

Alaska Scientific Crime Detection Laboratory

DataMaster Certification Form

Issued: 2/2/2015
Effective: 2/2/2015

Version: DMCEF 2015 R0
Status: Active

Instrument S/N 100342 Analyst Colleen O'Bryen Start Date 4/20/15

1. Diagnostic Test (attached)
2. 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)

3. Print Calibration Factors (attached)

4. Volume Test - Minimum 1.5 L (1.3L to 1.7L)

5. Linearity Test (attached)

a. Levels Used

- i. 0.020g/210L Mnf ILMO Lot 02915020A2 Exp 5/5/17
- ii. 0.040g/210L Mnf ILMO Lot 02915040A3 Exp 3/5/17
- iii. 0.080g/210L Mnf ILMO Lot 09214080A2 Exp 5/1/16
- iv. 0.100g/210L Mnf ILMO Lot 02915100A1 Exp 3/5/17
02915100A1
02915100A1
- v. 0.200g/210L Mnf BOTH Lot 14130 Exp 5/2/16
 1. Simulator S/N SD1200 Date Calibrated 1/30/15
- vi. 0.300g/210L Mnf BOTH Lot 14270 Exp 12/6/16
 1. Simulator S/N DE6267 Date Calibrated 1/30/15

6. Functional Tests (attached)

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

- i. Acetone - Mnf BOTH Lot 14110 Level 0.100 Exp 5/1/16
 1. Simulator S/N DE4162 Date Calibrated 1/19/15
- ii. Isopropanol - Mnf BOTH Lot 14110 Level 0.100 Exp 5/1/16
 1. Simulator S/N DE4163 Date Calibrated 1/19/15
- iii. Negative Control - Mnf BOTH Lot 14030 Level 0.100 Exp 1/30/16
 1. Simulator S/N DE4178 Date Calibrated 1/19/15

e. RFI

7. Verify stylus is calibrated
8. Reset Options
9. Clear Memory
10. Verification of Calibration
11. Non-Drinking Subject Test (attached)
12. Upload
13. Remove tank prior to shut down

End Date 4/23/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100342

Date: 04/20/2015
Time: 08:53:19

VERSIONS

DMT: 3.00
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 49.0°C PASSED
Breath Tube = 48.1°C PASSED

PUMP INFO

Flow Rate = 5.240 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: 100342

Date: 04/20/2015
Time: 9:59 AM

Temperatures (°C)

Sample Cell: 49.5°C
Breath Tube: 48.1°C

Current Barometer 29.4 in
Volume (Ltr) 1.48

Settings

Lamp: 1.73 V
Bias: 80 V
Cooler: 1.66 V
Chopper: 528 Hz

Voltages (V)

Flow: 1.02 V
Detector: 0.037 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100342

Date: 06/24/2011
Time: 09:44:57

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

LOT #: REPCO100
BOTTLE #: 10003
EXPIRATION: 09/08/2012

Ca = 0.1000
CAL = 0.963640 0.800 <= CAL < 1.200
b1 = 0.0004 0.0000 <= b1 < 0.0040
b2 = 0.0062 0.0010 <= b2 < 0.0100
b3 = 0.0003 0.0000 <= b3 < 0.0040
Xq = 0.0913 0.0500 <= Xq < 0.2000
a21 = 1.160994 1.050 <= a21 < 1.300
a31 = 0.474325 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100342

Date: 04/20/2015
Time: 09:59:48

SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME

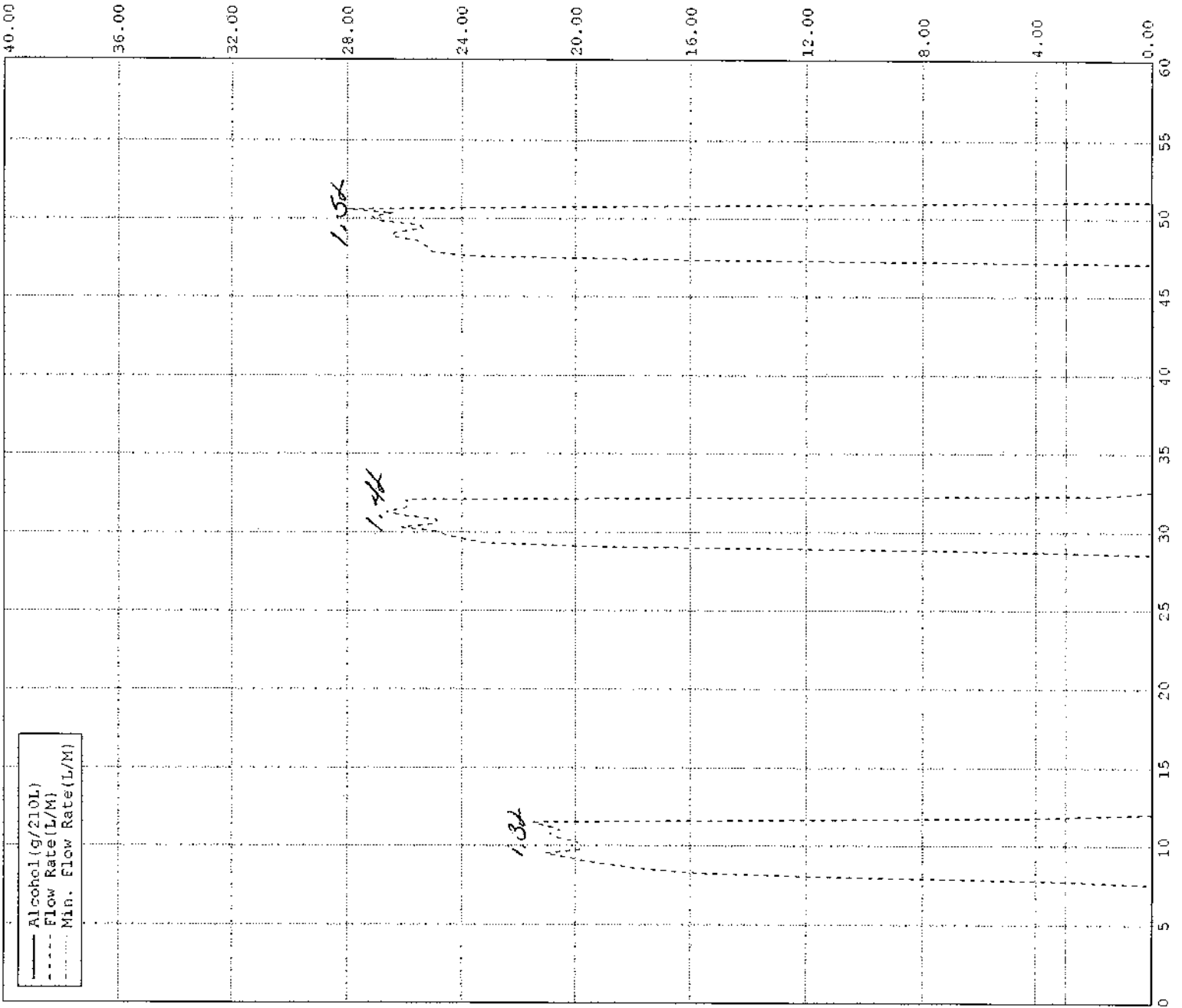
OPERATOR NAME:
COLLEEN S OBRVANT
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.41: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	10:02
BLANK TEST	0.000	10:02
INTERNAL STANDARD	VERIFIED	10:02
EXTERNAL STANDARD	0.075	10:02
BLANK TEST	0.000	10:03
SUBJECT SAMPLE (Vol=1.52L)	0.000	10:04
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.076	10:05
BLANK TEST	0.000	10:06

CAS



LINEARITY CHECK

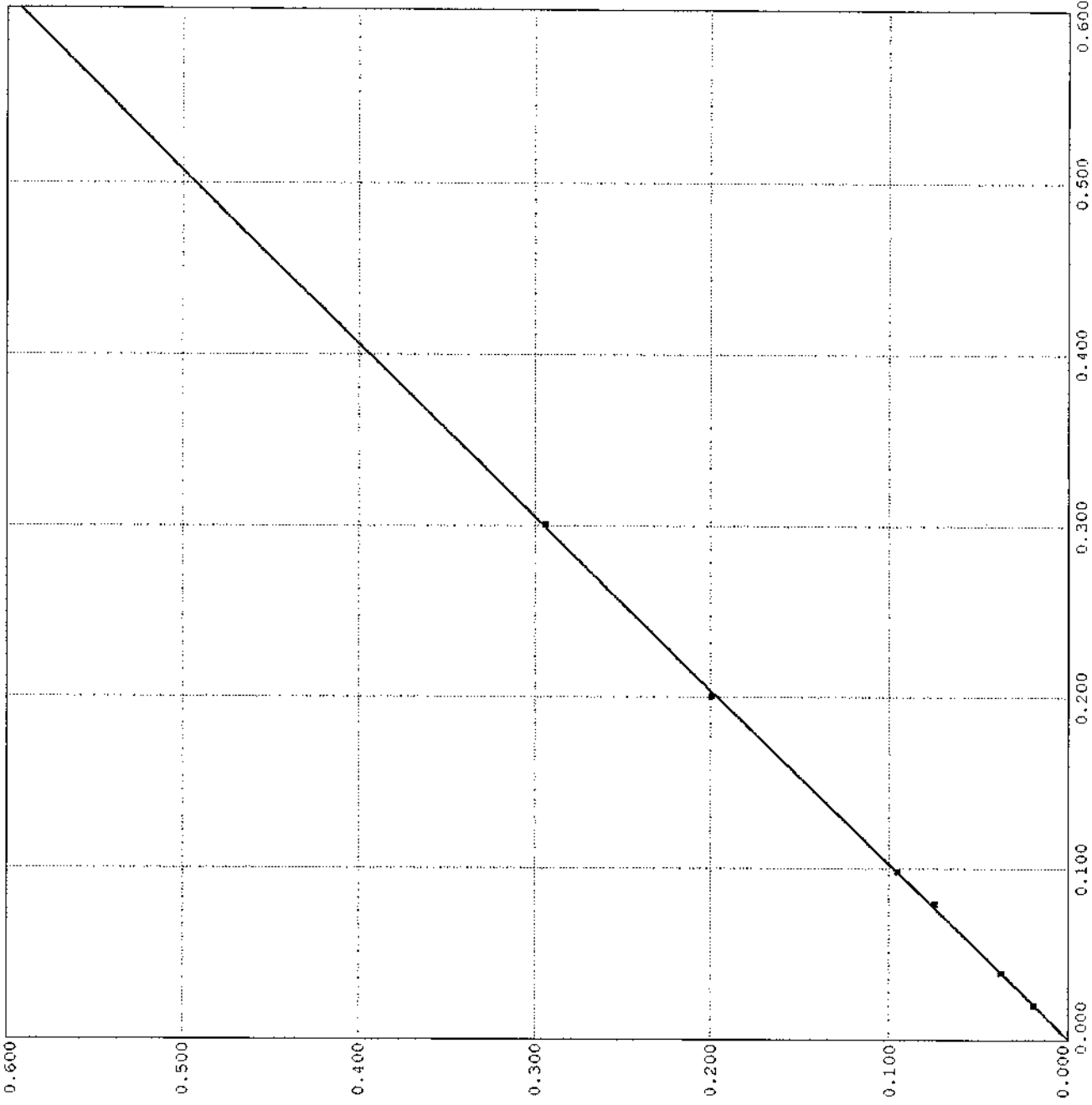
Alaska Department of Public Safety
 DATAMASTER dmt: 100342

