

Alaska Scientific Crime Detection Laboratory

DataMaster Certification Form

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

Version: DMCEF 2020 R0
Status: Active

Instrument S/N 100385 Analyst Derech Walton Start Date 02/04/2021

Diagnostic Test (attached)

Internal Standard value \leq 3.00%

Voltage Checks

Adjust voltages, if needed

i. Lamp (2.6V Maximum)

iv. Chopper Frequency

ii. Bias

v. Detector Voltage (-0.100V to 0.100V)

iii. Cooler (2.0V Maximum)

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 1.6 L (1.3L to 1.7L)

Linearity Test (attached)

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 cutn Lot 19200 Exp 08/06/21

Simulator S/N DR4161 Date Calibrated 05/08/20

vi. 0.300g/210L Mnf cutn Lot 19330 Exp 11/13/21

Simulator S/N DR5298 Date Calibrated 05/08/20

Functional Tests (attached)

Incomplete

Invalid

Interference

i. Acetone - Mnf cutn Lot 19301 Level 0.100 Exp 10/30/21

Simulator S/N SD1202 Date Calibrated 05/08/20

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

Simulator S/N SD1177 Date Calibrated 05/07/20

iii. Negative Control - Mnf cutn Lot 19301 Level 0.100 Exp 10/30/21

Simulator S/N SD1088 Date Calibrated 05/08/20

Exceeded Attempts

RFI

Verify stylus is calibrated

Verification of Calibration

Reset Options

Non-Drinking Subject Test (attached)

Clear Memory

Upload

Remove tank prior to shut down

Add Linearity Data to Spreadsheet

End Date 02/05/21

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 2/4/2021
Time: 12:36:24

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.9°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.62 V PASSED
(0.94 V - 2.20 V)
Cooler Voltage = 1.56 V PASSED
(0.95 V - 2.21 V)
Bias Voltage = 78 V PASSED
(47 V - 111 V)
Chopper Freq = 525 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 30.1 in

PUMP INFO

Flow Rate = 4.613 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 = 0.093 0.76% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100385

Date: 2/4/2021
Time: 1:08 PM

Temperatures (°C)

Sample Cell: 49.2°C
Breath Tube: 46.3°C

Current Barometer 30.1 in
Volume (Ltr) 1.49 ✓

Settings

Lamp: 1.62 V
Bias: 79 V
Cooler: 1.63 V
Chopper: 527 Hz

Voltages (V)

Flow: 1.05 V ✓
Detector: 0.042 V ✓

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 3/9/2011
Time: 12:02:20

Ca = 0.1000
CAL = 0.994034 0.800 <= CAL < 1.200
b1 = 0.0002 0.0000 <= b1 < 0.0040
b2 = 0.0044 0.0010 <= b2 < 0.0100
b3 = 0.0001 0.0000 <= b3 < 0.0040
Xq = 0.0918 0.0500 <= Xq < 0.2000
a21 = 1.184989 1.050 <= a21 < 1.300
a31 = 0.500132 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 2/4/2021
Time: 13:15:15

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

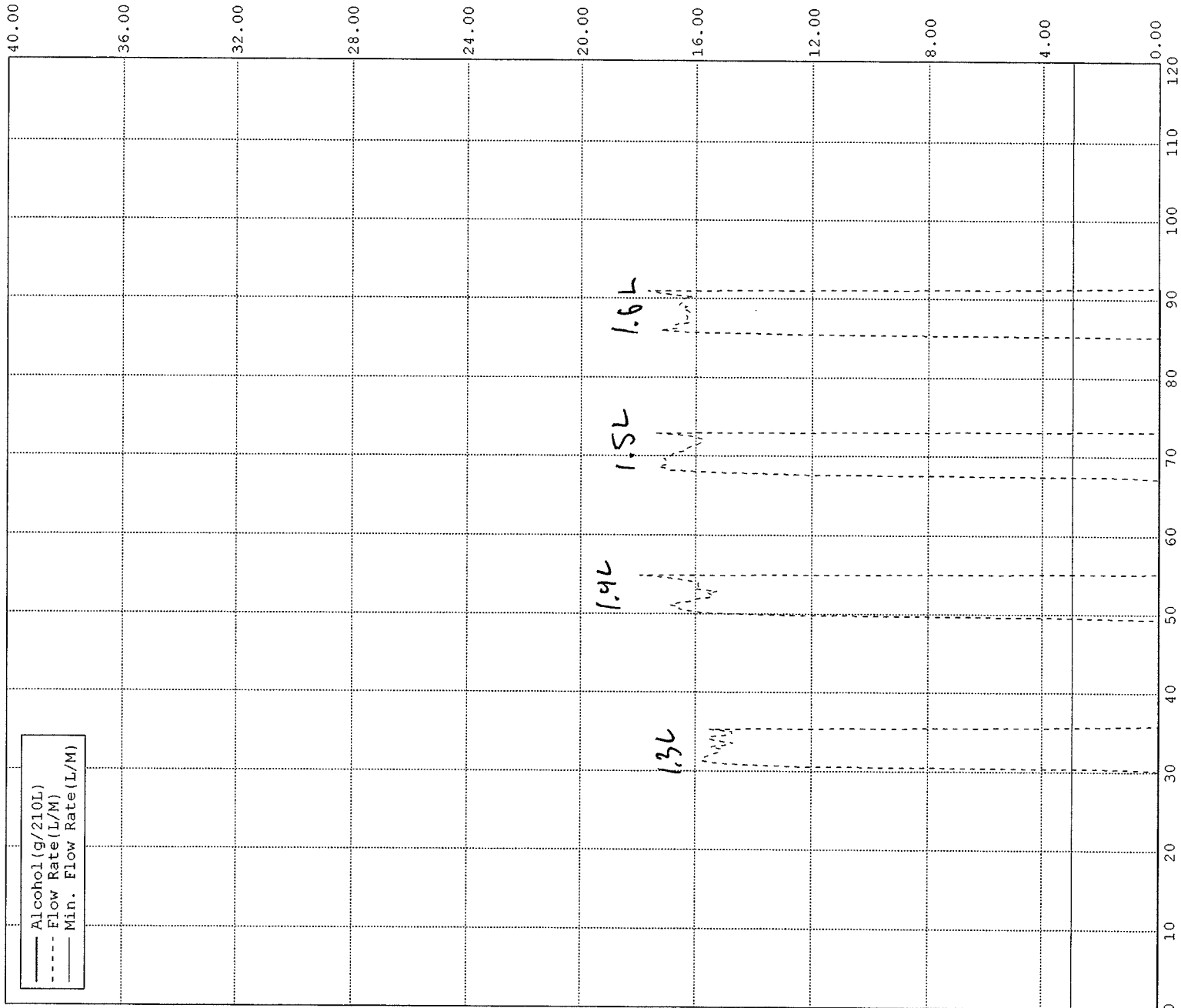
DEPT/AGENCY:
MINIMUM VOLUME
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.08: 0.080
LOT #: AG018102
EXPIRATION: 6/29/2022

DIAGNOSTIC CHECK	PASSED	13:16
BLANK TEST	0.000	13:16
INTERNAL STANDARD	VERIFIED	13:16
EXTERNAL STANDARD	0.081	13:16
BLANK TEST	0.000	13:17
SUBJECT SAMPLE (Vol=1.59L)	0.000	13:19
BLANK TEST	0.000	13:20
EXTERNAL STANDARD	0.081	13:20
BLANK TEST	0.000	13:21

DWC



LINEARITY CHECK

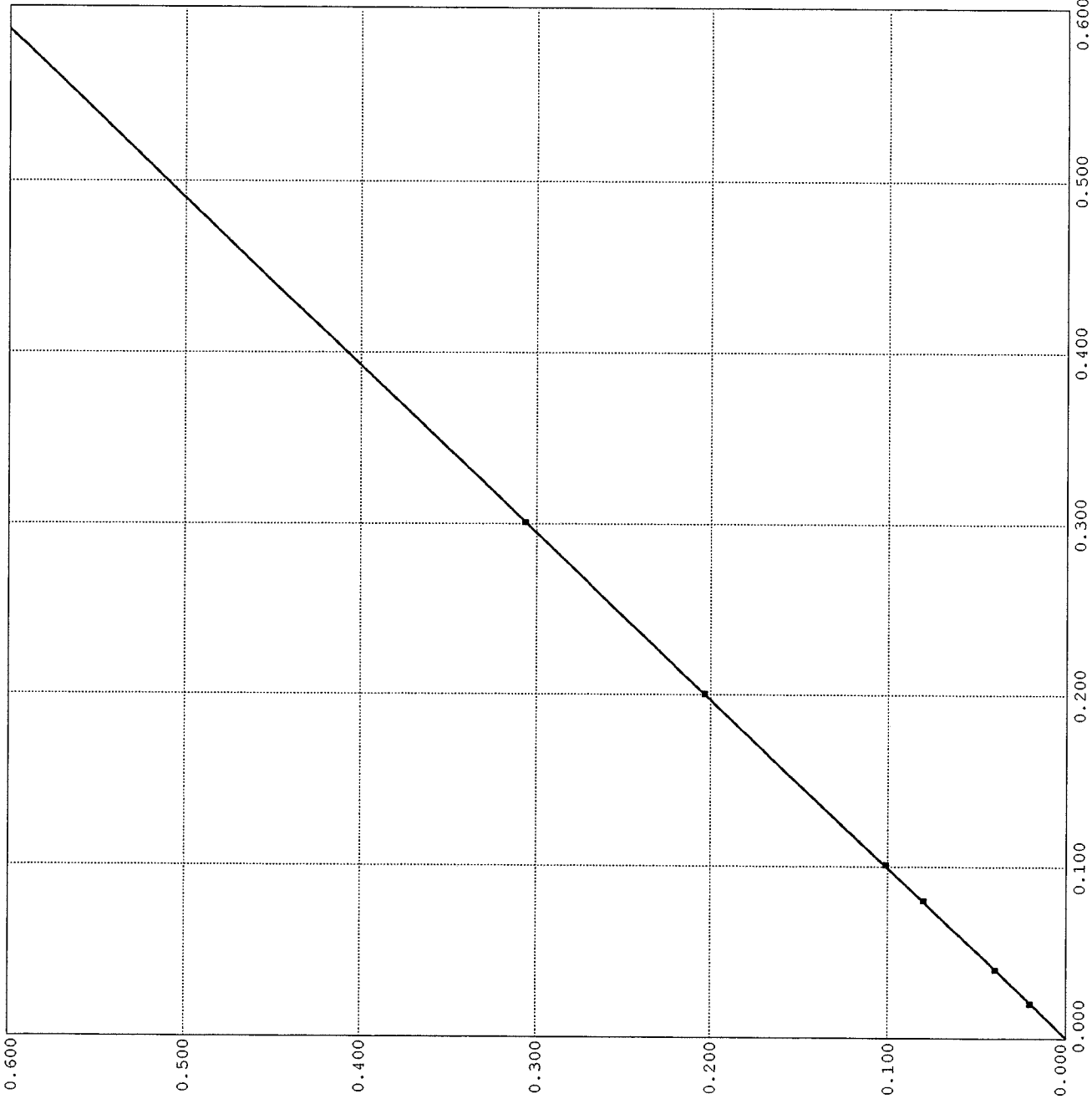
 Alaska Department of Public Safety
 DATAMASTER dmt: 100385

