

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 100350 Analyst Derch 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 Auto Lot 17340 Exp 10/09/2019
 - 1. Simulator S/N DRS298 Date Calibrated 01/24/2018
- vi. 0.300g/210L Mnf Auto 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 Auto Lot 18070 Level 0.100 Exp 02/26/2020
 - 1. Simulator S/N SD1177 Date Calibrated 01/24/2018
- ii. Isopropanol - Mnf Auto Lot 18070 Level 0.100 Exp 02/26/2020
 - 1. Simulator S/N SD1199 Date Calibrated 01/24/2018
- iii. Negative Control - Mnf Auto 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

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 10/26/18

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 10/26/2018
Time: 08:02:50

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 = 46.8°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.94 V PASSED
(1.09 V - 2.53 V)
Cooler Voltage = 1.69 V PASSED
(1.12 V - 2.62 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 523 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.0 in

PUMP INFO

Flow Rate = 4.186 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 = 0.103 0.43% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100350

Date: 10/26/2018
Time: 8:19 AM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 46.8°C

Current Barometer 29.1 in
Volume (Ltr) 1.58 ✓

Settings

Lamp: 1.91 V
Bias: 79 V
Cooler: 1.84 V
Chopper: 522 Hz

Voltages (V)

Flow: 1.04 V
Detector: -0.024 V ✓

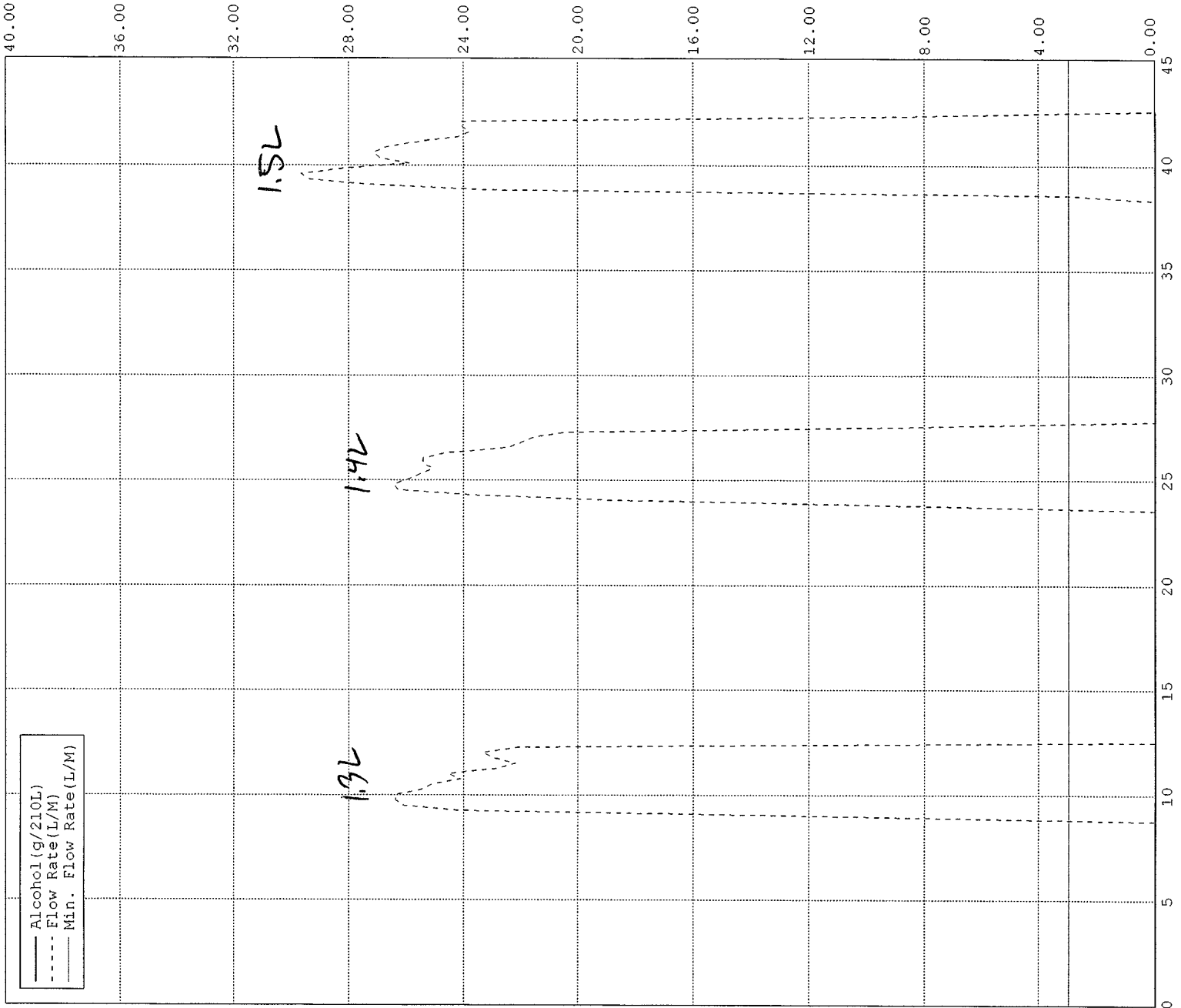
CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 04/04/2018
Time: 10:33:02

OPERATOR NAME:
BRANDI BARNETT
CERTIFICATE #: 7038

Ca = 0.1000
CAL = 0.961607 0.800 <= CAL < 1.200
b1 = 0.0006 0.0000 <= b1 < 0.0040
b2 = 0.0056 0.0010 <= b2 < 0.0100
b3 = 0.0009 0.0000 <= b3 < 0.0040
Xq = 0.1028 0.0500 <= Xq < 0.2000
a21 = 1.148061 1.050 <= a21 < 1.300
a31 = 0.485456 0.300 <= a31 < 0.800



SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100350

 Date: 10/26/2018
 Time: 08:45:48

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 29.07: 0.078
 LOT #: AG634001
 EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	08:47
BLANK TEST	0.000	08:47
INTERNAL STANDARD	VERIFIED	08:47
EXTERNAL STANDARD	0.075	08:47
BLANK TEST	0.000	08:48
SUBJECT SAMPLE (Vol=1.58L)	0.000	08:49
BLANK TEST	0.000	08:50
EXTERNAL STANDARD	0.075	08:50
BLANK TEST	0.000	08:51

DJK

LINEARITY CHECK

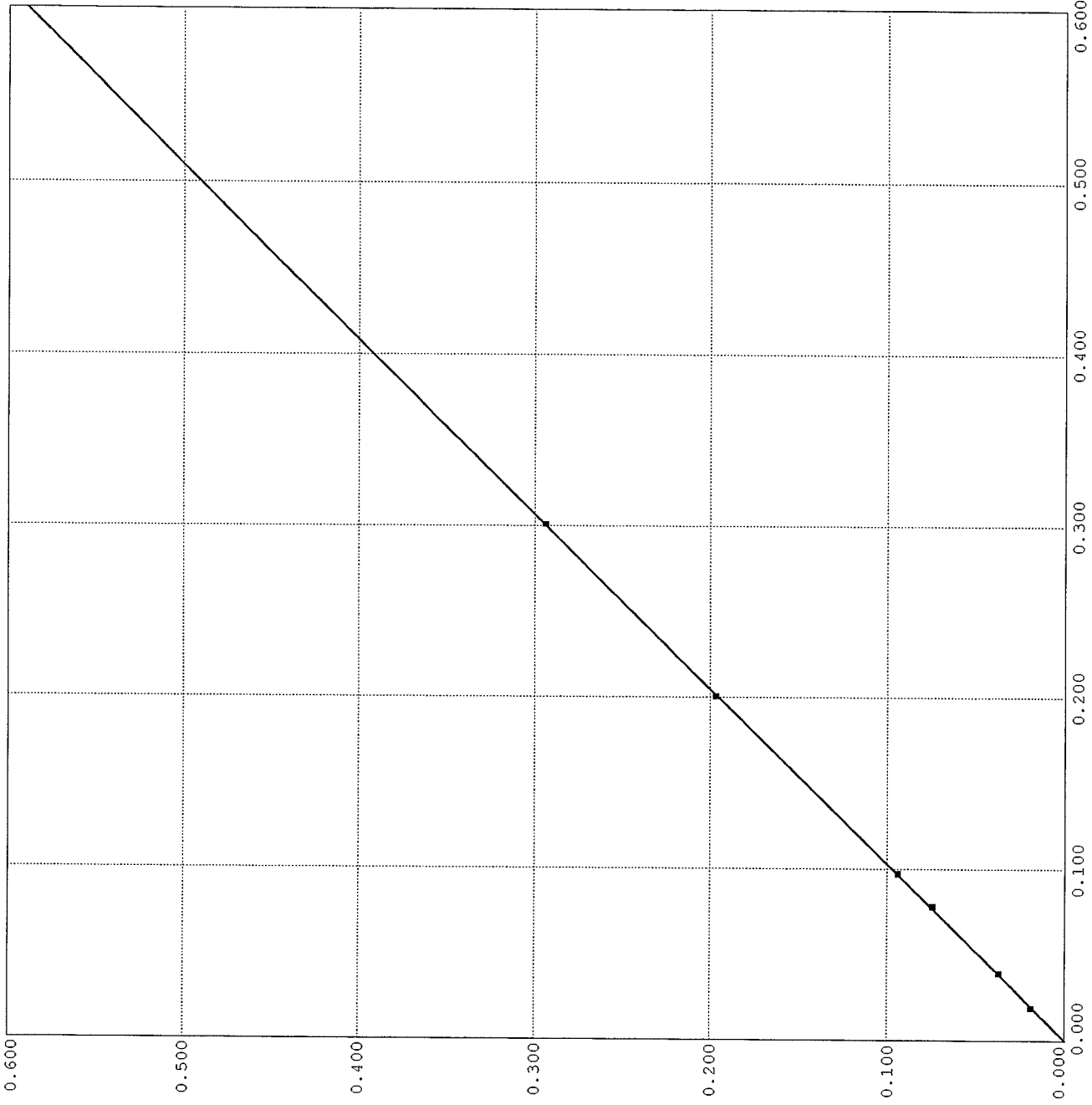
 Alaska Department of Public Safety
 DATAMASTER dmt: 100350

