

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 100693 Analyst Brandi Barnett Start Date 6/10/20

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 1.5 L (1.3L to 1.7L)

Linearity Test (attached)

Levels Used

- i. 0.020g/210L Mnf Airgas Lot AG 928203 Exp 10/9/21
ii. 0.040g/210L Mnf Airgas Lot AG 915607 Exp 6/5/21
iii. 0.080g/210L Mnf Airgas Lot AG 826101 Exp 9/18/20
iv. 0.100g/210L Mnf Airgas Lot AG 924701 Exp 9/4/21
v. 0.200g/210L Mnf Guth Lot 19200 Exp 8/6/21
Simulator S/N SD1200 Date Calibrated 10/8/19
vi. 0.300g/210L Mnf Guth Lot 19330 Exp 11/13/21
Simulator S/N DR4177 Date Calibrated 10/8/19

Functional Tests (attached)

Incomplete

Invalid

Interference

- i. Acetone - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N DR4162 Date Calibrated 10/7/19
ii. Isopropanol - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N DR4163 Date Calibrated 10/4/19
iii. Negative Control - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N SD1176 Date Calibrated 10/7/19

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 6/11/20

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 06/10/2020
Time: 10:42:56

VERSIONS

DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.7°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.64 V PASSED
(1.02 V - 2.38 V)
Cooler Voltage = 1.75 V PASSED
(0.98 V - 2.30 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 539 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 4.502 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.001 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 = 0.090 0.96% PASSED
(0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100693

Date: 06/10/2020
Time: 10:47 AM

Temperatures (°C)

Sample Cell: 49.1°C
Breath Tube: 46.4°C

Current Barometer 29.7 in
Volume (Ltr) 1.58

Settings

Lamp: 1.70 V
Bias: 79 V
Cooler: 1.75 V
Chopper: 537 Hz

Voltages (V)

Flow: 1.04 V
Detector: -0.004 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 04/01/2019
Time: 08:45:25

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca = 0.1000
CAL = 0.996487 0.800 <= CAL < 1.200
b1 = 0.0023 0.0000 <= b1 < 0.0040
b2 = 0.0072 0.0010 <= b2 < 0.0100
b3 = 0.0010 0.0000 <= b3 < 0.0040
Xq = 0.0909 0.0500 <= Xq < 0.2000
a21 = 1.137783 1.050 <= a21 < 1.300
a31 = 0.391506 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 06/10/2020
Time: 11:03:09

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

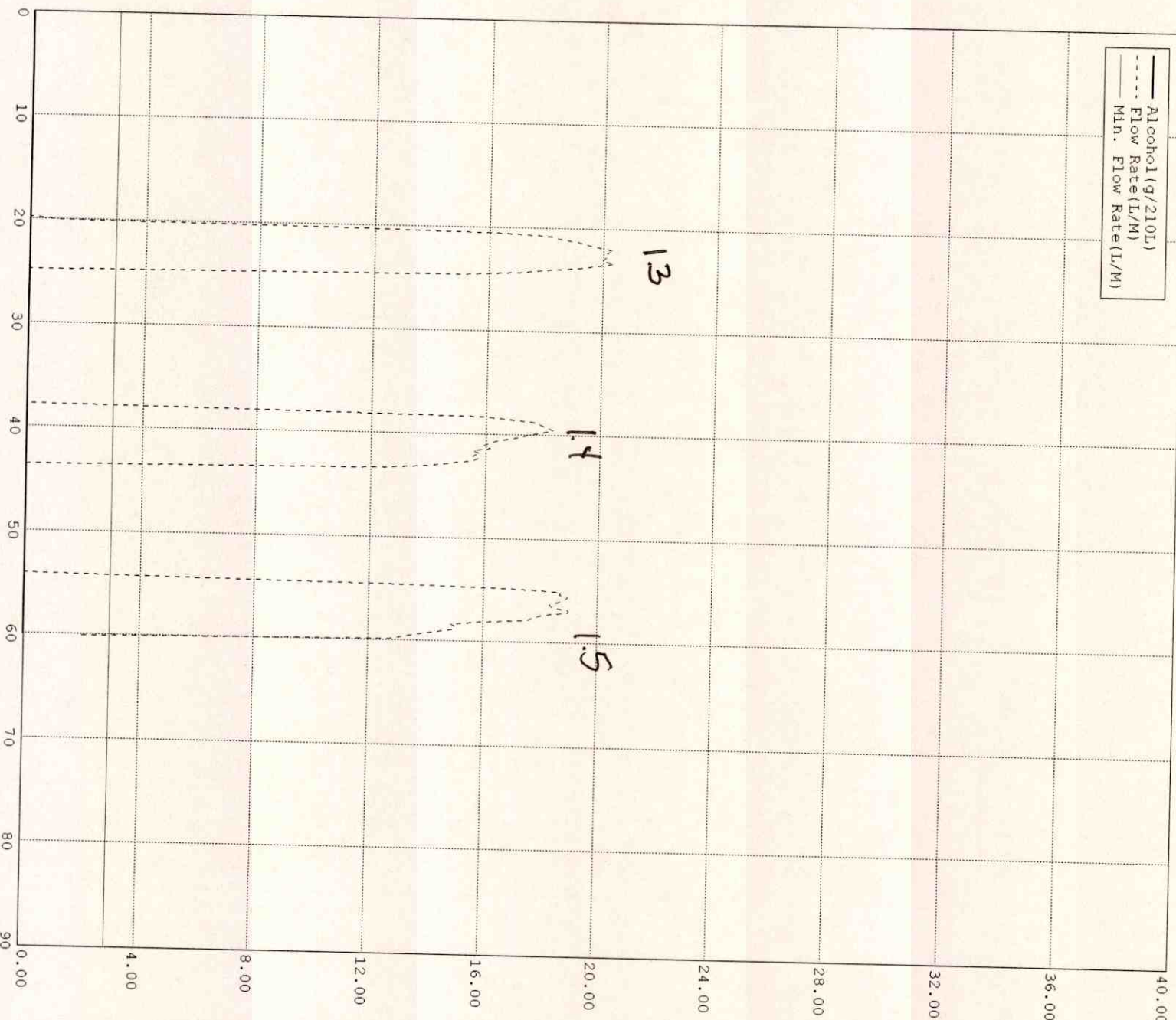
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.66: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	11:04
INTERNAL STANDARD	0.000	11:04
EXTERNAL STANDARD	0.079	11:04
INTERNAL STANDARD	0.000	11:05
EXTERNAL STANDARD	0.000	11:06
SUBJECT SAMPLE (Vol=1.56L)	0.000	11:07
INTERNAL STANDARD	0.079	11:08
EXTERNAL STANDARD	0.000	11:08

Handwritten signature: BNB



LINEARITY CHECK

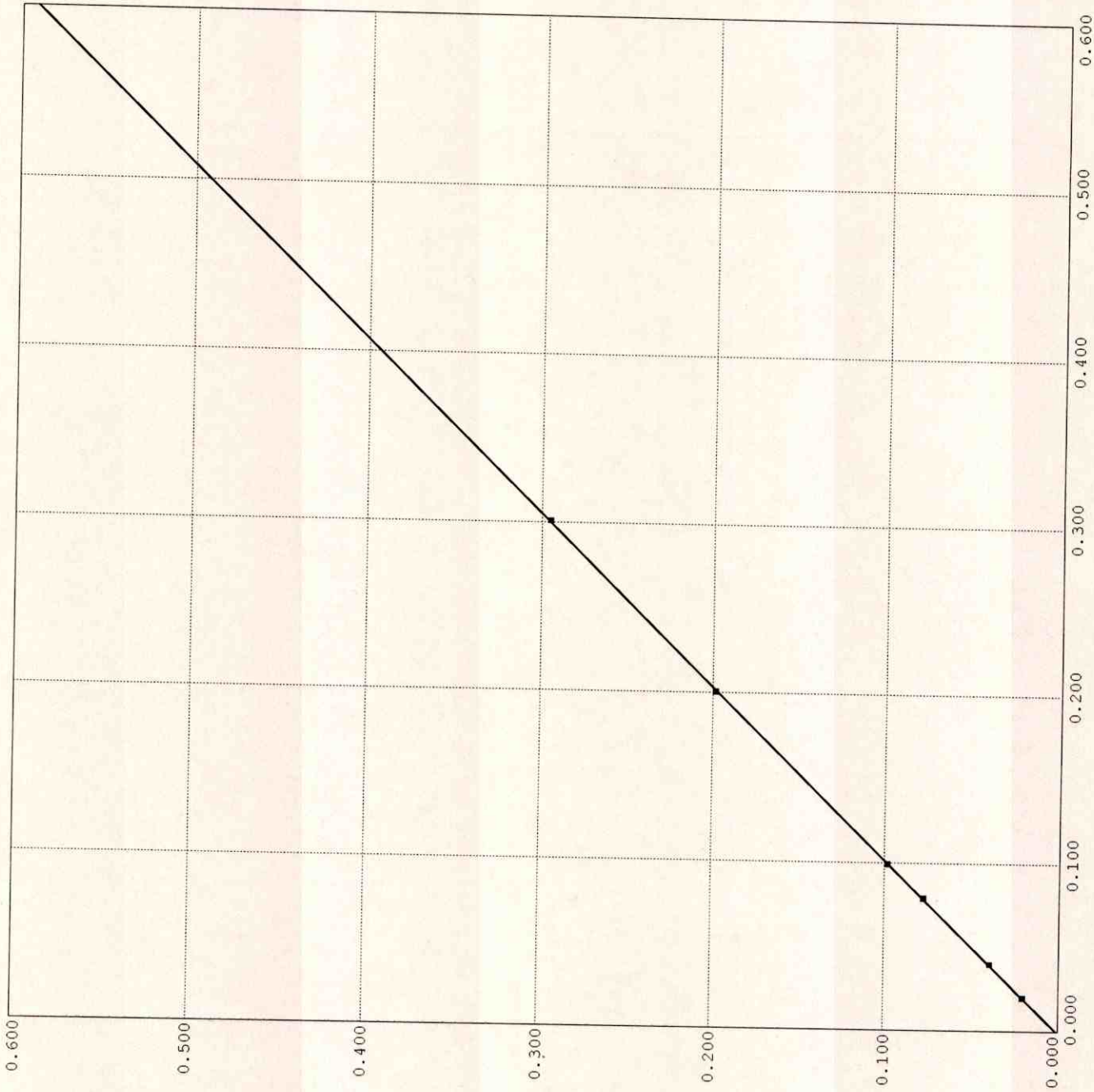
Alaska Department of Public Safety
 DATAMASTER dmt: 100693

