

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 100411 Analyst C.O. Bryant Start Date 2/26/2020

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 1.4 L (1.3L to 1.7L)

4. Linearity Test (attached)

a. Levels Used

i. 0.020g/210L Mnf Aurgas Lot AG805804 Exp 2/27/20

ii. 0.040g/210L Mnf Aurgas Lot AG915607 Exp 6/05/21

iii. 0.080g/210L Mnf Aurgas Lot AG826101 Exp 9/18/20

iv. 0.100g/210L Mnf Aurgas Lot AG805903 Exp 2/28/20

v. 0.200g/210L Mnf Buth Lot 19040 Exp 1/29/21

1. Simulator S/N DR4162 Date Calibrated 10/7/19

vi. 0.300g/210L Mnf Buth Lot 19330 Exp 11/13/21

1. Simulator S/N DR6267 Date Calibrated 10/8/19

5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

d. Exceeded attempts

i. Acetone - Mnf Buth Lot 18370 Level 0.100 Exp 12/5/20

1. Simulator S/N SD1199 Date Calibrated 3/6/19

ii. Isopropanol - Mnf Buth Lot 18370 Level 0.100 Exp 12/5/20

1. Simulator S/N DR4161 Date Calibrated 3/7/19

iii. Negative Control - Mnf Buth Lot 18370 Level 0.100 Exp 12/5/20

1. Simulator S/N SD1200 Date Calibrated 3/5/19

e. RFI

6. Verify stylus is calibrated

9. Verification of Calibration

7. Reset Options

10. Non-Drinking Subject Test (attached)

8. Clear Memory

11. Upload *

13. Remove tank prior to shut down

End Date 2/27/20

*Replaced modem board after initial upload was unsuccessful.
C.O. Bryant 2/27/20

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 02/26/2020
Time: 10:04:07

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.89 V PASSED
(1.10 V - 2.58 V)
Cooler Voltage = 1.70 V PASSED
(1.06 V - 2.48 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 530 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.3 in

PUMP INFO

Flow Rate = 3.482 L/M * FAILED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

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

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.086 0.20% PASSED
(0.00% - 4.00%)

* Pump flow rate was outside of acceptable range during the first diagnostic. Following tests + diagnostics all passed with acceptable pump flow rates. COB 2/27/20

Technician Screen

DATAMASTER dmt: 100411

Date: 02/26/2020

Time: 10:11 AM

Temperatures (°C)

Sample Cell: 49.3°C

Breath Tube: 47.8°C

Current Barometer 29.3 in

Volume (Ltr) 1.44

Settings

Lamp: 1.90 V

Bias: 80 V

Cooler: 1.68 V

Chopper: 528 Hz

Voltages (V)

Flow: 1.05 V

Detector: -0.049 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 07/06/2015
Time: 12:08:31

OPERATOR NAME:

M M M

CERTIFICATE #: GUTH 2100, DR7001, 34.0C

Ca = 0.1010

CAL = 1.001690 0.800 <= CAL < 1.200

b1 = 0.0002 0.0000 <= b1 < 0.0040

b2 = 0.0032 0.0010 <= b2 < 0.0100

b3 = 0.0001 0.0000 <= b3 < 0.0040

Xq = 0.0861 0.0500 <= Xq < 0.2000

a21 = 1.123352 1.050 <= a21 < 1.300

a31 = 0.462705 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 02/26/2020
Time: 10:27:18

SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1

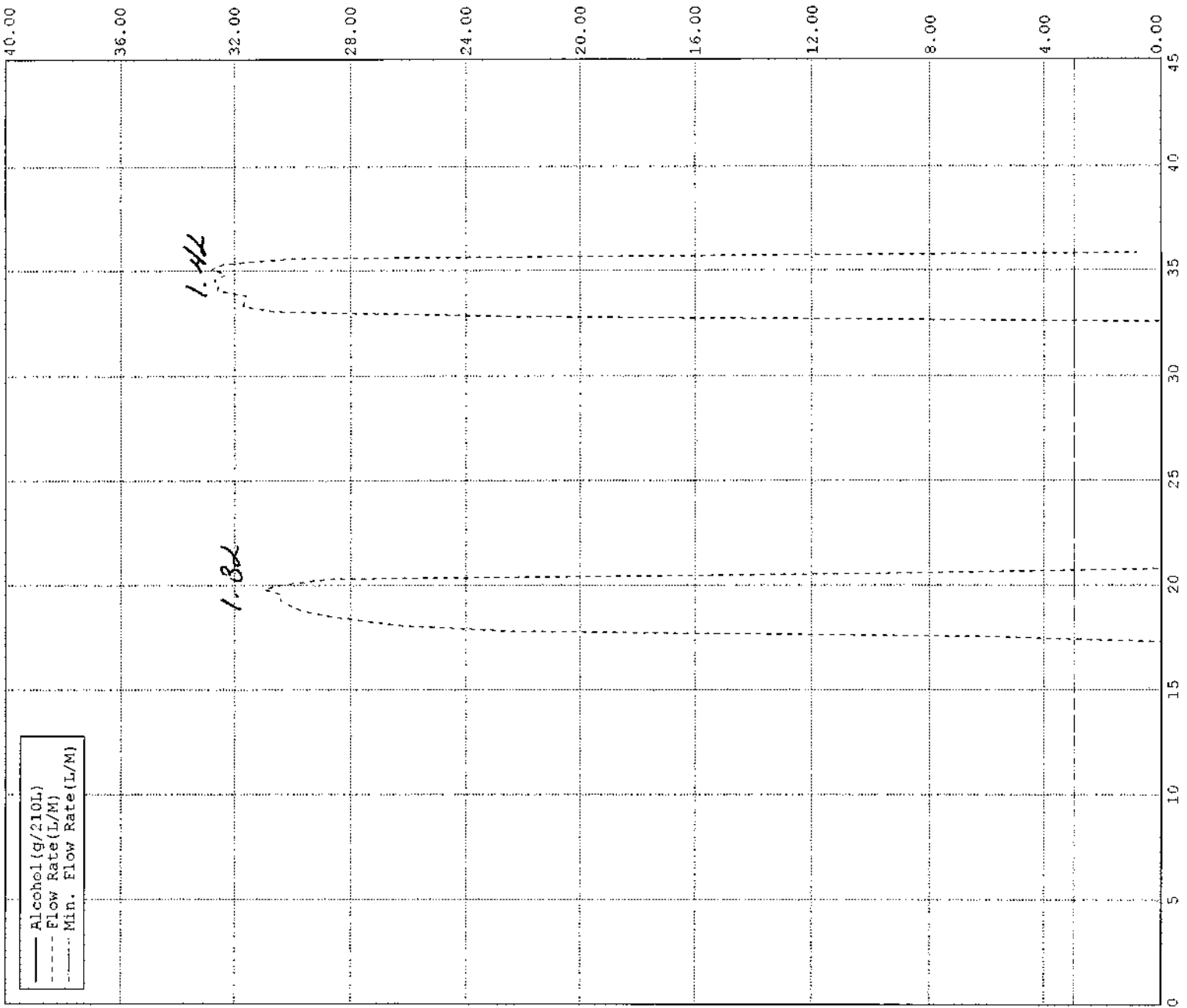
CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.27: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	10:28
BLANK TEST	0.000	10:28
INTERNAL STANDARD	VERIFIED	10:28
EXTERNAL STANDARD	0.077	10:28
BLANK TEST	0.000	10:29
SUBJECT SAMPLE (Vol=1.55L)	0.000	10:30
BLANK TEST	0.000	10:31
EXTERNAL STANDARD	0.079	10:31
BLANK TEST	0.000	10:32

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



40.00
36.00
32.00
28.00
24.00
20.00
16.00
12.00
8.00
4.00
0.00

0 5 10 15 20 25 30 35 40 45

LINERITY CHECK

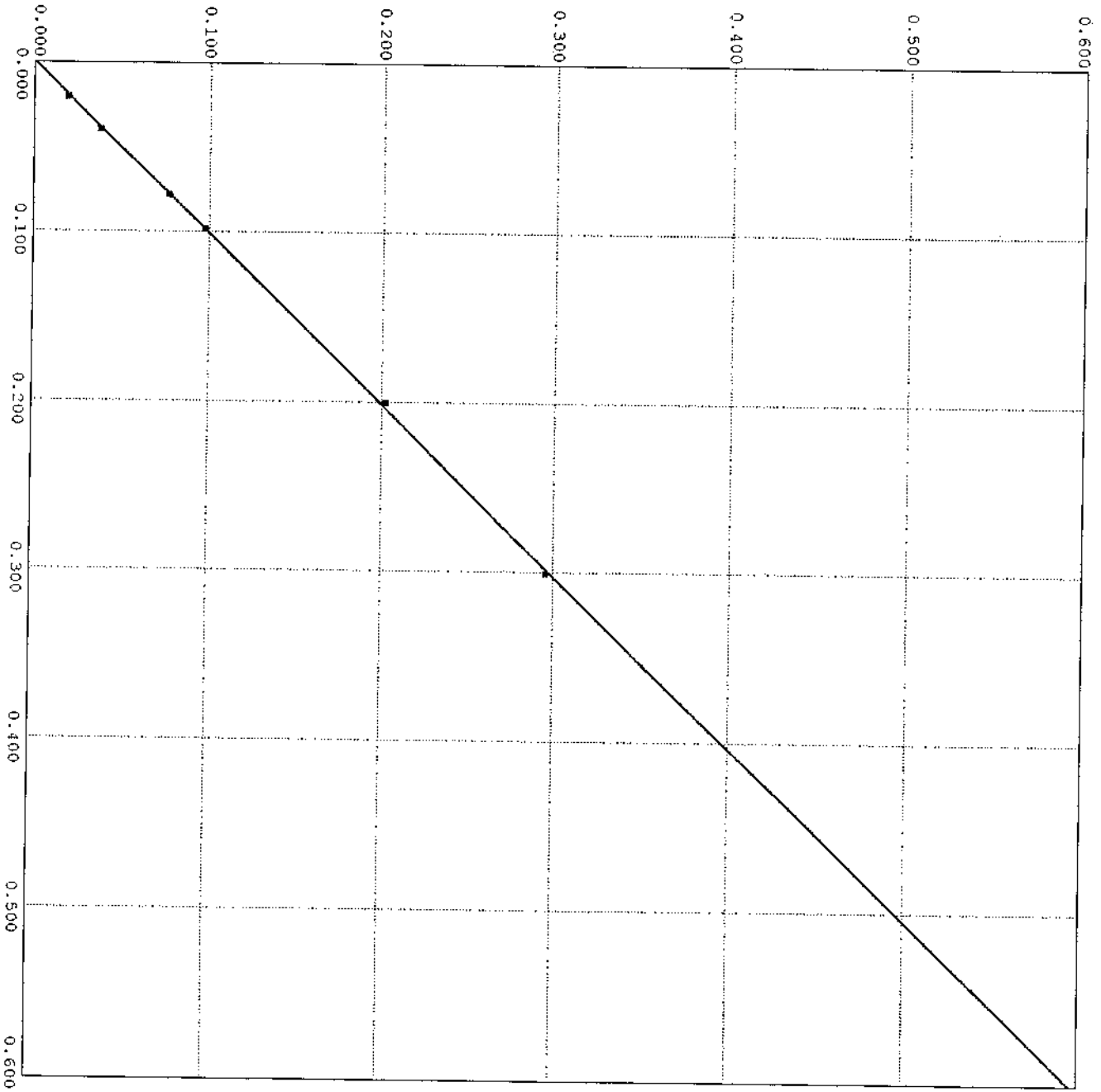
Alaska Department of Public Safety
DATAMASTER dmc: 100411

