

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 100895 Analyst C. O. Bryant Start Date 6/27/17

1. Diagnostic Test (attached) Internal Standard value $\leq 3.00\%$ Yes
 1. Voltage Checks
 - a. Adjust voltages, if needed
 - i. Lamp (2.6V Maximum)
 - ii. Bias
 - iii. Cooler (2.0V Maximum)
 - iv. Chopper Frequency
 - v. Detector Voltage (-0.100V to 0.100V)
 - b. Set RFI
 - c. Adjust barometer reading to match NIST traceable barometer
 - d. Adjust volume setting, if needed (1.5L +/- 0.1L)
 - e. Print Technician Screen (attached)
 2. Print Calibration Factors (attached)
 3. Volume Test - Minimum 1.6 L (1.3L to 1.7L)
 4. Linearity Test (attached)
 - a. Levels Used
 - i. 0.020g/210L Mnf Argas Lot AG 616504 Exp 6/13/18
 - ii. 0.040g/210L Mnf Argas Lot AG 630101 Exp 10/27/18
 - iii. 0.080g/210L Mnf Argas Lot AG 634001 Exp 12/5/18
 - iv. 0.100g/210L Mnf Argas Lot AG 629304 Exp 10/19/18
 - v. 0.200g/210L Mnf Guth Lot 16190 Exp 8/15/18
 1. Simulator S/N DR 5298 Date Calibrated 9/14/16
 - vi. 0.300g/210L Mnf Guth Lot 16210 Exp 8/22/18
 1. Simulator S/N SD 1177 Date Calibrated 9/13/16
 5. Functional Tests (attached)
 - a. Incomplete
 - b. Invalid
 - c. Interference
 - d. Exceeded attempts
 - i. Acetone - Mnf Guth Lot 16160 Level 0.100 Exp 7/19/18
 1. Simulator S/N SD 1199 Date Calibrated 9/13/16
 - ii. Isopropanol - Mnf Guth Lot 16160 Level 0.100 Exp 7/19/18
 1. Simulator S/N SD 1088 Date Calibrated 9/13/16
 - iii. Negative Control - Mnf Guth Lot 15220 Level 0.100 Exp 9/28/17
 1. Simulator S/N DR 4161 Date Calibrated 9/14/16
 - 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 7/3/17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100395

Date: 06/27/2017
Time: 08:59:08

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7°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
(1.10 V - 2.56 V)
Cooler Voltage = 1.67 V PASSED
(1.03 V - 2.41 V)
Bias Voltage = 80 V PASSED
(47 V - 111 V)
Chopper Freq = 538 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.7 in

PUMP INFO

Flow Rate = 4.276 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
(0.002 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.091 (0.68%) (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100395

Date: 06/27/2017

Time: 9:15 AM

Temperatures (°C)

Sample Cell: 48.7°C

Breath Tube: 47.3°C

Current Barometer 29.7 in

Volume (Ltr) 1.56

Settings

Lamp: 1.80 V

Bias: 80 V

Cooler: 1.72 V

Chopper: 536 Hz

Voltages (V)

Flow: 1.05 V

Detector: 0.021 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100395

Date: 05/01/2015
Time: 10:57:50

OPERATOR NAME:
CHARLES FOSTER
CERTIFICATE #: 7734

Ca = 0.1000
CAL = 0.974938 0.800 <= CAL < 1.200
b1 = 0.0007 0.0000 <= b1 < 0.0040
b2 = 0.0063 0.0010 <= b2 < 0.0100
b3 = 0.0003 0.0000 <= b3 < 0.0040
Xq = 0.0901 0.0500 <= Xq < 0.2000
a21 = 1.171322 1.050 <= a21 < 1.300
a31 = 0.371440 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100395

Date: 06/27/2017
Time: 09:17:43

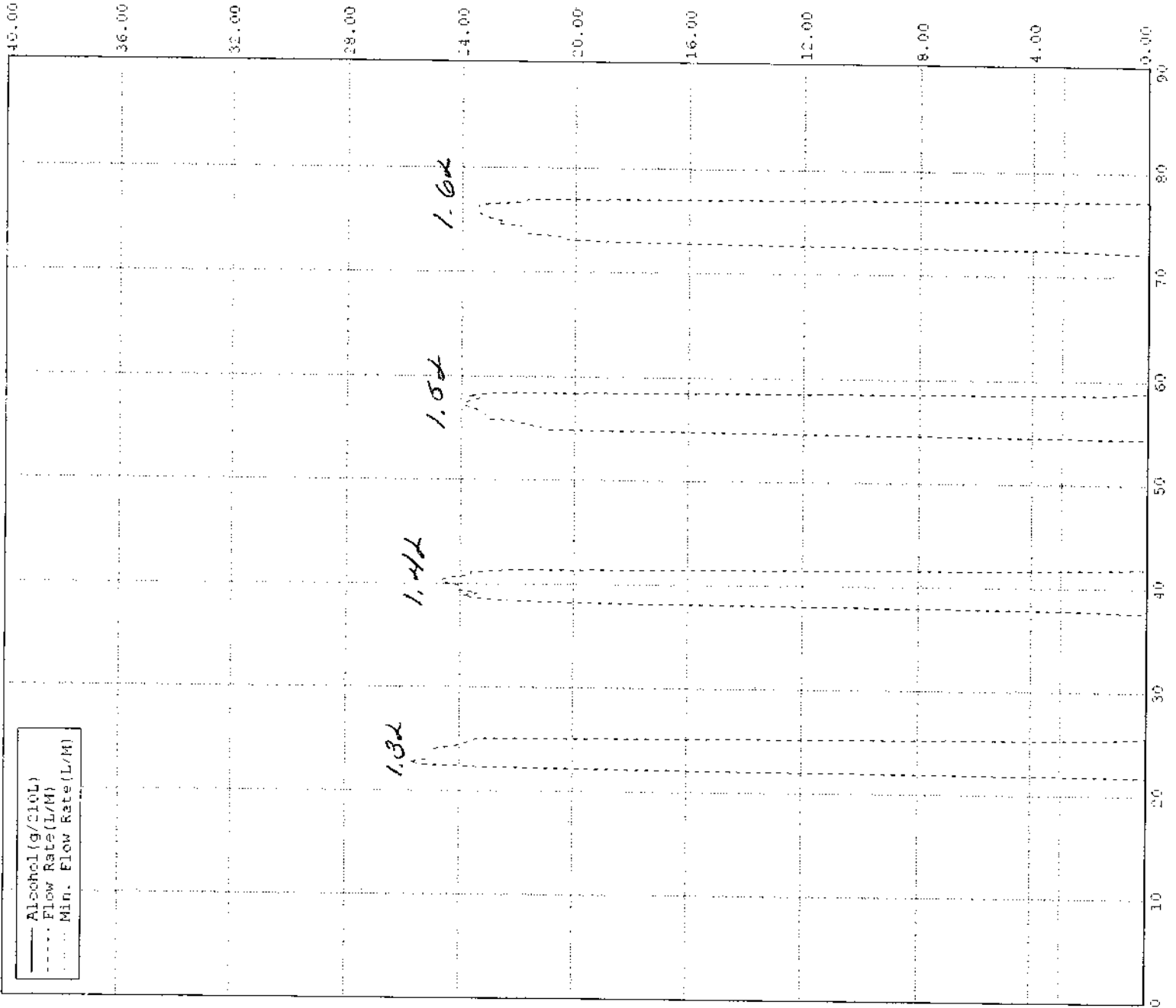
SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.69: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:19
BLANK TEST	0.000	09:19
INTERNAL STANDARD	VERIFIED	09:19
EXTERNAL STANDARD	0.077	09:19
BLANK TEST	0.000	09:20
SUBJECT SAMPLE (Vol=1.62L)	0.000	09:22
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.078	09:23
BLANK TEST	0.000	09:24



LINEARITY CHECK

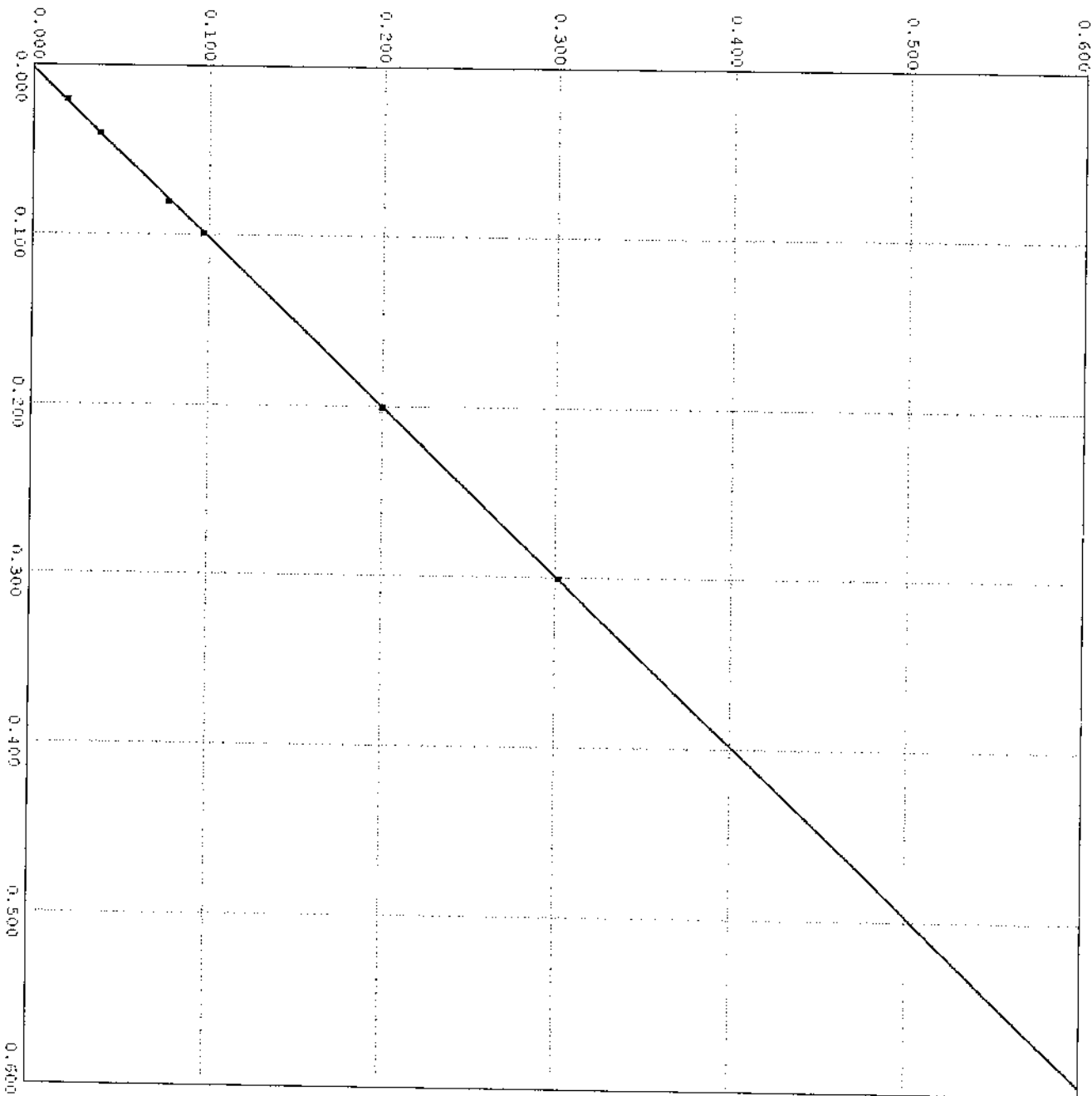
Alaska Department of Public Safety
DATAMASTER dmc: 100395

