

Alaska Scientific Crime Detection Laboratory

DataMaster Certification Form

Issued: 05/15/2020
Effective: 05/15/2020

Version: DMCEF 2020 R0
Status: Active

Instrument S/N 100411 Analyst Derch walter Start Date 03/25/2021

Diagnostic Test (attached)

Internal Standard value $\leq 3.00\%$

Voltage Checks

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)

Set RFI

Adjust barometer reading to match NIST traceable barometer

Adjust volume setting, if needed (1.5L +/- 0.1L)

Print Technician Screen (attached)

Print Calibration Factors (attached)

Volume Test - Minimum 1.5 L (1.3L to 1.7L)

Linearity Test (attached)

Levels Used

i. 0.020g/210L Mnf Airgas Lot A6928203 Exp 10/09/21

ii. 0.040g/210L Mnf Airgas Lot A6915607 Exp 06/05/21

iii. 0.080g/210L Mnf Airgas Lot A6018102 Exp 06/29/22

iv. 0.100g/210L Mnf Airgas Lot A6924701 Exp 09/04/21

v. 0.200g/210L Mnf wath Lot 19200 Exp 08/06/21

Simulator S/N DR4161 Date Calibrated 05/08/20

vi. 0.300g/210L Mnf wath Lot 19330 Exp 11/13/21

Simulator S/N DR5298 Date Calibrated 05/08/20

Functional Tests (attached)

Incomplete

Invalid

Interference

i. Acetone - Mnf wath Lot 19301 Level 0.100 Exp 10/30/21

Simulator S/N SD1202 Date Calibrated 05/08/20

ii. Isopropanol - Mnf wath Lot 19301 Level 0.100 Exp 10/30/21

Simulator S/N SD1177 Date Calibrated 05/07/20

iii. Negative Control - Mnf wath Lot 19301 Level 0.100 Exp 10/30/21

Simulator S/N SD1088 Date Calibrated 05/08/20

Exceeded Attempts

RFI

Verify stylus is calibrated

Verification of Calibration

Reset Options

Non-Drinking Subject Test (attached)

Clear Memory

Upload

Remove tank prior to shut down

Add Linearity Data to Spreadsheet

End Date 03/26/21

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 03/25/2021
Time: 12:54:28

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 = 42.3°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.77 V PASSED
(1.06 V - 2.48 V)
Cooler Voltage = 1.77 V PASSED
(1.06 V - 2.48 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 533 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.7 in

PUMP INFO

Flow Rate = 5.358 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 = 0.077 1.55% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100411

Date: 03/25/2021
Time: 1:27 PM

Temperatures (°C)
Sample Cell: 48.8°C
Breath Tube: 41.7°C

Current Barometer 29.6 in
Volume (Ltr) 1.52

Settings
Lamp: 1.77 V
Bias: 80 V
Cooler: 1.77 V
Chopper: 521 Hz

Voltages (V)
Flow: 1.05 V
Detector: 0.014 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 03/08/2021
Time: 13:19:26

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca	=	0.1000		
CAL	=	0.998486	0.800	<= CAL < 1.200
b1	=	0.0004	0.0000	<= b1 < 0.0040
b2	=	0.0043	0.0010	<= b2 < 0.0100
b3	=	0.0005	0.0000	<= b3 < 0.0040
Xq	=	0.0782	0.0500	<= Xq < 0.2000
a21	=	1.119847	1.050	<= a21 < 1.300
a31	=	0.479623	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100411

Date: 03/25/2021
Time: 13:42:40

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

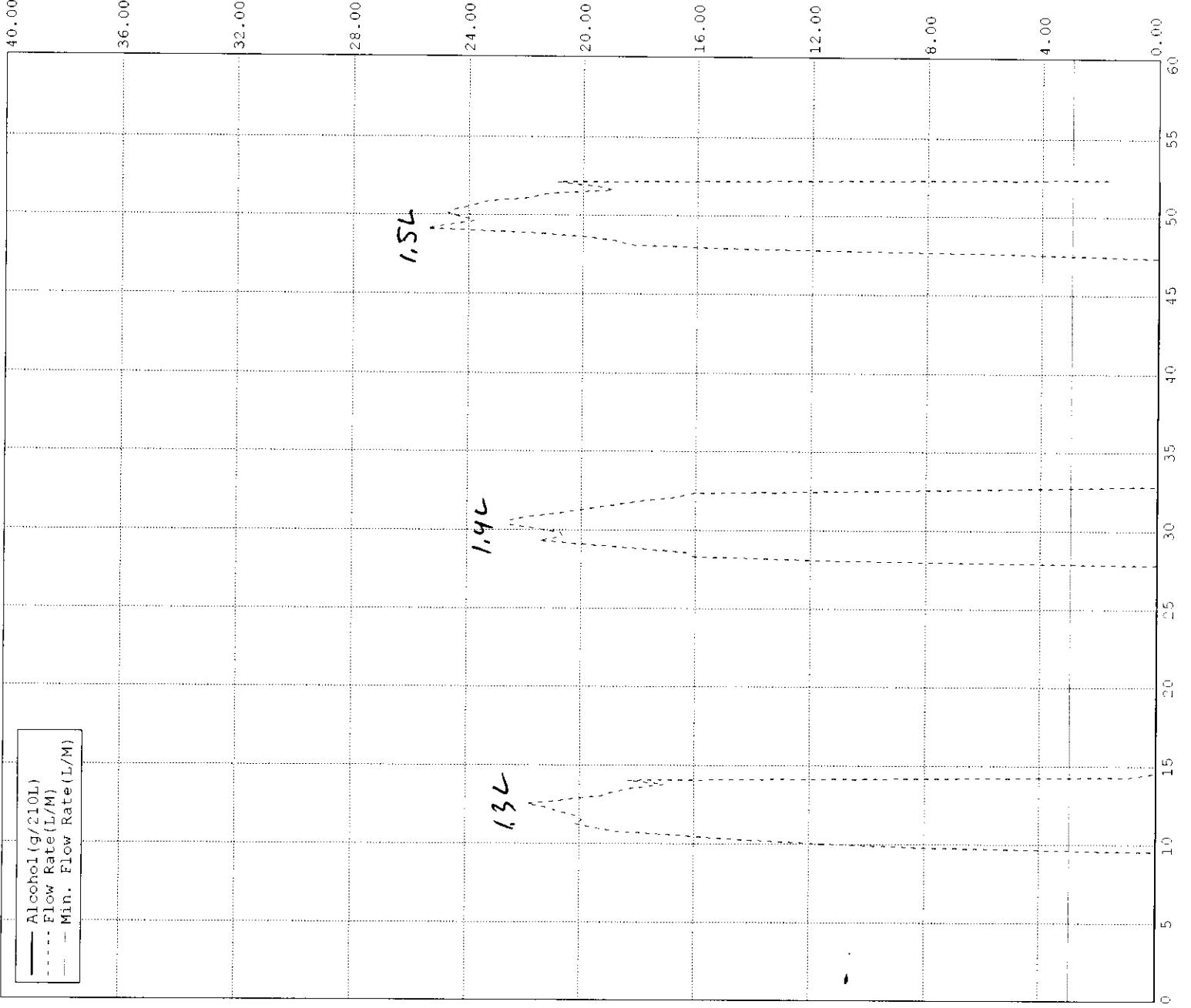
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.64: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	13:43
BLANK TEST	0.000	13:43
INTERNAL STANDARD	VERIFIED	13:44
EXTERNAL STANDARD	0.078	13:44
BLANK TEST	0.000	13:45
SUBJECT SAMPLE (Vol=1.65L)	0.000	13:46
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.079	13:47
BLANK TEST	0.000	13:48



LINEARITY CHECK

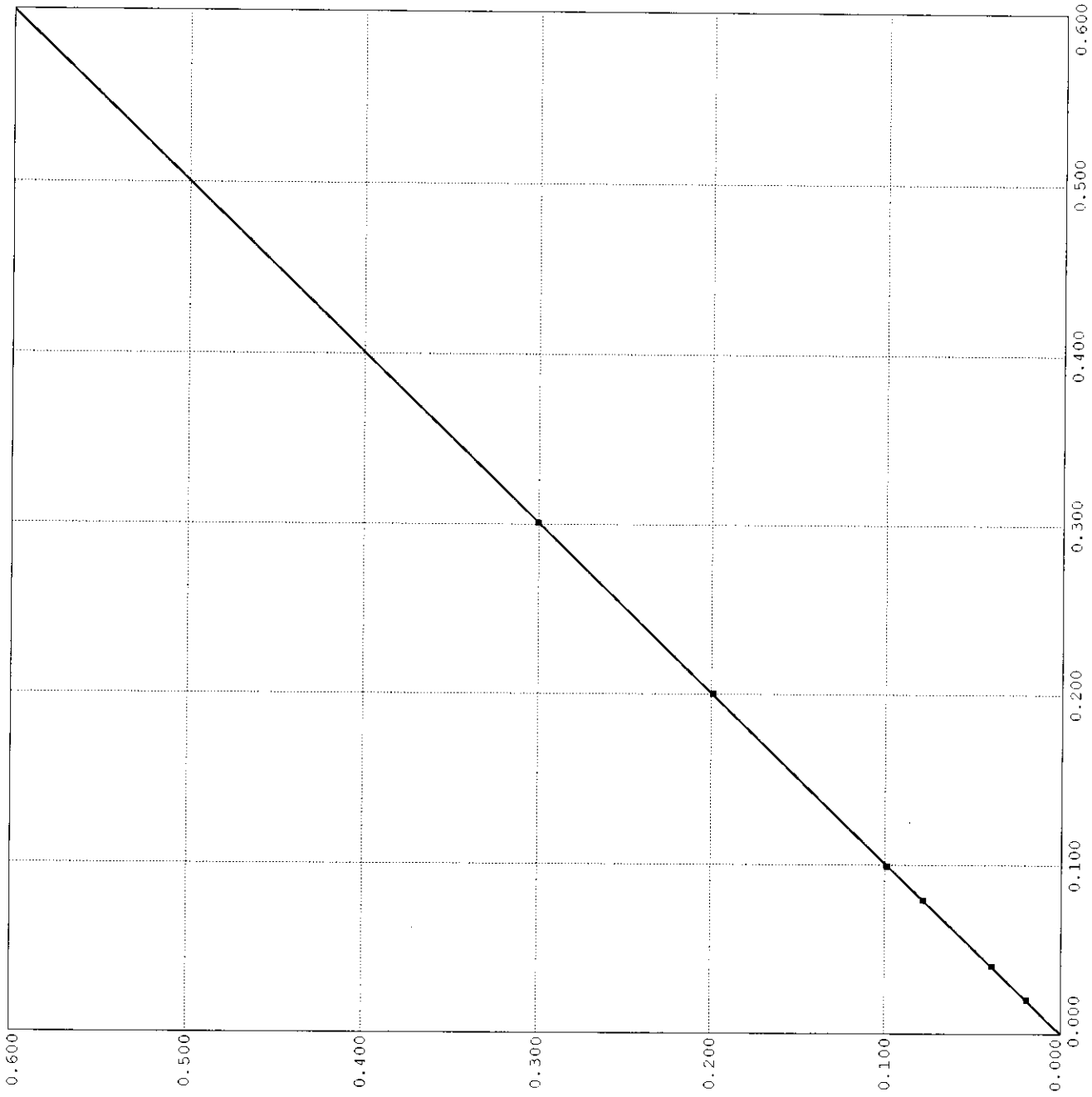
Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 03/25/2021
Time: 13:54:11

SUPERVISOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0400	0.0000
0.079	0.0792	0.0004
0.099	0.1000	0.0000
0.200	0.1998	0.0004
0.300	0.3008	0.0008

SLOPE = 1.001631
R² = 0.999982



DM

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100411

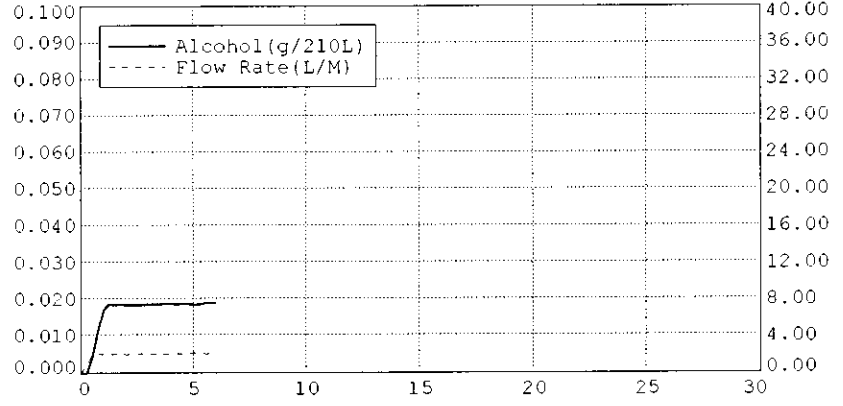
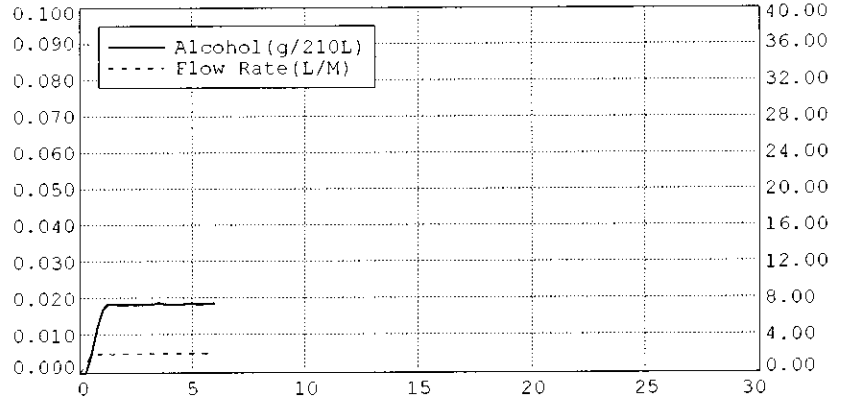
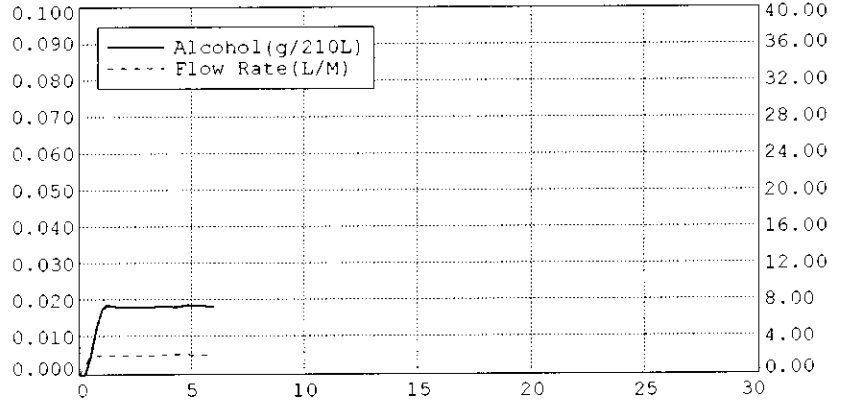
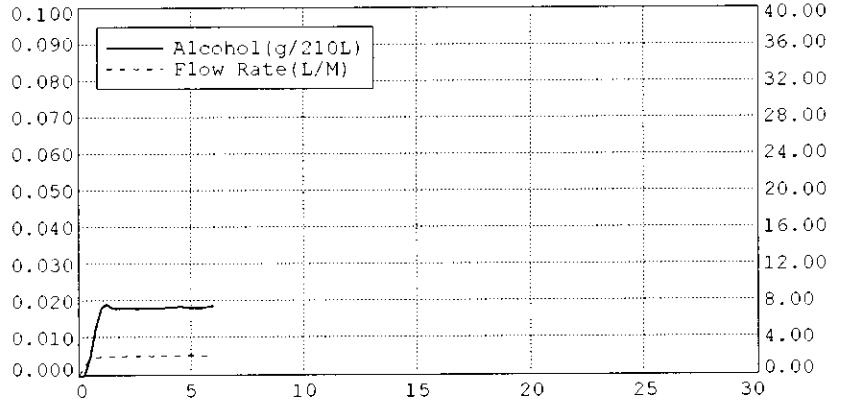
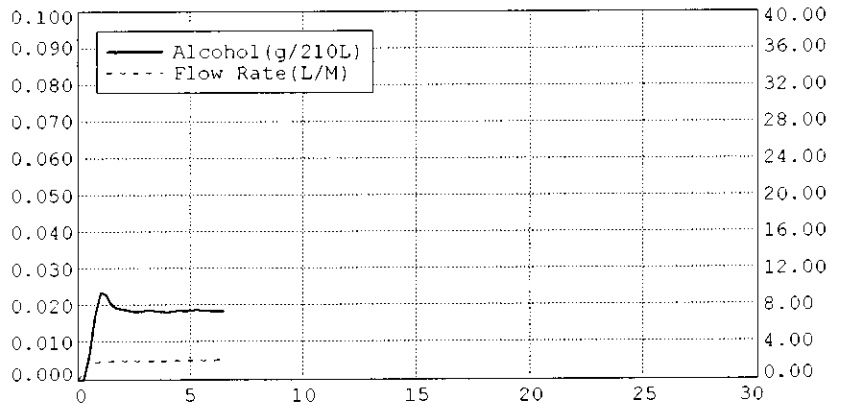
Date: 03/25/2021
Time: 13:54:13

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.64: 0.020
LOT #: AG928203
EXPIRATION: 10/09/2021
TANK PRESSURE: 611 psi

BLANK TEST	0.000	13:55
INTERNAL STANDARD	VERIFIED	13:55
EXTERNAL STANDARD	0.020	13:56
BLANK TEST	0.000	13:56
EXTERNAL STANDARD	0.020	13:57
BLANK TEST	0.000	13:58
EXTERNAL STANDARD	0.020	13:58
BLANK TEST	0.000	13:59
EXTERNAL STANDARD	0.020	13:59
BLANK TEST	0.000	14:00
EXTERNAL STANDARD	0.020	14:00
BLANK TEST	0.000	14:01

