

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 100366 Analyst Derck 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 Aircas Lot AG928203 Exp 10/09/21
- ii. 0.040g/210L Mnf Aircas Lot AG915607 Exp 06/05/21
- iii. 0.080g/210L Mnf Aircas Lot AG826101 Exp 09/18/20
- iv. 0.100g/210L Mnf Aircas Lot AG924701 Exp 09/04/21
- v. 0.200g/210L Mnf Auth Lot 19200 Exp 08/06/21
Simulator S/N SD1200 Date Calibrated 10/08/19
- vi. 0.300g/210L Mnf Auth Lot 19330 Exp 11/13/21
Simulator S/N DR4177 Date Calibrated 10/08/19

Functional Tests (attached)

- Incomplete Invalid
 Interference

- i. Acetone - Mnf Auth Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N DR4163 Date Calibrated 10/04/19
- ii. Isopropanol - Mnf Auth Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N DR4162 Date Calibrated 10/07/19
- iii. Negative Control - Mnf Auth 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: 100366

Date: 08/07/2020
Time: 08:45:32

VERSIONS
DMT: 3.02
PIC: 3.03
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 = 2.35 V PASSED
(1.46 V - 3.42 V)
Cooler Voltage = 1.99 V PASSED
(1.10 V - 2.58 V)
Bias Voltage = 81 V PASSED
(48 V - 112 V)
Chopper Freq = 541 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.2 in

PUMP INFO

Flow Rate = 4.615 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 = 0.101 0.88% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100366

Date: 08/07/2020
Time: 8:55 AM

Temperatures (°C)
Sample Cell: 48.8°C
Breath Tube: 47.6°C

Current Barometer 29.3 in
Volume (Ltr) 1.50

Settings
Lamp: 2.40 V
Bias: 81 V
Cooler: 1.96 V
Chopper: 524 Hz

Voltages (V)
Flow: 1.05 V
Detector: 0.006 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 03/22/2011
Time: 11:48:02

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

LOT #: GUTH100
BOTTLE #: 9380
EXPIRATION: 12/17/2011

Ca = 0.1000
CAL = 0.985254 0.800 <= CAL < 1.200
b1 = 0.0000 0.0000 <= b1 < 0.0040
b2 = 0.0054 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.1000 0.0500 <= Xq < 0.2000
a21 = 1.200050 1.050 <= a21 < 1.300
a31 = 0.503220 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 08/07/2020
Time: 08:57:00

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

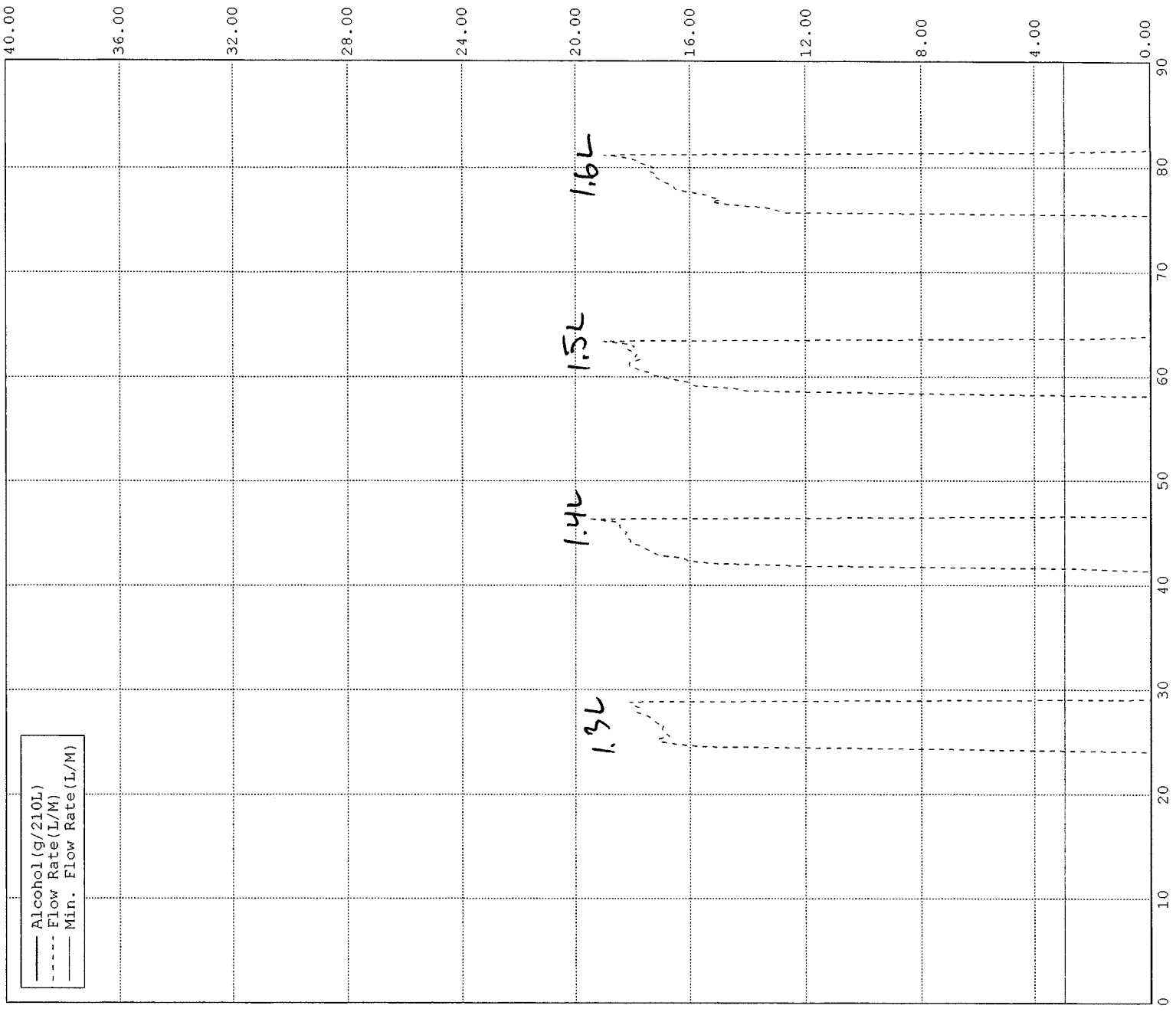
DEPT/AGENCY:
MINIMUM VOLUME
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	08:58
BLANK TEST	0.000	08:58
INTERNAL STANDARD	VERIFIED	08:58
INTERNAL STANDARD	0.075	08:58
BLANK TEST	0.000	08:59
SUBJECT SAMPLE (Vol=1.57L)	0.000	09:01
BLANK TEST	0.000	09:01
EXTERNAL STANDARD	0.075	09:02
BLANK TEST	0.000	09:03

DM



LINEARITY CHECK

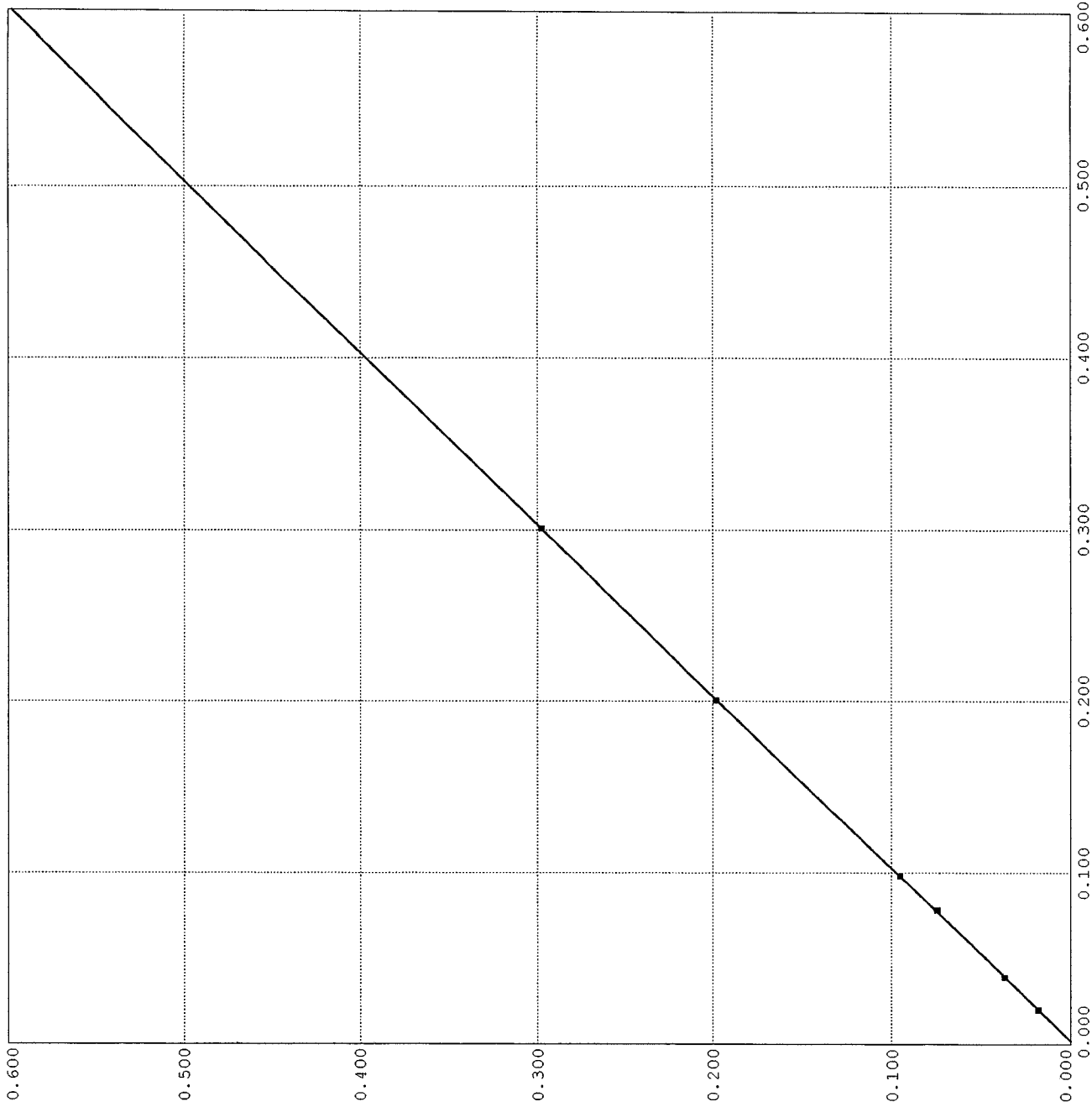
Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 08/07/2020
Time: 09:18:28

SUPERVISOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0190	0.0000
0.039	0.0380	0.0000
0.078	0.0754	0.0005
0.098	0.0962	0.0004
0.200	0.1988	0.0008
0.300	0.2984	0.0005

SLOPE = 0.999458
R² = 0.999967



W

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100366

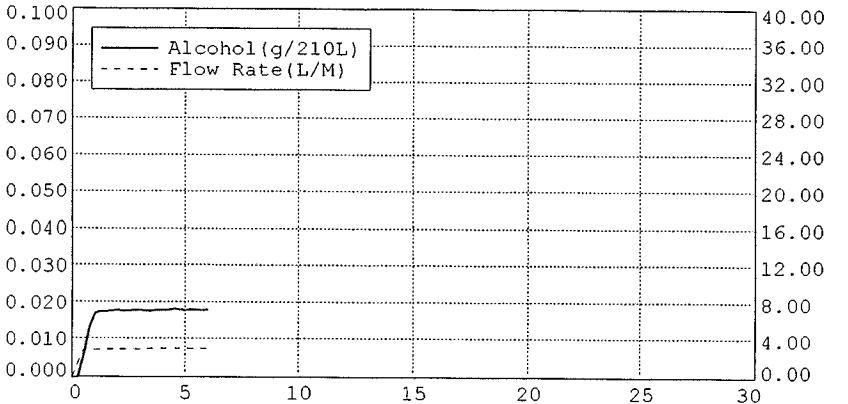
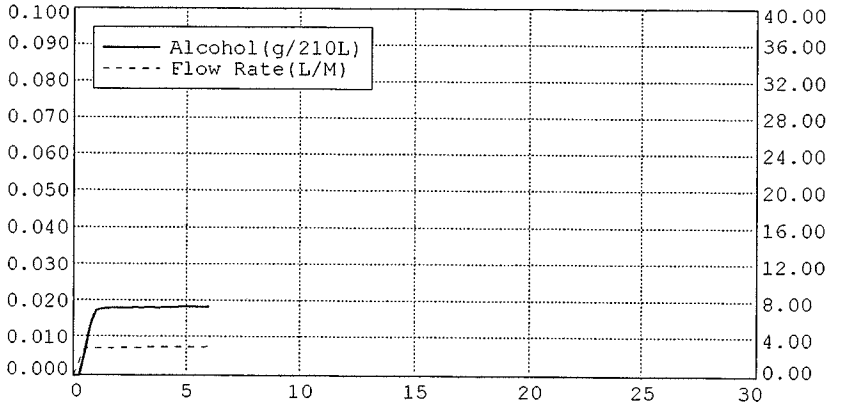
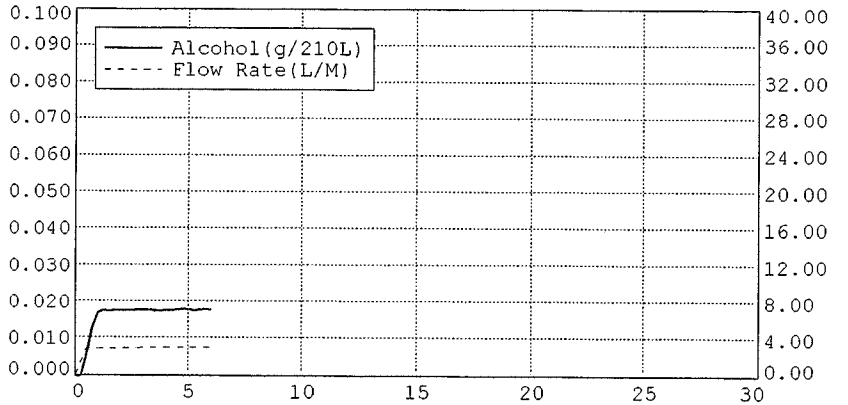
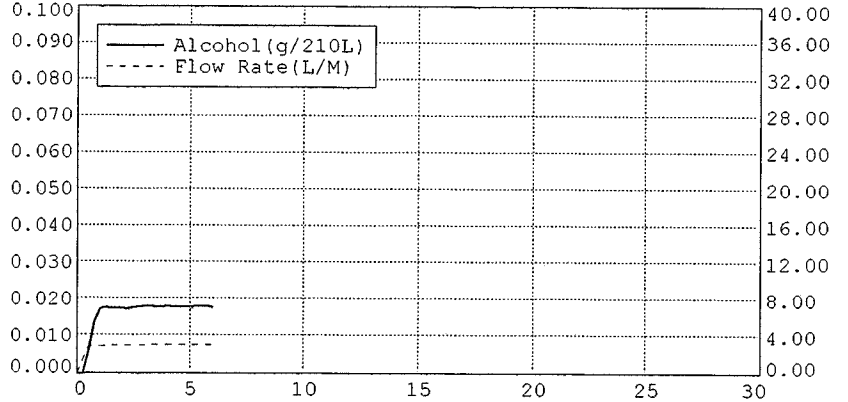
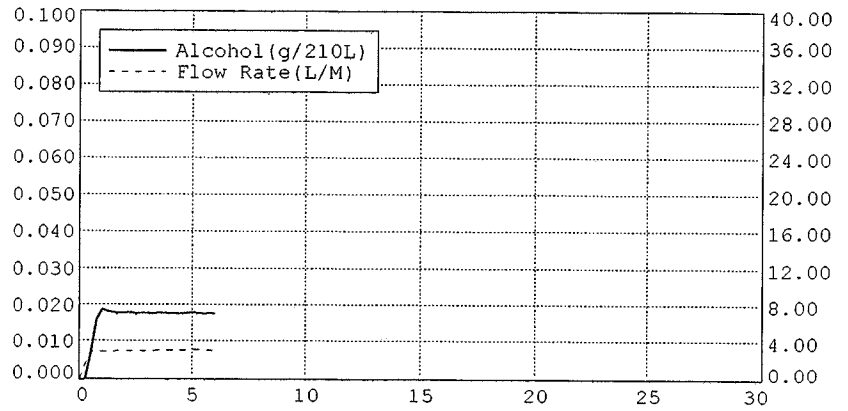
Date: 08/07/2020
 Time: 09:18:30

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.27: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 850 psi

BLANK TEST	0.000	09:19
INTERNAL STANDARD	VERIFIED	09:19
EXTERNAL STANDARD	0.019	09:19
BLANK TEST	0.000	09:20
EXTERNAL STANDARD	0.019	09:20
BLANK TEST	0.000	09:21
EXTERNAL STANDARD	0.019	09:22
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.019	09:23
BLANK TEST	0.000	09:24
EXTERNAL STANDARD	0.019	09:24
BLANK TEST	0.000	09:25

