

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 100402 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 A6735001 Exp 12/16/2019
- iv. 0.100g/210L Mnf Airgas Lot A6805903 Exp 02/28/2020
- v. 0.200g/210L Mnf Auth Lot 17340 Exp 10/09/2019

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

vi. 0.300g/210L Mnf Auth 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 Auth Lot 18070 Level 0.100 Exp 02/26/2020

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

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

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

iii. Negative Control - Mnf Auth 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: 100402

Date: 10/26/2018
Time: 08:09:13

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.80 V PASSED
(1.11 V - 2.59 V)
Cooler Voltage = 1.69 V PASSED
(0.95 V - 2.23 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 540 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.0 in

PUMP INFO

Flow Rate = 4.617 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 PASSED

Xq = 0.084 1.48% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100402

Date: 10/26/2018
Time: 8:23 AM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 46.0°C

Current Barometer 29.0 in ✓
Volume (Ltr) 1.53 ✓

Settings

Lamp: 1.80 V
Bias: 80 V
Cooler: 1.84 V
Chopper: 539 Hz

Voltages (V)

Flow: 1.04 V ✓
Detector: -0.013 V ✓

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100402

Date: 08/12/2015
Time: 13:14:12

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

Ca = 0.1000
CAL = 0.938109 0.800 <= CAL < 1.200
b1 = 0.0002 0.0000 <= b1 < 0.0040
b2 = 0.0064 0.0010 <= b2 < 0.0100
b3 = 0.0006 0.0000 <= b3 < 0.0040
Xq = 0.0825 0.0500 <= Xq < 0.2000
a21 = 1.169275 1.050 <= a21 < 1.300
a31 = 0.370388 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100402

Date: 10/26/2018
Time: 09:10:50

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

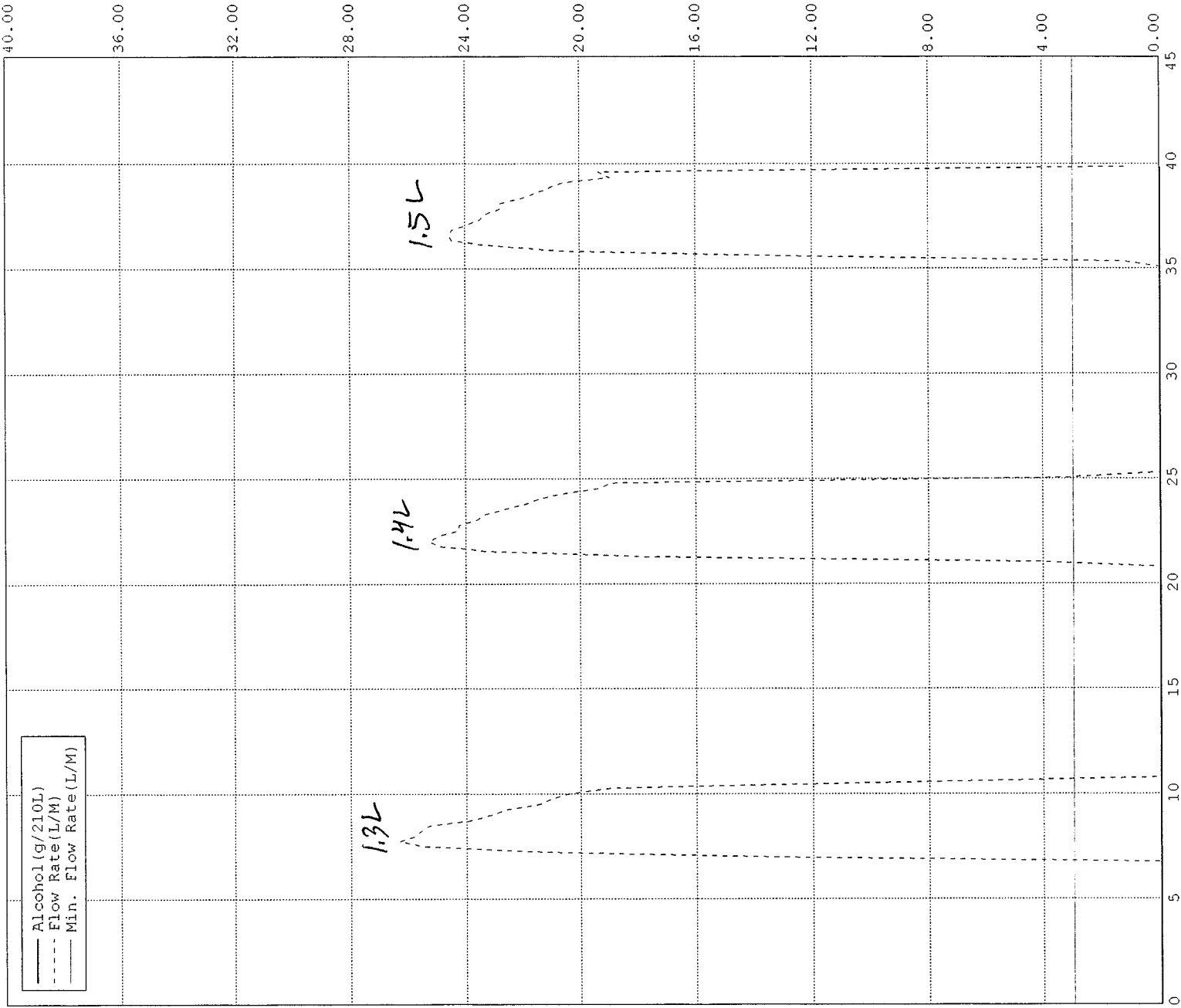
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.07: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	09:12
BLANK TEST	0.000	09:12
INTERNAL STANDARD	VERIFIED	09:12
EXTERNAL STANDARD	0.075	09:12
BLANK TEST	0.000	09:13
SUBJECT SAMPLE (Vol=1.54L)	0.000	09:14
BLANK TEST	0.000	09:15
EXTERNAL STANDARD	0.075	09:15
BLANK TEST	0.000	09:16

DM



LINEARITY CHECK

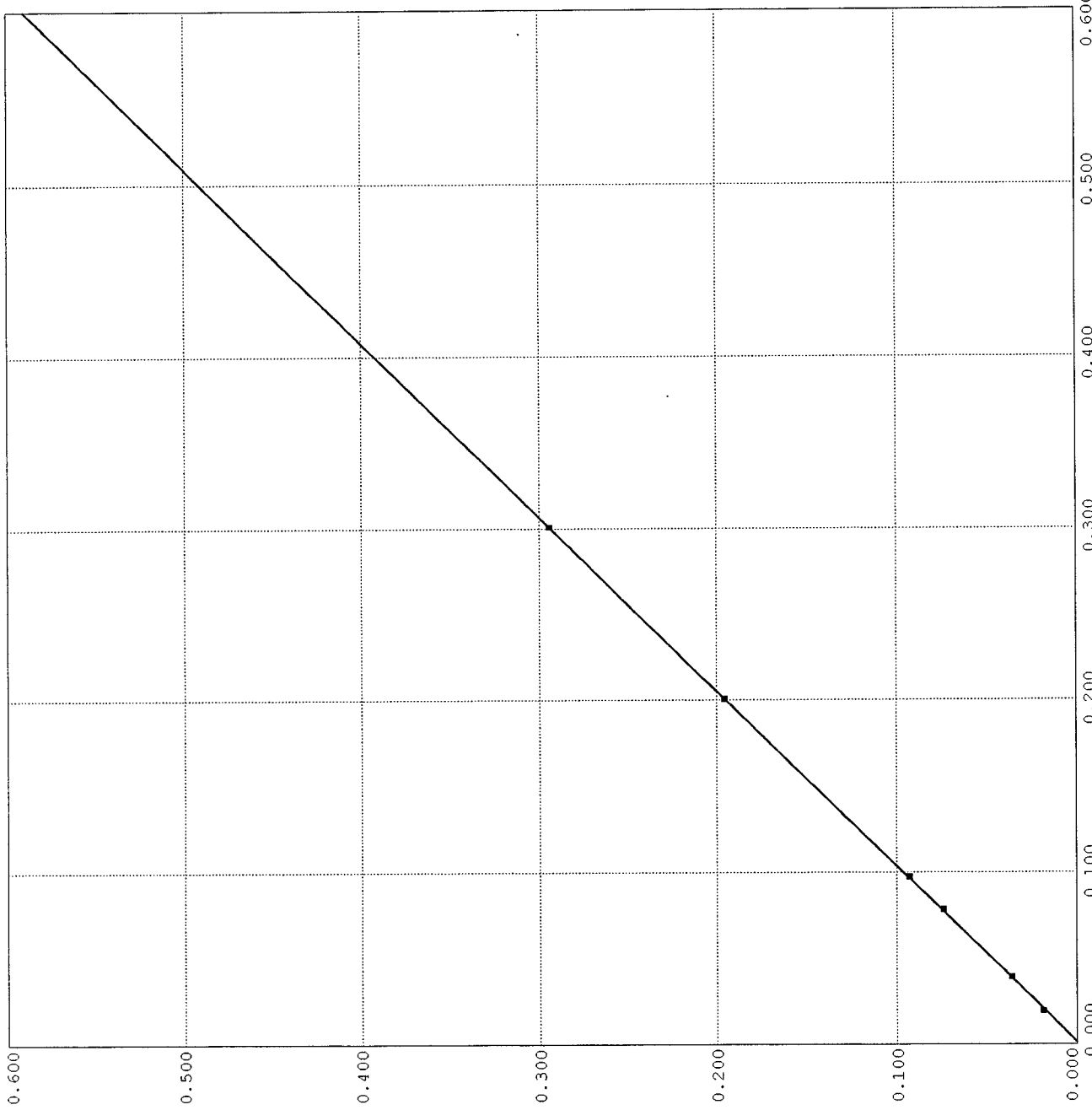
Alaska Department of Public Safety
DATAMASTER dmt: 100402

