

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 100690 Analyst Derek Walton Start Date 12/04/2021

Diagnostic Test (attached)

Internal Standard value $\leq 3.00\%$

Voltage Checks

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)

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 1.5 L (1.3L to 1.7L)

Linearity Test (attached)

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 A6018102 Exp 06/29/22

iv. 0.100g/210L Mnf Airgas Lot A6924701 Exp 09/04/21

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

Simulator S/N DE4161 Date Calibrated 05/08/20

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

Simulator S/N DE5298 Date Calibrated 05/08/20

Functional Tests (attached)

Incomplete

Invalid

Interference

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

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

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

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

iii. Negative Control - Mnf Walton 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: 100690

Date: 02/04/2021
Time: 13:35:52

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 43.9°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.97 V PASSED
(1.18 V - 2.76 V)
Cooler Voltage = 1.80 V PASSED
(1.09 V - 2.53 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 517 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 30.1 in

PUMP INFO

Flow Rate = 4.402 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 ✓ PASSED
Xq = 0.104 0.25% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100690

Date: 02/04/2021
Time: 1:46 PM

Temperatures (°C)
Sample Cell: 48.9°C
Breath Tube: 45.4°C

Current Barometer 30.1 in
Volume (Ltr) 1.57

Settings
Lamp: 2.05 V
Bias: 79 V
Cooler: 1.88 V
Chopper: 524 Hz

Voltages (V)
Flow: 1.05 V
Detector: 0.040 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 09/17/2020
Time: 14:33:31

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca = 0.1000
CAL = 0.974311 0.800 <= CAL < 1.200
b1 = 0.0005 0.0000 <= b1 < 0.0040
b2 = 0.0041 0.0010 <= b2 < 0.0100
b3 = 0.0007 0.0000 <= b3 < 0.0040
Xq = 0.1040 0.0500 <= Xq < 0.2000
a21 = 1.134840 1.050 <= a21 < 1.300
a31 = 0.432353 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100690

Date: 02/04/2021
Time: 13:48:25

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

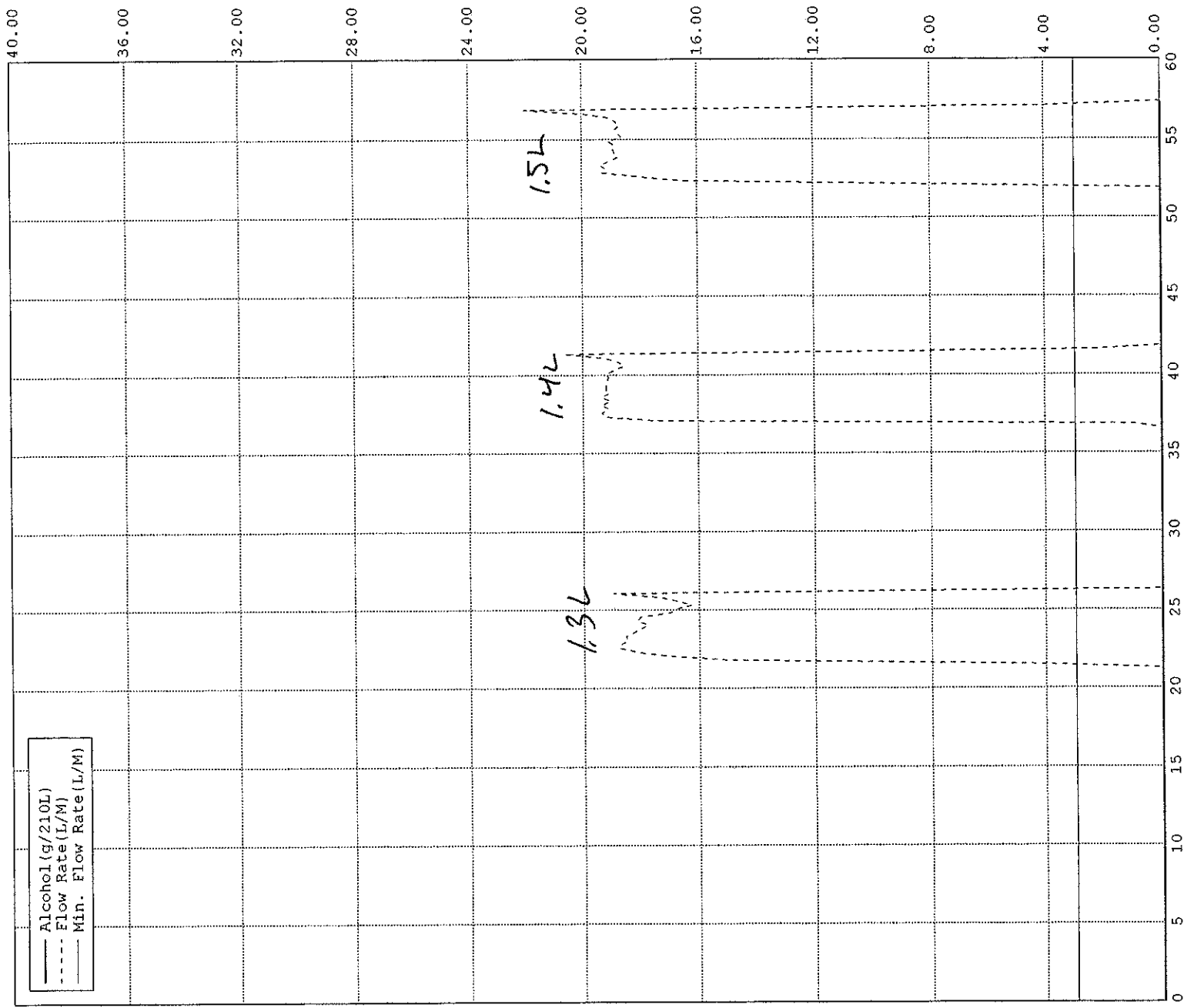
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.10: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	13:52
BLANK TEST	0.000	13:52
INTERNAL STANDARD	VERIFIED	13:53
EXTERNAL STANDARD	0.078	13:53
BLANK TEST	0.000	13:54
SUBJECT SAMPLE (Vol=1.56L)	0.000	13:55
BLANK TEST	0.000	13:56
EXTERNAL STANDARD	0.078	13:56
BLANK TEST	0.000	13:57



LINEARITY CHECK

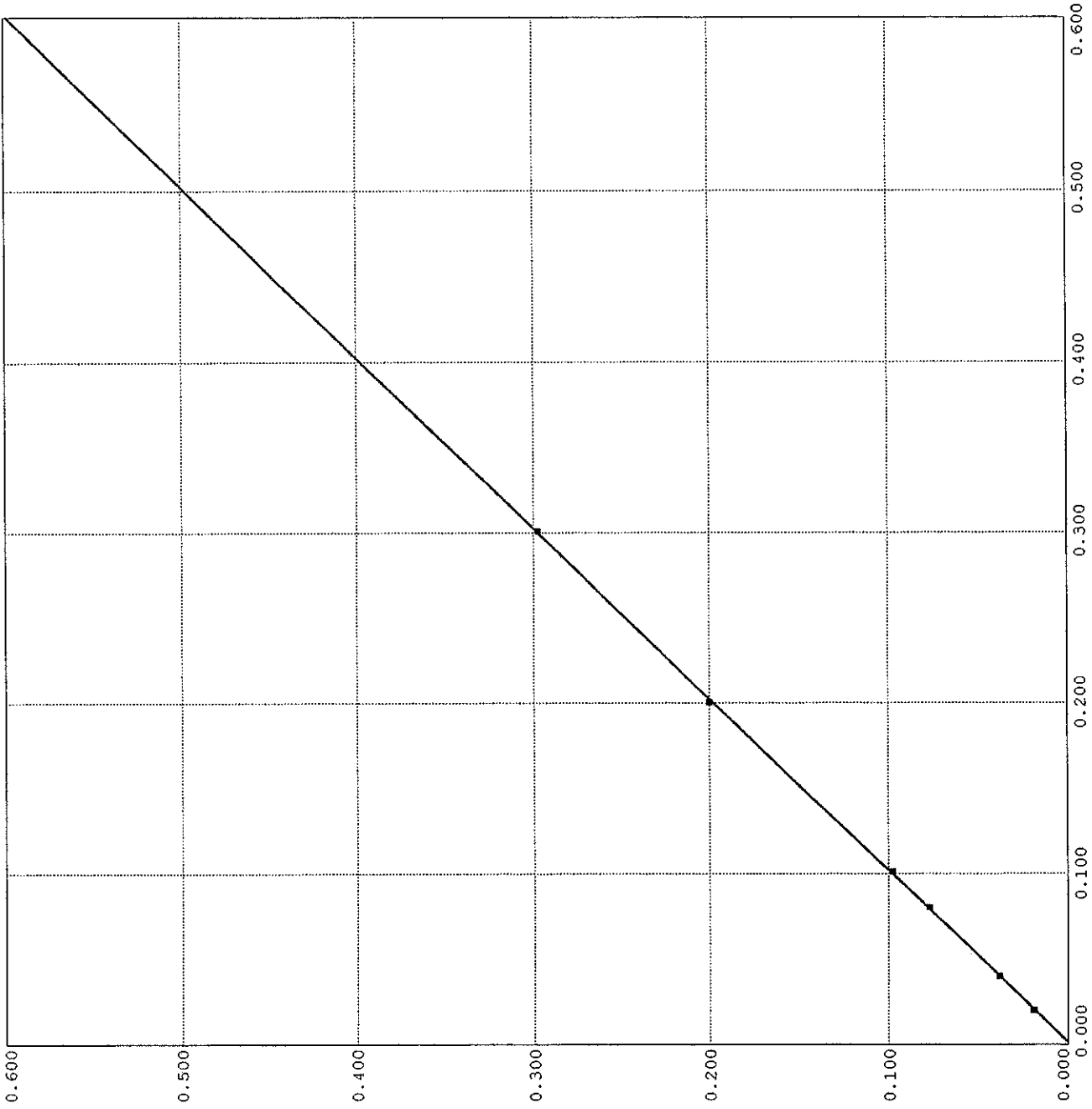
 Alaska Department of Public Safety
 DATAMASTER dmt: 100690

