

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 100348 Analyst Derek Walton Start Date 10/26/18

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 02/27/2020

ii. 0.040g/210L Mnf Airgas Lot A6630101 Exp 10/27/2018

iii. 0.080g/210L Mnf Airgas Lot A6634001 Exp 12/05/2018

iv. 0.100g/210L Mnf Airgas Lot A6805903 Exp 02/28/2020

v. 0.200g/210L Mnf Cuttn Lot 17340 Exp 10/09/2019

1. Simulator S/N DR5298 Date Calibrated 01/24/2018

vi. 0.300g/210L Mnf Cuttn Lot 17350 Exp 10/11/2019

1. Simulator S/N SD1198 Date Calibrated 01/23/2018

5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

d. Exceeded attempts

i. Acetone - Mnf Cuttn Lot 18070 Level 0.100 Exp 02/26/2020

1. Simulator S/N SD1177 Date Calibrated 01/24/2018

ii. Isopropanol - Mnf Cuttn Lot 18070 Level 0.100 Exp 02/26/2020

1. Simulator S/N SD1199 Date Calibrated 01/24/2018

iii. Negative Control - Mnf Cuttn Lot 18070 Level 0.100 Exp 02/26/2020

1. Simulator S/N SD1088 Date Calibrated 01/24/2018

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 10/26/18

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 10/26/2018
Time: 08:06:54

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 = 44.9°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.68 V PASSED
(1.01 V - 2.35 V)
Cooler Voltage = 1.74 V PASSED
(1.04 V - 2.44 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 538 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.0 in

PUMP INFO

Flow Rate = 4.406 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.005 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 = 0.089 0.49% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100348

Date: 10/26/2018
Time: 8:21 AM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 44.7°C

Current Barometer 29.1 in
Volume (Ltr) 1.57 ✓

Settings

Lamp: 1.74 V
Bias: 80 V
Cooler: 1.74 V
Chopper: 538 Hz

Voltages (V)

Flow: 1.03 V
Detector: 0.006 V ✓

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 09/20/2018
Time: 14:41:22

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca = 0.1000
CAL = 0.951429 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0052 0.0010 <= b2 < 0.0100
b3 = 0.0004 0.0000 <= b3 < 0.0040
Xq = 0.0893 0.0500 <= Xq < 0.2000
a21 = 1.182097 1.050 <= a21 < 1.300
a31 = 0.540738 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 10/26/2018
Time: 09:04:24

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

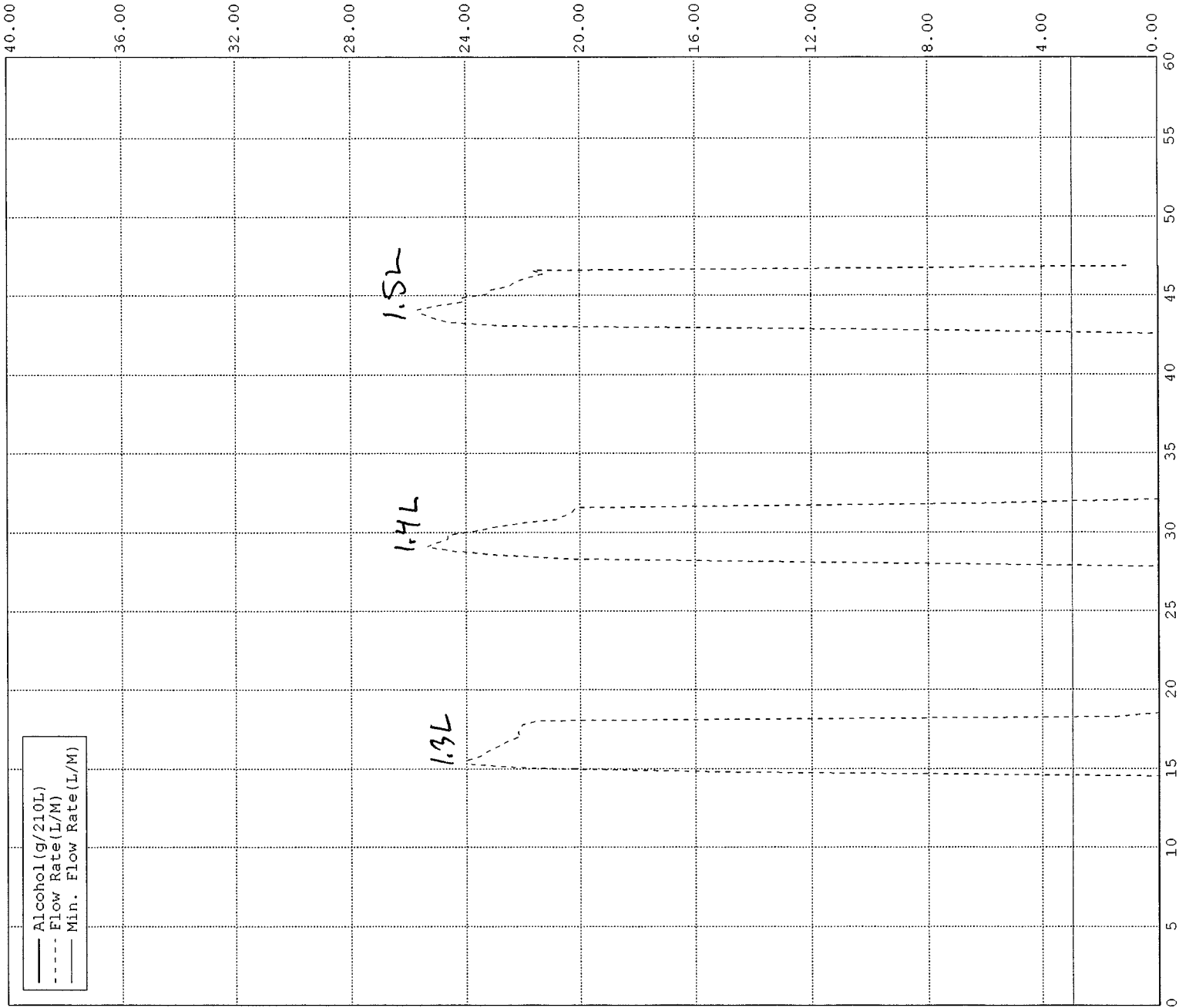
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.06: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:06
BLANK TEST	0.000	09:06
INTERNAL STANDARD	VERIFIED	09:06
EXTERNAL STANDARD	0.075	09:06
BLANK TEST	0.000	09:07
SUBJECT SAMPLE (Vol=1.51L)	0.000	09:08
BLANK TEST	0.000	09:09
EXTERNAL STANDARD	0.075	09:09
BLANK TEST	0.000	09:10



LINEARITY CHECK

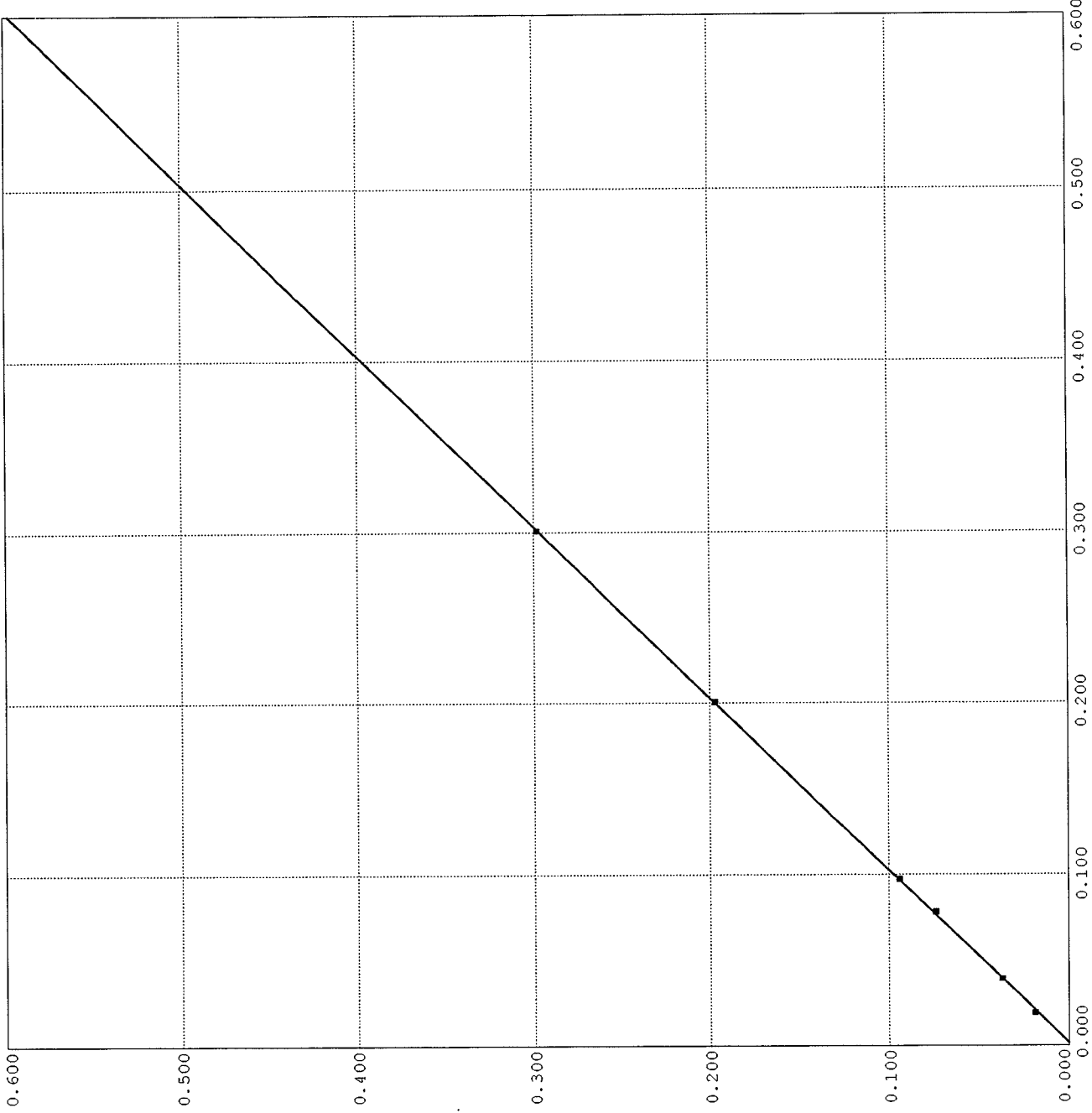
Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 10/26/2018
Time: 10:04:23

SUPERVISOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.019	0.0196	0.0005
0.039	0.0380	0.0000
0.078	0.0748	0.0004
0.097	0.0952	0.0004
0.200	0.1980	0.0000
0.300	0.2990	0.0010

SLOPE = 0.997828
R² = 0.999864



DW

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100348

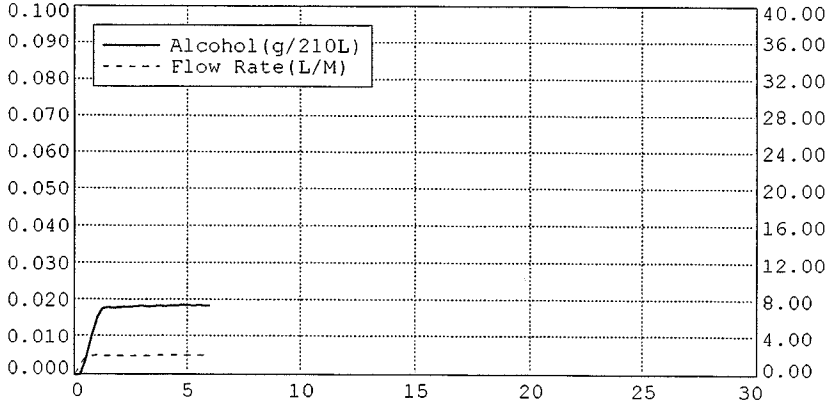
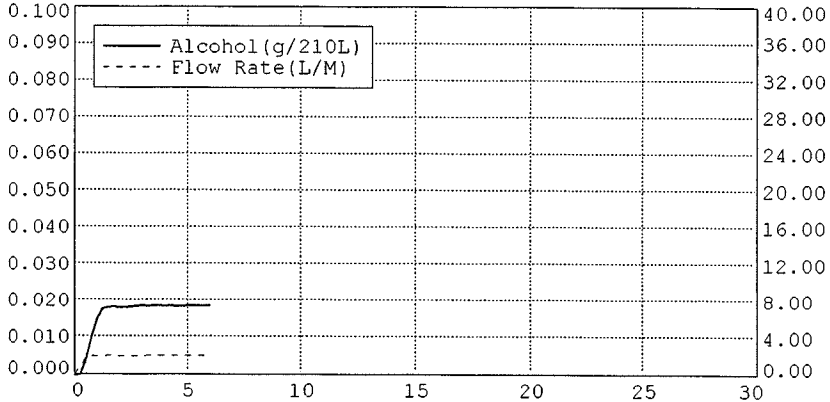
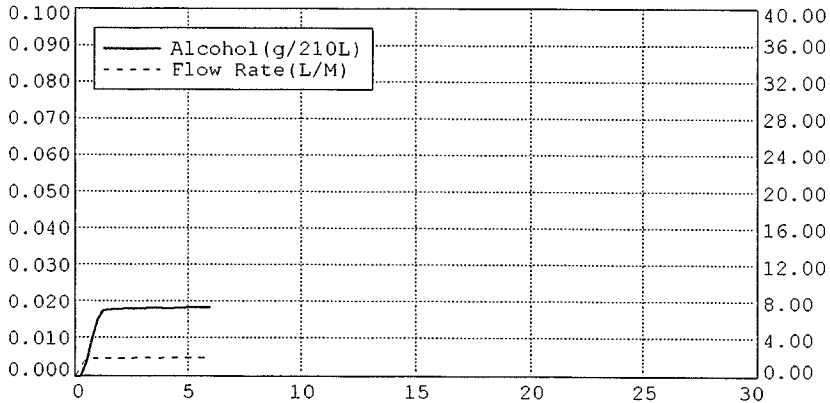
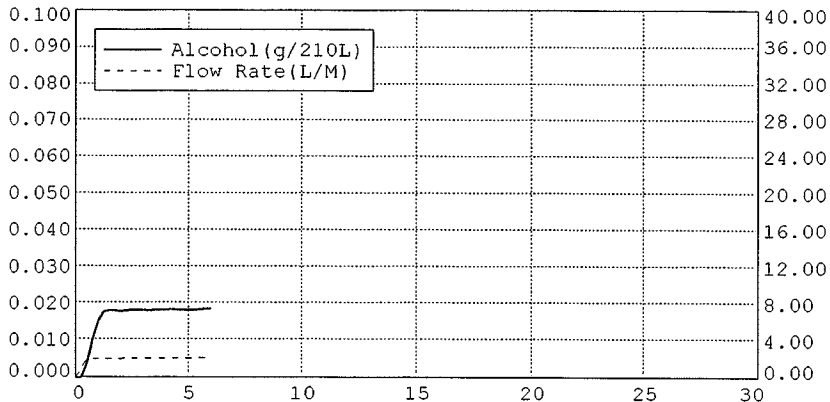
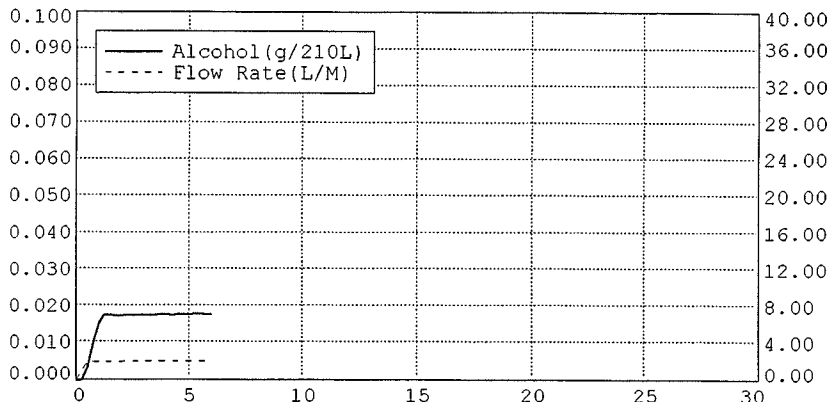
Date: 10/26/2018
Time: 10:04:25

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.08: 0.019
LOT #: AG805804
EXPIRATION: 02/27/2020
TANK PRESSURE: 955 psi

BLANK TEST	0.000	10:05
INTERNAL STANDARD	VERIFIED	10:05
EXTERNAL STANDARD	0.019	10:06
BLANK TEST	0.000	10:06
EXTERNAL STANDARD	0.019	10:07
BLANK TEST	0.000	10:08
EXTERNAL STANDARD	0.020	10:08
BLANK TEST	0.000	10:09
EXTERNAL STANDARD	0.020	10:09
BLANK TEST	0.000	10:10
EXTERNAL STANDARD	0.020	10:10
BLANK TEST	0.000	10:11

