

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 100421 Analyst C. O. Bryant Start Date 4/28/20

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 1.6 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 Guth Lot 19200 Exp 8/6/21
 - 1. Simulator S/N DR4176 Date Calibrated 10/7/19
- vi. 0.300g/210L Mnf Guth Lot 19330 Exp 11/13/21
 - 1. Simulator S/N DR4178 Date Calibrated 10/4/19

5. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference
- d. Exceeded attempts

- i. Acetone - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21
 - 1. Simulator S/N DR4162 Date Calibrated 10/7/19
- ii. Isopropanol - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21
 - 1. Simulator S/N DR4163 Date Calibrated 10/4/19
- iii. Negative Control - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21
 - 1. Simulator S/N DR1176 Date Calibrated 10/7/19

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 4/28/20

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 04/28/2020
Time: 11:11:32

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 = 45.5°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.71 V PASSED
(1.03 V - 2.39 V)
Cooler Voltage = 1.80 V PASSED
(1.08 V - 2.52 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 527 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.4 in

PUMP INFO

Flow Rate = 4.767 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 = 0.096 1.00% (0.00% - 4.00%) PASSED

Technician Screen

Joint Base Elmendorf - Richardson
DATAMASTER dnt: 100421

Date: 04/28/2020
Time: 11:27 AM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 45.8°C

Current Barometer 29.4 in
Volume (Ltr) 1.48

Settings

Lamp: 1.71 V
Bias: 80 V
Cooler: 1.80 V
Chopper: 526 Hz

Voltages (V)

Flow: 1.09 V
Detector: -0.020 V

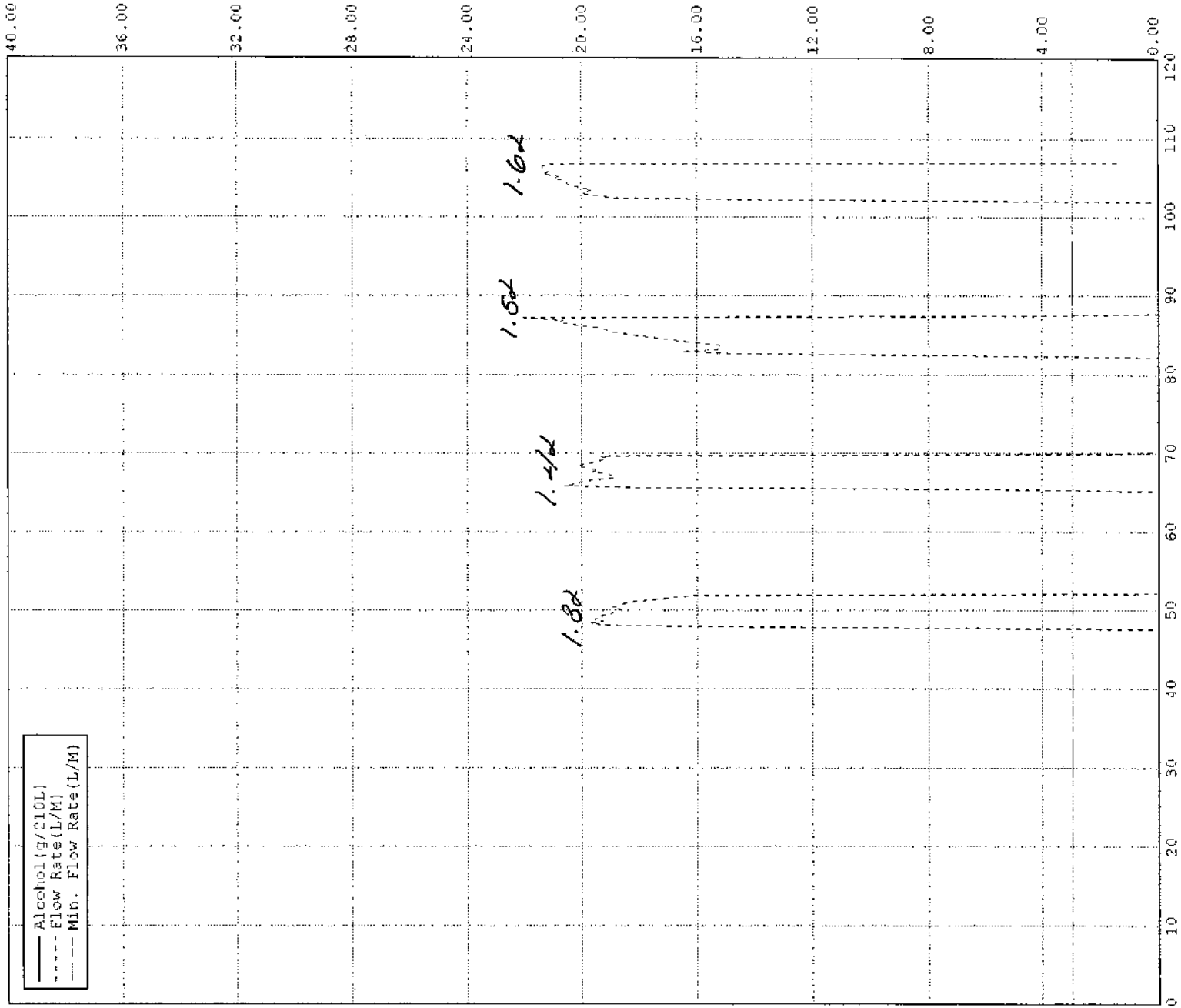
CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 04/21/2020
Time: 09:14:36

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

Ca = 0.1000
CAL = 0.965698 0.800 <= CAL < 1.200
b1 = 0.0009 0.0000 <= b1 < 0.0040
b2 = 0.0043 0.0010 <= b2 < 0.0100
b3 = 0.0014 0.0000 <= b3 < 0.0040
Xq = 0.0966 0.0500 <= Xq < 0.2000
a21 = 1.141766 1.050 <= a21 < 1.300
a31 = 0.455042 0.300 <= a31 < 0.800



SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

Date: 04/28/2020
 Time: 11:34:28

SUBJECT NAME:
TEST TEST
LICENSE #: MIN VOLUME

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 29.37: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

| TEST TYPE | RESULT | TIME |
|----------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 11:35 |
| BLANK TEST | 0.000 | 11:35 |
| INTERNAL STANDARD | VERIFIED | 11:35 |
| EXTERNAL STANDARD | 0.077 | 11:36 |
| BLANK TEST | 0.000 | 11:36 |
| SUBJECT SAMPLE (Vol=1.60L) | 0.000 | 11:38 |
| BLANK TEST | 0.000 | 11:39 |
| EXTERNAL STANDARD | 0.078 | 11:39 |
| BLANK TEST | 0.000 | 11:40 |

LINEARITY CHECK

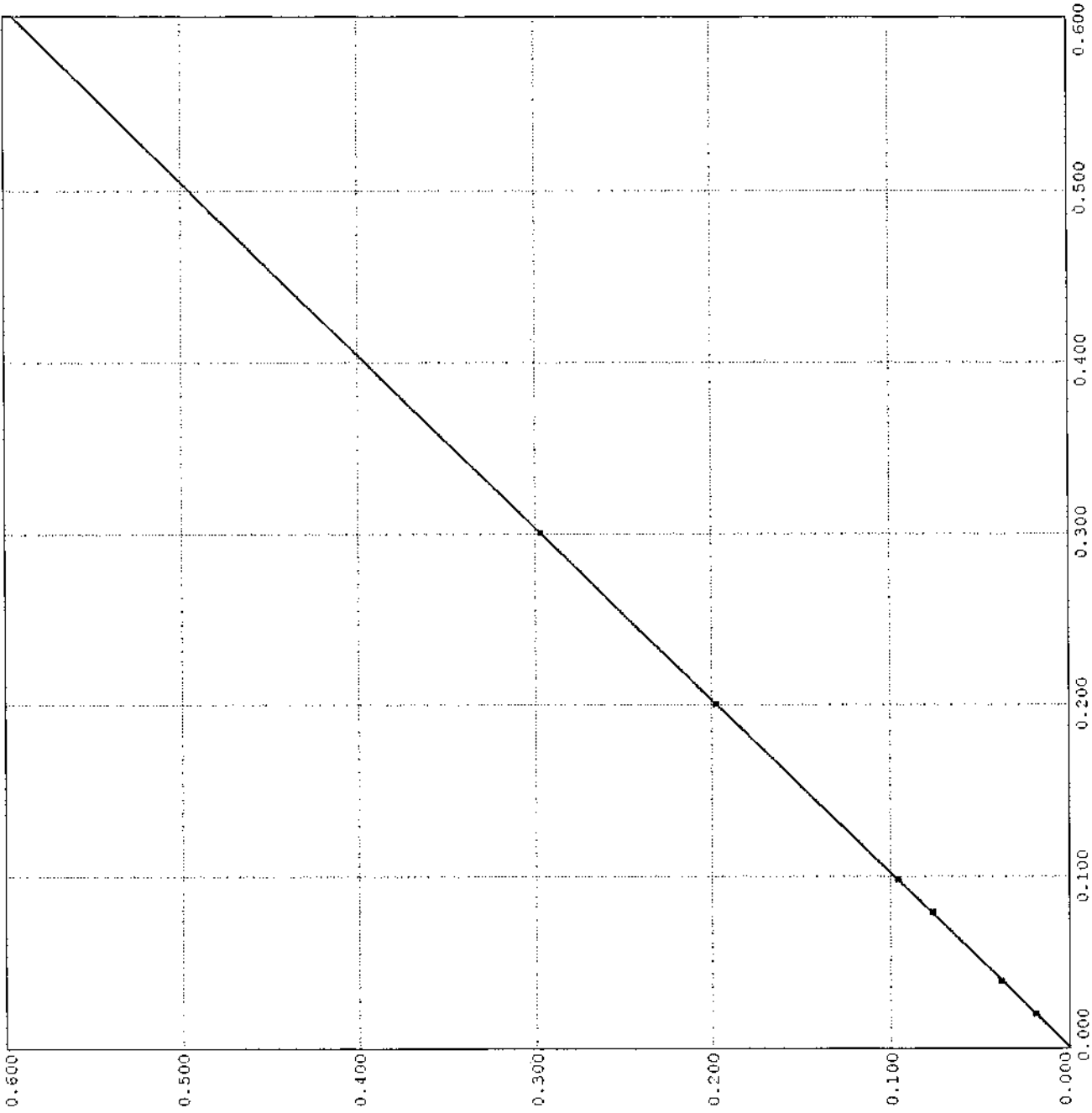
Alaska Department of Public Safety
 DATAMASTER dmt: 100421