Date: 2/4/2021
 Time: 13:29:18

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0210	0.0000
0.040	0.0410	0.0000
0.080	0.0810	0.0000
0.101	0.1020	0.0000
0.200	0.2042	0.0013
0.300	0.3072	0.0004

SLOPE = 1.023457
 R² = 0.999957



DM

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100385

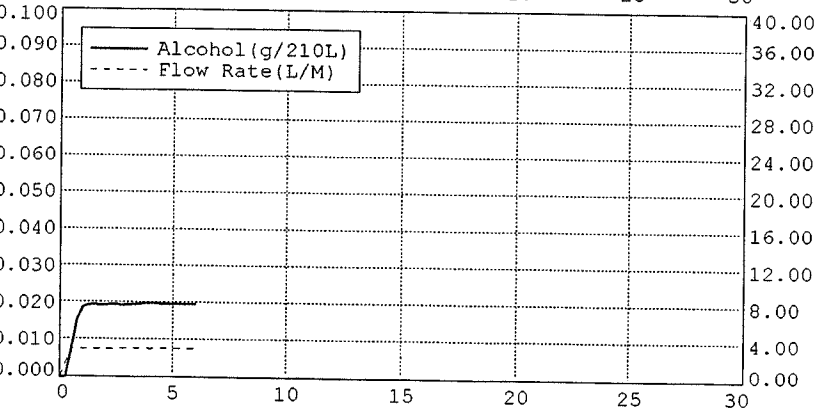
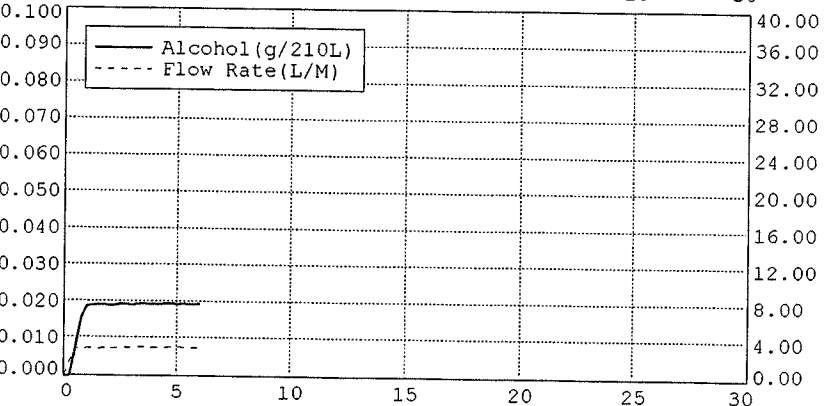
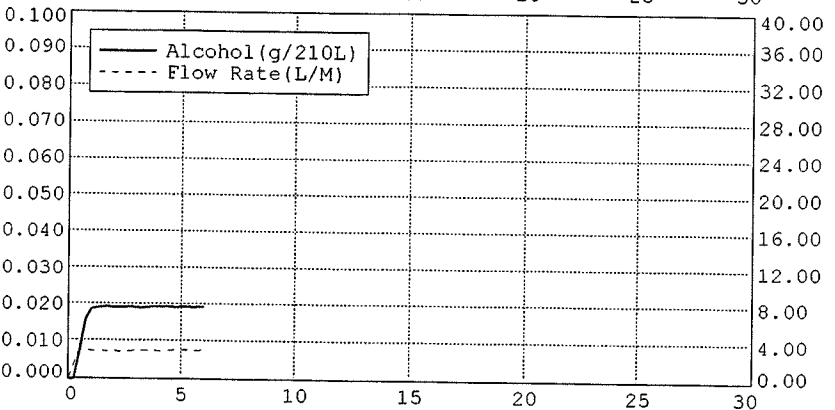
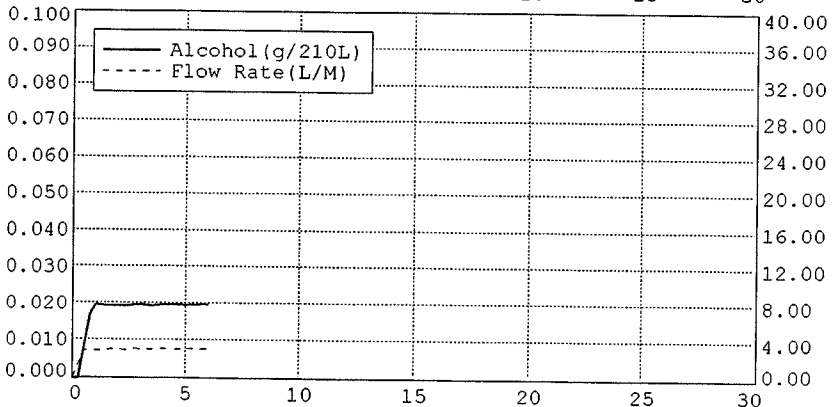
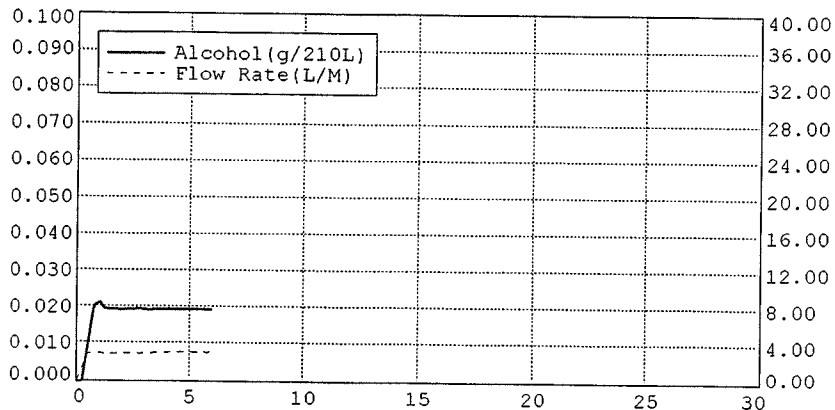
Date: 2/4/2021
 Time: 13:29:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 30.09: 0.020
 LOT #: AG928203
 EXPIRATION: 10/9/2021
 TANK PRESSURE: 685 psi

BLANK TEST	0.000	13:30
INTERNAL STANDARD	VERIFIED	13:30
EXTERNAL STANDARD	0.021	13:30
BLANK TEST	0.000	13:31
EXTERNAL STANDARD	0.021	13:31
BLANK TEST	0.000	13:32
EXTERNAL STANDARD	0.021	13:33
BLANK TEST	0.000	13:33
EXTERNAL STANDARD	0.021	13:34
BLANK TEST	0.000	13:34
EXTERNAL STANDARD	0.021	13:35
BLANK TEST	0.000	13:36

