

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 100688 Analyst Colleen O'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 1.5 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 01315080A2 Exp 2/5/17
- iv. 0.100g/210L Mnf ILMO Lot 02915100A1 Exp 3/5/17
- v. 0.200g/210L Mnf Guth Lot 15130 Exp 5/1/17
 - 1. Simulator S/N DR 6267 Date Calibrated 1/20/15
- vi. 0.300g/210L Mnf Guth Lot 15170 Exp 7/20/17
 - 1. Simulator S/N DR 4162 Date Calibrated 1/19/15

5. Functional Tests (attached)

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

- i. Acetone - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N DR 4163 Date Calibrated 1/19/15
- ii. Isopropanol - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N DR 4178 Date Calibrated 1/20/15
- iii. Negative Control - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N DR 4178 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: 100688

Date: 01/13/2016
Time: 08:00:09

VERSIONS

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

TEMPERATURES

Sample Chamber = 49.0°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 45.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.86 V PASSED
(1.05 V - 2.45 V)
Cooler Voltage = 1.88 V PASSED
(1.07 V - 2.49 V)
Bias Voltage = 80 V PASSED
(49 V - 113 V)
Chopper Freq = 551 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.1 in

PUMP INFO

Flow Rate = 4.245 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 PASSED

Xq = 0.096 1.02% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100688

Date: 01/13/2016
Time: 8:28 AM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 45.1°C

Current Barometer 29.1 in
Volume (Ltr) 1.52

Settings

Lamp: 1.86 V
Bias: 80 V
Cooler: 1.88 V
Chopper: 550 Hz

Voltages (V)

Flow: 1.02 V
Detector: -0.050 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100688

Date: 11/01/2011
Time: 09:18:29

| | | | | |
|-----|---|----------|--------|----------------|
| Ca | = | 0.1000 | | |
| CAL | = | 0.974947 | 0.800 | <= CAL < 1.200 |
| b1 | = | 0.0007 | 0.0000 | <= b1 < 0.0040 |
| b2 | = | 0.0044 | 0.0010 | <= b2 < 0.0100 |
| b3 | = | 0.0006 | 0.0000 | <= b3 < 0.0040 |
| Xq | = | 0.0948 | 0.0500 | <= Xq < 0.2000 |
| a21 | = | 1.147537 | 1.050 | <= a21 < 1.300 |
| a31 | = | 0.513077 | 0.300 | <= a31 < 0.800 |

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100688

Date: 01/13/2016
Time: 08:30:03

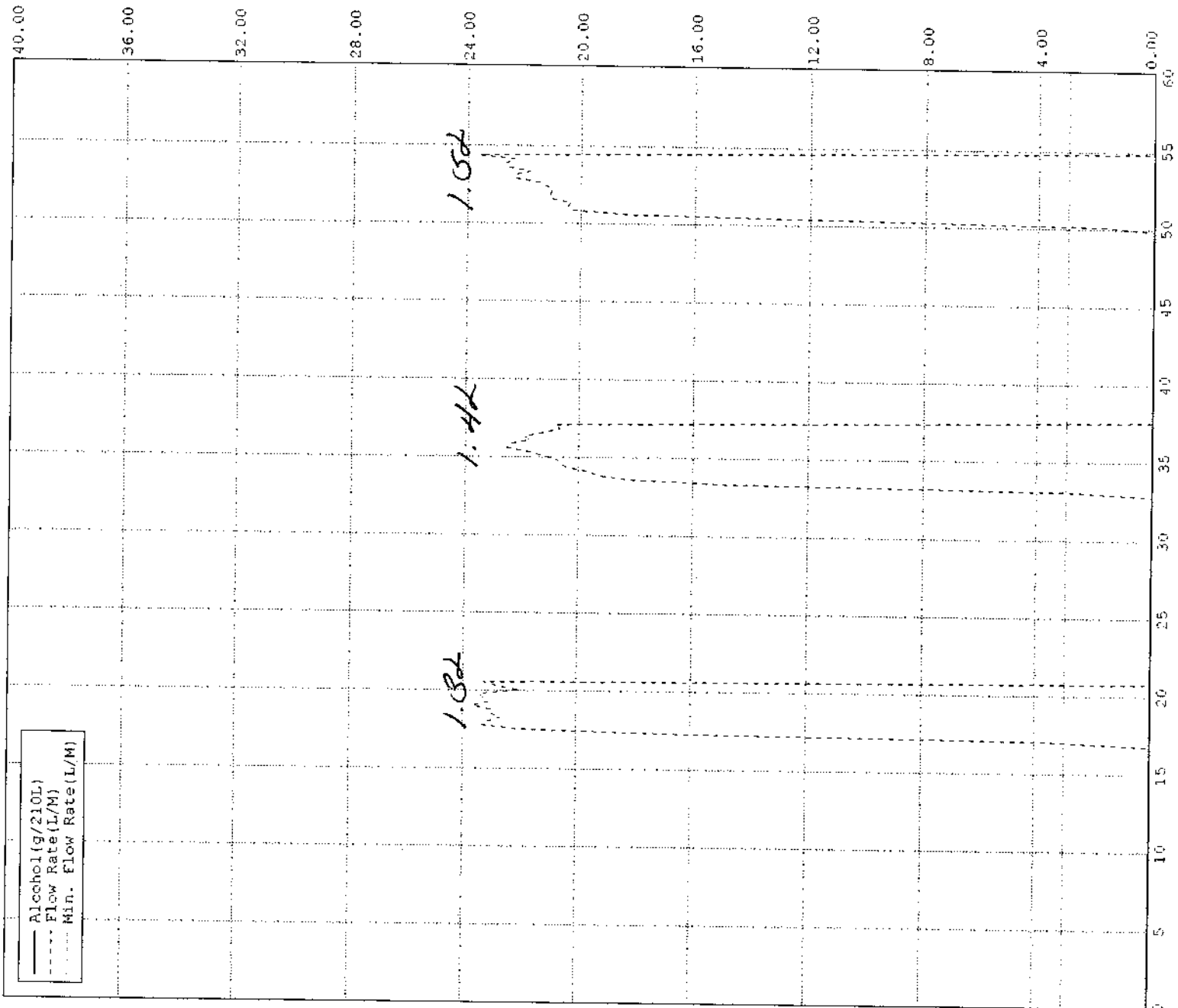
SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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 29.10: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

| | | |
|----------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 08:31 |
| BLANK TEST | 0.000 | 08:31 |
| INTERNAL STANDARD | VERIFIED | 08:31 |
| EXTERNAL STANDARD | 0.076 | 08:31 |
| BLANK TEST | 0.000 | 08:32 |
| SUBJECT SAMPLE (Vol=1.52L) | 0.000 | 08:33 |
| BLANK TEST | 0.000 | 08:34 |
| EXTERNAL STANDARD | 0.076 | 08:34 |
| BLANK TEST | 0.000 | 08:35 |



LINEARITY CHECK

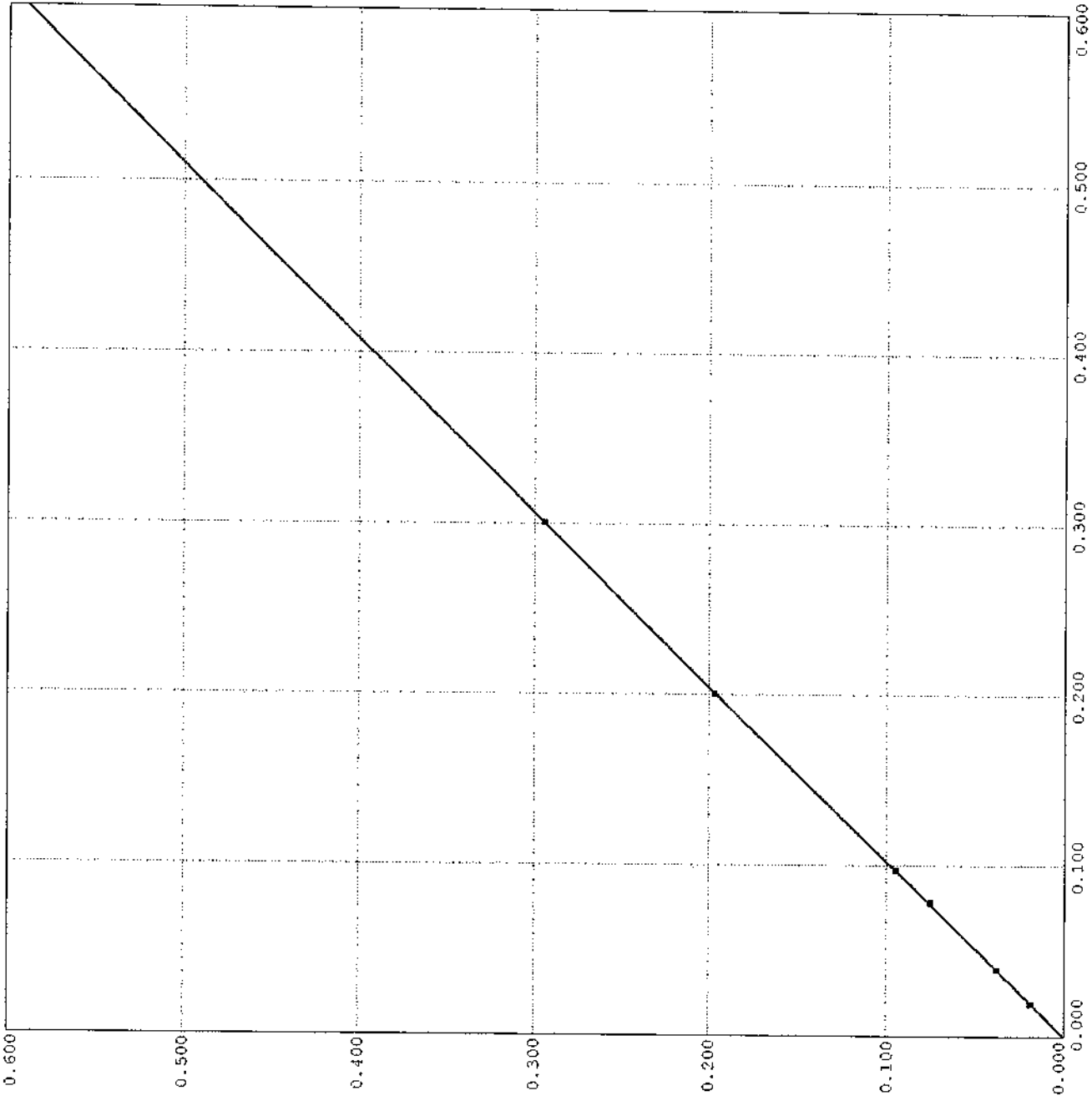
Alaska Department of Public Safety
 DATAMASTER dmt: 100688

