

Alaska Scientific Crime Detection Laboratory

DataMaster Certification Form

Issued: 7/10/2015
Effective: 7/10/2015

Version: DMCEF 2015 R1
Status: Active

Instrument S/N 100418 Analyst Derech Walton Start Date 10/08/20

1. Diagnostic Test (attached) Internal Standard value $\leq 3.00\%$ Yes
1. Voltage Checks
- a. 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)
 - b. Set RFI
 - c. Adjust barometer reading to match NIST traceable barometer
 - d. Adjust volume setting, if needed (1.5L +/- 0.1L)
 - e. Print Technician Screen (attached)

2. Print Calibration Factors (attached)

3. Volume Test - Minimum 1.4 L (1.3L to 1.7L)

4. Linearity Test (attached)

a. Levels Used

- i. 0.020g/210L Mnf Airgas Lot AG 928203 Exp 10/09/21
- 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 Wttn Lot 19200 Exp 08/06/21
 - 1. Simulator S/N DR4161 Date Calibrated 05/08/20
- vi. 0.300g/210L Mnf Wttn Lot 19330 Exp 11/13/21
 - 1. Simulator S/N DR5298 Date Calibrated 05/08/20

5. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference
- d. Exceeded attempts

- i. Acetone - Mnf Wttn Lot 19301 Level 0.100 Exp 10/30/21
 - 1. Simulator S/N SD1202 Date Calibrated 05/08/20
- ii. Isopropanol - Mnf Wttn Lot 19301 Level 0.100 Exp 10/30/21
 - 1. Simulator S/N SD1177 Date Calibrated 05/07/20
- iii. Negative Control - Mnf Wttn Lot 19301 Level 0.100 Exp 10/30/21
 - 1. Simulator S/N SD1088 Date Calibrated 05/08/20

e. RFI

- 6. Verify stylus is calibrated
- 7. Reset Options
- 8. Clear Memory

- 9. Verification of Calibration
- 10. Non-Drinking Subject Test (attached)
- 11. Upload
- 13. Remove tank prior to shut down

End Date 10/09/20

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 10/08/2020
Time: 10:02:13

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

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.7°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.85 V PASSED
(1.12 V - 2.60 V)
Cooler Voltage = 1.87 V PASSED
(1.12 V - 2.60 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 520 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.2 in

PUMP INFO

Flow Rate = 4.909 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
(0.001 v <= 0.010 v)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD ✓ PASSED
Xq = 0.065 1.96% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100418

Date: 10/08/2020
Time: 10:09 AM

Temperatures (°C)
Sample Cell: 49.2°C
Breath Tube: 45.8°C

Current Barometer 29.2 in
Volume (Ltr) 1.58 ✓

Settings
Lamp: 1.85 V
Bias: 80 V
Cooler: 1.73 V
Chopper: 522 Hz

Voltages (V)
Flow: 1.06 V
Detector: 0.016 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 08/12/2020
Time: 11:52:02

OPERATOR NAME:
ST LOUIS INTOX A TECH
CERTIFICATE #: OU812

Ca = 0.0970
CAL = 0.969762 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0053 0.0010 <= b2 < 0.0100
b3 = 0.0001 0.0000 <= b3 < 0.0040
Xq = 0.0660 0.0500 <= Xq < 0.2000
a21 = 1.176228 1.050 <= a21 < 1.300
a31 = 0.458989 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 10/08/2020
Time: 10:12:50

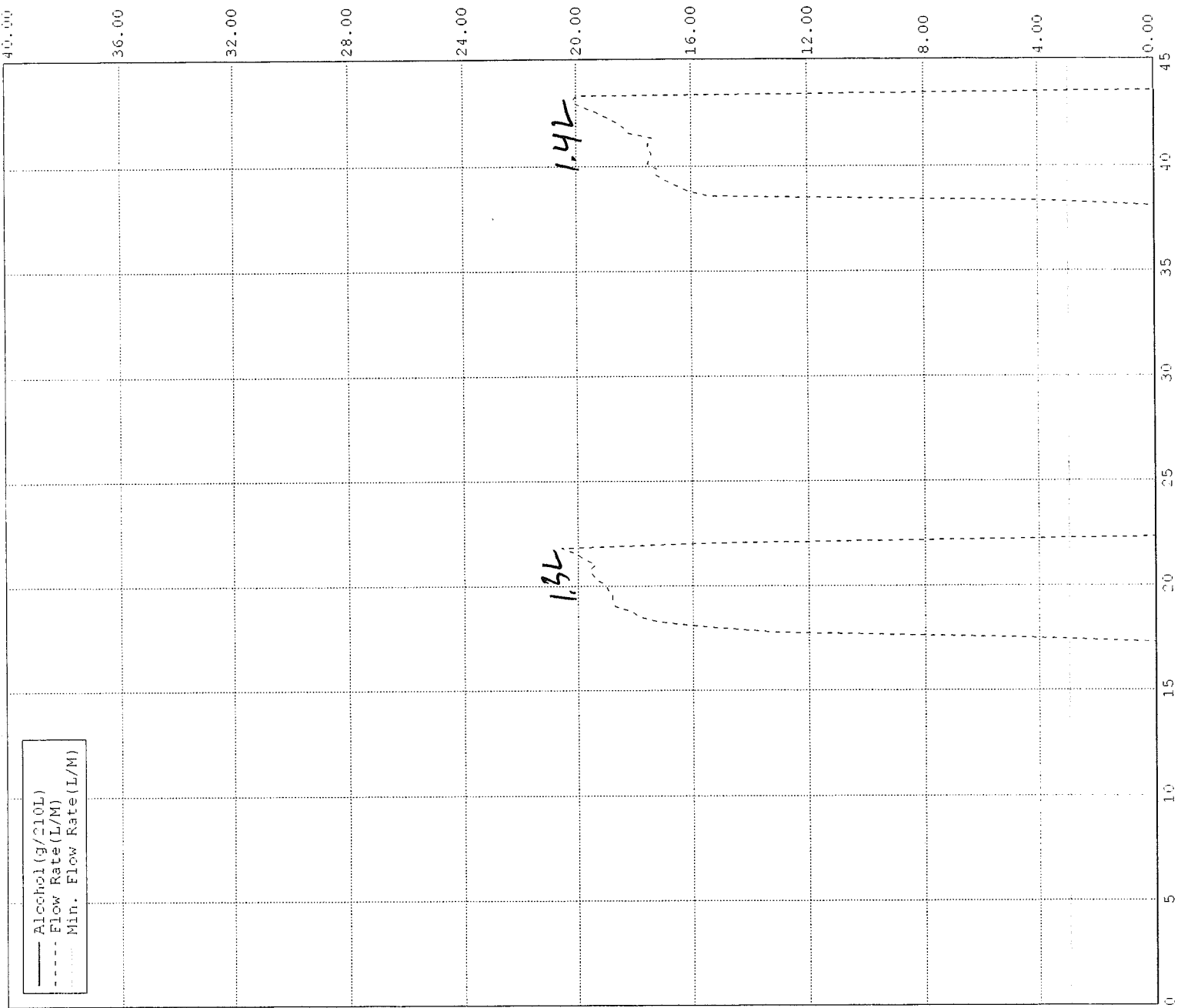
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 29.23: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	10:13
BLANK TEST	0.000	10:13
INTERNAL STANDARD	VERIFIED	10:14
EXTERNAL STANDARD	0.078	10:14
BLANK TEST	0.000	10:15
SUBJECT SAMPLE (Vol=1.51L)	0.000	10:16
BLANK TEST	0.000	10:16
EXTERNAL STANDARD	0.078	10:17
BLANK TEST	0.000	10:18



LINEARITY CHECK

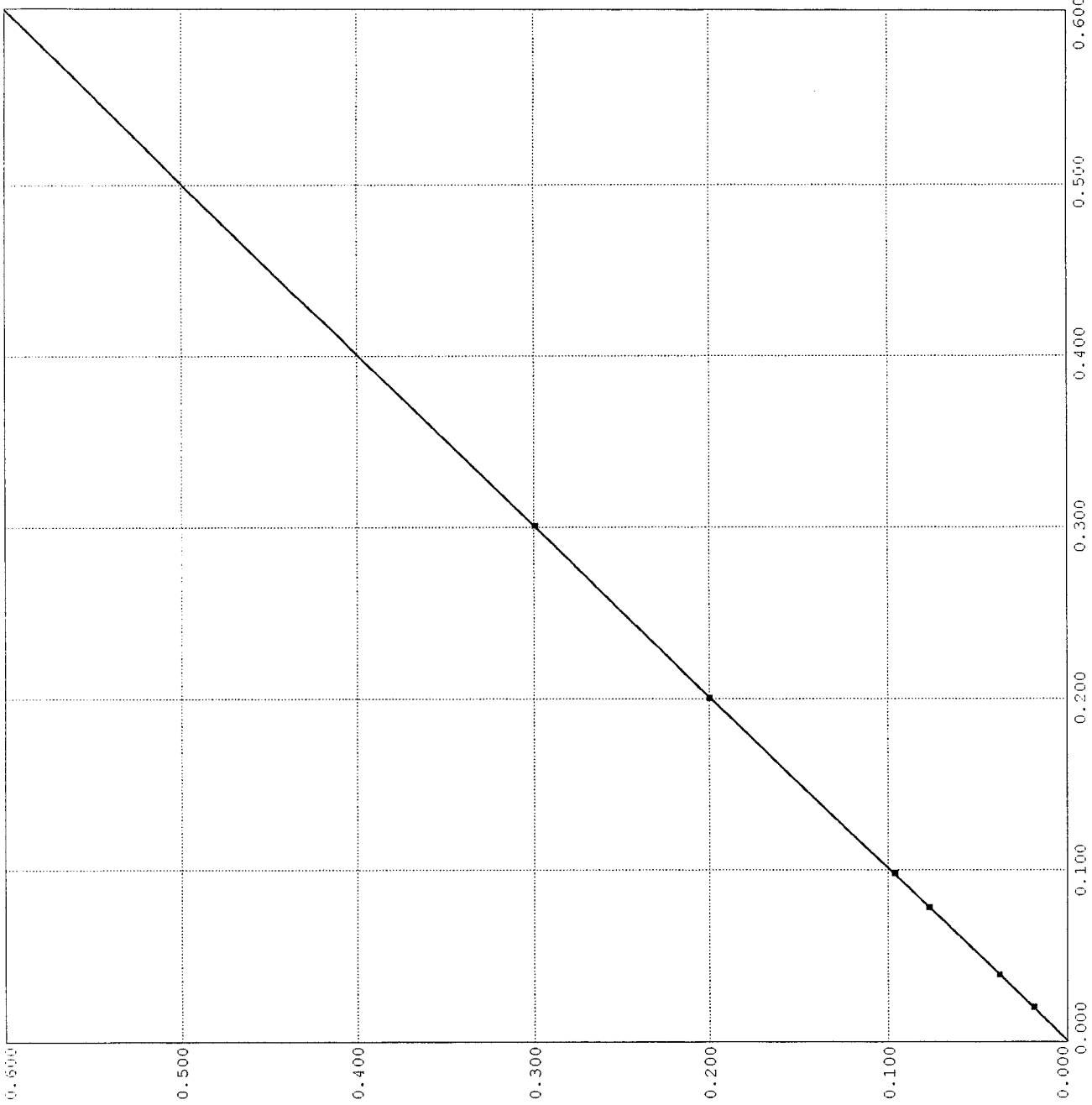
 Alaska Department of Public Safety
 DATAMASTER dmt: 100418

