

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 100376 Analyst Derek Walton Start Date 06/21/2018

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 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 Guth Lot 17090 Exp 02/24/2019
 1. Simulator S/N DR5298 Date Calibrated 01/24/2018
 - vi. 0.300g/210L Mnf Guth Lot 17140 Exp 05/15/2019
 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 Guth Lot 17280 Level 0.100 Exp 09/11/2019
 1. Simulator S/N SD1177 Date Calibrated 01/24/2018
 - ii. Isopropanol - Mnf Guth Lot 17280 Level 0.100 Exp 09/11/2019
 1. Simulator S/N SD1199 Date Calibrated 01/24/2018
 - iii. Negative Control - Mnf Guth 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 06/22/2018

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100376

Date: 06/21/2018
Time: 09:02:22

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 47.8°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.59 V PASSED
(0.98 V - 2.30 V)
Cooler Voltage = 1.53 V PASSED
(0.98 V - 2.28 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 532 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.5 in

PUMP INFO

Flow Rate = 4.228 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 PASSED
Xq = 0.076 1.90% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100376

Date: 06/21/2018
Time: 9:29 AM

Temperatures (°C)
Sample Cell: 48.9°C
Breath Tube: 47.8°C

Current Barometer 29.5 in
Volume (Ltr) 1.53

Settings
Lamp: 1.59 V
Bias: 79 V
Cooler: 1.58 V
Chopper: 531 Hz

Voltages (V)
Flow: 1.06 V
Detector: -0.038 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100376

Date: 03/02/2011
Time: 16:04:33

Ca = 0.1000
CAL = 0.982831 0.800 <= CAL < 1.200
b1 = 0.0000 0.0000 <= b1 < 0.0040
b2 = 0.0041 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0775 0.0500 <= Xq < 0.2000
a21 = 1.184234 1.050 <= a21 < 1.300
a31 = 0.361160 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100376

Date: 06/21/2018
Time: 09:46:15

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 29.49: 0.079

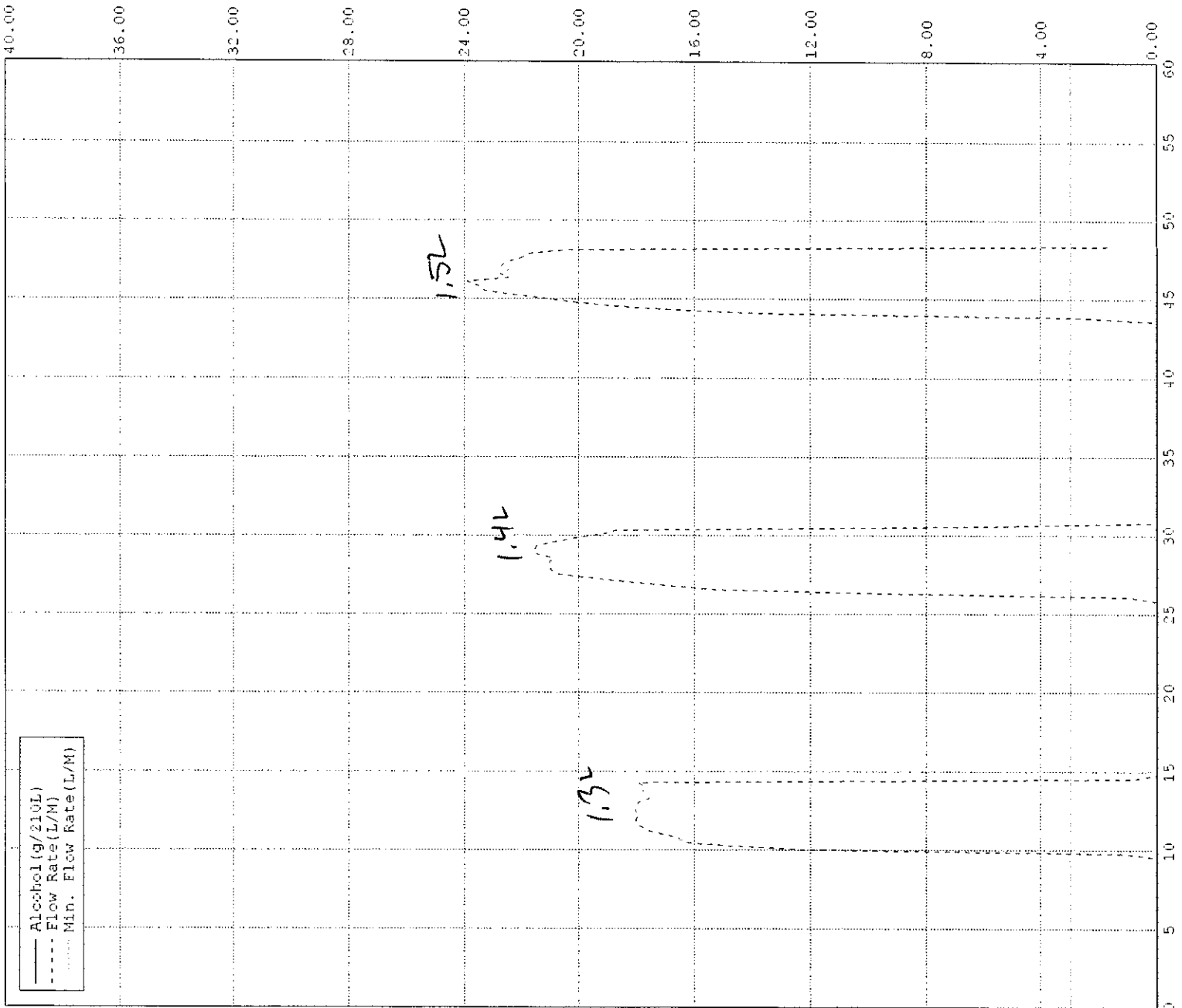
DIAGNOSTIC CHECK	PASSED	09:49
BLANK TEST	0.000	09:49
INTERNAL STANDARD	VERIFIED	09:49
EXTERNAL STANDARD	0.080	09:49
BLANK TEST	0.000	09:50
SUBJECT SAMPLE (Vol=1.51L)	0.000	09:51
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.079	09:52
BLANK TEST	0.000	09:53

External standard lot

AG 735001

Exp. 12/16/2019 DM 06/21/18

DM



LINEARITY CHECK

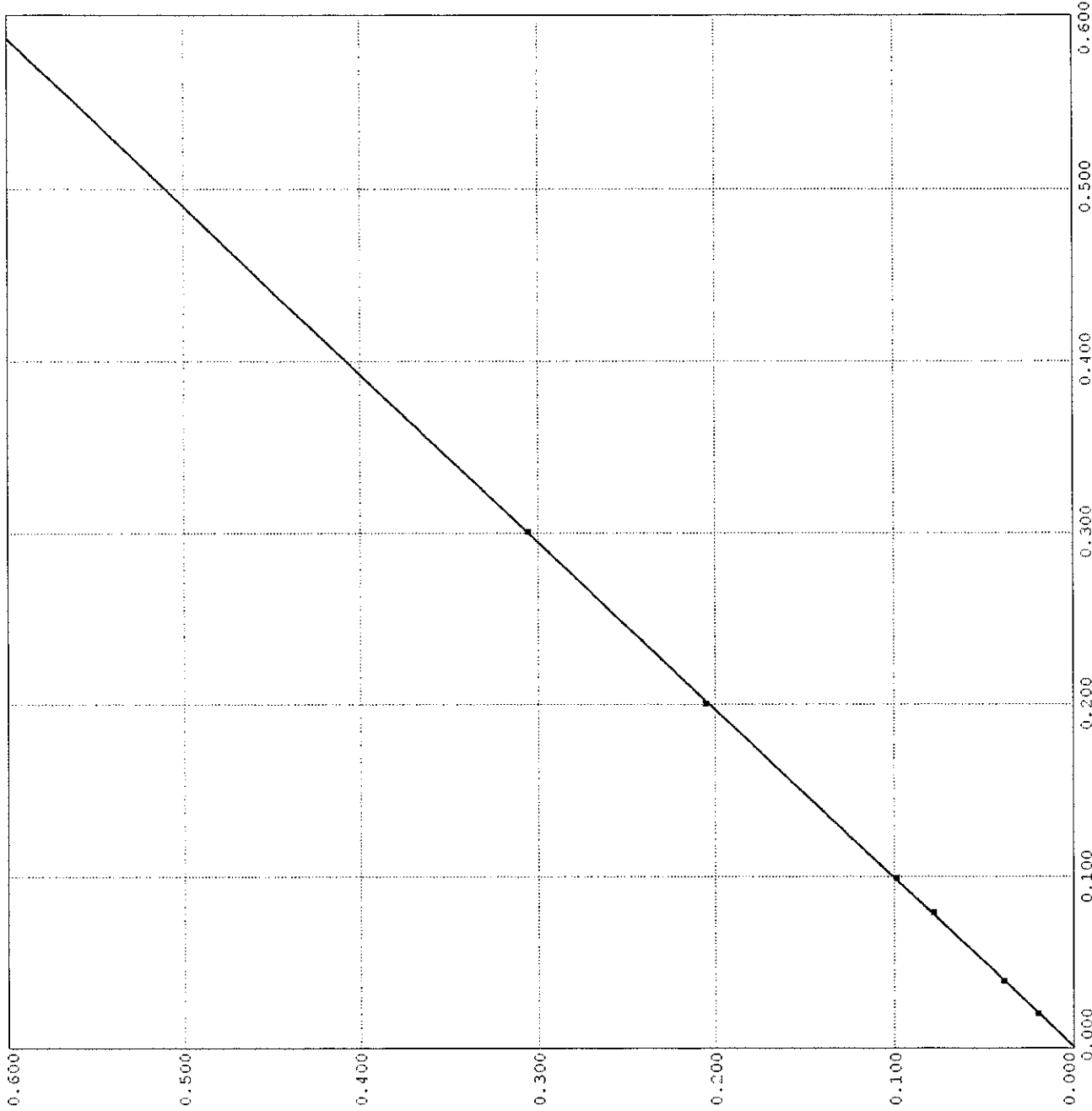
Alaska Department of Public Safety
DATAMASTER dmt: 100376

