

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 100671 Analyst Colleen O'Bryen Start Date 12/29/15

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 1.6 L (1.3L to 1.7L)
4. Linearity Test (attached)
 - a. Levels Used
 - i. 0.020g/210L Mnf ILMO Lot 02915020A2 Exp 3/5/17
 - ii. 0.040g/210L Mnf ILMO Lot 02915040A3 Exp 3/5/17
 - iii. 0.080g/210L Mnf ILMO Lot 01315080A2 Exp 2/5/17
 - iv. 0.100g/210L Mnf ILMO Lot 02915100A1 Exp 3/5/17
 - v. 0.200g/210L Mnf Both Lot 15130 Exp 5/11/17
 1. Simulator S/N DR 6267 Date Calibrated 1/20/15
 - vi. 0.300g/210L Mnf Both Lot 15170 Exp 7/30/17
 1. Simulator S/N DR 4162 Date Calibrated 1/19/15
5. Functional Tests (attached)
 - a. Incomplete
 - b. Invalid
 - c. Interference
 - d. Exceeded attempts
 - i. Acetone - Mnf Both Lot 15050 Level 0.100 Exp 3/9/17
 1. Simulator S/N DR 4163 Date Calibrated 1/19/15
 - ii. Isopropanol - Mnf Both Lot 15050 Level 0.100 Exp 3/9/17
 1. Simulator S/N DR 1176 Date Calibrated 1/20/15
 - iii. Negative Control - Mnf Both Lot 15050 Level 0.100 Exp 3/9/17
 1. Simulator S/N DR 4178 Date Calibrated 1/19/15
 - e. RFI
6. Verify stylus is calibrated
7. Reset Options
8. Clear Memory
9. Verification of Calibration
10. Non-Drinking Subject Test (attached)
11. Upload
13. Remove tank prior to shut down

End Date 12/30/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 12/29/2015
Time: 09:27:36

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

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.69 V PASSED
(1.01 V - 2.37 V)
Cooler Voltage = 1.66 V PASSED
(1.00 V - 2.32 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 546 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 4.644 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 = 0.101 2.04% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100671

Date: 12/29/2015
Time: 9:32 AM

Temperatures (°C)
Sample Cell: 48.9°C
Breath Tube: 47.6°C

Current Barometer 29.5 in
Volume (Ltr) 1.45

Settings
Lamp: 1.72 V
Bias: 80 V
Cooler: 1.66 V
Chopper: 546 Hz

Voltages (V)
Flow: 1.07 V
Detector: 0.071 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 04/09/2012
Time: 10:19:13

OPERATOR NAME:
CHARLES FOSTER
CERTIFICATE #: 7734

Ca = 0.1000
CAL = 0.981393 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0063 0.0010 <= b2 < 0.0100
b3 = 0.0001 0.0000 <= b3 < 0.0040
Xq = 0.0987 0.0500 <= Xq < 0.2000
a21 = 1.187324 1.050 <= a21 < 1.300
a31 = 0.451266 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DAYMASTER dmt: 100671

Date: 12/29/2015
Time: 13:15:51

SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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

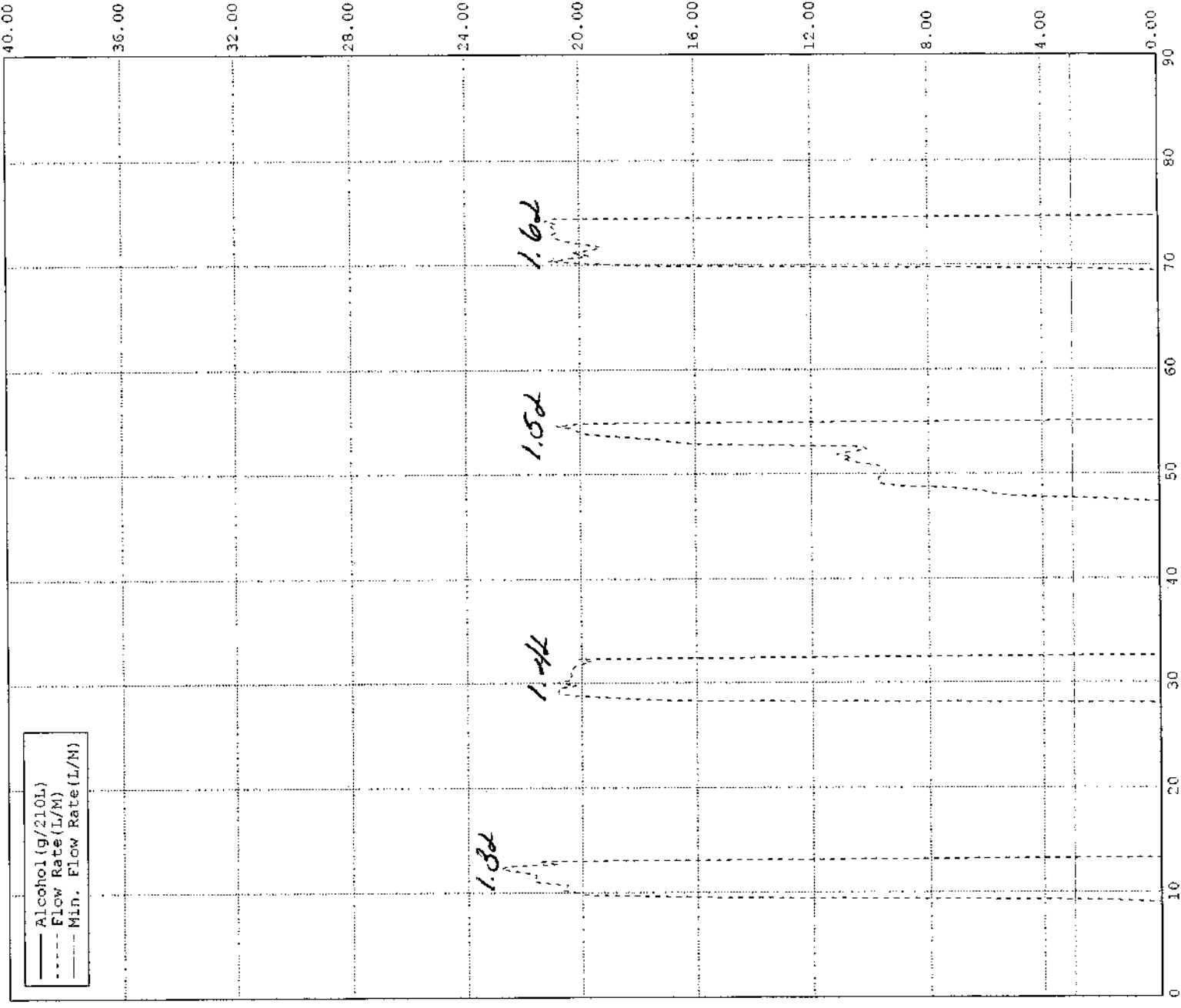
DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.53: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	13:19
BLANK TEST	0.000	13:19
INTERNAL STANDARD	VERIFIED	13:19
EXTERNAL STANDARD	0.079	13:19
BLANK TEST	0.000	13:20
SUBJECT SAMPLE (Vol=1.62L)	0.000	13:21
BLANK TEST	0.000	13:22
EXTERNAL STANDARD	0.078	13:22
BLANK TEST	0.000	13:23

CAS



LINEARITY CHECK

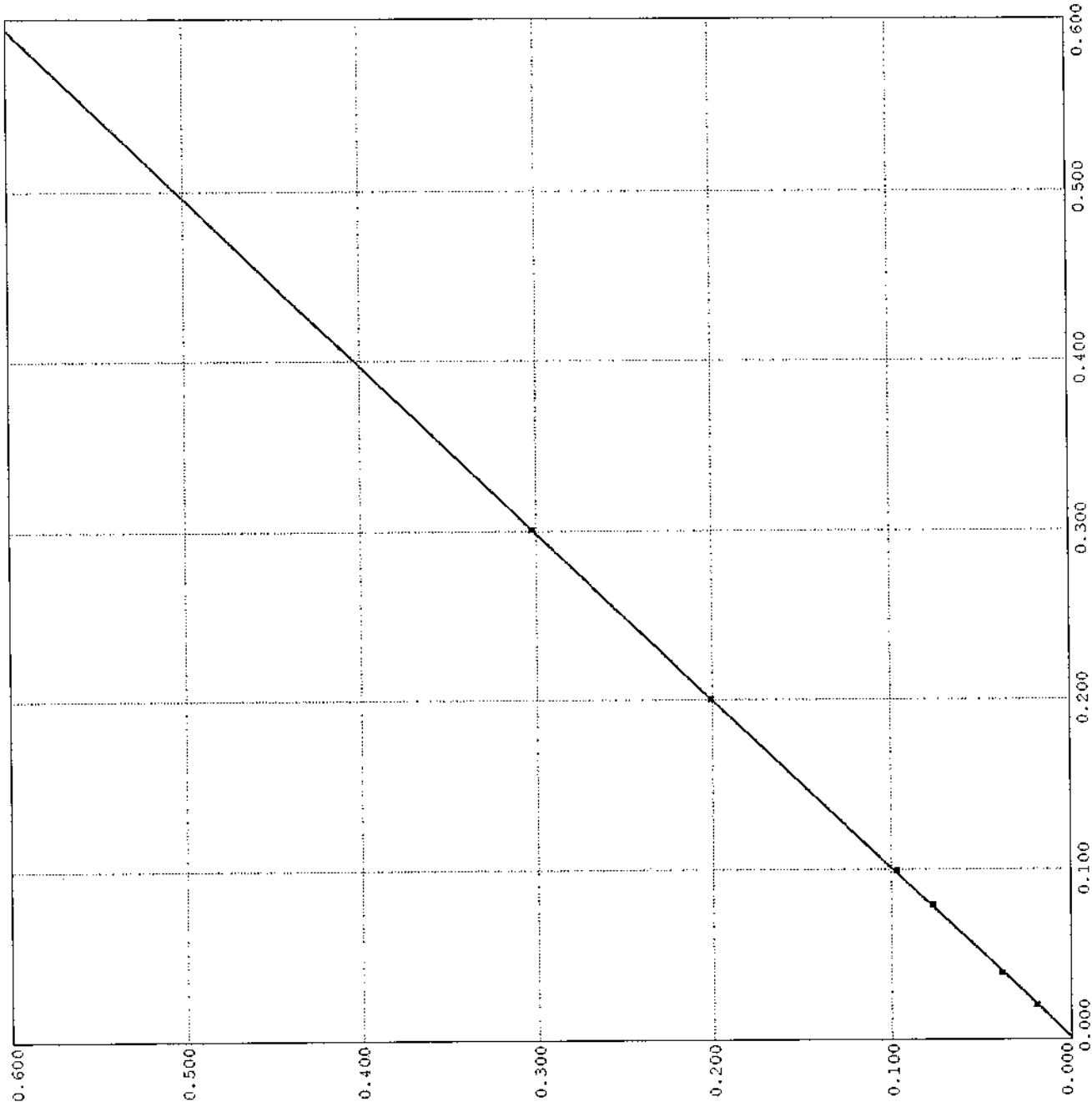
Alaska Department of Public Safety
 DATAMASTER dmt: 100671

