

# 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 100673 Analyst Derek Watten Start Date 10/08/20

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 1.6 L (1.3L to 1.7L)
4. Linearity Test (attached)

- a. Levels Used
  - i. 0.020g/210L Mnf Airgas Lot AG928203 Exp 10/09/21
  - ii. 0.040g/210L Mnf Airgas Lot AG915607 Exp 06/05/21
  - iii. 0.080g/210L Mnf Airgas Lot AG018102 Exp 06/29/22
  - iv. 0.100g/210L Mnf Airgas Lot AG924701 Exp 09/04/21
  - v. 0.200g/210L Mnf Wtm Lot 19200 Exp 08/06/21
    1. Simulator S/N DR4161 Date Calibrated 05/08/20
  - vi. 0.300g/210L Mnf Wtm Lot 19330 Exp 11/13/21
    1. Simulator S/N DR5298 Date Calibrated 05/08/20

5. Functional Tests (attached)
  - a. Incomplete
  - b. Invalid
  - c. Interference
  - d. Exceeded attempts
  - i. Acetone - Mnf Wtm Lot 19301 Level 0.100 Exp 10/30/21
    1. Simulator S/N SD1202 Date Calibrated 05/08/20
  - ii. Isopropanol - Mnf Wtm Lot 19301 Level 0.100 Exp 10/30/21
    1. Simulator S/N SD1177 Date Calibrated 05/07/20
  - iii. Negative Control - Mnf Wtm Lot 19301 Level 0.100 Exp 10/30/21
    1. Simulator S/N SD1088 Date Calibrated 05/08/20

e. RFI

6. Verify stylus is calibrated
7. Reset Options
8. Clear Memory
9. Verification of Calibration
10. Non-Drinking Subject Test (attached)
11. Upload
13. Remove tank prior to shut down

End Date 10/09/20

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100673  
-----

Date: 10/08/2020  
Time: 09:51:45

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

TEMPERATURES

Sample Chamber = 49.0°C                    PASSED  
(44.0°C - 52.0°C)  
Breath Tube       = 47.6°C                PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage     = 1.70 V                PASSED  
(1.02 V - 2.38 V)  
Cooler Voltage = 1.71 V                PASSED  
(1.03 V - 2.39 V)  
Bias Voltage     = 80 V                 PASSED  
(48 V - 112 V)  
Chopper Freq    = 521 Hz                PASSED  
(475 Hz - 575 Hz)  
Barometer        = 29.2 in

PUMP INFO

Flow Rate = 4.088 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 = 0.080 0.66% (0.00% - 4.00%)

Technician Screen

-----  
DATAMASTER dmt: 100673  
-----

Date: 10/08/2020  
Time: 10:40 AM

Temperatures (°C)  
Sample Cell: 48.9°C  
Breath Tube: 47.6°C

Current Barometer 29.2 in  
Volume (Ltr) 1.41 ✓

Settings  
Lamp: 1.70 V  
Bias: 80 V  
Cooler: 1.66 V  
Chopper: 522 Hz

Voltages (V)  
Flow: 1.05 V  
Detector: -0.051 V ✓

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100673  
-----

Date: 08/14/2020  
Time: 07:01:05

OPERATOR NAME:  
INTOX I METERS  
CERTIFICATE #: 9

Ca = 0.2000  
CAL = 0.999950    0.800 <= CAL < 1.200  
b1 = 0.0007    0.0000 <= b1 < 0.0040  
b2 = 0.0064    0.0010 <= b2 < 0.0100  
b3 = 0.0013    0.0000 <= b3 < 0.0040  
Xq = 0.0795    0.0500 <= Xq < 0.2000  
a21 = 1.196340    1.050 <= a21 < 1.300  
a31 = 0.439141    0.300 <= a31 < 0.800

SUBJECT TEST

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100673  
-----

Date: 10/08/2020  
Time: 10:41:13

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

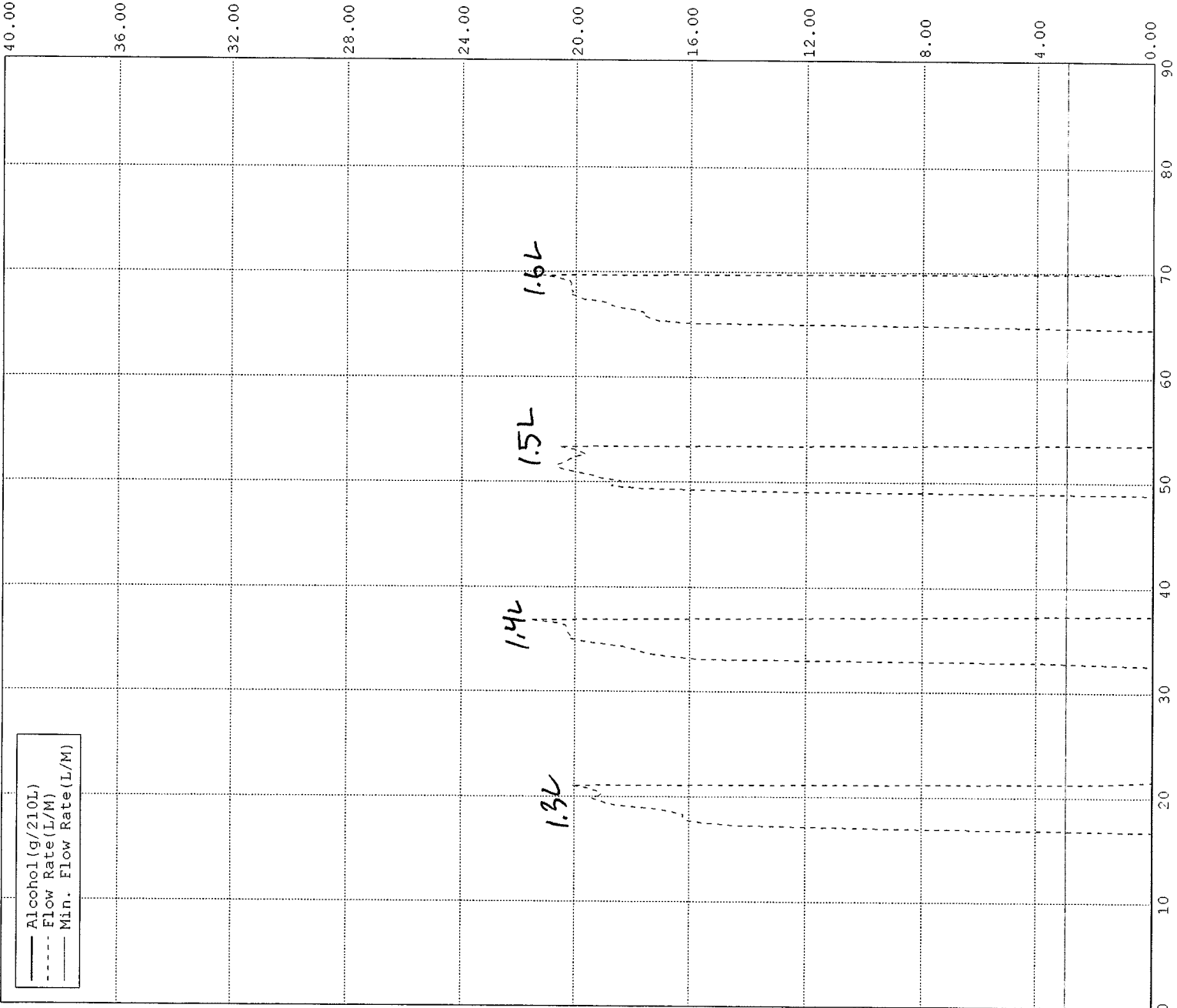
DEPT/AGENCY:  
MINIMUM VOLUME  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.24: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	10:42
BLANK TEST	0.000	10:42
INTERNAL STANDARD	VERIFIED	10:42
EXTERNAL STANDARD	0.078	10:42
BLANK TEST	0.000	10:43
SUBJECT SAMPLE (Vol=1.54L)	0.000	10:44
BLANK TEST	0.078	10:45
EXTERNAL STANDARD	0.000	10:46
BLANK TEST		

*DW*



LINEARITY CHECK

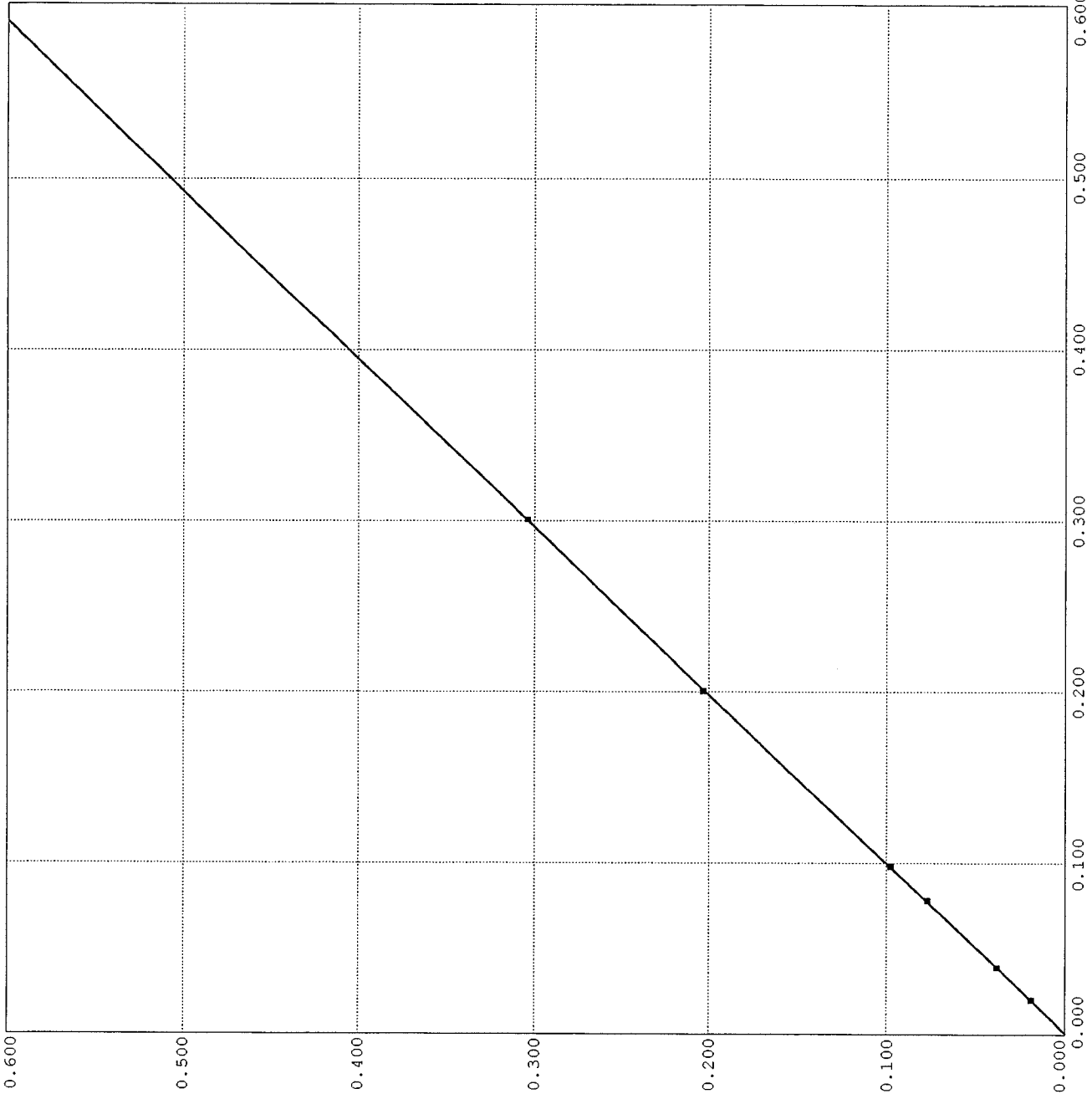
-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100673  
 -----