Date: 06/27/2017
Time: 10:00:18

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0202	0.0004
0.040	0.0390	0.0000
0.080	0.0778	0.0004
0.099	0.0978	0.0004
0.200	0.2006	0.0005
0.300	0.3026	0.0005

SLOPE = 1.012108
R² = 0.999899



CM

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100395

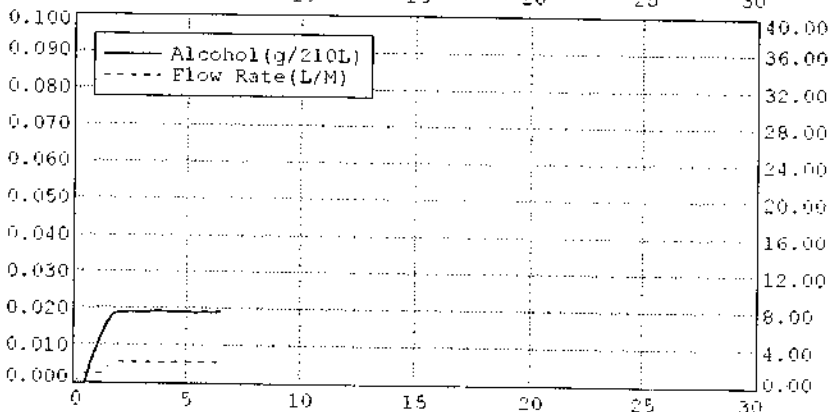
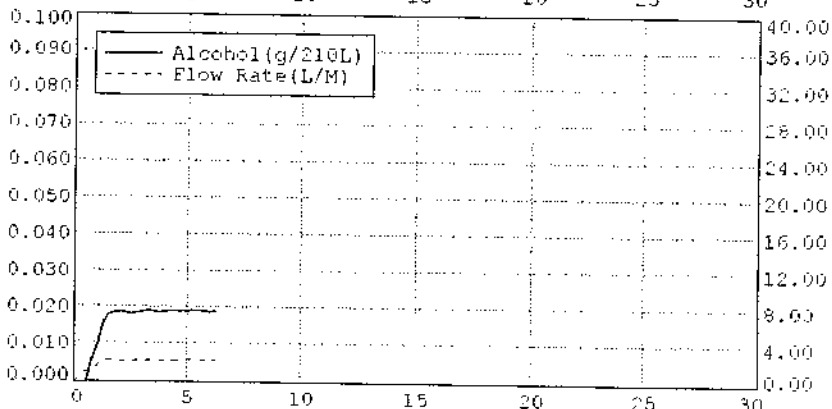
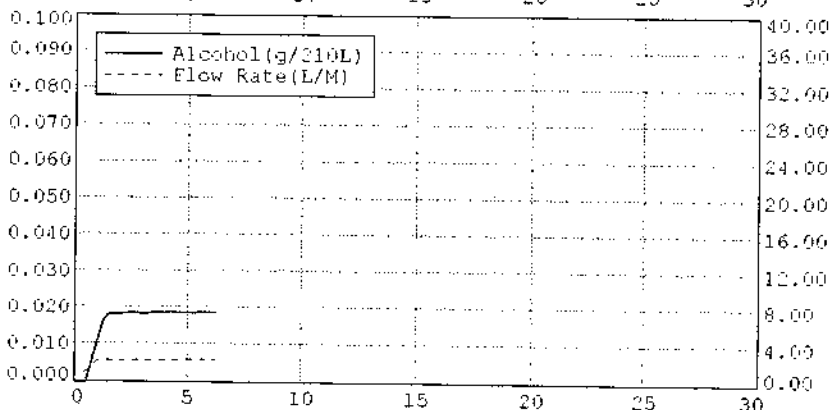
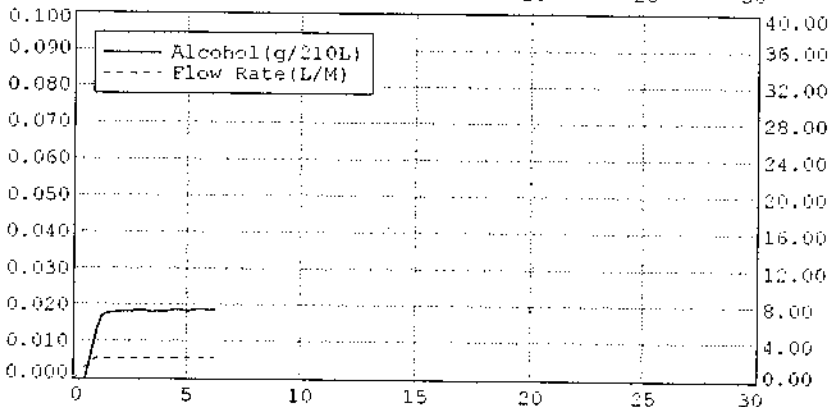
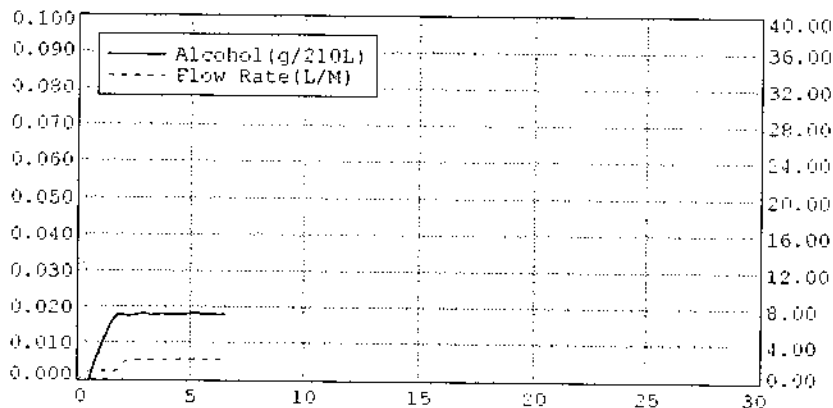
Date: 06/27/2017
 Time: 10:00:20

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.68: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 863 psi

BLANK TEST	0.000	10:01
INTERNAL STANDARD	VERIFIED	10:01
EXTERNAL STANDARD	0.020	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.020	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.020	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.020	10:05
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.021	10:06
BLANK TEST	0.000	10:07

