



GUTH LABORATORIES, INC.

890 NORTH 67th STREET • HARRISBURG, PA 17111-4511 • TELEPHONE: 717-564-5470

CERTIFICATE OF ANALYSIS

Certified Alcohol Reference Solution for Simulator

Random Samples of Lot Number 17140 of Alcohol Reference Solution for Simulator were analyzed by gas chromatography on **May 18, 2017**, using a Perkin Elmer Gas Chromatograph Autosystem XL S/N: 610N9030209, and found to contain **0.3610%** (w/vol) ethyl alcohol. The expiration date for this lot number is **May 15, 2019** at 11:59 PM.

When used in a calibrated Simulator, operating at $34^{\circ}\text{C} \pm .2^{\circ}\text{C}$, this solution will give a breath alcohol analysis instrument reading of **0.300 g/210L \pm 3%**.

The alcohol and water used in this solution were free of test interfering substances.

Ted L. Pauley, President
GUTH LABORATORIES, INC.

NIST Traceability:

Testing was conducted using Cerilliant Reference Standard lot number FN02121601 whose values are traceable to NIST.

All balances are calibrated annually by an outside agency using NIST traceable weights. Calibration verification is done prior to each use utilizing NIST traceable weights.

SUPERVISOR TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100671

Date: 10/10/2017
 Time: 11:08:04

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

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 11:09 |
| INTERNAL STANDARD | VERIFIED | 11:09 |
| EXTERNAL STANDARD | 0.297 | 11:10 |
| BLANK TEST | 0.000 | 11:11 |
| EXTERNAL STANDARD | 0.298 | 11:11 |
| BLANK TEST | 0.000 | 11:12 |
| EXTERNAL STANDARD | 0.298 | 11:13 |
| BLANK TEST | 0.000 | 11:14 |
| EXTERNAL STANDARD | 0.299 | 11:14 |
| BLANK TEST | 0.000 | 11:15 |
| EXTERNAL STANDARD | 0.300 | 11:15 |
| BLANK TEST | 0.000 | 11:16 |

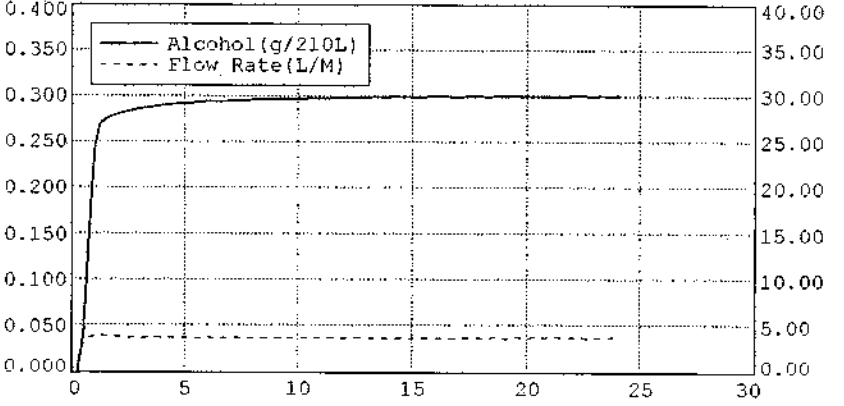
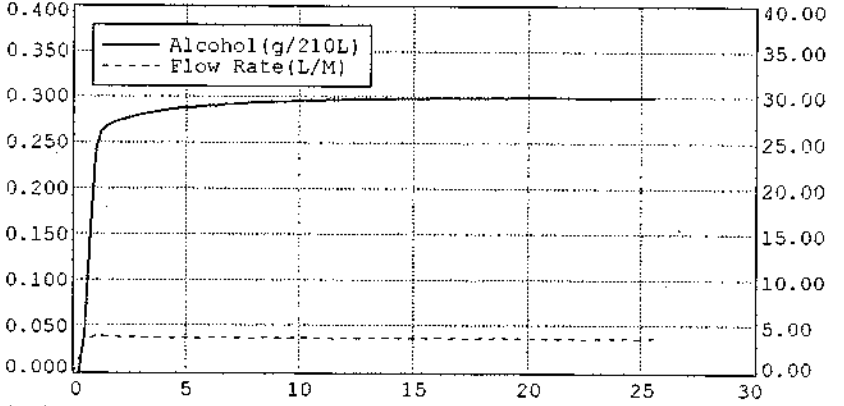
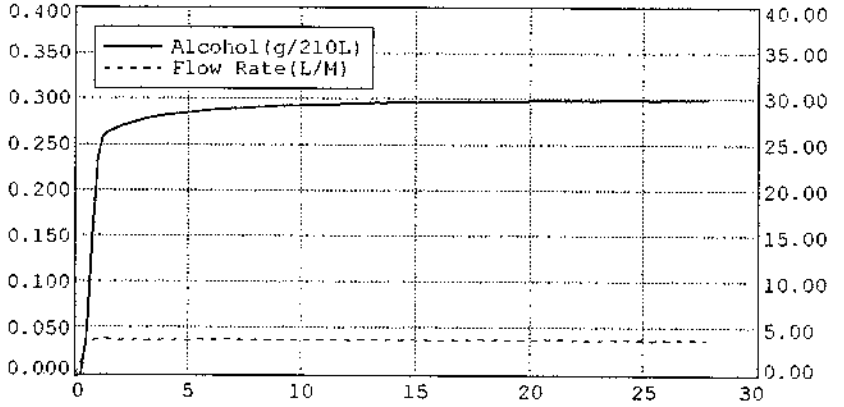
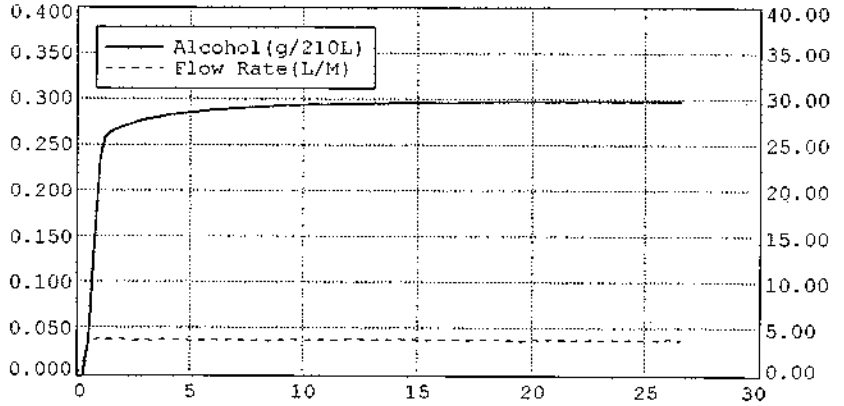
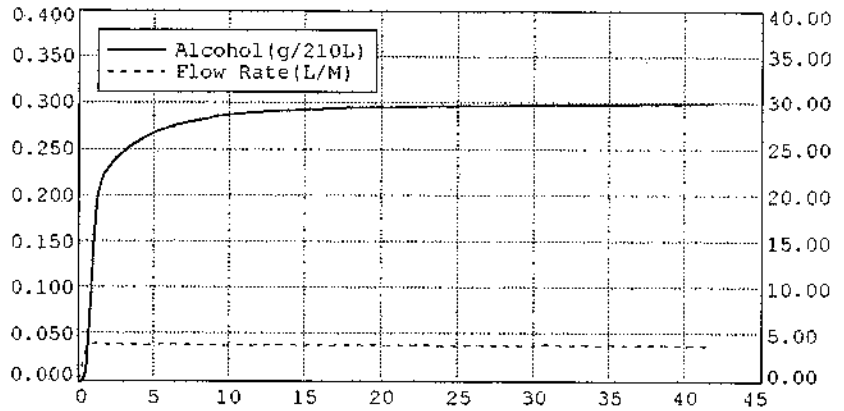
Average = 0.2984
 Std Dev = 0.0011