Date: 04/20/2015
 Time: 14:27:53

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0007
0.039	0.0386	0.0005
0.079	0.0758	0.0004
0.098	0.0962	0.0004
0.200	0.2004	0.0005
0.300	0.2948	0.0004

SLOPE = 0.988282
 R² = 0.999722



COB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100342

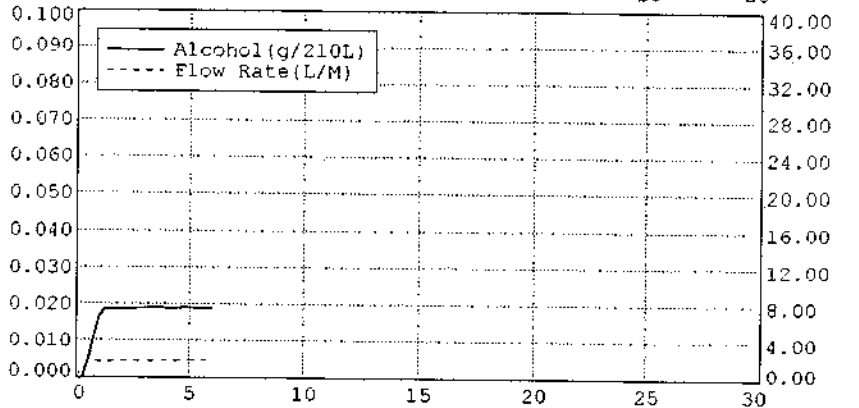
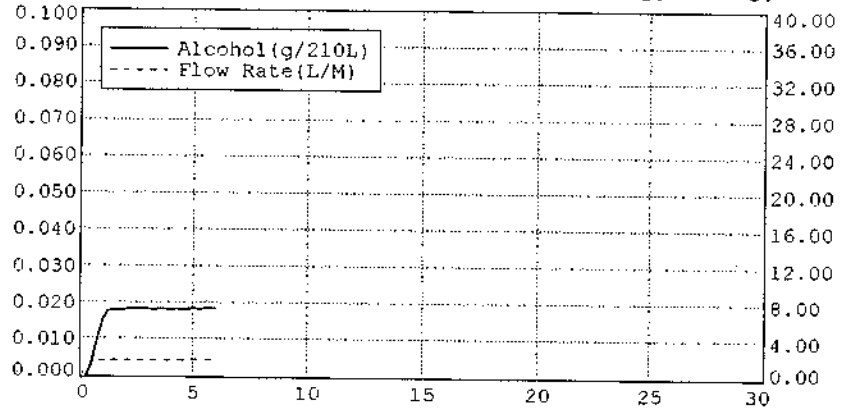
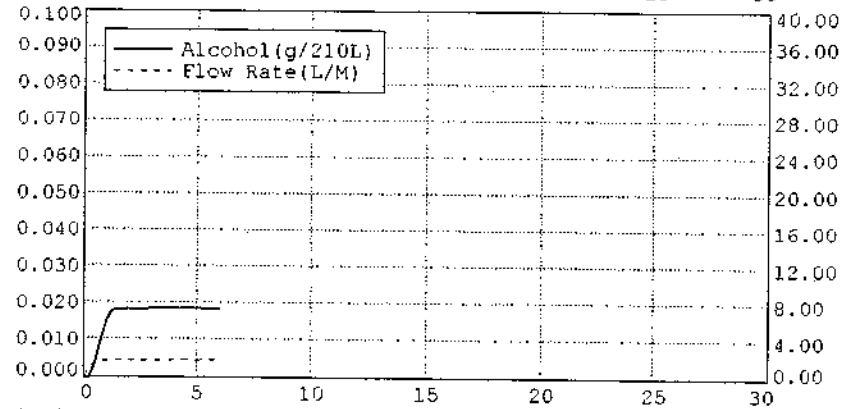
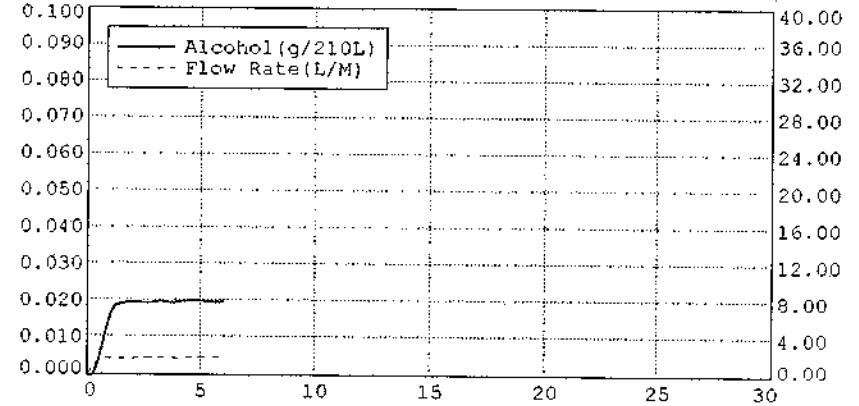
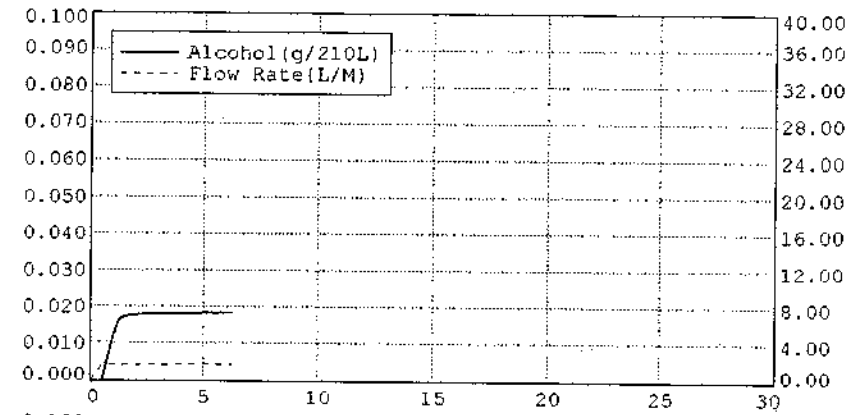
Date: 04/20/2015
 Time: 14:27:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.46: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 952 psi

BLANK TEST	0.000	14:38
INTERNAL STANDARD	VERIFIED	14:38
EXTERNAL STANDARD	0.020	14:38
BLANK TEST	0.000	14:39
EXTERNAL STANDARD	0.021	14:39
BLANK TEST	0.000	14:40
EXTERNAL STANDARD	0.020	14:40
BLANK TEST	0.000	14:41
EXTERNAL STANDARD	0.019	14:41
BLANK TEST	0.000	14:42
EXTERNAL STANDARD	0.020	14:42
BLANK TEST	0.000	14:43

