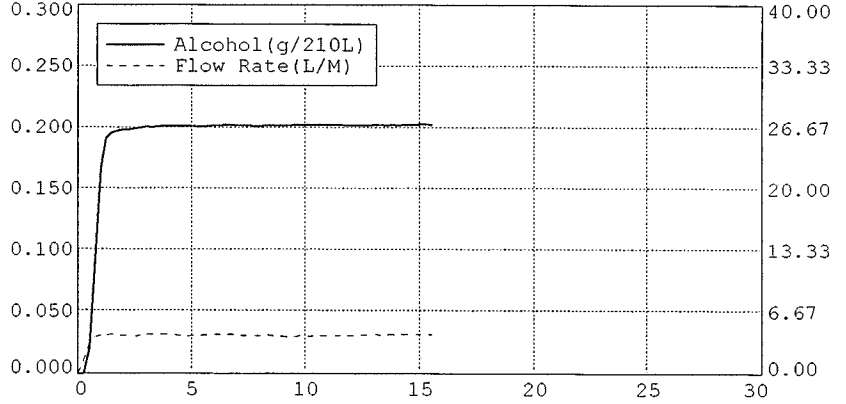
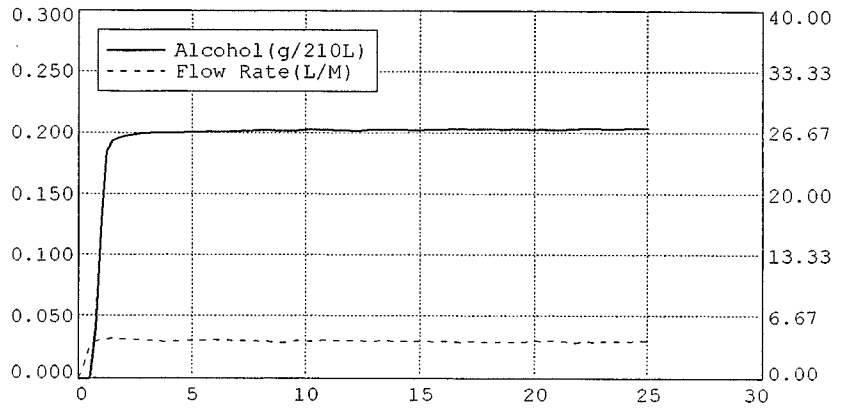
Date: 05/30/2019
 Time: 09:43:19

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	09:48
INTERNAL STANDARD	VERIFIED	09:48
EXTERNAL STANDARD	0.204	09:49
BLANK TEST	0.000	09:50
EXTERNAL STANDARD	0.203	09:50
BLANK TEST	0.000	09:51
EXTERNAL STANDARD	0.203	09:51
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.202	09:53
BLANK TEST	0.000	09:53
EXTERNAL STANDARD	0.202	09:54
BLANK TEST	0.000	09:55