Date: 10/26/2018
 Time: 08:57:53

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	0.0754	0.0005
0.097	0.0950	0.0000
0.200	0.1976	0.0005
0.300	0.2944	0.0009

SLOPE = 0.982772
 R² = 0.999930



DW

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100350

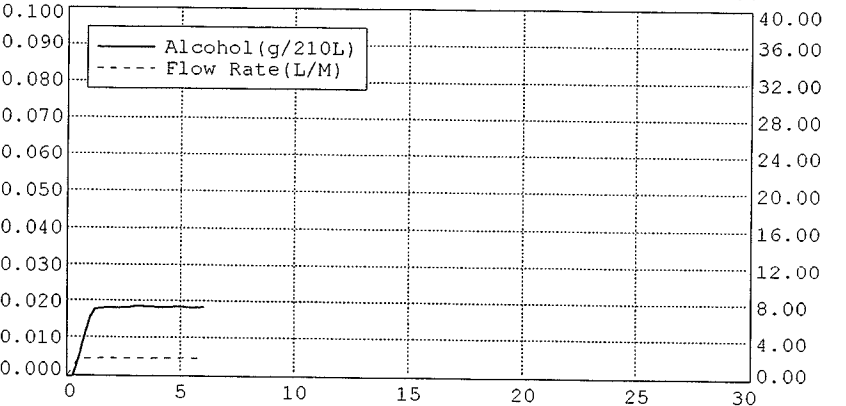
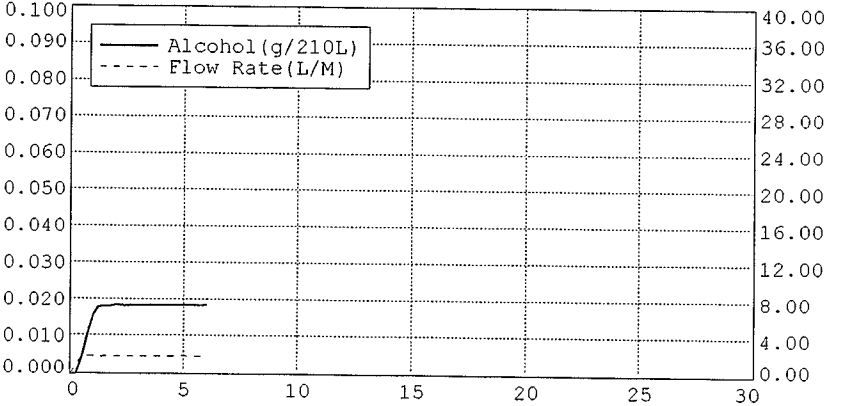
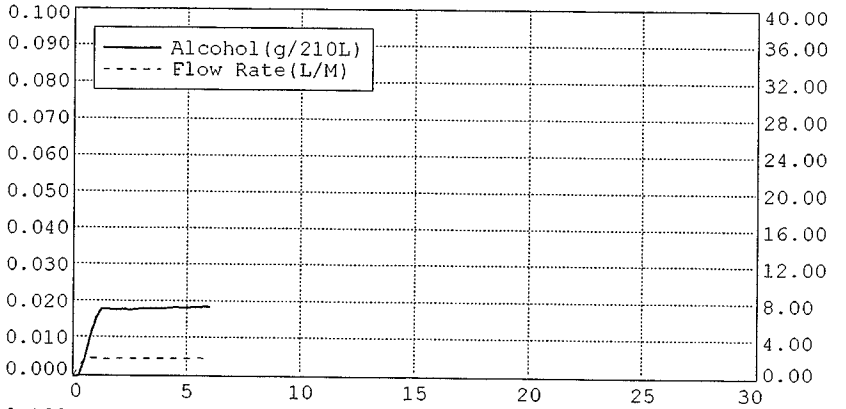
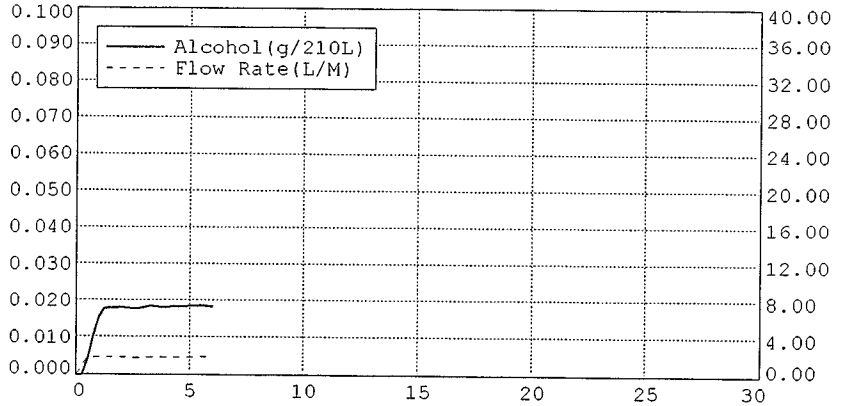
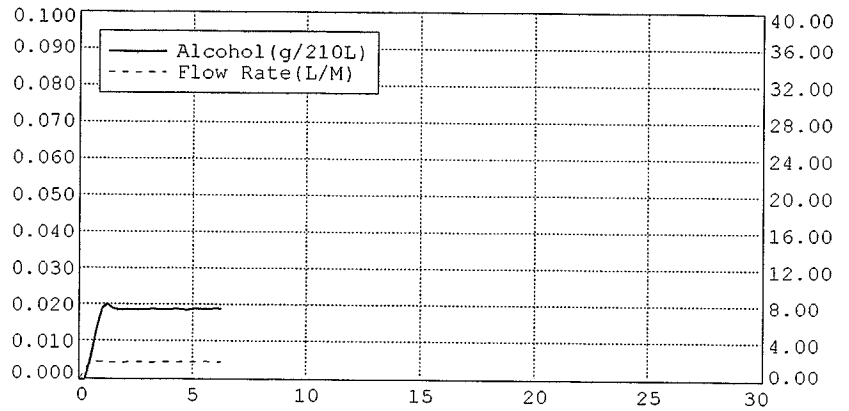
Date: 10/26/2018
 Time: 08:57:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.08: 0.019
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 1017 psi

BLANK TEST	0.000	09:00
INTERNAL STANDARD	VERIFIED	09:00
EXTERNAL STANDARD	0.020	09:01
BLANK TEST	0.000	09:02
EXTERNAL STANDARD	0.020	09:02
BLANK TEST	0.000	09:03
EXTERNAL STANDARD	0.019	09:03
BLANK TEST	0.000	09:04
EXTERNAL STANDARD	0.019	09:04
BLANK TEST	0.000	09:05
EXTERNAL STANDARD	0.020	09:05
BLANK TEST	0.000	09:06

