

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 100424 Analyst Derek Walton Start Date 03/25/21

- 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 1.6 L (1.3L to 1.7L)

Linearity Test (attached)

Levels Used

- i. 0.020g/210L Mnf Airgas Lot A6928203 Exp 10/07/2021
- 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 Wttn Lot 19200 Exp 08/06/21
Simulator S/N DR4161 Date Calibrated 05/08/20
- vi. 0.300g/210L Mnf Wttn Lot 19330 Exp 11/13/21
Simulator S/N DR5298 Date Calibrated 05/08/20

Functional Tests (attached)

- Incomplete Invalid
 Interference

- i. Acetone - Mnf Wttn Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N SD1202 Date Calibrated 05/08/20
- ii. Isopropanol - Mnf Wttn Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N SD1177 Date Calibrated 05/07/20
- iii. Negative Control - Mnf Wttn 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
- Reset Options
- Clear Memory
- Remove tank prior to shut down
- Verification of Calibration
- Non-Drinking Subject Test (attached)
- Upload
- Add Linearity Data to Spreadsheet

End Date 03/26/21

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/25/2021
Time: 13:01:20

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 47.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.68 V PASSED
(1.03 V - 2.39 V)
Cooler Voltage = 1.63 V PASSED
(1.04 V - 2.42 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 536 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.7 in

PUMP INFO

Flow Rate = 5.500 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.001 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 = 0.079 0.00% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100424

Date: 03/25/2021

Time: 1:22 PM

Temperatures (°C)

Sample Cell: 49.1°C

Breath Tube: 45.7°C

Current Barometer 29.7 in

Volume (Ltr) 1.46

Settings

Lamp: 1.68 V

Bias: 80 V

Cooler: 1.68 V

Chopper: 524 Hz

Voltages (V)

Flow: 1.04 V

Detector: -0.036 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 02/04/2021
Time: 08:40:43

OPERATOR NAME:
ST LOUIS INTOX A TECH
CERTIFICATE #: OU8122

Ca = 0.1990
CAL = 1.027085 0.800 <= CAL < 1.200
b1 = 0.0004 0.0000 <= b1 < 0.0040
b2 = 0.0051 0.0010 <= b2 < 0.0100
b3 = 0.0004 0.0000 <= b3 < 0.0040
Xq = 0.0785 0.0500 <= Xq < 0.2000
a21 = 1.135345 1.050 <= a21 < 1.300
a31 = 0.399030 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/25/2021
Time: 13:24:24

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

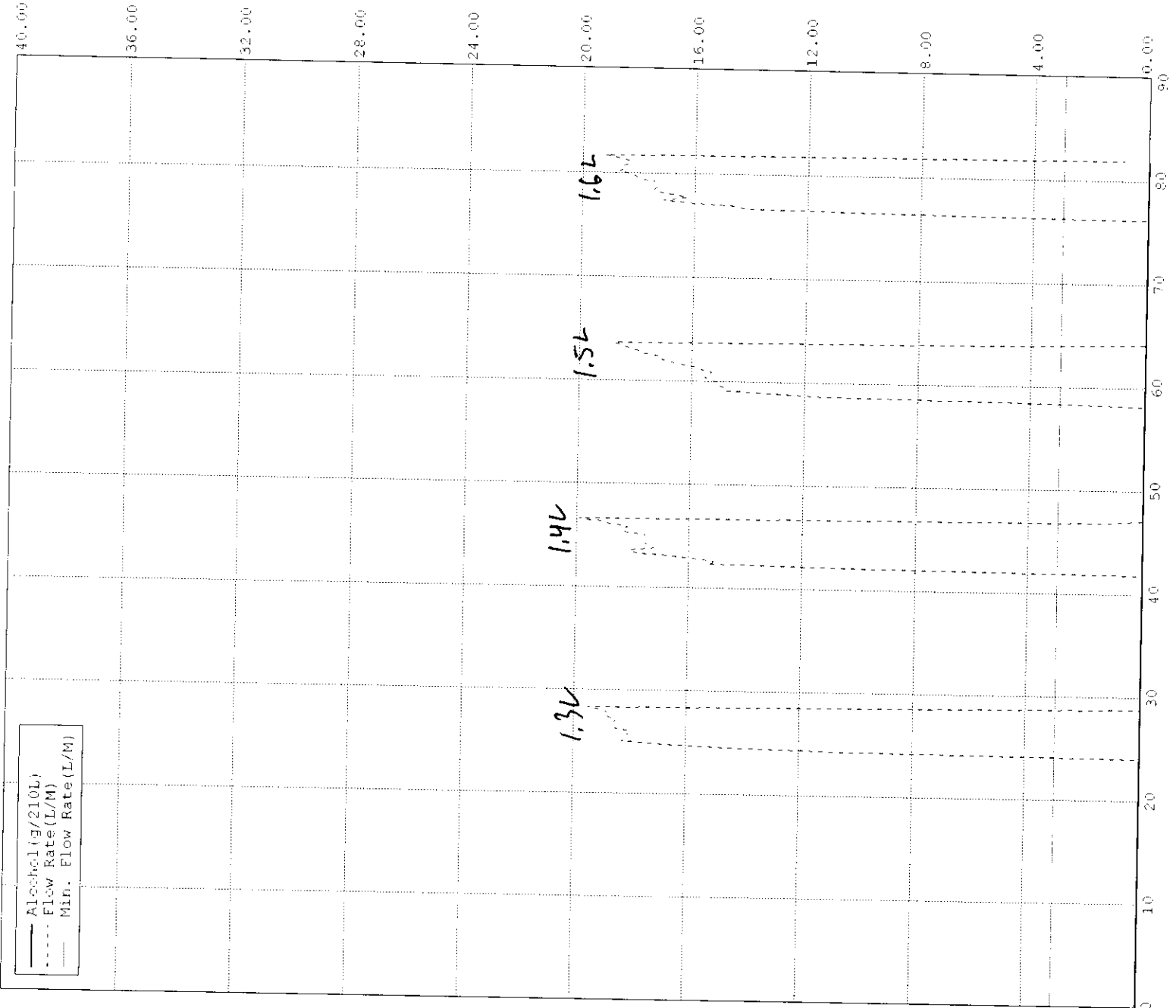
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.65: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 13:25
BLANK TEST 0.000 13:25
INTERNAL STANDARD VERIFIED 13:25
EXTERNAL STANDARD 0.080 13:26
BLANK TEST 0.000 13:27
SUBJECT SAMPLE (Vol=1.57L) 0.000 13:28
BLANK TEST 0.000 13:29
EXTERNAL STANDARD 0.081 13:29
BLANK TEST 0.000 13:30

DWT



LINEARITY CHECK

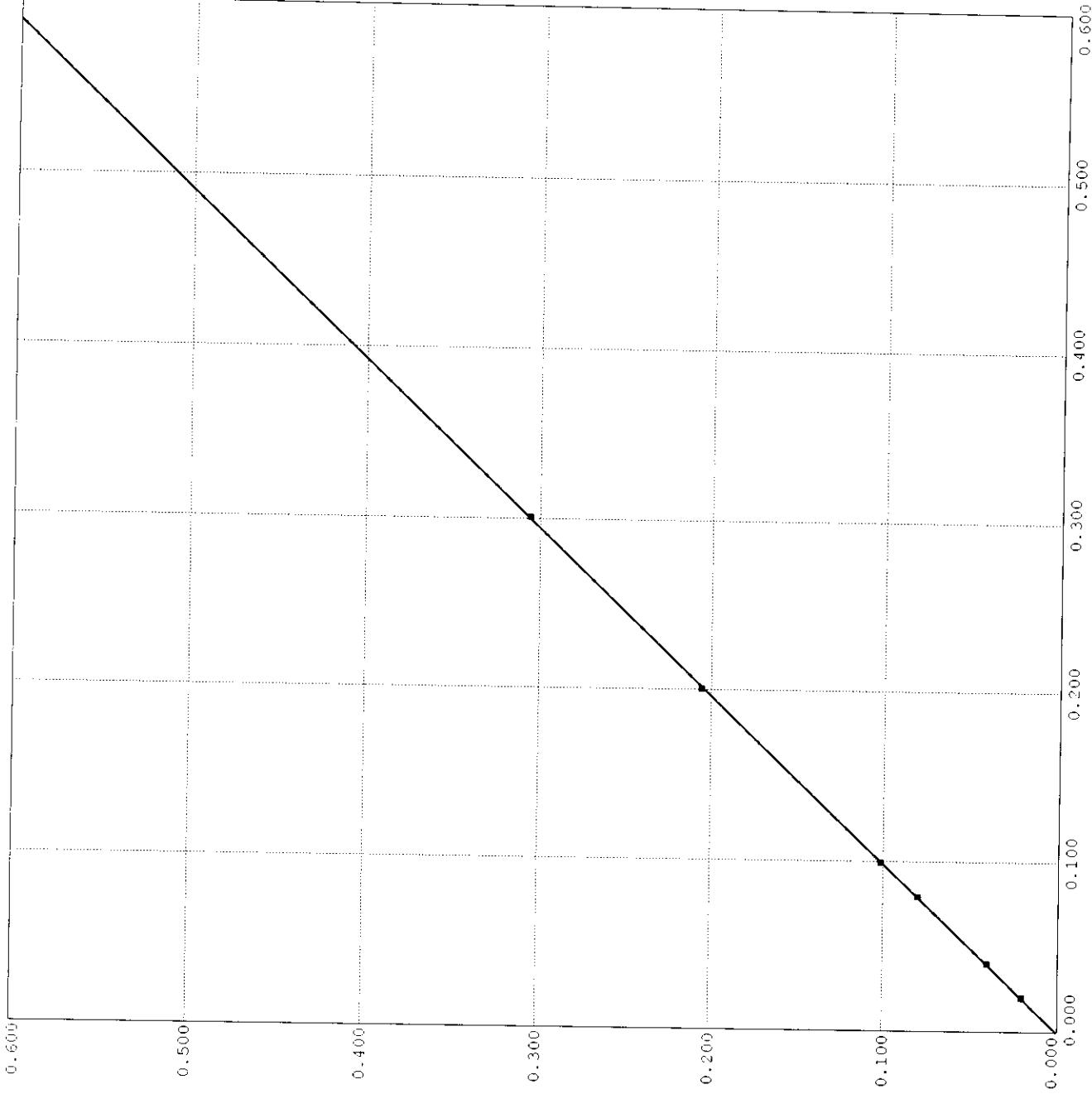
Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/25/2021
Time: 13:44:45

SUPERVISOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0210	0.0000
0.040	0.0412	0.0004
0.079	0.0810	0.0000
0.099	0.1024	0.0005
0.200	0.2064	0.0005
0.300	0.3062	0.0013

SLOPE = 1.021268
R² = 0.999942



DW

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100424

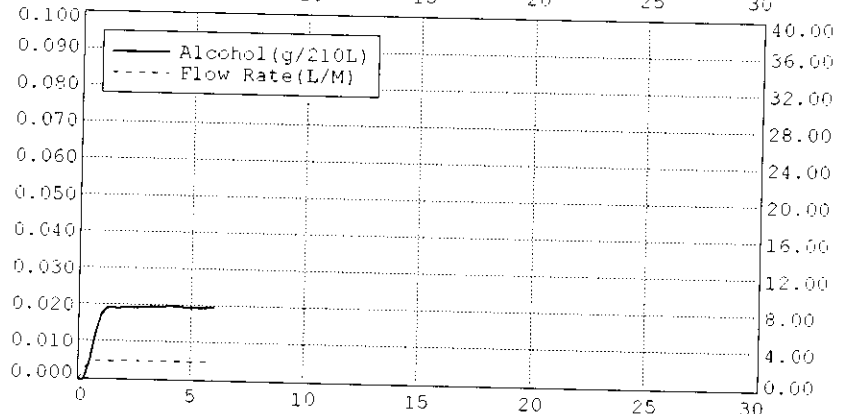
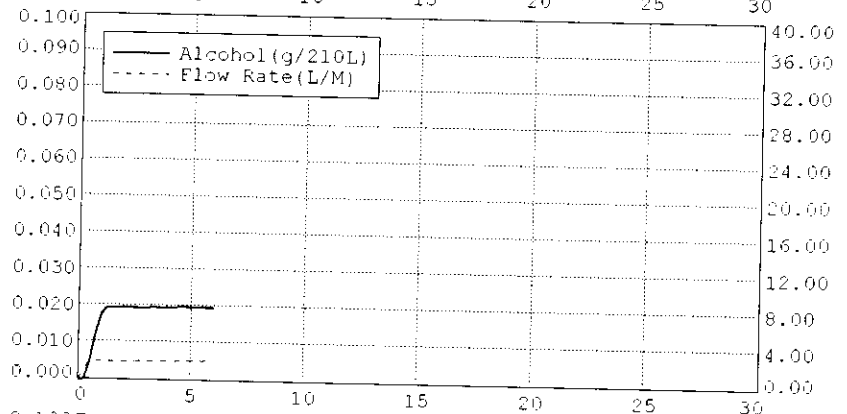
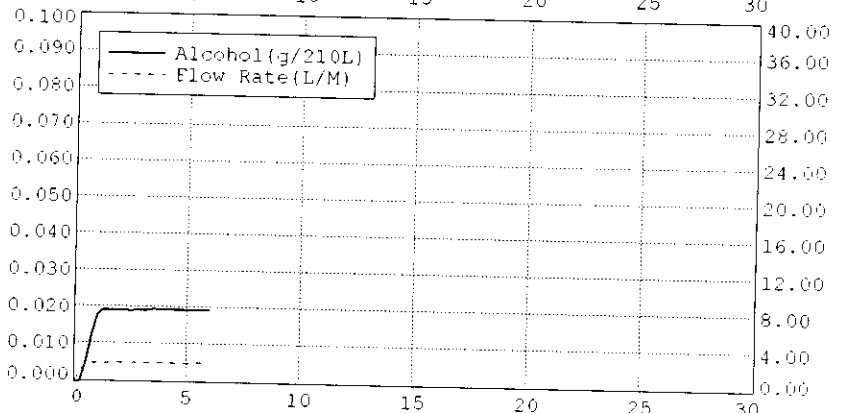
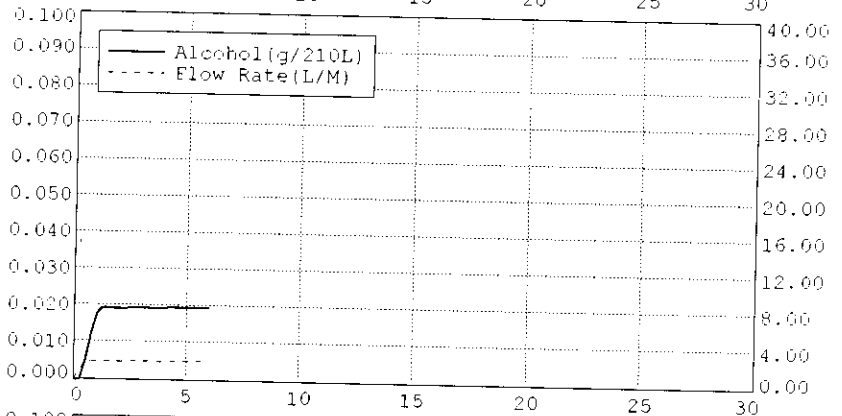
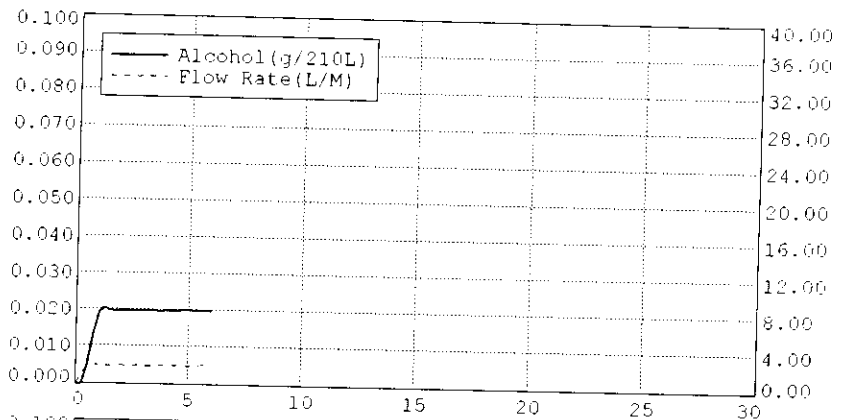
Date: 03/25/2021
 Time: 13:44:46

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.64: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 631 psi

BLANK TEST	0.000	13:46
INTERNAL STANDARD	VERIFIED	13:46
EXTERNAL STANDARD	0.021	13:46
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.021	13:48
BLANK TEST	0.000	13:48
EXTERNAL STANDARD	0.021	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.021	13:50
BLANK TEST	0.000	13:51
EXTERNAL STANDARD	0.021	13:51
BLANK TEST	0.000	13:52