Average = 0.0200
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

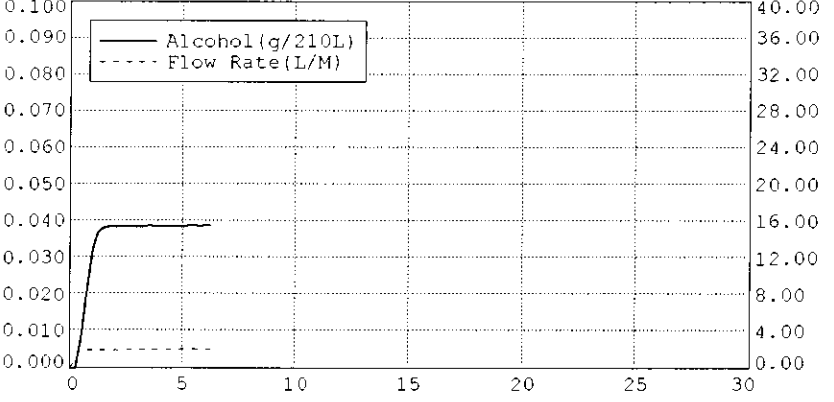
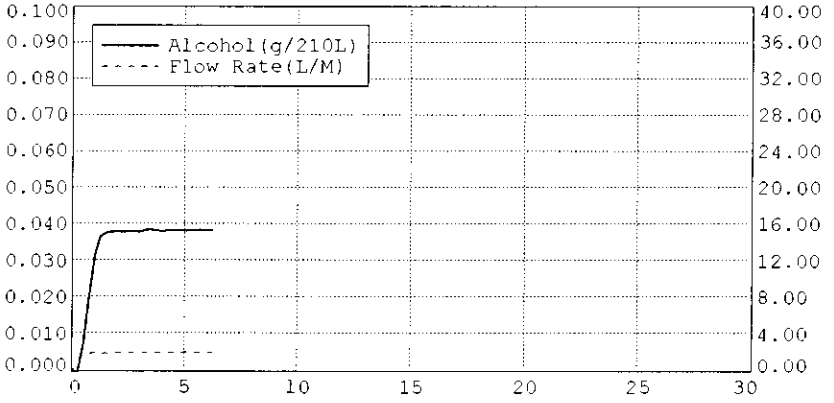
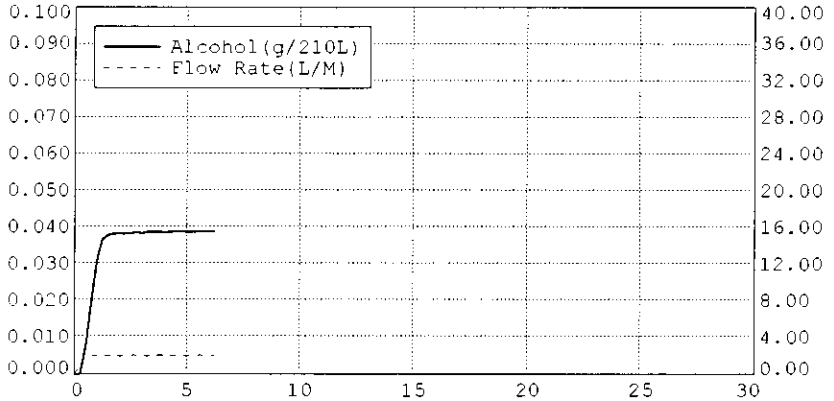
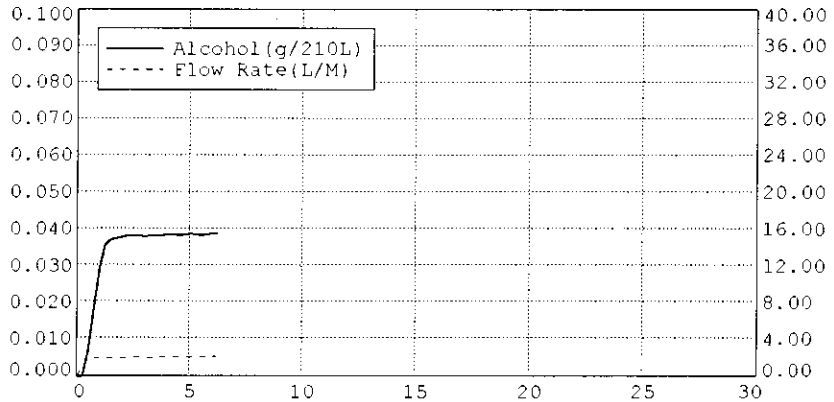
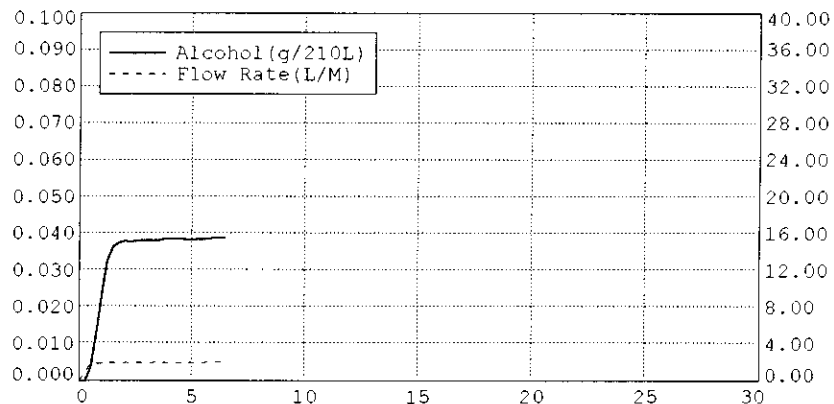
Date: 03/25/2021
 Time: 14:01:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.64: 0.040
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 363 psi

BLANK TEST	0.000	14:03
INTERNAL STANDARD	VERIFIED	14:03
EXTERNAL STANDARD	0.040	14:03
BLANK TEST	0.000	14:04
EXTERNAL STANDARD	0.040	14:04
BLANK TEST	0.000	14:05
EXTERNAL STANDARD	0.040	14:05
BLANK TEST	0.000	14:06
EXTERNAL STANDARD	0.040	14:06
BLANK TEST	0.000	14:07
EXTERNAL STANDARD	0.040	14:08
BLANK TEST	0.000	14:08

Average = 0.0400
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

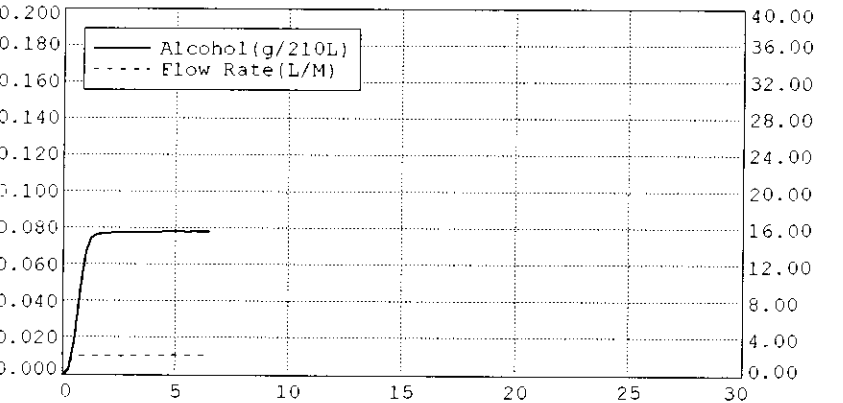
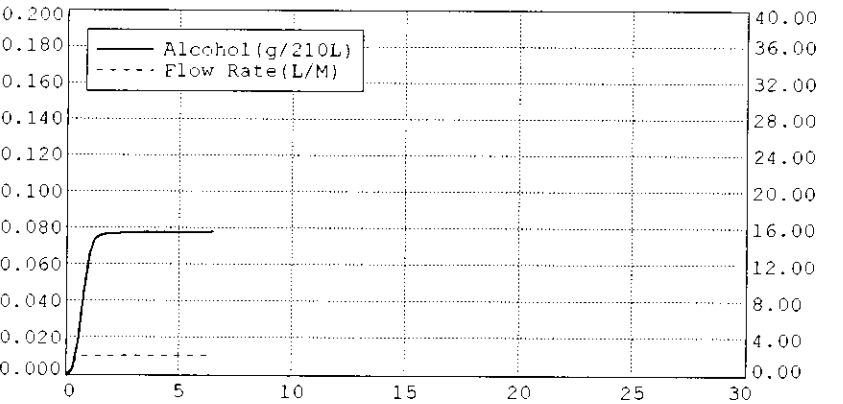
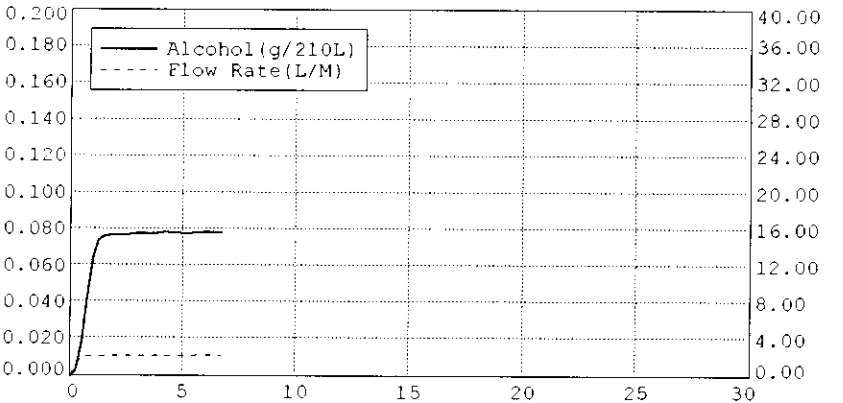
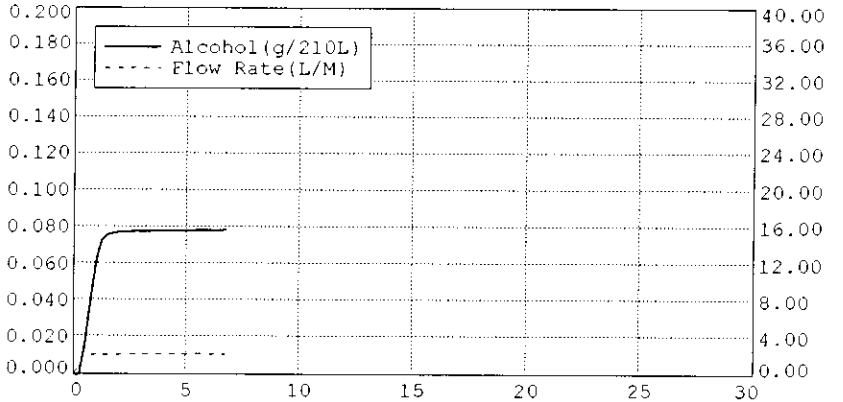
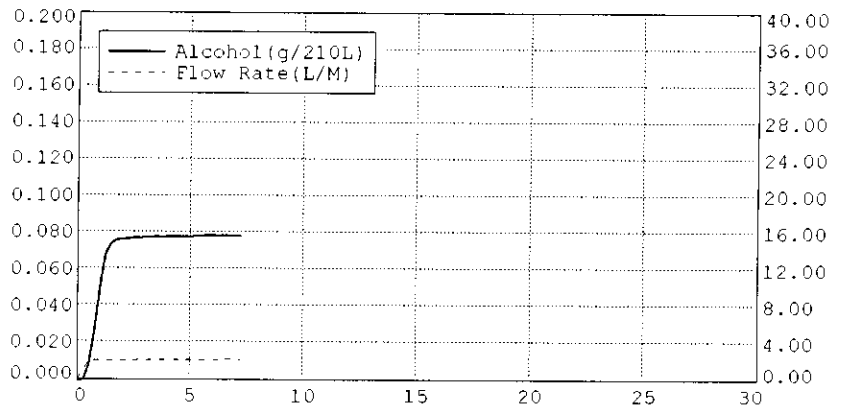
Date: 03/25/2021
 Time: 14:09:49

