

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 100689 Analyst C. O. Bryant Start Date 7/14/20

- 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 Aligas Lot AG928203 Exp 10/9/21
- ii. 0.040g/210L Mnf Aligas Lot AG915607 Exp 6/5/21
- iii. 0.080g/210L Mnf Aligas Lot AG826101 Exp 9/18/20
- iv. 0.100g/210L Mnf Aligas Lot AG924701 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 DR4163 Date Calibrated 10/4/19
- ii. Isopropanol - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21
Simulator S/N DR4162 Date Calibrated 10/7/19
- 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 7/15/20

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 07/14/2020
Time: 15:03:21

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 = 43.8°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.78 V PASSED
(1.10 V - 2.56 V)
Cooler Voltage = 1.70 V PASSED
(0.99 V - 2.31 V)
Bias Voltage = 78 V PASSED
(47 V - 111 V)
Chopper Freq = 527 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 3.670 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
(0.004 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.097 0.98% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100689

Date: 07/14/2020
Time: 3:07 PM

Temperatures (°C)

Sample Cell: 49.0°C
Breath Tube: 43.9°C

Current Barometer 29.6 in
Volume (Ltr) 1.54

Settings

Lamp: 1.83 V
Bias: 80 V
Cooler: 1.70 V
Chopper: 525 Hz

Voltages (V)

Flow: 0.99 V
Detector: -0.085 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 12/16/2019
Time: 10:52:30

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca = 0.1000
CAL = 0.979465 0.800 <= CAL < 1.200
b1 = 0.0013 0.0000 <= b1 < 0.0040
b2 = 0.0069 0.0010 <= b2 < 0.0100
b3 = 0.0011 0.0000 <= b3 < 0.0040
Xq = 0.0979 0.0500 <= Xq < 0.2000
a21 = 1.227391 1.050 <= a21 < 1.300
a31 = 0.543345 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 07/14/2020
Time: 15:08:12

SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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

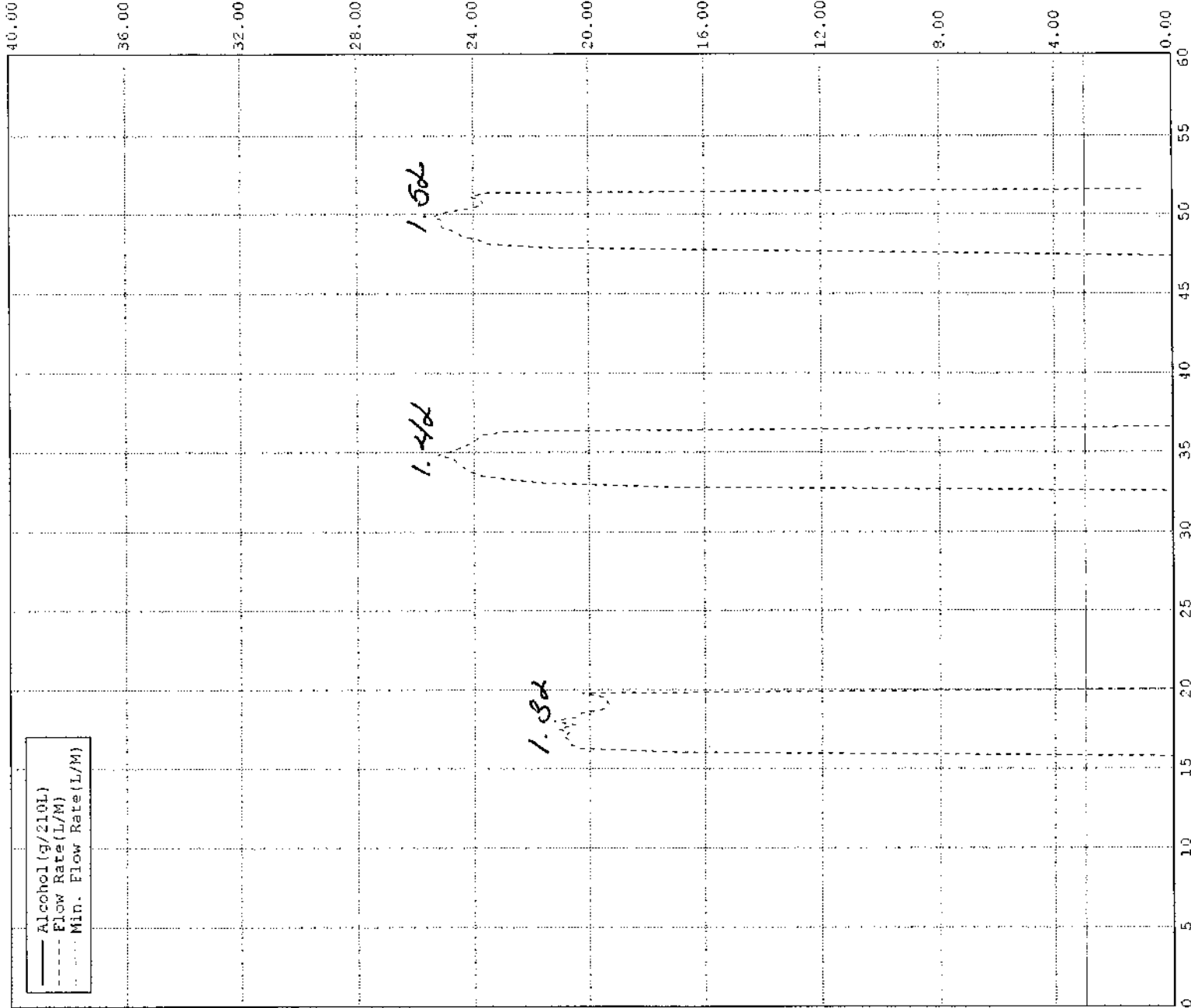
DEPT/AGENCY:
AAA1

CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	15:09
BLANK TEST	0.000	15:09
INTERNAL STANDARD	VERIFIED	15:09
EXTERNAL STANDARD	0.076	15:09
BLANK TEST	0.000	15:10
SUBJECT SAMPLE (Vol=1.55L)	0.000	15:11
BLANK TEST	0.000	15:12
EXTERNAL STANDARD	0.077	15:12
BLANK TEST	0.000	15:13



LINEARITY CHECK

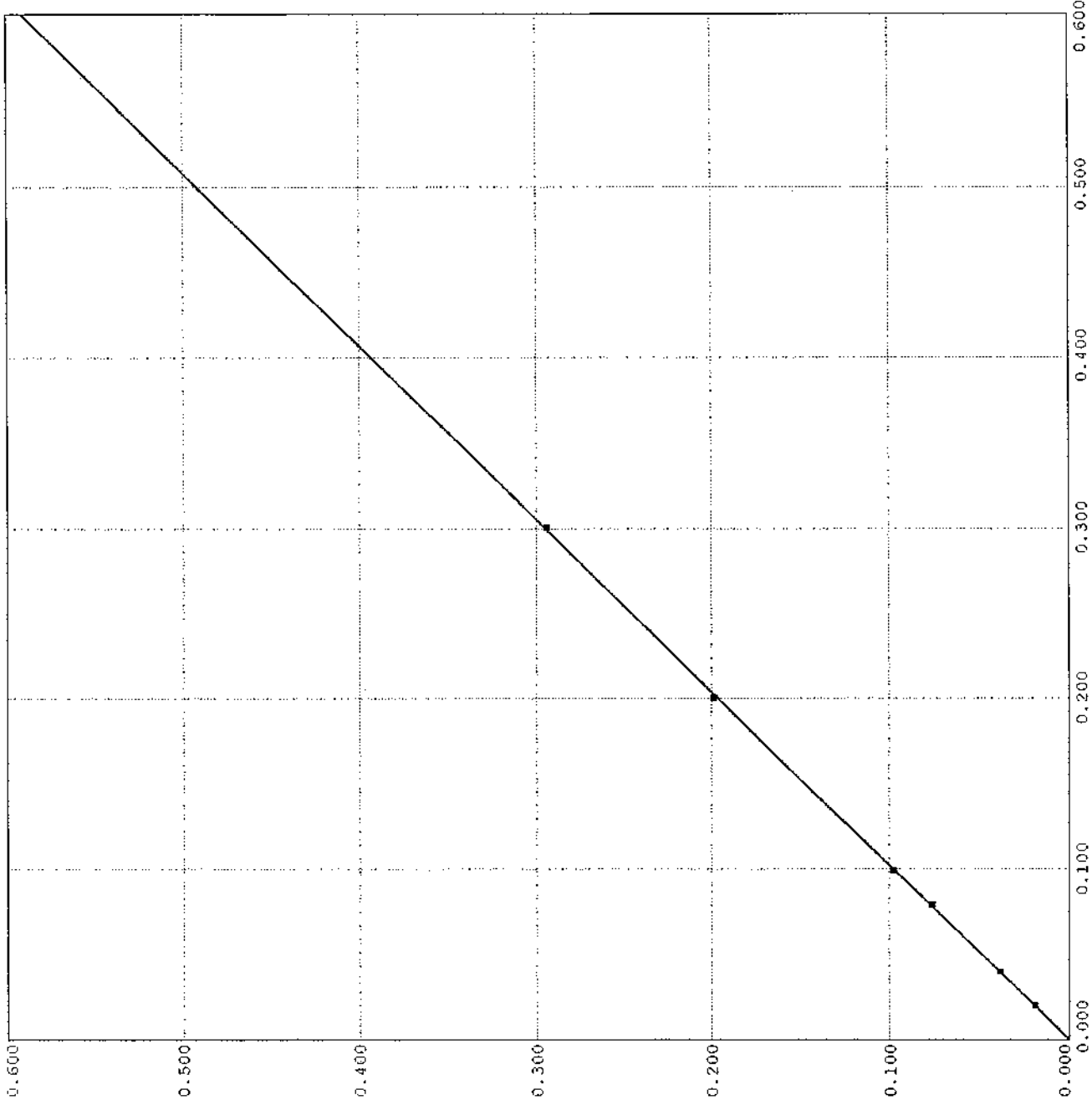
Alaska Department of Public Safety
 DATAMASTER dmt: 100689