Average = 0.0200
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100342

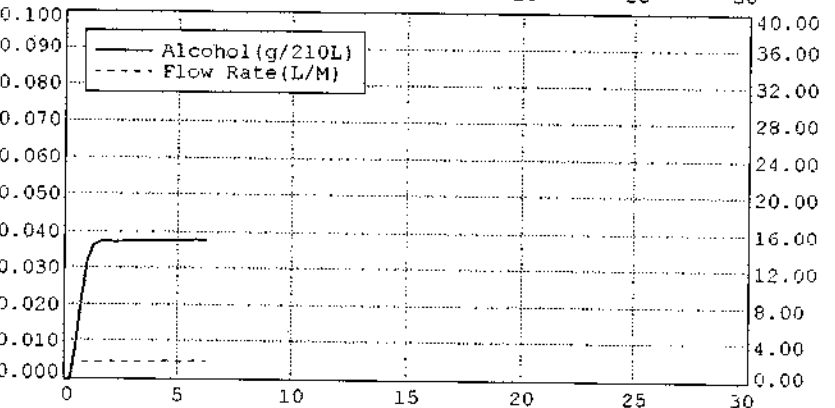
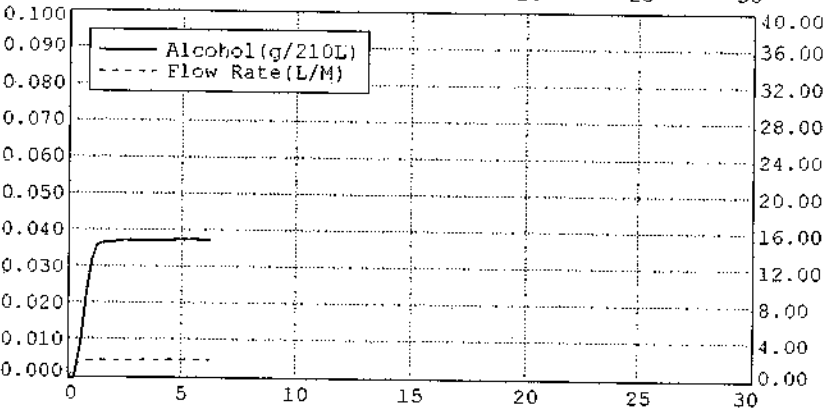
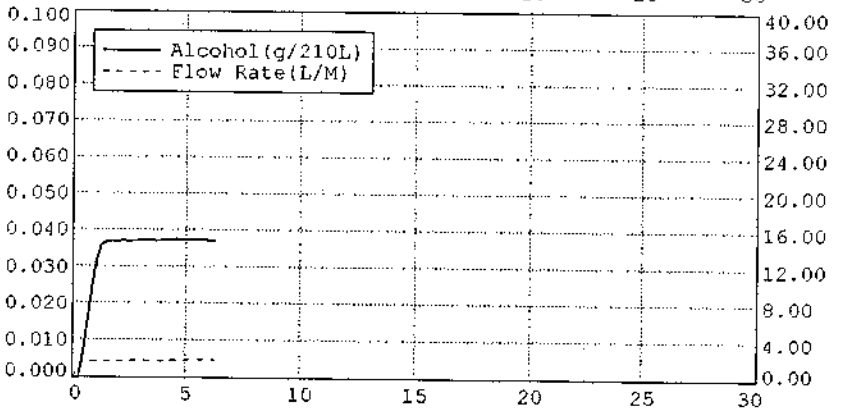
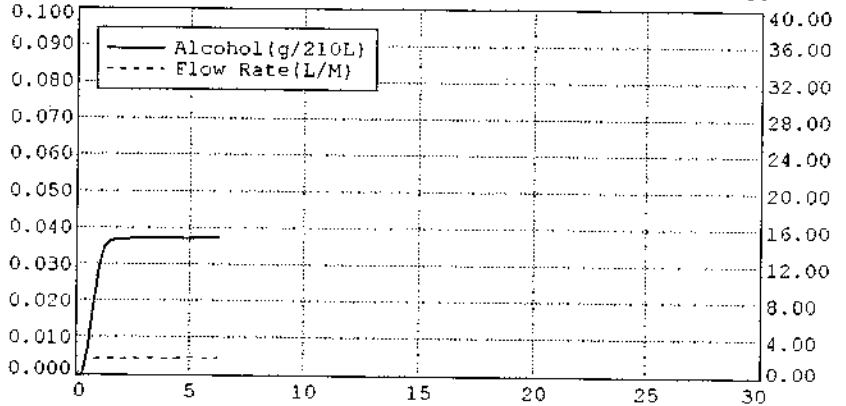
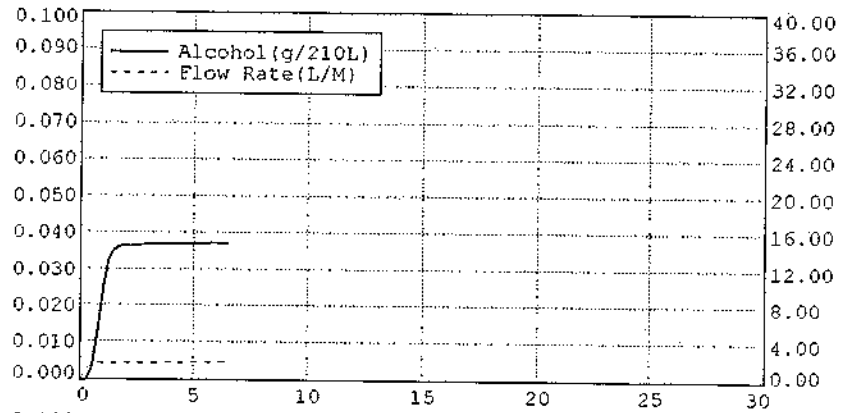
Date: 04/20/2015
 Time: 14:45:17

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.46: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1025 psi

BLANK TEST	0.000	14:46
INTERNAL STANDARD	VERIFIED	14:46
EXTERNAL STANDARD	0.038	14:46
BLANK TEST	0.000	14:47
EXTERNAL STANDARD	0.039	14:47
BLANK TEST	0.000	14:48
EXTERNAL STANDARD	0.039	14:49
BLANK TEST	0.000	14:49
EXTERNAL STANDARD	0.038	14:50
BLANK TEST	0.000	14:51
EXTERNAL STANDARD	0.039	14:51
BLANK TEST	0.000	14:52

Average = 0.0386
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100342

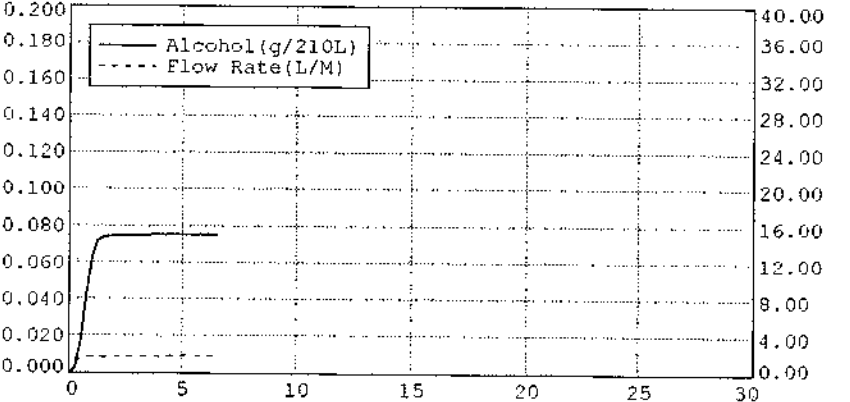
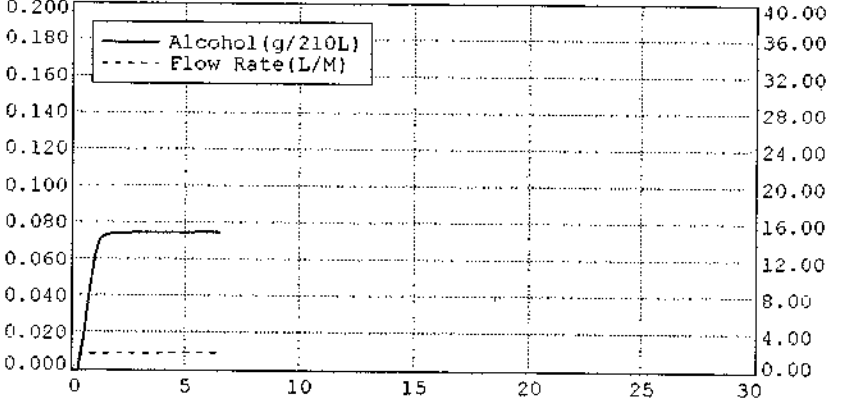
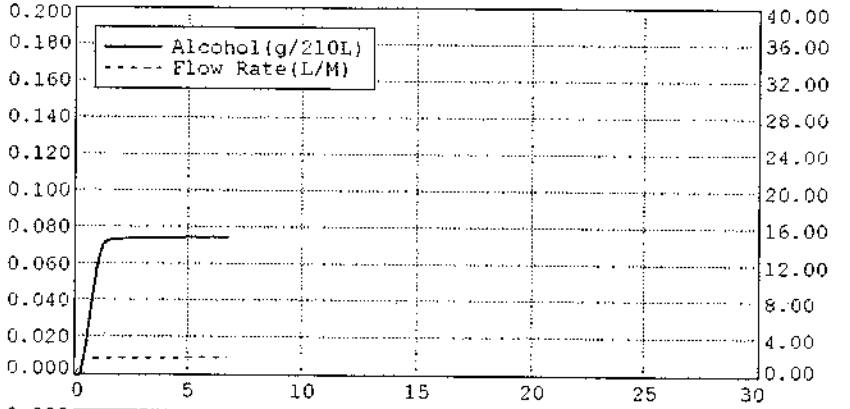
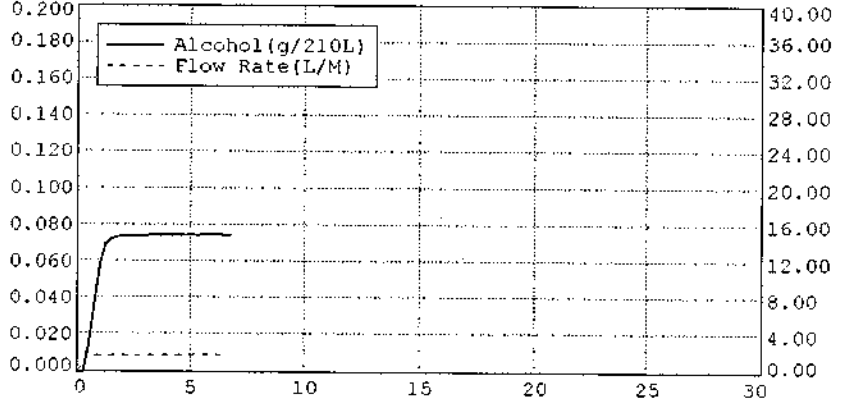
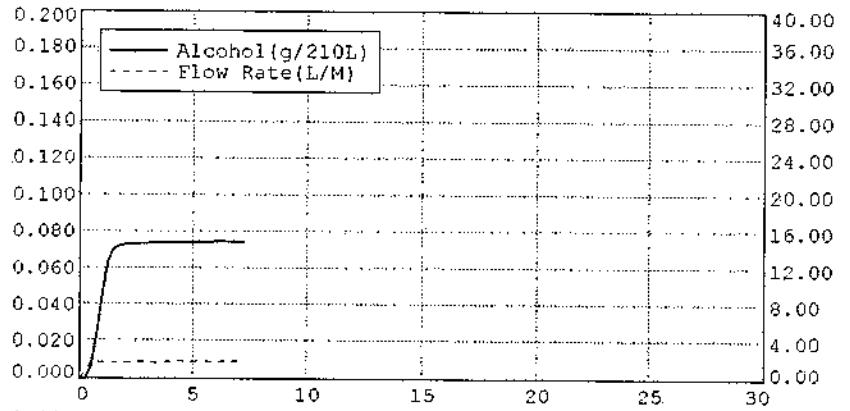
Date: 04/20/2015
 Time: 14:52:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.46: 0.079
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016
 TANK PRESSURE: 897 psi