Date: 10/08/2020  
 Time: 10:53:43

SUPERVISOR NAME:  
 DEREK WALTON  
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0198	0.0004
0.039	0.0394	0.0005
0.078	0.0780	0.0000
0.098	0.0988	0.0004
0.200	0.2040	0.0000
0.300	0.3046	0.0009

SLOPE = 1.019002  
 R<sup>2</sup> = 0.999969



*DM*

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100673

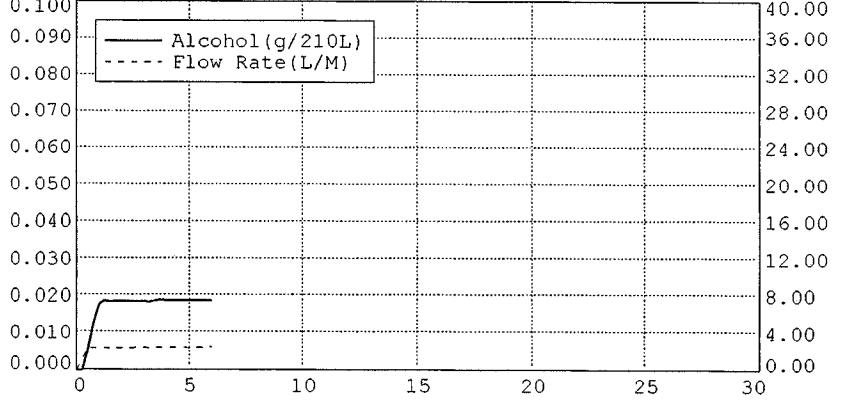
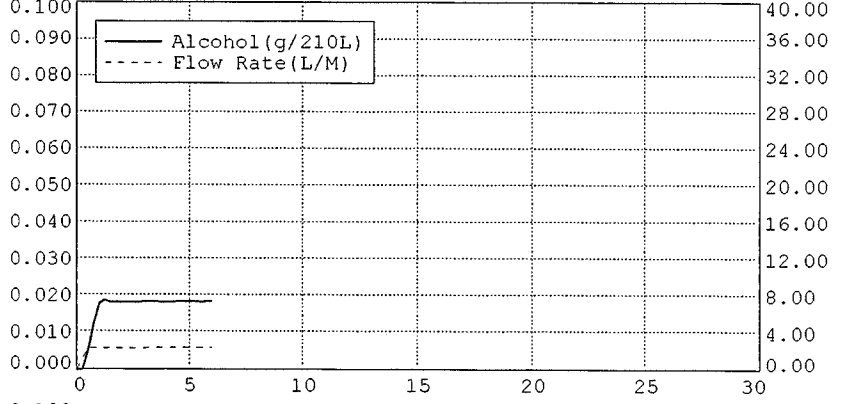
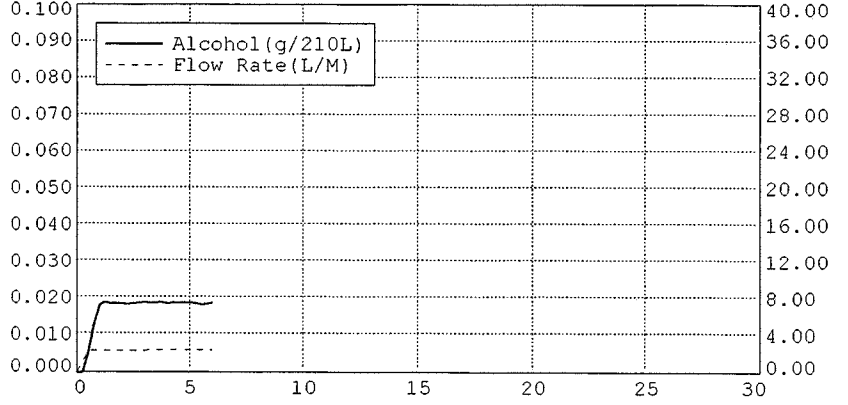
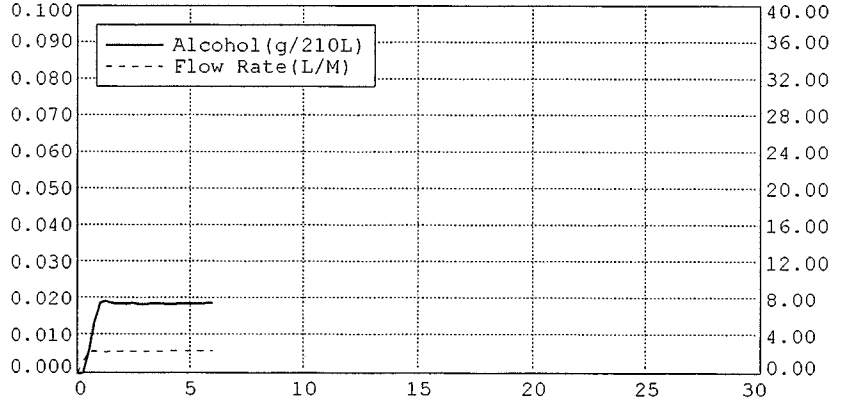
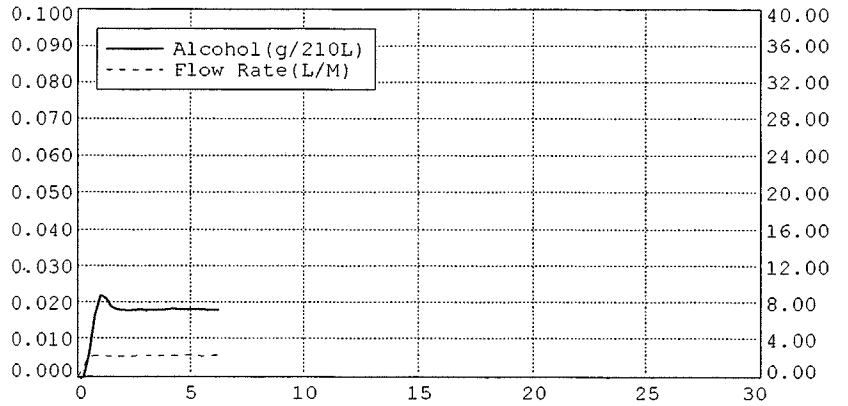
Date: 10/08/2020  
 Time: 10:53:44

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.24: 0.020  
 LOT #: AG928203  
 EXPIRATION: 10/09/2021  
 TANK PRESSURE: 701 psi

BLANK TEST	0.000	10:54
INTERNAL STANDARD	VERIFIED	10:55
EXTERNAL STANDARD	0.019	10:55
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.020	10:56
BLANK TEST	0.000	10:57
EXTERNAL STANDARD	0.020	10:57
BLANK TEST	0.000	10:58
EXTERNAL STANDARD	0.020	10:58
BLANK TEST	0.000	10:59
EXTERNAL STANDARD	0.020	10:59
BLANK TEST	0.000	11:00

