

# 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 100343 Analyst Derek Walton Start Date 03/20/20

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 A6928203 Exp 10/09/21
    - ii. 0.040g/210L Mnf Airgas Lot A6915607 Exp 06/05/21
    - iii. 0.080g/210L Mnf Airgas Lot A6826101 Exp 09/18/20
    - iv. 0.100g/210L Mnf Airgas Lot A6924701 Exp 09/04/21
    - v. 0.200g/210L Mnf Waters Lot 19200 Exp 08/06/21
      1. Simulator S/N DR4176 Date Calibrated 10/07/19
    - vi. 0.300g/210L Mnf Waters Lot 19330 Exp 11/13/21
      1. Simulator S/N DR4178 Date Calibrated 10/04/19
5. Functional Tests (attached)
  - a. Incomplete
  - b. Invalid
  - c. Interference
  - d. Exceeded attempts 
    - i. Acetone - Mnf Waters Lot 19301 Level 0.100 Exp 10/30/21
      1. Simulator S/N DR4162 Date Calibrated 10/07/19
    - ii. Isopropanol - Mnf Waters Lot 19301 Level 0.100 Exp 10/30/21
      1. Simulator S/N DR4163 Date Calibrated 10/04/19
    - iii. Negative Control - Mnf Waters Lot 19301 Level 0.100 Exp 10/30/21
      1. Simulator S/N SD1176 Date Calibrated 10/07/19
  - 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 03/23/20

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100343  
-----

Date: 03/20/2020  
Time: 16:06:53

VERSIONS  
DMT: 3.02  
PIC: 3.06  
Modem: 2.6  
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 45.8°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.73 V PASSED  
(1.04 V - 2.44 V)  
Cooler Voltage = 1.75 V PASSED  
(1.05 V - 2.45 V)  
Bias Voltage = 80 V PASSED  
(49 V - 113 V)  
Chopper Freq = 527 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 30.0 in

PUMP INFO

Flow Rate = 4.981 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 ✓

Xq = 0.089 0.49% (0.00% - 4.00%) PASSED

Technician Screen

-----  
DATAMASTER dmt: 100343  
-----

Date: 03/20/2020  
Time: 4:25 PM

Temperatures (°C)  
Sample Cell: 48.7°C  
Breath Tube: 46.0°C

Current Barometer 30.3 in  
Volume (Ltr) 1.80

Settings  
Lamp: 1.73 V  
Bias: 80 V  
Cooler: 1.75 V  
Chopper: 527 Hz

Voltages (V)  
Flow: 1.05 V  
Detector: -0.046 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100343  
-----

Date: 02/18/2020  
Time: 08:46:39

OPERATOR NAME:  
INTOX I METERS  
CERTIFICATE #: 1

Ca = 0.2000  
CAL = 0.980607    0.800 <= CAL < 1.200  
b1 = 0.0000    0.0000 <= b1 < 0.0040  
b2 = 0.0046    0.0010 <= b2 < 0.0100  
b3 = 0.0000    0.0000 <= b3 < 0.0040  
Xq = 0.0894    0.0500 <= Xq < 0.2000  
a21 = 1.145697    1.050 <= a21 < 1.300  
a31 = 0.499087    0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100343

Date: 03/20/2020  
Time: 16:29:58

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

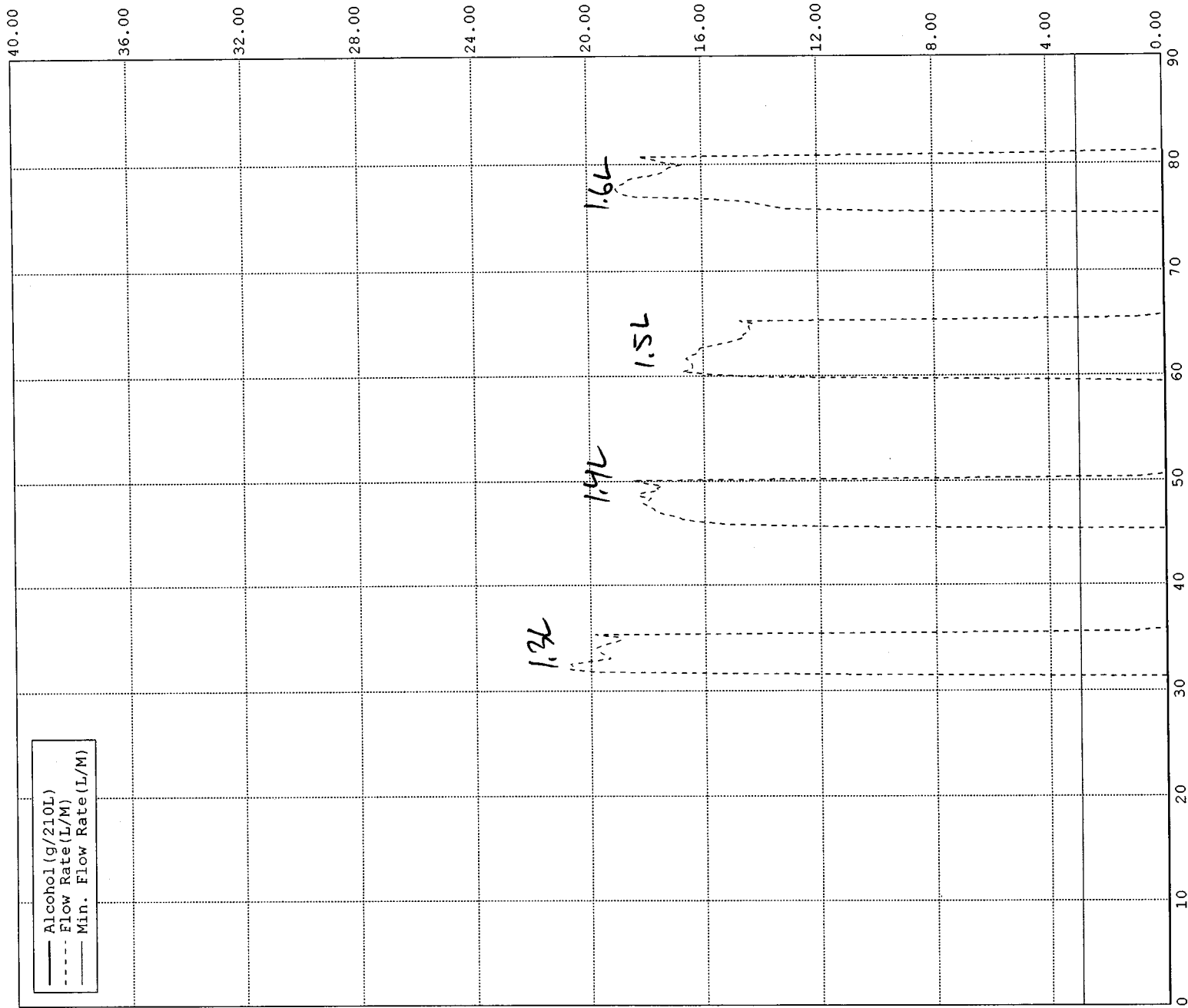
OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 30.30: 0.081  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	16:31
BLANK TEST	0.000	16:31
INTERNAL STANDARD	VERIFIED	16:31
EXTERNAL STANDARD	0.081	16:31
BLANK TEST	0.000	16:32
SUBJECT SAMPLE (Vol=1.57L)	0.000	16:34
BLANK TEST	0.000	16:35
EXTERNAL STANDARD	0.081	16:35
BLANK TEST	0.000	16:36



