

# Alaska Scientific Crime Detection Laboratory

## DataMaster Certification Form

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

Version: DMCEF 2020 R0  
Status: Active

*Carlie Bailey*

Instrument S/N 100342 Analyst Deren Walton Start Date 04/22/21

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 10/09/2021

ii. 0.040g/210L Mnf Airgas Lot AG915607 Exp 6/5/2021

iii. 0.080g/210L Mnf Airgas Lot AG018102 Exp 6/29/2022

iv. 0.100g/210L Mnf Airgas Lot AG924701 Exp 9/4/2021

v. 0.200g/210L Mnf Guth Lot 19200 Exp 8/6/2021

Simulator S/N DR414266 Date Calibrated 5/8/2020

vi. 0.300g/210L Mnf Guth Lot 19330 Exp 11/13/2021

Simulator S/N DR5298 Date Calibrated 5/8/2020

### Functional Tests (attached)

Incomplete

Interference

Invalid

i. Acetone - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/2021

Simulator S/N SD1202 Date Calibrated 5/8/2020

ii. Isopropanol - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/2021

Simulator S/N SD1177 Date Calibrated 5/7/2020

iii. Negative Control - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/2021

Simulator S/N DR6267 Date Calibrated 11/17/2020

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 4/23/2021

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100342  
-----

Date: 04/22/2021  
Time: 12:31:24

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 = 47.9°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.65 V PASSED  
(0.99 V - 2.31 V)  
Cooler Voltage = 1.61 V PASSED  
(0.97 V - 2.25 V)  
Bias Voltage = 80 V PASSED  
(48 V - 112 V)  
Chopper Freq = 535 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.9 in

PUMP INFO

Flow Rate = 5.503 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  
(0.001 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED  
Filter 2 PASSED  
Filter 3 PASSED

INTERNAL STANDARD ✓ PASSED  
Xq = 0.082 0.74% (0.00% - 4.00%)

Technician Screen

-----  
DATAMASTER dmt: 100342  
-----

Date: 04/22/2021

Time: 1:00 PM

Temperatures (°C)

Sample Cell: 49.4°C

Breath Tube: 46.5°C

Current Barometer 29.9 in

Volume (Ltr) 1.59

Settings

Lamp: 1.65 V

Bias: 80 V

Cooler: 1.61 V

Chopper: 527 Hz

Voltages (V)

Flow: 1.02 V

Detector: -0.041 V

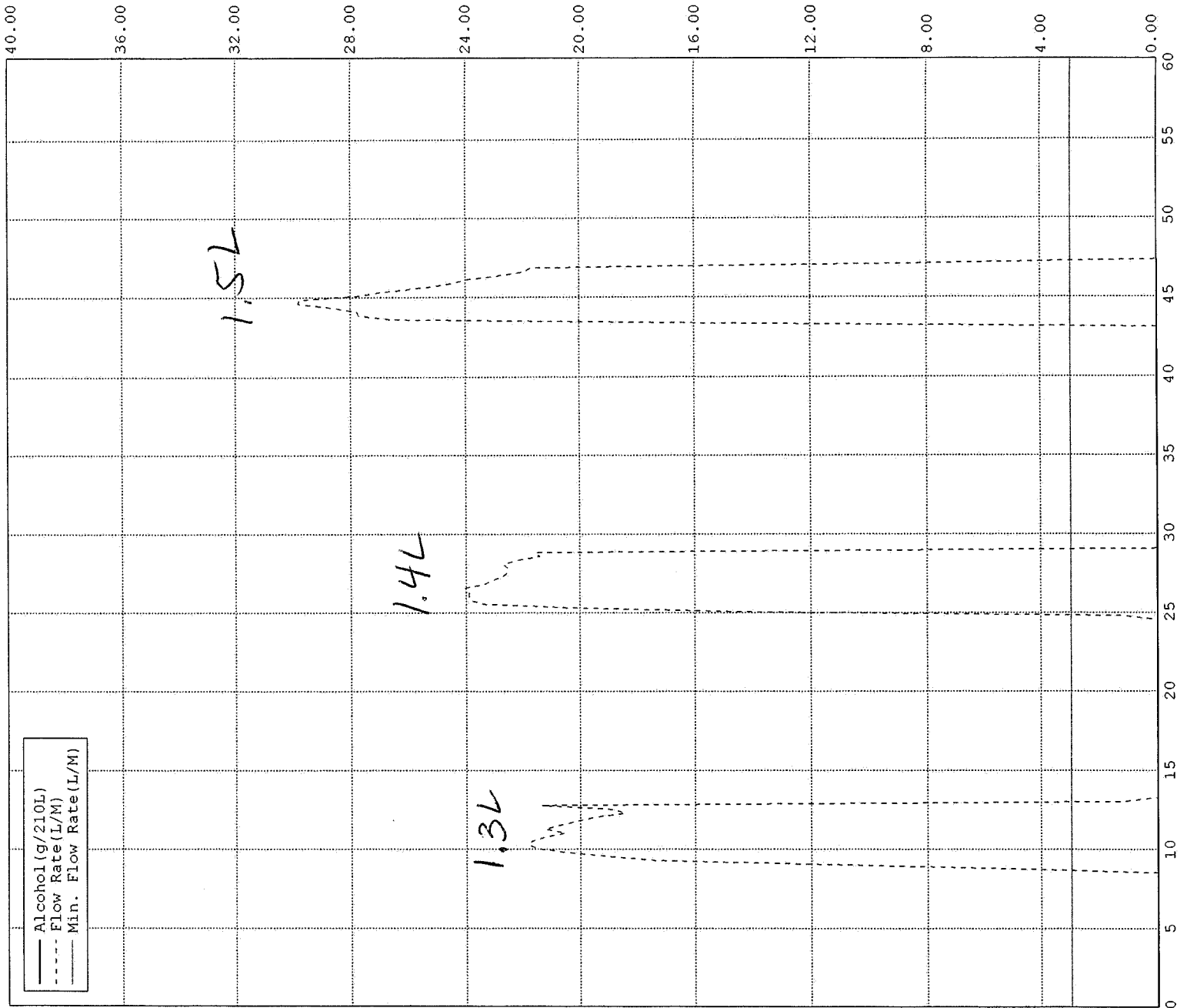
CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100342  
-----

Date: 01/06/2021  
Time: 09:25:33

OPERATOR NAME:  
INTOX I METERS  
CERTIFICATE #: TEST

Ca = 0.2000  
CAL = 0.981695    0.800 <= CAL < 1.200  
b1 = 0.0006    0.0000 <= b1 < 0.0040  
b2 = 0.0066    0.0010 <= b2 < 0.0100  
b3 = 0.0007    0.0000 <= b3 < 0.0040  
Xq = 0.0823    0.0500 <= Xq < 0.2000  
a21 = 1.174111    1.050 <= a21 < 1.300  
a31 = 0.474277    0.300 <= a31 < 0.800



SUBJECT TEST

-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100342  
 -----  
 Date: 04/22/2021  
 Time: 13:01:47

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

OPERATOR NAME:  
 DEREK WALTON  
 OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.89: 0.080

DIAGNOSTIC CHECK	PASSED	13:04
BLANK TEST	0.000	13:04
INTERNAL STANDARD	VERIFIED	13:04
EXTERNAL STANDARD	0.079	13:04
BLANK TEST	0.000	13:05
SUBJECT SAMPLE (Vol=1.62L)	0.000	13:06
BLANK TEST	0.000	13:07
EXTERNAL STANDARD	0.080	13:07
BLANK TEST	0.000	13:08

Lot # A5-018102  
 Exp. 6/29/2022 OLB 4/22/2021  
 DM 04/20/21

*[Handwritten Signature]*

LINEARITY CHECK

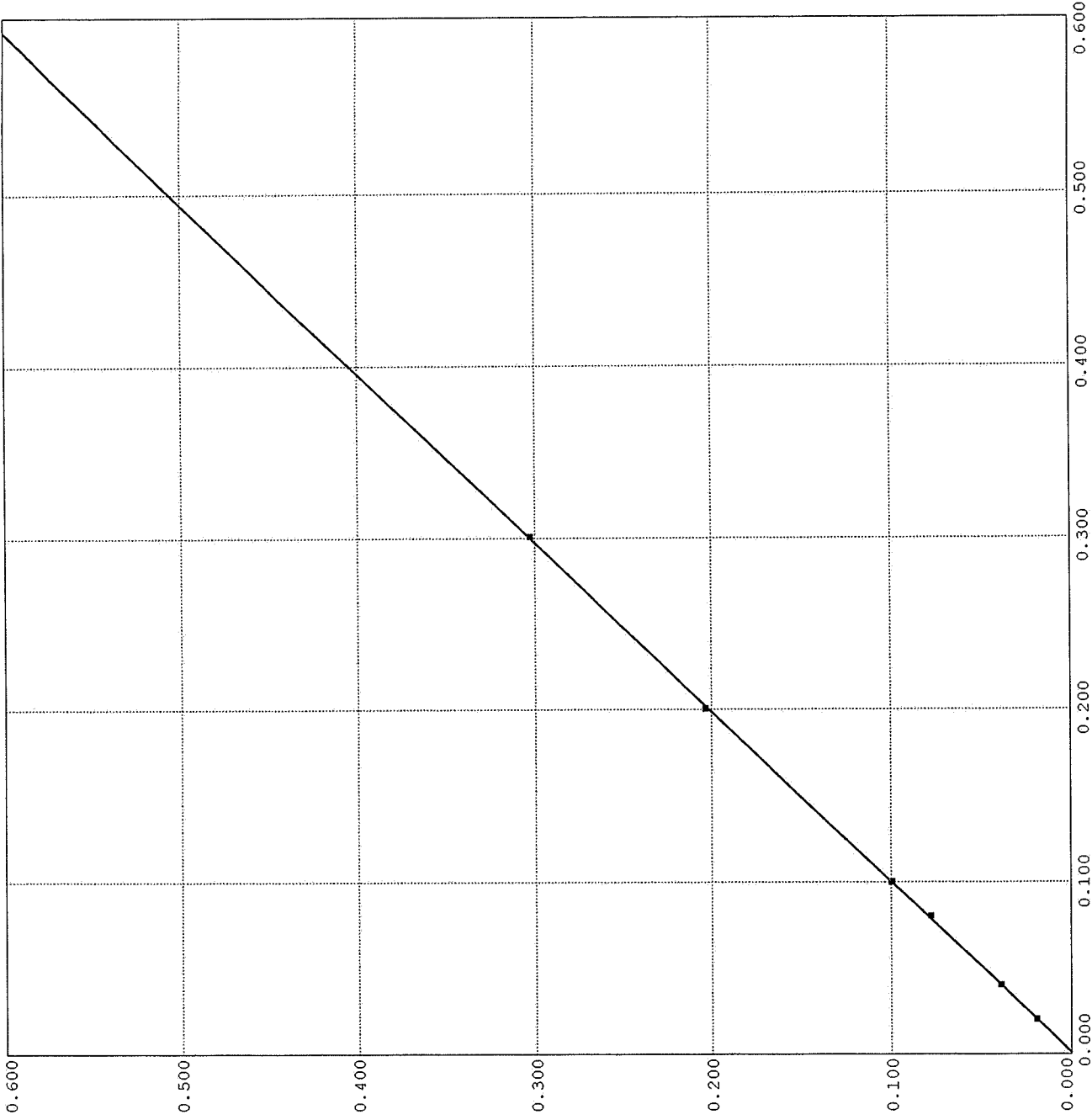
-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100342  
-----

