

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 100681 Analyst Derek Walton Start Date 08/07/20

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 1.6 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 A6826101 Exp 09/18/20

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

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

Simulator S/N SD1200 Date Calibrated 10/08/19

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

Simulator S/N DR4177 Date Calibrated 10/08/19

Functional Tests (attached)

Incomplete

Invalid

Interference

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

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

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

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

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

Simulator S/N SD1176 Date Calibrated 10/07/19

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 08/07/20

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100681

Date: 08/07/2020
Time: 08:46:53

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 = 44.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.72 V PASSED
(1.02 V - 2.38 V)
Cooler Voltage = 1.48 V PASSED
(0.92 V - 2.14 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 522 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.3 in

PUMP INFO

Flow Rate = 4.284 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 = 0.107 0.83% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100681

Date: 08/07/2020
Time: 9:11 AM

Temperatures (°C)
Sample Cell: 48.7°C
Breath Tube: 43.2°C

Current Barometer 29.3 in
Volume (Ltr) 1.45

Settings
Lamp: 1.72 V
Bias: 79 V
Cooler: 1.55 V
Chopper: 525 Hz

Voltages (V)
Flow: 1.07 V
Detector: -0.002 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100681

Date: 01/22/2020
Time: 09:42:43

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca = 0.1000
CAL = 0.962393 0.800 <= CAL < 1.200
b1 = 0.0005 0.0000 <= b1 < 0.0040
b2 = 0.0047 0.0010 <= b2 < 0.0100
b3 = 0.0002 0.0000 <= b3 < 0.0040
Xq = 0.1063 0.0500 <= Xq < 0.2000
a21 = 1.164412 1.050 <= a21 < 1.300
a31 = 0.490989 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100681

Date: 08/07/2020
 Time: 09:13:43

SUBJECT NAME:
 TEST TEST
 LICENSE #: XXXX

OPERATOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

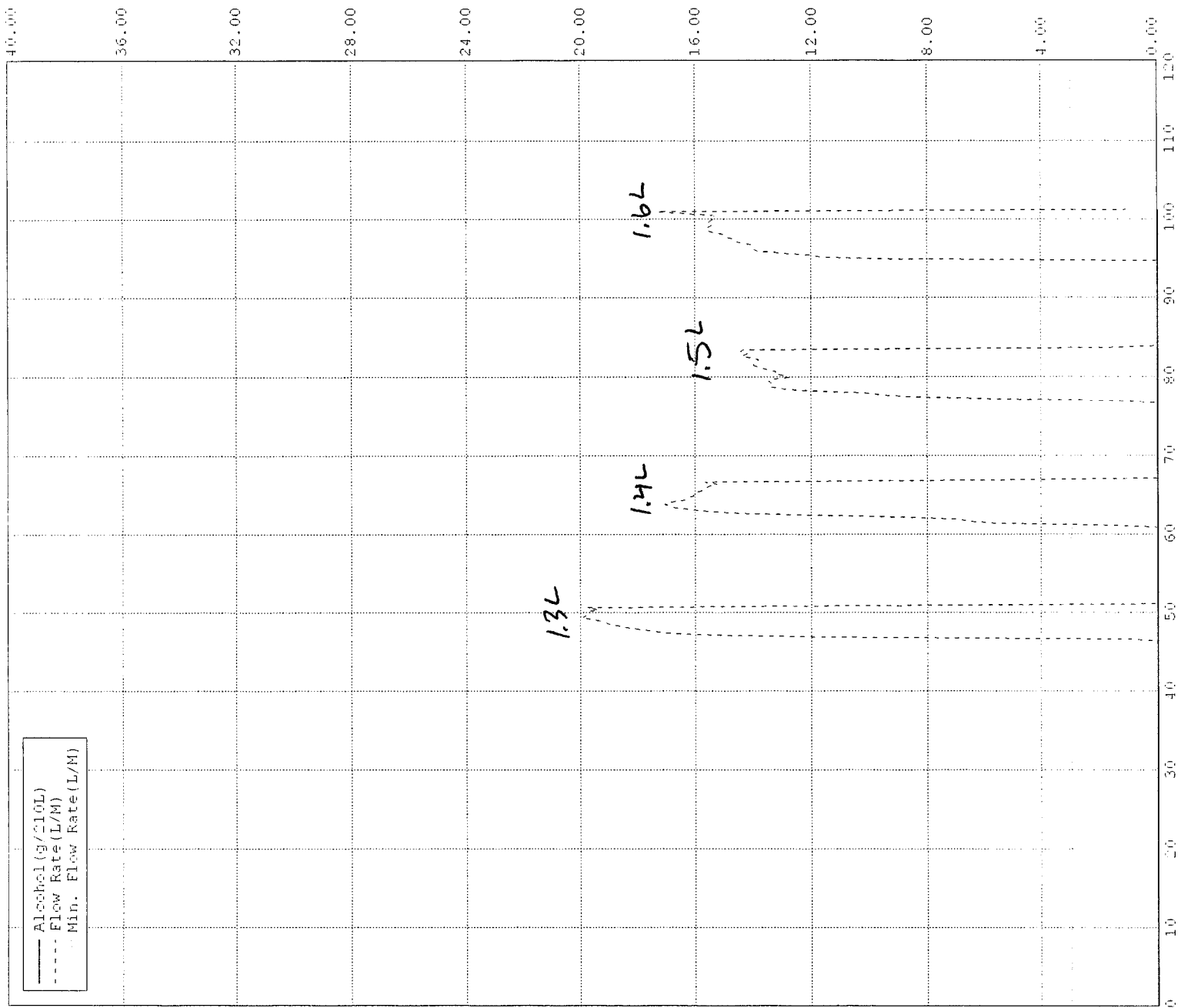
DEPT/AGENCY:
 MINIMUM VOLUME
 CASE/REPORT: XXXX
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.26: 0.078
 LOT #: AG826101
 EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	09:18
BLANK TEST	0.000	09:19
INTERNAL STANDARD	VERIFIED	09:19
EXTERNAL STANDARD	0.076	09:19
BLANK TEST	0.000	09:20
SUBJECT SAMPLE (Vol=1.52L)	0.000	09:22
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.076	09:23
BLANK TEST	0.000	09:24

DW



LINEARITY CHECK

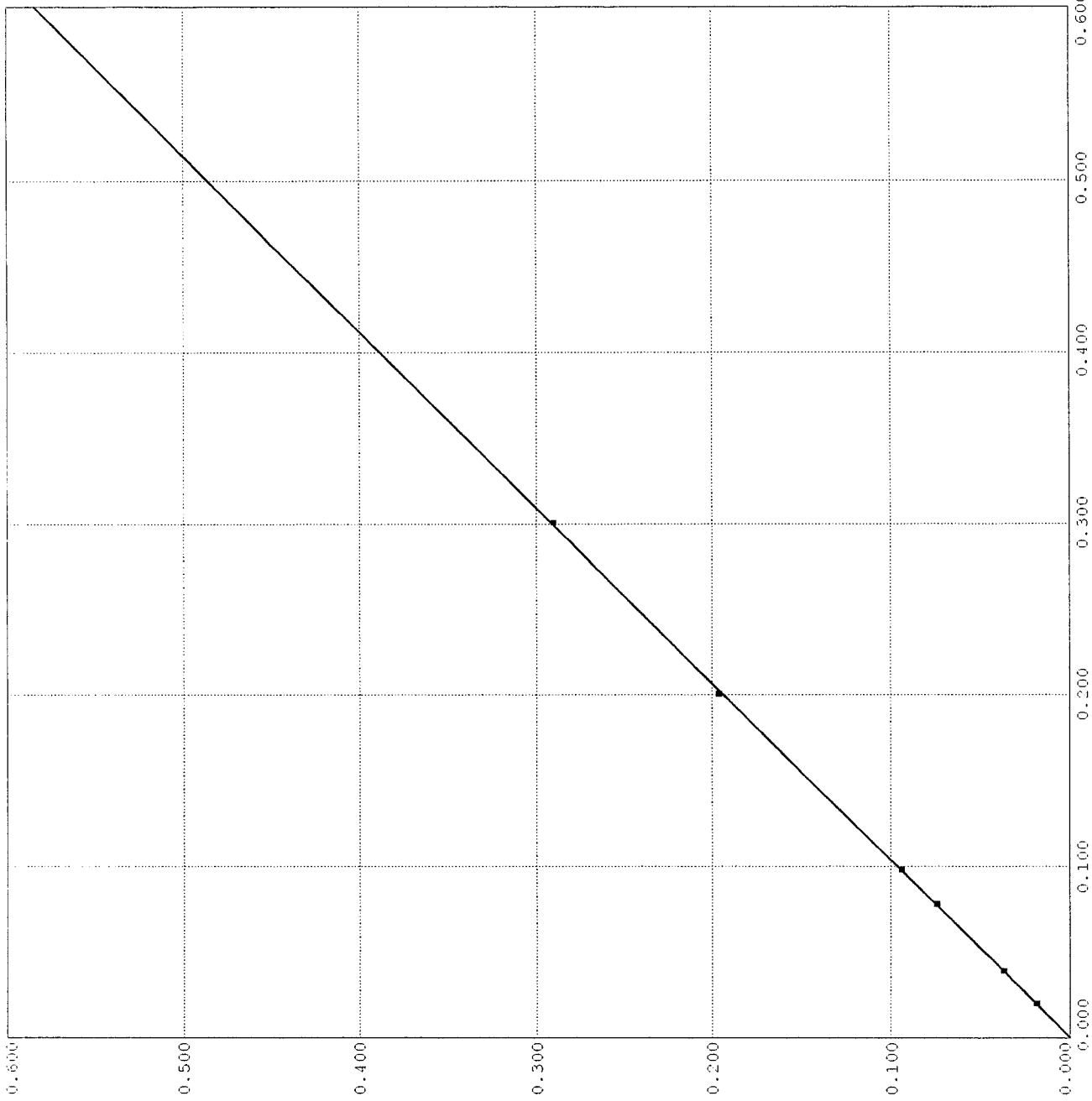
Alaska Department of Public Safety
DATAMASTER dmt: 100681