Date: 06/10/2020
 Time: 12:30:40

SUPERVISOR NAME:
 BRANDI BARNETT
 OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0210	0.0000
0.040	0.0402	0.0004
0.079	0.0786	0.0005
0.099	0.0992	0.0004
0.200	0.1992	0.0004
0.300	0.2956	0.0009

SLOPE = 0.983460
 R² = 0.999952



BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100693

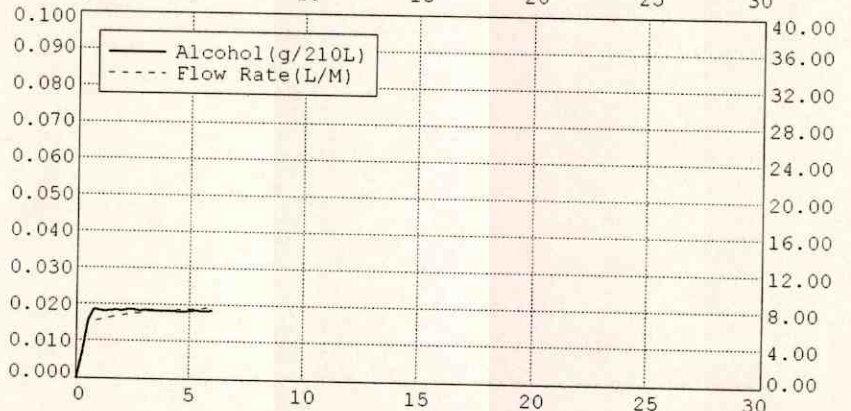
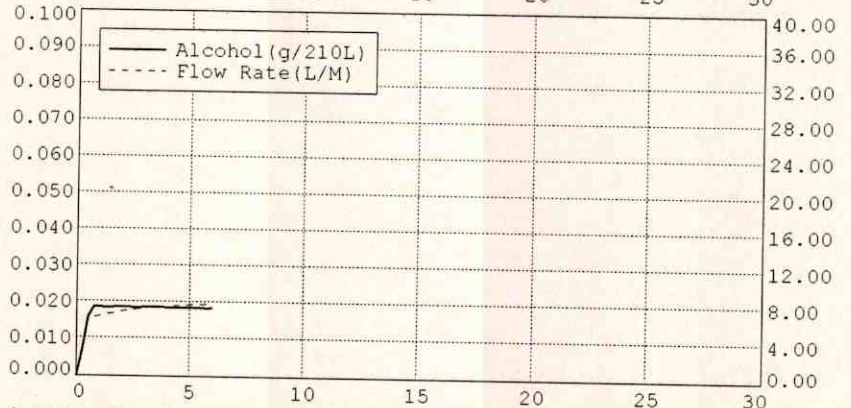
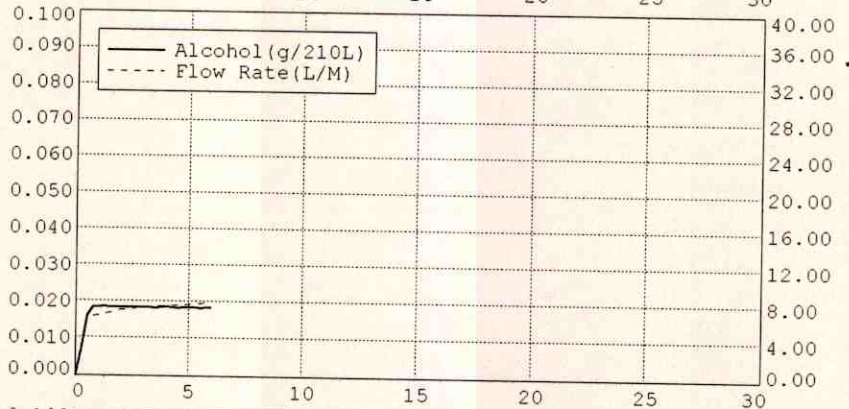
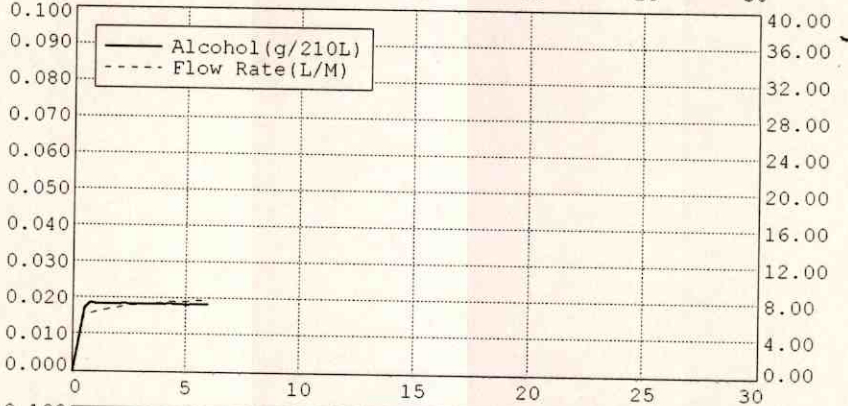
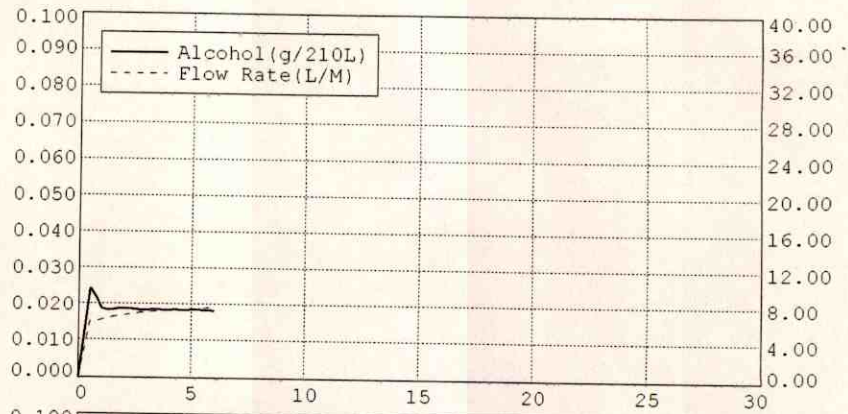
Date: 06/10/2020
 Time: 12:30:42

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.67: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 881 psi

BLANK TEST	0.000	12:32
INTERNAL STANDARD	VERIFIED	12:32
EXTERNAL STANDARD	0.021	12:32
BLANK TEST	0.000	12:33
EXTERNAL STANDARD	0.021	12:33
BLANK TEST	0.000	12:34
EXTERNAL STANDARD	0.021	12:34
BLANK TEST	0.000	12:35
EXTERNAL STANDARD	0.021	12:35
BLANK TEST	0.000	12:36
EXTERNAL STANDARD	0.021	12:36
BLANK TEST	0.000	12:37