Date: 04/22/2021  
Time: 13:11:46

SUPERVISOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0402	0.0004
0.080	0.0790	0.0000
0.100	0.1006	0.0005
0.200	0.2042	0.0004
0.300	0.3034	0.0015

SLOPE = 1.016371  
R<sup>2</sup> = 0.999896



*COAS*

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

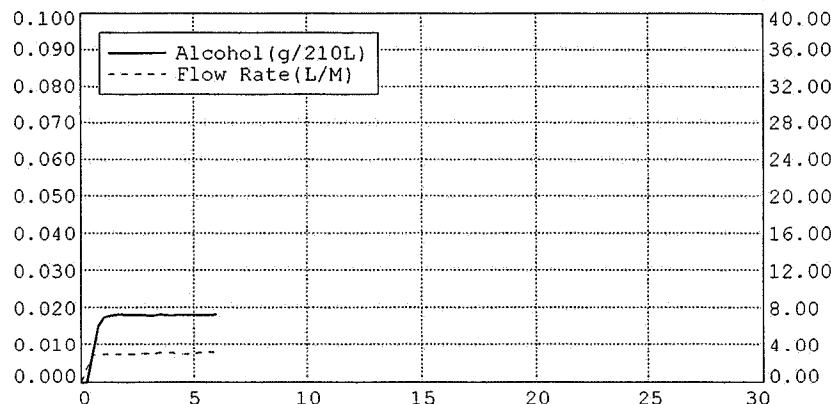
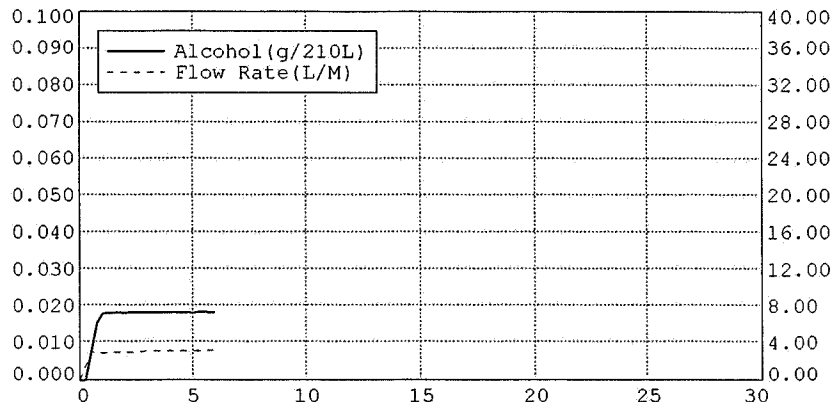
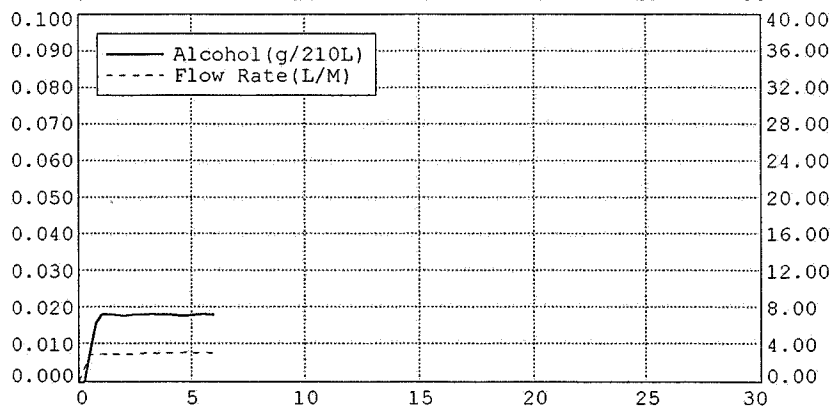
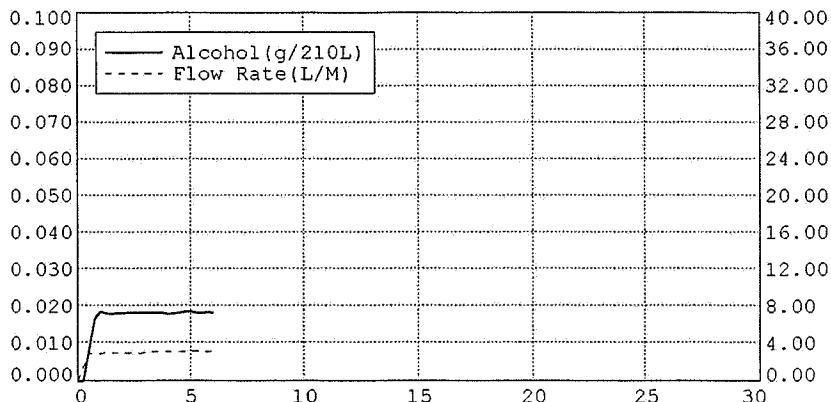
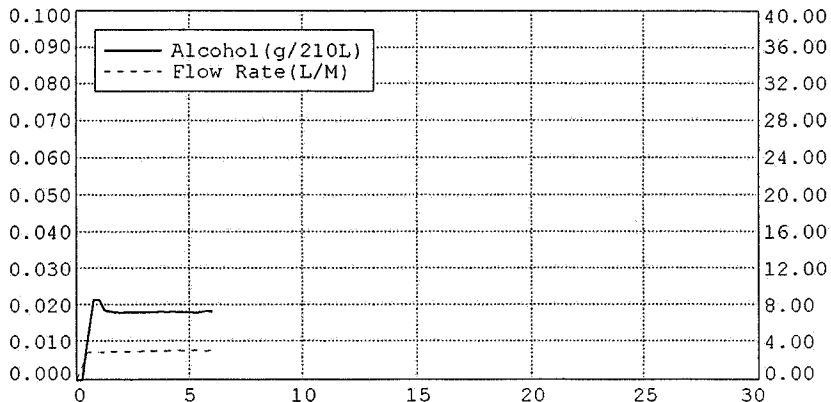
Date: 04/22/2021  
Time: 13:11:49

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
TARGET AT 29.88: 0.020  
LOT #: AG928203  
EXPIRATION: 10/09/2021  
TANK PRESSURE: 582 psi

BLANK TEST	0.000	13:13
INTERNAL STANDARD	VERIFIED	13:14
EXTERNAL STANDARD	0.020	13:14
BLANK TEST	0.000	13:15
EXTERNAL STANDARD	0.020	13:15
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.020	13:16
BLANK TEST	0.000	13:17
EXTERNAL STANDARD	0.020	13:17
BLANK TEST	0.000	13:18
EXTERNAL STANDARD	0.020	13:18
BLANK TEST	0.000	13:19

