

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 100349 Analyst Derck Walton Start Date 12/17/19

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 1.6 L (1.3L to 1.7L)

4. Linearity Test (attached)

a. Levels Used

- i. 0.020g/210L Mnf Airgas Lot AG805804 Exp 02/27/20
- ii. 0.040g/210L Mnf Airgas Lot AG915607 Exp 06/05/21
- iii. 0.080g/210L Mnf Airgas Lot AG826101 Exp 09/18/20
- iv. 0.100g/210L Mnf Airgas Lot AG924701 Exp 09/04/21
- v. 0.200g/210L Mnf Autu Lot 19040 Exp 01/29/21
 - 1. Simulator S/N DR4162 Date Calibrated 10/07/19
- vi. 0.300g/210L Mnf Autu Lot 19010 Exp 01/03/21
 - 1. Simulator S/N DR4178 Date Calibrated 10/04/19

5. Functional Tests (attached)

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

- i. Acetone - Mnf Autu Lot 18370 Level 0.100 Exp 12/05/20
 - 1. Simulator S/N SD1199 Date Calibrated 03/06/19
- ii. Isopropanol - Mnf Autu Lot 18370 Level 0.100 Exp 12/05/20
 - 1. Simulator S/N DR4161 Date Calibrated 03/07/19
- iii. Negative Control - Mnf Autu Lot 18370 Level 0.100 Exp 12/05/20
 - 1. Simulator S/N SD1202 Date Calibrated 03/05/19

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 12/17/19

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 12/17/2019
Time: 08:53:12

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 = 1.75 V PASSED
(1.05 V - 2.45 V)
Cooler Voltage = 1.71 V PASSED
(1.03 V - 2.39 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 527 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.1 in

PUMP INFO

Flow Rate = 4.410 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 = 0.076 0.23% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100349

Date: 12/17/2019
Time: 9:05 AM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 47.4°C

Current Barometer 29.1 in
Volume (Ltr) 1.54

Settings

Lamp: 1.75 V
Bias: 80 V
Cooler: 1.68 V
Chopper: 526 Hz

Voltages (V)

Flow: 1.05 V
Detector: -0.024 V

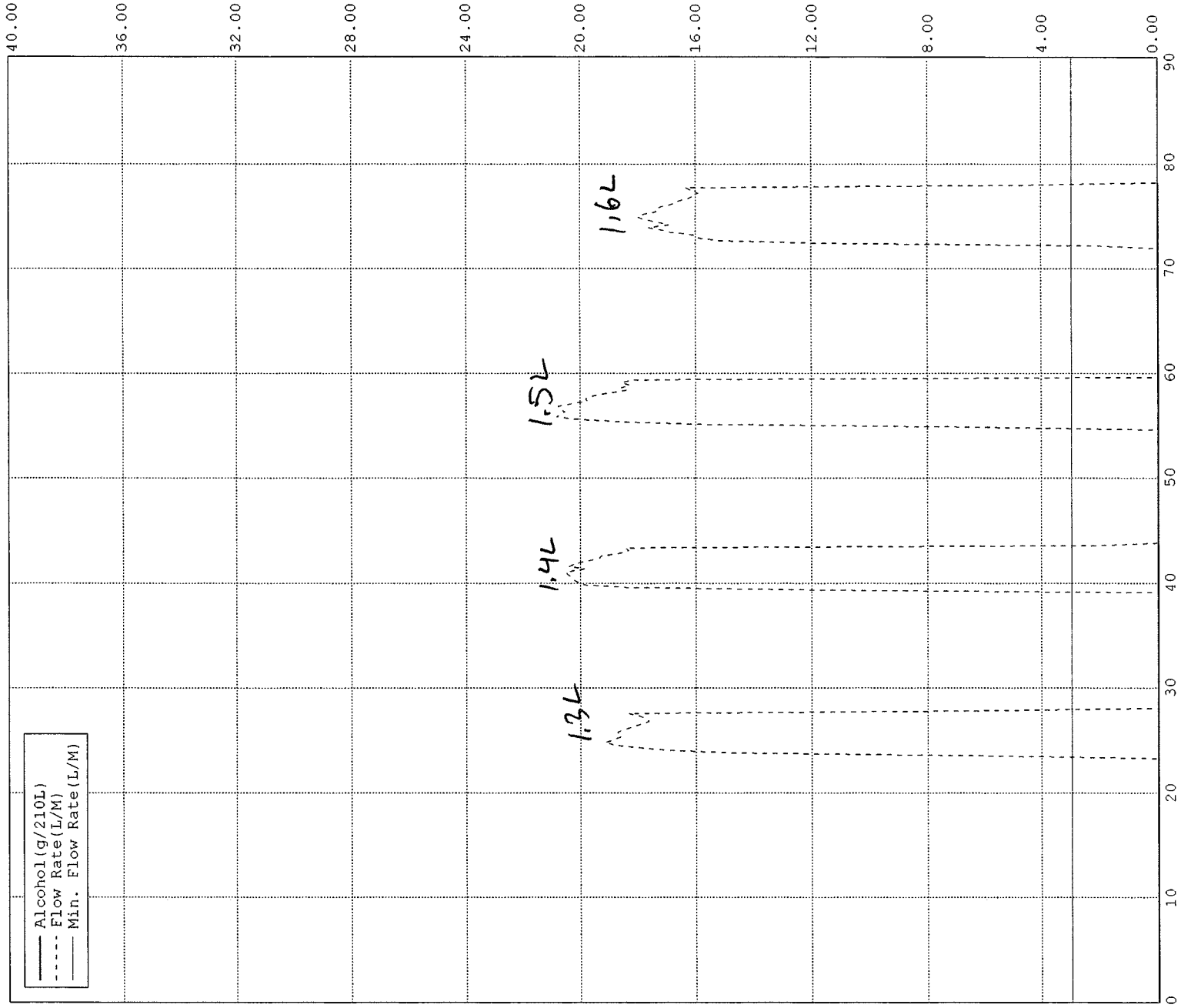
CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 12/16/2019
Time: 10:27:32

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca = 0.1000
CAL = 0.976909 0.800 <= CAL < 1.200
b1 = 0.0001 0.0000 <= b1 < 0.0040
b2 = 0.0047 0.0010 <= b2 < 0.0100
b3 = 0.0005 0.0000 <= b3 < 0.0040
Xq = 0.0763 0.0500 <= Xq < 0.2000
a21 = 1.192322 1.050 <= a21 < 1.300
a31 = 0.565539 0.300 <= a31 < 0.800



SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100349

 Date: 12/17/2019
 Time: 09:41:25

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 29.09: 0.078
 LOT #: ~~AG826101~~ **AG826101 DM 12/23/19**
 EXPIRATION: 09/18/2020

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	09:42
BLANK TEST	0.000	09:42
INTERNAL STANDARD	VERIFIED	09:42
EXTERNAL STANDARD	0.076	09:42
BLANK TEST	0.000	09:43
SUBJECT SAMPLE (Vol=1.54L)	0.000	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.076	09:46
BLANK TEST	0.000	09:47

DMC

LINEARITY CHECK

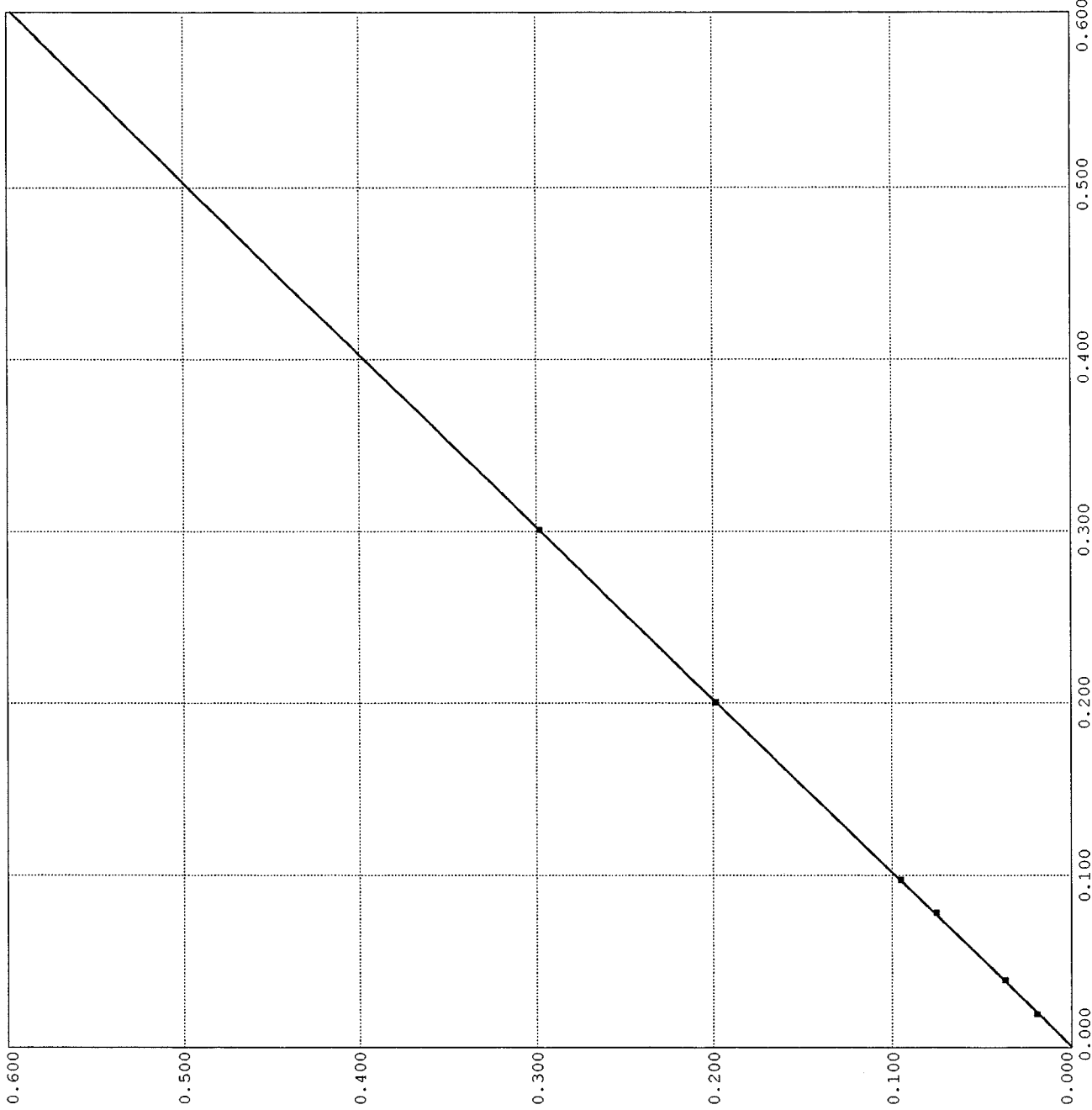
 Alaska Department of Public Safety
 DATAMASTER dmt: 100349