Guth 0.300

*Lot 17140
 Exp 5/15/19*

*Simulator SD1200
 calibrated 3/29/17
 COB 10/10/17*

Total Avg = 0.303



SUPERVISOR TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100353

Date: 10/10/2017
 Time: 10:42:23

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

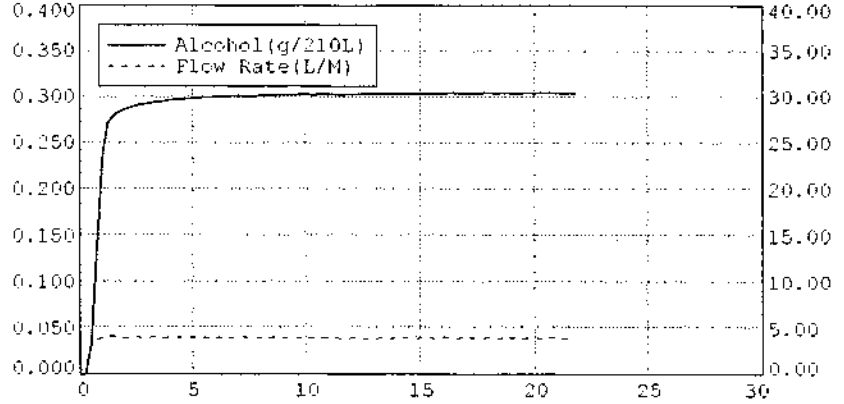
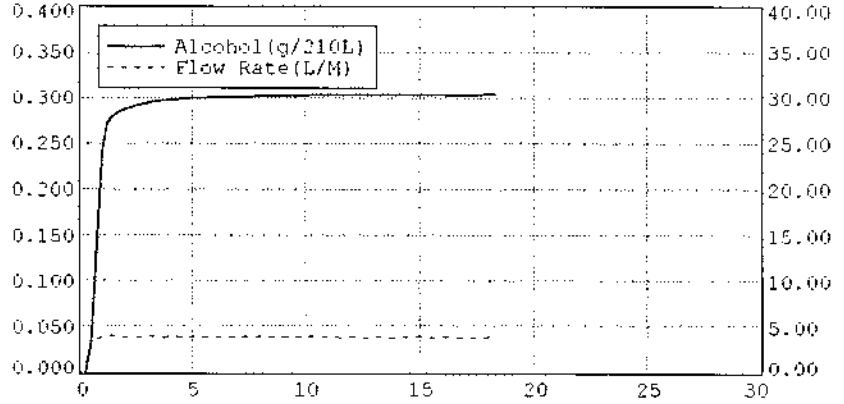
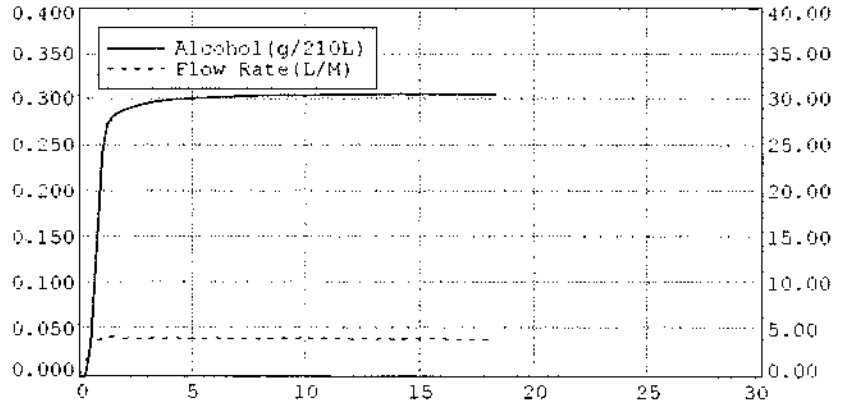
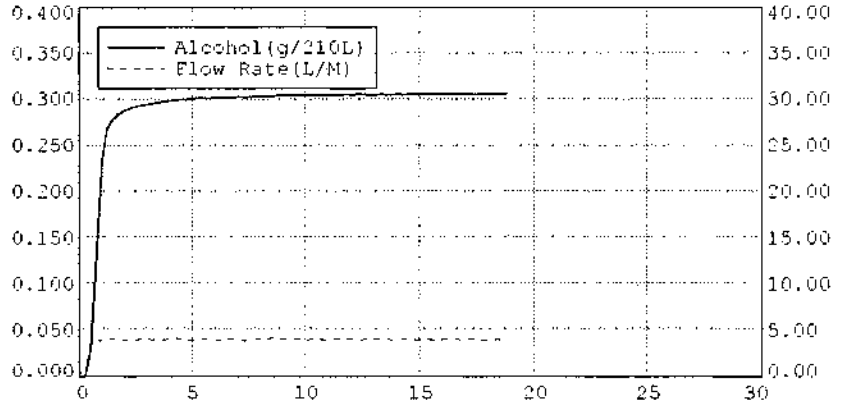
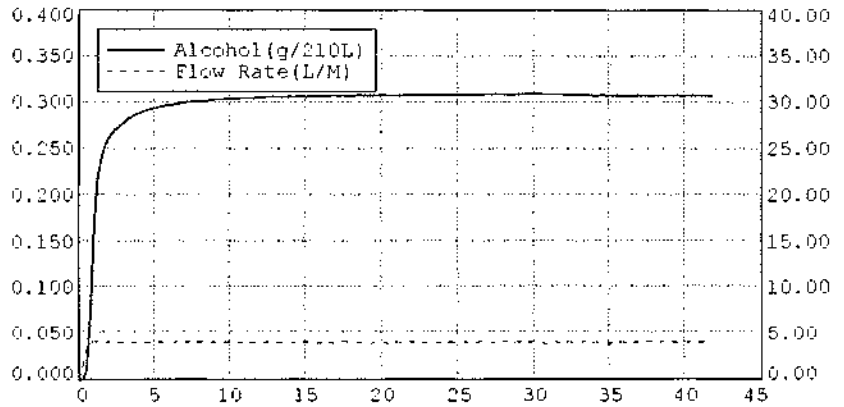
EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 10:43 |
| INTERNAL STANDARD | VERIFIED | 10:43 |
| EXTERNAL STANDARD | 0.308 | 10:44 |
| BLANK TEST | 0.000 | 10:45 |
| EXTERNAL STANDARD | 0.306 | 10:46 |
| BLANK TEST | 0.000 | 10:47 |
| EXTERNAL STANDARD | 0.306 | 10:47 |
| BLANK TEST | 0.000 | 10:48 |
| EXTERNAL STANDARD | 0.305 | 10:48 |
| BLANK TEST | 0.000 | 10:49 |
| EXTERNAL STANDARD | 0.305 | 10:50 |
| BLANK TEST | 0.000 | 10:51 |

Average = 0.3060
 Std Dev = 0.0012

Guth 0.300
Lot 17140
Exp 5/15/19

Simulator SD1200
Calibrated 3/29/17
COB 10/10/17



SUPERVISOR TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

Date: 10/10/2017
 Time: 10:42:05

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

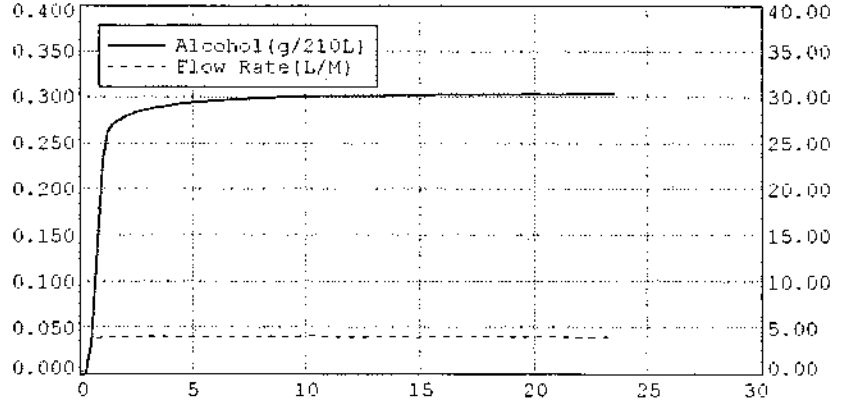
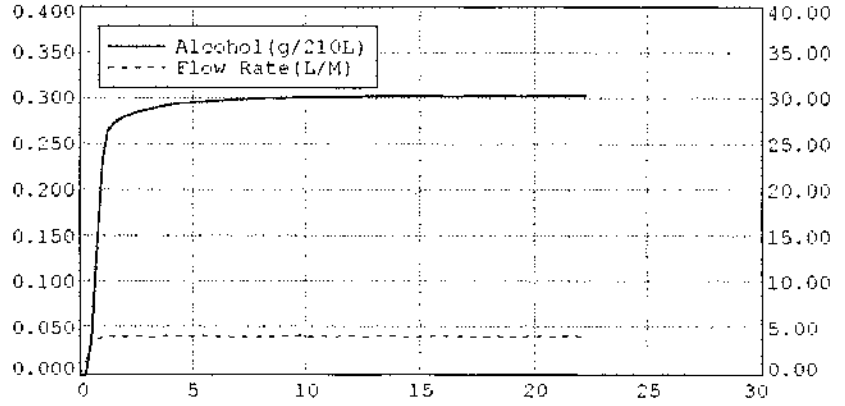
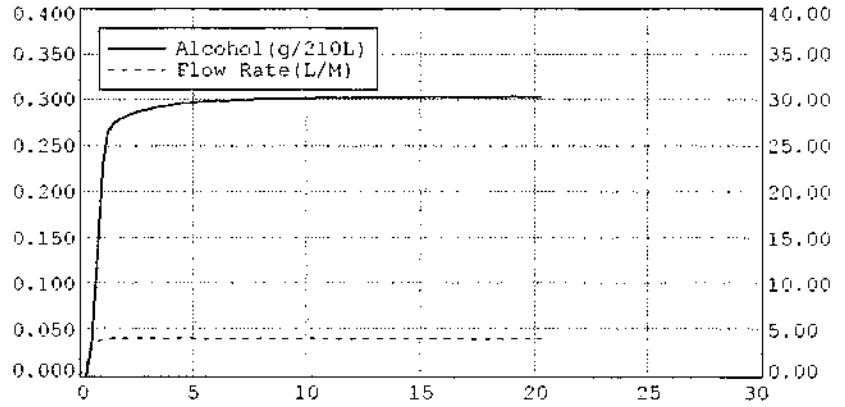
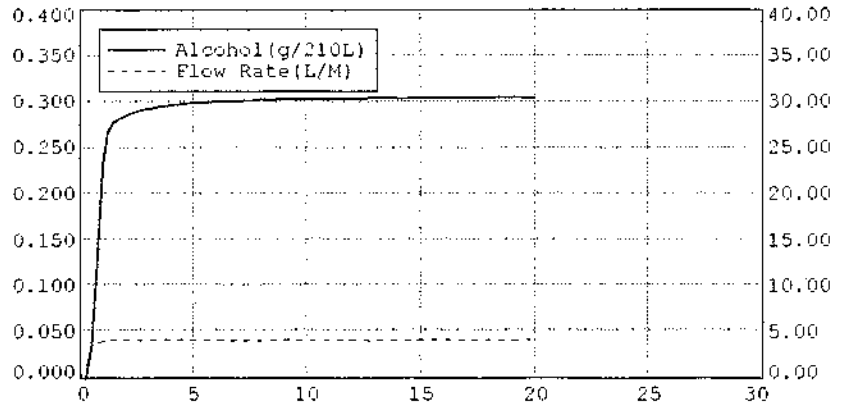
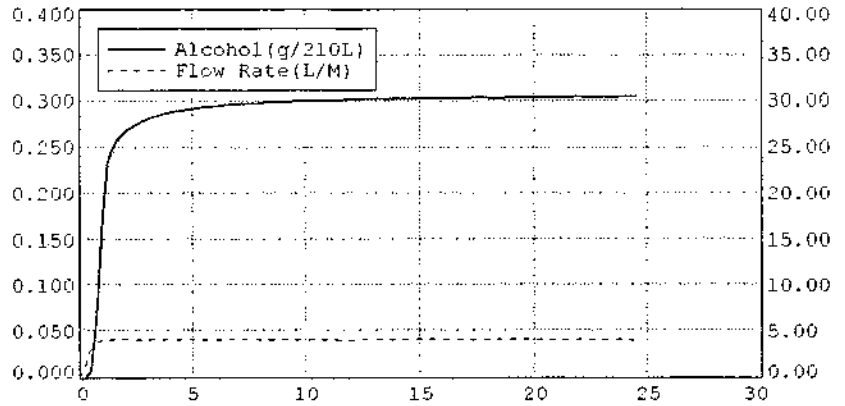
EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 10:43 |
| INTERNAL STANDARD | VERIFIED | 10:43 |
| EXTERNAL STANDARD | 0.304 | 10:43 |
| BLANK TEST | 0.000 | 10:44 |
| EXTERNAL STANDARD | 0.304 | 10:45 |
| BLANK TEST | 0.000 | 10:46 |
| EXTERNAL STANDARD | 0.303 | 10:46 |
| BLANK TEST | 0.000 | 10:47 |
| EXTERNAL STANDARD | 0.303 | 10:47 |
| BLANK TEST | 0.000 | 10:48 |
| EXTERNAL STANDARD | 0.304 | 10:49 |
| BLANK TEST | 0.000 | 10:50 |

Average = 0.3036
 Std Dev = 0.0005

Guth 0.300
Lot# 1710
Exp 5/15/19

Simulator VDI200
Calibrated 3/9/17
COB 10/10/17



DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 10/10/2017
Time: 09:52:17

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED
Breath Tube = 48.1°C PASSED

PUMP INFO

Flow Rate = 4.765 L/M PASSED

DETECTOR INFO

PUMP ON PASSED
PUMP OFF PASSED

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD PASSED

Technician Screen

DATAMASTER dmt: 100353

Date: 10/10/2017
Time: 9:55 AM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 48.1°C

Current Barometer 29.9 in
Volume (Ltr) 0.00

Settings

Lamp: 2.17 V
Bias: 80 V
Cooler: 2.15 V
Chopper: 540 Hz

Voltages (V)

