

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 100679 Analyst Derck Walton Start Date 03/20/20

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 1.6 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 07/18/20
 - iv. 0.100g/210L Mnf Airgas Lot AG924 AG924701 Exp 09/04/21
 - v. 0.200g/210L Mnf Auto Lot 19200 Exp 08/06/21
 - 1. Simulator S/N DR4176 Date Calibrated 10/07/19
 - vi. 0.300g/210L Mnf Auto Lot 19330 Exp 11/13/21
 - 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 Auto Lot 19301 Level 0.100 Exp 10/30/21
 - 1. Simulator S/N DR4162 Date Calibrated 10/07/19
- ii. Isopropanol - Mnf Auto Lot 19301 Level 0.100 Exp 10/30/21
 - 1. Simulator S/N DR4163 Date Calibrated 10/04/19
- iii. Negative Control - Mnf Auto Lot 19301 Level 0.100 Exp 10/30/21
 - 1. Simulator S/N SD1176 Date Calibrated 10/07/19

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 03/23/20

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 03/20/2020
Time: 16:52:20

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 = 48.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.83 V PASSED
(1.00 V - 2.34 V)
Cooler Voltage = 1.73 V PASSED
(1.00 V - 2.32 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 532 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 30.3 in

PUMP INFO

Flow Rate = 4.098 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 ✓

Xq = 0.100 0.18% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100679

Date: 03/20/2020
Time: 5:04 PM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 47.3°C

Current Barometer 30.3 in
Volume (Ltr) 1.43

Settings

Lamp: 1.96 V
Bias: 79 V
Cooler: 1.73 V
Chopper: 524 Hz

Voltages (V)

Flow: 1.05 V
Detector: 0.016 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 10/26/2011
Time: 06:48:21

Ca = 0.1000
CAL = 0.972703 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0035 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0998 0.0500 <= Xq < 0.2000
a21 = 1.124684 1.050 <= a21 < 1.300
a31 = 0.535932 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 03/20/2020
Time: 17:09:29

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

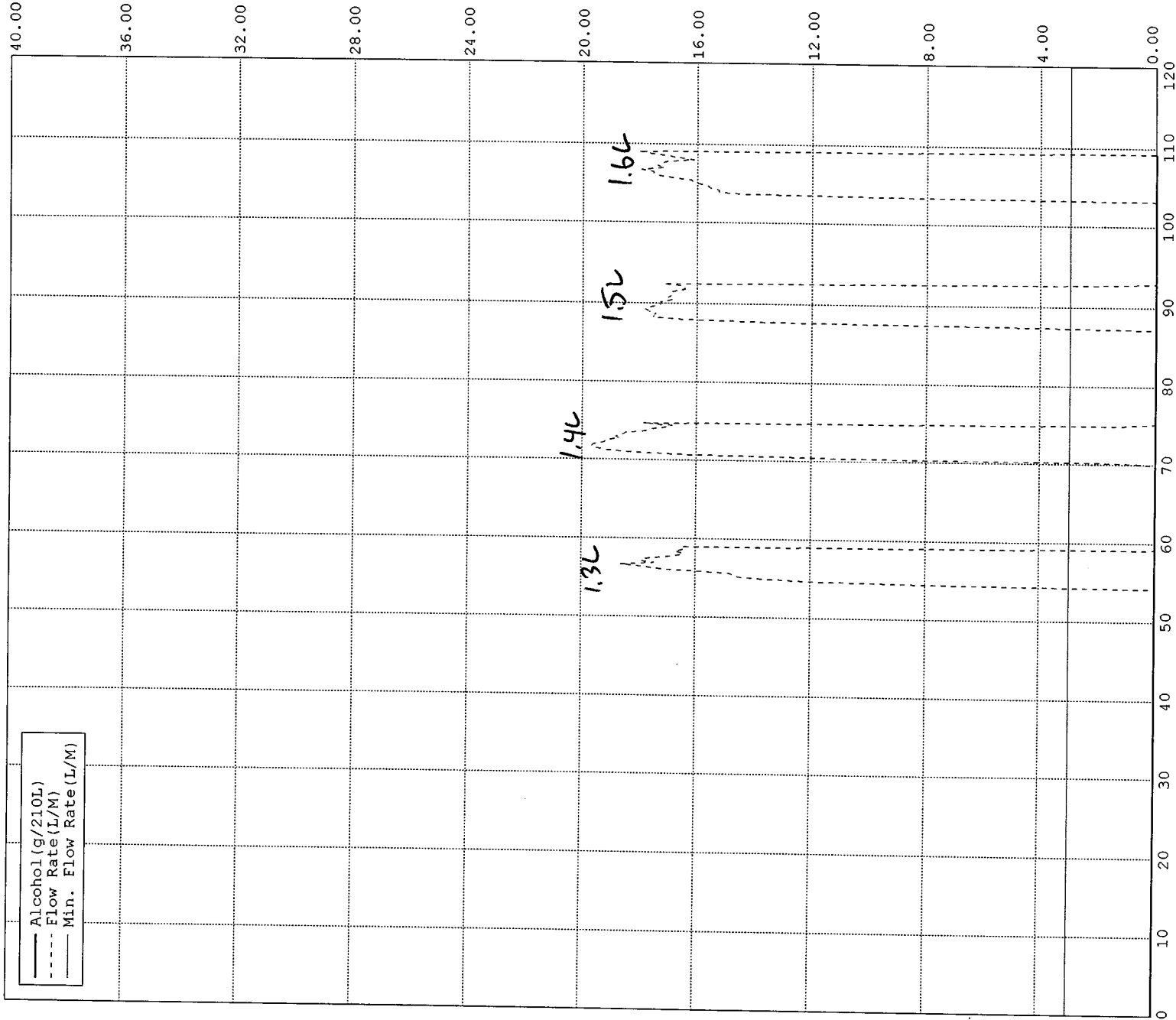
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.30: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	17:10
BLANK TEST	0.000	17:10
INTERNAL STANDARD	VERIFIED	17:10
EXTERNAL STANDARD	0.080	17:10
BLANK TEST	0.000	17:11
SUBJECT SAMPLE (Vol=1.57L)	0.000	17:13
BLANK TEST	0.000	17:14
EXTERNAL STANDARD	0.081	17:14
BLANK TEST	0.000	17:15



LINEARITY CHECK

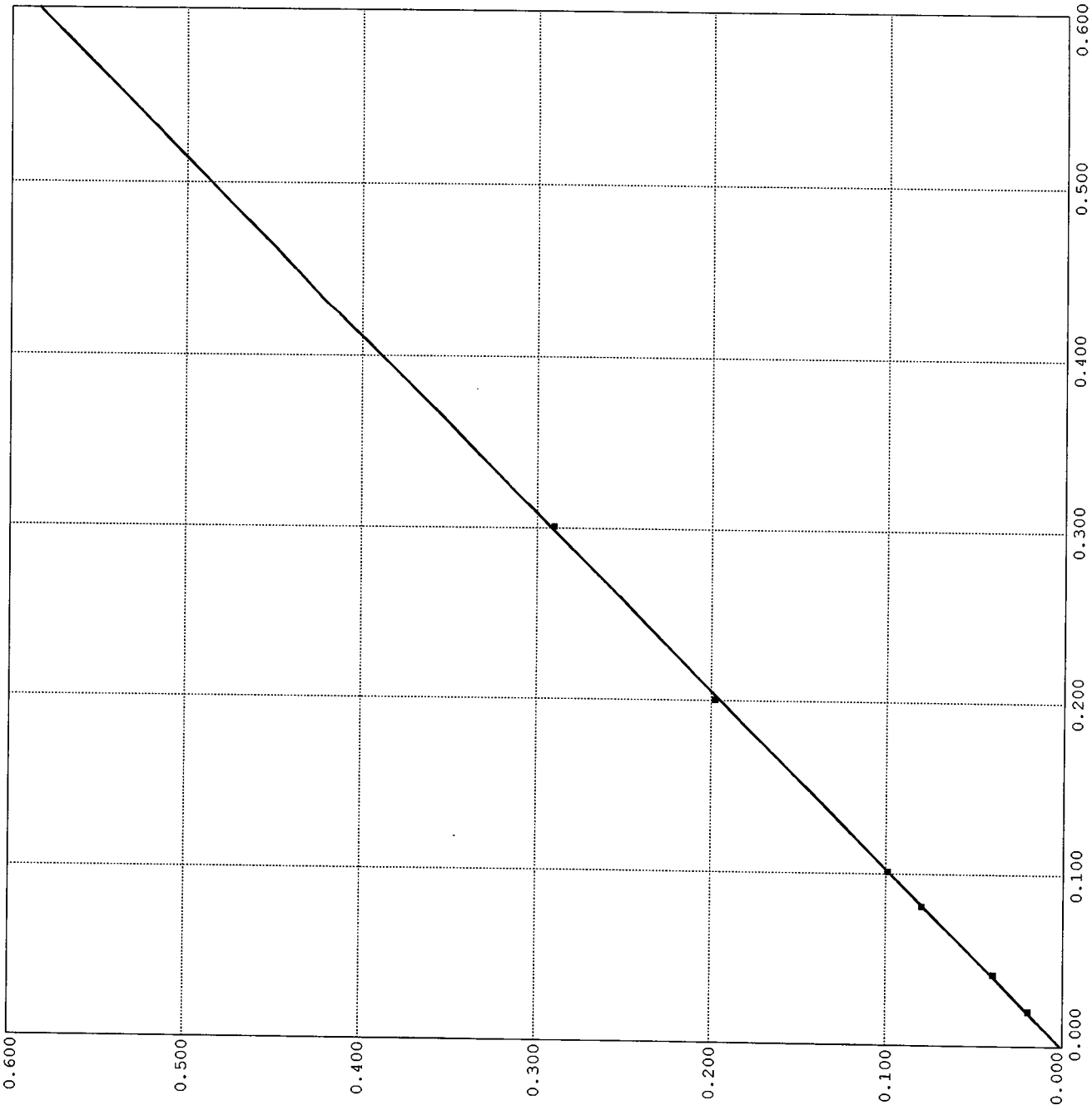
 Alaska Department of Public Safety
 DATAMASTER dmt: 100679