Average = 0.0198  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100673

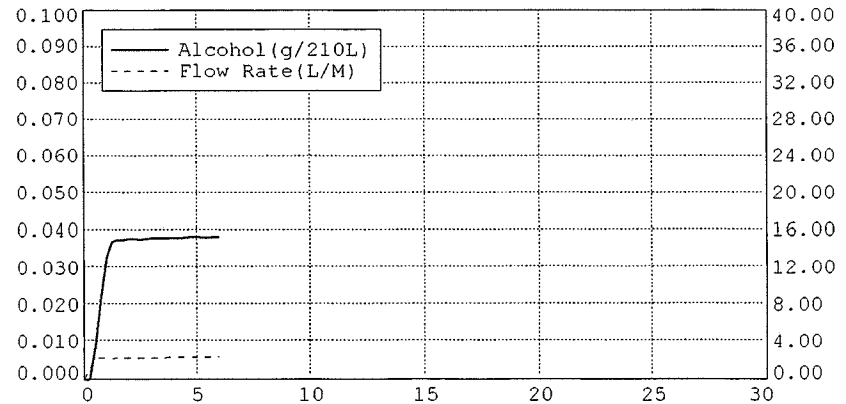
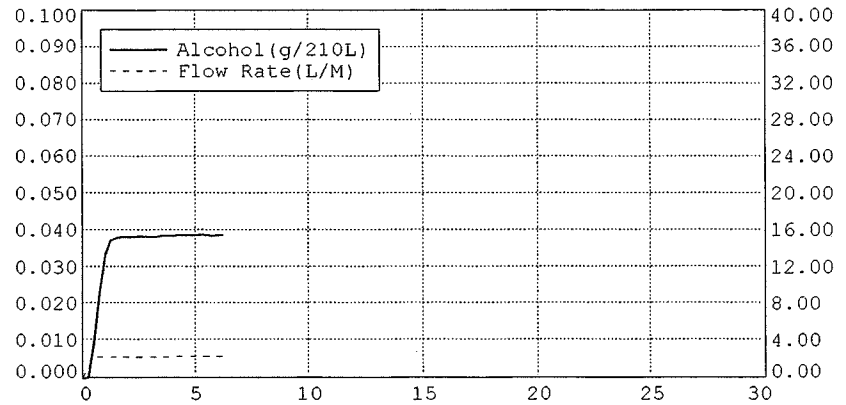
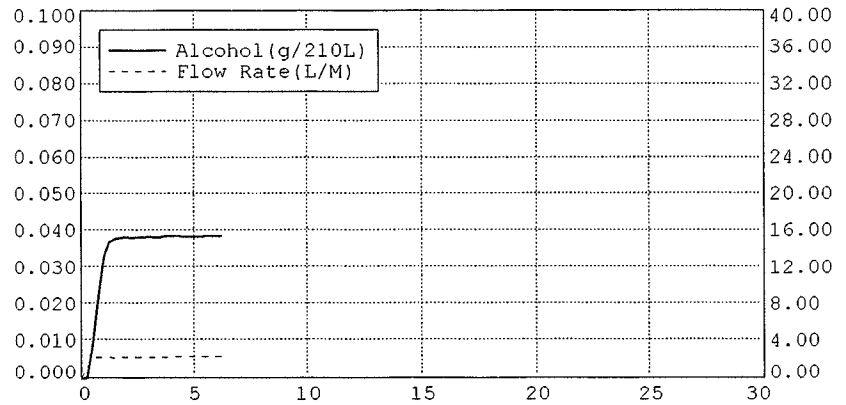
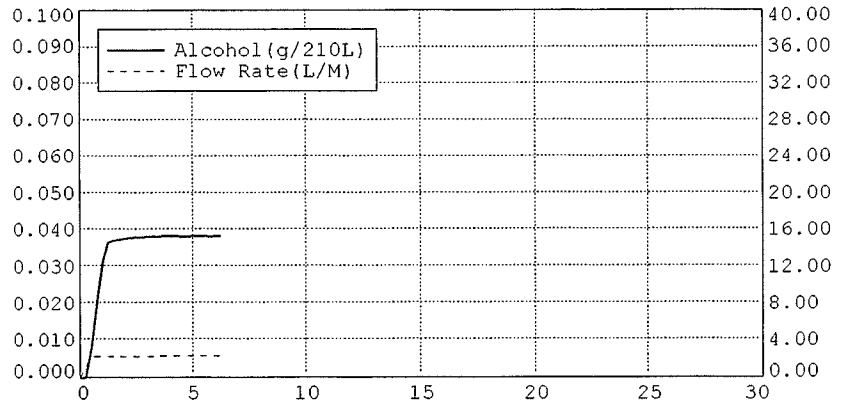
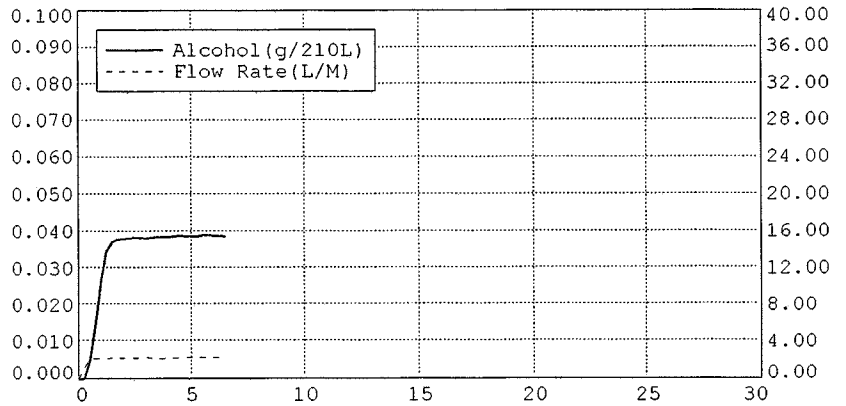
Date: 10/08/2020  
 Time: 11:00:57

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.23: 0.039  
 LOT #: AG915607  
 EXPIRATION: 06/05/2021  
 TANK PRESSURE: 497 psi

BLANK TEST	0.000	11:02
INTERNAL STANDARD	VERIFIED	11:02
EXTERNAL STANDARD	0.040	11:02
BLANK TEST	0.000	11:03
EXTERNAL STANDARD	0.039	11:03
BLANK TEST	0.000	11:04
EXTERNAL STANDARD	0.040	11:04
BLANK TEST	0.000	11:05
EXTERNAL STANDARD	0.039	11:05
BLANK TEST	0.000	11:06
EXTERNAL STANDARD	0.039	11:06
BLANK TEST	0.000	11:07

Average = 0.0394  
 Std Dev = 0.0005





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100673

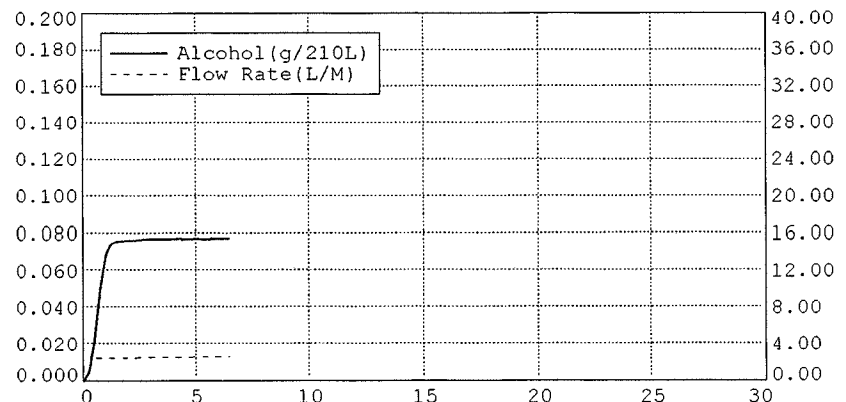
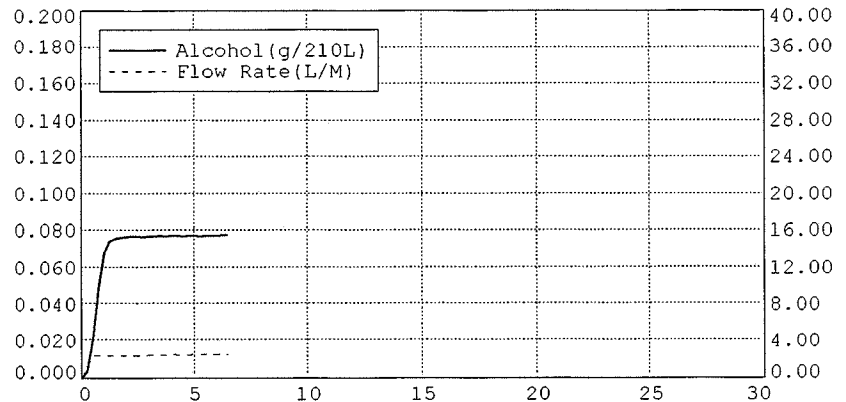
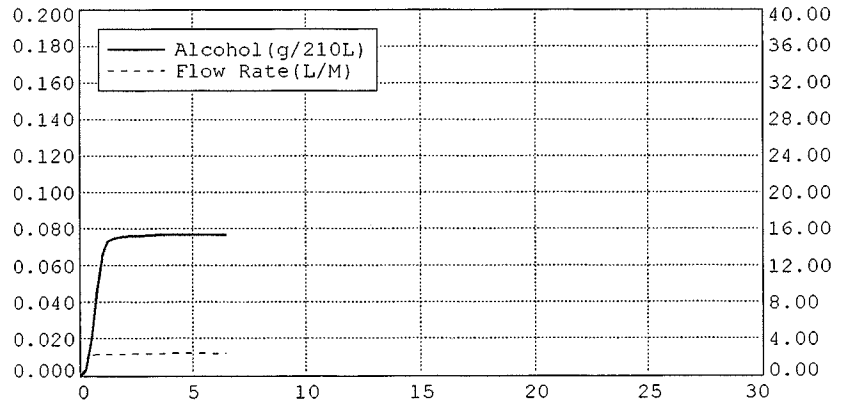
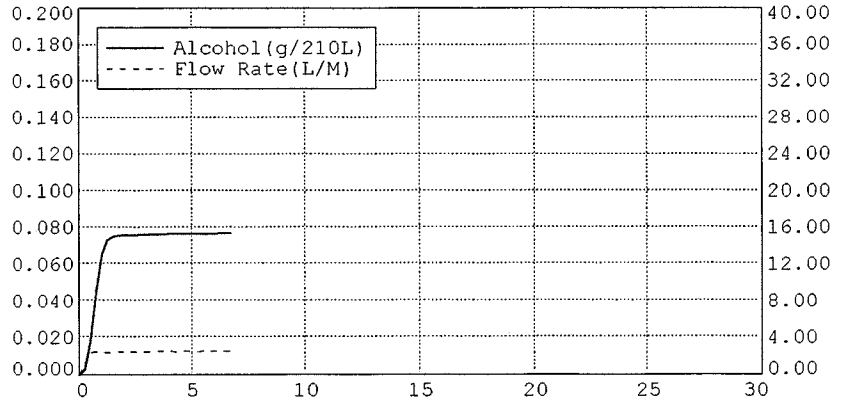
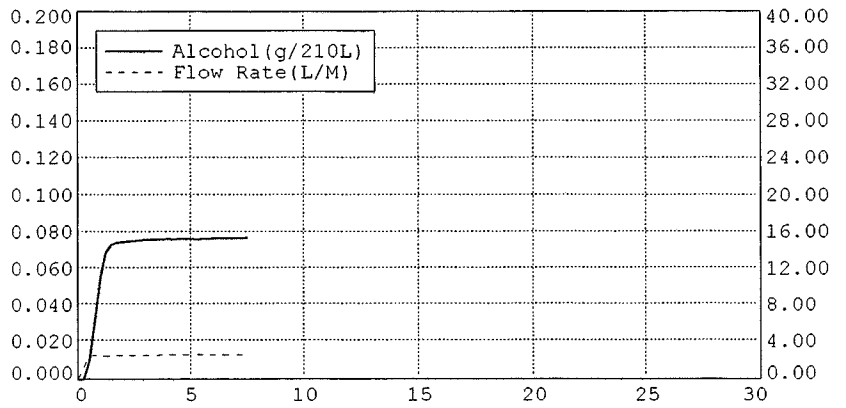
Date: 10/08/2020  
 Time: 11:09:09

