

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 100353 Analyst Dereh 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 1.4 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 Autn Lot 19200 Exp 08/06/21
Simulator S/N SD1200 Date Calibrated 10/08/19
- vi. 0.300g/210L Mnf Autn Lot 19330 Exp 11/13/21
Simulator S/N DR4177 Date Calibrated 10/08/19

Functional Tests (attached)

Incomplete

Invalid

Interference

- i. Acetone - Mnf Autn Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N DR4163 Date Calibrated 10/04/19
- ii. Isopropanol - Mnf Autn Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N DR4162 Date Calibrated 10/07/19
- iii. Negative Control - Mnf Autn 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: 100353

Date: 08/07/2020
Time: 07:52:13

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 = 2.28 V PASSED
(1.30 V - 3.04 V)
Cooler Voltage = 1.92 V PASSED
(1.26 V - 2.94 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 525 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.3 in

PUMP INFO

Flow Rate = 5.039 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 ✓

Xq = 0.094 0.37% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100353

Date: 08/07/2020
Time: 8:10 AM

Temperatures (°C)

Sample Cell: 49.1°C
Breath Tube: 48.1°C

Current Barometer 29.3 in
Volume (Ltr) 1.58

Settings

Lamp: 2.36 V
Bias: 79 V
Cooler: 1.92 V
Chopper: 516 Hz

Voltages (V)

Flow: 1.06 V
Detector: -0.067 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 02/11/2016
Time: 14:05:58

OPERATOR NAME:
NPAS T TECH
CERTIFICATE #: G12921, 15200, 34.0C

Ca = 0.1010
CAL = 0.991996 0.800 <= CAL < 1.200
b1 = 0.0008 0.0000 <= b1 < 0.0040
b2 = 0.0067 0.0010 <= b2 < 0.0100
b3 = 0.0002 0.0000 <= b3 < 0.0040
Xq = 0.0942 0.0500 <= Xq < 0.2000
a21 = 1.174903 1.050 <= a21 < 1.300
a31 = 0.525450 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/07/2020
Time: 08:12:47

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

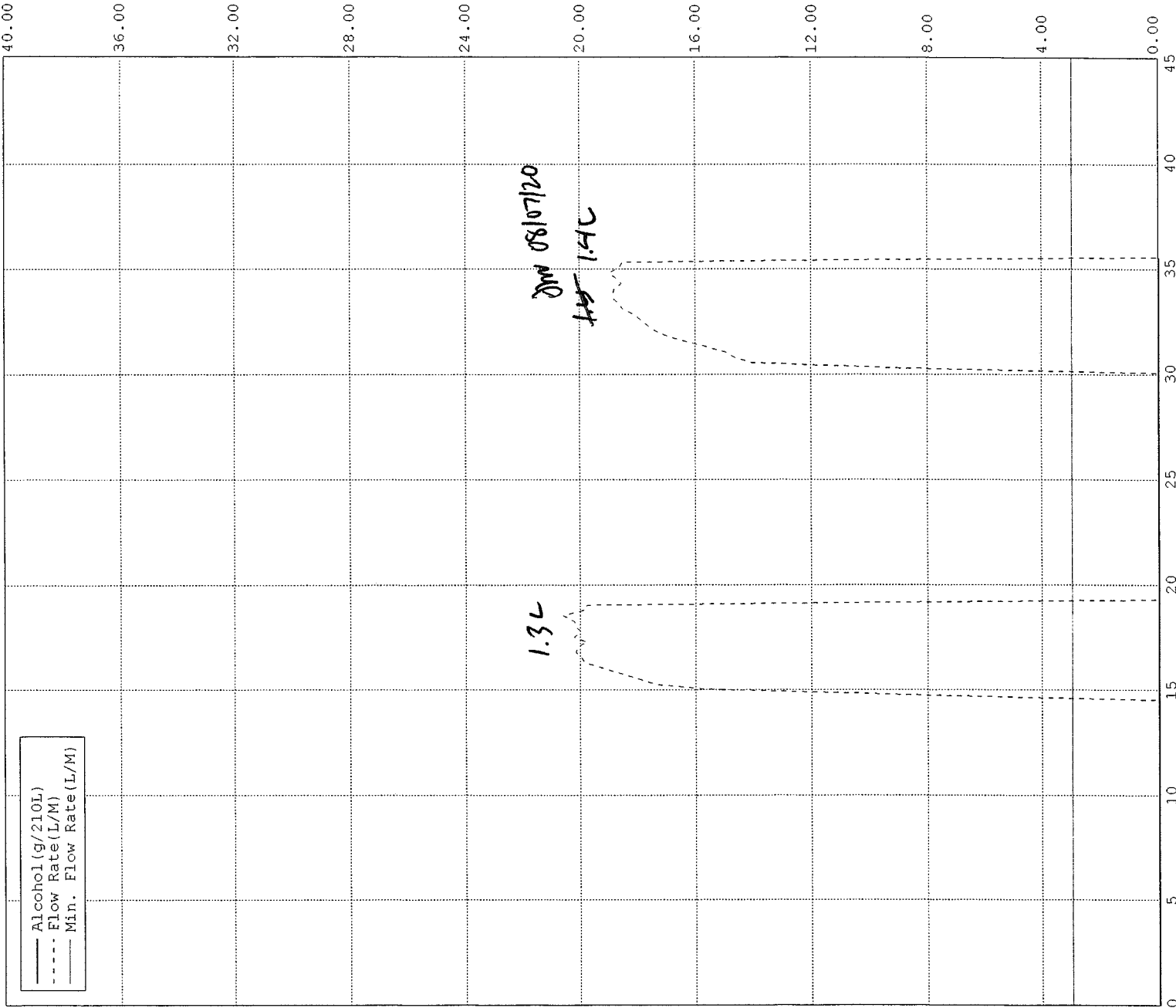
DEPT/AGENCY:
MINIMUM VOLUME
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.27: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	08:14
BLANK TEST	0.000	08:14
INTERNAL STANDARD	VERIFIED	08:14
EXTERNAL STANDARD	0.078	08:14
BLANK TEST	0.000	08:15
SUBJECT SAMPLE (Vol=1.50L)	0.000	08:16
BLANK TEST	0.000	08:17
EXTERNAL STANDARD	0.079	08:17
BLANK TEST	0.000	08:18

DW



LINEARITY CHECK

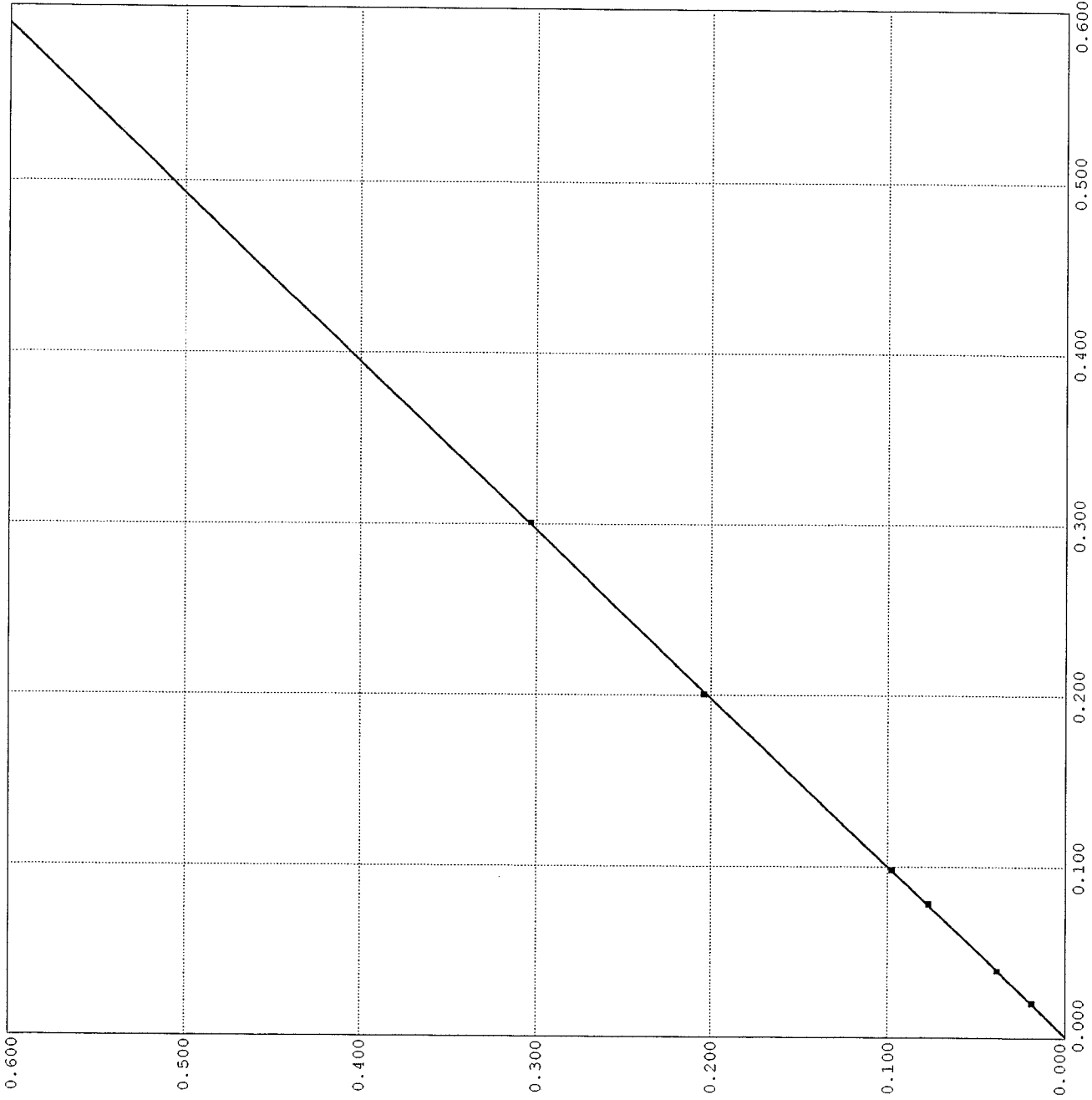
 Alaska Department of Public Safety
 DATAMASTER dmt: 100353