Date: 03/20/2020
 Time: 17:22:43

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0202	0.0004
0.041	0.0400	0.0000
0.081	0.0808	0.0004
0.101	0.1000	0.0000
0.200	0.1986	0.0011
0.300	0.2910	0.0007

SLOPE = 0.971872
 R² = 0.999731



Handwritten signature

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100679

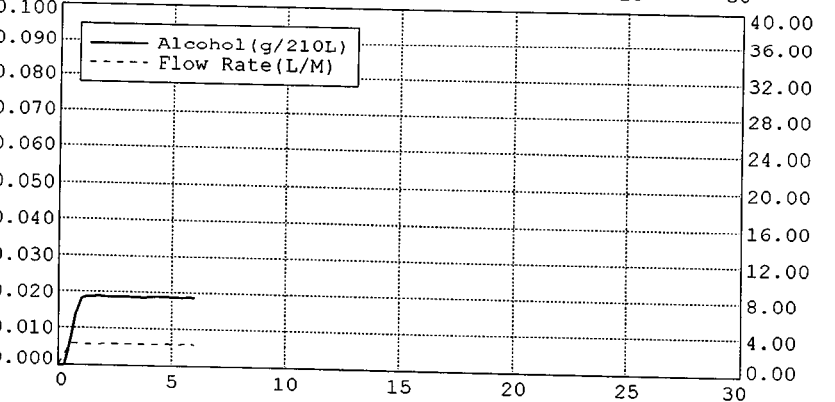
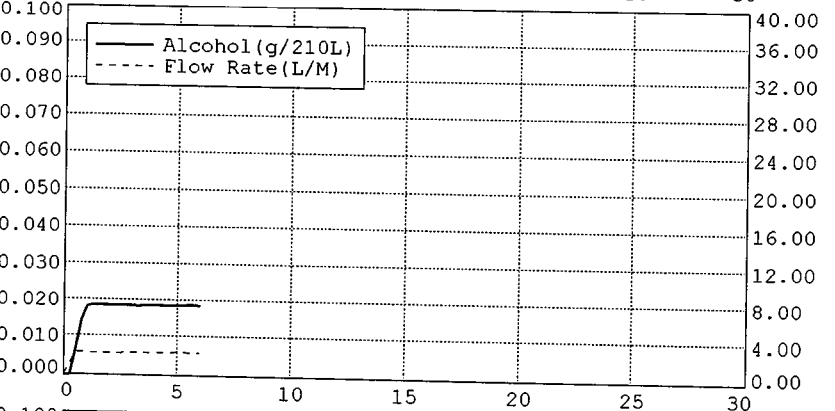
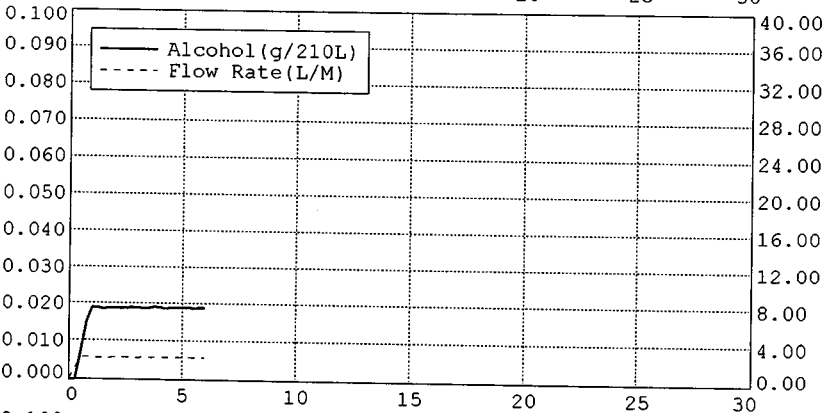
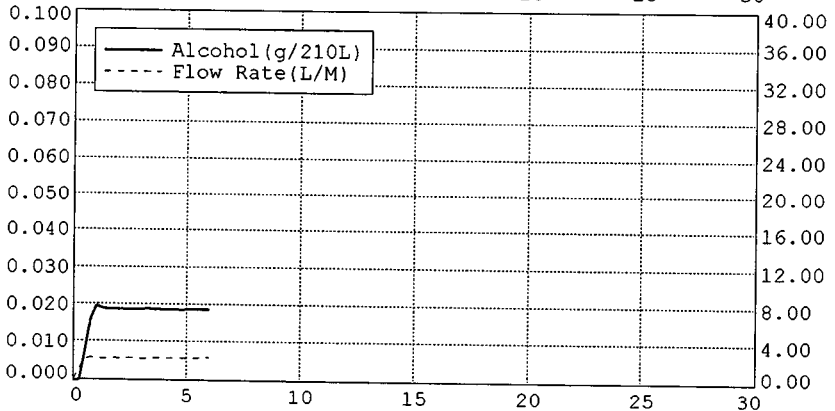
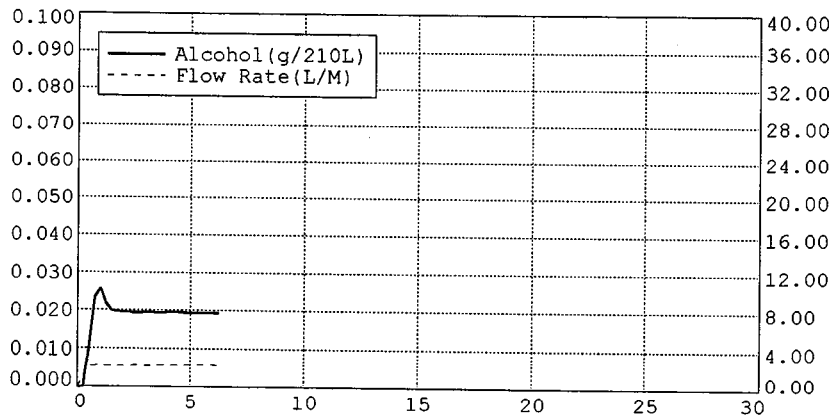
Date: 03/20/2020
 Time: 17:22:45

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 30.30: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 944 psi

BLANK TEST	0.000	17:23
INTERNAL STANDARD	VERIFIED	17:24
EXTERNAL STANDARD	0.021	17:24
BLANK TEST	0.000	17:25
EXTERNAL STANDARD	0.020	17:25
BLANK TEST	0.000	17:26
EXTERNAL STANDARD	0.020	17:26
BLANK TEST	0.000	17:27
EXTERNAL STANDARD	0.020	17:27
BLANK TEST	0.000	17:28
EXTERNAL STANDARD	0.020	17:28
BLANK TEST	0.000	17:29

Average = 0.0202
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100679

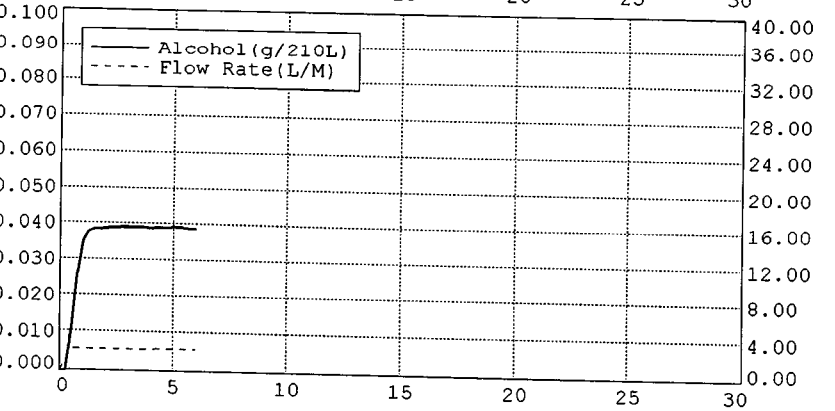
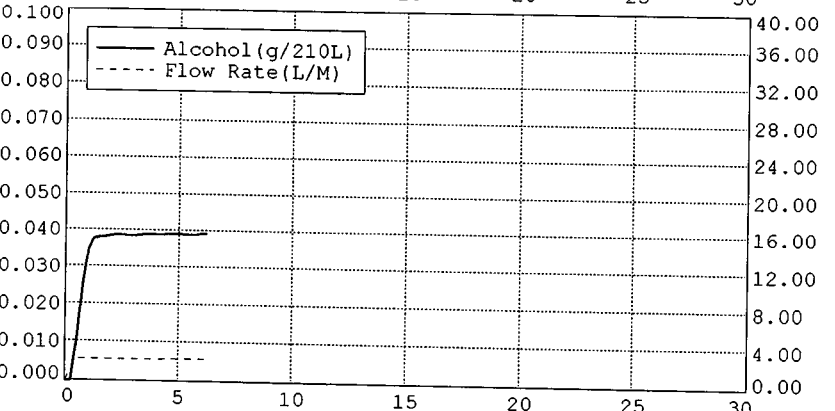
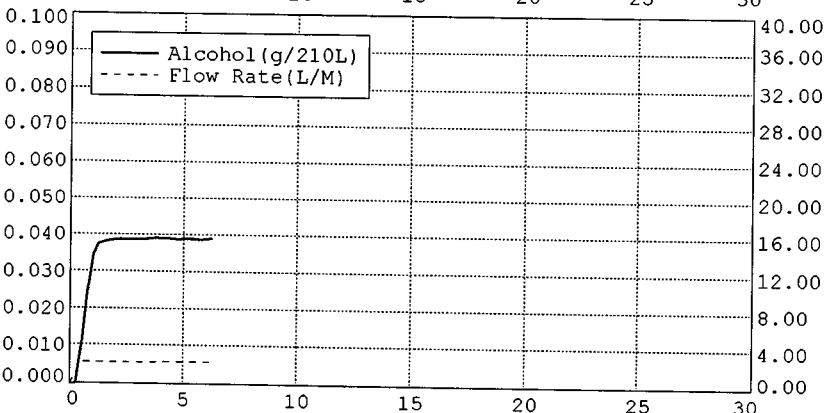
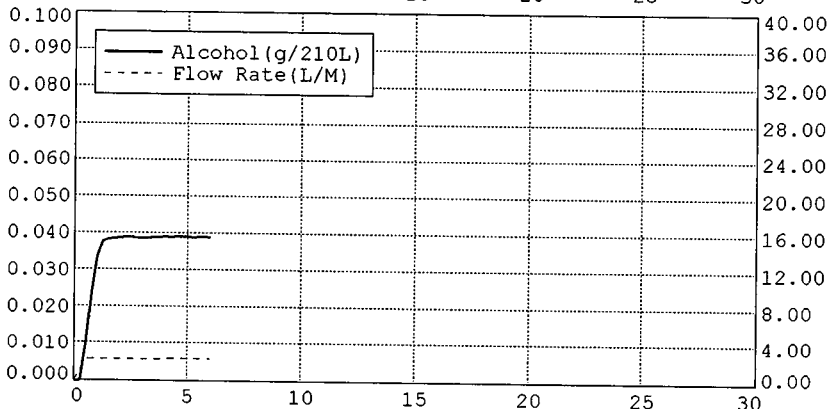
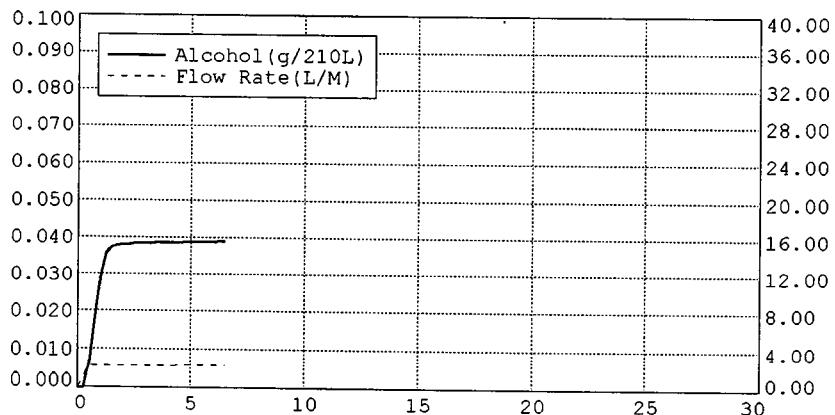
Date: 03/20/2020
 Time: 17:31:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 30.31: 0.041
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 773 psi

