

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 100374 Analyst Derek Walton Start Date 05/25/21

- 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 Airgas Lot A6928203 Exp 10/09/21
- ii. 0.040g/210L Mnf Airgas Lot A6915607 Exp 06/05/21
- iii. 0.080g/210L Mnf Airgas Lot A6923401 Exp 08/22/21
- iv. 0.100g/210L Mnf Airgas Lot A6924701 Exp 09/01/21
- v. 0.200g/210L Mnf Wtm Lot 19200 Exp 08/06/21
Simulator S/N DR6267 Date Calibrated 11/17/20
- vi. 0.300g/210L Mnf Wtm Lot 19330 Exp 11/13/21
Simulator S/N DR4177 Date Calibrated 11/17/20

Functional Tests (attached)

- Incomplete Invalid
 Interference

- i. Acetone - Mnf Wtm Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N DR4178 Date Calibrated 11/18/20
- ii. Isopropanol - Mnf Wtm Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N DR4176 Date Calibrated 11/18/20
- iii. Negative Control - Mnf Wtm Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N DR4163 Date Calibrated 11/17/20

- Exceeded Attempts RFI

- Verify stylus is calibrated
- Reset Options
- Clear Memory
- Remove tank prior to shut down
- Verification of Calibration
- Non-Drinking Subject Test (attached)
- Upload
- Add Linearity Data to Spreadsheet

End Date 05/25/21

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 05/25/2021
Time: 09:00:00

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 = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.59 V PASSED
(0.95 V - 2.23 V)
Cooler Voltage = 1.53 V PASSED
(0.92 V - 2.14 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 525 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.966 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
(0.002 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD ✓

Xq = 0.088 0.60% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100374

Date: 05/25/2021
Time: 9:12 AM

Temperatures (°C)
Sample Cell: 48.8°C
Breath Tube: 48.1°C

Current Barometer 29.8 in
Volume (Ltr) 1.50

Settings
Lamp: 1.59 V
Bias: 80 V
Cooler: 1.53 V
Chopper: 525 Hz

Voltages (V)
Flow: 1.05 V
Detector: 0.031 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 05/19/2021
Time: 12:43:22

OPERATOR NAME:
CARLIE BAILEY
CERTIFICATE #: 10436

Ca = 0.1000
CAL = 0.962604 0.800 <= CAL < 1.200
b1 = 0.0012 0.0000 <= b1 < 0.0040
b2 = 0.0076 0.0010 <= b2 < 0.0100
b3 = 0.0010 0.0000 <= b3 < 0.0040
Xq = 0.0876 0.0500 <= Xq < 0.2000
a21 = 1.207609 1.050 <= a21 < 1.300
a31 = 0.391692 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 05/25/2021
Time: 09:15:28

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

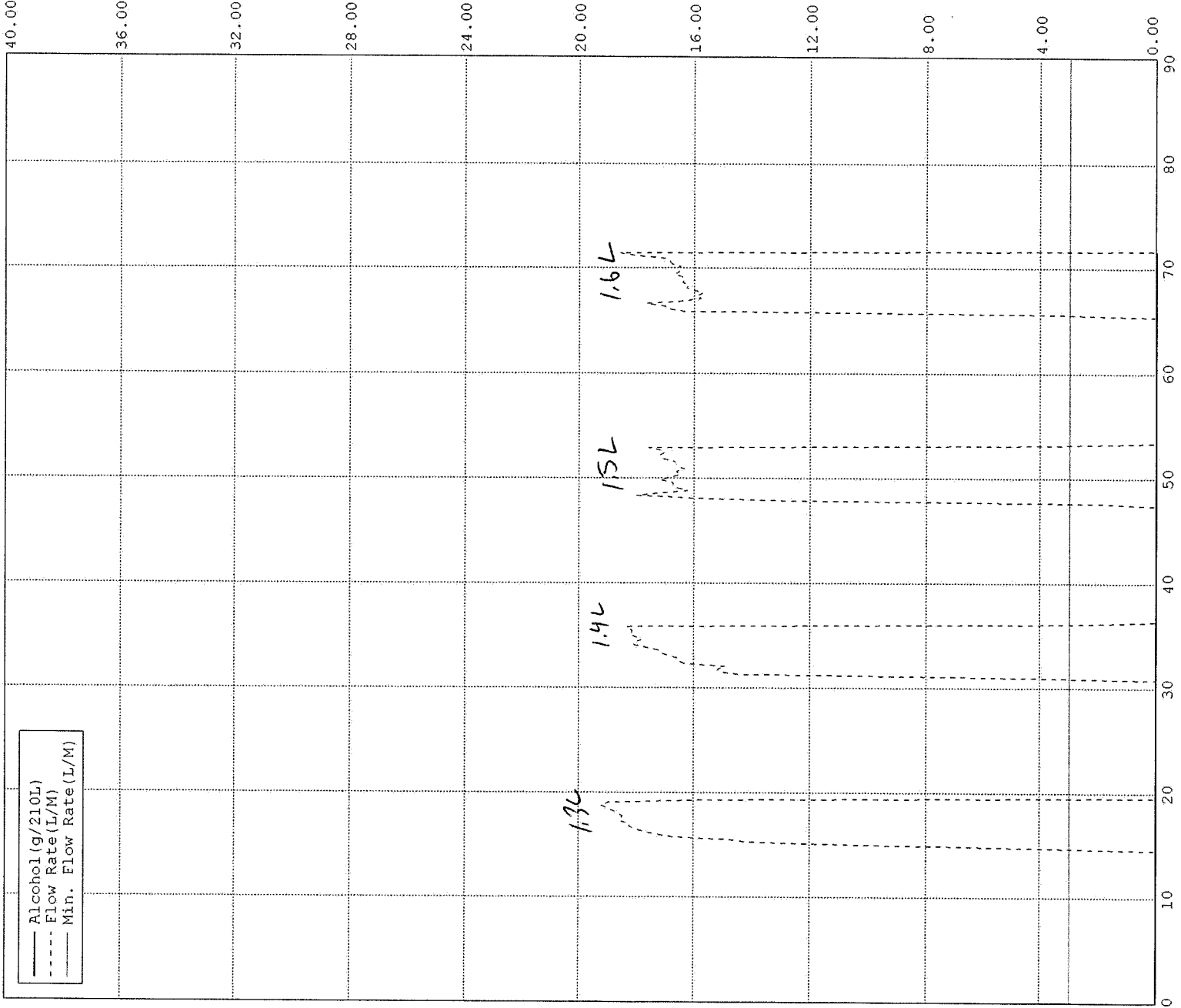
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.79: 0.080
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK	PASSED	09:16
BLANK TEST	0.000	09:16
INTERNAL STANDARD	VERIFIED	09:16
EXTERNAL STANDARD	0.079	09:17
BLANK TEST	0.000	09:17
SUBJECT SAMPLE (Vol=1.61L)	0.000	09:19
BLANK TEST	0.000	09:20
EXTERNAL STANDARD	0.079	09:20
BLANK TEST	0.000	09:21



LINEARITY CHECK

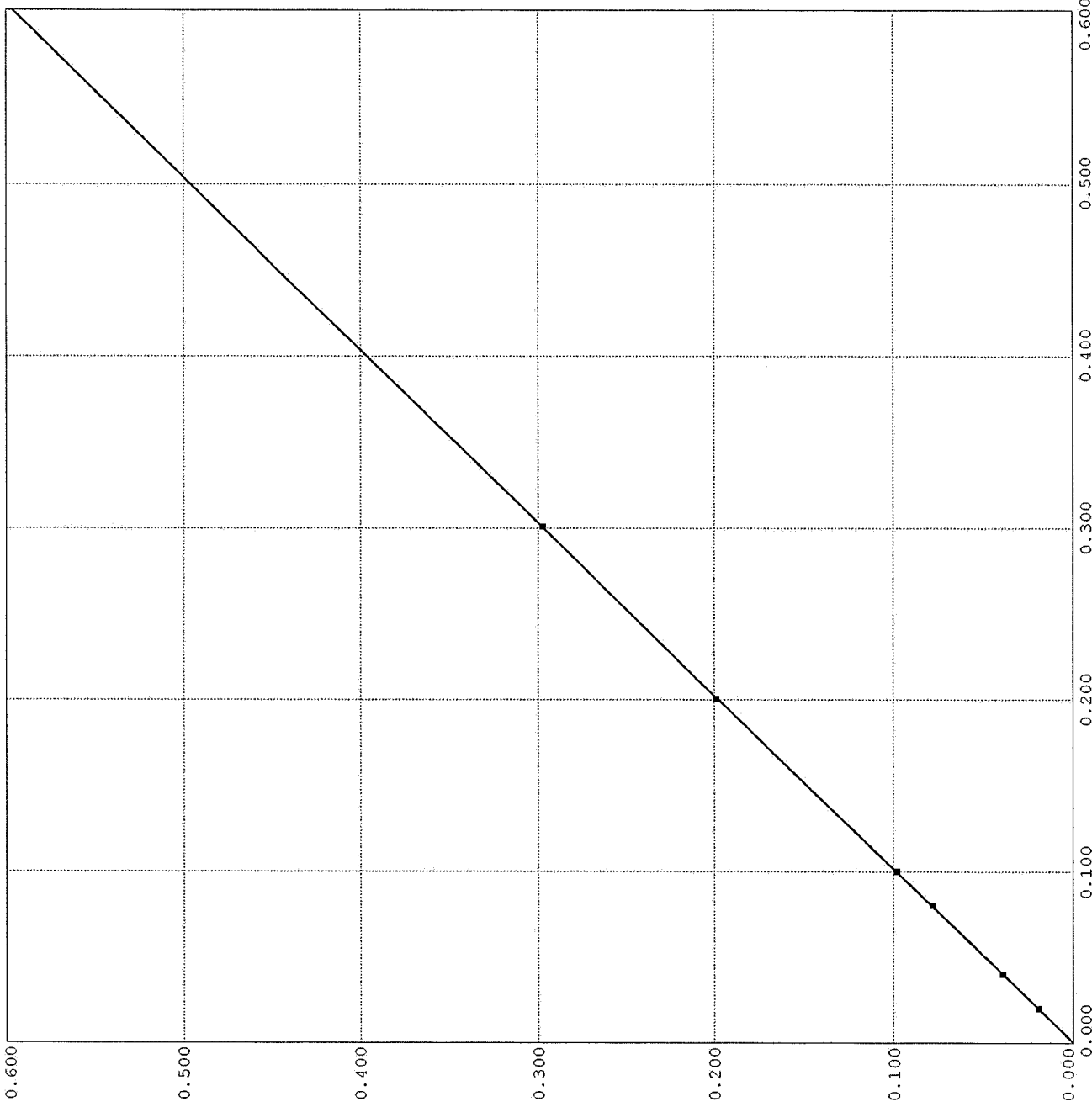
 Alaska Department of Public Safety
 DATAMASTER dmt: 100374

