

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 100682 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 10/07/19

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: 100682

Date: 06/10/2020
Time: 10:50:54

VERSIONS

DMT: 3.02
PIC: 3.03
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 = 2.24 V PASSED
(1.36 V - 3.18 V)
Cooler Voltage = 1.71 V PASSED
(1.04 V - 2.44 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 538 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 4.680 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

Xq = 0.092 0.28% PASSED
(0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100682

Date: 06/10/2020
Time: 10:58 AM

Temperatures (°C)

Sample Cell: 49.0°C
Breath Tube: 48.1°C

Current Barometer 29.7 in
Volume (Ltr) 1.56

Settings

Lamp: 2.14 V
Bias: 79 V
Cooler: 1.71 V
Chopper: 536 Hz

Voltages (V)

Flow: 1.04 V
Detector: 0.001 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100682

Date: 04/01/2019
Time: 09:15:52

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca	=	0.1000		
CAL	=	0.962605	0.800	<= CAL < 1.200
b1	=	0.0010	0.0000	<= b1 < 0.0040
b2	=	0.0048	0.0010	<= b2 < 0.0100
b3	=	0.0002	0.0000	<= b3 < 0.0040
Xq	=	0.0924	0.0500	<= Xq < 0.2000
a21	=	1.117691	1.050	<= a21 < 1.300
a31	=	0.445338	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100682

Date: 06/10/2020
Time: 10:59:59

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

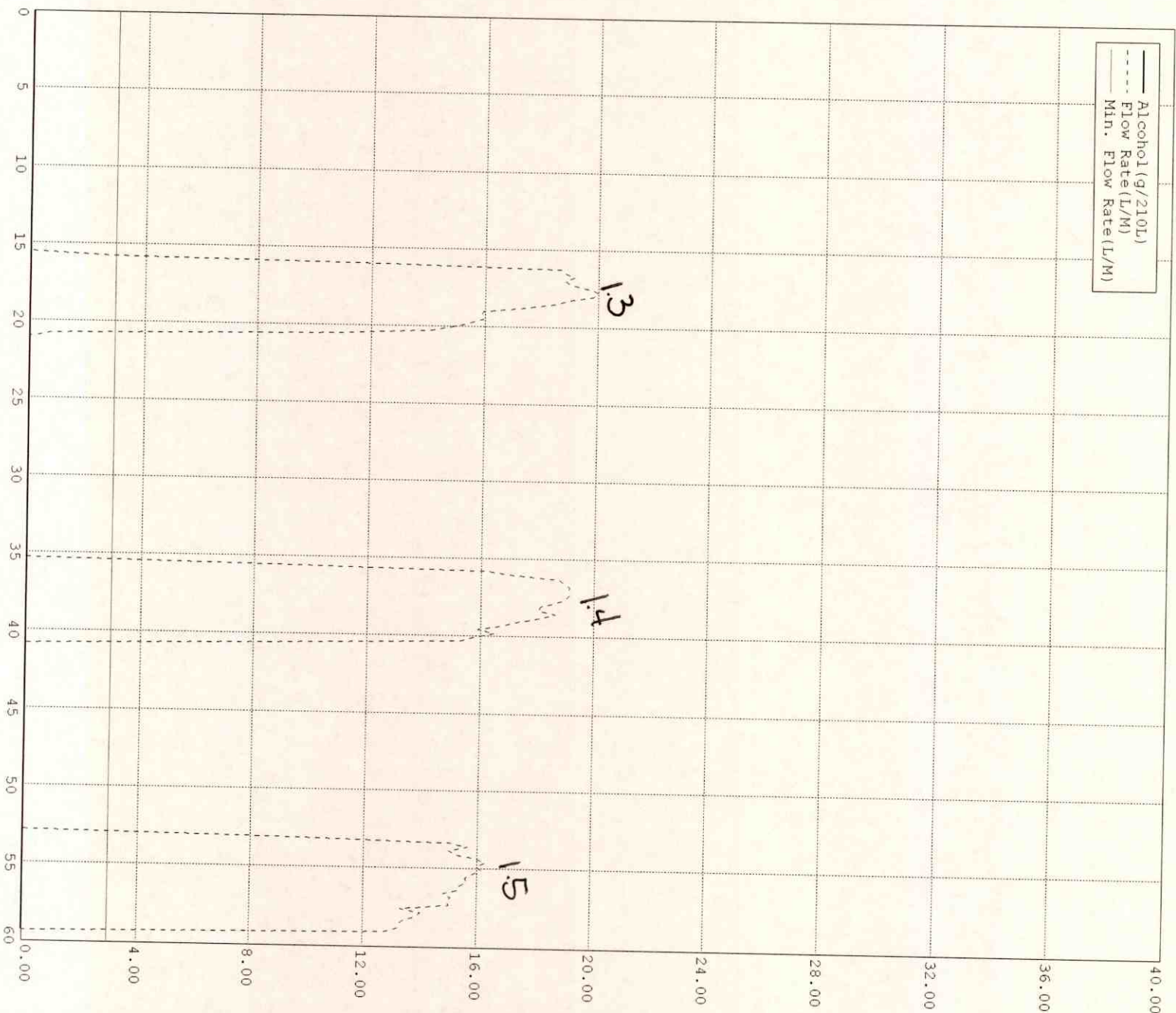
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.65: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	11:01
BLANK TEST	0.000	11:01
INTERNAL STANDARD	VERIFIED	11:01
EXTERNAL STANDARD	0.077	11:02
BLANK TEST	0.000	11:03
SUBJECT SAMPLE (Vol=1.53L)	0.000	11:04
BLANK TEST	0.000	11:04
EXTERNAL STANDARD	0.077	11:05
BLANK TEST	0.000	11:06

BMB



LINEARITY CHECK

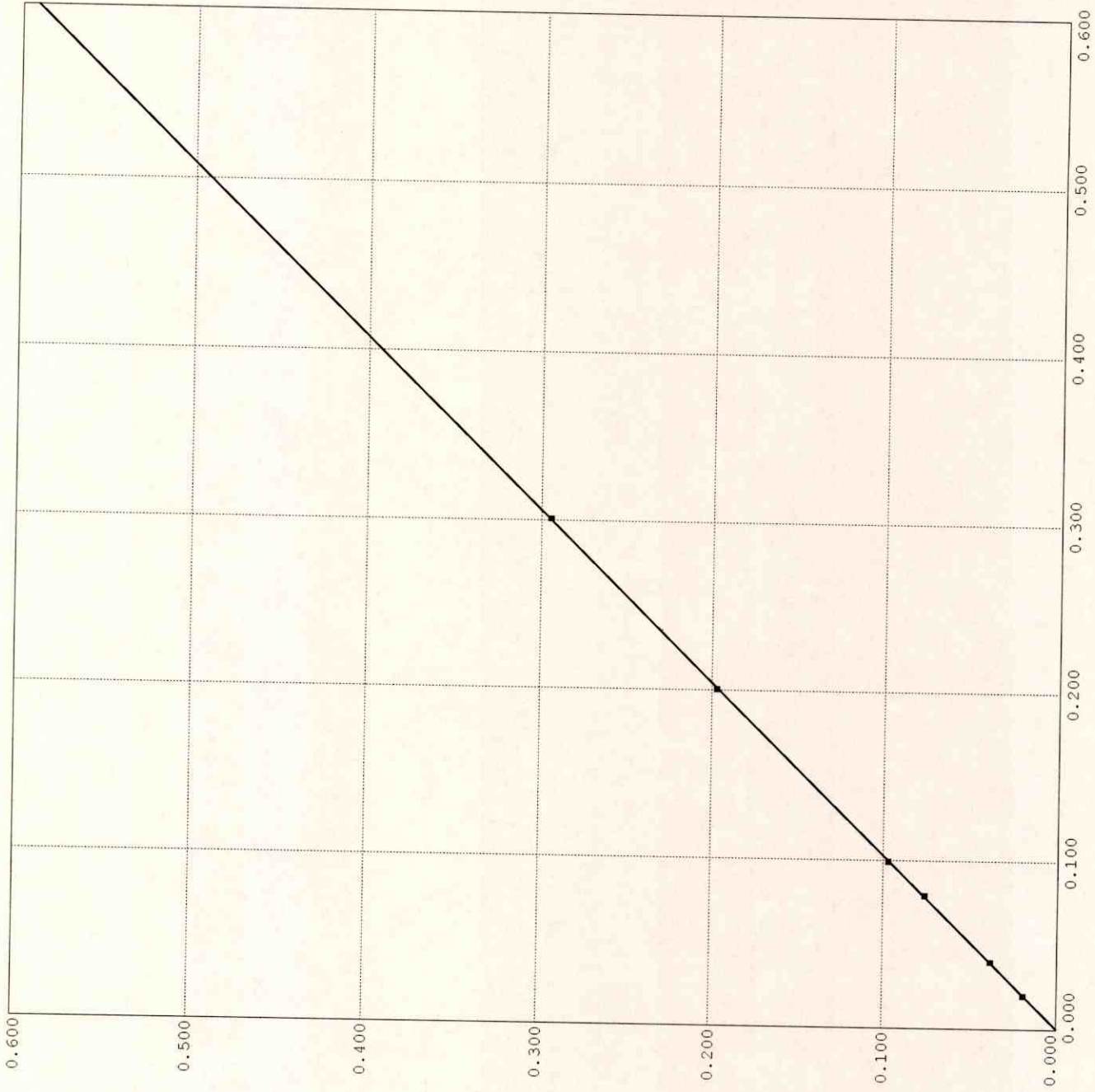
 Alaska Department of Public Safety
 DATAMASTER dmt: 100682

Date: 06/10/2020
 Time: 12:23:57

SUPERVISOR NAME:
 BRANDI BARNETT
 OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0198	0.0004
0.040	0.0388	0.0004
0.079	0.0770	0.0000
0.099	0.0980	0.0000
0.200	0.1980	0.0007
0.300	0.2950	0.0000