BLANK TEST	0.000	17:32
INTERNAL STANDARD	VERIFIED	17:32
EXTERNAL STANDARD	0.040	17:33
BLANK TEST	0.000	17:34
EXTERNAL STANDARD	0.040	17:34
BLANK TEST	0.000	17:35
EXTERNAL STANDARD	0.040	17:35
BLANK TEST	0.000	17:36
EXTERNAL STANDARD	0.040	17:36
BLANK TEST	0.000	17:37
EXTERNAL STANDARD	0.040	17:37
BLANK TEST	0.000	17:38

Average = 0.0400
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100679

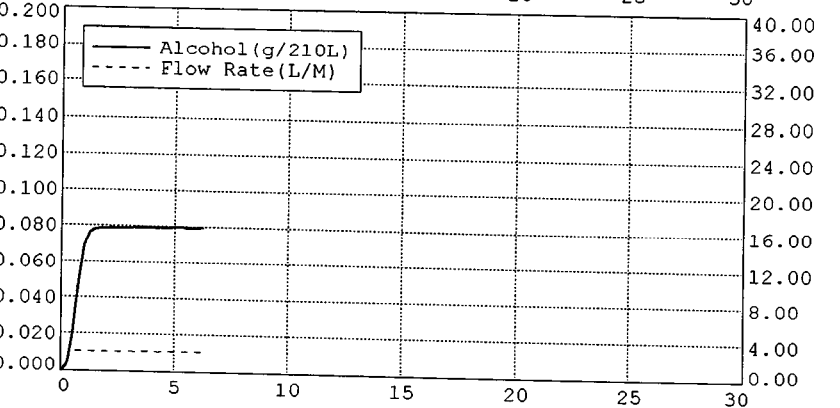
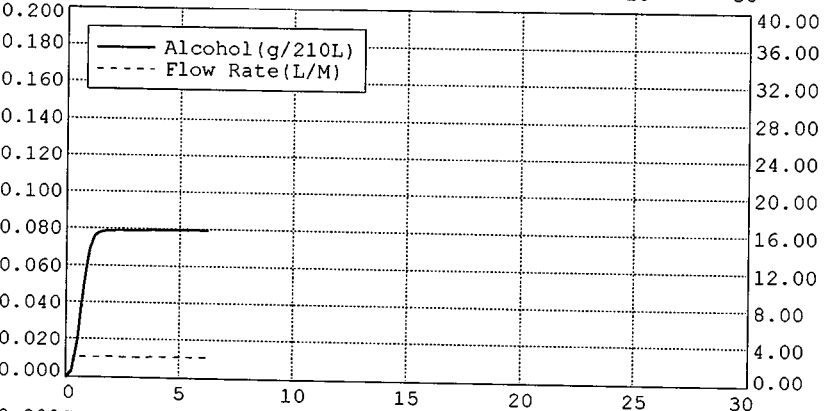
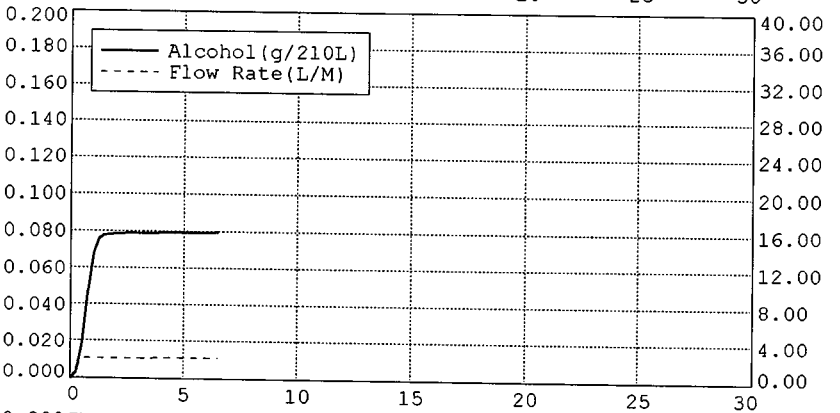
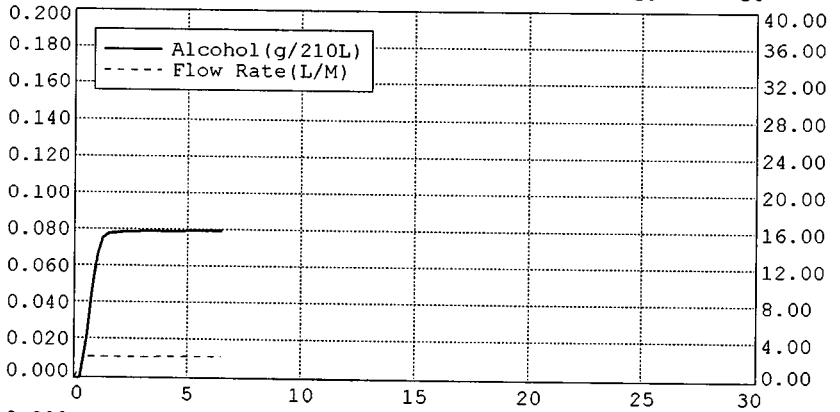
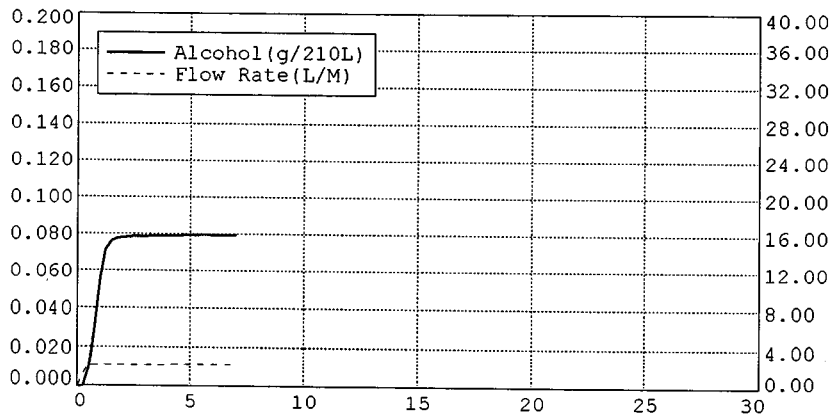
Date: 03/20/2020
 Time: 17:41:28

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 30.30: 0.081
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 608 psi

BLANK TEST	0.000	17:42
INTERNAL STANDARD	VERIFIED	17:42
EXTERNAL STANDARD	0.081	17:43
BLANK TEST	0.000	17:44
EXTERNAL STANDARD	0.080	17:44
BLANK TEST	0.000	17:45
EXTERNAL STANDARD	0.081	17:45
BLANK TEST	0.000	17:46
EXTERNAL STANDARD	0.081	17:46
BLANK TEST	0.000	17:47
EXTERNAL STANDARD	0.081	17:47
BLANK TEST	0.000	17:48