Date: 08/07/2020
 Time: 08:29:46

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0196	0.0005
0.039	0.0394	0.0005
0.078	0.0780	0.0000
0.098	0.0988	0.0004
0.200	0.2050	0.0010
0.300	0.3040	0.0007

SLOPE = 1.018855
 R² = 0.999908



DW

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100353

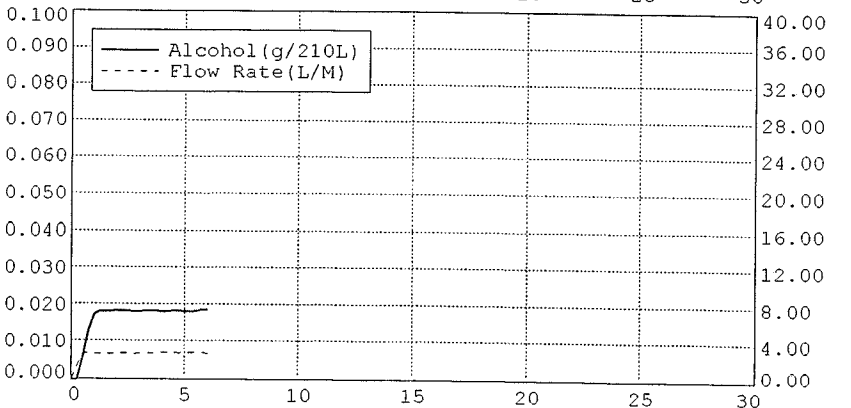
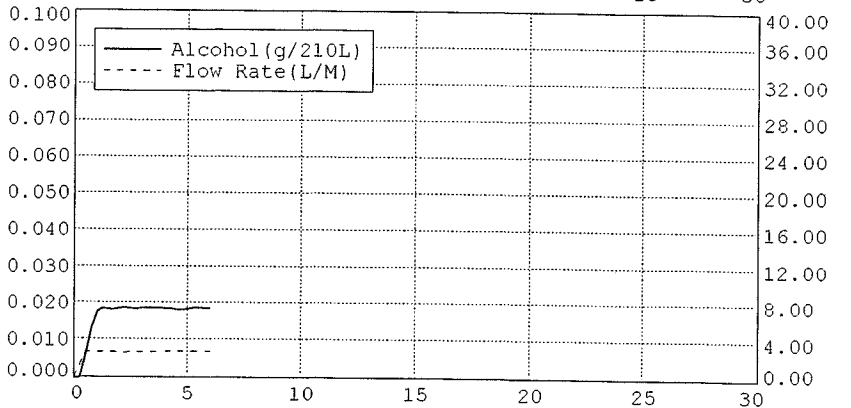
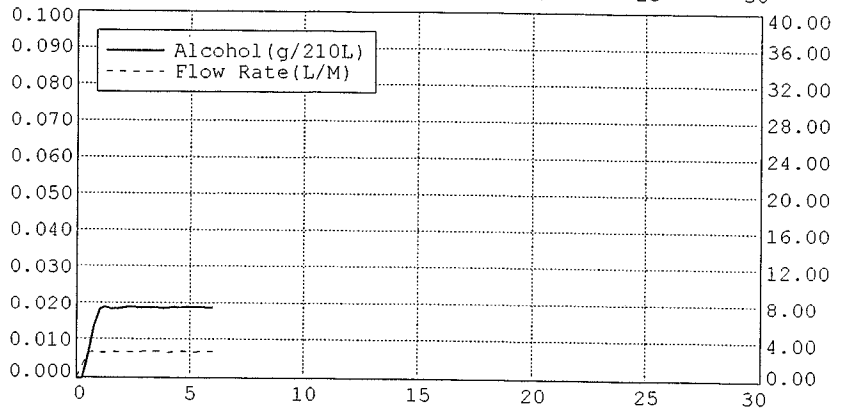
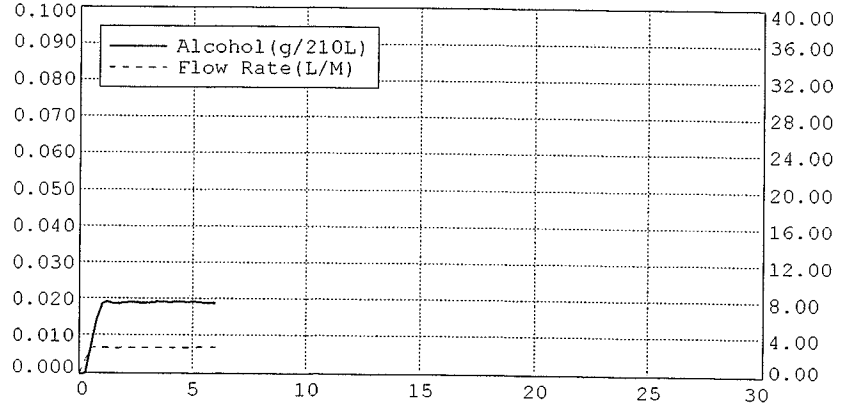
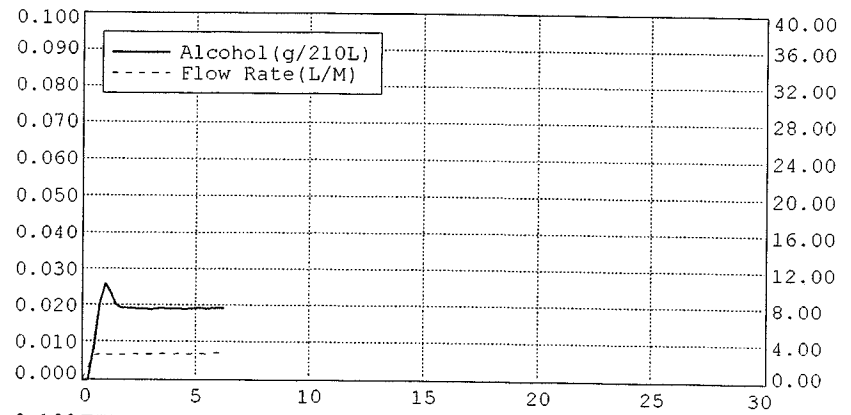
Date: 08/07/2020
 Time: 08:29:48

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.27: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 840 psi

BLANK TEST	0.000	08:37
INTERNAL STANDARD	VERIFIED	08:37
EXTERNAL STANDARD	0.020	08:37
BLANK TEST	0.000	08:38
EXTERNAL STANDARD	0.020	08:38
BLANK TEST	0.000	08:39
EXTERNAL STANDARD	0.020	08:39
BLANK TEST	0.000	08:40
EXTERNAL STANDARD	0.019	08:41
BLANK TEST	0.000	08:41
EXTERNAL STANDARD	0.019	08:42
BLANK TEST	0.000	08:43

Average = 0.0196
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100353

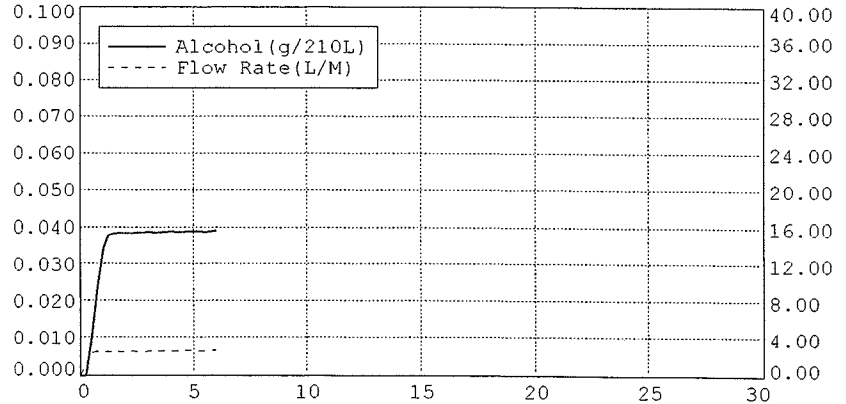
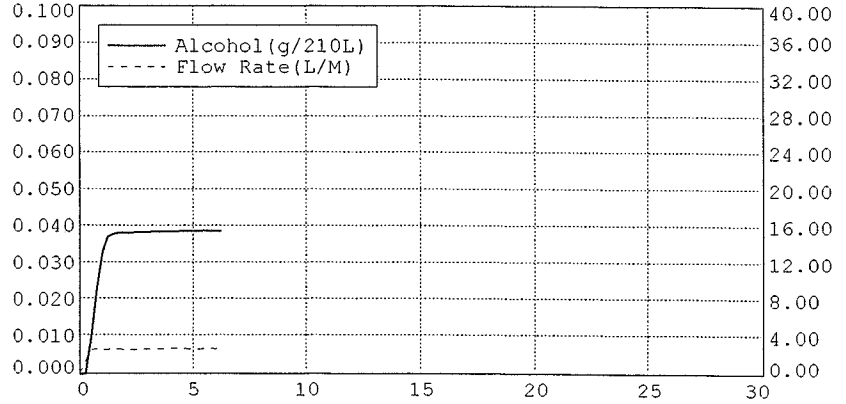
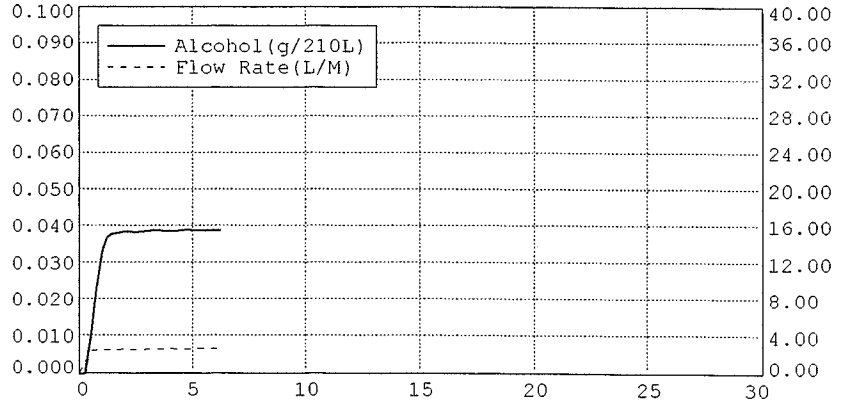
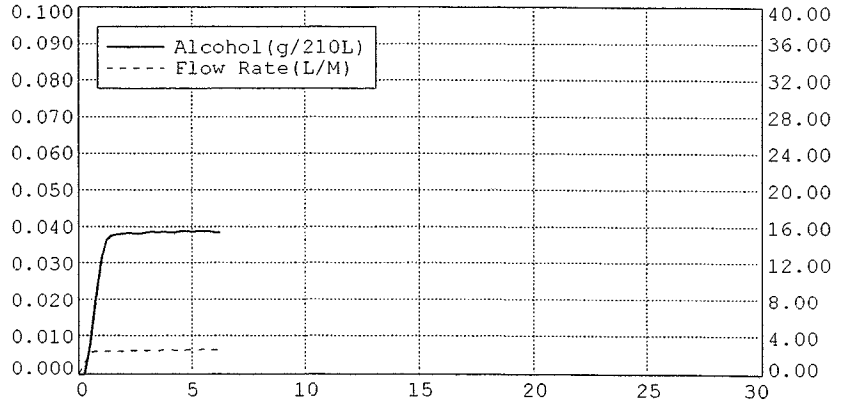
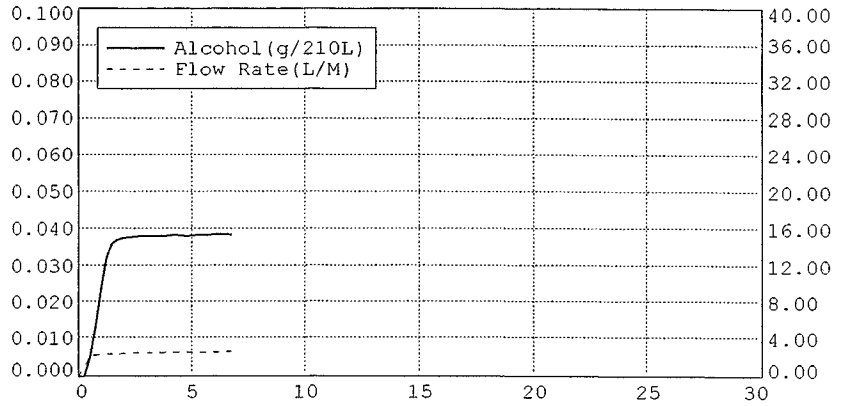
Date: 08/07/2020
Time: 08:45:56