Date: 02/04/2021
 Time: 14:03:05

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0198	0.0004
0.040	0.0392	0.0004
0.080	0.0780	0.0000
0.101	0.0988	0.0004
0.200	0.2008	0.0004
0.300	0.2982	0.0004

SLOPE = 0.999431
 R² = 0.999878



DW

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100690

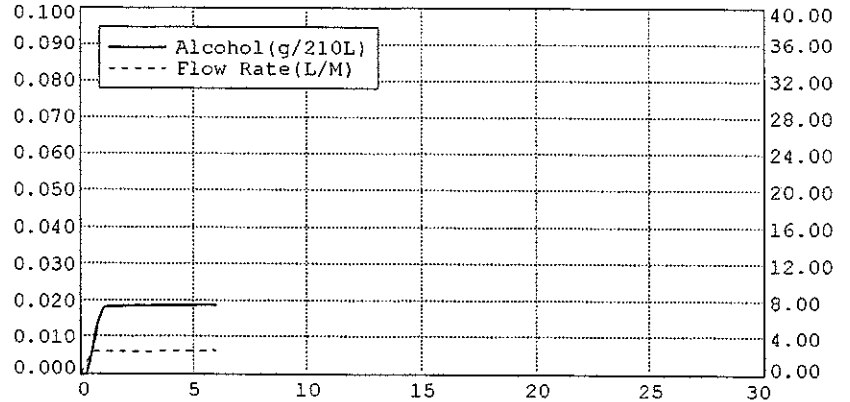
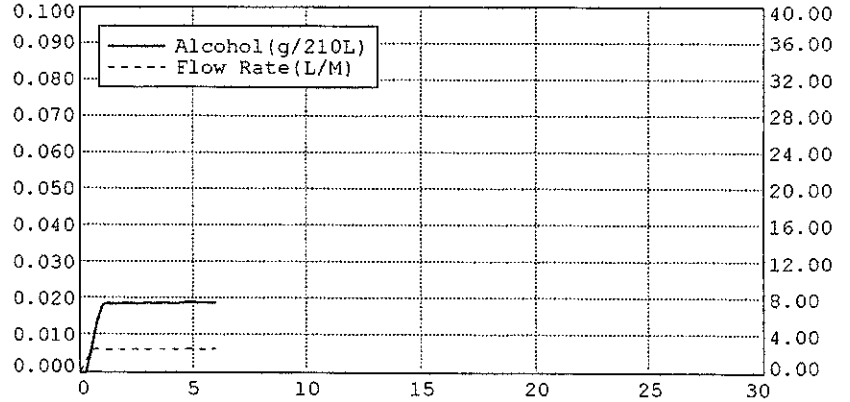
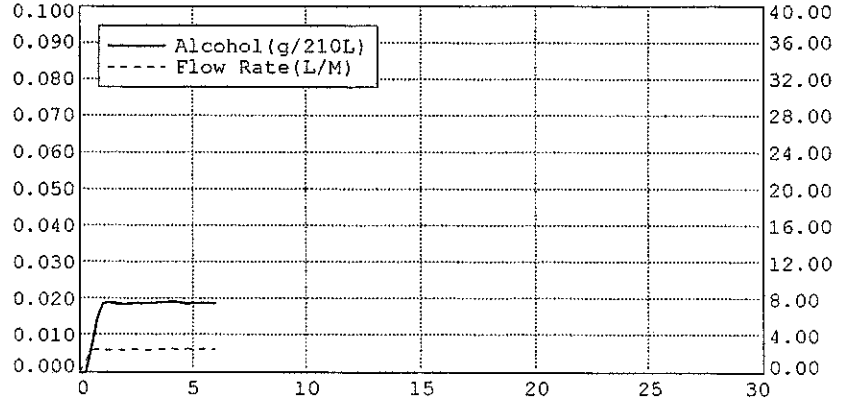
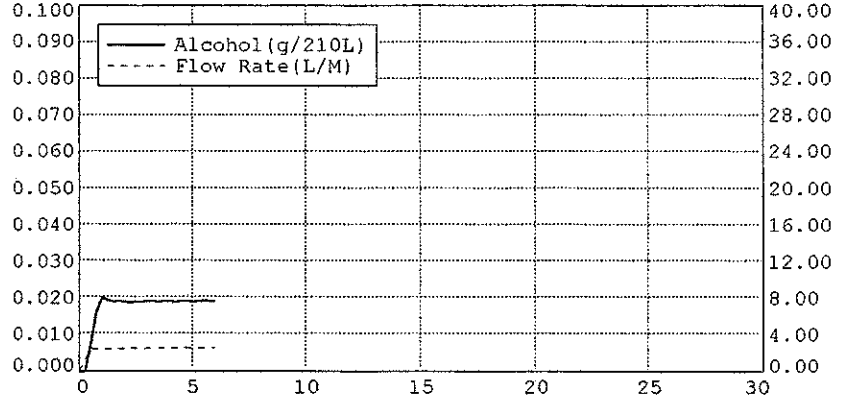
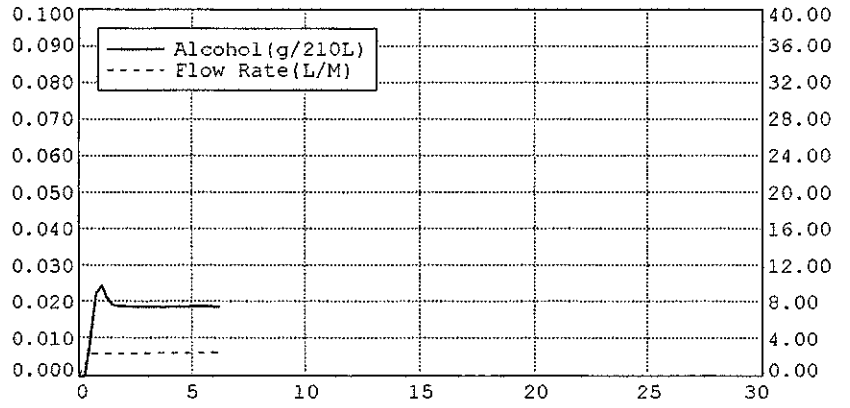
Date: 02/04/2021
Time: 14:03:07

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 30.10: 0.020
LOT #: AG928203
EXPIRATION: 10/09/2021
TANK PRESSURE: 700 psi

BLANK TEST	0.000	14:04
INTERNAL STANDARD	VERIFIED	14:05
EXTERNAL STANDARD	0.019	14:05
BLANK TEST	0.000	14:06
EXTERNAL STANDARD	0.020	14:06
BLANK TEST	0.000	14:07
EXTERNAL STANDARD	0.020	14:07
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.020	14:08
BLANK TEST	0.000	14:09
EXTERNAL STANDARD	0.020	14:09
BLANK TEST	0.000	14:10

Average = 0.0198
Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100690

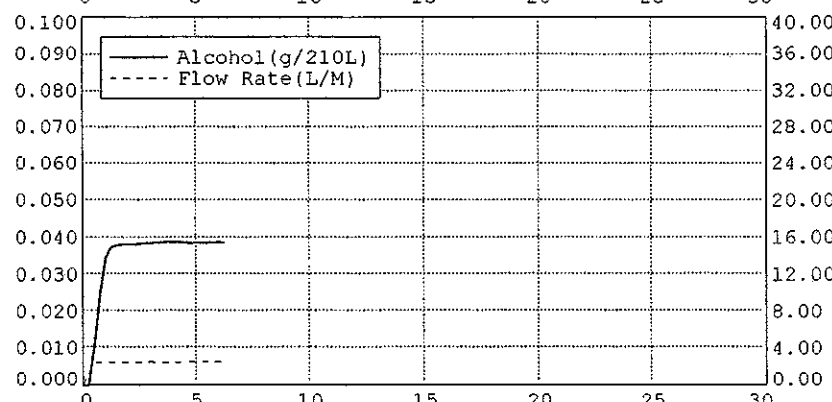
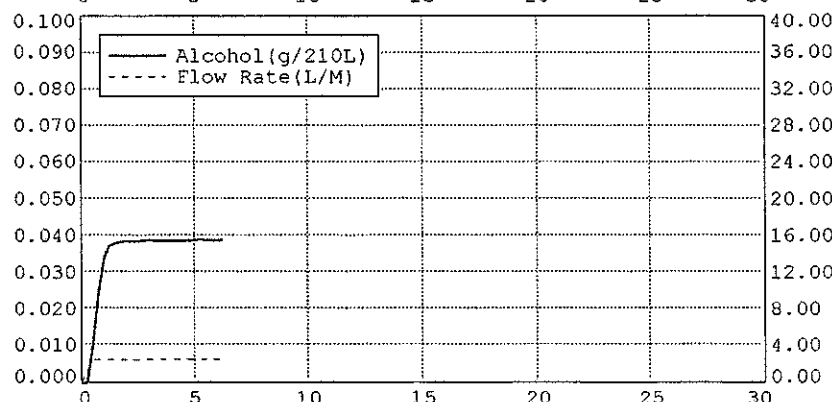
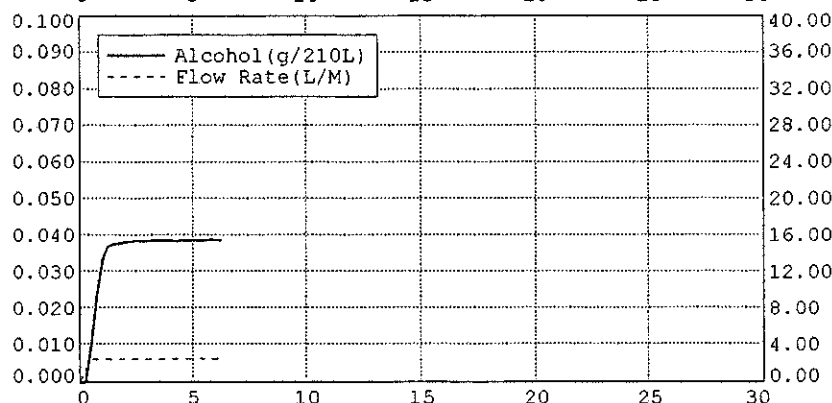
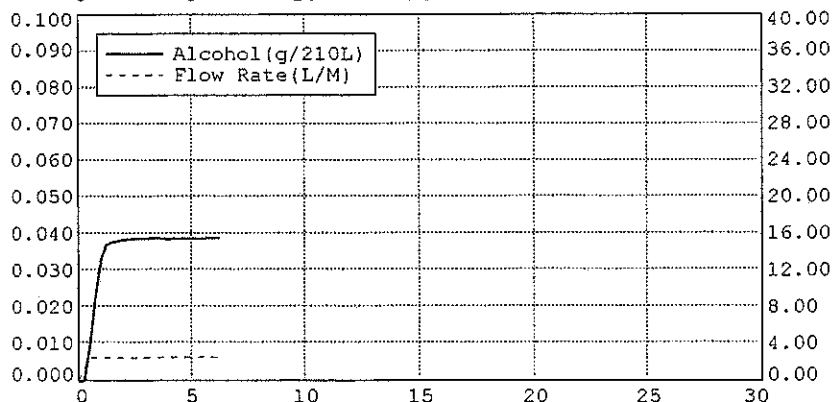
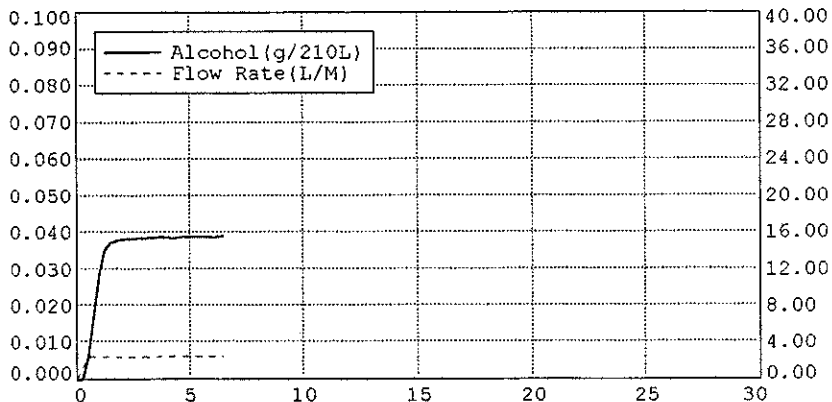
Date: 02/04/2021
 Time: 14:12:54

