

# 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 100413 Analyst Decca Walton Start Date 01/22/20

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 1.5 L (1.3L to 1.7L)

4. Linearity Test (attached)

a. 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 A6923401 Exp 08/22/21

iv. 0.100g/210L Mnf Airgas Lot A6805903 Exp 02/28/20

v. 0.200g/210L Mnf Wttn Lot 19040 Exp 01/29/21

1. Simulator S/N DR4176 Date Calibrated 10/07/19

vi. 0.300g/210L Mnf Wttn Lot 19010 Exp 01/03/21

1. Simulator S/N DR6267 Date Calibrated 10/08/19

5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

DM 01/22/20 d. Exceeded attempts

i. Acetone - Mnf Wttn Lot 1918370 Level 0.100 Exp 12/05/20

1. Simulator S/N SD1199 Date Calibrated 03/06/19

ii. Isopropanol - Mnf Wttn Lot 18370 Level 0.100 Exp 12/05/20

1. Simulator S/N DR4161 Date Calibrated 03/07/19

iii. Negative Control - Mnf Wttn Lot 18370 Level 0.100 Exp 12/05/20

1. Simulator S/N SD1202 Date Calibrated 03/05/19

e. RFI

6. Verify stylus is calibrated

9. Verification of Calibration

7. Reset Options

10. Non-Drinking Subject Test (attached)

8. Clear Memory

11. Upload

13. Remove tank prior to shut down

End Date 01/22/20

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100413  
-----

Date: 01/22/2020  
Time: 09:03:54

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 48.0°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.98 V PASSED  
(1.08 V - 2.52 V)  
Cooler Voltage = 1.87 V PASSED  
(0.95 V - 2.23 V)  
Bias Voltage = 79 V PASSED  
(47 V - 111 V)  
Chopper Freq = 530 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.4 in

PUMP INFO

Flow Rate = 5.234 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 ✓ PASSED  
Xq = 0.095 0.93% (0.00% - 4.00%)

Technician Screen

-----  
DATAMASTER dmt: 100413  
-----

Date: 01/22/2020  
Time: 9:24 AM

Temperatures (°C)

Sample Cell: 49.3°C  
Breath Tube: 48.1°C

Current Barometer 29.4 in  
Volume (Ltr) 1.56

Settings

Lamp: 2.01 V  
Bias: 79 V  
Cooler: 1.92 V  
Chopper: 529 Hz

Voltages (V)

Flow: 1.05 V  
Detector: 0.054 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100413  
-----

Date: 09/14/2015  
Time: 14:27:59

OPERATOR NAME:  
BRANDI BARNETT  
CERTIFICATE #: 7038

Ca = 0.1000  
CAL = 0.979791 0.800 <= CAL < 1.200  
b1 = 0.0001 0.0000 <= b1 < 0.0040  
b2 = 0.0039 0.0010 <= b2 < 0.0100  
b3 = 0.0000 0.0000 <= b3 < 0.0040  
Xq = 0.0945 0.0500 <= Xq < 0.2000  
a21 = 1.129336 1.050 <= a21 < 1.300  
a31 = 0.441836 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 01/22/2020  
Time: 09:35:24

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

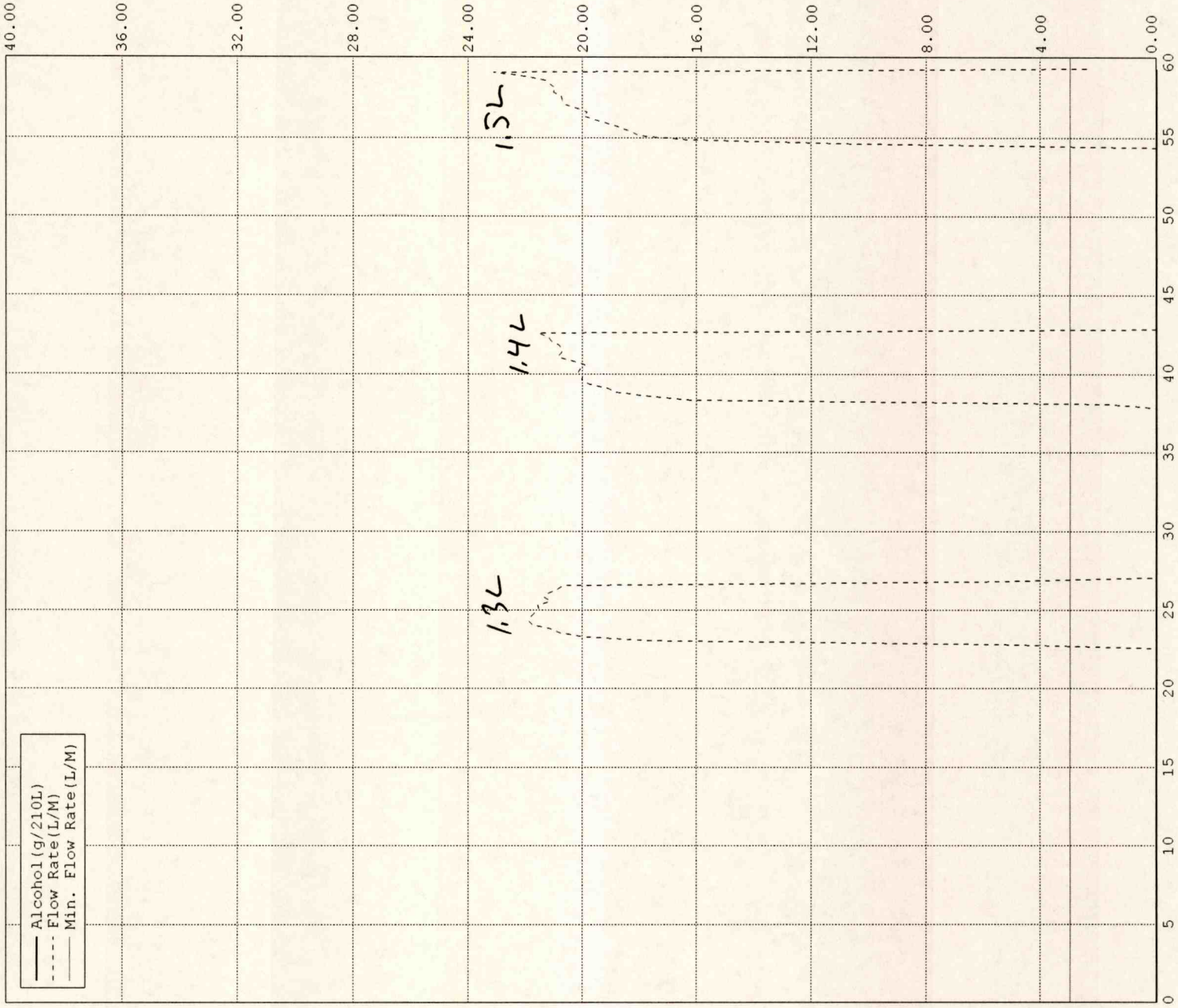
DEPT/AGENCY:  
MINIMUM VOLUME  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.44: 0.079  
LOT #: AG923401  
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK	PASSED	09:37
BLANK TEST	0.000	09:37
INTERNAL STANDARD	VERIFIED	09:37
EXTERNAL STANDARD	0.077	09:37
BLANK TEST	0.000	09:38
SUBJECT SAMPLE (Vol=1.55L)	0.000	09:39
BLANK TEST	0.000	09:40
EXTERNAL STANDARD	0.077	09:40
BLANK TEST	0.000	09:41

*DM*



LINEARITY CHECK

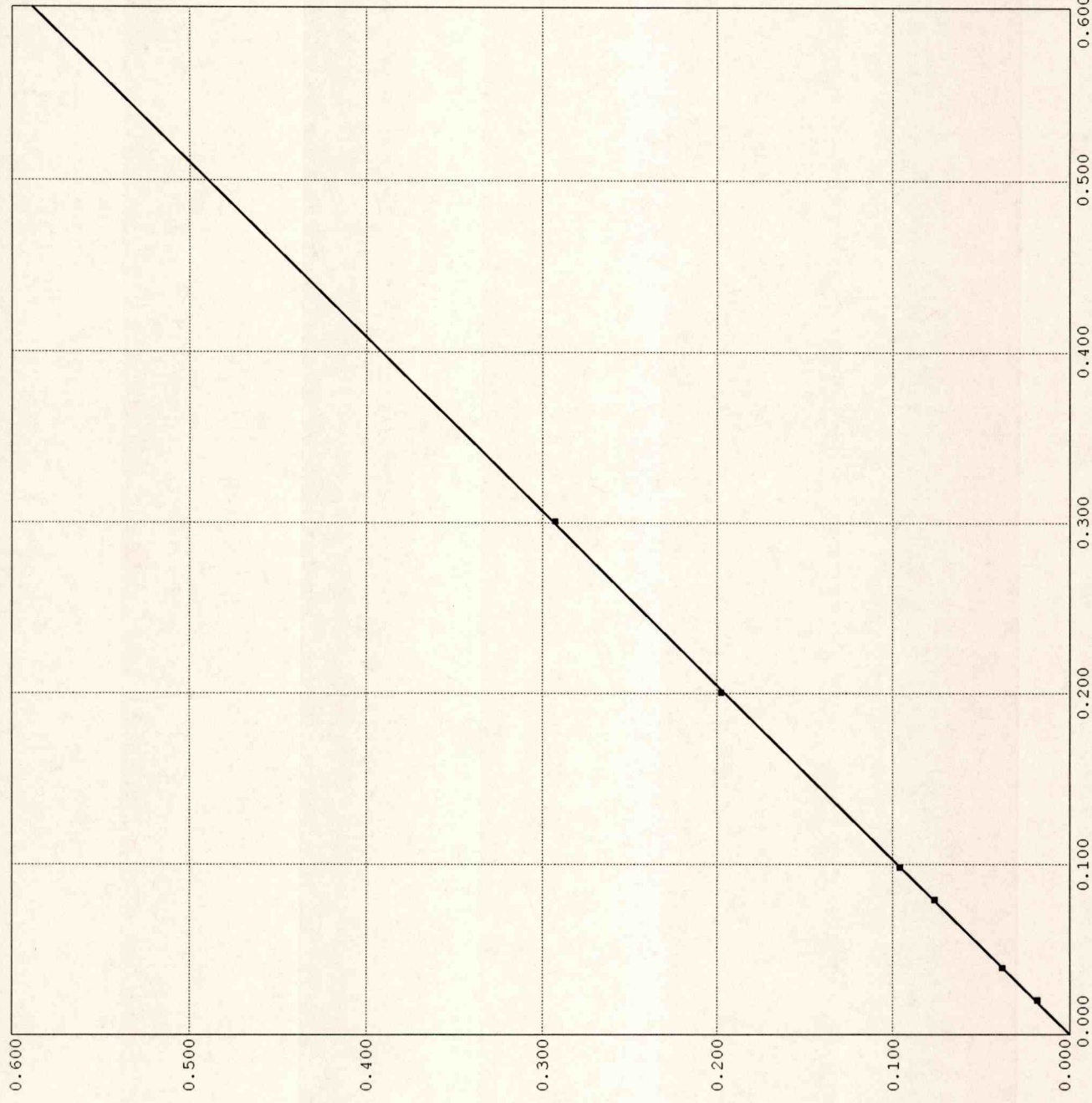
-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100413  
 -----