Average = 0.0210
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100424

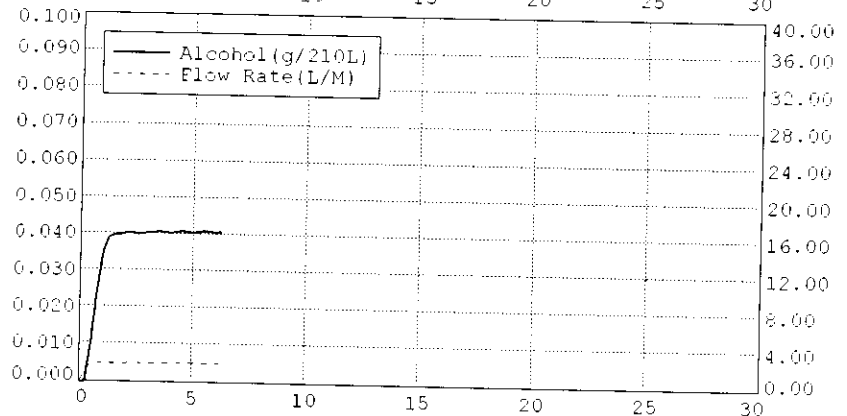
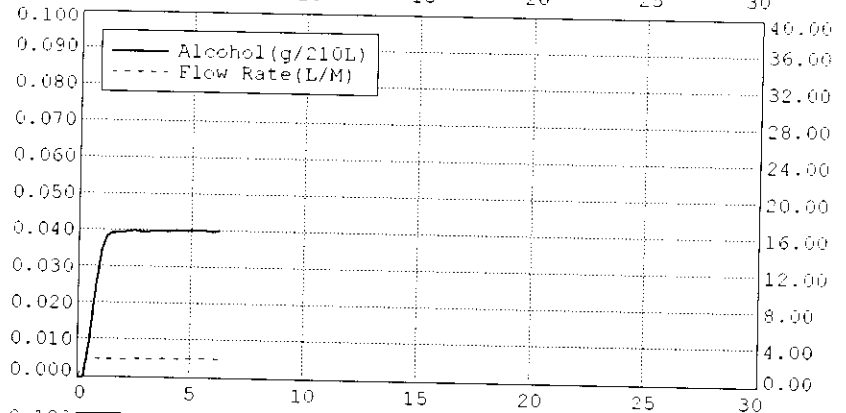
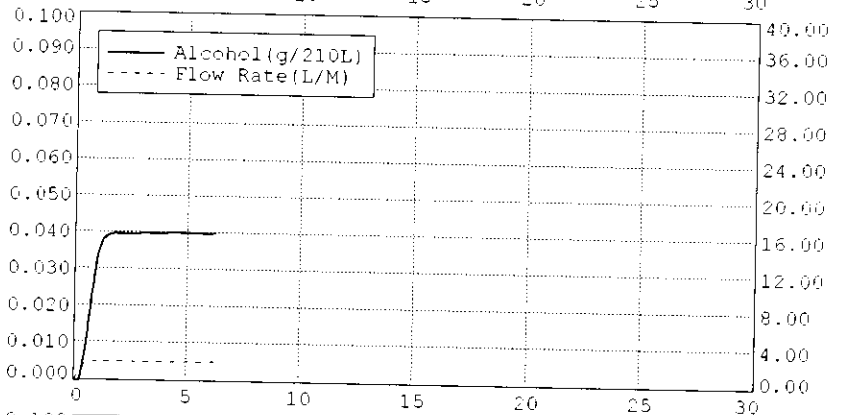
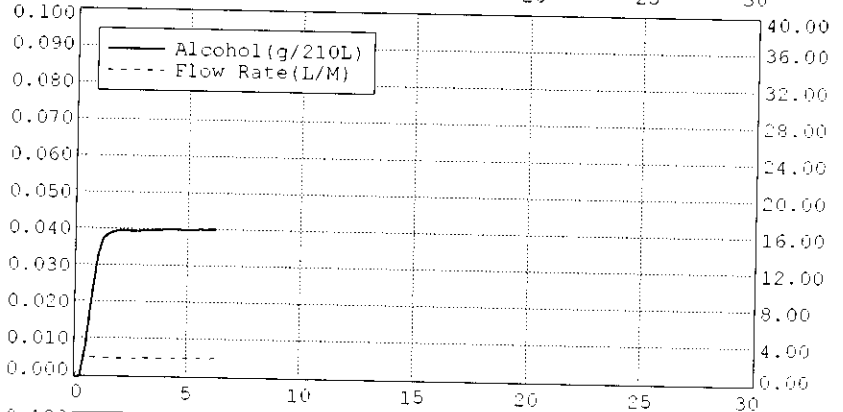
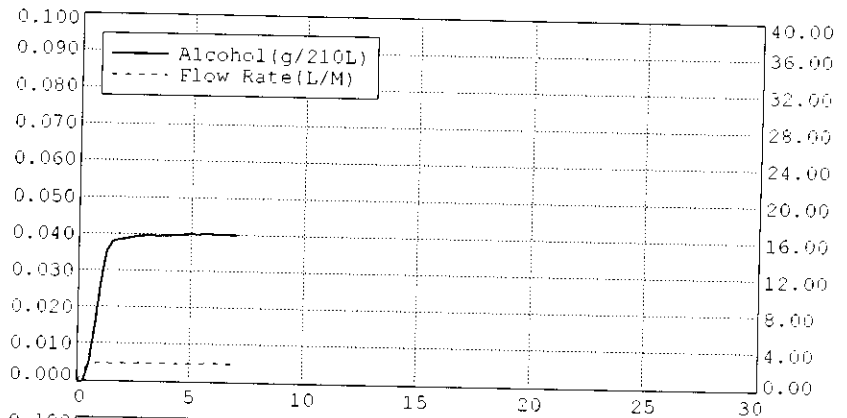
Date: 03/25/2021
 Time: 13:53:43

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.64: 0.040
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 611 psi

BLANK TEST	0.000	13:54
INTERNAL STANDARD	VERIFIED	13:54
EXTERNAL STANDARD	0.041	13:55
BLANK TEST	0.000	13:56
EXTERNAL STANDARD	0.041	13:56
BLANK TEST	0.000	13:57
EXTERNAL STANDARD	0.041	13:57
BLANK TEST	0.000	13:58
EXTERNAL STANDARD	0.041	13:58
BLANK TEST	0.000	13:59
EXTERNAL STANDARD	0.042	13:59
BLANK TEST	0.000	14:00

Average = 0.0412
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100424

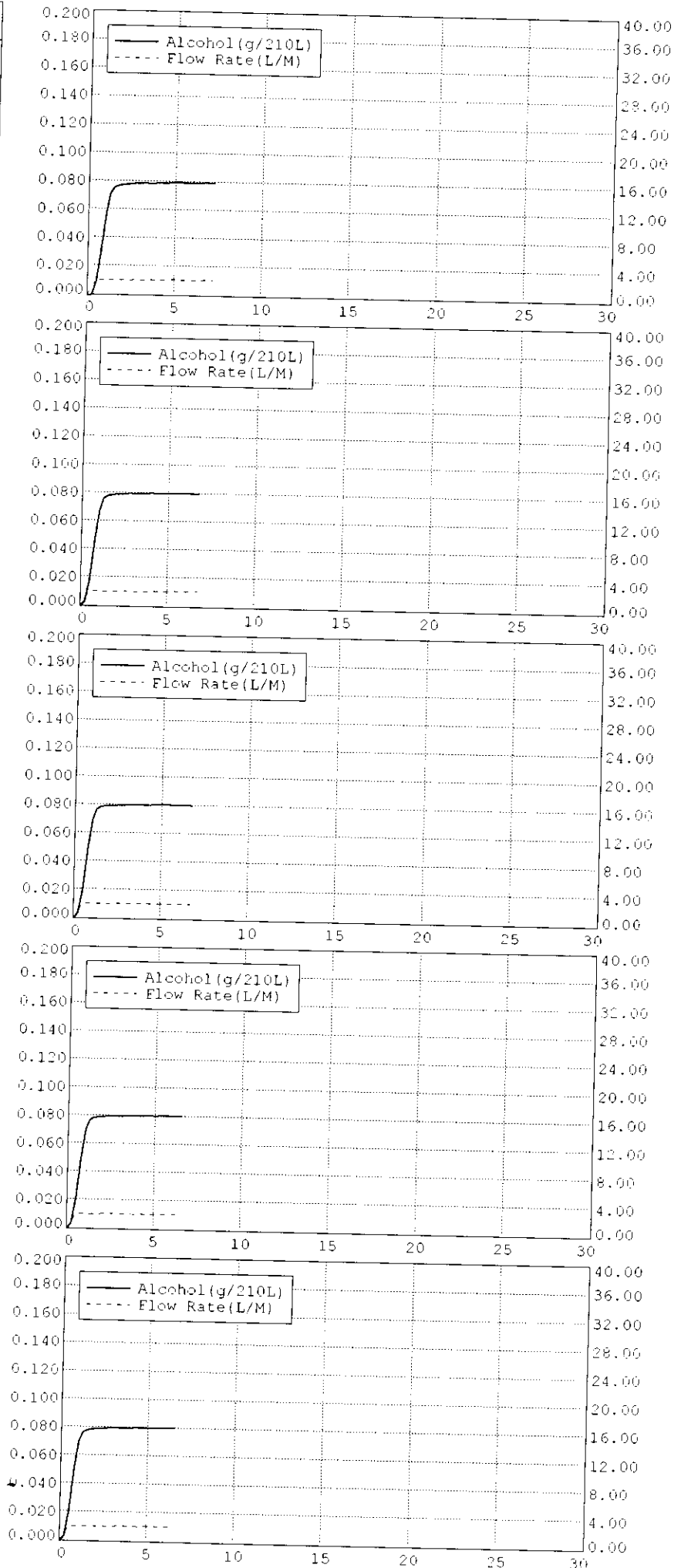
Date: 03/25/2021
 Time: 14:03:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.64: 0.079
 LOT #: AG018102
 EXPIRATION: 06/29/2022
 TANK PRESSURE: 883 psi

BLANK TEST	0.000	14:04
INTERNAL STANDARD	VERIFIED	14:04
EXTERNAL STANDARD	0.081	14:05
BLANK TEST	0.000	14:05
EXTERNAL STANDARD	0.081	14:06
BLANK TEST	0.000	14:07
EXTERNAL STANDARD	0.081	14:07
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.081	14:08
BLANK TEST	0.000	14:09
EXTERNAL STANDARD	0.081	14:09
BLANK TEST	0.000	14:10

