

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 100347 Analyst Derech Walker Start Date 03/25/2021

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

iii. Cooler (2.0V Maximum)

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 Wuth Lot 19200 Exp 08/06/21

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

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

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

Functional Tests (attached)

Incomplete

Invalid

Interference

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

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

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

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

iii. Negative Control - Mnf Wuth 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 03/26/21

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 03/25/2021
Time: 13:02:56

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 44.4°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.63 V PASSED
(0.98 V - 2.28 V)
Cooler Voltage = 1.64 V PASSED
(0.98 V - 2.30 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 536 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.7 in

PUMP INFO

Flow Rate = 4.816 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
(0.002 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD PASSED
Xq = 0.109 0.98% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100347

Date: 03/25/2021
Time: 1:39 PM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 41.7°C

Current Barometer 29.7 in
Volume (Ltr) 1.57

Settings

Lamp: 1.63 V
Bias: 80 V
Cooler: 1.64 V
Chopper: 518 Hz

Voltages (V)

Flow: 1.05 V
Detector: 0.002 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 03/08/2021
Time: 13:17:40

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca = 0.1000
CAL = 0.985656 0.800 <= CAL < 1.200
b1 = 0.0006 0.0000 <= b1 < 0.0040
b2 = 0.0055 0.0010 <= b2 < 0.0100
b3 = 0.0002 0.0000 <= b3 < 0.0040
Xq = 0.1083 0.0500 <= Xq < 0.2000
a21 = 1.173794 1.050 <= a21 < 1.300
a31 = 0.460529 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 03/25/2021
Time: 13:48:42

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

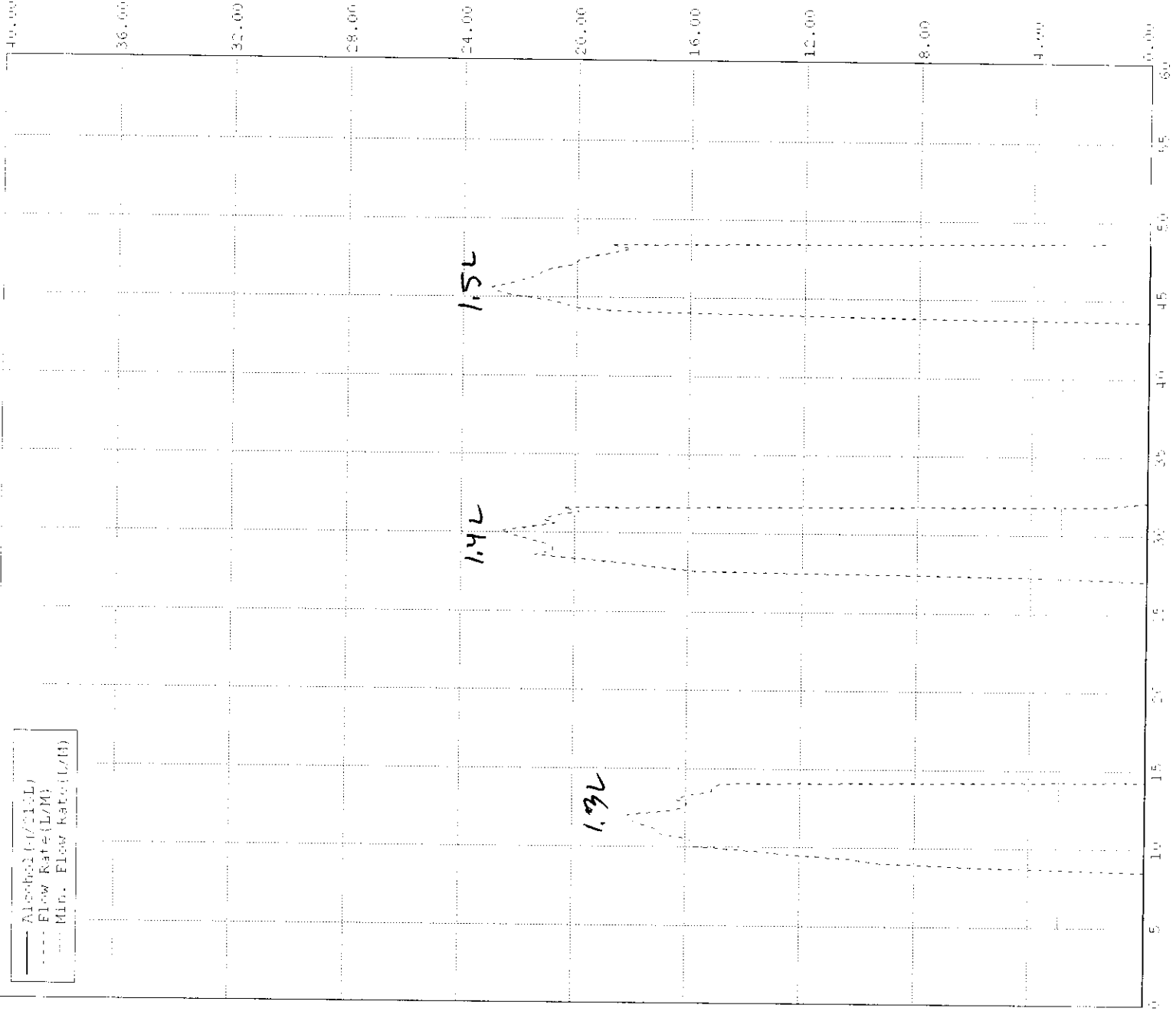
DEPT/AGENCY:
MINIMUM VOLUME
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.65: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	TIME
BLANK TEST	0.000	13:49
INTERNAL STANDARD	VERIFIED	13:49
EXTERNAL STANDARD	0.077	13:50
BLANK TEST	0.000	13:51
SUBJECT SAMPLE (Vol=1.59L)	0.000	13:51
BLANK TEST	0.000	13:52
EXTERNAL STANDARD	0.078	13:53
BLANK TEST	0.000	13:53

Alcohol (L/L)
Flow Rate (L/M)
Min. Flow Rate (L/H)



LINEARITY CHECK

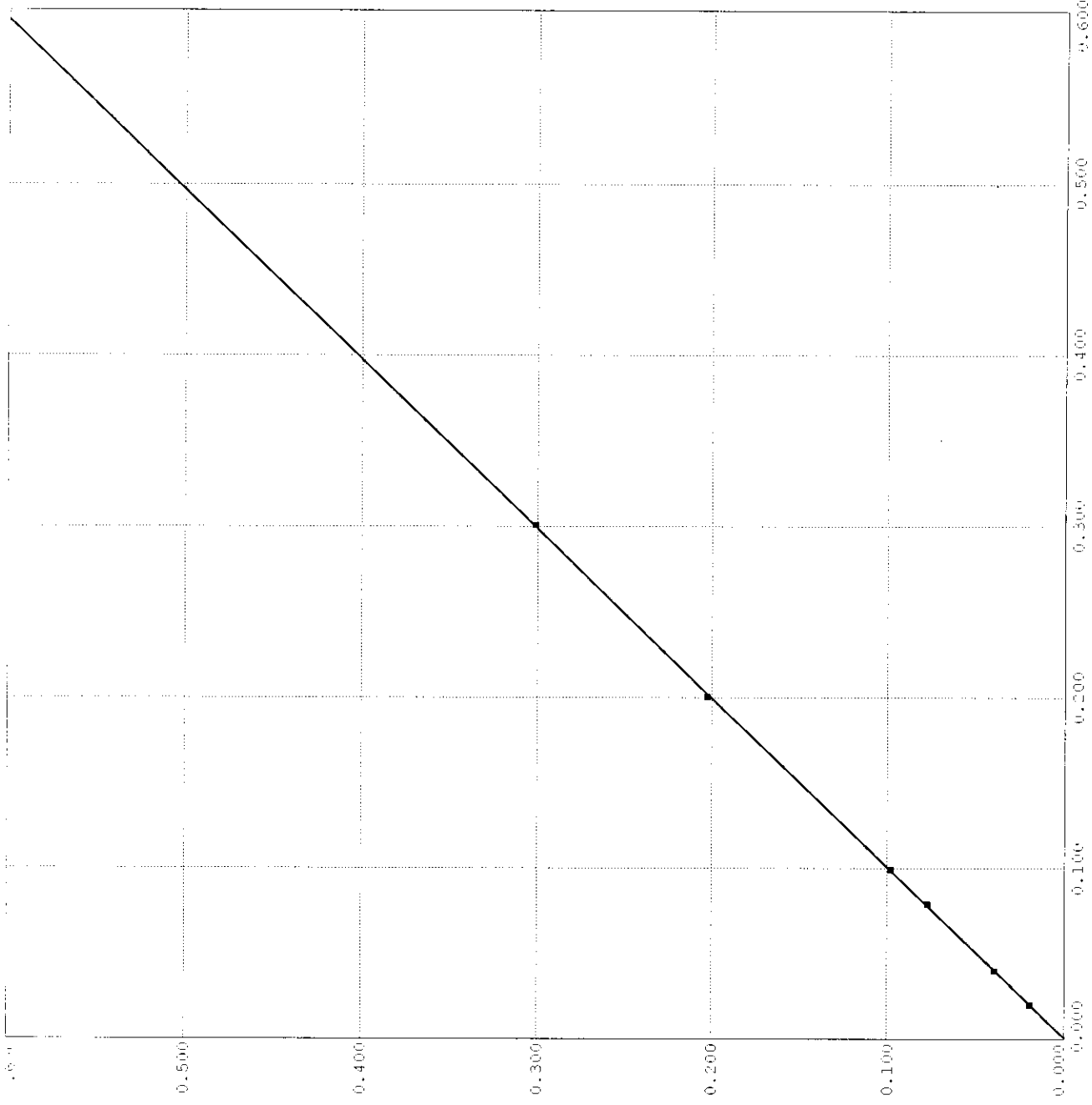
Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 03/25/2021
Time: 13:56:35

SUPERVISOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0202	0.0004
0.040	0.0400	0.0000
0.079	0.0782	0.0004
0.099	0.0990	0.0000
0.200	0.2034	0.0009
0.300	0.3020	0.0012

SLOPE = 1.011008
R² = 0.999907



DM

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100347

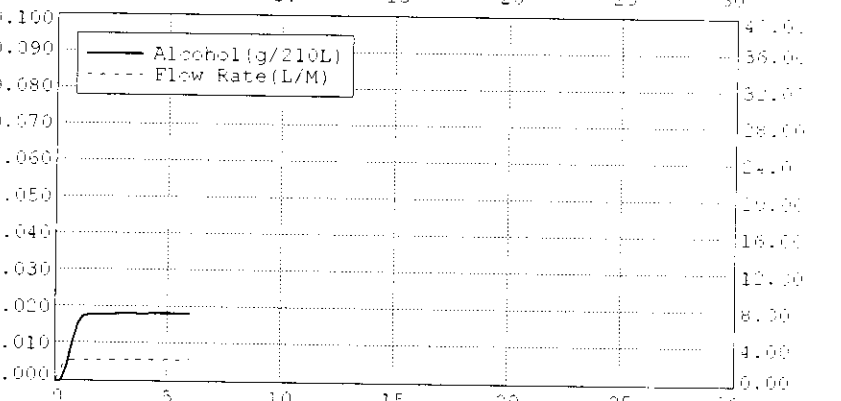
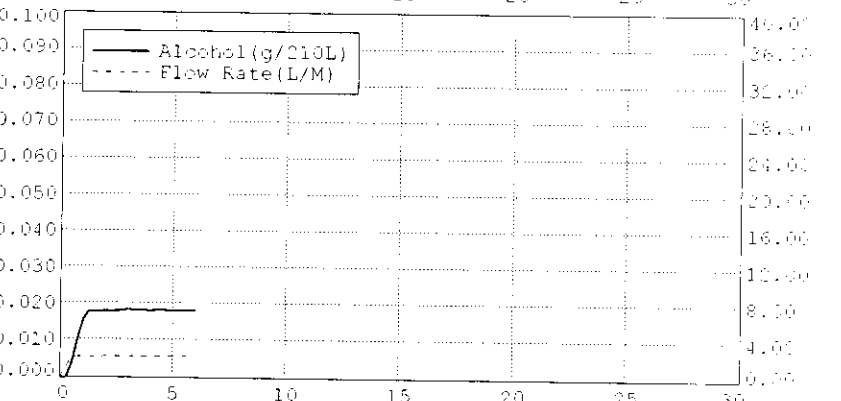
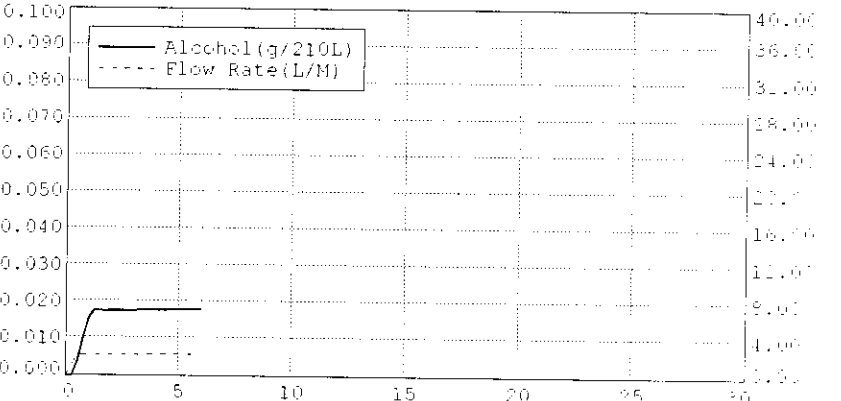
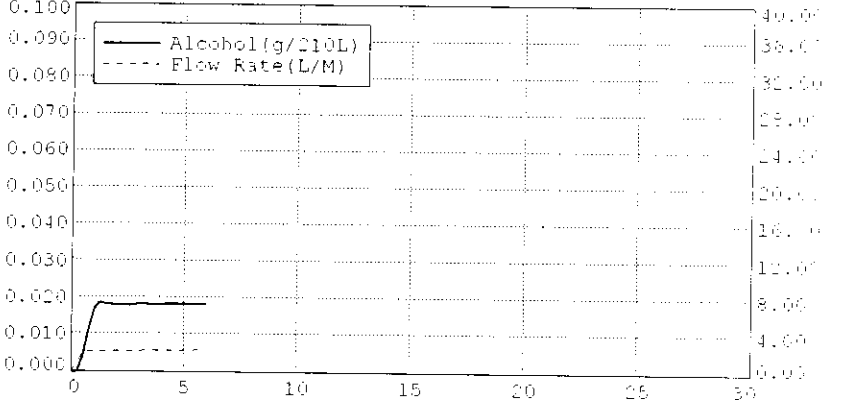
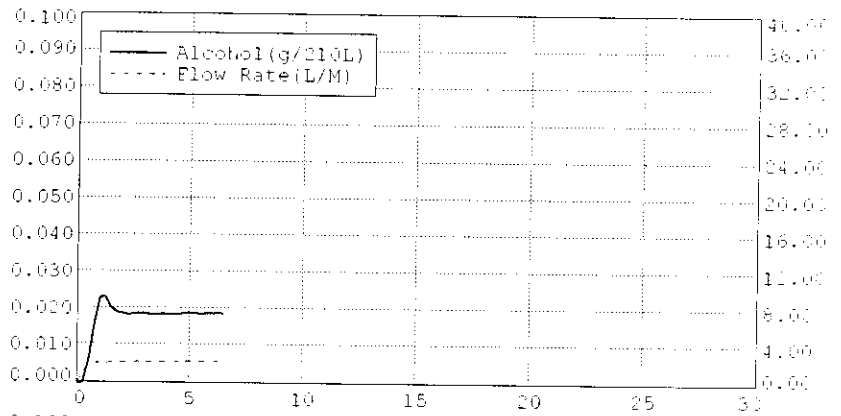
Date: 03/25/2021
 Time: 13:56:37

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.64: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 595 psi

BLANK TEST	0.000	13:57
INTERNAL STANDARD	VERIFIED	13:58
EXTERNAL STANDARD	0.021	13:58
BLANK TEST	0.000	13:59
EXTERNAL STANDARD	0.020	13:59
BLANK TEST	0.000	14:00
EXTERNAL STANDARD	0.020	14:00
BLANK TEST	0.000	14:01
EXTERNAL STANDARD	0.020	14:01
BLANK TEST	0.000	14:02
EXTERNAL STANDARD	0.020	14:02
BLANK TEST	0.000	14:03