Flow: 1.06 V
Detector: 0.051 V

LINERITY CHECK

Alaska Department of Public Safety
DATAMASTER dmt: 100353

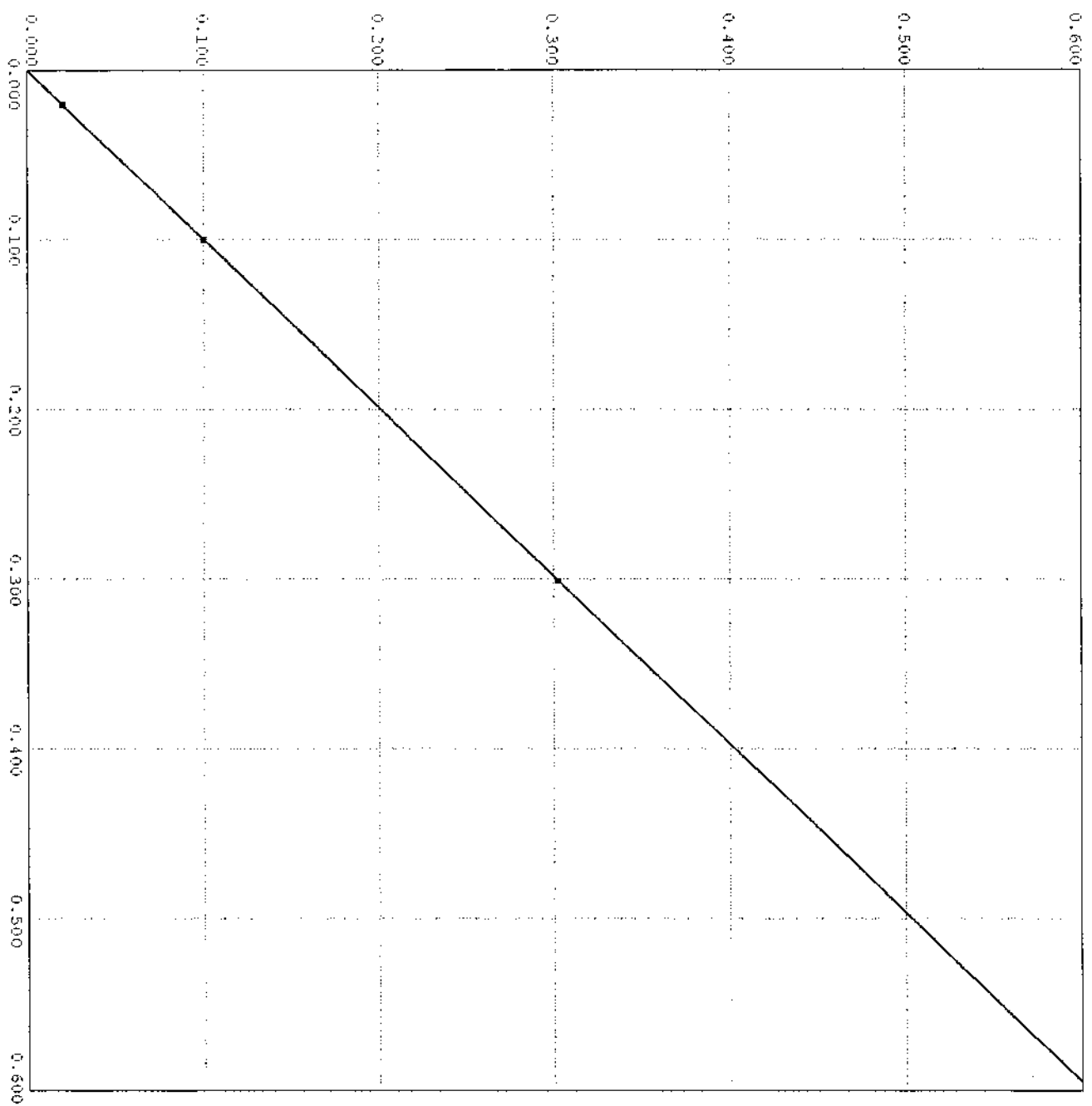
Date: 10/10/2017
Time: 10:06:07

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

| TARGET | AVERAGE | STD. DEV. |
|--------|---------|-----------|
| 0.020 | 0.0210 | 0.0000 |
| 0.100 | 0.1010 | 0.0000 |
| 0.300 | 0.3032 | 0.0008 |

SLOPE = 1.008462
R² = 0.999994

MS



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100353

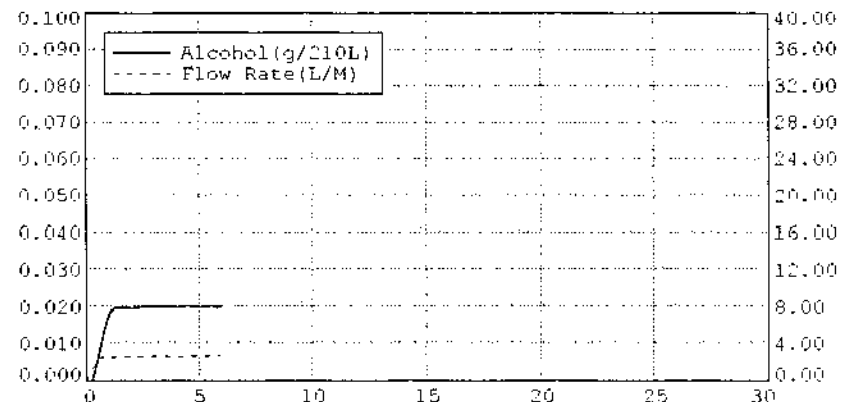
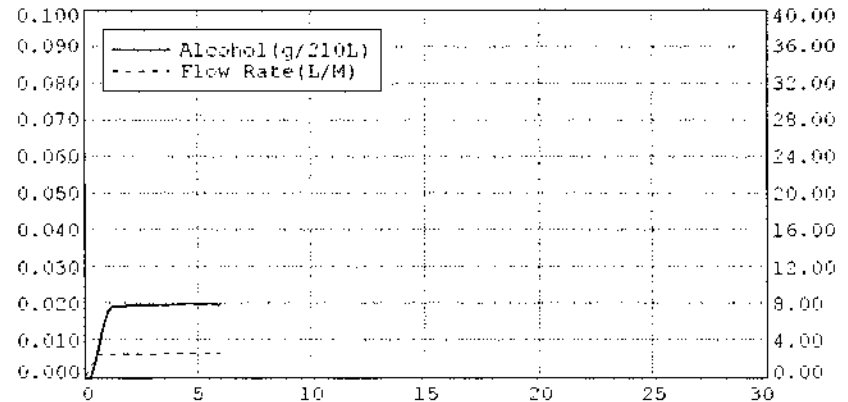
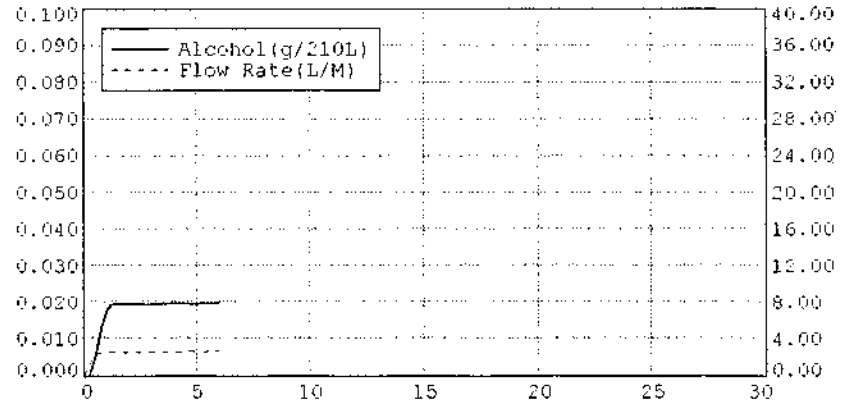
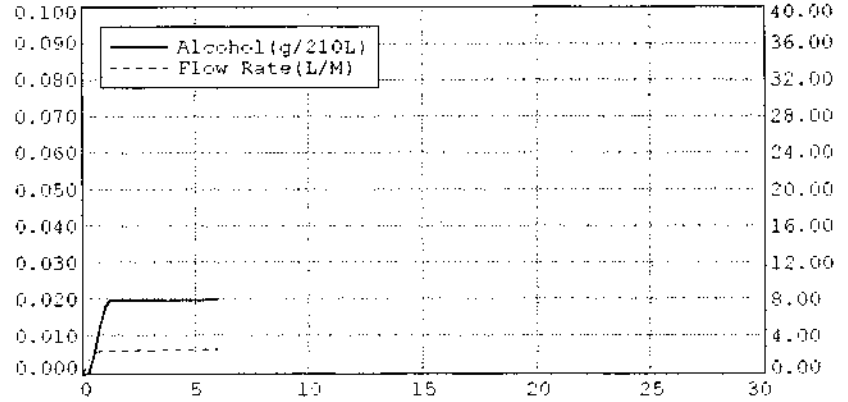
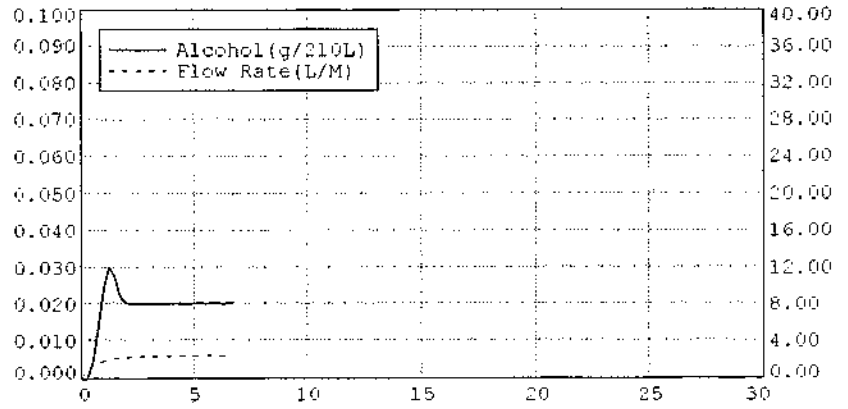
Date: 10/10/2017
 Time: 10:06:09

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.94: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 581 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 10:07 |
| INTERNAL STANDARD | VERIFIED | 10:07 |
| EXTERNAL STANDARD | 0.021 | 10:07 |
| BLANK TEST | 0.000 | 10:08 |
| EXTERNAL STANDARD | 0.021 | 10:08 |
| BLANK TEST | 0.000 | 10:09 |
| EXTERNAL STANDARD | 0.021 | 10:09 |
| BLANK TEST | 0.000 | 10:10 |
| EXTERNAL STANDARD | 0.021 | 10:11 |
| BLANK TEST | 0.000 | 10:11 |
| EXTERNAL STANDARD | 0.021 | 10:12 |
| BLANK TEST | 0.000 | 10:13 |

