

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 100687 Analyst Collen 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 00813030A1 Exp 3/1/15
- ii. 0.040g/210L Mnf ILMO Lot 00813040A2 Exp 3/1/15
- iii. 0.080g/210L Mnf ILMO Lot 09214080A2 Exp 5/1/16
- 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 DR5298 Date Calibrated 2/19/14
- vi. 0.300g/210L Mnf Guth Lot 14150 Exp 6/2/16
 1. Simulator S/N SD1177 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 SD1198 Date Calibrated 2/20/14
- ii. Isopropanol - Mnf Guth Lot 14030 Level 0.100 Exp 1/20/16
 1. Simulator S/N SD1202 Date Calibrated 2/20/14
- iii. Negative Control - Mnf Guth Lot 14030 Level 0.100 Exp 1/20/16
 1. Simulator S/N DR4161 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 dmt: 100687

Date: 11/21/2014
Time: 14:42:20

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C PASSED
Breath Tube = 48.1°C PASSED

PUMP INFO

Flow Rate = 4.057 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: 100687

Date: 11/21/2014
Time: 2:49 PM

Temperatures (°C)
Sample Cell: 48.8°C
Breath Tube: 48.0°C

Current Barometer 28.7 in
Volume (Ltr) 1.57

Settings
Lamp: 1.67 V
Bias: 80 V
Cooler: 1.63 V
Chopper: 535 Hz

Voltages (V)
Flow: 1.06 V
Detector: 0.066 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 10/24/2011
Time: 09:24:54

Ca = 0.1000
CAL = 1.019002 0.800 <= CAL < 1.200
b1 = 0.0009 0.0000 <= b1 < 0.0040
b2 = 0.0040 0.0010 <= b2 < 0.0100
b3 = 0.0021 0.0000 <= b3 < 0.0040
Xq = 0.1354 0.0500 <= Xq < 0.2000
a21 = 1.149434 1.050 <= a21 < 1.300
a31 = 0.503196 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 11/21/2014
Time: 14:56:04

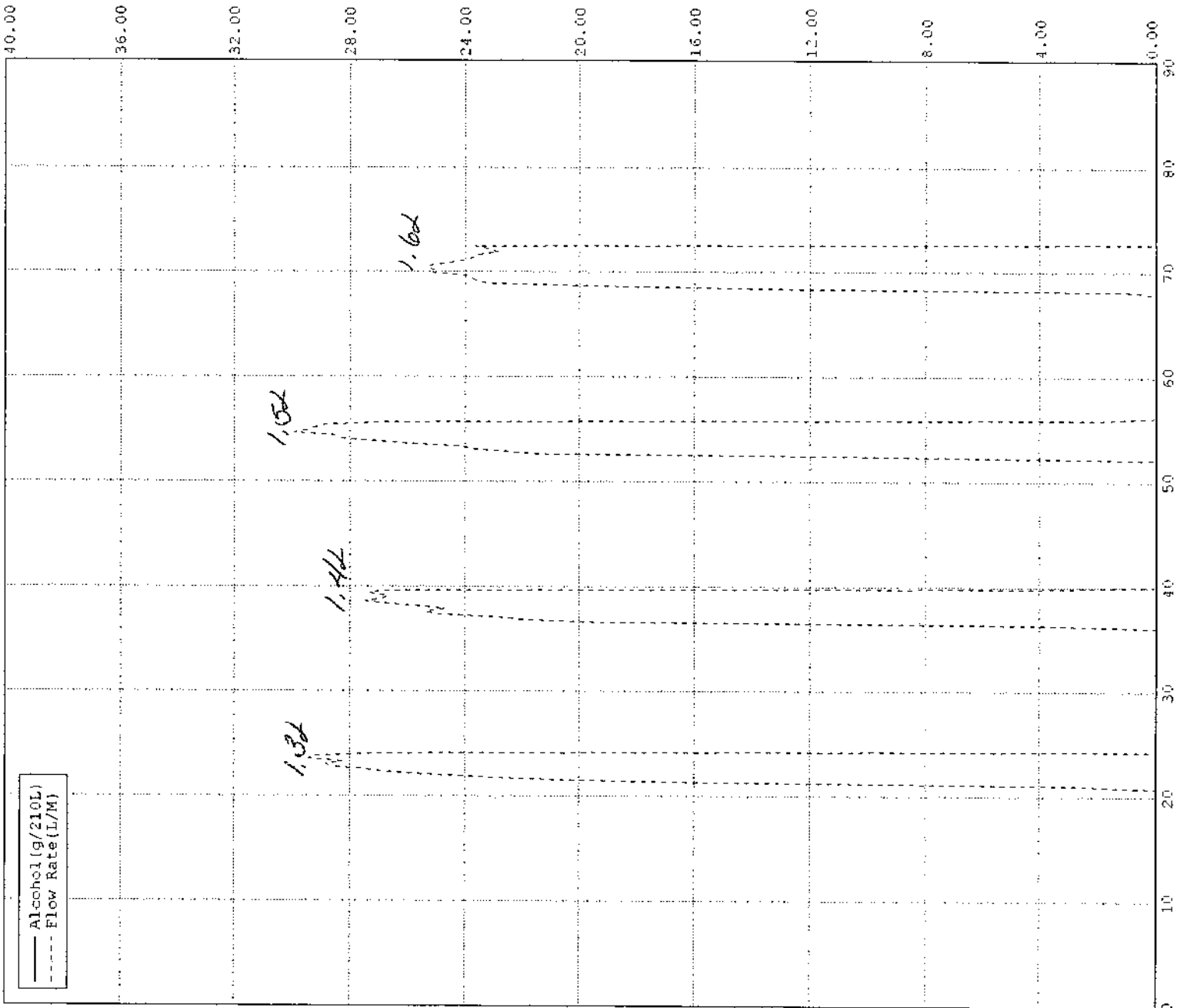
SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME

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 28.65: 0.076

DIAGNOSTIC CHECK	PASSED	14:57
BLANK TEST	0.000	14:57
INTERNAL STANDARD	VERIFIED	14:57
EXTERNAL STANDARD	0.076	14:57
BLANK TEST	0.000	14:58
SUBJECT SAMPLE	0.000	14:59
BLANK TEST	0.000	15:00
EXTERNAL STANDARD	0.077	15:00
BLANK TEST	0.000	15:01



LINEARITY CHECK

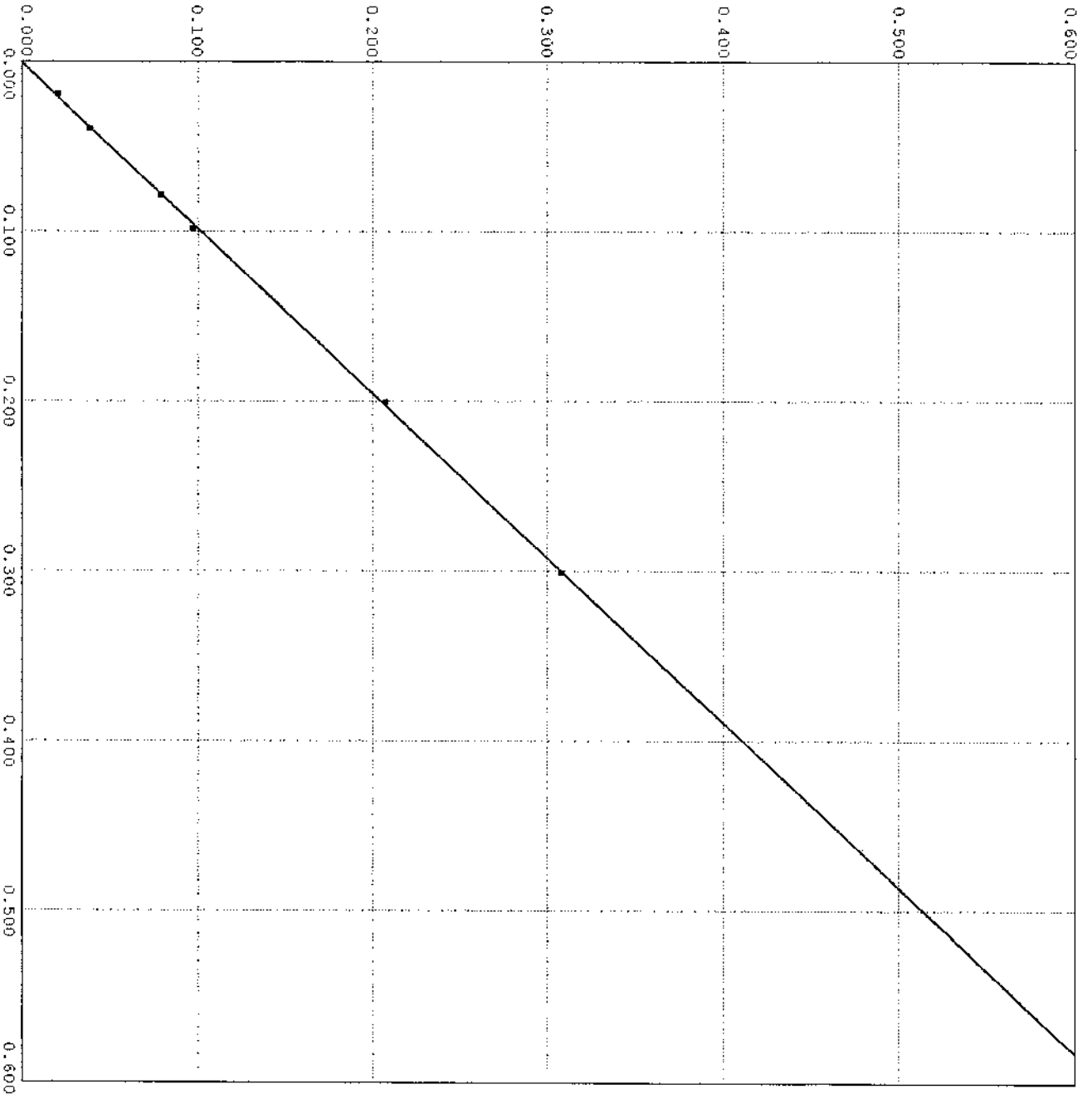
Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 11/24/2014
Time: 08:20:16

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

TARGET	AVERAGE	STD. DEV.
0.019	0.0211	0.0003
0.039	0.0398	0.0009
0.078	0.0800	0.0006
0.098	0.0980	0.0003
0.200	0.2083	0.0006
0.300	0.3086	0.0003