Date: 12/17/2019
 Time: 09:53:10

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.019	0.0198	0.0004
0.039	0.0380	0.0007
0.078	0.0762	0.0004
0.097	0.0962	0.0004
0.200	0.1994	0.0005
0.300	0.2988	0.0013

SLOPE = 0.997236
 R² = 0.999942



Handwritten signature

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100349

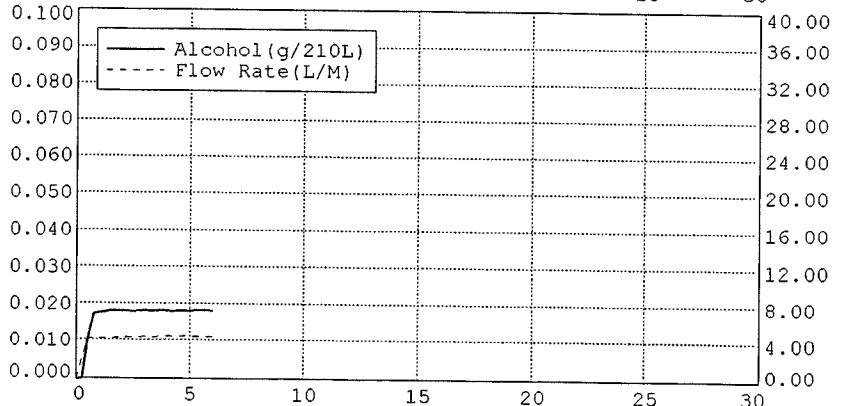
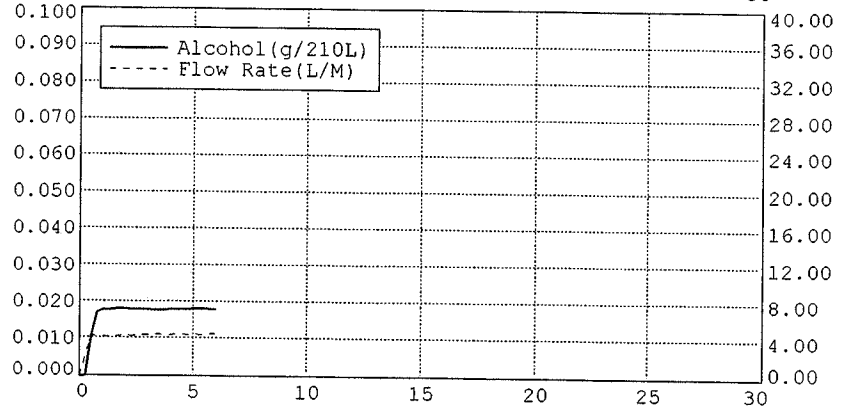
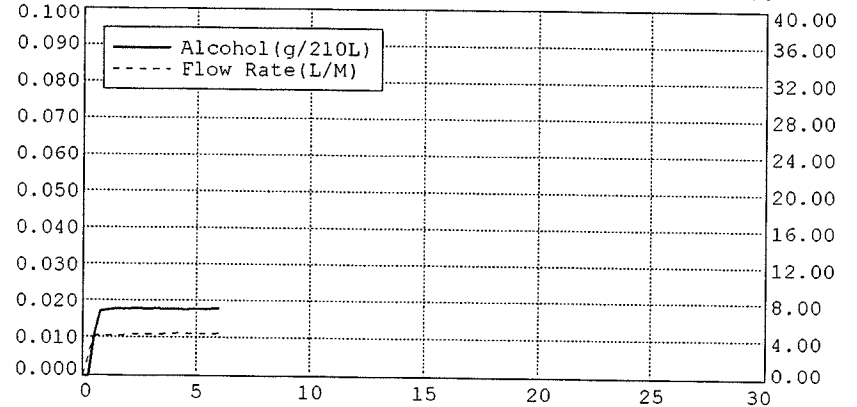
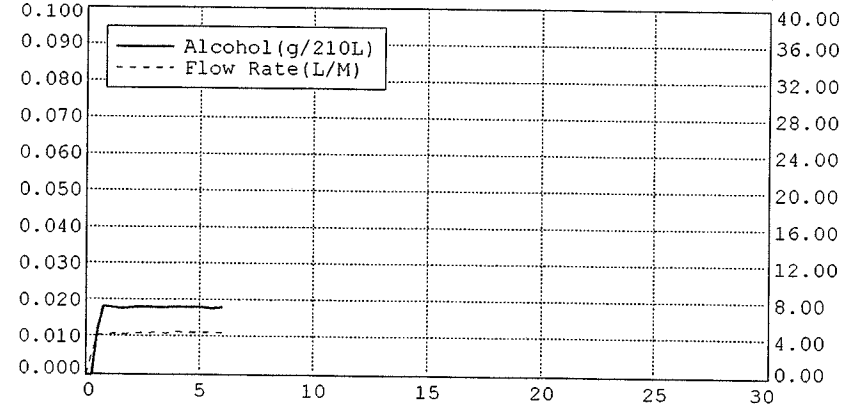
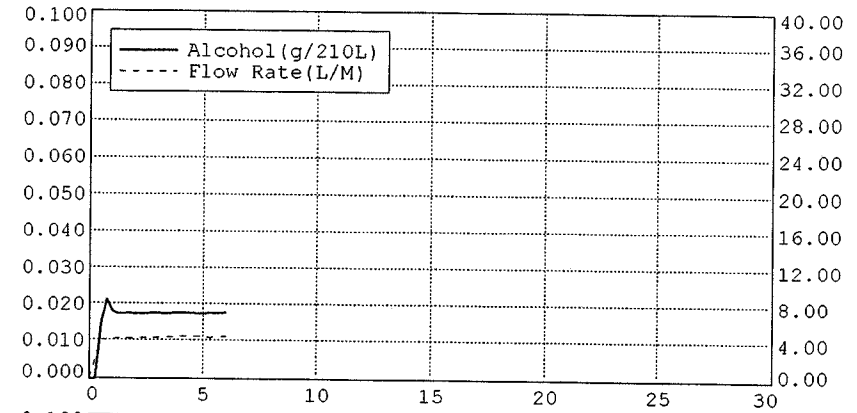
Date: 12/17/2019
 Time: 09:53:13

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.09: 0.019
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 506 psi

BLANK TEST	0.000	09:54
INTERNAL STANDARD	VERIFIED	09:54
EXTERNAL STANDARD	0.019	09:54
BLANK TEST	0.000	09:55
EXTERNAL STANDARD	0.020	09:55
BLANK TEST	0.000	09:56
EXTERNAL STANDARD	0.020	09:56
BLANK TEST	0.000	09:57
EXTERNAL STANDARD	0.020	09:58
BLANK TEST	0.000	09:58
EXTERNAL STANDARD	0.020	09:59
BLANK TEST	0.000	10:00