Average = 0.0808
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100679

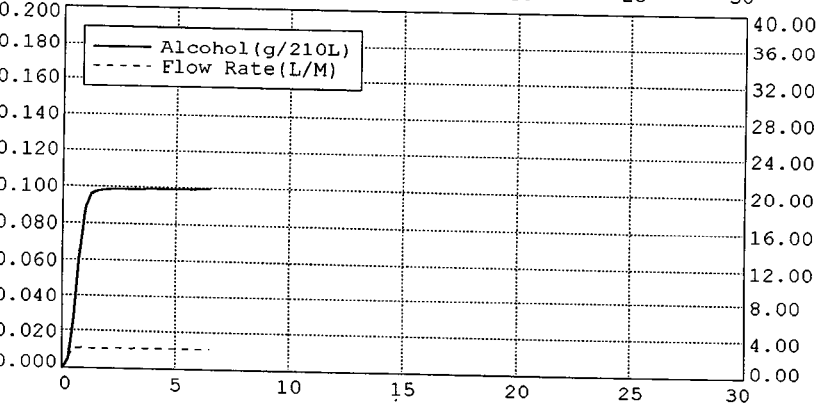
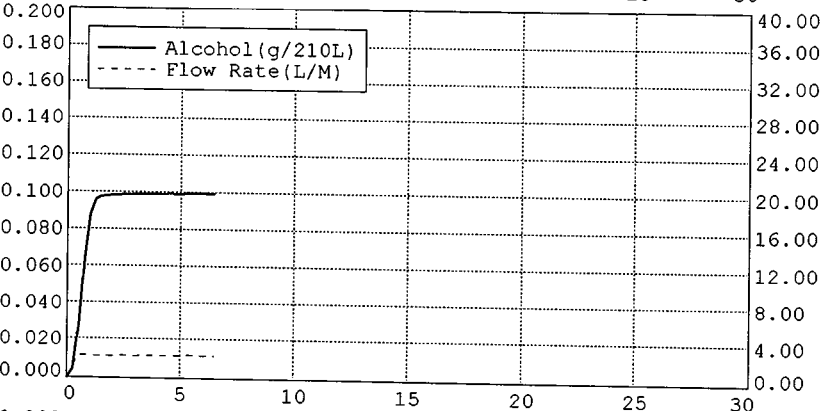
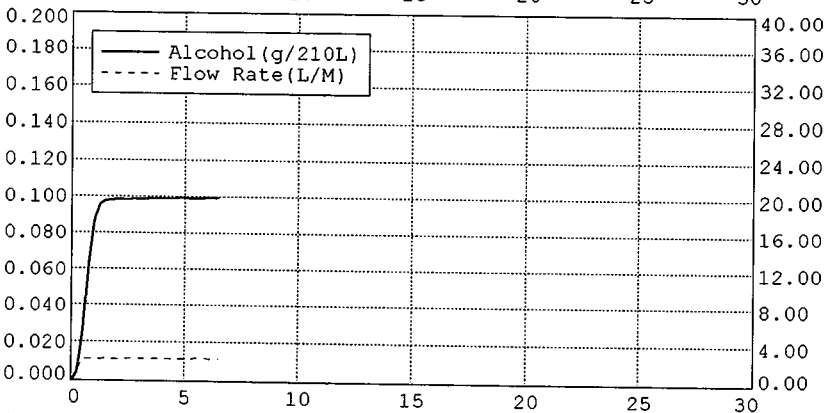
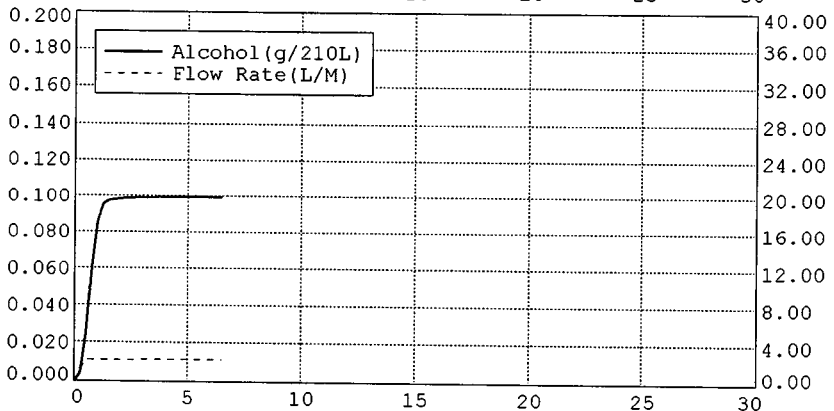
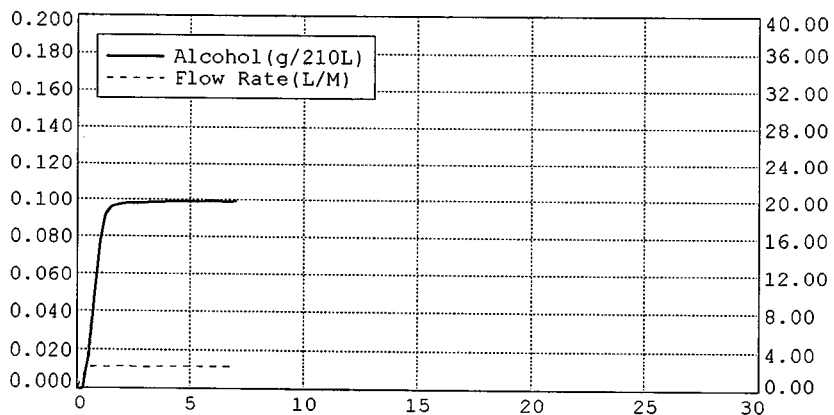
Date: 03/20/2020
 Time: 17:50:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 30.31: 0.101
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 994 psi

BLANK TEST	0.000	17:51
INTERNAL STANDARD	VERIFIED	17:51
EXTERNAL STANDARD	0.100	17:52
BLANK TEST	0.000	17:53
EXTERNAL STANDARD	0.100	17:53
BLANK TEST	0.000	17:54
EXTERNAL STANDARD	0.100	17:54
BLANK TEST	0.000	17:55
EXTERNAL STANDARD	0.100	17:55
BLANK TEST	0.000	17:56
EXTERNAL STANDARD	0.100	17:56
BLANK TEST	0.000	17:57

Average = 0.1000
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100679

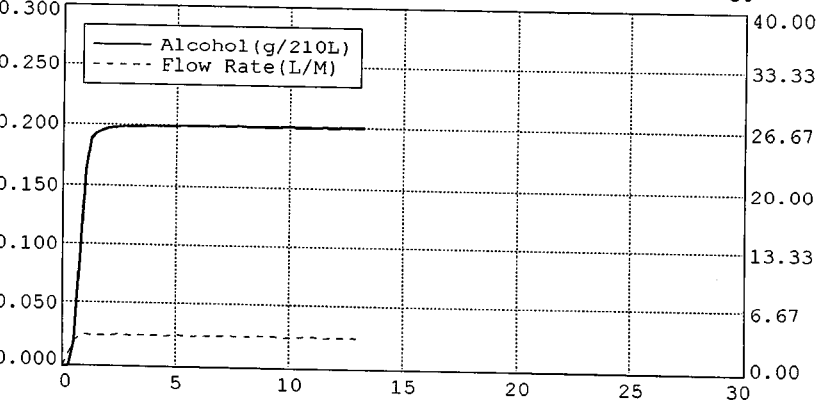
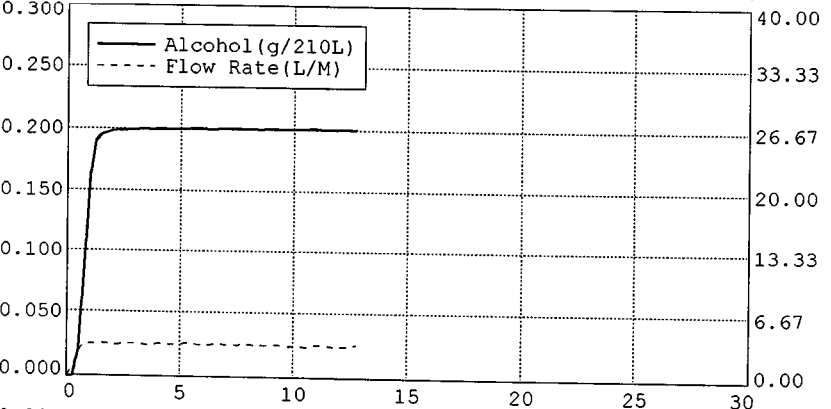
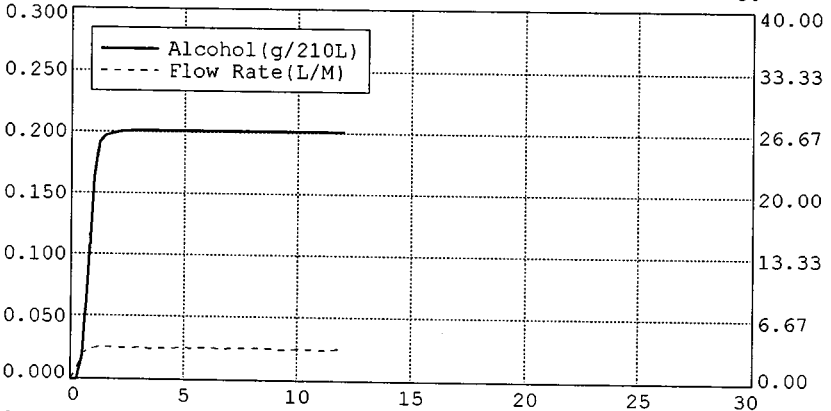
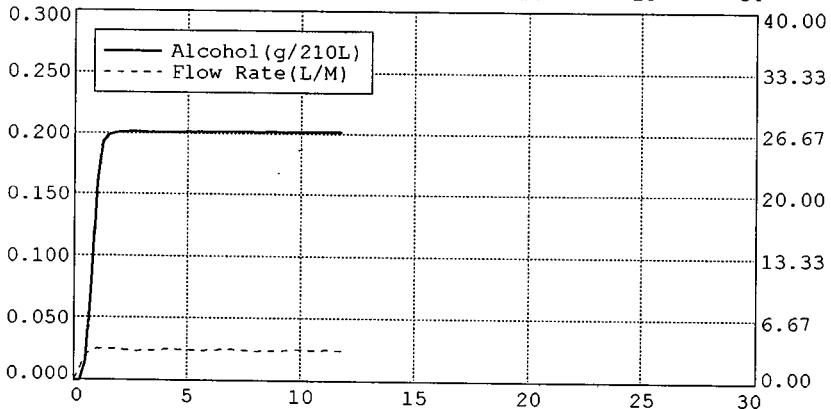
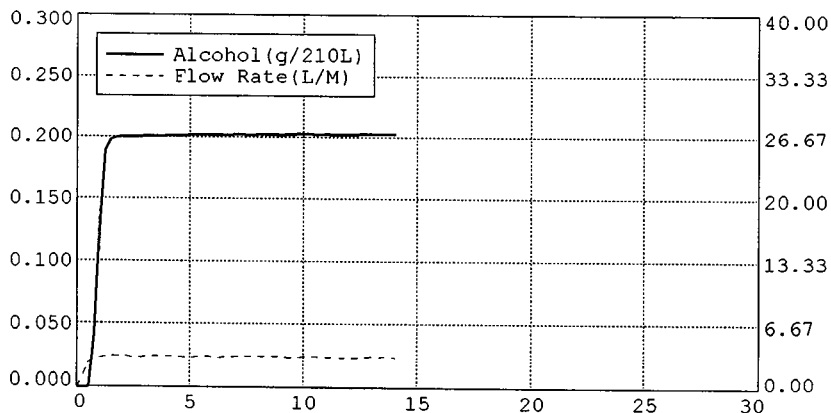
Date: 03/20/2020
 Time: 17:57:45

