

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 100362 Analyst Derck Walton Start Date 12/11/19

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 A6805804 Exp 02/27/20
- ii. 0.040g/210L Mnf Airgas Lot A6915607 Exp 06/05/21
- 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 Walth Lot 19040 Exp 01/29/21
 - 1. Simulator S/N DR4162 Date Calibrated 10/07/19
- vi. 0.300g/210L Mnf Walth 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 Walth Lot 18370 Level 0.100 Exp 12/05/20

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

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

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

iii. Negative Control - Mnf Walth 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 12/12/19

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 12/11/2019
Time: 08:50:48

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 = 45.4°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.77 V PASSED
(1.10 V - 2.56 V)
Cooler Voltage = 1.87 V PASSED
(0.97 V - 2.25 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 537 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.2 in

PUMP INFO

Flow Rate = 5.142 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.003 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 = 0.073 0.48% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100362

Date: 12/11/2019
Time: 9:15 AM

Temperatures (°C)

Sample Cell: 49.2°C
Breath Tube: 44.3°C

Current Barometer 29.2 in
Volume (Ltr) 1.57

Settings

Lamp: 1.77 V
Bias: 79 V
Cooler: 1.79 V
Chopper: 515 Hz

Voltages (V)

Flow: 1.03 V
Detector: -0.015 V

CALIBRATION FACTORS

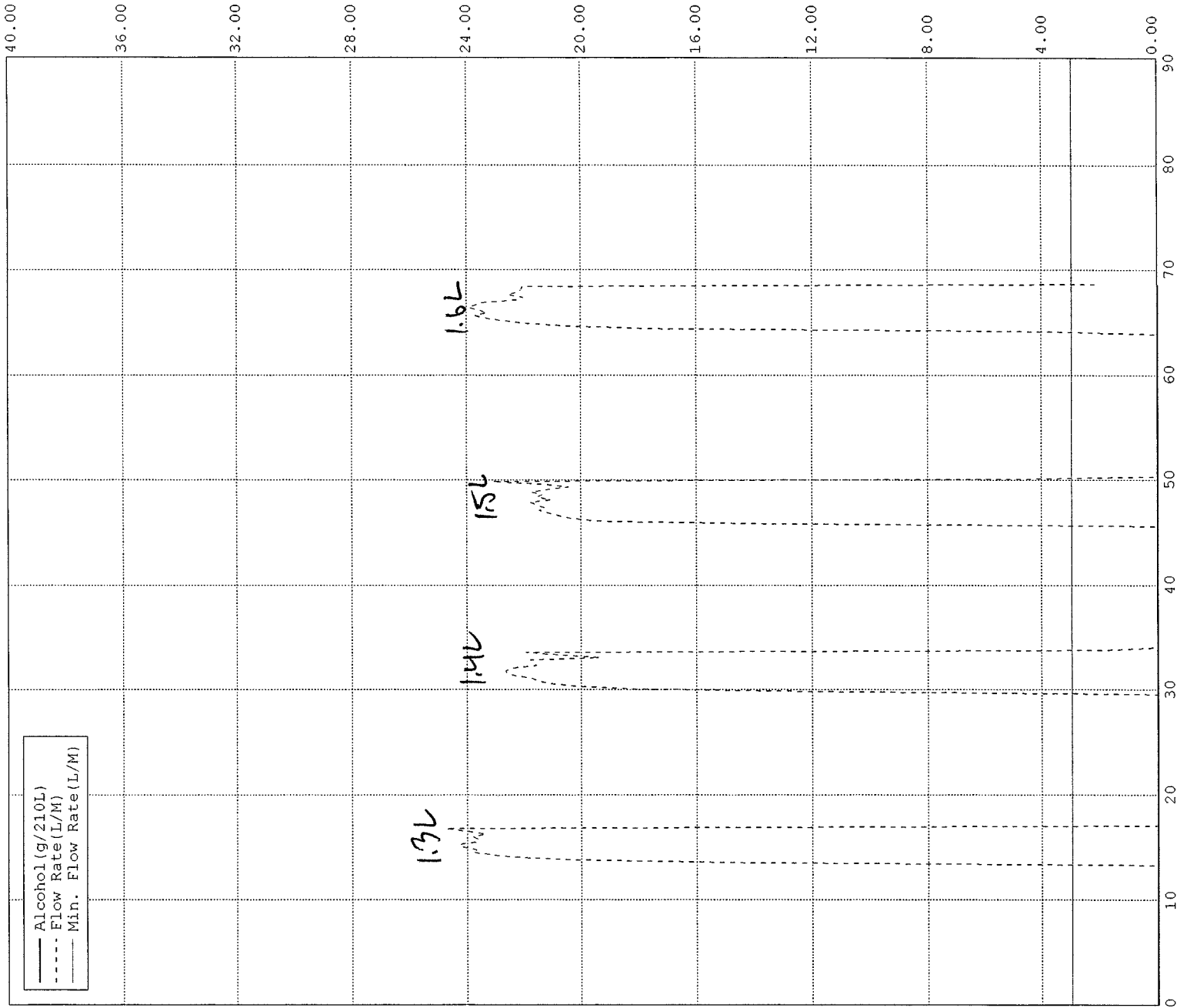
Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 03/15/2011
Time: 07:01:28

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

LOT #: GUTH100
BOTTLE #: 9380
EXPIRATION: 12/17/2011

Ca = 0.1000
CAL = 0.977426 0.800 <= CAL < 1.200
b1 = 0.0004 0.0000 <= b1 < 0.0040
b2 = 0.0058 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0727 0.0500 <= Xq < 0.2000
a21 = 1.161401 1.050 <= a21 < 1.300
a31 = 0.532998 0.300 <= a31 < 0.800



SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100362

 Date: 12/11/2019
 Time: 09:26:28

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 29.23: 0.078
 LOT #: AG826101
 EXPIRATION: 09/18/2020

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	09:27
BLANK TEST	0.000	09:27
INTERNAL STANDARD	VERIFIED	09:27
EXTERNAL STANDARD	0.077	09:27
BLANK TEST	0.000	09:28
SUBJECT SAMPLE (Vol=1.60L)	0.000	09:30
BLANK TEST	0.000	09:31
EXTERNAL STANDARD	0.078	09:31
BLANK TEST	0.000	09:32

DM

LINEARITY CHECK

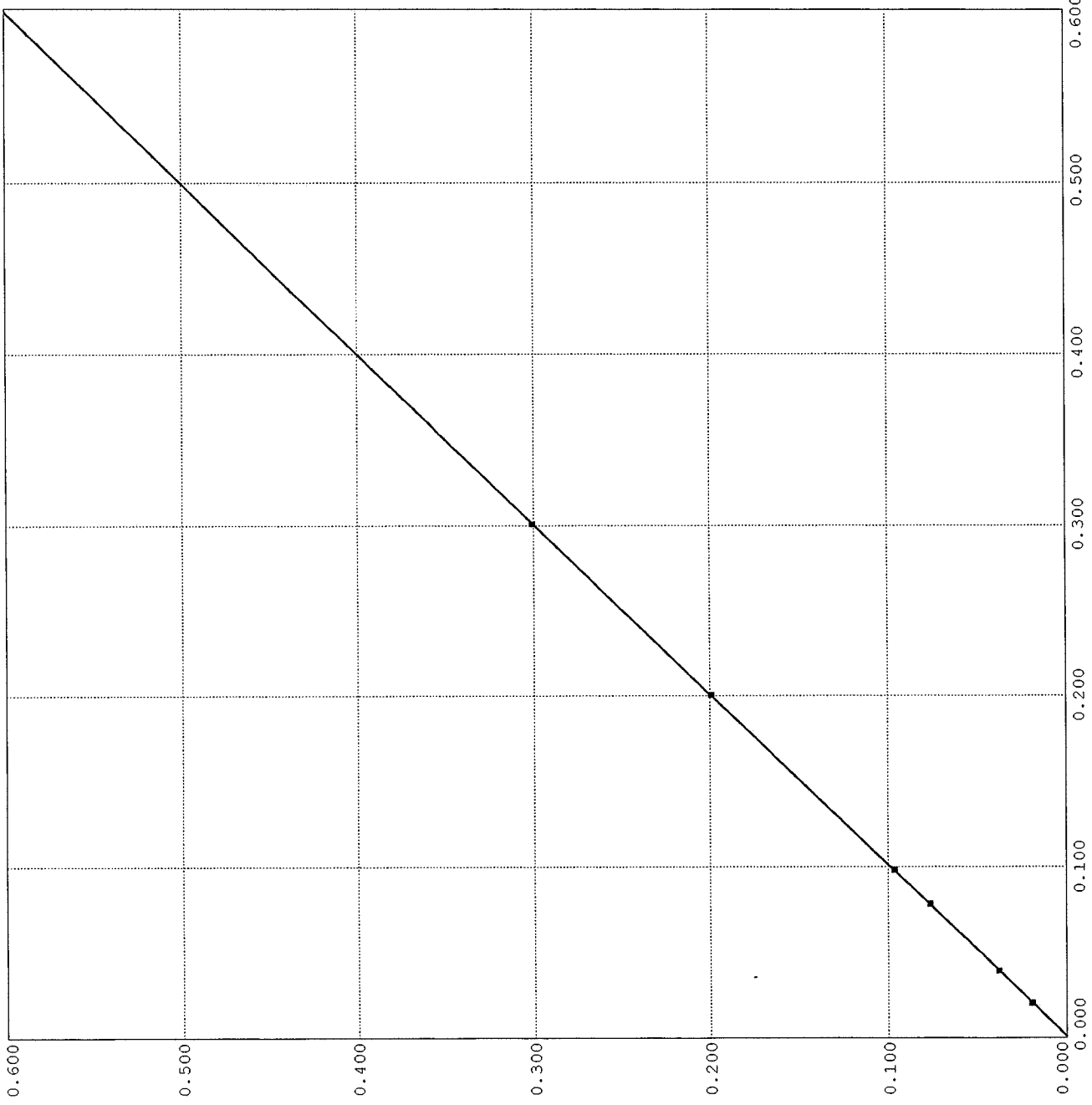
 Alaska Department of Public Safety
 DATAMASTER dmt: 100362

