

Alaska Scientific Crime Detection Laboratory

DataMaster Certification Form

Issued: 10/9/2014
Effective: 10/9/2014

Version: DMCEF 2014 R1
Status: Active

Instrument S/N 100392 Analyst Colleen O'Bryen Start Date 11/21/14

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 1.6 L (1.3L to 1.7L)

5. Linearity Test (attached)

a. Levels Used

- i. 0.020g/210L Mnf ILMO Lot 00813020A1 Exp 3/1/15
- ii. 0.040g/210L Mnf ILMO Lot 00813040A2 Exp 3/1/15
- iii. 0.080g/210L Mnf ILMO Lot 11313080A1 Exp 3/1/15
- iv. 0.100g/210L Mnf ILMO Lot 00813100A3 Exp 3/1/15
- v. 0.200g/210L Mnf Guth Lot 14130 Exp 5/12/16
 1. Simulator S/N S⁷⁸ DR5298 Date Calibrated 2/19/14
- vi. 0.300g/210L Mnf Guth Lot 14150 Exp 6/2/16
 1. Simulator S/N 01177 Date Calibrated 2/20/14

6. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference

- i. Acetone - Mnf Guth Lot 14030 Level 0.100 Exp 1/20/16
 1. Simulator S/N 501198 Date Calibrated 2/20/14
- ii. Isopropanol - Mnf Guth Lot 14030 Level 0.100 Exp 1/20/16
 1. Simulator S/N 501302 Date Calibrated 2/20/14
- iii. Negative Control - Mnf Guth Lot 14030 Level 0.100 Exp 1/20/16
 1. Simulator S/N DR41621 Date Calibrated 2/19/14

d. 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 11/25/14

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dnt: 100392

Date: 11/21/2014
Time: 13:28:33

VERSIONS

DMT: 2.00
PIC: 3.02
Modem: 2.3
Questions: 2.2

TEMPERATURES

Sample Chamber = 49.0°C PASSED
Breath Tube = 44.0°C PASSED

PUMP INFO

Flow Rate = 5.421 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: 100392

Date: 11/21/2014
Time: 1:34 PM

Temperatures (°C)
Sample Cell: 49.1°C
Breath Tube: 44.3°C

Current Barometer 28.7 in
Volume (Ltr) 1.41

Settings
Lamp: 1.68 V
Bias: 80 V
Cooler: 1.62 V
Chopper: 525 Hz

Voltages (V)
Flow: 1.06 V
Detector: 0.075 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 03/15/2011
Time: 07:58:03

Ca = 0.1000
CAL = 0.990755 0.800 <= CAL < 1.200
b1 = 0.0000 0.0000 <= b1 < 0.0040
b2 = 0.0037 0.0010 <= b2 < 0.0100
b3 = 0.0002 0.0000 <= b3 < 0.0040
Xq = 0.0967 0.0500 <= Xq < 0.2000
a21 = 1.157321 1.050 <= a21 < 1.300
a31 = 0.392902 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 11/21/2014
Time: 13:38:27

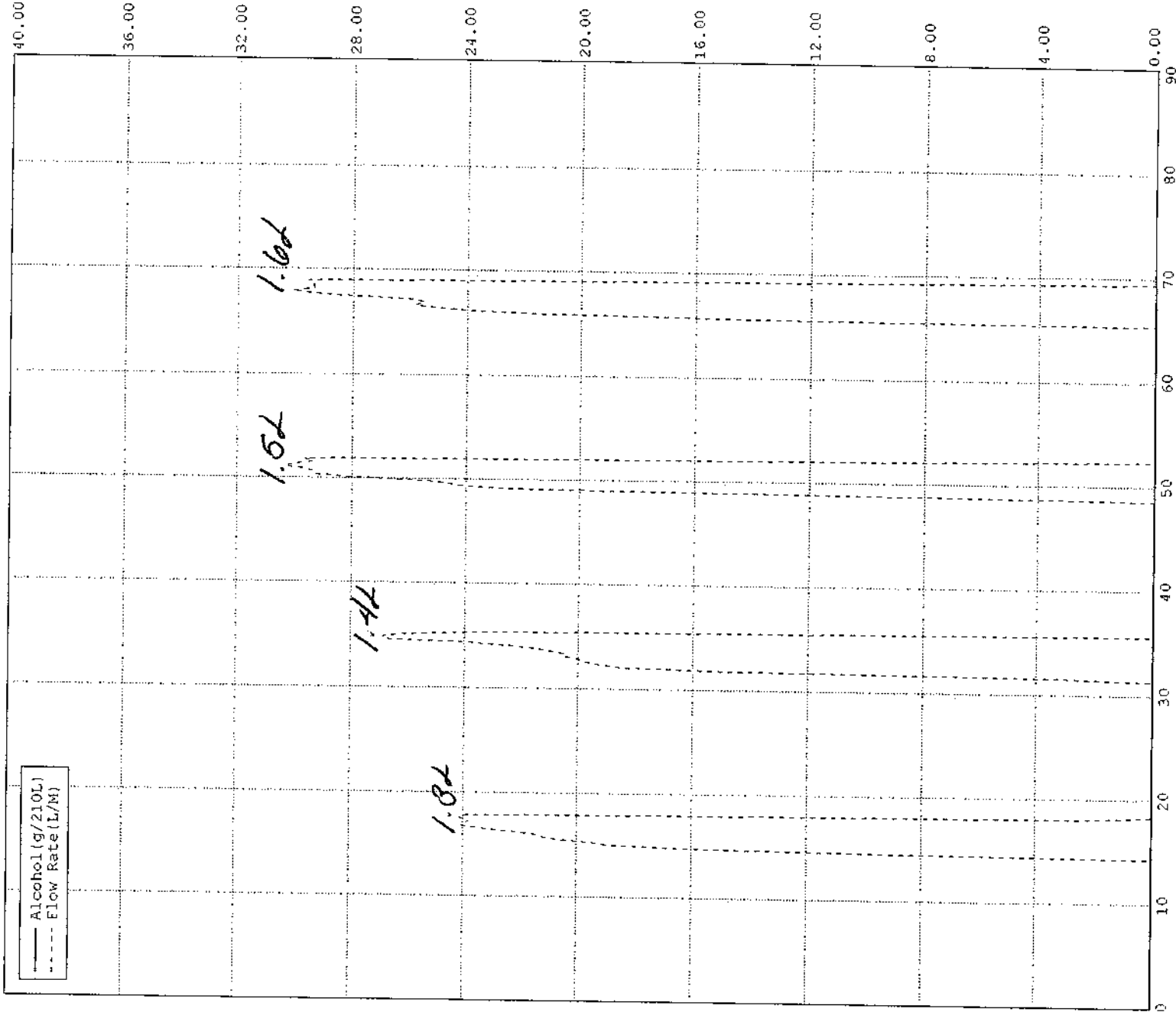
SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 28.66: 0.076
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	13:40
BLANK TEST	0.000	13:40
INTERNAL STANDARD	VERIFIED	13:40
EXTERNAL STANDARD	0.076	13:40
BLANK TEST	0.000	13:41
SUBJECT SAMPLE	0.000	13:42
BLANK TEST	0.000	13:43
EXTERNAL STANDARD	0.076	13:43
BLANK TEST	0.000	13:44