SLOPE = 0.985912
 R² = 0.999956



Handwritten signature: BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100682

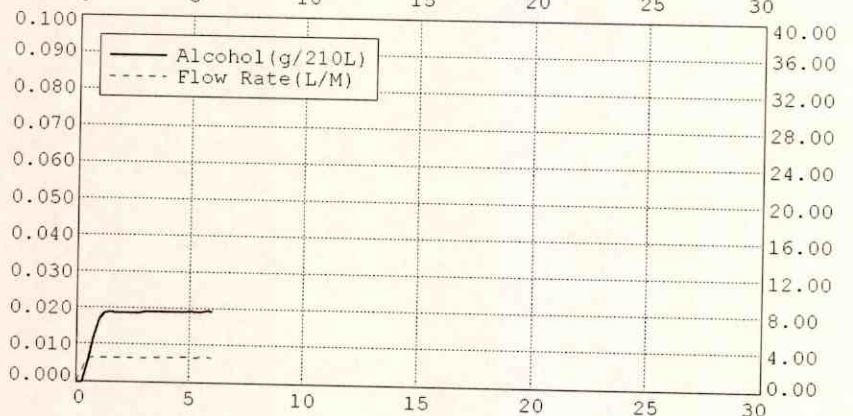
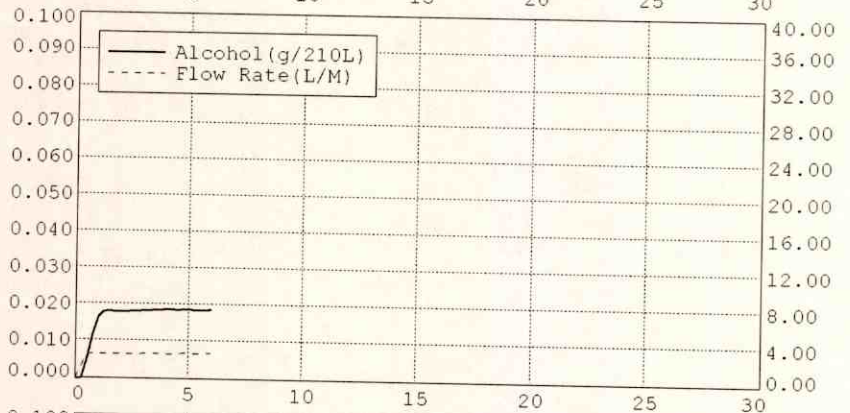
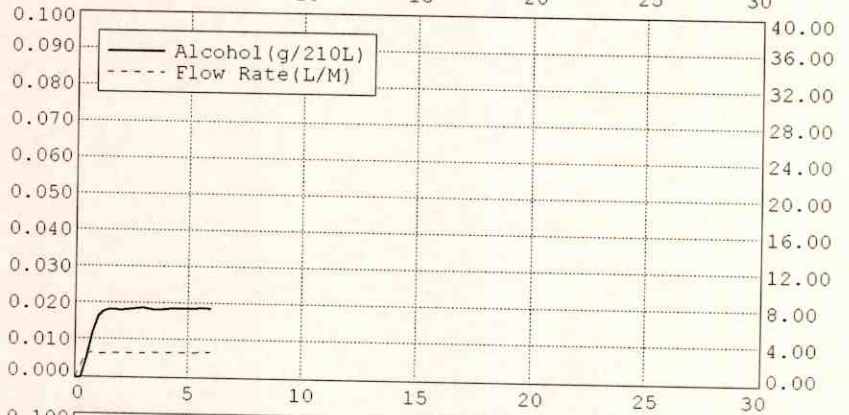
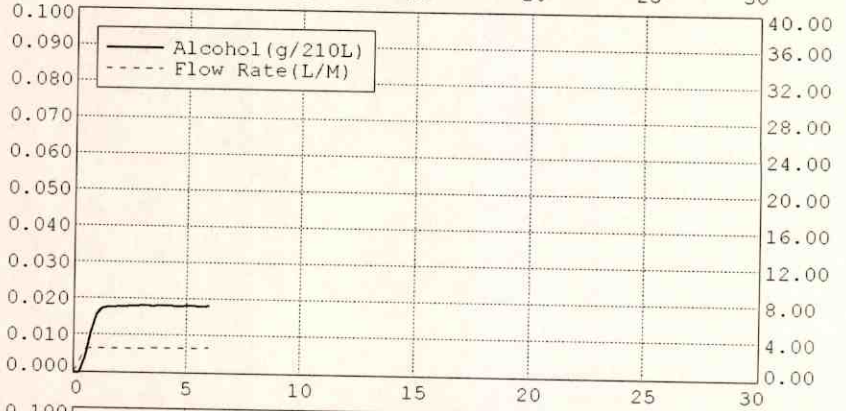
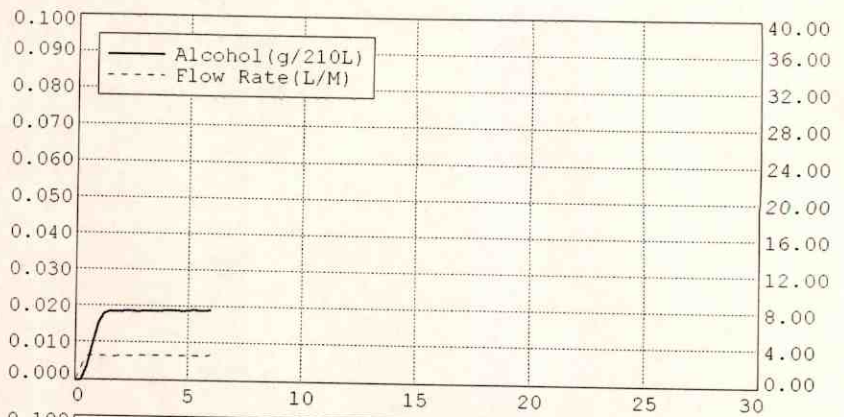
Date: 06/10/2020
 Time: 12:23:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.68: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 941 psi

BLANK TEST	0.000	12:25
INTERNAL STANDARD	VERIFIED	12:25
EXTERNAL STANDARD	0.020	12:25
BLANK TEST	0.000	12:26
EXTERNAL STANDARD	0.019	12:26
BLANK TEST	0.000	12:27
EXTERNAL STANDARD	0.020	12:27
BLANK TEST	0.000	12:28
EXTERNAL STANDARD	0.020	12:28
BLANK TEST	0.000	12:29
EXTERNAL STANDARD	0.020	12:30
BLANK TEST	0.000	12:30

Average = 0.0198
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100682

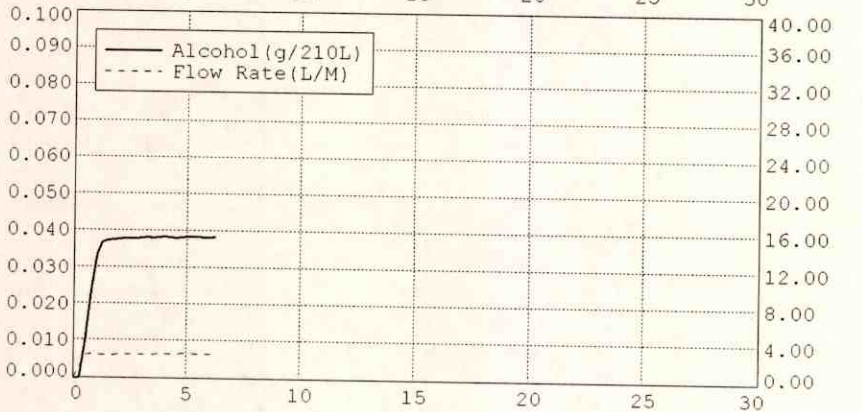
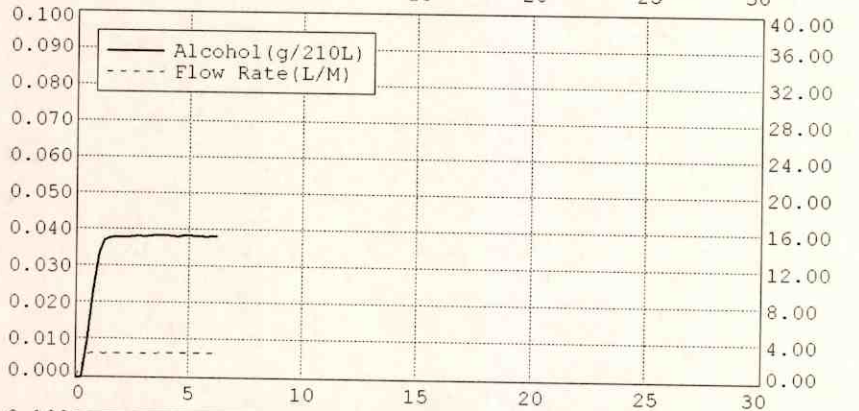
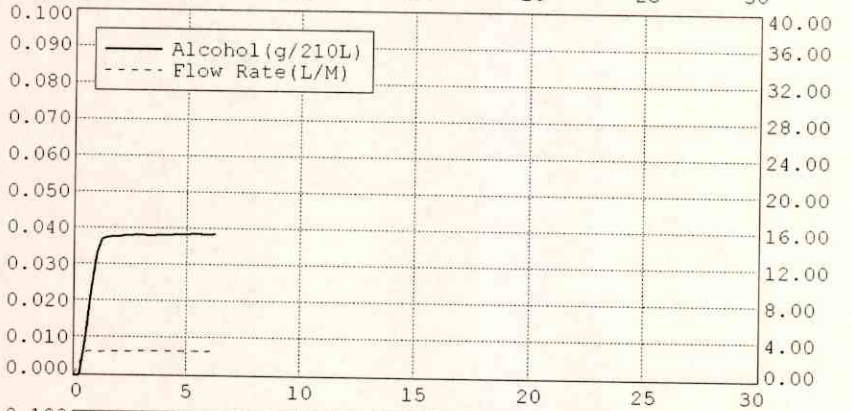
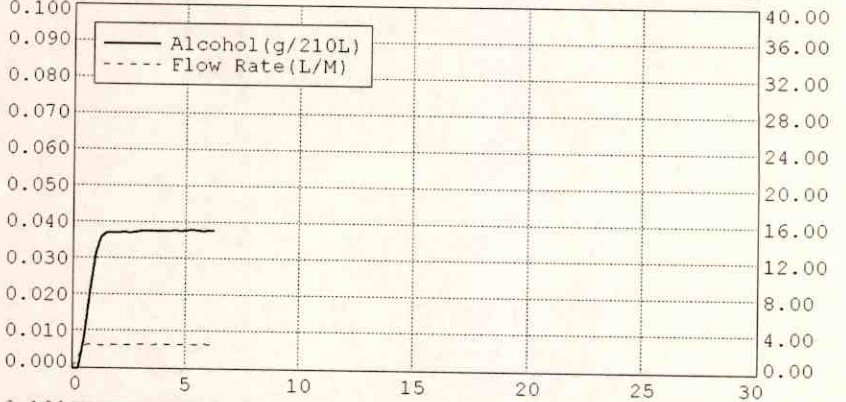
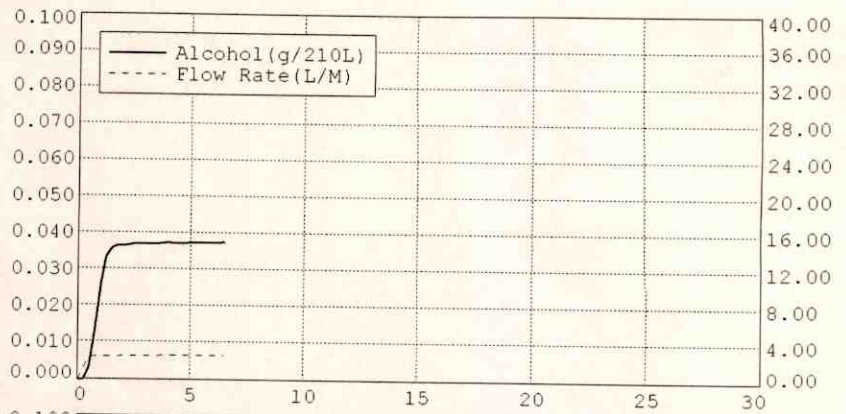
Date: 06/10/2020
 Time: 12:39:23