Date: 05/25/2021
 Time: 09:24:28

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0400	0.0000
0.080	0.0790	0.0000
0.100	0.0990	0.0000
0.200	0.1998	0.0004
0.300	0.2980	0.0007

SLOPE = 0.994714
 R² = 0.999973



DW

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100374

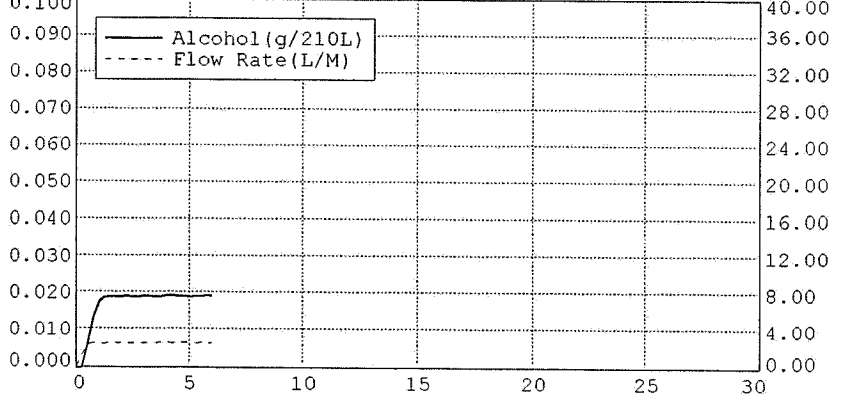
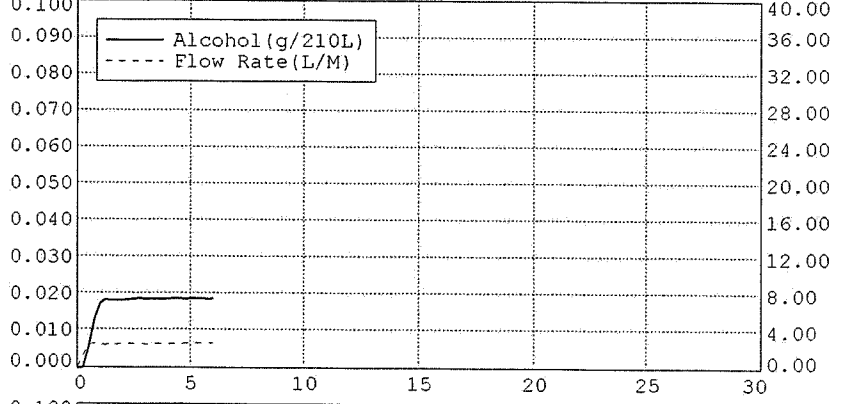
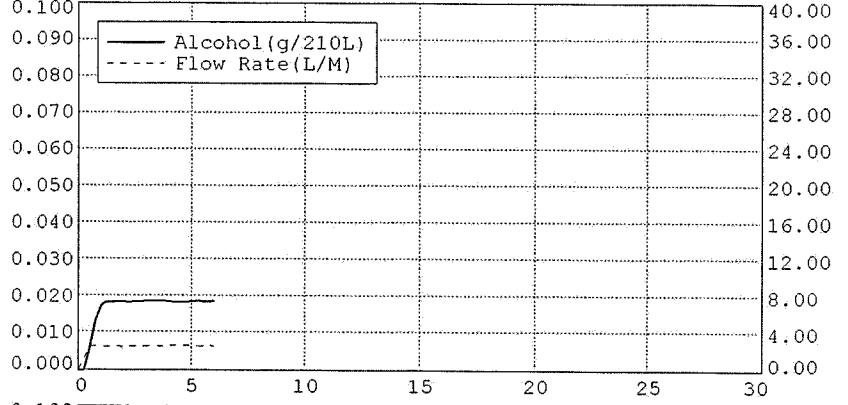
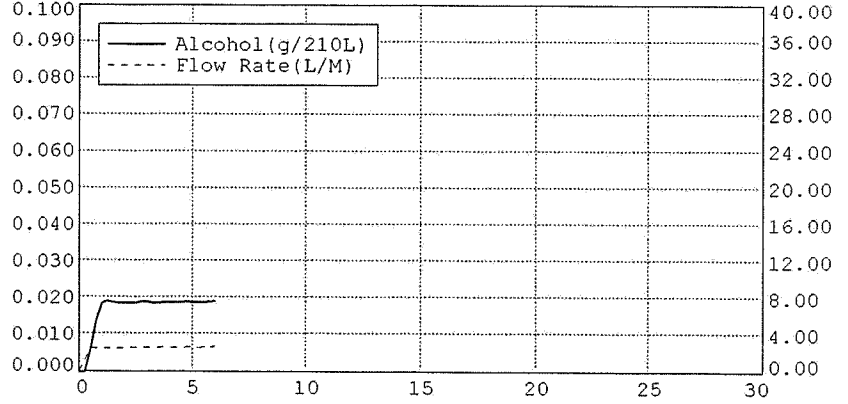
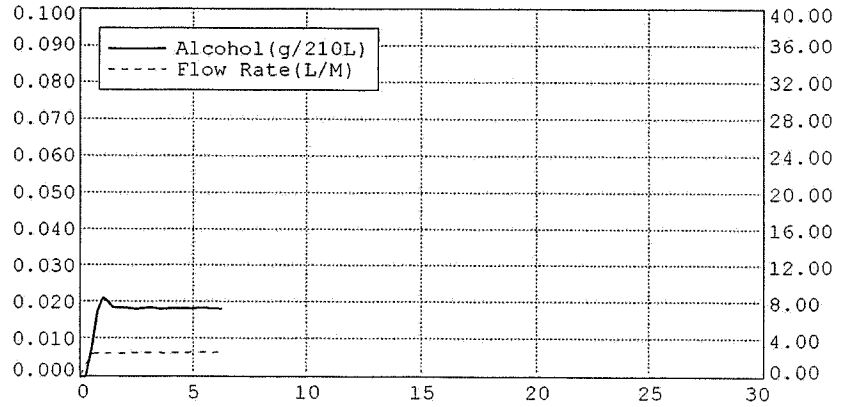
Date: 05/25/2021
 Time: 09:24:31

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.79: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 478 psi

BLANK TEST	0.000	09:27
INTERNAL STANDARD	VERIFIED	09:27
EXTERNAL STANDARD	0.020	09:27
BLANK TEST	0.000	09:28
EXTERNAL STANDARD	0.020	09:28
BLANK TEST	0.000	09:29
EXTERNAL STANDARD	0.020	09:29
BLANK TEST	0.000	09:30
EXTERNAL STANDARD	0.020	09:31
BLANK TEST	0.000	09:31
EXTERNAL STANDARD	0.020	09:32
BLANK TEST	0.000	09:33