Date: 01/13/2016
 Time: 08:39:11

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

| TARGET | AVERAGE | STD. DEV. |
|--------|---------|-----------|
| 0.019 | 0.0198 | 0.0004 |
| 0.039 | 0.0390 | 0.0000 |
| 0.078 | 0.0762 | 0.0008 |
| 0.097 | 0.0958 | 0.0004 |
| 0.200 | 0.1978 | 0.0008 |
| 0.300 | 0.2950 | 0.0007 |

SLOPE = 0.982132
 R² = 0.999965



COB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100688

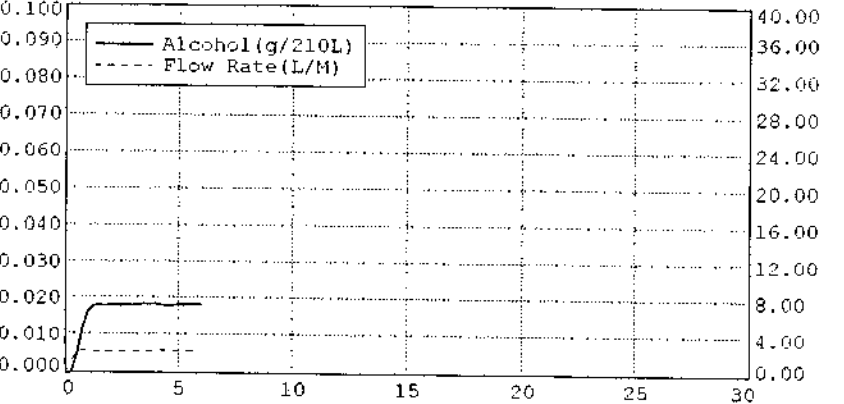
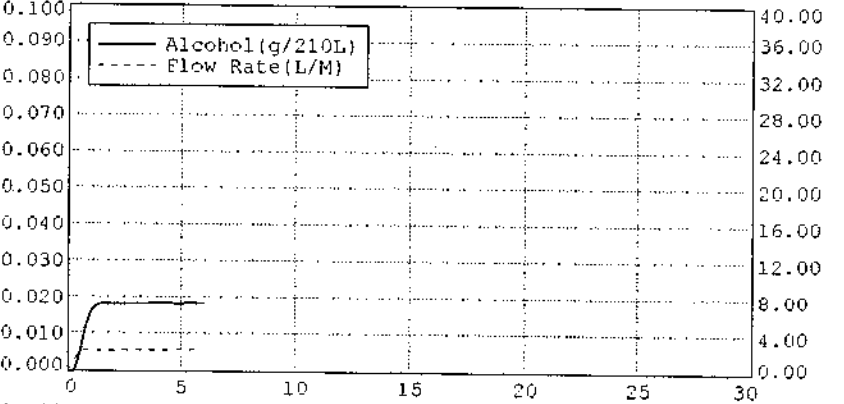
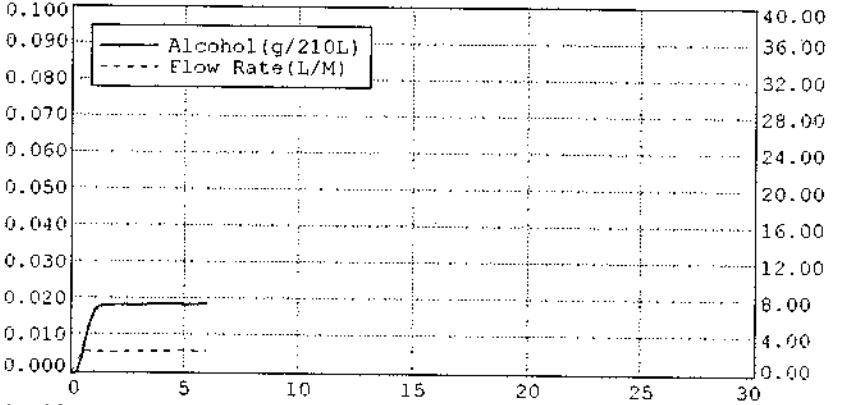
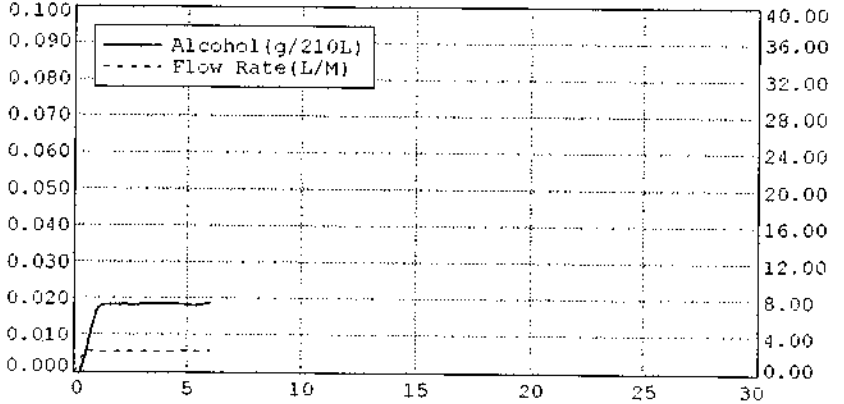
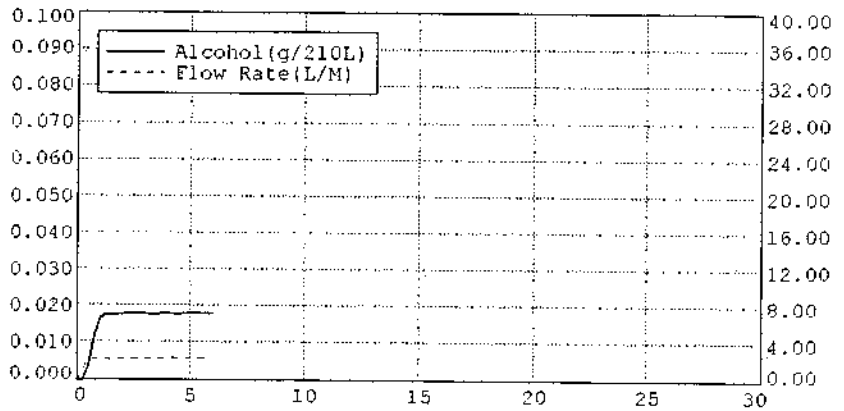
Date: 01/13/2016
 Time: 08:39:13

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.10: 0.019
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 992 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 08:57 |
| INTERNAL STANDARD | VERIFIED | 08:57 |
| EXTERNAL STANDARD | 0.019 | 08:57 |
| BLANK TEST | 0.000 | 08:58 |
| EXTERNAL STANDARD | 0.020 | 08:58 |
| BLANK TEST | 0.000 | 08:59 |
| EXTERNAL STANDARD | 0.020 | 08:59 |
| BLANK TEST | 0.000 | 09:00 |
| EXTERNAL STANDARD | 0.020 | 09:00 |
| BLANK TEST | 0.000 | 09:01 |
| EXTERNAL STANDARD | 0.020 | 09:01 |
| BLANK TEST | 0.000 | 09:02 |