LINEARITY CHECK

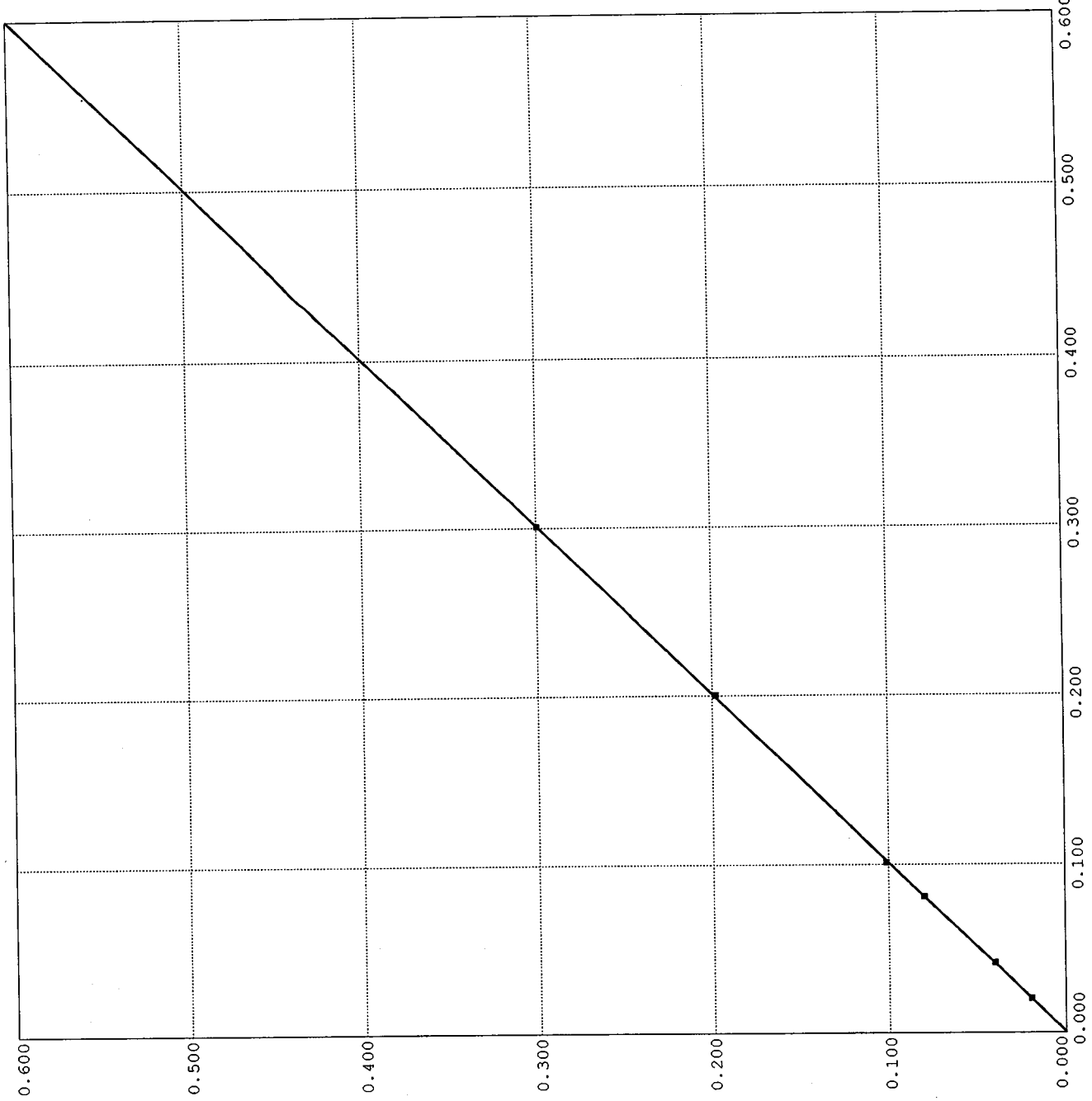
-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100343  
 -----

Date: 03/20/2020  
 Time: 16:46:45

SUPERVISOR NAME:  
 DEREK WALTON  
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.041	0.0406	0.0005
0.081	0.0810	0.0000
0.101	0.1022	0.0004
0.200	0.1988	0.0004
0.300	0.3004	0.0005

SLOPE = 0.999733  
 R<sup>2</sup> = 0.999944



*DM*

LINEARITY CHECK: Control Test 1

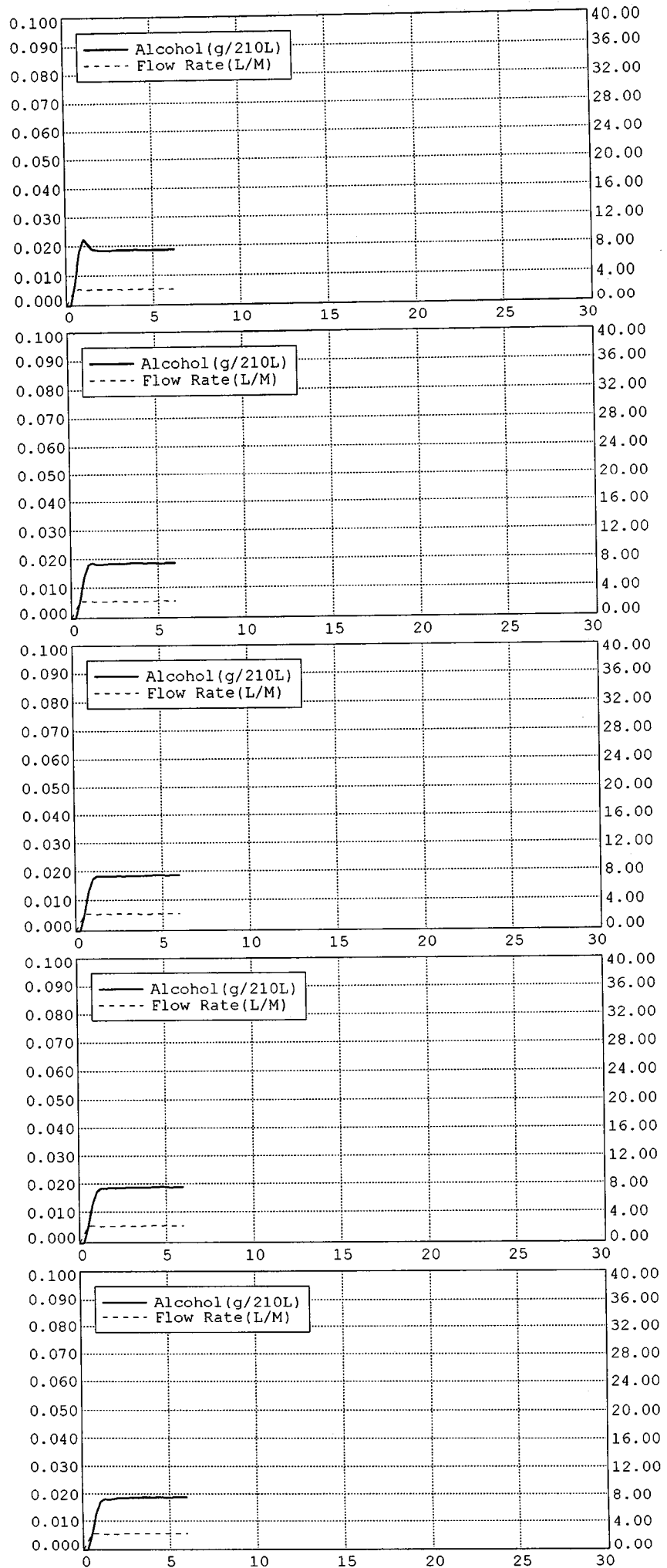
Alaska Department of Public Safety  
 DATAMASTER dmt: 100343

Date: 03/20/2020  
 Time: 16:46:47

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.020  
 TARGET AT 30.30: 0.020  
 LOT #: AG928203  
 EXPIRATION: 10/09/2021  
 TANK PRESSURE: 936 psi

BLANK TEST	0.000	16:48
INTERNAL STANDARD	VERIFIED	16:48
EXTERNAL STANDARD	0.020	16:48
BLANK TEST	0.000	16:49
EXTERNAL STANDARD	0.020	16:49
BLANK TEST	0.000	16:50
EXTERNAL STANDARD	0.020	16:50
BLANK TEST	0.000	16:51
EXTERNAL STANDARD	0.020	16:51
BLANK TEST	0.000	16:52
EXTERNAL STANDARD	0.020	16:52
BLANK TEST	0.000	16:53