Average = 0.0202
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100347

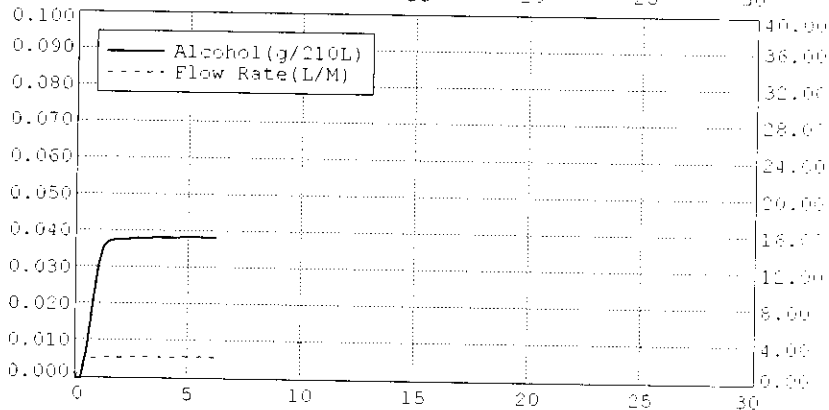
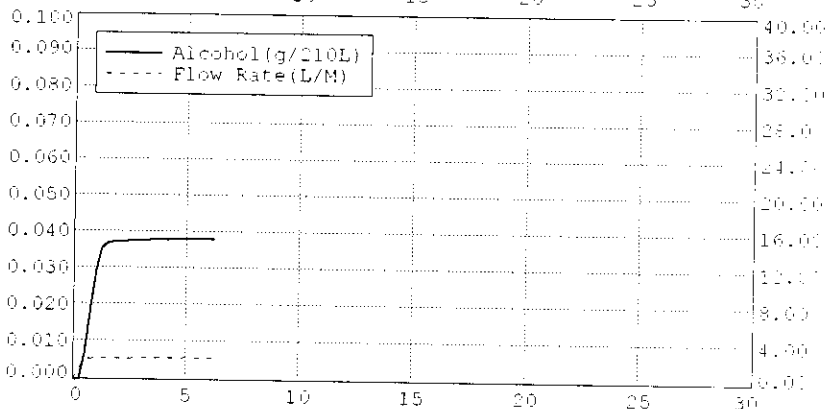
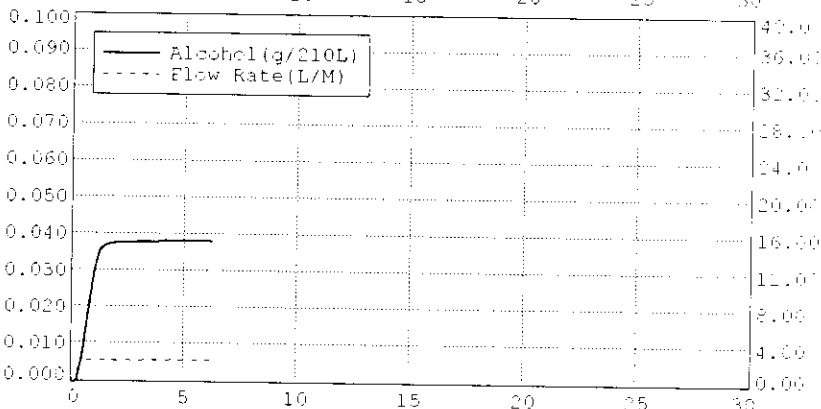
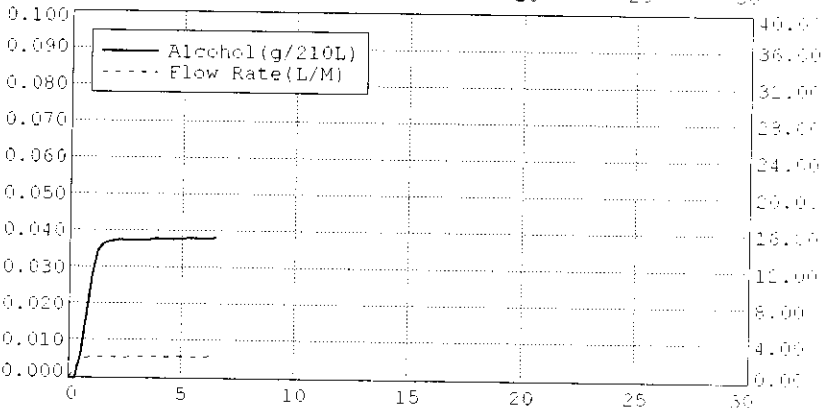
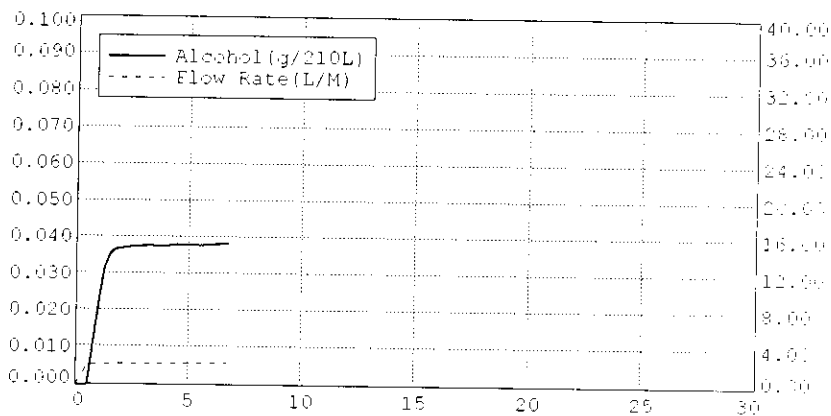
Date: 03/25/2021
 Time: 14:04:49

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.64: 0.040
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 567 psi

BLANK TEST	0.000	14:06
INTERNAL STANDARD	VERIFIED	14:06
EXTERNAL STANDARD	0.040	14:06
BLANK TEST	0.000	14:07
EXTERNAL STANDARD	0.040	14:07
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.040	14:08
BLANK TEST	0.000	14:09
EXTERNAL STANDARD	0.040	14:09
BLANK TEST	0.000	14:10
EXTERNAL STANDARD	0.040	14:10
BLANK TEST	0.000	14:11

Average = 0.0400
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100347

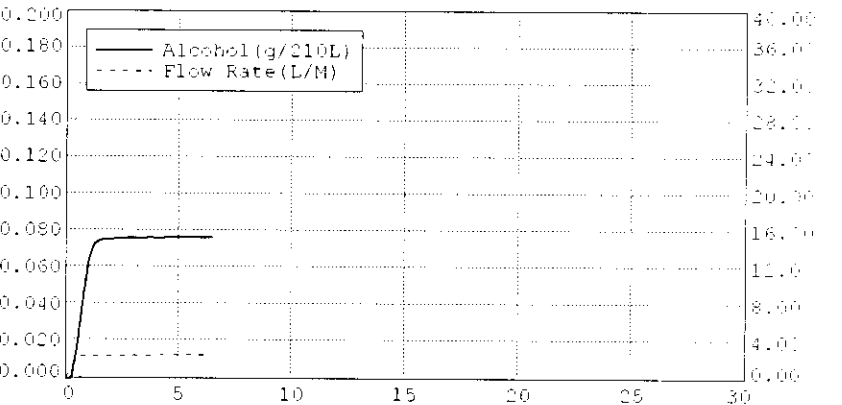
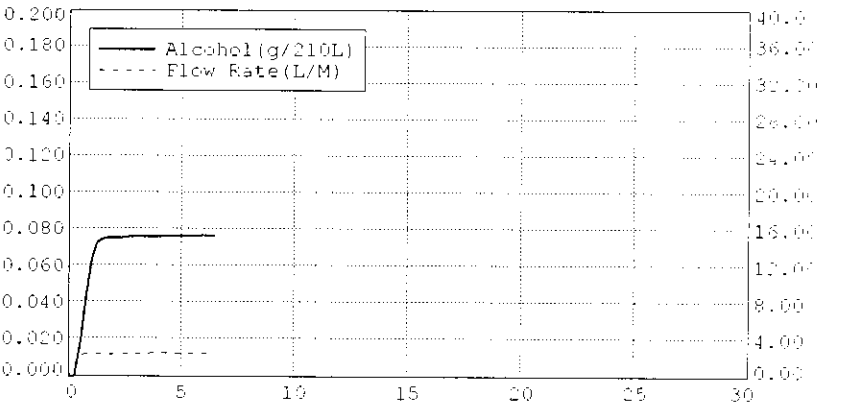
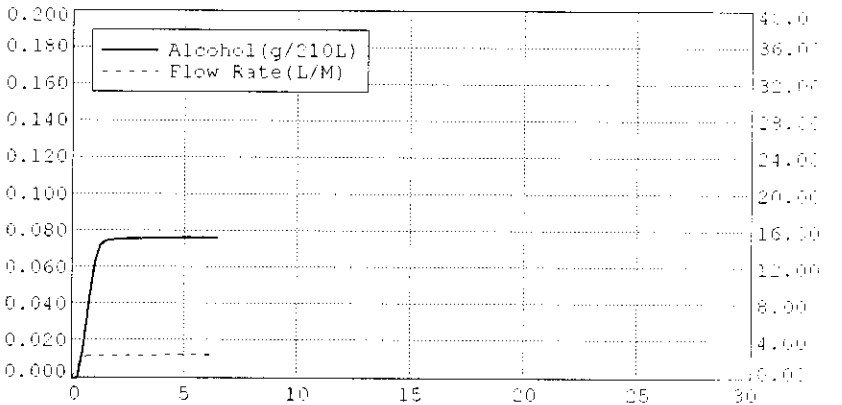
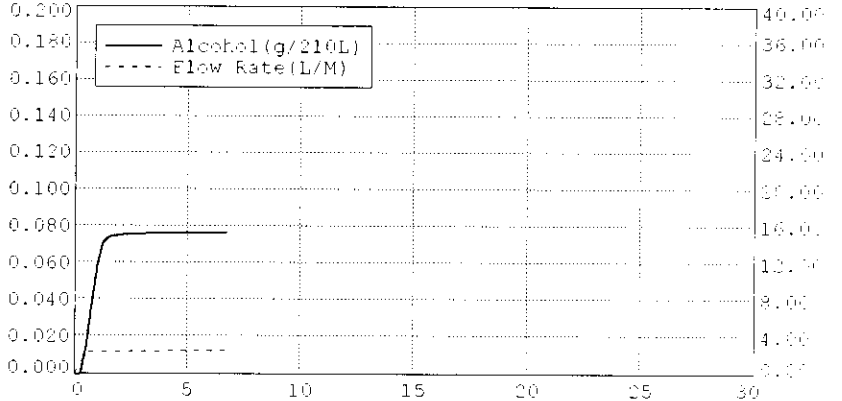
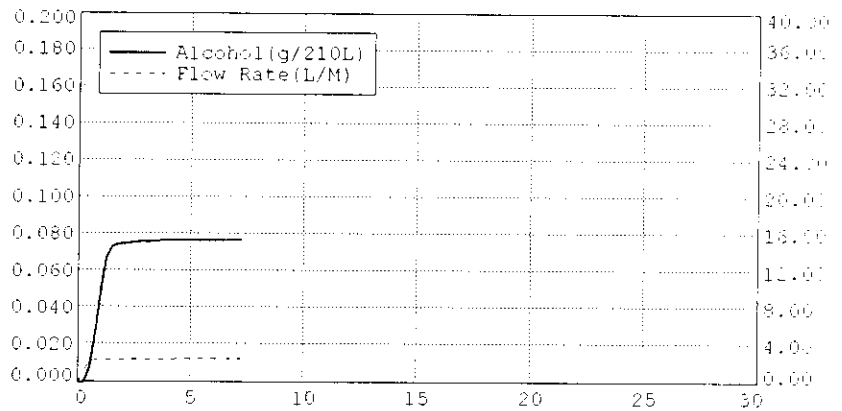
Date: 03/25/2021
 Time: 14:11:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.64: 0.079
 LOT #: AG018102
 EXPIRATION: 06/29/2022
 TANK PRESSURE: 824 psi