BLANK TEST	0.000	14:54
INTERNAL STANDARD	VERIFIED	14:54
EXTERNAL STANDARD	0.075	14:54
BLANK TEST	0.000	14:55
EXTERNAL STANDARD	0.076	14:55
BLANK TEST	0.000	14:56
EXTERNAL STANDARD	0.076	14:56
BLANK TEST	0.000	14:57
EXTERNAL STANDARD	0.076	14:57
BLANK TEST	0.000	14:58
EXTERNAL STANDARD	0.076	14:59
BLANK TEST	0.000	14:59

Average = 0.0758
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dat: 100342

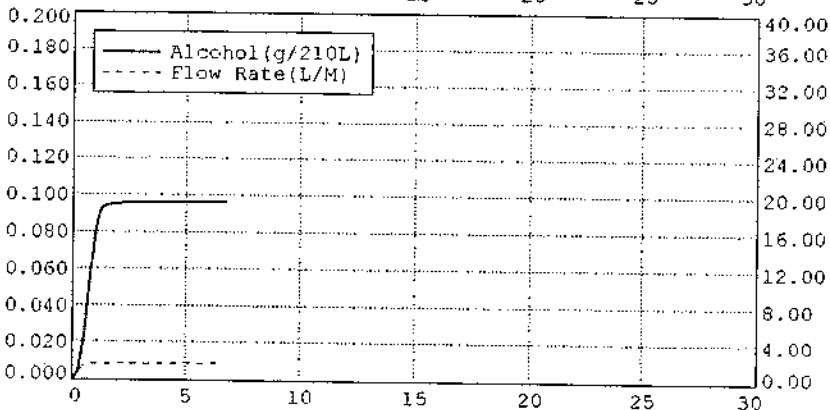
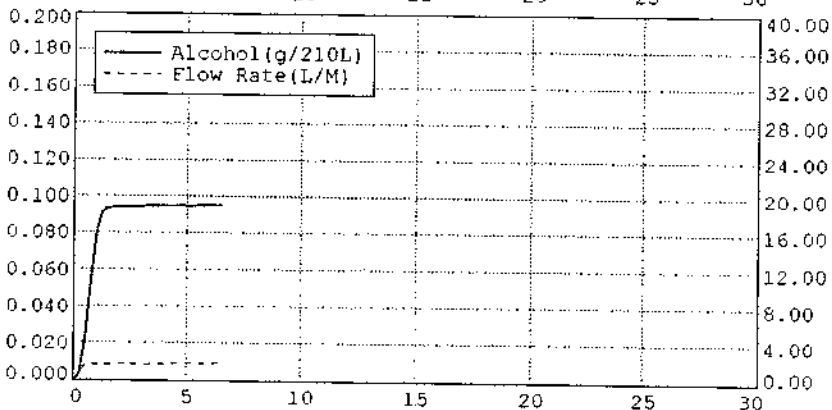
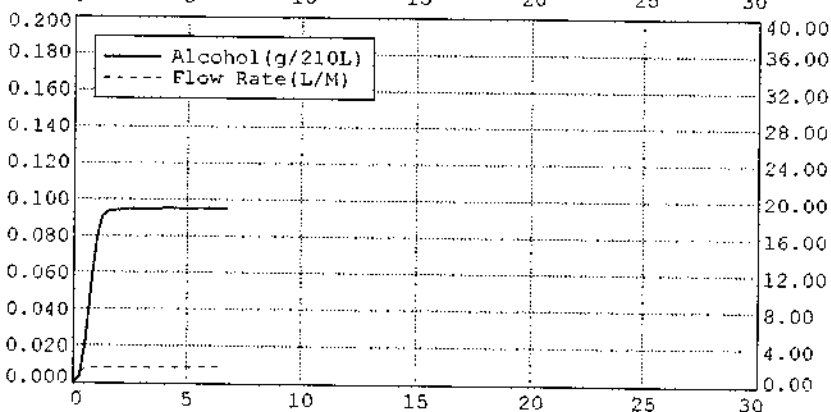
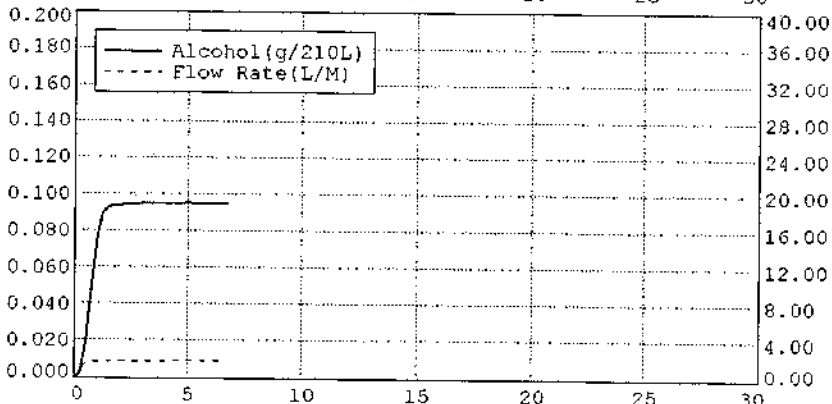
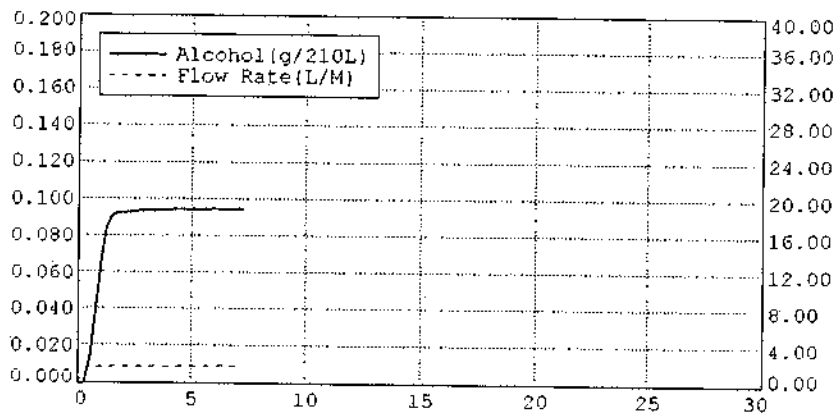
Date: 04/20/2015
 Time: 15:02:54

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.46: 0.098
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 975 psi

BLANK TEST	0.000	15:04
INTERNAL STANDARD	VERIFIED	15:04
EXTERNAL STANDARD	0.096	15:04
BLANK TEST	0.000	15:05
EXTERNAL STANDARD	0.096	15:05
BLANK TEST	0.000	15:06
EXTERNAL STANDARD	0.096	15:06
BLANK TEST	0.000	15:07
EXTERNAL STANDARD	0.096	15:07
BLANK TEST	0.000	15:08
EXTERNAL STANDARD	0.097	15:08
BLANK TEST	0.000	15:09

Average = 0.0962
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
DATAMASTER dmt: 100342

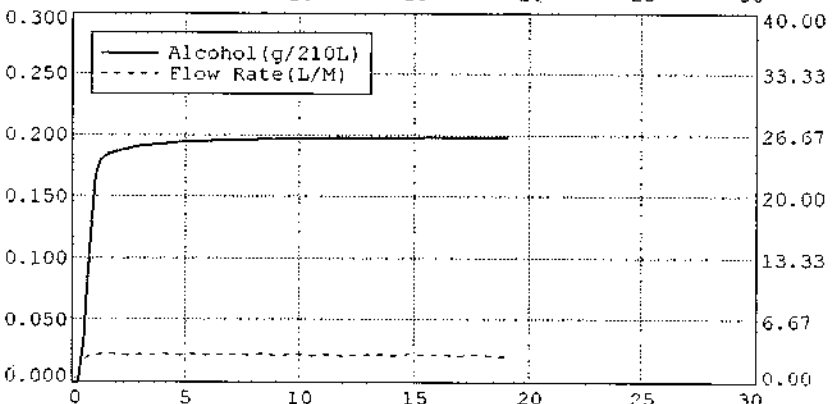
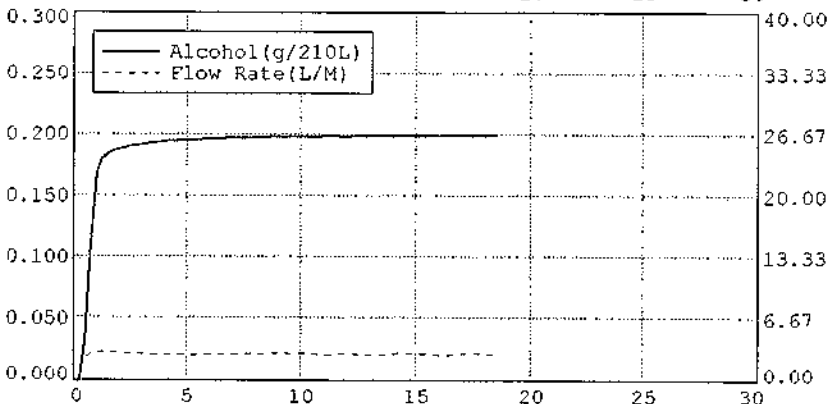
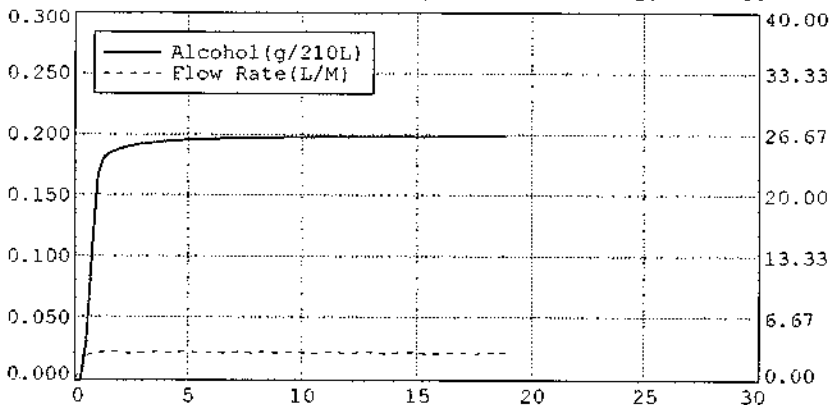
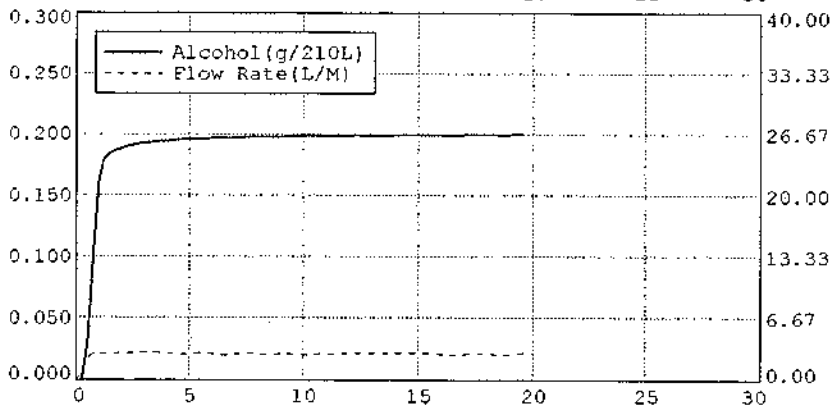
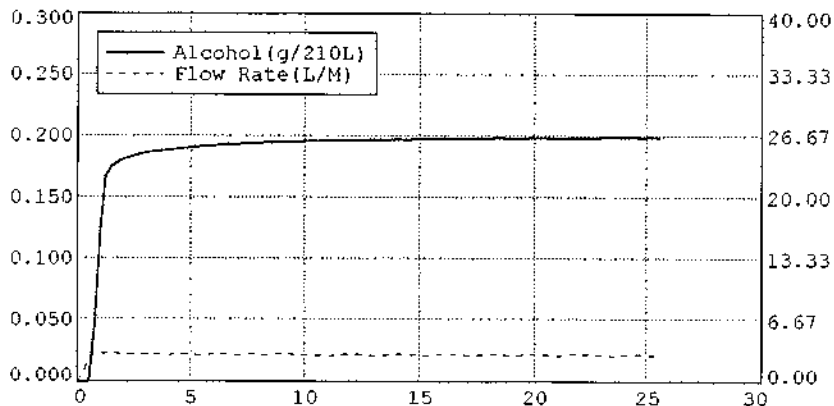
Date: 04/20/2015
Time: 15:11:30

