

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 100694 Analyst Derech Walton Start Date 08/08/18

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 1.5L L (1.3L to 1.7L)

4. Linearity Test (attached)

a. Levels Used

- i. 0.020g/210L Mnf Airgas Lot AG805804 Exp 02/27/2020
- ii. 0.040g/210L Mnf Airgas Lot AG630101 Exp 10/27/2018
- iii. 0.080g/210L Mnf Airgas Lot AG735001 Exp 12/16/2019
- iv. 0.100g/210L Mnf Airgas Lot AG629304 Exp 10/19/2018
- v. 0.200g/210L Mnf Walton Lot 17090 Exp 02/24/2019
 - 1. Simulator S/N DR5298 Date Calibrated 01/24/2018
- vi. 0.300g/210L Mnf Walton 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 Walton Lot 17280 Level 0.100 Exp 09/11/2019
 - 1. Simulator S/N SD1177 Date Calibrated 01/24/2018
- ii. Isopropanol - Mnf Walton Lot 17280 Level 0.100 Exp 09/11/2019
 - 1. Simulator S/N SD1199 Date Calibrated 01/24/2018
- iii. Negative Control - Mnf Walton Lot 17280 Level 0.100 Exp 09/11/2019
 - 1. Simulator S/N SD1088 Date Calibrated 01/24/2018

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 08/09/18

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 08/08/2018
Time: 08:07:28

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 = 45.3°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.58 V PASSED
(0.95 V - 2.21 V)
Cooler Voltage = 1.59 V PASSED
(0.95 V - 2.23 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 542 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.4 in

PUMP INFO

Flow Rate = 4.055 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 = 0.098 0.00% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100694

Date: 08/08/2018

Time: 8:44 AM

Temperatures (°C)

Sample Cell: 49.0°C

Breath Tube: 45.9°C

Current Barometer 29.4 in

Volume (Ltr) 1.53

Settings

Lamp: 1.63 V

Bias: 80 V

Cooler: 1.59 V

Chopper: 542 Hz

Voltages (V)

Flow: 1.04 V

Detector: -0.009 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 07/31/2018
Time: 09:35:29

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca = 0.1000
CAL = 0.994234 0.800 <= CAL < 1.200
b1 = 0.0014 0.0000 <= b1 < 0.0040
b2 = 0.0063 0.0010 <= b2 < 0.0100
b3 = 0.0010 0.0000 <= b3 < 0.0040
Xq = 0.0975 0.0500 <= Xq < 0.2000
a21 = 1.196264 1.050 <= a21 < 1.300
a31 = 0.414663 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 08/08/2018
Time: 12:04:01

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

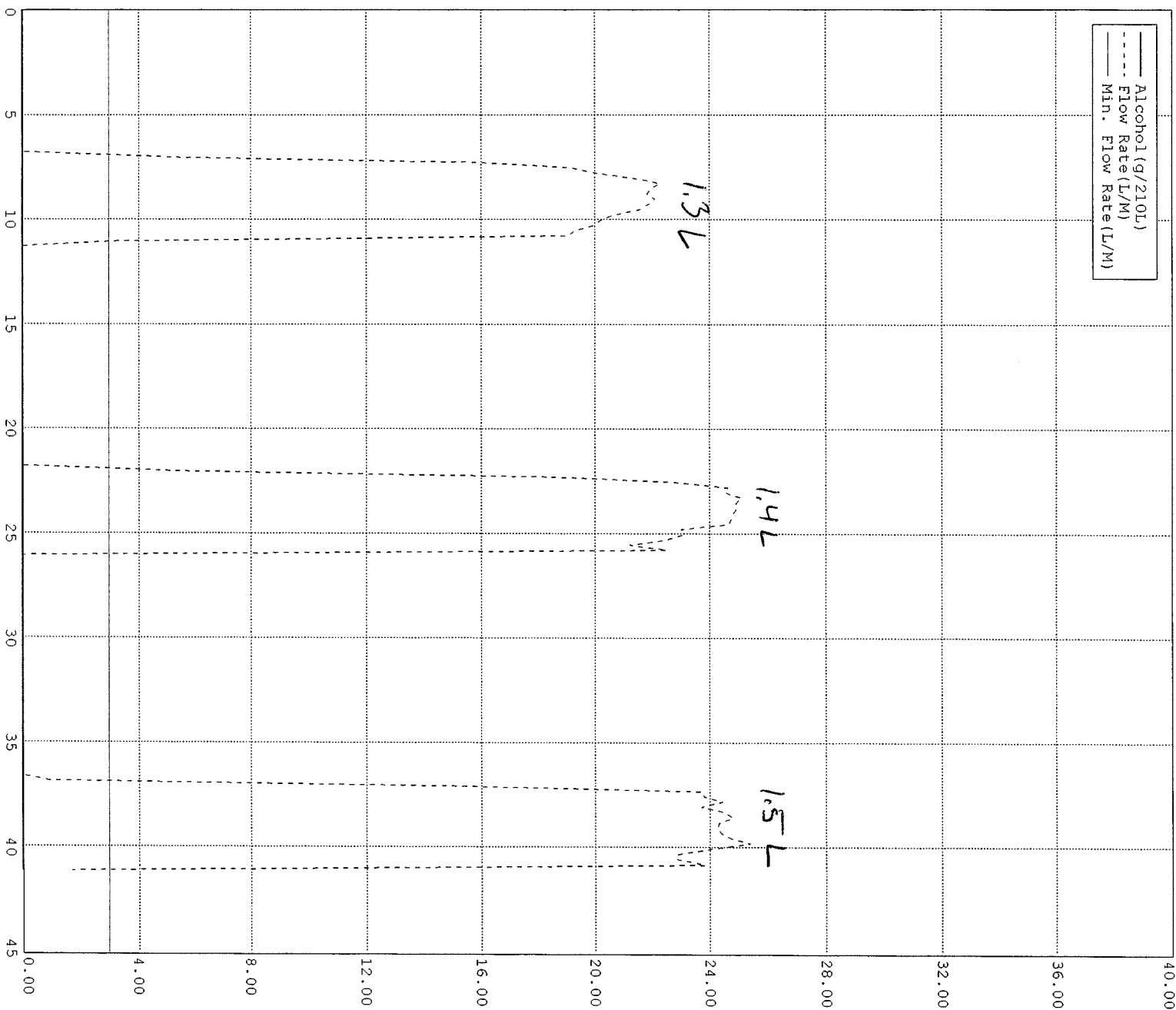
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.37: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	12:06
BLANK TEST	0.000	12:06
INTERNAL STANDARD	VERIFIED	12:06
EXTERNAL STANDARD	0.078	12:06
BLANK TEST	0.000	12:07
SUBJECT SAMPLE (Vol=1.57L)	0.000	12:08
BLANK TEST	0.000	12:09
EXTERNAL STANDARD	0.078	12:09
BLANK TEST	0.000	12:10

DM



LINEARITY CHECK

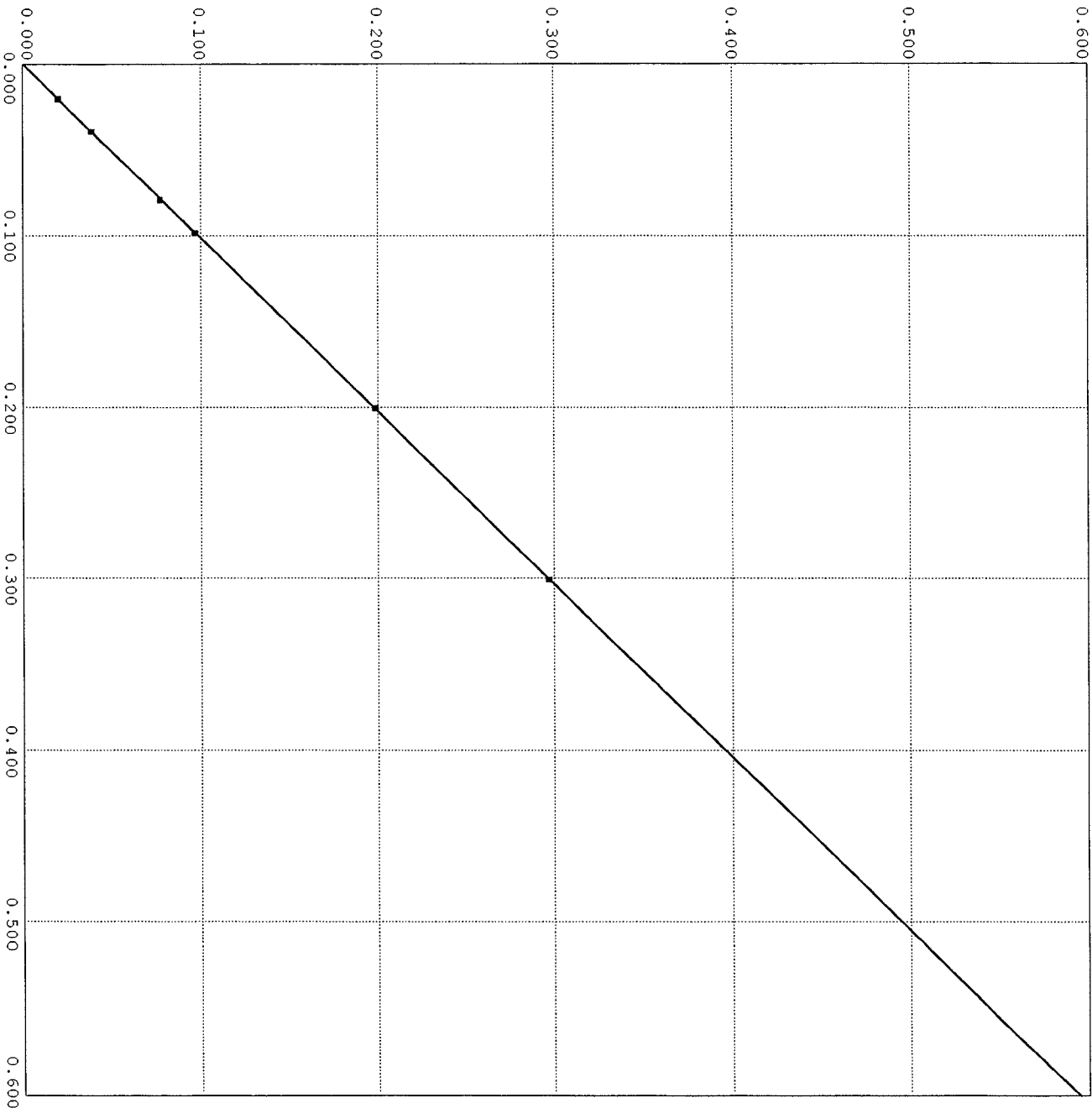
Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 08/08/2018
Time: 12:14:03

SUPERVISOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0208	0.0004
0.039	0.0398	0.0004
0.079	0.0780	0.0000
0.098	0.0978	0.0004
0.200	0.1994	0.0009
0.300	0.2978	0.0008

SLOPE = 0.990658
R² = 0.999973



DM

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100694

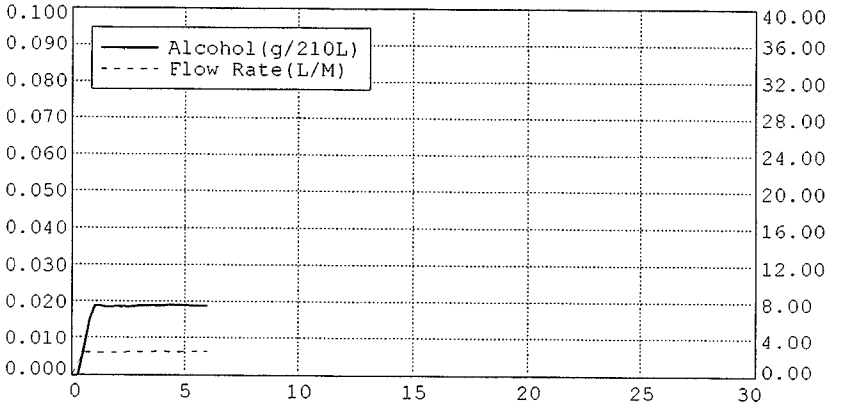
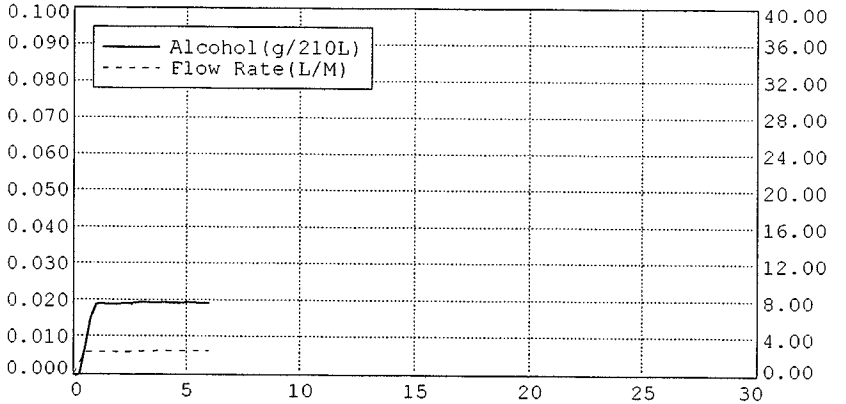
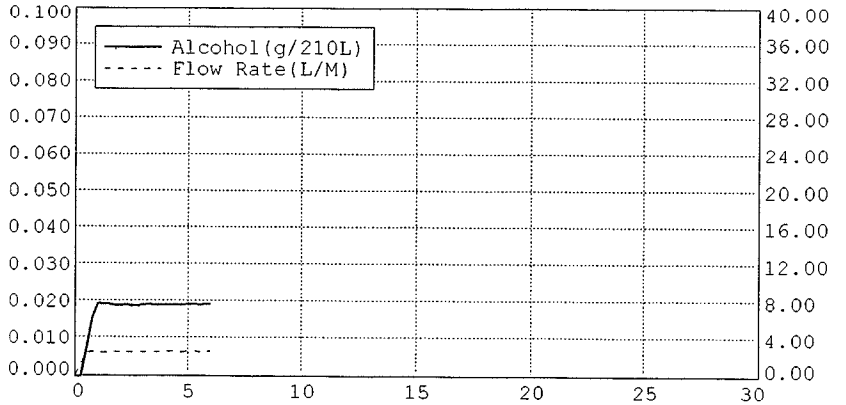
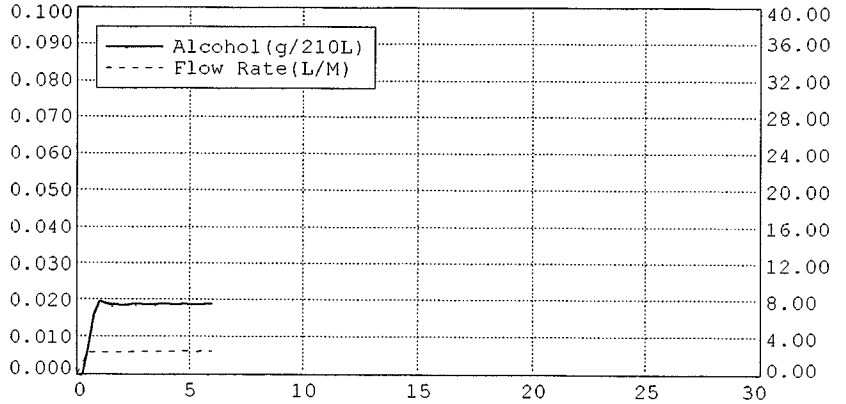
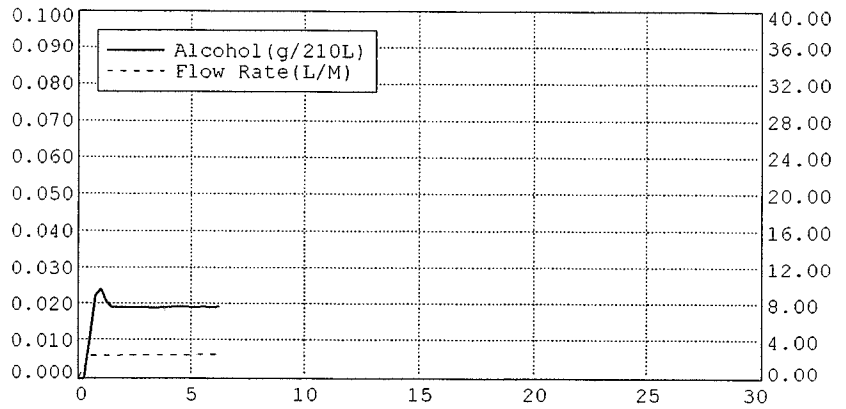
Date: 08/08/2018
 Time: 12:14:05

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.38: 0.020
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 1060 psi

BLANK TEST	0.000	12:16
INTERNAL STANDARD	VERIFIED	12:16
EXTERNAL STANDARD	0.021	12:16
BLANK TEST	0.000	12:17
EXTERNAL STANDARD	0.020	12:17
BLANK TEST	0.000	12:18
EXTERNAL STANDARD	0.021	12:18
BLANK TEST	0.000	12:19
EXTERNAL STANDARD	0.021	12:19
BLANK TEST	0.000	12:20
EXTERNAL STANDARD	0.021	12:21
BLANK TEST	0.000	12:21