Date: 01/22/2020  
 Time: 09:55:48

SUPERVISOR NAME:  
 DEREK WALTON  
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0190	0.0000
0.039	0.0388	0.0004
0.079	0.0772	0.0004
0.098	0.0970	0.0000
0.200	0.1984	0.0005
0.300	0.2934	0.0009

SLOPE = 0.981360  
 R<sup>2</sup> = 0.999880



*DM*

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100413

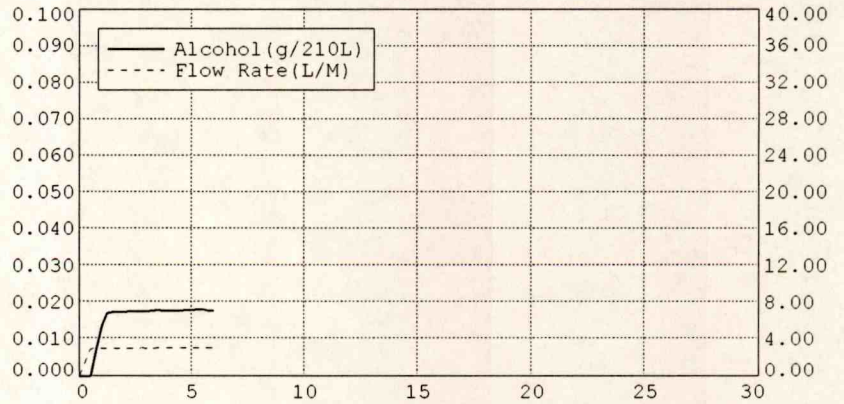
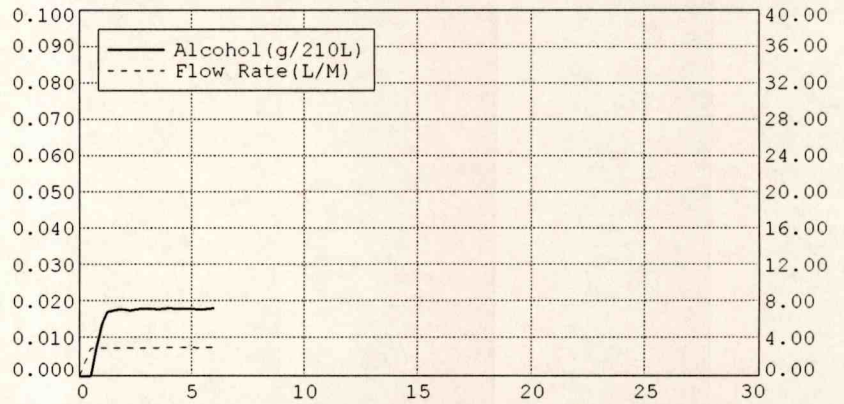
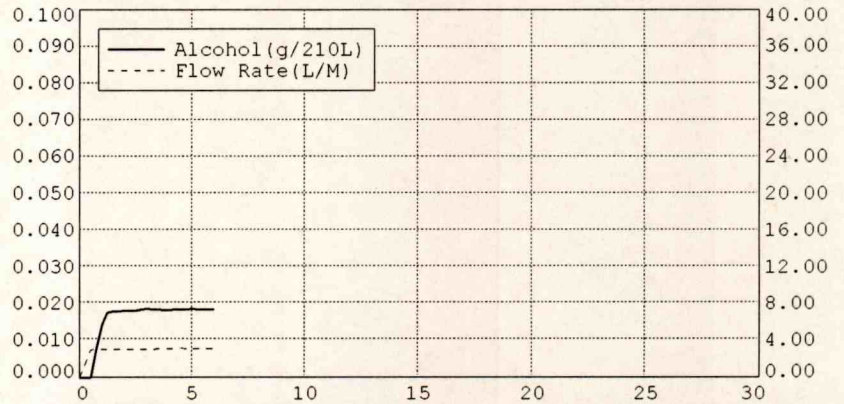
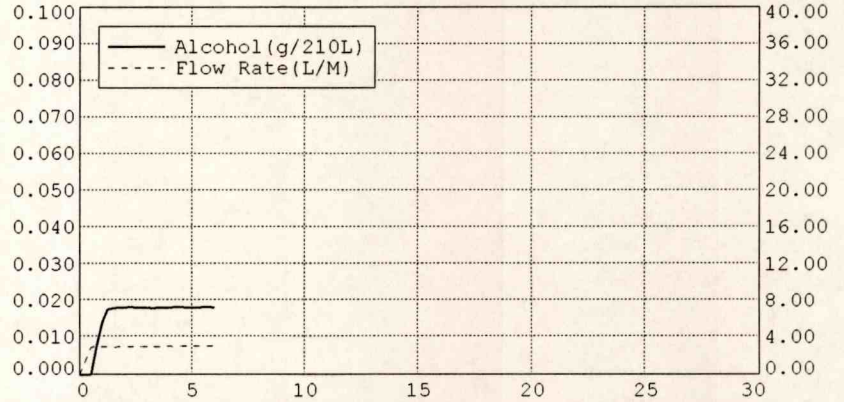
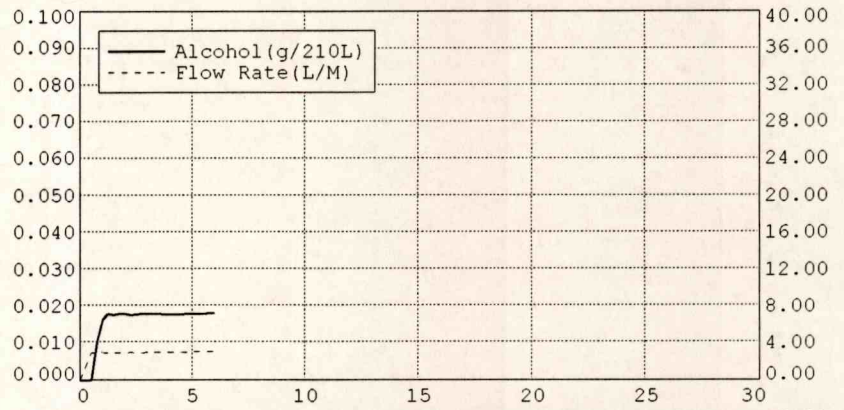
Date: 01/22/2020  
 Time: 09:55:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.44: 0.020  
 LOT #: AG928203  
 EXPIRATION: 10/09/2021  
 TANK PRESSURE: 1084 psi

BLANK TEST	0.000	09:57
INTERNAL STANDARD	VERIFIED	09:57
EXTERNAL STANDARD	0.019	09:57
BLANK TEST	0.000	09:58
EXTERNAL STANDARD	0.019	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.019	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.019	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.019	10:01
BLANK TEST	0.000	10:02