Date: 02/26/2020
Time: 10:35:30

SUPERVISOR NAME:
COLLEEN S O'BRYEN
OPERATOR'S #: 6237

TARGET	AVERAGE	STD. DEV.
0.020	0.0202	0.0004
0.039	0.0392	0.0004
0.078	0.0782	0.0004
0.098	0.0988	0.0004
0.200	0.2028	0.0008
0.300	0.2964	0.0013

SLOPE = 0.991529
R² = 0.999693



CSB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

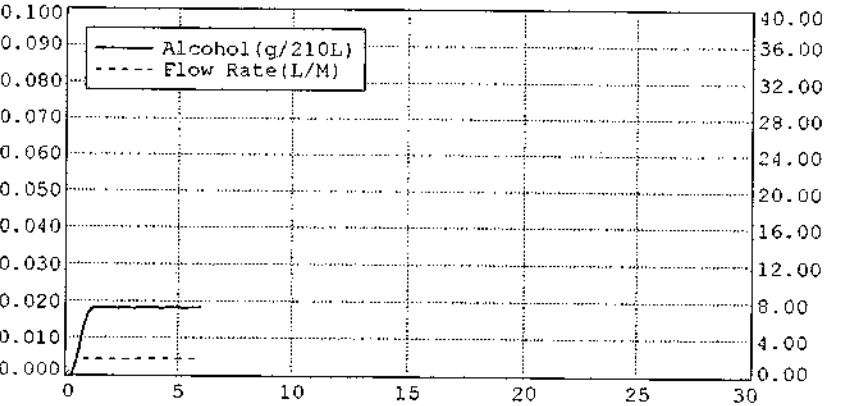
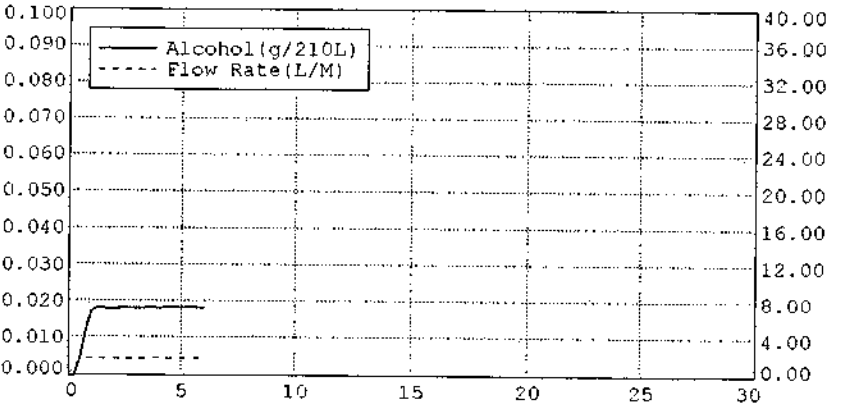
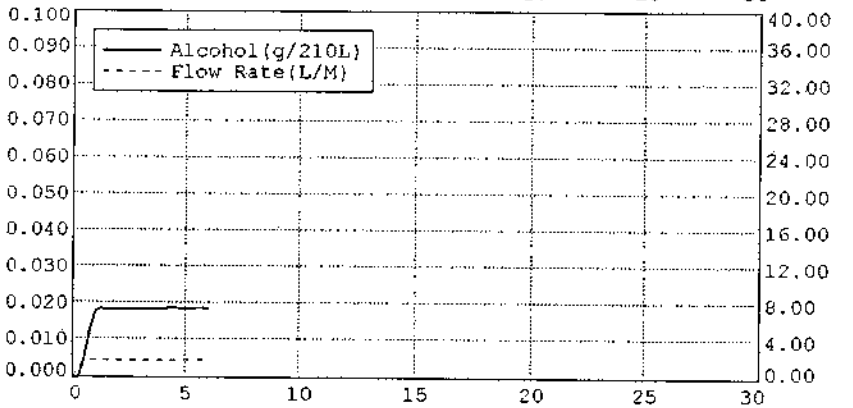
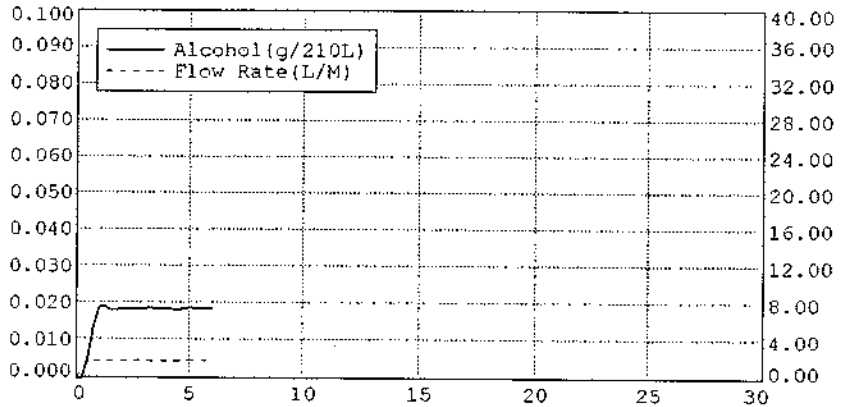
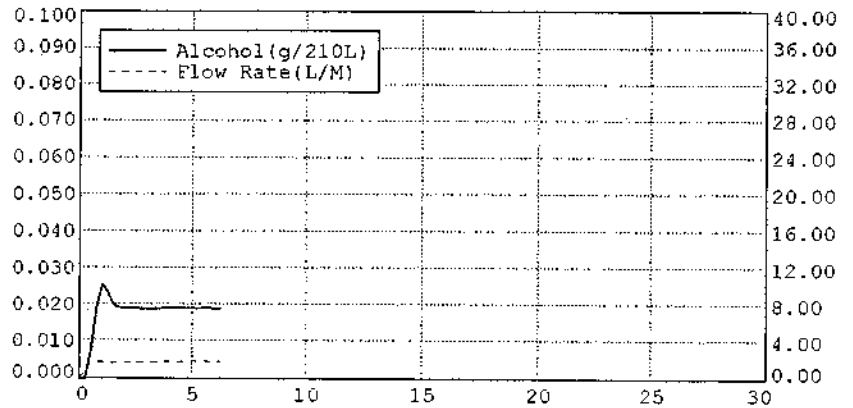
Date: 02/26/2020
 Time: 10:35:32

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.27: 0.020
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 357 psi

BLANK TEST	0.000	10:37
INTERNAL STANDARD	VERIFIED	10:37
EXTERNAL STANDARD	0.021	10:37
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.020	10:38
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.020	10:39
BLANK TEST	0.000	10:40
EXTERNAL STANDARD	0.020	10:40
BLANK TEST	0.000	10:41
EXTERNAL STANDARD	0.020	10:41
BLANK TEST	0.000	10:42

Average = 0.0202
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dat: 100411

