

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 100399 Analyst Brandi Barnett Start Date 6/18/21

Diagnostic Test (attached)

Internal Standard value $\leq 3.00\%$

Voltage Checks

Adjust voltages, if needed

i. Lamp (2.6V Maximum)

ii. Bias

iii. Cooler (2.0V Maximum)

iv. Chopper Frequency

v. Detector Voltage (-0.100V to 0.100V)

Set RFI

Adjust barometer reading to match NIST traceable barometer

Adjust volume setting, if needed (1.5L +/- 0.1L)

Print Technician Screen (attached)

Print Calibration Factors (attached)

Volume Test - Minimum 1.5 L (1.3L to 1.7L)

Linearity Test (attached)

Levels Used

- i. 0.020g/210L Mnf Airgas Lot AG 928203 Exp 10/9/21
- ii. 0.040g/210L Mnf Airgas Lot AG 111710 Exp 4/27/23
- iii. 0.080g/210L Mnf Airgas Lot AG 018102 Exp 6/29/22
- iv. 0.100g/210L Mnf Airgas Lot AG 924701 Exp 9/4/21
- v. 0.200g/210L Mnf Guth Lot 19200 Exp 8/6/21
- Simulator S/N DR6267 Date Calibrated 11/17/20
- vi. 0.300g/210L Mnf Guth Lot 19330 Exp 11/13/21
- Simulator S/N DR4177 Date Calibrated 11/17/20

Functional Tests (attached)

Incomplete

Invalid

Interference

- i. Acetone - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21
- Simulator S/N DR4178 Date Calibrated 11/18/20
- ii. Isopropanol - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21
- Simulator S/N DR7176 Date Calibrated 11/18/20
- iii. Negative Control - Mnf Guth Lot 19301 Level 0.100 Exp 10/30/21
- Simulator S/N DR6263 Date Calibrated 11/17/20

Exceeded Attempts

8mb DR4163
6/23/21

RFI

Verify stylus is calibrated

Reset Options

Clear Memory

Remove tank prior to shut down

Verification of Calibration

Non-Drinking Subject Test (attached)

Upload

Add Linearity Data to Spreadsheet

End Date 6/23/21

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100399

Date: 06/18/2021
Time: 10:28:03

VERSIONS
DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.69 V PASSED
(1.01 V - 2.37 V)
Cooler Voltage = 1.70 V PASSED
(1.02 V - 2.38 V)
Bias Voltage = 81 V PASSED
(49 V - 113 V)
Chopper Freq = 523 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 5.407 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 = 0.084 2.32% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100399

Date: 06/18/2021

Time: 10:35 AM

Temperatures (°C)

Sample Cell: 49.3°C

Breath Tube: 46.0°C

Current Barometer 29.8 in

Volume (Ltr) 1.54

Settings

Lamp: 1.66 V

Bias: 81 V

Cooler: 1.65 V

Chopper: 518 Hz

Voltages (V)

Flow: 1.06 V

Detector: -0.012 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100399

Date: 05/19/2021
Time: 12:09:54

OPERATOR NAME:
CARLIE BAILEY
CERTIFICATE #: 10436

| | | | | |
|-----|---|----------|--------|----------------|
| Ca | = | 0.1000 | | |
| CAL | = | 0.978472 | 0.800 | <= CAL < 1.200 |
| b1 | = | 0.0004 | 0.0000 | <= b1 < 0.0040 |
| b2 | = | 0.0063 | 0.0010 | <= b2 < 0.0100 |
| b3 | = | 0.0001 | 0.0000 | <= b3 < 0.0040 |
| Xq | = | 0.0862 | 0.0500 | <= Xq < 0.2000 |
| a21 | = | 1.217464 | 1.050 | <= a21 < 1.300 |
| a31 | = | 0.423104 | 0.300 | <= a31 < 0.800 |

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100399

Date: 06/18/2021
Time: 10:36:45

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

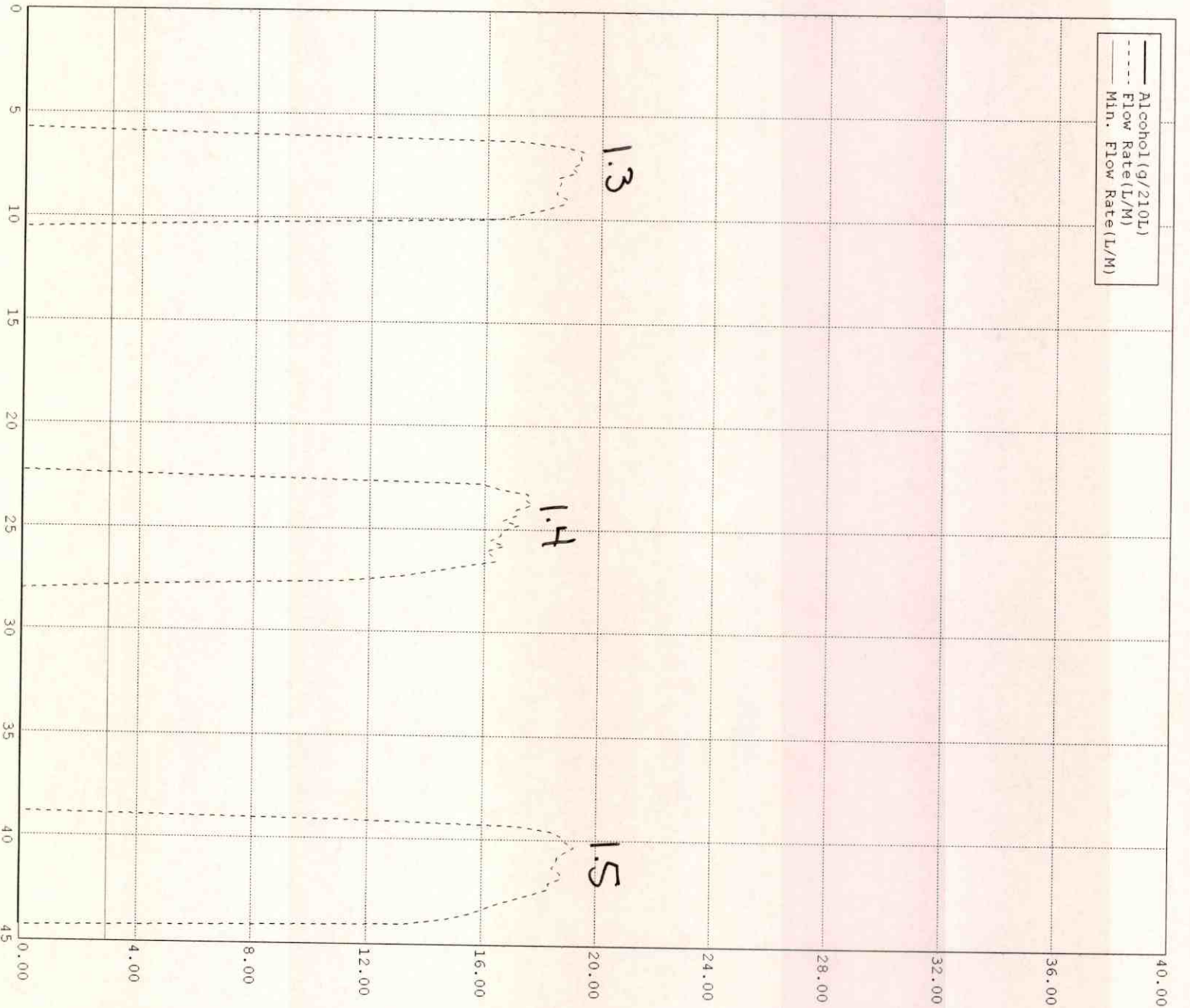
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.78: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

| DIAGNOSTIC CHECK | PASSED | 10:38 |
|----------------------------|----------|-------|
| BLANK TEST | 0.000 | 10:38 |
| INTERNAL STANDARD | VERIFIED | 10:38 |
| EXTERNAL STANDARD | 0.077 | 10:39 |
| BLANK TEST | 0.000 | 10:40 |
| SUBJECT SAMPLE (Vol=1.52L) | 0.000 | 10:40 |
| BLANK TEST | 0.000 | 10:41 |
| EXTERNAL STANDARD | 0.077 | 10:42 |
| BLANK TEST | 0.000 | 10:42 |

BBMB



LINEARITY CHECK

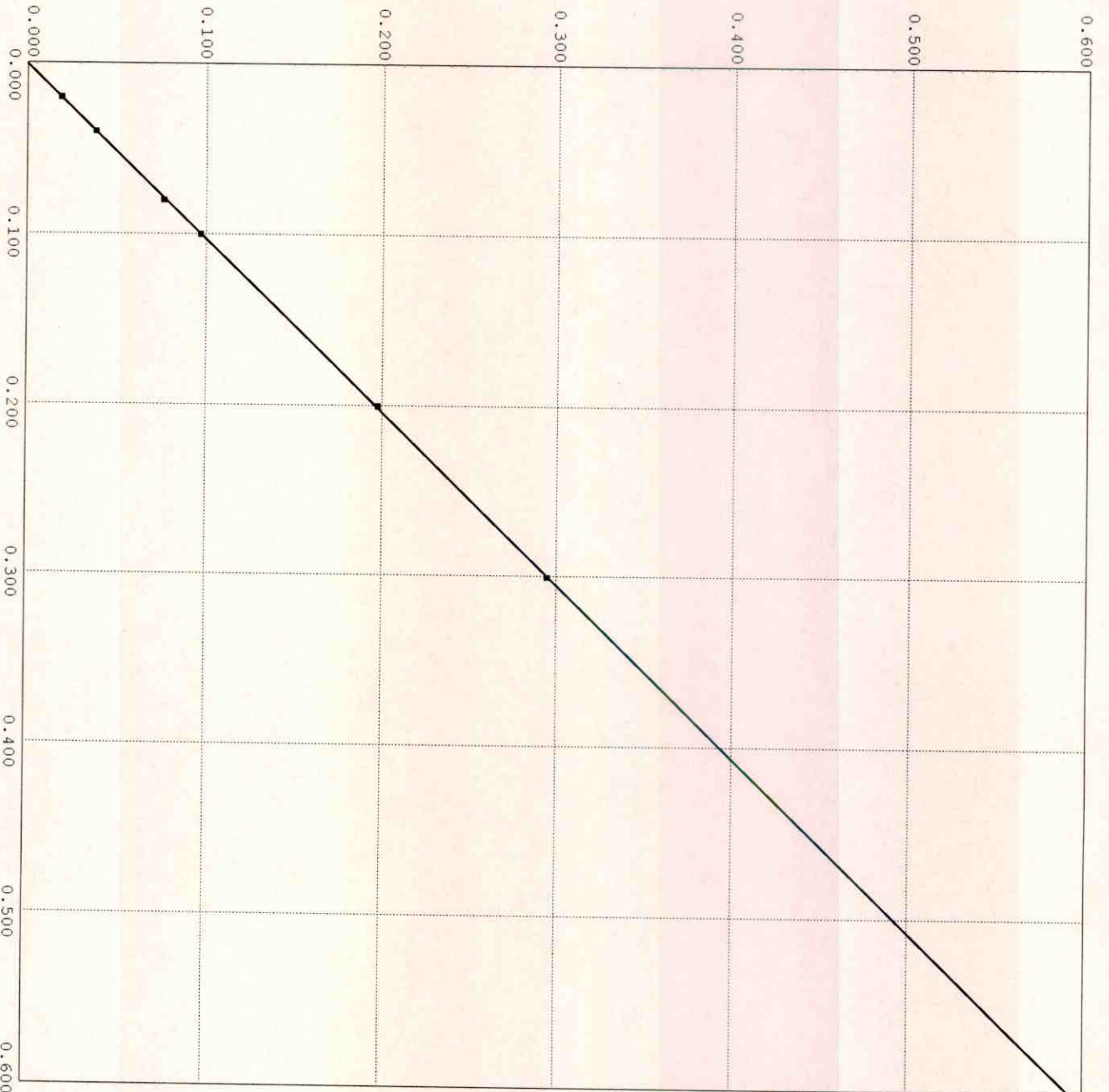
Alaska Department of Public Safety
DATAMASTER dnt: 100399

