

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 100361 Analyst Derek Walton Start Date 07/14/21

- 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 1.5 L (1.3L to 1.7L)

Linearity Test (attached)

Levels Used

- i. 0.020g/210L Mnf Airgas Lot AG928203 Exp 10/09/21
- ii. 0.040g/210L Mnf Airgas Lot AG111710 Exp 04/27/23
- iii. 0.080g/210L Mnf Airgas Lot AG018102 Exp 06/29/22
- iv. 0.100g/210L Mnf Airgas Lot AG108404 Exp 03/25/23
- v. 0.200g/210L Mnf cutn Lot 19200 Exp 08/06/21
Simulator S/N DR6267 Date Calibrated 11/17/20
- vi. 0.300g/210L Mnf cutn Lot 19330 Exp 11/13/21
Simulator S/N DR4177 Date Calibrated 11/17/20

Functional Tests (attached)

- Incomplete Invalid
- Interference

- i. Acetone - Mnf cutn Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N DR4178 Date Calibrated 11/18/20
- ii. Isopropanol - Mnf cutn Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N DR4176 Date Calibrated 11/18/20
- iii. Negative Control - Mnf cutn Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N DR4163 Date Calibrated 11/17/20

- 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 07/15/21

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 07/14/2021
Time: 09:43:36

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

TEMPERATURES

Sample Chamber = 49.1°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 43.2°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.95 V PASSED
(1.17 V - 2.73 V)
Cooler Voltage = 1.91 V PASSED
(1.01 V - 2.35 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 521 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.938 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

Xq = 0.087 0.70% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100361

Date: 07/14/2021
Time: 10:08 AM

Temperatures (°C)
Sample Cell: 49.2°C
Breath Tube: 42.8°C

Current Barometer 29.8 in
Volume (Ltr) 1.56 ✓

Settings
Lamp: 1.92 V
Bias: 80 V
Cooler: 1.89 V
Chopper: 523 Hz

Voltages (V)
Flow: 1.04 V
Detector: 0.000 V ✓

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 04/23/2021
Time: 09:19:31

OPERATOR NAME:
NPAS TECH
CERTIFICATE #: G12921/20490

Ca = 0.1000
CAL = 0.999458 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0060 0.0010 <= b2 < 0.0100
b3 = 0.0001 0.0000 <= b3 < 0.0040
Xq = 0.0877 0.0500 <= Xq < 0.2000
a21 = 1.187326 1.050 <= a21 < 1.300
a31 = 0.501823 0.300 <= a31 < 0.800



LINEARITY CHECK

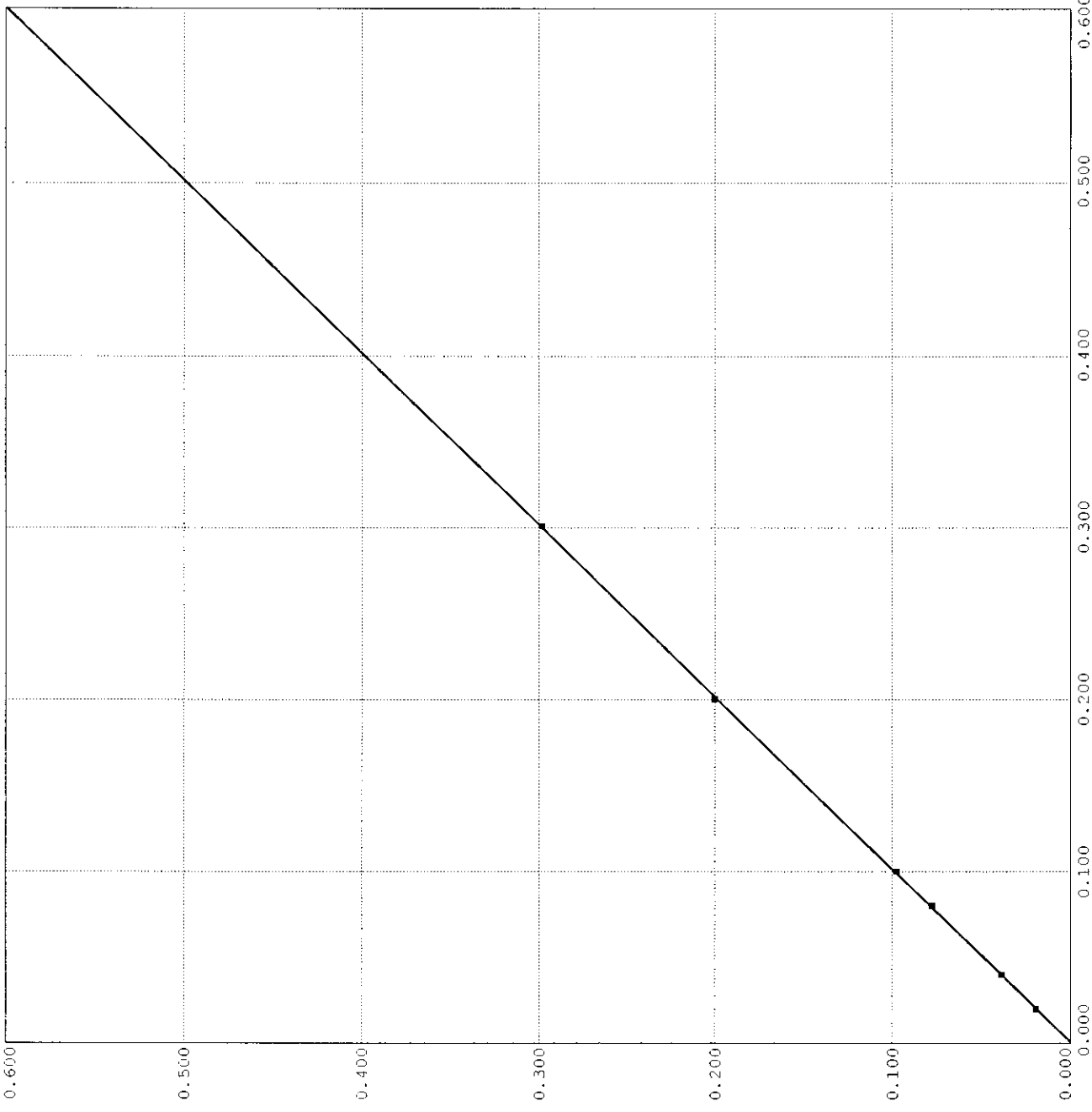
Alaska Department of Public Safety
 DATAMASTER dmt: 100361

Date: 07/14/2021
 Time: 10:20:08

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0394	0.0005
0.080	0.0786	0.0005
0.100	0.0984	0.0005
0.200	0.2010	0.0007
0.300	0.2988	0.0013

SLOPE = 1.000222
 R² = 0.999914



DM

SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100361

Date: 07/14/2021
Time: 10:09:56

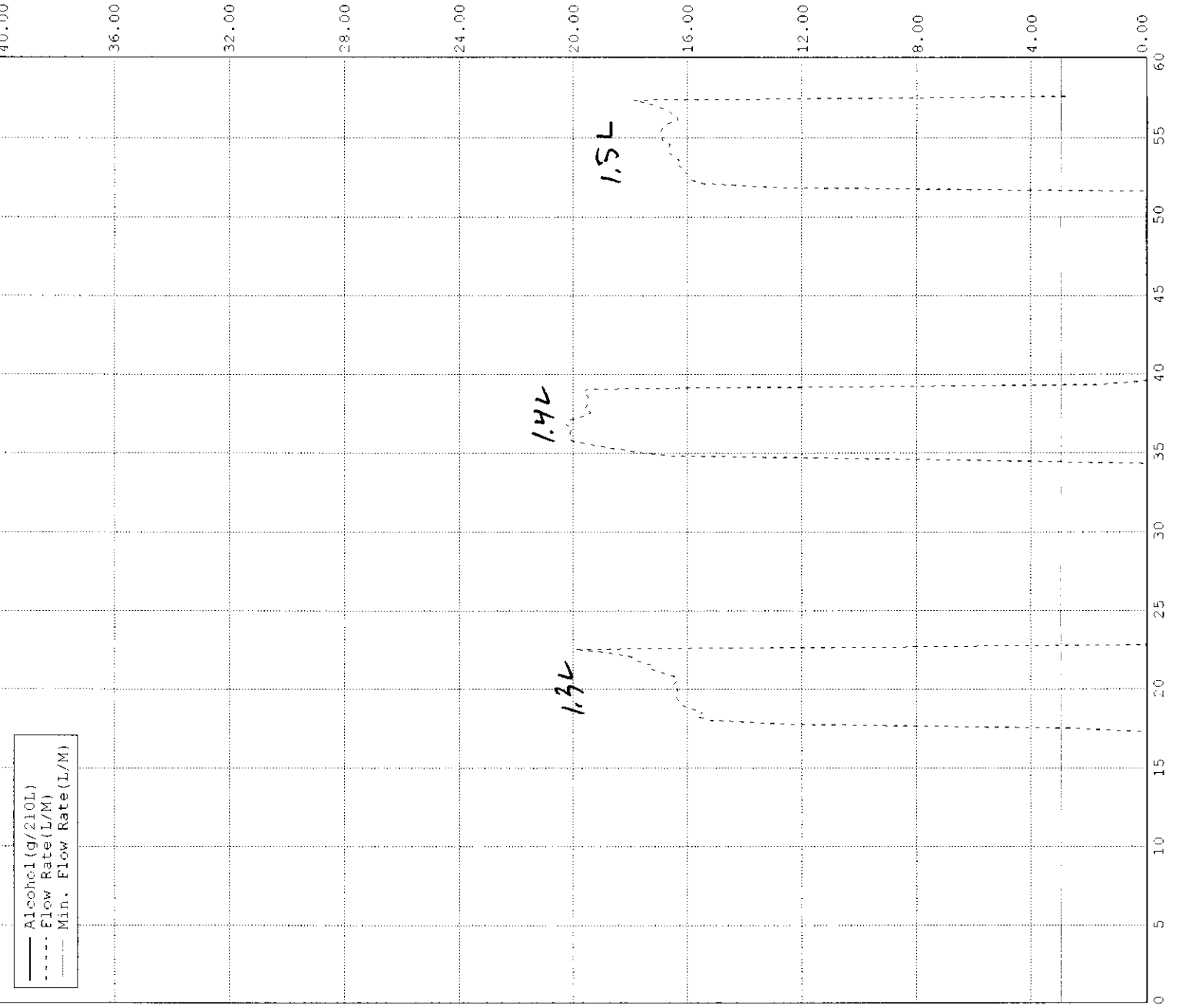
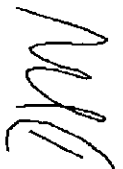
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 29.79: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	10:10
INTERNAL STANDARD	0.000	10:11
EXTERNAL STANDARD	0.078	10:11
INTERNAL STANDARD	0.000	10:12
EXTERNAL STANDARD	0.000	10:13
SUBJECT SAMPLE (Vol=1.57L)	0.079	10:14
INTERNAL STANDARD	0.000	10:15
EXTERNAL STANDARD		