Average = 0.2028
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 6

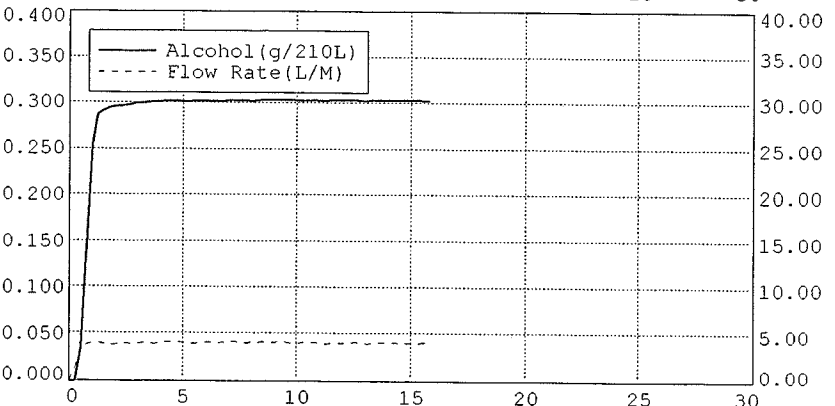
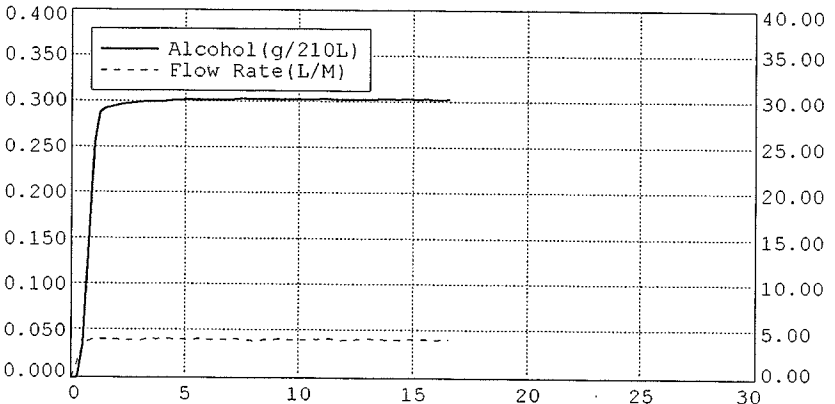
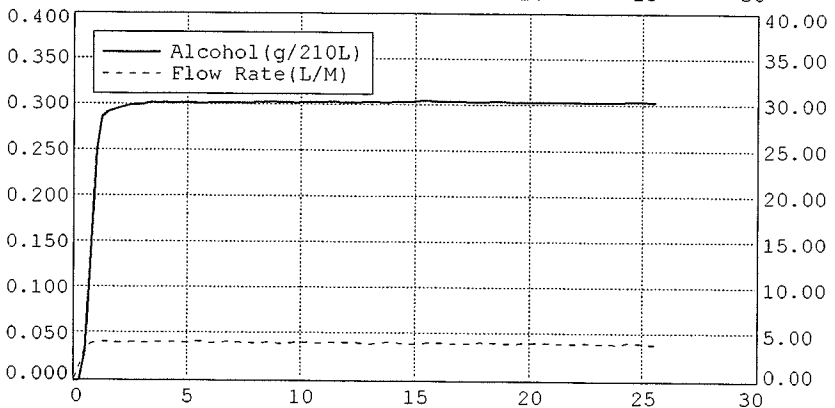
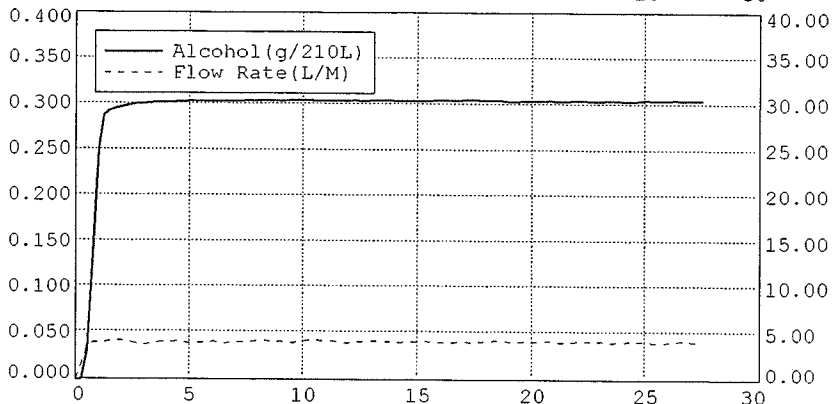
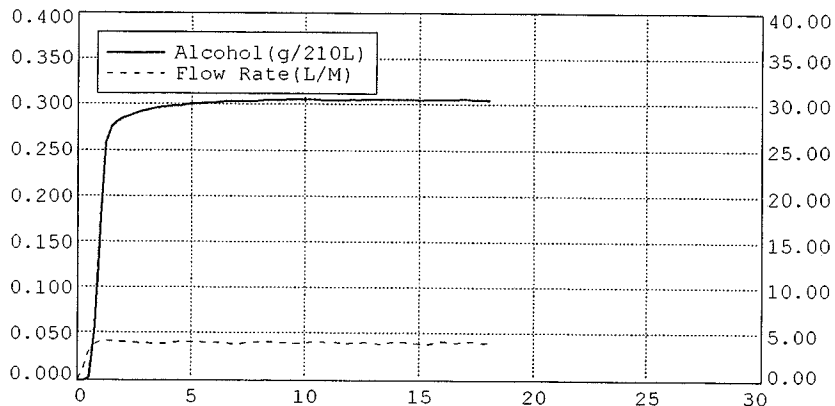
Alaska Department of Public Safety
 DATAMASTER dmt: 100421

Date: 05/30/2019
 Time: 09:57:09

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 17350
 EXPIRATION: 10/11/2019

BLANK TEST	0.000	09:58
INTERNAL STANDARD	VERIFIED	09:58
EXTERNAL STANDARD	0.304	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.304	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.303	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.303	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.303	10:04
BLANK TEST	0.000	10:05

Average = 0.3034
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 05/30/2019
Time: 10:14:02