Date: 07/14/2020
 Time: 15:15:38

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0392	0.0004
0.079	0.0770	0.0000
0.099	0.0984	0.0005
0.200	0.1994	0.0005
0.300	0.2948	0.0004

SLOPE = 0.986069
 R² = 0.999871



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100689

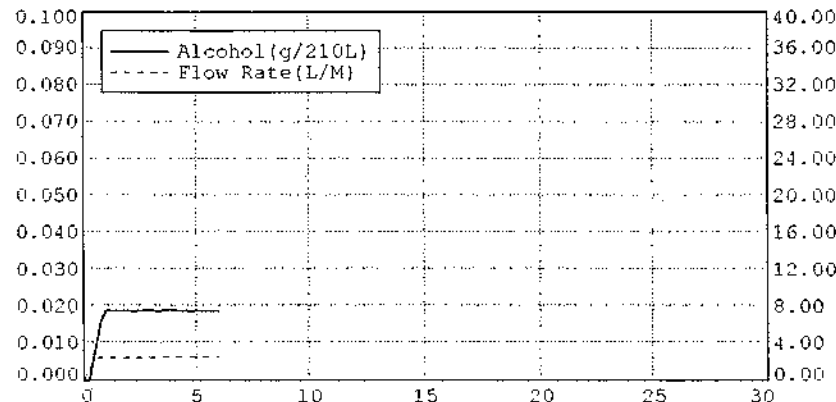
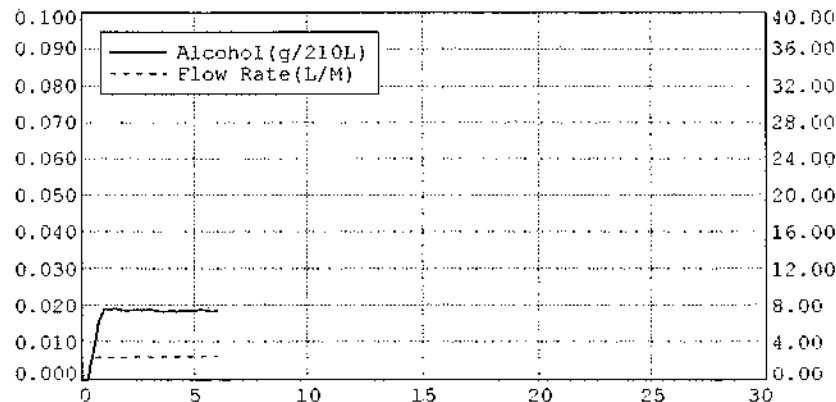
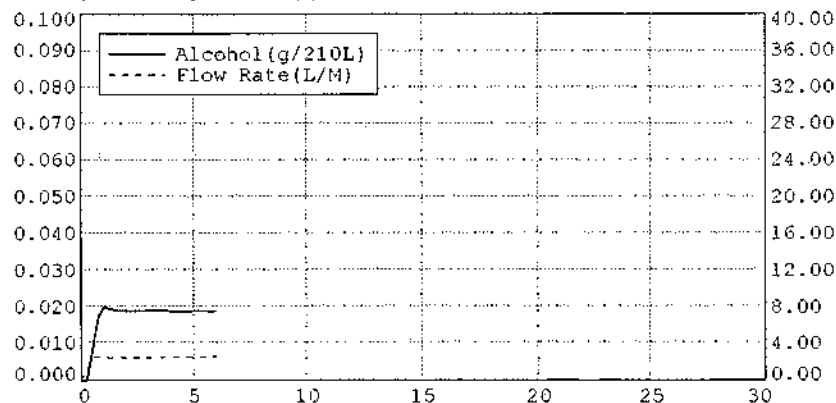
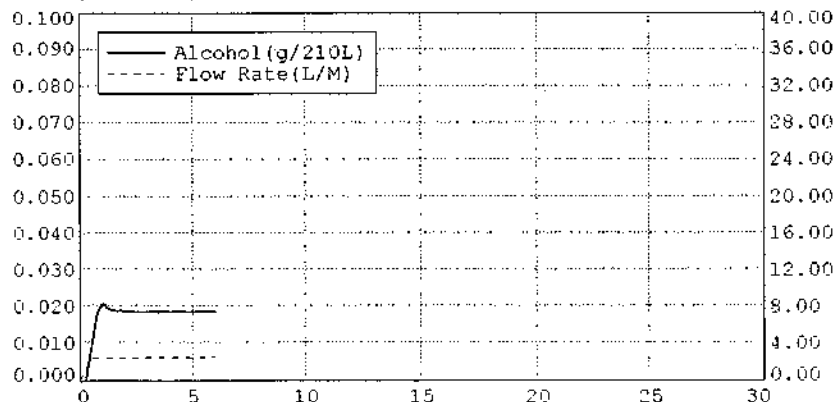
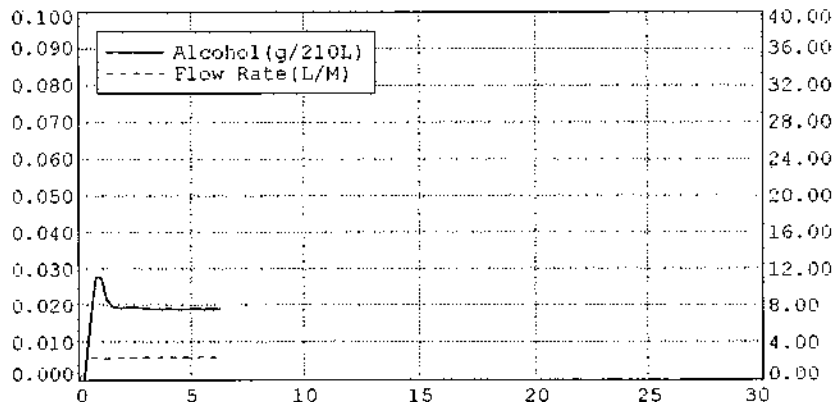
Date: 07/14/2020
 Time: 15:15:41

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.60: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 862 psi

BLANK TEST	0.000	15:16
INTERNAL STANDARD	VERIFIED	15:16
EXTERNAL STANDARD	0.020	15:17
BLANK TEST	0.000	15:18
EXTERNAL STANDARD	0.020	15:18
BLANK TEST	0.000	15:19
EXTERNAL STANDARD	0.020	15:19
BLANK TEST	0.000	15:20
EXTERNAL STANDARD	0.020	15:20
BLANK TEST	0.000	15:21
EXTERNAL STANDARD	0.020	15:21
BLANK TEST	0.000	15:22

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100689

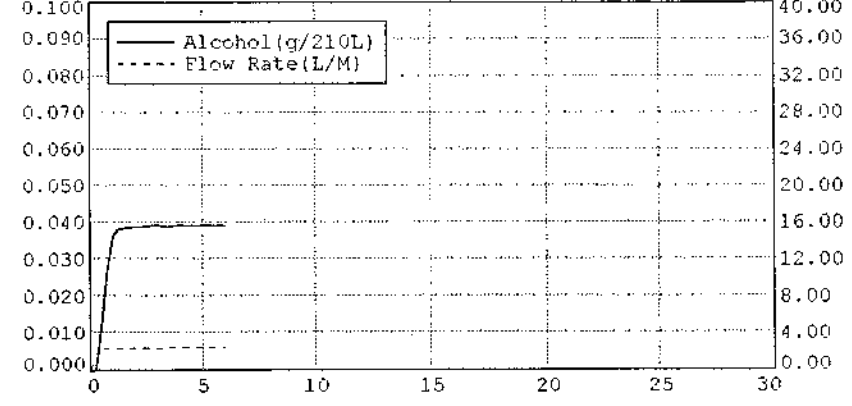
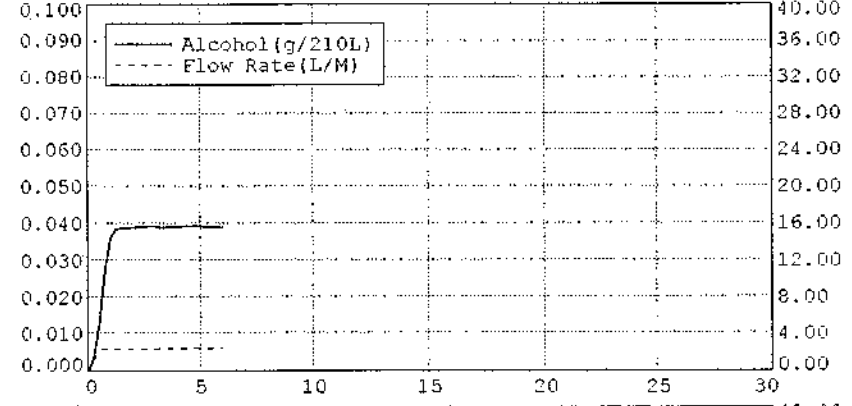
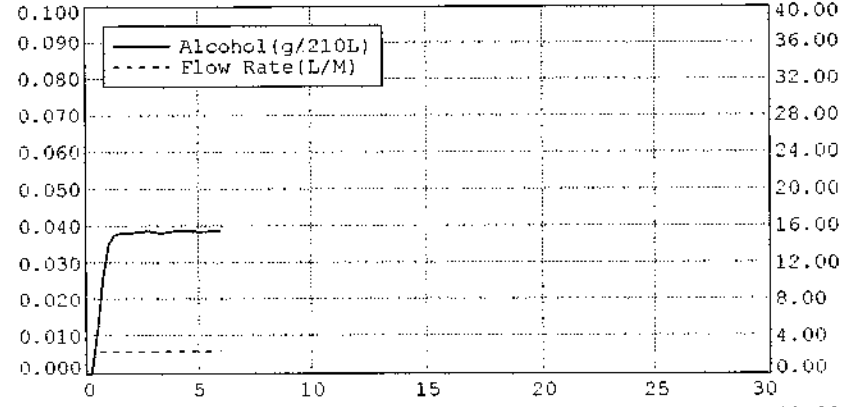
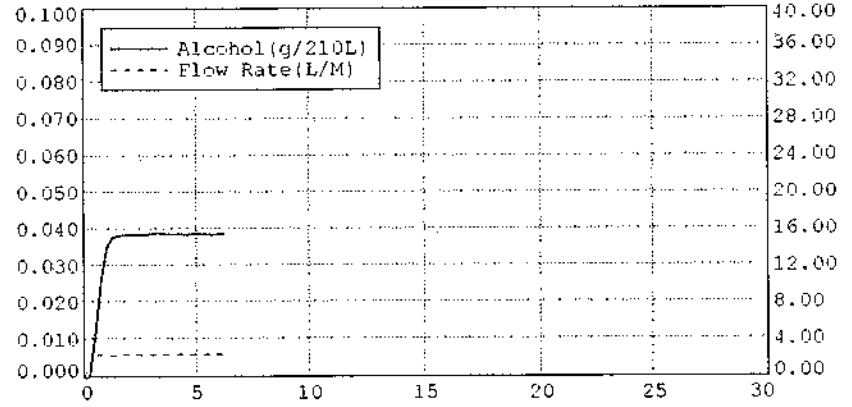
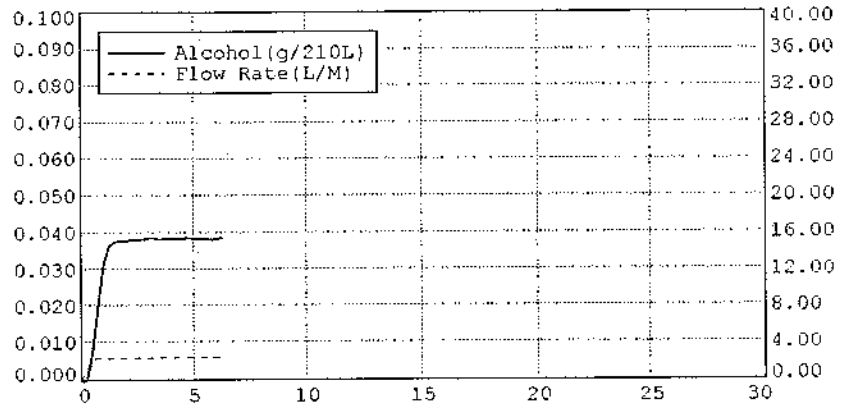
Date: 07/14/2020
 Time: 15:23:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.60: 0.040
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 641 psi

