



GUTH LABORATORIES, INC.

690 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 17090 of Alcohol Reference Solution for Simulator were analyzed by gas chromatography on February 27, 2017, using a Perkin Elmer Gas Chromatograph Autosystem XL S/N: 610N9030209, and found to contain 0.2416% (w/vol) ethyl alcohol. The expiration date for this lot number is February 24, 2019 at 11:59 PM.

When used in a calibrated Simulator, operating at 34°C +/- .2°C, this solution will give a breath alcohol analysis instrument reading of 0.200 g/210L +/- 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 FN08101505 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: 100353

Date: 10/04/2017
 Time: 12:30:47

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

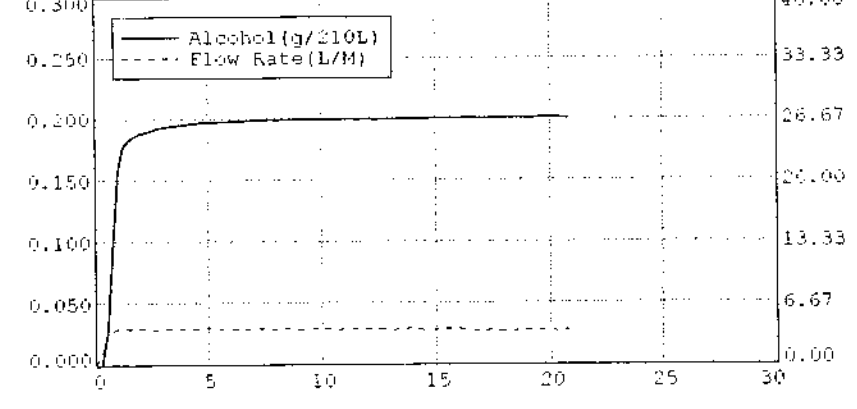
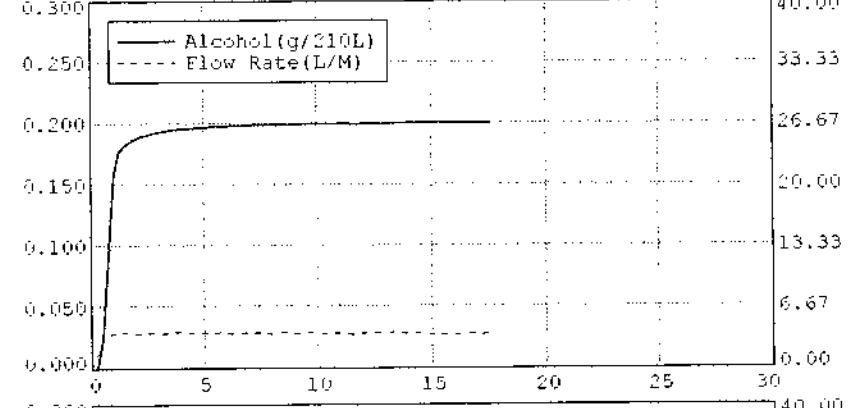
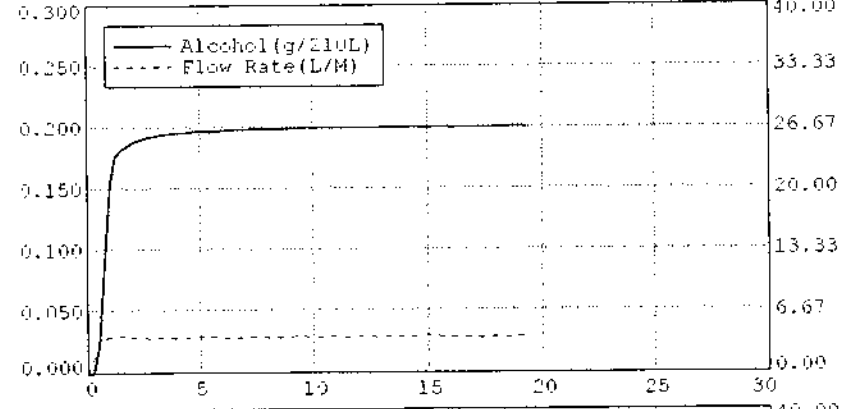
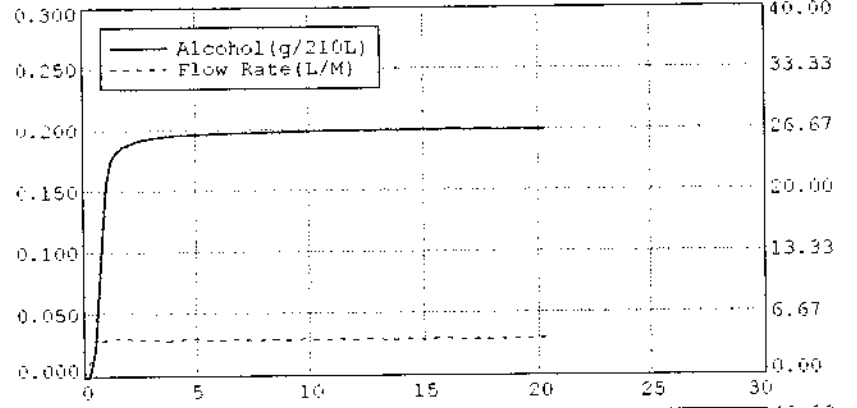
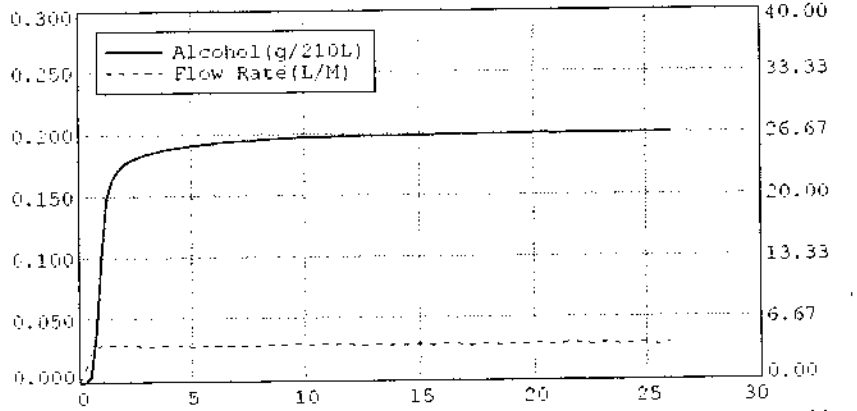
EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200

BLANK TEST	0.000	12:31
INTERNAL STANDARD	VERIFIED	12:31
EXTERNAL STANDARD	0.201	12:32
BLANK TEST	0.000	12:33
EXTERNAL STANDARD	0.201	12:33
BLANK TEST	0.000	12:34
EXTERNAL STANDARD	0.201	12:35
BLANK TEST	0.000	12:36
EXTERNAL STANDARD	0.201	12:36
BLANK TEST	0.000	12:37
EXTERNAL STANDARD	0.202	12:37
BLANK TEST	0.000	12:38

Average = 0.2012
 Std Dev = 0.0004

*Simulator - DR-4162
 Calibrated - 3/27/17*

*Solution Lot# 17090
 Expires 2/24/19
 COB 10/4/17*



DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 10/04/2017
Time: 11:51:56

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED
Breath Tube = 43.3°C PASSED

PUMP INFO

Flow Rate = 4.435 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: 100348

Date: 10/04/2017

Time: 11:56 AM

Temperatures (°C)

Sample Cell: 48.7°C

Breath Tube: 42.6°C

Current Barometer 29.5 in

Volume (Ltr) 0.00

Settings

Lamp: 1.71 V

Bias: 80 V

Cooler: 1.76 V

Chopper: 543 Hz

Voltages (V)