Average = 0.0198
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100349

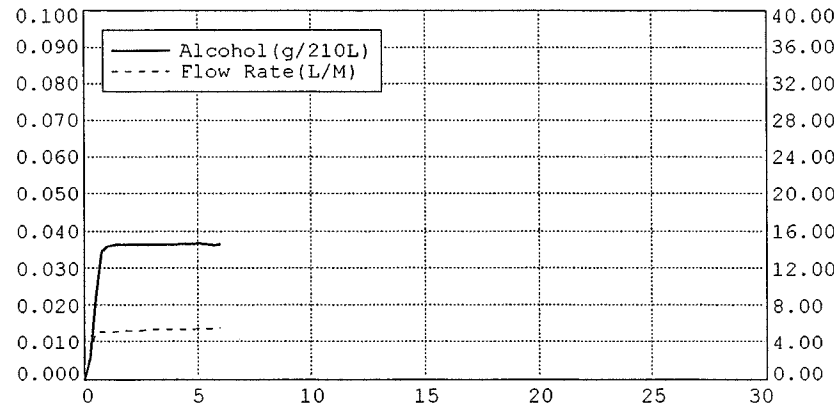
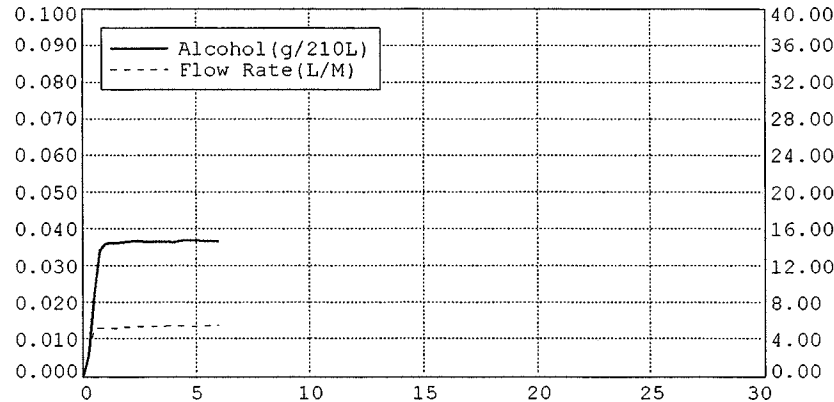
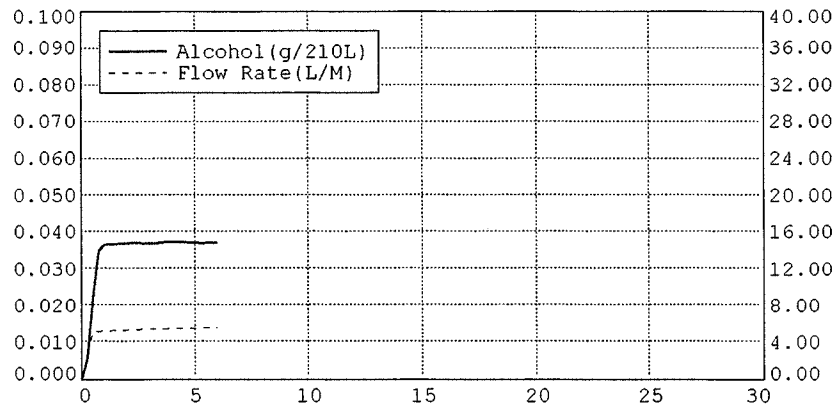
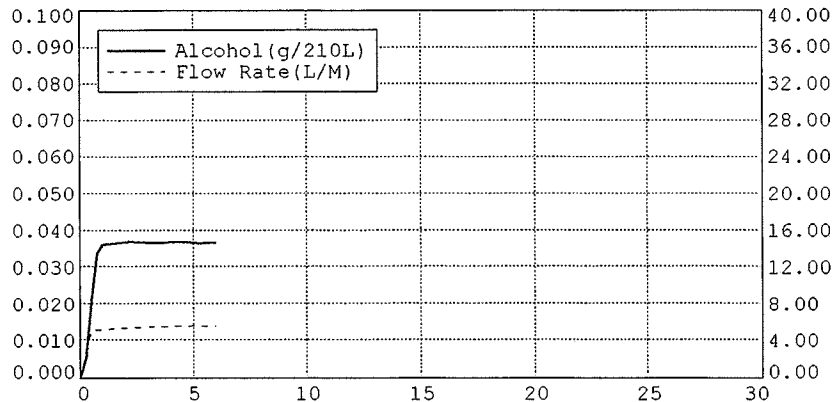
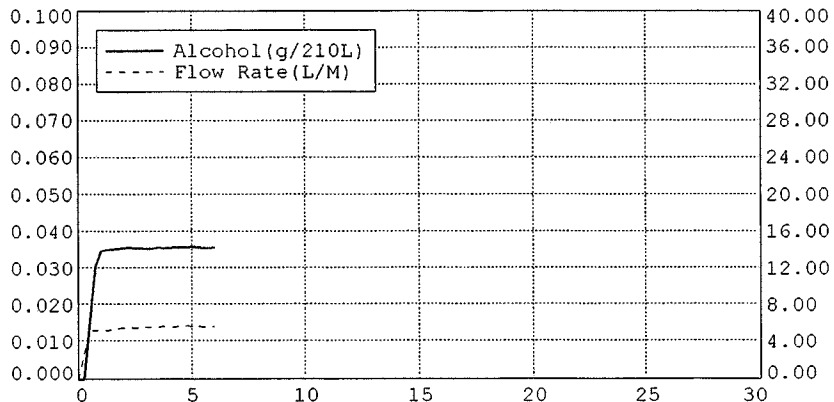
Date: 12/17/2019
 Time: 10:01:52

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.10: 0.039
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 1069 psi

BLANK TEST	0.000	10:03
INTERNAL STANDARD	VERIFIED	10:03
EXTERNAL STANDARD	0.037	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.038	10:04
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.039	10:05
BLANK TEST	0.000	10:06
EXTERNAL STANDARD	0.038	10:06
BLANK TEST	0.000	10:07
EXTERNAL STANDARD	0.038	10:07
BLANK TEST	0.000	10:08

Average = 0.0380
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100349

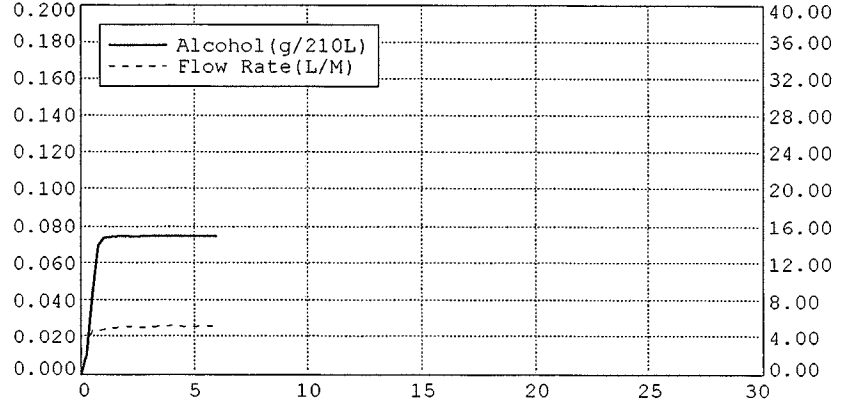
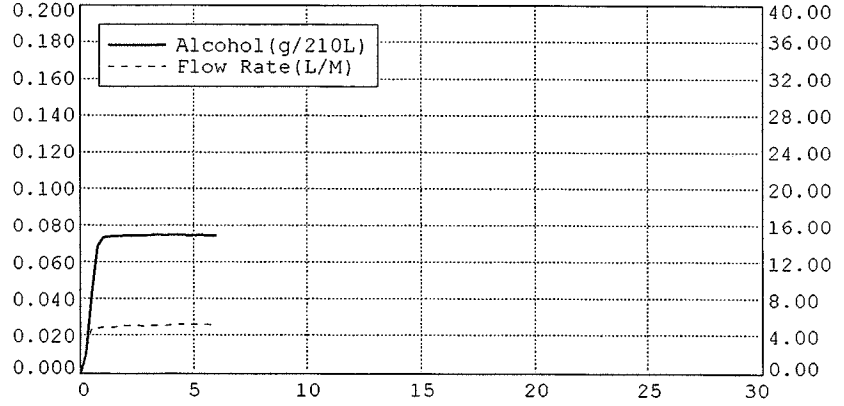
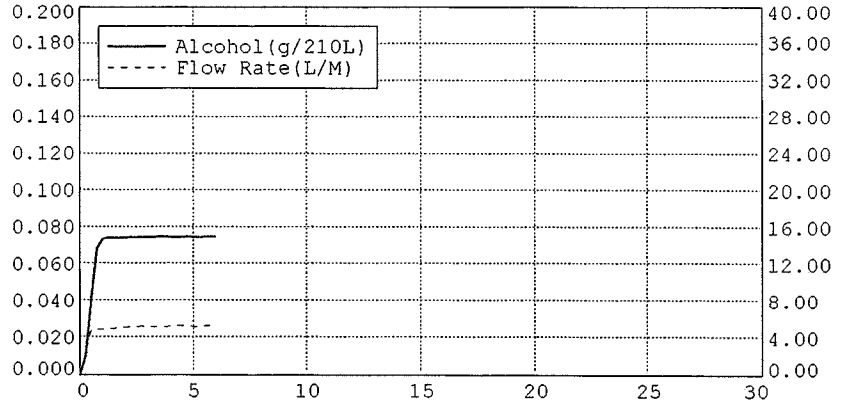
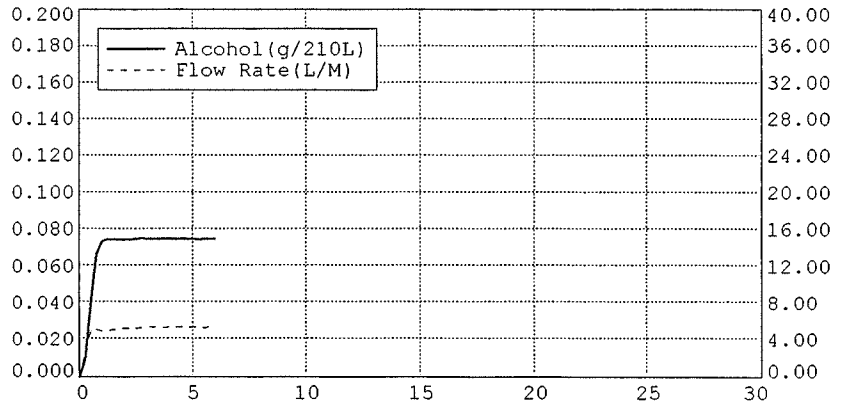
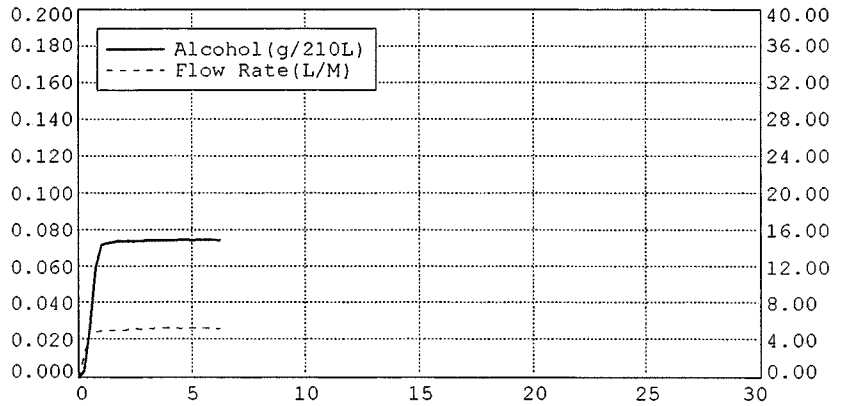
Date: 12/17/2019
 Time: 10:13:29

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.09: 0.078
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 928 psi

BLANK TEST	0.000	10:14
INTERNAL STANDARD	VERIFIED	10:14
EXTERNAL STANDARD	0.076	10:15
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.076	10:16
BLANK TEST	0.000	10:17
EXTERNAL STANDARD	0.077	10:17
BLANK TEST	0.000	10:18
EXTERNAL STANDARD	0.076	10:18
BLANK TEST	0.000	10:19
EXTERNAL STANDARD	0.076	10:19
BLANK TEST	0.000	10:20

