

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 100423 Analyst Derech Watten Start Date 03/20/20

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 1.6 L (1.3L to 1.7L)
 4. Linearity Test (attached)
 - a. Levels Used
 - i. 0.020g/210L Mnf Airgas Lot AG928203 Exp 10/09/21
 - ii. 0.040g/210L Mnf Airgas Lot AG915607 Exp 06/05/21
 - iii. 0.080g/210L Mnf Airgas Lot AG826101 Exp 09/18/20
 - iv. 0.100g/210L Mnf Airgas Lot AG924701 Exp 09/04/21
 - v. 0.200g/210L Mnf Auto Lot 19200 Exp 08/06/21
 1. Simulator S/N DR4176 Date Calibrated 10/07/19
 - vi. 0.300g/210L Mnf Auto Lot 19330 Exp 11/13/21
 1. Simulator S/N DR4178 Date Calibrated 10/04/19
 5. Functional Tests (attached)
 - a. Incomplete
 - b. Invalid
 - c. Interference
 - d. Exceeded attempts
 - i. Acetone - Mnf Auto Lot 19301 Level 0.100 Exp 10/30/21
 1. Simulator S/N DR4162 Date Calibrated 10/07/19
 - ii. Isopropanol - Mnf Auto Lot 19301 Level 0.100 Exp 10/30/21
 1. Simulator S/N DR4163 Date Calibrated 10/04/19
 - iii. Negative Control - Mnf Auto Lot 19301 Level 0.100 Exp 10/30/21
 1. Simulator S/N SD1176 Date Calibrated 10/07/19
 - 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 03/23/20

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 03/20/2020
Time: 16:48:01

VERSIONS
DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.76 V PASSED
(1.09 V - 2.53 V)
Cooler Voltage = 1.56 V PASSED
(0.97 V - 2.25 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 524 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 30.3 in

PUMP INFO

Flow Rate = 4.835 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 = 0.093 0.19% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100423

Date: 03/20/2020
Time: 5:30 PM

Temperatures (°C)
Sample Cell: 49.5°C
Breath Tube: 47.9°C

Current Barometer 30.3 in
Volume (Ltr) 1.48

Settings
Lamp: 1.81 V
Bias: 79 V
Cooler: 1.58 V
Chopper: 524 Hz

Voltages (V)
Flow: 1.06 V
Detector: 0.004 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 09/30/2014
Time: 10:52:52

OPERATOR NAME:
NPAS TECH
CERTIFICATE #: GUTH2100 DR7001 13340, 34.0C

Ca = 0.1000
CAL = 0.989254 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0038 0.0010 <= b2 < 0.0100
b3 = 0.0003 0.0000 <= b3 < 0.0040
Xq = 0.0933 0.0500 <= Xq < 0.2000
a21 = 1.151649 1.050 <= a21 < 1.300
a31 = 0.545950 0.300 <= a31 < 0.800

RLM

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 03/20/2020
Time: 17:32:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

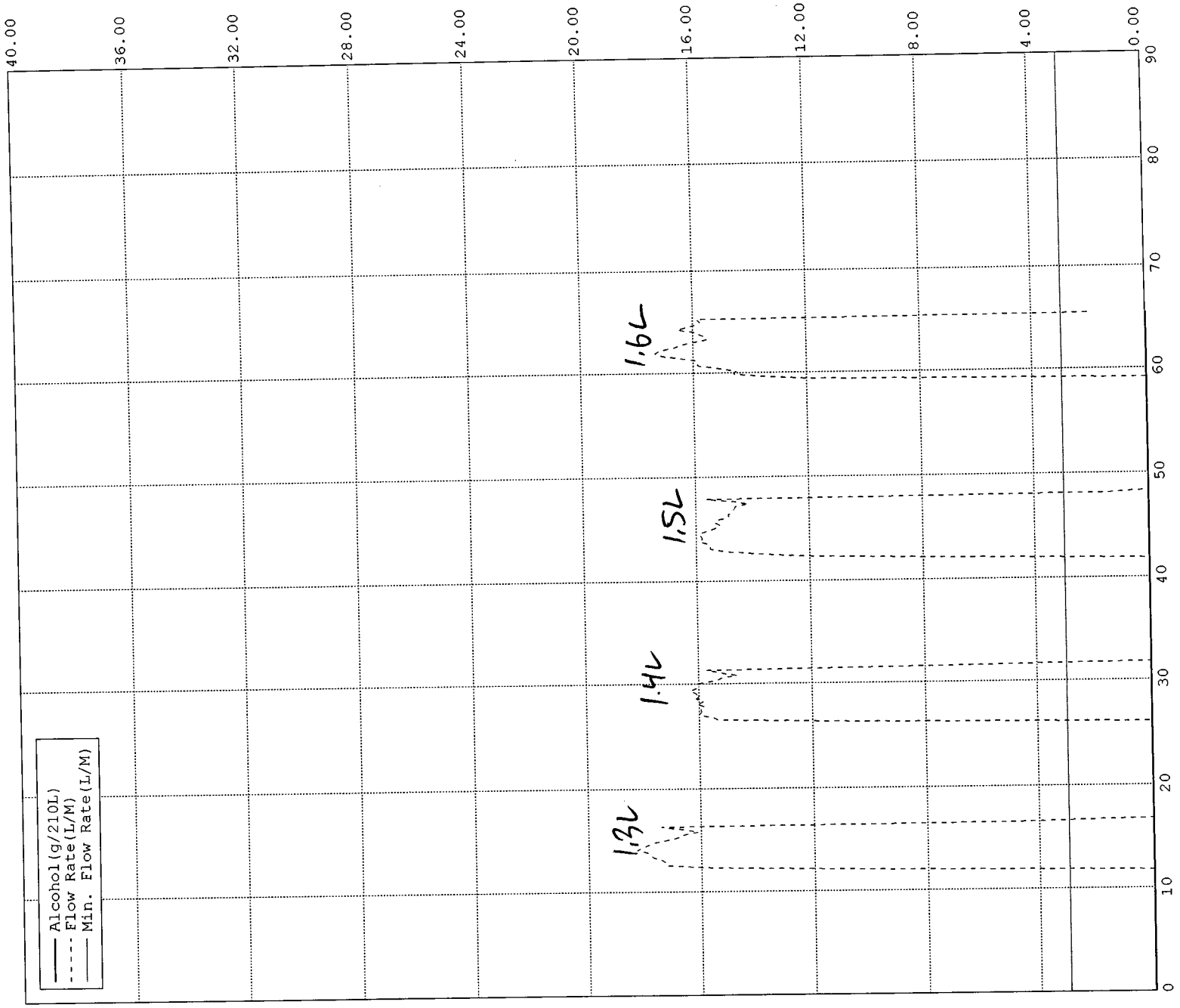
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.31: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	17:37
BLANK TEST	0.000	17:37
INTERNAL STANDARD	VERIFIED	17:37
EXTERNAL STANDARD	0.080	17:37
BLANK TEST	0.000	17:38
SUBJECT SAMPLE (Vol=1.58L)	0.000	17:40
BLANK TEST	0.000	17:40
EXTERNAL STANDARD	0.079	17:41
BLANK TEST	0.000	17:42



LINEARITY CHECK

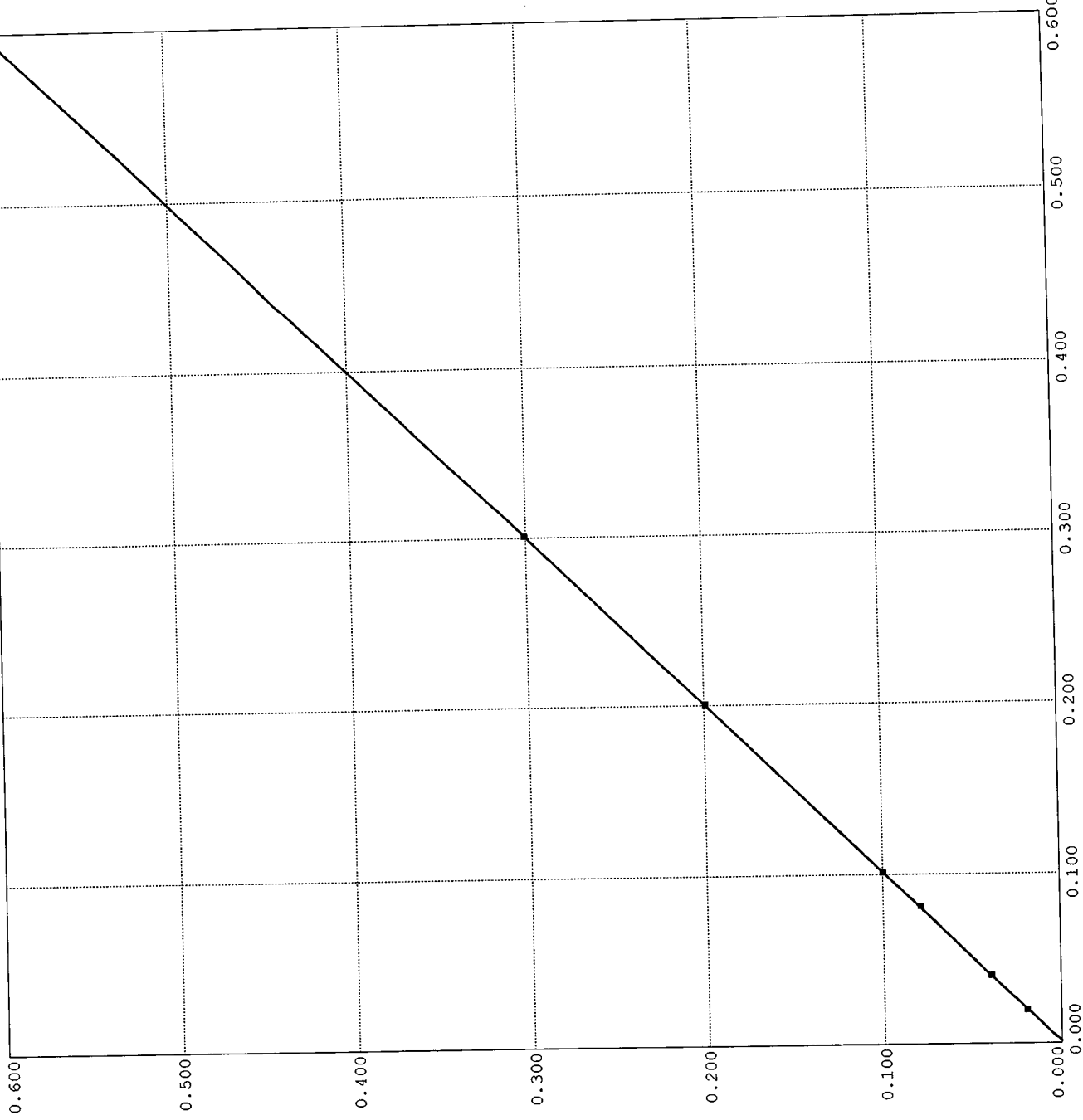
 Alaska Department of Public Safety
 DATAMASTER dmt: 100423