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 30.10: 0.040
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 641 psi

BLANK TEST	0.000	14:14
INTERNAL STANDARD	VERIFIED	14:14
EXTERNAL STANDARD	0.039	14:14
BLANK TEST	0.000	14:15
EXTERNAL STANDARD	0.039	14:15
BLANK TEST	0.000	14:16
EXTERNAL STANDARD	0.039	14:16
BLANK TEST	0.000	14:17
EXTERNAL STANDARD	0.040	14:17
BLANK TEST	0.000	14:18
EXTERNAL STANDARD	0.039	14:18
BLANK TEST	0.000	14:19

Average = 0.0392
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100690

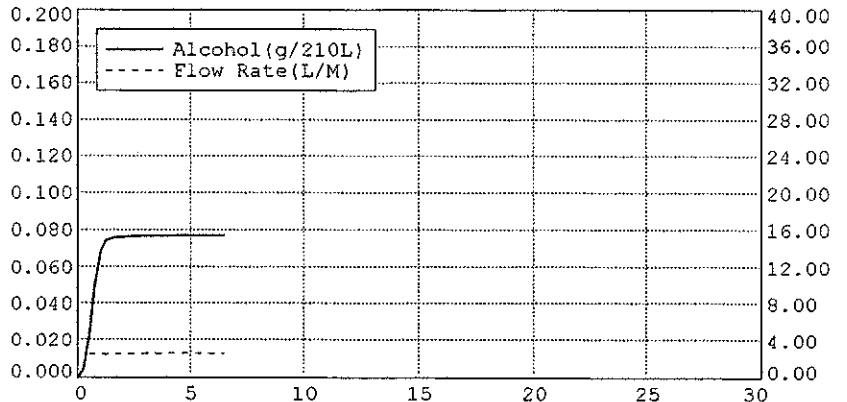
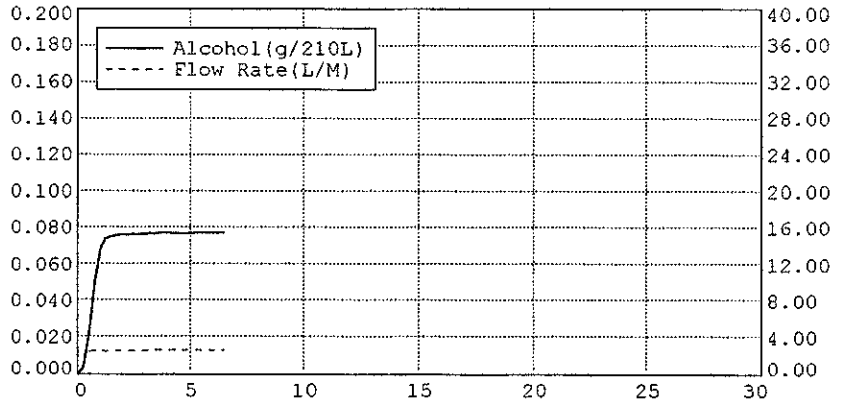
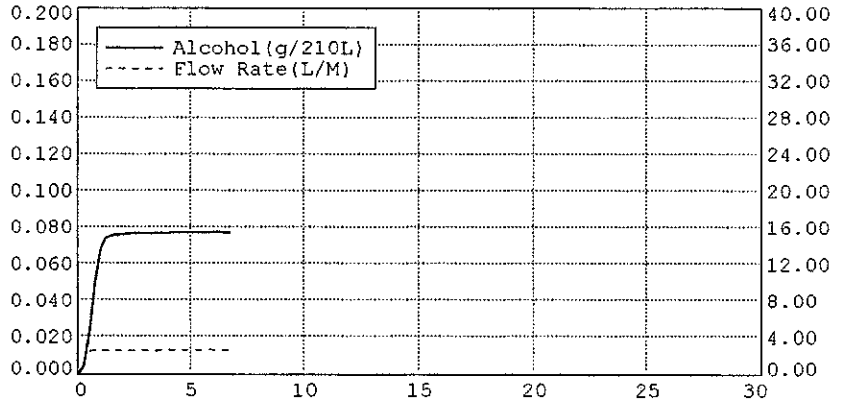
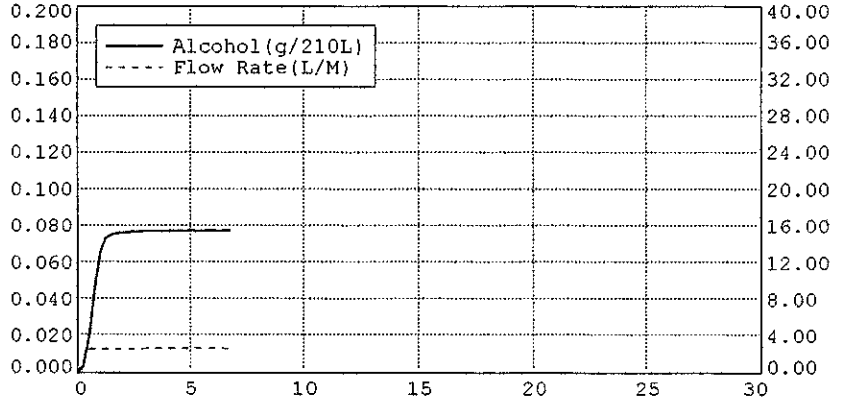
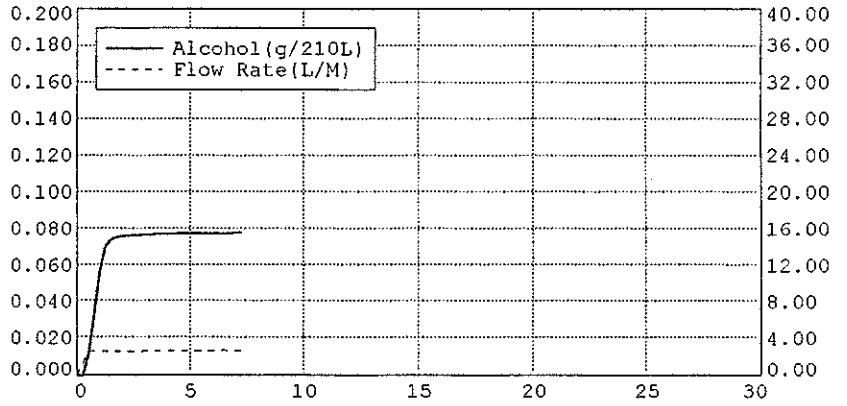
Date: 02/04/2021
Time: 14:20:23

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.11: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022
TANK PRESSURE: 1021 psi

BLANK TEST	0.000	14:21
INTERNAL STANDARD	VERIFIED	14:21
EXTERNAL STANDARD	0.078	14:21
BLANK TEST	0.000	14:22
EXTERNAL STANDARD	0.078	14:23
BLANK TEST	0.000	14:23
EXTERNAL STANDARD	0.078	14:24
BLANK TEST	0.000	14:25
EXTERNAL STANDARD	0.078	14:25
BLANK TEST	0.000	14:26
EXTERNAL STANDARD	0.078	14:26
BLANK TEST	0.000	14:27