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.68: 0.040
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 707 psi

BLANK TEST	0.000	12:40
INTERNAL STANDARD	VERIFIED	12:41
EXTERNAL STANDARD	0.038	12:41
BLANK TEST	0.000	12:42
EXTERNAL STANDARD	0.039	12:42
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.039	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.039	12:44
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.039	12:45
BLANK TEST	0.000	12:46

Average = 0.0388
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100682

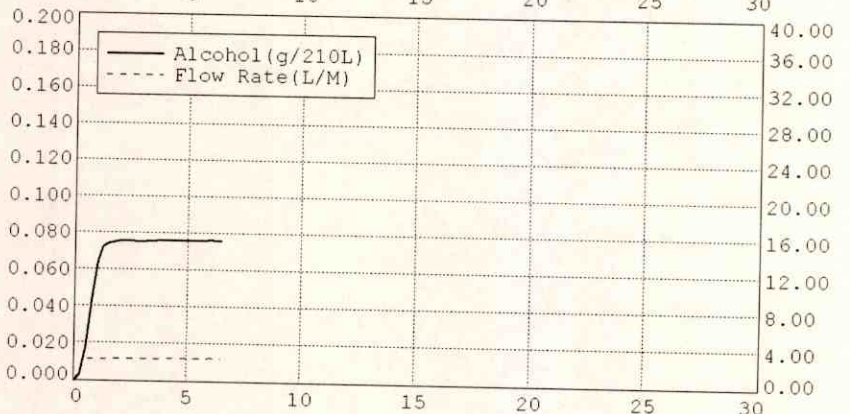
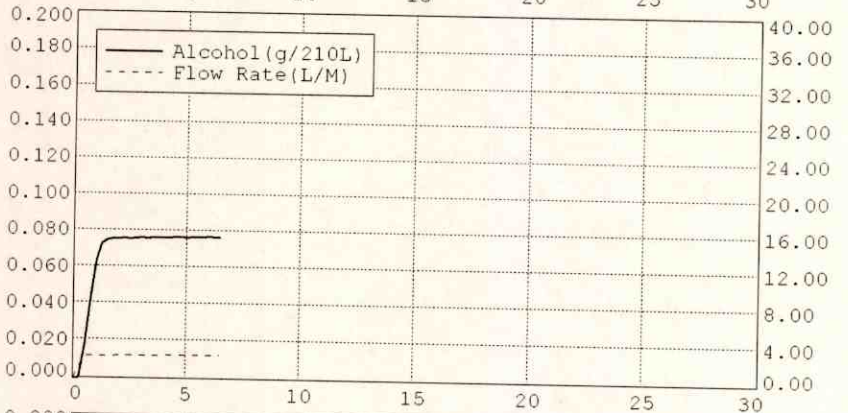
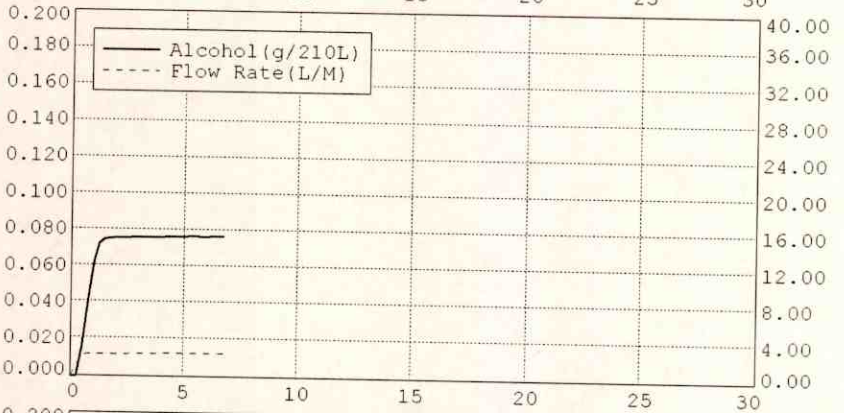
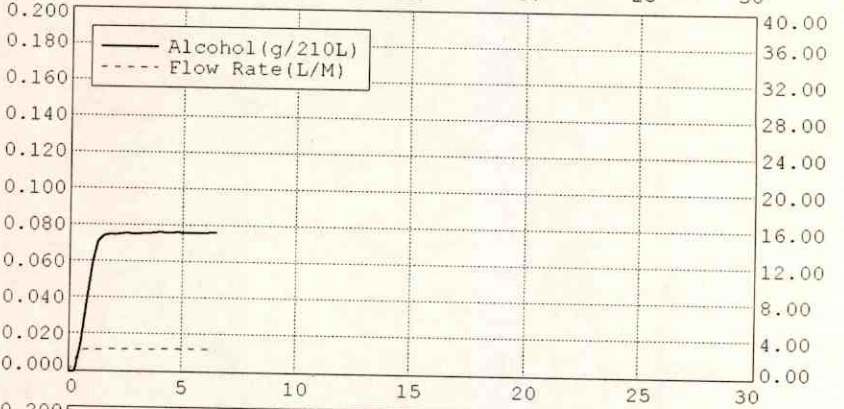
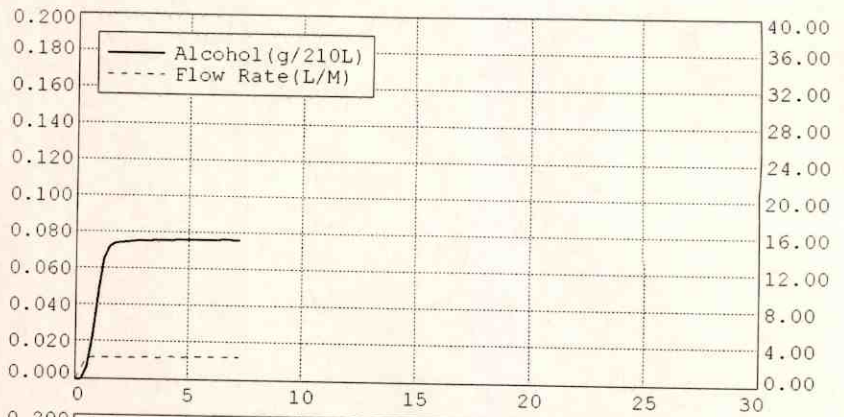
Date: 06/10/2020
 Time: 12:52:23

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.68: 0.079
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 394 psi

BLANK TEST	0.000	12:53
INTERNAL STANDARD	VERIFIED	12:53
EXTERNAL STANDARD	0.077	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.077	12:54
BLANK TEST	0.000	12:55
EXTERNAL STANDARD	0.077	12:56
BLANK TEST	0.000	12:56
EXTERNAL STANDARD	0.077	12:57
BLANK TEST	0.000	12:58
EXTERNAL STANDARD	0.077	12:58
BLANK TEST	0.000	12:59