Date: 10/26/2018
Time: 09:19:16

SUPERVISOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.019	0.0192	0.0004
0.039	0.0370	0.0000
0.078	0.0750	0.0000
0.097	0.0940	0.0000
0.200	0.1964	0.0005
0.300	0.2950	0.0007

SLOPE = 0.985895
R² = 0.999935



DW

LINEARITY CHECK: Control Test 1

 Alaska Department of Public Safety
 DATAMASTER dmt: 100402

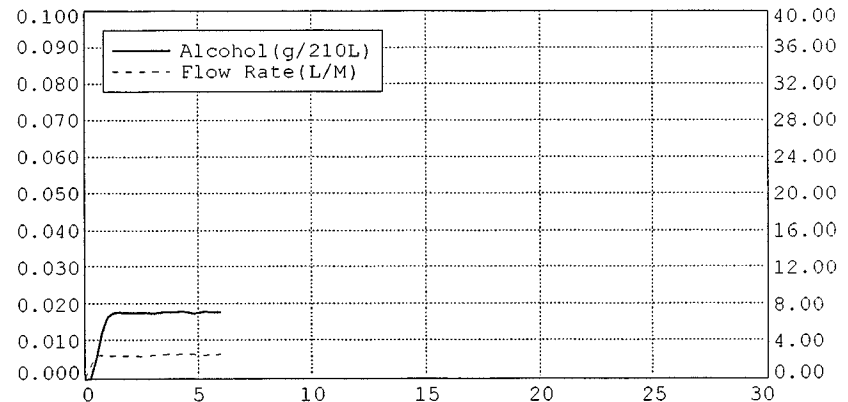
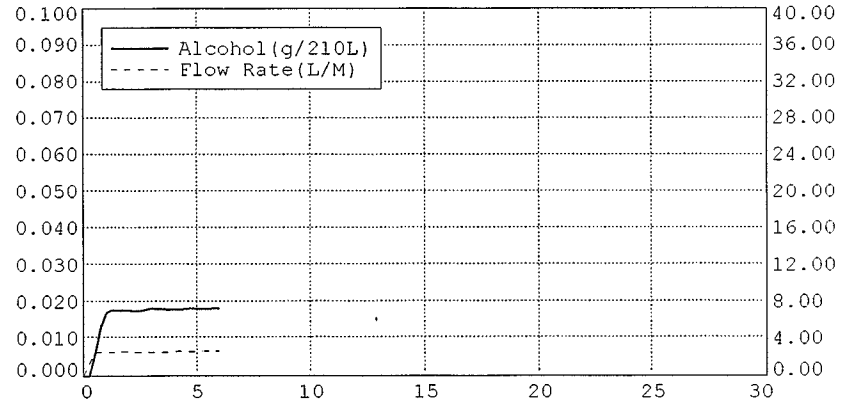
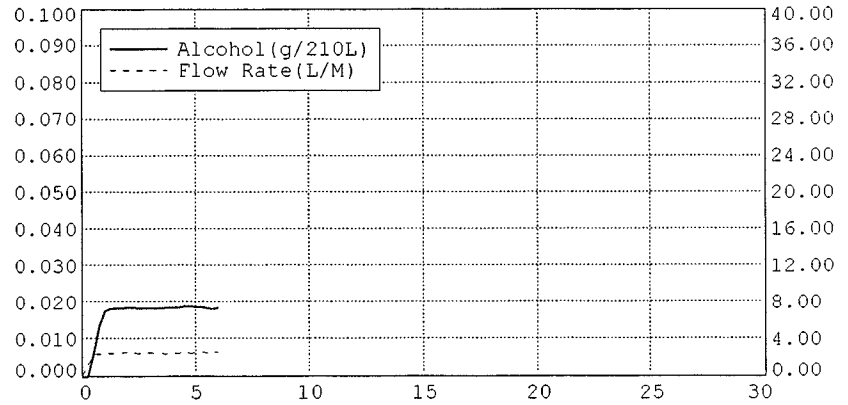
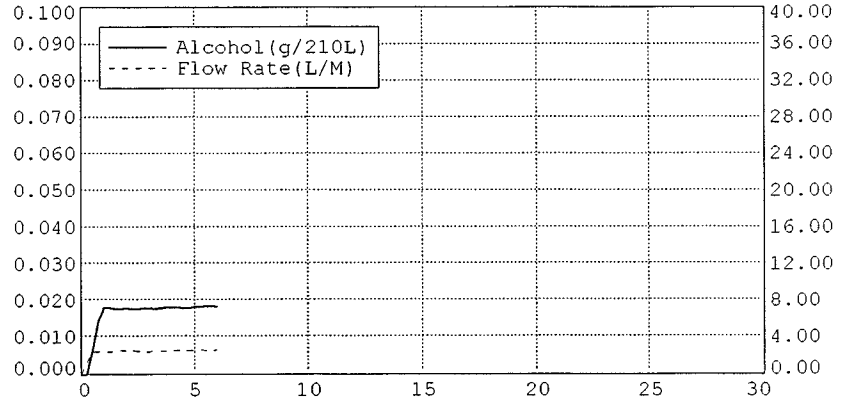
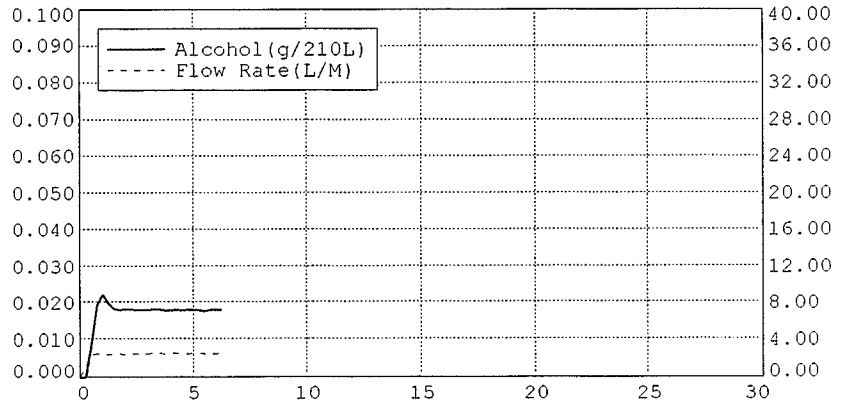
Date: 10/26/2018
 Time: 09:19:18

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.08: 0.019
 LOT #: ~~AG805804~~ AG805804 *Jm*
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 983 psi
 10/30/18

BLANK TEST	0.000	09:20
INTERNAL STANDARD	VERIFIED	09:21
EXTERNAL STANDARD	0.019	09:21
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.019	09:22
BLANK TEST	0.000	09:23
EXTERNAL STANDARD	0.020	09:23
BLANK TEST	0.000	09:24
EXTERNAL STANDARD	0.019	09:24
BLANK TEST	0.000	09:25
EXTERNAL STANDARD	0.019	09:25
BLANK TEST	0.000	09:26