Average = 0.0780
Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100690

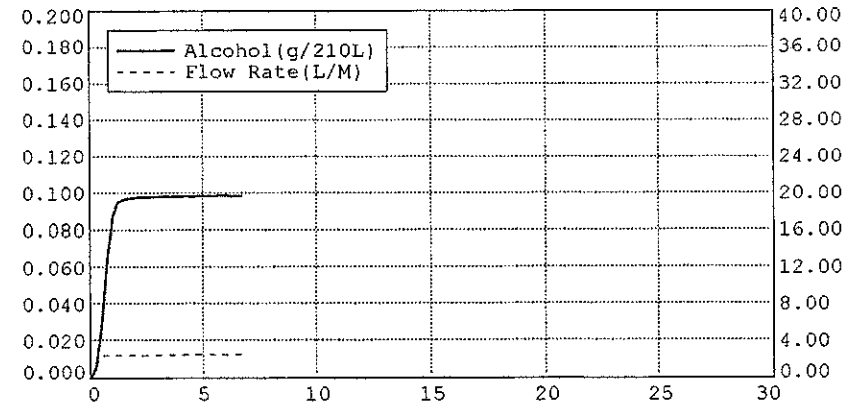
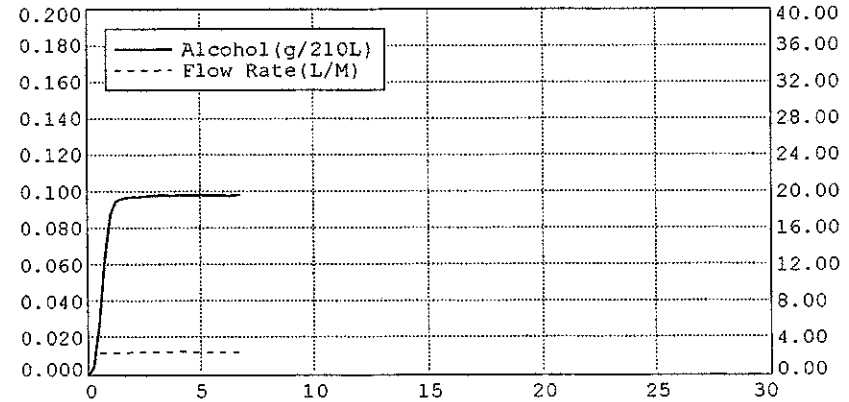
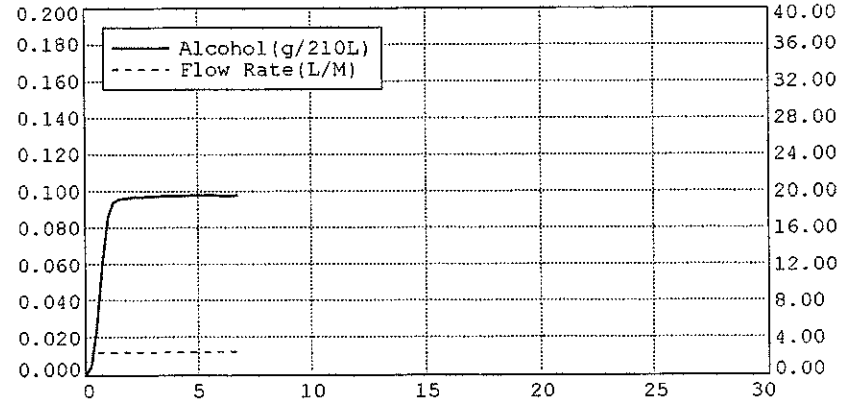
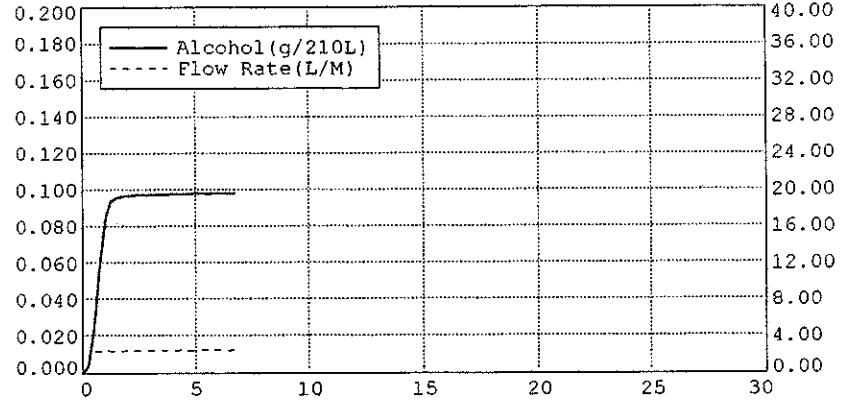
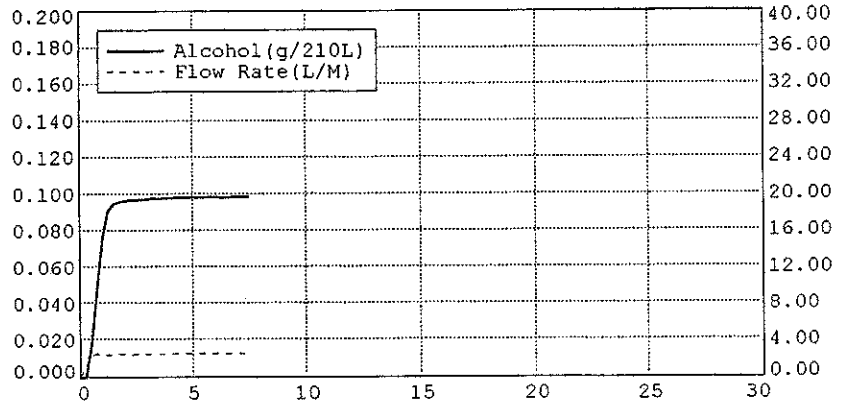
Date: 02/04/2021
Time: 14:28:42

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 30.10: 0.101
LOT #: AG924701
EXPIRATION: 09/04/2021
TANK PRESSURE: 753 psi

BLANK TEST	0.000	14:29
INTERNAL STANDARD	VERIFIED	14:30
EXTERNAL STANDARD	0.099	14:30
BLANK TEST	0.000	14:31
EXTERNAL STANDARD	0.098	14:31
BLANK TEST	0.000	14:32
EXTERNAL STANDARD	0.099	14:32
BLANK TEST	0.000	14:33
EXTERNAL STANDARD	0.099	14:33
BLANK TEST	0.000	14:34
EXTERNAL STANDARD	0.099	14:34
BLANK TEST	0.000	14:35

Average = 0.0988
Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

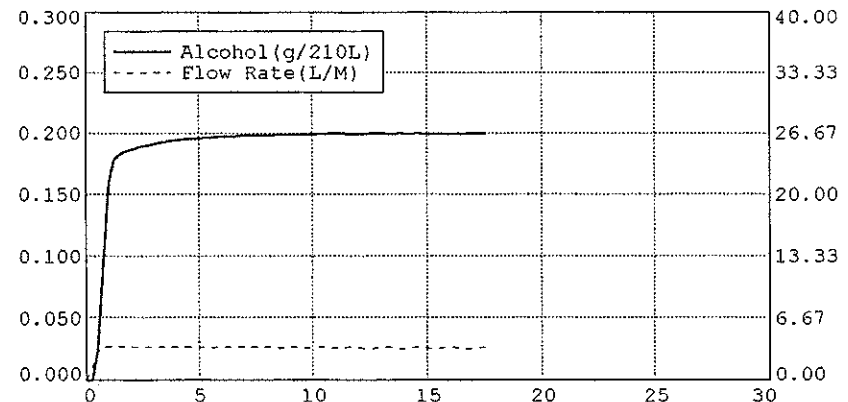
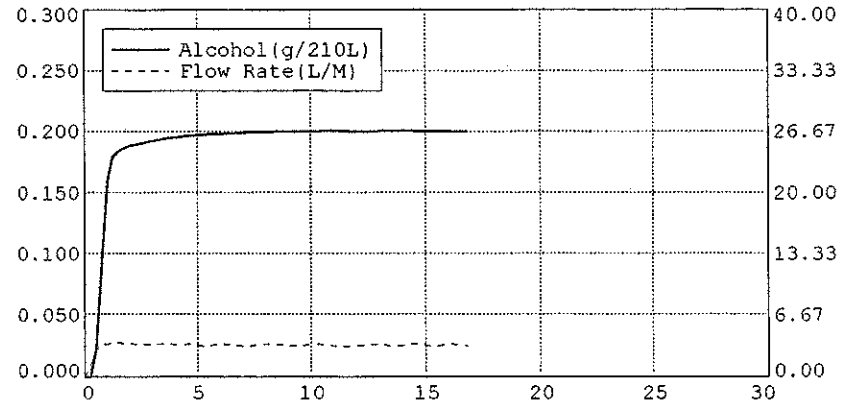
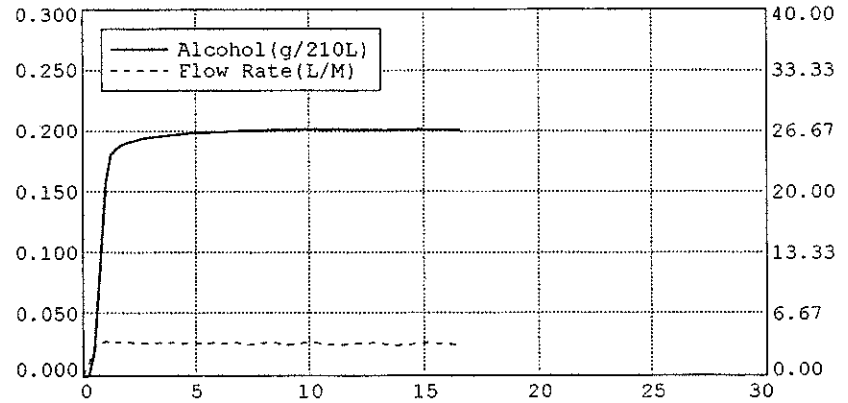
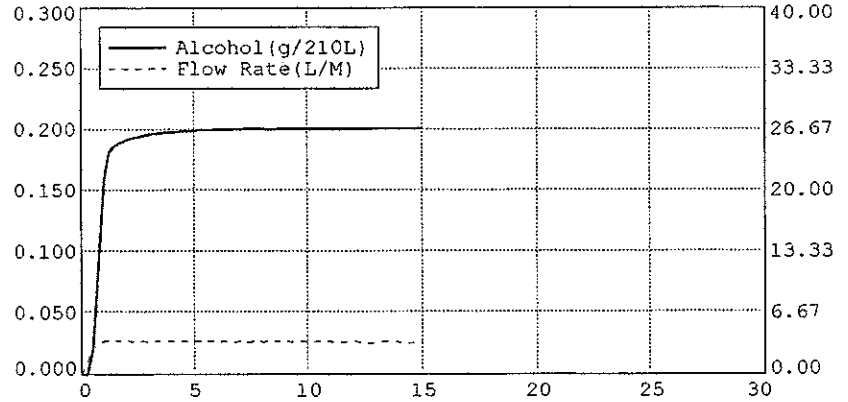
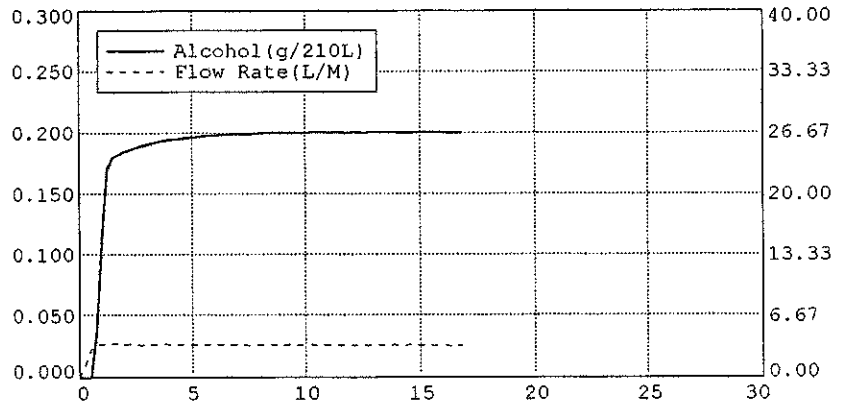
Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 02/04/2021
Time: 14:43:20