Date: 04/28/2020
 Time: 11:43:55

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

| TARGET | AVERAGE | STD. DEV. |
|--------|---------|-----------|
| 0.020 | 0.0196 | 0.0005 |
| 0.039 | 0.0392 | 0.0004 |
| 0.079 | 0.0774 | 0.0005 |
| 0.098 | 0.0968 | 0.0004 |
| 0.200 | 0.1986 | 0.0005 |
| 0.300 | 0.2976 | 0.0005 |

SLOPE = 0.992866
 R² = 0.999977



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

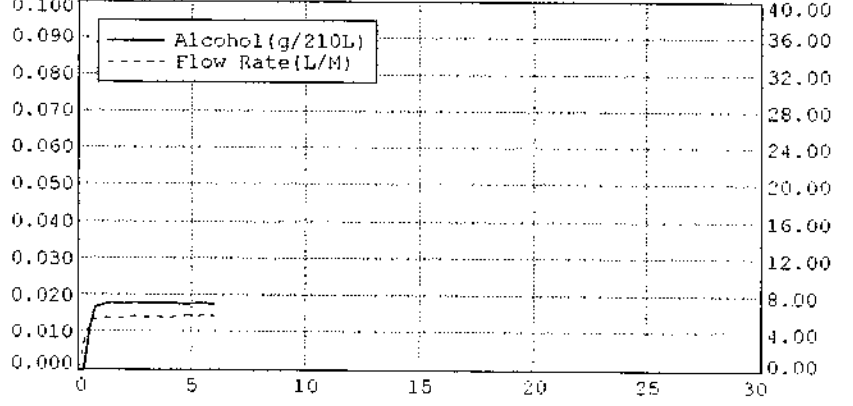
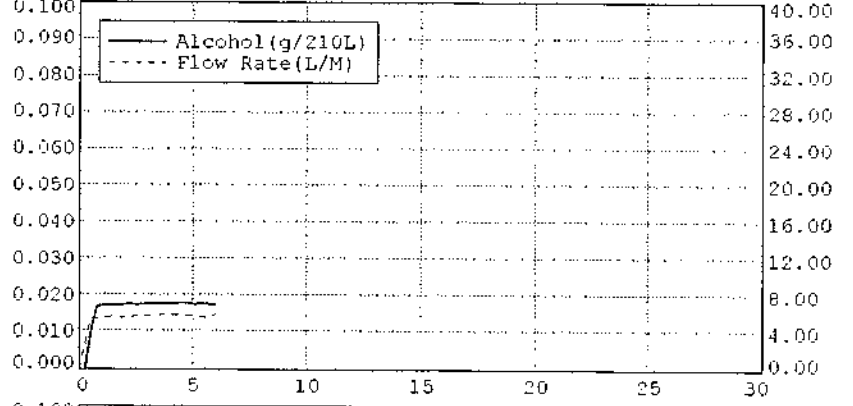
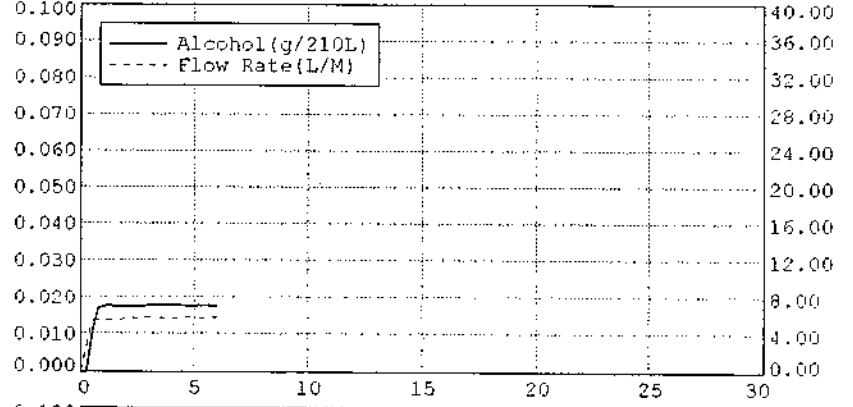
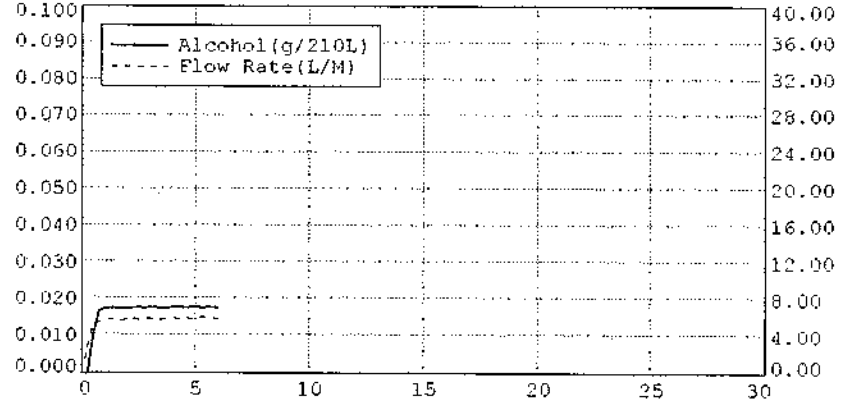
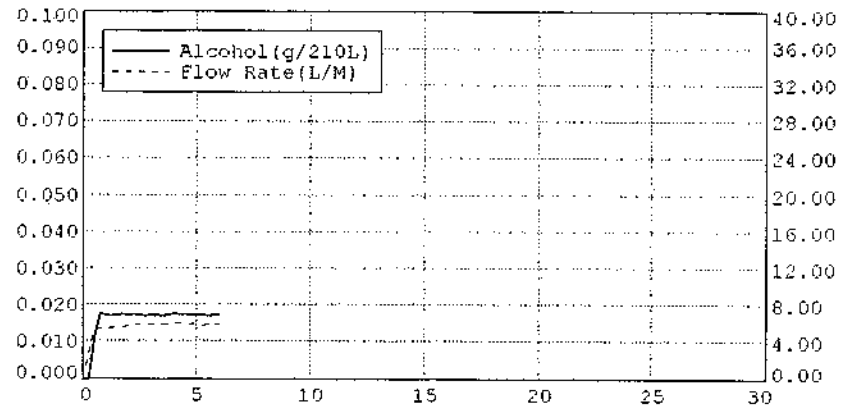
Date: 04/28/2020
 Time: 11:43:57

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.38: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 1006 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 11:54 |
| INTERNAL STANDARD | VERIFIED | 11:54 |
| EXTERNAL STANDARD | 0.019 | 11:54 |
| BLANK TEST | 0.000 | 11:55 |
| EXTERNAL STANDARD | 0.019 | 11:55 |
| BLANK TEST | 0.000 | 11:56 |
| EXTERNAL STANDARD | 0.020 | 11:56 |
| BLANK TEST | 0.000 | 11:57 |
| EXTERNAL STANDARD | 0.020 | 11:57 |
| BLANK TEST | 0.000 | 11:58 |
| EXTERNAL STANDARD | 0.020 | 11:58 |
| BLANK TEST | 0.000 | 11:59 |