Average = 0.0208
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100694

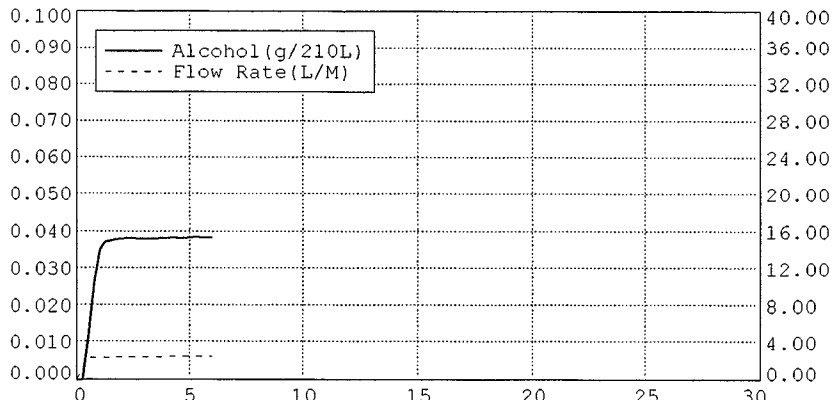
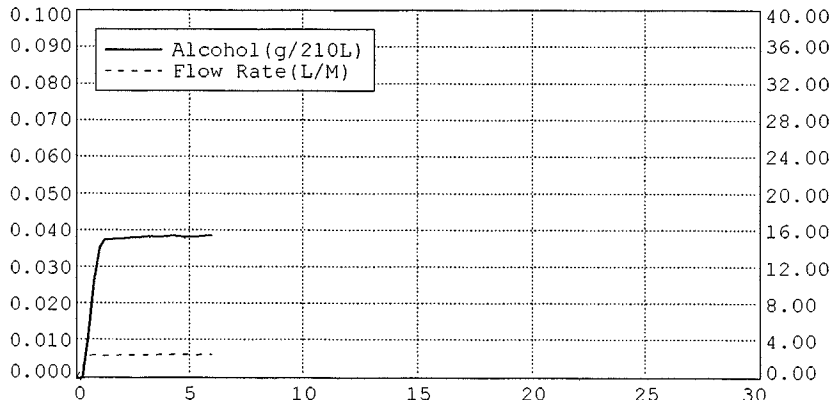
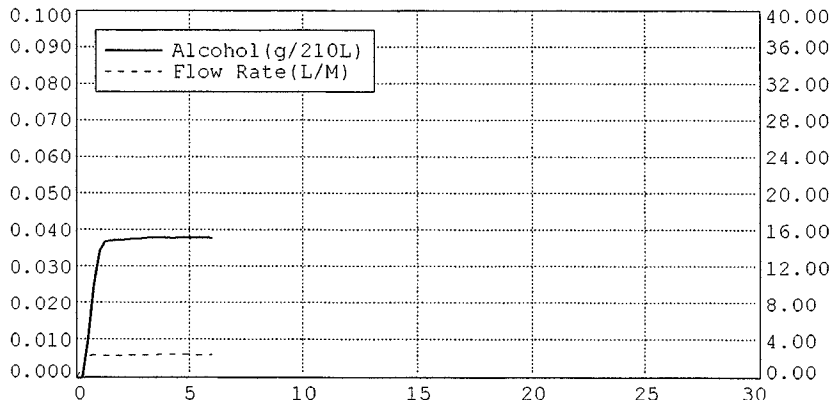
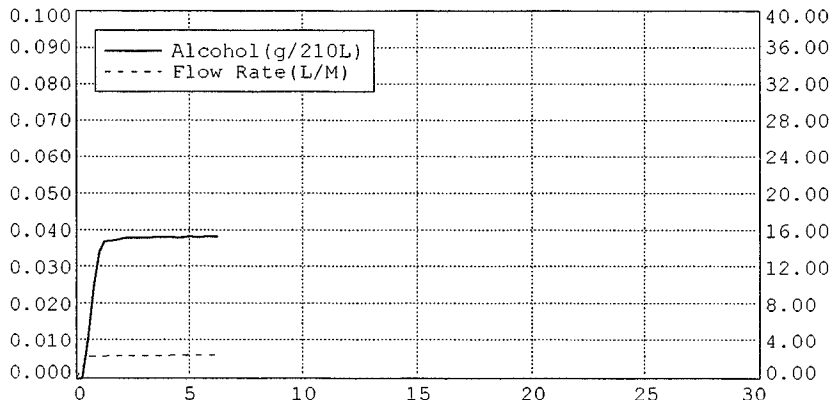
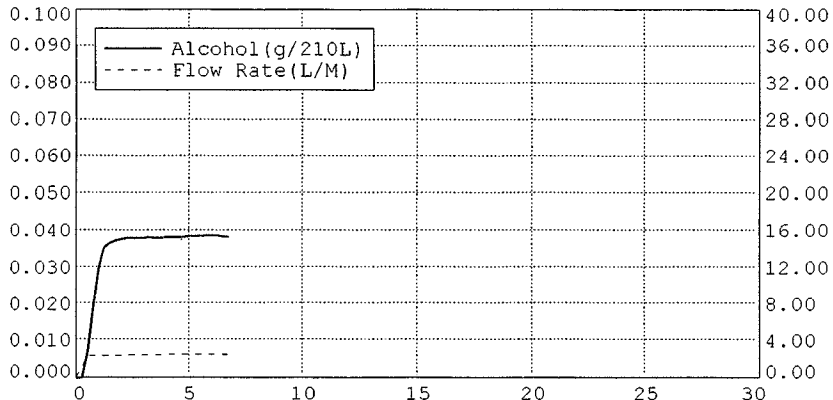
Date: 08/08/2018
Time: 12:24:27

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.37: 0.039
LOT #: AG630101
EXPIRATION: 10/27/2018
TANK PRESSURE: 844 psi

BLANK TEST	0.000	12:25
INTERNAL STANDARD	VERIFIED	12:25
EXTERNAL STANDARD	0.040	12:26
BLANK TEST	0.000	12:27
EXTERNAL STANDARD	0.040	12:27
BLANK TEST	0.000	12:28
EXTERNAL STANDARD	0.039	12:28
BLANK TEST	0.000	12:29
EXTERNAL STANDARD	0.040	12:29
BLANK TEST	0.000	12:30
EXTERNAL STANDARD	0.040	12:30
BLANK TEST	0.000	12:31

Average = 0.0398
Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100694

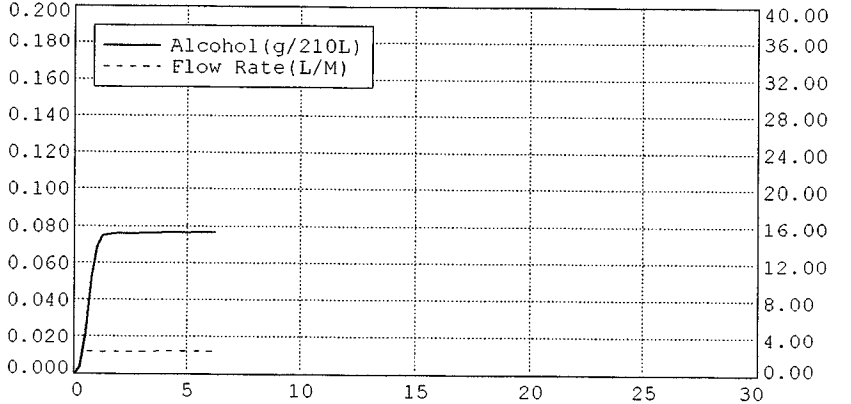
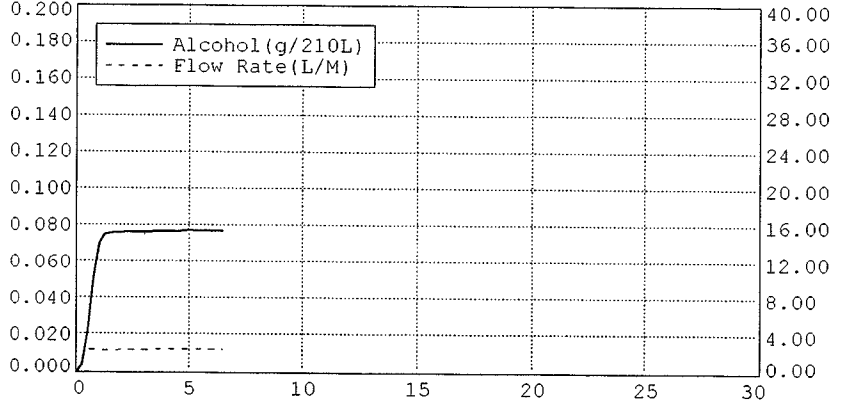
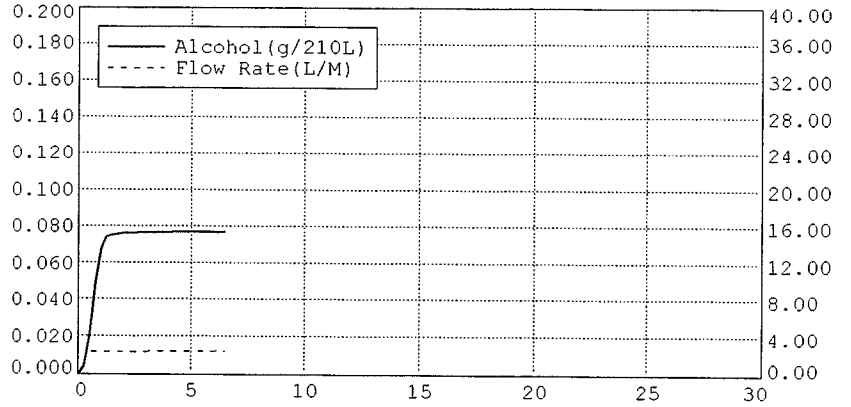
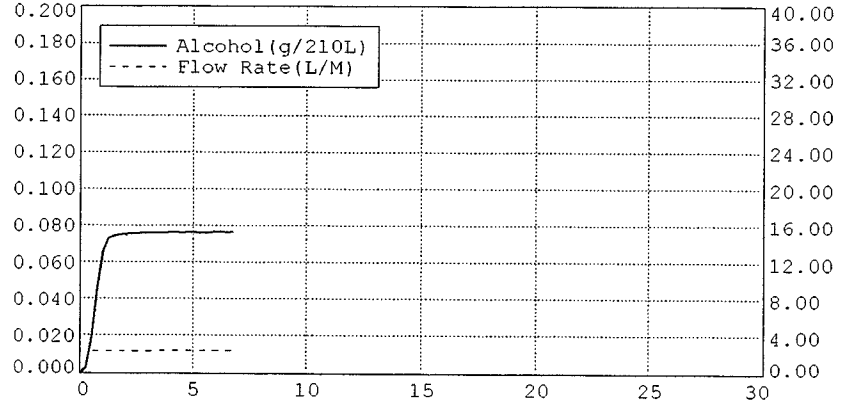
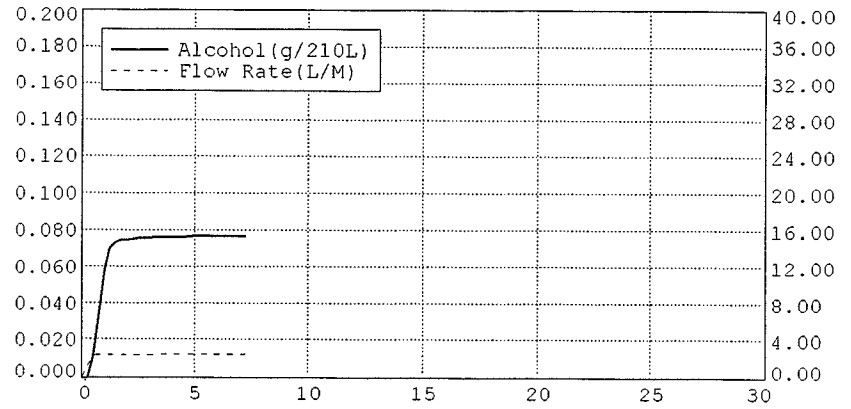
Date: 08/08/2018
 Time: 12:32:03

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.38: 0.079
 LOT #: AG735001
 EXPIRATION: 12/16/2019
 TANK PRESSURE: 931 psi

