

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 100679 Analyst C. Bryant Start Date 1/13/16

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 ILMO Lot 02915020A2 Exp 3/5/17
- ii. 0.040g/210L Mnf ILMO Lot 02915040A3 Exp 3/5/17
- iii. 0.080g/210L Mnf ILMO Lot 01315080A3 Exp 2/5/17
- iv. 0.100g/210L Mnf ILMO Lot 02915100A1 Exp 3/5/17
- v. 0.200g/210L Mnf Both Lot 15130 Exp 5/11/17
 - 1. Simulator S/N DR6267 Date Calibrated 1/20/15
- vi. 0.300g/210L Mnf Both Lot 15170 Exp 4/20/17
 - 1. Simulator S/N DR4162 Date Calibrated 1/19/15

5. Functional Tests (attached)

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

- i. Acetone - Mnf Both Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N DR4163 Date Calibrated 1/19/15
- ii. Isopropanol - Mnf Both Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N SD1170 Date Calibrated 1/20/15
- iii. Negative Control - Mnf Both Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N DR4178 Date Calibrated 1/19/15

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 1/13/16

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 01/13/2016
Time: 07:59:39

VERSIONS

DMT: 3.01
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.72 V PASSED
(1.00 V - 2.34 V)
Cooler Voltage = 1.71 V PASSED
(1.00 V - 2.32 V)
Bias Voltage = 80 V PASSED
(47 V - 111 V)
Chopper Freq = 533 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.2 in

PUMP INFO

Flow Rate = 4.838 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
(0.001 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.099 0.35% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100679

Date: 01/13/2016
Time: 8:17 AM

Temperatures (°C)

Sample Cell: 49.3°C
Breath Tube: 47.9°C

Current Barometer 29.1 in
Volume (Ltr) 1.43

Settings

Lamp: 1.85 V
Bias: 80 V
Cooler: 1.76 V
Chopper: 533 Hz

Voltages (V)

Flow: 1.05 V
Detector: 0.017 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 10/26/2011
Time: 06:48:21

| | | | | |
|-----|---|----------|--------|----------------|
| Ca | = | 0.1000 | | |
| CAL | = | 0.972703 | 0.800 | <= CAL < 1.200 |
| b1 | = | 0.0003 | 0.0000 | <= b1 < 0.0040 |
| b2 | = | 0.0035 | 0.0010 | <= b2 < 0.0100 |
| b3 | = | 0.0000 | 0.0000 | <= b3 < 0.0040 |
| Xq | = | 0.0998 | 0.0500 | <= Xq < 0.2000 |
| a21 | = | 1.124684 | 1.050 | <= a21 < 1.300 |
| a31 | = | 0.535932 | 0.300 | <= a31 < 0.800 |

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 01/13/2016
Time: 08:18:56

SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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

DEPT/AGENCY:
AAA1

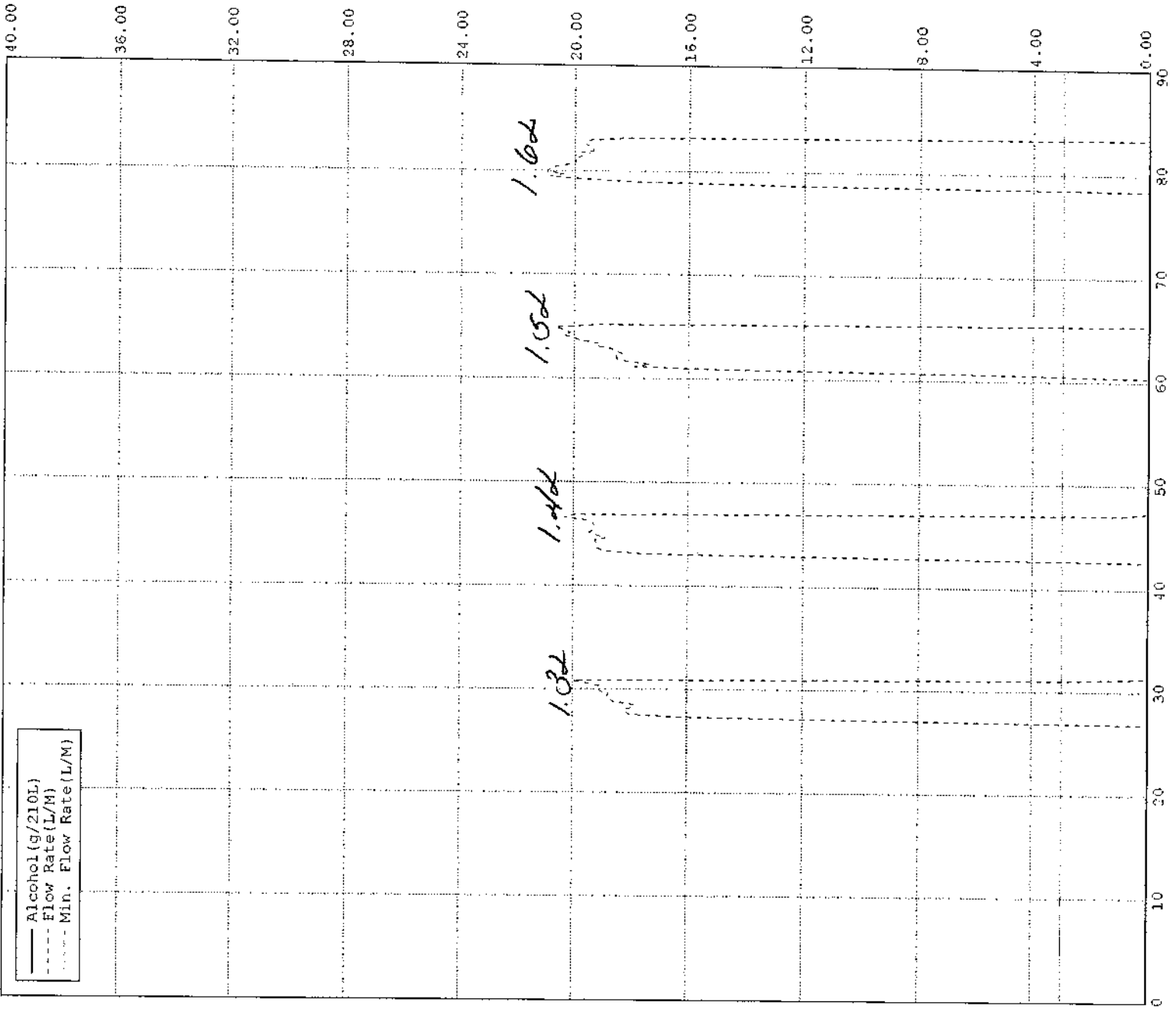
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.09: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

| | | |
|----------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 08:20 |
| BLANK TEST | 0.000 | 08:20 |
| INTERNAL STANDARD | VERIFIED | 08:20 |
| EXTERNAL STANDARD | 0.077 | 08:20 |
| BLANK TEST | 0.000 | 08:21 |
| SUBJECT SAMPLE (Vol=1.54L) | 0.000 | 08:23 |
| BLANK TEST | 0.000 | 08:24 |
| EXTERNAL STANDARD | 0.078 | 08:24 |
| BLANK TEST | 0.000 | 08:25 |

CS



LINEARITY CHECK

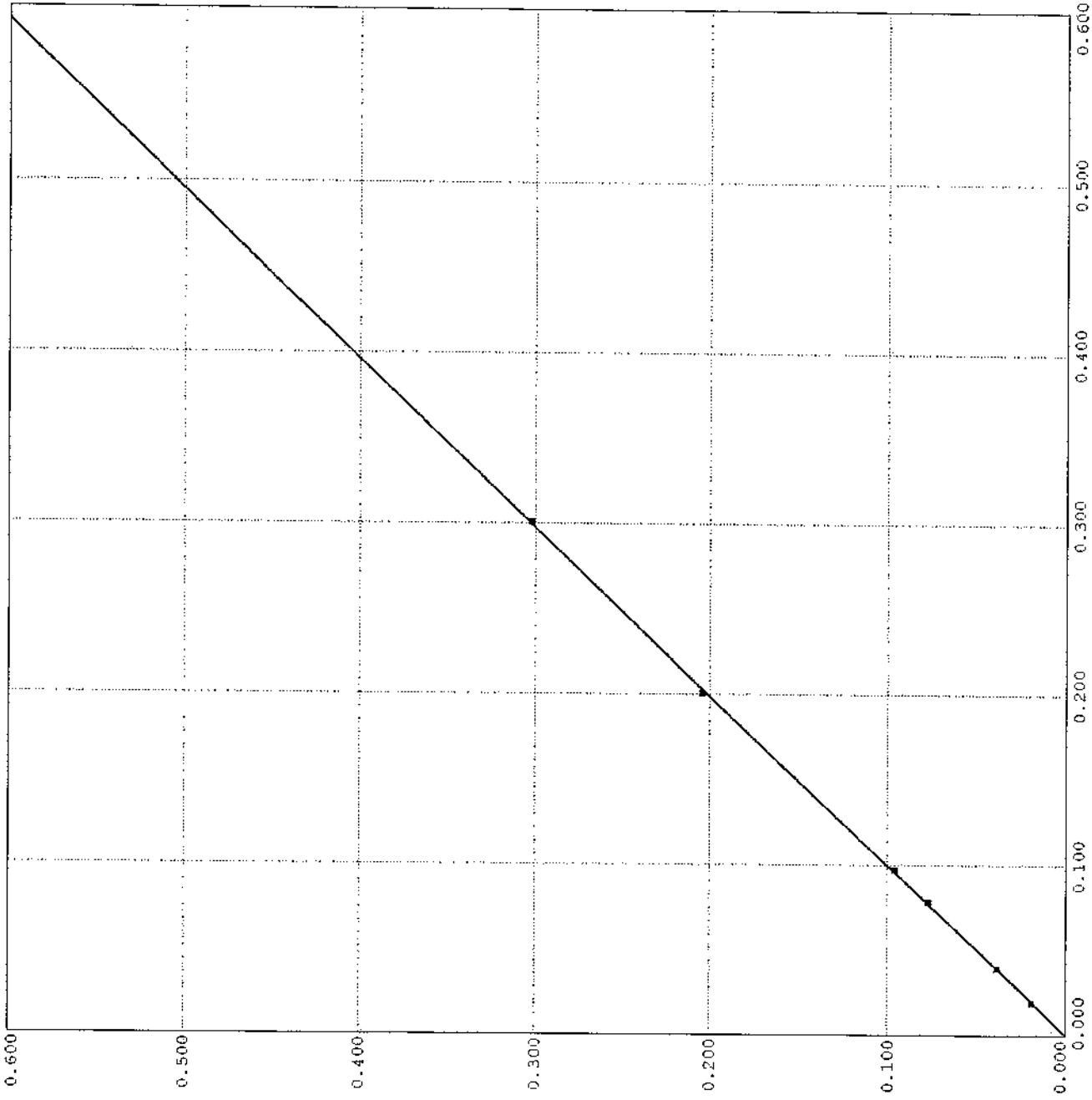
Alaska Department of Public Safety
 DATAMASTER dmt: 100679