Average = 0.0190
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100366

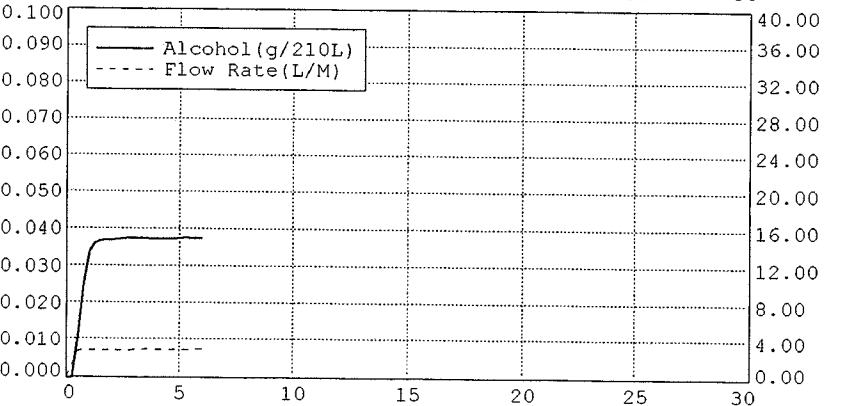
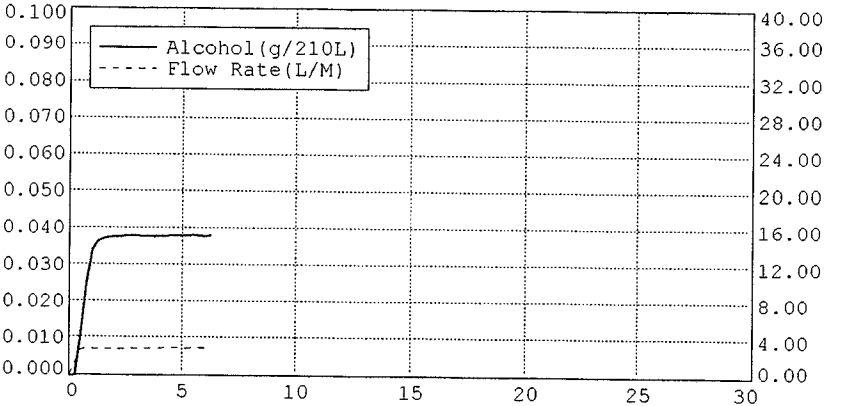
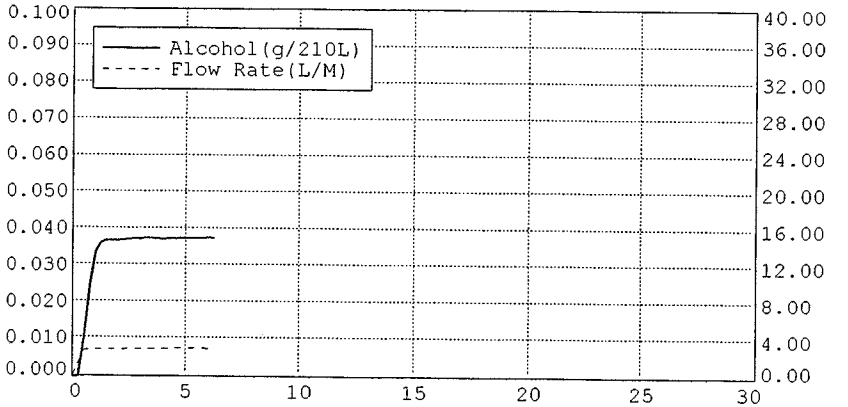
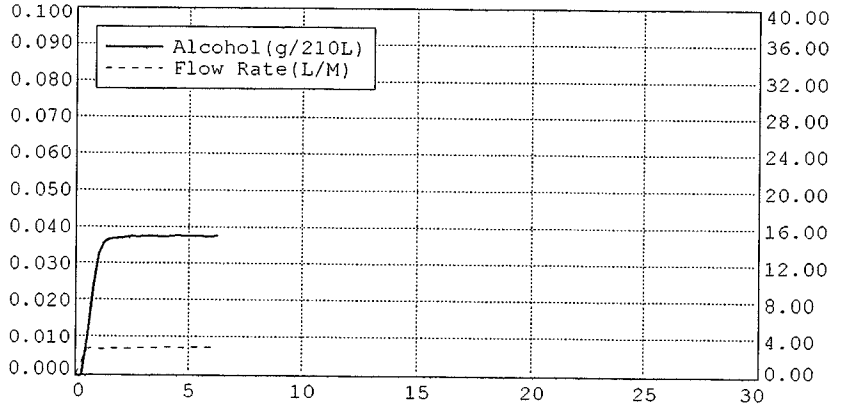
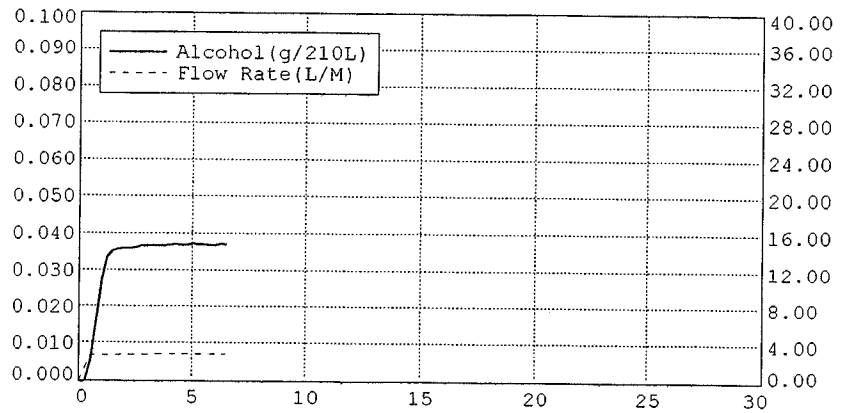
Date: 08/07/2020
 Time: 09:27:42

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.27: 0.039
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 736 psi

BLANK TEST	0.000	09:28
INTERNAL STANDARD	VERIFIED	09:29
EXTERNAL STANDARD	0.038	09:29
BLANK TEST	0.000	09:30
EXTERNAL STANDARD	0.038	09:30
BLANK TEST	0.000	09:31
EXTERNAL STANDARD	0.038	09:31
BLANK TEST	0.000	09:32
EXTERNAL STANDARD	0.038	09:32
BLANK TEST	0.000	09:33
EXTERNAL STANDARD	0.038	09:33
BLANK TEST	0.000	09:34

Average = 0.0380
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100366

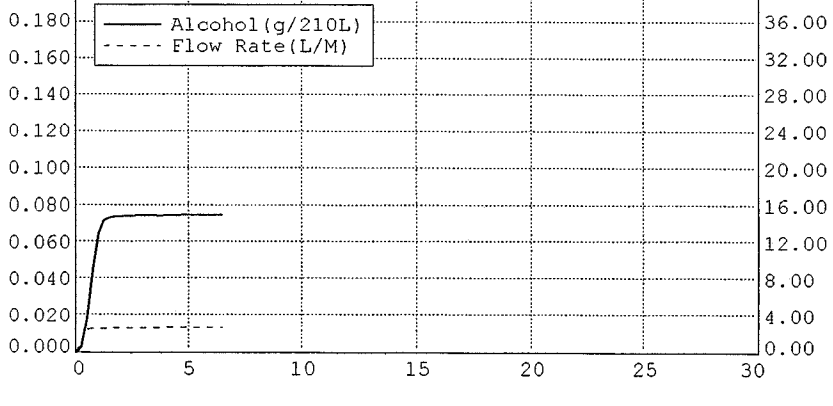
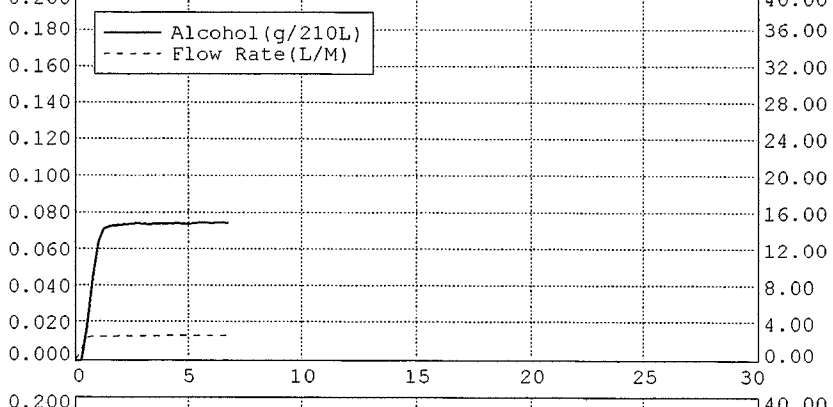
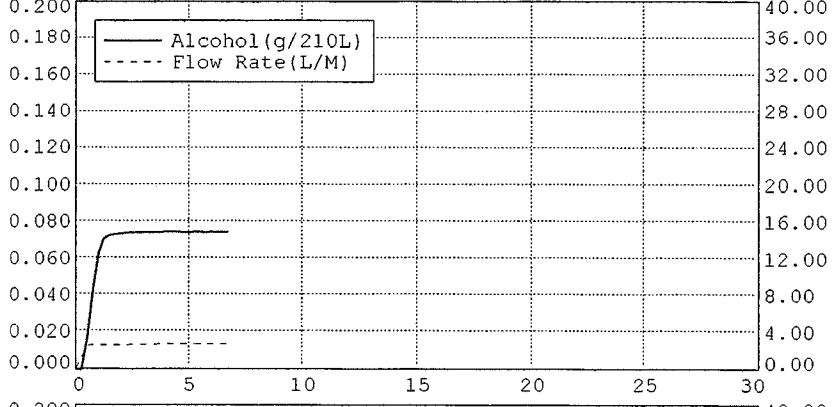
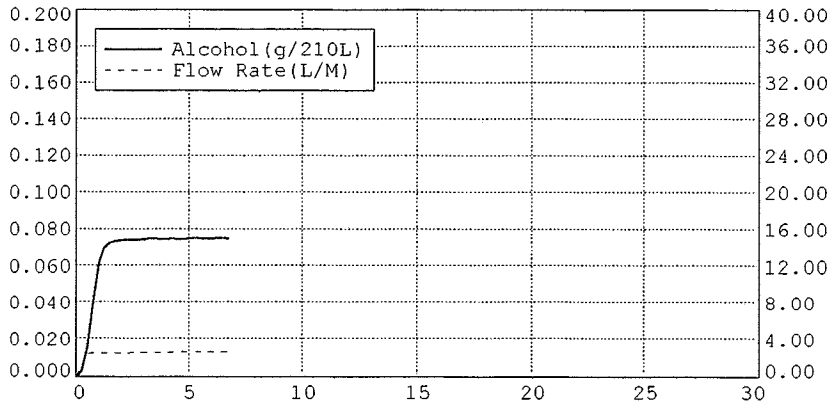
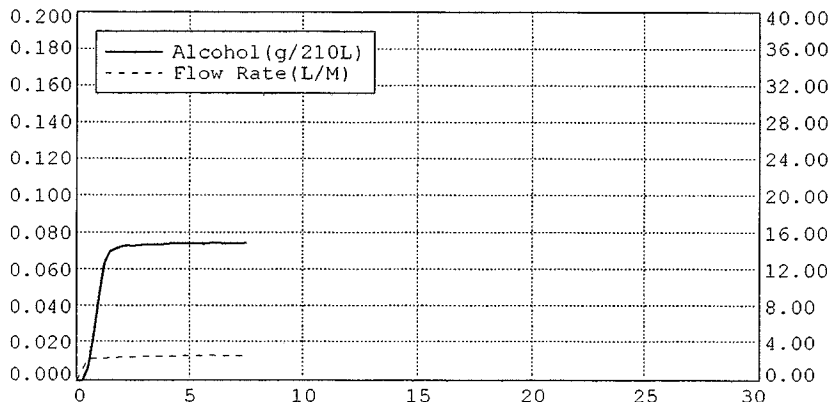
Date: 08/07/2020
 Time: 09:37:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.27: 0.078
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 241 psi