Average = 0.0200  
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

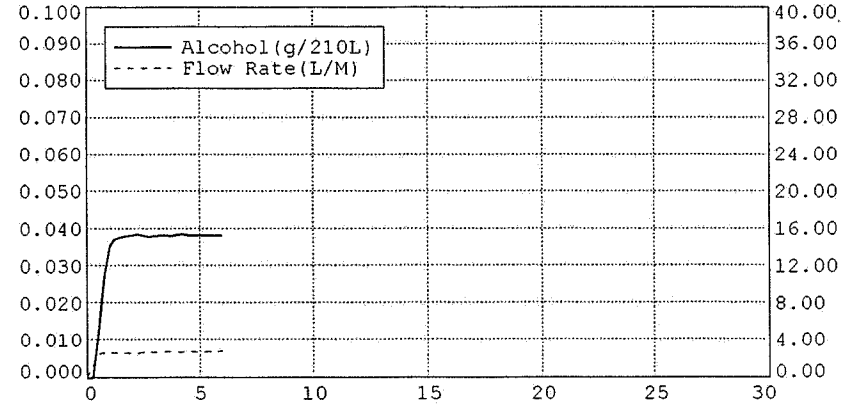
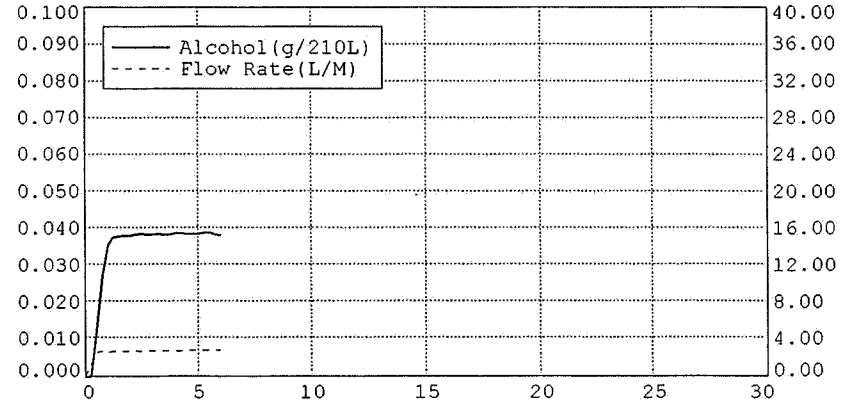
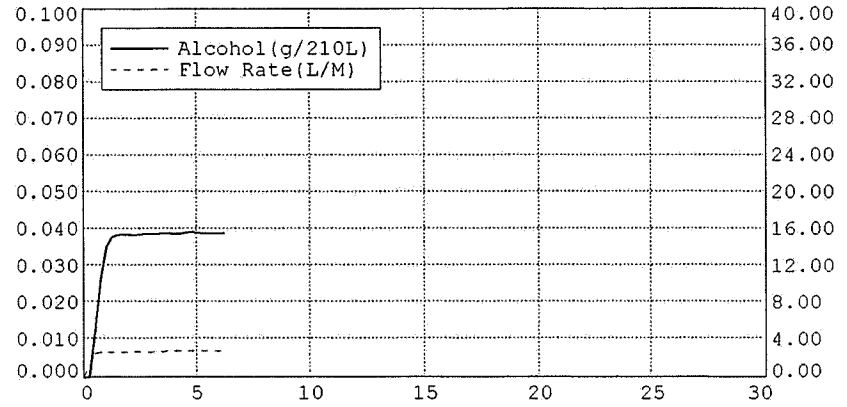
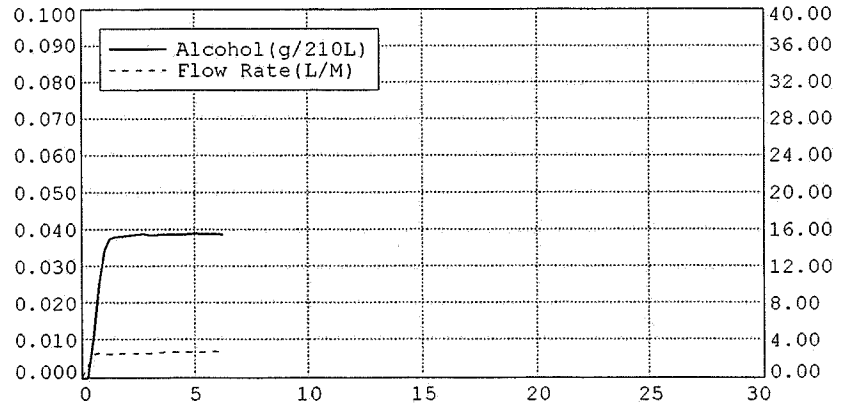
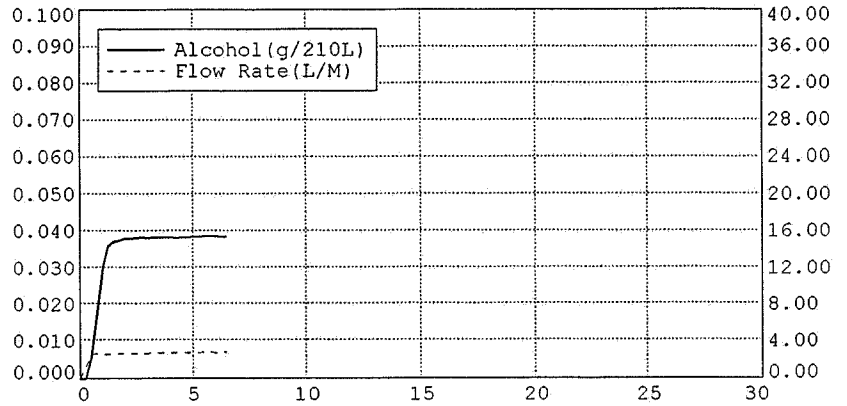
Date: 04/22/2021  
Time: 13:20:15

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
TARGET AT 29.87: 0.040  
LOT #: AG915607  
EXPIRATION: 06/05/2021  
TANK PRESSURE: 327 psi

BLANK TEST	0.000	13:21
INTERNAL STANDARD	VERIFIED	13:22
EXTERNAL STANDARD	0.040	13:22
BLANK TEST	0.000	13:23
EXTERNAL STANDARD	0.040	13:23
BLANK TEST	0.000	13:24
EXTERNAL STANDARD	0.041	13:24
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.040	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.040	13:26
BLANK TEST	0.000	13:27

Average = 0.0402  
Std Dev = 0.0004





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100342

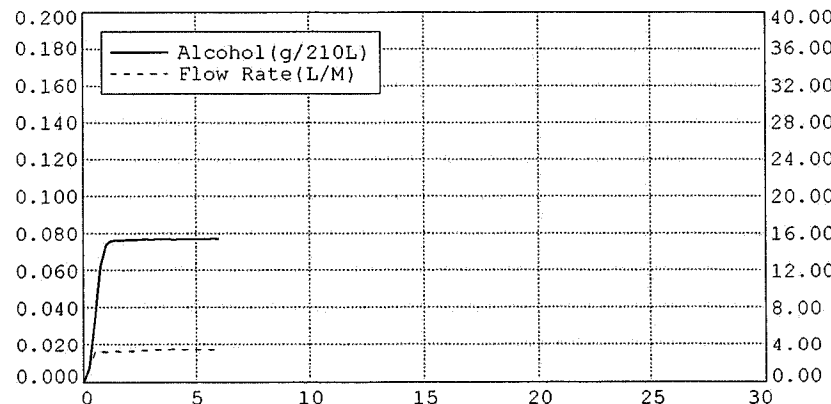
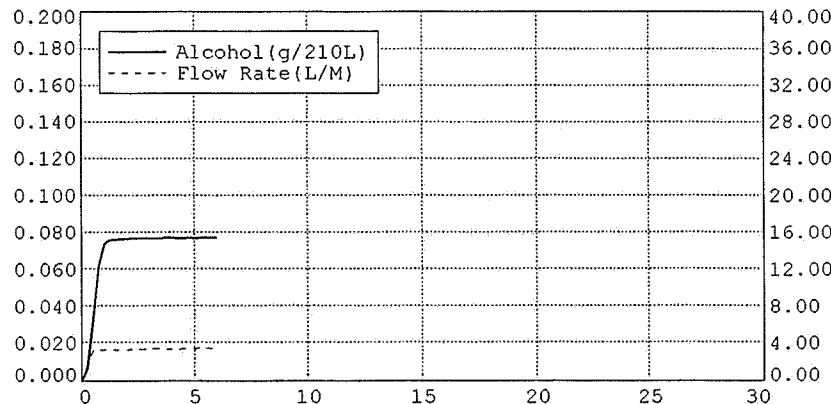
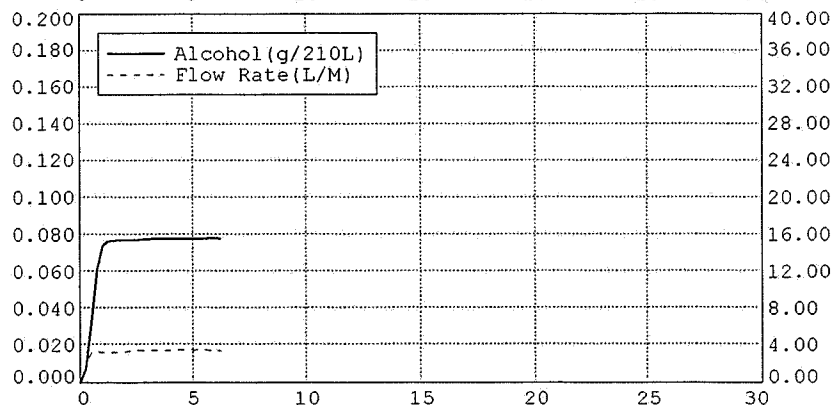
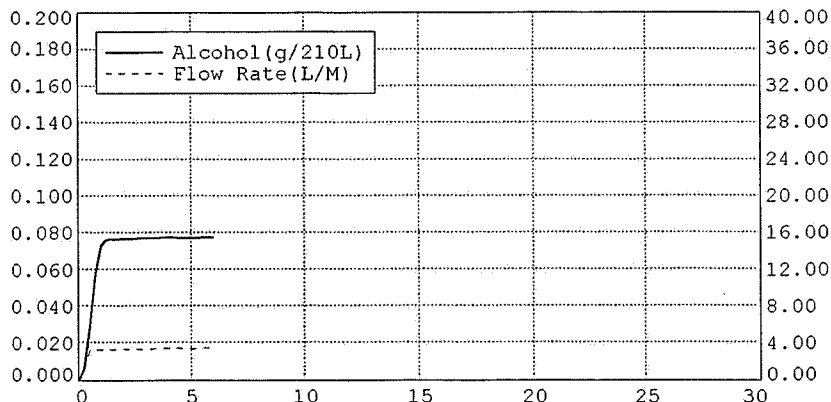
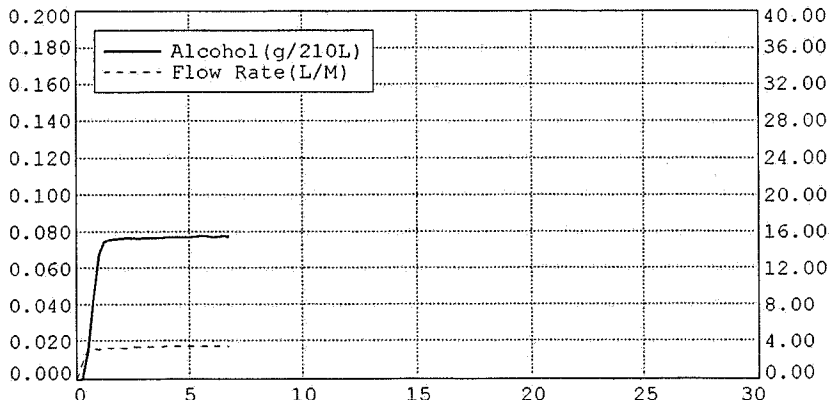
Date: 04/22/2021  
 Time: 13:35:27

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.87: 0.080  
 LOT #: AG018102  
 EXPIRATION: 06/29/2022  
 TANK PRESSURE: 780 psi

