

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 100398 Analyst C. O. Bryant Start Date 8/5/15

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 1.62 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 09214080A2 Exp 5/1/16
- iv. 0.100g/210L Mnf ILMO Lot 02915100A1 Exp 3/5/17
- v. 0.200g/210L Mnf Both Lot 13220 Exp 8/5/15
 - 1. Simulator S/N DR4162 Date Calibrated 1/19/15
- vi. 0.300g/210L Mnf Both Lot 14270 Exp 12/2/16
 - 1. Simulator S/N DR 6267 Date Calibrated 1/20/15

5. Functional Tests (attached)

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

- i. Acetone - Mnf Both Lot 14110 Level 0.100 Exp 5/1/16
 - 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 SD1176 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 8/6/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/05/2015
Time: 09:27:12

VERSIONS
DMT: 3.01
PIC: 3.02
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 49.1°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.80 V PASSED
(1.09 V - 2.55 V)
Cooler Voltage = 1.74 V PASSED
(1.06 V - 2.46 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 537 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.960 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 = 0.095 0.46% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100398

Date: 08/05/2015
Time: 10:08 AM

Temperatures (°C)
Sample Cell: 49.2°C
Breath Tube: 47.9°C

Current Barometer 29.7 in
Volume (Ltr) 1.54

Settings
Lamp: 1.82 V
Bias: 80 V
Cooler: 1.82 V
Chopper: 537 Hz

Voltages (V)
Flow: 1.03 V
Detector: 0.024 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 05/01/2015
Time: 10:32:08

OPERATOR NAME:
CHARLES FOSTER
CERTIFICATE #: 7734

Ca = 0.1000
CAL = 0.977715 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0078 0.0010 <= b2 < 0.0100
b3 = 0.0003 0.0000 <= b3 < 0.0040
Xq = 0.0952 0.0500 <= Xq < 0.2000
a21 = 1.238166 1.050 <= a21 < 1.300
a31 = 0.474955 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100398

Date: 08/05/2015
Time: 10:11:16

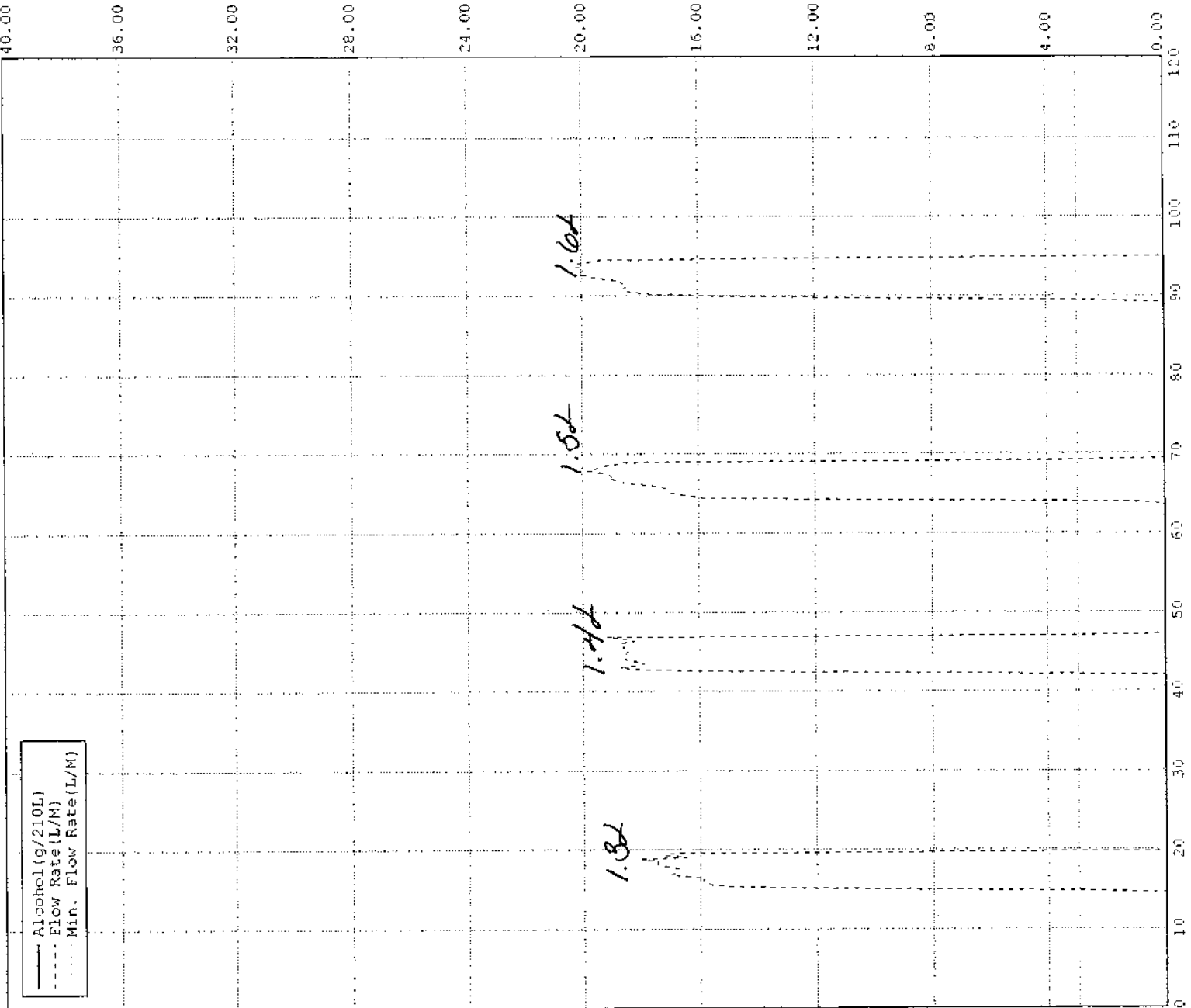
SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.66: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

| | | |
|----------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 10:16 |
| BLANK TEST | 0.000 | 10:16 |
| INTERNAL STANDARD | VERIFIED | 10:16 |
| EXTERNAL STANDARD | 0.078 | 10:16 |
| BLANK TEST | 0.000 | 10:17 |
| SUBJECT SAMPLE (Vol=1.61L) | 0.000 | 10:19 |
| BLANK TEST | 0.000 | 10:20 |
| EXTERNAL STANDARD | 0.078 | 10:20 |
| BLANK TEST | 0.000 | 10:21 |



LINEARITY CHECK

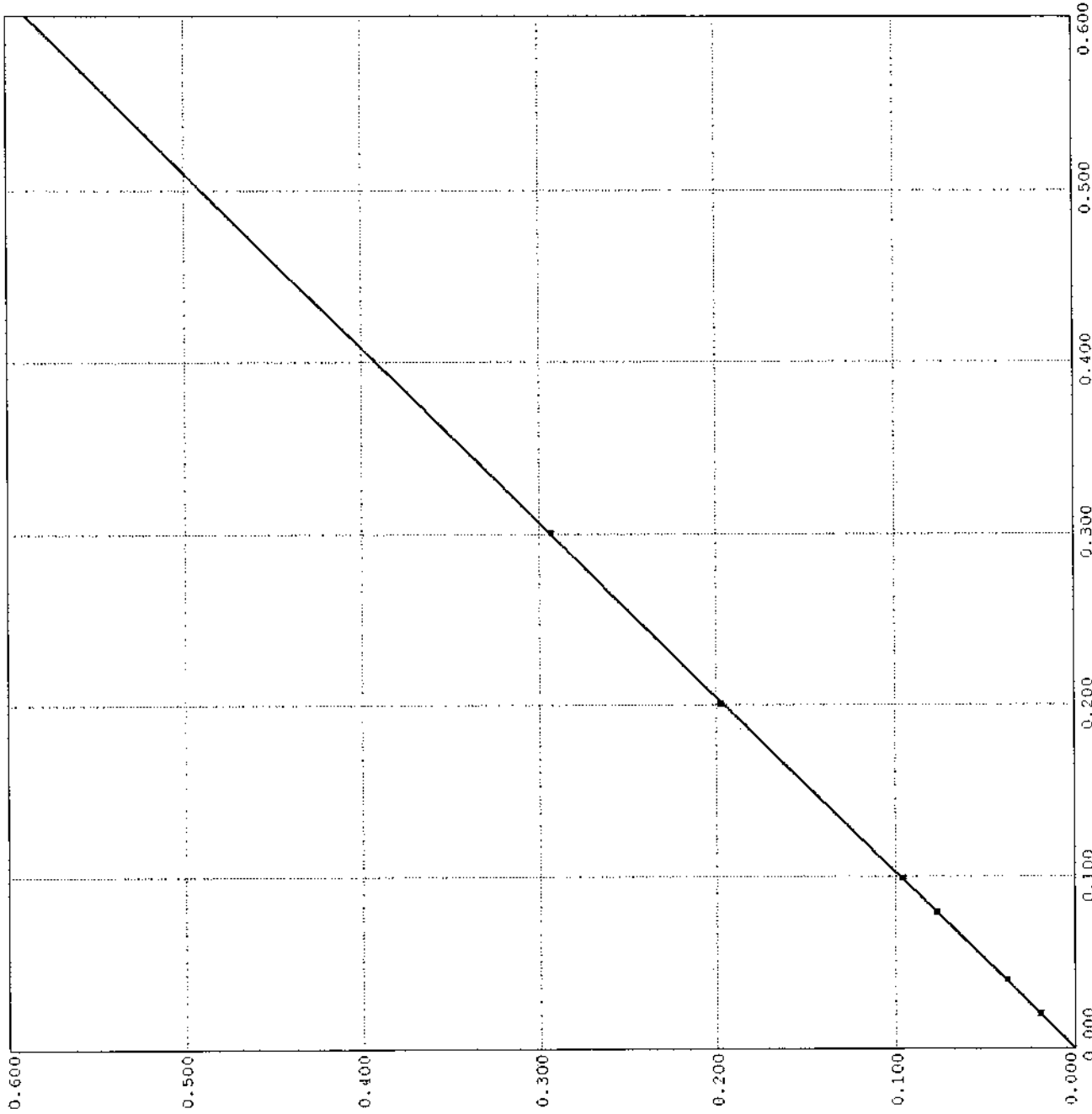
Alaska Department of Public Safety
 DATAMASTER dmt: 100398