Average = 0.0198
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100688

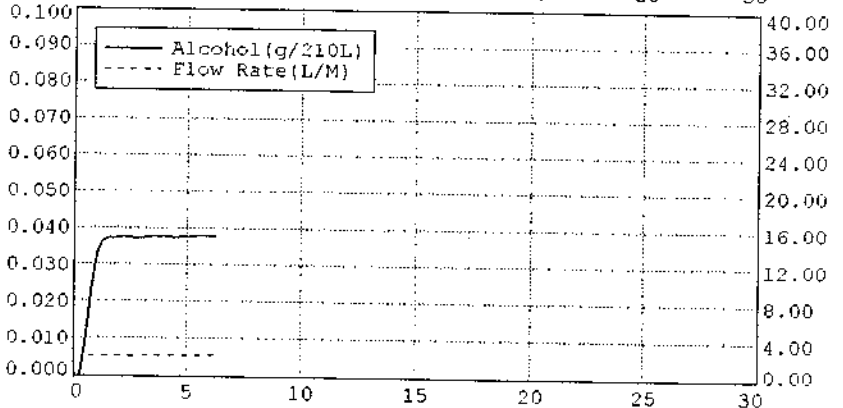
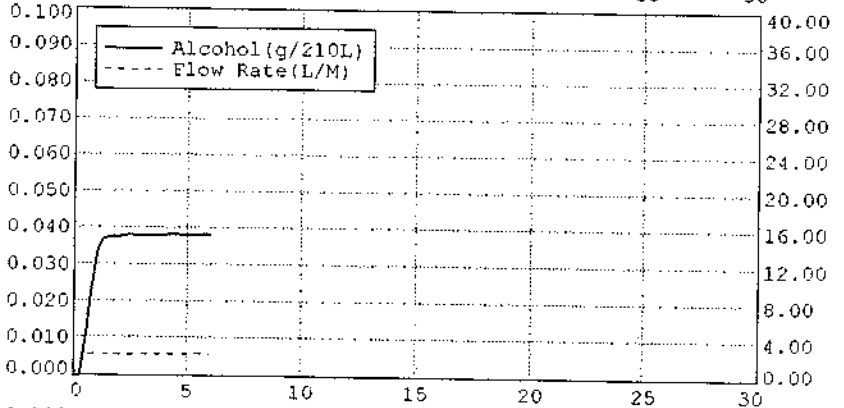
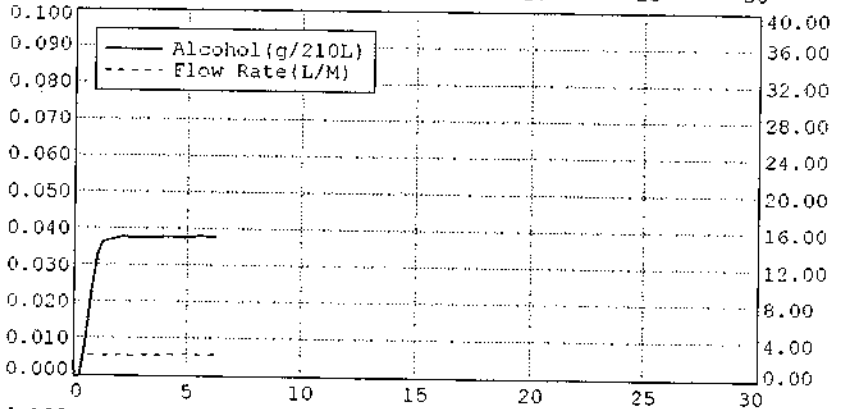
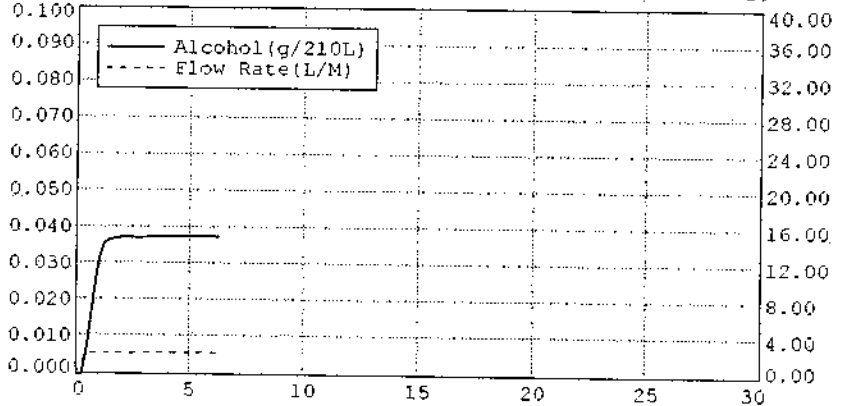
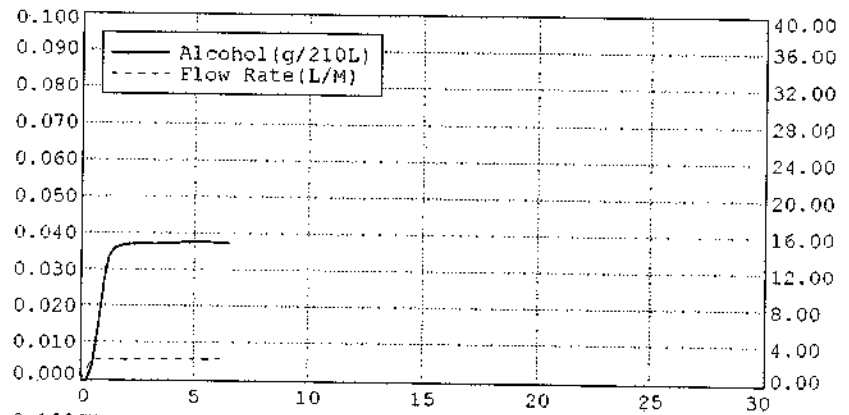
Date: 01/13/2016
 Time: 09:05:42

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.11: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1019 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 09:06 |
| INTERNAL STANDARD | VERIFIED | 09:07 |
| EXTERNAL STANDARD | 0.039 | 09:07 |
| BLANK TEST | 0.000 | 09:08 |
| EXTERNAL STANDARD | 0.039 | 09:08 |
| BLANK TEST | 0.000 | 09:09 |
| EXTERNAL STANDARD | 0.039 | 09:09 |
| BLANK TEST | 0.000 | 09:10 |
| EXTERNAL STANDARD | 0.039 | 09:10 |
| BLANK TEST | 0.000 | 09:11 |
| EXTERNAL STANDARD | 0.039 | 09:11 |
| BLANK TEST | 0.000 | 09:12 |

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100688

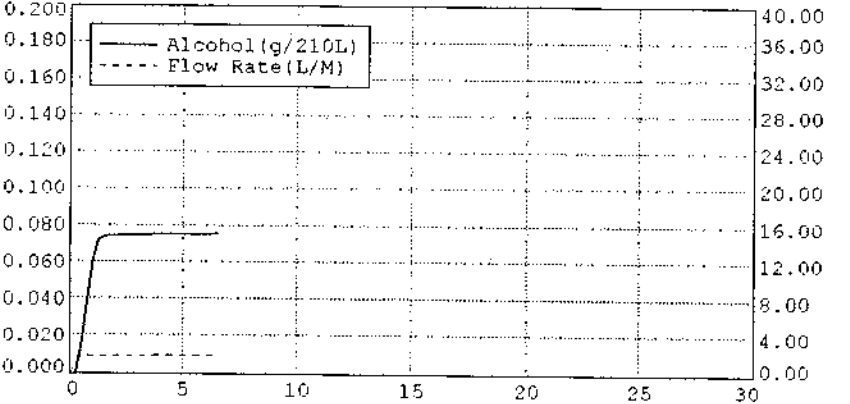
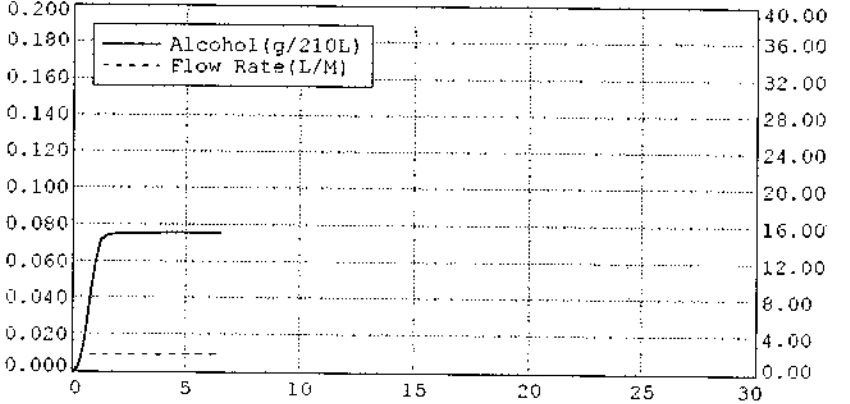
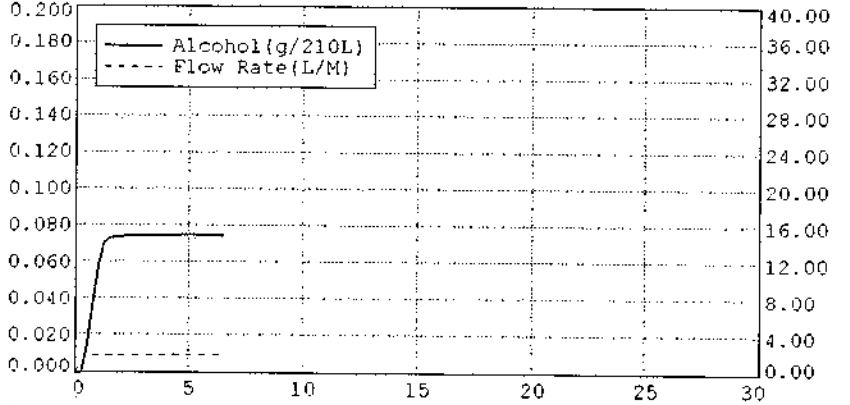
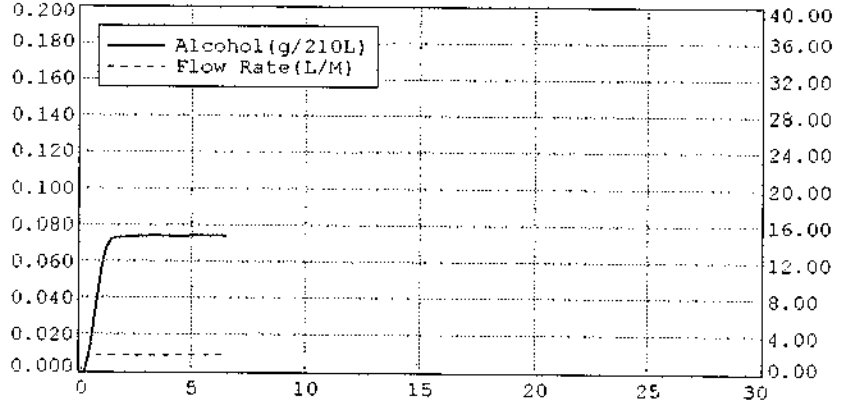
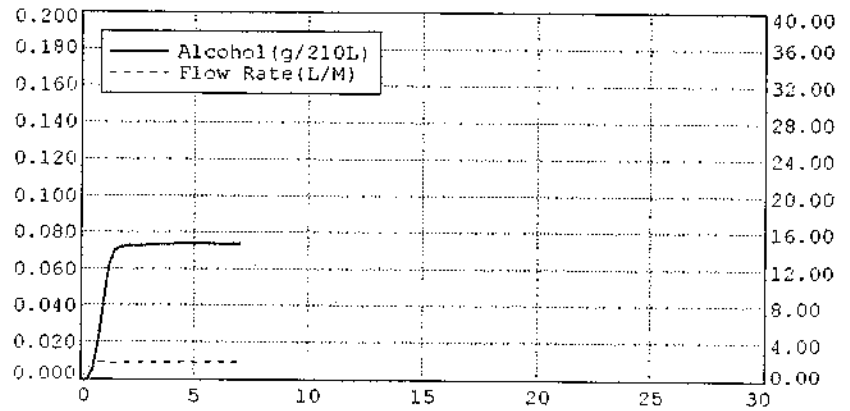
Date: 01/13/2016
 Time: 09:15:20

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.12: 0.078
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 237 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 09:16 |
| INTERNAL STANDARD | VERIFIED | 09:16 |
| EXTERNAL STANDARD | 0.075 | 09:16 |
| BLANK TEST | 0.000 | 09:17 |
| EXTERNAL STANDARD | 0.076 | 09:18 |
| BLANK TEST | 0.000 | 09:18 |
| EXTERNAL STANDARD | 0.076 | 09:19 |
| BLANK TEST | 0.000 | 09:20 |
| EXTERNAL STANDARD | 0.077 | 09:20 |
| BLANK TEST | 0.000 | 09:21 |
| EXTERNAL STANDARD | 0.077 | 09:21 |
| BLANK TEST | 0.000 | 09:22 |