Date: 12/29/2015
 Time: 13:31:42

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0202	0.0004
0.039	0.0394	0.0005
0.079	0.0782	0.0004
0.099	0.0980	0.0000
0.200	0.2018	0.0008
0.300	0.3032	0.0008

SLOPE = 1.012373
 R² = 0.999930



CS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100671

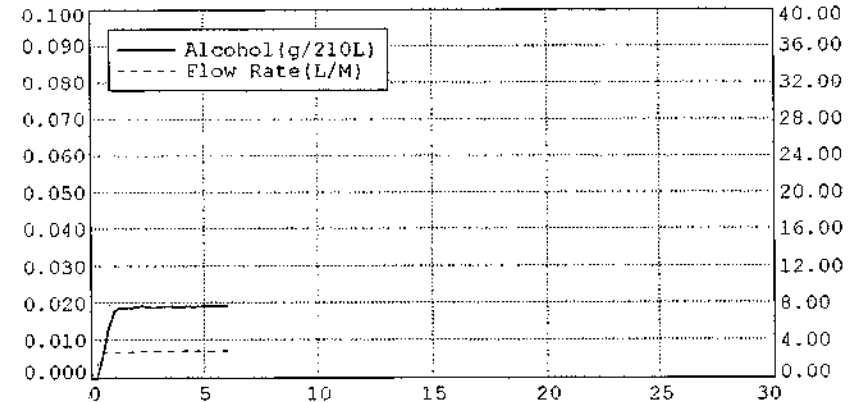
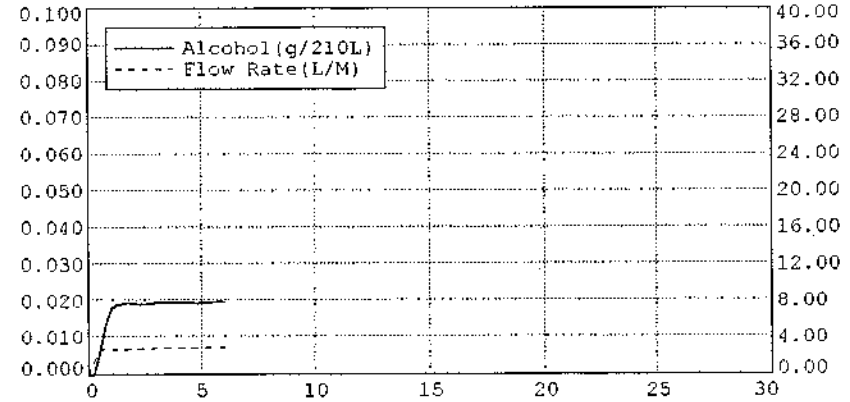
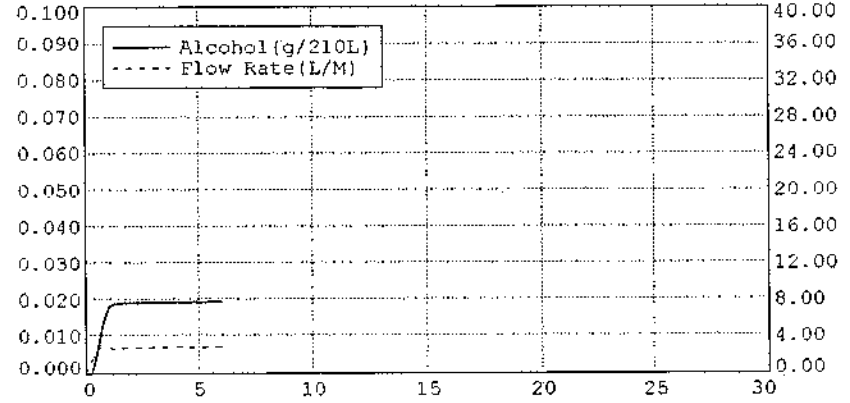
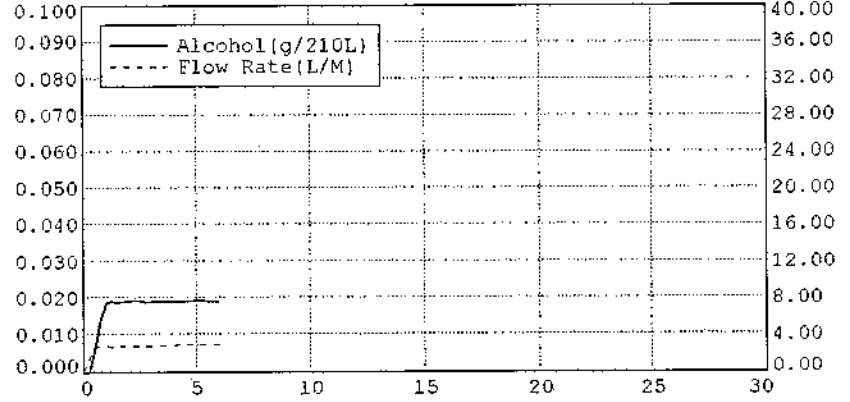
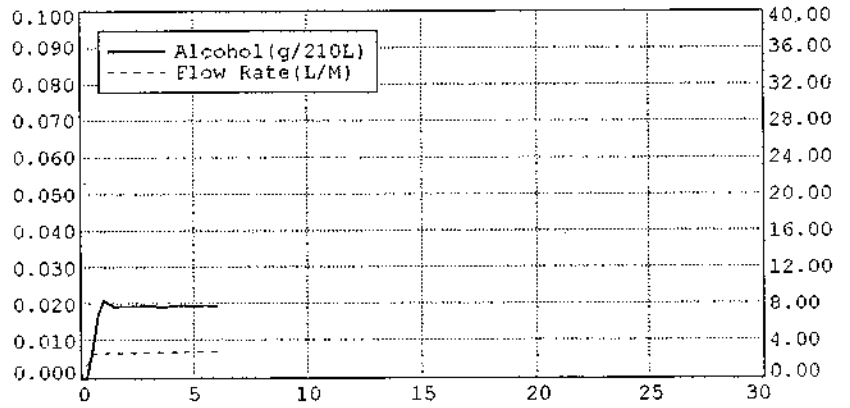
Date: 12/29/2015
 Time: 13:31:44

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.53: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 625 psi

BLANK TEST	0.000	13:32
INTERNAL STANDARD	VERIFIED	13:33
EXTERNAL STANDARD	0.020	13:33
BLANK TEST	0.000	13:34
EXTERNAL STANDARD	0.020	13:34
BLANK TEST	0.000	13:35
EXTERNAL STANDARD	0.020	13:35
BLANK TEST	0.000	13:36
EXTERNAL STANDARD	0.021	13:36
BLANK TEST	0.000	13:37
EXTERNAL STANDARD	0.020	13:37
BLANK TEST	0.000	13:38