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

BLANK TEST	0.000	14:44
INTERNAL STANDARD	VERIFIED	14:44
EXTERNAL STANDARD	0.201	14:44
BLANK TEST	0.000	14:45
EXTERNAL STANDARD	0.201	14:46
BLANK TEST	0.000	14:47
EXTERNAL STANDARD	0.201	14:47
BLANK TEST	0.000	14:48
EXTERNAL STANDARD	0.201	14:48
BLANK TEST	0.000	14:49
EXTERNAL STANDARD	0.200	14:50
BLANK TEST	0.000	14:51

Average = 0.2008
Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

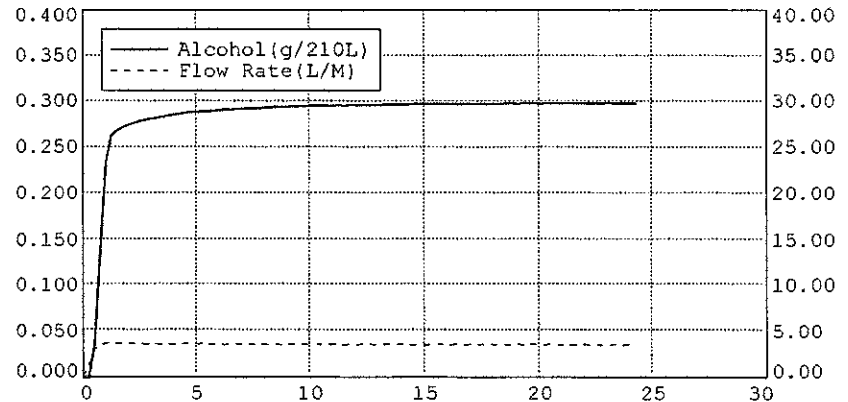
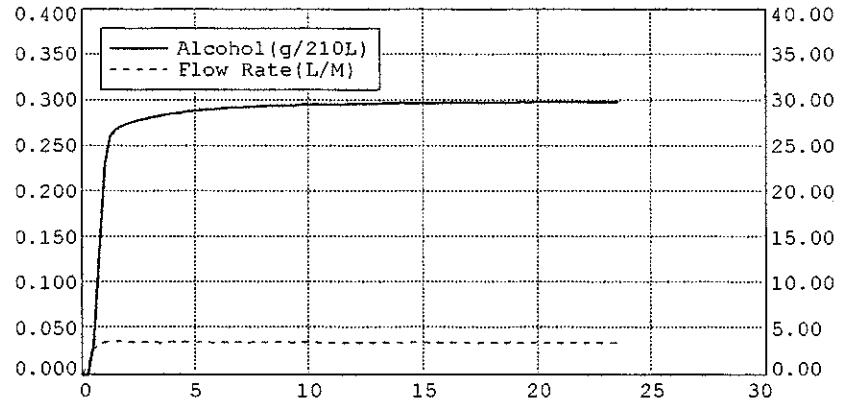
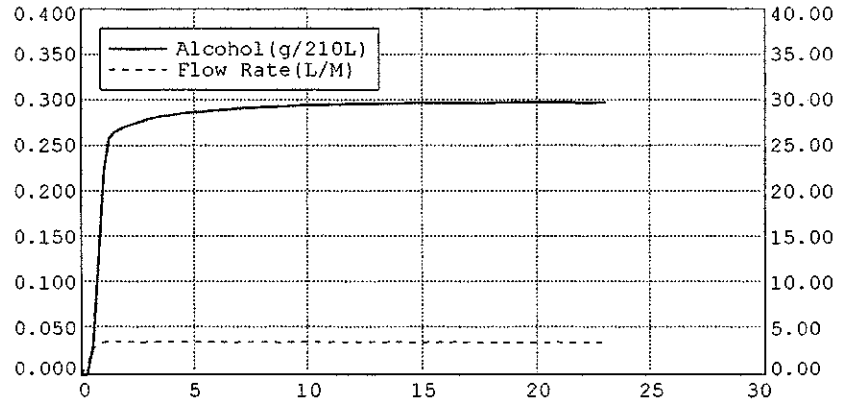
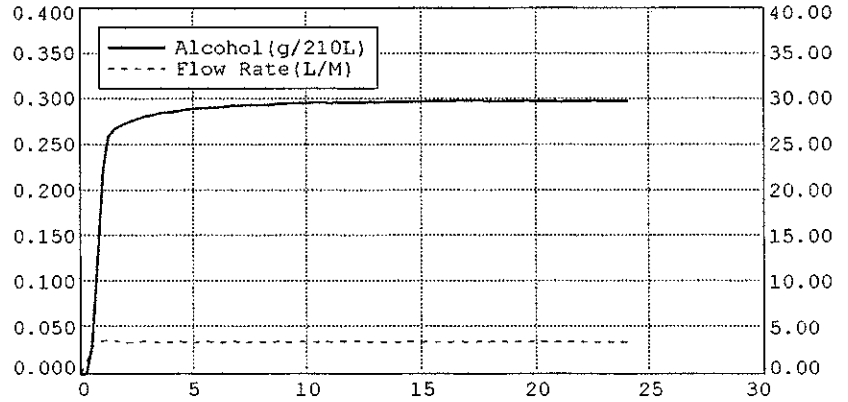
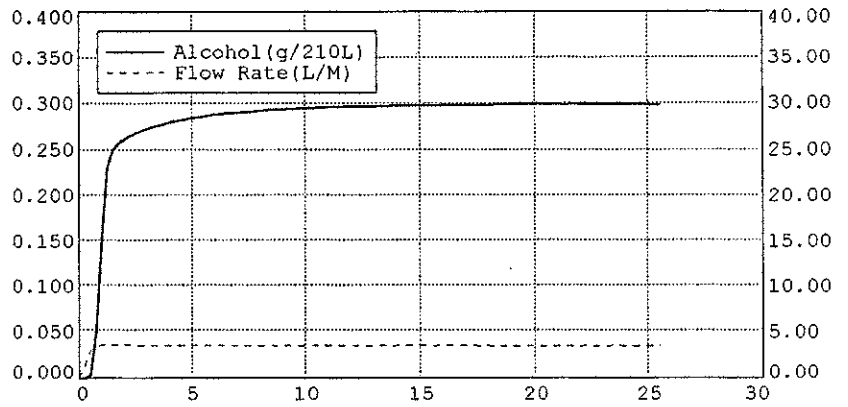
Alaska Department of Public Safety
 DATAMASTER dmt: 100690

Date: 02/04/2021
 Time: 14:52:52

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 19330
 EXPIRATION: 11/13/2021

BLANK TEST	0.000	14:54
INTERNAL STANDARD	VERIFIED	14:54
EXTERNAL STANDARD	0.299	14:54
BLANK TEST	0.000	14:55
EXTERNAL STANDARD	0.298	14:56
BLANK TEST	0.000	14:57
EXTERNAL STANDARD	0.298	14:57
BLANK TEST	0.000	14:58
EXTERNAL STANDARD	0.298	14:59
BLANK TEST	0.000	14:59
EXTERNAL STANDARD	0.298	15:00
BLANK TEST	0.000	15:01

