

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 100357 Analyst C. O. Bryant Start Date 2/20/2020

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 1.5 L (1.3L to 1.7L)
 4. Linearity Test (attached)
 - a. Levels Used
 - i. 0.020g/210L Mnf Argas Lot AG928203 Exp 10/9/21
 - ii. 0.040g/210L Mnf Argas Lot AG915607 Exp 6/5/21
 - iii. 0.080g/210L Mnf Argas Lot AG826101 Exp 9/18/20
 - iv. 0.100g/210L Mnf Argas Lot AG924701 Exp 9/4/21
 - v. 0.200g/210L Mnf Both Lot 19040 Exp 1/29/21
 1. Simulator S/N DR4160 Date Calibrated 10/7/19
 - vi. 0.300g/210L Mnf Both 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 Both Lot 18370 Level 0.100 Exp 12/15/20
 1. Simulator S/N SD1199 Date Calibrated 3/6/19
 - ii. Isopropanol - Mnf Both Lot 18370 Level 0.100 Exp 12/15/20
 1. Simulator S/N DR4161 Date Calibrated 3/7/19
 - iii. Negative Control - Mnf Both Lot 18370 Level 0.100 Exp 12/15/20
 1. Simulator S/N SD1002 Date Calibrated 3/5/19
 - 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 2/27/20

DIAGNOSTIC RECORD

 Alaska Department of Public Safety
 DATAMASTER dmt: 100357

Date: 02/26/2020
 Time: 10:05:54

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 = 44.9°C PASSED
 (38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.86 V PASSED
 (1.12 V - 2.60 V)
 Cooler Voltage = 1.79 V PASSED
 (1.07 V - 2.51 V)
 Bias Voltage = 78 V PASSED
 (47 V - 109 V)
 Chopper Freq = 523 Hz PASSED
 (475 Hz - 575 Hz)
 Barometer = 29.3 in

PUMP INFO

Flow Rate = 4.394 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 = 0.090 0.48% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100357

Date: 02/26/2020
Time: 10:21 AM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 44.5°C

Current Barometer 29.3 in
Volume (Ltr) 1.41

Settings

Lamp: 1.86 V
Bias: 80 V
Cooler: 1.79 V
Chopper: 522 Hz

Voltages (V)

Flow: 1.04 V
Detector: 0.074 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 01/22/2020
Time: 15:18:20

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca	=	0.1000			
CAL	=	0.957741	0.800	<=	CAL < 1.200
b1	=	0.0003	0.0000	<=	b1 < 0.0040
b2	=	0.0052	0.0010	<=	b2 < 0.0100
b3	=	0.0000	0.0000	<=	b3 < 0.0040
Xq	=	0.0902	0.0500	<=	Xq < 0.2000
a21	=	1.186339	1.050	<=	a21 < 1.300
a31	=	0.526948	0.300	<=	a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/26/2020
Time: 10:30:15

SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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

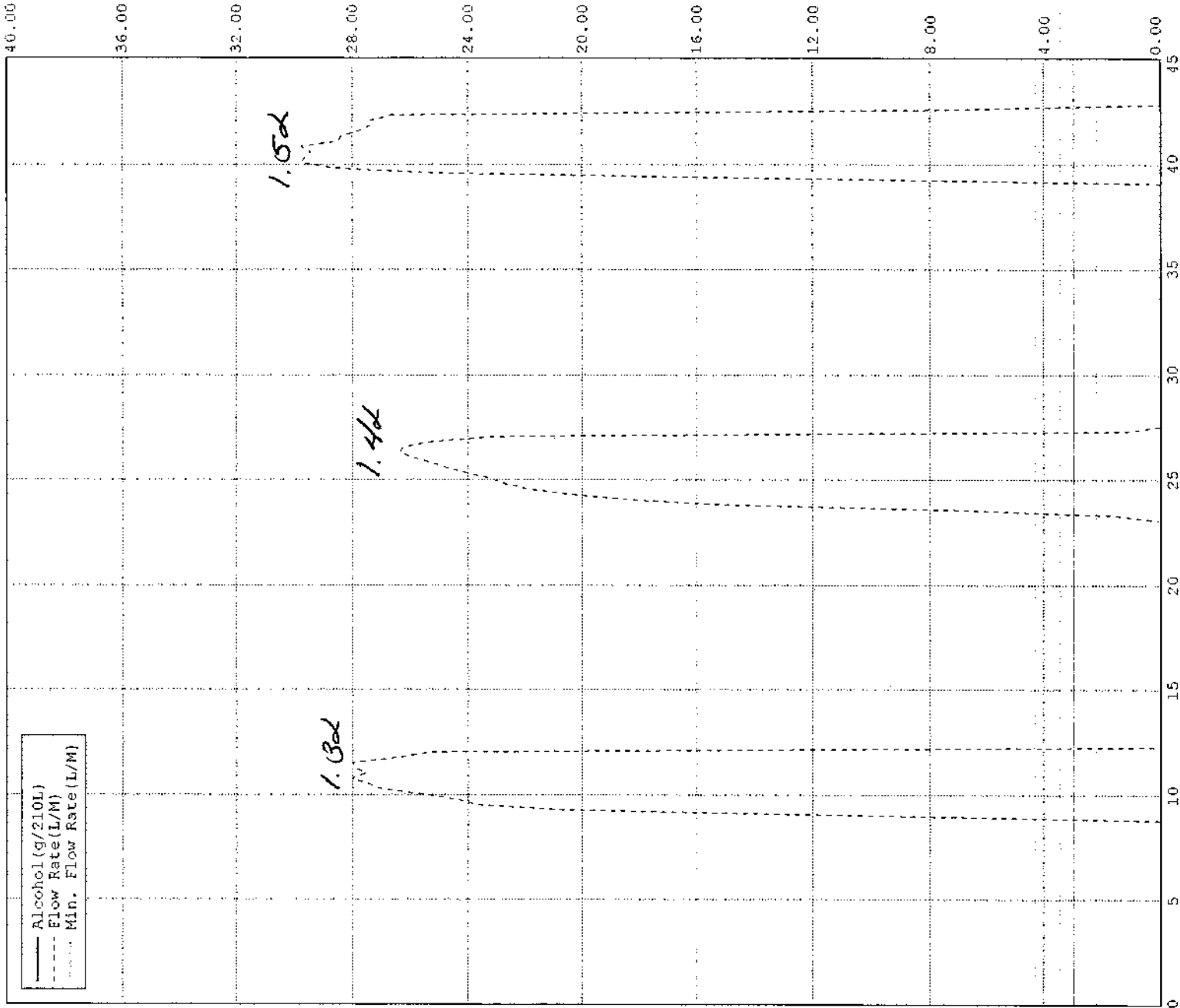
DEPT/AGENCY:
AAA1

CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	10:31
BLANK TEST	0.000	10:31
INTERNAL STANDARD	VERIFIED	10:31
EXTERNAL STANDARD	0.077	10:31
BLANK TEST	0.000	10:32
SUBJECT SAMPLE (Vol=1.50L)	0.000	10:33
BLANK TEST	0.000	10:34
EXTERNAL STANDARD	0.077	10:34
BLANK TEST	0.000	10:35



LINEARITY CHECK

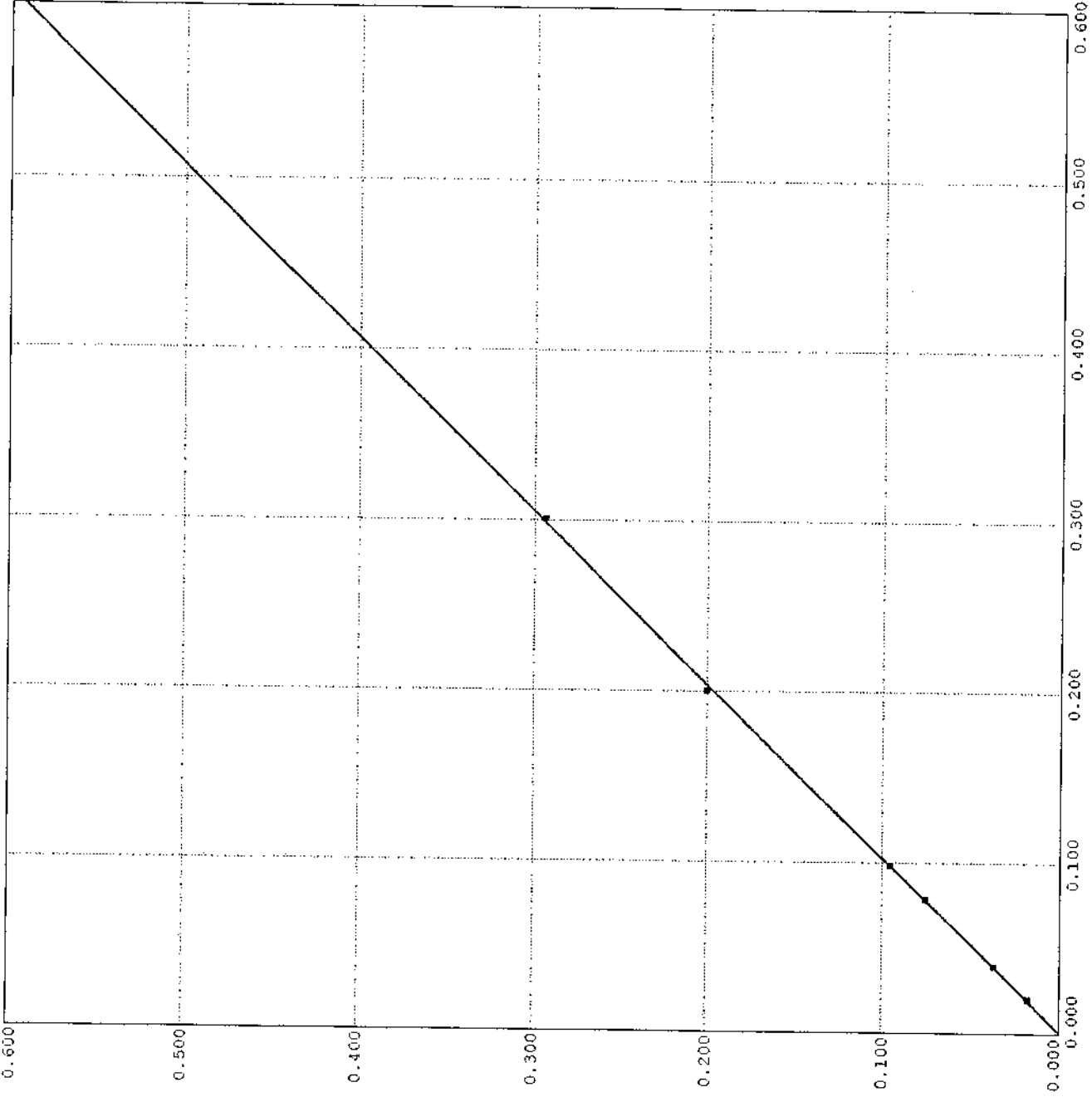
Alaska Department of Public Safety
 DATAMASTER dmt: 100357