BLANK TEST	0.000	14:13
INTERNAL STANDARD	VERIFIED	14:13
EXTERNAL STANDARD	0.079	14:13
BLANK TEST	0.000	14:14
EXTERNAL STANDARD	0.078	14:14
BLANK TEST	0.000	14:15
EXTERNAL STANDARD	0.078	14:15
BLANK TEST	0.000	14:16
EXTERNAL STANDARD	0.078	14:16
BLANK TEST	0.000	14:17
EXTERNAL STANDARD	0.078	14:17
BLANK TEST	0.000	14:18

Average = 0.0782
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100347

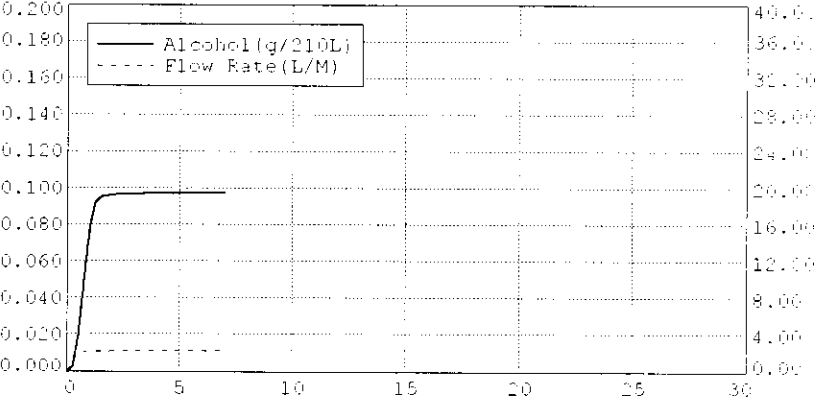
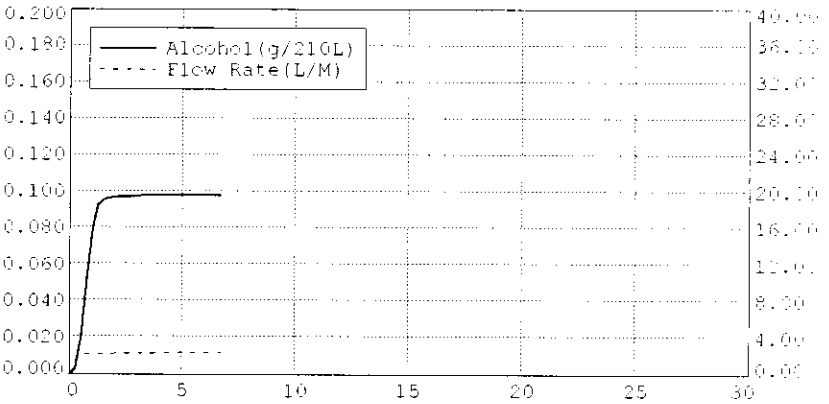
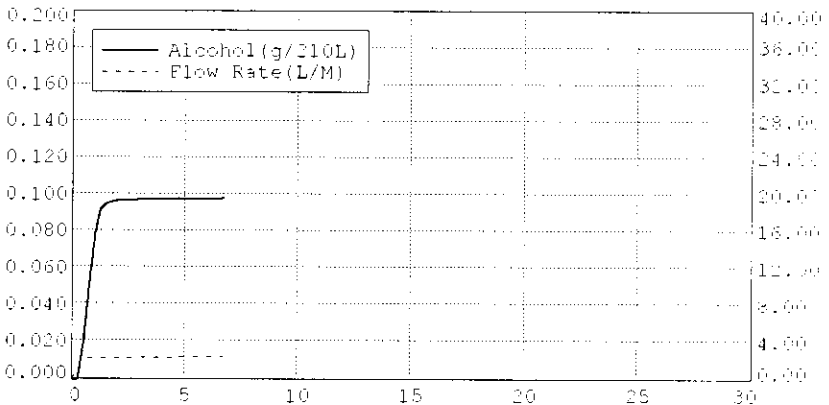
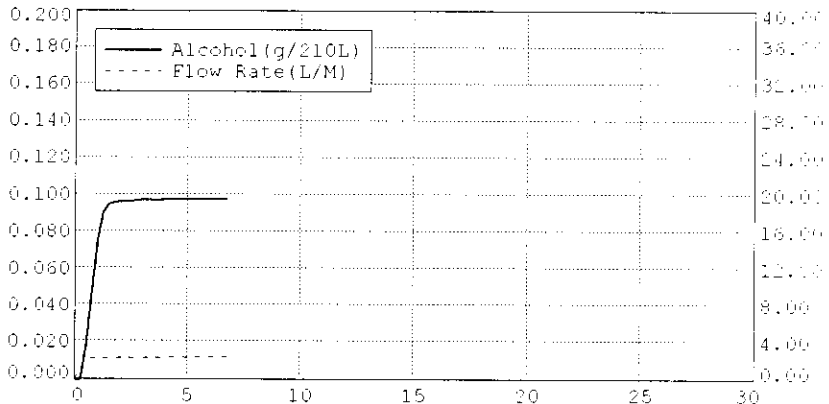
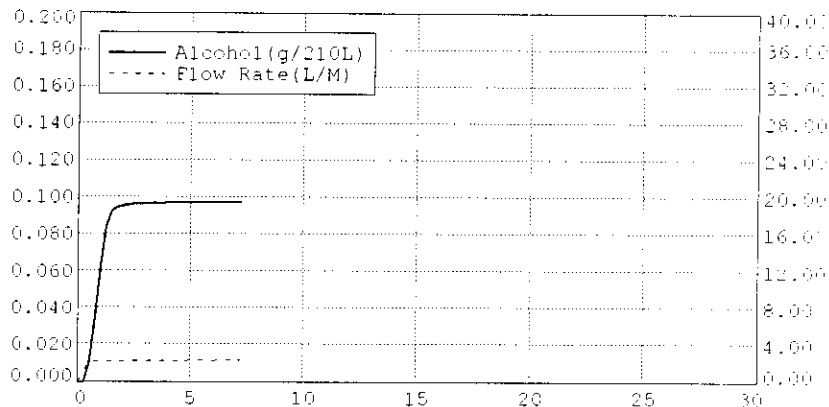
Date: 03/25/2021
 Time: 14:20:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.64: 0.099
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 648 psi

BLANK TEST	0.000	14:23
INTERNAL STANDARD	VERIFIED	14:23
EXTERNAL STANDARD	0.099	14:24
BLANK TEST	0.000	14:25
EXTERNAL STANDARD	0.099	14:25
BLANK TEST	0.000	14:26
EXTERNAL STANDARD	0.099	14:26
BLANK TEST	0.000	14:27
EXTERNAL STANDARD	0.099	14:27
BLANK TEST	0.000	14:28
EXTERNAL STANDARD	0.099	14:28
BLANK TEST	0.000	14:29

Average = 0.0990
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100347

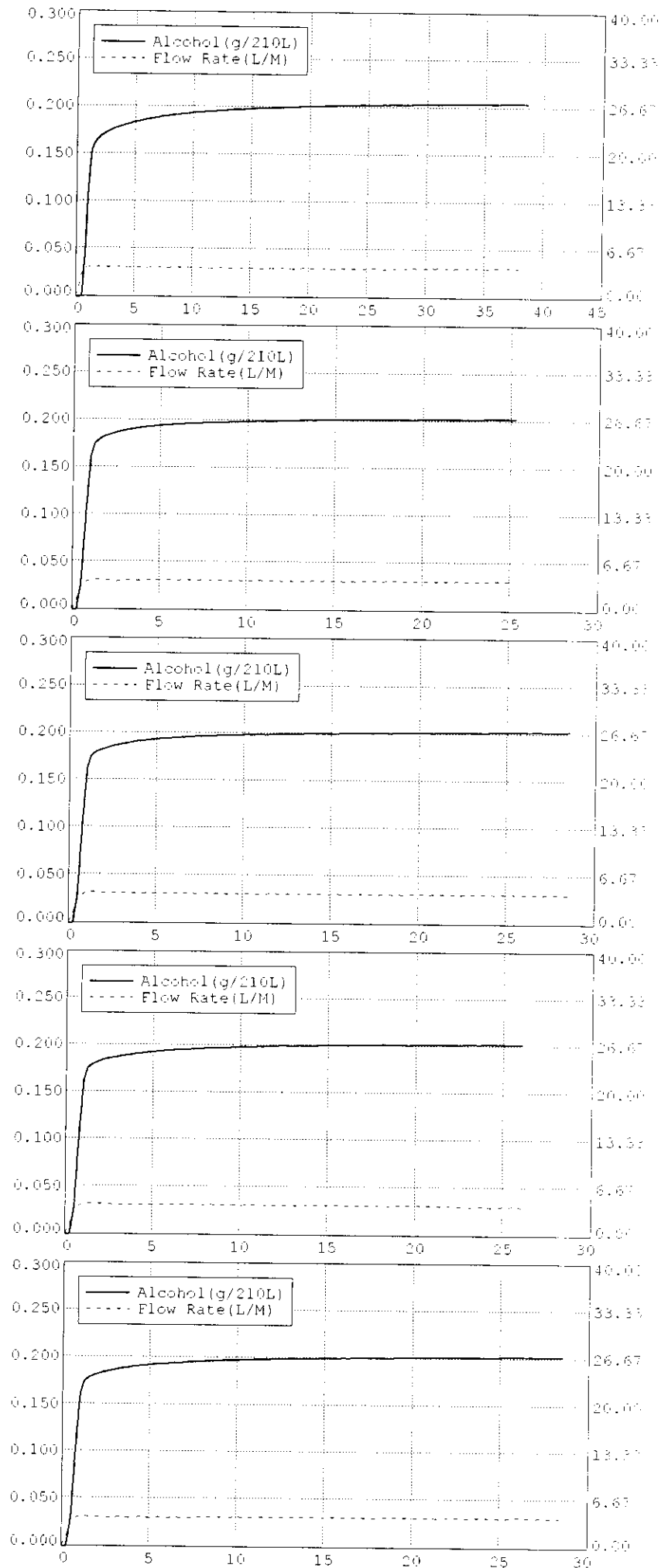
Date: 03/25/2021
 Time: 14:45:24

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:50
INTERNAL STANDARD	VERIFIED	14:50
EXTERNAL STANDARD	0.205	14:51
BLANK TEST	0.000	14:52
EXTERNAL STANDARD	0.203	14:53
BLANK TEST	0.000	14:53
EXTERNAL STANDARD	0.203	14:54
BLANK TEST	0.000	14:55
EXTERNAL STANDARD	0.203	14:56
BLANK TEST	0.000	14:56
EXTERNAL STANDARD	0.203	14:57
BLANK TEST	0.000	14:58