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100374

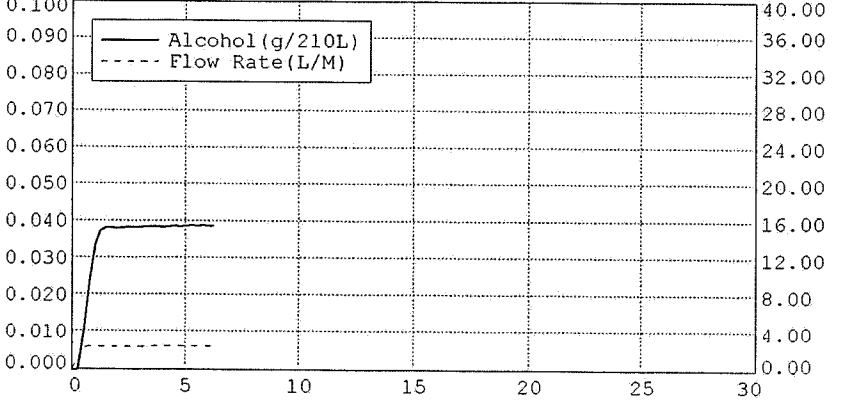
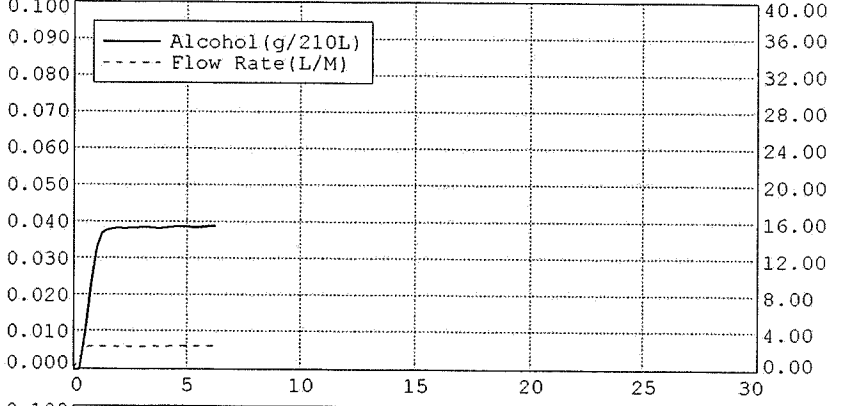
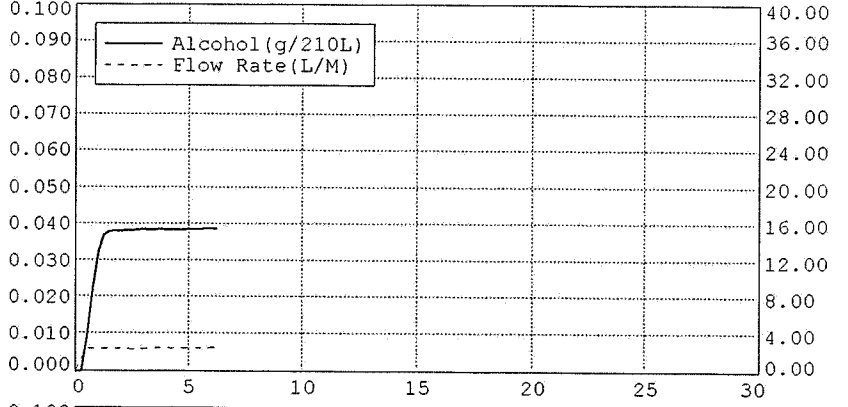
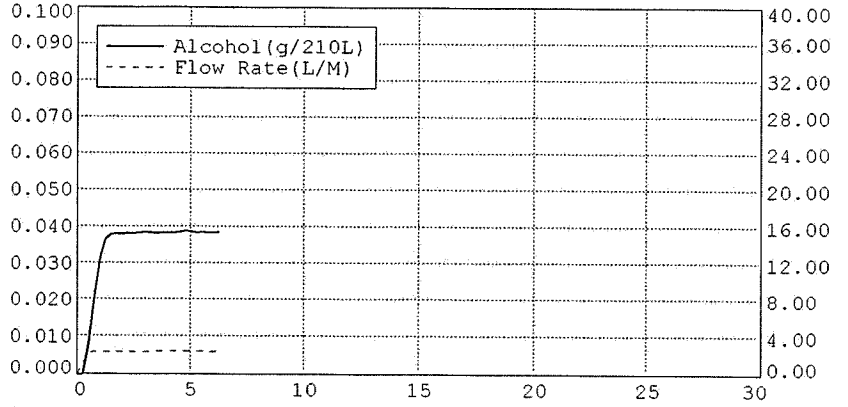
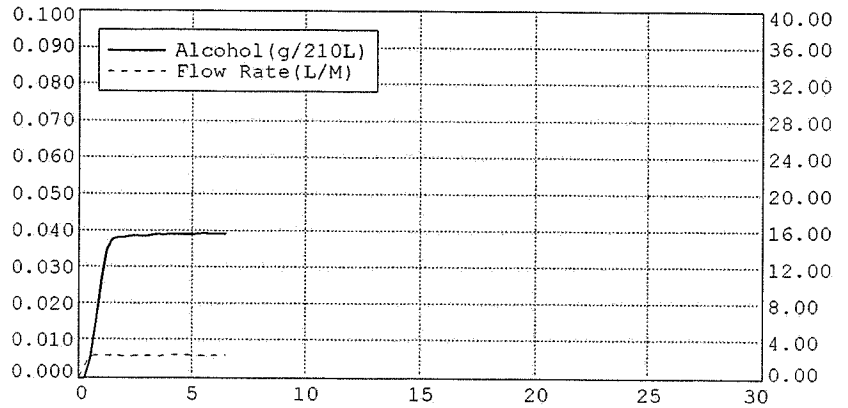
Date: 05/25/2021
 Time: 09:33:52

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.80: 0.040
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 285 psi

BLANK TEST	0.000	09:35
INTERNAL STANDARD	VERIFIED	09:35
EXTERNAL STANDARD	0.040	09:35
BLANK TEST	0.000	09:36
EXTERNAL STANDARD	0.040	09:36
BLANK TEST	0.000	09:37
EXTERNAL STANDARD	0.040	09:37
BLANK TEST	0.000	09:38
EXTERNAL STANDARD	0.040	09:38
BLANK TEST	0.000	09:39
EXTERNAL STANDARD	0.040	09:39
BLANK TEST	0.000	09:40

Average = 0.0400
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100374

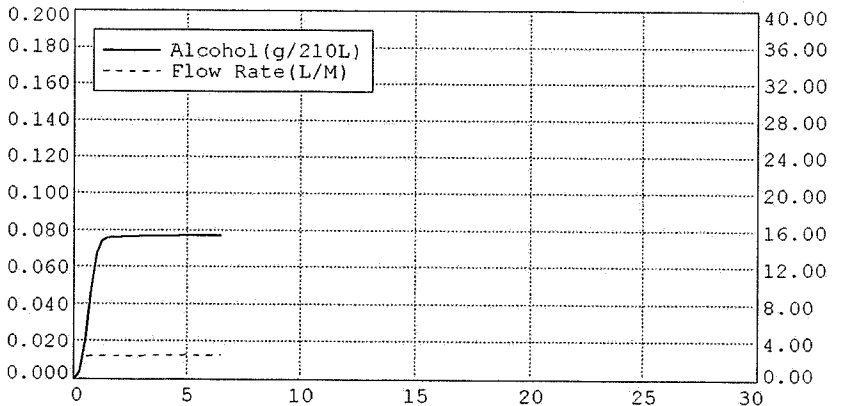
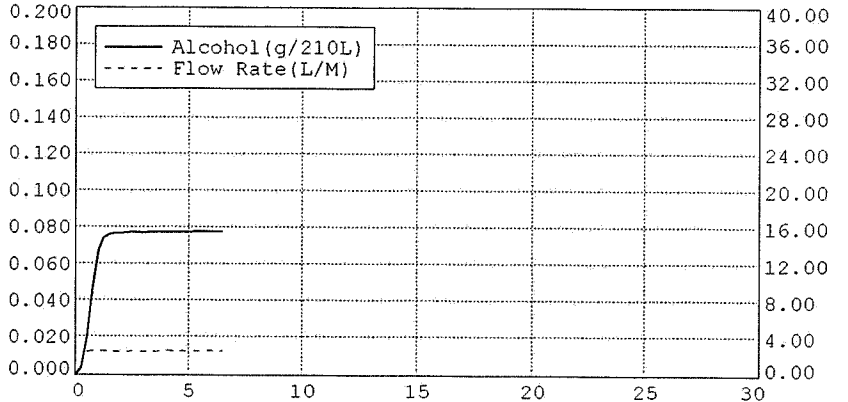
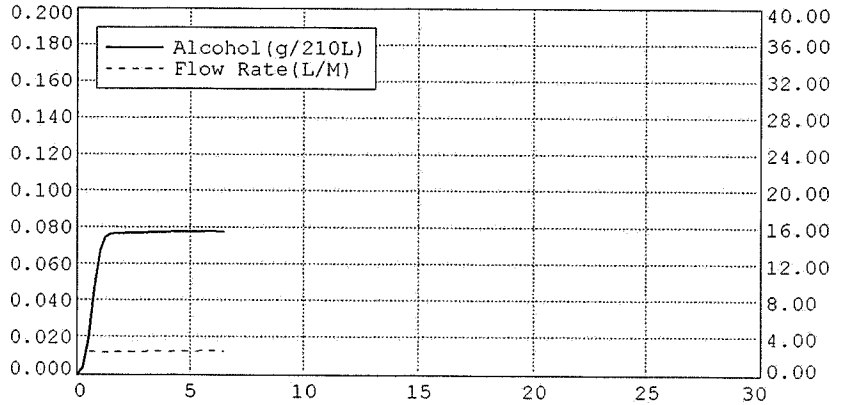
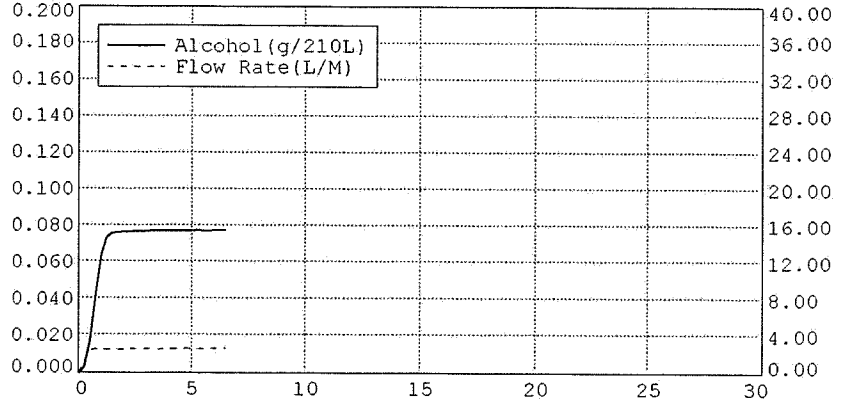
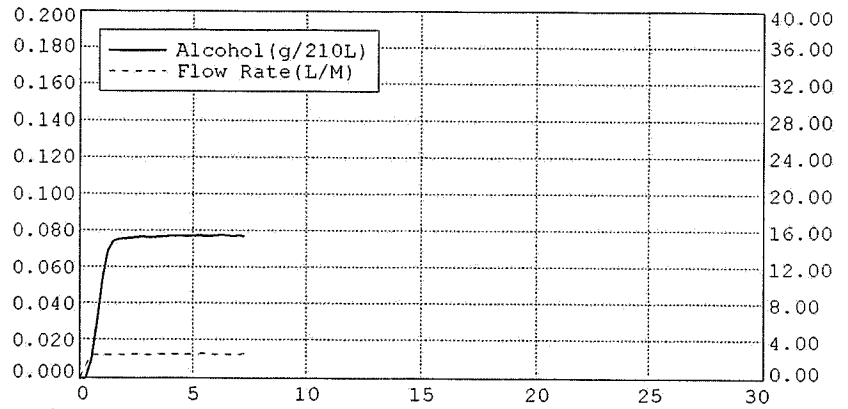
Date: 05/25/2021
 Time: 09:40:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.80: 0.080
 LOT #: AG923401
 EXPIRATION: 08/22/2021
 TANK PRESSURE: 485 psi