Average = 0.0192
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

 Alaska Department of Public Safety
 DATAMASTER dmt: 100402

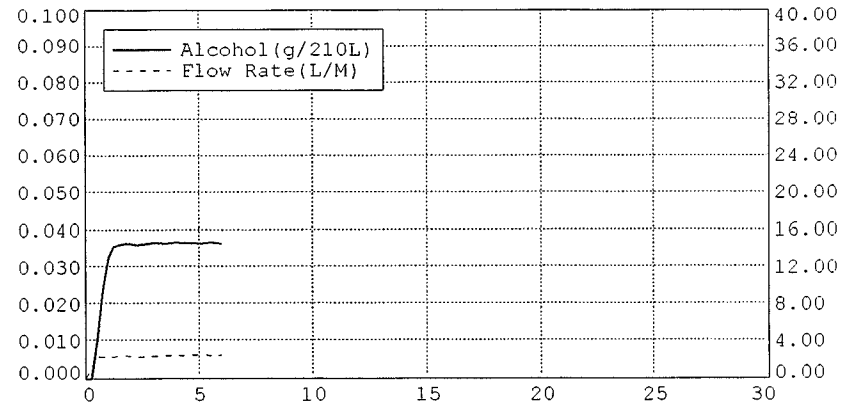
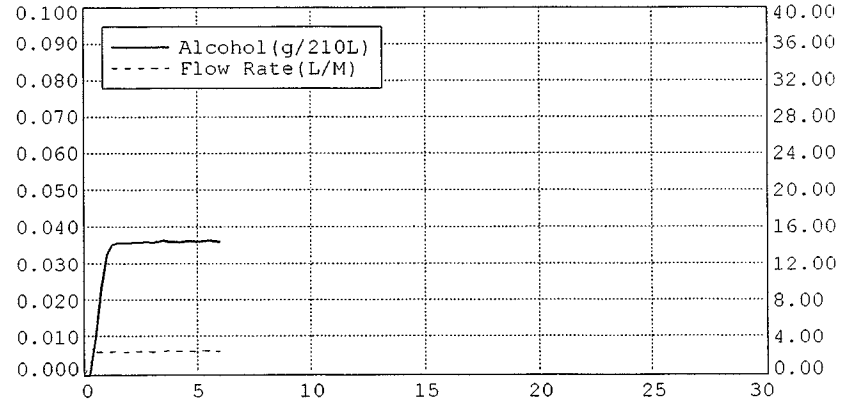
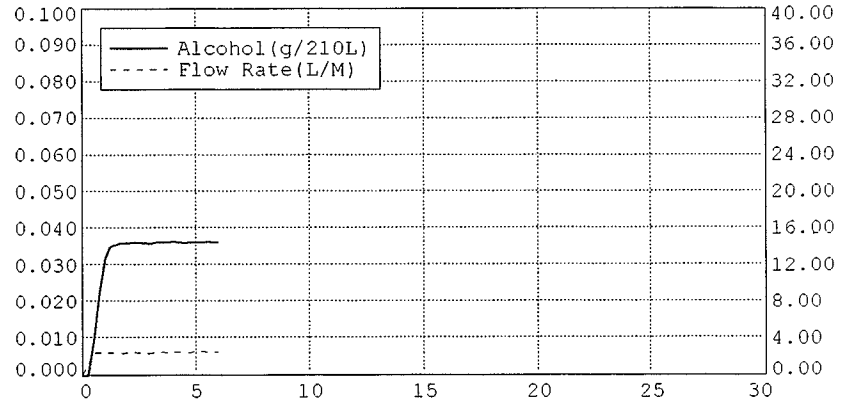
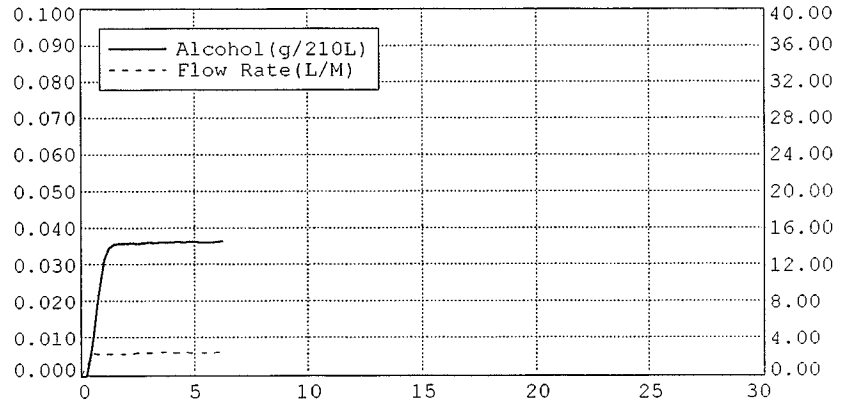
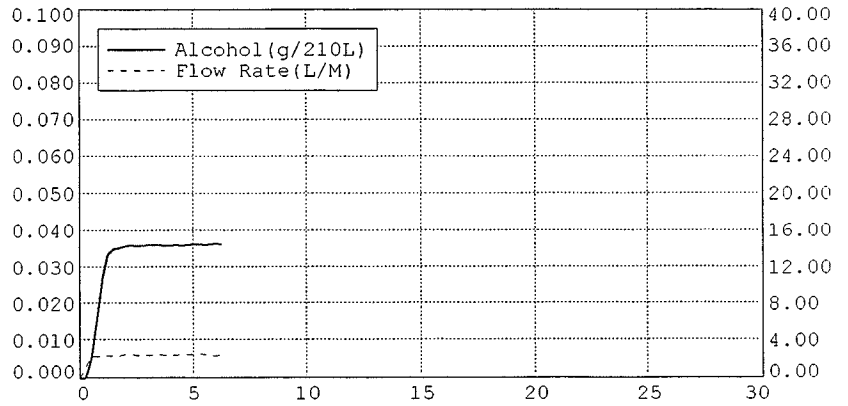
Date: 10/26/2018
 Time: 09:33:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.08: 0.039
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 792 psi

BLANK TEST	0.000	09:35
INTERNAL STANDARD	VERIFIED	09:35
EXTERNAL STANDARD	0.037	09:35
BLANK TEST	0.000	09:36
EXTERNAL STANDARD	0.037	09:36
BLANK TEST	0.000	09:37
EXTERNAL STANDARD	0.037	09:38
BLANK TEST	0.000	09:38
EXTERNAL STANDARD	0.037	09:39
BLANK TEST	0.000	09:40
EXTERNAL STANDARD	0.037	09:40
BLANK TEST	0.000	09:41

Average = 0.0370
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

 Alaska Department of Public Safety
 DATAMASTER dmt: 100402

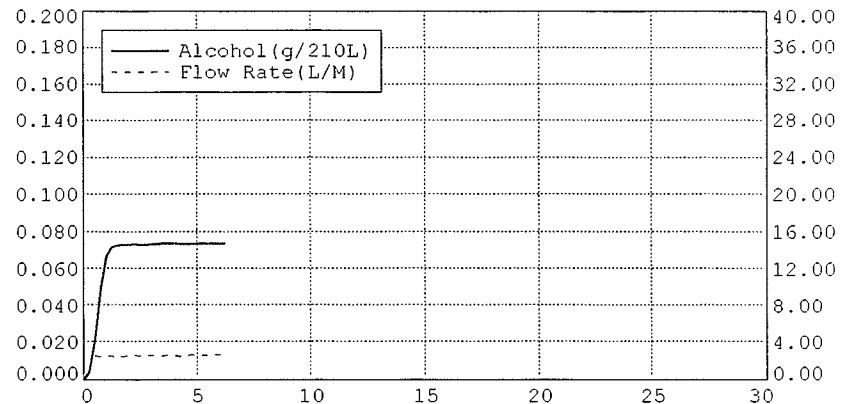
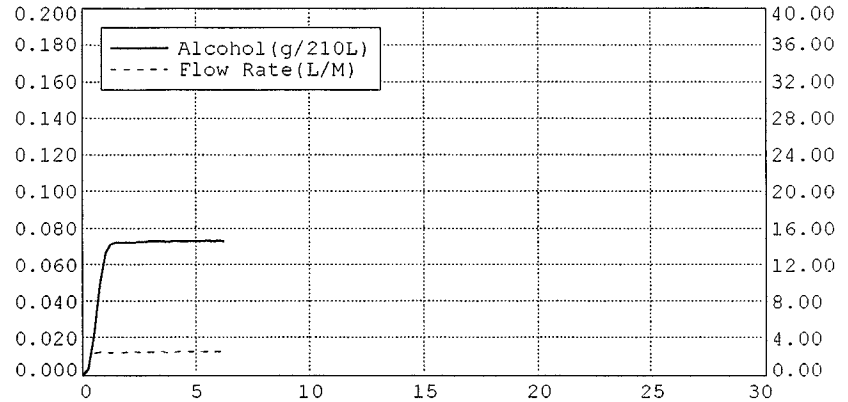
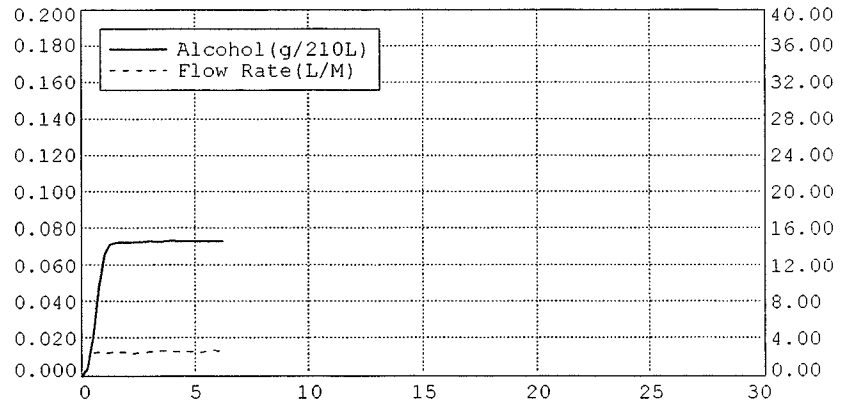
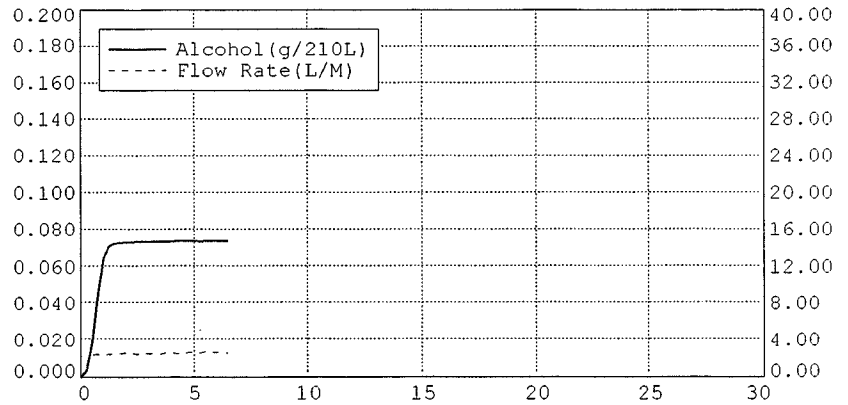
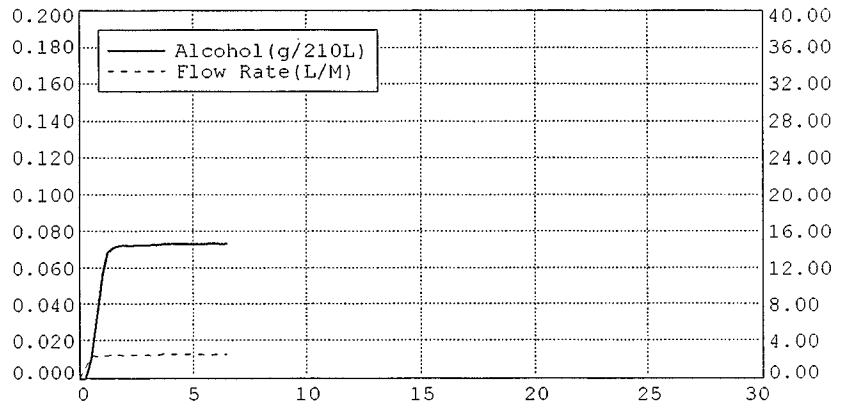
Date: 10/26/2018
 Time: 09:42:43

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.08: 0.078
 LOT #: AG735001
 EXPIRATION: 12/16/2019
 TANK PRESSURE: 1112 psi

BLANK TEST	0.000	09:44
INTERNAL STANDARD	VERIFIED	09:44
EXTERNAL STANDARD	0.075	09:44
BLANK TEST	0.000	09:45
EXTERNAL STANDARD	0.075	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.075	09:46
BLANK TEST	0.000	09:47
EXTERNAL STANDARD	0.075	09:47
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.075	09:48
BLANK TEST	0.000	09:49