Date: 12/11/2019
 Time: 09:35:37

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0202	0.0004
0.039	0.0390	0.0000
0.078	0.0774	0.0005
0.098	0.0974	0.0005
0.200	0.2000	0.0007
0.300	0.3014	0.0005

SLOPE = 1.004679
 R² = 0.999975



DW

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100362

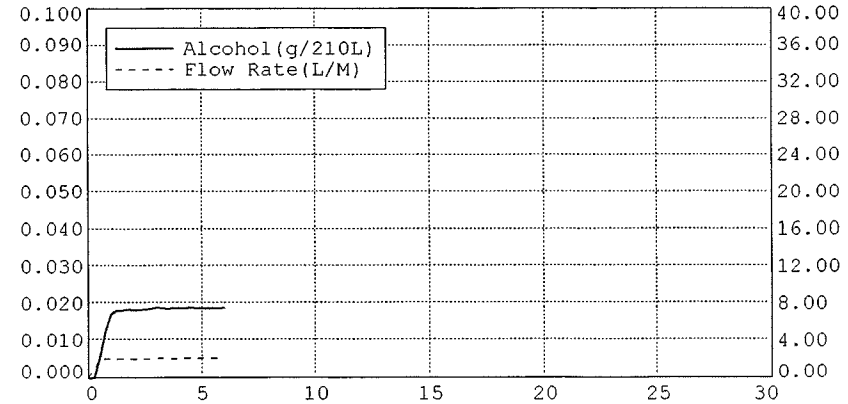
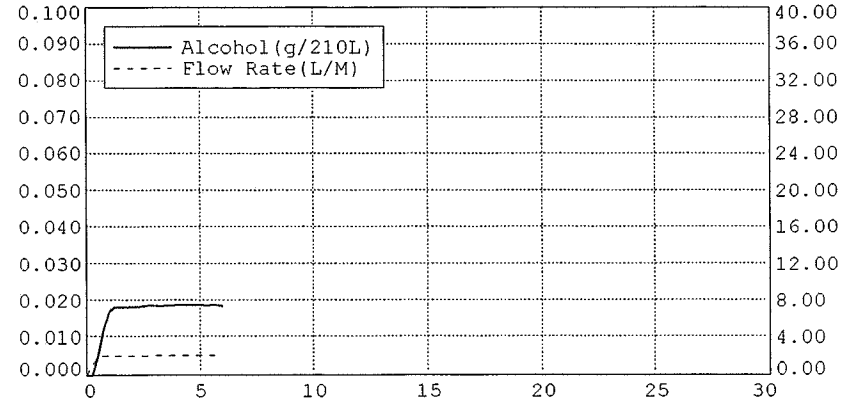
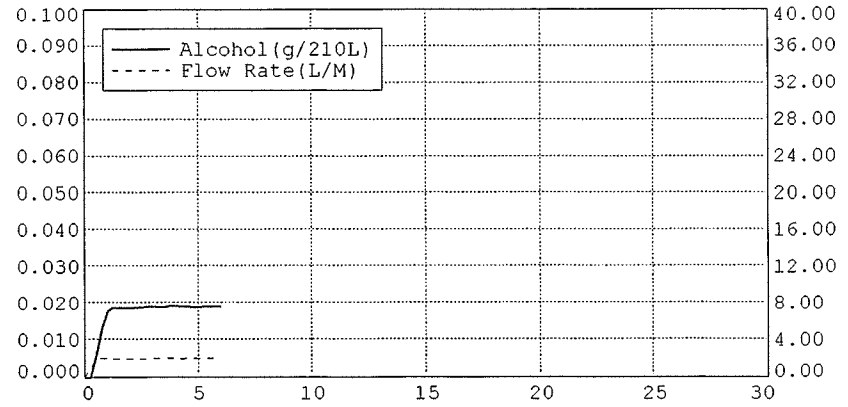
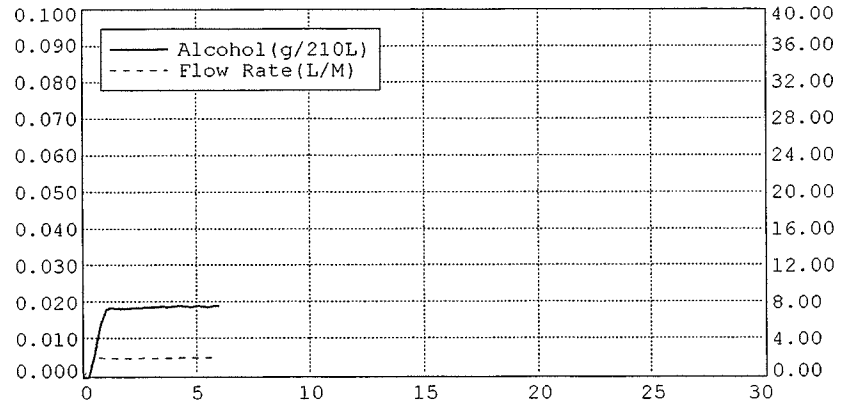
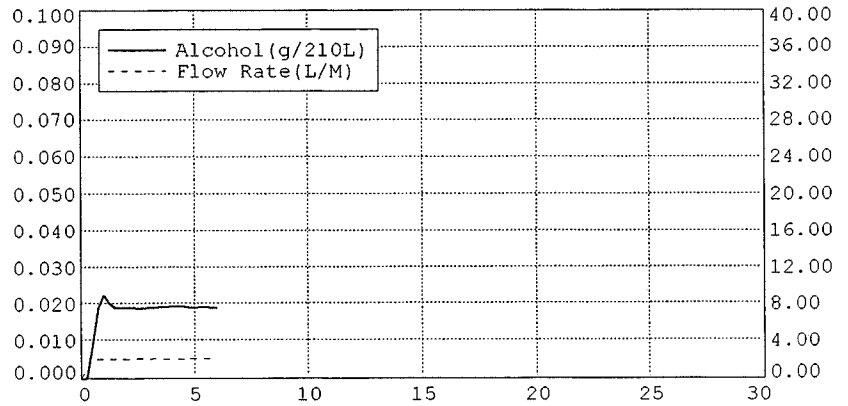
Date: 12/11/2019
Time: 09:35:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.24: 0.020
LOT #: AG805804
EXPIRATION: 02/27/2020
TANK PRESSURE: 557 psi

BLANK TEST	0.000	09:37
INTERNAL STANDARD	VERIFIED	09:37
EXTERNAL STANDARD	0.021	09:37
BLANK TEST	0.000	09:38
EXTERNAL STANDARD	0.020	09:38
BLANK TEST	0.000	09:39
EXTERNAL STANDARD	0.020	09:39
BLANK TEST	0.000	09:40
EXTERNAL STANDARD	0.020	09:40
BLANK TEST	0.000	09:41
EXTERNAL STANDARD	0.020	09:41
BLANK TEST	0.000	09:42