Average = 0.0810
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100424

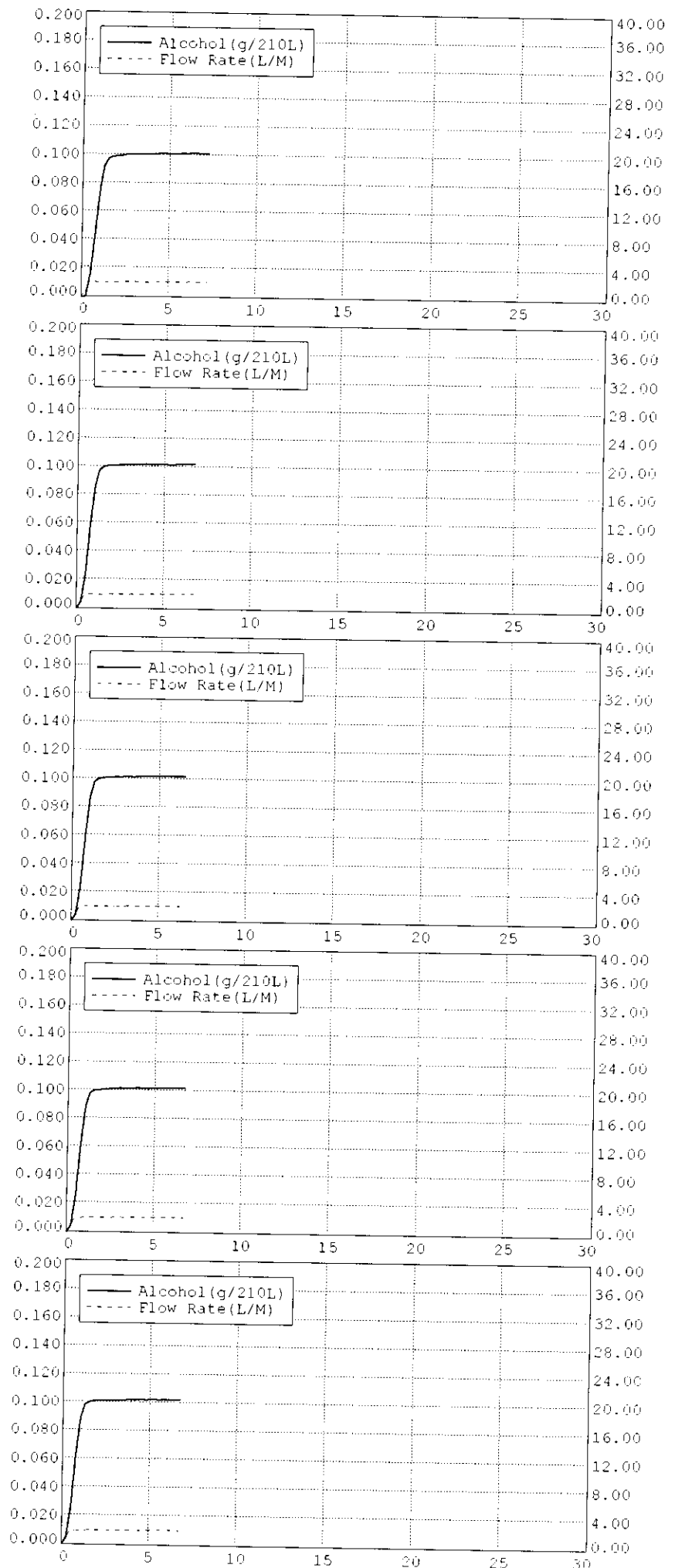
Date: 03/25/2021
 Time: 14:12:46

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.63: 0.099
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 687 psi

BLANK TEST	0.000	14:13
INTERNAL STANDARD	VERIFIED	14:14
EXTERNAL STANDARD	0.102	14:14
BLANK TEST	0.000	14:15
EXTERNAL STANDARD	0.102	14:15
BLANK TEST	0.000	14:16
EXTERNAL STANDARD	0.102	14:16
BLANK TEST	0.000	14:17
EXTERNAL STANDARD	0.103	14:17
BLANK TEST	0.000	14:18
EXTERNAL STANDARD	0.103	14:18
BLANK TEST	0.000	14:19

Average = 0.1024
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

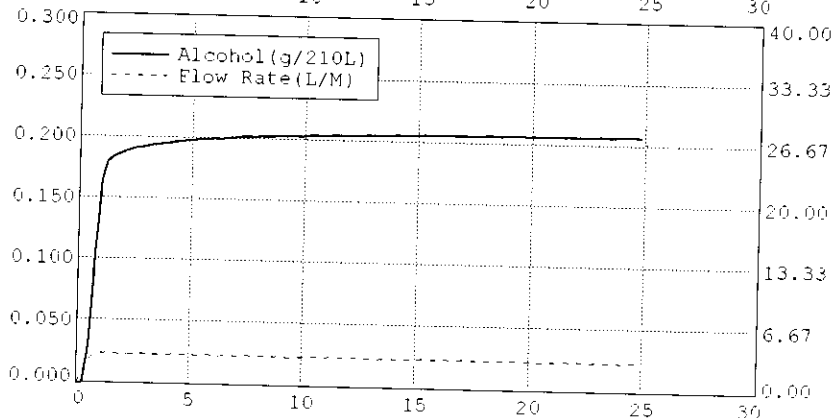
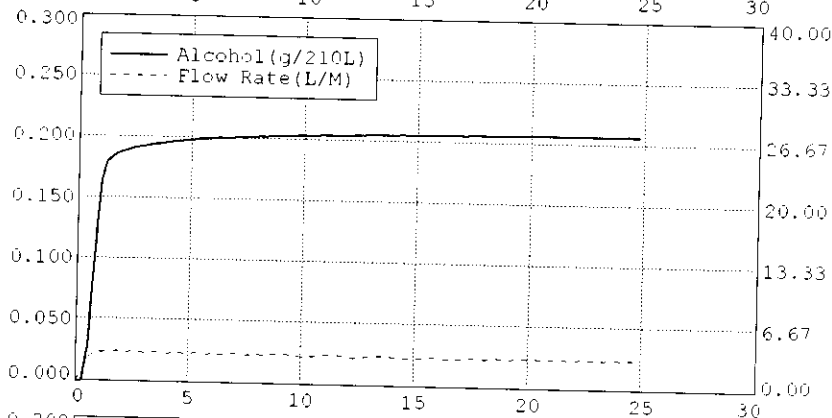
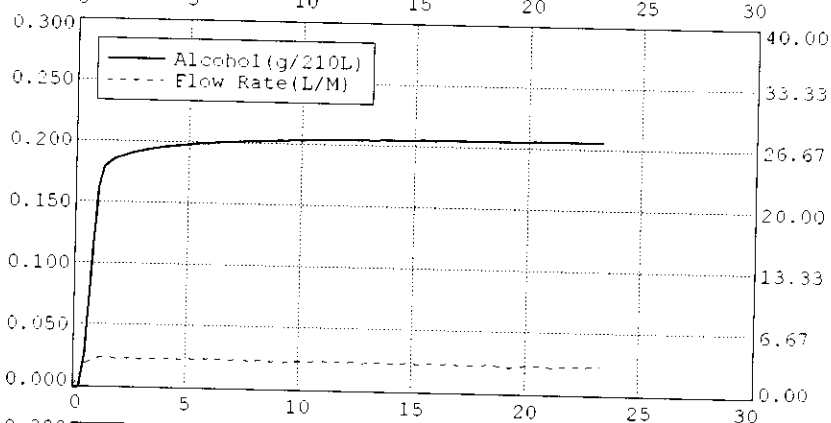
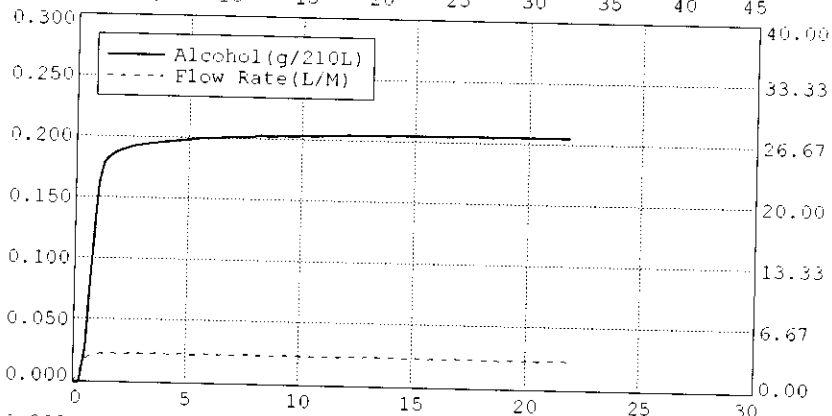
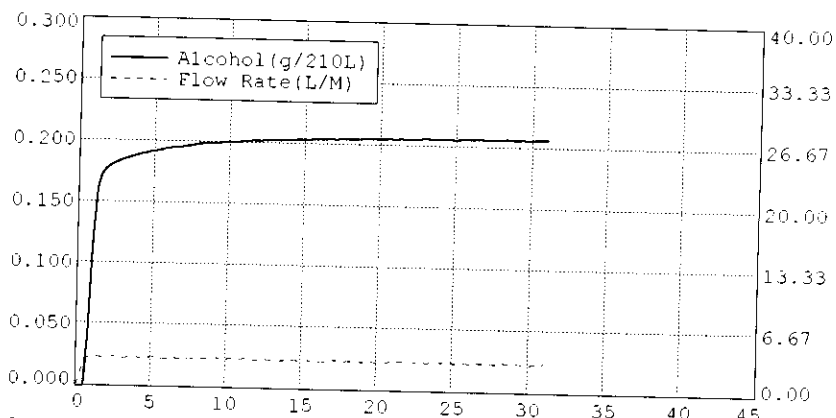
Alaska Department of Public Safety
 DATAMASTER dmt: 100424