Date: 06/21/2018
Time: 09:56:51

SUPERVISOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0206	0.0005
0.039	0.0398	0.0004
0.079	0.0790	0.0000
0.099	0.0998	0.0004
0.200	0.2060	0.0007
0.300	0.3062	0.0004

SLOPE = 1.024612
R² = 0.999888



DM

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100376

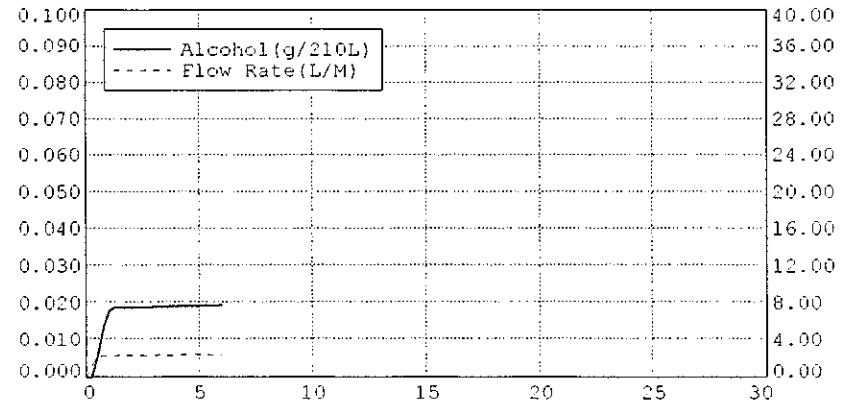
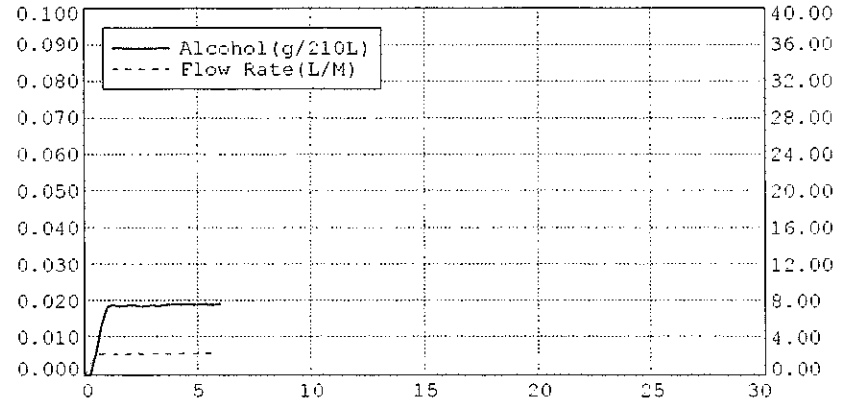
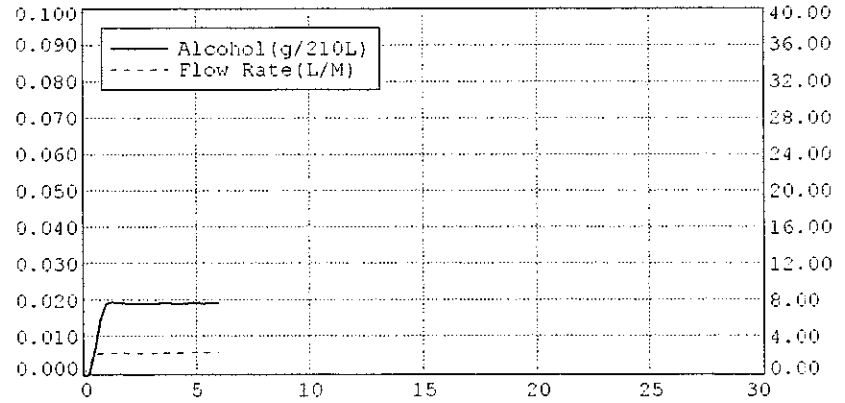
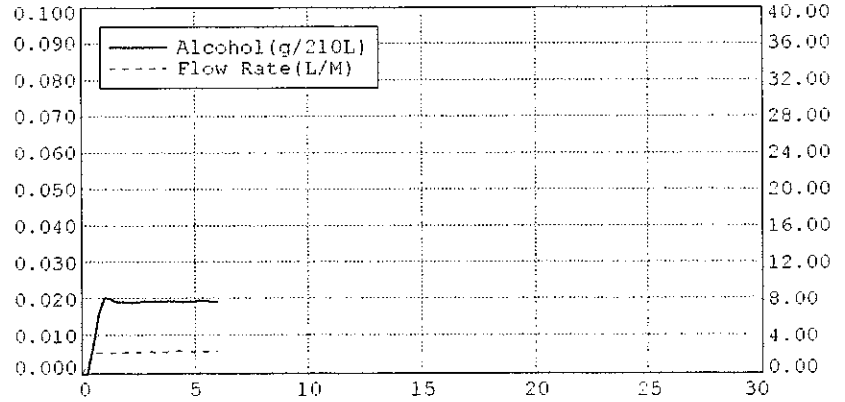
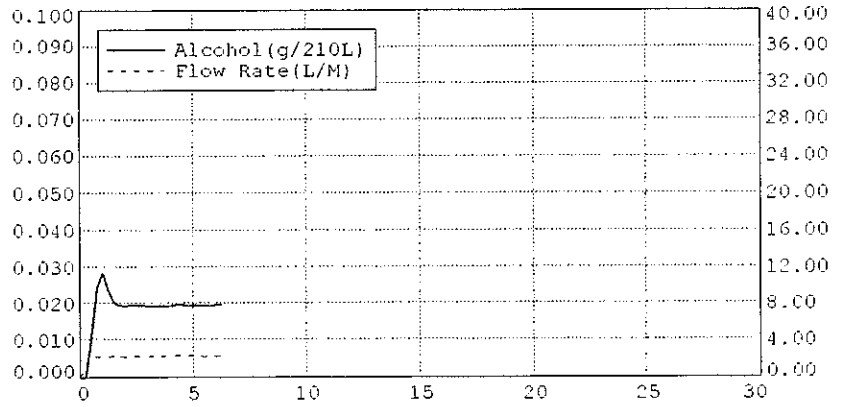
Date: 06/21/2018
 Time: 09:56:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.50: 0.020
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 1102 psi

BLANK TEST	0.000	09:58
INTERNAL STANDARD	VERIFIED	09:58
EXTERNAL STANDARD	0.021	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.021	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.021	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.020	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.020	10:03
BLANK TEST	0.000	10:04

Average = 0.0206
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

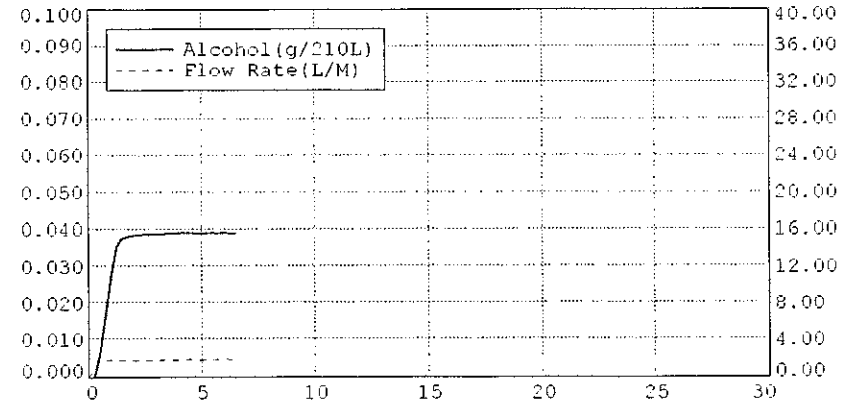
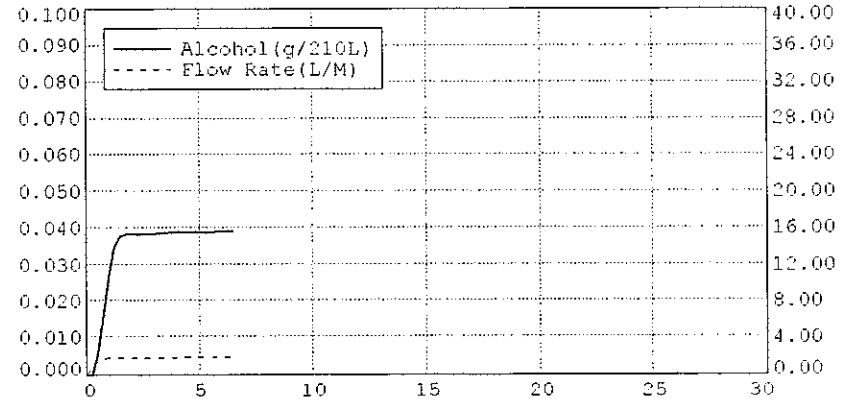
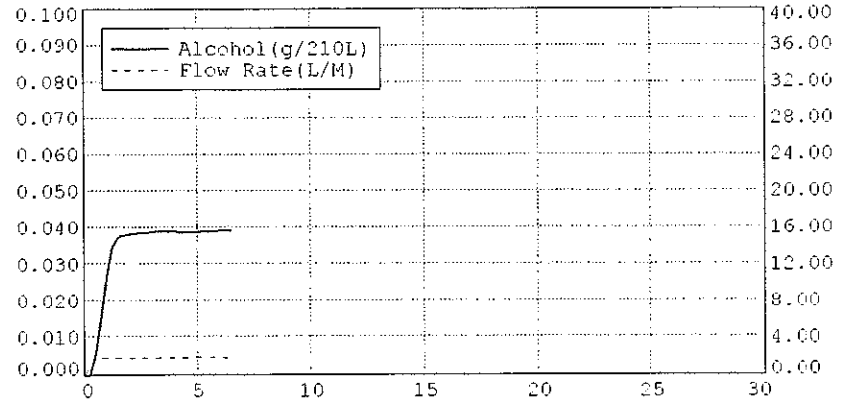
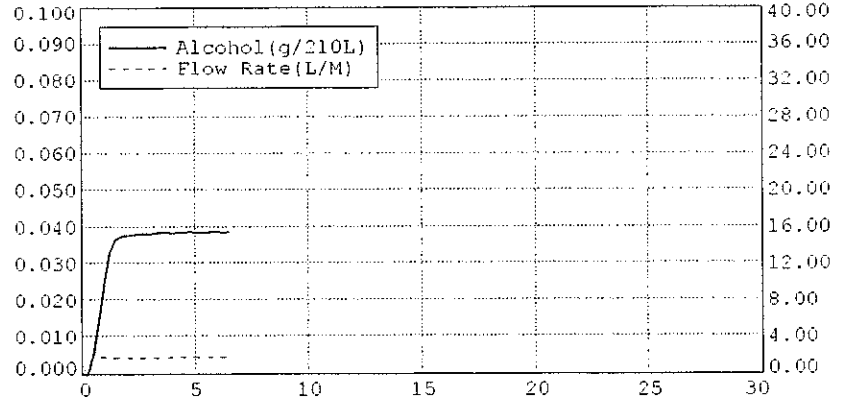
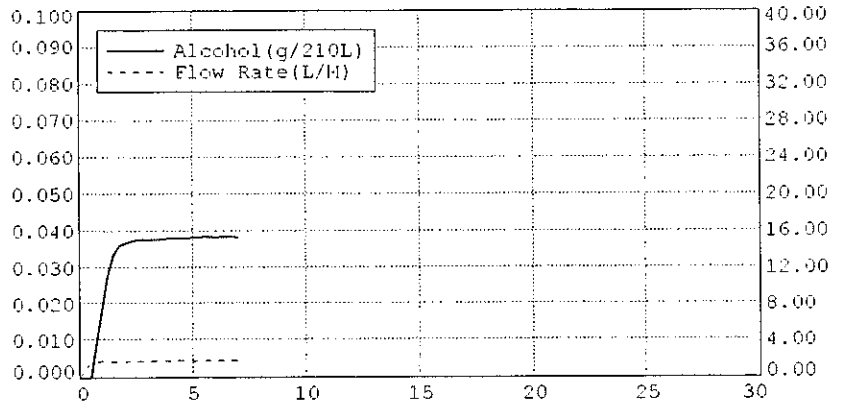
Alaska Department of Public Safety
 DATAMASTER dmt: 100376