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	17:59
INTERNAL STANDARD	VERIFIED	17:59
EXTERNAL STANDARD	0.200	17:59
BLANK TEST	0.000	18:00
EXTERNAL STANDARD	0.199	18:01
BLANK TEST	0.000	18:02
EXTERNAL STANDARD	0.199	18:02
BLANK TEST	0.000	18:03
EXTERNAL STANDARD	0.198	18:03
BLANK TEST	0.000	18:04
EXTERNAL STANDARD	0.197	18:04
BLANK TEST	0.000	18:05

Average = 0.1986
 Std Dev = 0.0011



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100679

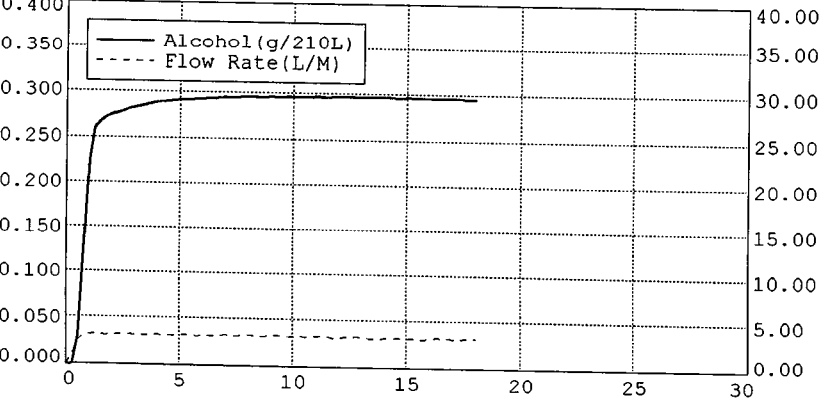
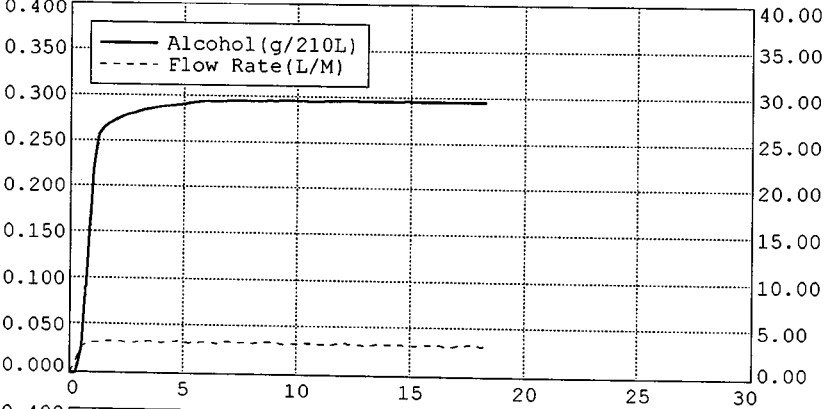
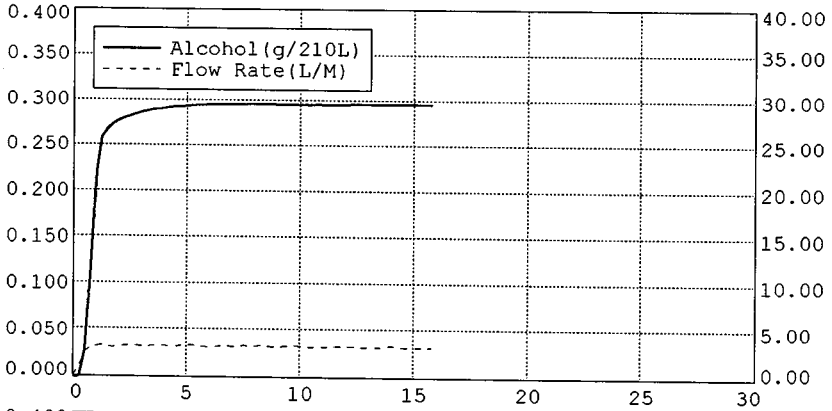
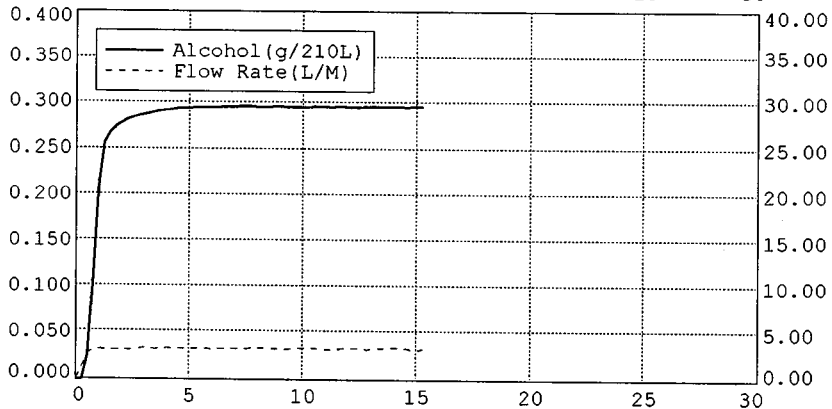
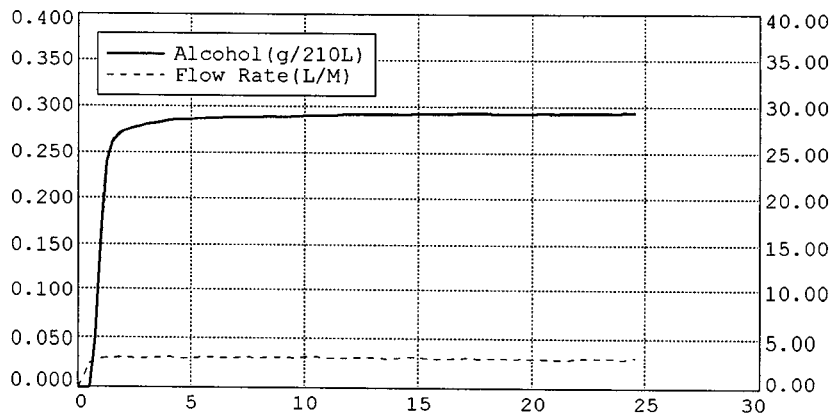
Date: 03/20/2020
 Time: 18:08:10

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	18:09
INTERNAL STANDARD	VERIFIED	18:09
EXTERNAL STANDARD	0.290	18:09
BLANK TEST	0.000	18:10
EXTERNAL STANDARD	0.291	18:11
BLANK TEST	0.000	18:12
EXTERNAL STANDARD	0.291	18:12
BLANK TEST	0.000	18:13
EXTERNAL STANDARD	0.291	18:13
BLANK TEST	0.000	18:14
EXTERNAL STANDARD	0.292	18:15
BLANK TEST	0.000	18:16