Average = 0.0762
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100349

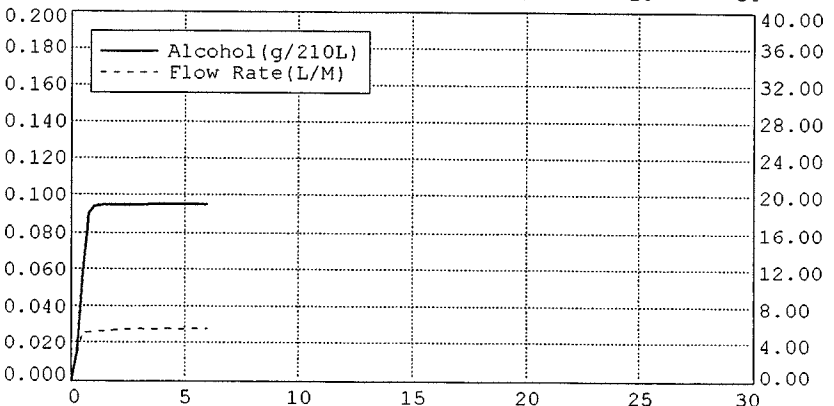
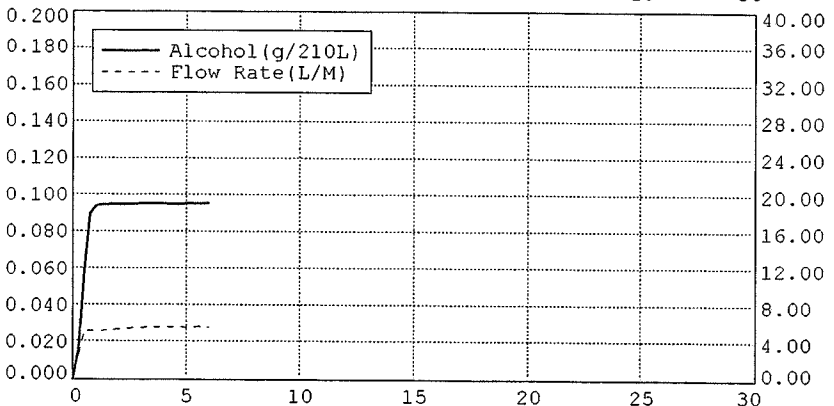
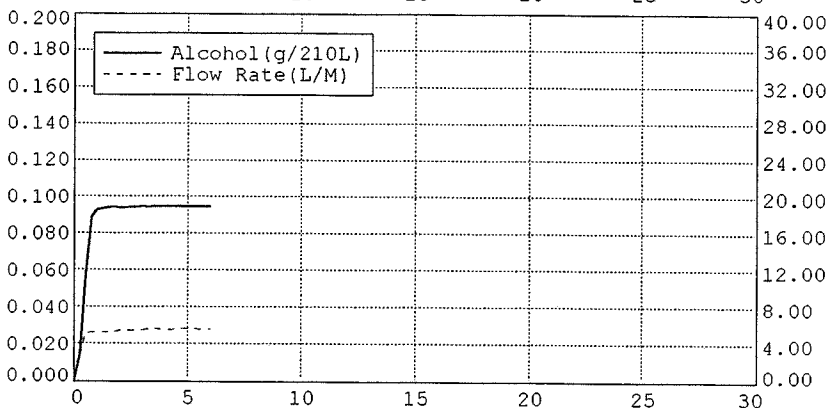
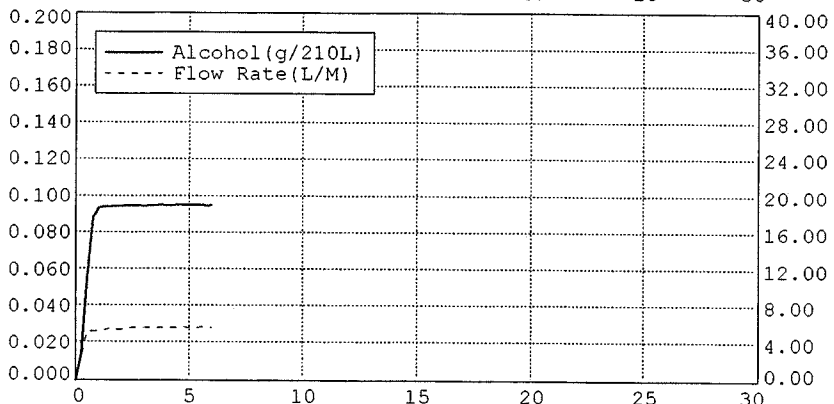
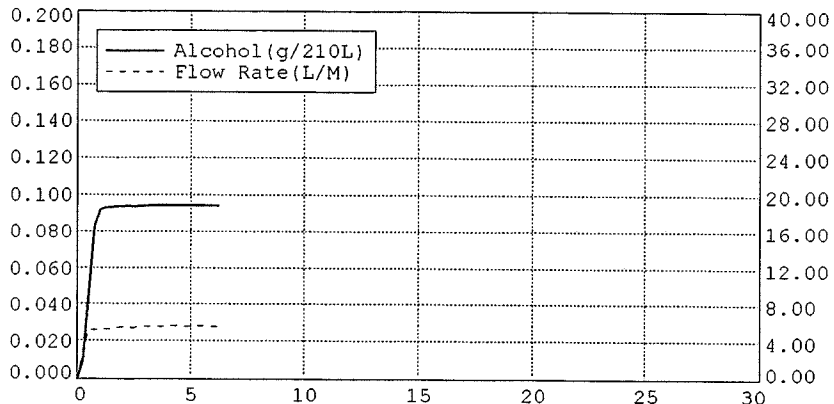
Date: 12/17/2019
 Time: 10:21:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.09: 0.097
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 1138 psi

BLANK TEST	0.000	10:22
INTERNAL STANDARD	VERIFIED	10:22
EXTERNAL STANDARD	0.096	10:23
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.096	10:24
BLANK TEST	0.000	10:25
EXTERNAL STANDARD	0.096	10:25
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.097	10:26
BLANK TEST	0.000	10:27
EXTERNAL STANDARD	0.096	10:27
BLANK TEST	0.000	10:28

Average = 0.0962
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100349

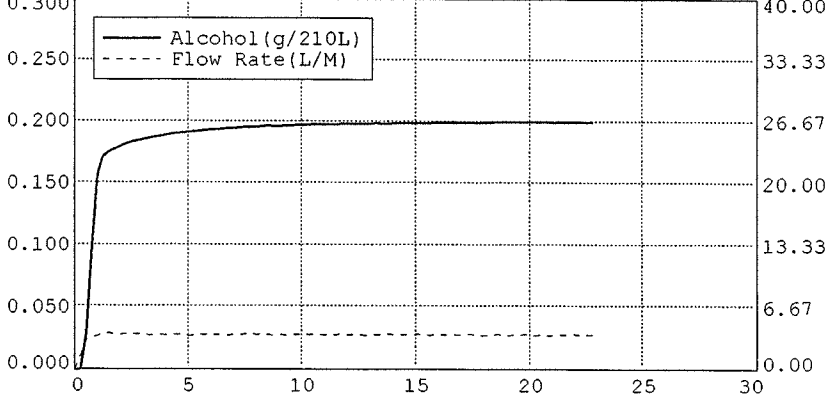
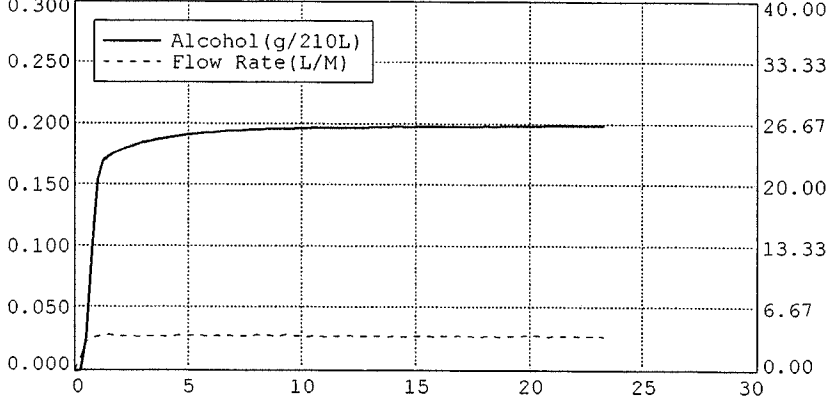
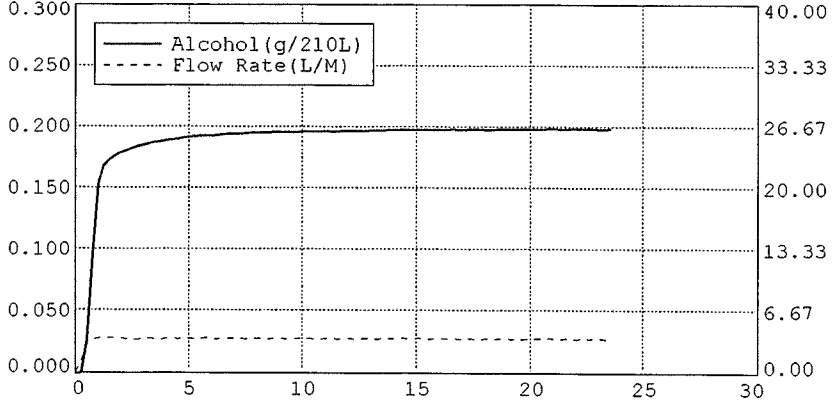
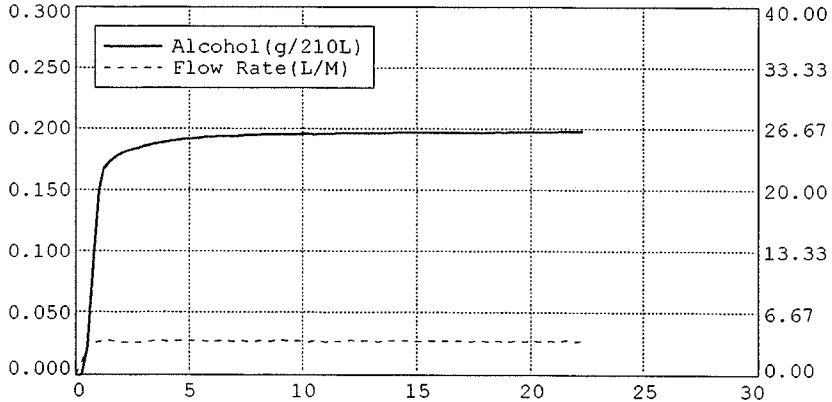
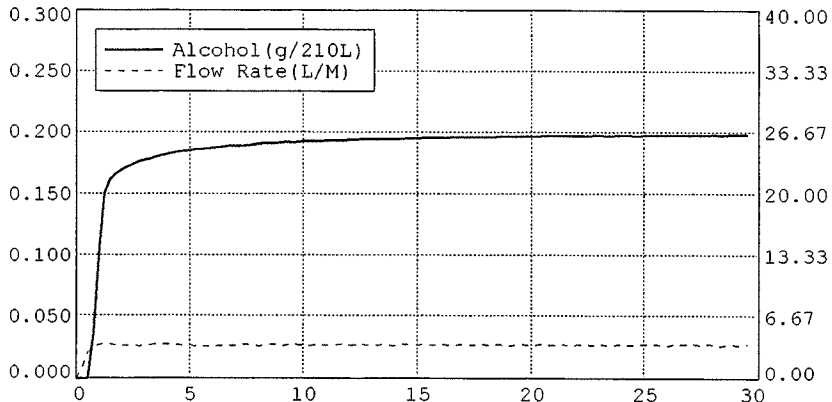
Date: 12/17/2019
 Time: 10:54:07