Average = 0.0210
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100385

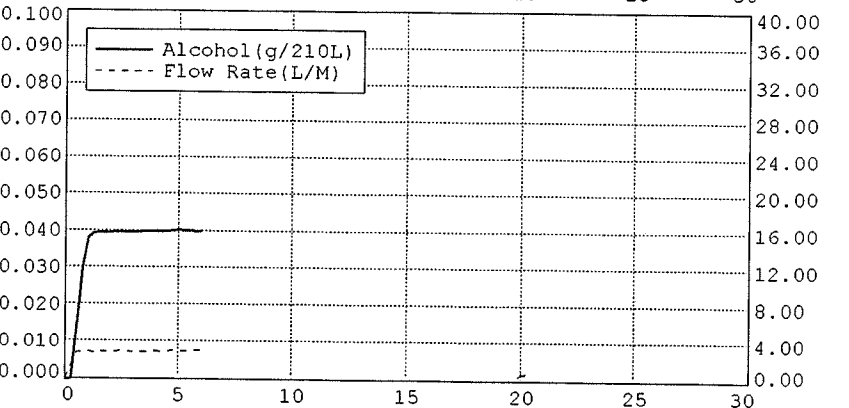
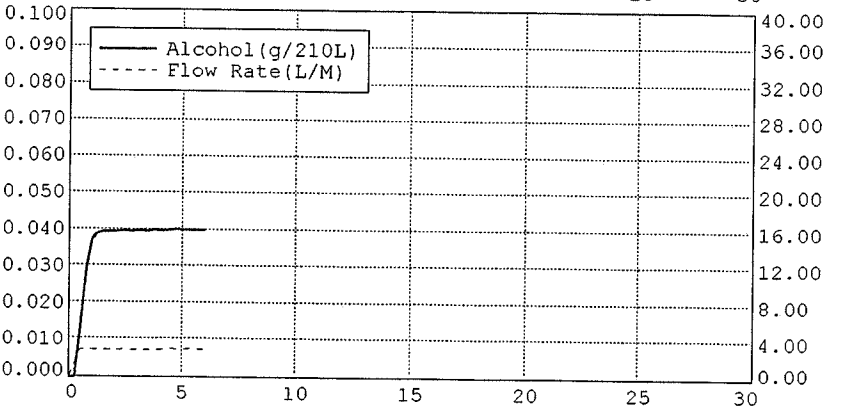
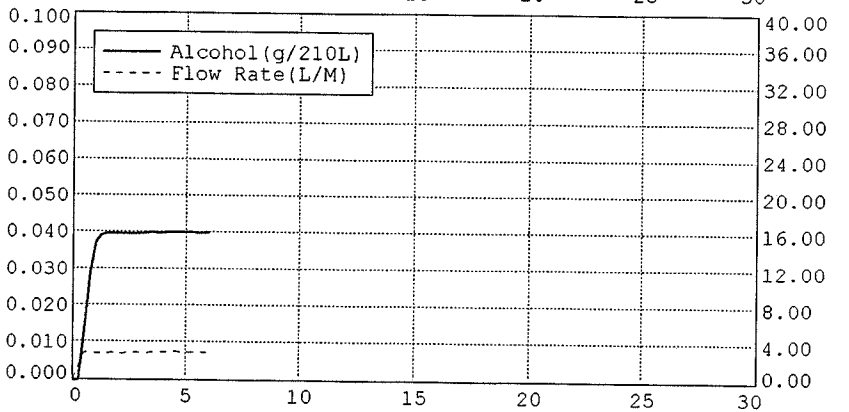
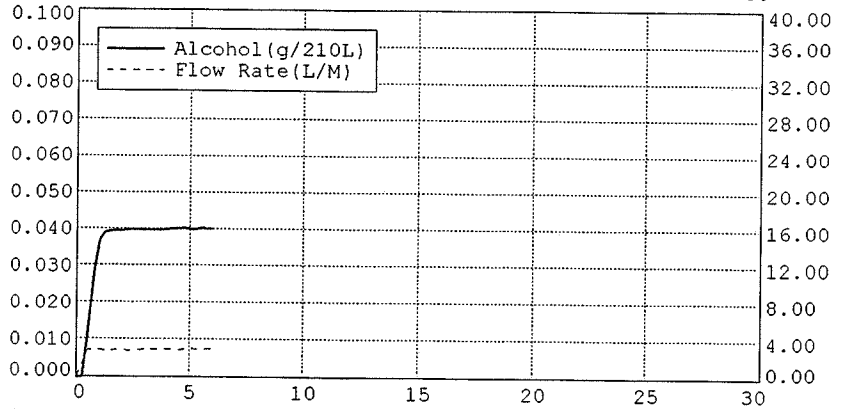
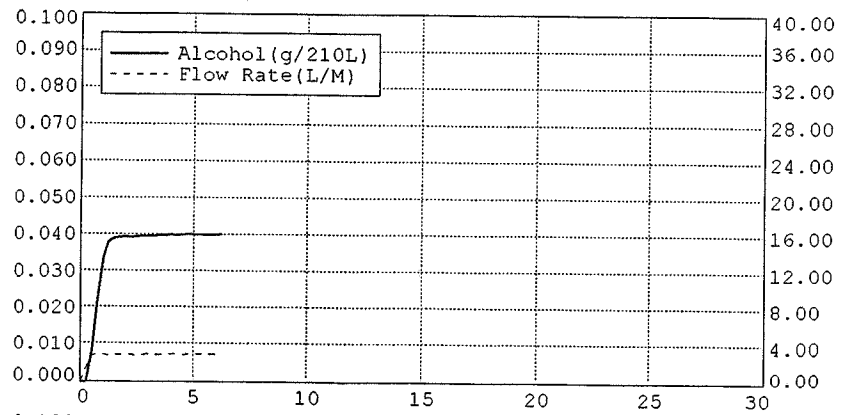
Date: 2/4/2021
 Time: 13:36:56

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 30.10: 0.040
 LOT #: AG915607
 EXPIRATION: 6/5/2021
 TANK PRESSURE: 461 psi

BLANK TEST	0.000	13:38
INTERNAL STANDARD	VERIFIED	13:38
EXTERNAL STANDARD	0.041	13:38
BLANK TEST	0.000	13:39
EXTERNAL STANDARD	0.041	13:39
BLANK TEST	0.000	13:40
EXTERNAL STANDARD	0.041	13:40
BLANK TEST	0.000	13:41
EXTERNAL STANDARD	0.041	13:41
BLANK TEST	0.000	13:42
EXTERNAL STANDARD	0.041	13:42
BLANK TEST	0.000	13:43

Average = 0.0410
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100385

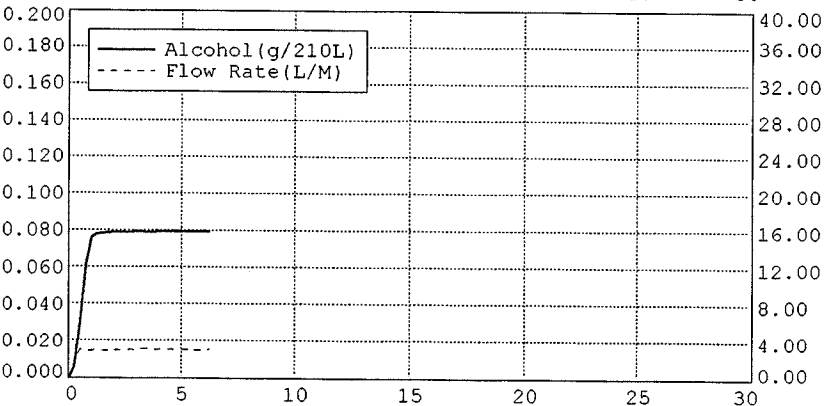
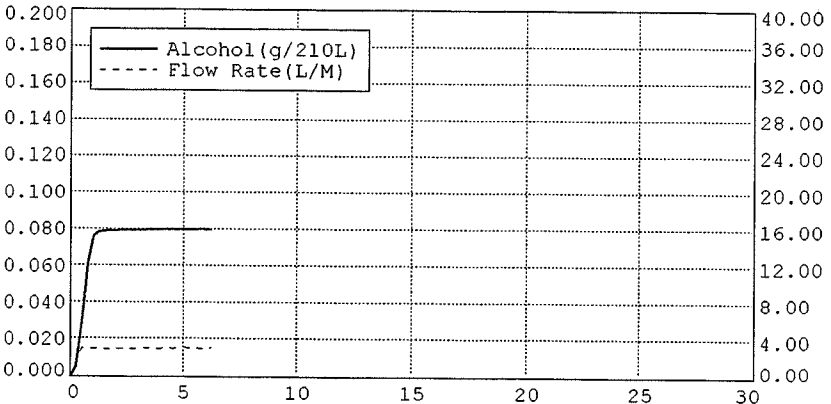
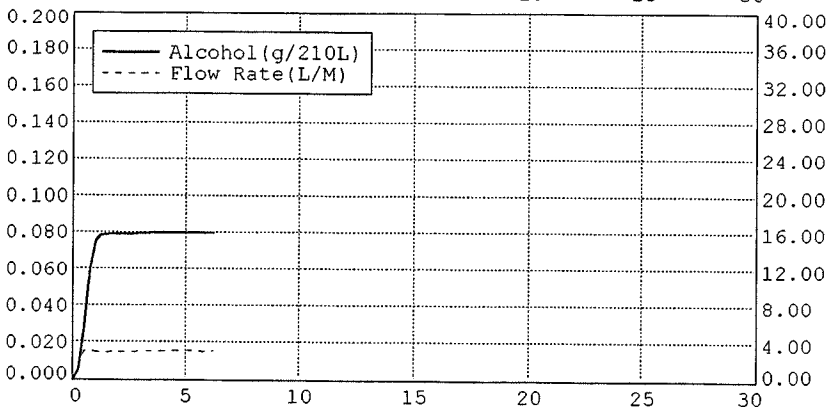
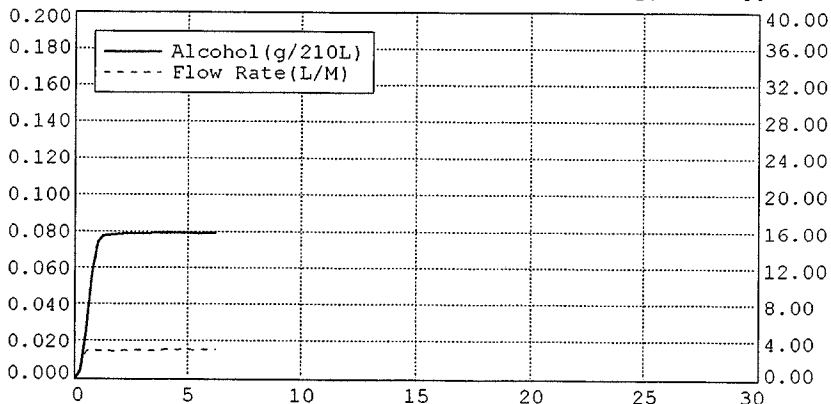
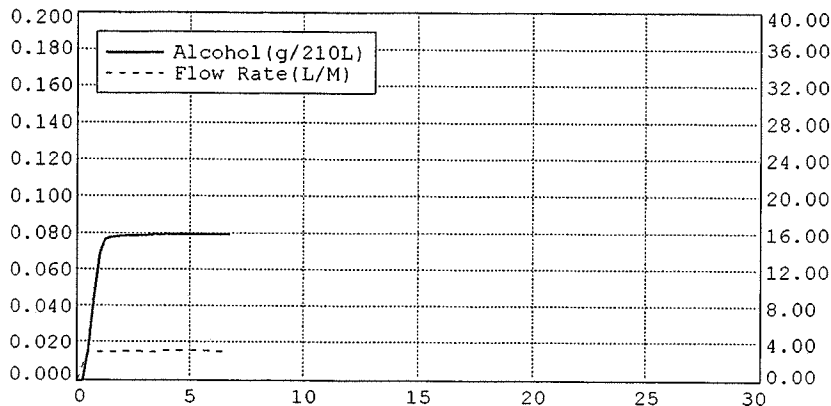
Date: 2/4/2021
 Time: 13:44:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 30.10: 0.080
 LOT #: AG018102
 EXPIRATION: 6/29/2022
 TANK PRESSURE: 866 psi