Date: 10/08/2020
 Time: 10:22:16

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0194	0.0005
0.039	0.0390	0.0000
0.078	0.0778	0.0004
0.098	0.0972	0.0004
0.200	0.2008	0.0004
0.300	0.2998	0.0008

SLOPE = 1.002024
 R² = 0.999977



DW

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100418

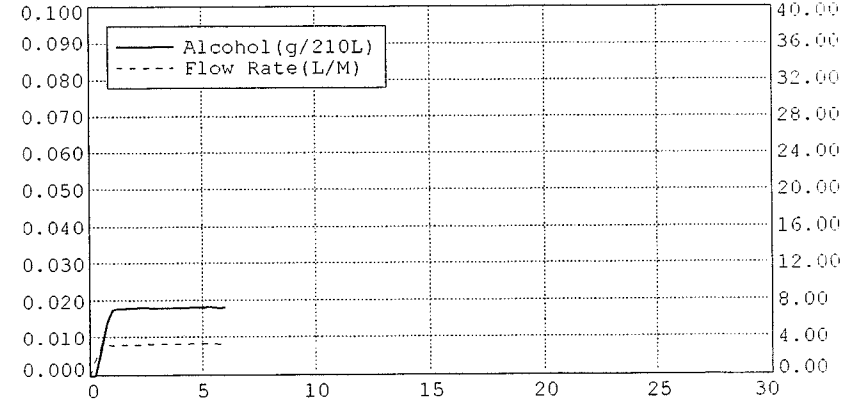
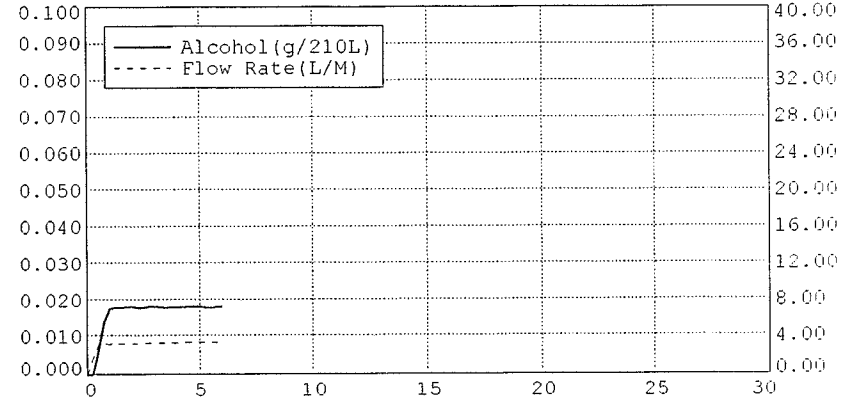
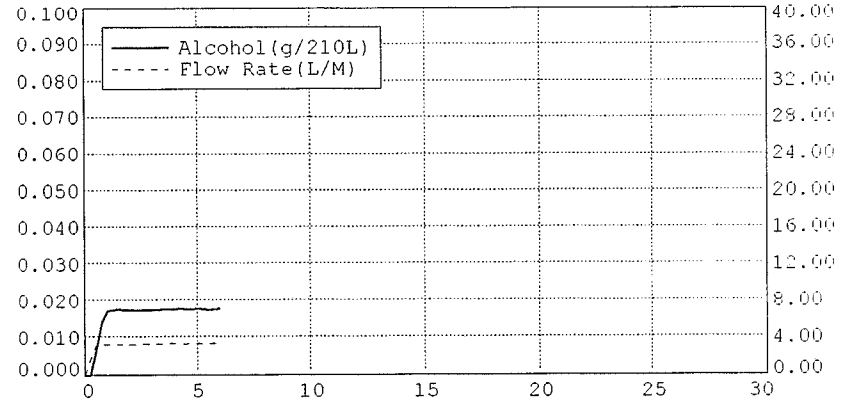
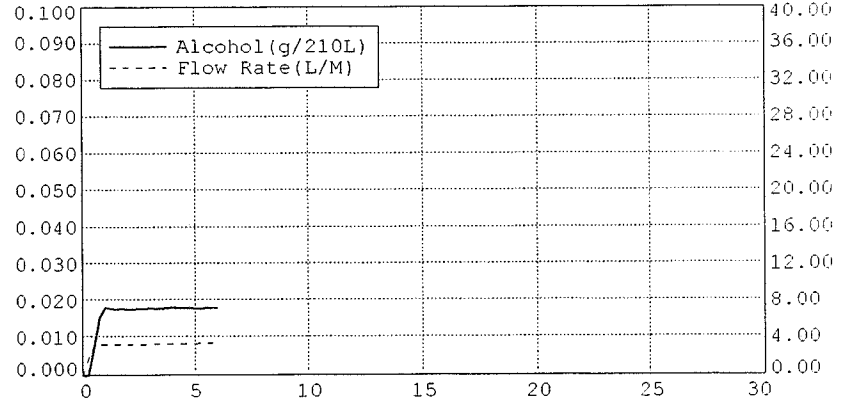
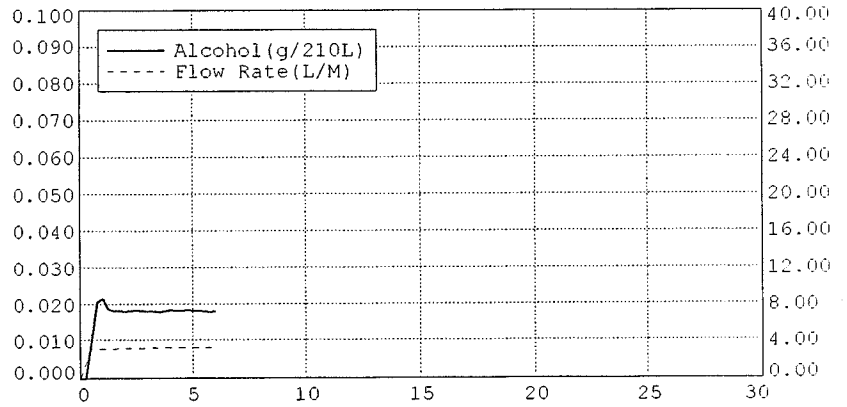
Date: 10/08/2020
 Time: 10:22:17

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.22: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 734 psi

BLANK TEST	0.000	10:23
INTERNAL STANDARD	VERIFIED	10:23
EXTERNAL STANDARD	0.020	10:24
BLANK TEST	0.000	10:25
EXTERNAL STANDARD	0.019	10:25
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.019	10:26
BLANK TEST	0.000	10:27
EXTERNAL STANDARD	0.019	10:27
BLANK TEST	0.000	10:28
EXTERNAL STANDARD	0.020	10:28
BLANK TEST	0.000	10:29