BLANK TEST	0.000	09:42
INTERNAL STANDARD	VERIFIED	09:42
EXTERNAL STANDARD	0.079	09:42
BLANK TEST	0.000	09:43
EXTERNAL STANDARD	0.079	09:43
BLANK TEST	0.000	09:44
EXTERNAL STANDARD	0.079	09:44
BLANK TEST	0.000	09:45
EXTERNAL STANDARD	0.079	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.079	09:46
BLANK TEST	0.000	09:47

Average = 0.0790
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100374

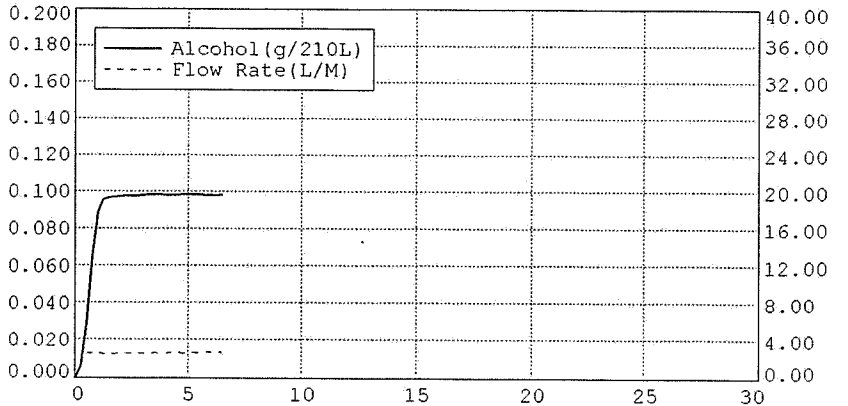
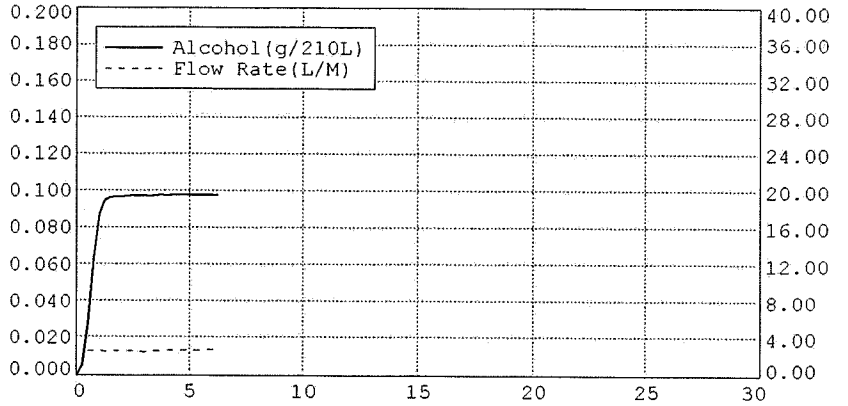
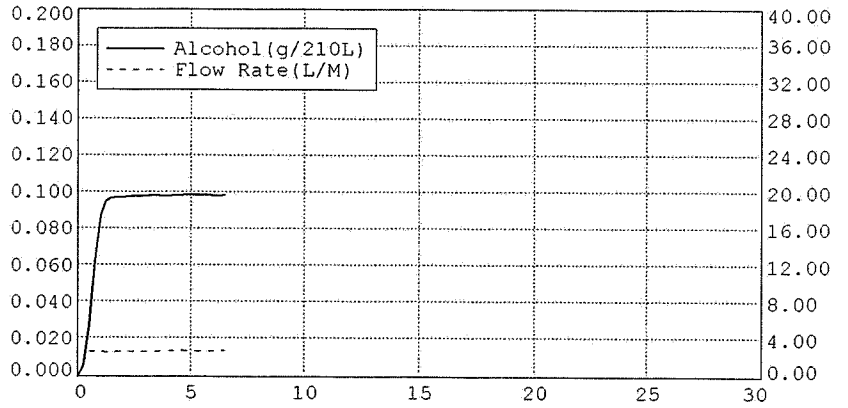
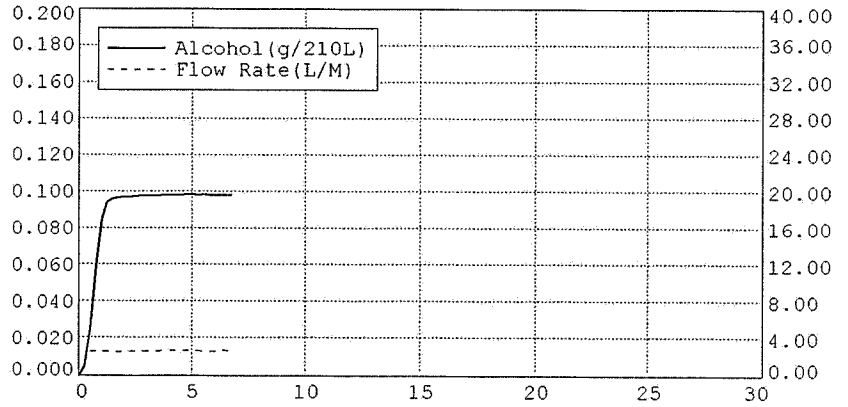
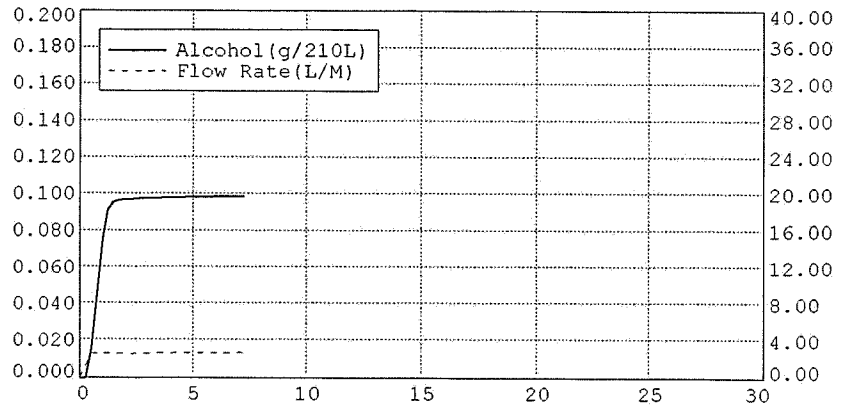
Date: 05/25/2021
 Time: 09:49:27

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.79: 0.100
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 475 psi

BLANK TEST	0.000	09:57
INTERNAL STANDARD	VERIFIED	09:57
EXTERNAL STANDARD	0.099	09:57
BLANK TEST	0.000	09:58
EXTERNAL STANDARD	0.099	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.099	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.099	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.099	10:01
BLANK TEST	0.000	10:02

Average = 0.0990
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100374

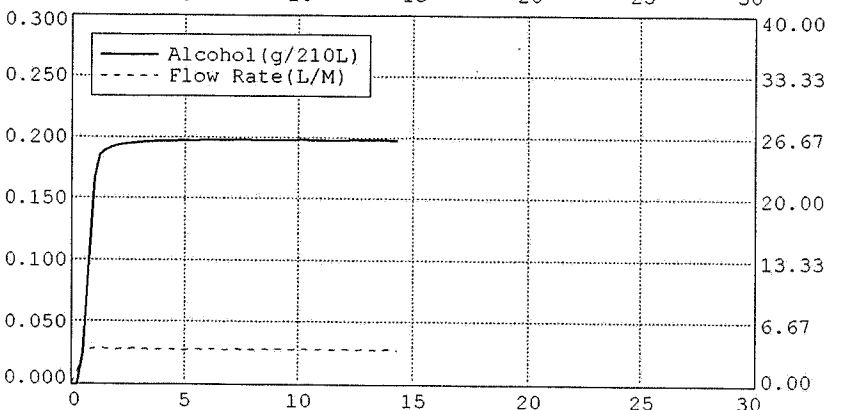
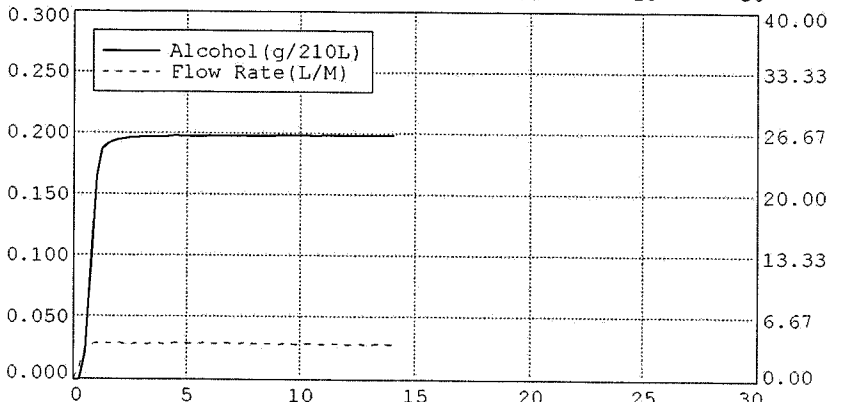
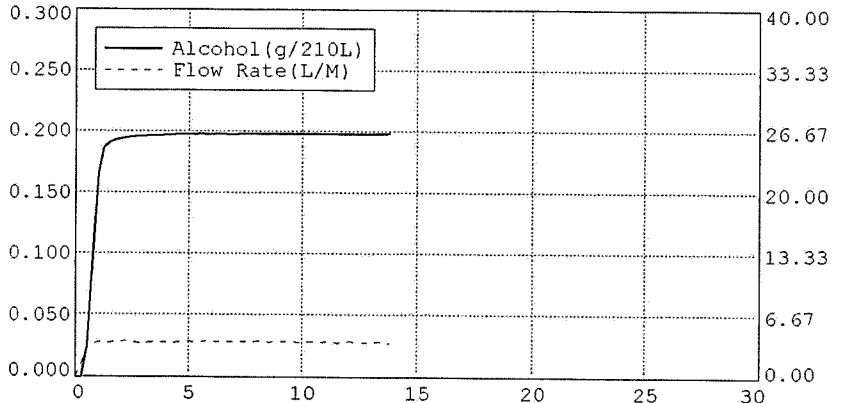
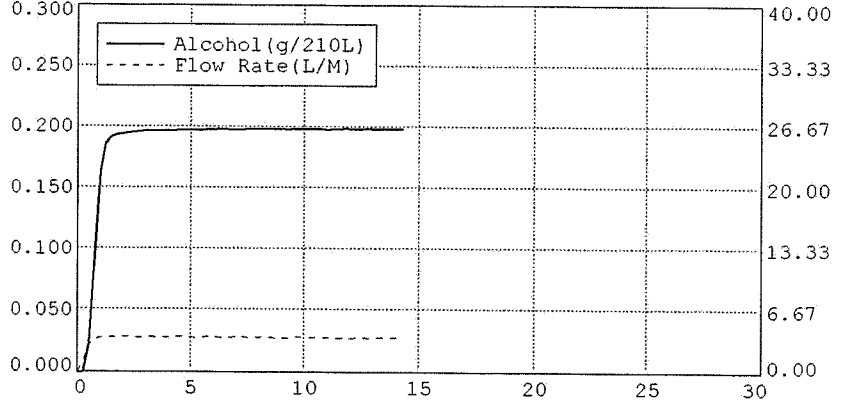
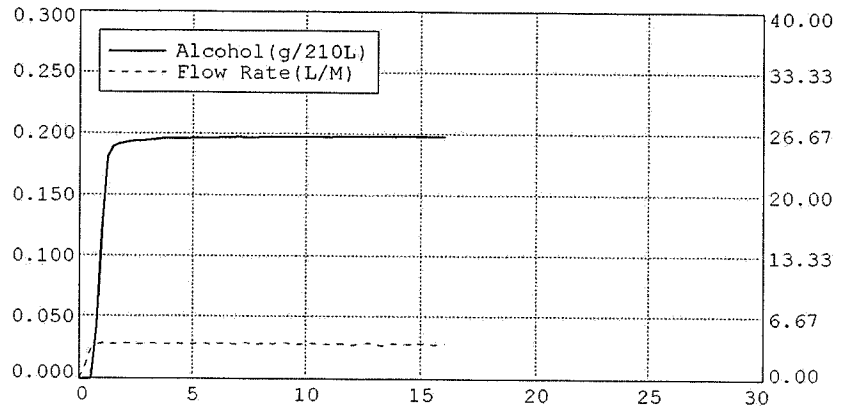
Date: 05/25/2021
 Time: 10:06:20