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: 19040
 EXPIRATION: 01/29/2021

BLANK TEST	0.000	10:55
INTERNAL STANDARD	VERIFIED	10:55
EXTERNAL STANDARD	0.199	10:56
BLANK TEST	0.000	10:57
EXTERNAL STANDARD	0.199	10:57
BLANK TEST	0.000	10:58
EXTERNAL STANDARD	0.199	10:59
BLANK TEST	0.000	11:00
EXTERNAL STANDARD	0.200	11:00
BLANK TEST	0.000	11:01
EXTERNAL STANDARD	0.200	11:01
BLANK TEST	0.000	11:02

Average = 0.1994
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

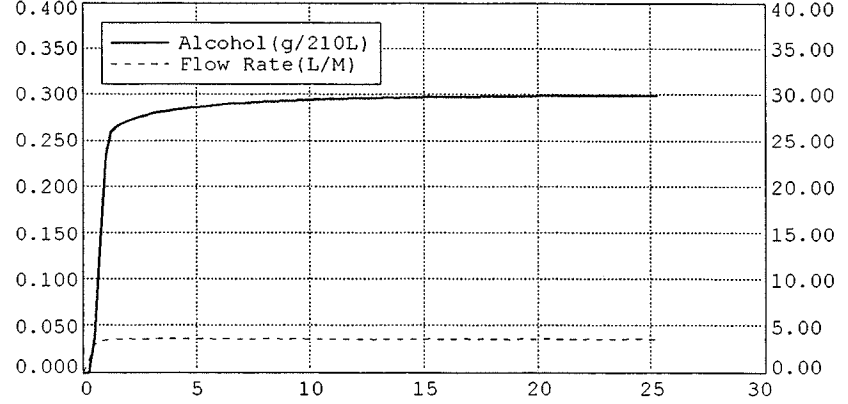
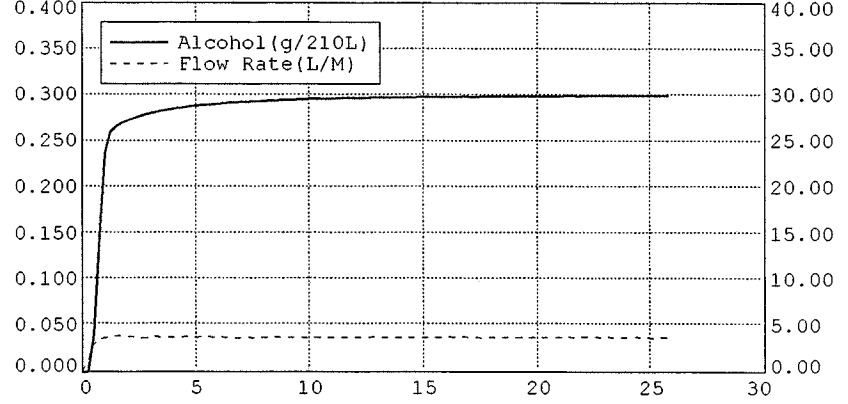
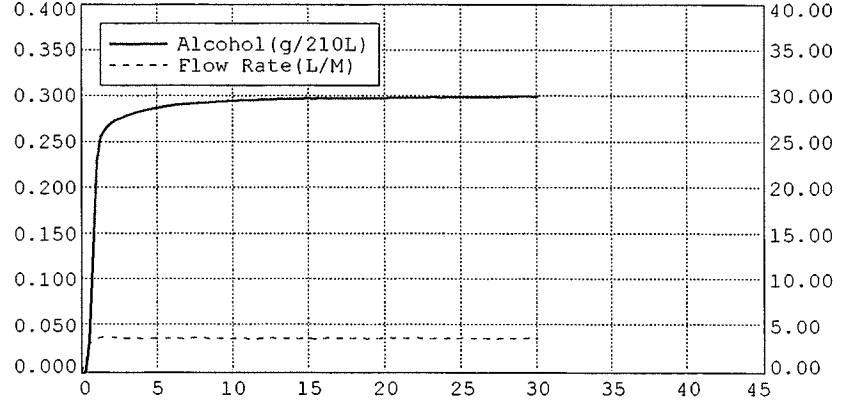
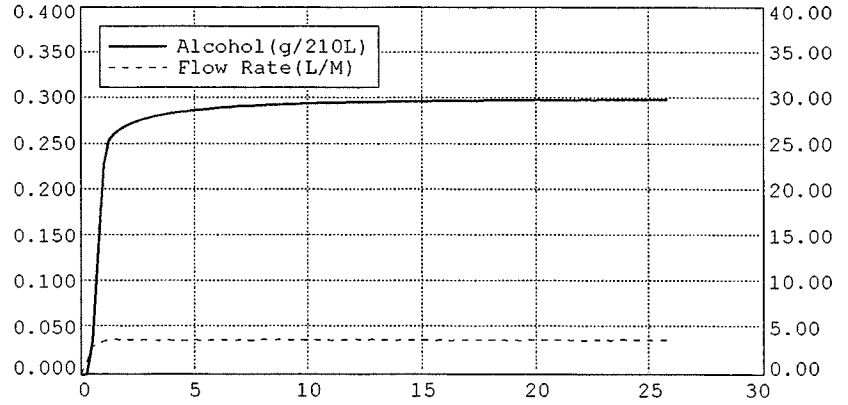
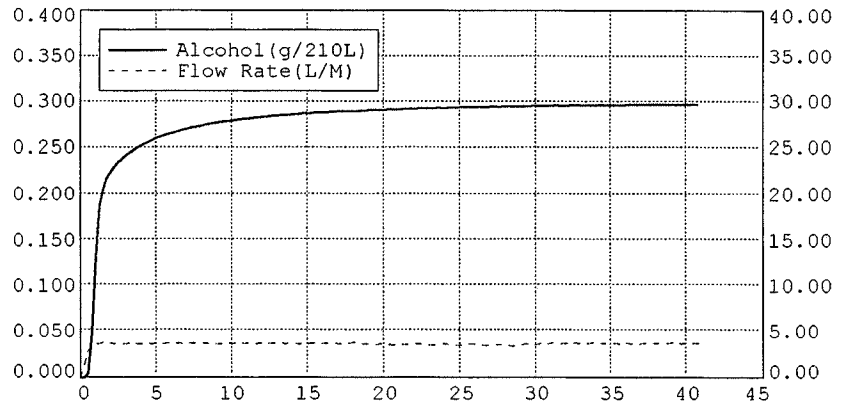
Alaska Department of Public Safety
 DATAMASTER dmt: 100349

Date: 12/17/2019
 Time: 11:07:19

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 19010
 EXPIRATION: 01/03/2021

BLANK TEST	0.000	11:08
INTERNAL STANDARD	VERIFIED	11:08
EXTERNAL STANDARD	0.297	11:09
BLANK TEST	0.000	11:10
EXTERNAL STANDARD	0.298	11:10
BLANK TEST	0.000	11:11
EXTERNAL STANDARD	0.300	11:12
BLANK TEST	0.000	11:13
EXTERNAL STANDARD	0.299	11:13
BLANK TEST	0.000	11:14
EXTERNAL STANDARD	0.300	11:15
BLANK TEST	0.000	11:16