LINEARITY CHECK

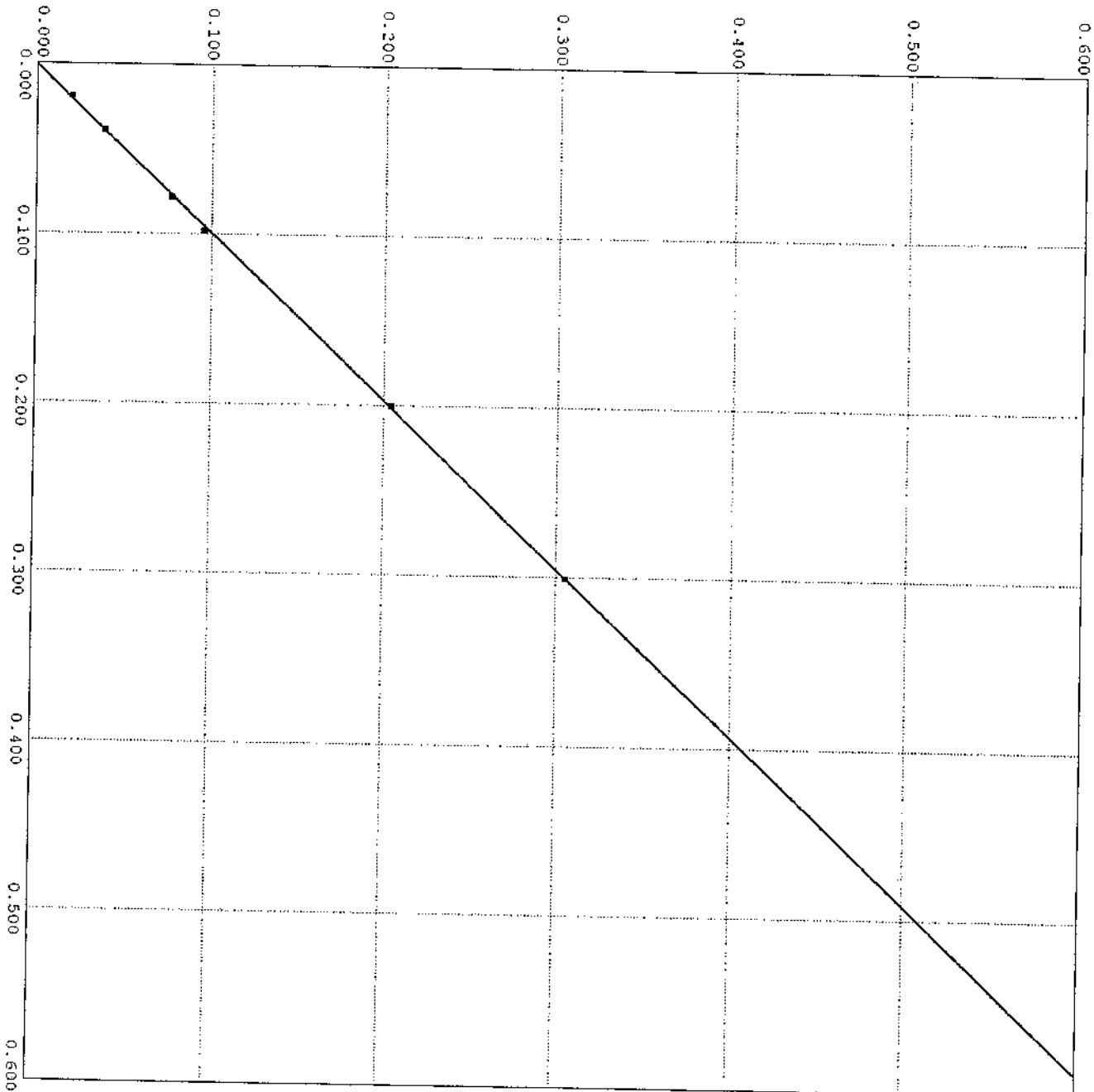
Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 11/24/2014
Time: 07:40:49

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

TARGET	AVERAGE	STD. DEV.
0.019	0.0207	0.0004
0.039	0.0398	0.0003
0.078	0.0782	0.0002
0.098	0.0967	0.0003
0.200	0.2052	0.0002
0.300	0.3060	0.0005

SLOPE = 1.021698
R² = 0.999761



CRB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100392

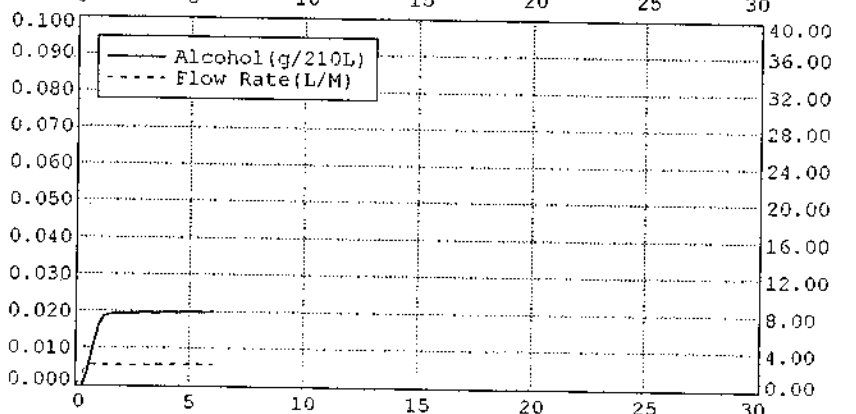
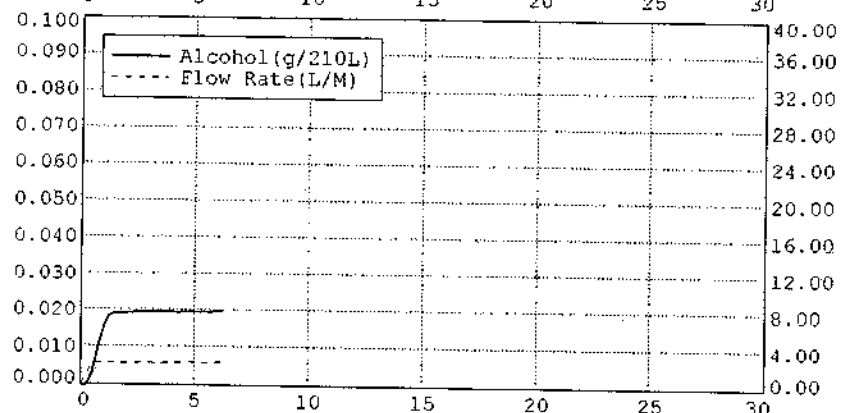
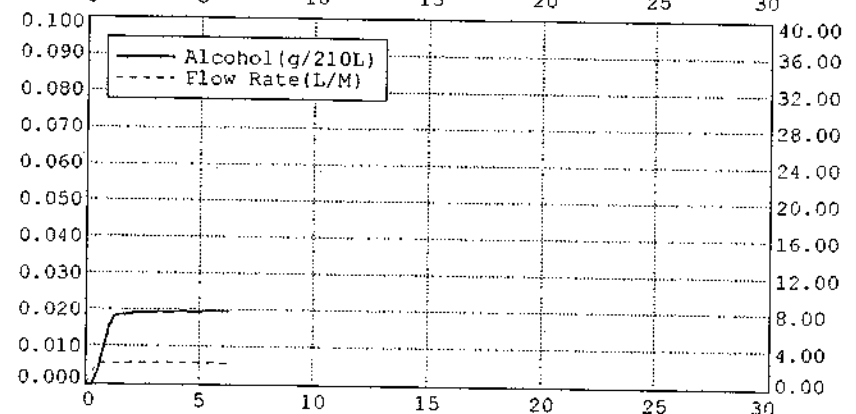
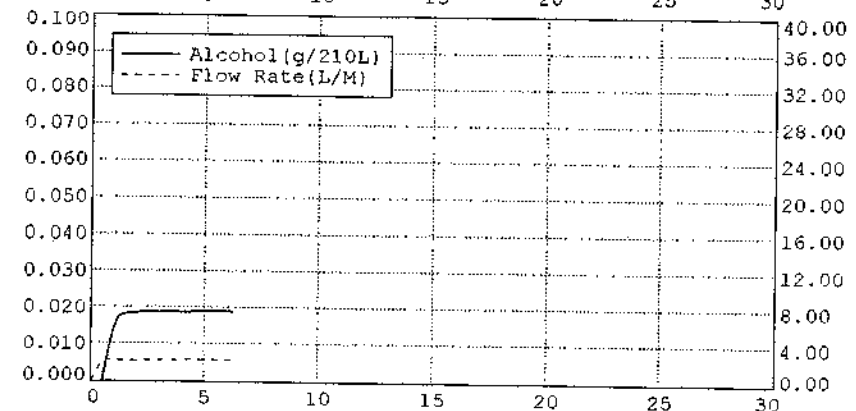
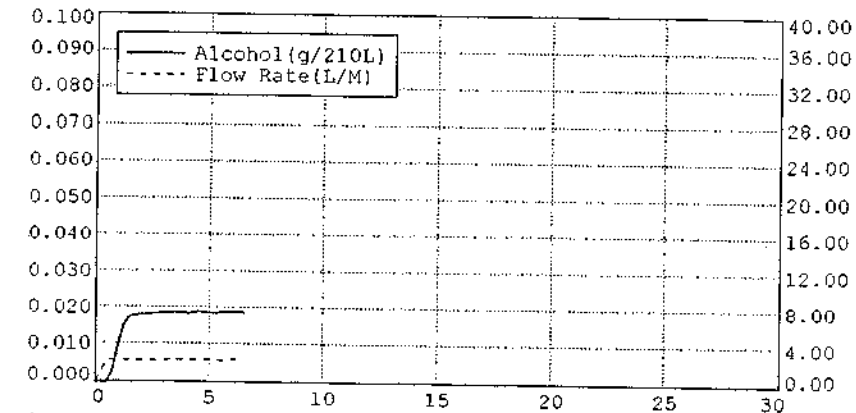
Date: 11/24/2014
 Time: 07:40:51

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.42: 0.019
 LOT #: 00813020A1
 EXPIRATION: 03/01/2015

BLANK TEST	0.000	07:41
INTERNAL STANDARD	VERIFIED	07:42
EXTERNAL STANDARD	0.020	07:42
BLANK TEST	0.000	07:43
EXTERNAL STANDARD	0.020	07:43
BLANK TEST	0.000	07:44
EXTERNAL STANDARD	0.020	07:44
BLANK TEST	0.000	07:45
EXTERNAL STANDARD	0.020	07:45
BLANK TEST	0.000	07:46
EXTERNAL STANDARD	0.021	07:46
BLANK TEST	0.000	07:47

