

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 100666 Analyst Derch Watten 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 Aircas Lot AG92823 Exp 10/09/21

ii. 0.040g/210L Mnf Aircas Lot AG915607 Exp 06/05/21

iii. 0.080g/210L Mnf Aircas Lot AG826101 Exp 09/18/20

iv. 0.100g/210L Mnf Aircas Lot AG924701 Exp 09/04/21

v. 0.200g/210L Mnf Watt Lot 19200 Exp 08/06/21

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

vi. 0.300g/210L Mnf Watt 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 Watt Lot 19301 Level 0.100 Exp 10/30/21

1. Simulator S/N DR4162 Date Calibrated 10/07/19

ii. Isopropanol - Mnf Watt Lot 19301 Level 0.100 Exp 10/30/21

1. Simulator S/N DR4163 Date Calibrated 10/04/19

iii. Negative Control - Mnf Watt 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

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 03/23/20

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100666

Date: 03/20/2020
Time: 16:42:04

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 42.7°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.78 V PASSED
(0.97 V - 2.27 V)
Cooler Voltage = 1.56 V PASSED
(0.92 V - 2.14 V)
Bias Voltage = 78 V PASSED
(47 V - 111 V)
Chopper Freq = 531 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 30.3 in

PUMP INFO

Flow Rate = 4.833 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 = 0.092 0.48% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100666

Date: 03/20/2020
Time: 5:13 PM

Temperatures (°C)

Sample Cell: 49.0°C
Breath Tube: 41.9°C

Current Barometer 30.3 in
Volume (Ltr) 1.47

Settings

Lamp: 1.78 V
Bias: 78 V
Cooler: 1.58 V
Chopper: 527 Hz

Voltages (V)

Flow: 1.04 V
Detector: 0.031 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100666

Date: 07/31/2018
Time: 09:33:31

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca = 0.1000
CAL = 0.989892 0.800 <= CAL < 1.200
b1 = 0.0011 0.0000 <= b1 < 0.0040
b2 = 0.0050 0.0010 <= b2 < 0.0100
b3 = 0.0008 0.0000 <= b3 < 0.0040
Xq = 0.0917 0.0500 <= Xq < 0.2000
a21 = 1.144600 1.050 <= a21 < 1.300
a31 = 0.529690 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100666

Date: 03/20/2020
Time: 17:16:32

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

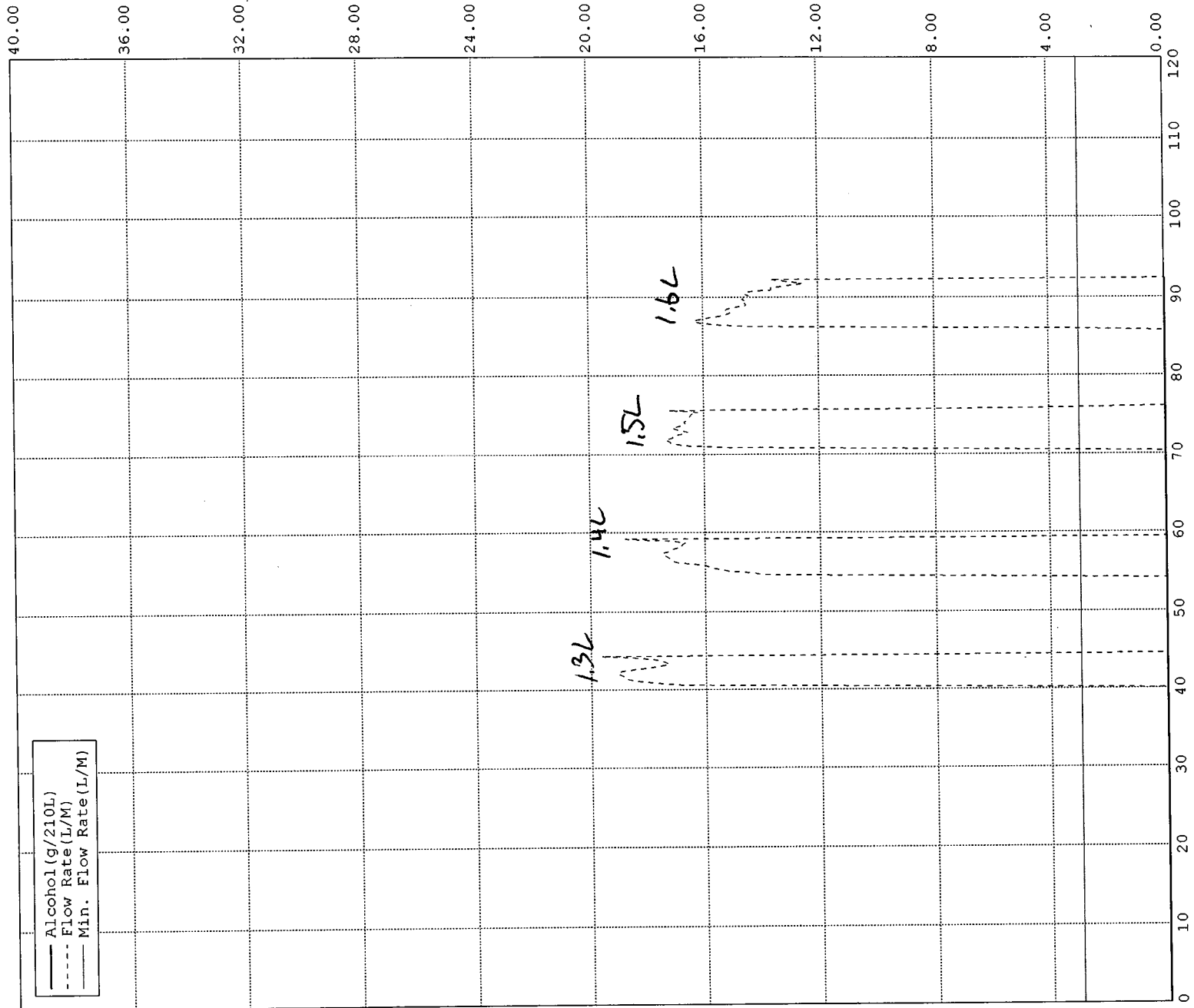
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	17:18
BLANK TEST	0.000	17:19
INTERNAL STANDARD	VERIFIED	17:19
EXTERNAL STANDARD	0.080	17:19
BLANK TEST	0.000	17:20
SUBJECT SAMPLE (Vol=1.54L)	0.000	17:21
BLANK TEST	0.000	17:22
EXTERNAL STANDARD	0.081	17:23
BLANK TEST	0.000	17:23



LINEARITY CHECK

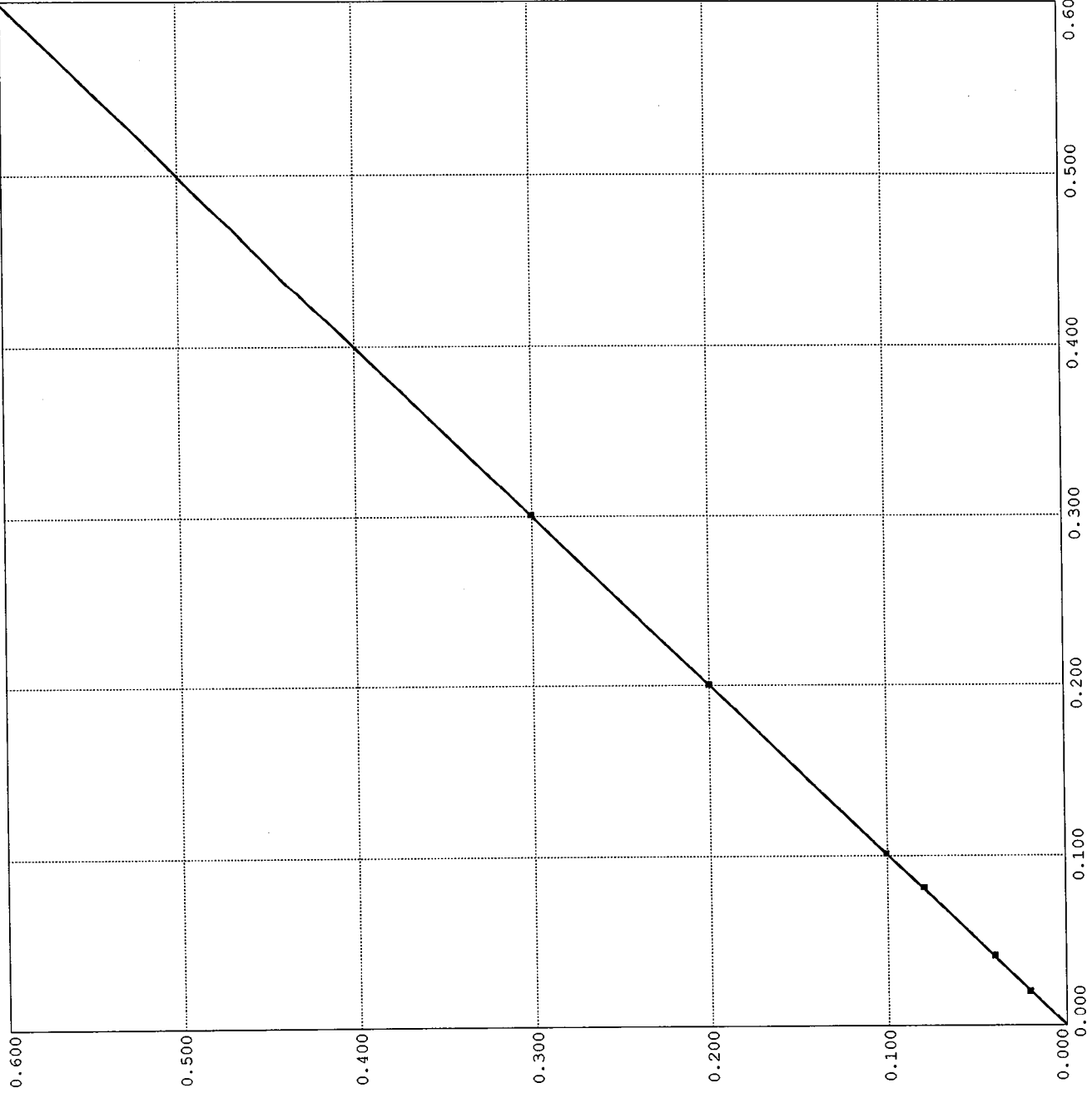
 Alaska Department of Public Safety
 DATAMASTER dmt: 100666