Average = 0.0202
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100395

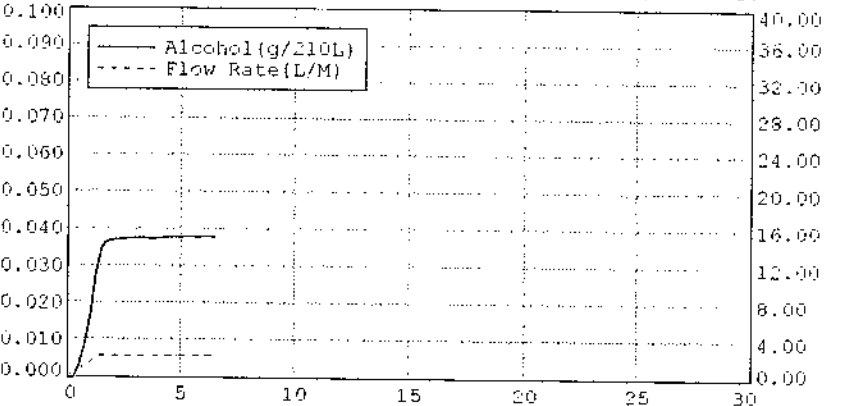
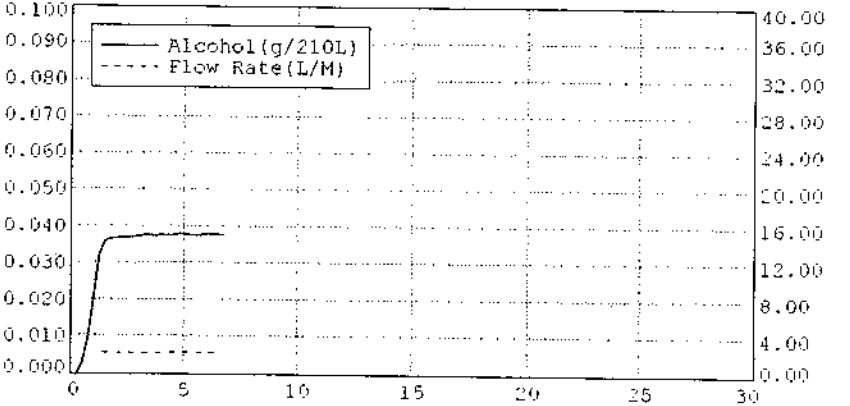
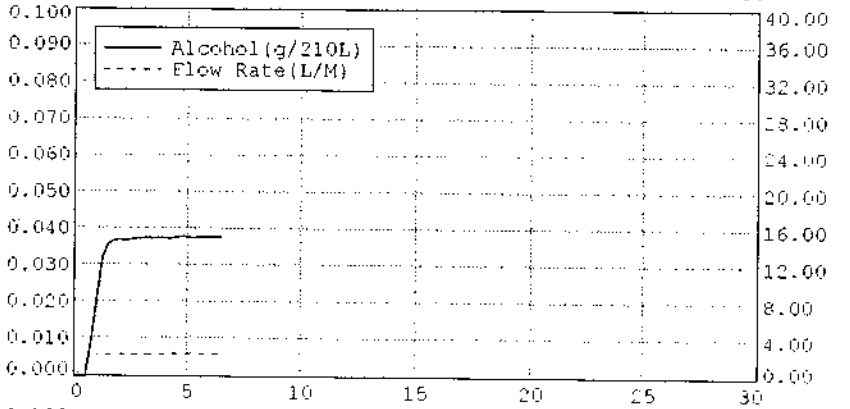
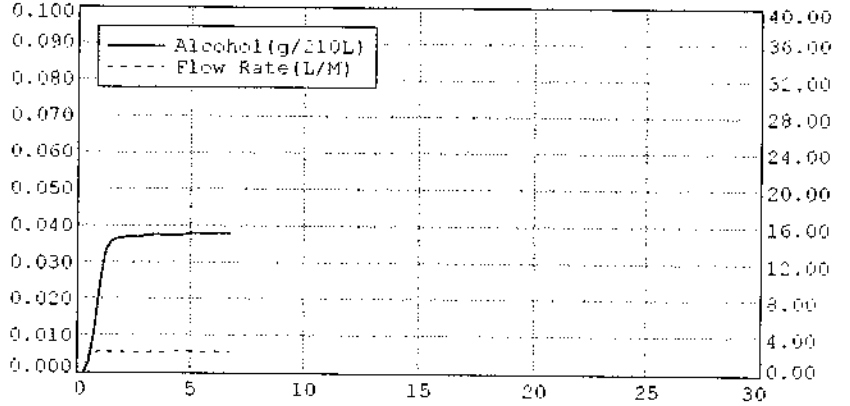
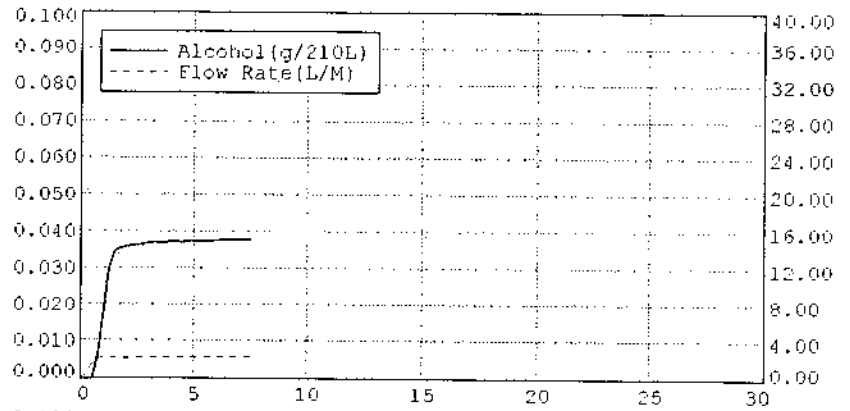
Date: 06/28/2017
 Time: 10:34:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.74: 0.040
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 863 psi

BLANK TEST	0.000	10:35
INTERNAL STANDARD	VERIFIED	10:36
EXTERNAL STANDARD	0.039	10:36
BLANK TEST	0.000	10:37
EXTERNAL STANDARD	0.039	10:37
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.039	10:38
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.039	10:39
BLANK TEST	0.000	10:40
EXTERNAL STANDARD	0.039	10:40
BLANK TEST	0.000	10:41

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100395

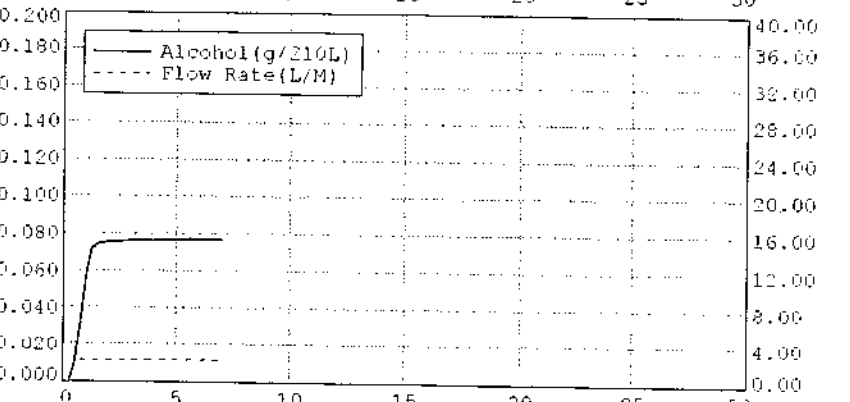
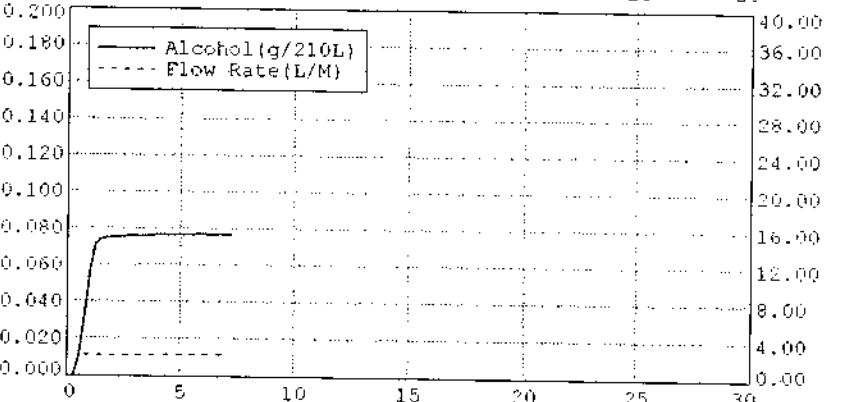
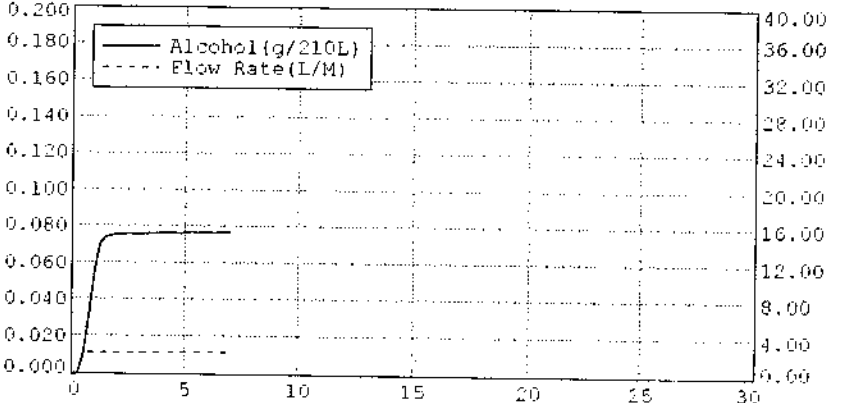
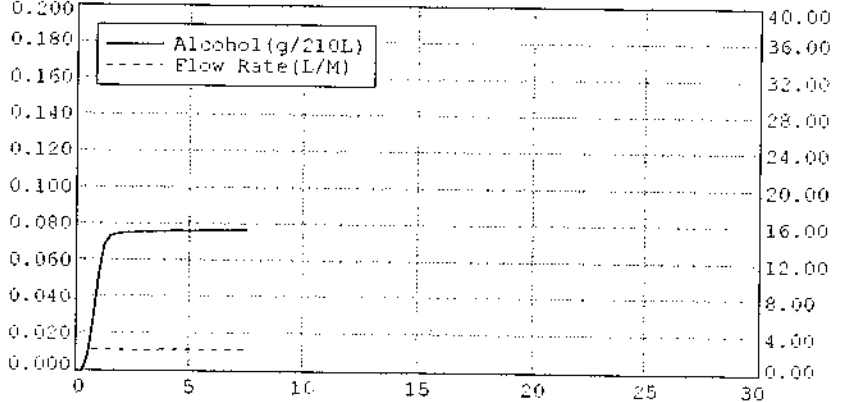
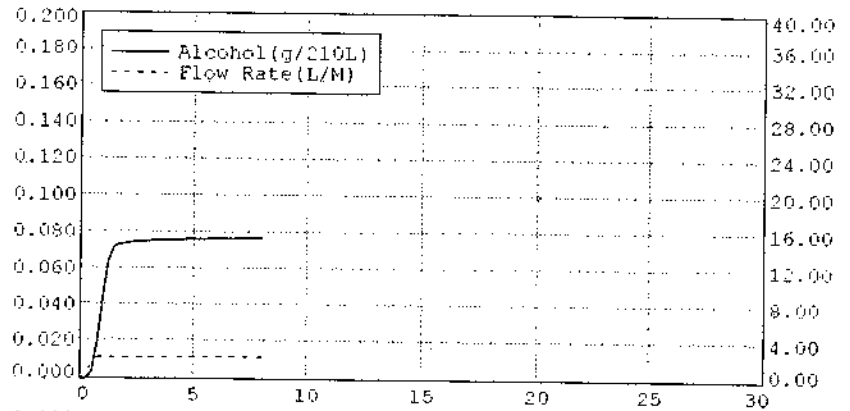
Date: 06/28/2017
 Time: 10:55:26

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.75: 0.080
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 906 psi