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
LOT #: 14130
EXPIRATION: 05/12/2016

BLANK TEST	0.000	15:12
INTERNAL STANDARD	VERIFIED	15:13
EXTERNAL STANDARD	0.200	15:13
BLANK TEST	0.000	15:14
EXTERNAL STANDARD	0.201	15:14
BLANK TEST	0.000	15:15
EXTERNAL STANDARD	0.200	15:16
BLANK TEST	0.000	15:17
EXTERNAL STANDARD	0.201	15:17
BLANK TEST	0.000	15:18
EXTERNAL STANDARD	0.200	15:18
BLANK TEST	0.000	15:19

Average = 0.2004
Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100342

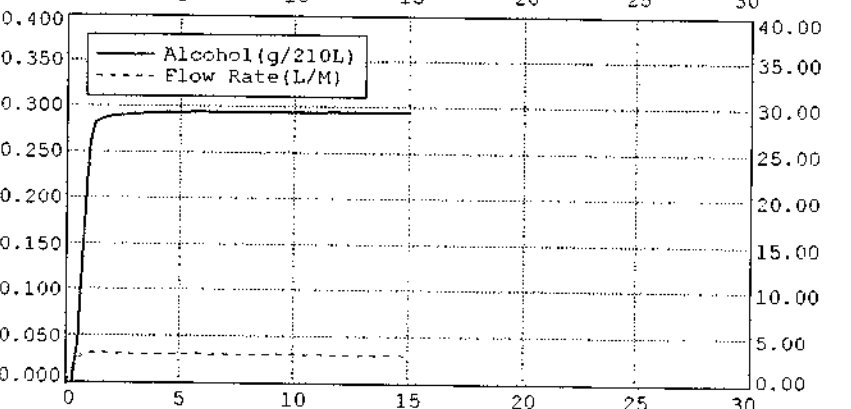
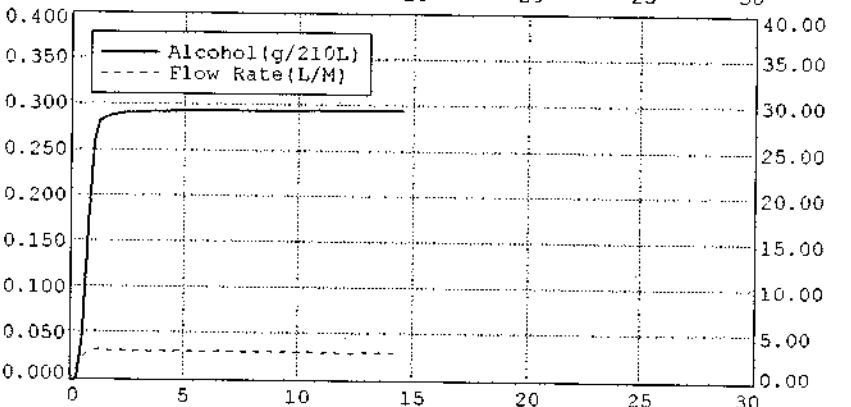
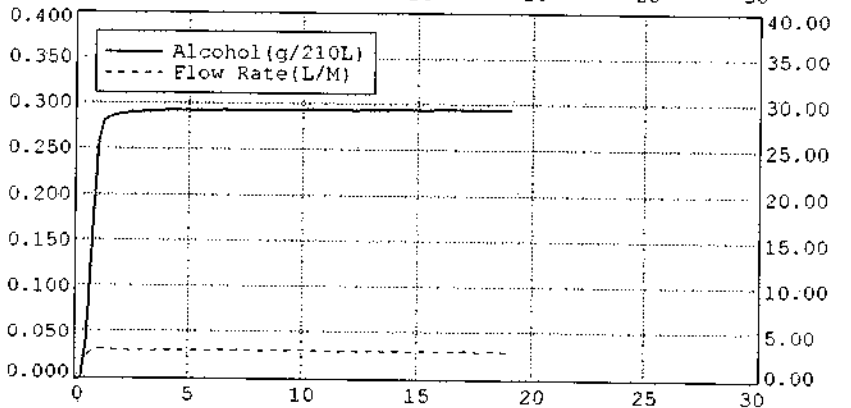
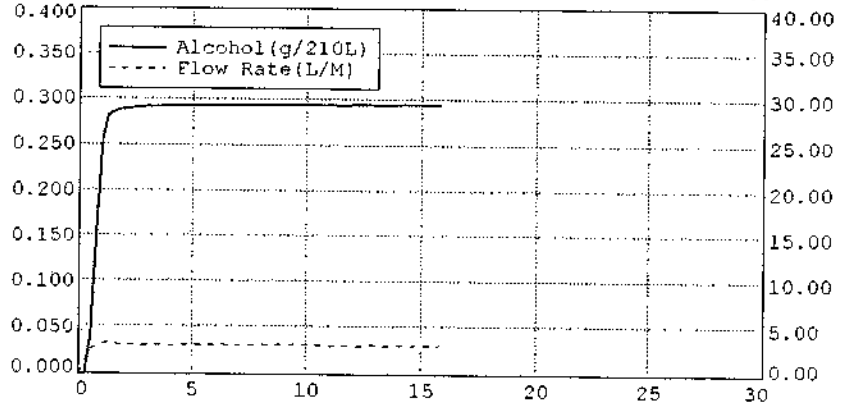
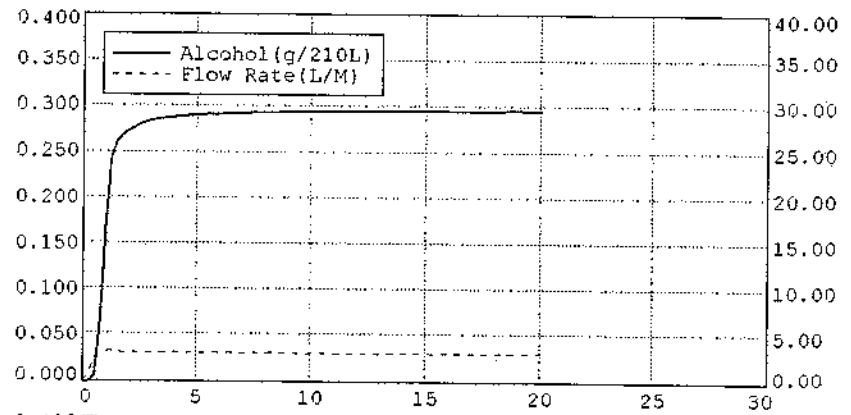
Date: 04/20/2015
 Time: 15:21:27

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	15:22
INTERNAL STANDARD	VERIFIED	15:22
EXTERNAL STANDARD	0.295	15:23
BLANK TEST	0.000	15:23
EXTERNAL STANDARD	0.295	15:24
BLANK TEST	0.000	15:25
EXTERNAL STANDARD	0.295	15:25
BLANK TEST	0.000	15:26
EXTERNAL STANDARD	0.294	15:26
BLANK TEST	0.000	15:27
EXTERNAL STANDARD	0.295	15:28
BLANK TEST	0.000	15:29

Average = 0.2948
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100342

Date: 04/22/2015
Time: 15:22:07

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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