BLANK TEST	0.000	09:38
INTERNAL STANDARD	VERIFIED	09:38
EXTERNAL STANDARD	0.075	09:39
BLANK TEST	0.000	09:39
EXTERNAL STANDARD	0.076	09:40
BLANK TEST	0.000	09:41
EXTERNAL STANDARD	0.075	09:41
BLANK TEST	0.000	09:42
EXTERNAL STANDARD	0.075	09:42
BLANK TEST	0.000	09:43
EXTERNAL STANDARD	0.076	09:43
BLANK TEST	0.000	09:44

Average = 0.0754
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100366

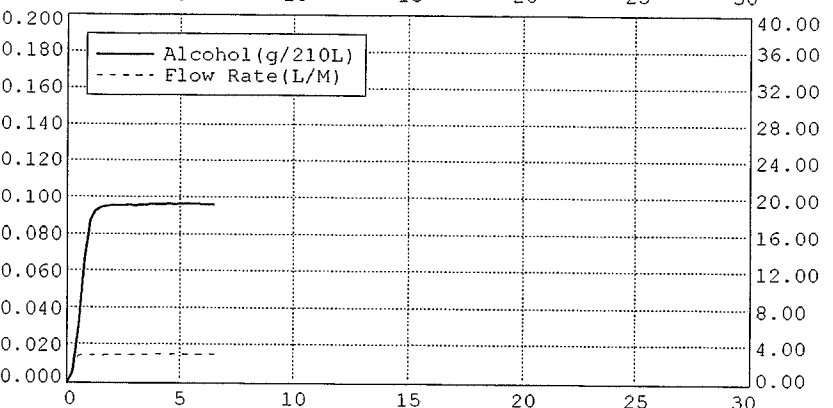
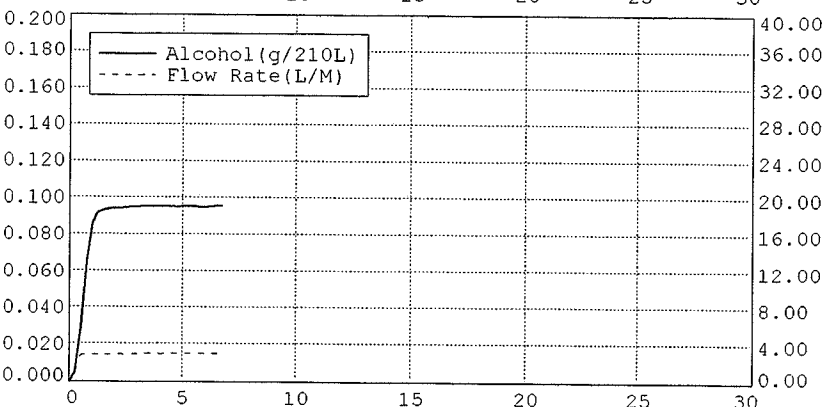
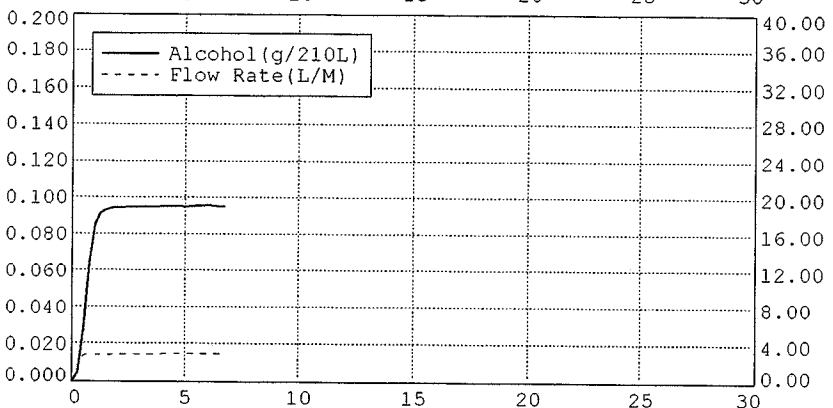
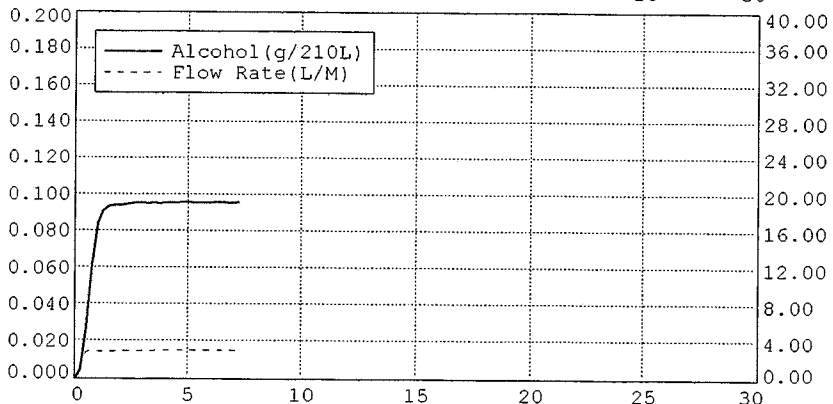
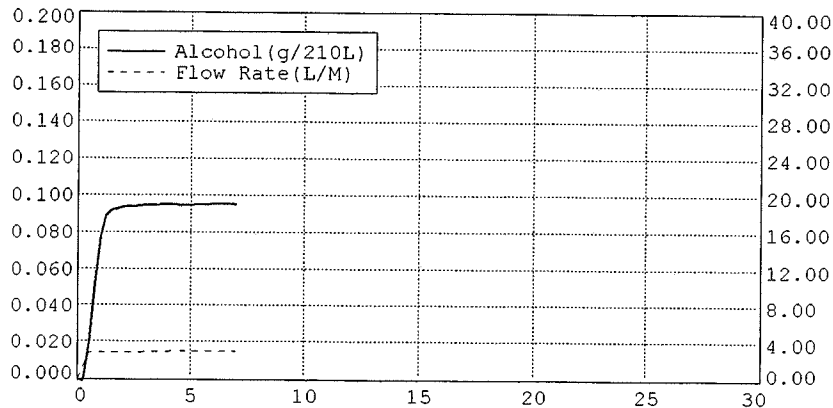
Date: 08/07/2020
 Time: 09:46:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.27: 0.098
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 937 psi

BLANK TEST	0.000	09:47
INTERNAL STANDARD	VERIFIED	09:47
EXTERNAL STANDARD	0.096	09:48
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.096	09:49
BLANK TEST	0.000	09:50
EXTERNAL STANDARD	0.096	09:50
BLANK TEST	0.000	09:51
EXTERNAL STANDARD	0.096	09:51
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.097	09:52
BLANK TEST	0.000	09:53

Average = 0.0962
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100366

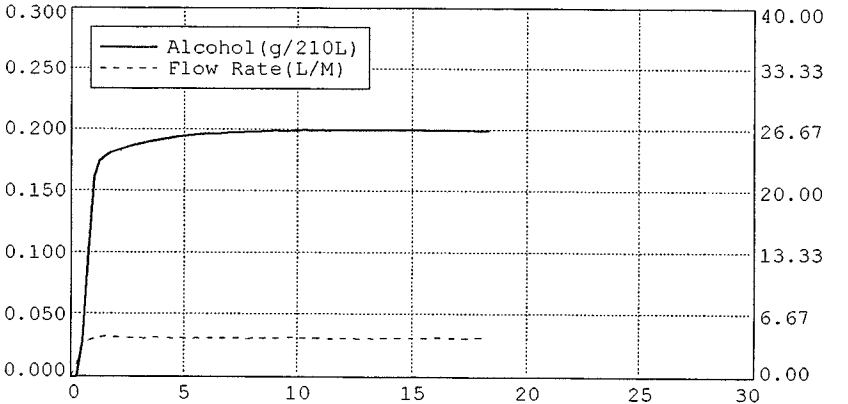
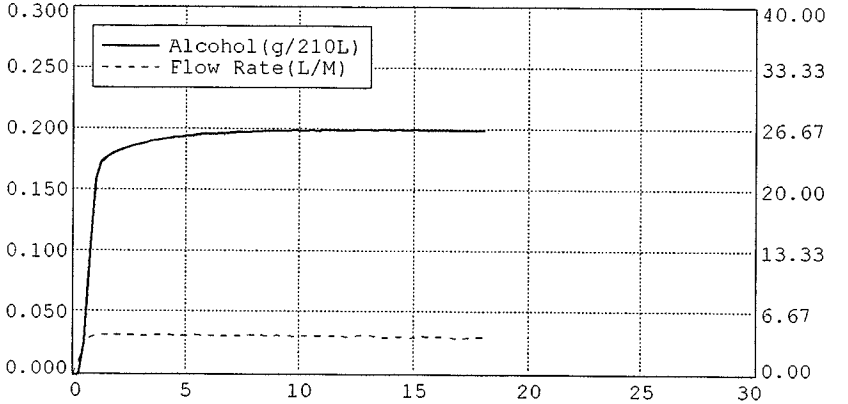
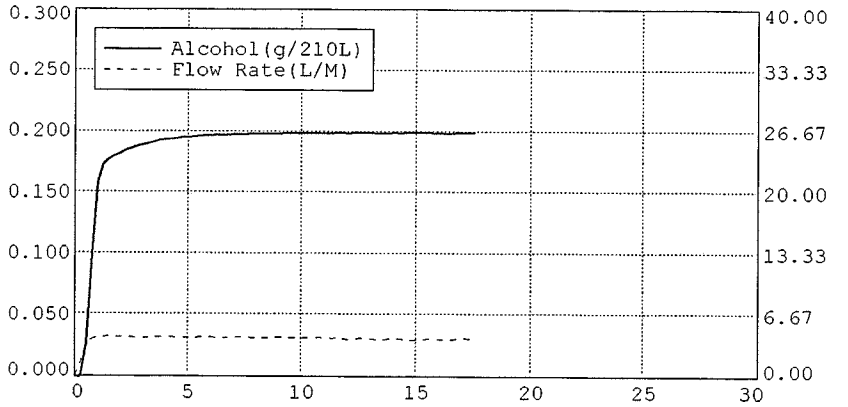
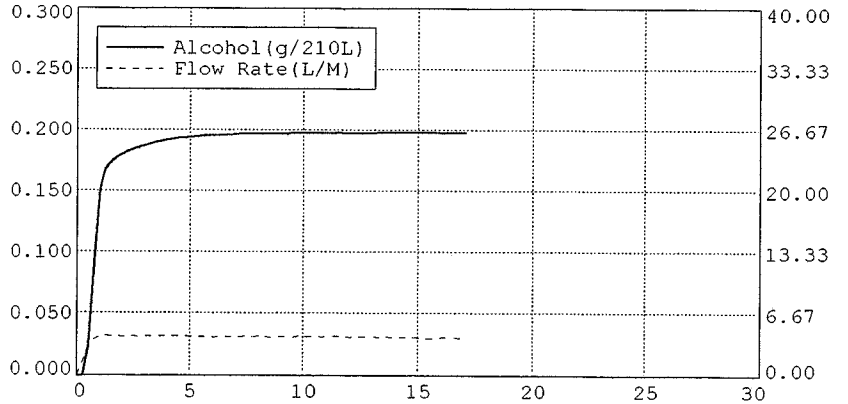
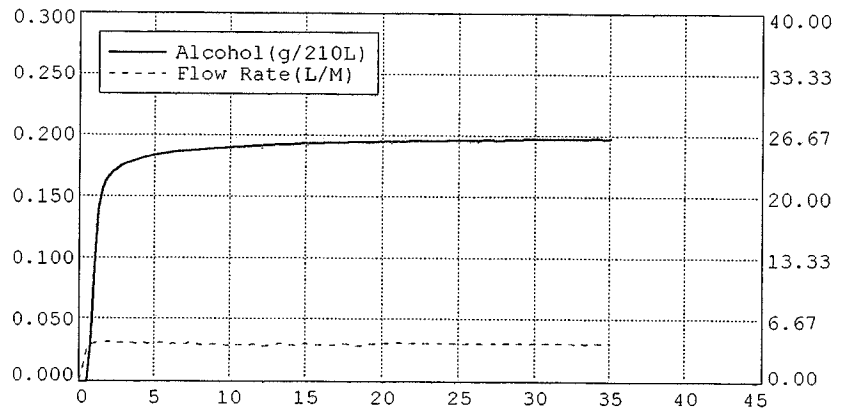
Date: 08/07/2020
 Time: 09:55:37