BLANK TEST	0.000	10:56
INTERNAL STANDARD	VERIFIED	10:56
EXTERNAL STANDARD	0.077	10:57
BLANK TEST	0.000	10:57
EXTERNAL STANDARD	0.078	10:58
BLANK TEST	0.000	10:59
EXTERNAL STANDARD	0.078	10:59
BLANK TEST	0.000	11:00
EXTERNAL STANDARD	0.078	11:00
BLANK TEST	0.000	11:01
EXTERNAL STANDARD	0.078	11:01
BLANK TEST	0.000	11:02

Average = 0.0778
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100395

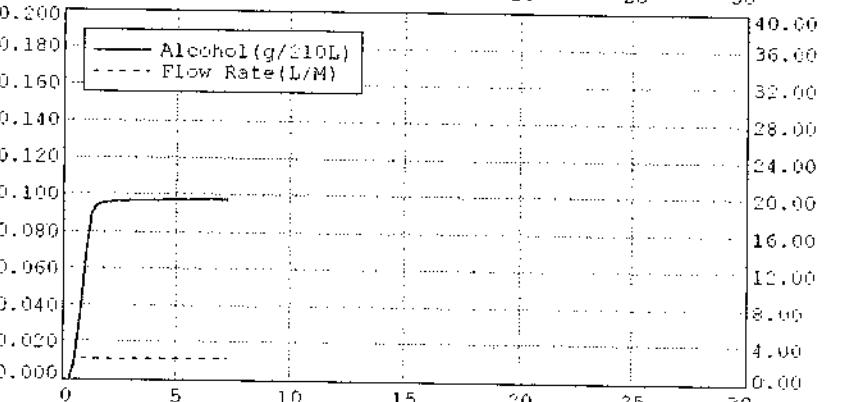
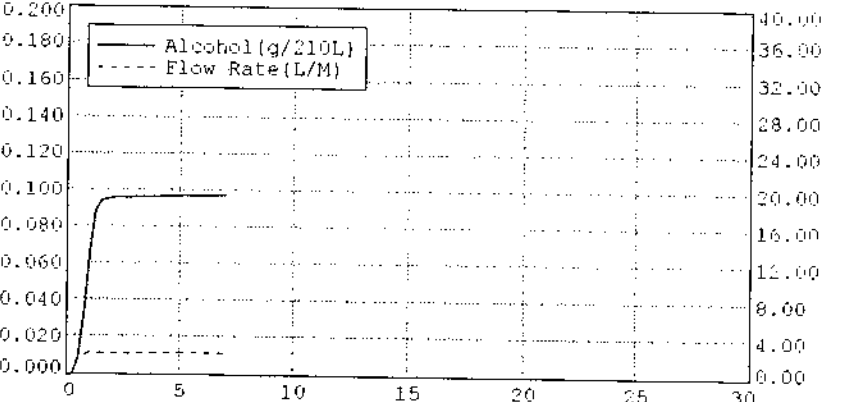
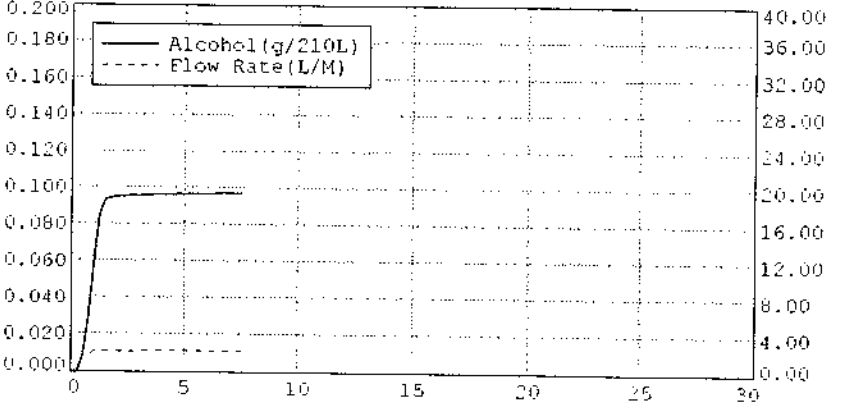
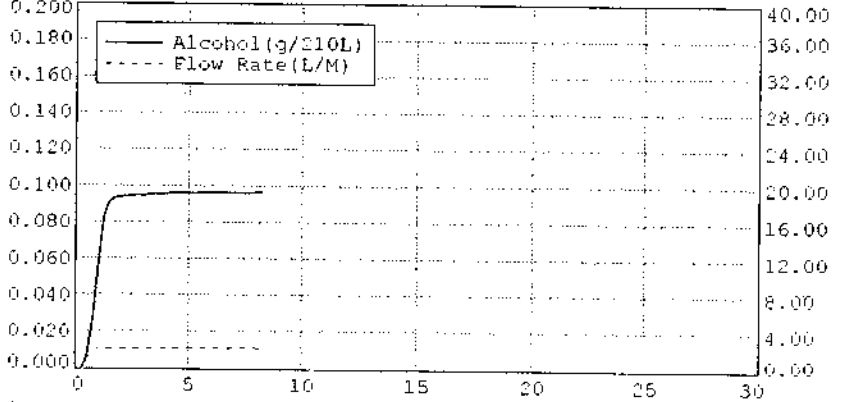
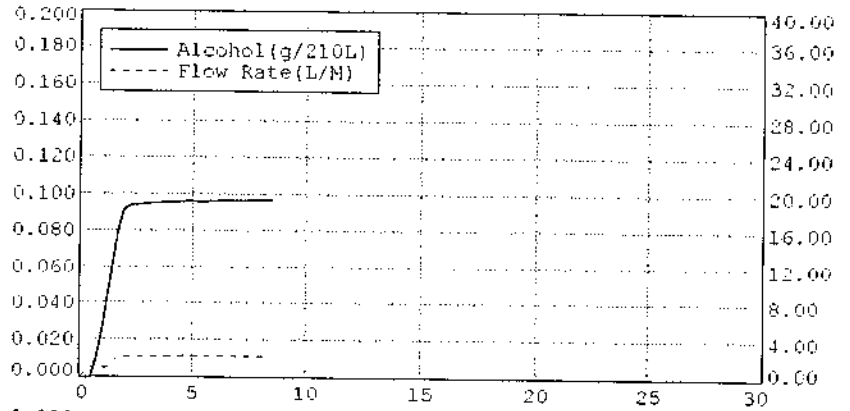
Date: 06/28/2017
 Time: 12:29:51

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.75: 0.099
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 800 psi

BLANK TEST	0.000	12:31
INTERNAL STANDARD	VERIFIED	12:31
EXTERNAL STANDARD	0.098	12:31
BLANK TEST	0.000	12:32
EXTERNAL STANDARD	0.097	12:32
BLANK TEST	0.000	12:33
EXTERNAL STANDARD	0.098	12:33
BLANK TEST	0.000	12:34
EXTERNAL STANDARD	0.098	12:34
BLANK TEST	0.000	12:35
EXTERNAL STANDARD	0.098	12:35
BLANK TEST	0.000	12:36

Average = 0.0978
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100395

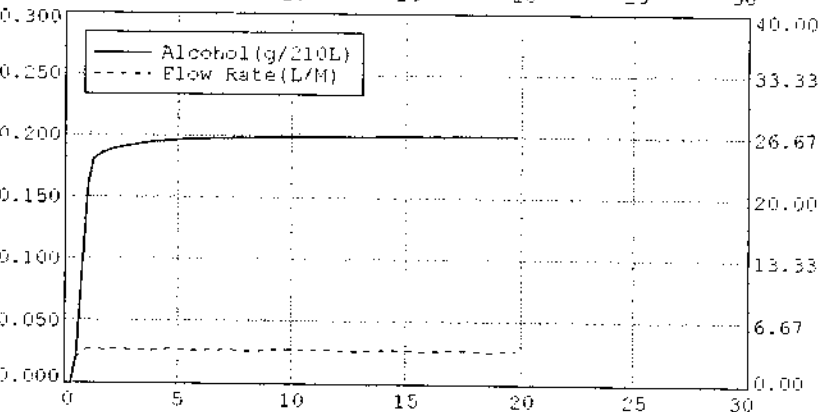
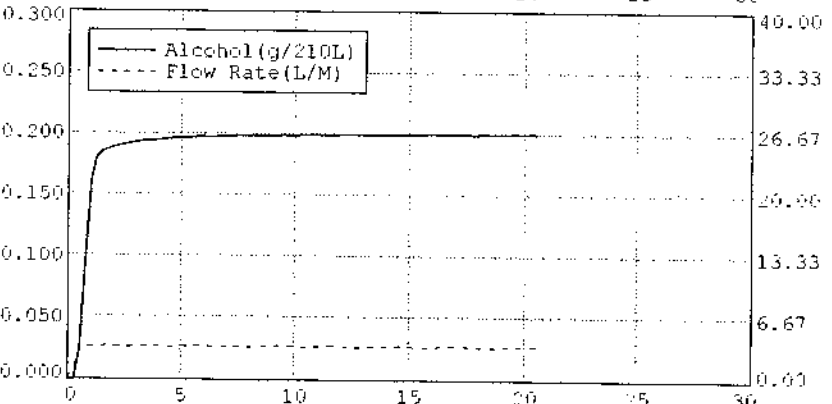
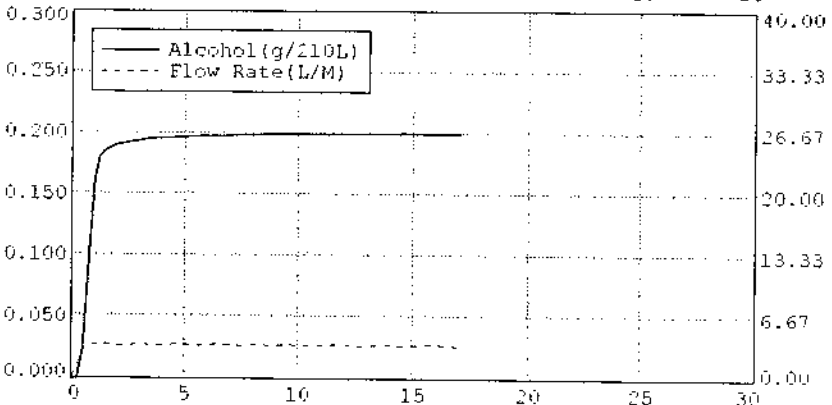
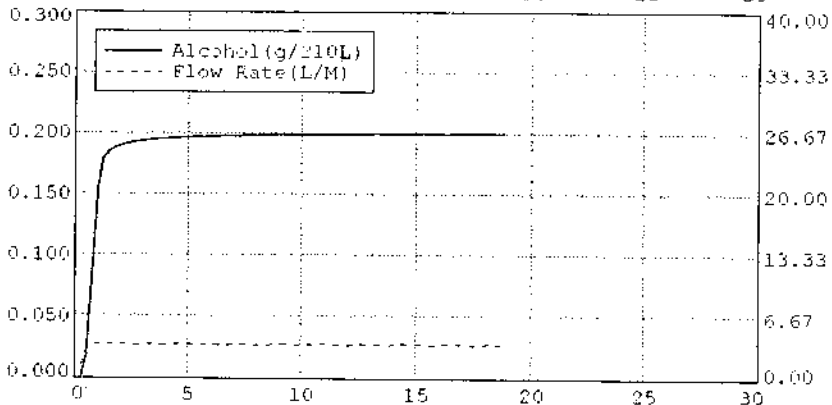
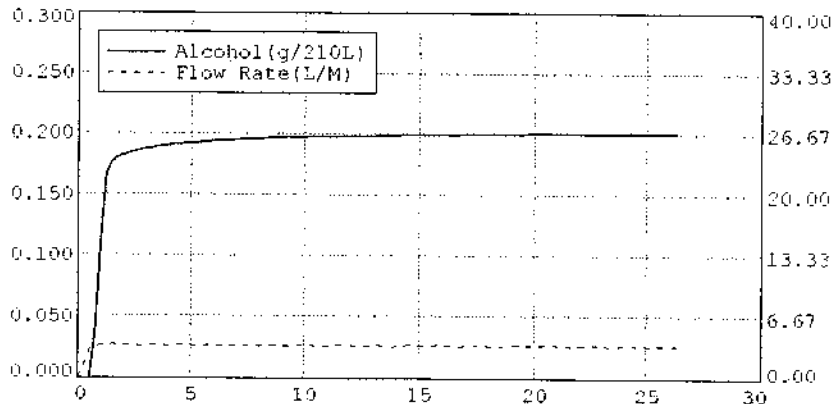
Date: 06/28/2017
 Time: 12:39:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: 16190
 EXPIRATION: 08/15/2018