BLANK TEST	0.000	12:33
INTERNAL STANDARD	VERIFIED	12:33
EXTERNAL STANDARD	0.078	12:33
BLANK TEST	0.000	12:34
EXTERNAL STANDARD	0.078	12:34
BLANK TEST	0.000	12:35
EXTERNAL STANDARD	0.078	12:35
BLANK TEST	0.000	12:36
EXTERNAL STANDARD	0.078	12:36
BLANK TEST	0.000	12:37
EXTERNAL STANDARD	0.078	12:38
BLANK TEST	0.000	12:38

Average = 0.0780
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100694

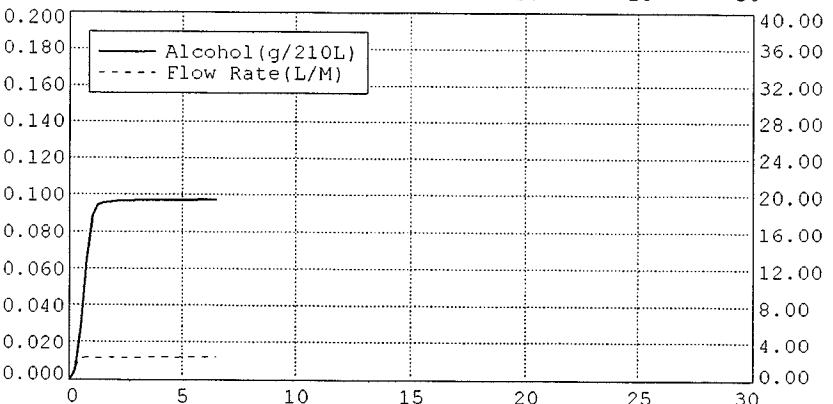
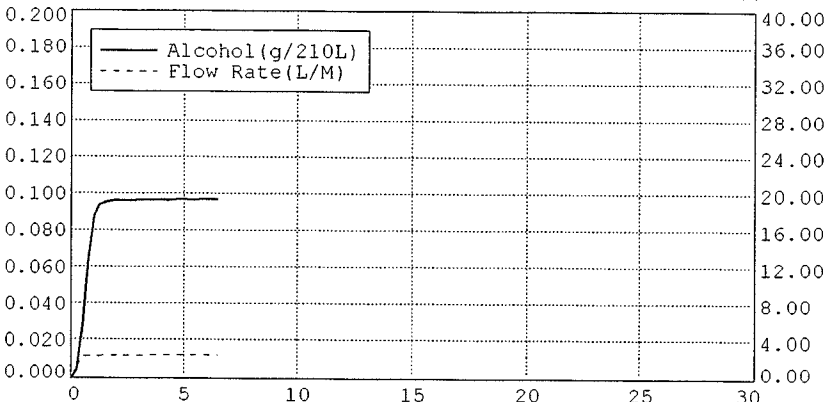
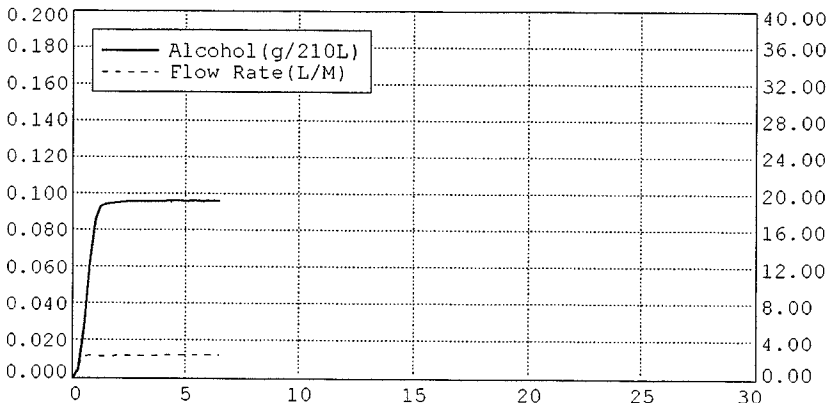
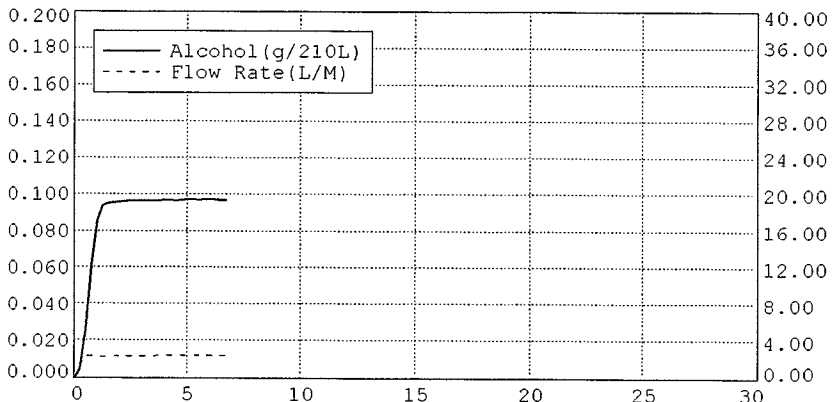
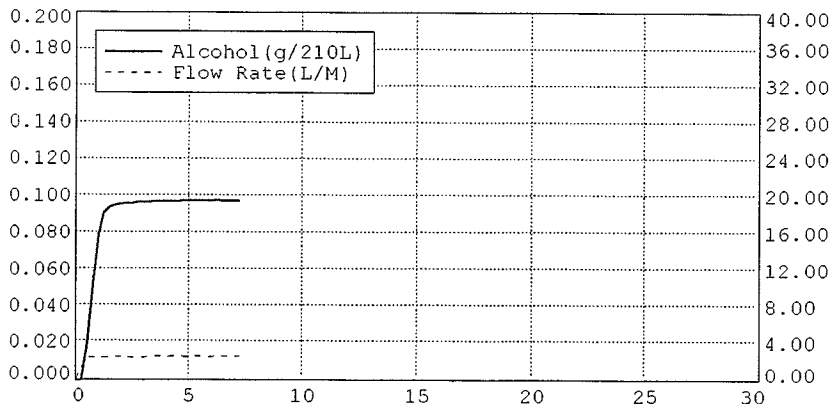
Date: 08/08/2018
Time: 12:40:08

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.38: 0.098
LOT #: AG629304
EXPIRATION: 10/19/2018
TANK PRESSURE: 877 psi

BLANK TEST	0.000	12:41
INTERNAL STANDARD	VERIFIED	12:41
EXTERNAL STANDARD	0.098	12:42
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.098	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.097	12:44
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.098	12:45
BLANK TEST	0.000	12:46
EXTERNAL STANDARD	0.098	12:46
BLANK TEST	0.000	12:47

Average = 0.0978
Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

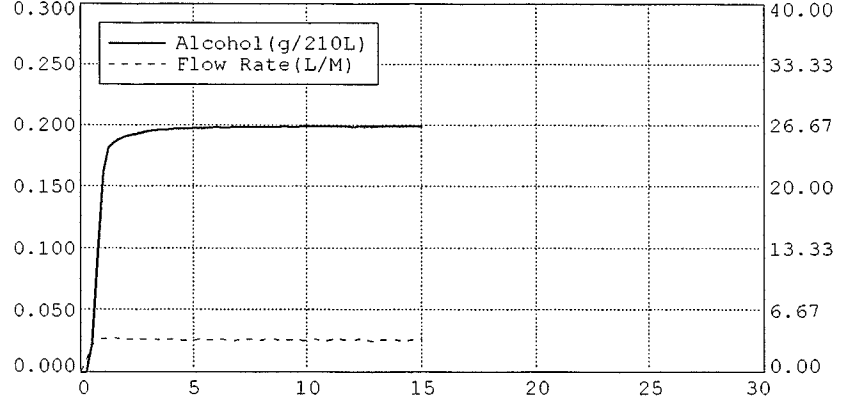
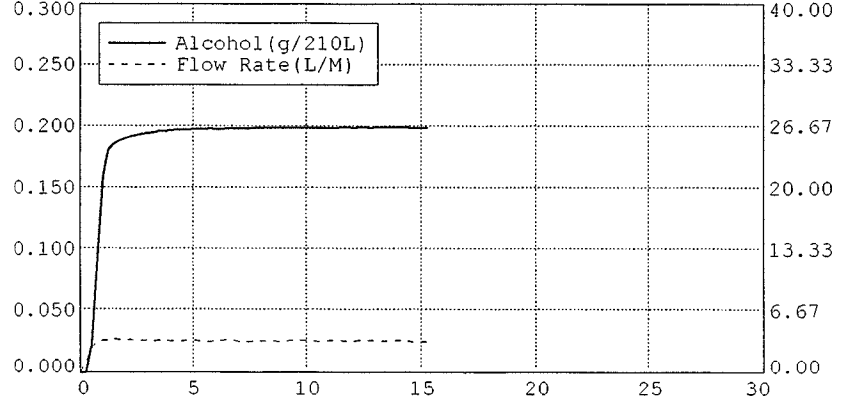
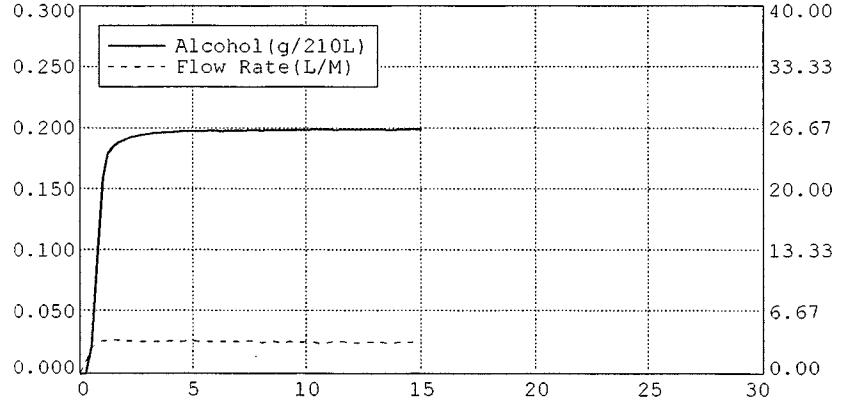
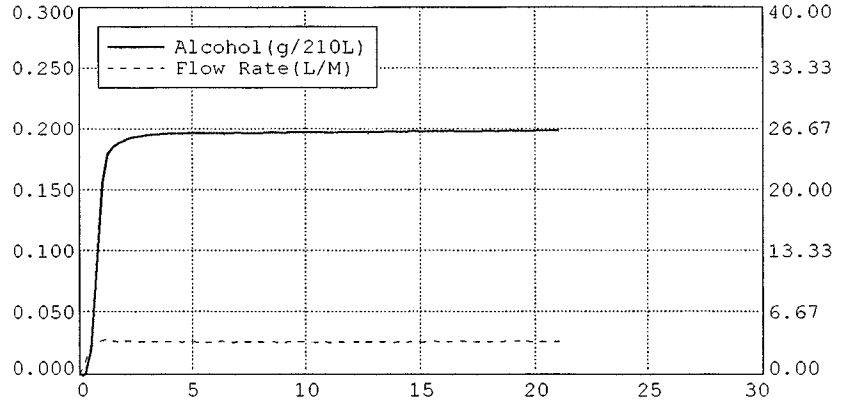
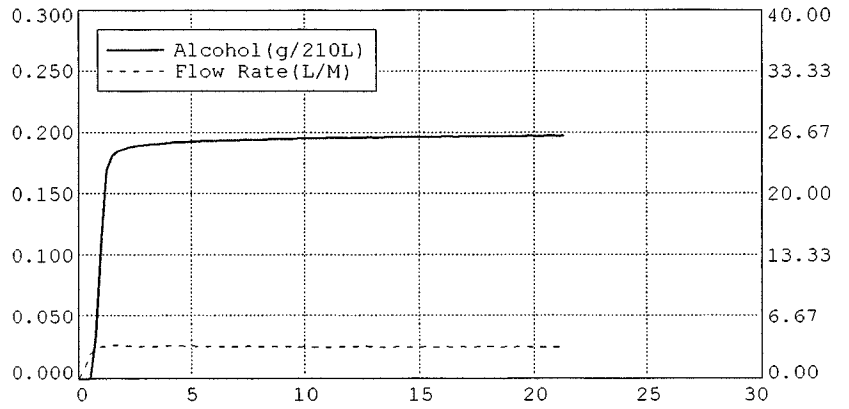
Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 08/08/2018
Time: 12:49:38