Date: 06/18/2021
Time: 10:53:52

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

| TARGET | AVERAGE | STD. DEV. |
|--------|---------|-----------|
| 0.020 | 0.0196 | 0.0005 |
| 0.040 | 0.0390 | 0.0000 |
| 0.080 | 0.0772 | 0.0004 |
| 0.100 | 0.0980 | 0.0000 |
| 0.200 | 0.1984 | 0.0009 |
| 0.300 | 0.2954 | 0.0005 |

SLOPE = 0.988751
R² = 0.999931



Handwritten signature: BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100399

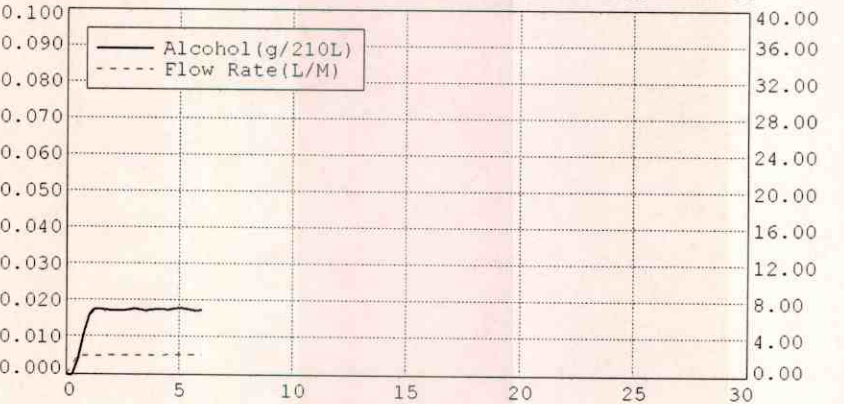
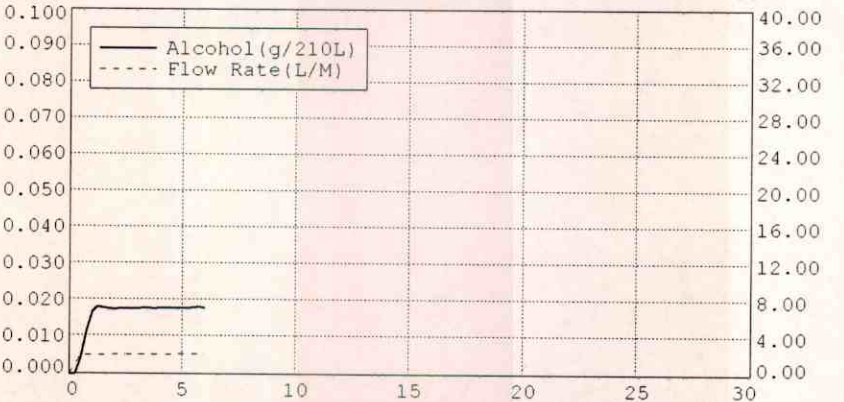
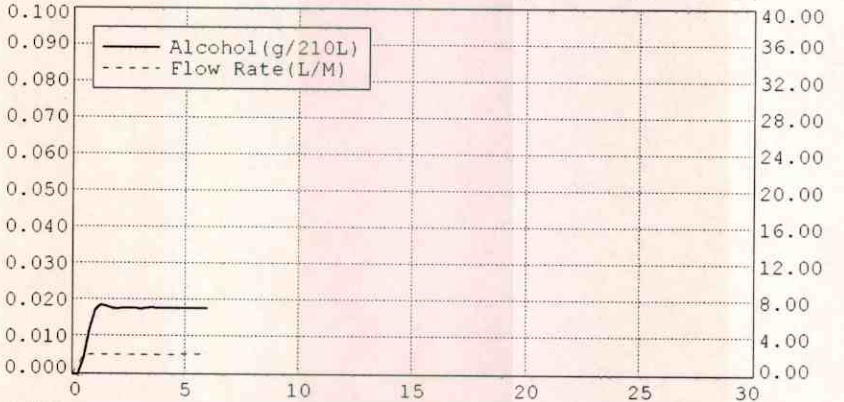
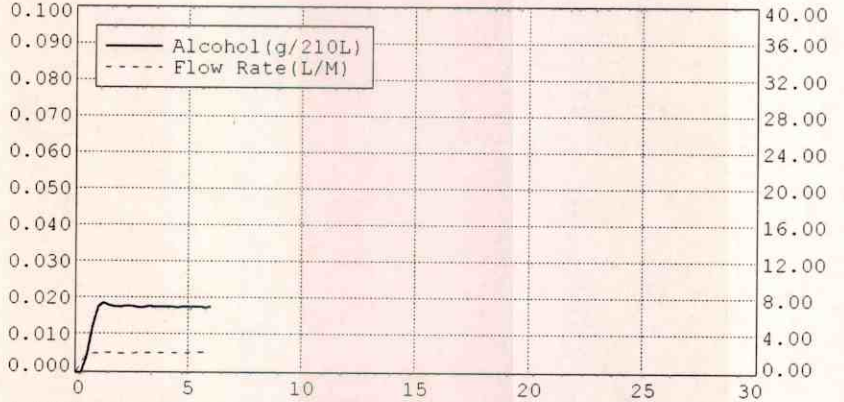
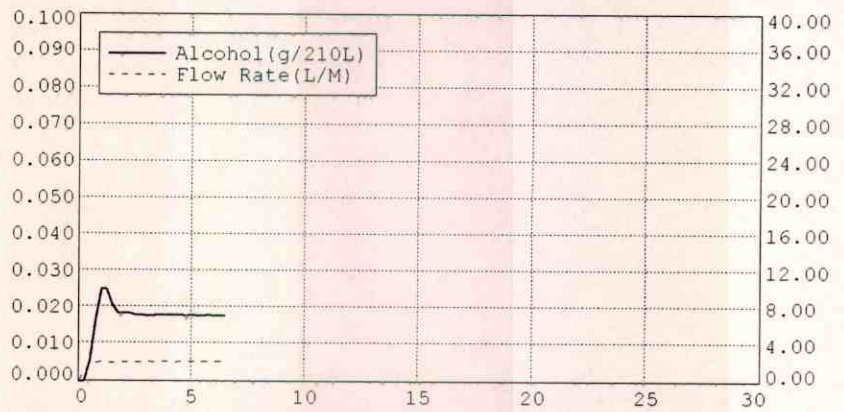
Date: 06/18/2021
 Time: 10:53:54

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.78: 0.020
 LOT #: AG928203
 EXPIRATION: 10/09/2021
 TANK PRESSURE: 413 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 10:55 |
| INTERNAL STANDARD | VERIFIED | 10:55 |
| EXTERNAL STANDARD | 0.019 | 10:55 |
| BLANK TEST | 0.000 | 10:56 |
| EXTERNAL STANDARD | 0.020 | 10:56 |
| BLANK TEST | 0.000 | 10:57 |
| EXTERNAL STANDARD | 0.020 | 10:57 |
| BLANK TEST | 0.000 | 10:58 |
| EXTERNAL STANDARD | 0.020 | 10:58 |
| BLANK TEST | 0.000 | 10:59 |
| EXTERNAL STANDARD | 0.019 | 10:59 |
| BLANK TEST | 0.000 | 11:00 |