Date: 08/05/2015
 Time: 10:38:49

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

| TARGET | AVERAGE | STD. DEV. |
|--------|---------|-----------|
| 0.020 | 0.0200 | 0.0000 |
| 0.040 | 0.0390 | 0.0000 |
| 0.079 | 0.0780 | 0.0000 |
| 0.099 | 0.0970 | 0.0000 |
| 0.200 | 0.1982 | 0.0008 |
| 0.300 | 0.2940 | 0.0007 |

SLOPE = 0.982091
 R² = 0.999934



COB

LINEARITY CHECK: Control Test 1

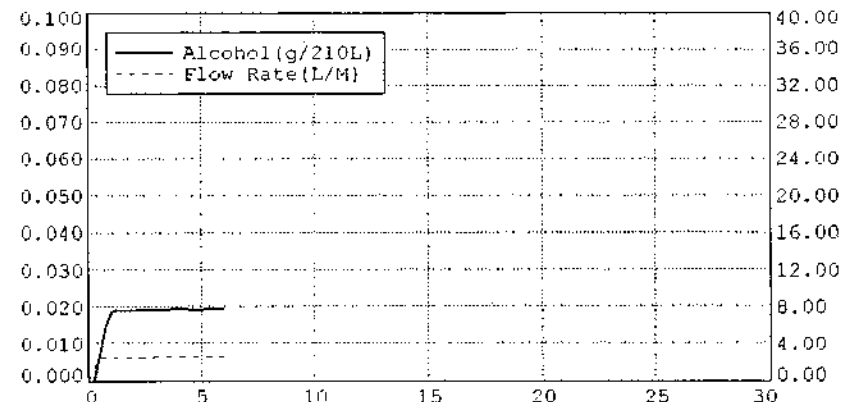
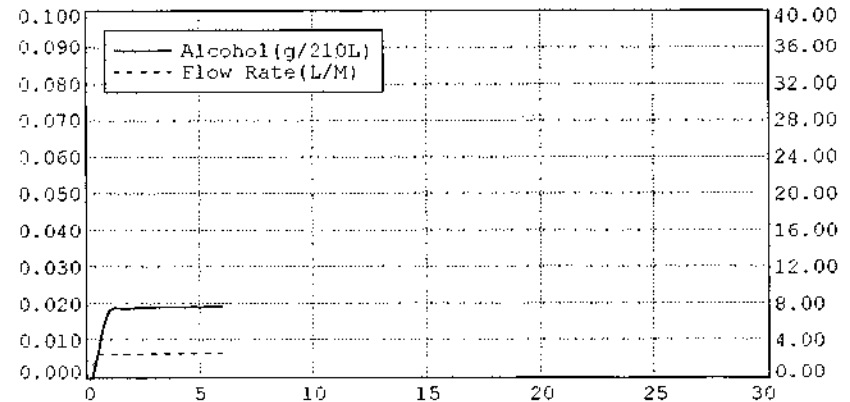
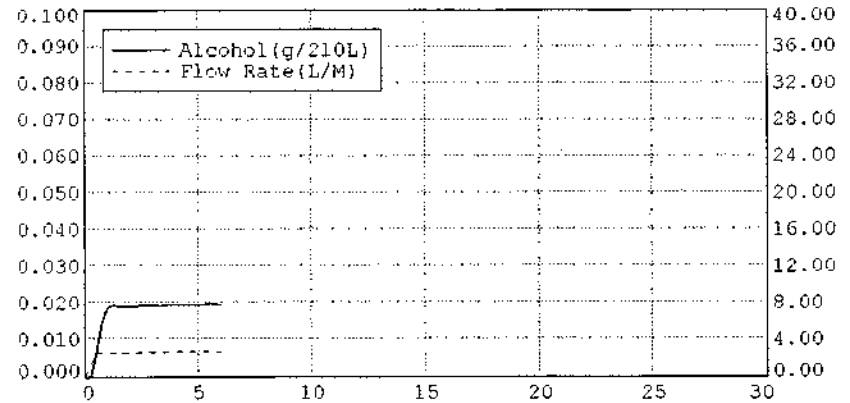
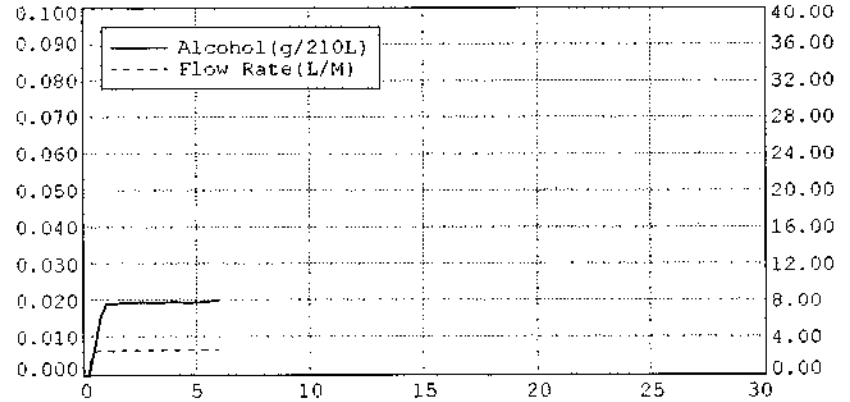
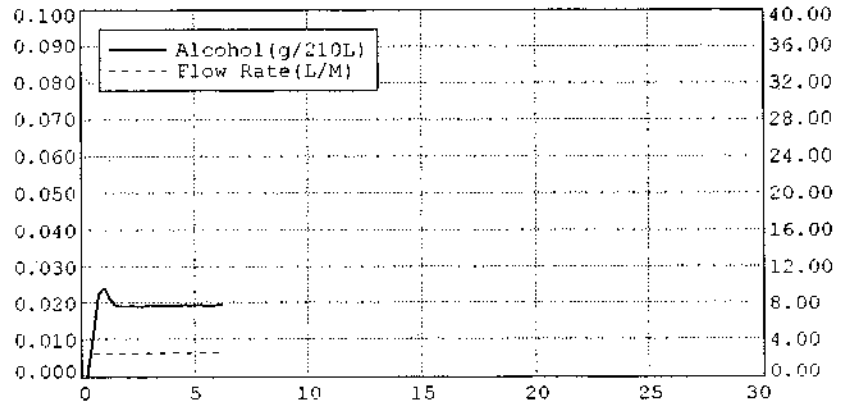
Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/05/2015
Time: 10:38:50

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.020
TARGET AT 29.66: 0.020
LOT #: 02915020A2
EXPIRATION: 03/05/2017
TANK PRESSURE: 573 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 10:52 |
| INTERNAL STANDARD | VERIFIED | 10:52 |
| EXTERNAL STANDARD | 0.020 | 10:52 |
| BLANK TEST | 0.000 | 10:53 |
| EXTERNAL STANDARD | 0.020 | 10:53 |
| BLANK TEST | 0.000 | 10:54 |
| EXTERNAL STANDARD | 0.020 | 10:54 |
| BLANK TEST | 0.000 | 10:55 |
| EXTERNAL STANDARD | 0.020 | 10:55 |
| BLANK TEST | 0.000 | 10:56 |
| EXTERNAL STANDARD | 0.020 | 10:56 |
| BLANK TEST | 0.000 | 10:57 |