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.200
LOT #: 17090
EXPIRATION: 02/24/2019

BLANK TEST	0.000	12:51
INTERNAL STANDARD	VERIFIED	12:51
EXTERNAL STANDARD	0.198	12:52
BLANK TEST	0.000	12:53
EXTERNAL STANDARD	0.200	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.200	12:54
BLANK TEST	0.000	12:55
EXTERNAL STANDARD	0.199	12:56
BLANK TEST	0.000	12:56
EXTERNAL STANDARD	0.200	12:57
BLANK TEST	0.000	12:58

Average = 0.1994
Std Dev = 0.0009



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100694

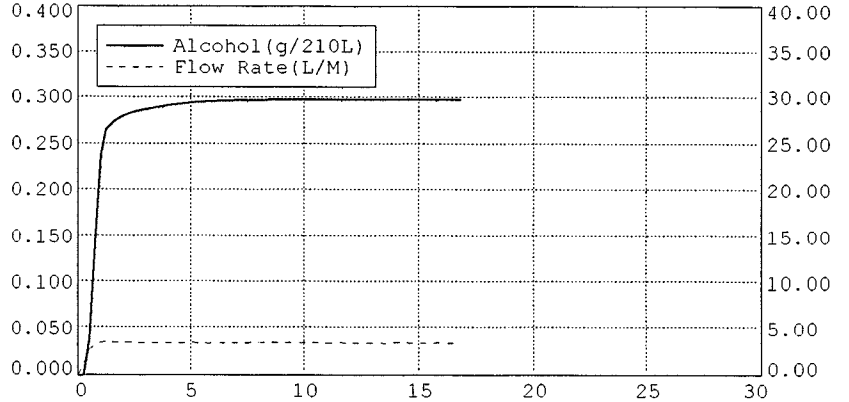
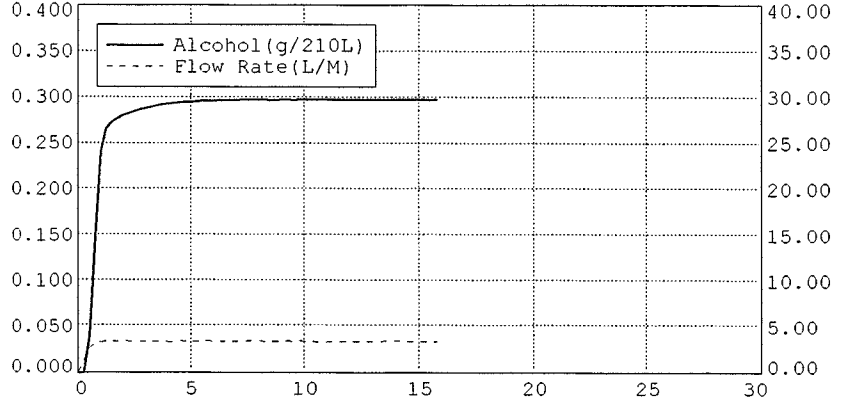
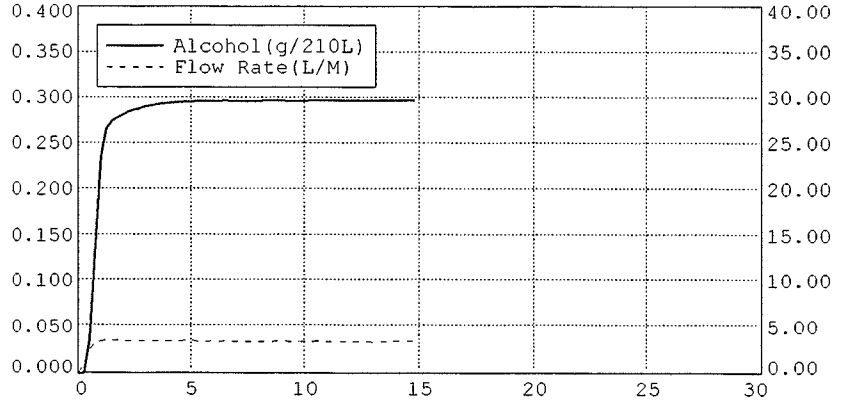
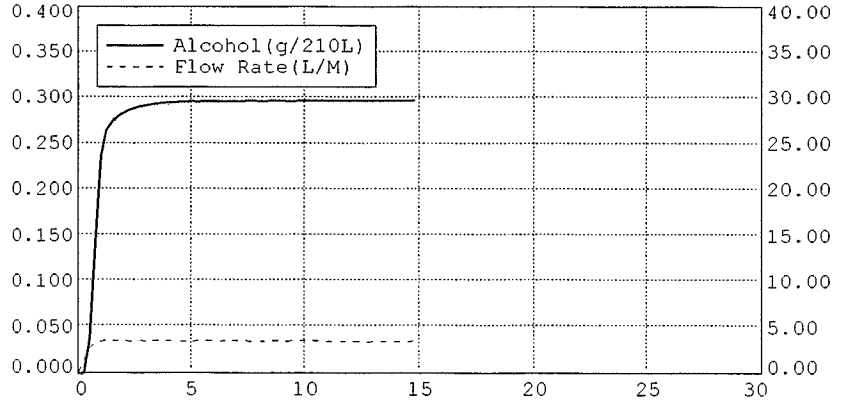
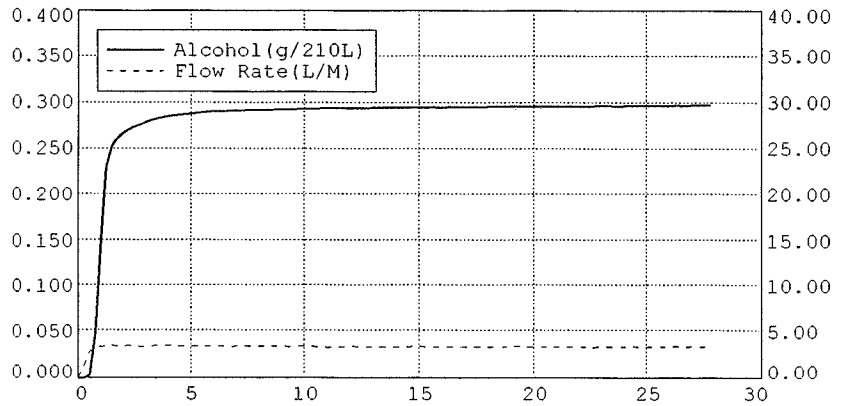
Date: 08/08/2018
 Time: 12:59:35

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:00
INTERNAL STANDARD	VERIFIED	13:00
EXTERNAL STANDARD	0.298	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.297	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.297	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.298	13:05
BLANK TEST	0.000	13:06
EXTERNAL STANDARD	0.299	13:06
BLANK TEST	0.000	13:07