Average = 0.0196
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100399

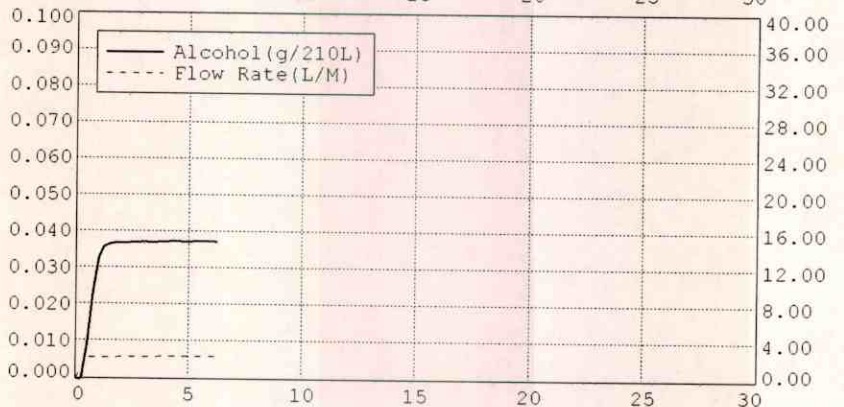
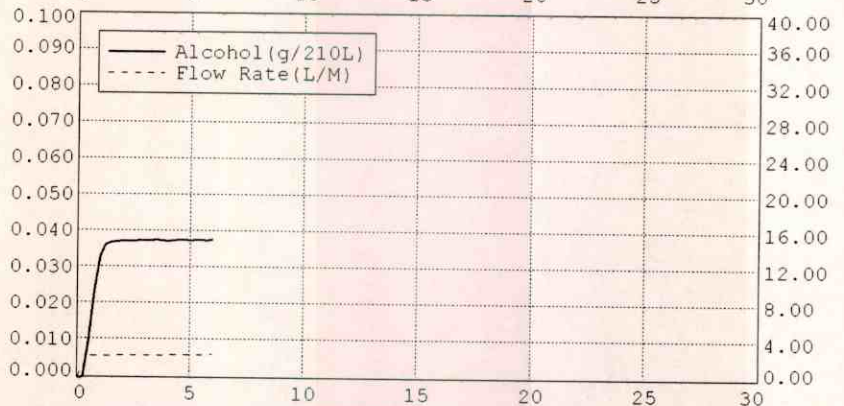
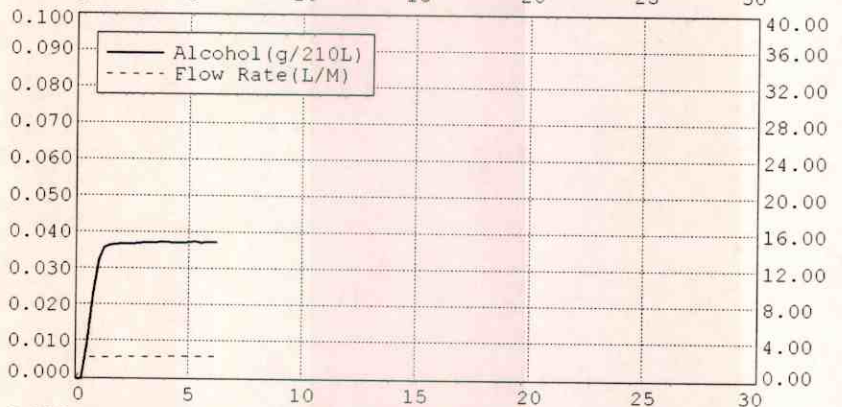
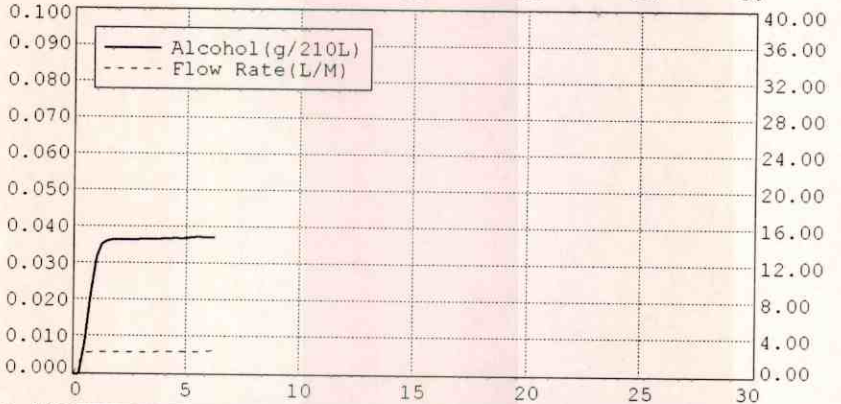
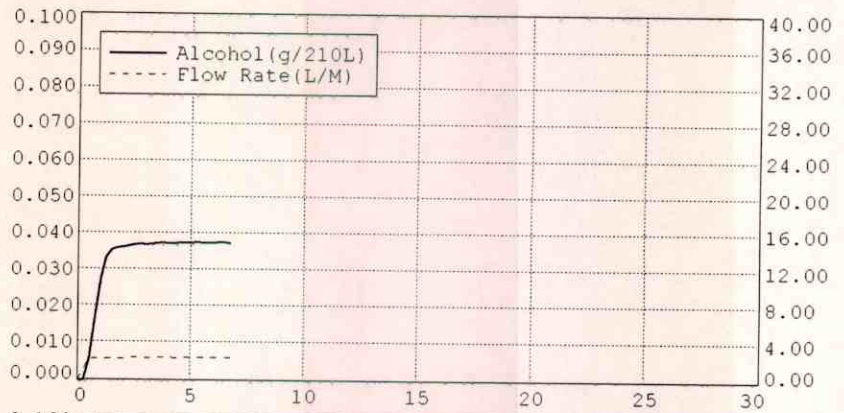
Date: 06/18/2021
 Time: 11:03:29

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.77: 0.040
 LOT #: AG111710
 EXPIRATION: 04/27/2023
 TANK PRESSURE: 1112 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 11:04 |
| INTERNAL STANDARD | VERIFIED | 11:04 |
| EXTERNAL STANDARD | 0.039 | 11:05 |
| BLANK TEST | 0.000 | 11:06 |
| EXTERNAL STANDARD | 0.039 | 11:06 |
| BLANK TEST | 0.000 | 11:07 |
| EXTERNAL STANDARD | 0.039 | 11:07 |
| BLANK TEST | 0.000 | 11:08 |
| EXTERNAL STANDARD | 0.039 | 11:08 |
| BLANK TEST | 0.000 | 11:09 |
| EXTERNAL STANDARD | 0.039 | 11:09 |
| BLANK TEST | 0.000 | 11:10 |

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100399

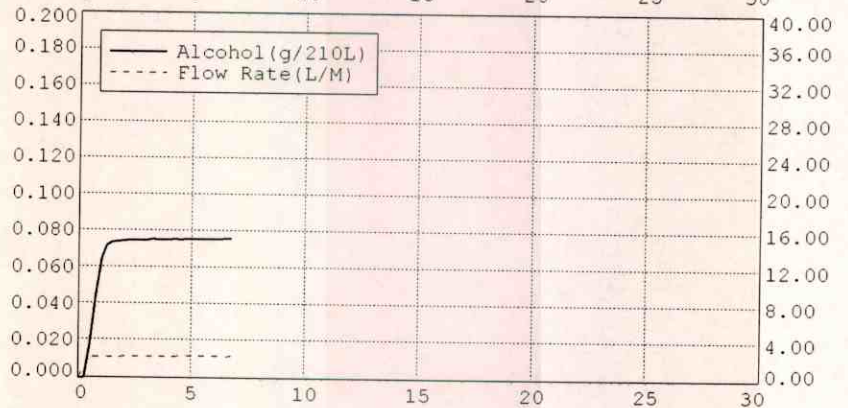
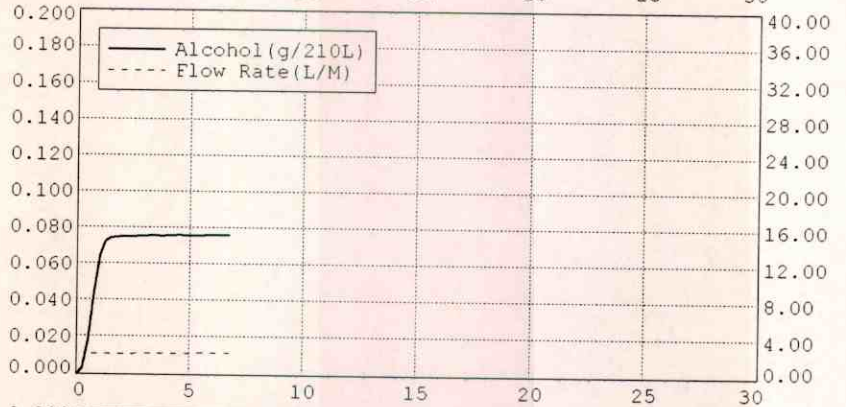
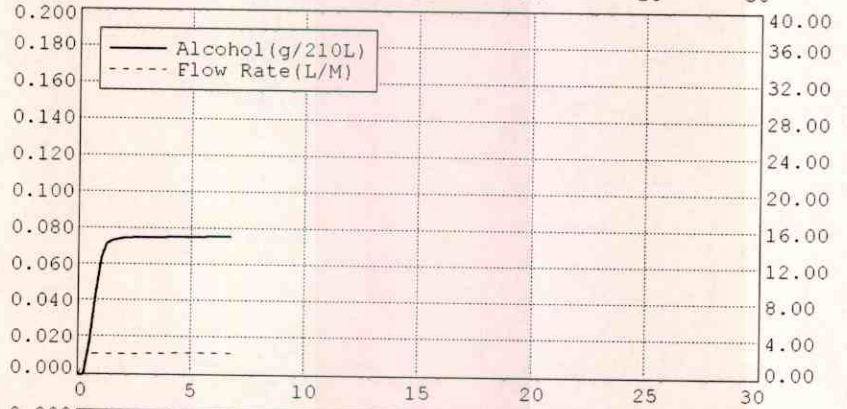
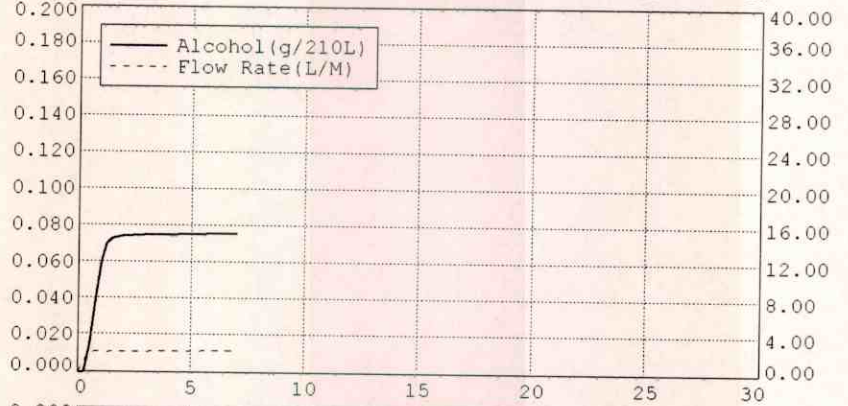
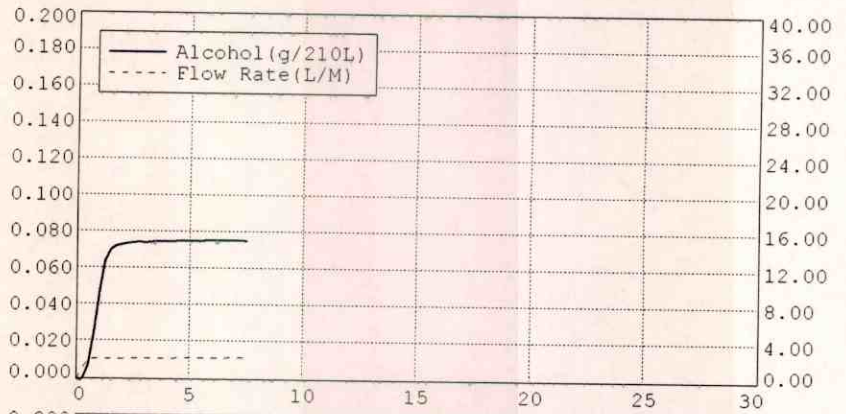
Date: 06/18/2021
 Time: 11:19:42