Date: 03/20/2020
 Time: 17:31:09

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0210	0.0000
0.041	0.0408	0.0004
0.081	0.0806	0.0005
0.101	0.1016	0.0005
0.200	0.2010	0.0000
0.300	0.3012	0.0008

SLOPE = 1.003585
 R² = 0.999973



WLC

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100666

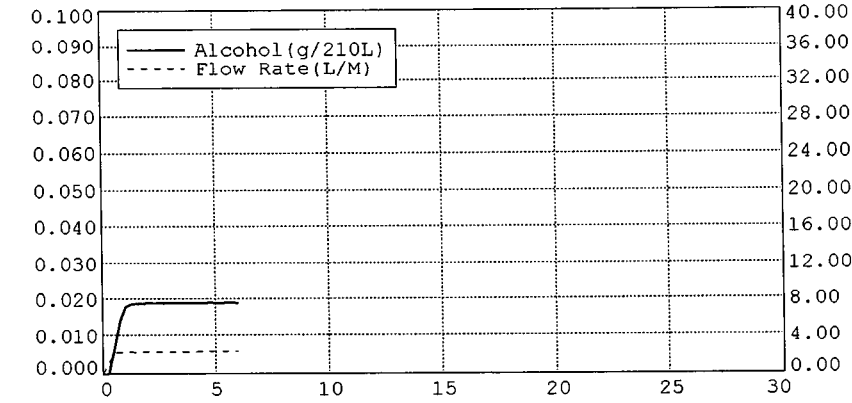
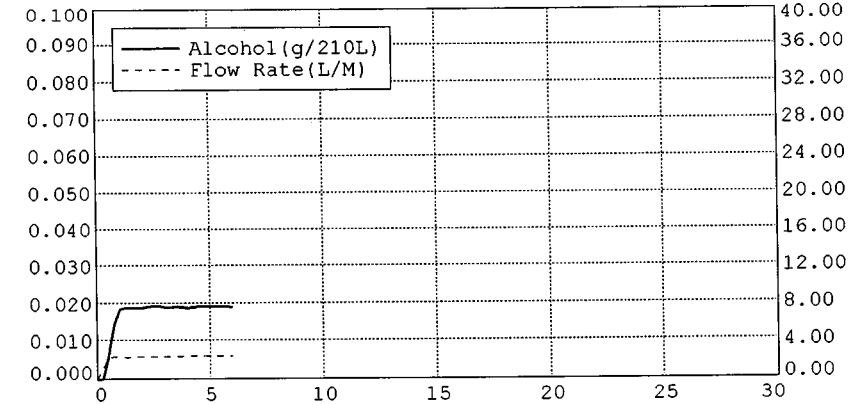
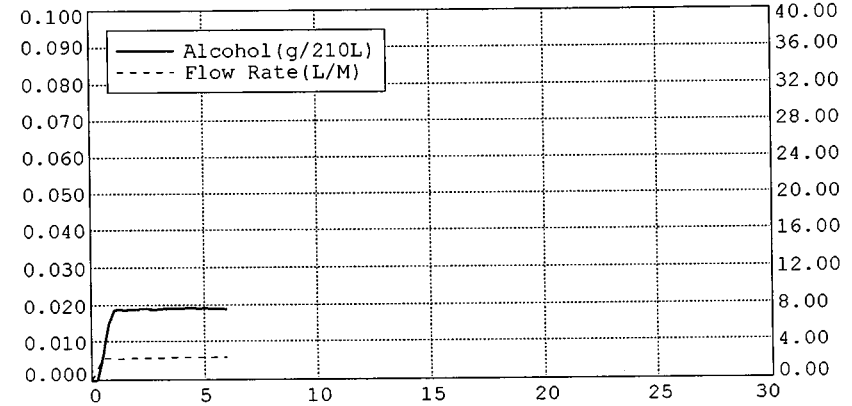
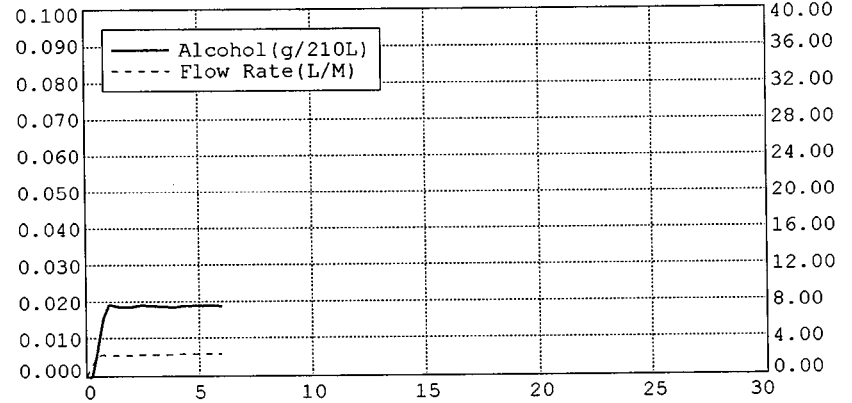
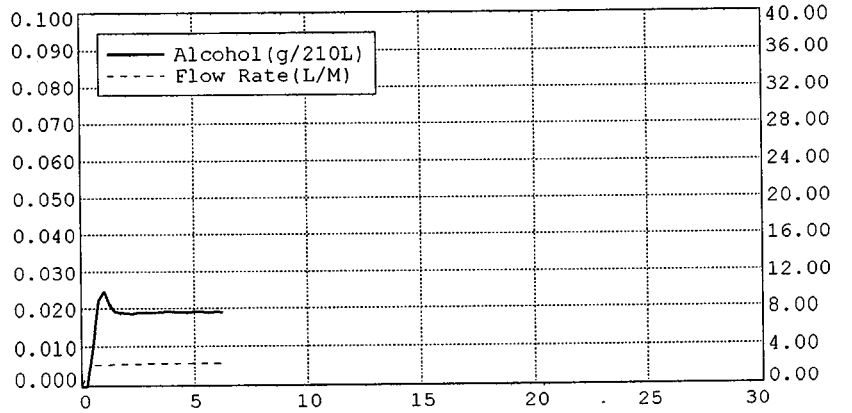
Date: 03/20/2020
Time: 17:31:11

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 30.30: 0.020
LOT #: AG928203
EXPIRATION: 10/09/2021
TANK PRESSURE: 1101 psi

BLANK TEST	0.000	17:32
INTERNAL STANDARD	VERIFIED	17:32
EXTERNAL STANDARD	0.021	17:32
BLANK TEST	0.000	17:33
EXTERNAL STANDARD	0.021	17:33
BLANK TEST	0.000	17:34
EXTERNAL STANDARD	0.021	17:34
BLANK TEST	0.000	17:35
EXTERNAL STANDARD	0.021	17:36
BLANK TEST	0.000	17:36
EXTERNAL STANDARD	0.021	17:37
BLANK TEST	0.000	17:38