Average = 0.0207
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100392

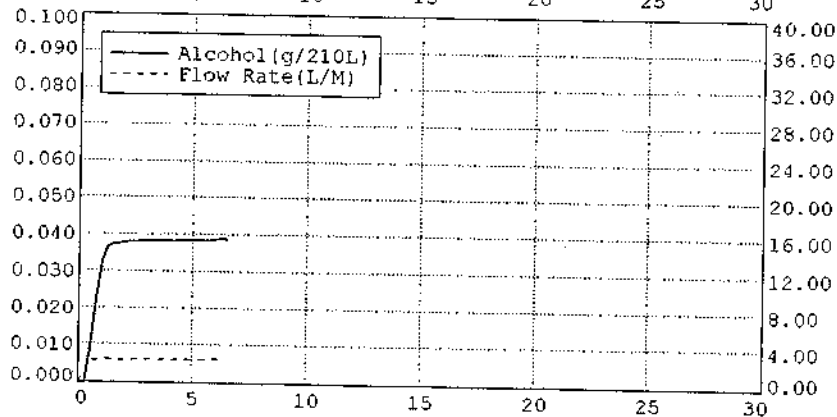
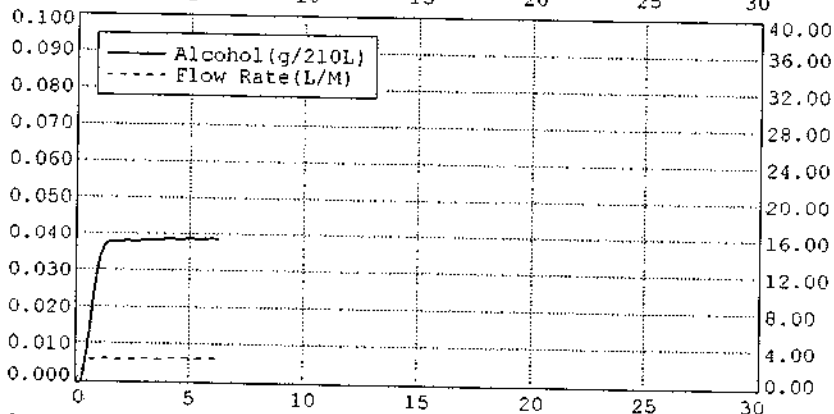
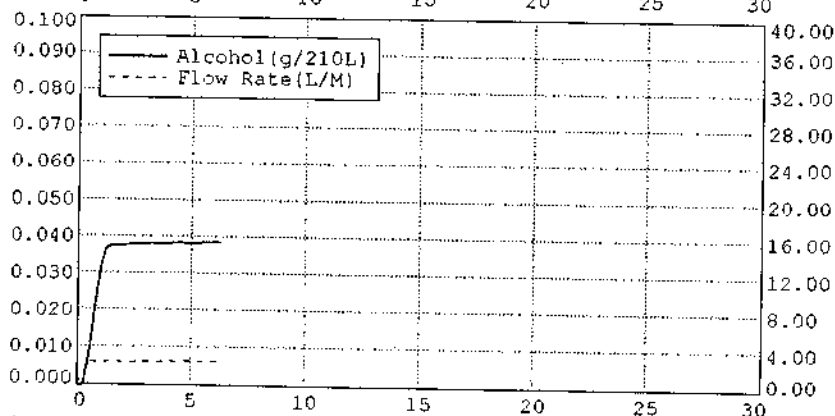
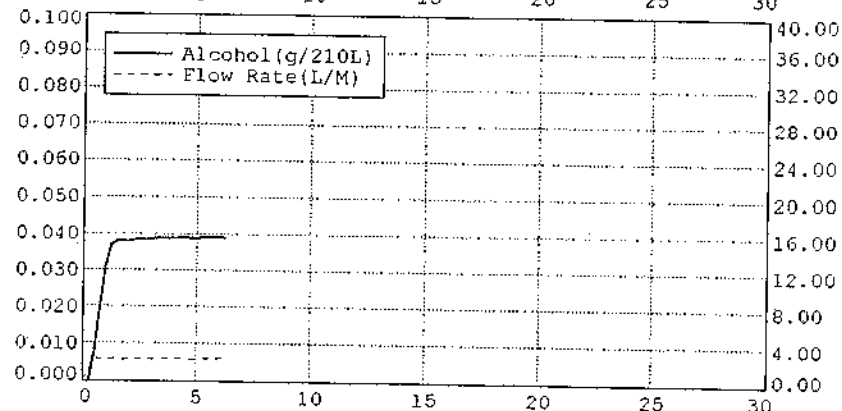
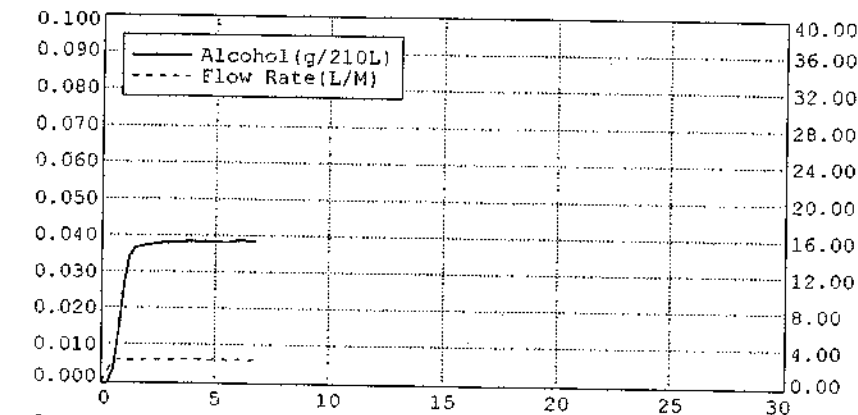
Date: 11/24/2014
 Time: 07:48:31

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.42: 0.039
 LOT #: 00813040A2
 EXPIRATION: 03/01/2015

BLANK TEST	0.000	07:49
INTERNAL STANDARD	VERIFIED	07:49
EXTERNAL STANDARD	0.039	07:50
BLANK TEST	0.000	07:51
EXTERNAL STANDARD	0.040	07:51
BLANK TEST	0.000	07:52
EXTERNAL STANDARD	0.039	07:52
BLANK TEST	0.000	07:53
EXTERNAL STANDARD	0.039	07:53
BLANK TEST	0.000	07:54
EXTERNAL STANDARD	0.039	07:54
BLANK TEST	0.000	07:55

Average = 0.0398
 Std Dev = 0.0003



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100392

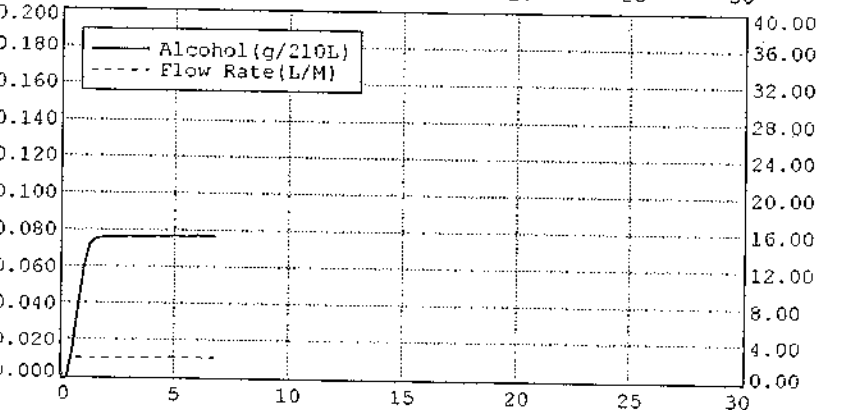
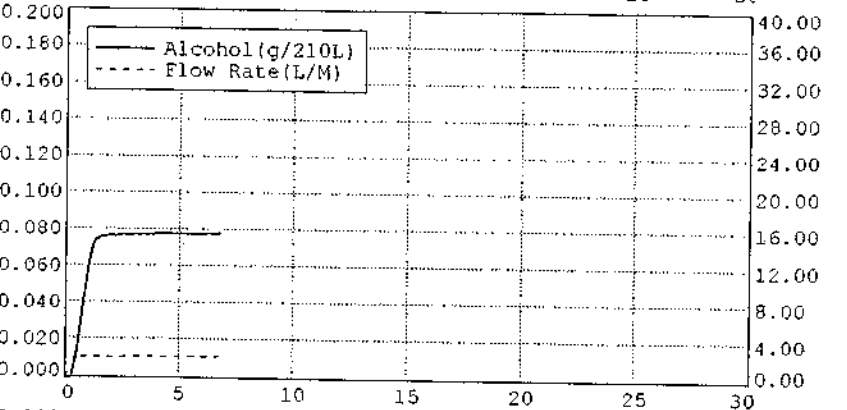
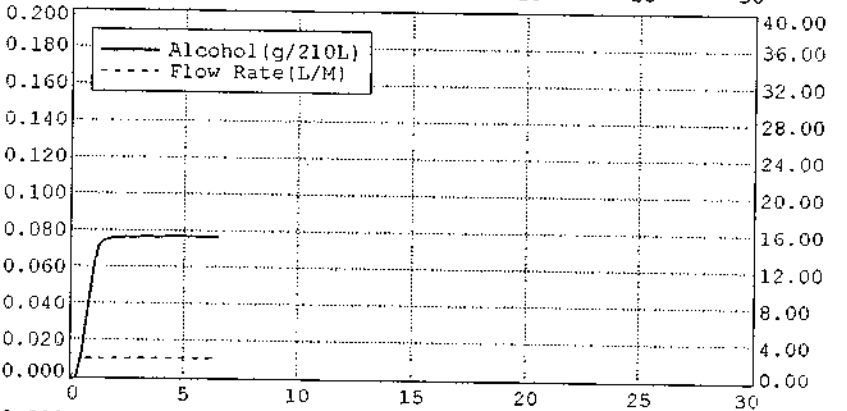
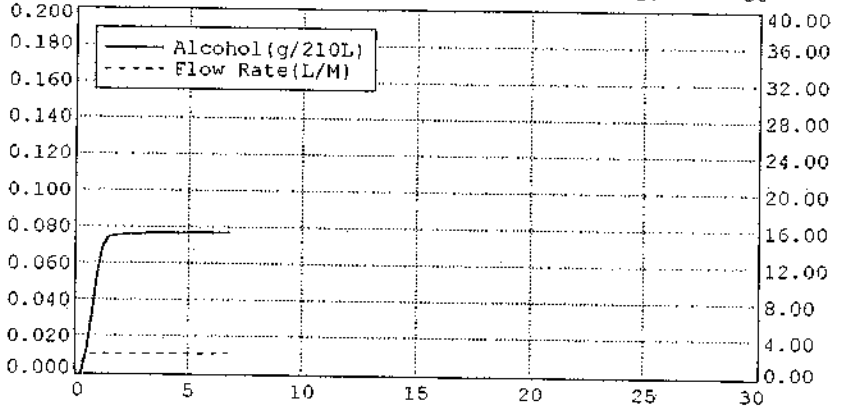
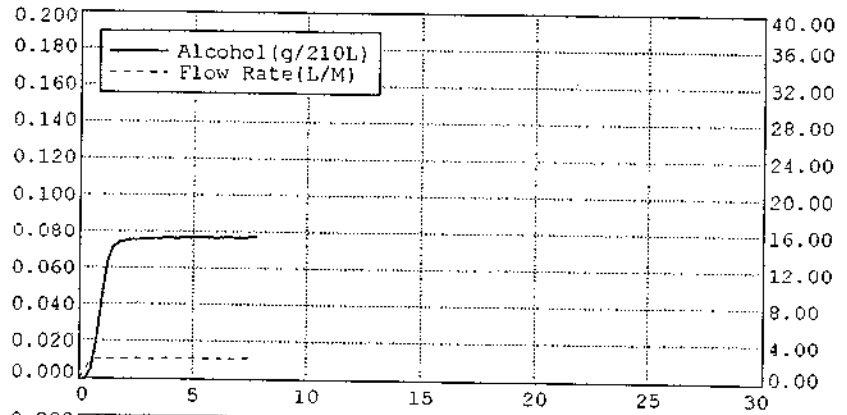
Date: 11/24/2014
 Time: 07:56:27