Average = 0.0762
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100688

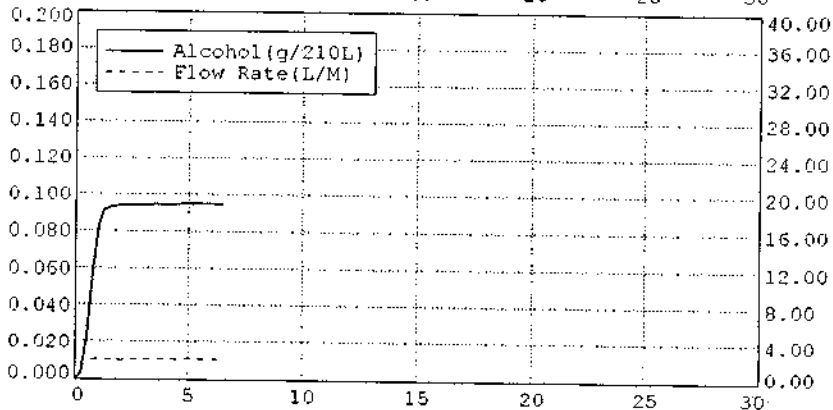
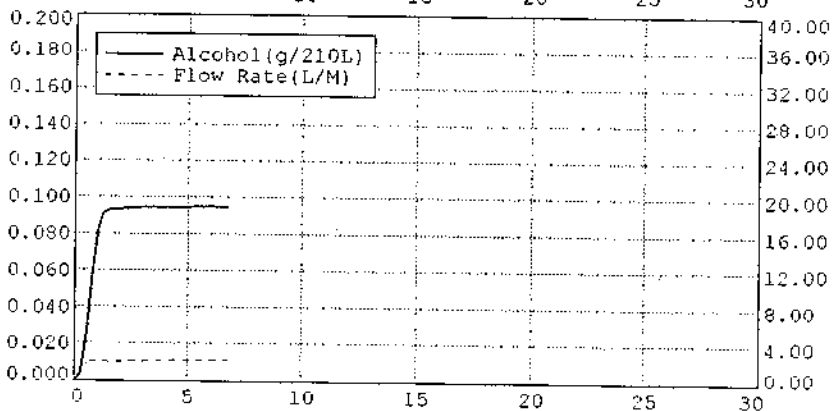
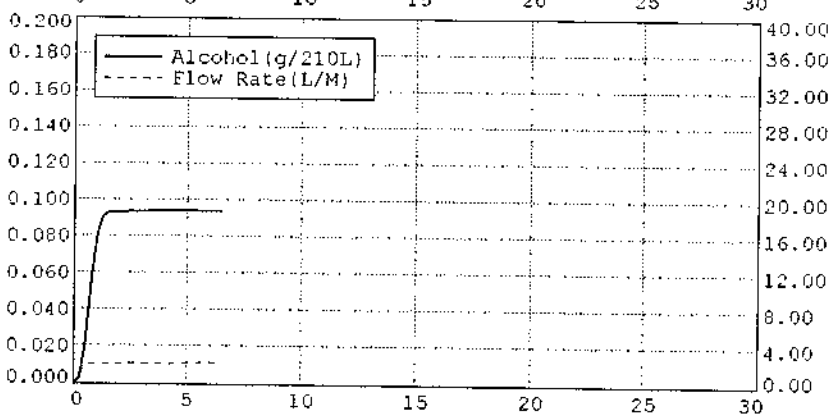
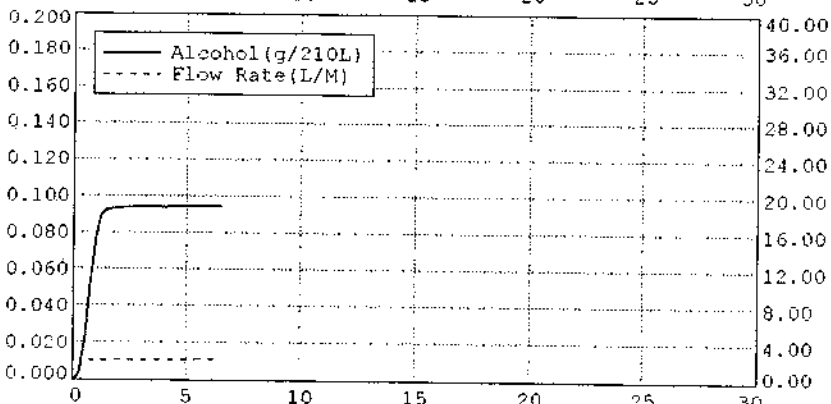
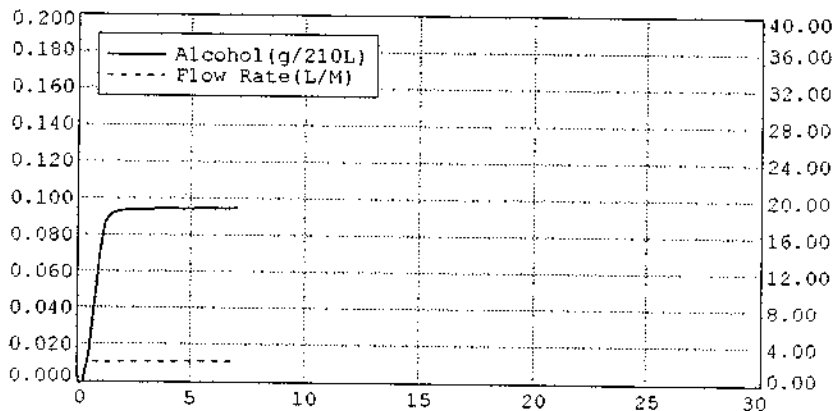
Date: 01/13/2016
 Time: 09:24:07

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.12: 0.097
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 773 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 09:25 |
| INTERNAL STANDARD | VERIFIED | 09:25 |
| EXTERNAL STANDARD | 0.096 | 09:25 |
| BLANK TEST | 0.000 | 09:26 |
| EXTERNAL STANDARD | 0.096 | 09:26 |
| BLANK TEST | 0.000 | 09:27 |
| EXTERNAL STANDARD | 0.095 | 09:27 |
| BLANK TEST | 0.000 | 09:28 |
| EXTERNAL STANDARD | 0.096 | 09:29 |
| BLANK TEST | 0.000 | 09:30 |
| EXTERNAL STANDARD | 0.096 | 09:30 |
| BLANK TEST | 0.000 | 09:31 |

Average = 0.0958
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100688

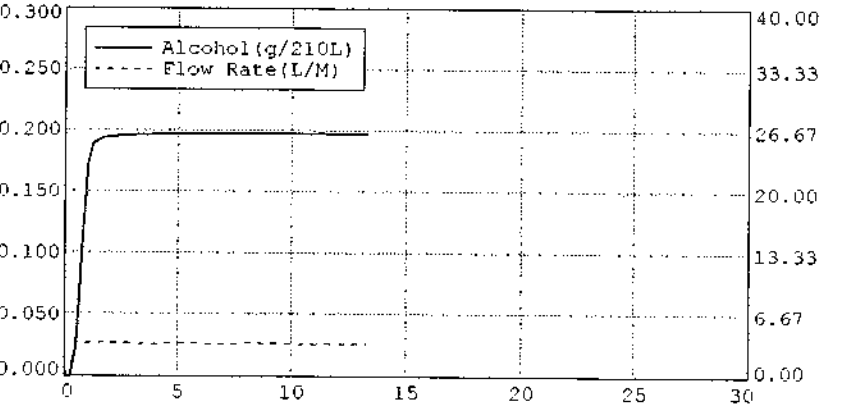
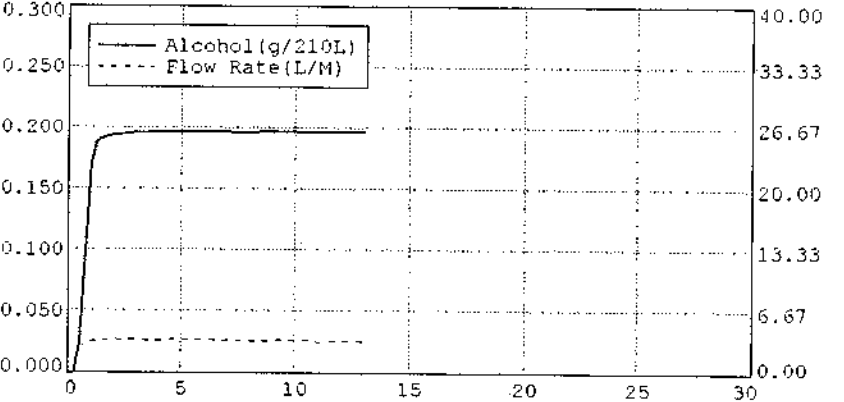
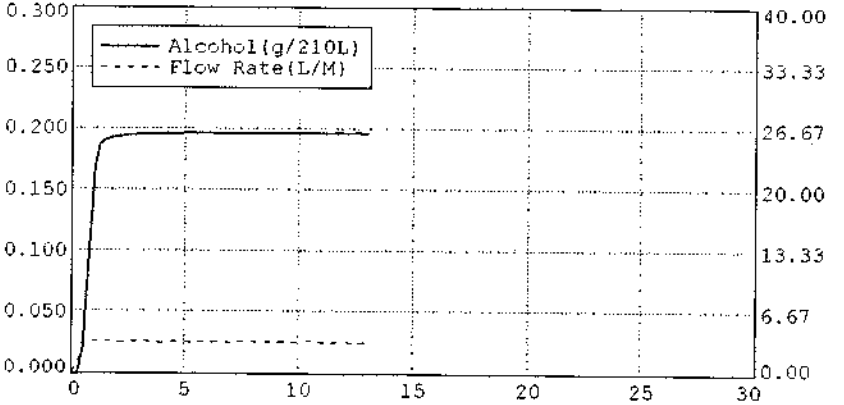
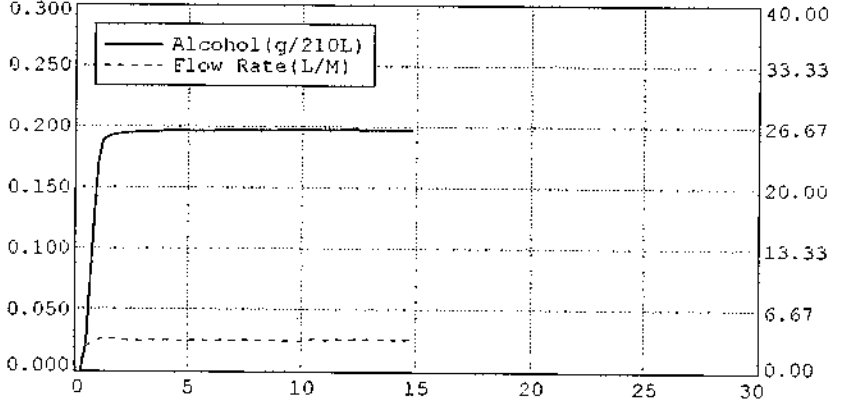
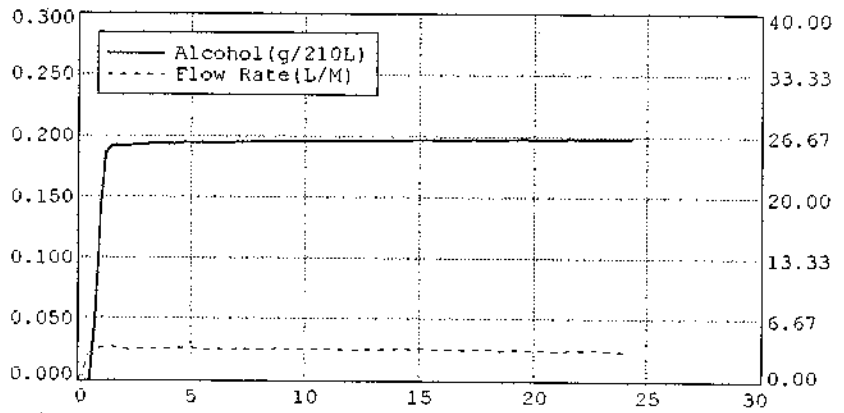
Date: 01/13/2016
 Time: 09:31:57