Average = 0.0190  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100413

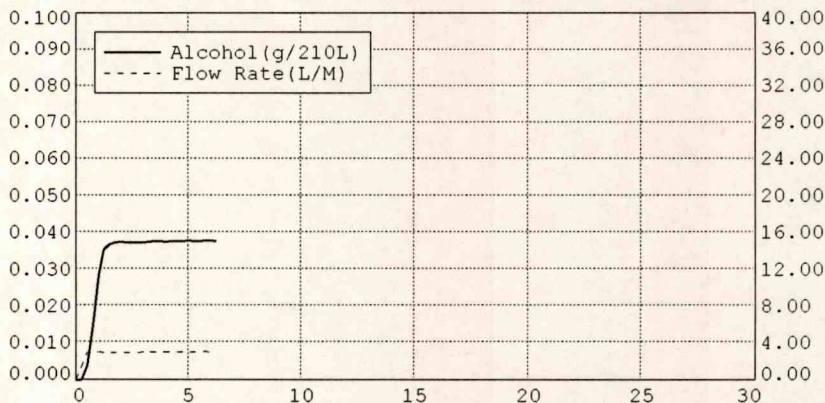
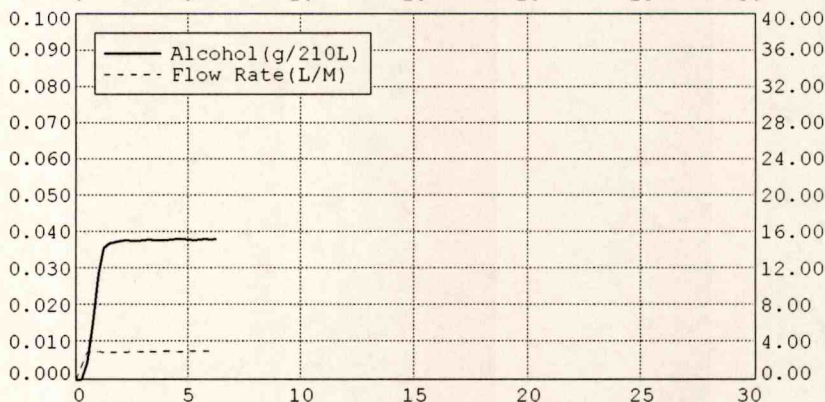
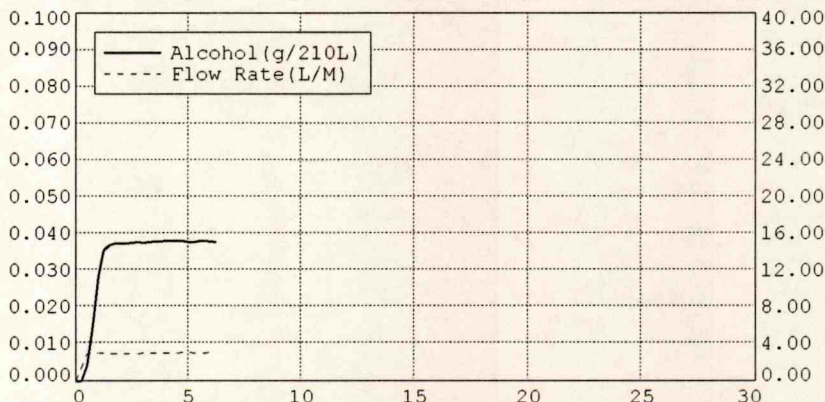
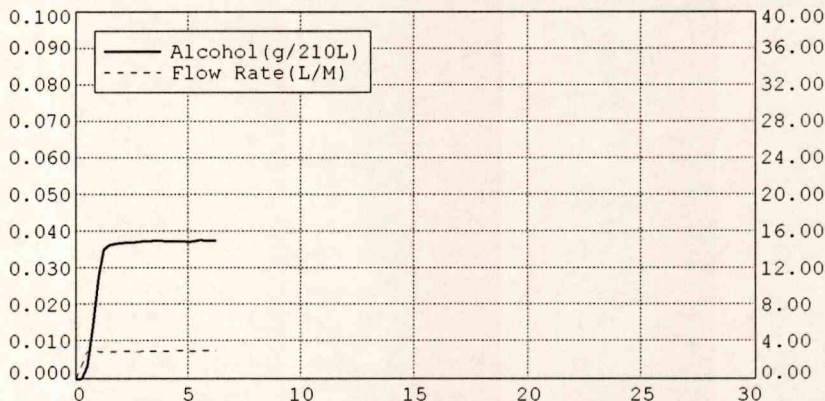
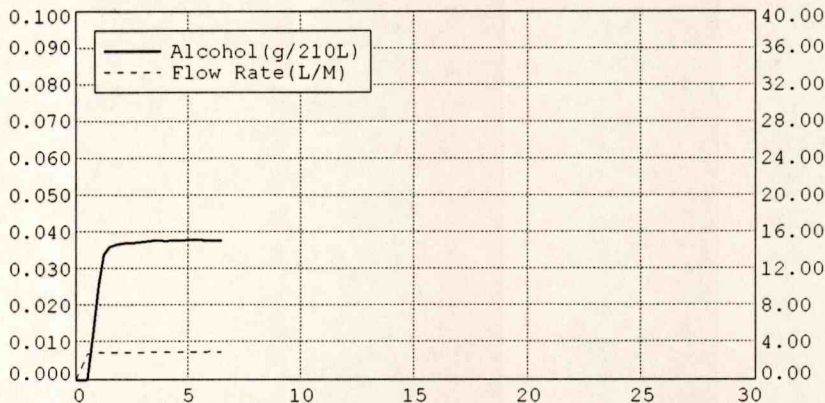
Date: 01/22/2020  
 Time: 10:13:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.45: 0.039  
 LOT #: AG915607  
 EXPIRATION: 06/05/2021  
 TANK PRESSURE: 991 psi

BLANK TEST	0.000	10:14
INTERNAL STANDARD	VERIFIED	10:14
EXTERNAL STANDARD	0.039	10:15
BLANK TEST	0.000	10:16
EXTERNAL STANDARD	0.039	10:16
BLANK TEST	0.000	10:17
EXTERNAL STANDARD	0.039	10:17
BLANK TEST	0.000	10:18
EXTERNAL STANDARD	0.039	10:18
BLANK TEST	0.000	10:19
EXTERNAL STANDARD	0.038	10:19
BLANK TEST	0.000	10:20

Average = 0.0388  
 Std Dev = 0.0004





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100413

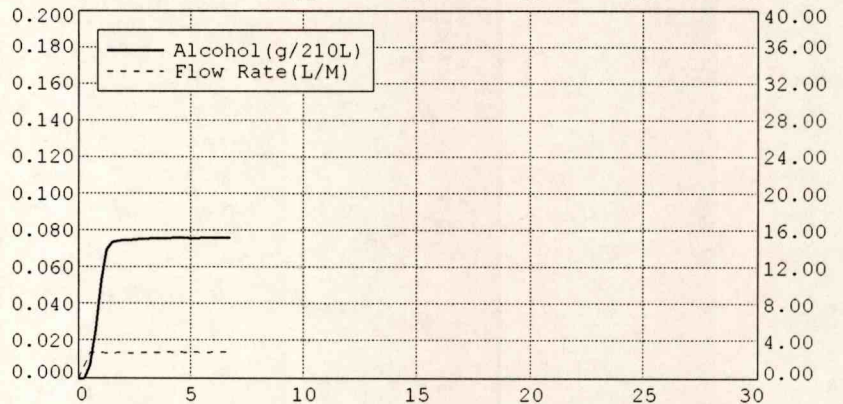
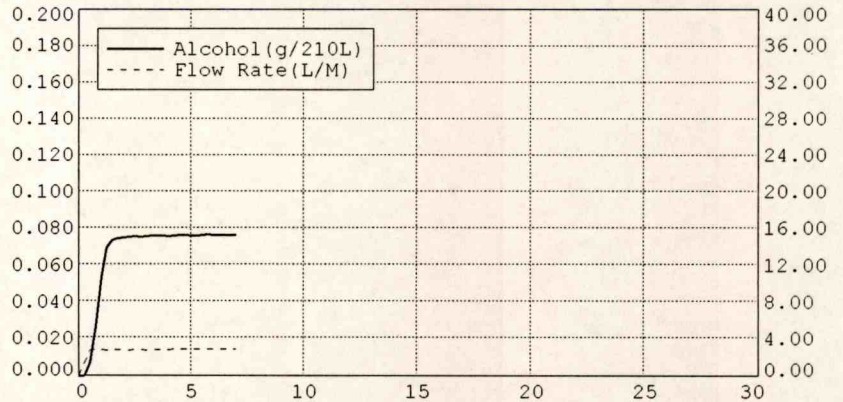
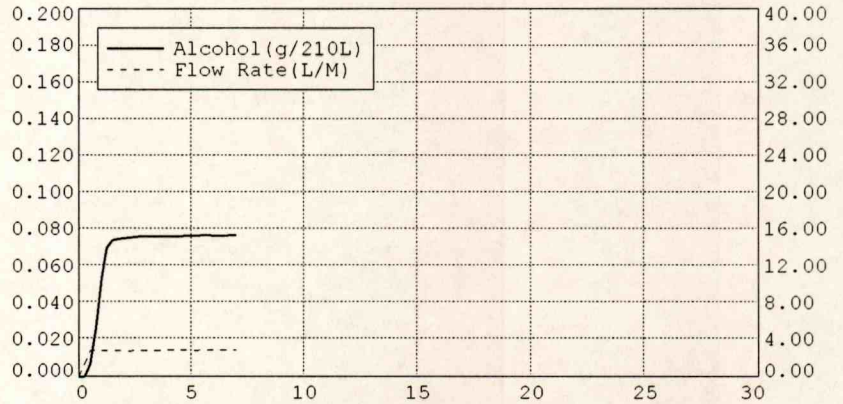
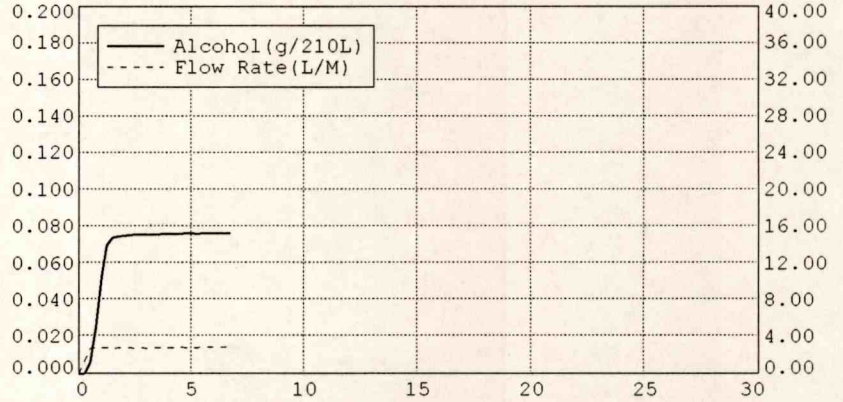
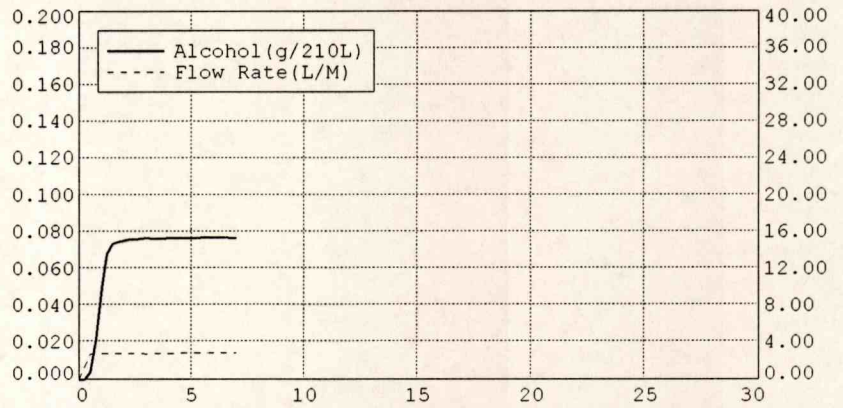
Date: 01/22/2020  
 Time: 10:21:41

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.45: 0.079  
 LOT #: AG923401  
 EXPIRATION: 08/22/2021  
 TANK PRESSURE: 424 psi