Average = 0.0196
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

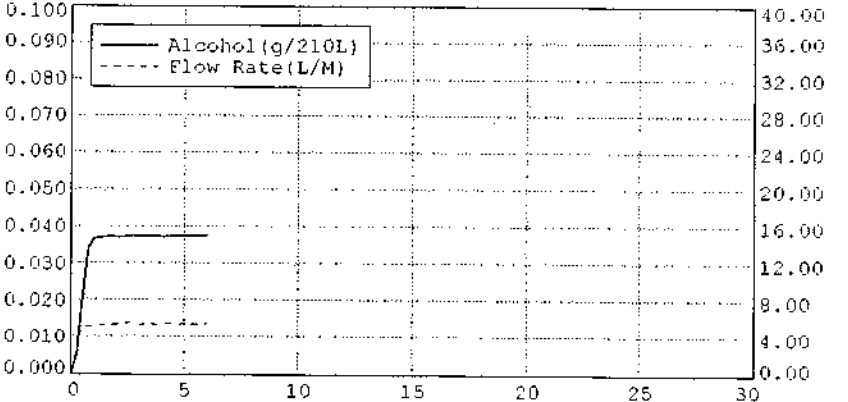
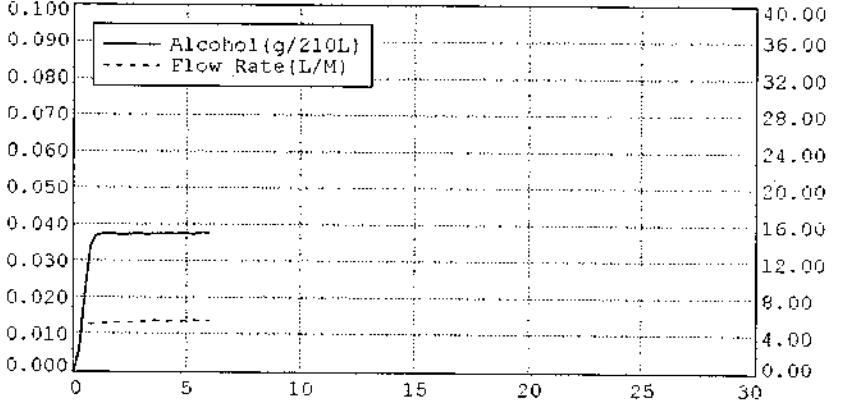
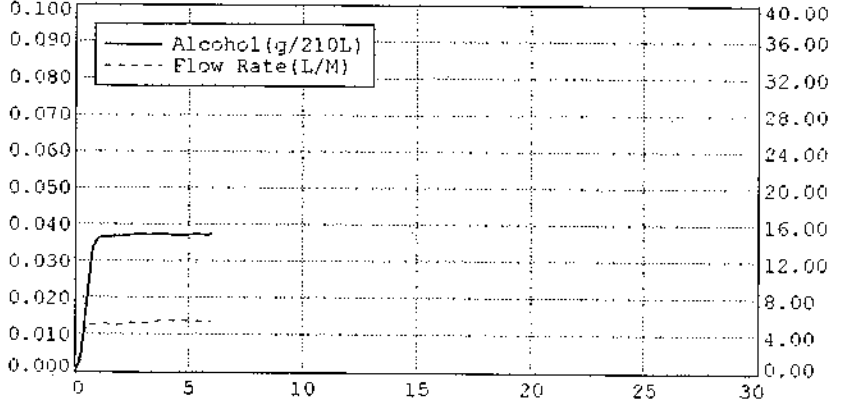
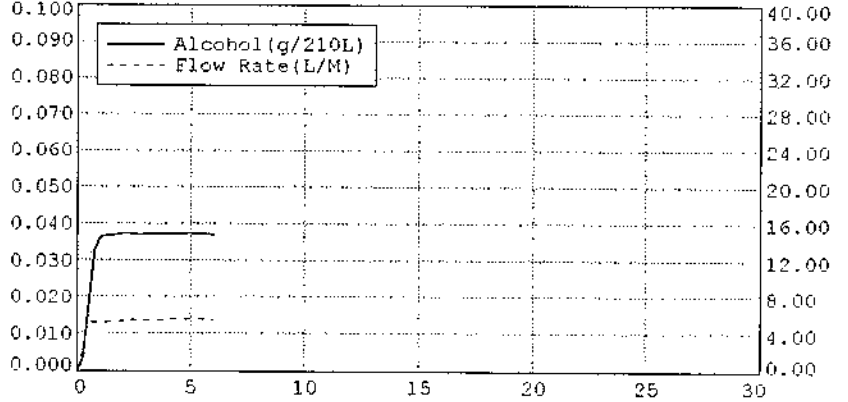
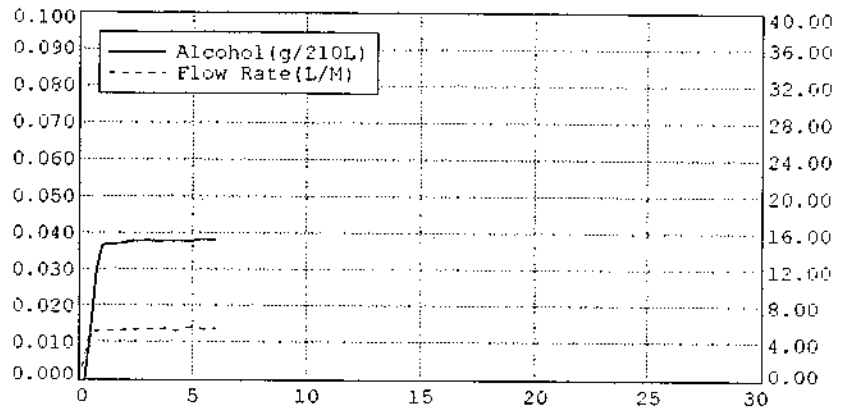
Date: 04/28/2020
 Time: 12:00:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.37: 0.039
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 823 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 12:01 |
| INTERNAL STANDARD | VERIFIED | 12:01 |
| EXTERNAL STANDARD | 0.040 | 12:02 |
| BLANK TEST | 0.000 | 12:03 |
| EXTERNAL STANDARD | 0.039 | 12:03 |
| BLANK TEST | 0.000 | 12:04 |
| EXTERNAL STANDARD | 0.039 | 12:04 |
| BLANK TEST | 0.000 | 12:05 |
| EXTERNAL STANDARD | 0.039 | 12:05 |
| BLANK TEST | 0.000 | 12:06 |
| EXTERNAL STANDARD | 0.039 | 12:06 |
| BLANK TEST | 0.000 | 12:07 |

Average = 0.0392
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

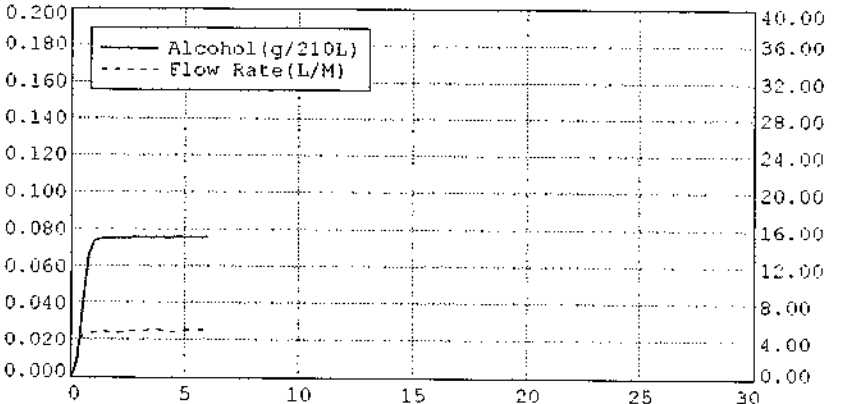
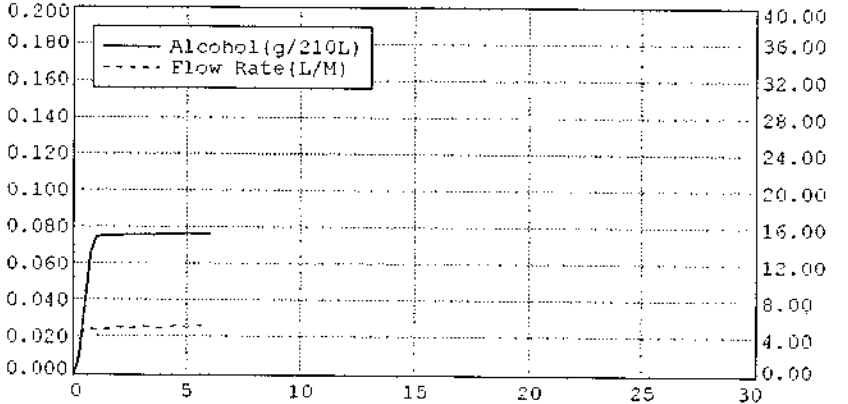
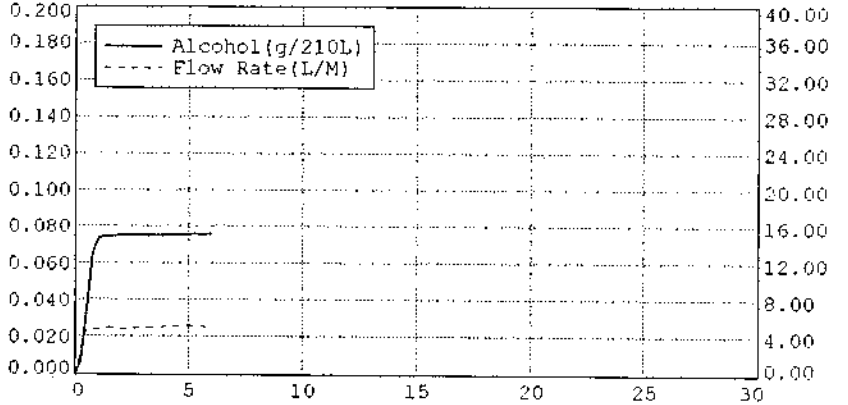
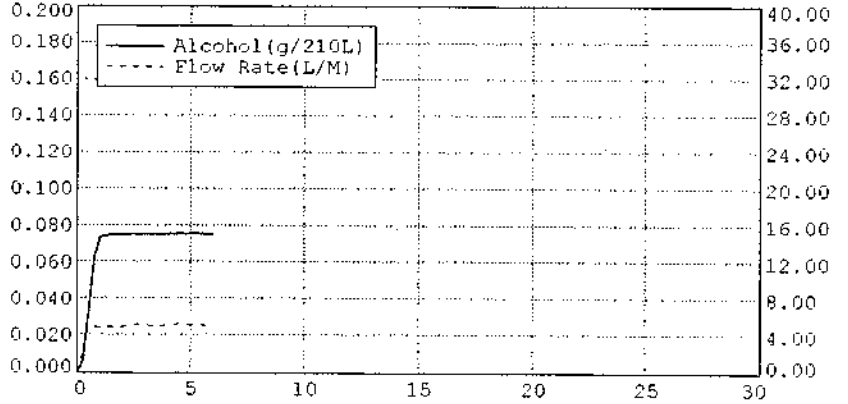
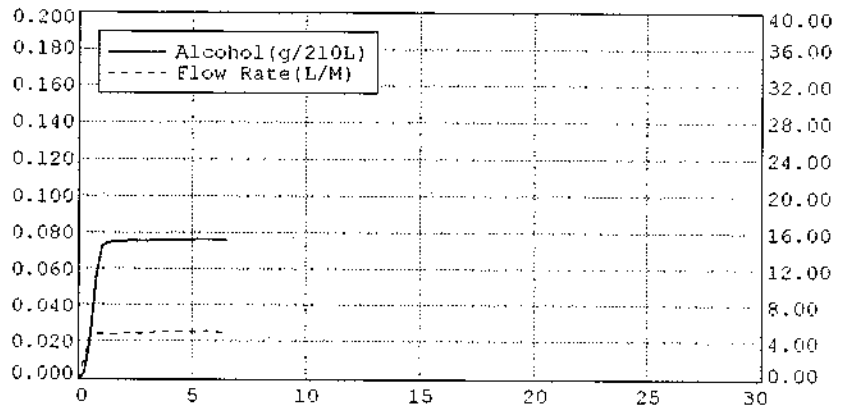
Date: 04/28/2020
 Time: 12:10:44

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.37: 0.079
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 562 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 12:11 |
| INTERNAL STANDARD | VERIFIED | 12:12 |
| EXTERNAL STANDARD | 0.078 | 12:12 |
| BLANK TEST | 0.000 | 12:13 |
| EXTERNAL STANDARD | 0.077 | 12:13 |
| BLANK TEST | 0.000 | 12:14 |
| EXTERNAL STANDARD | 0.077 | 12:14 |
| BLANK TEST | 0.000 | 12:15 |
| EXTERNAL STANDARD | 0.078 | 12:15 |
| BLANK TEST | 0.000 | 12:16 |
| EXTERNAL STANDARD | 0.077 | 12:16 |
| BLANK TEST | 0.000 | 12:17 |