LINEARITY CHECK: Control Test 1

 Alaska Department of Public Safety
 DATAMASTER dmt: 100361

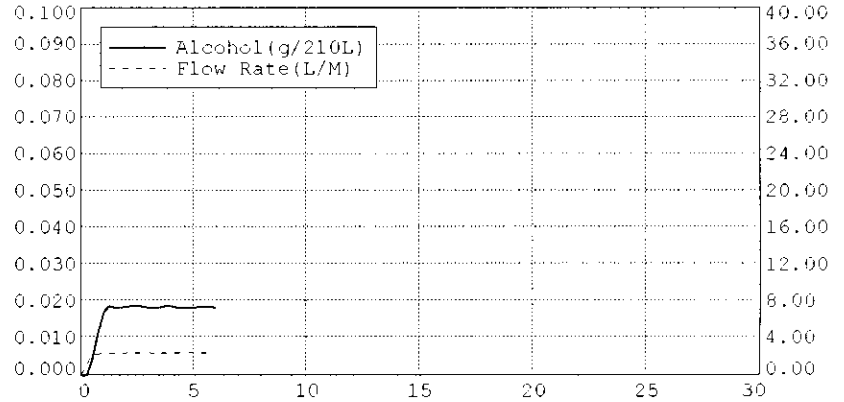
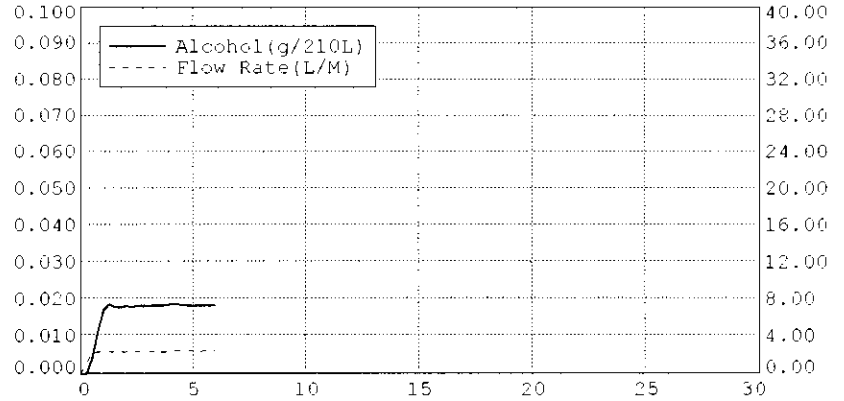
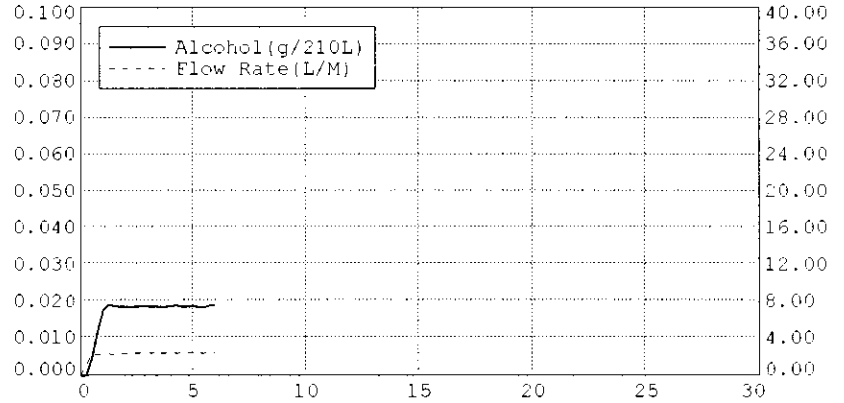
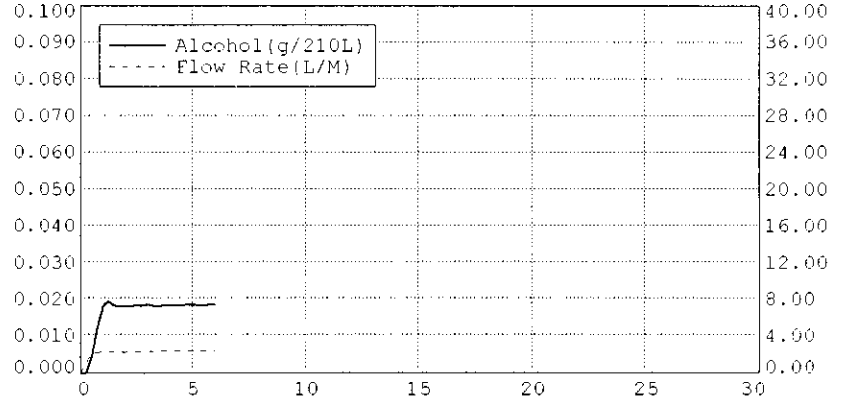
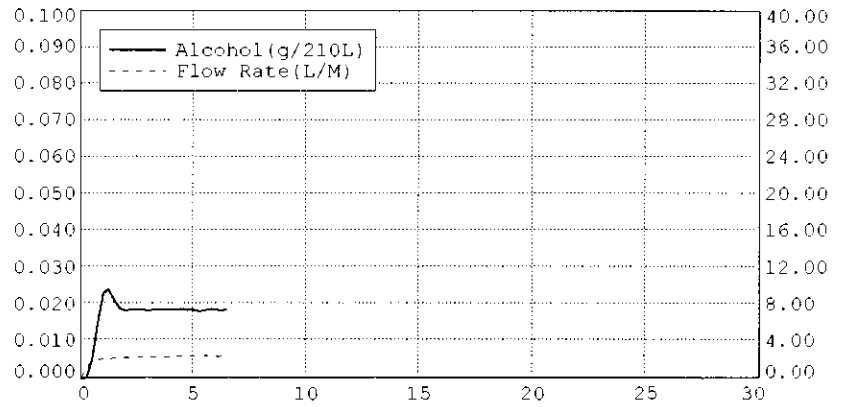
Date: 07/14/2021
 Time: 10:20:11

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.79: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 246 psi

BLANK TEST	0.000	10:21
INTERNAL STANDARD	VERIFIED	10:21
EXTERNAL STANDARD	0.020	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.020	10:22
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.020	10:23
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.020	10:24
BLANK TEST	0.000	10:25
EXTERNAL STANDARD	0.020	10:26
BLANK TEST	0.000	10:26