Average = 0.2978
 Std Dev = 0.0008



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 08/08/2018
Time: 13:26:16

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

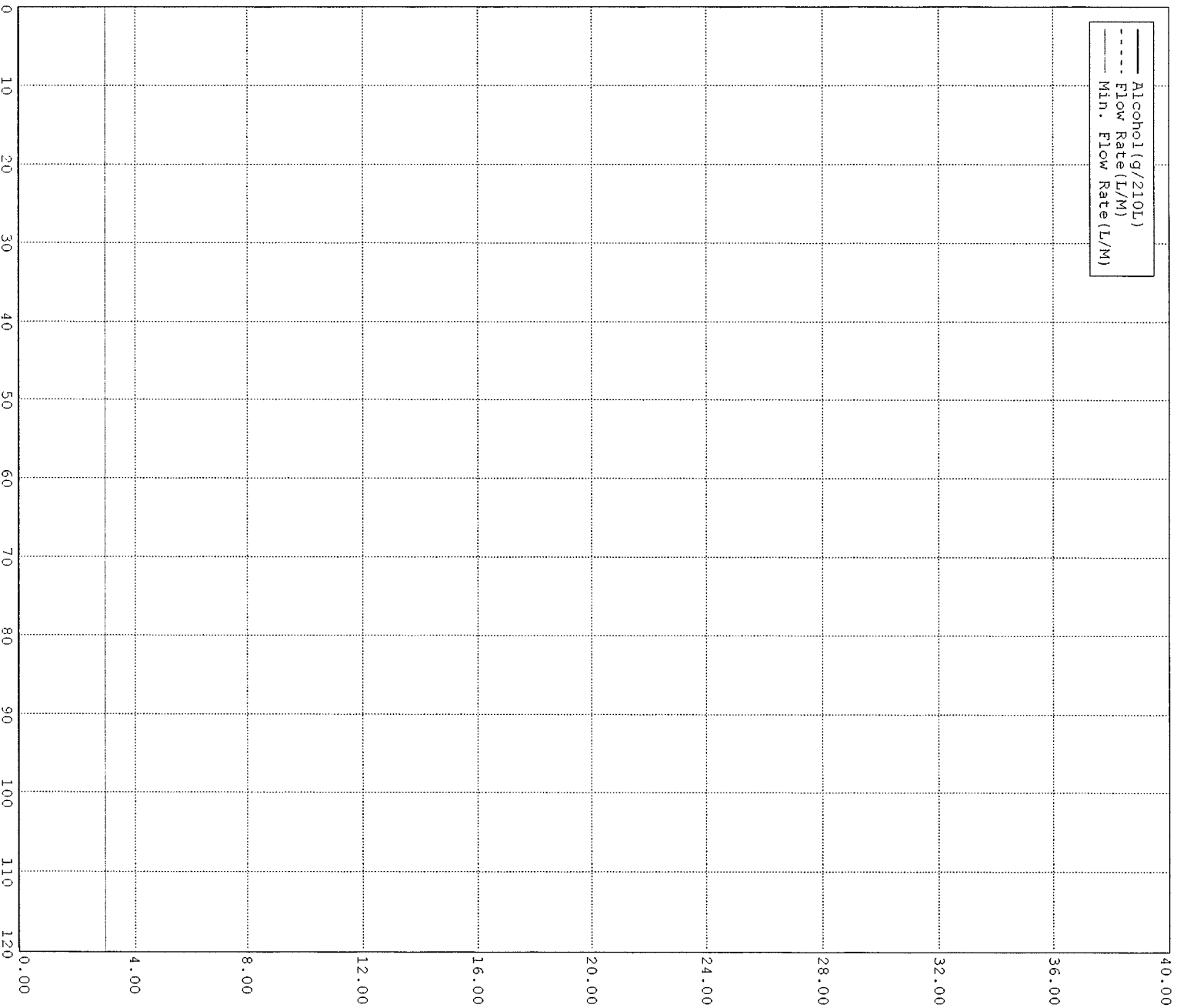
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.39: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	13:27
BLANK TEST	0.000	13:28
INTERNAL STANDARD	VERIFIED	13:28
EXTERNAL STANDARD	0.078	13:28
BLANK TEST	0.000	13:29
SUBJECT SAMPLE	INCOMPLETE	13:31

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



DM

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 08/08/2018
Time: 13:37:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

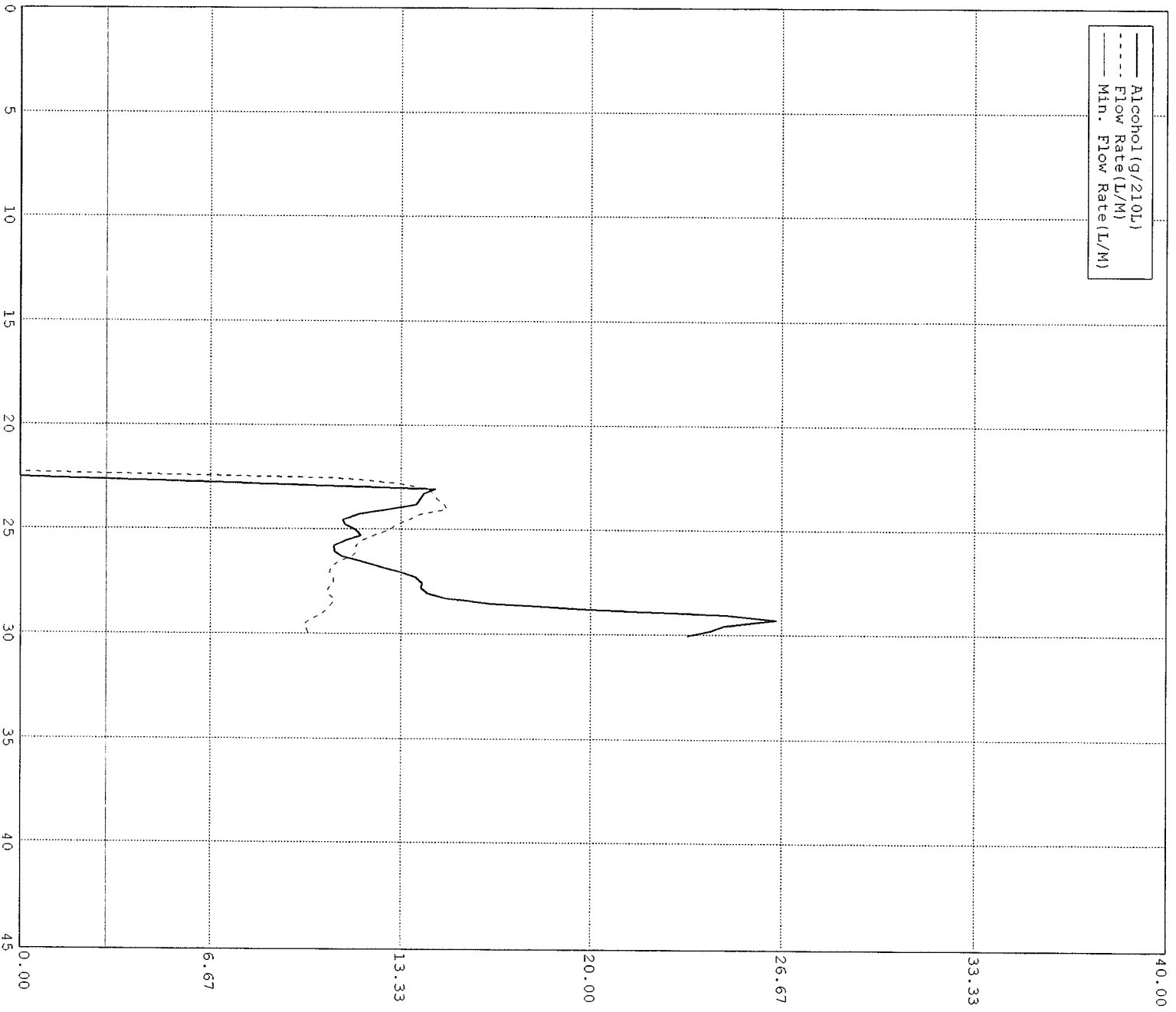
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.39: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	13:39
BLANK TEST	0.000	13:39
INTERNAL STANDARD	VERIFIED	13:39
EXTERNAL STANDARD	0.079	13:39
BLANK TEST	0.000	13:40
SUBJECT SAMPLE	INVALID	13:41

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 08/08/2018
Time: 13:47:17

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 29.39: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	13:48
BLANK TEST	0.000	13:48
INTERNAL STANDARD	VERIFIED	13:48
Xq = 0.098 (0.99%)		
EXTERNAL STANDARD	0.078	13:49
X[1] = 0.0779 (0.0002)	(0.0032)	
BLANK TEST	0.000	13:49
SUBJECT SAMPLE	XXX	13:50
X[1] = 0.1049 (-0.0212)	(0.0002)	