Average = 0.0210
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100693

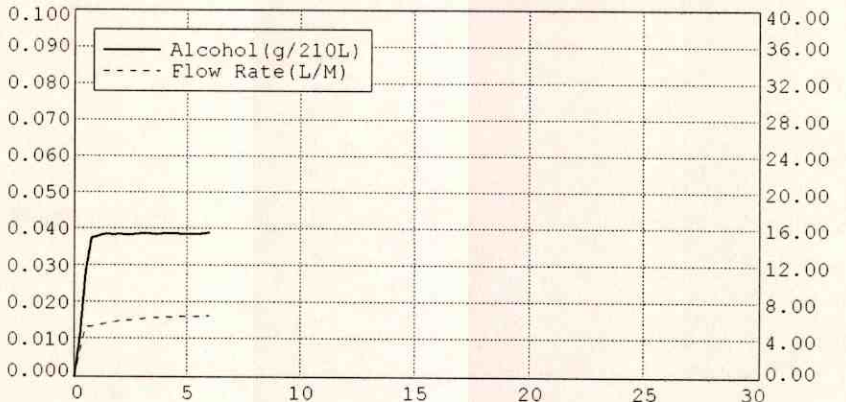
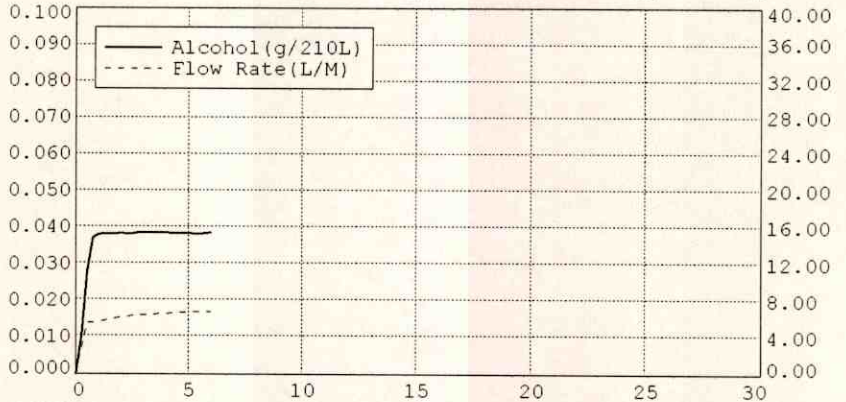
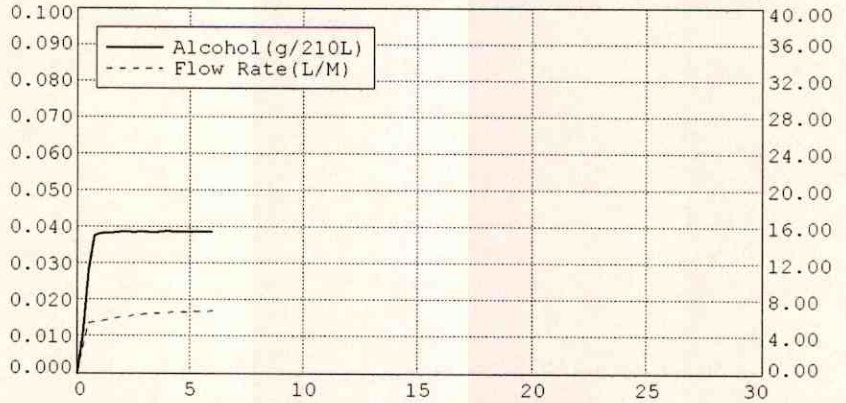
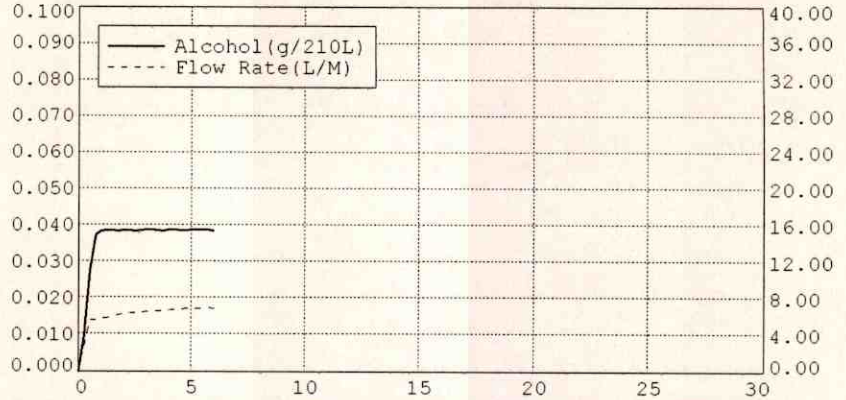
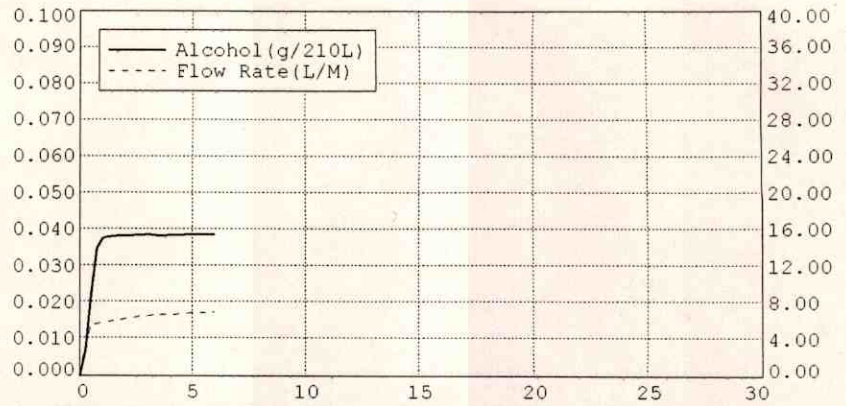
Date: 06/10/2020
Time: 12:43:03

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.67: 0.040
LOT #: AG915607
EXPIRATION: 06/05/2021
TANK PRESSURE: 756 psi

BLANK TEST	0.000	12:44
INTERNAL STANDARD	VERIFIED	12:44
EXTERNAL STANDARD	0.040	12:44
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.040	12:45
BLANK TEST	0.000	12:46
EXTERNAL STANDARD	0.041	12:46
BLANK TEST	0.000	12:47
EXTERNAL STANDARD	0.040	12:47
BLANK TEST	0.000	12:48
EXTERNAL STANDARD	0.040	12:48
BLANK TEST	0.000	12:49

Average = 0.0402
Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100693

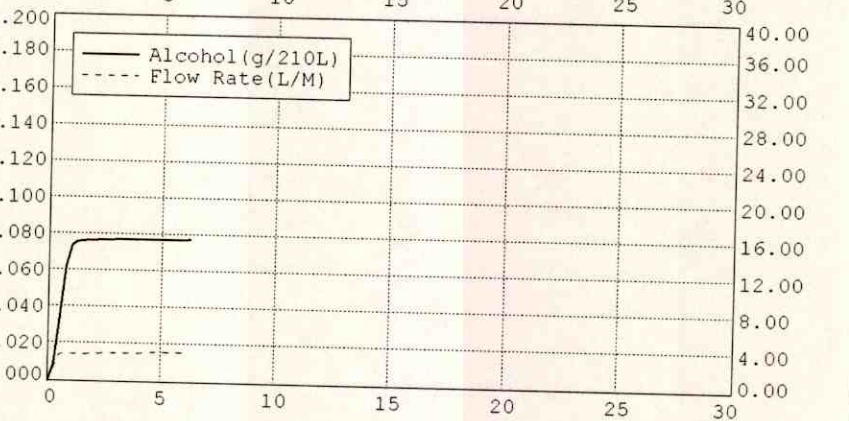
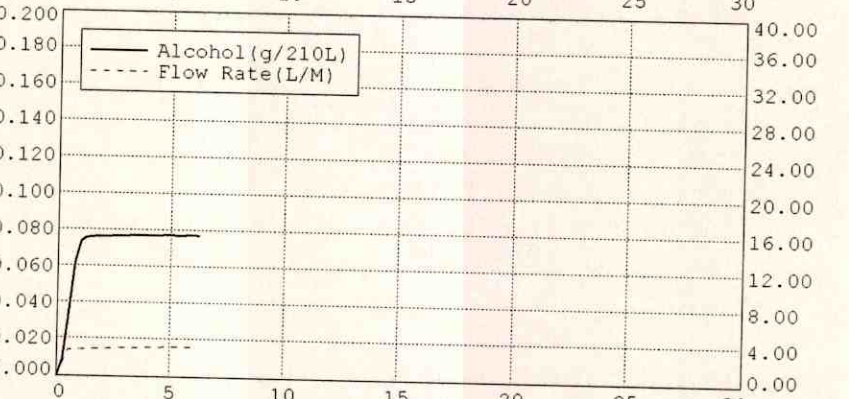
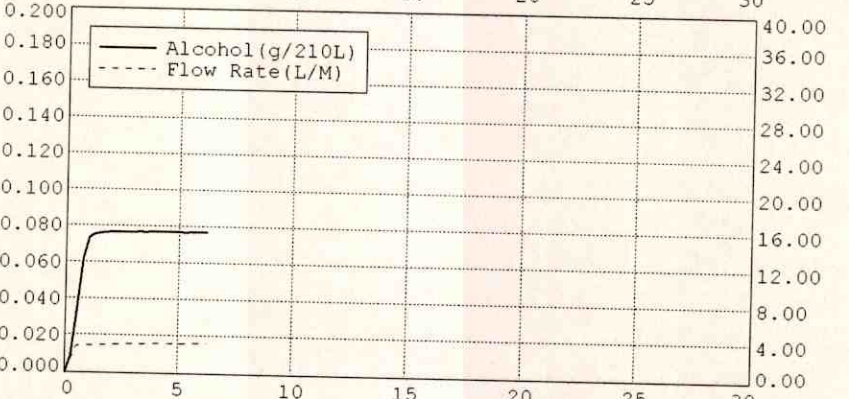
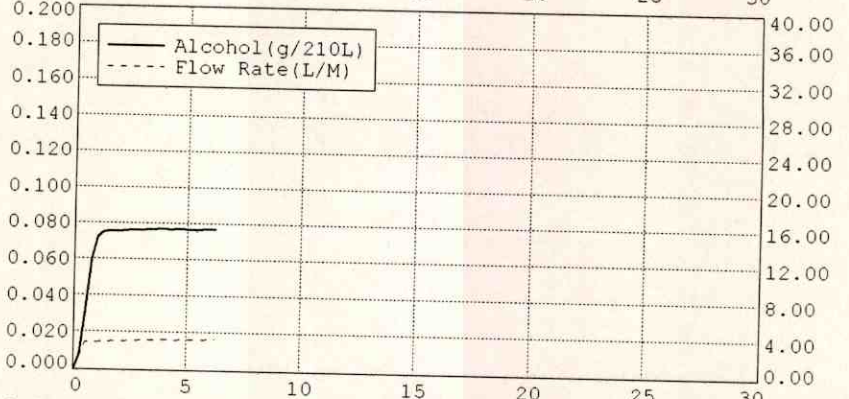
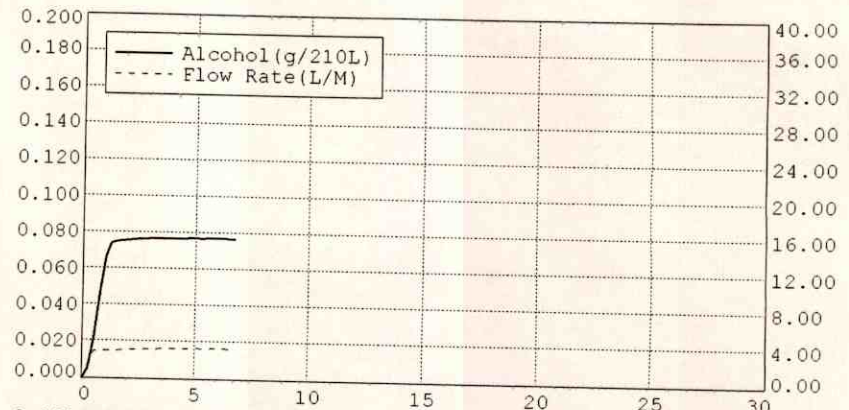
Date: 06/10/2020
 Time: 12:53:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.68: 0.079
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 412 psi