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100361

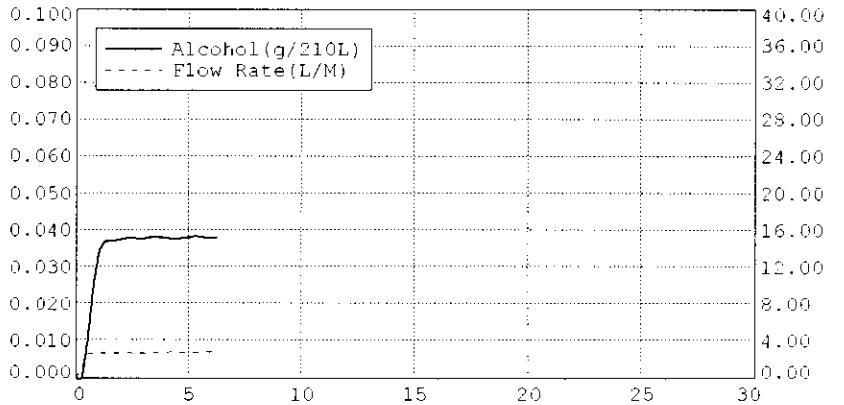
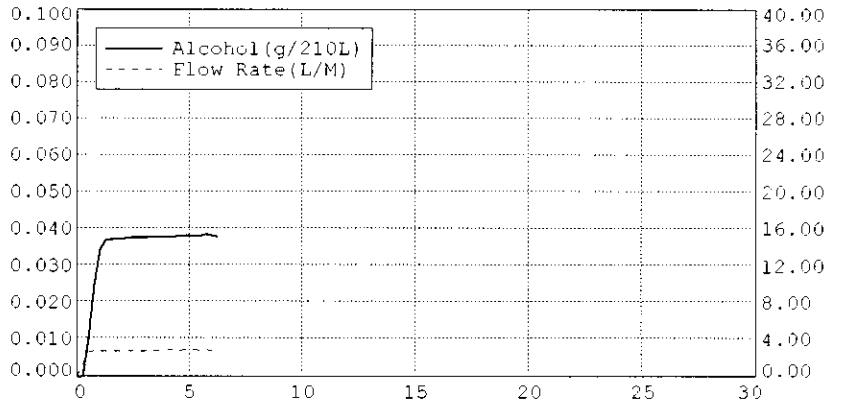
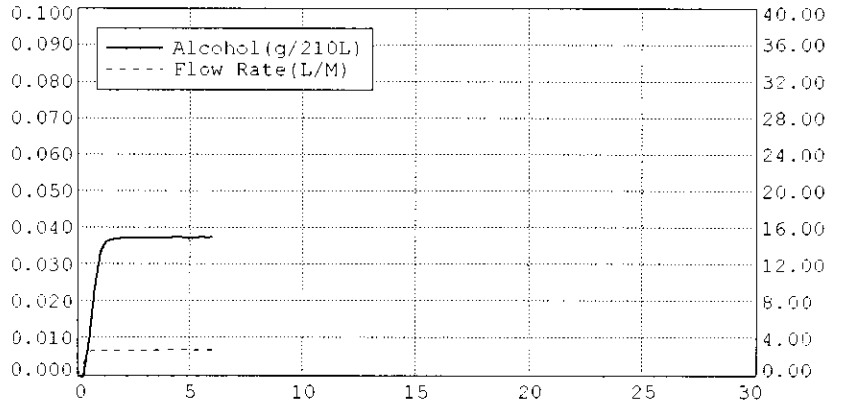
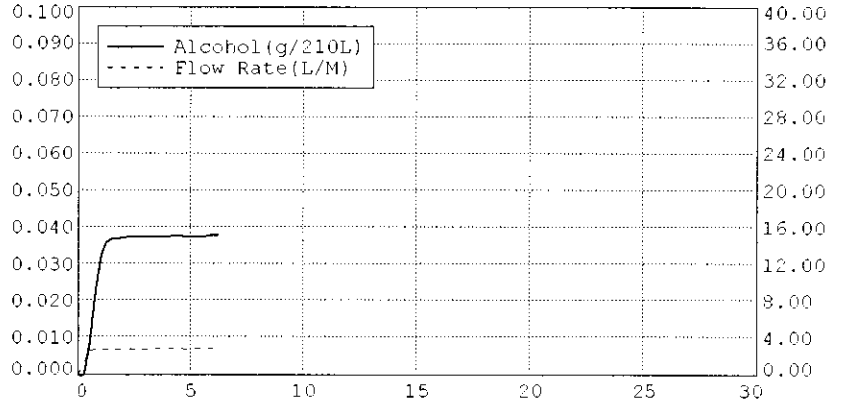
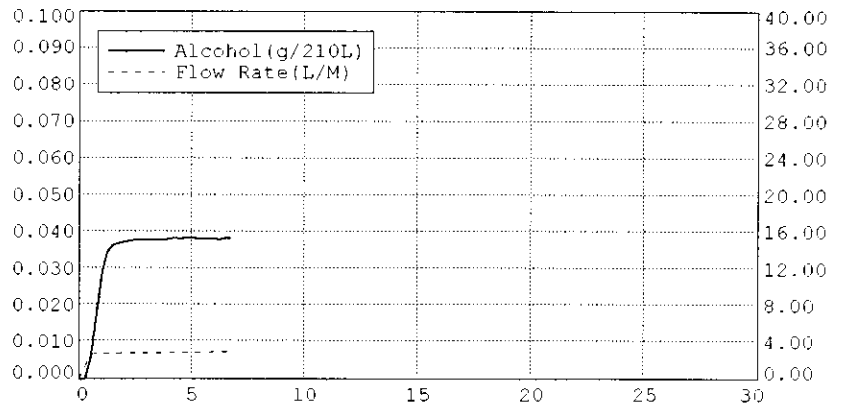
Date: 07/14/2021
Time: 10:29:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.78: 0.040
LOT #: AG111710
EXPIRATION: 04/27/2023
TANK PRESSURE: 1102 psi

BLANK TEST	0.000	10:31
INTERNAL STANDARD	VERIFIED	10:31
EXTERNAL STANDARD	0.040	10:31
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.039	10:32
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.039	10:33
BLANK TEST	0.000	10:34
EXTERNAL STANDARD	0.040	10:34
BLANK TEST	0.000	10:35
EXTERNAL STANDARD	0.039	10:35
BLANK TEST	0.000	10:36

Average = 0.0394
Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100361

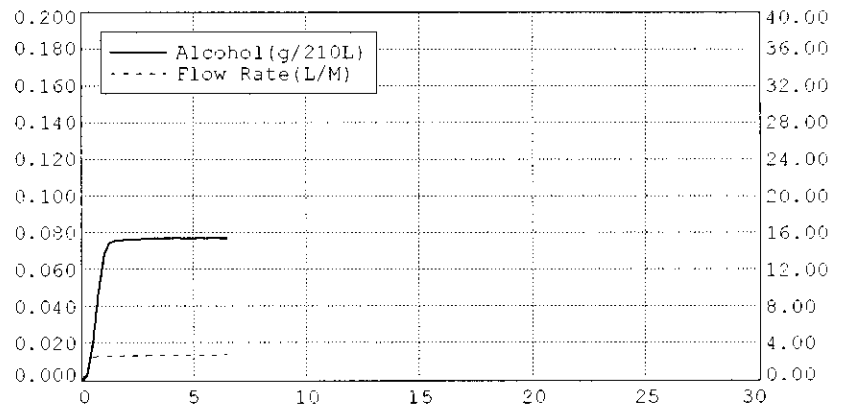
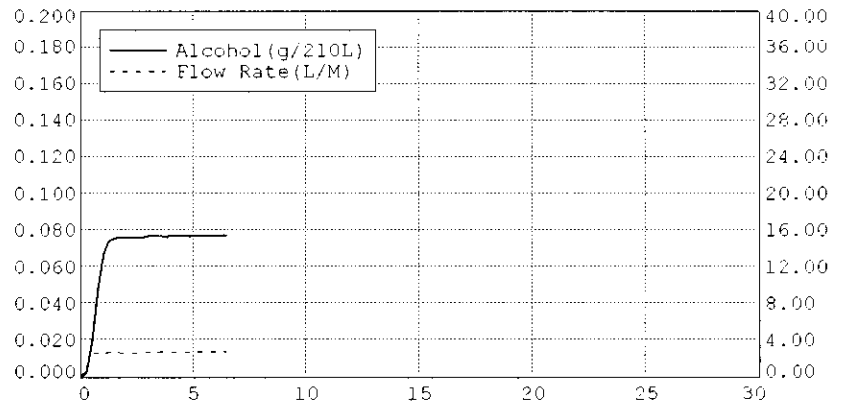
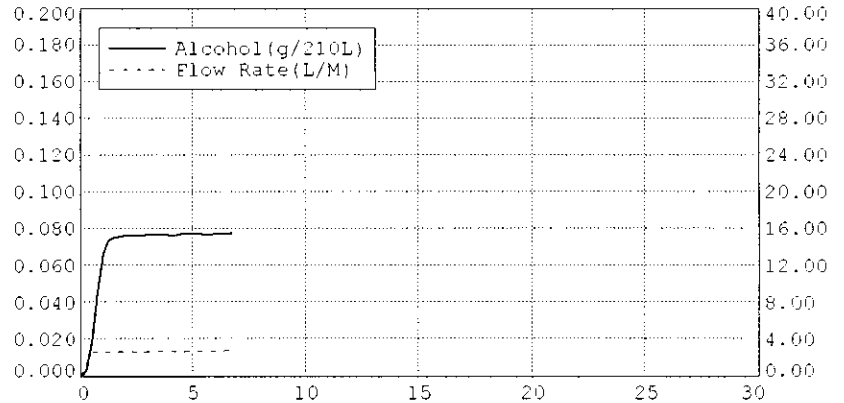
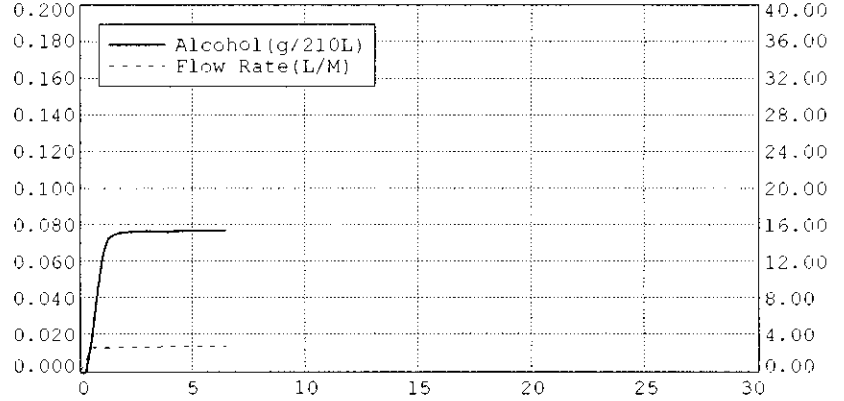
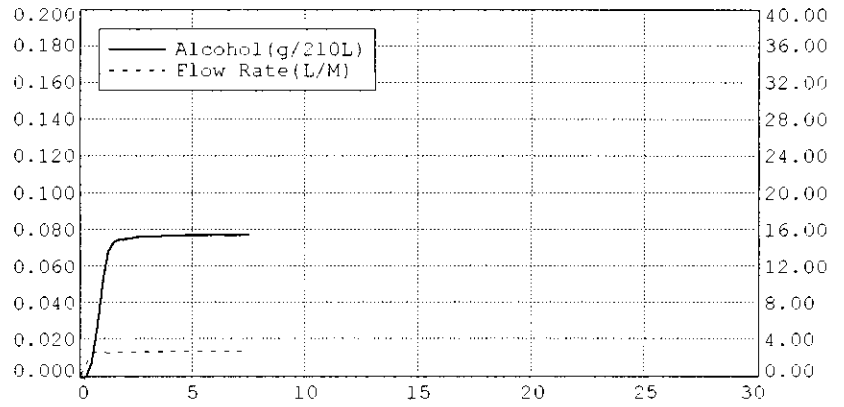
Date: 07/14/2021
Time: 10:50:25

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.78: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022
TANK PRESSURE: 1164 psi

BLANK TEST	0.000	10:51
INTERNAL STANDARD	VERIFIED	10:51
EXTERNAL STANDARD	0.079	10:51
BLANK TEST	0.000	10:52
EXTERNAL STANDARD	0.078	10:53
BLANK TEST	0.000	10:53
EXTERNAL STANDARD	0.078	10:54
BLANK TEST	0.000	10:55
EXTERNAL STANDARD	0.079	10:55
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.079	10:56
BLANK TEST	0.000	10:57