Average = 0.0202
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100671

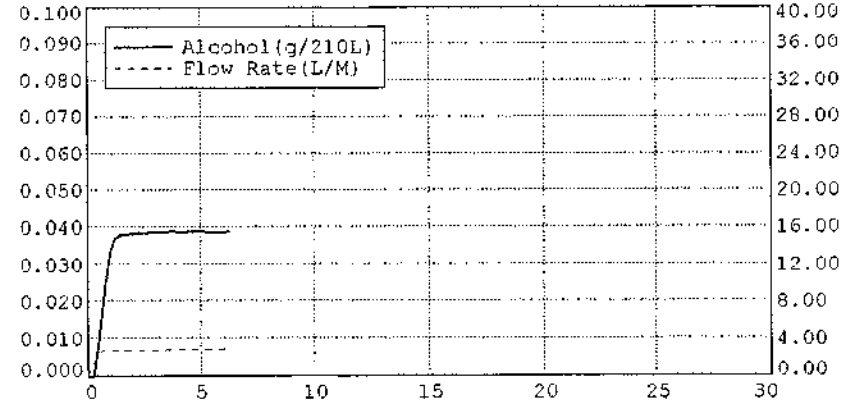
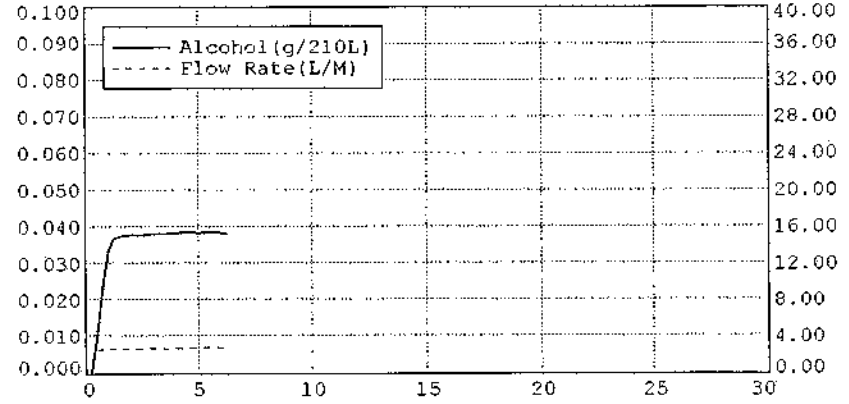
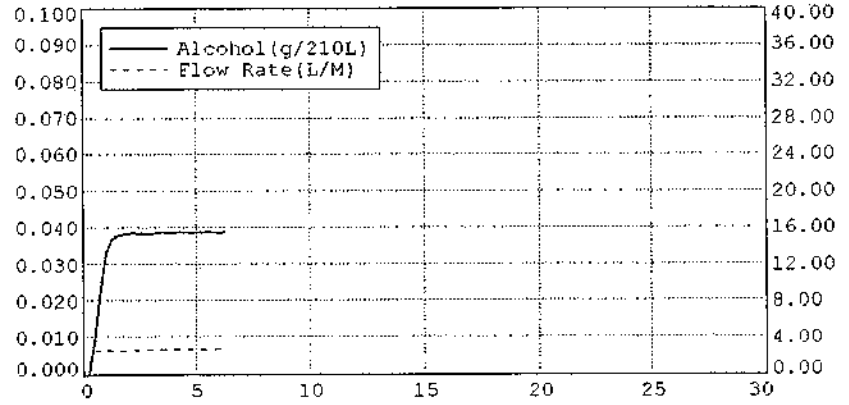
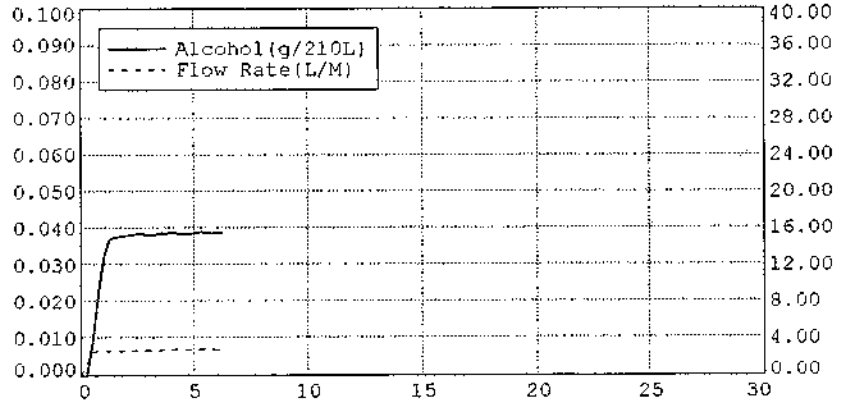
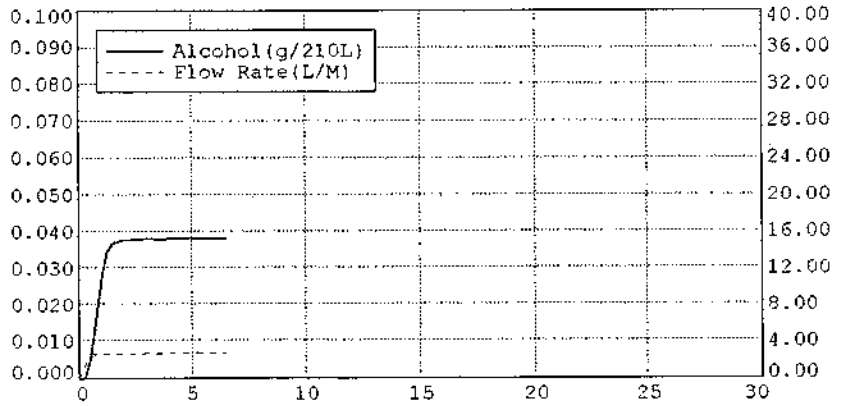
Date: 12/29/2015
 Time: 13:40:21

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.53: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 645 psi

BLANK TEST	0.000	13:41
INTERNAL STANDARD	VERIFIED	13:41
EXTERNAL STANDARD	0.039	13:41
BLANK TEST	0.000	13:42
EXTERNAL STANDARD	0.039	13:42
BLANK TEST	0.000	13:43
EXTERNAL STANDARD	0.040	13:43
BLANK TEST	0.000	13:44
EXTERNAL STANDARD	0.039	13:45
BLANK TEST	0.000	13:45
EXTERNAL STANDARD	0.040	13:46
BLANK TEST	0.000	13:47

Average = 0.0394
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100671

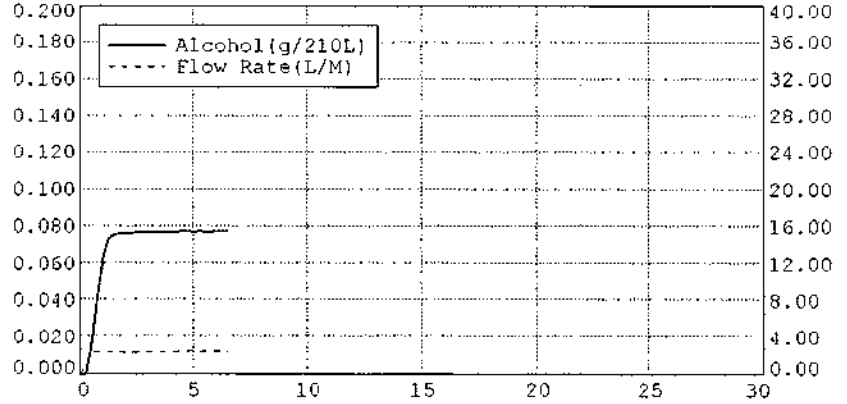
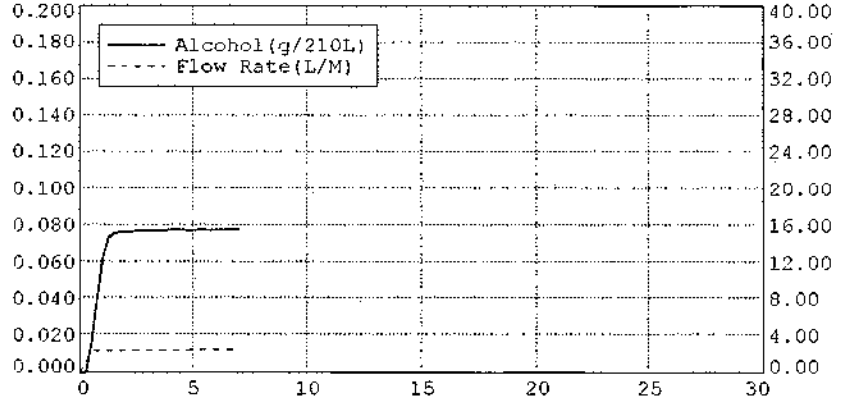
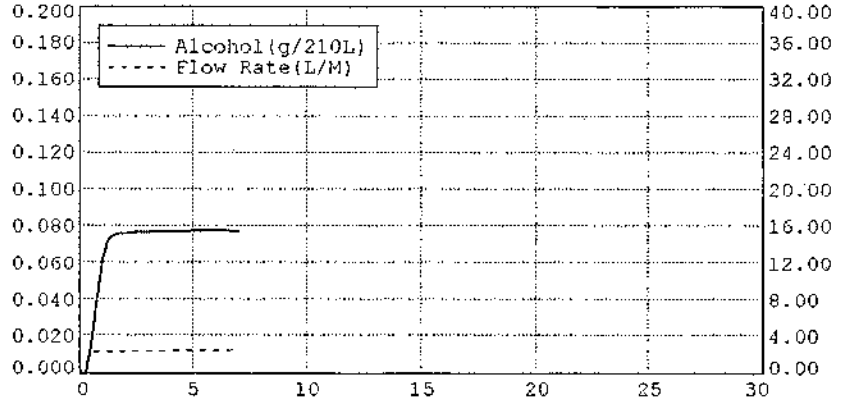
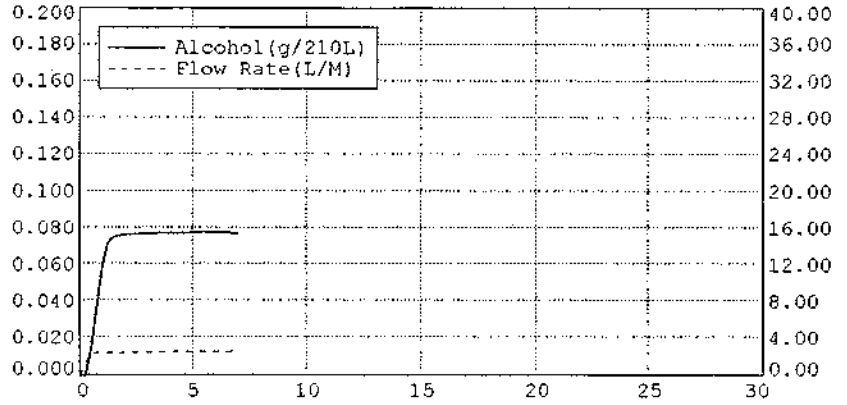
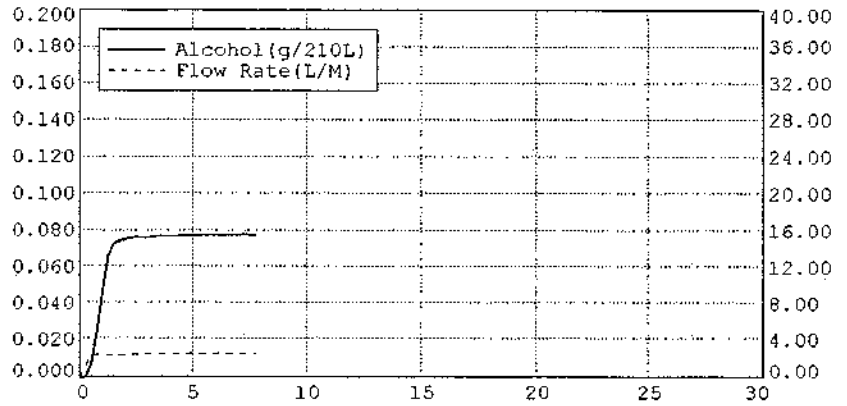
Date: 12/29/2015
 Time: 13:48:05