BLANK TEST	0.000	12:55
INTERNAL STANDARD	VERIFIED	12:55
EXTERNAL STANDARD	0.079	12:55
BLANK TEST	0.000	12:56
EXTERNAL STANDARD	0.078	12:56
BLANK TEST	0.000	12:57
EXTERNAL STANDARD	0.078	12:57
BLANK TEST	0.000	12:58
EXTERNAL STANDARD	0.079	12:58
BLANK TEST	0.000	12:59
EXTERNAL STANDARD	0.079	12:59
BLANK TEST	0.000	13:00

Average = 0.0786
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100693

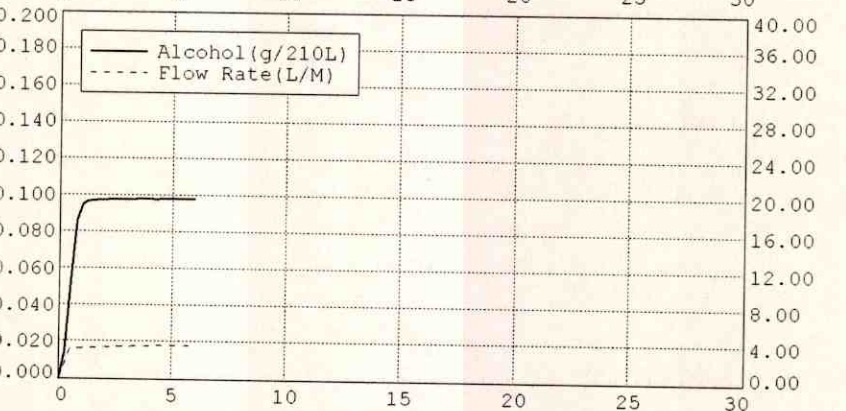
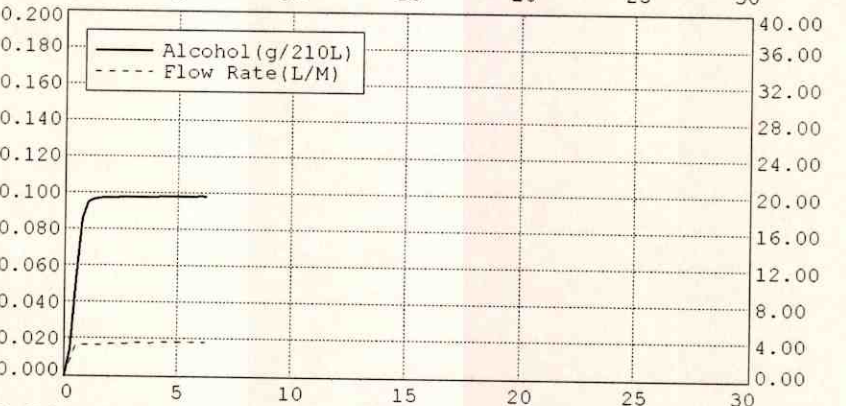
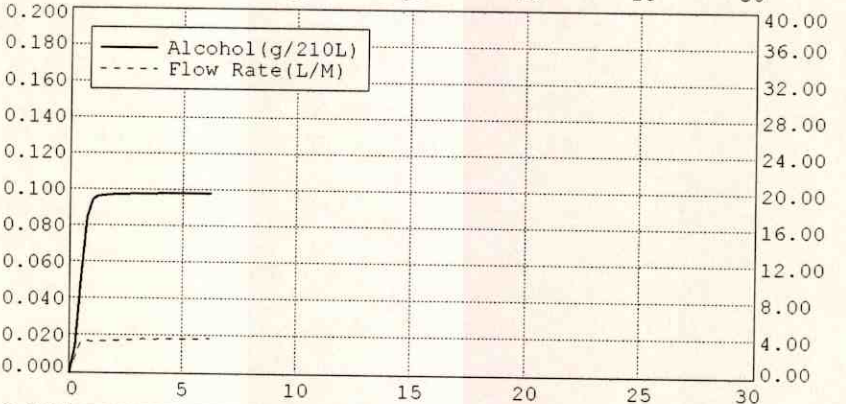
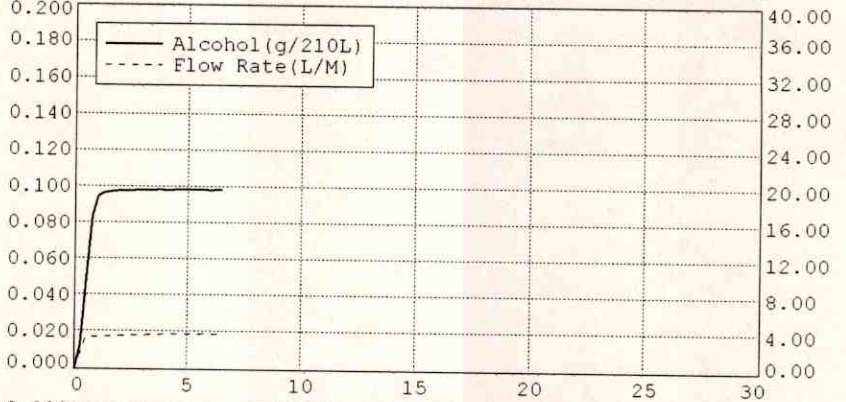
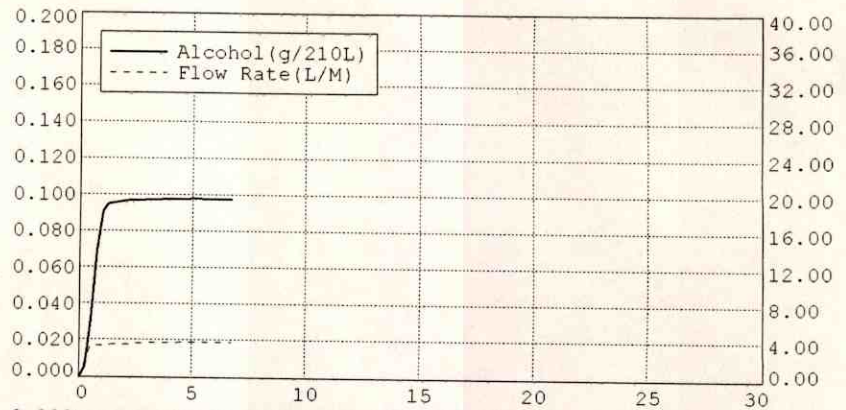
Date: 06/10/2020
 Time: 13:19:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.69: 0.099
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 512 psi

BLANK TEST	0.000	13:21
INTERNAL STANDARD	VERIFIED	13:21
EXTERNAL STANDARD	0.099	13:21
BLANK TEST	0.000	13:22
EXTERNAL STANDARD	0.100	13:22
BLANK TEST	0.000	13:23
EXTERNAL STANDARD	0.099	13:24
BLANK TEST	0.000	13:24
EXTERNAL STANDARD	0.099	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.099	13:26
BLANK TEST	0.000	13:27

Average = 0.0992
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100693

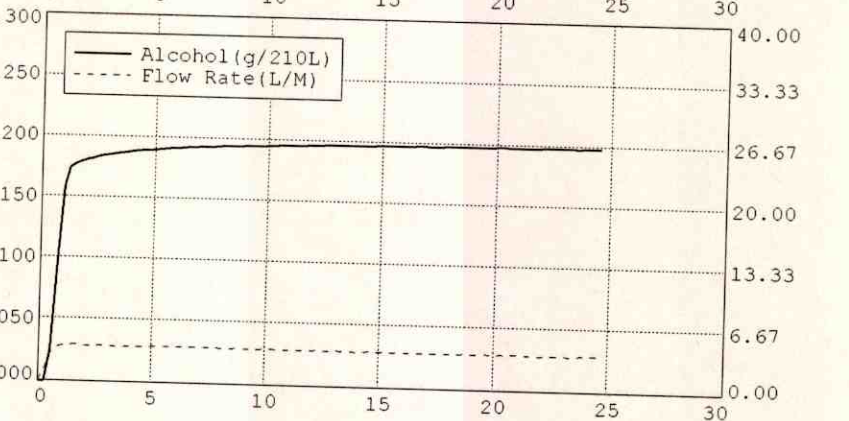
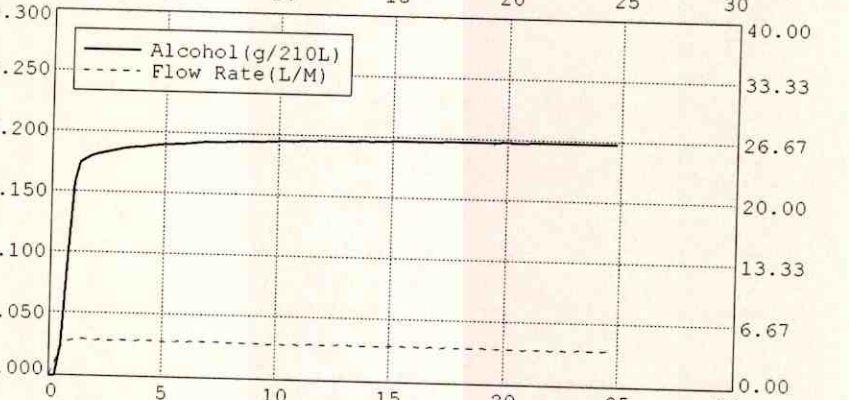
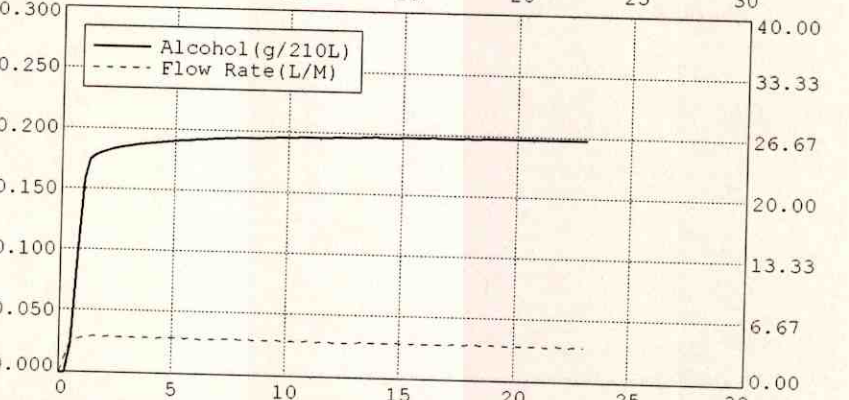
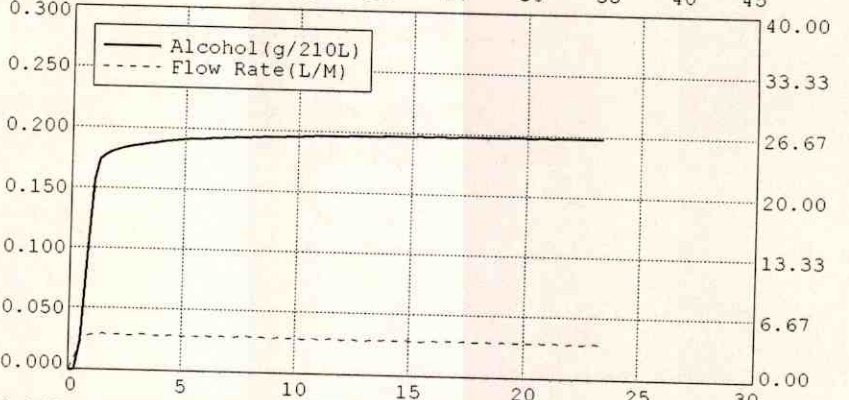
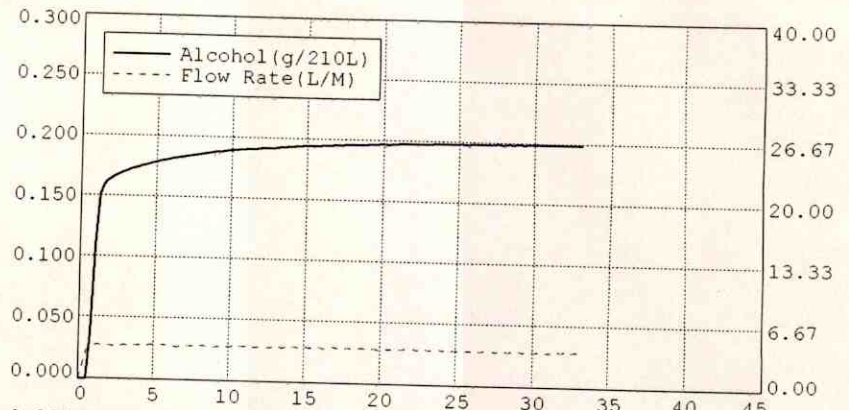
Date: 06/10/2020
 Time: 13:29:07