Date: 08/07/2020
Time: 09:31:48

SUPERVISOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0192	0.0004
0.039	0.0380	0.0000
0.078	0.0752	0.0004
0.098	0.0950	0.0000
0.200	0.1970	0.0000
0.300	0.2910	0.0007

SLOPE = 0.974529
R² = 0.999870



DM

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100681

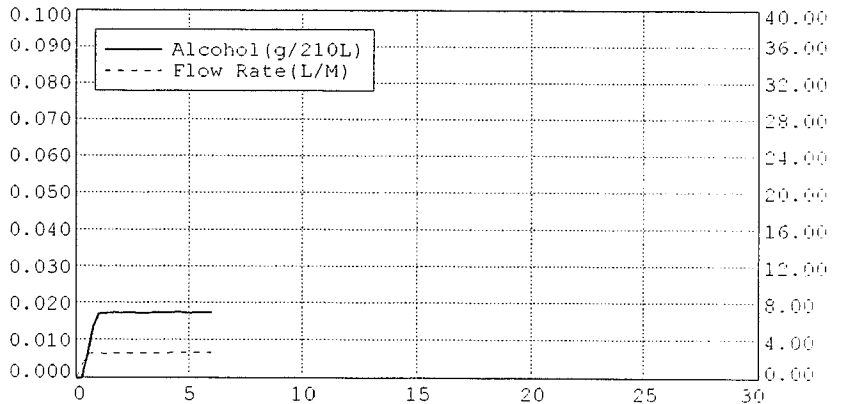
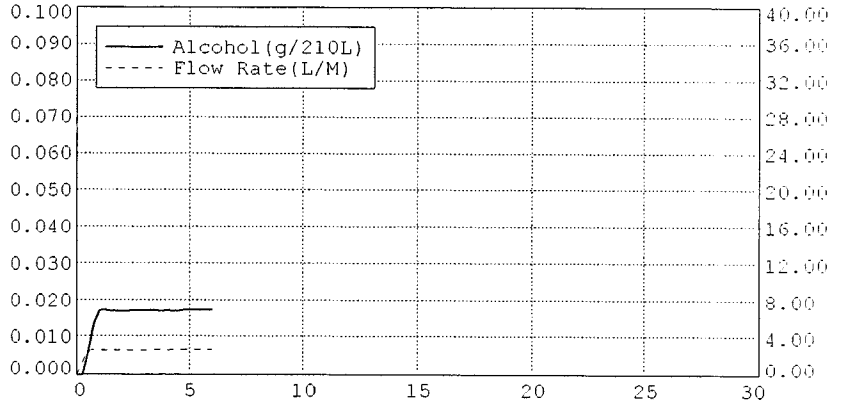
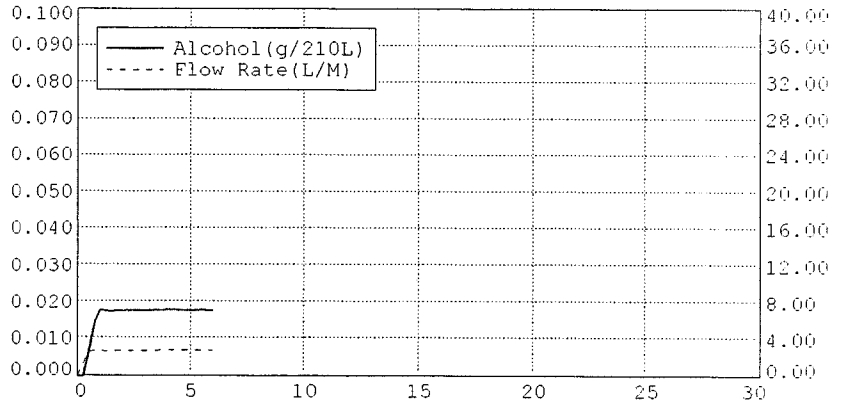
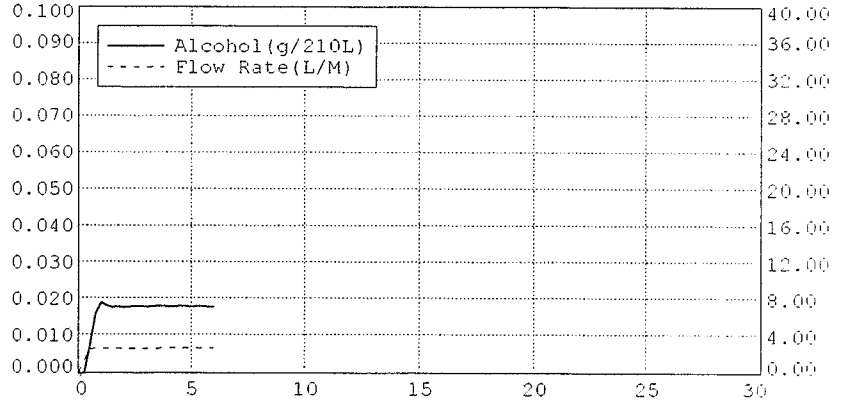
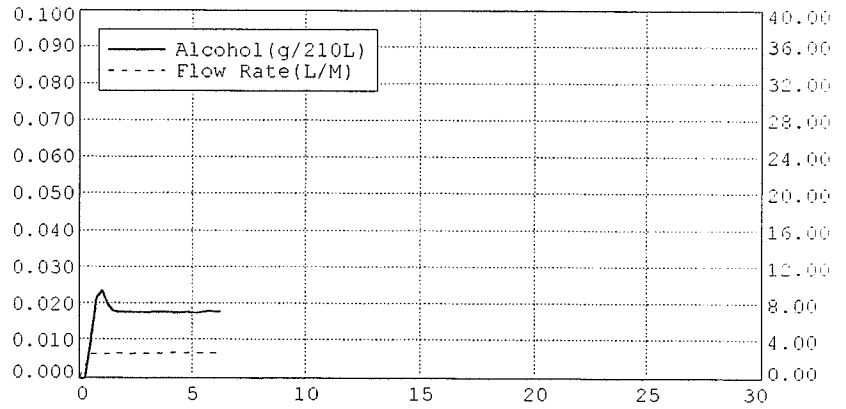
Date: 08/07/2020
Time: 09:31:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.27: 0.020
LOT #: AG928203
EXPIRATION: 10/09/2021
TANK PRESSURE: 788 psi

BLANK TEST	0.000	09:33
INTERNAL STANDARD	VERIFIED	09:33
EXTERNAL STANDARD	0.019	09:33
BLANK TEST	0.000	09:34
EXTERNAL STANDARD	0.020	09:34
BLANK TEST	0.000	09:35
EXTERNAL STANDARD	0.019	09:35
BLANK TEST	0.000	09:36
EXTERNAL STANDARD	0.019	09:36
BLANK TEST	0.000	09:37
EXTERNAL STANDARD	0.019	09:37
BLANK TEST	0.000	09:38