BLANK TEST	0.000	10:22
INTERNAL STANDARD	VERIFIED	10:22
EXTERNAL STANDARD	0.078	10:23
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.077	10:24
BLANK TEST	0.000	10:25
EXTERNAL STANDARD	0.077	10:25
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.077	10:26
BLANK TEST	0.000	10:27
EXTERNAL STANDARD	0.077	10:27
BLANK TEST	0.000	10:28

Average = 0.0772  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

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 Alaska Department of Public Safety  
 DATAMASTER dmt: 100413  
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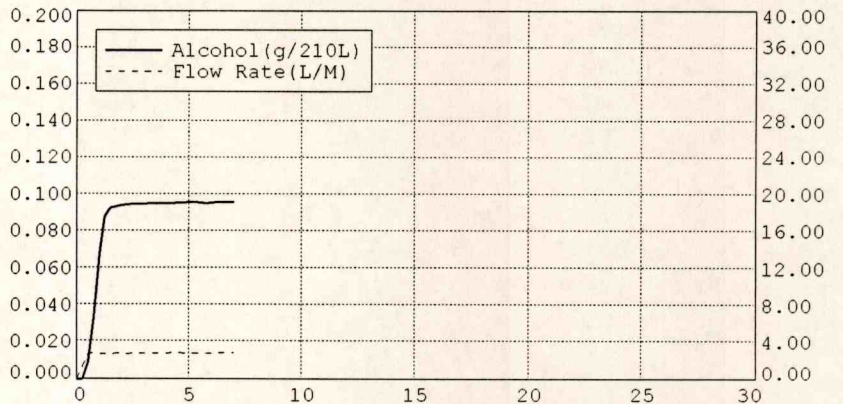
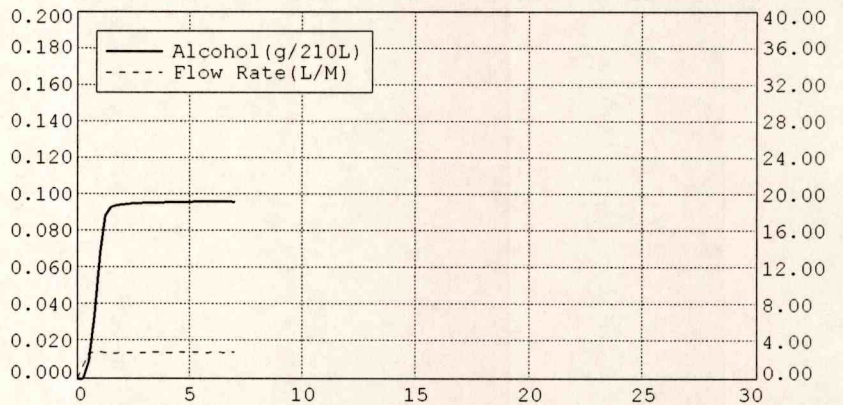
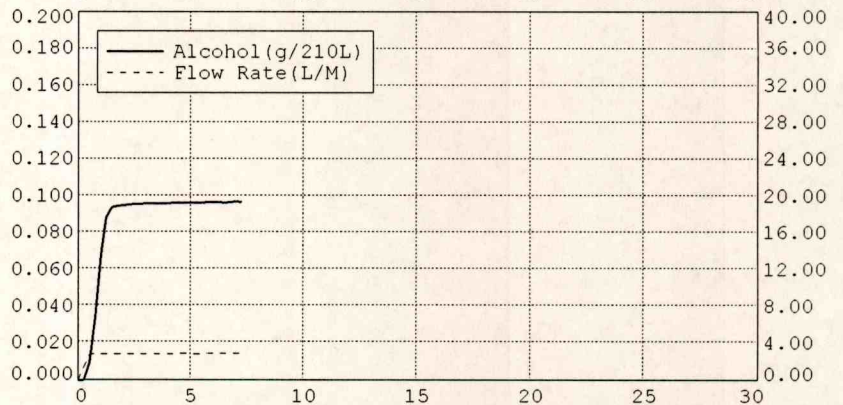
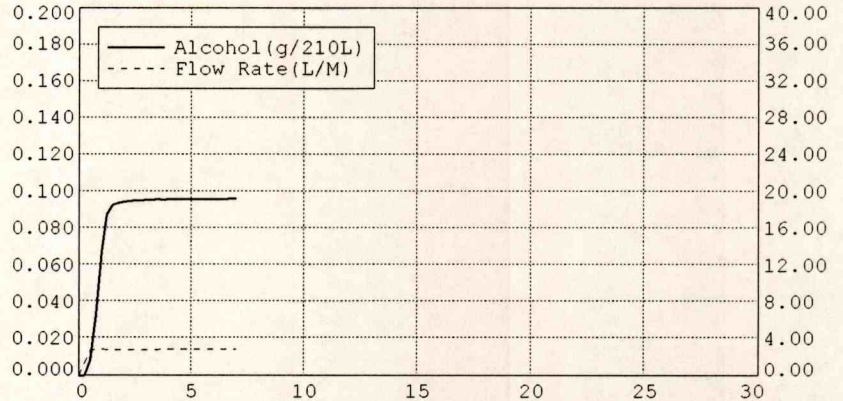
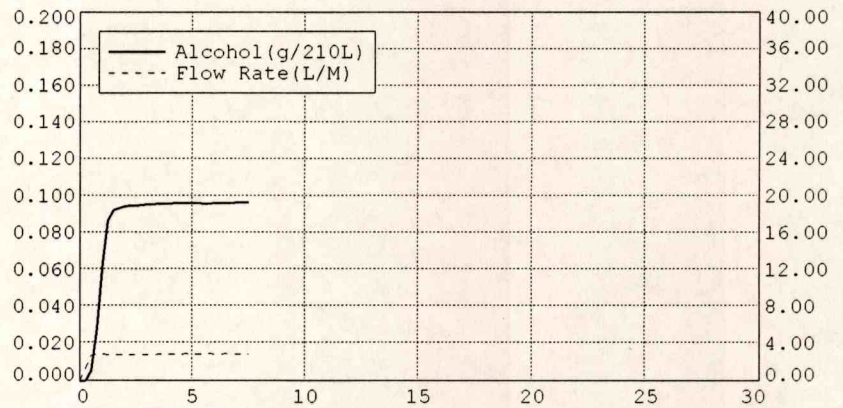
Date: 01/22/2020  
 Time: 10:30:12

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.45: 0.098  
 LOT #: AG805903  
 EXPIRATION: 02/28/2020  
 TANK PRESSURE: 490 psi

BLANK TEST	0.000	10:31
INTERNAL STANDARD	VERIFIED	10:31
EXTERNAL STANDARD	0.097	10:31
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.097	10:32
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.097	10:34
BLANK TEST	0.000	10:35
EXTERNAL STANDARD	0.097	10:35
BLANK TEST	0.000	10:36
EXTERNAL STANDARD	0.097	10:36
BLANK TEST	0.000	10:37

Average = 0.0970  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

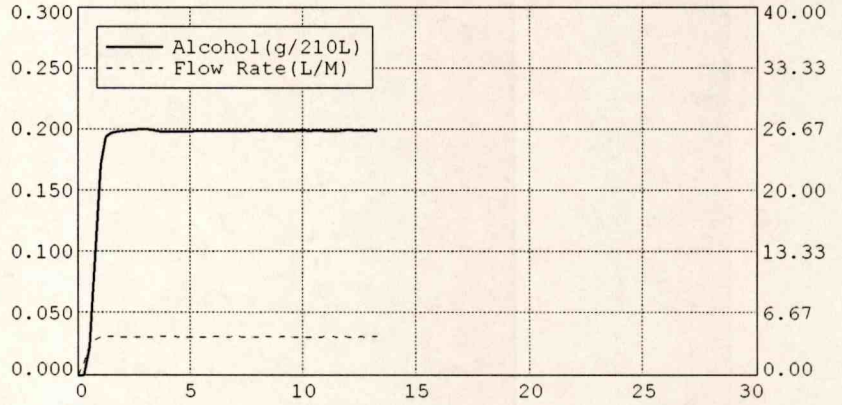
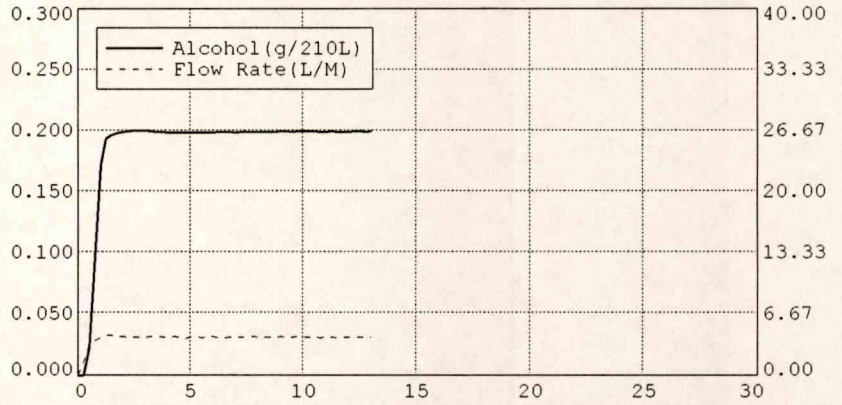
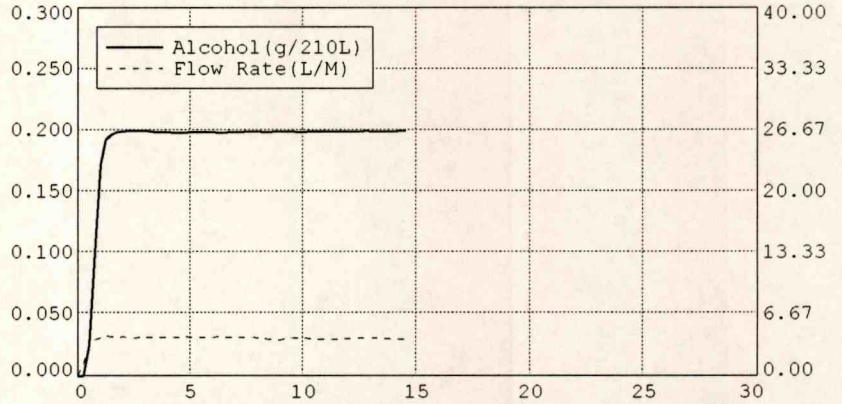
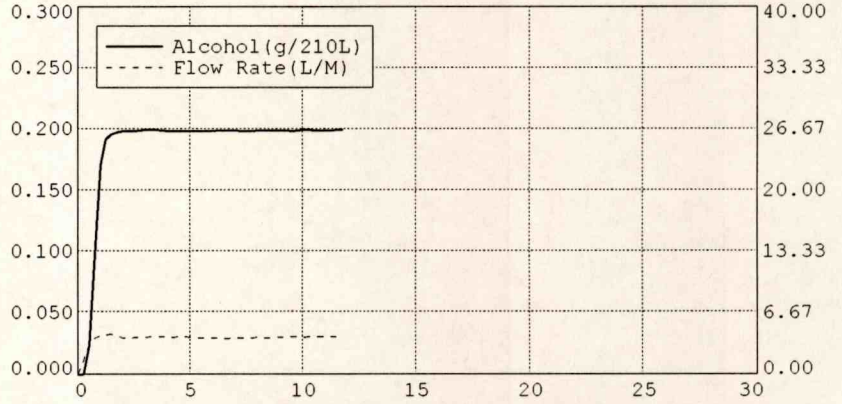
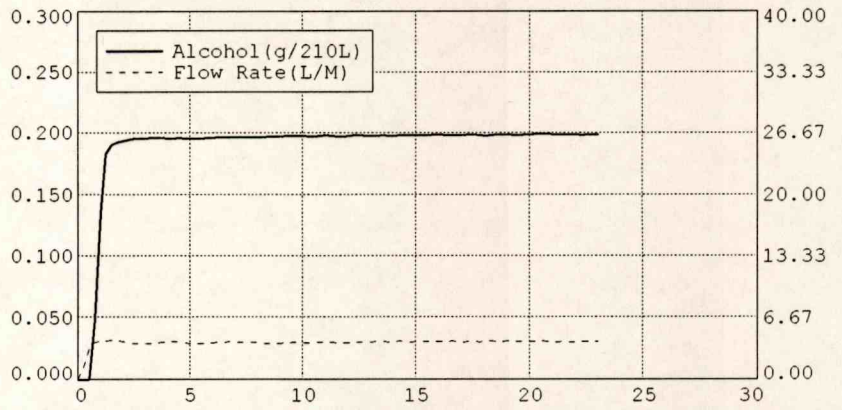
Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 01/22/2020  
Time: 10:41:10

