

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 100361 Analyst Derek Walton Start Date 01/22/20

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 1.5 L (1.3L to 1.7L)

4. Linearity Test (attached)

a. Levels Used

- i. 0.020g/210L Mnf Airgas Lot AG928203 Exp 10/09/21
- 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 AG805903 Exp 02/28/20
- v. 0.200g/210L Mnf Cwth Lot 19040 Exp 01/29/21
 - 1. Simulator S/N DR4176 Date Calibrated 10/07/19
- vi. 0.300g/210L Mnf Cwth Lot 19010 Exp 01/03/21
 - 1. Simulator S/N DR6267 Date Calibrated 10/08/19

5. Functional Tests (attached)

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

- i. Acetone - Mnf Cwth Lot 18370 Level 0.100 Exp 12/05/20 ① DW 01/22/20
 - 1. Simulator S/N DR4167 ⁵⁰¹¹⁹⁹ Date Calibrated 03/19/19 ~~03/06/19~~
- ii. Isopropanol - Mnf Cwth Lot 18370 Level 0.100 Exp 12/05/20
 - 1. Simulator S/N DR4161 Date Calibrated 07/07/19
- iii. Negative Control - Mnf Cwth 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 01/22/20

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 01/22/2020
Time: 10:22:13

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 = 42.6°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 2.14 V PASSED
(1.28 V - 3.00 V)
Cooler Voltage = 1.91 V PASSED
(1.15 V - 2.67 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 535 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.4 in

PUMP INFO

Flow Rate = 3.983 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.003 V <= 0.010 V)
PUMP OFF PASSED
(0.004 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD ✓

Xq = 0.078 2.19% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100361

Date: 01/22/2020
Time: 10:30 AM

Temperatures (°C)

Sample Cell: 49.2°C
Breath Tube: 41.0°C

Current Barometer 29.4 in
Volume (Ltr) 1.49

Settings

Lamp: 2.14 V
Bias: 80 V
Cooler: 1.94 V
Chopper: 535 Hz

Voltages (V)

Flow: 1.04 V
Detector: 0.061 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 01/22/2020
Time: 09:37:21

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca = 0.1000
CAL = 0.972848 0.800 <= CAL < 1.200
b1 = 0.0001 0.0000 <= b1 < 0.0040
b2 = 0.0042 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0793 0.0500 <= Xq < 0.2000
a21 = 1.205857 1.050 <= a21 < 1.300
a31 = 0.508812 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 01/22/2020
Time: 10:33:57

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

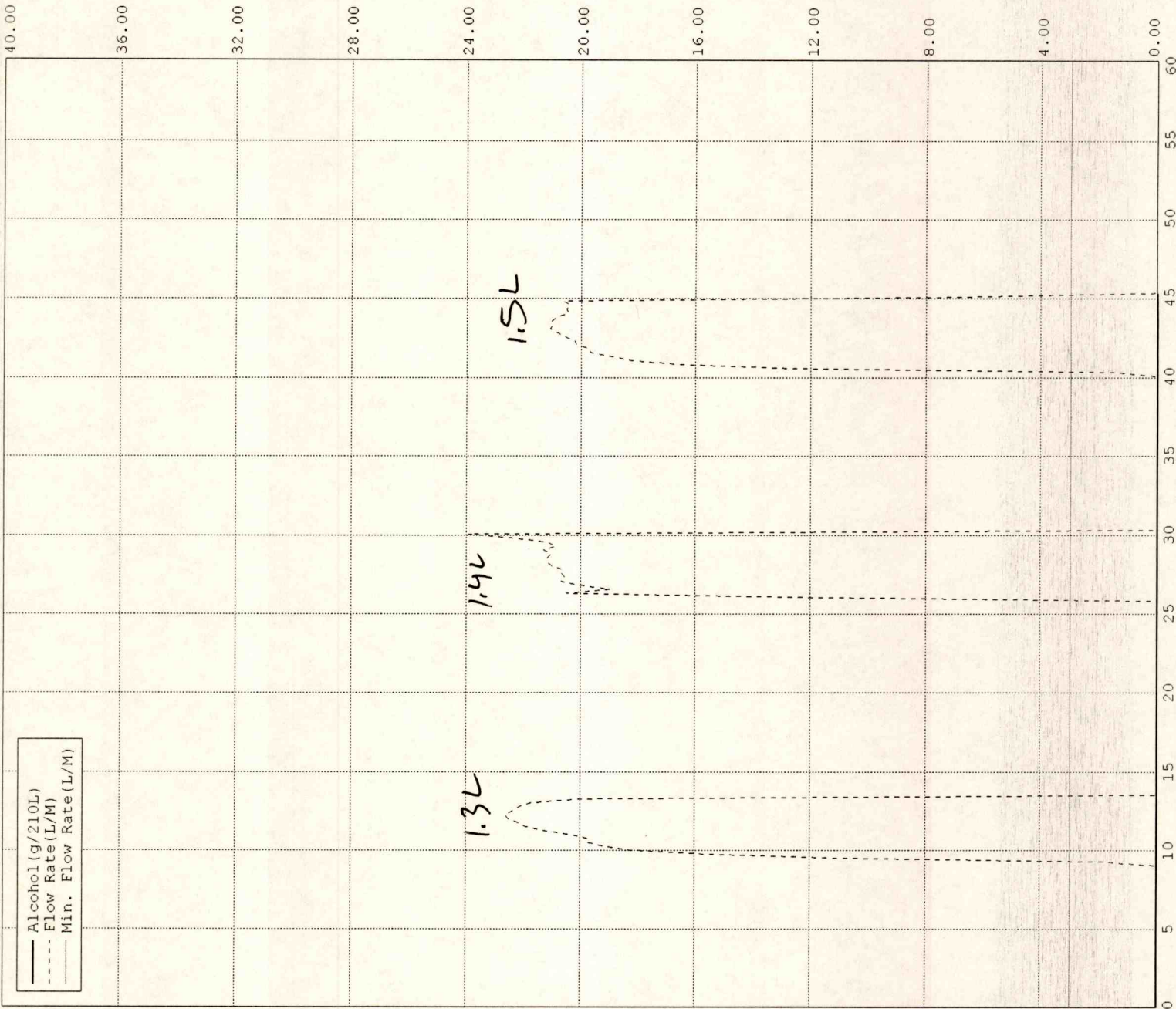
DEPT/AGENCY:
MINIMUM VOLUME
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.45: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	TIME
BLANK TEST	0.000	10:38
INTERNAL STANDARD	VERIFIED	10:38
EXTERNAL STANDARD	0.076	10:39
BLANK TEST	0.000	10:40
SUBJECT SAMPLE (Vol=1.50L)	0.000	10:40
BLANK TEST	0.000	10:41
EXTERNAL STANDARD	0.077	10:41
BLANK TEST	0.000	10:42

DMC



LINEARITY CHECK

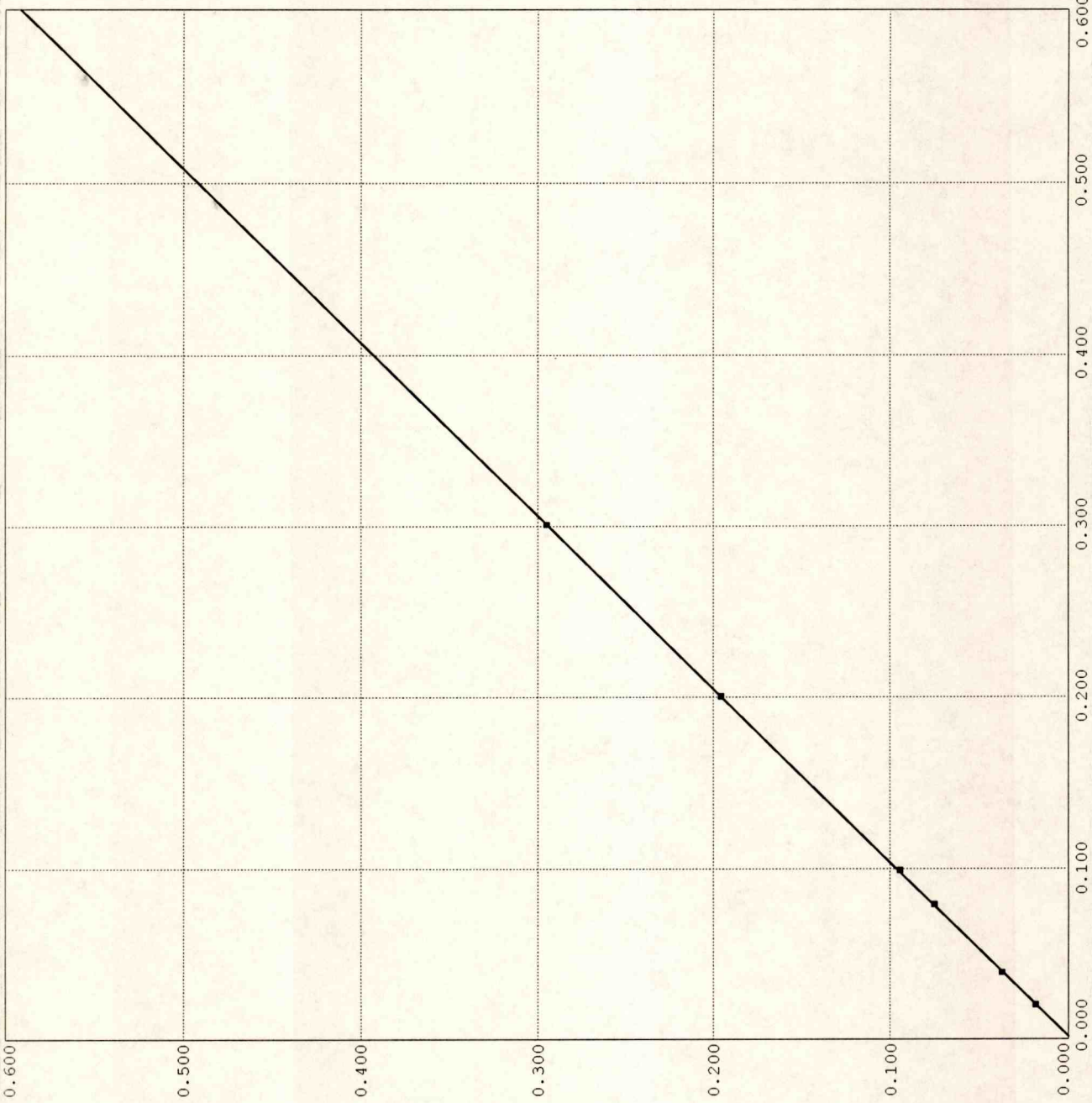
Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 01/22/2020
Time: 12:00:22

SUPERVISOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0190	0.0000
0.039	0.0380	0.0000
0.079	0.0760	0.0000
0.099	0.0954	0.0005
0.200	0.1964	0.0005
0.300	0.2956	0.0005

SLOPE = 0.988624
R² = 0.999948



ML

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100361

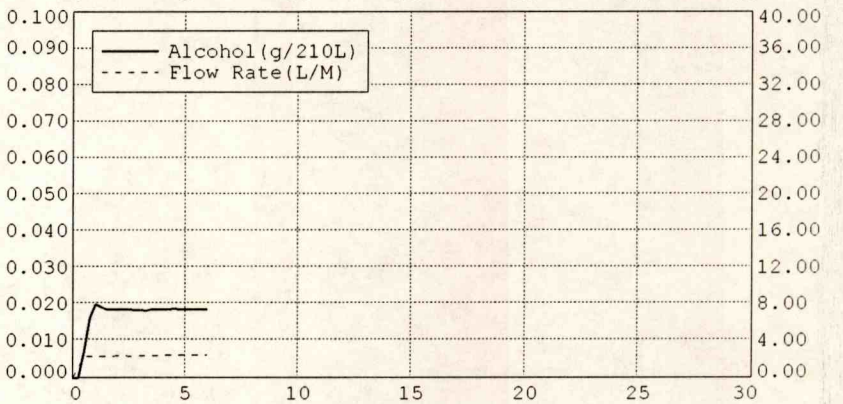
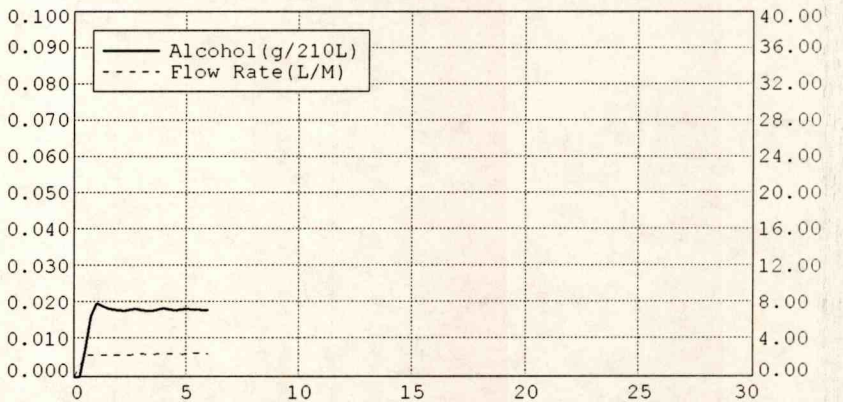
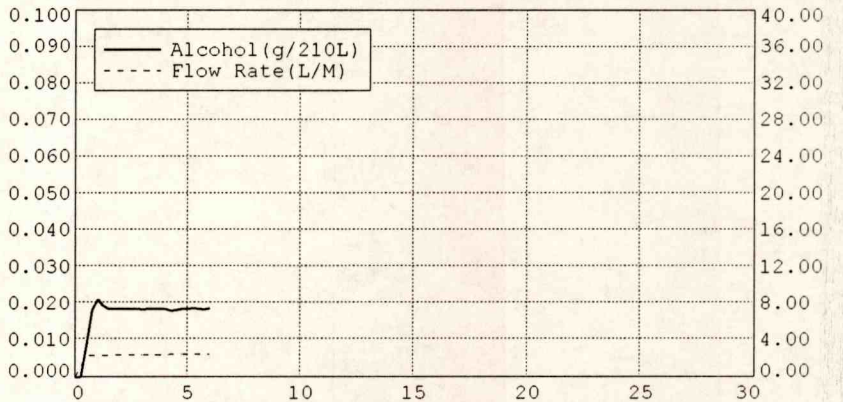
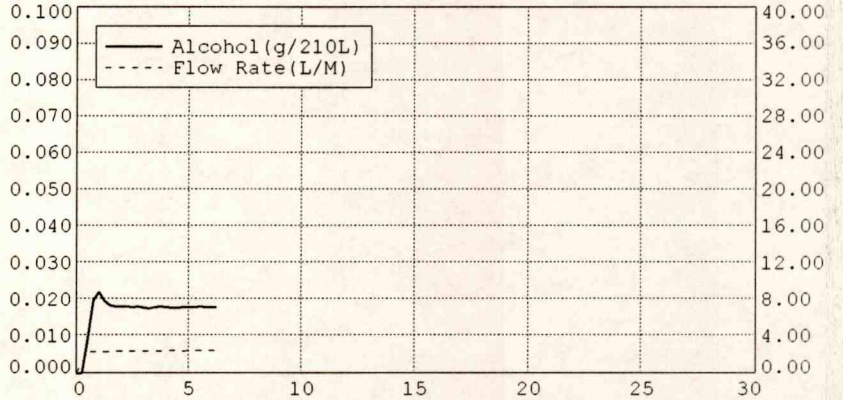
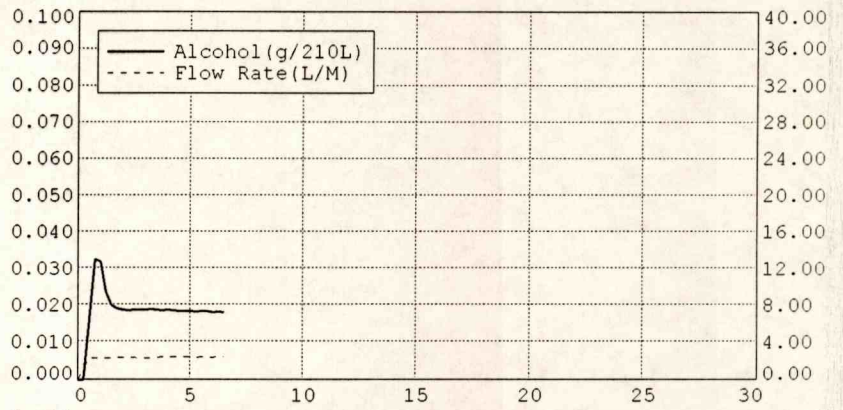
Date: 01/22/2020
Time: 12:00:24

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.48: 0.020
LOT #: AG928203
EXPIRATION: 10/09/2021
TANK PRESSURE: 1045 psi

BLANK TEST	0.000	12:01
INTERNAL STANDARD	VERIFIED	12:01
EXTERNAL STANDARD	0.019	12:01
BLANK TEST	0.000	12:02
EXTERNAL STANDARD	0.019	12:02
BLANK TEST	0.000	12:03
EXTERNAL STANDARD	0.019	12:04
BLANK TEST	0.000	12:04
EXTERNAL STANDARD	0.019	12:05
BLANK TEST	0.000	12:06
EXTERNAL STANDARD	0.019	12:06
BLANK TEST	0.000	12:07