Flow: 1.03 V

Detector: 0.035 V

LINERITY CHECK

Alaska Department of Public Safety
DATAMASTER dmt: 100348

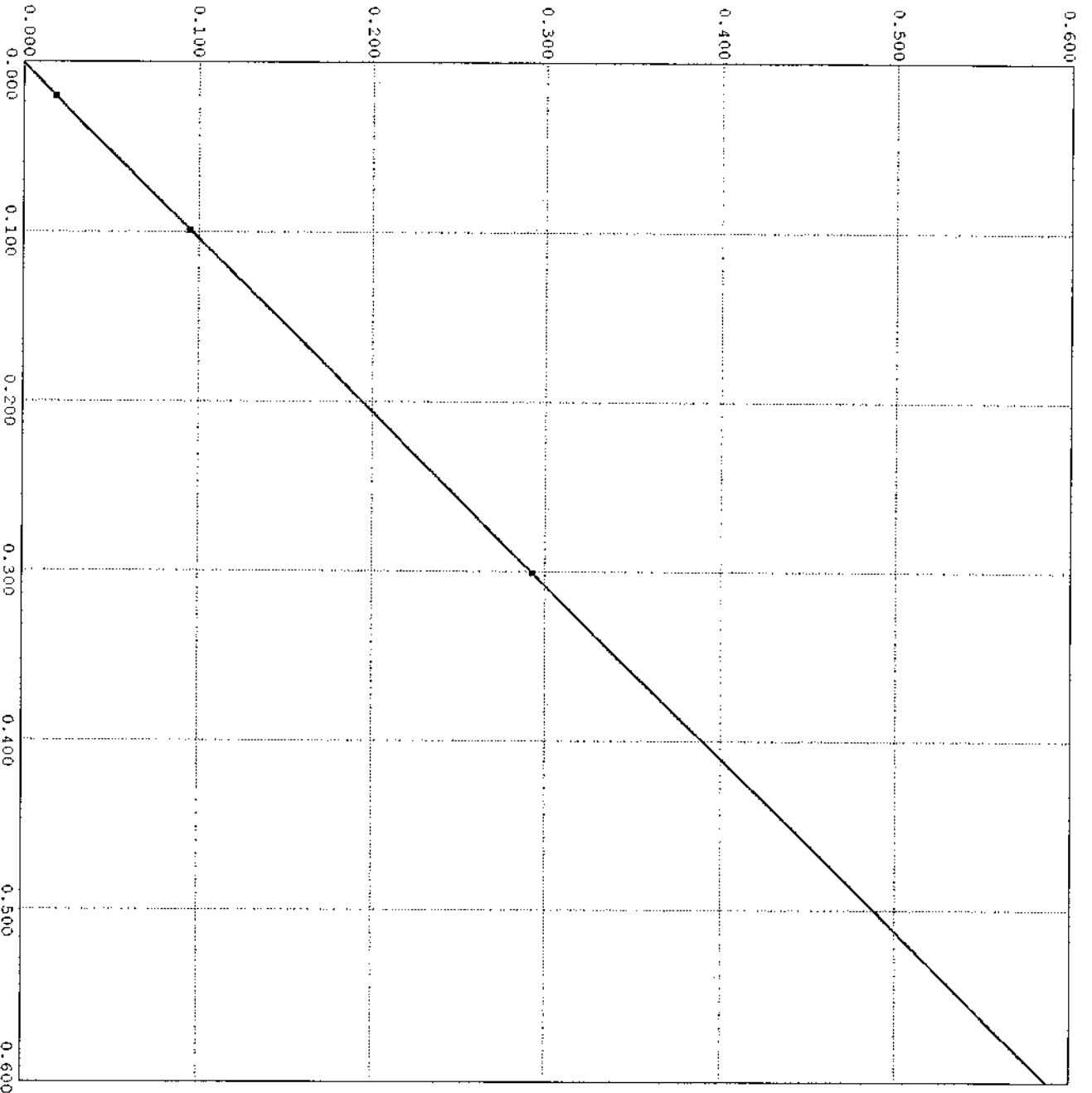
Date: 10/04/2017
Time: 11:59:09

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0192	0.0004
0.099	0.0958	0.0004
0.300	0.2934	0.0009

SLOPE = 0.980031
R² = 0.999991

CRS



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100348

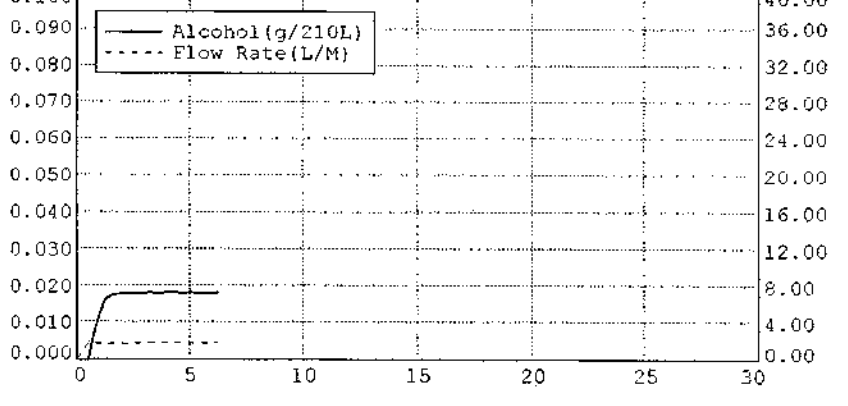
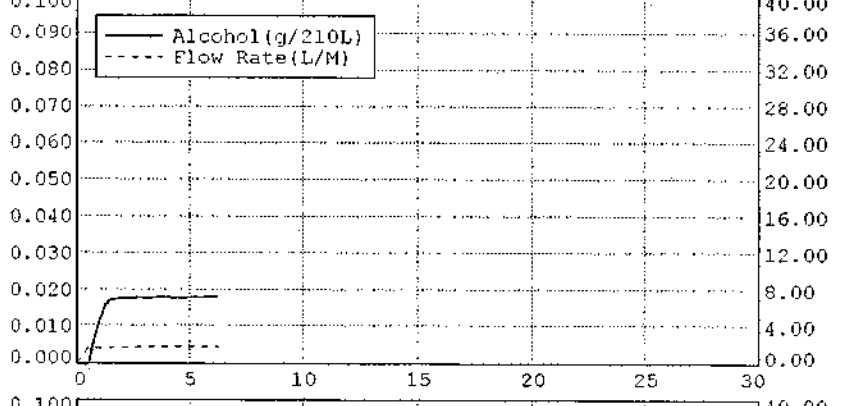
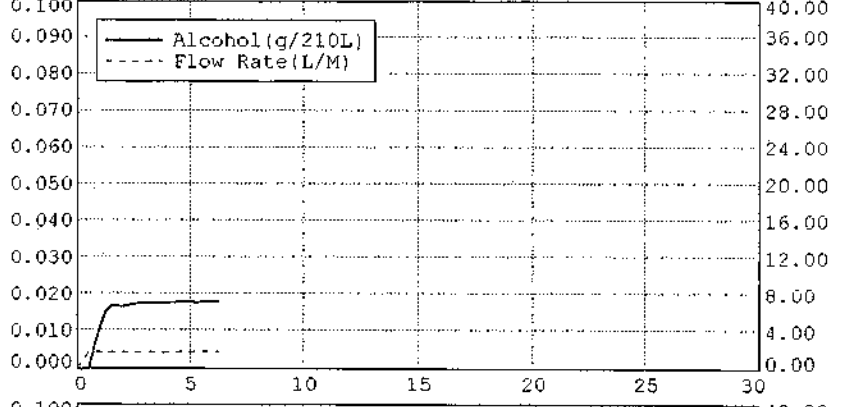
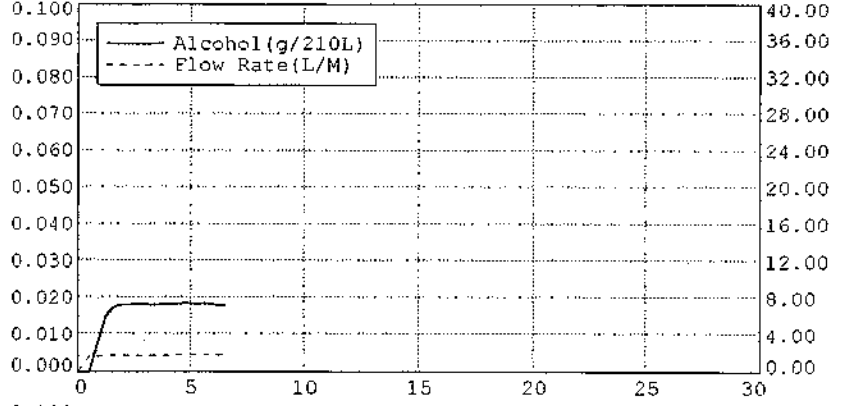
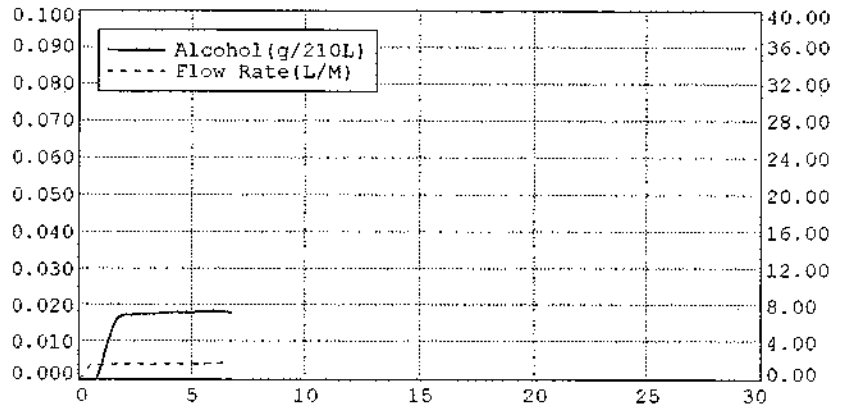
Date: 10/04/2017
 Time: 11:59:12

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.49: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 602 psi

BLANK TEST	0.000	12:15
INTERNAL STANDARD	VERIFIED	12:15
EXTERNAL STANDARD	0.020	12:15
BLANK TEST	0.000	12:16
EXTERNAL STANDARD	0.019	12:16
BLANK TEST	0.000	12:17
EXTERNAL STANDARD	0.019	12:17
BLANK TEST	0.000	12:18
EXTERNAL STANDARD	0.019	12:18
BLANK TEST	0.000	12:19
EXTERNAL STANDARD	0.019	12:20
BLANK TEST	0.000	12:20