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	09:57
INTERNAL STANDARD	VERIFIED	09:57
EXTERNAL STANDARD	0.198	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.198	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.199	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.199	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.200	10:03
BLANK TEST	0.000	10:04

Average = 0.1988
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100366

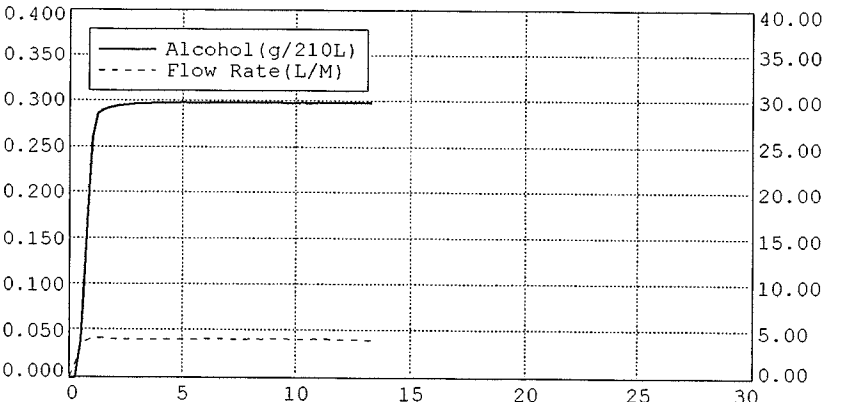
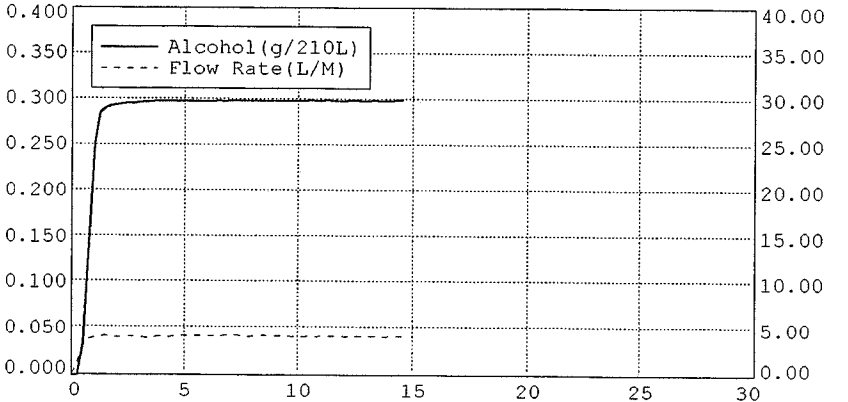
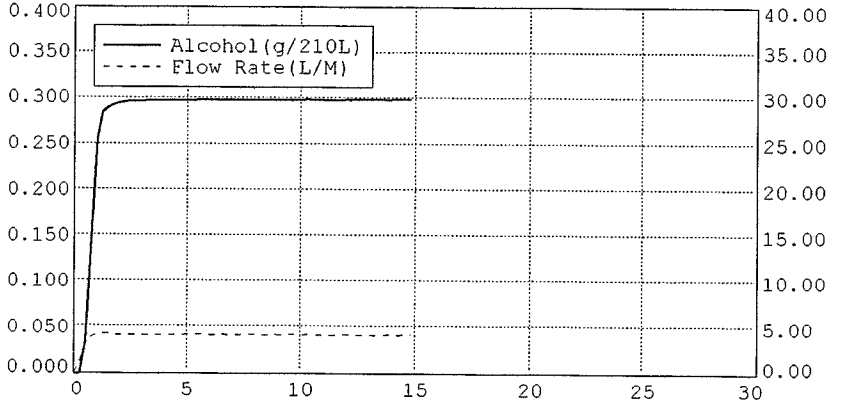
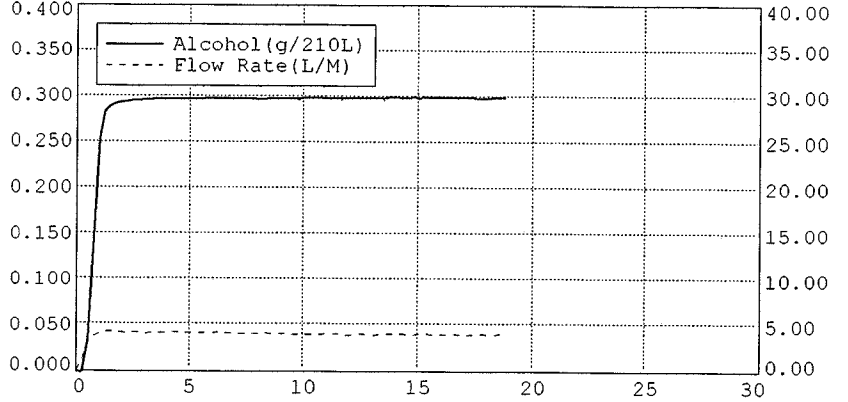
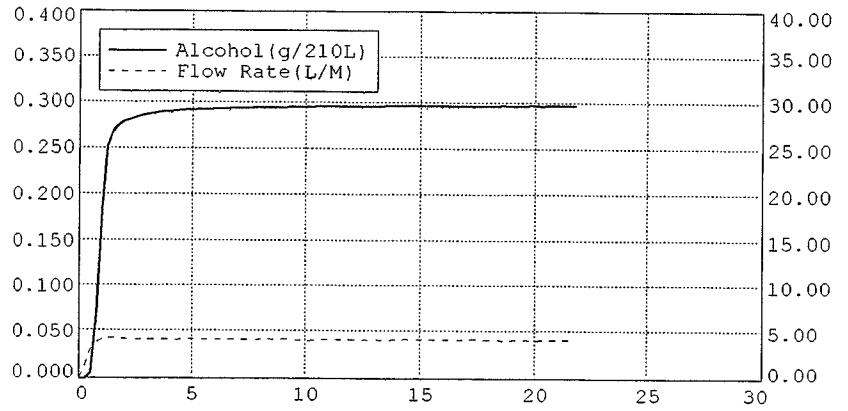
Date: 08/07/2020
 Time: 10:09:50

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:11
INTERNAL STANDARD	VERIFIED	10:11
EXTERNAL STANDARD	0.298	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.299	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.298	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.299	10:15
BLANK TEST	0.000	10:16
EXTERNAL STANDARD	0.298	10:16
BLANK TEST	0.000	10:17

Average = 0.2984
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 08/07/2020
Time: 10:23:59