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

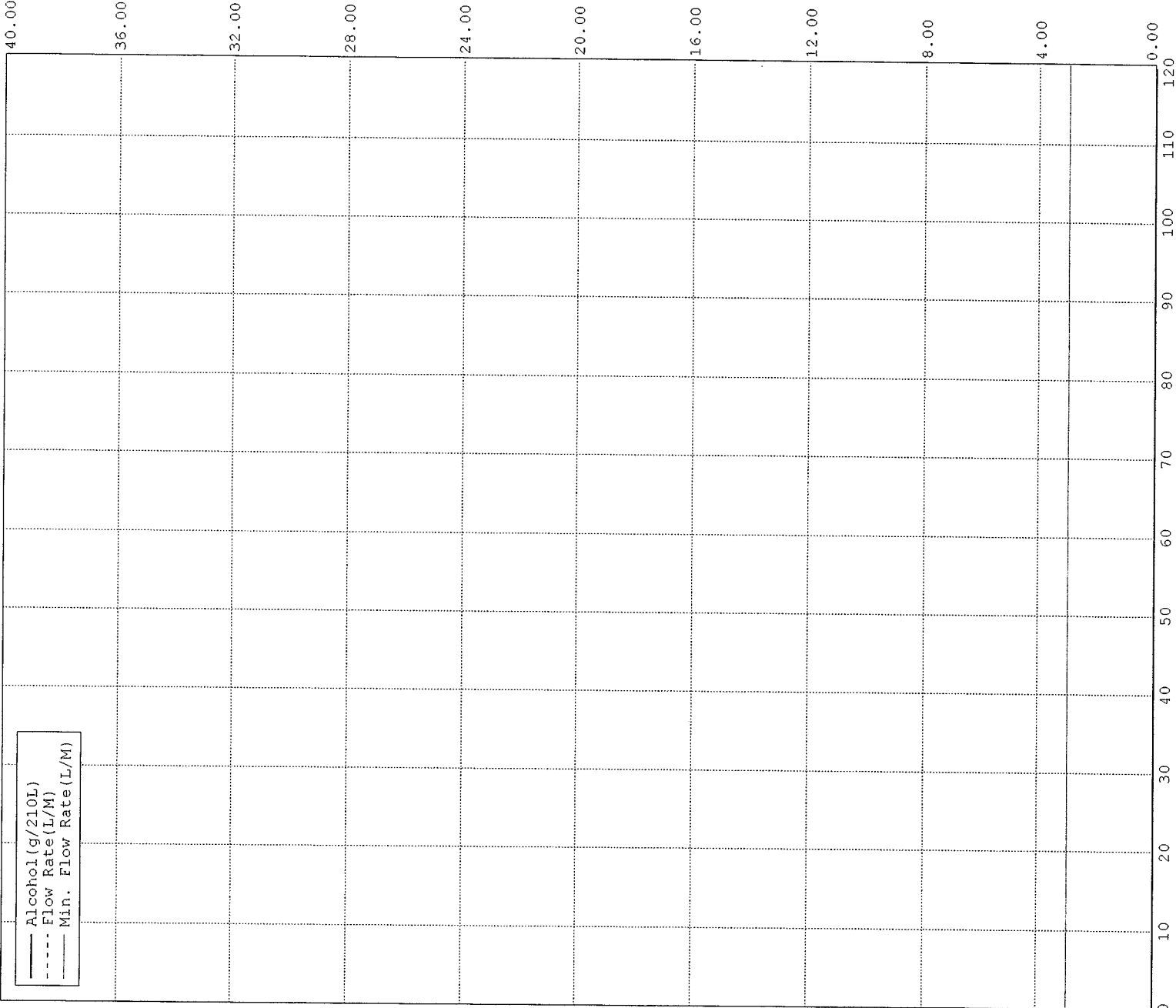
DEPT/AGENCY:
INCOMPLETE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK PASSED 10:15
BLANK TEST 0.000 10:15
INTERNAL STANDARD VERIFIED 10:15
EXTERNAL STANDARD 0.079 10:15
BLANK TEST 0.000 10:16
SUBJECT SAMPLE INCOMPLETE 10:18