Date: 03/20/2020
 Time: 17:46:35

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.041	0.0400	0.0000
0.081	0.0798	0.0004
0.101	0.1008	0.0004
0.200	0.2000	0.0007
0.300	0.3014	0.0005

SLOPE = 1.006782
 R² = 0.999971



Handwritten signature/initials

LINEARITY CHECK: Control Test 1

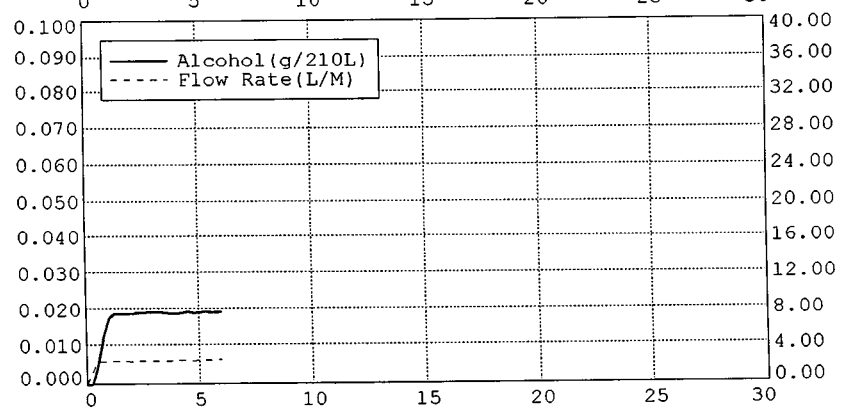
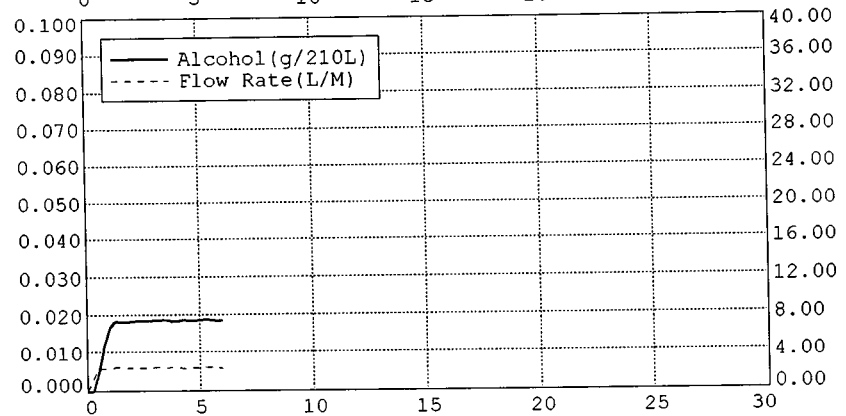
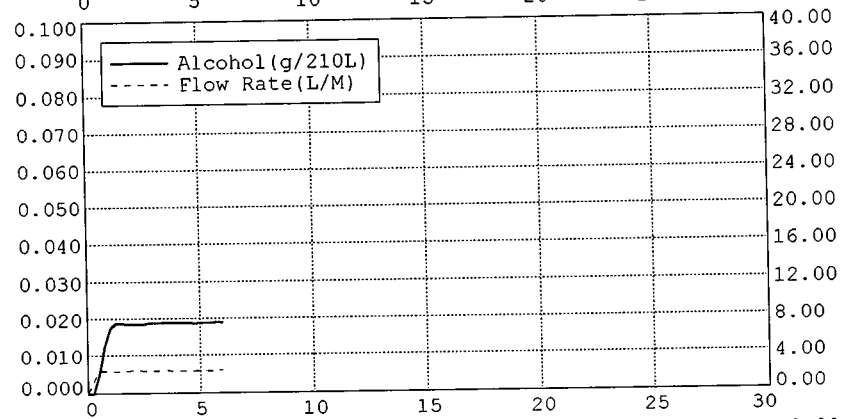
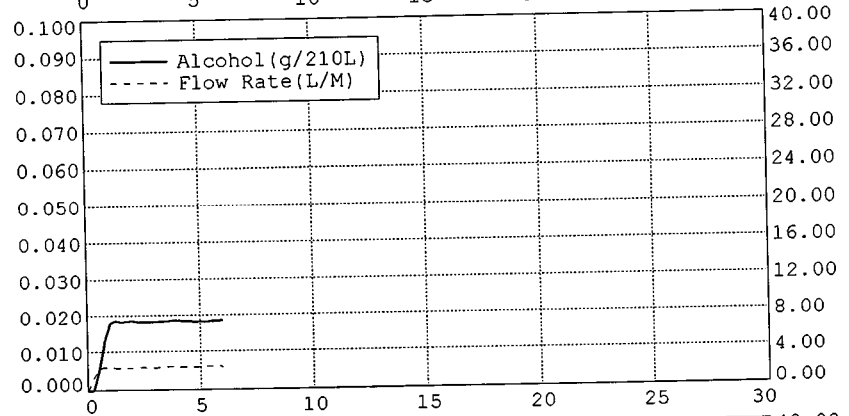
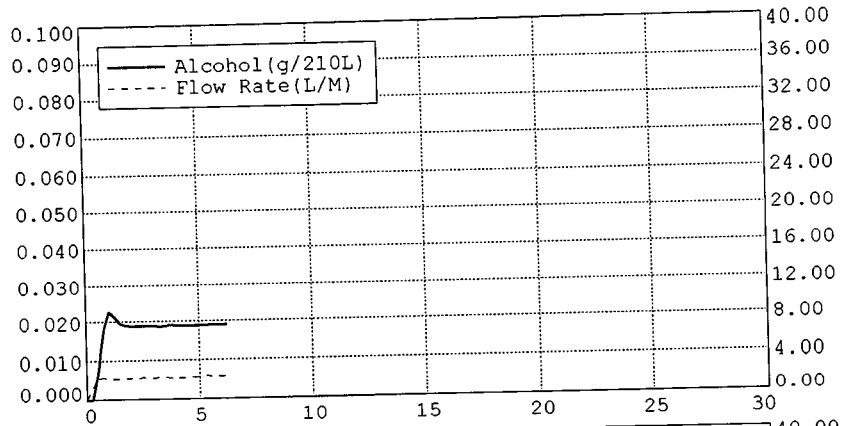
Alaska Department of Public Safety
 DATAMASTER dmt: 100423

Date: 03/20/2020
 Time: 17:46:36

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.020
 TARGET AT 30.31: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 927 psi

BLANK TEST	0.000	17:47
INTERNAL STANDARD	VERIFIED	17:47
EXTERNAL STANDARD	0.020	17:48
BLANK TEST	0.000	17:49
EXTERNAL STANDARD	0.020	17:49
BLANK TEST	0.000	17:50
EXTERNAL STANDARD	0.020	17:50
BLANK TEST	0.000	17:51
EXTERNAL STANDARD	0.020	17:51
BLANK TEST	0.000	17:52
EXTERNAL STANDARD	0.020	17:52
BLANK TEST	0.000	17:53