Average = 0.0196
Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100348

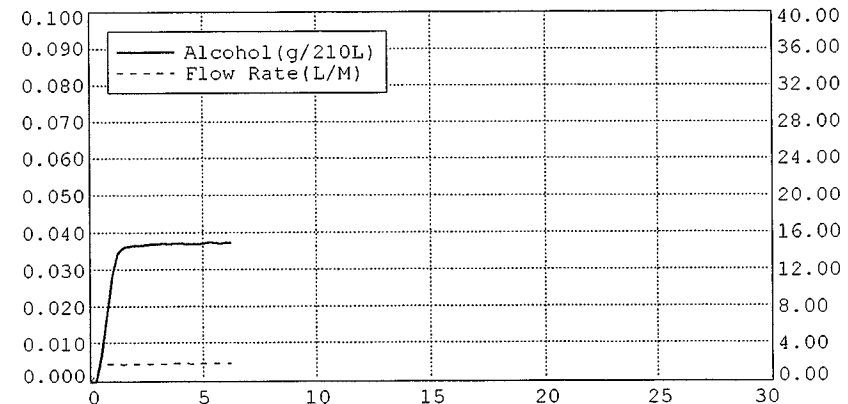
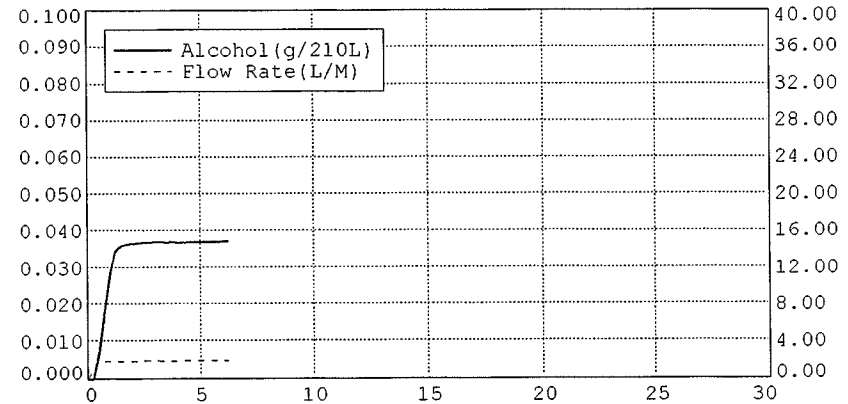
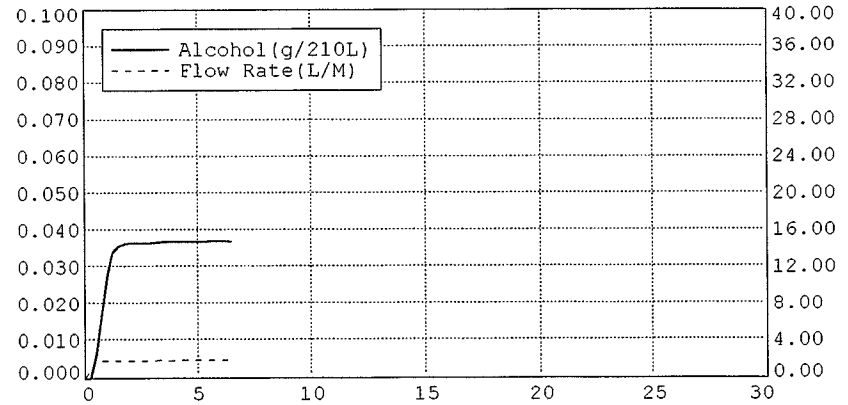
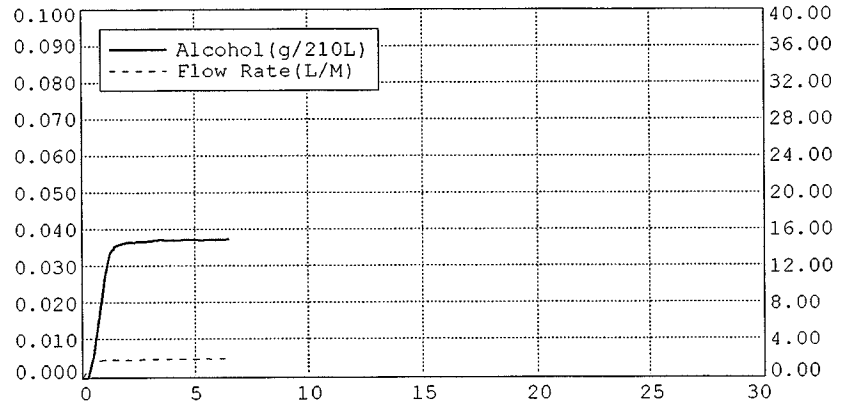
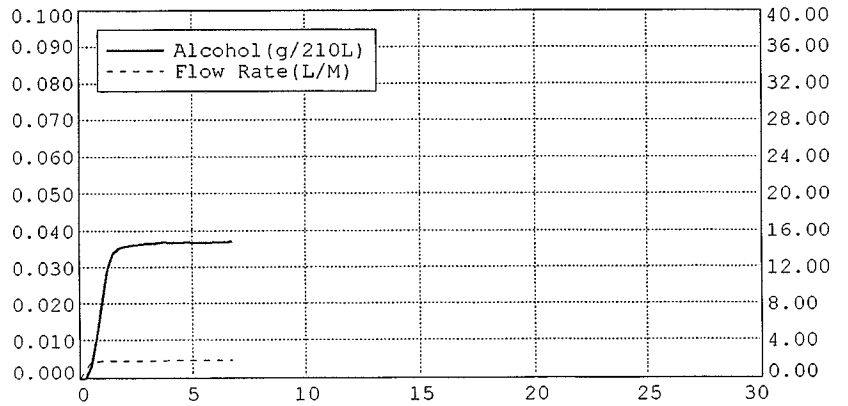
Date: 10/26/2018
Time: 10:11:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.08: 0.039
LOT #: AG630101
EXPIRATION: 10/27/2018
TANK PRESSURE: 766 psi

BLANK TEST	0.000	10:13
INTERNAL STANDARD	VERIFIED	10:13
EXTERNAL STANDARD	0.038	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.038	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.038	10:15
BLANK TEST	0.000	10:16
EXTERNAL STANDARD	0.038	10:16
BLANK TEST	0.000	10:17
EXTERNAL STANDARD	0.038	10:18
BLANK TEST	0.000	10:18

Average = 0.0380
Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100348

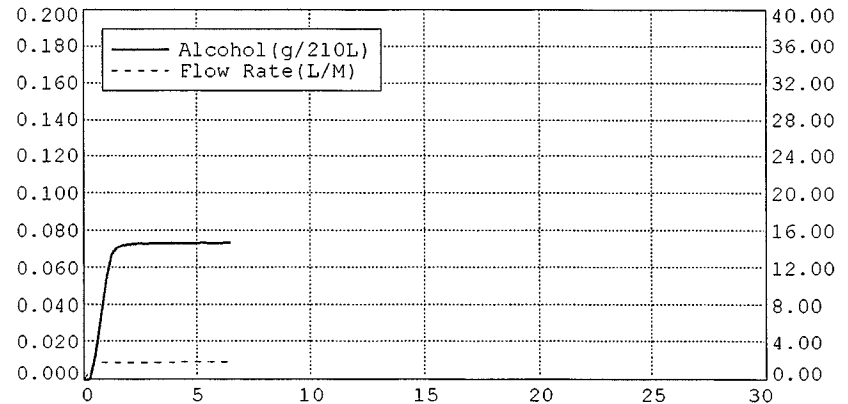
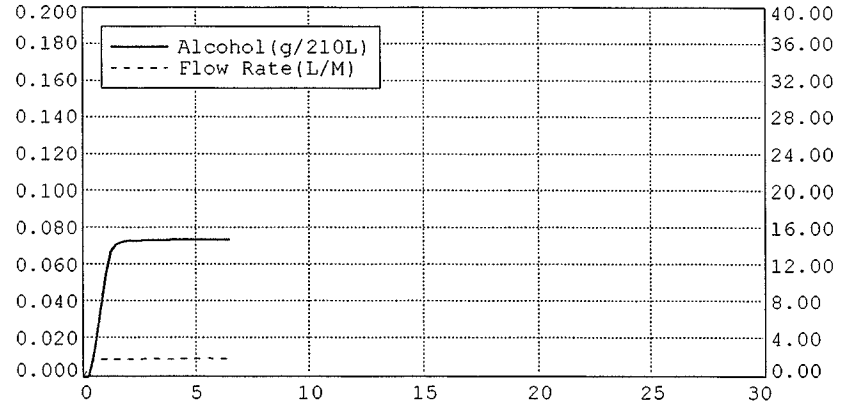
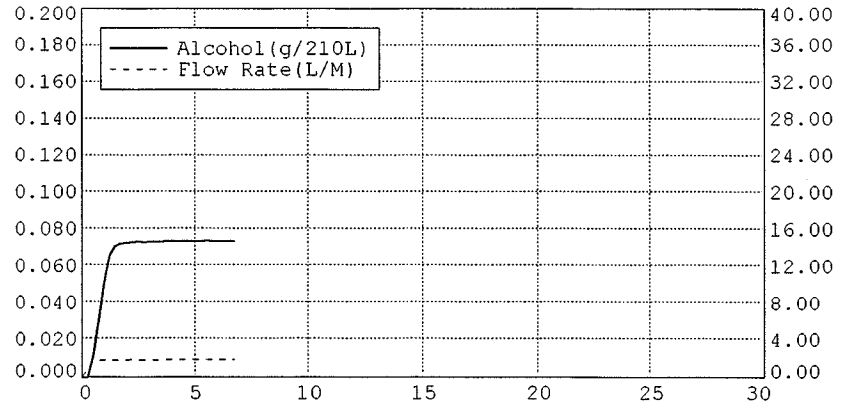
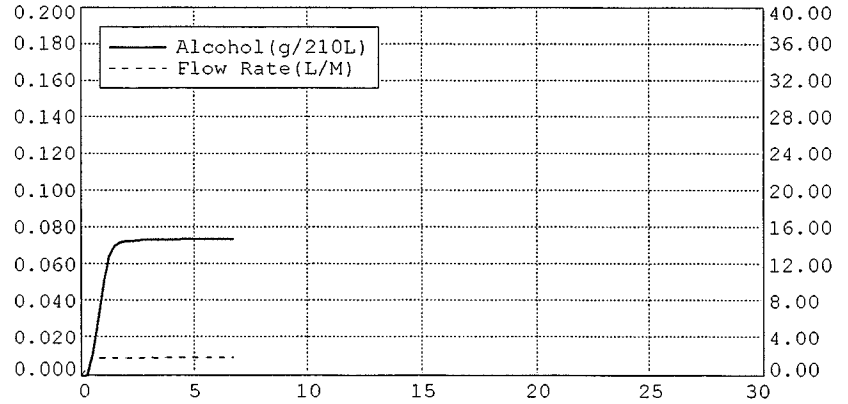
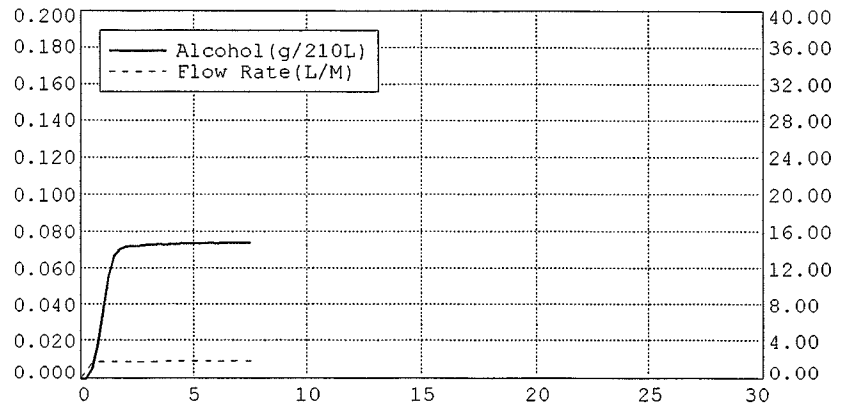
Date: 10/26/2018
 Time: 10:19:46

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.09: 0.078
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 631 psi

BLANK TEST	0.000	10:20
INTERNAL STANDARD	VERIFIED	10:21
EXTERNAL STANDARD	0.075	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.075	10:22
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.074	10:23
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.075	10:24
BLANK TEST	0.000	10:25
EXTERNAL STANDARD	0.075	10:25
BLANK TEST	0.000	10:26