Average = 0.0192
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100348

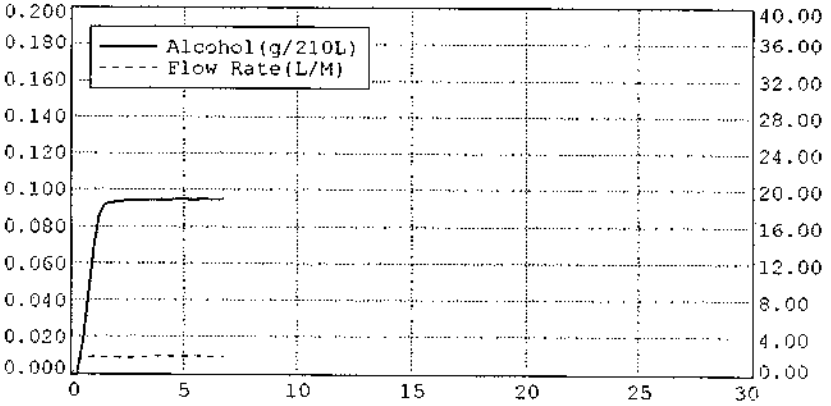
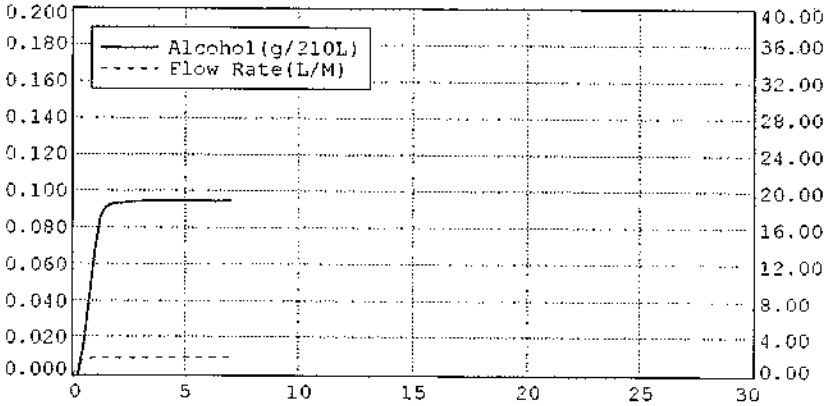
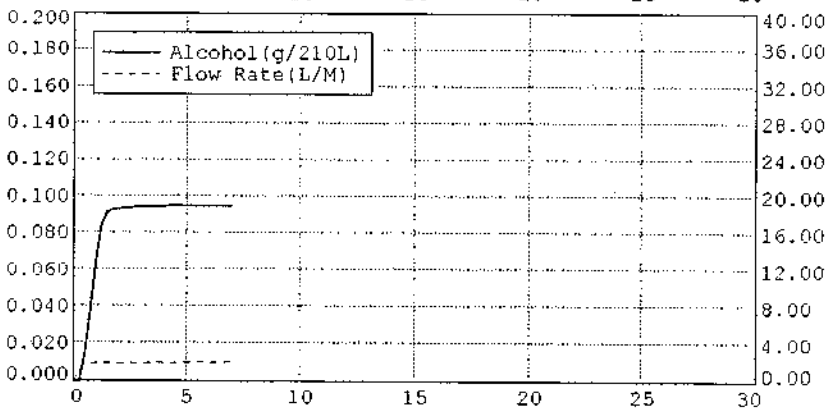
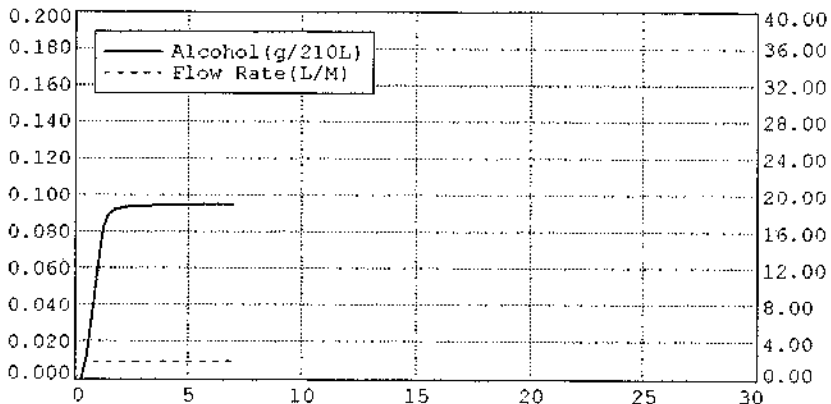
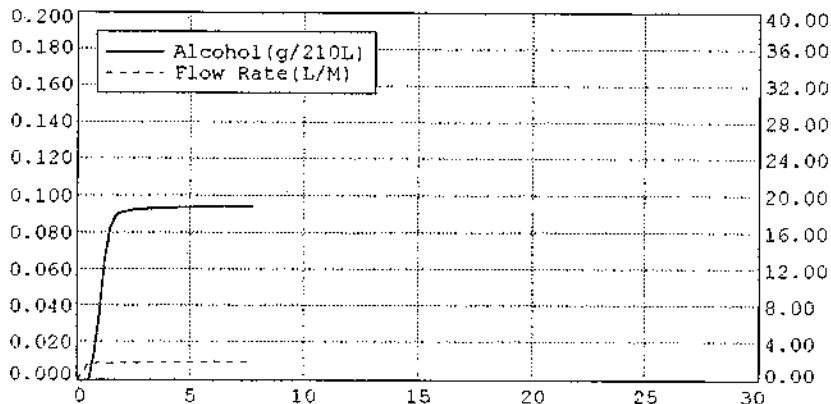
Date: 10/04/2017
 Time: 12:22:42

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.48: 0.099
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 856 psi

BLANK TEST	0.000	12:23
INTERNAL STANDARD	VERIFIED	12:23
EXTERNAL STANDARD	0.095	12:24
BLANK TEST	0.000	12:25
EXTERNAL STANDARD	0.096	12:25
BLANK TEST	0.000	12:26
EXTERNAL STANDARD	0.096	12:26
BLANK TEST	0.000	12:27
EXTERNAL STANDARD	0.096	12:27
BLANK TEST	0.000	12:28
EXTERNAL STANDARD	0.096	12:28
BLANK TEST	0.000	12:29