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:07
INTERNAL STANDARD	VERIFIED	10:07
EXTERNAL STANDARD	0.199	10:08
BLANK TEST	0.000	10:09
EXTERNAL STANDARD	0.200	10:09
BLANK TEST	0.000	10:10
EXTERNAL STANDARD	0.200	10:10
BLANK TEST	0.000	10:11
EXTERNAL STANDARD	0.200	10:12
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.200	10:13
BLANK TEST	0.000	10:14

Average = 0.1998
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100374

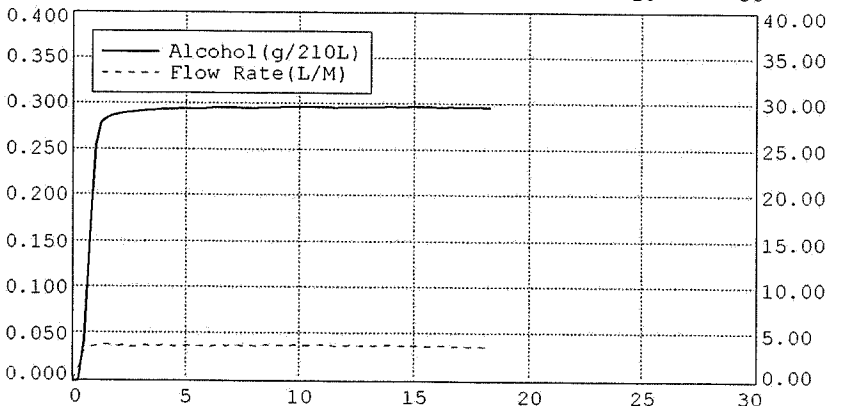
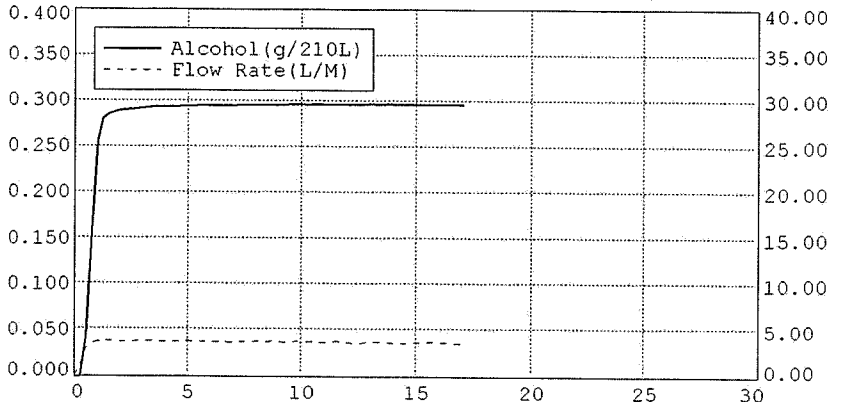
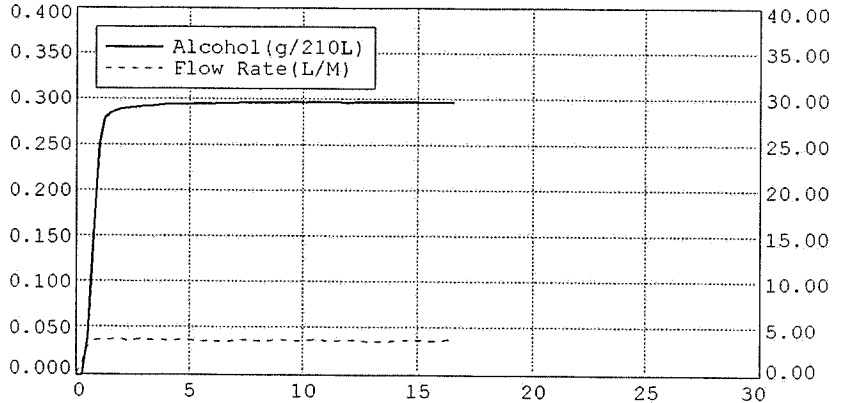
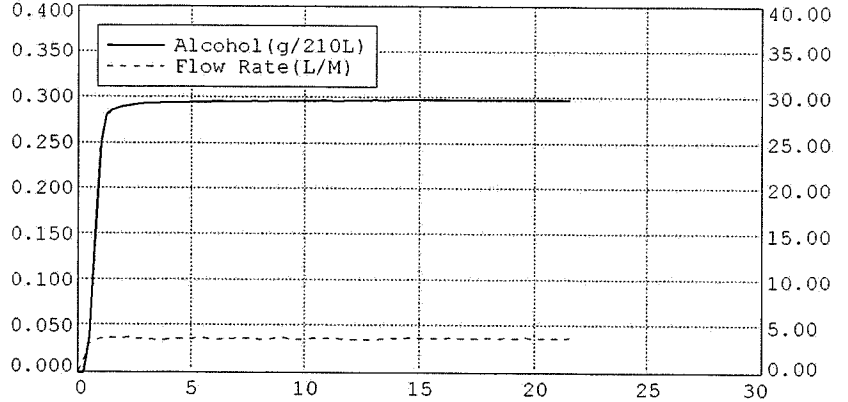
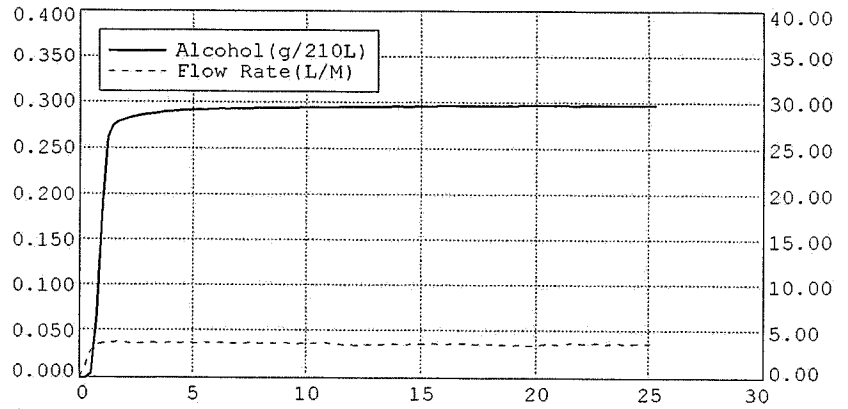
Date: 05/25/2021
 Time: 10:24:43

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:26
INTERNAL STANDARD	VERIFIED	10:26
EXTERNAL STANDARD	0.298	10:26
BLANK TEST	0.000	10:27
EXTERNAL STANDARD	0.299	10:28
BLANK TEST	0.000	10:29
EXTERNAL STANDARD	0.298	10:29
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.298	10:30
BLANK TEST	0.000	10:31
EXTERNAL STANDARD	0.297	10:32
BLANK TEST	0.000	10:32