Average = 0.0200  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

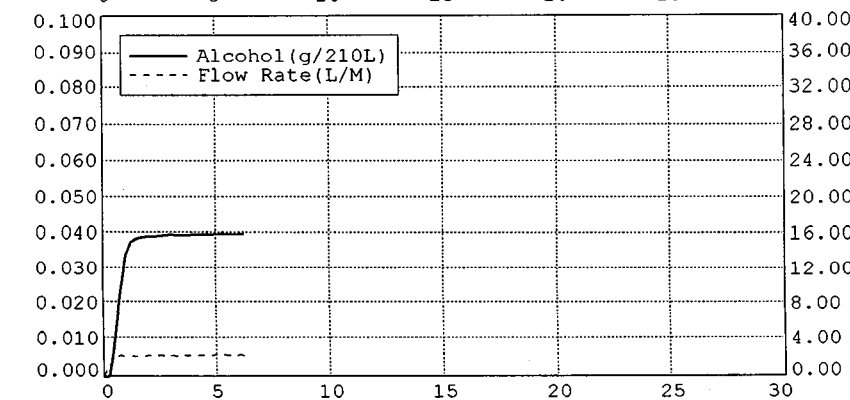
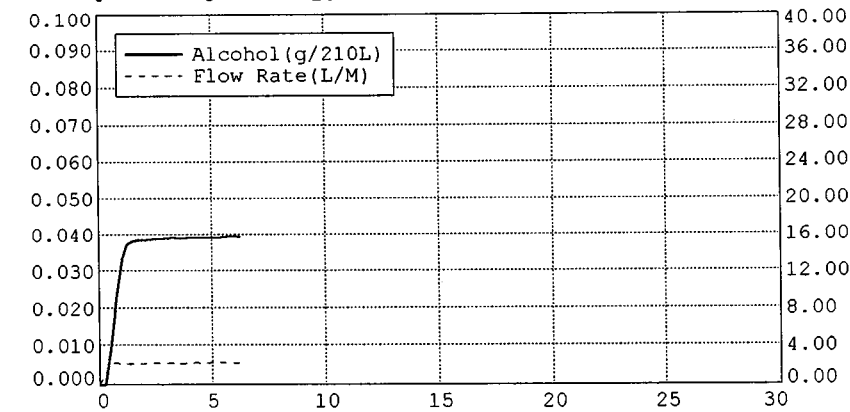
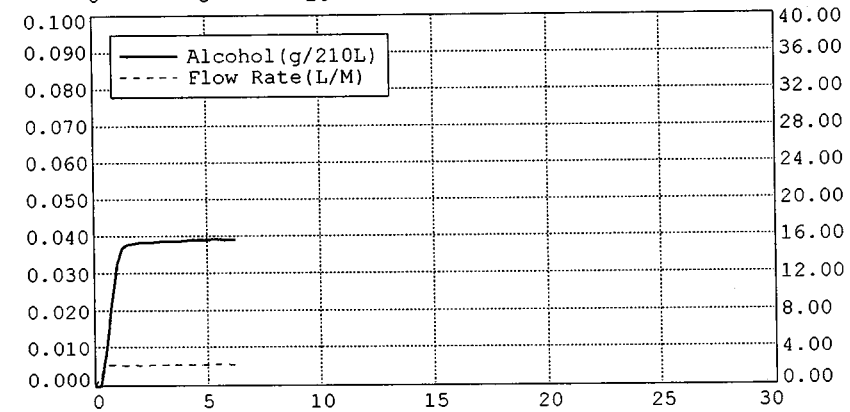
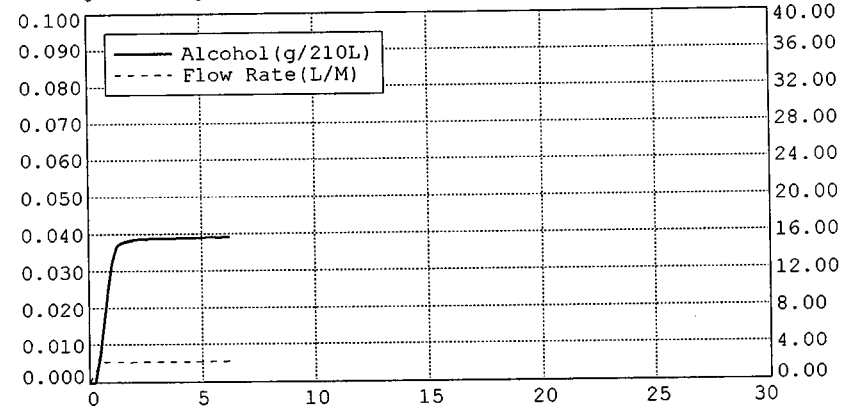
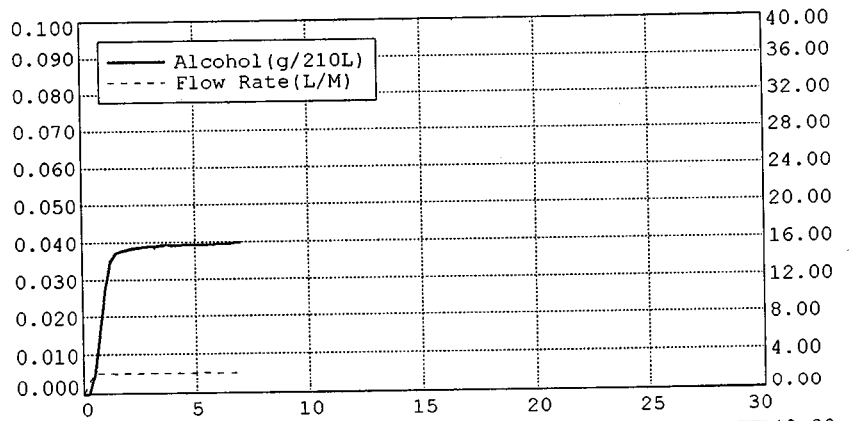
Alaska Department of Public Safety  
 DATAMASTER dmt: 100343

Date: 03/20/2020  
 Time: 16:58:52

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.040  
 TARGET AT 30.31: 0.041  
 LOT #: AG915607  
 EXPIRATION: 06/05/2021  
 TANK PRESSURE: 763 psi

BLANK TEST	0.000	17:00
INTERNAL STANDARD	VERIFIED	17:00
EXTERNAL STANDARD	0.041	17:00
BLANK TEST	0.000	17:01
EXTERNAL STANDARD	0.040	17:01
BLANK TEST	0.000	17:02
EXTERNAL STANDARD	0.040	17:02
BLANK TEST	0.000	17:03
EXTERNAL STANDARD	0.041	17:03
BLANK TEST	0.000	17:04
EXTERNAL STANDARD	0.041	17:04
BLANK TEST	0.000	17:05

Average = 0.0406  
 Std Dev = 0.0005





LINEARITY CHECK: Control Test 3

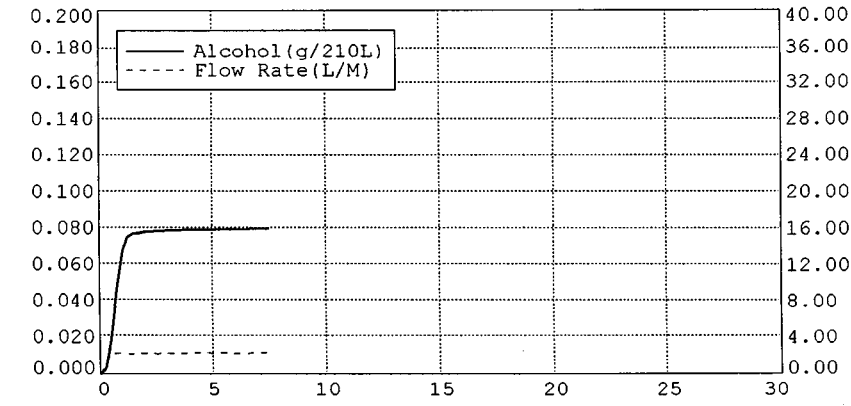
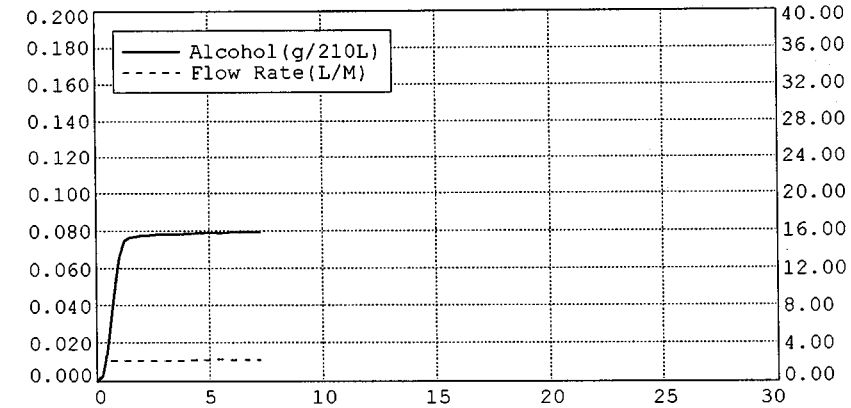
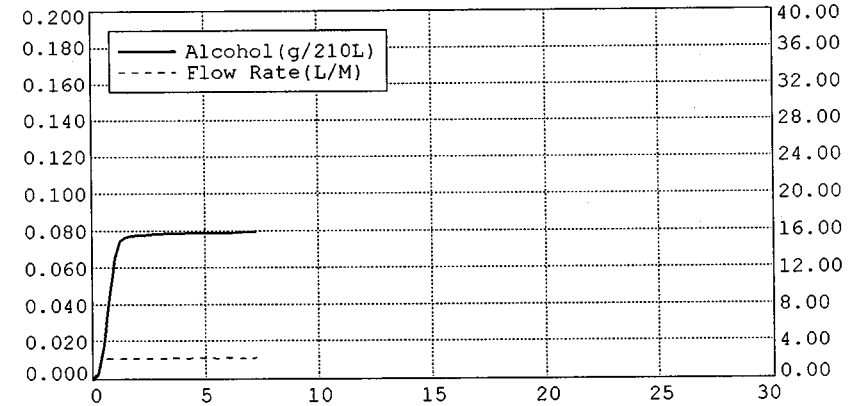
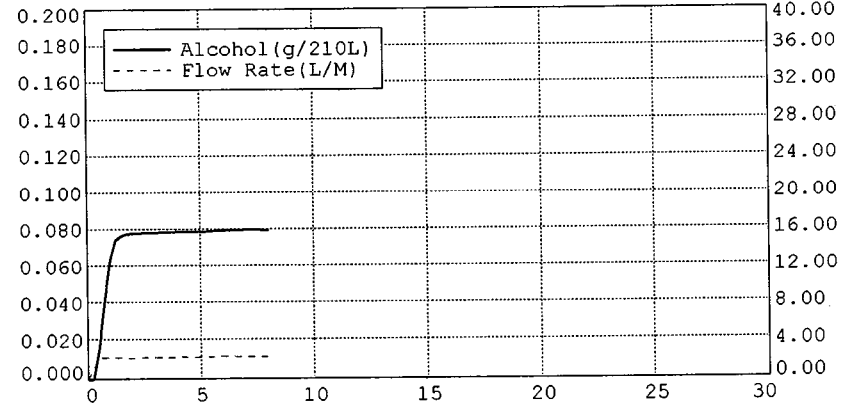
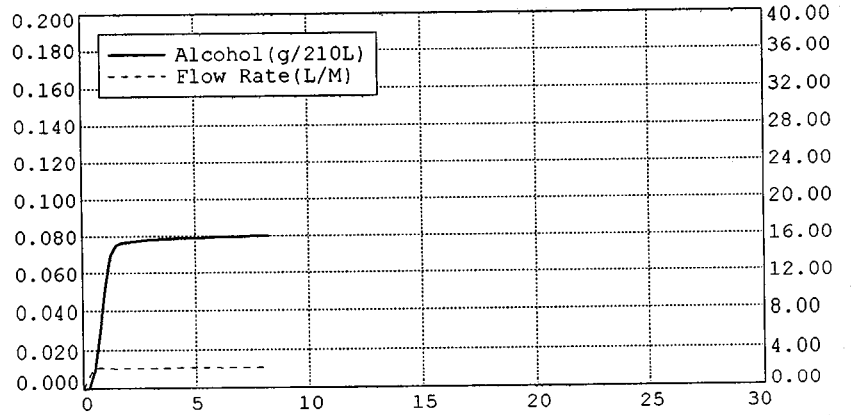
Alaska Department of Public Safety  
 DATAMASTER dmt: 100343