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 05/30/2019
Time: 10:47:03

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

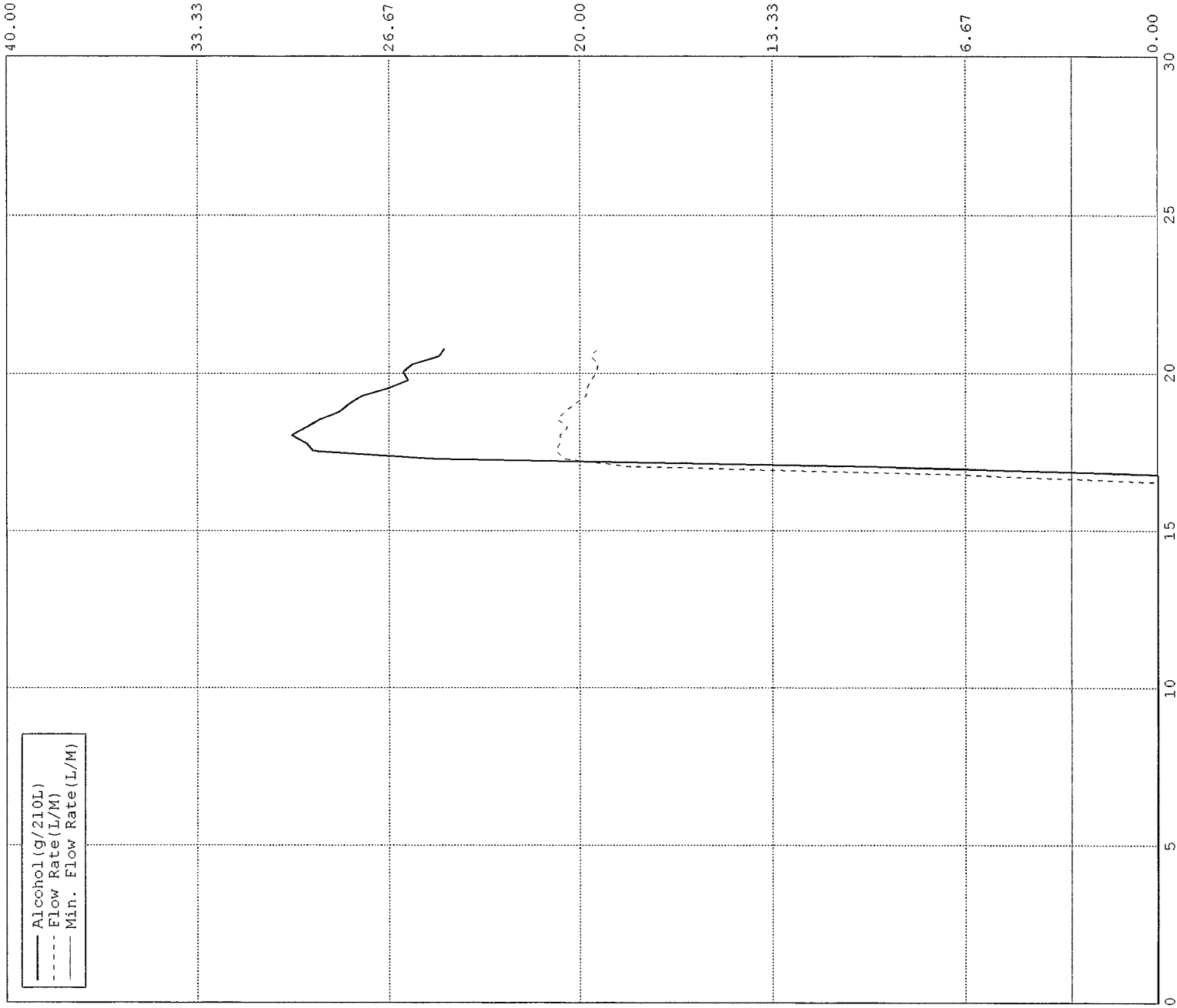
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

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

DIAGNOSTIC CHECK	PASSED	10:51
BLANK TEST	0.000	10:52
INTERNAL STANDARD	VERIFIED	10:52
EXTERNAL STANDARD	0.080	10:52
BLANK TEST	0.000	10:53
SUBJECT SAMPLE	INVALID	10:53

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 05/30/2019
Time: 11:20:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

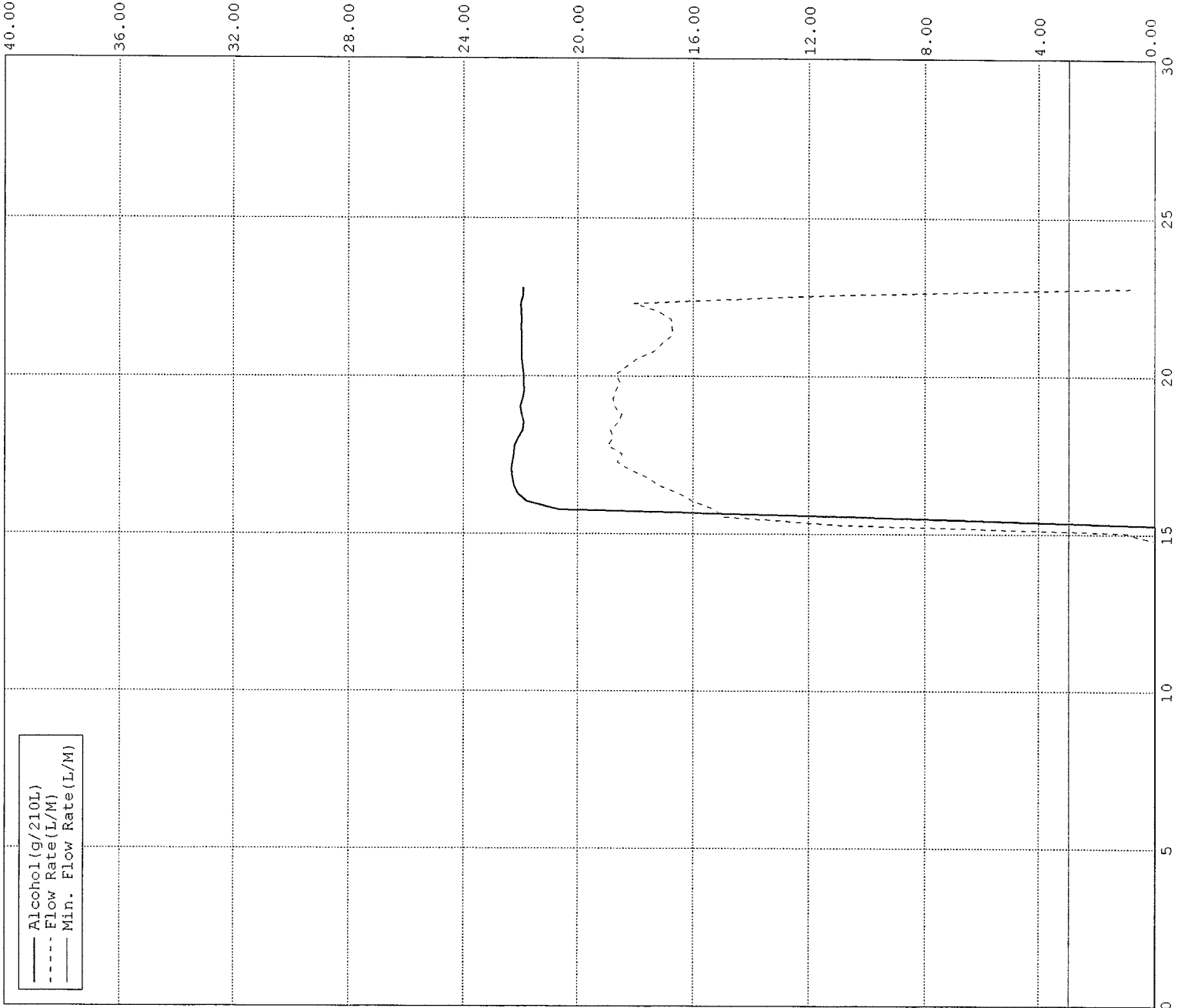
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.72: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	11:21
BLANK TEST	0.000	11:21
INTERNAL STANDARD	VERIFIED	11:21
Xq = 0.099 (0.62%)		
EXTERNAL STANDARD	0.080	11:22
X[1] = 0.0800 (0.0014) (0.0022)		
BLANK TEST	0.000	11:23
SUBJECT SAMPLE	XXX	11:23
X[1] = 0.1097 (-0.0197) (0.0020)		