Average = 0.0200
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100398

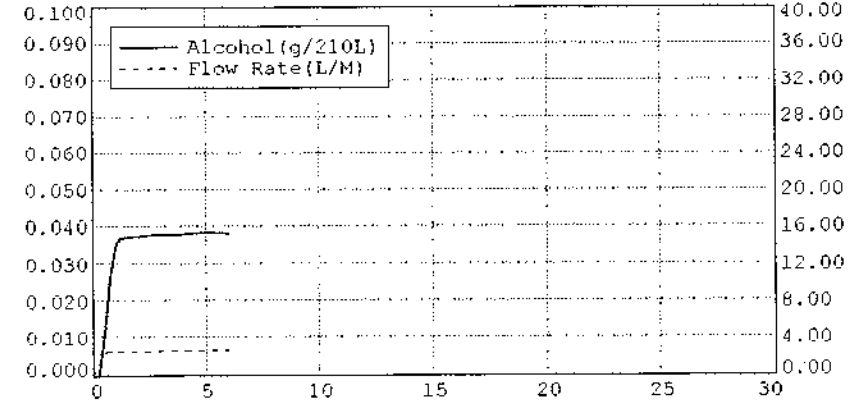
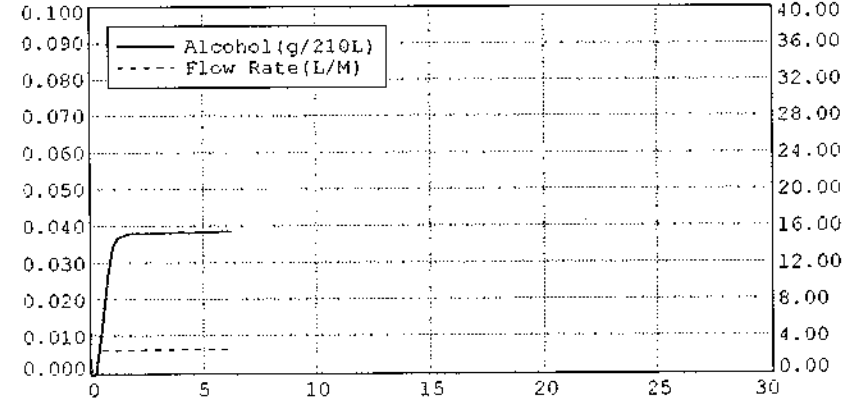
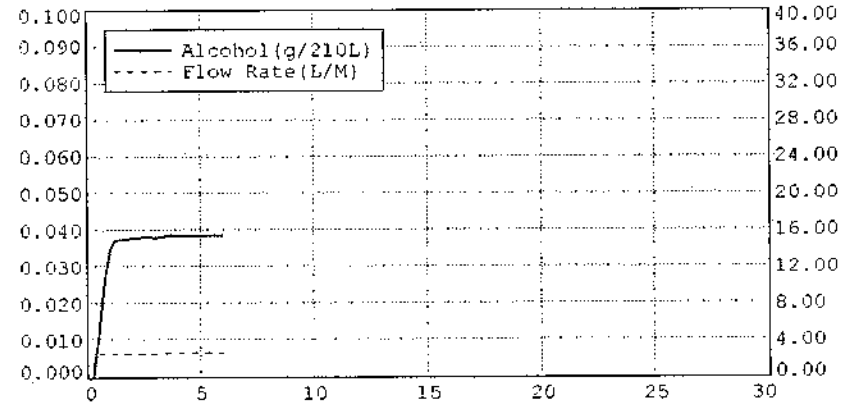
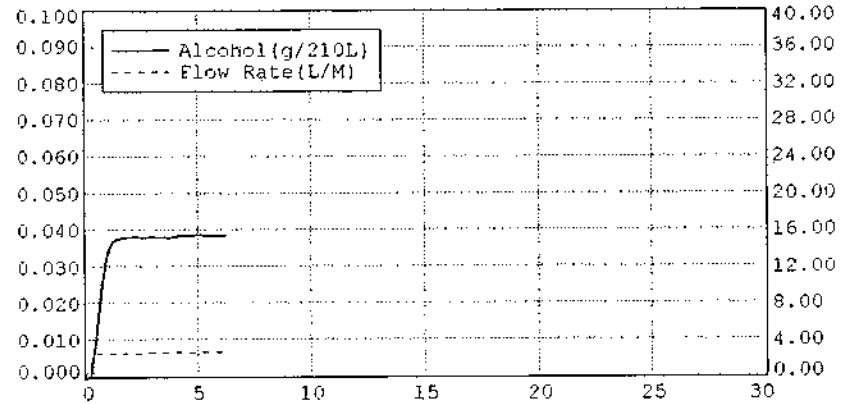
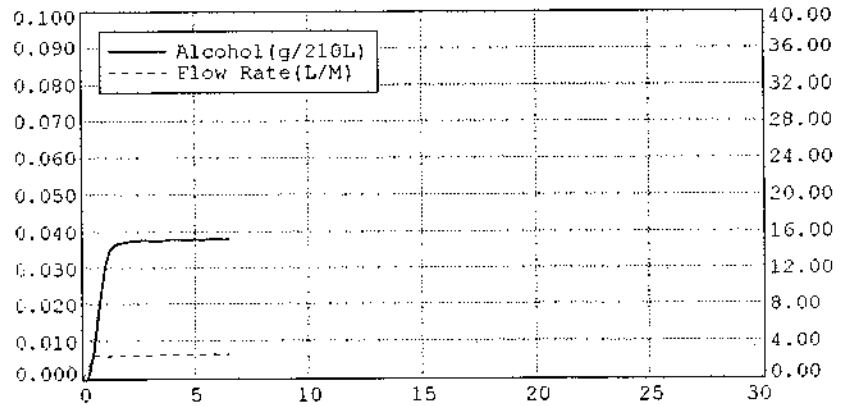
Date: 08/05/2015
 Time: 10:58:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.66: 0.040
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 676 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 11:01 |
| INTERNAL STANDARD | VERIFIED | 11:01 |
| EXTERNAL STANDARD | 0.039 | 11:01 |
| BLANK TEST | 0.000 | 11:02 |
| EXTERNAL STANDARD | 0.039 | 11:02 |
| BLANK TEST | 0.000 | 11:03 |
| EXTERNAL STANDARD | 0.039 | 11:03 |
| BLANK TEST | 0.000 | 11:04 |
| EXTERNAL STANDARD | 0.039 | 11:04 |
| BLANK TEST | 0.000 | 11:05 |
| EXTERNAL STANDARD | 0.039 | 11:05 |
| BLANK TEST | 0.000 | 11:06 |

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

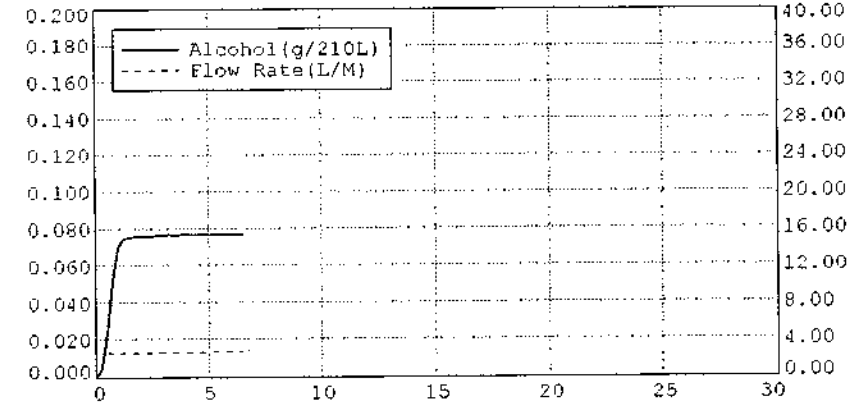
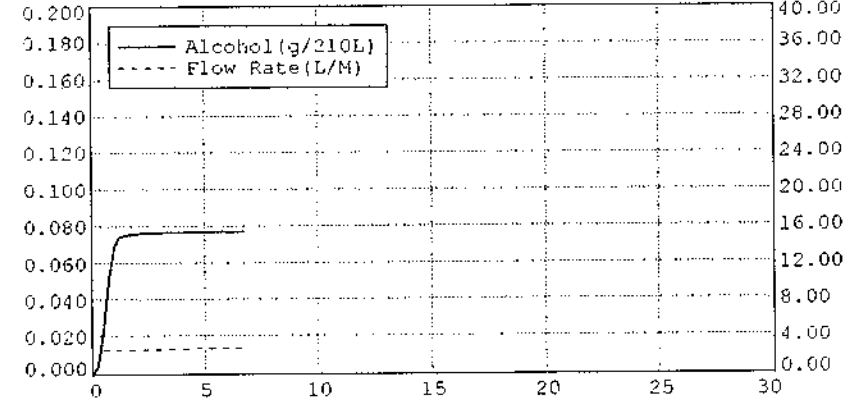
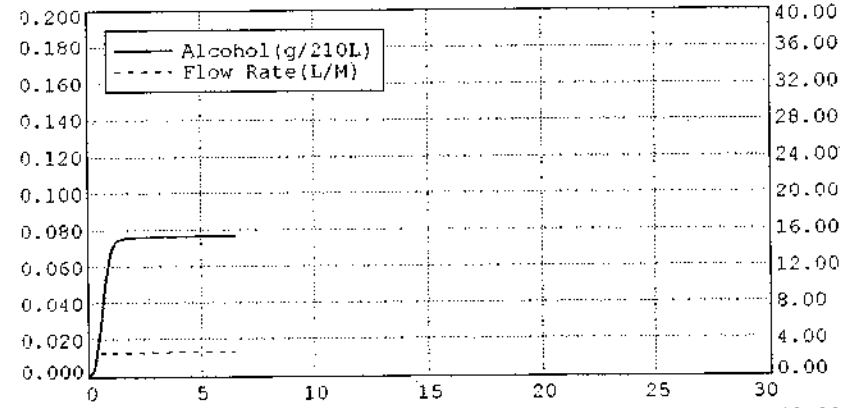
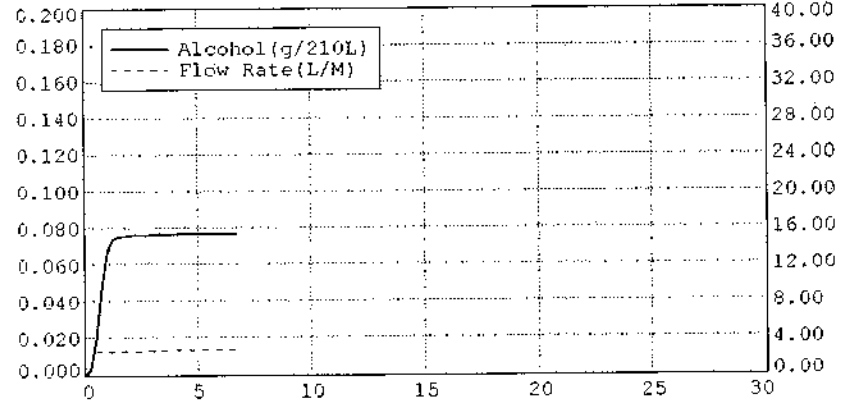
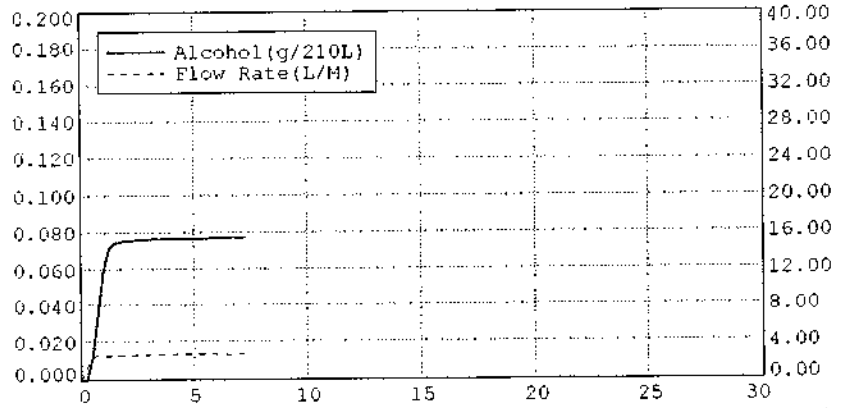
Alaska Department of Public Safety
 DATAMASTER dmt: 100398

Date: 08/05/2015
 Time: 11:08:08

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.66: 0.079
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016
 TANK PRESSURE: 880 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 11:09 |
| INTERNAL STANDARD | VERIFIED | 11:09 |
| EXTERNAL STANDARD | 0.078 | 11:09 |
| BLANK TEST | 0.000 | 11:10 |
| EXTERNAL STANDARD | 0.078 | 11:10 |
| BLANK TEST | 0.000 | 11:11 |
| EXTERNAL STANDARD | 0.078 | 11:11 |
| BLANK TEST | 0.000 | 11:12 |
| EXTERNAL STANDARD | 0.078 | 11:13 |
| BLANK TEST | 0.000 | 11:13 |
| EXTERNAL STANDARD | 0.078 | 11:14 |
| BLANK TEST | 0.000 | 11:15 |