Average = 0.0748
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100348

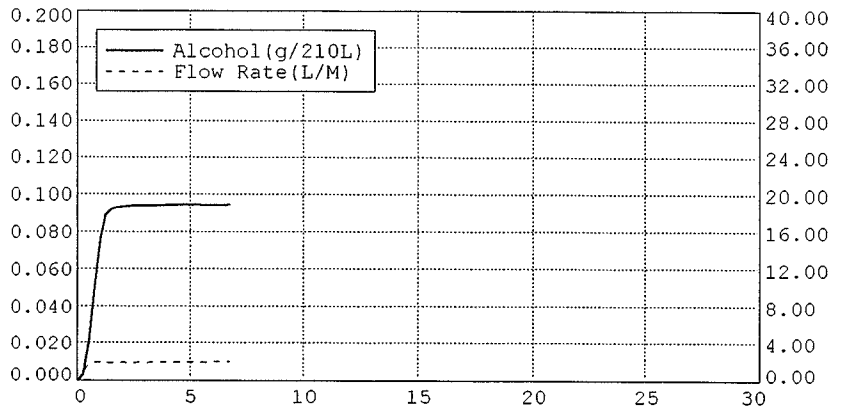
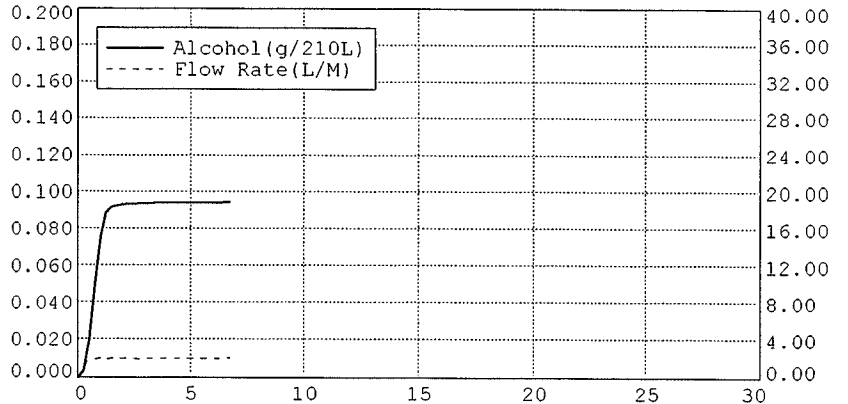
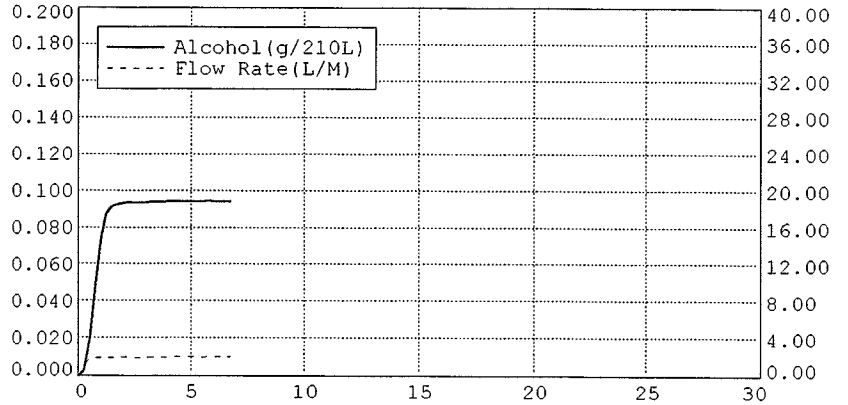
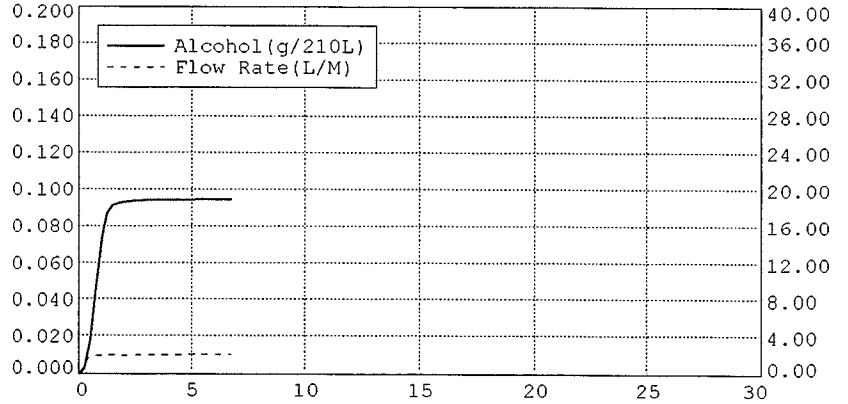
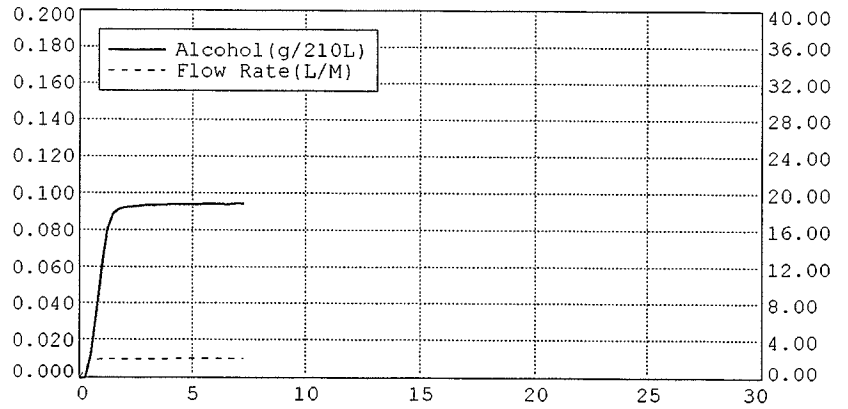
Date: 10/26/2018
Time: 10:27:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.10: 0.097
LOT #: AG805903
EXPIRATION: 02/28/2020
TANK PRESSURE: 1065 psi

BLANK TEST	0.000	10:29
INTERNAL STANDARD	VERIFIED	10:29
EXTERNAL STANDARD	0.096	10:29
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.095	10:30
BLANK TEST	0.000	10:31
EXTERNAL STANDARD	0.095	10:31
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.095	10:32
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.095	10:34
BLANK TEST	0.000	10:34

Average = 0.0952
Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

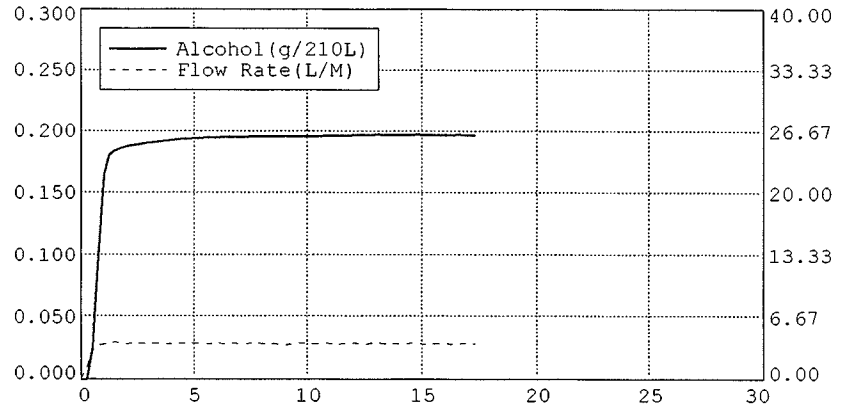
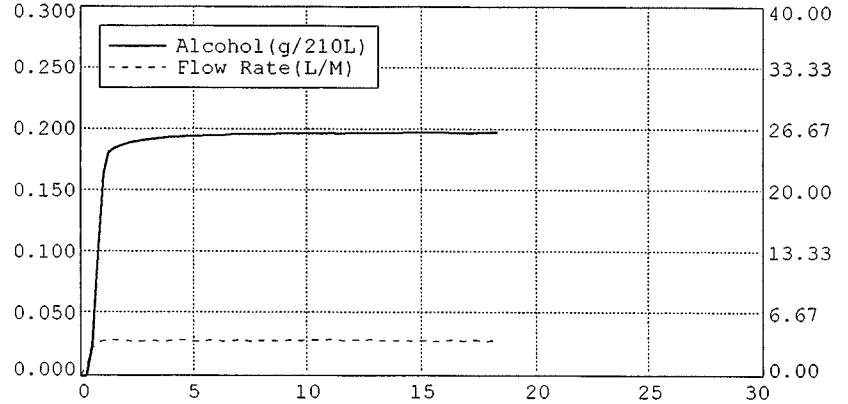
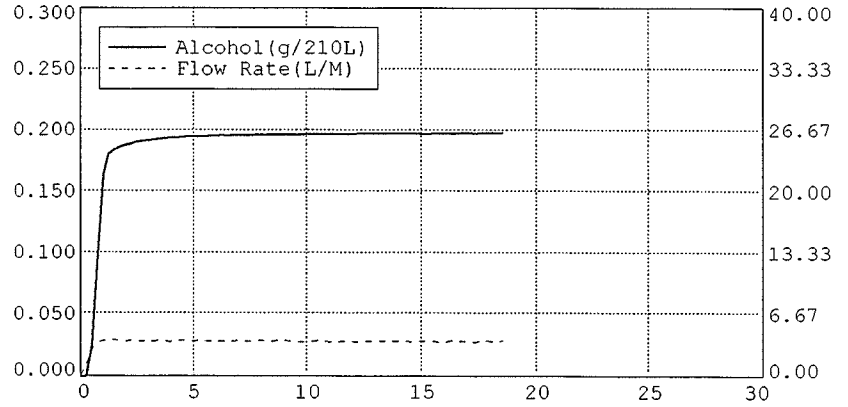
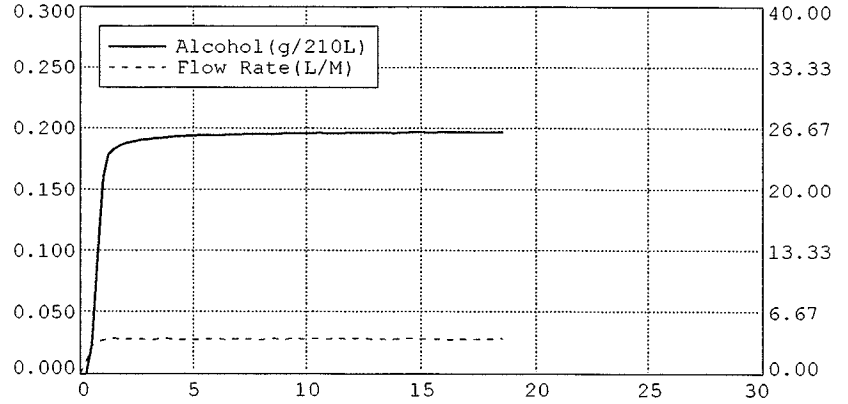
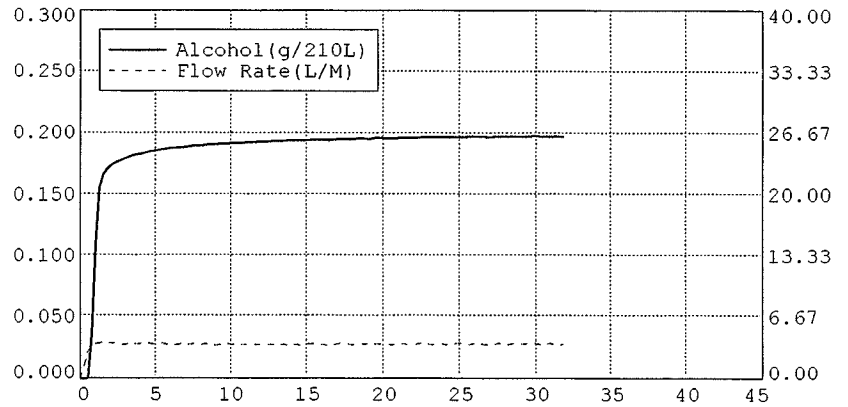
 Alaska Department of Public Safety
 DATAMASTER dmt: 100348