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.64: 0.079
 LOT #: AG018102
 EXPIRATION: 06/29/2022
 TANK PRESSURE: 611 psi

BLANK TEST	0.000	14:11
INTERNAL STANDARD	VERIFIED	14:11
EXTERNAL STANDARD	0.079	14:11
BLANK TEST	0.000	14:12
EXTERNAL STANDARD	0.079	14:12
BLANK TEST	0.000	14:13
EXTERNAL STANDARD	0.079	14:13
BLANK TEST	0.000	14:14
EXTERNAL STANDARD	0.079	14:14
BLANK TEST	0.000	14:15
EXTERNAL STANDARD	0.080	14:15
BLANK TEST	0.000	14:16

Average = 0.0792
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

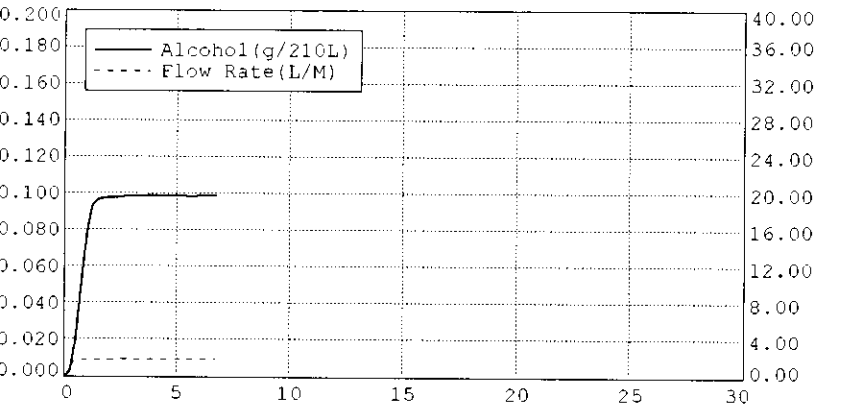
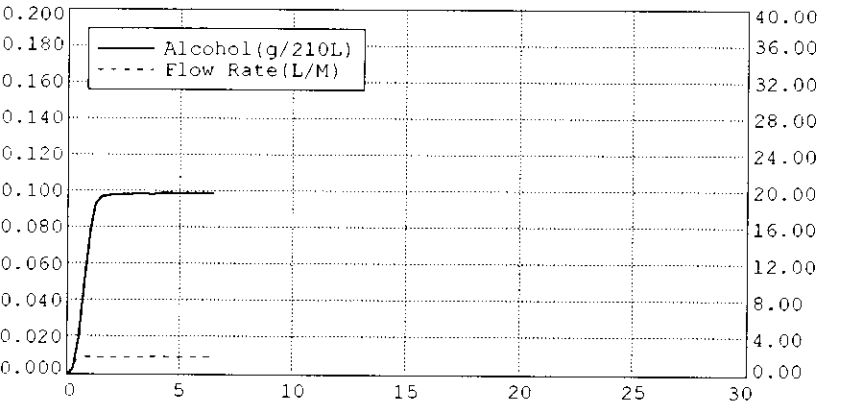
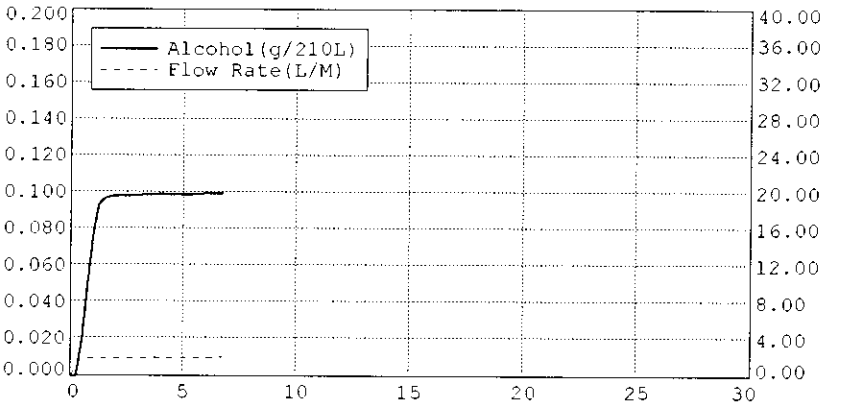
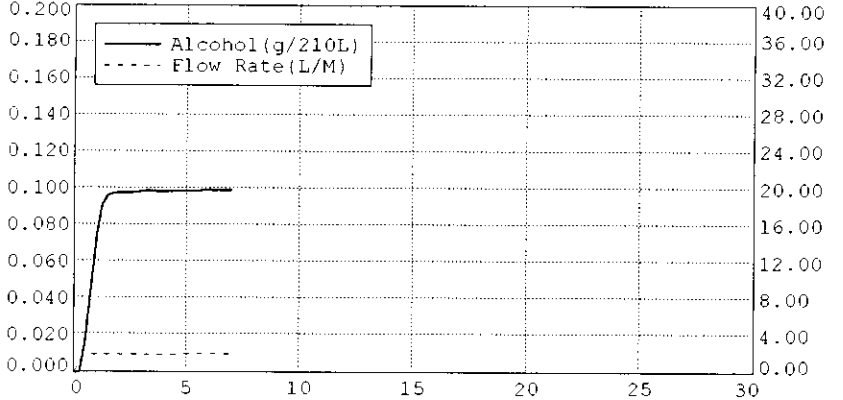
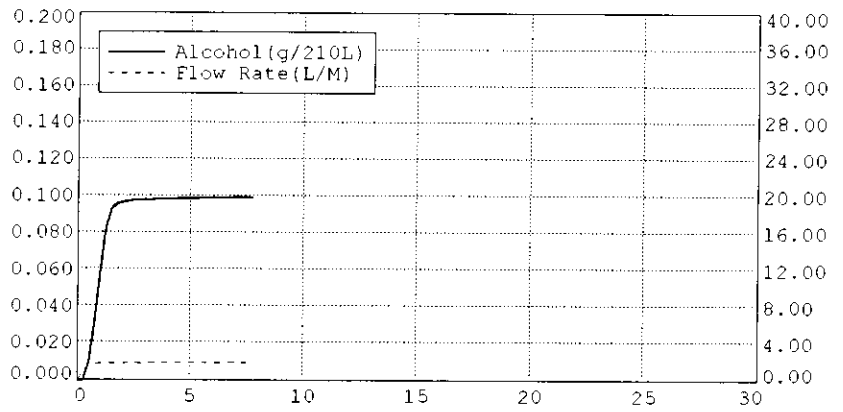
Date: 03/25/2021
 Time: 14:19:09

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.64: 0.099
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 190 psi

BLANK TEST	0.000	14:20
INTERNAL STANDARD	VERIFIED	14:20
EXTERNAL STANDARD	0.100	14:20
BLANK TEST	0.000	14:21
EXTERNAL STANDARD	0.100	14:21
BLANK TEST	0.000	14:22
EXTERNAL STANDARD	0.100	14:22
BLANK TEST	0.000	14:23
EXTERNAL STANDARD	0.100	14:23
BLANK TEST	0.000	14:24
EXTERNAL STANDARD	0.100	14:25
BLANK TEST	0.000	14:25

Average = 0.1000
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

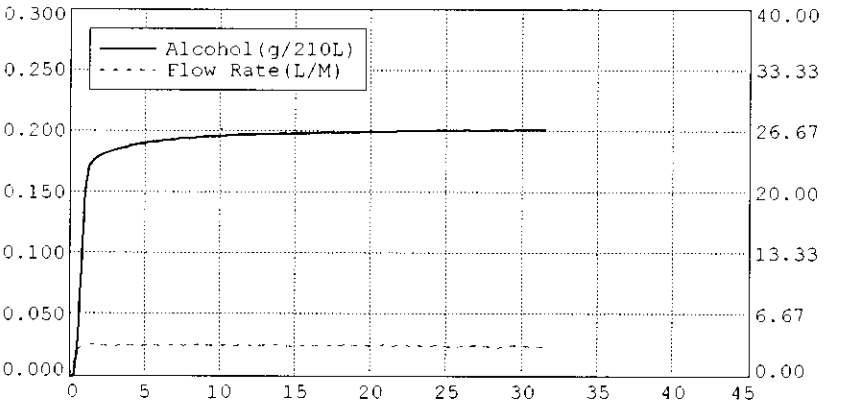
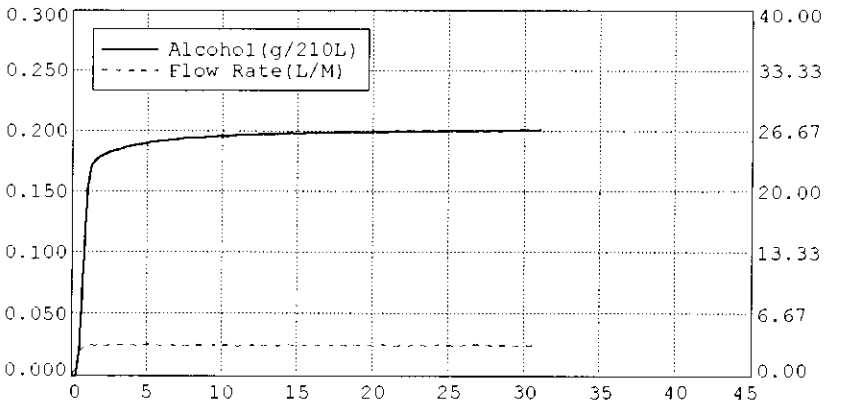
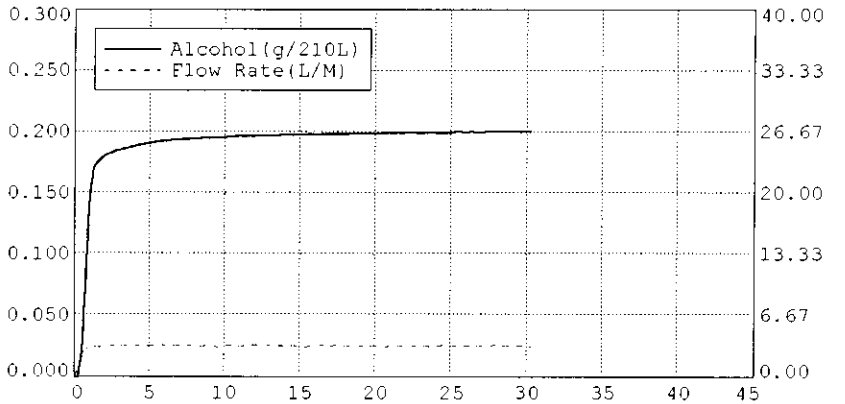
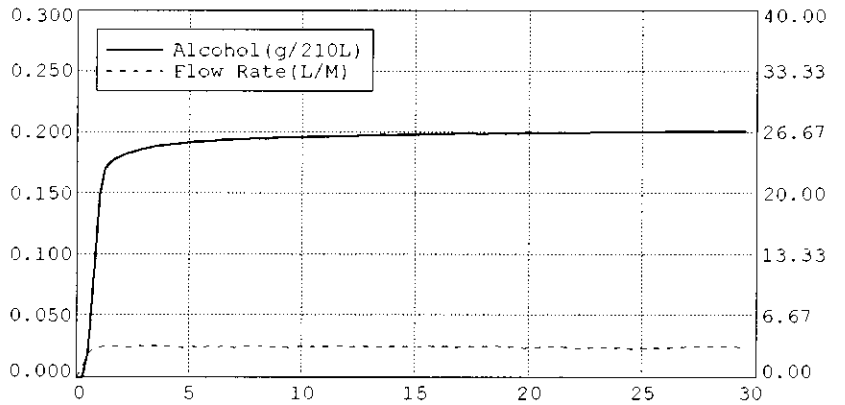
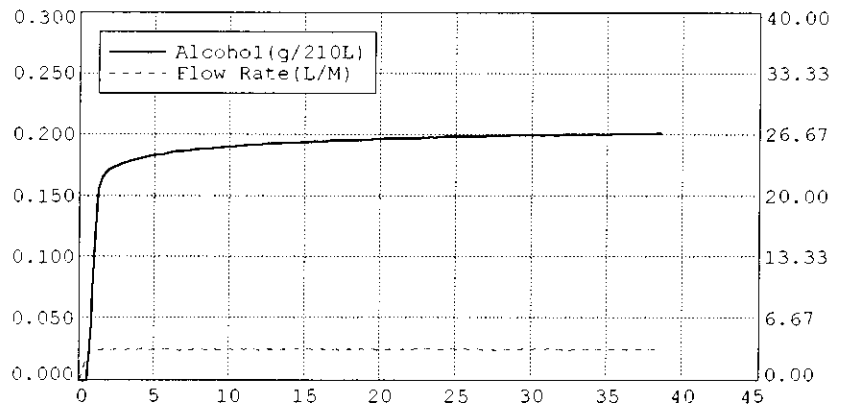
Date: 03/25/2021
 Time: 14:39:28