Average = 0.0192
Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100681

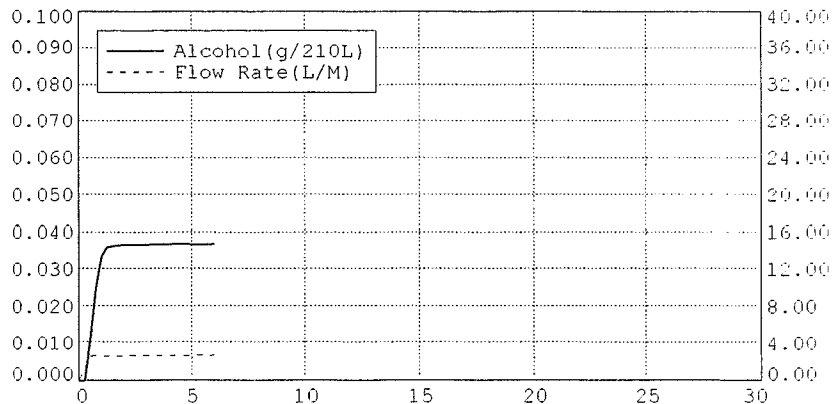
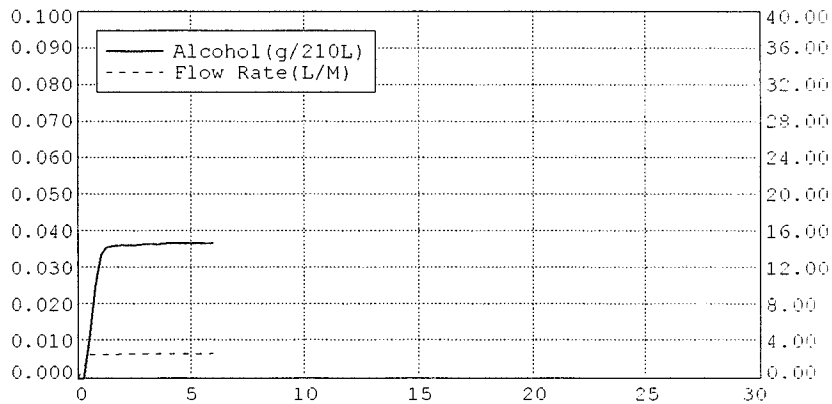
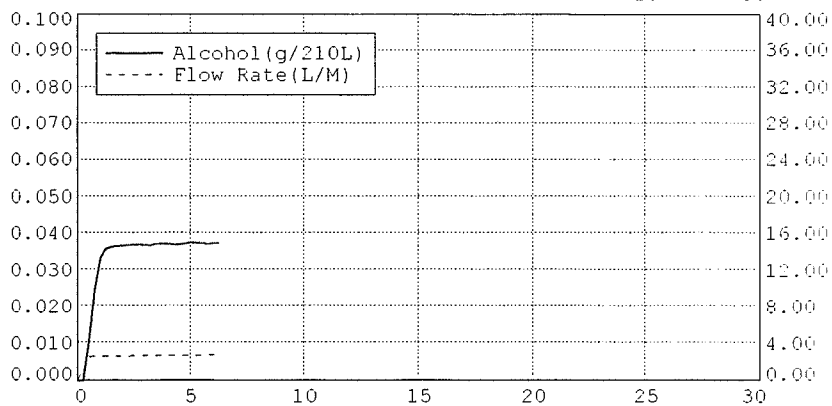
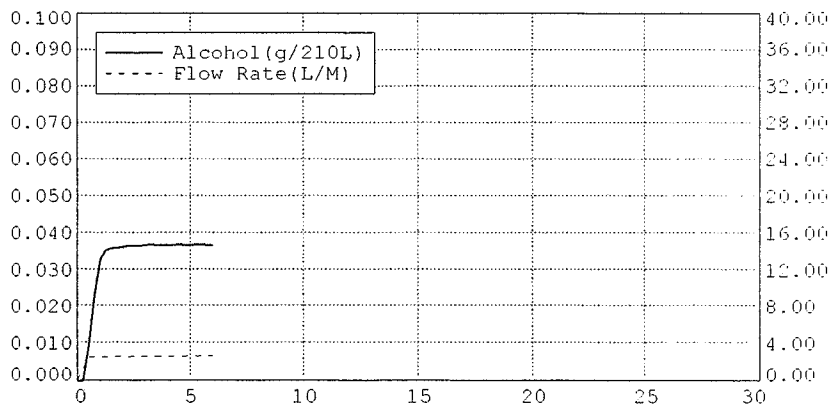
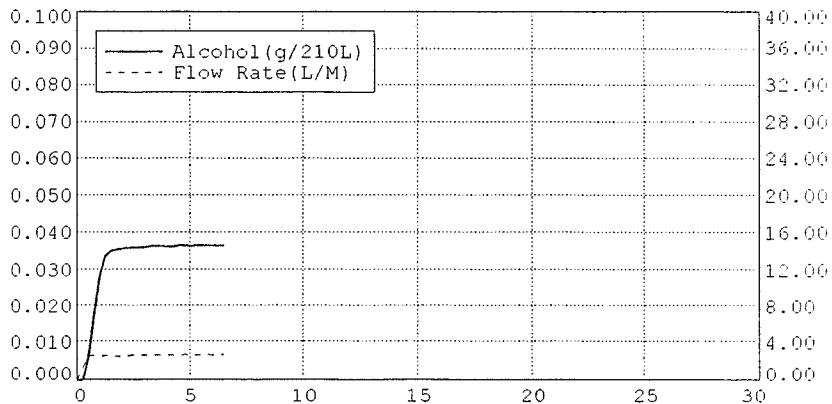
Date: 08/07/2020
 Time: 09:43:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.27: 0.039
 LOT #: AG916507
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 709 psi

BLANK TEST	0.000	09:44
INTERNAL STANDARD	VERIFIED	09:44
EXTERNAL STANDARD	0.038	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.038	09:46
BLANK TEST	0.000	09:47
EXTERNAL STANDARD	0.038	09:47
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.038	09:48
BLANK TEST	0.000	09:49
EXTERNAL STANDARD	0.038	09:49
BLANK TEST	0.000	09:50

Average = 0.0380
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100681

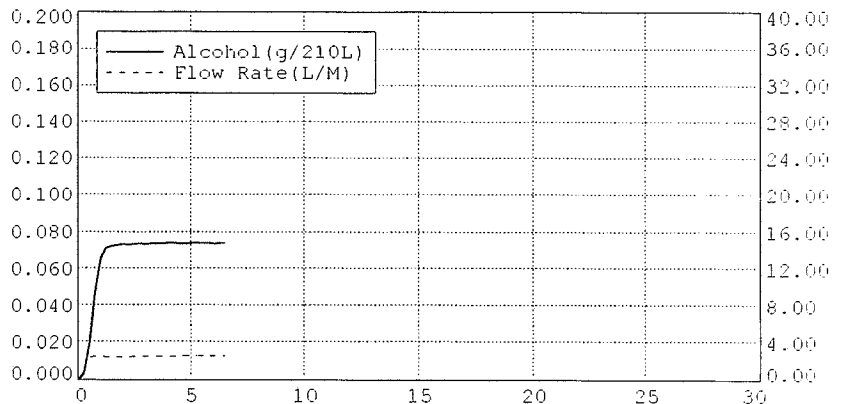
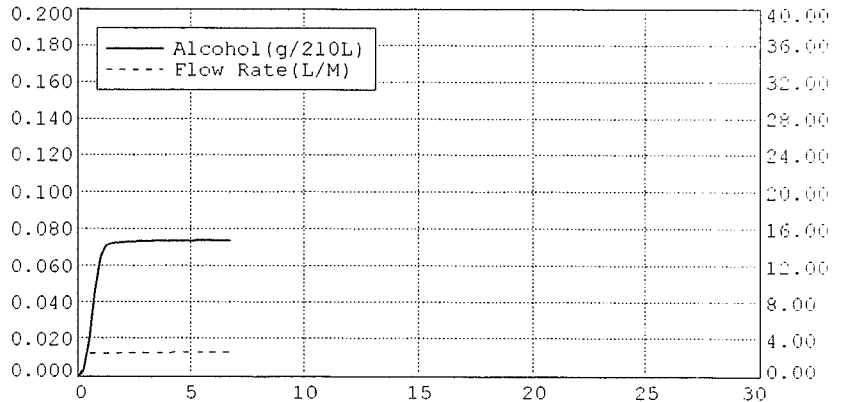
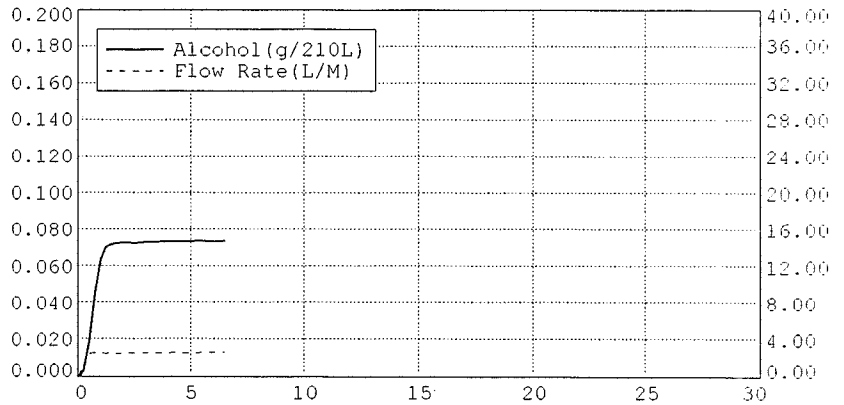
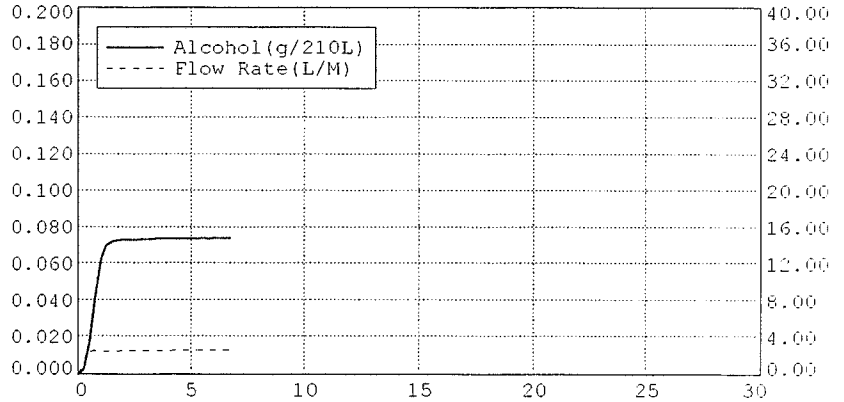
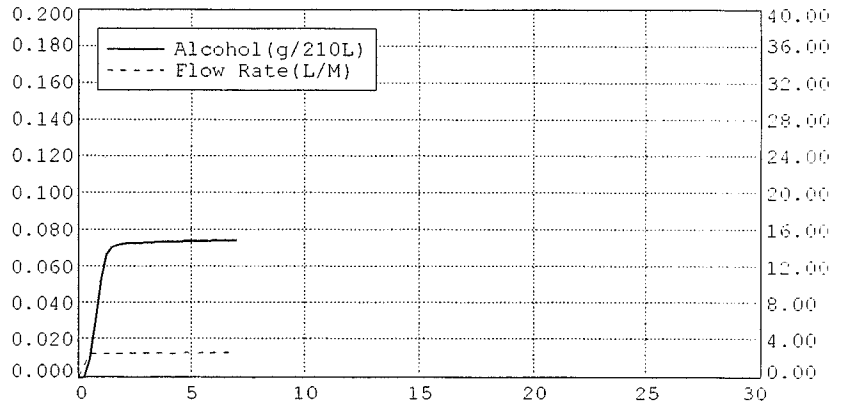
Date: 08/07/2020
 Time: 09:51:40

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.27: 0.078
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 456 psi

BLANK TEST	0.000	09:52
INTERNAL STANDARD	VERIFIED	09:52
EXTERNAL STANDARD	0.076	09:53
BLANK TEST	0.000	09:54
EXTERNAL STANDARD	0.075	09:54
BLANK TEST	0.000	09:55
EXTERNAL STANDARD	0.075	09:55
BLANK TEST	0.000	09:56
EXTERNAL STANDARD	0.075	09:56
BLANK TEST	0.000	09:57
EXTERNAL STANDARD	0.075	09:57
BLANK TEST	0.000	09:58