Date: 03/25/2021
 Time: 14:25:13

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

BLANK TEST	0.000	14:26
INTERNAL STANDARD	VERIFIED	14:26
EXTERNAL STANDARD	0.206	14:27
BLANK TEST	0.000	14:27
EXTERNAL STANDARD	0.206	14:28
BLANK TEST	0.000	14:29
EXTERNAL STANDARD	0.206	14:29
BLANK TEST	0.000	14:30
EXTERNAL STANDARD	0.207	14:31
BLANK TEST	0.000	14:32
EXTERNAL STANDARD	0.207	14:32
BLANK TEST	0.000	14:33

Average = 0.2064
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

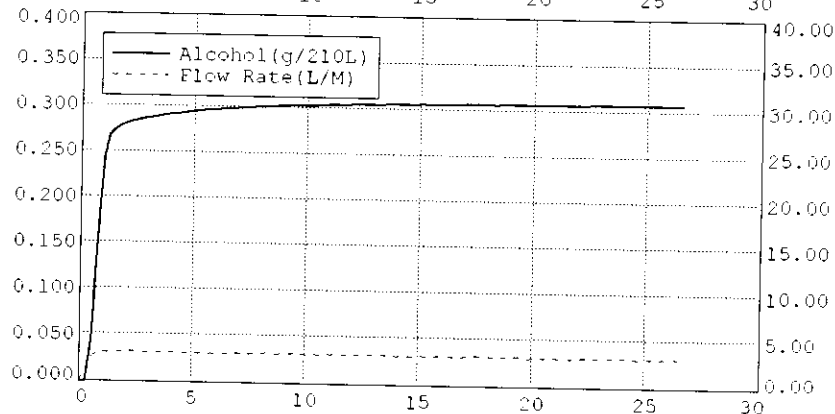
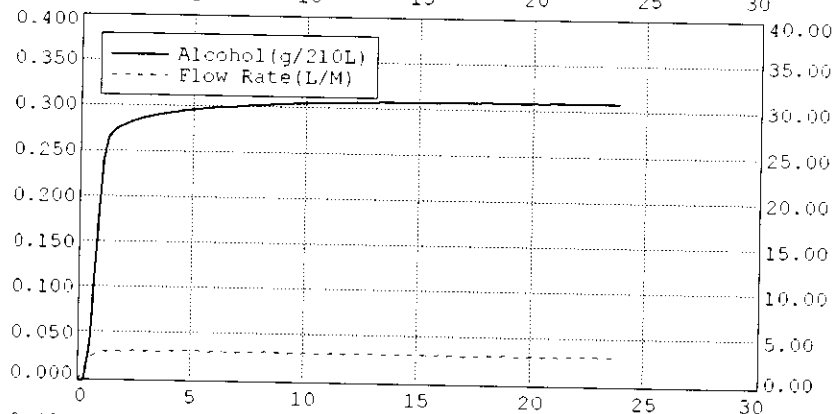
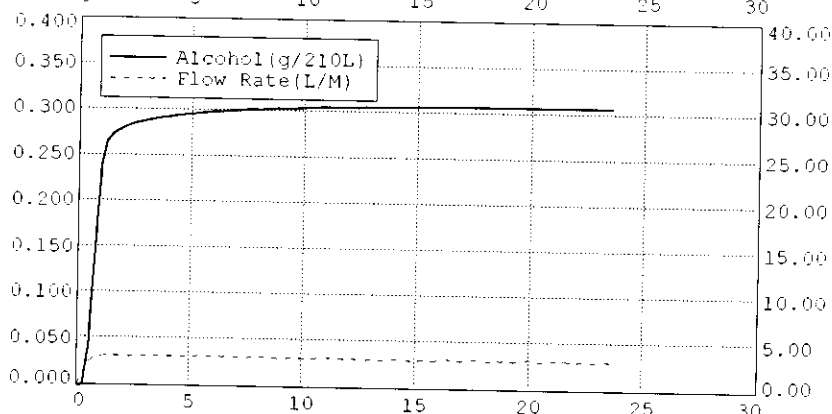
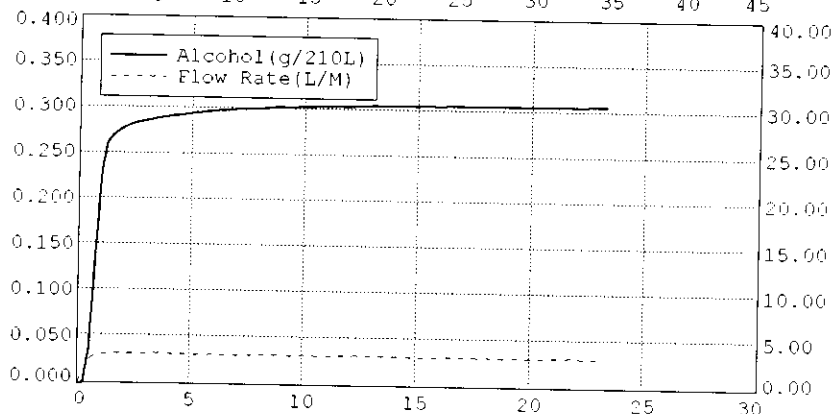
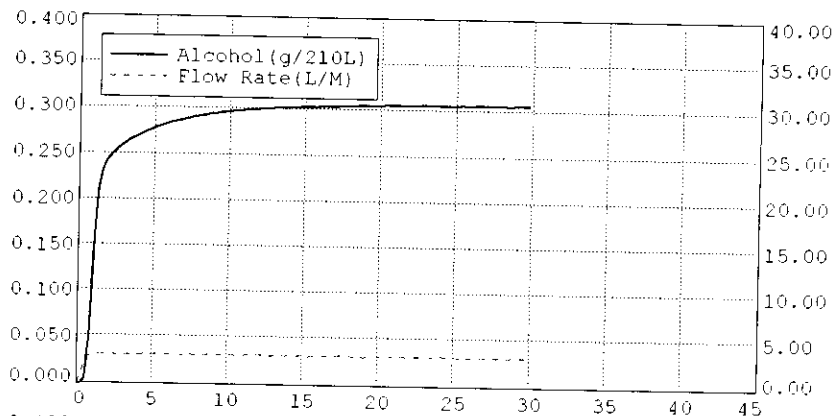
Alaska Department of Public Safety
 DATAMASTER dmt: 100424

Date: 03/25/2021
 Time: 14:36:54

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

BLANK TEST	0.000	14:38
INTERNAL STANDARD	VERIFIED	14:38
EXTERNAL STANDARD	0.305	14:39
BLANK TEST	0.000	14:40
EXTERNAL STANDARD	0.305	14:40
BLANK TEST	0.000	14:41
EXTERNAL STANDARD	0.306	14:42
BLANK TEST	0.000	14:43
EXTERNAL STANDARD	0.308	14:43
BLANK TEST	0.000	14:44
EXTERNAL STANDARD	0.307	14:44
BLANK TEST	0.000	14:45

Average = 0.3062
 Std Dev = 0.0013



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/25/2021
Time: 14:52:38

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

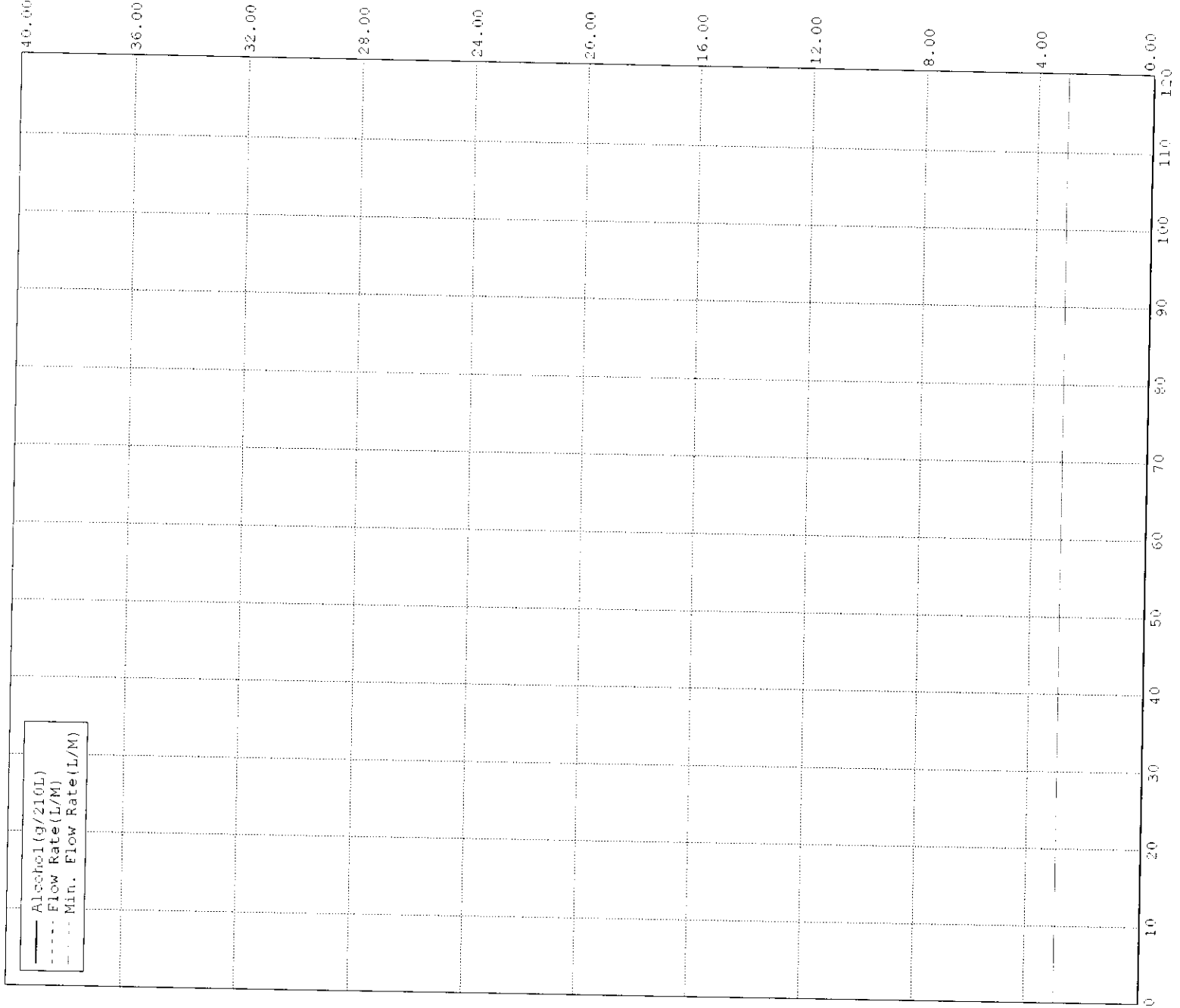
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.63: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK
BLANK TEST PASSED 14:53
INTERNAL STANDARD VERIFIED 14:53
EXTERNAL STANDARD 0.080 14:54
BLANK TEST 0.000 14:55
SUBJECT SAMPLE INCOMPLETE 14:57