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.27: 0.039
LOT #: AG915607
EXPIRATION: 06/05/2021
TANK PRESSURE: 564 psi

BLANK TEST	0.000	08:49
INTERNAL STANDARD	VERIFIED	08:49
EXTERNAL STANDARD	0.039	08:49
BLANK TEST	0.000	08:50
EXTERNAL STANDARD	0.039	08:50
BLANK TEST	0.000	08:51
EXTERNAL STANDARD	0.040	08:51
BLANK TEST	0.000	08:52
EXTERNAL STANDARD	0.039	08:52
BLANK TEST	0.000	08:53
EXTERNAL STANDARD	0.040	08:54
BLANK TEST	0.000	08:54

Average = 0.0394
Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100353

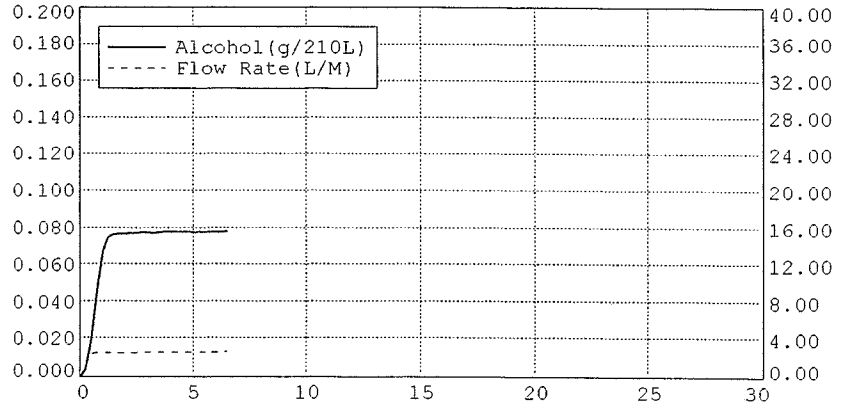
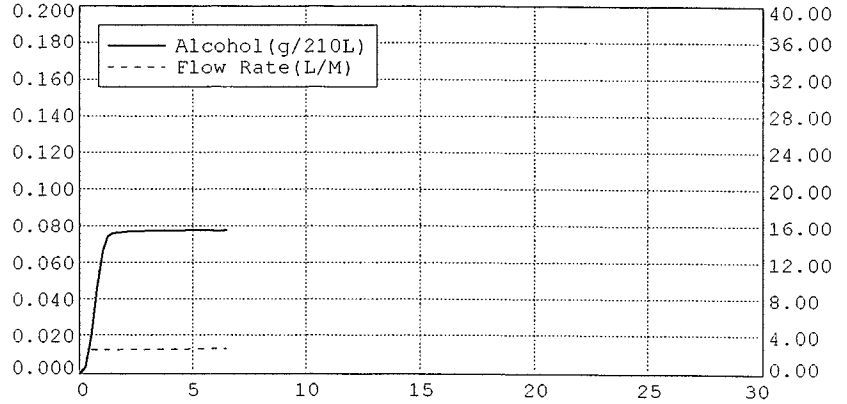
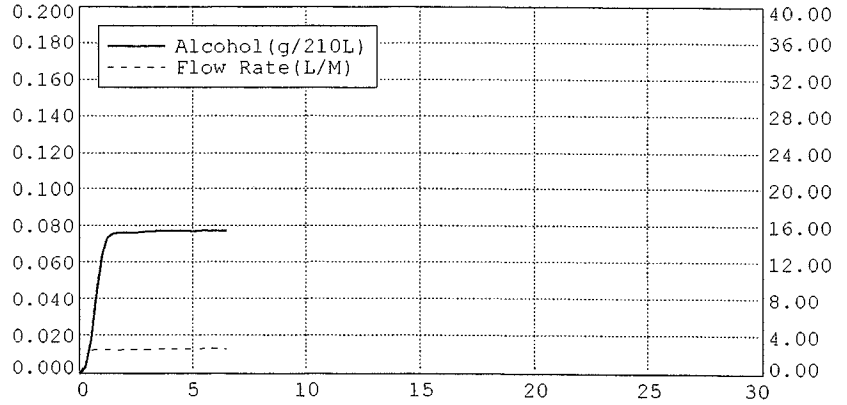
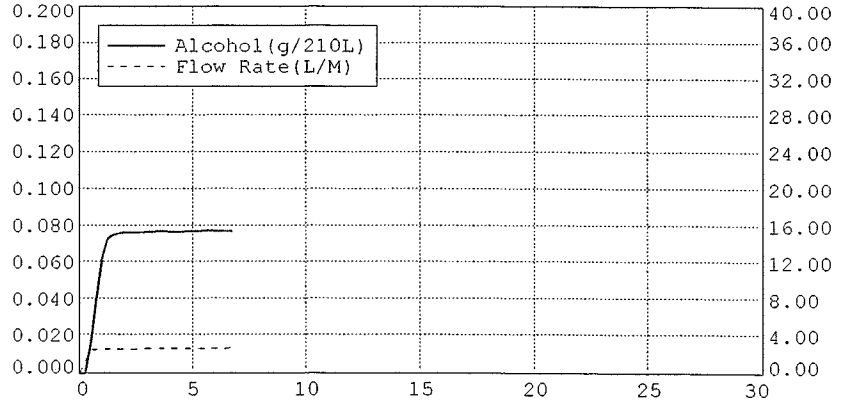
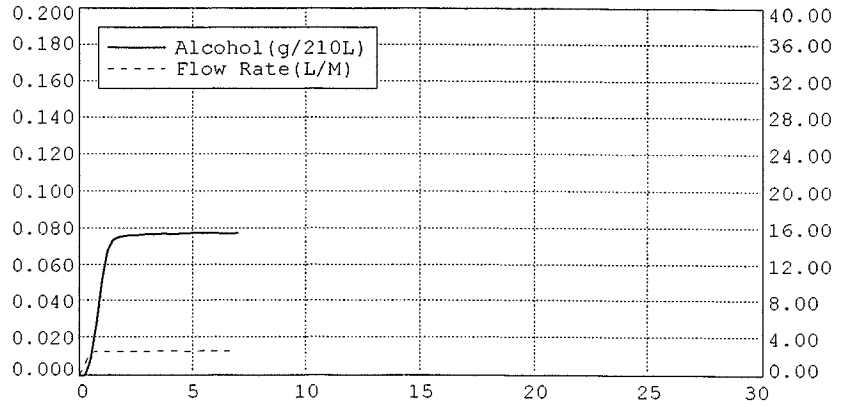
Date: 08/07/2020
Time: 08:56:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.27: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020
TANK PRESSURE: 488 psi

BLANK TEST	0.000	08:57
INTERNAL STANDARD	VERIFIED	08:57
EXTERNAL STANDARD	0.078	08:57
BLANK TEST	0.000	08:58
EXTERNAL STANDARD	0.078	08:58
BLANK TEST	0.000	08:59
EXTERNAL STANDARD	0.078	08:59
BLANK TEST	0.000	09:00
EXTERNAL STANDARD	0.078	09:01
BLANK TEST	0.000	09:02
EXTERNAL STANDARD	0.078	09:02
BLANK TEST	0.000	09:03