Average = 0.2034
 Std Dev = 0.0009



LINEARITY CHECK: Control Test 6

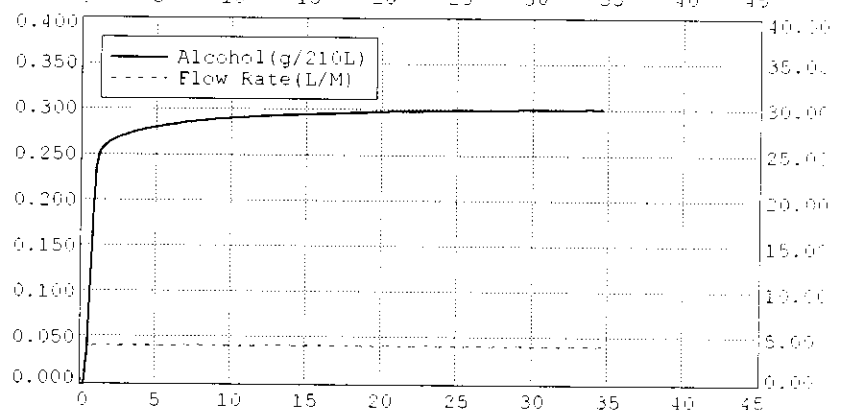
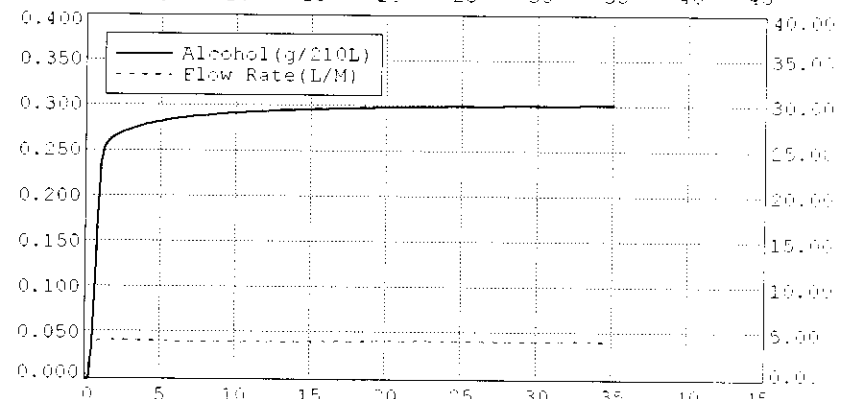
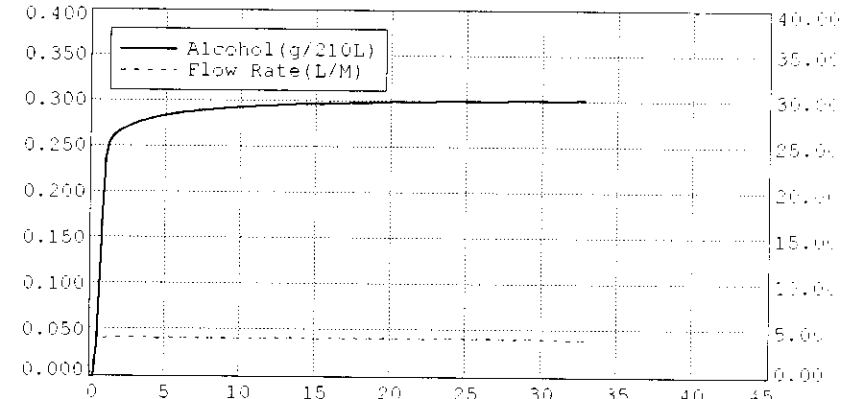
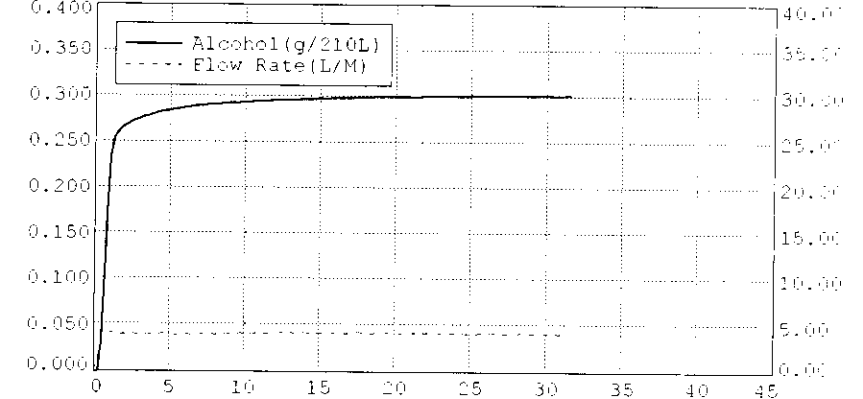
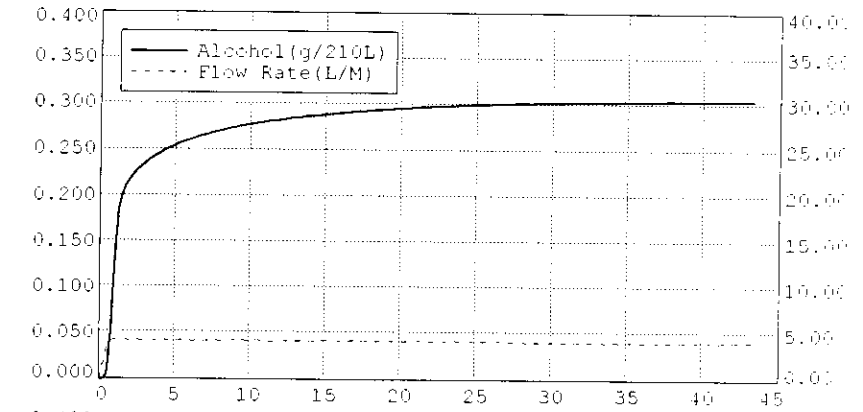
Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 03/25/2021
Time: 15:00:49

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

BLANK TEST	0.000	15:01
INTERNAL STANDARD	VERIFIED	15:02
EXTERNAL STANDARD	0.304	15:02
BLANK TEST	0.000	15:03
EXTERNAL STANDARD	0.302	15:04
BLANK TEST	0.000	15:05
EXTERNAL STANDARD	0.302	15:06
BLANK TEST	0.000	15:06
EXTERNAL STANDARD	0.301	15:07
BLANK TEST	0.000	15:08
EXTERNAL STANDARD	0.301	15:09
BLANK TEST	0.000	15:10