Average = 0.0194
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

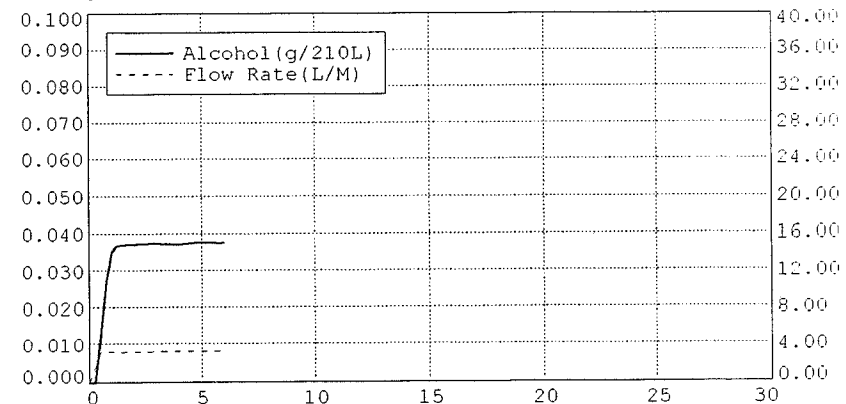
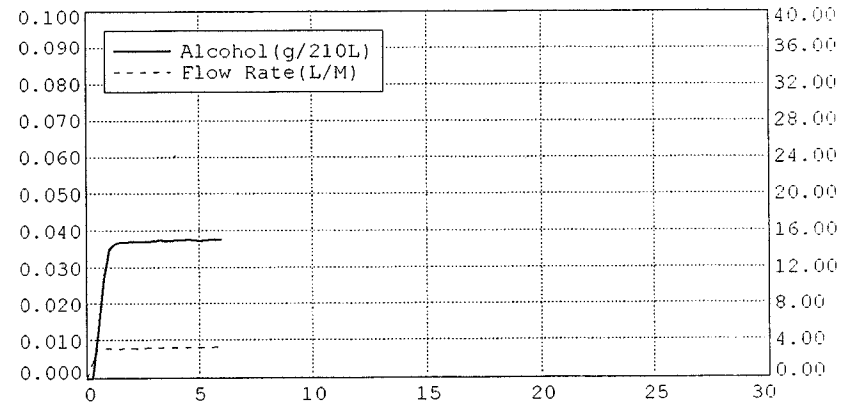
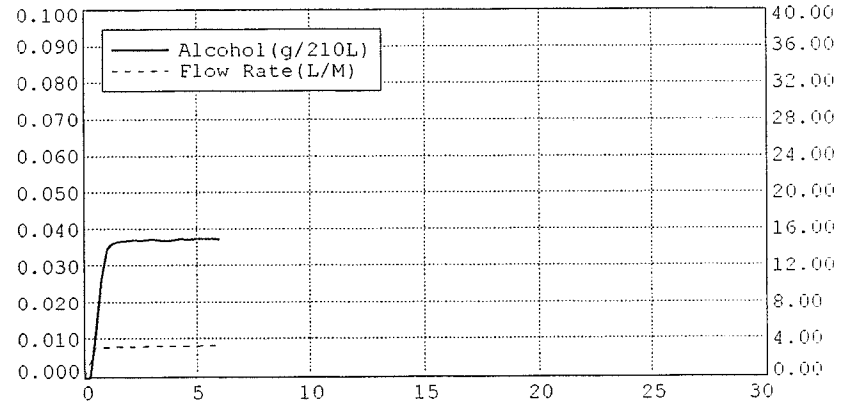
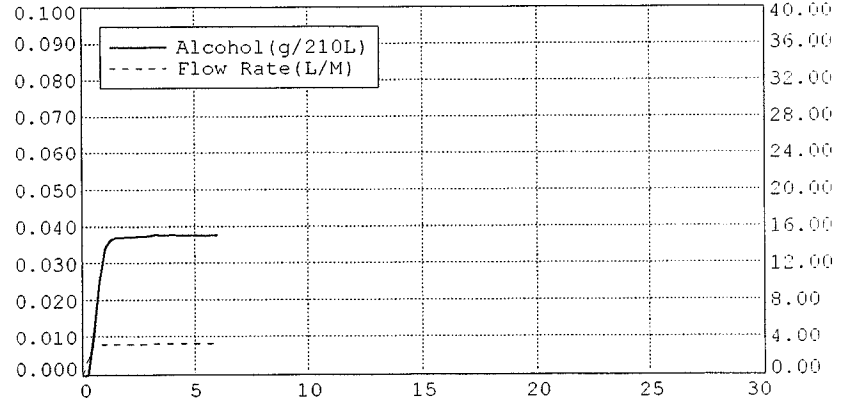
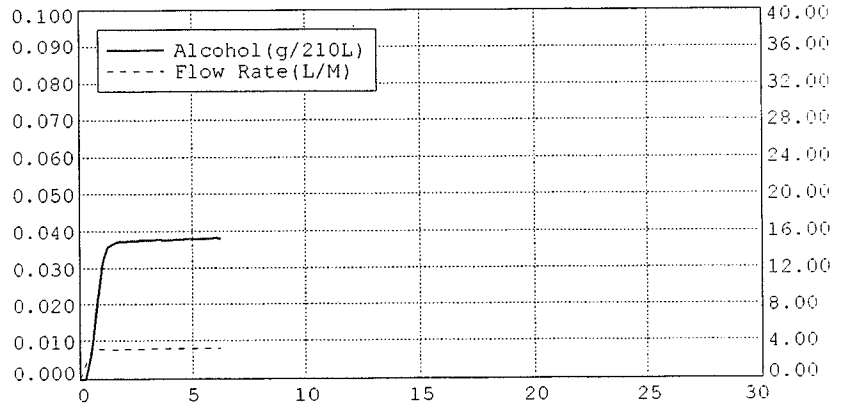
Alaska Department of Public Safety
 DATAMASTER dmt: 100418

Date: 10/08/2020
 Time: 10:34:06

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.040
 TARGET AT 29.23: 0.039
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 683 psi

BLANK TEST	0.000	10:35
INTERNAL STANDARD	VERIFIED	10:35
EXTERNAL STANDARD	0.039	10:35
BLANK TEST	0.000	10:36
EXTERNAL STANDARD	0.039	10:36
BLANK TEST	0.000	10:37
EXTERNAL STANDARD	0.039	10:37
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.039	10:38
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.039	10:40
BLANK TEST	0.000	10:40

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100418

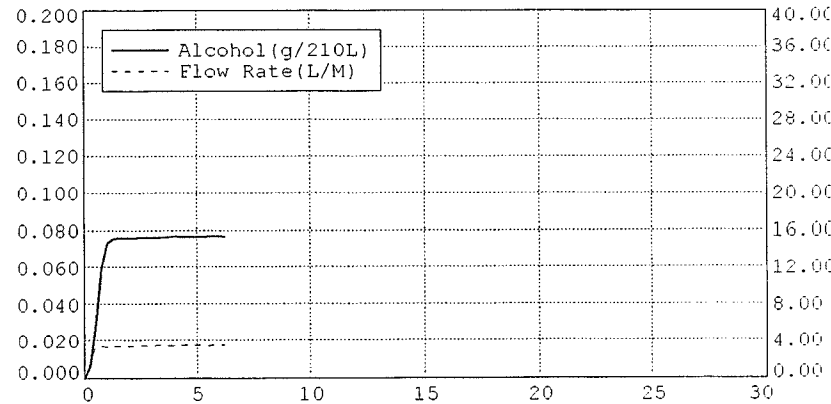
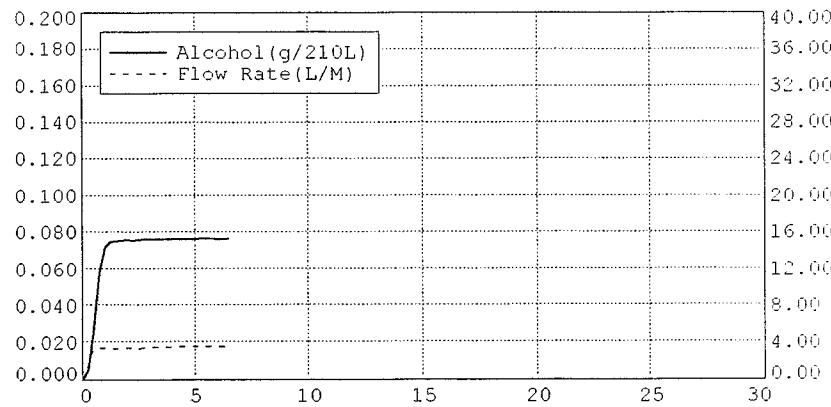
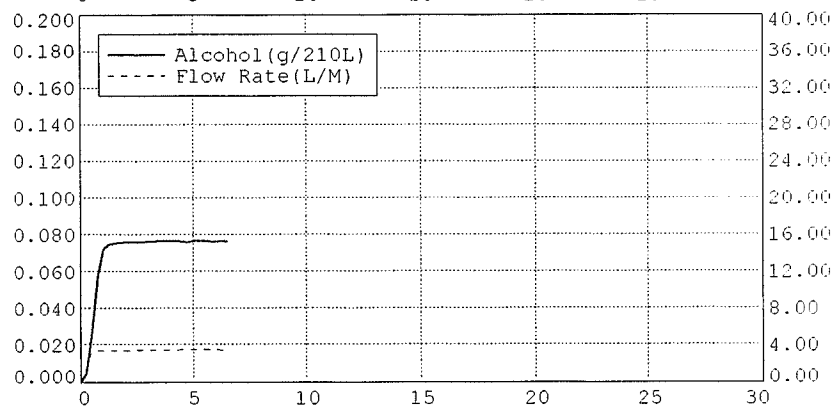
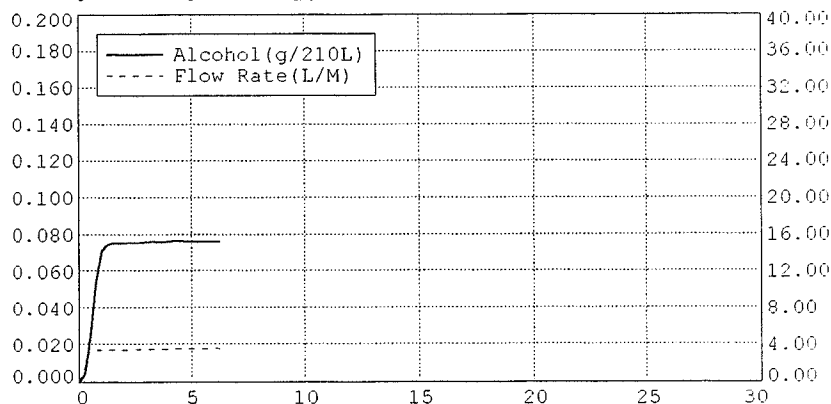
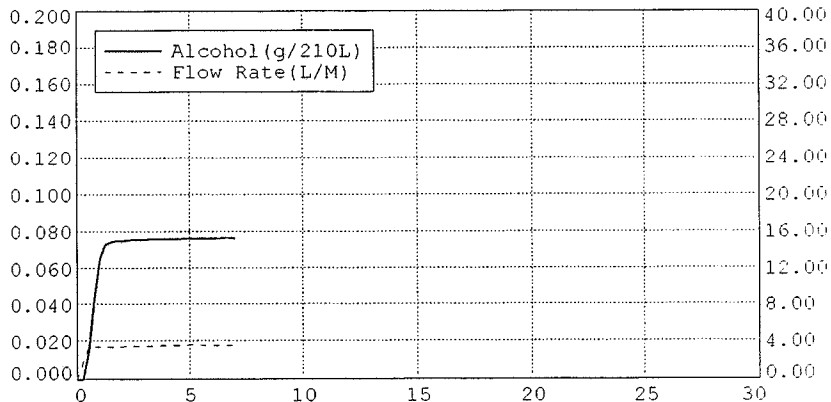
Date: 10/08/2020
 Time: 10:44:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.22: 0.078
 LOT #: AG018102
 EXPIRATION: 06/29/2022
 TANK PRESSURE: 1163 psi