BLANK TEST	0.000	15:25
INTERNAL STANDARD	VERIFIED	15:25
EXTERNAL STANDARD	0.039	15:25
BLANK TEST	0.000	15:26
EXTERNAL STANDARD	0.039	15:26
BLANK TEST	0.000	15:27
EXTERNAL STANDARD	0.039	15:27
BLANK TEST	0.000	15:28
EXTERNAL STANDARD	0.040	15:28
BLANK TEST	0.000	15:29
EXTERNAL STANDARD	0.039	15:30
BLANK TEST	0.000	15:30

Average = 0.0392
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100689

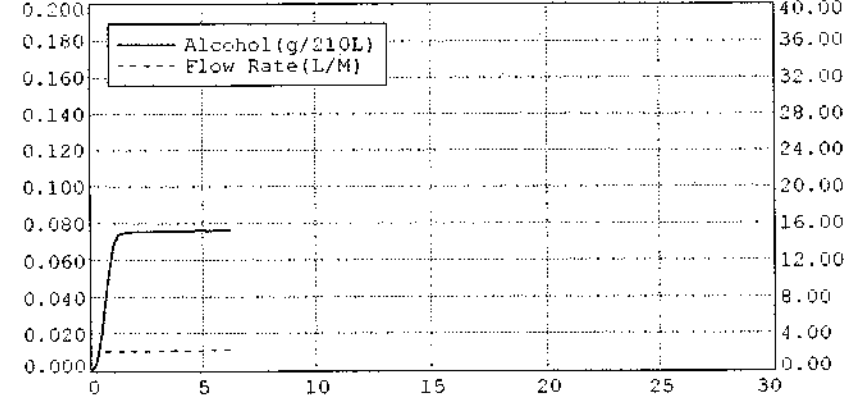
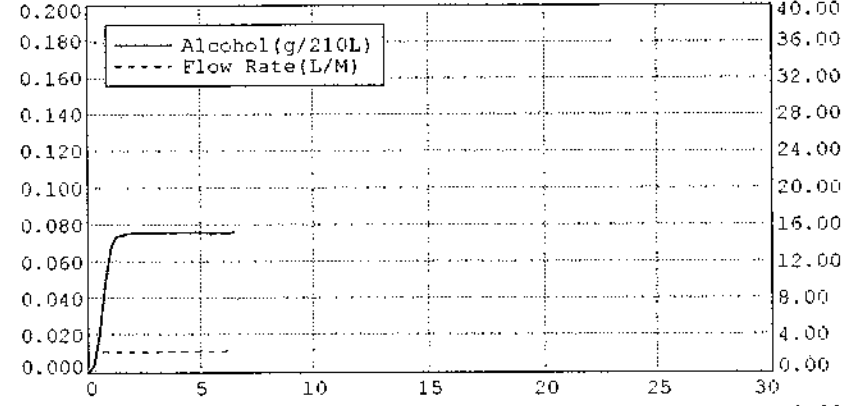
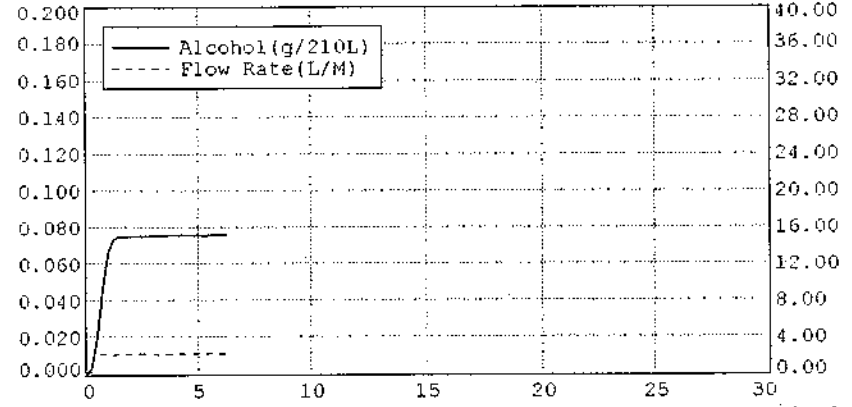
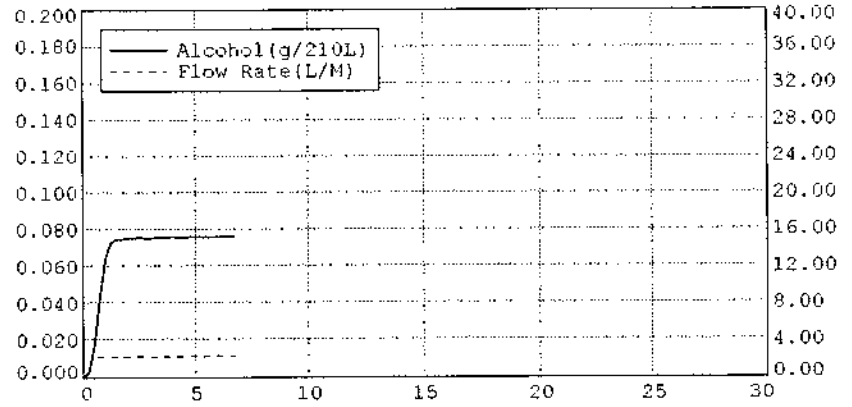
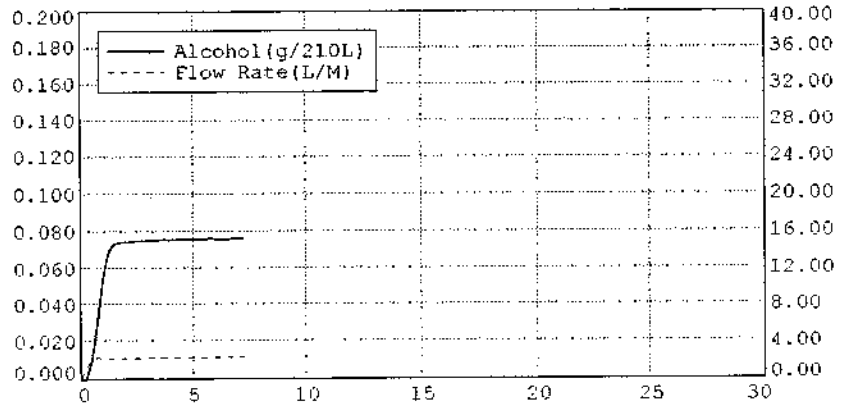
Date: 07/14/2020
 Time: 15:31:41

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.59: 0.079
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 344 psi

BLANK TEST	0.000	15:33
INTERNAL STANDARD	VERIFIED	15:33
EXTERNAL STANDARD	0.077	15:33
BLANK TEST	0.000	15:34
EXTERNAL STANDARD	0.077	15:34
BLANK TEST	0.000	15:35
EXTERNAL STANDARD	0.077	15:35
BLANK TEST	0.000	15:36
EXTERNAL STANDARD	0.077	15:36
BLANK TEST	0.000	15:37
EXTERNAL STANDARD	0.077	15:37
BLANK TEST	0.000	15:38