Average = 0.0752
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100681

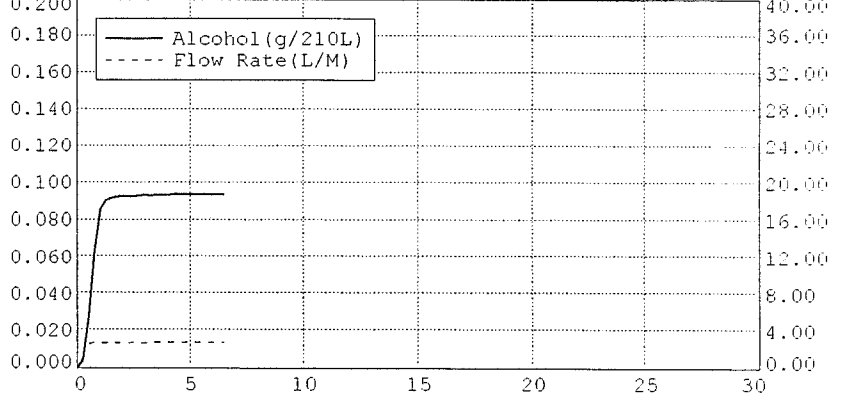
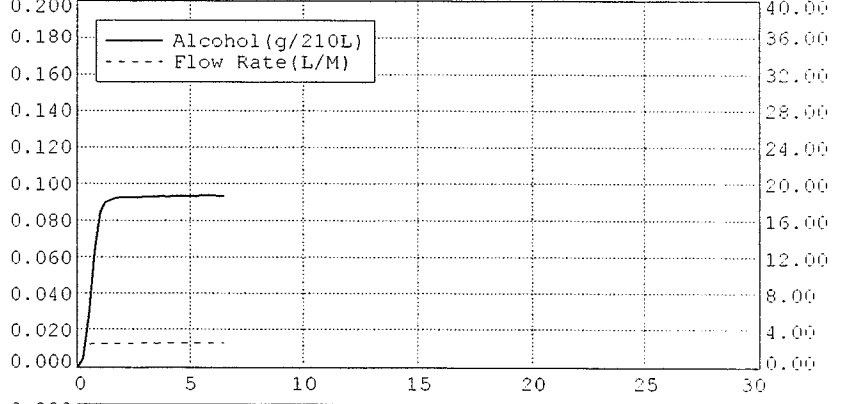
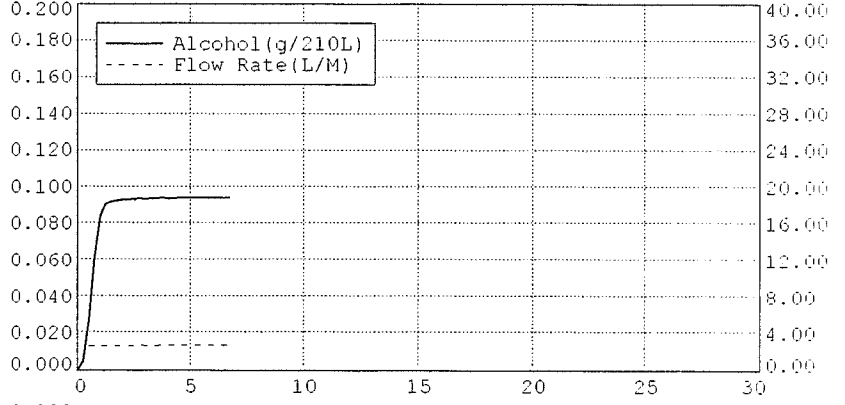
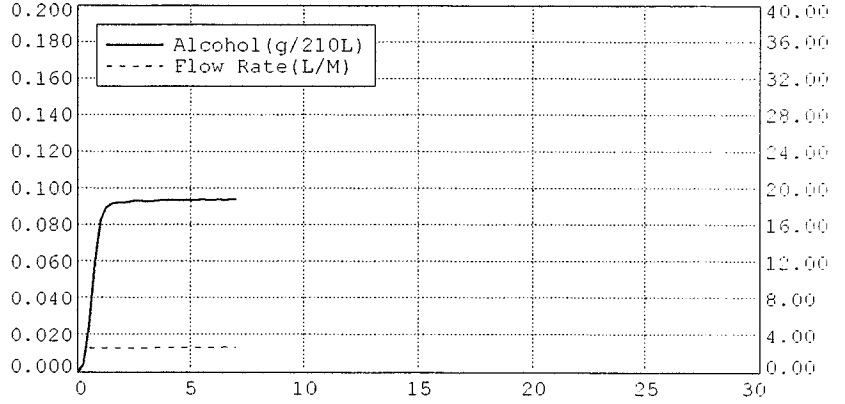
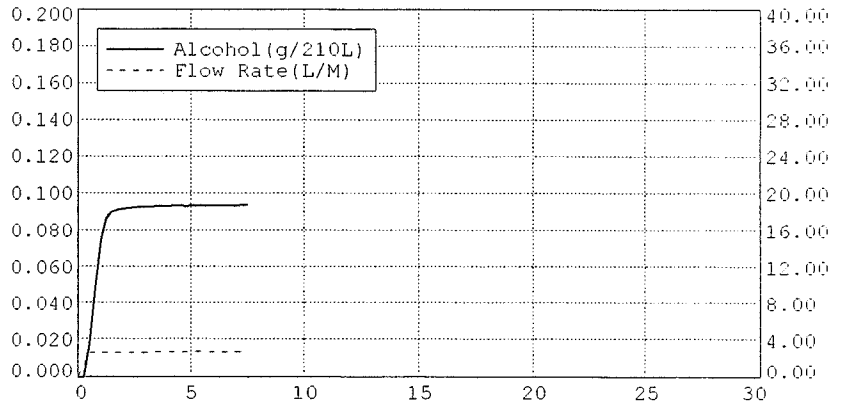
Date: 08/07/2020
 Time: 10:01:23

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.27: 0.098
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 915 psi

BLANK TEST	0.000	10:02
INTERNAL STANDARD	VERIFIED	10:02
EXTERNAL STANDARD	0.095	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.095	10:04
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.095	10:05
BLANK TEST	0.000	10:06
EXTERNAL STANDARD	0.095	10:06
BLANK TEST	0.000	10:07
EXTERNAL STANDARD	0.095	10:07
BLANK TEST	0.000	10:08

Average = 0.0950
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100681

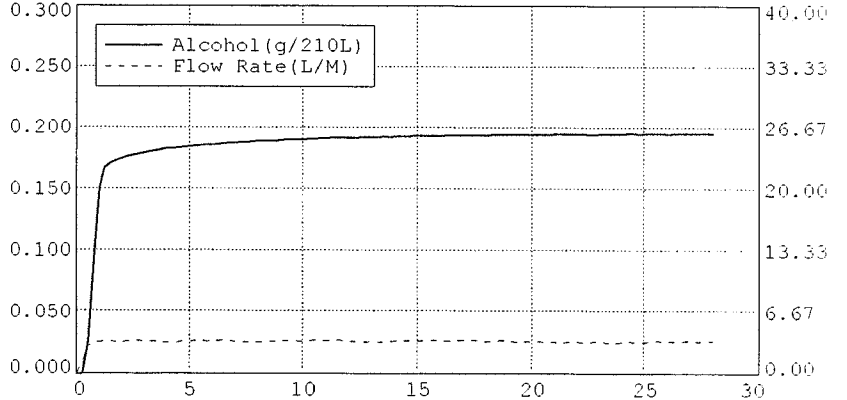
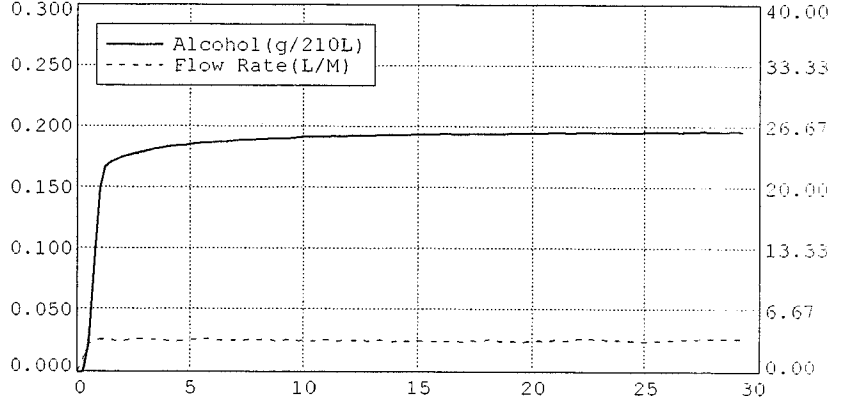
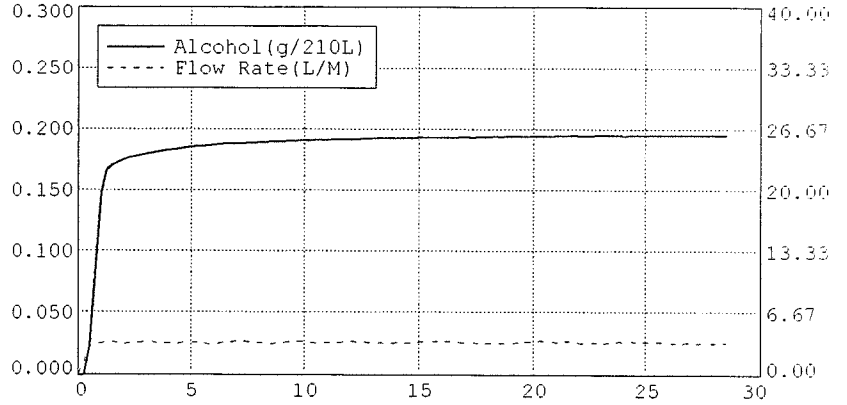
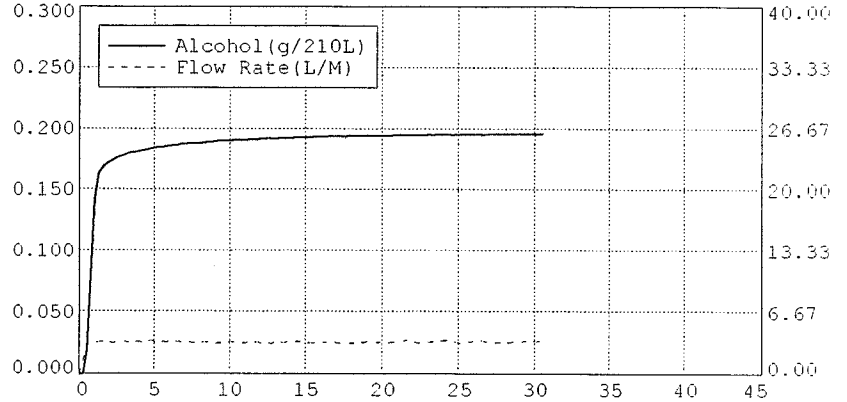
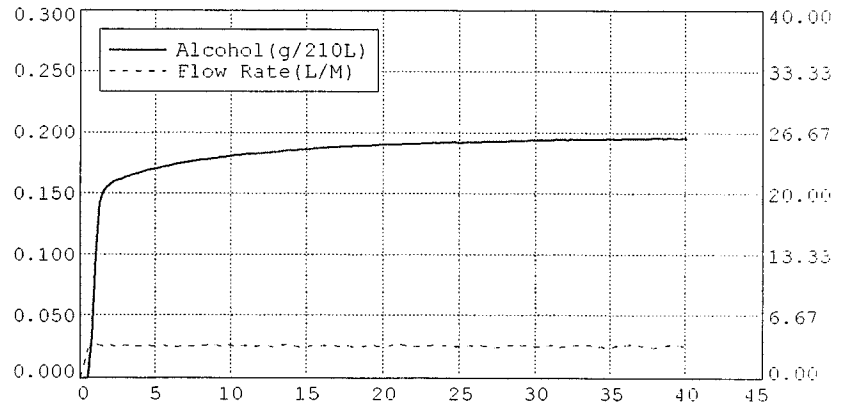
Date: 08/07/2020
 Time: 10:13:30