Date: 03/20/2020  
 Time: 17:06:16

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 30.31: 0.081  
 LOT #: AG826101  
 EXPIRATION: 09/18/2020  
 TANK PRESSURE: 823 psi

BLANK TEST	0.000	17:07
INTERNAL STANDARD	VERIFIED	17:07
EXTERNAL STANDARD	0.081	17:07
BLANK TEST	0.000	17:08
EXTERNAL STANDARD	0.081	17:09
BLANK TEST	0.000	17:09
EXTERNAL STANDARD	0.081	17:10
BLANK TEST	0.000	17:11
EXTERNAL STANDARD	0.081	17:11
BLANK TEST	0.000	17:12
EXTERNAL STANDARD	0.081	17:12
BLANK TEST	0.000	17:13

Average = 0.0810  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

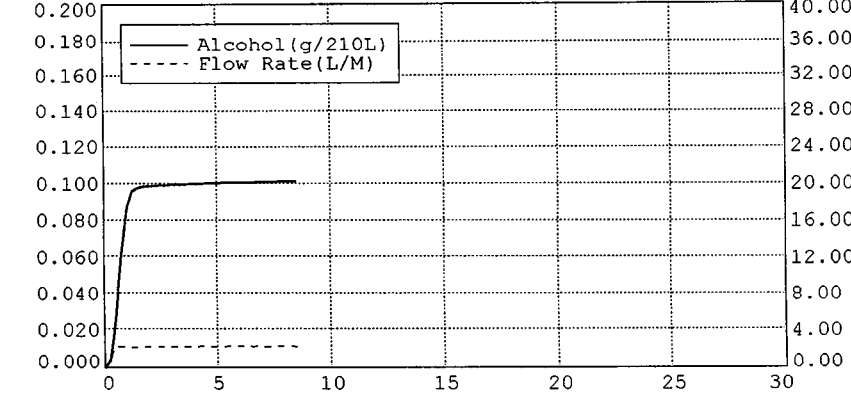
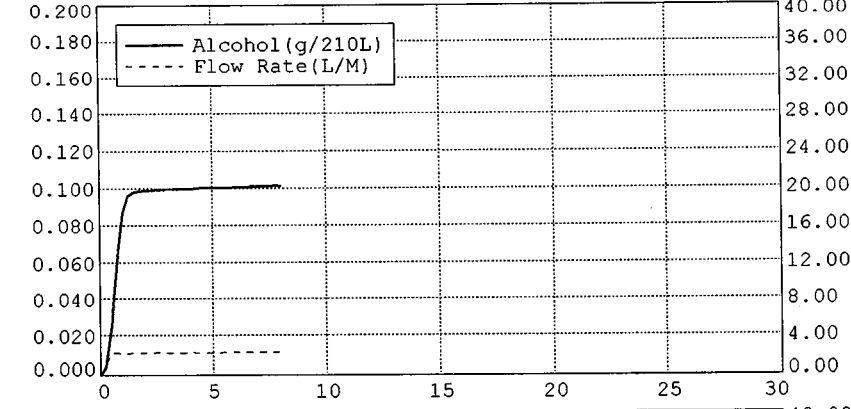
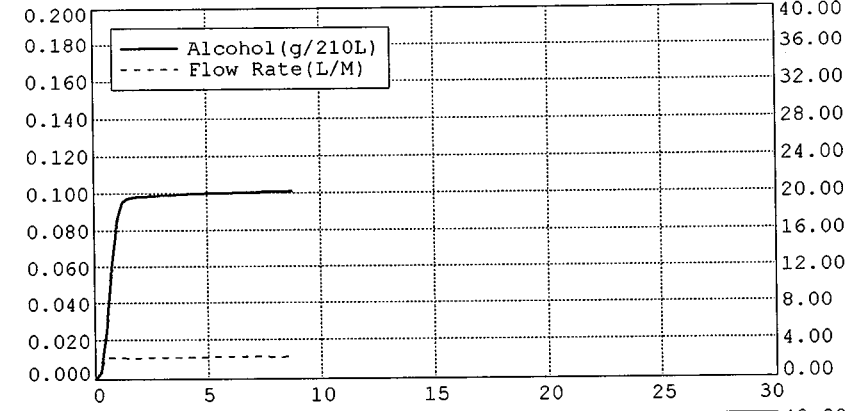
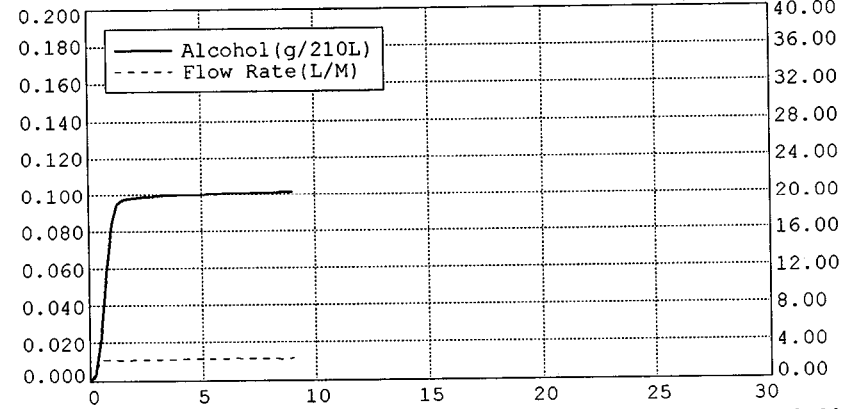
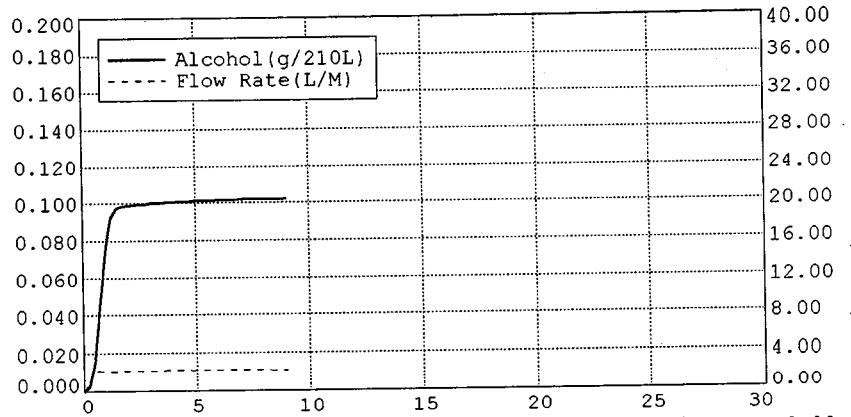
Alaska Department of Public Safety  
 DATAMASTER dmt: 100343

Date: 03/20/2020  
 Time: 17:13:50

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.100  
 TARGET AT 30.30: 0.101  
 LOT #: AG924701  
 EXPIRATION: 09/04/2021  
 TANK PRESSURE: 984 psi

BLANK TEST	0.000	17:15
INTERNAL STANDARD	VERIFIED	17:15
EXTERNAL STANDARD	0.103	17:15
BLANK TEST	0.000	17:16
EXTERNAL STANDARD	0.102	17:16
BLANK TEST	0.000	17:17
EXTERNAL STANDARD	0.102	17:17
BLANK TEST	0.000	17:18
EXTERNAL STANDARD	0.102	17:18
BLANK TEST	0.000	17:19
EXTERNAL STANDARD	0.102	17:20
BLANK TEST	0.000	17:21