Average = 0.0770
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100689

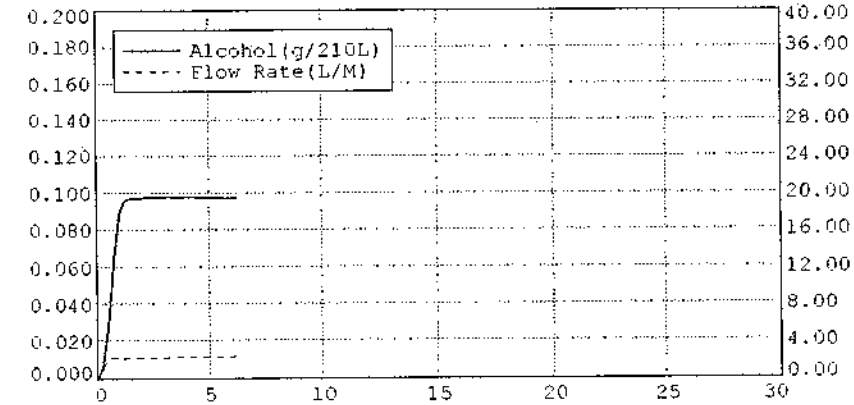
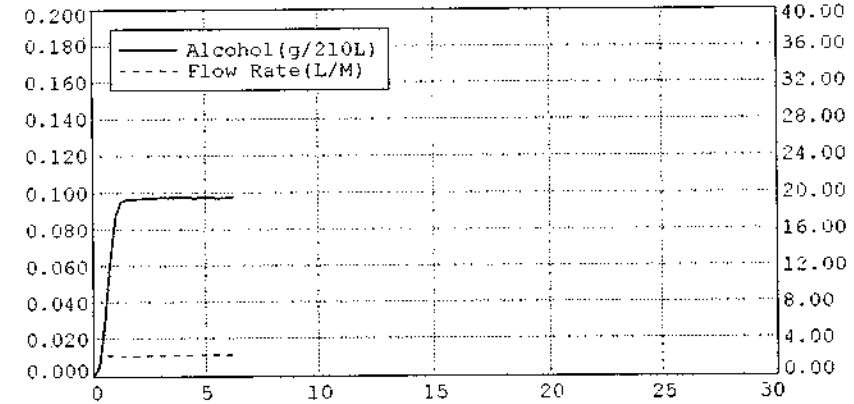
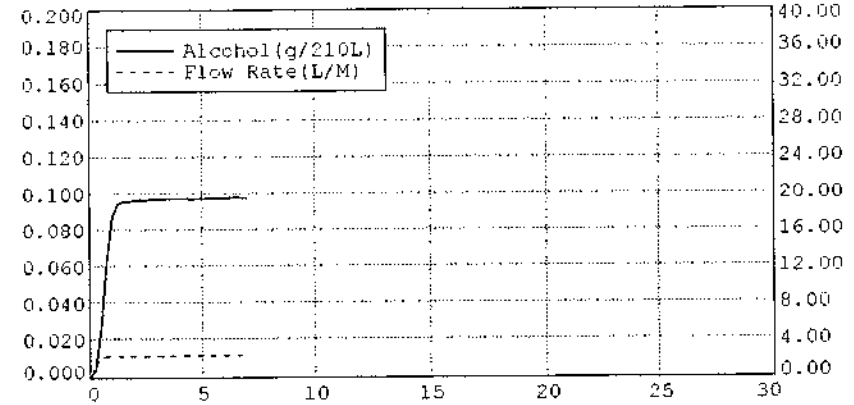
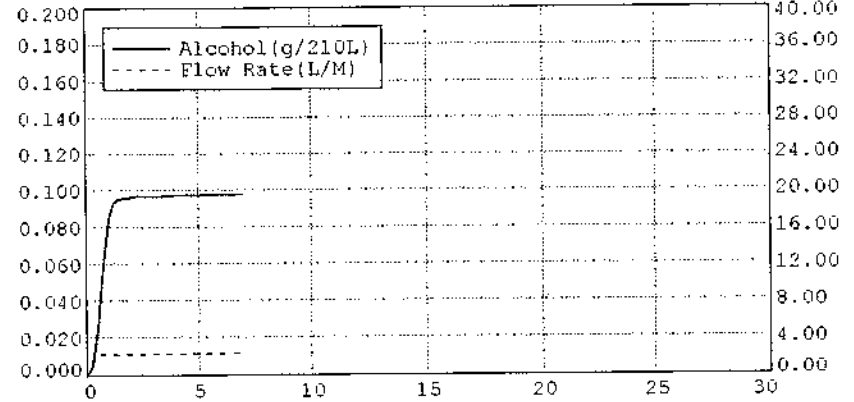
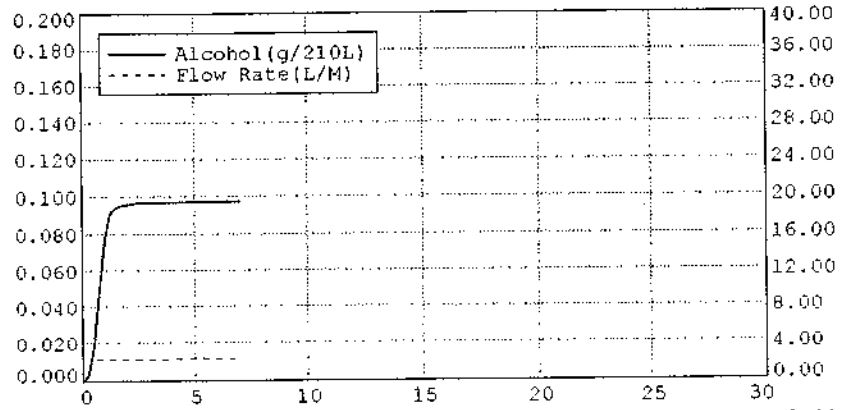
Date: 07/14/2020
 Time: 15:39:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.59: 0.099
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 439 psi

BLANK TEST	0.000	15:40
INTERNAL STANDARD	VERIFIED	15:40
EXTERNAL STANDARD	0.098	15:41
BLANK TEST	0.000	15:42
EXTERNAL STANDARD	0.099	15:42
BLANK TEST	0.000	15:43
EXTERNAL STANDARD	0.099	15:43
BLANK TEST	0.000	15:44
EXTERNAL STANDARD	0.098	15:44
BLANK TEST	0.000	15:45
EXTERNAL STANDARD	0.098	15:45
BLANK TEST	0.000	15:46

Average = 0.0984
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

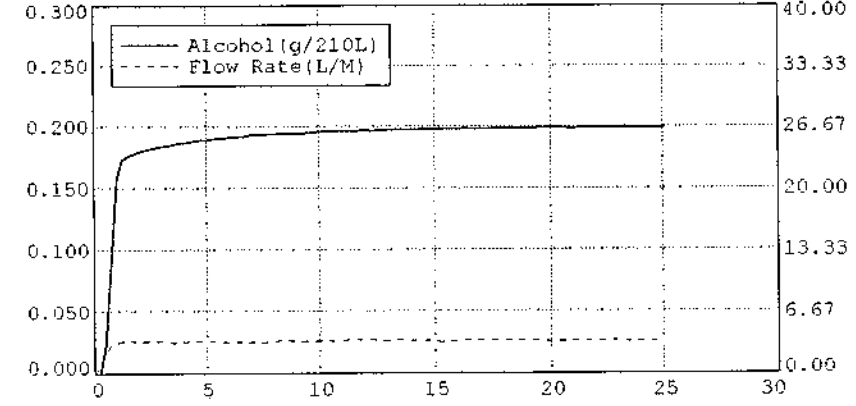
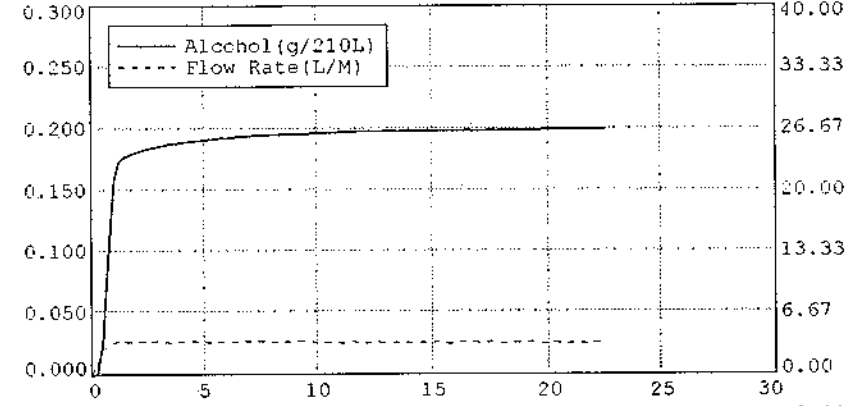
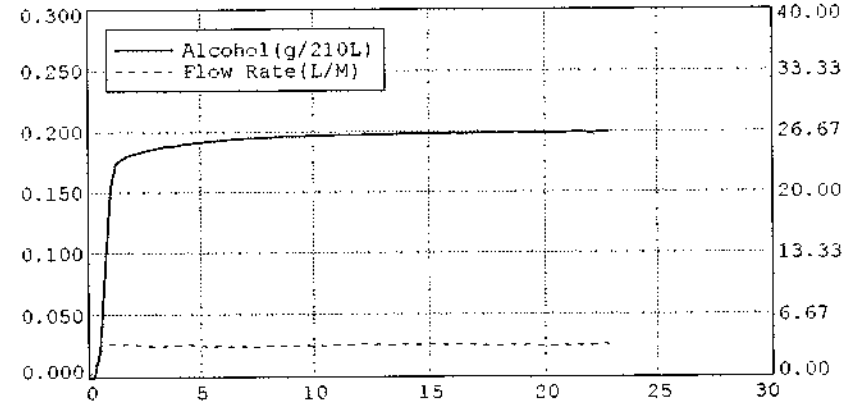
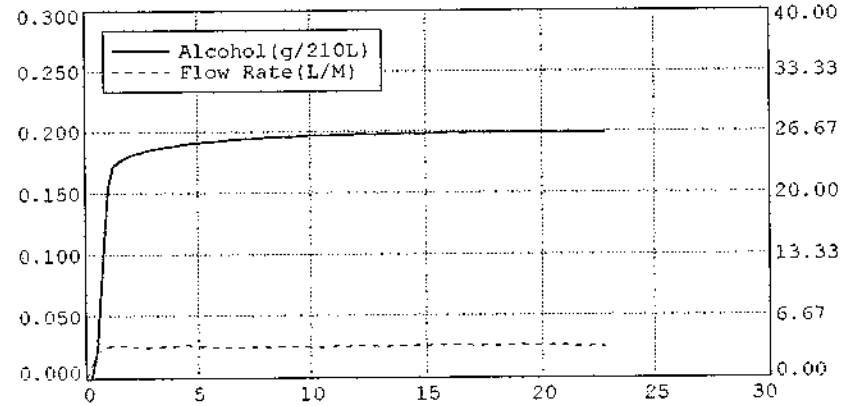
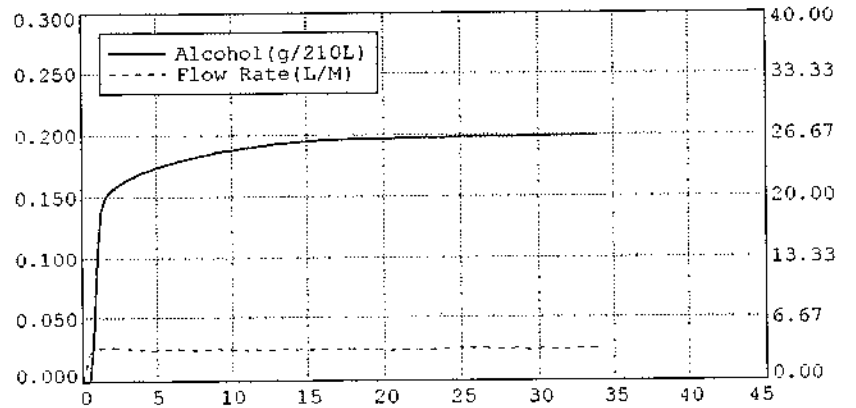
Alaska Department of Public Safety
 DATAMASTER dmt: 100689