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: 19200
 EXPIRATION: 08/06/2021

BLANK TEST	0.000	14:51
INTERNAL STANDARD	VERIFIED	14:51
EXTERNAL STANDARD	0.200	14:52
BLANK TEST	0.000	14:53
EXTERNAL STANDARD	0.200	14:54
BLANK TEST	0.000	14:55
EXTERNAL STANDARD	0.199	14:55
BLANK TEST	0.000	14:56
EXTERNAL STANDARD	0.200	14:57
BLANK TEST	0.000	14:58
EXTERNAL STANDARD	0.200	14:58
BLANK TEST	0.000	14:59

Average = 0.1998
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

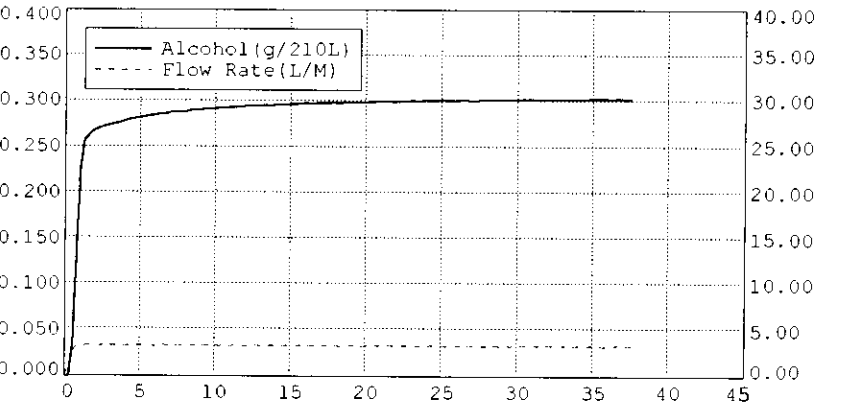
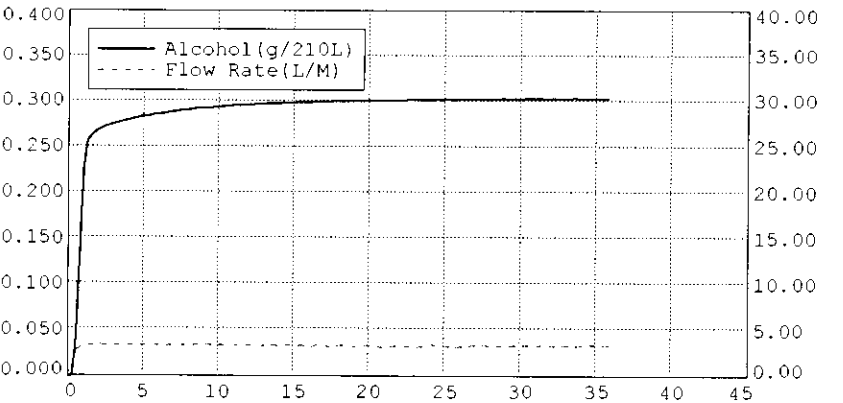
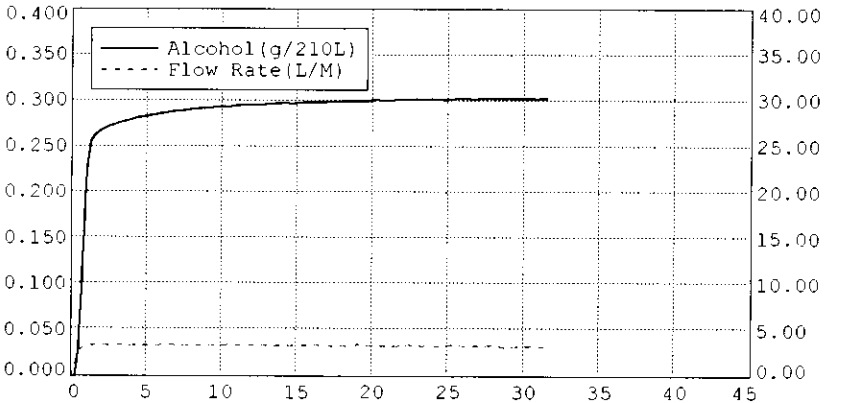
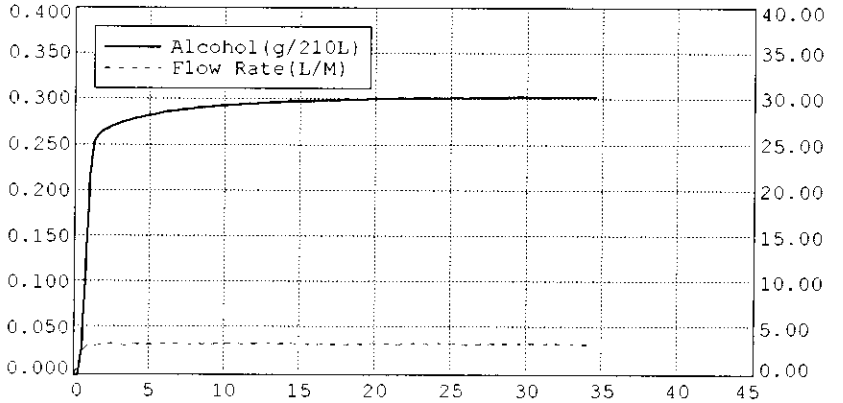
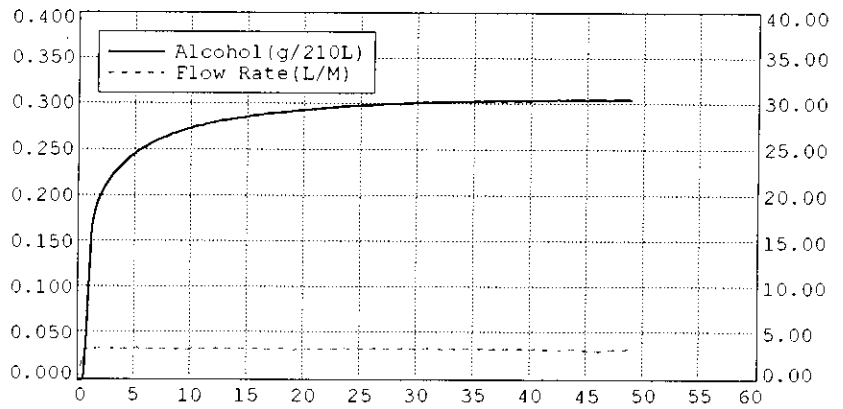
Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 03/25/2021
Time: 15:03:59

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

BLANK TEST	0.000	15:05
INTERNAL STANDARD	VERIFIED	15:05
EXTERNAL STANDARD	0.302	15:06
BLANK TEST	0.000	15:07
EXTERNAL STANDARD	0.301	15:07
BLANK TEST	0.000	15:08
EXTERNAL STANDARD	0.300	15:09
BLANK TEST	0.000	15:10
EXTERNAL STANDARD	0.301	15:10
BLANK TEST	0.000	15:11
EXTERNAL STANDARD	0.300	15:12
BLANK TEST	0.000	15:13