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.23: 0.078  
 LOT #: AG018102  
 EXPIRATION: 06/29/2022  
 TANK PRESSURE: 1191 psi

BLANK TEST	0.000	11:10
INTERNAL STANDARD	VERIFIED	11:10
EXTERNAL STANDARD	0.078	11:10
BLANK TEST	0.000	11:11
EXTERNAL STANDARD	0.078	11:11
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.078	11:12
BLANK TEST	0.000	11:13
EXTERNAL STANDARD	0.078	11:13
BLANK TEST	0.000	11:14
EXTERNAL STANDARD	0.078	11:15
BLANK TEST	0.000	11:15

Average = 0.0780  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100673

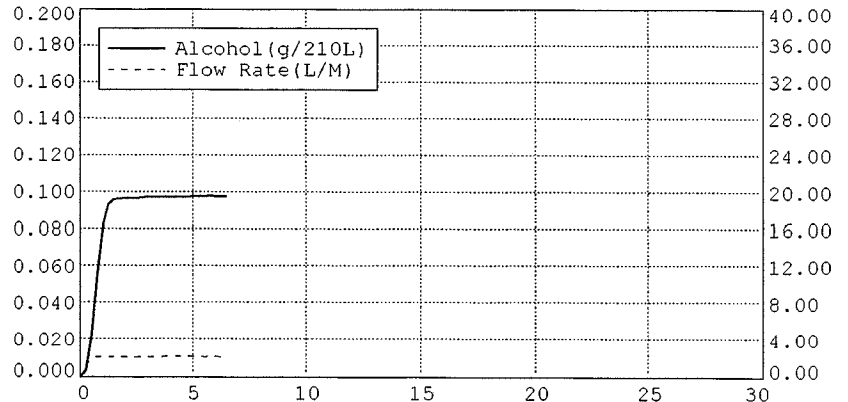
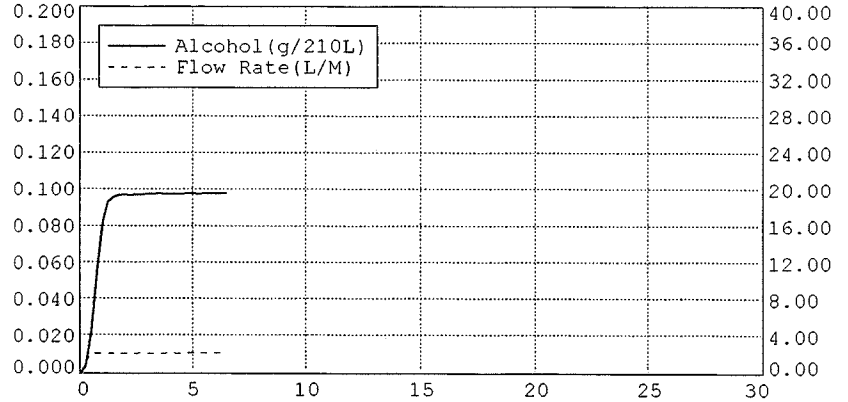
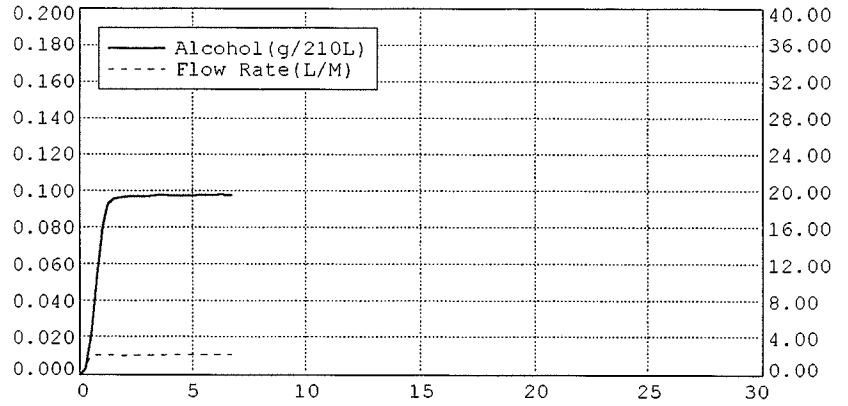
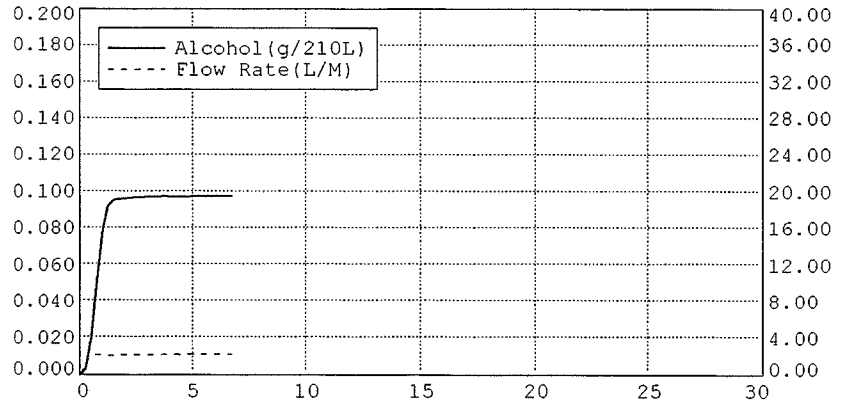
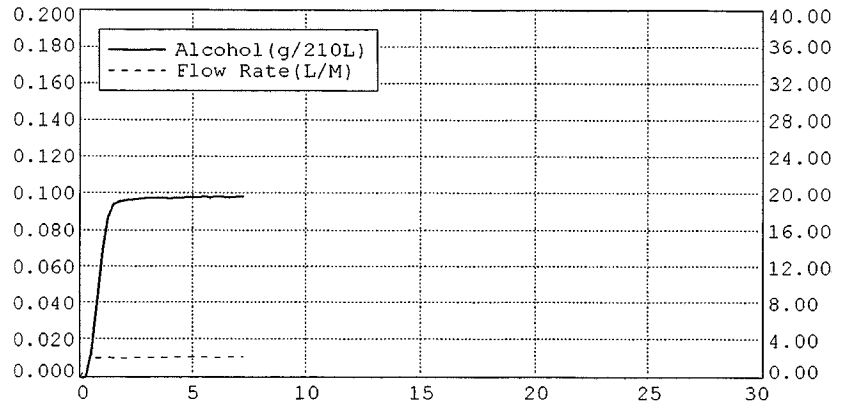
Date: 10/08/2020  
 Time: 11:17:11

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.23: 0.098  
 LOT #: AG924701  
 EXPIRATION: 09/04/2021  
 TANK PRESSURE: 290 psi

BLANK TEST	0.000	11:18
INTERNAL STANDARD	VERIFIED	11:18
EXTERNAL STANDARD	0.099	11:18
BLANK TEST	0.000	11:19
EXTERNAL STANDARD	0.098	11:19
BLANK TEST	0.000	11:20
EXTERNAL STANDARD	0.099	11:20
BLANK TEST	0.000	11:21
EXTERNAL STANDARD	0.099	11:22
BLANK TEST	0.000	11:23
EXTERNAL STANDARD	0.099	11:23
BLANK TEST	0.000	11:24