Date: 01/13/2016
 Time: 08:31:25

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

| TARGET | AVERAGE | STD. DEV. |
|--------|---------|-----------|
| 0.019 | 0.0200 | 0.0000 |
| 0.039 | 0.0394 | 0.0005 |
| 0.078 | 0.0778 | 0.0004 |
| 0.097 | 0.0970 | 0.0000 |
| 0.200 | 0.2050 | 0.0007 |
| 0.300 | 0.3030 | 0.0000 |

SLOPE = 1.013749
 R² = 0.999829



CS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100679

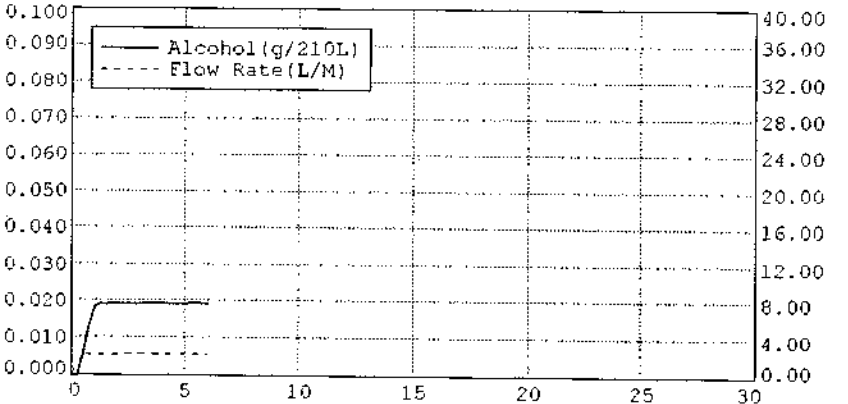
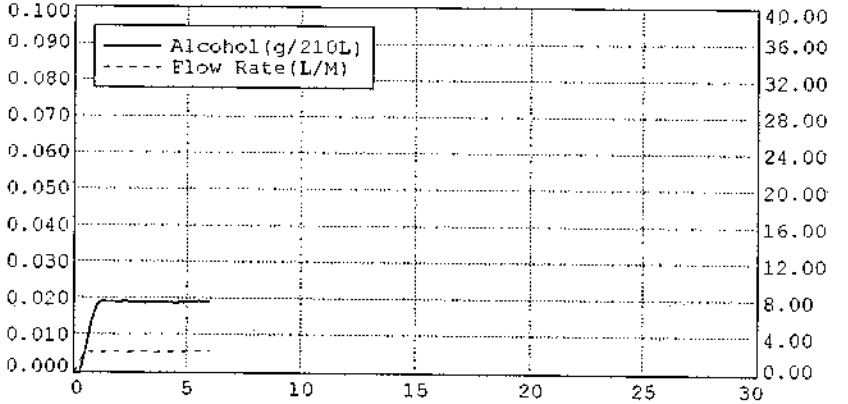
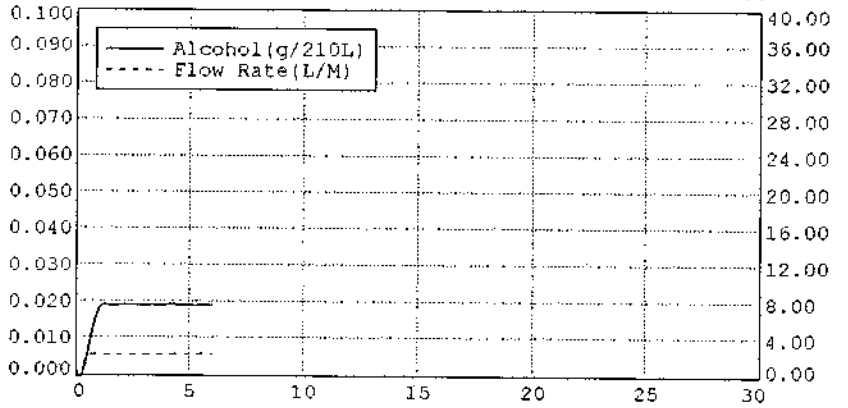
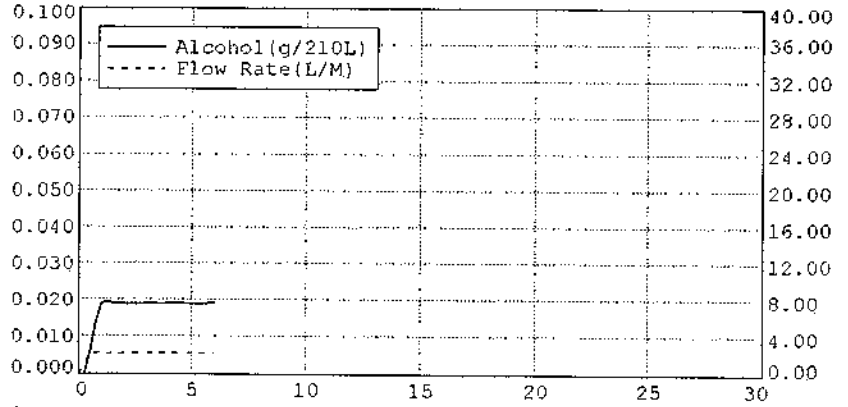
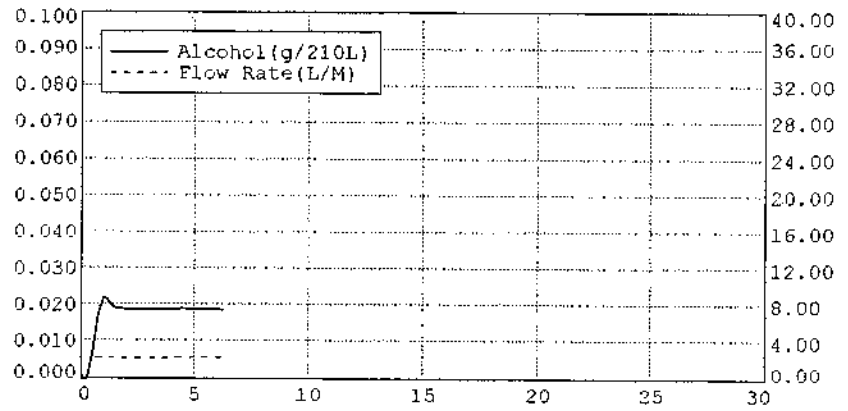
Date: 01/13/2016
 Time: 08:31:26

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.09: 0.019
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1021 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 08:32 |
| INTERNAL STANDARD | VERIFIED | 08:32 |
| EXTERNAL STANDARD | 0.020 | 08:33 |
| BLANK TEST | 0.000 | 08:33 |
| EXTERNAL STANDARD | 0.020 | 08:34 |
| BLANK TEST | 0.000 | 08:35 |
| EXTERNAL STANDARD | 0.020 | 08:35 |
| BLANK TEST | 0.000 | 08:36 |
| EXTERNAL STANDARD | 0.020 | 08:36 |
| BLANK TEST | 0.000 | 08:37 |
| EXTERNAL STANDARD | 0.020 | 08:37 |
| BLANK TEST | 0.000 | 08:38 |