Average = 0.0770
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100682

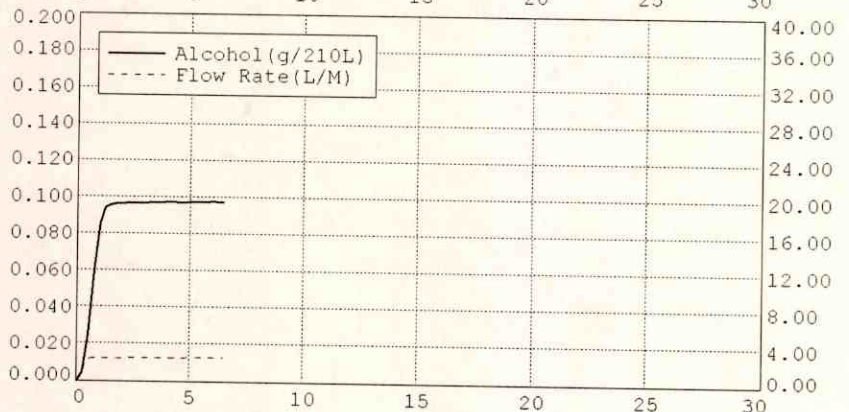
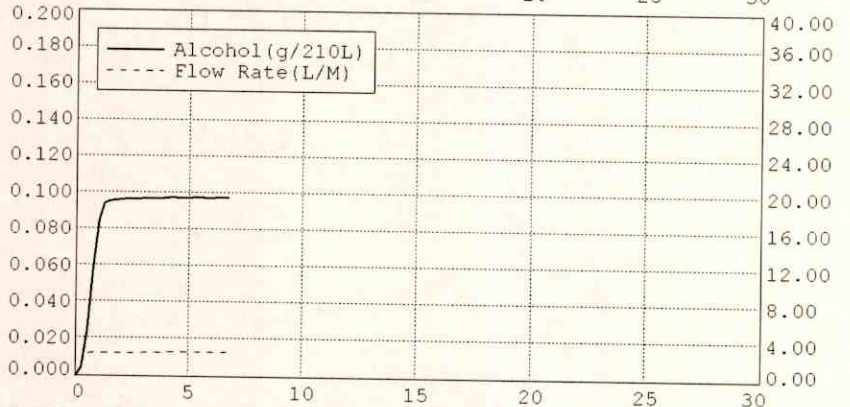
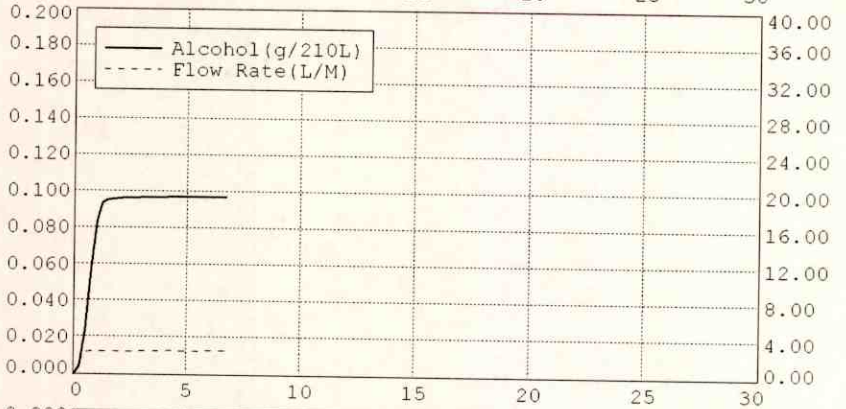
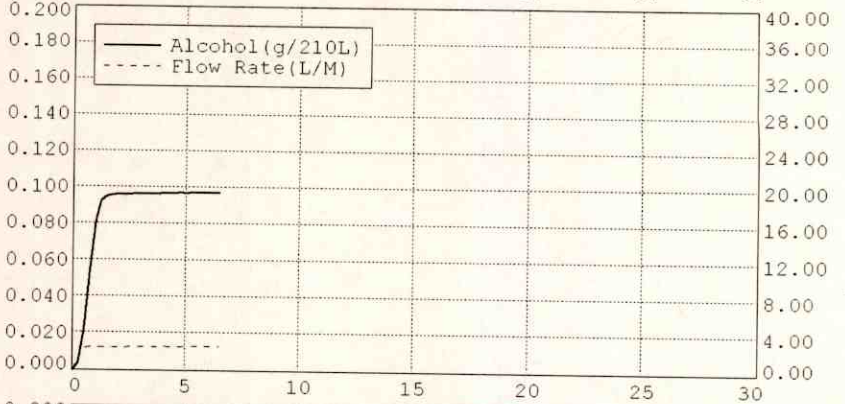
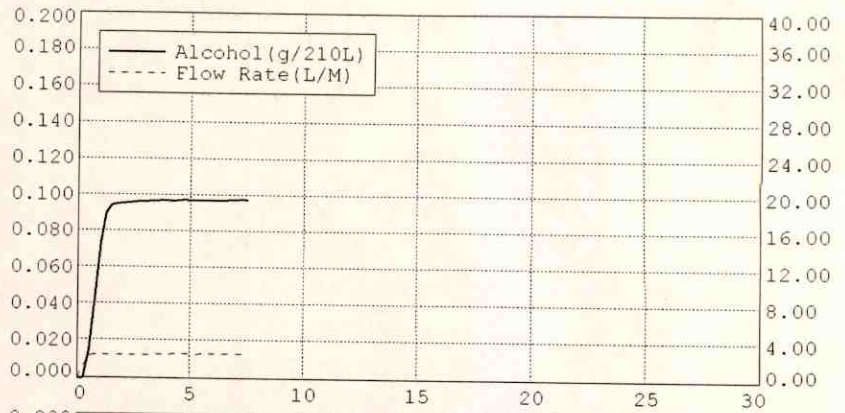
Date: 06/10/2020
 Time: 13:02:26

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.69: 0.099
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 534 psi

BLANK TEST	0.000	13:03
INTERNAL STANDARD	VERIFIED	13:03
EXTERNAL STANDARD	0.098	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.098	13:05
BLANK TEST	0.000	13:06
EXTERNAL STANDARD	0.098	13:06
BLANK TEST	0.000	13:07
EXTERNAL STANDARD	0.098	13:07
BLANK TEST	0.000	13:08
EXTERNAL STANDARD	0.098	13:08
BLANK TEST	0.000	13:09

Average = 0.0980
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

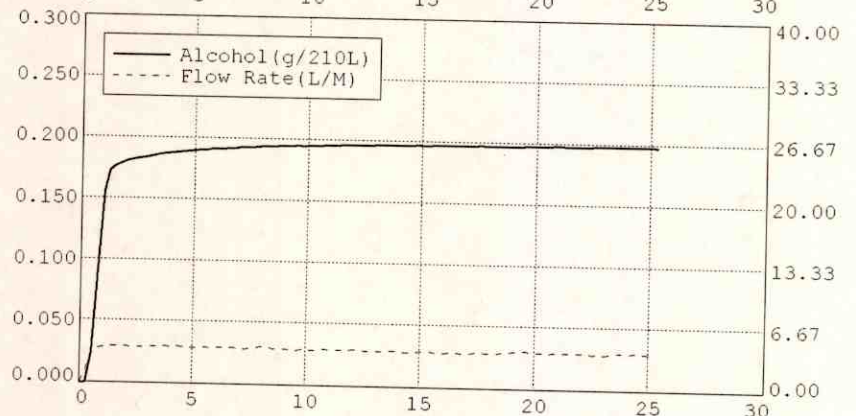
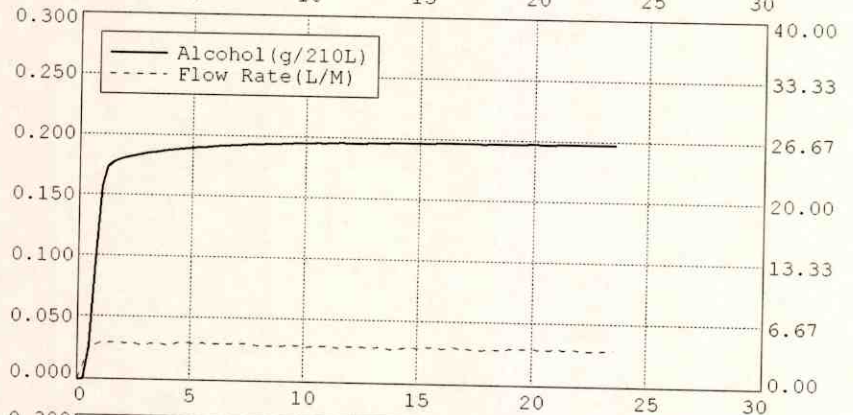
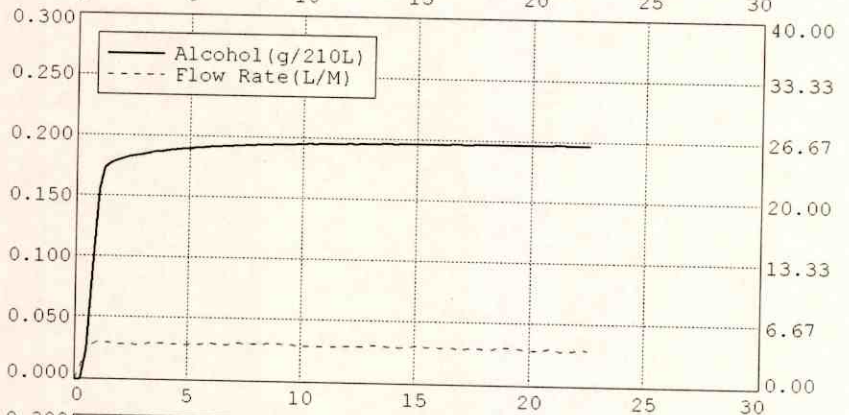
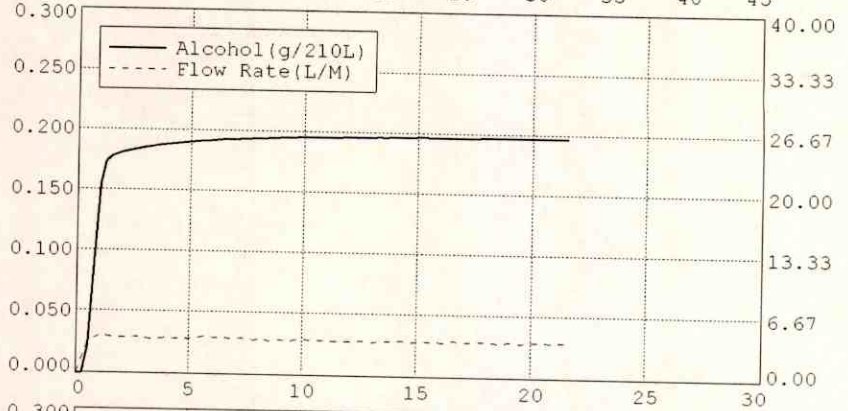
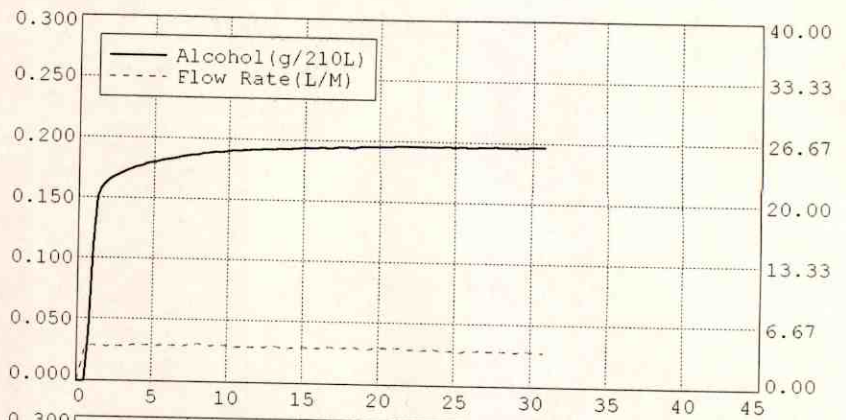
Alaska Department of Public Safety
 DATAMASTER dmt: 100682