Average = 0.0210
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100666

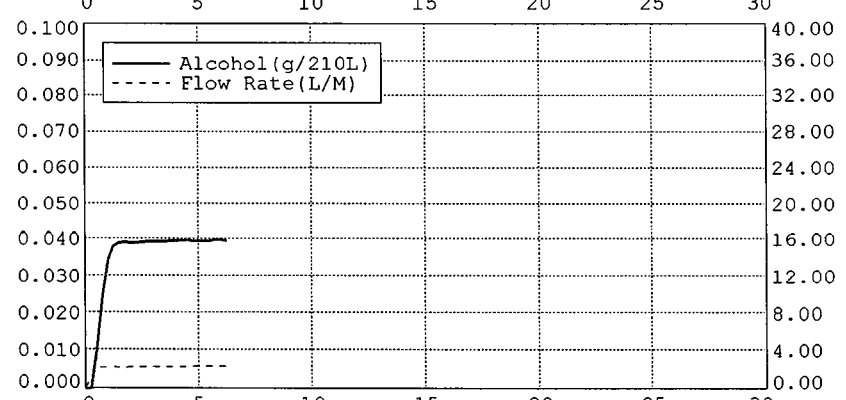
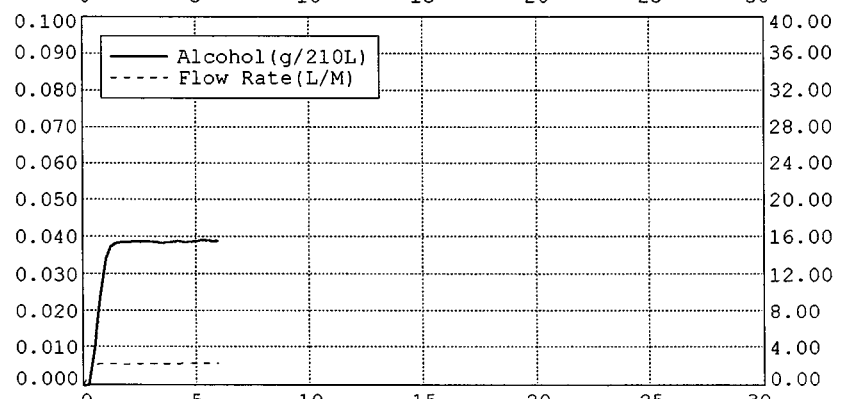
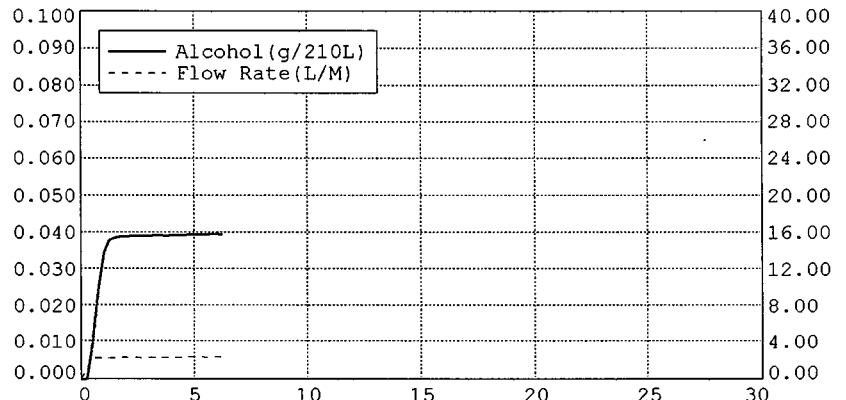
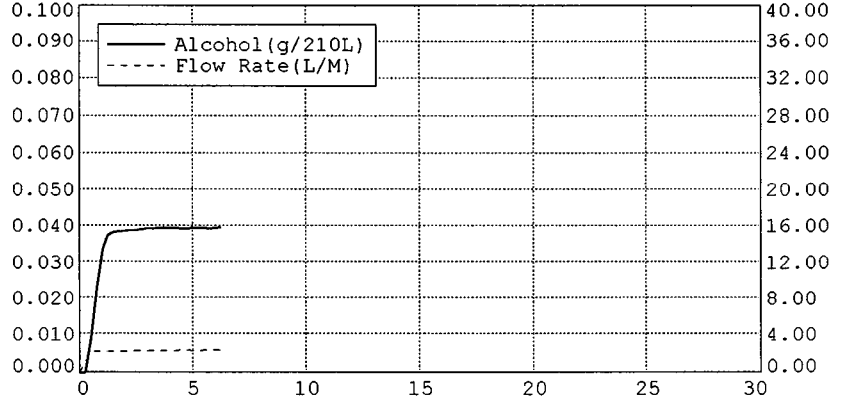
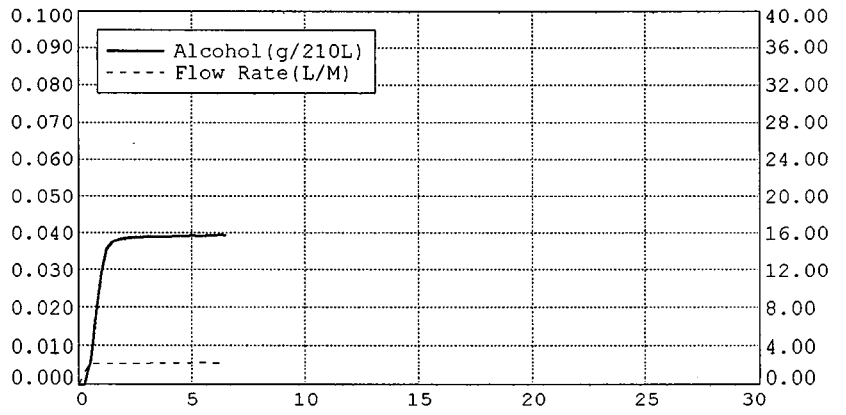
Date: 03/20/2020
Time: 17:43:42

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 30.30: 0.041
LOT #: AG915607
EXPIRATION: 06/05/2021
TANK PRESSURE: 925 psi

BLANK TEST	0.000	17:44
INTERNAL STANDARD	VERIFIED	17:44
EXTERNAL STANDARD	0.041	17:45
BLANK TEST	0.000	17:46
EXTERNAL STANDARD	0.041	17:46
BLANK TEST	0.000	17:47
EXTERNAL STANDARD	0.041	17:47
BLANK TEST	0.000	17:48
EXTERNAL STANDARD	0.040	17:48
BLANK TEST	0.000	17:49
EXTERNAL STANDARD	0.041	17:49
BLANK TEST	0.000	17:50

Average = 0.0408
Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100666

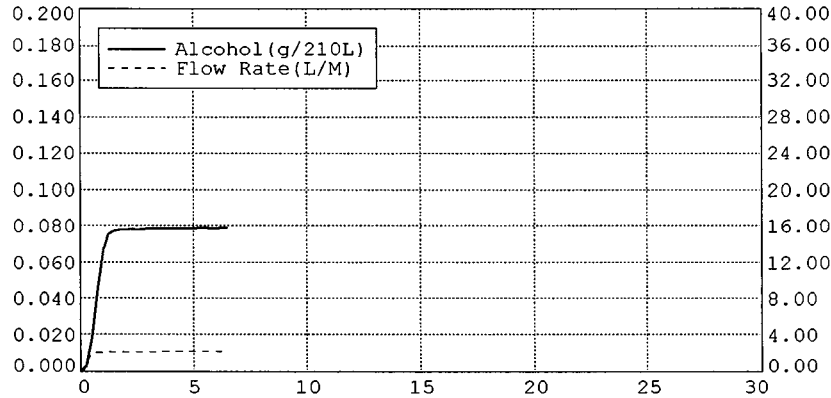
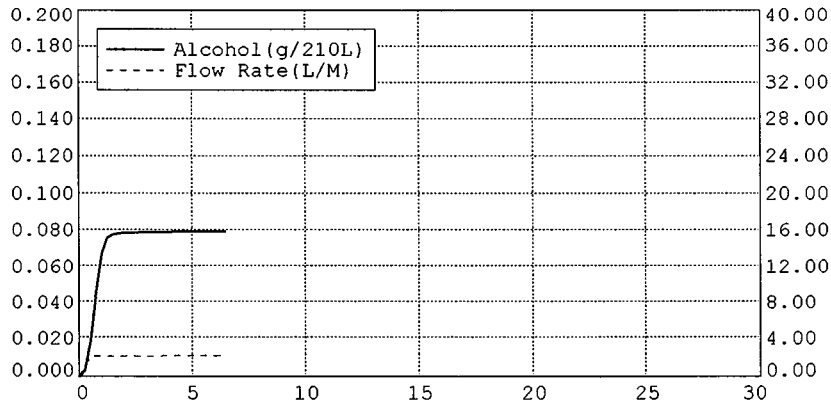
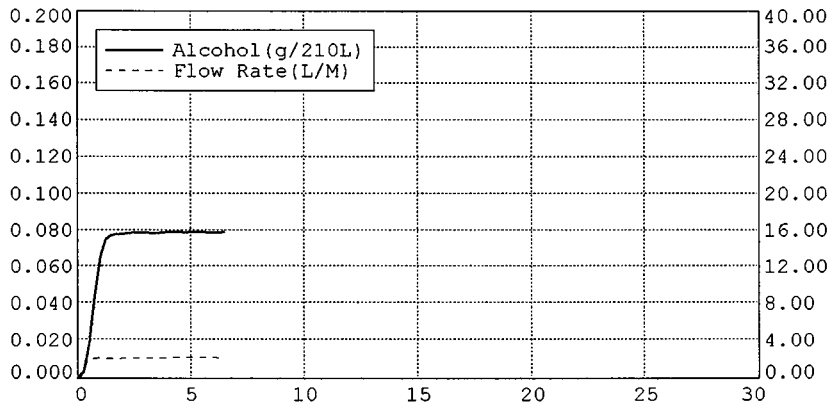
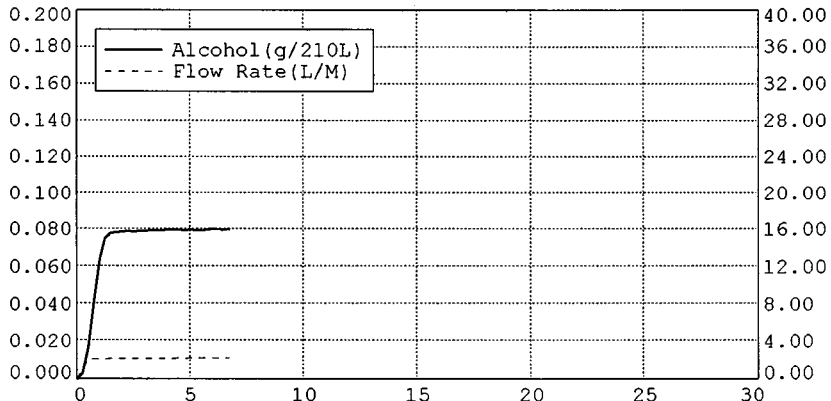
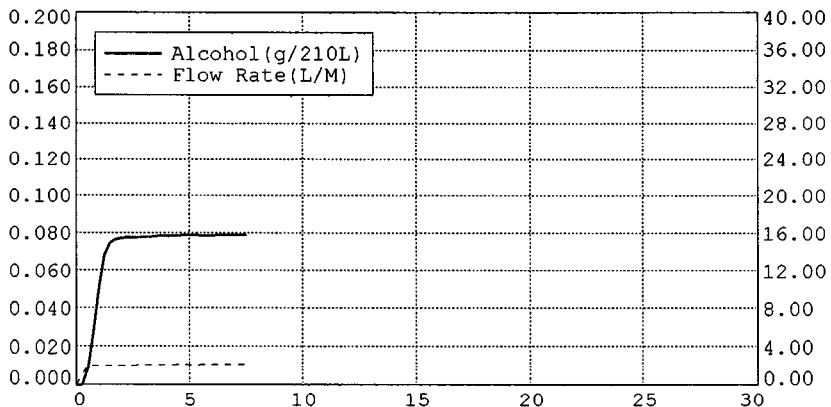
Date: 03/20/2020
Time: 17:51:21