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.42: 0.078
 LOT #: 11313080A1
 EXPIRATION: 06/01/2015

BLANK TEST	0.000	07:57
INTERNAL STANDARD	VERIFIED	07:57
EXTERNAL STANDARD	0.078	07:57
BLANK TEST	0.000	07:58
EXTERNAL STANDARD	0.078	07:59
BLANK TEST	0.000	07:59
EXTERNAL STANDARD	0.077	08:00
BLANK TEST	0.000	08:01
EXTERNAL STANDARD	0.078	08:01
BLANK TEST	0.000	08:02
EXTERNAL STANDARD	0.078	08:02
BLANK TEST	0.000	08:03

Average = 0.0782
 Std Dev = 0.0002



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100392

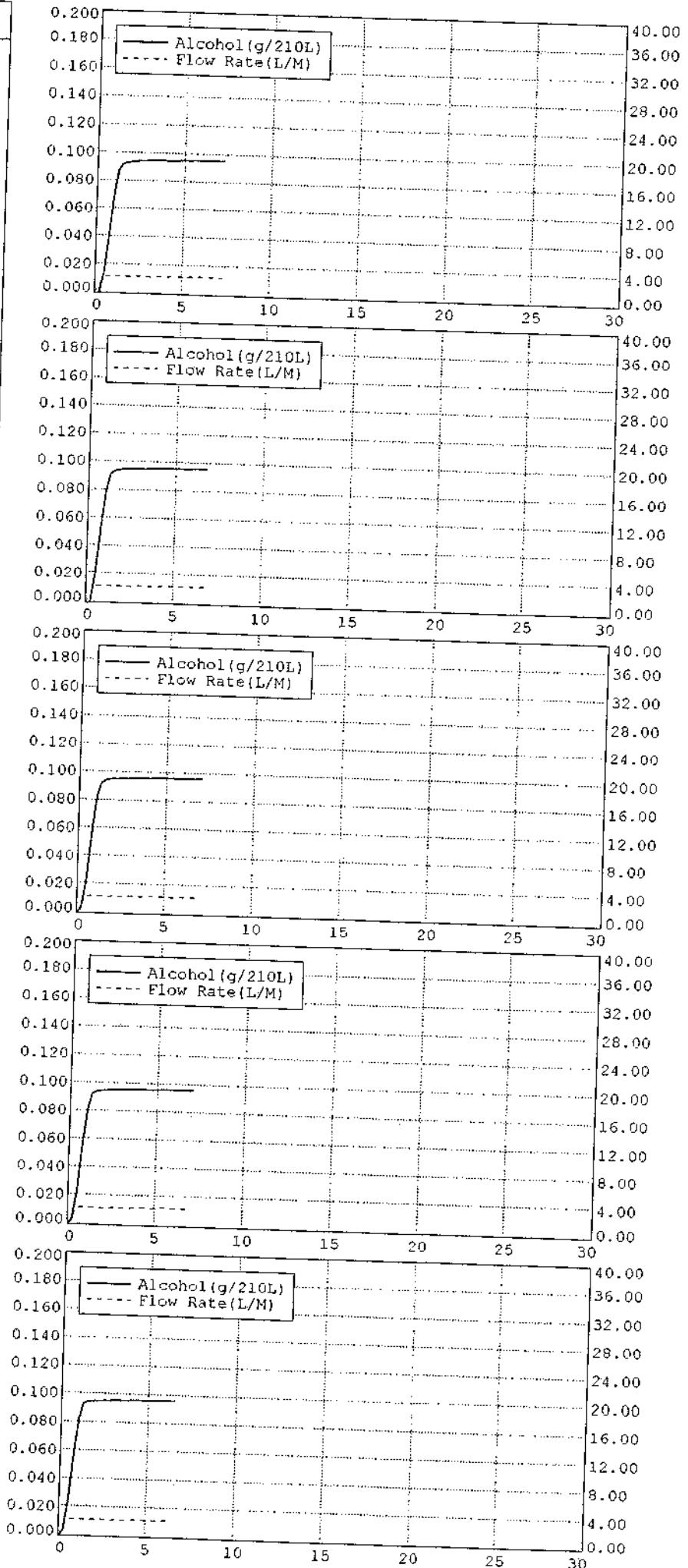
Date: 11/24/2014
Time: 08:05:25

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.42: 0.098
LOT #: 00813100A3
EXPIRATION: 03/01/2015

BLANK TEST	0.000	08:06
INTERNAL STANDARD	VERIFIED	08:06
EXTERNAL STANDARD	0.096	08:07
BLANK TEST	0.000	08:07
EXTERNAL STANDARD	0.096	08:08
BLANK TEST	0.000	08:09
EXTERNAL STANDARD	0.096	08:09
BLANK TEST	0.000	08:10
EXTERNAL STANDARD	0.096	08:10
BLANK TEST	0.000	08:11
EXTERNAL STANDARD	0.097	08:11
BLANK TEST	0.000	08:12