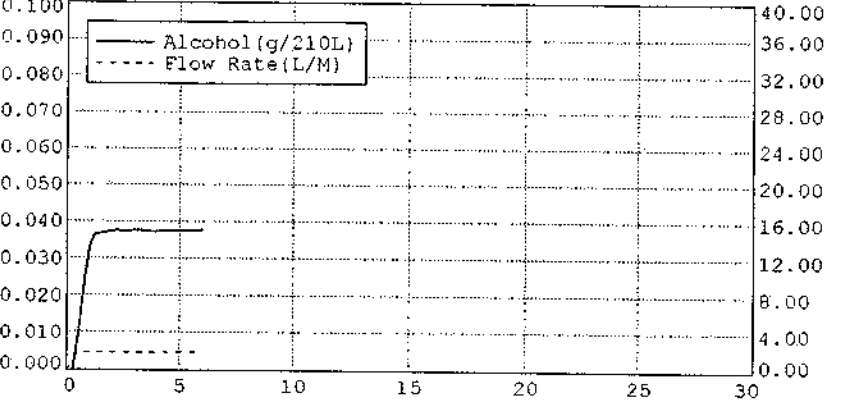
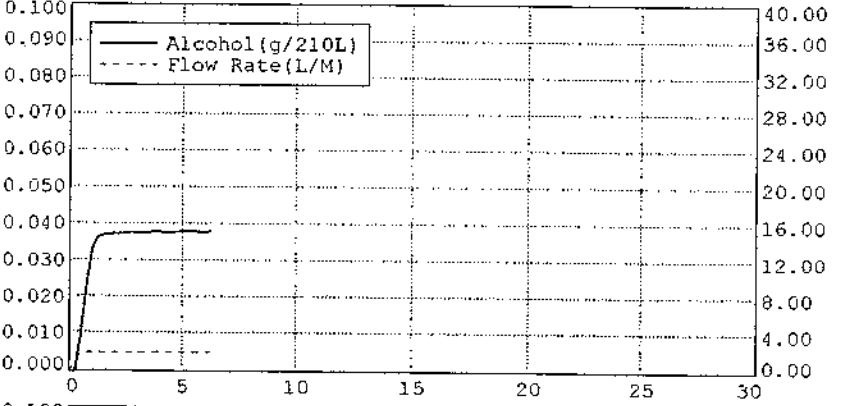
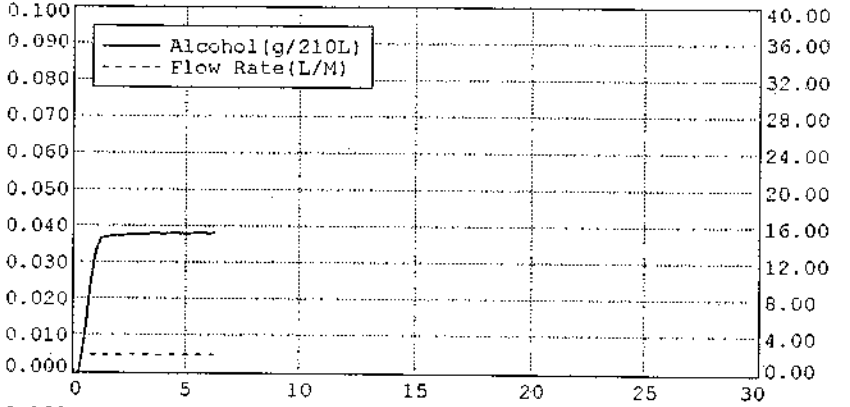
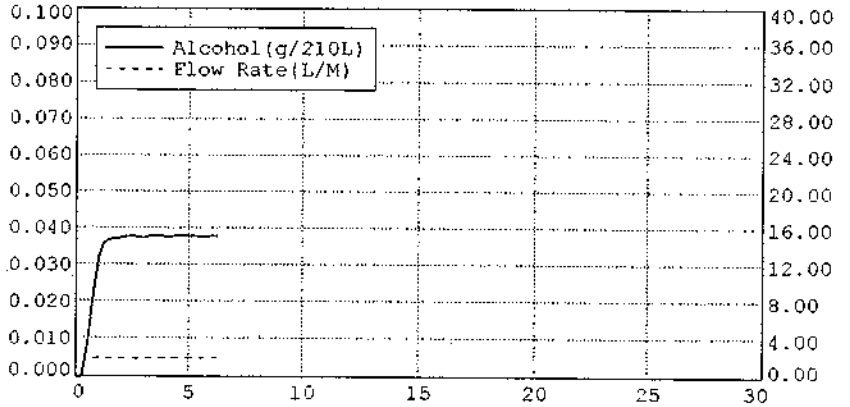
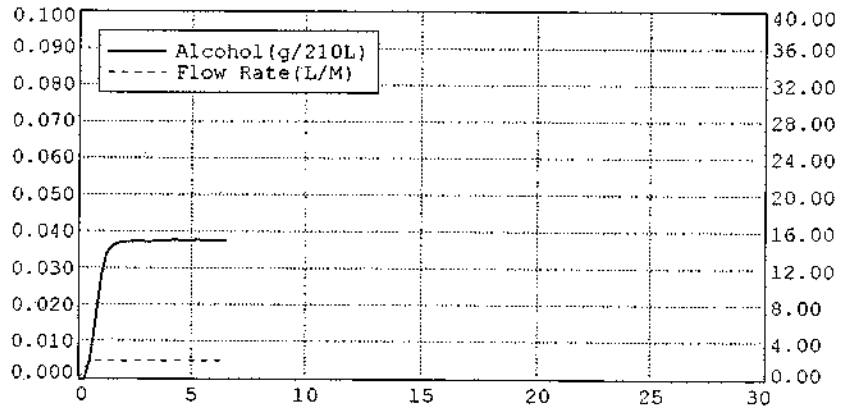
Date: 02/26/2020
 Time: 10:43:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.27: 0.039
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 882 psi

BLANK TEST	0.000	10:45
INTERNAL STANDARD	VERIFIED	10:45
EXTERNAL STANDARD	0.039	10:45
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.039	10:46
BLANK TEST	0.000	10:47
EXTERNAL STANDARD	0.040	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.039	10:48
BLANK TEST	0.000	10:49
EXTERNAL STANDARD	0.039	10:49
BLANK TEST	0.000	10:50

Average = 0.0392
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

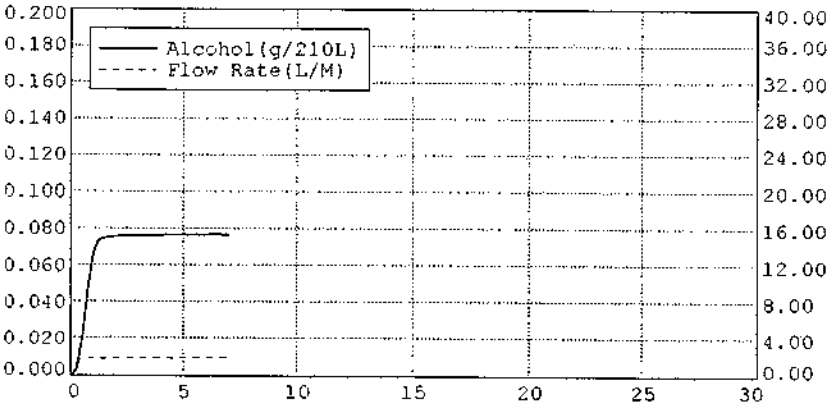
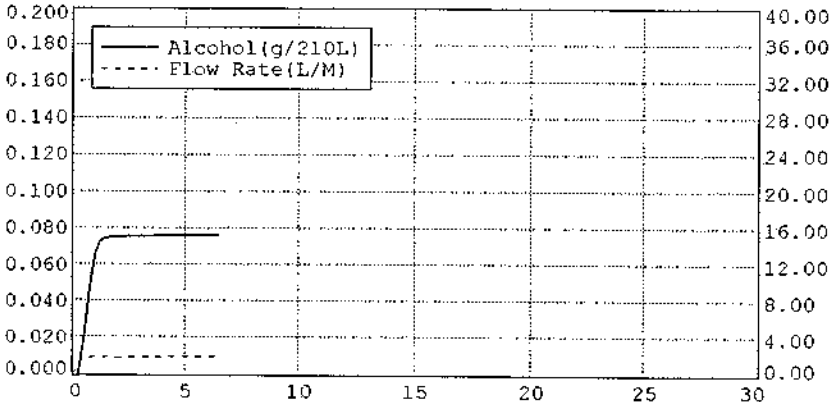
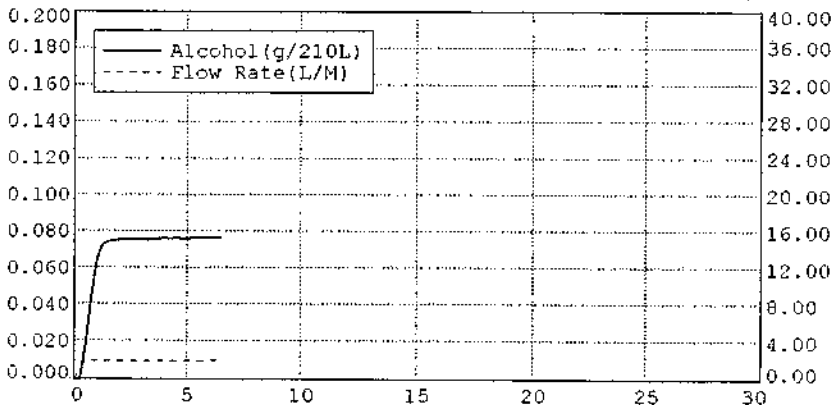
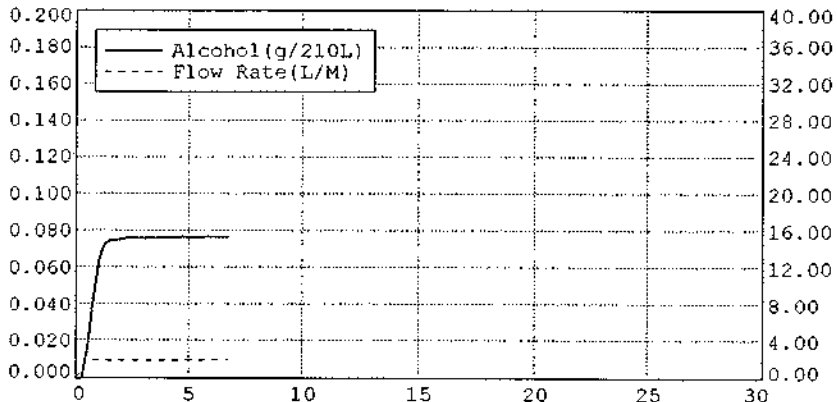
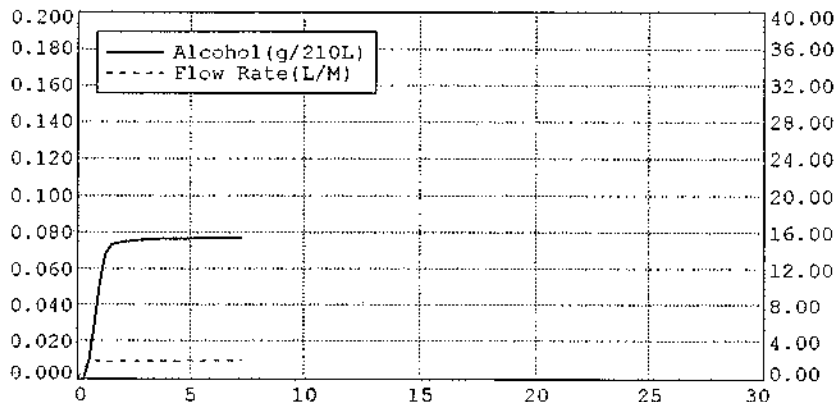
Date: 02/26/2020
 Time: 10:50:57