Date: 06/21/2018
 Time: 10:09:23

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.040
 TARGET AT 29.50: 0.039
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 261 psi

BLANK TEST	0.000	10:10
INTERNAL STANDARD	VERIFIED	10:11
EXTERNAL STANDARD	0.039	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.040	10:12
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.040	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.040	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.040	10:15
BLANK TEST	0.000	10:16

Average = 0.0398
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

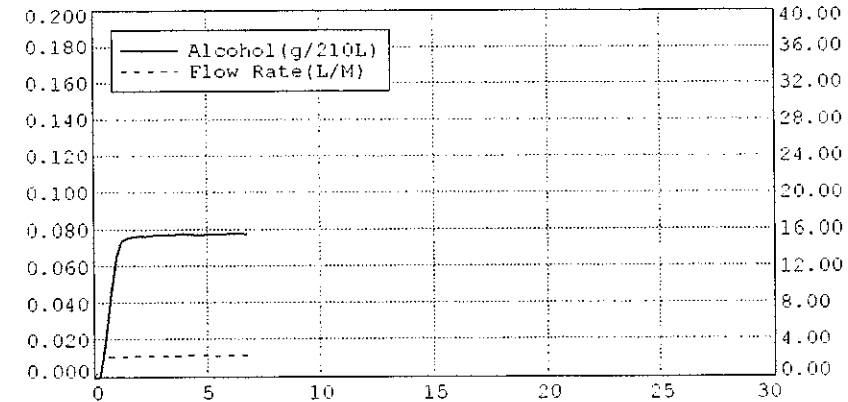
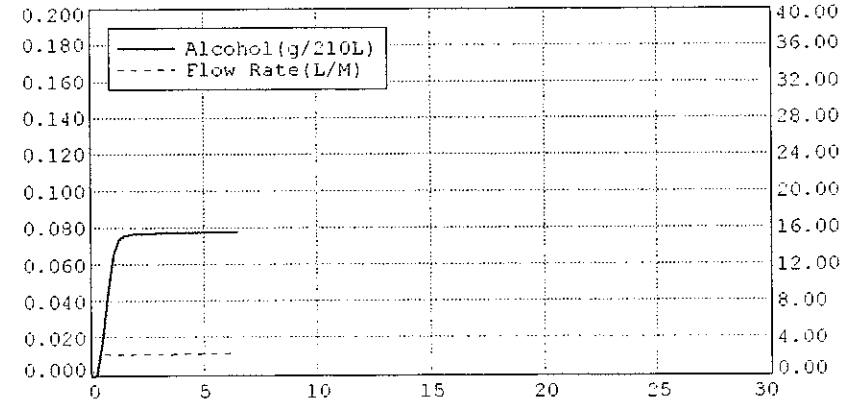
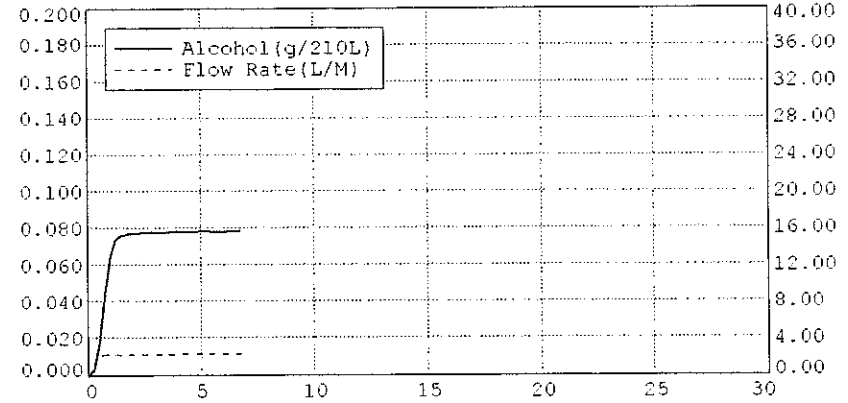
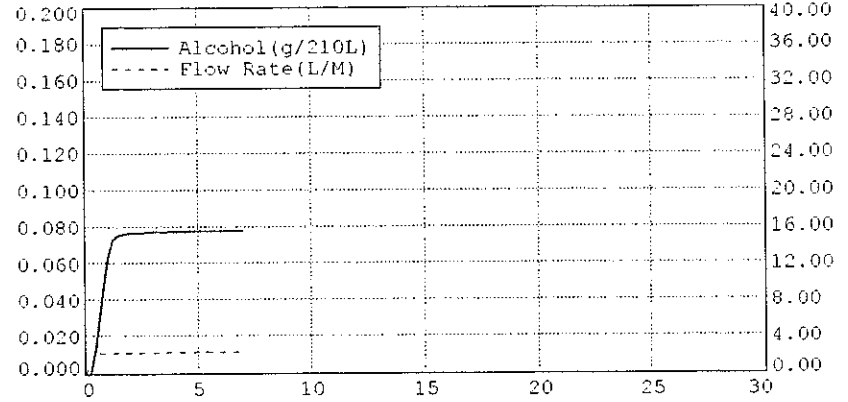
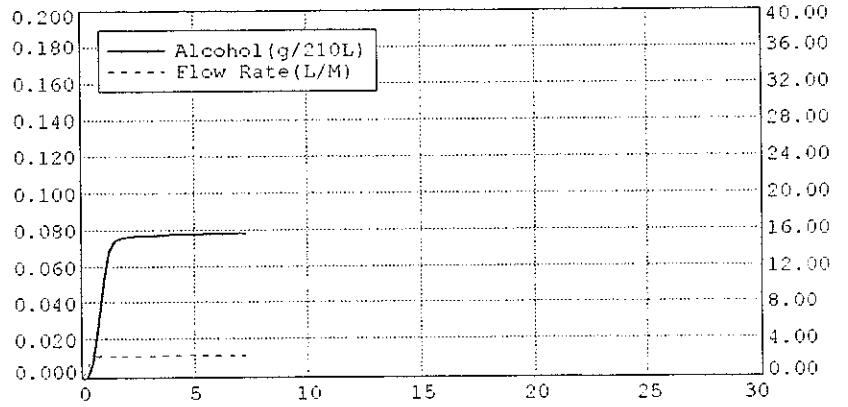
Alaska Department of Public Safety
 DATAMASTER dmt: 100376

Date: 06/21/2018
 Time: 10:18:51

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.50: 0.079
 LOT #: AG735001
 EXPIRATION: 12/16/2019
 TANK PRESSURE: 1041 psi

BLANK TEST	0.000	10:20
INTERNAL STANDARD	VERIFIED	10:20
EXTERNAL STANDARD	0.079	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.079	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.079	10:22
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.079	10:23
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.079	10:25
BLANK TEST	0.000	10:25