Average = 0.0774
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

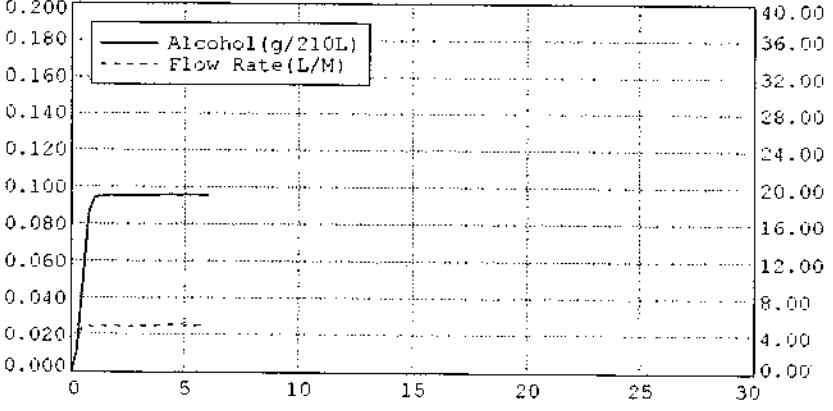
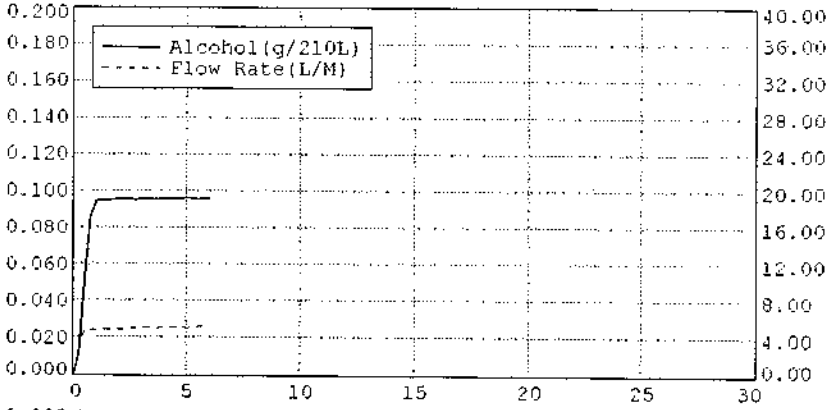
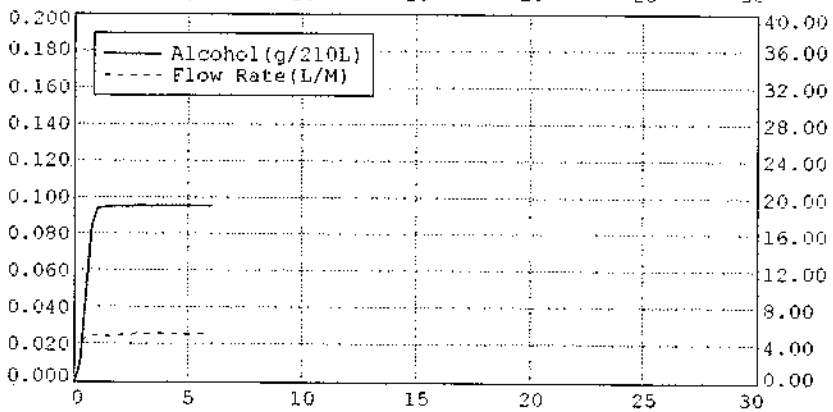
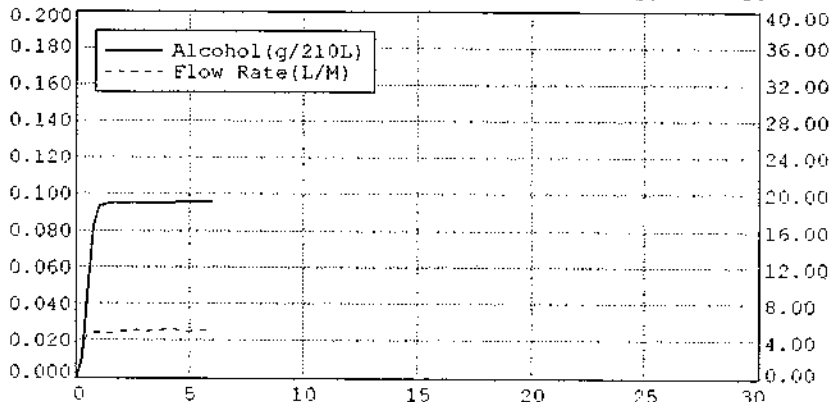
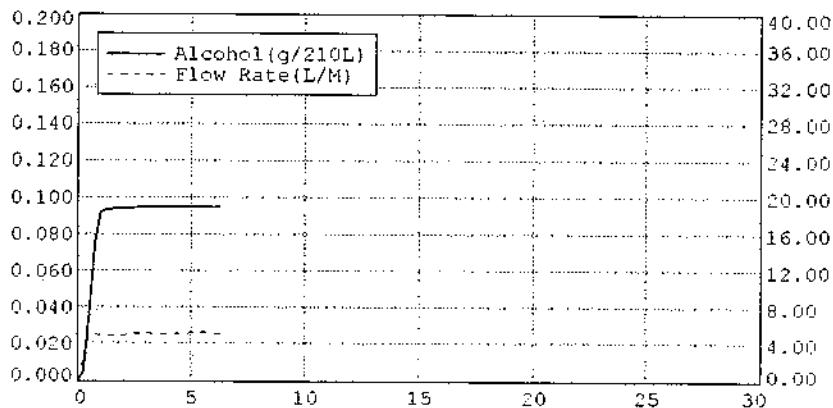
Date: 04/28/2020
 Time: 12:19:04

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.38: 0.098
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 604 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 12:20 |
| INTERNAL STANDARD | VERIFIED | 12:20 |
| EXTERNAL STANDARD | 0.096 | 12:20 |
| BLANK TEST | 0.000 | 12:21 |
| EXTERNAL STANDARD | 0.097 | 12:21 |
| BLANK TEST | 0.000 | 12:22 |
| EXTERNAL STANDARD | 0.097 | 12:22 |
| BLANK TEST | 0.000 | 12:23 |
| EXTERNAL STANDARD | 0.097 | 12:23 |
| BLANK TEST | 0.000 | 12:24 |
| EXTERNAL STANDARD | 0.097 | 12:25 |
| BLANK TEST | 0.000 | 12:25 |

Average = 0.0968
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

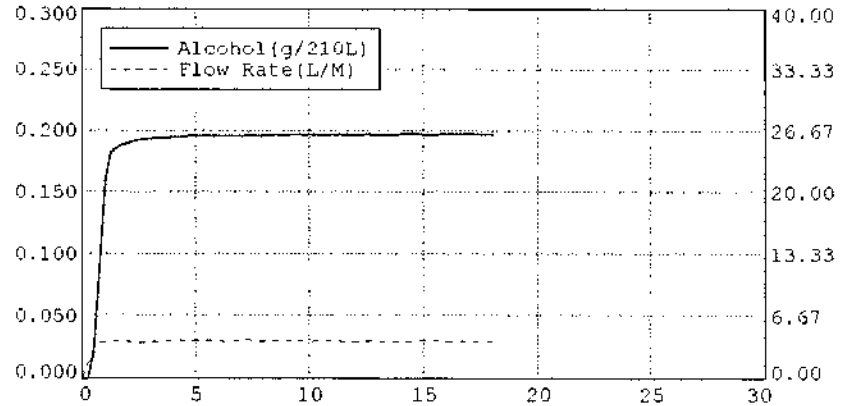
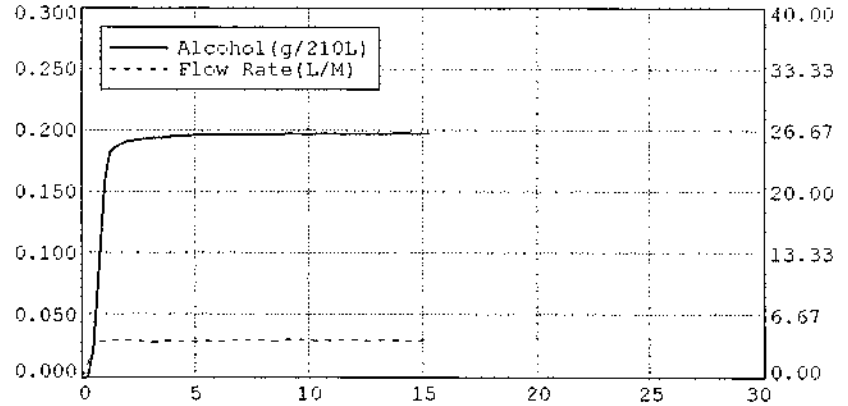
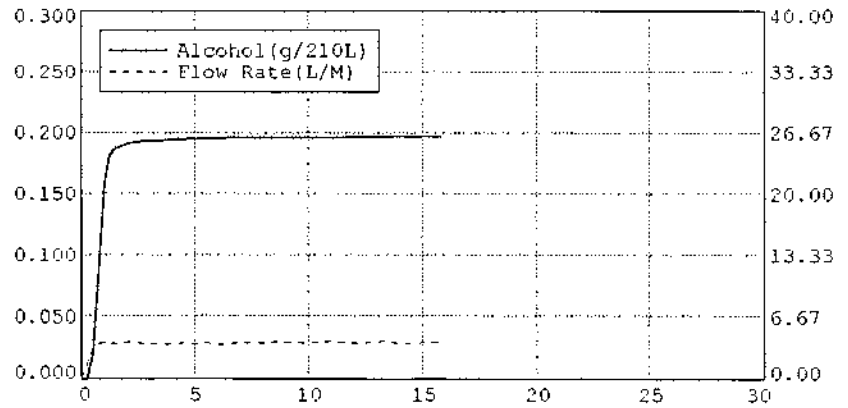
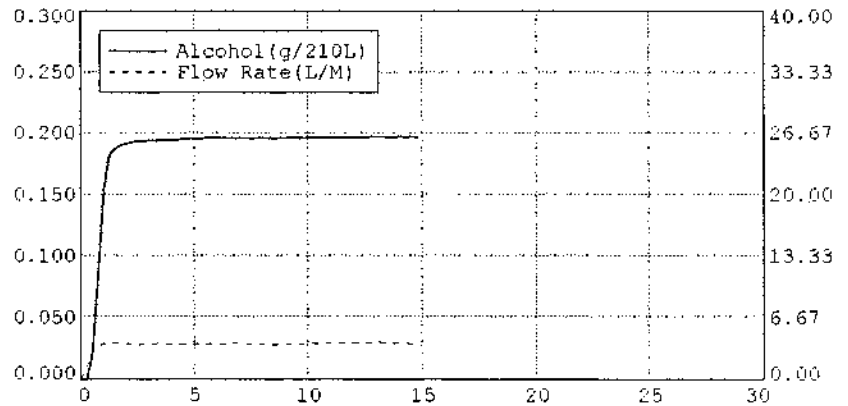
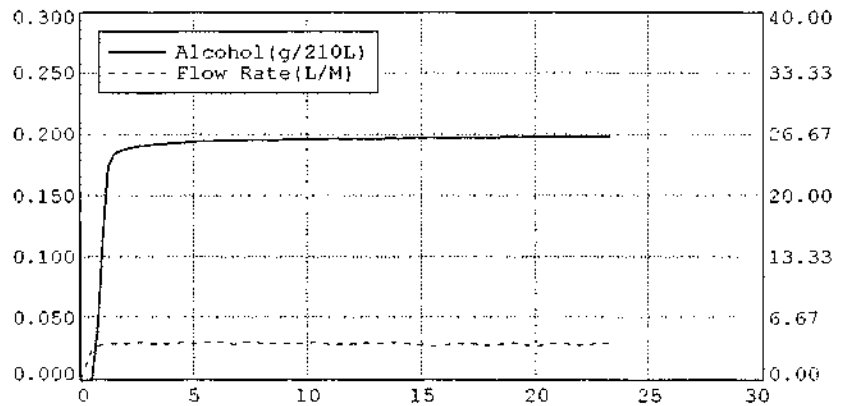
Date: 04/28/2020
 Time: 12:26:29