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

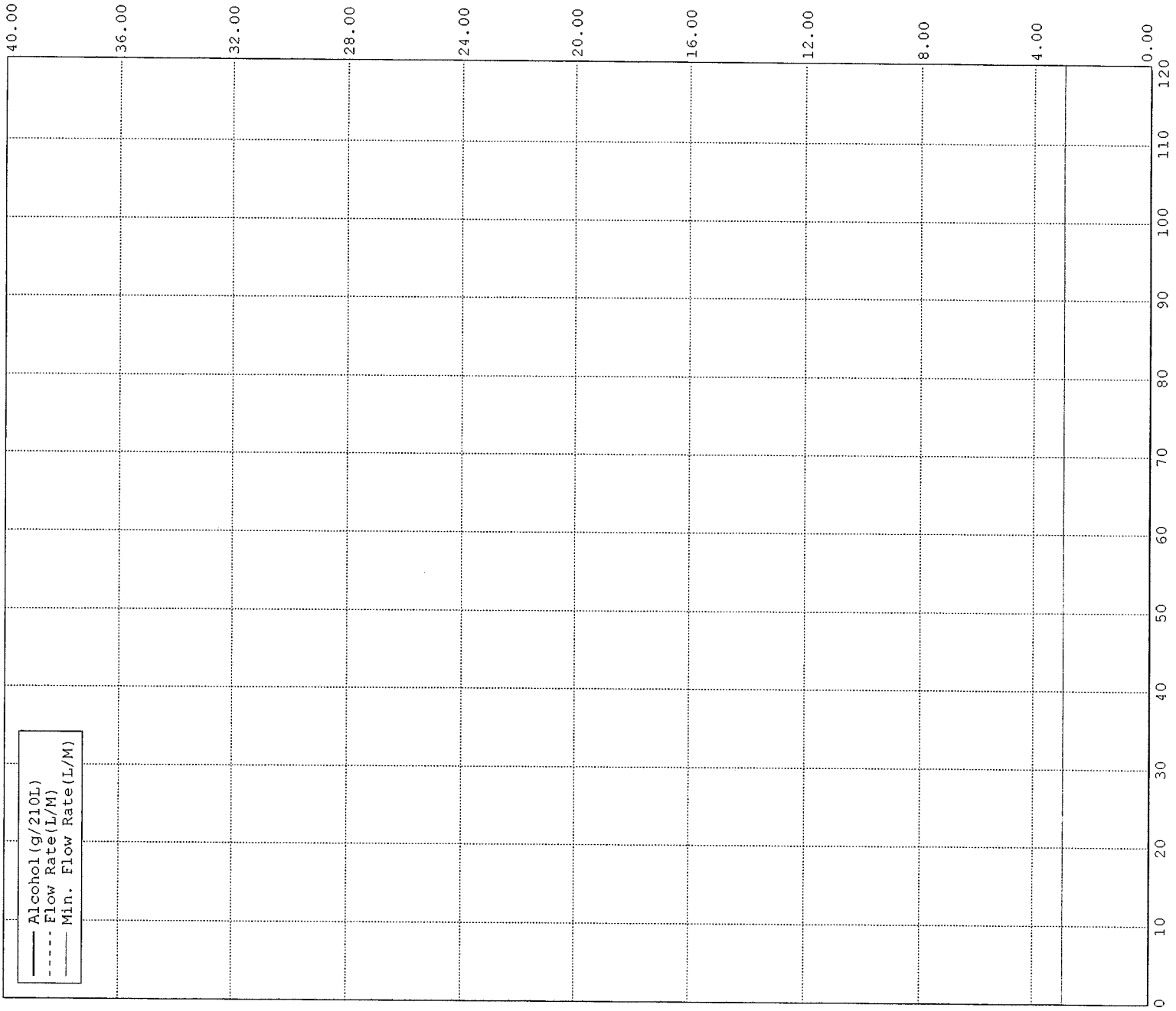
DEPT/AGENCY:
INCOMPLETE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK PASSED 10:26
BLANK TEST 0.000 10:26
INTERNAL STANDARD VERIFIED 10:26
EXTERNAL STANDARD 0.075 10:27
BLANK TEST 0.000 10:28
SUBJECT SAMPLE INCOMPLETE 10:30

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 08/07/2020
Time: 11:40:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

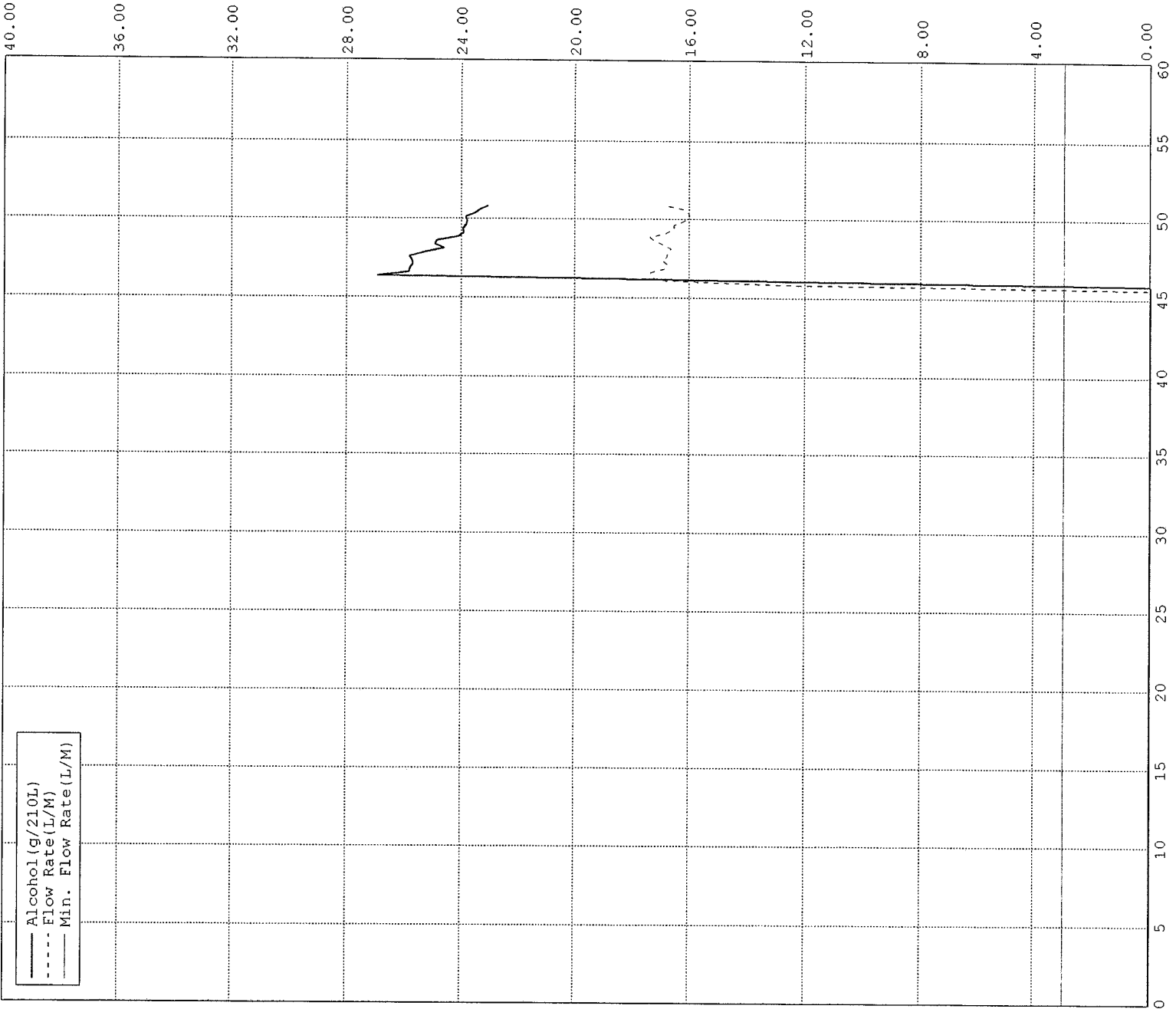
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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 11:41
BLANK TEST 0.000 11:41
INTERNAL STANDARD VERIFIED 11:41
EXTERNAL STANDARD 0.075 11:42
BLANK TEST 0.000 11:43
SUBJECT SAMPLE INVALID 11:44

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 08/07/2020
Time: 10:44:13

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 29.28: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

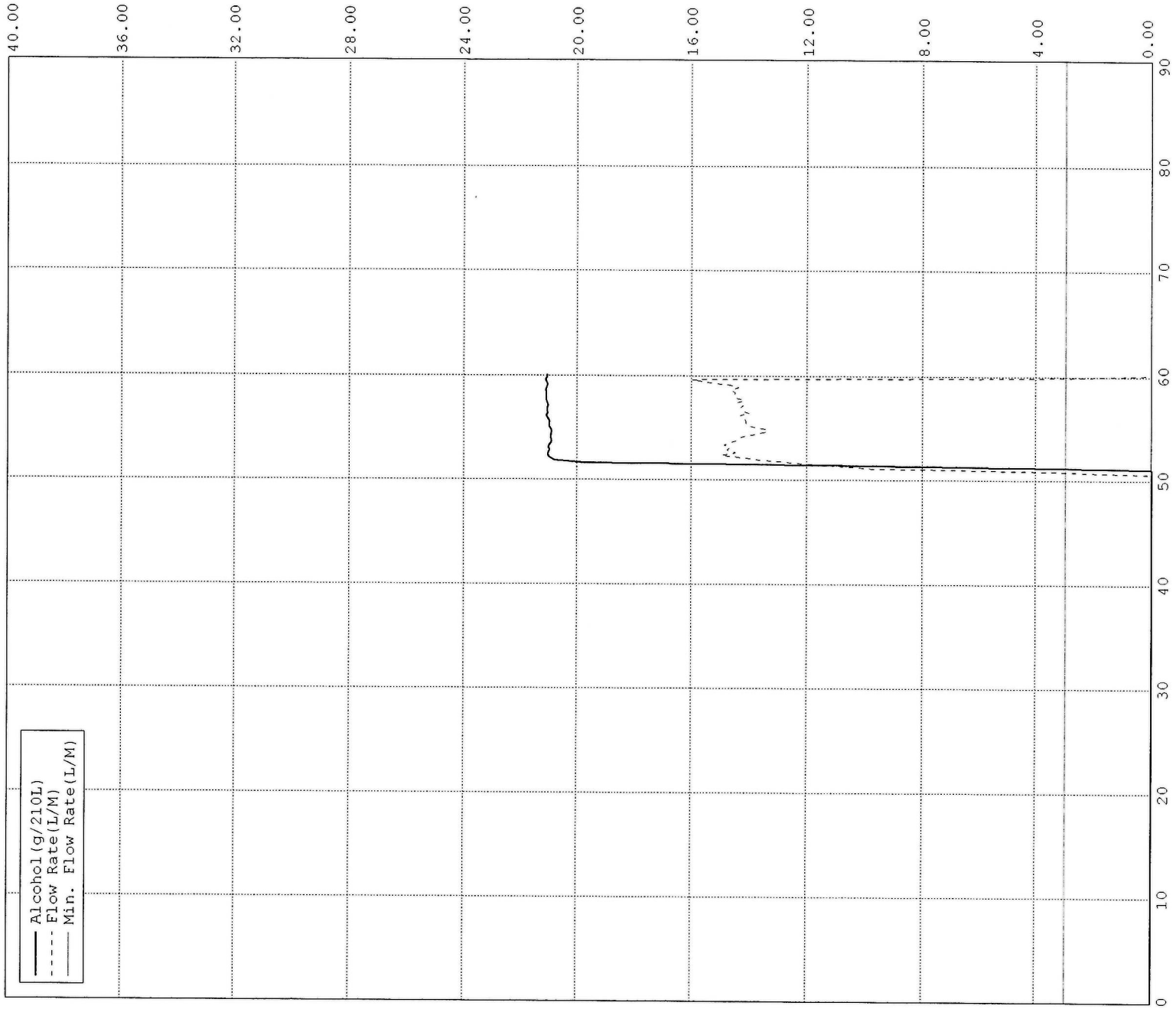
DIAGNOSTIC CHECK PASSED 10:45
BLANK TEST 0.000 10:45
INTERNAL STANDARD VERIFIED 10:45
Xq = 0.101 (0.61%)
EXTERNAL STANDARD 0.074 10:45
X[1] = 0.0745 (0.0002) (0.0034)
BLANK TEST 0.000 10:46
SUBJECT SAMPLE XXX 10:47
X[1] = 0.1049 (-0.0168) (0.0008)