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.53: 0.079
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 355 psi

BLANK TEST	0.000	13:49
INTERNAL STANDARD	VERIFIED	13:49
EXTERNAL STANDARD	0.078	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.078	13:50
BLANK TEST	0.000	13:51
EXTERNAL STANDARD	0.078	13:51
BLANK TEST	0.000	13:52
EXTERNAL STANDARD	0.079	13:52
BLANK TEST	0.000	13:53
EXTERNAL STANDARD	0.078	13:54
BLANK TEST	0.000	13:54

Average = 0.0782
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100671

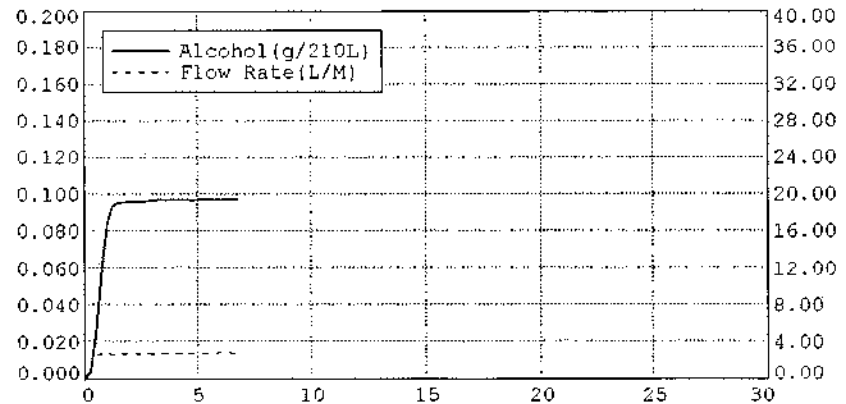
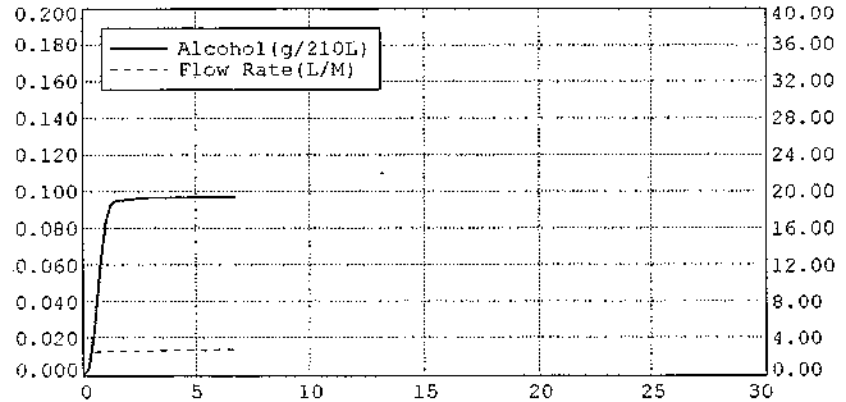
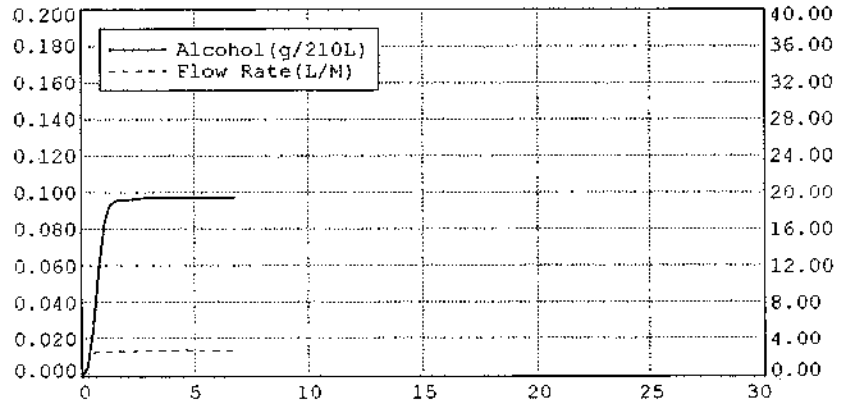
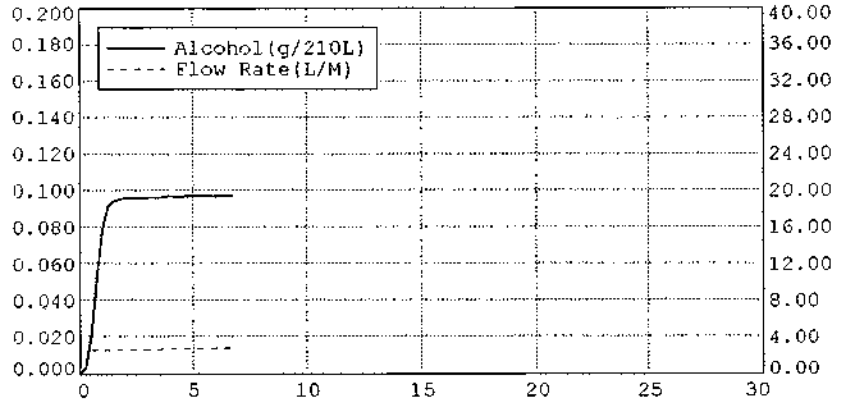
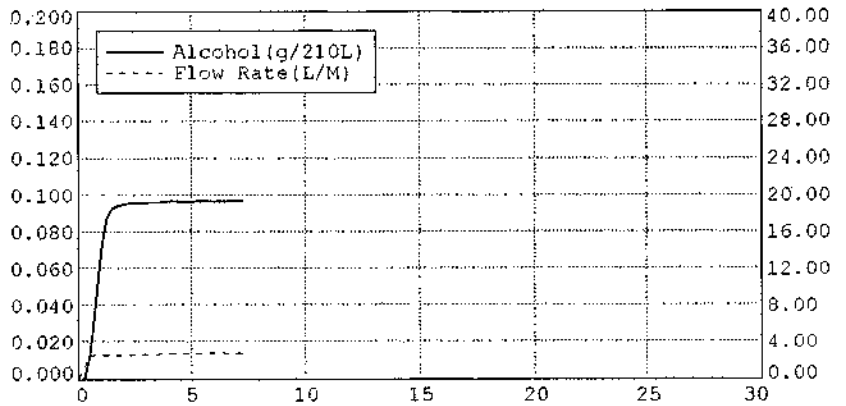
Date: 12/29/2015
 Time: 14:03:13

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.53: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 625 psi

BLANK TEST	0.000	14:04
INTERNAL STANDARD	VERIFIED	14:04
EXTERNAL STANDARD	0.098	14:05
BLANK TEST	0.000	14:05
EXTERNAL STANDARD	0.098	14:06
BLANK TEST	0.000	14:07
EXTERNAL STANDARD	0.098	14:07
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.098	14:08
BLANK TEST	0.000	14:09
EXTERNAL STANDARD	0.098	14:09
BLANK TEST	0.000	14:10

Average = 0.0980
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

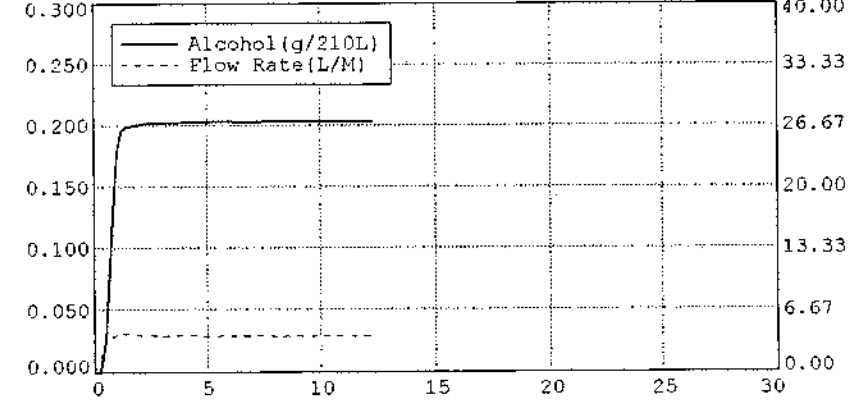
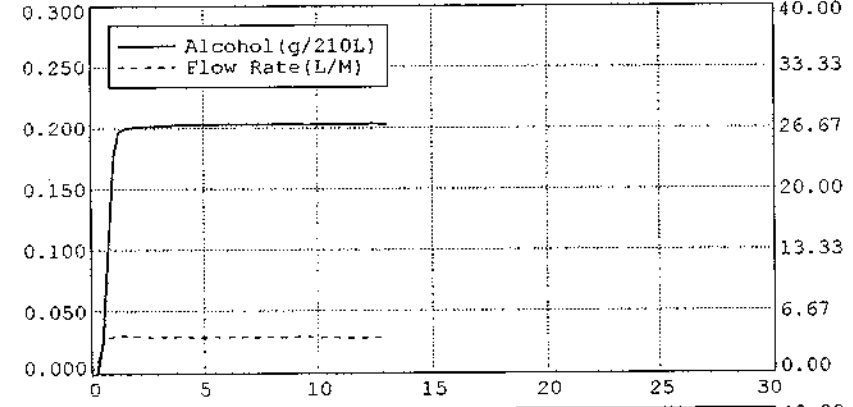
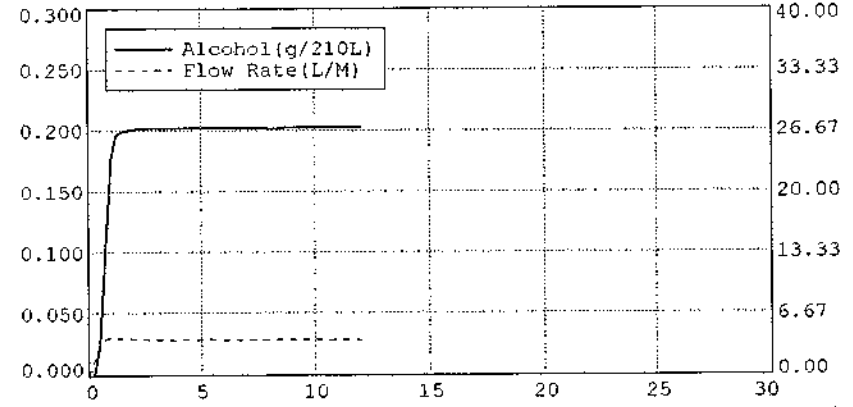
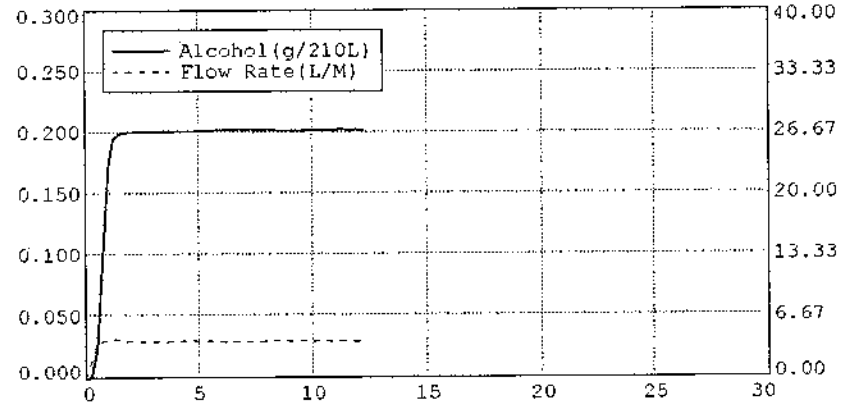
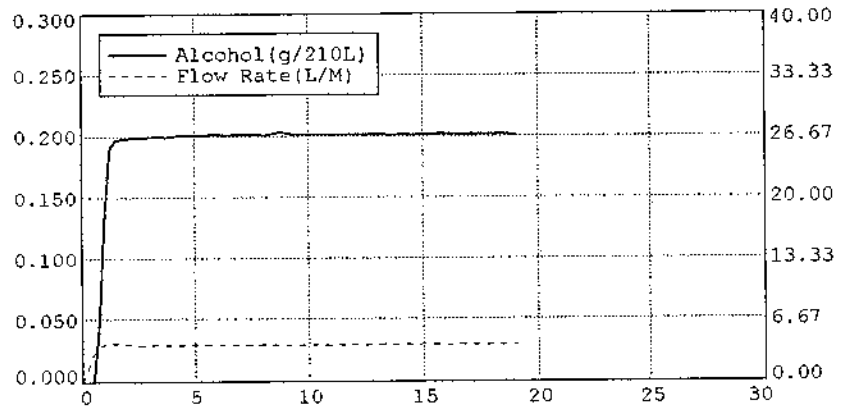
Alaska Department of Public Safety
 DATAMASTER dmt: 100671