Interference Detected

Filter 2 Avg: 0.0020

Filter 3 Avg: 0.0027



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 05/30/2019
Time: 11:04:56

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

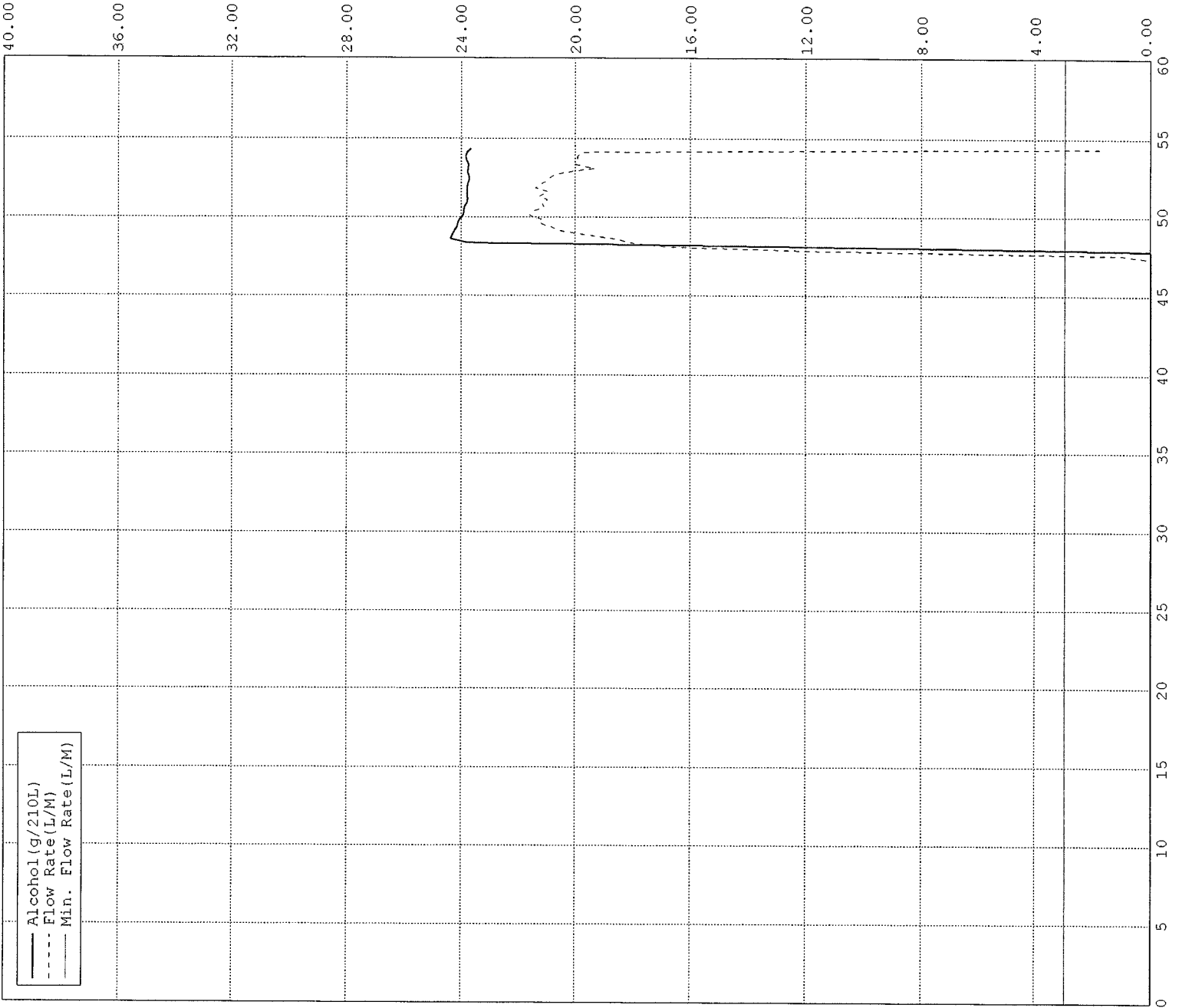
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.72: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	11:07
BLANK TEST	0.000	11:07
INTERNAL STANDARD	VERIFIED	11:07
Xq = 0.098 (0.80%)		
EXTERNAL STANDARD	0.080	11:07
X[1] = 0.0802 (0.0023) (0.0031)		
BLANK TEST	0.000	11:08
SUBJECT SAMPLE	XXX	11:09
X[1] = 0.1183 (-0.0205) (0.0027)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 05/30/2019
Time: 11:13:44