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

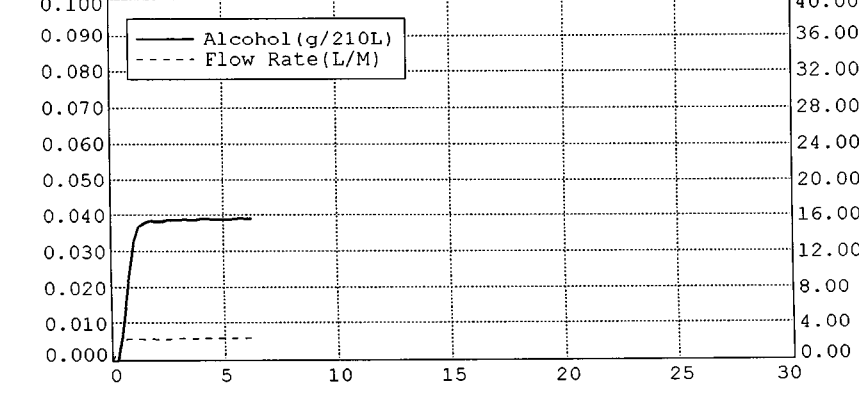
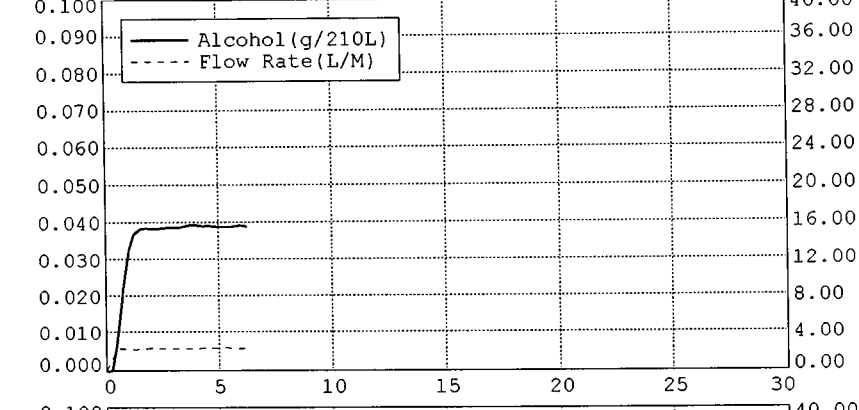
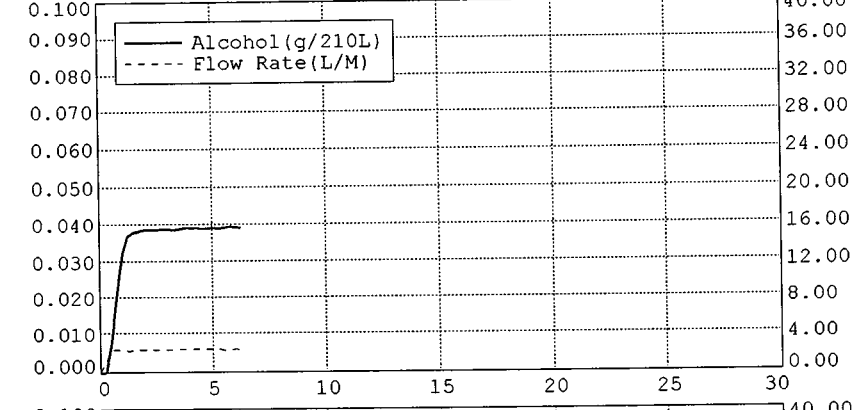
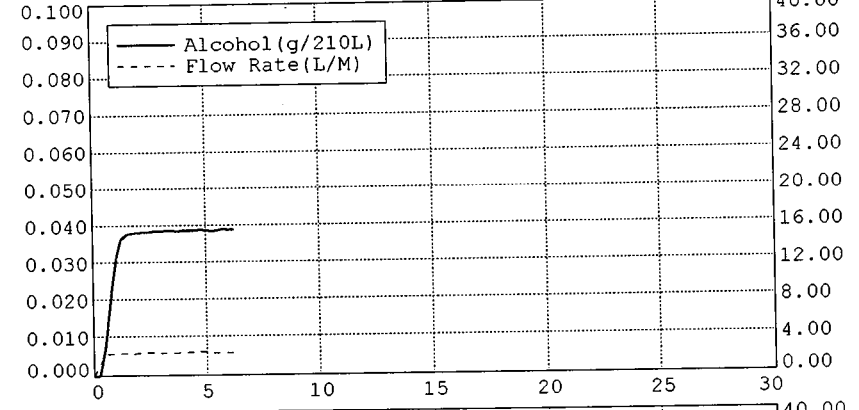
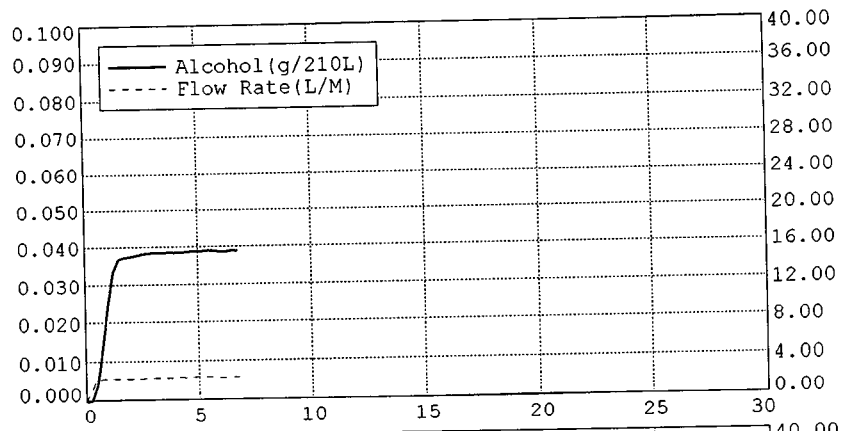
Alaska Department of Public Safety
 DATAMASTER dmt: 100423

Date: 03/20/2020
 Time: 17:54:05

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.040
 TARGET AT 30.31: 0.041
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 749 psi

BLANK TEST	0.000	17:55
INTERNAL STANDARD	VERIFIED	17:55
EXTERNAL STANDARD	0.040	17:55
BLANK TEST	0.000	17:56
EXTERNAL STANDARD	0.040	17:56
BLANK TEST	0.000	17:57
EXTERNAL STANDARD	0.040	17:57
BLANK TEST	0.000	17:58
EXTERNAL STANDARD	0.040	17:58
BLANK TEST	0.000	17:59
EXTERNAL STANDARD	0.040	18:00
BLANK TEST	0.000	18:00

Average = 0.0400
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

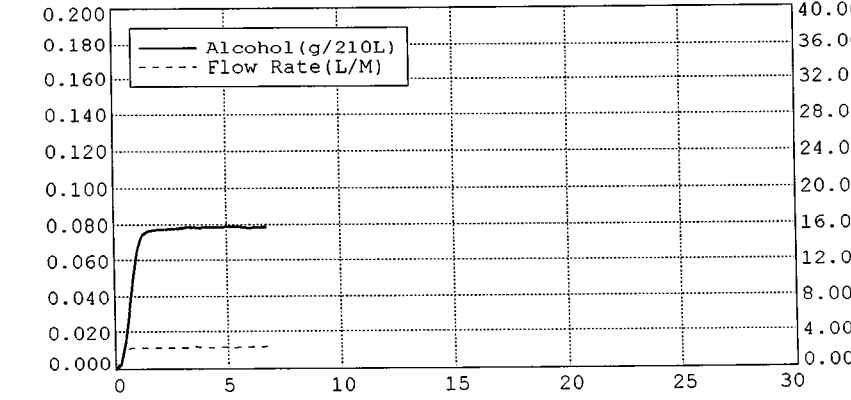
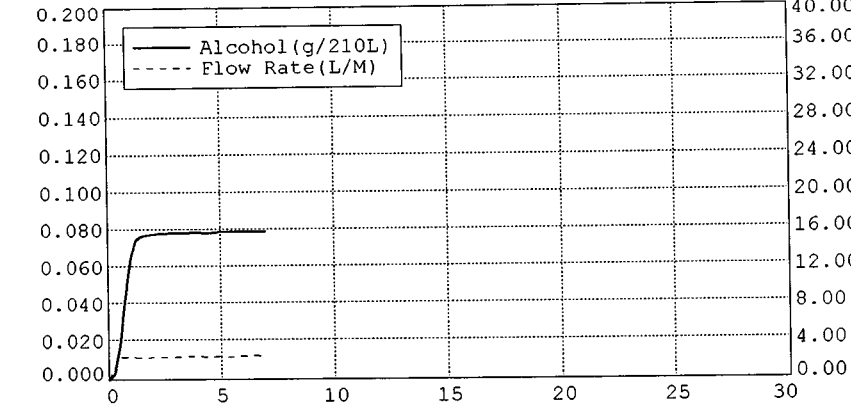
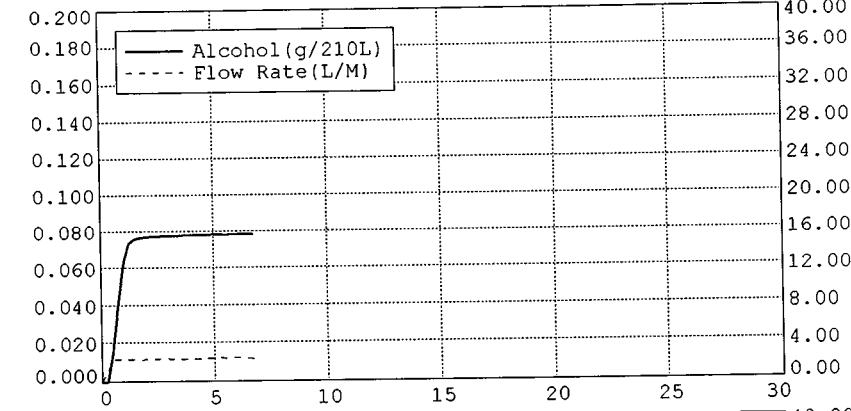
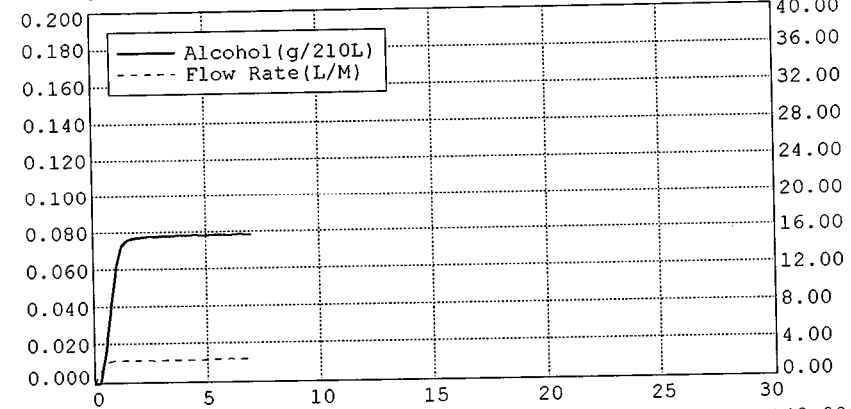
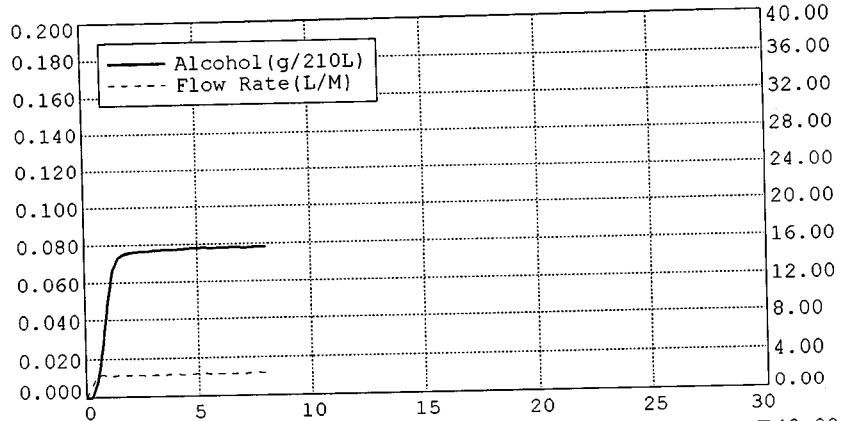
Alaska Department of Public Safety
 DATAMASTER dmt: 100423