Date: 12/29/2015
 Time: 14:12:07

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 15130
 EXPIRATION: 05/11/2017

BLANK TEST	0.000	14:13
INTERNAL STANDARD	VERIFIED	14:13
EXTERNAL STANDARD	0.201	14:14
BLANK TEST	0.000	14:14
EXTERNAL STANDARD	0.201	14:15
BLANK TEST	0.000	14:16
EXTERNAL STANDARD	0.202	14:16
BLANK TEST	0.000	14:17
EXTERNAL STANDARD	0.202	14:17
BLANK TEST	0.000	14:18
EXTERNAL STANDARD	0.203	14:18
BLANK TEST	0.000	14:19

Average = 0.2018
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100671

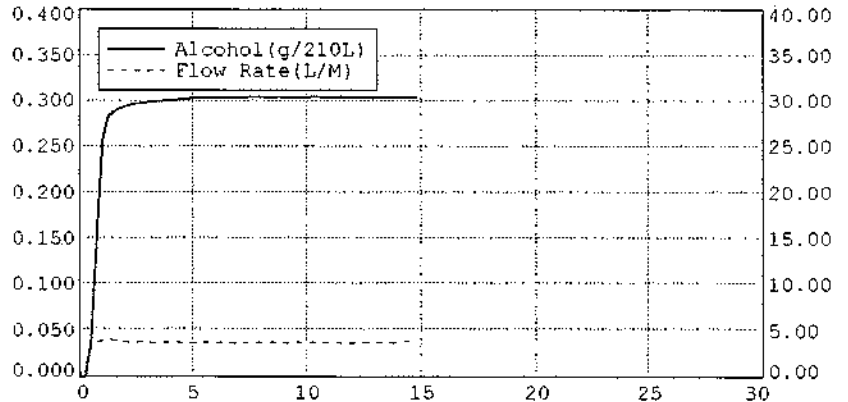
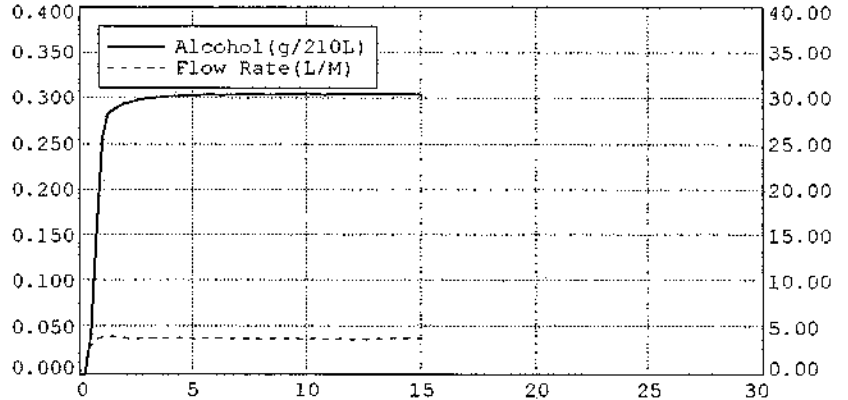
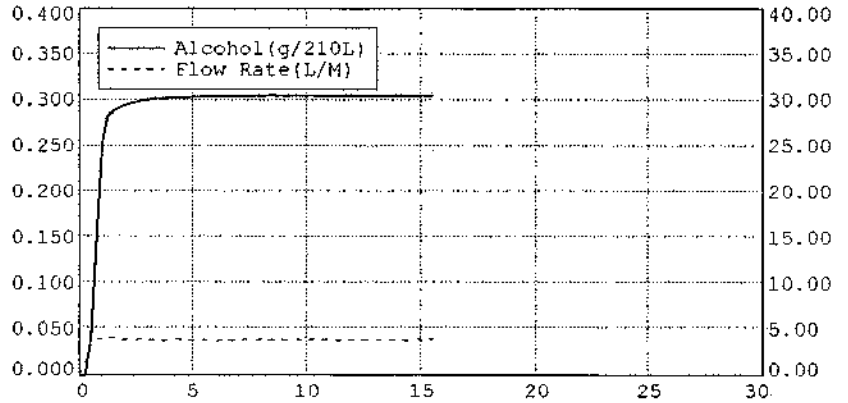
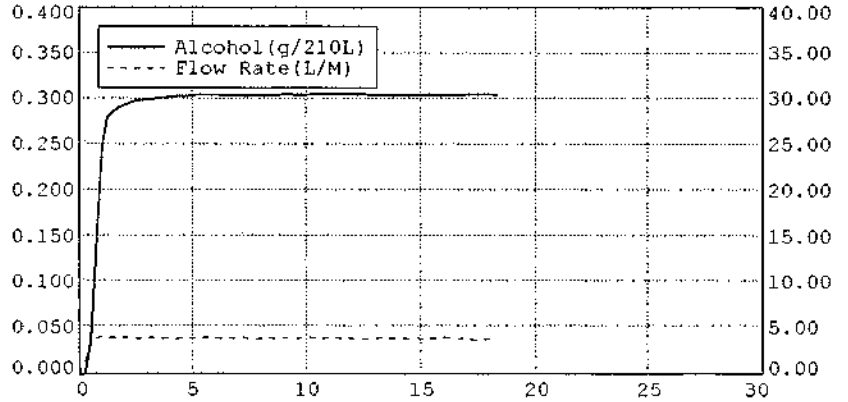
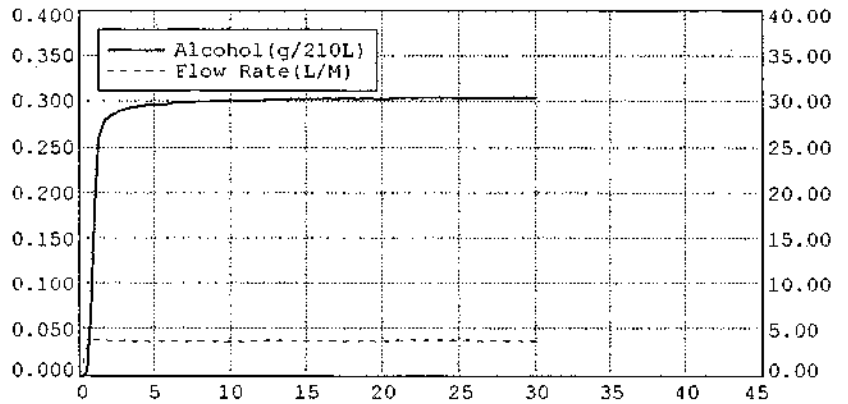
Date: 12/29/2015
 Time: 14:21:42

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:22
INTERNAL STANDARD	VERIFIED	14:22
EXTERNAL STANDARD	0.302	14:23
BLANK TEST	0.000	14:24
EXTERNAL STANDARD	0.303	14:24
BLANK TEST	0.000	14:25
EXTERNAL STANDARD	0.304	14:26
BLANK TEST	0.000	14:27
EXTERNAL STANDARD	0.304	14:27
BLANK TEST	0.000	14:28
EXTERNAL STANDARD	0.303	14:28
BLANK TEST	0.000	14:29