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.77: 0.080
 LOT #: AG018102
 EXPIRATION: 06/29/2022
 TANK PRESSURE: 1086 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 11:21 |
| INTERNAL STANDARD | VERIFIED | 11:21 |
| EXTERNAL STANDARD | 0.077 | 11:21 |
| BLANK TEST | 0.000 | 11:22 |
| EXTERNAL STANDARD | 0.077 | 11:22 |
| BLANK TEST | 0.000 | 11:23 |
| EXTERNAL STANDARD | 0.077 | 11:23 |
| BLANK TEST | 0.000 | 11:24 |
| EXTERNAL STANDARD | 0.078 | 11:24 |
| BLANK TEST | 0.000 | 11:25 |
| EXTERNAL STANDARD | 0.077 | 11:25 |
| BLANK TEST | 0.000 | 11:26 |

Average = 0.0772
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100399

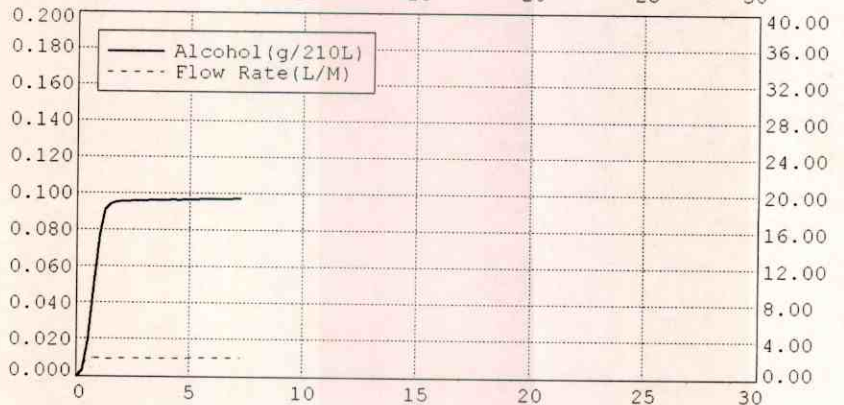
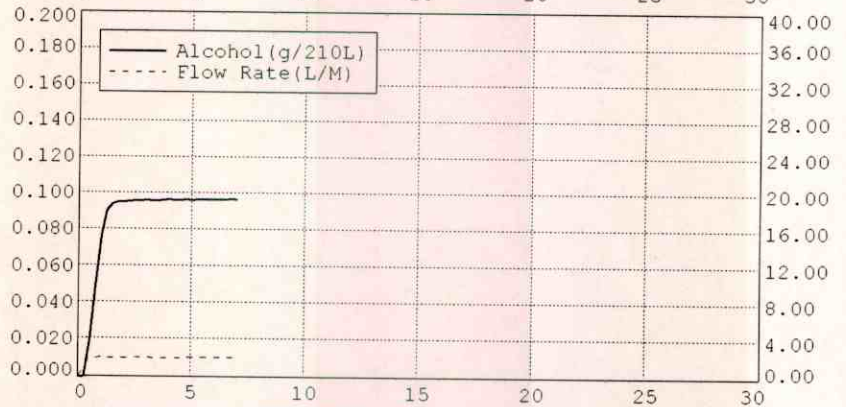
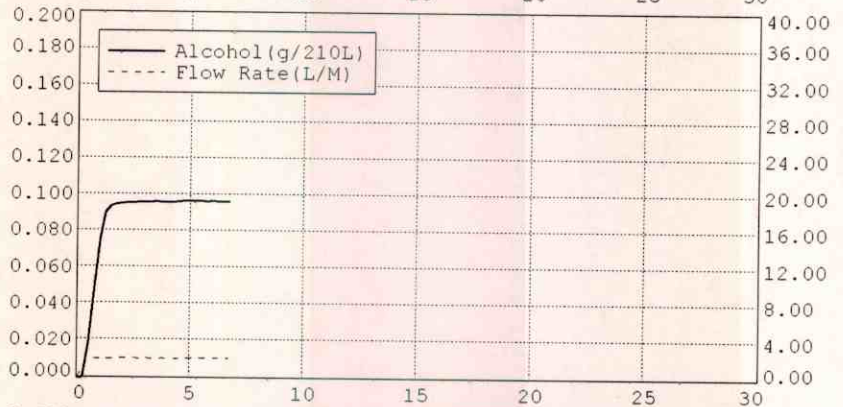
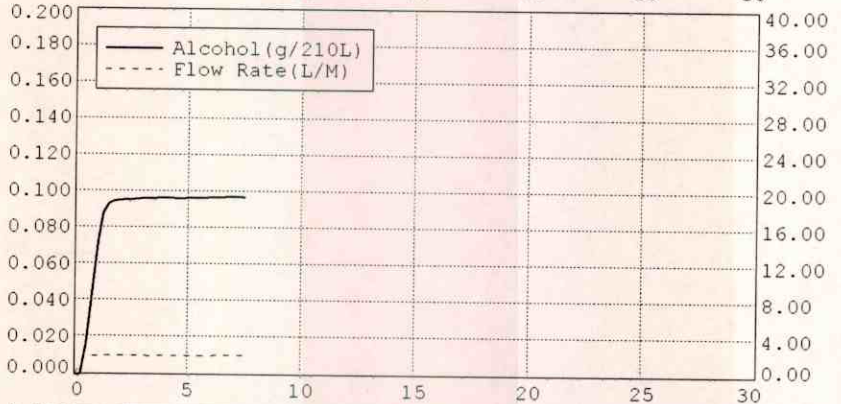
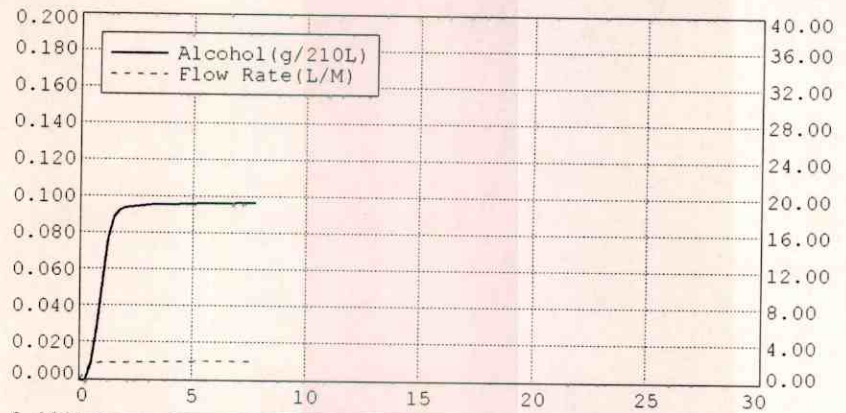
Date: 06/18/2021
 Time: 11:32:28

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.77: 0.100
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 441 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 11:35 |
| INTERNAL STANDARD | VERIFIED | 11:35 |
| EXTERNAL STANDARD | 0.098 | 11:35 |
| BLANK TEST | 0.000 | 11:36 |
| EXTERNAL STANDARD | 0.098 | 11:36 |
| BLANK TEST | 0.000 | 11:37 |
| EXTERNAL STANDARD | 0.098 | 11:38 |
| BLANK TEST | 0.000 | 11:38 |
| EXTERNAL STANDARD | 0.098 | 11:39 |
| BLANK TEST | 0.000 | 11:40 |
| EXTERNAL STANDARD | 0.098 | 11:40 |
| BLANK TEST | 0.000 | 11:41 |