Average = 0.3008
Std Dev = 0.0008



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 03/25/2021
Time: 15:20:14

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

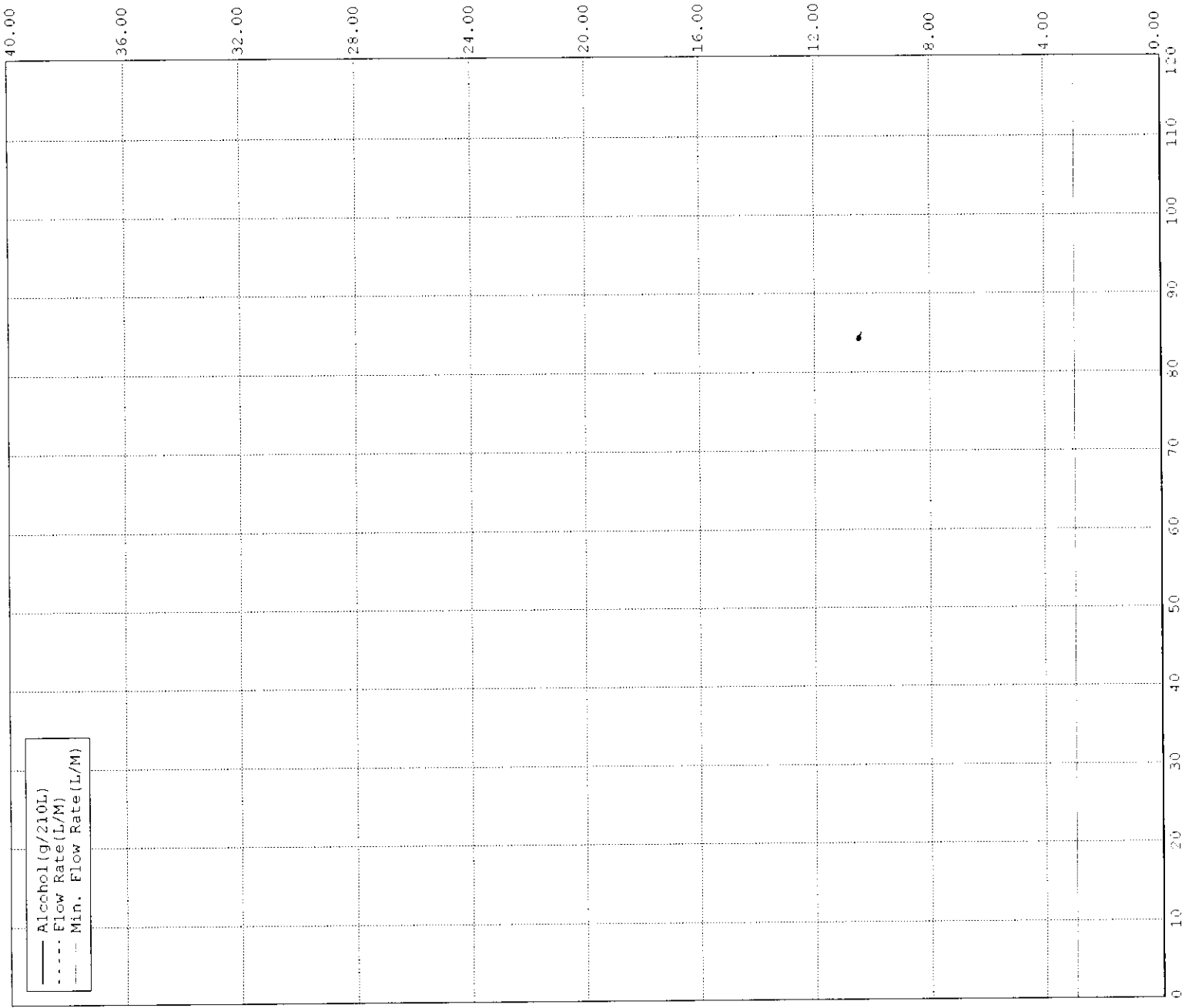
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.64: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 15:21
BLANK TEST 0.000 15:21
INTERNAL STANDARD VERIFIED 15:21
EXTERNAL STANDARD 0.078 15:21
BLANK TEST 0.000 15:22
SUBJECT SAMPLE INCOMPLETE 15:24

Handwritten signature



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 03/26/2021
Time: 12:35:06

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

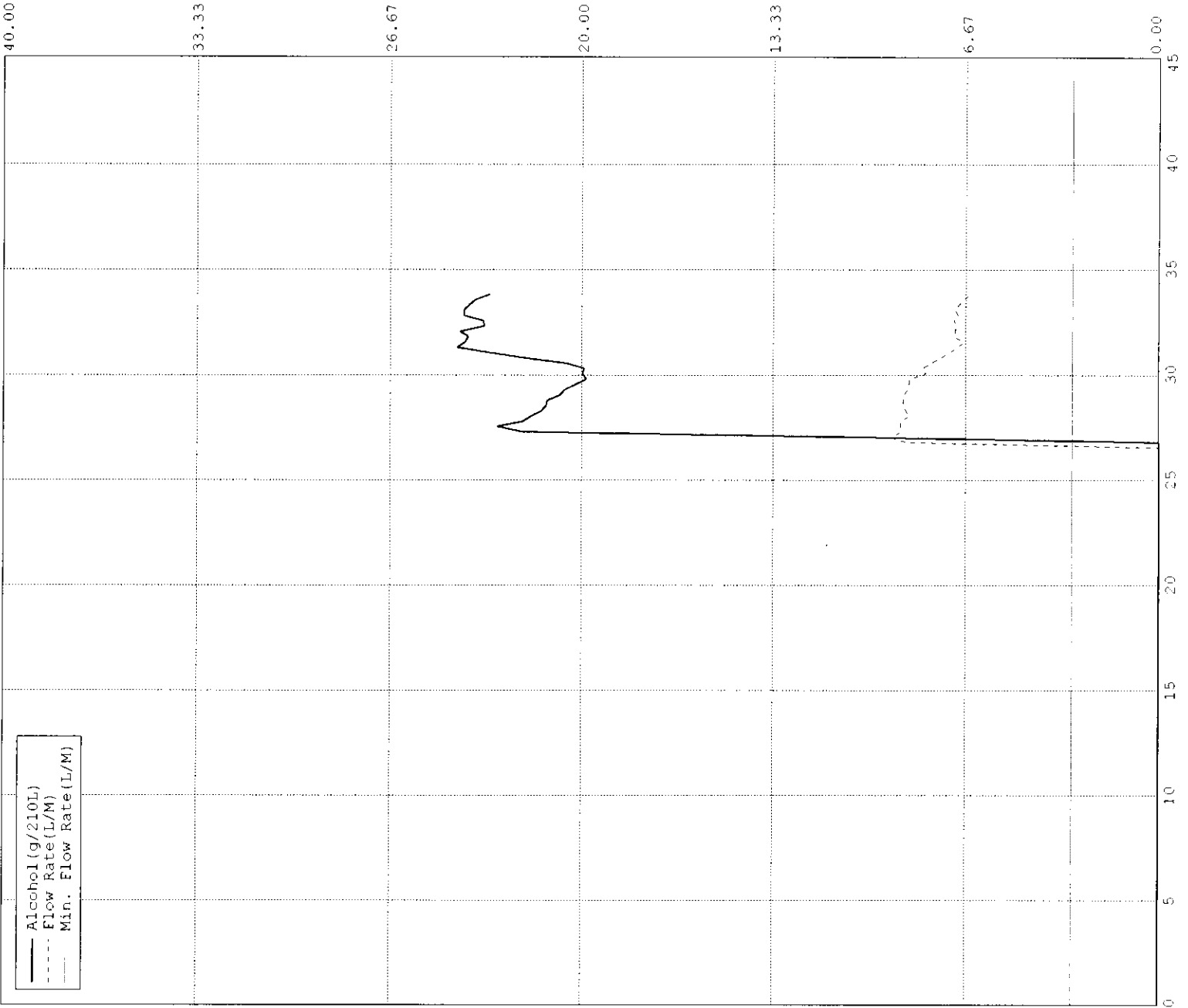
DEPT/AGENCY:
INVALID
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.66: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:37
BLANK TEST 0.000 12:37
INTERNAL STANDARD VERIFIED 12:37
EXTERNAL STANDARD 0.080 12:37
BLANK TEST 0.000 12:38
SUBJECT SAMPLE INVALID 12:40

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 03/26/2021
Time: 12:03:00

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 29.66: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