Average = 0.0202
Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100362

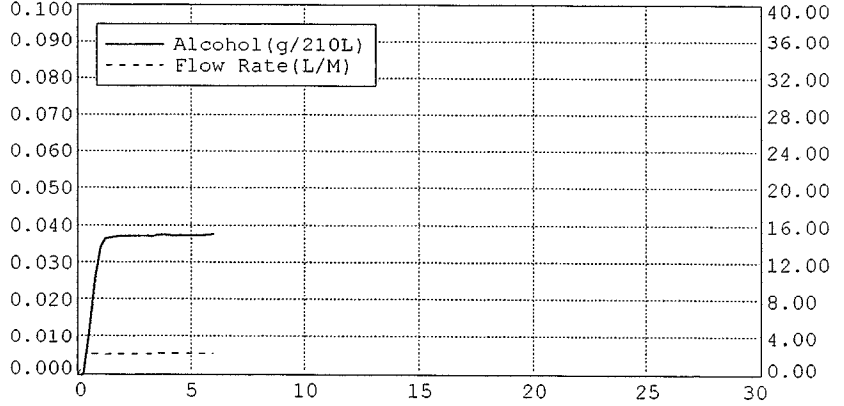
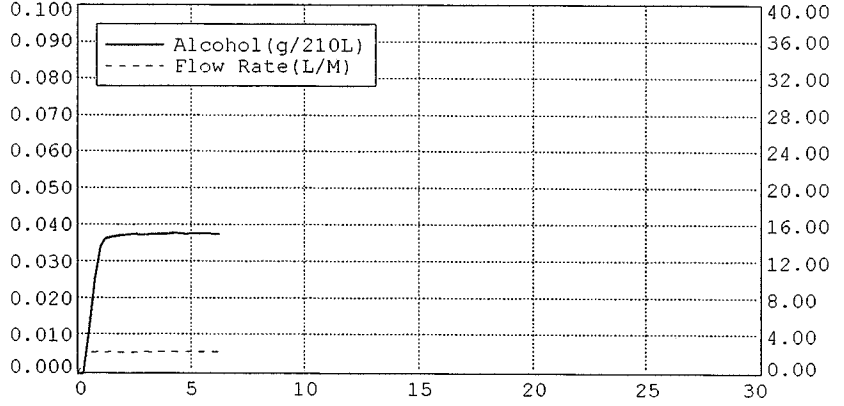
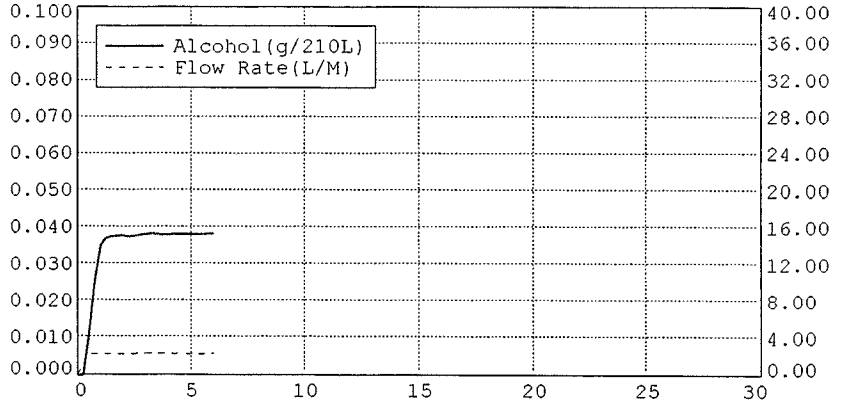
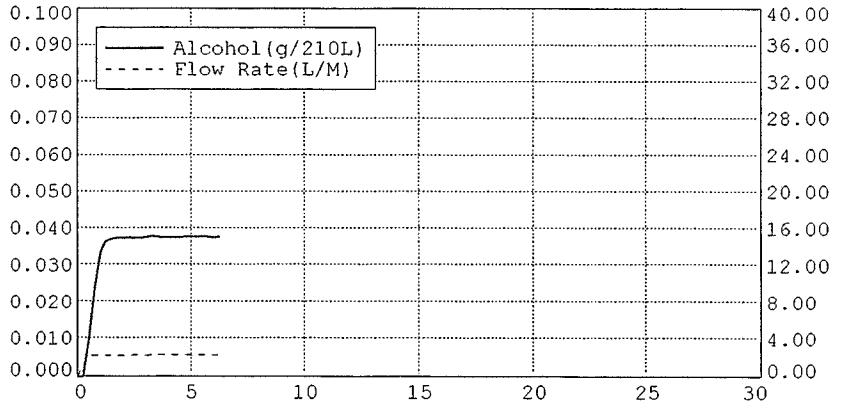
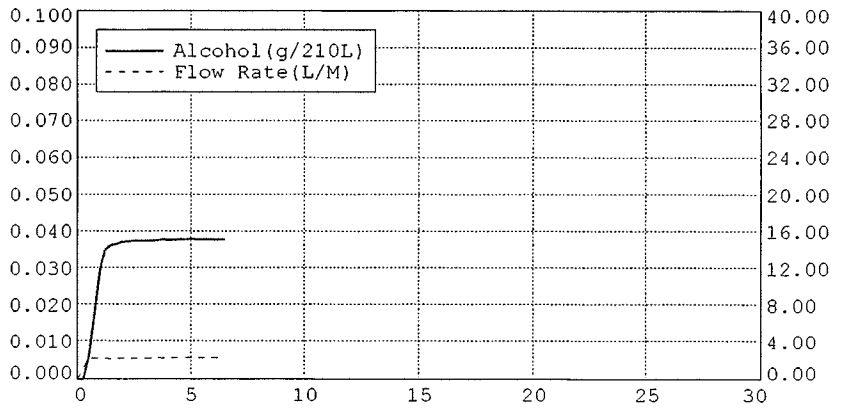
Date: 12/11/2019
Time: 09:49:20

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.22: 0.039
LOT #: AG915607
EXPIRATION: 06/05/2021
TANK PRESSURE: 1133 psi

BLANK TEST	0.000	09:50
INTERNAL STANDARD	VERIFIED	09:50
EXTERNAL STANDARD	0.039	09:50
BLANK TEST	0.000	09:51
EXTERNAL STANDARD	0.039	09:52
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.039	09:53
BLANK TEST	0.000	09:54
EXTERNAL STANDARD	0.039	09:54
BLANK TEST	0.000	09:55
EXTERNAL STANDARD	0.039	09:55
BLANK TEST	0.000	09:56

Average = 0.0390
Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100362

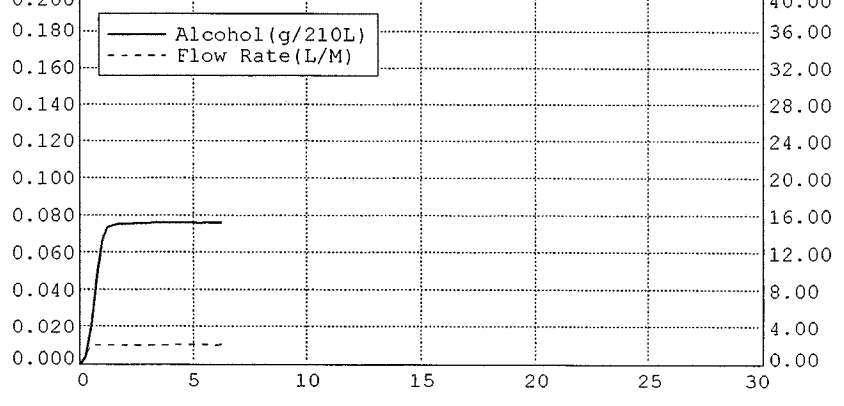
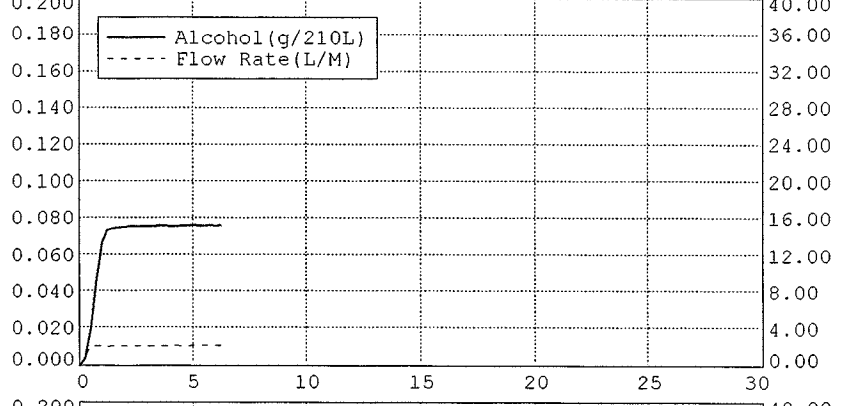
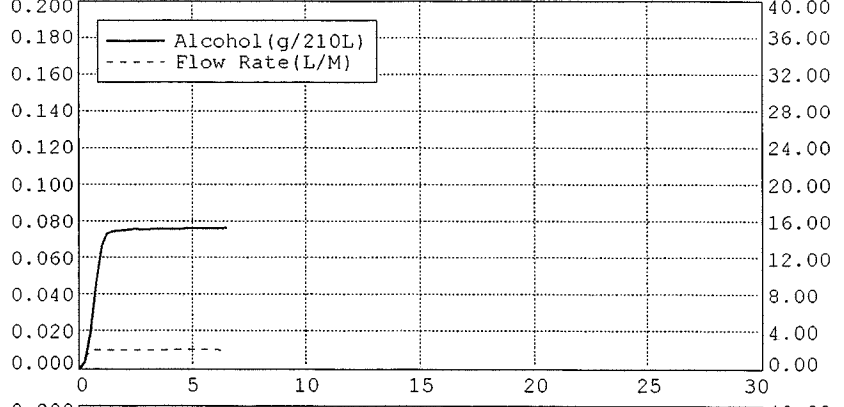
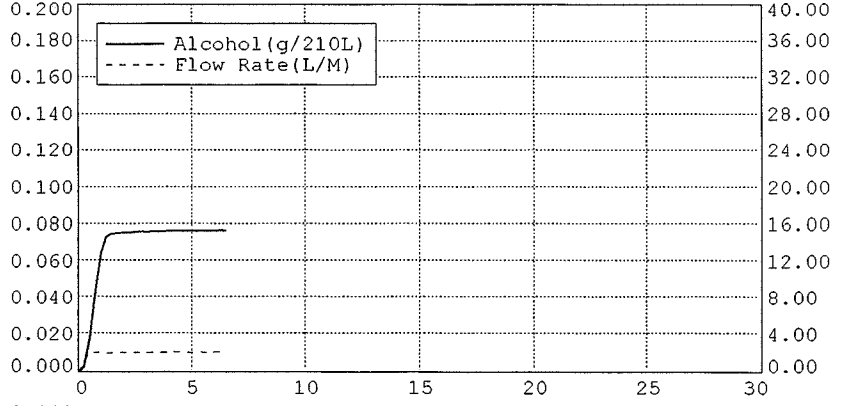
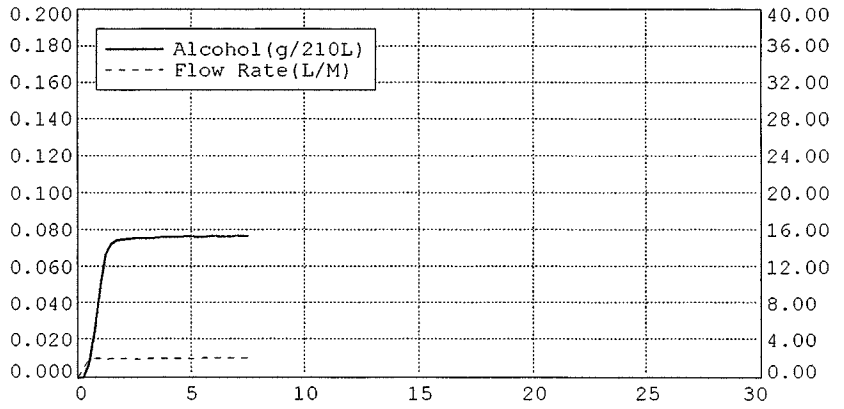
Date: 12/11/2019
 Time: 10:00:09

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.22: 0.078
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 588 psi

BLANK TEST	0.000	10:01
INTERNAL STANDARD	VERIFIED	10:01
EXTERNAL STANDARD	0.078	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.078	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.077	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.077	10:05
BLANK TEST	0.000	10:06
EXTERNAL STANDARD	0.077	10:06
BLANK TEST	0.000	10:07