BLANK TEST	0.000	13:46
INTERNAL STANDARD	VERIFIED	13:46
EXTERNAL STANDARD	0.081	13:46
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.081	13:47
BLANK TEST	0.000	13:48
EXTERNAL STANDARD	0.081	13:48
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.081	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.081	13:50
BLANK TEST	0.000	13:51

Average = 0.0810
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100385

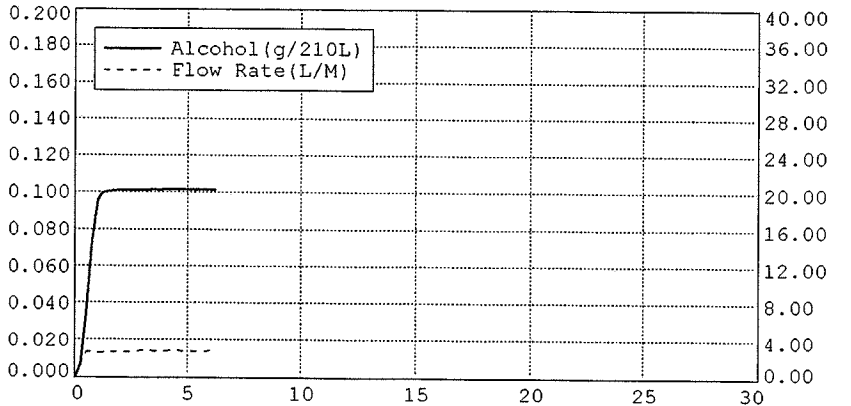
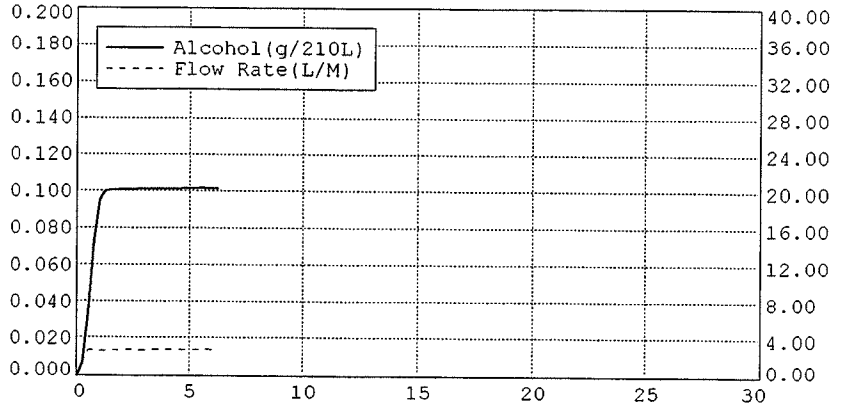
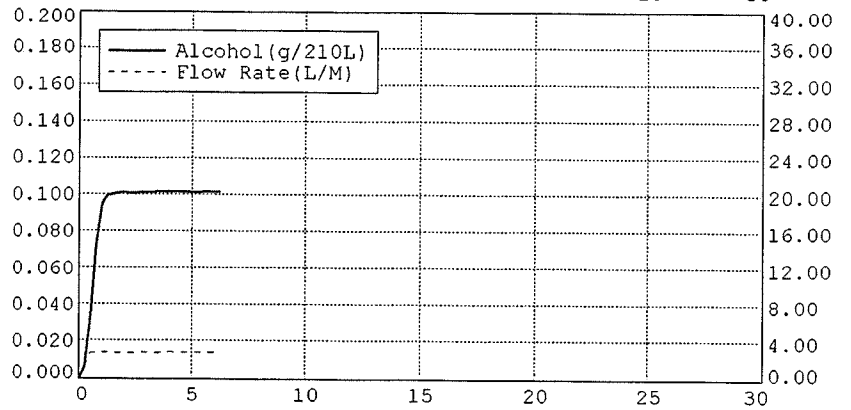
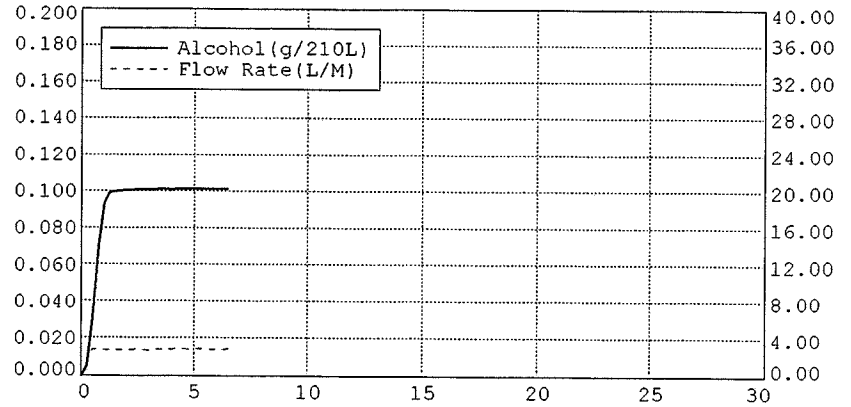
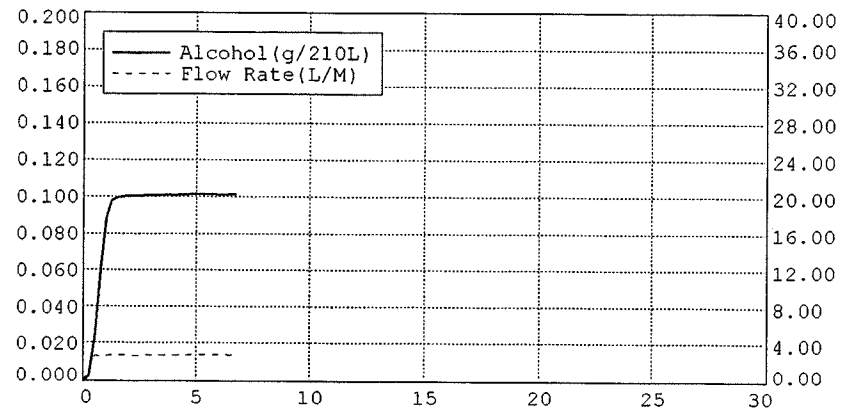
Date: 2/4/2021
 Time: 13:52:26

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 30.09: 0.101
 LOT #: AG924701
 EXPIRATION: 9/4/2021
 TANK PRESSURE: 279 psi

BLANK TEST	0.000	13:53
INTERNAL STANDARD	VERIFIED	13:53
EXTERNAL STANDARD	0.102	13:53
BLANK TEST	0.000	13:54
EXTERNAL STANDARD	0.102	13:55
BLANK TEST	0.000	13:55
EXTERNAL STANDARD	0.102	13:56
BLANK TEST	0.000	13:57
EXTERNAL STANDARD	0.102	13:57
BLANK TEST	0.000	13:58
EXTERNAL STANDARD	0.102	13:58
BLANK TEST	0.000	13:59

Average = 0.1020
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

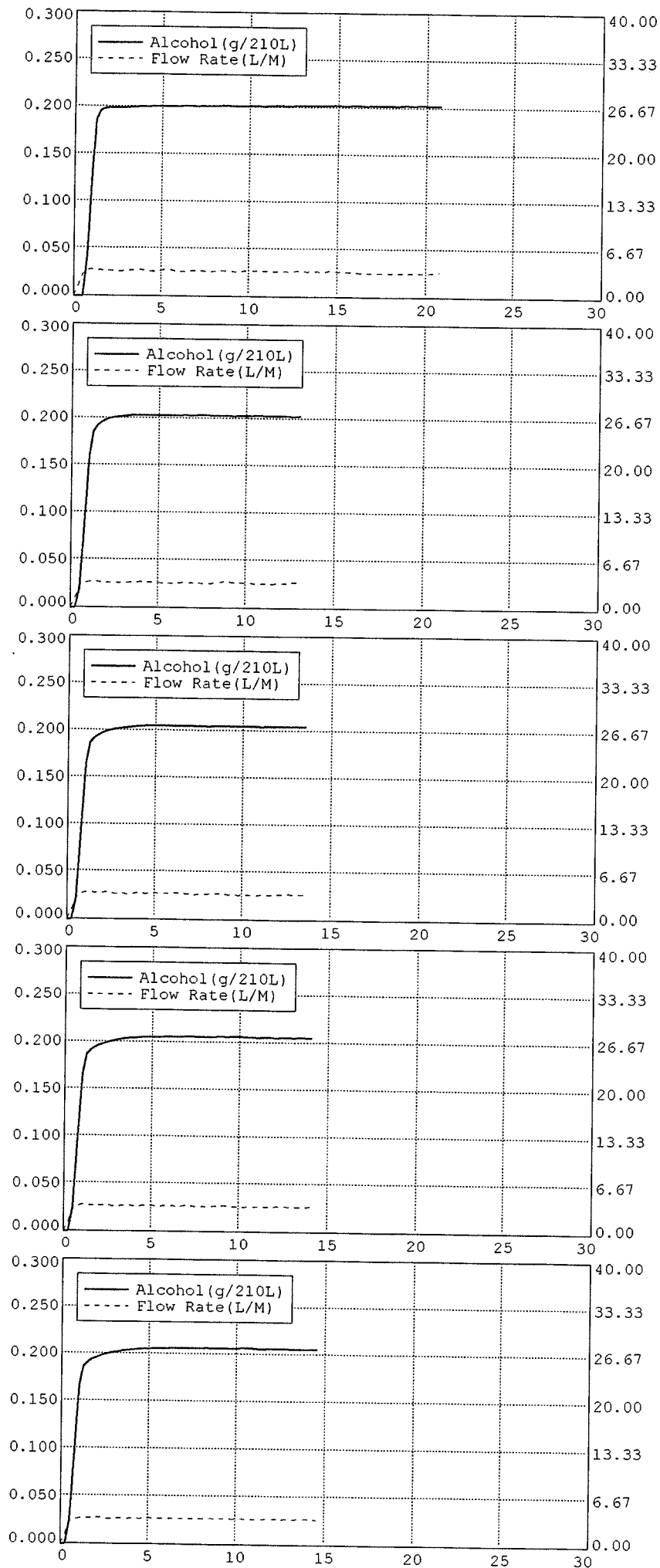
Alaska Department of Public Safety
 DATAMASTER dmt: 100385