Average = 0.0780
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100398

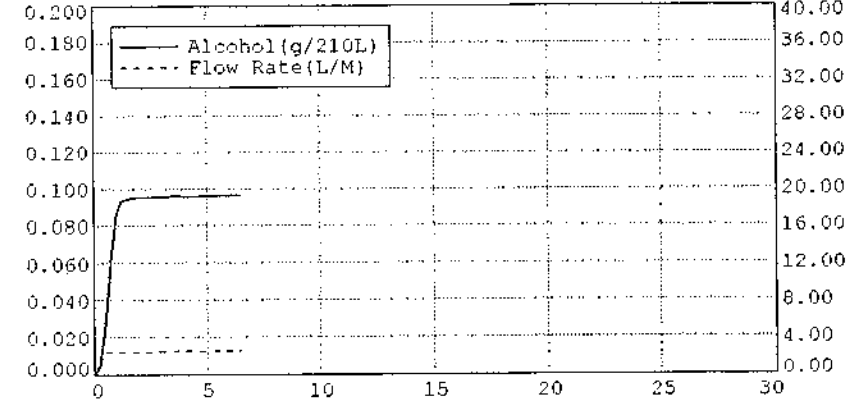
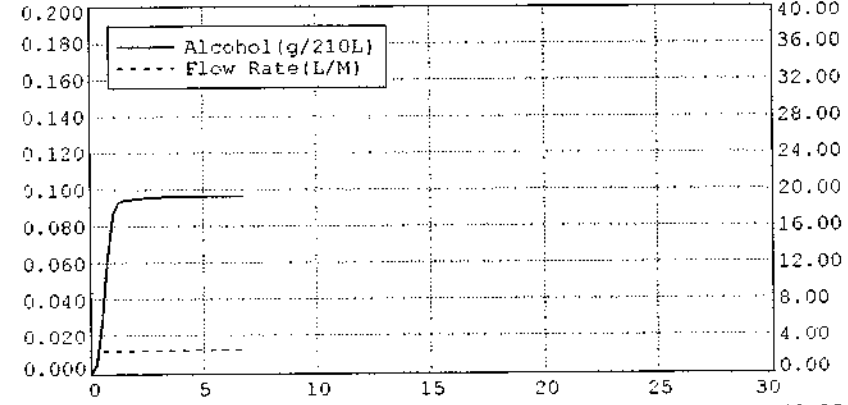
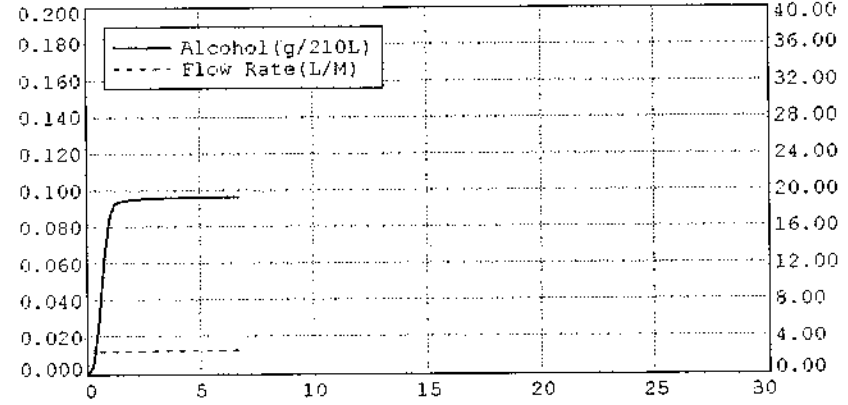
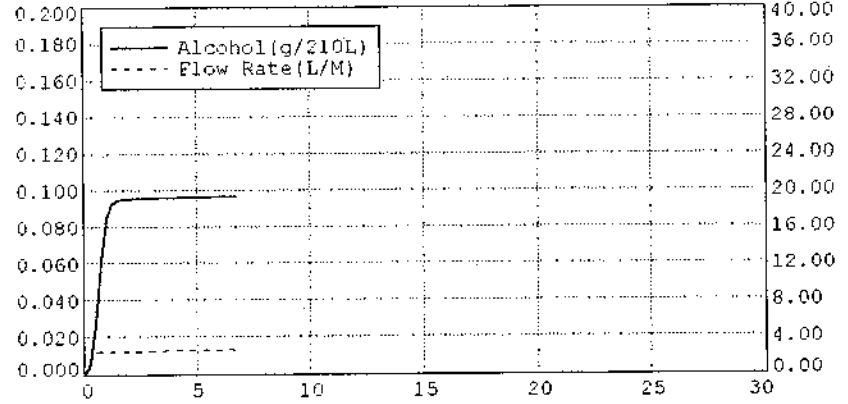
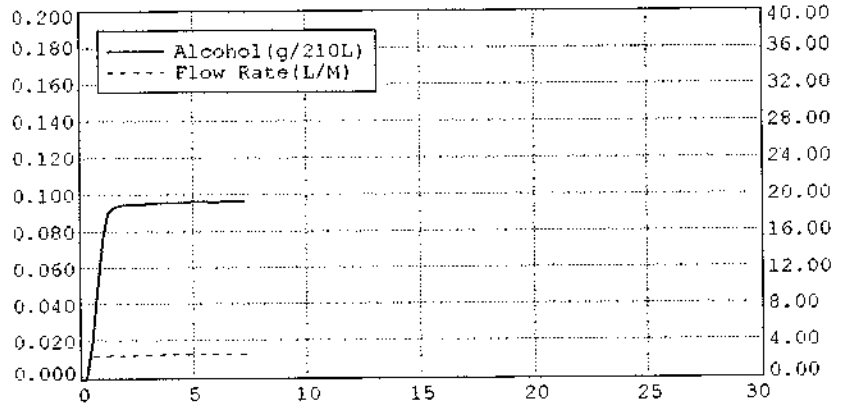
Date: 08/05/2015
 Time: 11:15:29

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.66: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 535 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 11:19 |
| INTERNAL STANDARD | VERIFIED | 11:19 |
| EXTERNAL STANDARD | 0.097 | 11:20 |
| BLANK TEST | 0.000 | 11:21 |
| EXTERNAL STANDARD | 0.097 | 11:21 |
| BLANK TEST | 0.000 | 11:22 |
| EXTERNAL STANDARD | 0.097 | 11:22 |
| BLANK TEST | 0.000 | 11:23 |
| EXTERNAL STANDARD | 0.097 | 11:23 |
| BLANK TEST | 0.000 | 11:24 |
| EXTERNAL STANDARD | 0.097 | 11:24 |
| BLANK TEST | 0.000 | 11:25 |

Average = 0.0970
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

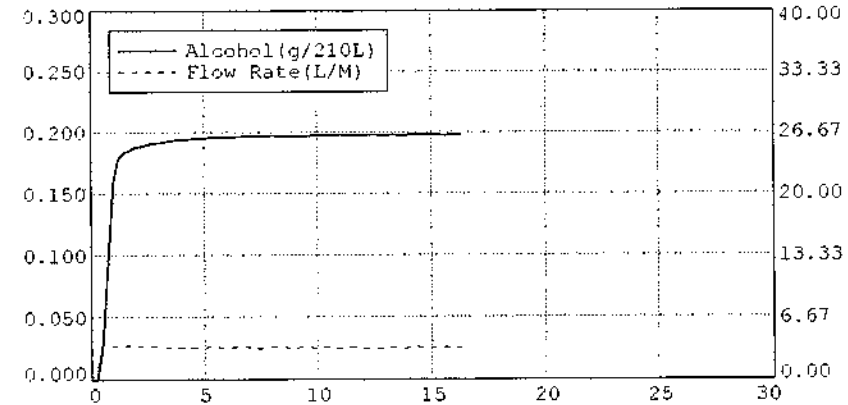
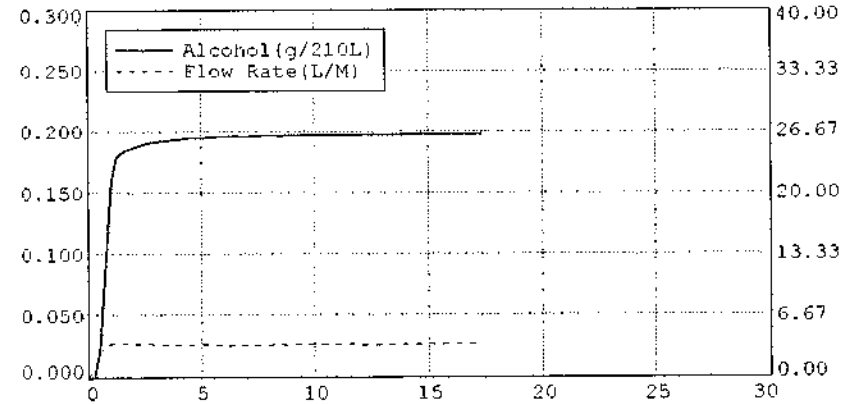
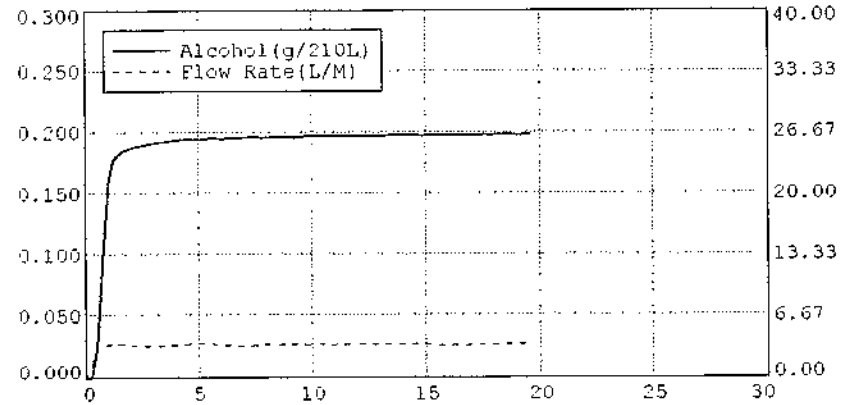
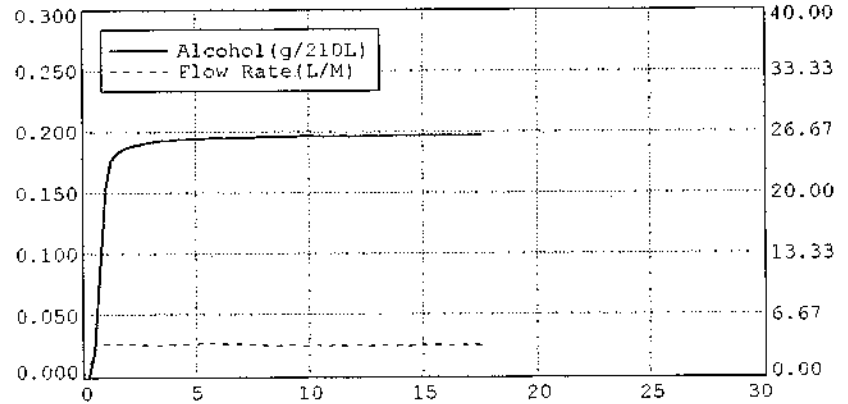
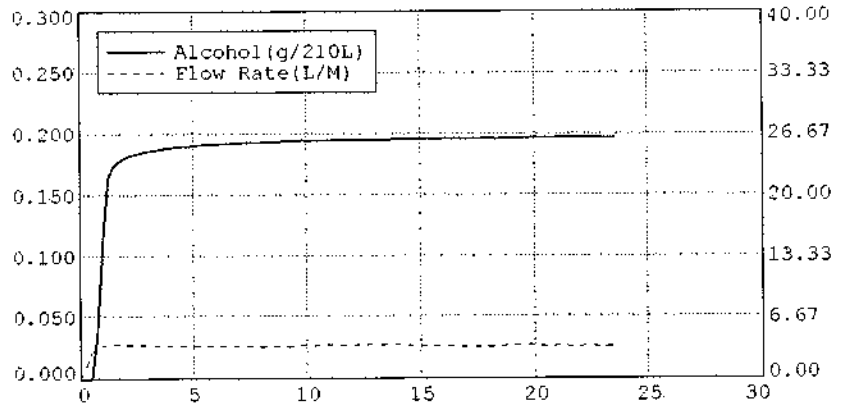
Alaska Department of Public Safety
 DATAMASTER dmt: 100398