Average = 0.0196
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

 Alaska Department of Public Safety
 DATAMASTER dmt: 100350

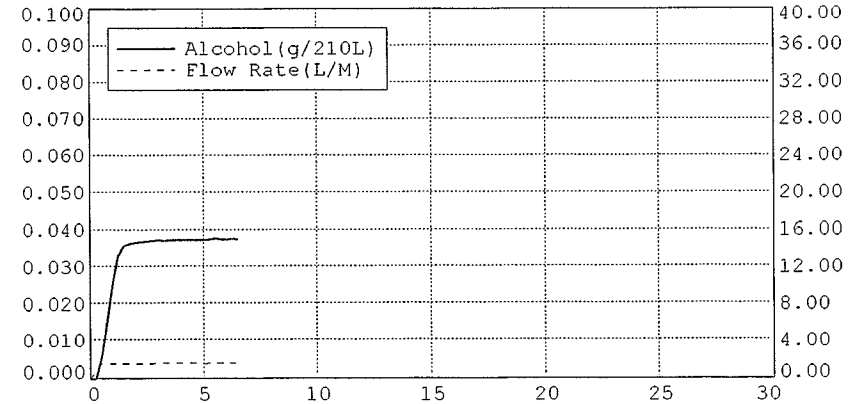
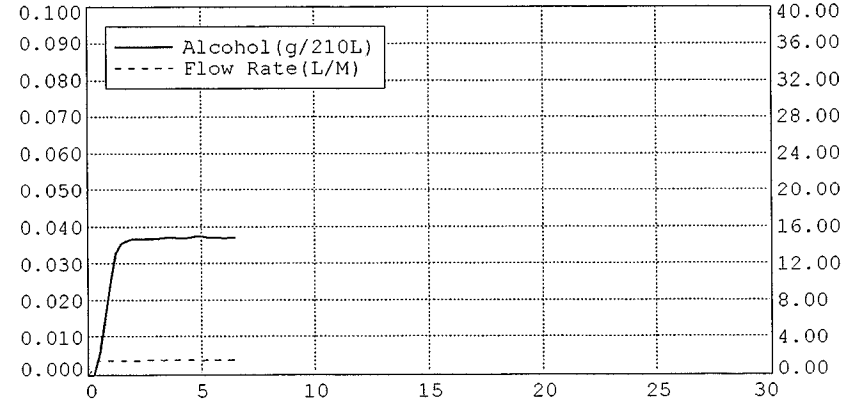
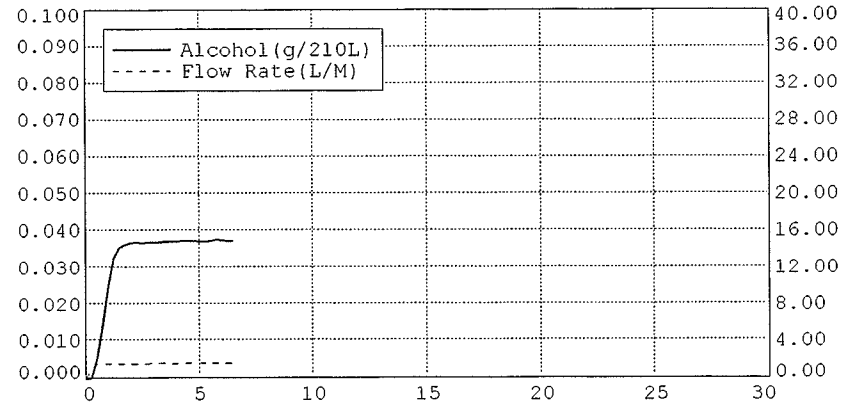
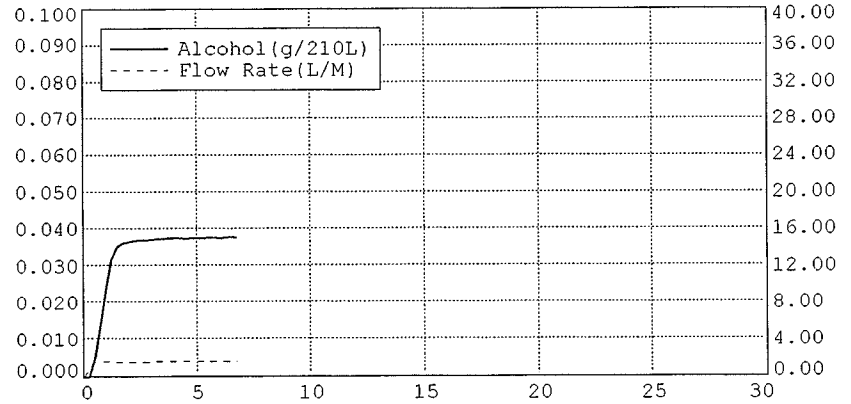
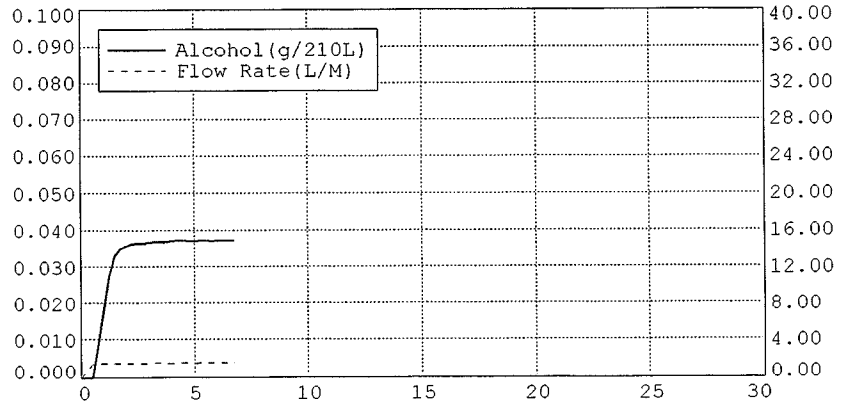
Date: 10/26/2018
 Time: 09:09:03

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.08: 0.039
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 219 psi

BLANK TEST	0.000	09:11
INTERNAL STANDARD	VERIFIED	09:11
EXTERNAL STANDARD	0.038	09:11
BLANK TEST	0.000	09:12
EXTERNAL STANDARD	0.038	09:12
BLANK TEST	0.000	09:13
EXTERNAL STANDARD	0.038	09:13
BLANK TEST	0.000	09:14
EXTERNAL STANDARD	0.038	09:14
BLANK TEST	0.000	09:15
EXTERNAL STANDARD	0.038	09:15
BLANK TEST	0.000	09:16

Average = 0.0380
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100350

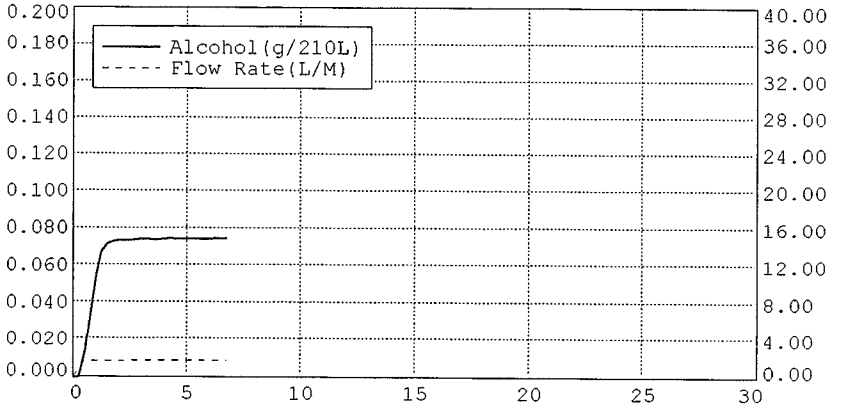
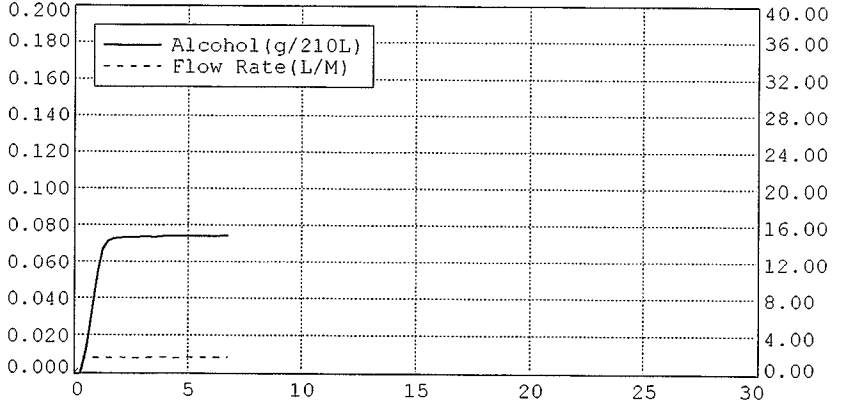
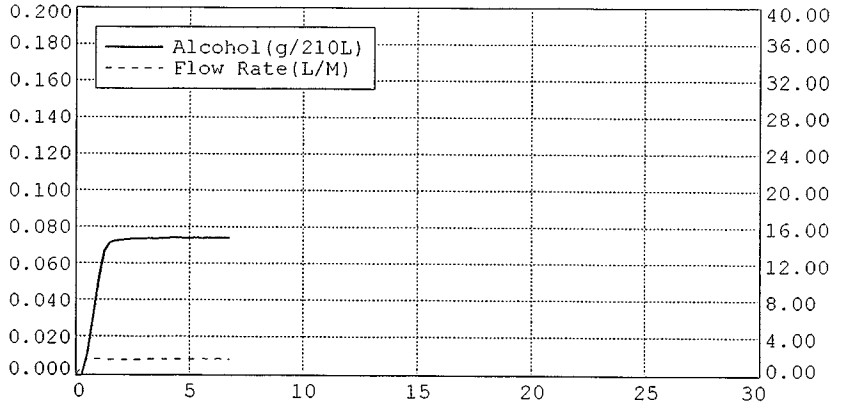
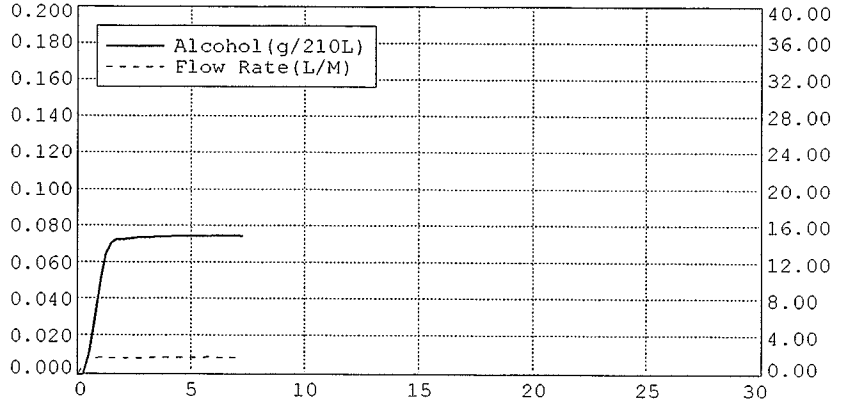
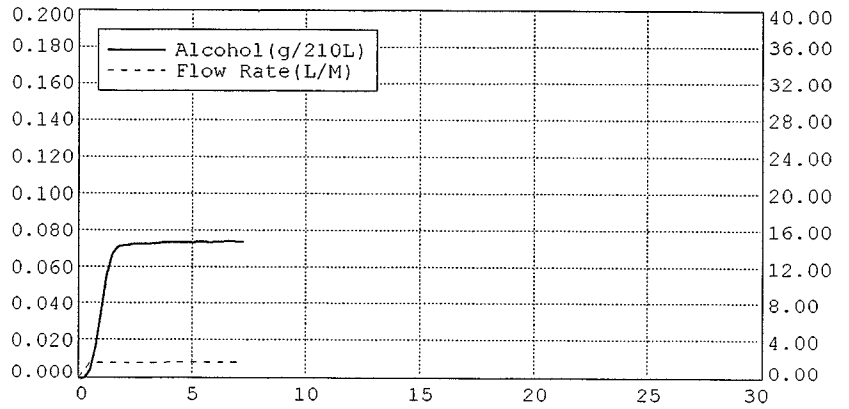
Date: 10/26/2018
 Time: 09:24:10

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.09: 0.078
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 455 psi

BLANK TEST	0.000	09:25
INTERNAL STANDARD	VERIFIED	09:25
EXTERNAL STANDARD	0.075	09:26
BLANK TEST	0.000	09:27
EXTERNAL STANDARD	0.075	09:27
BLANK TEST	0.000	09:28
EXTERNAL STANDARD	0.076	09:28
BLANK TEST	0.000	09:29
EXTERNAL STANDARD	0.076	09:29
BLANK TEST	0.000	09:30
EXTERNAL STANDARD	0.075	09:30
BLANK TEST	0.000	09:31