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:30
INTERNAL STANDARD	VERIFIED	10:31
EXTERNAL STANDARD	0.197	10:31
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.197	10:33
BLANK TEST	0.000	10:34
EXTERNAL STANDARD	0.197	10:34
BLANK TEST	0.000	10:35
EXTERNAL STANDARD	0.197	10:36
BLANK TEST	0.000	10:37
EXTERNAL STANDARD	0.197	10:37
BLANK TEST	0.000	10:38

Average = 0.1970
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100681

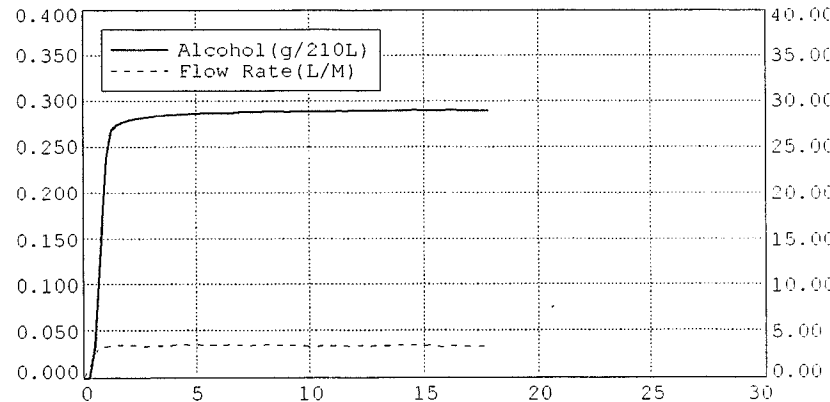
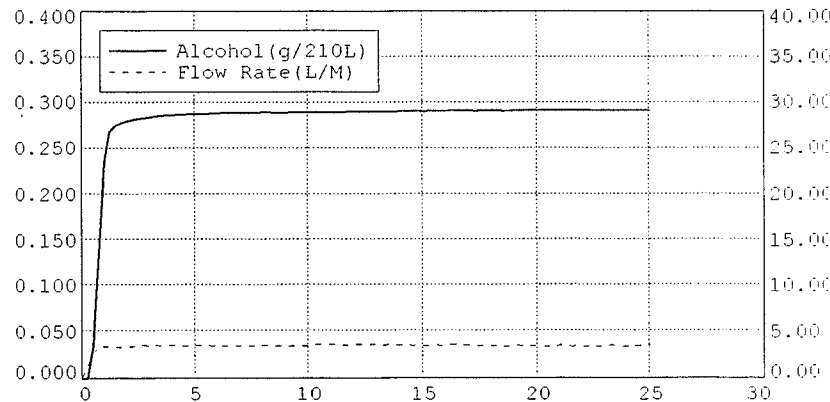
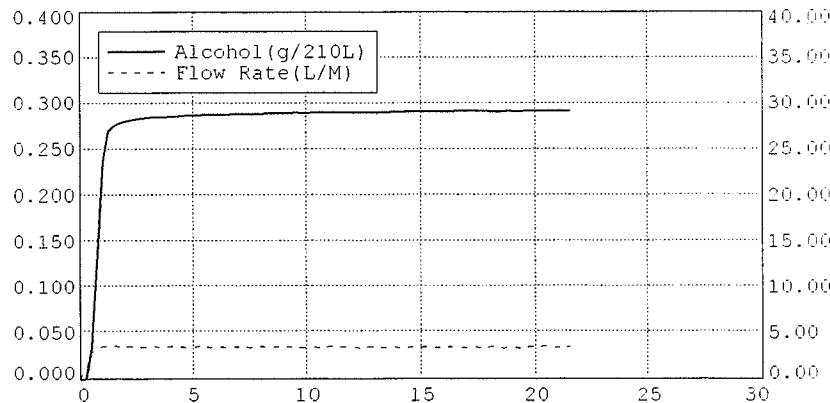
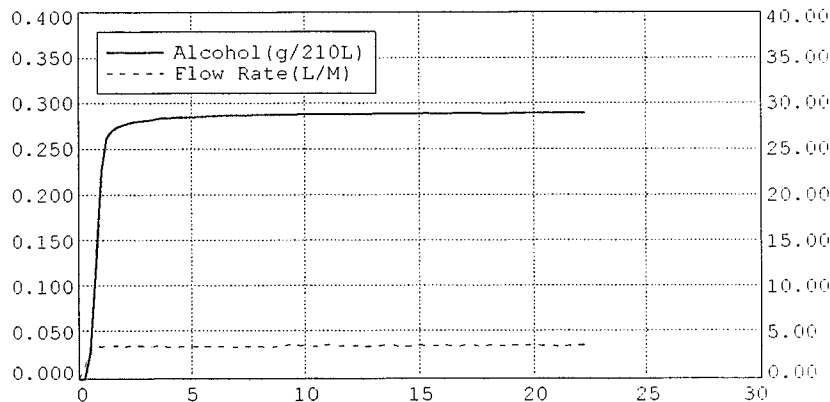
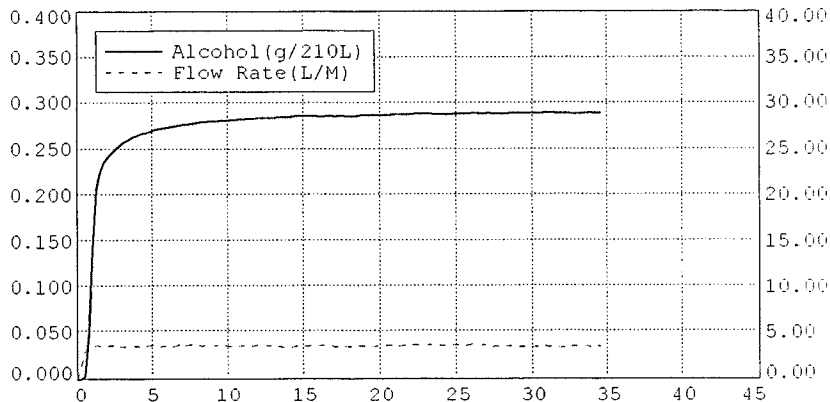
Date: 08/07/2020
 Time: 10:50:41

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:52
INTERNAL STANDARD	VERIFIED	10:52
EXTERNAL STANDARD	0.290	10:52
BLANK TEST	0.000	10:53
EXTERNAL STANDARD	0.291	10:54
BLANK TEST	0.000	10:55
EXTERNAL STANDARD	0.292	10:55
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.291	10:57
BLANK TEST	0.000	10:57
EXTERNAL STANDARD	0.291	10:58
BLANK TEST	0.000	10:59