Average = 0.0750
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

 Alaska Department of Public Safety
 DATAMASTER dmt: 100402

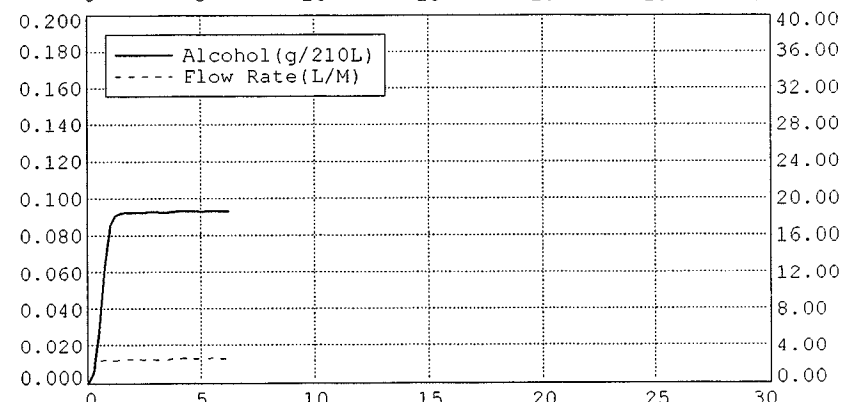
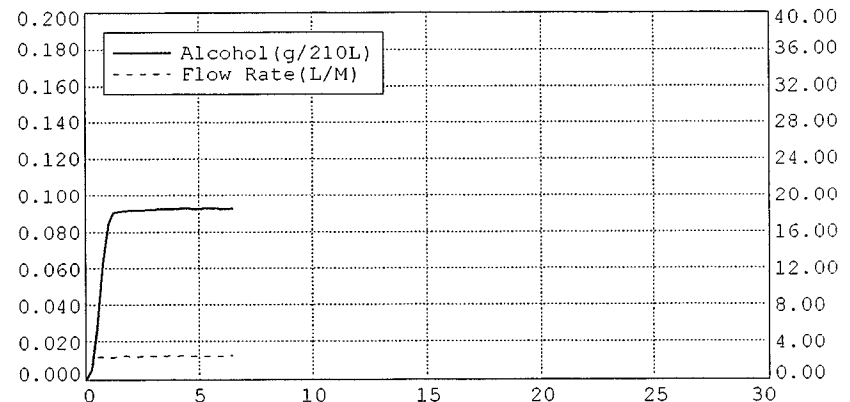
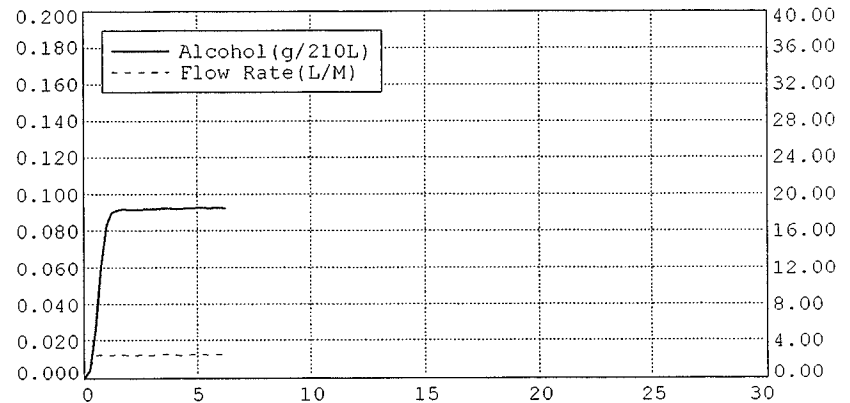
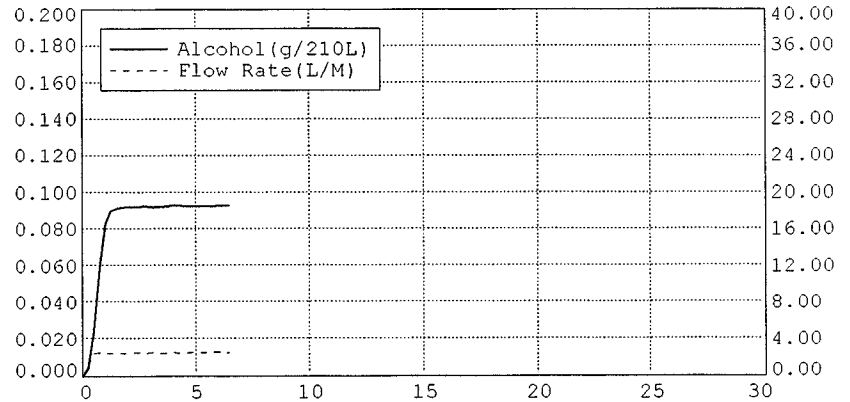
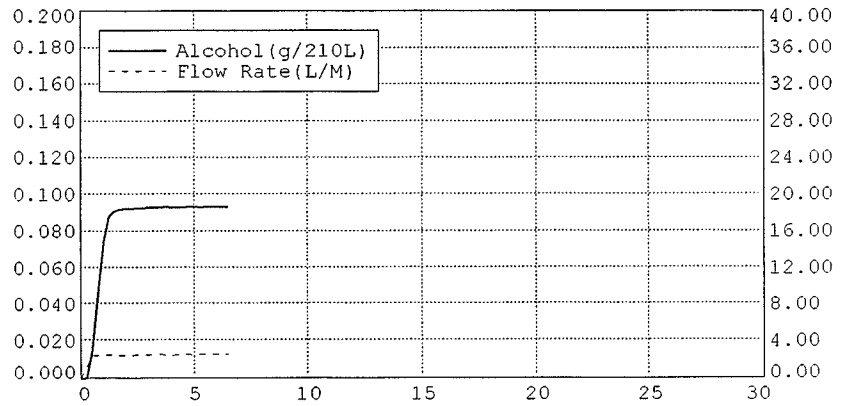
Date: 10/26/2018
 Time: 09:57:02

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.08: 0.097
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 1097 psi

BLANK TEST	0.000	09:58
INTERNAL STANDARD	VERIFIED	09:58
EXTERNAL STANDARD	0.094	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.094	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.094	10:01
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.094	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.094	10:03
BLANK TEST	0.000	10:04

Average = 0.0940
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

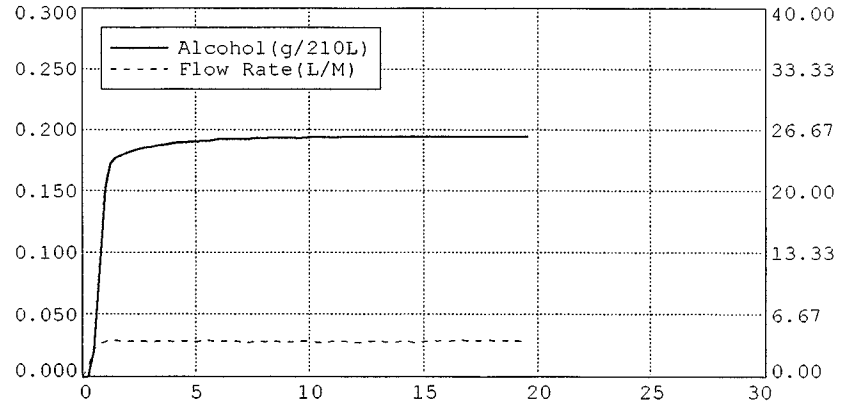
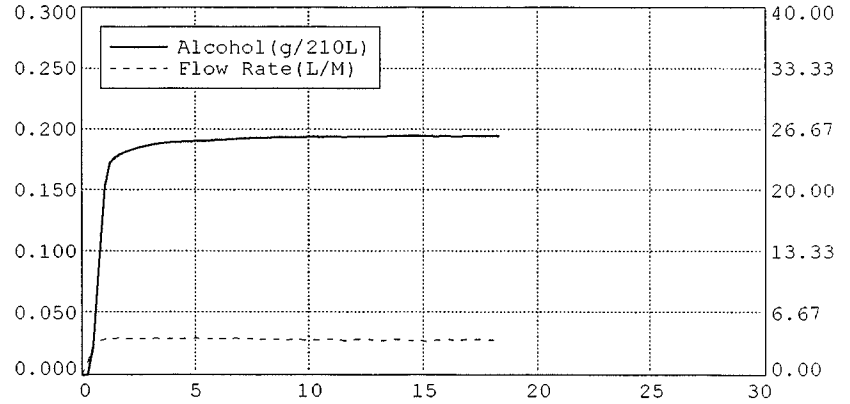
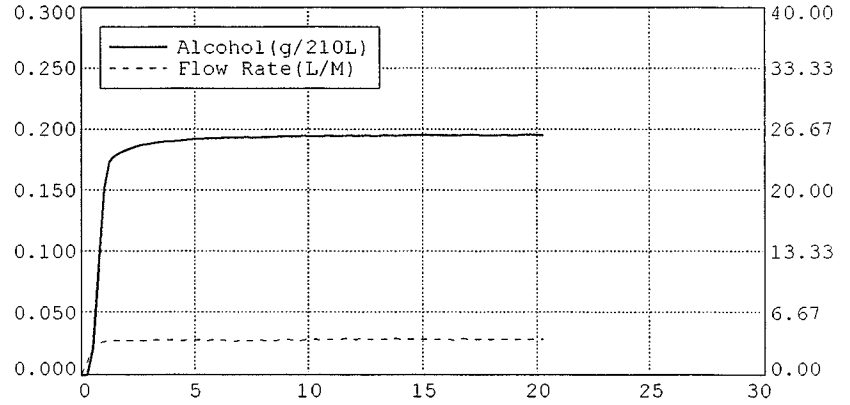
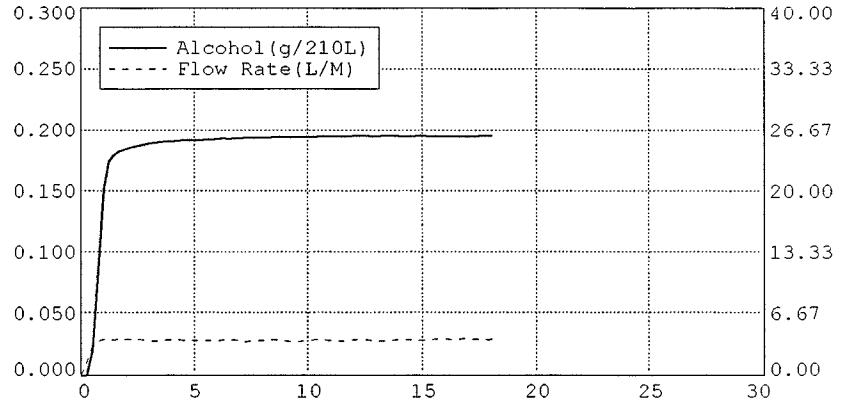
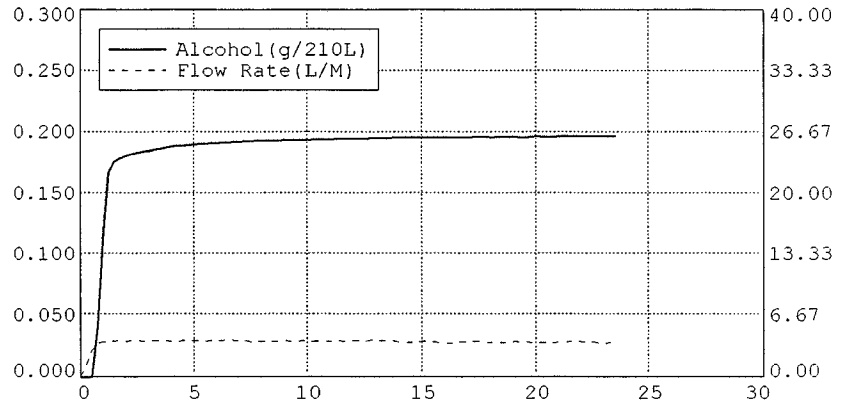
 Alaska Department of Public Safety
 DATAMASTER dmt: 100402