Date: 06/10/2020
 Time: 13:25:30

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

BLANK TEST	0.000	13:26
INTERNAL STANDARD	VERIFIED	13:27
EXTERNAL STANDARD	0.197	13:27
BLANK TEST	0.000	13:28
EXTERNAL STANDARD	0.198	13:29
BLANK TEST	0.000	13:29
EXTERNAL STANDARD	0.198	13:30
BLANK TEST	0.000	13:31
EXTERNAL STANDARD	0.198	13:31
BLANK TEST	0.000	13:32
EXTERNAL STANDARD	0.199	13:33
BLANK TEST	0.000	13:34

Average = 0.1980
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100682

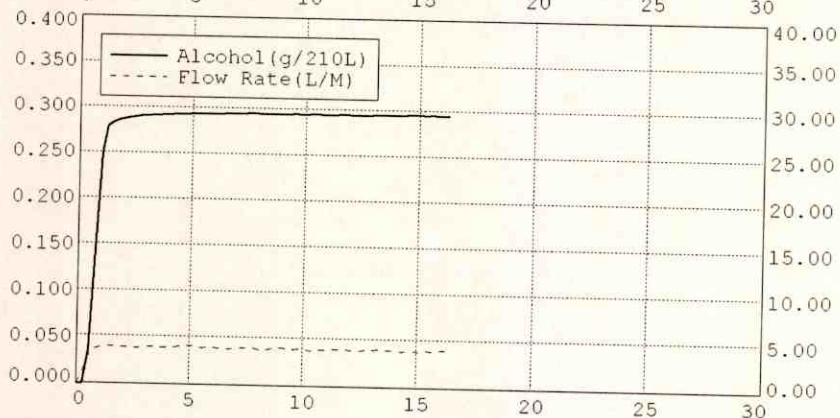
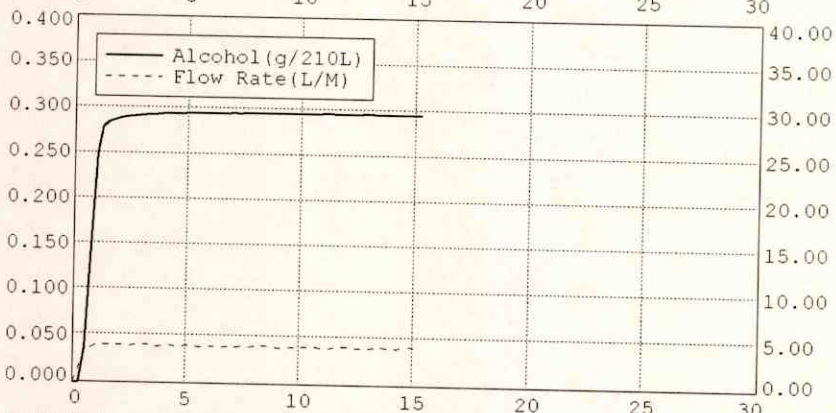
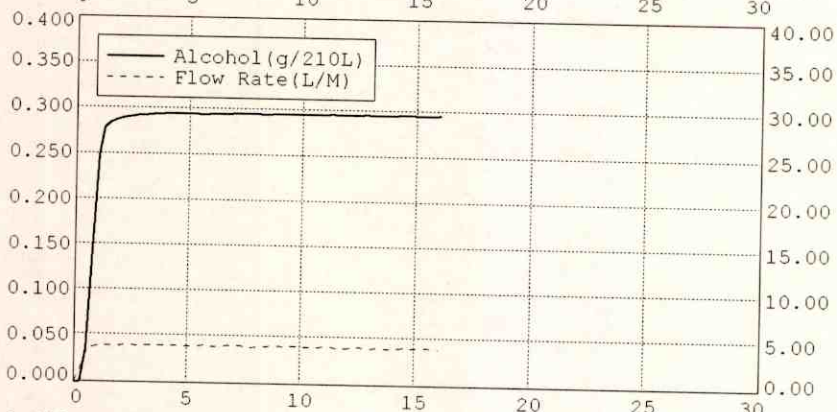
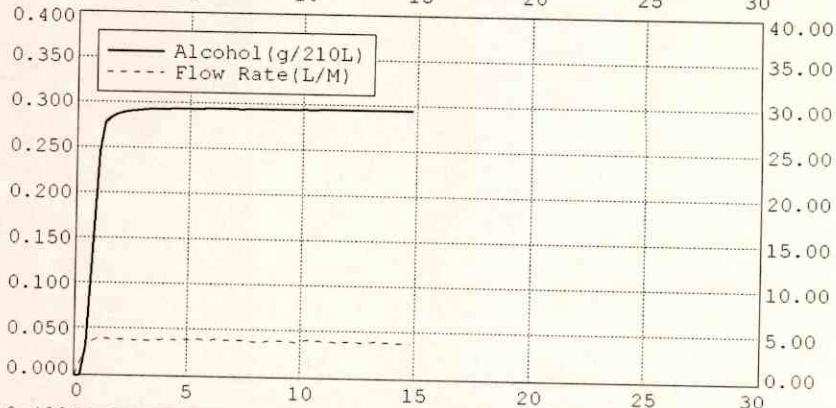
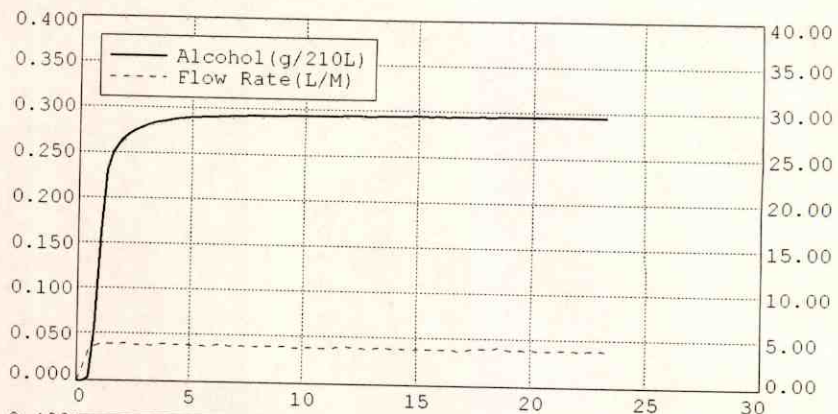
Date: 06/10/2020
 Time: 13:37:24

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:39
INTERNAL STANDARD	VERIFIED	13:39
EXTERNAL STANDARD	0.295	13:39
BLANK TEST	0.000	13:40
EXTERNAL STANDARD	0.295	13:41
BLANK TEST	0.000	13:41
EXTERNAL STANDARD	0.295	13:42
BLANK TEST	0.000	13:43
EXTERNAL STANDARD	0.295	13:43
BLANK TEST	0.000	13:44
EXTERNAL STANDARD	0.295	13:44
BLANK TEST	0.000	13:45