Average = 0.0780
Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100353

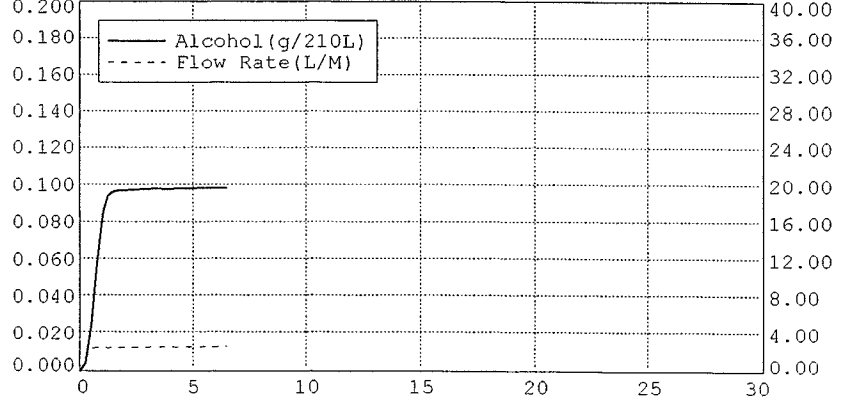
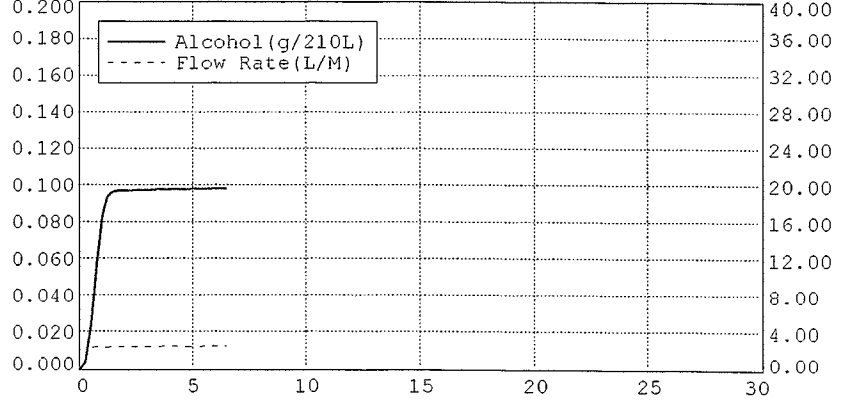
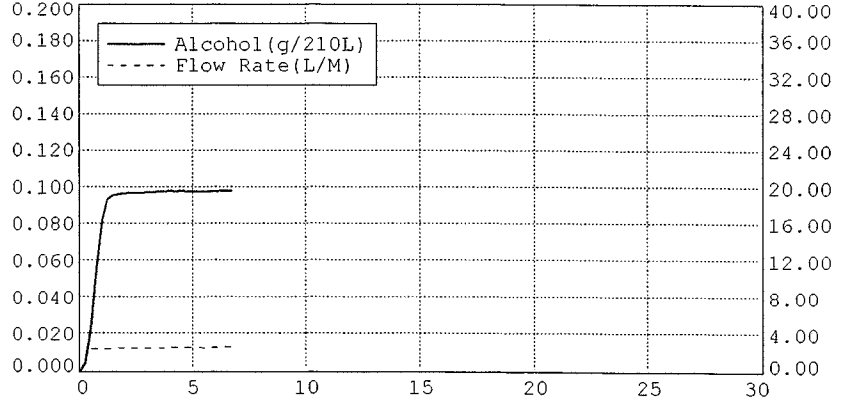
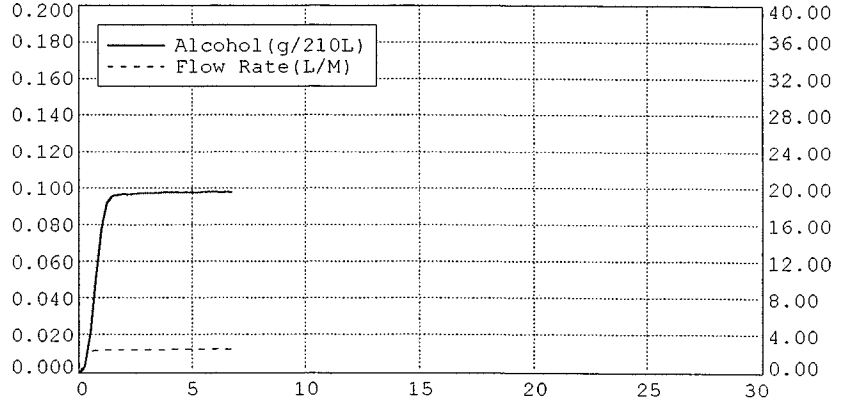
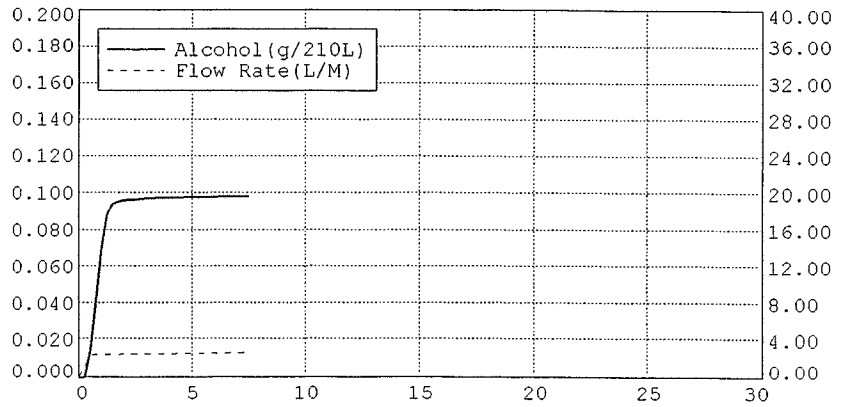
Date: 08/07/2020
Time: 09:04:38

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.27: 0.098
LOT #: AG924701
EXPIRATION: 09/04/2021
TANK PRESSURE: 364 psi

BLANK TEST	0.000	09:05
INTERNAL STANDARD	VERIFIED	09:06
EXTERNAL STANDARD	0.099	09:06
BLANK TEST	0.000	09:07
EXTERNAL STANDARD	0.098	09:07
BLANK TEST	0.000	09:08
EXTERNAL STANDARD	0.099	09:08
BLANK TEST	0.000	09:09
EXTERNAL STANDARD	0.099	09:09
BLANK TEST	0.000	09:10
EXTERNAL STANDARD	0.099	09:10
BLANK TEST	0.000	09:11

Average = 0.0988
Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100353

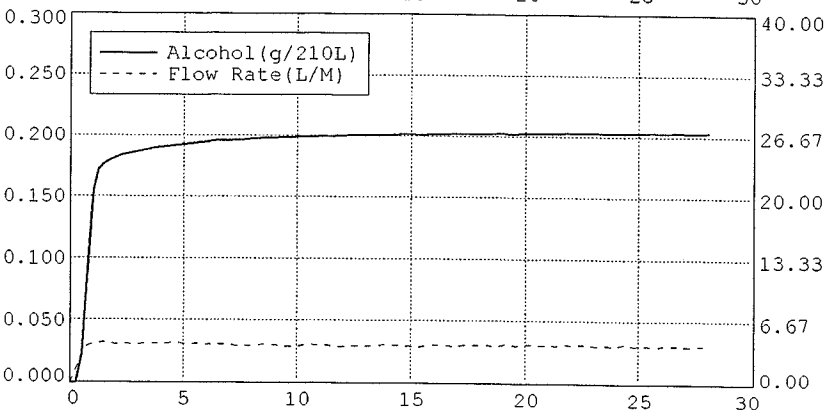
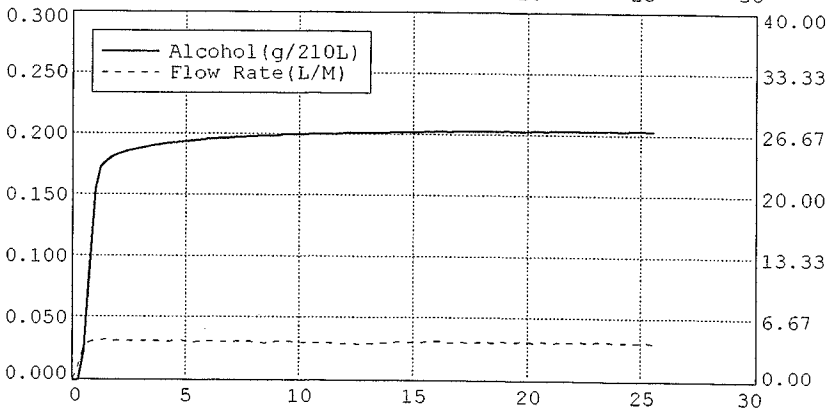
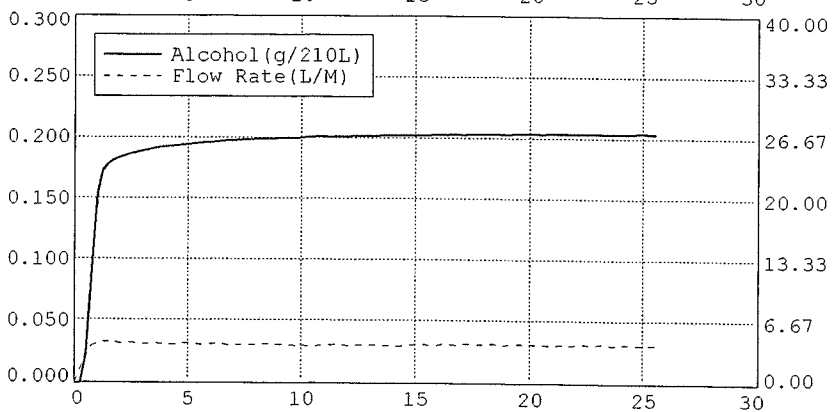
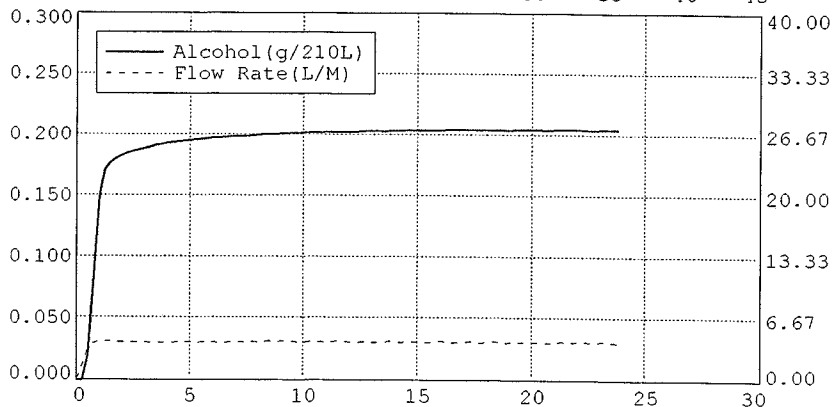
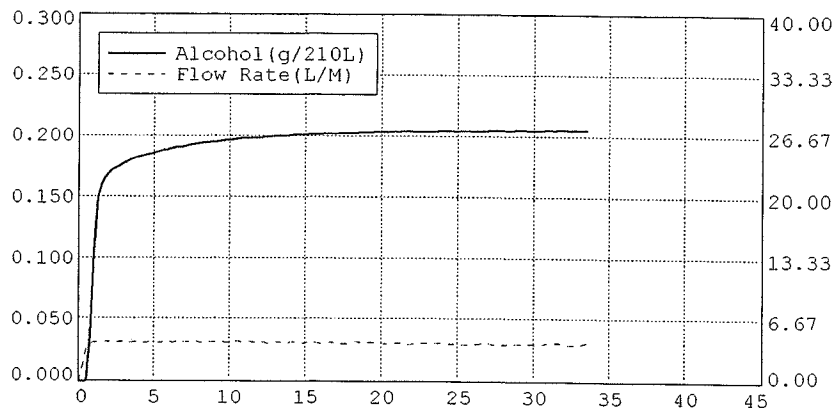
Date: 08/07/2020
 Time: 09:18:25