Average = 0.0190
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100361

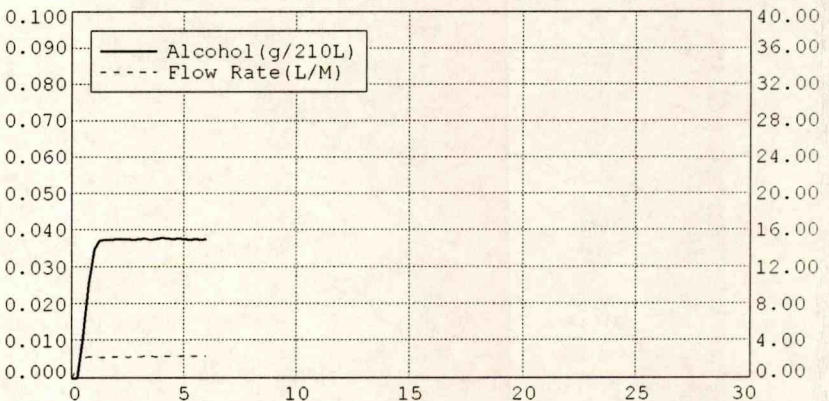
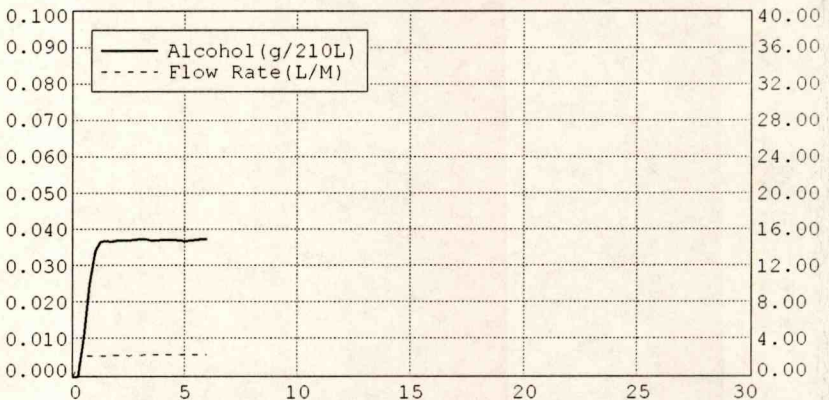
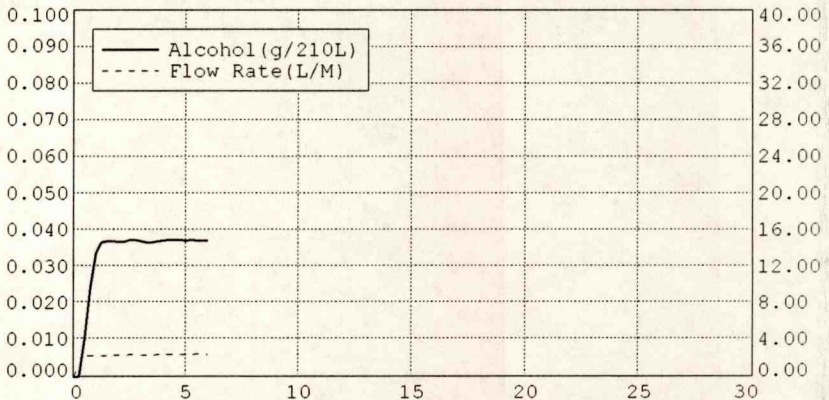
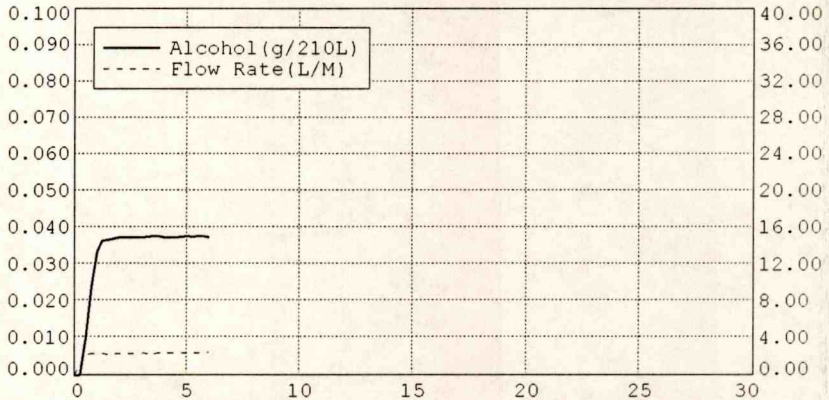
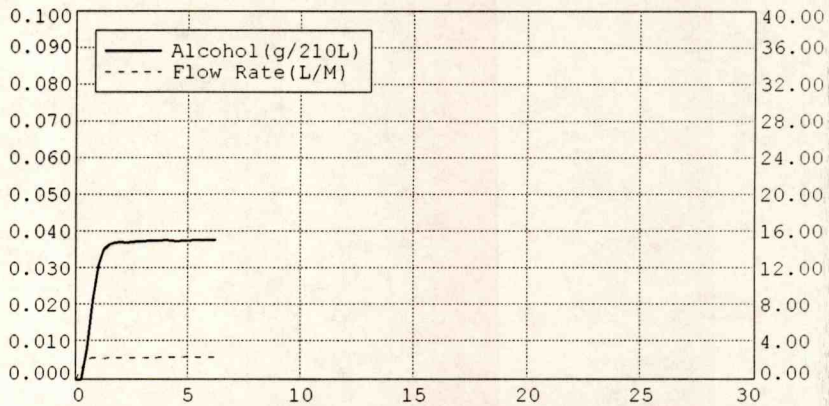
Date: 01/22/2020
 Time: 12:08:38

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.48: 0.039
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 932 psi

BLANK TEST	0.000	12:09
INTERNAL STANDARD	VERIFIED	12:09
EXTERNAL STANDARD	0.038	12:10
BLANK TEST	0.000	12:11
EXTERNAL STANDARD	0.038	12:11
BLANK TEST	0.000	12:12
EXTERNAL STANDARD	0.038	12:12
BLANK TEST	0.000	12:13
EXTERNAL STANDARD	0.038	12:13
BLANK TEST	0.000	12:14
EXTERNAL STANDARD	0.038	12:14
BLANK TEST	0.000	12:15

Average = 0.0380
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100361

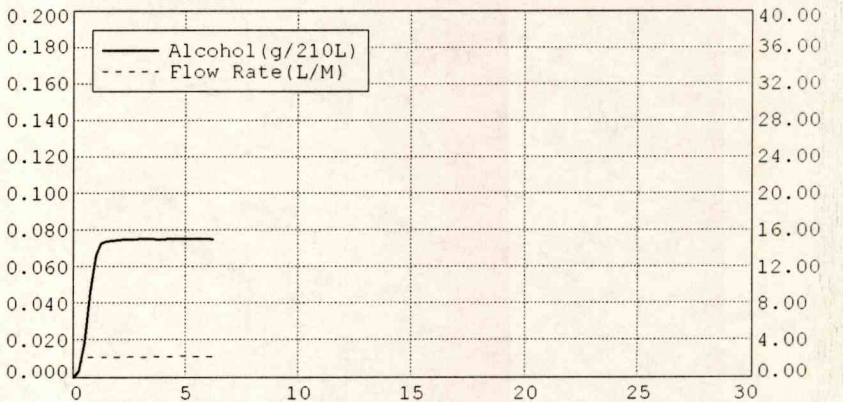
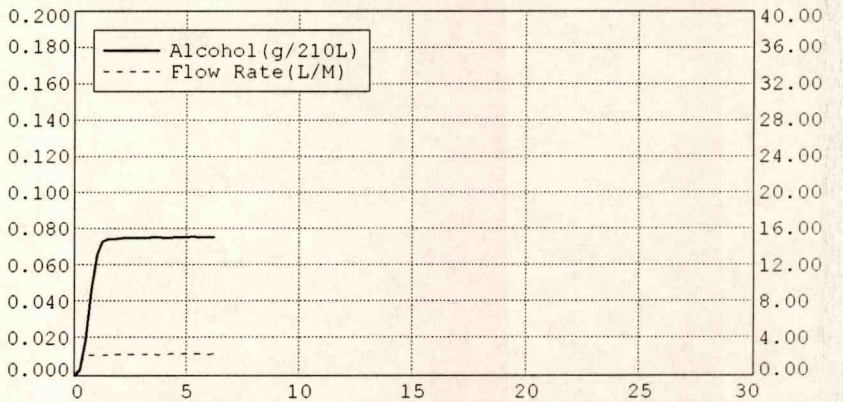
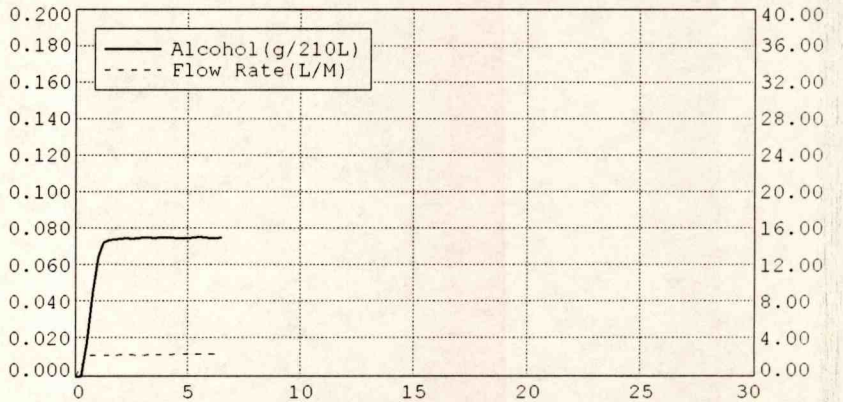
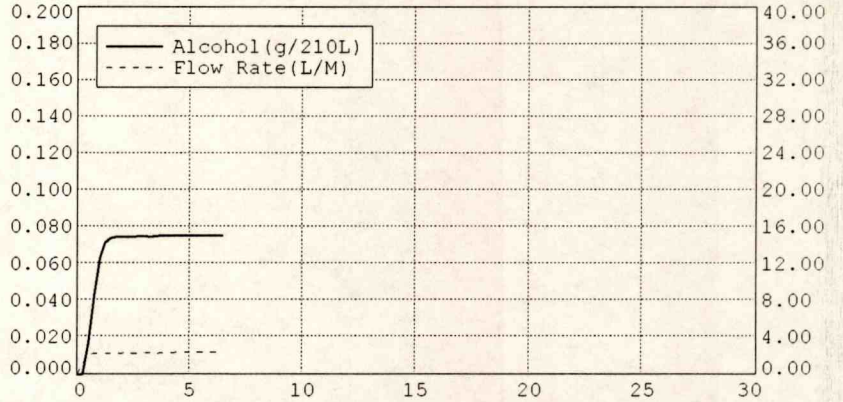
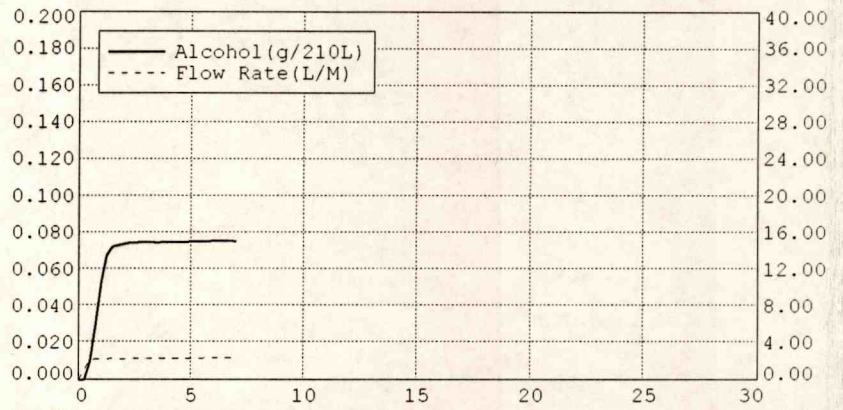
Date: 01/22/2020
 Time: 12:17:01

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.48: 0.079
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 816 psi

BLANK TEST	0.000	12:18
INTERNAL STANDARD	VERIFIED	12:18
EXTERNAL STANDARD	0.076	12:18
BLANK TEST	0.000	12:19
EXTERNAL STANDARD	0.076	12:19
BLANK TEST	0.000	12:20
EXTERNAL STANDARD	0.076	12:20
BLANK TEST	0.000	12:21
EXTERNAL STANDARD	0.076	12:21
BLANK TEST	0.000	12:22
EXTERNAL STANDARD	0.076	12:22
BLANK TEST	0.000	12:23