Date: 03/20/2020
 Time: 18:01:49

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 30.31: 0.081
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 751 psi

BLANK TEST	0.000	18:03
INTERNAL STANDARD	VERIFIED	18:03
EXTERNAL STANDARD	0.080	18:03
BLANK TEST	0.000	18:04
EXTERNAL STANDARD	0.080	18:04
BLANK TEST	0.000	18:05
EXTERNAL STANDARD	0.079	18:05
BLANK TEST	0.000	18:06
EXTERNAL STANDARD	0.080	18:06
BLANK TEST	0.000	18:07
EXTERNAL STANDARD	0.080	18:07
BLANK TEST	0.000	18:08

Average = 0.0798
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

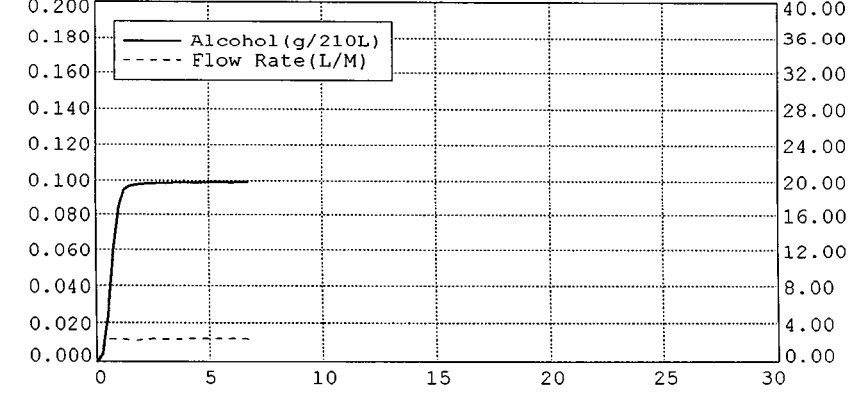
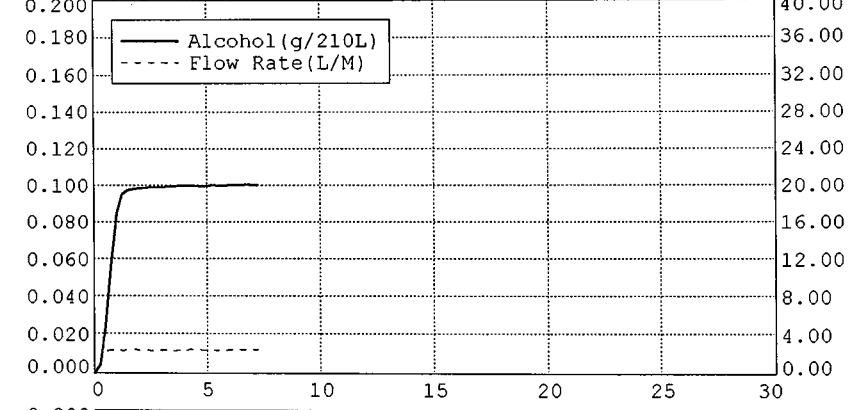
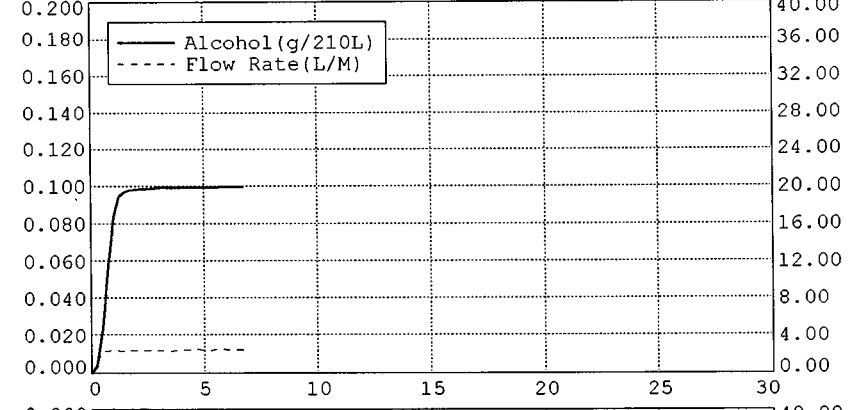
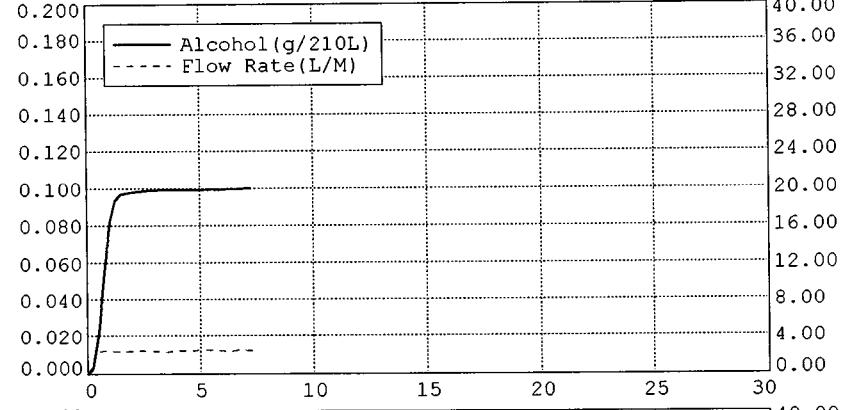
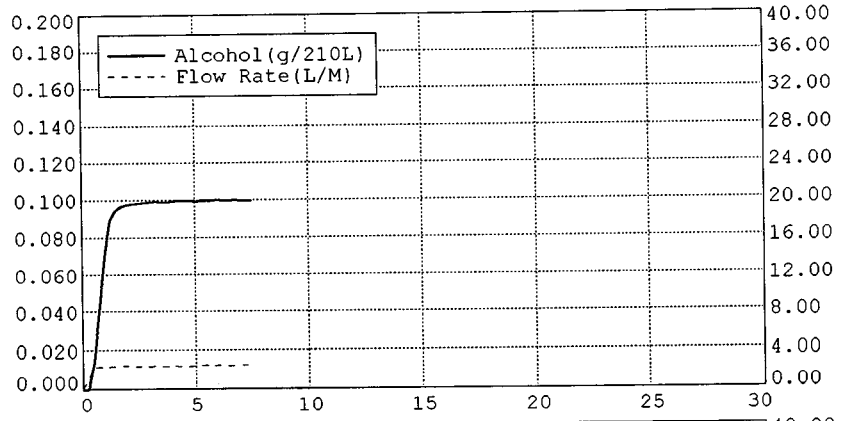
Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 03/20/2020
Time: 18:11:44

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.100
TARGET AT 30.30: 0.101
LOT #: AG924701
EXPIRATION: 09/04/2021
TANK PRESSURE: 960 psi

BLANK TEST	0.000	18:12
INTERNAL STANDARD	VERIFIED	18:13
EXTERNAL STANDARD	0.101	18:13
BLANK TEST	0.000	18:14
EXTERNAL STANDARD	0.101	18:14
BLANK TEST	0.000	18:15
EXTERNAL STANDARD	0.101	18:15
BLANK TEST	0.000	18:16
EXTERNAL STANDARD	0.101	18:16
BLANK TEST	0.000	18:17
EXTERNAL STANDARD	0.100	18:17
BLANK TEST	0.000	18:18