BLANK TEST	0.000	12:40
INTERNAL STANDARD	VERIFIED	12:40
EXTERNAL STANDARD	0.201	12:41
BLANK TEST	0.000	12:41
EXTERNAL STANDARD	0.200	12:42
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.200	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.201	12:45
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.201	12:46
BLANK TEST	0.000	12:47

Average = 0.2006
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100395

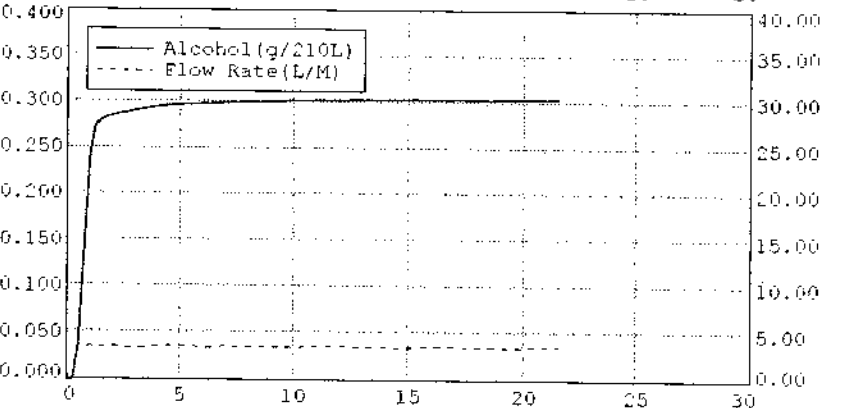
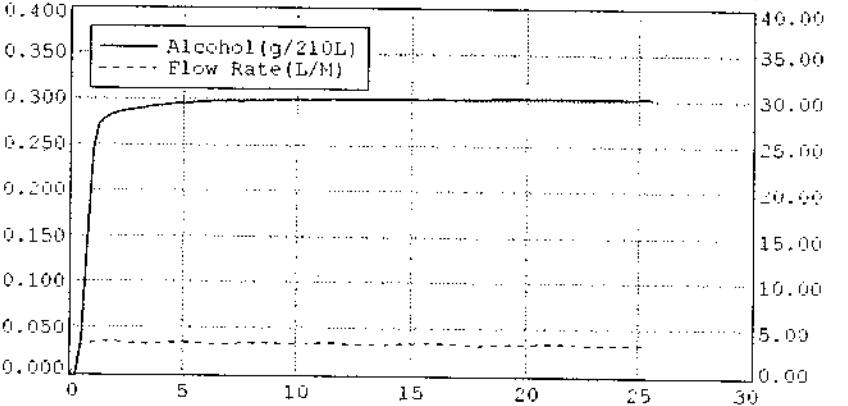
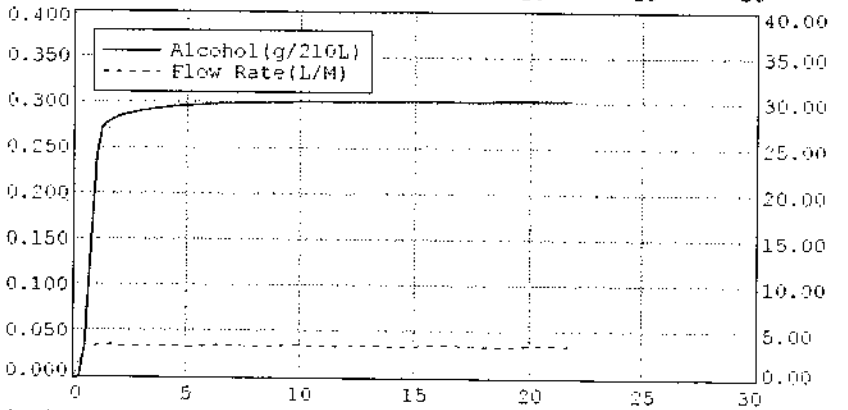
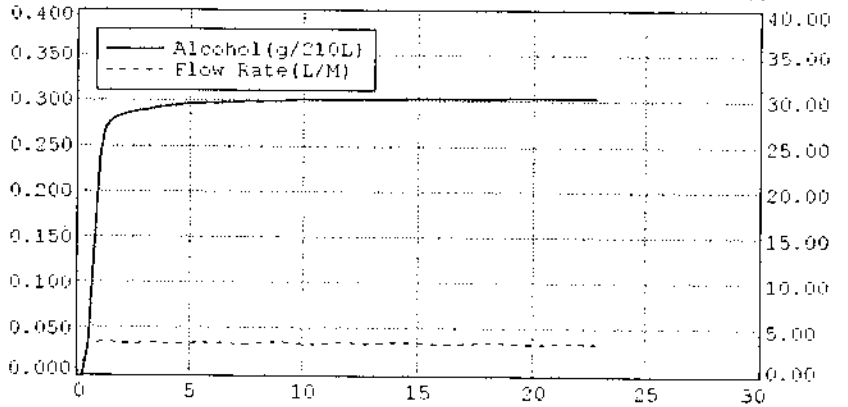
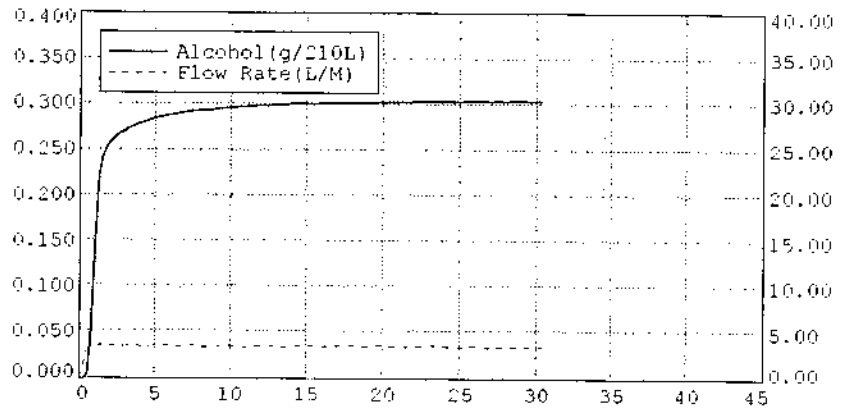
Date: 06/28/2017
 Time: 12:49:23

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 16210
 EXPIRATION: 08/22/2018

BLANK TEST	0.000	12:50
INTERNAL STANDARD	VERIFIED	12:50
EXTERNAL STANDARD	0.303	12:51
BLANK TEST	0.000	12:52
EXTERNAL STANDARD	0.303	12:52
BLANK TEST	0.000	12:53
EXTERNAL STANDARD	0.302	12:54
BLANK TEST	0.000	12:55
EXTERNAL STANDARD	0.302	12:55
BLANK TEST	0.000	12:56
EXTERNAL STANDARD	0.303	12:56
BLANK TEST	0.000	12:57