Average = 0.0786
Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100361

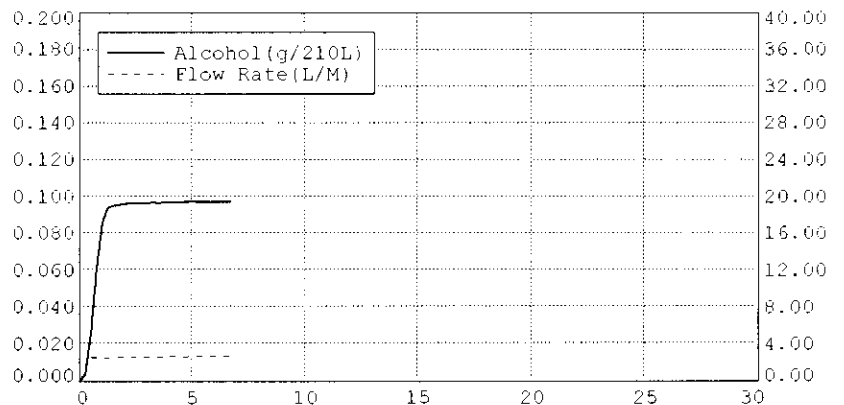
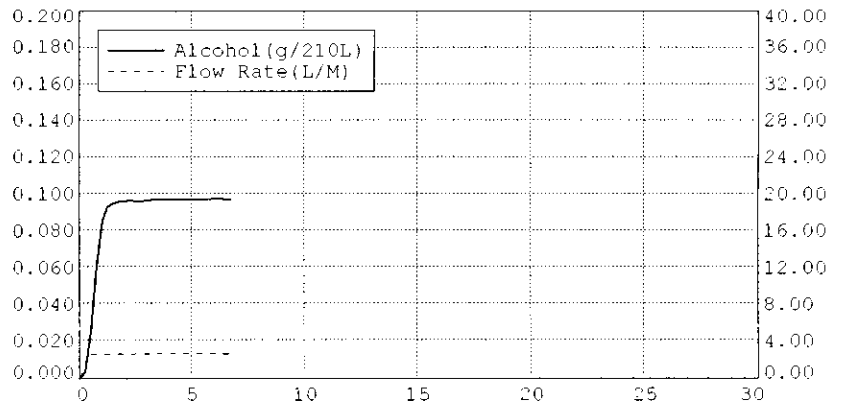
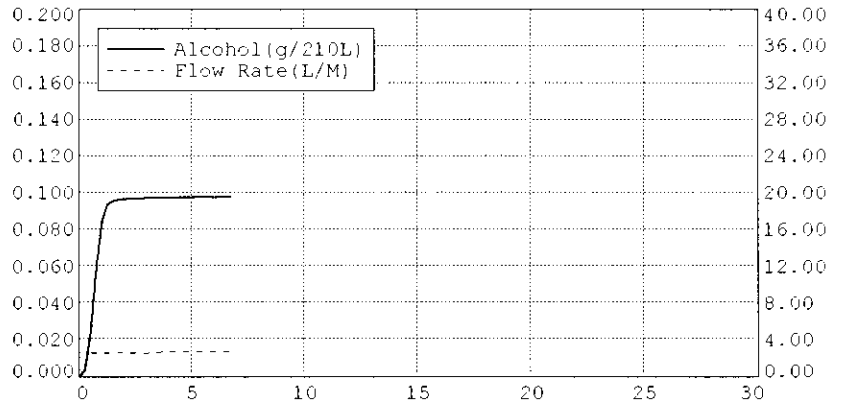
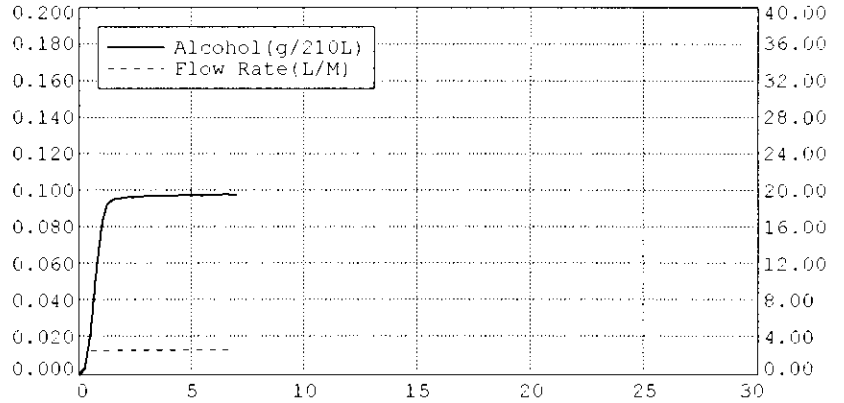
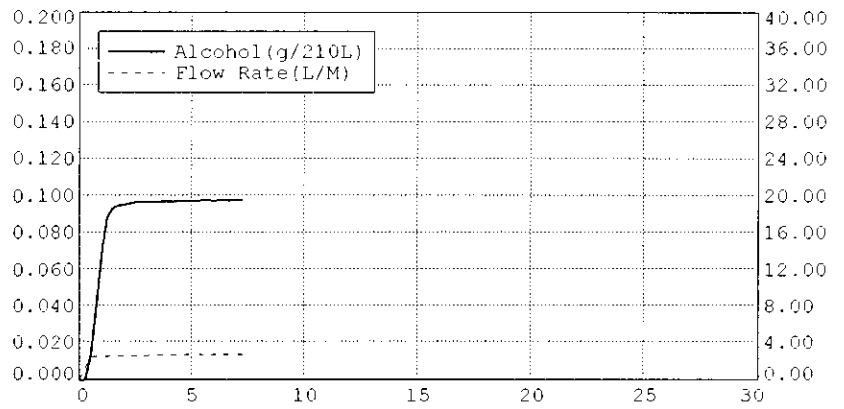
Date: 07/14/2021
Time: 11:03:26

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.79: 0.100
LOT #: AG108404
EXPIRATION: 03/25/2023
TANK PRESSURE: 1012 psi

BLANK TEST	0.000	11:04
INTERNAL STANDARD	VERIFIED	11:04
EXTERNAL STANDARD	0.098	11:04
BLANK TEST	0.000	11:05
EXTERNAL STANDARD	0.099	11:06
BLANK TEST	0.000	11:06
EXTERNAL STANDARD	0.099	11:07
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.098	11:08
BLANK TEST	0.000	11:09
EXTERNAL STANDARD	0.098	11:09
BLANK TEST	0.000	11:10

Average = 0.0984
Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

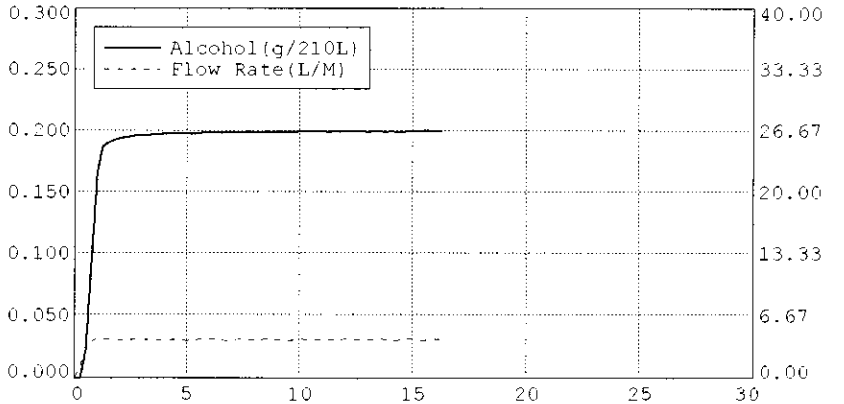
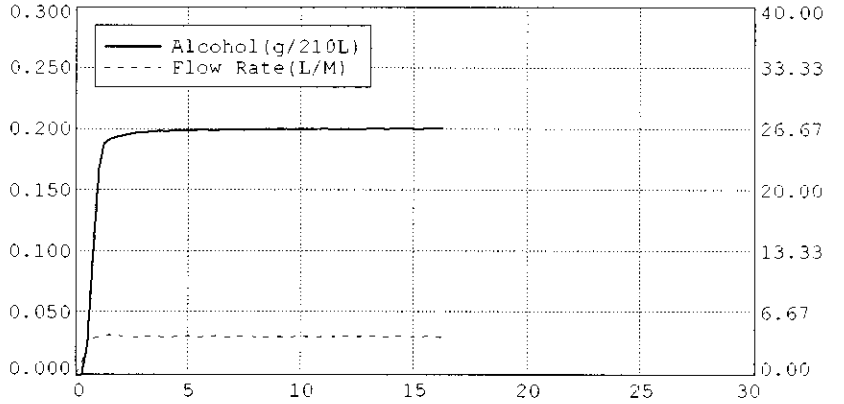
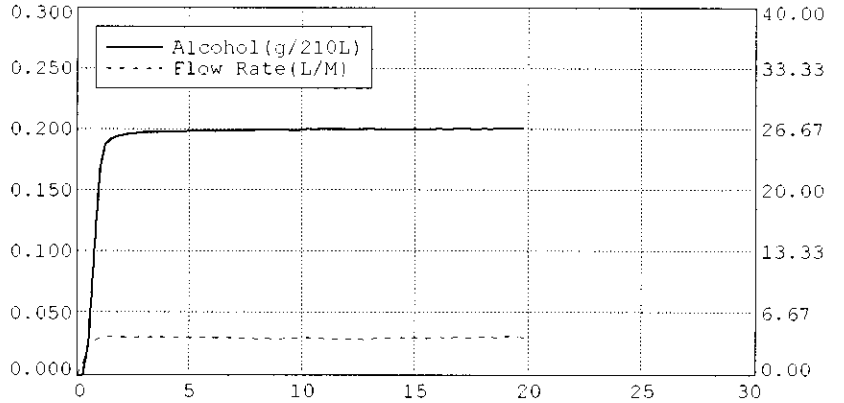
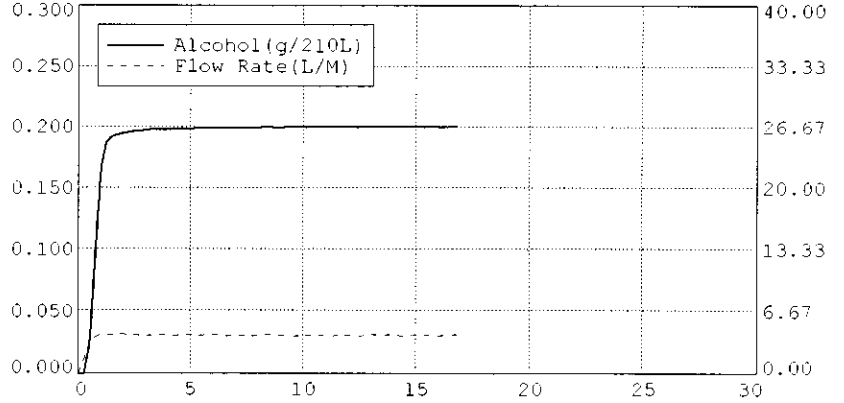
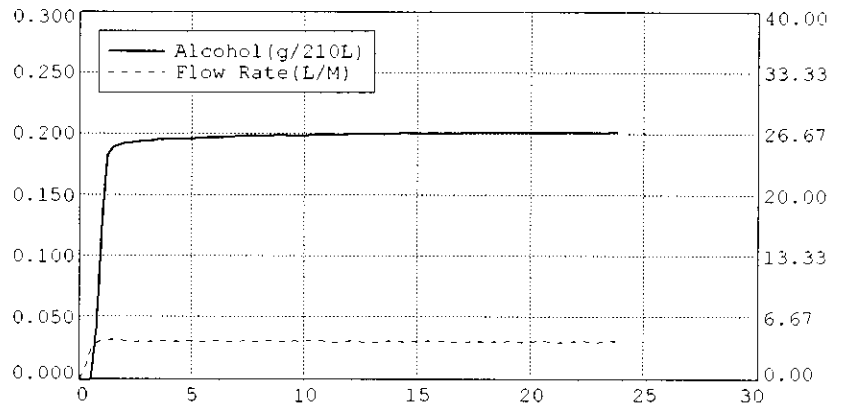
Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 07/14/2021
Time: 11:11:18