Date: 10/26/2018
 Time: 10:36:32

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 17340
 EXPIRATION: 10/09/2019

BLANK TEST	0.000	10:38
INTERNAL STANDARD	VERIFIED	10:38
EXTERNAL STANDARD	0.198	10:38
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.198	10:40
BLANK TEST	0.000	10:41
EXTERNAL STANDARD	0.198	10:41
BLANK TEST	0.000	10:42
EXTERNAL STANDARD	0.198	10:42
BLANK TEST	0.000	10:43
EXTERNAL STANDARD	0.198	10:44
BLANK TEST	0.000	10:45

Average = 0.1980
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

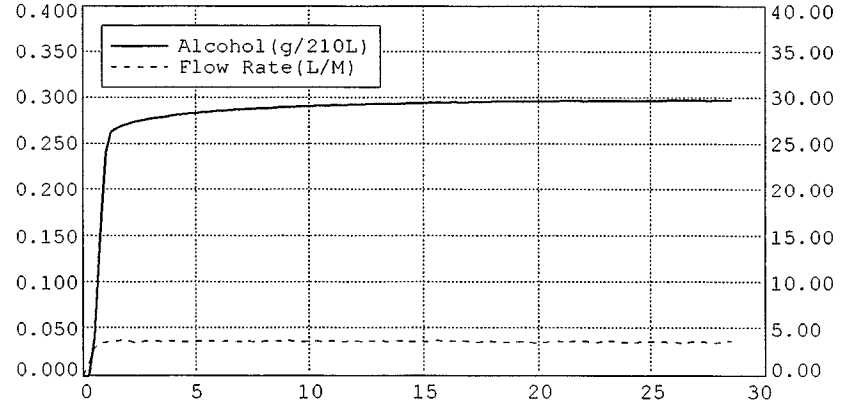
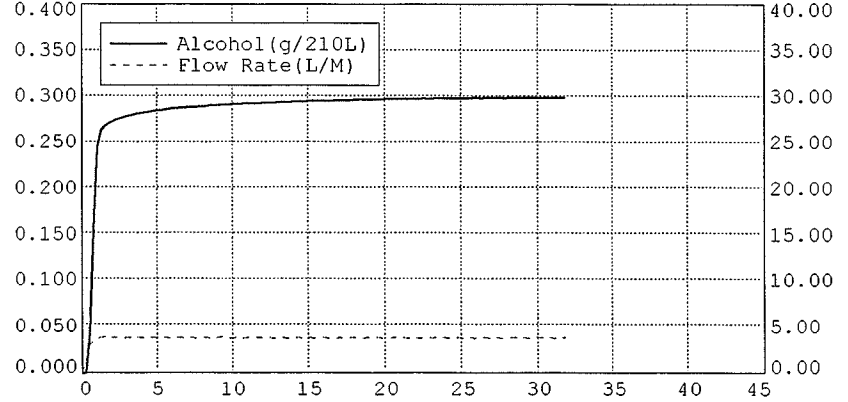
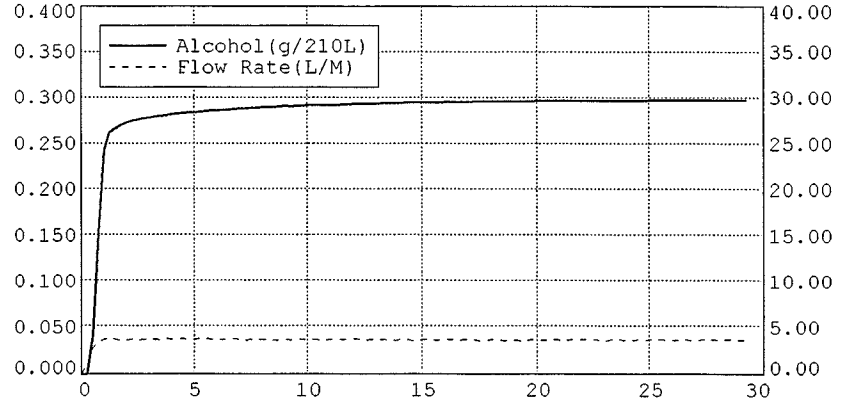
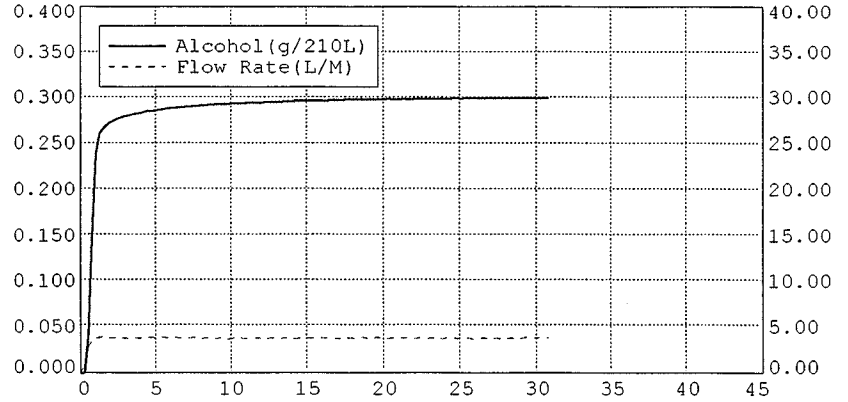
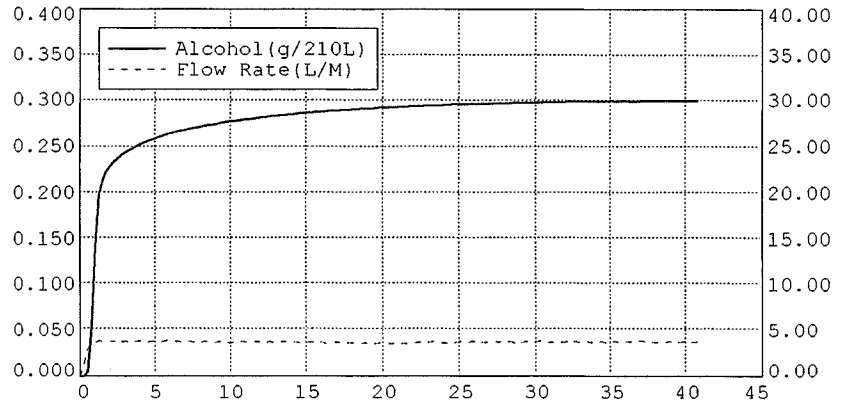
 Alaska Department of Public Safety
 DATAMASTER dmt: 100348

Date: 10/26/2018
 Time: 10:46:24

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

BLANK TEST	0.000	10:47
INTERNAL STANDARD	VERIFIED	10:48
EXTERNAL STANDARD	0.300	10:48
BLANK TEST	0.000	10:49
EXTERNAL STANDARD	0.300	10:50
BLANK TEST	0.000	10:51
EXTERNAL STANDARD	0.298	10:51
BLANK TEST	0.000	10:52
EXTERNAL STANDARD	0.299	10:53
BLANK TEST	0.000	10:54
EXTERNAL STANDARD	0.298	10:54
BLANK TEST	0.000	10:55