EXTERNAL STANDARD INFORMATION

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

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 12:27 |
| INTERNAL STANDARD | VERIFIED | 12:27 |
| EXTERNAL STANDARD | 0.199 | 12:28 |
| BLANK TEST | 0.000 | 12:29 |
| EXTERNAL STANDARD | 0.198 | 12:29 |
| BLANK TEST | 0.000 | 12:30 |
| EXTERNAL STANDARD | 0.198 | 12:30 |
| BLANK TEST | 0.000 | 12:31 |
| EXTERNAL STANDARD | 0.199 | 12:32 |
| BLANK TEST | 0.000 | 12:33 |
| EXTERNAL STANDARD | 0.199 | 12:33 |
| BLANK TEST | 0.000 | 12:34 |

Average = 0.1986
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

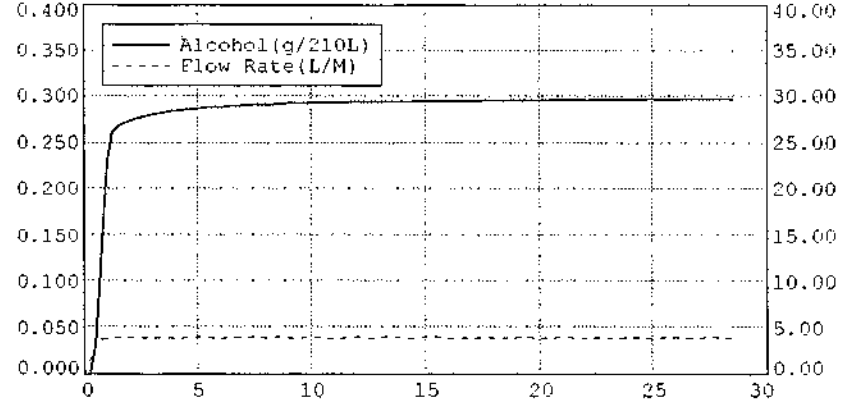
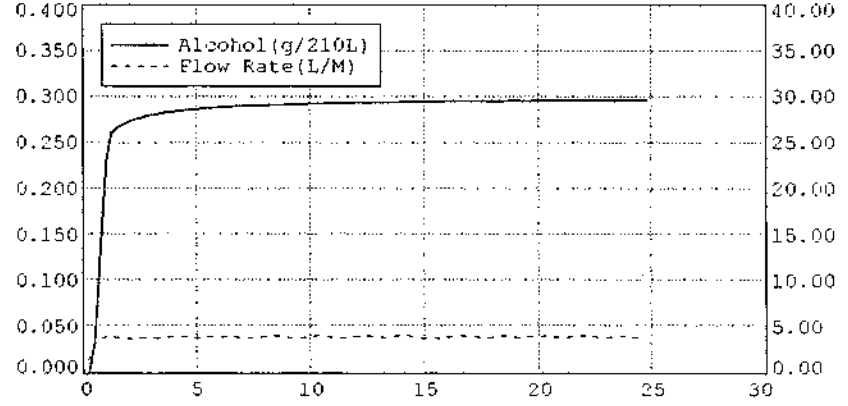
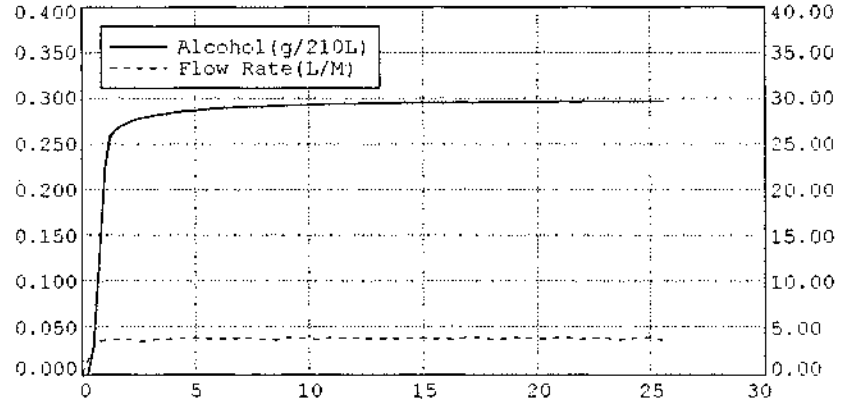
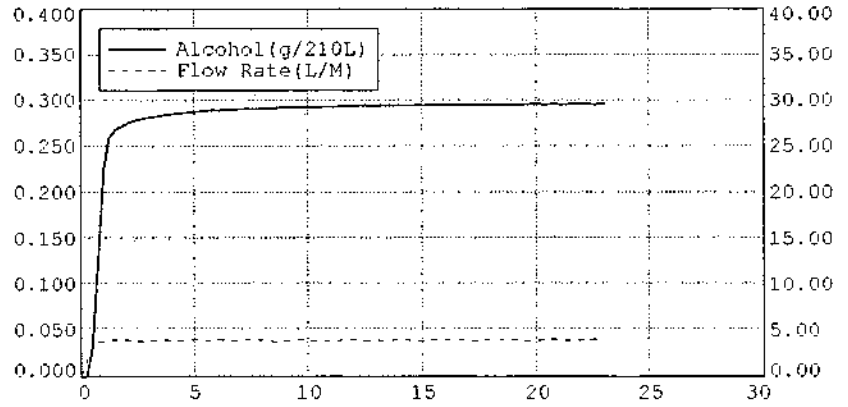
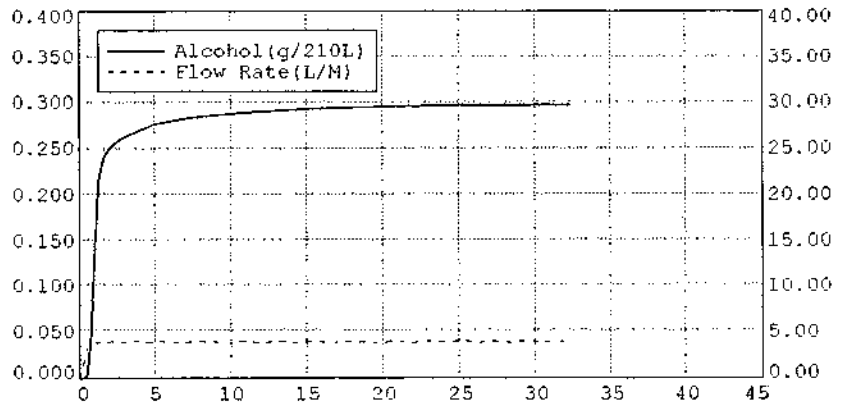
Date: 04/28/2020
 Time: 12:37:17

EXTERNAL STANDARD INFORMATION

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

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 12:38 |
| INTERNAL STANDARD | VERIFIED | 12:38 |
| EXTERNAL STANDARD | 0.298 | 12:39 |
| BLANK TEST | 0.000 | 12:40 |
| EXTERNAL STANDARD | 0.297 | 12:40 |
| BLANK TEST | 0.000 | 12:41 |
| EXTERNAL STANDARD | 0.298 | 12:42 |
| BLANK TEST | 0.000 | 12:43 |
| EXTERNAL STANDARD | 0.297 | 12:43 |
| BLANK TEST | 0.000 | 12:44 |
| EXTERNAL STANDARD | 0.298 | 12:45 |
| BLANK TEST | 0.000 | 12:46 |

Average = 0.2976
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 04/28/2020
Time: 13:51:33

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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