Average = 0.3026
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100395

Date: 07/03/2017
Time: 13:38:09

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

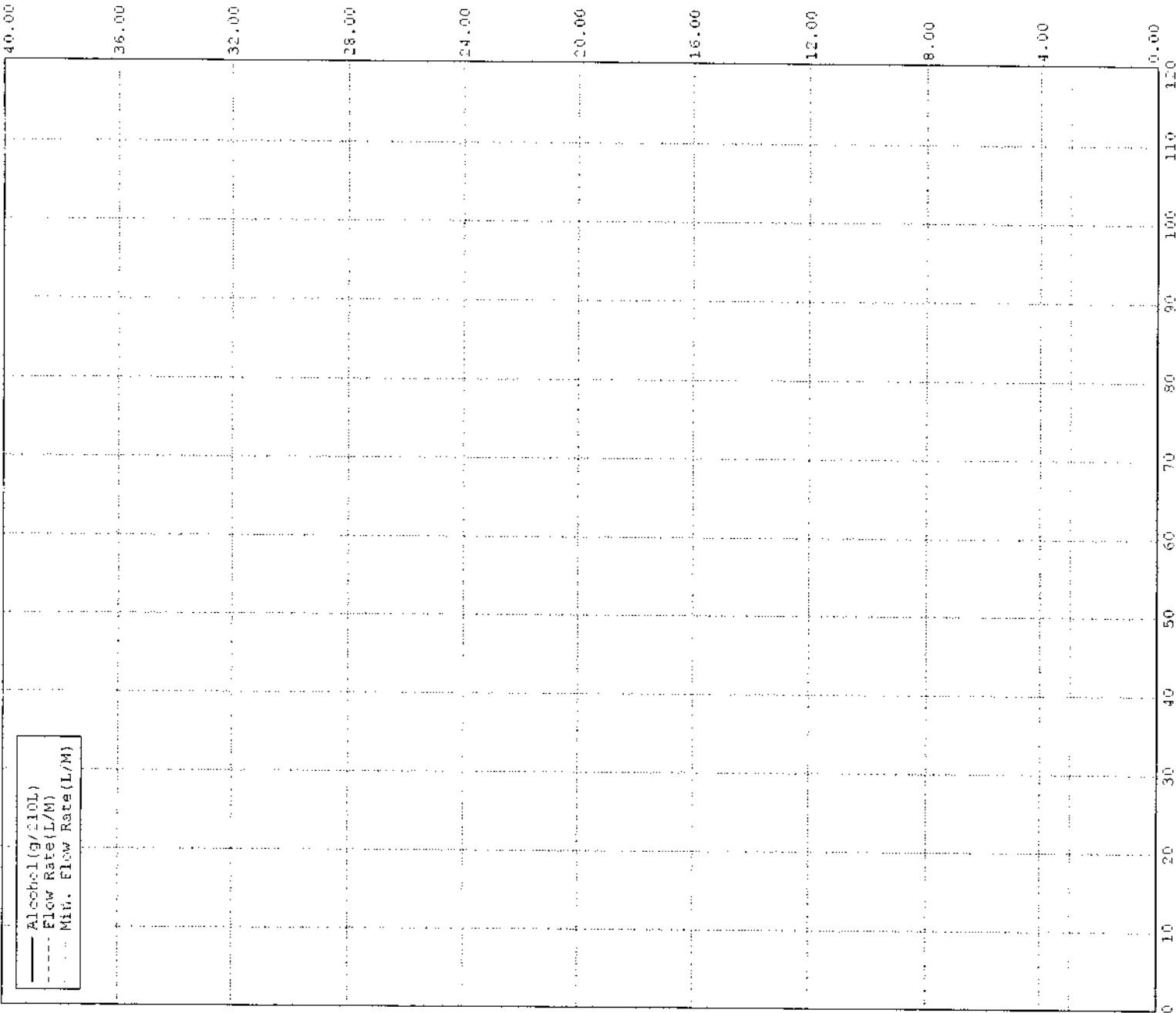
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 13:39
BLANK TEST 0.000 13:39
INTERNAL STANDARD VERIFIED 13:39
EXTERNAL STANDARD 0.077 13:39
BLANK TEST 0.000 13:40
SUBJECT SAMPLE INCOMPLETE 13:42

CRB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100395

Date: 07/03/2017
Time: 13:44:58

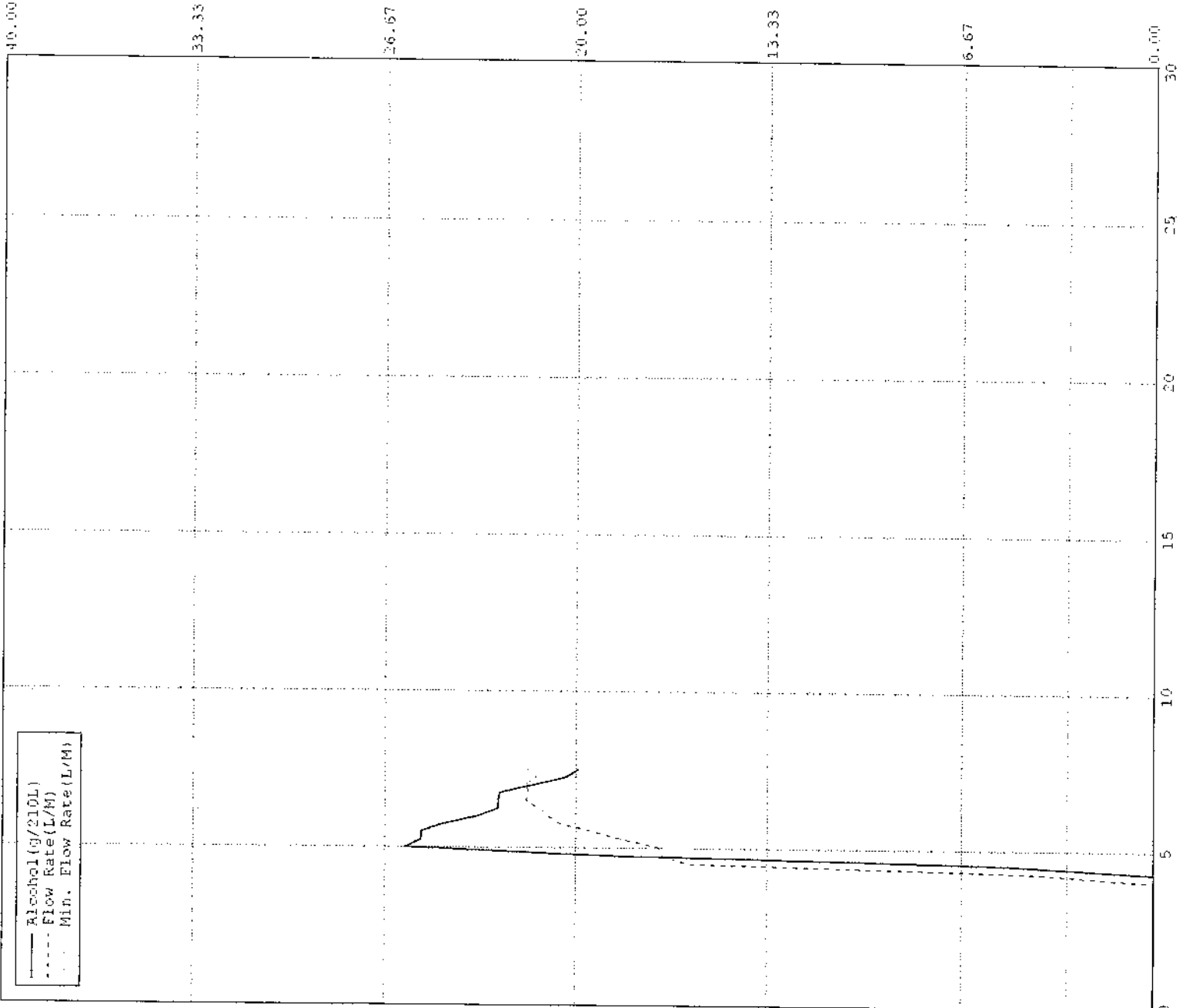
SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 13:45
BLANK TEST 0.000 13:46
INTERNAL STANDARD VERIFIED 13:46
EXTERNAL STANDARD 0.078 13:46
BLANK TEST 0.000 13:47
SUBJECT SAMPLE INVALID 13:47



SUBJECT TEST

Alaska Department of Public Safety
DAPMASTER dmt: 100395

Date: 07/03/2017
Time: 13:50:17

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

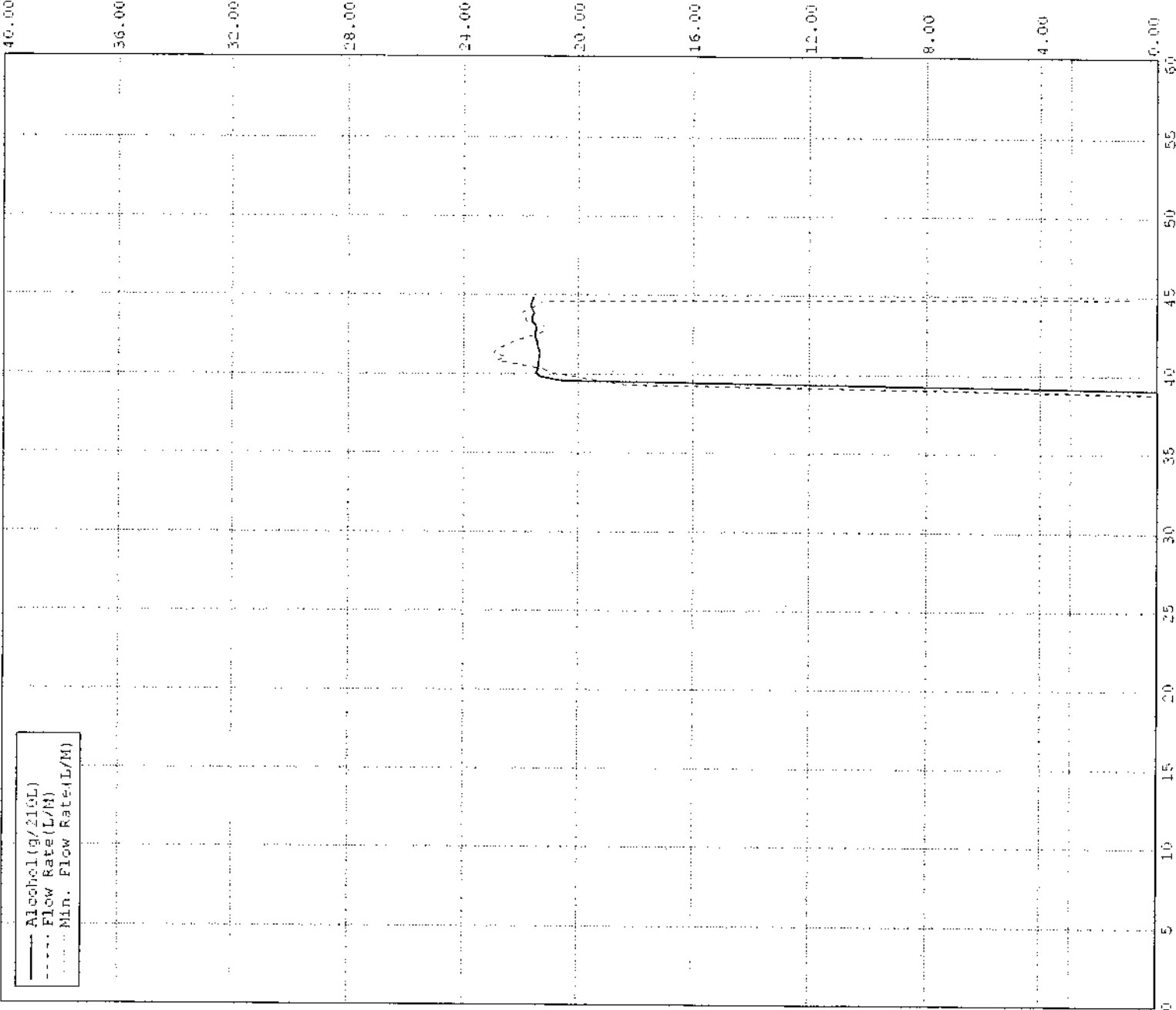
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 13:51
BLANK TEST 0.000 13:51
INTERNAL STANDARD VERIFIED 13:51
Xq = 0.091 (1.07%)
EXTERNAL STANDARD 0.078 13:51
X[1] = 0.0779 (0.0005) (0.0023)
BLANK TEST 0.000 13:52
SUBJECT SAMPLE XXX 13:53
X[1] = 0.1066 (-0.0166) (-0.0002)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100395