BLANK TEST	0.000	10:45
INTERNAL STANDARD	VERIFIED	10:45
EXTERNAL STANDARD	0.078	10:46
BLANK TEST	0.000	10:47
EXTERNAL STANDARD	0.078	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.078	10:48
BLANK TEST	0.000	10:49
EXTERNAL STANDARD	0.077	10:49
BLANK TEST	0.000	10:50
EXTERNAL STANDARD	0.078	10:50
BLANK TEST	0.000	10:51

Average = 0.0778
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100418

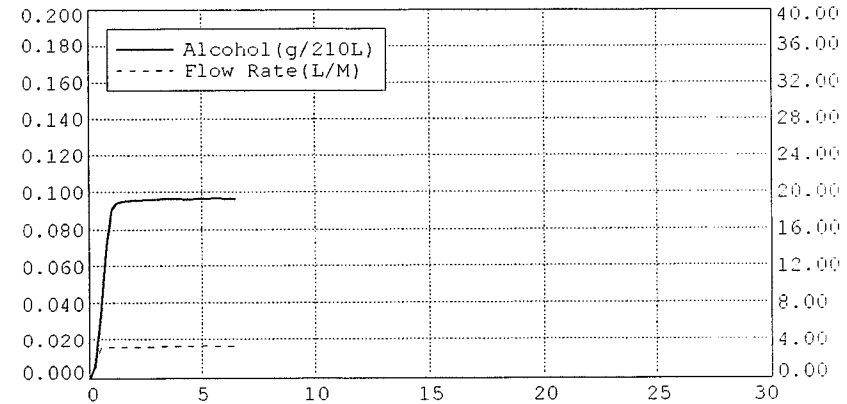
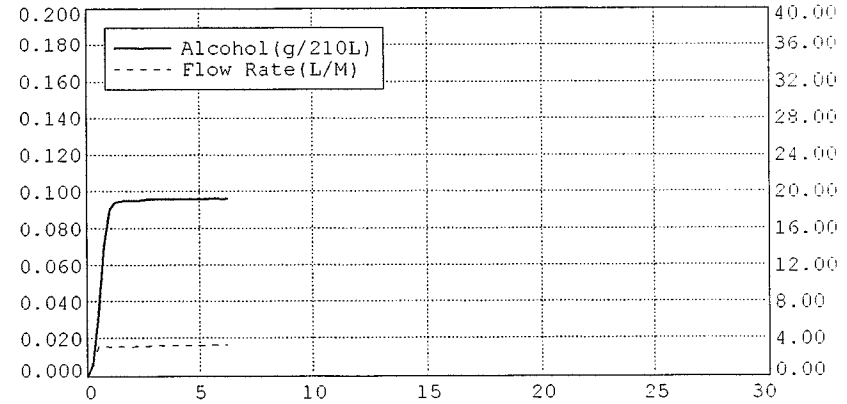
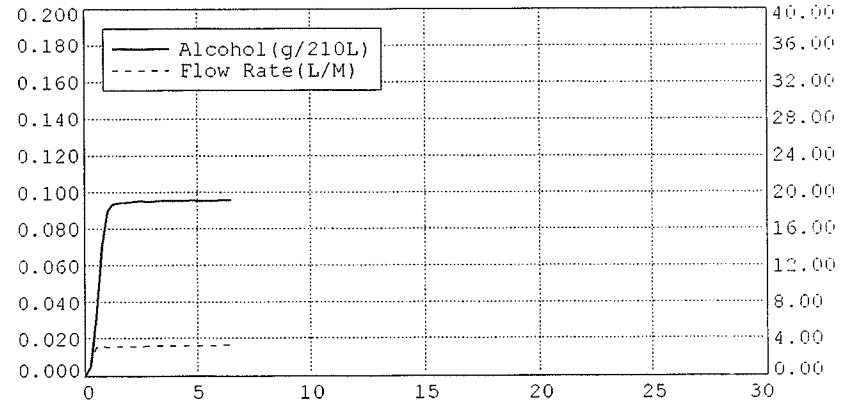
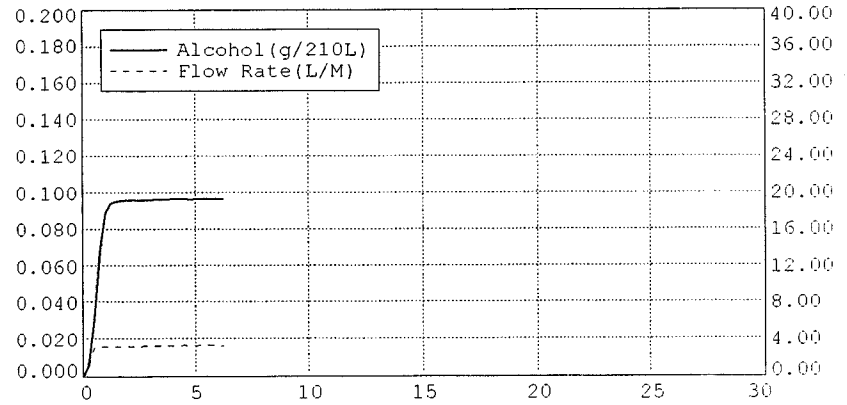
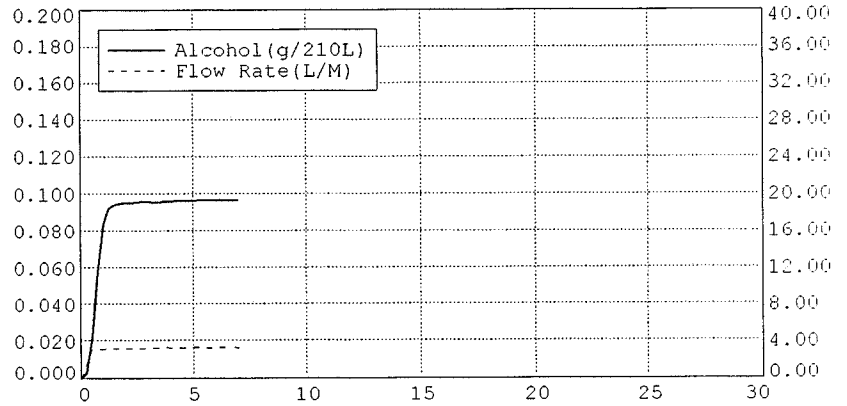
Date: 10/08/2020
Time: 10:53:45

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.23: 0.098
LOT #: AG924701
EXPIRATION: 09/04/2021
TANK PRESSURE: 821 psi

BLANK TEST	0.000	10:54
INTERNAL STANDARD	VERIFIED	10:55
EXTERNAL STANDARD	0.097	10:55
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.098	10:56
BLANK TEST	0.000	10:57
EXTERNAL STANDARD	0.097	10:57
BLANK TEST	0.000	10:58
EXTERNAL STANDARD	0.097	10:58
BLANK TEST	0.000	10:59
EXTERNAL STANDARD	0.097	10:59
BLANK TEST	0.000	11:00

Average = 0.0972
Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100418

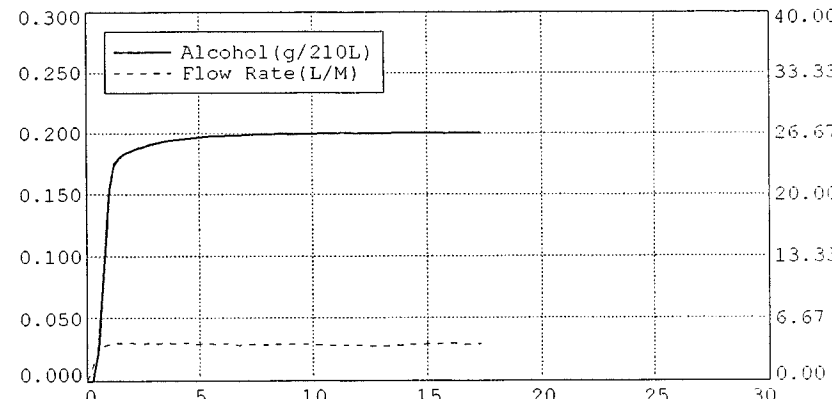
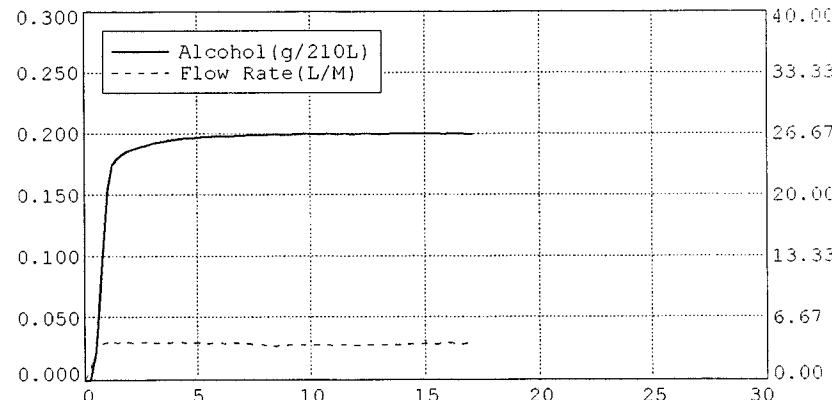
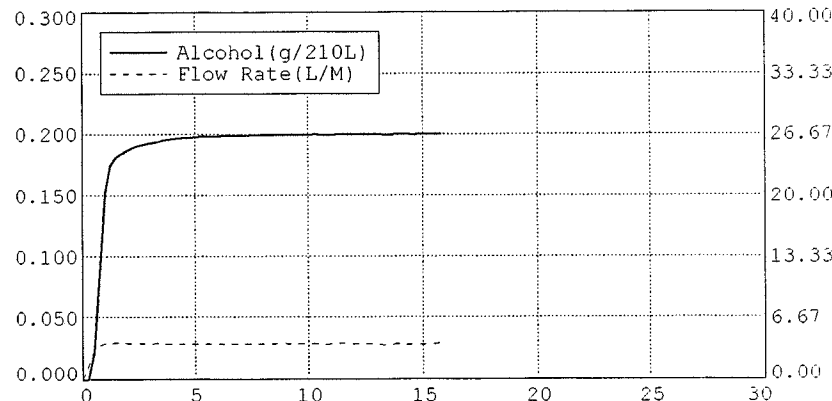
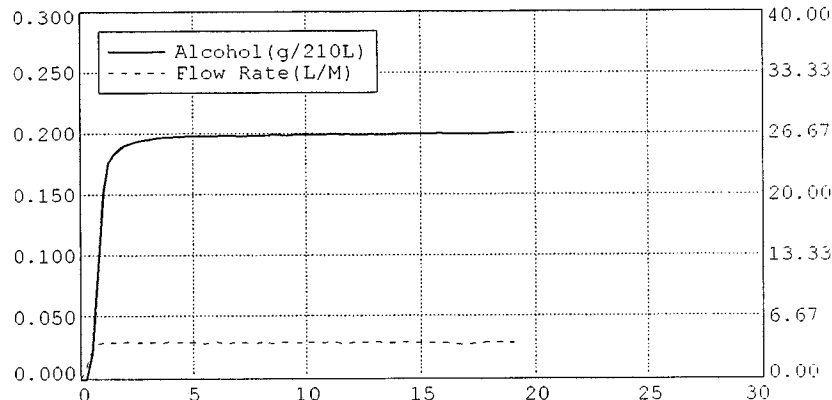
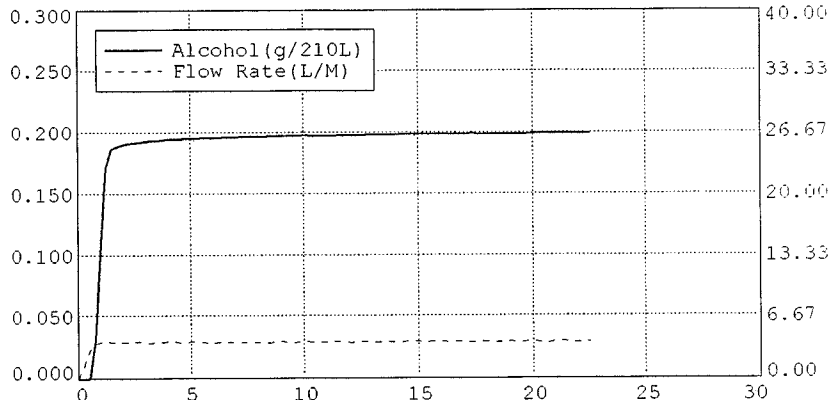
Date: 10/08/2020
 Time: 11:02:10