SLOPE = 1.031270
R² = 0.999731



CRB

LINEARITY CHECK: Control Test 1

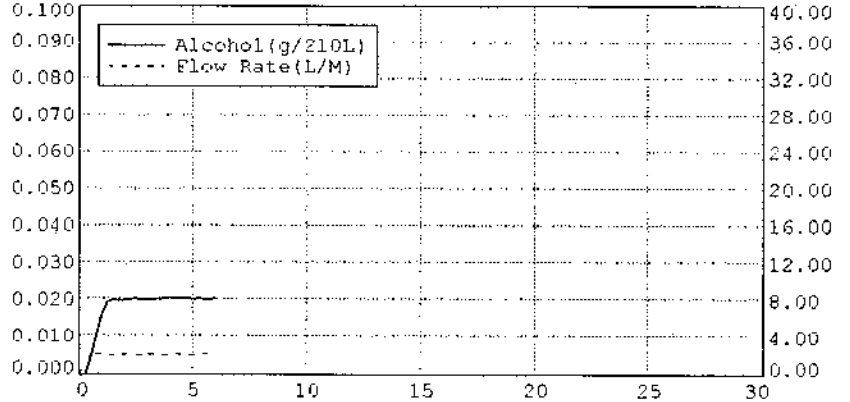
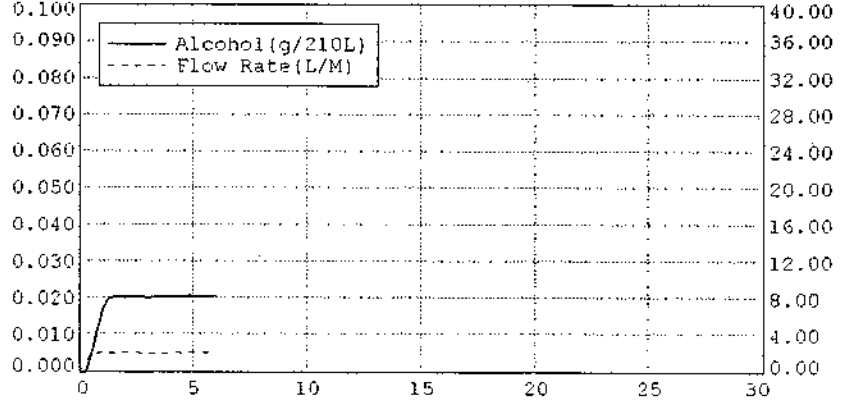
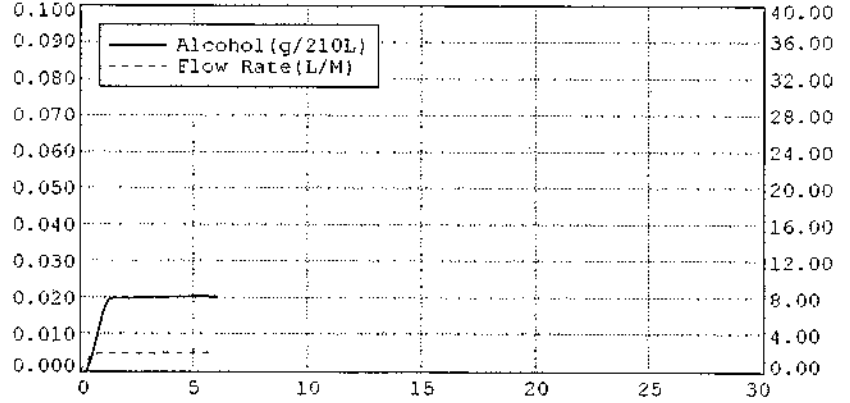
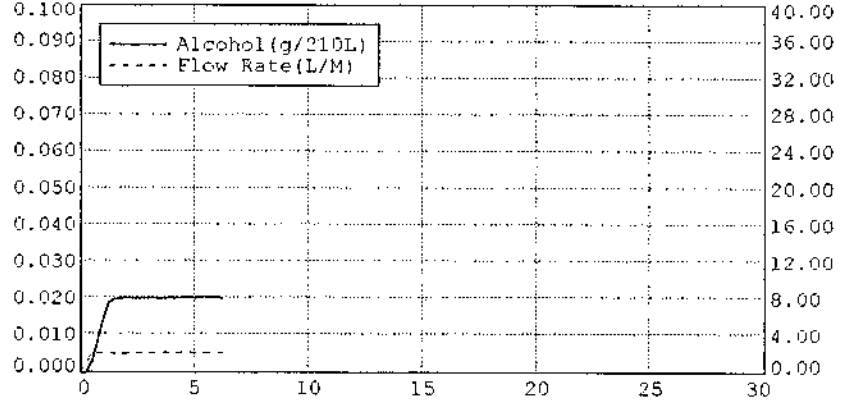
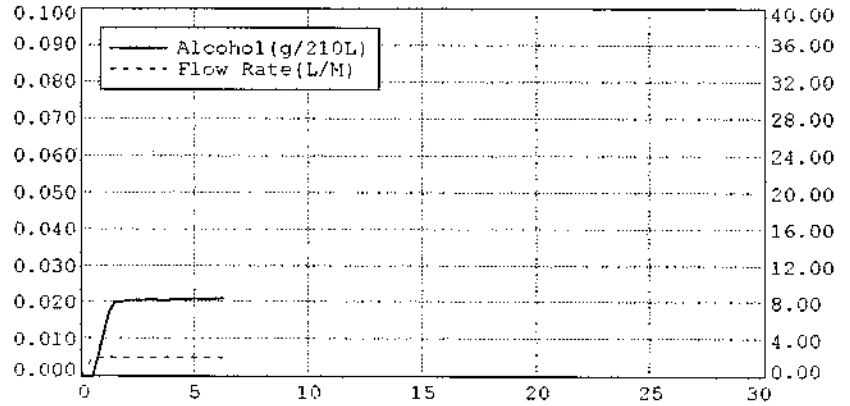
Alaska Department of Public Safety
 DATAMASTER dmt: 100687