Average = 0.1008
Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

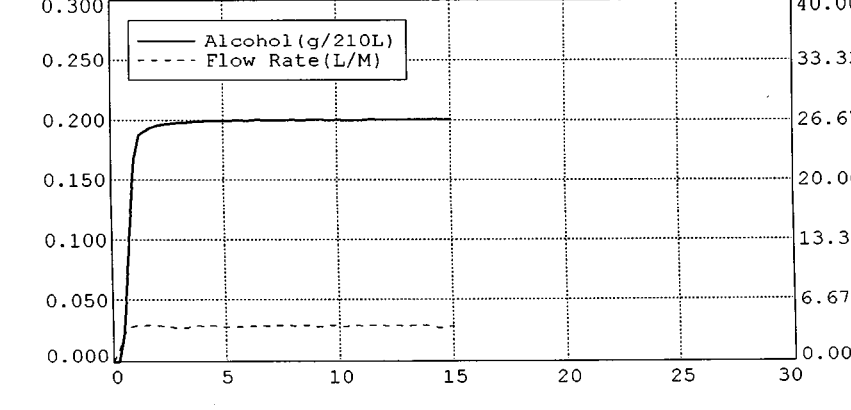
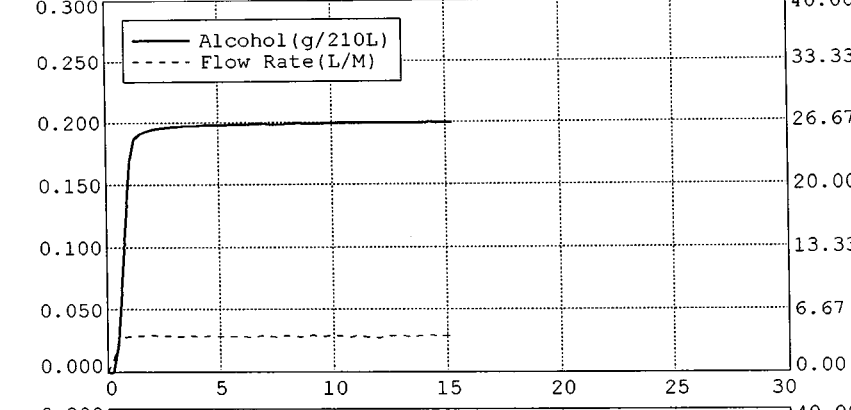
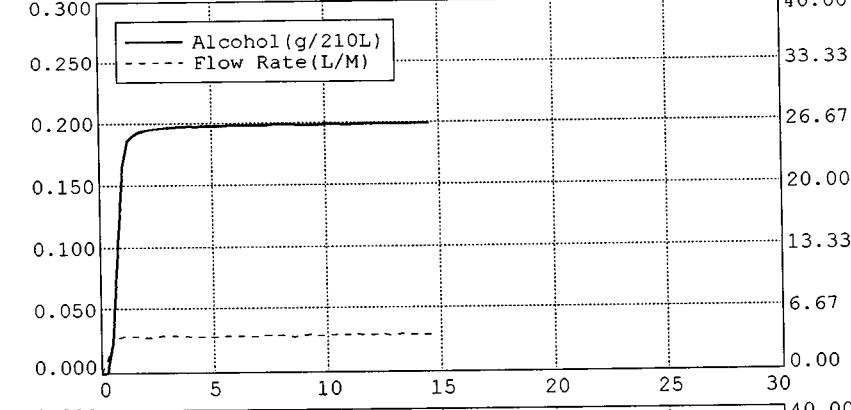
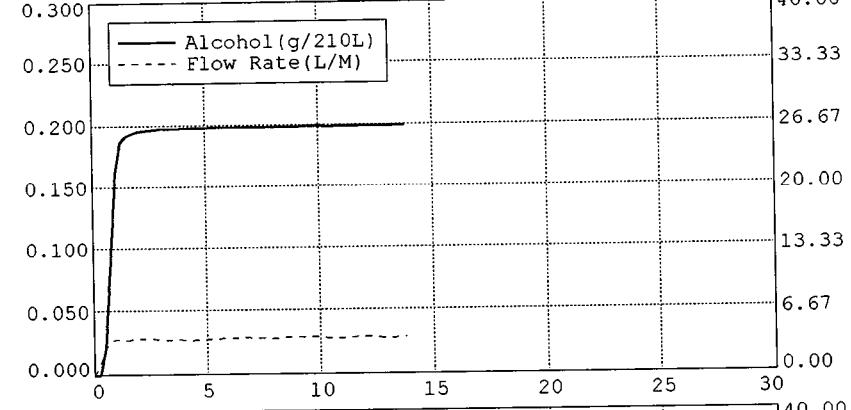
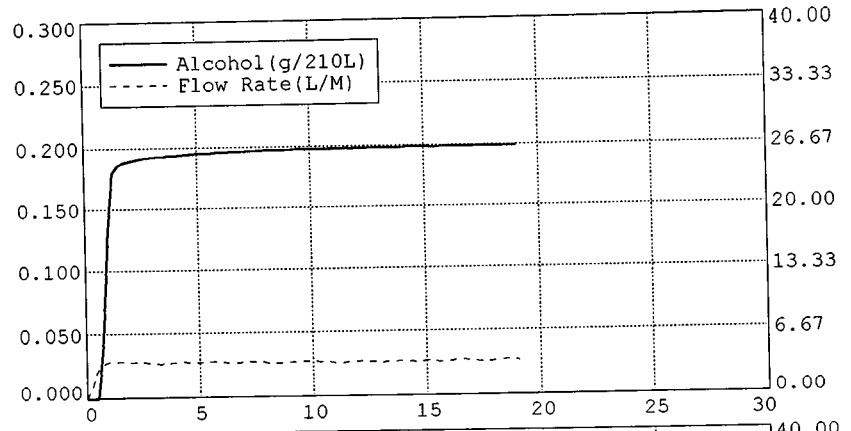
Alaska Department of Public Safety
 DATAMASTER dmt: 100423

Date: 03/20/2020
 Time: 18:35:27

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 19200
 EXPIRATION: 08/06/2021

BLANK TEST	0.000	18:36
INTERNAL STANDARD	VERIFIED	18:36
EXTERNAL STANDARD	0.199	18:37
BLANK TEST	0.000	18:38
EXTERNAL STANDARD	0.200	18:38
BLANK TEST	0.000	18:39
EXTERNAL STANDARD	0.200	18:39
BLANK TEST	0.000	18:40
EXTERNAL STANDARD	0.200	18:40
BLANK TEST	0.000	18:41
EXTERNAL STANDARD	0.201	18:42
BLANK TEST	0.000	18:43

Average = 0.2000
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 6

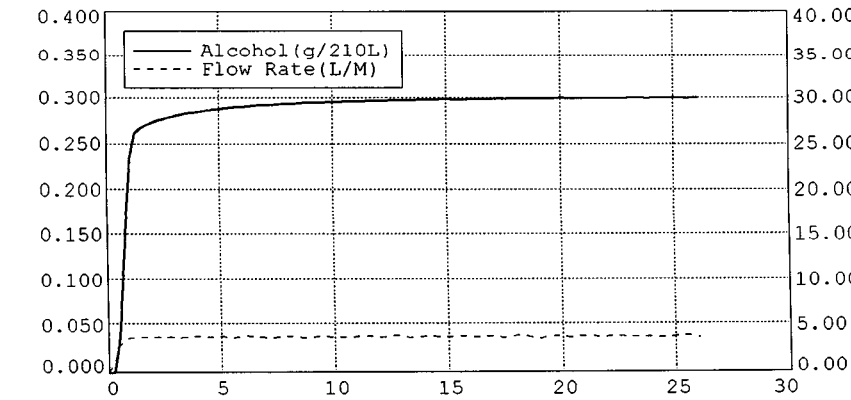
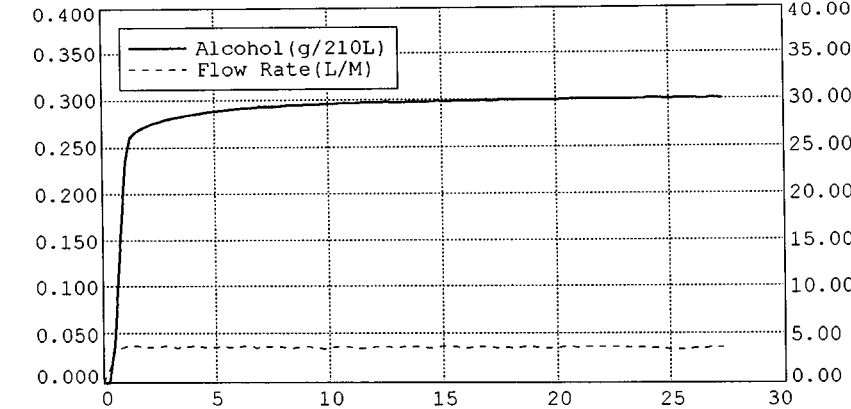
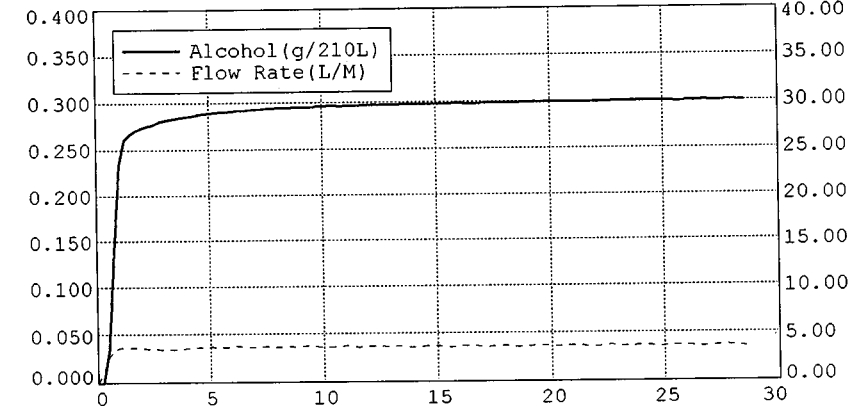
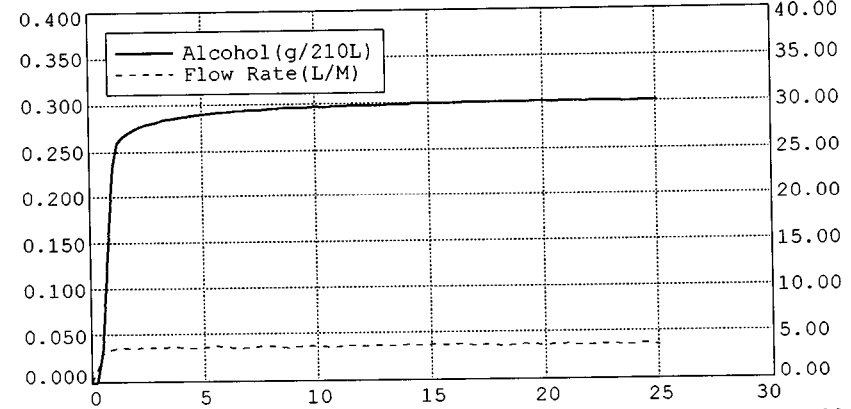
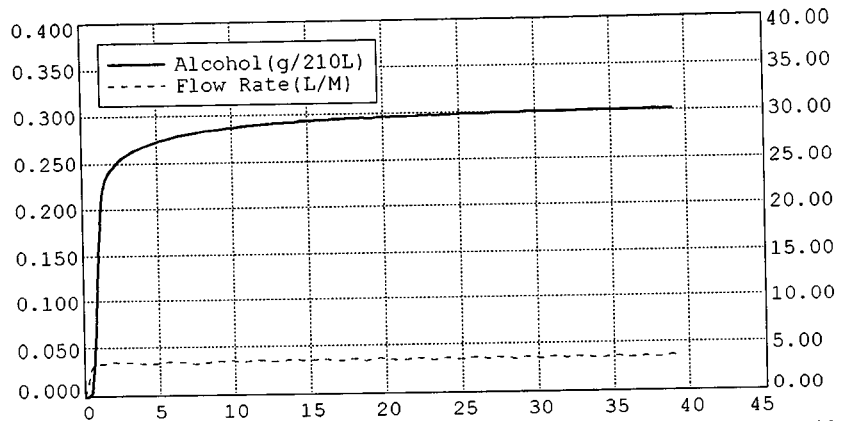
Alaska Department of Public Safety
 DATAMASTER dmt: 100423