Average = 0.0774
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100362

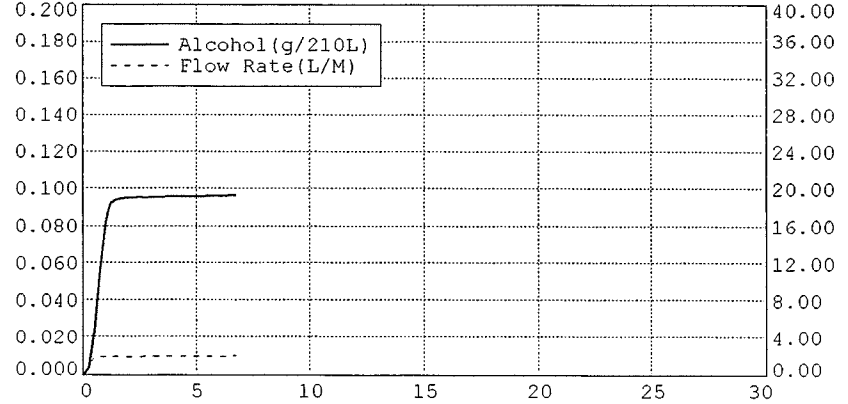
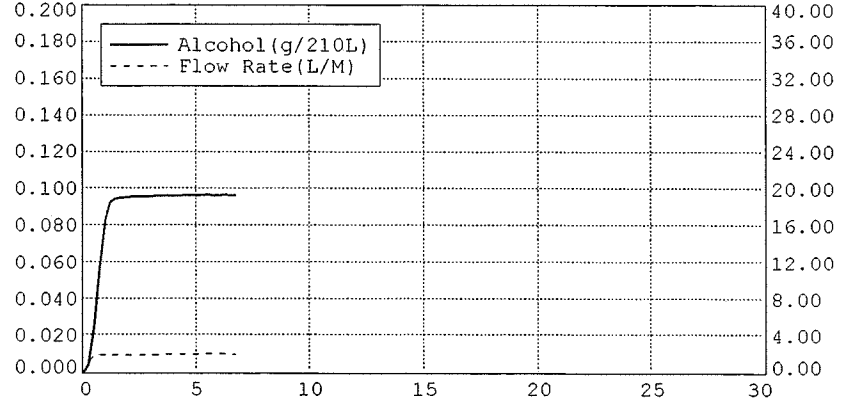
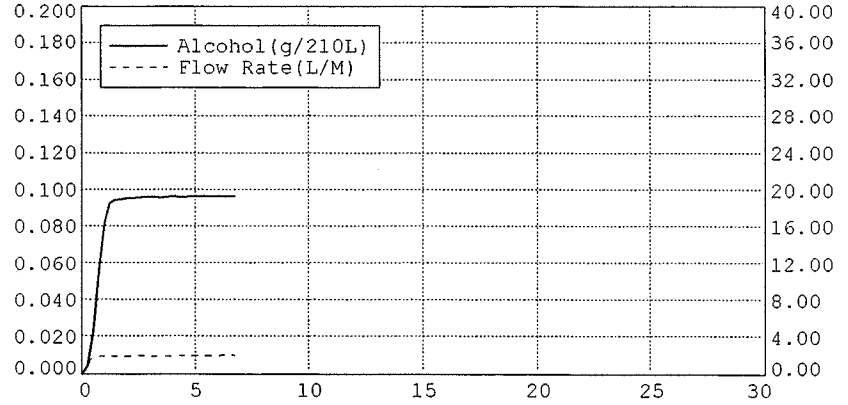
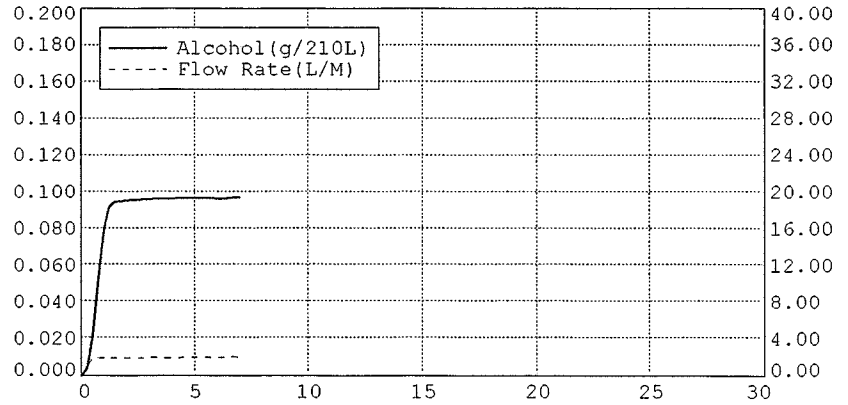
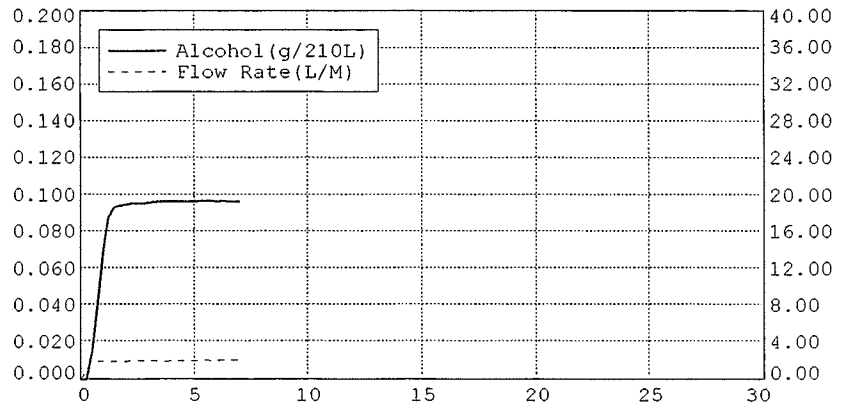
Date: 12/11/2019
 Time: 10:08:25

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.22: 0.098
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 244 psi

BLANK TEST	0.000	10:09
INTERNAL STANDARD	VERIFIED	10:09
EXTERNAL STANDARD	0.097	10:10
BLANK TEST	0.000	10:10
EXTERNAL STANDARD	0.097	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.098	10:12
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.098	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.097	10:14
BLANK TEST	0.000	10:15

Average = 0.0974
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

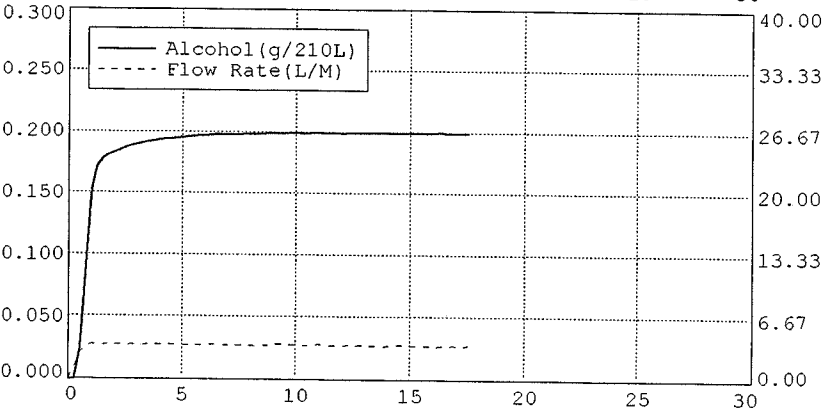
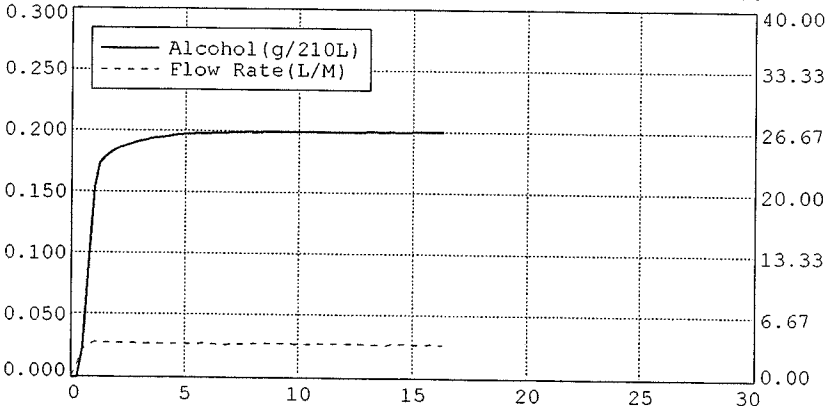
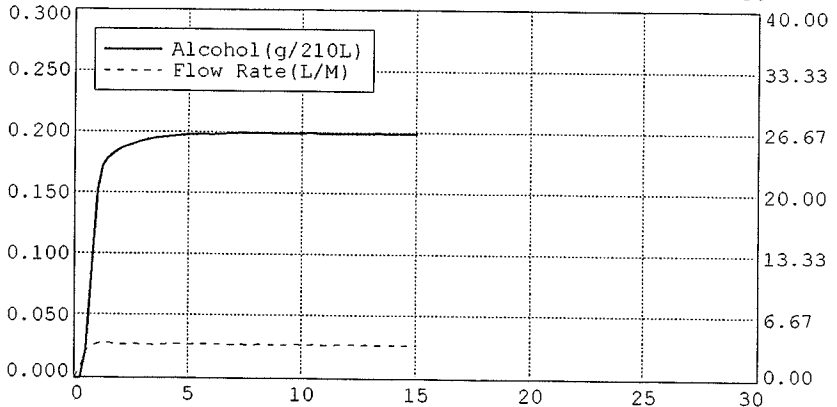
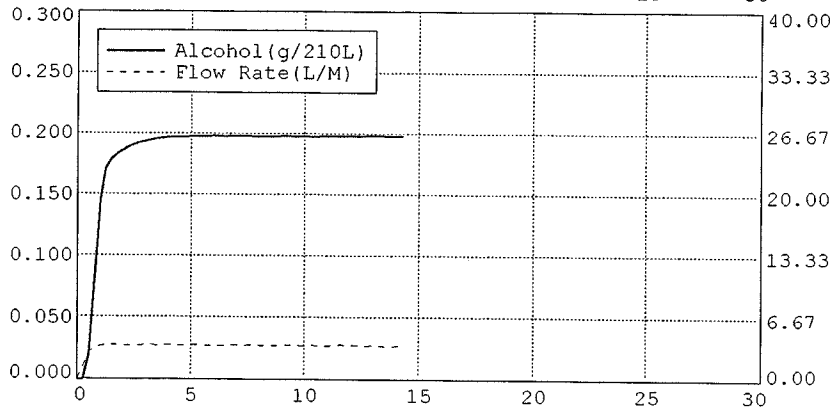
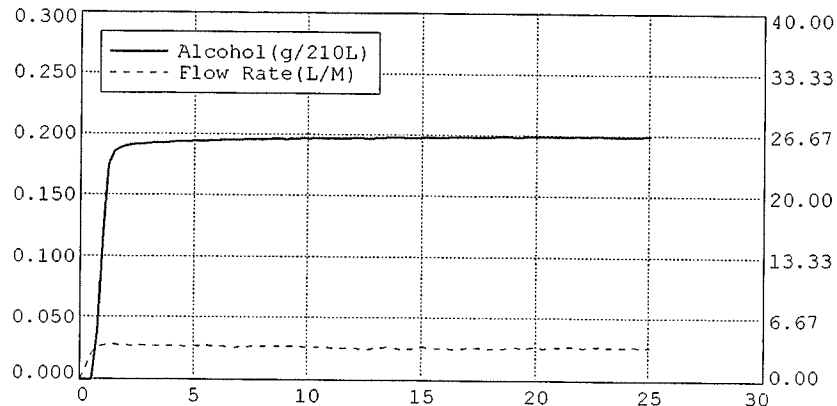
Alaska Department of Public Safety
 DATAMASTER dmt: 100362