Average = 0.0988  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

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 Alaska Department of Public Safety  
 DATAMASTER dmt: 100673  
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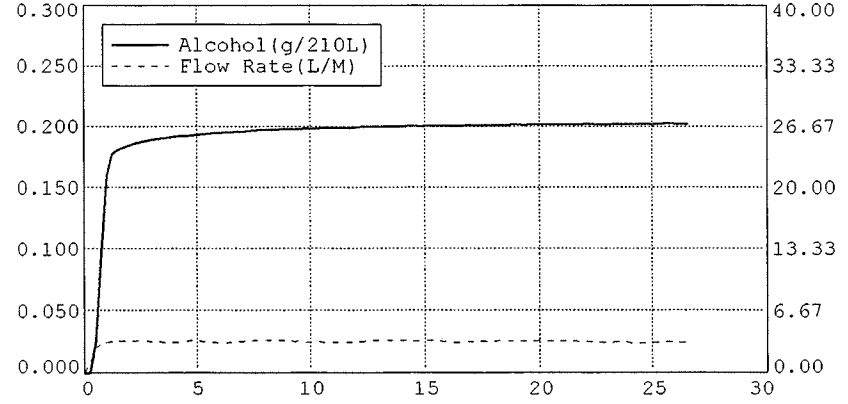
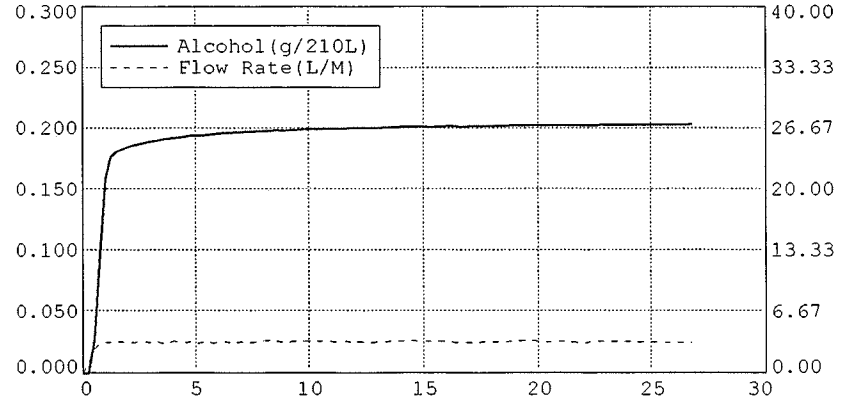
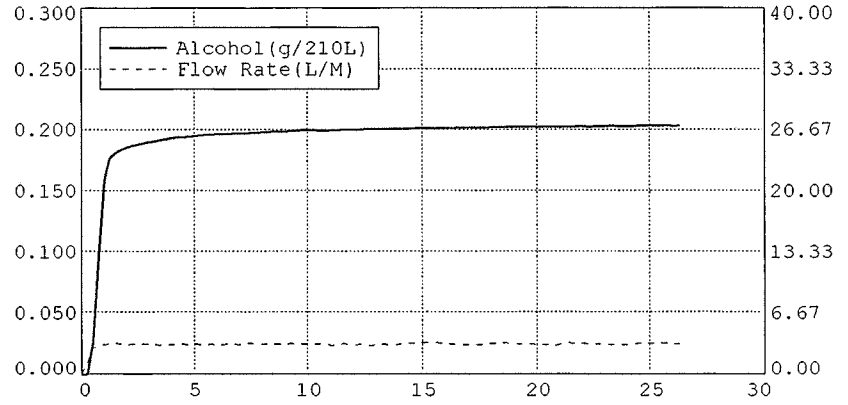
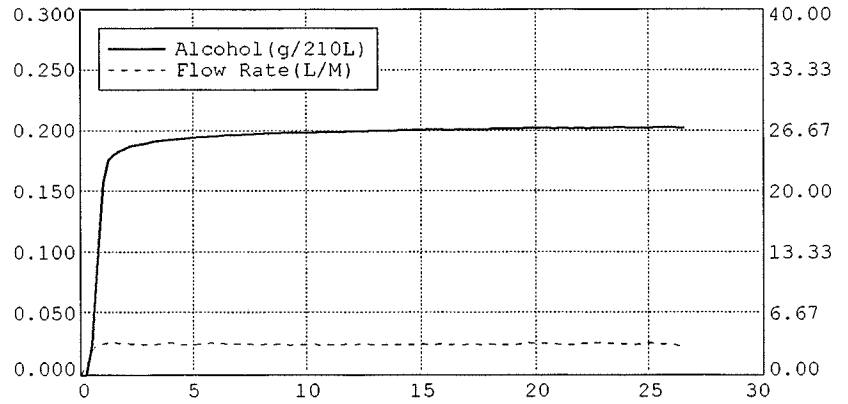
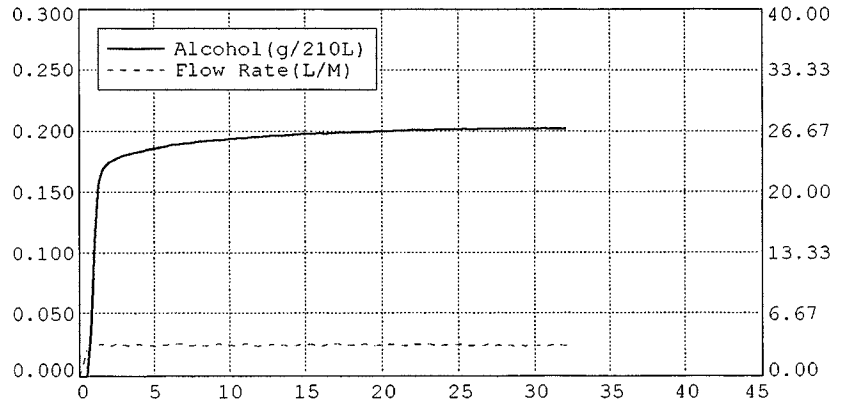
Date: 10/08/2020  
 Time: 11:38:31

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	11:39
INTERNAL STANDARD	VERIFIED	11:39
EXTERNAL STANDARD	0.204	11:40
BLANK TEST	0.000	11:41
EXTERNAL STANDARD	0.204	11:41
BLANK TEST	0.000	11:42
EXTERNAL STANDARD	0.204	11:43
BLANK TEST	0.000	11:44
EXTERNAL STANDARD	0.204	11:44
BLANK TEST	0.000	11:45
EXTERNAL STANDARD	0.204	11:46
BLANK TEST	0.000	11:47

Average = 0.2040  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
DATAMASTER dmt: 100673

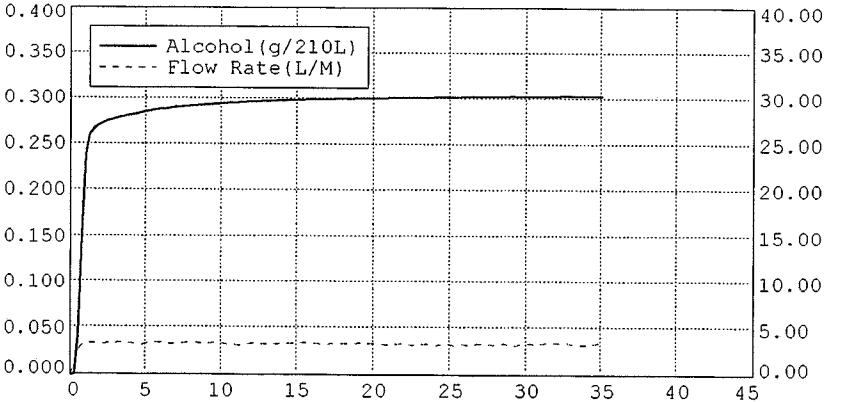
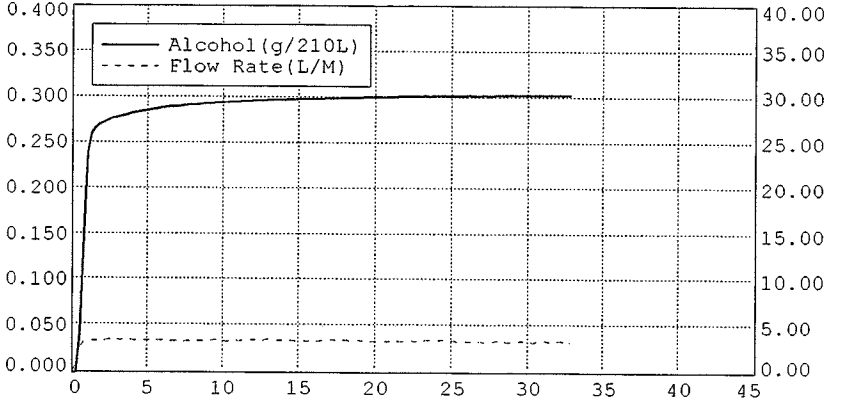
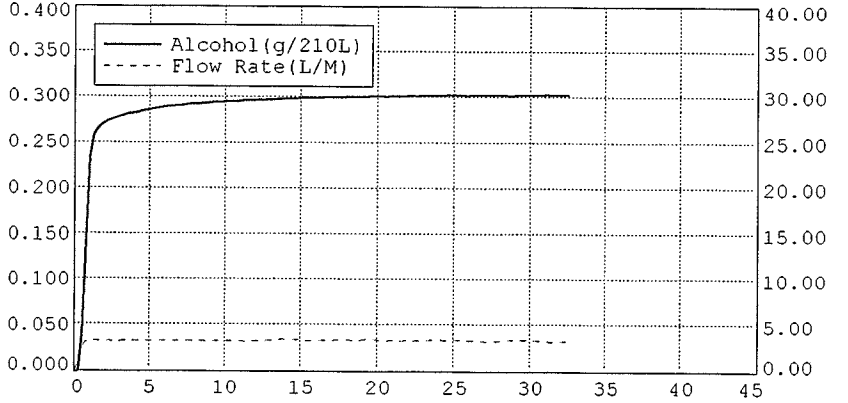
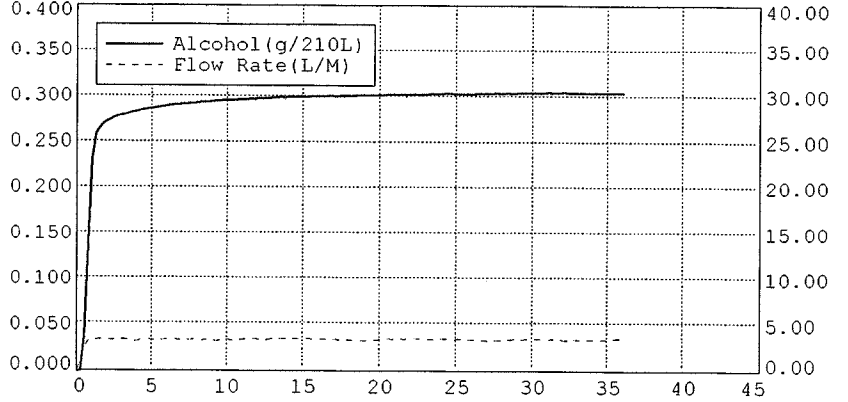
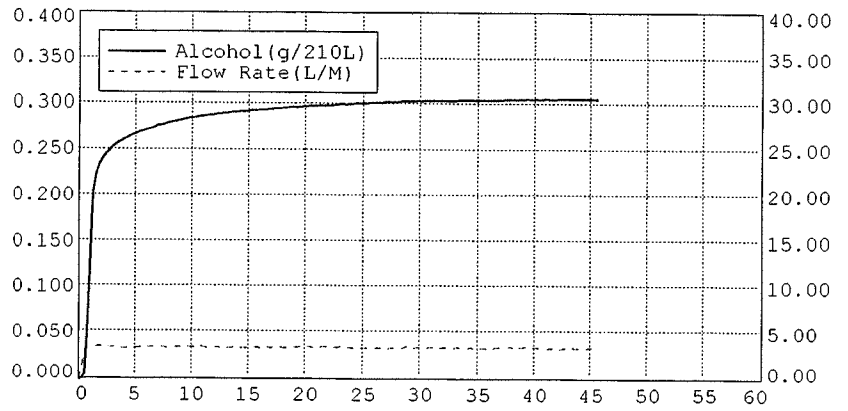
Date: 10/08/2020  
Time: 11:52:05

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	11:53
INTERNAL STANDARD	VERIFIED	11:53
EXTERNAL STANDARD	0.306	11:54
BLANK TEST	0.000	11:55
EXTERNAL STANDARD	0.305	11:55
BLANK TEST	0.000	11:56
EXTERNAL STANDARD	0.304	11:57
BLANK TEST	0.000	11:58
EXTERNAL STANDARD	0.304	11:58
BLANK TEST	0.000	11:59
EXTERNAL STANDARD	0.304	12:00
BLANK TEST	0.000	12:01

Average = 0.3046  
Std Dev = 0.0009



SUBJECT TEST

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100673  
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Date: 10/08/2020  
Time: 12:14:16