Average = 0.0760
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100361

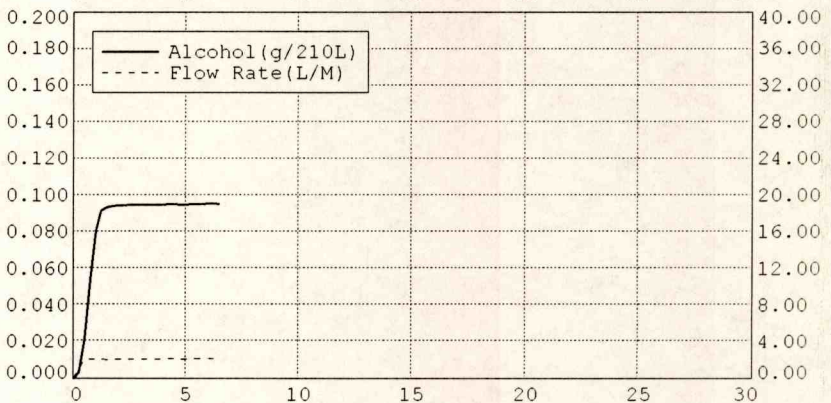
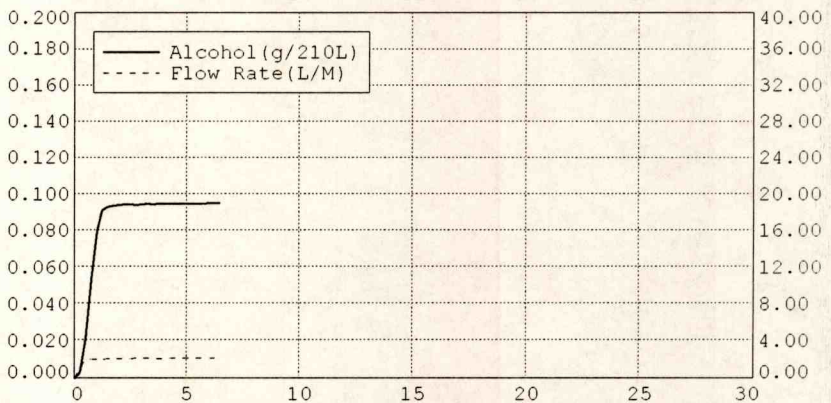
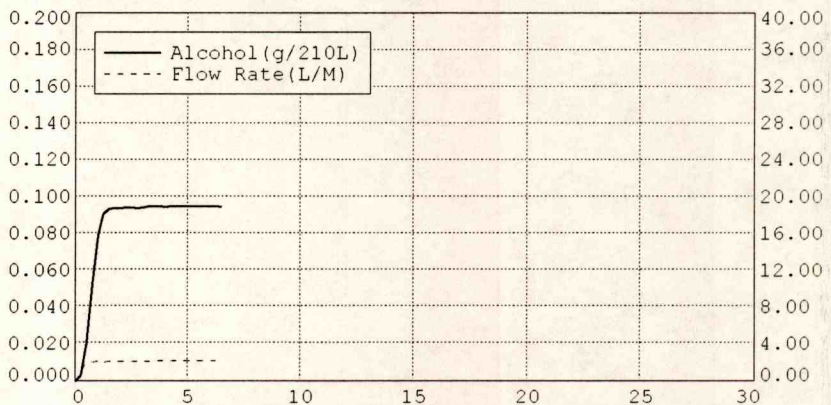
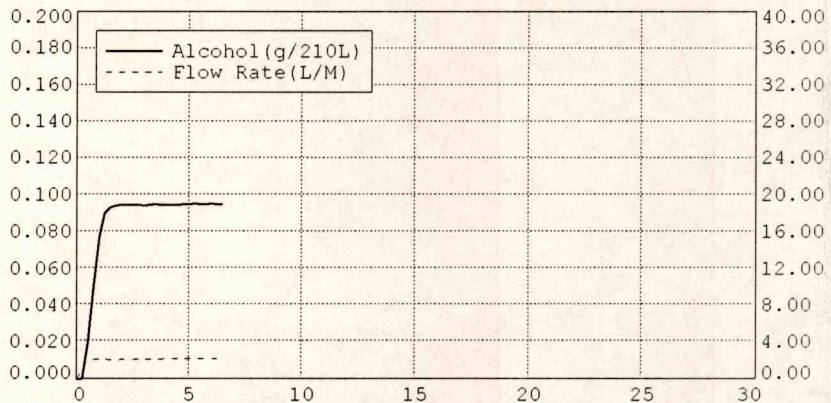
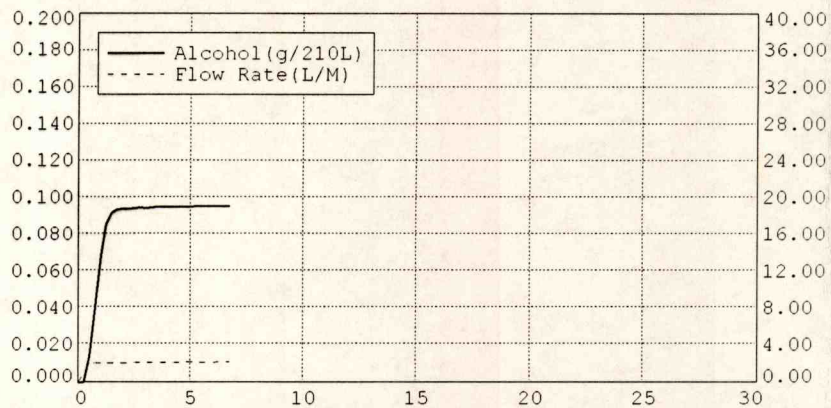
Date: 01/22/2020
 Time: 12:24:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.47: 0.099
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 441 psi

BLANK TEST	0.000	12:25
INTERNAL STANDARD	VERIFIED	12:25
EXTERNAL STANDARD	0.096	12:26
BLANK TEST	0.000	12:27
EXTERNAL STANDARD	0.095	12:27
BLANK TEST	0.000	12:28
EXTERNAL STANDARD	0.095	12:28
BLANK TEST	0.000	12:29
EXTERNAL STANDARD	0.095	12:29
BLANK TEST	0.000	12:30
EXTERNAL STANDARD	0.096	12:30
BLANK TEST	0.000	12:31

Average = 0.0954
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100361

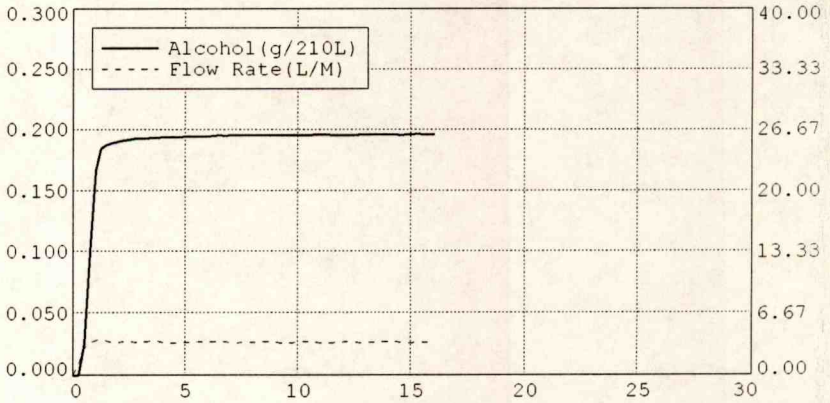
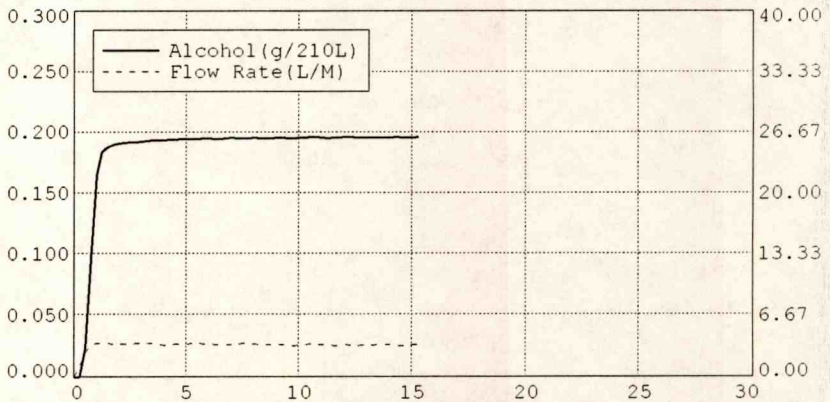
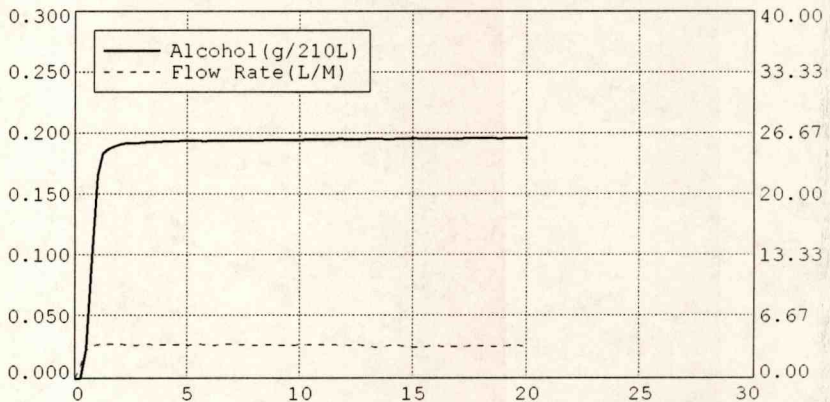
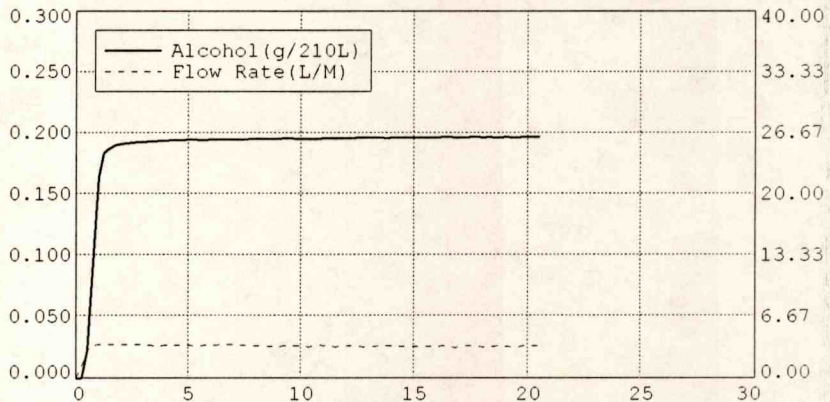
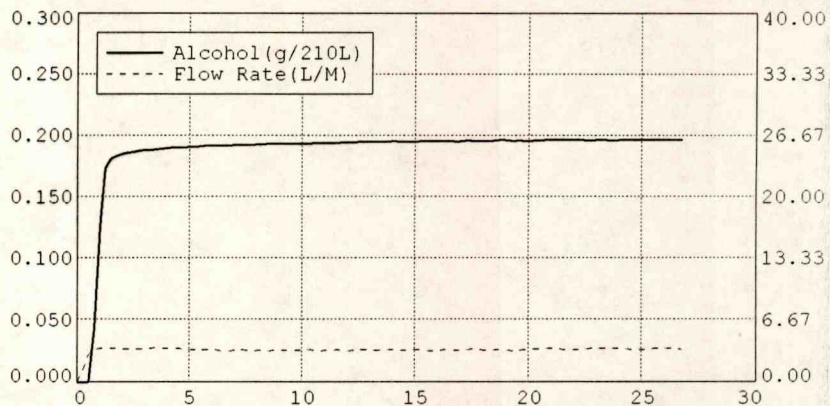
Date: 01/22/2020
 Time: 12:35:27