BLANK TEST	0.000	13:37
INTERNAL STANDARD	VERIFIED	13:37
EXTERNAL STANDARD	0.079	13:37
BLANK TEST	0.000	13:38
EXTERNAL STANDARD	0.079	13:38
BLANK TEST	0.000	13:39
EXTERNAL STANDARD	0.079	13:39
BLANK TEST	0.000	13:40
EXTERNAL STANDARD	0.079	13:40
BLANK TEST	0.000	13:41
EXTERNAL STANDARD	0.079	13:41
BLANK TEST	0.000	13:42

Average = 0.0790  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

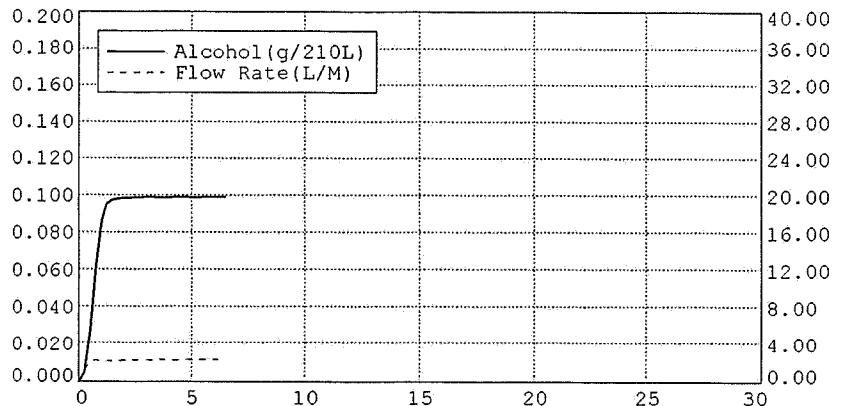
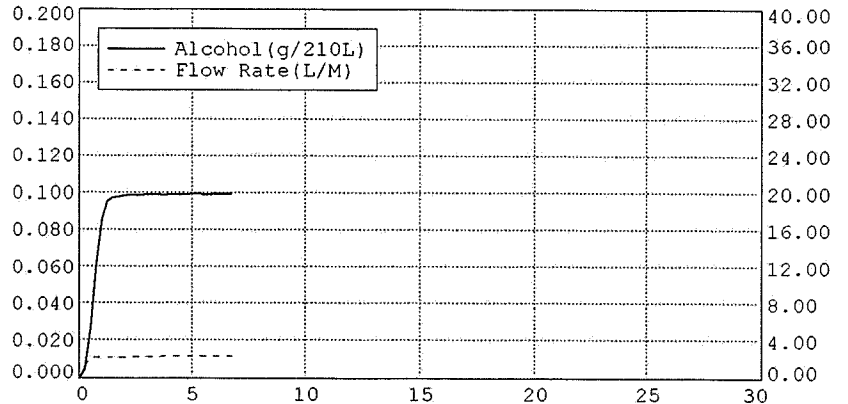
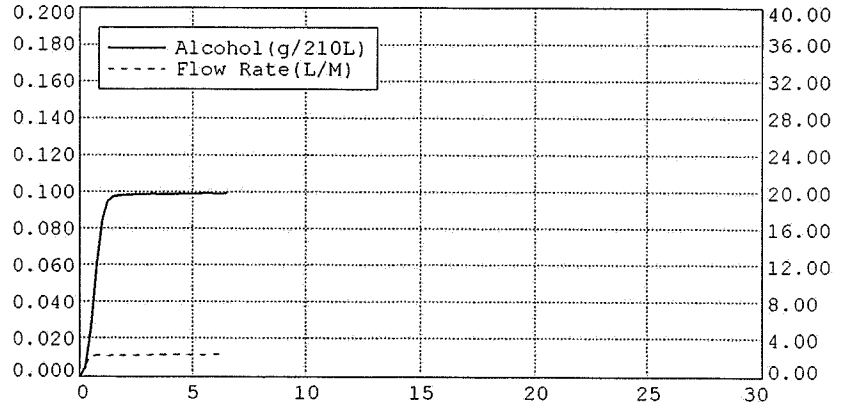
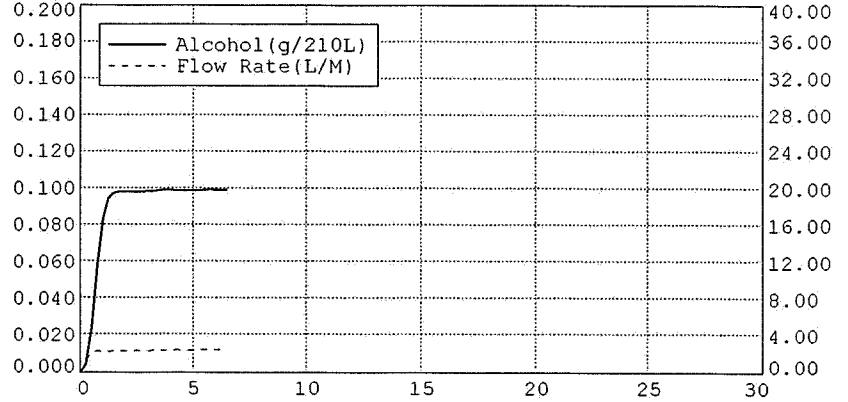
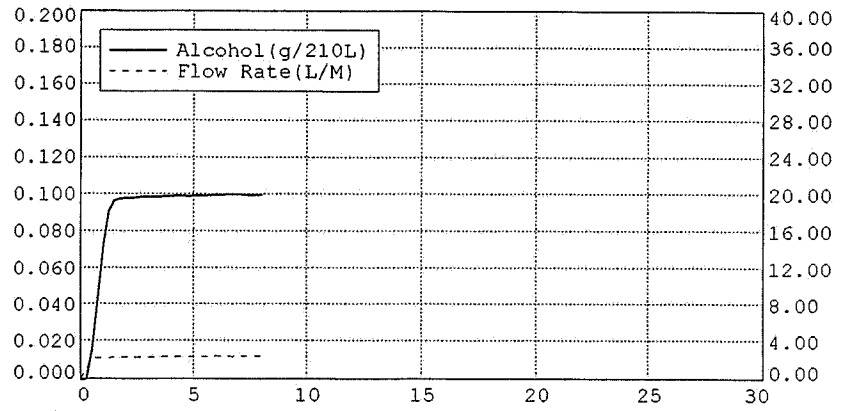
Date: 04/22/2021  
Time: 13:43:21

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
TARGET AT 29.87: 0.100  
LOT #: AG924701  
EXPIRATION: 09/04/2021  
TANK PRESSURE: 161 psi

BLANK TEST	0.000	13:45
INTERNAL STANDARD	VERIFIED	13:45
EXTERNAL STANDARD	0.101	13:45
BLANK TEST	0.000	13:46
EXTERNAL STANDARD	0.100	13:46
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.100	13:48
BLANK TEST	0.000	13:48
EXTERNAL STANDARD	0.101	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.101	13:50
BLANK TEST	0.000	13:51

Average = 0.1006  
Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

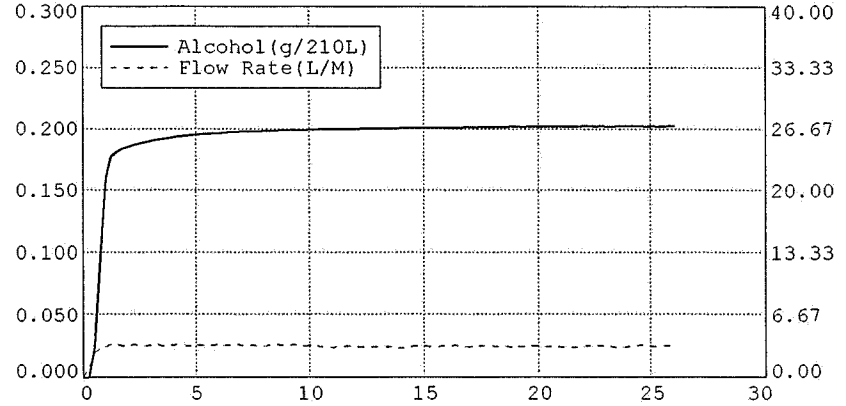
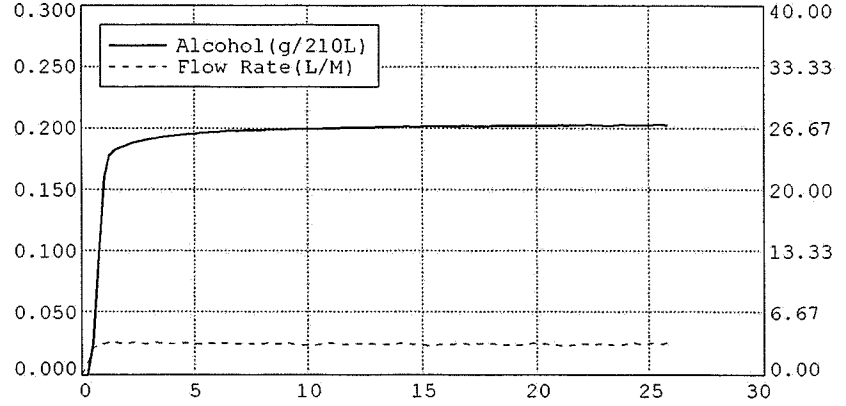
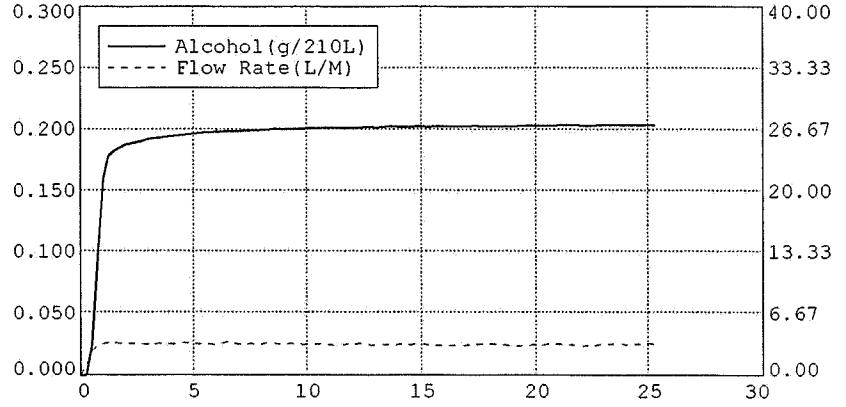
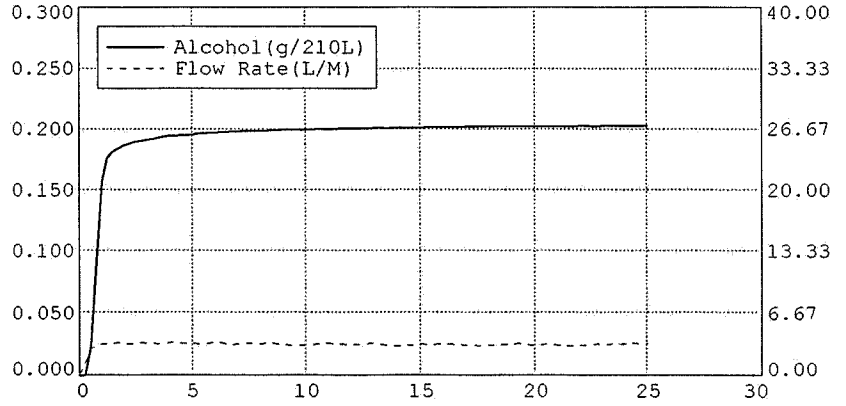
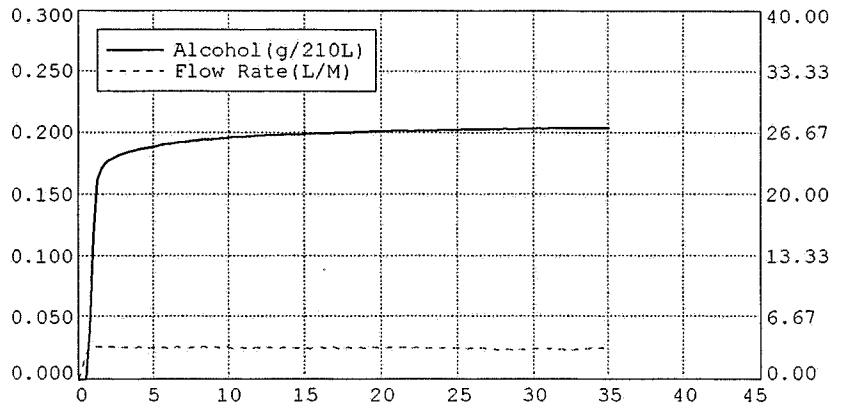
Alaska Department of Public Safety  
 DATAMASTER dmt: 100342