Date: 02/26/2020
 Time: 13:26:27

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0190	0.0000
0.039	0.0382	0.0004
0.078	0.0766	0.0005
0.098	0.0964	0.0005
0.200	0.2010	0.0012
0.300	0.2944	0.0009

SLOPE = 0.988784
 R² = 0.999706



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100357

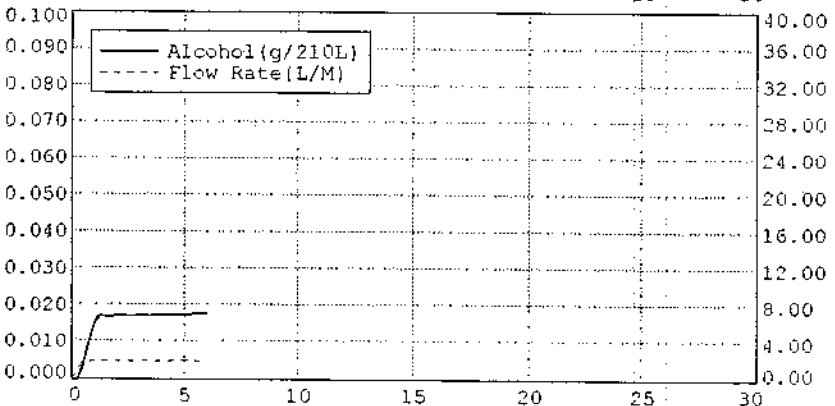
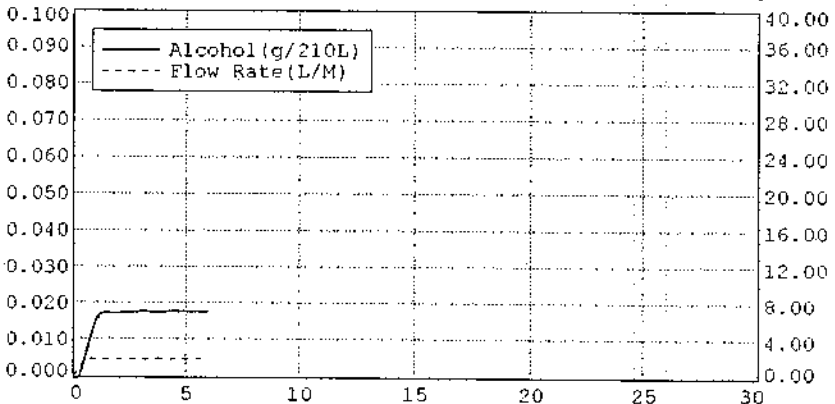
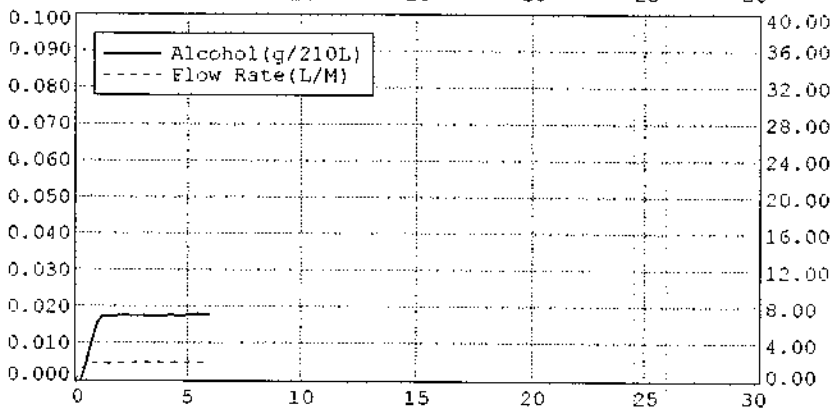
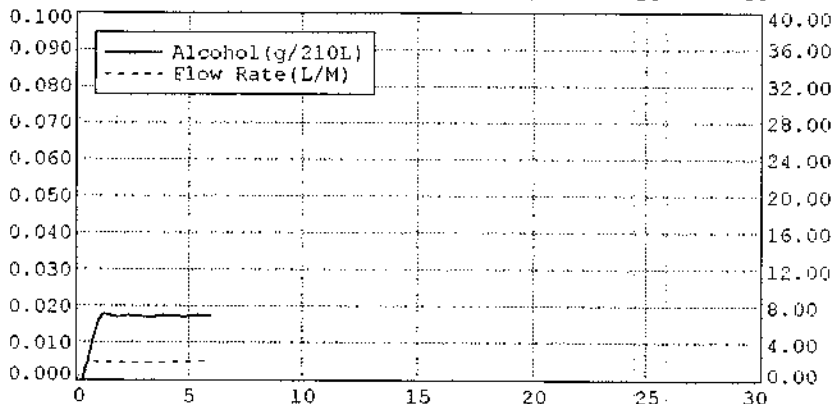
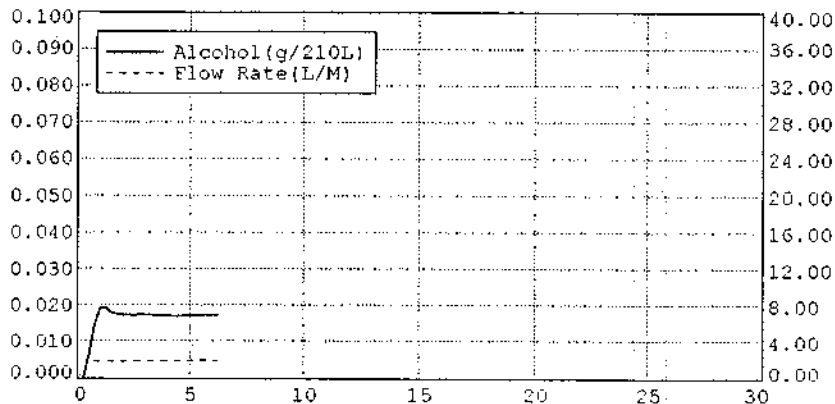
Date: 02/26/2020
 Time: 13:26:29

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.27: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 983 psi

BLANK TEST	0.000	13:27
INTERNAL STANDARD	VERIFIED	13:27
EXTERNAL STANDARD	0.019	13:27
BLANK TEST	0.000	13:28
EXTERNAL STANDARD	0.019	13:29
BLANK TEST	0.000	13:29
EXTERNAL STANDARD	0.019	13:30
BLANK TEST	0.000	13:31
EXTERNAL STANDARD	0.019	13:31
BLANK TEST	0.000	13:32
EXTERNAL STANDARD	0.019	13:32
BLANK TEST	0.000	13:33