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:30
INTERNAL STANDARD	VERIFIED	13:30
EXTERNAL STANDARD	0.200	13:31
BLANK TEST	0.000	13:32
EXTERNAL STANDARD	0.199	13:32
BLANK TEST	0.000	13:33
EXTERNAL STANDARD	0.199	13:34
BLANK TEST	0.000	13:35
EXTERNAL STANDARD	0.199	13:35
BLANK TEST	0.000	13:36
EXTERNAL STANDARD	0.199	13:36
BLANK TEST	0.000	13:37

Average = 0.1992
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100693

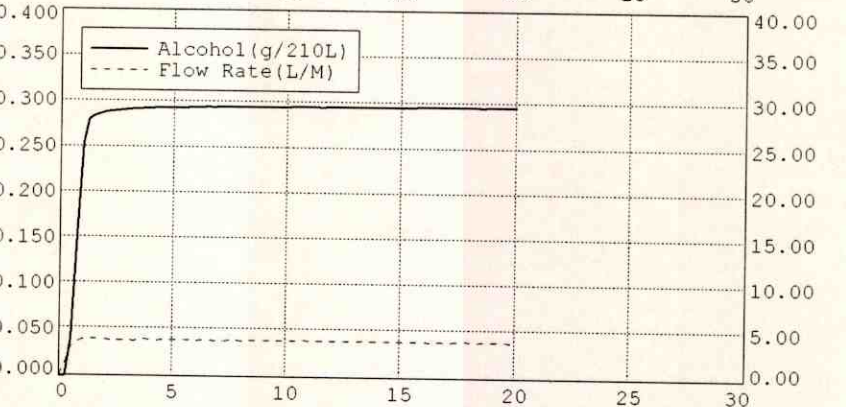
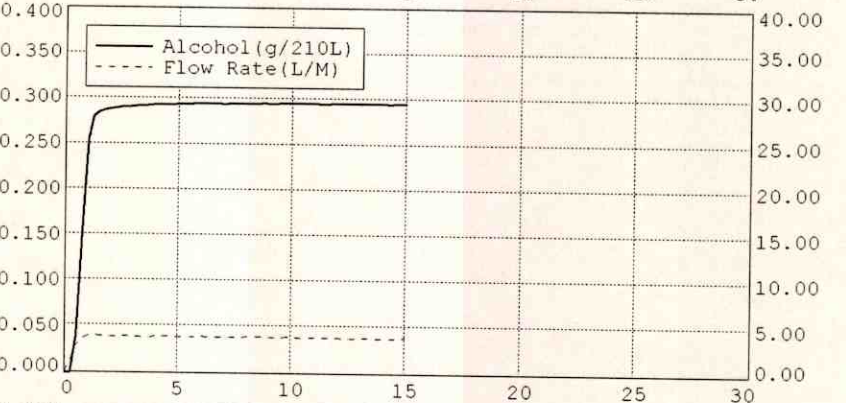
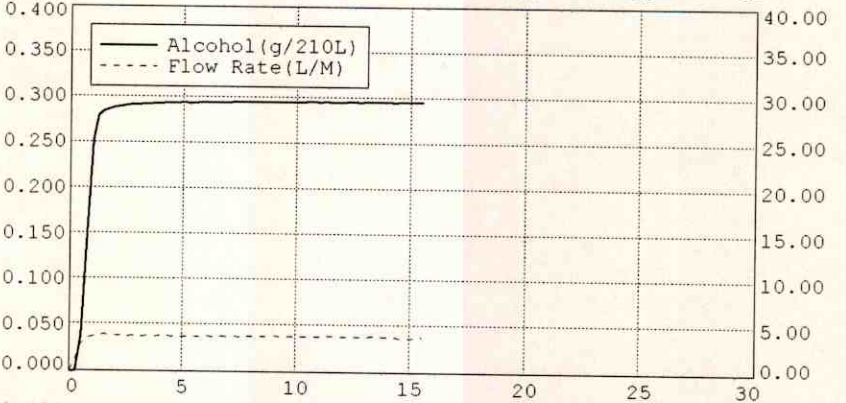
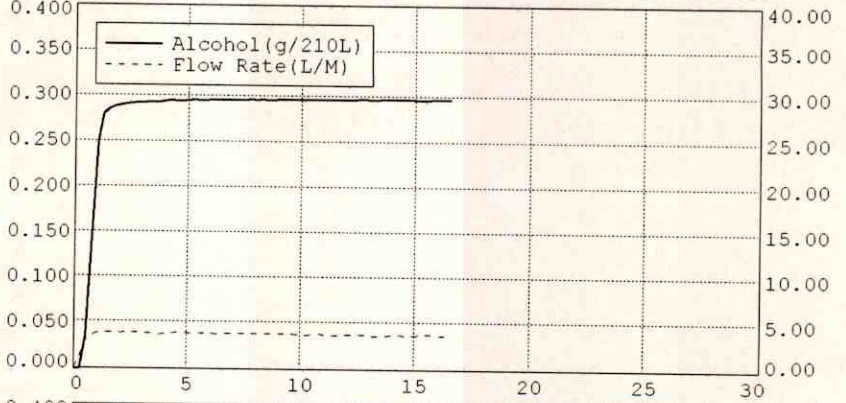
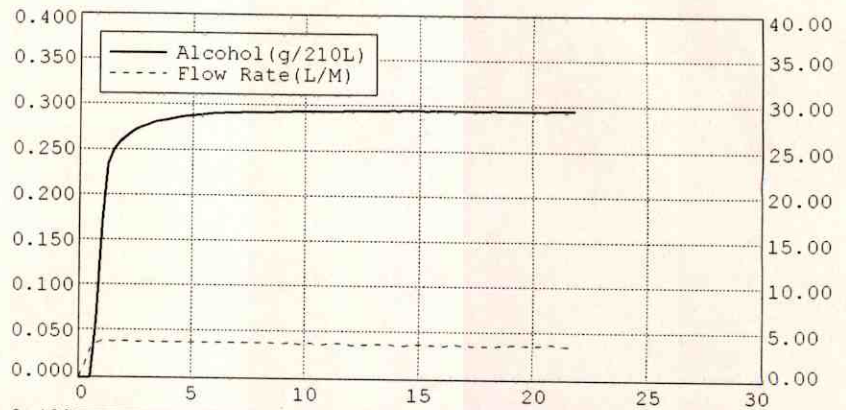
Date: 06/10/2020
 Time: 13:42:44

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:43
INTERNAL STANDARD	VERIFIED	13:44
EXTERNAL STANDARD	0.295	13:44
BLANK TEST	0.000	13:45
EXTERNAL STANDARD	0.297	13:45
BLANK TEST	0.000	13:46
EXTERNAL STANDARD	0.295	13:47
BLANK TEST	0.000	13:48
EXTERNAL STANDARD	0.295	13:48
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.296	13:49
BLANK TEST	0.000	13:50