Date: 07/14/2020
 Time: 15:47:20

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

BLANK TEST	0.000	15:48
INTERNAL STANDARD	VERIFIED	15:48
EXTERNAL STANDARD	0.199	15:49
BLANK TEST	0.000	15:50
EXTERNAL STANDARD	0.199	15:50
BLANK TEST	0.000	15:51
EXTERNAL STANDARD	0.200	15:52
BLANK TEST	0.000	15:53
EXTERNAL STANDARD	0.200	15:53
BLANK TEST	0.000	15:54
EXTERNAL STANDARD	0.199	15:55
BLANK TEST	0.000	15:55

Average = 0.1994
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

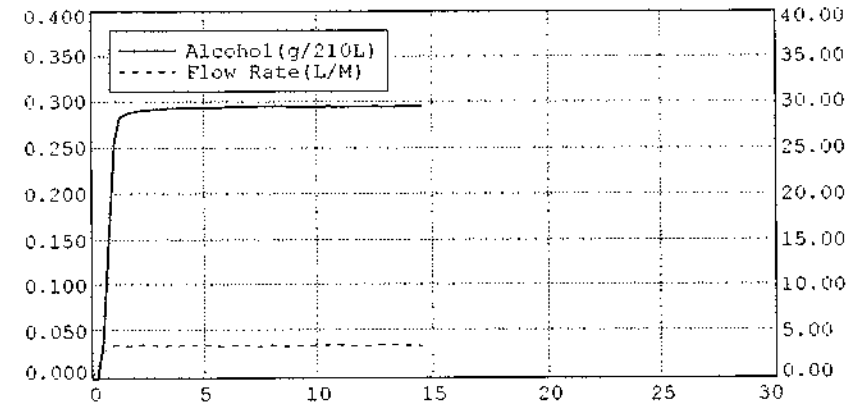
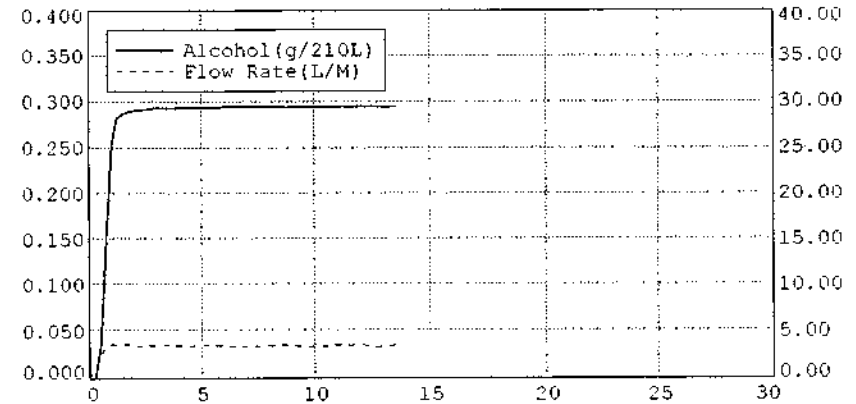
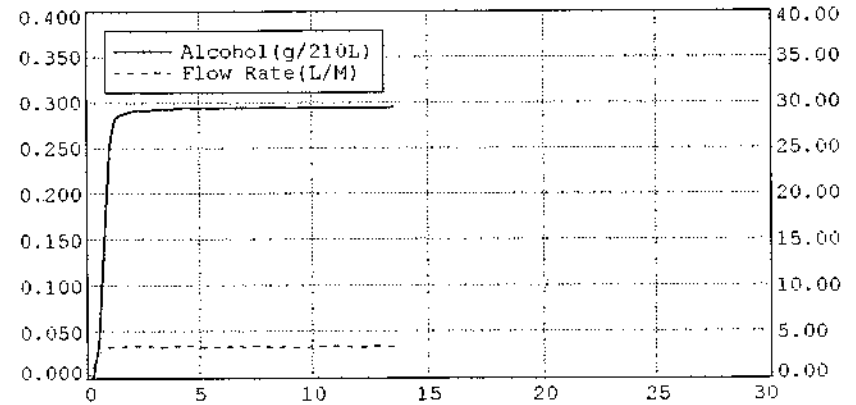
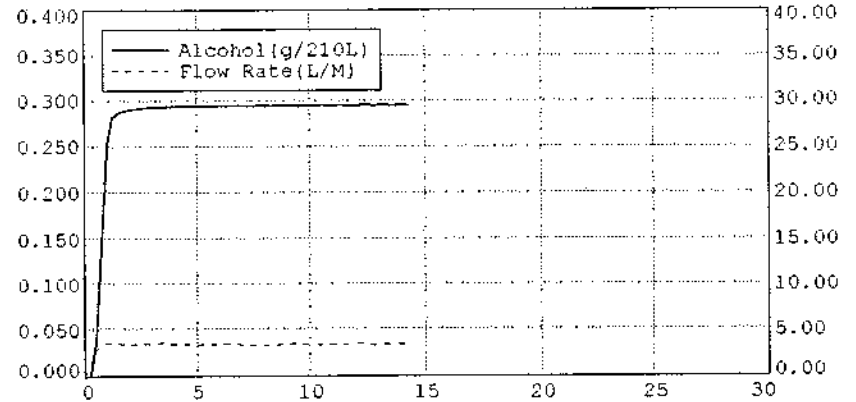
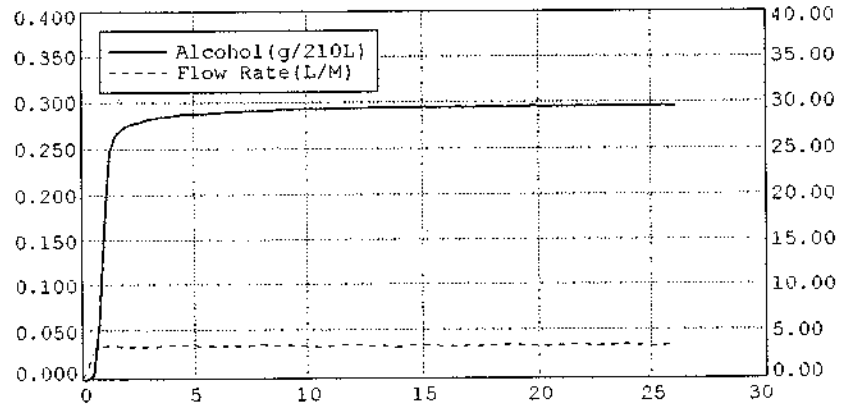
Alaska Department of Public Safety
 DATAMASTER dmt: 100689

Date: 07/14/2020
 Time: 15:56:51

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

BLANK TEST	0.000	15:58
INTERNAL STANDARD	VERIFIED	15:58
EXTERNAL STANDARD	0.295	15:59
BLANK TEST	0.000	16:00
EXTERNAL STANDARD	0.295	16:00
BLANK TEST	0.000	16:01
EXTERNAL STANDARD	0.295	16:01
BLANK TEST	0.000	16:02
EXTERNAL STANDARD	0.294	16:02
BLANK TEST	0.000	16:03
EXTERNAL STANDARD	0.295	16:04
BLANK TEST	0.000	16:05

Average = 0.2948
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DAYMASTER dmt: 100689