Date: 04/22/2021  
 Time: 14:03:35

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

BLANK TEST	0.000	14:05
INTERNAL STANDARD	VERIFIED	14:05
EXTERNAL STANDARD	0.205	14:06
BLANK TEST	0.000	14:07
EXTERNAL STANDARD	0.204	14:07
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.204	14:09
BLANK TEST	0.000	14:10
EXTERNAL STANDARD	0.204	14:10
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.204	14:12
BLANK TEST	0.000	14:12

Average = 0.2042  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100342

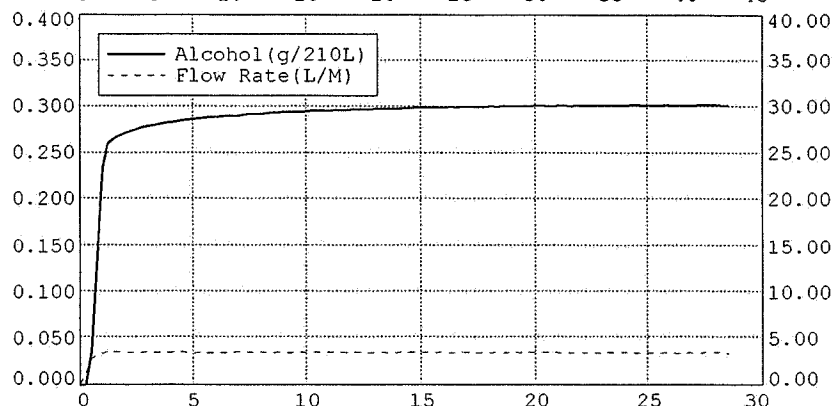
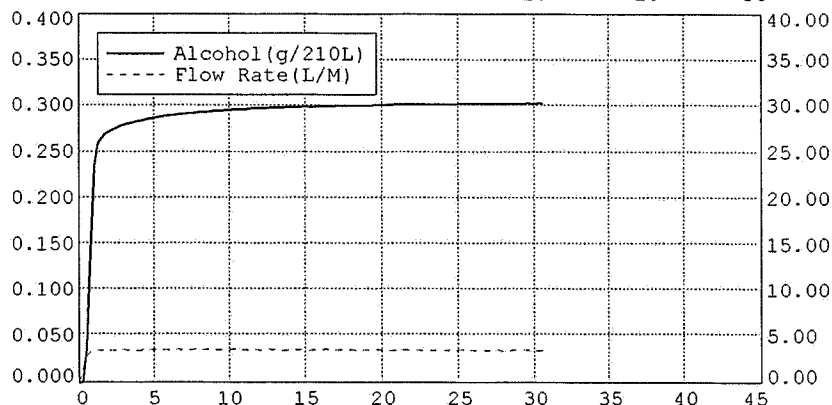
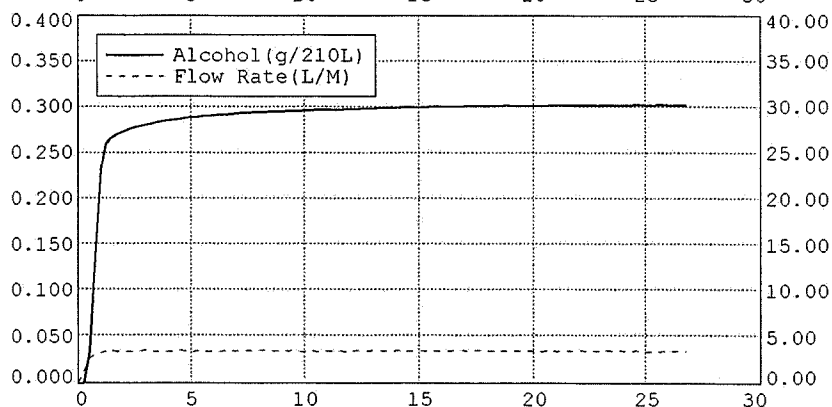
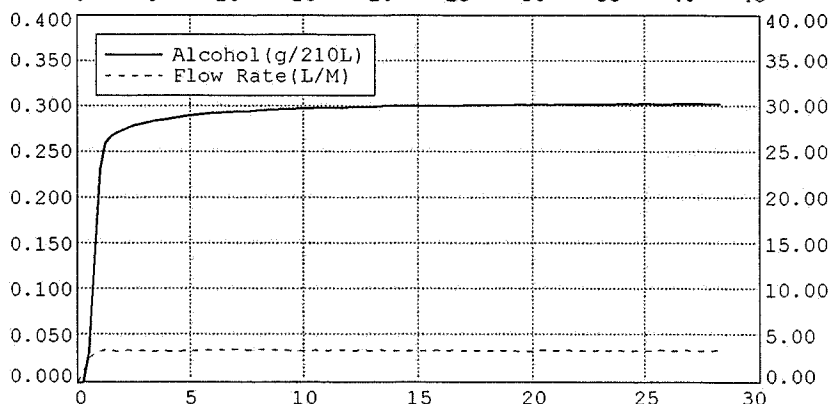
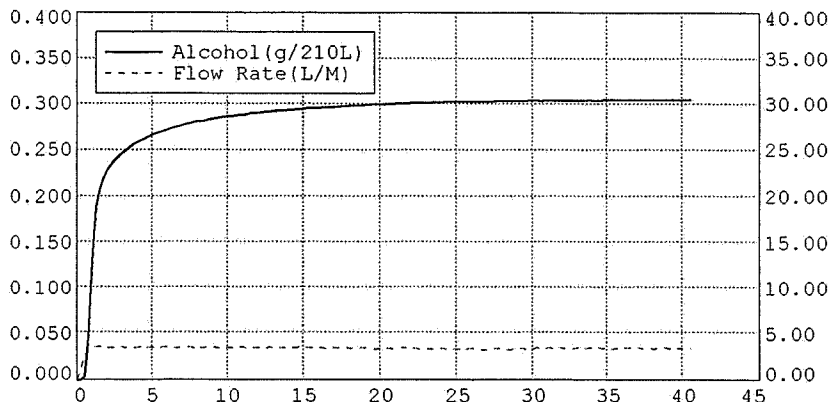
Date: 04/22/2021  
 Time: 14:15:46

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
 LOT #: 19330  
 EXPIRATION: 11/13/2021

BLANK TEST	0.000	14:17
INTERNAL STANDARD	VERIFIED	14:17
EXTERNAL STANDARD	0.306	14:18
BLANK TEST	0.000	14:19
EXTERNAL STANDARD	0.303	14:19
BLANK TEST	0.000	14:20
EXTERNAL STANDARD	0.302	14:21
BLANK TEST	0.000	14:22
EXTERNAL STANDARD	0.303	14:22
BLANK TEST	0.000	14:23
EXTERNAL STANDARD	0.303	14:24
BLANK TEST	0.000	14:25