Average = 0.3020
Std Dev = 0.0012



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 03/25/2021
Time: 15:14:15

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

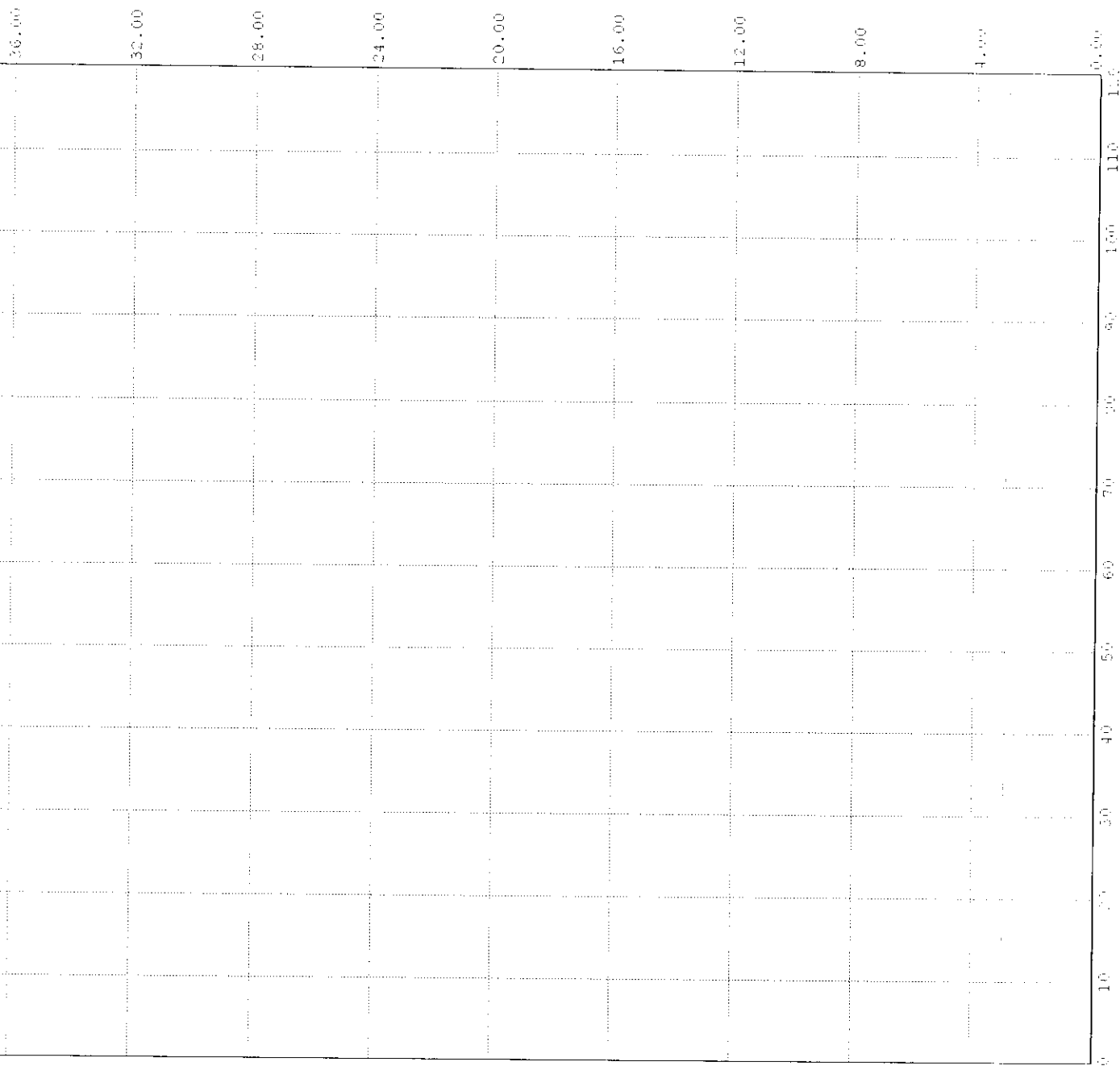
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.64: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 15:15
BLANK TEST 0.000 15:15
INTERNAL STANDARD VERIFIED 15:15
EXTERNAL STANDARD 0.078 15:16
BLANK TEST 0.000 15:16
SUBJECT SAMPLE INCOMPLETE 15:19

DM

Alcohol (g/10L)
Flow Rate(L/H)
MIG. Flow Rate(L/M)



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 03/26/2021
Time: 12:43:29

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

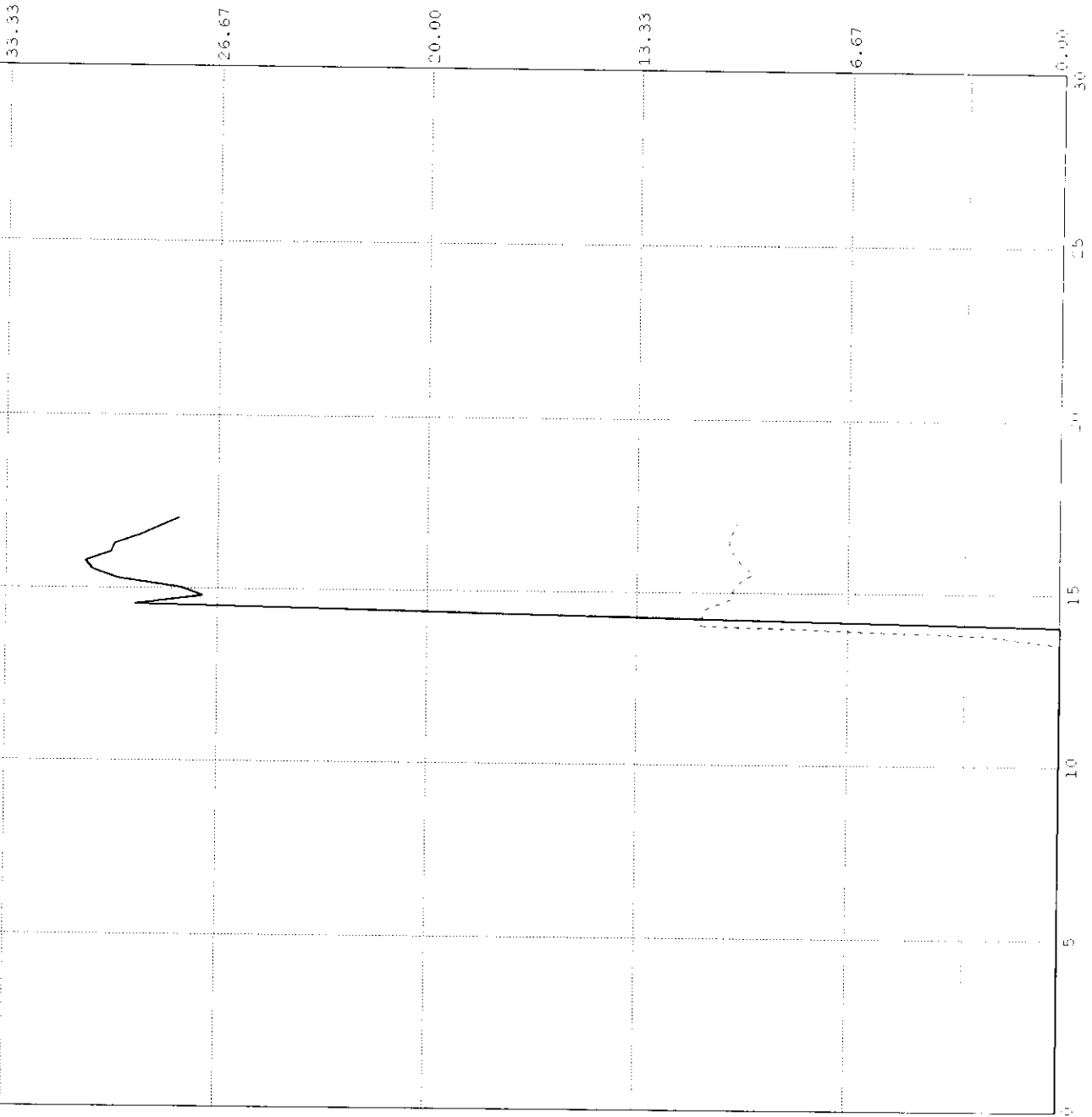
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.67: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:45
BLANK TEST 0.000 12:45
INTERNAL STANDARD VERIFIED 12:45
EXTERNAL STANDARD 0.078 12:45
BLANK TEST 0.000 12:46
SUBJECT SAMPLE INVALID 12:48

— Alcohol (g/21.0L)
- - - - - Flow Rate (L/M)
- - - - - MHD. Flow Rate (L/M)



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 03/26/2021
Time: 12:26:16

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

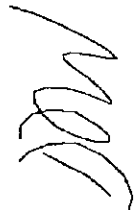
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.67: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:27
BLANK TEST 0.000 12:27
INTERNAL STANDARD VERIFIED 12:27
Xg = 0.110 (1.71%)
EXTERNAL STANDARD 0.078 12:27
X[1] = 0.0780 (-0.0011) (0.0033)
BLANK TEST 0.000 12:28
SUBJECT SAMPLE XXX 12:30
X[1] = 0.1104 (-0.0194) (0.0011)

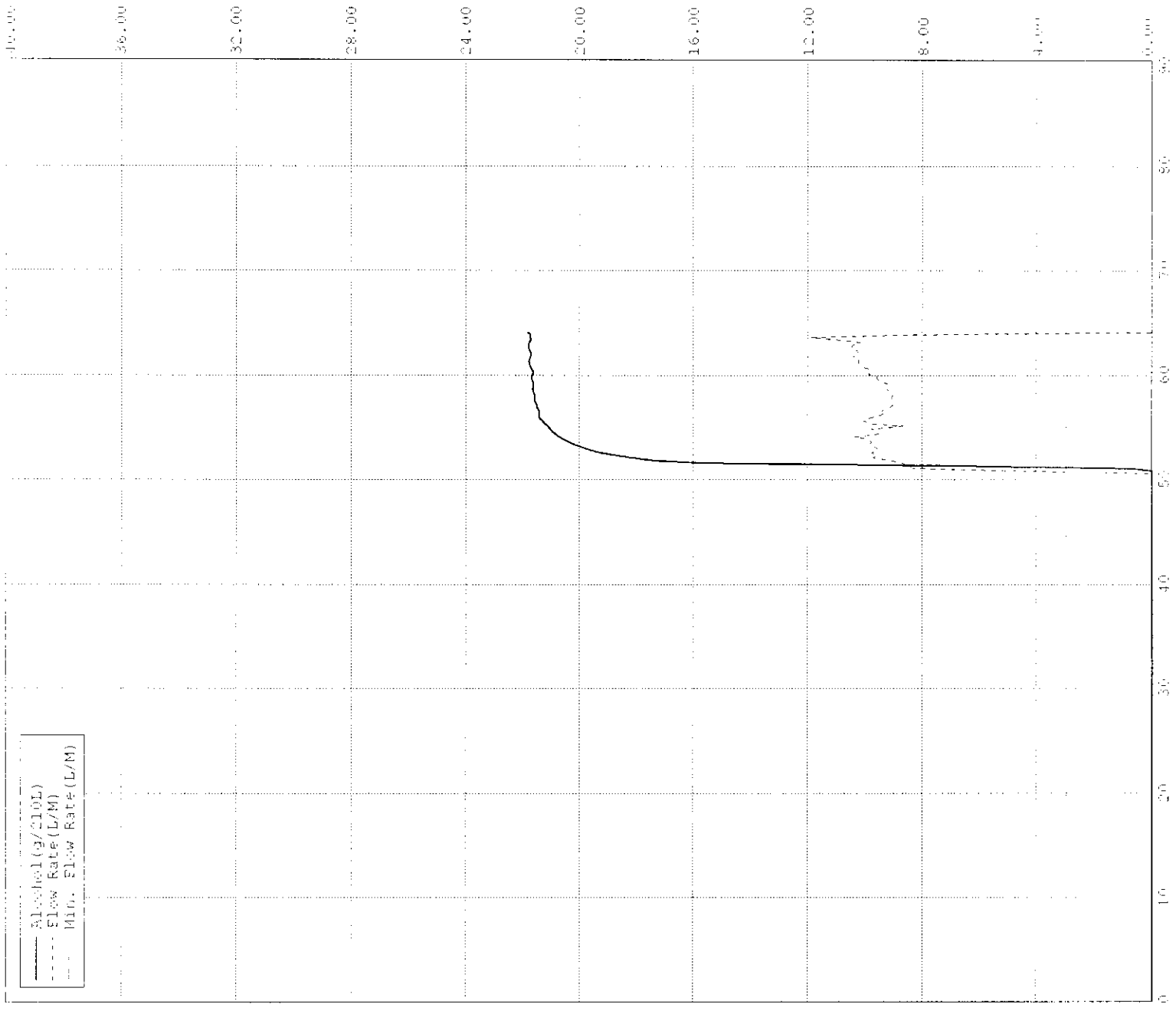
Interference Detected

Filter 2 average: -0.0015

Filter 3 average: 0.0025



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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 03/26/2021
Time: 12:16:16