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

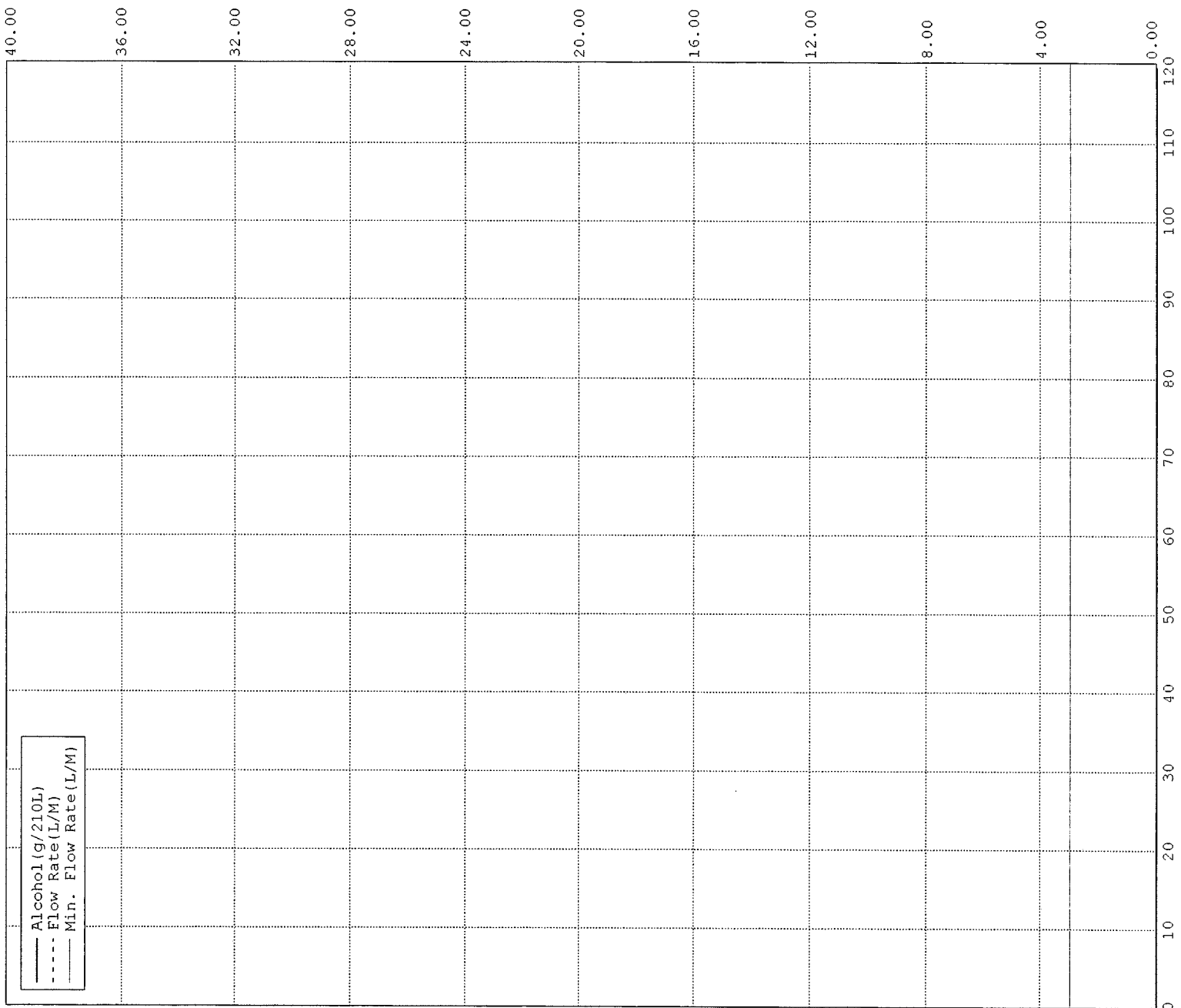
OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.22: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:15  
BLANK TEST 0.000 12:15  
INTERNAL STANDARD VERIFIED 12:15  
EXTERNAL STANDARD 0.077 12:15  
BLANK TEST 0.000 12:16  
SUBJECT SAMPLE INCOMPLETE 12:18

*ME*



SUBJECT TEST

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100673  
-----

Date: 10/08/2020  
Time: 14:19:43

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

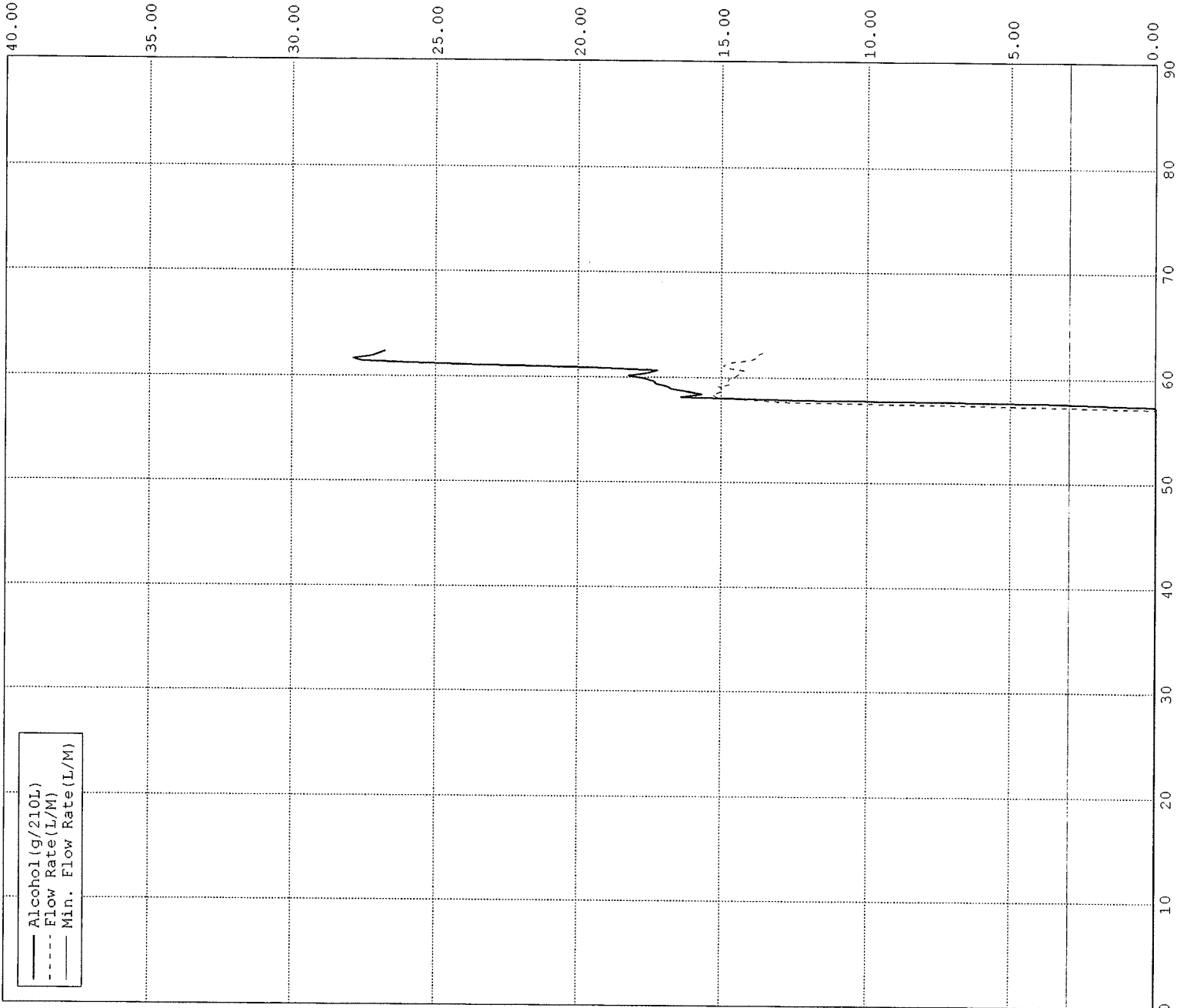
DEPT/AGENCY:  
'INVALID  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.18: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 14:21  
BLANK TEST 0.000 14:21  
INTERNAL STANDARD VERIFIED 14:21  
EXTERNAL STANDARD 0.078 14:21  
BLANK TEST 0.000 14:22  
SUBJECT SAMPLE INVALID 14:23