Average = 0.3032
 Std Dev = 0.0008



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 12/30/2015
Time: 09:50:55

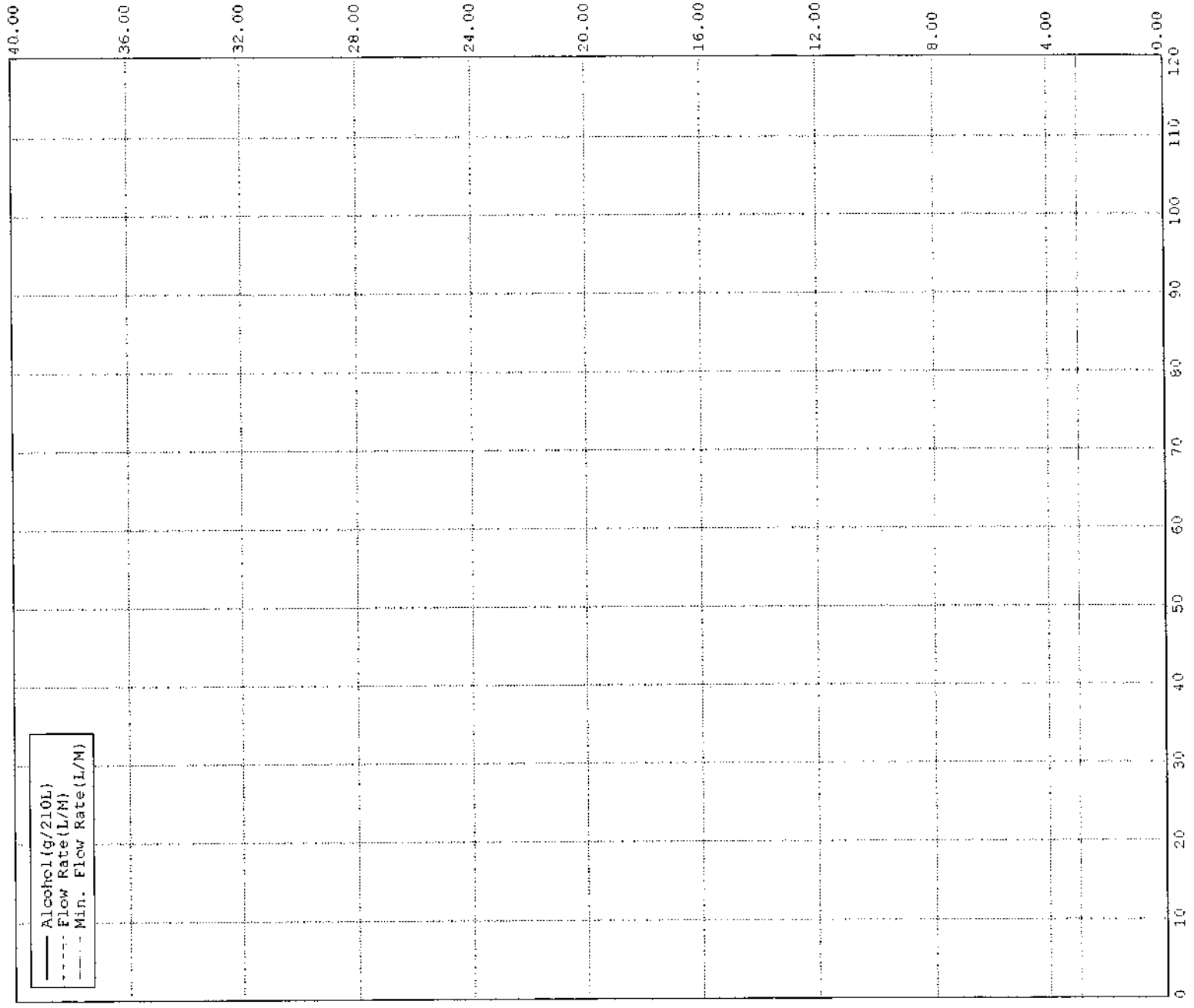
SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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 29.25: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 09:52
BLANK TEST 0.000 09:52
INTERNAL STANDARD VERIFIED 09:52
EXTERNAL STANDARD 0.078 09:53
BLANK TEST 0.000 09:54
SUBJECT SAMPLE INCOMPLETE 09:56