Average = 0.0754
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100350

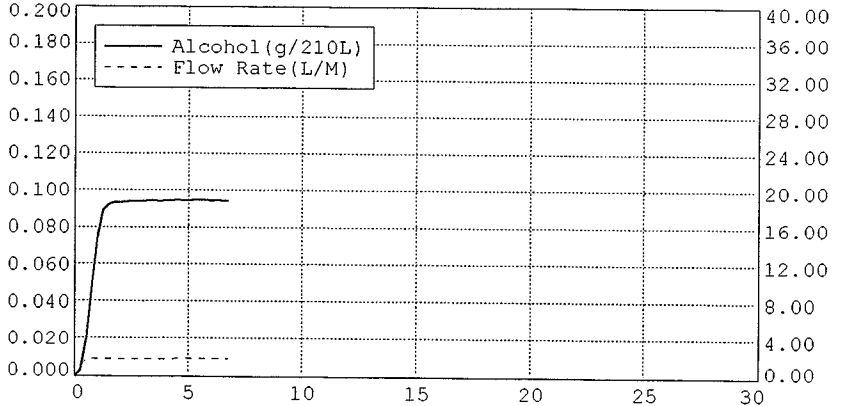
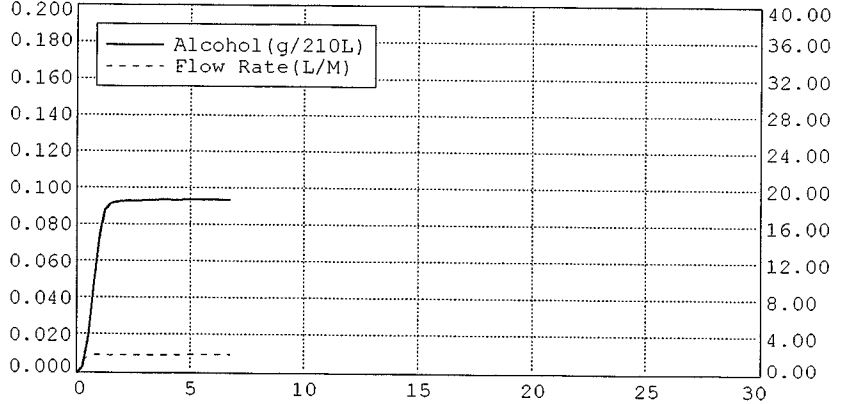
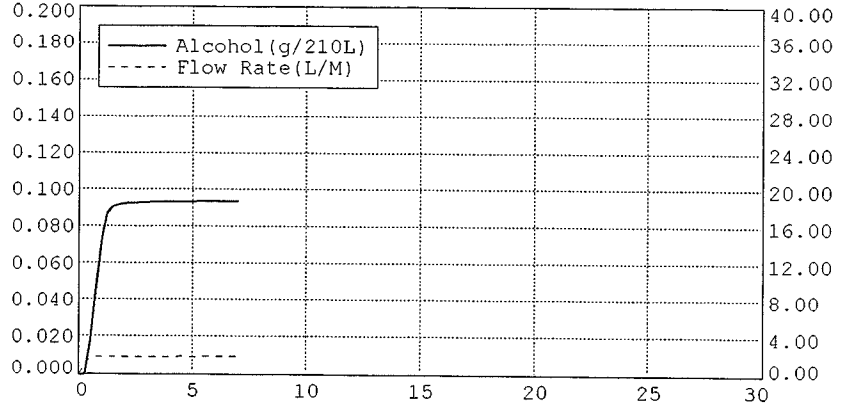
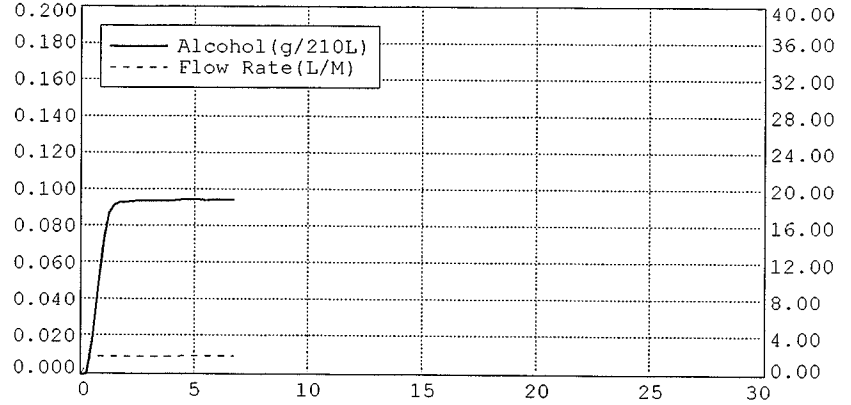
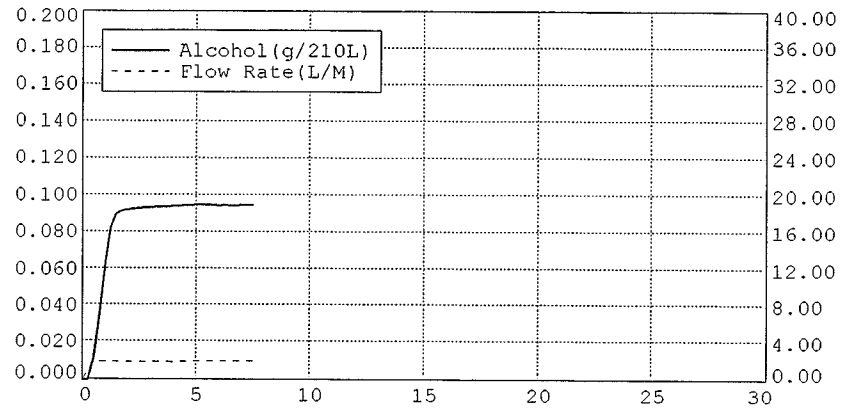
Date: 10/26/2018
 Time: 09:33:17

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.10: 0.097
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 1099 psi

BLANK TEST	0.000	09:34
INTERNAL STANDARD	VERIFIED	09:35
EXTERNAL STANDARD	0.095	09:35
BLANK TEST	0.000	09:36
EXTERNAL STANDARD	0.095	09:36
BLANK TEST	0.000	09:37
EXTERNAL STANDARD	0.095	09:37
BLANK TEST	0.000	09:38
EXTERNAL STANDARD	0.095	09:38
BLANK TEST	0.000	09:39
EXTERNAL STANDARD	0.095	09:39
BLANK TEST	0.000	09:40

Average = 0.0950
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

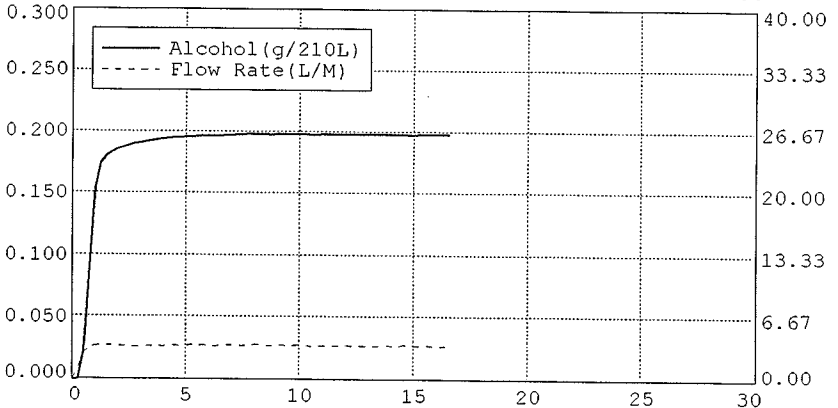
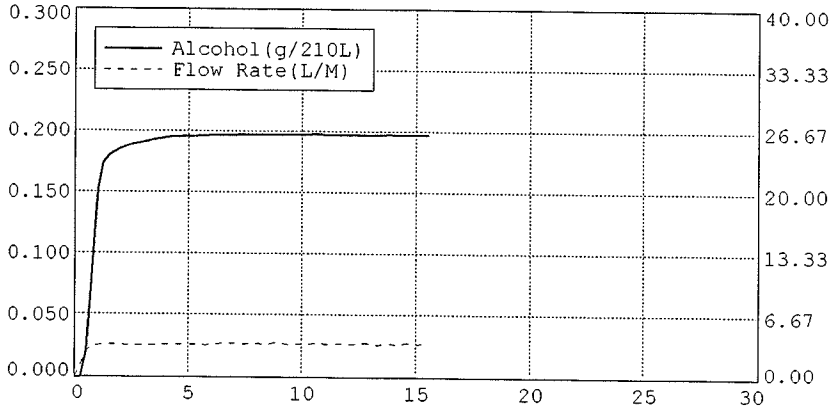
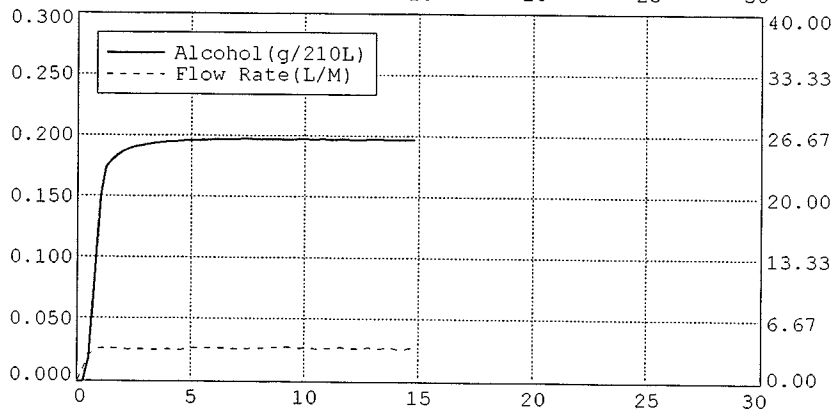
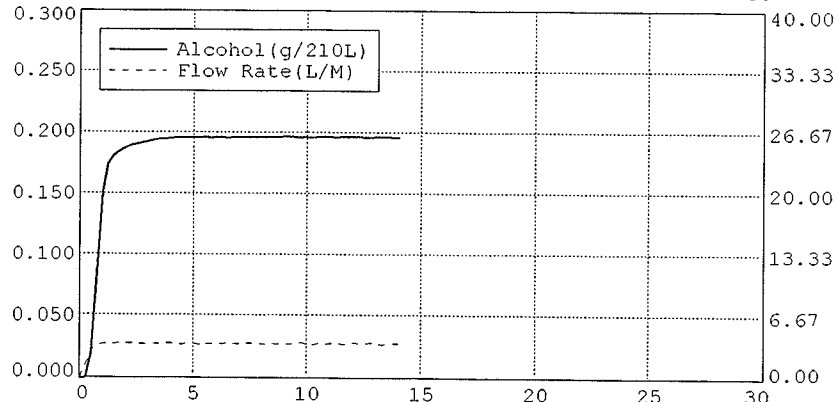
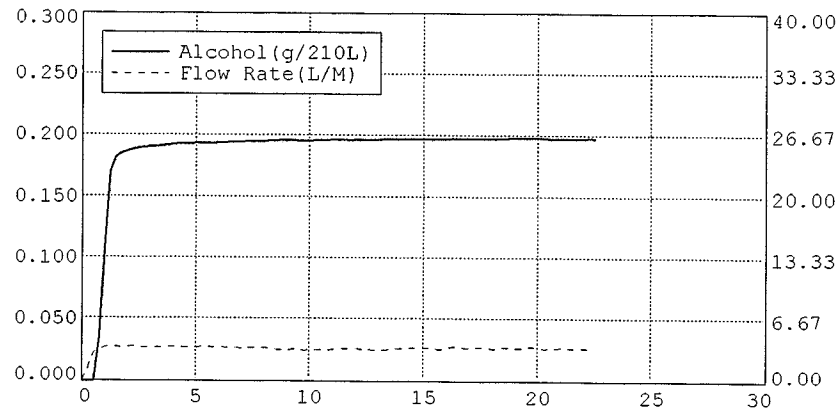
Alaska Department of Public Safety
 DATAMASTER dmt: 100350