Handwritten signature



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/26/2021
Time: 12:42:53

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
INVALID

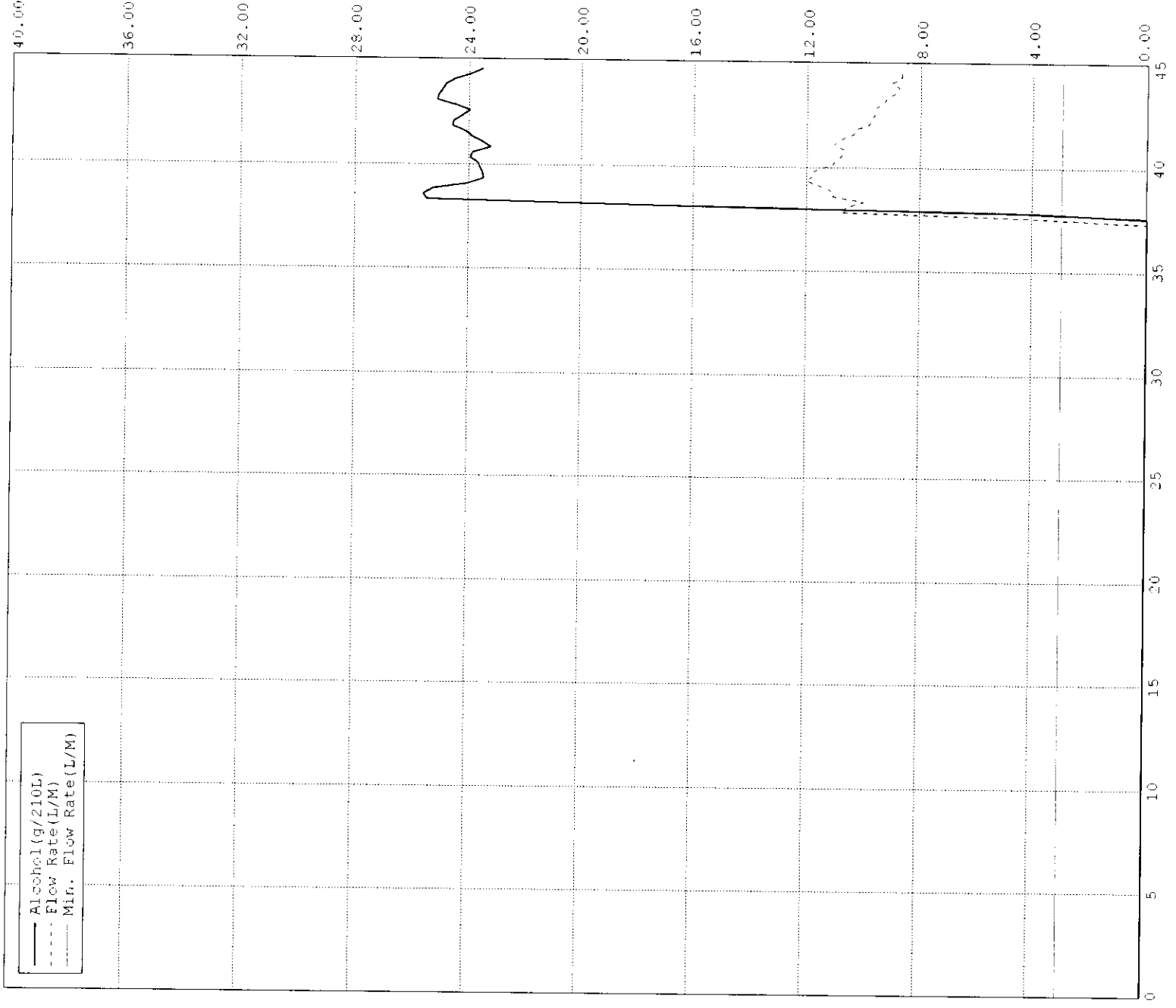
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK PASSED 12:45
BLANK TEST 0.000 12:45
INTERNAL STANDARD VERIFIED 12:45
EXTERNAL STANDARD 0.081 12:45
BLANK TEST 0.000 12:46
SUBJECT SAMPLE INVALID 12:47

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/26/2021
Time: 12:14:11

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

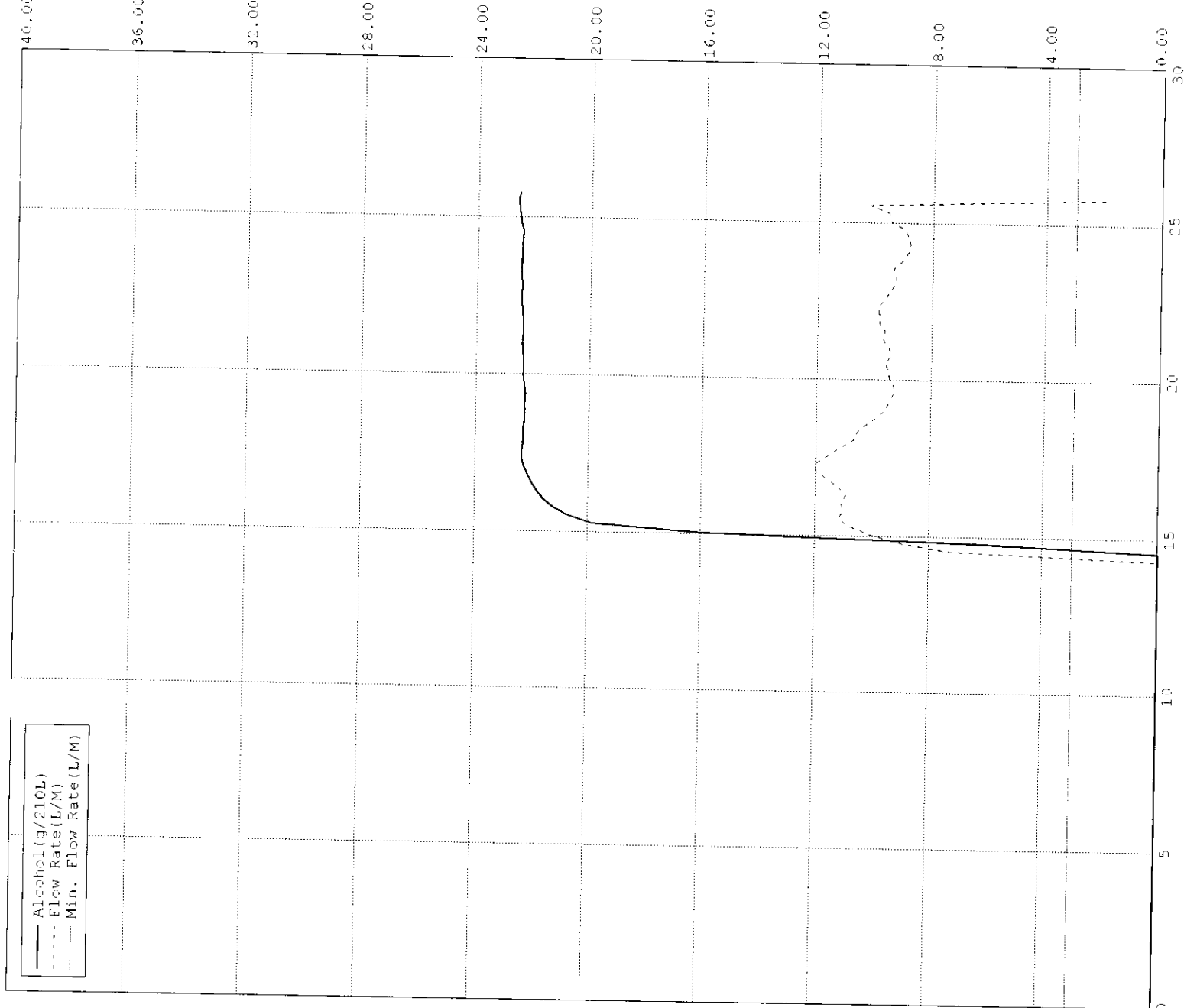
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.66: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:15
BLANK TEST 0.000 12:15
INTERNAL STANDARD VERIFIED 12:15
Xq = 0.078 (0.22%)
EXTERNAL STANDARD 0.081 12:15
X[1] = 0.0807 (-0.0018) (0.0008)
BLANK TEST 0.000 12:16
SUBJECT SAMPLE XXX 12:17
X[1] = 0.1129 (-0.0220) (-0.0018)