SUBJECT TEST

Alaska Department of Public Safety

DATA MASTER dmt: 100671

Date: 12/30/2015

Time: 10:02:16

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 29.26: 0.078

LOT #: 01315080A2

EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK

BLANK TEST

INTERNAL STANDARD

EXTERNAL STANDARD

BLANK TEST

SUBJECT SAMPLE

PASSED 10:08

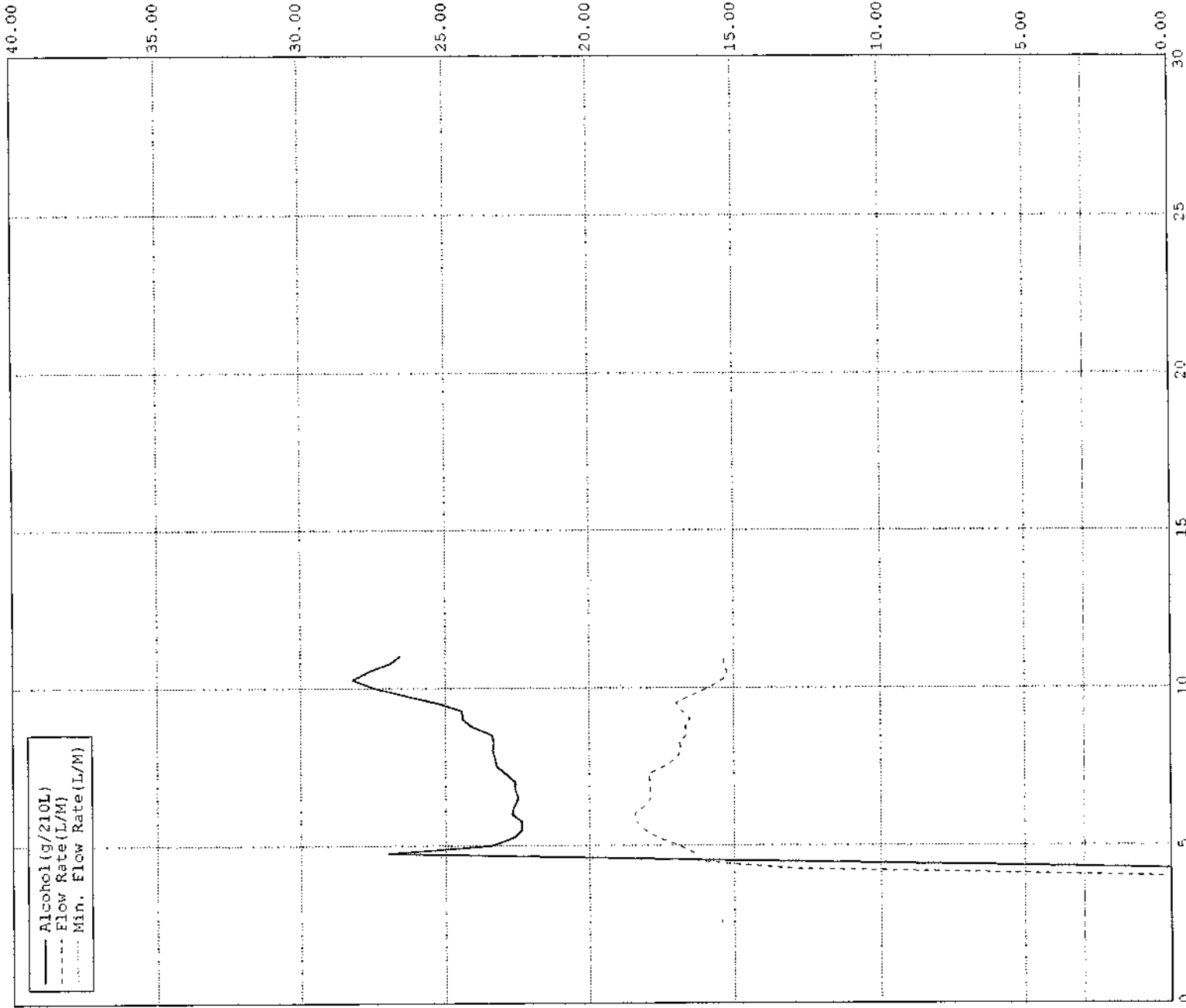
0.000 10:08

VERIFIED 10:09

0.078 10:09

0.000 10:10

INVALID 10:10



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 12/30/2015
Time: 10:14:15

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

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

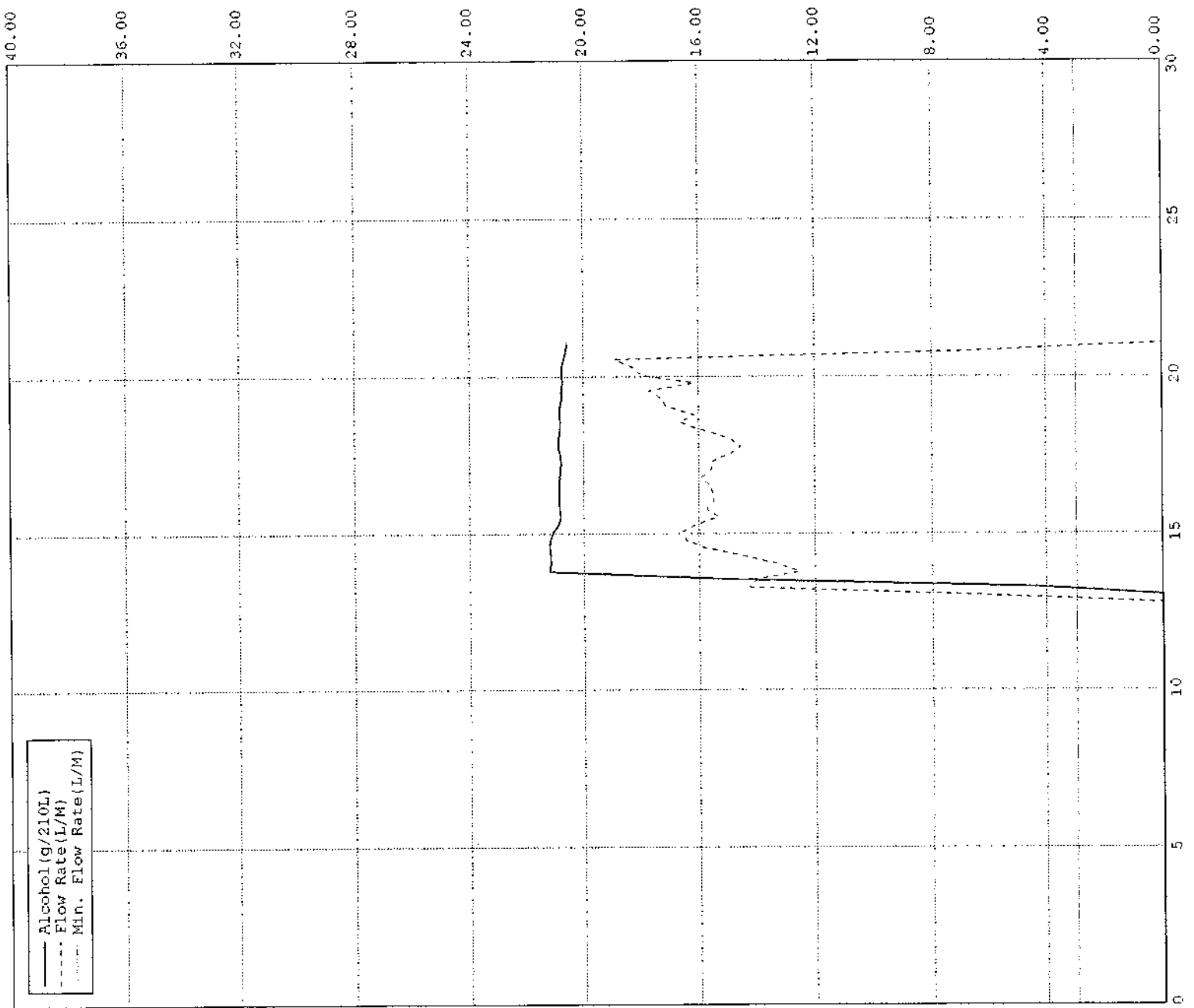
DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.28: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 10:15
BLANK TEST 0.000 10:15
INTERNAL STANDARD VERIFIED 10:15
Xq = 0.100 (1.51%)
EXTERNAL STANDARD 0.078 10:15
X[1] = 0.0777 (-0.0022) (0.0017)
BLANK TEST 0.000 10:16
SUBJECT SAMPLE XXX 10:17
X[1] = 0.1034 (-0.0157) (-0.0001)

Interference Detected

COB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100671

Date: 12/30/2015
Time: 10:21:44

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

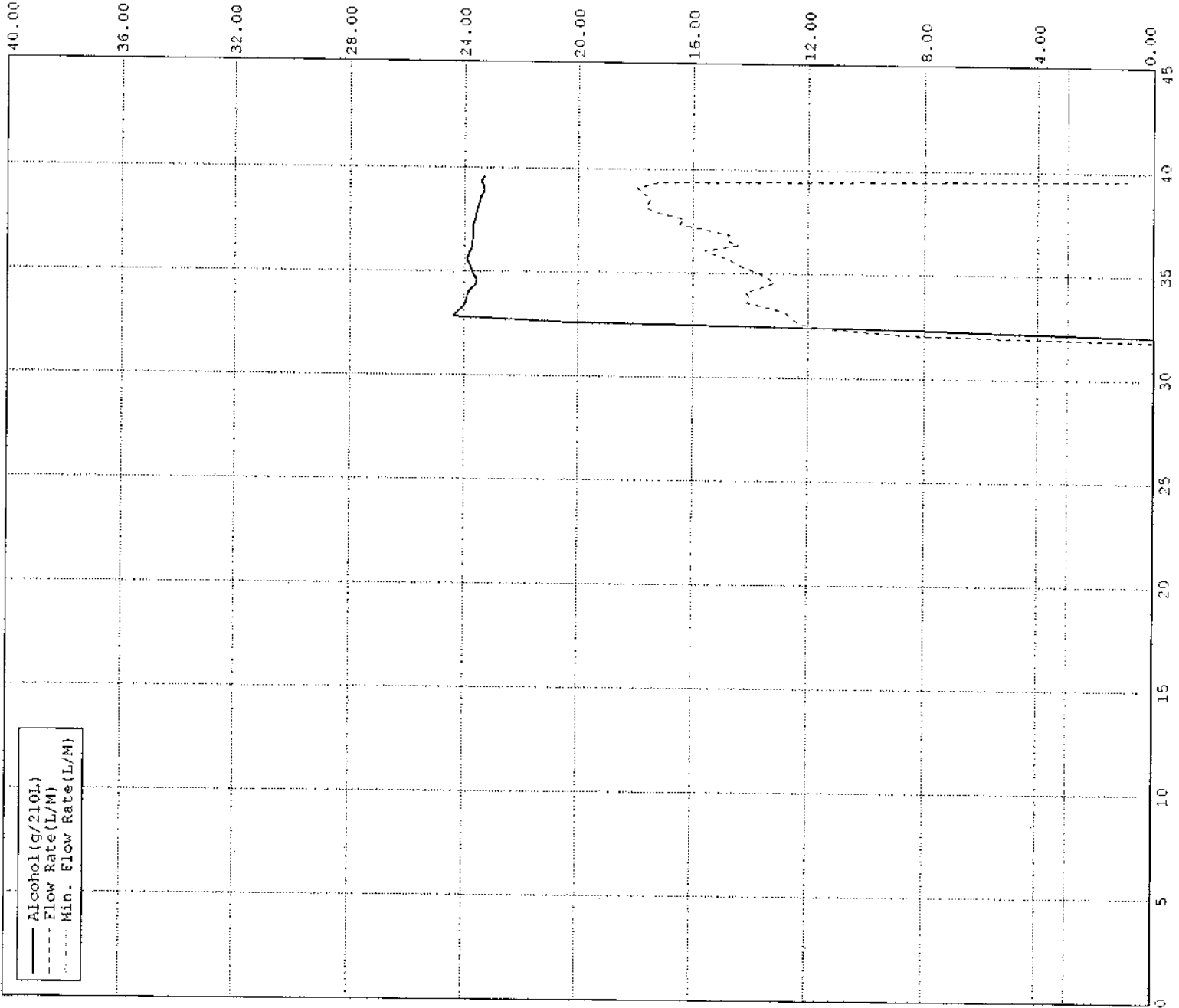
OPERATOR NAME:
COLLEEN S OBRVANT
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.28: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:22
BLANK TEST	0.000	10:22
INTERNAL STANDARD	VERIFIED	10:22
Xq = 0.100 (1.51%)	0.077	10:23
EXTERNAL STANDARD	X[1] = 0.0775 (-0.0013) (0.0019)	10:24
BLANK TEST	0.000	10:24
SUBJECT SAMPLE	XXX	10:24
X[1] = 0.1162 (-0.0249) (0.0011)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 12/30/2015
Time: 10:28:56

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

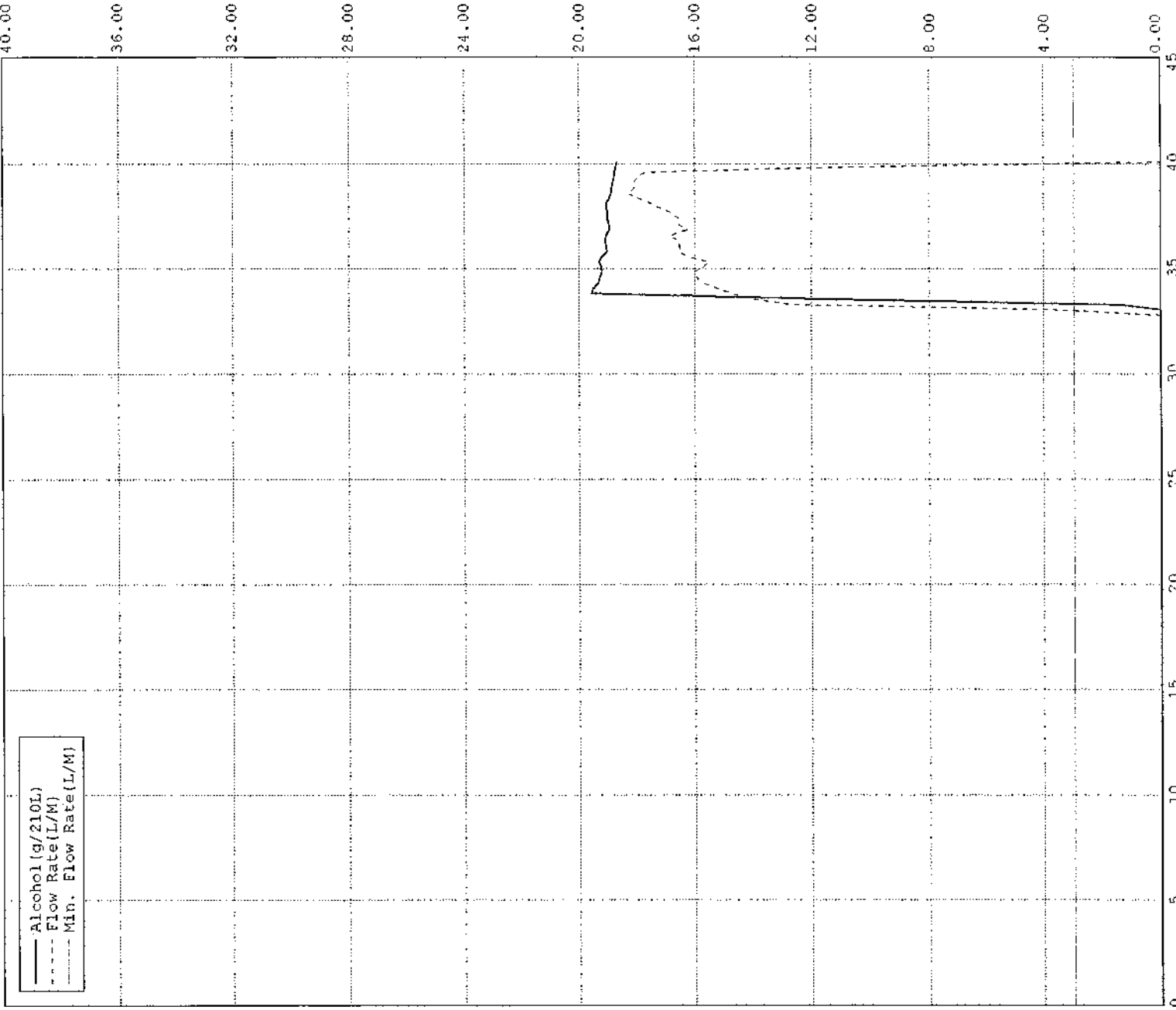
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.29: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:30
BLANK TEST	0.000	10:30
INTERNAL STANDARD	VERIFIED	10:30
Xg = 0.101 (2.40%)		
EXTERNAL STANDARD	0.078	10:30
X[1] = 0.0780 (-0.0012) (0.0023)		
BLANK TEST	0.000	10:31
SUBJECT SAMPLE (Vol=1.84L)	0.093	10:32
X[1] = 0.0937 (-0.0005) (0.0002)		
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.078	10:33
X[1] = 0.0777 (-0.0019) (0.0021)		
BLANK TEST	0.000	10:34