Date: 12/11/2019
 Time: 10:18:25

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 19040
 EXPIRATION: 01/29/2021

BLANK TEST	0.000	10:19
INTERNAL STANDARD	VERIFIED	10:19
EXTERNAL STANDARD	0.200	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.199	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.200	10:22
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.201	10:24
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.200	10:25
BLANK TEST	0.000	10:26

Average = 0.2000
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100362

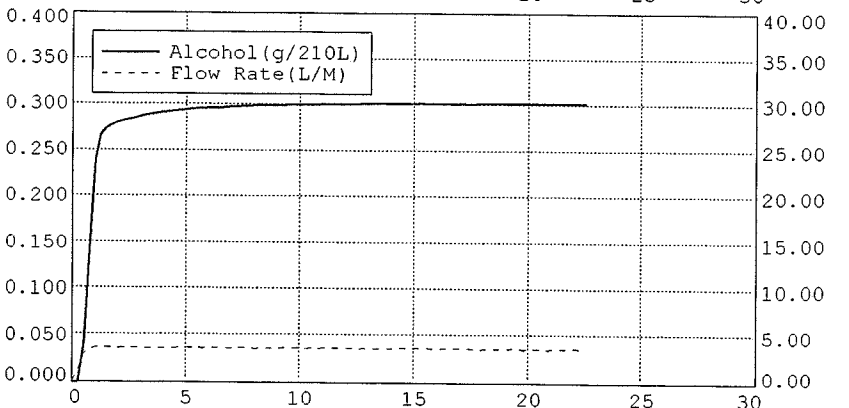
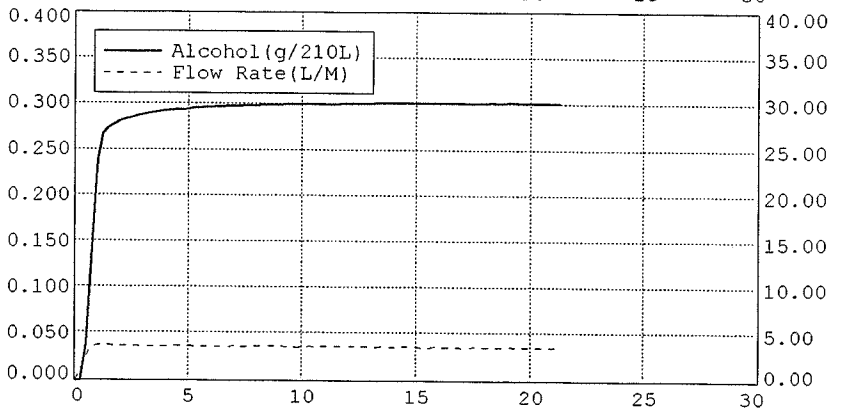
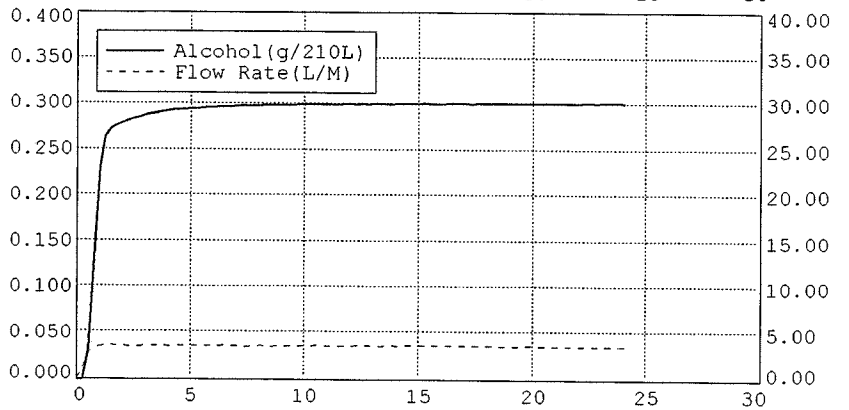
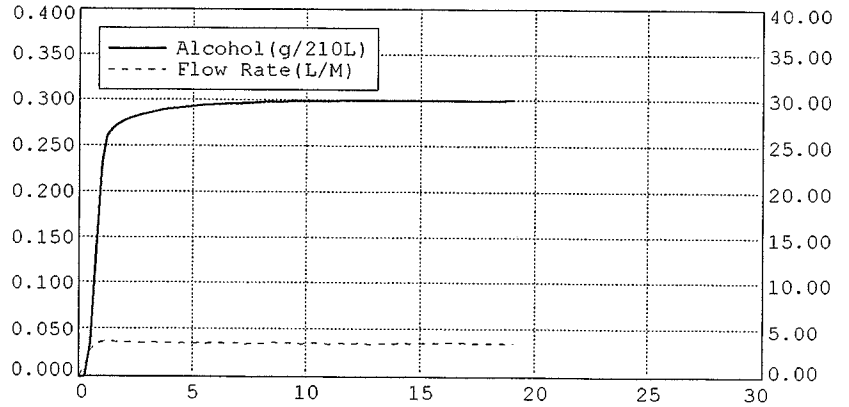
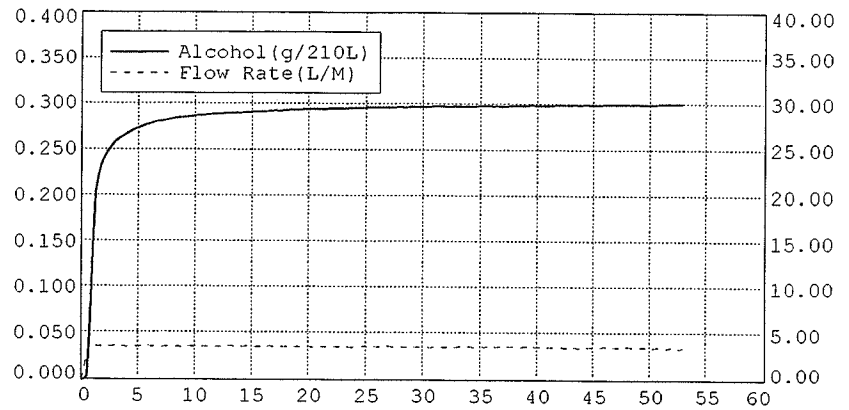
Date: 12/11/2019
 Time: 10:30:08

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:31
INTERNAL STANDARD	VERIFIED	10:31
EXTERNAL STANDARD	0.301	10:32
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.301	10:33
BLANK TEST	0.000	10:34
EXTERNAL STANDARD	0.301	10:35
BLANK TEST	0.000	10:36
EXTERNAL STANDARD	0.302	10:36
BLANK TEST	0.000	10:37
EXTERNAL STANDARD	0.302	10:37
BLANK TEST	0.000	10:38

Average = 0.3014
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 12/11/2019
Time: 10:49:22