EXTERNAL STANDARD INFORMATION

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

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 09:33 |
| INTERNAL STANDARD | VERIFIED | 09:33 |
| EXTERNAL STANDARD | 0.199 | 09:34 |
| BLANK TEST | 0.000 | 09:34 |
| EXTERNAL STANDARD | 0.198 | 09:35 |
| BLANK TEST | 0.000 | 09:36 |
| EXTERNAL STANDARD | 0.197 | 09:36 |
| BLANK TEST | 0.000 | 09:37 |
| EXTERNAL STANDARD | 0.197 | 09:37 |
| BLANK TEST | 0.000 | 09:38 |
| EXTERNAL STANDARD | 0.198 | 09:38 |
| BLANK TEST | 0.000 | 09:39 |

Average = 0.1978
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100688

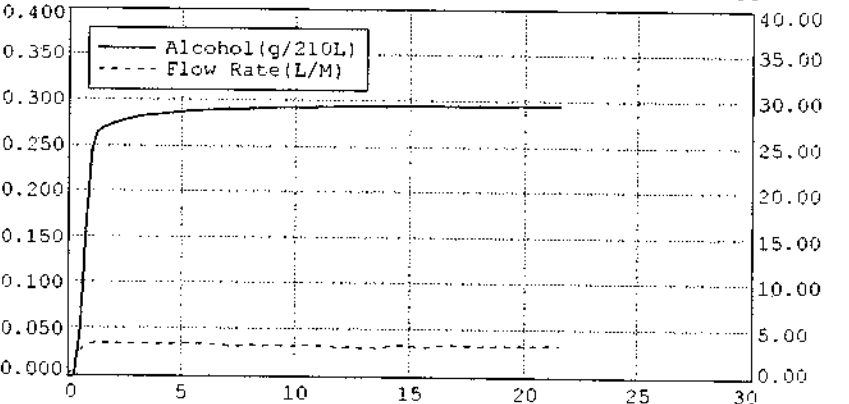
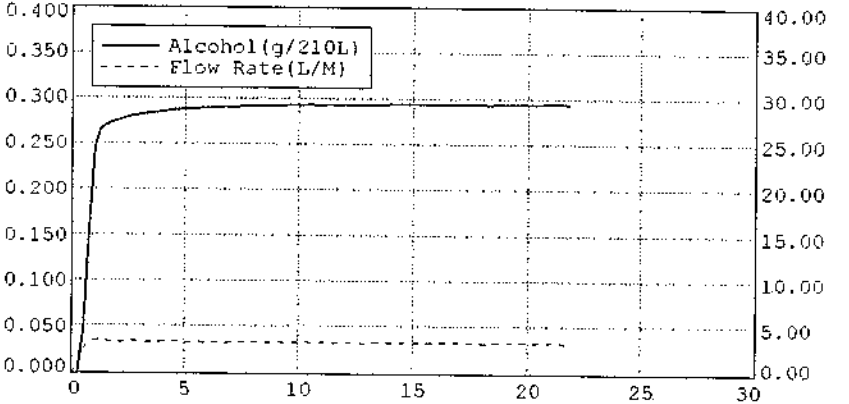
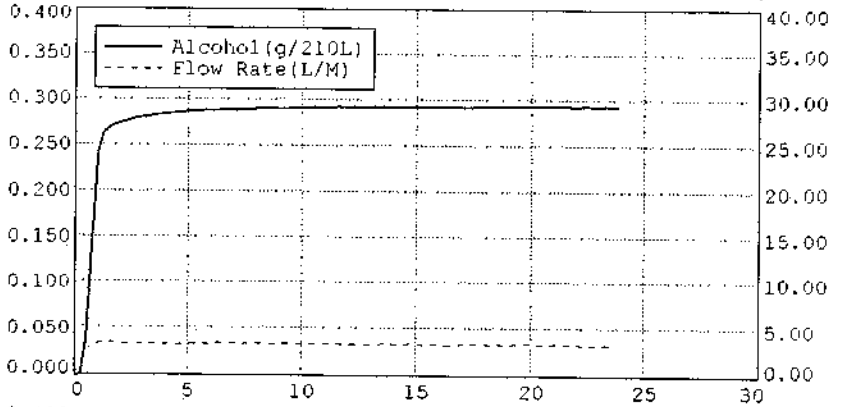
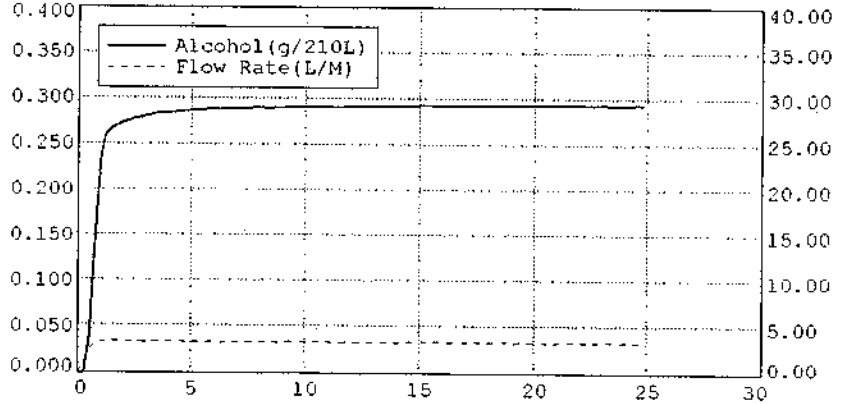
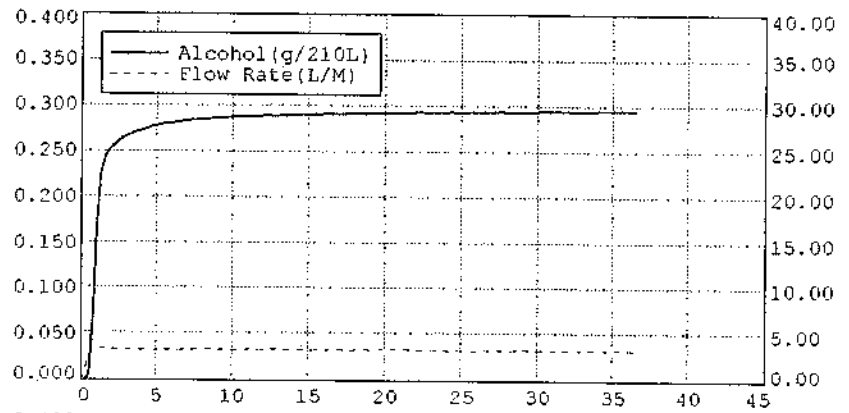
Date: 01/13/2016
 Time: 09:45:37

EXTERNAL STANDARD INFORMATION

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

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 09:46 |
| INTERNAL STANDARD | VERIFIED | 09:46 |
| EXTERNAL STANDARD | 0.296 | 09:47 |
| BLANK TEST | 0.000 | 09:48 |
| EXTERNAL STANDARD | 0.294 | 09:48 |
| BLANK TEST | 0.000 | 09:49 |
| EXTERNAL STANDARD | 0.295 | 09:50 |
| BLANK TEST | 0.000 | 09:51 |
| EXTERNAL STANDARD | 0.295 | 09:51 |
| BLANK TEST | 0.000 | 09:52 |
| EXTERNAL STANDARD | 0.295 | 09:53 |
| BLANK TEST | 0.000 | 09:54 |