Average = 0.1022  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

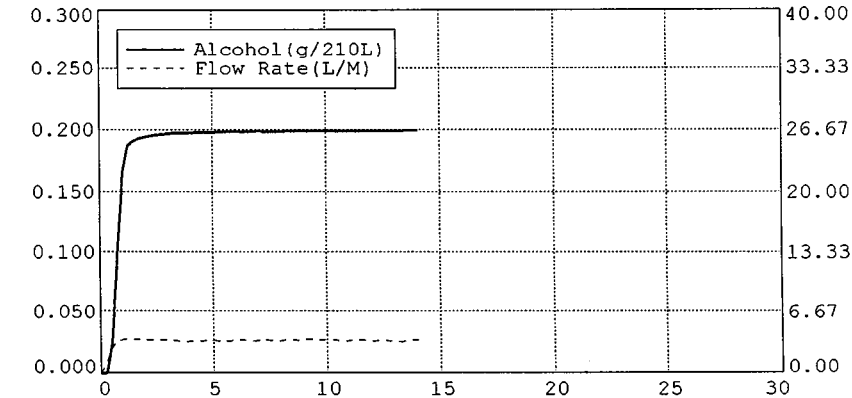
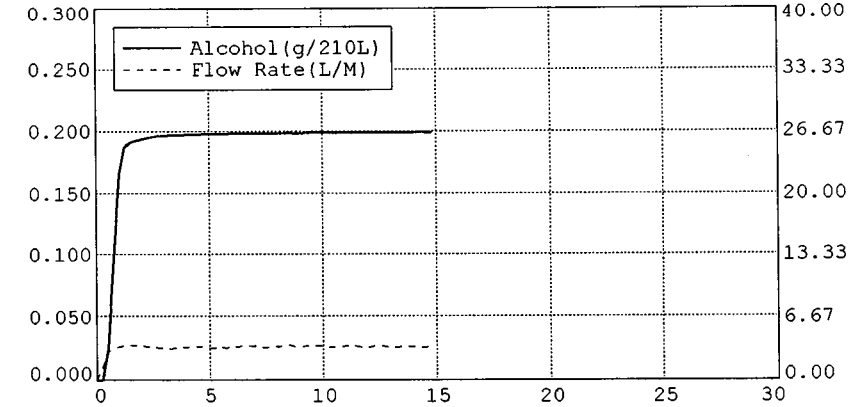
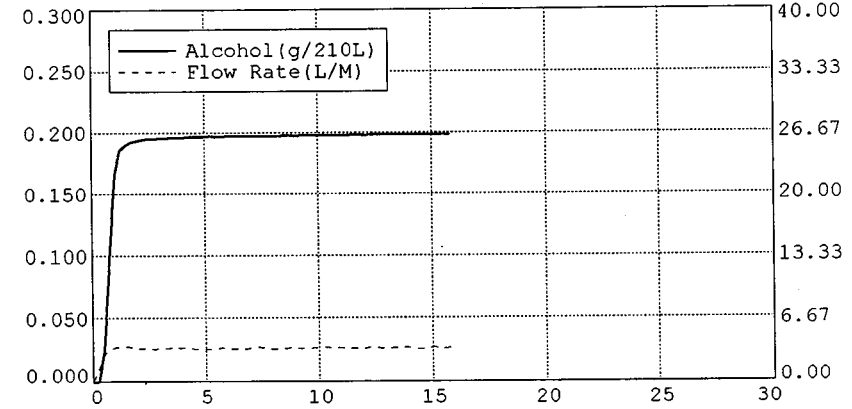
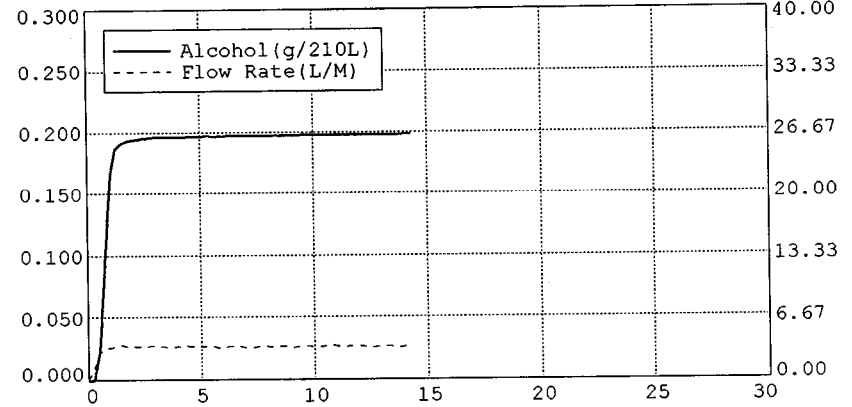
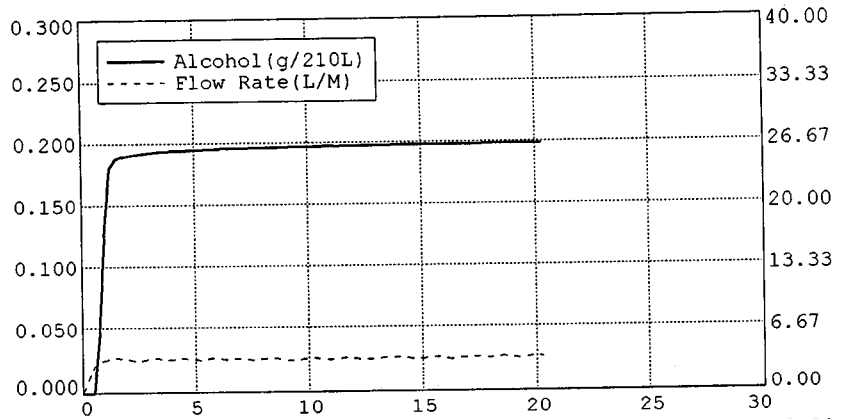
Alaska Department of Public Safety  
 DATAMASTER dmt: 100343

Date: 03/20/2020  
 Time: 17:38:15

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

BLANK TEST	0.000	17:39
INTERNAL STANDARD	VERIFIED	17:39
EXTERNAL STANDARD	0.199	17:39
BLANK TEST	0.000	17:40
EXTERNAL STANDARD	0.198	17:41
BLANK TEST	0.000	17:42
EXTERNAL STANDARD	0.199	17:42
BLANK TEST	0.000	17:43
EXTERNAL STANDARD	0.199	17:43
BLANK TEST	0.000	17:44
EXTERNAL STANDARD	0.199	17:45
BLANK TEST	0.000	17:45