Interference Detected

Filter 2 average: 0.0001

Filter 3 average: 0.0029

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER cmt: 100366

Date: 08/07/2020
Time: 10:56:52

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

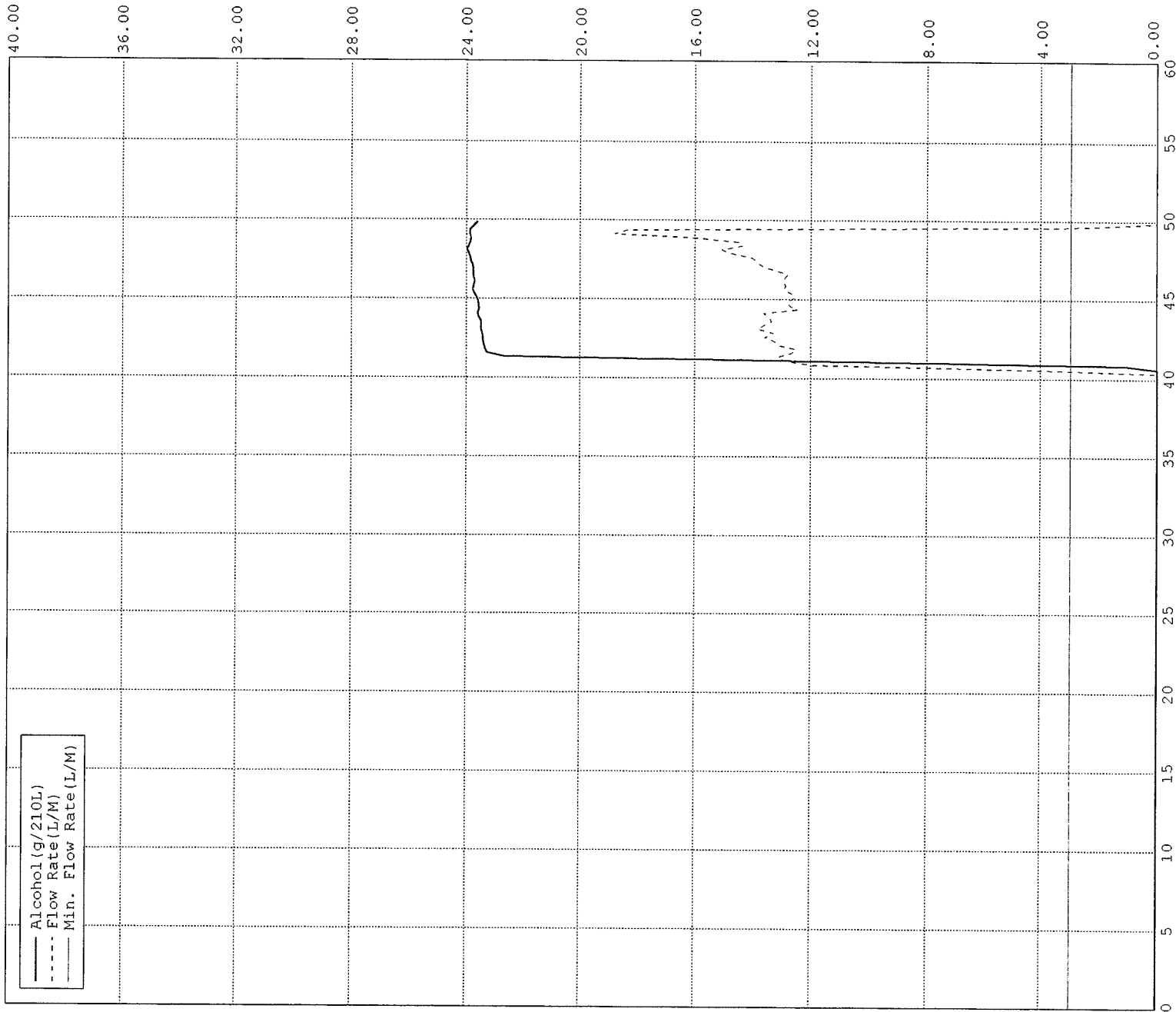
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.28: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	10:57
BLANK TEST	0.000	10:58
INTERNAL STANDARD	VERIFIED	10:58
Xq = 0.100 (0.09%)		
EXTERNAL STANDARD	0.074	10:58
X[1] = 0.0743 (0.0002) (0.0034)		
BLANK TEST	0.000	10:59
SUBJECT SAMPLE	XXX	11:00
X[1] = 0.1176 (-0.0251) (0.0023)		

Interference Detected

DMW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 08/07/2020
Time: 11:04:14

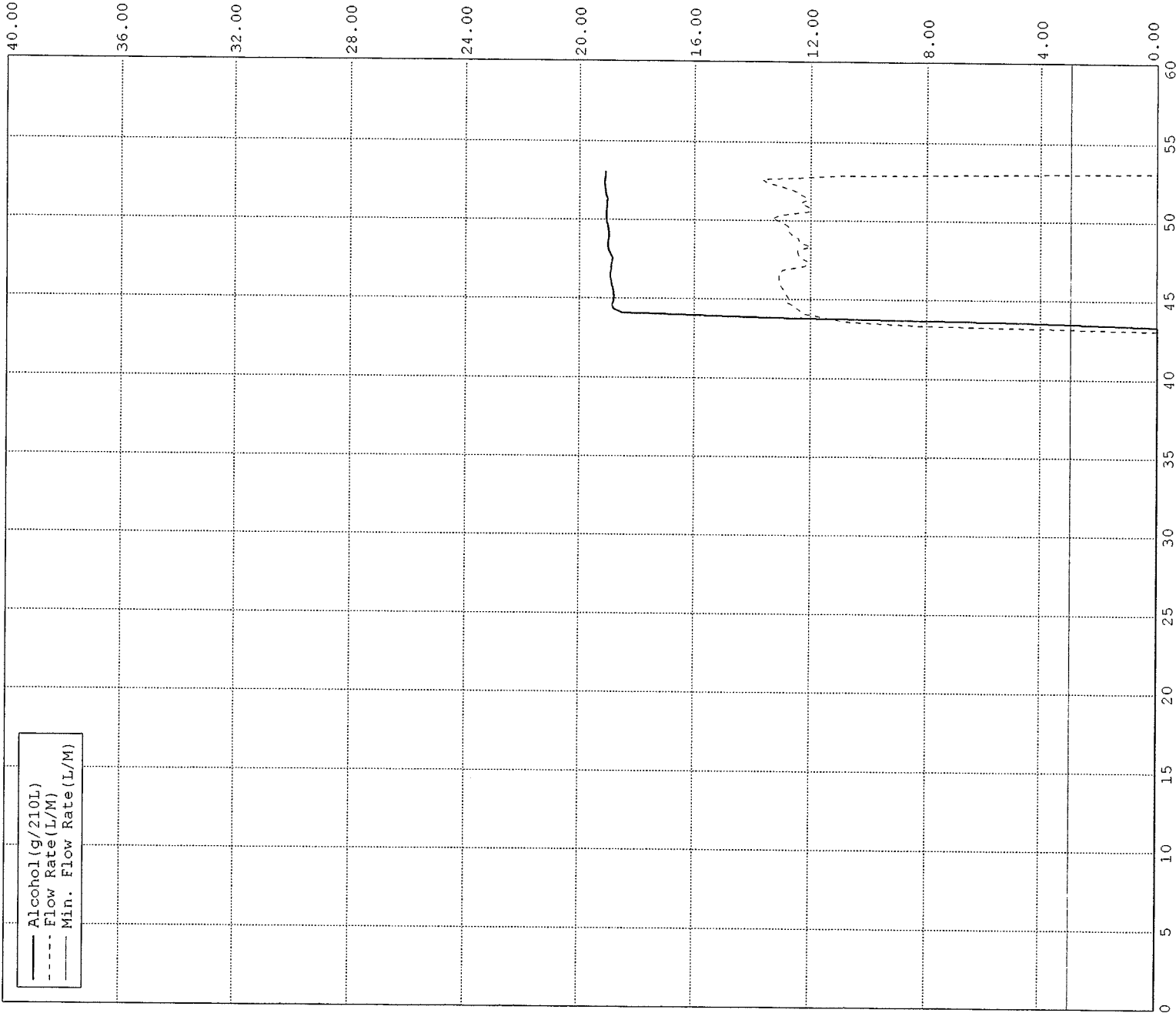
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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