Date: 2/4/2021
 Time: 14:01:23

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 19200
 EXPIRATION: 8/6/2021

BLANK TEST	0.000	14:02
INTERNAL STANDARD	VERIFIED	14:02
EXTERNAL STANDARD	0.203	14:03
BLANK TEST	0.000	14:04
EXTERNAL STANDARD	0.203	14:04
BLANK TEST	0.000	14:05
EXTERNAL STANDARD	0.204	14:05
BLANK TEST	0.000	14:06
EXTERNAL STANDARD	0.205	14:06
BLANK TEST	0.000	14:07
EXTERNAL STANDARD	0.206	14:08
BLANK TEST	0.000	14:09

Average = 0.2042
 Std Dev = 0.0013



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100385

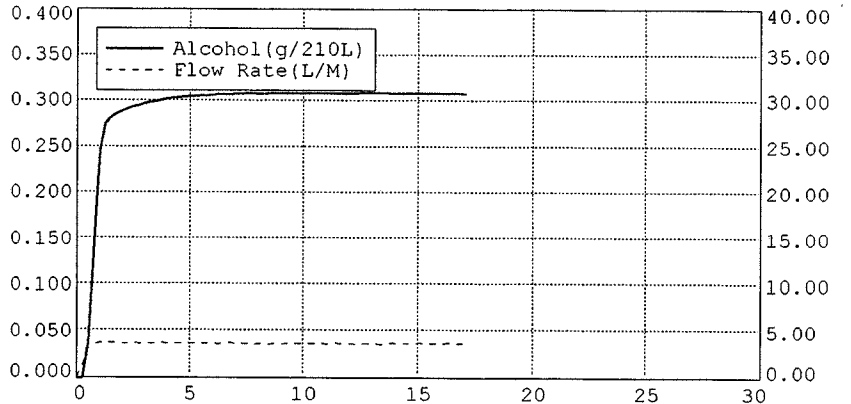
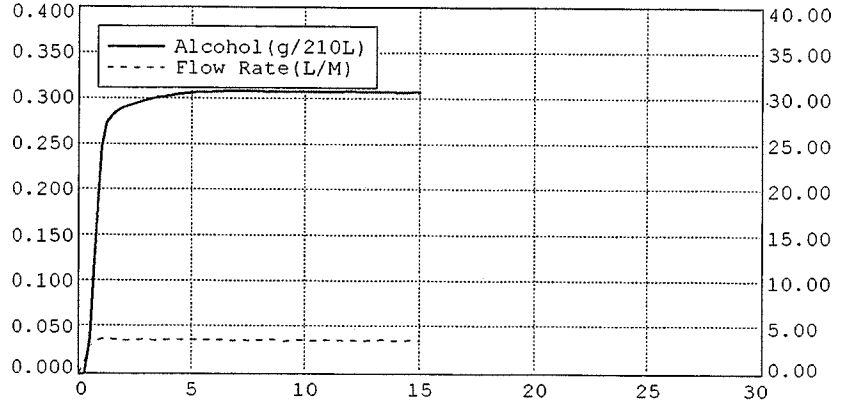
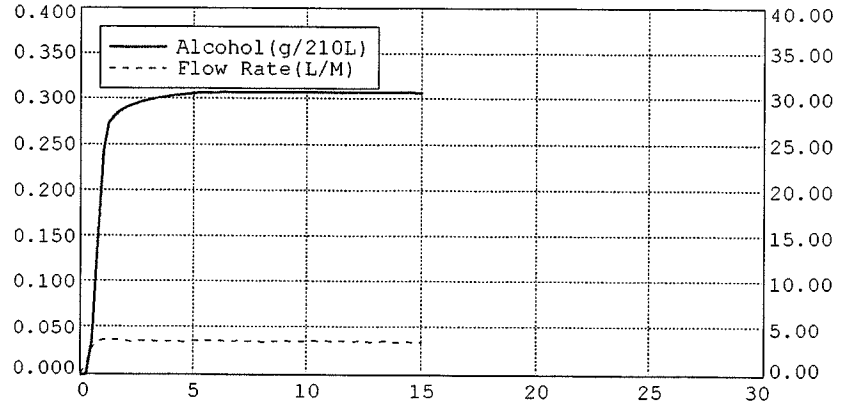
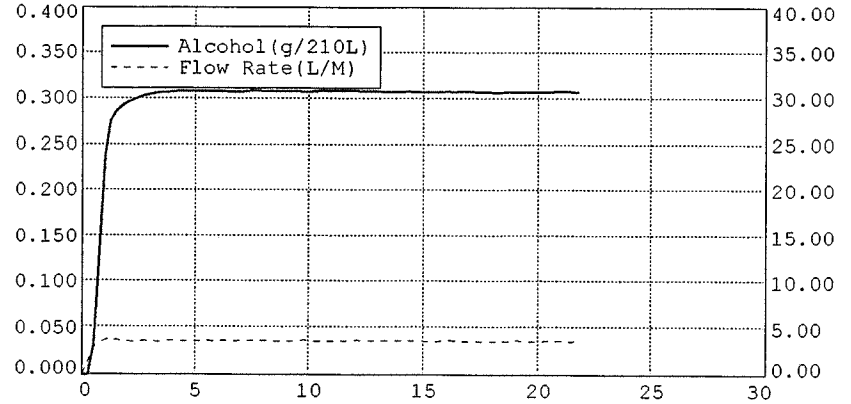
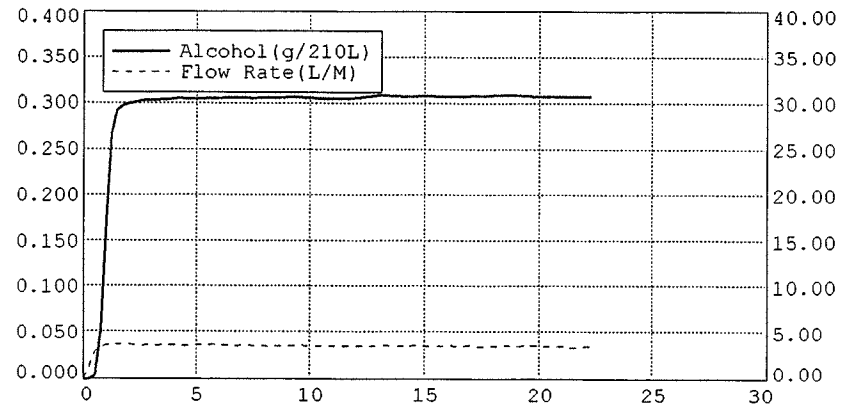
Date: 2/4/2021
 Time: 14:11:49

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:13
INTERNAL STANDARD	VERIFIED	14:13
EXTERNAL STANDARD	0.307	14:13
BLANK TEST	0.000	14:14
EXTERNAL STANDARD	0.307	14:15
BLANK TEST	0.000	14:16
EXTERNAL STANDARD	0.307	14:16
BLANK TEST	0.000	14:17
EXTERNAL STANDARD	0.307	14:17
BLANK TEST	0.000	14:18
EXTERNAL STANDARD	0.308	14:19
BLANK TEST	0.000	14:19