*DW*



SUBJECT TEST

Alaska Department of Public Safety  
DAPMASTER dmt: 100673

Date: 10/09/2020  
Time: 09:15:25

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

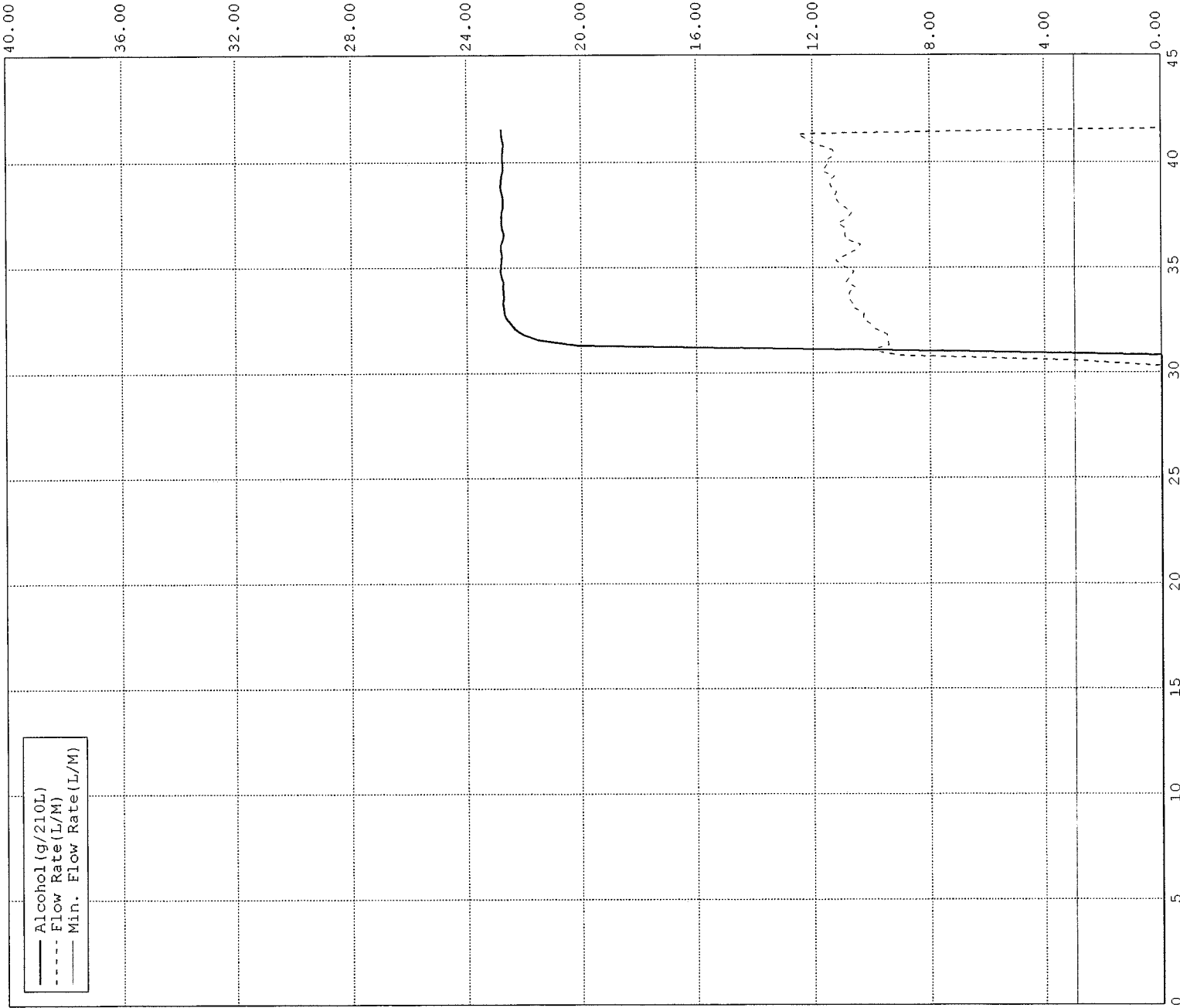
EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 28.99: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	09:16
BLANK TEST	0.000	09:16
INTERNAL STANDARD	VERIFIED	09:16
Xq = 0.080 (1.09%)		
EXTERNAL STANDARD	0.077	09:16
X[1] = 0.0772 (-0.0015) (0.0008)		
BLANK TEST	0.000	09:17
SUBJECT SAMPLE	XXX	09:18
X[1] = 0.1146 (-0.0200) (0.0000)		

Interference Detected

Filter 2 average: -0.0010

Filter 3 average: 0.0011



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100673

Date: 10/08/2020  
Time: 14:55:29

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

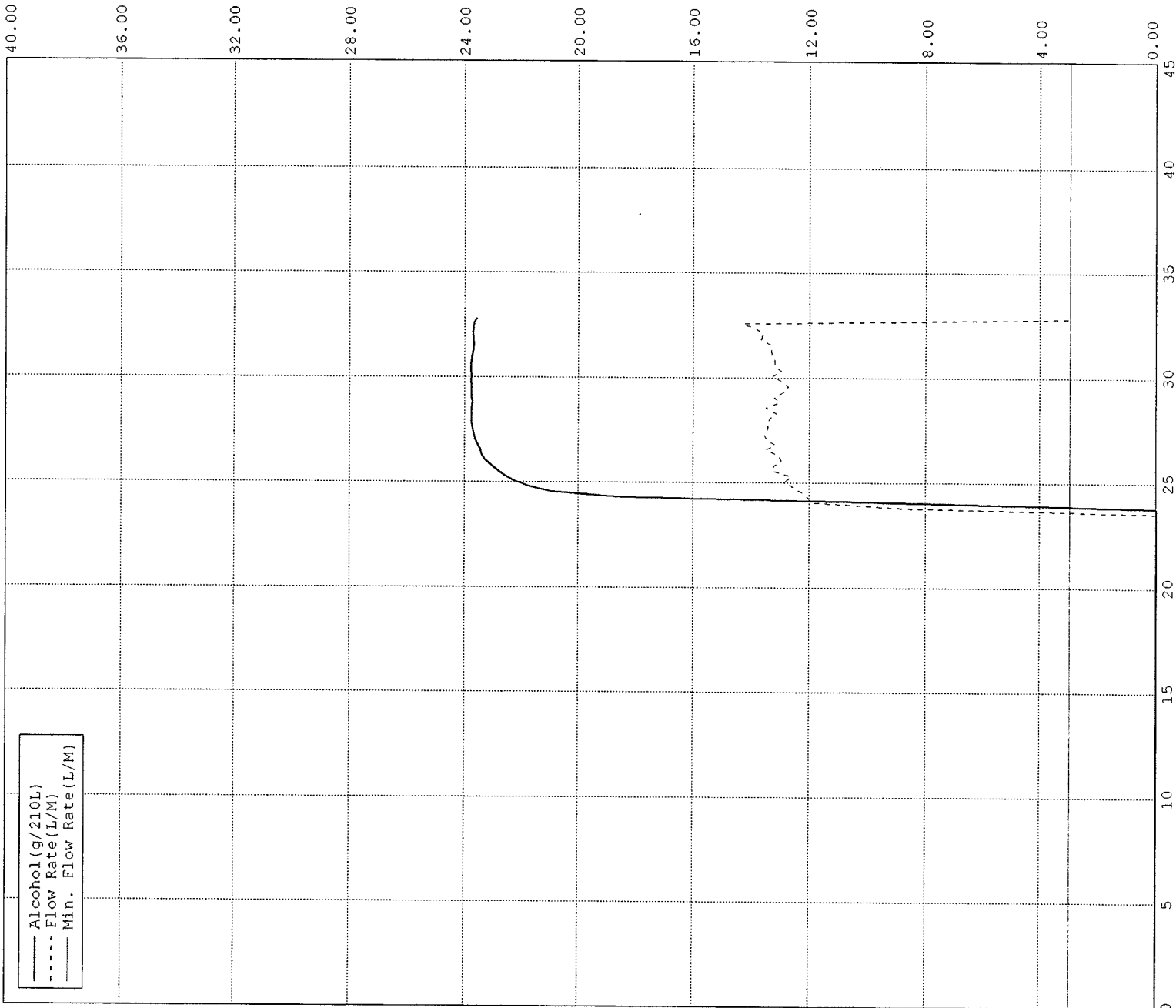
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.16: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 14:59  
BLANK TEST 0.000 14:59  
INTERNAL STANDARD VERIFIED 14:59  
Xq = 0.081 (2.07%)  
EXTERNAL STANDARD 0.079 14:59  
X[1] = 0.0785 (-0.0004) (0.0013)  
BLANK TEST 0.000 15:00  
SUBJECT SAMPLE XXX 15:01  
X[1] = 0.1187 (-0.0279) (0.0008)

Interference Detected

*DM*





SUBJECT TEST

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100673  
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Date: 10/08/2020  
Time: 14:46:36

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

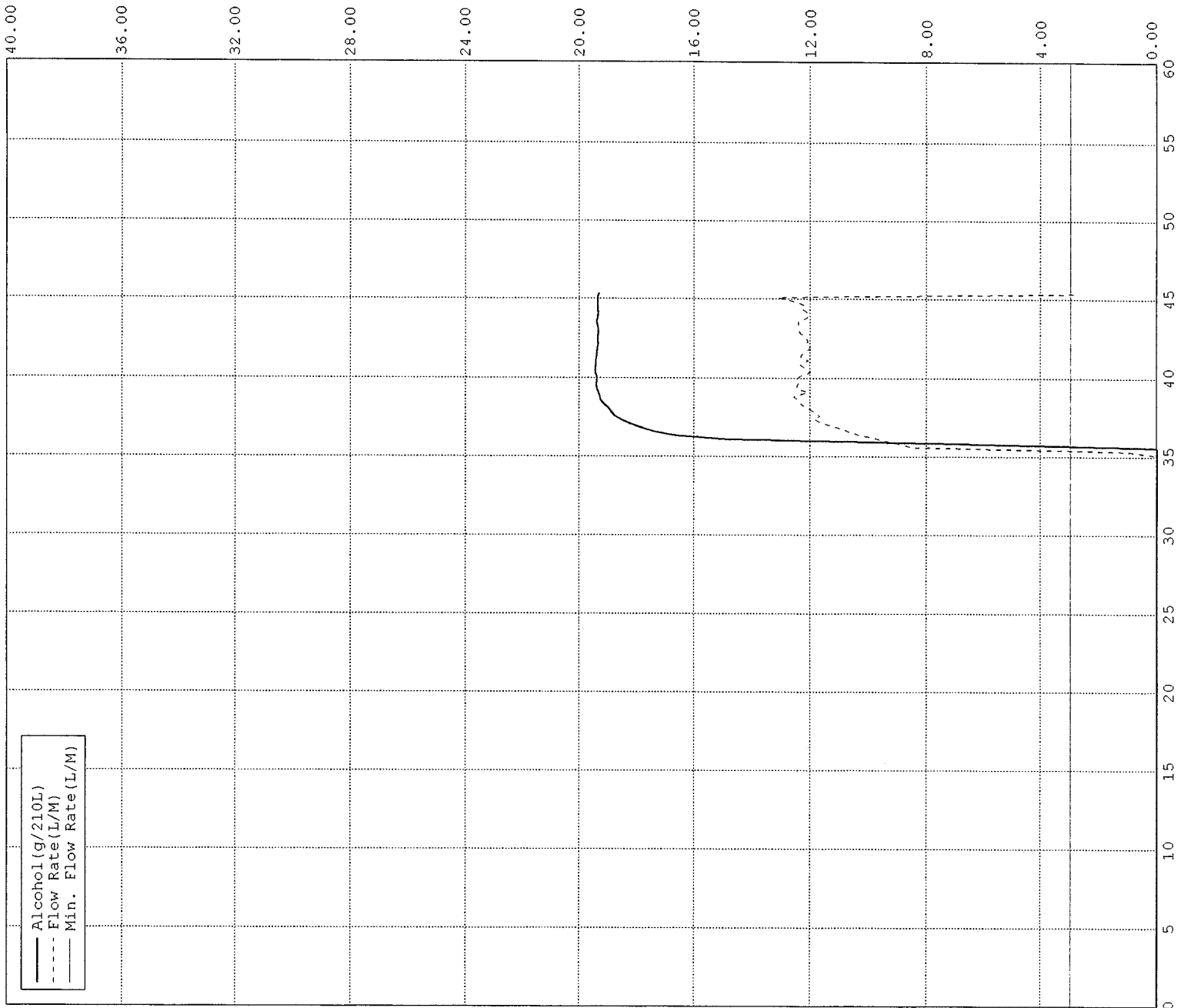
OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.16: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	14:47
BLANK TEST	0.000	14:47
INTERNAL STANDARD	VERIFIED	14:47
$x_q = 0.081$ (1.20%)		
EXTERNAL STANDARD	0.078	14:48
$x[1] = 0.0776$ (-0.0010) (0.0015)		
BLANK TEST	0.000	14:49
SUBJECT SAMPLE (Vol=1.93L)	0.097	14:49
$x[1] = 0.0976$ (-0.0003) (0.0010)		
BLANK TEST	0.000	14:50
EXTERNAL STANDARD	0.077	14:51
$x[1] = 0.0771$ (-0.0010) (0.0006)		
BLANK TEST	0.000	14:51