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

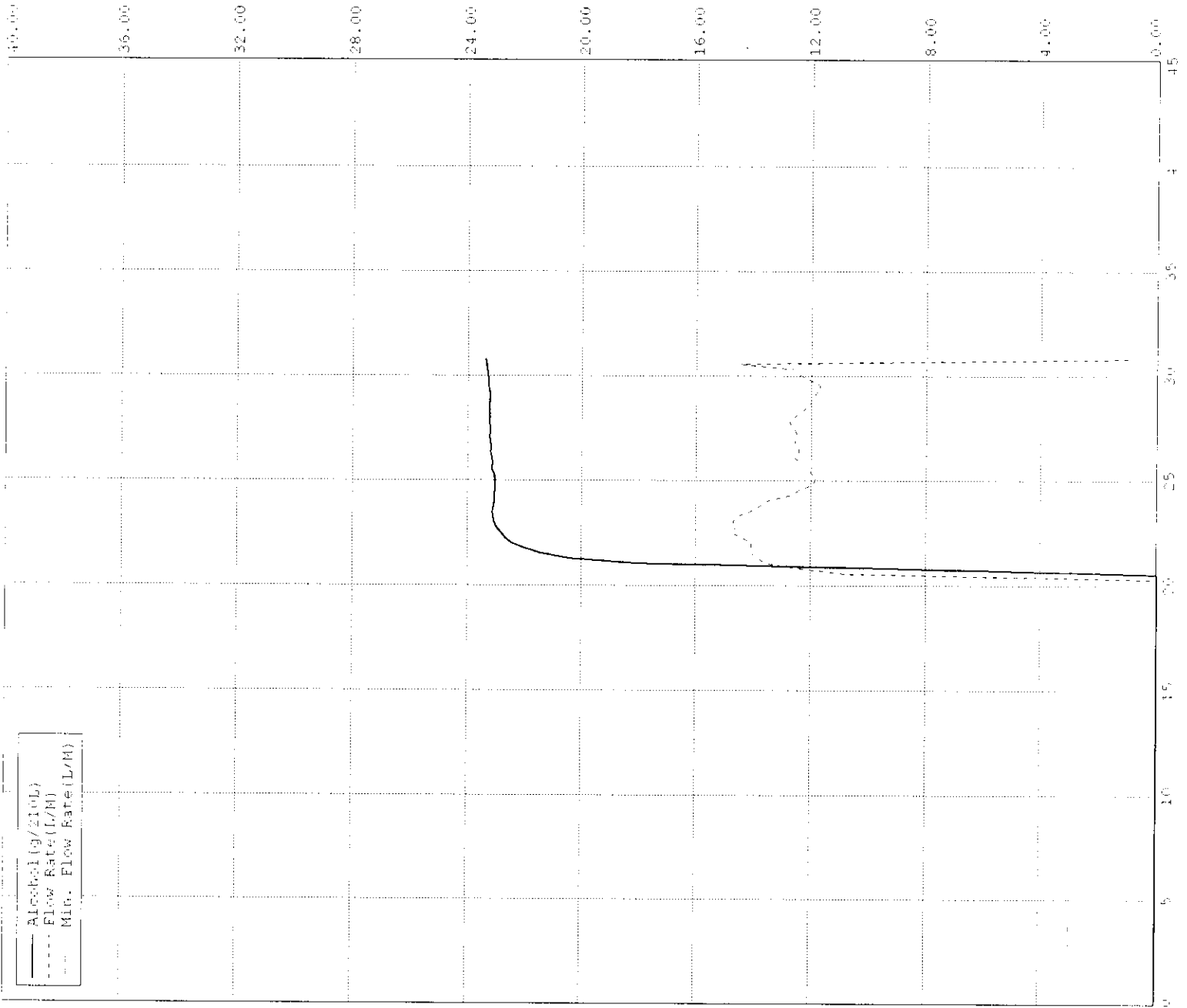
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.68: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:17
BLANK TEST 0.000 12:17
INTERNAL STANDARD VERIFIED 12:17
Xq = 0.110 (1.79%)
EXTERNAL STANDARD 0.078 12:17
X[1] = 0.0785 (-0.0015) (0.0019)
BLANK TEST 0.000 12:18
SUBJECT SAMPLE XXX 12:19
X[1] = 0.1183 (-0.0265) (0.0011)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 03/26/2021
Time: 12:09:25

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

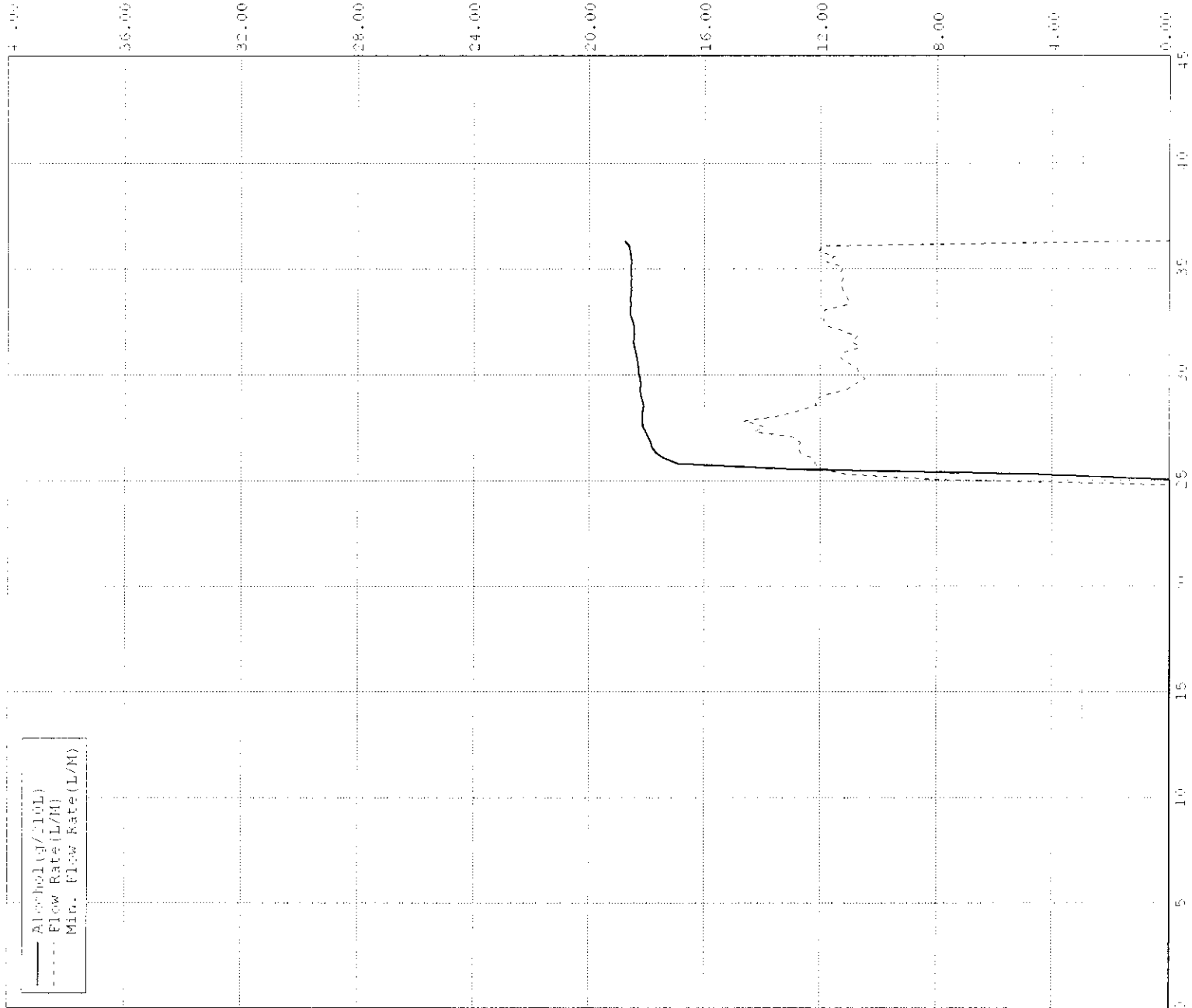
DEPT/AGENCY:
INTERFERENCE NEGATIVE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.67: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	12:10
BLANK TEST	0.000	12:10
INTERNAL STANDARD	VERIFIED	12:10
$X_q = 0.110$ (1.71%)		
EXTERNAL STANDARD	0.078	12:11
$X[1] = 0.0781$ (-0.0017) (0.0030)		
BLANK TEST	0.000	12:12
SUBJECT SAMPLE (Vol=2.20L)	0.095	12:12
$X[1] = 0.0953$ (-0.0004) (-0.0002)		
BLANK TEST	0.000	12:13
EXTERNAL STANDARD	0.078	12:13
$X[1] = 0.0780$ (-0.0015) (0.0016)		
BLANK TEST	0.000	12:14