Average = 0.2980
 Std Dev = 0.0007



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 05/25/2021
Time: 10:37:49

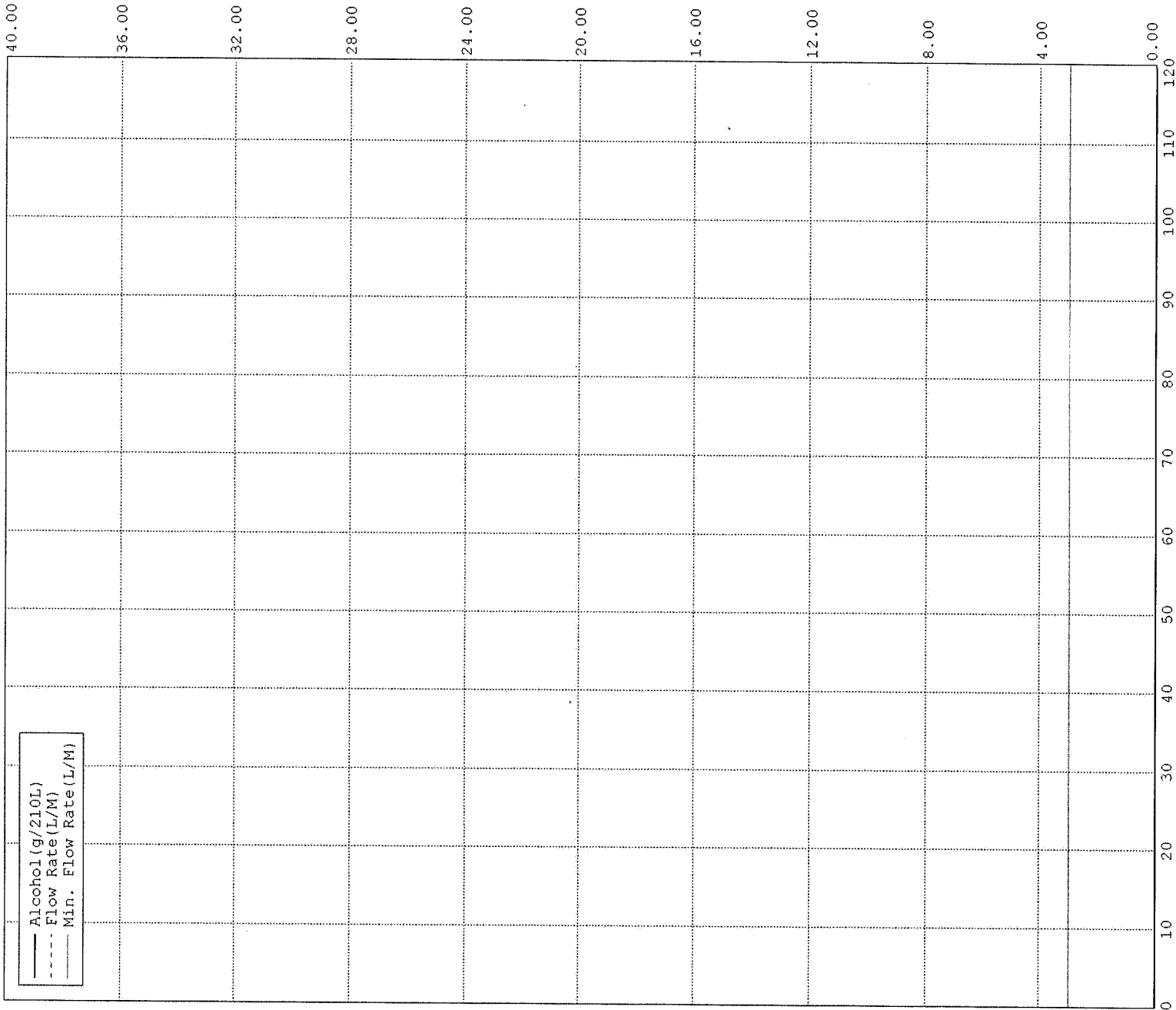
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.79: 0.080
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK PASSED 10:39
BLANK TEST 0.000 10:40
INTERNAL STANDARD VERIFIED 10:40
EXTERNAL STANDARD 0.079 10:40
BLANK TEST 0.000 10:41
SUBJECT SAMPLE INCOMPLETE 10:43



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 05/25/2021
Time: 12:32:05

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
INVALID

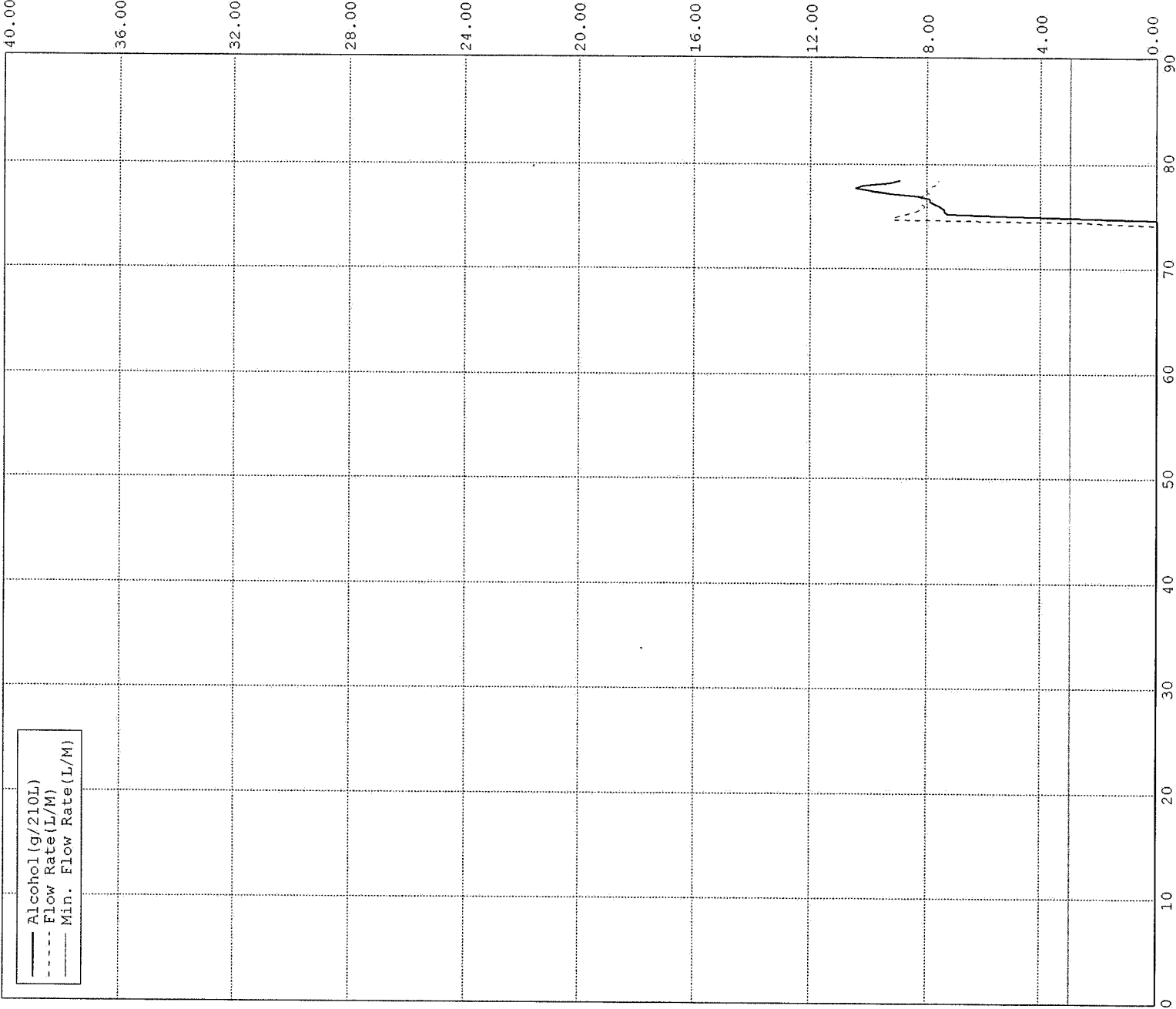
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.75: 0.080
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK PASSED 12:34
BLANK TEST 0.000 12:34
INTERNAL STANDARD VERIFIED 12:34
EXTERNAL STANDARD 0.079 12:34
BLANK TEST 0.000 12:35
SUBJECT SAMPLE INVALID 12:37

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 05/25/2021
Time: 12:25:42

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 29.76: 0.080
LOT #: AG923401
EXPIRATION: 08/22/2021

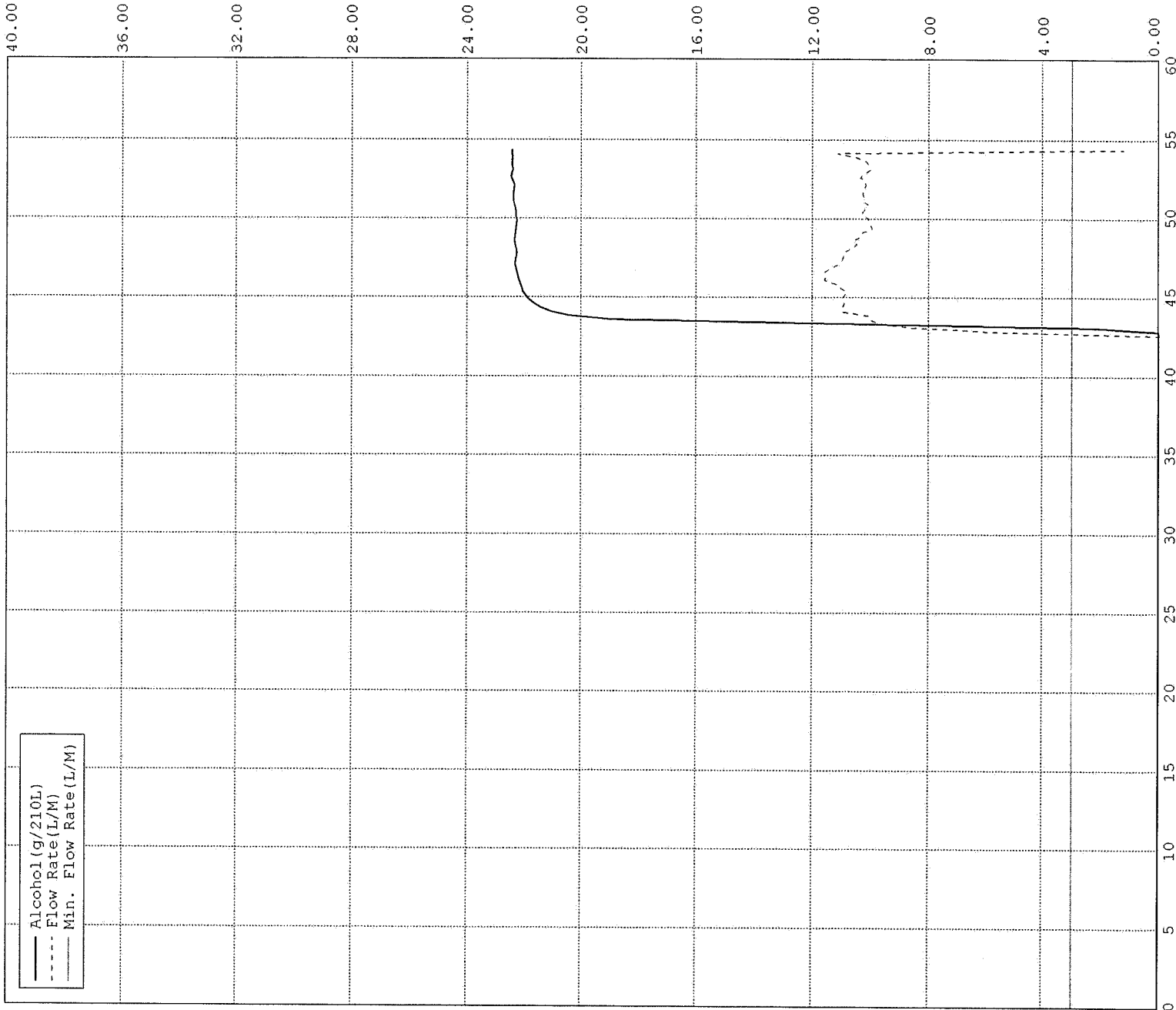
DIAGNOSTIC CHECK	PASSED	12:27
BLANK TEST	0.000	12:27
INTERNAL STANDARD	VERIFIED	12:27
Xg = 0.088 (0.90%)		
EXTERNAL STANDARD	0.080	12:28
X[1] = 0.0796 (-0.0009) (0.0014)		
BLANK TEST	0.000	12:29
SUBJECT SAMPLE	XXX	12:30
X[1] = 0.1126 (-0.0181) (0.0007)		