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	12:36
INTERNAL STANDARD	VERIFIED	12:36
EXTERNAL STANDARD	0.197	12:37
BLANK TEST	0.000	12:38
EXTERNAL STANDARD	0.197	12:38
BLANK TEST	0.000	12:39
EXTERNAL STANDARD	0.196	12:40
BLANK TEST	0.000	12:40
EXTERNAL STANDARD	0.196	12:41
BLANK TEST	0.000	12:42
EXTERNAL STANDARD	0.196	12:42
BLANK TEST	0.000	12:43

Average = 0.1964
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

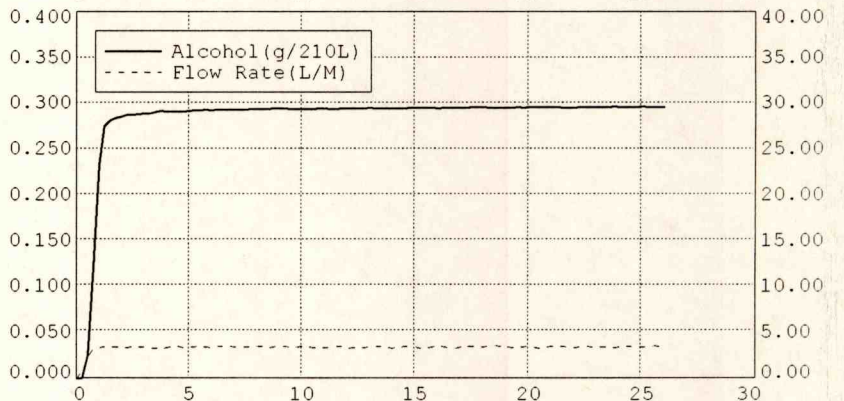
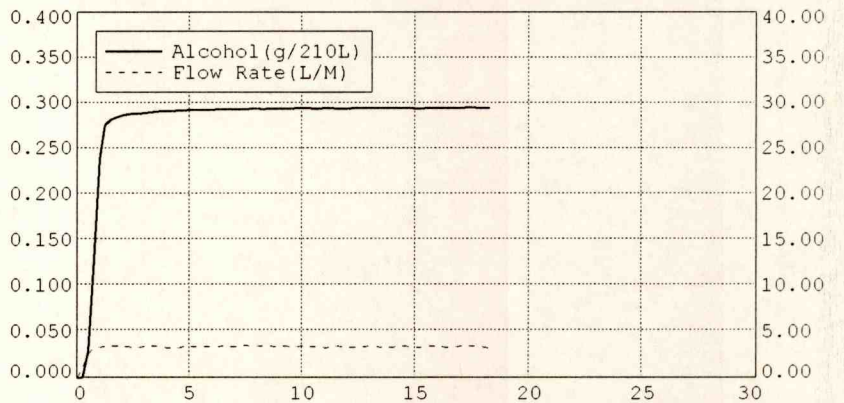
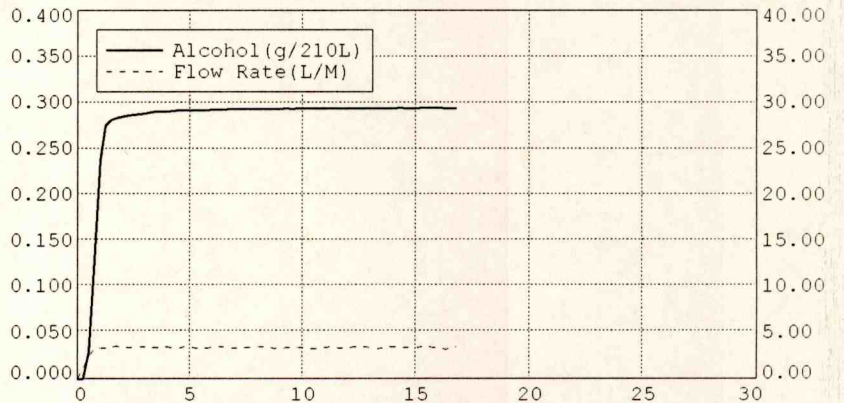
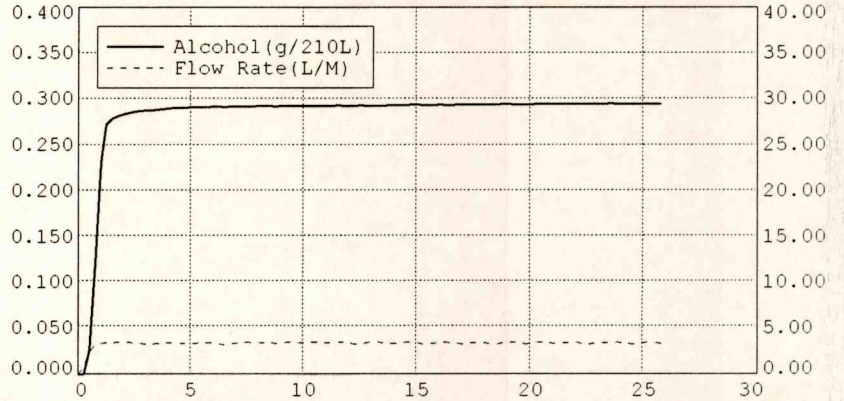
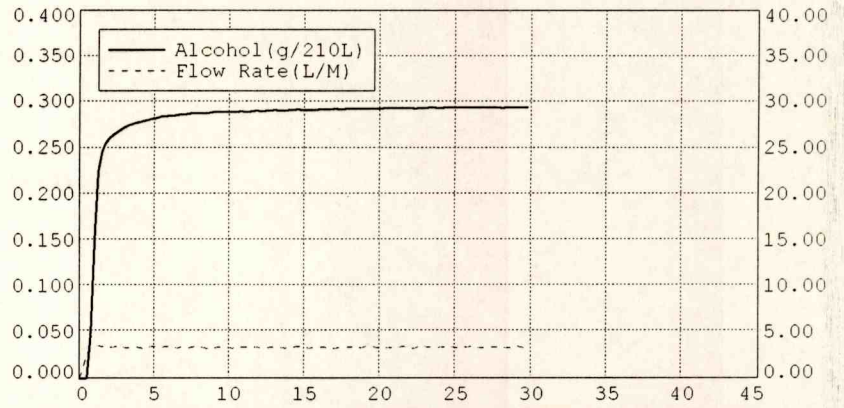
Alaska Department of Public Safety
 DATAMASTER dmt: 100361

Date: 01/22/2020
 Time: 12:47:10

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

BLANK TEST	0.000	12:48
INTERNAL STANDARD	VERIFIED	12:48
EXTERNAL STANDARD	0.295	12:49
BLANK TEST	0.000	12:49
EXTERNAL STANDARD	0.296	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.295	12:51
BLANK TEST	0.000	12:52
EXTERNAL STANDARD	0.296	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.296	12:54
BLANK TEST	0.000	12:55