Average = 0.0980
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100399

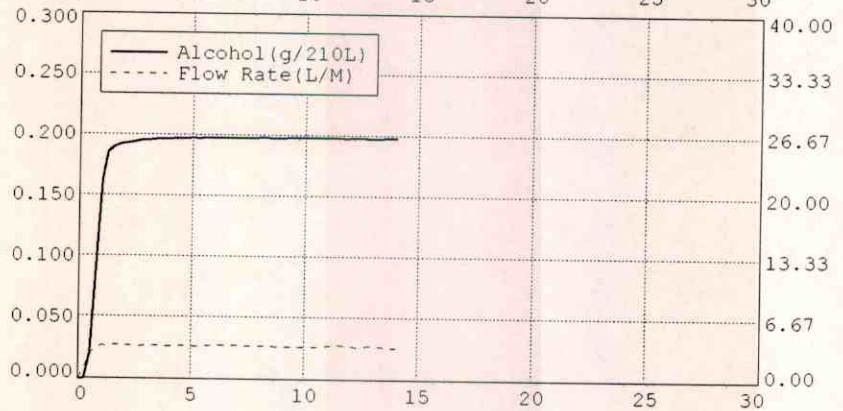
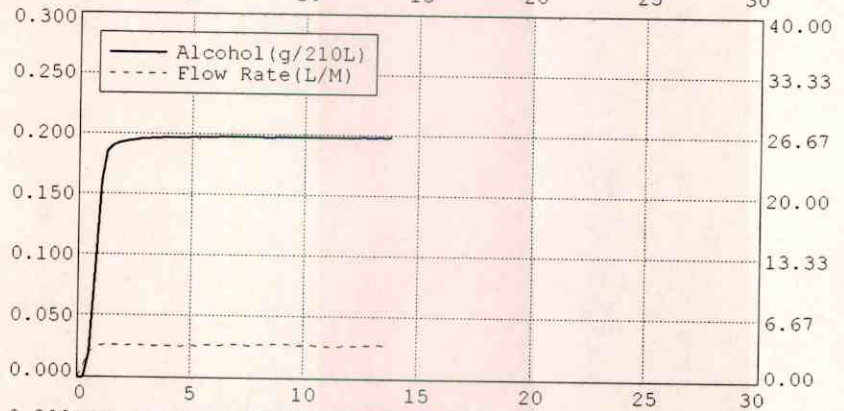
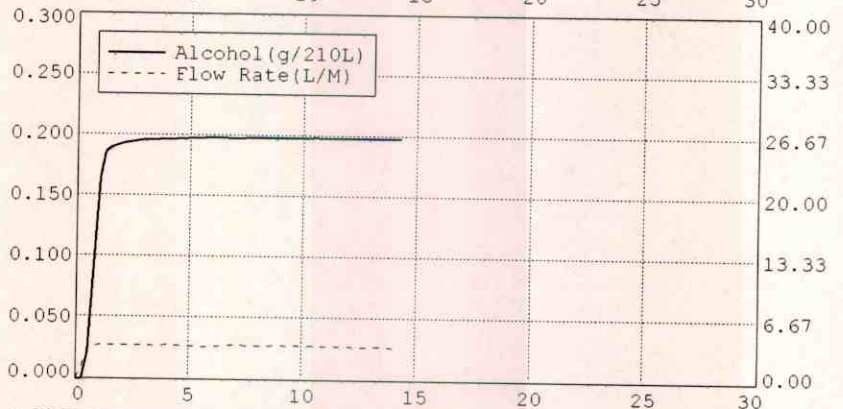
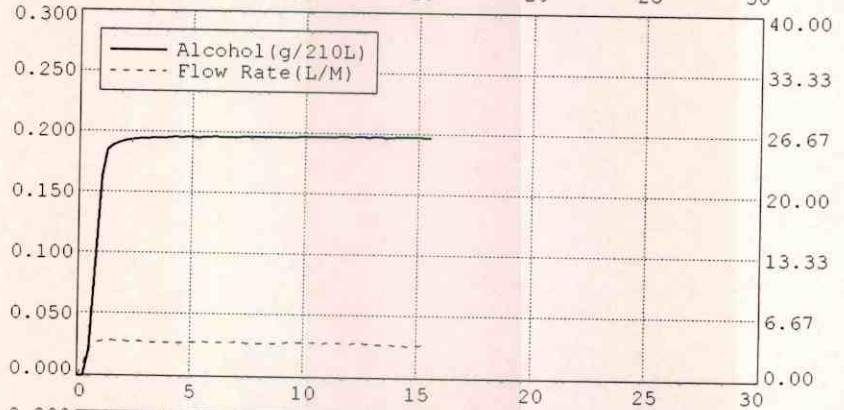
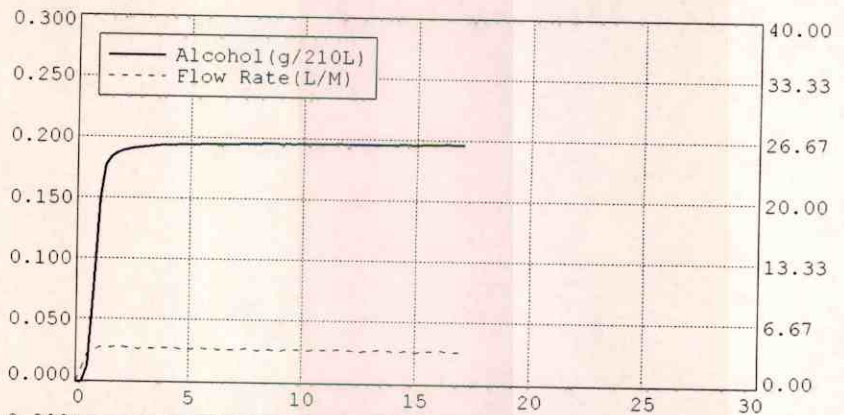
Date: 06/18/2021
 Time: 12:37:36

EXTERNAL STANDARD INFORMATION

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

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 12:38 |
| INTERNAL STANDARD | VERIFIED | 12:38 |
| EXTERNAL STANDARD | 0.197 | 12:39 |
| BLANK TEST | 0.000 | 12:40 |
| EXTERNAL STANDARD | 0.198 | 12:40 |
| BLANK TEST | 0.000 | 12:41 |
| EXTERNAL STANDARD | 0.199 | 12:41 |
| BLANK TEST | 0.000 | 12:42 |
| EXTERNAL STANDARD | 0.199 | 12:42 |
| BLANK TEST | 0.000 | 12:43 |
| EXTERNAL STANDARD | 0.199 | 12:44 |
| BLANK TEST | 0.000 | 12:45 |

Average = 0.1984
 Std Dev = 0.0009



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100399

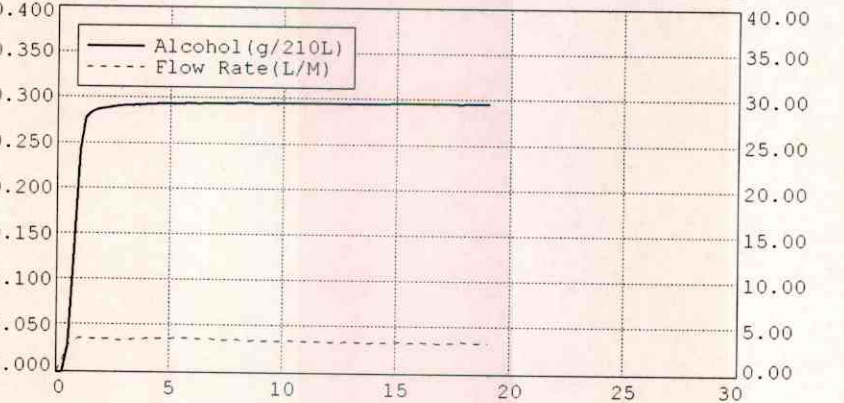
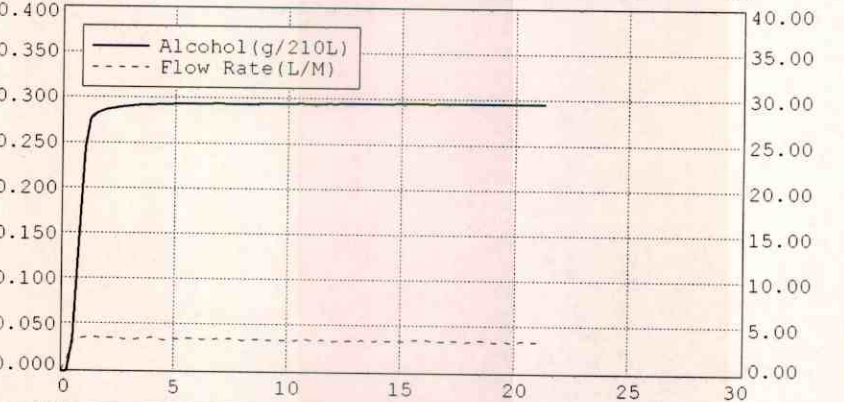
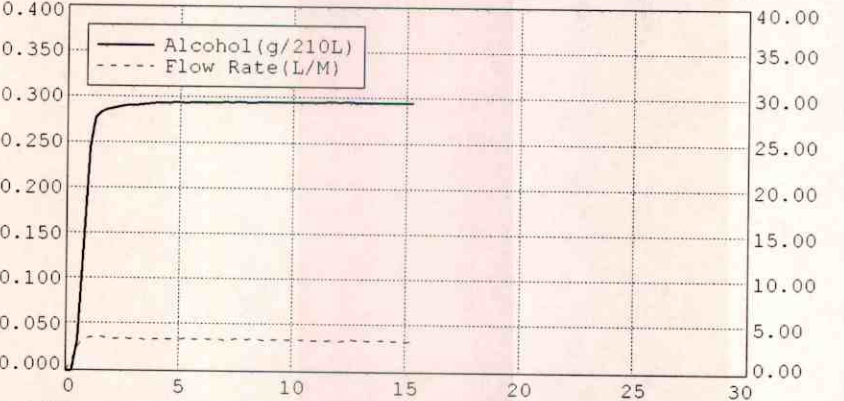
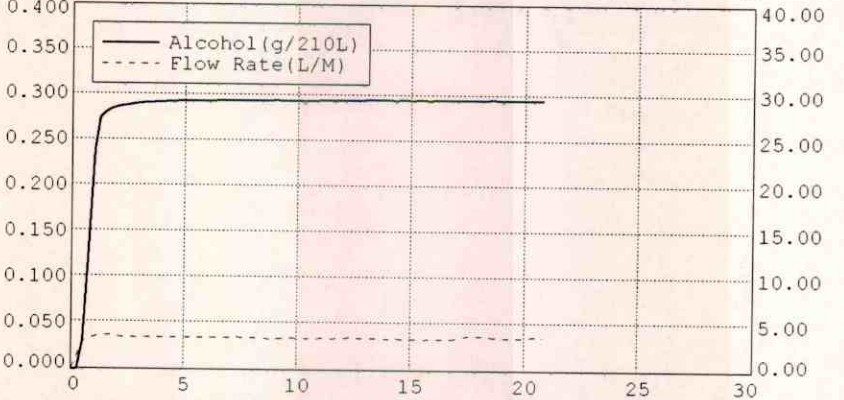
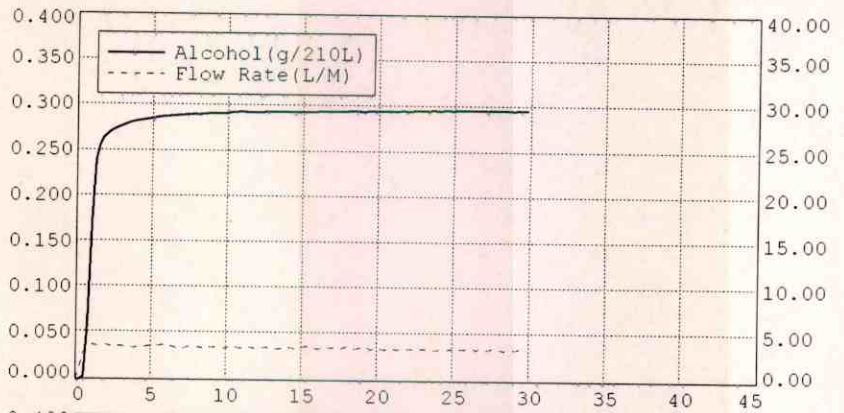
Date: 06/18/2021
 Time: 12:52:54

EXTERNAL STANDARD INFORMATION

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

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 12:54 |
| INTERNAL STANDARD | VERIFIED | 12:54 |
| EXTERNAL STANDARD | 0.295 | 12:55 |
| BLANK TEST | 0.000 | 12:56 |
| EXTERNAL STANDARD | 0.295 | 12:56 |
| BLANK TEST | 0.000 | 12:57 |
| EXTERNAL STANDARD | 0.295 | 12:57 |
| BLANK TEST | 0.000 | 12:58 |
| EXTERNAL STANDARD | 0.296 | 12:59 |
| BLANK TEST | 0.000 | 13:00 |
| EXTERNAL STANDARD | 0.296 | 13:00 |
| BLANK TEST | 0.000 | 13:01 |