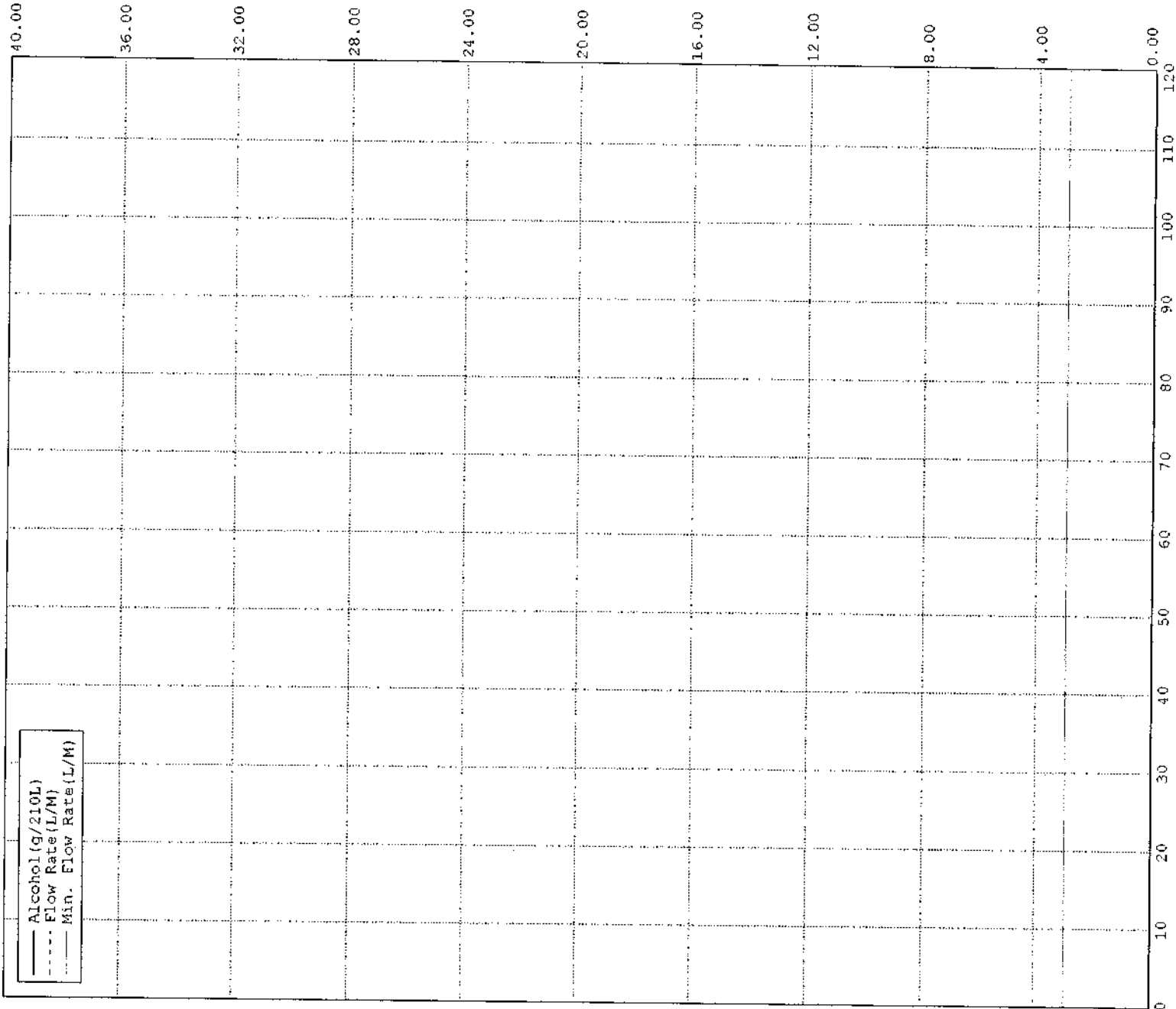
DEPT/AGENCY:
AAA1

CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.77: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 15:23
BLANK TEST 0.000 15:23
INTERNAL STANDARD VERIFIED 15:24
EXTERNAL STANDARD 0.076 15:24
BLANK TEST 0.000 15:25
SUBJECT SAMPLE INCOMPLETE 15:27



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100342

Date: 04/22/2015
Time: 15:29:11

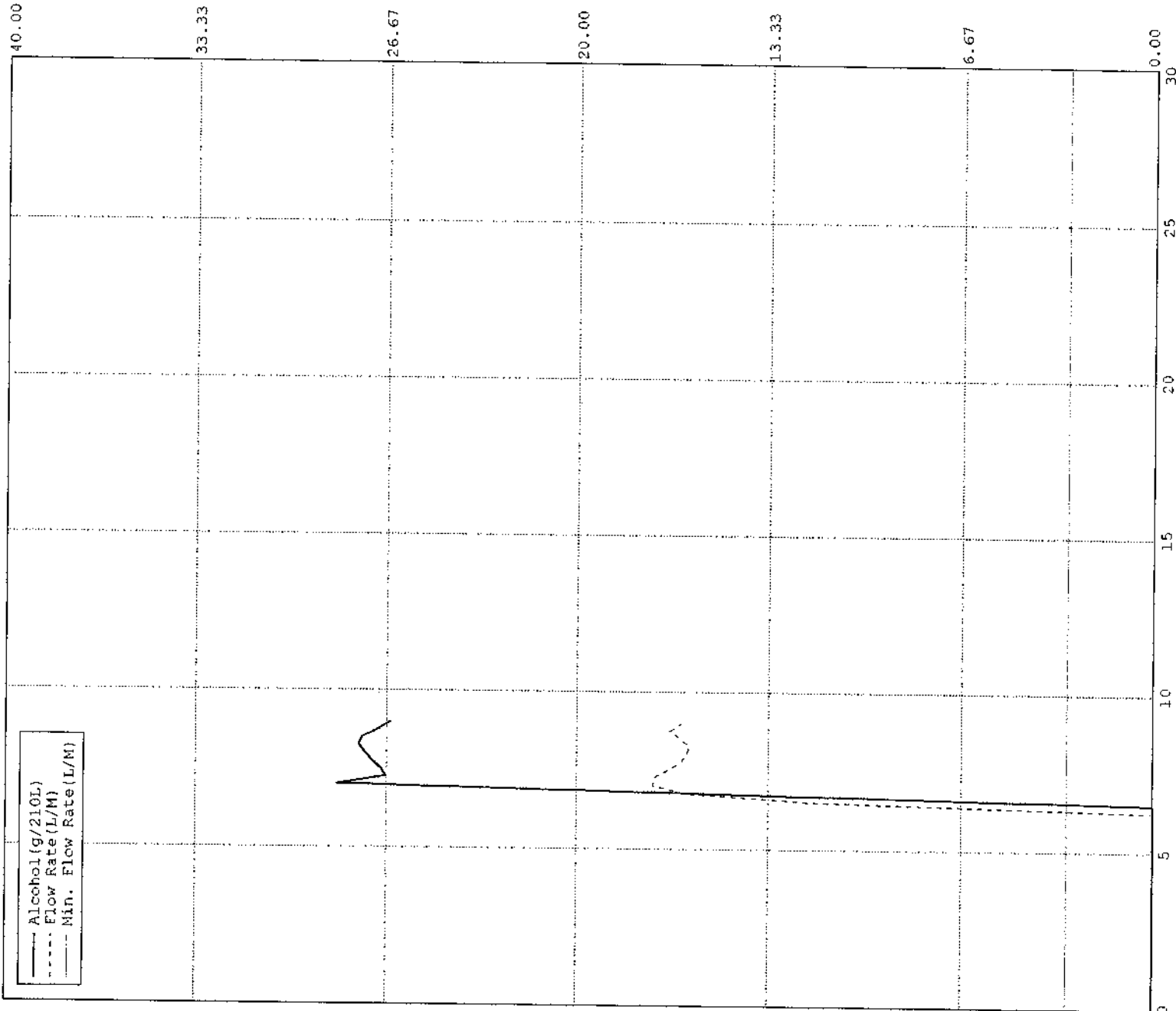
SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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 29.77: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 15:30
BLANK TEST 0.000 15:30
INTERNAL STANDARD VERIFIED 15:30
EXTERNAL STANDARD 0.077 15:30
BLANK TEST 0.000 15:31
SUBJECT SAMPLE INVALID 15:31



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100342

Date: 04/23/2015
Time: 08:31:02

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

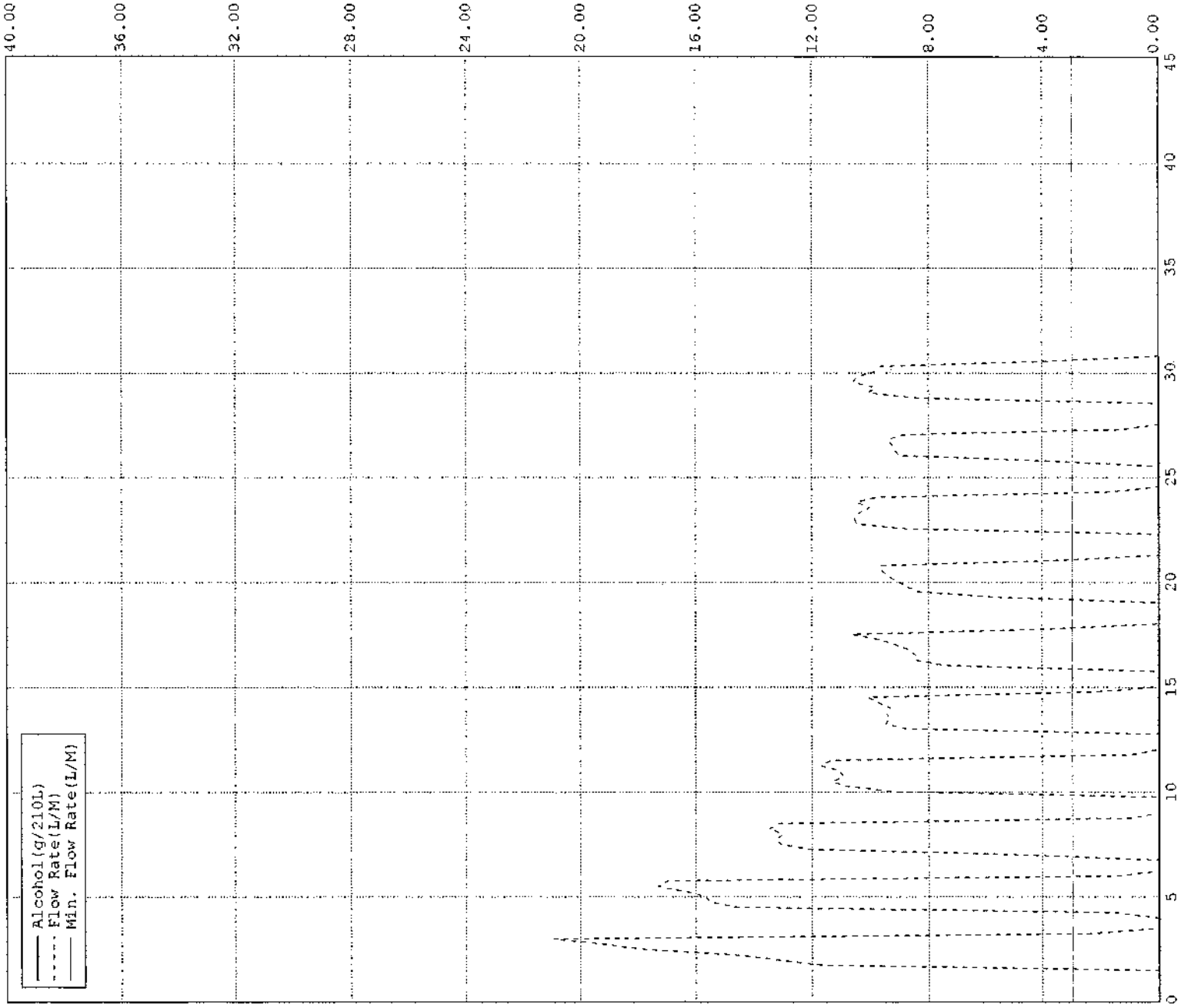
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.74: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 08:35
BLANK TEST 0.000 08:35
INTERNAL STANDARD VERIFIED 08:35
EXTERNAL STANDARD 0.076 08:35
BLANK TEST 0.000 08:36
SUBJECT SAMPLE XXX 08:37