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100679

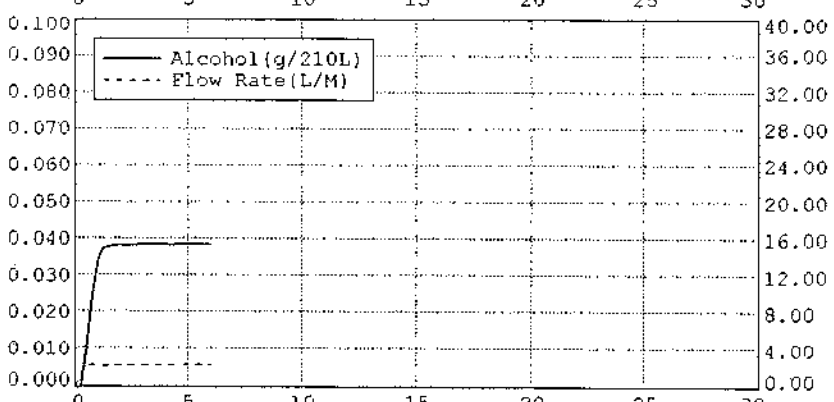
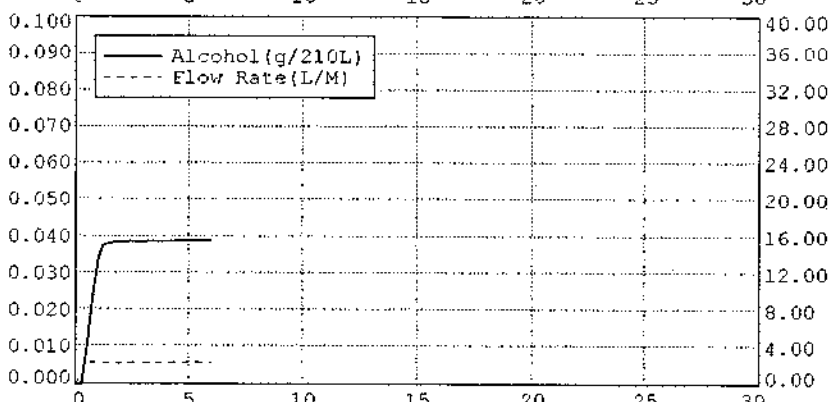
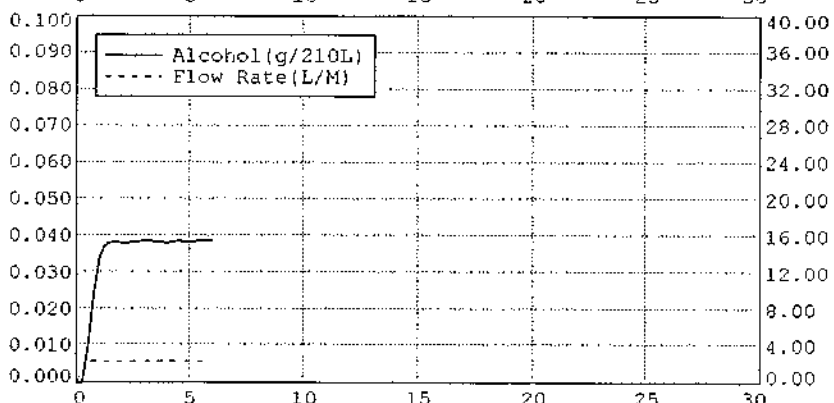
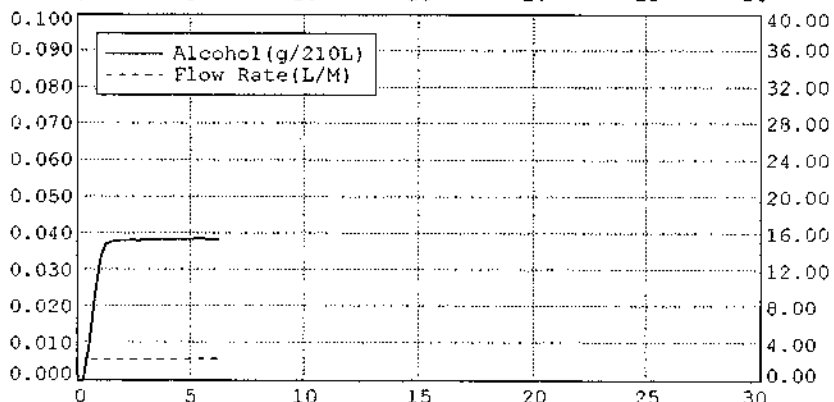
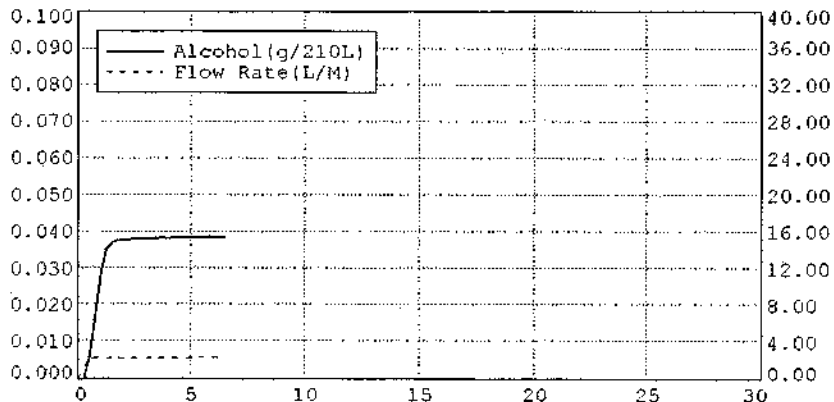
Date: 01/13/2016
Time: 08:38:57

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.10: 0.039
LOT #: 02915040A3
EXPIRATION: 03/05/2017
TANK PRESSURE: 1054 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 08:40 |
| INTERNAL STANDARD | VERIFIED | 08:40 |
| EXTERNAL STANDARD | 0.039 | 08:40 |
| BLANK TEST | 0.000 | 08:41 |
| EXTERNAL STANDARD | 0.039 | 08:41 |
| BLANK TEST | 0.000 | 08:42 |
| EXTERNAL STANDARD | 0.039 | 08:42 |
| BLANK TEST | 0.000 | 08:43 |
| EXTERNAL STANDARD | 0.040 | 08:43 |
| BLANK TEST | 0.000 | 08:44 |
| EXTERNAL STANDARD | 0.040 | 08:45 |
| BLANK TEST | 0.000 | 08:45 |

Average = 0.0394
Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100679

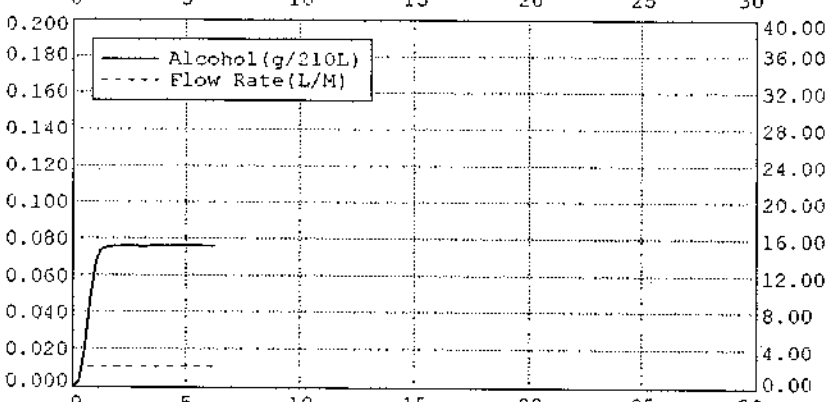
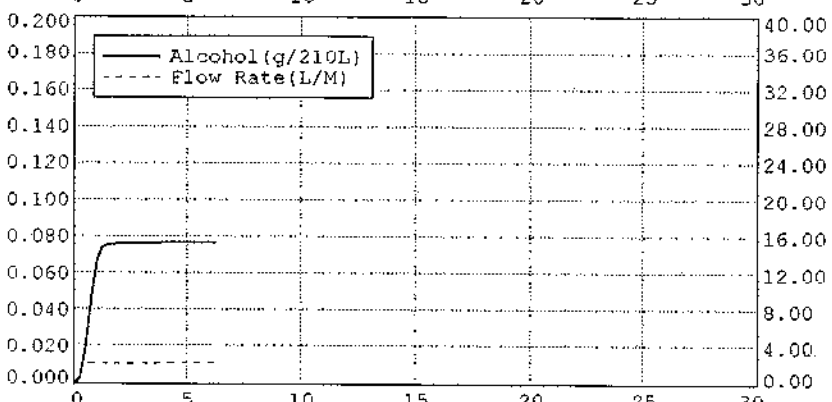
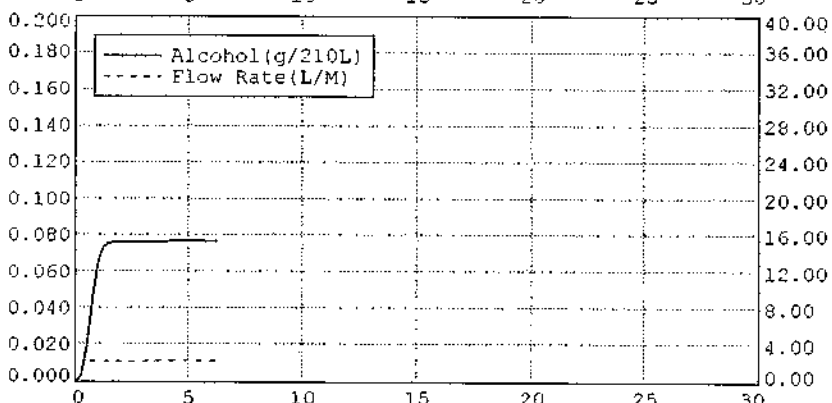
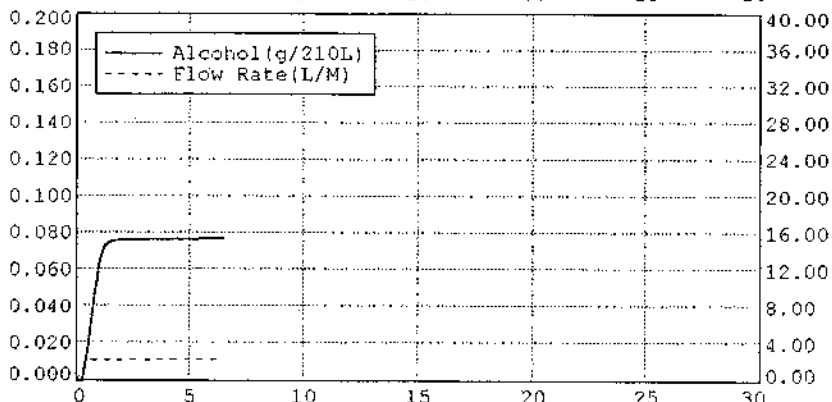
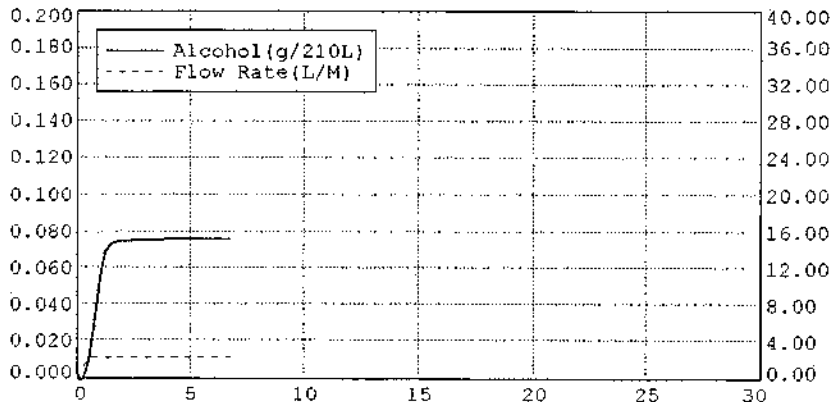
Date: 01/13/2016
 Time: 08:46:21

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.10: 0.078
 LOT #: 01315080A3
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 1031 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 08:47 |
| INTERNAL STANDARD | VERIFIED | 08:47 |
| EXTERNAL STANDARD | 0.077 | 08:47 |
| BLANK TEST | 0.000 | 08:48 |
| EXTERNAL STANDARD | 0.078 | 08:49 |
| BLANK TEST | 0.000 | 08:49 |
| EXTERNAL STANDARD | 0.078 | 08:50 |
| BLANK TEST | 0.000 | 08:51 |
| EXTERNAL STANDARD | 0.078 | 08:51 |
| BLANK TEST | 0.000 | 08:52 |
| EXTERNAL STANDARD | 0.078 | 08:52 |
| BLANK TEST | 0.000 | 08:53 |