Average = 0.2910
 Std Dev = 0.0007



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100679

Date: 03/20/2020
Time: 18:22:28

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

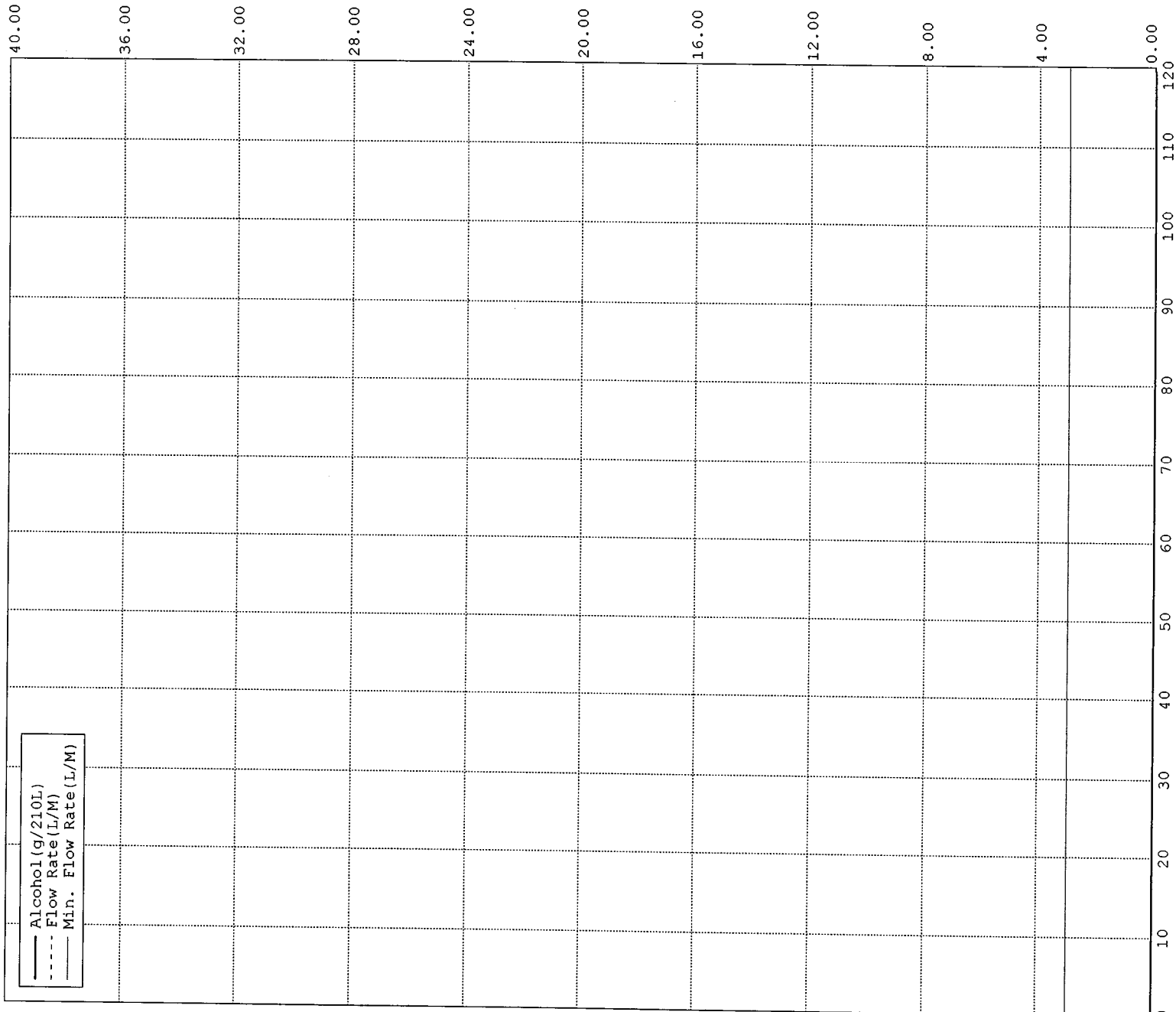
DEPT/AGENCY:
INCOMPLETE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.31: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 18:24
BLANK TEST 0.000 18:24
INTERNAL STANDARD VERIFIED 18:24
EXTERNAL STANDARD 0.080 18:24
BLANK TEST 0.000 18:25
SUBJECT SAMPLE INCOMPLETE 18:27

WRC



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 03/20/2020
Time: 20:40:11

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

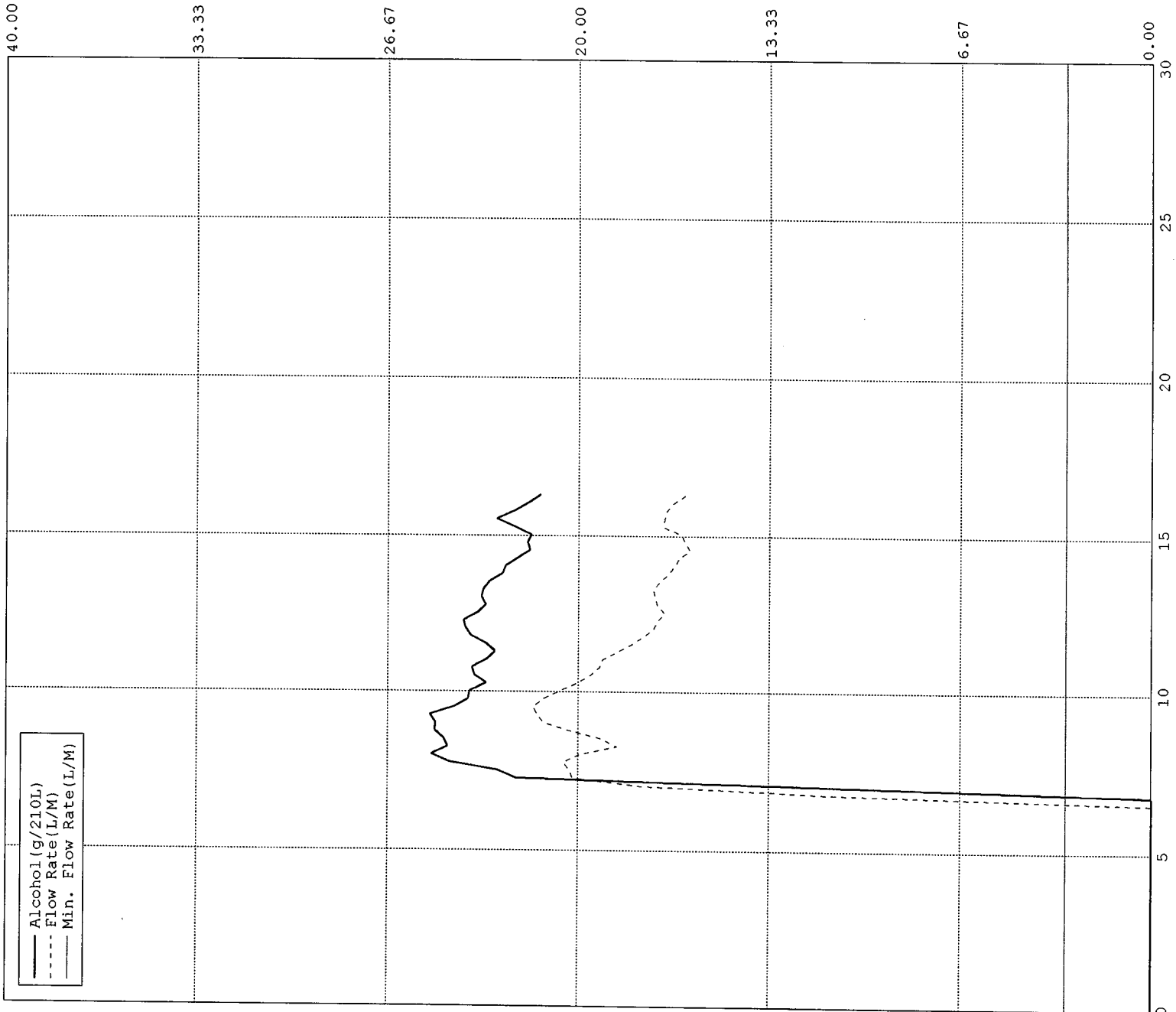
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.27: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 20:48
BLANK TEST 0.000 20:49
INTERNAL STANDARD VERIFIED 20:49
EXTERNAL STANDARD 0.078 20:49
BLANK TEST 0.000 20:50
SUBJECT SAMPLE INVALID 20:50



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 03/23/2020
Time: 15:44:45

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 30.27: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

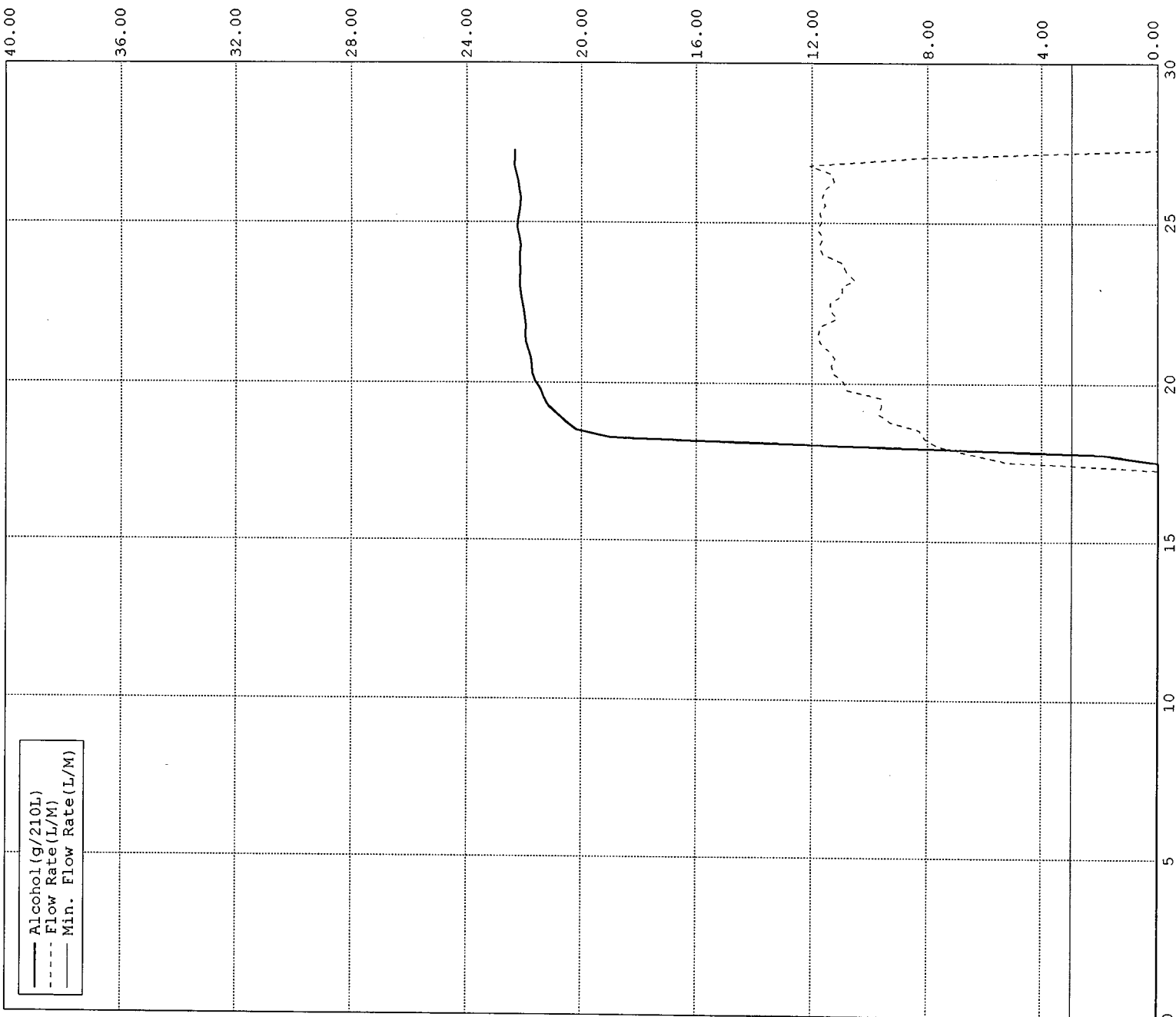
DIAGNOSTIC CHECK	PASSED	15:46
BLANK TEST	0.000	15:46
INTERNAL STANDARD	VERIFIED	15:46
Xq = 0.100 (0.09%)		
EXTERNAL STANDARD	0.081	15:46
X[1] = 0.0805 (-0.0002) (0.0020)		
BLANK TEST	0.000	15:47
SUBJECT SAMPLE	XXX	15:47
X[1] = 0.1118 (-0.0180) (0.0026)		