Average = 0.0210
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100353

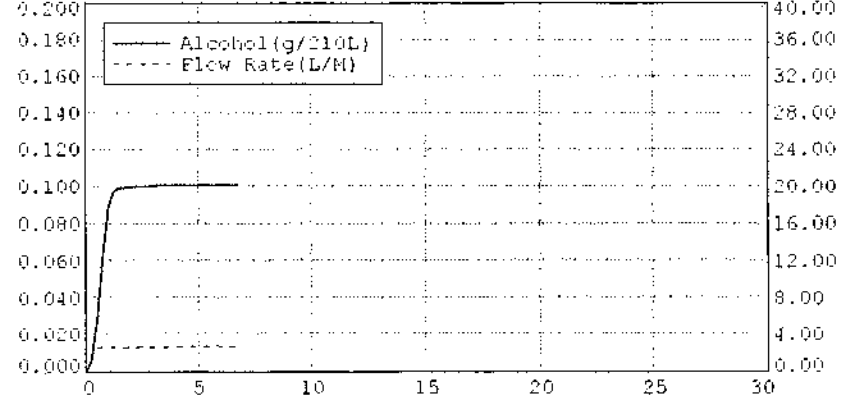
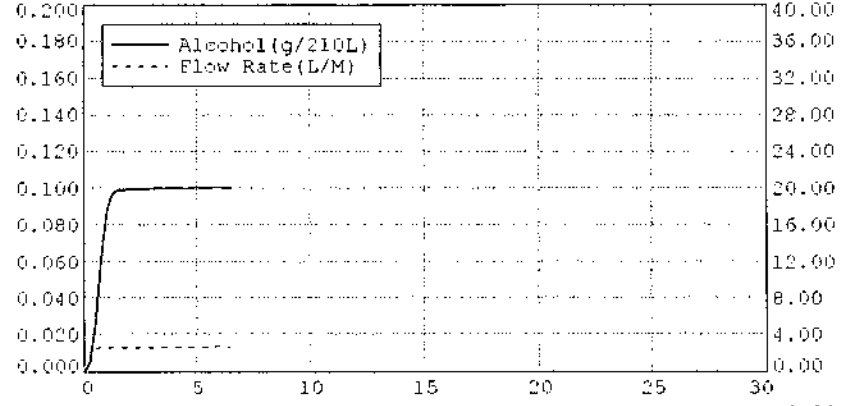
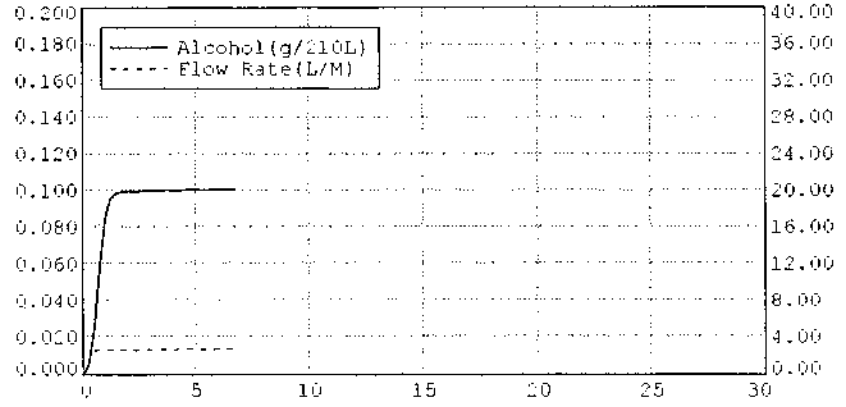
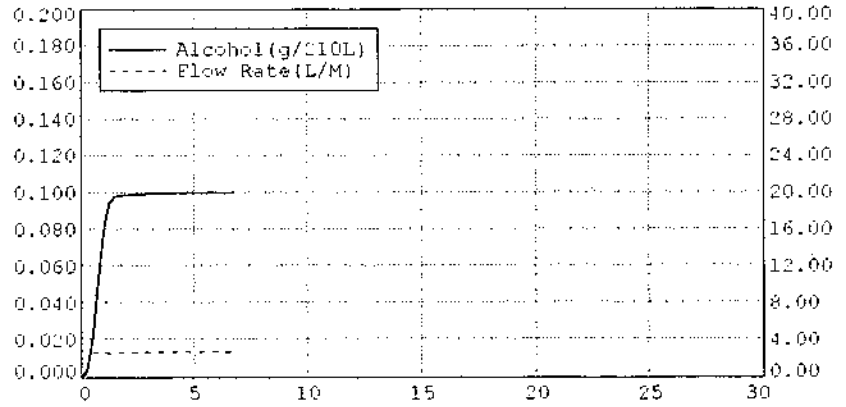
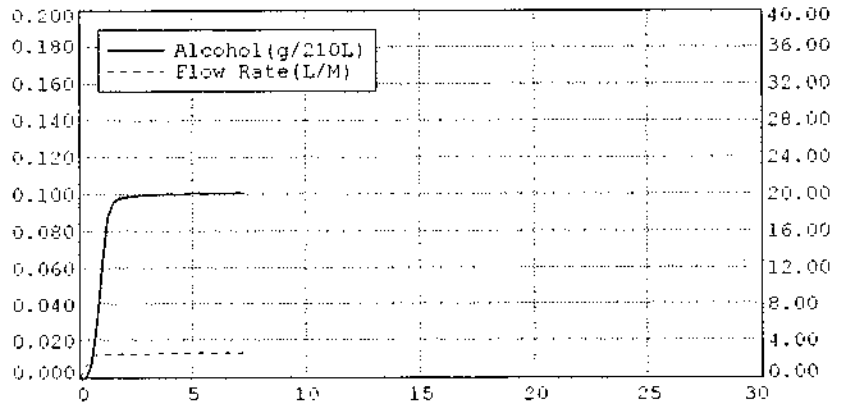
Date: 10/10/2017
 Time: 10:13:30

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.94: 0.100
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 831 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 10:14 |
| INTERNAL STANDARD | VERIFIED | 10:15 |
| EXTERNAL STANDARD | 0.101 | 10:15 |
| BLANK TEST | 0.000 | 10:16 |
| EXTERNAL STANDARD | 0.101 | 10:16 |
| BLANK TEST | 0.000 | 10:17 |
| EXTERNAL STANDARD | 0.101 | 10:17 |
| BLANK TEST | 0.000 | 10:18 |
| EXTERNAL STANDARD | 0.101 | 10:18 |
| BLANK TEST | 0.000 | 10:19 |
| EXTERNAL STANDARD | 0.101 | 10:19 |
| BLANK TEST | 0.000 | 10:20 |

Average = 0.1010
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100353

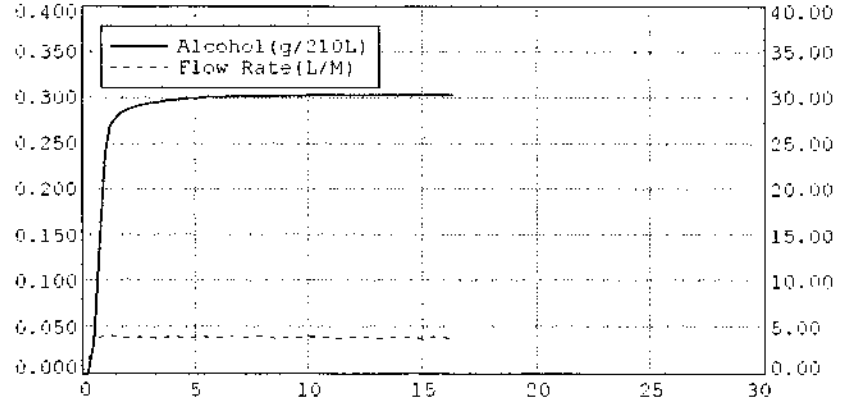
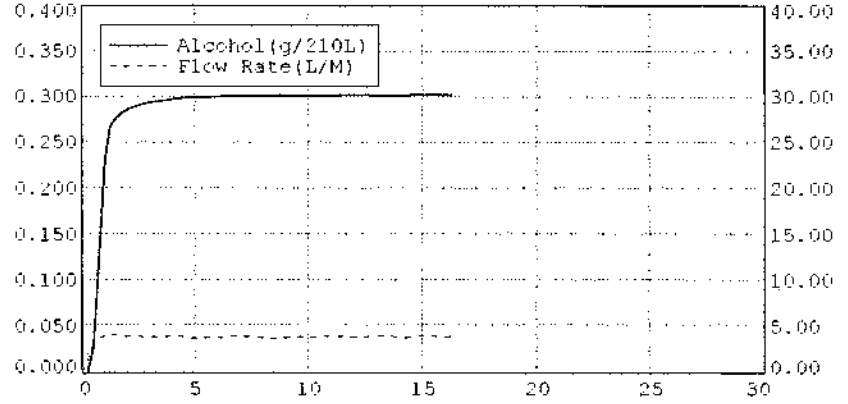
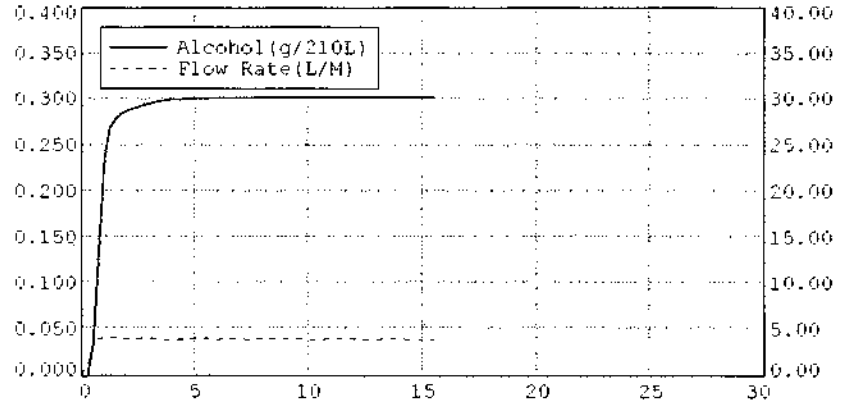
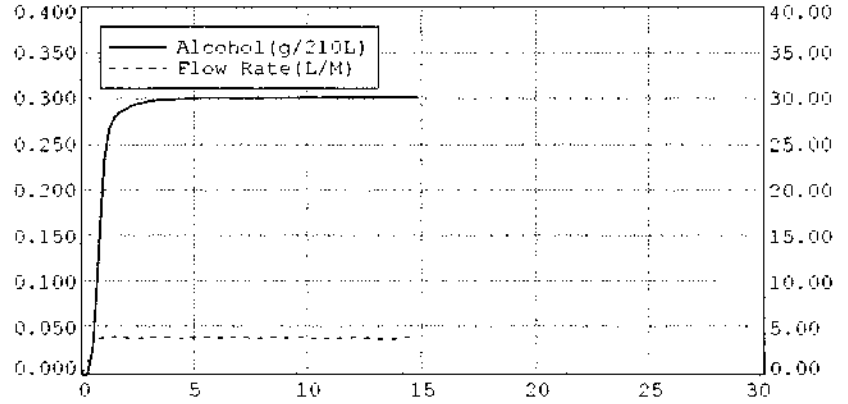
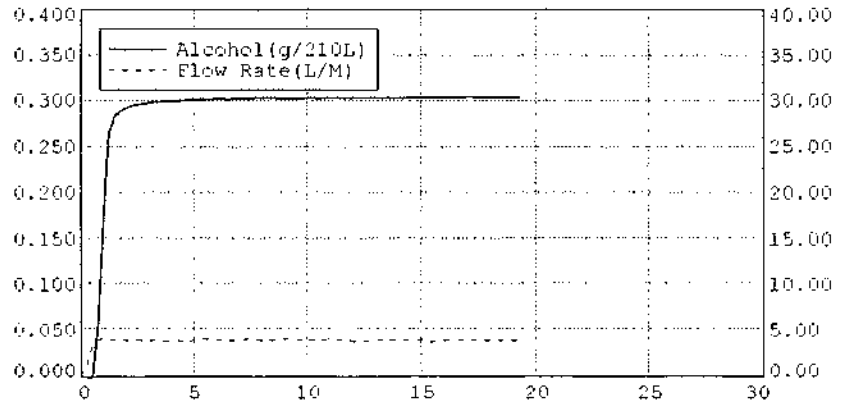
Date: 10/10/2017
 Time: 10:22:33