Average = 0.3034  
 Std Dev = 0.0015



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

Date: 04/22/2021  
Time: 14:31:43

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

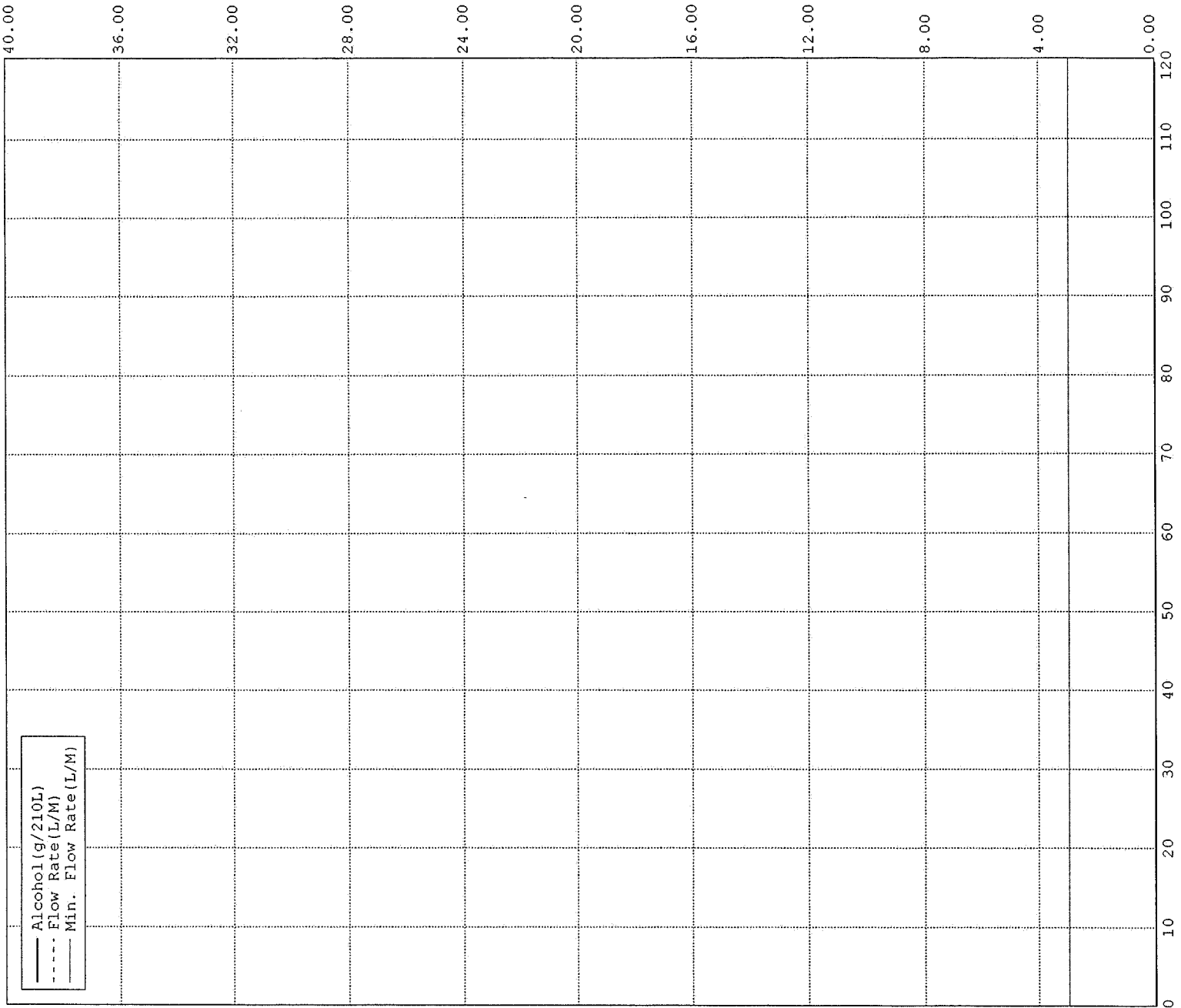
DEPT/AGENCY:  
INCOMPLETE  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.87: 0.080

DIAGNOSTIC CHECK	PASSED	14:33
BLANK TEST	0.000	14:33
INTERNAL STANDARD	VERIFIED	14:33
EXTERNAL STANDARD	0.079	14:33
BLANK TEST	0.000	14:34
SUBJECT SAMPLE	INCOMPLETE	14:36

LOT # AG-018102  
EXP. 6/29/2022 OCB 4/22/21  
JMW 04/26/21

OXIS



SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dmt: 100342

Date: 04/23/2021  
Time: 13:07:12

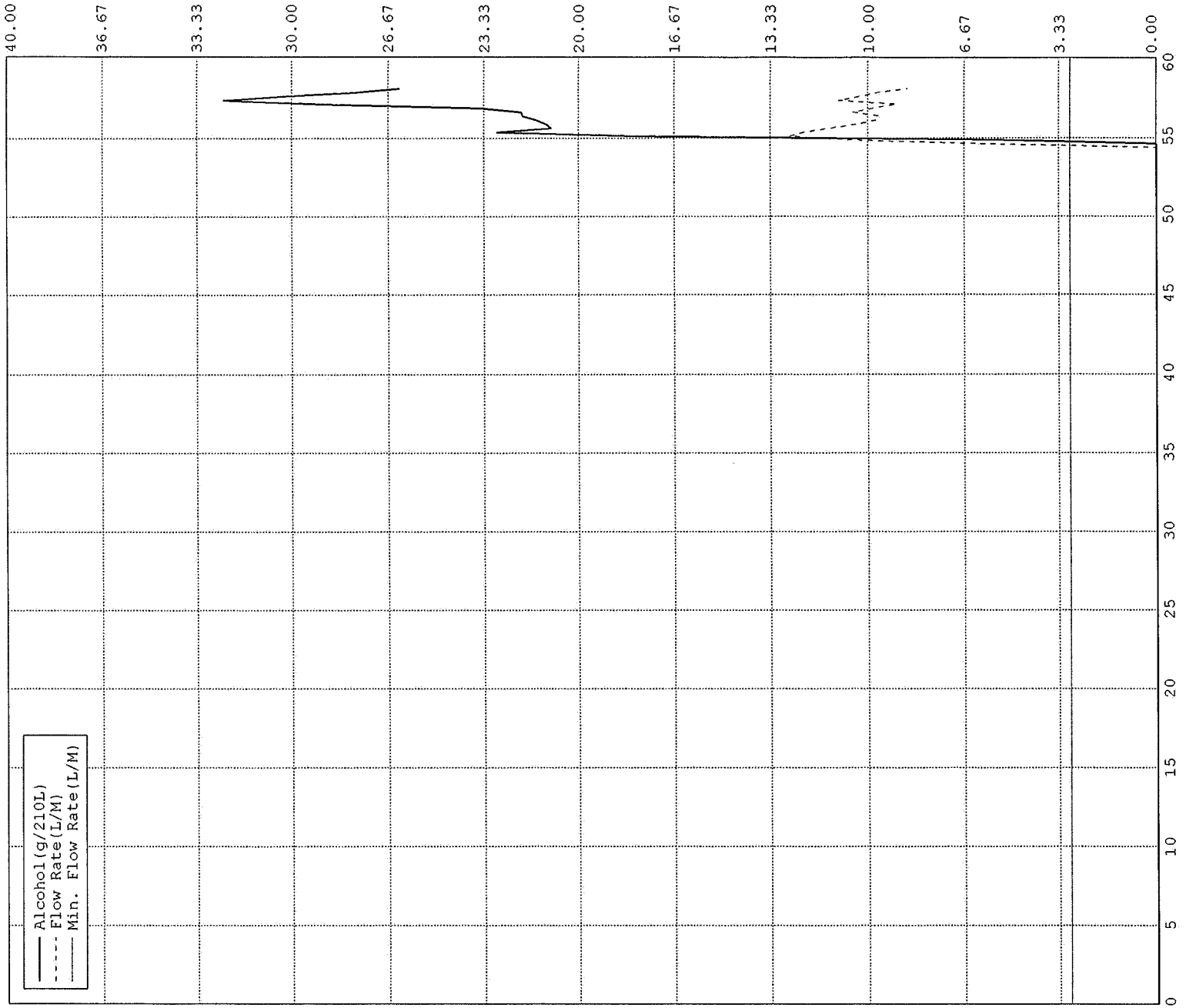
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

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

DIAGNOSTIC CHECK PASSED 13:08  
BLANK TEST 0.000 13:09  
INTERNAL STANDARD VERIFIED 13:09  
EXTERNAL STANDARD 0.078 13:09  
BLANK TEST 0.000 13:10  
SUBJECT SAMPLE INVALID 13:11



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

Date: 04/23/2021  
Time: 13:29:07

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  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	13:30
BLANK TEST	0.000	13:30
INTERNAL STANDARD	VERIFIED	13:30
Xq = 0.082 (0.11%)		
EXTERNAL STANDARD	0.079	13:30
X[1] = 0.0785 (-0.0023) (0.0013)		
BLANK TEST	0.000	13:31
SUBJECT SAMPLE	XXX	13:32
X[1] = 0.1129 (-0.0154) (-0.0009)		