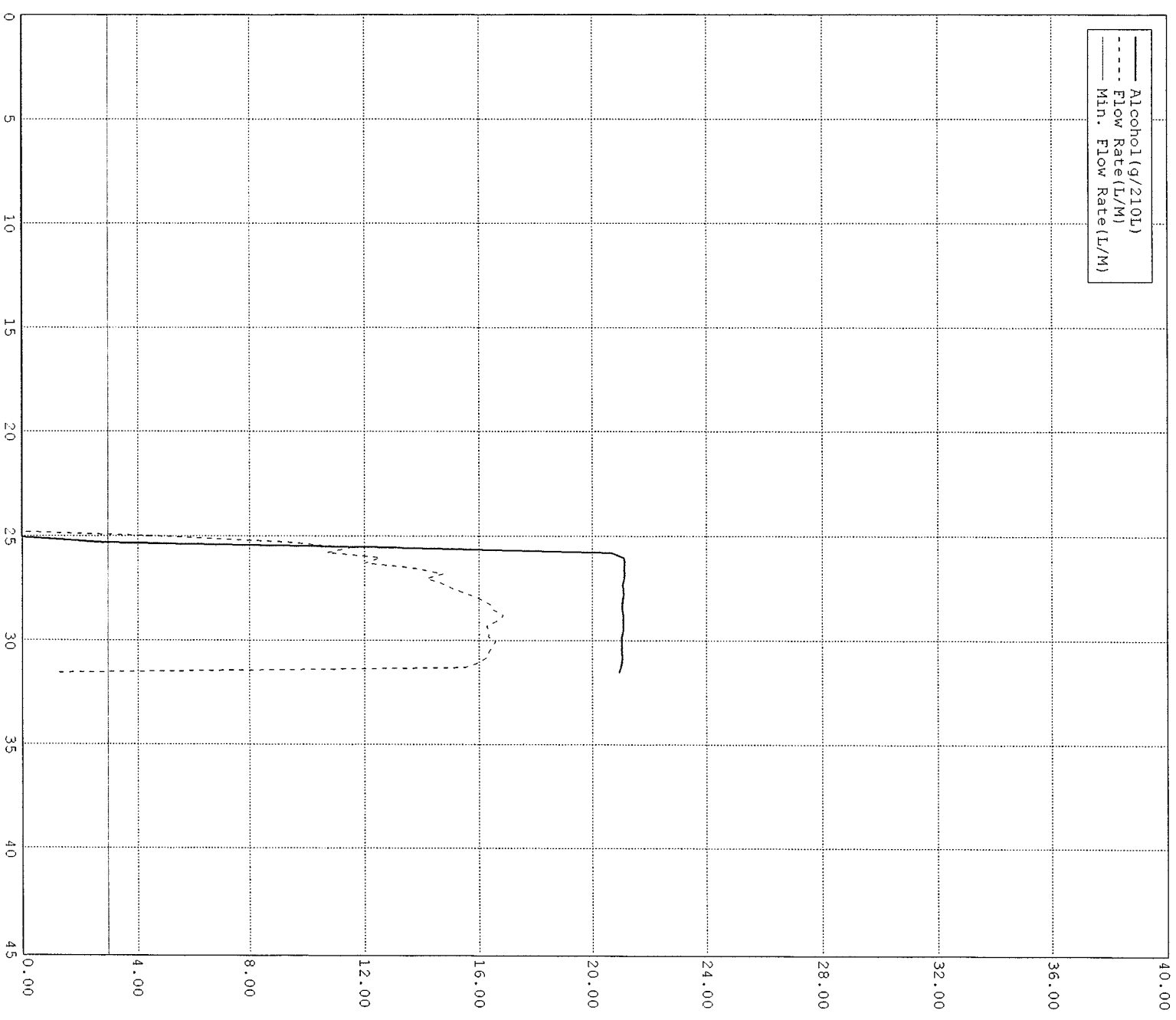
Interference Detected

Filter 2 Avg: 0.0004

Filter 3 Avg: 0.0028

MM 08/09/18

DM



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100694

Date: 08/08/2018
Time: 13:55:51

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

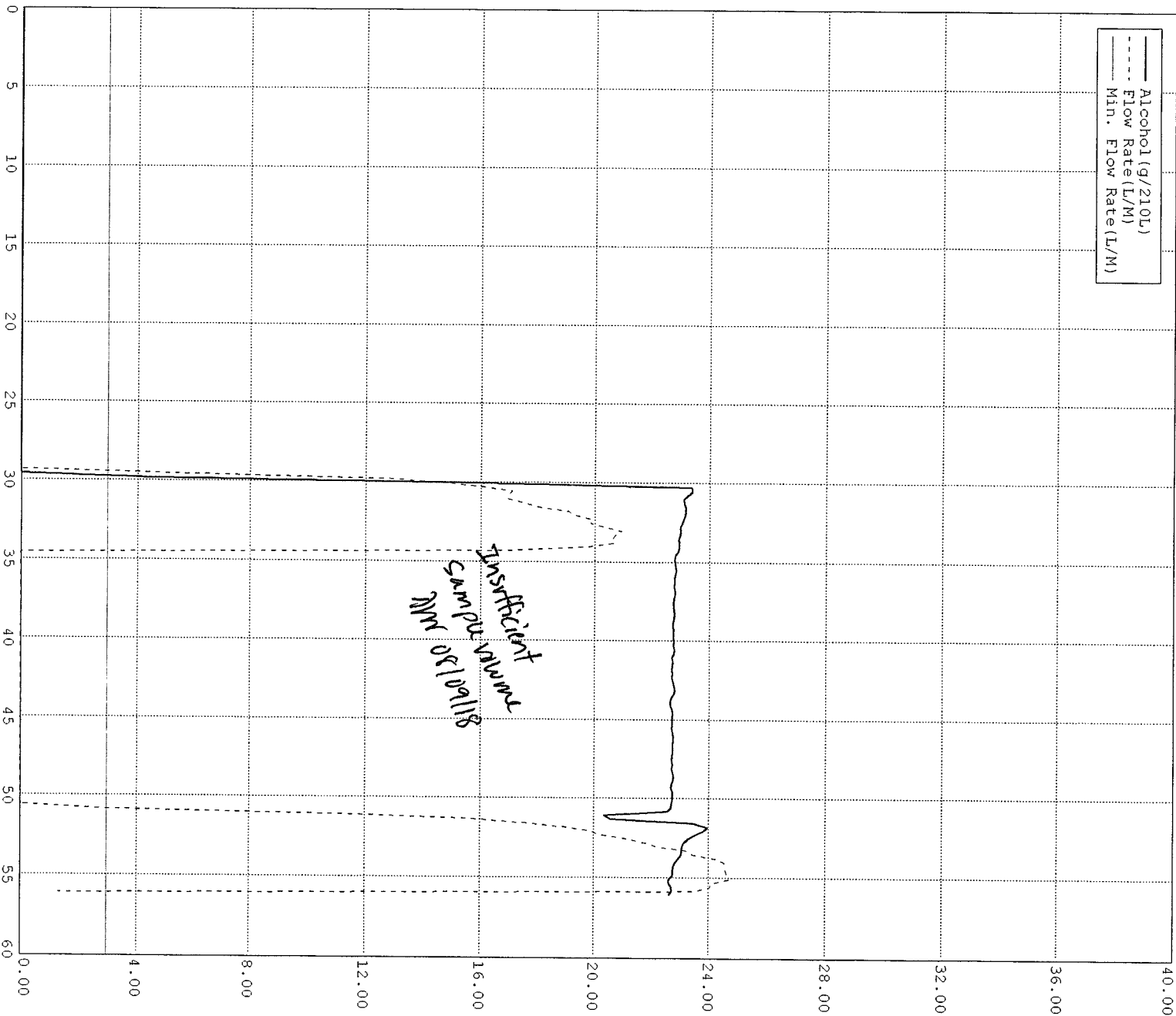
DEPT/AGENCY:
INTERFERENCE IPA
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.38: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	13:56
BLANK TEST	0.000	13:56
INTERNAL STANDARD	VERIFIED	13:57
Xq = 0.098 (0.63%)		
EXTERNAL STANDARD	0.078	13:57
X[1] = 0.0781 (0.0006)	(0.0029)	
BLANK TEST	0.000	13:58
SUBJECT SAMPLE	XXX	13:59
X[1] = 0.1131 (-0.0256)	(0.0017)	

Interference Detected

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 08/08/2018
Time: 14:04:39

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

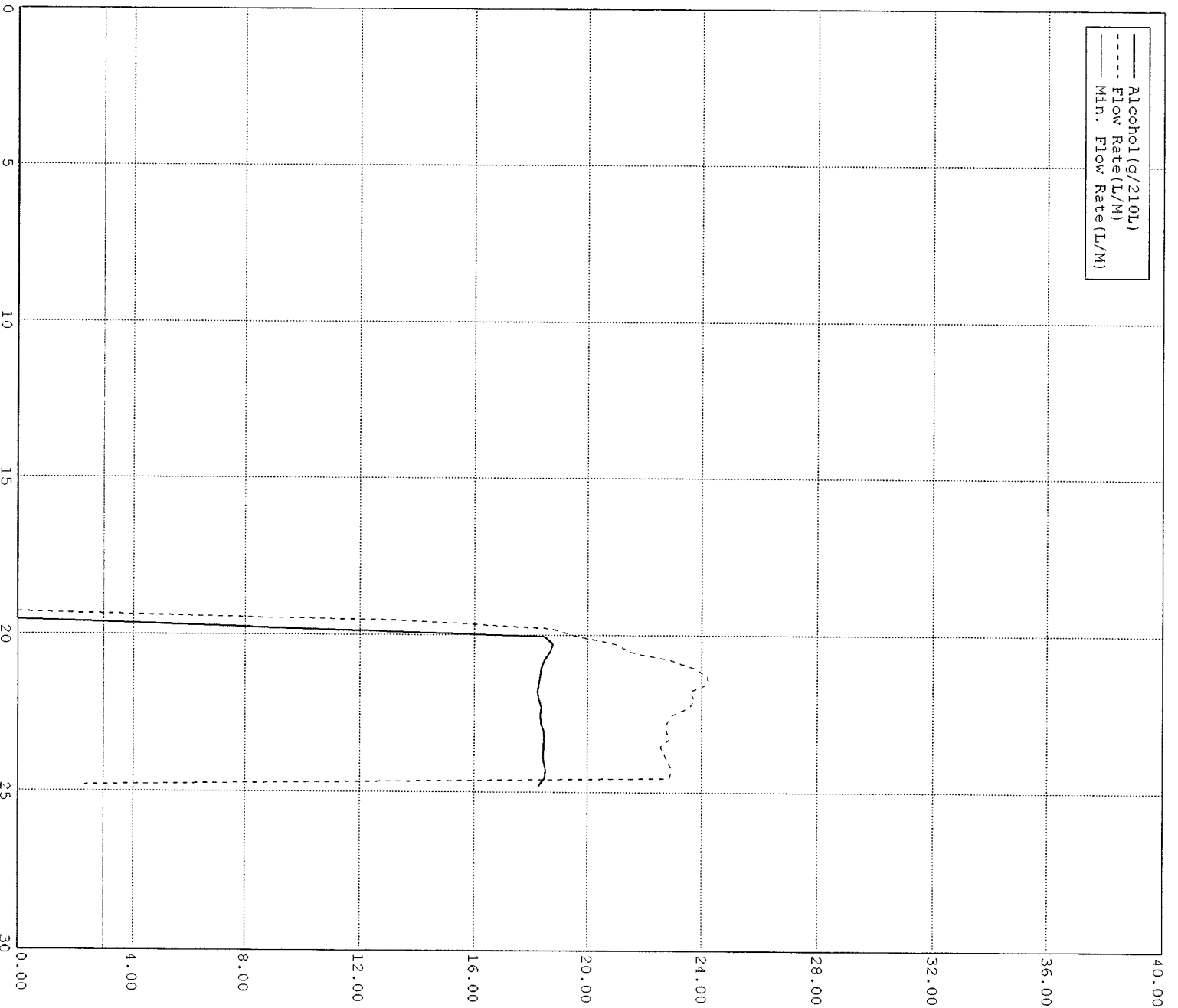
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.39: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	14:05
BLANK TEST	0.000	14:05
INTERNAL STANDARD	VERIFIED	14:06
Xq = 0.098 (0.90%)		
EXTERNAL STANDARD	0.078	14:06
X[1] = 0.0784 (0.0008)	(0.0029)	
BLANK TEST	0.000	14:07
SUBJECT SAMPLE (Vol=1.94L)	0.091	14:07
X[1] = 0.0916 (-0.0002)	(0.0009)	
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.078	14:08
X[1] = 0.0776 (-0.0001)	(0.0020)	
BLANK TEST	0.000	14:09