Average = 0.3072
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100385

Date: 2/4/2021
Time: 14:25:20

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

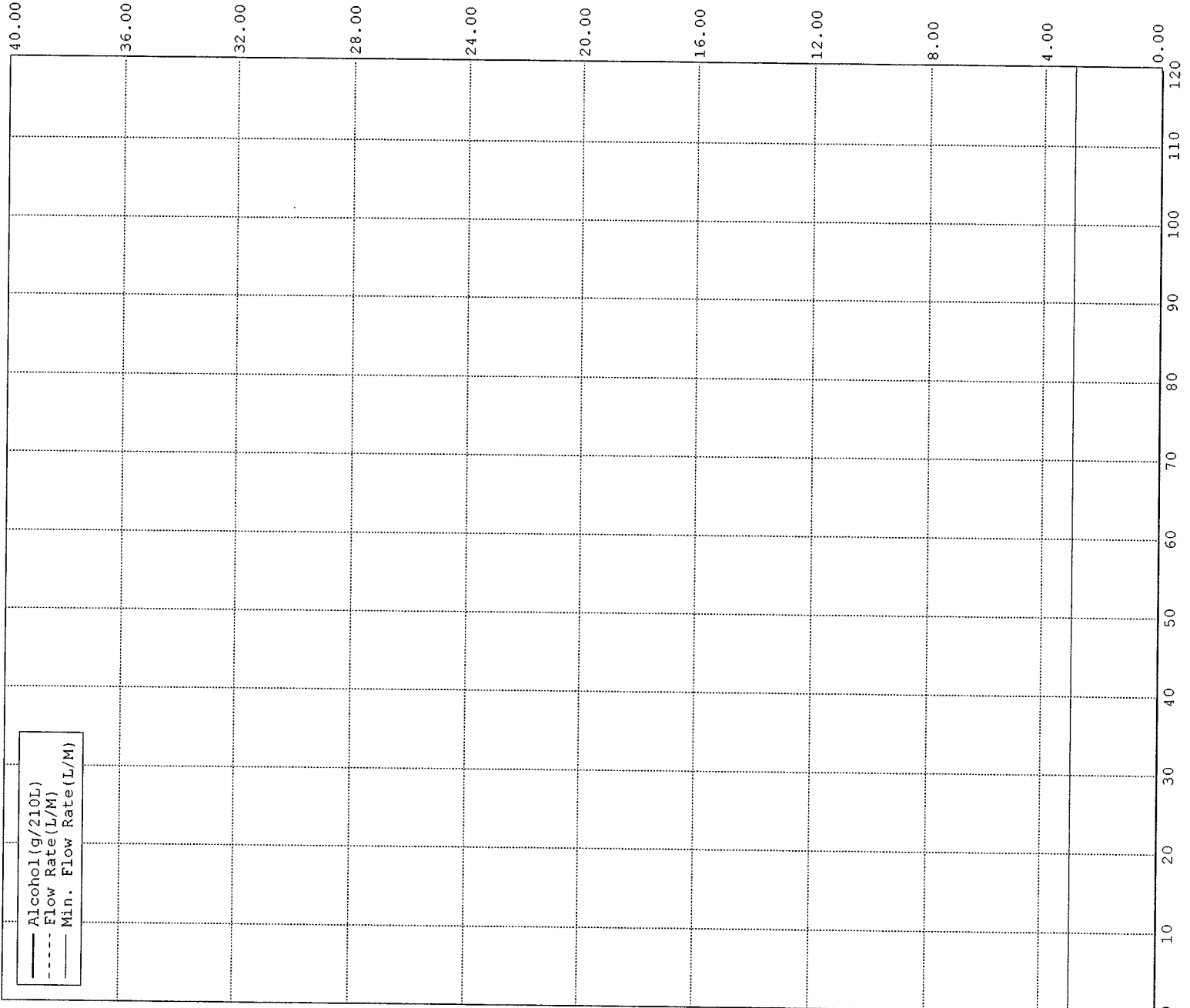
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.10: 0.080
LOT #: AG018102
EXPIRATION: 6/29/2022

DIAGNOSTIC CHECK PASSED 14:27
BLANK TEST 0.000 14:27
INTERNAL STANDARD VERIFIED 14:27
EXTERNAL STANDARD 0.080 14:27
BLANK TEST 0.000 14:28
SUBJECT SAMPLE INCOMPLETE 14:30

JM



SUBJECT TEST

Alaska Department of Public Safety

DATA MASTER dmt: 100385

Date: 2/5/2021
Time: 08:14:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

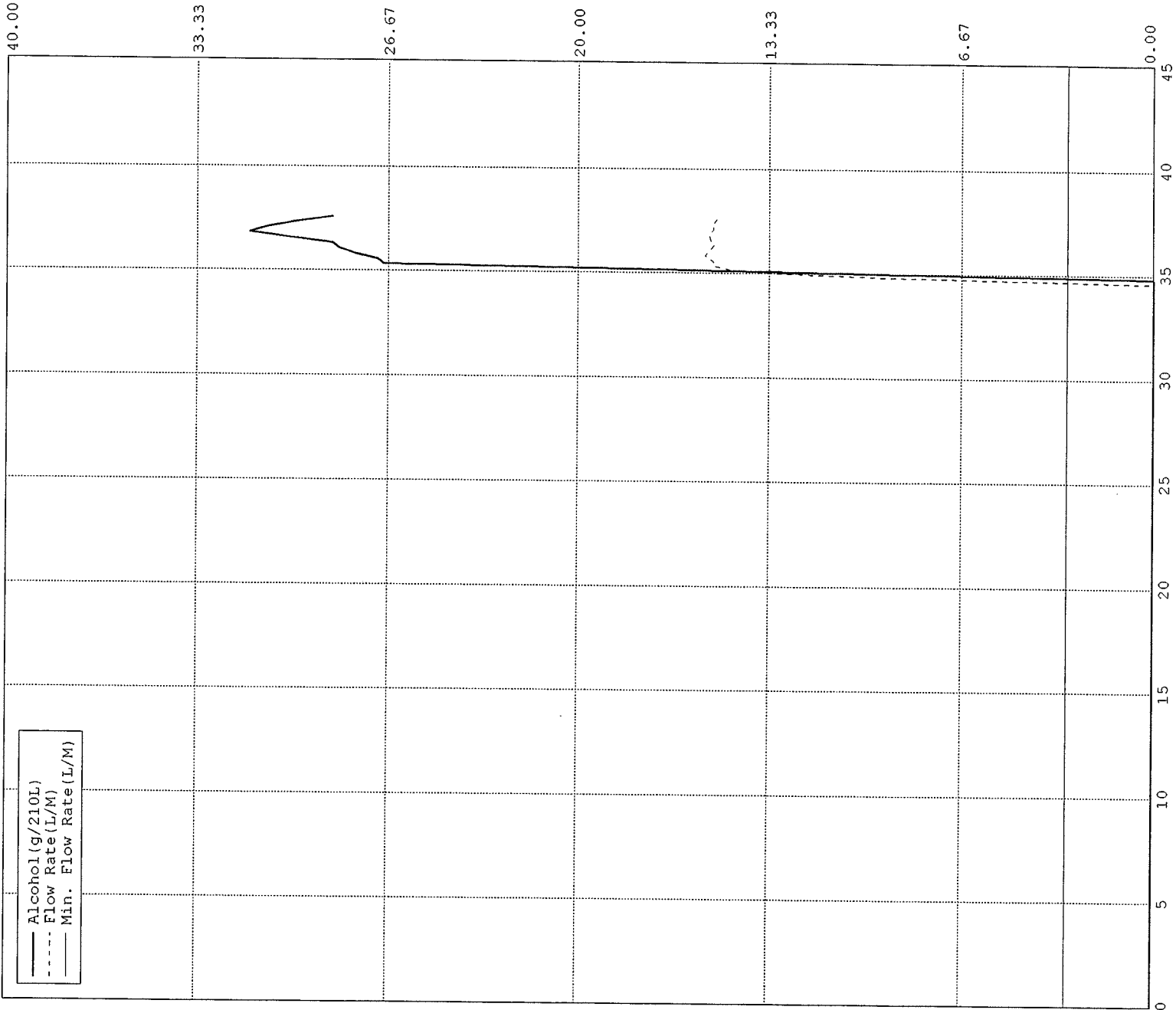
DEPT/AGENCY:
INVALID
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.01: 0.080
LOT #: AG018102
EXPIRATION: 6/29/2022

DIAGNOSTIC CHECK PASSED 08:15
BLANK TEST 0.000 08:15
INTERNAL STANDARD VERIFIED 08:16
EXTERNAL STANDARD 0.080 08:16
BLANK TEST 0.000 08:17
SUBJECT SAMPLE INVALID 08:18

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 2/5/2021
Time: 08:23:01

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 30.01: 0.080
LOT #: AG018102
EXPIRATION: 6/29/2022

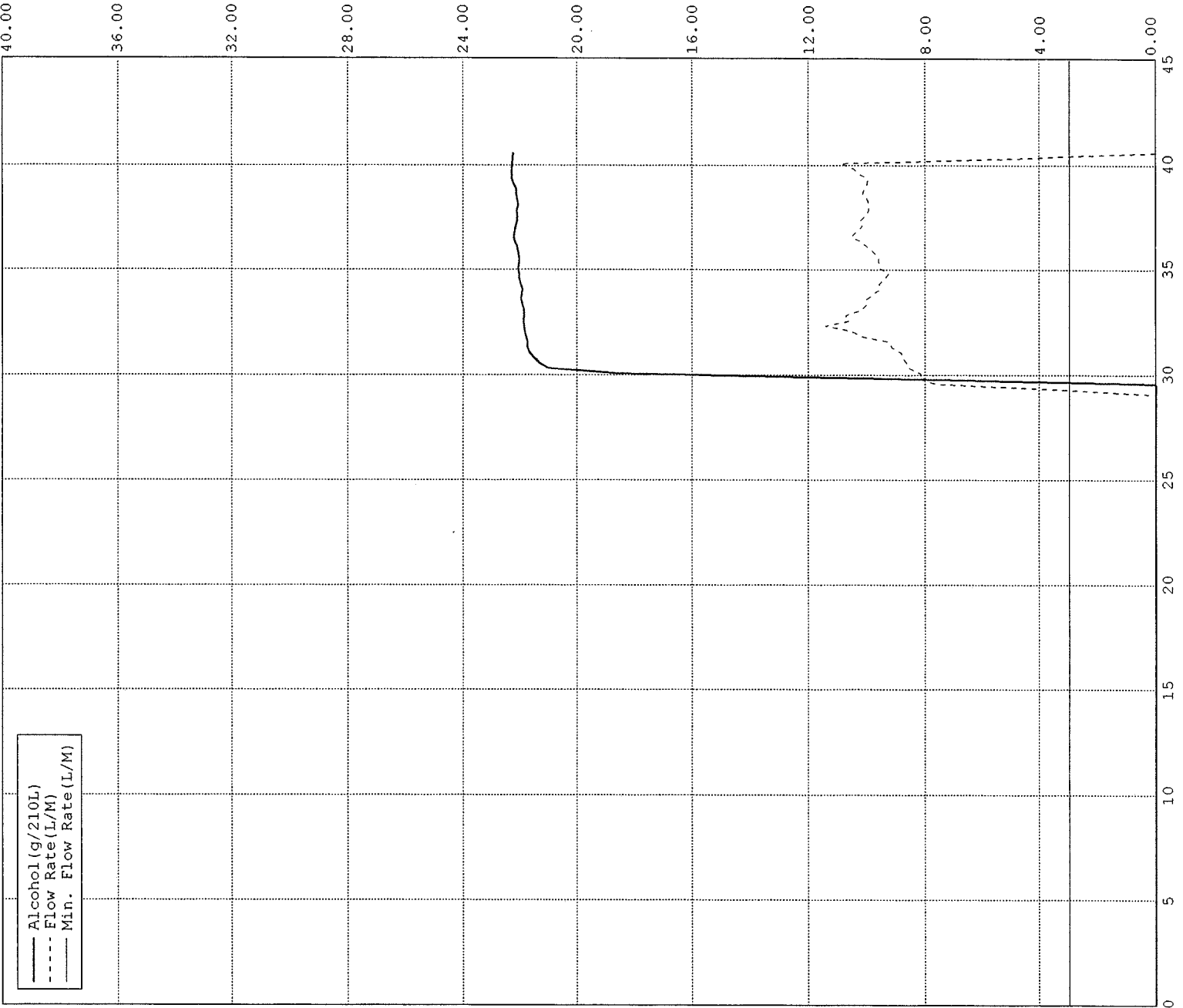
DIAGNOSTIC CHECK	PASSED	08:24
BLANK TEST	0.000	08:24
INTERNAL STANDARD	VERIFIED	08:24
Xq = 0.093 (1.33%)		
EXTERNAL STANDARD	0.080	08:24
X[1] = 0.0803 (-0.0009) (0.0028)		
BLANK TEST	0.000	08:25
SUBJECT SAMPLE	XXX	08:26
X[1] = 0.1116 (-0.0216) (0.0010)		