Average = 0.0967
Std Dev = 0.0003



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100392

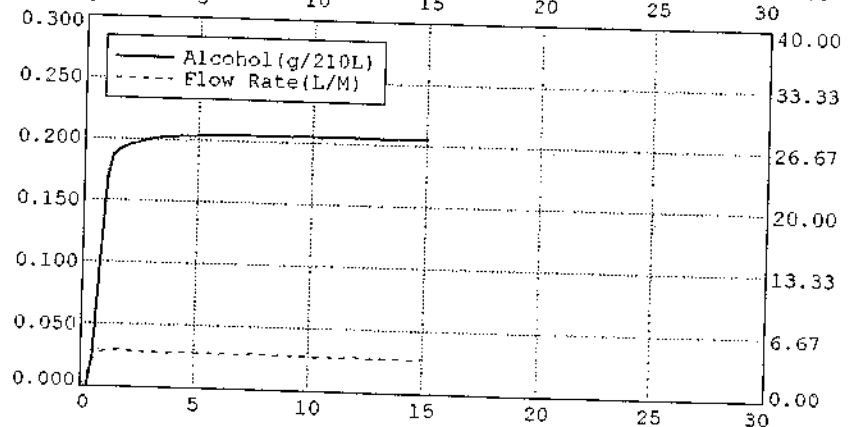
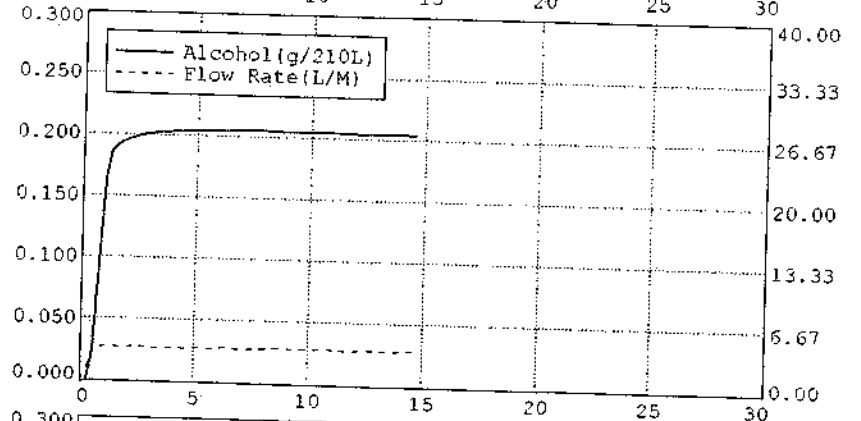
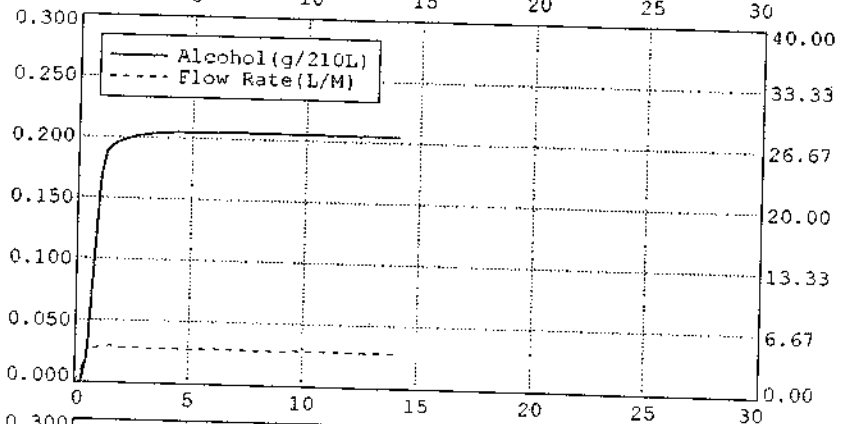
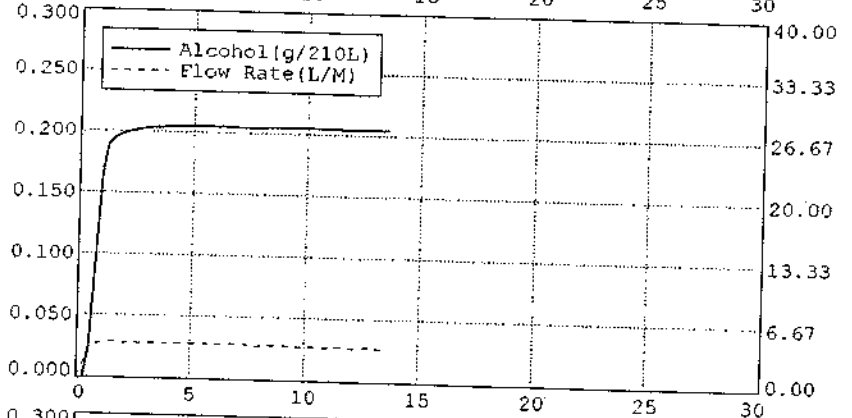
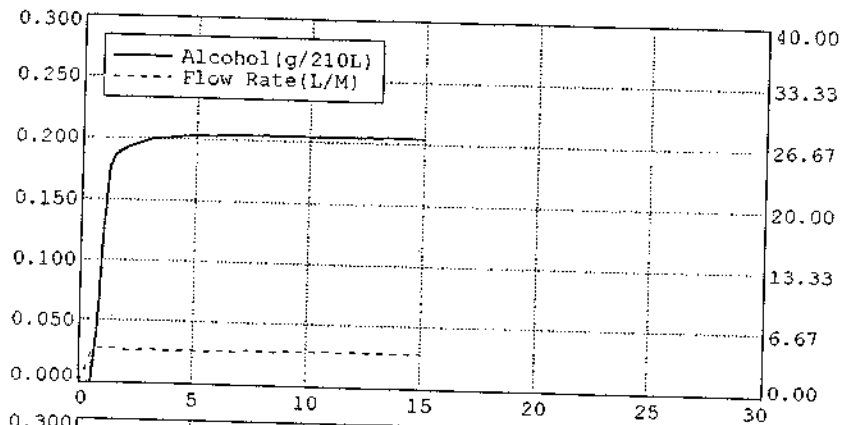
Date: 11/24/2014
 Time: 08:16:52

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	08:18
INTERNAL STANDARD	VERIFIED	08:18
EXTERNAL STANDARD	0.205	08:18
BLANK TEST	0.000	08:19
EXTERNAL STANDARD	0.205	08:19
BLANK TEST	0.000	08:20
EXTERNAL STANDARD	0.205	08:21
BLANK TEST	0.000	08:21
EXTERNAL STANDARD	0.204	08:22
BLANK TEST	0.000	08:23
EXTERNAL STANDARD	0.205	08:23
BLANK TEST	0.000	08:24

Average = 0.2052
 Std Dev = 0.0002



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100392

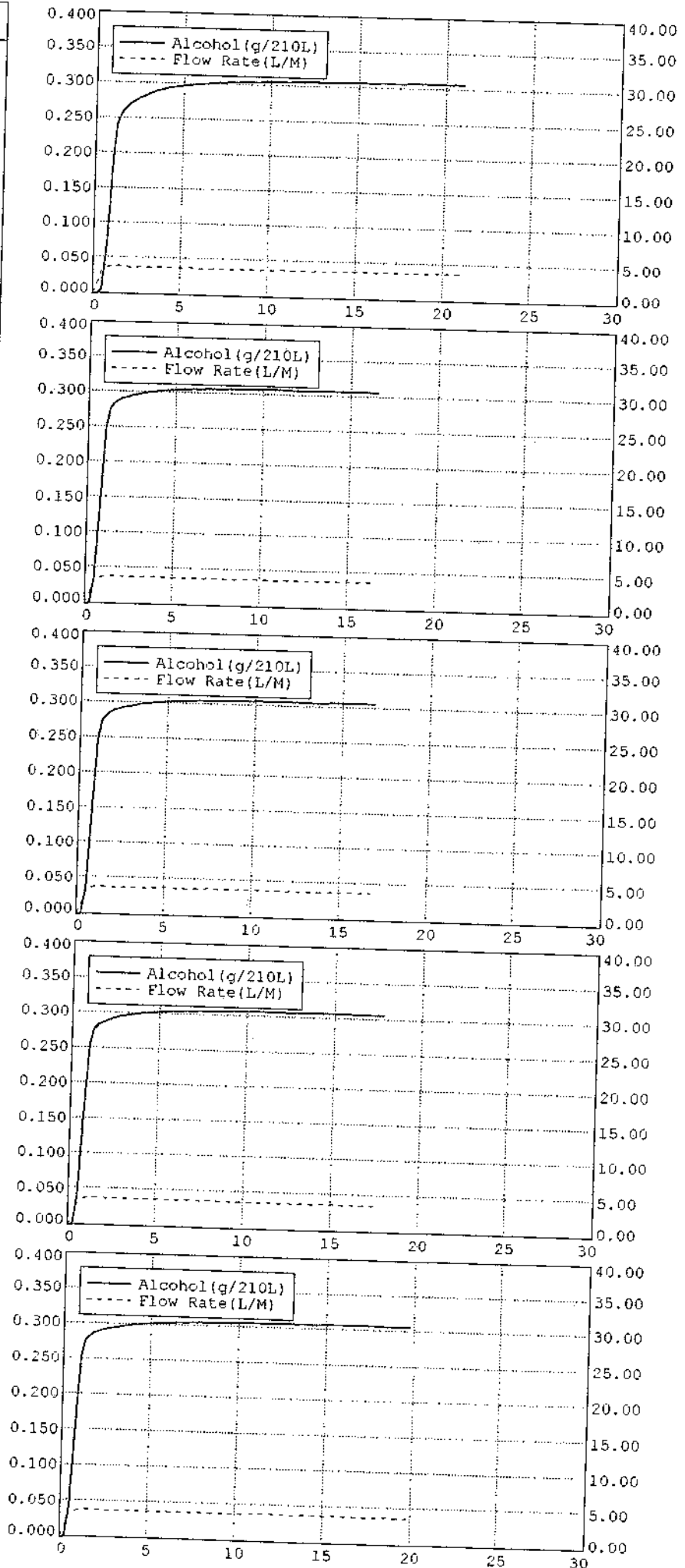
Date: 11/24/2014
 Time: 08:27:30

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 14150
 EXPIRATION: 06/02/2016