Average = 0.0190
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100357

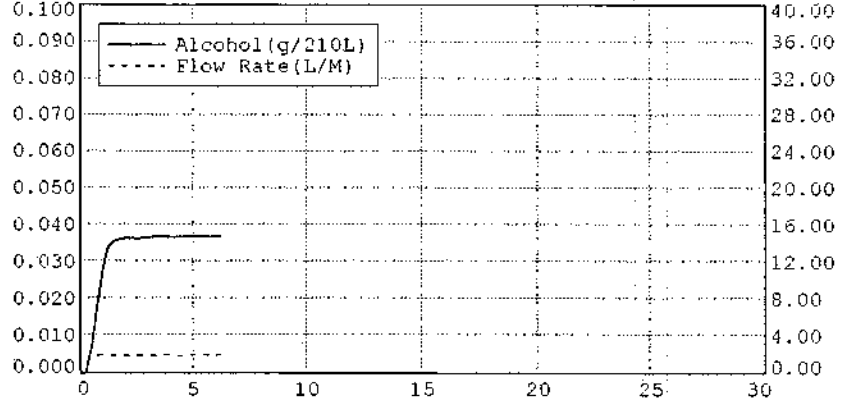
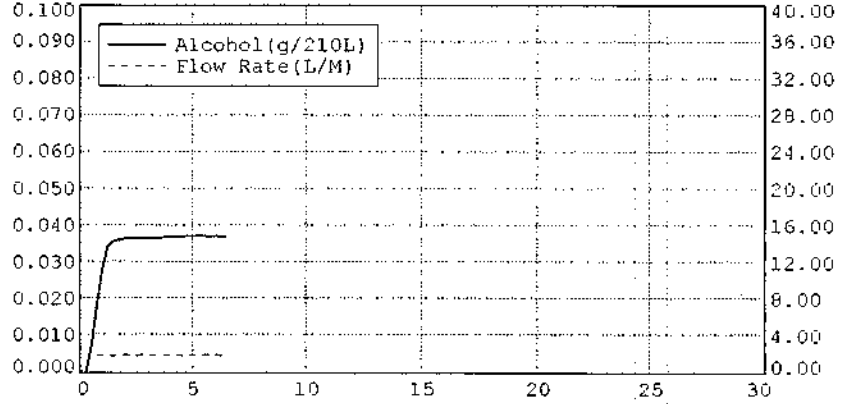
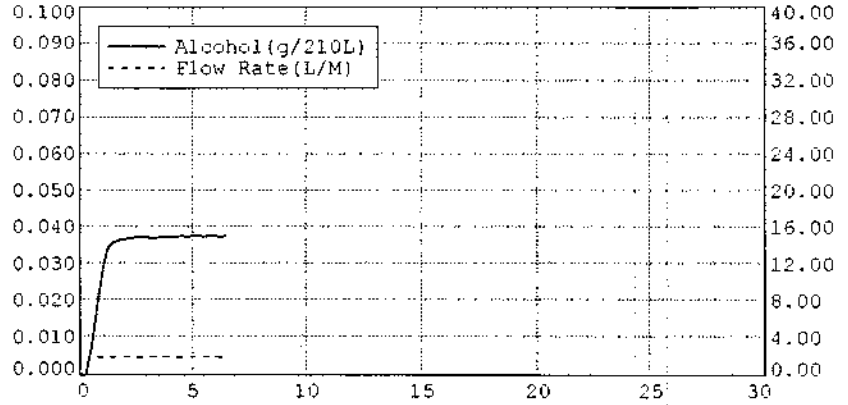
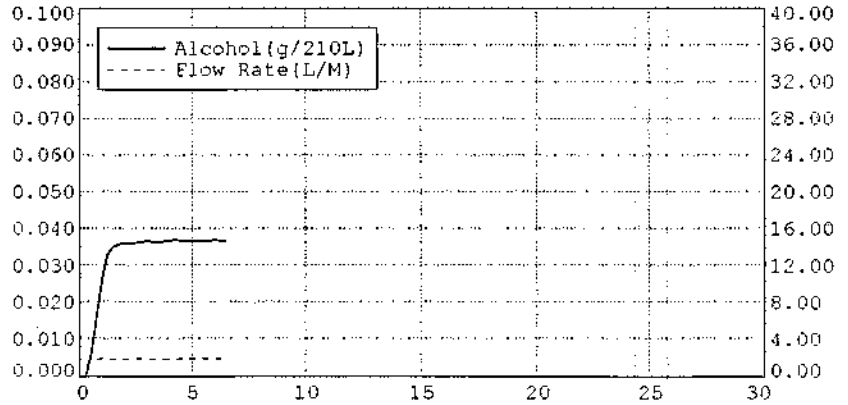
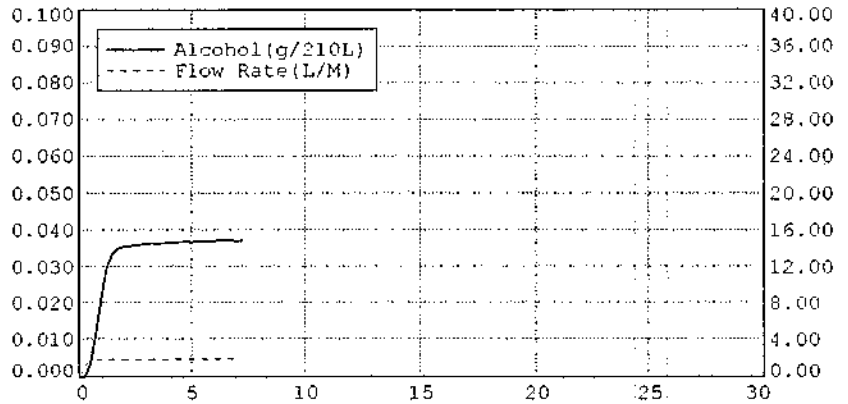
Date: 02/26/2020
 Time: 13:34:27

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.27: 0.039
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 811 psi

BLANK TEST	0.000	13:35
INTERNAL STANDARD	VERIFIED	13:35
EXTERNAL STANDARD	0.038	13:35
BLANK TEST	0.000	13:36
EXTERNAL STANDARD	0.038	13:37
BLANK TEST	0.000	13:37
EXTERNAL STANDARD	0.039	13:38
BLANK TEST	0.000	13:39
EXTERNAL STANDARD	0.038	13:39
BLANK TEST	0.000	13:40
EXTERNAL STANDARD	0.038	13:40
BLANK TEST	0.000	13:41

Average = 0.0382
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100357

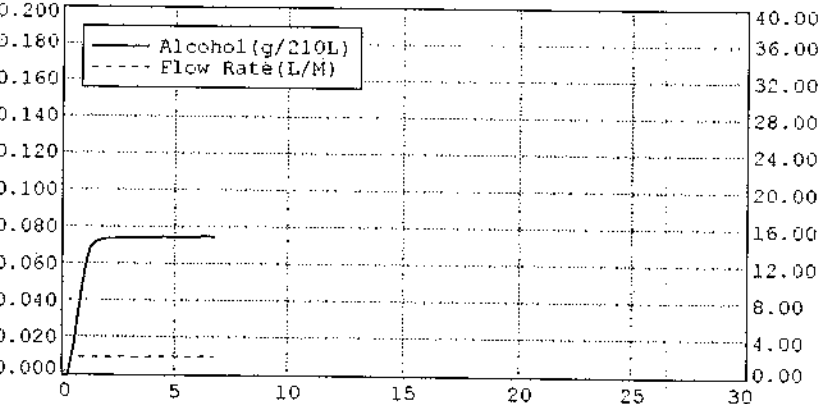
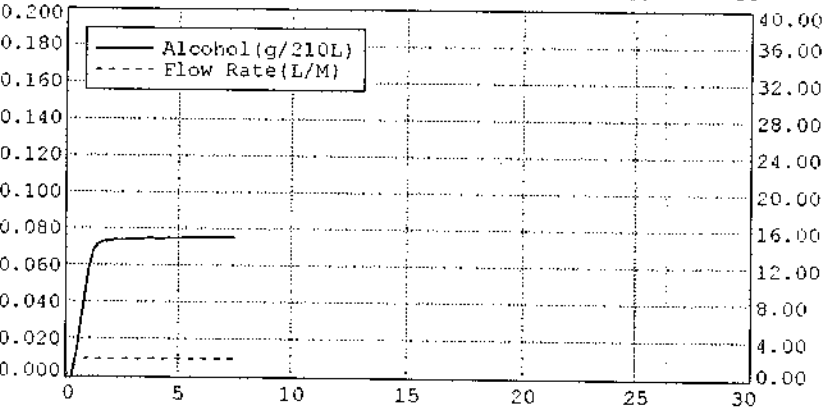
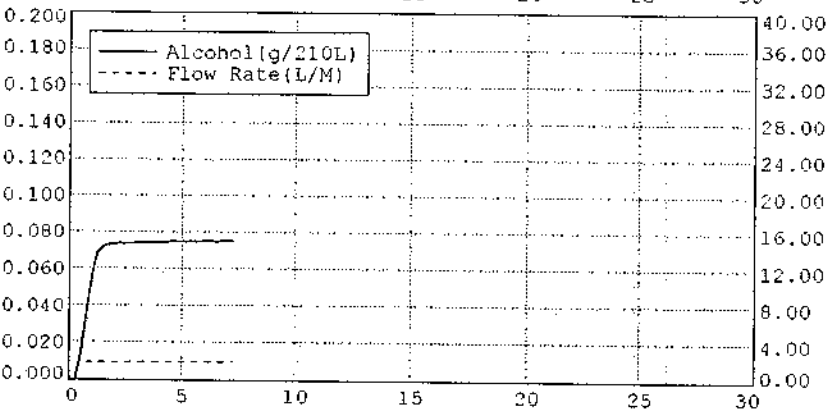
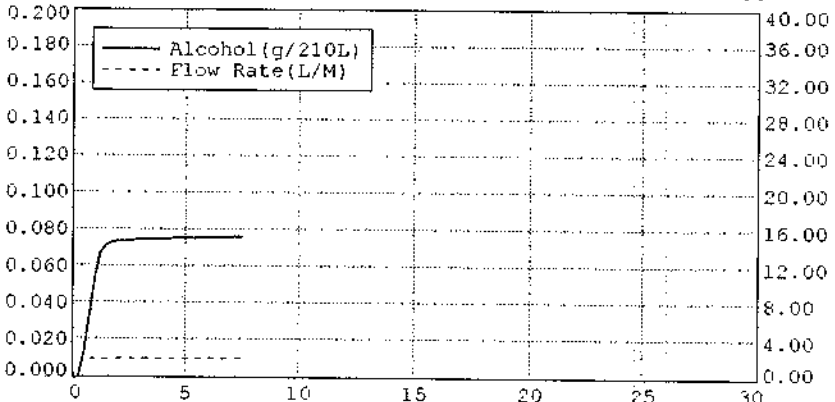
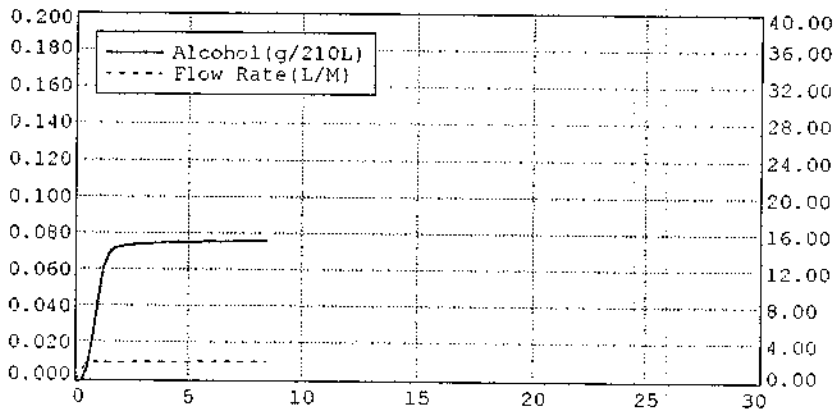
Date: 02/26/2020
 Time: 13:42:01

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.27: 0.078
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 1030 psi

BLANK TEST	0.000	13:43
INTERNAL STANDARD	VERIFIED	13:43
EXTERNAL STANDARD	0.077	13:43
BLANK TEST	0.000	13:44
EXTERNAL STANDARD	0.077	13:44
BLANK TEST	0.000	13:45
EXTERNAL STANDARD	0.076	13:45
BLANK TEST	0.000	13:46
EXTERNAL STANDARD	0.077	13:46
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.076	13:48
BLANK TEST	0.000	13:48