Filter 2 avg = -0.0017

Filter 3 avg = 0.0020

COB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 12/30/2015
Time: 10:45:20

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

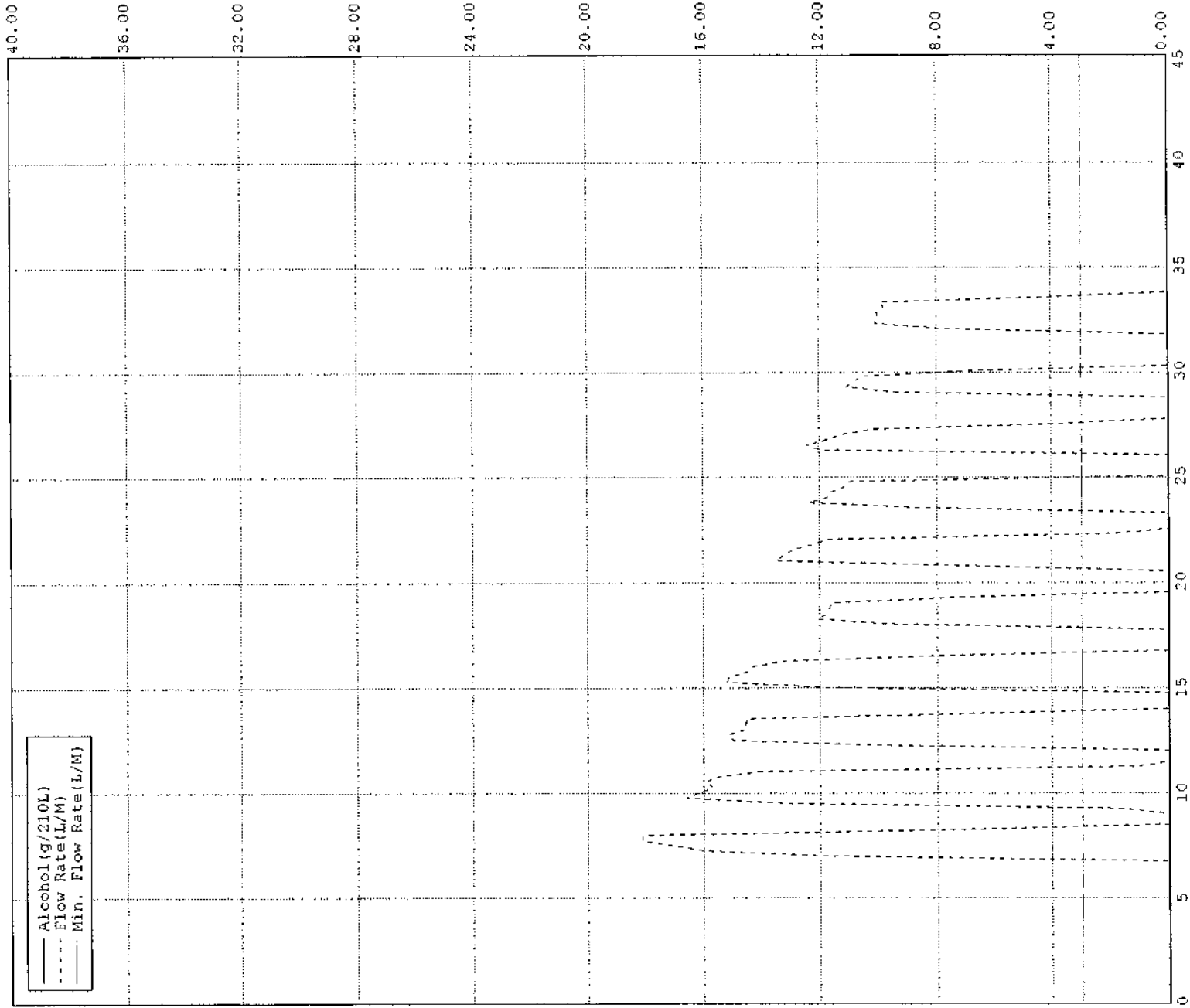
OPERATOR NAME:
COLLEEN S OBRYANT
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.30: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 10:46
BLANK TEST 0.000 10:47
INTERNAL STANDARD VERIFIED 10:47
EXTERNAL STANDARD 0.078 10:47
BLANK TEST 0.000 10:48
SUBJECT SAMPLE XXX 10:49

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 12/30/2015
Time: 10:54:21

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

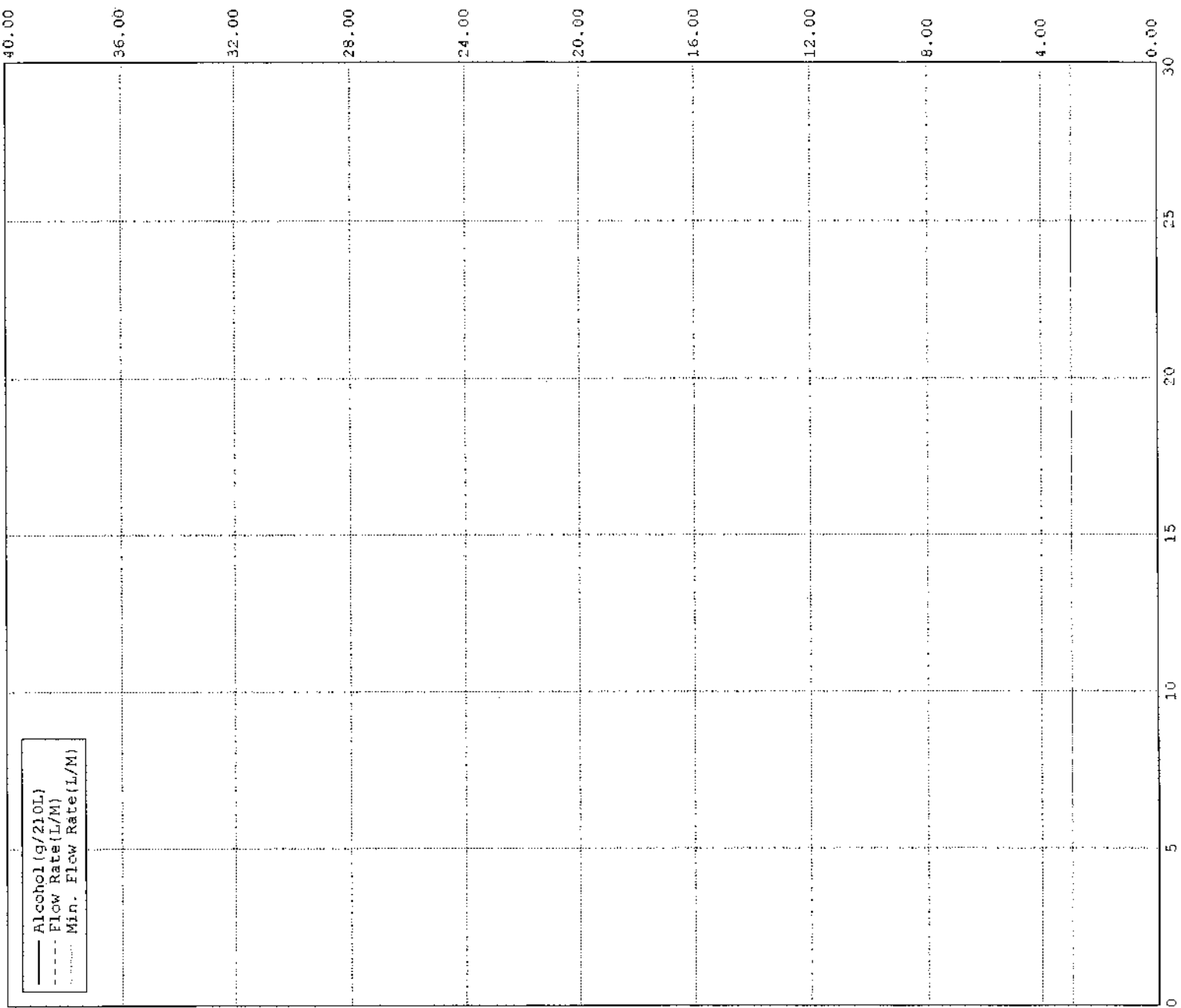
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.30: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 10:57
BLANK TEST 0.000 10:57
INTERNAL STANDARD VERIFIED 10:58
EXTERNAL STANDARD 0.078 10:58
BLANK TEST 0.000 10:59

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100671

Date: 12/30/2015
Time: 11:10:24

SUBJECT NAME:
TEST TEST
LICENSE #: NON-DRINKING

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 29.31: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 11:11
BLANK TEST 0.000 11:11
INTERNAL STANDARD VERIFIED 11:11
EXTERNAL STANDARD 0.077 11:11
BLANK TEST 0.000 11:12
SUBJECT SAMPLE (Vol=1.90L) 0.000 11:13
BLANK TEST 0.000 11:14
EXTERNAL STANDARD 0.078 11:14
BLANK TEST 0.000 11:15

COB