Average = 0.0958
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100348

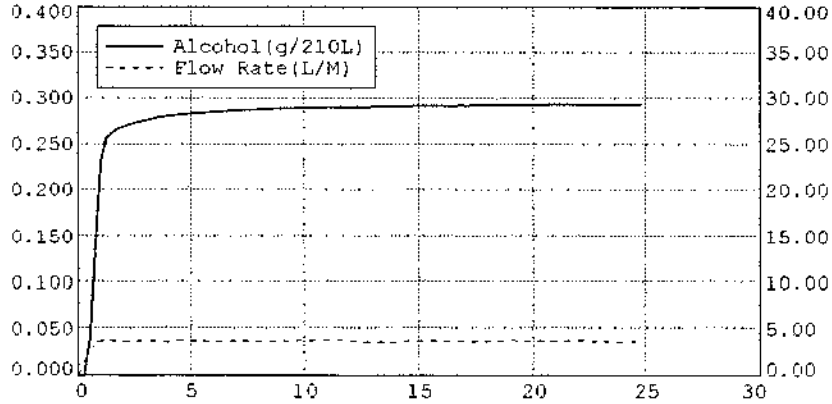
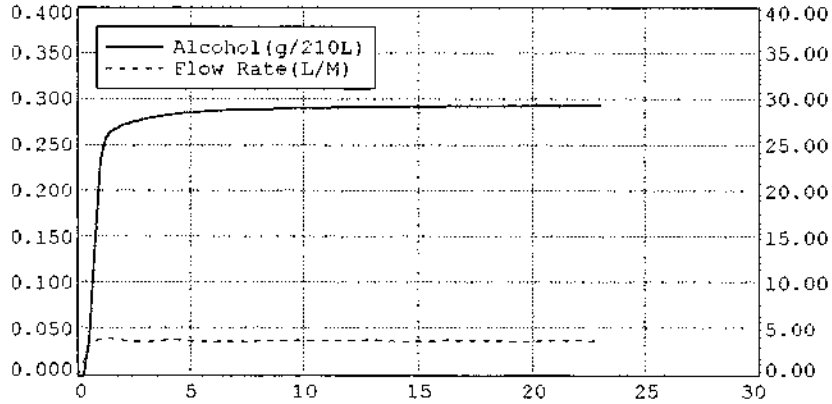
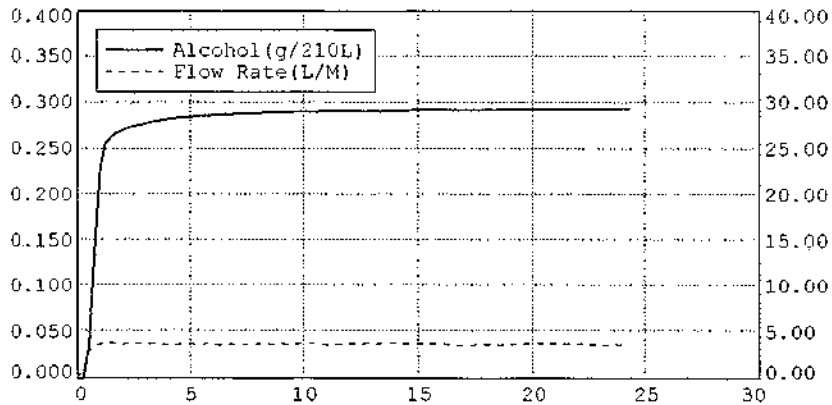
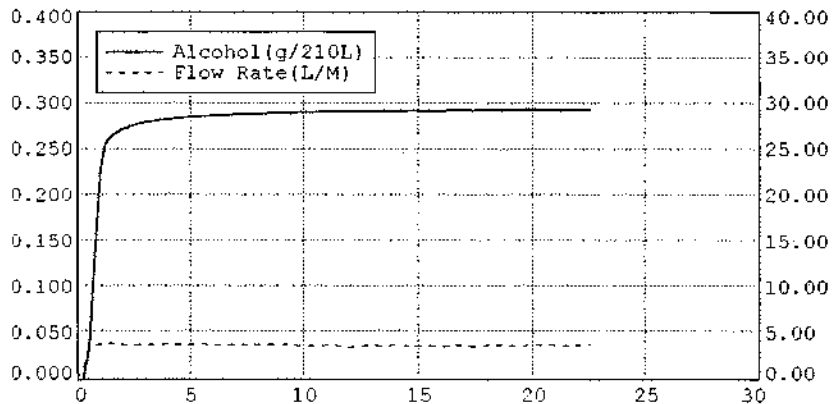
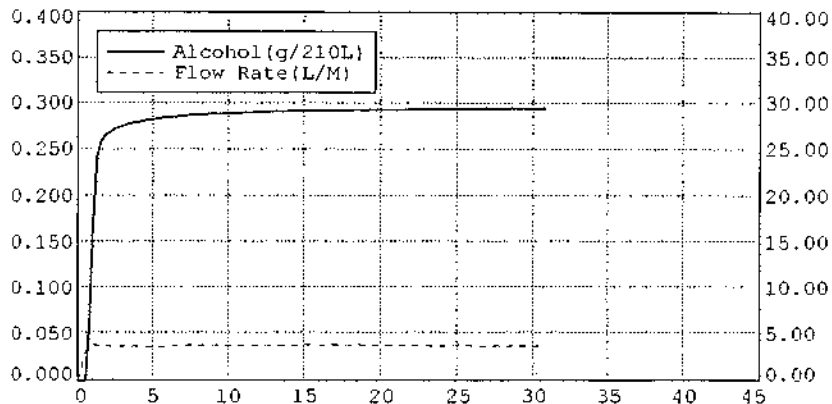
Date: 10/04/2017
 Time: 12:30:15

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

BLANK TEST	0.000	12:32
INTERNAL STANDARD	VERIFIED	12:32
EXTERNAL STANDARD	0.295	12:32
BLANK TEST	0.000	12:33
EXTERNAL STANDARD	0.293	12:34
BLANK TEST	0.000	12:35
EXTERNAL STANDARD	0.293	12:35
BLANK TEST	0.000	12:36
EXTERNAL STANDARD	0.293	12:37
BLANK TEST	0.000	12:38
EXTERNAL STANDARD	0.293	12:38
BLANK TEST	0.000	12:39

Average = 0.2934
 Std Dev = 0.0009

*Simulator - SD1200
 Calibrated - 3/29/17*



DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100353

Date: 10/04/2017
Time: 10:53:52

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 = 4.619 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: 10/04/2017
Time: 10:56 AM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 48.1°C

Current Barometer 29.5 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: 0.059 V

LINEARITY CHECK

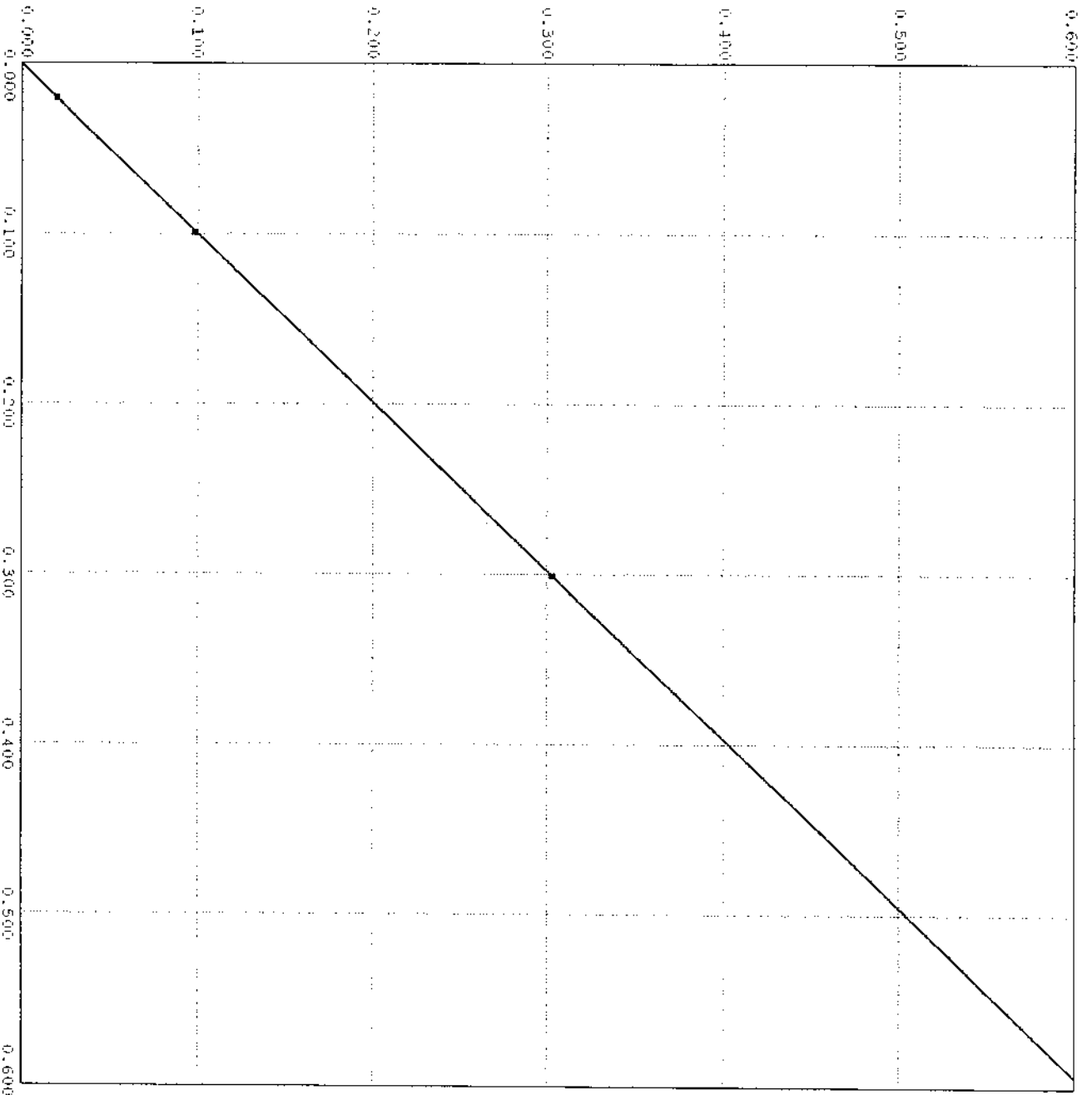
Alaska Department of Public Safety
DATAMASTER dnt: 100353

Date: 10/04/2017
Time: 10:59:23

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0206	0.0005
0.099	0.0994	0.0005
0.300	0.3036	0.0011