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.200  
LOT #: 19040  
EXPIRATION: 01/29/2021

BLANK TEST	0.000	10:42
INTERNAL STANDARD	VERIFIED	10:42
EXTERNAL STANDARD	0.198	10:42
BLANK TEST	0.000	10:43
EXTERNAL STANDARD	0.198	10:44
BLANK TEST	0.000	10:45
EXTERNAL STANDARD	0.199	10:45
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.198	10:46
BLANK TEST	0.000	10:47
EXTERNAL STANDARD	0.199	10:47
BLANK TEST	0.000	10:48

Average = 0.1984  
Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100413

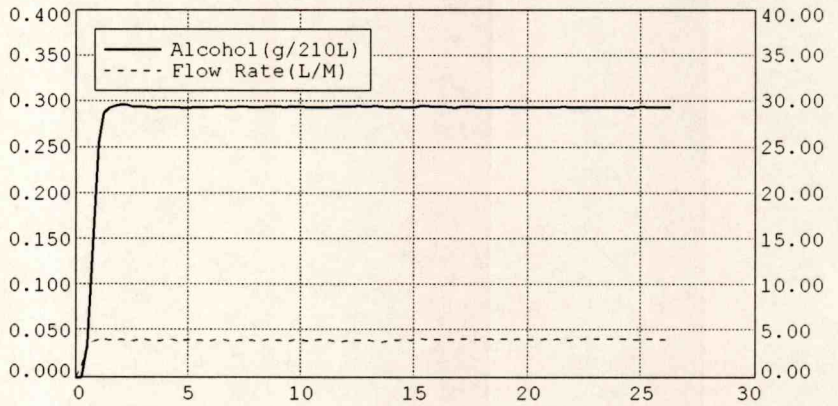
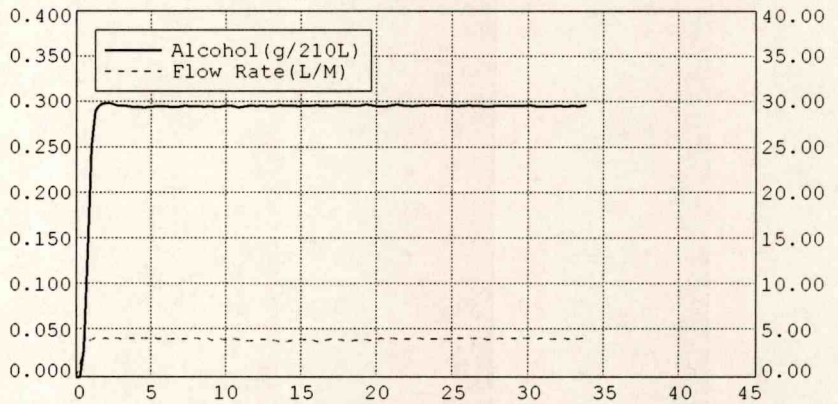
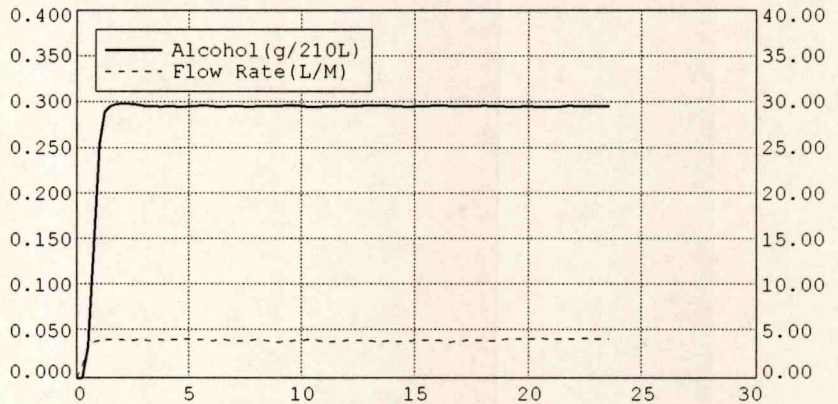
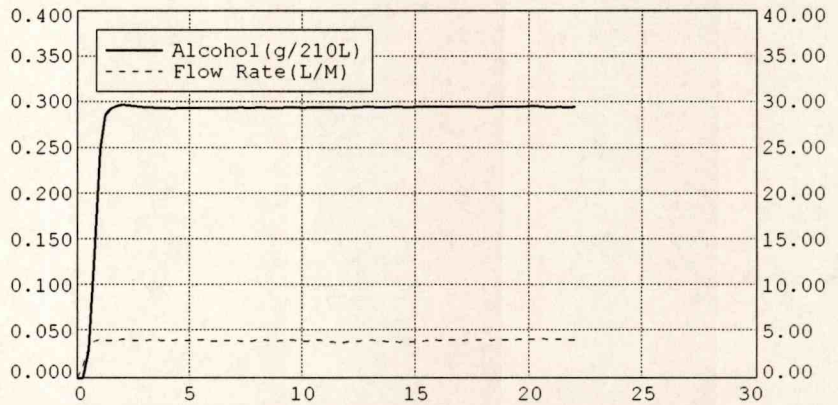
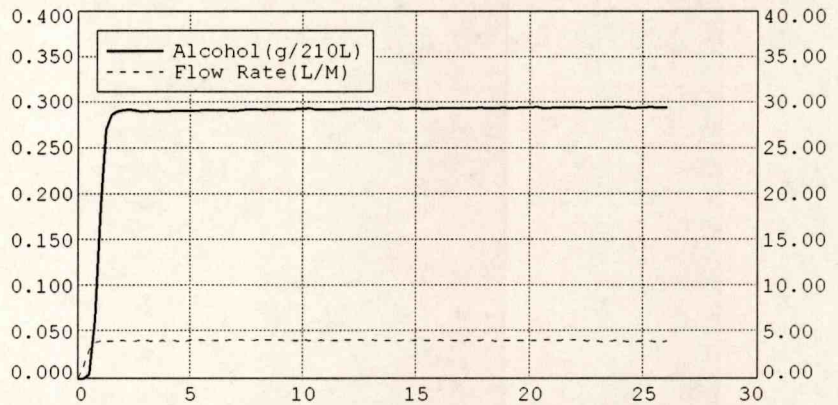
Date: 01/22/2020  
 Time: 10:55:12