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	09:27
INTERNAL STANDARD	VERIFIED	09:27
EXTERNAL STANDARD	0.206	09:27
BLANK TEST	0.000	09:29
EXTERNAL STANDARD	0.206	09:29
BLANK TEST	0.000	09:30
EXTERNAL STANDARD	0.205	09:31
BLANK TEST	0.000	09:31
EXTERNAL STANDARD	0.204	09:32
BLANK TEST	0.000	09:33
EXTERNAL STANDARD	0.204	09:34
BLANK TEST	0.000	09:34

Average = 0.2050
 Std Dev = 0.0010



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100353

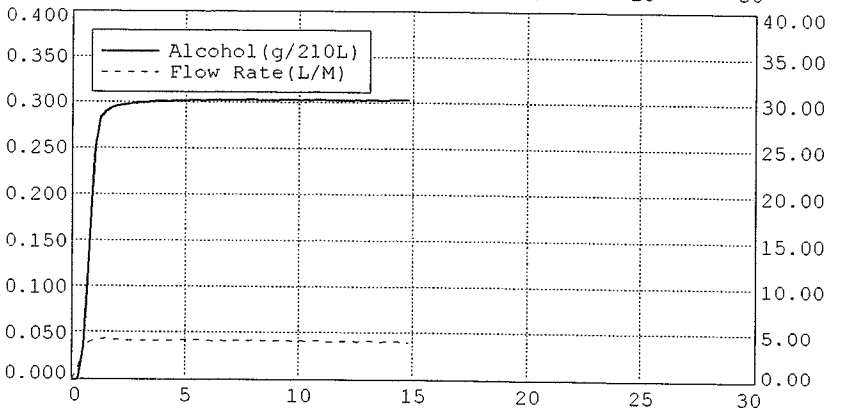
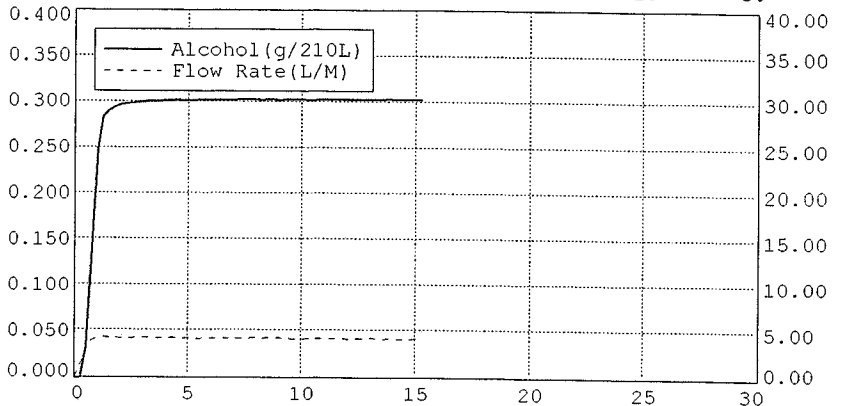
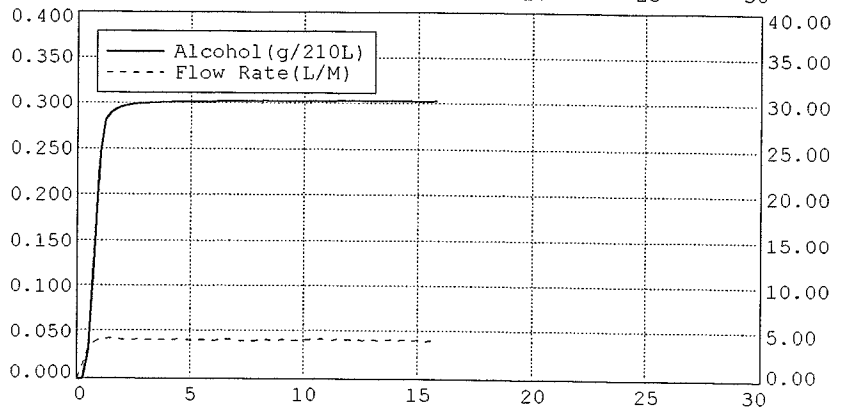
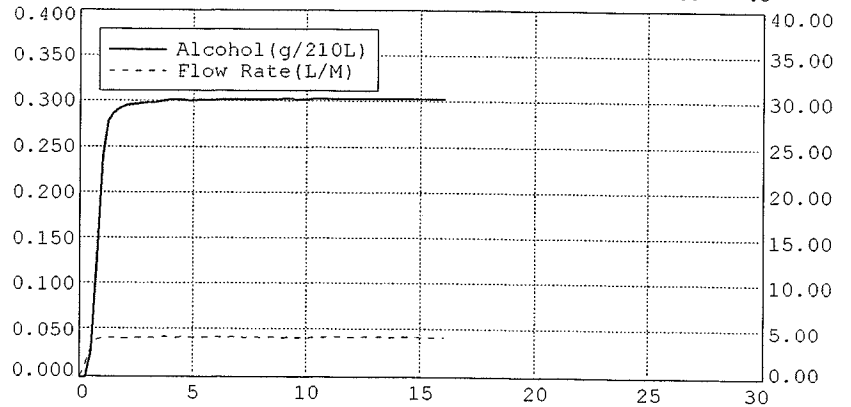
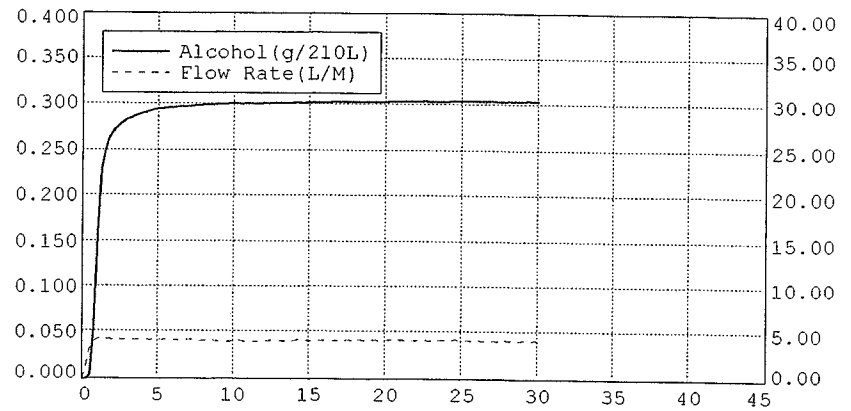
Date: 08/07/2020
 Time: 09:36:28

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	09:37
INTERNAL STANDARD	VERIFIED	09:37
EXTERNAL STANDARD	0.305	09:38
BLANK TEST	0.000	09:39
EXTERNAL STANDARD	0.304	09:39
BLANK TEST	0.000	09:40
EXTERNAL STANDARD	0.304	09:41
BLANK TEST	0.000	09:41
EXTERNAL STANDARD	0.303	09:42
BLANK TEST	0.000	09:43
EXTERNAL STANDARD	0.304	09:43
BLANK TEST	0.000	09:44

Average = 0.3040
 Std Dev = 0.0007



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/07/2020
Time: 09:53:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