SLOPE = 1.011735
R² = 0.999984



CS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100353

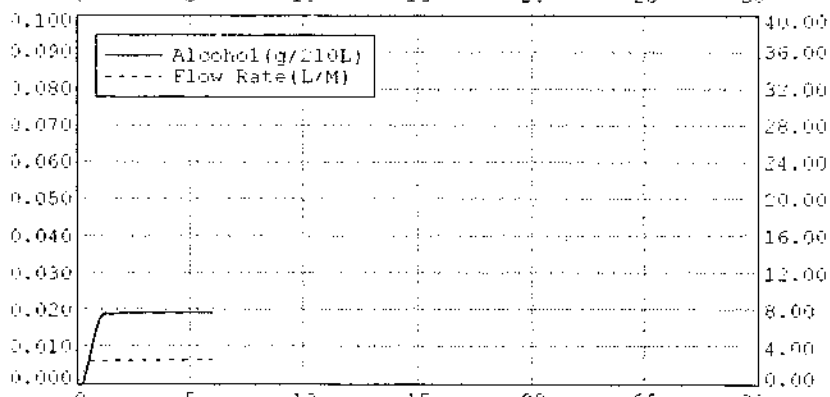
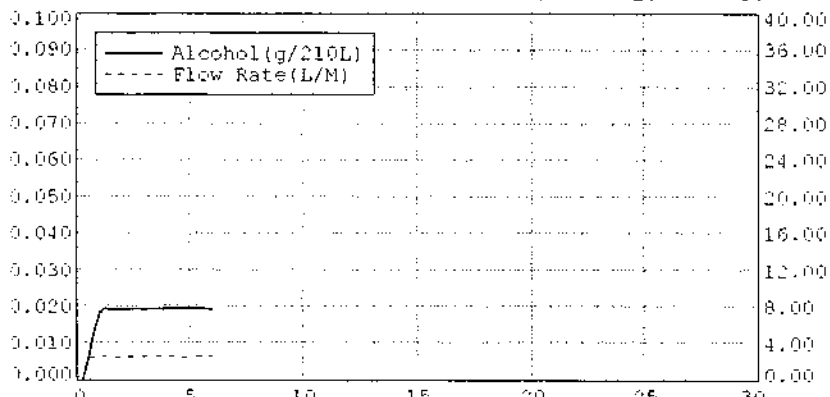
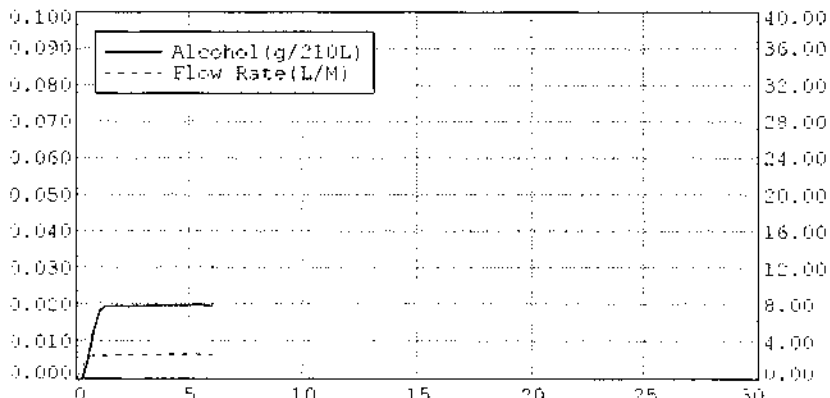
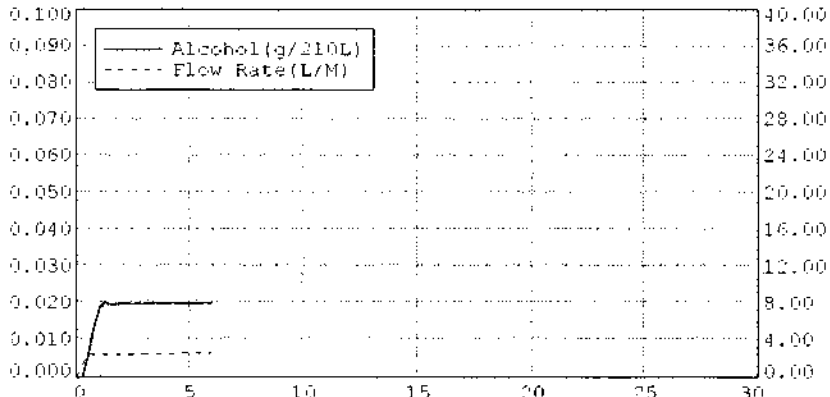
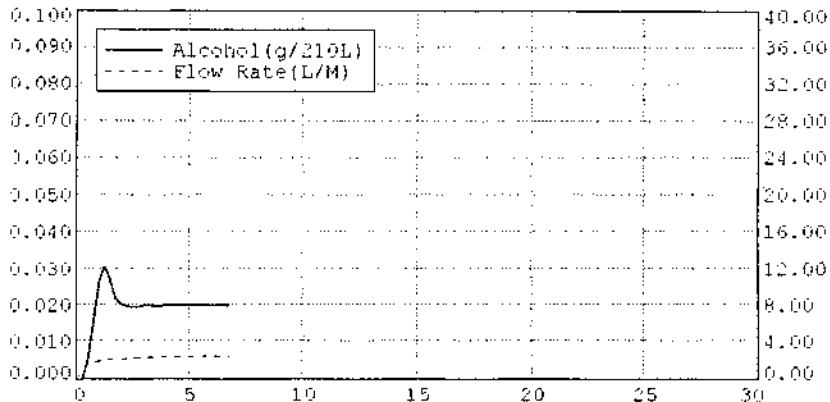
Date: 10/04/2017
 Time: 10:59:25

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.49: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 633 psi

BLANK TEST	0.000	11:00
INTERNAL STANDARD	VERIFIED	11:00
EXTERNAL STANDARD	0.021	11:01
BLANK TEST	0.000	11:01
EXTERNAL STANDARD	0.021	11:02
BLANK TEST	0.000	11:03
EXTERNAL STANDARD	0.021	11:03
BLANK TEST	0.000	11:04
EXTERNAL STANDARD	0.020	11:04
BLANK TEST	0.000	11:05
EXTERNAL STANDARD	0.020	11:05
BLANK TEST	0.000	11:06

Average = 0.0206
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100353

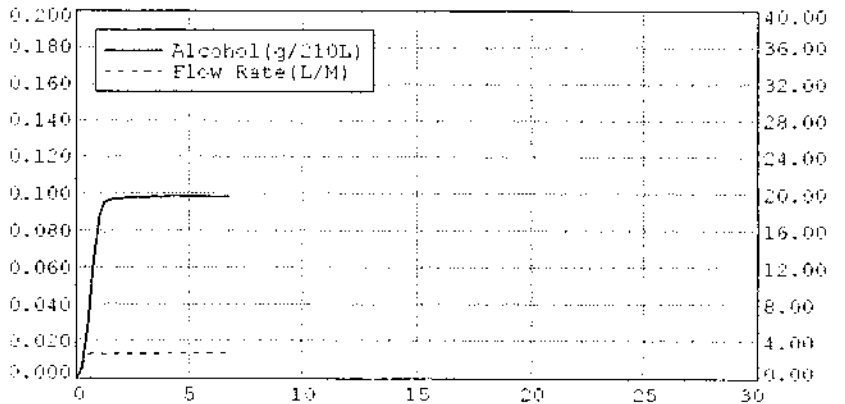
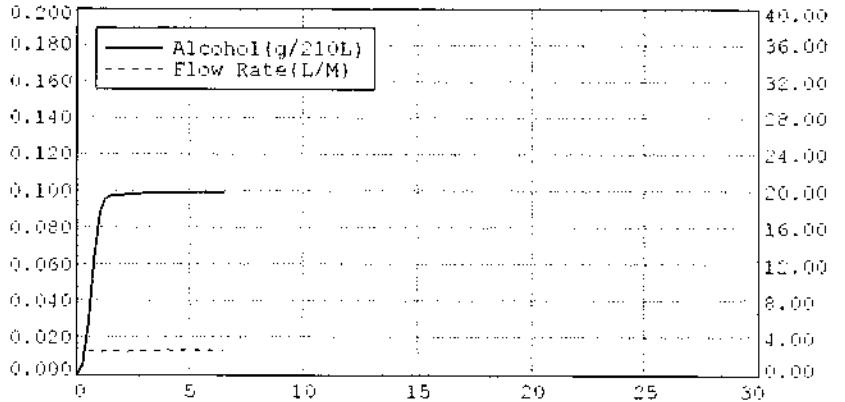
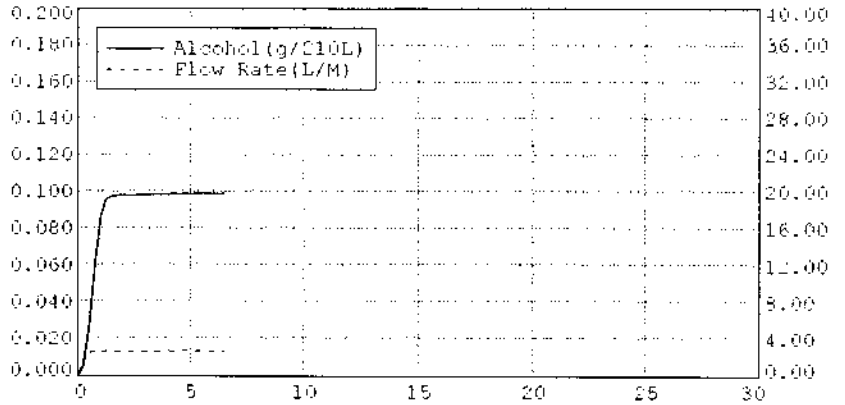
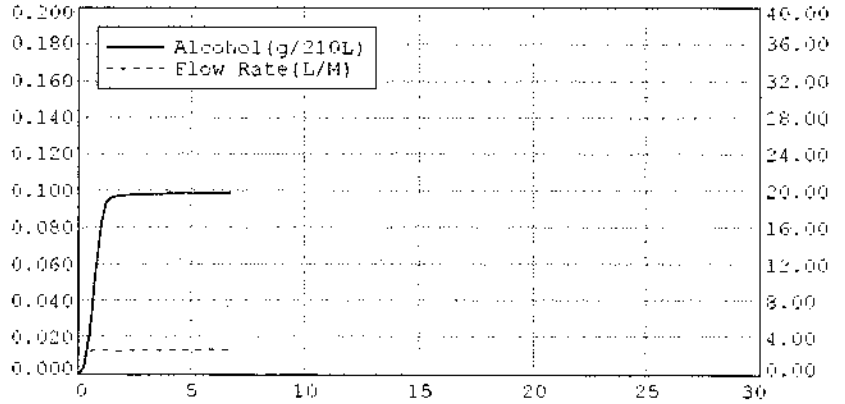
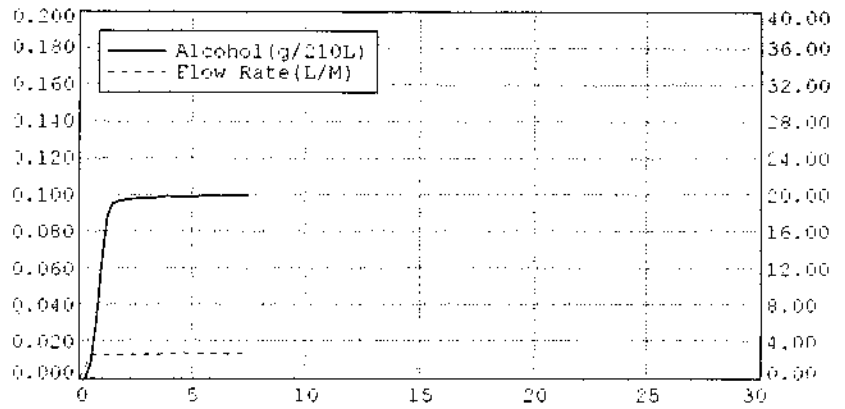
Date: 10/04/2017
 Time: 11:07:04