Average = 0.2910
 Std Dev = 0.0007



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100681

Date: 08/07/2020
Time: 11:17:35

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

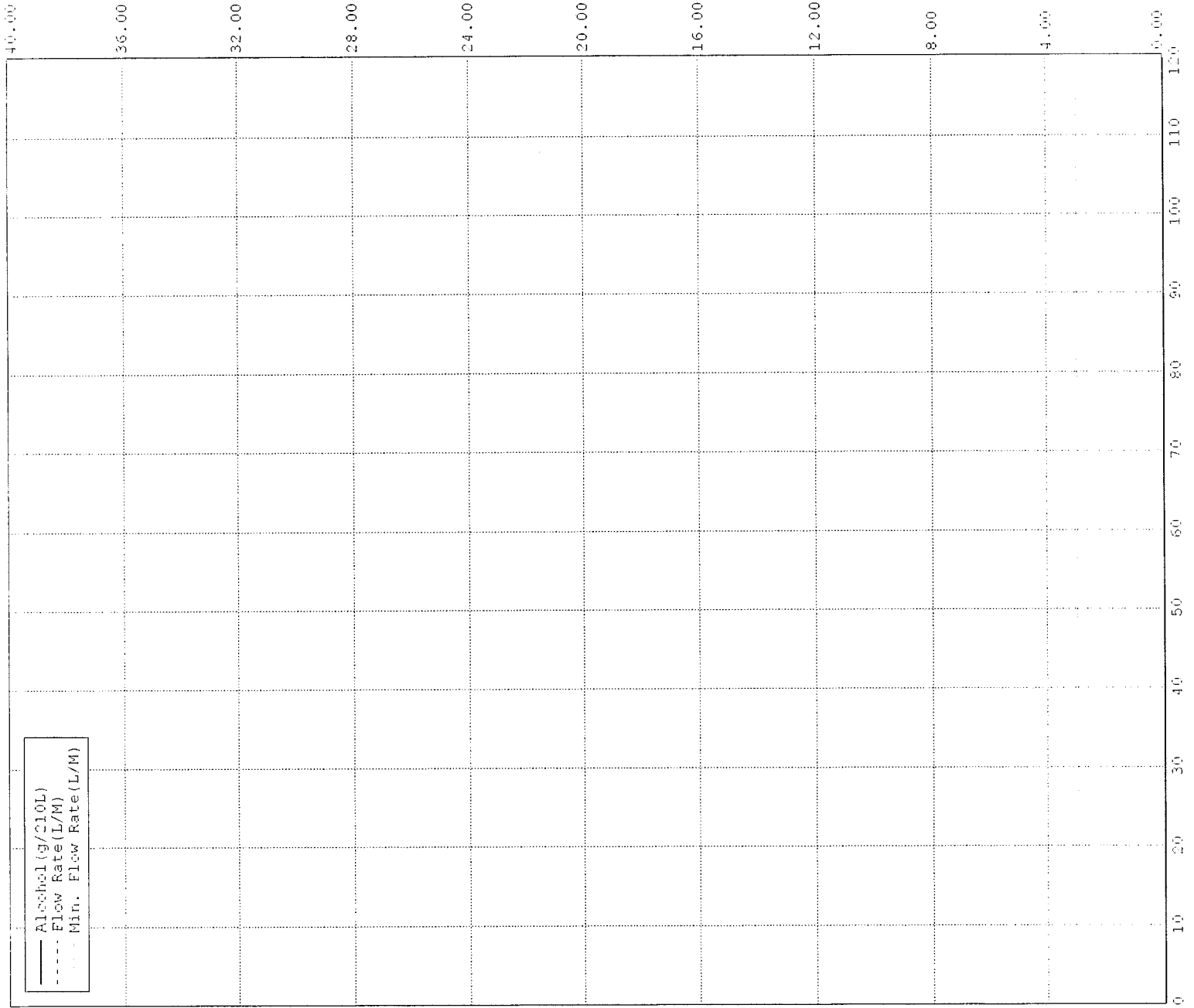
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.29: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 11:24
BLANK TEST 0.000 11:24
INTERNAL STANDARD VERIFIED 11:24
EXTERNAL STANDARD 0.075 11:25
BLANK TEST 0.000 11:26
SUBJECT SAMPLE INCOMPLETE 11:28

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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100681

Date: 08/07/2020
Time: 11:39:53

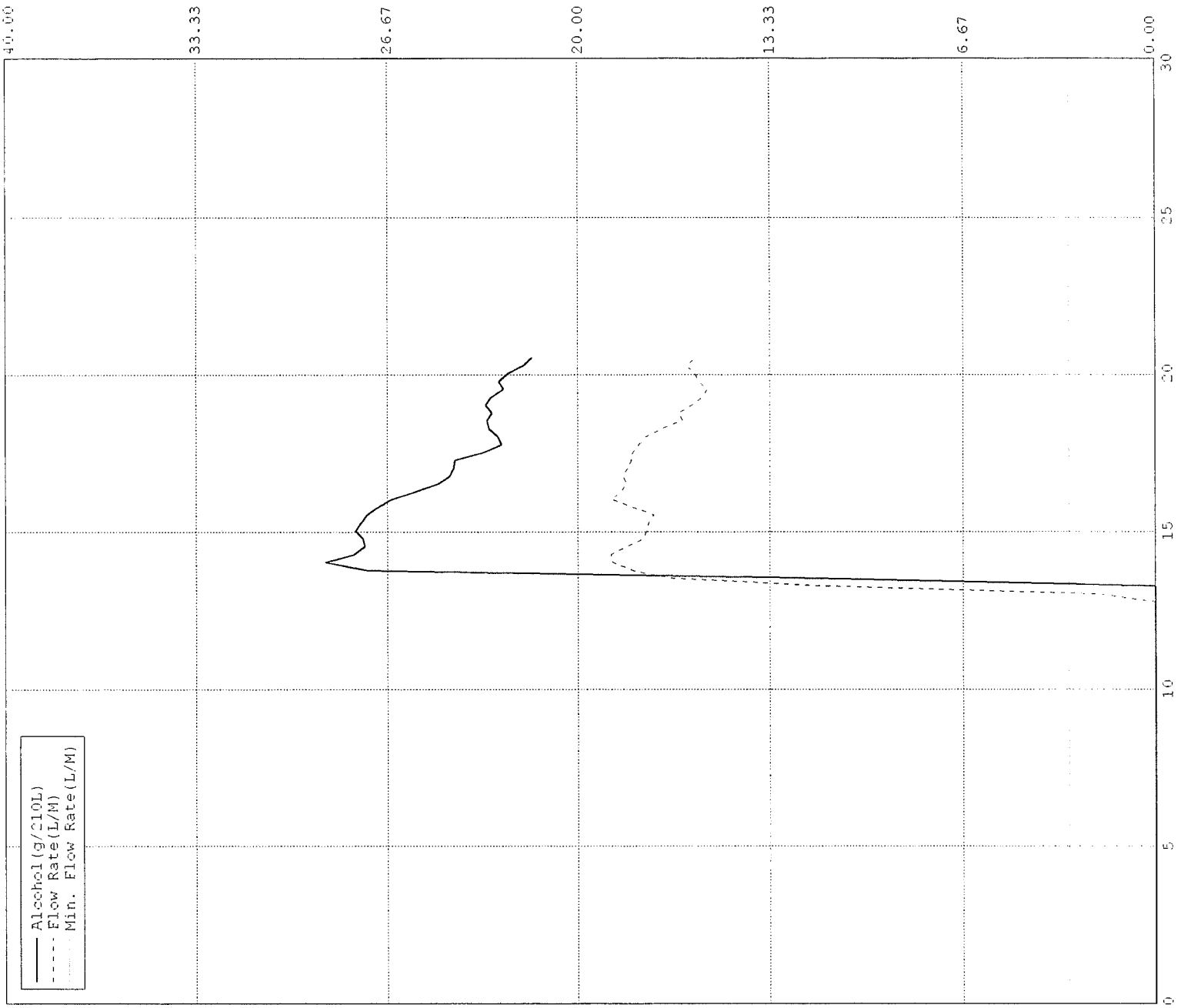
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.30: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 11:42
BLANK TEST 0.000 11:42
INTERNAL STANDARD VERIFIED 11:42
EXTERNAL STANDARD 0.076 11:43
BLANK TEST 0.000 11:44
SUBJECT SAMPLE INVALID 11:44



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100681

Date: 08/07/2020
Time: 13:10:42

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 29.31: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

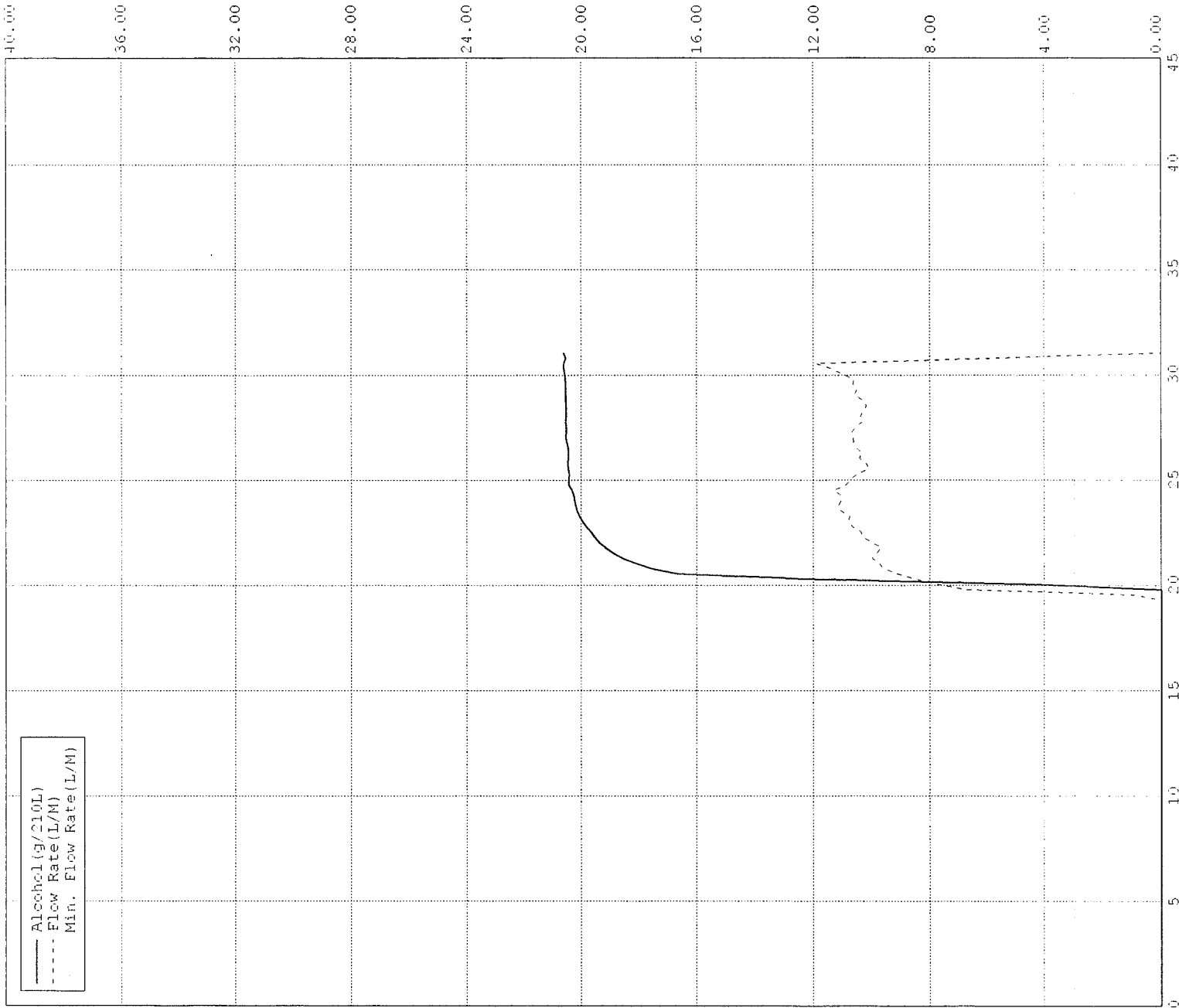
DIAGNOSTIC CHECK PASSED 13:11
BLANK TEST 0.000 13:11
INTERNAL STANDARD VERIFIED 13:11
Xq = 0.107 (0.41%)
EXTERNAL STANDARD 0.075 13:12
X[1] = 0.0753 (-0.0002) (0.0020)
BLANK TEST 0.000 13:13
SUBJECT SAMPLE XXX 13:13
X[1] = 0.1039 (-0.0150) (-0.0004)