Date: 08/05/2015
 Time: 11:33:37

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 13220
 EXPIRATION: 08/05/2015

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 11:34 |
| INTERNAL STANDARD | VERIFIED | 11:34 |
| EXTERNAL STANDARD | 0.197 | 11:35 |
| BLANK TEST | 0.000 | 11:36 |
| EXTERNAL STANDARD | 0.198 | 11:36 |
| BLANK TEST | 0.000 | 11:37 |
| EXTERNAL STANDARD | 0.199 | 11:38 |
| BLANK TEST | 0.000 | 11:38 |
| EXTERNAL STANDARD | 0.199 | 11:39 |
| BLANK TEST | 0.000 | 11:40 |
| EXTERNAL STANDARD | 0.198 | 11:40 |
| BLANK TEST | 0.000 | 11:41 |

Average = 0.1982
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100398

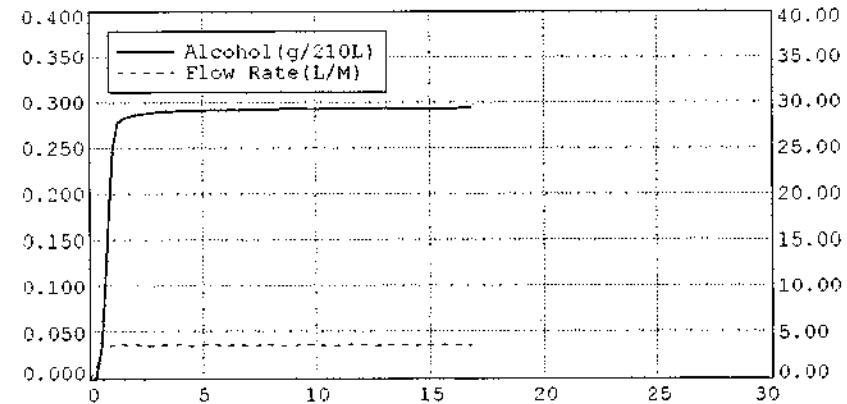
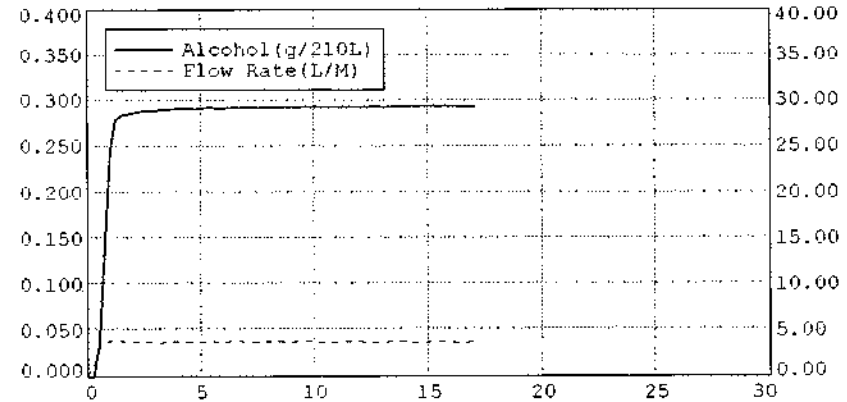
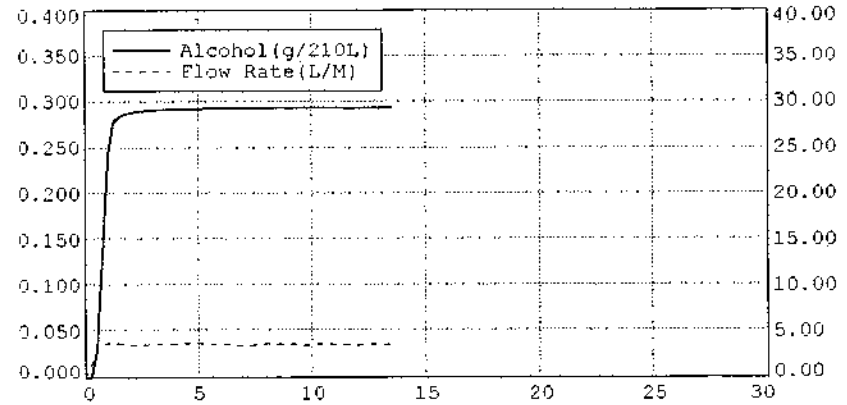
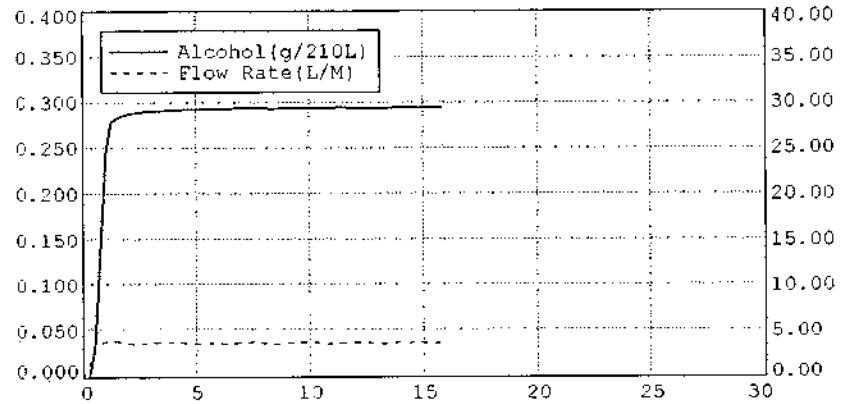
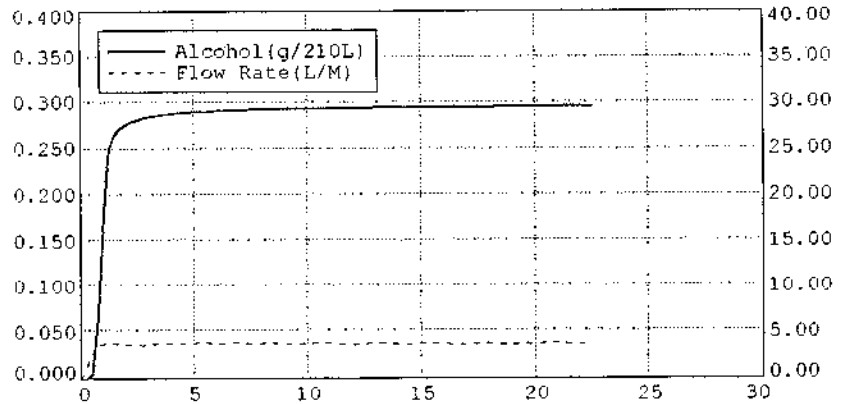
Date: 08/05/2015
 Time: 11:42:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 14270
 EXPIRATION: 12/02/2016

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 11:44 |
| INTERNAL STANDARD | VERIFIED | 11:44 |
| EXTERNAL STANDARD | 0.295 | 11:44 |
| BLANK TEST | 0.000 | 11:45 |
| EXTERNAL STANDARD | 0.294 | 11:46 |
| BLANK TEST | 0.000 | 11:47 |
| EXTERNAL STANDARD | 0.293 | 11:47 |
| BLANK TEST | 0.000 | 11:48 |
| EXTERNAL STANDARD | 0.294 | 11:48 |
| BLANK TEST | 0.000 | 11:49 |
| EXTERNAL STANDARD | 0.294 | 11:50 |
| BLANK TEST | 0.000 | 11:51 |