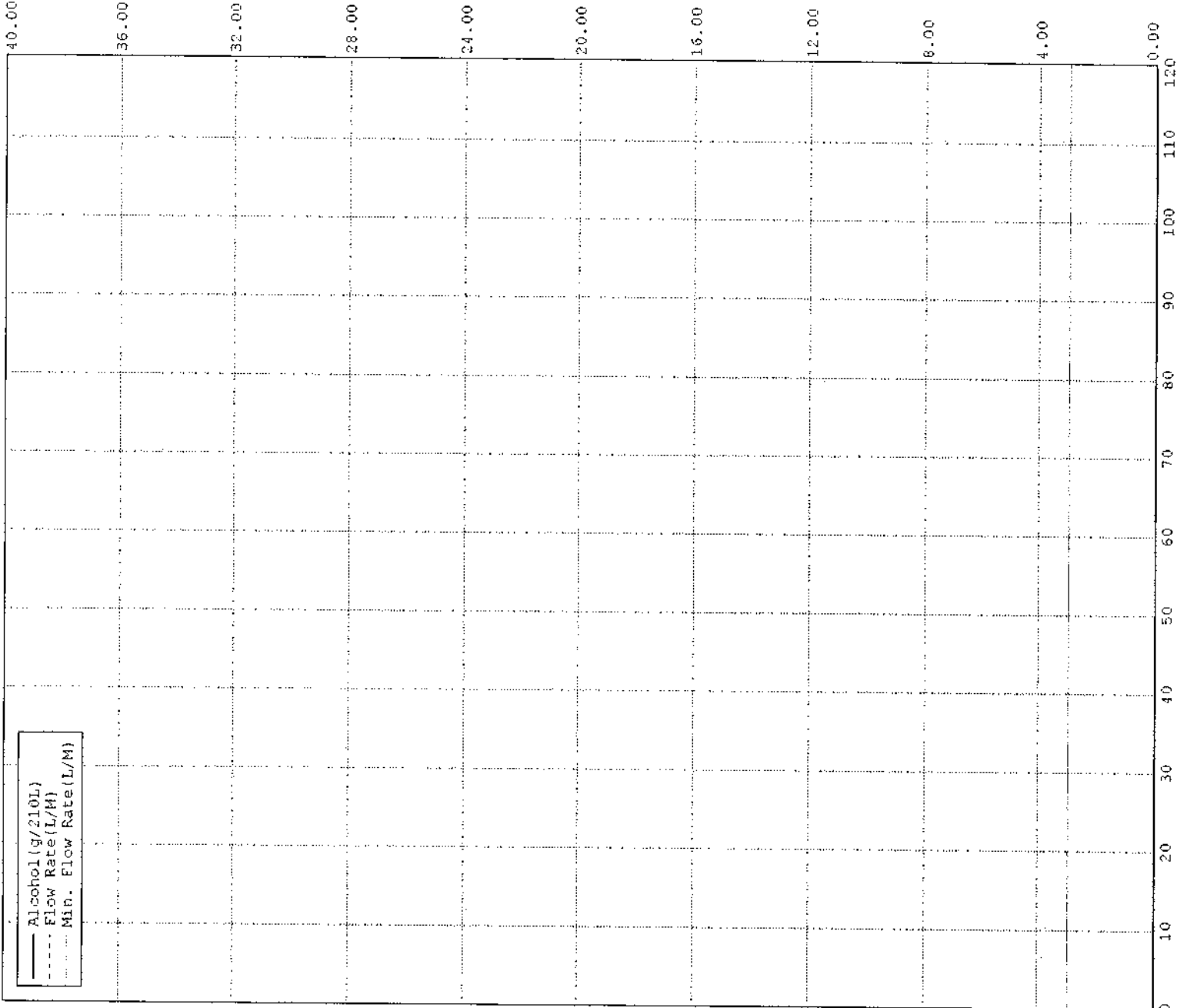
DEPT/AGENCY:
AAA1

CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.36: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:52
BLANK TEST 0.000 13:53
INTERNAL STANDARD VERIFIED 13:53
EXTERNAL STANDARD 0.076 13:53
BLANK TEST 0.000 13:54
SUBJECT SAMPLE INCOMPLETE 13:56



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 04/28/2020
Time: 14:06:58

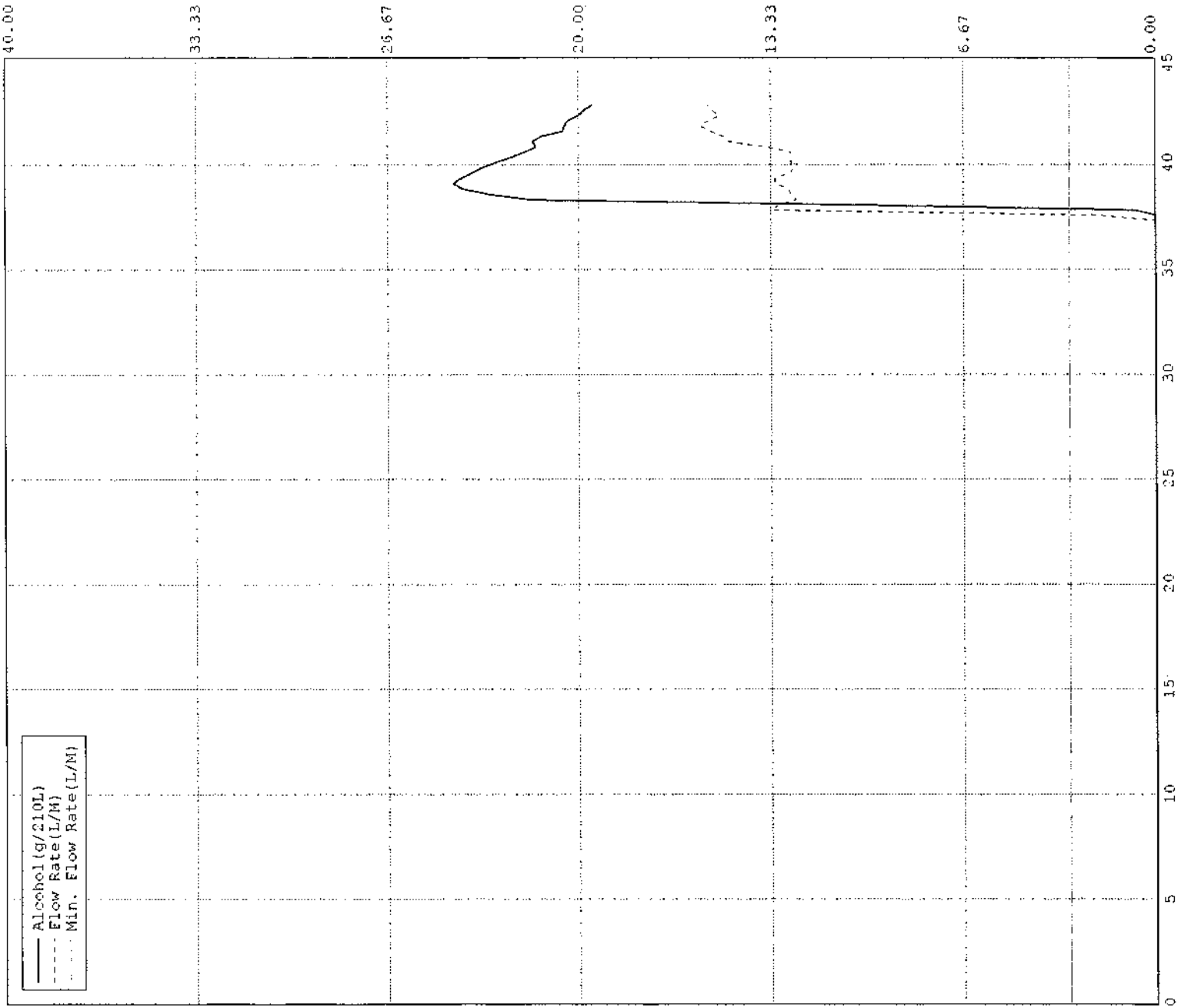
SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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 29.37: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

| | | |
|-------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 14:14 |
| BLANK TEST | 0.000 | 14:14 |
| INTERNAL STANDARD | VERIFIED | 14:14 |
| EXTERNAL STANDARD | 0.078 | 14:14 |
| BLANK TEST | 0.000 | 14:15 |
| SUBJECT SAMPLE | INVALID | 14:16 |



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER chmt: 100421

Date: 04/28/2020
Time: 12:51:53

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

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

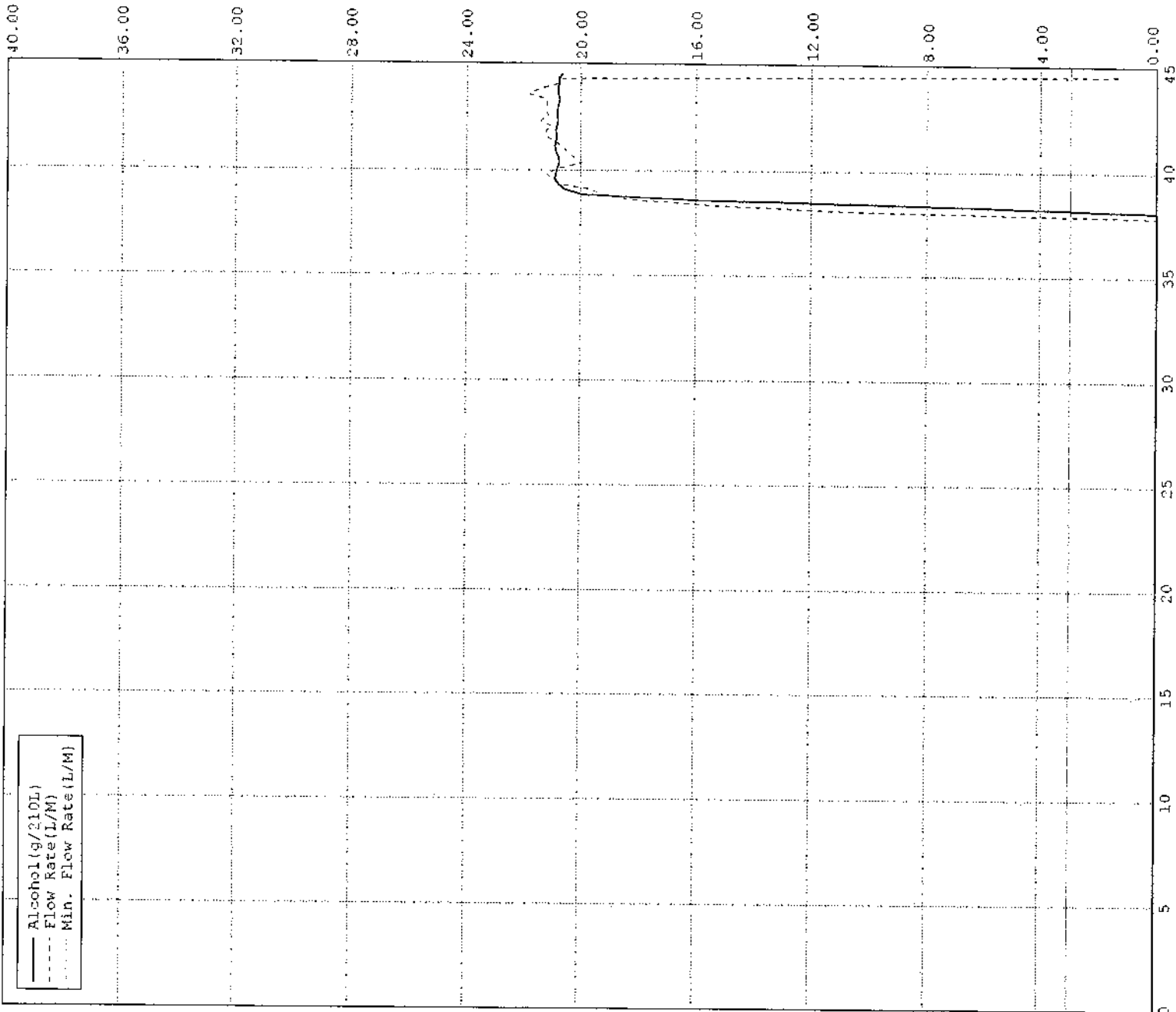
DEPT/AGENCY:
AAA1
CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.37: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