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	11:03
INTERNAL STANDARD	VERIFIED	11:03
EXTERNAL STANDARD	0.200	11:04
BLANK TEST	0.000	11:04
EXTERNAL STANDARD	0.201	11:05
BLANK TEST	0.000	11:06
EXTERNAL STANDARD	0.201	11:06
BLANK TEST	0.000	11:07
EXTERNAL STANDARD	0.201	11:07
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.201	11:09
BLANK TEST	0.000	11:10

Average = 0.2008
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

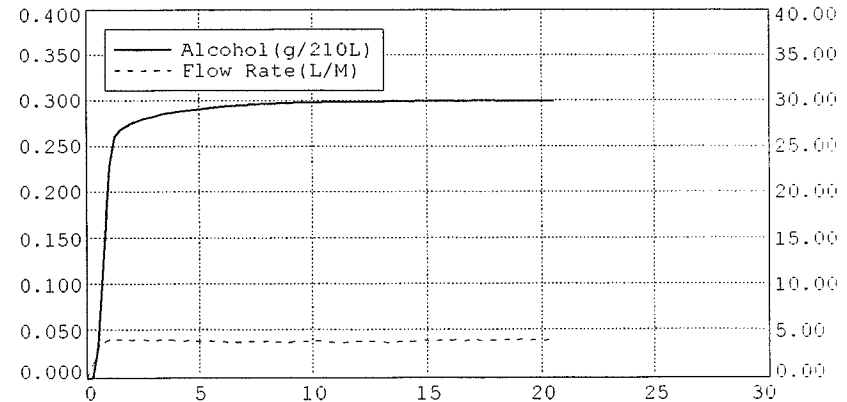
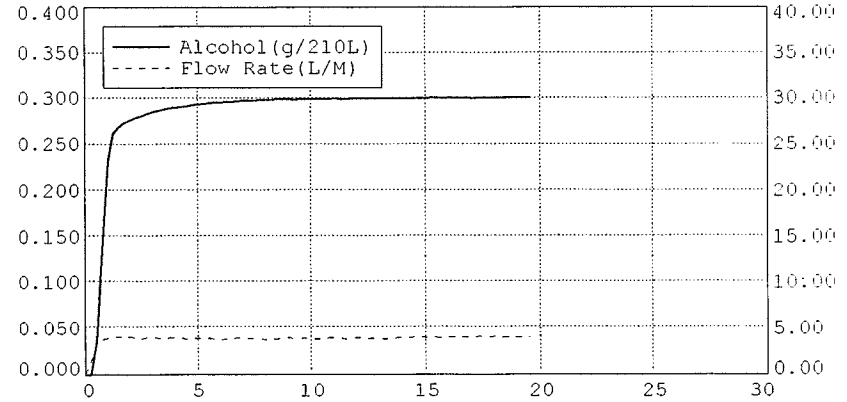
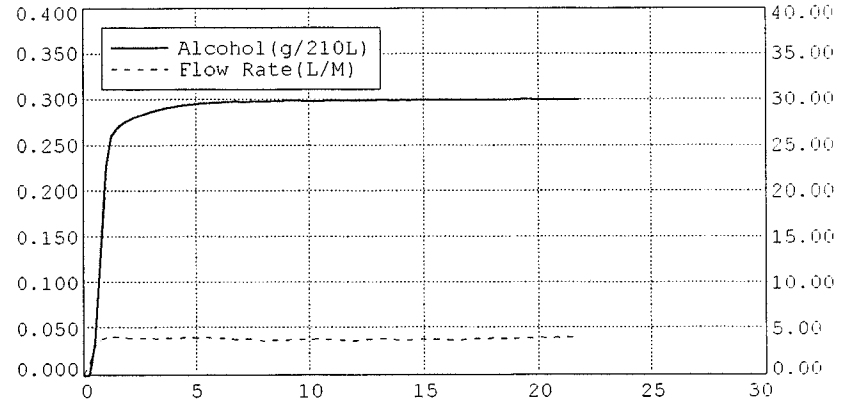
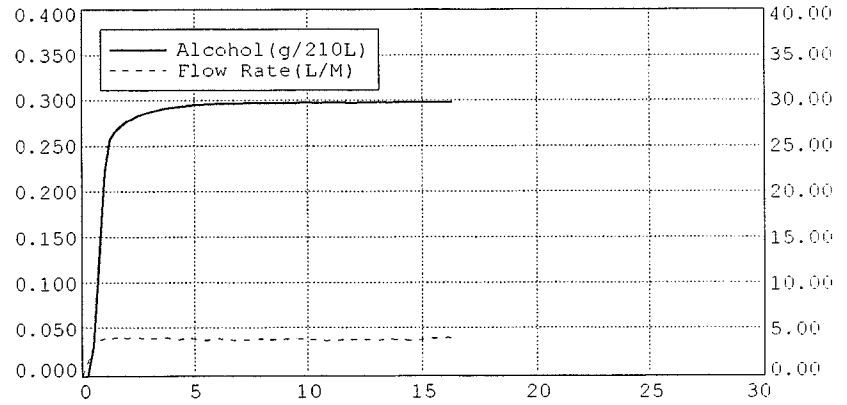
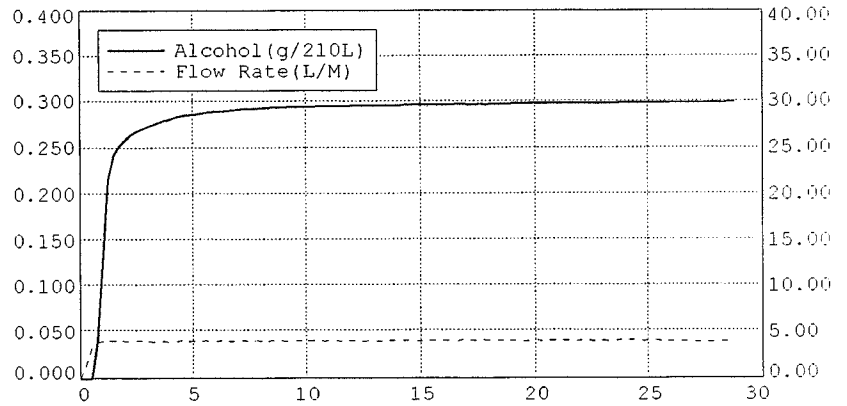
Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 10/08/2020
Time: 11:13:04

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

BLANK TEST	0.000	11:14
INTERNAL STANDARD	VERIFIED	11:14
EXTERNAL STANDARD	0.299	11:14
BLANK TEST	0.000	11:15
EXTERNAL STANDARD	0.299	11:16
BLANK TEST	0.000	11:17
EXTERNAL STANDARD	0.300	11:17
BLANK TEST	0.000	11:18
EXTERNAL STANDARD	0.301	11:19
BLANK TEST	0.000	11:19
EXTERNAL STANDARD	0.300	11:20
BLANK TEST	0.000	11:21

