

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 100378 Analyst Derek Watten Start Date 05/25/21

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 AG 928203 Exp 10/09/2021

ii. 0.040g/210L Mnf Airgas Lot AG 915607 Exp 06/05/21

iii. 0.080g/210L Mnf Airgas Lot AG 018102 Exp 06/29/22

iv. 0.100g/210L Mnf Airgas Lot AG 924701 Exp 09/04/21

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

Simulator S/N DR6267 Date Calibrated 11/17/20

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

Simulator S/N DR4177 Date Calibrated 11/17/20

Functional Tests (attached)

Incomplete

Invalid

Interference

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

Simulator S/N DR4178 Date Calibrated 11/18/20

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

Simulator S/N DR4176 Date Calibrated 11/18/20

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

Simulator S/N DR4163 Date Calibrated 11/17/20

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 05/25/21

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 05/25/2021
Time: 08:59:53

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 = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.55 V PASSED
(0.93 V - 2.17 V)
Cooler Voltage = 1.57 V PASSED
(0.94 V - 2.20 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 535 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 5.060 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
(0.003 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD ✓ PASSED
Xq = 0.086 1.30% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100378

Date: 05/25/2021
Time: 9:07 AM

Temperatures (°C)
Sample Cell: 49.5°C
Breath Tube: 48.1°C

Current Barometer 29.8 in
Volume (Ltr) 1.55

Settings
Lamp: 1.55 V
Bias: 80 V
Cooler: 1.60 V
Chopper: 527 Hz

Voltages (V)
Flow: 1.05 V
Detector: 0.023 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 05/19/2021
Time: 12:20:25

OPERATOR NAME:
CARLIE BAILEY
CERTIFICATE #: 10436

Ca = 0.1000
CAL = 0.957976 0.800 <= CAL < 1.200
b1 = 0.0008 0.0000 <= b1 < 0.0040
b2 = 0.0058 0.0010 <= b2 < 0.0100
b3 = 0.0012 0.0000 <= b3 < 0.0040
Xq = 0.0869 0.0500 <= Xq < 0.2000
a21 = 1.178345 1.050 <= a21 < 1.300
a31 = 0.448135 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 05/25/2021
Time: 09:08:45

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

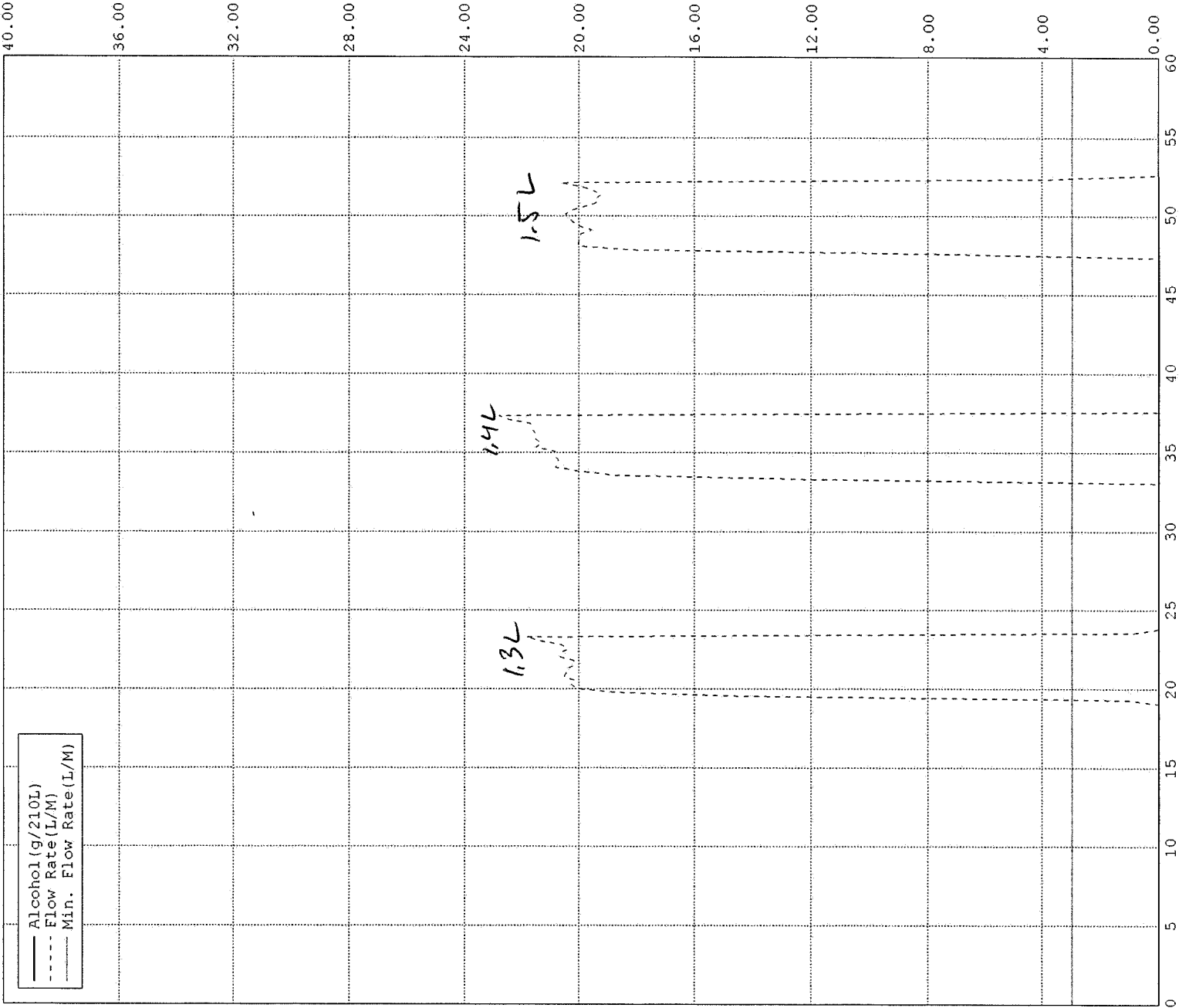
DEPT/AGENCY:
MINIMUM VOLUME
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.79: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	09:09
BLANK TEST	0.000	09:10
INTERNAL STANDARD	VERIFIED	09:10
EXTERNAL STANDARD	0.078	09:10
BLANK TEST	0.000	09:11
SUBJECT SAMPLE (Vol=1.54L)	0.000	09:12
BLANK TEST	0.000	09:13
EXTERNAL STANDARD	0.079	09:13
BLANK TEST	0.000	09:14

DW



LINEARITY CHECK

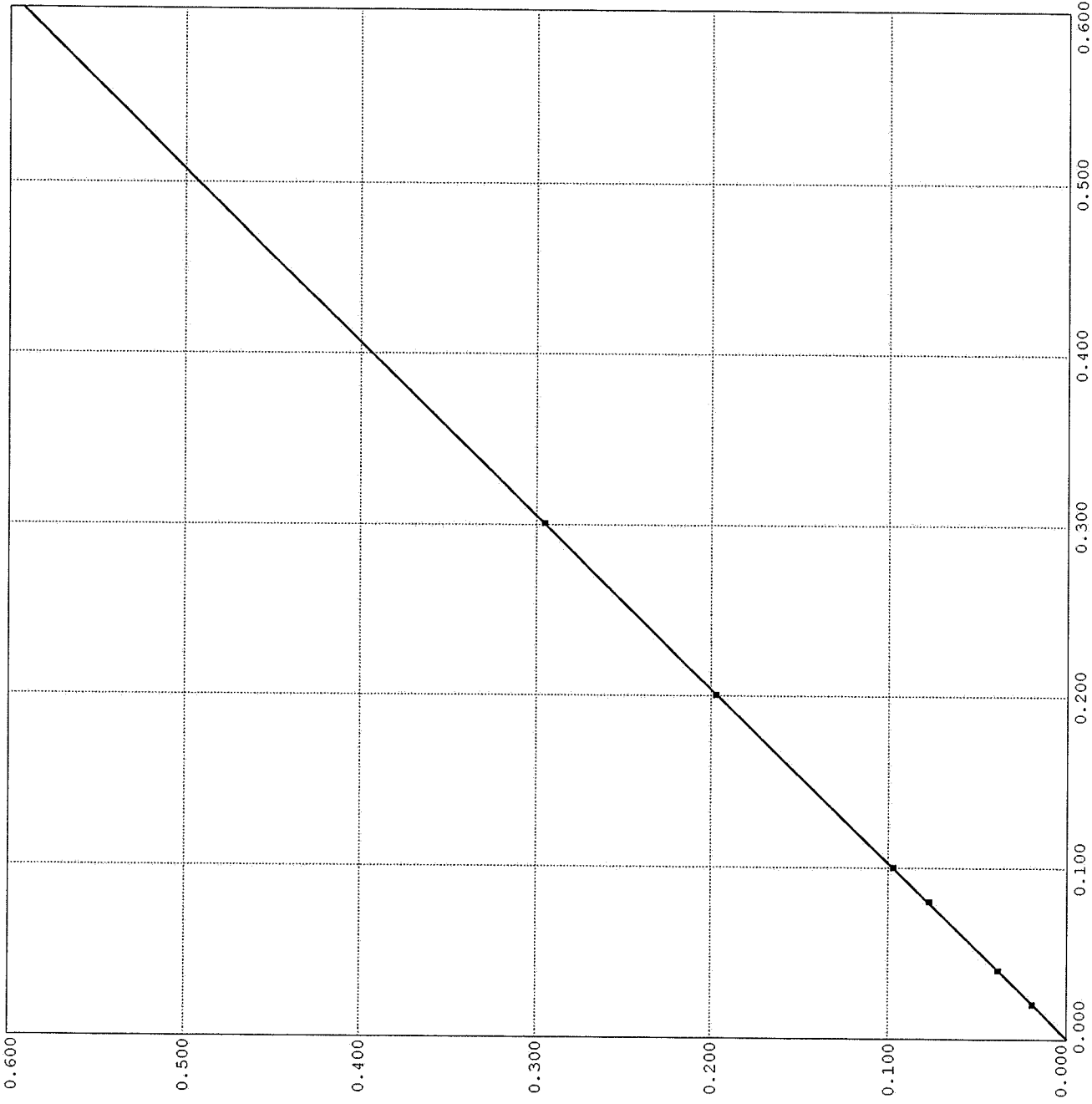
 Alaska Department of Public Safety
 DATAMASTER dmt: 100378