Average = 0.0778
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100679

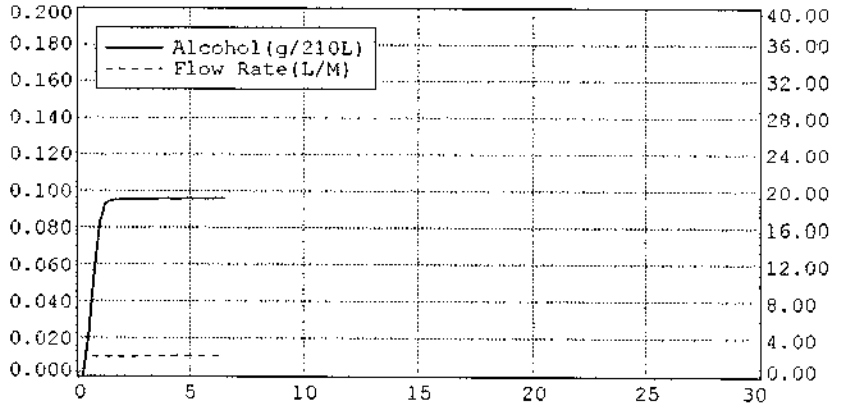
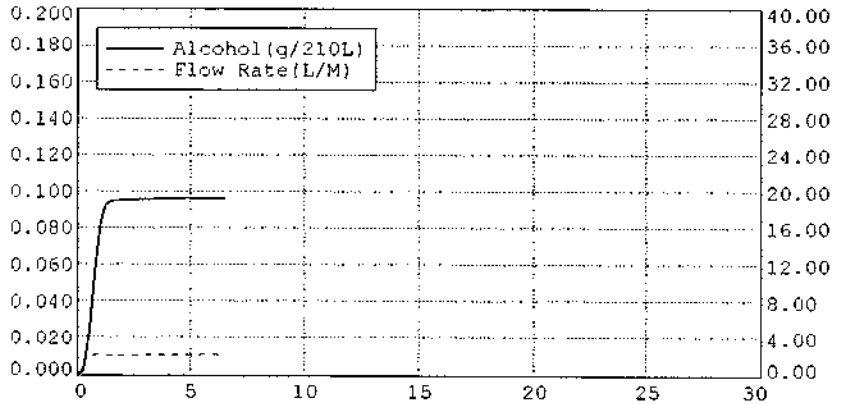
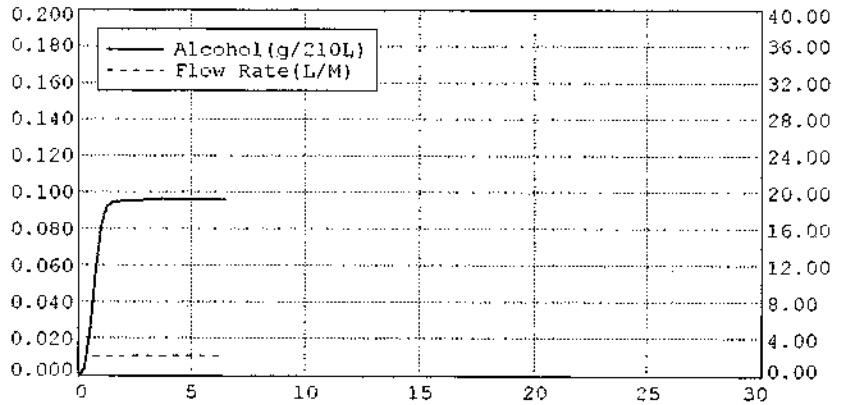
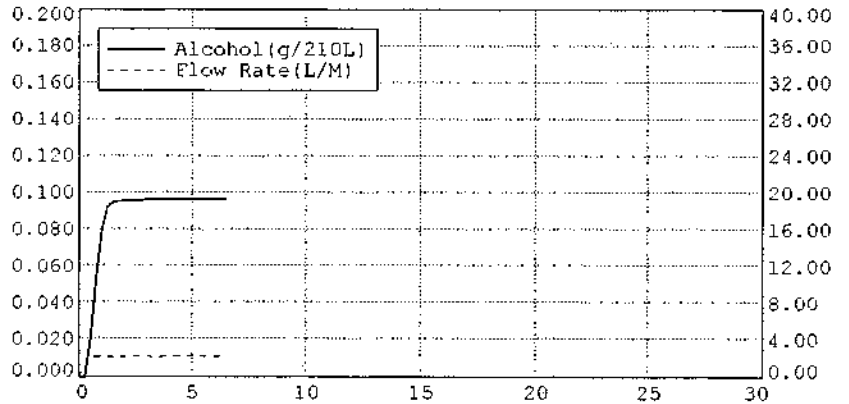
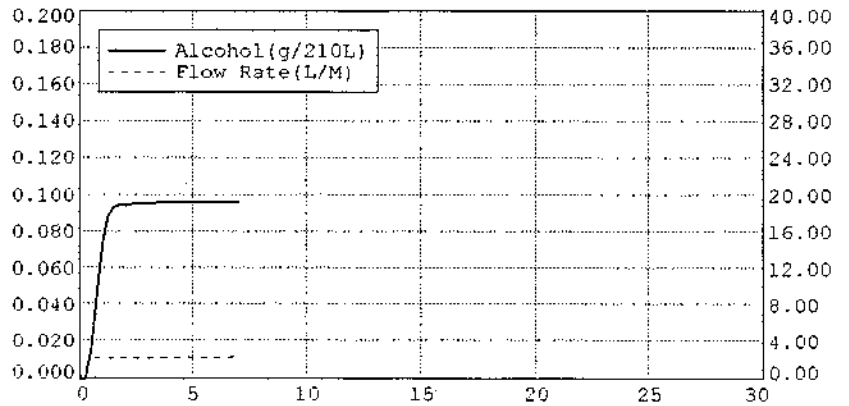
Date: 01/13/2016
 Time: 08:54:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.10: 0.097
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 808 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 08:55 |
| INTERNAL STANDARD | VERIFIED | 08:55 |
| EXTERNAL STANDARD | 0.097 | 08:55 |
| BLANK TEST | 0.000 | 08:56 |
| EXTERNAL STANDARD | 0.097 | 08:56 |
| BLANK TEST | 0.000 | 08:57 |
| EXTERNAL STANDARD | 0.097 | 08:57 |
| BLANK TEST | 0.000 | 08:58 |
| EXTERNAL STANDARD | 0.097 | 08:58 |
| BLANK TEST | 0.000 | 08:59 |
| EXTERNAL STANDARD | 0.097 | 09:00 |
| BLANK TEST | 0.000 | 09:00 |

Average = 0.0970
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100679

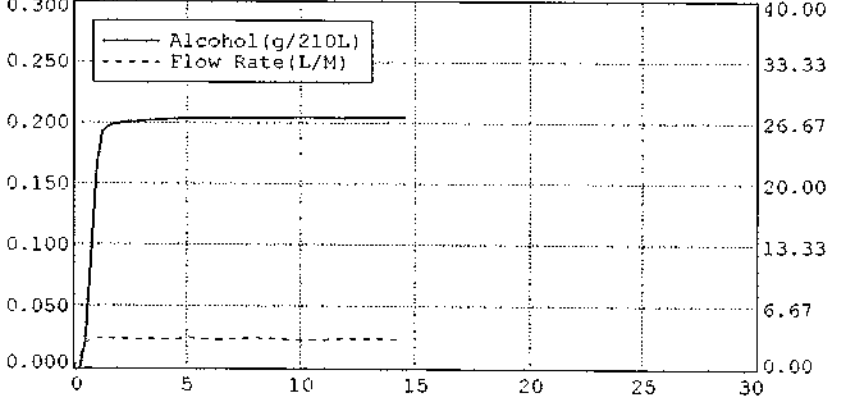
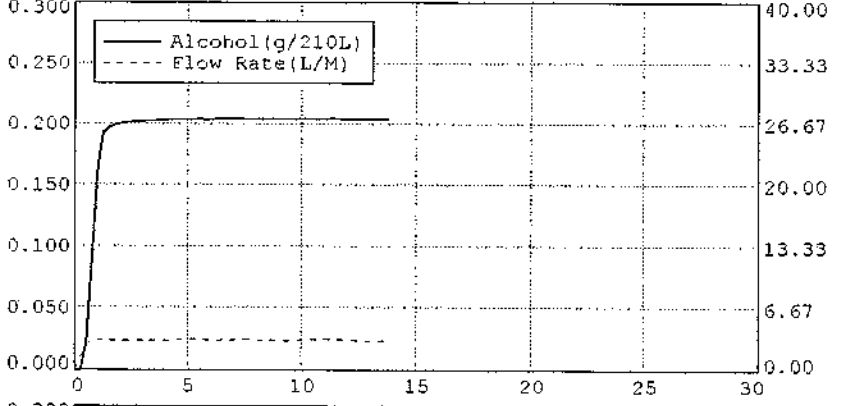
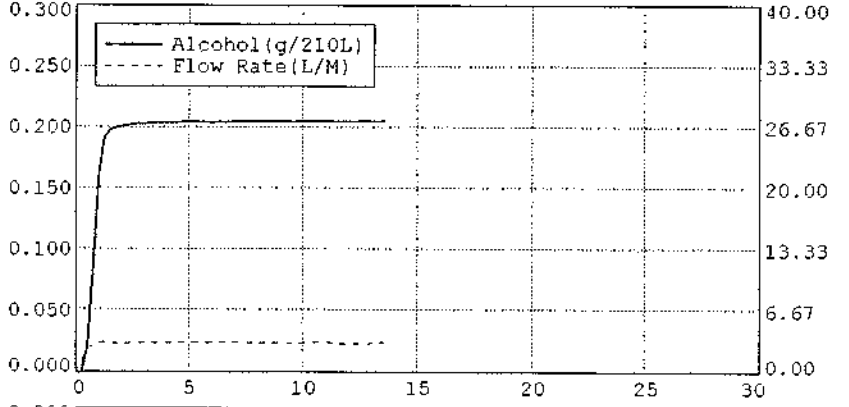
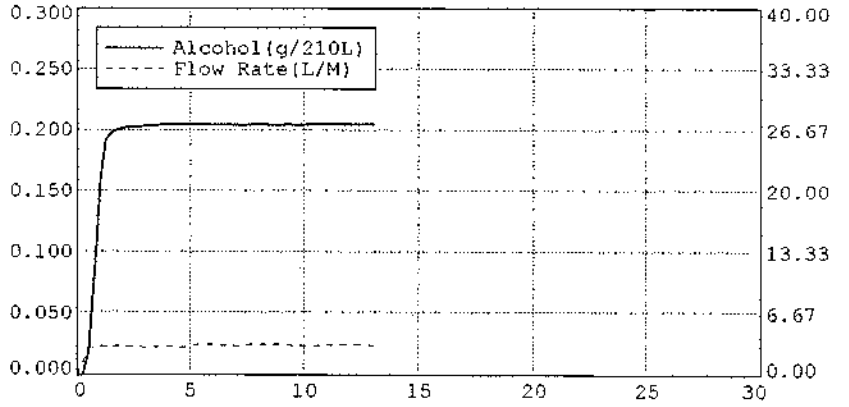
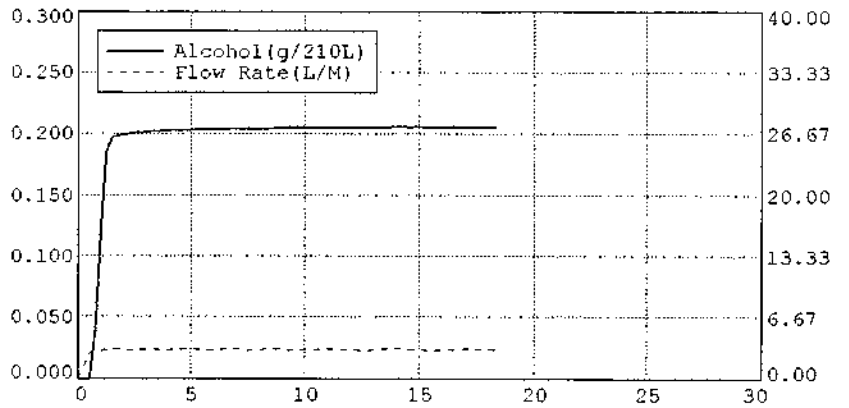
Date: 01/13/2016
 Time: 09:02:57