Interference Detected

Filter 2 average: -0.0013

Filter 3 average: 0.0012

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 05/25/2021
Time: 12:20:04

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

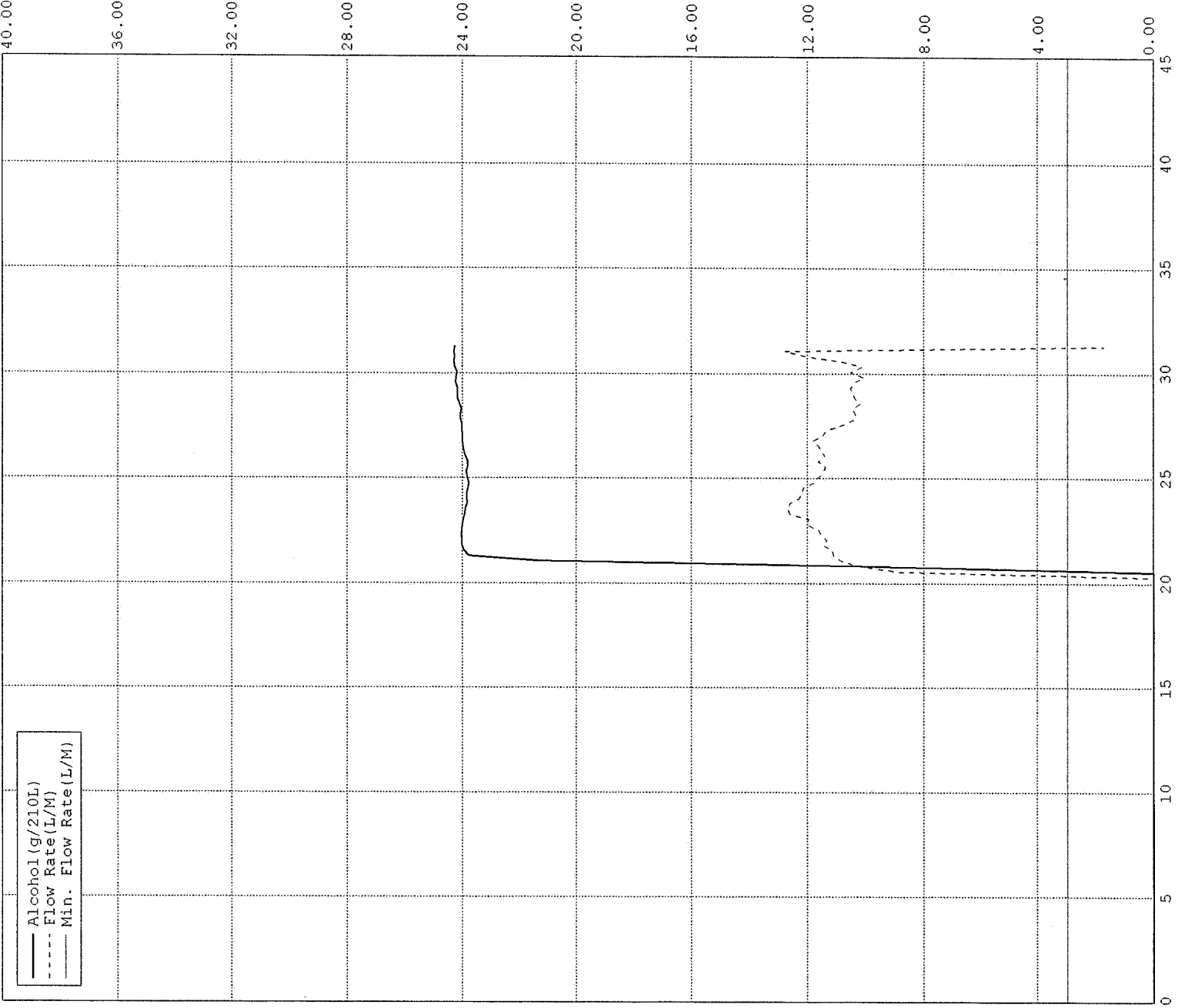
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.76: 0.080
LOF #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK PASSED 12:21
BLANK TEST 0.000 12:21
INTERNAL STANDARD VERIFIED 12:21
Xq = 0.088 (0.20%)
EXTERNAL STANDARD 0.079 12:21
X[1] = 0.0789 (-0.0015) (0.0009)
BLANK TEST 0.000 12:22
SUBJECT SAMPLE XXX 12:23
X[1] = 0.1218 (-0.0331) (0.0017)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 05/25/2021
Time: 12:12:22

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

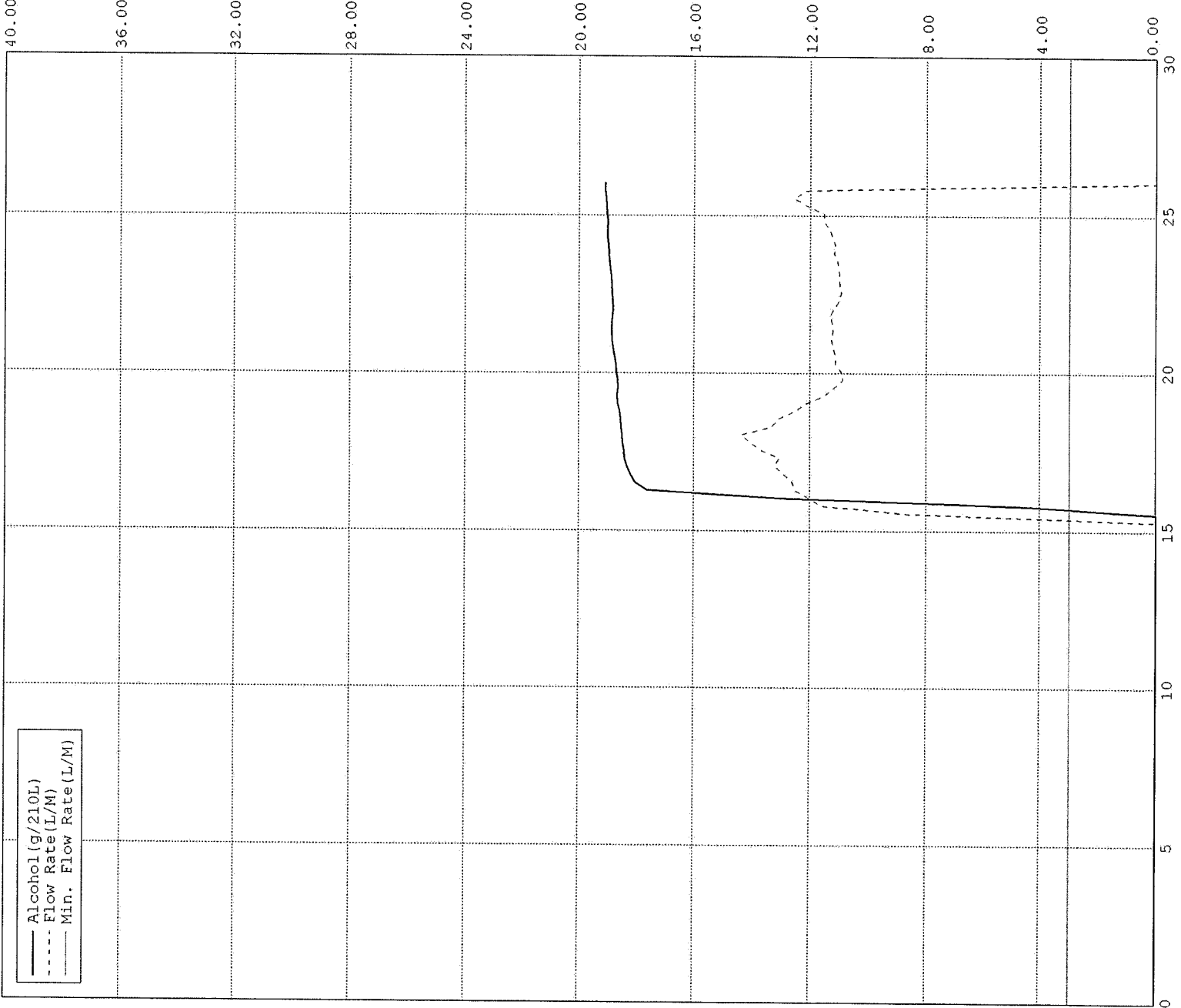
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.75: 0.080
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK	PASSED	12:14
BLANK TEST	0.000	12:14
INTERNAL STANDARD	VERIFIED	12:14
Xq = 0.088 (0.20%)		
EXTERNAL STANDARD	0.079	12:14
X[1] = 0.0793 (-0.0010) (0.0019)		
BLANK TEST	0.000	12:15
SUBJECT SAMPLE (Vol=2.07L)	0.095	12:16
X[1] = 0.0959 (-0.0003) (-0.0001)		
BLANK TEST	0.000	12:17
EXTERNAL STANDARD	0.078	12:17
X[1] = 0.0779 (-0.0017) (0.0004)		
BLANK TEST	0.000	12:18