Date: 05/25/2021
 Time: 09:18:14

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0394	0.0005
0.080	0.0778	0.0004
0.100	0.0982	0.0004
0.200	0.1980	0.0007
0.300	0.2960	0.0000

SLOPE = 0.988226
 R² = 0.999968



DM

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100378

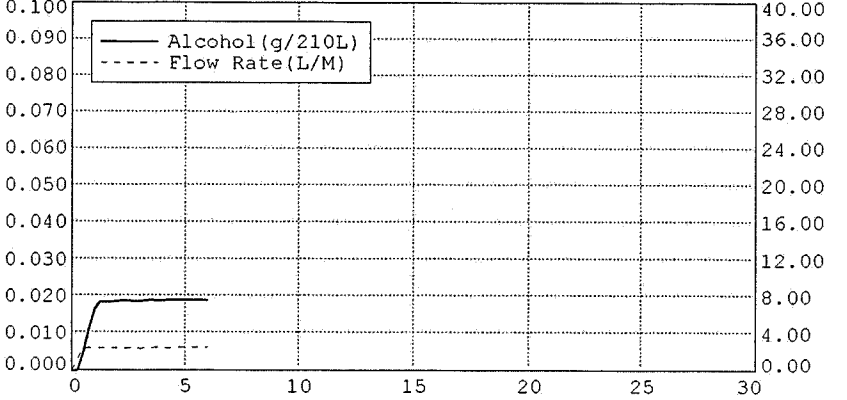
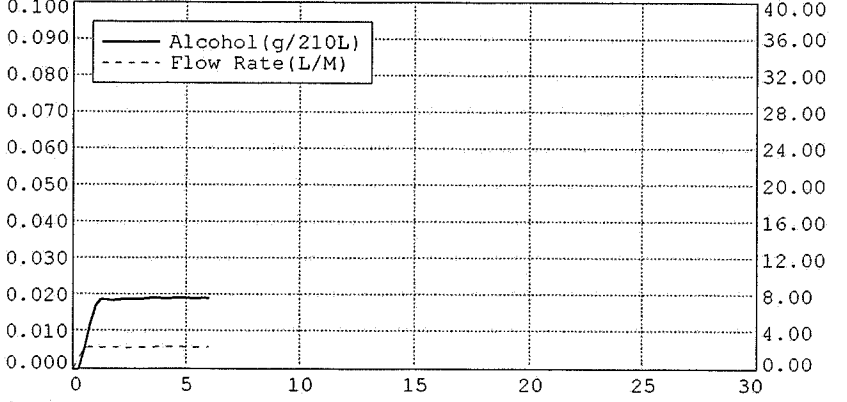
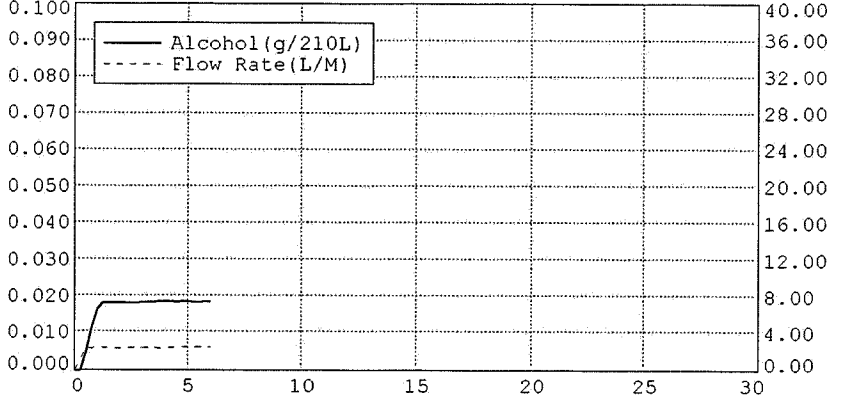
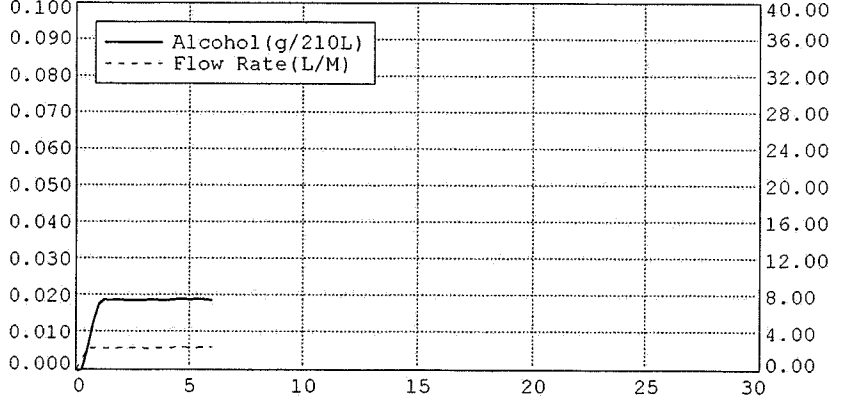
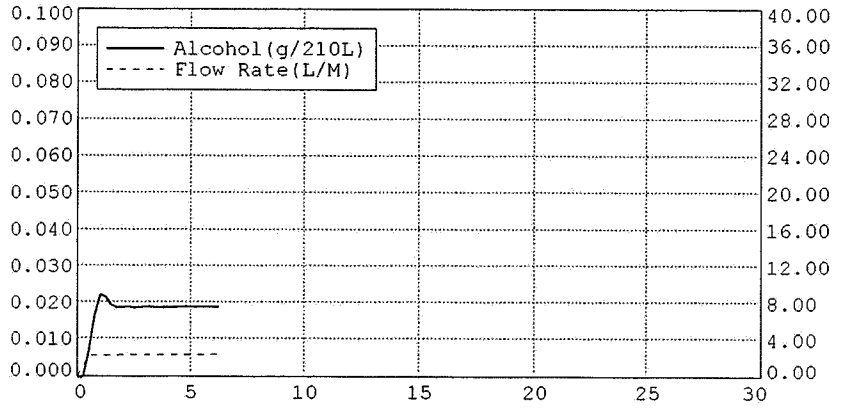
Date: 05/25/2021
Time: 09:18:17

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.79: 0.020
LOT #: AG928203
EXPIRATION: 10/09/2021
TANK PRESSURE: 484 psi

BLANK TEST	0.000	09:19
INTERNAL STANDARD	VERIFIED	09:19
EXTERNAL STANDARD	0.020	09:19
BLANK TEST	0.000	09:20
EXTERNAL STANDARD	0.020	09:20
BLANK TEST	0.000	09:21
EXTERNAL STANDARD	0.020	09:21
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.020	09:23
BLANK TEST	0.000	09:23
EXTERNAL STANDARD	0.020	09:24
BLANK TEST	0.000	09:25