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.31: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020
TANK PRESSURE: 542 psi

BLANK TEST	0.000	17:52
INTERNAL STANDARD	VERIFIED	17:52
EXTERNAL STANDARD	0.081	17:52
BLANK TEST	0.000	17:53
EXTERNAL STANDARD	0.081	17:53
BLANK TEST	0.000	17:54
EXTERNAL STANDARD	0.080	17:55
BLANK TEST	0.000	17:56
EXTERNAL STANDARD	0.081	17:56
BLANK TEST	0.000	17:57
EXTERNAL STANDARD	0.080	17:57
BLANK TEST	0.000	17:58

Average = 0.0806
Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100666

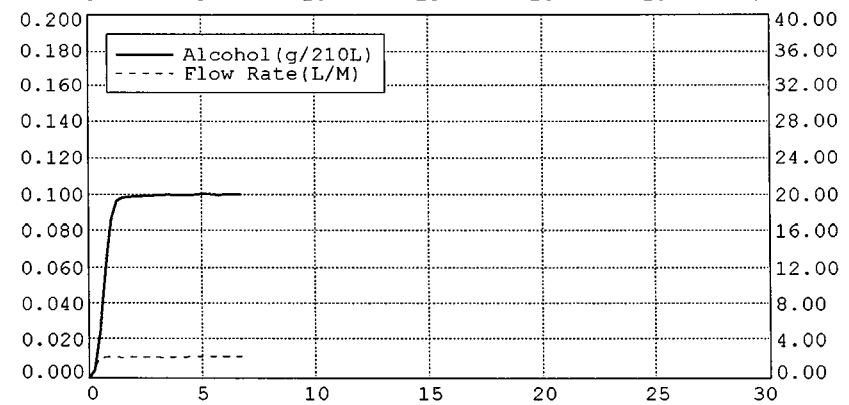
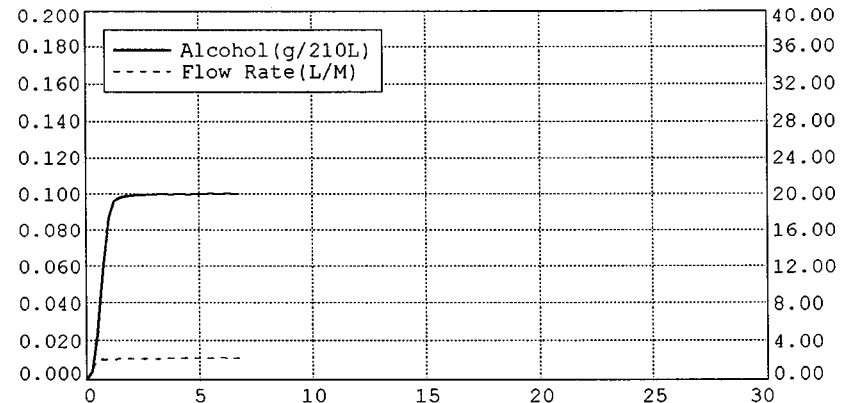
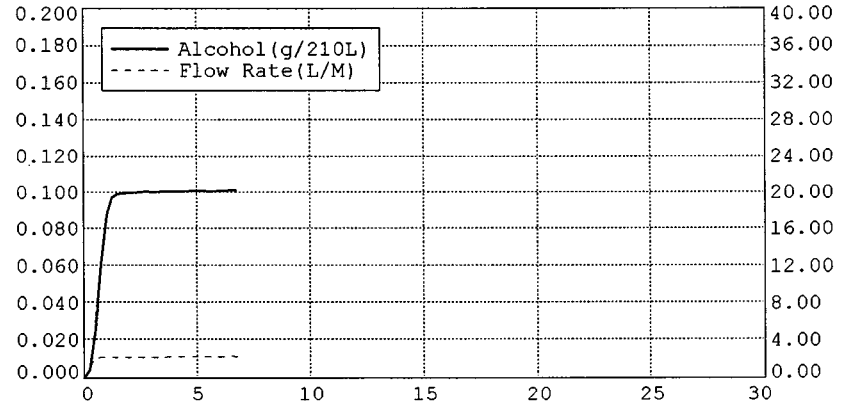
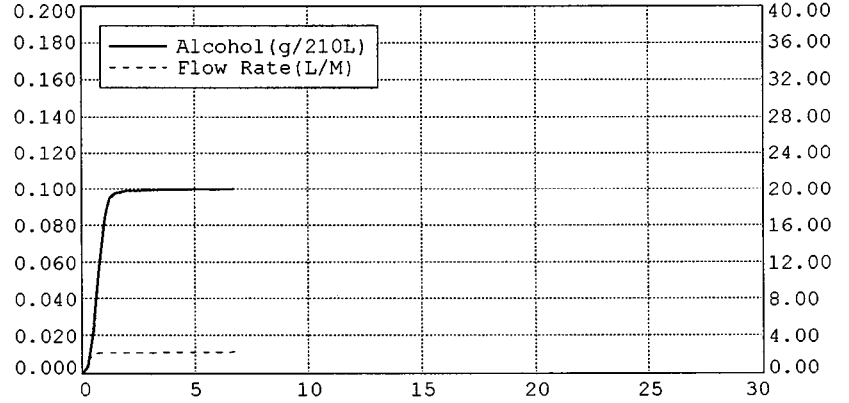
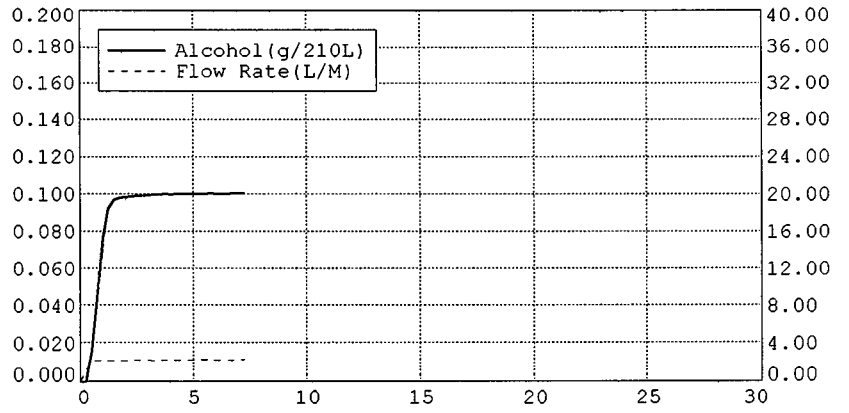
Date: 03/20/2020
 Time: 18:00:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 30.30: 0.101
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 695 psi

BLANK TEST	0.000	18:01
INTERNAL STANDARD	VERIFIED	18:01
EXTERNAL STANDARD	0.102	18:01
BLANK TEST	0.000	18:02
EXTERNAL STANDARD	0.101	18:02
BLANK TEST	0.000	18:03
EXTERNAL STANDARD	0.102	18:04
BLANK TEST	0.000	18:05
EXTERNAL STANDARD	0.101	18:05
BLANK TEST	0.000	18:06
EXTERNAL STANDARD	0.102	18:06
BLANK TEST	0.000	18:07