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 16410
 EXPIRATION: 12/19/2018

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 10:23 |
| INTERNAL STANDARD | VERIFIED | 10:23 |
| EXTERNAL STANDARD | 0.304 | 10:24 |
| BLANK TEST | 0.000 | 10:25 |
| EXTERNAL STANDARD | 0.302 | 10:25 |
| BLANK TEST | 0.000 | 10:26 |
| EXTERNAL STANDARD | 0.303 | 10:26 |
| BLANK TEST | 0.000 | 10:27 |
| EXTERNAL STANDARD | 0.303 | 10:28 |
| BLANK TEST | 0.000 | 10:29 |
| EXTERNAL STANDARD | 0.304 | 10:29 |
| BLANK TEST | 0.000 | 10:30 |

Average = 0.3032
 Std Dev = 0.0008

*Sumulator DR 4162
 Calibrated 3/27/17
 COB 10/10/17*



DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 10/10/2017
Time: 09:51:24

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C PASSED
Breath Tube = 47.6°C PASSED

PUMP INFO

Flow Rate = 5.247 L/M PASSED

DETECTOR INFO

PUMP ON PASSED
PUMP OFF PASSED

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD PASSED

Technician Screen

DATAMASTER dmt: 100411

Date: 10/10/2017

Time: 9:53 AM

Temperatures (°C)

Sample Cell: 48.8°C

Breath Tube: 47.7°C

Current Barometer 29.9 in

Volume (Ltr) 0.00

Settings

Lamp: 1.82 V

Bias: 80 V

Cooler: 1.95 V

Chopper: 538 Hz

Voltages (V)

Flow: 1.05 V

Detector: 0.042 V

LINEARITY CHECK

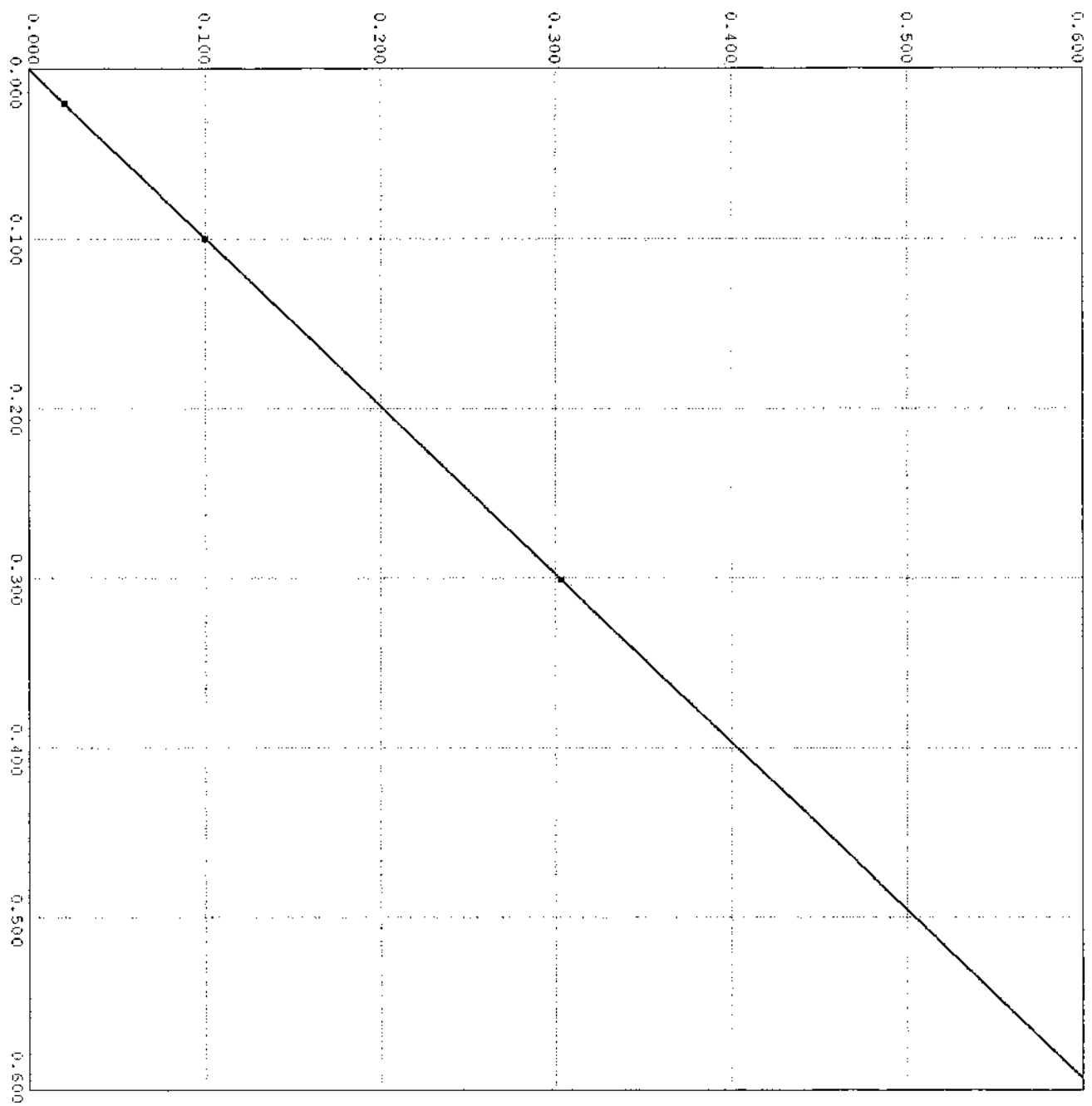
Alaska Department of Public Safety
DATA MASTER dmt: 100411

Date: 10/10/2017
Time: 09:58:06

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

| TARGET | AVERAGE | STD. DEV. |
|--------|---------|-----------|
| 0.020 | 0.0210 | 0.0000 |
| 0.100 | 0.1008 | 0.0004 |
| 0.300 | 0.3038 | 0.0004 |

SLOPE = 1.010962
 R^2 = 0.999985



MB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

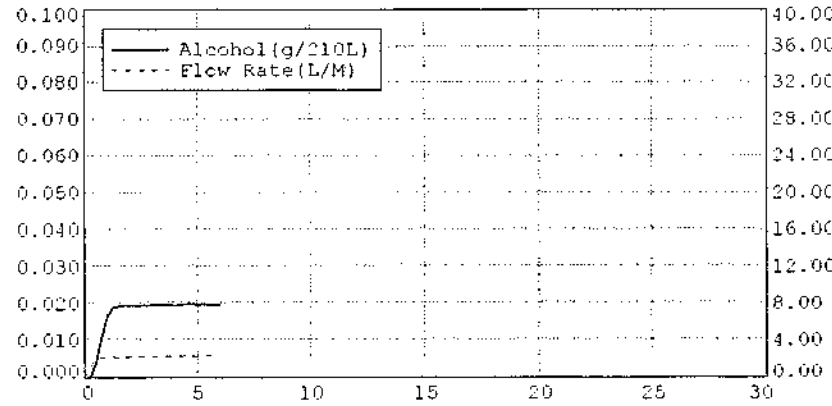
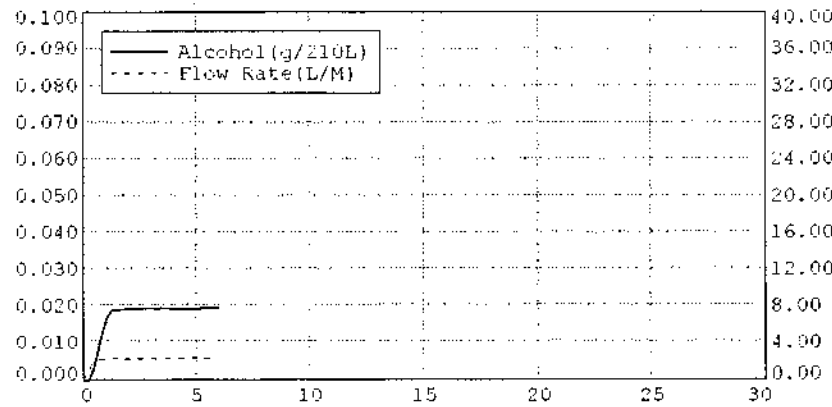
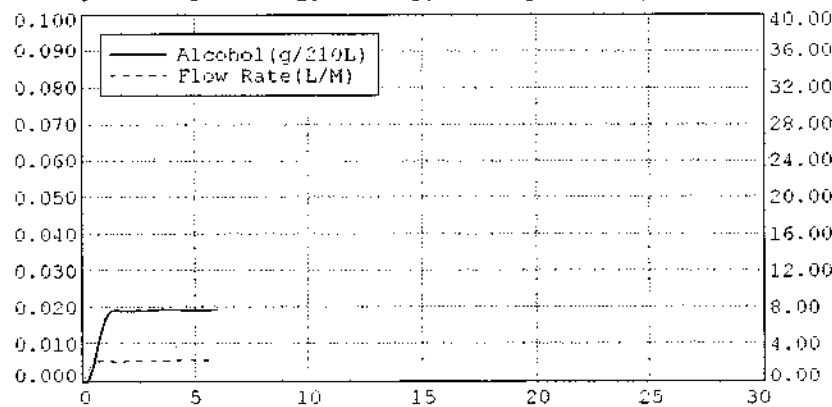
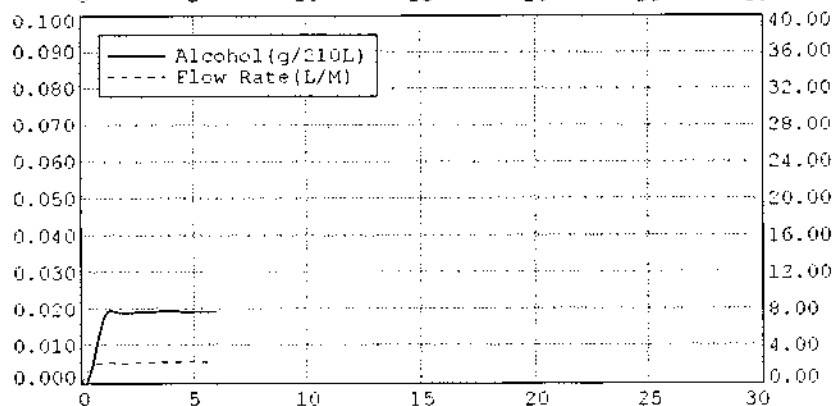
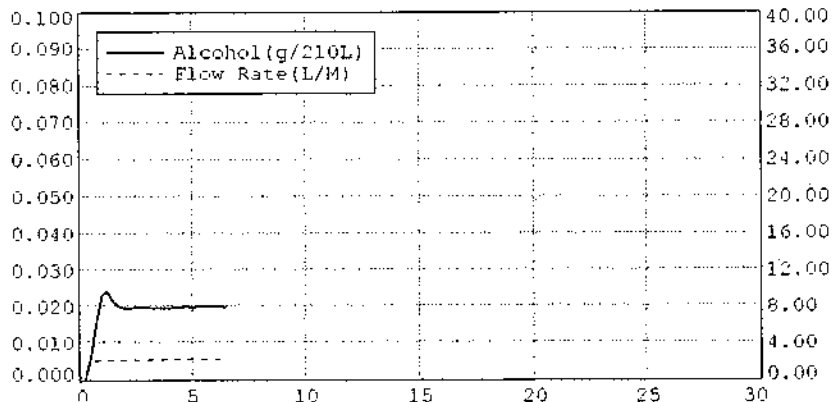
Date: 10/10/2017
 Time: 09:58:08