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: 15130
 EXPIRATION: 05/11/2017

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 09:04 |
| INTERNAL STANDARD | VERIFIED | 09:04 |
| EXTERNAL STANDARD | 0.206 | 09:05 |
| BLANK TEST | 0.000 | 09:06 |
| EXTERNAL STANDARD | 0.205 | 09:06 |
| BLANK TEST | 0.000 | 09:07 |
| EXTERNAL STANDARD | 0.205 | 09:07 |
| BLANK TEST | 0.000 | 09:08 |
| EXTERNAL STANDARD | 0.204 | 09:08 |
| BLANK TEST | 0.000 | 09:09 |
| EXTERNAL STANDARD | 0.205 | 09:10 |
| BLANK TEST | 0.000 | 09:11 |

Average = 0.2050
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100679

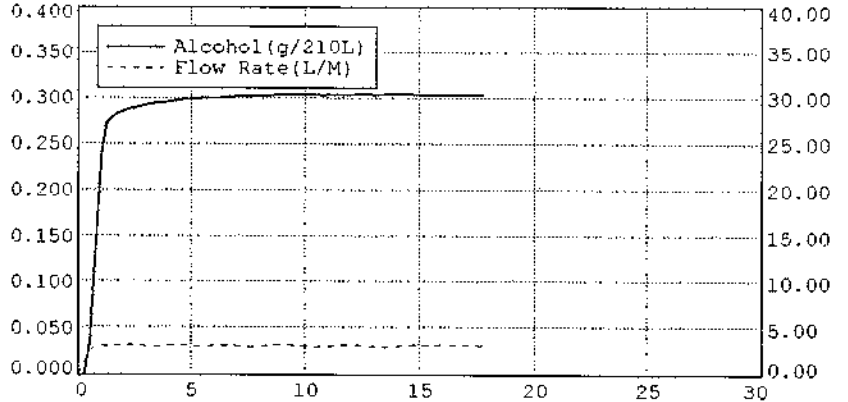
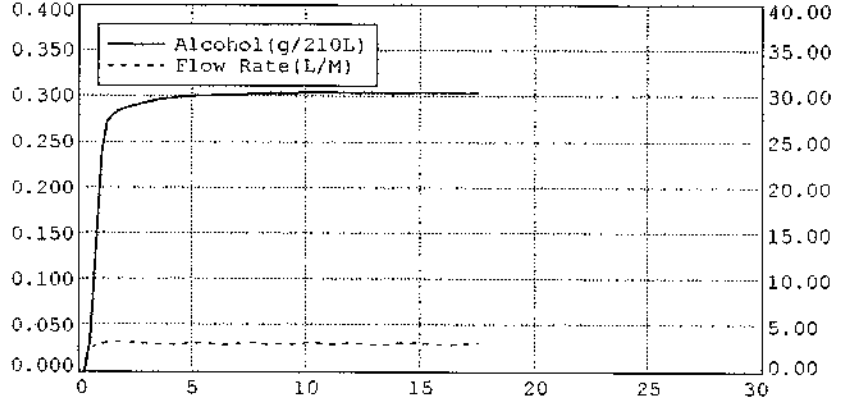
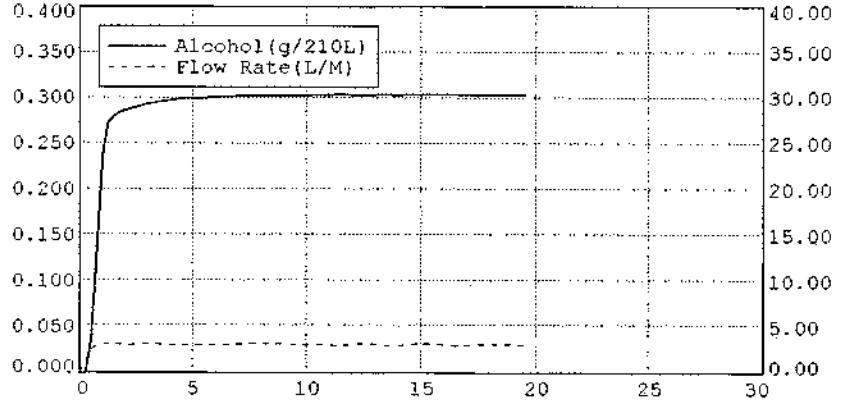
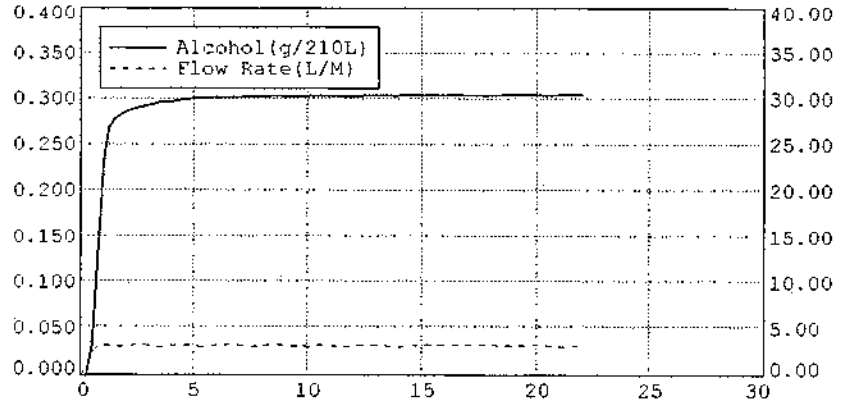
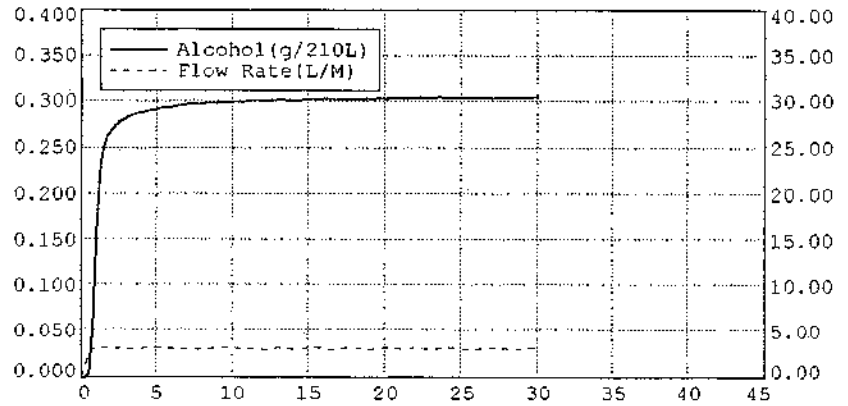
Date: 01/13/2016
 Time: 09:13:38

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 15170
 EXPIRATION: 07/20/2017

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 09:14 |
| INTERNAL STANDARD | VERIFIED | 09:14 |
| EXTERNAL STANDARD | 0.303 | 09:15 |
| BLANK TEST | 0.000 | 09:16 |
| EXTERNAL STANDARD | 0.303 | 09:16 |
| BLANK TEST | 0.000 | 09:17 |
| EXTERNAL STANDARD | 0.303 | 09:18 |
| BLANK TEST | 0.000 | 09:19 |
| EXTERNAL STANDARD | 0.303 | 09:19 |
| BLANK TEST | 0.000 | 09:20 |
| EXTERNAL STANDARD | 0.303 | 09:20 |
| BLANK TEST | 0.000 | 09:21 |