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety

DATA MASTER dmt: 100342

Date: 04/22/2015
Time: 15:38:04

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 29.77: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

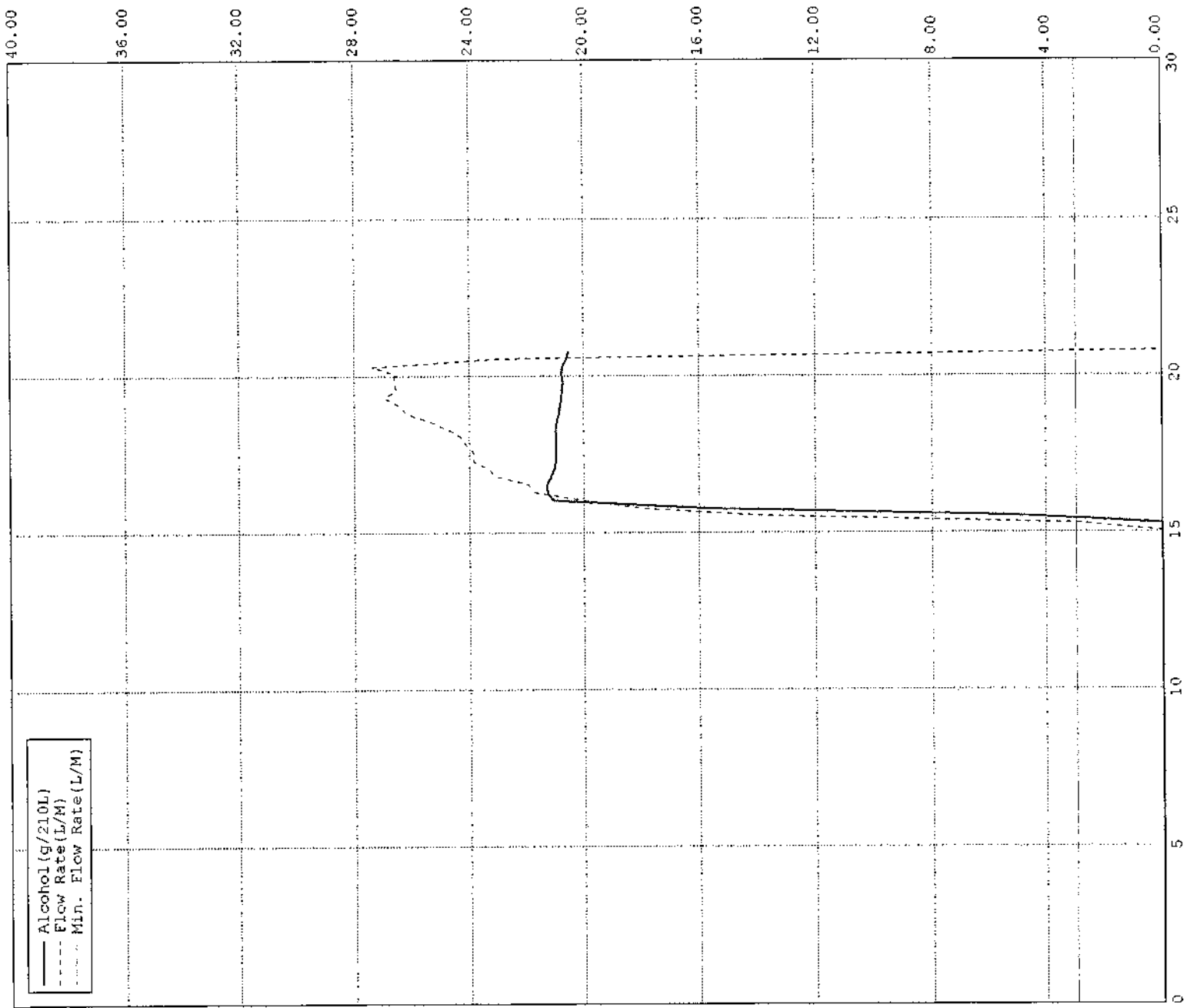
DIAGNOSTIC CHECK	PASSED	15:43
BLANK TEST	0.000	15:43
INTERNAL STANDARD	VERIFIED	15:43
$x_q = 0.091$ (0.19%)		
EXTERNAL STANDARD	0.076	15:44
$x[1] = 0.0763$ (-0.0028) (0.0018)		
BLANK TEST	0.000	15:45
SUBJECT SAMPLE	XXX	15:45
$x[1] = 0.1034$ (-0.0148) (0.0012)		

Interference Detected

Filter 2 avg: -0.0038

Filter 3 avg: 0.0081

CS



SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100342

 Date: 04/22/2015
 Time: 15:48:11

SUBJECT NAME:
 TEST TEST
 LICENSE #: INT-IPA

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

DEPT/AGENCY:
 AAA1

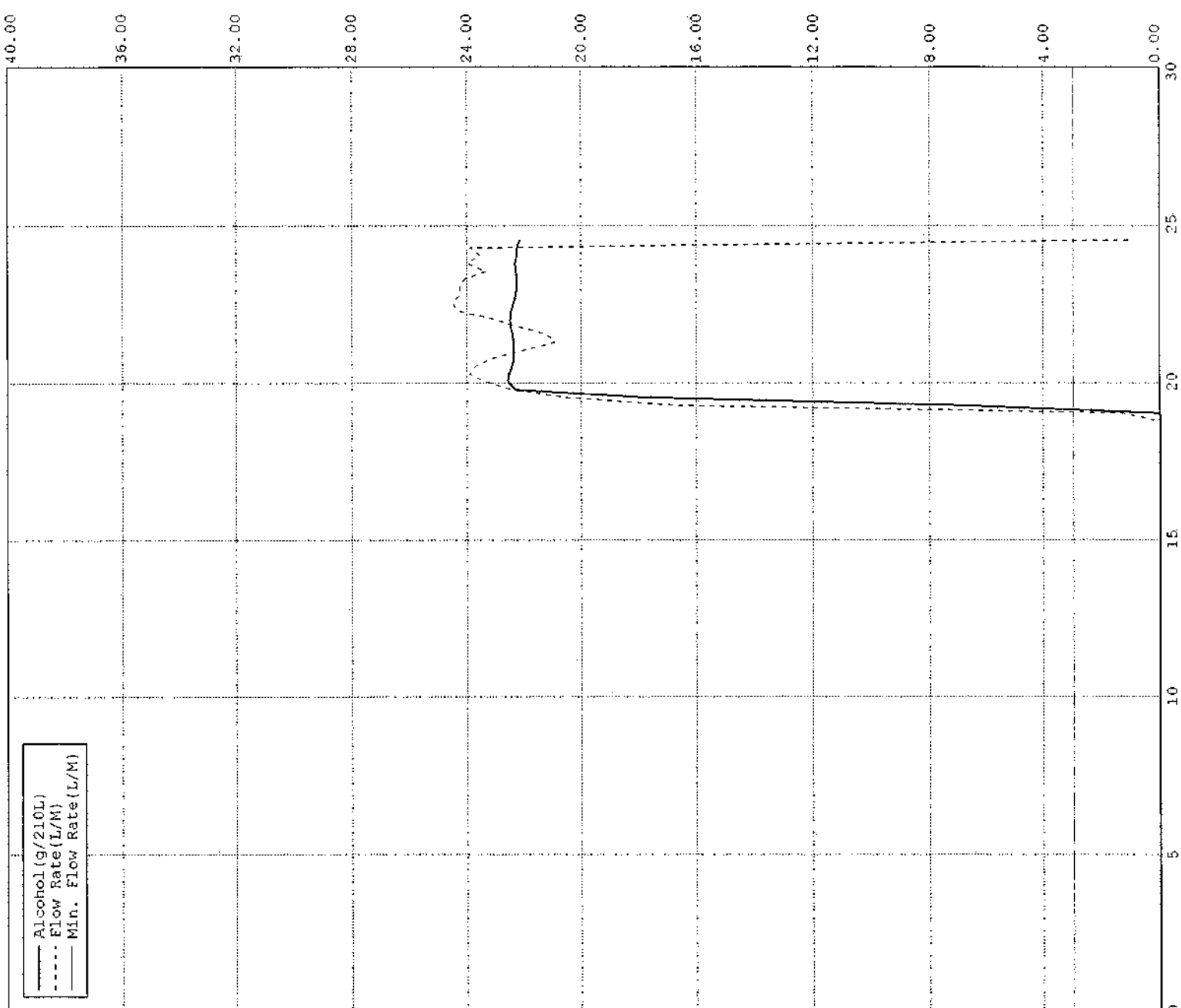
CASE/REPORT: 15-1234
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.77: 0.080
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:49
BLANK TEST	0.000	15:49
INTERNAL STANDARD	VERIFIED	15:49
Xq = 0.092 (0.57%)		
EXTERNAL STANDARD	0.076	15:49
X[1] = 0.0763 (-0.0028) (0.0022)		
BLANK TEST	0.000	15:50
SUBJECT SAMPLE	XXX	15:51
X[1] = 0.1117 (-0.0258) (0.0009)		