Average = 0.0200
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100378

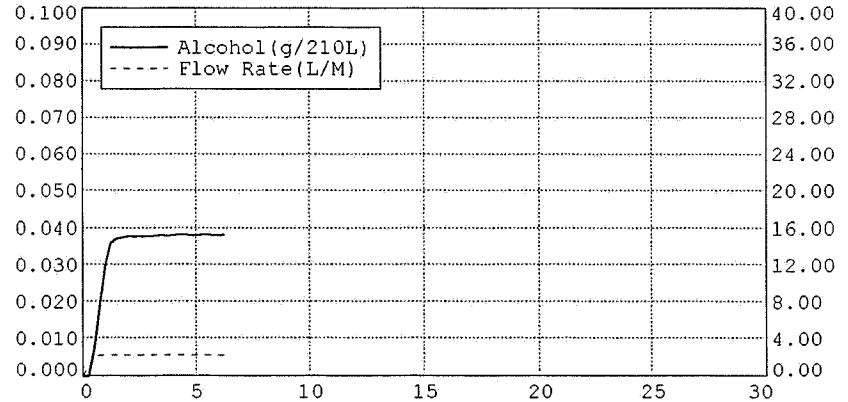
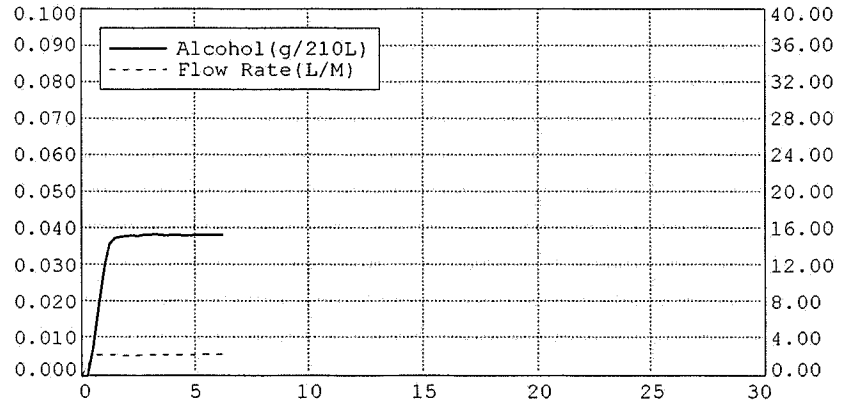
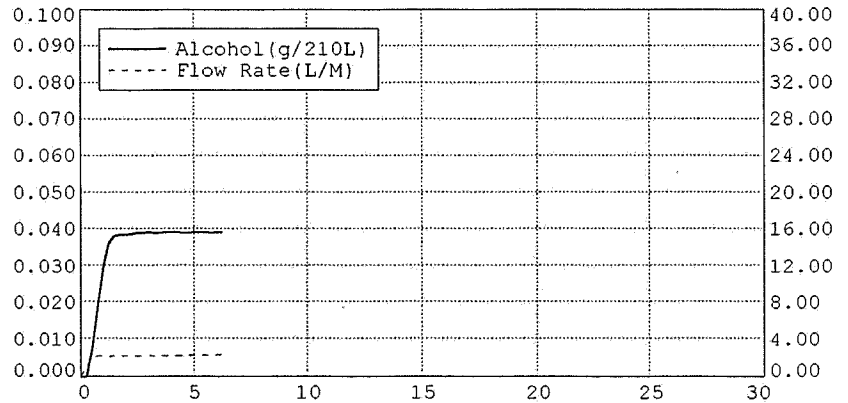
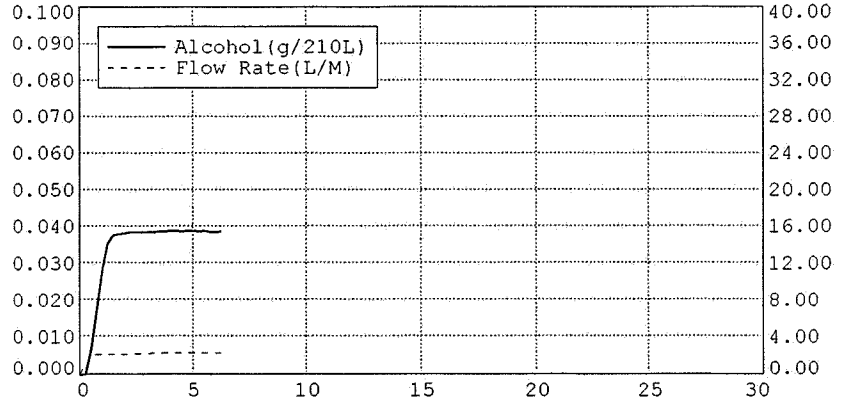
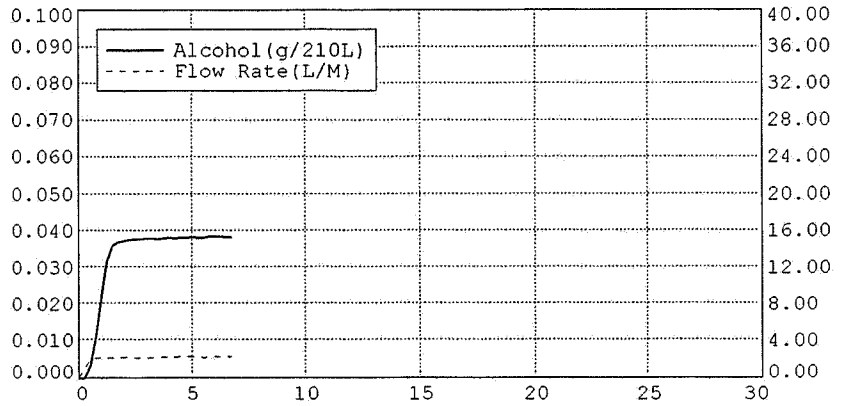
Date: 05/25/2021
 Time: 09:26:18

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.79: 0.040
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 295 psi

BLANK TEST	0.000	09:27
INTERNAL STANDARD	VERIFIED	09:27
EXTERNAL STANDARD	0.039	09:27
BLANK TEST	0.000	09:28
EXTERNAL STANDARD	0.040	09:28
BLANK TEST	0.000	09:29
EXTERNAL STANDARD	0.040	09:30
BLANK TEST	0.000	09:30
EXTERNAL STANDARD	0.039	09:31
BLANK TEST	0.000	09:32
EXTERNAL STANDARD	0.039	09:32
BLANK TEST	0.000	09:33

Average = 0.0394
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100378

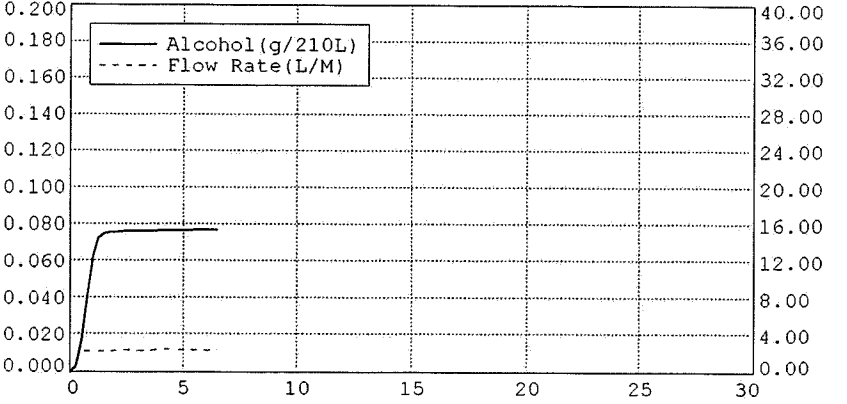
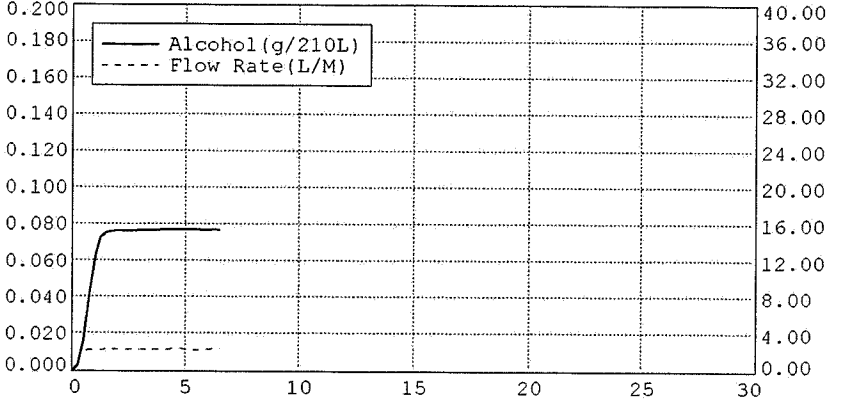
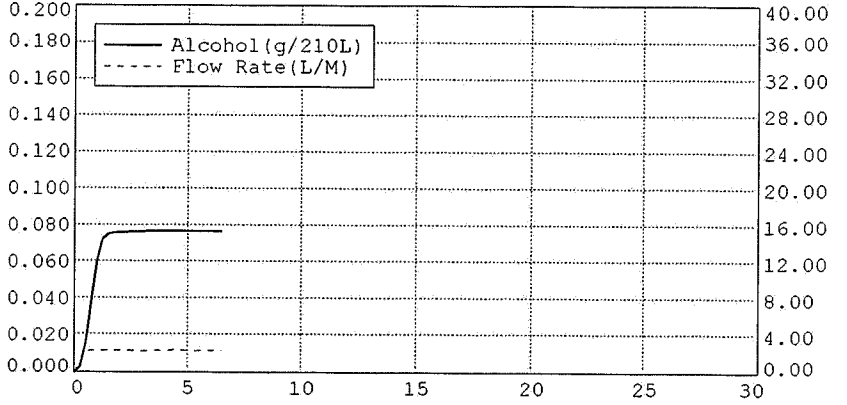
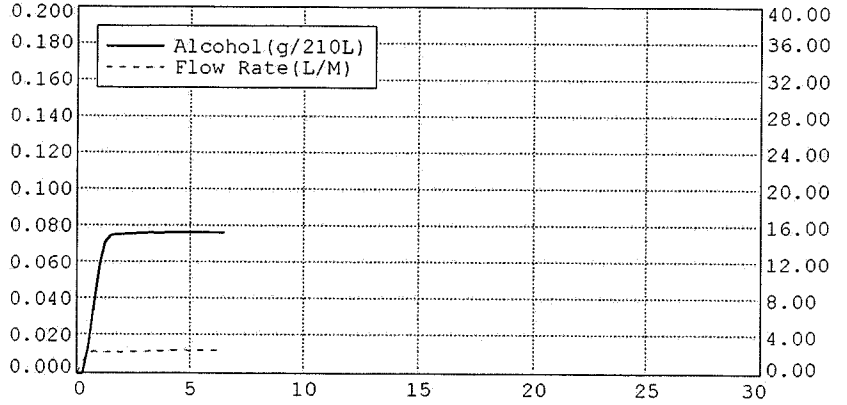
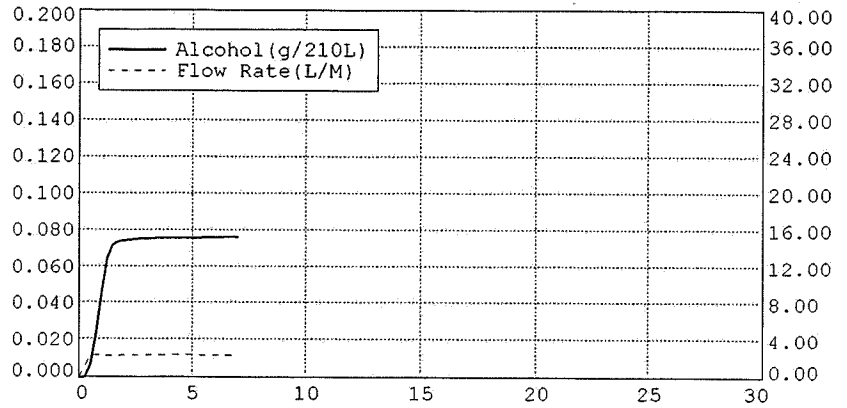
Date: 05/25/2021
 Time: 09:33:38

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.79: 0.080
 LOT #: AG018102
 EXPIRATION: 06/29/2022
 TANK PRESSURE: 398 psi