Average = 0.2950
 Std Dev = 0.0000



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100682

Date: 06/11/2020
Time: 11:09:08

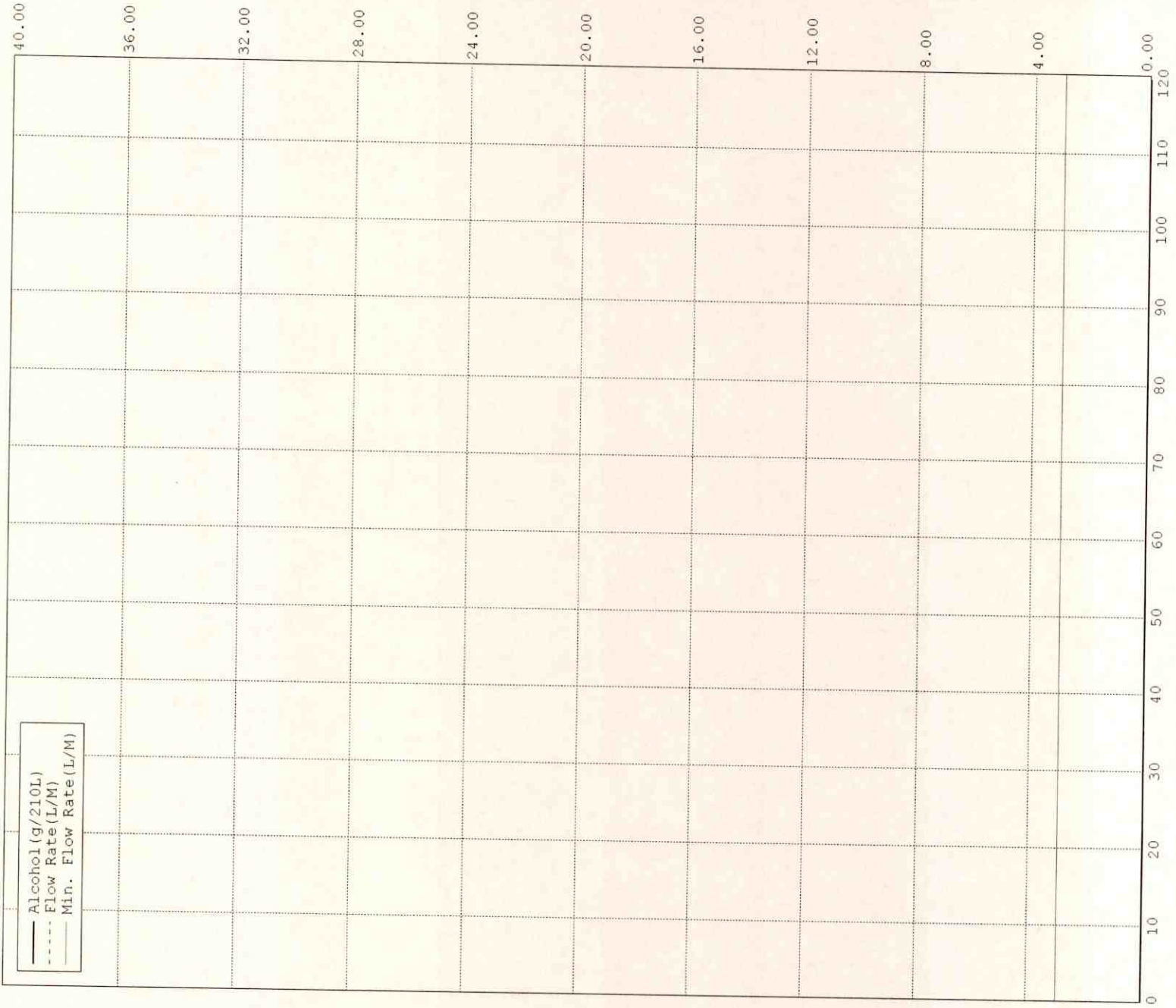
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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
BLANK TEST PASSED 11:12
INTERNAL STANDARD VERIFIED 11:12
EXTERNAL STANDARD 0.077 11:12
BLANK TEST 0.000 11:13
SUBJECT SAMPLE INCOMPLETE 11:15



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100682

Date: 06/11/2020
Time: 11:17:14

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

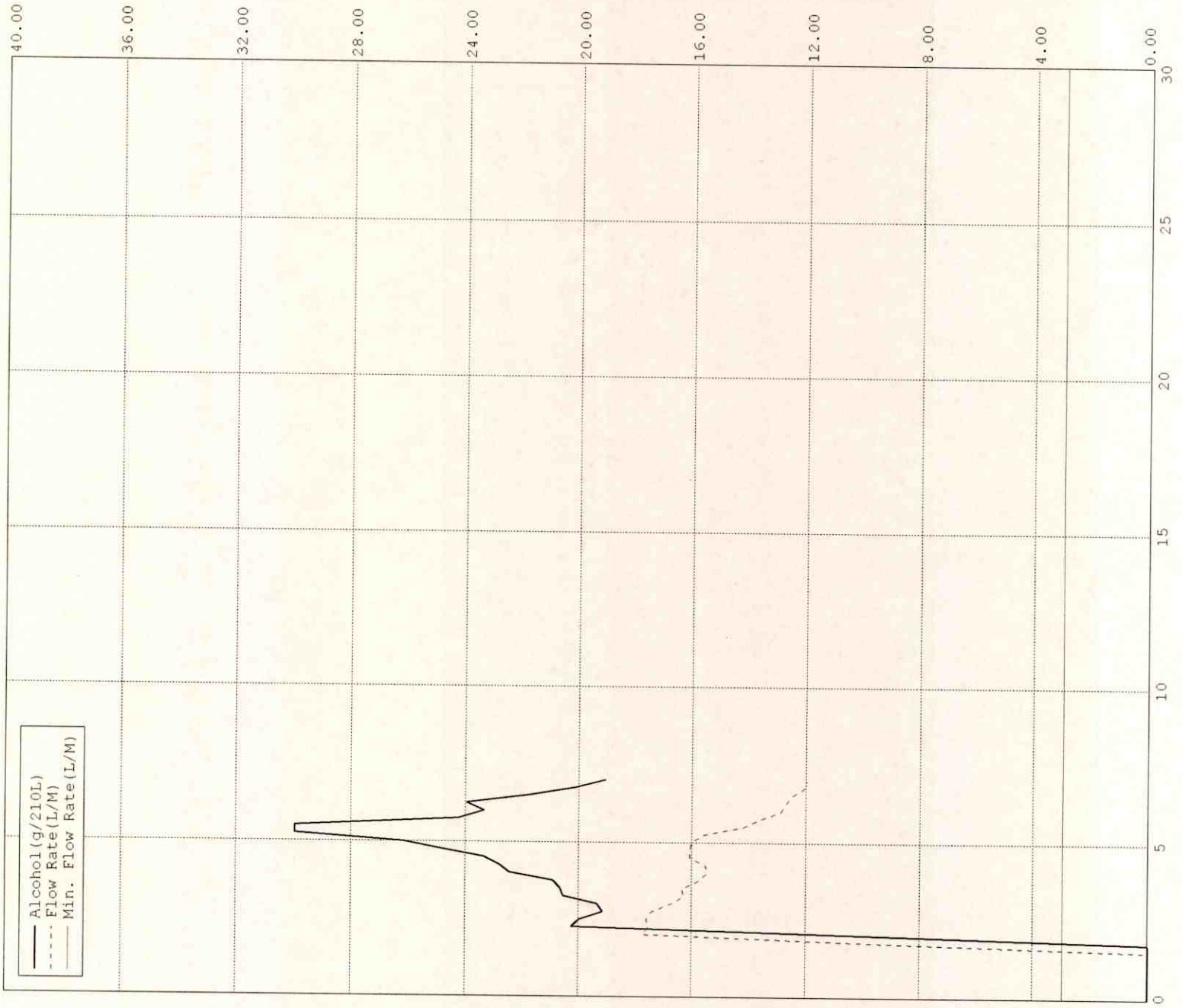
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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
BLANK TEST PASSED 11:18
INTERNAL STANDARD 0.000 11:18
EXTERNAL STANDARD 0.078 11:19
BLANK TEST 0.000 11:20
SUBJECT SAMPLE INVALID 11:20

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100682

Date: 06/11/2020
Time: 12:32:16

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

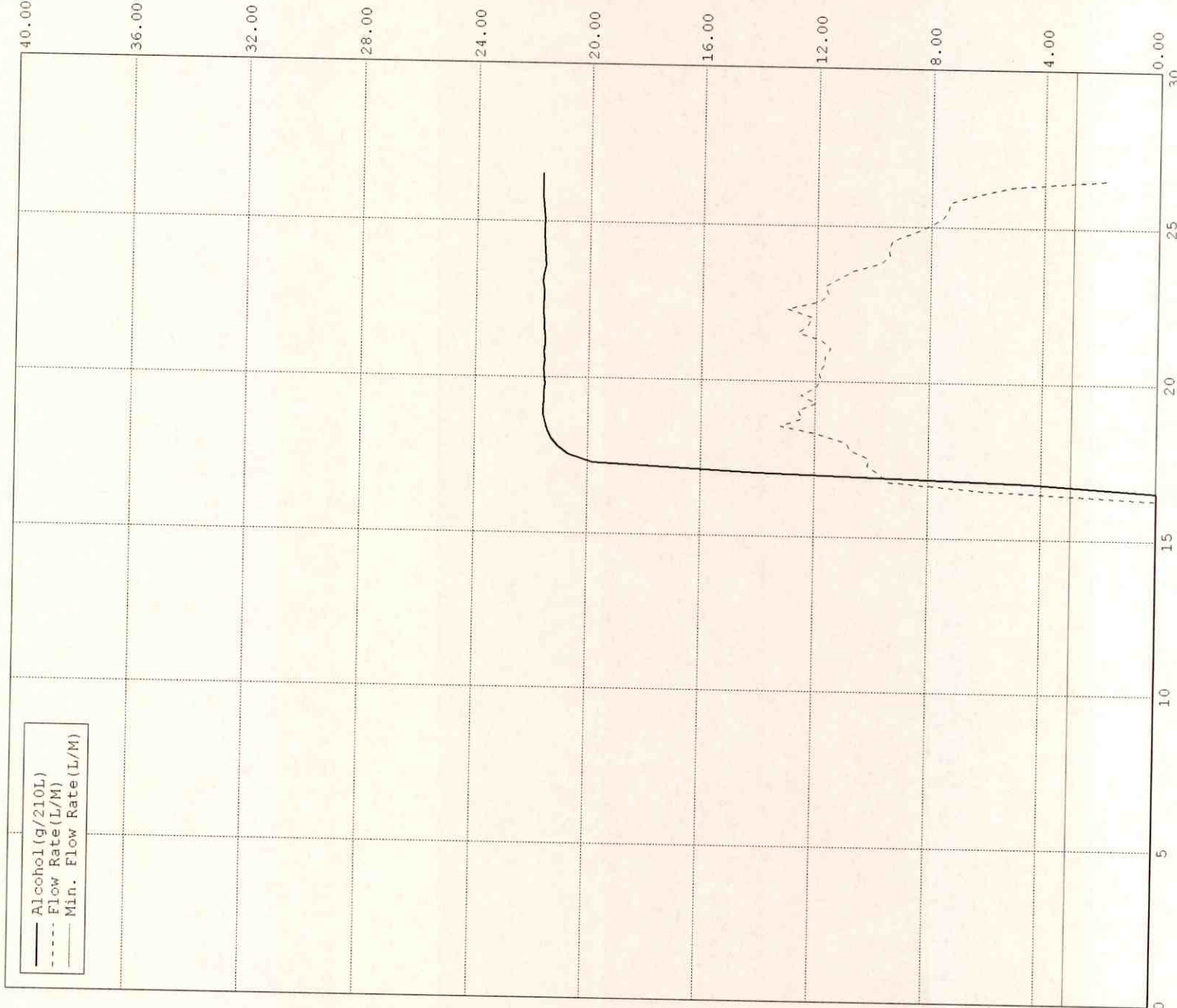
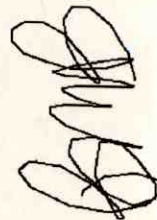
DEPT/AGENCY:
INTERFERENCE ACETONE
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK PASSED 12:36
BLANK TEST 0.000 12:36
INTERNAL STANDARD VERIFIED 12:36
Xg = 0.092 (0.57%)
EXTERNAL STANDARD 0.077 12:36
X[1] = 0.0775 (-0.0005) (0.0018)
BLANK TEST 0.000 12:37
SUBJECT SAMPLE XXX 12:38
X[1] = 0.1087 (-0.0149) (0.0010)