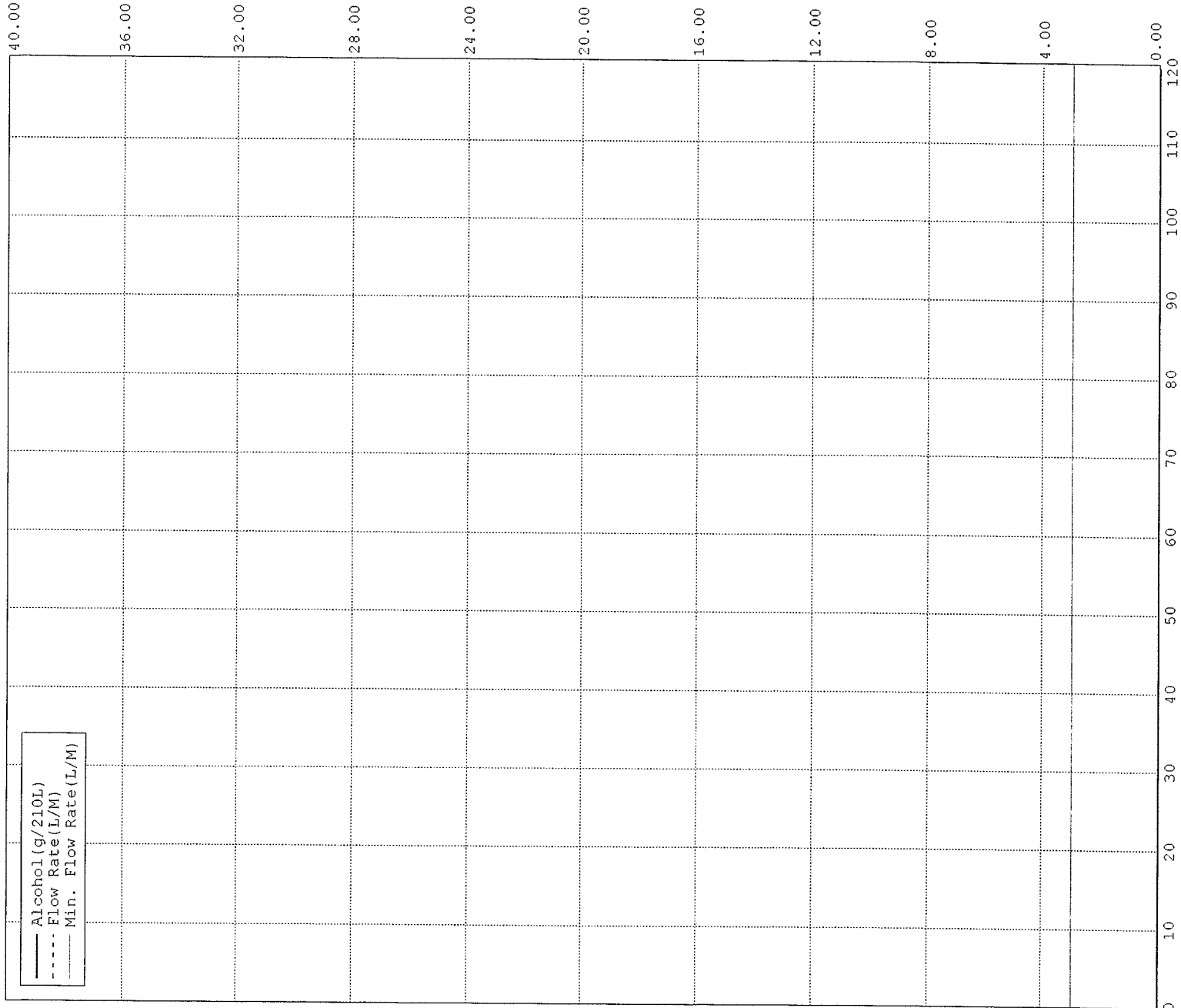
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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 09:56
BLANK TEST 0.000 09:56
INTERNAL STANDARD VERIFIED 09:56
EXTERNAL STANDARD 0.078 09:57
BLANK TEST 0.000 09:58
SUBJECT SAMPLE INCOMPLETE 10:00



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/07/2020
Time: 10:46:35

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

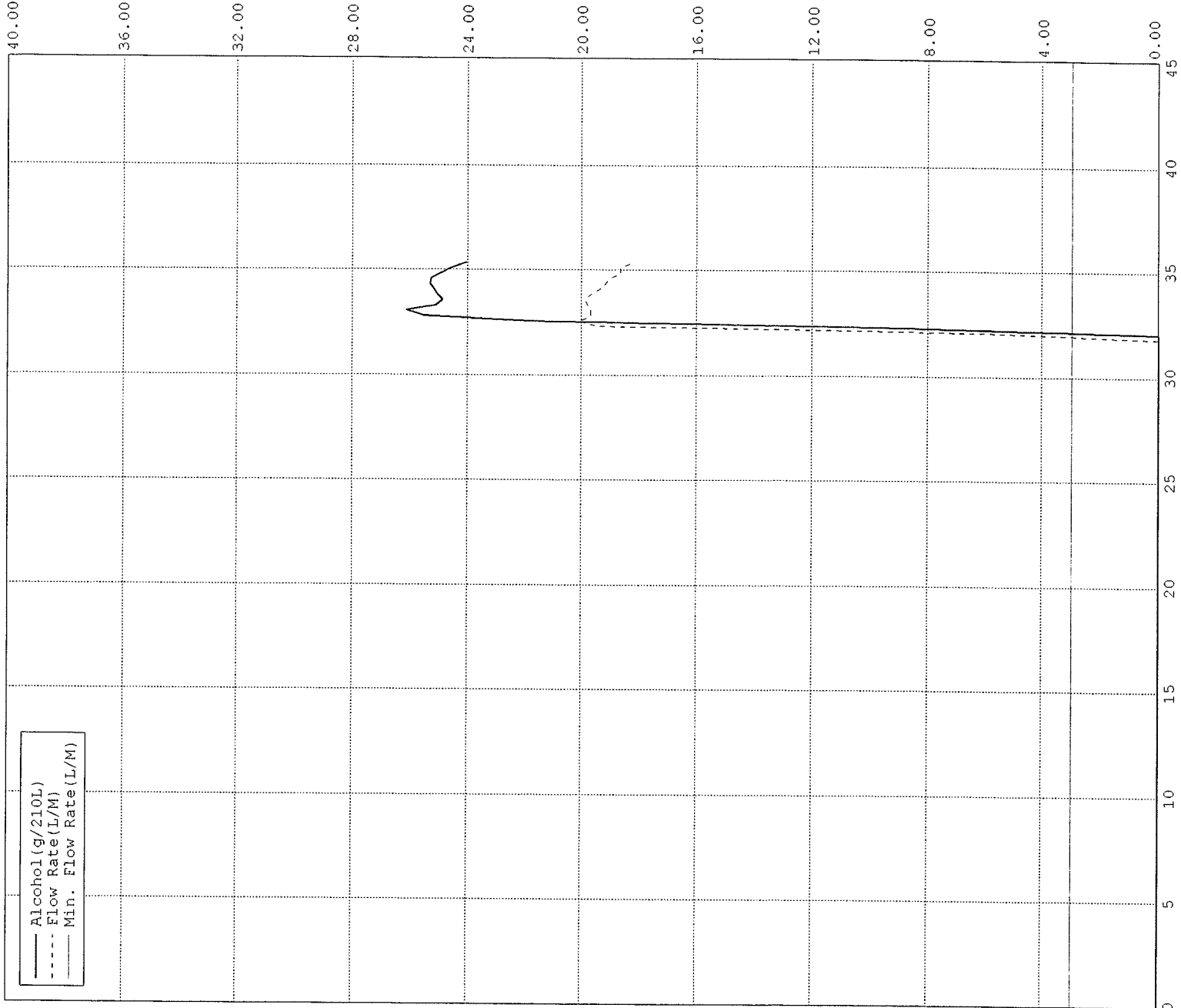
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

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

DIAGNOSTIC CHECK PASSED 10:48
BLANK TEST 0.000 10:48
INTERNAL STANDARD VERIFIED 10:48
EXTERNAL STANDARD 0.079 10:49
BLANK TEST 0.000 10:49
SUBJECT SAMPLE INVALID 10:51

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/07/2020
Time: 10:24:14

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 29.29: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

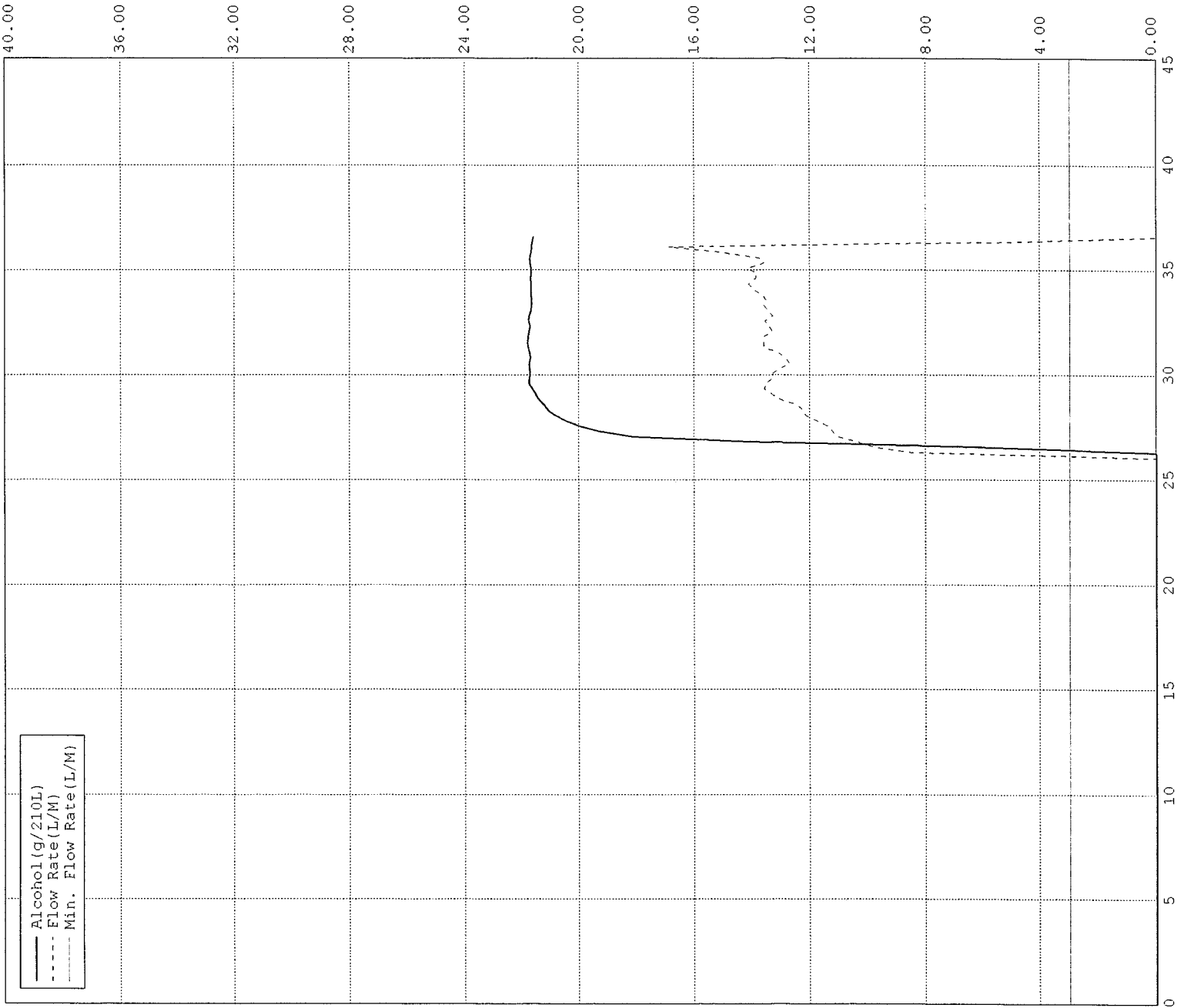
DIAGNOSTIC CHECK	PASSED	10:25
BLANK TEST	0.000	10:25
INTERNAL STANDARD	VERIFIED	10:25
Xq = 0.095 (0.46%)		
EXTERNAL STANDARD	0.079	10:25
X[1] = 0.0787 (0.0002) (0.0040)		
BLANK TEST	0.000	10:26
SUBJECT SAMPLE	XXX	10:27
X[1] = 0.1087 (-0.0145) (0.0016)		