Average = 0.0790
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100376

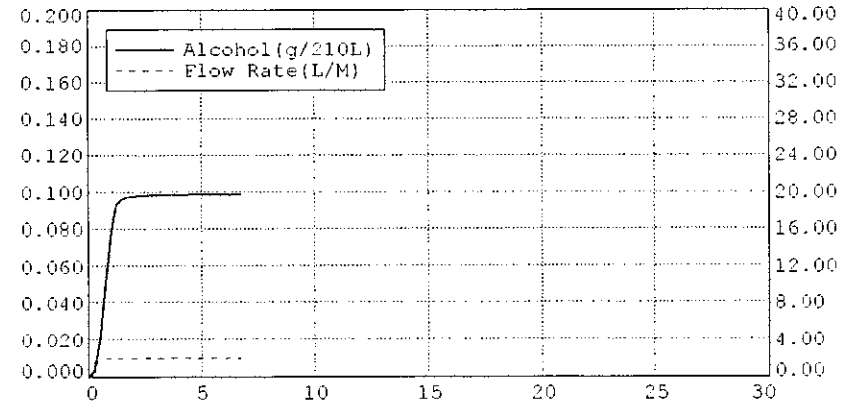
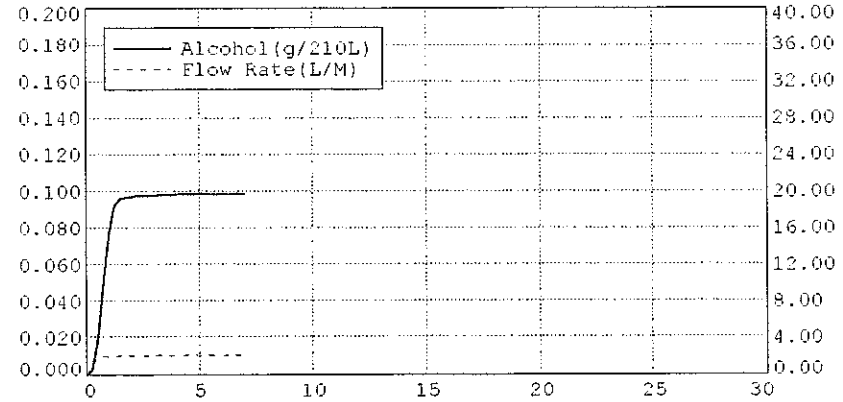
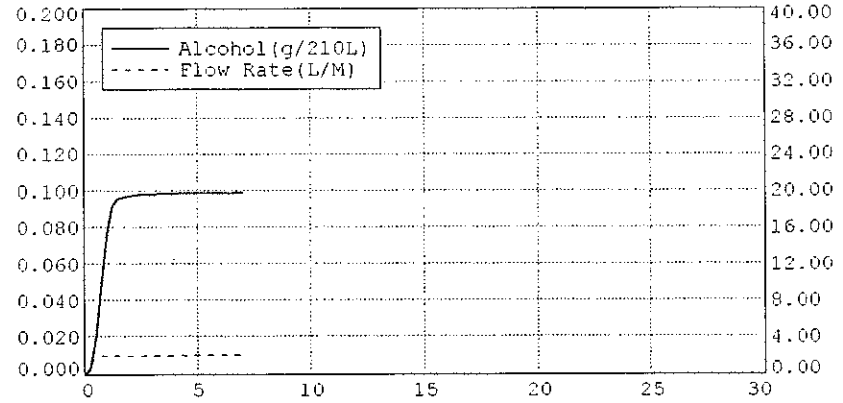
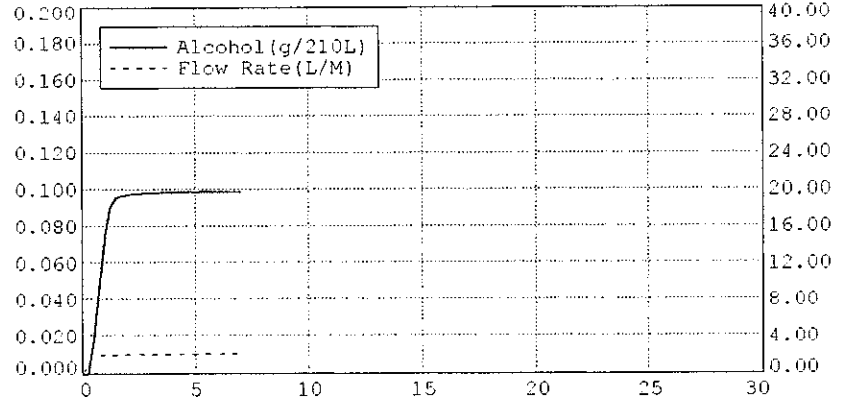
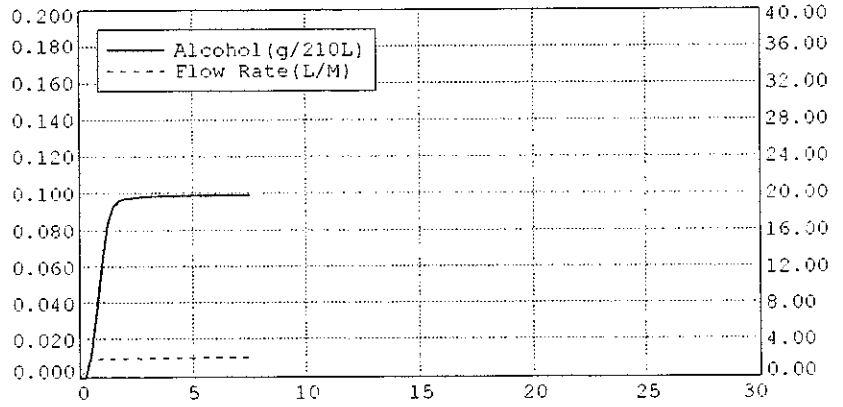
Date: 06/21/2018
 Time: 10:26:56

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.50: 0.099
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 476 psi

BLANK TEST	0.000	10:28
INTERNAL STANDARD	VERIFIED	10:28
EXTERNAL STANDARD	0.100	10:28
BLANK TEST	0.000	10:29
EXTERNAL STANDARD	0.100	10:29
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.100	10:31
BLANK TEST	0.000	10:31
EXTERNAL STANDARD	0.099	10:32
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.100	10:33
BLANK TEST	0.000	10:34

Average = 0.0998
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

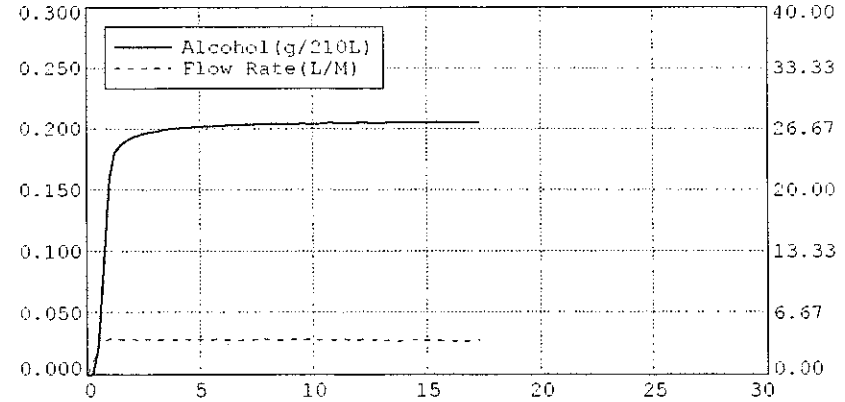
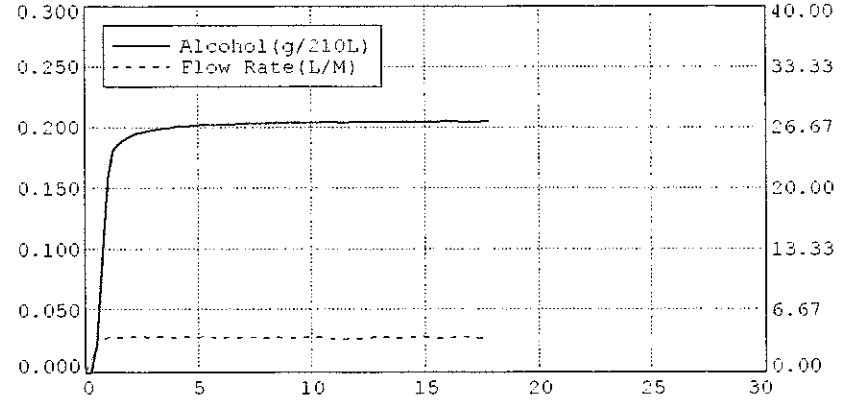
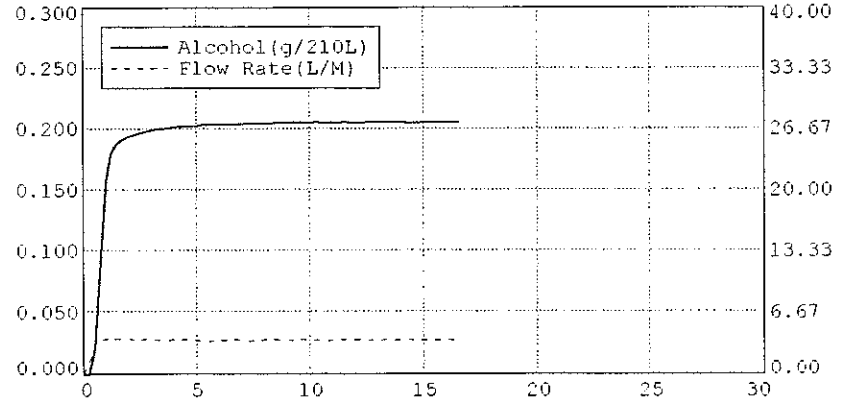
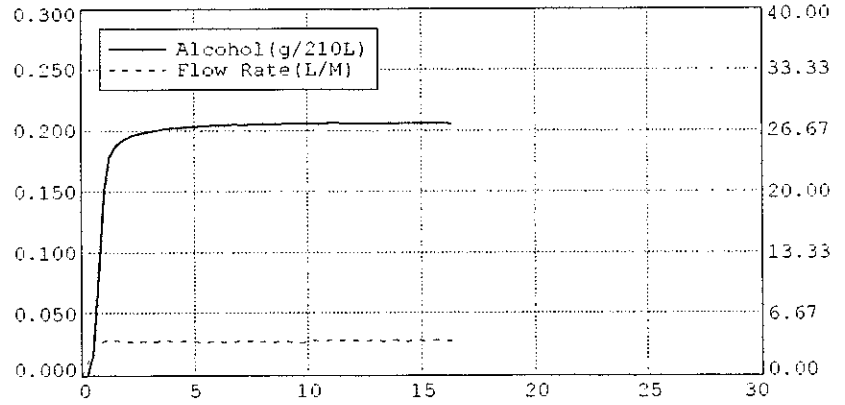
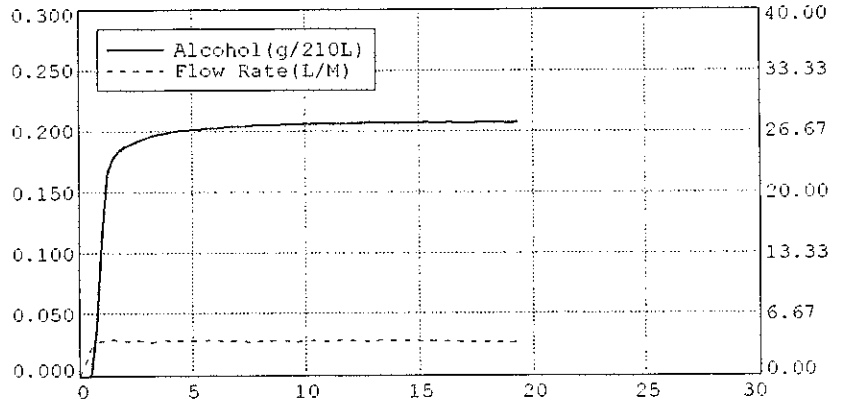
Alaska Department of Public Safety
 DATAMASTER dmt: 100376