Interference Detected

Filter 2 average: 0.0003

Filter 3 average: 0.0018

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100681

Date: 08/07/2020
Time: 13:21:41

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

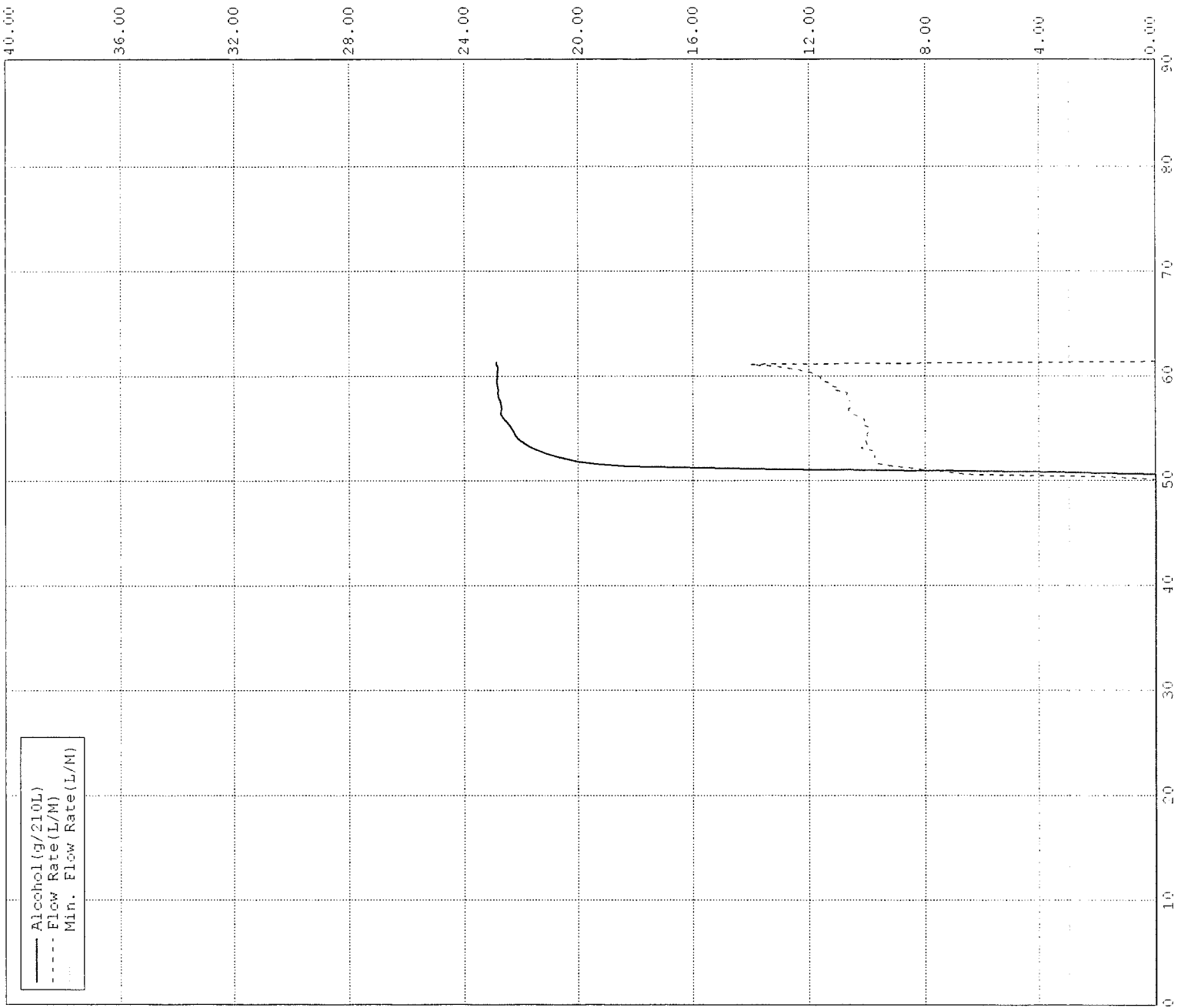
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.31: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:23
BLANK TEST 0.000 13:23
INTERNAL STANDARD VERIFIED 13:23
Xq = 0.107 (0.66%)
EXTERNAL STANDARD 0.076 13:24
X[1] = 0.0757 (0.0009) (0.0027)
BLANK TEST 0.000 13:25
SUBJECT SAMPLE XXX 13:26
X[1] = 0.1150 (-0.0226) (0.0012)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100681

Date: 08/07/2020
Time: 12:59:58

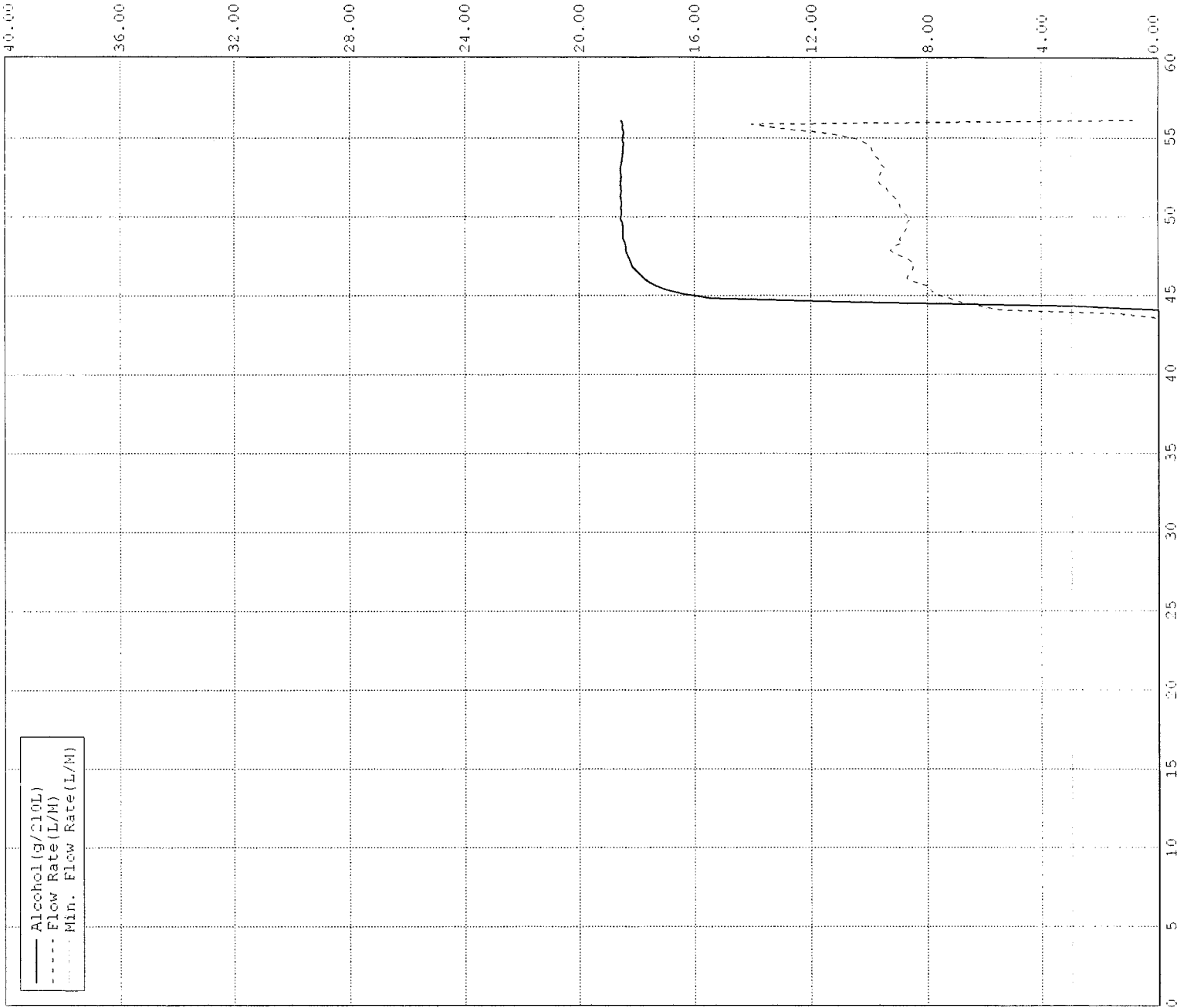
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 29.30: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:01
BLANK TEST 0.000 13:01
INTERNAL STANDARD VERIFIED 13:01
Xq = 0.107 (0.83%)
EXTERNAL STANDARD 0.076 13:01
X[1] = 0.0758 (0.0002) (0.0012)
BLANK TEST 0.000 13:02
SUBJECT SAMPLE (Vol=1.83L) 0.093 13:03
X[1] = 0.0937 (0.0005) (-0.0009)
BLANK TEST 0.000 13:04
EXTERNAL STANDARD 0.075 13:04
X[1] = 0.0748 (0.0004) (0.0013)
BLANK TEST 0.000 13:05