Date: 11/24/2014
 Time: 08:20:17

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

BLANK TEST	0.000	08:21
INTERNAL STANDARD	VERIFIED	08:21
EXTERNAL STANDARD	0.021	08:21
BLANK TEST	0.000	08:22
EXTERNAL STANDARD	0.020	08:22
BLANK TEST	0.000	08:23
EXTERNAL STANDARD	0.021	08:23
BLANK TEST	0.000	08:24
EXTERNAL STANDARD	0.021	08:25
BLANK TEST	0.000	08:25
EXTERNAL STANDARD	0.020	08:26
BLANK TEST	0.000	08:27

Average = 0.0211
 Std Dev = 0.0003



LINEARITY CHECK: Control Test 2

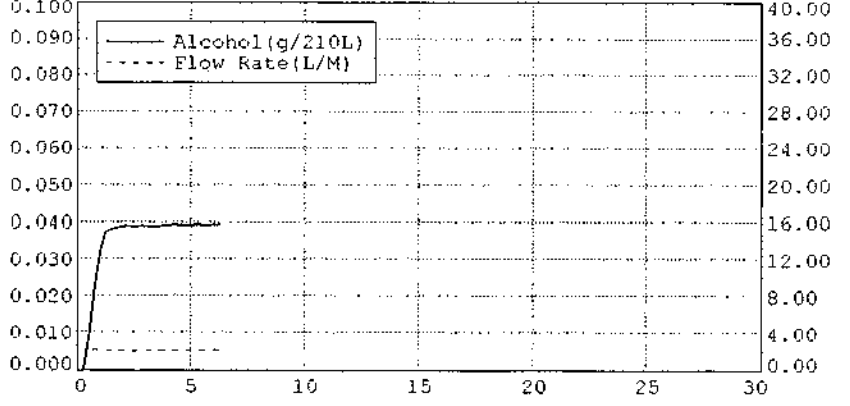
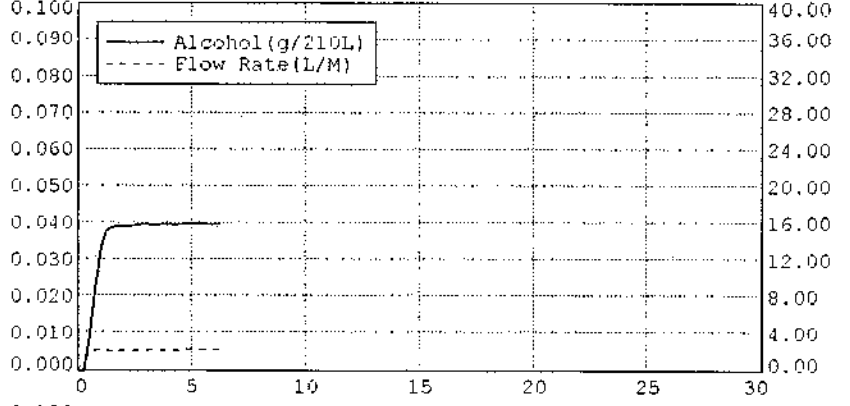
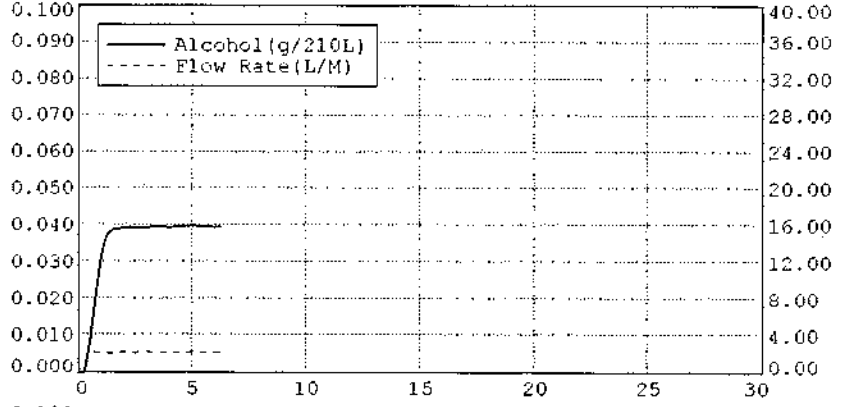
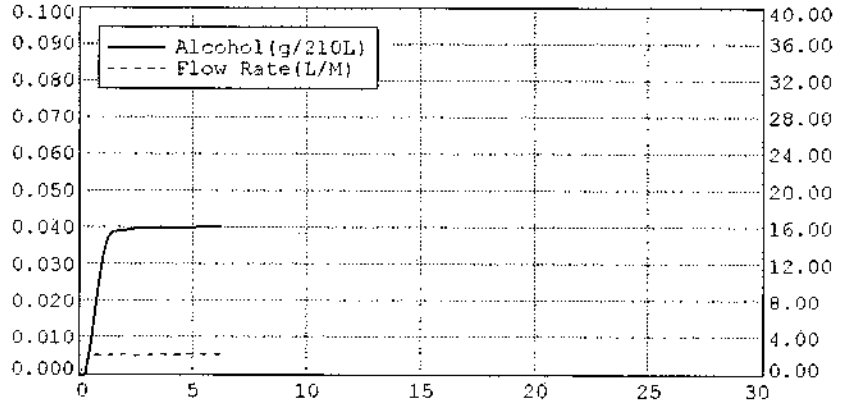
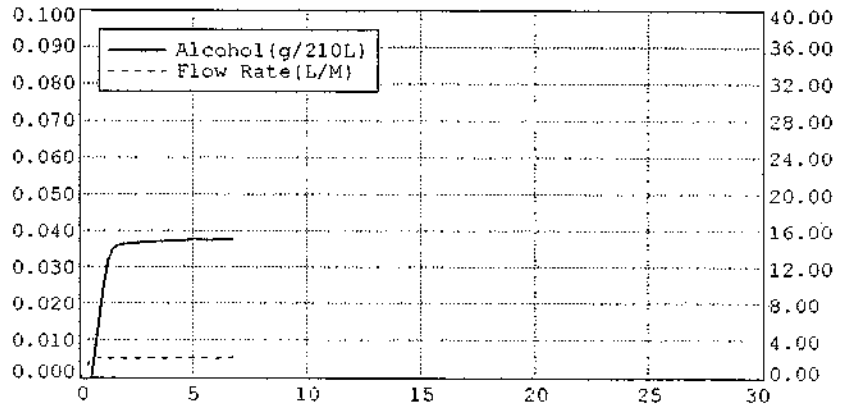
Alaska Department of Public Safety
 DATAMASTER dmt: 100687