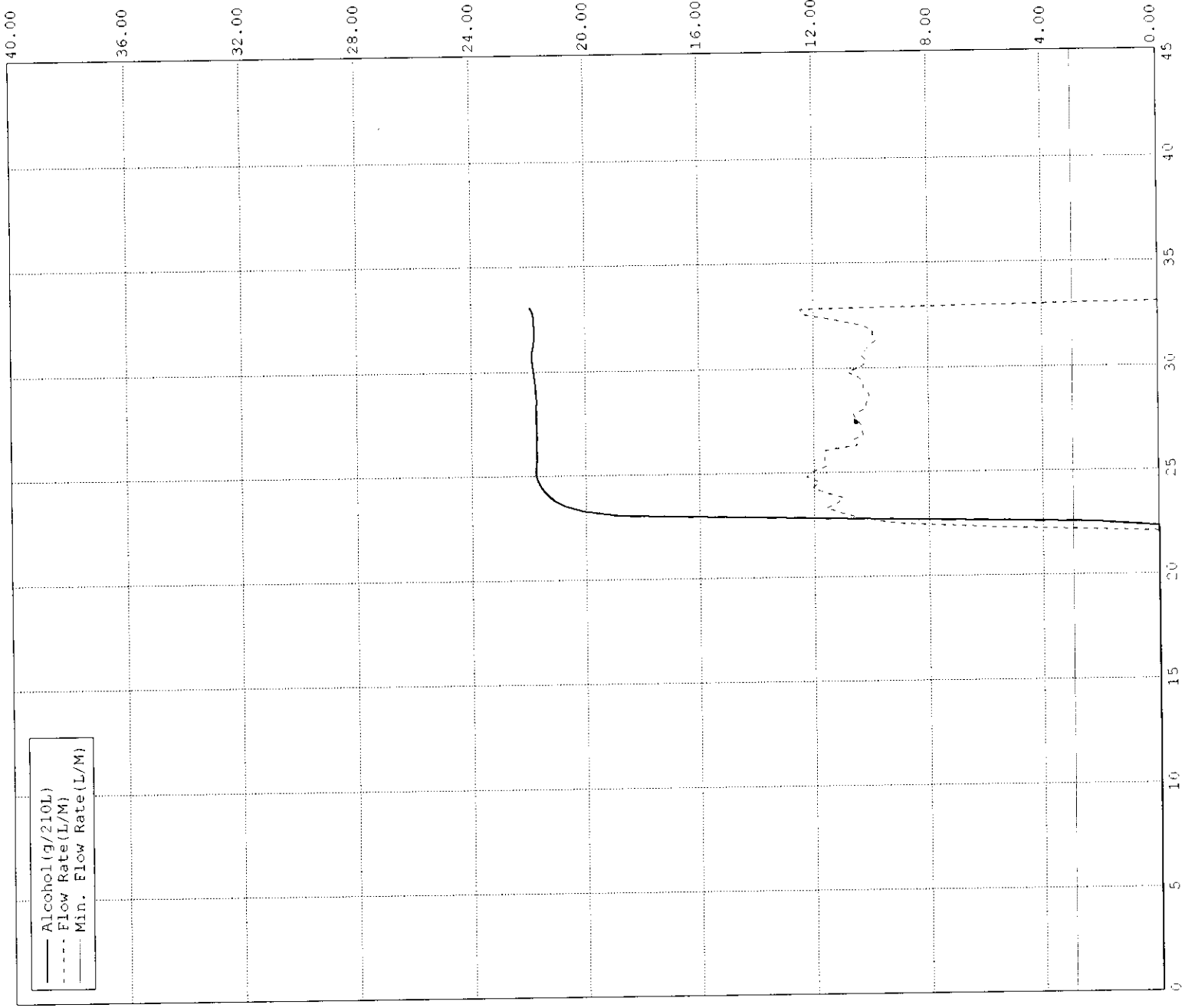
DIAGNOSTIC CHECK PASSED 12:03
BLANK TEST 0.000 12:04
INTERNAL STANDARD VERIFIED 12:04
Xq = 0.077 (1.22%)
EXTERNAL STANDARD 0.079 12:04
X[1] = 0.0786 (-0.0015) (0.0017)
BLANK TEST 0.000 12:05
SUBJECT SAMPLE XXX 12:05
X[1] = 0.1104 (-0.0204) (-0.0003)

Interference Detected

Filter 2 average: -0.0017

Filter 3 average: 0.0017

JW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 03/26/2021
Time: 12:08:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

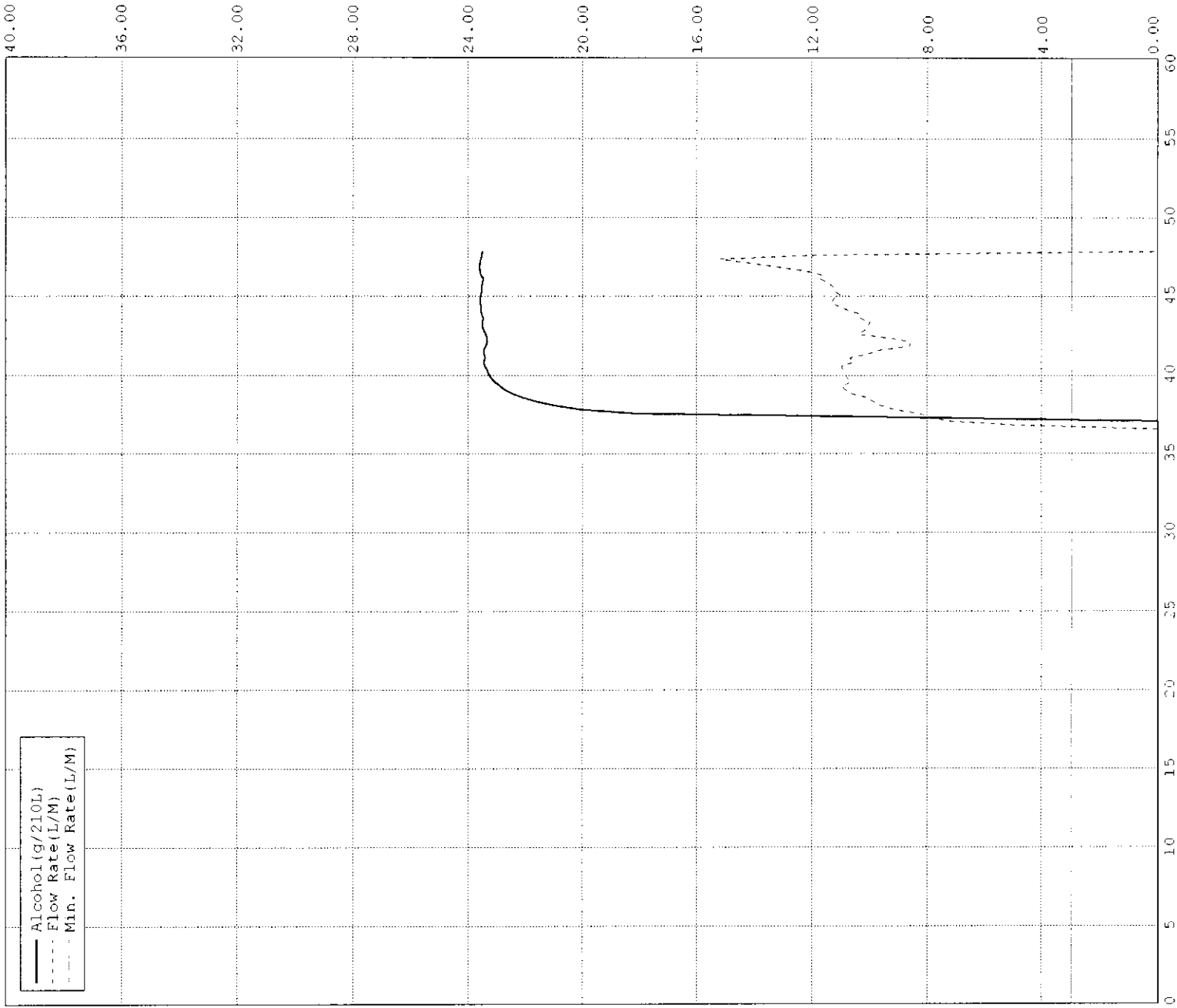
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.66: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:12
BLANK TEST 0.000 12:12
INTERNAL STANDARD VERIFIED 12:12
Xq = 0.077 (0.89%)
EXTERNAL STANDARD 0.079 12:12
X[1] = 0.0790 (-0.0019) (0.0013)
BLANK TEST 0.000 12:13
SUBJECT SAMPLE XXX 12:14
X[1] = 0.1184 (-0.0218) (0.0000)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 03/26/2021
Time: 12:20:17

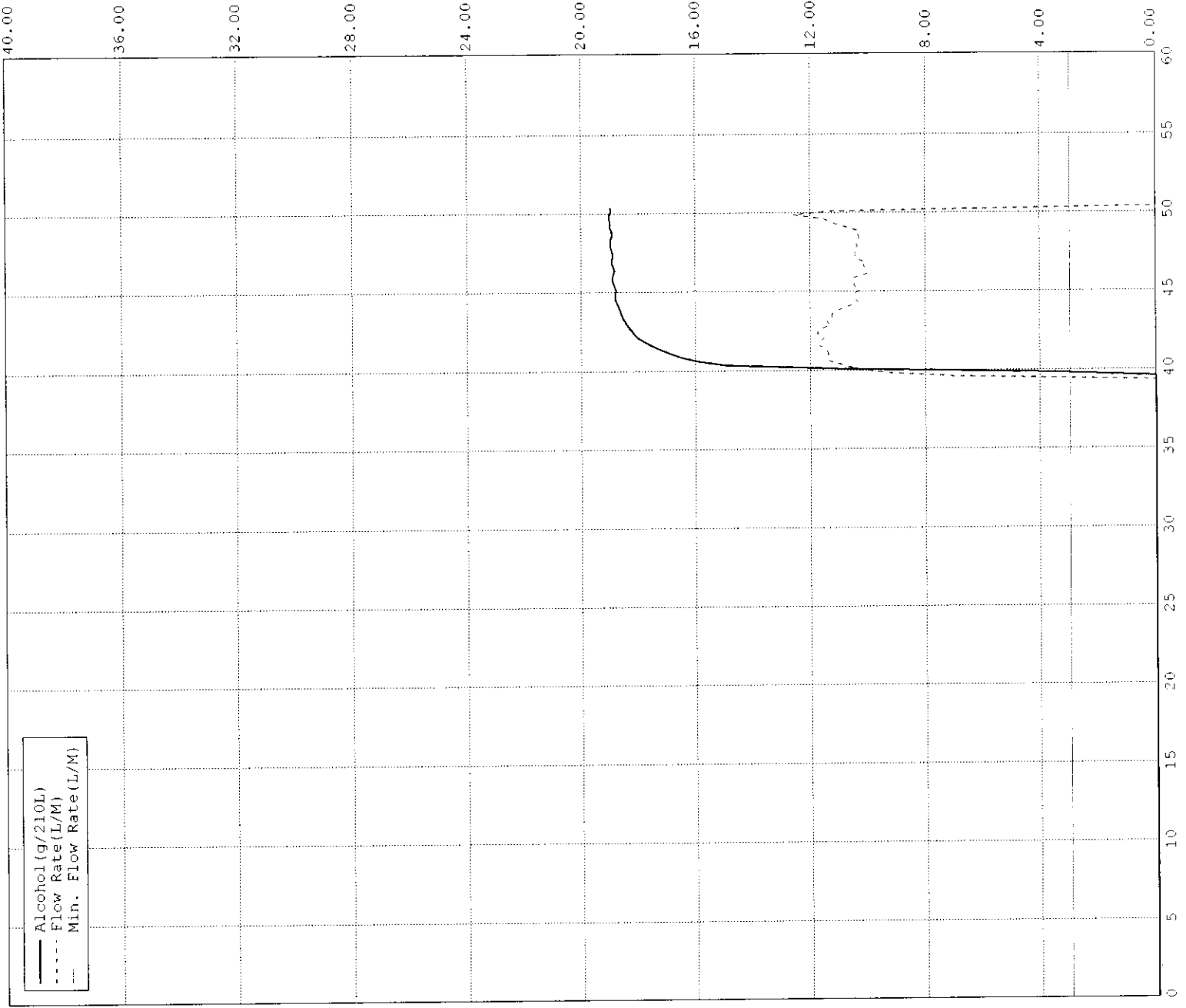
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 29.66: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	12:22
BLANK TEST	0.000	12:23
INTERNAL STANDARD	VERIFIED	12:23
$Xq = 0.078$ (0.11%)		
EXTERNAL STANDARD	0.079	12:23
$X[1] = 0.0789$ (-0.0016)	(0.0021)	
BLANK TEST	0.000	12:24
SUBJECT SAMPLE (Vol=1.93L)	0.096	12:25
$X[1] = 0.0960$ (-0.0013)	(-0.0004)	
BLANK TEST	0.000	12:26
EXTERNAL STANDARD	0.078	12:26
$X[1] = 0.0784$ (-0.0019)	(0.0016)	
BLANK TEST	0.000	12:27