Average = 0.2998
Std Dev = 0.0008



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 10/08/2020
Time: 11:29:30

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

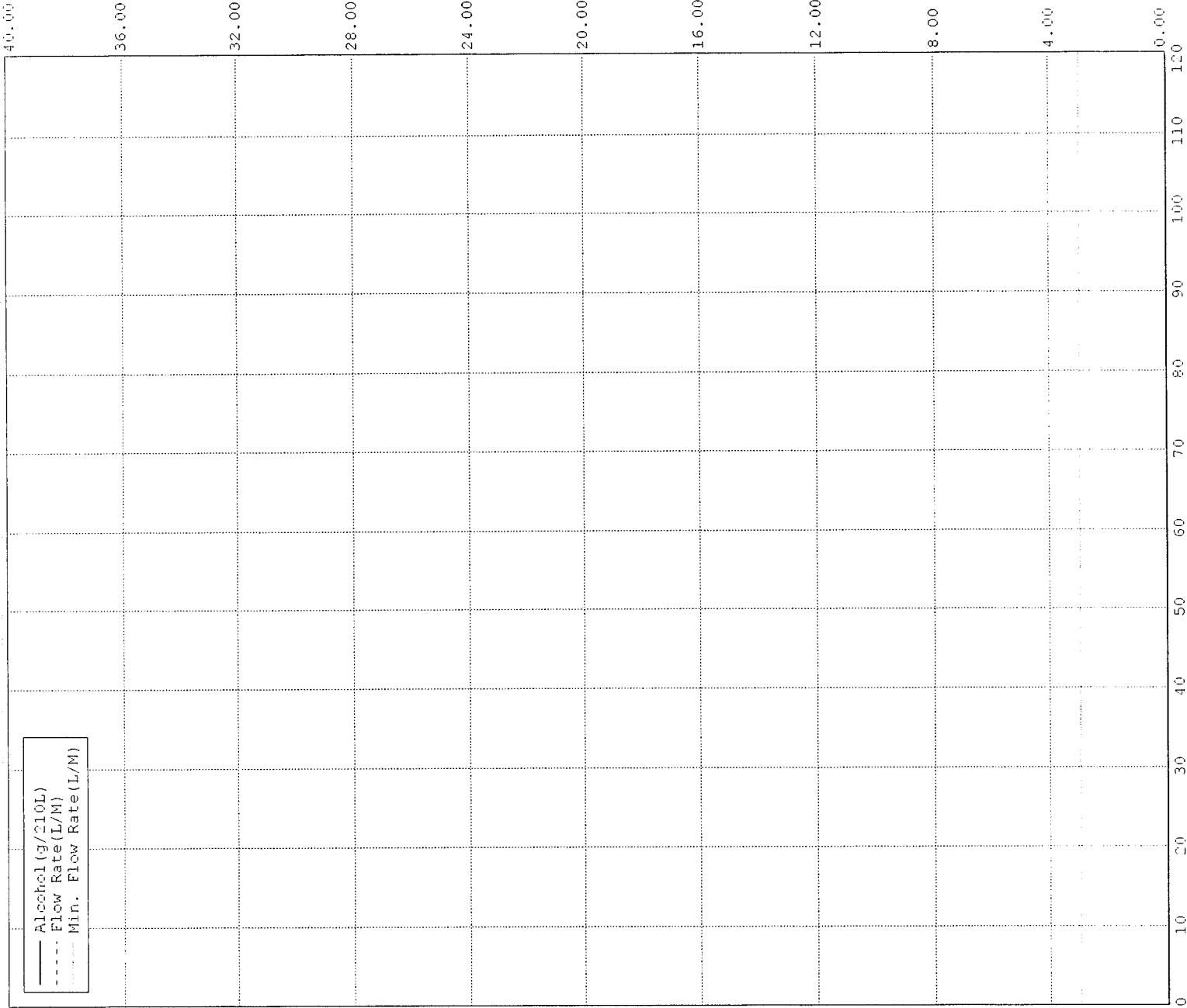
DEPT/AGENCY:
INCOMPLETE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.23: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 11:30
BLANK TEST 0.000 11:30
INTERNAL STANDARD VERIFIED 11:30
EXTERNAL STANDARD 0.077 11:30
BLANK TEST 0.000 11:31
SUBJECT SAMPLE INCOMPLETE 11:33

WJ



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 10/08/2020
Time: 14:17:34

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

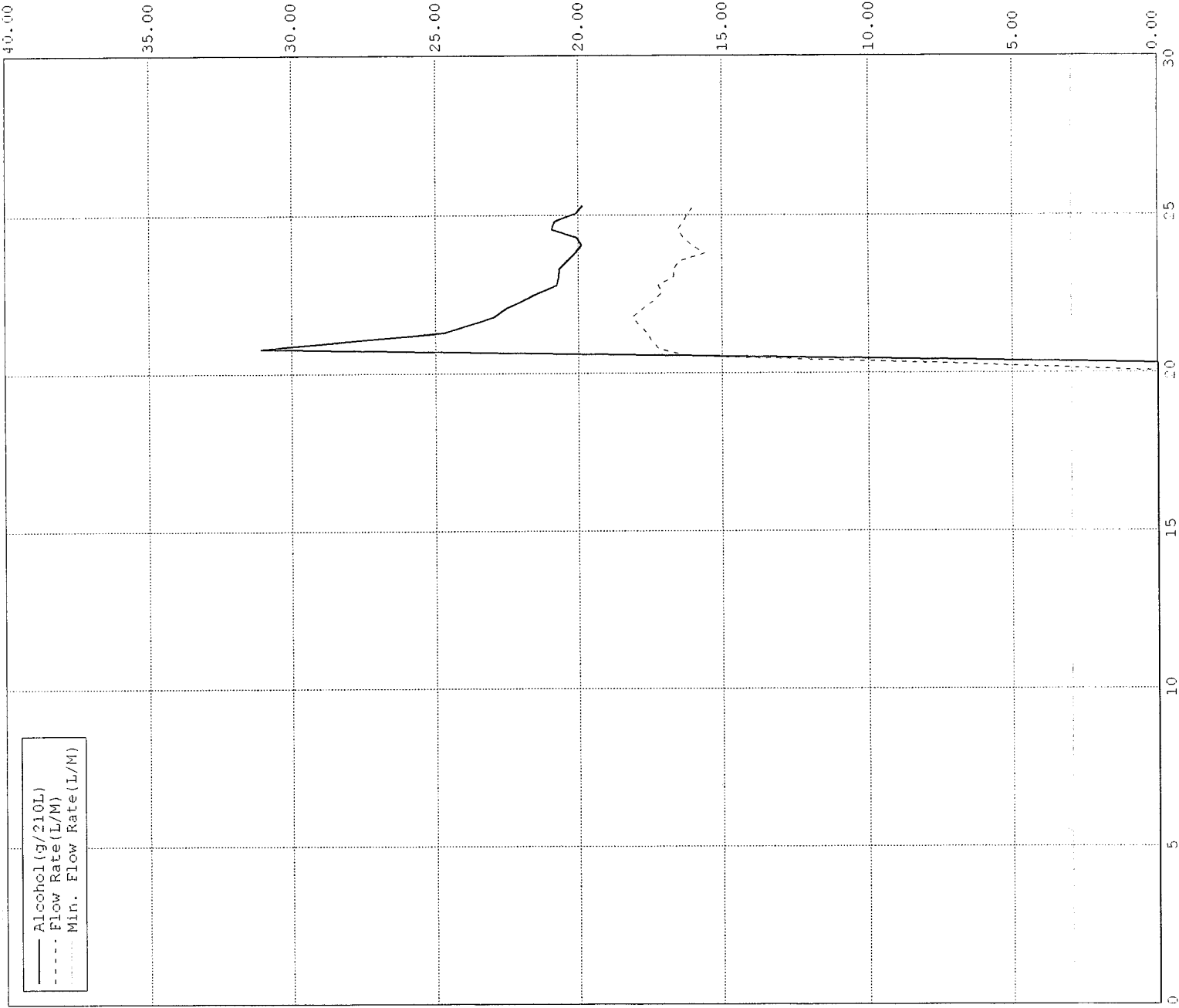
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 14:19
BLANK TEST 0.000 14:20
INTERNAL STANDARD VERIFIED 14:20
EXTERNAL STANDARD 0.078 14:20
BLANK TEST 0.000 14:21
SUBJECT SAMPLE INVALID 14:22

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 10/09/2020
Time: 09:10:14

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 28.98: 0.077
LOT #: AG018102
EXPIRATION: 06/29/2022