Average = 0.3030
 Std Dev = 0.0000



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 01/13/2016
Time: 09:33:26

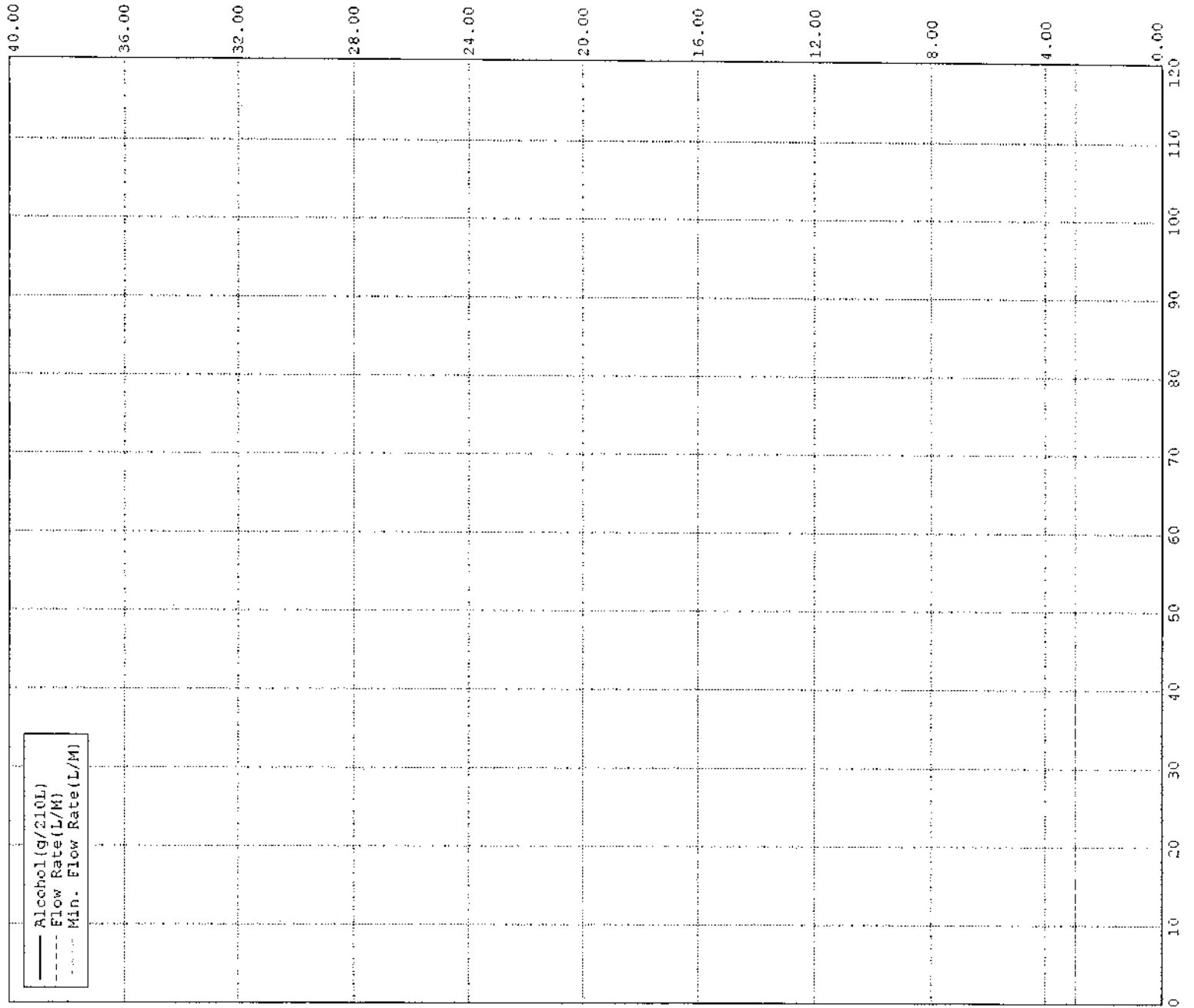
SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.12: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 09:58
BLANK TEST 0.000 09:58
INTERNAL STANDARD VERIFIED 09:59
EXTERNAL STANDARD 0.078 09:59
BLANK TEST 0.000 10:00
SUBJECT SAMPLE INCOMPLETE 10:26



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100679

Date: 01/13/2016
Time: 10:28:34

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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

DEPT/AGENCY:
AAA1

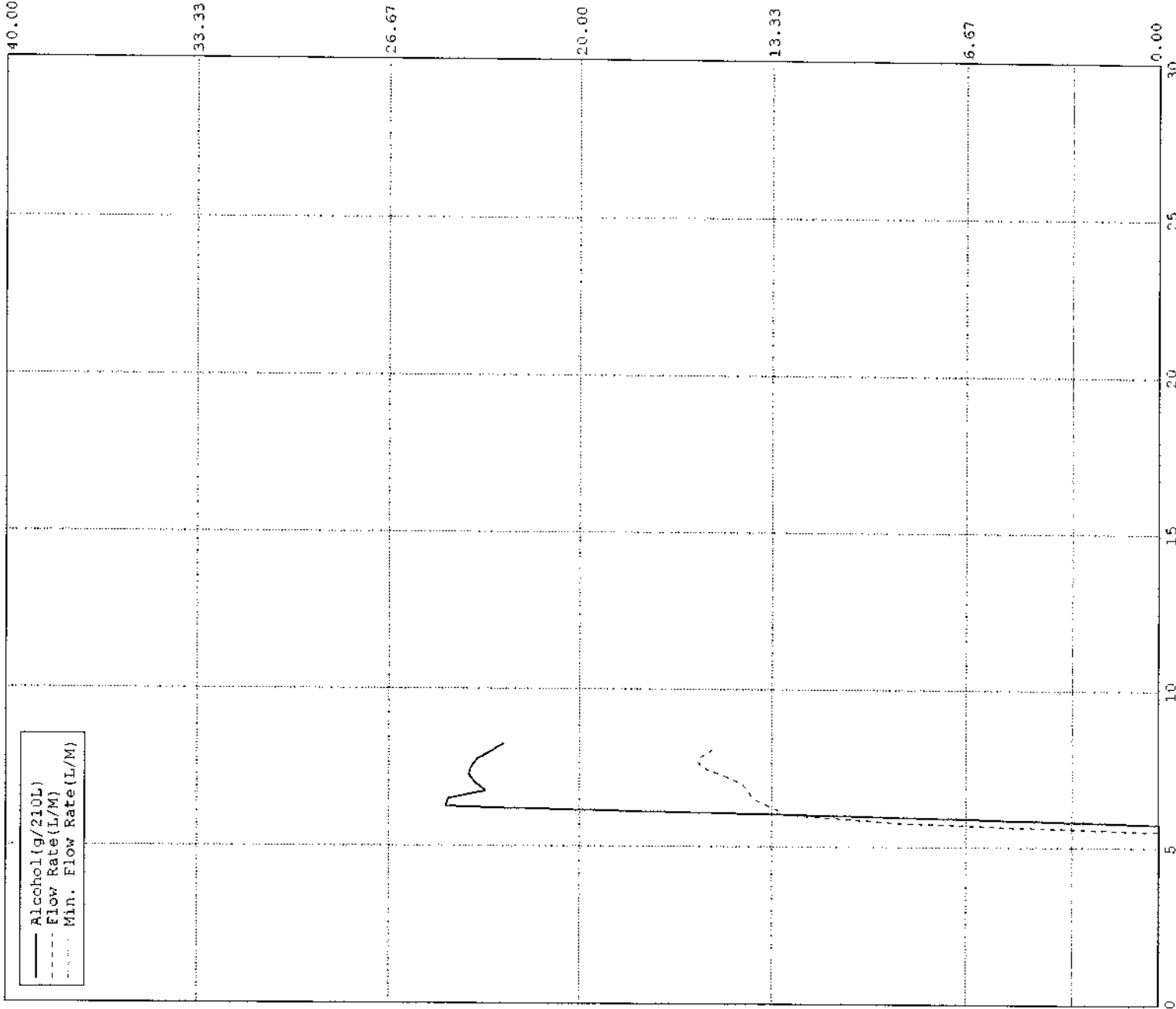
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.13: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 10:29
BLANK TEST 0.000 10:29
INTERNAL STANDARD VERIFIED 10:29
EXTERNAL STANDARD 0.077 10:30
BLANK TEST 0.000 10:31
SUBJECT SAMPLE INVALID 10:31

MS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 01/13/2016
Time: 10:40:31

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

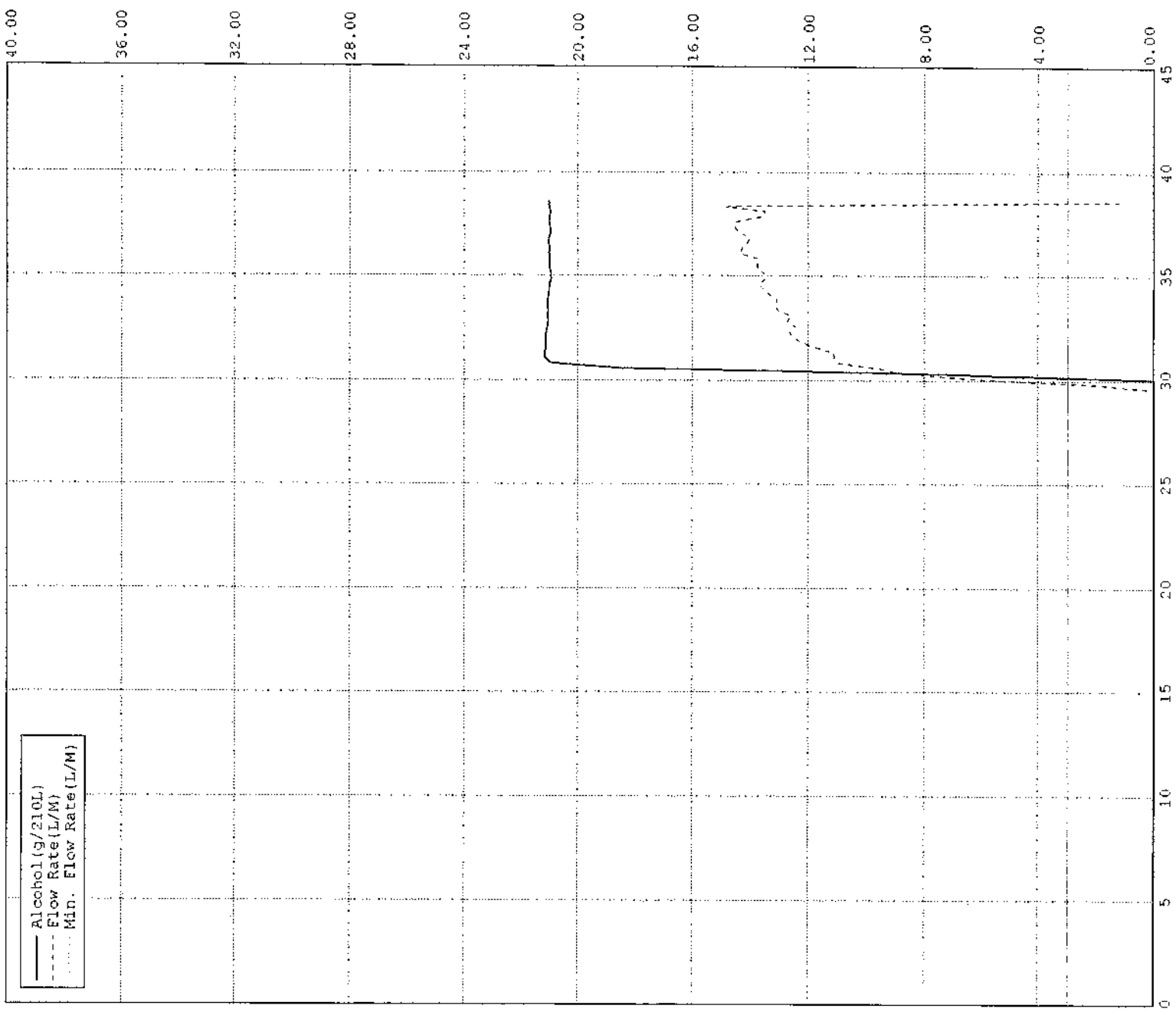
NOMINAL: 0.080
TARGET AT 29.14: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