Interference Detected

Filter 2 average: -0.0019

Filter 3 average: 0.0011



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/26/2021
Time: 12:08:19

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

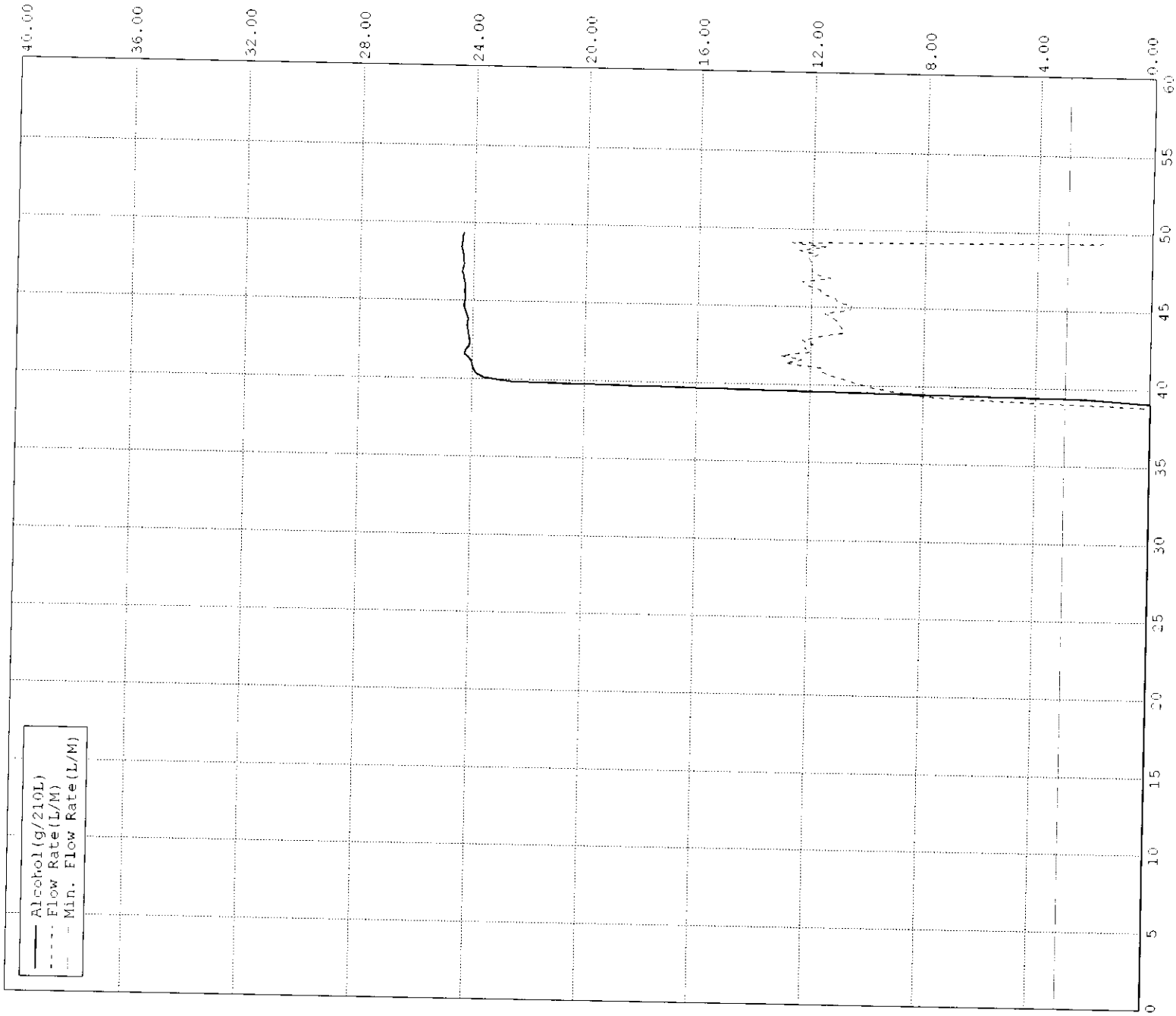
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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 12:09
BLANK TEST 0.000 12:09
INTERNAL STANDARD VERIFIED 12:09
Xq = 0.078 (0.66%)
EXTERNAL STANDARD 0.080 12:09
X[1] = 0.0802 (-0.0025) (0.0012)
BLANK TEST 0.000 12:10
SUBJECT SAMPLE XXX 12:11
X[1] = 0.1221 (-0.0227) (0.0006)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/26/2021
Time: 12:24:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

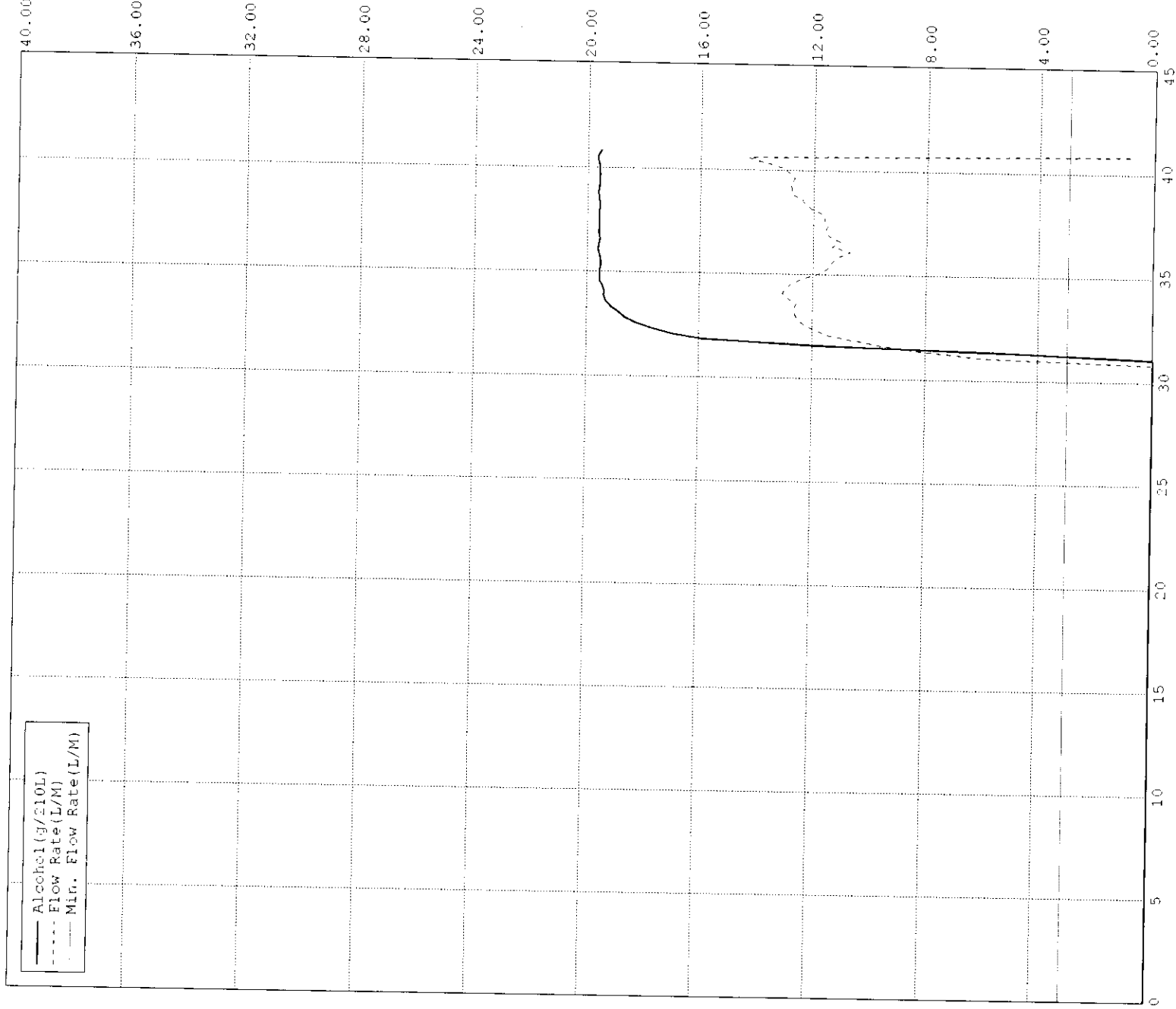
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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	12:25
BLANK TEST	0.000	12:25
INTERNAL STANDARD	VERIFIED	12:25
$X_q = 0.078$ (0.11%)		
EXTERNAL STANDARD	0.081	12:25
$X[1] = 0.0806$ (-0.0011) (0.0016)		
BLANK TEST	0.000	12:26
SUBJECT SAMPLE (Vol=1.93L)	0.097	12:27
$X[1] = 0.0979$ (0.0001) (-0.0004)		
BLANK TEST	0.000	12:28
EXTERNAL STANDARD	0.081	12:28
$X[1] = 0.0805$ (-0.0020) (0.0006)		
BLANK TEST	0.000	12:29