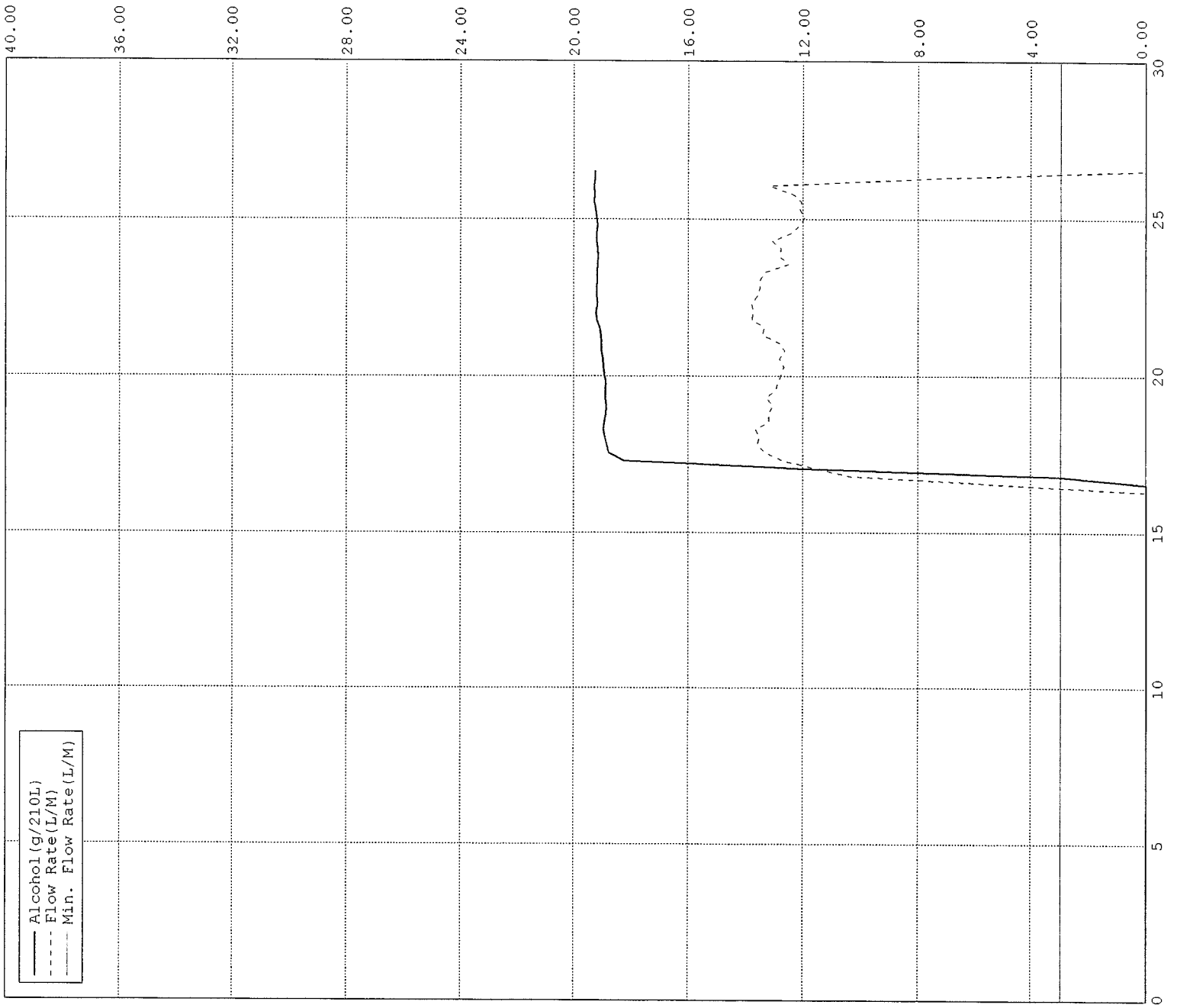
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 29.72: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	11:14
BLANK TEST	0.000	11:15
INTERNAL STANDARD	VERIFIED	11:15
Xq = 0.099 (0.18%)		
EXTERNAL STANDARD	0.080	11:15
X[1] = 0.0803 (0.0025)	(0.0033)	
BLANK TEST	0.000	11:16
SUBJECT SAMPLE (Vol=2.10L)	0.096	11:16
X[1] = 0.0964 (0.0005)	(0.0022)	
BLANK TEST	0.000	11:17
EXTERNAL STANDARD	0.079	11:17
X[1] = 0.0794 (0.0018)	(0.0023)	
BLANK TEST	0.000	11:18