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.94: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 566 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 10:05 |
| INTERNAL STANDARD | VERIFIED | 10:05 |
| EXTERNAL STANDARD | 0.021 | 10:05 |
| BLANK TEST | 0.000 | 10:06 |
| EXTERNAL STANDARD | 0.021 | 10:07 |
| BLANK TEST | 0.000 | 10:07 |
| EXTERNAL STANDARD | 0.021 | 10:08 |
| BLANK TEST | 0.000 | 10:09 |
| EXTERNAL STANDARD | 0.021 | 10:09 |
| BLANK TEST | 0.000 | 10:10 |
| EXTERNAL STANDARD | 0.021 | 10:10 |
| BLANK TEST | 0.000 | 10:11 |

Average = 0.0210
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

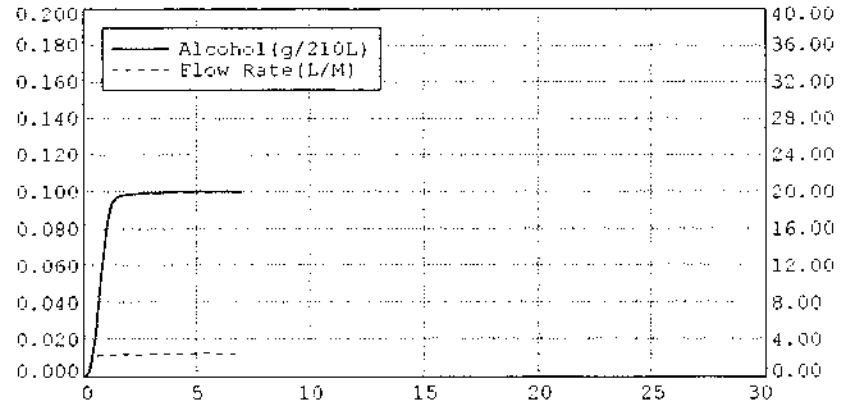
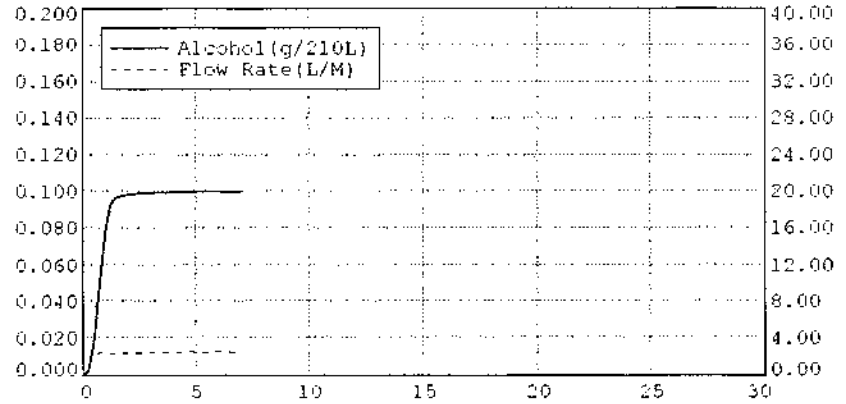
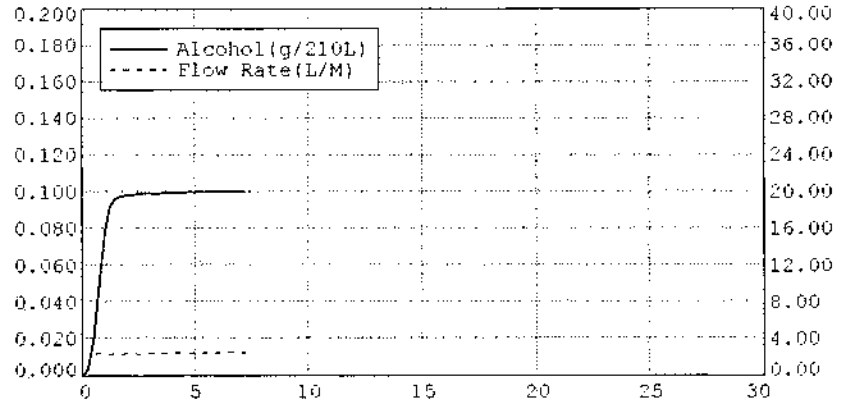
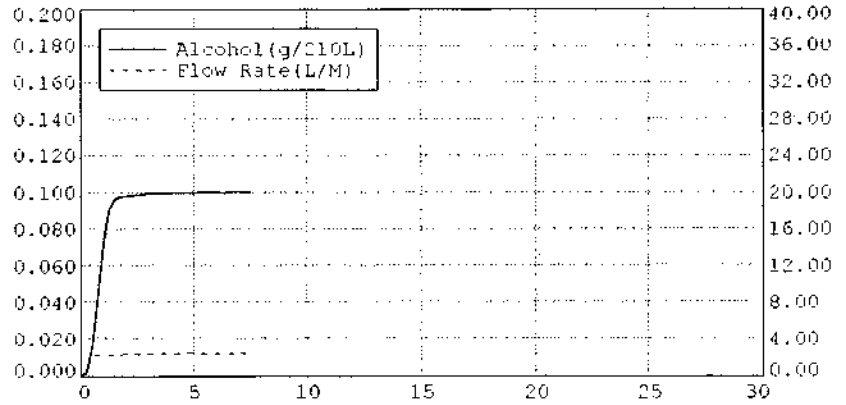
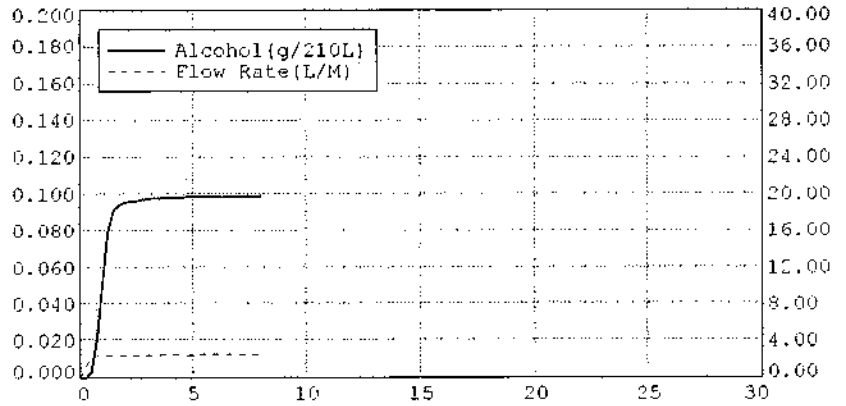
Date: 10/10/2017
 Time: 10:12:35

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.94: 0.100
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 813 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 10:13 |
| INTERNAL STANDARD | VERIFIED | 10:13 |
| EXTERNAL STANDARD | 0.100 | 10:13 |
| BLANK TEST | 0.000 | 10:14 |
| EXTERNAL STANDARD | 0.101 | 10:15 |
| BLANK TEST | 0.000 | 10:16 |
| EXTERNAL STANDARD | 0.101 | 10:16 |
| BLANK TEST | 0.000 | 10:17 |
| EXTERNAL STANDARD | 0.101 | 10:17 |
| BLANK TEST | 0.000 | 10:18 |
| EXTERNAL STANDARD | 0.101 | 10:18 |
| BLANK TEST | 0.000 | 10:19 |

Average = 0.1008
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100411

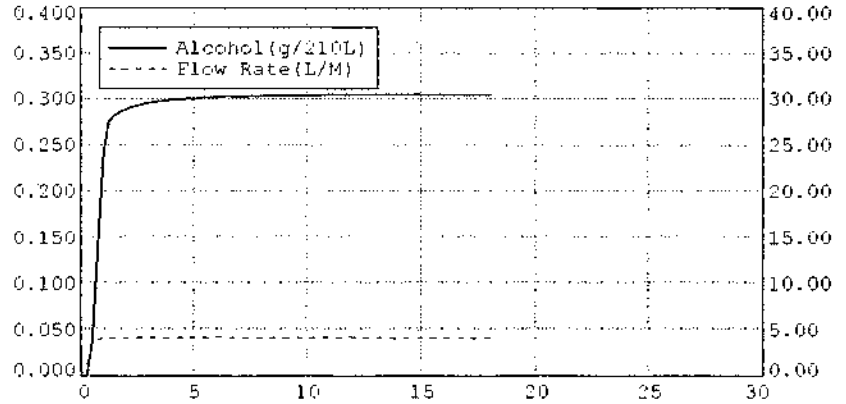
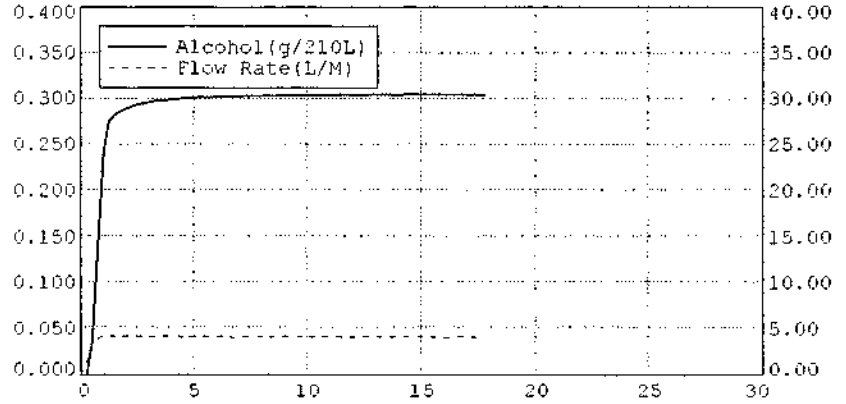
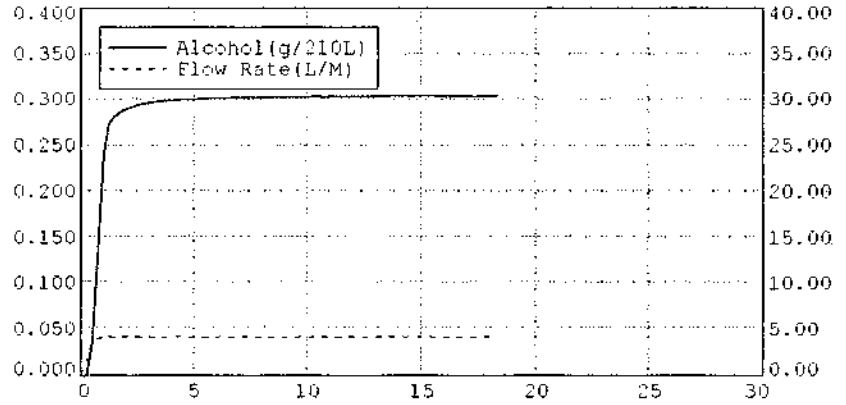
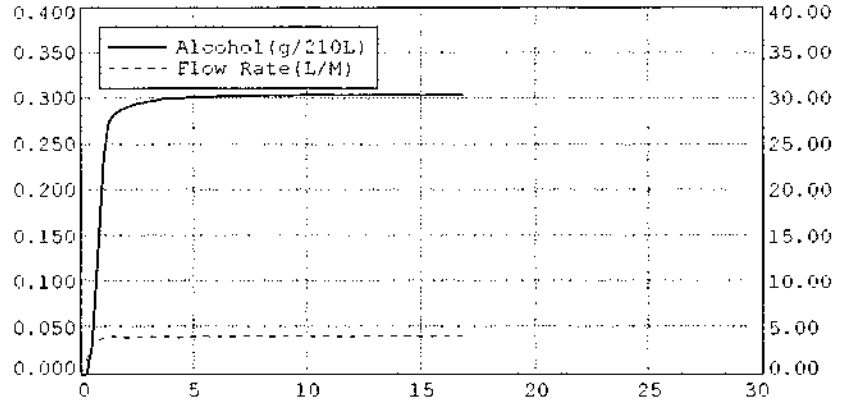
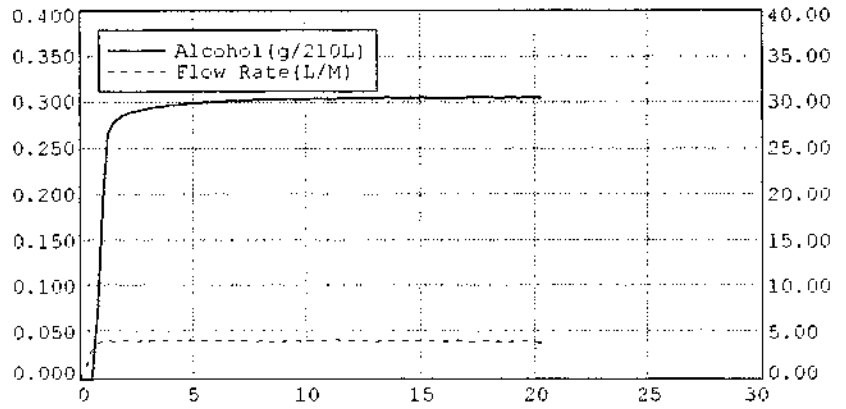
Date: 10/10/2017
Time: 10:20:56