Date: 11/24/2014
 Time: 08:28:01

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

BLANK TEST	0.000	08:29
INTERNAL STANDARD	VERIFIED	08:29
EXTERNAL STANDARD	0.038	08:29
BLANK TEST	0.000	08:30
EXTERNAL STANDARD	0.040	08:30
BLANK TEST	0.000	08:31
EXTERNAL STANDARD	0.040	08:31
BLANK TEST	0.000	08:32
EXTERNAL STANDARD	0.040	08:32
BLANK TEST	0.000	08:33
EXTERNAL STANDARD	0.040	08:33
BLANK TEST	0.000	08:34

Average = 0.0398
 Std Dev = 0.0009



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100687

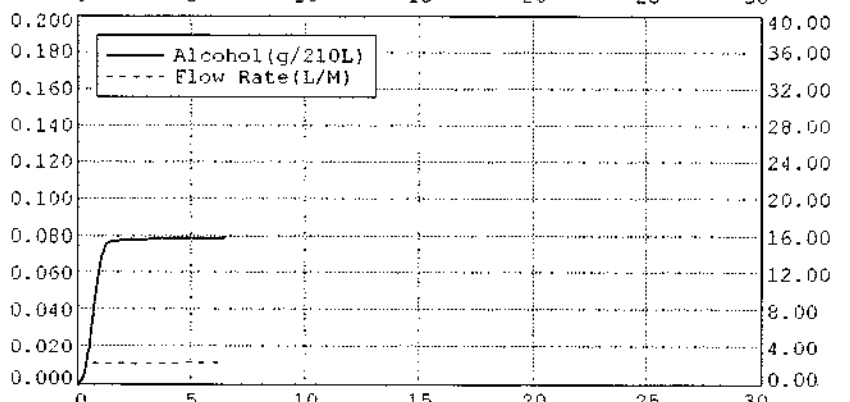
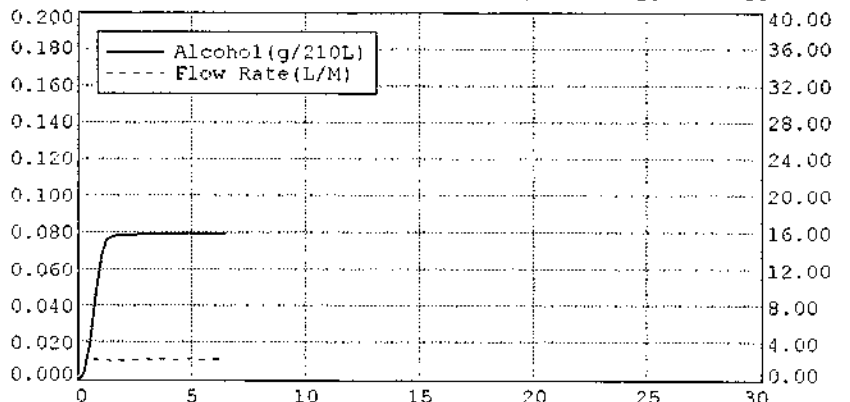
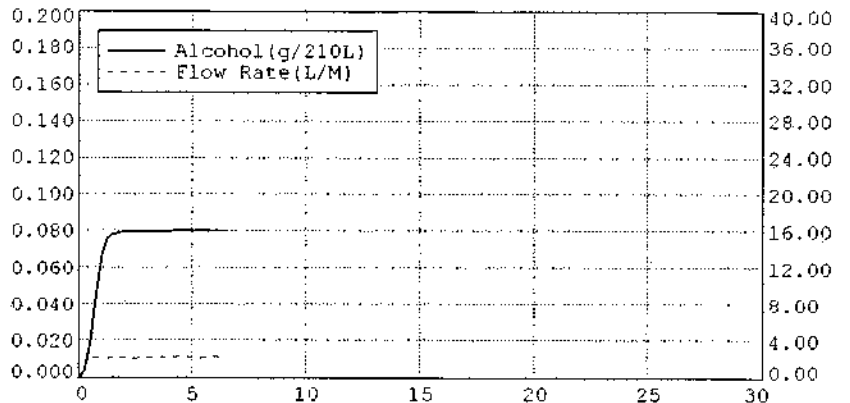
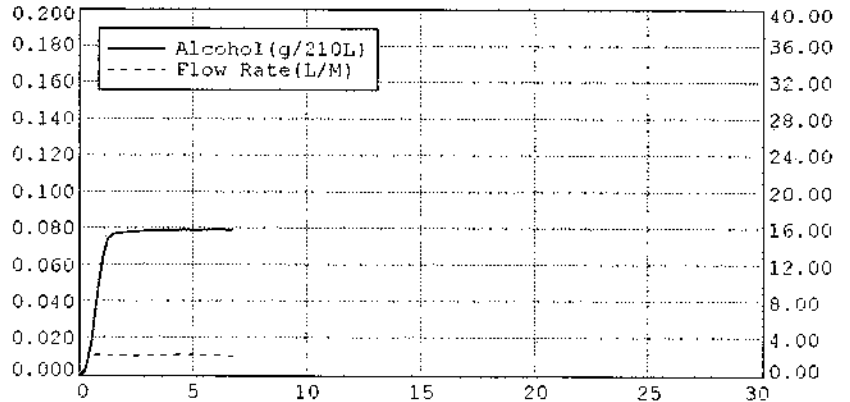
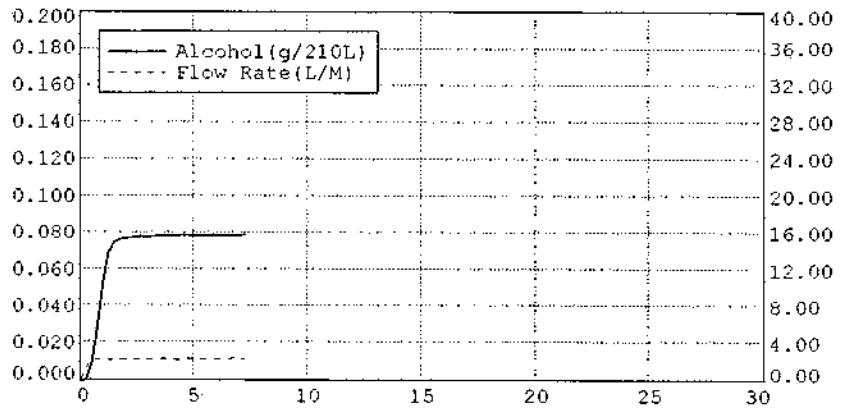
Date: 11/24/2014
 Time: 08:35:37