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 05/30/2019
Time: 10:22:41

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

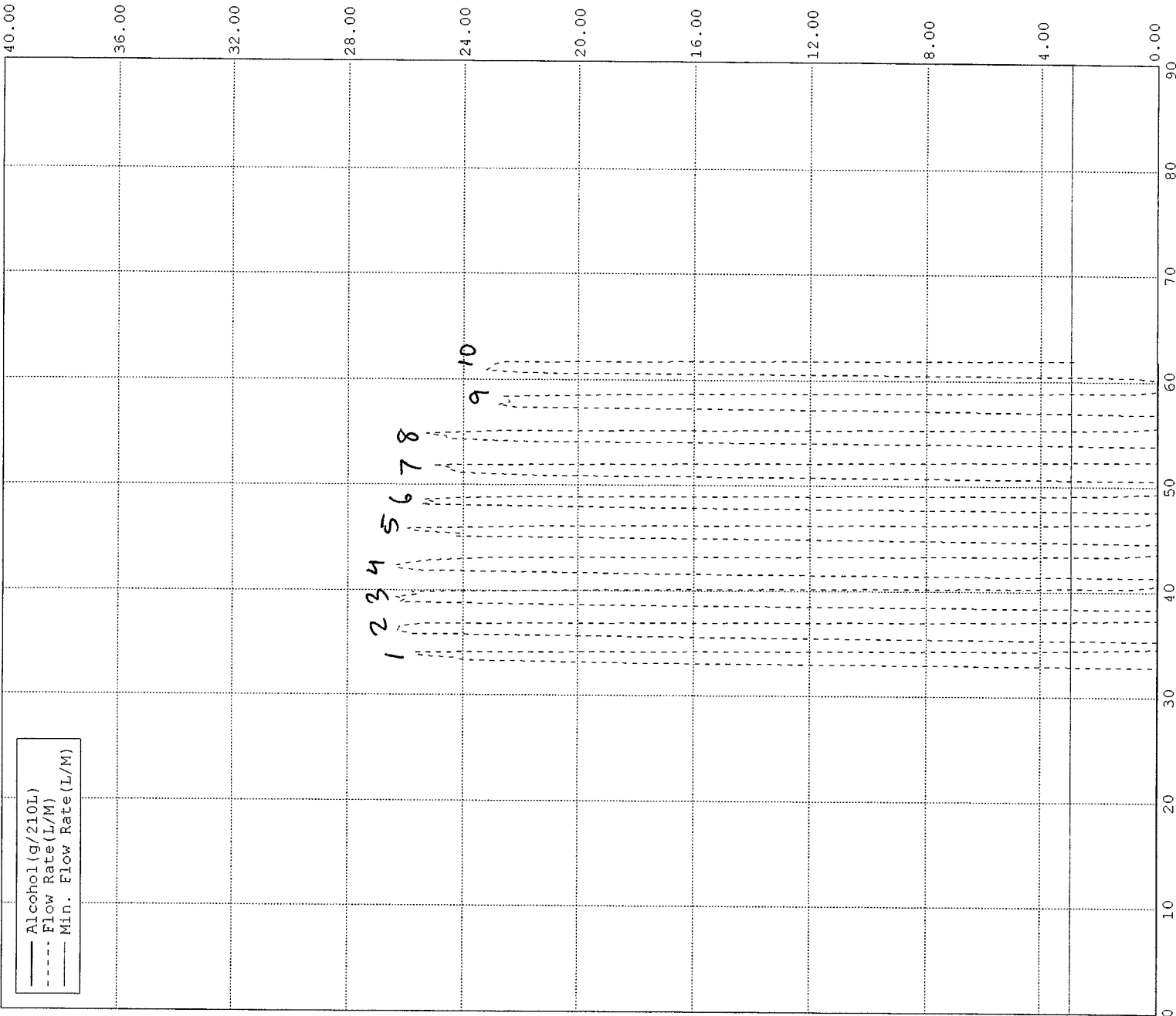
EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK PASSED 10:34
BLANK TEST 0.000 10:34
INTERNAL STANDARD VERIFIED 10:34
EXTERNAL STANDARD 0.080 10:34
BLANK TEST 0.000 10:35
SUBJECT SAMPLE XXX 10:36