Average = 0.0766
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100357

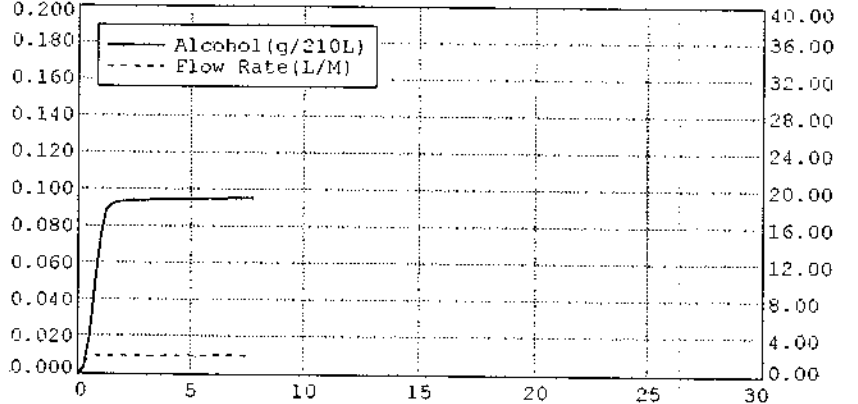
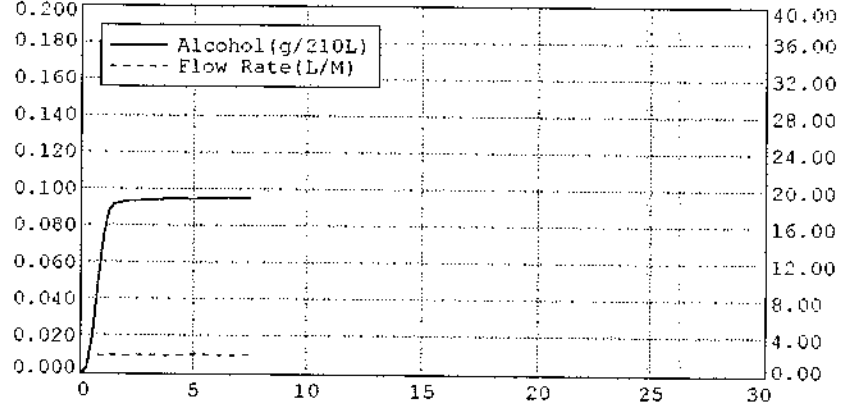
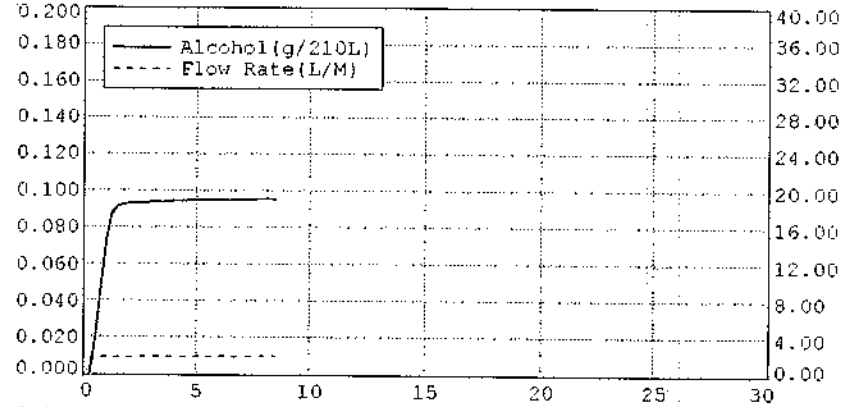
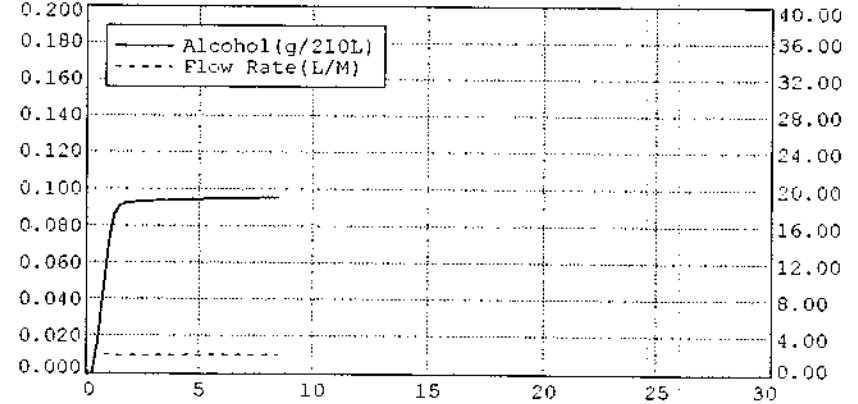
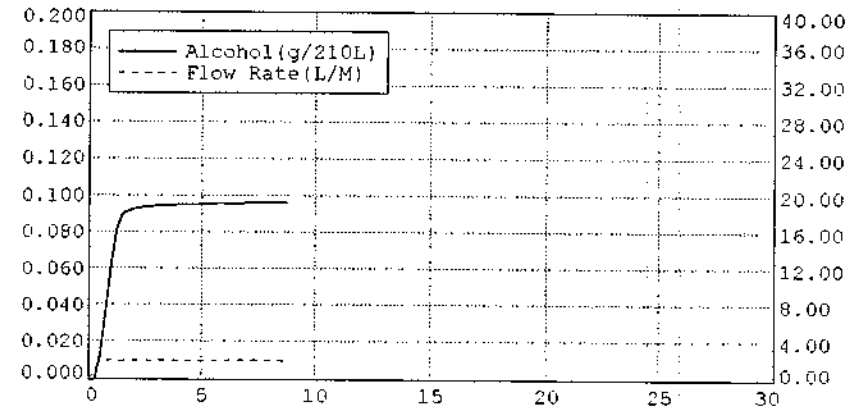
Date: 02/26/2020
 Time: 13:49:18

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.27: 0.098
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 1032 psi

BLANK TEST	0.000	13:50
INTERNAL STANDARD	VERIFIED	13:50
EXTERNAL STANDARD	0.097	13:50
BLANK TEST	0.000	13:51
EXTERNAL STANDARD	0.096	13:52
BLANK TEST	0.000	13:52
EXTERNAL STANDARD	0.097	13:53
BLANK TEST	0.000	13:54
EXTERNAL STANDARD	0.096	13:54
BLANK TEST	0.000	13:55
EXTERNAL STANDARD	0.096	13:55
BLANK TEST	0.000	13:56

Average = 0.0964
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

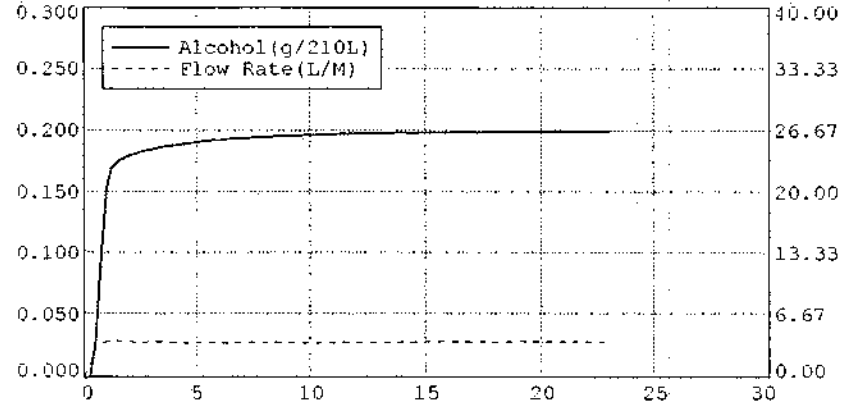
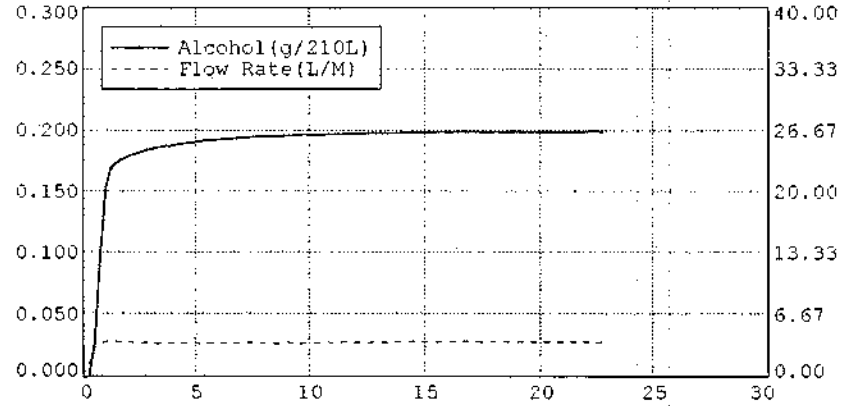
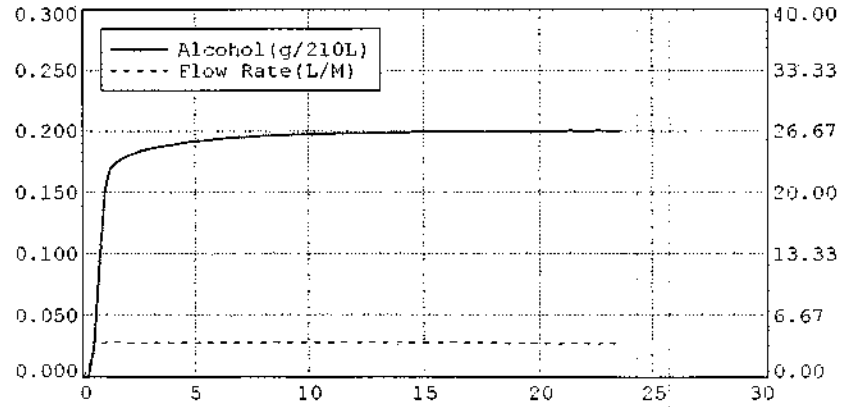
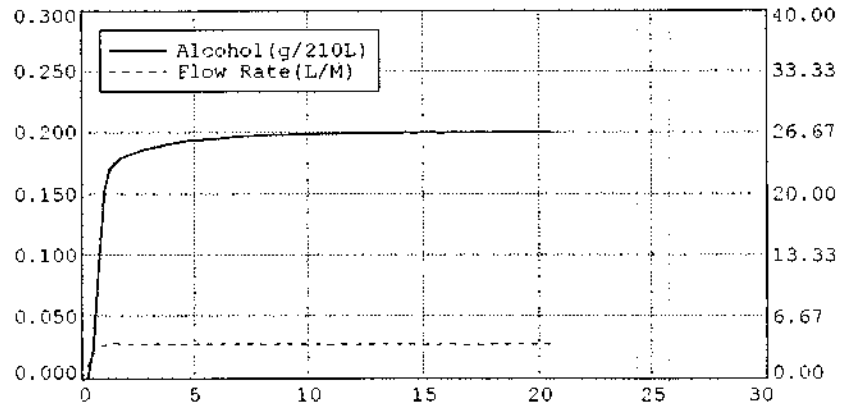
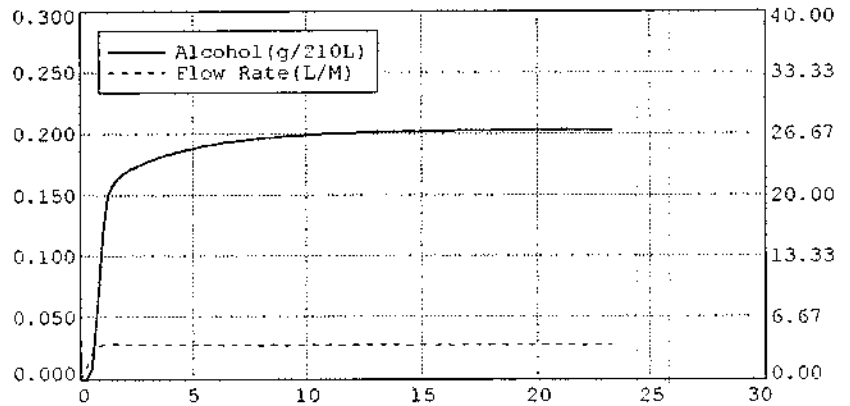
Alaska Department of Public Safety
 DATAMASTER dmt: 100357