Average = 0.2954
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100399

Date: 06/18/2021
Time: 13:27:14

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

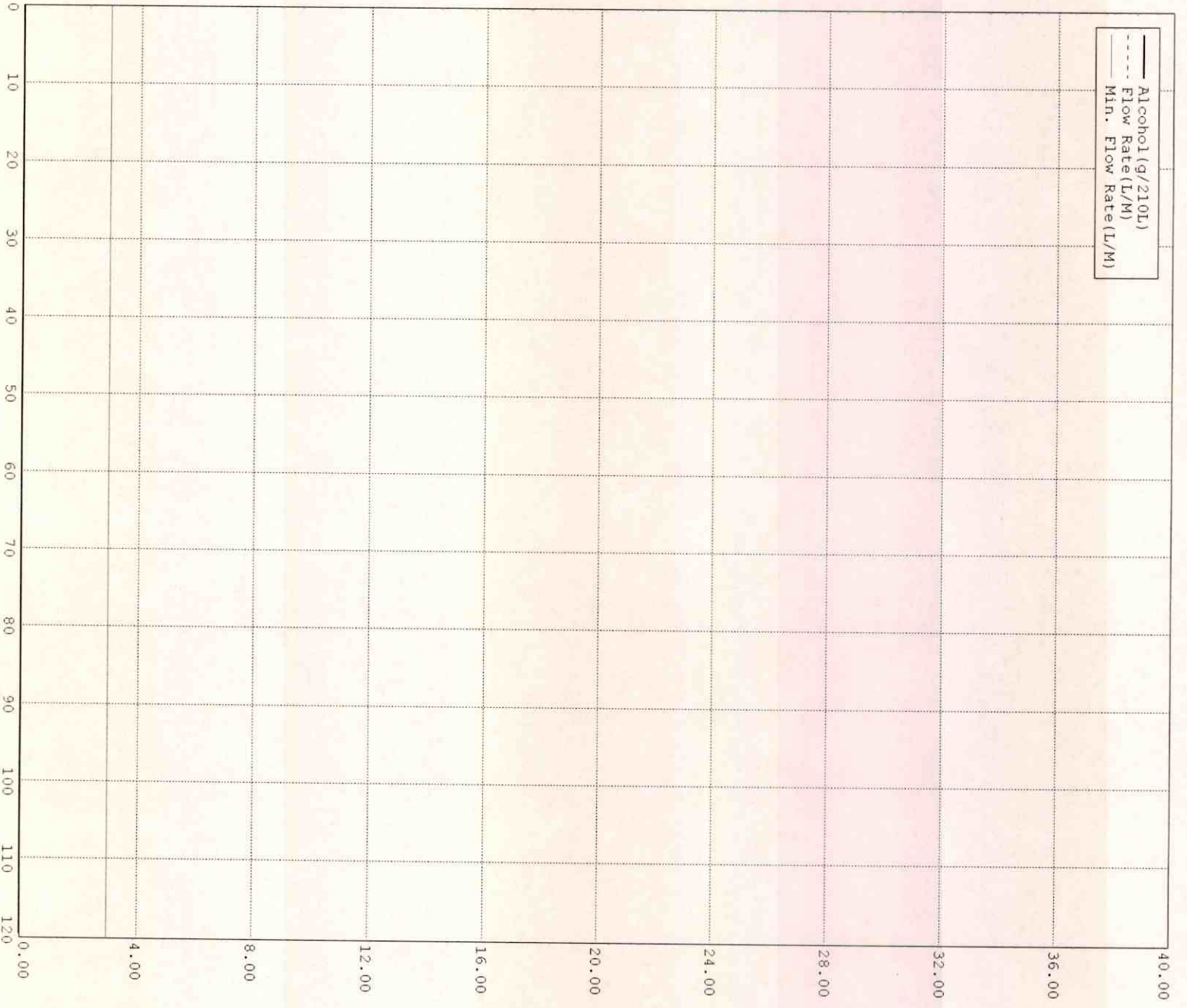
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.78: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

| DIAGNOSTIC CHECK | PASSED | 13:28 |
|-------------------|------------|-------|
| BLANK TEST | 0.000 | 13:28 |
| INTERNAL STANDARD | VERIFIED | 13:28 |
| EXTERNAL STANDARD | 0.077 | 13:28 |
| BLANK TEST | 0.000 | 13:29 |
| SUBJECT SAMPLE | INCOMPLETE | 13:31 |

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100399

Date: 06/18/2021
Time: 13:36:46

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

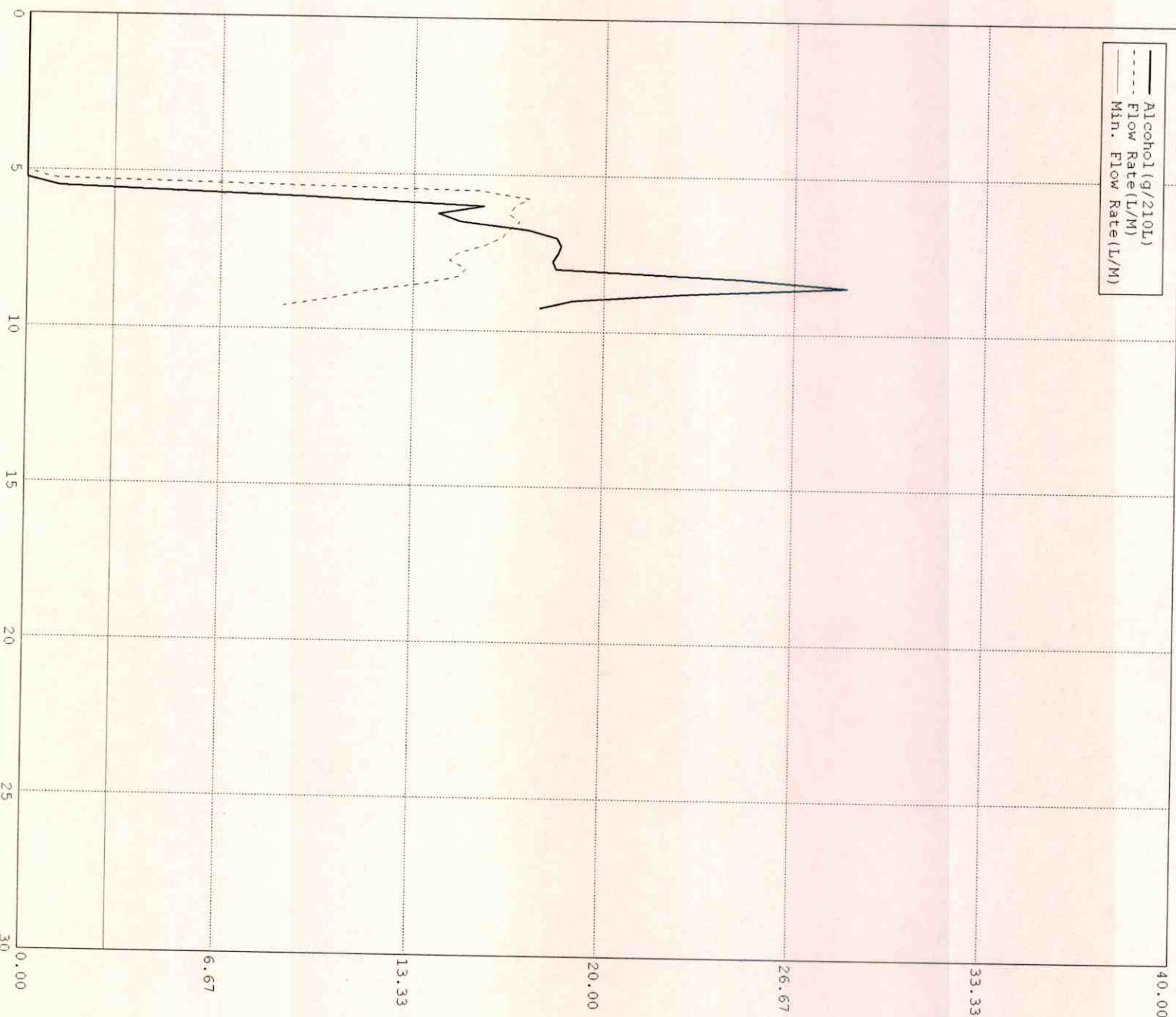
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.78: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

| DIAGNOSTIC CHECK | PASSED | 13:41 |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 13:41 |
| INTERNAL STANDARD | VERIFIED | 13:41 |
| EXTERNAL STANDARD | 0.077 | 13:41 |
| BLANK TEST | 0.000 | 13:42 |
| SUBJECT SAMPLE | INVALID | 13:42 |

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100399

Date: 06/23/2021
Time: 13:57:28

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

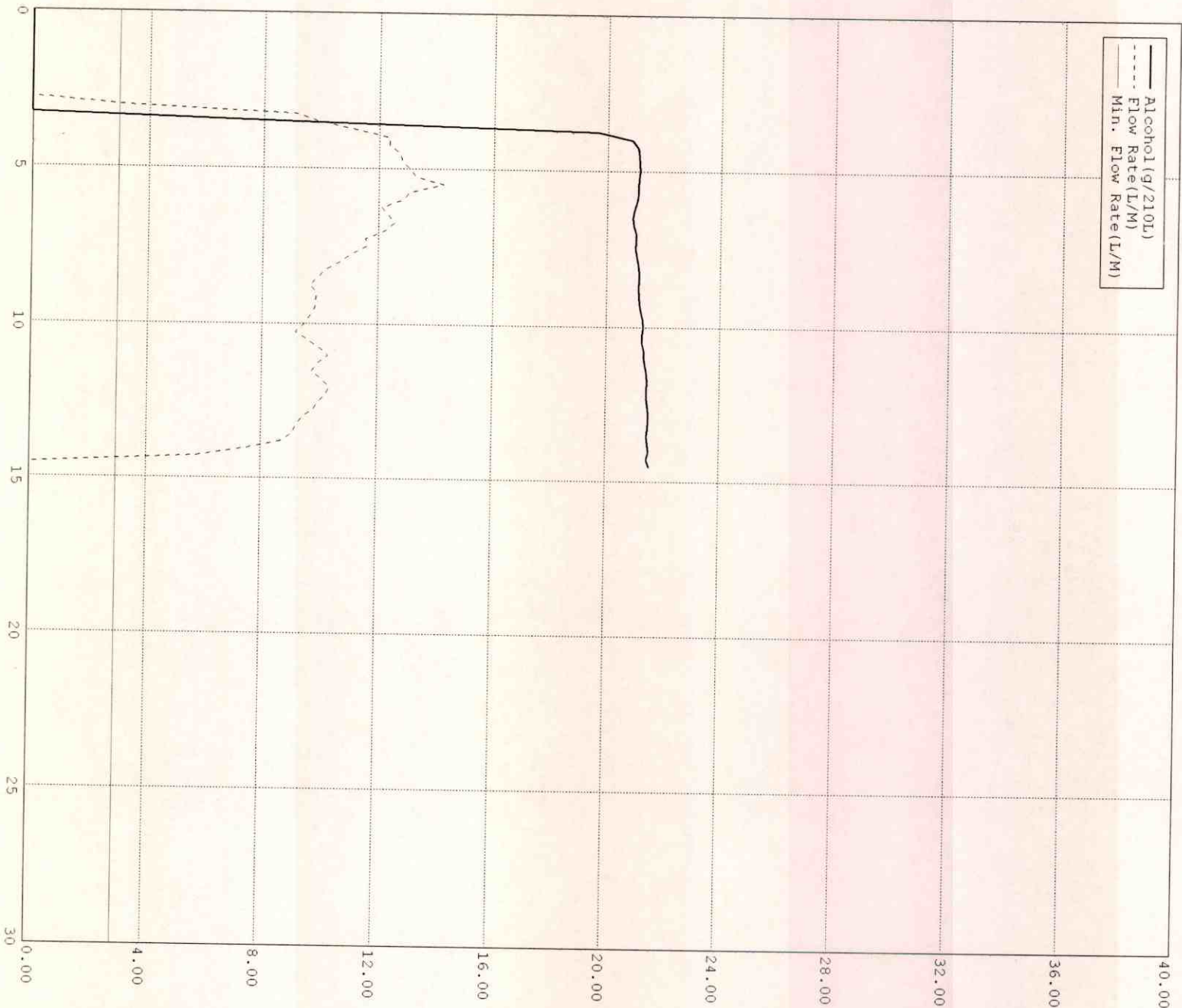
DEPT/AGENCY:
INTERFERENCE ACETONE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.36: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