Maximum Attempts Exceeded

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 05/30/2019
Time: 10:58:03

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

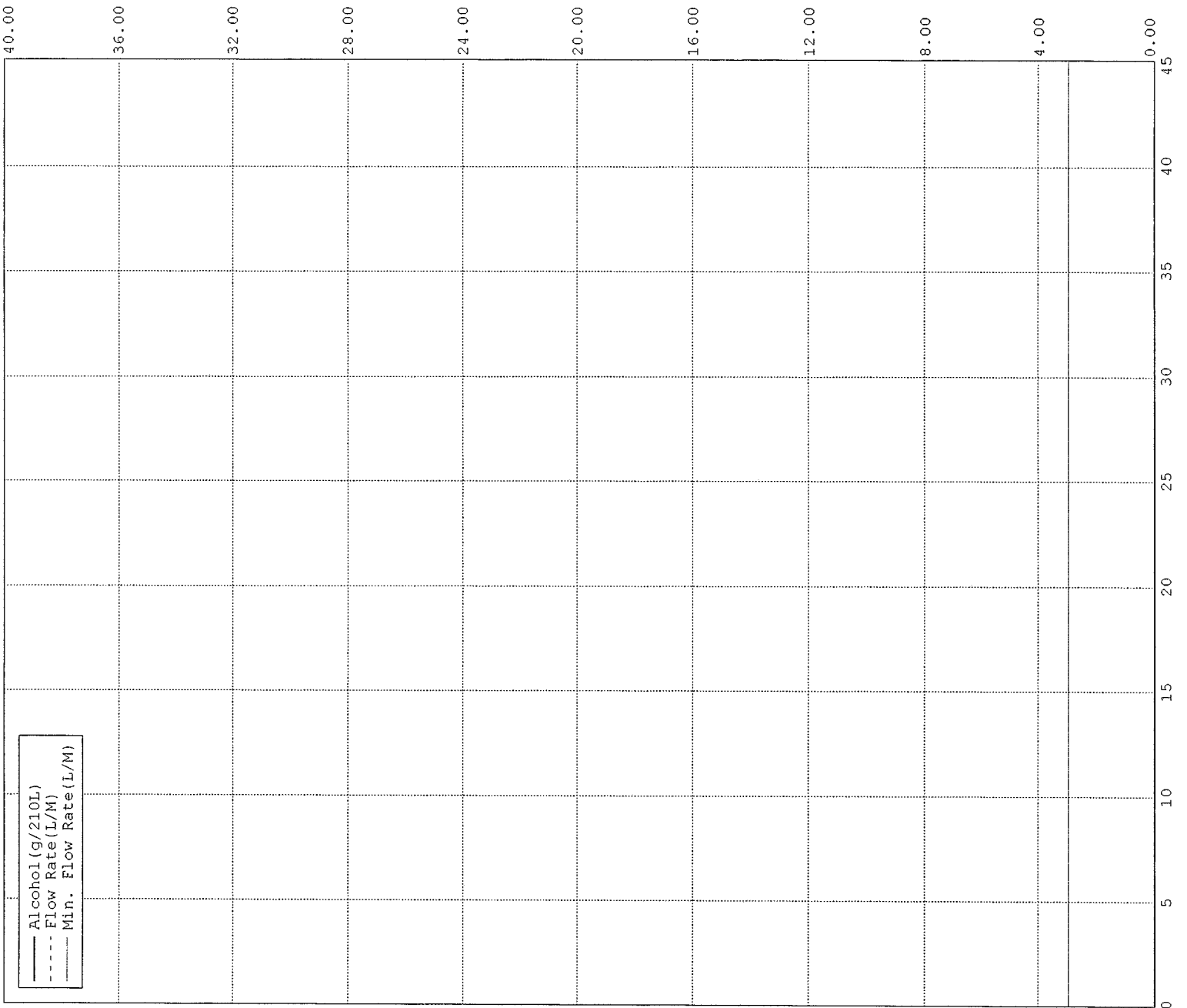
DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK PASSED 10:59
BLANK TEST 0.000 10:59
INTERNAL STANDARD VERIFIED 10:59
EXTERNAL STANDARD 0.079 10:59
BLANK TEST 0.000 11:00

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 05/30/2019
Time: 11:46:55

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	11:47
BLANK TEST	0.000	11:48
INTERNAL STANDARD	VERIFIED	11:48
EXTERNAL STANDARD	0.080	11:48
BLANK TEST	0.000	11:49
SUBJECT SAMPLE (Vol=2.85L)	0.000	11:49
BLANK TEST	0.000	11:50
EXTERNAL STANDARD	0.080	11:50
BLANK TEST	0.000	11:51