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.27: 0.078
 LOT #: AGB26101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 911 psi

BLANK TEST	0.000	10:52
INTERNAL STANDARD	VERIFIED	10:52
EXTERNAL STANDARD	0.079	10:52
BLANK TEST	0.000	10:53
EXTERNAL STANDARD	0.078	10:53
BLANK TEST	0.000	10:54
EXTERNAL STANDARD	0.078	10:54
BLANK TEST	0.000	10:55
EXTERNAL STANDARD	0.078	10:55
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.078	10:56
BLANK TEST	0.000	10:57

Average = 0.0782
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

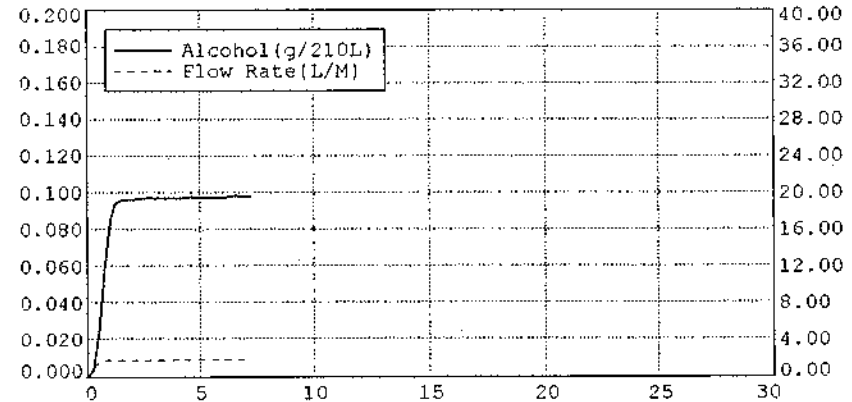
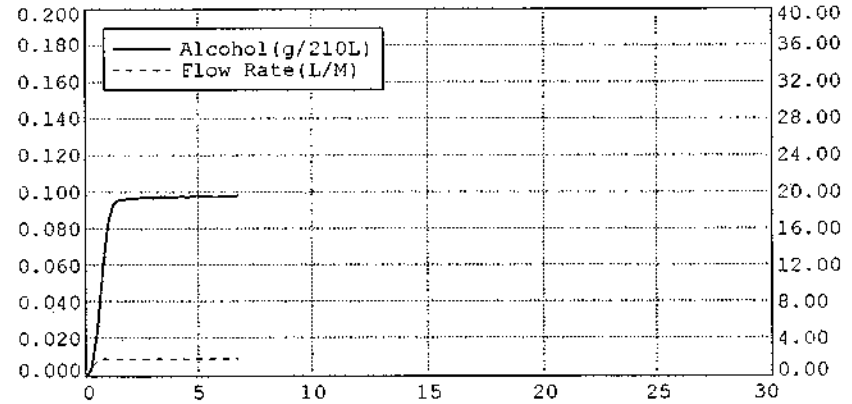
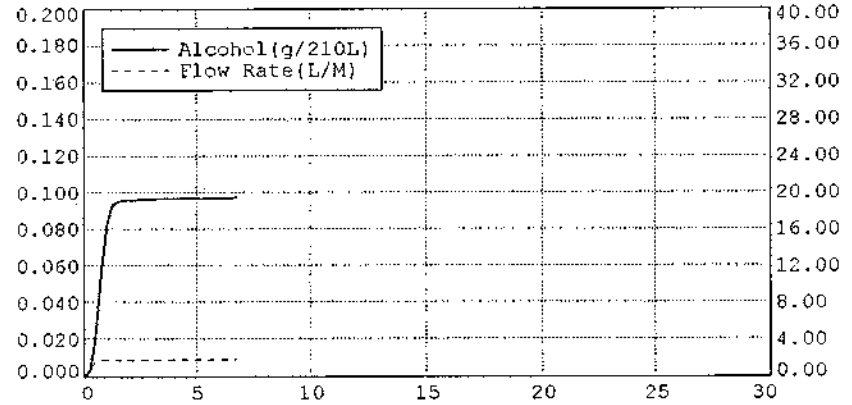
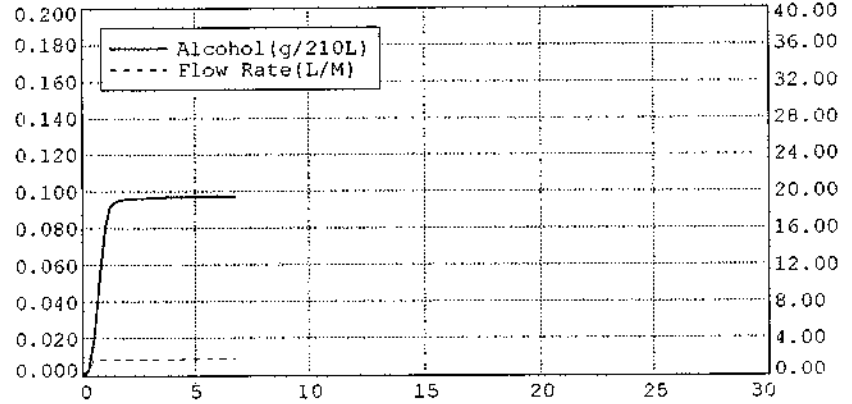
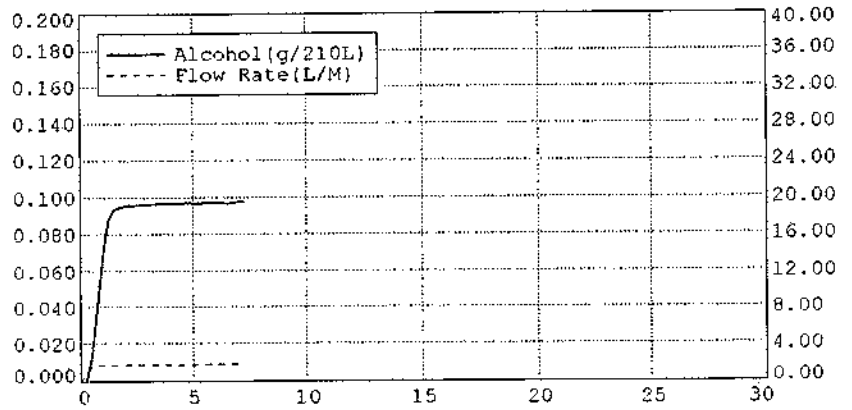
Date: 02/26/2020
 Time: 10:58:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.26: 0.098
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 403 psi

BLANK TEST	0.000	10:59
INTERNAL STANDARD	VERIFIED	10:59
EXTERNAL STANDARD	0.099	10:59
BLANK TEST	0.000	11:00
EXTERNAL STANDARD	0.099	11:00
BLANK TEST	0.000	11:01
EXTERNAL STANDARD	0.098	11:01
BLANK TEST	0.000	11:02
EXTERNAL STANDARD	0.099	11:03
BLANK TEST	0.000	11:03
EXTERNAL STANDARD	0.099	11:04
BLANK TEST	0.000	11:05

Average = 0.0988
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

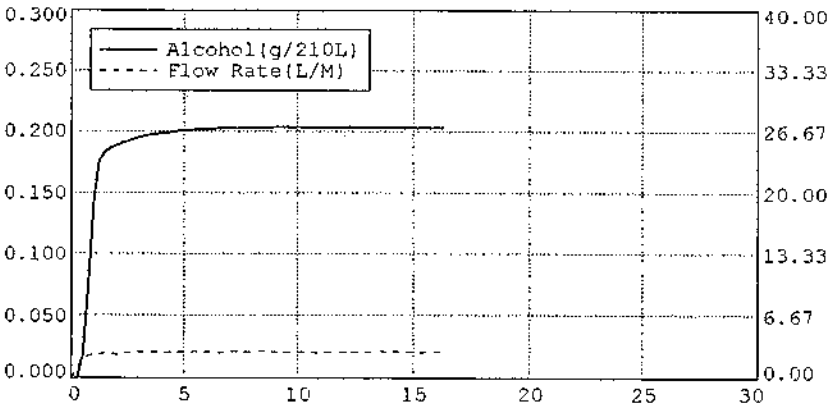
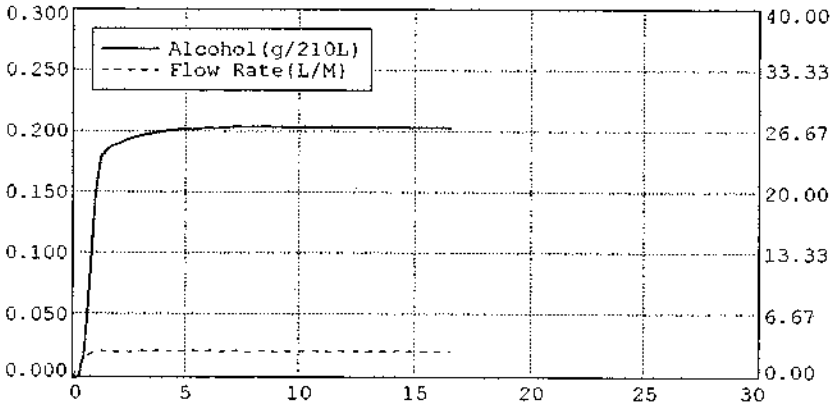
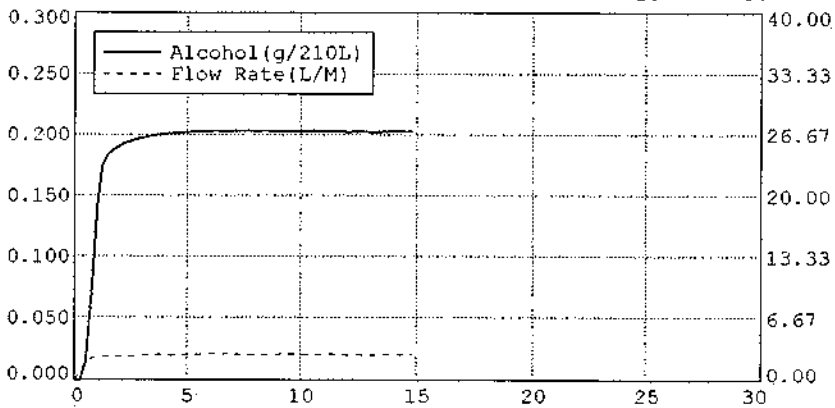
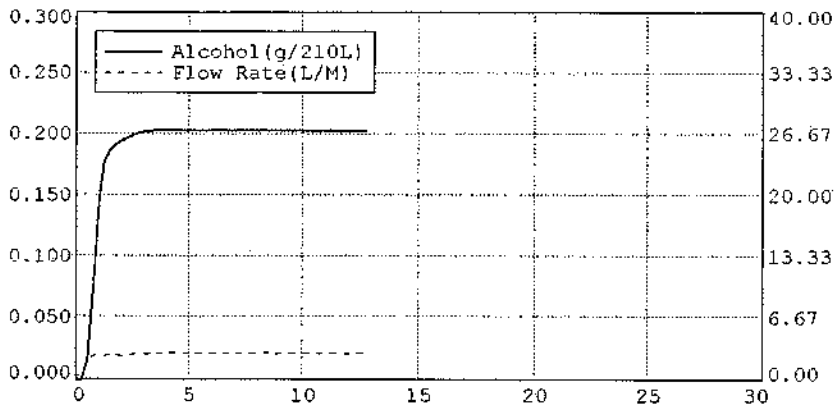
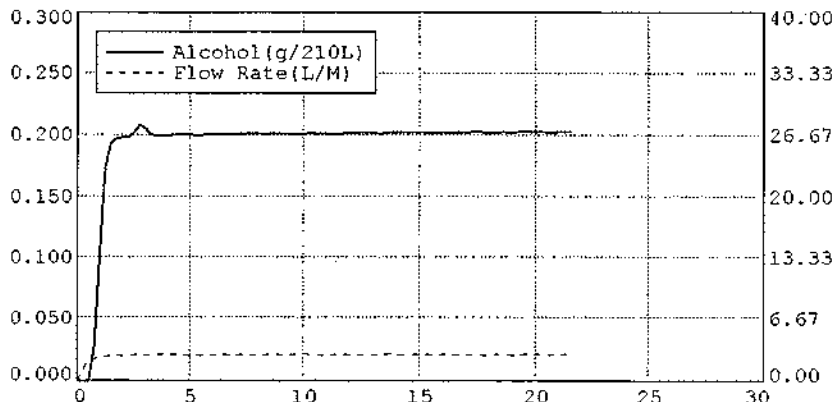
Alaska Department of Public Safety
 DATAMASTER dmt: 100411