BLANK TEST	0.000	08:28
INTERNAL STANDARD	VERIFIED	08:28
EXTERNAL STANDARD	0.306	08:29
BLANK TEST	0.000	08:30
EXTERNAL STANDARD	0.306	08:30
BLANK TEST	0.000	08:31
EXTERNAL STANDARD	0.305	08:31
BLANK TEST	0.000	08:32
EXTERNAL STANDARD	0.305	08:33
BLANK TEST	0.000	08:34
EXTERNAL STANDARD	0.306	08:34
BLANK TEST	0.000	08:35

Average = 0.3060
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 11/24/2014
Time: 08:41:57

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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

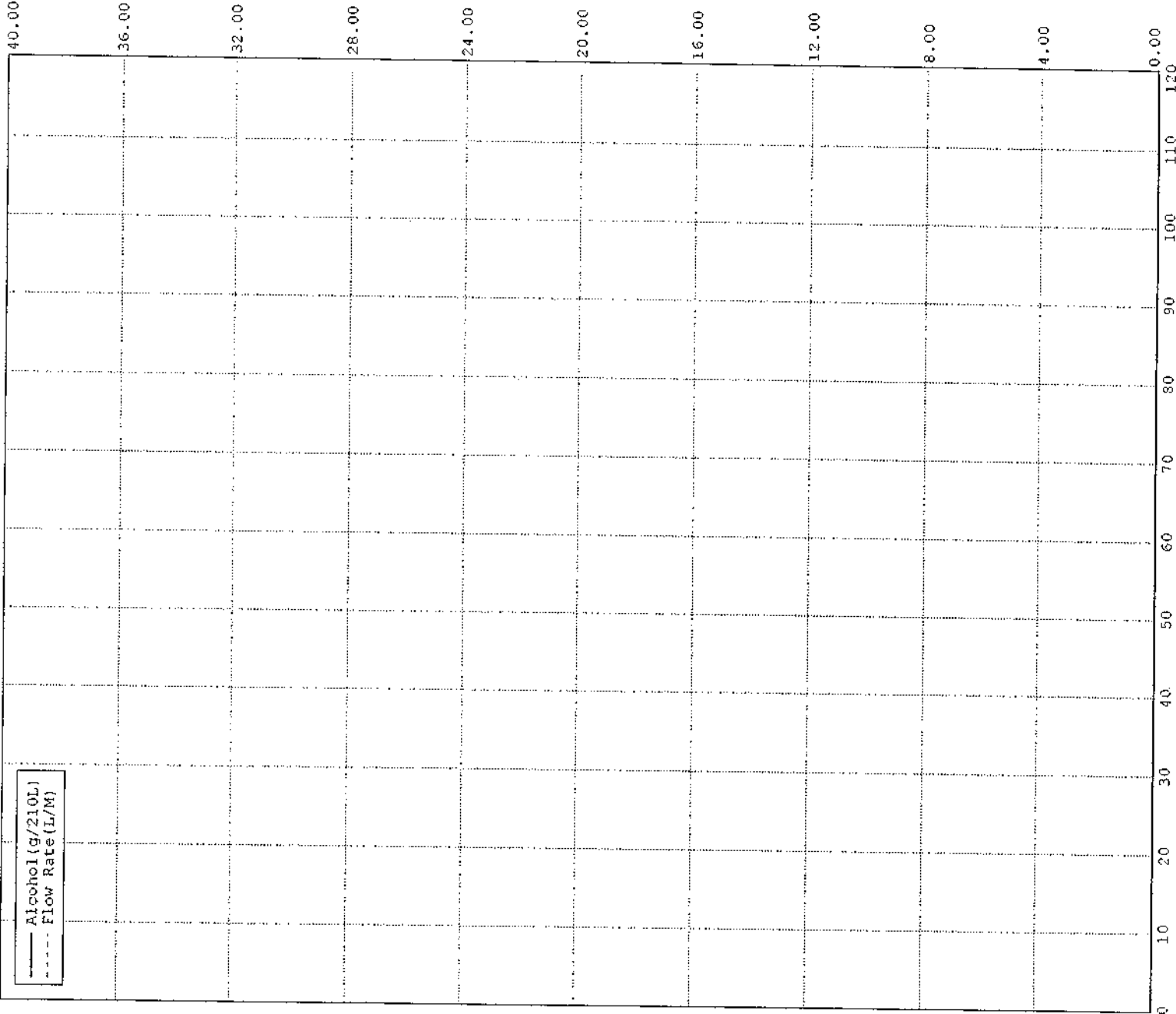
DEPT/AGENCY:
AAA1
CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.45: 0.078
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK PASSED 09:42
BLANK TEST 0.000 09:43
INTERNAL STANDARD VERIFIED 09:43
EXTERNAL STANDARD 0.078 09:43
BLANK TEST 0.000 09:44
SUBJECT SAMPLE INCOMPLETE 09:46

CS

Alcohol (g/210L)
Flow Rate (L/M)



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 11/25/2014
Time: 07:36:09

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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

DEPT/AGENCY:
AAA1

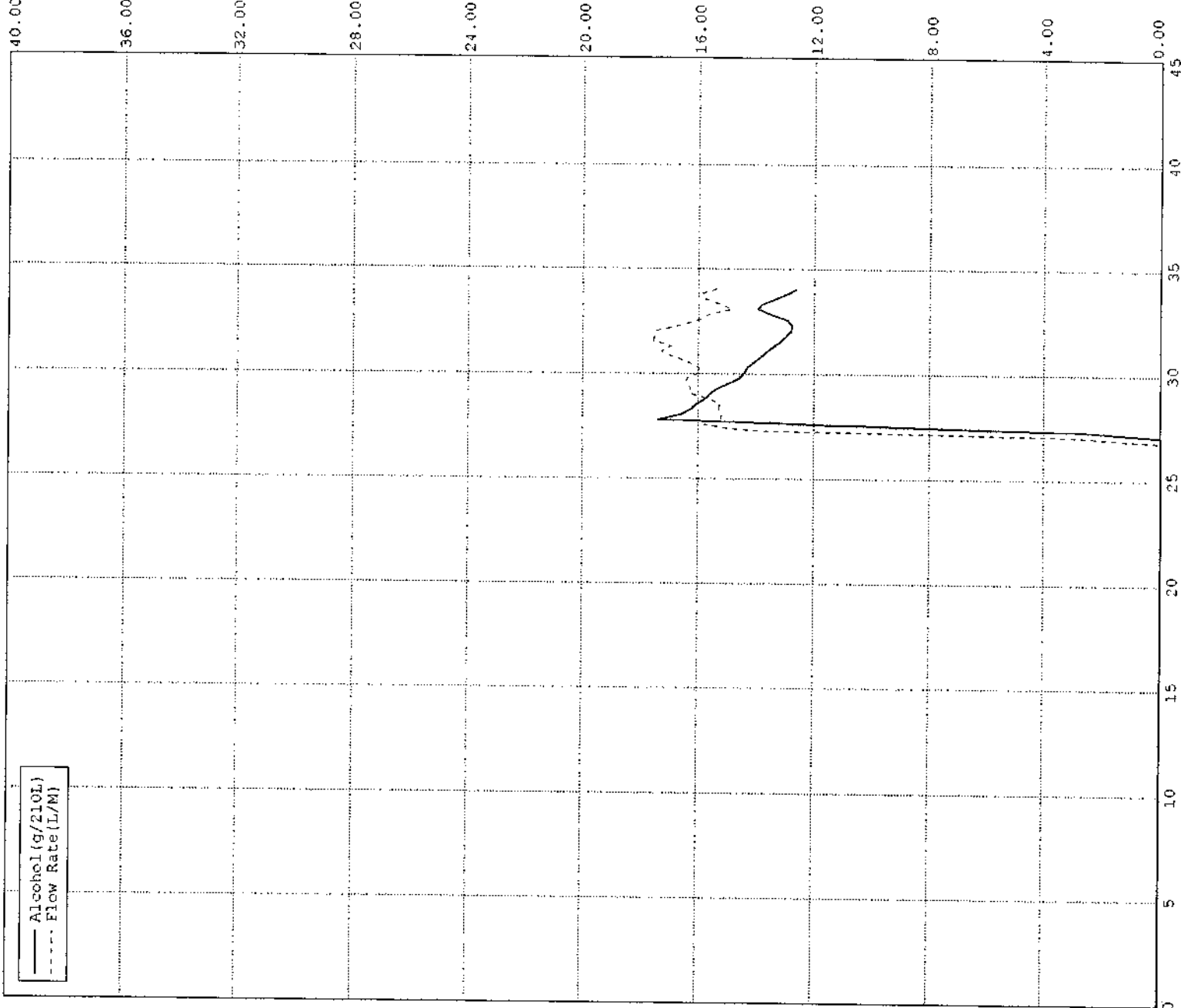
CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.87: 0.079
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	07:37
BLANK TEST	0.000	07:37
INTERNAL STANDARD	VERIFIED	07:37
EXTERNAL STANDARD	0.079	07:37
BLANK TEST	0.000	07:38
SUBJECT SAMPLE	INVALID	07:39