Date: 10/26/2018
 Time: 09:42:48

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

BLANK TEST	0.000	09:55
INTERNAL STANDARD	VERIFIED	09:56
EXTERNAL STANDARD	0.198	09:56
BLANK TEST	0.000	09:57
EXTERNAL STANDARD	0.197	09:57
BLANK TEST	0.000	09:58
EXTERNAL STANDARD	0.197	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.198	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.198	10:01
BLANK TEST	0.000	10:02

Average = 0.1976
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
DATAMASTER dmt: 100350

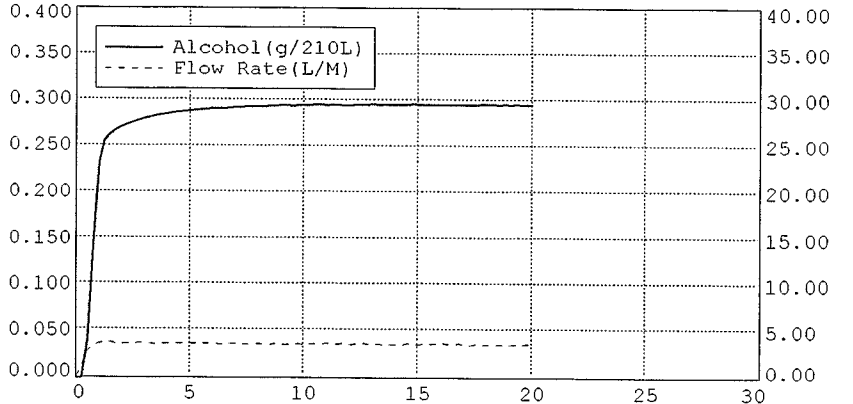
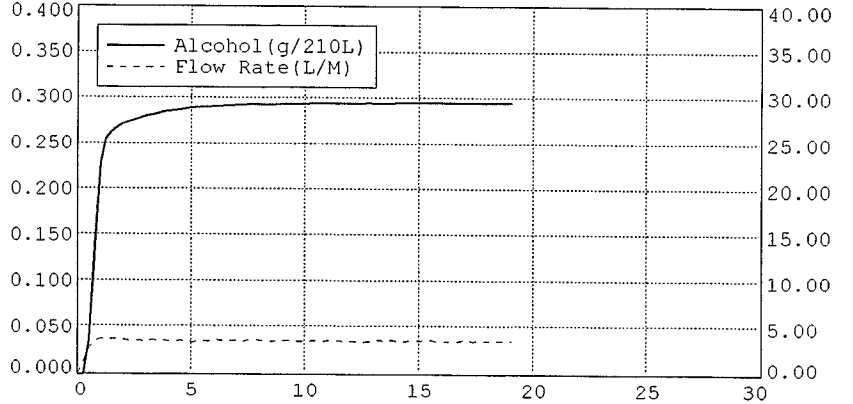
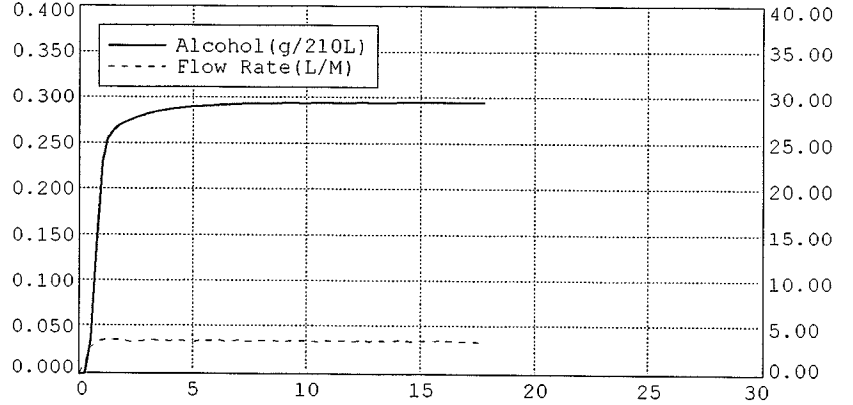
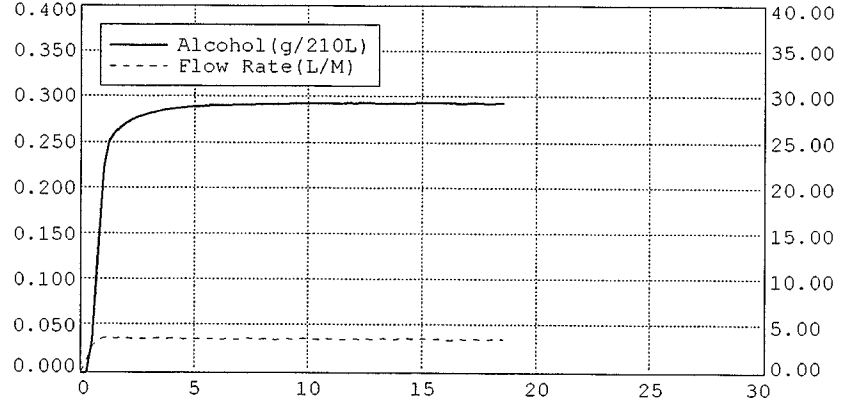
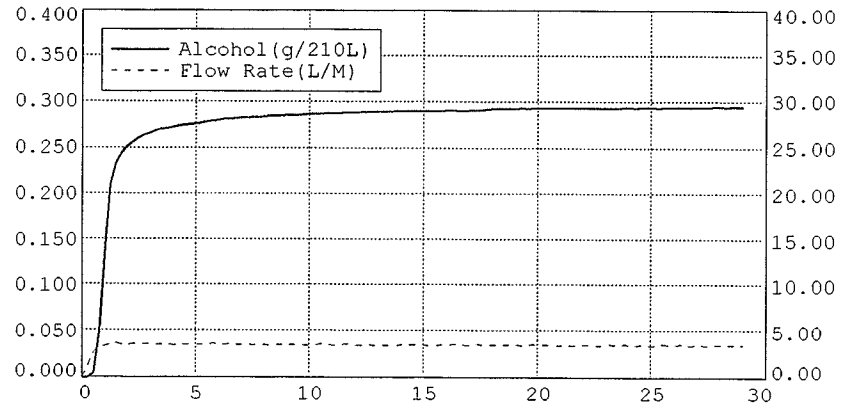
Date: 10/26/2018
Time: 10:04:31

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:05
INTERNAL STANDARD	VERIFIED	10:05
EXTERNAL STANDARD	0.294	10:06
BLANK TEST	0.000	10:07
EXTERNAL STANDARD	0.293	10:07
BLANK TEST	0.000	10:08
EXTERNAL STANDARD	0.295	10:09
BLANK TEST	0.000	10:10
EXTERNAL STANDARD	0.295	10:10
BLANK TEST	0.000	10:11
EXTERNAL STANDARD	0.295	10:12
BLANK TEST	0.000	10:12