Date: 10/26/2018
 Time: 10:06:00

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

BLANK TEST	0.000	10:18
INTERNAL STANDARD	VERIFIED	10:18
EXTERNAL STANDARD	0.197	10:19
BLANK TEST	0.000	10:20
EXTERNAL STANDARD	0.196	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.197	10:22
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.196	10:23
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.196	10:24
BLANK TEST	0.000	10:25

Average = 0.1964
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

 Alaska Department of Public Safety
 DATAMASTER dmt: 100402

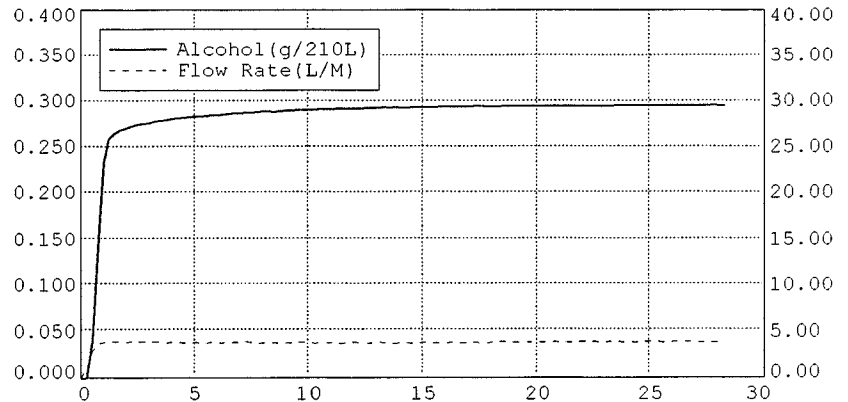
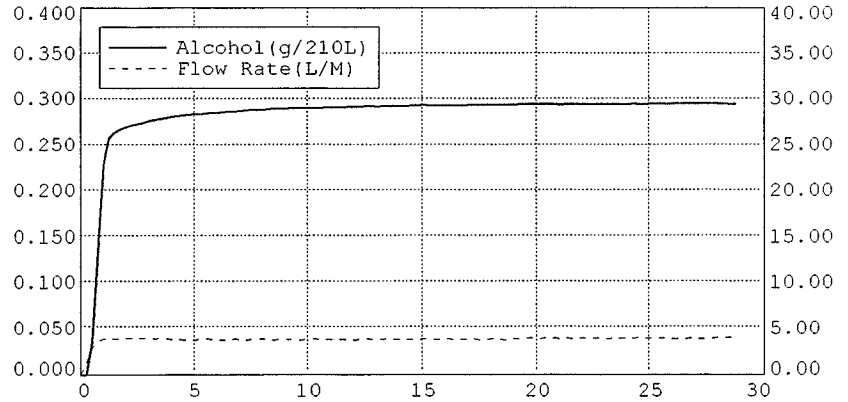
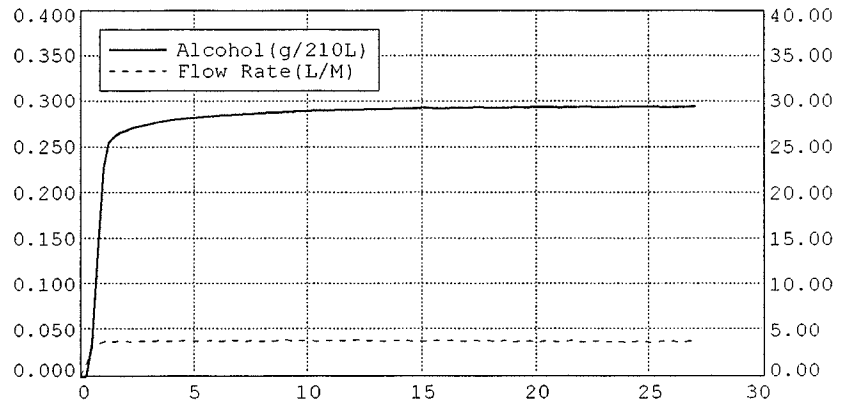
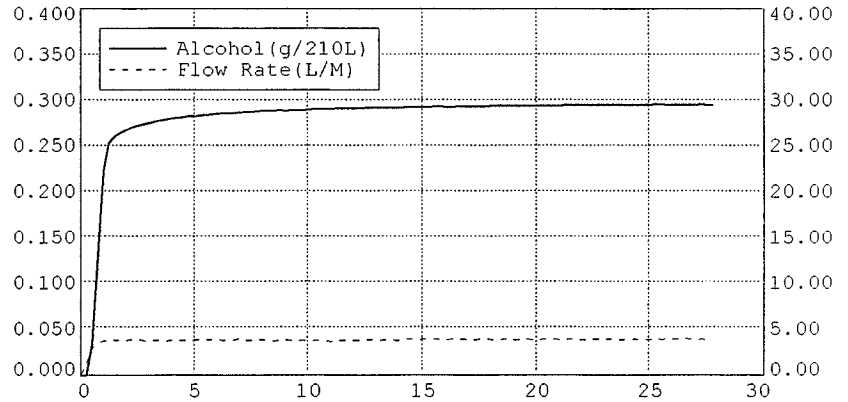
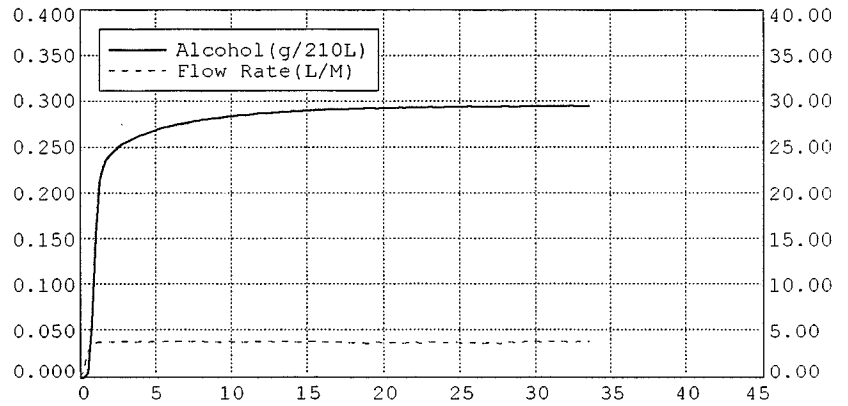
Date: 10/26/2018
 Time: 10:27:10

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:30
INTERNAL STANDARD	VERIFIED	10:30
EXTERNAL STANDARD	0.295	10:30
BLANK TEST	0.000	10:31
EXTERNAL STANDARD	0.296	10:32
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.294	10:33
BLANK TEST	0.000	10:34
EXTERNAL STANDARD	0.295	10:35
BLANK TEST	0.000	10:36
EXTERNAL STANDARD	0.295	10:36
BLANK TEST	0.000	10:37