Average = 0.2982
 Std Dev = 0.0004



SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100690

 Date: 02/04/2021
 Time: 15:11:07

SUBJECT NAME:
 TEST TEST
 LICENSE #: XXXX

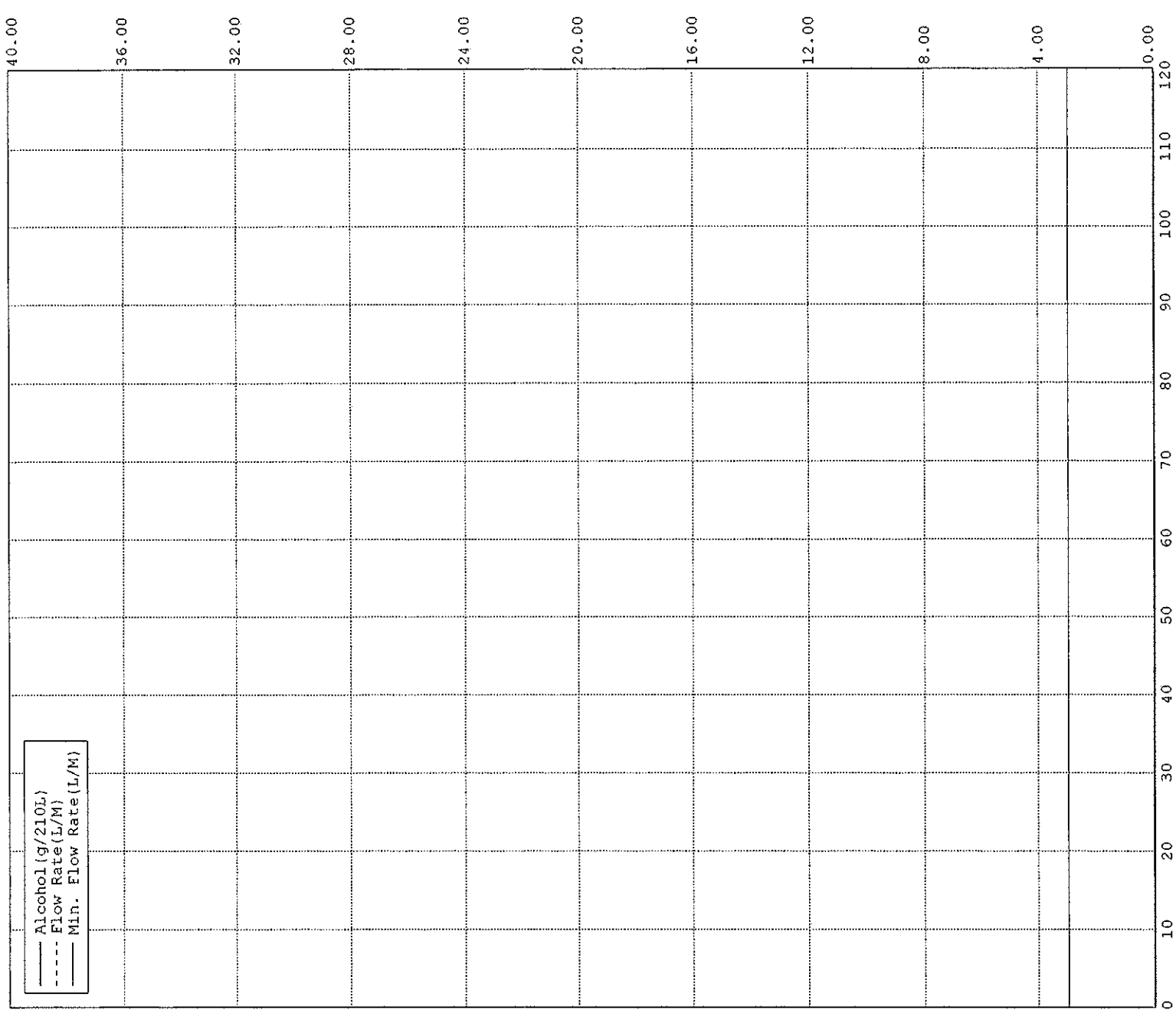
OPERATOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 30.11: 0.080
 LOT #: AG018102
 EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 15:13
 BLANK TEST 0.000 15:13
 INTERNAL STANDARD VERIFIED 15:14
 EXTERNAL STANDARD 0.078 15:14
 BLANK TEST 0.000 15:15
 SUBJECT SAMPLE INCOMPLETE 15:17

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 02/05/2021
Time: 08:46:53

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

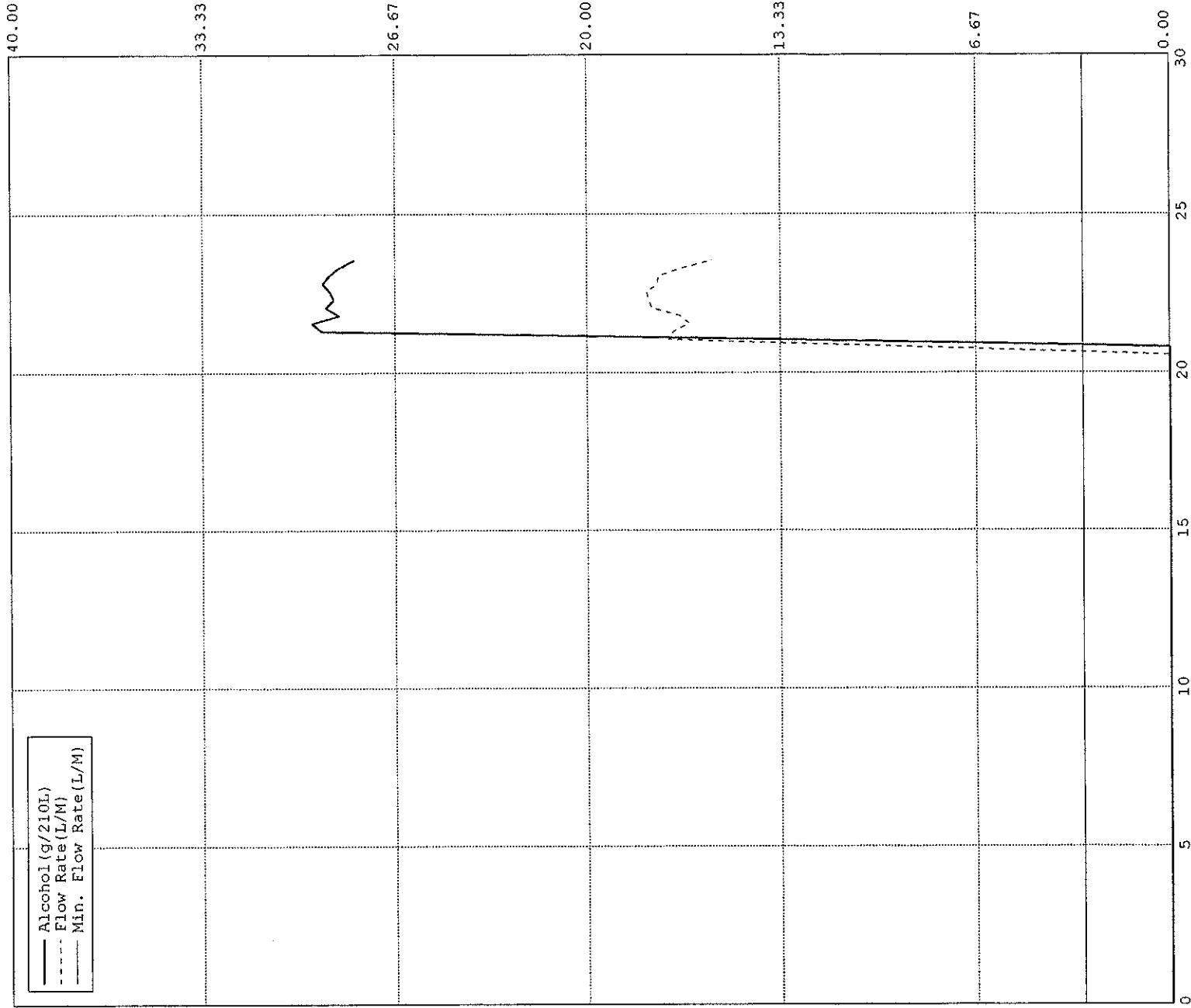
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.02: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 08:48
BLANK TEST 0.000 08:48
INTERNAL STANDARD VERIFIED 08:48
EXTERNAL STANDARD 0.078 08:48
BLANK TEST 0.000 08:49
SUBJECT SAMPLE INVALID 08:50

DMC



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 02/05/2021
Time: 09:03:05

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 30.02: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

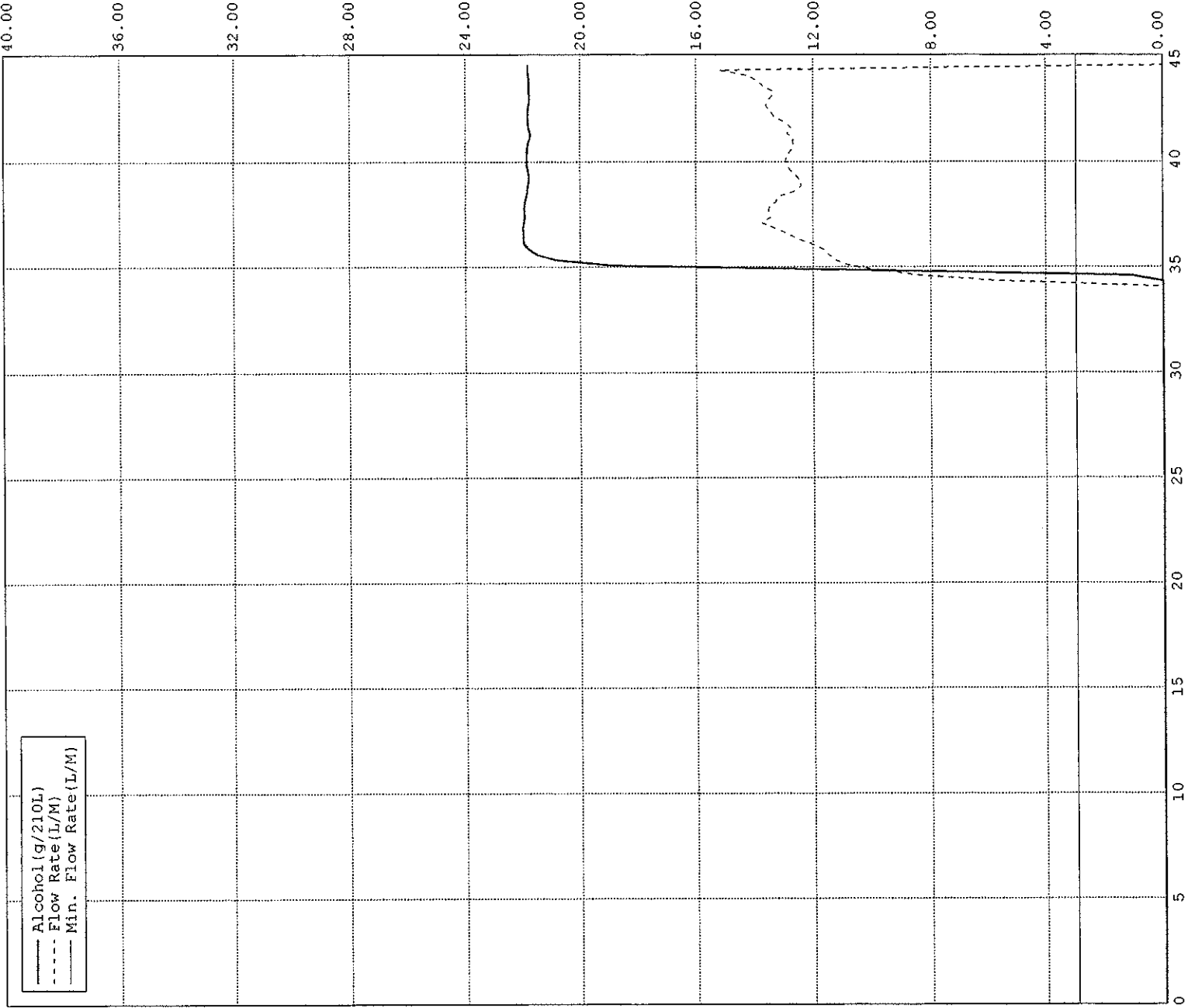
DIAGNOSTIC CHECK PASSED 09:04
BLANK TEST 0.000 09:04
INTERNAL STANDARD VERIFIED 09:04
Xq = 0.105 (1.01%)
EXTERNAL STANDARD 0.077 09:04
X[1] = 0.0775 (0.0003) (0.0019)
BLANK TEST 0.000 09:05
SUBJECT SAMPLE XXX 09:06
X[1] = 0.1082 (-0.0216) (-0.0003)