Date: 06/21/2018
 Time: 10:58:43

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

BLANK TEST	0.000	11:00
INTERNAL STANDARD	VERIFIED	11:00
EXTERNAL STANDARD	0.207	11:00
BLANK TEST	0.000	11:01
EXTERNAL STANDARD	0.206	11:02
BLANK TEST	0.000	11:03
EXTERNAL STANDARD	0.205	11:03
BLANK TEST	0.000	11:04
EXTERNAL STANDARD	0.206	11:04
BLANK TEST	0.000	11:05
EXTERNAL STANDARD	0.206	11:06
BLANK TEST	0.000	11:07

Average = 0.2060
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100376

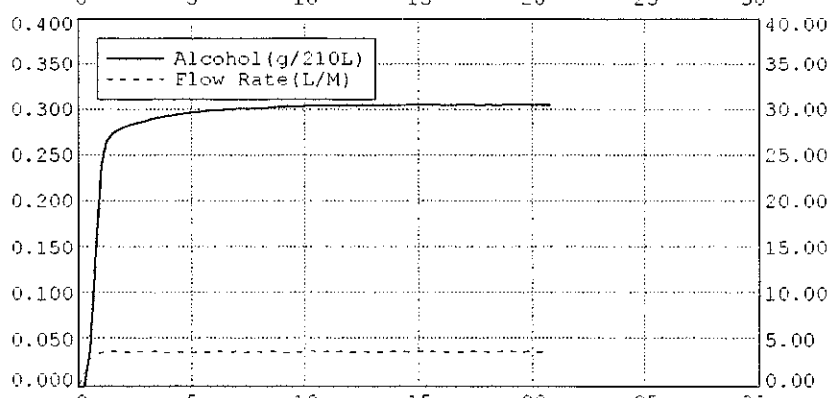
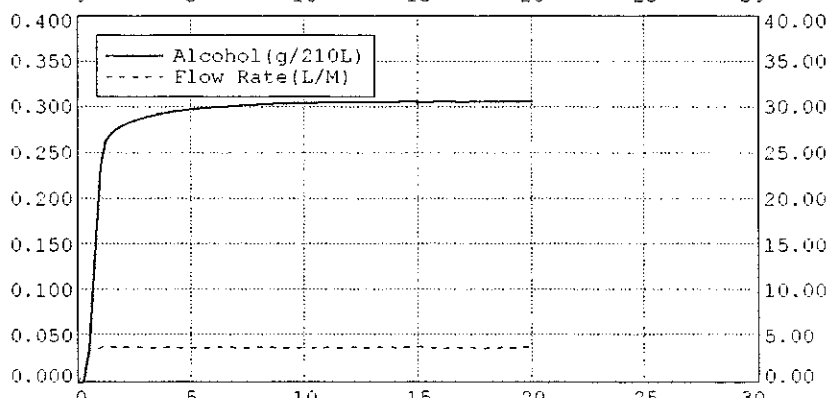
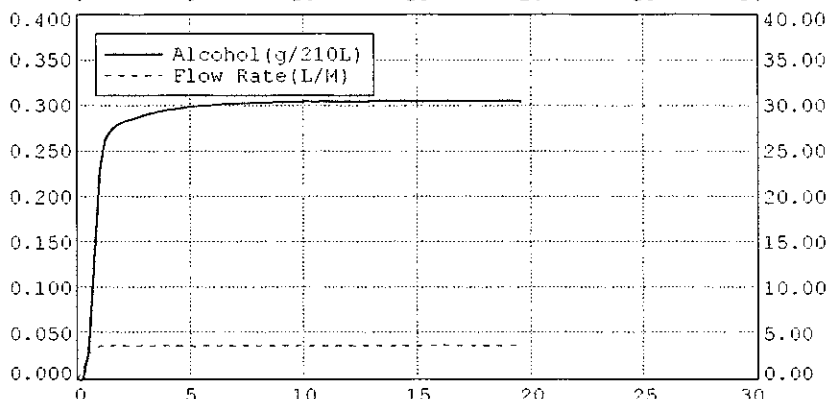
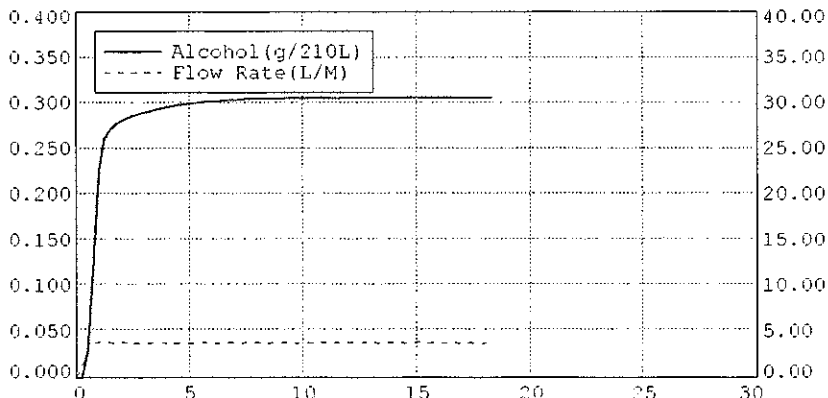
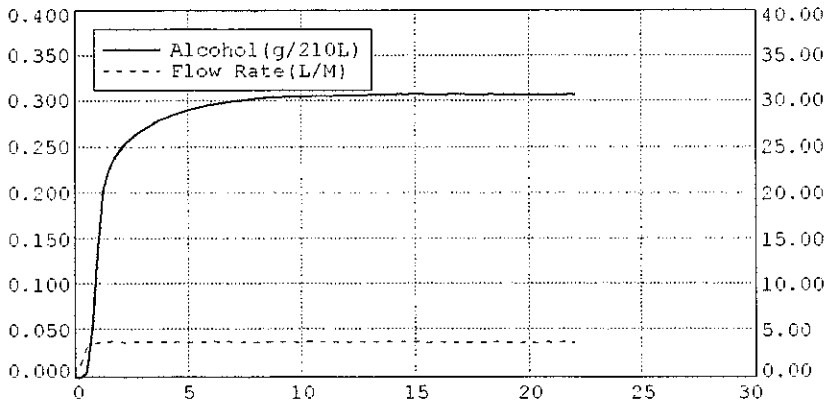
Date: 06/21/2018
 Time: 11:10:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 17140
 EXPIRATION: 05/15/2019

BLANK TEST	0.000	11:11
INTERNAL STANDARD	VERIFIED	11:11
EXTERNAL STANDARD	0.307	11:12
BLANK TEST	0.000	11:13
EXTERNAL STANDARD	0.306	11:13
BLANK TEST	0.000	11:14
EXTERNAL STANDARD	0.306	11:15
BLANK TEST	0.000	11:16
EXTERNAL STANDARD	0.306	11:16
BLANK TEST	0.000	11:17
EXTERNAL STANDARD	0.306	11:18
BLANK TEST	0.000	11:18