Interference Detected

CO



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100342

Date: 04/22/2015
Time: 15:54:12

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

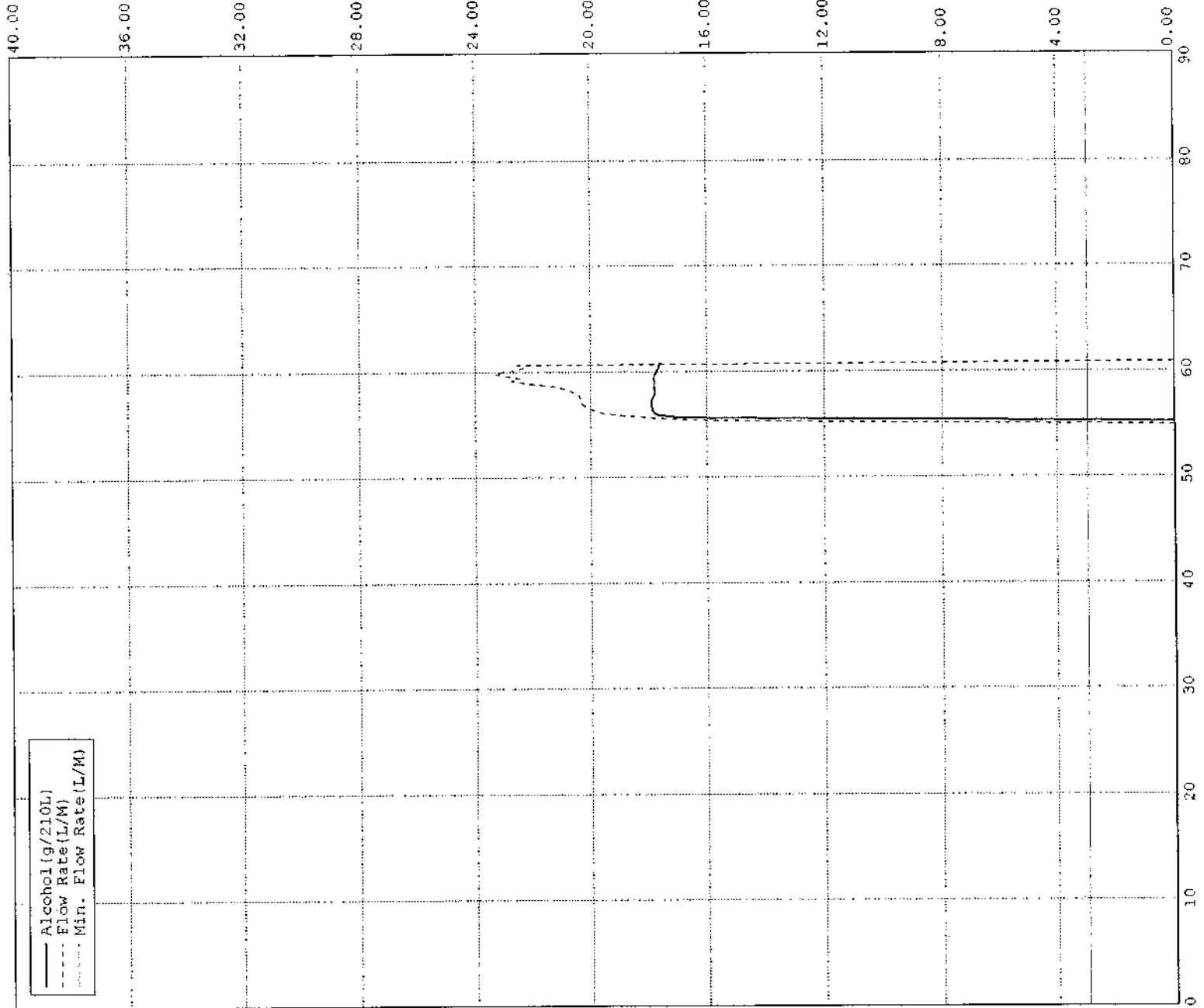
OPERATOR NAME:
COLLEEN S OBRYANT
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.77: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:55
BLANK TEST	0.000	15:55
INTERNAL STANDARD	VERIFIED	15:55
$X_Q = 0.092$ (0.86%)		
EXTERNAL STANDARD	0.077	15:55
$X\{1\} = 0.0766$ (-0.0027) (0.0027)		
BLANK TEST	0.000	15:56
SUBJECT SAMPLE (Vol=1.96L)	0.088	15:57
$X\{1\} = 0.0886$ (-0.0021) (0.0004)		
BLANK TEST	0.000	15:58
EXTERNAL STANDARD	0.076	15:58
$X\{1\} = 0.0762$ (-0.0030) (0.0018)		
BLANK TEST	0.000	15:59

CAB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100342

Date: 04/23/2015
Time: 08:39:23

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

DEPT/AGENCY:
AAA1

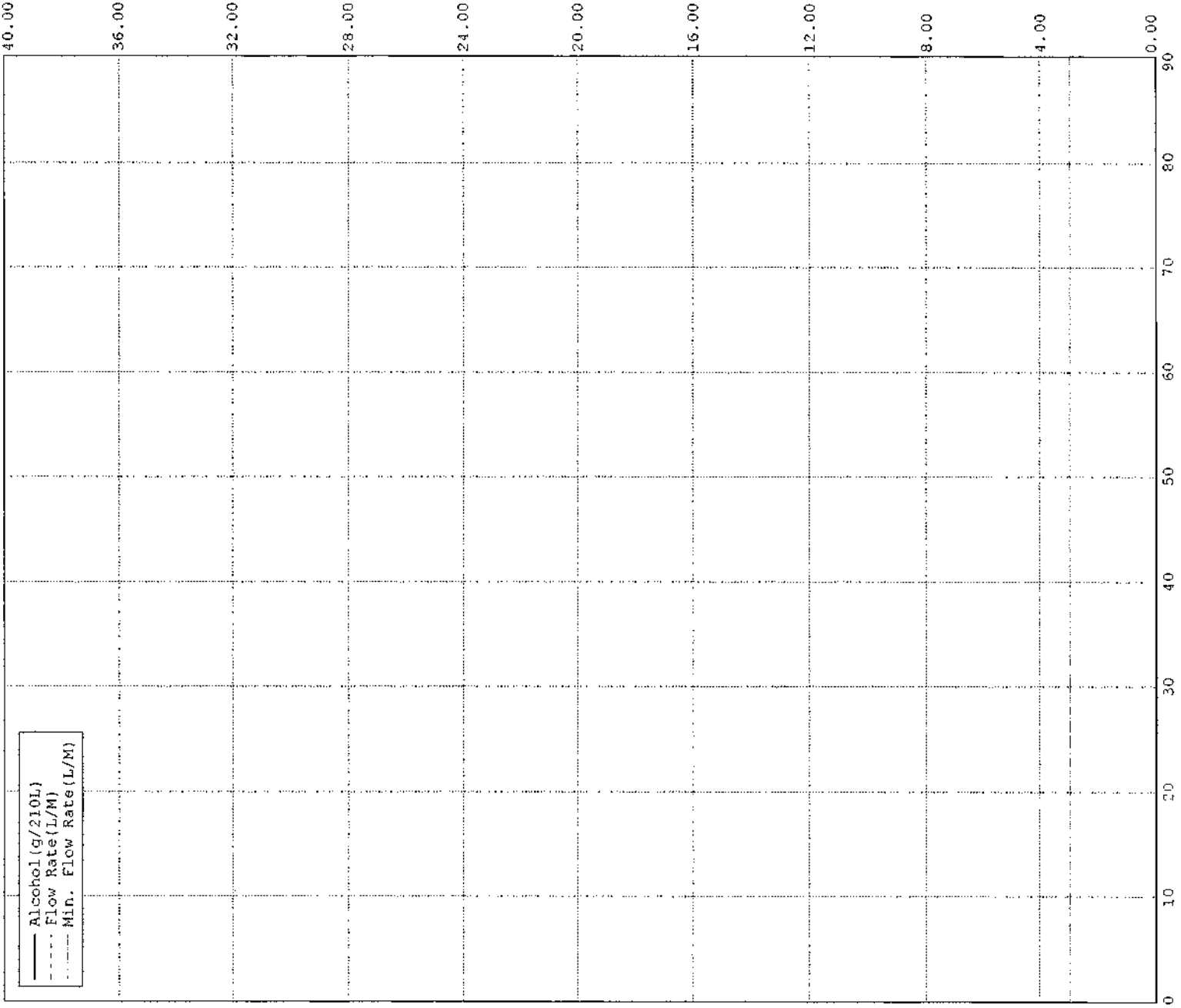
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.74: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 08:40
BLANK TEST 0.000 08:40
INTERNAL STANDARD VERIFIED 08:40
EXTERNAL STANDARD 0.076 08:40
BLANK TEST 0.000 08:41

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100342

Date: 04/23/2015
Time: 08:57:26

SUBJECT NAME:
TEST TEST
LICENSE #: NONDRINKING

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 29.74: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	08:58
BLANK TEST	0.000	08:58
INTERNAL STANDARD	VERIFIED	08:58
EXTERNAL STANDARD	0.076	08:58
BLANK TEST	0.000	08:59
SUBJECT SAMPLE (Vol=2.36L)	0.000	09:01
BLANK TEST	0.000	09:02
EXTERNAL STANDARD	0.077	09:02
BLANK TEST	0.000	09:03

CRB