BLANK TEST	0.000	09:34
INTERNAL STANDARD	VERIFIED	09:34
EXTERNAL STANDARD	0.077	09:35
BLANK TEST	0.000	09:35
EXTERNAL STANDARD	0.078	09:36
BLANK TEST	0.000	09:37
EXTERNAL STANDARD	0.078	09:37
BLANK TEST	0.000	09:38
EXTERNAL STANDARD	0.078	09:38
BLANK TEST	0.000	09:39
EXTERNAL STANDARD	0.078	09:39
BLANK TEST	0.000	09:40

Average = 0.0778
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100378

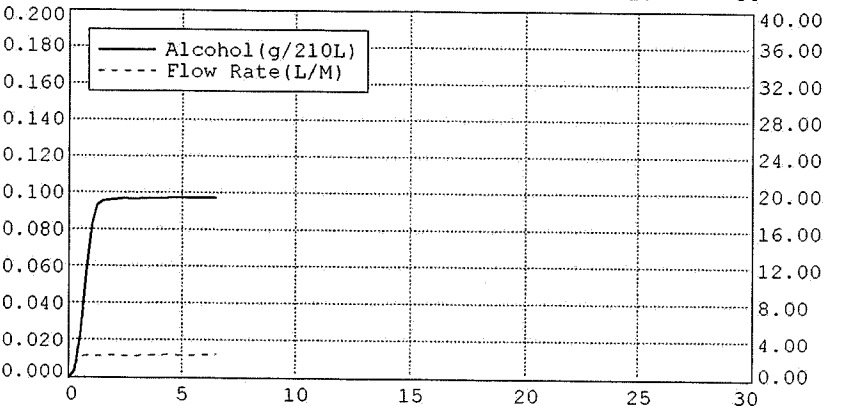
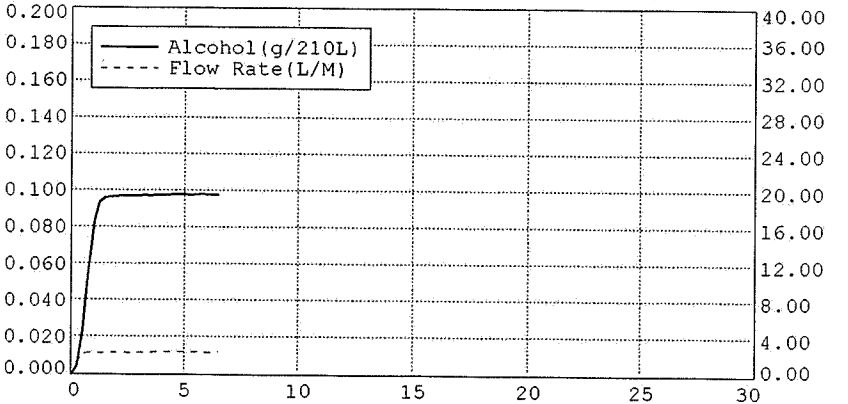
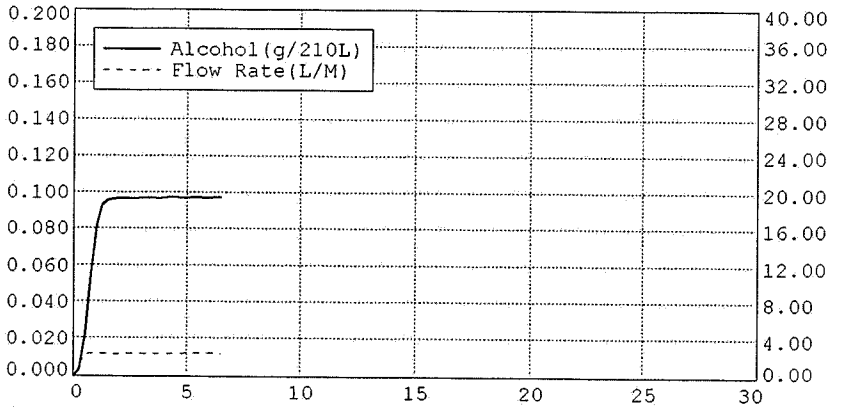
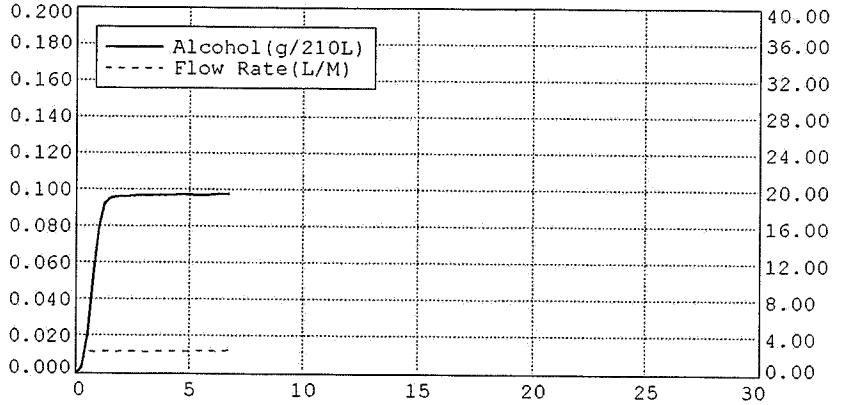
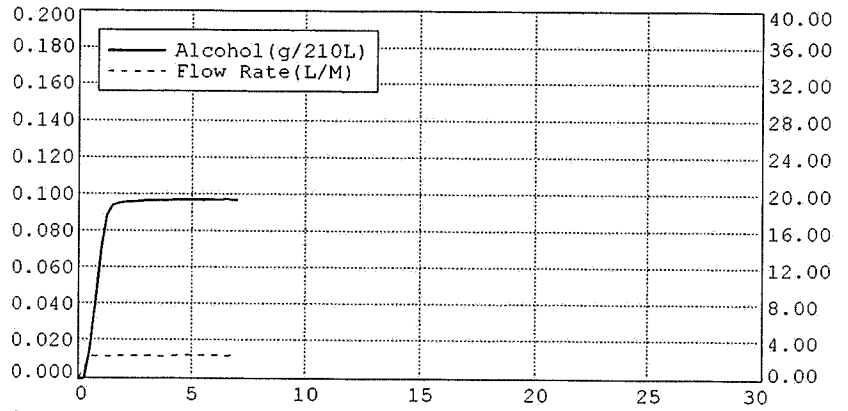
Date: 05/25/2021
 Time: 09:40:48

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.79: 0.100
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 501 psi

BLANK TEST	0.000	09:42
INTERNAL STANDARD	VERIFIED	09:42
EXTERNAL STANDARD	0.098	09:42
BLANK TEST	0.000	09:43
EXTERNAL STANDARD	0.098	09:43
BLANK TEST	0.000	09:44
EXTERNAL STANDARD	0.098	09:44
BLANK TEST	0.000	09:45
EXTERNAL STANDARD	0.099	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.098	09:46
BLANK TEST	0.000	09:47

Average = 0.0982
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100378

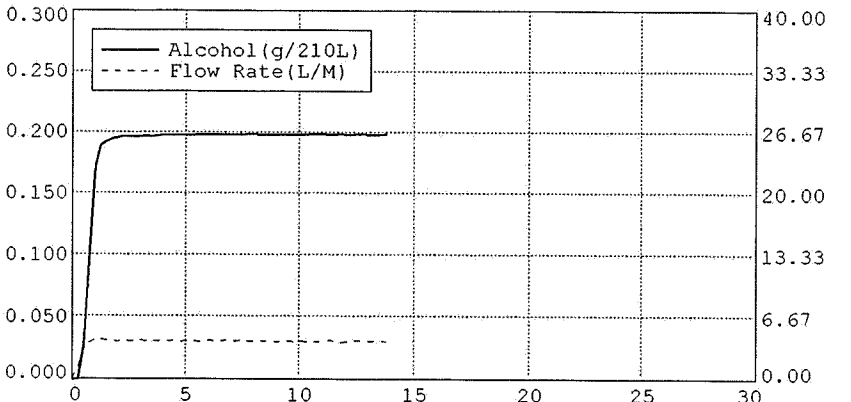
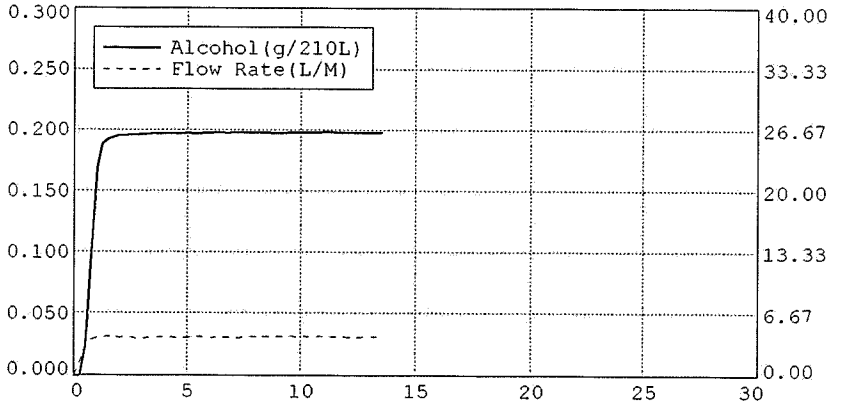
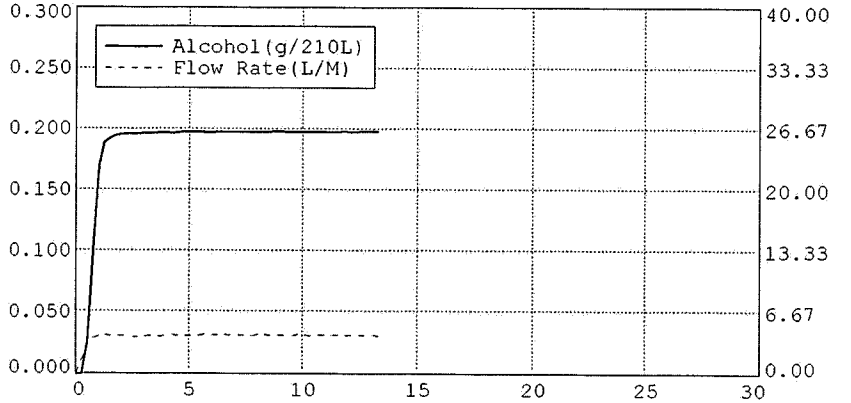
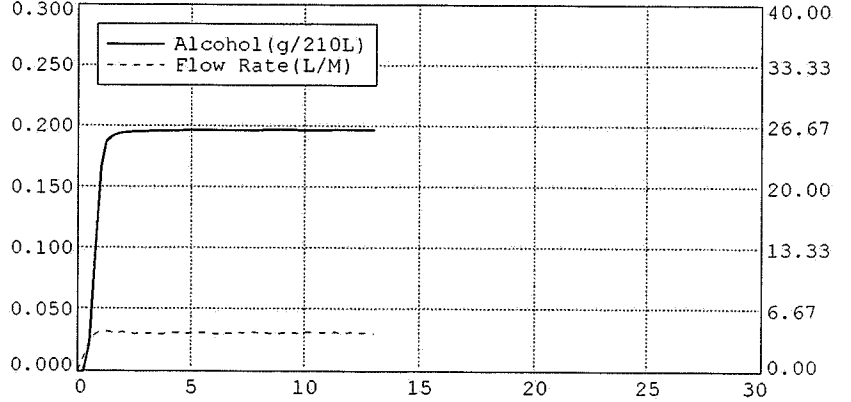
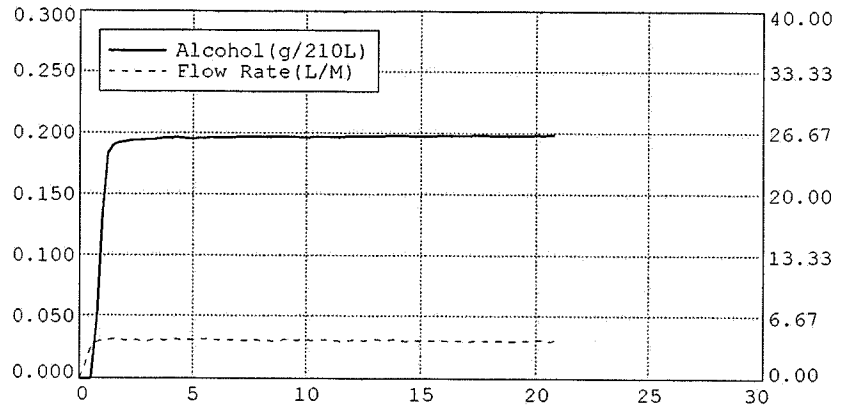
Date: 05/25/2021
 Time: 09:48:38