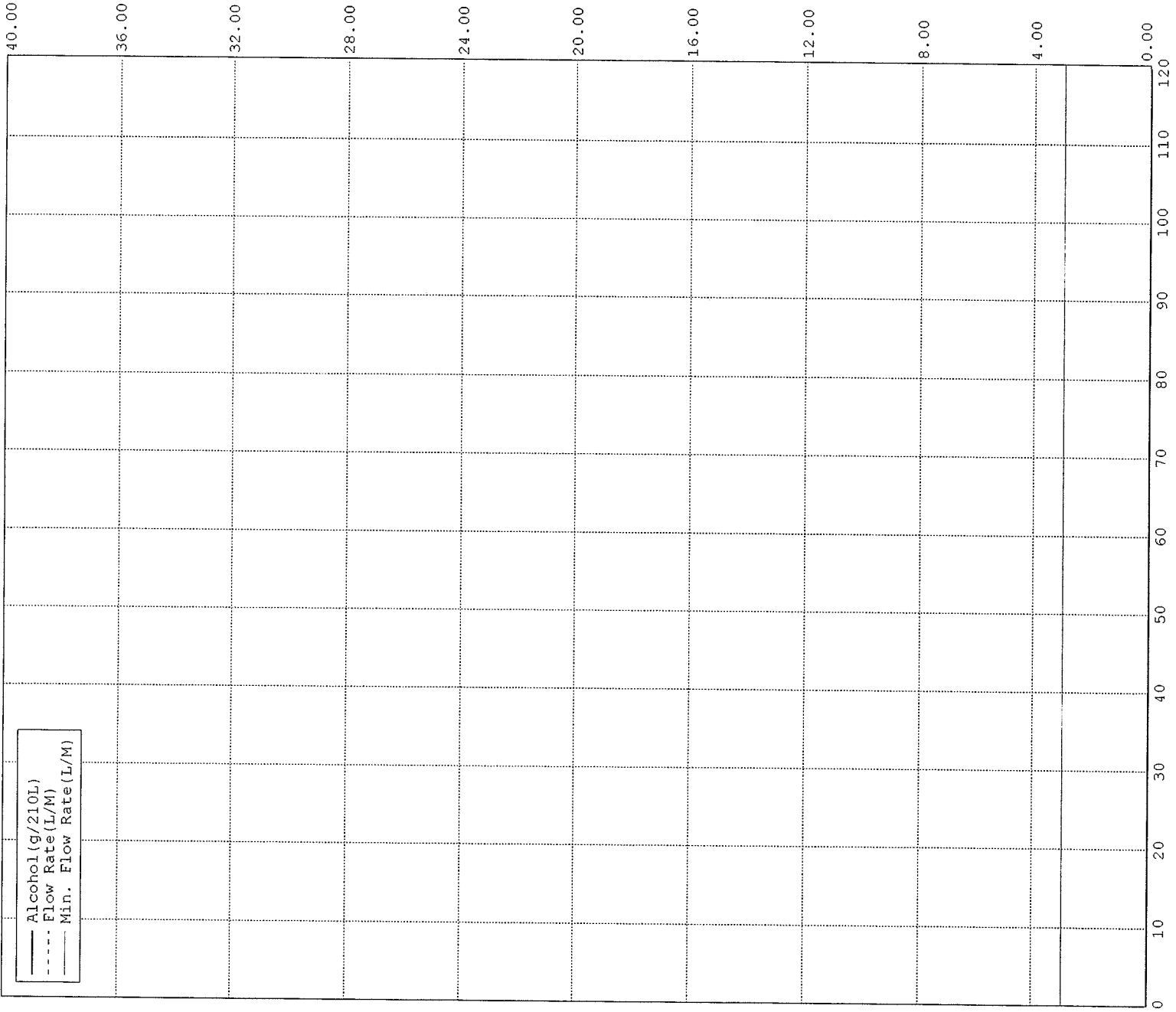
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.22: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 10:50
BLANK TEST 0.000 10:50
INTERNAL STANDARD VERIFIED 10:50
EXTERNAL STANDARD 0.077 10:51
BLANK TEST 0.000 10:51
SUBJECT SAMPLE INCOMPLETE 10:53



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 12/11/2019
Time: 10:58:02

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

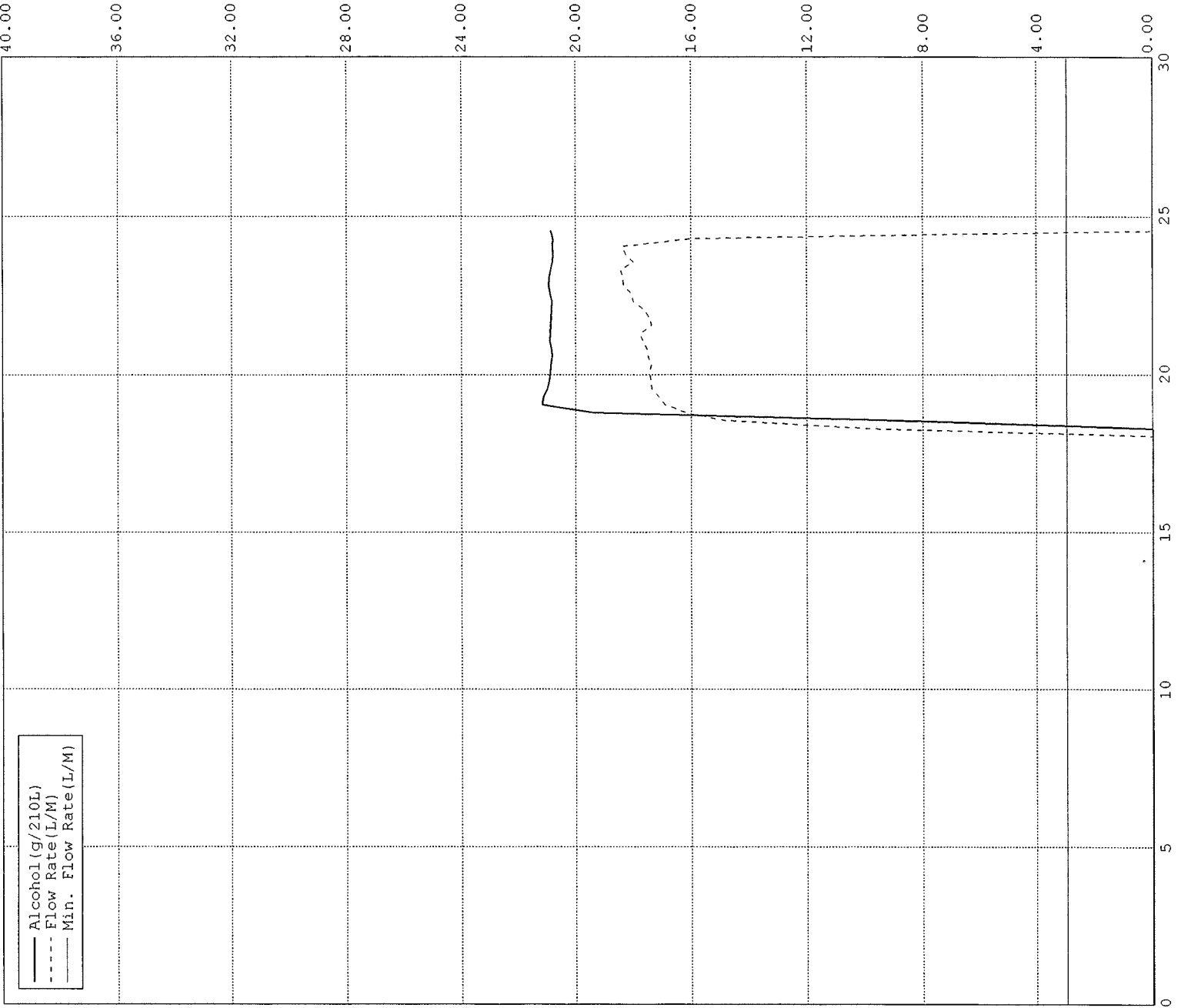
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.20: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	10:59
BLANK TEST	0.000	10:59
INTERNAL STANDARD	VERIFIED	10:59
Xq = 0.073 (0.36%)		
EXTERNAL STANDARD	0.077	10:59
X[1] = 0.0769 (-0.0017) (0.0040)		
BLANK TEST	0.000	11:00
SUBJECT SAMPLE	XXX	11:01
X[1] = 0.1039 (-0.0178) (0.0024)		

Interference Detected

Filter 2 Avg: -0.0015
Filter 3 Avg: 0.0037

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 12/11/2019
Time: 11:04:39

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

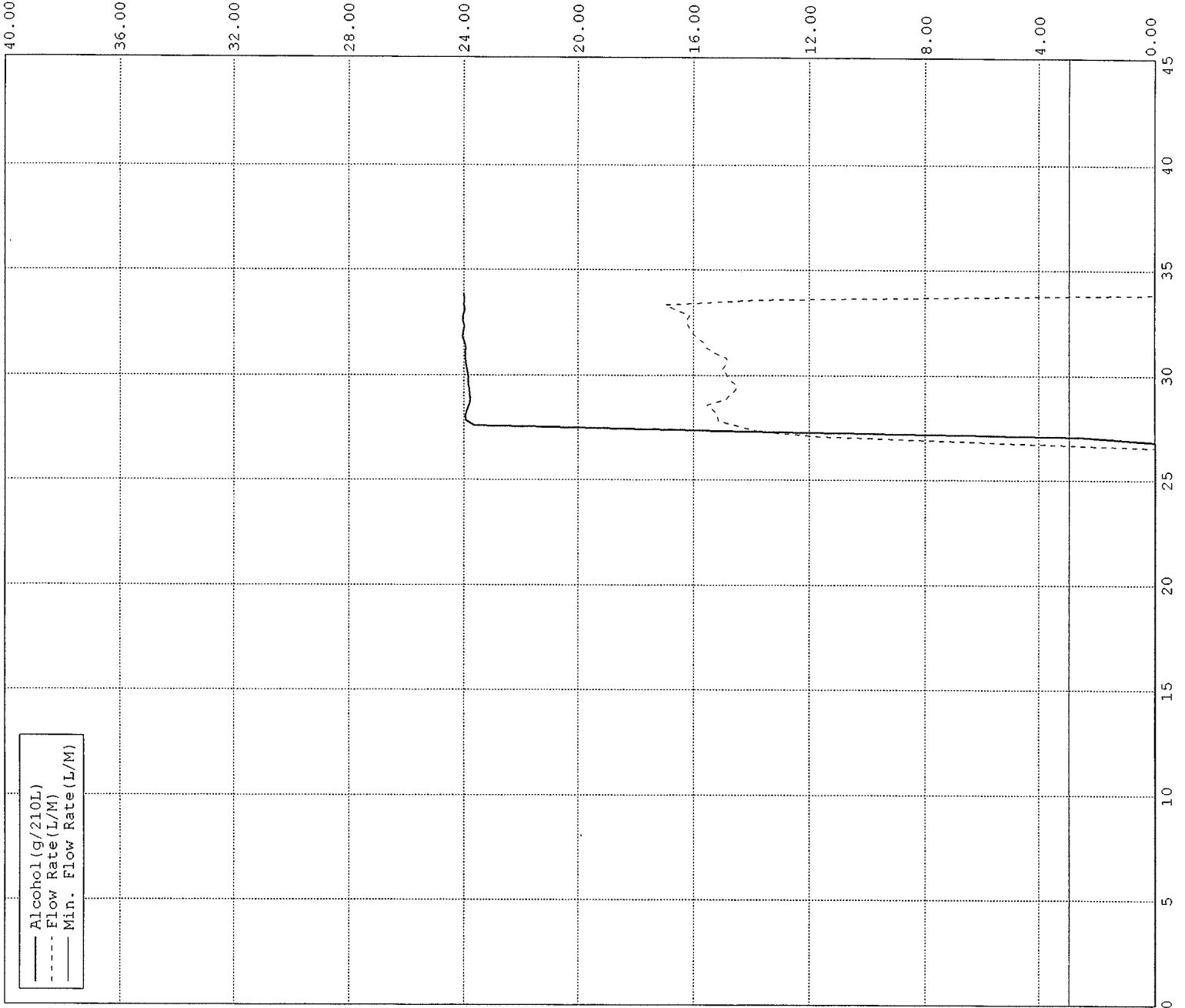
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.19: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	11:05
BLANK TEST	0.000	11:05
INTERNAL STANDARD	VERIFIED	11:05
Xq = 0.074 (1.79%)		
EXTERNAL STANDARD	0.078	11:06
X[1] = 0.0776 (-0.0014) (0.0036)		
BLANK TEST	0.000	11:07
SUBJECT SAMPLE	XXX	11:07
X[1] = 0.1193 (-0.0256) (0.0027)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100362