Average = 0.2990
 Std Dev = 0.0010



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 10/26/2018
Time: 11:54:14

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

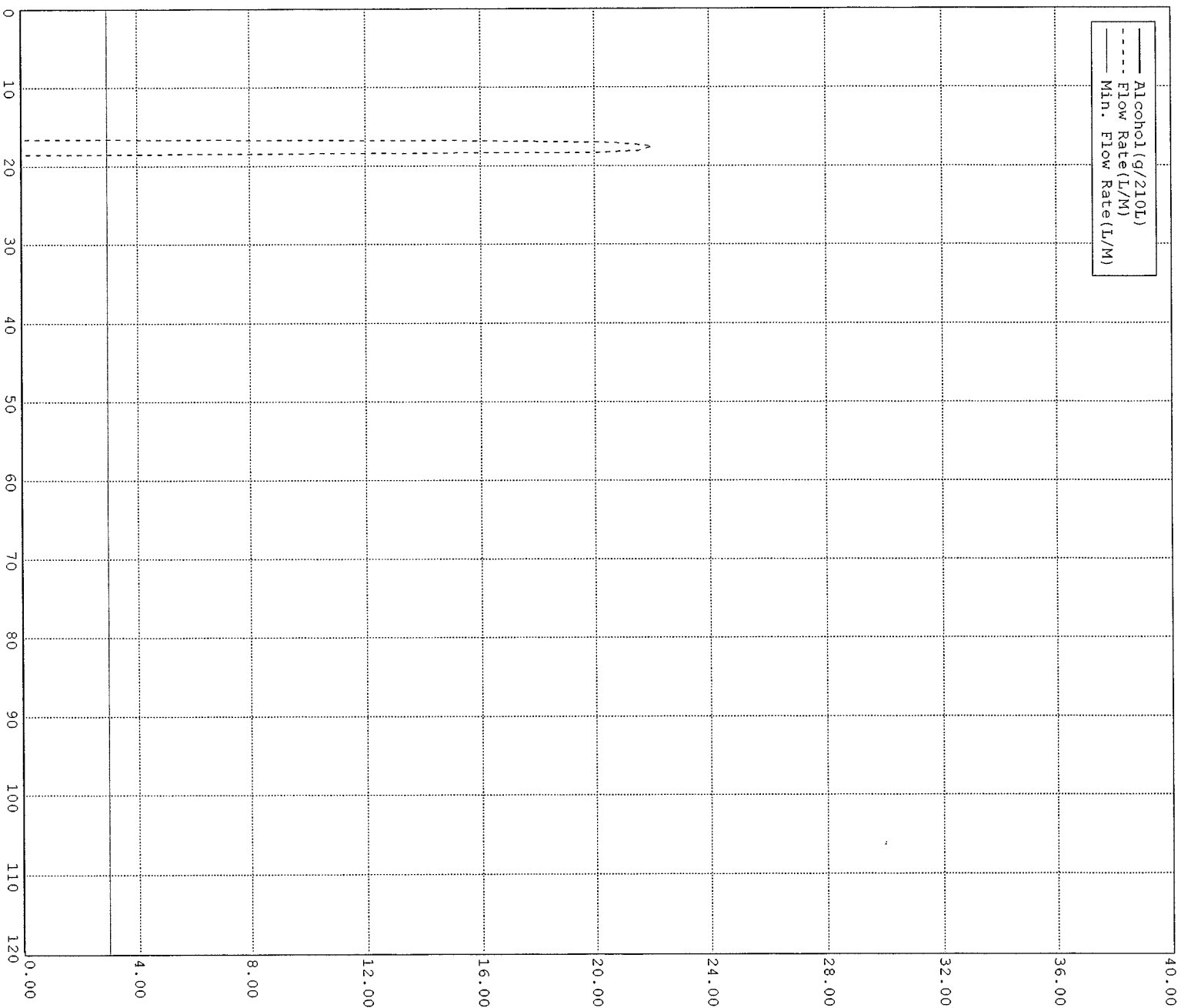
OPERATOR NAME:
DEREK WALLTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.11: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	11:55
BLANK TEST	0.000	11:55
INTERNAL STANDARD	VERIFIED	11:55
EXTERNAL STANDARD	0.075	11:55
BLANK TEST	0.000	11:56
SUBJECT SAMPLE	INCOMPLETE	11:58

Handwritten signature



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 10/26/2018
Time: 11:00:16

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

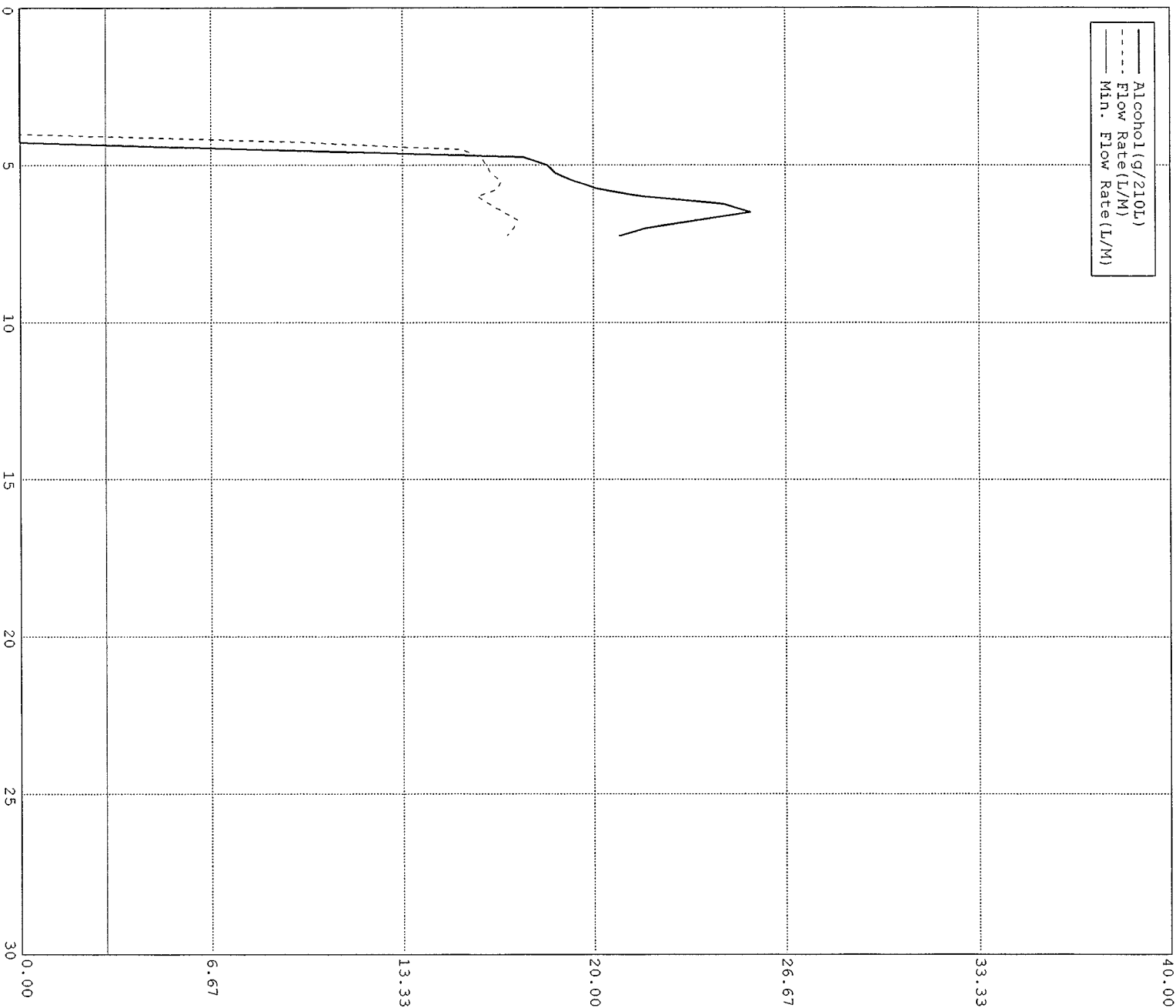
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.10: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	11:01
BLANK TEST	0.000	11:01
INTERNAL STANDARD	VERIFIED	11:01
EXTERNAL STANDARD	0.074	11:01
BLANK TEST	0.000	11:02
SUBJECT SAMPLE	INVALID	11:03

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 10/26/2018
Time: 12:22:15

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

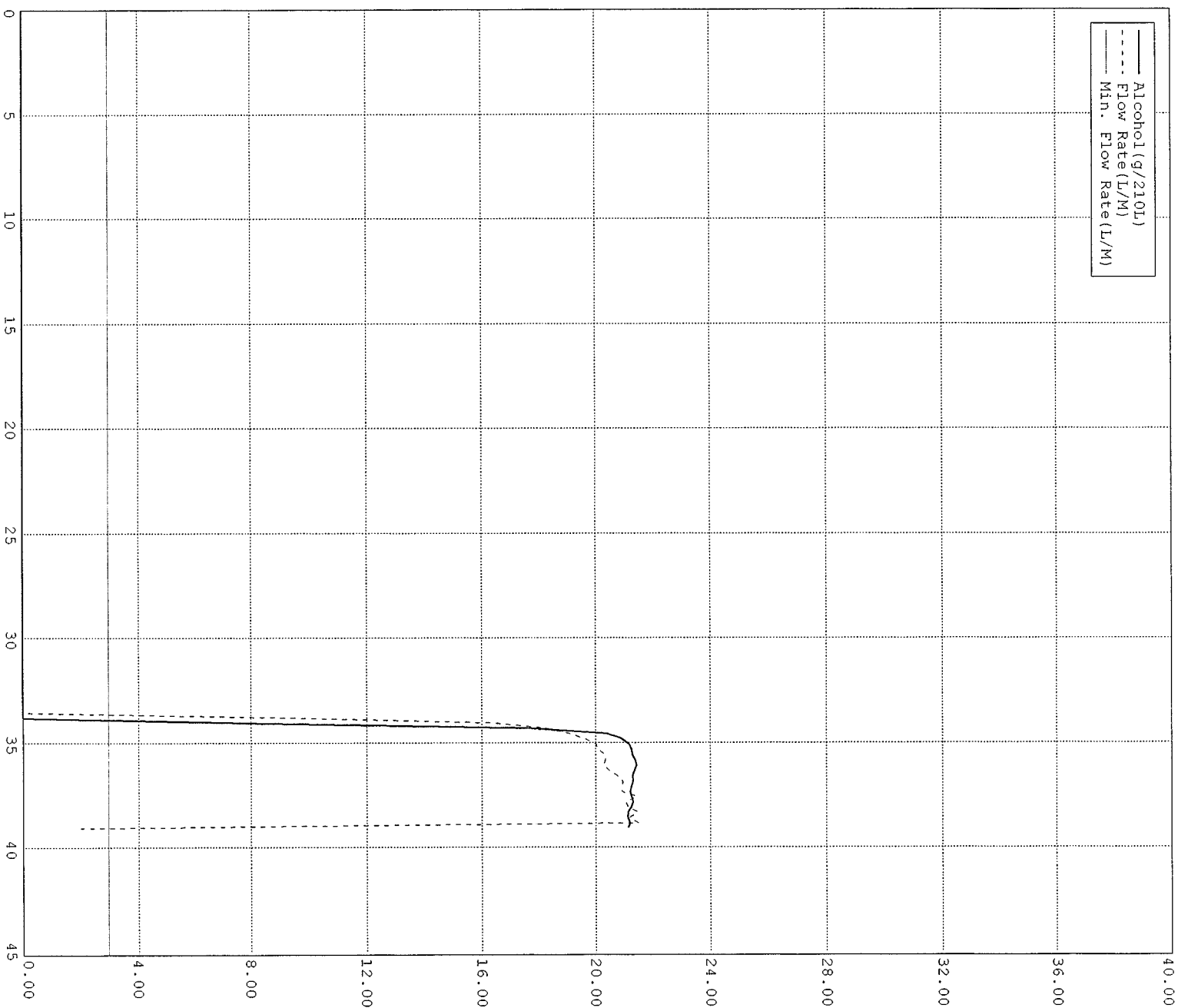
DEPT/AGENCY:
INTERFERENCE ACETONE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.10: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 12:24
BLANK TEST 0.000 12:24
INTERNAL STANDARD VERIFIED 12:24
Xq = 0.090 (0.68%)
EXTERNAL STANDARD 0.075 12:25
X[1] = 0.0750 (-0.0002) (0.0026)
BLANK TEST 0.000 12:26
SUBJECT SAMPLE XXX 12:26
X[1] = 0.1053 (-0.0159) (0.0022)