Interference Detected

Filter 2 average: -0.0007

Filter 3 average: 0.0050

DWN



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/07/2020
Time: 10:31:47

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

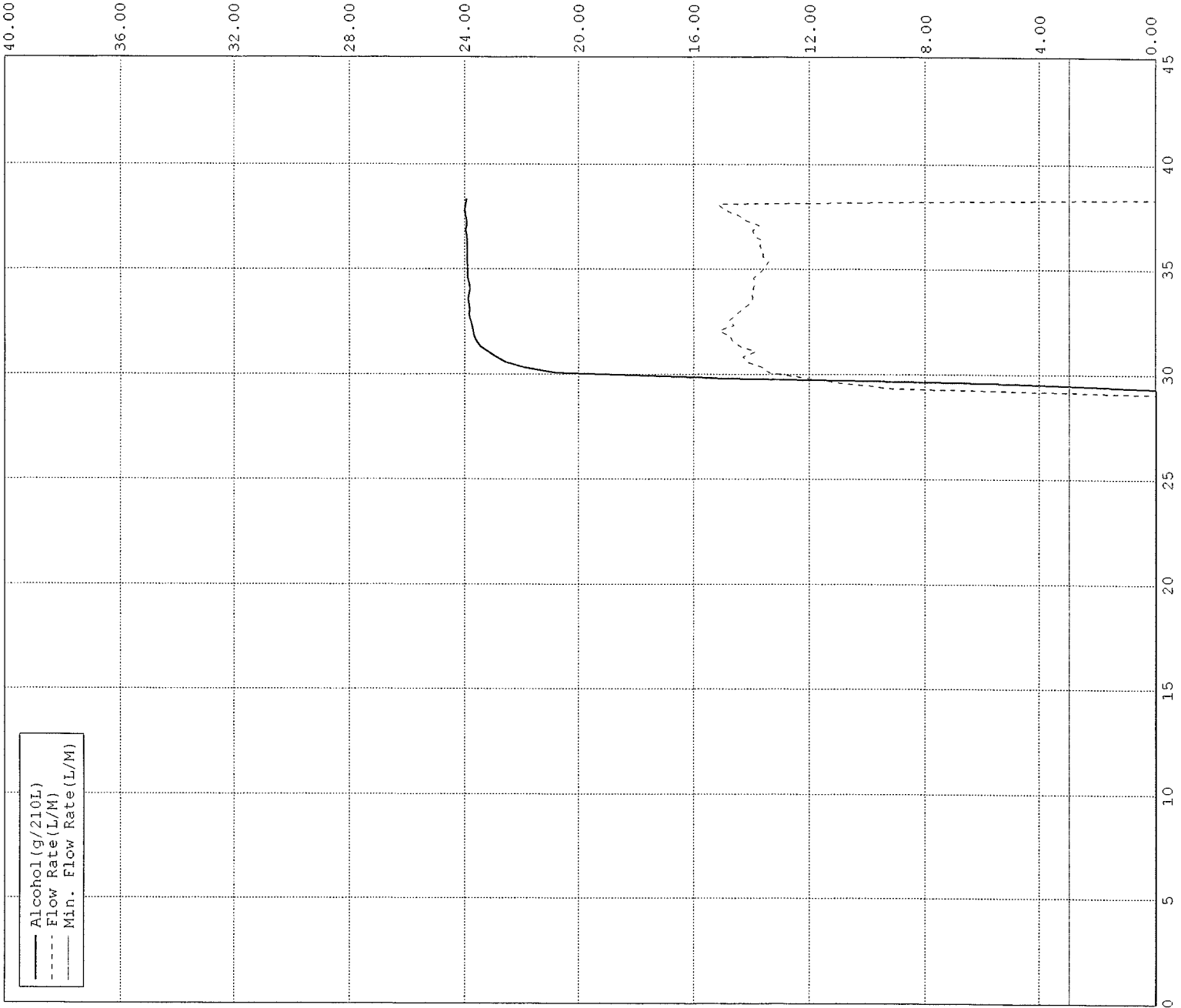
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK PASSED 10:32
BLANK TEST 0.000 10:32
INTERNAL STANDARD VERIFIED 10:33
Xq = 0.094 (0.65%)
EXTERNAL STANDARD 0.078 10:33
X[1] = 0.0781 (-0.0006) (0.0032)
BLANK TEST 0.000 10:34
SUBJECT SAMPLE XXX 10:34
X[1] = 0.1198 (-0.0253) (0.0020)

Interference Detected

DJK



SUBJECT TEST

Alaska Department of Public Safety

DATA MASTER dmt: 100353

Date: 08/07/2020
Time: 11:59:48

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

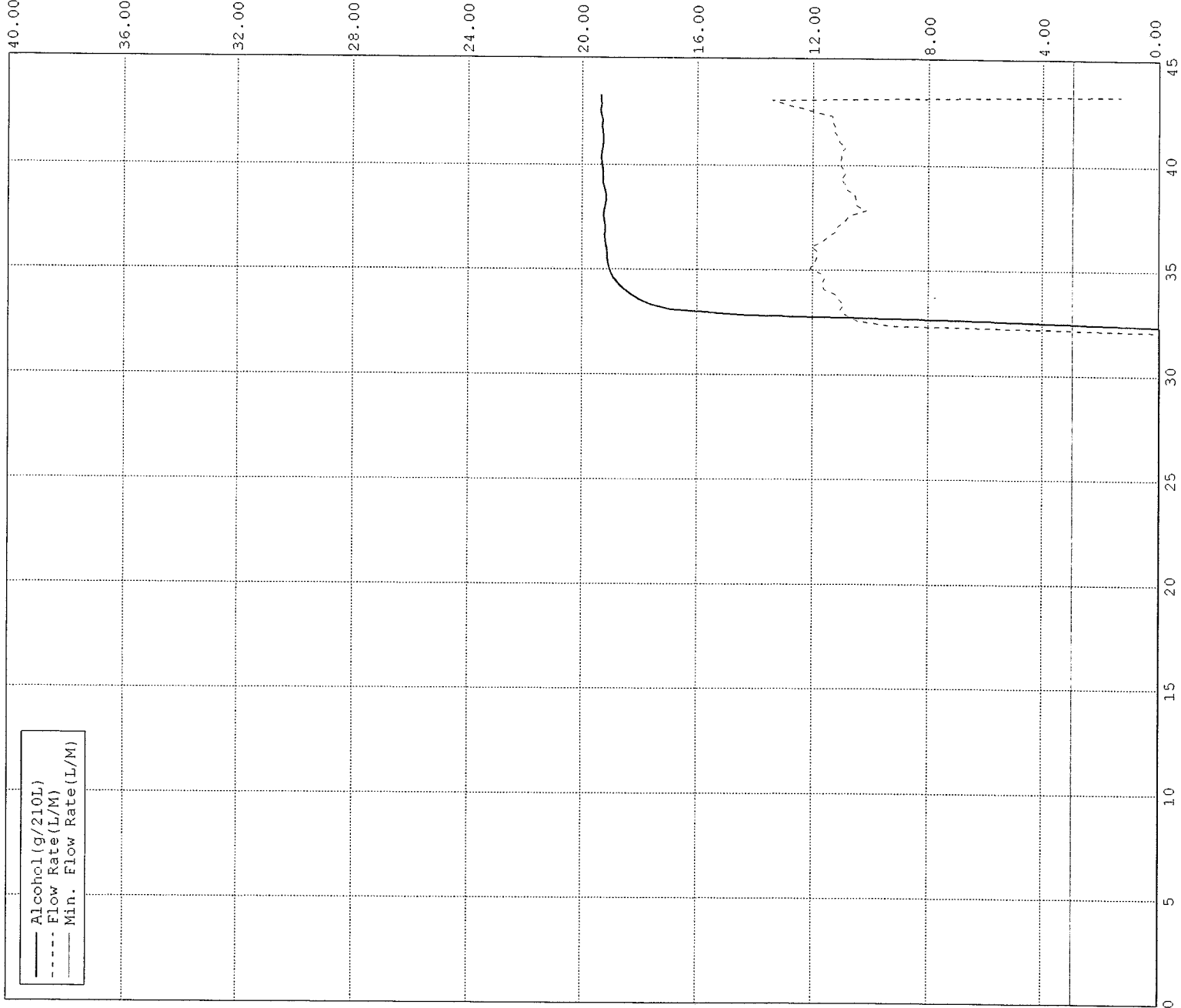
DEPT/AGENCY:
INTERFERENCE NEGATIVE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	12:00
BLANK TEST	0.000	12:00
INTERNAL STANDARD	VERIFIED	12:01
X _q = 0.094 (0.37%)		
EXTERNAL STANDARD	0.079	12:01
X[1] = 0.0786 (-0.0008) (0.0030)		
BLANK TEST	0.000	12:02
SUBJECT SAMPLE (Vol=2.07L)	0.097	12:02
X[1] = 0.0973 (0.0017) (0.0008)		
BLANK TEST	0.000	12:03
EXTERNAL STANDARD	0.078	12:04
X[1] = 0.0775 (-0.0014) (0.0019)		
BLANK TEST	0.000	12:05