Date: 02/26/2020
 Time: 13:57:38

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

BLANK TEST	0.000	13:58
INTERNAL STANDARD	VERIFIED	13:58
EXTERNAL STANDARD	0.203	13:59
BLANK TEST	0.000	14:00
EXTERNAL STANDARD	0.201	14:00
BLANK TEST	0.000	14:01
EXTERNAL STANDARD	0.201	14:02
BLANK TEST	0.000	14:03
EXTERNAL STANDARD	0.200	14:03
BLANK TEST	0.000	14:04
EXTERNAL STANDARD	0.200	14:04
BLANK TEST	0.000	14:05

Average = 0.2010
 Std Dev = 0.0012



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100357

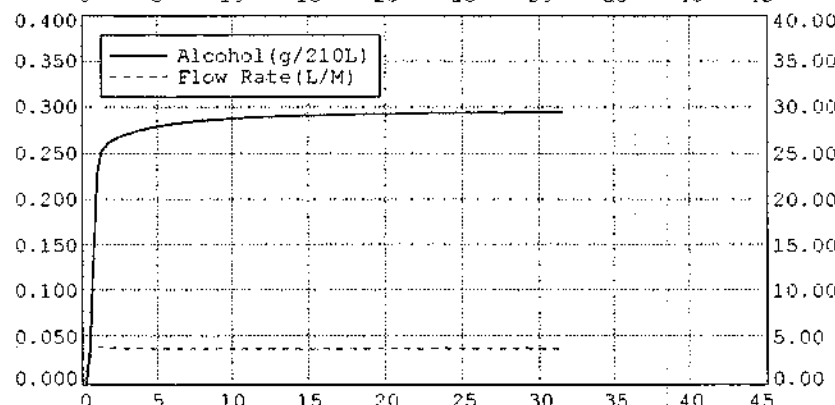
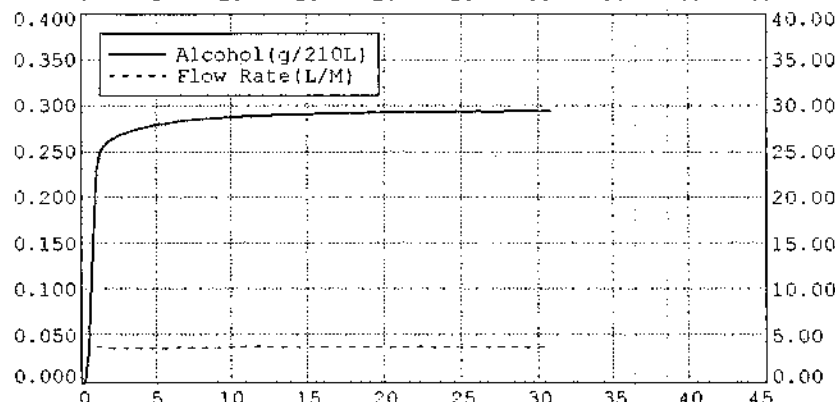
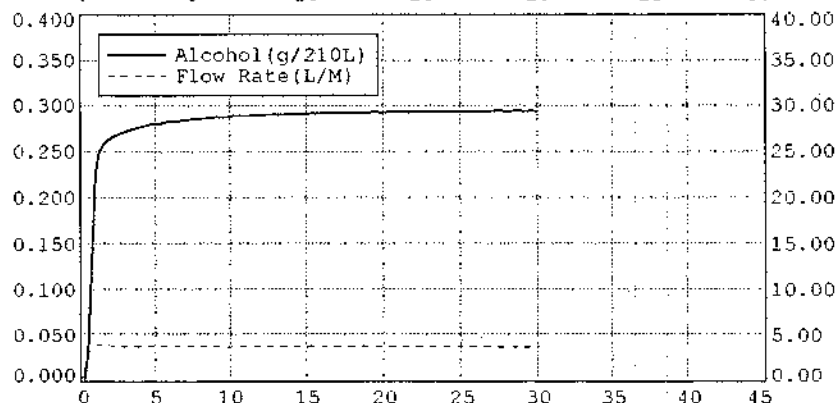
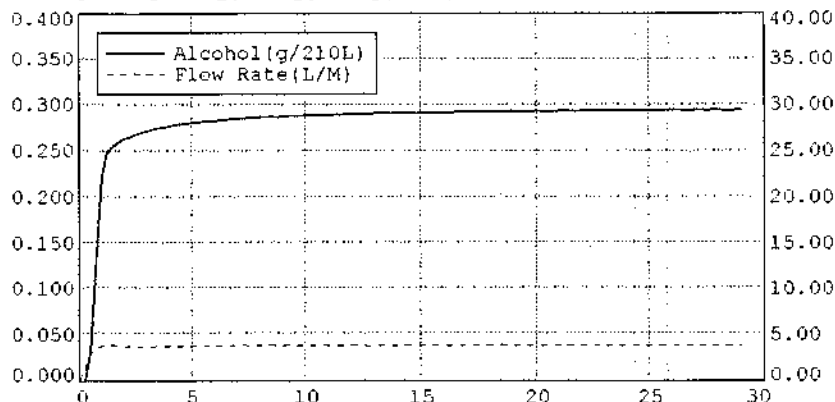
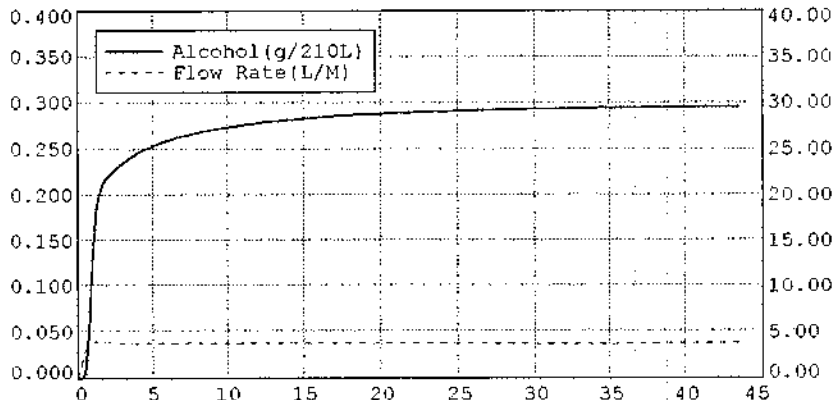
Date: 02/26/2020
 Time: 14:08:44

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:09
INTERNAL STANDARD	VERIFIED	14:10
EXTERNAL STANDARD	0.295	14:10
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.293	14:12
BLANK TEST	0.000	14:13
EXTERNAL STANDARD	0.294	14:13
BLANK TEST	0.000	14:14
EXTERNAL STANDARD	0.295	14:15
BLANK TEST	0.000	14:16
EXTERNAL STANDARD	0.295	14:17
BLANK TEST	0.000	14:17

Average = 0.2944
 Std Dev = 0.0009



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100357

Date: 02/26/2020
Time: 14:22:27

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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