Average = 0.1016
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100666

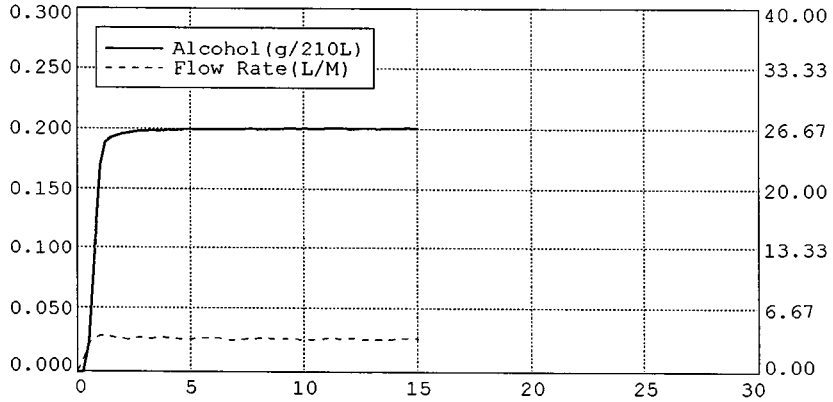
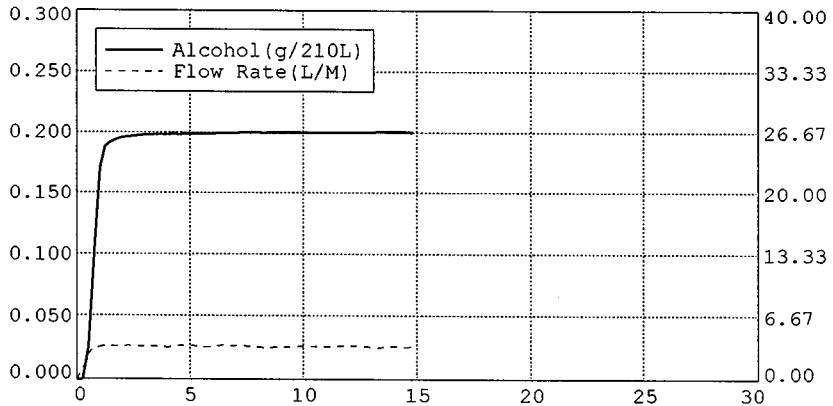
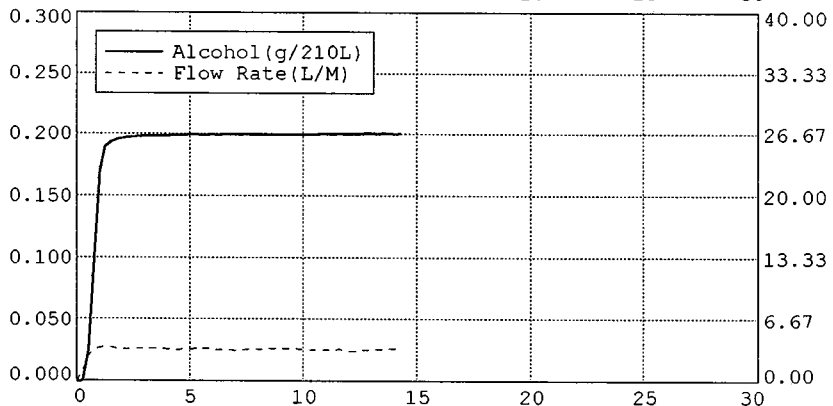
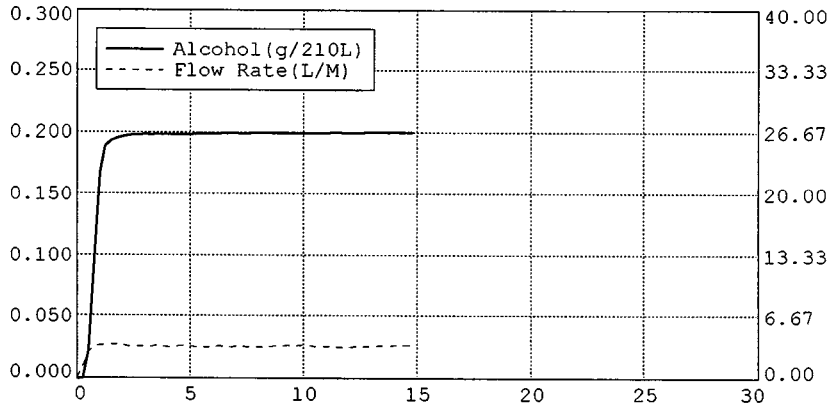
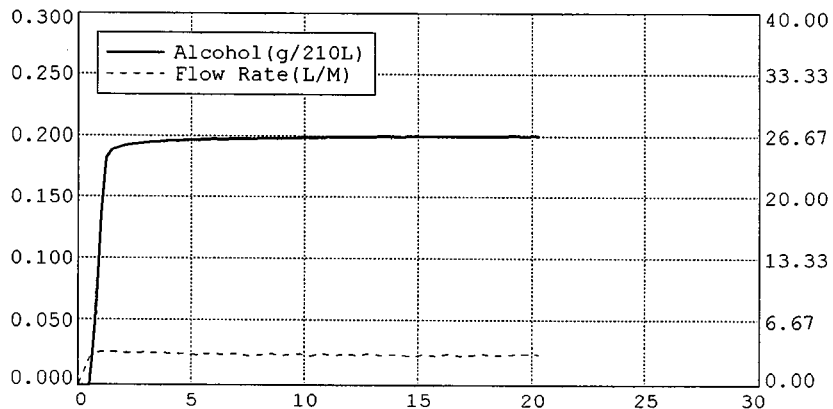
Date: 03/20/2020
 Time: 18:11:30

EXTERNAL STANDARD INFORMATION

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

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

Average = 0.2010
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100666

Date: 03/20/2020
 Time: 18:23:17

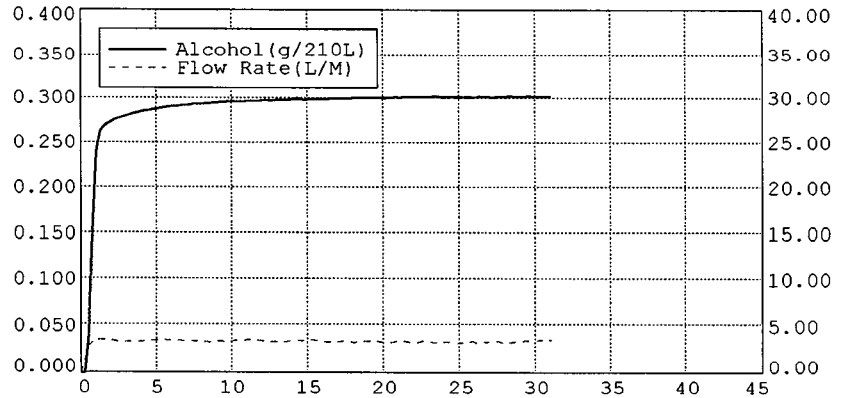
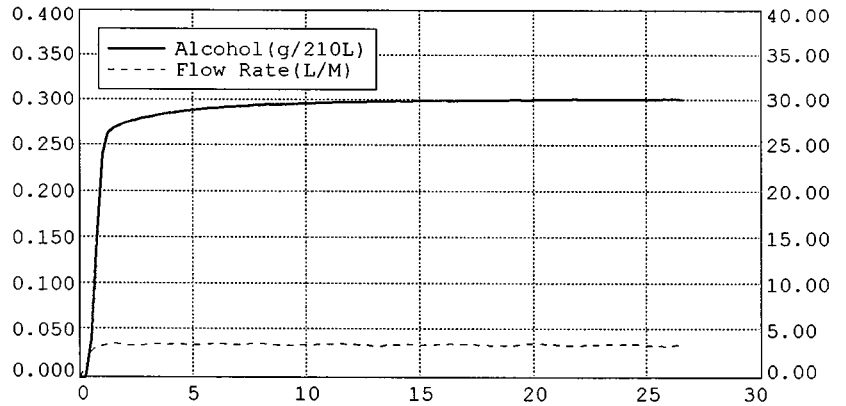
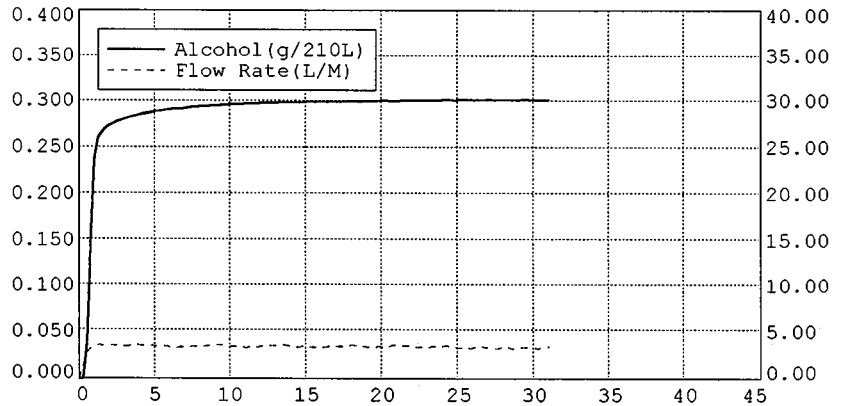
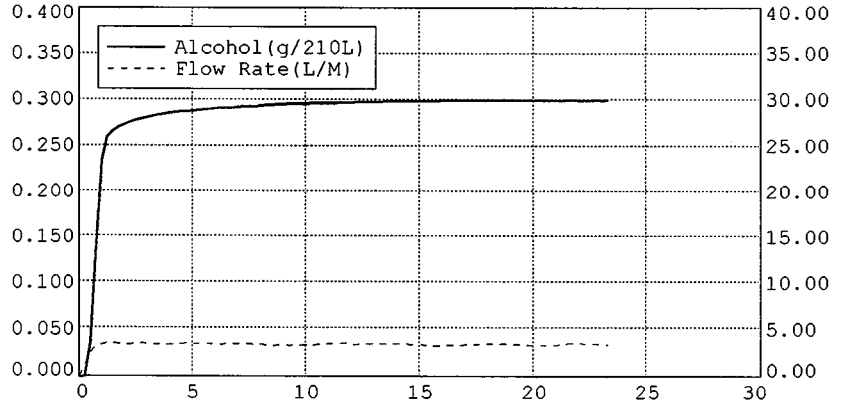
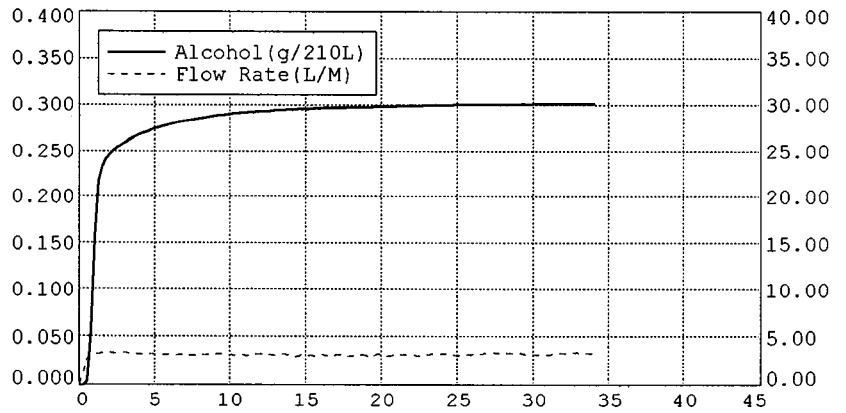
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 19330
 EXPIRATION: 10/04/2019