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/25/2021
Time: 14:58:55

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

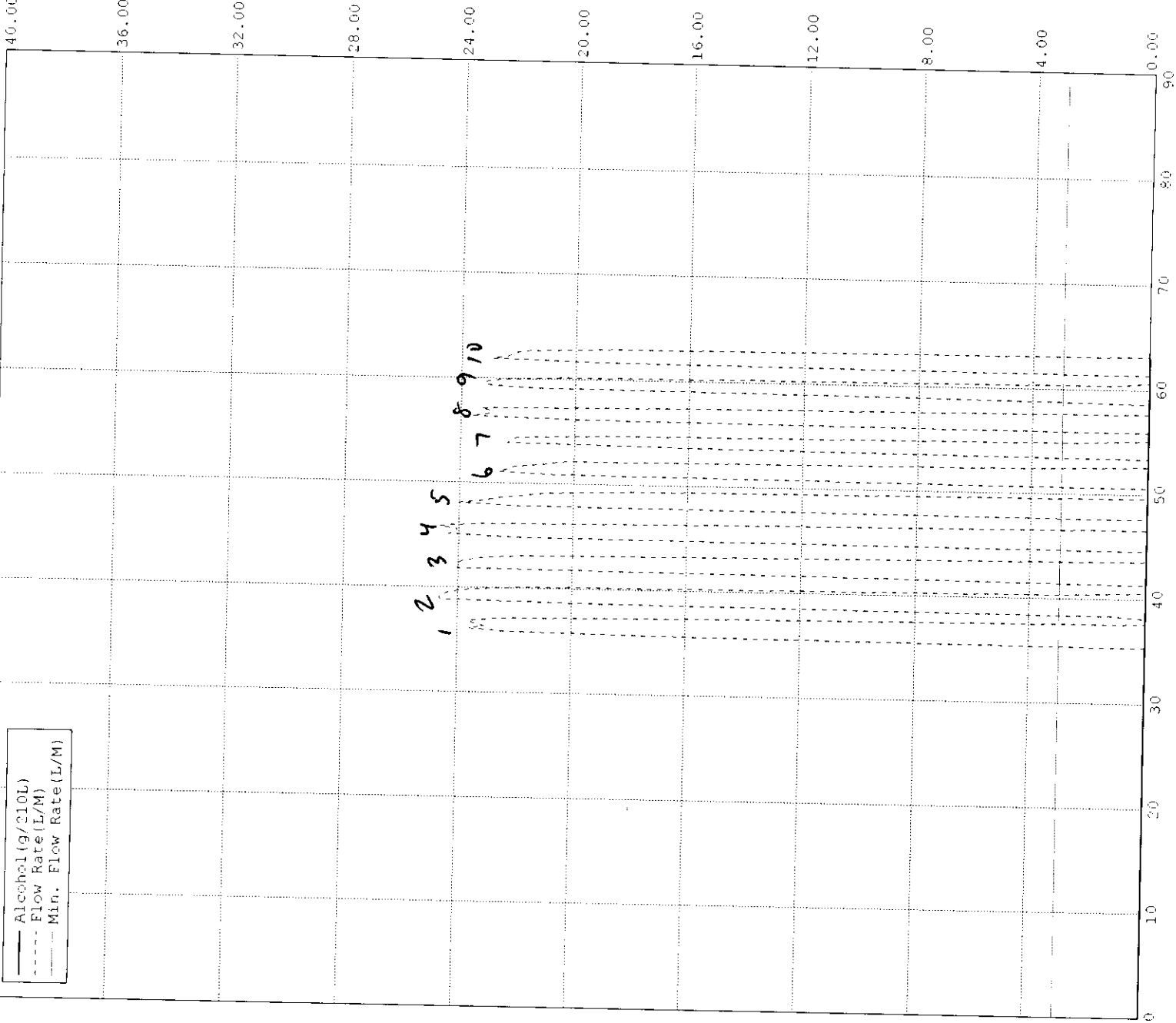
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.63: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 14:59
BLANK TEST 0.000 15:00
INTERNAL STANDARD VERIFIED 15:00
EXTERNAL STANDARD 0.081 15:00
BLANK TEST 0.000 15:01
SUBJECT SAMPLE XXX 15:02

Maximum Attempts Exceeded

Alcohol(g/C10L)
Flow Rate(L/M)
Min. Flow Rate(L/M)



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100424

Date: 03/26/2021
Time: 12:50:23

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

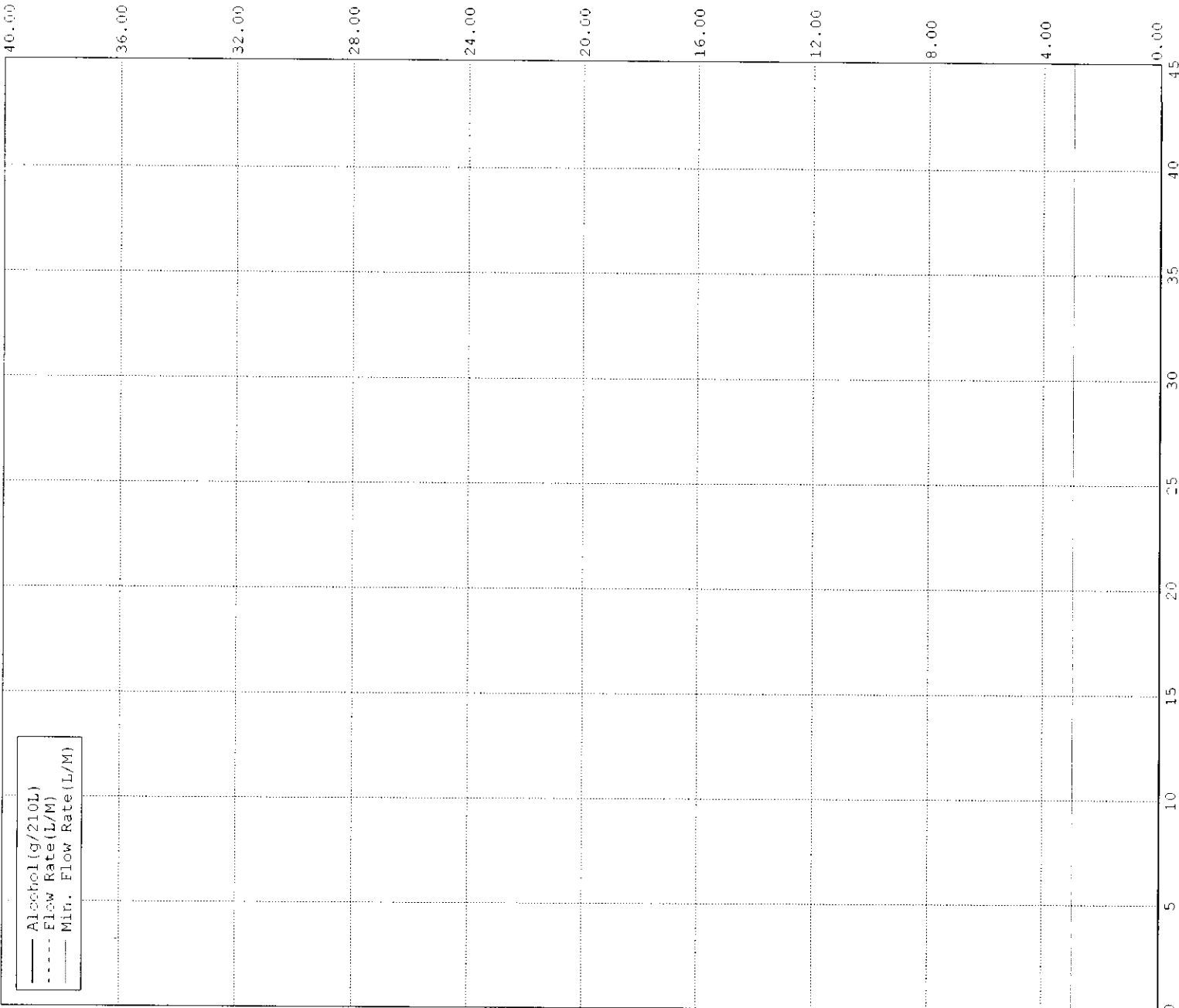
DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK PASSED 12:52
BLANK TEST 0.000 12:52
INTERNAL STANDARD VERIFIED 12:52
EXTERNAL STANDARD 0.080 12:52
BLANK TEST 0.000 12:53

RFI DETECTED

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100424

Date: 03/26/2021
Time: 13:13:01

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 13:14
BLANK TEST 0.000 13:14
INTERNAL STANDARD VERIFIED 13:14
EXTERNAL STANDARD 0.082 13:15
BLANK TEST 0.000 13:16
SUBJECT SAMPLE (Vol=2.14L) 0.000 13:16
BLANK TEST 0.000 13:17
EXTERNAL STANDARD 0.081 13:17
BLANK TEST 0.000 13:18