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

BLANK TEST	0.000	11:12
INTERNAL STANDARD	VERIFIED	11:12
EXTERNAL STANDARD	0.202	11:13
BLANK TEST	0.000	11:14
EXTERNAL STANDARD	0.201	11:14
BLANK TEST	0.000	11:15
EXTERNAL STANDARD	0.201	11:16
BLANK TEST	0.000	11:16
EXTERNAL STANDARD	0.201	11:17
BLANK TEST	0.000	11:18
EXTERNAL STANDARD	0.200	11:18
BLANK TEST	0.000	11:19

Average = 0.2010
Std Dev = 0.0007



LINEARITY CHECK: Control Test 6

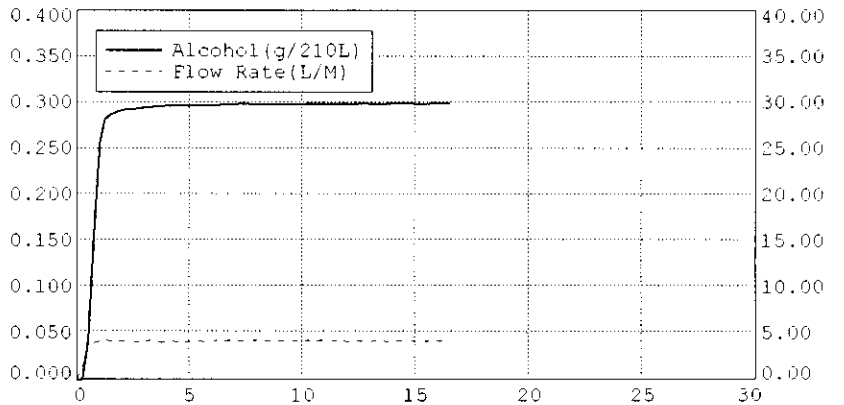
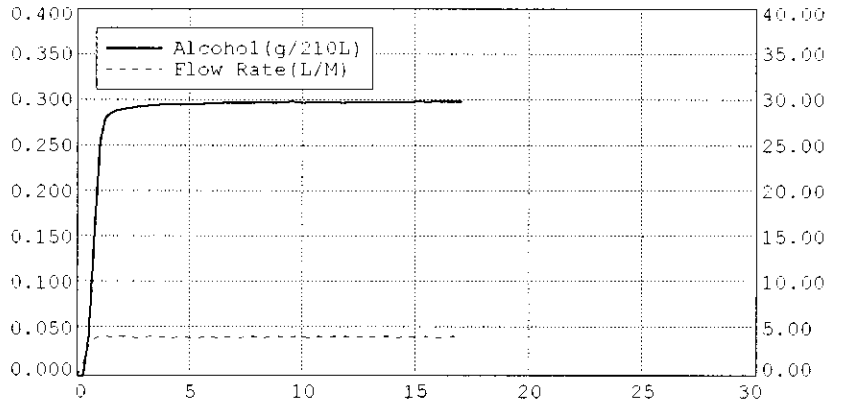
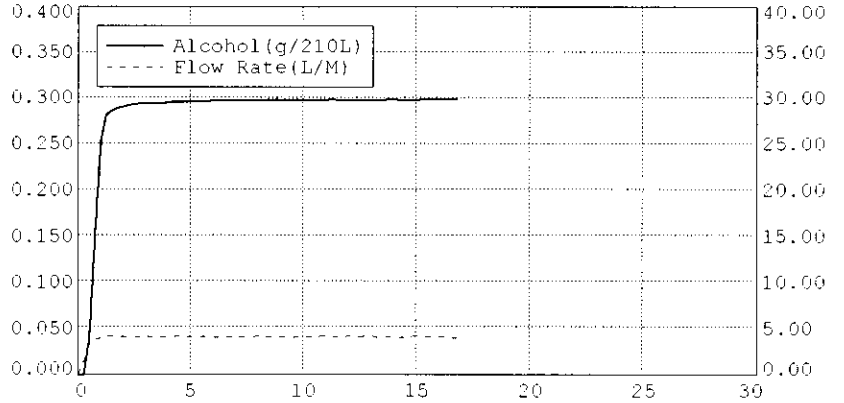
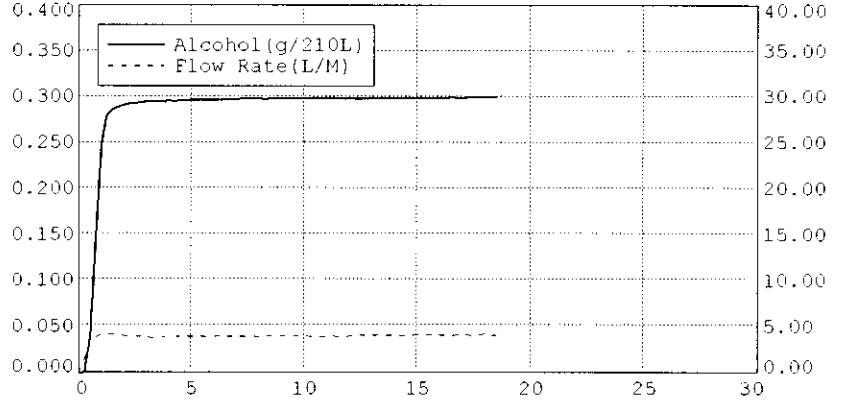
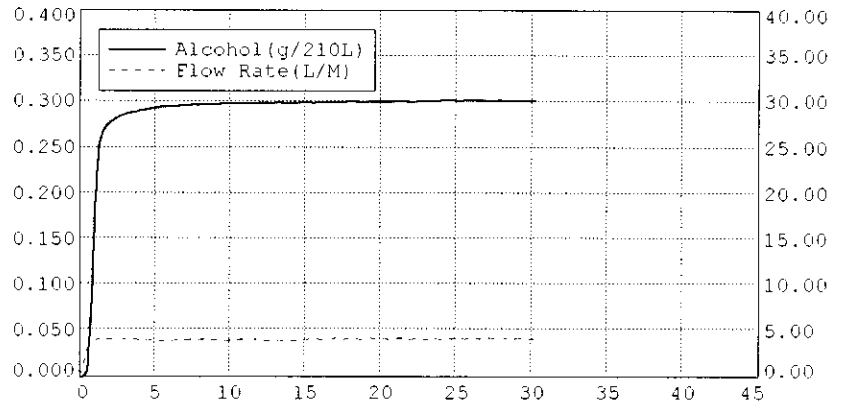
Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 07/14/2021
Time: 11:23:13

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

BLANK TEST	0.000	11:24
INTERNAL STANDARD	VERIFIED	11:24
EXTERNAL STANDARD	0.301	11:25
BLANK TEST	0.000	11:26
EXTERNAL STANDARD	0.298	11:26
BLANK TEST	0.000	11:27
EXTERNAL STANDARD	0.298	11:27
BLANK TEST	0.000	11:28
EXTERNAL STANDARD	0.298	11:29
BLANK TEST	0.000	11:30
EXTERNAL STANDARD	0.299	11:30
BLANK TEST	0.000	11:31