Interference Detected

Filter 2 average: -0.0006

Filter 3 average: 0.0030

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 2/5/2021
Time: 08:43:40

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

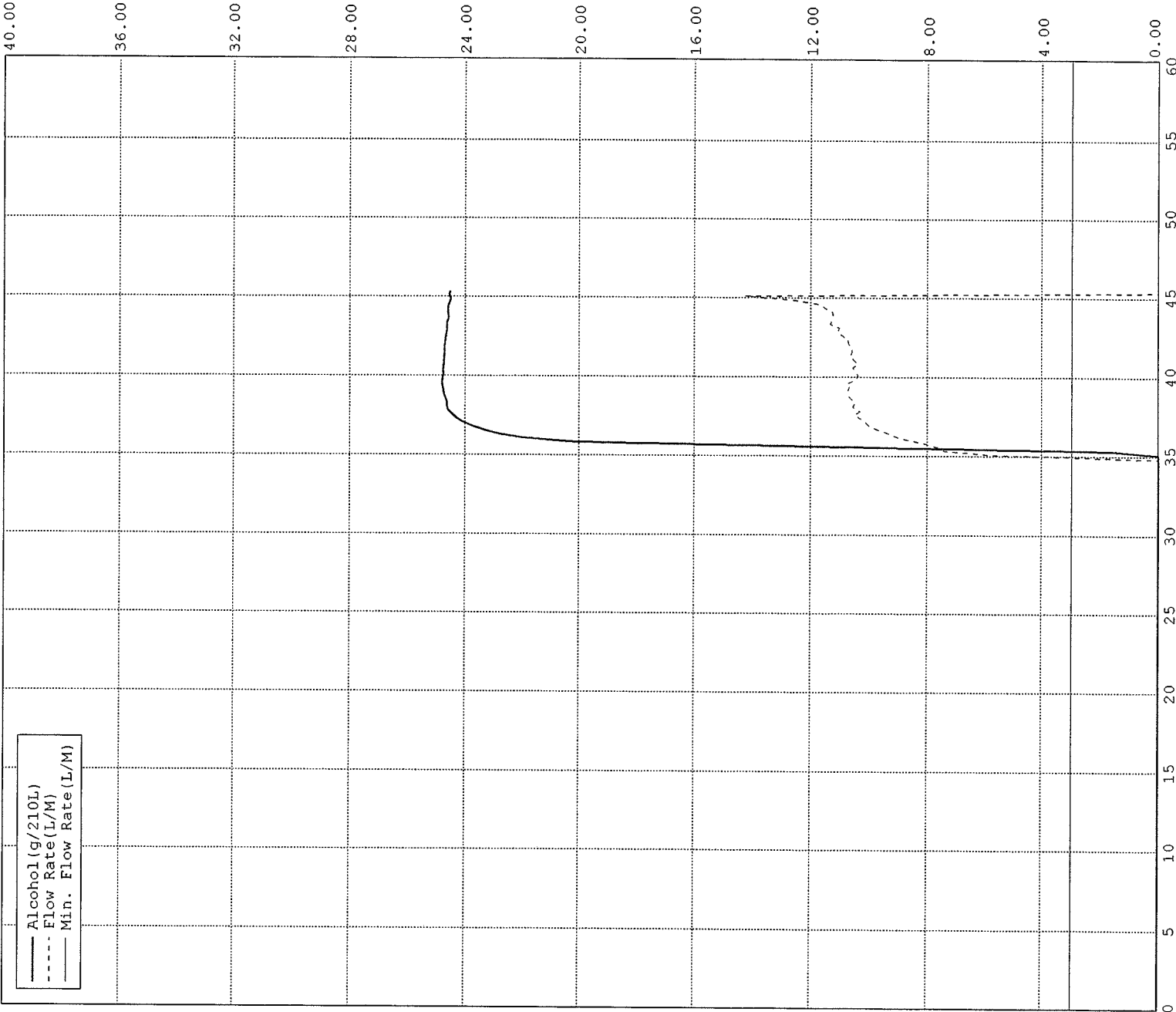
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.02: 0.080
LOT #: AG018102
EXPIRATION: 6/29/2022

DIAGNOSTIC CHECK PASSED 08:44
BLANK TEST 0.000 08:44
INTERNAL STANDARD VERIFIED 08:45
Xq = 0.093 (1.52%) 0.080 08:45
EXTERNAL STANDARD X[1] = 0.0803 (-0.0005) (0.0035) 0.000 08:46
BLANK TEST XXXX 08:47
SUBJECT SAMPLE X[1] = 0.1229 (-0.0251) (0.0021) 0.000 08:47

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 2/5/2021
Time: 08:30:18

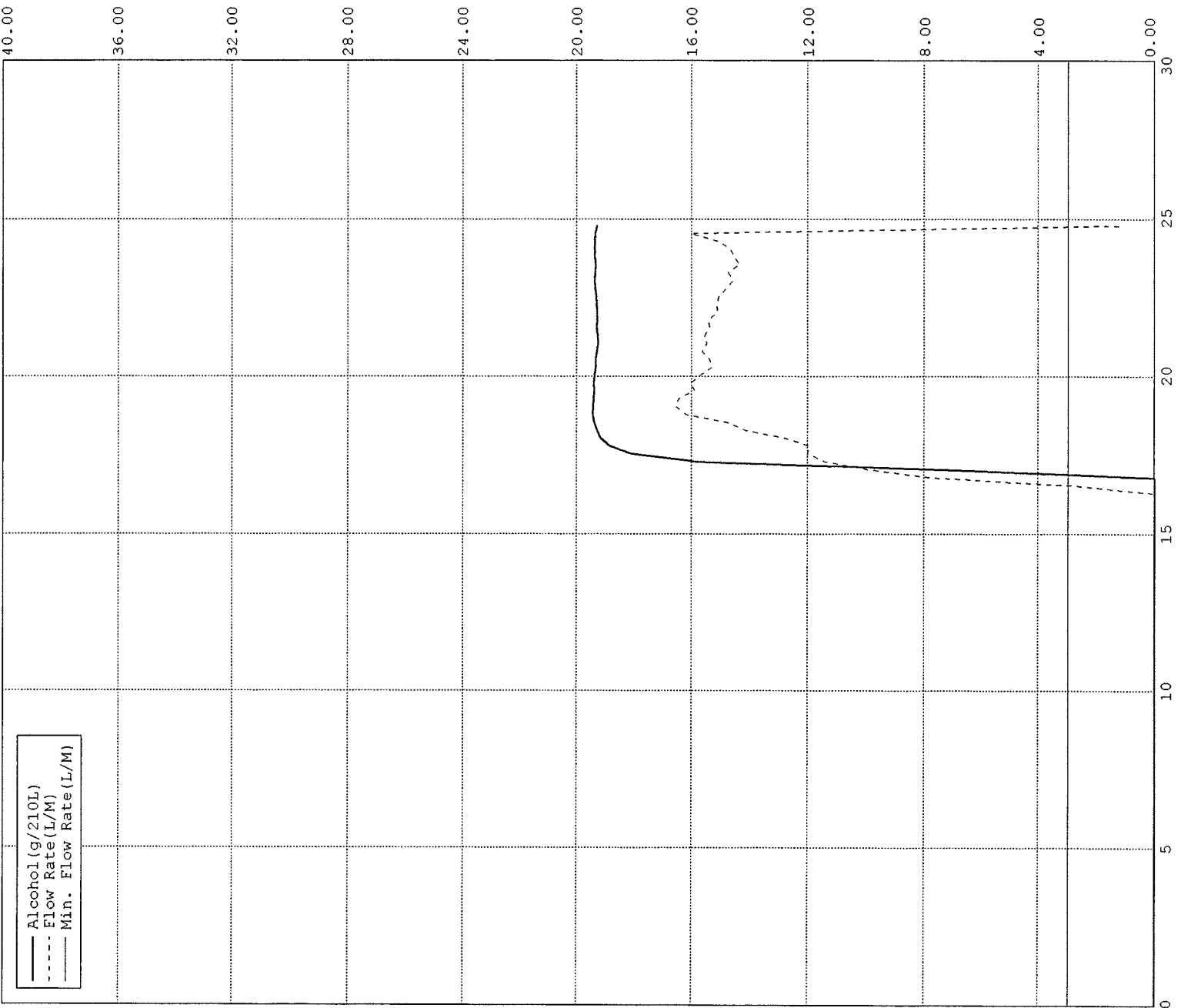
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 30.02: 0.080
LOT #: AG018102
EXPIRATION: 6/29/2022