Average = 0.1988  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100343

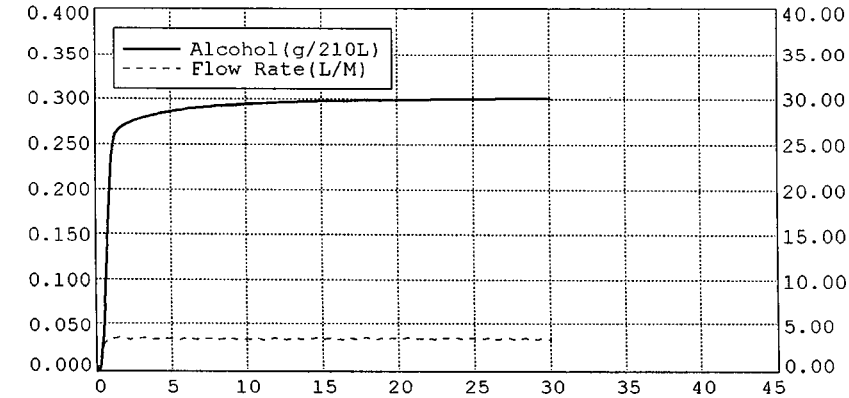
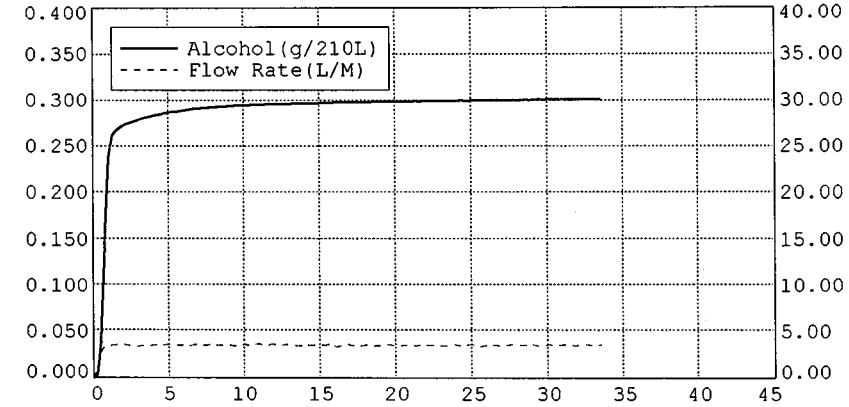
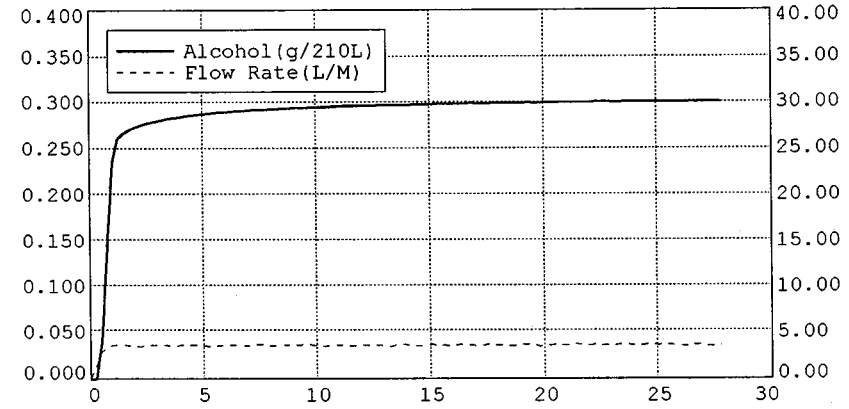
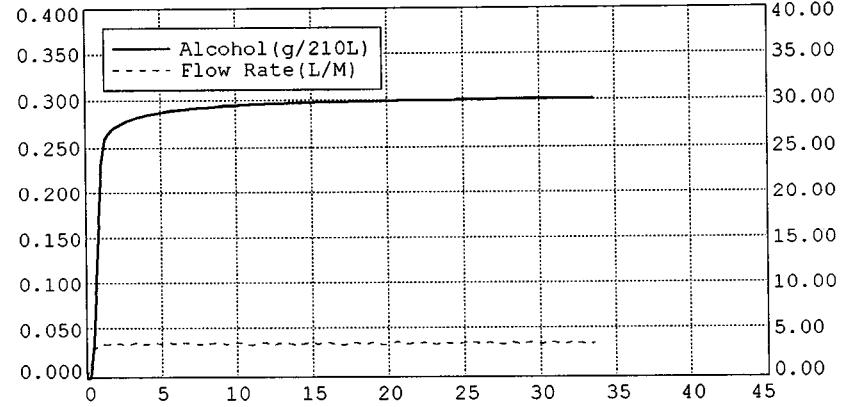
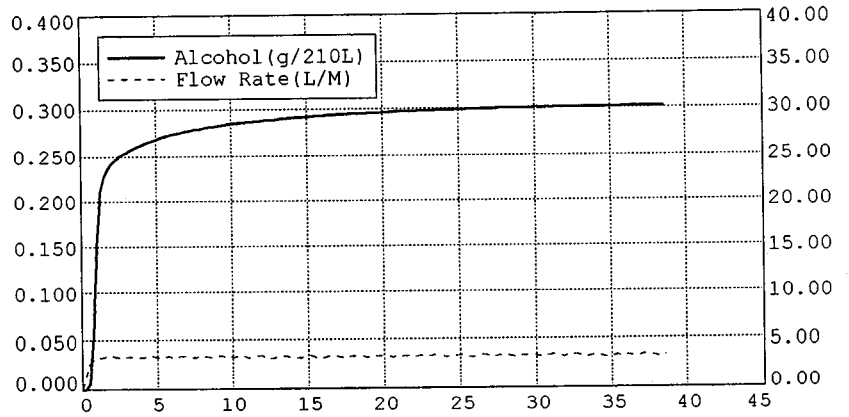
Date: 03/20/2020  
 Time: 17:51:17

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	17:53
INTERNAL STANDARD	VERIFIED	17:53
EXTERNAL STANDARD	0.301	17:54
BLANK TEST	0.000	17:55
EXTERNAL STANDARD	0.300	17:55
BLANK TEST	0.000	17:56
EXTERNAL STANDARD	0.300	17:57
BLANK TEST	0.000	17:58
EXTERNAL STANDARD	0.301	17:59
BLANK TEST	0.000	18:00
EXTERNAL STANDARD	0.300	18:00
BLANK TEST	0.000	18:01

Average = 0.3004  
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100343

Date: 03/20/2020

Time: 18:06:23

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 30.31: 0.081

LOT #: AG826101

EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK

PASSED

18:08

BLANK TEST

0.000

18:08

INTERNAL STANDARD

VERIFIED

18:08

EXTERNAL STANDARD

0.081

18:08

BLANK TEST

0.000

18:09

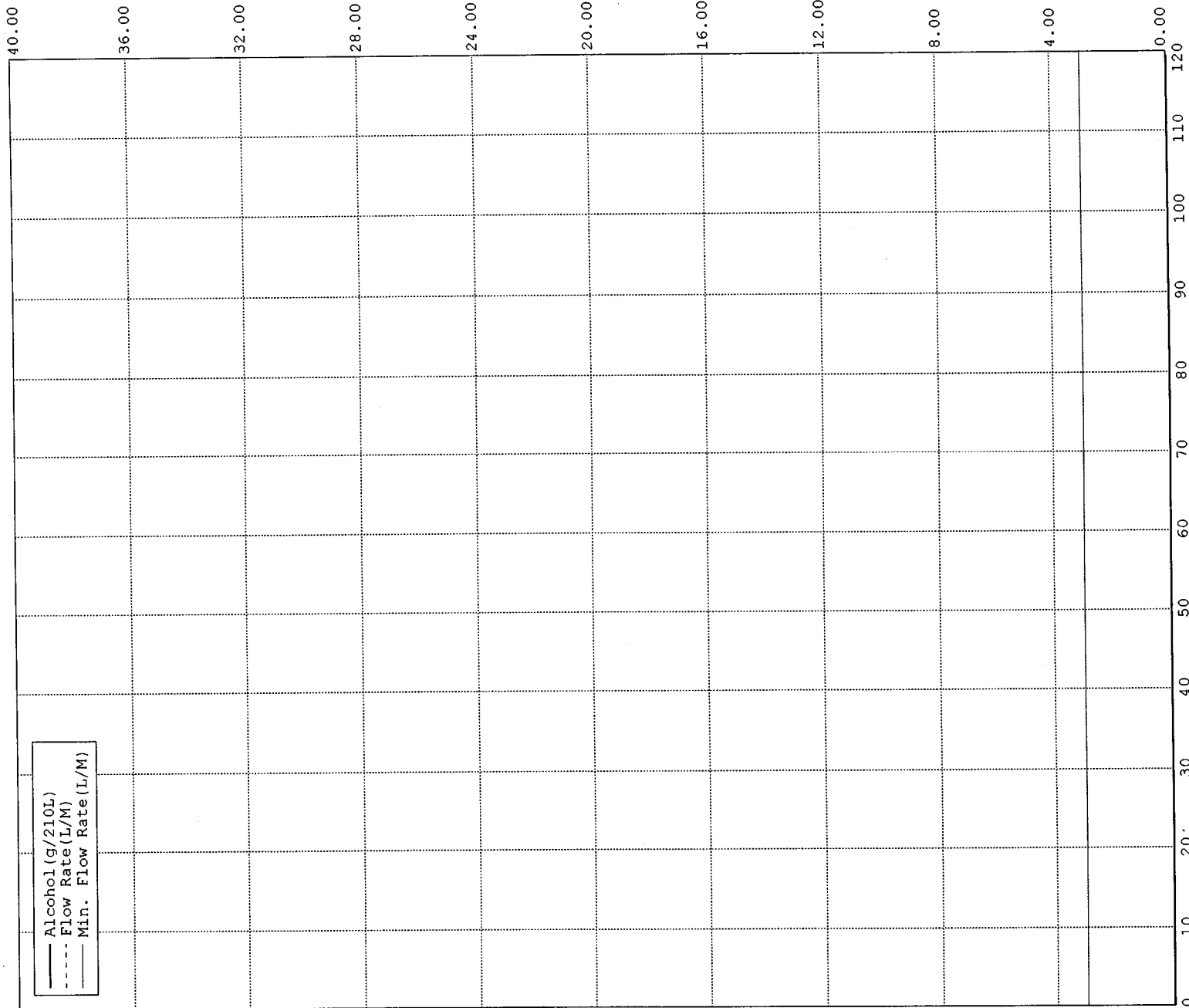
SUBJECT SAMPLE

INCOMPLETE

18:11

AM

Alcohol (g/210L)  
Flow Rate (L/M)  
Min. Flow Rate (L/M)



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100343

Date: 03/20/2020  
Time: 19:36:53

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 30.29: 0.081  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 19:38  
BLANK TEST 0.000 19:38  
INTERNAL STANDARD VERIFIED 19:38  
EXTERNAL STANDARD 0.081 19:38  
BLANK TEST 0.000 19:39  
SUBJECT SAMPLE INVALID 19:40



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100343

Date: 03/23/2020  
Time: 15:07:12

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 30.27: 0.081  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 15:08  
BLANK TEST 0.000 15:08  
INTERNAL STANDARD VERIFIED 15:08  
Xq = 0.090 (0.20%)  
EXTERNAL STANDARD 0.081 15:08  
X[1] = 0.0811 (-0.0020) (0.0013)  
BLANK TEST 0.000 15:09  
SUBJECT SAMPLE XXX 15:10  
X[1] = 0.1154 (-0.0217) (-0.0002)

Interference Detected

Filter 2 Avg: -0.0019

Filter 3 Avg: 0.0011

*Handwritten signature*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100343