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.300
LOT #: 16410
EXPIRATION: 12/19/2018

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 10:21 |
| INTERNAL STANDARD | VERIFIED | 10:22 |
| EXTERNAL STANDARD | 0.304 | 10:22 |
| BLANK TEST | 0.000 | 10:23 |
| EXTERNAL STANDARD | 0.304 | 10:23 |
| BLANK TEST | 0.000 | 10:24 |
| EXTERNAL STANDARD | 0.303 | 10:25 |
| BLANK TEST | 0.000 | 10:26 |
| EXTERNAL STANDARD | 0.304 | 10:26 |
| BLANK TEST | 0.000 | 10:27 |
| EXTERNAL STANDARD | 0.304 | 10:27 |
| BLANK TEST | 0.000 | 10:28 |

Average = 0.3038
Std Dev = 0.0004

*Simulator DR4162
Calibrated 3/27/17
COB 10/10/17*



DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 10/10/2017
Time: 10:00:57

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED
Breath Tube = 47.3°C PASSED

PUMP INFO
Flow Rate = 4.651 L/M PASSED

DETECTOR INFO
PUMP ON PASSED
PUMP OFF PASSED

FILTER INFO
Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD PASSED

Technician Screen

DATAMASTER dmt: 100671

Date: 10/10/2017

Time: 10:04 AM

Temperatures (°C)

Sample Cell: 48.9°C

Breath Tube: 47.5°C

Current Barometer 29.9 in

Volume (Ltr) 0.00

Settings

Lamp: 1.67 V

Bias: 80 V

Cooler: 1.76 V

Chopper: 543 Hz

Voltages (V)

Flow: 1.06 V

Detector: 0.086 V

LINEARITY CHECK

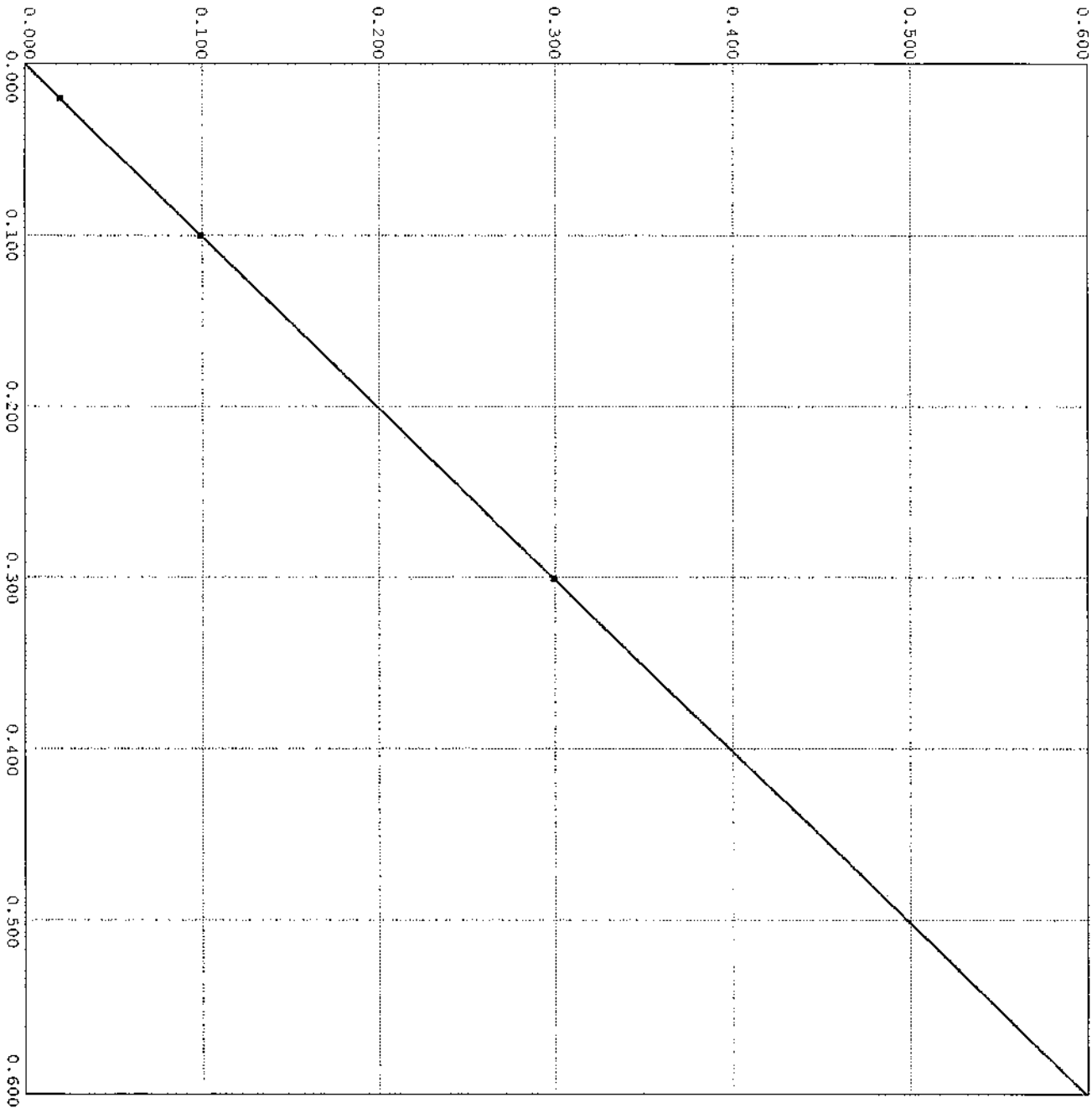
Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 10/10/2017
Time: 10:16:47

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

| TARGET | AVERAGE | STD. DEV. |
|--------|---------|-----------|
| 0.020 | 0.0204 | 0.0005 |
| 0.100 | 0.1000 | 0.0000 |
| 0.300 | 0.2998 | 0.0004 |

SLOPE = 0.998077
R² = 0.999999



MS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100671

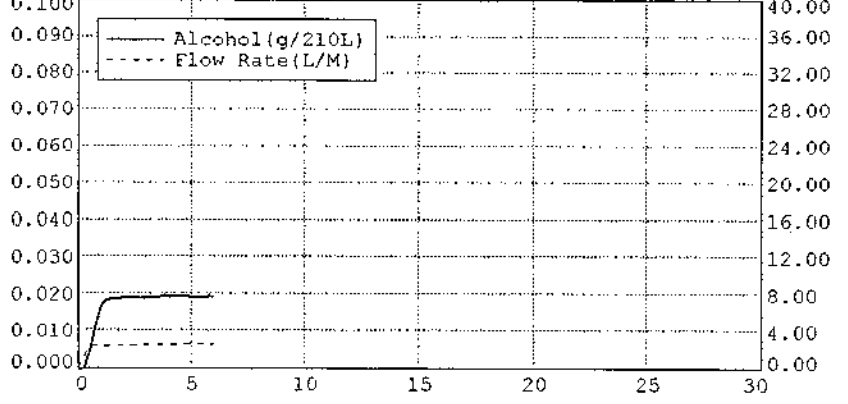
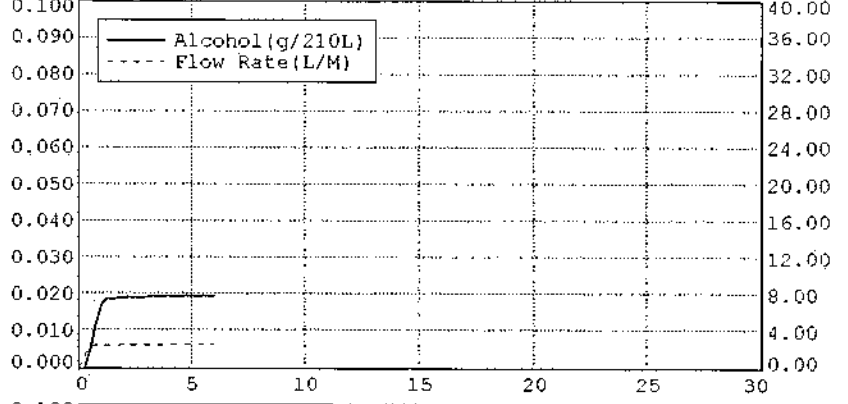
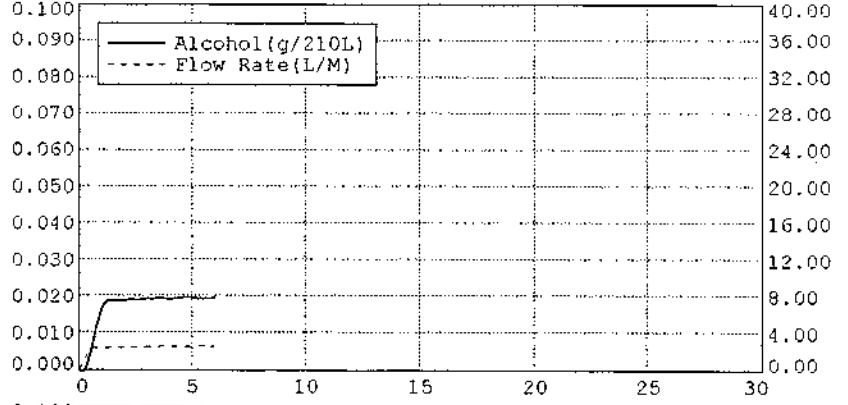
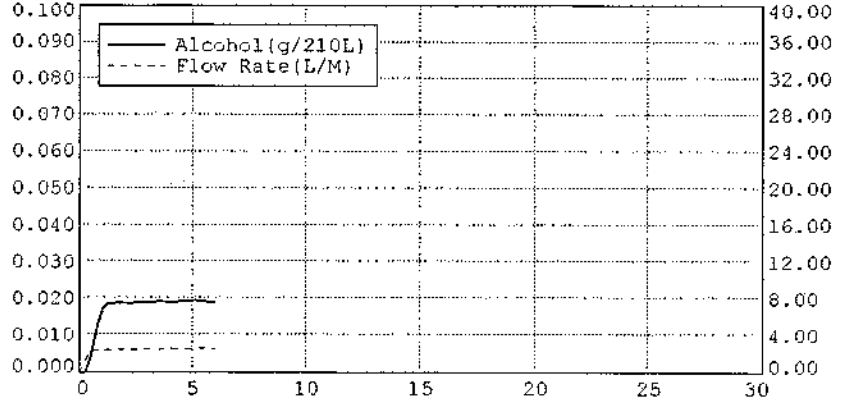
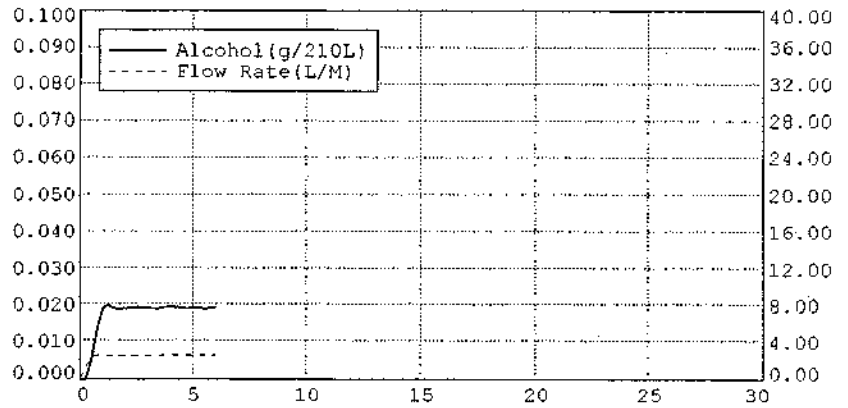
Date: 10/10/2017
Time: 10:16:49