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	09:49
INTERNAL STANDARD	VERIFIED	09:49
EXTERNAL STANDARD	0.198	09:50
BLANK TEST	0.000	09:51
EXTERNAL STANDARD	0.197	09:51
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.198	09:52
BLANK TEST	0.000	09:53
EXTERNAL STANDARD	0.198	09:54
BLANK TEST	0.000	09:54
EXTERNAL STANDARD	0.199	09:55
BLANK TEST	0.000	09:56

Average = 0.1980
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100378

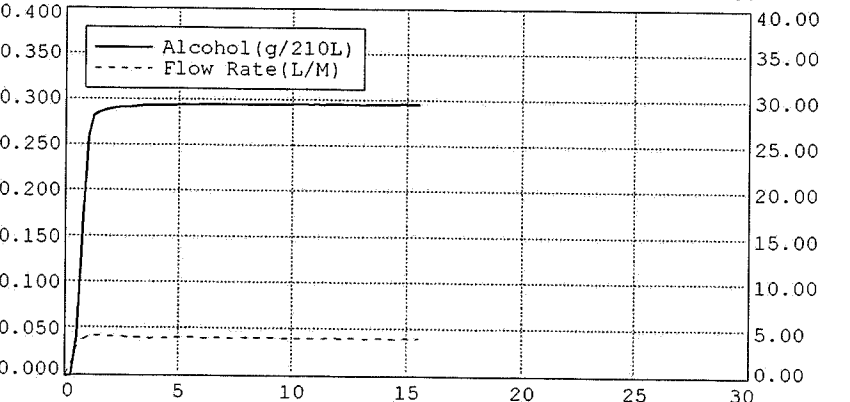
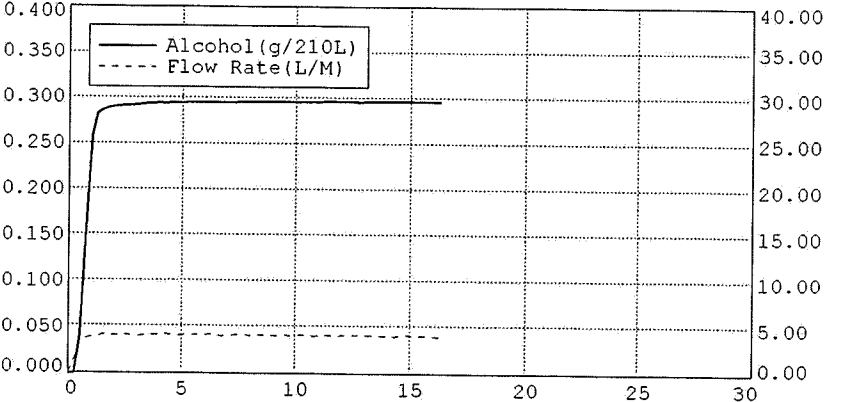
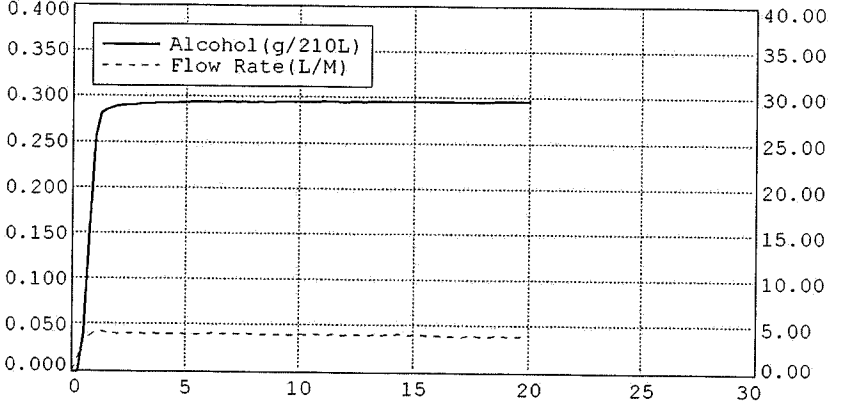
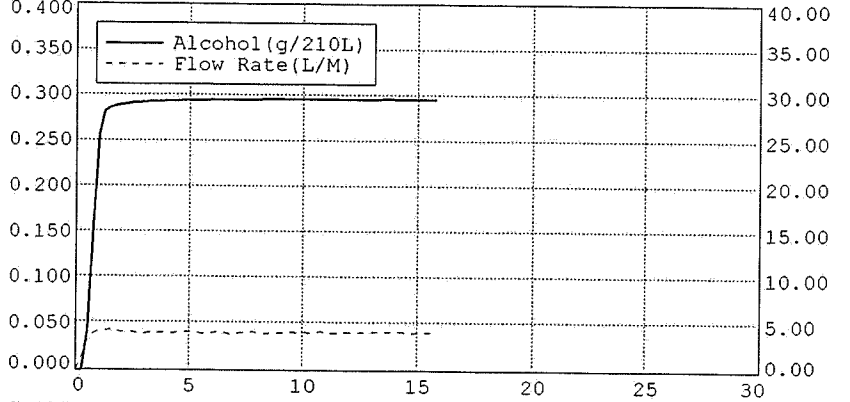
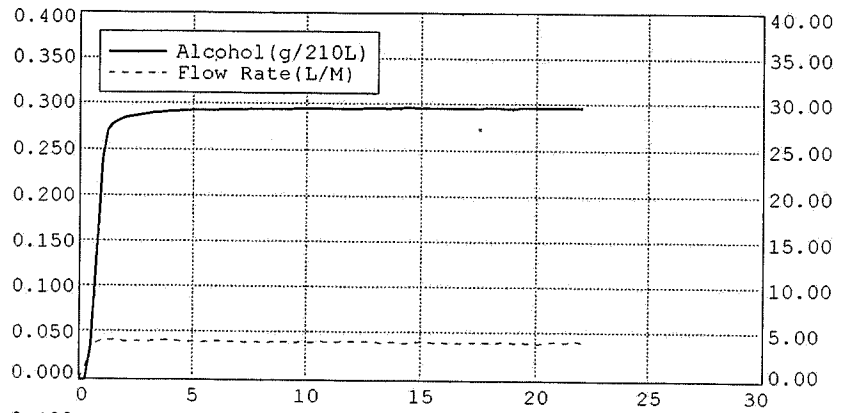
Date: 05/25/2021
 Time: 10:08:06

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:09
INTERNAL STANDARD	VERIFIED	10:09
EXTERNAL STANDARD	0.296	10:10
BLANK TEST	0.000	10:11
EXTERNAL STANDARD	0.296	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.296	10:12
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.296	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.296	10:15
BLANK TEST	0.000	10:16