Date: 02/26/2020
 Time: 11:07:18

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 19040
 EXPIRATION: 01/29/2021

BLANK TEST	0.000	11:08
INTERNAL STANDARD	VERIFIED	11:08
EXTERNAL STANDARD	0.202	11:09
BLANK TEST	0.000	11:10
EXTERNAL STANDARD	0.202	11:10
BLANK TEST	0.000	11:11
EXTERNAL STANDARD	0.203	11:11
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.204	11:12
BLANK TEST	0.000	11:13
EXTERNAL STANDARD	0.203	11:14
BLANK TEST	0.000	11:15

Average = 0.2028
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 6

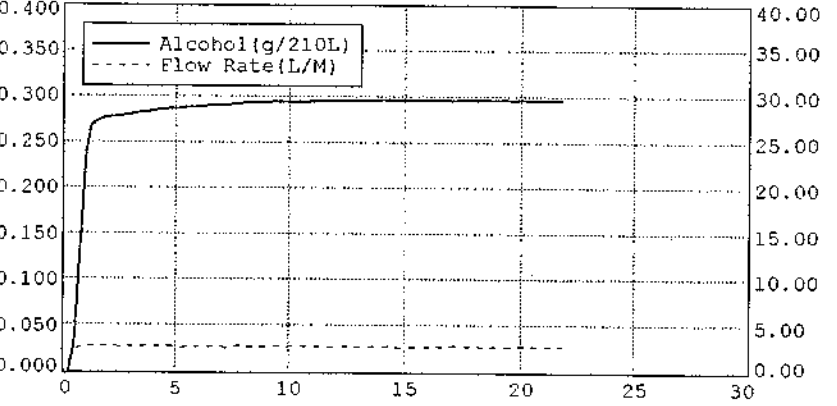
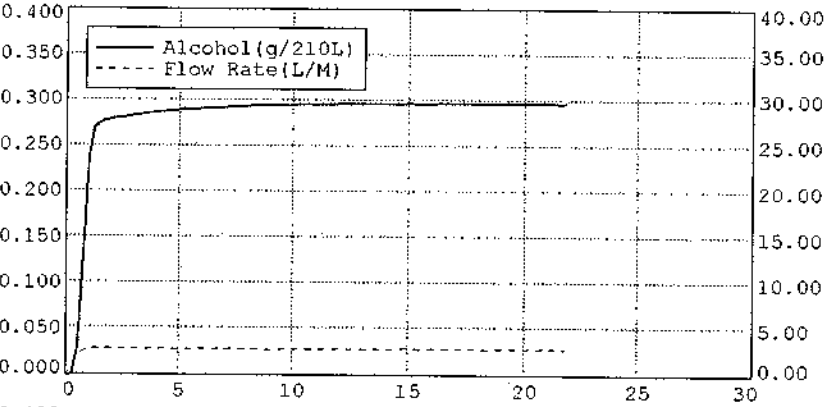
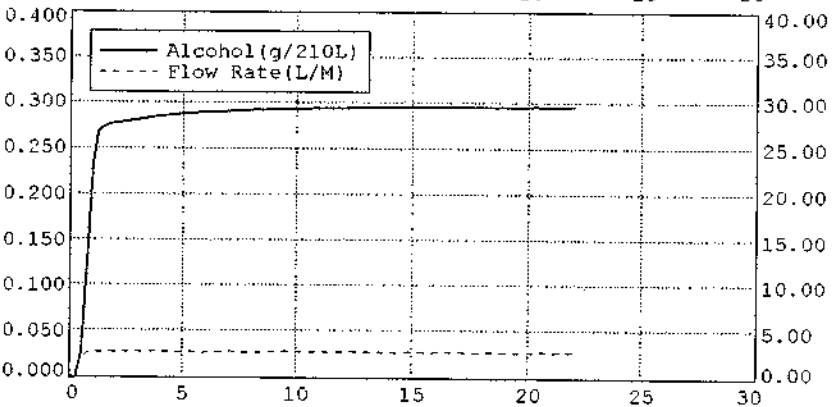
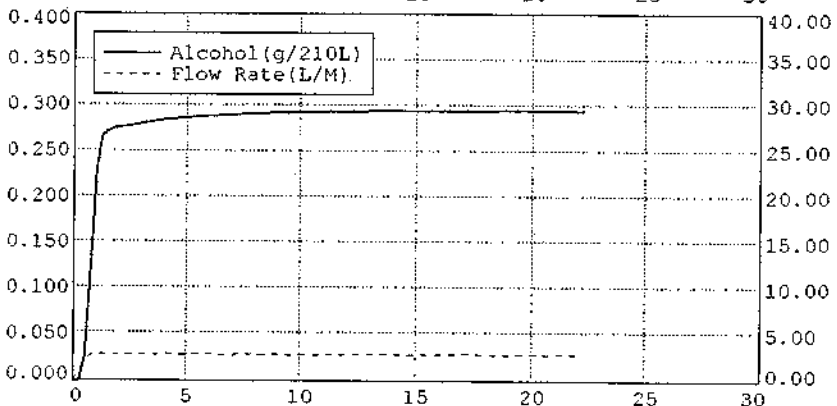
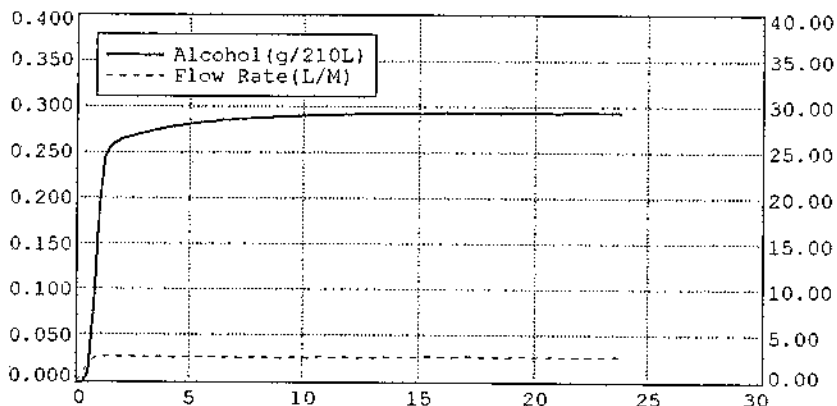
Alaska Department of Public Safety
 DATAMASTER dmt: 100411

Date: 02/26/2020
 Time: 12:01:52

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 19330
 EXPIRATION: 11/13/2021

BLANK TEST	0.000	12:02
INTERNAL STANDARD	VERIFIED	12:03
EXTERNAL STANDARD	0.295	12:03
BLANK TEST	0.000	12:04
EXTERNAL STANDARD	0.295	12:05
BLANK TEST	0.000	12:05
EXTERNAL STANDARD	0.297	12:06
BLANK TEST	0.000	12:07
EXTERNAL STANDARD	0.298	12:07
BLANK TEST	0.000	12:08
EXTERNAL STANDARD	0.297	12:09
BLANK TEST	0.000	12:10