11/13/2021
 DJW 03/26/20

BLANK TEST	0.000	18:24
INTERNAL STANDARD	VERIFIED	18:24
EXTERNAL STANDARD	0.302	18:25
BLANK TEST	0.000	18:26
EXTERNAL STANDARD	0.300	18:26
BLANK TEST	0.000	18:27
EXTERNAL STANDARD	0.301	18:28
BLANK TEST	0.000	18:29
EXTERNAL STANDARD	0.301	18:29
BLANK TEST	0.000	18:30
EXTERNAL STANDARD	0.302	18:31
BLANK TEST	0.000	18:32

Average = 0.3012
 Std Dev = 0.0008



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100666

Date: 03/20/2020
Time: 20:21:24

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

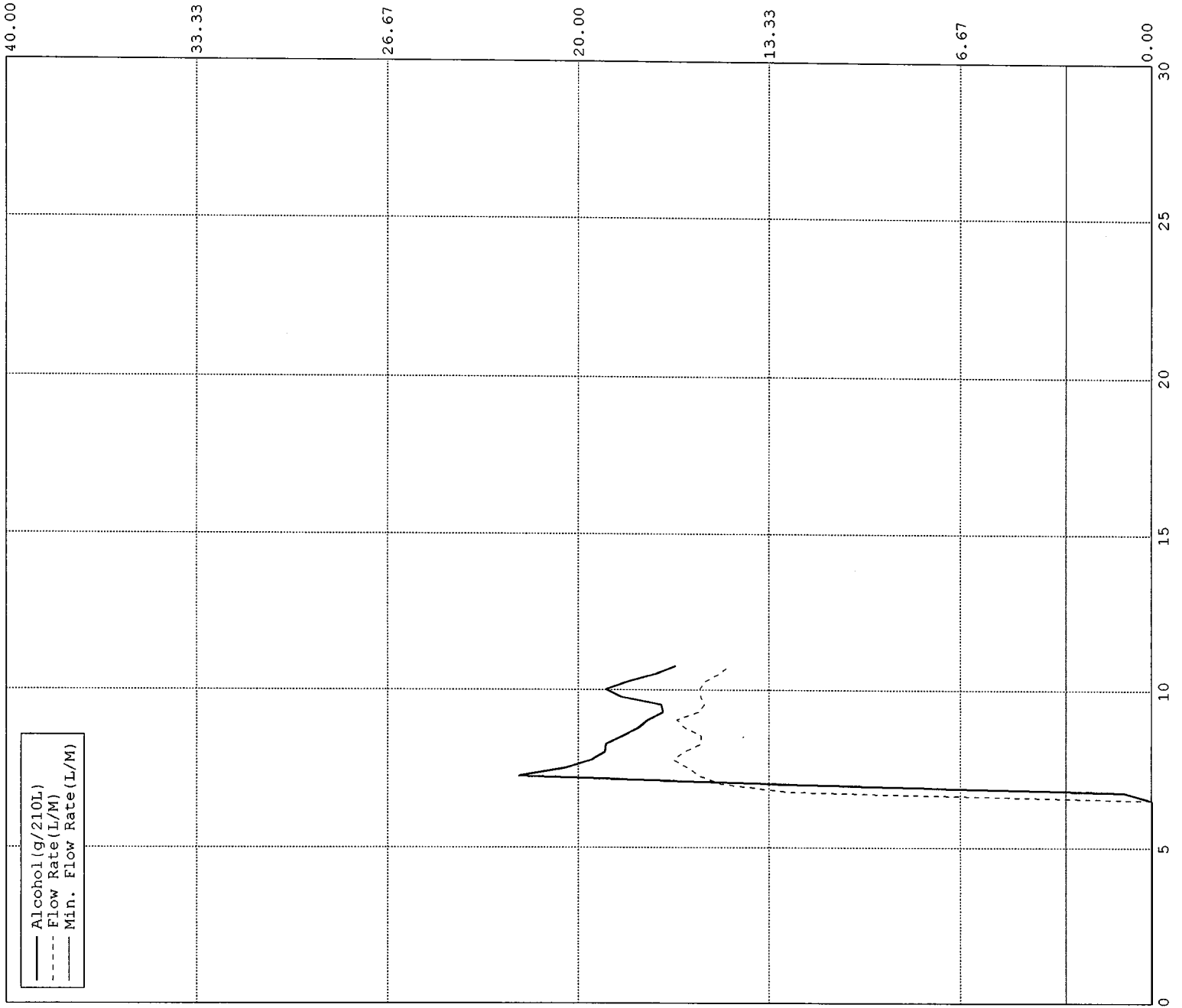
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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 20:22
BLANK TEST 0.000 20:22
INTERNAL STANDARD VERIFIED 20:22
EXTERNAL STANDARD 0.080 20:22
BLANK TEST 0.000 20:23
SUBJECT SAMPLE INVALID 20:24

Handwritten signature



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100666

Date: 03/23/2020
Time: 16:24:25

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

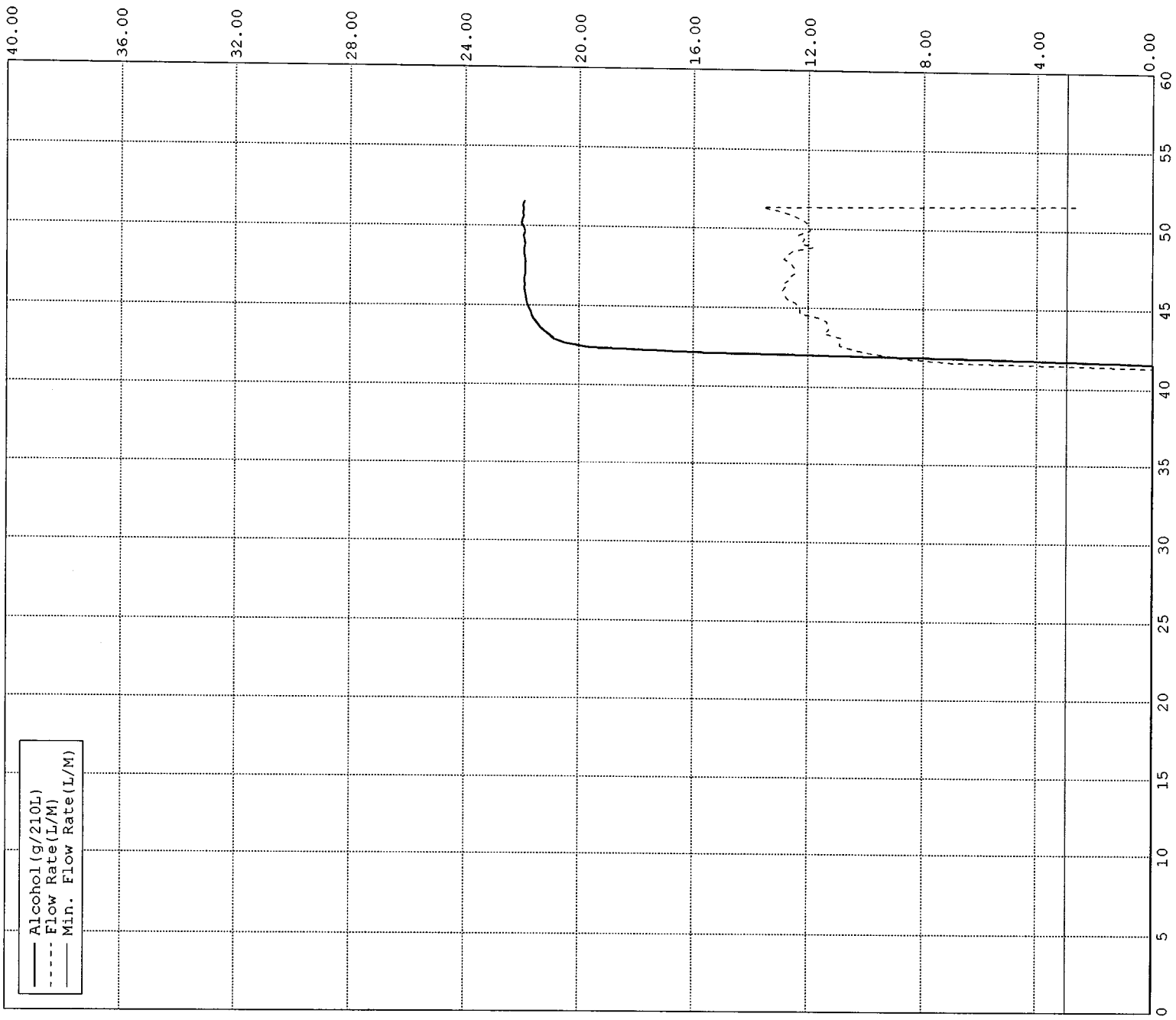
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.26: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 16:25
BLANK TEST 0.000 16:26
INTERNAL STANDARD VERIFIED 16:26
Xg = 0.092 (0.10%)
EXTERNAL STANDARD 0.080 16:26
X[1] = 0.0803 (-0.0012) (0.0022)
BLANK TEST 0.000 16:27
SUBJECT SAMPLE XXX 16:28
X[1] = 0.1106 (-0.0209) (0.0010)