Average = 0.2956
 Std Dev = 0.0009



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 06/11/2020
Time: 11:01:23

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

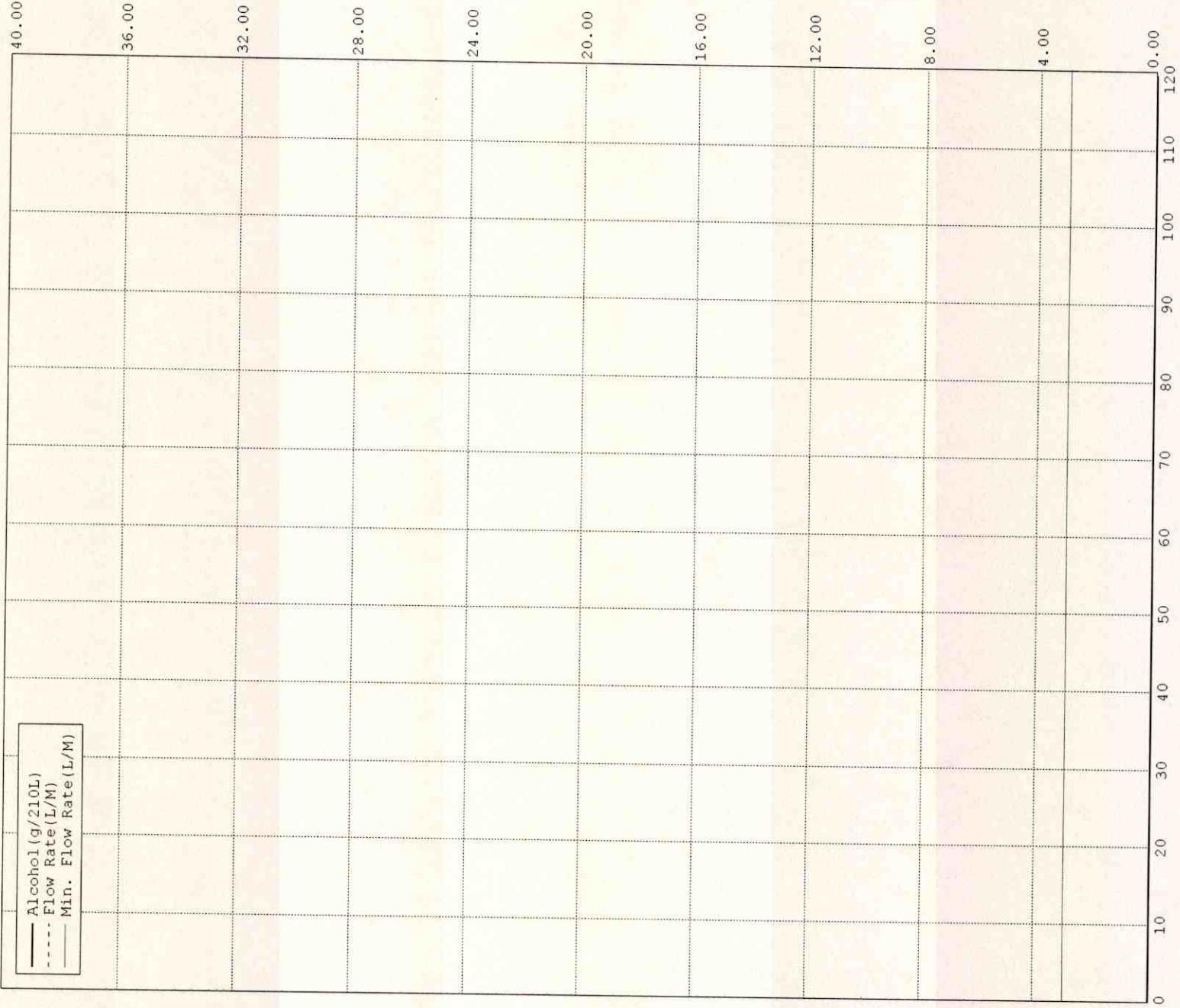
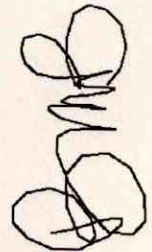
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 11:04
BLANK TEST 0.000 11:04
INTERNAL STANDARD VERIFIED 11:04
EXTERNAL STANDARD 0.080 11:05
BLANK TEST 0.000 11:05
SUBJECT SAMPLE INCOMPLETE 11:08



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 06/11/2020
Time: 12:10:02

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

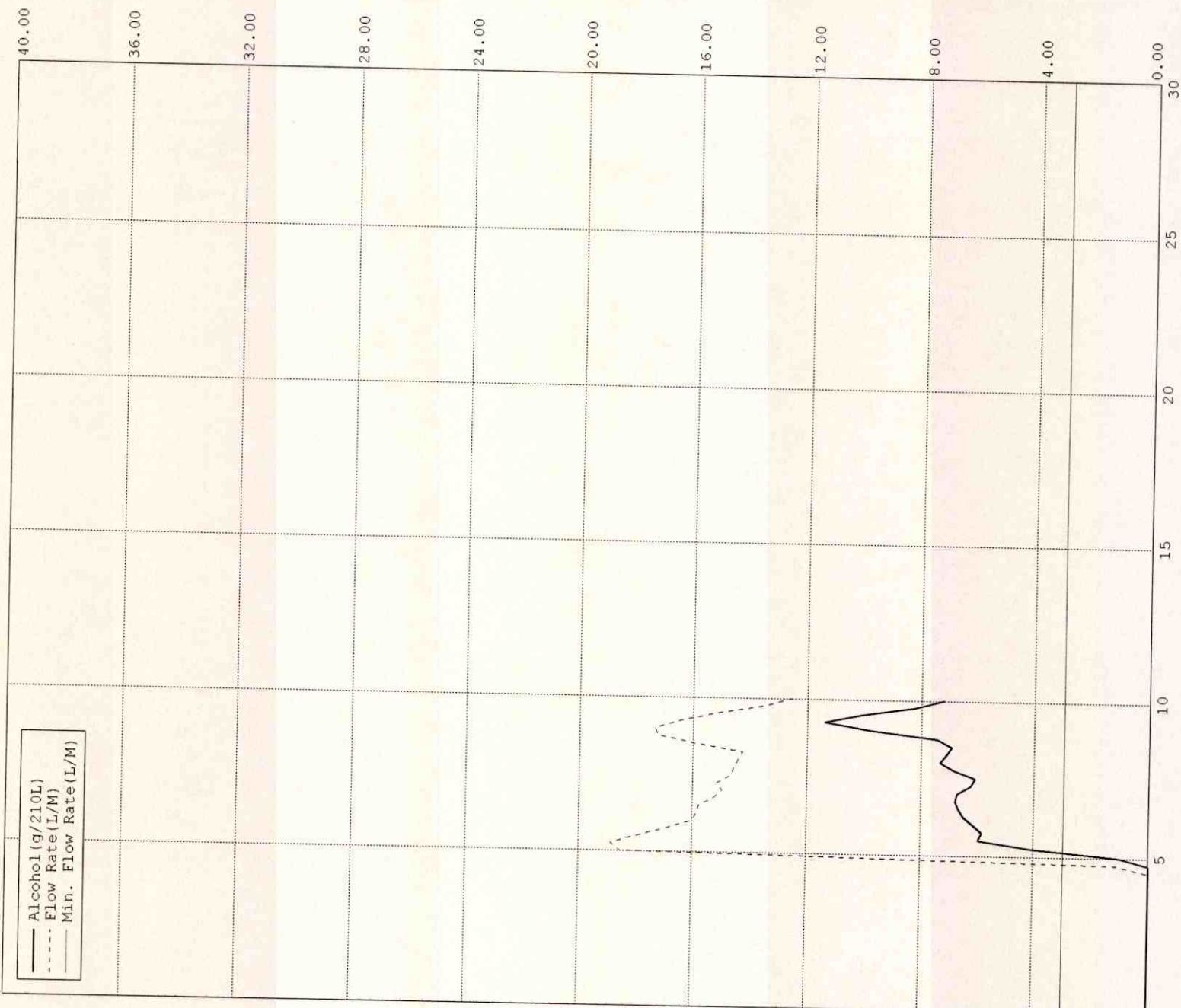
DEPT/AGENCY:
INVALID

CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 12:11
BLANK TEST 0.000 12:11
INTERNAL STANDARD VERIFIED 12:11
EXTERNAL STANDARD 0.079 12:11
BLANK TEST 0.000 12:12
SUBJECT SAMPLE INVALID 12:12