Average = 0.2988
Std Dev = 0.0013



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 07/14/2021
Time: 11:40:50

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

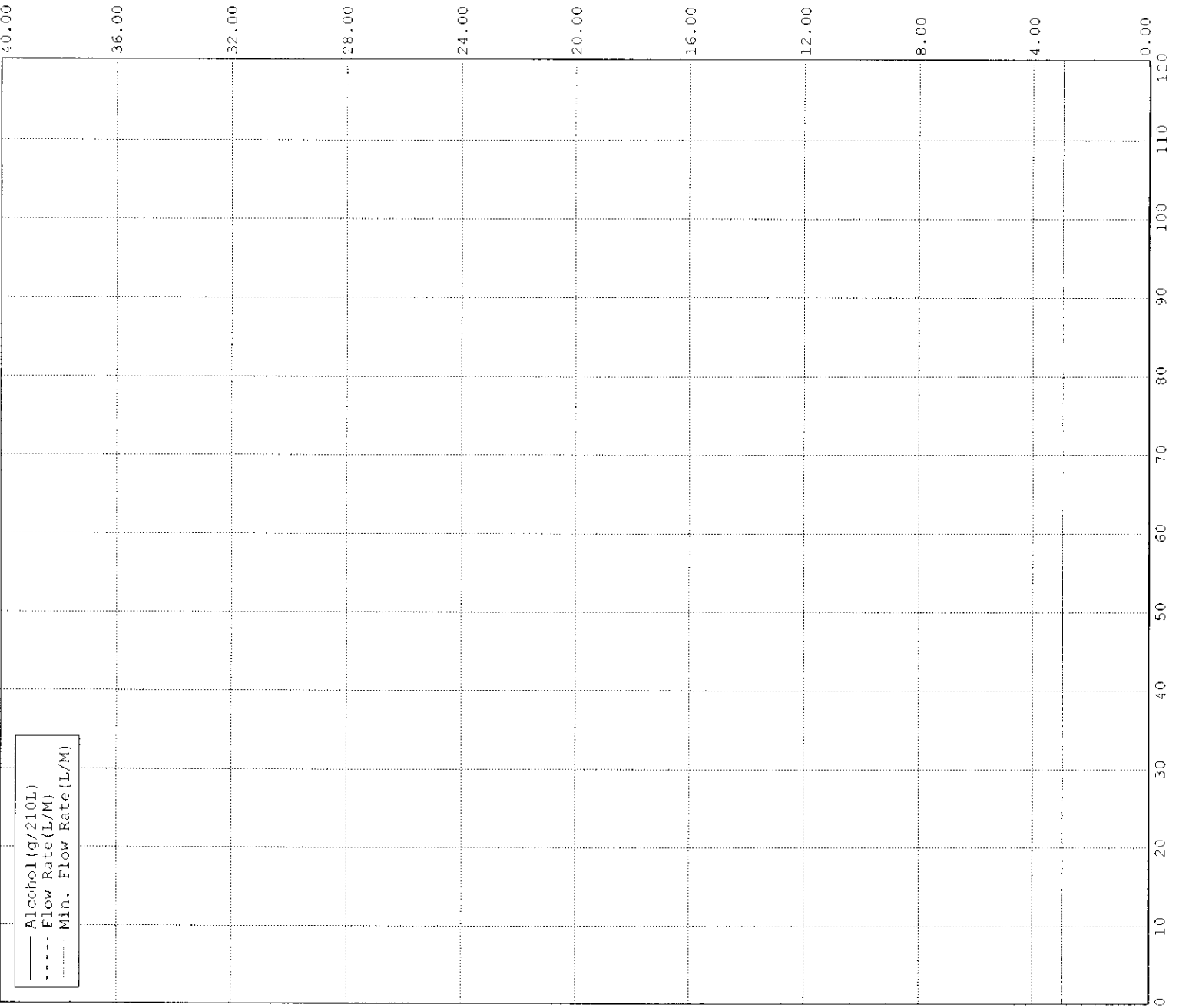
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.77: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 11:41
BLANK TEST 0.000 11:41
INTERNAL STANDARD VERIFIED 11:42
EXTERNAL STANDARD 0.078 11:42
BLANK TEST 0.000 11:43
SUBJECT SAMPLE INCOMPLETE 11:45

DM



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100361

Date: 07/15/2021
Time: 10:40:56

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 29.77: 0.080

LOT #: AG018102

EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK

BLANK TEST

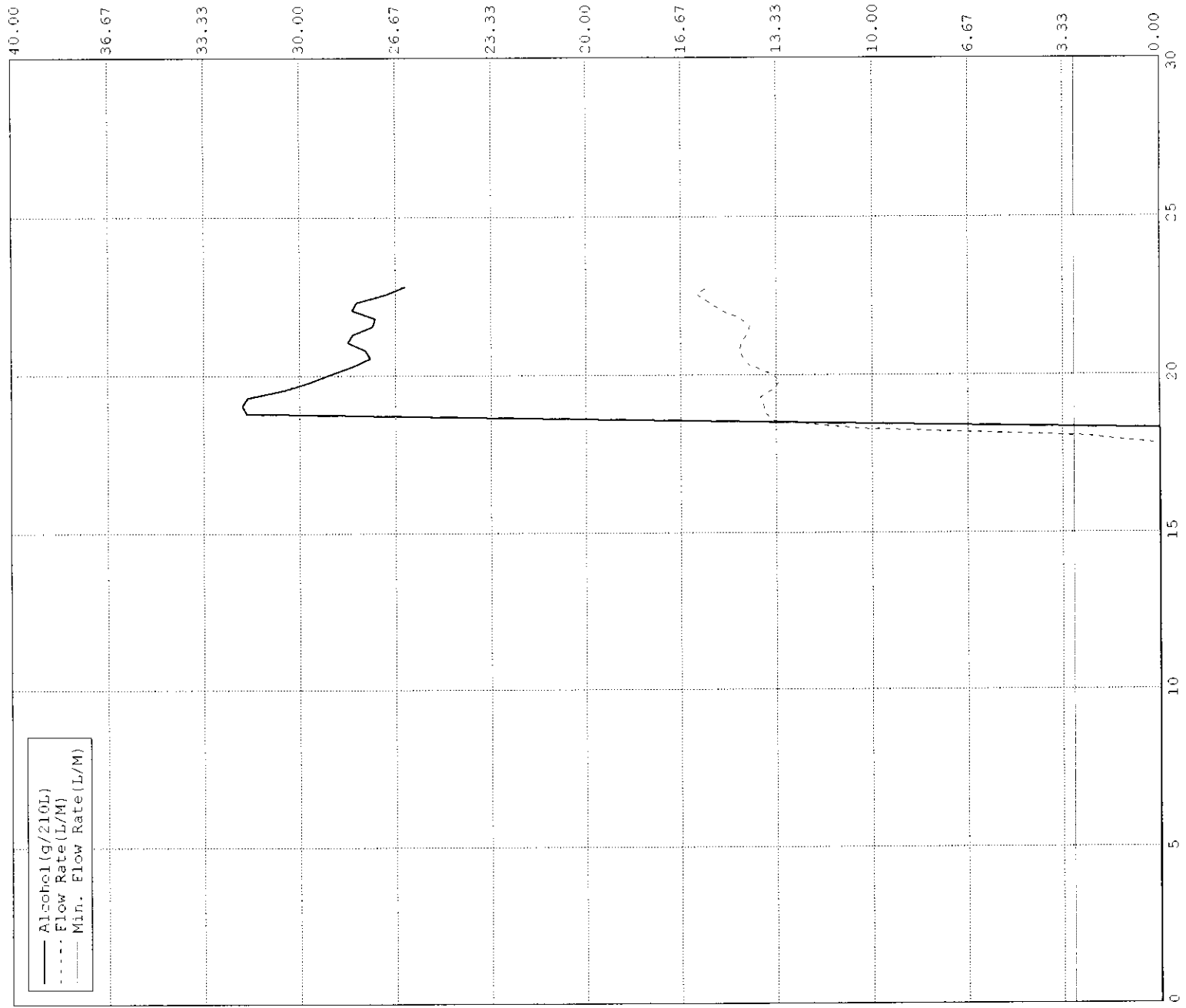
INTERNAL STANDARD

EXTERNAL STANDARD

BLANK TEST

SUBJECT SAMPLE

PASSED 10:44
0.000 10:44
VERIFIED 10:44
0.078 10:45
0.000 10:46
INVALID 10:47



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100361

Date: 07/15/2021
Time: 10:28:03

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 29.79: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