Date: 03/20/2020
 Time: 18:49:11

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 19330
 EXPIRATION: 11/13/2021

BLANK TEST	0.000	18:50
INTERNAL STANDARD	VERIFIED	18:50
EXTERNAL STANDARD	0.302	18:51
BLANK TEST	0.000	18:52
EXTERNAL STANDARD	0.302	18:52
BLANK TEST	0.000	18:53
EXTERNAL STANDARD	0.301	18:54
BLANK TEST	0.000	18:55
EXTERNAL STANDARD	0.301	18:55
BLANK TEST	0.000	18:56
EXTERNAL STANDARD	0.301	18:57
BLANK TEST	0.000	18:57

Average = 0.3014
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 03/20/2020
Time: 20:31:38

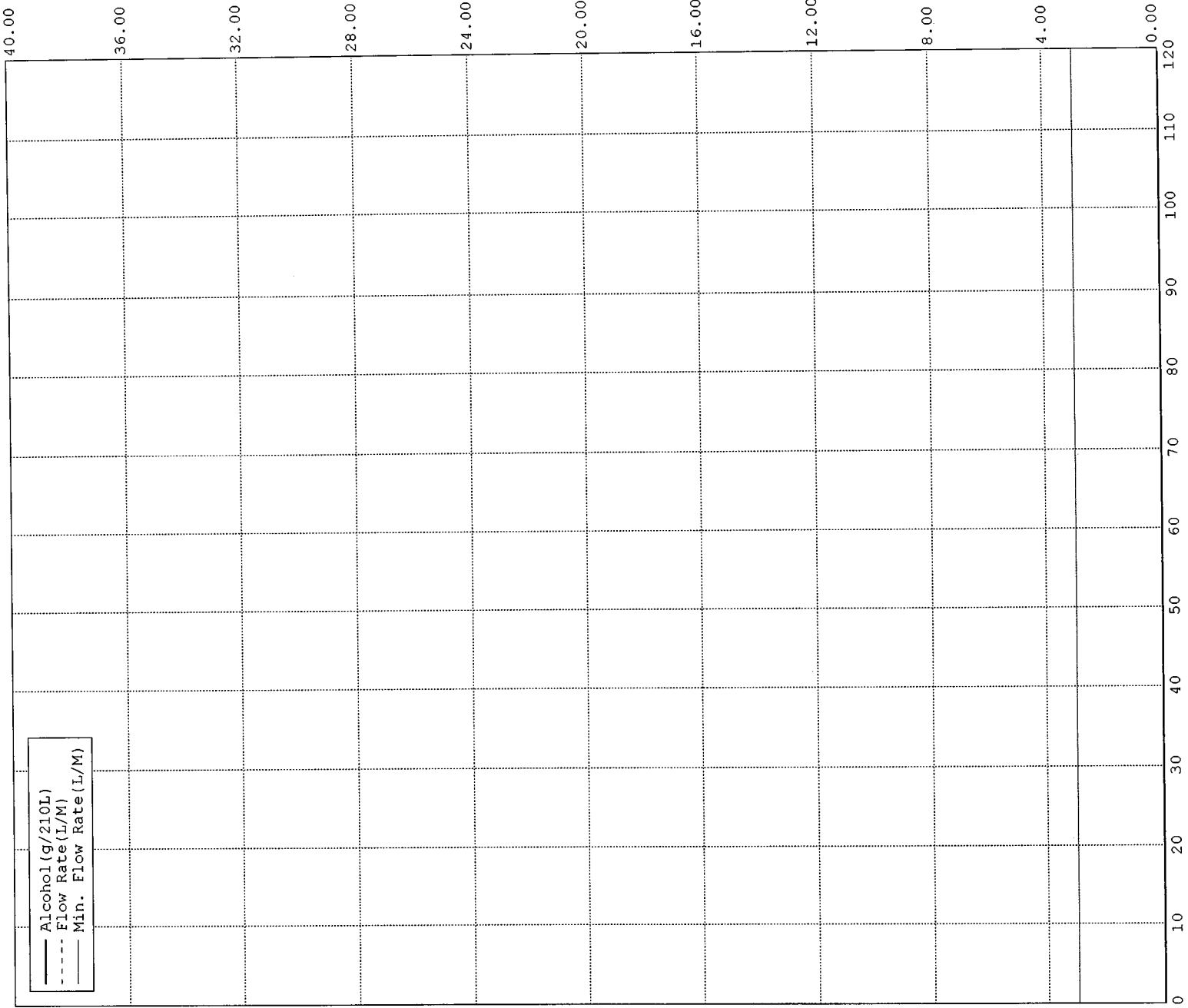
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.27: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 20:32
BLANK TEST 0.000 20:32
INTERNAL STANDARD VERIFIED 20:33
EXTERNAL STANDARD 0.080 20:33
BLANK TEST 0.000 20:34
SUBJECT SAMPLE INCOMPLETE 20:36



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 03/20/2020
Time: 20:23:46

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 30.28: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 20:25
BLANK TEST 0.000 20:25
INTERNAL STANDARD VERIFIED 20:25
EXTERNAL STANDARD 0.080 20:25
BLANK TEST 0.000 20:26
SUBJECT SAMPLE INVALID 20:27



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 03/23/2020
Time: 16:00:48

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 30.26: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

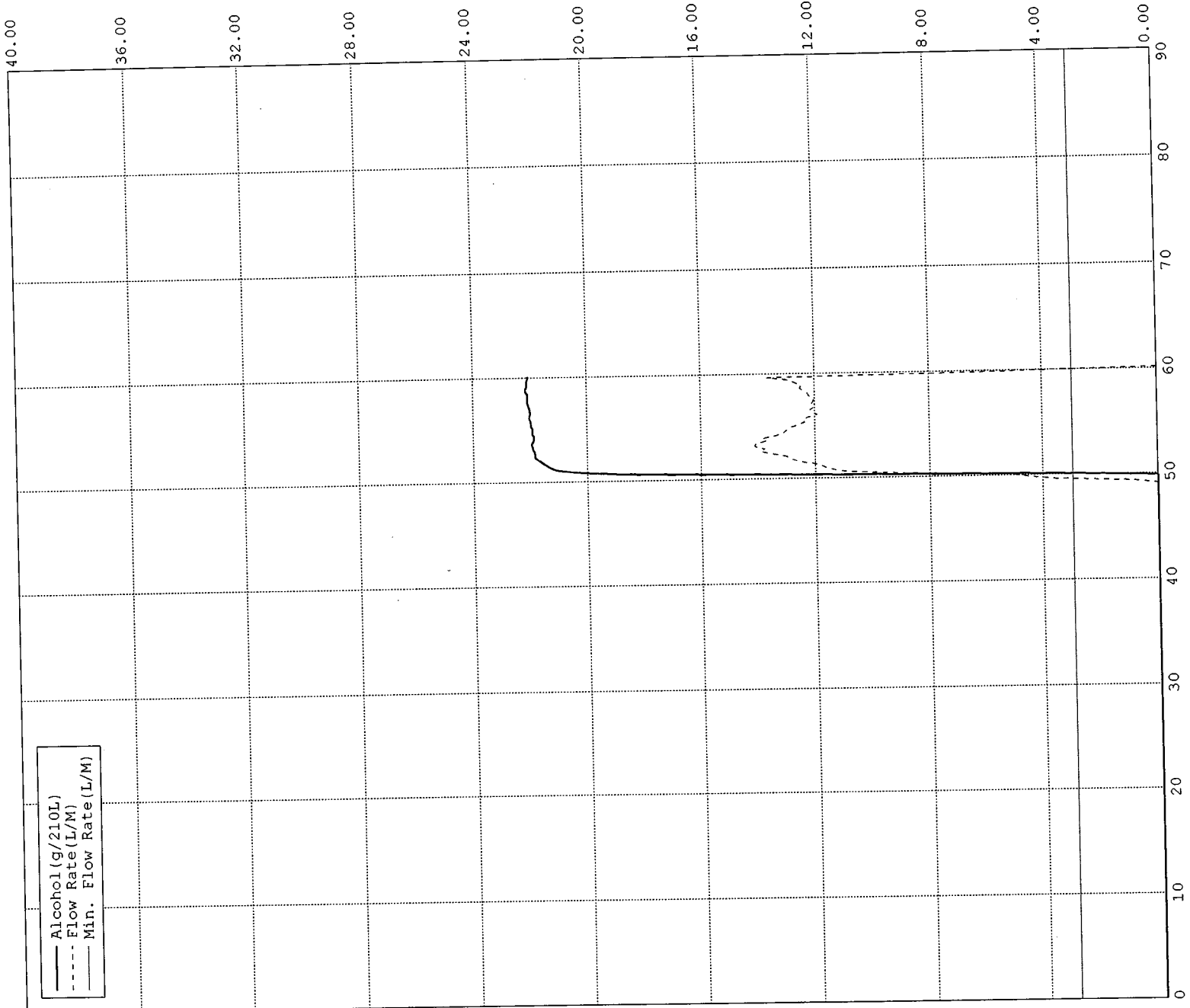
DIAGNOSTIC CHECK PASSED 16:01
BLANK TEST 0.000 16:01
INTERNAL STANDARD VERIFIED 16:02
Xg = 0.093 (0.09%) 0.080 16:02
EXTERNAL STANDARD X[1] = 0.0795 (-0.0006) (0.0016) 0.000 16:03
BLANK TEST 0.000 16:03
SUBJECT SAMPLE XXX 16:04
X[1] = 0.1108 (-0.0227) (-0.0012)