SUBJECT TEST

Alaska Department of Public Safety

DATA MASTER dmt: 100411

Date: 03/25/2021

Time: 15:27:22

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 29.64: 0.079

LOT #: AG018102

EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK

PASSED 15:28

BLANK TEST 0.000 15:28

INTERNAL STANDARD

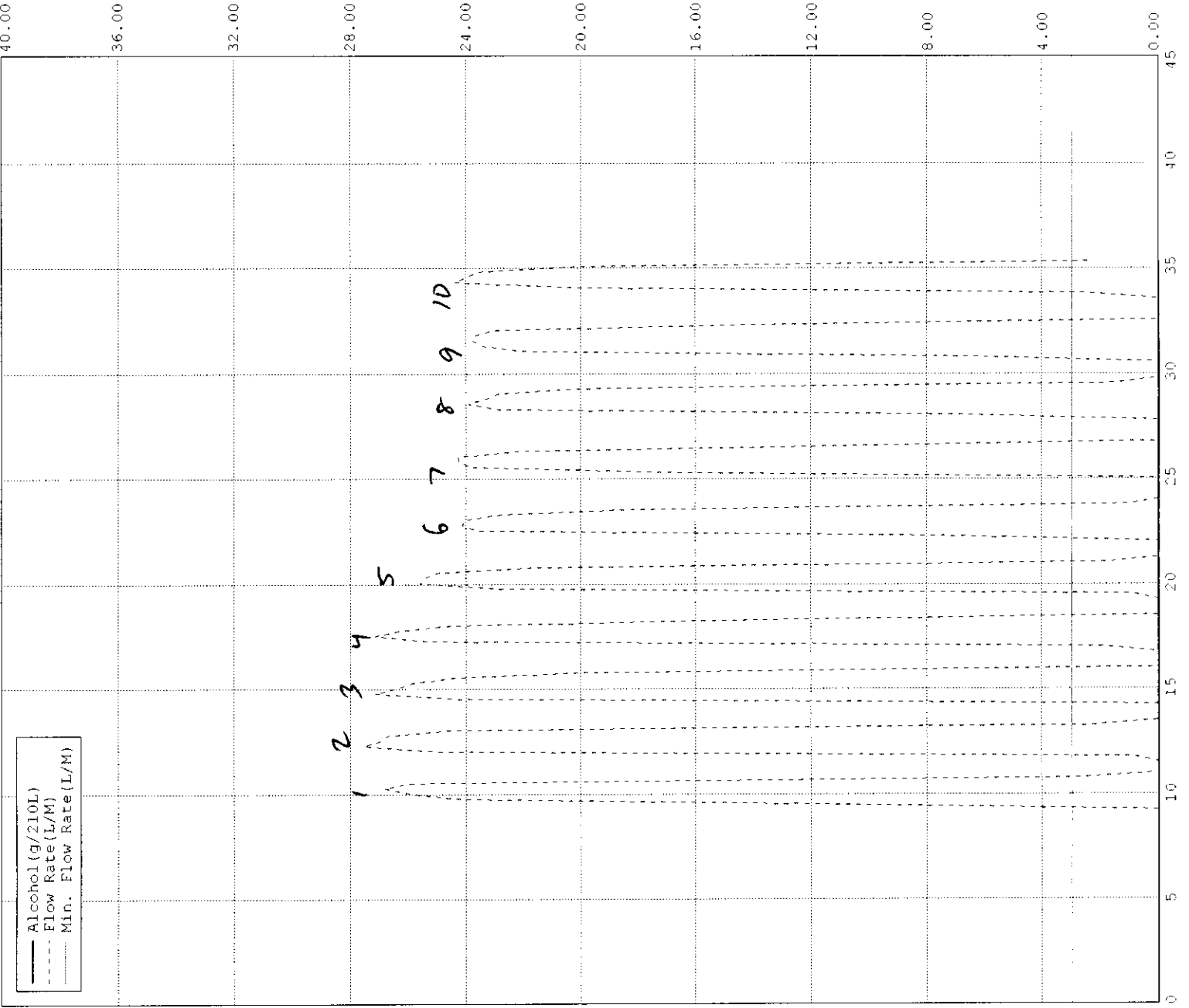
VERIFIED 15:28

EXTERNAL STANDARD 0.079 15:28

BLANK TEST 0.000 15:29

SUBJECT SAMPLE XXX 15:30

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 03/26/2021
Time: 12:42:44

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

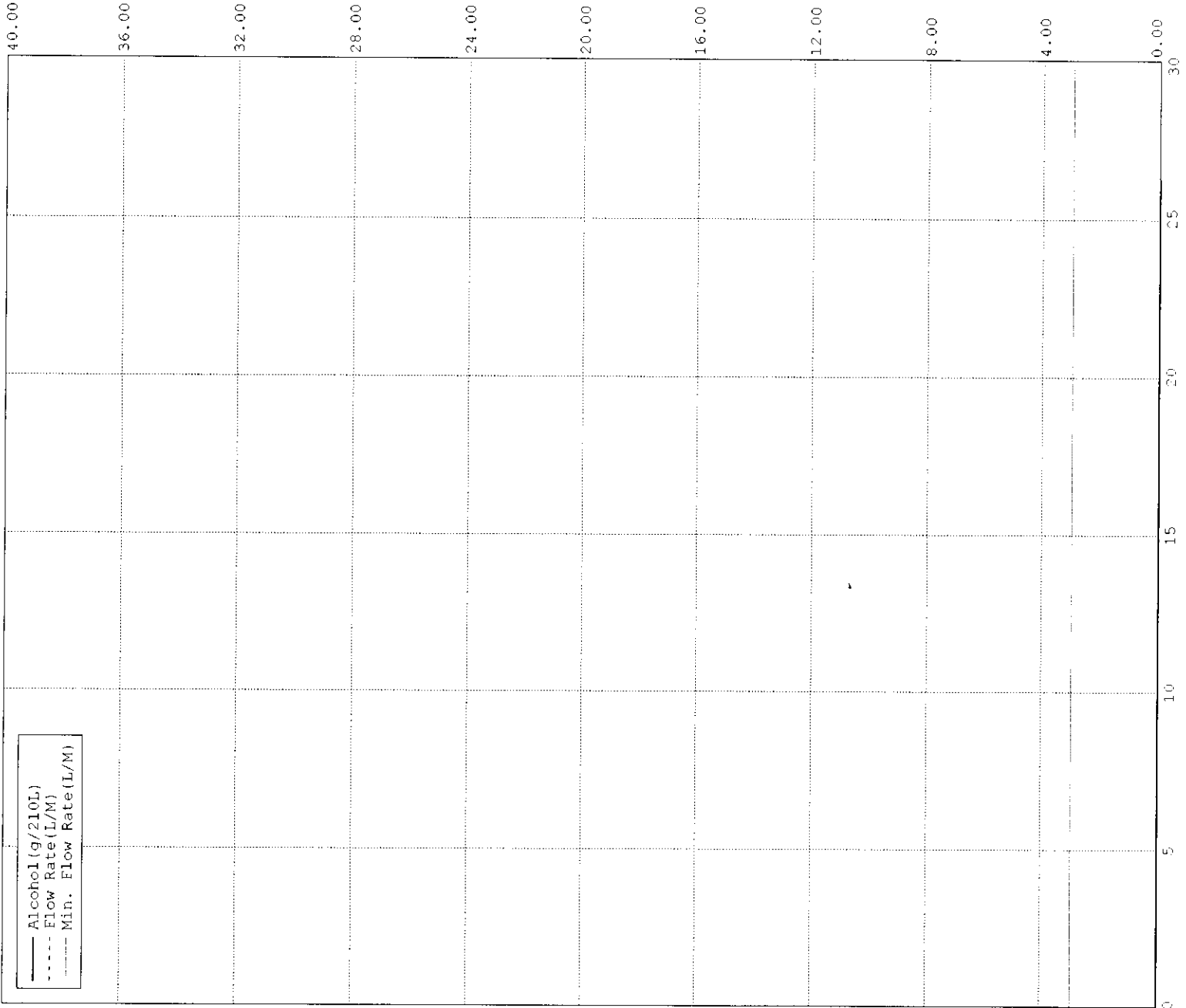
DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.66: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:44
BLANK TEST 0.000 12:44
INTERNAL STANDARD VERIFIED 12:44
EXTERNAL STANDARD 0.079 12:45
BLANK TEST 0.000 12:45

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 03/26/2021
Time: 13:06:40

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 29.66: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	13:08
BLANK TEST	0.000	13:08
INTERNAL STANDARD	VERIFIED	13:08
EXTERNAL STANDARD	0.079	13:08
BLANK TEST	0.000	13:09
SUBJECT SAMPLE (Vol=2.54L)	0.000	13:10
BLANK TEST	0.000	13:11
EXTERNAL STANDARD	0.079	13:11
BLANK TEST	0.000	13:12