| | | |
|----------------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 12:53 |
| BLANK TEST | 0.000 | 12:53 |
| INTERNAL STANDARD | VERIFIED | 12:53 |
| Xq = 0.097 (0.91%) | | |
| EXTERNAL STANDARD | 0.076 | 12:53 |
| X[1] = 0.0764 (0.0011) (0.0026) | | |
| BLANK TEST | 0.000 | 12:54 |
| SUBJECT SAMPLE | XXX | 12:55 |
| X[1] = 0.1027 (-0.0191) (0.0022) | | |

Interference Detected

Filter 2 avg = 0.0016
Filter 3 avg = 0.0021



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 04/28/2020
Time: 13:00:13

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

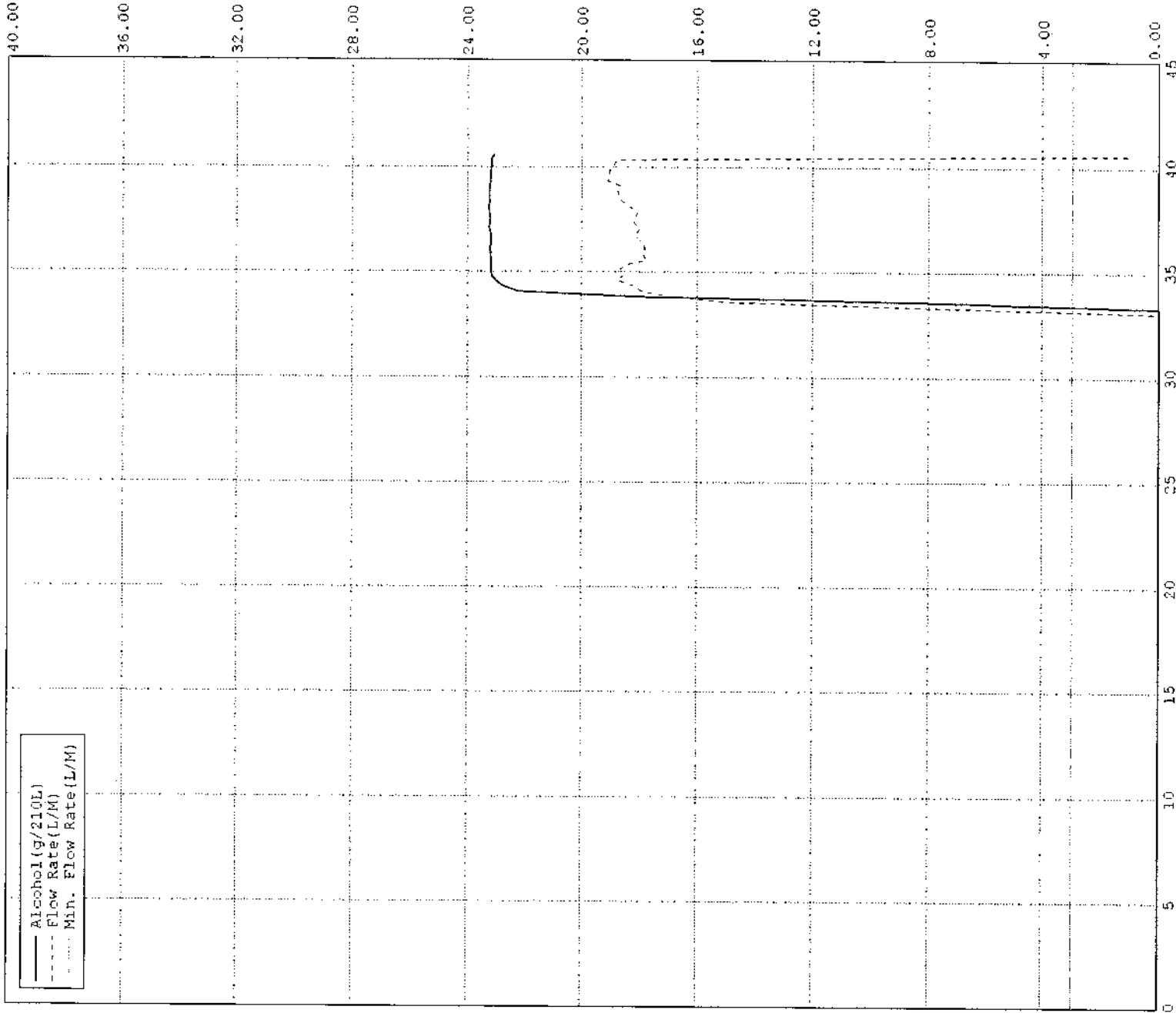
DEPT/AGENCY:
AAA1
CASE/REPORT: 20-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.37: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:01
BLANK TEST 0.000 13:01
INTERNAL STANDARD VERIFIED 13:01
X_Q = 0.096 (0.27%)
EXTERNAL STANDARD 0.076 13:01
X[1] = 0.0758 (0.0013) (0.0020)
BLANK TEST 0.000 13:02
SUBJECT SAMPLE XXX 13:03
X[1] = 0.1143 (-0.0170) (0.0028)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

Date: 04/28/2020
 Time: 13:09:54

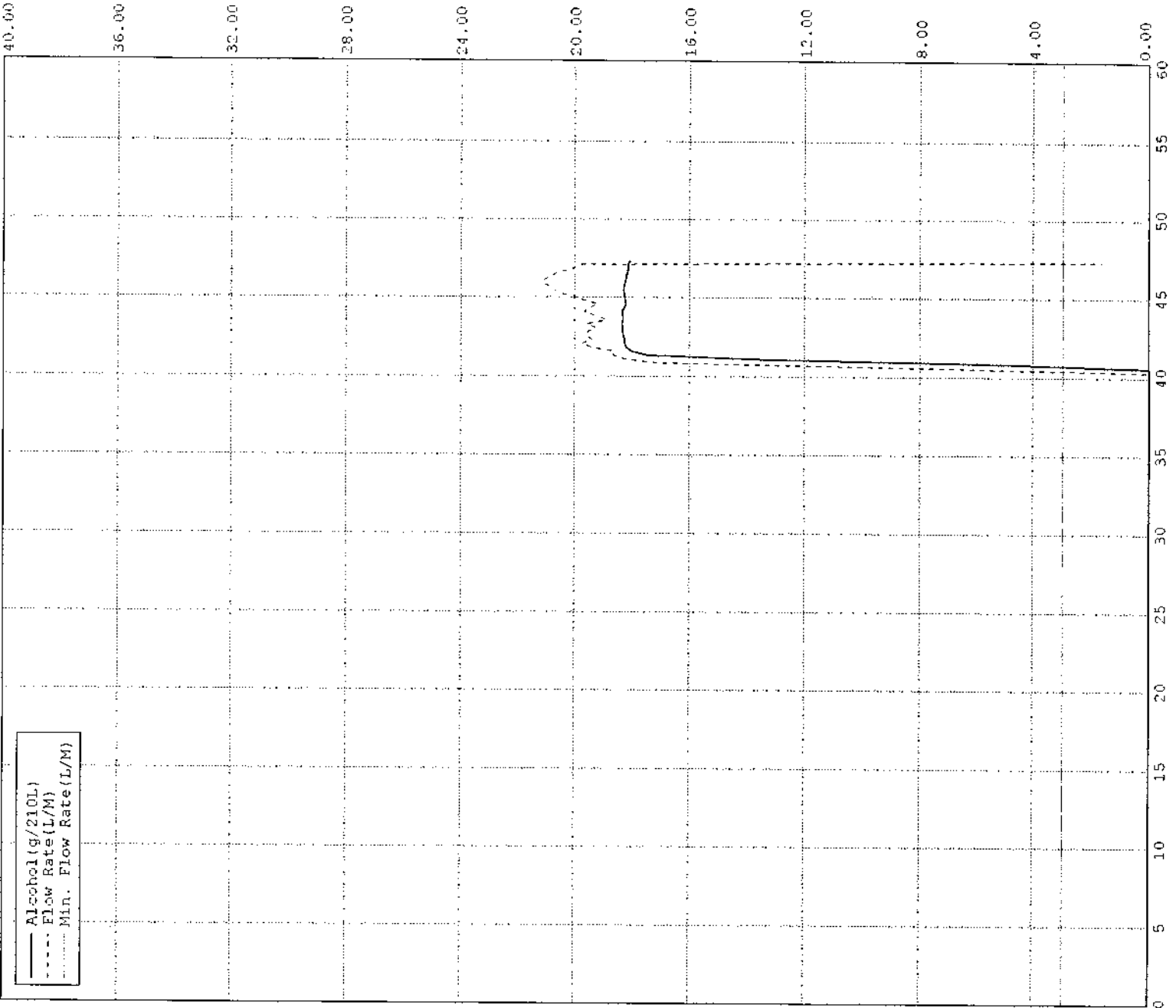
SUBJECT NAME:
 TEST TEST
 LICENSE #: INT-NEGATIVE