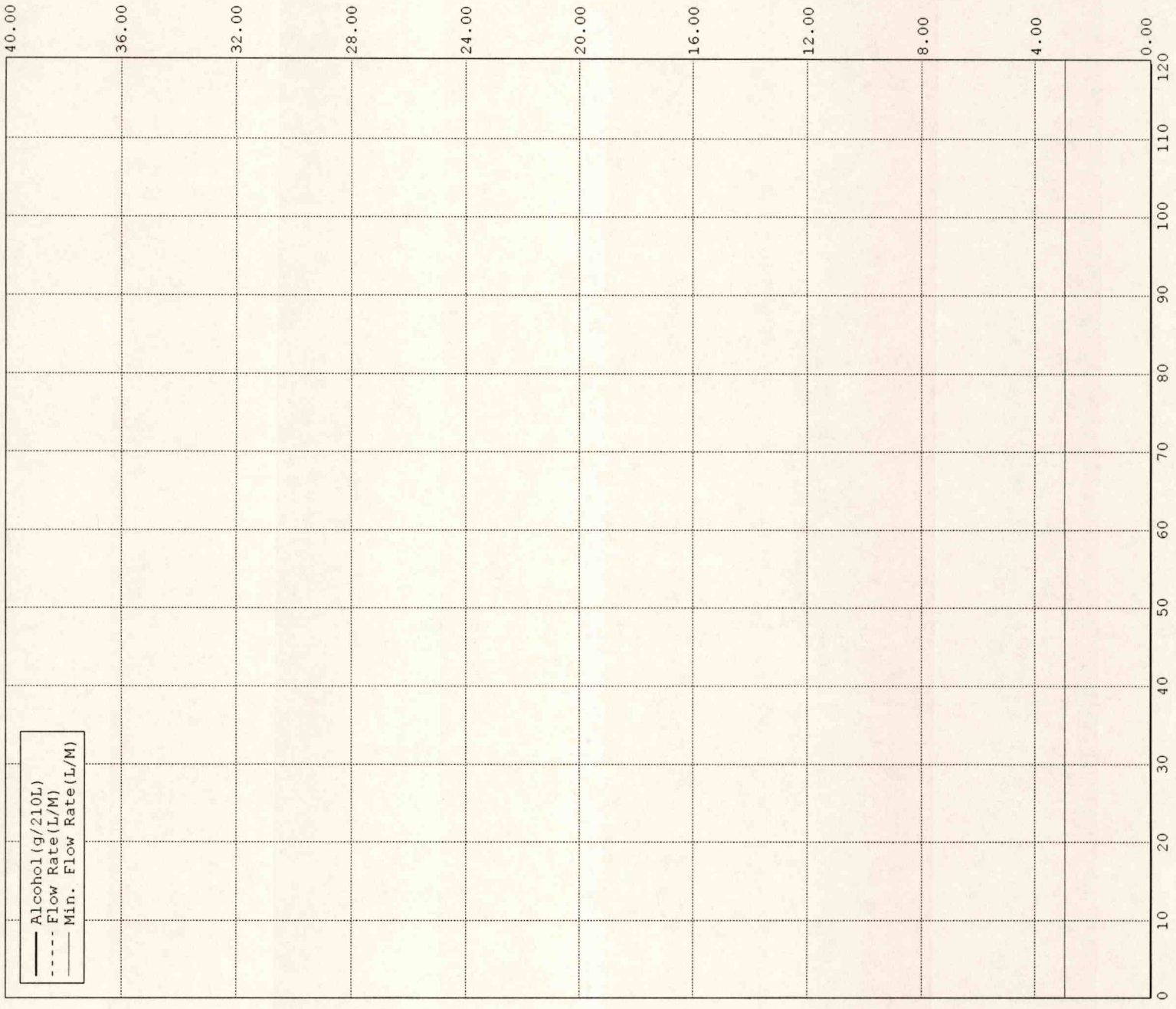
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
 LOT #: 19010  
 EXPIRATION: 01/03/2021

BLANK TEST	0.000	10:56
INTERNAL STANDARD	VERIFIED	10:56
EXTERNAL STANDARD	0.293	10:57
BLANK TEST	0.000	10:58
EXTERNAL STANDARD	0.294	10:58
BLANK TEST	0.000	10:59
EXTERNAL STANDARD	0.294	11:00
BLANK TEST	0.000	11:01
EXTERNAL STANDARD	0.294	11:01
BLANK TEST	0.000	11:02
EXTERNAL STANDARD	0.292	11:03
BLANK TEST	0.000	11:04

Average = 0.2934  
 Std Dev = 0.0009





**SUBJECT TEST**

-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100413  
 -----  
 Date: 01/22/2020  
 Time: 11:11:43

**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 29.46: 0.079  
 LOT #: AG923401  
 EXPIRATION: 08/22/2021

**DIAGNOSTIC CHECK**  
 BLANK TEST PASSED 11:13  
 0.000 11:13  
 INTERNAL STANDARD VERIFIED 11:13  
 0.077 11:14  
 EXTERNAL STANDARD 0.000 11:15  
 BLANK TEST INCOMPLETE 11:17  
 SUBJECT SAMPLE INCOMPLETE 11:17

*DW*

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 01/22/2020  
Time: 14:23:46

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

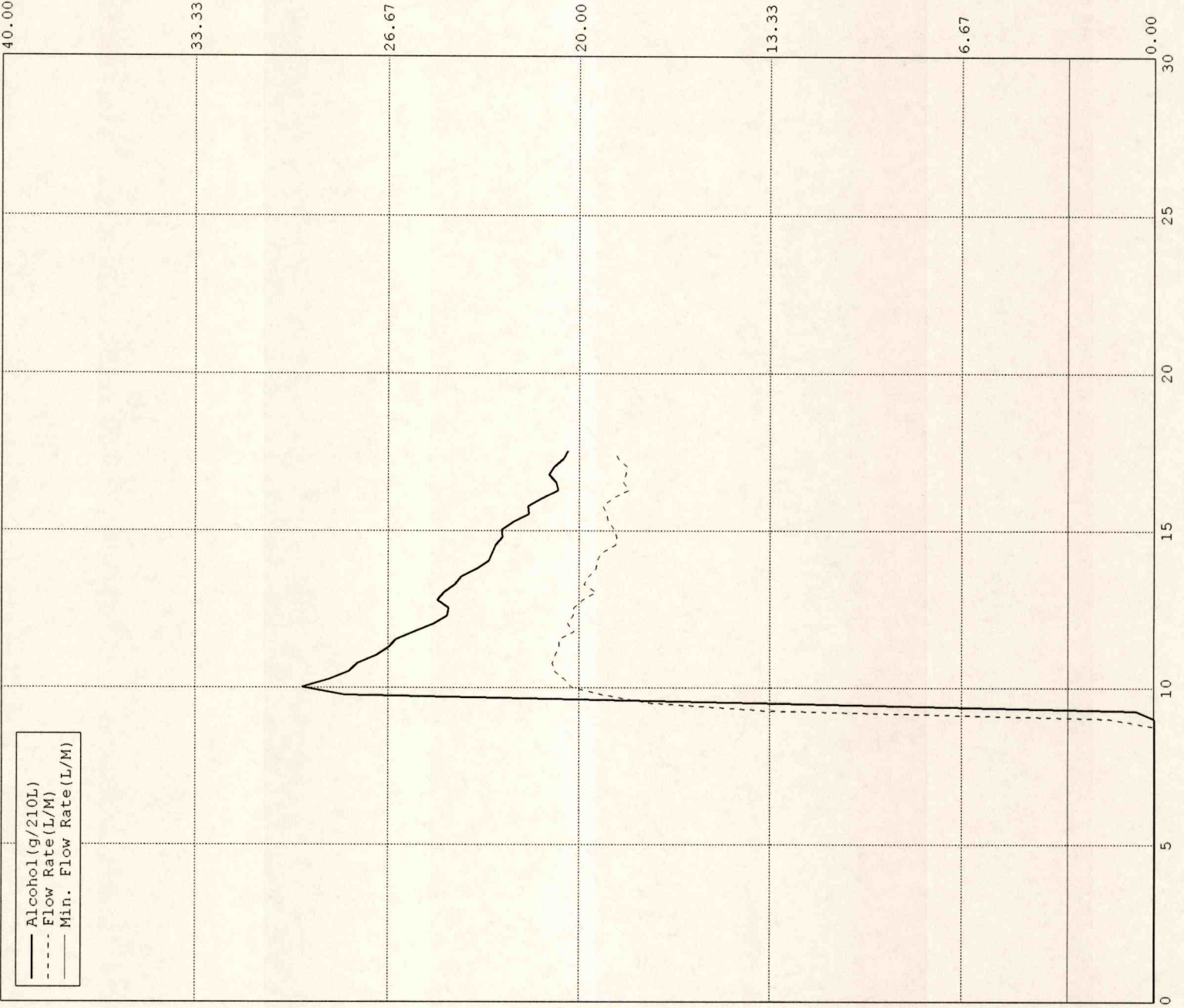
OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.48: 0.079  
LOT #: AG923401  
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK PASSED 14:24  
BLANK TEST 0.000 14:25  
INTERNAL STANDARD VERIFIED 14:25  
EXTERNAL STANDARD 0.077 14:25  
BLANK TEST 0.000 14:26  
SUBJECT SAMPLE INVALID 14:27

*DM*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 01/22/2020  
Time: 12:05:02

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 29.47: 0.079  
LOT #: AG923401  
EXPIRATION: 08/22/2021