Interference Detected

Filter 2Ag: -0.0005

Filter 3Ag: 0.0021

DMV



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 03/23/2020
Time: 15:58:42

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

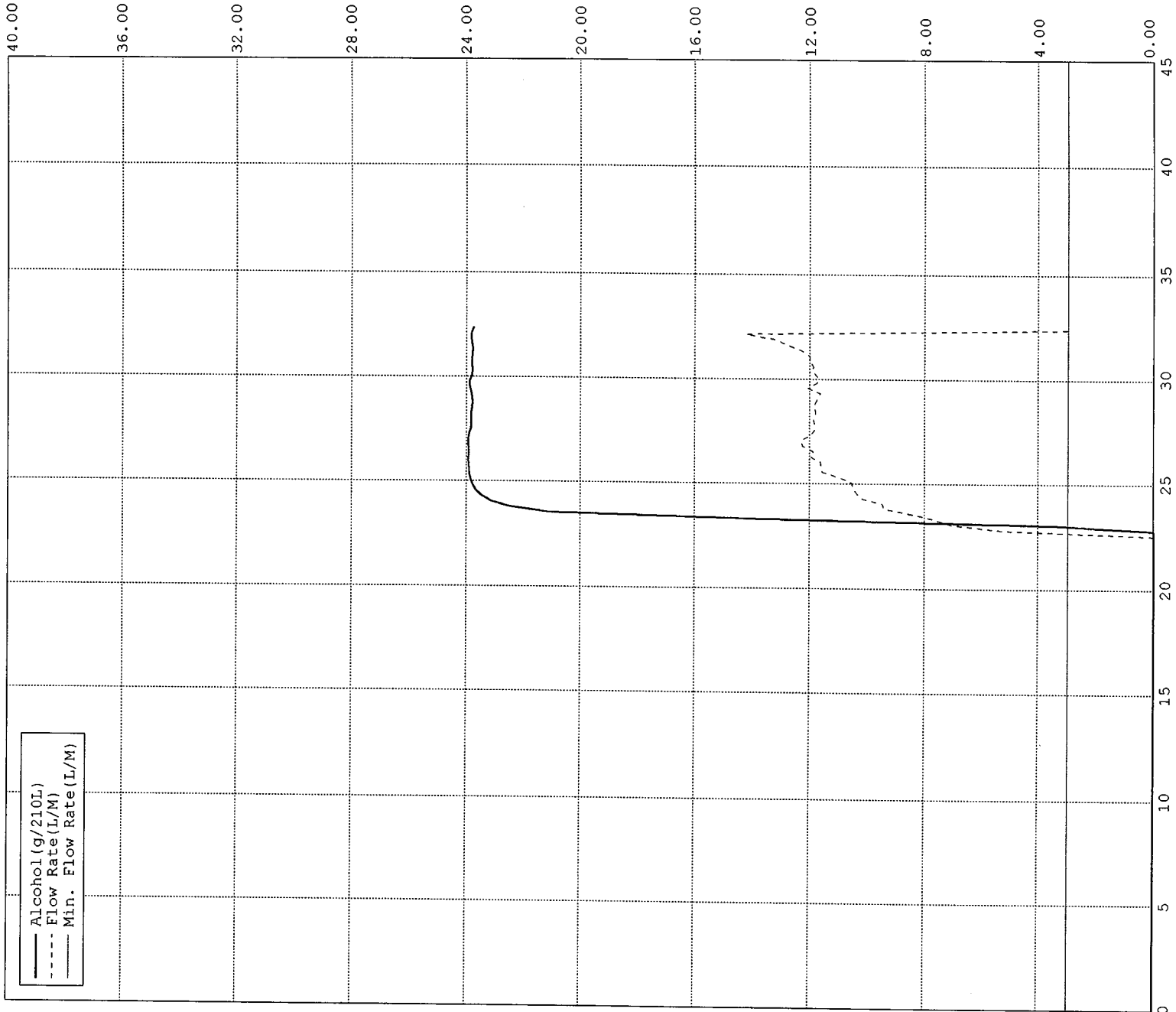
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.27: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 16:00
BLANK TEST 0.000 16:00
INTERNAL STANDARD VERIFIED 16:00
Xq = 0.100 (0.62%)
EXTERNAL STANDARD 0.081 16:00
X[1] = 0.0808 (-0.0004) (0.0023)
BLANK TEST 0.000 16:01
SUBJECT SAMPLE XXX 16:02
X[1] = 0.1188 (-0.0220) (-0.0001)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 03/23/2020
Time: 15:51:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

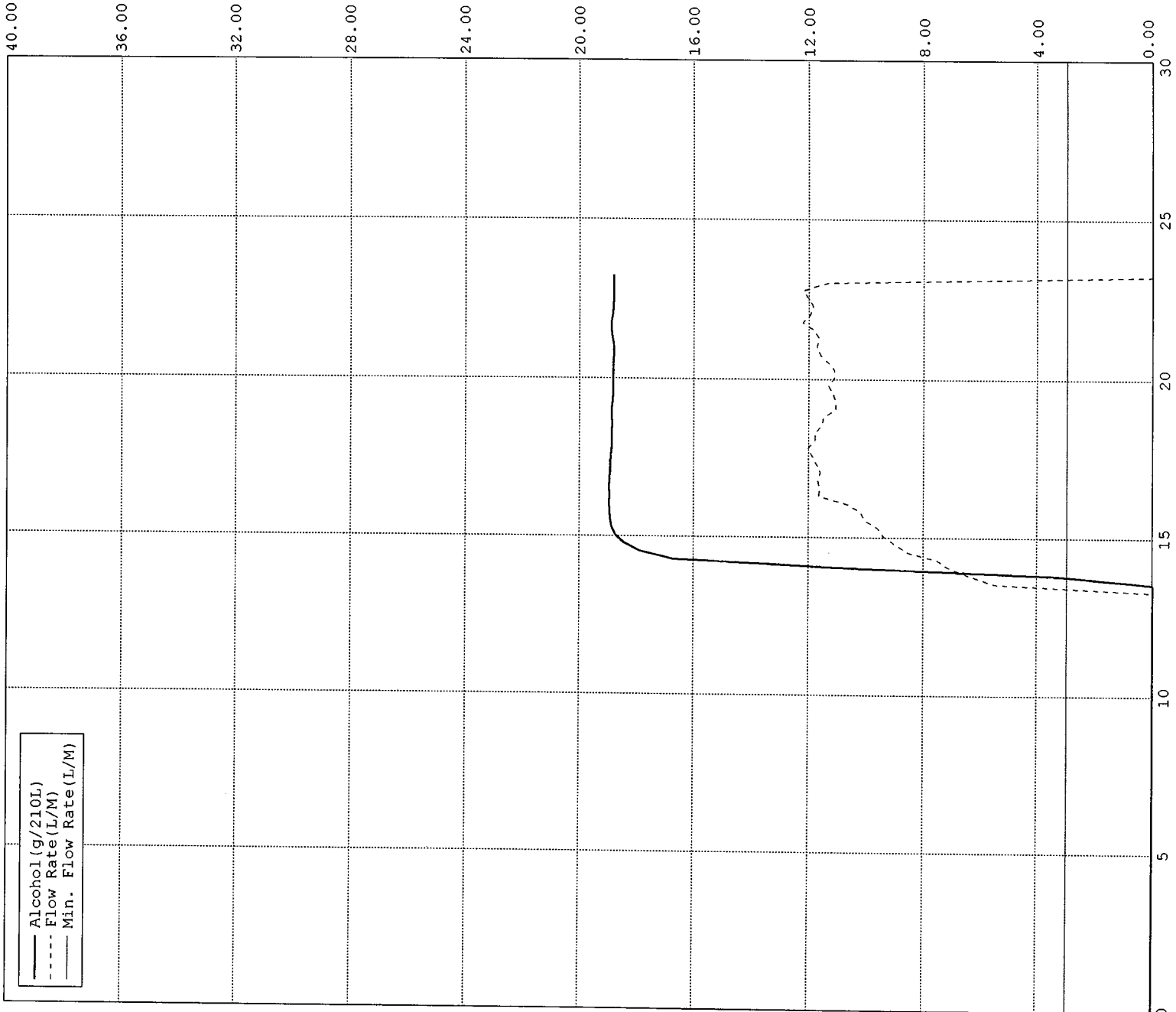
DEPT/AGENCY:
INTERFERENCE NEGATIVE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.27: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	15:52
BLANK TEST	0.000	15:52
INTERNAL STANDARD	VERIFIED	15:52
Xq = 0.100 (0.09%)		
EXTERNAL STANDARD	0.081	15:52
X[1] = 0.0807 (-0.0006)	(0.0020)	
BLANK TEST	0.000	15:53
SUBJECT SAMPLE (Vol=1.75L)	0.094	15:54
X[1] = 0.0942 (-0.0004)	(-0.0001)	
BLANK TEST	0.000	15:55
EXTERNAL STANDARD	0.080	15:55
X[1] = 0.0797 (-0.0008)	(0.0020)	
BLANK TEST	0.000	15:56