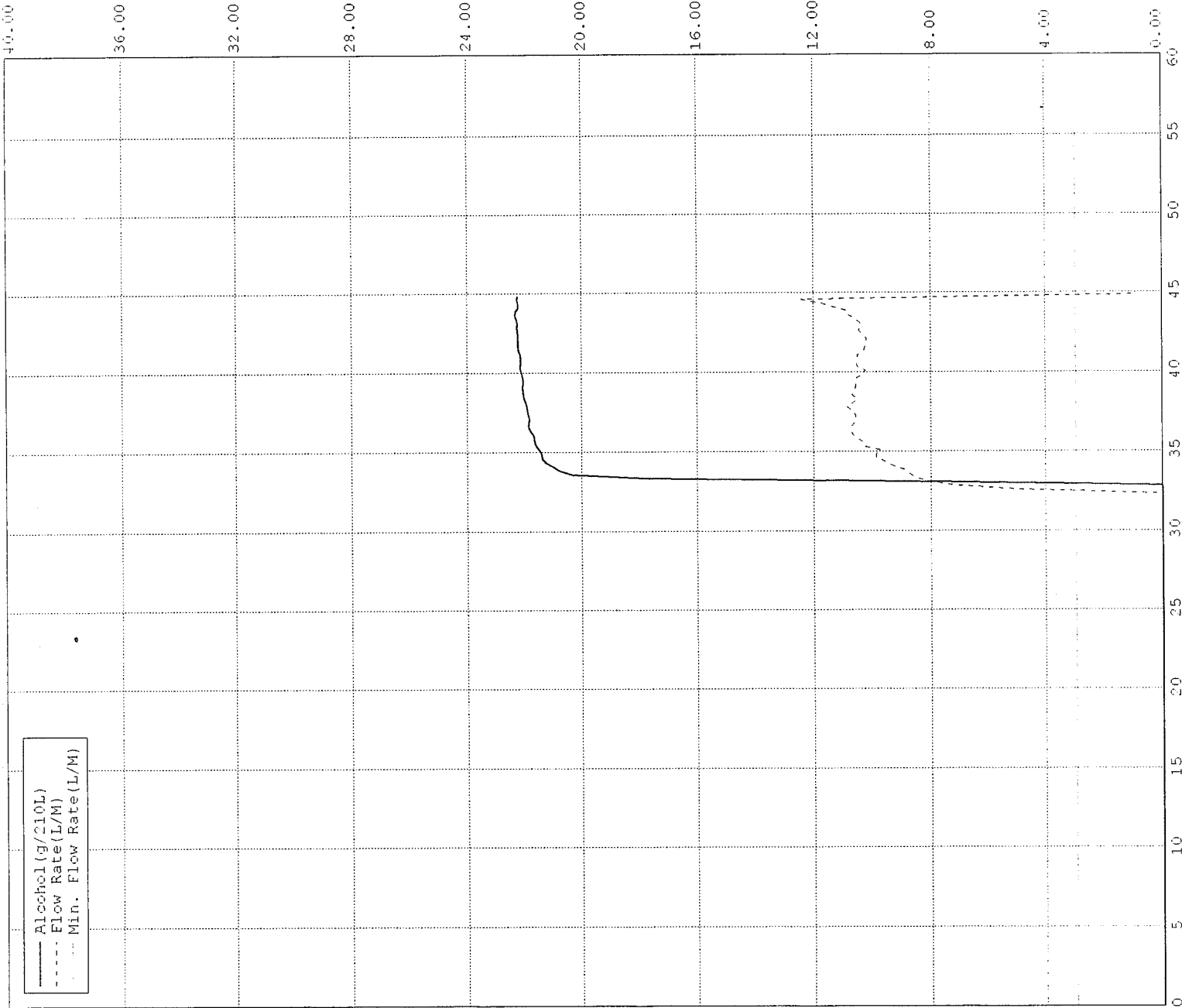
DIAGNOSTIC CHECK	PASSED	09:11
BLANK TEST	0.000	09:11
INTERNAL STANDARD	VERIFIED	09:11
Xq = 0.065 (0.92%)		
EXTERNAL STANDARD	0.077	09:11
X[1] = 0.0772 (-0.0009) (0.0015)		
BLANK TEST	0.000	09:12
SUBJECT SAMPLE	XXX	09:13
X[1] = 0.1117 (-0.0208) (-0.0016)		

Interference Detected

Filter 2 average: -0.0013

Filter 3 average: 0.0009

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 10/08/2020
Time: 14:28:20

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

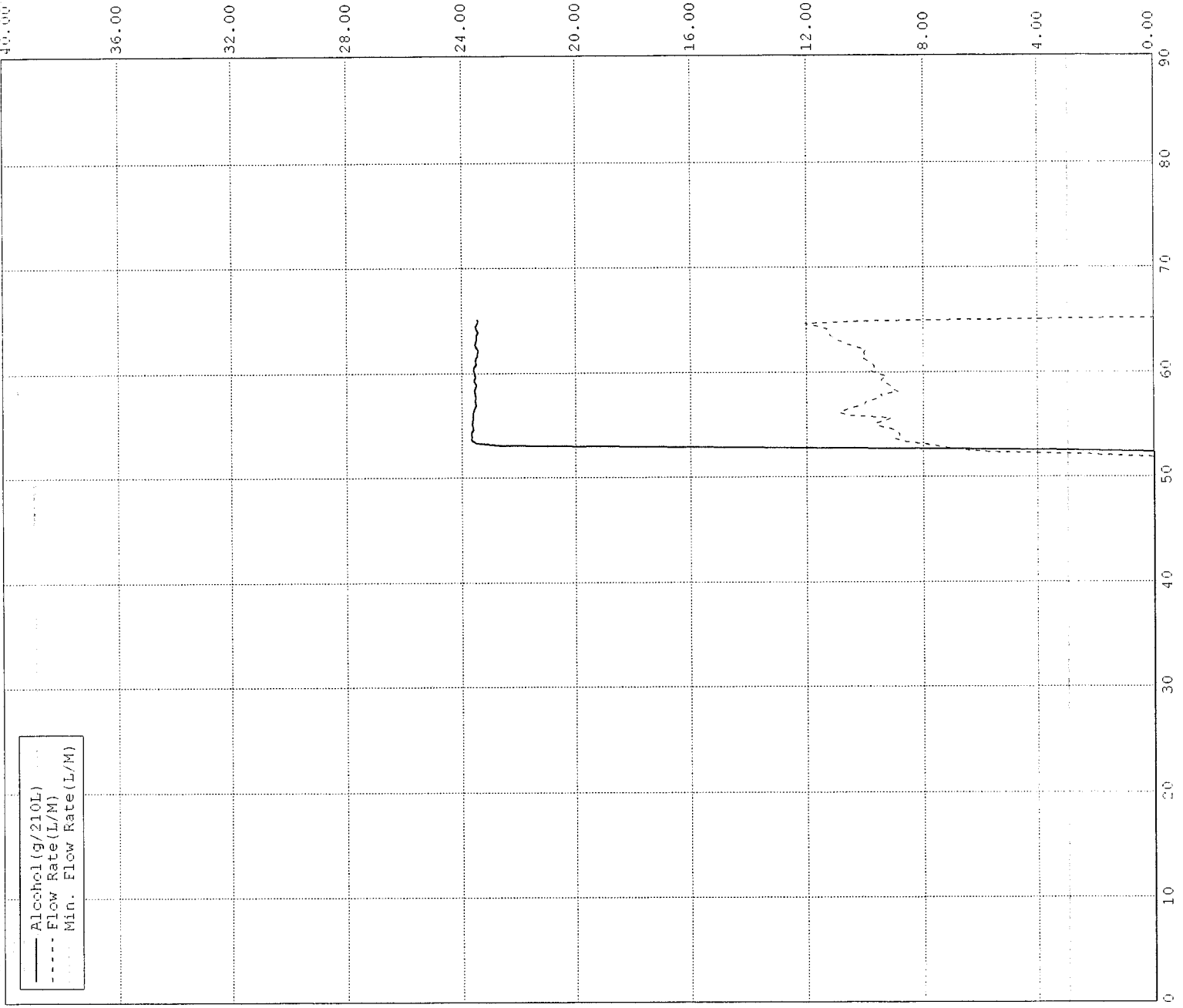
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.17: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	14:29
BLANK TEST	0.000	14:29
INTERNAL STANDARD	VERIFIED	14:29
Xq = 0.065 (1.44%)		
EXTERNAL STANDARD	0.077	14:30
X[1] = 0.0773 (-0.0016) (0.0013)		
BLANK TEST	0.000	14:30
SUBJECT SAMPLE	XXX	14:32
X[1] = 0.1177 (-0.0256) (-0.0008)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 10/08/2020
Time: 14:36:14

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

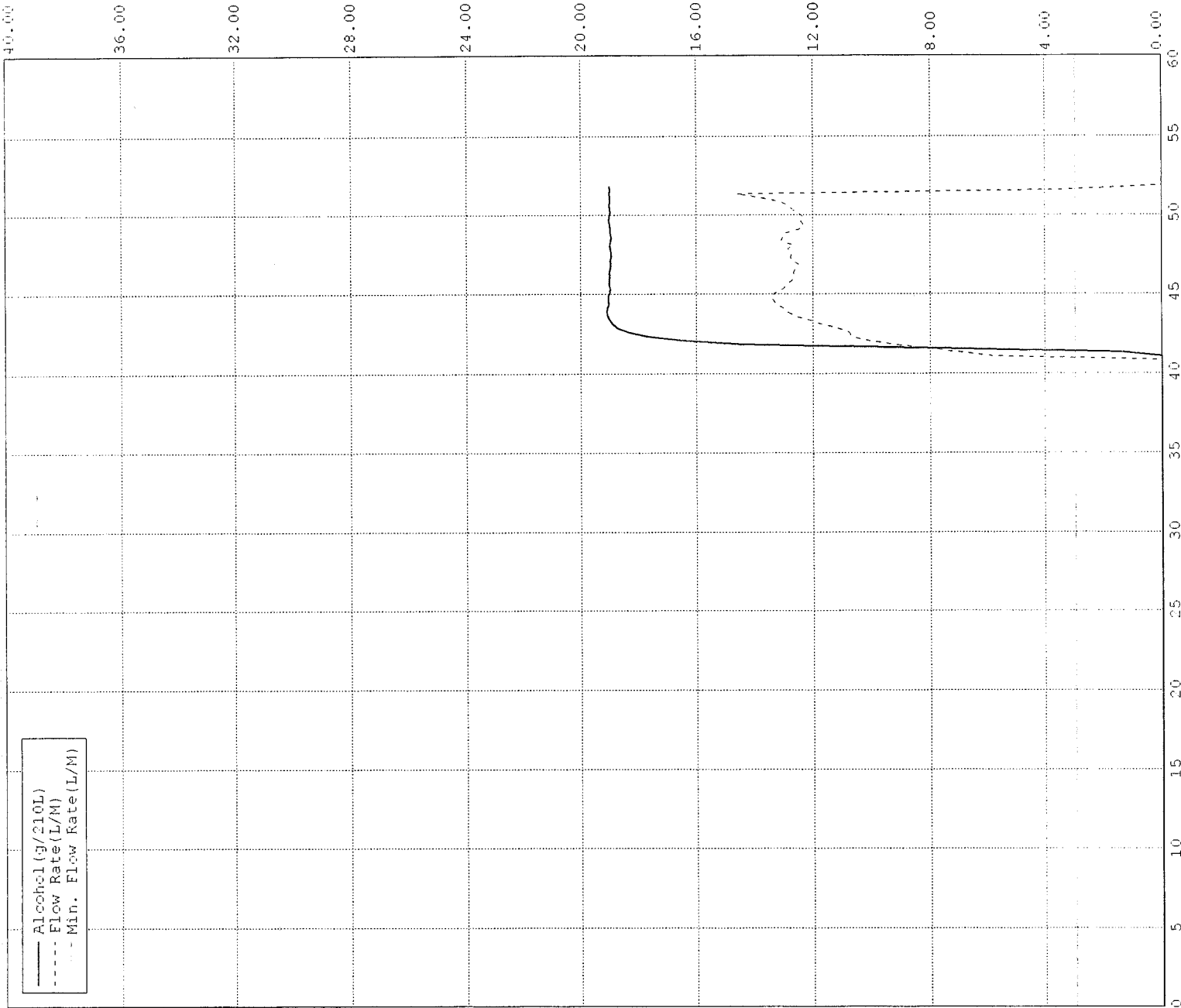

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.16: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	14:38
BLANK TEST	0.000	14:38
INTERNAL STANDARD	VERIFIED	14:38
xq = 0.065 (1.83%)		
EXTERNAL STANDARD	0.077	14:39
X[1] = 0.0772 (-0.0013)	(0.0005)	
BLANK TEST	0.000	14:40
SUBJECT SAMPLE (Vol=2.14L)	0.095	14:41
X[1] = 0.0957 (-0.0001)	(-0.0011)	
BLANK TEST	0.000	14:41
EXTERNAL STANDARD	0.077	14:42
X[1] = 0.0771 (-0.0012)	(0.0002)	
BLANK TEST	0.000	14:43