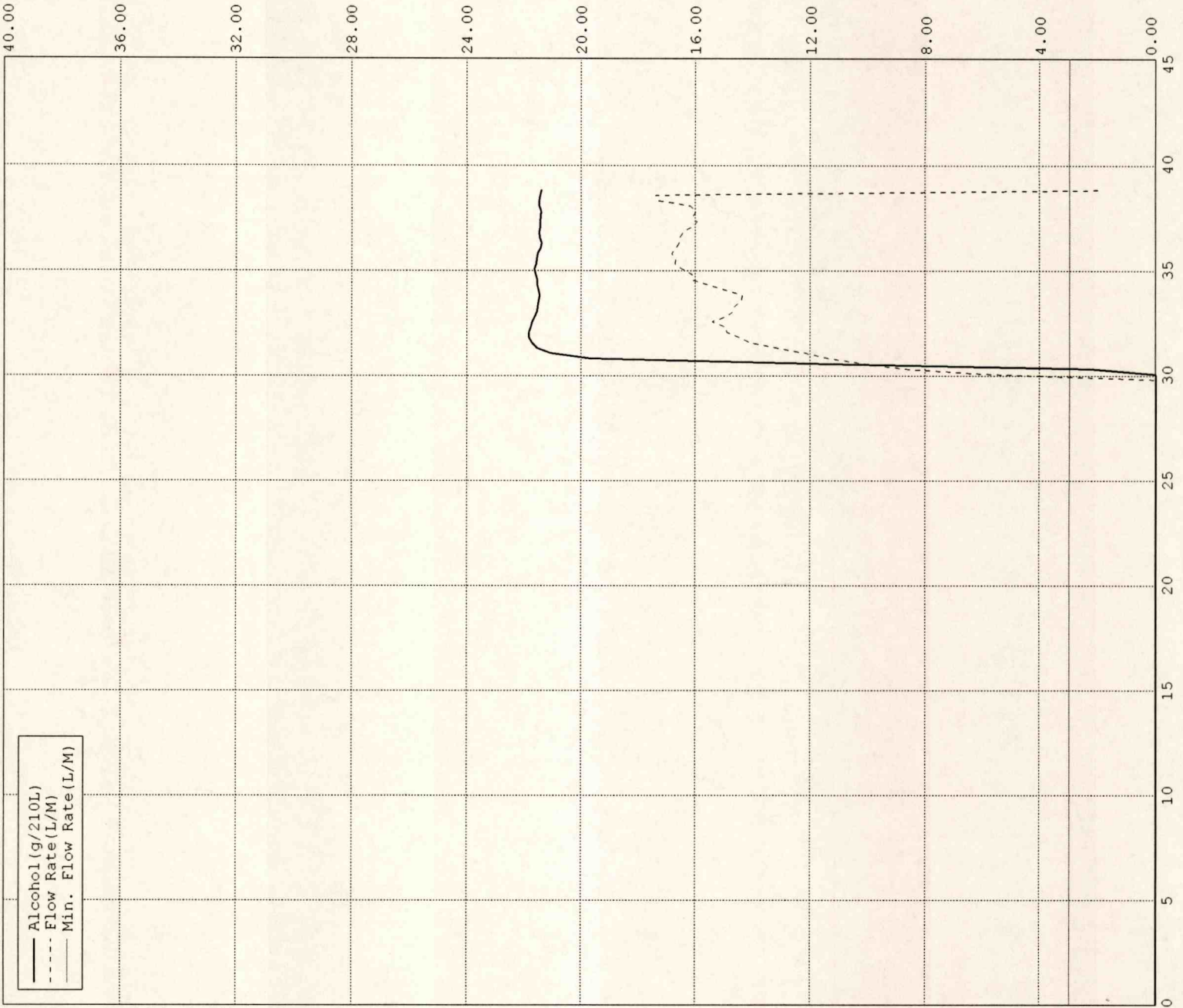
DIAGNOSTIC CHECK PASSED 12:06  
BLANK TEST 0.000 12:06  
INTERNAL STANDARD VERIFIED 12:06  
Xq = 0.095 (0.37%) 0.077 12:06  
EXTERNAL STANDARD 0.0024  
X[1] = 0.0769 (-0.0011) (0.0024)  
BLANK TEST 0.000 12:07  
SUBJECT SAMPLE XXX 12:08  
X[1] = 0.1075 (-0.0227) (-0.0002)

Interference Detected

Filter 2 Avg: -0.0015

Filter 3 Avg: 0.0020

*DM*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 01/22/2020  
Time: 12:13:55

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

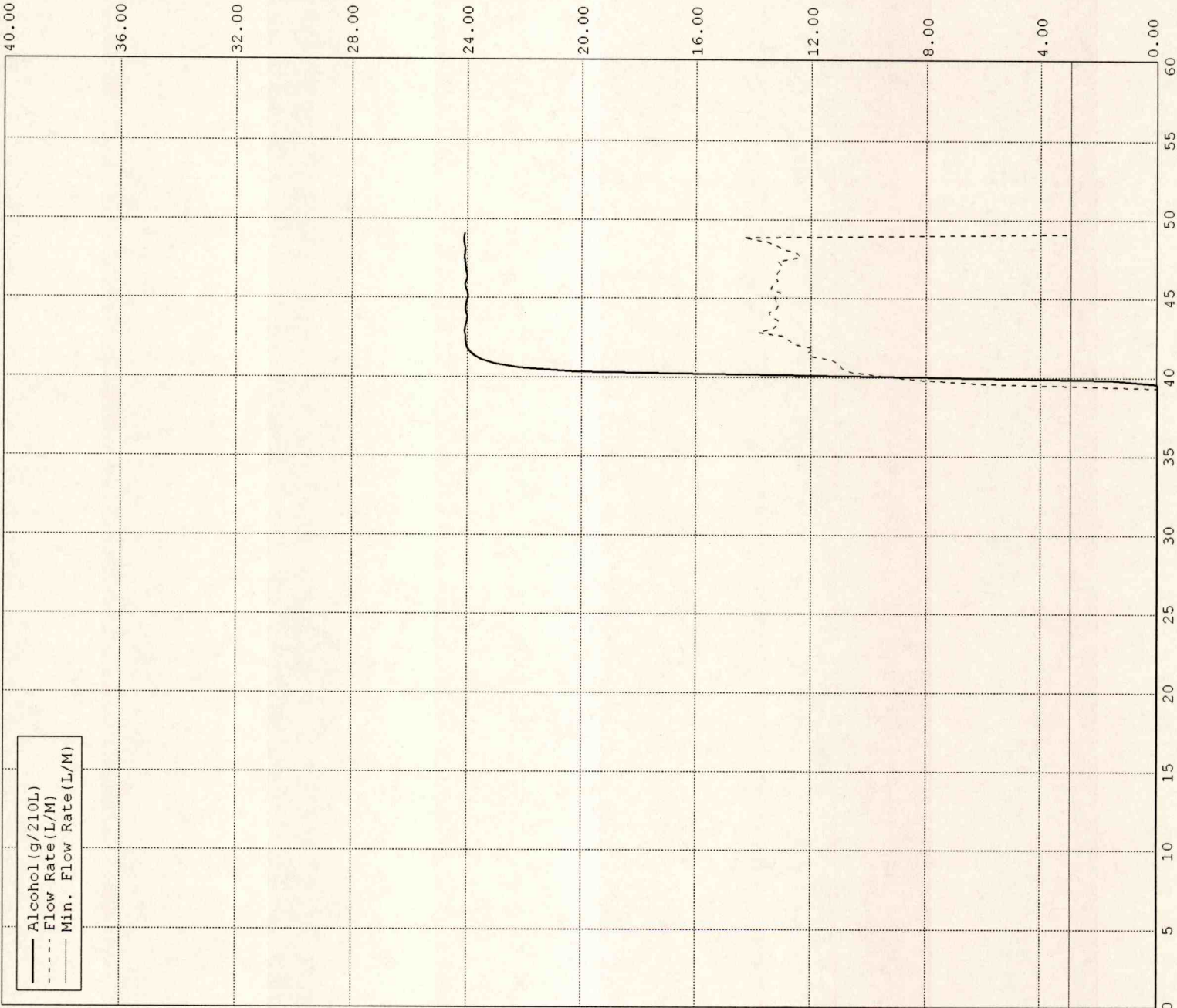
OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.47: 0.079  
LOT #: AG923401  
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK	PASSED	12:15
BLANK TEST	0.000	12:16
INTERNAL STANDARD	VERIFIED	12:16
Xq = 0.095 (0.65%)		
EXTERNAL STANDARD	0.078	12:16
X[1] = 0.0776 (-0.0015) (0.0026)		
BLANK TEST	0.000	12:17
SUBJECT SAMPLE	XXX	12:18
X[1] = 0.1212 (-0.0247) (0.00006)		

Interference Detected





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 01/22/2020  
Time: 12:23:15

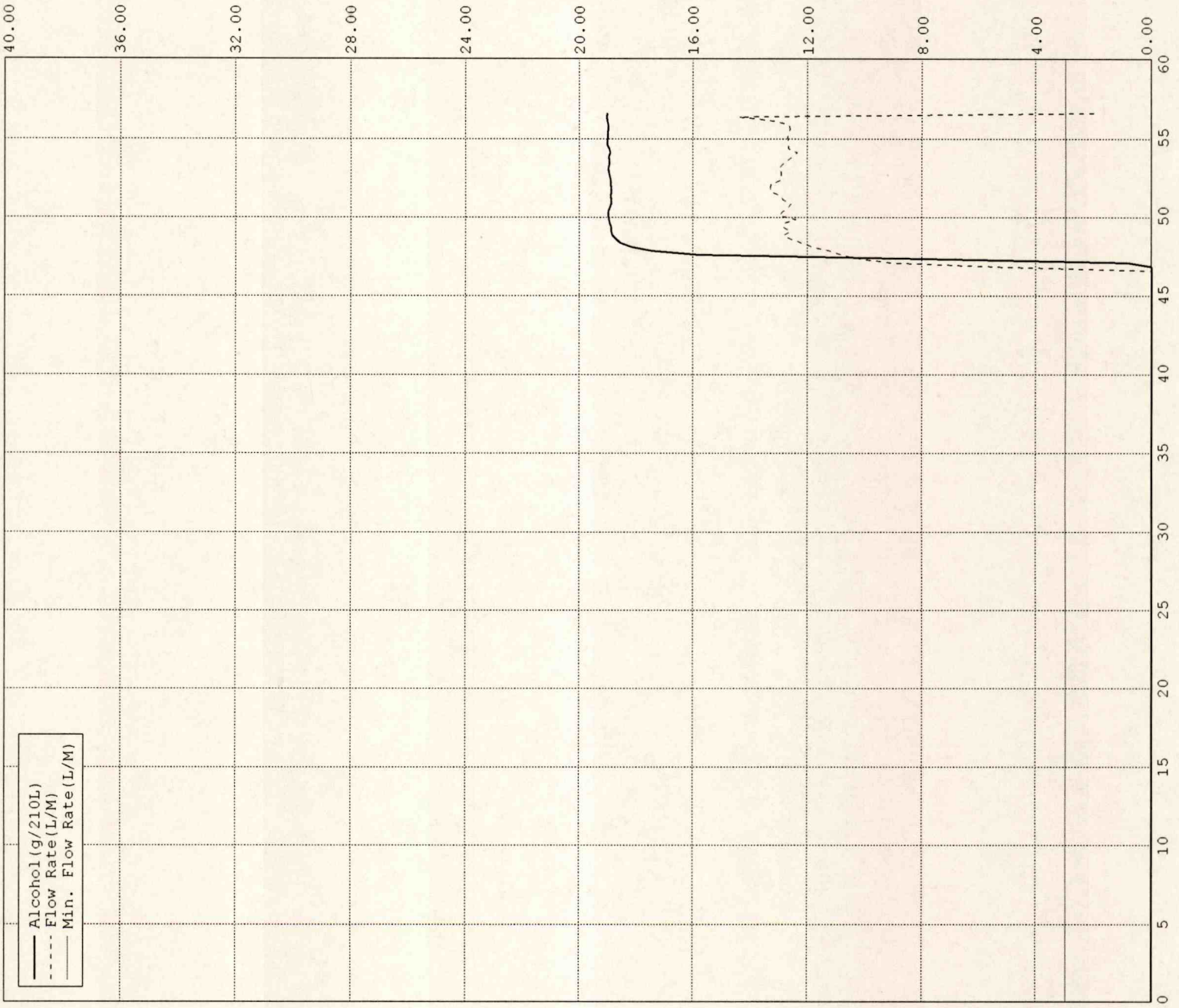
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