CS



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100392

Date: 11/25/2014
Time: 07:45:28

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

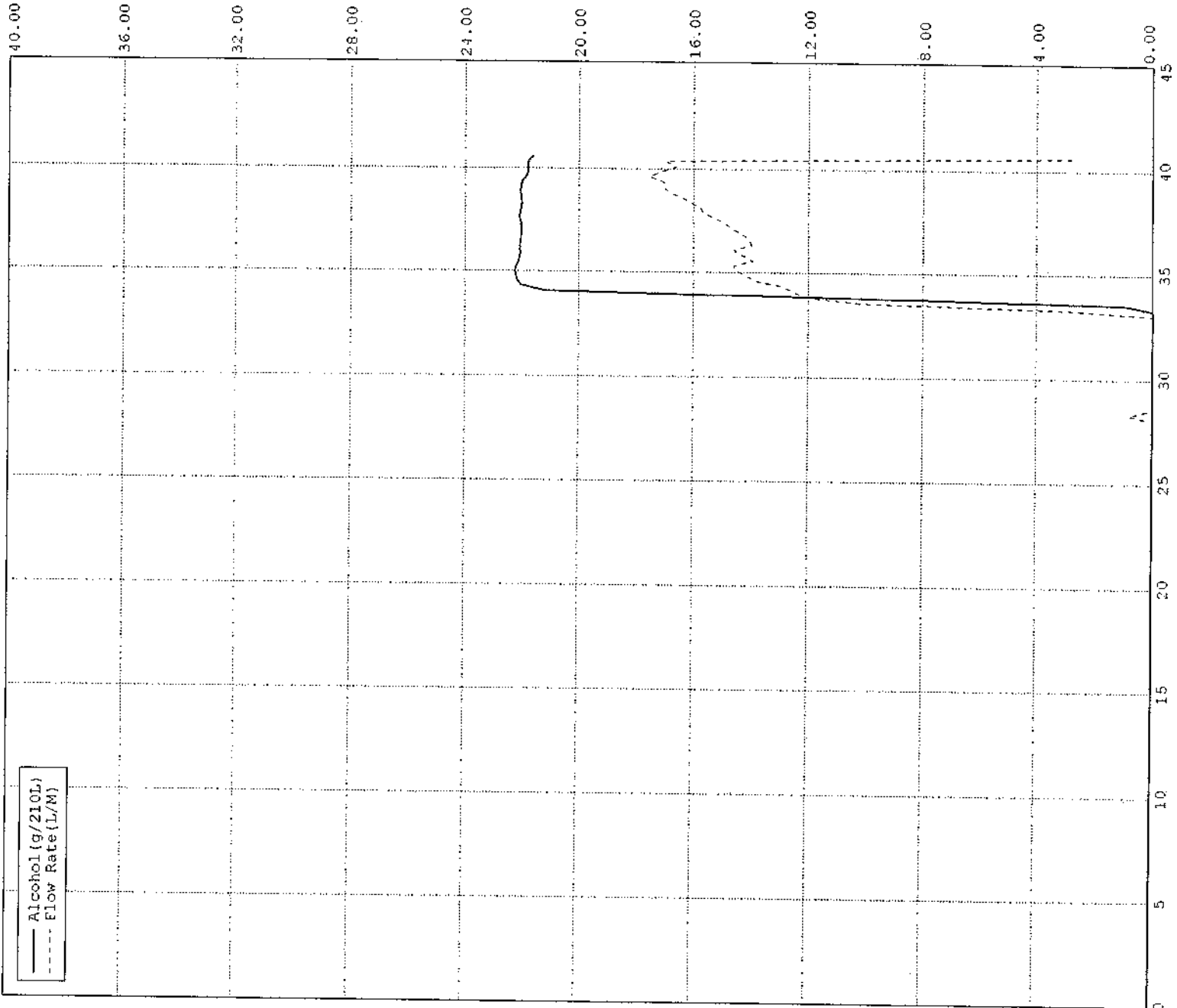
OPERATOR NAME:
COLLEEN S OBRYANT
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.87: 0.079
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	07:46
BLANK TEST	0.000	07:46
INTERNAL STANDARD	VERIFIED	07:46
$Xq = 0.096$ (1.00%)		
EXTERNAL STANDARD	0.079	07:47
$X[1] = 0.0797$ (0.0002) (0.0032)		
BLANK TEST	0.000	07:47
SUBJECT SAMPLE INTERFERENCE	07:48	
$X[1] = 0.1091$ (-0.0190) (0.0008)		



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 11/25/2014
Time: 07:52:23

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

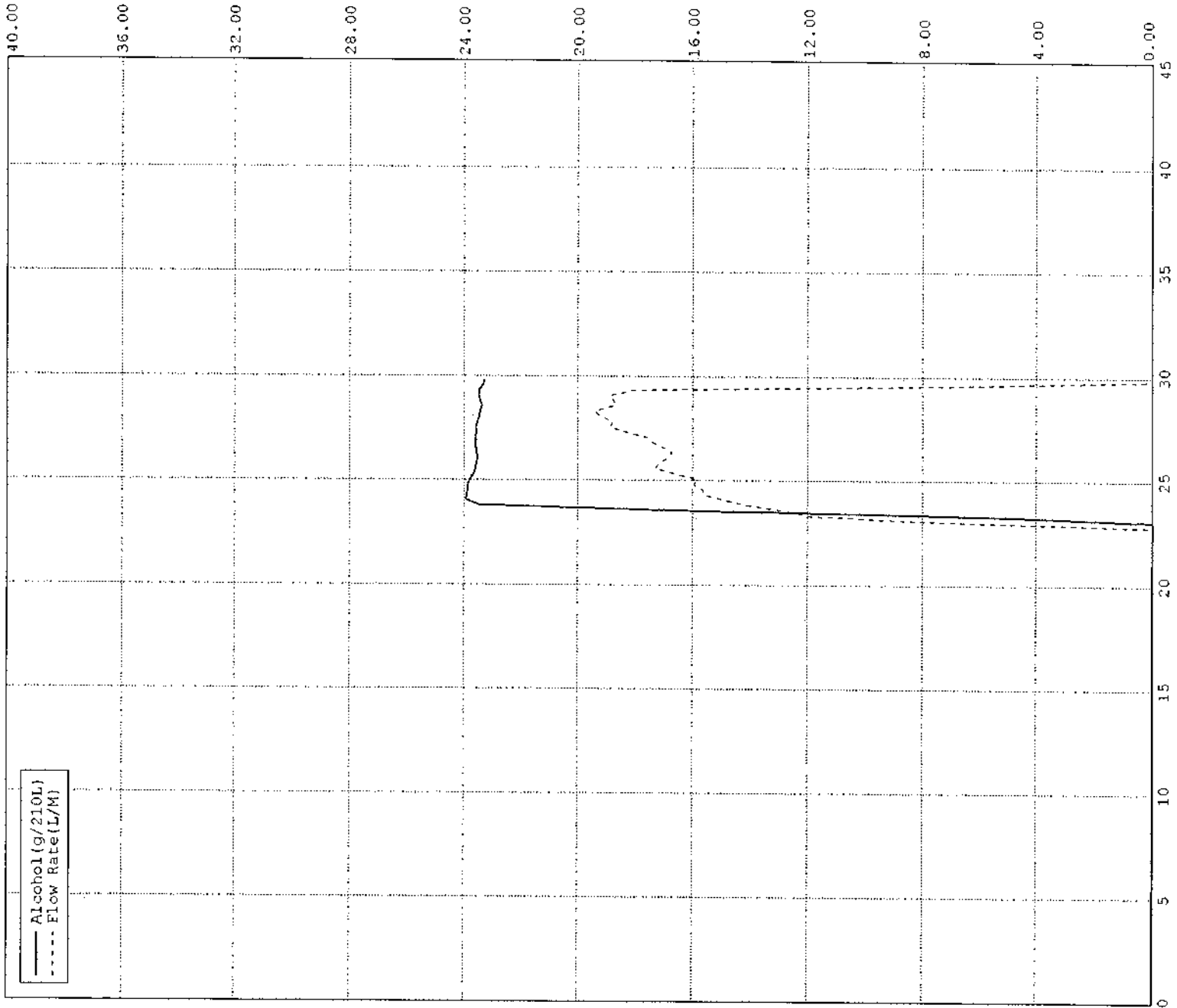
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.89: 0.079
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	07:53
BLANK TEST	0.000	07:53
INTERNAL STANDARD	VERIFIED	07:53
Xg = 0.096 (1.00%)		
EXTERNAL STANDARD	0.078	07:54
X[1] = 0.0789 (0.0001) (0.0021)		
BLANK TEST	0.000	07:54
SUBJECT SAMPLE INTERFERENCE		07:55
X[1] = 0.1173 (-0.0213) (0.0028)		



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100392

Date: 11/25/2014

Time: 07:57:47

SUBJECT NAME:

TEST TEST

LICENSE #: INT-NEGATIVE

OPERATOR NAME:

COLLEEN S O'BRYAN

OPERATOR'S #: 6237

DEPT/AGENCY:

AAA1

CASE/REPORT: 14-1234

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.89: 0.079

LOT #: 11313080A1

EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK

PASSED 07:58

BLANK TEST

0.000 07:58

INTERNAL STANDARD

VERIFIED 07:59

Xg = 0.096 (0.36%)