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100418

Date: 10/08/2020
Time: 11:35:40

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

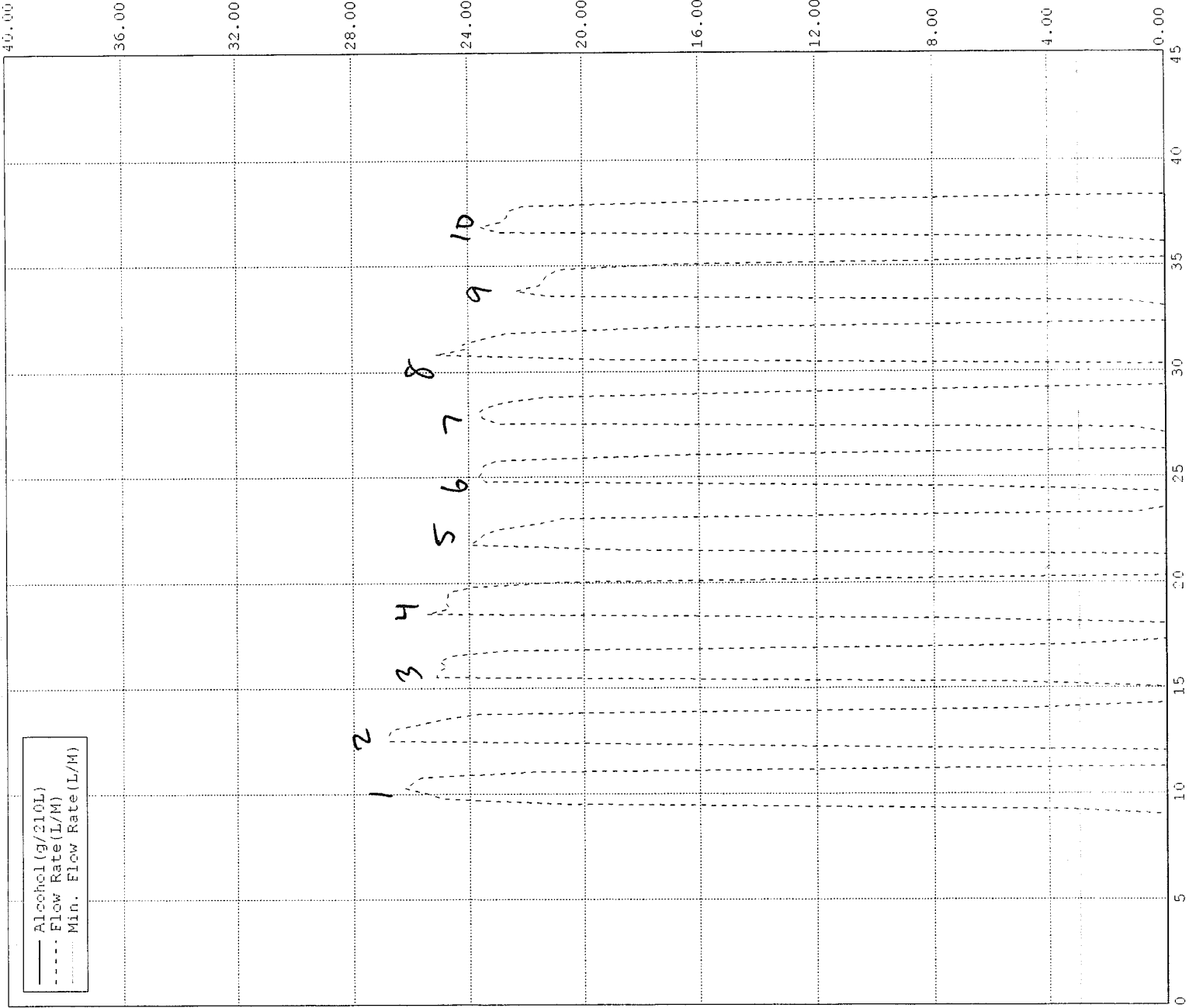
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.22: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 11:36
BLANK TEST 0.000 11:36
INTERNAL STANDARD VERIFIED 11:36
EXTERNAL STANDARD 0.078 11:37
BLANK TEST 0.000 11:38
SUBJECT SAMPLE XXX 11:38

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100418

Date: 10/08/2020
Time: 14:10:17

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

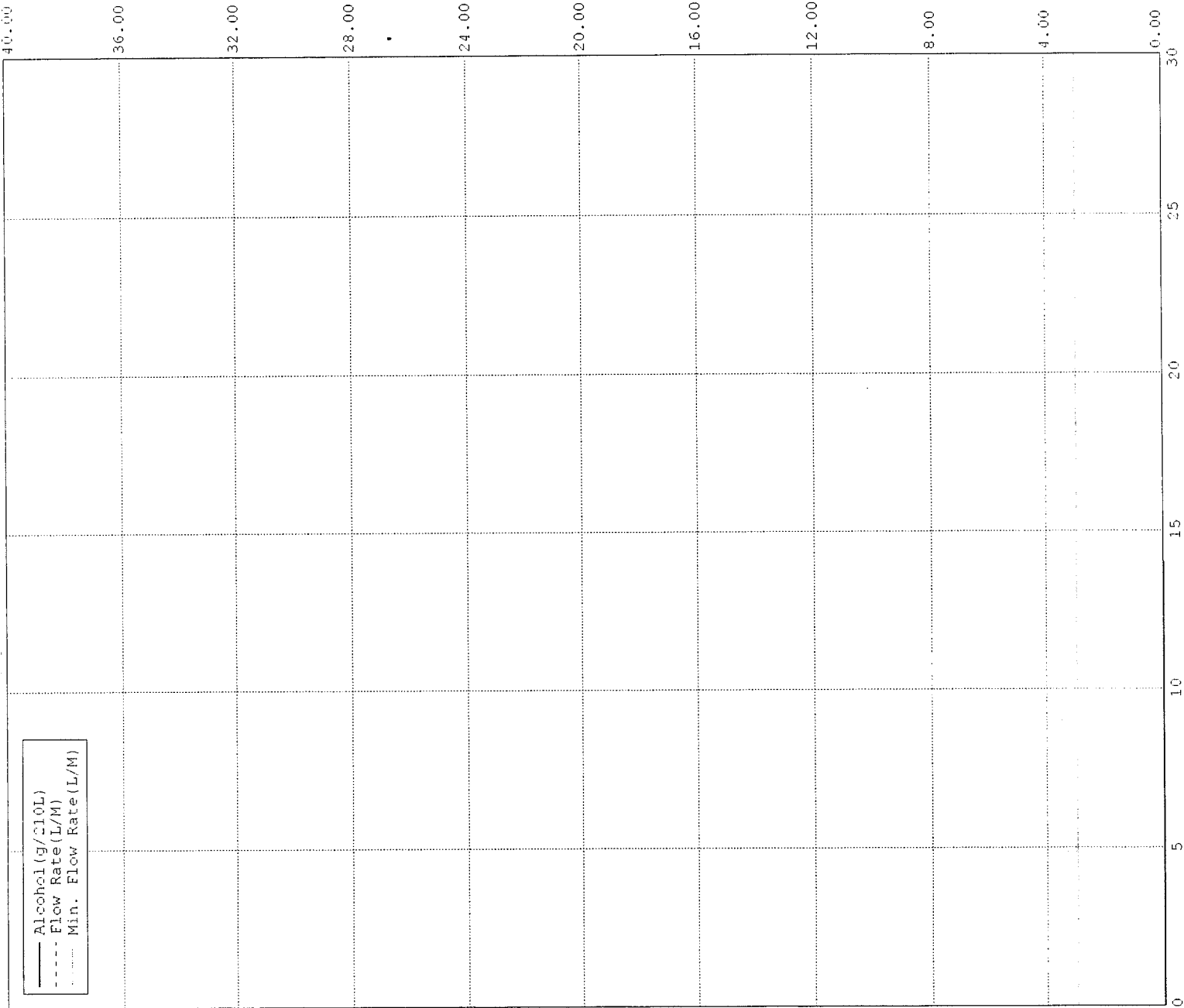
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK PASSED 14:11
BLANK TEST 0.000 14:11
INTERNAL STANDARD VERIFIED 14:11
EXTERNAL STANDARD 0.078 14:11
BLANK TEST 0.000 14:12

RFI DETECTED

DM



SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100418

 Date: 10/09/2020
 Time: 09:51:07

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 28.98: 0.077
 LOT #: AG018102
 EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK	PASSED	09:52
BLANK TEST	0.000	09:52
INTERNAL STANDARD	VERIFIED	09:52
EXTERNAL STANDARD	0.077	09:52
BLANK TEST	0.000	09:53
SUBJECT SAMPLE (Vol=2.91L)	0.000	09:53
BLANK TEST	0.000	09:54
EXTERNAL STANDARD	0.077	09:54
BLANK TEST	0.000	09:55

DM