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.50: 0.099
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 894 psi

BLANK TEST	0.000	11:08
INTERNAL STANDARD	VERIFIED	11:08
EXTERNAL STANDARD	0.100	11:08
BLANK TEST	0.000	11:09
EXTERNAL STANDARD	0.099	11:09
BLANK TEST	0.000	11:10
EXTERNAL STANDARD	0.099	11:11
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.100	11:12
BLANK TEST	0.000	11:13
EXTERNAL STANDARD	0.099	11:13
BLANK TEST	0.000	11:14

Average = 0.0994
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100353

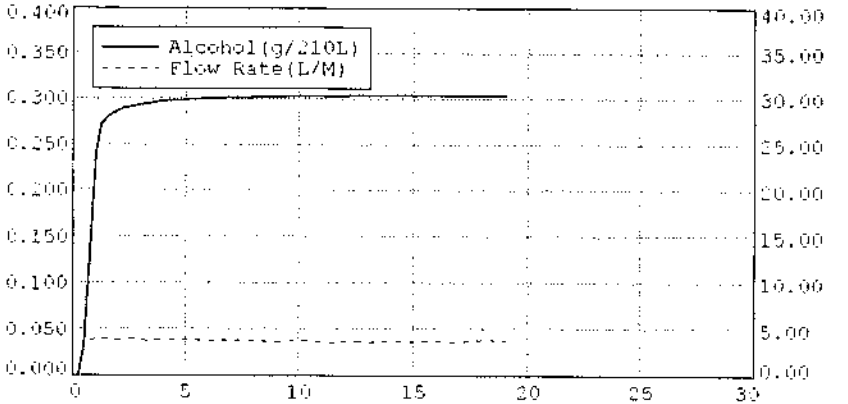
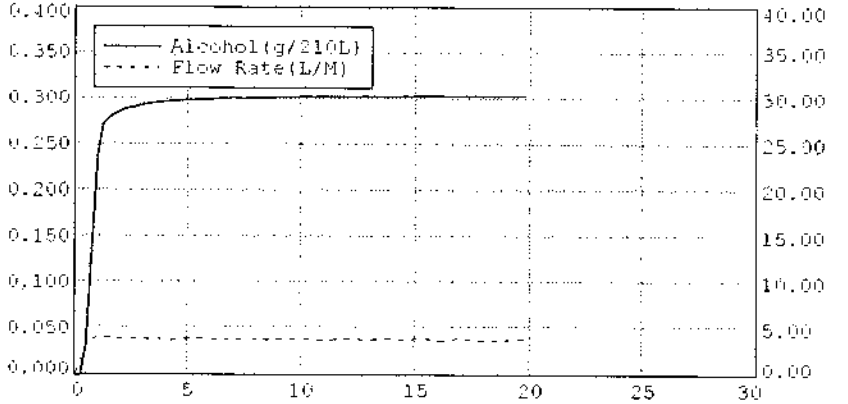
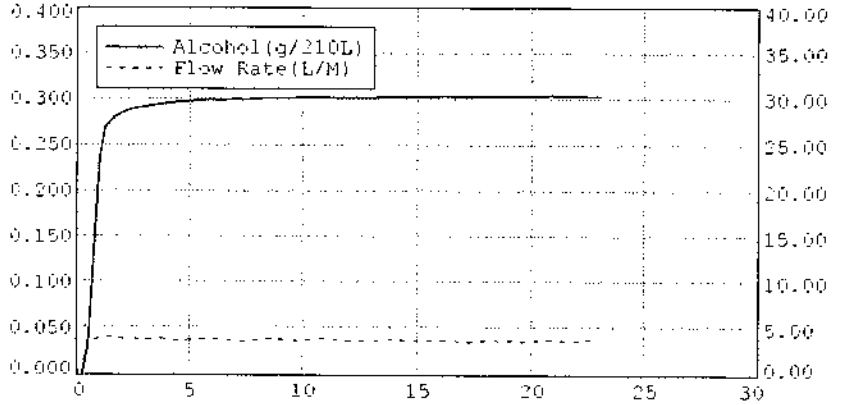
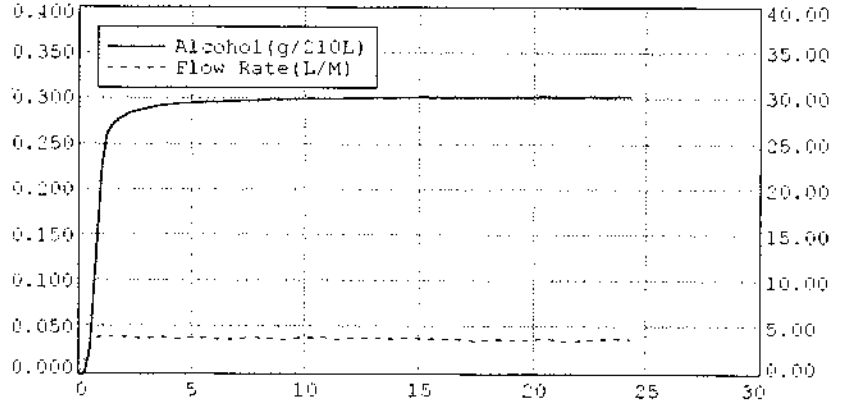
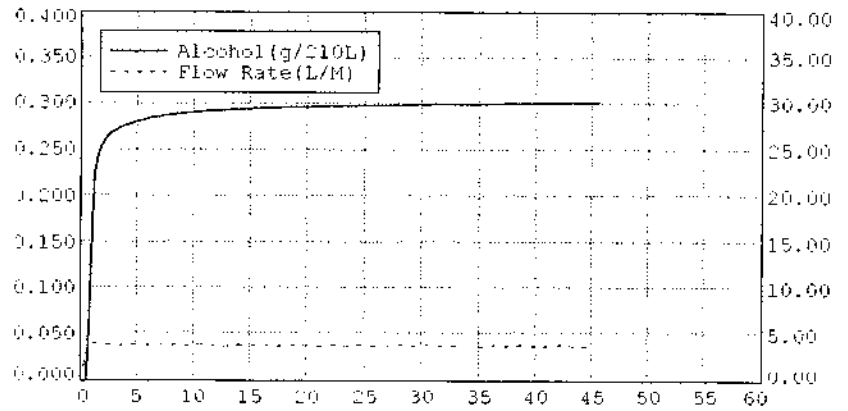
Date: 10/04/2017
 Time: 11:15:14

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

BLANK TEST	0.000	11:16
INTERNAL STANDARD	VERIFIED	11:16
EXTERNAL STANDARD	0.302	11:17
BLANK TEST	0.000	11:18
EXTERNAL STANDARD	0.303	11:19
BLANK TEST	0.000	11:20
EXTERNAL STANDARD	0.304	11:20
BLANK TEST	0.000	11:21
EXTERNAL STANDARD	0.304	11:21
BLANK TEST	0.000	11:22
EXTERNAL STANDARD	0.305	11:23
BLANK TEST	0.000	11:24

Average = 0.3036
 Std Dev = 0.0011

*Simulator - SD1200
 Calibrated - 3/29/17
 COS 10/4/17*



DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 10/04/2017
Time: 11:44:54

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 = 5.162 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: 10/04/2017
Time: 11:49 AM