Interference Detected

Filter 2Avg: -0.0010

Filter 3Avg: 0.0012

DW



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100423

Date: 03/23/2020
Time: 15:55:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

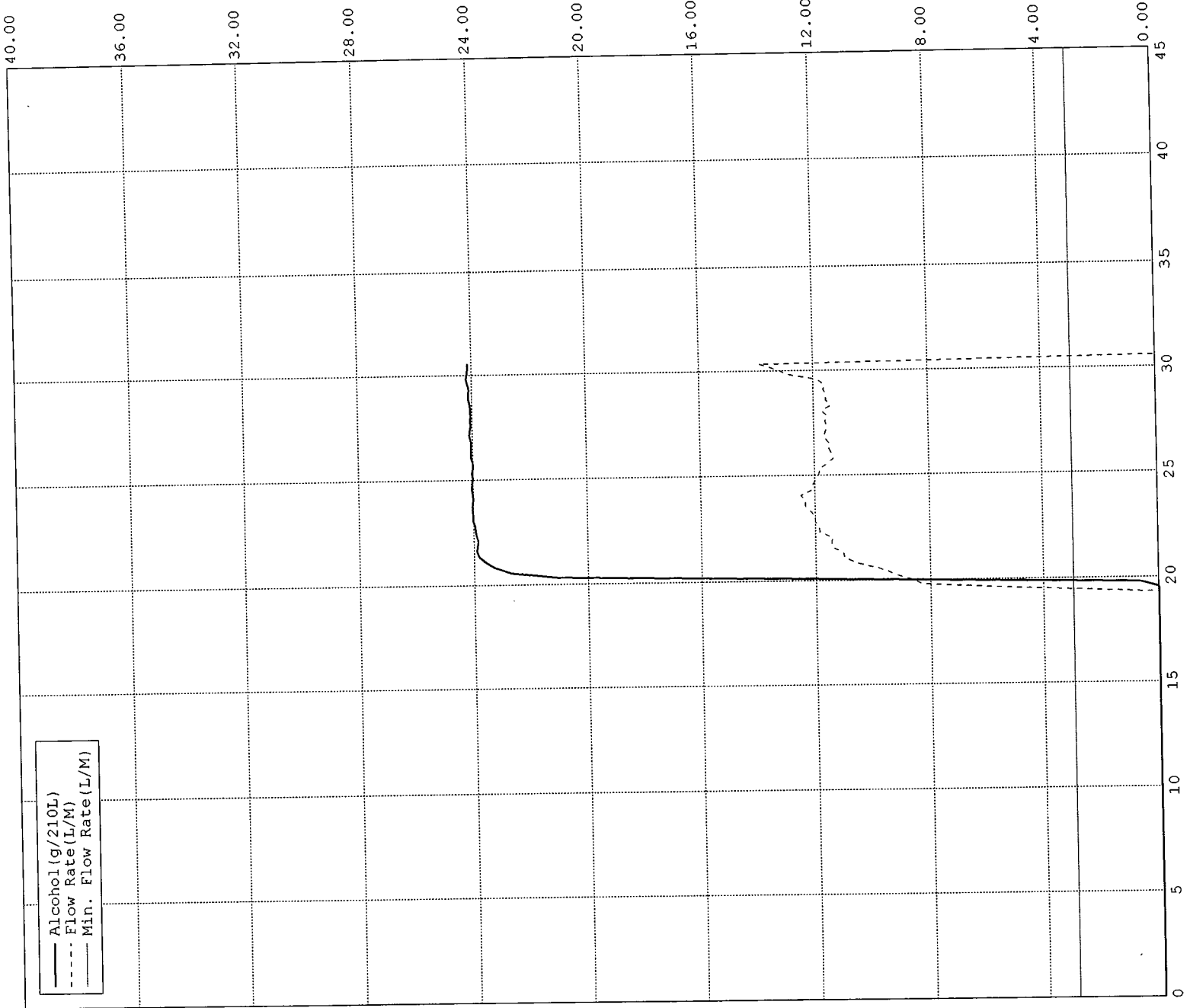
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.27: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	15:57
BLANK TEST	0.000	15:57
INTERNAL STANDARD	VERIFIED	15:57
$X_q = 0.094$ (0.56%)	0.080	15:57
EXTERNAL STANDARD	$X[1] = 0.0798$ (-0.0009)	(0.0007)
BLANK TEST	0.000	15:58
SUBJECT SAMPLE	XXX	15:58
$X[1] = 0.1208$ (-0.0249)	(-0.0004)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 03/23/2020
Time: 15:48:32

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

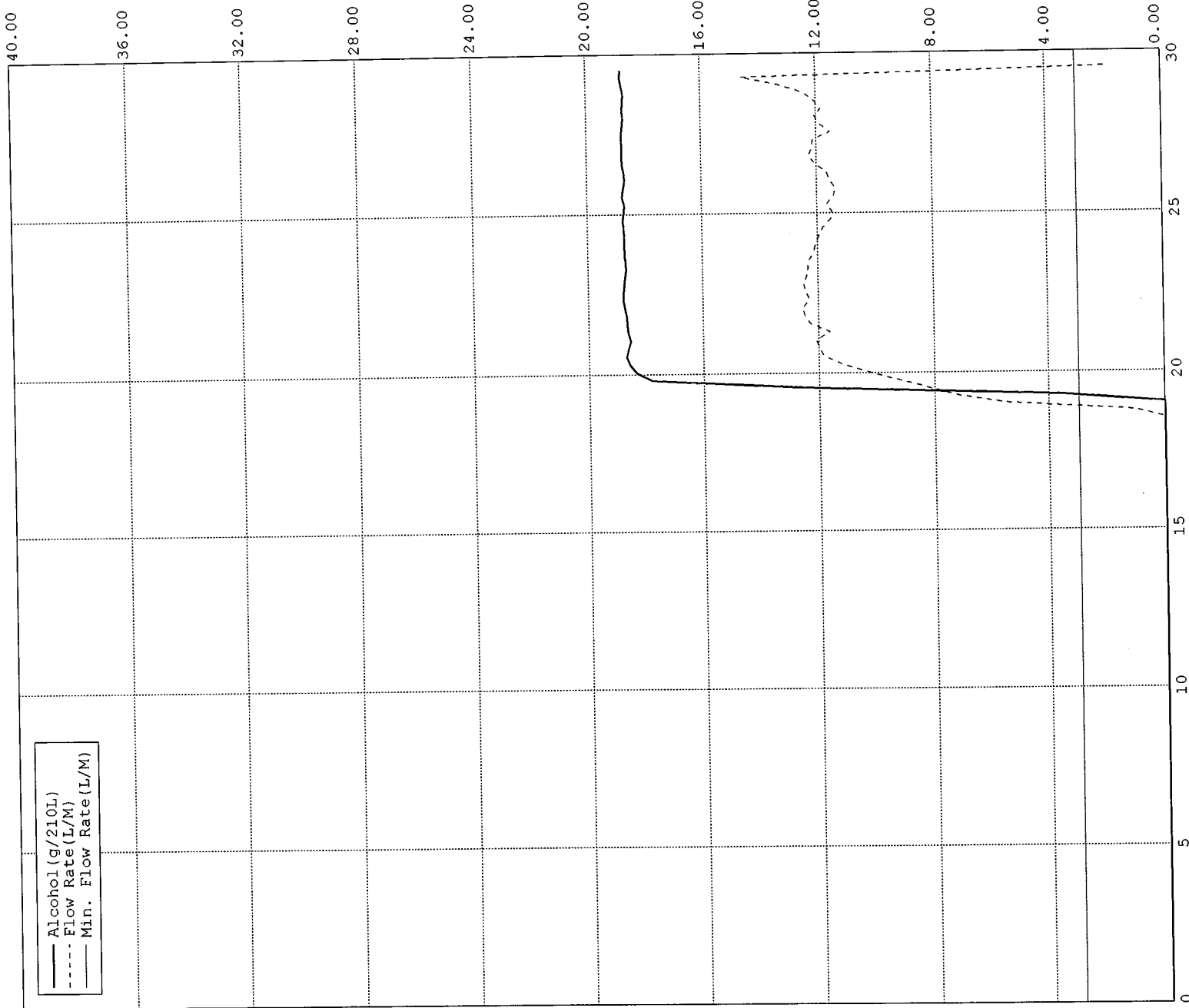
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.27: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	15:49
BLANK TEST	0.000	15:49
INTERNAL STANDARD	VERIFIED	15:50
Xq = 0.093 (0.00%)		
EXTERNAL STANDARD	0.079	15:50
X[1] = 0.0792 (-0.0017) (0.0016)		
BLANK TEST	0.000	15:51
SUBJECT SAMPLE (Vol=2.04L)	0.094	15:51
X[1] = 0.0945 (-0.0006) (-0.0011)		
BLANK TEST	0.000	15:52
EXTERNAL STANDARD	0.079	15:52
X[1] = 0.0791 (-0.0009) (0.0007)		
BLANK TEST	0.000	15:53