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 29.48: 0.079  
LOT #: AG923401  
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK	PASSED	12:26
BLANK TEST	0.000	12:26
INTERNAL STANDARD	VERIFIED	12:26
$Xq = 0.095$ (0.46%)		
EXTERNAL STANDARD	0.077	12:26
$X[1] = 0.0770$ (-0.0017) (0.0016)		
BLANK TEST	0.000	12:27
SUBJECT SAMPLE (Vol=2.01L)	0.095	12:28
$X[1] = 0.0958$ (-0.0009) (-0.0003)		
BLANK TEST	0.000	12:29
EXTERNAL STANDARD	0.077	12:30
$X[1] = 0.0773$ (-0.0015) (0.0012)		
BLANK TEST	0.000	12:31



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 01/22/2020  
Time: 11:22:45

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

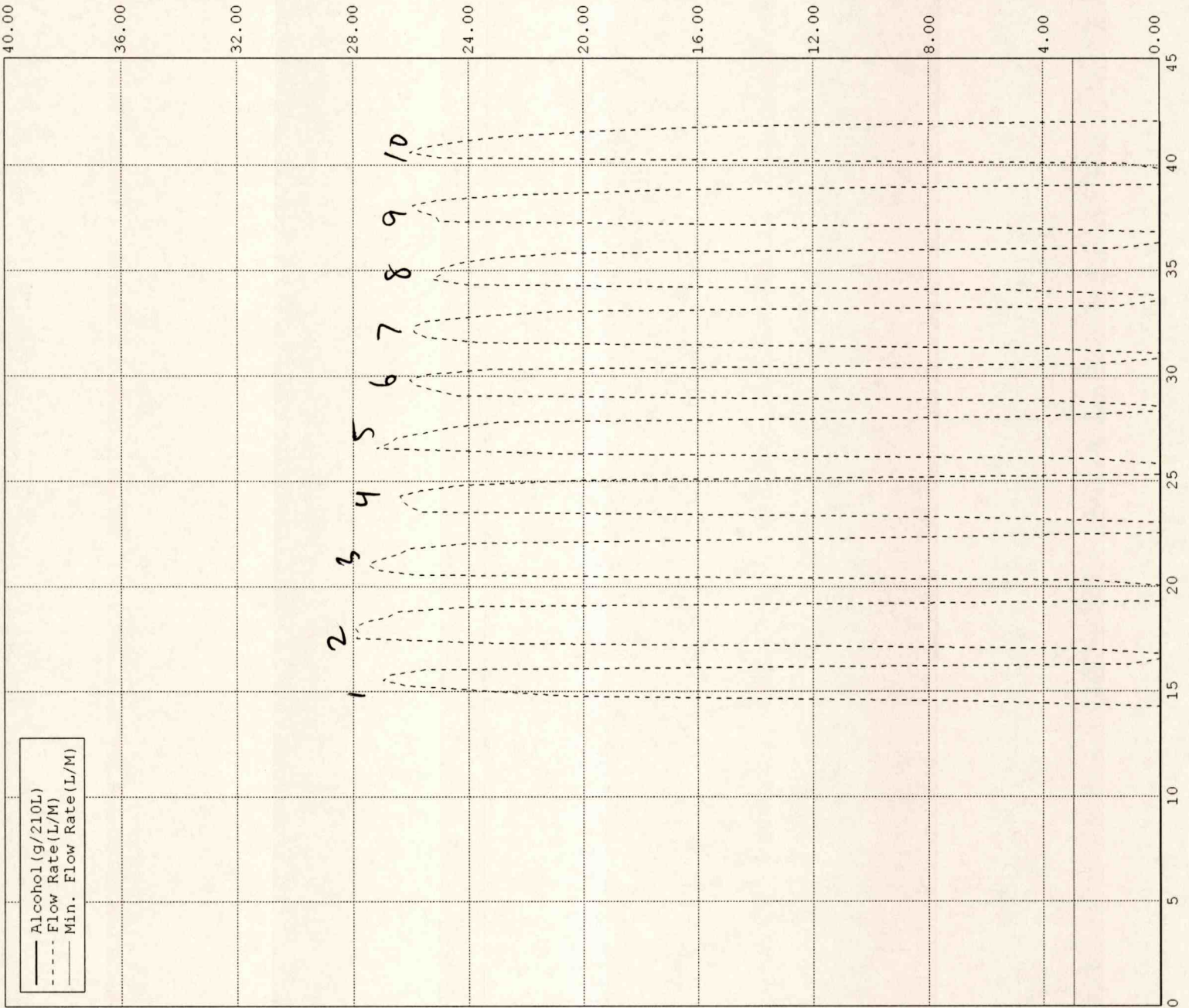
OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.46: 0.079  
LOT #: AG923401  
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK PASSED 11:23  
BLANK TEST 0.000 11:23  
INTERNAL STANDARD VERIFIED 11:24  
EXTERNAL STANDARD 0.077 11:24  
BLANK TEST 0.000 11:25  
SUBJECT SAMPLE XXX 11:26

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100413

Date: 01/22/2020  
Time: 14:31:14

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

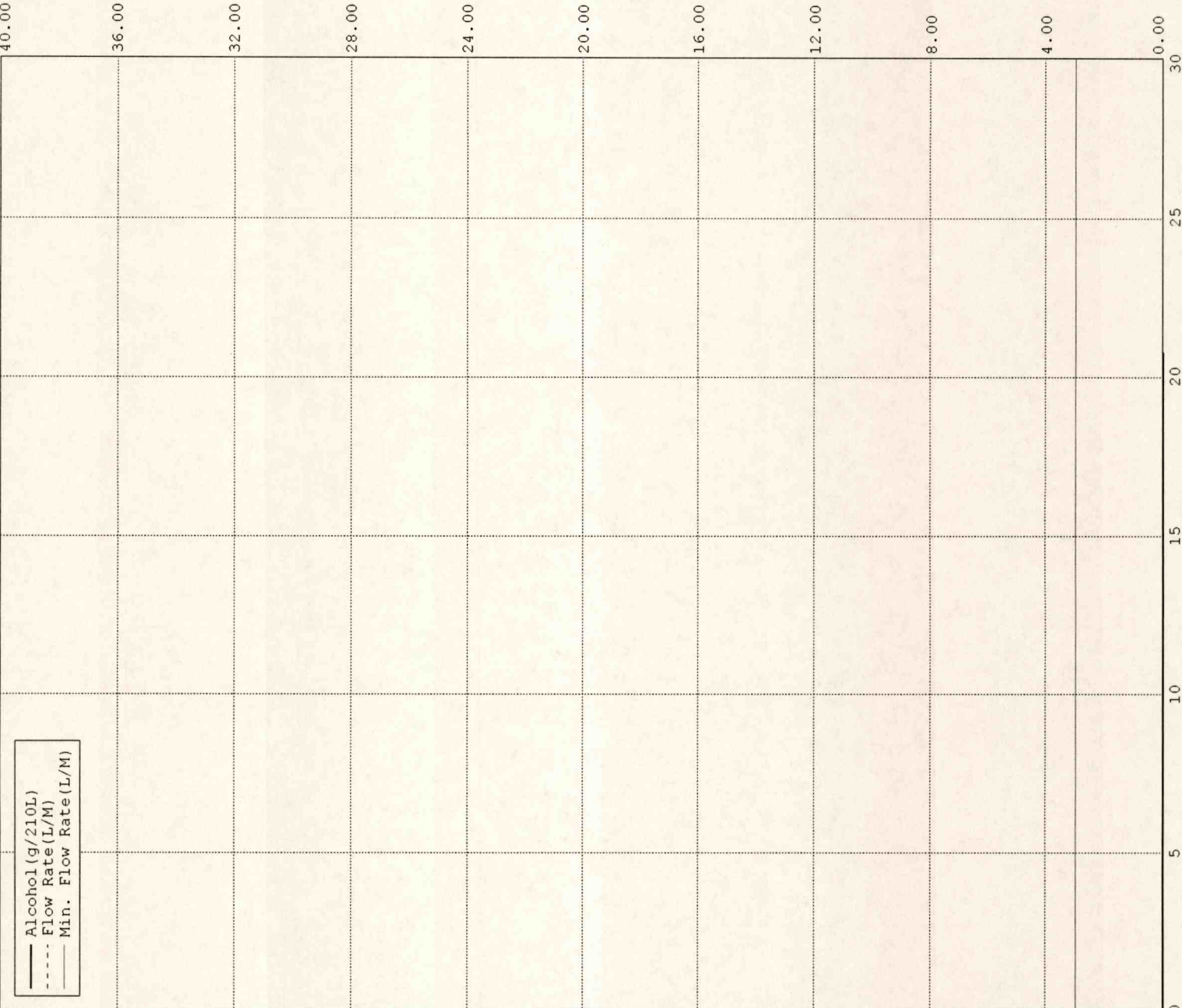
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.49: 0.079  
LOT #: AG923401  
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK  
BLANK TEST PASSED 14:32  
INTERNAL STANDARD VERIFIED 14:32  
EXTERNAL STANDARD 0.077 14:33  
BLANK TEST 0.000 14:34

RFI DETECTED

*JW*



SUBJECT TEST

Alaska Department of Public Safety

DATA MASTER dmt: 100413

Date: 01/22/2020

Time: 15:59:24

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 29.48: 0.079

LOT #: AG923401

EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK

BLANK TEST

INTERNAL STANDARD

EXTERNAL STANDARD

BLANK TEST

SUBJECT SAMPLE (Vol=3.19L)

BLANK TEST

EXTERNAL STANDARD

BLANK TEST

PASSED 16:01  
0.000 16:01  
VERIFIED 16:01  
0.077 16:01  
0.000 16:02  
0.000 16:03  
0.000 16:04  
0.077 16:04  
0.000 16:05