Average = 0.2960
 Std Dev = 0.0000



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 05/25/2021
Time: 10:23:36

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

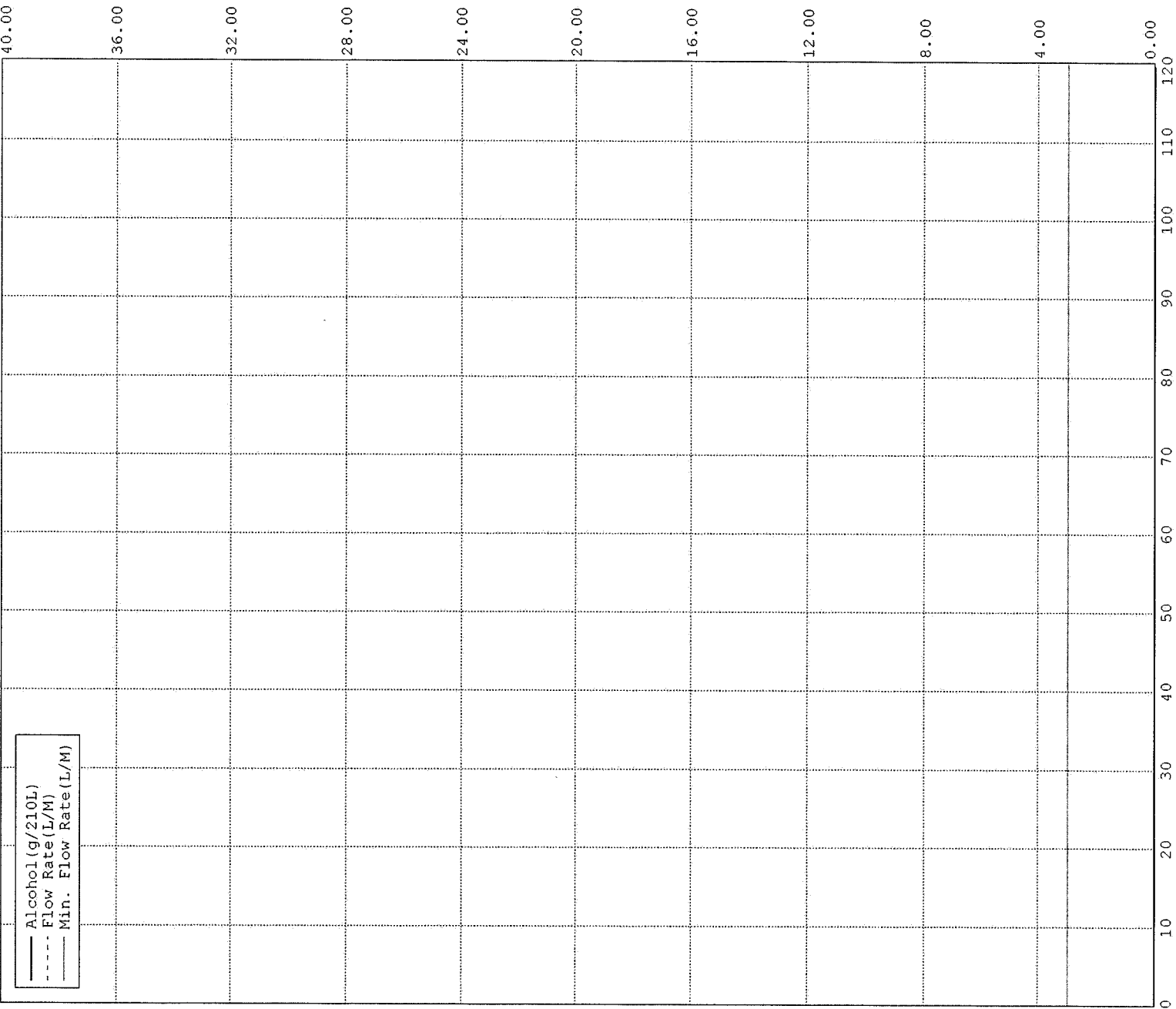
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.79: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 10:24
BLANK TEST 0.000 10:24
INTERNAL STANDARD VERIFIED 10:24
EXTERNAL STANDARD 0.077 10:25
BLANK TEST 0.000 10:26
SUBJECT SAMPLE INCOMPLETE 10:28

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 05/25/2021
Time: 12:32:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

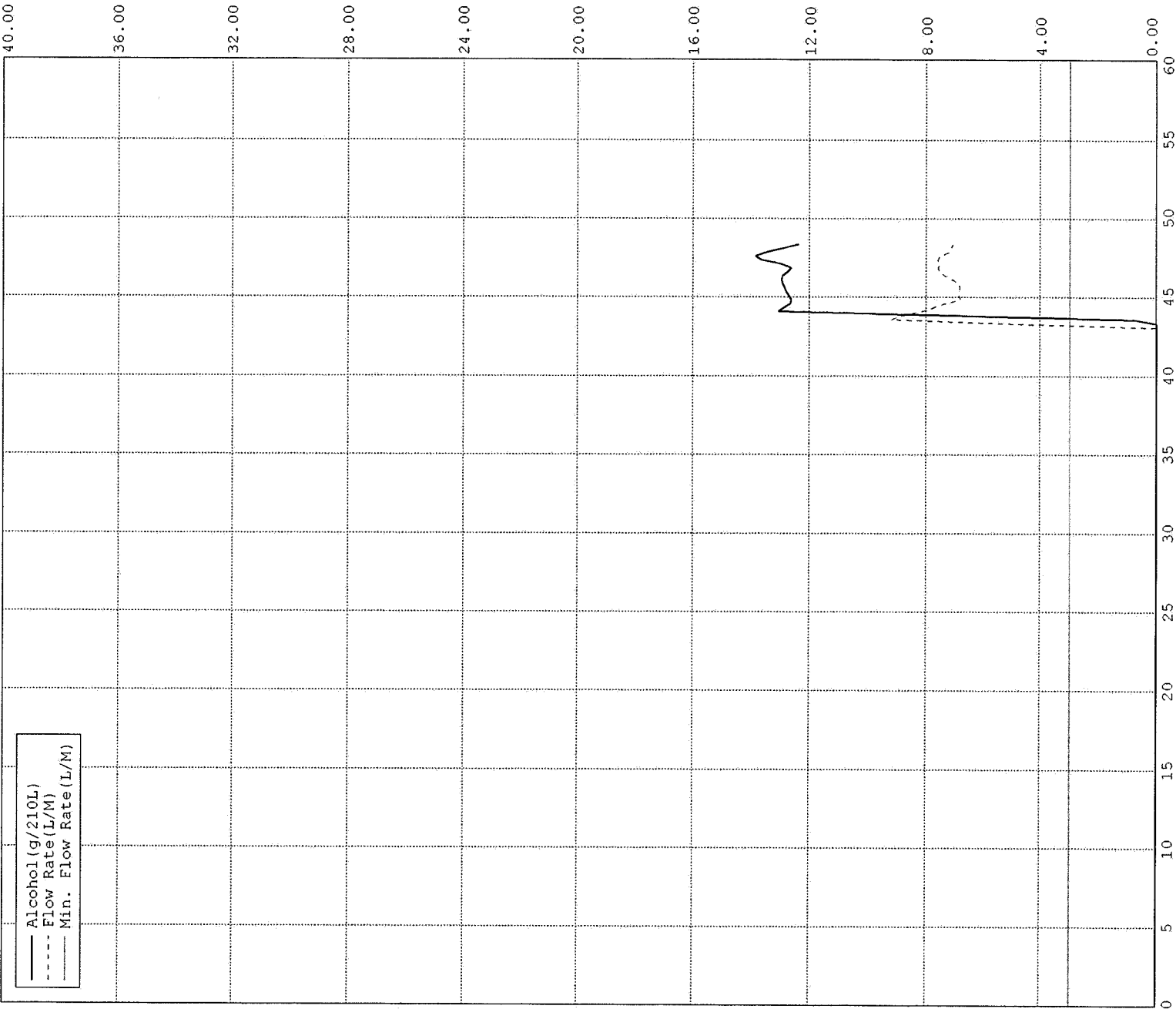
DEPT/AGENCY:
INVALID

CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.77: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:34
BLANK TEST 0.000 12:34
INTERNAL STANDARD VERIFIED 12:35
EXTERNAL STANDARD 0.078 12:35
BLANK TEST 0.000 12:36
SUBJECT SAMPLE INVALID 12:37