Average = 0.2956
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety

DATA MASTER dmt: 100361

Date: 01/22/2020

Time: 13:47:34

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 29.49: 0.079

LOT #: AG826101

EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK

PASSED 13:48

BLANK TEST

0.000

INTERNAL STANDARD

VERIFIED 13:48

EXTERNAL STANDARD

0.075

BLANK TEST

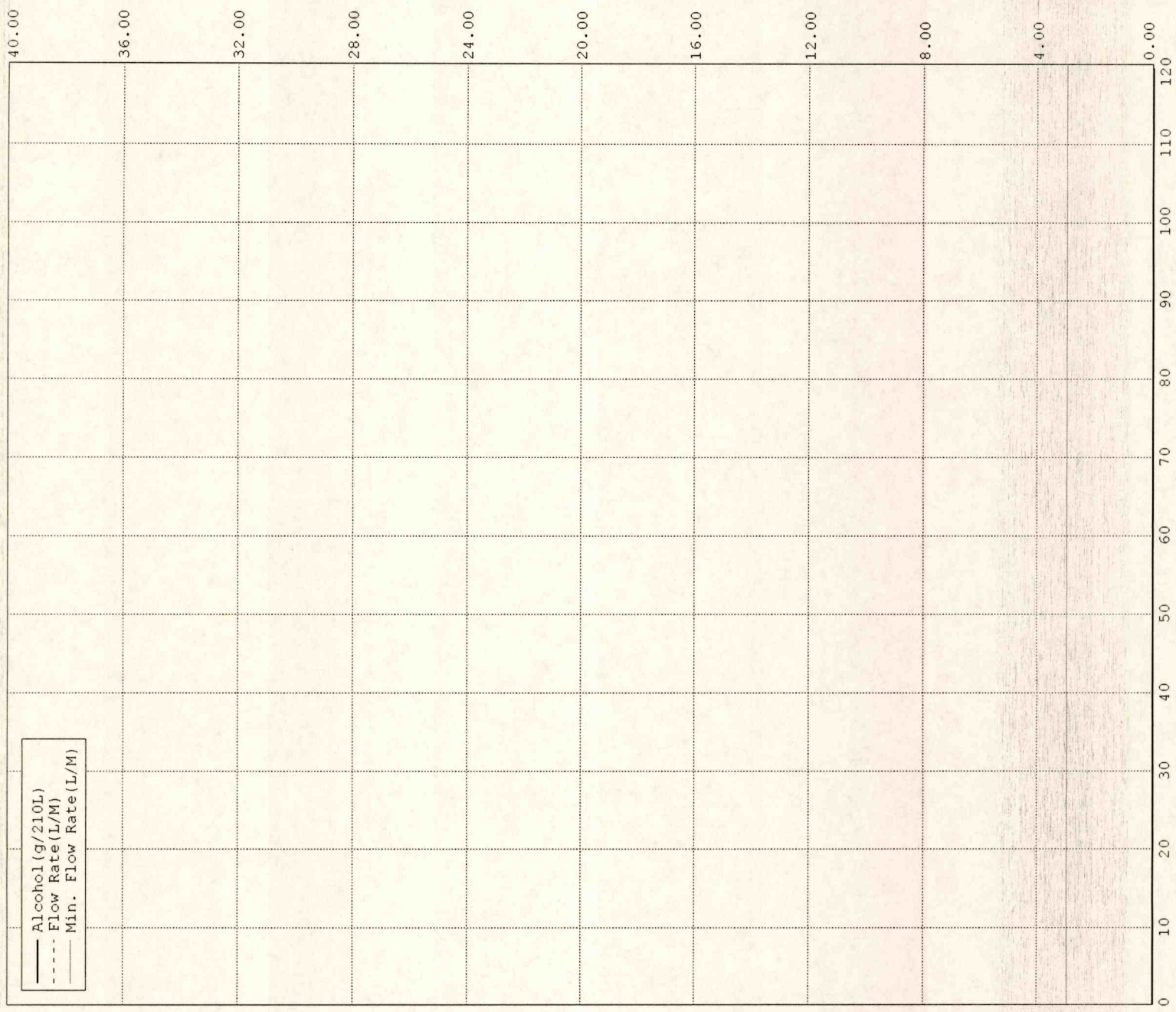
0.000

SUBJECT SAMPLE

INCOMPLETE

13:52

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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 01/22/2020
Time: 14:29:05

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: XXXX

DEPT/AGENCY:
INVALID

CASE/REPORT: XXXX
TEST TYPE: TEST

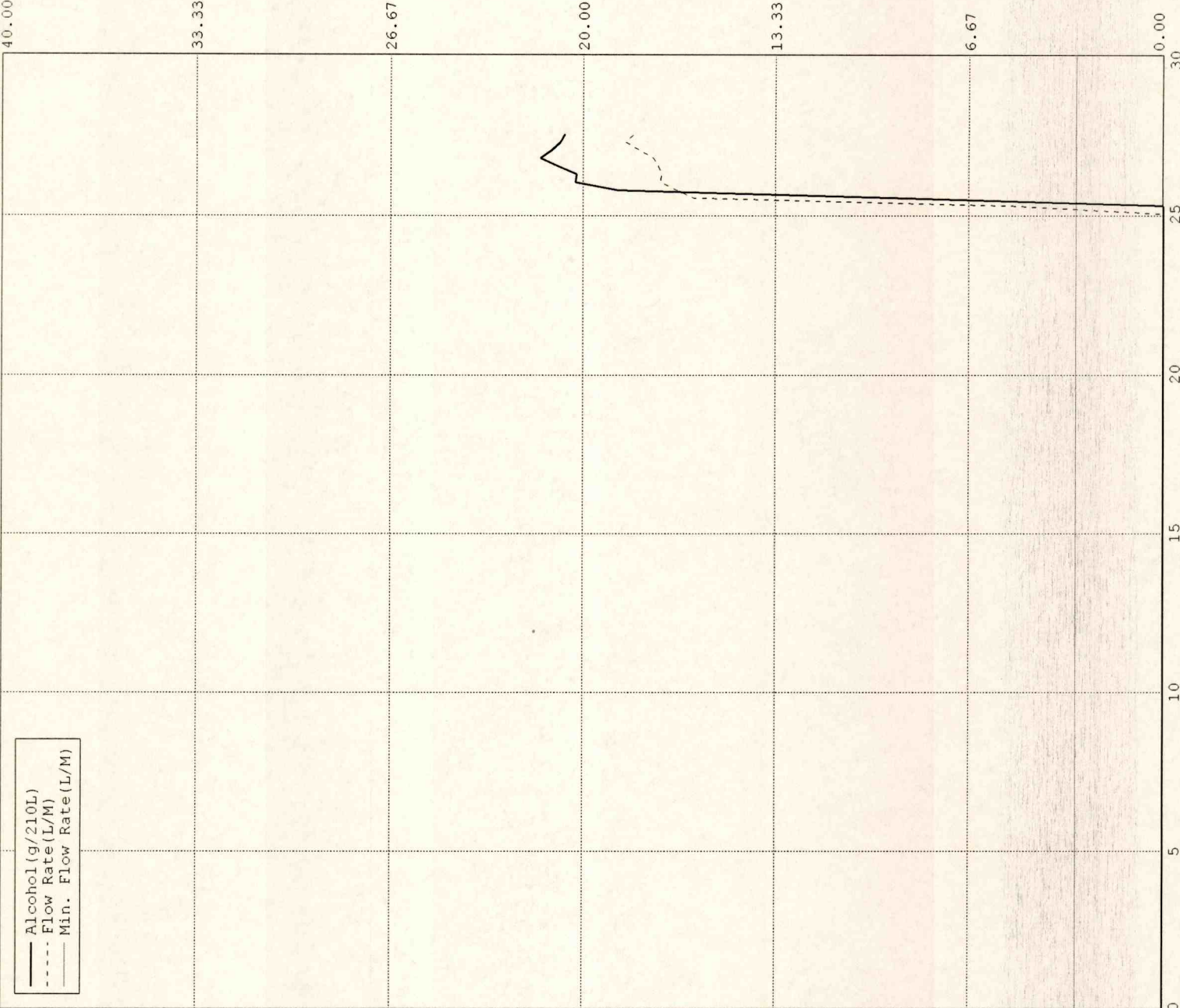
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.49: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	14:30
BLANK TEST	0.000	14:30
INTERNAL STANDARD	VERIFIED	14:30
EXTERNAL STANDARD	0.075	14:30
BLANK TEST	0.000	14:31
SUBJECT SAMPLE	INVALID	14:32

DM

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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 01/22/2020
Time: 14:04:52

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 29.49: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

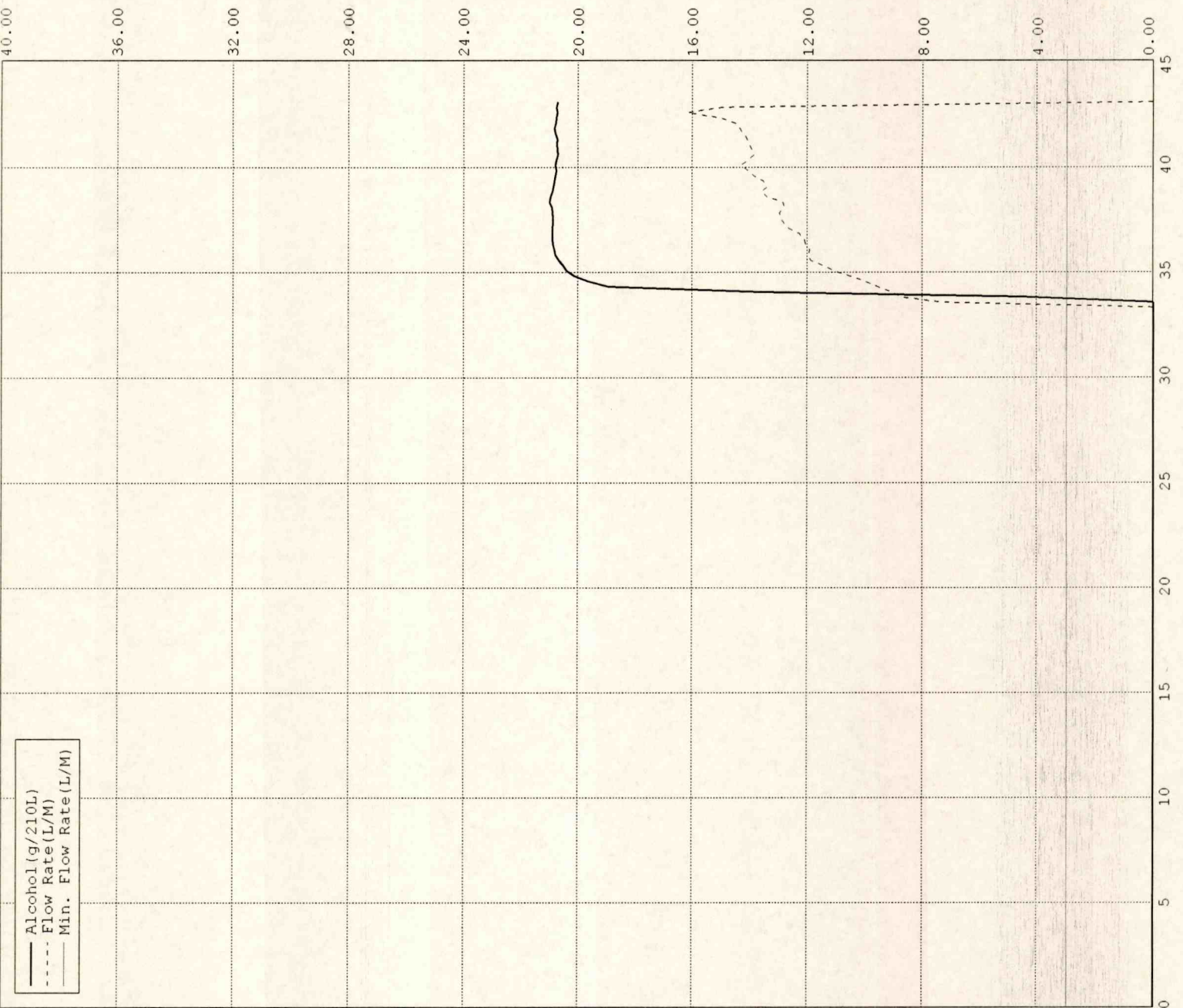
DIAGNOSTIC CHECK PASSED 14:06
BLANK TEST 0.000 14:06
INTERNAL STANDARD VERIFIED 14:06
Xg = 0.079 (0.11%) 0.076 14:06
EXTERNAL STANDARD X[1] = 0.0763 (-0.0001) (0.0030) 0.000 14:07
BLANK TEST XXX 14:08
SUBJECT SAMPLE X[1] = 0.1036 (-0.0213) (-0.0002)