DIAGNOSTIC CHECK	PASSED	11:06
BLANK TEST	0.000	11:06
INTERNAL STANDARD	VERIFIED	11:06
Xg = 0.101 (1.14%)		
EXTERNAL STANDARD	0.075	11:07
X[1] = 0.0750 (0.0005) (0.0029)		
BLANK TEST	0.000	11:08
SUBJECT SAMPLE (Vol=2.03L)	0.095	11:08
X[1] = 0.0952 (0.0019) (0.0007)		
BLANK TEST	0.000	11:09
EXTERNAL STANDARD	0.075	11:10
X[1] = 0.0748 (-0.0006) (0.0020)		
BLANK TEST	0.000	11:11



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 08/07/2020
Time: 10:34:45

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

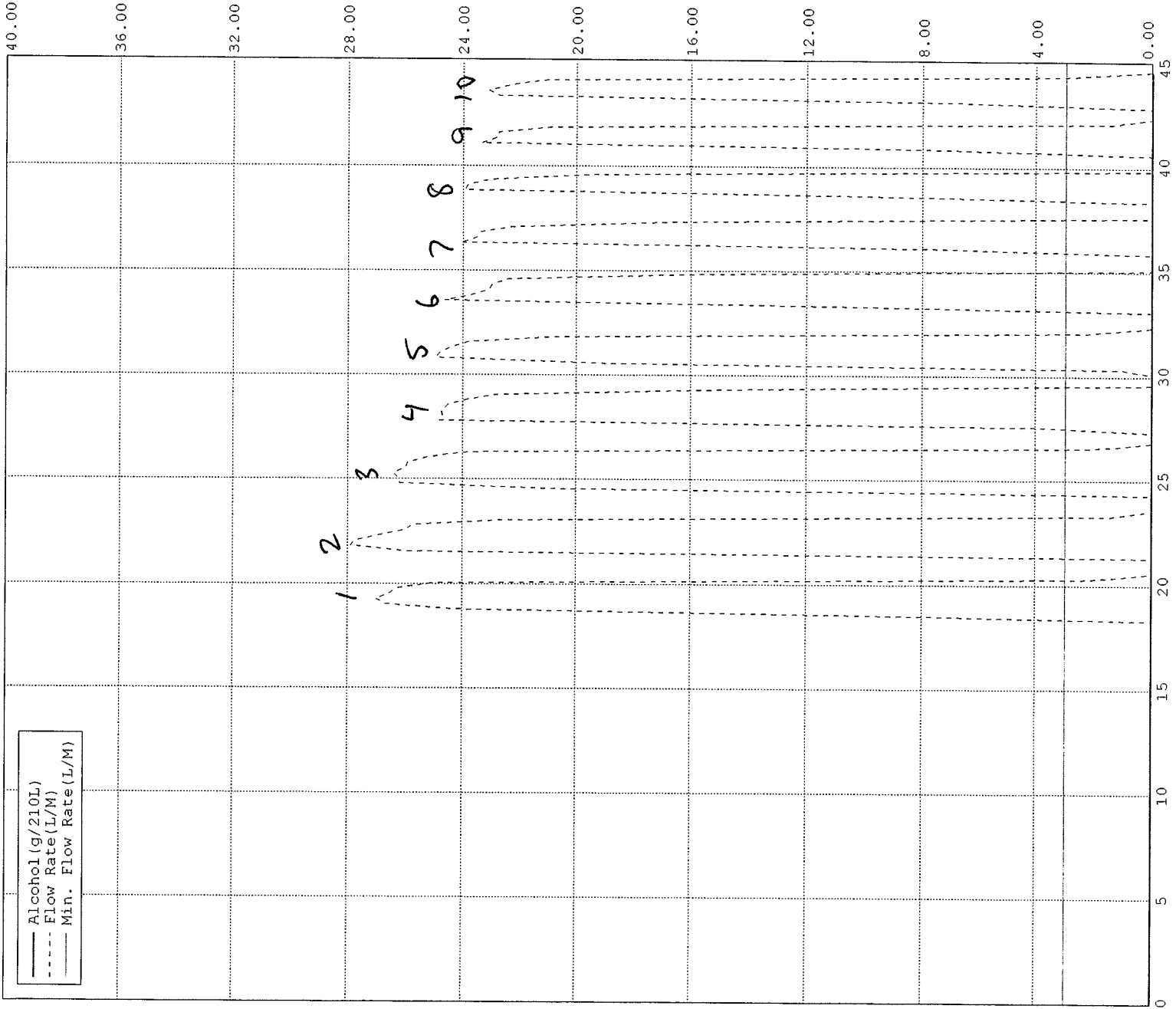
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.28: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 10:36
BLANK TEST 0.000 10:36
INTERNAL STANDARD VERIFIED 10:36
EXTERNAL STANDARD 0.075 10:36
BLANK TEST 0.000 10:37
SUBJECT SAMPLE XXX 10:38

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100366

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

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

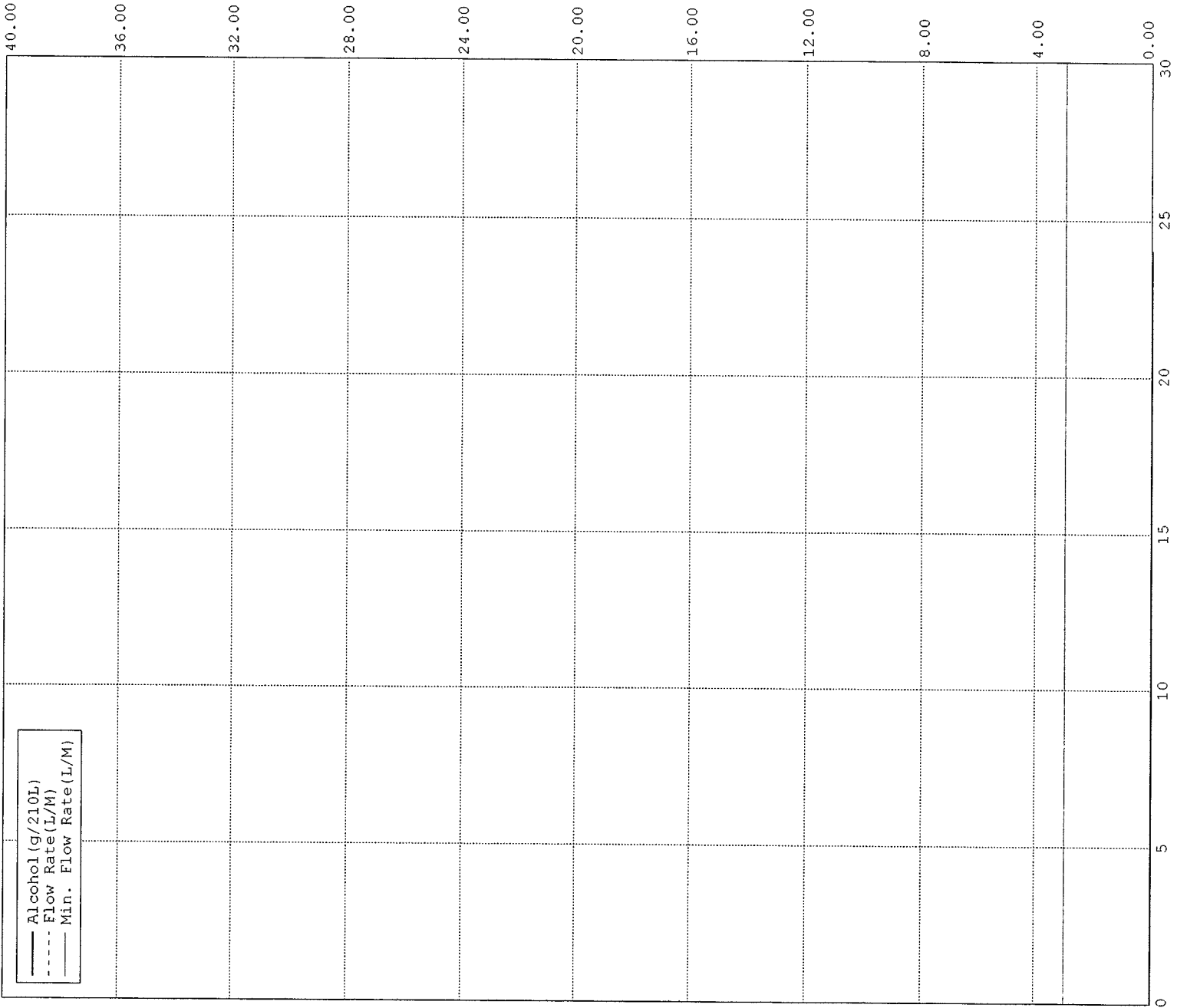
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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 11:33
BLANK TEST 0.000 11:33
INTERNAL STANDARD VERIFIED 11:33
EXTERNAL STANDARD 0.075 11:34
BLANK TEST 0.000 11:34

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100366

Date: 08/07/2020
Time: 13:41:38

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
NON-DRINKING SUBJECTT
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	13:44
BLANK TEST	0.000	13:44
INTERNAL STANDARD	VERIFIED	13:44
EXTERNAL STANDARD	0.075	13:45
BLANK TEST	0.000	13:46
SUBJECT SAMPLE (Vol=2.80L)	0.000	13:46
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.076	13:48
BLANK TEST	0.000	13:48

DM