Average = 0.2940
 Std Dev = 0.0007



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/06/2015
Time: 06:05:48

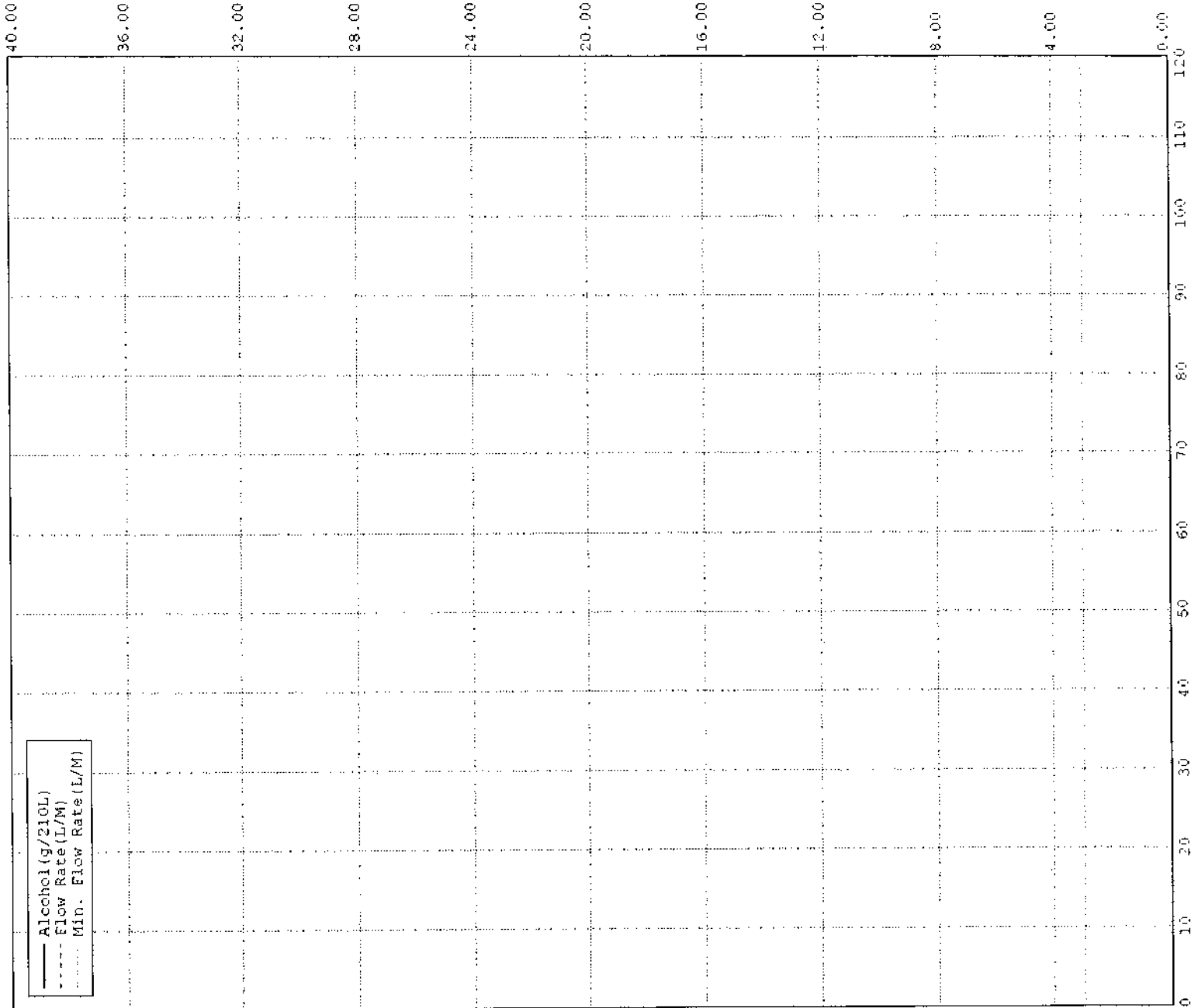
SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.65: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 06:06
BLANK TEST 0.000 06:06
INTERNAL STANDARD VERIFIED 06:07
EXTERNAL STANDARD 0.077 06:07
BLANK TEST 0.000 06:08
SUBJECT SAMPLE INCOMPLETE 06:10



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100398

Date: 08/06/2015

Time: 09:20:14

SUBJECT NAME:

TEST TEST

LICENSE #: INVALID

OPERATOR NAME:

COLLEEN S O'BRYAN

OPERATOR'S #: 6237

DEPT/AGENCY:

AAA1

CASE/REPORT: 15-1234

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.66: 0.079

LOT #: 09214080A2

EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK

BLANK TEST

PASSED

09:21

INTERNAL STANDARD

VERIFIED

09:21

EXTERNAL STANDARD

0.077

09:21

BLANK TEST

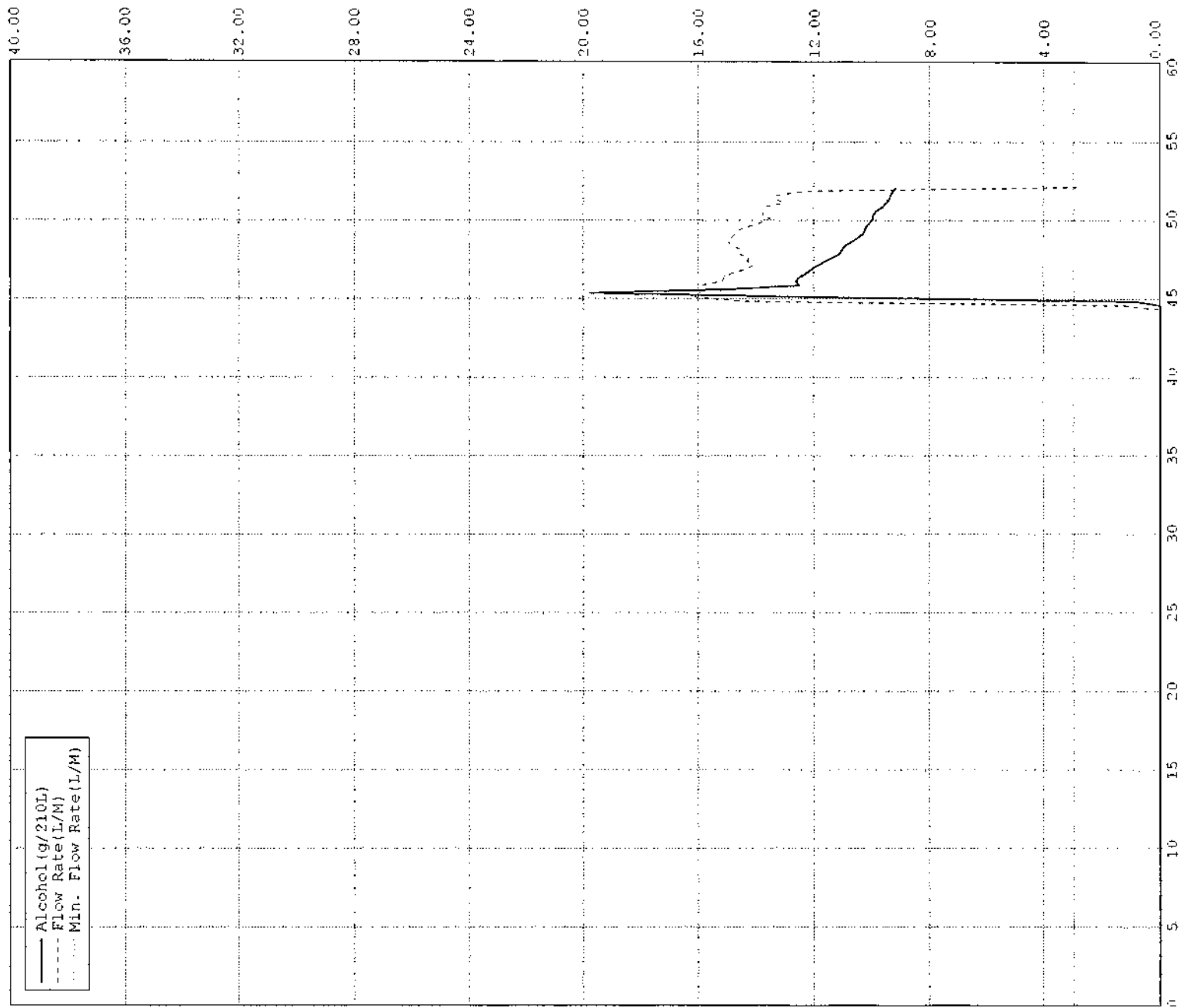
0.000

09:22

SUBJECT SAMPLE

INVALID

09:24



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/06/2015
Time: 09:28:53

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

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

DEPT/AGENCY:
AAA1

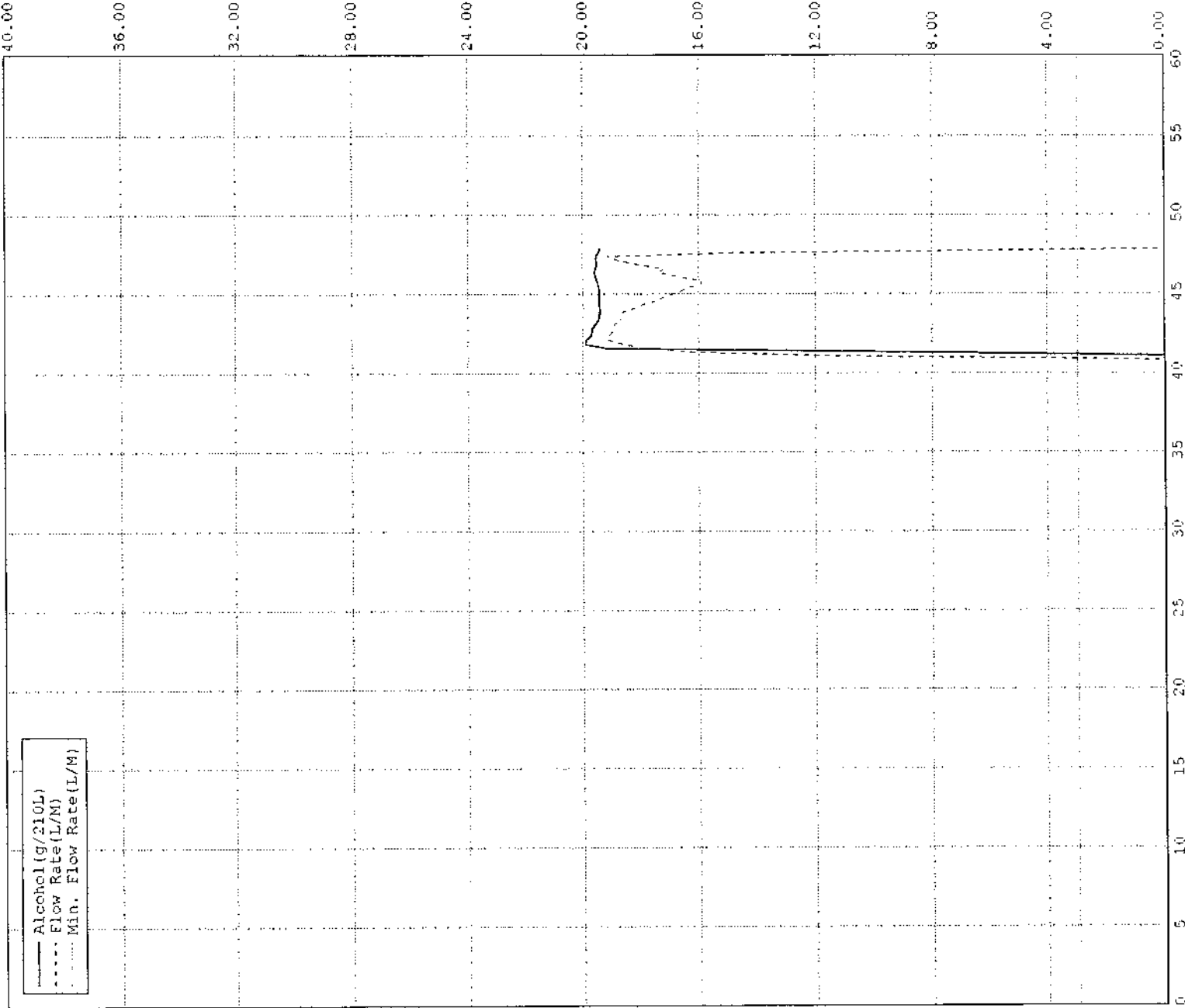
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.66: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