Interference Detected

Filter 2 Avg: 0.0006

Filter 3 Avg: 0.0027

DJK



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 01/22/2020
Time: 14:12:03

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

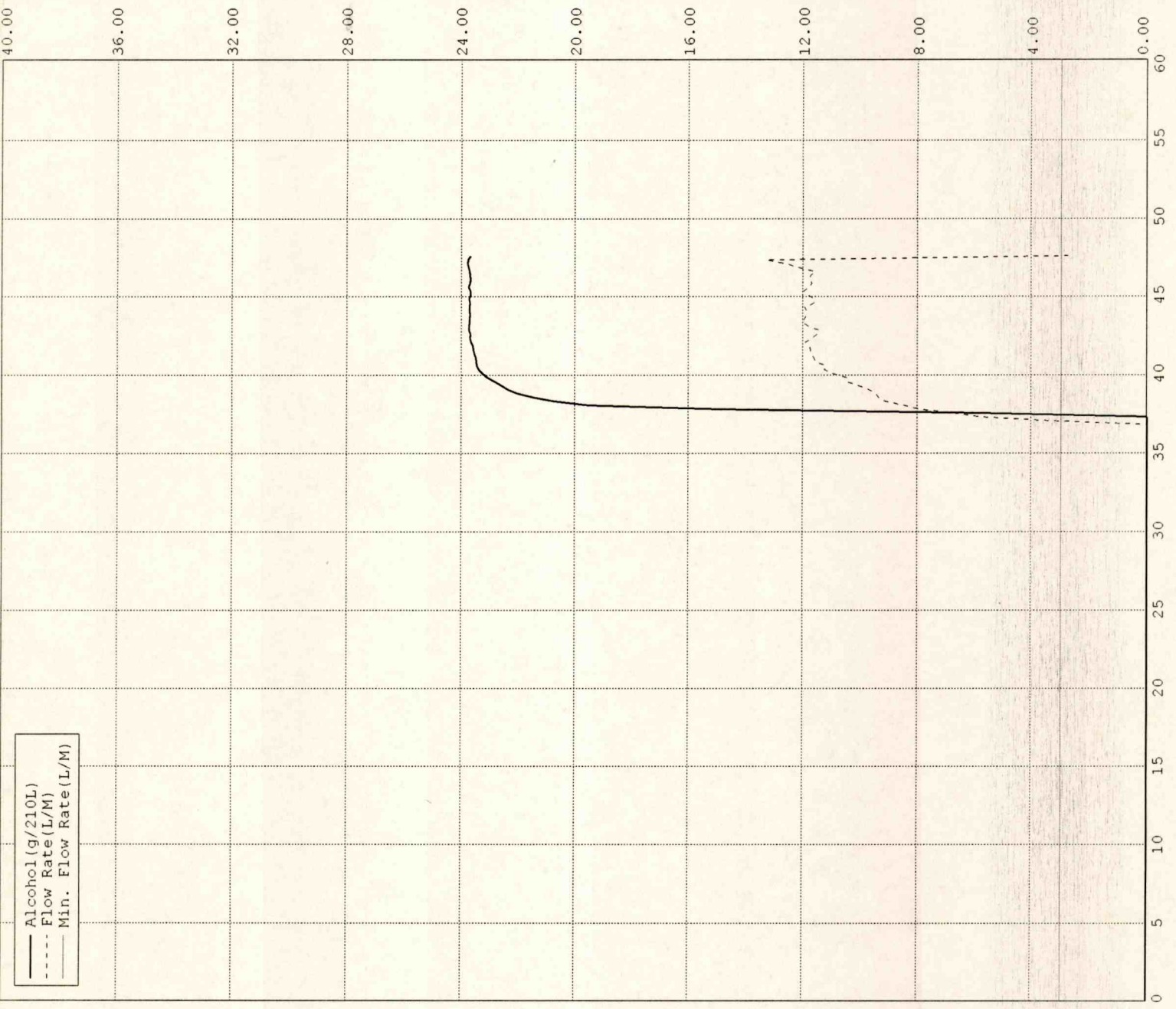
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.49: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 14:13
BLANK TEST 0.000 14:13
INTERNAL STANDARD VERIFIED 14:13
Xq = 0.080 (1.10%)
EXTERNAL STANDARD 0.076 14:13
X[1] = 0.0765 (0.0007) (0.0026)
BLANK TEST 0.000 14:14
SUBJECT SAMPLE XXX 14:15
X[1] = 0.1185 (-0.0267) (0.0014)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 01/22/2020
Time: 14:17:24

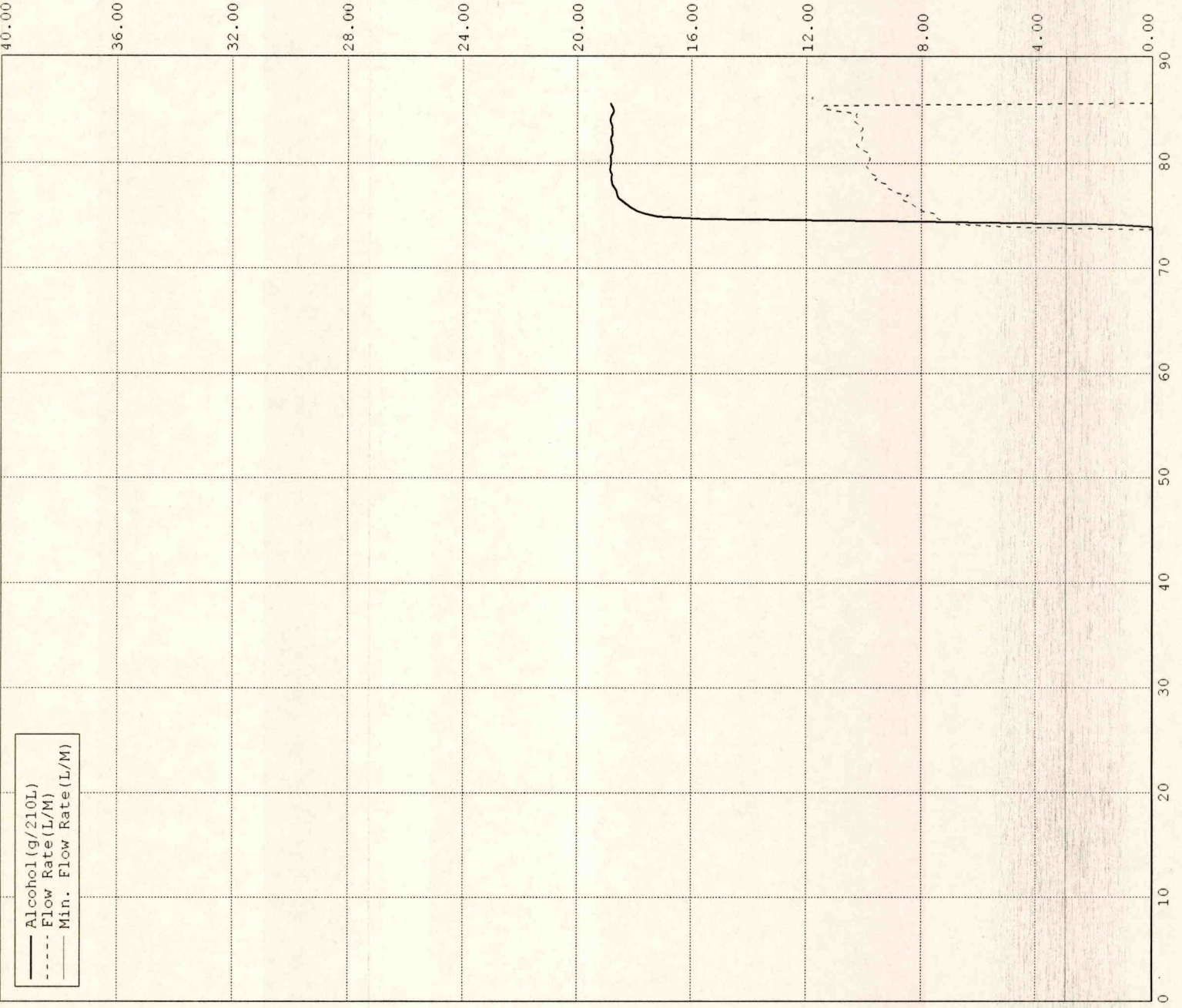
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 29.49: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	14:20
BLANK TEST	0.000	14:20
INTERNAL STANDARD	VERIFIED	14:20
Xq = 0.080 (0.55%)		
EXTERNAL STANDARD	0.076	14:20
X[1] = 0.0763 (0.0010) (0.0027)		
BLANK TEST	0.000	14:21
SUBJECT SAMPLE (Vol=1.84L)	0.094	14:23
X[1] = 0.0943 (0.0009) (0.0011)		
BLANK TEST	0.000	14:24
EXTERNAL STANDARD	0.076	14:24
X[1] = 0.0755 (0.0007) (0.0026)		
BLANK TEST	0.000	14:25