Interference Detected

Filter 2 Avg: -0.0005
Filter 3 Avg: 0.0022
Bmb 6/11/20



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100682

Date: 06/11/2020
Time: 12:41:08

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

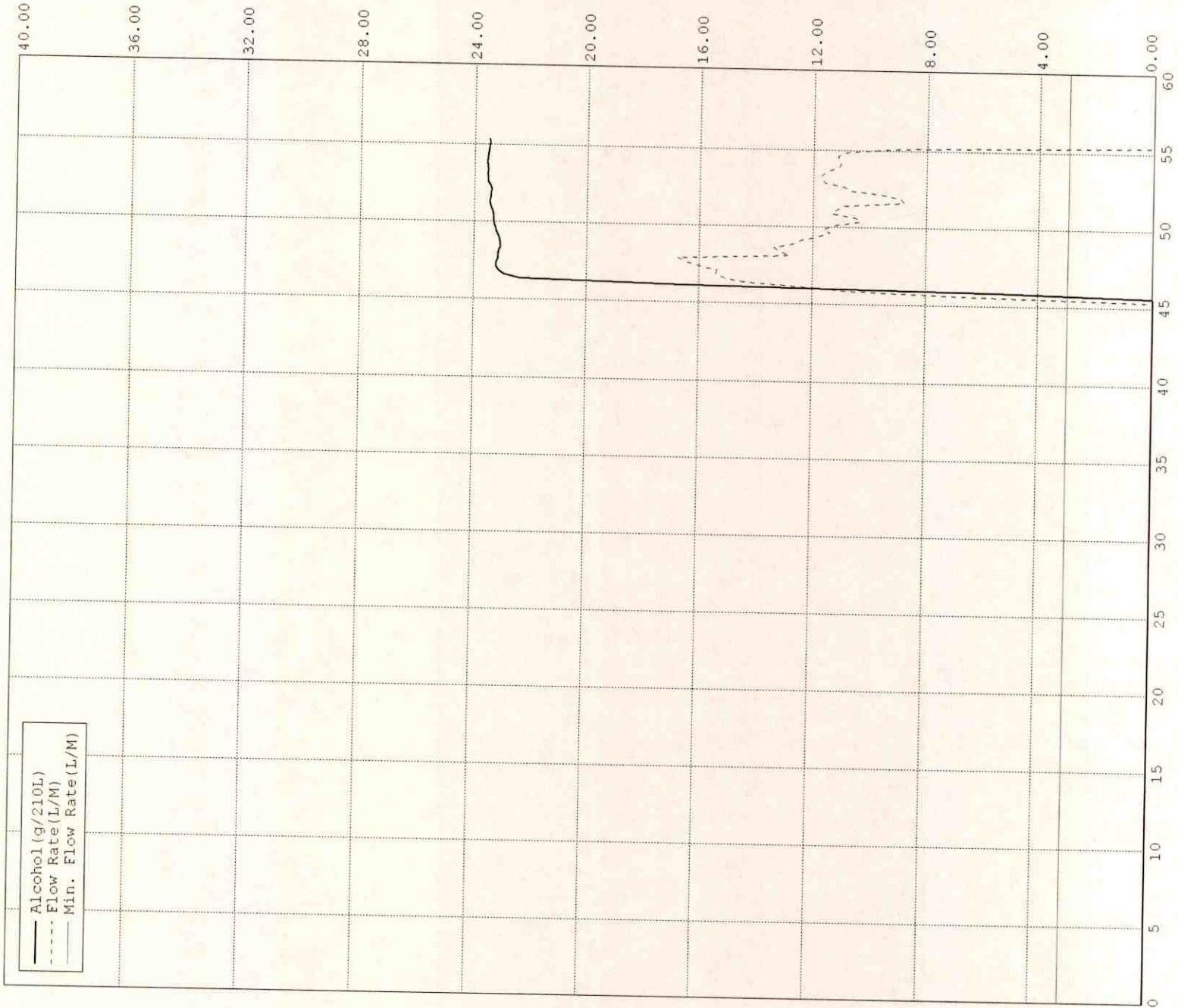
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK PASSED 12:42
BLANK TEST 0.000 12:42
INTERNAL STANDARD VERIFIED 12:42
Xq = 0.092 (0.47%) 0.077 12:42
EXTERNAL STANDARD X[1] = 0.0772 (-0.0006) (0.0026)
BLANK TEST 0.000 12:43
SUBJECT SAMPLE XXX 12:44
X[1] = 0.1176 (-0.0211) (0.0011)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100682

Date: 06/11/2020
Time: 12:47:36

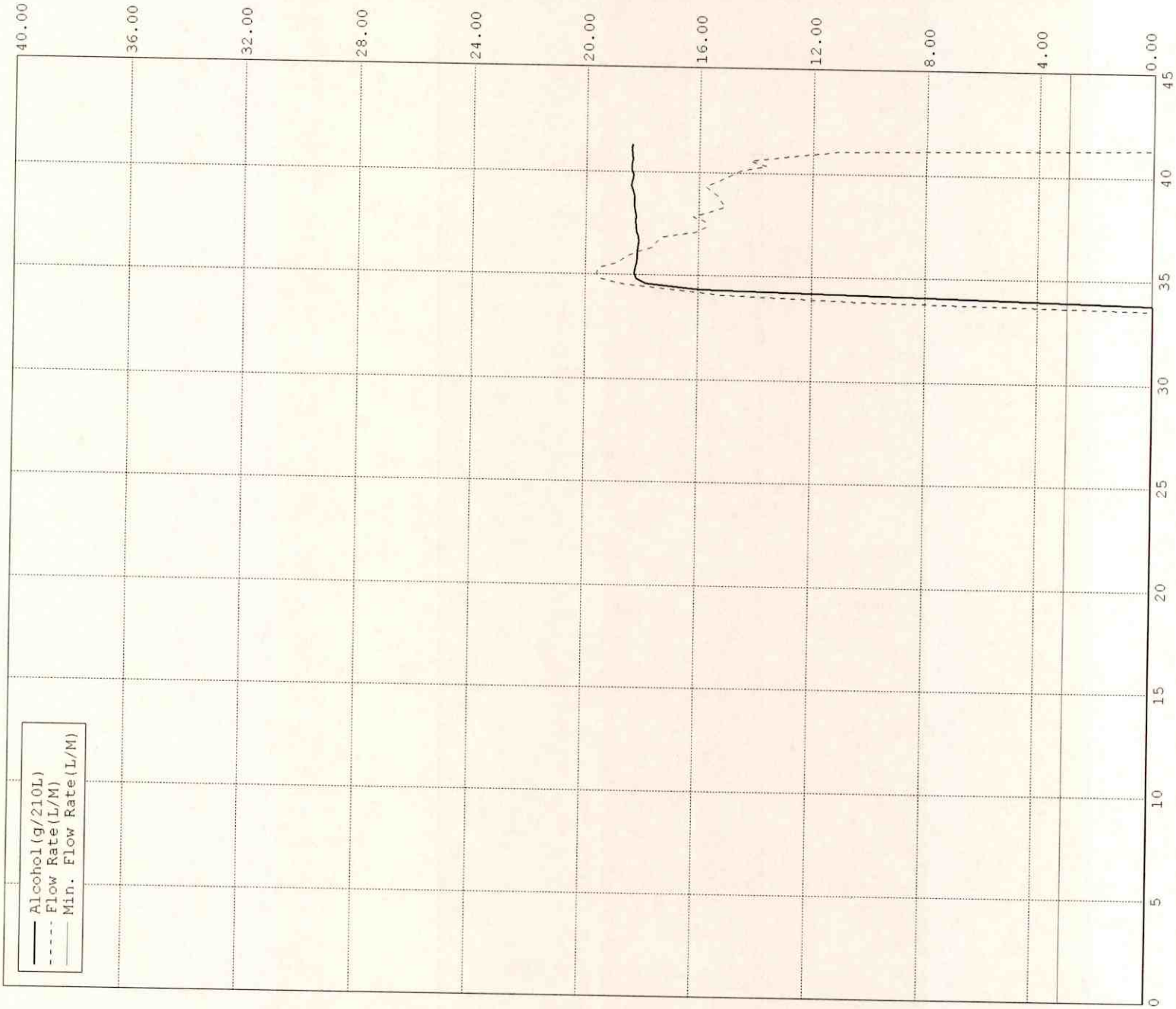
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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	12:48
BLANK TEST	0.000	12:48
INTERNAL STANDARD	VERIFIED	12:48
Xq = 0.093 (0.47%)		
EXTERNAL STANDARD	0.077	12:49
X[1] = 0.0773 (-0.0012) (0.0022)		
BLANK TEST	0.000	12:50
SUBJECT SAMPLE (Vol=2.01L)	0.092	12:50
X[1] = 0.0923 (0.0010) (0.0006)		
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.077	12:52
X[1] = 0.0775 (0.0002) (0.0023)		
BLANK TEST	0.000	12:52