Date: 03/23/2020  
Time: 15:00:56

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

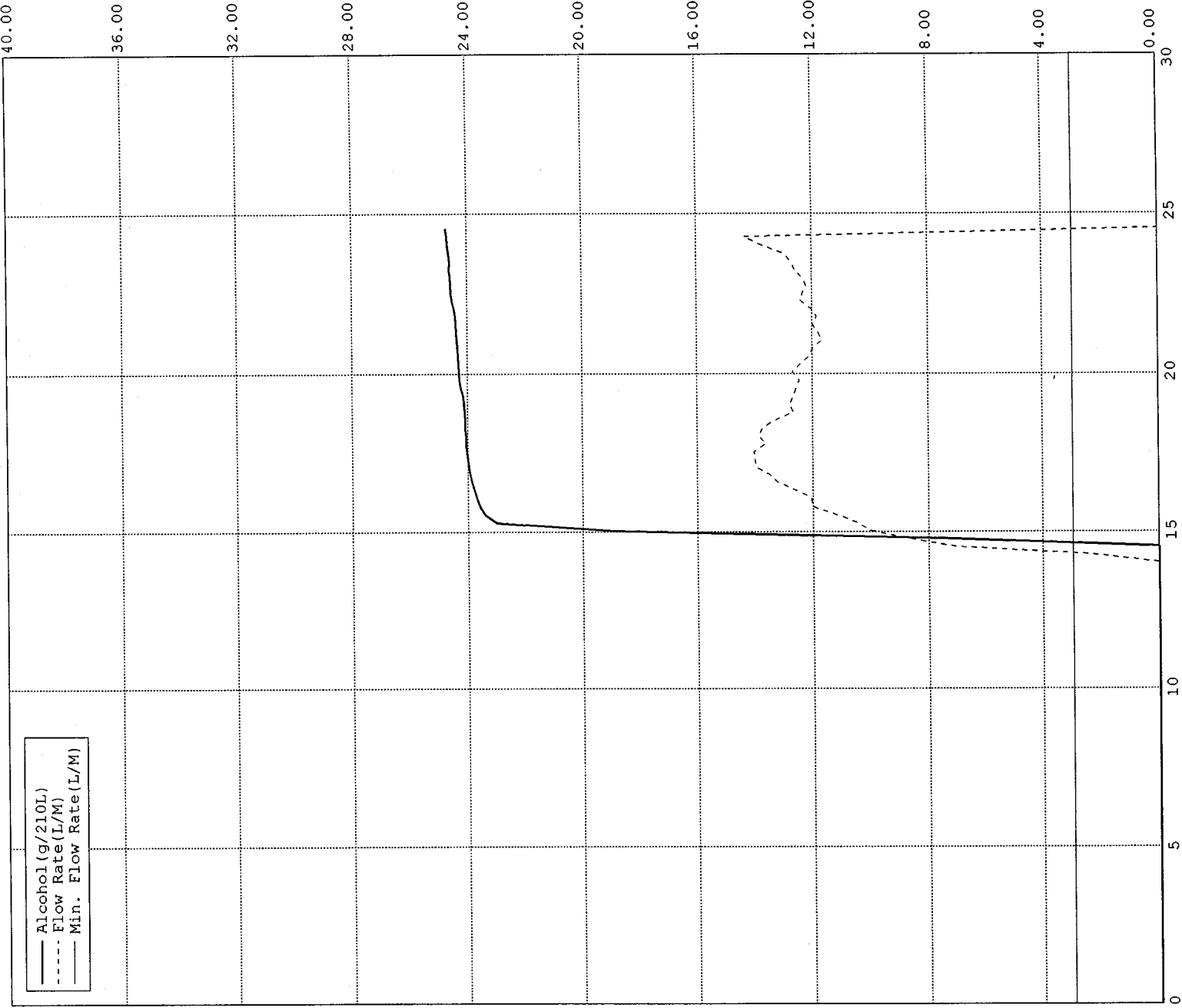
OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.27: 0.081  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 15:02  
BLANK TEST 0.000 15:02  
INTERNAL STANDARD VERIFIED 15:02  
Xq = 0.089 (0.59%)  
EXTERNAL STANDARD 0.080 15:02  
X[1] = 0.0803 (-0.0020) (0.0010)  
BLANK TEST 0.000 15:03  
SUBJECT SAMPLE XXX 15:04  
X[1] = 0.1238 (-0.0268) (0.0001)

Interference Detected





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100343

Date: 03/23/2020  
Time: 15:12:51

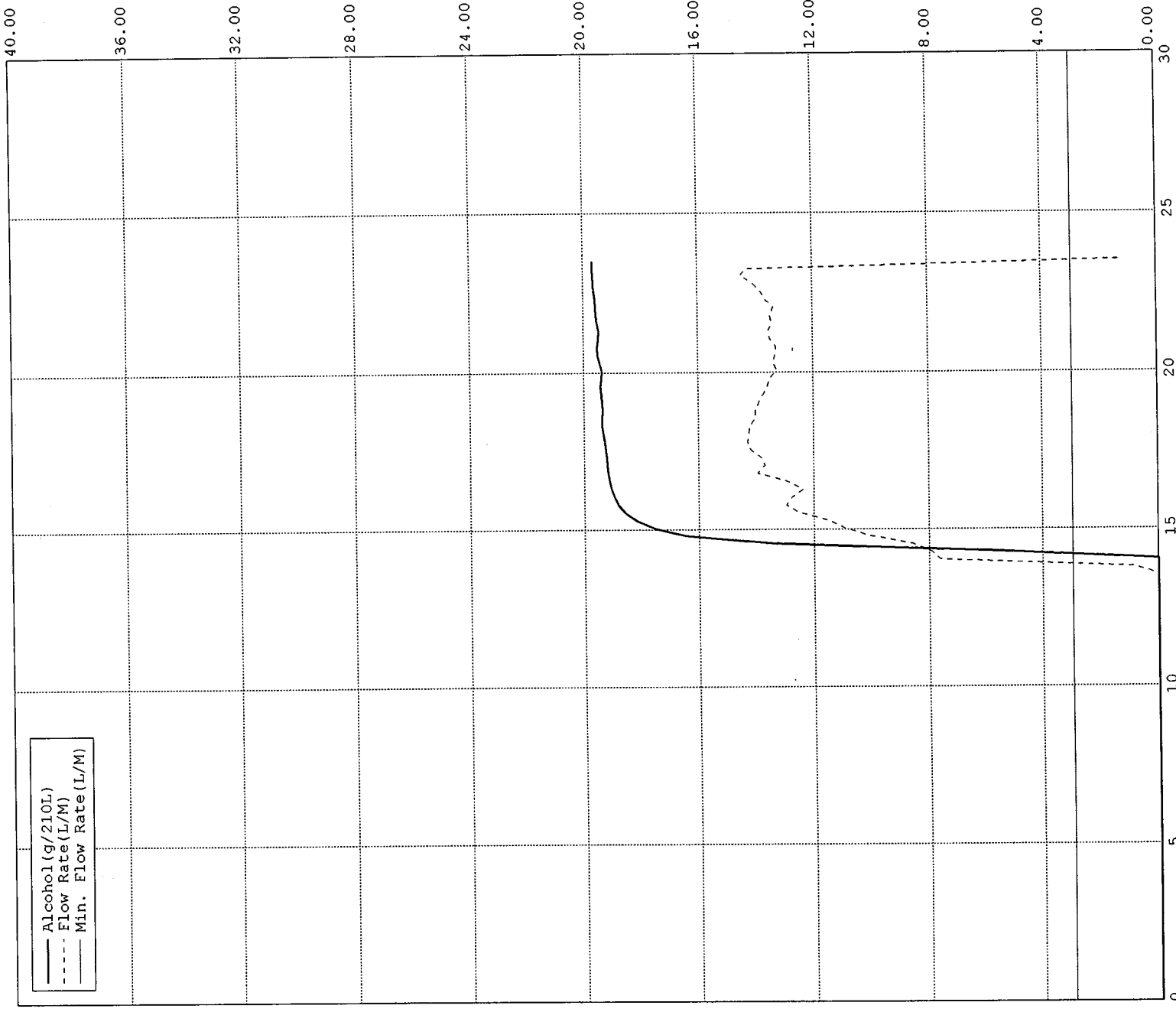
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

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 30.27: 0.081  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	15:13
BLANK TEST	0.000	15:14
INTERNAL STANDARD	VERIFIED	15:14
Xq = 0.089 (0.10%)		
EXTERNAL STANDARD	0.081	15:14
X[1] = 0.0810 (-0.0019)	(0.0010)	
BLANK TEST	0.000	15:15
SUBJECT SAMPLE (Vol=2.06L)	0.099	15:15
X[1] = 0.0992 (-0.0013)	(-0.0007)	
BLANK TEST	0.000	15:16
EXTERNAL STANDARD	0.081	15:17
X[1] = 0.0805 (-0.0018)	(0.0011)	
BLANK TEST	0.000	15:18