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 01/22/2020
Time: 13:56:38

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

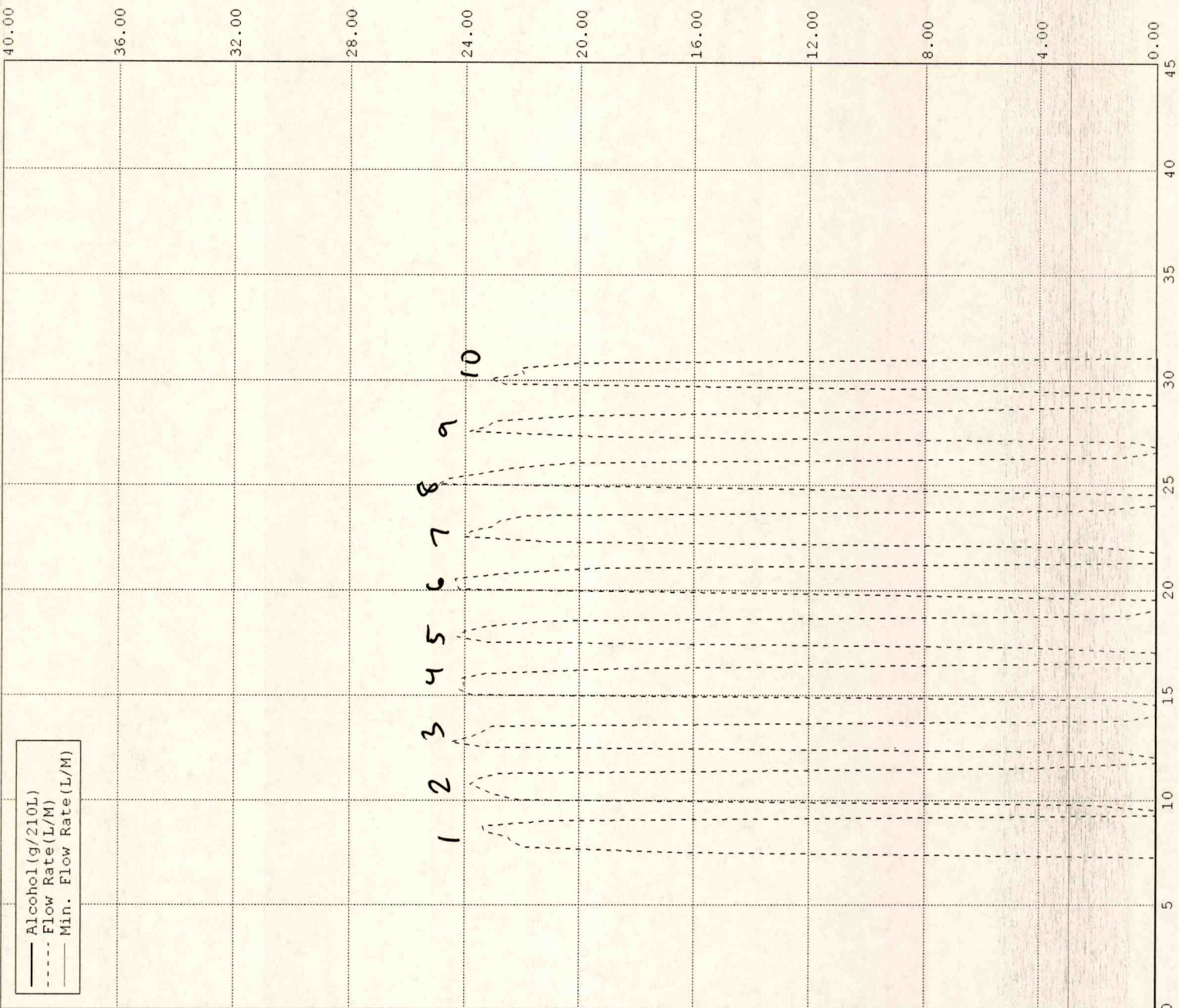
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.49: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:58
BLANK TEST 0.000 13:58
INTERNAL STANDARD VERIFIED 13:58
EXTERNAL STANDARD 0.075 13:58
BLANK TEST 0.000 13:59
SUBJECT SAMPLE XXX 14:00

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100361

Date: 01/22/2020
Time: 14:36:08

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: XXXX

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

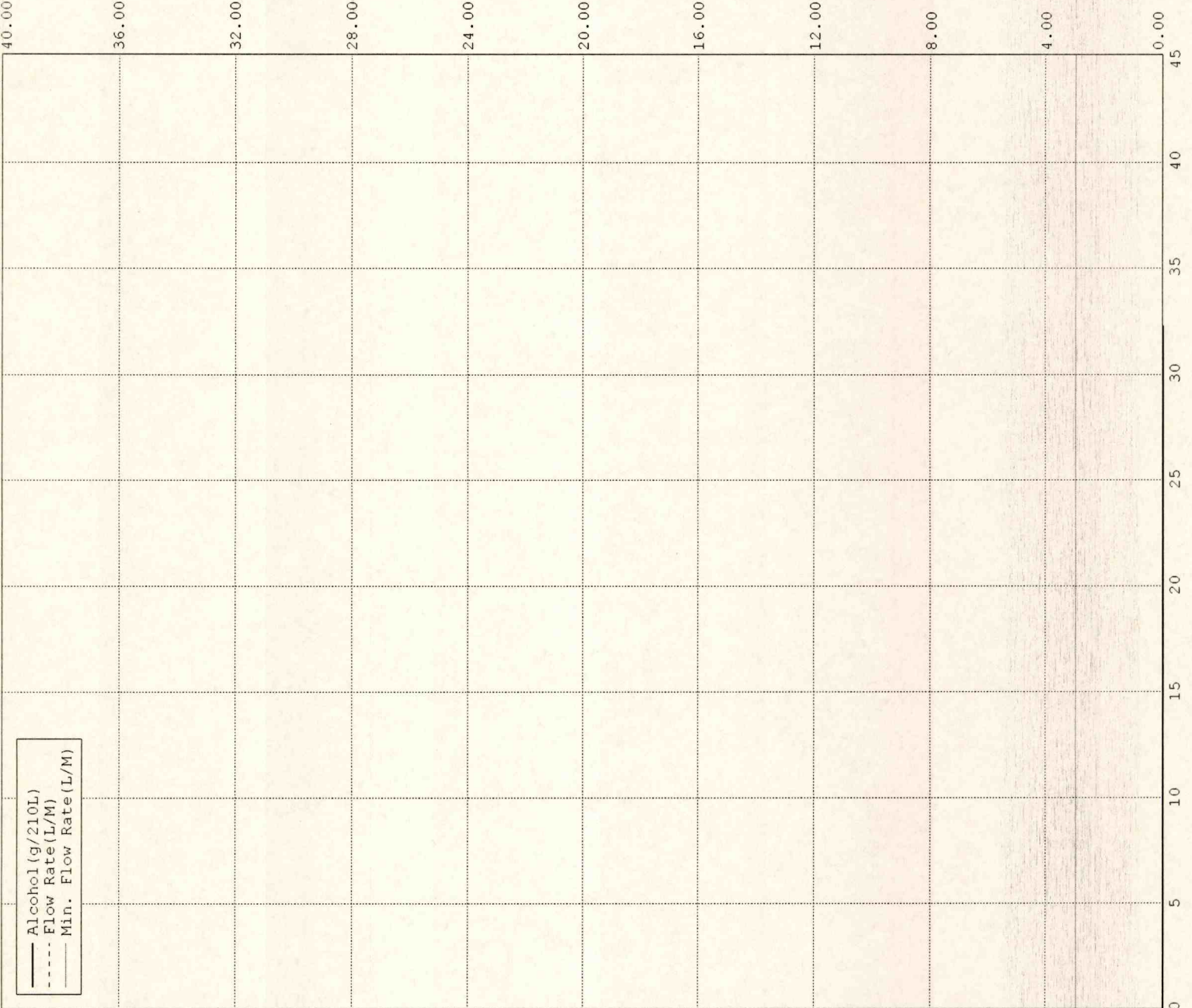
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.49: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK
BLANK TEST PASSED 14:38
INTERNAL STANDARD 0.000 14:38
EXTERNAL STANDARD 0.075 14:38
BLANK TEST 0.000 14:39

RFI DETECTED

Handwritten signature



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100361

Date: 01/22/2020

Time: 16:09:44

SUBJECT NAME:

TEST TEST

LICENSE #: XXXX

OPERATOR NAME:

DEREK WALTON

OPERATOR'S #: XXXX

DEPT/AGENCY:

NON-DRINKING SUBJECT

CASE/REPORT: XXXX

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.48: 0.079

LOT #: AG826101

EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK

BLANK TEST

INTERNAL STANDARD

EXTERNAL STANDARD

BLANK TEST

SUBJECT SAMPLE (Vol=2.27L)

BLANK TEST

EXTERNAL STANDARD

BLANK TEST

PASSED 16:10
0.000 16:10
VERIFIED 16:10
0.076 16:11
0.000 16:12
0.000 16:12
0.000 16:13
0.076 16:13
0.000 16:14

Handwritten signature