Average = 0.2950
 Std Dev = 0.0007



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100688

Date: 01/13/2016
Time: 09:58:37

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

OPERATOR NAME:
COLLIEN S OBRVANT
OPERATOR'S #: 6237

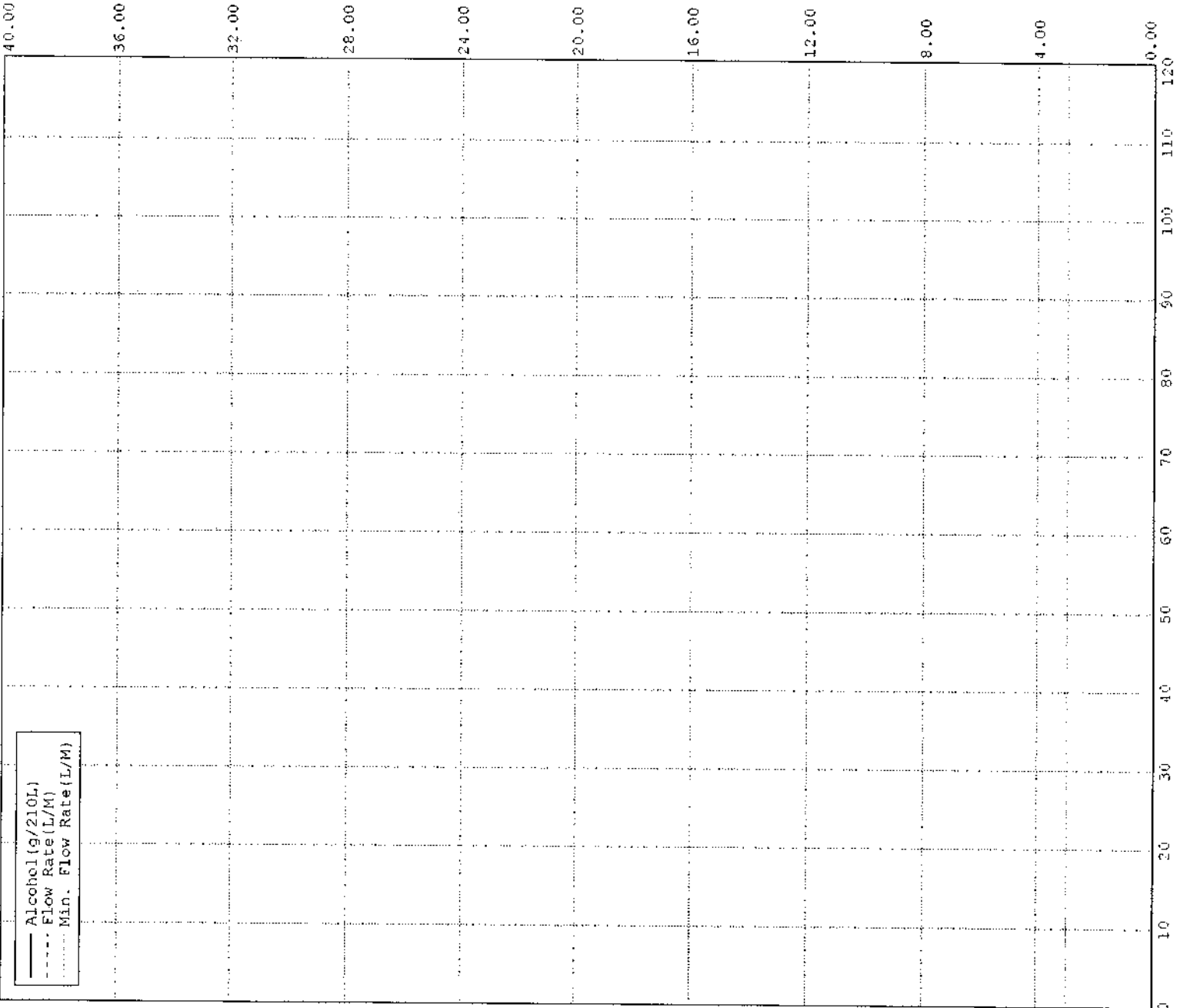
DEPT/AGENCY:
AAA1

CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.14: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 09:59
BLANK TEST 0.000 09:59
INTERNAL STANDARD VERIFIED 09:59
EXTERNAL STANDARD 0.076 10:00
BLANK TEST 0.000 10:01
SUBJECT SAMPLE INCOMPLETE 10:03



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100688

Date: 01/13/2016
Time: 10:28:49

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

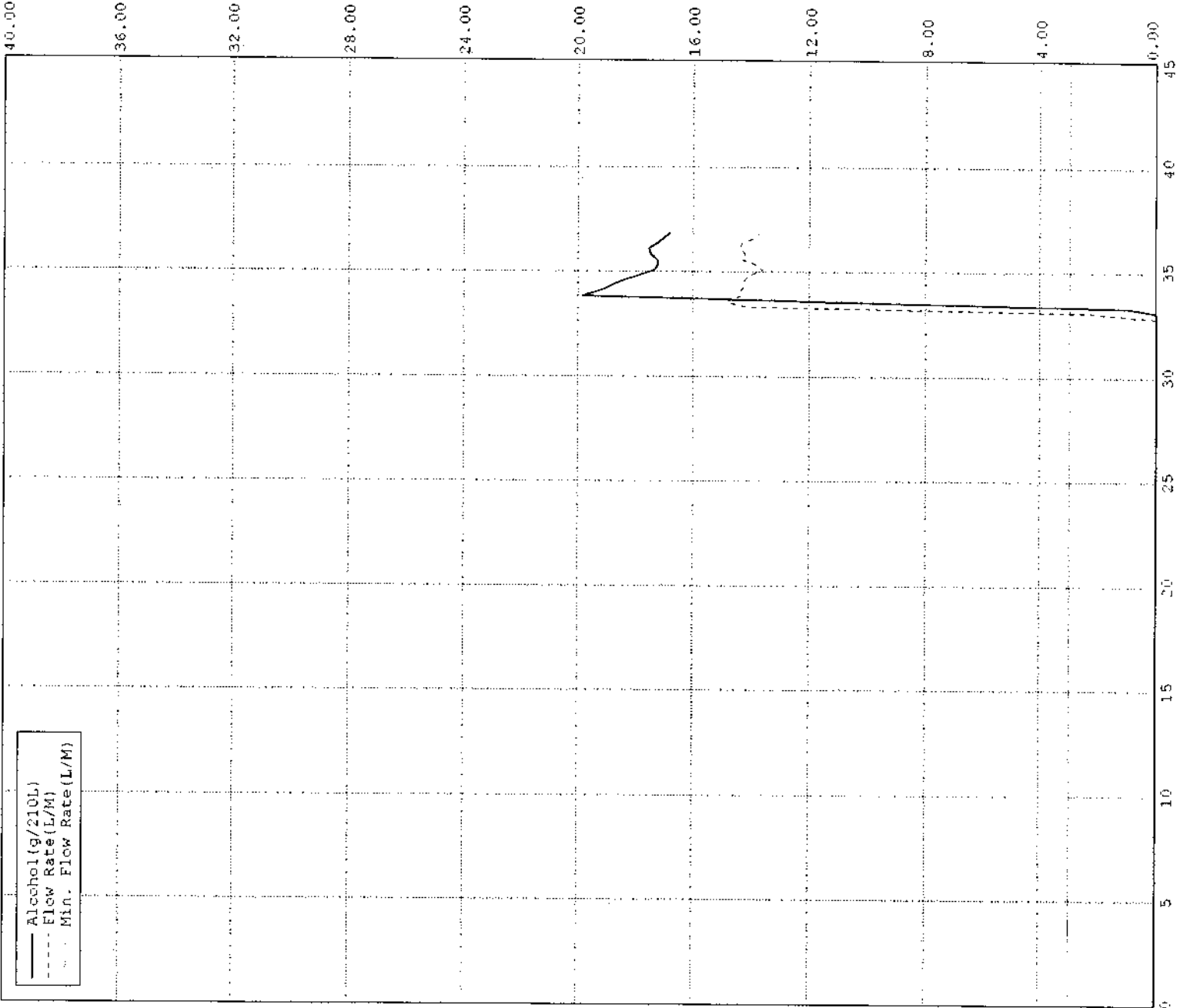
OPERATOR NAME:
COLLEEN S OBRVANT
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.14: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

| | | |
|-------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 10:30 |
| BLANK TEST | 0.000 | 10:30 |
| INTERNAL STANDARD | VERIFIED | 10:30 |
| EXTERNAL STANDARD | 0.076 | 10:30 |
| BLANK TEST | 0.000 | 10:31 |
| SUBJECT SAMPLE | INVALID | 10:32 |

CS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100688

Date: 01/13/2016
Time: 10:48:06

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

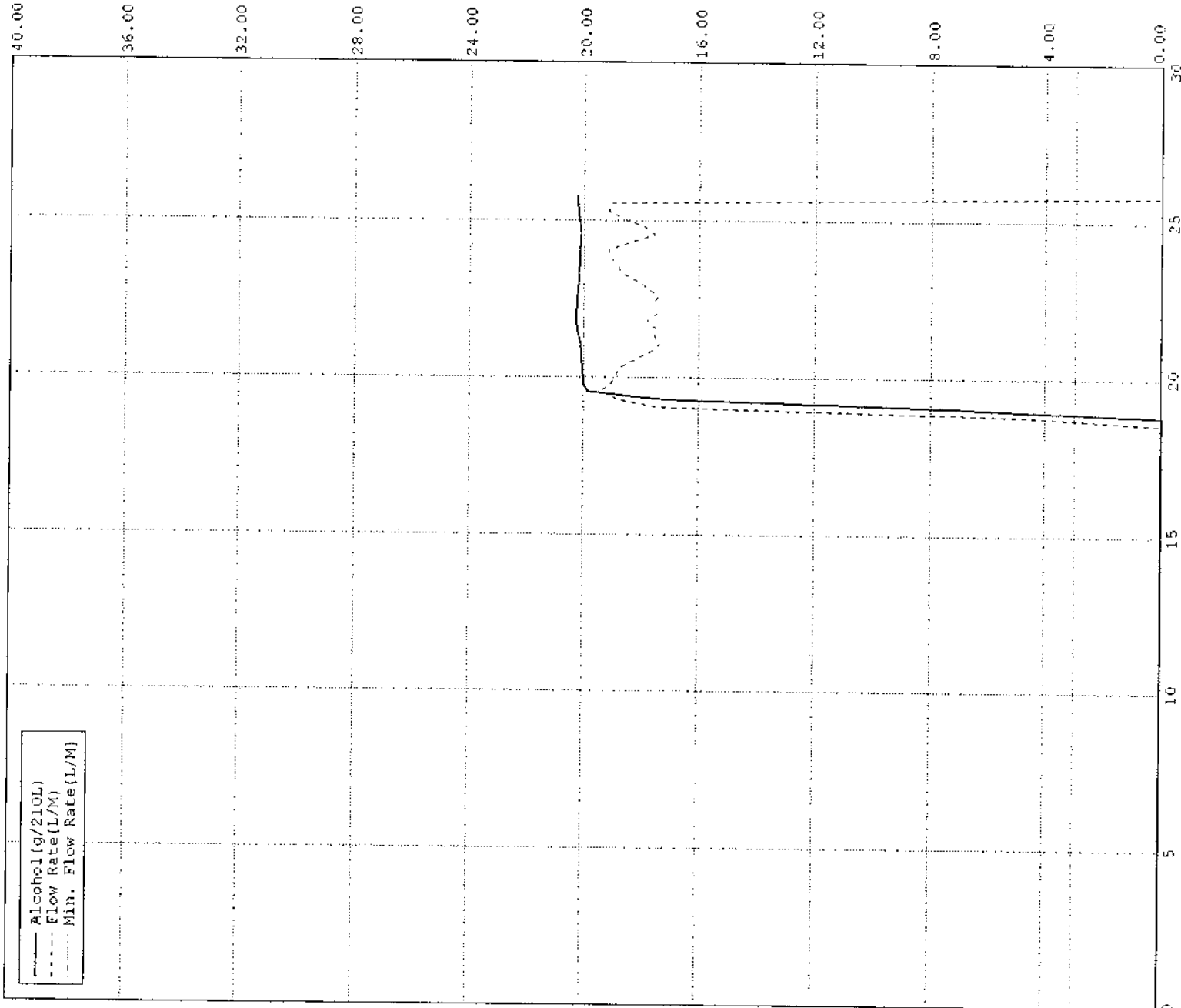
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.15: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