Average = 0.2964
 Std Dev = 0.0013



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 02/26/2020
Time: 13:36:28

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1

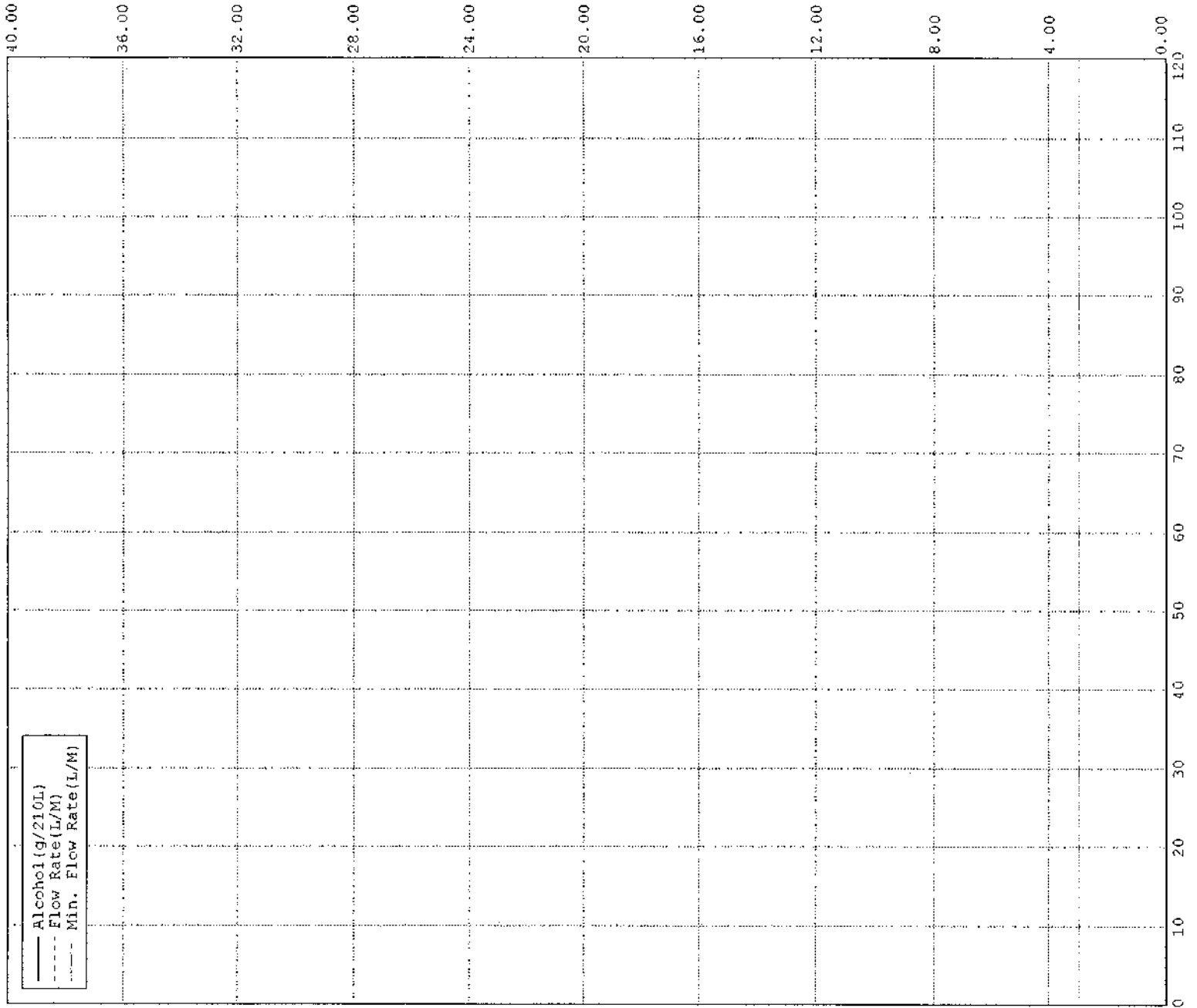
CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.27: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK
BLANK TEST PASSED 13:37
INTERNAL STANDARD VERIFIED 13:37
EXTERNAL STANDARD 0.078 13:38
BLANK TEST 0.000 13:38
SUBJECT SAMPLE INCOMPLETE 13:40

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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 02/26/2020
Time: 13:49:29

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

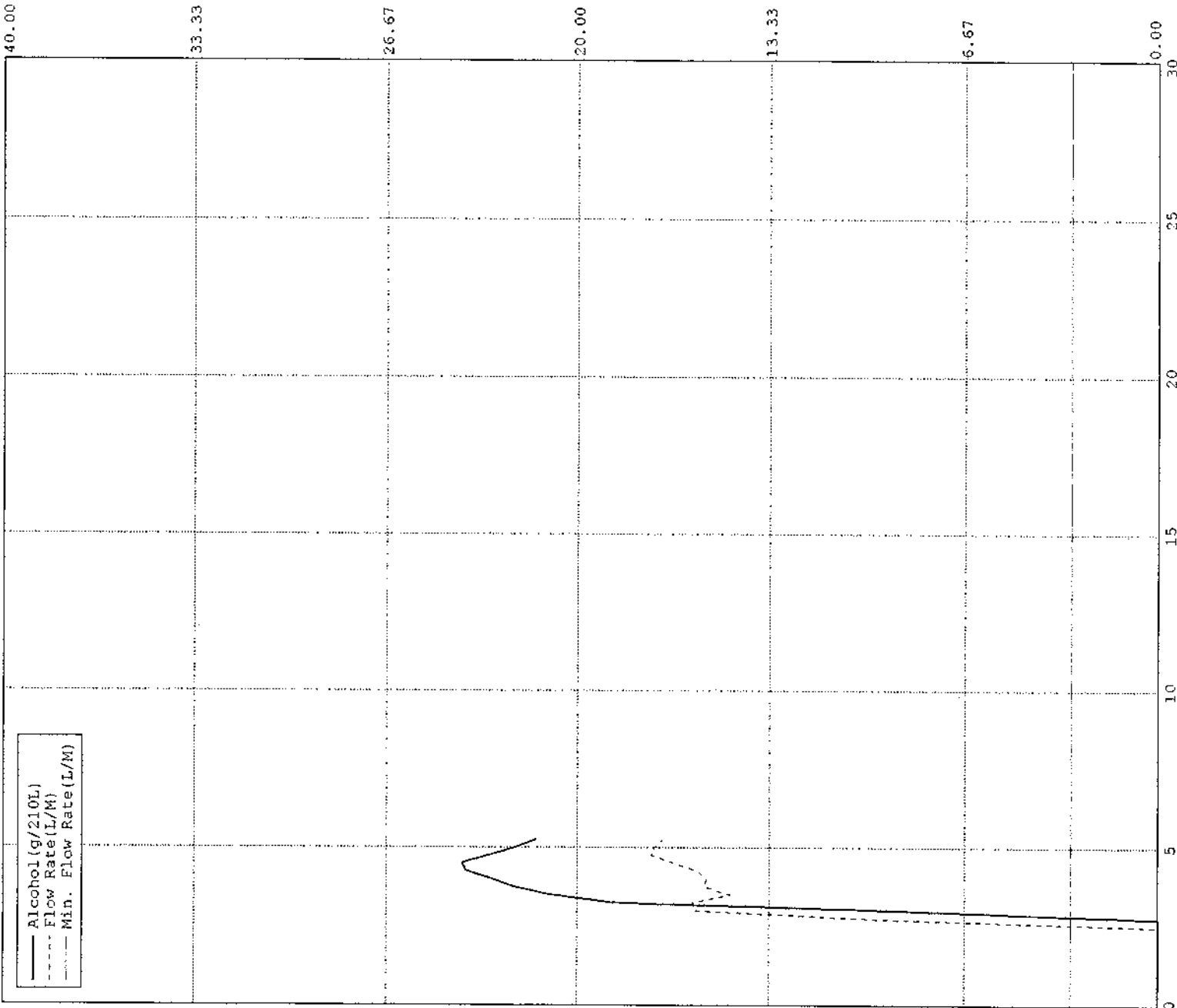
DEPT/AGENCY:
AAA1

CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.26: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:50
BLANK TEST 0.000 13:50
INTERNAL STANDARD VERIFIED 13:50
EXTERNAL STANDARD 0.078 13:51
BLANK TEST 0.000 13:52
SUBJECT SAMPLE INVALID 13:52



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 02/26/2020
Time: 14:14:49

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

OPERATOR NAME:
COLLEEN S OBRYANT
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1

CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

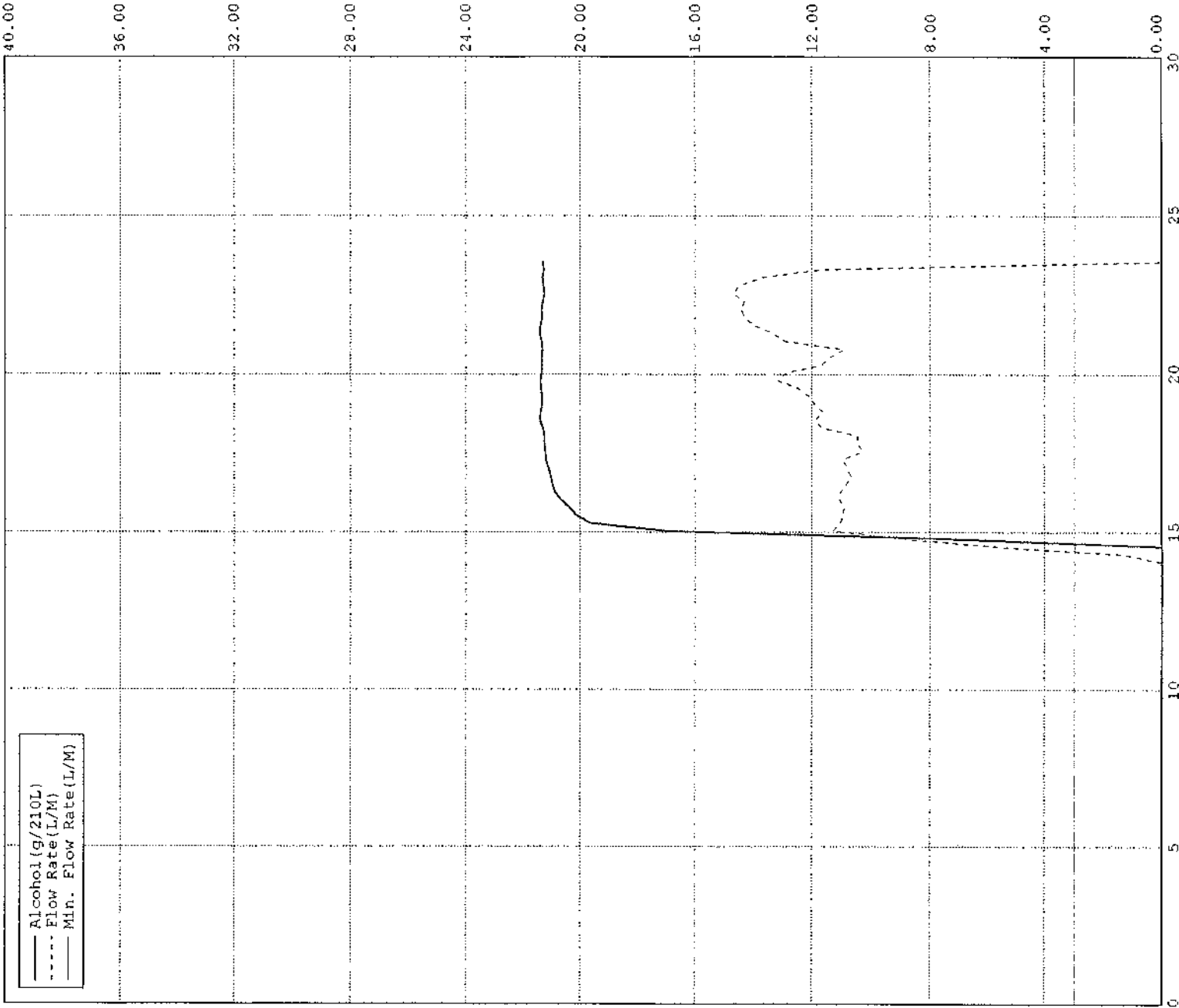
NOMINAL: 0.080
TARGET AT 29.27: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	14:15
BLANK TEST	0.000	14:15
INTERNAL STANDARD	VERIFIED	14:16
Xq = 0.088 (2.03%)		
EXTERNAL STANDARD	0.078	14:16
X[1] = 0.0778 (0.0004) (0.0027)		
BLANK TEST	0.000	14:17
SUBJECT SAMPLE	XXX	14:17
X[1] = 0.1075 (-0.0173) (0.0010)		

Interference Detected

Filter avg = 0.0003

Filter S = 0.0024



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 02/26/2020
Time: 14:20:23

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1

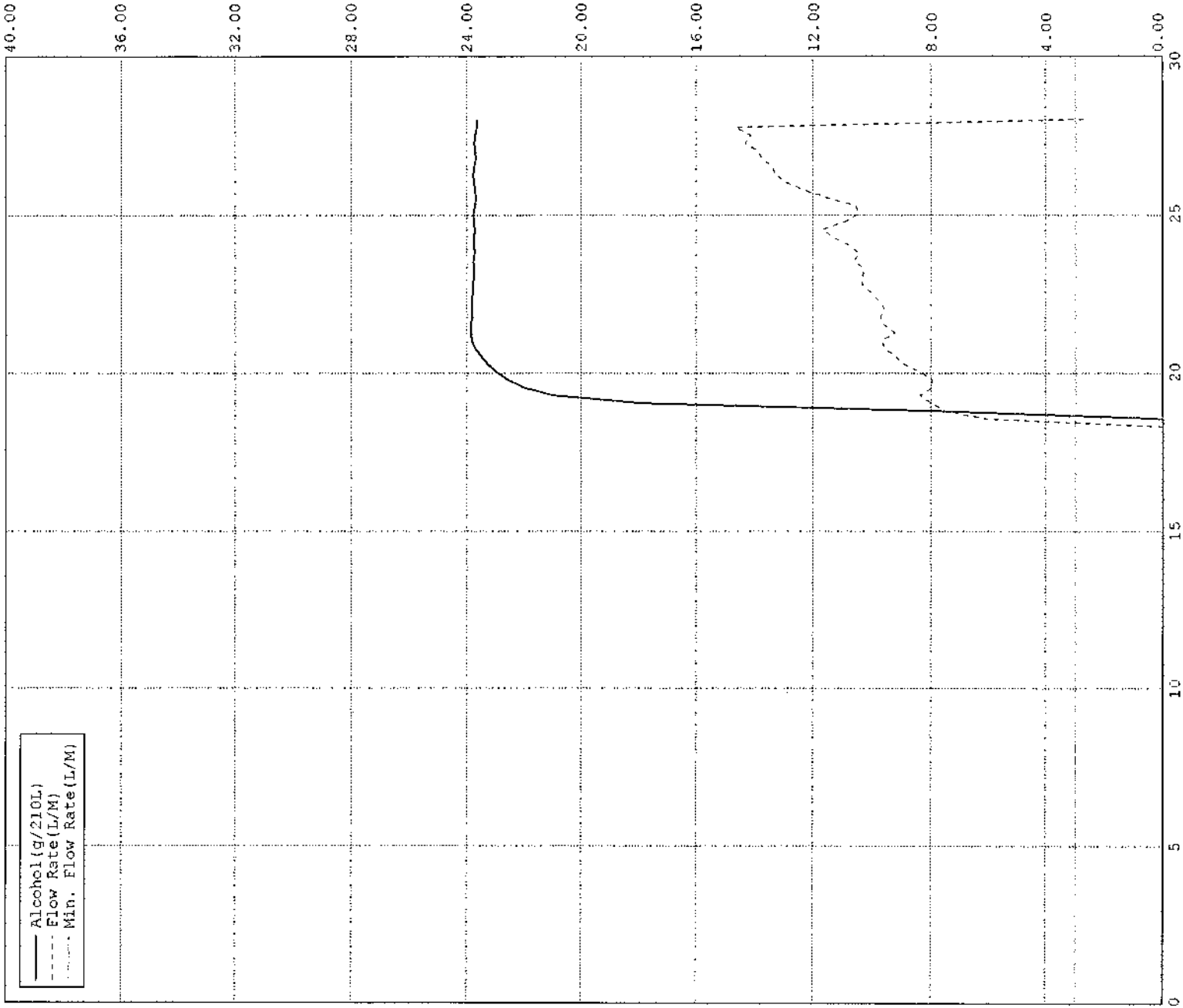
CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.27: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	14:21
BLANK TEST	0.000	14:21
INTERNAL STANDARD	VERIFIED	14:21
Xq = 0.088 (2.03%)		
EXTERNAL STANDARD	0.078	14:22
X[1] = 0.0779 (0.0001) (0.0023)		
BLANK TEST	0.000	14:23
SUBJECT SAMPLE	XXX	14:23
X[1] = 0.1191 (-0.0204) (0.0010)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 02/26/2020
Time: 14:26:46

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEG

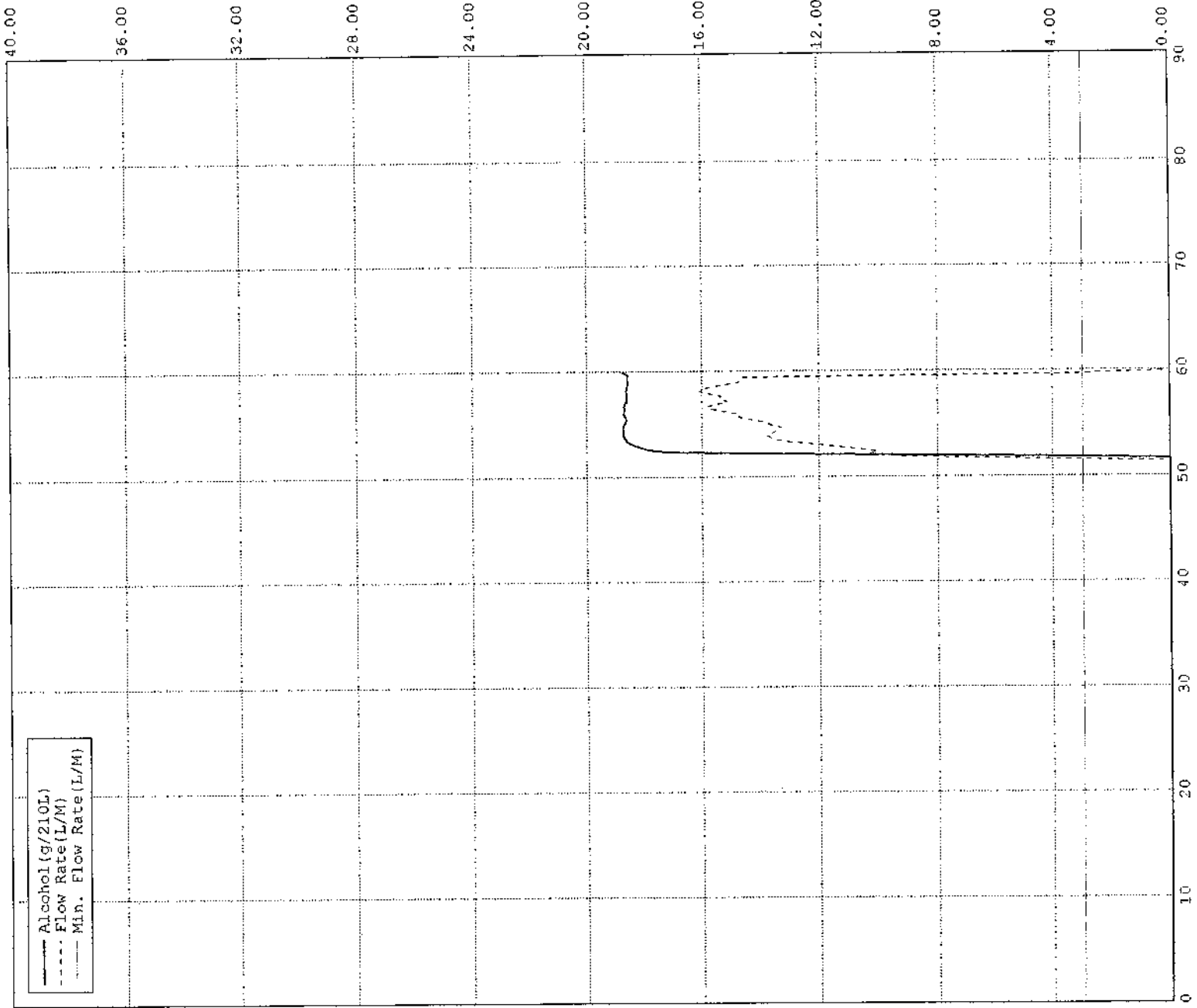
OPERATOR NAME:
COLLEEN S OBRyant
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.27: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	14:27
BLANK TEST	0.000	14:27
INTERNAL STANDARD	VERIFIED	14:28
Xq = 0.088 (1.92%)		
EXTERNAL STANDARD	0.078	14:28
X[1] = 0.0783 (0.0004) (0.0023)		
BLANK TEST	0.000	14:29
SUBJECT SAMPLE (Vol=1.84L)	0.094	14:30
X[1] = 0.0943 (0.0005) (0.0004)		
BLANK TEST	0.000	14:31
EXTERNAL STANDARD	0.078	14:31
X[1] = 0.0778 (0.0004) (0.0021)		
BLANK TEST	0.000	14:32