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/07/2020
Time: 10:05:53

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

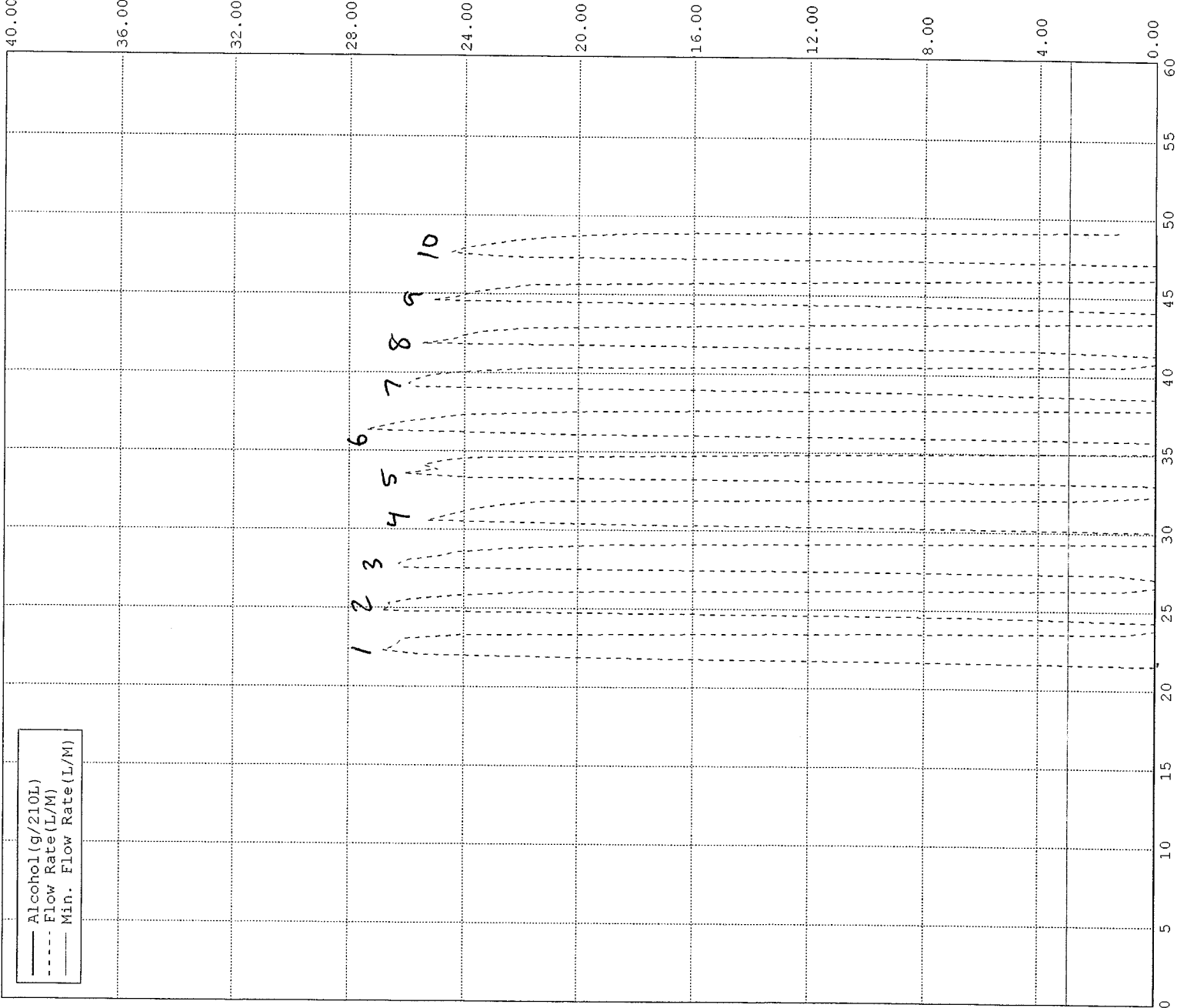
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK PASSED 10:08
BLANK TEST 0.000 10:08
INTERNAL STANDARD VERIFIED 10:08
EXTERNAL STANDARD 0.078 10:08
BLANK TEST 0.000 10:09
SUBJECT SAMPLE XXX 10:10

Maximum Attempts Exceeded

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/07/2020
Time: 10:38:47

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

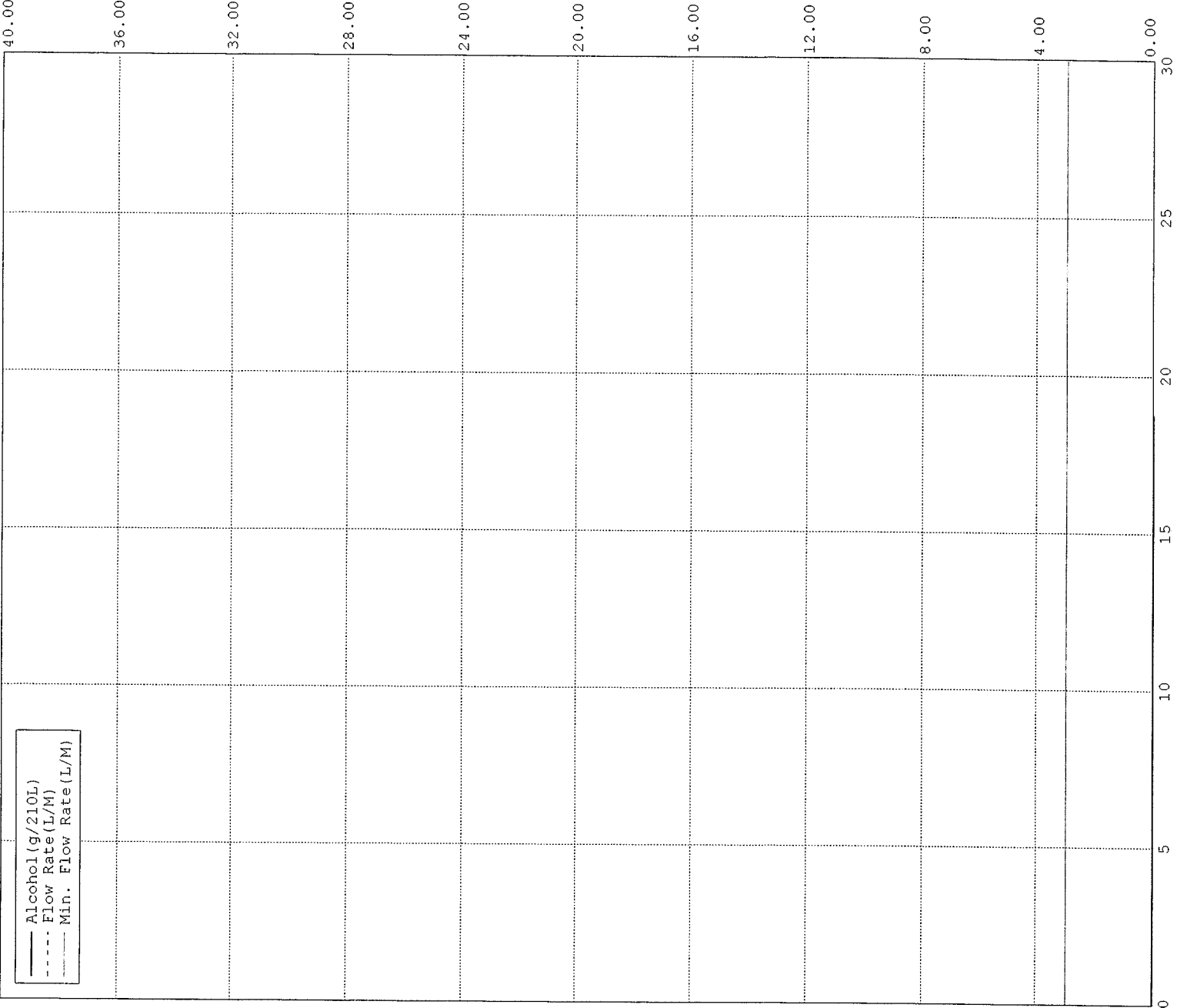
NOMINAL: 0.080
TARGET AT 29.29: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 10:40
BLANK TEST 0.000 10:40
INTERNAL STANDARD VERIFIED 10:40
EXTERNAL STANDARD 0.078 10:40
BLANK TEST 0.000 10:41

RFI DETECTED

DM

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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 08/07/2020
Time: 12:58:40

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

DIAGNOSTIC CHECK	PASSED	13:00
BLANK TEST	0.000	13:00
INTERNAL STANDARD	VERIFIED	13:00
EXTERNAL STANDARD	0.079	13:01
BLANK TEST	0.000	13:02
SUBJECT SAMPLE (Vol=2.26L)	0.000	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.079	13:03
BLANK TEST	0.000	13:04

DW