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 05/25/2021
Time: 12:14:45

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

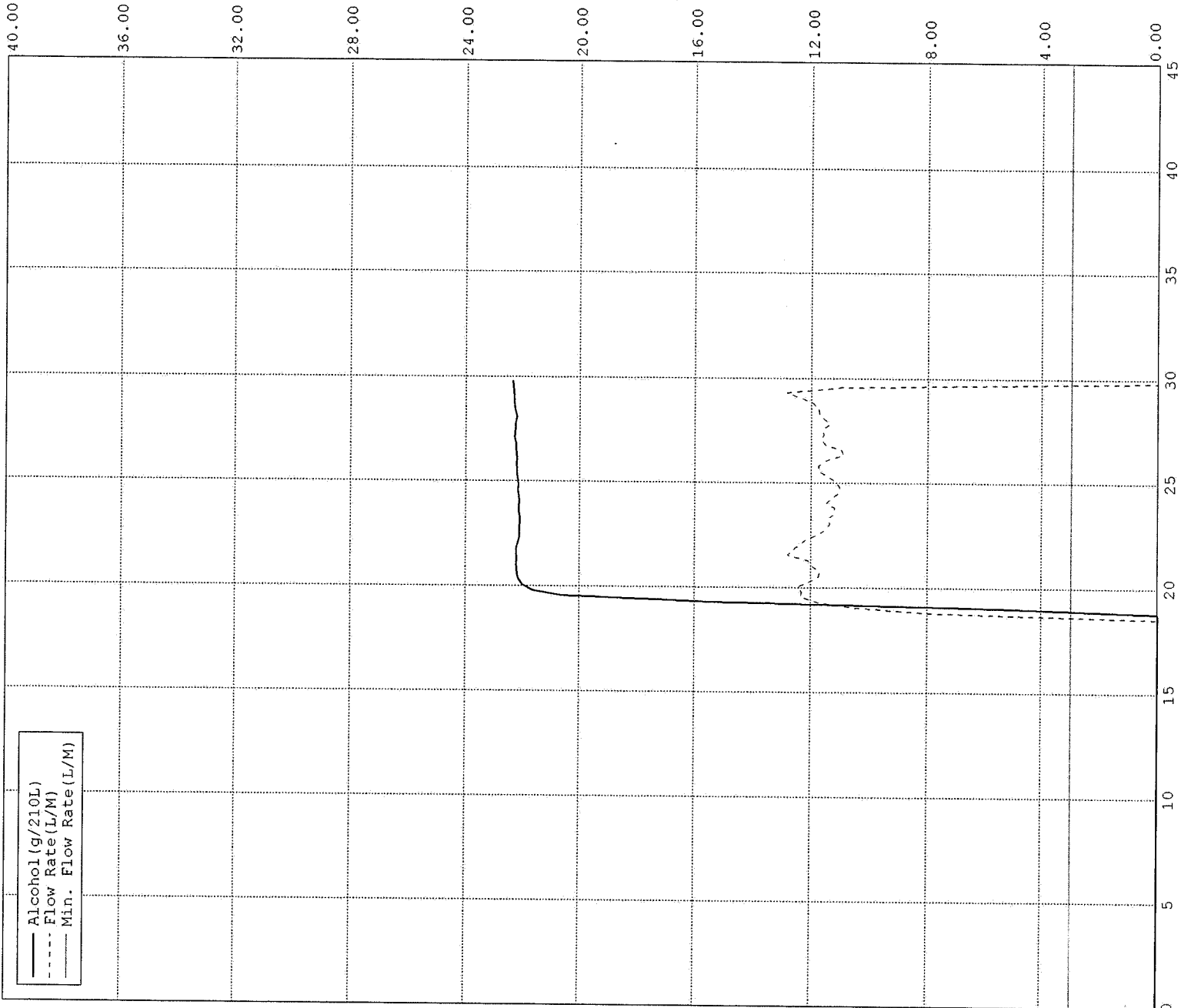
DEPT/AGENCY:
INTERFERENCE ACETONE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.76: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	12:15
BLANK TEST	0.000	12:15
INTERNAL STANDARD	VERIFIED	12:15
Xq = 0.086 (0.60%)		
EXTERNAL STANDARD	0.078	12:16
X[1] = 0.0780 (-0.0006) (0.00004)		
BLANK TEST	0.000	12:17
SUBJECT SAMPLE	XXX	12:17
X[1] = 0.1124 (-0.0192) (0.00007)		

Interference Detected

Filter 2 average: -0.0007
Filter 3 average: 0.0013



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 05/25/2021
Time: 12:26:55

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

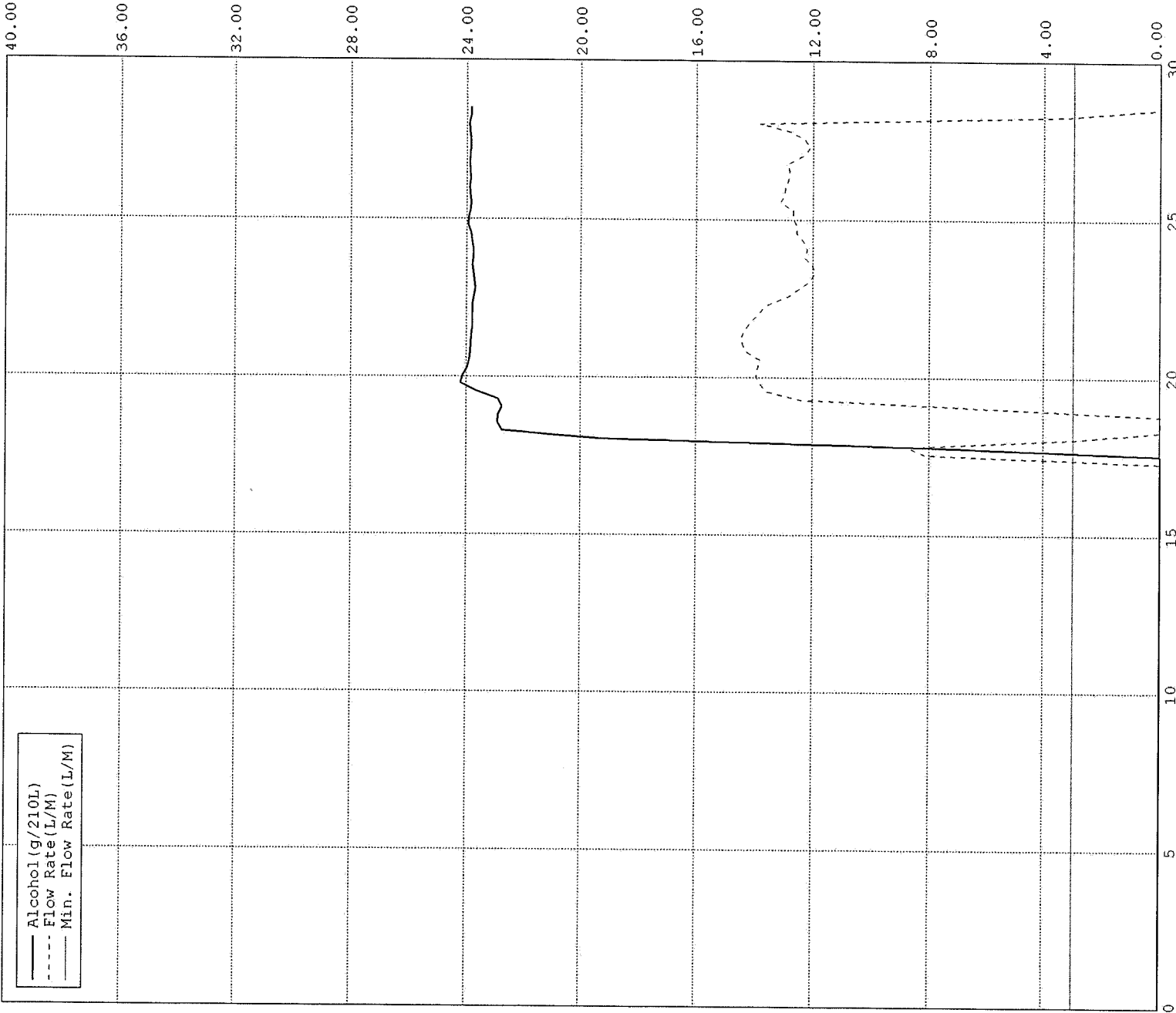
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.77: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:27
BLANK TEST 0.000 12:28
INTERNAL STANDARD VERIFIED 12:28
Xq = 0.087 (0.00%) 0.078 12:28
EXTERNAL STANDARD X[1] = 0.0782 (-0.0004) (0.0022)
BLANK TEST 0.000 12:29
SUBJECT SAMPLE XXX 12:29
X[1] = 0.1201 (-0.0289) (0.0018)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 05/25/2021
Time: 12:19:30

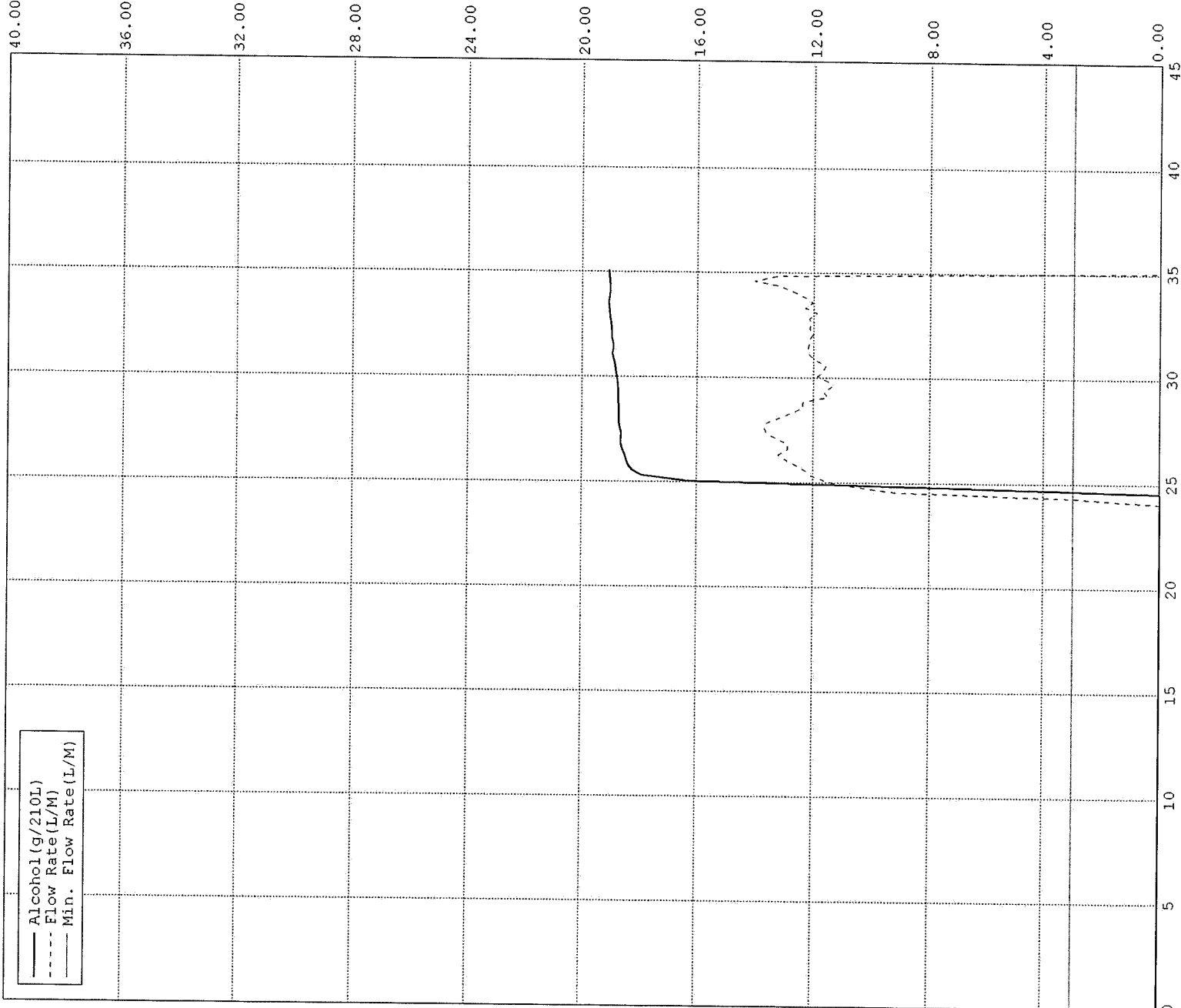
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 29.76: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	12:20
BLANK TEST	0.000	12:20
INTERNAL STANDARD	VERIFIED	12:20
Xq = 0.087 (0.30%)		
EXTERNAL STANDARD	0.078	12:20
X[1] = 0.0777 (-0.0012) (0.0015)		
BLANK TEST	0.000	12:21
SUBJECT SAMPLE (Vol=2.16L)	0.096	12:22
X[1] = 0.0960 (-0.0005) (0.0001)		
BLANK TEST	0.000	12:23
EXTERNAL STANDARD	0.078	12:23
X[1] = 0.0776 (-0.0007) (0.0009)		
BLANK TEST	0.000	12:24