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100682

Date: 06/11/2020
Time: 12:26:15

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

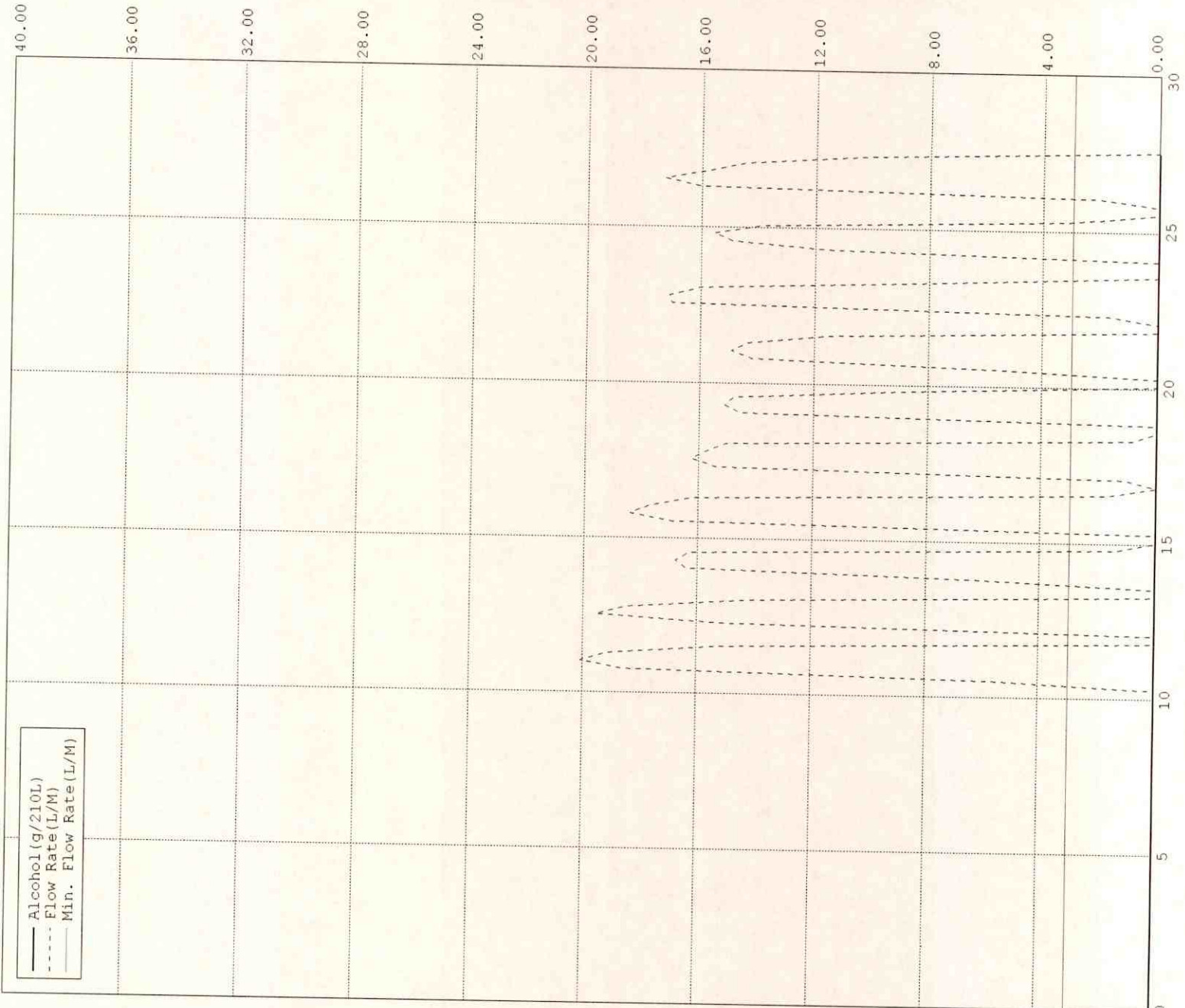
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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 12:27
BLANK TEST 0.000 12:27
INTERNAL STANDARD VERIFIED 12:27
EXTERNAL STANDARD 0.078 12:27
BLANK TEST 0.000 12:28
SUBJECT SAMPLE XXX 12:29

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100682

Date: 06/11/2020
Time: 11:22:41

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

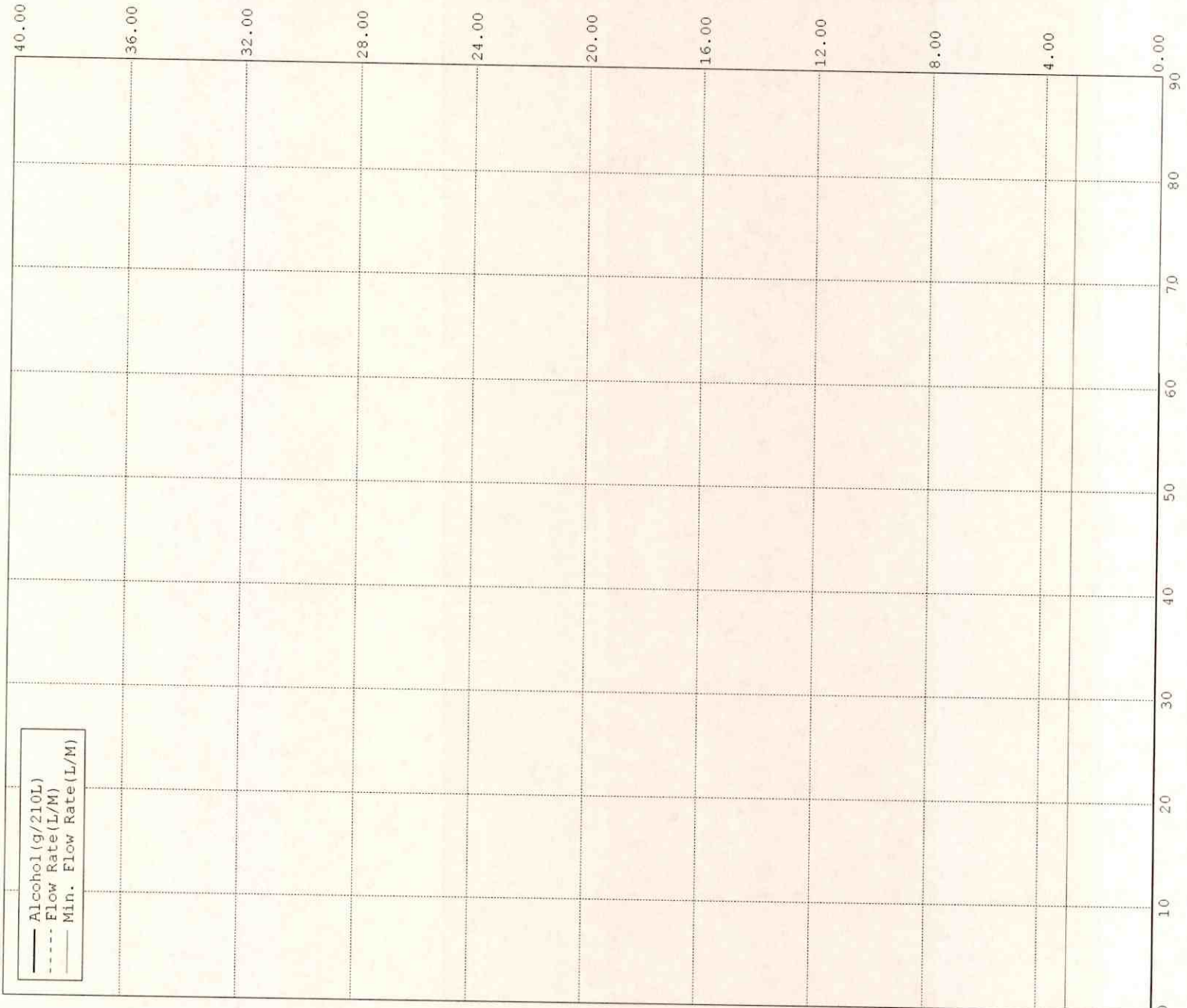
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK
BLANK TEST PASSED 11:24
INTERNAL STANDARD VERIFIED 11:24
EXTERNAL STANDARD 0.077 11:25
BLANK TEST 0.000 11:25

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100682

Date: 06/11/2020
Time: 13:19:19

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	13:20
BLANK TEST	0.000	13:20
INTERNAL STANDARD	VERIFIED	13:20
EXTERNAL STANDARD	0.077	13:20
BLANK TEST	0.000	13:21
SUBJECT SAMPLE (Vol=1.91L)	0.000	13:22
BLANK TEST	0.000	13:23
EXTERNAL STANDARD	0.078	13:23
BLANK TEST	0.000	13:24