Date: 07/14/2020
Time: 16:09:49

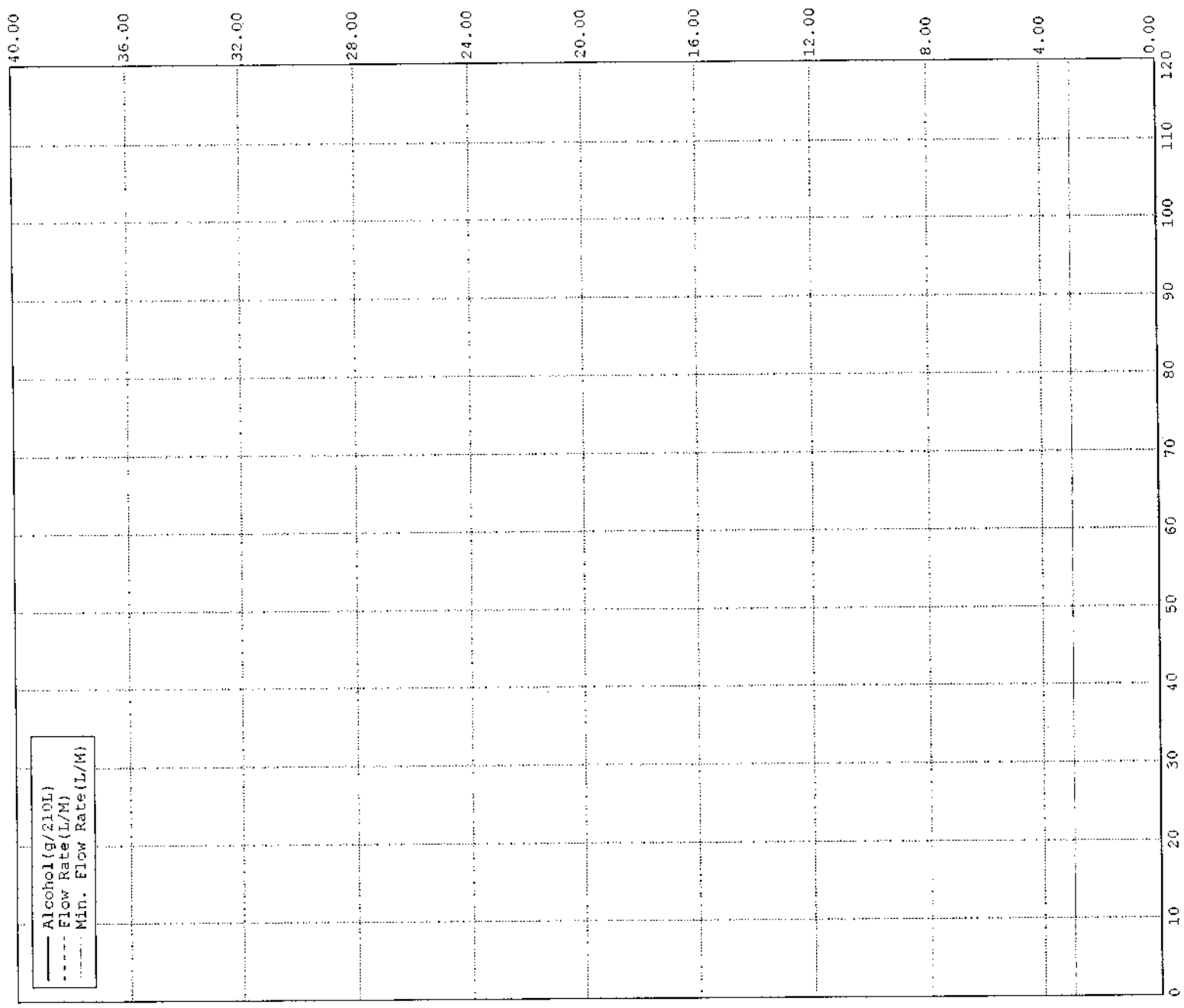
SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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 29.59: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 16:10
BLANK TEST 0.000 16:10
INTERNAL STANDARD VERIFIED 16:11
EXTERNAL STANDARD 0.077 16:11
BLANK TEST 0.000 16:12
SUBJECT SAMPLE INCOMPLETE 16:14



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 07/15/2020
Time: 07:27:54

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

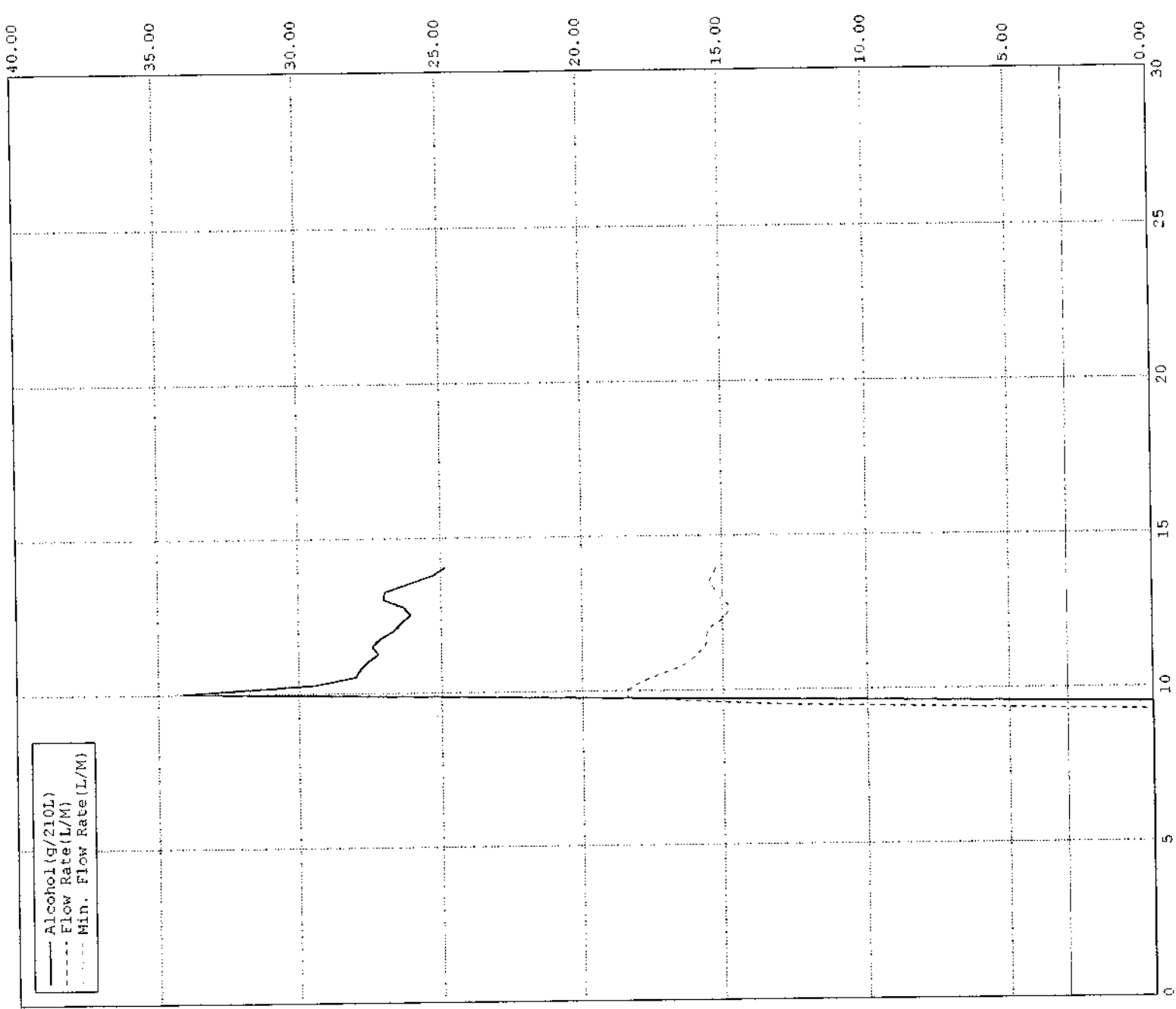
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	07:28
BLANK TEST	0.000	07:29
INTERNAL STANDARD	VERIFIED	07:29
EXTERNAL STANDARD	0.077	07:29
BLANK TEST	0.000	07:30
SUBJECT SAMPLE	INVALID	07:30



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 07/15/2020
Time: 07:42:39

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

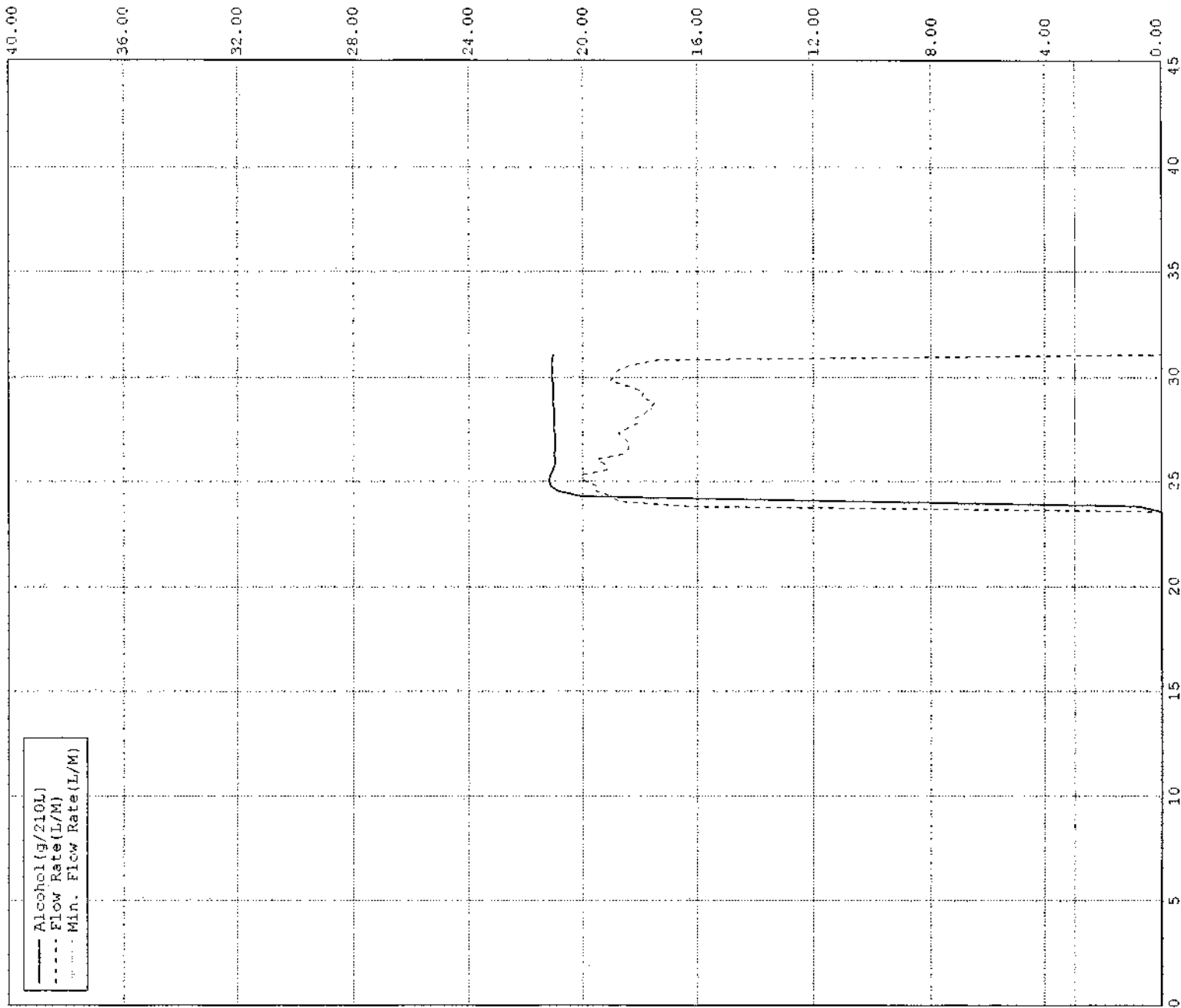
NOMINAL: 0.080
TARGET AT 29.65: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	07:44
BLANK TEST	0.000	07:44
INTERNAL STANDARD	VERIFIED	07:45
Xq = 0.099 (0.99%)		
EXTERNAL STANDARD	0.077	07:45
X[1] = 0.073 (0.0007)	(0.0019)	
BLANK TEST	0.000	07:46
SUBJECT SAMPLE	XXX	07:46
X[1] = 0.1045 (-0.0164)	(0.0008)	