Date: 12/11/2019
Time: 11:10:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

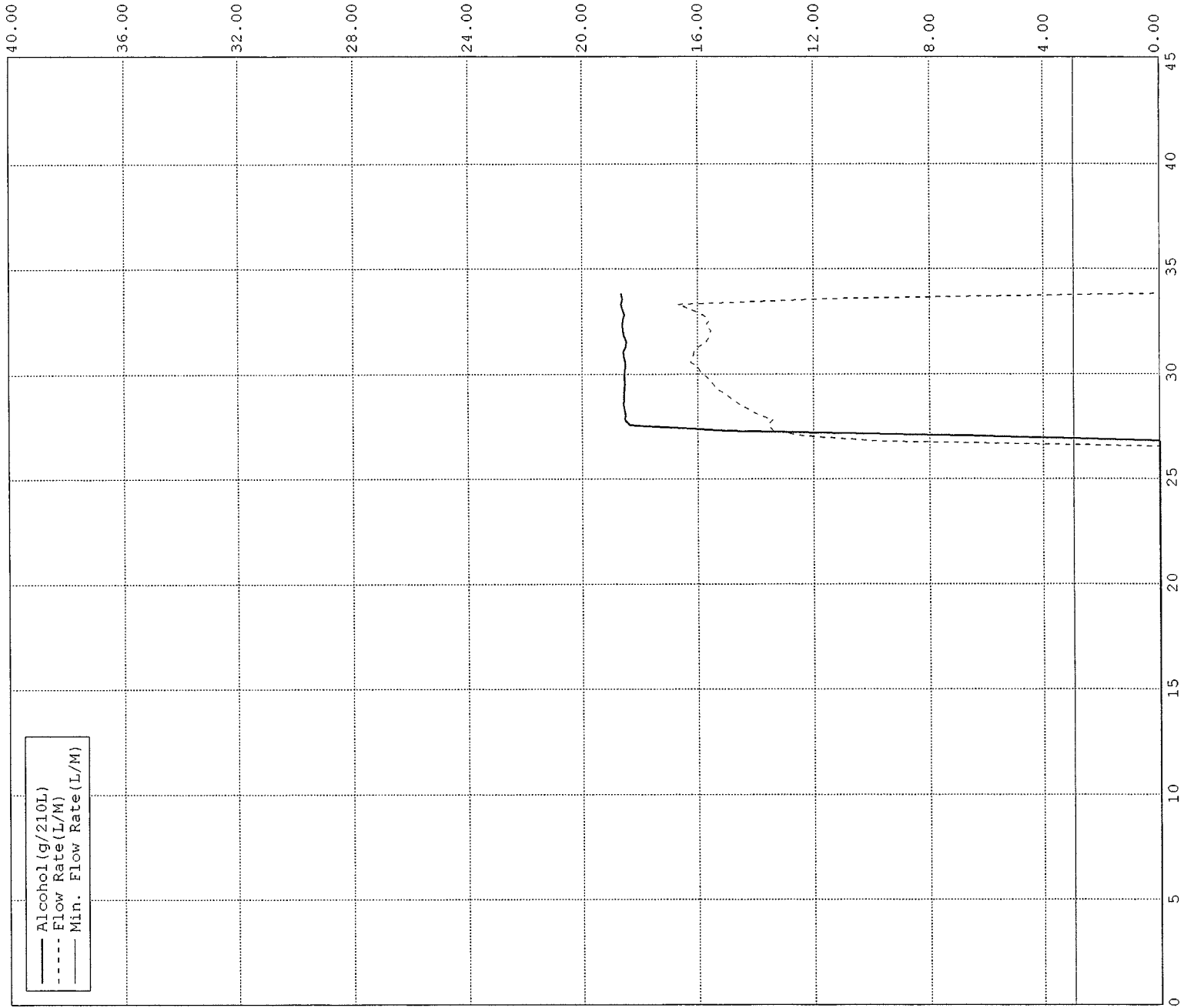
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.20: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	11:11
BLANK TEST	0.000	11:11
INTERNAL STANDARD	VERIFIED	11:11
Xq = 0.074 (1.31%)		
EXTERNAL STANDARD	0.077	11:11
X[1] = 0.0774 (-0.0012) (0.0041)		
BLANK TEST	0.000	11:12
SUBJECT SAMPLE (Vol=1.74L)	0.093	11:13
X[1] = 0.0932 (0.0008) (0.0017)		
BLANK TEST	0.000	11:14
EXTERNAL STANDARD	0.077	11:14
X[1] = 0.0769 (-0.0018) (0.0031)		
BLANK TEST	0.000	11:15

DW



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100362

Date: 12/11/2019
Time: 11:24:28

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

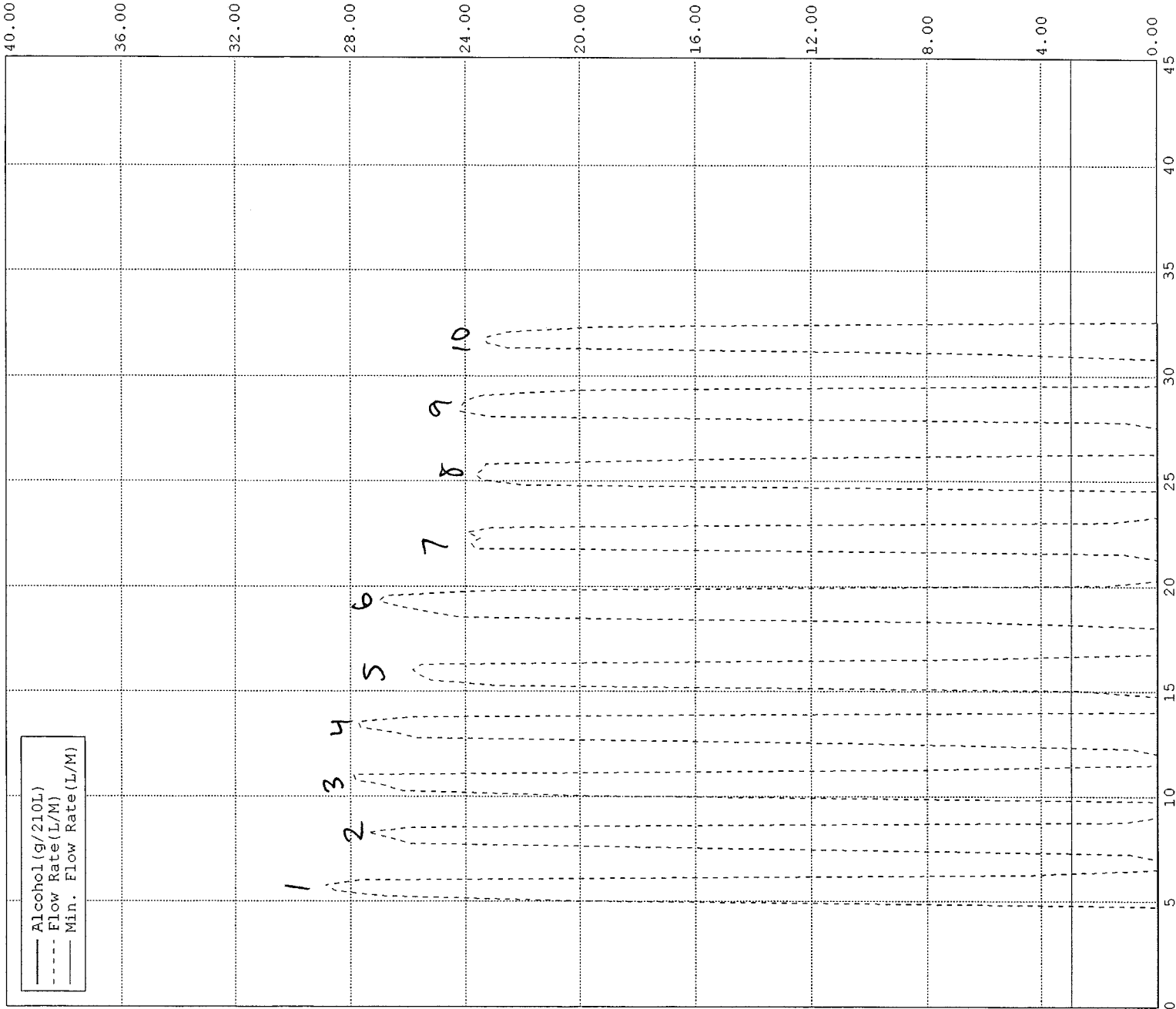
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.19: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 11:26
BLANK TEST 0.000 11:26
INTERNAL STANDARD VERIFIED 11:26
EXTERNAL STANDARD 0.077 11:26
BLANK TEST 0.000 11:27
SUBJECT SAMPLE XXX 11:28