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 03/25/2021
Time: 15:28:59

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 29.64: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

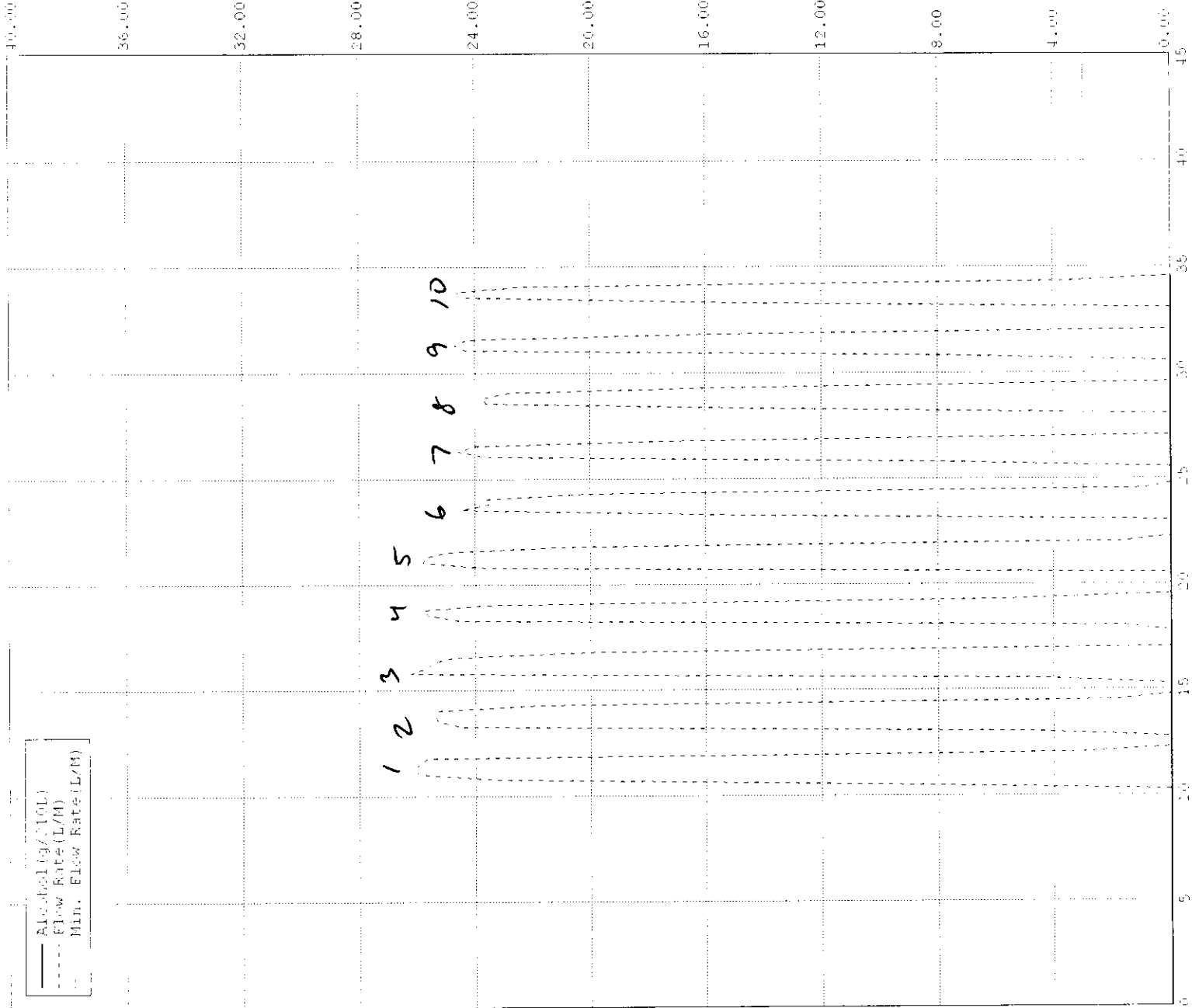
DIAGNOSTIC CHECK PASSED 15:29
BLANK TEST 0.000 15:30
INTERNAL STANDARD VERIFIED 15:30
EXTERNAL STANDARD 0.078 15:30
BLANK TEST 0.000 15:31
SUBJECT SAMPLE XXX 15:32

Maximum Attempts Exceeded

DW

Alcohol(g/100L)
Flow Rate(L/M)
Min. Flow Rate(L/M)

1 2 3 4 5 6 7 8 9 10



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 03/26/2021
Time: 12:51:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

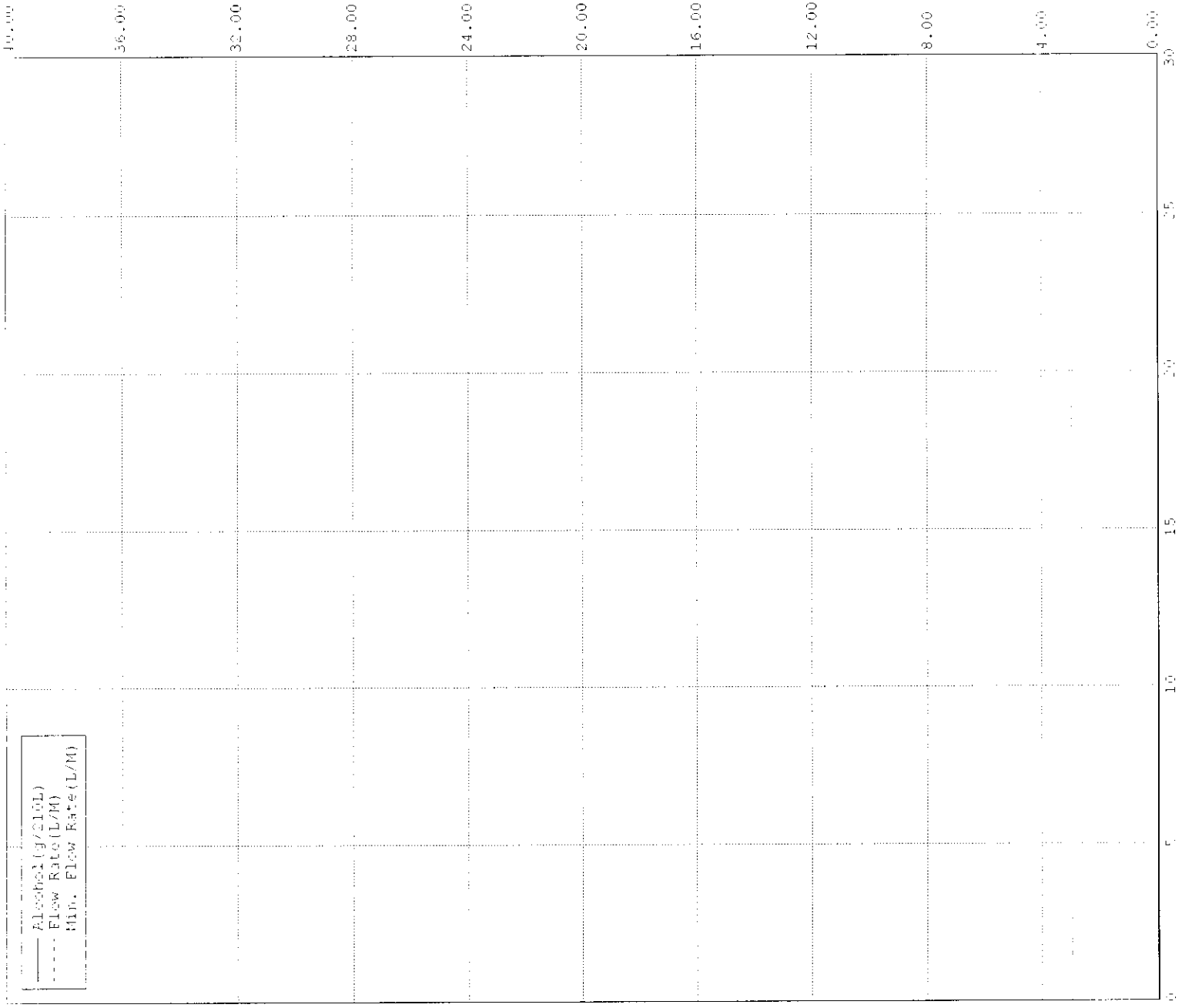
DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.67: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 12:52
BLANK TEST 0.000 12:52
INTERNAL STANDARD VERIFIED 12:52
EXTERNAL STANDARD 0.078 12:53
BLANK TEST 0.000 12:54

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100347

Date: 03/26/2021
Time: 13:14:05

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 29.67: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	13:16
BLANK TEST	0.000	13:16
INTERNAL STANDARD	VERIFIED	13:16
EXTERNAL STANDARD	0.078	13:16
BLANK TEST	0.000	13:17
SUBJECT SAMPLE (Vol=3.04L)	0.000	13:18
BLANK TEST	0.000	13:18
EXTERNAL STANDARD	0.078	13:19
BLANK TEST	0.000	13:20