Interference Detected

Filter 2 avg = 0.0008

Filter 3 avg = 0.0020



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 07/15/2020
Time: 07:49:47

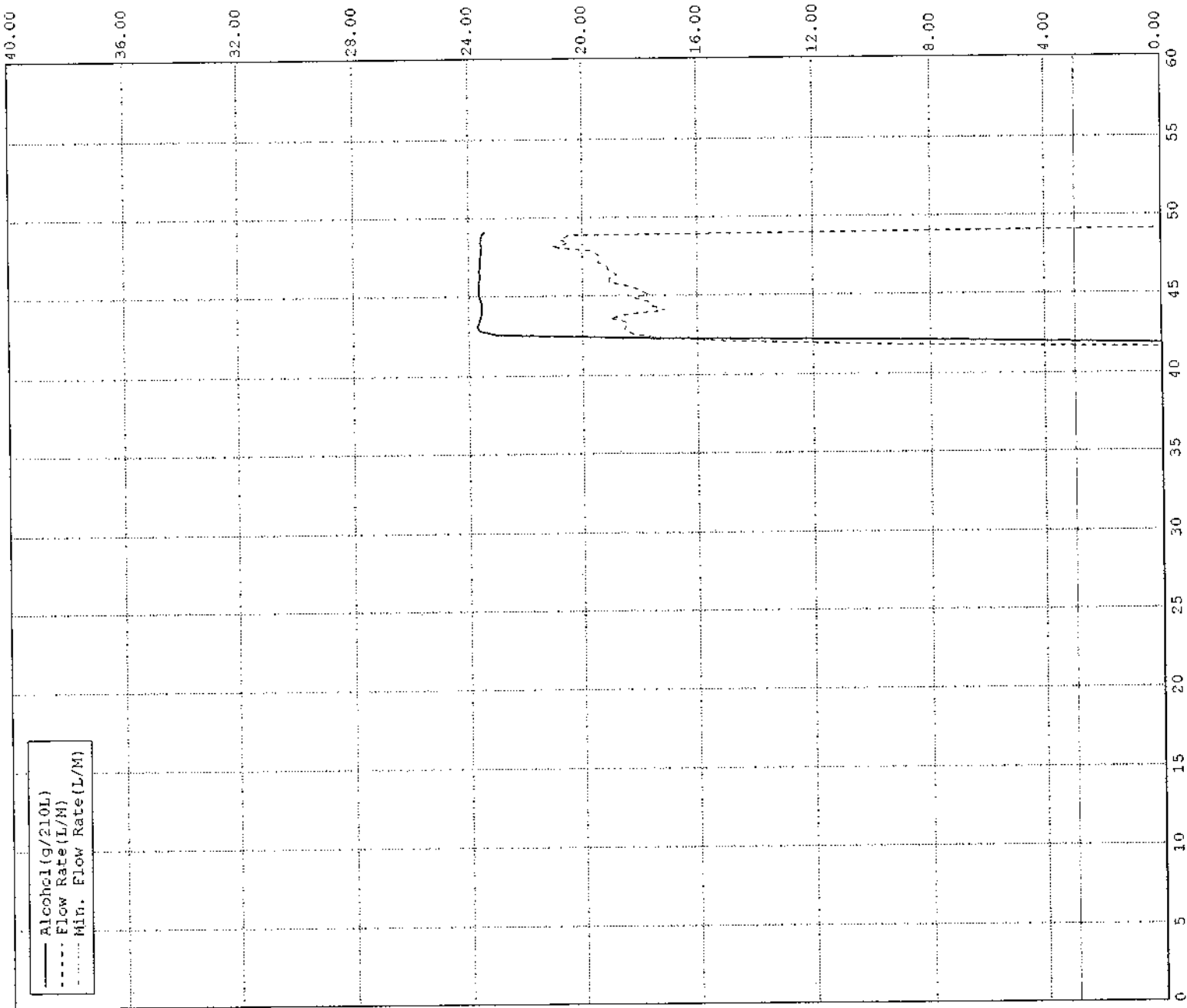
SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.64: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	07:50
BLANK TEST	0.000	07:51
INTERNAL STANDARD	VERIFIED	07:51
Xq = 0.098 (0.18%)		
EXTERNAL STANDARD	0.078	07:51
X[1] = 0.0777 (0.0015) (0.0028)		
BLANK TEST	0.000	07:52
SUBJECT SAMPLE	XXX	07:53
X[1] = 0.1159 (-0.0289) (0.0014)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100689

Date: 07/15/2020
Time: 07:55:56

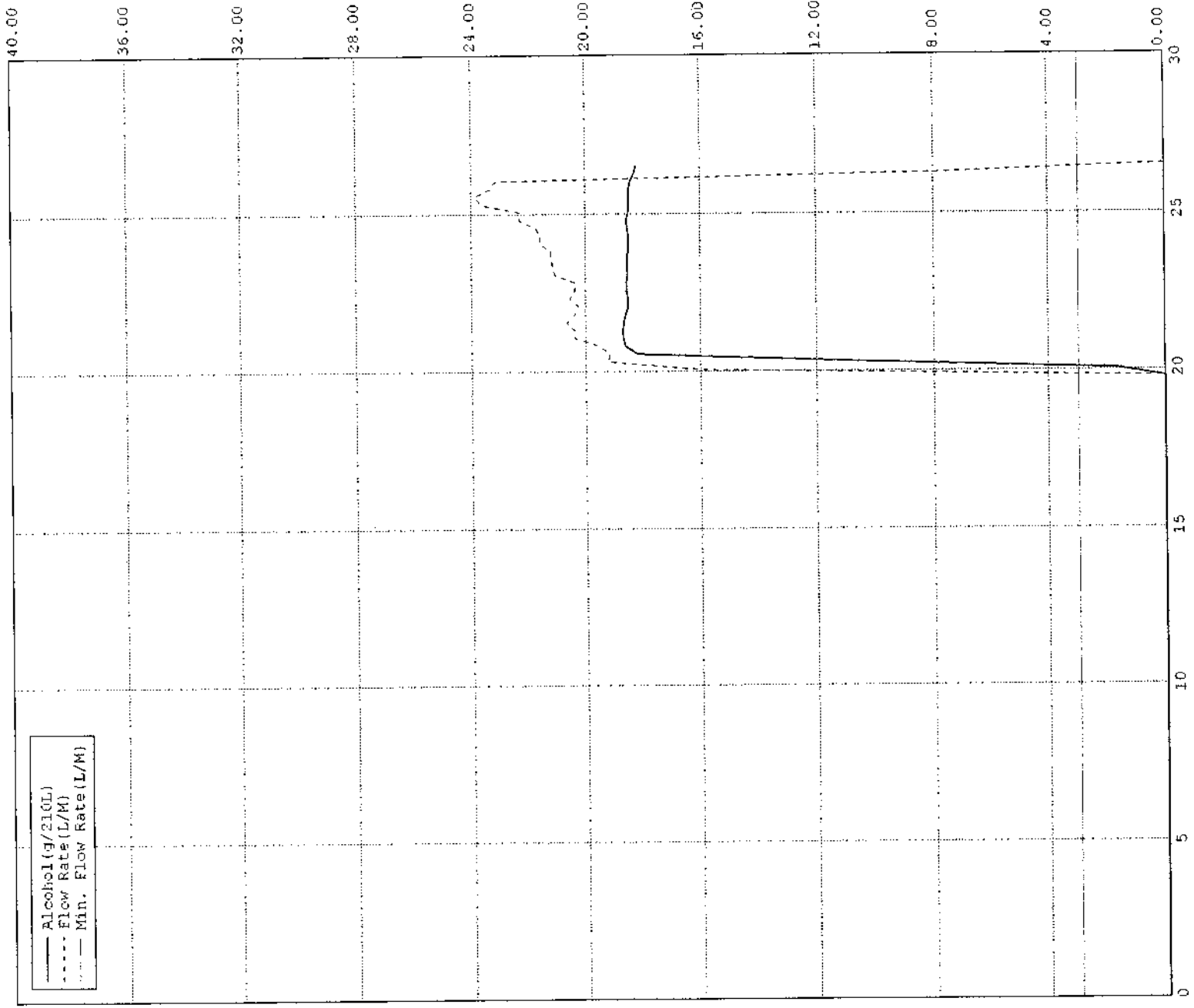
SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