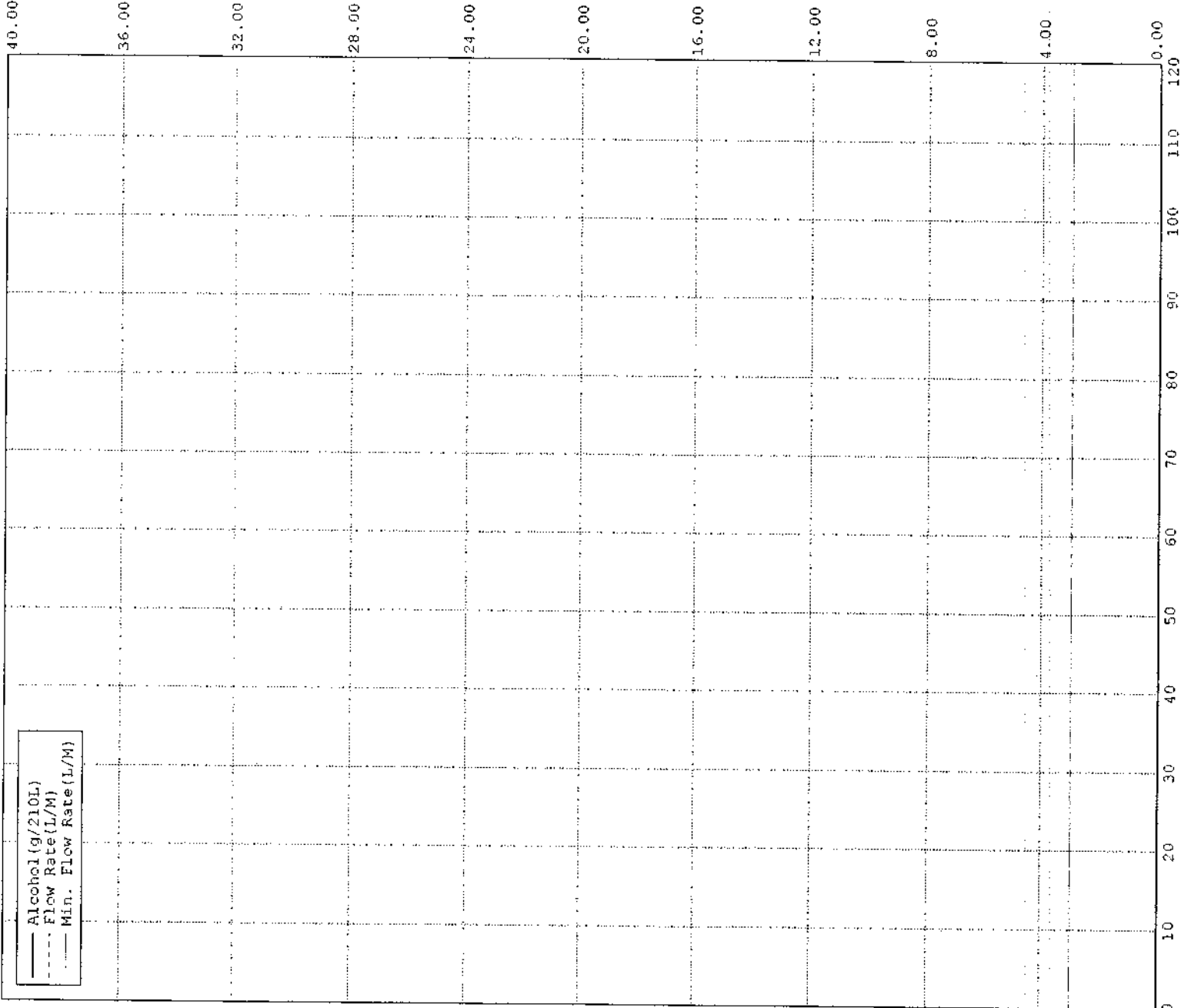
DEPT/AGENCY:
AAA1

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 PASSED 14:23
BLANK TEST 0.000 14:23
INTERNAL STANDARD VERIFIED 14:24
EXTERNAL STANDARD 0.077 14:24
BLANK TEST 0.000 14:25
SUBJECT SAMPLE INCOMPLETE 14:27



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/26/2020
Time: 14:35:04

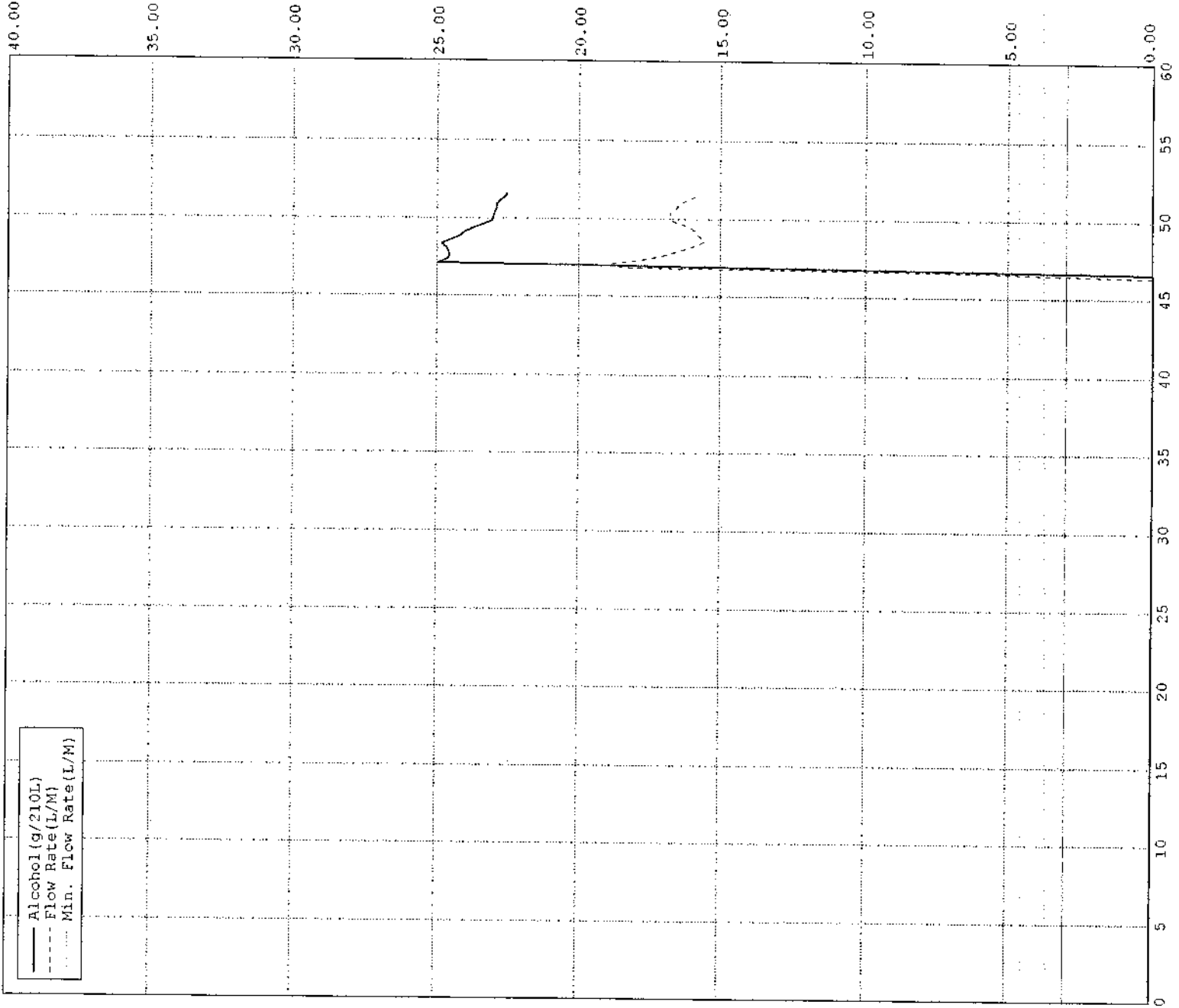
SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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	14:36
BLANK TEST	0.000	14:36
INTERNAL STANDARD	VERIFIED	14:36
EXTERNAL STANDARD	0.077	14:36
BLANK TEST	0.000	14:37
SUBJECT SAMPLE	INVALID	14:38



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/26/2020
Time: 14:42:11

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

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

DEPT/AGENCY:

AAAI
CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

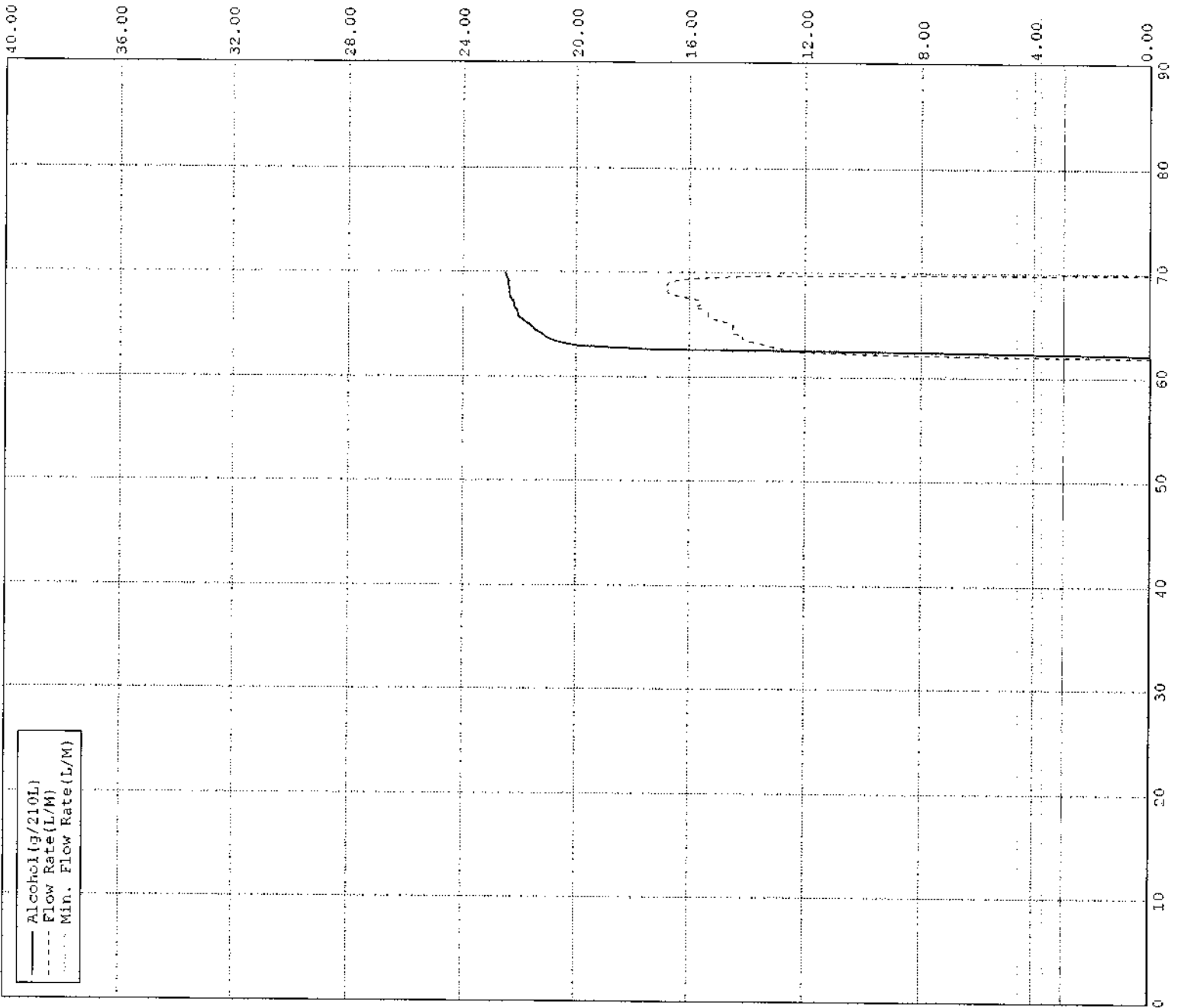
NOMINAL: 0.080
TARGET AT 29.27: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	14:43
BLANK TEST	0.000	14:43
INTERNAL STANDARD	VERIFIED	14:43
Xg = 0.090 (0.00%)		
EXTERNAL STANDARD	0.076	14:43
X[1] = 0.0763 (-0.0001)	(0.0038)	
BLANK TEST	0.000	14:44
SUBJECT SAMPLE	XXX	14:45
X[1] = 0.1113 (-0.0111)	(0.0052)	