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 06/11/2020
Time: 12:24:40

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

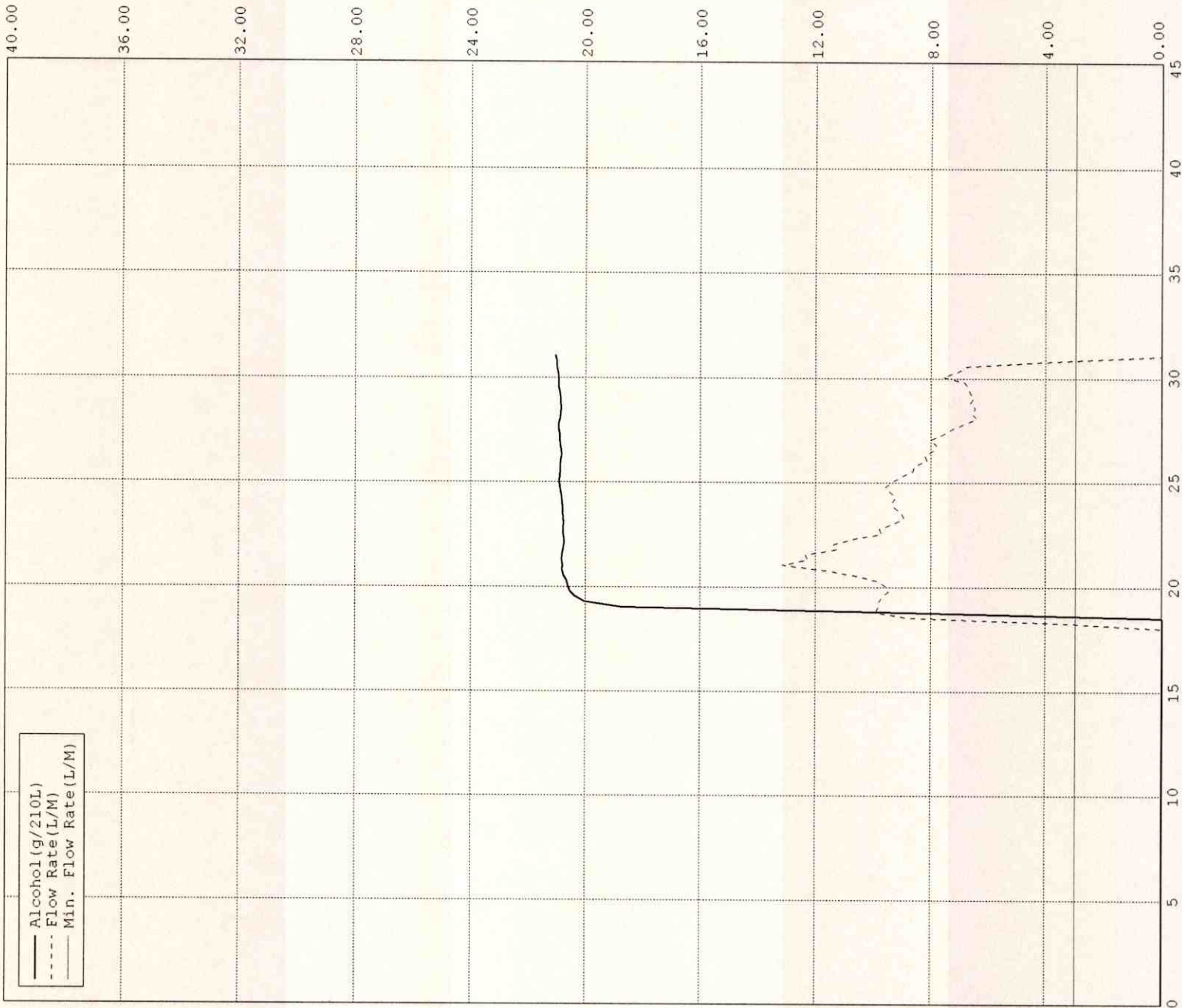
DEPT/AGENCY:
INTERFERENCE ACETONE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 12:26
BLANK TEST 0.000 12:27
INTERNAL STANDARD VERIFIED 12:27
Xq = 0.091 (0.38%)
EXTERNAL STANDARD 0.079 12:27
X[1] = 0.0792 (-0.0007) (0.0029)
BLANK TEST 0.000 12:28
SUBJECT SAMPLE XXX 12:28
X[1] = 0.1059 (-0.0180) (-0.0005)

Interference Detected

Filter 2 Avg: -0.0006
Filter 3 Avg: 0.0023
BMB 6/11/20



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 06/11/2020
Time: 12:33:19

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

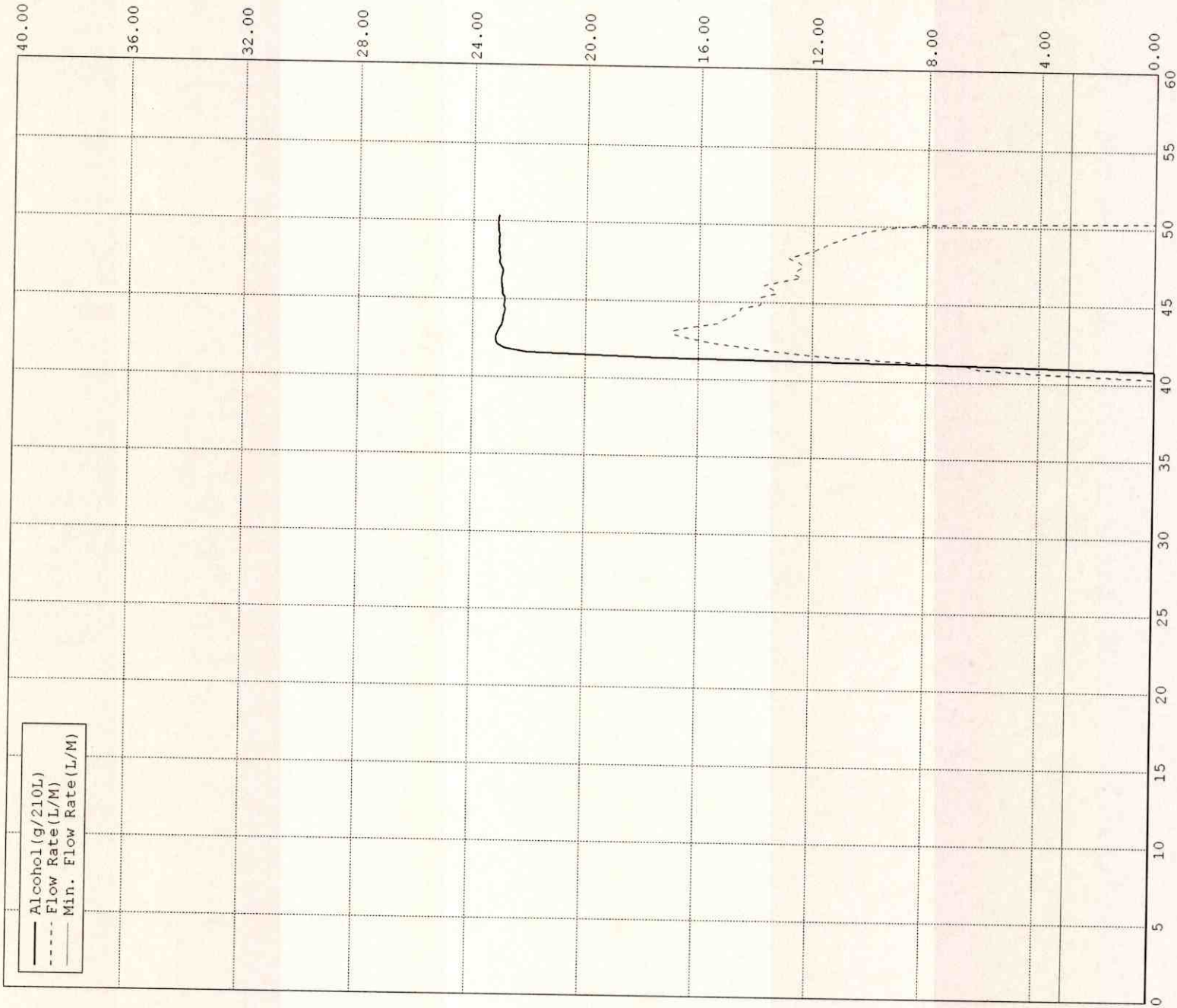
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.80: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:34
BLANK TEST	0.000	12:34
INTERNAL STANDARD	VERIFIED	12:34
Xq = 0.091 (0.29%)		
EXTERNAL STANDARD	0.079	12:34
X[1] = 0.0793 (-0.0002) (0.0026)		
BLANK TEST	0.000	12:35
SUBJECT SAMPLE	XXX	12:36
X[1] = 0.1163 (-0.0210) (0.0021)		

Interference Detected

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 06/11/2020
Time: 12:40:15

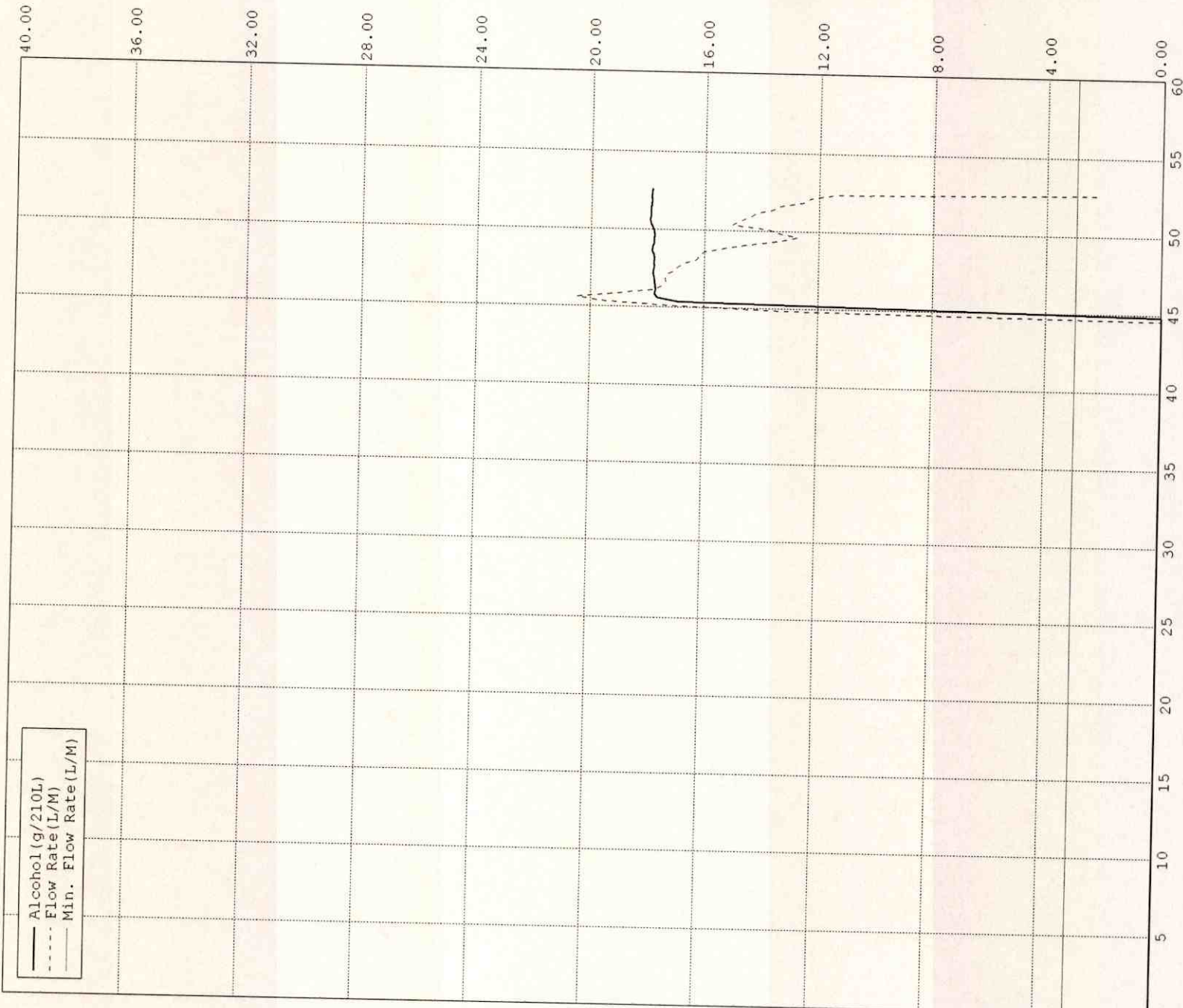
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:41
BLANK TEST	0.000	12:41
INTERNAL STANDARD	VERIFIED	12:41
$x_q = 0.091$ (0.38%)		
EXTERNAL STANDARD	0.079	12:41
$x[1] = 0.0785$ (-0.0008) (0.0023)		
BLANK TEST	0.000	12:42
SUBJECT SAMPLE (Vol=2.01L)	0.090	12:43
$x[1] = 0.0902$ (0.0009) (0.0008)		
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.079	12:44
$x[1] = 0.0785$ (-0.0006) (0.0013)		
BLANK TEST	0.000	12:45