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100343

Date: 03/20/2020  
Time: 19:44:31

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

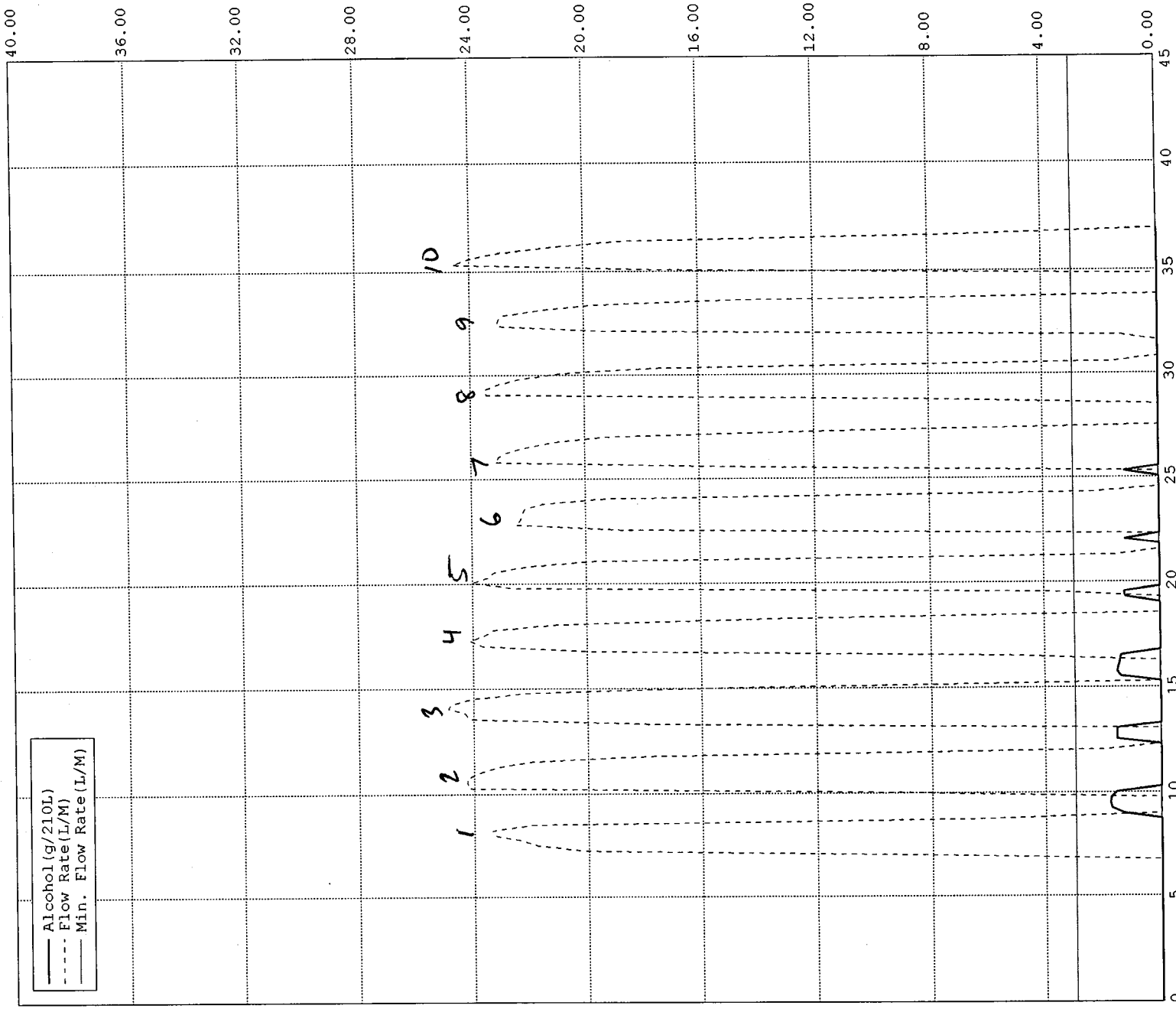
DEPT/AGENCY:  
MAXIMUM ATTEMPTS  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 30.27: 0.081  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 19:53  
BLANK TEST 0.000 19:53  
INTERNAL STANDARD VERIFIED 19:53  
EXTERNAL STANDARD 0.081 19:54  
BLANK TEST 0.000 19:55  
SUBJECT SAMPLE XXX 19:55

Maximum Attempts Exceeded



SUBJECT TEST

-----  
Alaska Department of Public Safety

-----  
DATAMASTER dmt: 100343

-----  
Date: 03/20/2020  
Time: 19:25:38

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

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

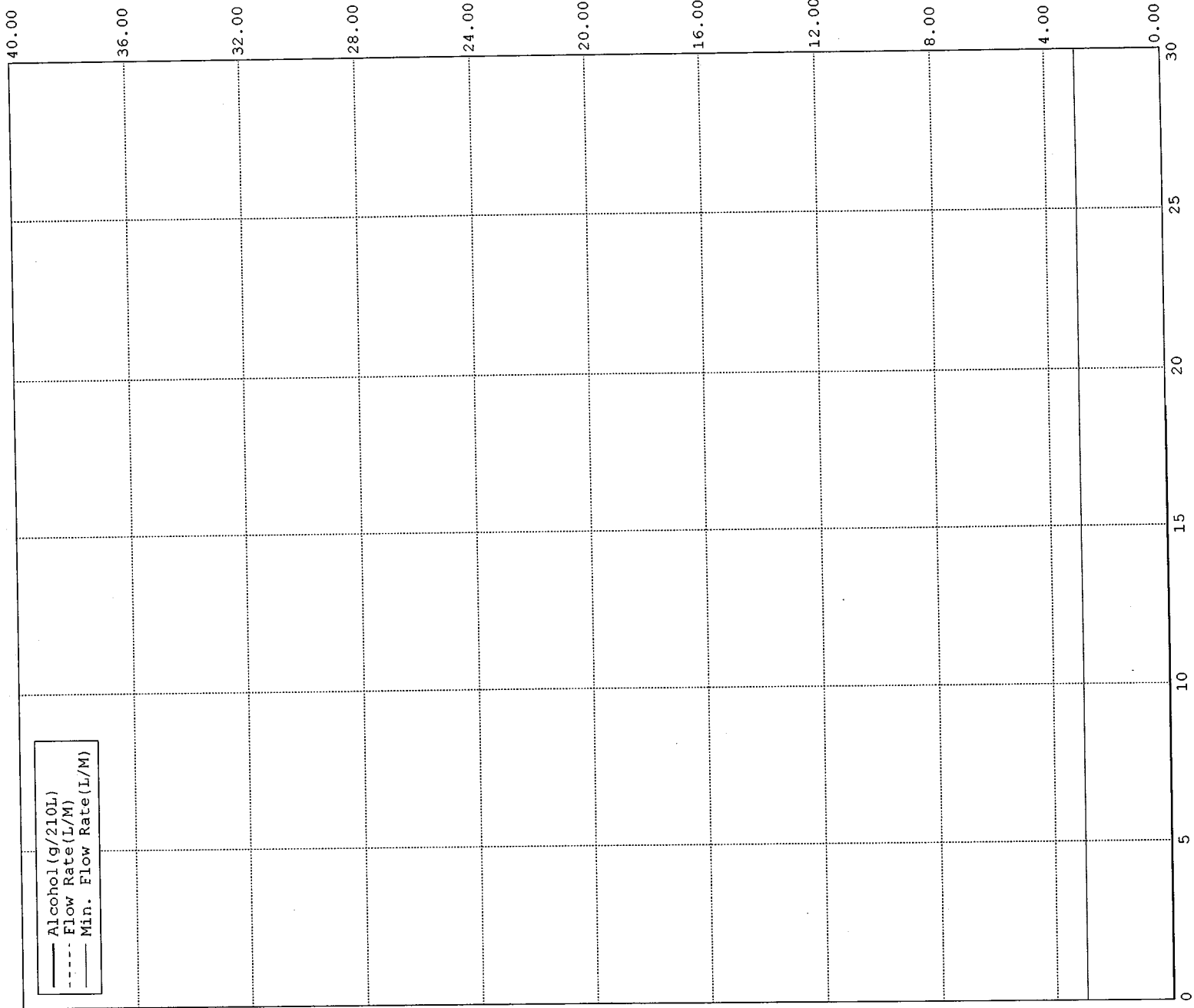
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 30.29: 0.081  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 19:29  
BLANK TEST 0.000 19:29  
INTERNAL STANDARD VERIFIED 19:29  
EXTERNAL STANDARD 0.081 19:29  
BLANK TEST 0.000 19:30

RFI DETECTED

*DM*



SUBJECT TEST

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100343  
-----

Date: 03/23/2020  
Time: 16:10:27

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 30.23: 0.081  
LOT #: AG826101  
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	16:11
BLANK TEST	0.000	16:11
INTERNAL STANDARD	VERIFIED	16:11
EXTERNAL STANDARD	0.080	16:12
BLANK TEST	0.000	16:13
SUBJECT SAMPLE (Vol=3.61L)	0.000	16:13
BLANK TEST	0.000	16:14
EXTERNAL STANDARD	0.081	16:14
BLANK TEST	0.000	16:15