Interference Detected

Filter 2 avg = -0.0004

Filter 3 avg = 0.0020



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/27/2020
Time: 08:33:23

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

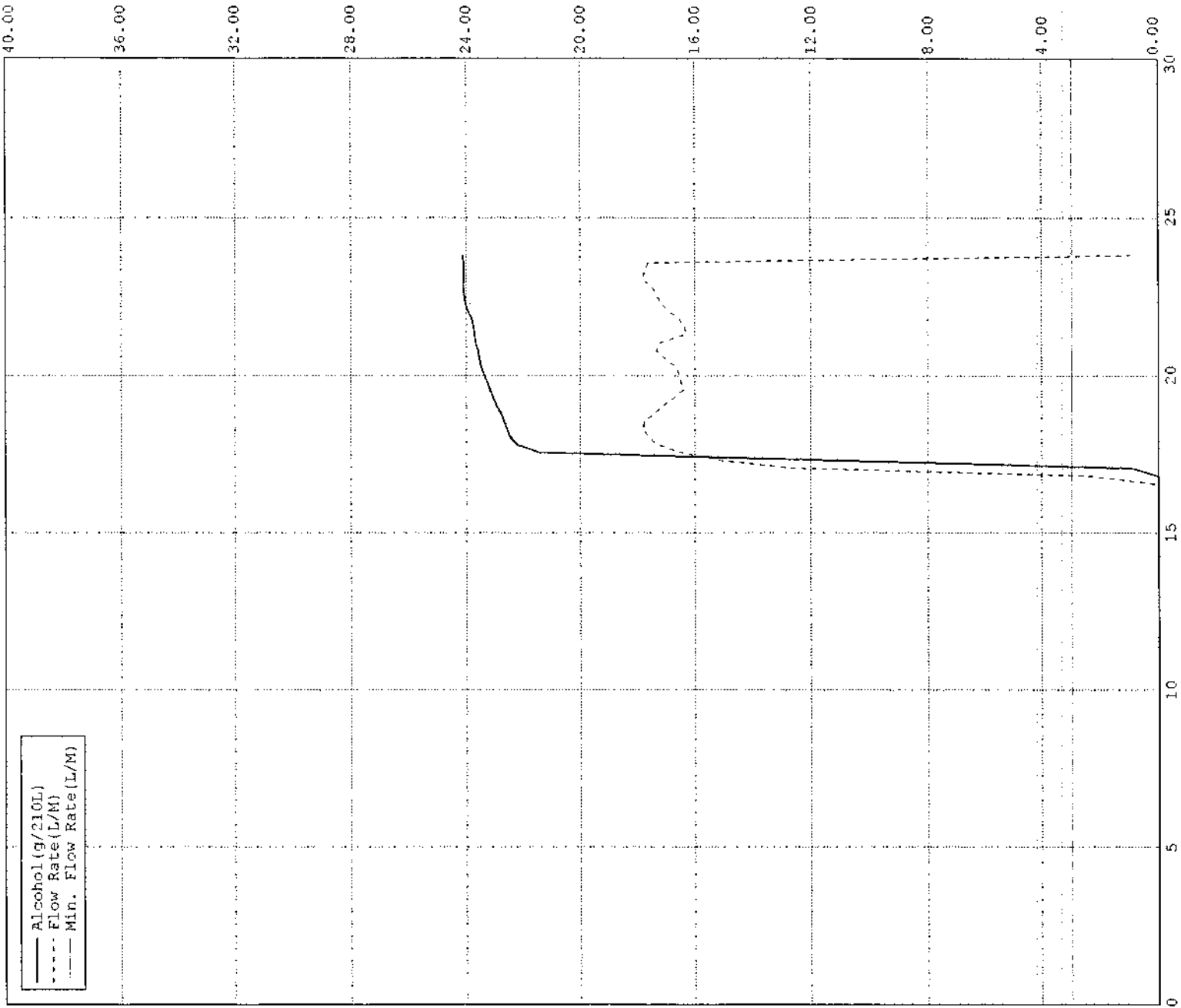
DEPT/AGENCY:
AAA1
CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	08:36
BLANK TEST	0.000	08:36
INTERNAL STANDARD	VERIFIED	08:37
Xq = 0.090 (0.19%)		
EXTERNAL STANDARD	0.078	08:37
X[1] = 0.0776 (-0.0005)	(0.0015)	
BLANK TEST	0.000	08:38
SUBJECT SAMPLE	XXX	08:38
X[1] = 0.1198 (-0.0262)	(0.0012)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/27/2020
Time: 08:41:13

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEG

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

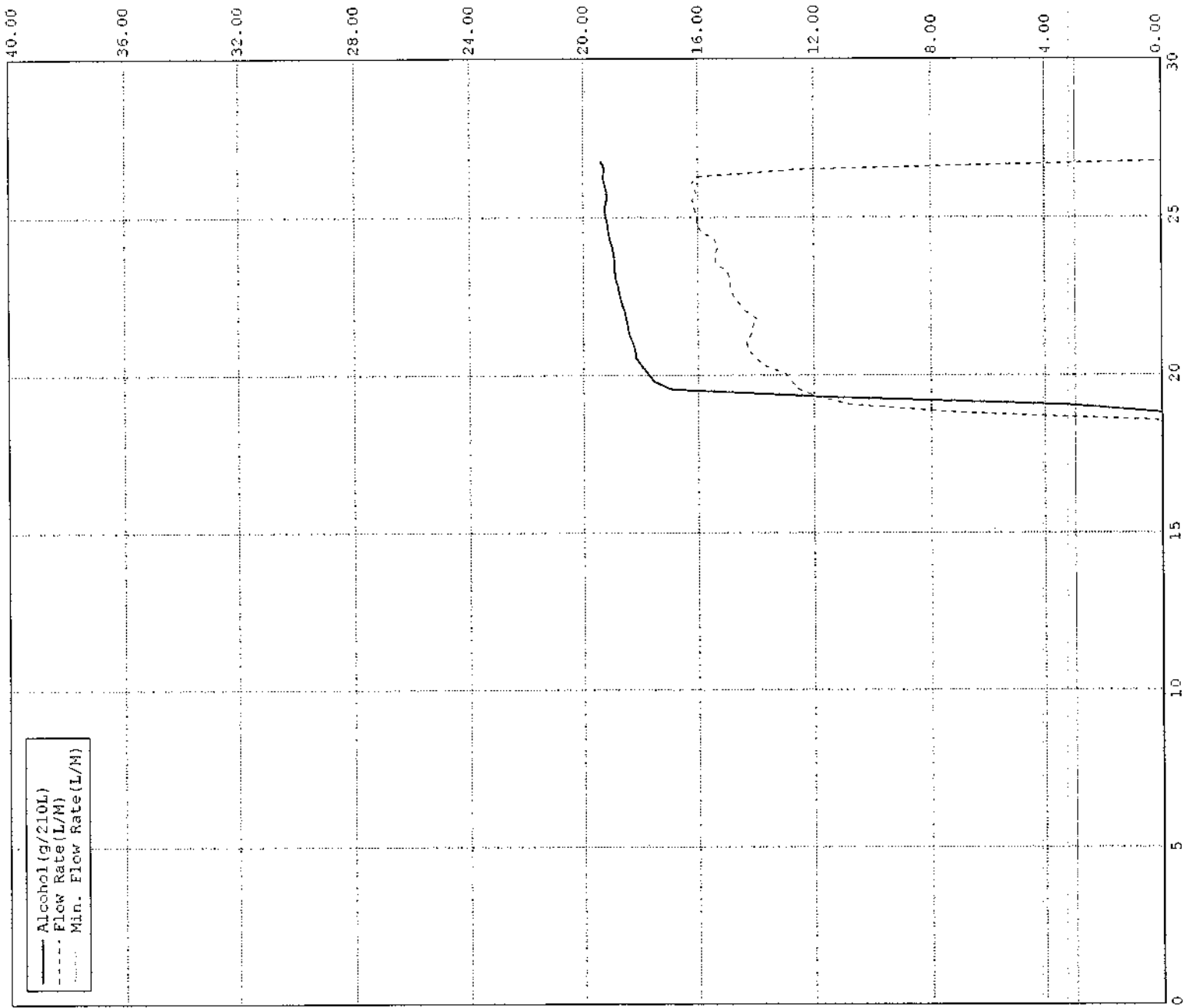
DEPT/AGENCY:
AAA1

CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.34: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	08:42
BLANK TEST	0.000	08:42
INTERNAL STANDARD	VERIFIED	08:42
$X_q = 0.090$ (0.00%)		
EXTERNAL STANDARD	0.078	08:42
$X[1] = 0.0781$ (-0.0001) (0.0012)		
BLANK TEST	0.000	08:43
SUBJECT SAMPLE (Vol=1.91L)	0.096	08:44
$X[1] = 0.0960$ (0.0017) (0.0012)		
BLANK TEST	0.000	08:45
EXTERNAL STANDARD	0.076	08:45
$X[1] = 0.0763$ (-0.0009) (0.0015)		
BLANK TEST	0.000	08:46