| DIAGNOSTIC CHECK | PASSED | 13:58 |
|-------------------------|-----------|-------|
| BLANK TEST | 0.000 | 13:58 |
| INTERNAL STANDARD | VERIFIED | 13:58 |
| Xq = 0.085 (1.82%) | | |
| EXTERNAL STANDARD | 0.076 | 13:59 |
| X[1] = 0.0755 (-0.0015) | (0.0023) | |
| BLANK TEST | 0.000 | 13:59 |
| SUBJECT SAMPLE | XXX | 14:00 |
| X[1] = 0.1089 (-0.0208) | (-0.0007) | |

Interference Detected

Filter 2 Avg: -0.0008
Filter 3 Avg: 0.0021
OMB 6/23/21



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100399

Date: 06/23/2021
Time: 14:04:15

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

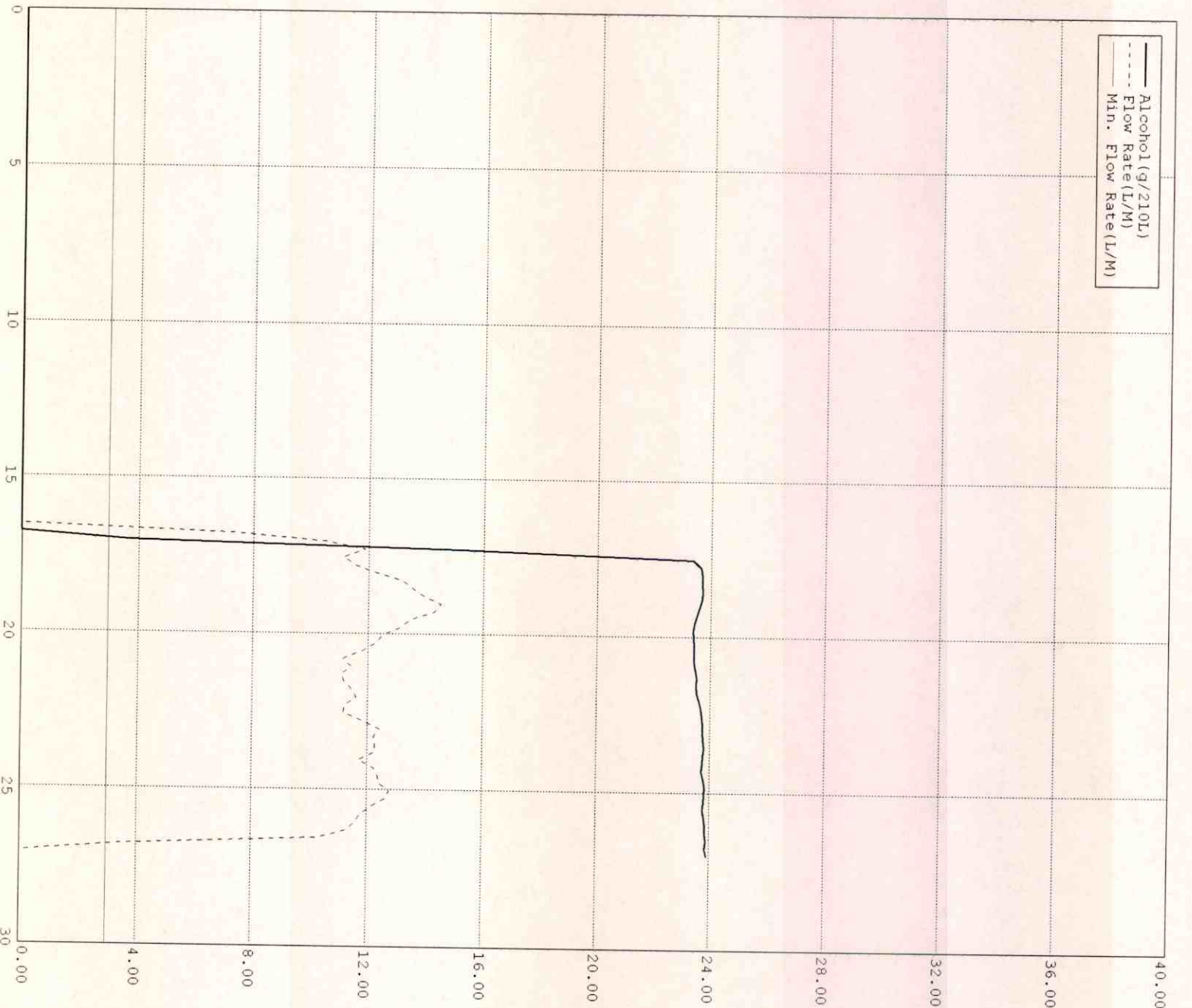
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.36: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK
BLANK TEST PASSED 14:05
INTERNAL STANDARD VERIFIED 14:05
Xq = 0.085 (1.62%)
EXTERNAL STANDARD 0.076 14:05
X[1] = 0.0760 (-0.0006) (0.0021)
BLANK TEST 0.000 14:06
SUBJECT SAMPLE XXX 14:07
X[1] = 0.1205 (-0.0330) (0.0012)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100399

Date: 06/23/2021
Time: 14:09:42

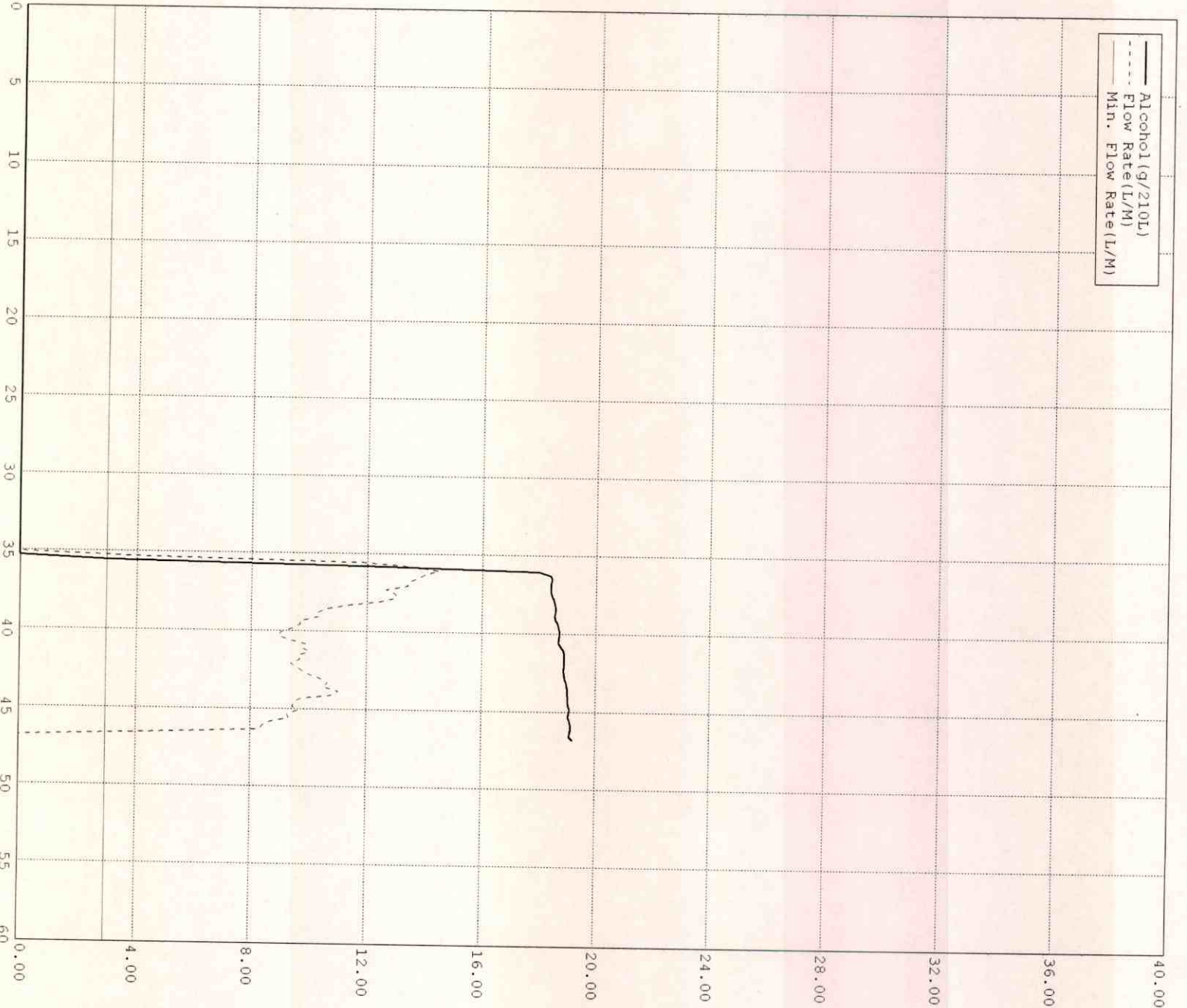
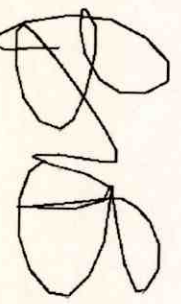
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
INTERFERENCE NEGATIVE CONTROL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.36: 0.079
LOT #: AG018102
EXPIRATION: 06/29/2022

| DIAGNOSTIC CHECK | PASSED | 14:11 |
|----------------------------|-----------|-------|
| BLANK TEST | 0.000 | 14:11 |
| INTERNAL STANDARD | VERIFIED | 14:11 |
| Xq = 0.086 (0.71%) | | |
| EXTERNAL STANDARD | 0.076 | 14:11 |
| X[1] = 0.0763 (-0.0007) | (0.0017) | |
| BLANK TEST | 0.000 | 14:12 |
| SUBJECT SAMPLE (Vol=1.99L) | 0.097 | 14:13 |
| X[1] = 0.0971 (0.0000) | (-0.0002) | |
| BLANK TEST | 0.000 | 14:14 |
| EXTERNAL STANDARD | 0.076 | 14:14 |
| X[1] = 0.0760 (-0.0003) | (0.0021) | |
| BLANK TEST | 0.000 | 14:15 |