| | | |
|-------------------------|-----------|-------|
| DIAGNOSTIC CHECK | PASSED | 09:36 |
| BLANK TEST | 0.000 | 09:36 |
| INTERNAL STANDARD | VERIFIED | 09:36 |
| Xq = 0.096 (0.28%) | | |
| EXTERNAL STANDARD | 0.078 | 09:36 |
| X[1] = 0.0777 (-0.0005) | (0.0014) | |
| BLANK TEST | 0.000 | 09:37 |
| SUBJECT SAMPLE | XXX | 09:38 |
| X[1] = 0.0970 (-0.0140) | (-0.0013) | |

Interference Detected

Filter 2 avg = -0.0004
Filter 3 avg = 0.0019



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/06/2015
Time: 09:40:54

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

DEPT/AGENCY:

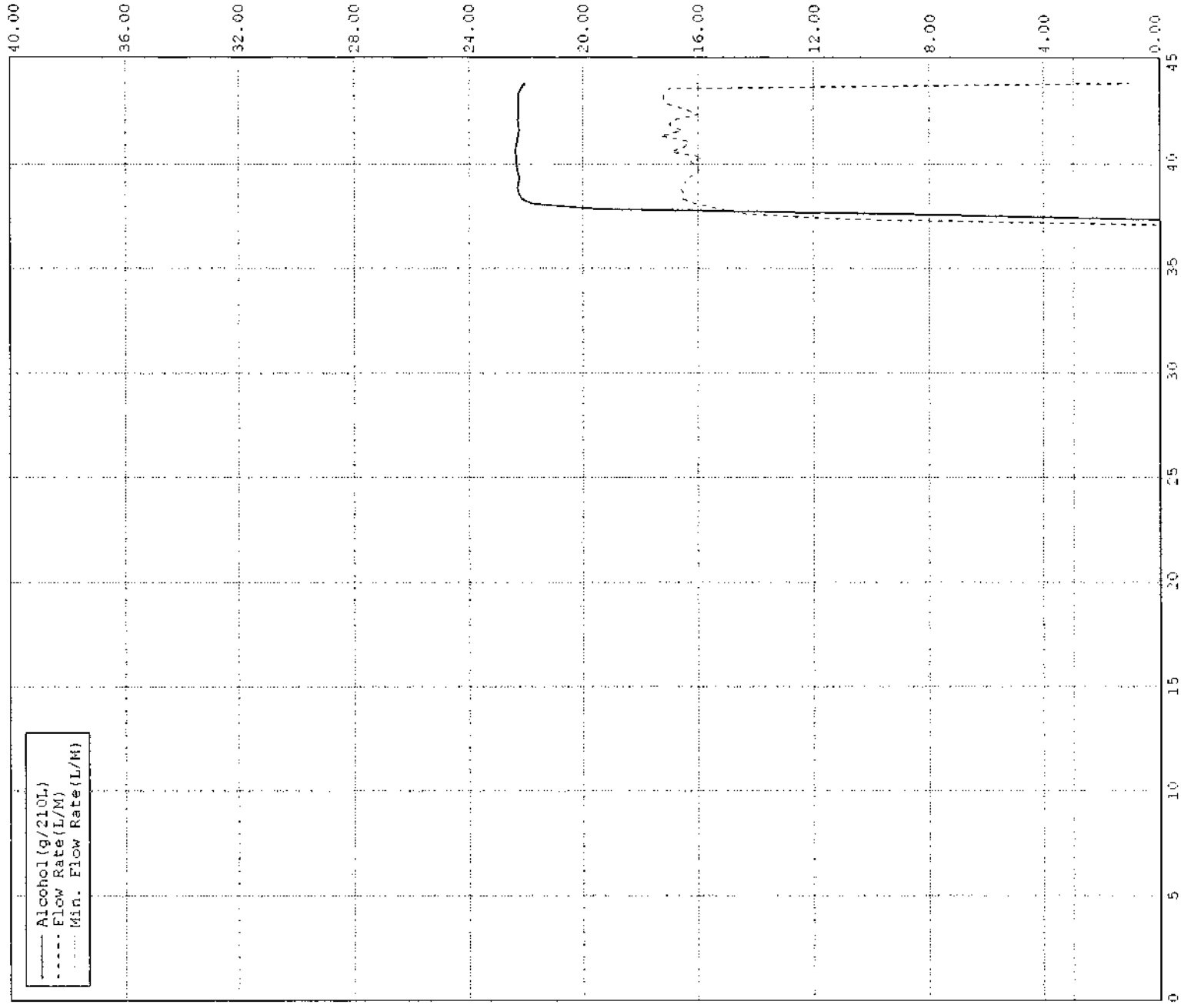
AAAA
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.66: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

| | | |
|-------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 09:41 |
| BLANK TEST | 0.000 | 09:42 |
| INTERNAL STANDARD | VERIFIED | 09:42 |
| Xq = 0.095 (0.18%) | | |
| EXTERNAL STANDARD | 0.078 | 09:42 |
| X[1] = 0.0776 (-0.0008) | (0.0019) | |
| BLANK TEST | 0.000 | 09:43 |
| SUBJECT SAMPLE | XXX | 09:44 |
| X[1] = 0.1104 (-0.0234) | (0.0013) | |

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/06/2015
Time: 09:46:38

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

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

DEPT/AGENCY:
AAA1

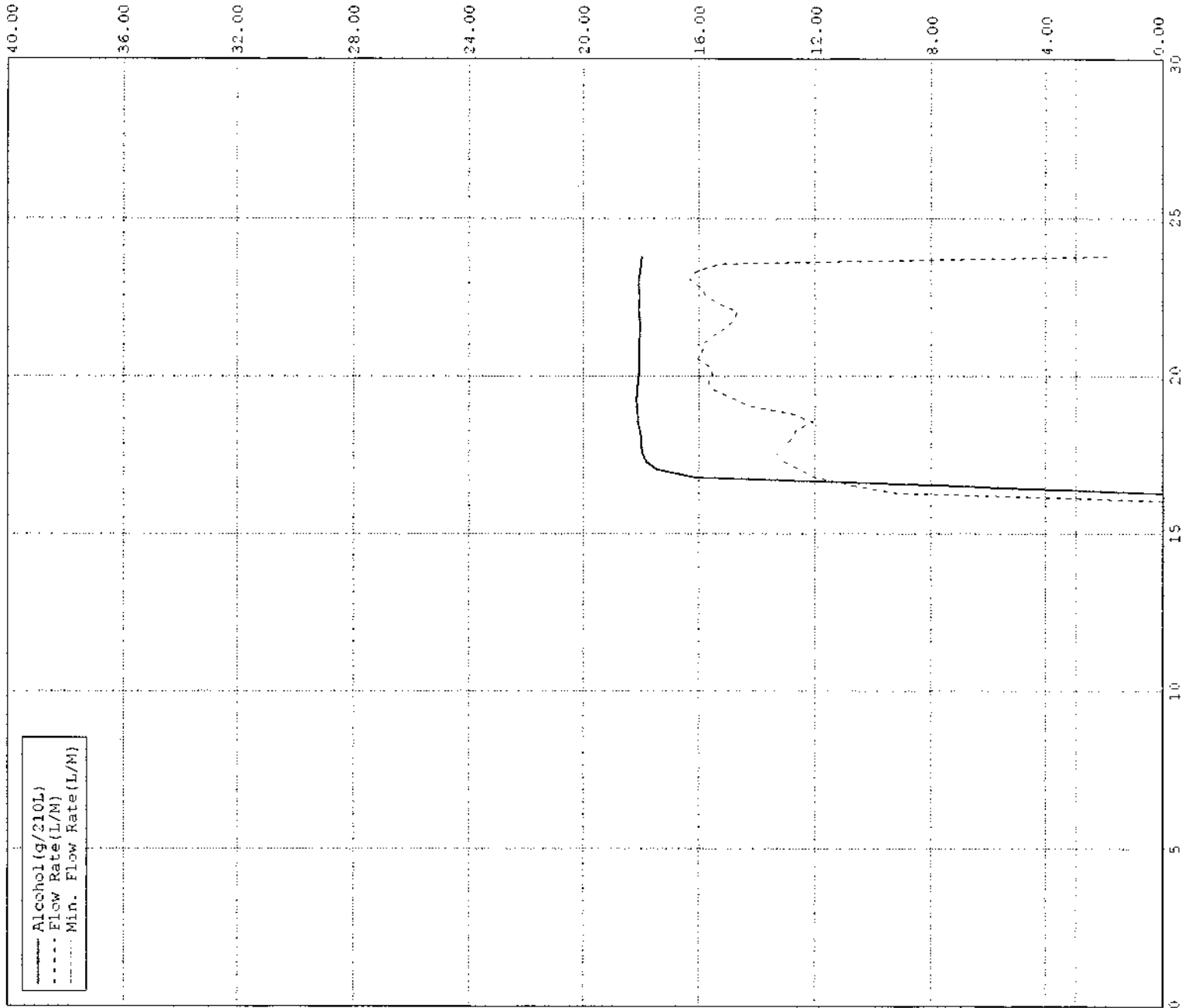
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.65: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

| | | |
|----------------------------|----------|-------|
| DIAGNOSTIC CHECK | PASSED | 09:47 |
| INTERNAL STANDARD | 0.000 | 09:47 |
| INTERNAL STANDARD | VERIFIED | 09:47 |
| Xq = 0.095 (0.00%) | | |
| EXTERNAL STANDARD | 0.078 | 09:48 |
| X[1] = 0.0775 (-0.0001) | (0.0021) | |
| BLANK TEST | 0.000 | 09:49 |
| SUBJECT SAMPLE (Vol=1.79L) | 0.090 | 09:49 |
| X[1] = 0.0902 (0.0019) | (0.0007) | |
| BLANK TEST | 0.000 | 09:50 |
| EXTERNAL STANDARD | 0.077 | 09:50 |
| X[1] = 0.0774 (-0.0002) | (0.0022) | |
| BLANK TEST | 0.000 | 09:51 |