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100673

Date: 10/08/2020  
Time: 14:29:02

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

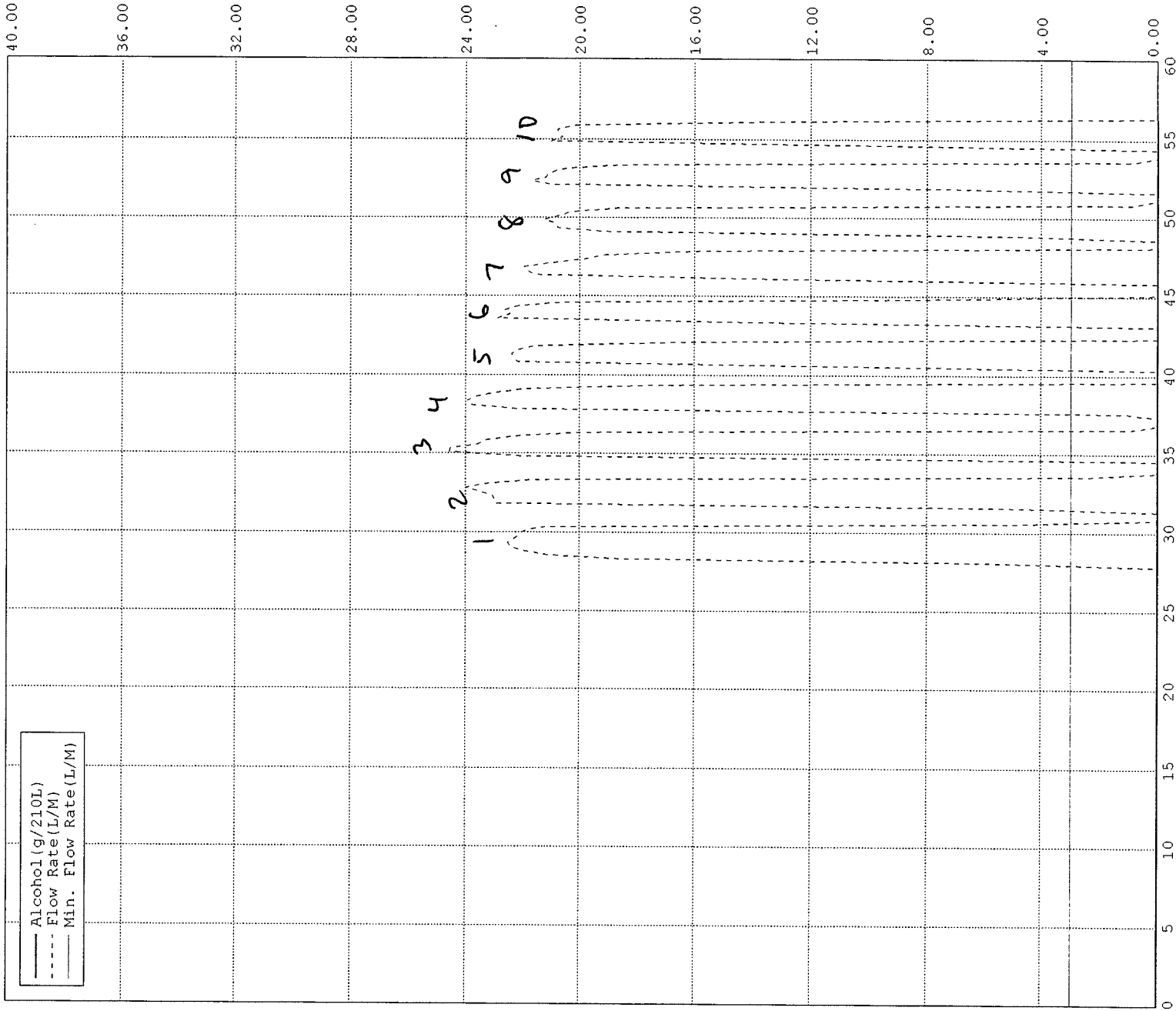
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.18: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 14:30  
BLANK TEST 0.000 14:30  
INTERNAL STANDARD VERIFIED 14:30  
EXTERNAL STANDARD 0.078 14:30  
BLANK TEST 0.000 14:31  
SUBJECT SAMPLE XXX 14:32

Maximum Attempts Exceeded

*DM*



**SUBJECT TEST**

-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100673  
 -----  
 Date: 10/08/2020  
 Time: 14:01:21

**SUBJECT NAME:**  
**TEST TEST**  
**LICENSE #:** XXXX

**OPERATOR NAME:**  
 DEREK WALTON  
 OPERATOR'S #: 9508

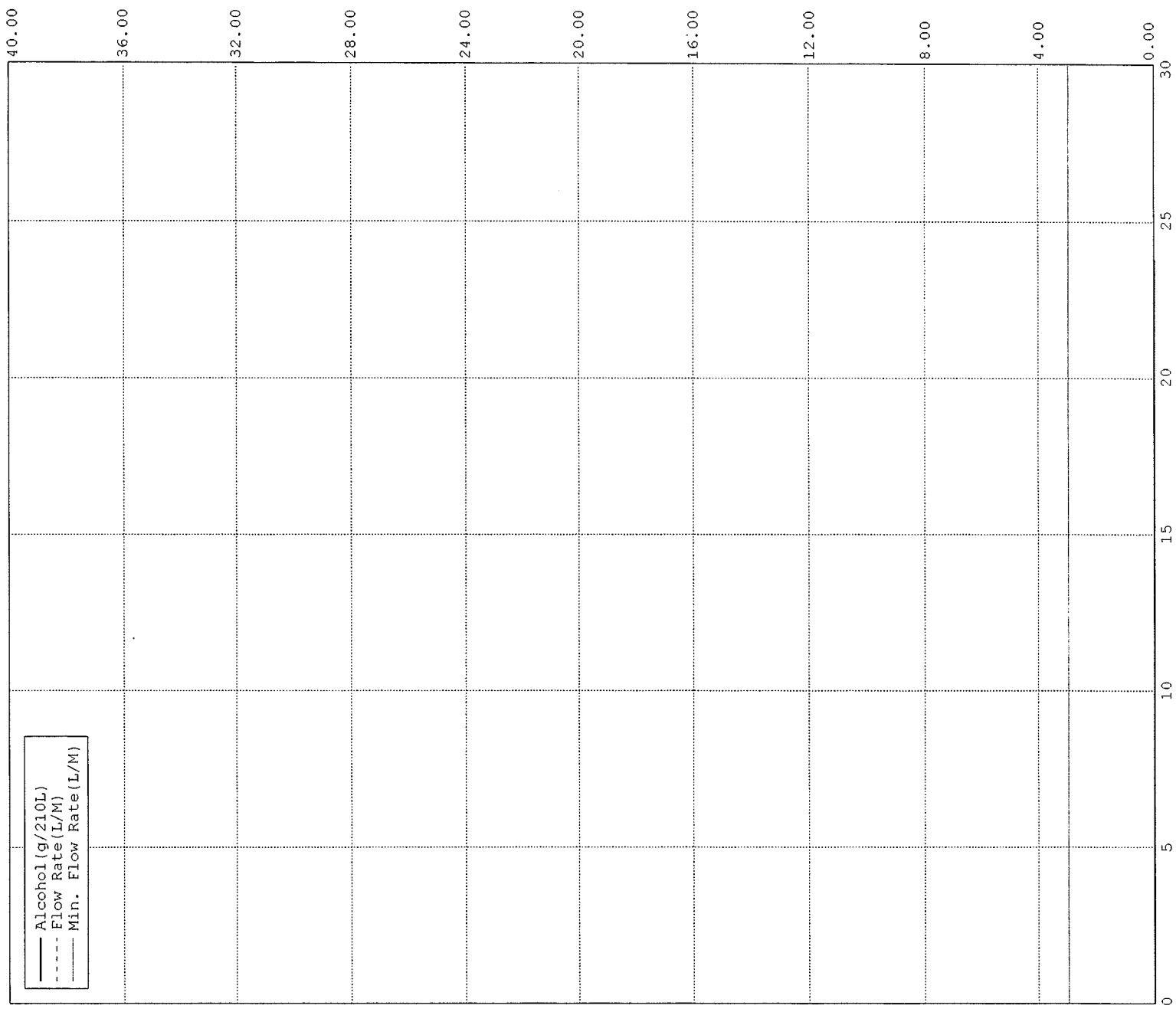
**DEPT/AGENCY:**  
 RADIO FREQUENCY  
 CASE/REPORT: XXXX  
 TEST TYPE: TEST

**EXTERNAL STANDARD INFORMATION**  
 NOMINAL: 0.080  
 TARGET AT 29.19: 0.078  
 LOT #: AG018102  
 EXPIRATION: 06/29/2022

**DIAGNOSTIC CHECK** PASSED 14:03  
 BLANK TEST 0.000 14:03  
 INTERNAL STANDARD VERIFIED 14:04  
 EXTERNAL STANDARD 0.078 14:04  
 BLANK TEST 0.000 14:05

RFI DETECTED

*DM*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100673

Date: 10/09/2020  
Time: 10:11:43

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 28.99: 0.078  
LOT #: AG018102  
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	10:12
BLANK TEST	0.000	10:12
INTERNAL STANDARD	VERIFIED	10:12
EXTERNAL STANDARD	0.078	10:13
BLANK TEST	0.000	10:14
SUBJECT SAMPLE (Vol=2.74L)	0.000	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.078	10:15
BLANK TEST	0.000	10:16