Average = 0.2950
 Std Dev = 0.0007



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100402

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

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

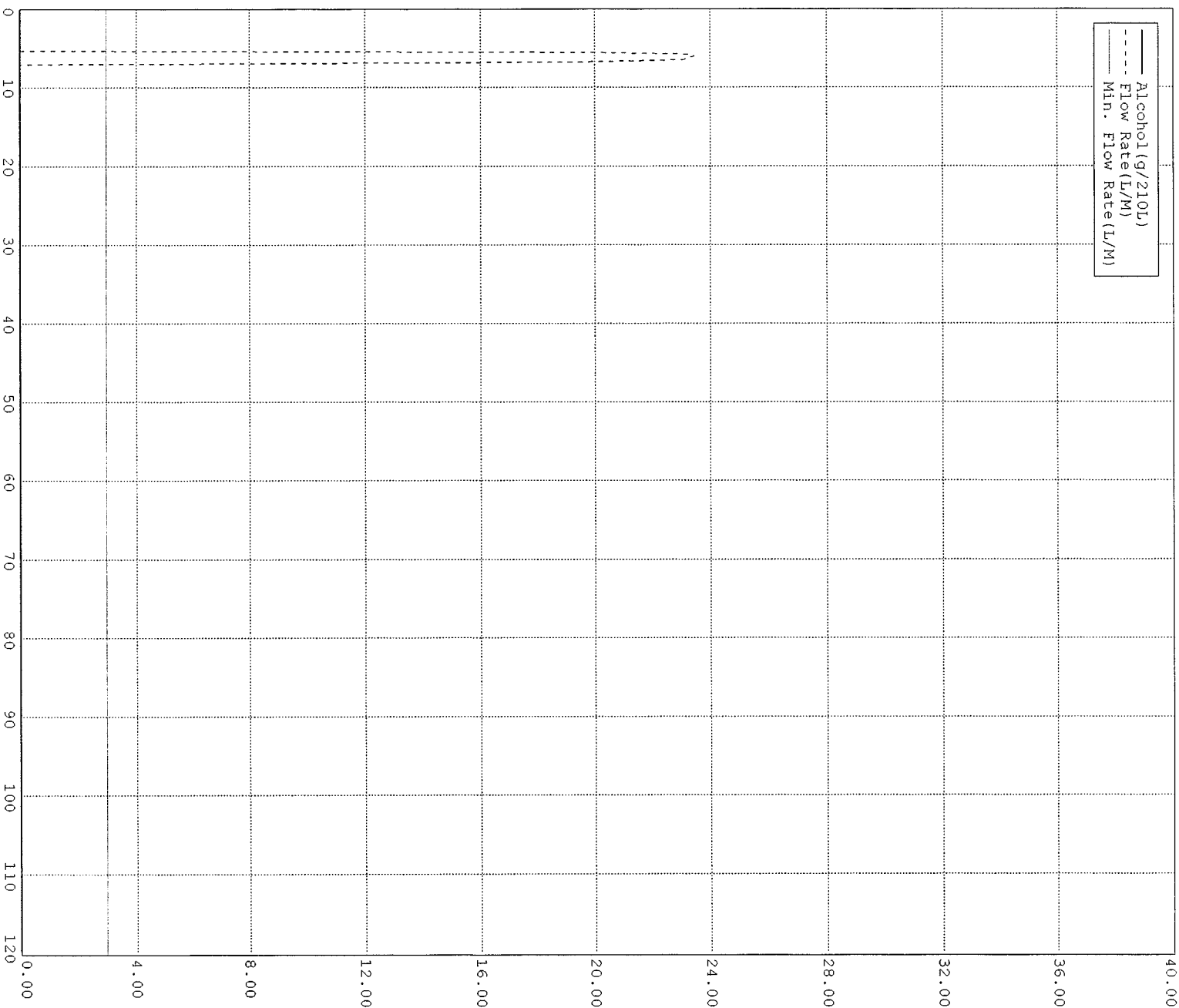
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.09: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	10:47
BLANK TEST	0.000	10:47
INTERNAL STANDARD	VERIFIED	10:47
EXTERNAL STANDARD	0.074	10:47
BLANK TEST	0.000	10:48
SUBJECT SAMPLE	INCOMPLETE	10:50

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100402

Date: 10/26/2018
Time: 10:59:42

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

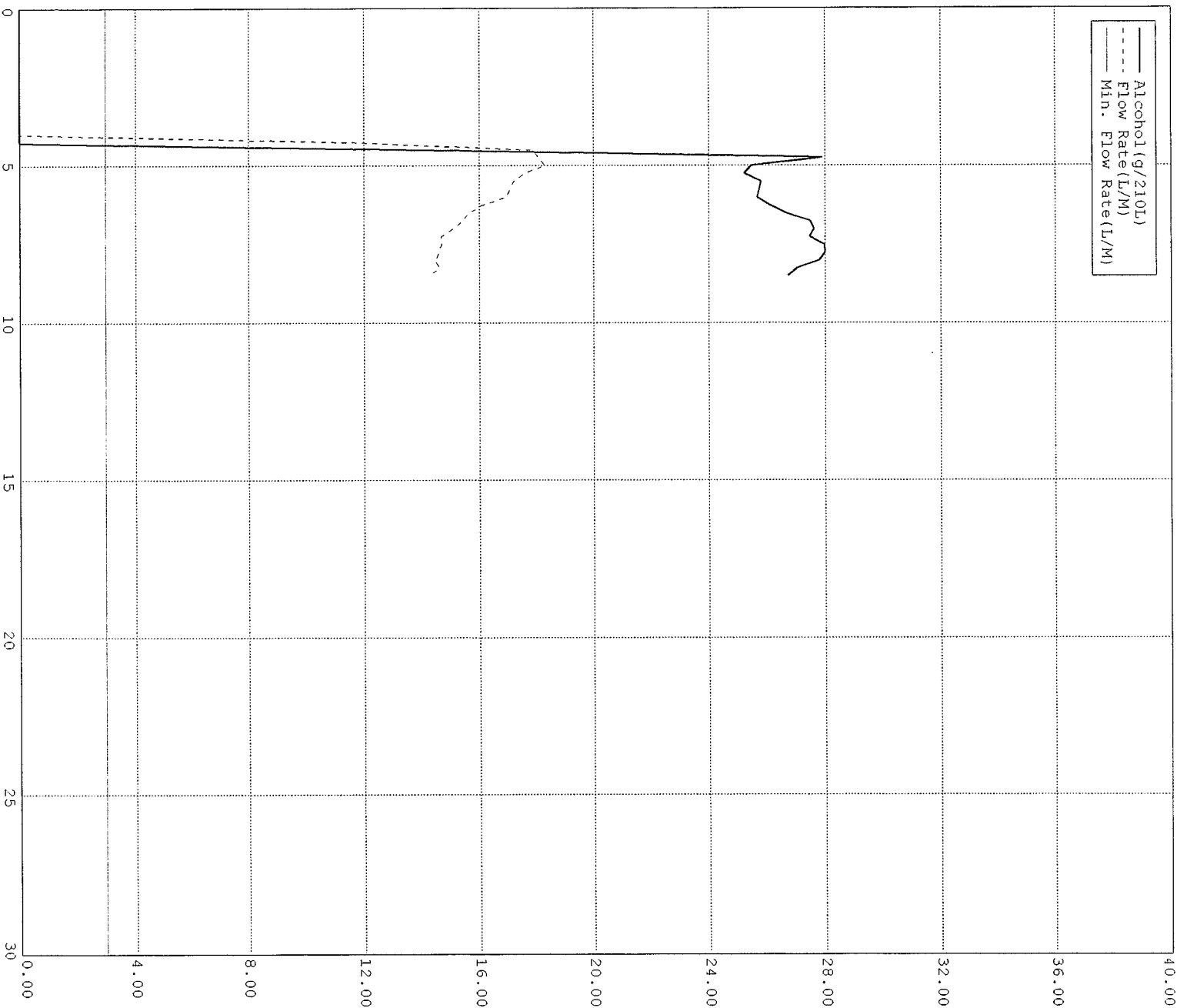
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.09: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	11:00
BLANK TEST	0.000	11:01
INTERNAL STANDARD	VERIFIED	11:01
EXTERNAL STANDARD	0.075	11:01
BLANK TEST	0.000	11:02
SUBJECT SAMPLE	INVALID	11:02

JM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100402

Date: 10/26/2018
Time: 12:04:43

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

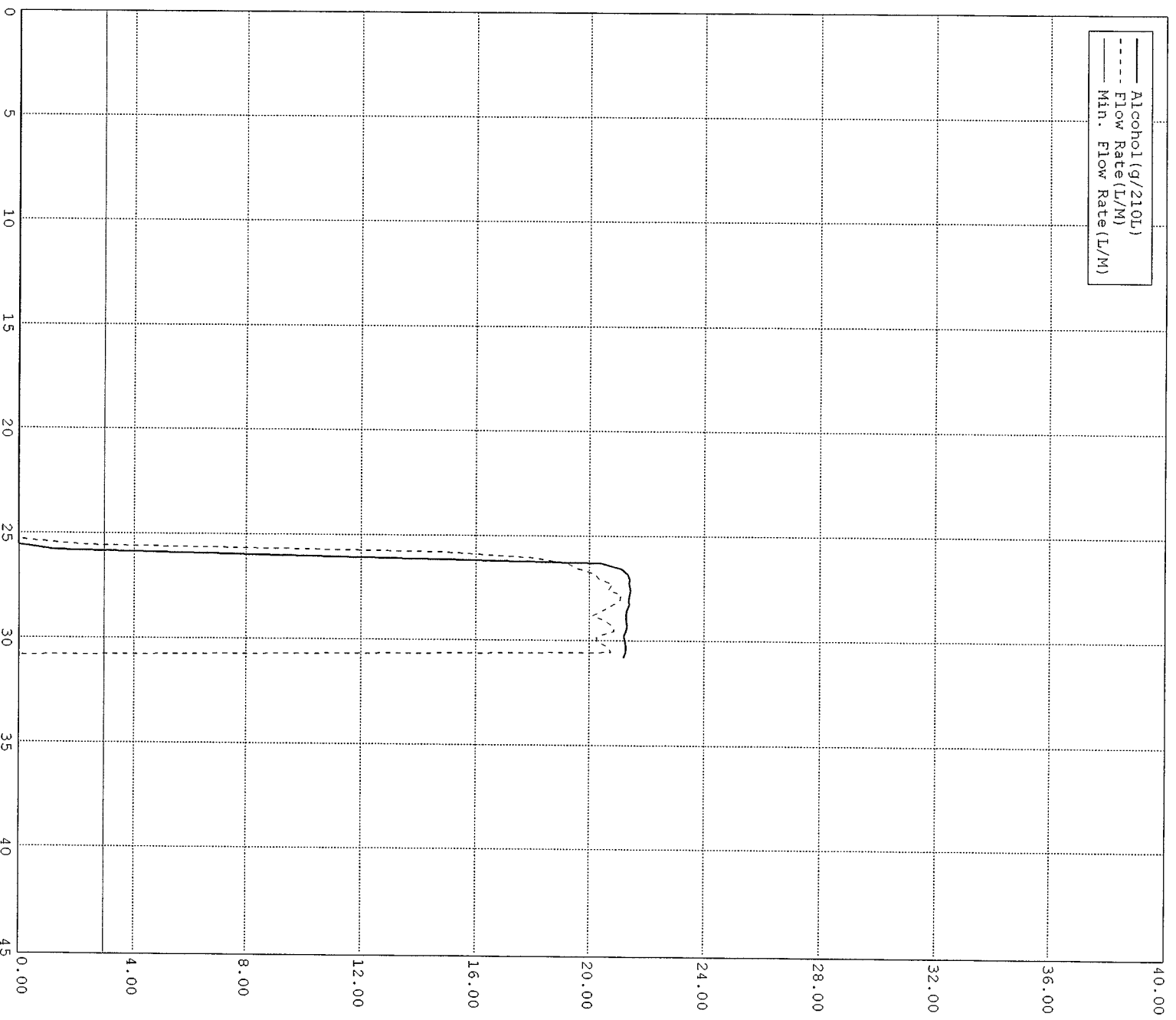
DEPT/AGENCY:
INTERFERENCE ACETONE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.11: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	12:06
BLANK TEST	0.000	12:06
INTERNAL STANDARD	VERIFIED	12:07
Xq = 0.085 (2.64%)		
EXTERNAL STANDARD	0.075	12:07
X[1] = 0.0754 (-0.0020) (0.0021)		
BLANK TEST	0.000	12:08
SUBJECT SAMPLE	XXX	12:08
X[1] = 0.1064 (-0.0148) (0.0004)		