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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/06/2015
Time: 09:53:30

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

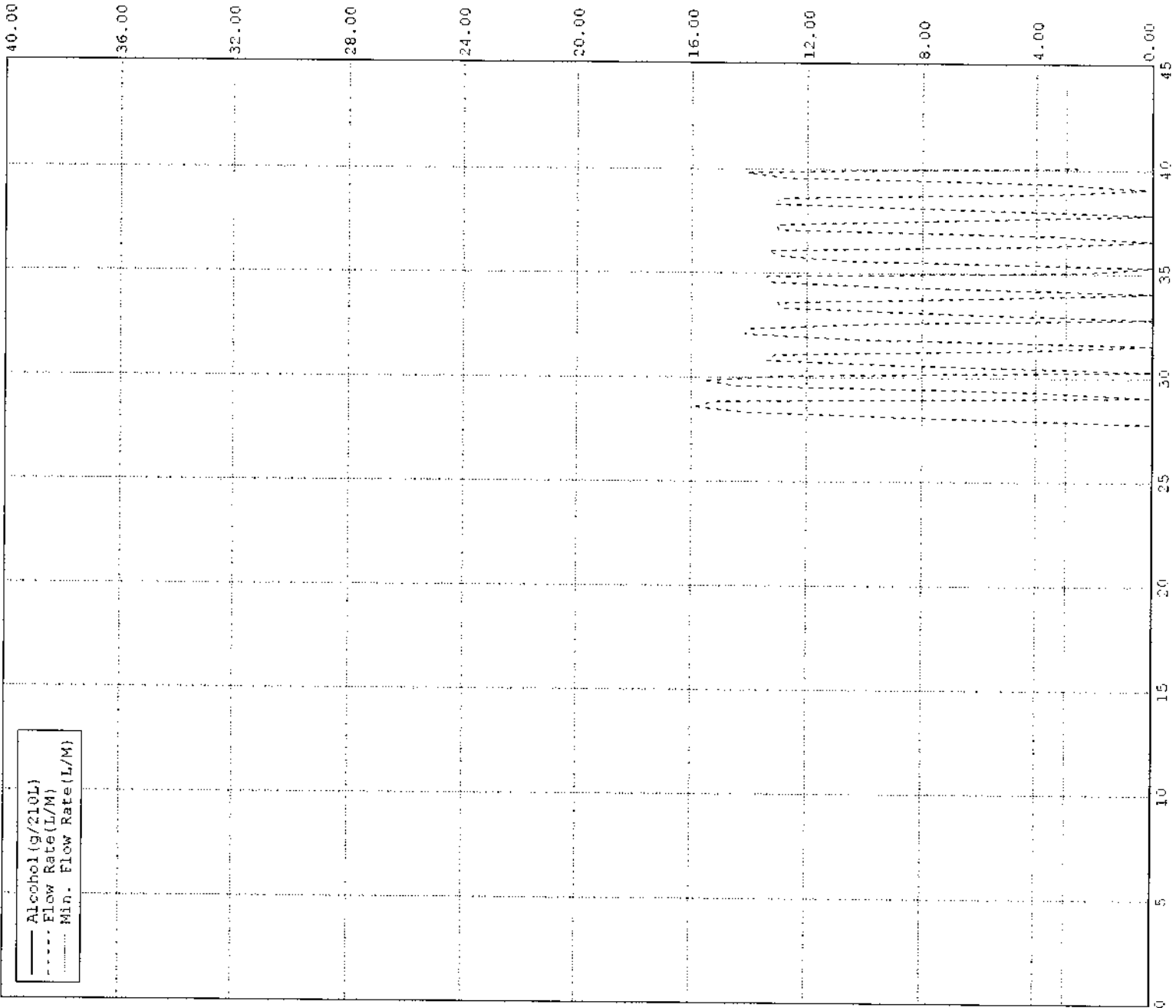
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.65: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 09:54
BLANK TEST 0.000 09:54
INTERNAL STANDARD VERIFIED 09:54
EXTERNAL STANDARD 0.078 09:54
BLANK TEST 0.000 09:55
SUBJECT SAMPLE XXX 09:56

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/06/2015
Time: 09:58:25

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

DEPT/AGENCY:
AAA1

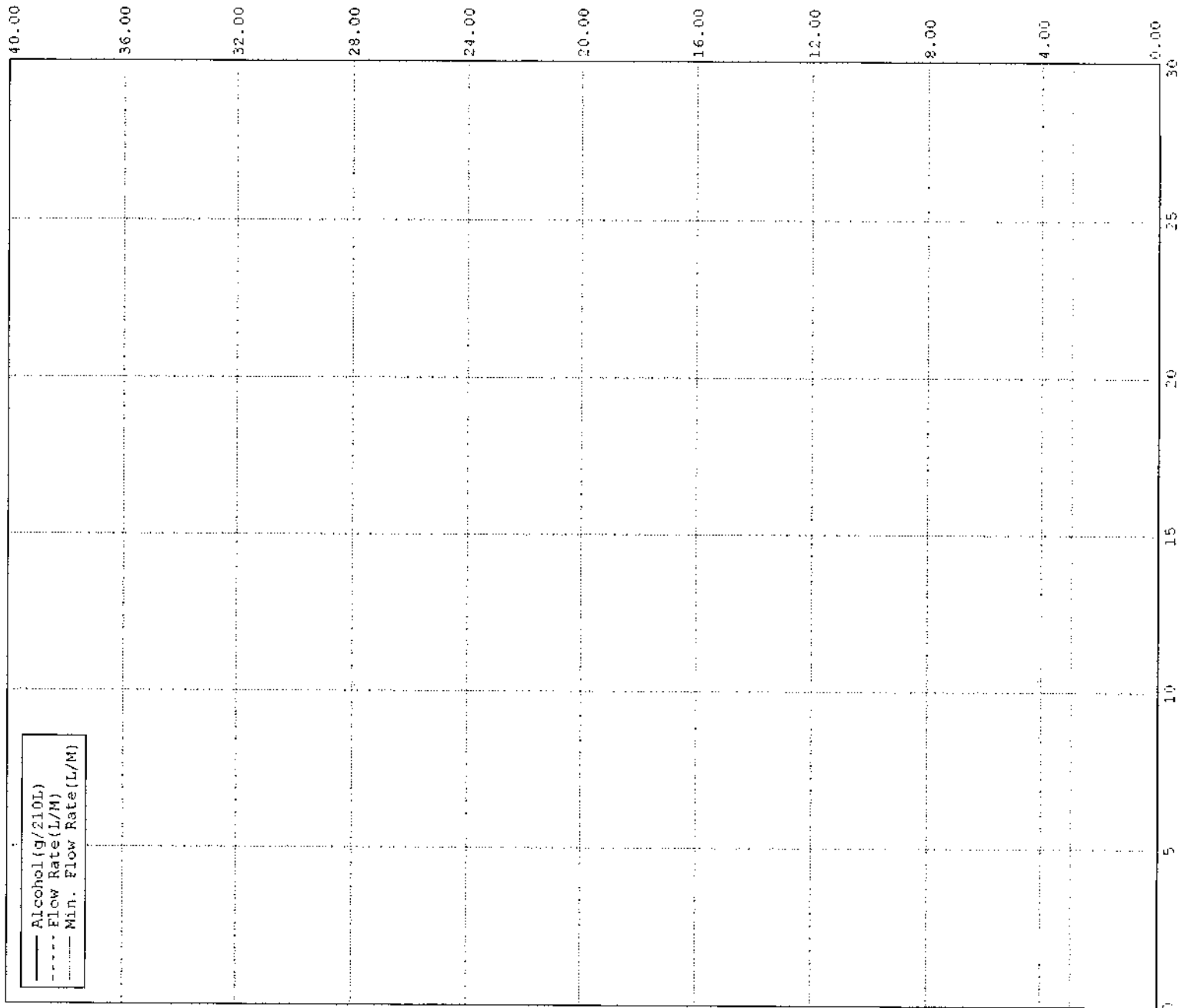
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.65: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 09:59
BLANK TEST 0.000 09:59
INTERNAL STANDARD VERIFIED 09:59
EXTERNAL STANDARD 0.077 09:59
BLANK TEST 0.000 10:00

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100398

Date: 08/06/2015
Time: 10:15:34

SUBJECT NAME:
TEST TEST
LICENSE #: NONDRINKING

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

DEPT/AGENCY:
AAAI
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.66: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

| DIAGNOSTIC CHECK | PASSED | 10:16 |
|----------------------------|----------|-------|
| BLANK TEST | 0.000 | 10:16 |
| INTERNAL STANDARD | VERIFIED | 10:16 |
| EXTERNAL STANDARD | 0.078 | 10:17 |
| BLANK TEST | 0.000 | 10:17 |
| SUBJECT SAMPLE (Vol=1.95L) | 0.000 | 10:18 |
| BLANK TEST | 0.000 | 10:19 |
| EXTERNAL STANDARD | 0.078 | 10:19 |
| BLANK TEST | 0.000 | 10:20 |