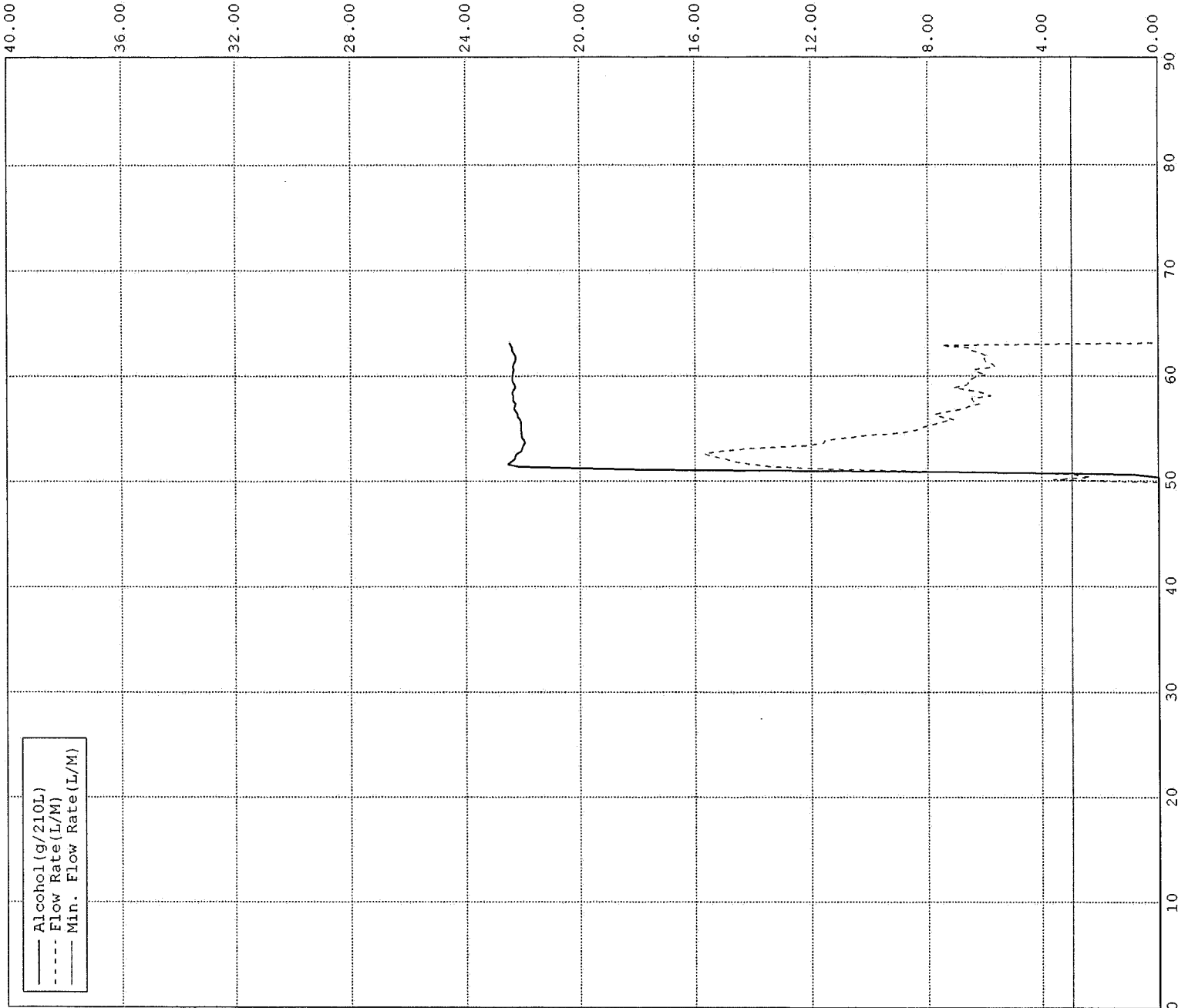
Interference Detected

filter 2 avg -0.0023

filter 3 avg 0.0009

CMB 4/23/2021

JM 04/26/21



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

Date: 04/23/2021  
Time: 13:45:25

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

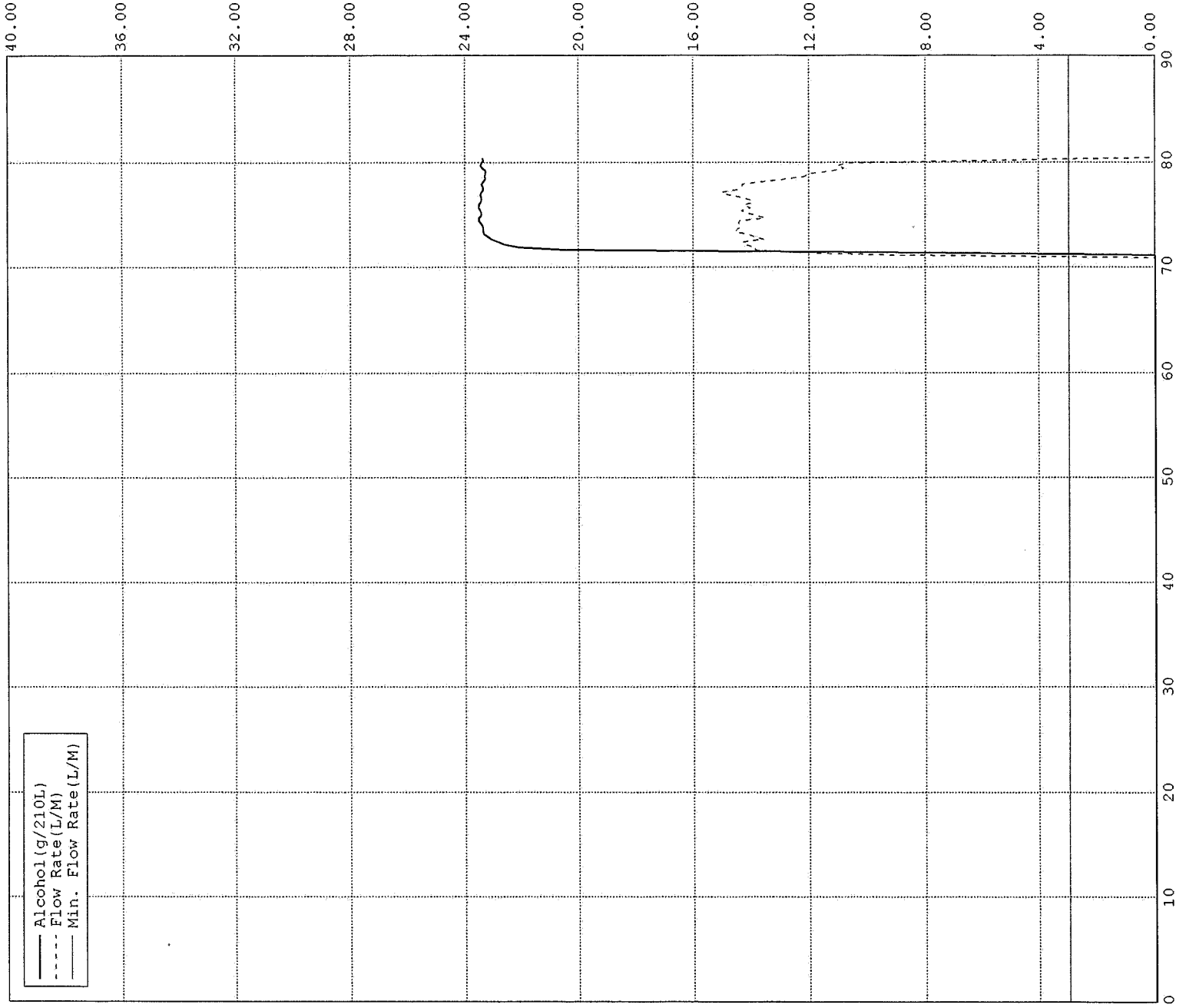
OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

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

DIAGNOSTIC CHECK PASSED 13:46  
BLANK TEST 0.000 13:46  
INTERNAL STANDARD VERIFIED 13:46  
Xq = 0.083 (0.21%)  
EXTERNAL STANDARD 0.079 13:46  
X[1] = 0.0789 (-0.0018) (0.0011)  
BLANK TEST 0.000 13:47  
SUBJECT SAMPLE XXX 13:49  
X[1] = 0.1172 (-0.0275) (-0.0002)

Interference Detected





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

Date: 04/23/2021  
Time: 13:35:24

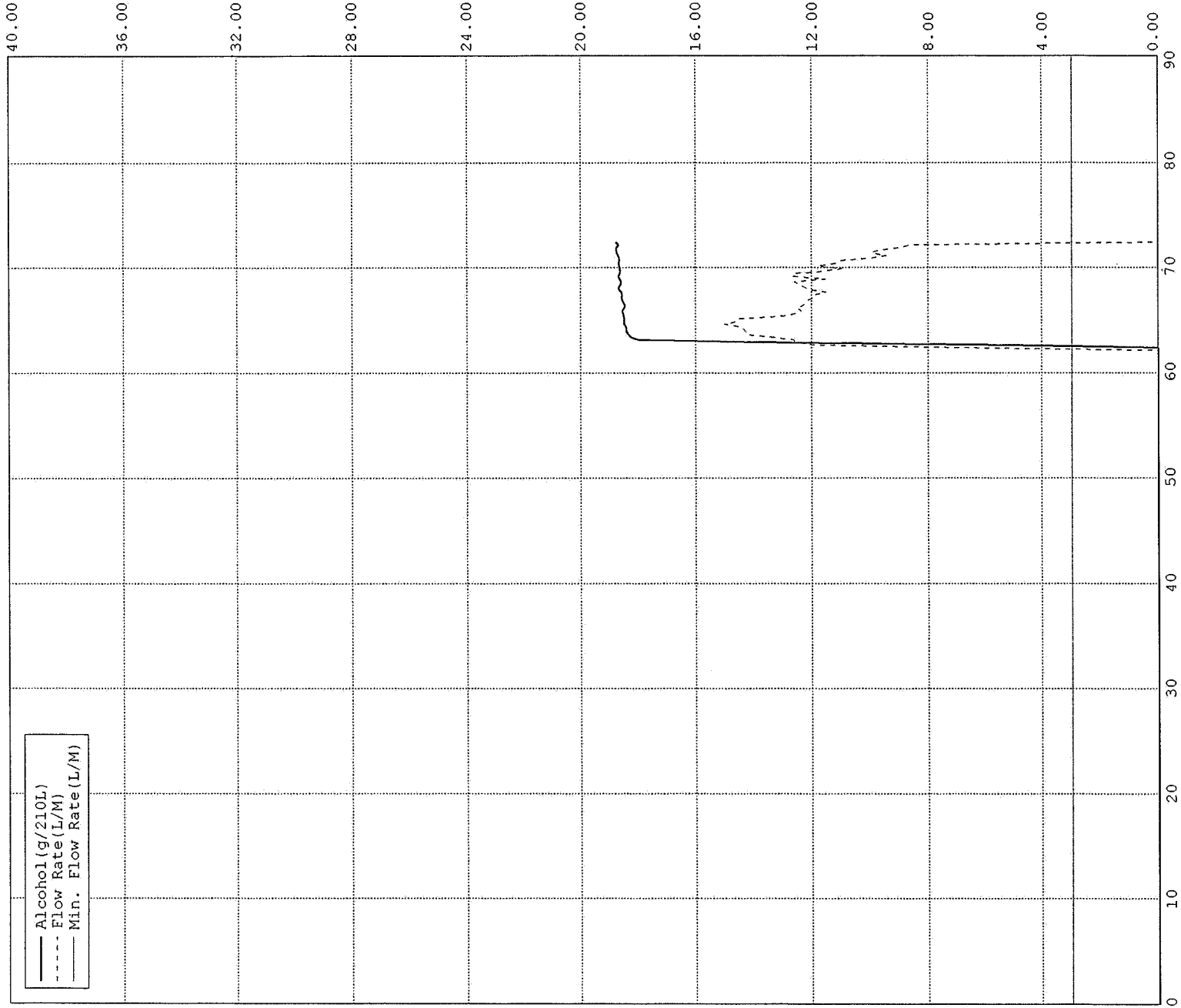
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