Interference Detected

722



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100402

Date: 10/26/2018
Time: 11:50:08

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

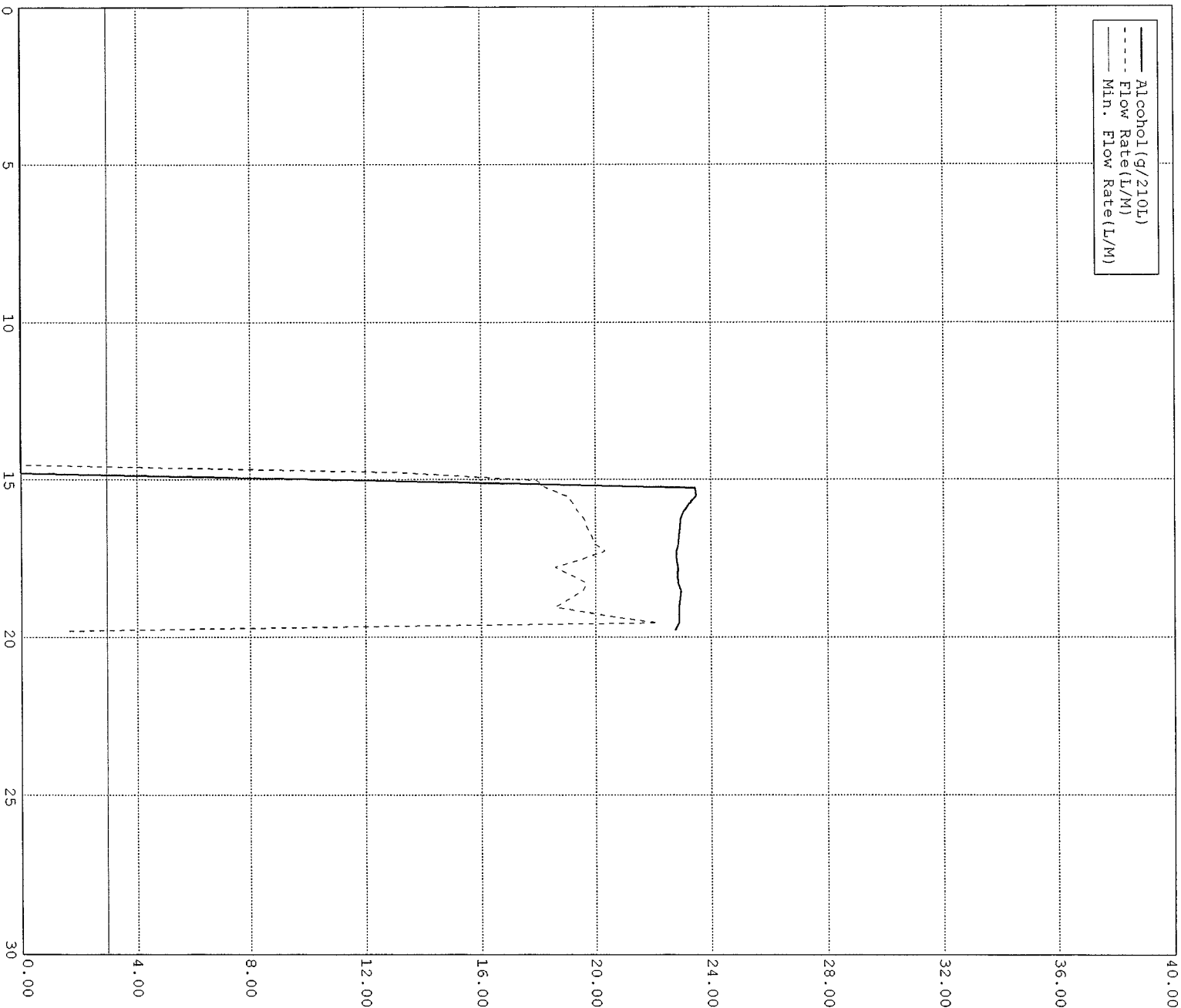
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.11: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	11:51
BLANK TEST	0.000	11:51
INTERNAL STANDARD	VERIFIED	11:51
Xq = 0.084 (2.00%)		
EXTERNAL STANDARD	0.074	11:51
X[1] = 0.0745 (-0.0020)	(0.0026)	
BLANK TEST	0.000	11:52
SUBJECT SAMPLE	XXX	11:52
X[1] = 0.1140 (-0.0257)	(0.0016)	

Interference Detected

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100402

Date: 10/26/2018
Time: 11:56:41

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

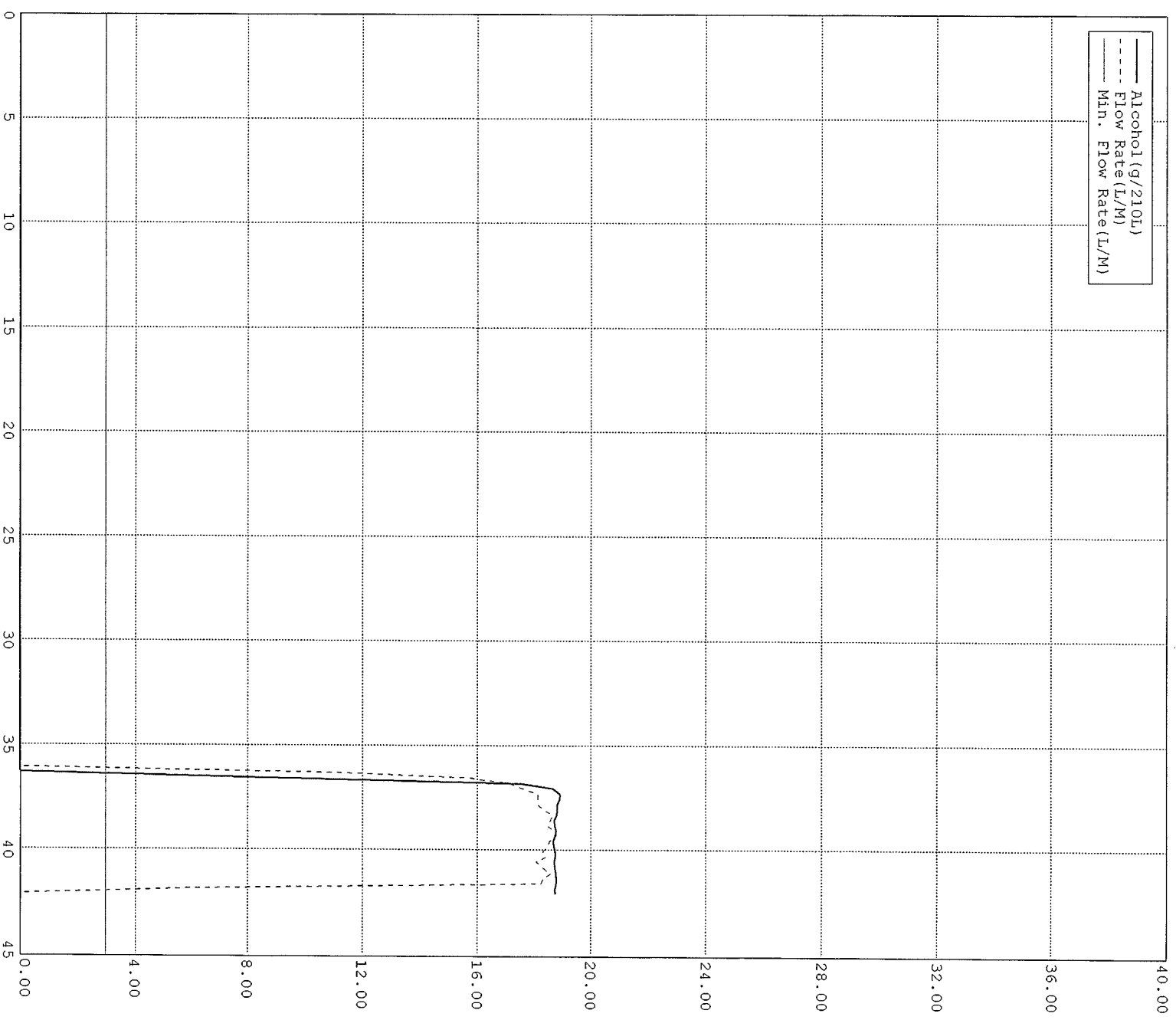
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.11: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	11:57
BLANK TEST	0.000	11:57
INTERNAL STANDARD	VERIFIED	11:57
Xq = 0.084 (1.90%)		
EXTERNAL STANDARD	0.075	11:58
X[1] = 0.0749 (-0.0018)	(0.0020)	
BLANK TEST	0.000	11:59
SUBJECT SAMPLE (Vol=1.66L)	0.094	11:59
X[1] = 0.0942 (-0.0004)	(0.0003)	
BLANK TEST	0.000	12:00
EXTERNAL STANDARD	0.074	12:00
X[1] = 0.0744 (-0.0027)	(0.0010)	
BLANK TEST	0.000	12:01