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 03/20/2020
Time: 20:41:39

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

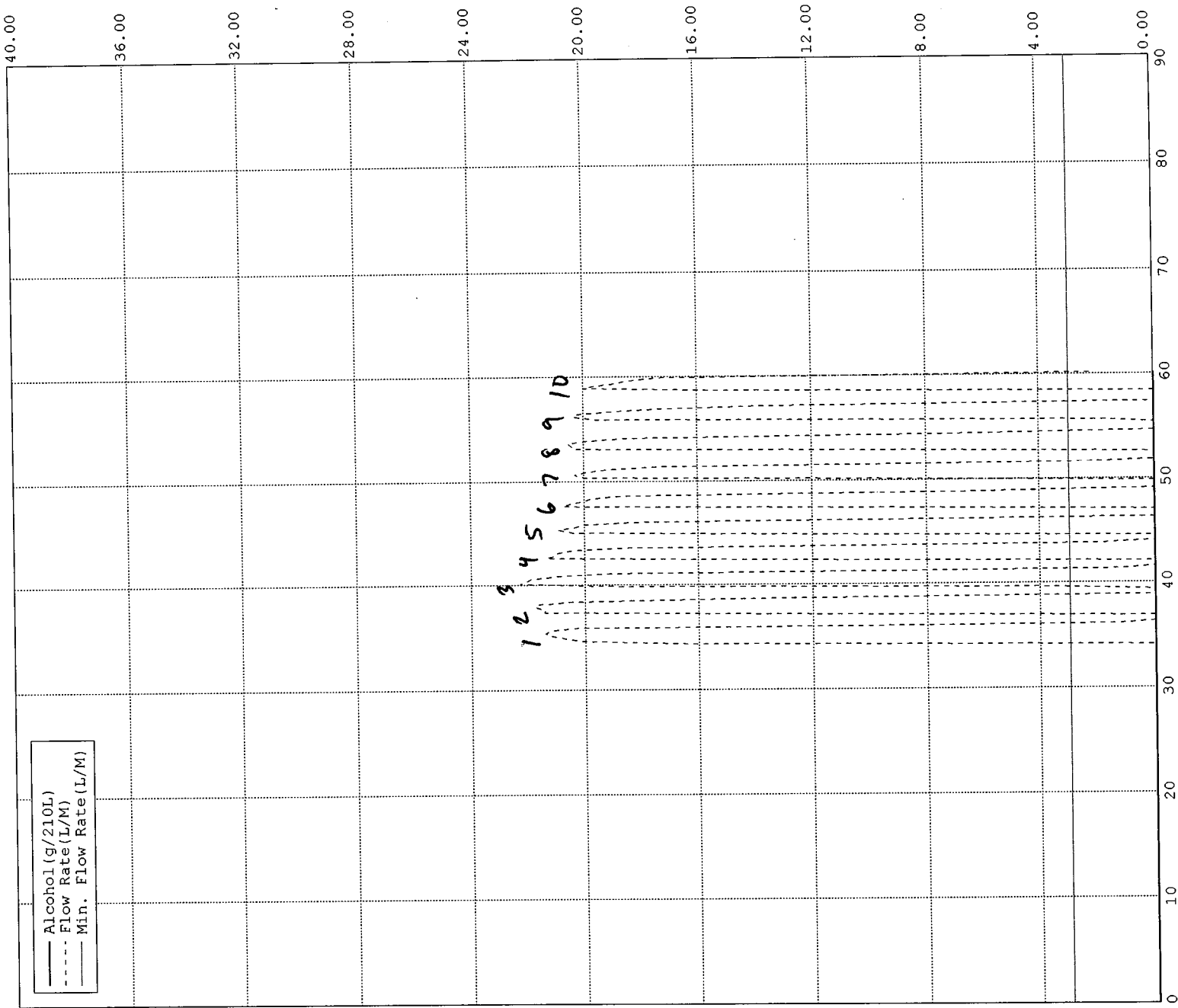
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.27: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	20:46
BLANK TEST	0.000	20:46
INTERNAL STANDARD	VERIFIED	20:46
EXTERNAL STANDARD	0.079	20:46
BLANK TEST	0.000	20:47
SUBJECT SAMPLE	XXX	20:48

Maximum Attempts Exceeded

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 03/20/2020
Time: 20:12:17

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

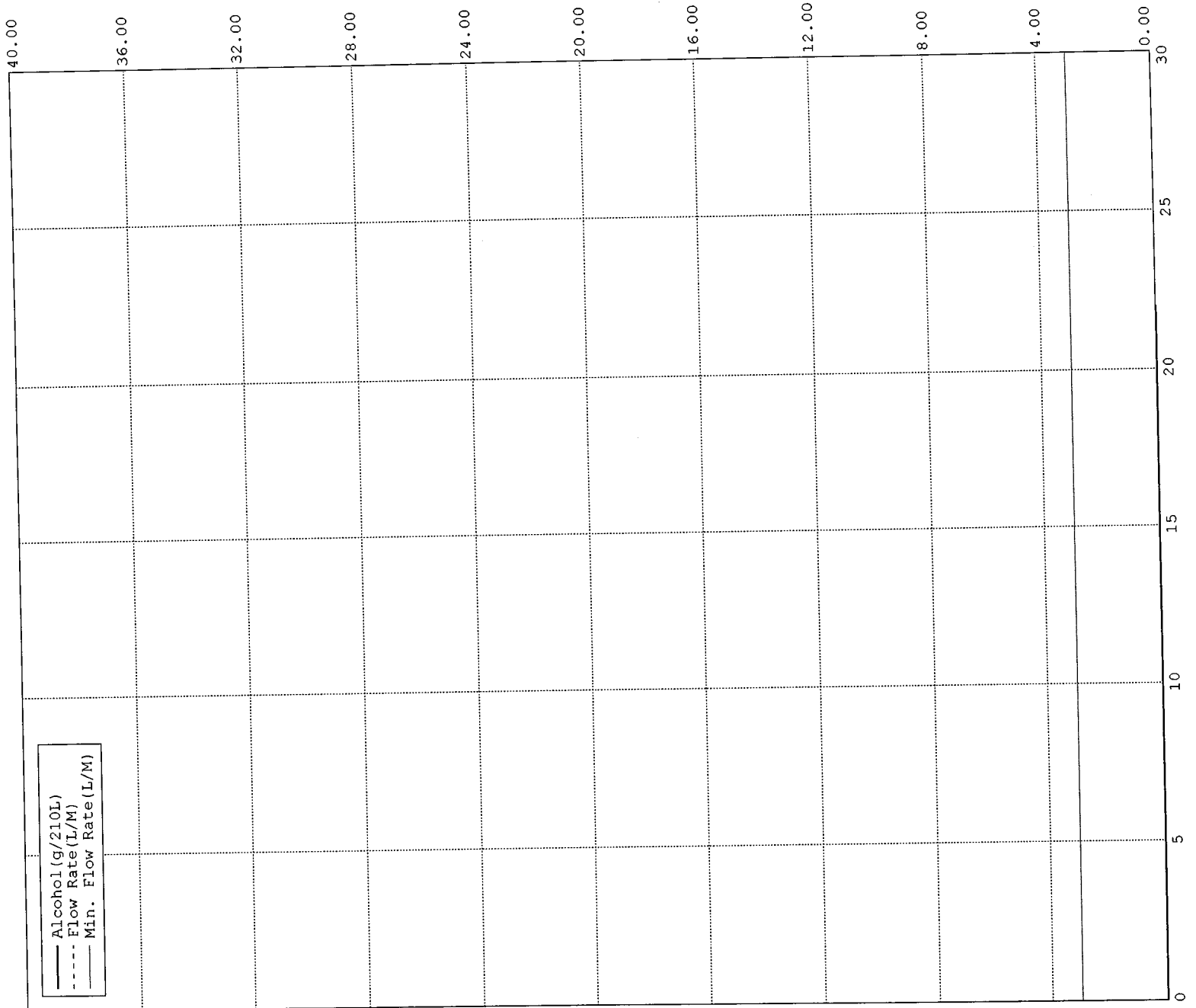
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.28: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 20:16
BLANK TEST 0.000 20:16
INTERNAL STANDARD VERIFIED 20:16
EXTERNAL STANDARD 0.079 20:16
BLANK TEST 0.000 20:17

RFI DETECTED

Handwritten signature



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 03/23/2020
Time: 16:56:46

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 30.25: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	16:57
BLANK TEST	0.000	16:58
INTERNAL STANDARD	VERIFIED	16:58
EXTERNAL STANDARD	0.080	16:58
BLANK TEST	0.000	16:59
SUBJECT SAMPLE (Vol=2.84L)	0.000	16:59
BLANK TEST	0.000	17:00
EXTERNAL STANDARD	0.080	17:00
BLANK TEST	0.000	17:01