Interference Detected

File 2Avg; -0.0015

File 3Avg; 0.0014



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100666

Date: 03/23/2020
Time: 16:16:15

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

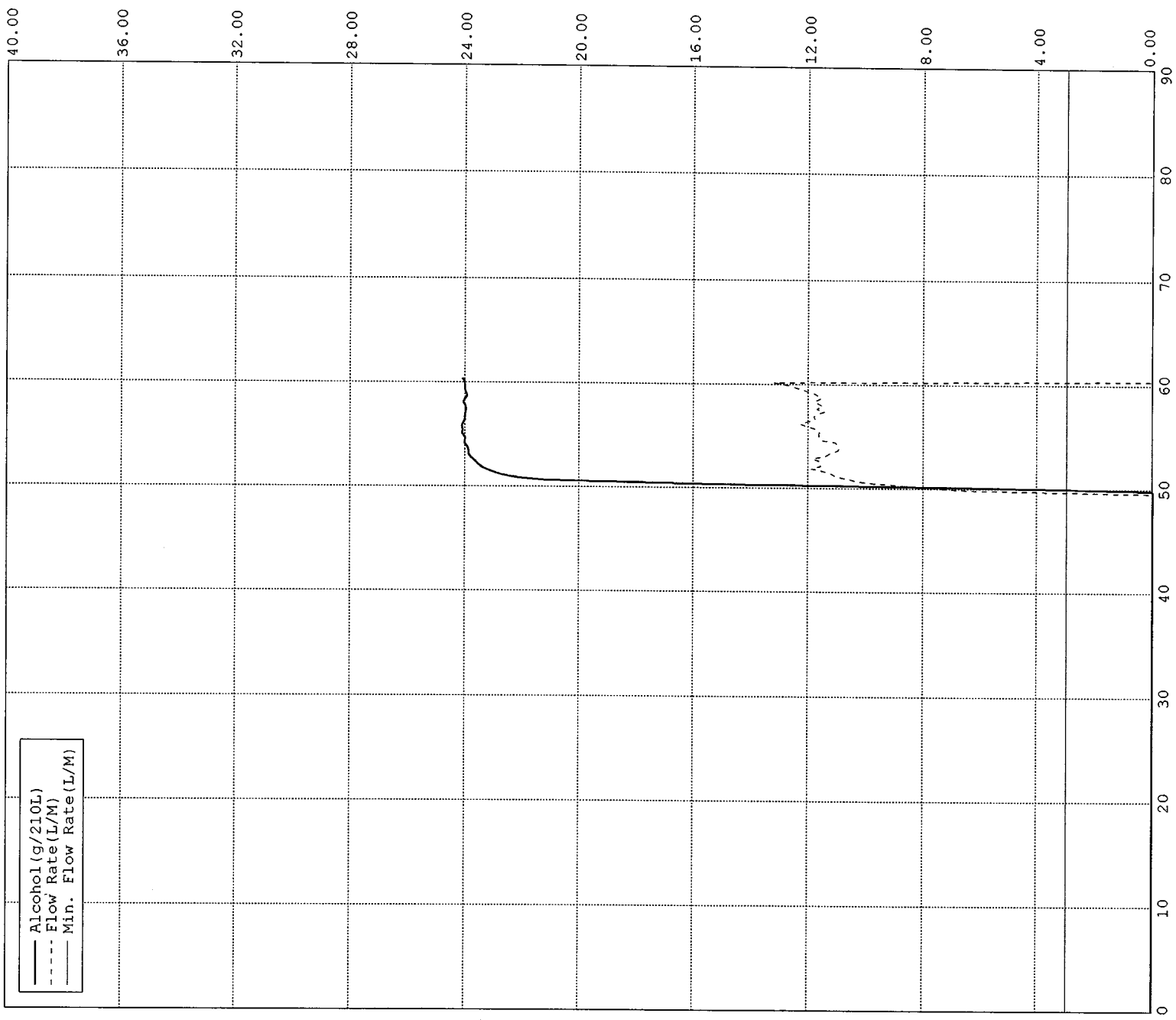
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK PASSED 16:17
BLANK TEST 0.000 16:17
INTERNAL STANDARD VERIFIED 16:17
Xq = 0.092 (0.00%)
EXTERNAL STANDARD 0.080 16:17
X[1] = 0.0801 (-0.0009) (0.0013)
BLANK TEST 0.000 16:18
SUBJECT SAMPLE XXX 16:19
X[1] = 0.1207 (-0.0256) (0.0001)

Interference Detected

JM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100666

Date: 03/23/2020
Time: 16:00:46

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

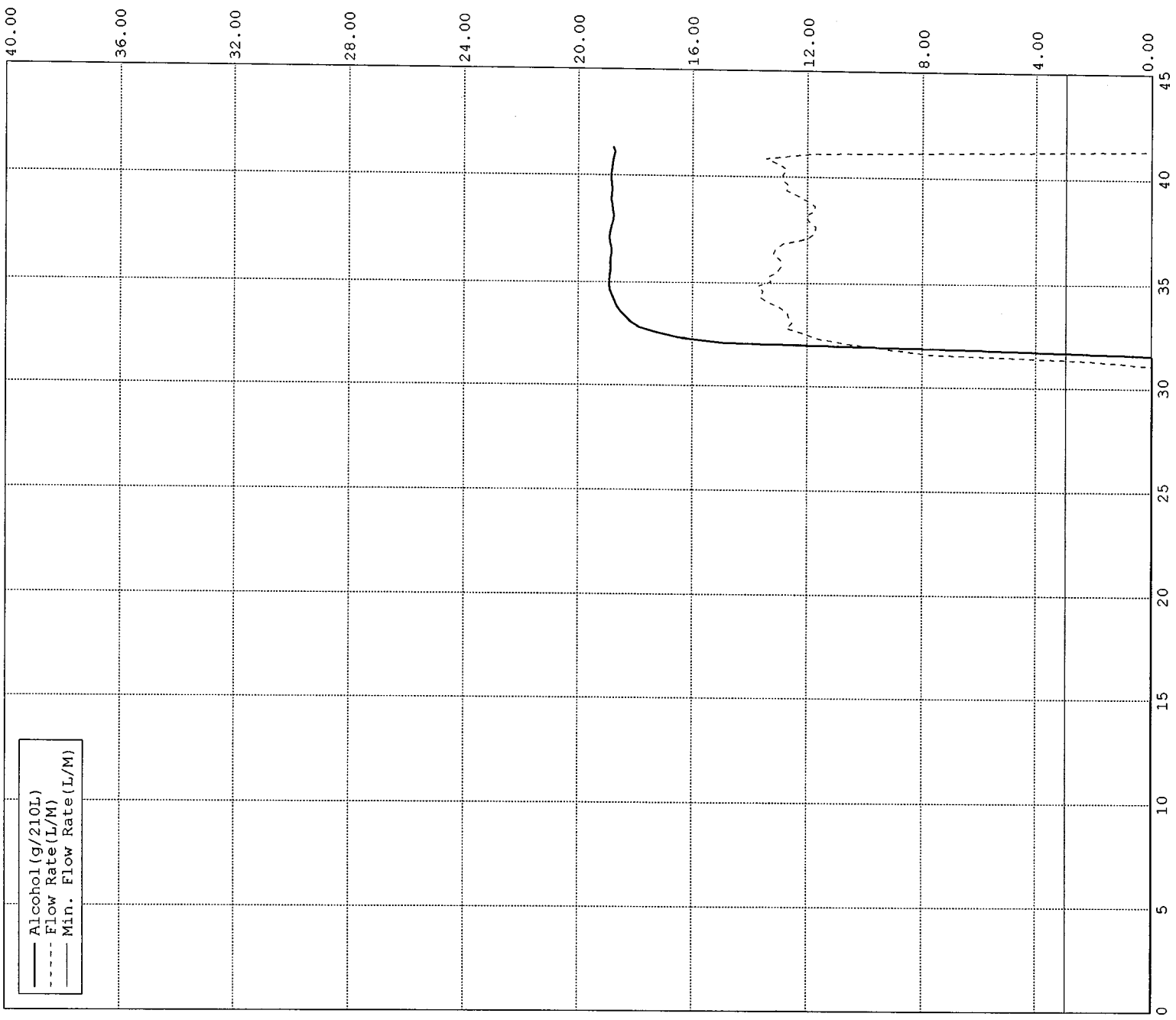
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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	16:03
BLANK TEST	0.000	16:04
INTERNAL STANDARD	VERIFIED	16:04
Xg = 0.091 (0.19%)		
EXTERNAL STANDARD	0.080	16:04
X[1] = 0.0800 (-0.0020) (0.0012)		
BLANK TEST	0.000	16:05
SUBJECT SAMPLE (Vol=2.02L)	0.094	16:06
X[1] = 0.0949 (-0.0012) (-0.0008)		
BLANK TEST	0.000	16:07
EXTERNAL STANDARD	0.080	16:07
X[1] = 0.0800 (-0.0019) (0.0007)		
BLANK TEST	0.000	16:08