Average = 0.3062
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100376

Date: 06/21/2018
Time: 15:02:59

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 29.54: 0.079

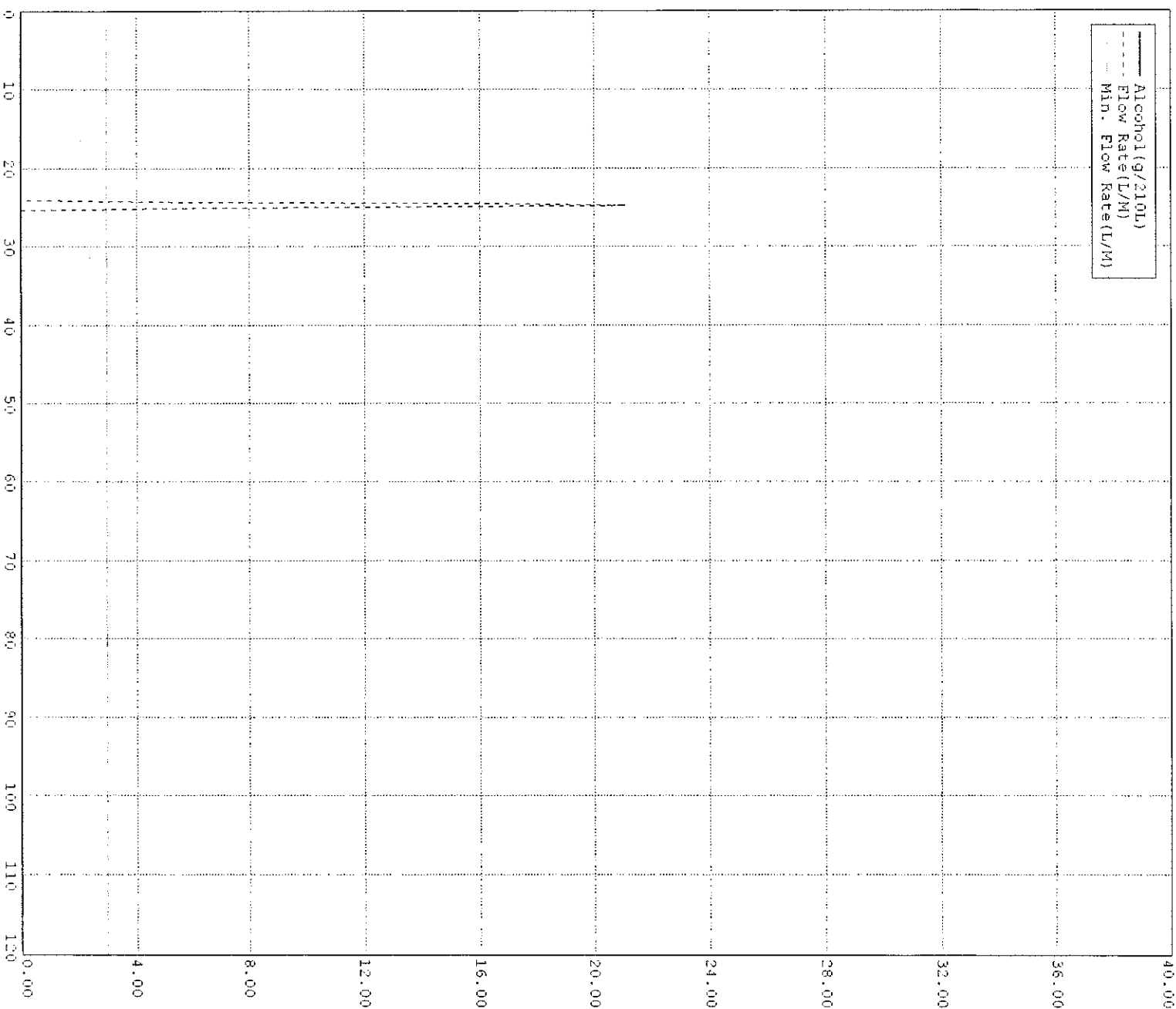
TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	15:06
BLANK TEST	0.000	15:06
INTERNAL STANDARD	VERIFIED	15:06
EXTERNAL STANDARD	0.079	15:07
BLANK TEST	0.000	15:07
SUBJECT SAMPLE	INCOMPLETE	15:10

External standard lot

A6735 001

Exp. 12/16/2019 DM 06/21/18

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100376

Date: 06/21/2018
Time: 15:16:32

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 29.55: 0.079

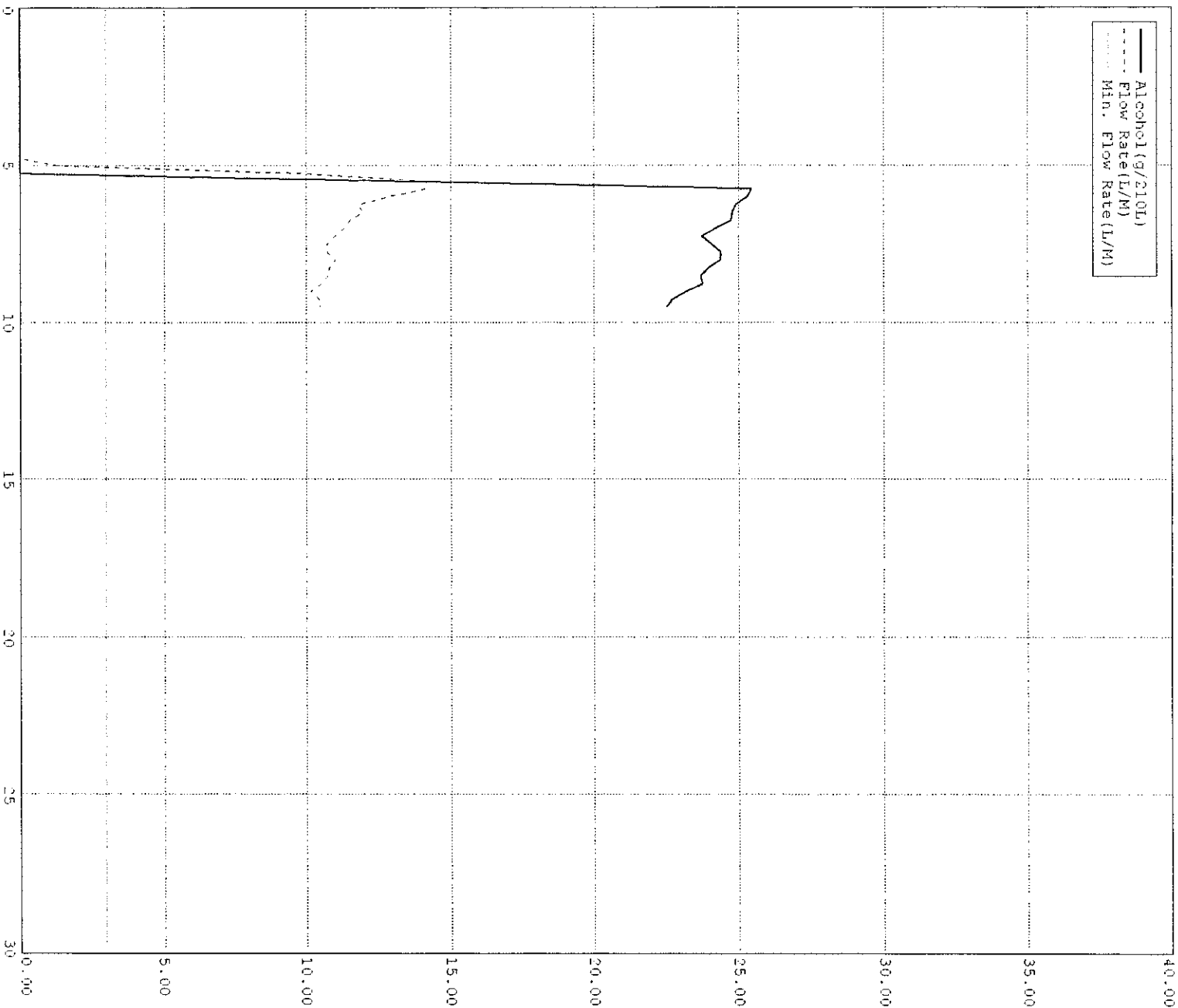
TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	15:17
BLANK TEST	0.000	15:17
INTERNAL STANDARD	VERIFIED	15:18
EXTERNAL STANDARD	0.079	15:18
BLANK TEST	0.000	15:19
SUBJECT SAMPLE	INVALID	15:19

External standard lot

AG735001

Exp. 12/16/2019 JMW 06/21/18

JW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100376

Date: 06/22/2018
Time: 08:06:21

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 29.77: 0.080

DIAGNOSTIC CHECK	PASSED	08:08
BLANK TEST	0.000	08:08
INTERNAL STANDARD	VERIFIED	08:08
Xq = 0.077 (0.90%)		
EXTERNAL STANDARD	0.079	08:08
X[1] = 0.0795 (0.0006)	(0.0002)	
BLANK TEST	0.000	08:09
SUBJECT SAMPLE	XXX	08:10
X[1] = 0.1155 (-0.0158)	(-0.0014)	