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 29.64: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	07:57
BLANK TEST	0.000	07:57
INTERNAL STANDARD	VERIFIED	07:57
Xq = 0.098 (0.18%)		
EXTERNAL STANDARD	0.076	07:57
X[1] = 0.0762 (0.0004)	(0.0020)	
BLANK TEST	0.000	07:58
SUBJECT SAMPLE (Vol=2.23L)	0.090	07:58
X[1] = 0.0907 (0.0013)	(0.0015)	
BLANK TEST	0.000	07:59
EXTERNAL STANDARD	0.076	08:00
X[1] = 0.0762 (0.0006)	(0.0014)	
BLANK TEST	0.000	08:01



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 07/15/2020
Time: 07:16:18

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

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

DEPT/AGENCY:
AAA1

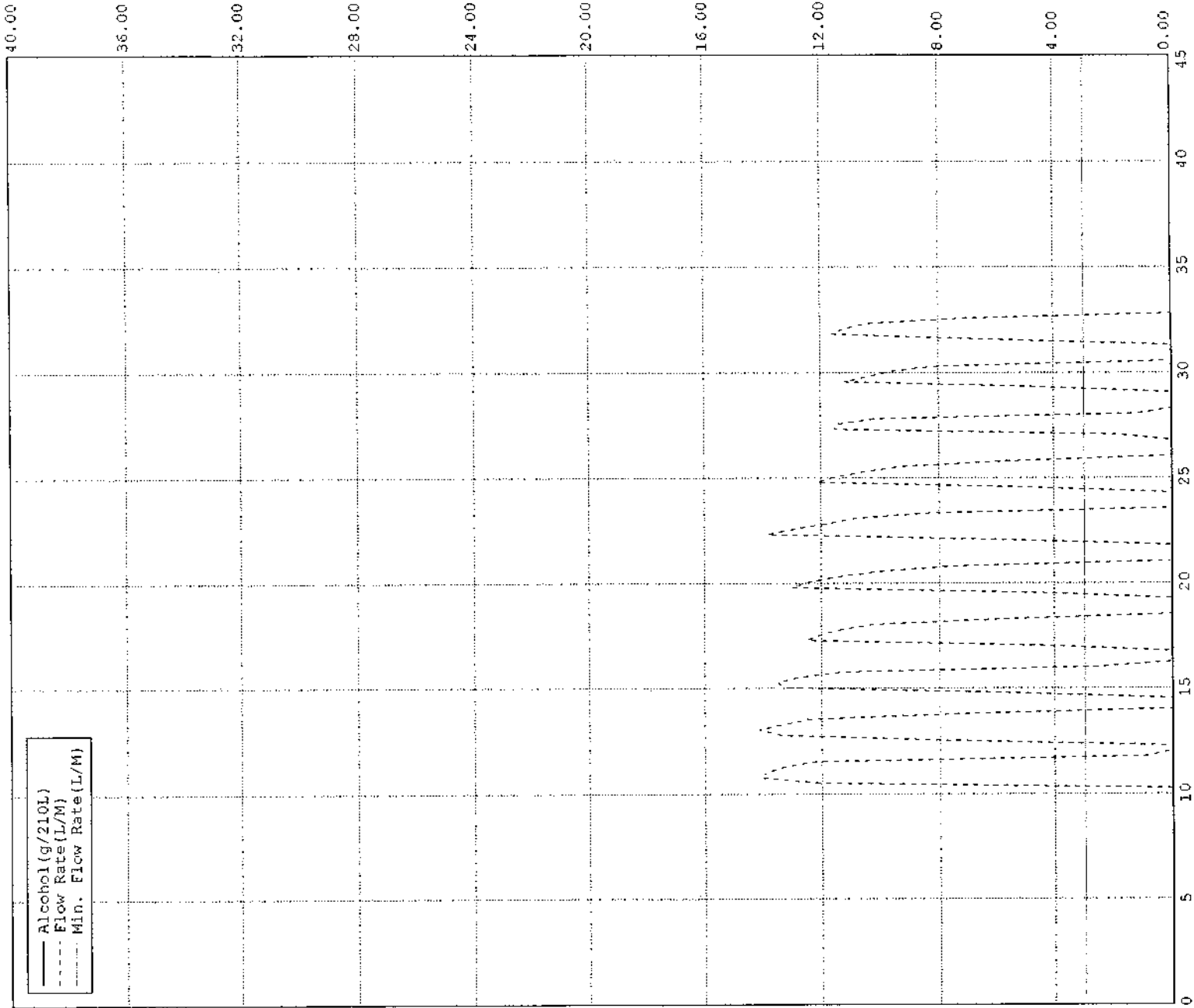
CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK PASSED 07:17
BLANK TEST 0.000 07:17
INTERNAL STANDARD VERIFIED 07:17
EXTERNAL STANDARD 0.077 07:17
BLANK TEST 0.000 07:18
SUBJECT SAMPLE XXX 07:19

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 07/15/2020
Time: 07:32:07

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

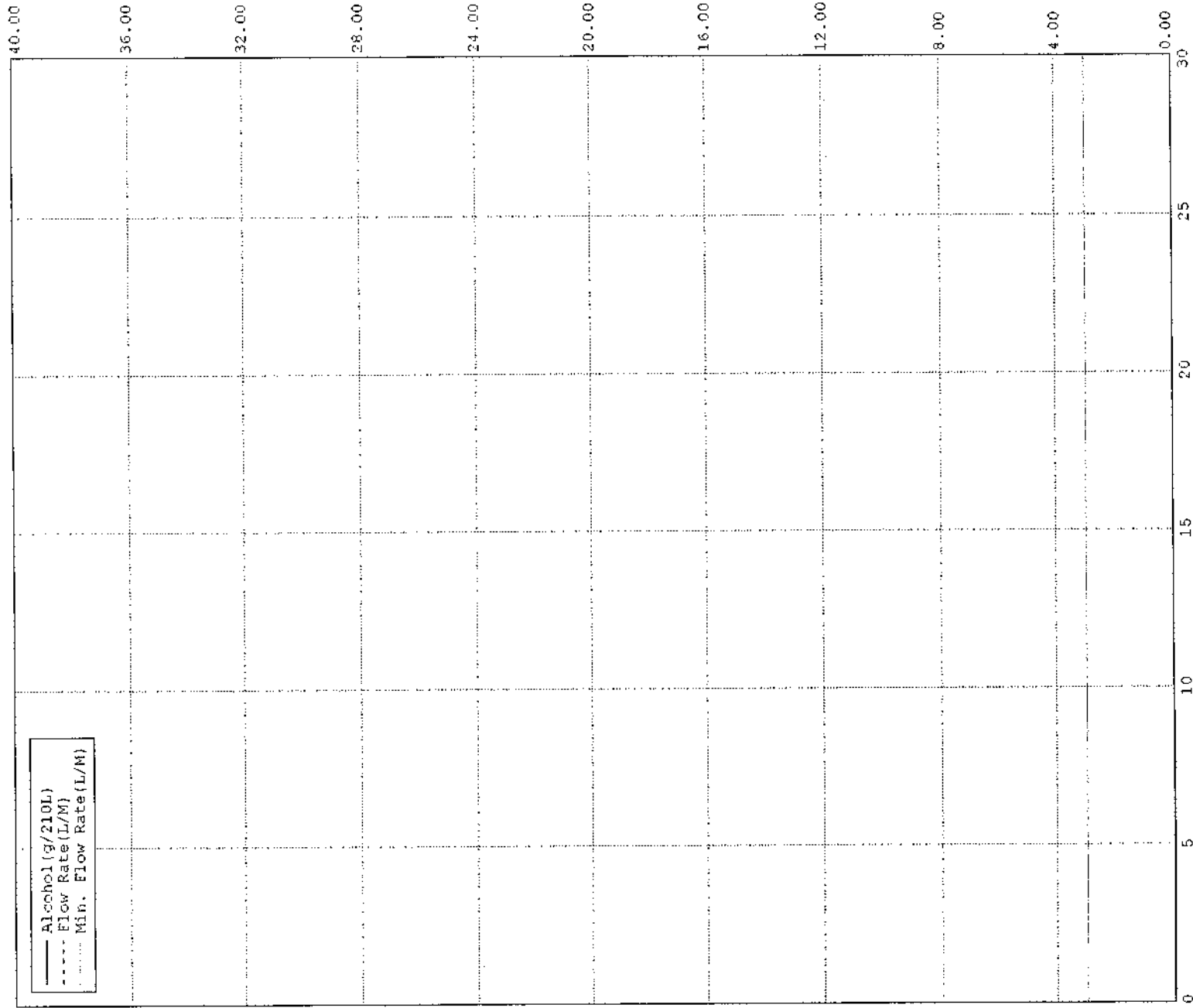
DEPT/AGENCY:
AAA1
CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.64: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 07:38
BLANK TEST 0.000 07:38
INTERNAL STANDARD VERIFIED 07:38
EXTERNAL STANDARD 0.076 07:38
BLANK TEST 0.000 07:39

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 07/15/2020
Time: 08:12:49

SUBJECT NAME:
TEST TEST
LICENSE #: NONDRINKING

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 20-12343
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	08:16
BLANK TEST	0.000	08:16
INTERNAL STANDARD	VERIFIED	08:16
EXTERNAL STANDARD	0.078	08:16
BLANK TEST	0.000	08:17
SUBJECT SAMPLE (Vol=2.29L)	0.000	08:18
BLANK TEST	0.000	08:18
EXTERNAL STANDARD	0.077	08:19
BLANK TEST	0.000	08:20