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 12/11/2019
Time: 14:53:38

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

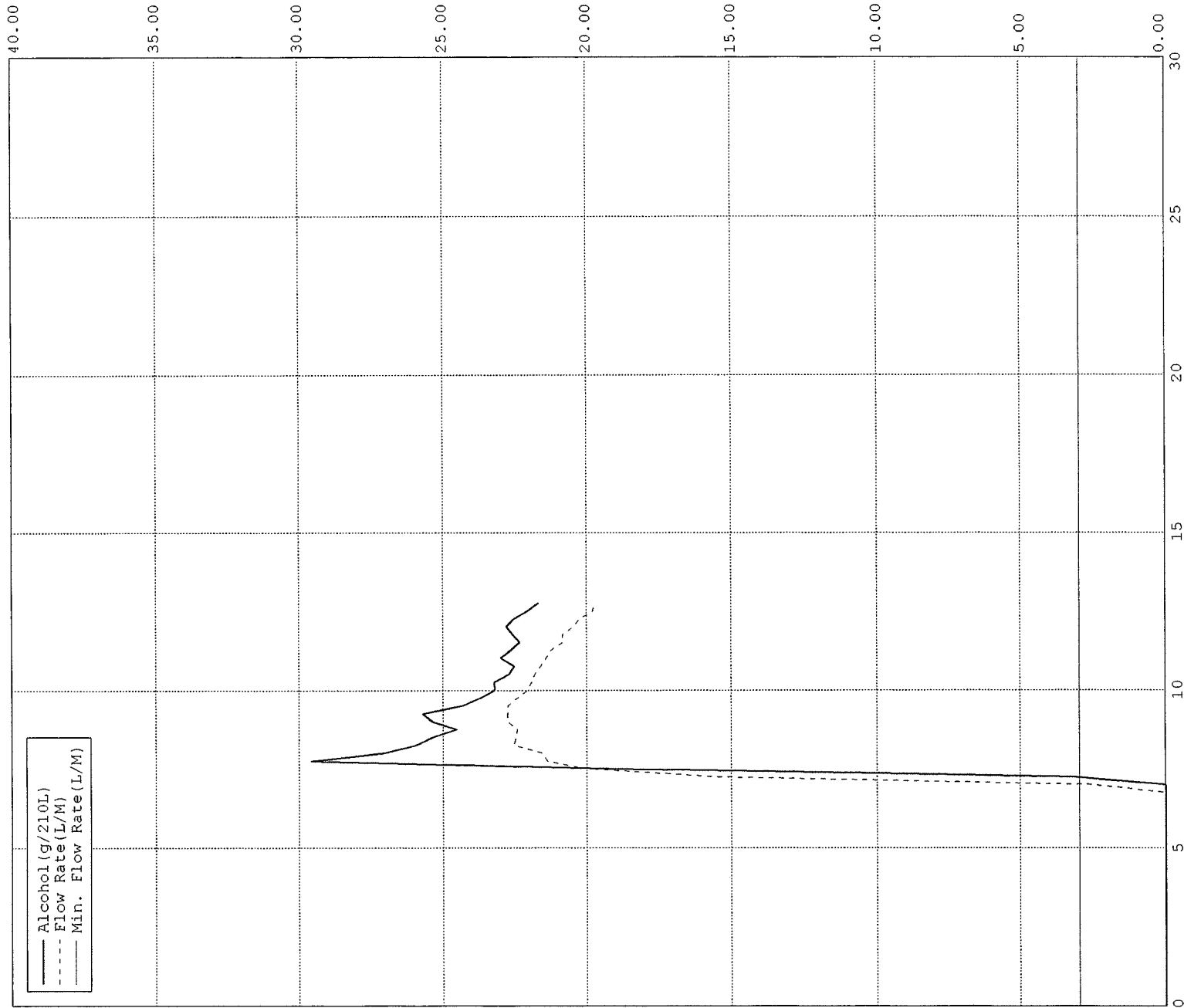
DEPT/AGENCY:
INVALID
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.13: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 14:55
BLANK TEST 0.000 14:55
INTERNAL STANDARD VERIFIED 14:55
EXTERNAL STANDARD 0.077 14:55
BLANK TEST 0.000 14:56
SUBJECT SAMPLE INVALID 14:56

AW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 12/11/2019
Time: 15:00:07

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

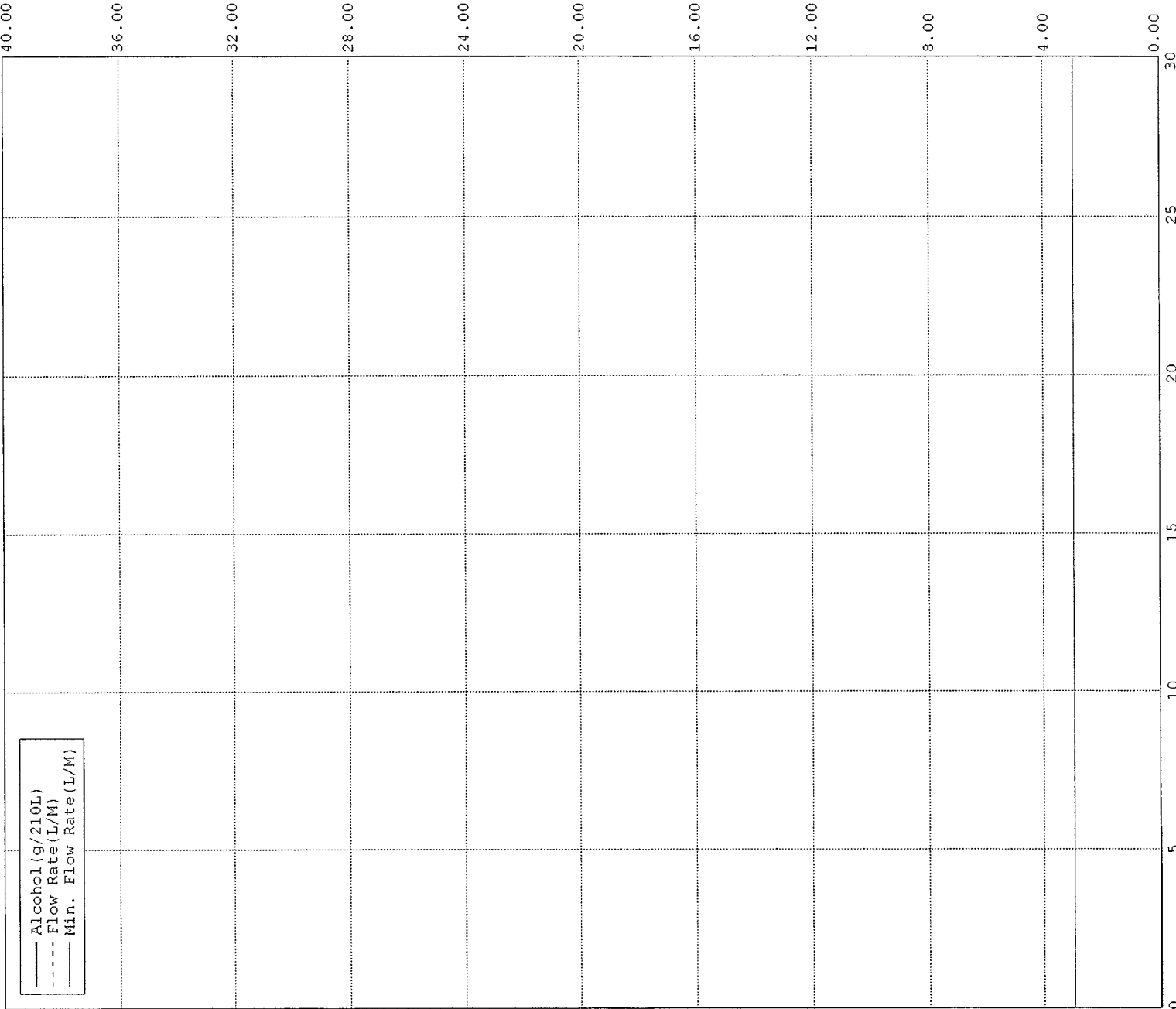
DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.13: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 15:01
BLANK TEST 0.000 15:01
INTERNAL STANDARD VERIFIED 15:01
EXTERNAL STANDARD 0.077 15:01
BLANK TEST 0.000 15:02

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100362

Date: 12/12/2019
 Time: 10:50:29

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 29.03: 0.078
 LOT #: AG826101
 EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	10:52
BLANK TEST	0.000	10:52
INTERNAL STANDARD	VERIFIED	10:53
EXTERNAL STANDARD	0.077	10:53
BLANK TEST	0.000	10:54
SUBJECT SAMPLE (Vol=2.19L)	0.000	10:54
BLANK TEST	0.000	10:55
EXTERNAL STANDARD	0.077	10:55
BLANK TEST	0.000	10:56

DMW