DIAGNOSTIC CHECK	PASSED	08:31
BLANK TEST	0.000	08:31
INTERNAL STANDARD	VERIFIED	08:31
Xq = 0.093 (1.52%)		
EXTERNAL STANDARD	0.081	08:31
X[1] = 0.0807 (-0.0003) (0.0030)		
BLANK TEST	0.000	08:32
SUBJECT SAMPLE (Vol=1.94L)	0.097	08:33
X[1] = 0.0971 (0.0004) (0.0005)		
BLANK TEST	0.000	08:34
EXTERNAL STANDARD	0.080	08:34
X[1] = 0.0801 (-0.0006) (0.0027)		
BLANK TEST	0.000	08:35



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 2/4/2021
Time: 14:33:17

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

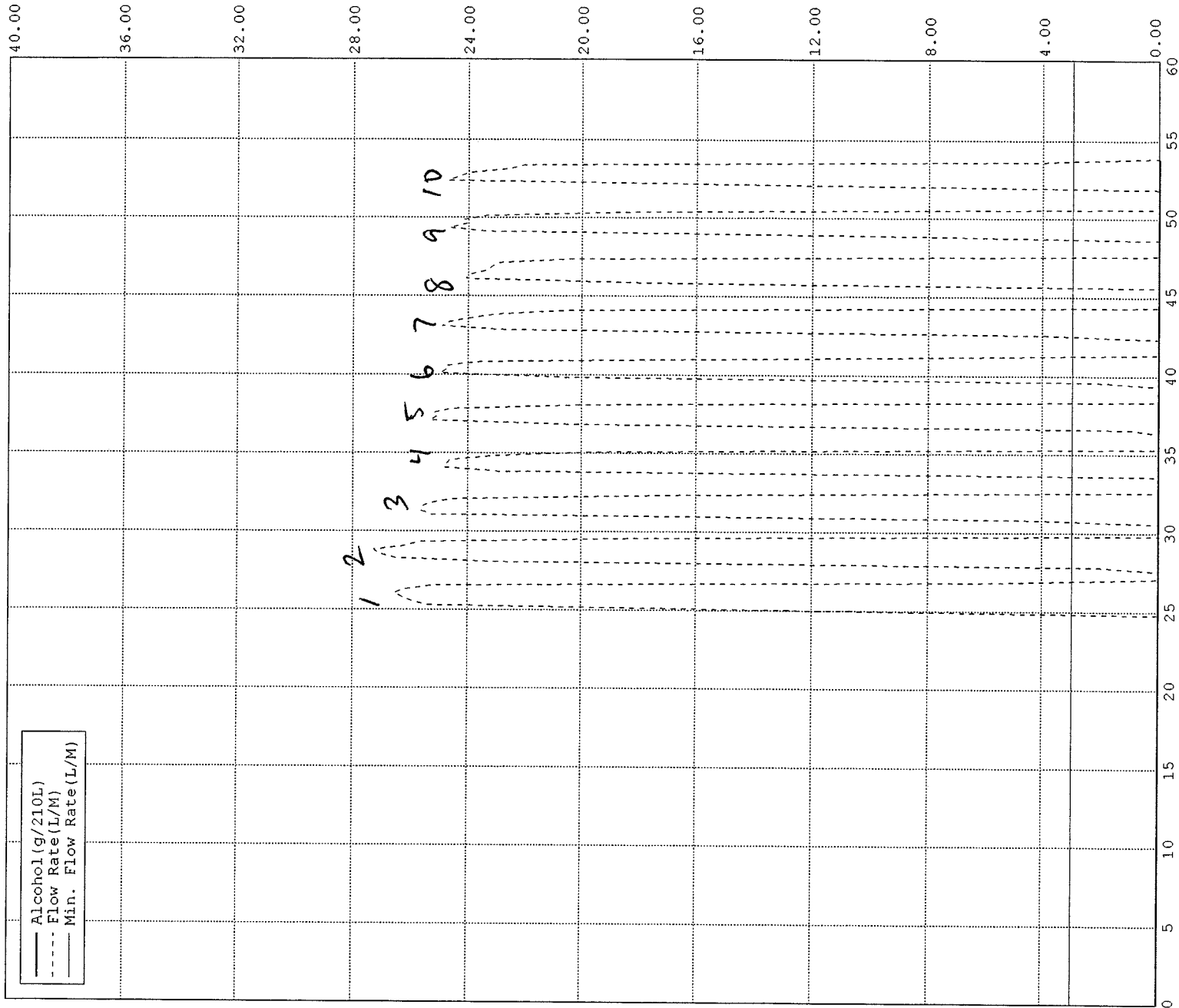
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.11: 0.080
LOT #: AG018102
EXPIRATION: 6/29/2022

DIAGNOSTIC CHECK PASSED 14:34
BLANK TEST 0.000 14:35
INTERNAL STANDARD VERIFIED 14:35
EXTERNAL STANDARD 0.081 14:35
BLANK TEST 0.000 14:36
SUBJECT SAMPLE XXX 14:37

Maximum Attempts Exceeded

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 2/5/2021
Time: 09:11:32

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

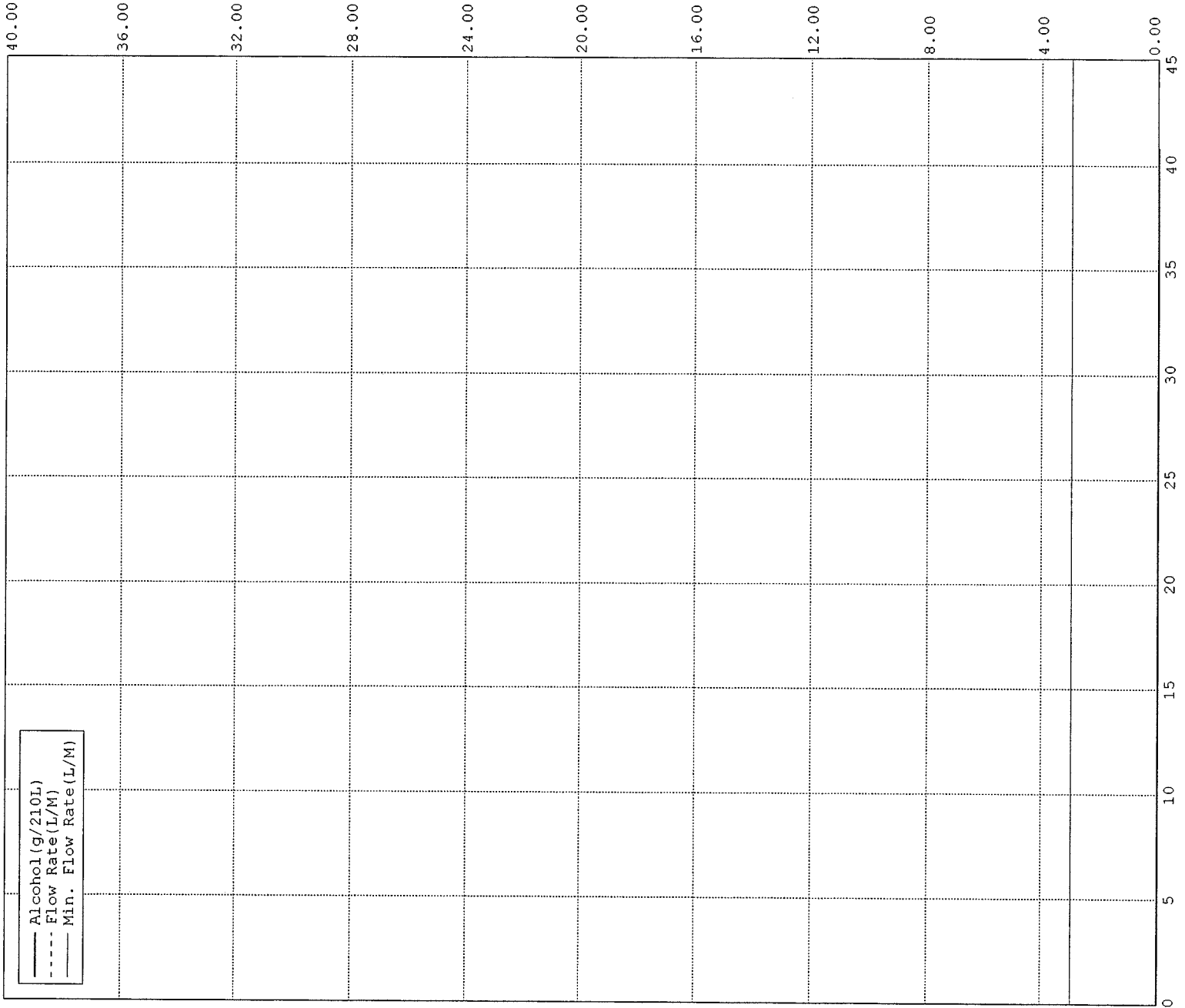
DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.02: 0.080
LOT #: AG018102
EXPIRATION: 6/29/2022

DIAGNOSTIC CHECK PASSED 09:12
BLANK TEST 0.000 09:12
INTERNAL STANDARD VERIFIED 09:12
EXTERNAL STANDARD 0.080 09:13
BLANK TEST 0.000 09:13

RFI DETECTED

JW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 2/5/2021
Time: 09:33:18

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 30.01: 0.080
LOT #: AG018102
EXPIRATION: 6/29/2022

DIAGNOSTIC CHECK	PASSED	09:34
BLANK TEST	0.000	09:34
INTERNAL STANDARD	VERIFIED	09:34
EXTERNAL STANDARD	0.081	09:34
BLANK TEST	0.000	09:35
SUBJECT SAMPLE (Vol=2.38L)	0.000	09:36
BLANK TEST	0.000	09:37
EXTERNAL STANDARD	0.081	09:37
BLANK TEST	0.000	09:38

DM