Temperatures (°C)
Sample Cell: 48.7°C
Breath Tube: 48.1°C

Current Barometer 29.5 in
Volume (Ltr) 0.00

Settings
Lamp: 1.82 V
Bias: 80 V
Cooler: 1.96 V
Chopper: 538 Hz

Voltages (V)
Flow: 1.05 V
Detector: 0.050 V

LINEARITY CHECK

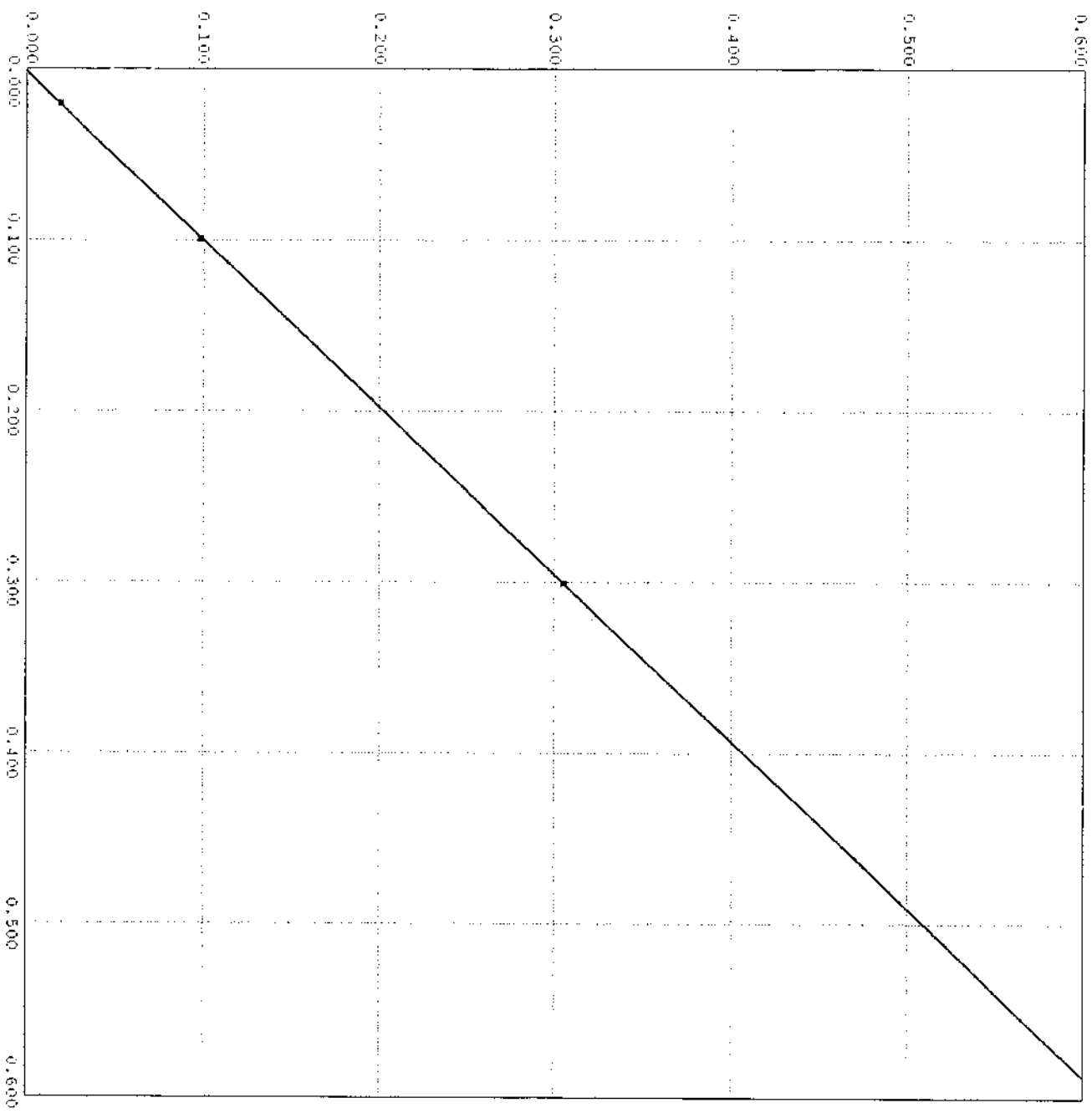
Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 10/04/2017
Time: 11:51:21

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.099	0.0992	0.0004
0.300	0.3062	0.0011

SLOPE = 1.023654
 R^2 = 0.999966



CRB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

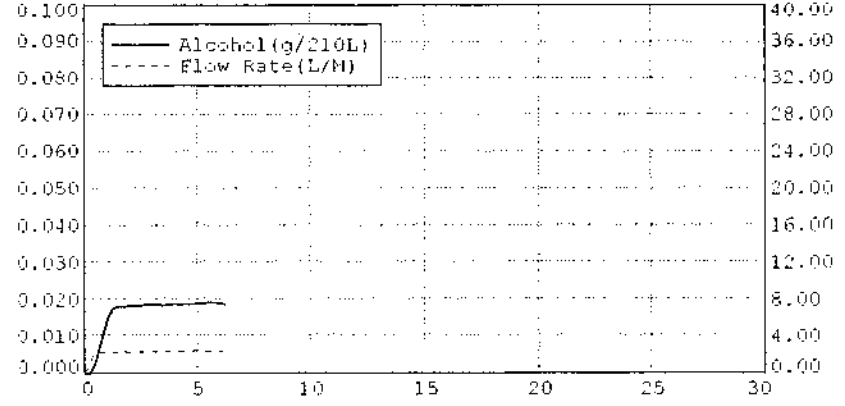
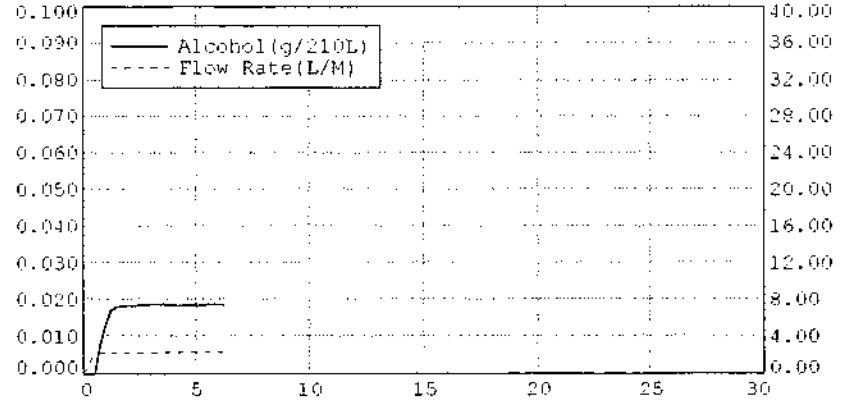
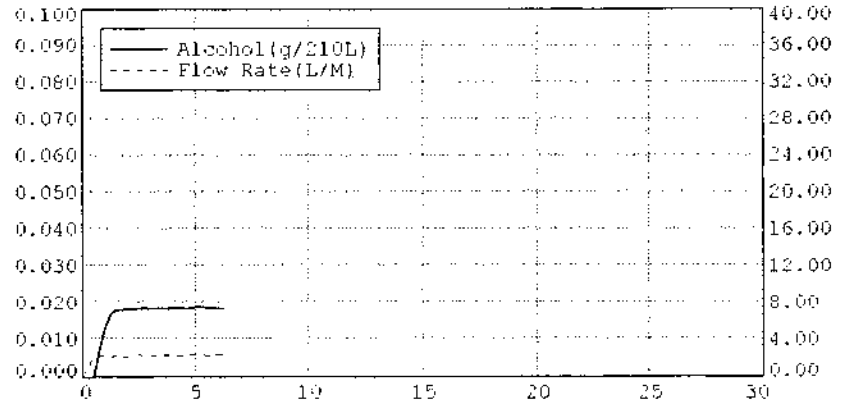
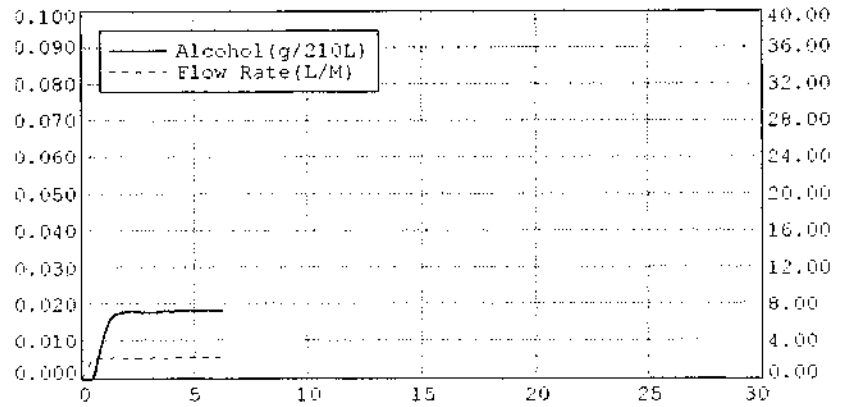
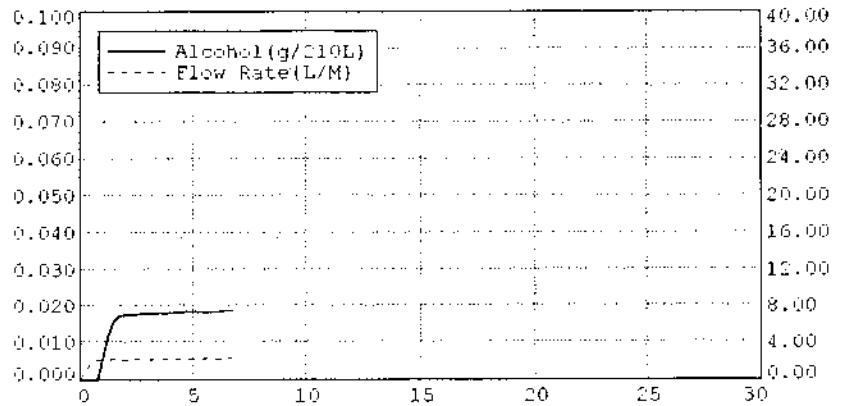
Date: 10/04/2017
 Time: 11:51:23