EXTERNAL STANDARD

0.079 07:59

X[1] = 0.0796 (0.0012) (0.0024)

BLANK TEST

0.000 08:00

SUBJECT SAMPLE (Vol=1.61L)

0.095 08:00

X[1] = 0.0958 (-0.0001) (0.0016)

BLANK TEST

0.000 08:01

EXTERNAL STANDARD

0.079 08:02

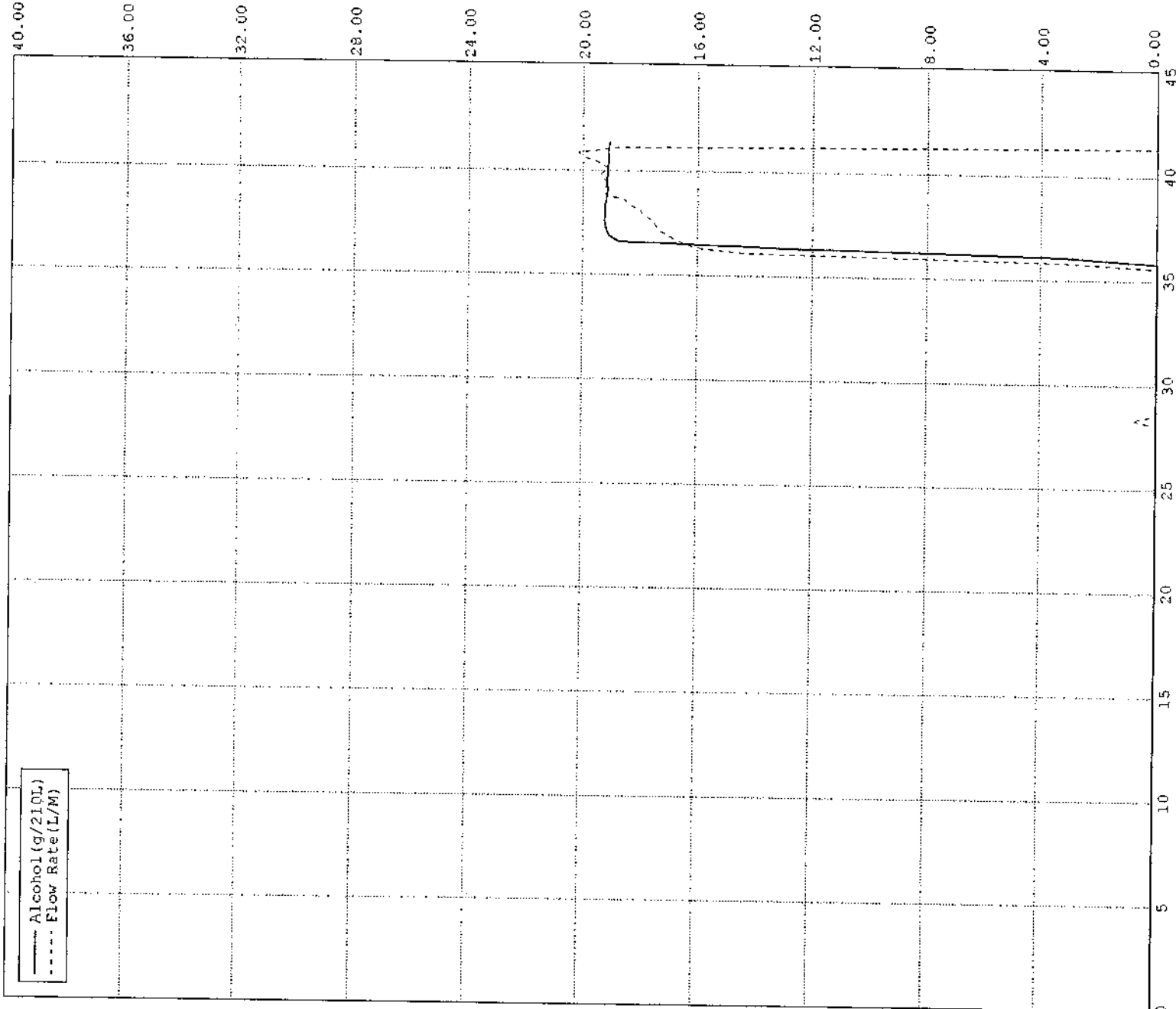
X[1] = 0.0792 (0.0008) (0.0019)

BLANK TEST

0.000 08:03

Filter 2 average 0.0006

Filter 3 average 0.0030



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 11/25/2014
Time: 08:16:27

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 5237

DEPT/AGENCY:
AAA1

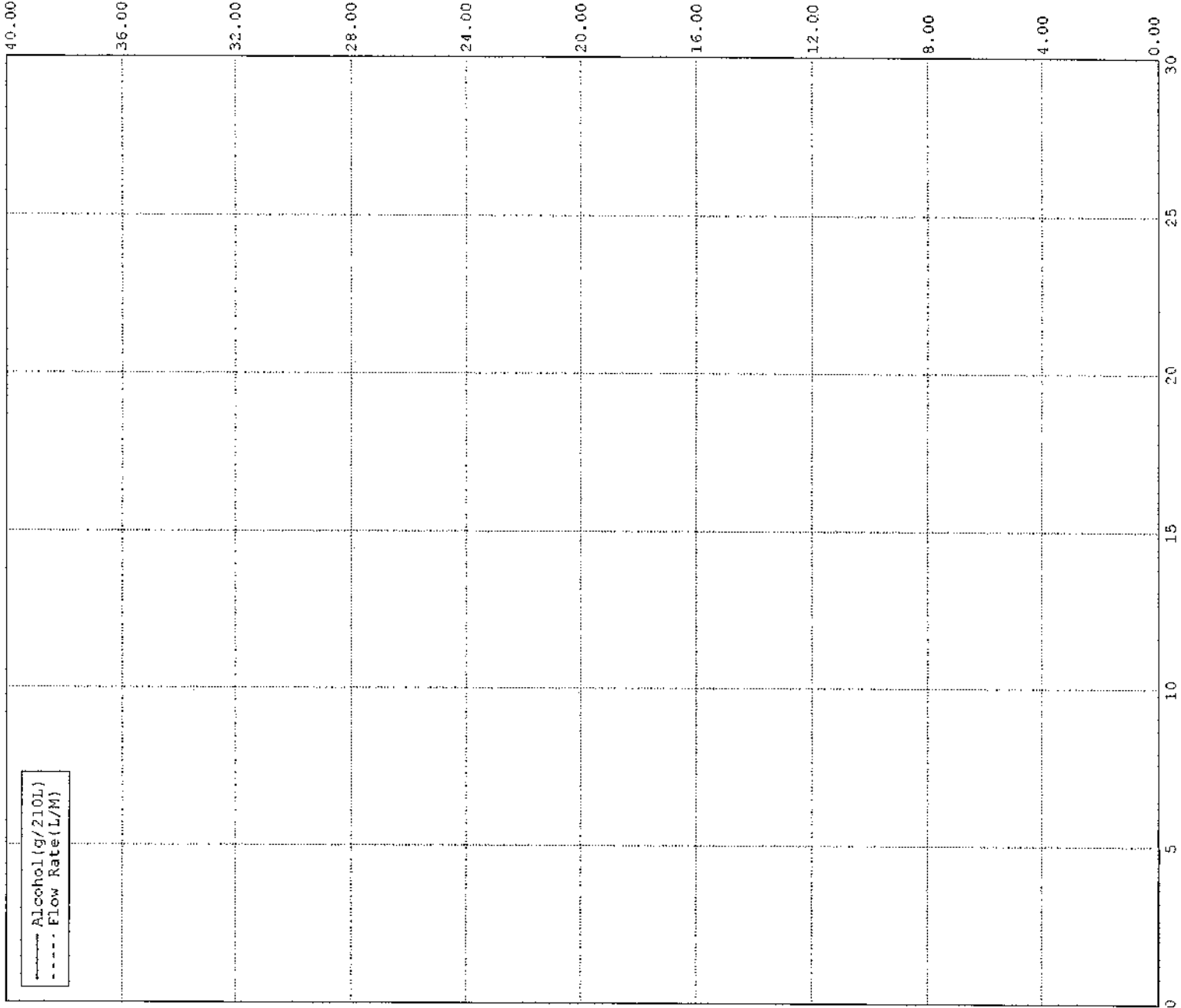
CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.90: 0.079
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK PASSED 08:18
BLANK TEST 0.000 08:18
INTERNAL STANDARD VERIFIED 08:18
EXTERNAL STANDARD 0.079 08:18
BLANK TEST 0.000 08:19

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100392

Date: 11/25/2014
Time: 08:44:30

SUBJECT NAME:
TEST TEST
LICENSE #: NONDRINKING

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.91: 0.079
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	08:45
BLANK TEST	0.000	08:45
INTERNAL STANDARD	VERIFIED	08:45
EXTERNAL STANDARD	0.079	08:45
BLANK TEST	0.000	08:46
SUBJECT SAMPLE	0.000	08:47
BLANK TEST	0.000	08:48
EXTERNAL STANDARD	0.080	08:48
BLANK TEST	0.000	08:49