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 29.37: 0.079
 LOT #: AG826101
 EXPIRATION: 09/18/2020

| | | |
|---------------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 13:13 |
| BLANK TEST | 0.000 | 13:13 |
| INTERNAL STANDARD | VERIFIED | 13:14 |
| Xq = 0.096 (0.54%) | | |
| EXTERNAL STANDARD | 0.077 | 13:14 |
| X[1] = 0.0771 (0.0017) (0.0021) | | |
| BLANK TEST | 0.000 | 13:15 |
| SUBJECT SAMPLE (Vol=2.16L) | 0.089 | 13:16 |
| X[1] = 0.0898 (0.0029) (0.0020) | | |
| BLANK TEST | 0.000 | 13:16 |
| EXTERNAL STANDARD | 0.076 | 13:17 |
| X[1] = 0.0764 (0.0023) (0.0016) | | |
| BLANK TEST | 0.000 | 13:18 |



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 04/28/2020
Time: 13:20:42

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

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

DEPT/AGENCY:
AAA1

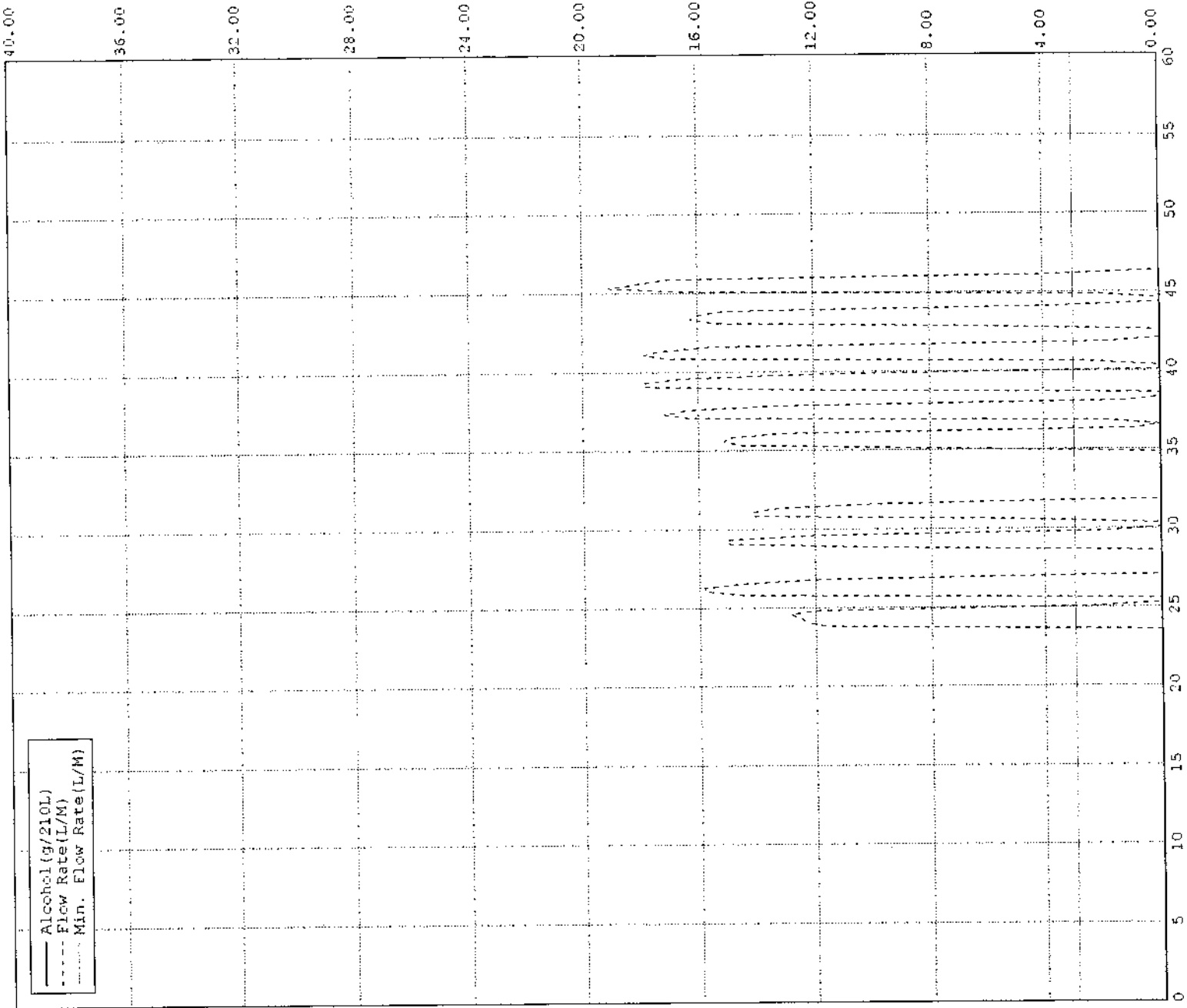
CASE/REPORT: 20-1234
TEST TYPE: TEST

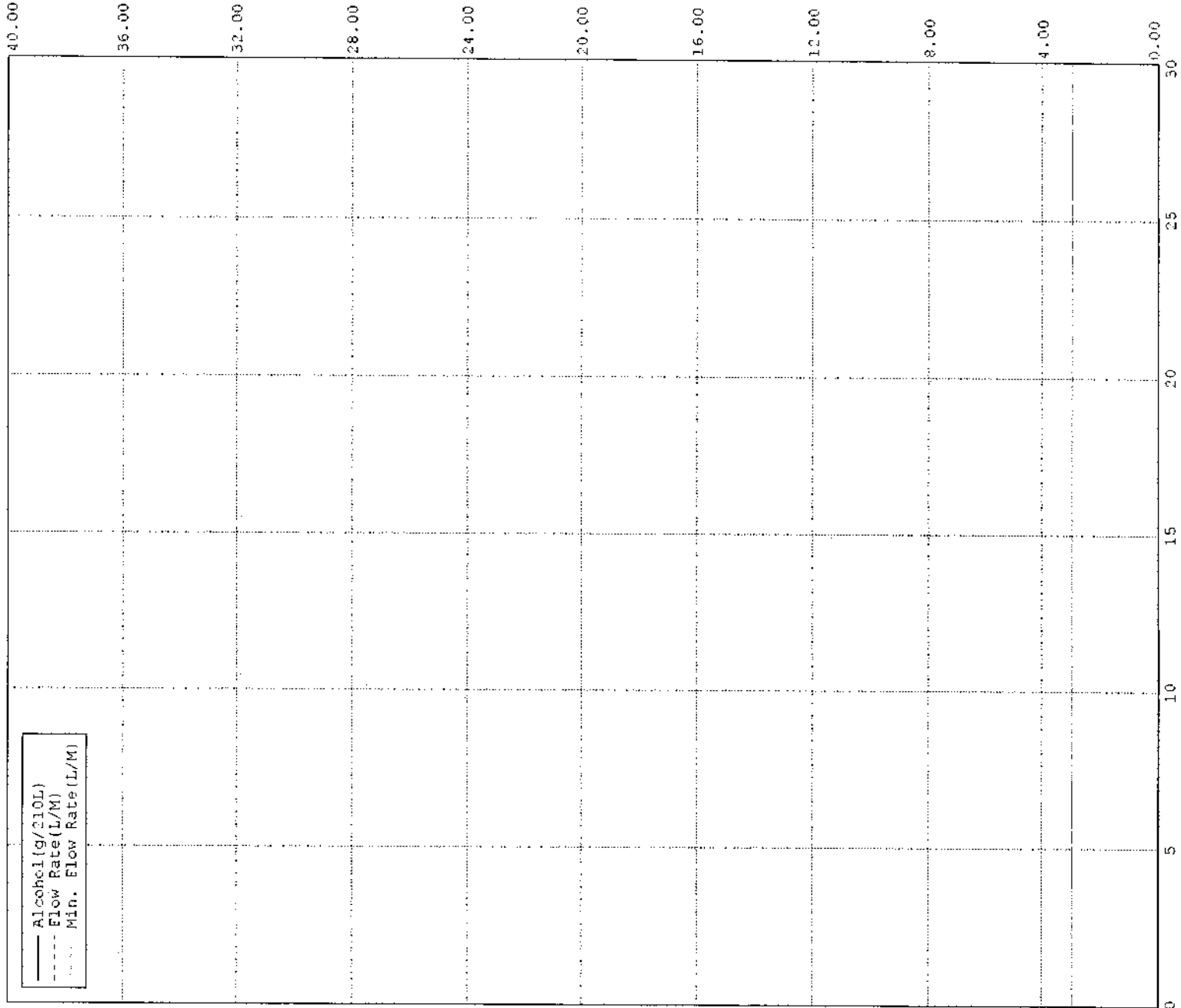
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.37: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

| | | |
|-------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 13:23 |
| BLANK TEST | 0.000 | 13:23 |
| INTERNAL STANDARD | VERIFIED | 13:23 |
| EXTERNAL STANDARD | 0.078 | 13:23 |
| BLANK TEST | 0.000 | 13:24 |
| SUBJECT SAMPLE | XXX | 13:25 |

Maximum Attempts Exceeded





SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100421

 Date: 04/28/2020
 Time: 14:00:15

SUBJECT NAME:
 TEST TEST
 LICENSE #: REI

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 29.37: 0.079
 LOT #: AG826101
 EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 14:01
 BLANK TEST 0.000 14:01
 INTERNAL STANDARD VERIFIED 14:01
 EXTERNAL STANDARD 0.077 14:02
 BLANK TEST 0.000 14:03

RFI DETECTED

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 04/28/2020
Time: 14:44:52

SUBJECT NAME:
TEST TEST
LICENSE #: NON DRINKING

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 29.36: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

| TEST TYPE | RESULT | TIME |
|----------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 14:46 |
| BLANK TEST | 0.000 | 14:46 |
| INTERNAL STANDARD | VERIFIED | 14:46 |
| EXTERNAL STANDARD | 0.077 | 14:46 |
| BLANK TEST | 0.000 | 14:47 |
| SUBJECT SAMPLE (Vol=2.16L) | 0.000 | 14:47 |
| BLANK TEST | 0.000 | 14:48 |
| EXTERNAL STANDARD | 0.077 | 14:48 |
| BLANK TEST | 0.000 | 14:49 |