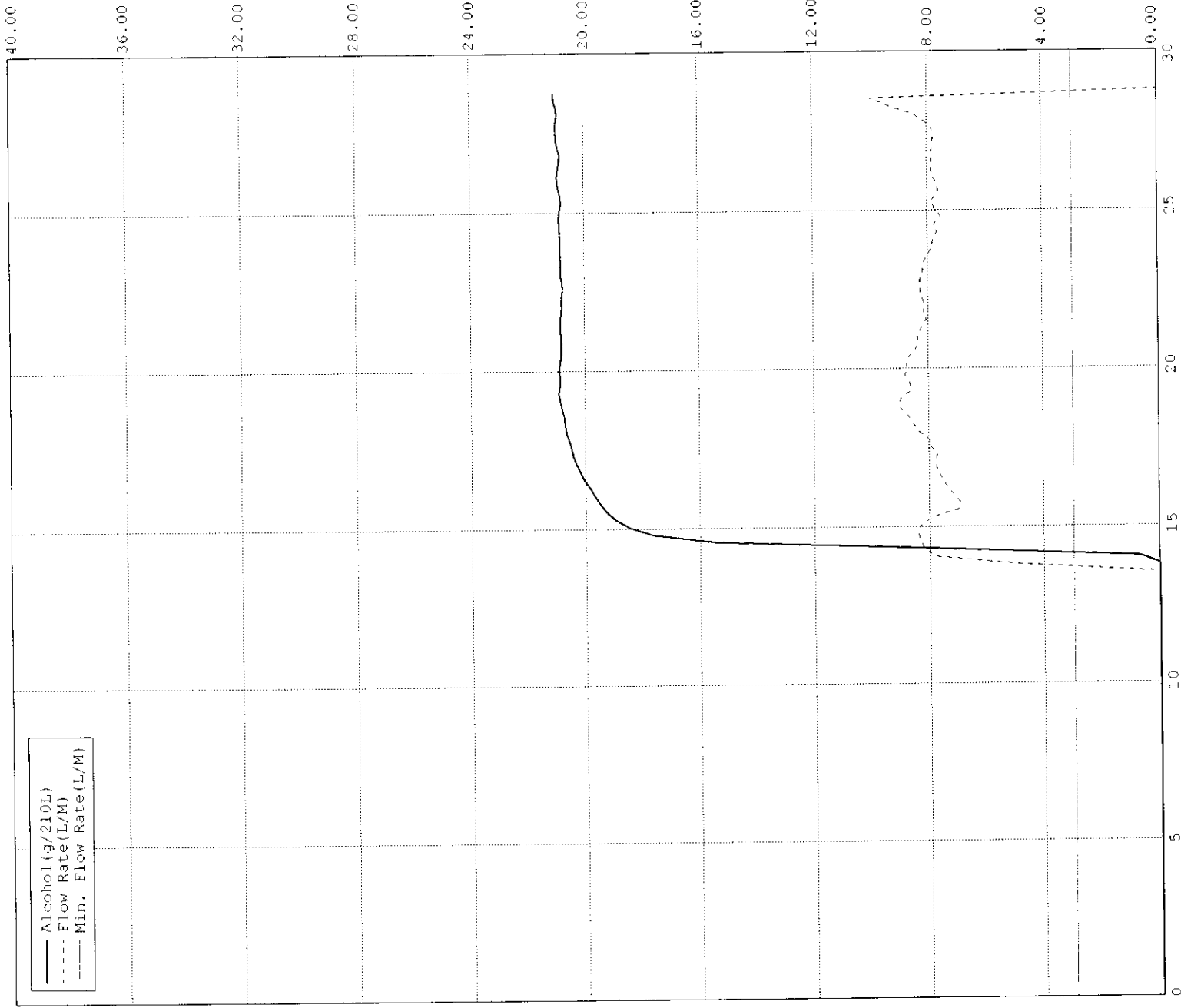
DIAGNOSTIC CHECK	PASSED	10:29
BLANK TEST	0.000	10:29
INTERNAL STANDARD	VERIFIED	10:29
$X_q = 0.087$ (0.70%)		
EXTERNAL STANDARD	0.078	10:29
$X[1] = 0.0780$ (-0.0010) (0.0022)		
BLANK TEST	0.000	10:30
SUBJECT SAMPLE	XXX	10:30
$X[1] = 0.1063$ (-0.0186) (-0.0005)		

Interference Detected

Filter 2 average: -0.0008

Filter 3 average: 0.0020

DWD



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 07/15/2021
Time: 10:22:55

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

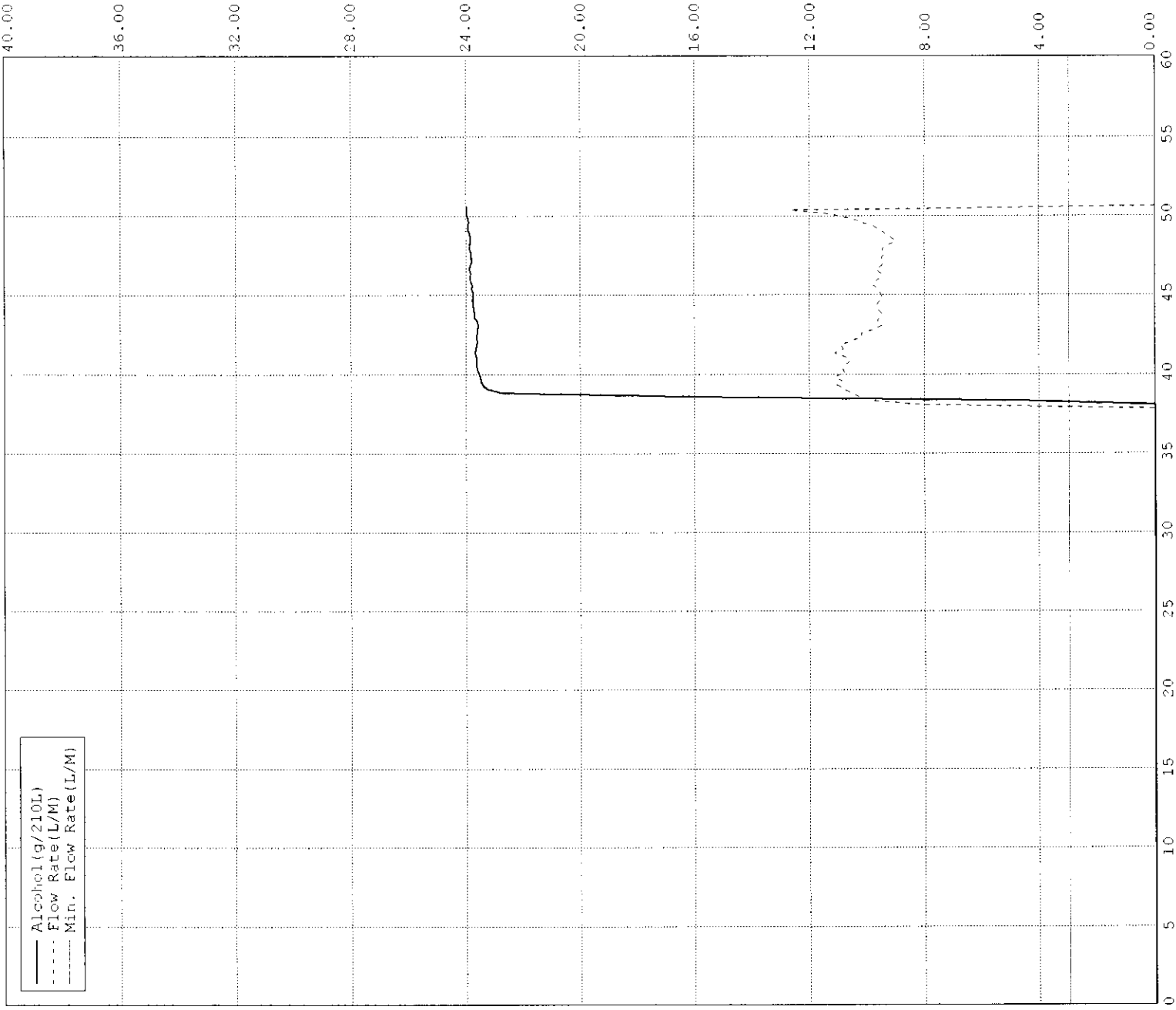
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

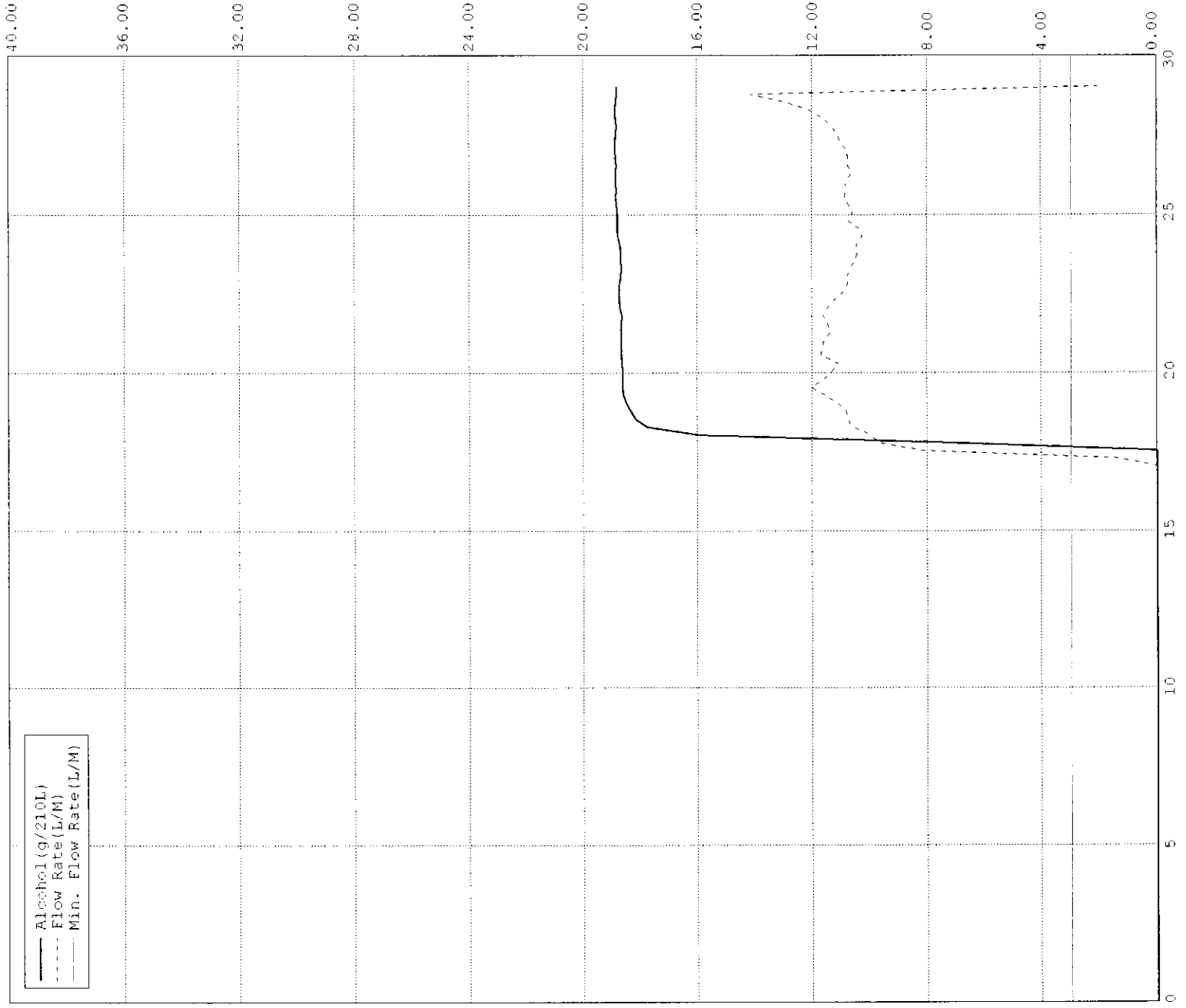
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.78: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	10:23
BLANK TEST	0.000	10:24
INTERNAL STANDARD	VERIFIED	10:24
$x_q = 0.088$ (0.00%)		
EXTERNAL STANDARD	0.078	10:24
$x_{[1]} = 0.0785$ (-0.0011)	(0.0015)	
BLANK TEST	0.000	10:25
SUBJECT SAMPLE	XXX	10:26
$x_{[1]} = 0.1208$ (-0.0254)	(0.0015)	