Filter 2 Avg = -0.0021

Filter 3 Avg = 0.0019

DMV



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100402

Date: 10/26/2018
Time: 10:52:38

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

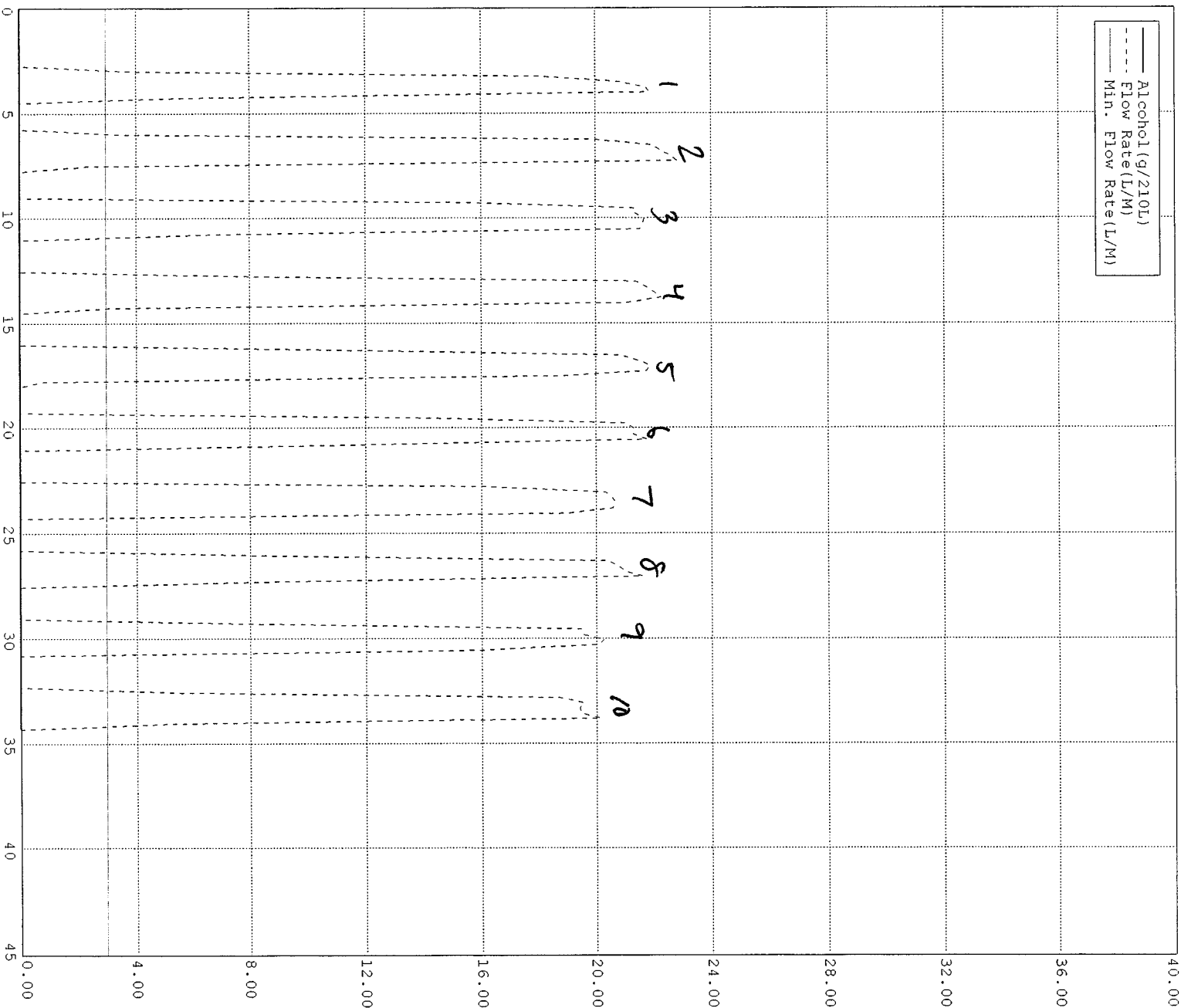
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.09: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

TEST TYPE	PASSED	TIME
DIAGNOSTIC CHECK	0.000	10:53
BLANK TEST	0.000	10:53
INTERNAL STANDARD	0.075	10:53
EXTERNAL STANDARD	0.000	10:54
BLANK TEST	0.000	10:55
SUBJECT SAMPLE	XXX	10:55

Maximum Attempts Exceeded

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100402

Date: 10/26/2018
Time: 11:07:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

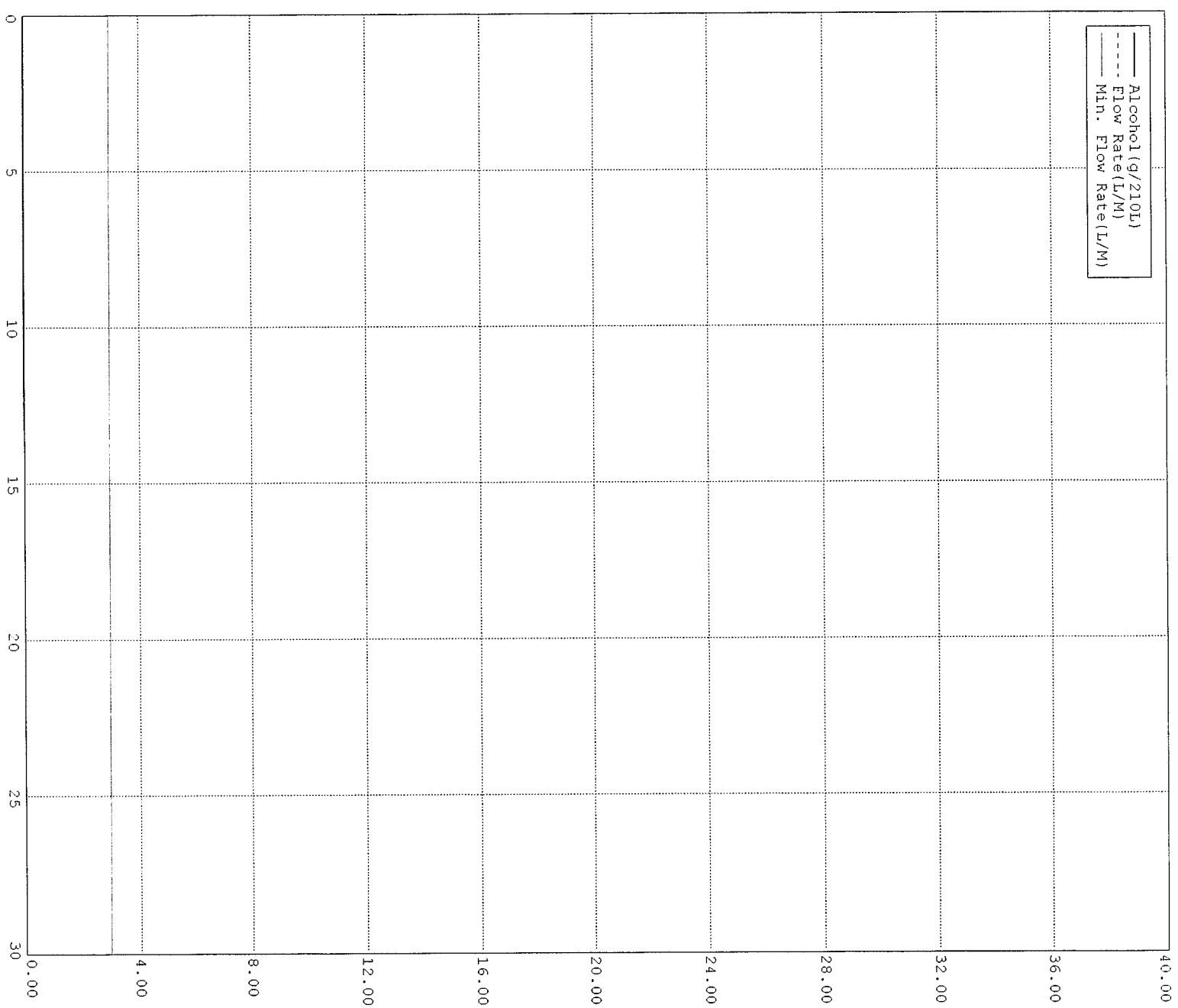
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.10: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

TEST TYPE	PASSED	11:09
DIAGNOSTIC CHECK	0.000	11:09
INTERNAL STANDARD	0.075	11:09
EXTERNAL STANDARD	0.000	11:10

RFI DETECTED

20W



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100402

Date: 10/26/2018
Time: 12:26:42

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 #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	12:28
BLANK TEST	0.000	12:28
INTERNAL STANDARD	VERIFIED	12:28
EXTERNAL STANDARD	0.075	12:28
BLANK TEST	0.000	12:29
SUBJECT SAMPLE (Vol=2.80L)	0.000	12:29
BLANK TEST	0.000	12:30
EXTERNAL STANDARD	0.075	12:30
BLANK TEST	0.000	12:31

DM