Average = 0.2988
 Std Dev = 0.0013



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 12/17/2019
Time: 11:29:16

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

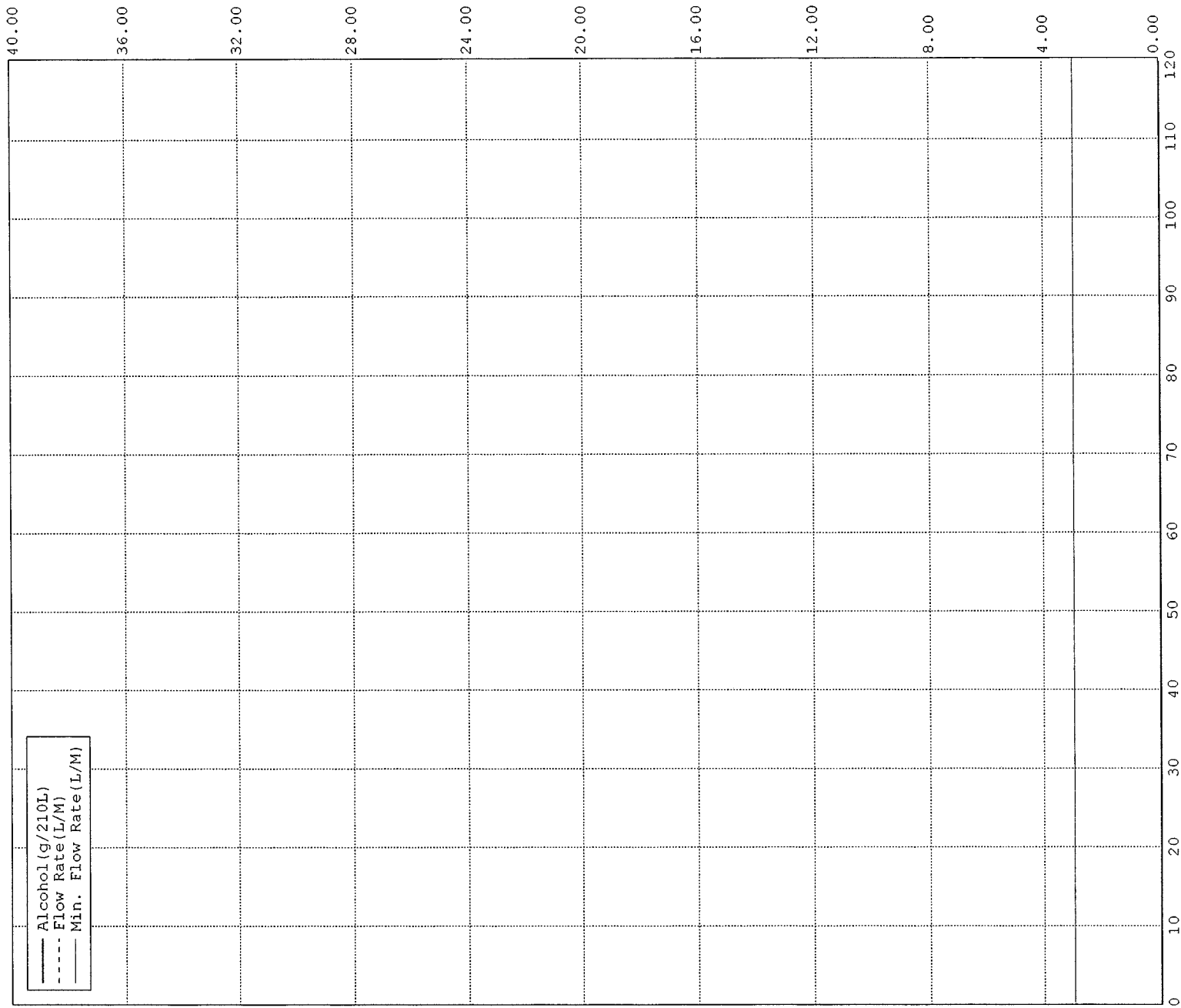
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.08: 0.078
LOT #: ~~AG8261011~~ AG826101 *DW 12/23/19*
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 11:30
BLANK TEST 0.000 11:30
INTERNAL STANDARD VERIFIED 11:30
EXTERNAL STANDARD 0.075 11:30
BLANK TEST 0.000 11:31
SUBJECT SAMPLE INCOMPLETE 11:33

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 12/17/2019
Time: 13:48:53

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

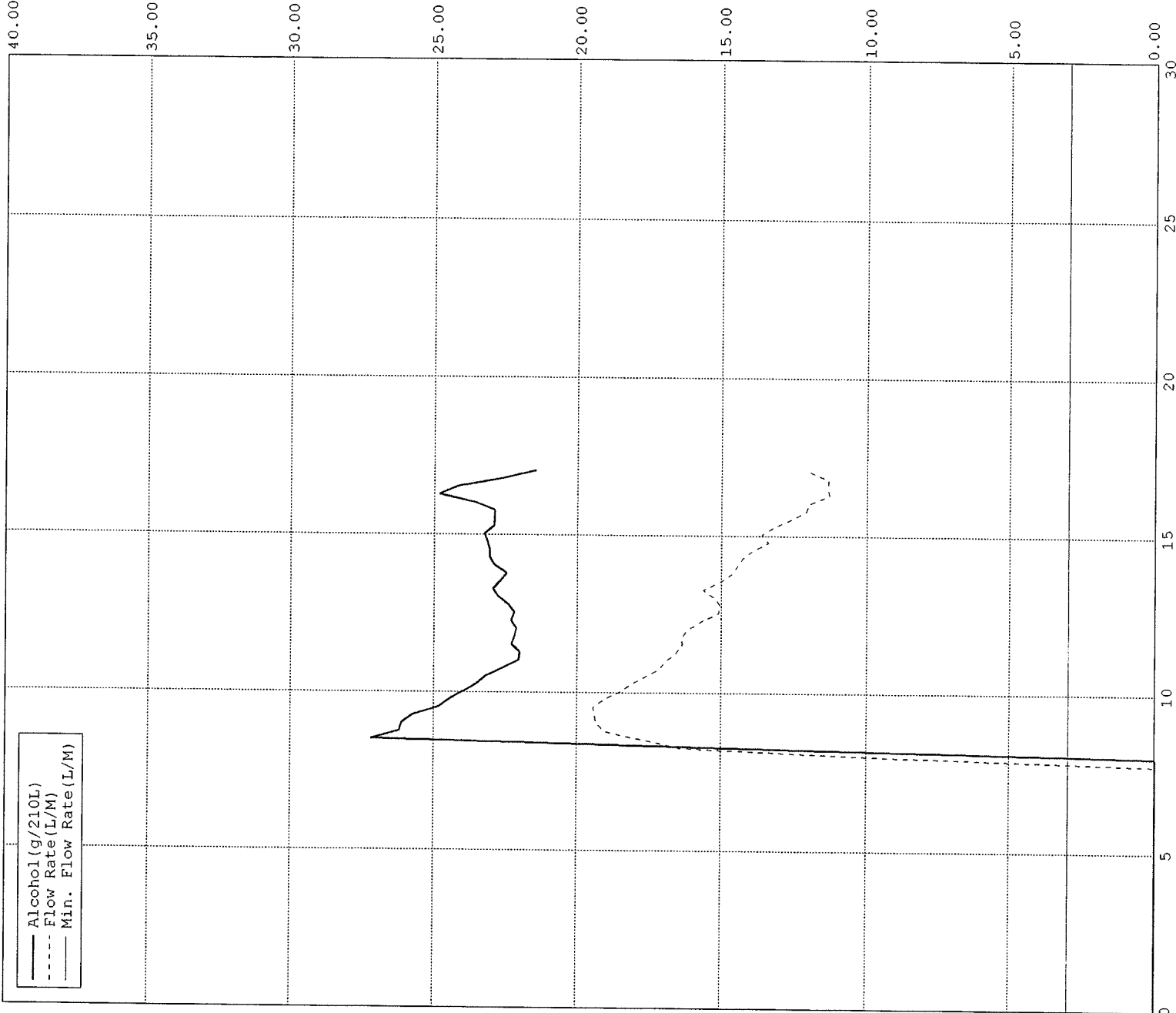
DEPT/AGENCY:
INVALID
CASE/REPORT: XXXX
TEST TYPE: TEST

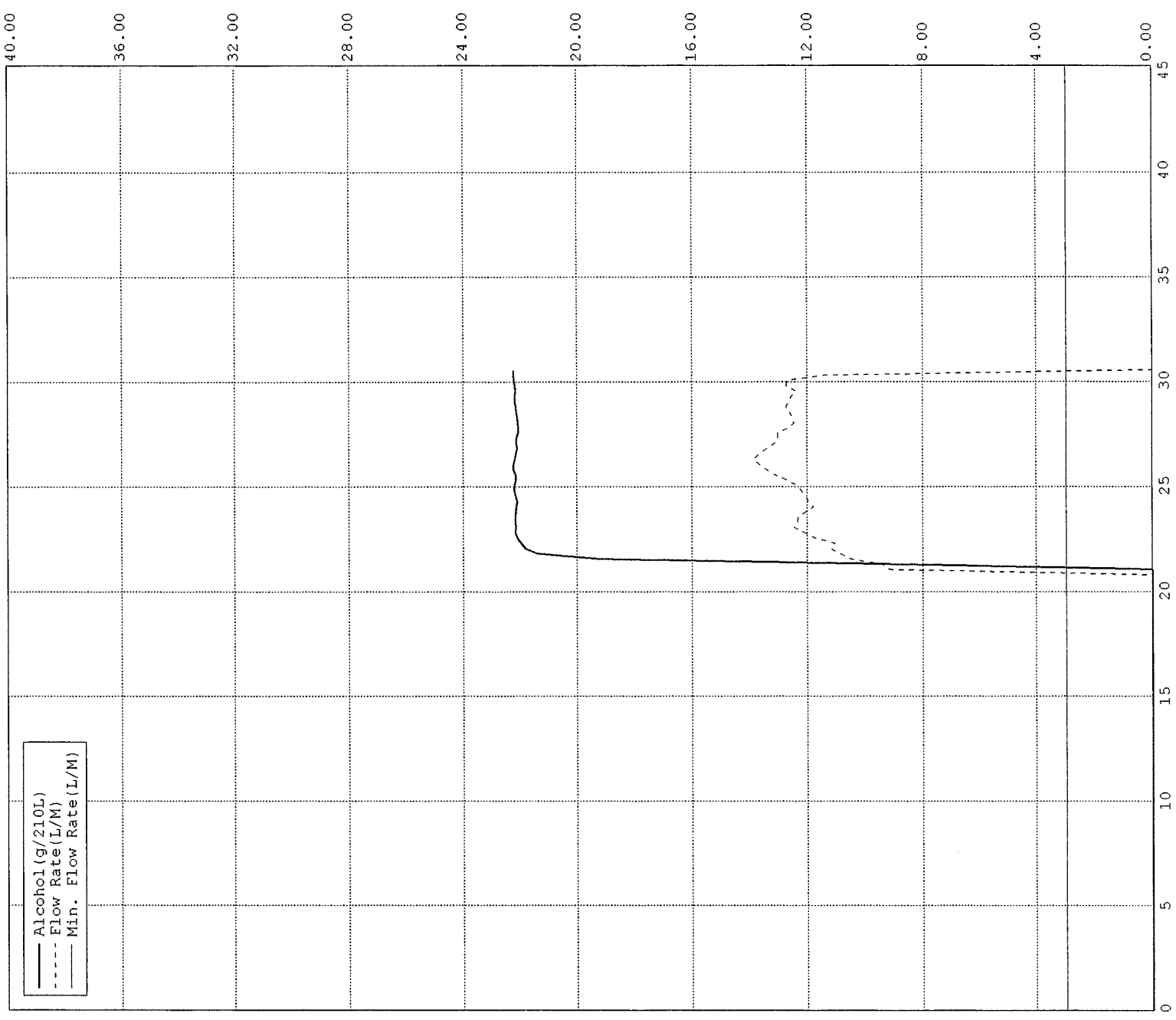
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.06: 0.078
LOT #: ~~A68261011~~ A6826101 DM 12/23/19
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:52
BLANK TEST 0.000 13:52
INTERNAL STANDARD VERIFIED 13:52
EXTERNAL STANDARD 0.076 13:53
BLANK TEST 0.000 13:53
SUBJECT SAMPLE INVALID 13:54