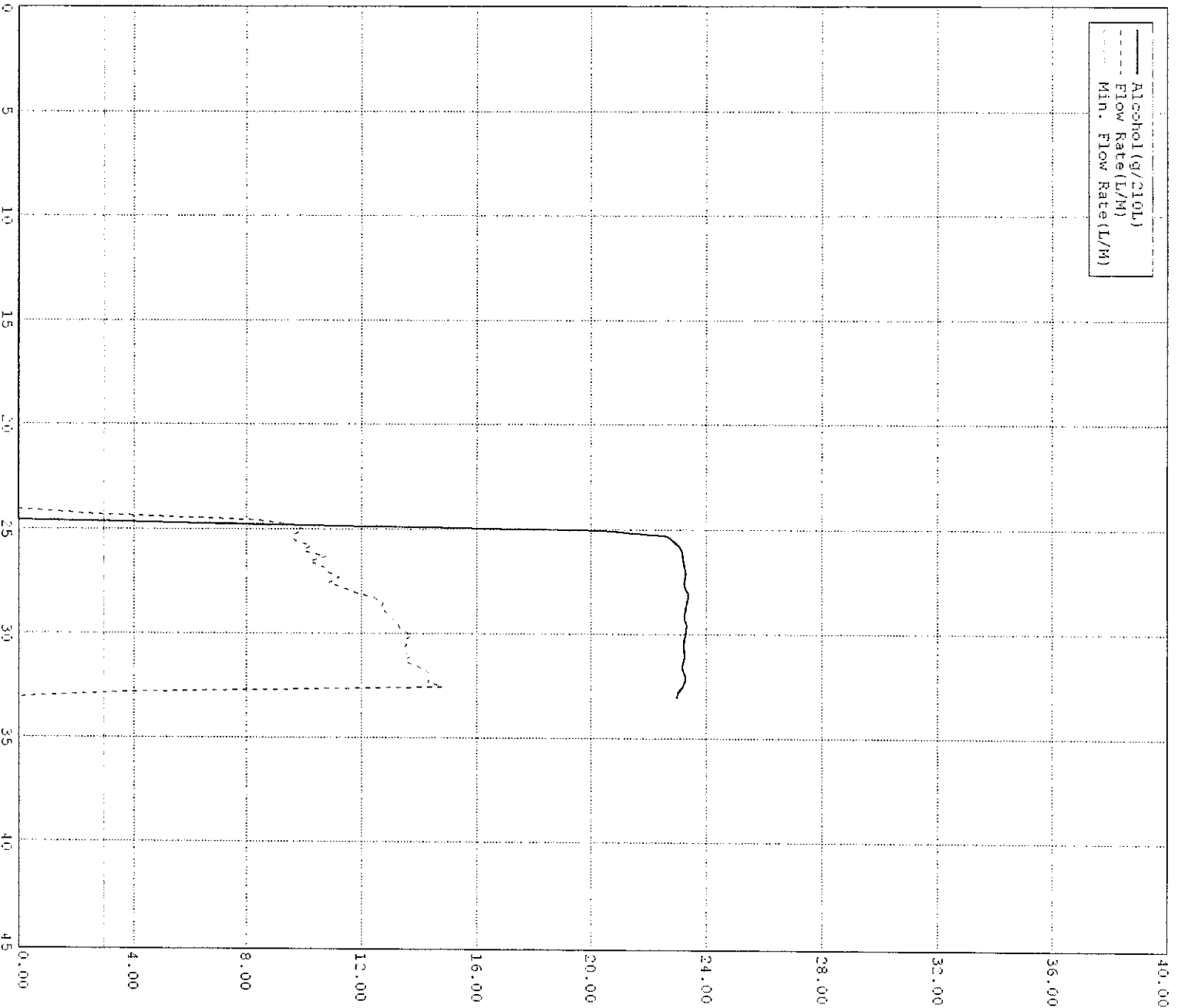
Interference Detected

External standard lot

AN735001

Exp. 12/16/2019 DW 06/22/18

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100376

Date: 06/22/2018
Time: 08:16:23

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.77: 0.080

DIAGNOSTIC CHECK	PASSED	08:17
BLANK TEST	0.000	08:17
INTERNAL STANDARD	VERIFIED	08:17
Xq = 0.077 (1.01%)		
EXTERNAL STANDARD	0.080	08:17
X[1] = 0.0797 (0.0010)	(0.0000)	
BLANK TEST	0.000	08:18
SUBJECT SAMPLE	XXX	08:19
X[1] = 0.1199 (-0.0277)	(-0.0017)	

Interference Detected

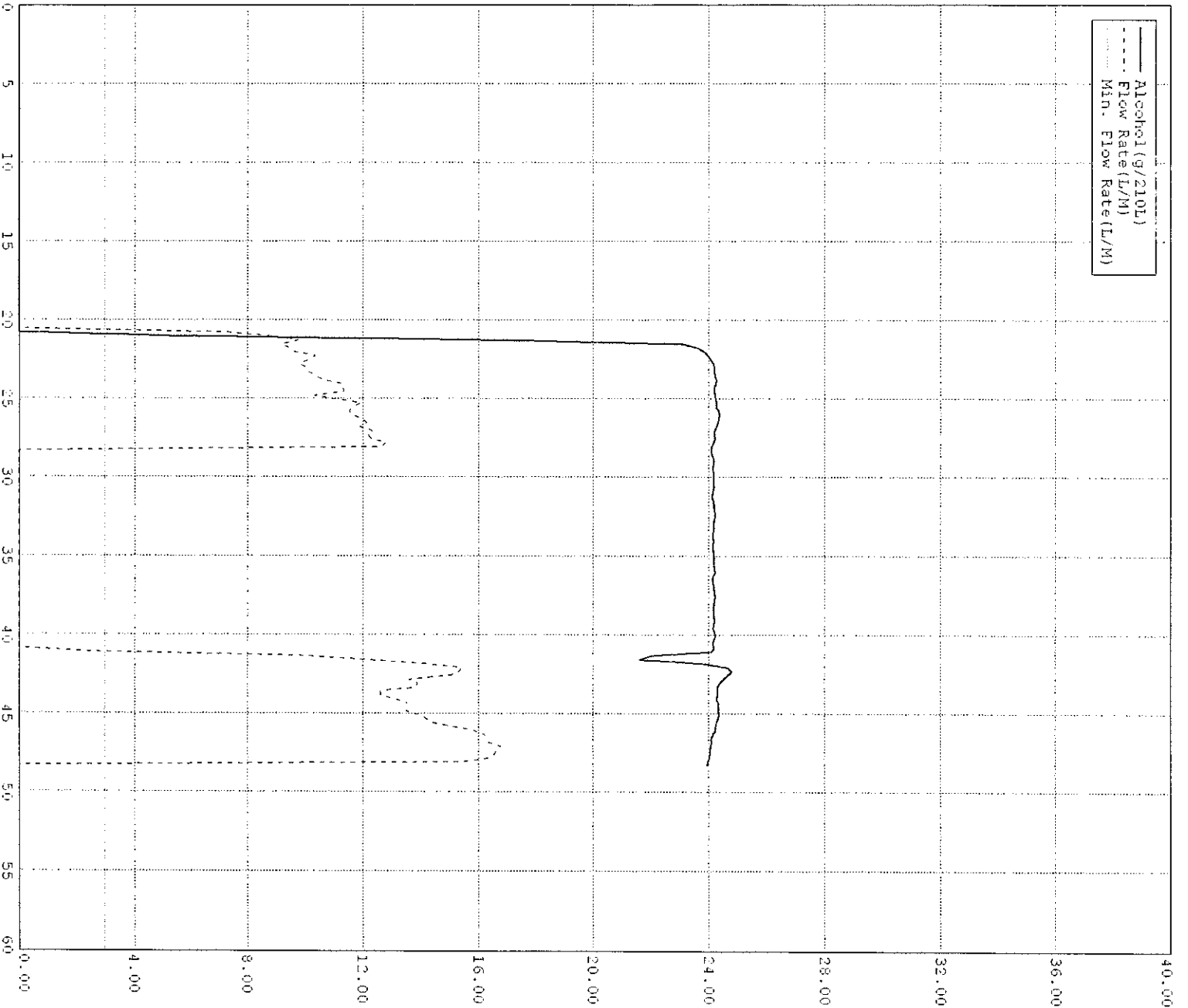
External standard lot

AG 735001

Exp. 12/16/2019

DMV 06/22/18

DMV



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100376

Date: 06/22/2018
Time: 08:27:00

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 29.78: 0.080

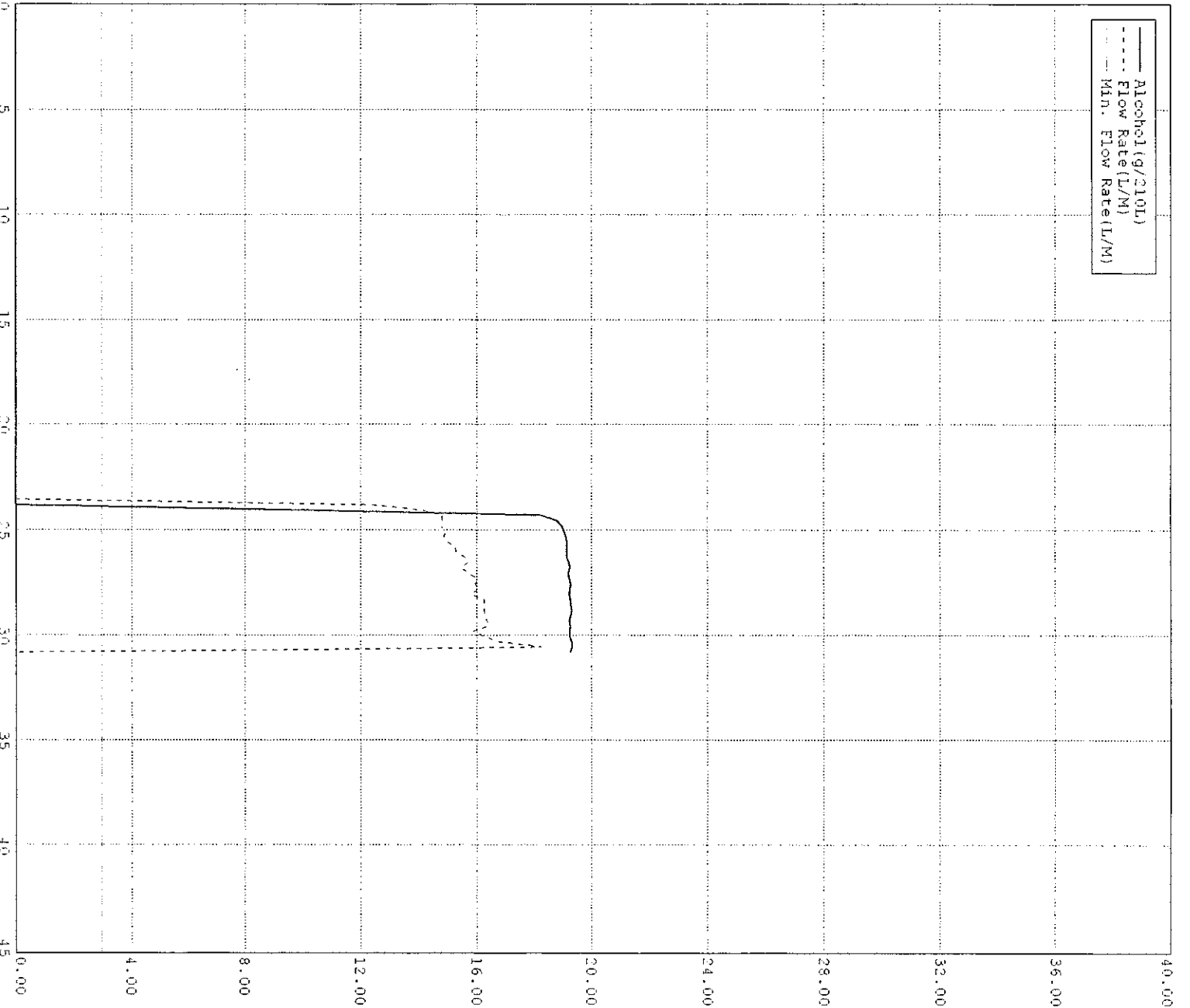
DIAGNOSTIC CHECK	PASSED	08:29
BLANK TEST	0.000	08:29
INTERNAL STANDARD	VERIFIED	08:29
Xq = 0.077 (0.67%)		
EXTERNAL STANDARD	0.080	08:29
X[1] = 0.0799 (0.0014)	(0.0003)	
BLANK TEST	0.000	08:30
SUBJECT SAMPLE (Vol=1.83L)	0.097	08:31
X[1] = 0.0970 (0.0005)	(-0.0016)	
BLANK TEST	0.000	08:32
EXTERNAL STANDARD	0.079	08:32
X[1] = 0.0794 (0.0006)	(-0.0006)	
BLANK TEST	0.000	08:33