Average = 0.2944
Std Dev = 0.0009



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 10/26/2018
Time: 10:19:30

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

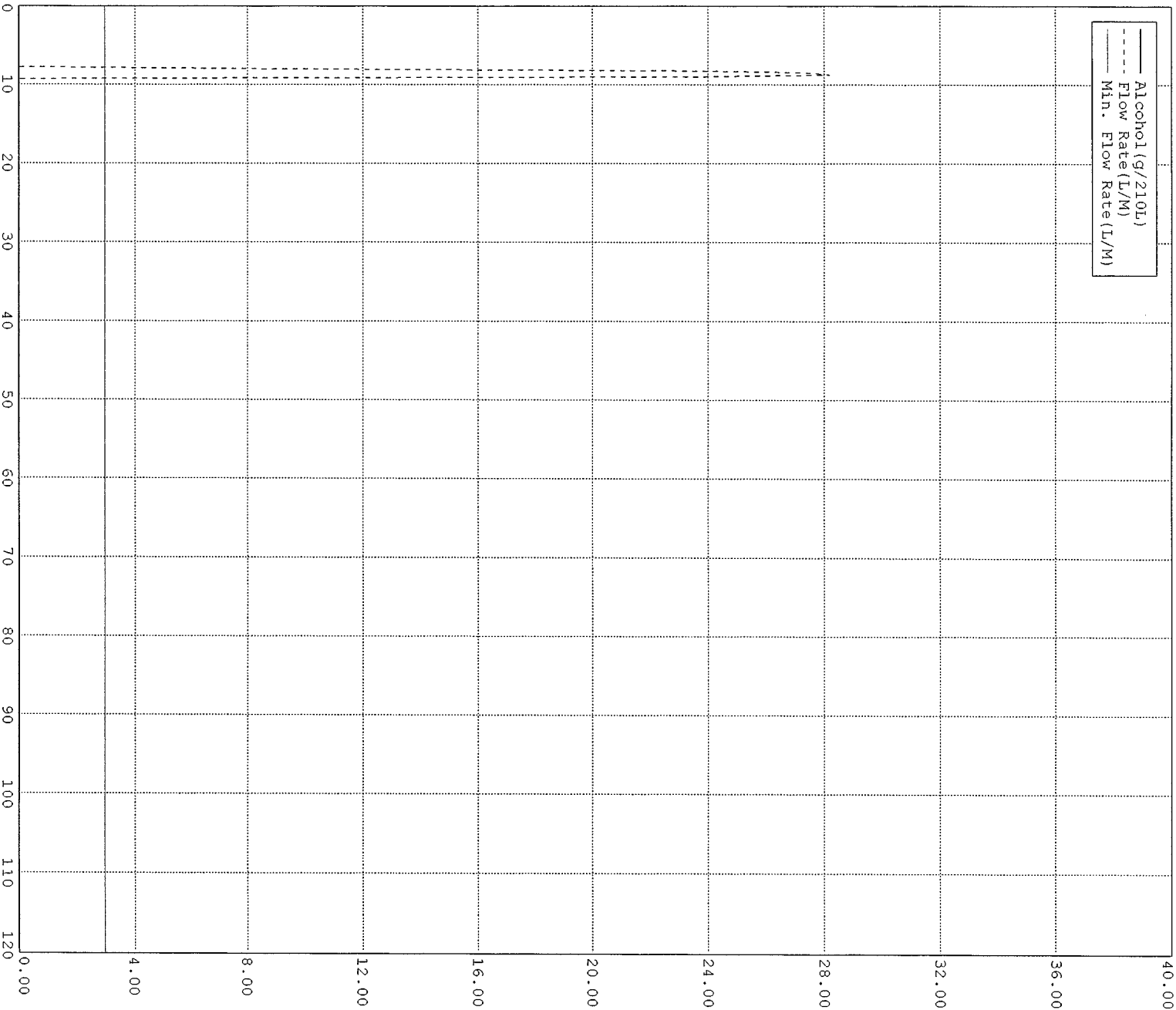
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

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

DIAGNOSTIC CHECK	PASSED	10:20
BLANK TEST	0.000	10:20
INTERNAL STANDARD	VERIFIED	10:20
EXTERNAL STANDARD	0.075	10:20
BLANK TEST	0.000	10:21
SUBJECT SAMPLE	INCOMPLETE	10:23

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 10/26/2018
Time: 10:53:40

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

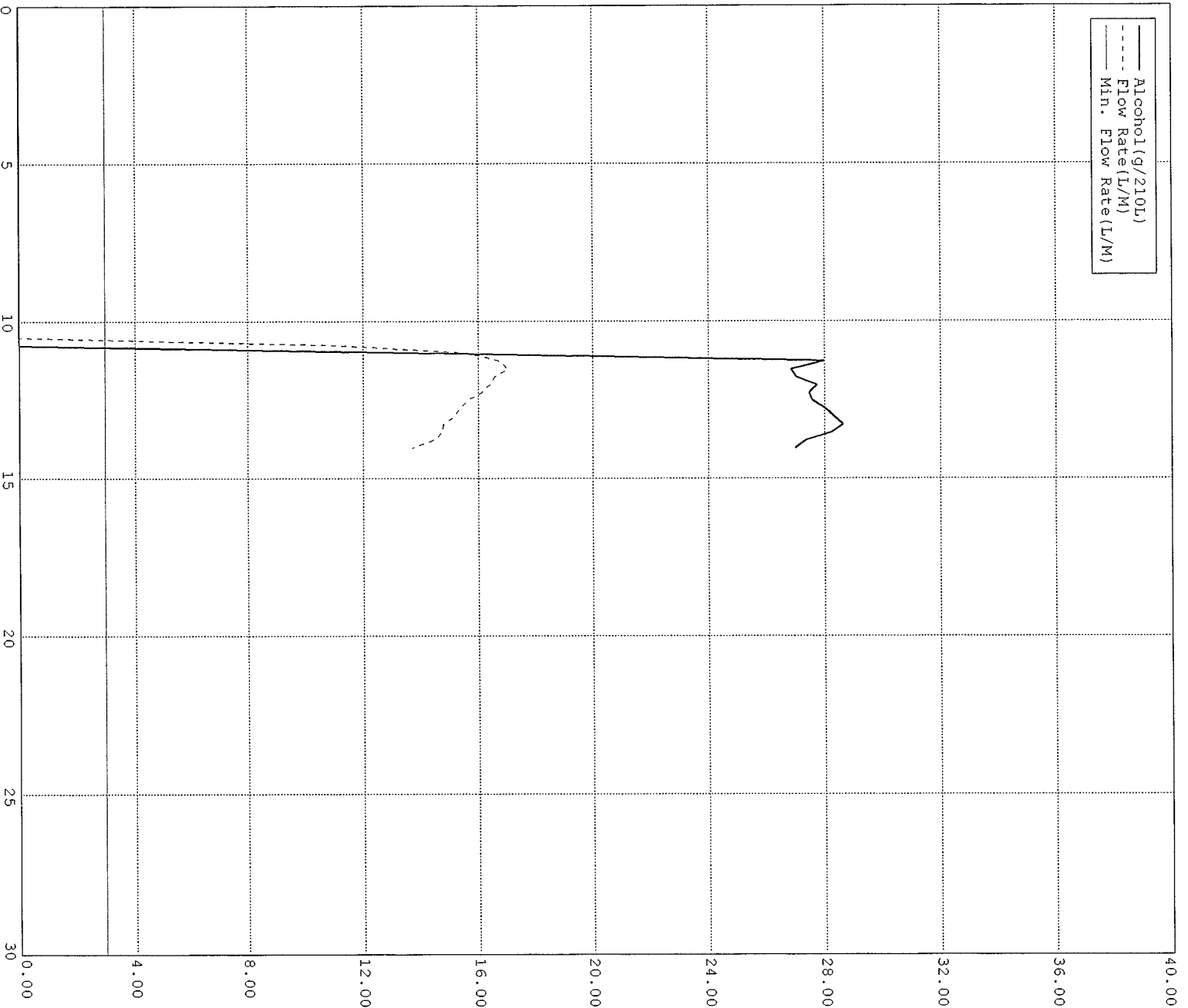
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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	10:55
BLANK TEST	0.000	10:55
INTERNAL STANDARD	VERIFIED	10:55
EXTERNAL STANDARD	0.075	10:55
BLANK TEST	0.000	10:56
SUBJECT SAMPLE	INVALID	10:56

Handwritten signature



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 10/26/2018
Time: 11:51:34

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

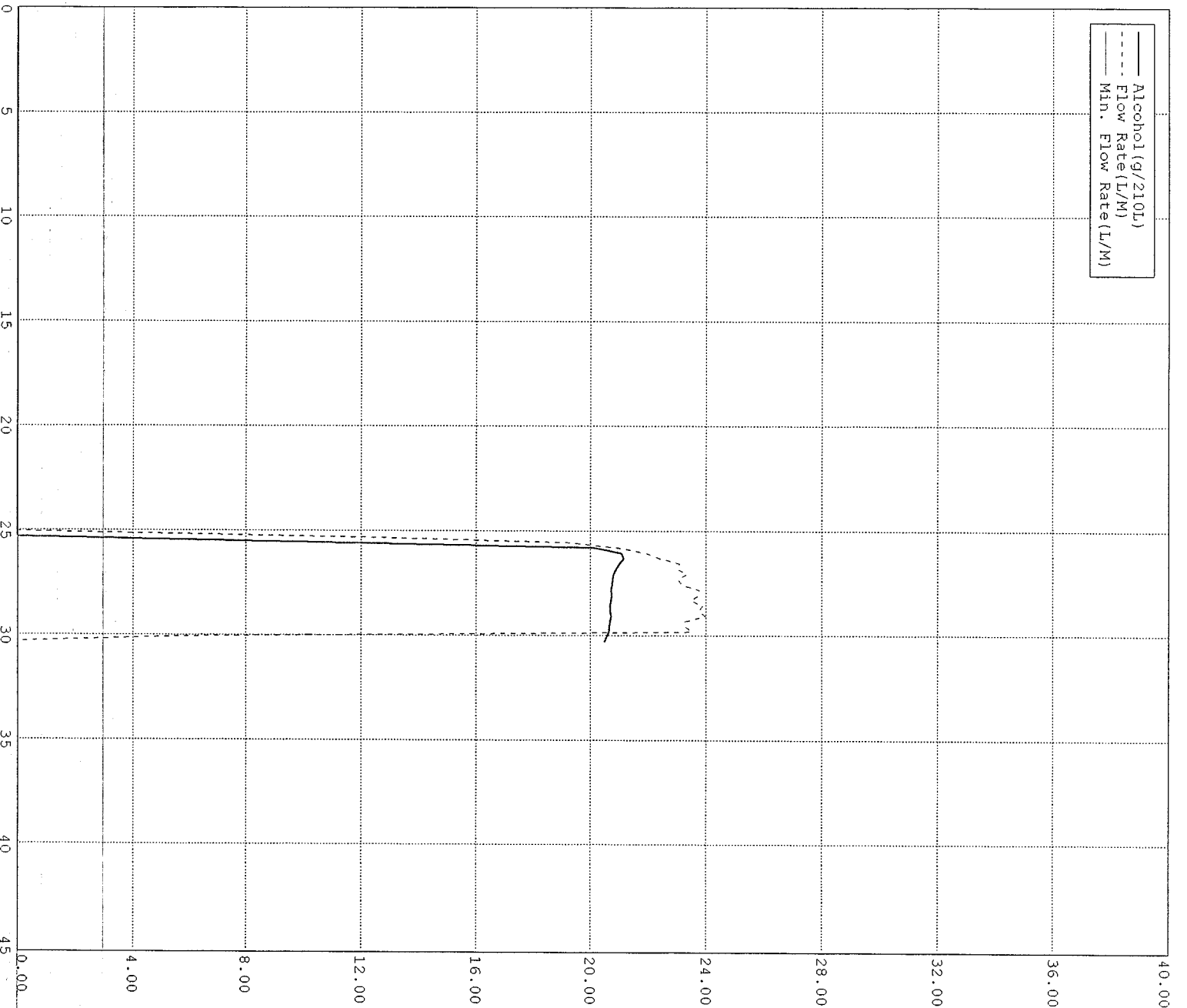
DEPT/AGENCY:
INTERFERENCE ACETONE
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	11:52
BLANK TEST	0.000	11:53
INTERNAL STANDARD	VERIFIED	11:53
Xq = 0.104 (1.28%)		
EXTERNAL STANDARD	0.076	11:53
X[1] = 0.0764 (0.0000)	(0.0025)	
BLANK TEST	0.000	11:54
SUBJECT SAMPLE	XXX	11:54
X[1] = 0.1035 (-0.0164)	(0.0016)	