DM





SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100349

 Date: 12/17/2019
 Time: 13:14:02

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 29.07: 0.078
 LOT #: ~~AG8261011~~ AG826101 DW 12/23/19
 EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:15
 BLANK TEST 0.000 13:15
 INTERNAL STANDARD VERIFIED 13:15
 Xg = 0.076 (0.45%)
 EXTERNAL STANDARD 0.076 13:16
 X[1] = 0.0756 (-0.0008) (0.0015)
 BLANK TEST 0.000 13:17
 SUBJECT SAMPLE XXX 13:17
 X[1] = 0.1119 (-0.0210) (0.0007)

Interference Detected

Filter 2 Avg: -0.0004
 Filter 3 Avg: 0.0012

DW

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 12/17/2019
Time: 13:20:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

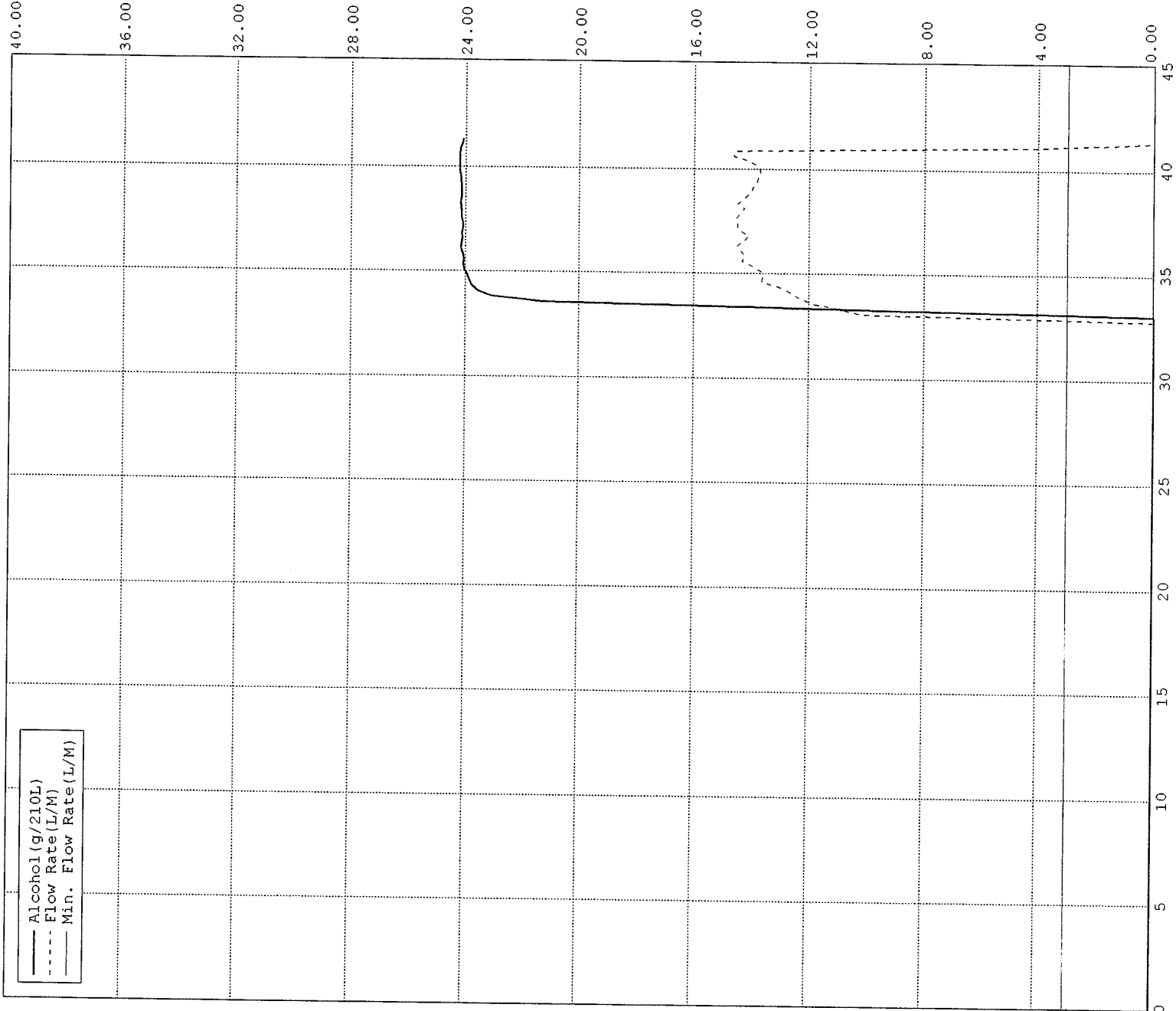
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.07: 0.078
LOT #: ~~AG8261011~~ **AG826101** *DW 12/23/19*
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:21
BLANK TEST 0.000 13:22
INTERNAL STANDARD VERIFIED 13:22
Xq = 0.076 (0.11%)
EXTERNAL STANDARD 0.076 13:22
X[1] = 0.0757 (-0.0007) (0.0004)
BLANK TEST 0.000 13:23
SUBJECT SAMPLE XXX 13:24
X[1] = 0.1214 (-0.0294) (-0.0001)

Interference Detected

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 12/17/2019
Time: 13:27:55

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

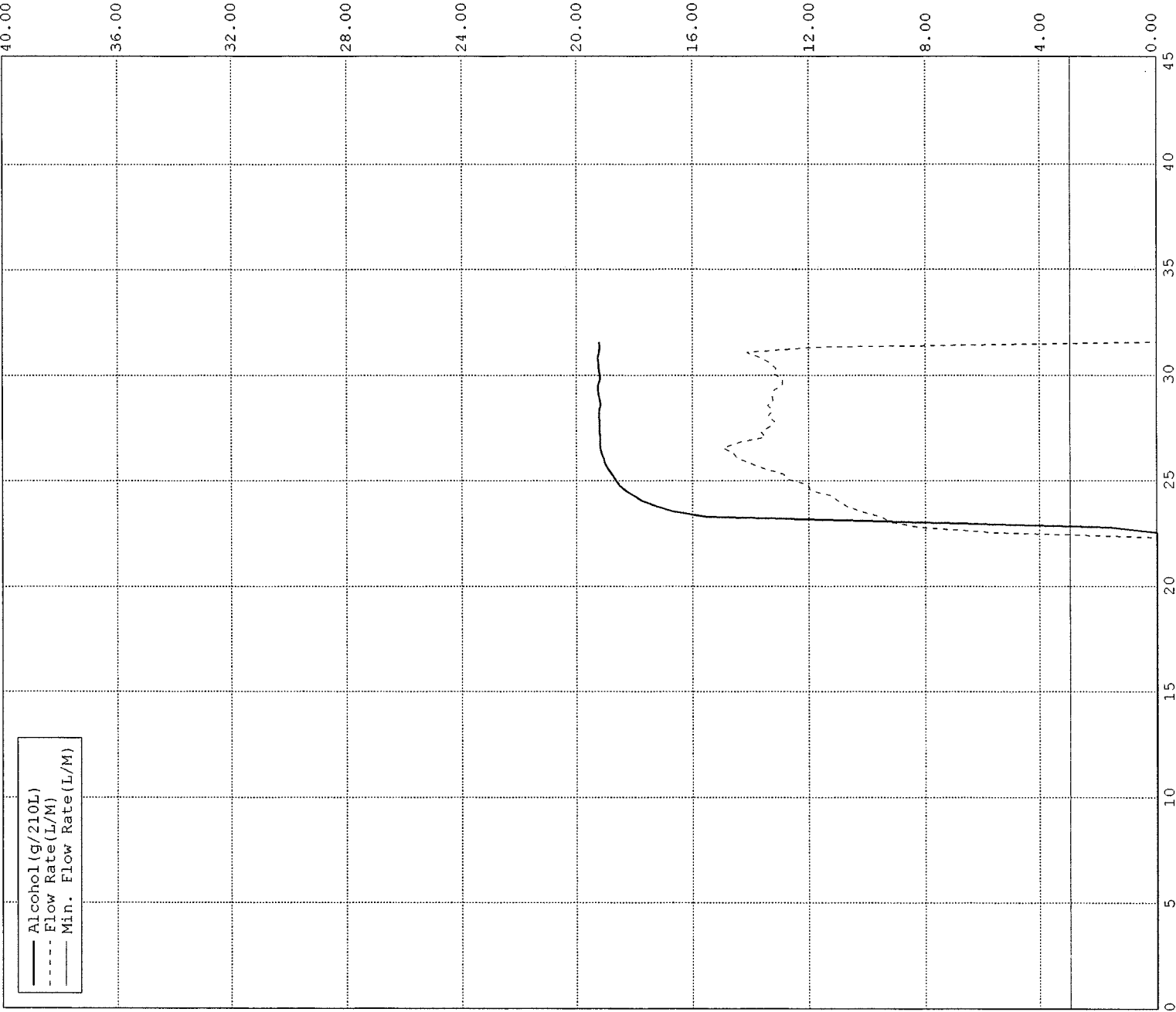
DEPT/AGENCY:
INTERFERENCE NEGATIVE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.07: 0.078
LOT #: ~~AG82601~~ **AG82601** *JW 12/23/19*
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	13:30
BLANK TEST	0.000	13:30
INTERNAL STANDARD	VERIFIED	13:30
Xq = 0.077 (0.23%)		
EXTERNAL STANDARD	0.076	13:31
X[1] = 0.0757 (-0.0006) (0.0013)		
BLANK TEST	0.000	13:31
SUBJECT SAMPLE (Vol=1.88L)	0.096	13:32
X[1] = 0.0968 (0.0006) (0.0003)		
BLANK TEST	0.000	13:33
EXTERNAL STANDARD	0.076	13:33
X[1] = 0.0761 (0.0006) (0.0014)		
BLANK TEST	0.000	13:34