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 06/11/2020
Time: 12:14:34

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

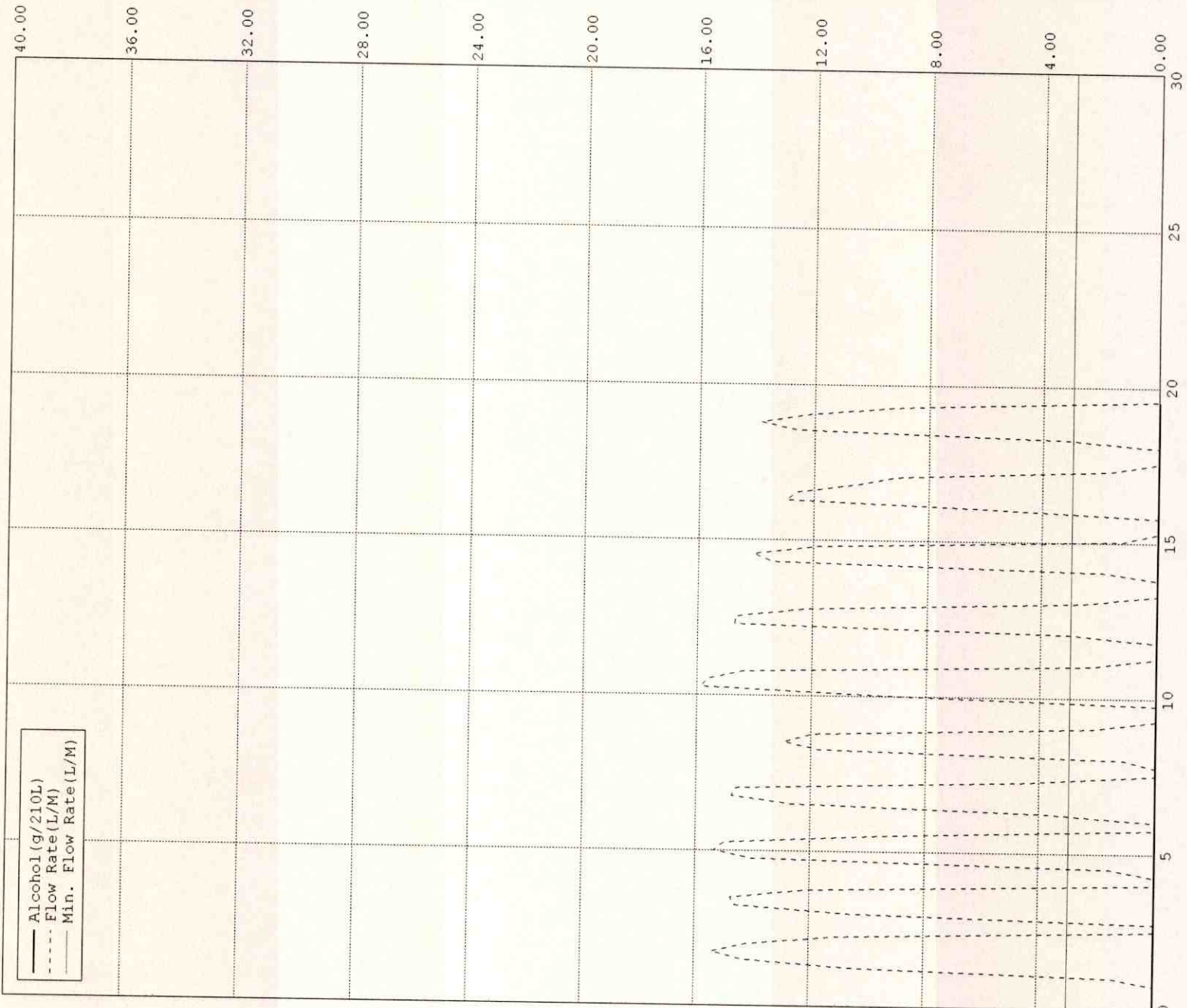
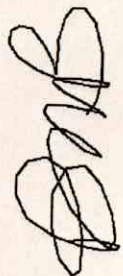
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 12:18
BLANK TEST 0.000 12:18
INTERNAL STANDARD VERIFIED 12:18
EXTERNAL STANDARD 0.079 12:18
BLANK TEST 0.000 12:19
SUBJECT SAMPLE XXX 12:19

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 06/11/2020
Time: 11:15:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
RFI

CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

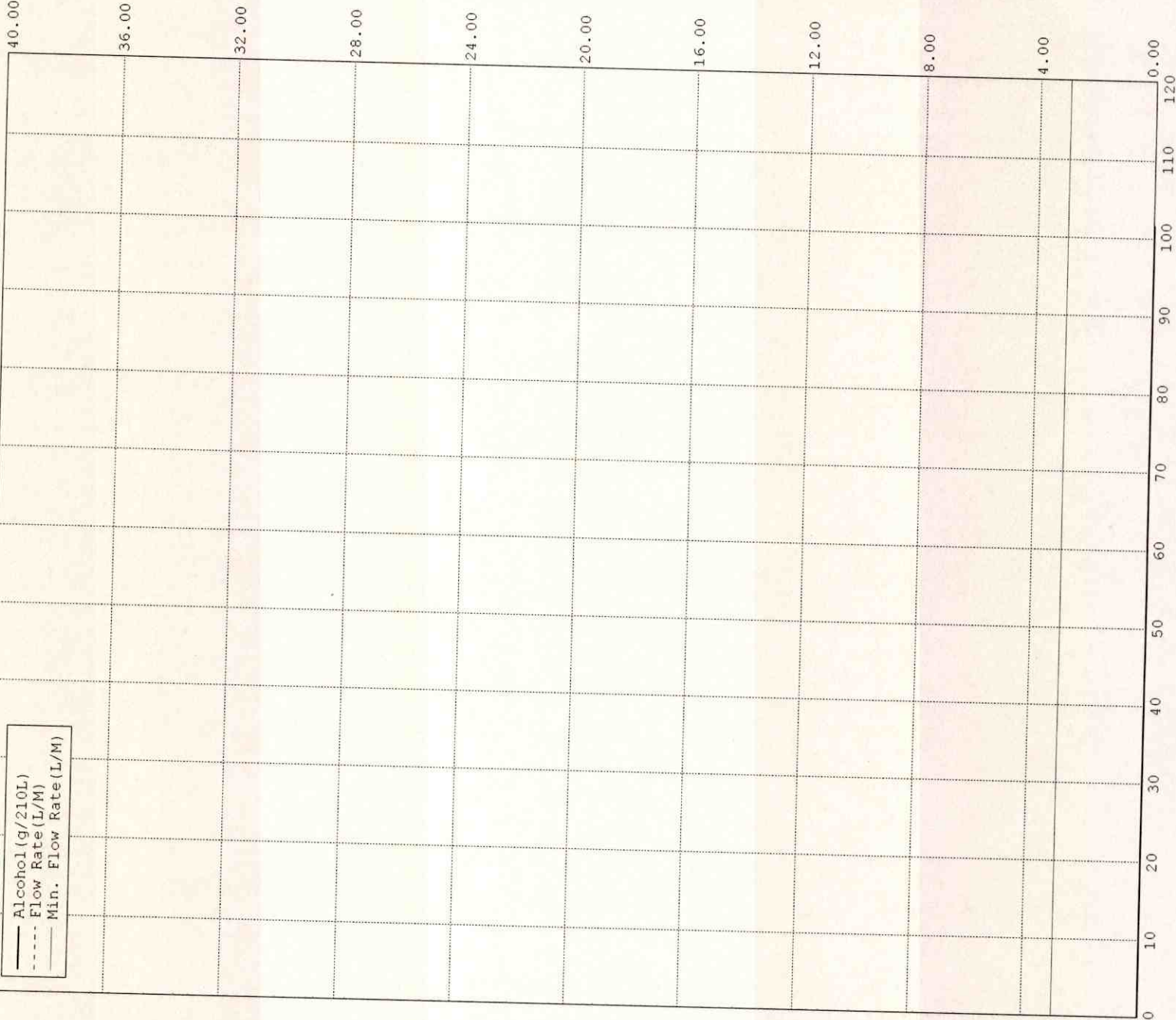
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 11:16
BLANK TEST 0.000 11:16
INTERNAL STANDARD VERIFIED 11:16
EXTERNAL STANDARD 0.079 11:16
BLANK TEST 0.000 11:17

RFI DETECTED

RFI

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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100693

Date: 06/11/2020
Time: 13:05:00

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
NON DRINKING SUBJECT TEST
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.80: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	13:06
BLANK TEST	0.000	13:06
INTERNAL STANDARD	VERIFIED	13:06
EXTERNAL STANDARD	0.079	13:06
BLANK TEST	0.000	13:07
SUBJECT SAMPLE (Vol=1.82L)	0.000	13:08
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.079	13:09
BLANK TEST	0.000	13:10