Date: 07/03/2017
Time: 13:56:30

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

DEPT/AGENCY:
AAAL
CASE/REPORT: 17-1234
TEST TYPE: TEST

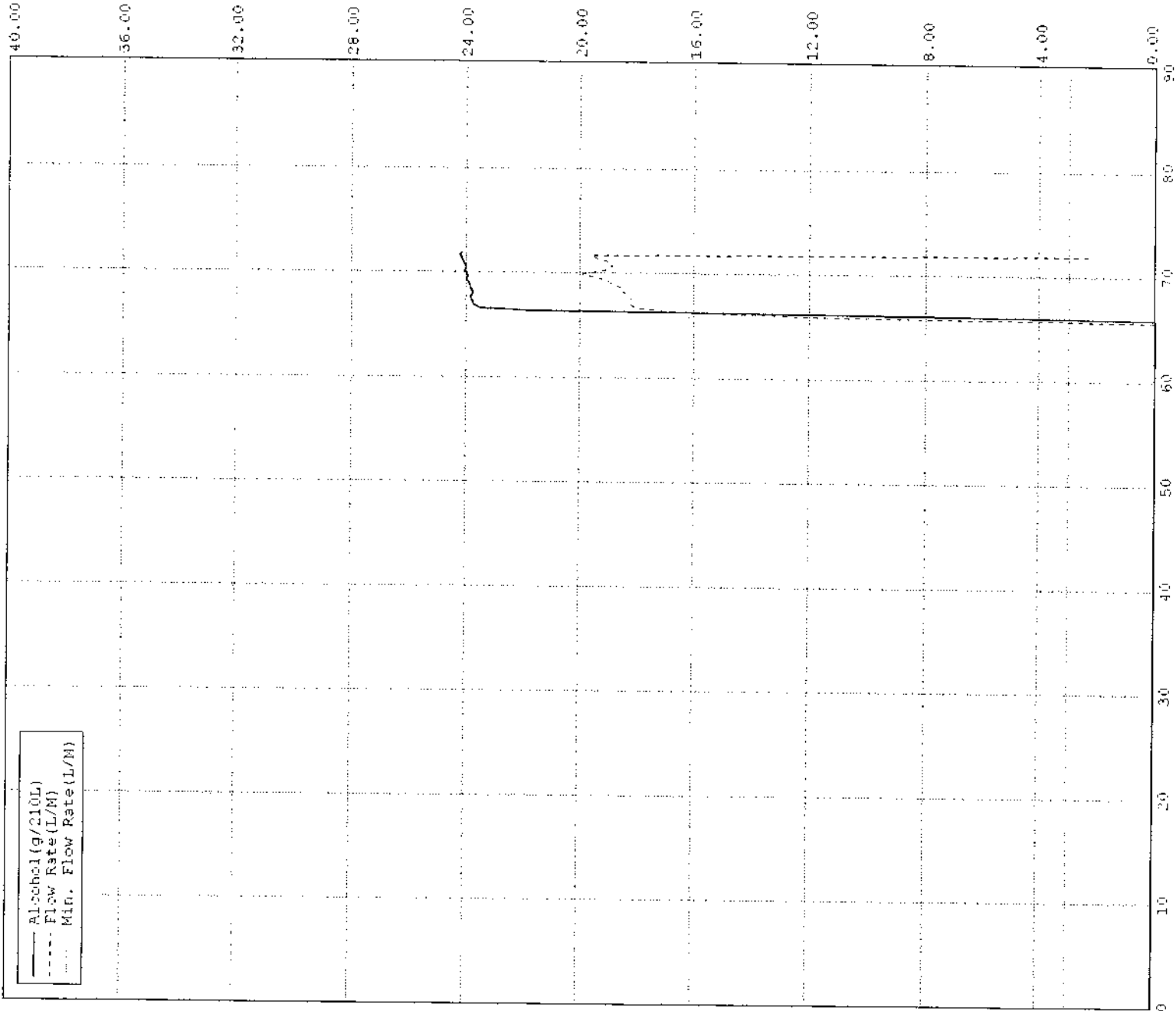
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 13:57
BLANK TEST 0.000 13:57
INTERNAL STANDARD VERIFIED 13:57
Xq = 0.091 (1.07%)
EXTERNAL STANDARD 0.078 13:58
X[1] = 0.0778 (0.0005) (0.0025)
BLANK TEST 0.000 13:59
SUBJECT SAMPLE XXX 14:00
X[1] = 0.1190 (-0.0236) (0.0017)

Interference Detected

C003



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100395

Date: 07/03/2017
Time: 14:05:31

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

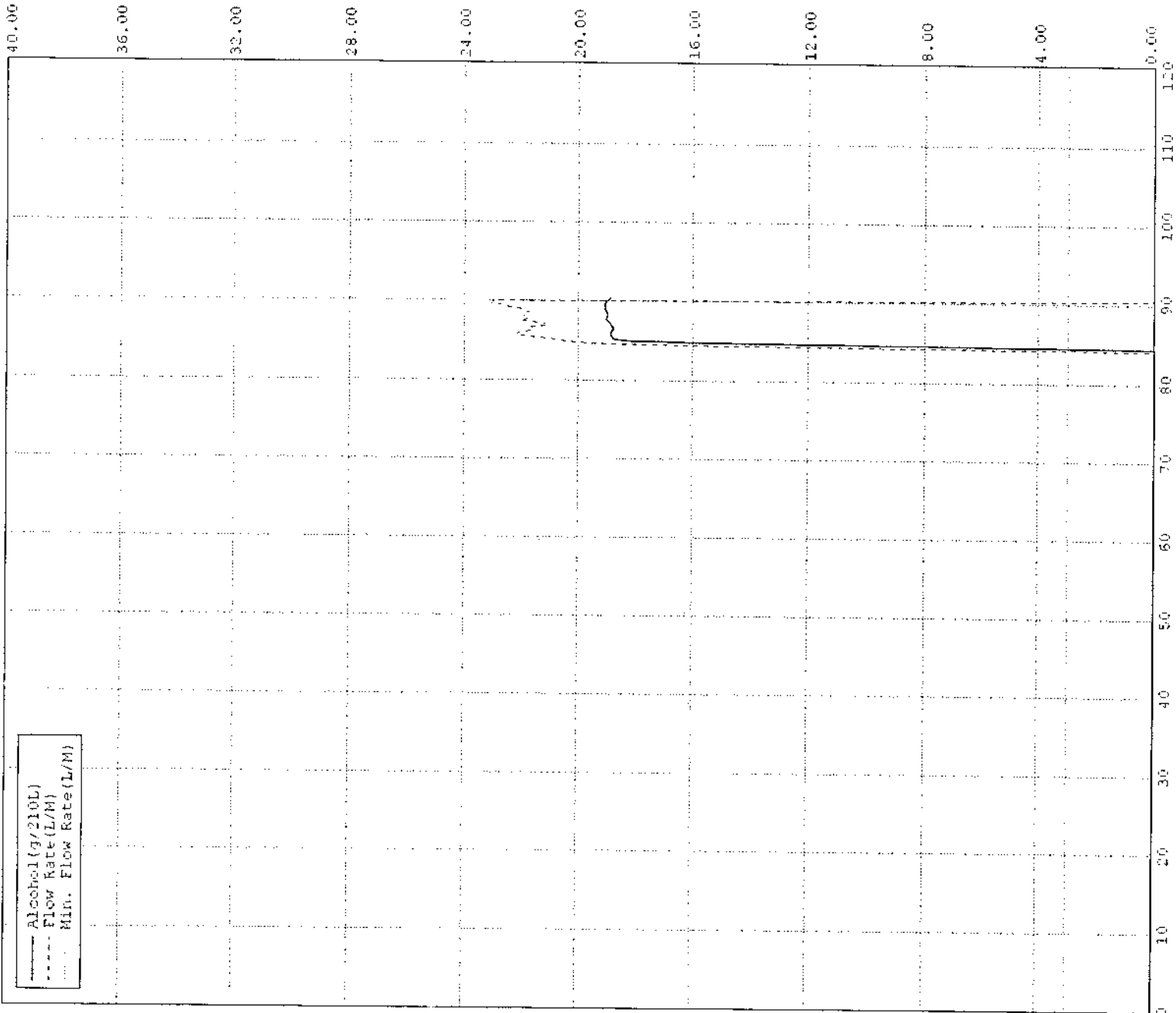
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