| | | |
|----------------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 10:49 |
| BLANK TEST | 0.000 | 10:49 |
| INTERNAL STANDARD | VERIFIED | 10:50 |
| Xq = 0.096 (1.11%) | | |
| EXTERNAL STANDARD | 0.076 | 10:50 |
| X[1] = 0.0757 (0.0001) (0.0031) | | |
| BLANK TEST | 0.000 | 10:51 |
| SUBJECT SAMPLE | XXX | 10:51 |
| X[1] = 0.1017 (-0.0117) (0.0026) | | |

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100688

Date: 01/13/2016
Time: 10:54:45

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

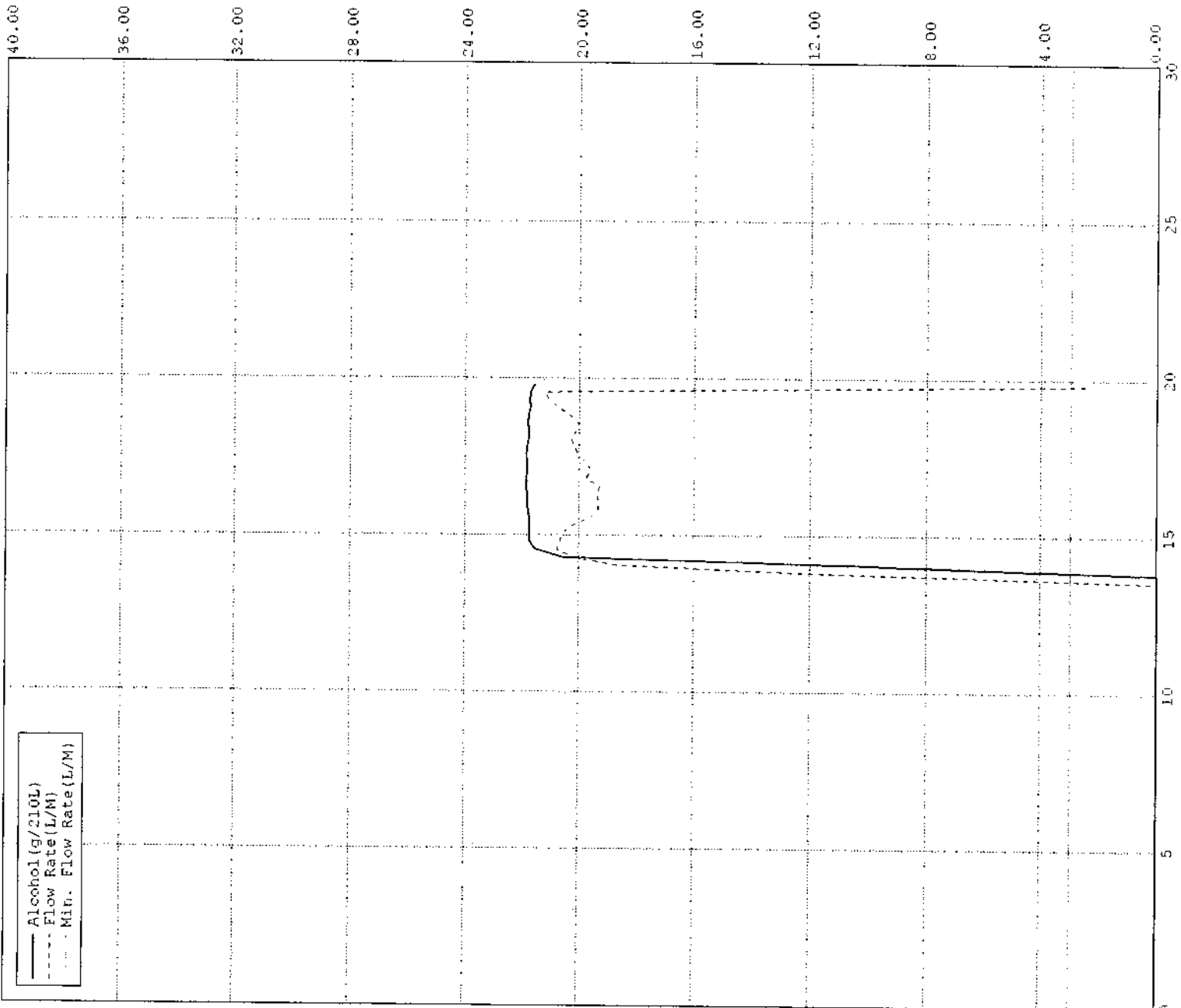
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.15: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

| | | |
|-------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 10:55 |
| BLANK TEST | 0.000 | 10:55 |
| INTERNAL STANDARD | VERIFIED | 10:55 |
| Xq = 0.096 (1.57%) | | |
| EXTERNAL STANDARD | 0.077 | 10:56 |
| X[1] = 0.0768 (0.0007) | (0.0040) | |
| BLANK TEST | 0.000 | 10:57 |
| SUBJECT SAMPLE | XXX | 10:57 |
| X[1] = 0.1084 (-0.0191) | (0.0030) | |

Interference Detected

CPB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100688

Date: 01/13/2016
Time: 11:01:15

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 16-1234
TEST TYPE: TEST

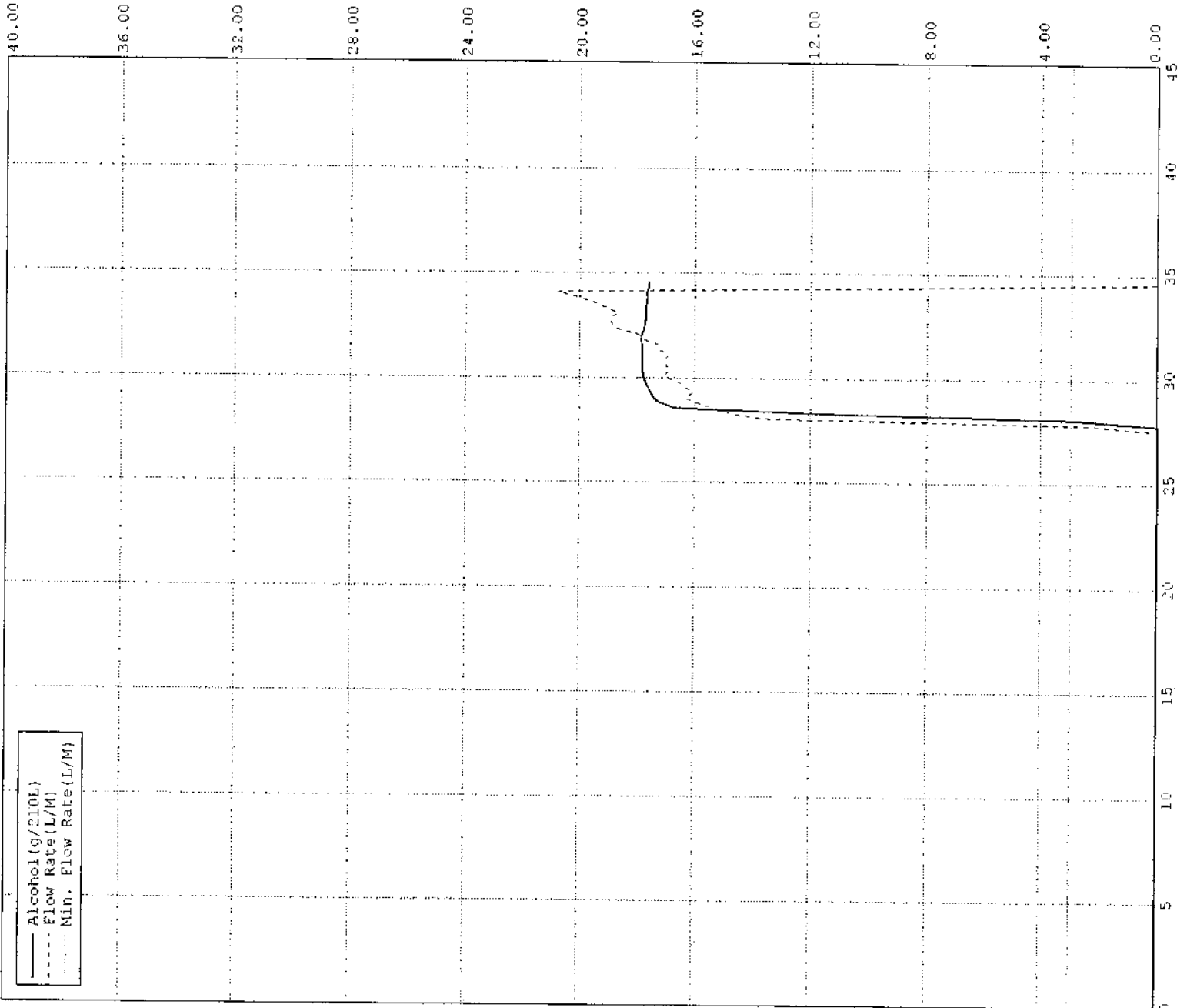
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.15: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

| | | |
|---------------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 11:02 |
| BLANK TEST | 0.000 | 11:02 |
| INTERNAL STANDARD | VERIFIED | 11:02 |
| Xq = 0.096 (1.66%) | | |
| EXTERNAL STANDARD | 0.076 | 11:02 |
| X[1] = 0.0764 (0.0011) (0.0035) | | |
| BLANK TEST | 0.000 | 11:03 |
| SUBJECT SAMPLE (Vol=1.85L) | 0.088 | 11:04 |
| X[1] = 0.0888 (0.0003) (0.0019) | | |
| BLANK TEST | 0.000 | 11:05 |
| EXTERNAL STANDARD | 0.076 | 11:05 |
| X[1] = 0.0755 (0.0003) (0.0036) | | |
| BLANK TEST | 0.000 | 11:06 |