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100357

Date: 02/27/2020
Time: 08:54:34

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

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

DEPT/AGENCY:
AAA1

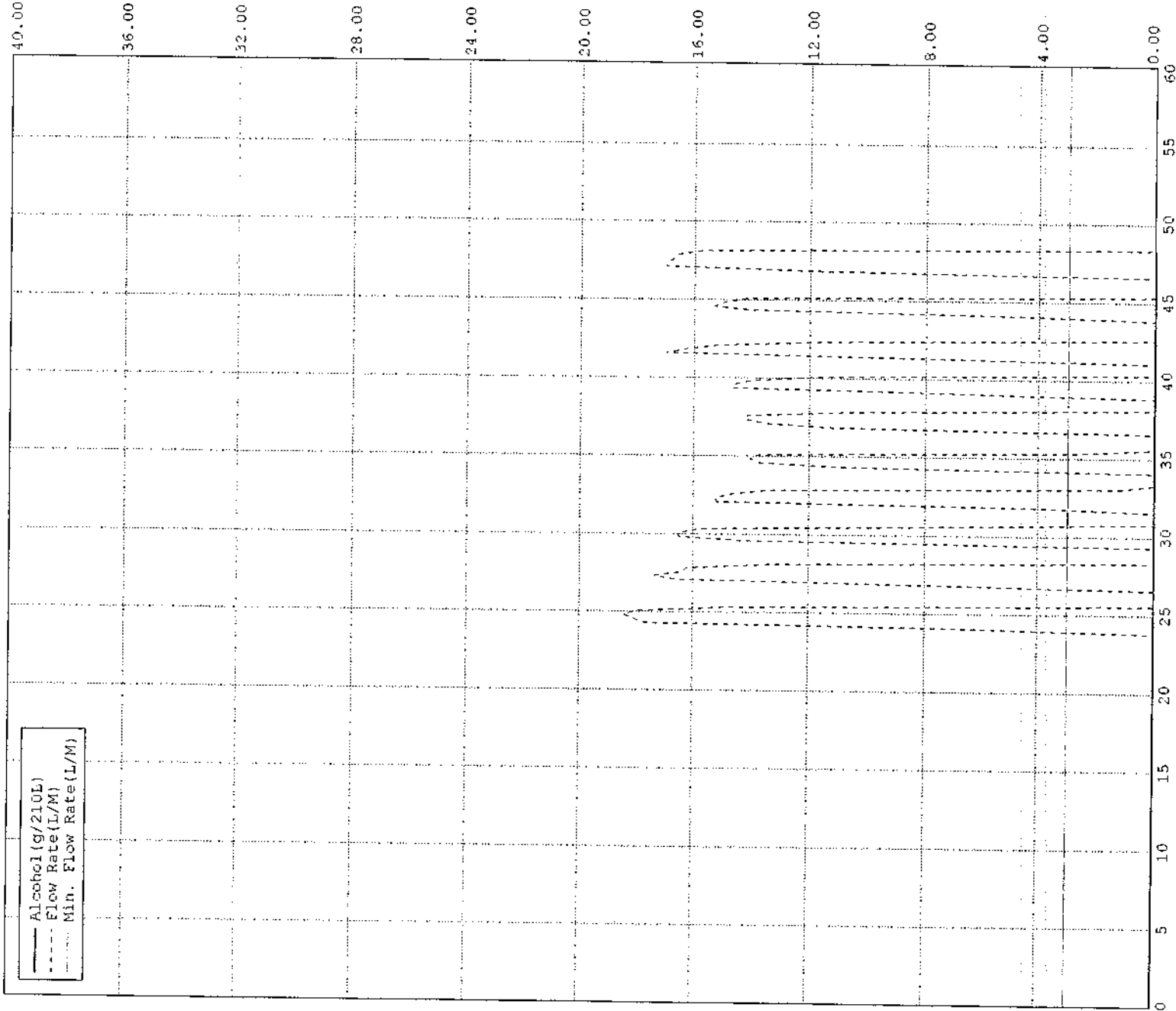
CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.34: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 08:57
BLANK TEST 0.000 08:57
INTERNAL STANDARD VERIFIED 08:57
EXTERNAL STANDARD 0.078 08:57
BLANK TEST 0.000 08:58
SUBJECT SAMPLE XXX 08:59

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100357

Date: 02/27/2020
Time: 08:48:51

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 5237

DEPT/AGENCY:
AAA1

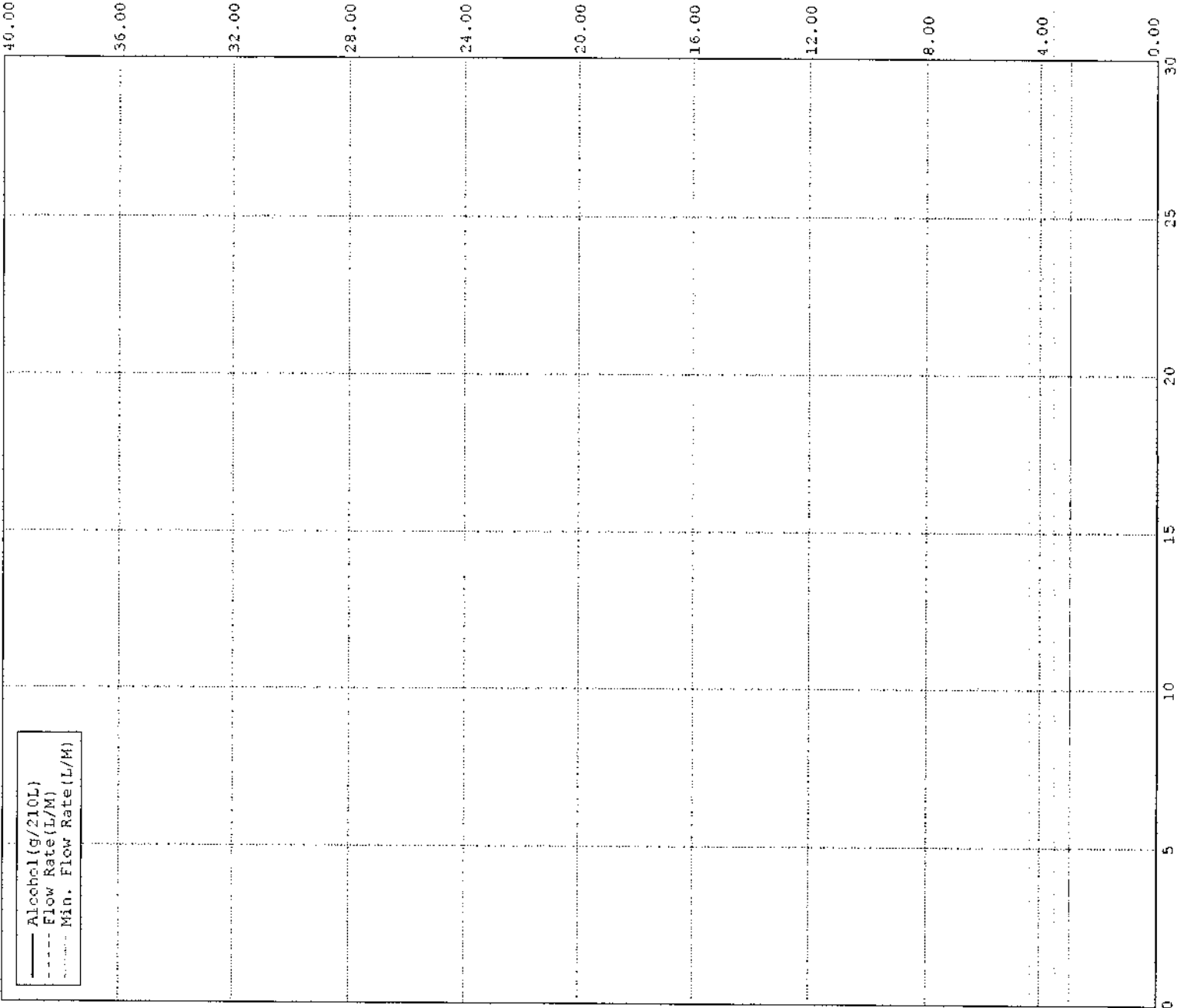
CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK PASSED 08:49
BLANK TEST 0.000 08:49
INTERNAL STANDARD VERIFIED 08:50
EXTERNAL STANDARD 0.077 08:50
BLANK TEST 0.000 08:51

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100357

Date: 02/27/2020
Time: 09:34:30

SUBJECT NAME:
TEST TEST
LICENSE #: NONDRINKING

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 29.34: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	09:35
BLANK TEST	0.000	09:35
INTERNAL STANDARD	VERIFIED	09:36
EXTERNAL STANDARD	0.077	09:36
BLANK TEST	0.000	09:37
SUBJECT SAMPLE (Vol=2.01L)	0.000	09:37
BLANK TEST	0.000	09:38
EXTERNAL STANDARD	0.078	09:38
BLANK TEST	0.000	09:39