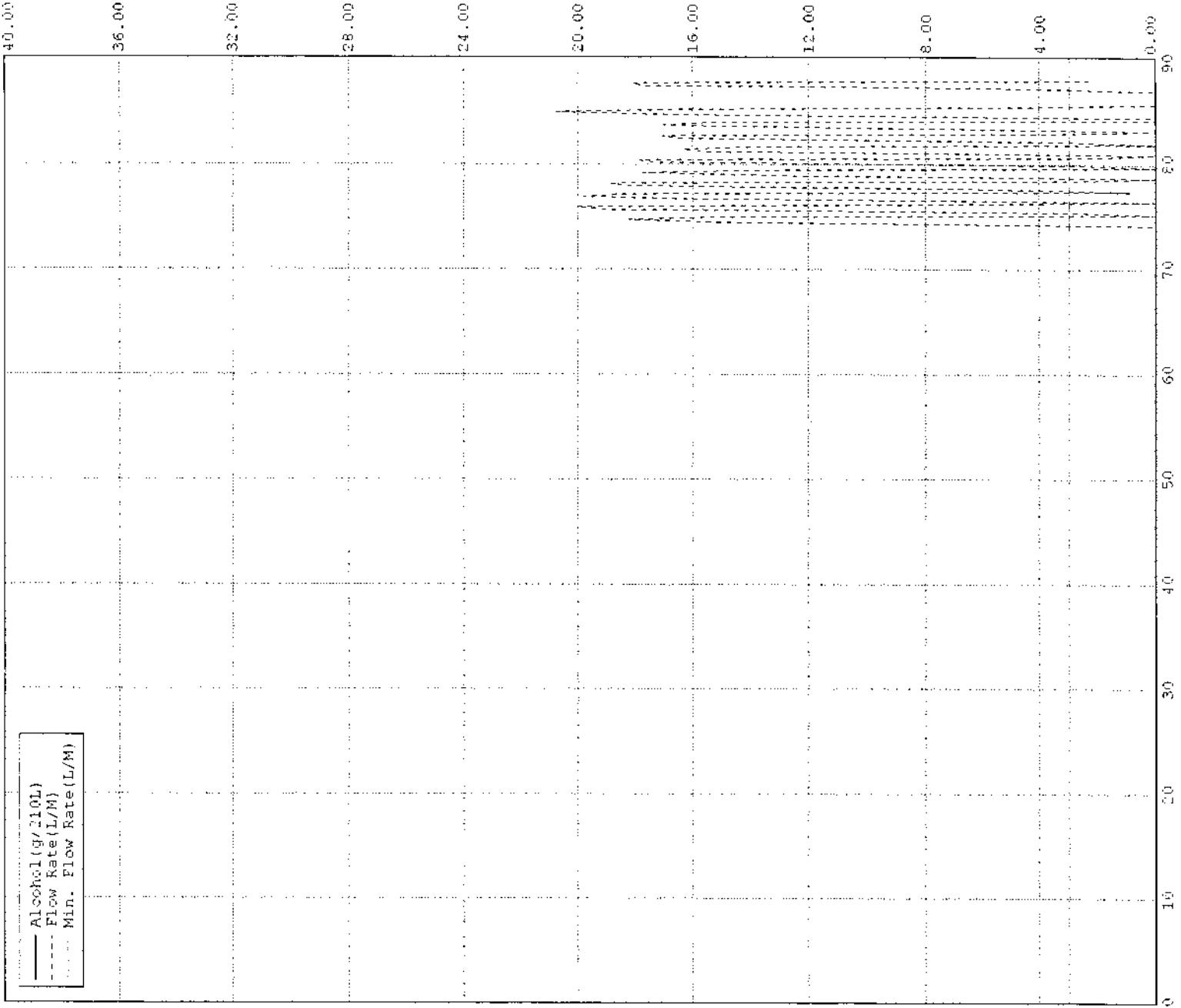
DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:06
BLANK TEST	0.000	14:06
INTERNAL STANDARD	VERIFIED	14:06
$x_q = 0.091$ (0.78%)		
EXTERNAL STANDARD	0.078	14:07
$x[1] = 0.0779$ (0.0002) (0.0035)		
BLANK TEST	0.000	14:08
SUBJECT SAMPLE (Vol=2.08L)	0.093	14:09
$x[1] = 0.0931$ (0.0025) (0.0014)		
BLANK TEST	0.000	14:10
EXTERNAL STANDARD	0.078	14:10
$x[1] = 0.0777$ (0.0000) (0.0021)		
BLANK TEST	0.000	14:11

Filter 2 avg = 0.0006³
COR 7/5/17
Filter 3 avg = 0.0026





SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100395

Date: 07/03/2017
 Time: 14:18:54

SUBJECT NAME:
 TEST TEST
 LICENSE #: MAX ATTEMPTS

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

DEPT/AGENCY:
 AAAA

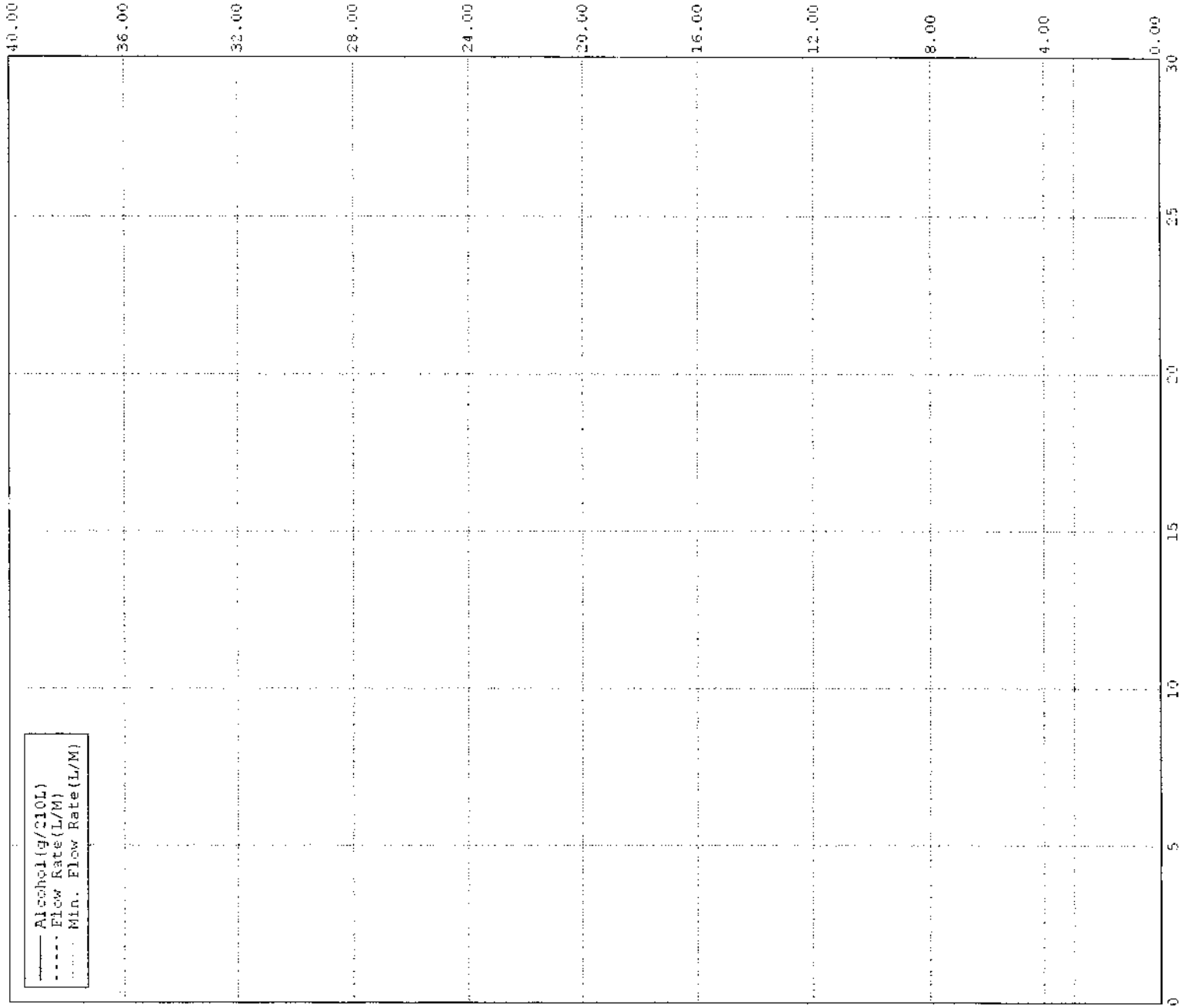
CASE/REPORT: 17-1234
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.81: 0.080
 LOT #: AG634001
 EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:20
BLANK TEST	0.000	14:20
INTERNAL STANDARD	VERIFIED	14:20
EXTERNAL STANDARD	0.078	14:20
BLANK TEST	0.000	14:21
SUBJECT SAMPLE	XXX	14:23

Maximum Attempts Exceeded

CS



SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100395

 Date: 07/03/2017
 Time: 14:28:13

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

DEPT/AGENCY:
 AAA1

CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.81: 0.080
 LOT #: AG634001
 EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 14:29
 BLANK TEST 0.000 14:30
 INTERNAL STANDARD VERIFIED 14:30
 EXTERNAL STANDARD 0.078 14:30
 BLANK TEST 0.000 14:31

RFI DETECTED

CBB

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100395

Date: 07/03/2017
Time: 14:50:05

SUBJECT NAME:
TEST TEST
LICENSE #: NON-DRINKING

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 17-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: AG634001
EXPIRATION: 12/05/2018

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	14:51
BLANK TEST	0.000	14:51
INTERNAL STANDARD	VERIFIED	14:51
EXTERNAL STANDARD	0.078	14:51
BLANK TEST	0.000	14:52
SUBJECT SAMPLE (Vol=2.60L)	0.000	14:53
BLANK TEST	0.000	14:54
EXTERNAL STANDARD	0.078	14:54
BLANK TEST	0.000	14:55

CSB