Interference Detected

Filter 2 average: 0.0004

Filter 3 average: 0.0018

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 02/05/2021
Time: 08:56:00

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

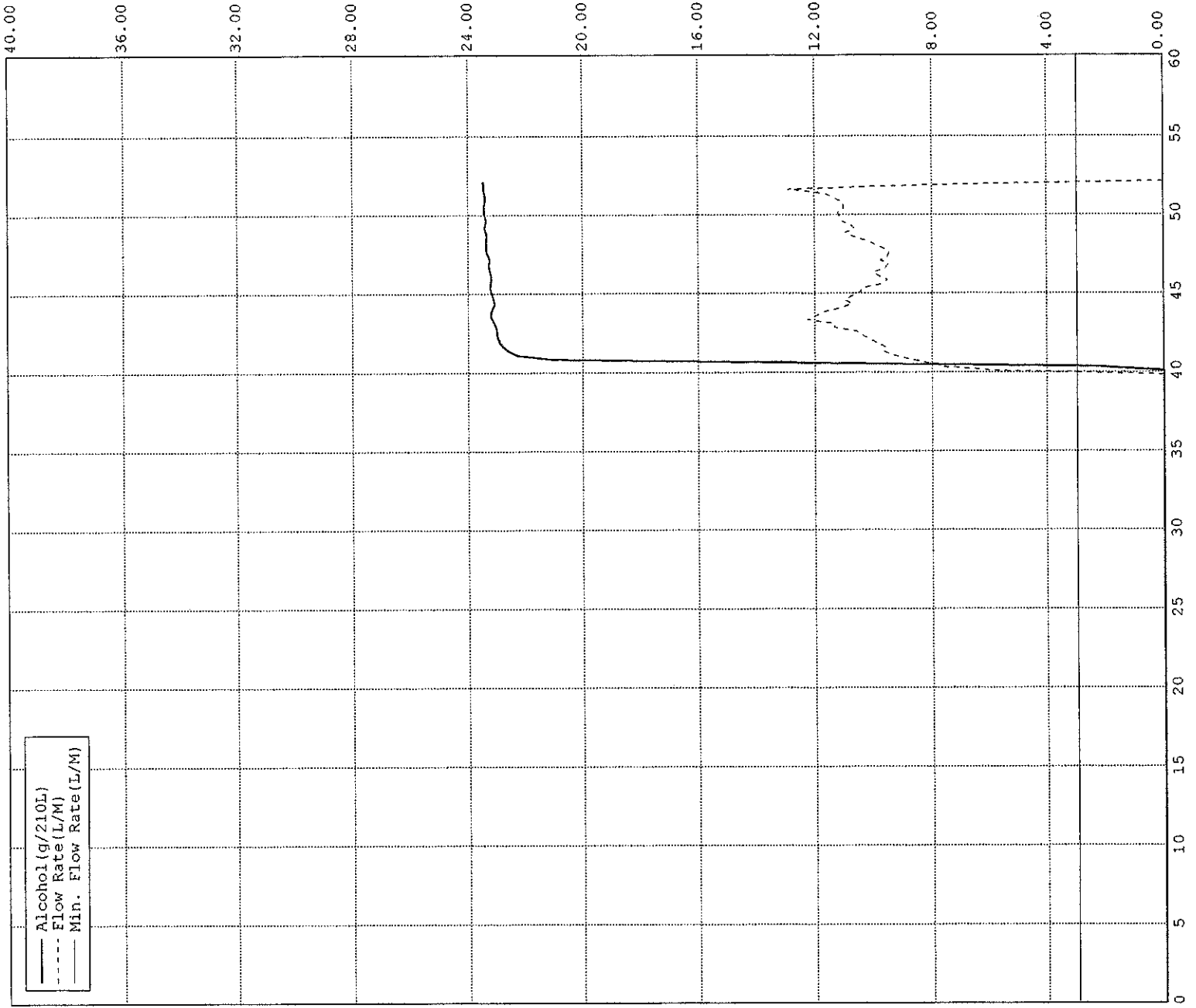
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.02: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	08:57
BLANK TEST	0.000	08:57
INTERNAL STANDARD	VERIFIED	08:57
Xq = 0.104 (0.17%)		
EXTERNAL STANDARD	0.078	08:57
X[1] = 0.0775 (0.0009) (0.0019)		
BLANK TEST	0.000	08:58
SUBJECT SAMPLE	XXX	08:59
X[1] = 0.1168 (-0.0194) (0.0010)		

Interference Detected

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 02/05/2021
Time: 09:08:17

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

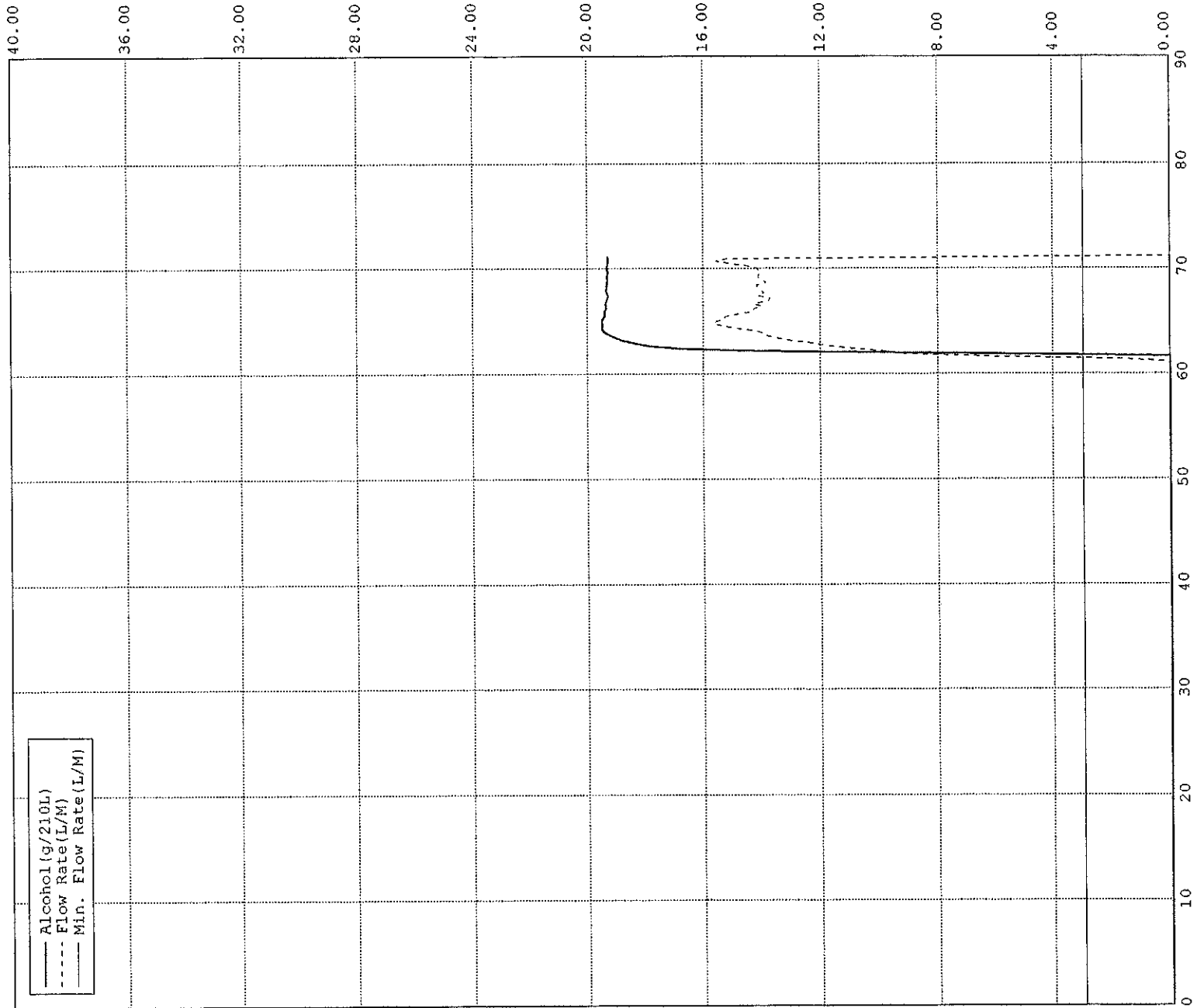
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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: 06/29/2022