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 05/25/2021
Time: 10:45:00

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

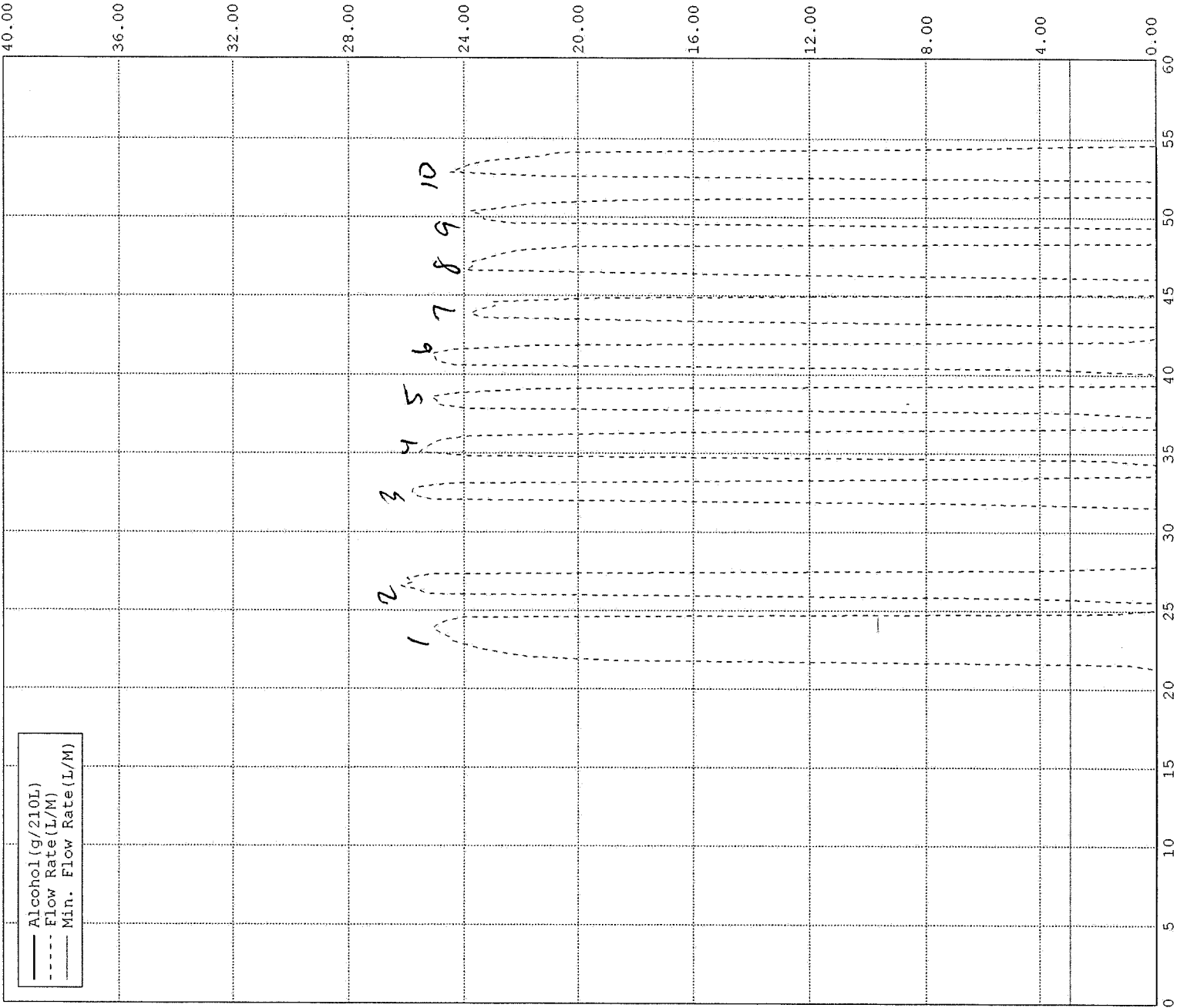
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.79: 0.080
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK PASSED 10:46
BLANK TEST 0.000 10:46
INTERNAL STANDARD VERIFIED 10:46
EXTERNAL STANDARD 0.078 10:46
BLANK TEST 0.000 10:47
SUBJECT SAMPLE XXX 10:48

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100374

Date: 05/25/2021
Time: 12:39:42

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

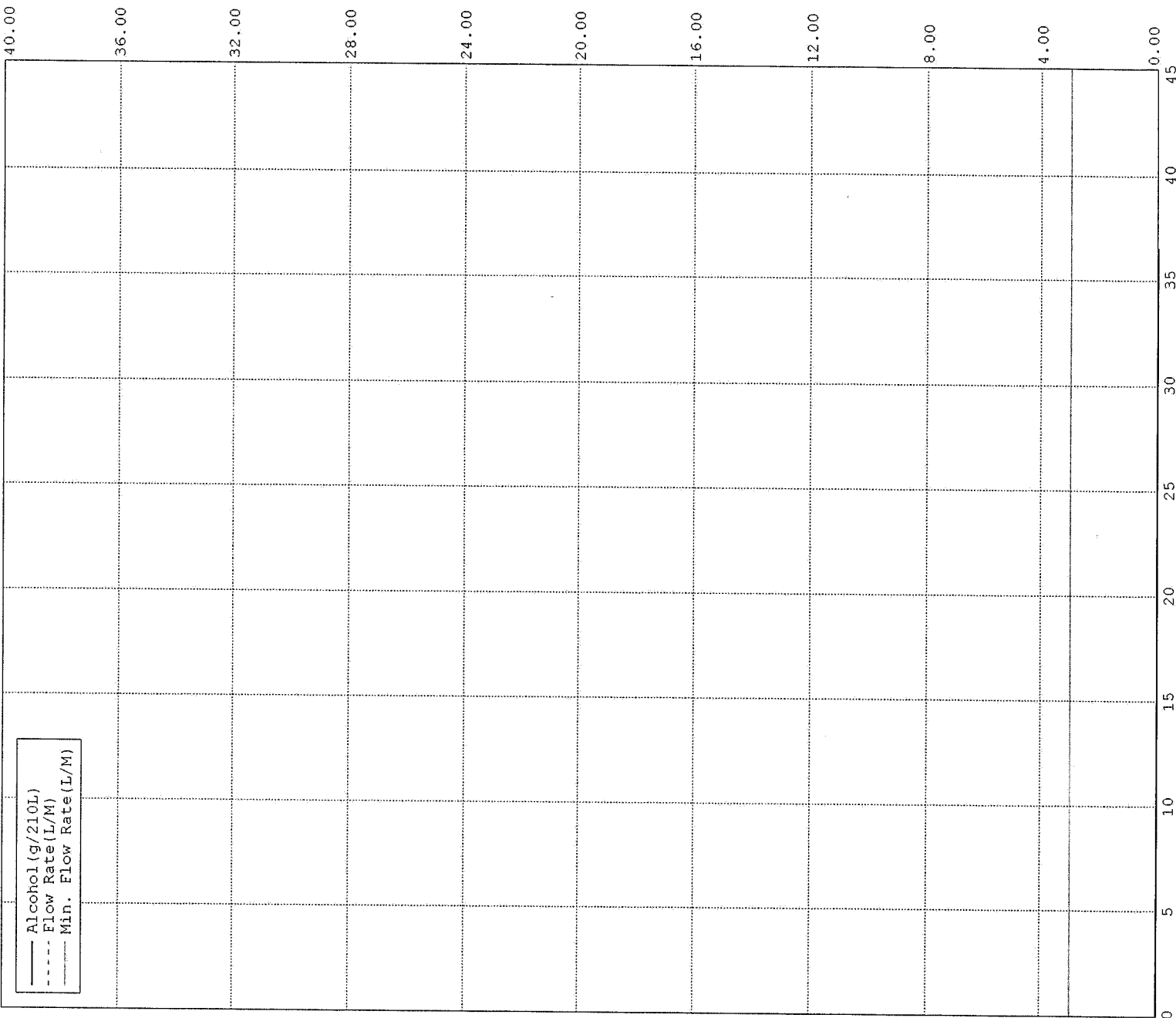
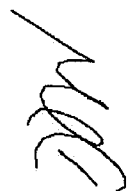
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.75: 0.080
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK PASSED 12:41
BLANK TEST 0.000 12:42
INTERNAL STANDARD VERIFIED 12:42
EXTERNAL STANDARD 0.079 12:42
BLANK TEST 0.000 12:43

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: I00374

Date: 05/25/2021
Time: 13:08:51

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 29.75: 0.080
LOT #: AG923401
EXPIRATION: 08/22/2021

DIAGNOSTIC CHECK PASSED 13:09
BLANK TEST 0.000 13:09
INTERNAL STANDARD VERIFIED 13:10
EXTERNAL STANDARD 0.079 13:10
BLANK TEST 0.000 13:11
SUBJECT SAMPLE (Vol=2.80L) 0.000 13:11
BLANK TEST 0.000 13:12
EXTERNAL STANDARD 0.079 13:12
BLANK TEST 0.000 13:13

DW