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.94: 0.020
LOT #: AG616504
EXPIRATION: 06/13/2018
TANK PRESSURE: 556 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 10:30 |
| INTERNAL STANDARD | VERIFIED | 10:30 |
| EXTERNAL STANDARD | 0.020 | 10:30 |
| BLANK TEST | 0.000 | 10:31 |
| EXTERNAL STANDARD | 0.020 | 10:31 |
| BLANK TEST | 0.000 | 10:32 |
| EXTERNAL STANDARD | 0.021 | 10:33 |
| BLANK TEST | 0.000 | 10:33 |
| EXTERNAL STANDARD | 0.021 | 10:34 |
| BLANK TEST | 0.000 | 10:35 |
| EXTERNAL STANDARD | 0.020 | 10:35 |
| BLANK TEST | 0.000 | 10:36 |

Average = 0.0204
Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

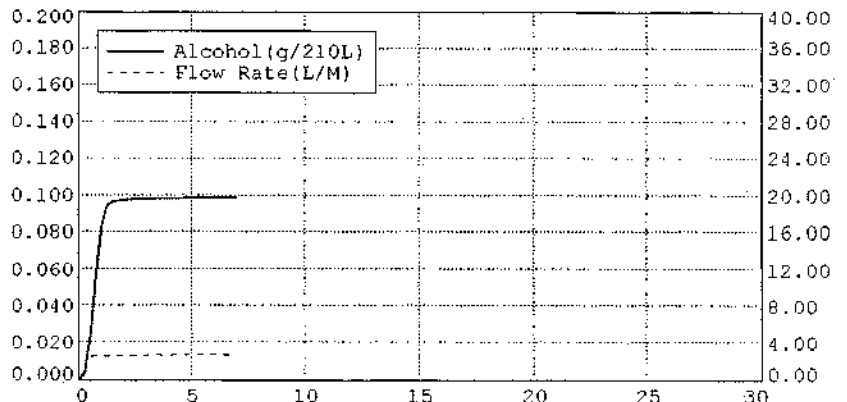
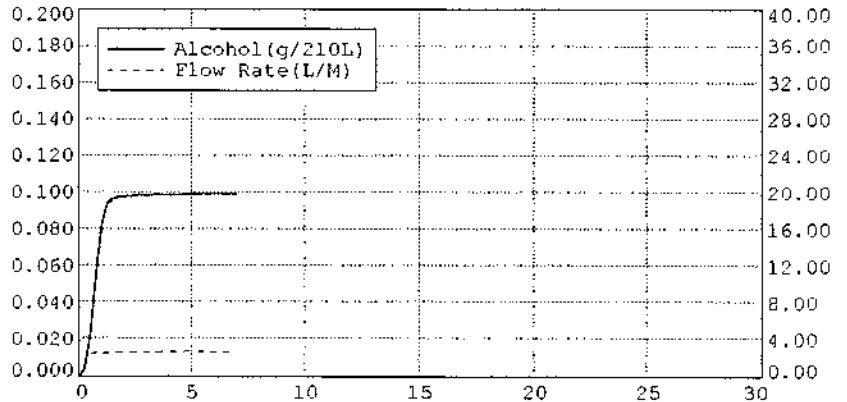
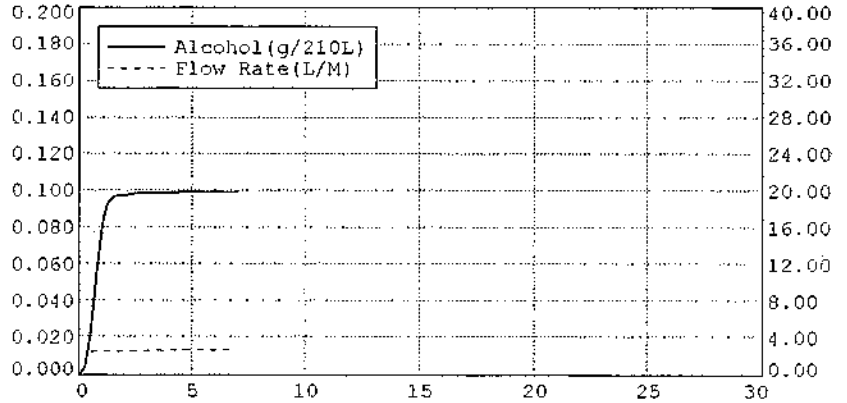
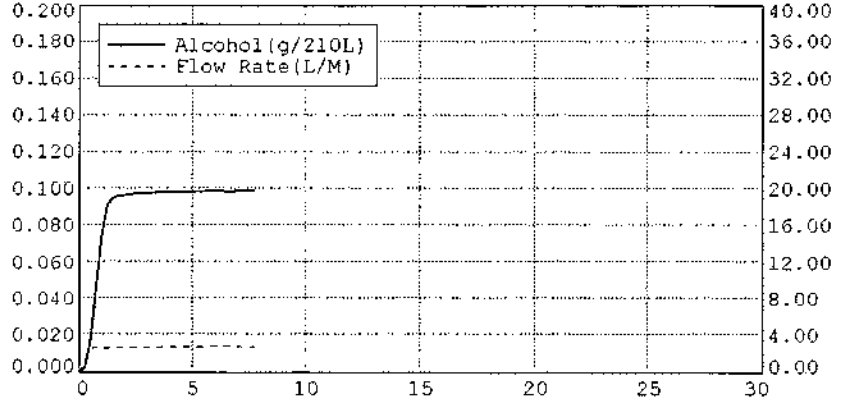
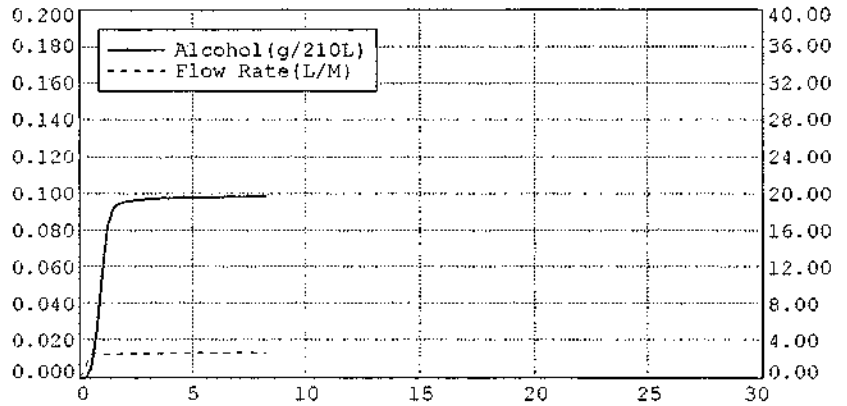
Alaska Department of Public Safety
 DATAMASTER dmt: 100671

Date: 10/10/2017
 Time: 10:37:41

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.100
 TARGET AT 29.95: 0.100
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 798 psi

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 10:38 |
| INTERNAL STANDARD | VERIFIED | 10:38 |
| EXTERNAL STANDARD | 0.100 | 10:39 |
| BLANK TEST | 0.000 | 10:39 |
| EXTERNAL STANDARD | 0.100 | 10:40 |
| BLANK TEST | 0.000 | 10:41 |
| EXTERNAL STANDARD | 0.100 | 10:41 |
| BLANK TEST | 0.000 | 10:42 |
| EXTERNAL STANDARD | 0.100 | 10:42 |
| BLANK TEST | 0.000 | 10:43 |
| EXTERNAL STANDARD | 0.100 | 10:43 |
| BLANK TEST | 0.000 | 10:44 |

Average = 0.1000
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100671

Date: 10/10/2017
 Time: 10:46:14

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 16410
 EXPIRATION: 12/19/2018

| | | |
|-------------------|----------|-------|
| BLANK TEST | 0.000 | 10:47 |
| INTERNAL STANDARD | VERIFIED | 10:47 |
| EXTERNAL STANDARD | 0.300 | 10:47 |
| BLANK TEST | 0.000 | 10:48 |
| EXTERNAL STANDARD | 0.299 | 10:49 |
| BLANK TEST | 0.000 | 10:50 |
| EXTERNAL STANDARD | 0.300 | 10:50 |
| BLANK TEST | 0.000 | 10:51 |
| EXTERNAL STANDARD | 0.300 | 10:52 |
| BLANK TEST | 0.000 | 10:53 |
| EXTERNAL STANDARD | 0.300 | 10:53 |
| BLANK TEST | 0.000 | 10:54 |

Average = 0.2998
 Std Dev = 0.0004

*Simulator DR4162
 calibrated 3/27/17
 COS 10/10/17*