Interference Detected

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 10/26/2018
Time: 11:57:11

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

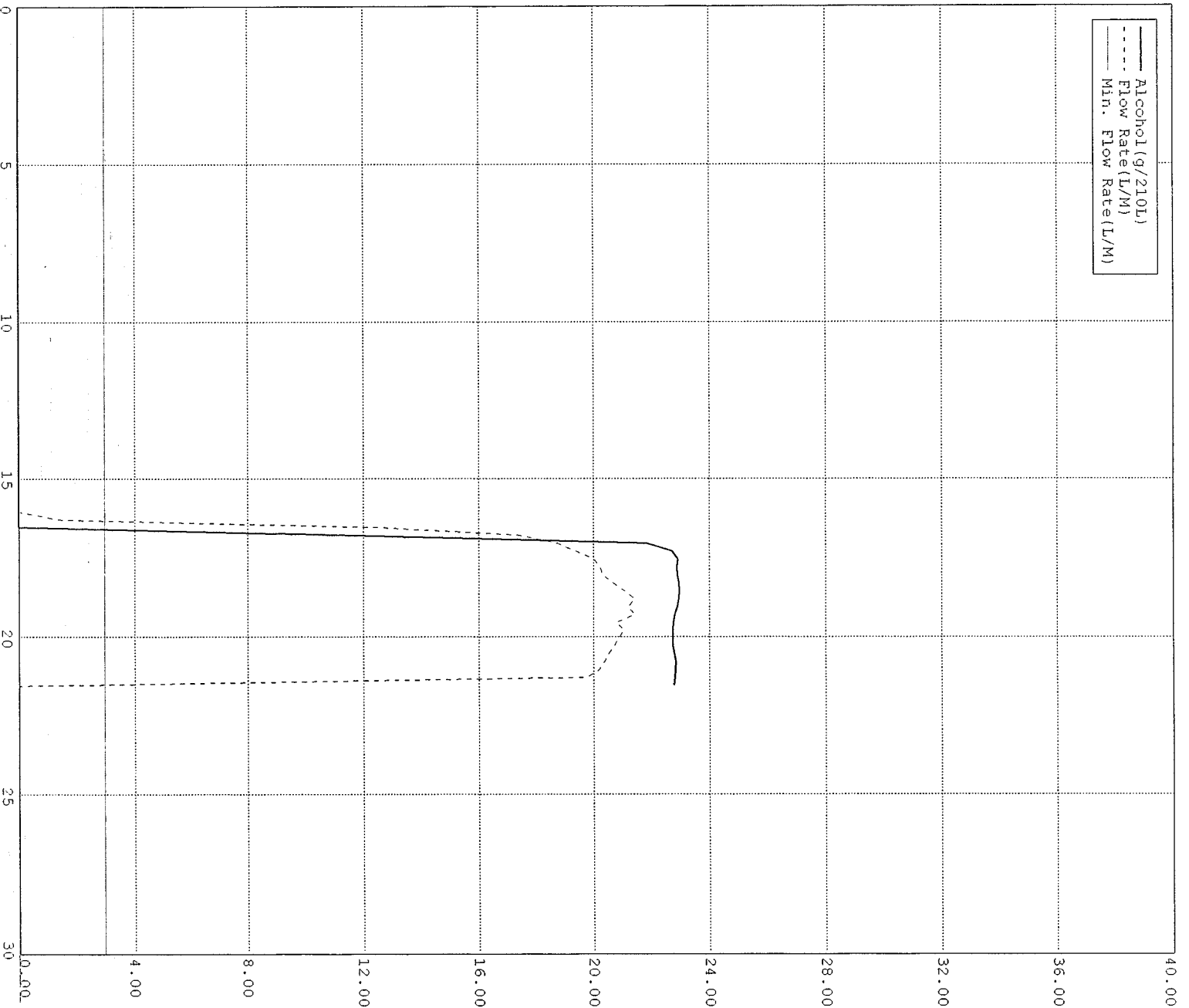
DEPT/AGENCY:
INTERERENCE IPA
CASE/REPORT: XXXX
TEST TYPE: TEST

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

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	11:59
BLANK TEST	0.000	11:59
INTERNAL STANDARD	VERIFIED	11:59
Xq = 0.105 (1.97%)		
EXTERNAL STANDARD	0.076	12:00
X[1] = 0.0759 (-0.0008)	(0.0025)	
BLANK TEST	0.000	12:00
SUBJECT SAMPLE	XXX	12:01
X[1] = 0.1152 (-0.0189)	(0.0027)	

Interference Detected

Handwritten signature



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 10/26/2018
Time: 11:42:55

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

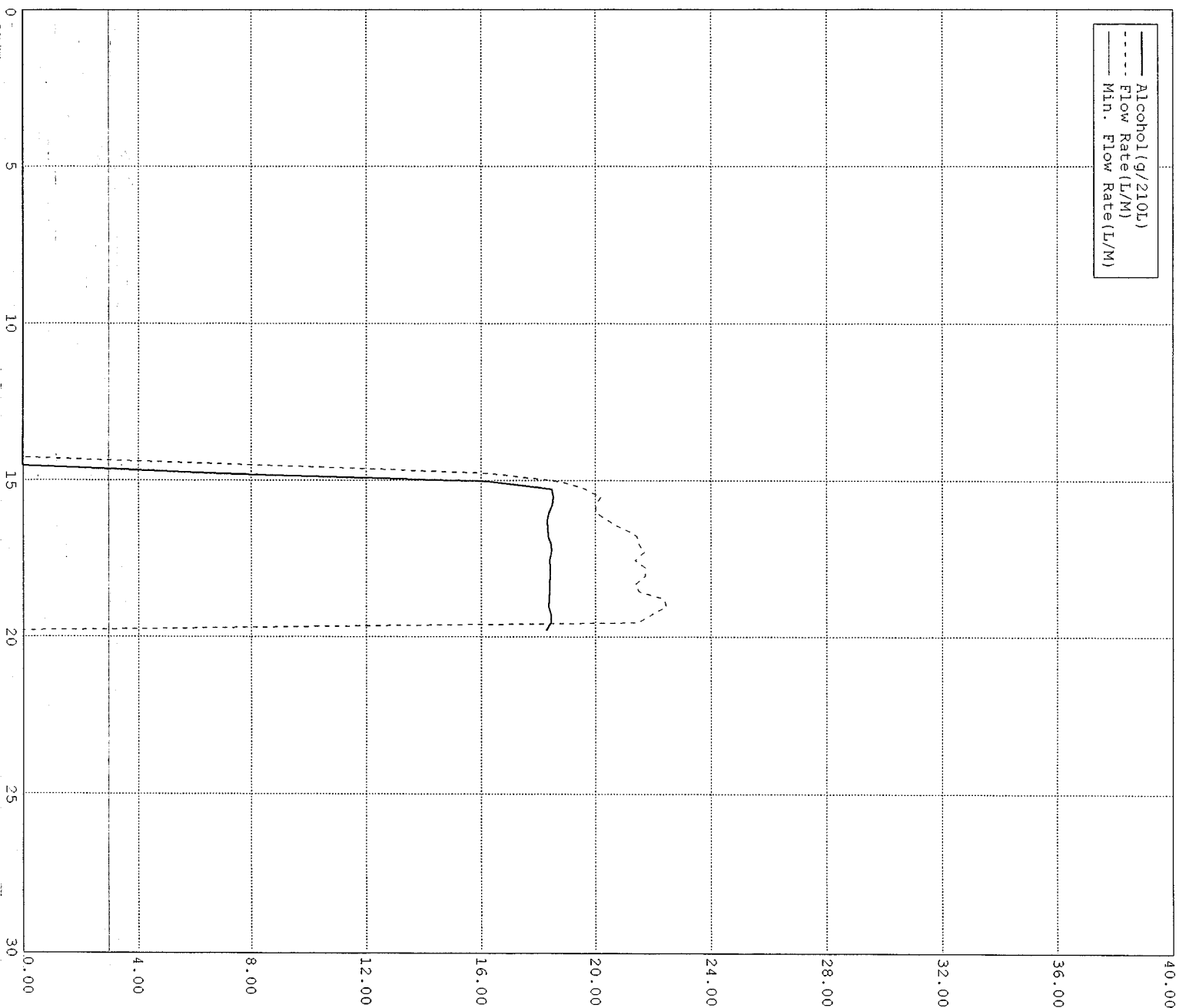
DEPT/AGENCY:
INTERFERENCE NEGATIVE
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	11:44
BLANK TEST	0.000	11:44
INTERNAL STANDARD	VERIFIED	11:44
Xq = 0.104 (1.03%)		
EXTERNAL STANDARD	0.075	11:44
X[1] = 0.0755 (-0.0009)	(0.0029)	
BLANK TEST	0.000	11:45
SUBJECT SAMPLE (Vol=1.78L)	0.093	11:46
X[1] = 0.0937 (0.0009)	(0.0015)	
BLANK TEST	0.000	11:47
EXTERNAL STANDARD	0.075	11:47
X[1] = 0.0754 (-0.0006)	(0.0020)	
BLANK TEST	0.000	11:48