JW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 12/17/2019
Time: 11:37:52

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

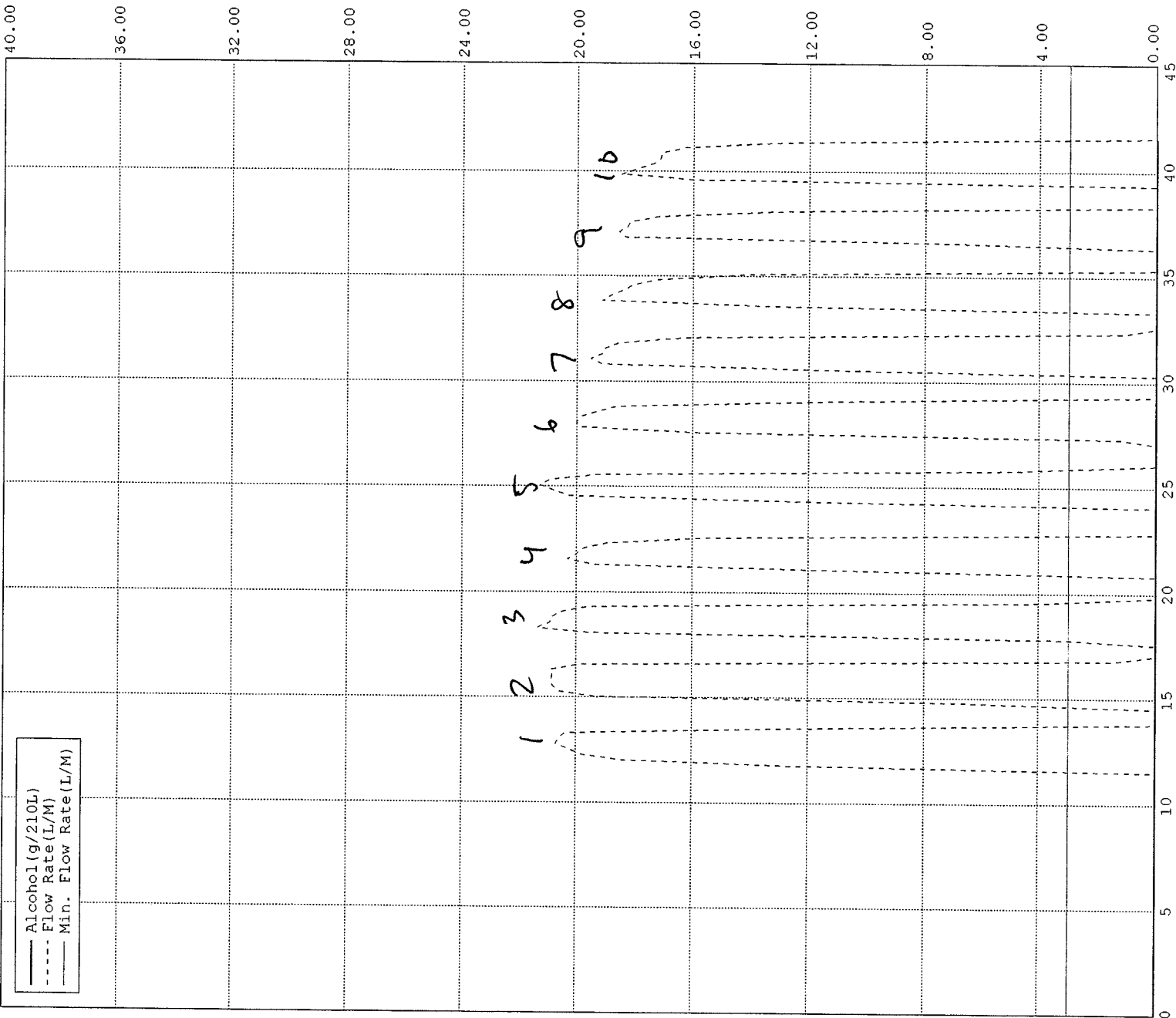
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.08: 0.078
LOT #: ~~AG826101~~ **AG826101** *AW 12/23/19*
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 11:39
BLANK TEST 0.000 11:39
INTERNAL STANDARD VERIFIED 11:39
EXTERNAL STANDARD 0.076 11:39
BLANK TEST 0.000 11:40
SUBJECT SAMPLE XXX 11:41

Maximum Attempts Exceeded

AW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 12/17/2019
Time: 13:56:35

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

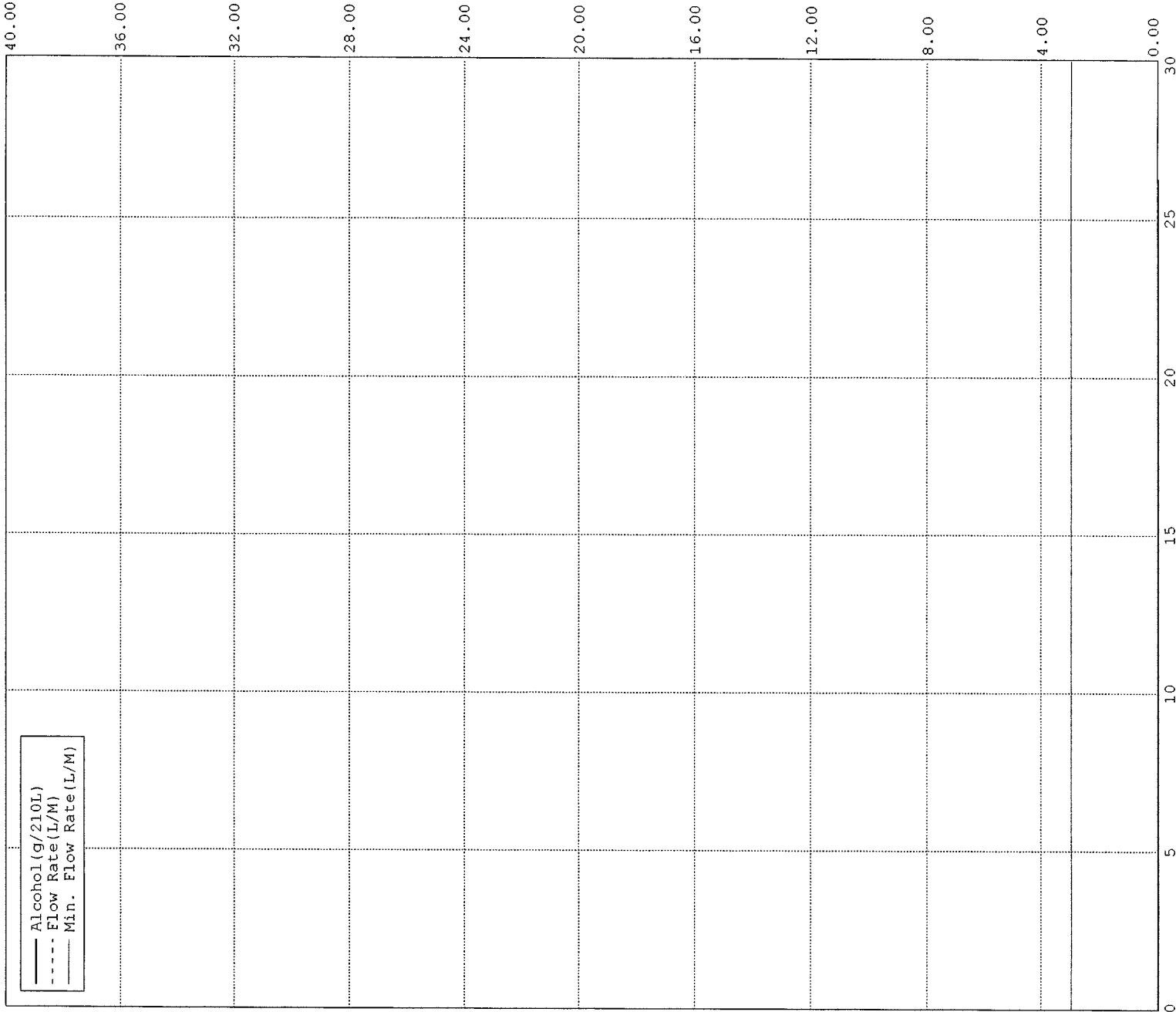
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.06: 0.078
LOT #: ~~AG826101~~ *AG826101 JMW 12/23/19*
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:59
BLANK TEST 0.000 13:59
INTERNAL STANDARD VERIFIED 13:59
EXTERNAL STANDARD 0.076 13:59
BLANK TEST 0.000 14:00

RFI DETECTED

JMW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 12/17/2019
Time: 15:00:48

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 29.05: 0.078
LOT #: ~~AG826101~~ **AG826101** *DM 12/23/19*
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	15:01
BLANK TEST	0.000	15:01
INTERNAL STANDARD	VERIFIED	15:02
EXTERNAL STANDARD	0.077	15:02
BLANK TEST	0.000	15:03
SUBJECT SAMPLE (Vol=3.04L)	0.000	15:03
BLANK TEST	0.000	15:04
EXTERNAL STANDARD	0.077	15:04
BLANK TEST	0.000	15:05