| | | |
|-------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 10:42 |
| BLANK TEST | 0.000 | 10:42 |
| INTERNAL STANDARD | VERIFIED | 10:42 |
| Xq = 0.099 (0.53%) | | |
| EXTERNAL STANDARD | 0.077 | 10:42 |
| X{1} = 0.0773 (0.002) | (0.0024) | |
| BLANK TEST | 0.000 | 10:43 |
| SUBJECT SAMPLE | XXX | 10:44 |
| X[1] = 0.1048 (-0.0136) | (0.0025) | |

Interference Detected

CUB

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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 01/13/2016
Time: 10:46:27

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

DEPT/AGENCY:
AAA1

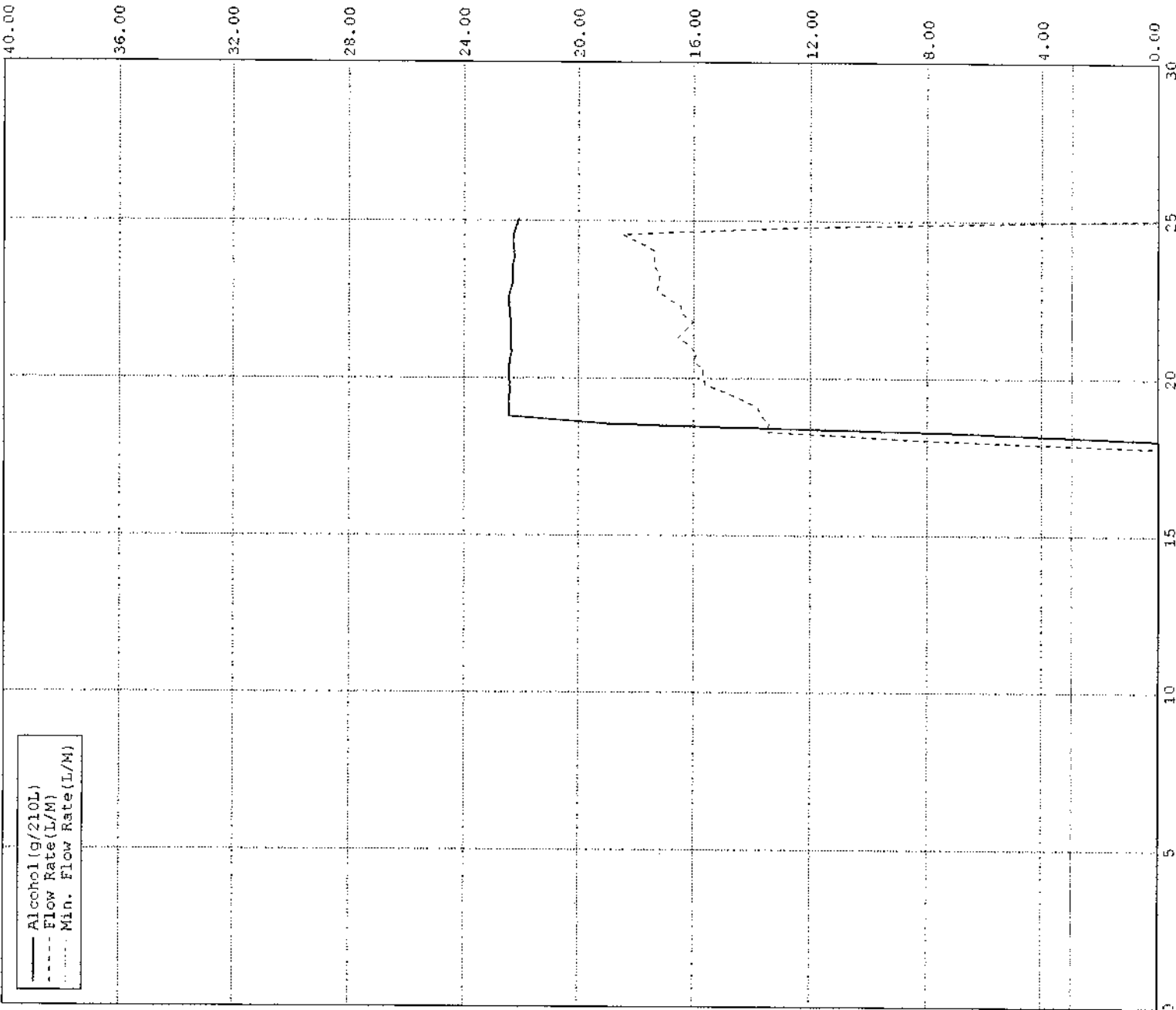
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.14: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

| | | |
|----------------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 10:47 |
| BLANK TEST | 0.000 | 10:47 |
| INTERNAL STANDARD | VERIFIED | 10:47 |
| Xq = 0.098 (1.32%) | | |
| EXTERNAL STANDARD | 0.077 | 10:47 |
| X[1] = 0.0773 (0.0000) (0.0027) | | |
| BLANK TEST | 0.000 | 10:48 |
| SUBJECT SAMPLE | XXX | 10:49 |
| X[1] = 0.1106 (-0.0185) (0.0005) | | |

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 01/13/2016
Time: 10:53:05

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

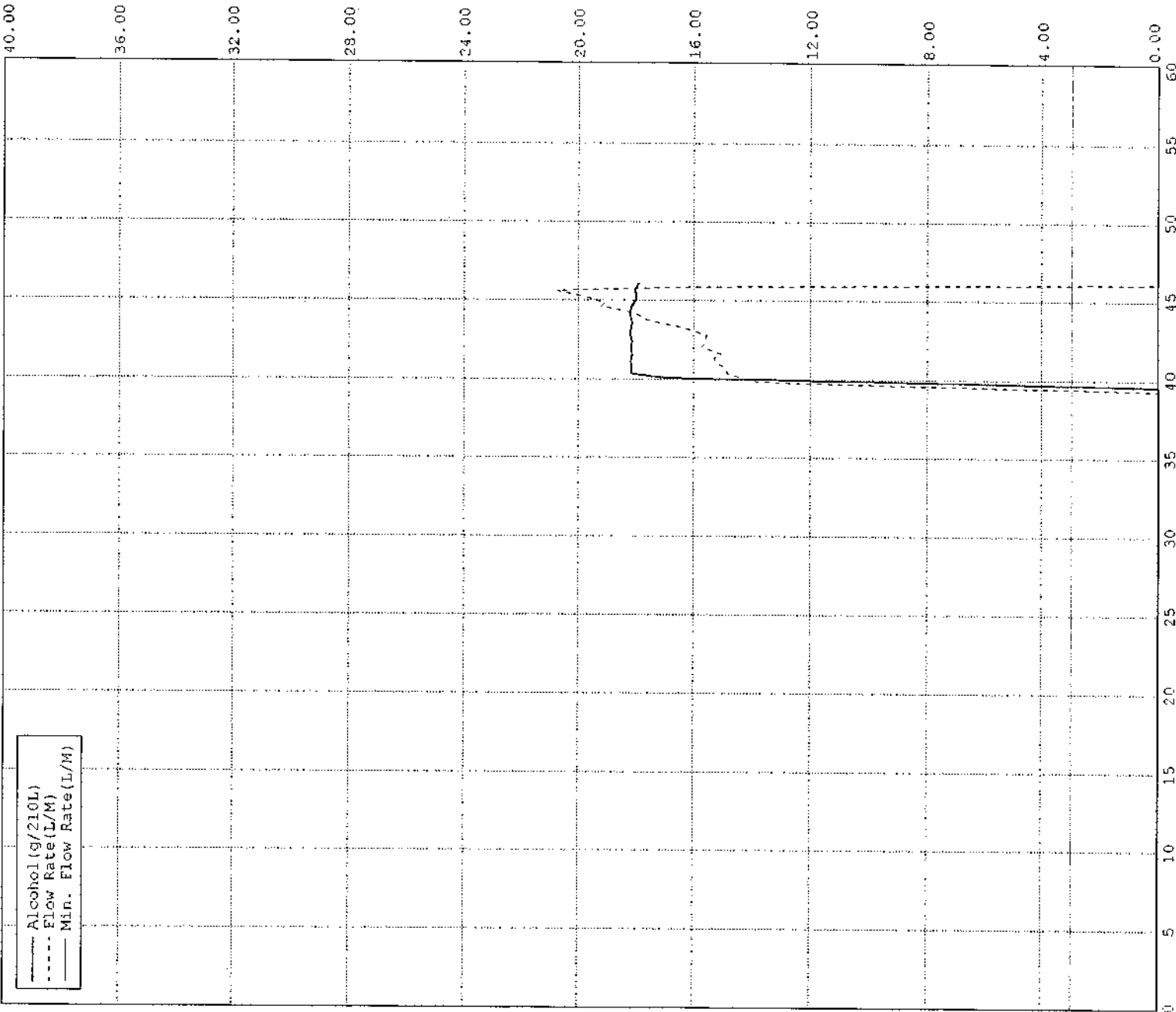
NOMINAL: 0.080
TARGET AT 29.14: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

| | | |
|----------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 10:55 |
| BLANK TEST | 0.000 | 10:55 |
| INTERNAL STANDARD | VERIFIED | 10:55 |
| Xq = 0.099 (1.05%) | | |
| EXTERNAL STANDARD | 0.077 | 10:55 |
| X[1] = 0.0773 (0.0001) | (0.0027) | |
| BLANK TEST | 0.000 | 10:56 |
| SUBJECT SAMPLE (Vol=1.77L) | 0.089 | 10:57 |
| X[1] = 0.0895 (-0.0007) | (0.0003) | |
| BLANK TEST | 0.000 | 10:58 |
| EXTERNAL STANDARD | 0.077 | 10:58 |
| X[1] = 0.0772 (0.0000) | (0.0023) | |
| BLANK TEST | 0.000 | 10:59 |