External standard lot A6735D01
Exp. 12/16/2019 JW 06/22/18

Filter 2 avg: 0.0009

Filter 3 avg: 0.0000

JW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100376

Date: 06/21/2018
Time: 15:31:09

SUBJECT NAME:
TEST TEST
LICENSE #: XXX

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 29.54: 0.079

TEST TYPE	PASSED	15:32
DIAGNOSTIC CHECK	0.000	15:32
BLANK TEST	0.000	15:32
INTERNAL STANDARD	0.079	15:32
EXTERNAL STANDARD	0.000	15:32
BLANK TEST	0.000	15:32
SUBJECT SAMPLE	XXX	15:34

Maximum Attempts Exceeded

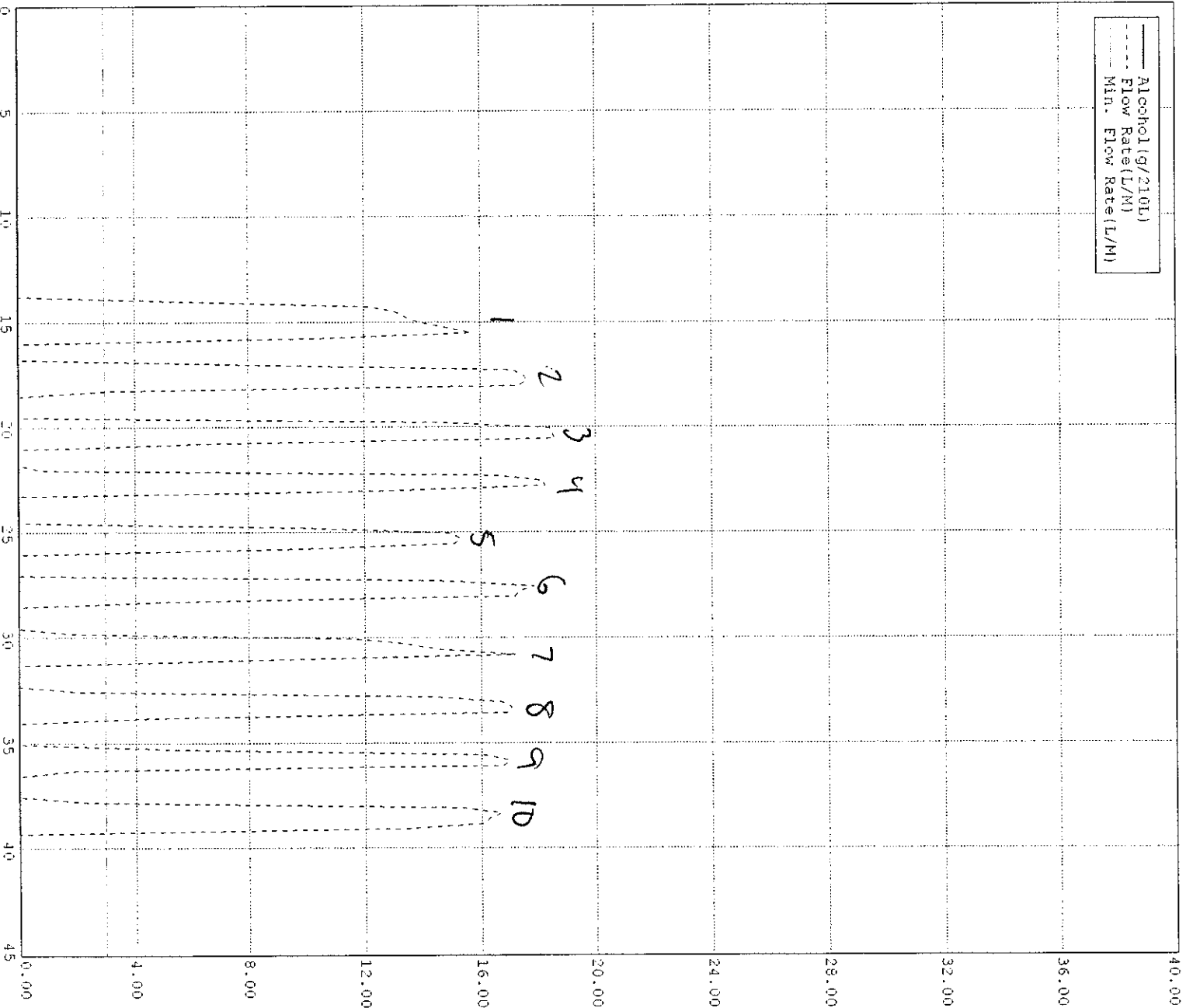
External standard lot

AG735001

Exp. 12/16/2019

DM 06/21/18

70W



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100376

Date: 06/21/2018
Time: 15:38:36

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 29.55: 0.079

DIAGNOSTIC CHECK	PASSED	15:40
BLANK TEST	0.000	15:40
INTERNAL STANDARD	0.079	15:40
EXTERNAL STANDARD	0.000	15:41

RFI DETECTED

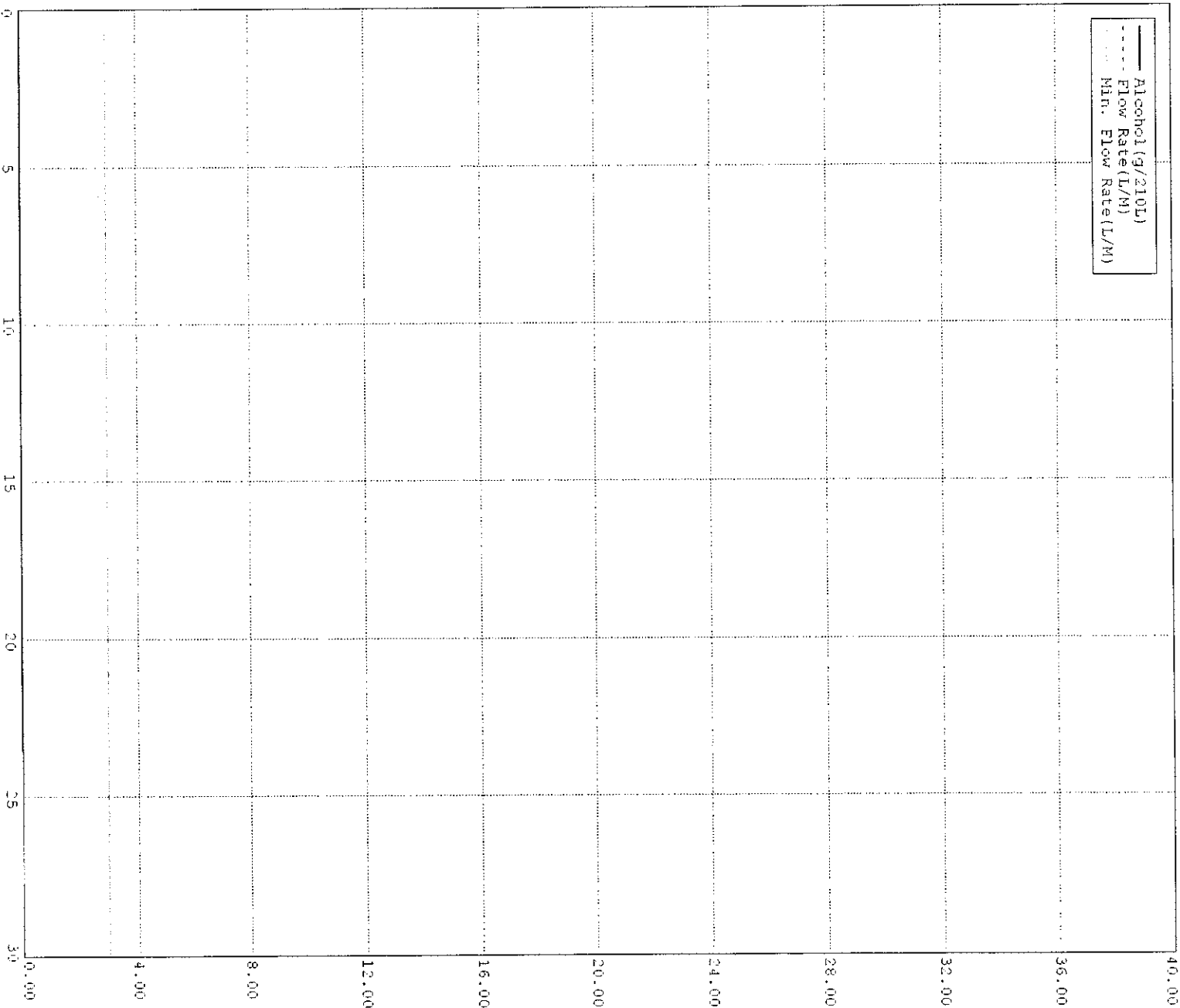
External Standard lot

AG-735001

EXP. 12/16/2019

JM/06/21/18

JM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100376

Date: 06/22/2018
Time: 09:04:20

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
NON-DRINKING SUBJECT TEST
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.79: 0.080

DIAGNOSTIC CHECK	PASSED	09:05
BLANK TEST	0.000	09:05
INTERNAL STANDARD	VERIFIED	09:05
EXTERNAL STANDARD	0.080	09:05
BLANK TEST	0.000	09:06
SUBJECT SAMPLE (Vol=2.37L)	0.000	09:07
BLANK TEST	0.000	09:08
EXTERNAL STANDARD	0.080	09:08
BLANK TEST	0.000	09:09

External standard lot

A6735001

Exp. 12/16/2019

JM 06/22/18

JM/