Interference Detected

JW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 10/26/2018
Time: 12:17:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

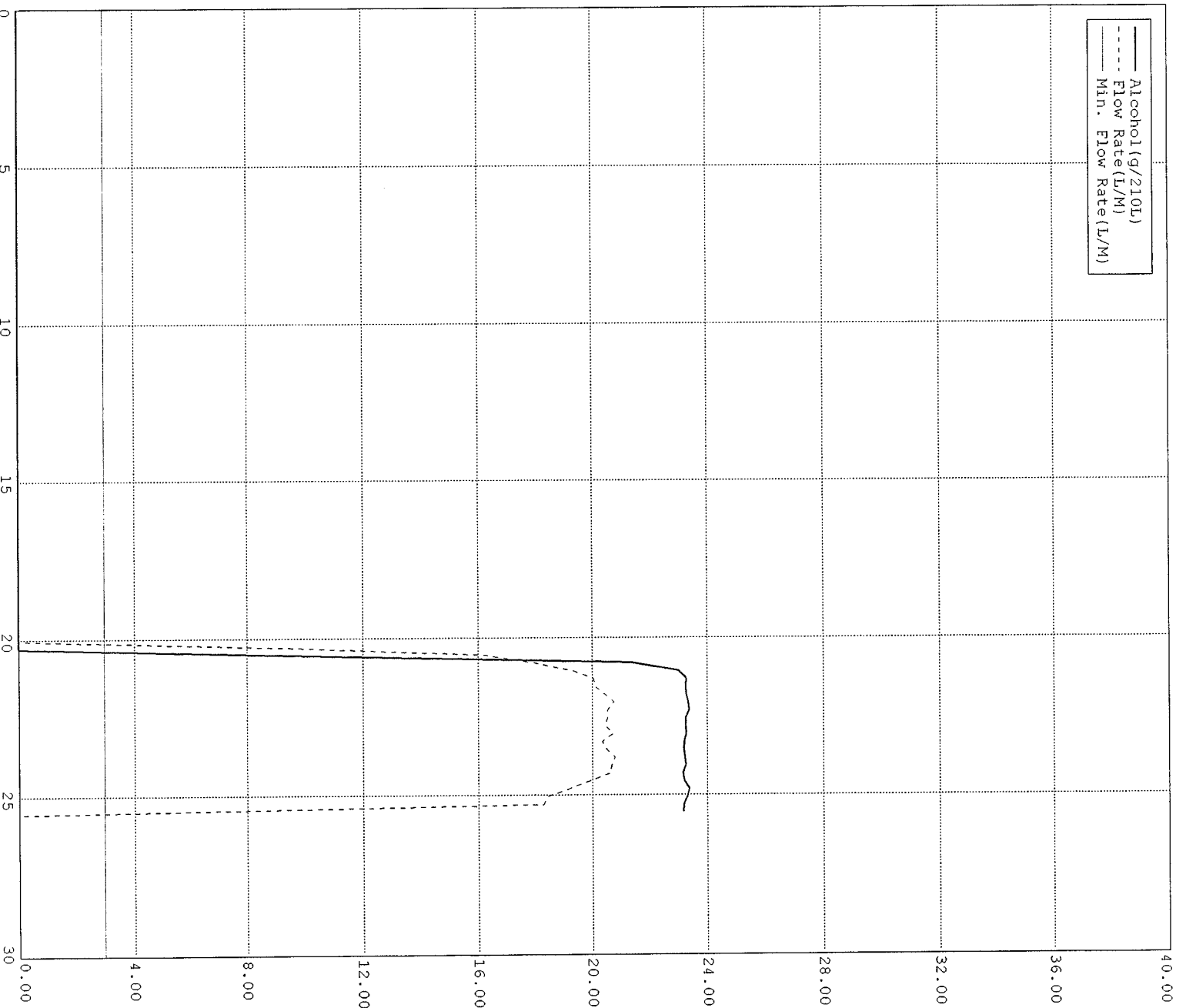
DEPT/AGENCY:
INTERFERENCE IPA
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.12: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	12:18
BLANK TEST	0.000	12:18
INTERNAL STANDARD	VERIFIED	12:18
Xq = 0.090 (0.59%)		
EXTERNAL STANDARD	0.075	12:18
X[1] = 0.0751 (-0.0001)	(0.0029)	
BLANK TEST	0.000	12:19
SUBJECT SAMPLE	XXX	12:20
X[1] = 0.1156 (-0.0249)	(0.0015)	

Interference Detected

JMW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 10/26/2018
Time: 12:08:45

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

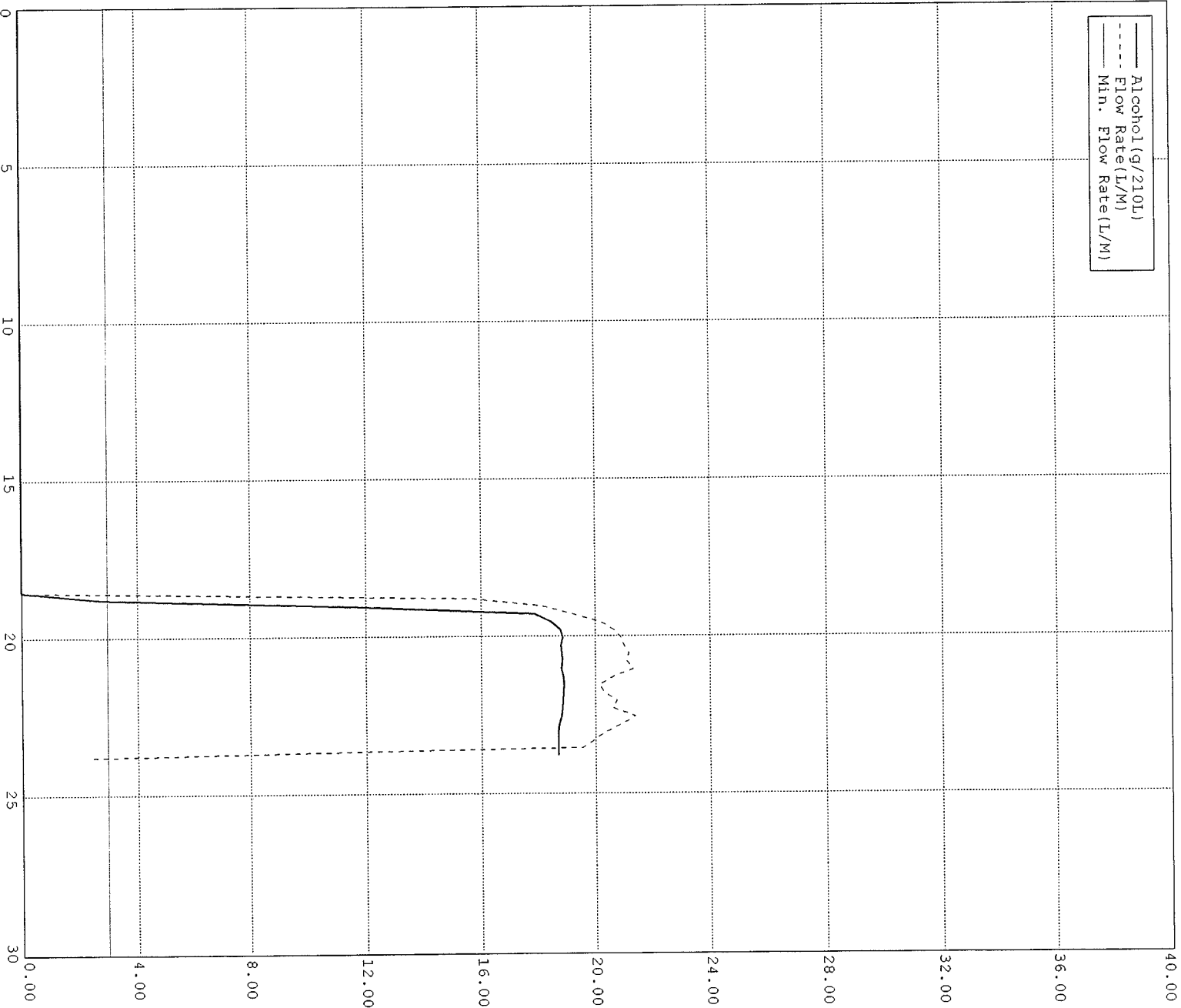
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.11: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	12:11
BLANK TEST	0.000	12:11
INTERNAL STANDARD	VERIFIED	12:11
Xq = 0.089 (0.20%)		
EXTERNAL STANDARD	0.075	12:11
X[1] = 0.0748 (-0.0005)	(0.0024)	
BLANK TEST	0.000	12:12
SUBJECT SAMPLE (Vol=1.69L)	0.094	12:13
X[1] = 0.0940 (0.0001)	(0.0012)	
BLANK TEST	0.000	12:14
EXTERNAL STANDARD	0.075	12:14
X[1] = 0.0748 (-0.0002)	(0.0020)	
BLANK TEST	0.000	12:15