Filter 2 avg = 0.0006
Filter 3 avg = 0.0086

CSB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100688

Date: 01/13/2016
Time: 11:15:41

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

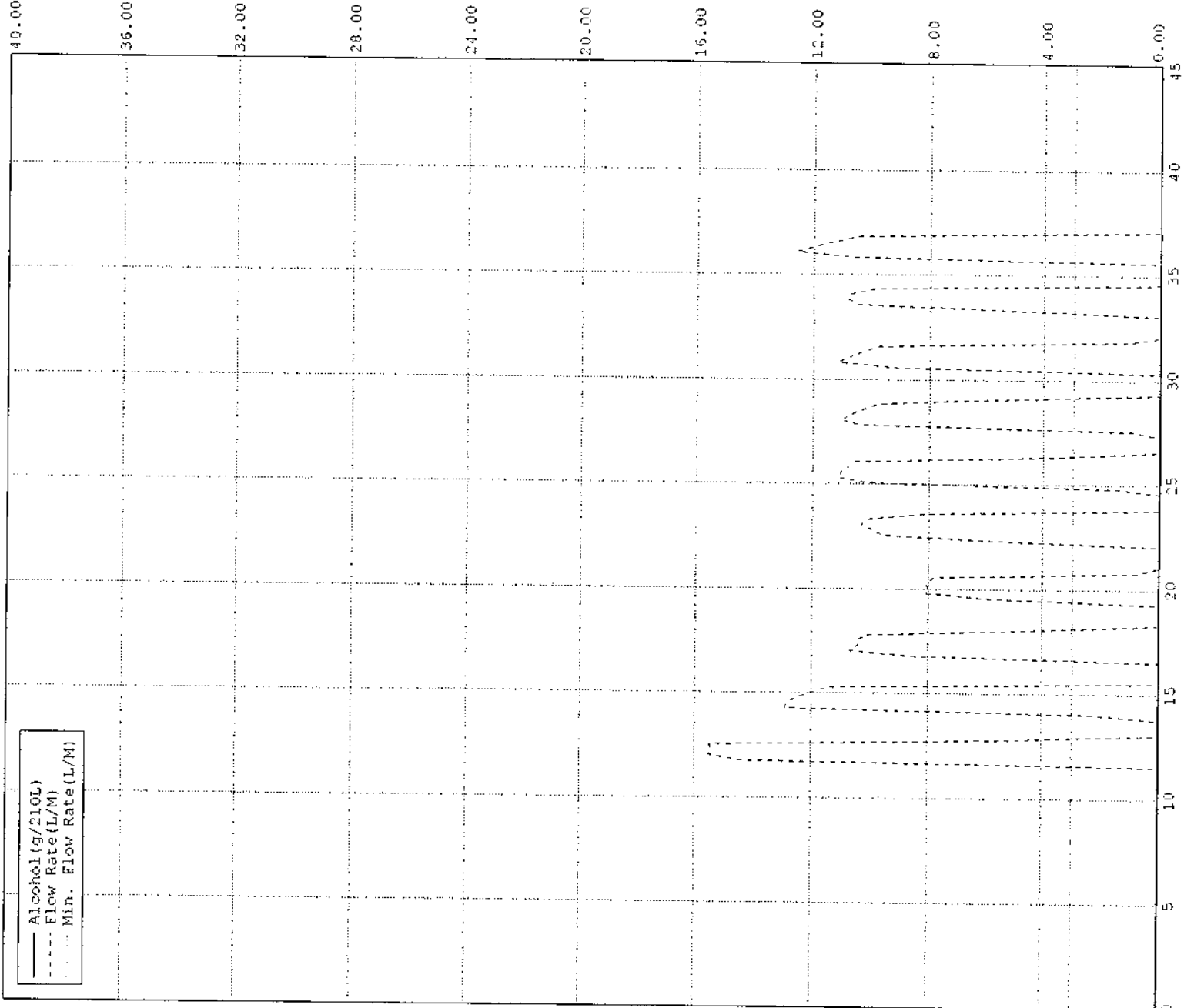
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.15: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

| | | |
|-------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 11:18 |
| BLANK TEST | 0.000 | 11:19 |
| INTERNAL STANDARD | VERIFIED | 11:19 |
| EXTERNAL STANDARD | 0.077 | 11:19 |
| BLANK TEST | 0.000 | 11:20 |
| SUBJECT SAMPLE | XXX | 11:20 |

Maximum Attempts Exceeded

CBA



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100688

Date: 01/13/2016
Time: 11:22:36

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 16-1234
TEST TYPE: TEST

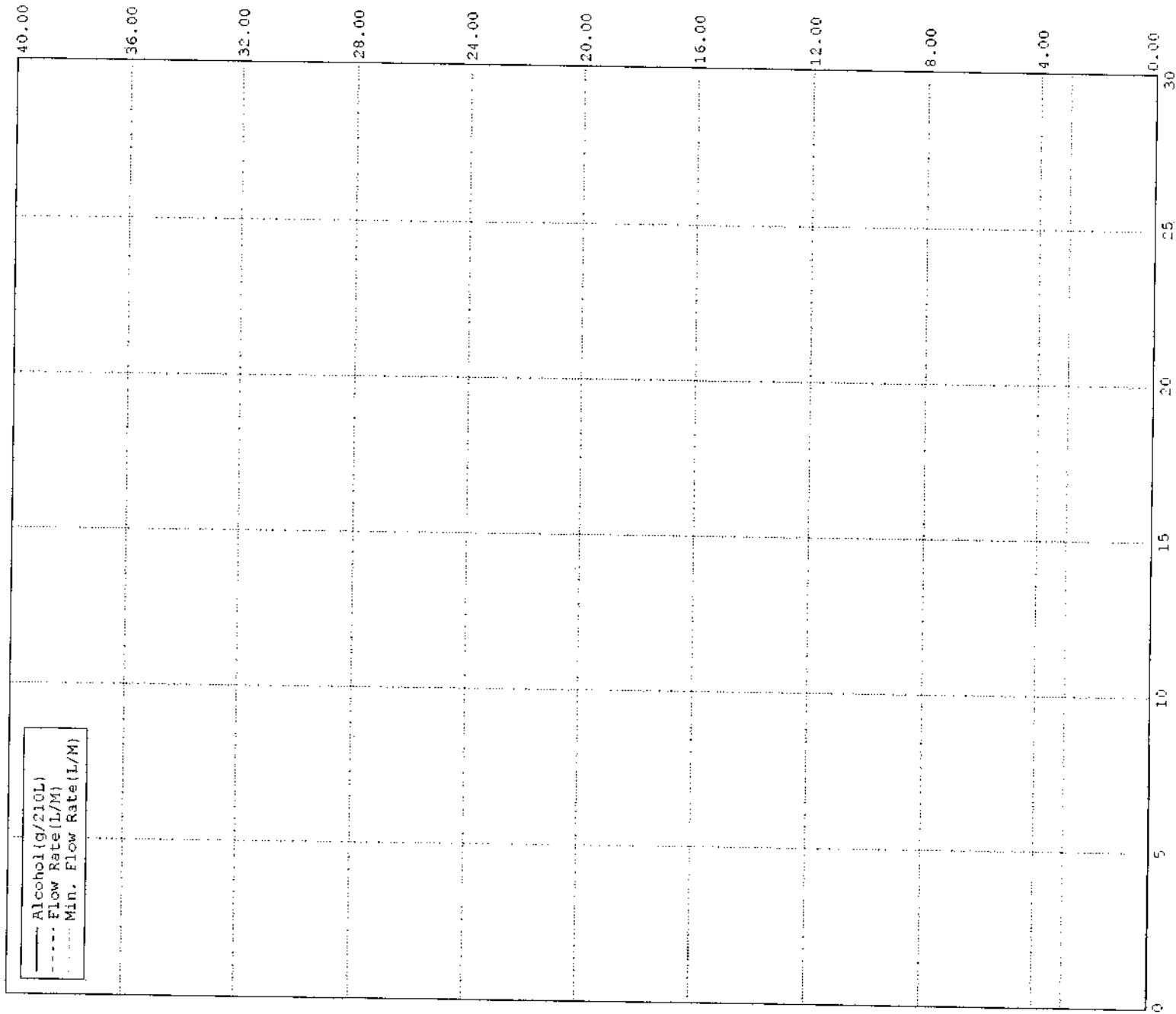
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.15: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 11:23
BLANK TEST 0.000 11:23
INTERNAL STANDARD VERIFIED 11:23
EXTERNAL STANDARD 0.076 11:24
BLANK TEST 0.000 11:25

RFI DETECTED

CSB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100688

Date: 01/13/2016
Time: 11:39:02

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 29.15: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

| | | |
|----------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 11:40 |
| BLANK TEST | 0.000 | 11:40 |
| INTERNAL STANDARD | VERIFIED | 11:40 |
| EXTERNAL STANDARD | 0.076 | 11:40 |
| BLANK TEST | 0.000 | 11:41 |
| SUBJECT SAMPLE (Vol=1.75L) | 0.000 | 11:42 |
| BLANK TEST | 0.000 | 11:43 |
| EXTERNAL STANDARD | 0.076 | 11:43 |
| BLANK TEST | 0.000 | 11:44 |