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 05/25/2021
Time: 10:31:17

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

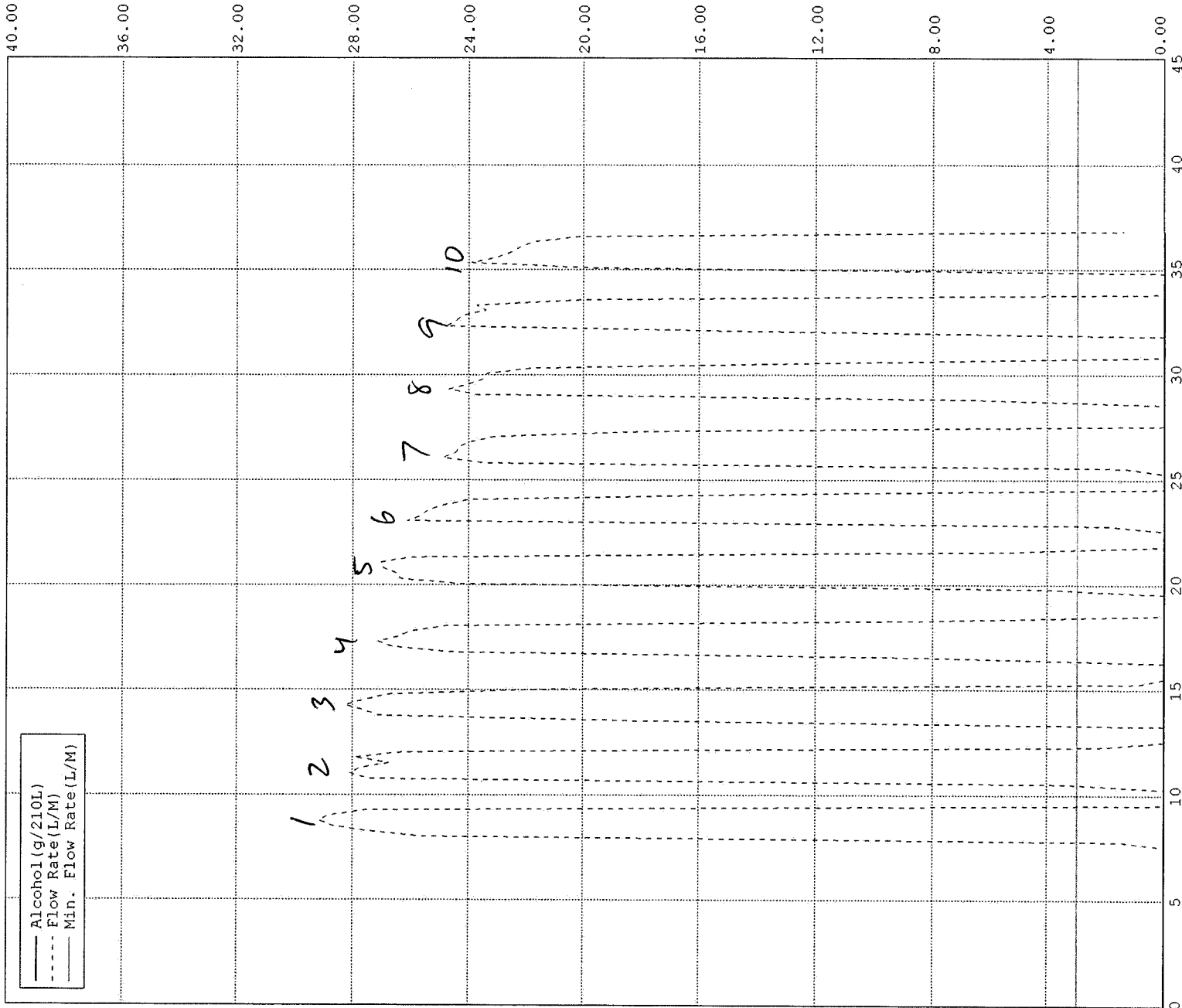
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.79: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 10:32
BLANK TEST 0.000 10:32
INTERNAL STANDARD VERIFIED 10:32
EXTERNAL STANDARD 0.078 10:32
BLANK TEST 0.000 10:33
SUBJECT SAMPLE XXX 10:34

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 05/25/2021
Time: 12:39:43

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

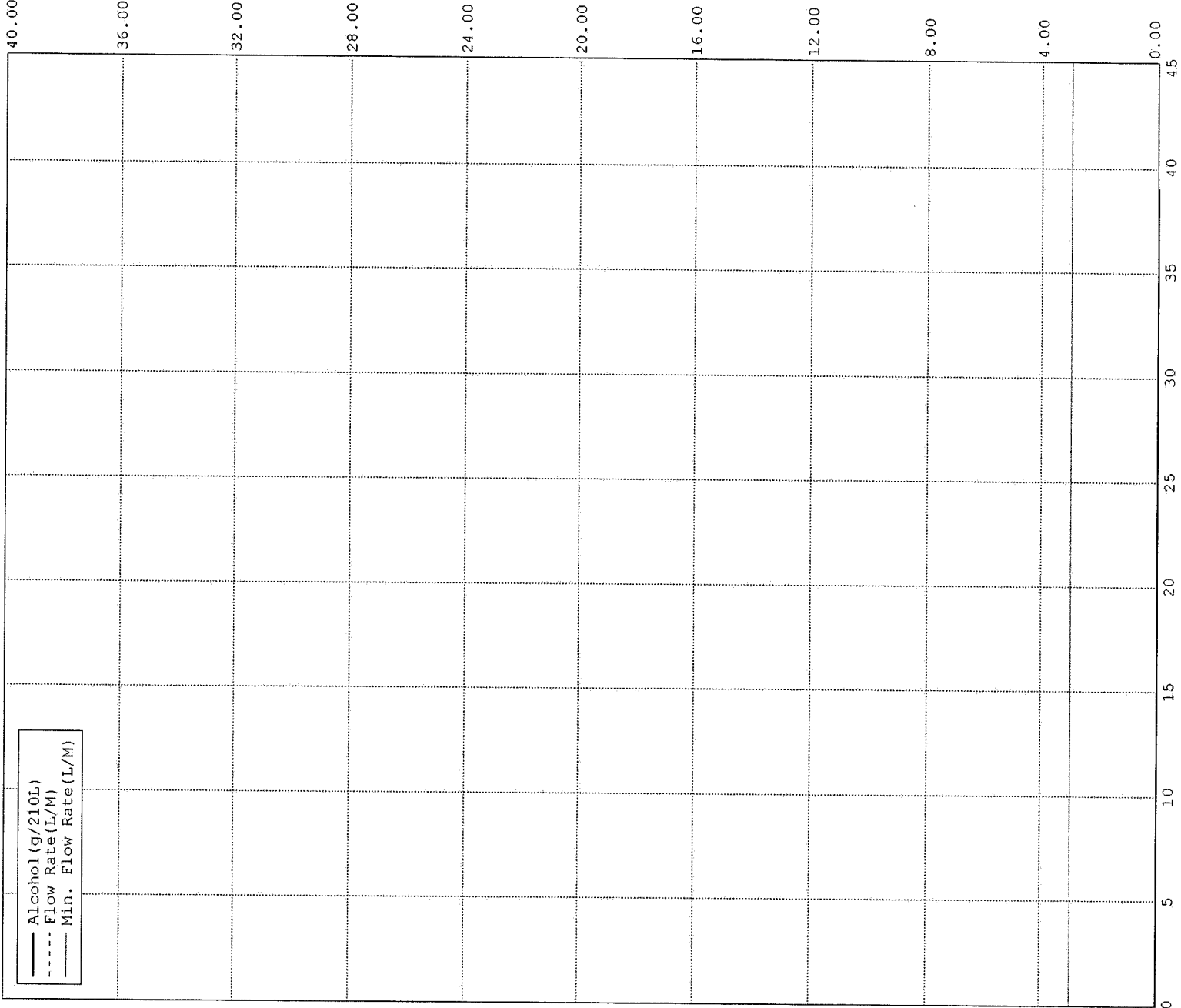
DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.76: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:42
BLANK TEST 0.000 12:42
INTERNAL STANDARD VERIFIED 12:42
EXTERNAL STANDARD 0.078 12:42
BLANK TEST 0.000 12:43

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 05/25/2021
Time: 13:05:27

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 29.76: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	13:06
BLANK TEST	0.000	13:06
INTERNAL STANDARD	VERIFIED	13:06
EXTERNAL STANDARD	0.078	13:07
BLANK TEST	0.000	13:08
SUBJECT SAMPLE (Vol=2.71L)	0.000	13:08
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.078	13:09
BLANK TEST	0.000	13:10

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