Filter 2 Avg = -0.0006
Filter 3 Avg = 0.0025

MMV



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100350

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

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

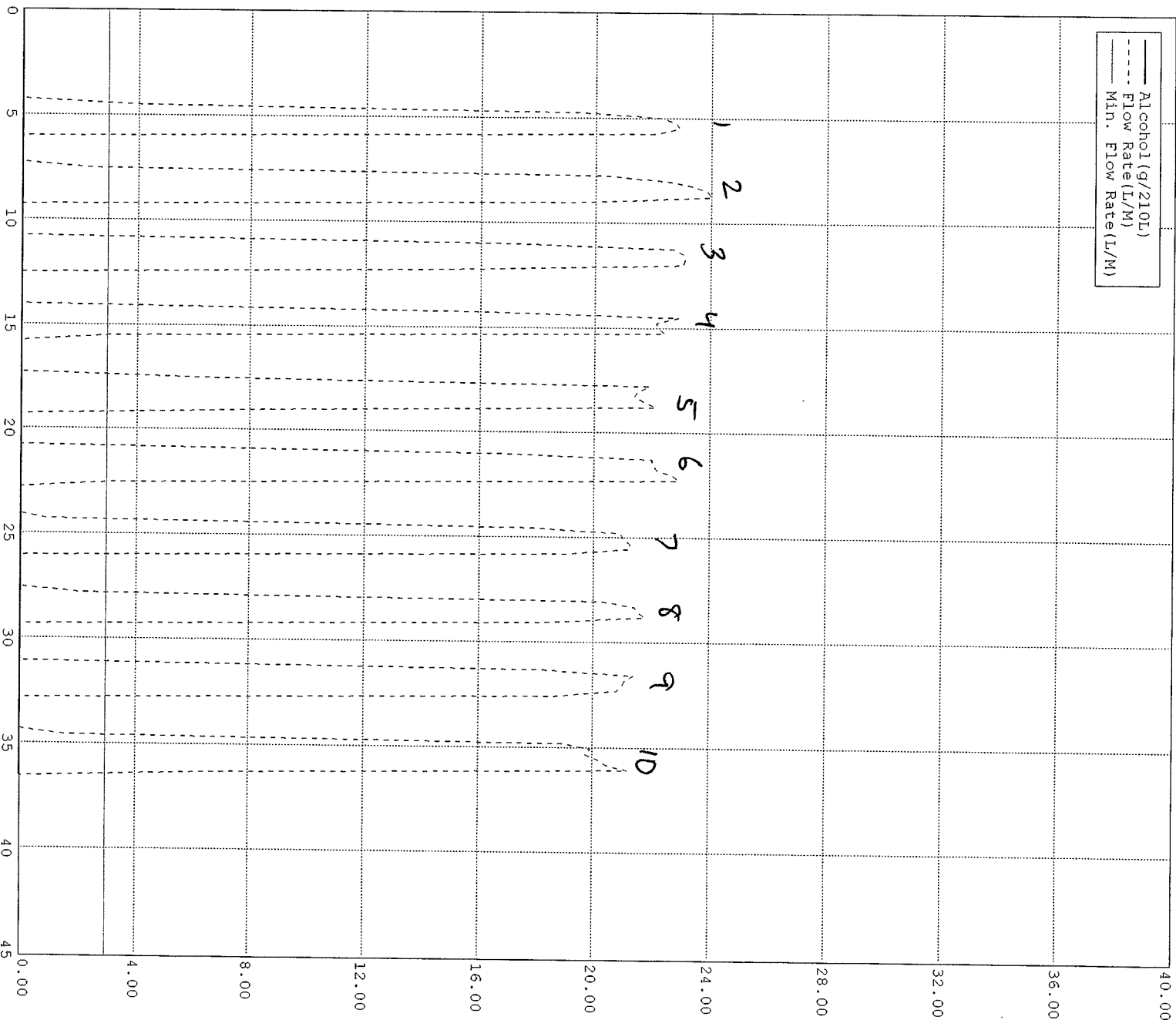
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	10:27
BLANK TEST	0.000	10:27
INTERNAL STANDARD	VERIFIED	10:27
EXTERNAL STANDARD	0.076	10:27
BLANK TEST	0.000	10:28
SUBJECT SAMPLE	XXX	10:29

Maximum Attempts Exceeded

2011



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 10/26/2018
Time: 11:01:53

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

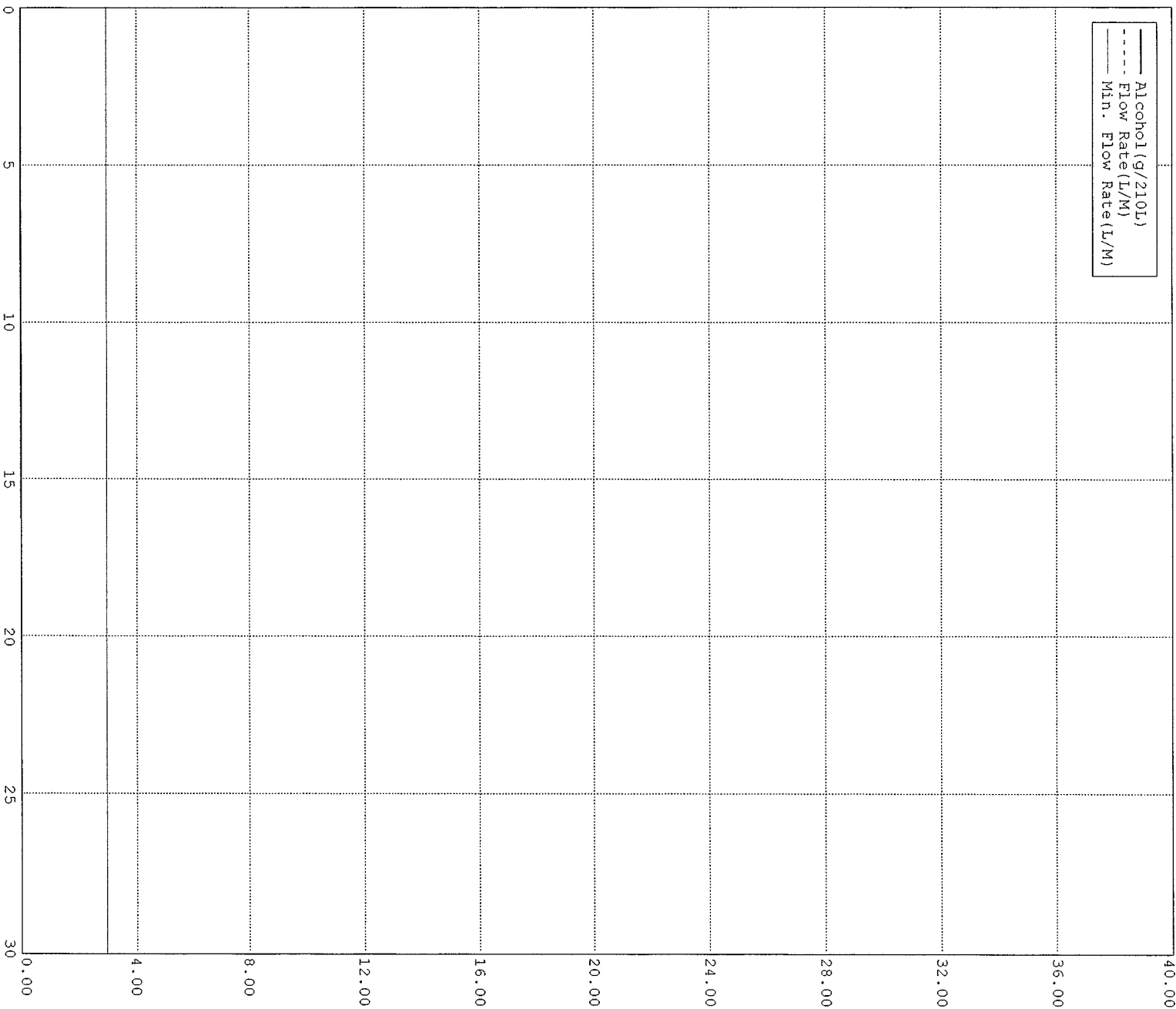
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	11:03
BLANK TEST	0.000	11:03
INTERNAL STANDARD	VERIFIED	11:03
EXTERNAL STANDARD	0.075	11:03
BLANK TEST	0.000	11:04

RFI DETECTED

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100350

Date: 10/26/2018
Time: 12:19:45

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 29.12: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	12:20
BLANK TEST	0.000	12:20
INTERNAL STANDARD	VERIFIED	12:21
EXTERNAL STANDARD	0.076	12:21
BLANK TEST	0.000	12:22
SUBJECT SAMPLE (Vol=3.03L)	0.000	12:22
BLANK TEST	0.000	12:23
EXTERNAL STANDARD	0.076	12:23
BLANK TEST	0.000	12:24

DJM