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 08/08/2018
Time: 14:15:45

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

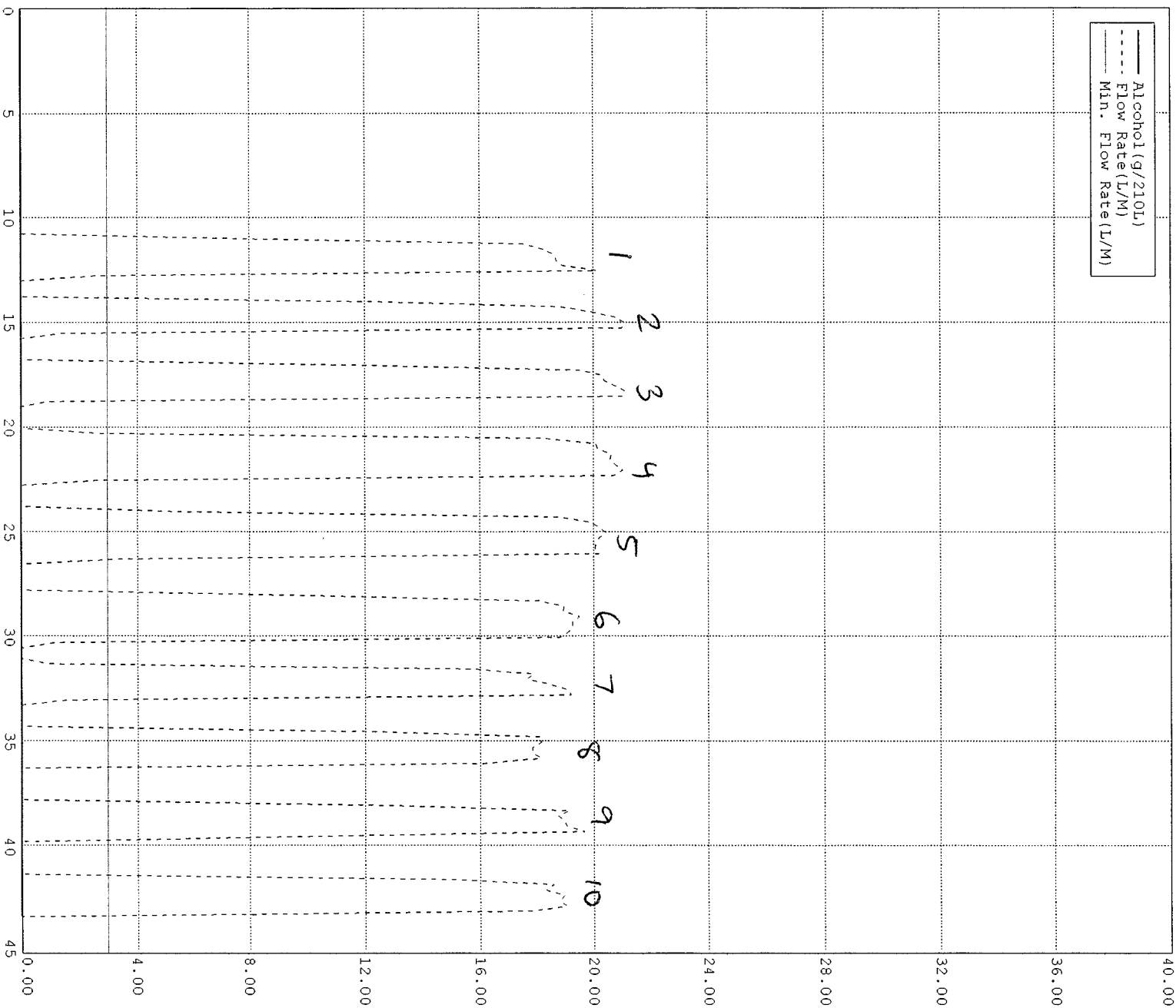
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.38: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	14:17
BLANK TEST	0.000	14:17
INTERNAL STANDARD	VERIFIED	14:17
EXTERNAL STANDARD	0.078	14:18
BLANK TEST	0.000	14:19
SUBJECT SAMPLE	XXX	14:19

Maximum Attempts Exceeded

mm



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100694

Date: 08/08/2018
Time: 14:28:00

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

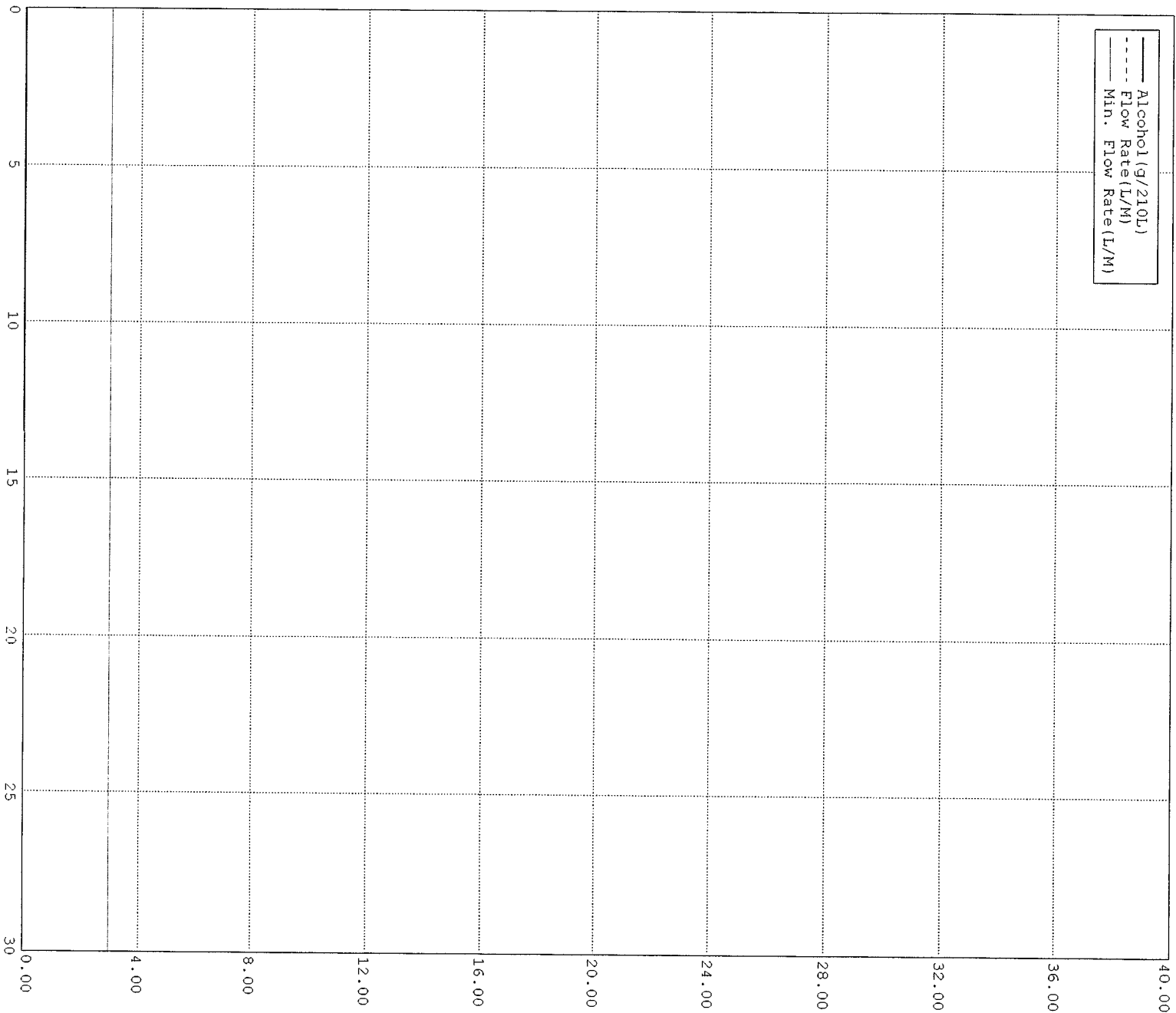
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.39: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK
BLANK TEST PASSED 14:33
INTERNAL STANDARD 0.000 14:33
EXTERNAL STANDARD VERIFIED 14:33
BLANK TEST 0.079 14:33
0.000 14:34

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100694

Date: 08/09/2018
Time: 09:55:23

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 29.47: 0.079
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	09:56
BLANK TEST	0.000	09:56
INTERNAL STANDARD	VERIFIED	09:56
EXTERNAL STANDARD	0.078	09:57
BLANK TEST	0.000	09:58
SUBJECT SAMPLE (Vol=2.86L)	0.000	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.079	09:59
BLANK TEST	0.000	10:00

DM