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 02/27/2020
Time: 08:35:00

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

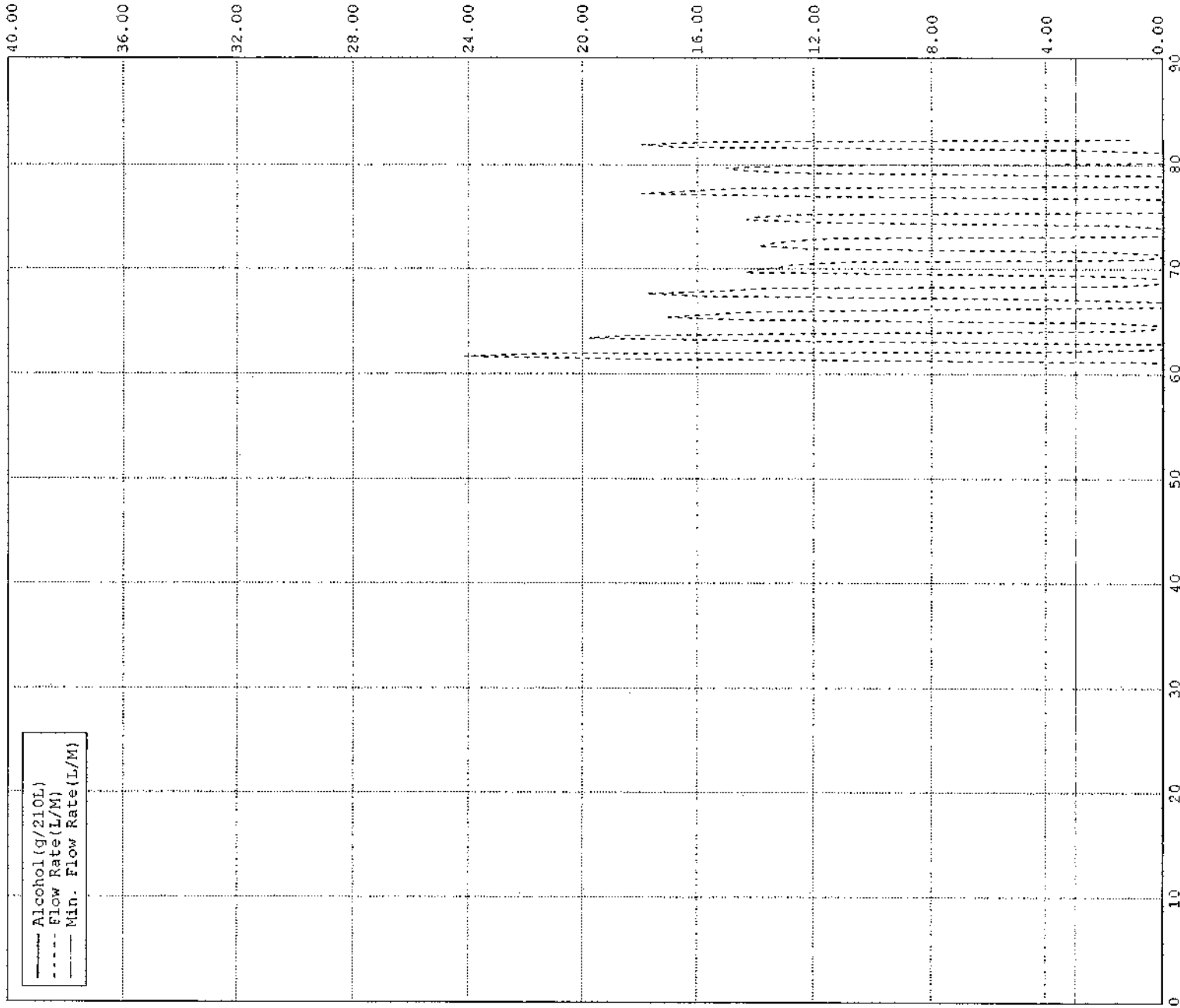
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.33: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 08:36
BLANK TEST 0.000 08:36
INTERNAL STANDARD VERIFIED 08:36
EXTERNAL STANDARD 0.079 08:36
BLANK TEST 0.000 08:37
SUBJECT SAMPLE XXX 08:38

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100411

Date: 02/27/2020
Time: 08:45:57

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

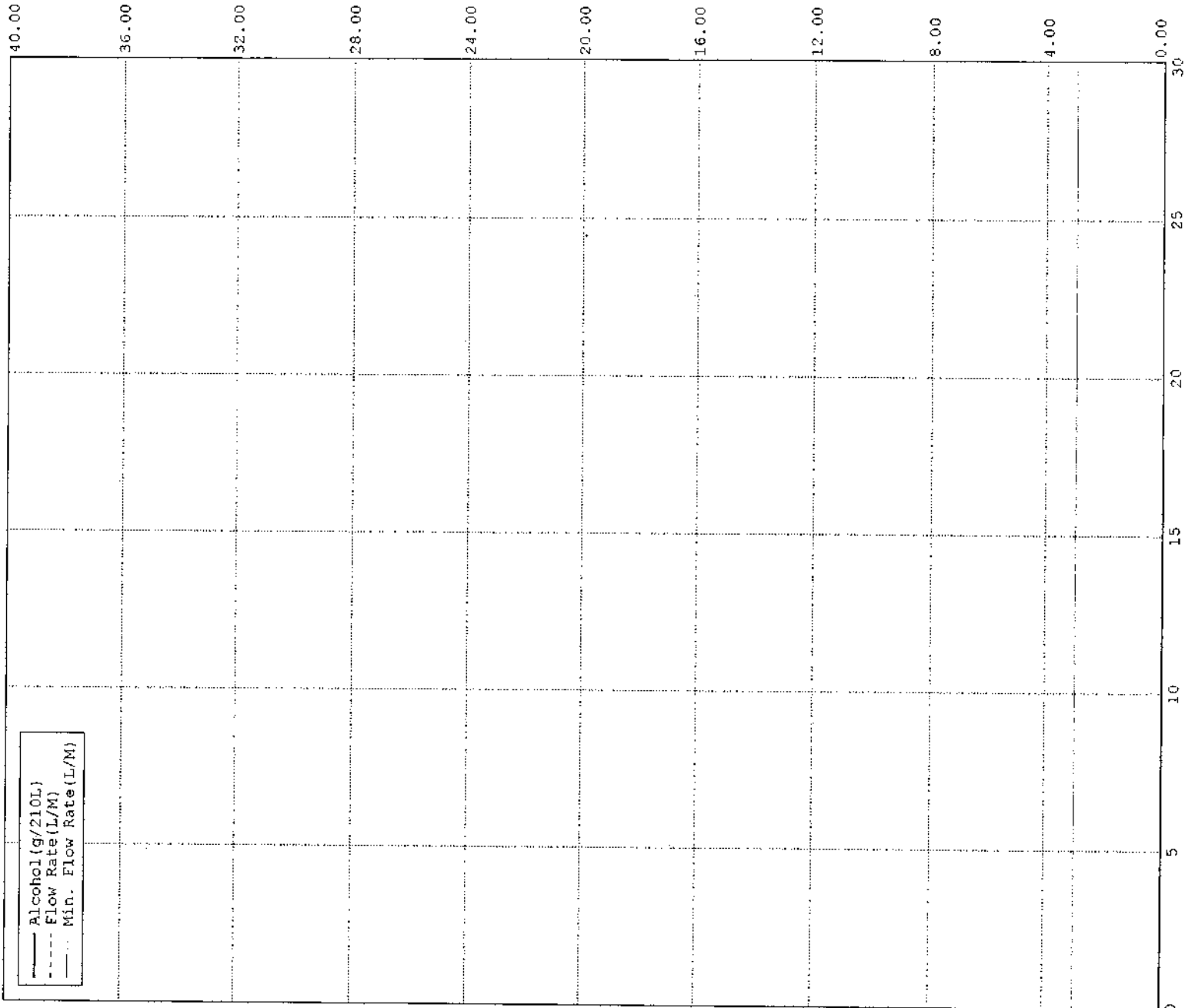
DEPT/AGENCY:
AAA1
CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.33: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 08:48
BLANK TEST 0.000 08:48
INTERNAL STANDARD VERIFIED 08:48
EXTERNAL STANDARD 0.078 08:48
BLANK TEST 0.000 08:49

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

Date: 02/27/2020
 Time: 09:11:55

SUBJECT NAME:
 TEST TEST
 LICENSE #: NONDRINKING

OPERATOR NAME:
 COLLEEN S O'BRYAN
 OPERATOR'S #: 6237

DEPT/AGENCY:
 AAAA
 CASE/REPORT: 20-1234
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.33: 0.078
 LOT #: AG826101
 EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	09:12
BLANK TEST	0.000	09:13
INTERNAL STANDARD	VERIFIED	09:13
EXTERNAL STANDARD	0.079	09:13
BLANK TEST	0.000	09:14
SUBJECT SAMPLE (Vol=1.83L)	0.000	09:14
BLANK TEST	0.000	09:15
EXTERNAL STANDARD	0.079	09:15
BLANK TEST	0.000	09:16