DIAGNOSTIC CHECK	PASSED	09:09
BLANK TEST	0.000	09:09
INTERNAL STANDARD	VERIFIED	09:09
$X_q = 0.104$ (0.42%)		
EXTERNAL STANDARD	0.077	09:10
$X[1] = 0.0773$ (-0.0004) (0.0015)		
BLANK TEST	0.000	09:11
SUBJECT SAMPLE (Vol=2.17L)	0.096	09:12
$X[1] = 0.0960$ (-0.0004) (0.0007)		
BLANK TEST	0.000	09:13
EXTERNAL STANDARD	0.077	09:13
$X[1] = 0.0773$ (0.0006) (0.0017)		
BLANK TEST	0.000	09:14



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 02/04/2021
Time: 15:28:06

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

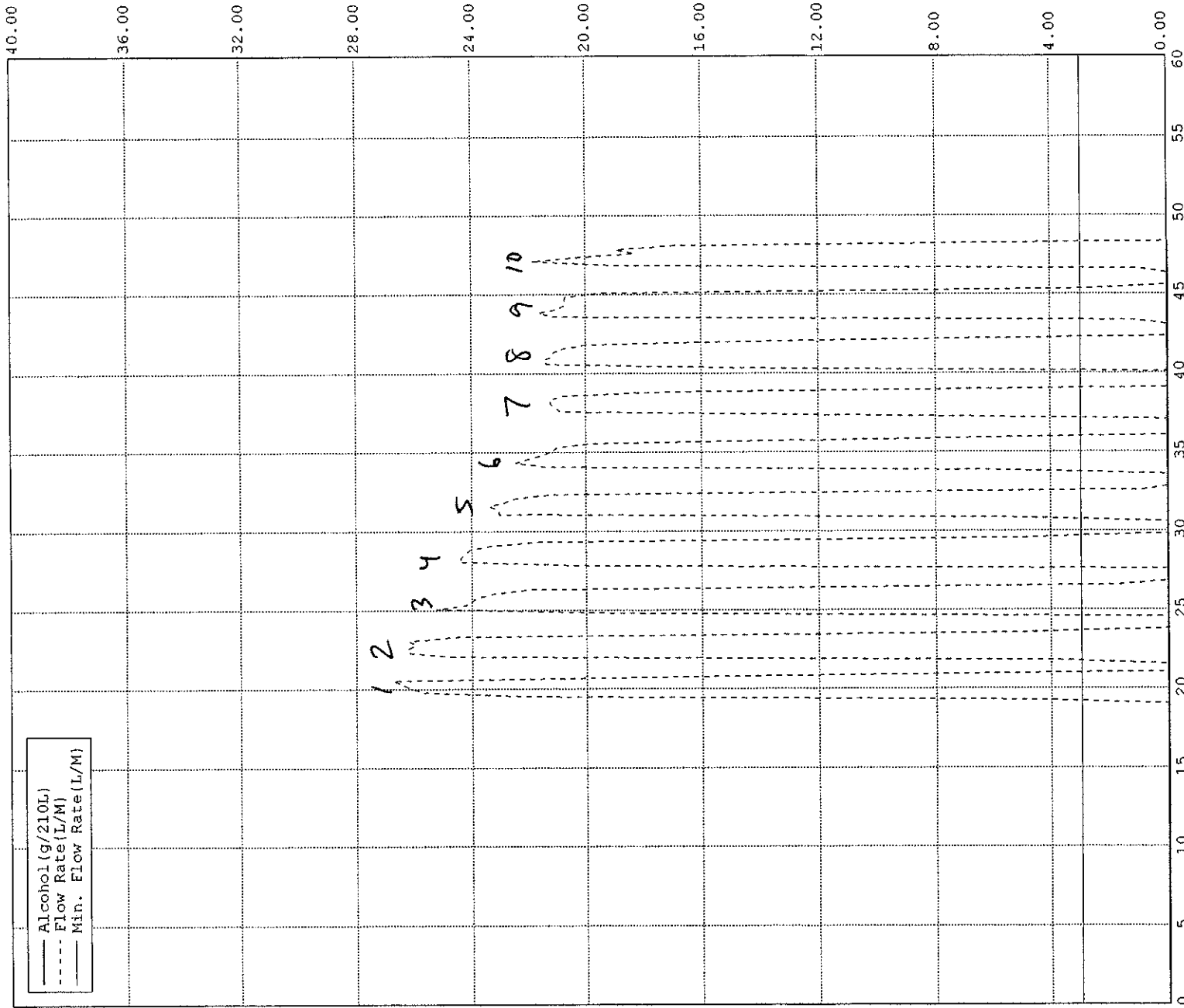
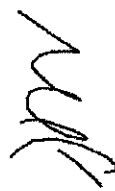
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

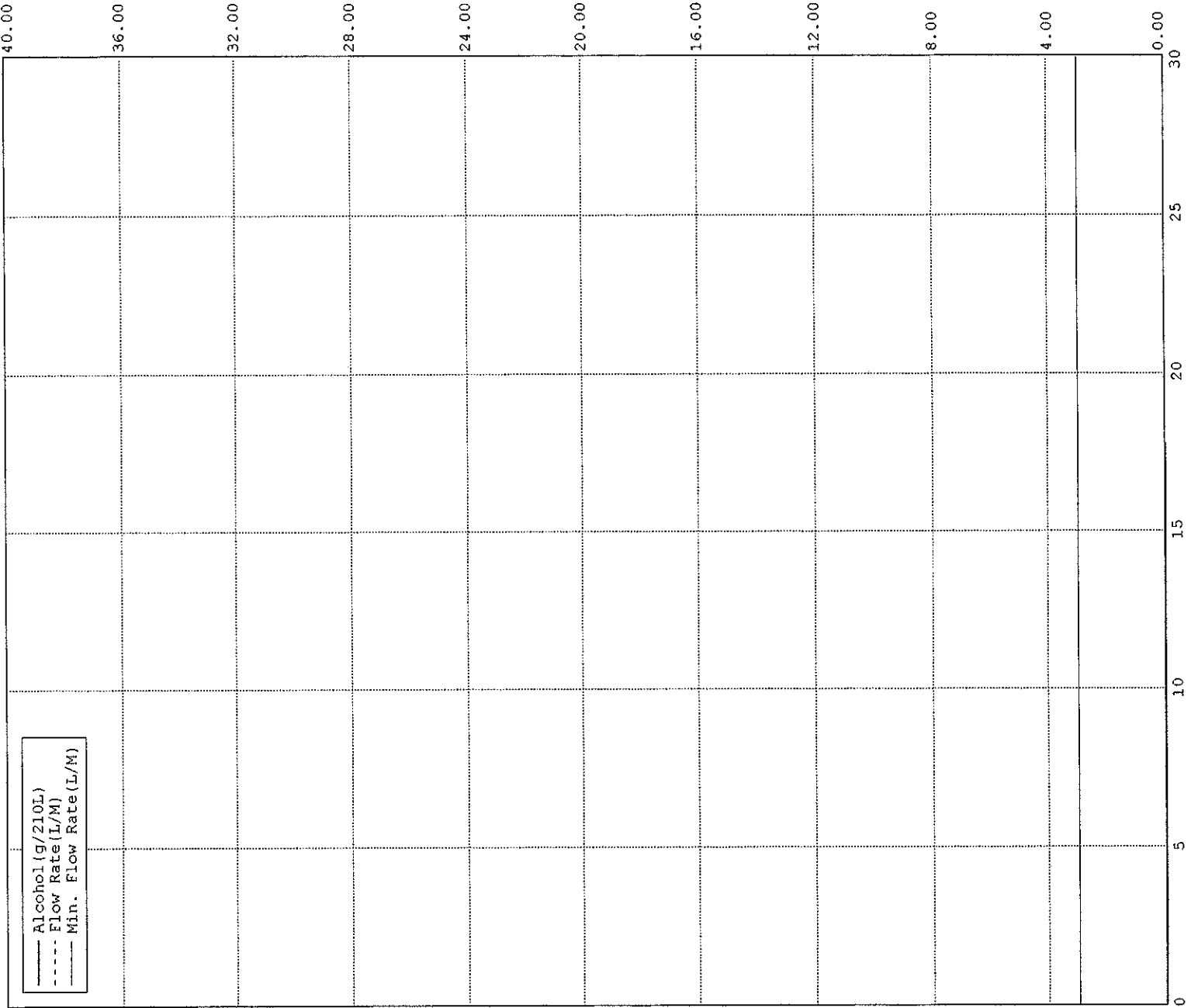
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.10: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 15:29
BLANK TEST 0.000 15:29
INTERNAL STANDARD VERIFIED 15:29
EXTERNAL STANDARD 0.078 15:29
BLANK TEST 0.000 15:30
SUBJECT SAMPLE XXX 15:31

Maximum Attempts Exceeded





SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100690

 Date: 02/05/2021
 Time: 08:39:02

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 30.01: 0.080
 LOT #: AG018102
 EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK
 BLANK TEST PASSED 08:40
 INTERNAL STANDARD VERIFIED 08:41
 EXTERNAL STANDARD 0.078 08:41
 BLANK TEST 0.000 08:42

RFI DETECTED

JW

SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100690

Date: 02/05/2021
Time: 10:22:36

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 30.02: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	10:23
BLANK TEST	0.000	10:23
INTERNAL STANDARD	VERIFIED	10:24
EXTERNAL STANDARD	0.078	10:24
BLANK TEST	0.000	10:25
SUBJECT SAMPLE (Vol=1.92L)	0.000	10:25
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.078	10:26
BLANK TEST	0.000	10:27

DW