Filter 2 avg = 0.0001

Filter 3 avg = 0.0025

CAS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 01/13/2016
Time: 11:02:18

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

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

DEPT/AGENCY:
AAA1

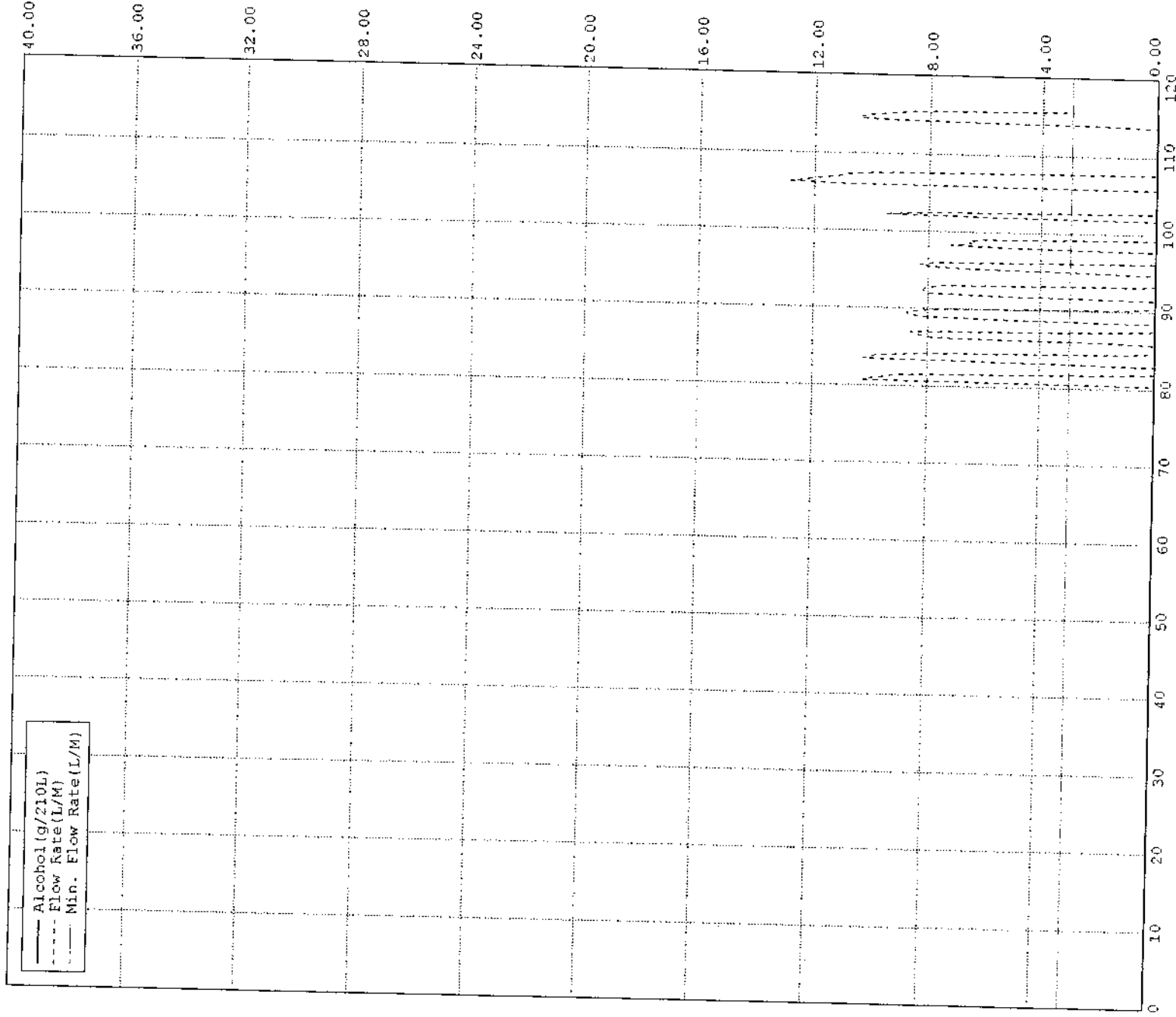
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.14: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

| | | |
|-------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 11:04 |
| BLANK TEST | 0.000 | 11:05 |
| INTERNAL STANDARD | VERIFIED | 11:05 |
| EXTERNAL STANDARD | 0.077 | 11:05 |
| BLANK TEST | 0.000 | 11:06 |
| SUBJECT SAMPLE | XXX | 11:08 |

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 01/13/2016
Time: 11:21:09

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

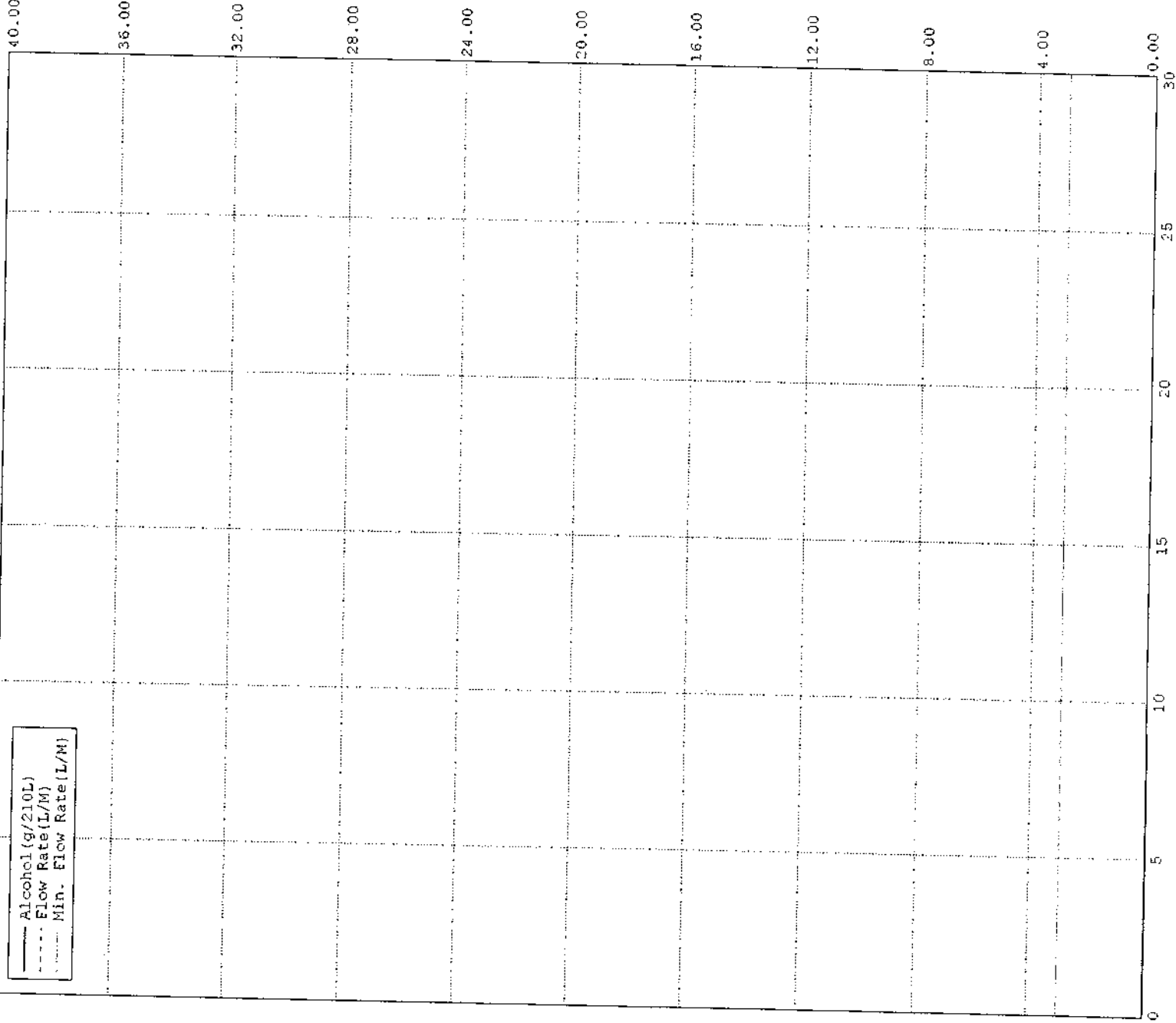
NOMINAL: 0.080
TARGET AT 29.14: 0.078
LOF #: 01315080A3
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 11:22
BLANK TEST 0.000 11:23
INTERNAL STANDARD VERIFIED 11:23
EXTERNAL STANDARD 0.077 11:23
BLANK TEST 0.000 11:24

RFI DETECTED

CS

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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100679

Date: 01/13/2016
Time: 11:38:13

SUBJECT NAME:
TEST TEST
LICENSE #: NONDRINKING

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.14: 0.078
LOT #: 01315080A3
EXPIRATION: 02/05/2017

| | | |
|----------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 11:39 |
| BLANK TEST | 0.000 | 11:39 |
| INTERNAL STANDARD | VERIFIED | 11:39 |
| EXTERNAL STANDARD | 0.078 | 11:39 |
| BLANK TEST | 0.000 | 11:40 |
| SUBJECT SAMPLE (Vol=1.77L) | 0.000 | 11:41 |
| BLANK TEST | 0.000 | 11:41 |
| EXTERNAL STANDARD | 0.078 | 11:42 |
| BLANK TEST | 0.000 | 11:43 |