Filter 2 Avg = -0.0003

Filter 3 Avg = 0.0025

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 10/26/2018
Time: 12:01:43

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

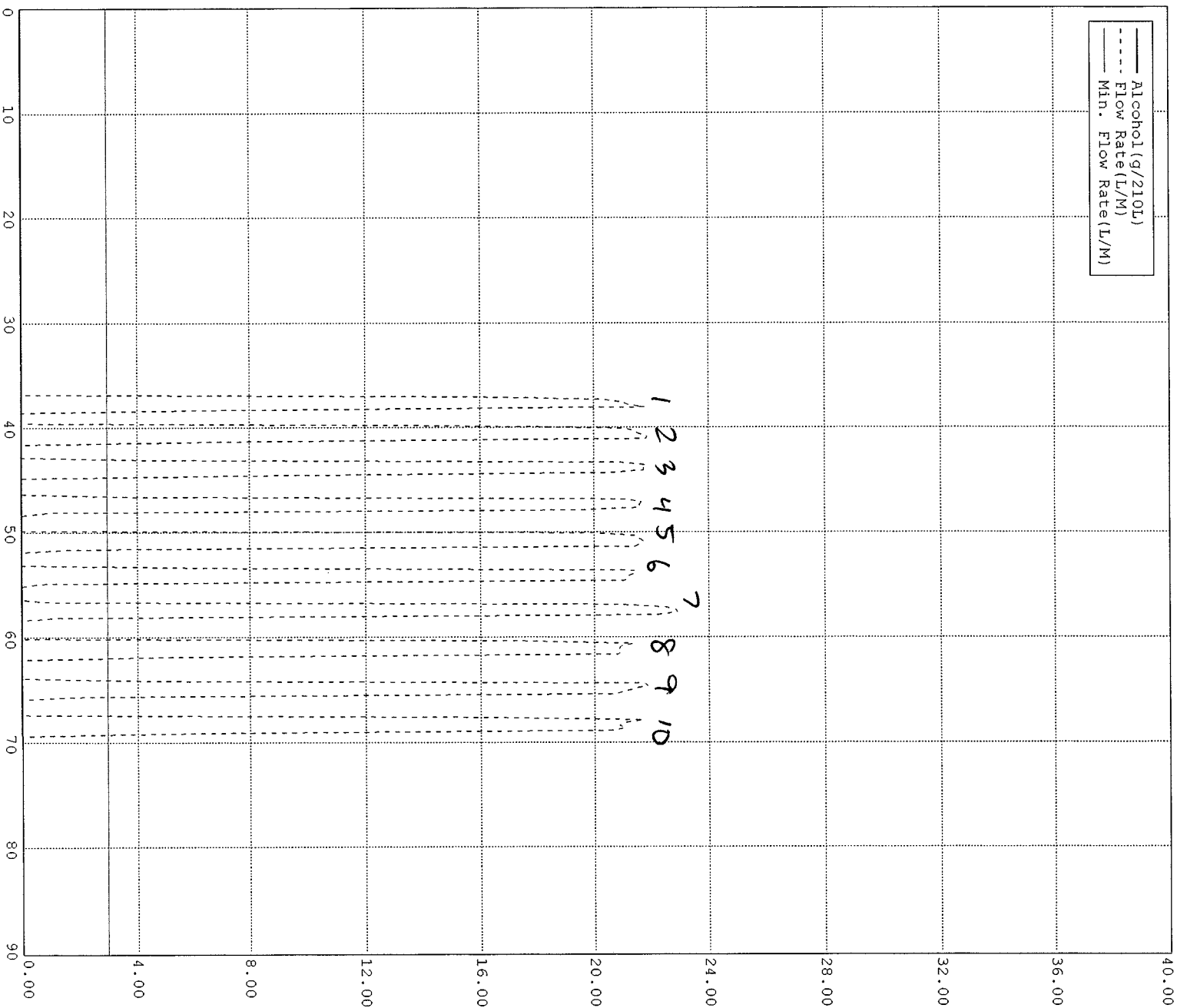
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.11: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	12:03
BLANK TEST	0.000	12:03
INTERNAL STANDARD	VERIFIED	12:03
EXTERNAL STANDARD	0.075	12:03
BLANK TEST	0.000	12:04
SUBJECT SAMPLE	XXX	12:06

Maximum Attempts Exceeded

JMN



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 10/26/2018
Time: 11:05:37

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

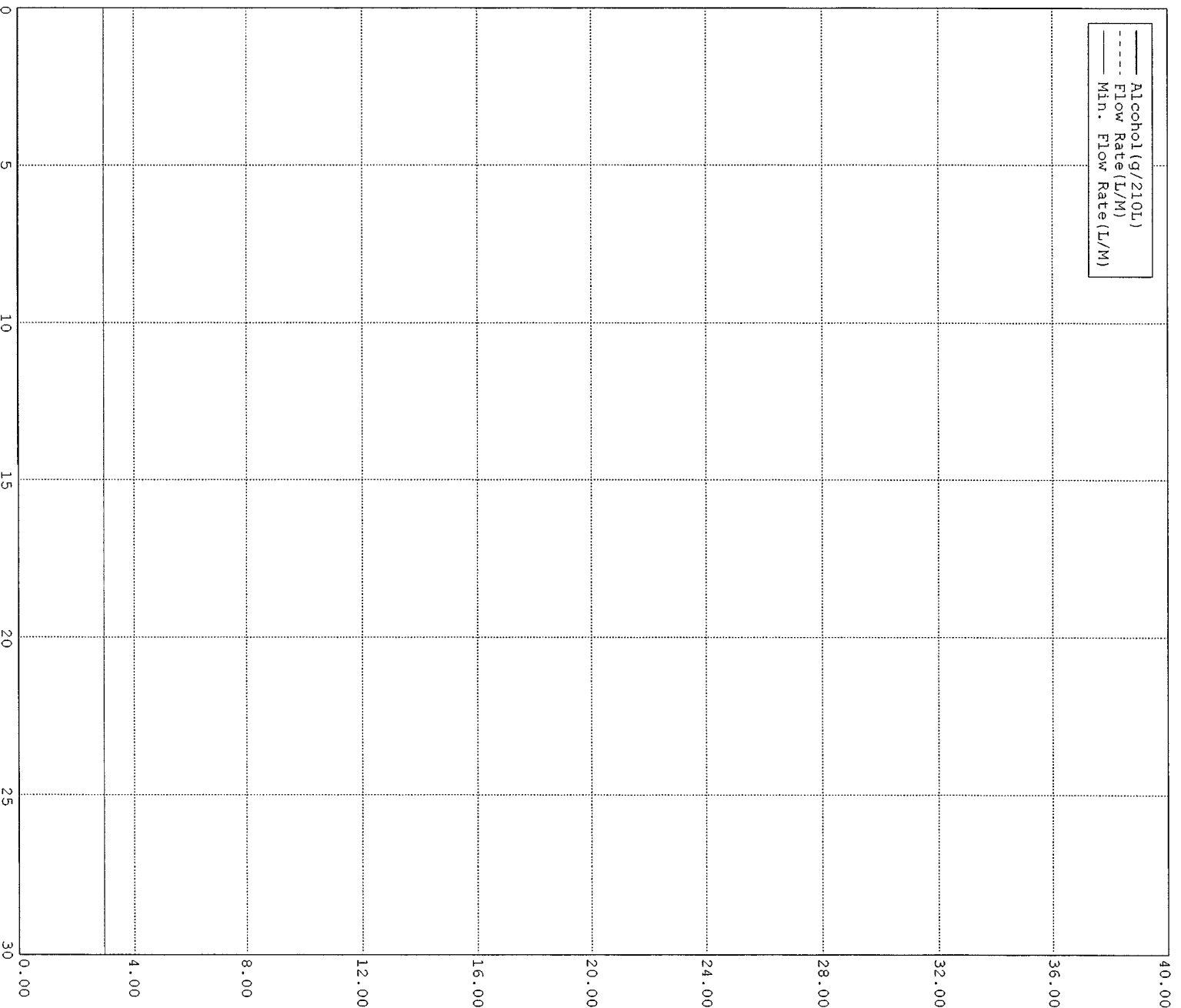
DEPT/AGENCY:
RPI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.10: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK
BLANK TEST PASSED 11:07
INTERNAL STANDARD VERIFIED 11:07
EXTERNAL STANDARD 0.075 11:07
BLANK TEST 0.000 11:08

RPI DETECTED

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 10/26/2018
Time: 12:40:11

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 29.10: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	12:41
BLANK TEST	0.000	12:41
INTERNAL STANDARD	VERIFIED	12:41
EXTERNAL STANDARD	0.075	12:42
BLANK TEST	0.000	12:43
SUBJECT SAMPLE (Vol=3.35L)	0.000	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.075	12:44
BLANK TEST	0.000	12:45

DMW