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt : 100399

Date: 06/18/2021
Time: 13:54:43

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

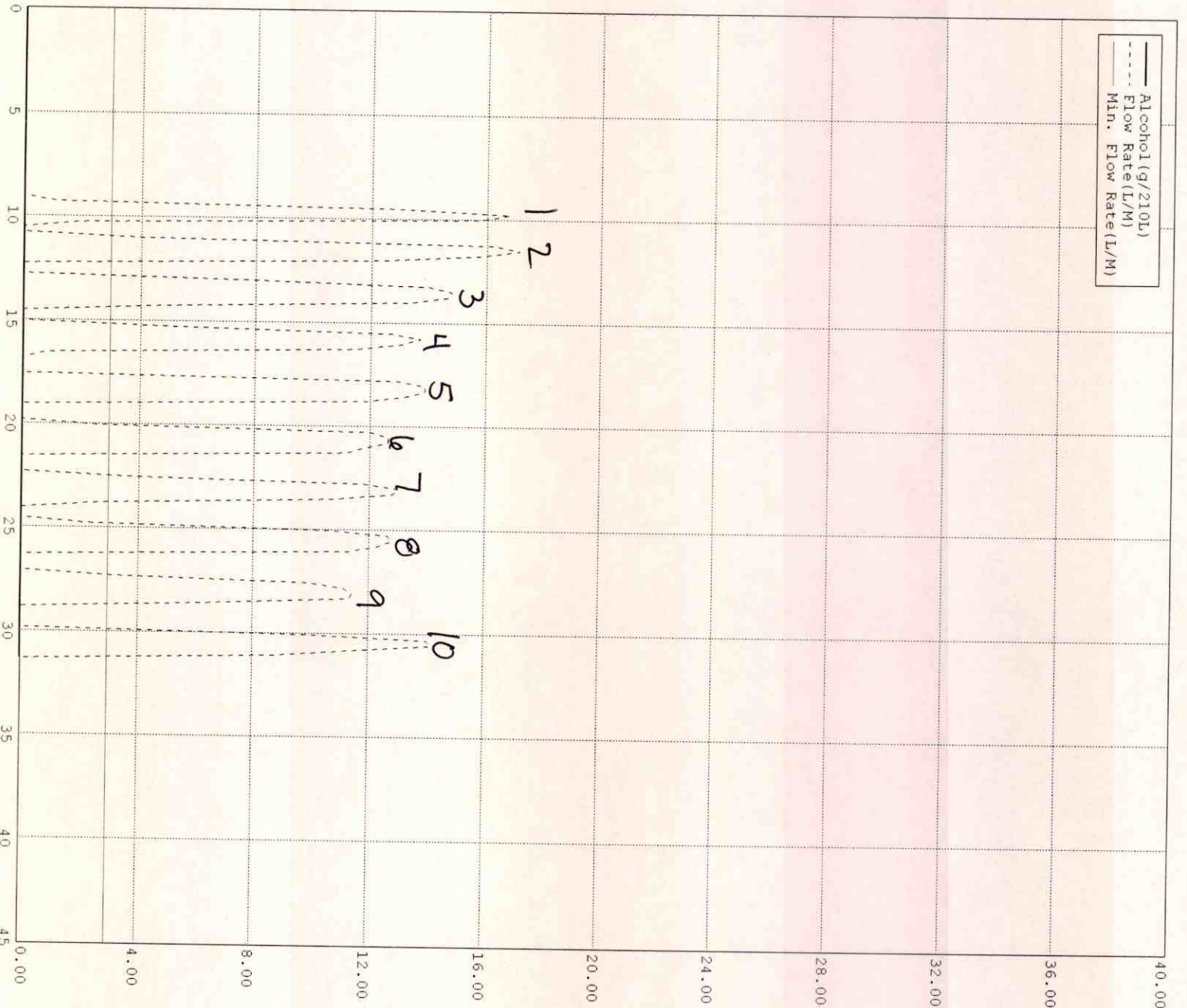
DEPT/AGENCY:
EXCEEDED ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.78: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

| DIAGNOSTIC CHECK | PASSED | 13:56 |
|-------------------|--------|-------|
| BLANK TEST | 0.000 | 13:56 |
| INTERNAL STANDARD | 0.077 | 13:56 |
| EXTERNAL STANDARD | 0.000 | 13:57 |
| BLANK TEST | 0.000 | 13:57 |
| SUBJECT SAMPLE | XXX | 13:58 |

Maximum Attempts Exceeded

BRB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100399

Date: 06/18/2021
Time: 13:45:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

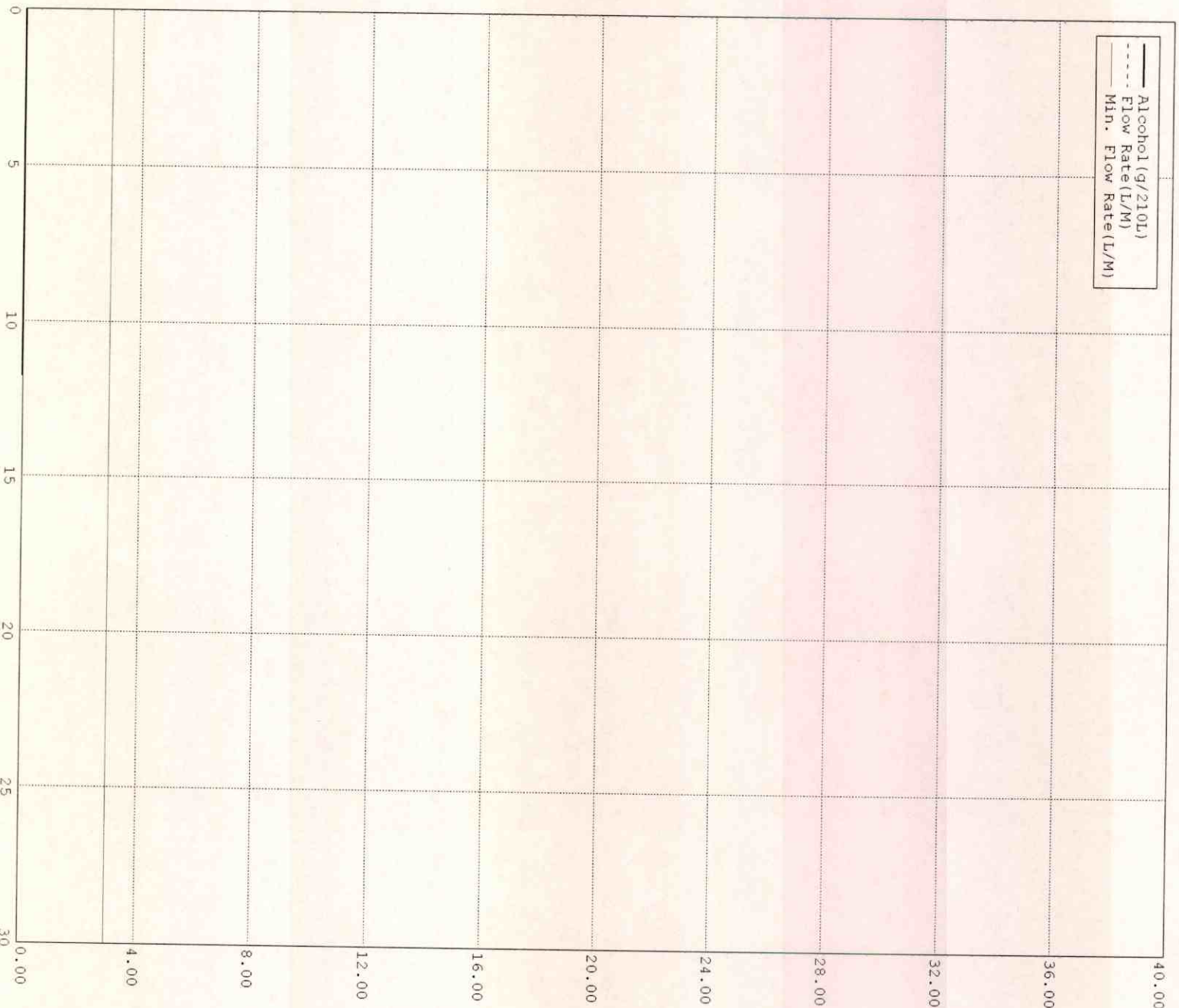
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.78: 0.080
LOT #: AG018102
EXPIRATION: 06/29/2022

DIAGNOSTIC CHECK
BLANK TEST PASSED 13:51
INTERNAL STANDARD 0.000 13:51
EXTERNAL STANDARD 0.077 13:51
BLANK TEST 0.000 13:52

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100399

Date: 06/23/2021
Time: 14:34:58

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
NON DRINKING SUBJECT
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.35: 0.078
LOT #: AG018102
EXPIRATION: 06/29/2022

| DIAGNOSTIC CHECK | PASSED | 14:35 |
|----------------------------|----------|-------|
| 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 (Vol=2.02L) | 0.000 | 14:37 |
| BLANK TEST | 0.000 | 14:38 |
| EXTERNAL STANDARD | 0.076 | 14:39 |
| BLANK TEST | 0.000 | 14:39 |

BBMB