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100681

Date: 08/07/2020
Time: 12:52:46

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

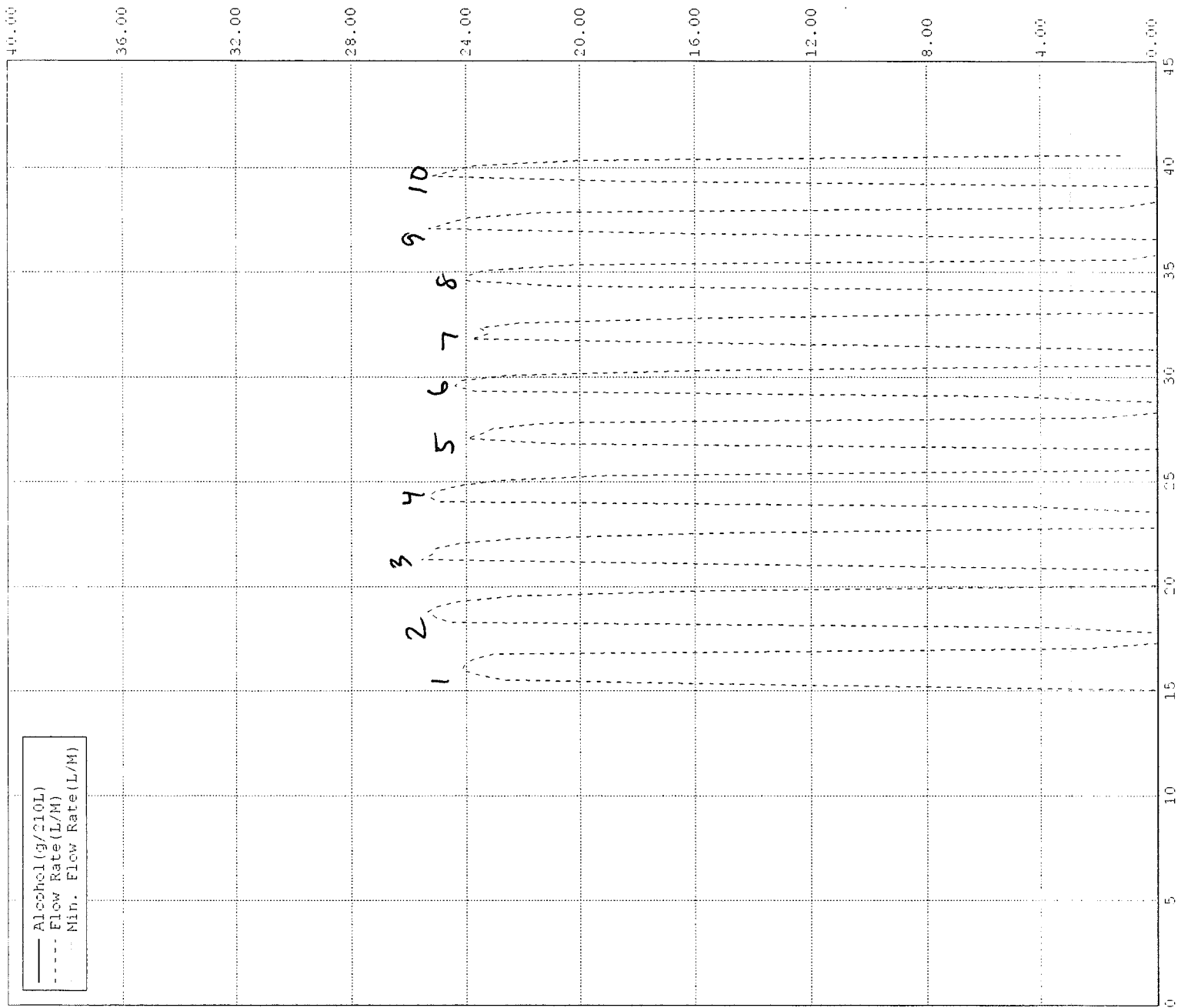
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.31: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 12:54
BLANK TEST 0.000 12:54
INTERNAL STANDARD VERIFIED 12:54
EXTERNAL STANDARD 0.075 12:54
BLANK TEST 0.000 12:55
SUBJECT SAMPLE XXX 12:56

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100681

Date: 08/07/2020
Time: 11:32:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

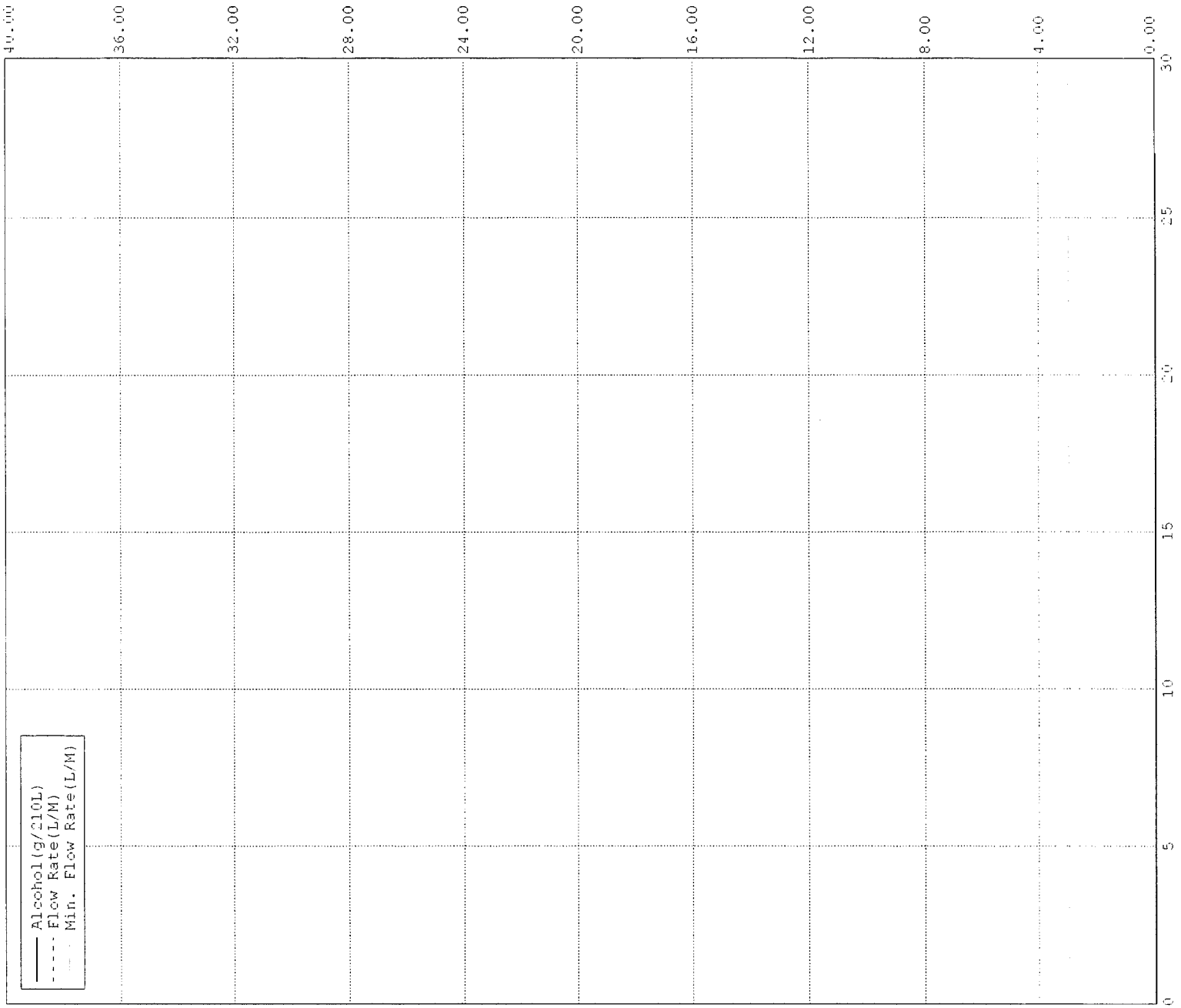
DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.29: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 11:34
BLANK TEST 0.000 11:34
INTERNAL STANDARD VERIFIED 11:35
EXTERNAL STANDARD 0.076 11:35
BLANK TEST 0.000 11:36

RFI DETECTED

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100681

Date: 08/07/2020
Time: 13:44:48

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 29.31: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	13:46
BLANK TEST	0.000	13:46
INTERNAL STANDARD	VERIFIED	13:46
EXTERNAL STANDARD	0.076	13:47
BLANK TEST	0.000	13:48
SUBJECT SAMPLE (Vol=2.39L)	0.000	13:48
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.075	13:49
BLANK TEST	0.000	13:50