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100666

Date: 03/20/2020
Time: 18:47:01

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

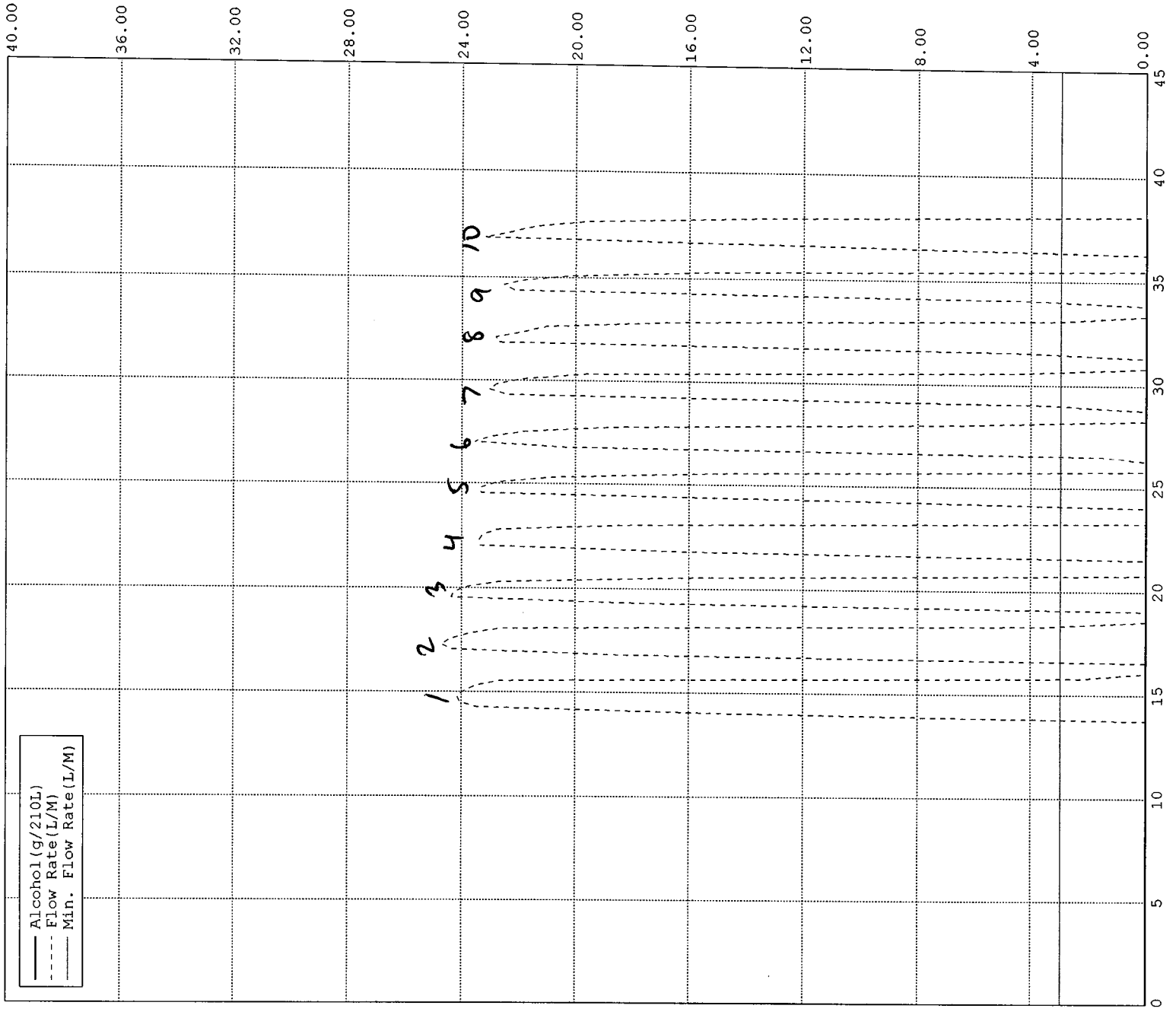
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK PASSED 18:47
BLANK TEST 0.000 18:48
INTERNAL STANDARD VERIFIED 18:48
EXTERNAL STANDARD 0.080 18:48
BLANK TEST 0.000 18:49
SUBJECT SAMPLE XXX 18:50

Maximum Attempts Exceeded

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100666

Date: 03/20/2020
Time: 20:05:14

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

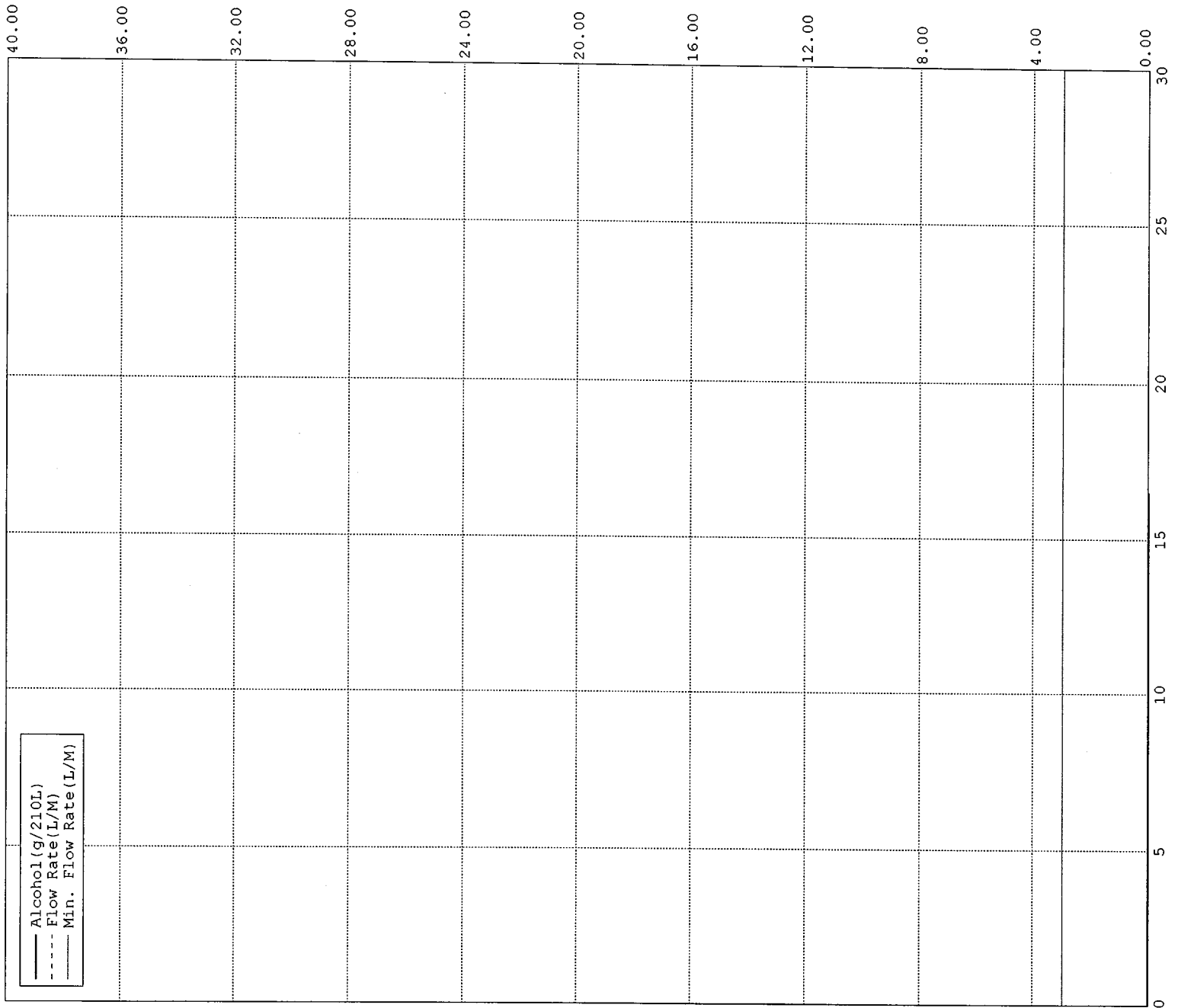
DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK PASSED 20:11
BLANK TEST 0.000 20:11
INTERNAL STANDARD VERIFIED 20:11
EXTERNAL STANDARD 0.081 20:11
BLANK TEST 0.000 20:12

RFI DETECTED

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100666

Date: 03/23/2020
Time: 16:54:17

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 30.24: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	16:55
BLANK TEST	0.000	16:55
INTERNAL STANDARD	VERIFIED	16:55
EXTERNAL STANDARD	0.081	16:55
BLANK TEST	0.000	16:56
SUBJECT SAMPLE (Vol=3.36L)	0.000	16:57
BLANK TEST	0.000	16:58
EXTERNAL STANDARD	0.081	16:58
BLANK TEST	0.000	16:59