Interference Detected





SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100361

Date: 07/15/2021
 Time: 10:16:07

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
 LOT #: AG018102
 EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	10:17
BLANK TEST	0.000	10:17
INTERNAL STANDARD	VERIFIED	10:17
Xq = 0.087 (0.89%)		
EXTERNAL STANDARD	0.078	10:17
X[1] = 0.0780 (-0.0003)	(0.0026)	
BLANK TEST	0.000	10:18
SUBJECT SAMPLE (Vol=2.12L)	0.095	10:19
X[1] = 0.0956 (0.0015)	(-0.0002)	
BLANK TEST	0.000	10:20
EXTERNAL STANDARD	0.077	10:20
X[1] = 0.0768 (-0.0008)	(0.0015)	
BLANK TEST	0.000	10:21

DW

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 07/14/2021
Time: 11:48:23

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

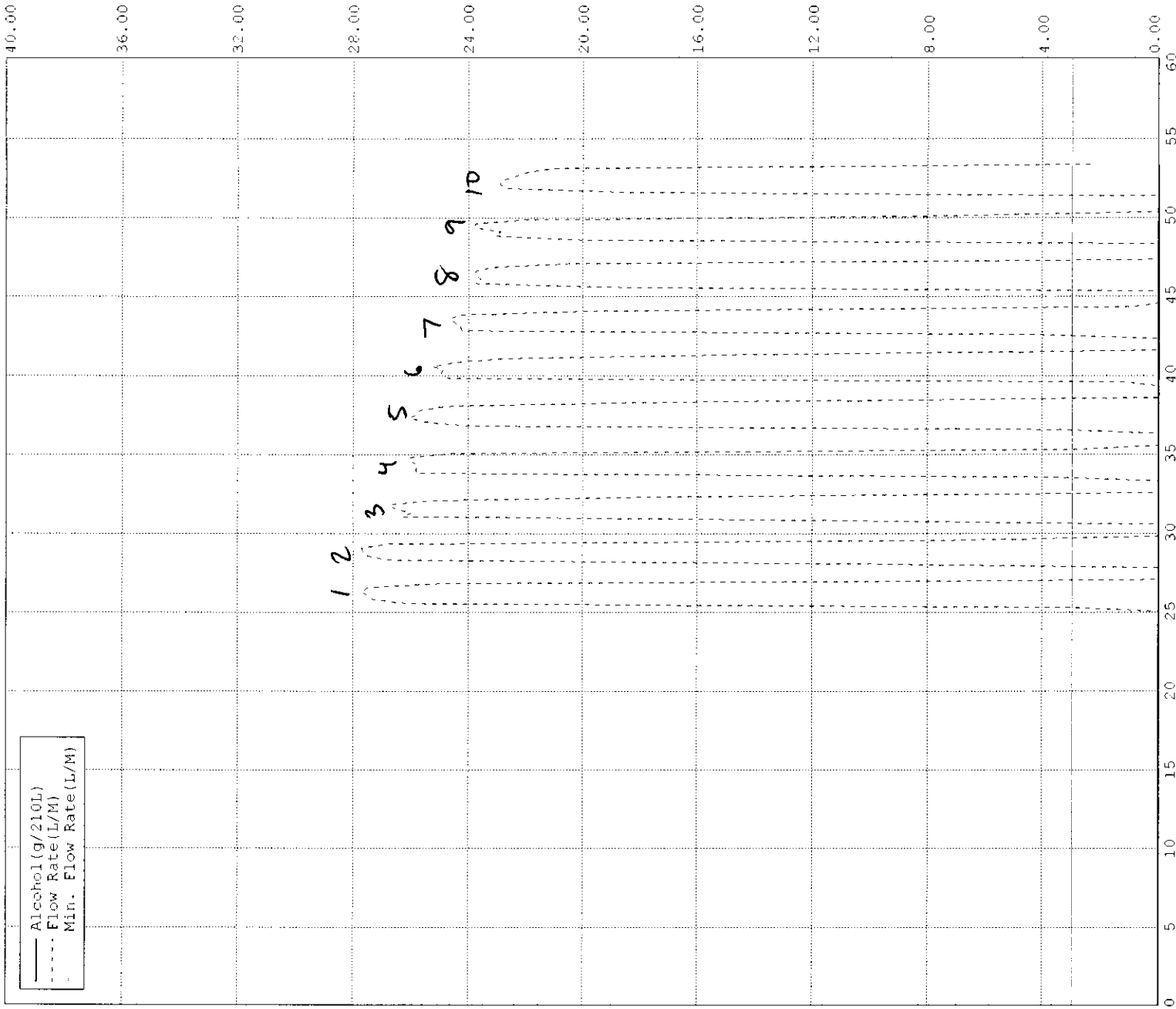
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.78: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 11:49
BLANK TEST 0.000 11:49
INTERNAL STANDARD VERIFIED 11:49
EXTERNAL STANDARD 0.078 11:49
BLANK TEST 0.000 11:50
SUBJECT SAMPLE XXX 11:51

Maximum Attempts Exceeded

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 07/15/2021
Time: 10:49:33

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

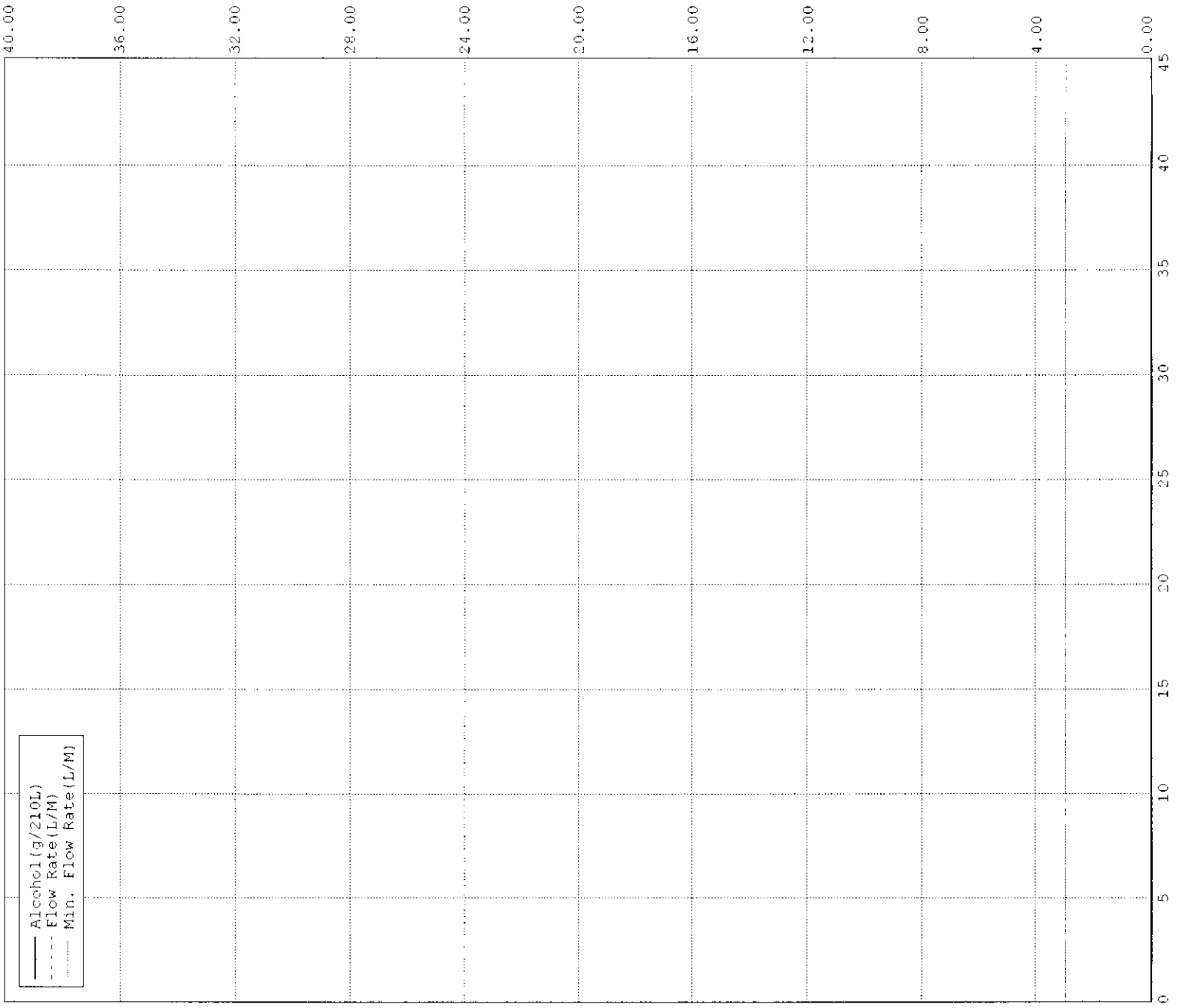
DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.78: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 10:51
BLANK TEST 0.000 10:51
INTERNAL STANDARD VERIFIED 10:51
EXTERNAL STANDARD 0.078 10:52
BLANK TEST 0.000 10:53

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 07/15/2021
Time: 11:10:50

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 29.78: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	11:12
BLANK TEST	0.000	11:12
INTERNAL STANDARD	VERIFIED	11:12
EXTERNAL STANDARD	0.079	11:12
BLANK TEST	0.000	11:13
SUBJECT SAMPLE (Vol=3.07L)	0.000	11:13
BLANK TEST	0.000	11:14
EXTERNAL STANDARD	0.078	11:14
BLANK TEST	0.000	11:15

MJC