DEPT/AGENCY:  
INTERFERENCE - NEGATIVE CONTROL  
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	13:36
BLANK TEST	0.000	13:36
INTERNAL STANDARD	VERIFIED	13:36
Xq = 0.083 (0.32%)		
EXTERNAL STANDARD	0.079	13:36
X[1] = 0.0785 (-0.0025) (0.0004)		
BLANK TEST	0.000	13:37
SUBJECT SAMPLE (Vol=2.01L)	0.094	13:39
X[1] = 0.0947 (-0.0003) (-0.0006)		
BLANK TEST	0.000	13:40
EXTERNAL STANDARD	0.078	13:40
X[1] = 0.0782 (-0.0024) (0.0006)		
BLANK TEST	0.000	13:41



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

Date: 04/22/2021  
Time: 14:44:42

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

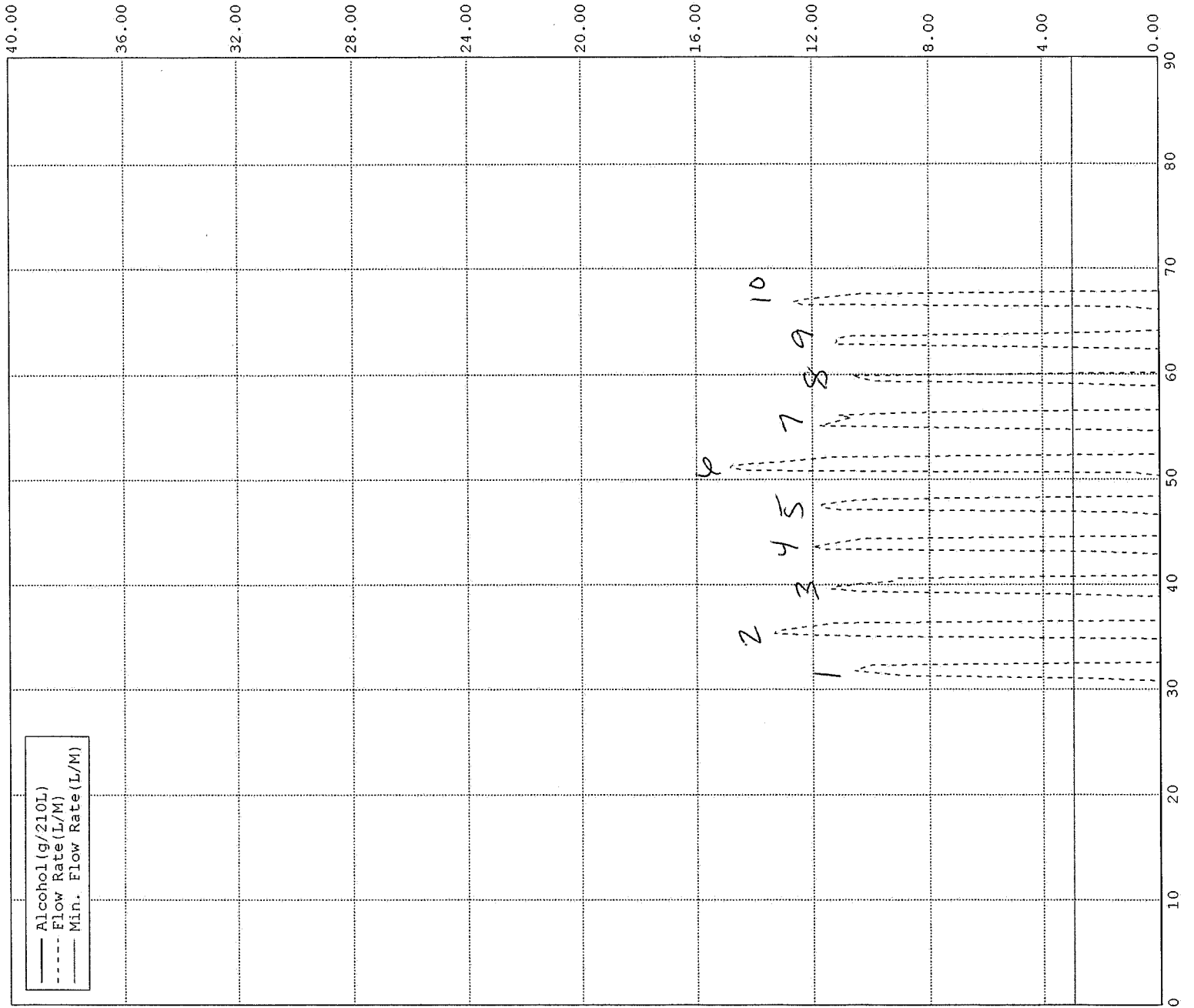
DEPT/AGENCY:  
MAX ATTEMPTS  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.86: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 14:45  
BLANK TEST 0.000 14:46  
INTERNAL STANDARD VERIFIED 14:46  
EXTERNAL STANDARD 0.079 14:46  
BLANK TEST 0.000 14:47  
SUBJECT SAMPLE XXX 14:48

Maximum Attempts Exceeded

CAS



SUBJECT TEST

Alaska Department of Public Safety  
DAFAMASTER dmt: 100342

Date: 04/23/2021  
Time: 13:14:38

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

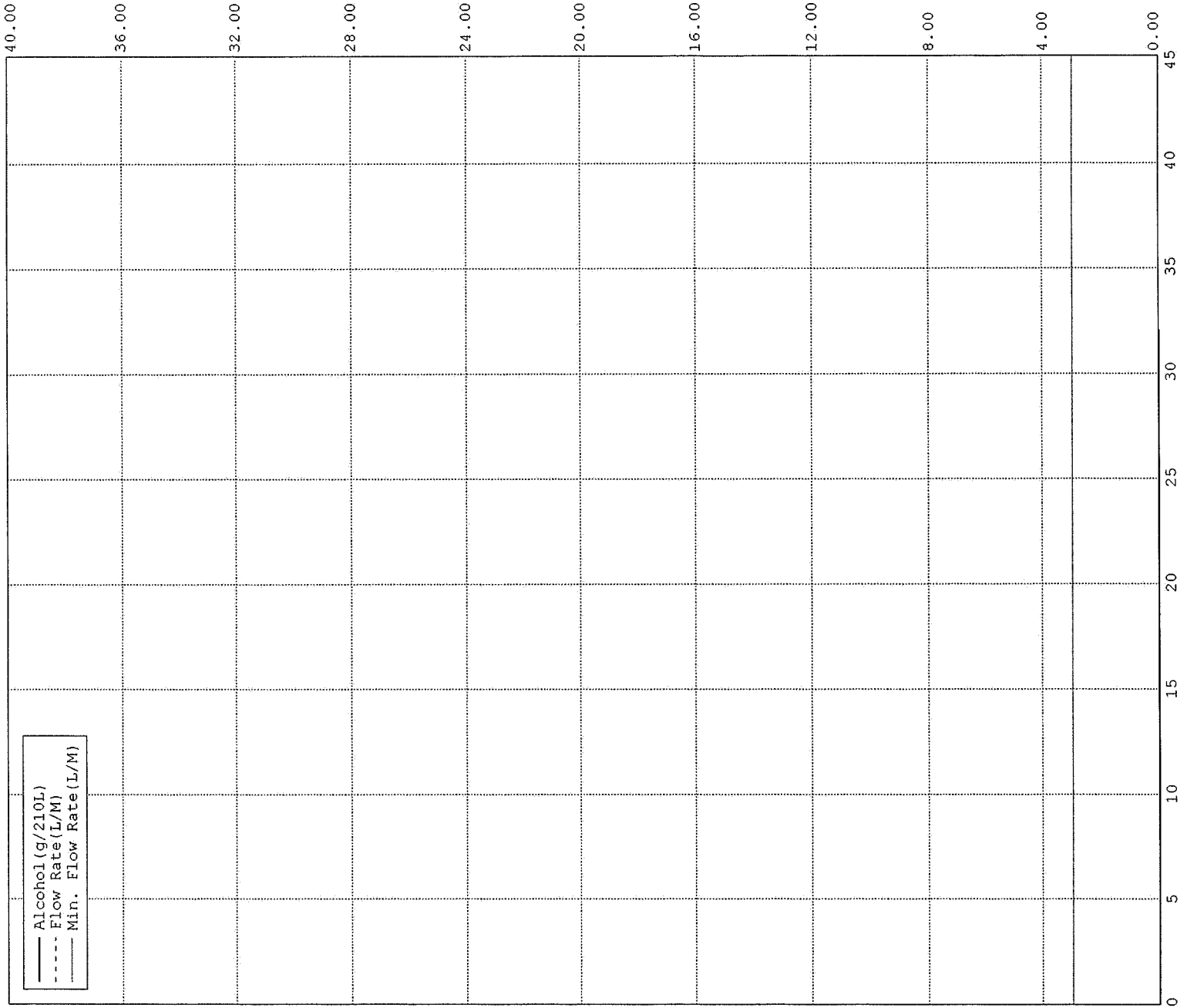
OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

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

DIAGNOSTIC CHECK PASSED 13:15  
BLANK TEST 0.000 13:16  
INTERNAL STANDARD VERIFIED 13:16  
EXTERNAL STANDARD 0.079 13:16  
BLANK TEST 0.000 13:17

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100342

Date: 04/23/2021  
Time: 14:23:11

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 29.77: 0.080  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 14:24  
BLANK TEST 0.000 14:24  
INTERNAL STANDARD VERIFIED 14:24  
EXTERNAL STANDARD 0.079 14:24  
BLANK TEST 0.000 14:25  
SUBJECT SAMPLE (Vol=2.23L) 0.000 14:26  
BLANK TEST 0.000 14:27  
EXTERNAL STANDARD 0.079 14:27  
BLANK TEST 0.000 14:28

*OKB*