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 03/20/2020
Time: 18:29:55

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

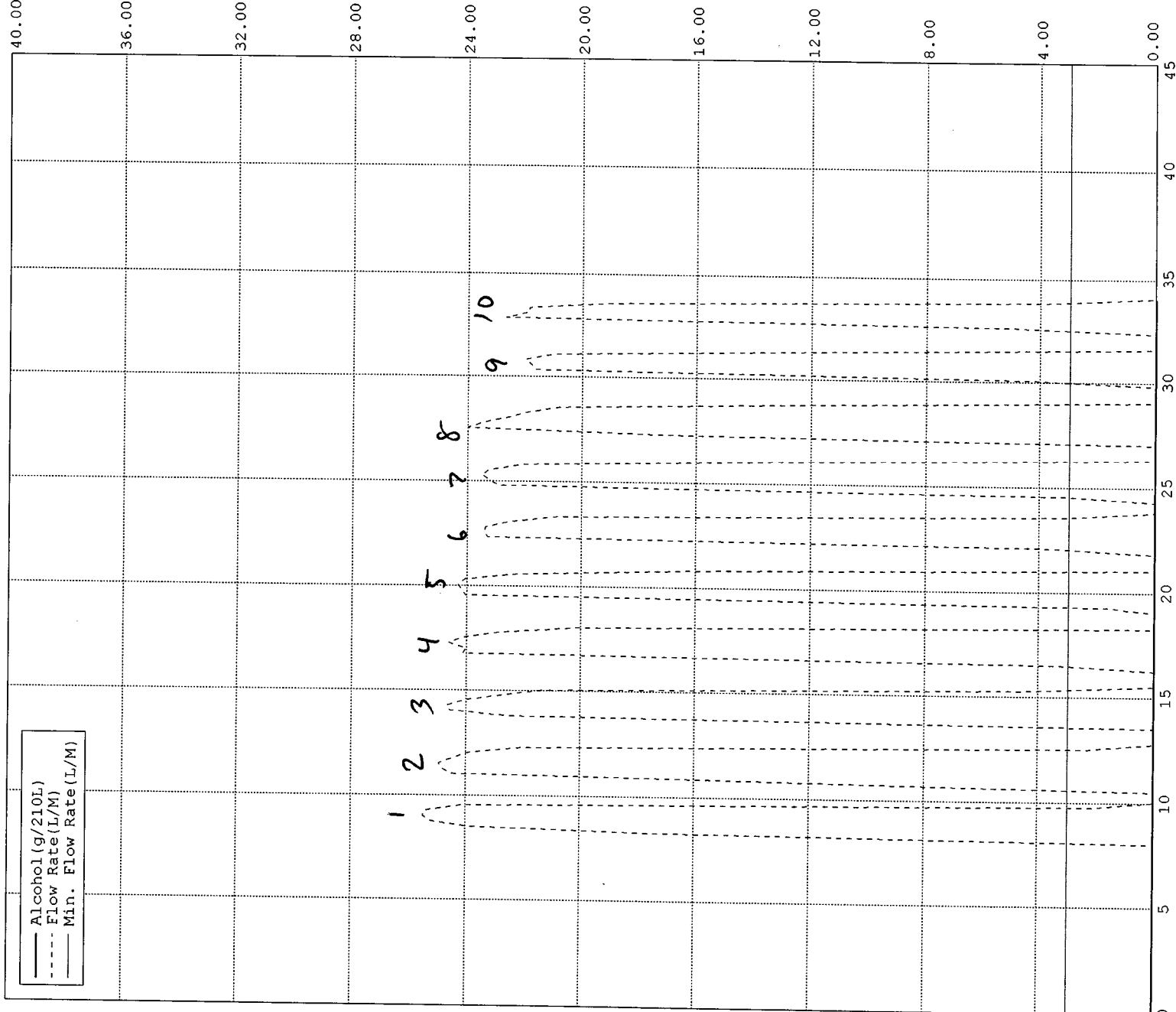
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.31: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 18:31
BLANK TEST 0.000 18:31
INTERNAL STANDARD VERIFIED 18:31
EXTERNAL STANDARD 0.081 18:31
BLANK TEST 0.000 18:32
SUBJECT SAMPLE XXX 18:33

Maximum Attempts Exceeded

Don



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 03/20/2020
Time: 20:11:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

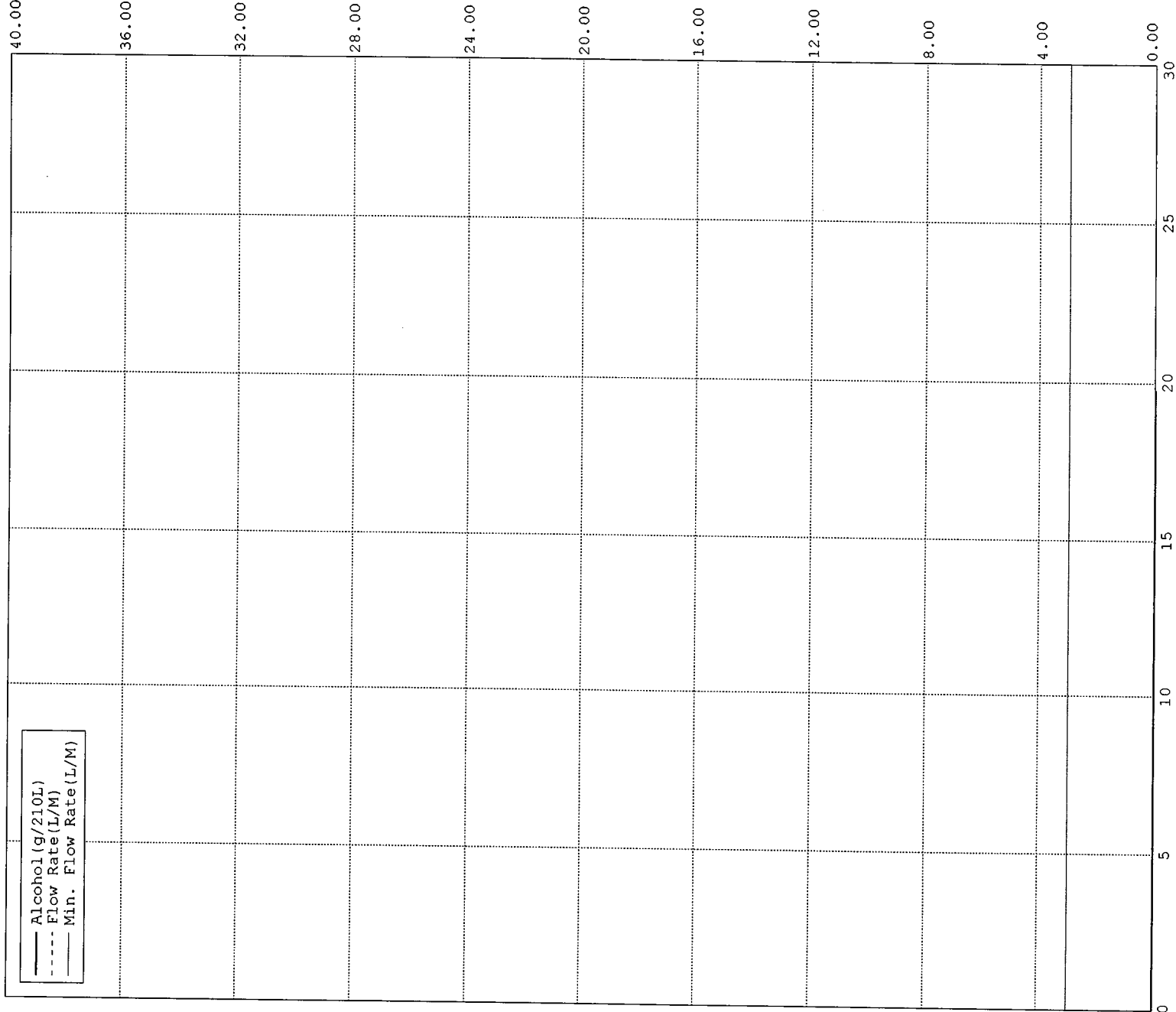
DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 30.29: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 20:14
BLANK TEST 0.000 20:14
INTERNAL STANDARD VERIFIED 20:14
EXTERNAL STANDARD 0.081 20:15
BLANK TEST 0.000 20:16

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 03/23/2020
Time: 16:56:35

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 30.25: 0.081
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	16:57
BLANK TEST	0.000	16:57
INTERNAL STANDARD	VERIFIED	16:57
EXTERNAL STANDARD	0.080	16:58
BLANK TEST	0.000	16:58
SUBJECT SAMPLE (Vol=3.43L)	0.000	16:59
BLANK TEST	0.000	17:00
EXTERNAL STANDARD	0.081	17:00
BLANK TEST	0.000	17:01