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.49: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 617 psi

BLANK TEST	0.000	11:59
INTERNAL STANDARD	VERIFIED	11:59
EXTERNAL STANDARD	0.020	11:59
BLANK TEST	0.000	12:00
EXTERNAL STANDARD	0.020	12:00
BLANK TEST	0.000	12:01
EXTERNAL STANDARD	0.020	12:01
BLANK TEST	0.000	12:02
EXTERNAL STANDARD	0.020	12:03
BLANK TEST	0.000	12:03
EXTERNAL STANDARD	0.020	12:04
BLANK TEST	0.000	12:05

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

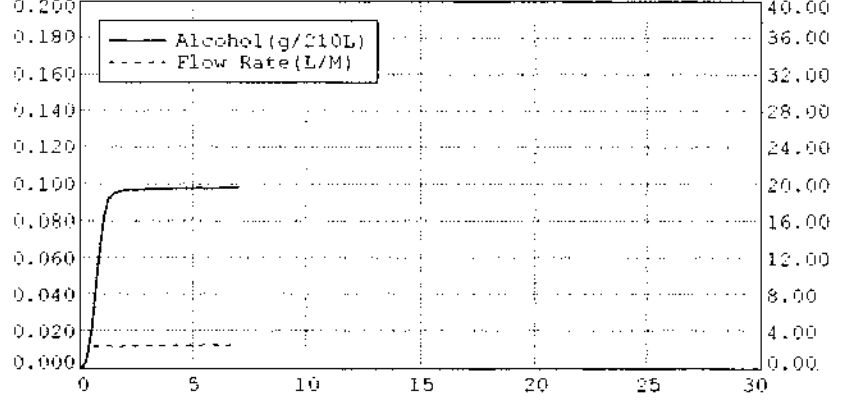
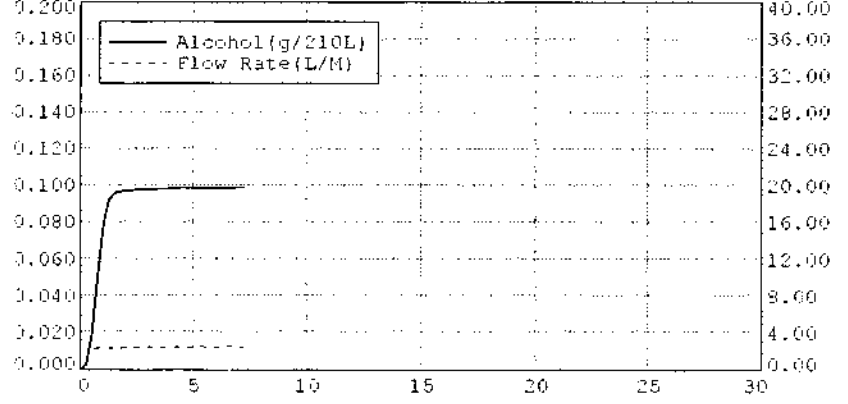
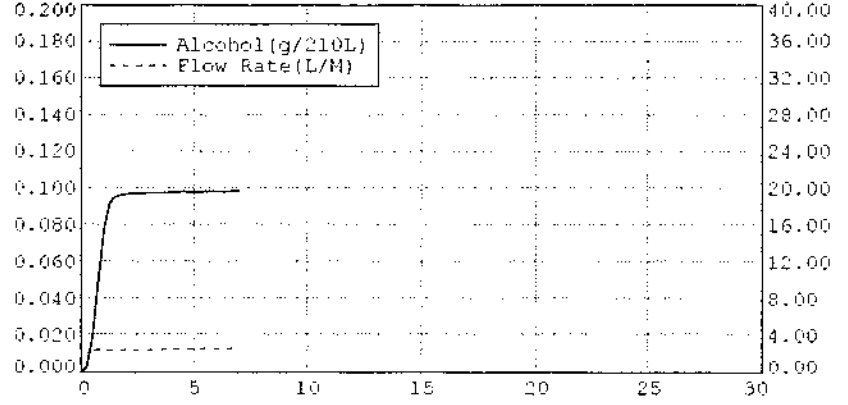
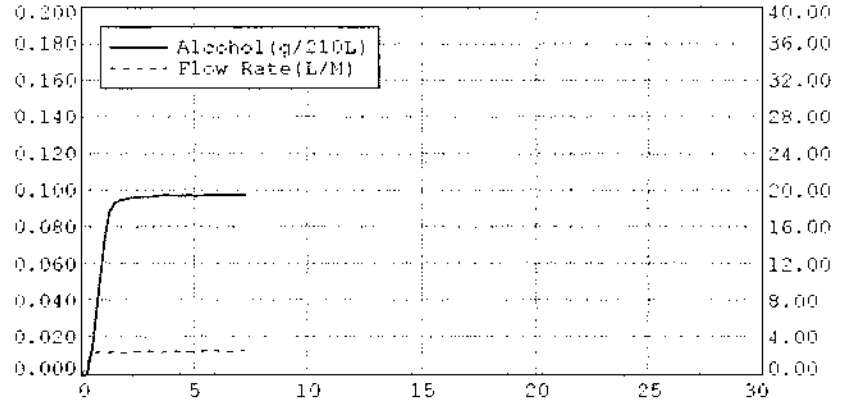
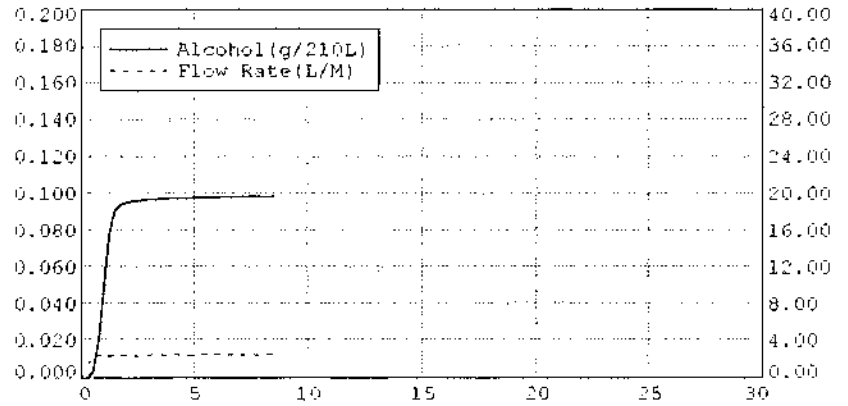
Date: 10/04/2017
 Time: 12:06:56

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.48: 0.099
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 886 psi

BLANK TEST	0.000	12:08
INTERNAL STANDARD	VERIFIED	12:08
EXTERNAL STANDARD	0.099	12:08
BLANK TEST	0.000	12:09
EXTERNAL STANDARD	0.099	12:09
BLANK TEST	0.000	12:10
EXTERNAL STANDARD	0.099	12:11
BLANK TEST	0.000	12:11
EXTERNAL STANDARD	0.100	12:12
BLANK TEST	0.000	12:13
EXTERNAL STANDARD	0.099	12:13
BLANK TEST	0.000	12:14

Average = 0.0992
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

Date: 10/04/2017
 Time: 12:16:14

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

BLANK TEST	0.000	12:17
INTERNAL STANDARD	VERIFIED	12:17
EXTERNAL STANDARD	0.308	12:17
BLANK TEST	0.000	12:18
EXTERNAL STANDARD	0.306	12:19
BLANK TEST	0.000	12:20
EXTERNAL STANDARD	0.306	12:20
BLANK TEST	0.000	12:21
EXTERNAL STANDARD	0.305	12:22
BLANK TEST	0.000	12:23
EXTERNAL STANDARD	0.306	12:23
BLANK TEST	0.000	12:24

Average = 0.3062
 Std Dev = 0.0011

*Simulator - SD1200
 Calibrated - 3/29/17
 COB 10/1/17*