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.42: 0.078
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016

BLANK TEST	0.000	08:36
INTERNAL STANDARD	VERIFIED	08:36
EXTERNAL STANDARD	0.079	08:36
BLANK TEST	0.000	08:37
EXTERNAL STANDARD	0.079	08:38
BLANK TEST	0.000	08:39
EXTERNAL STANDARD	0.081	08:39
BLANK TEST	0.000	08:40
EXTERNAL STANDARD	0.080	08:40
BLANK TEST	0.000	08:41
EXTERNAL STANDARD	0.079	08:41
BLANK TEST	0.000	08:42

Average = 0.0800
 Std Dev = 0.0006



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100687

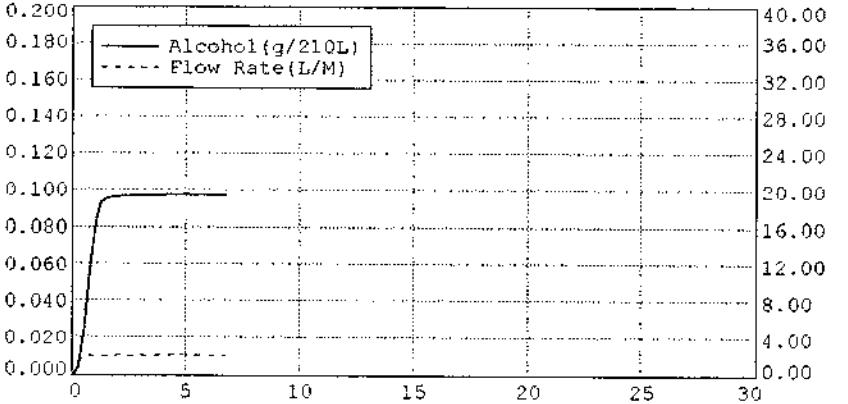
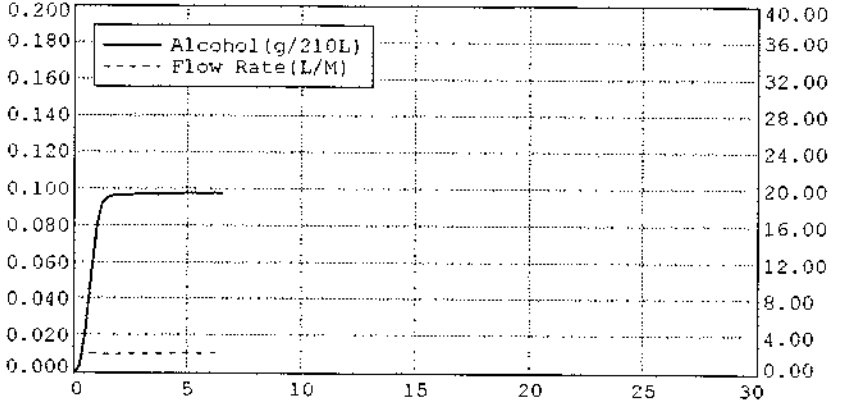
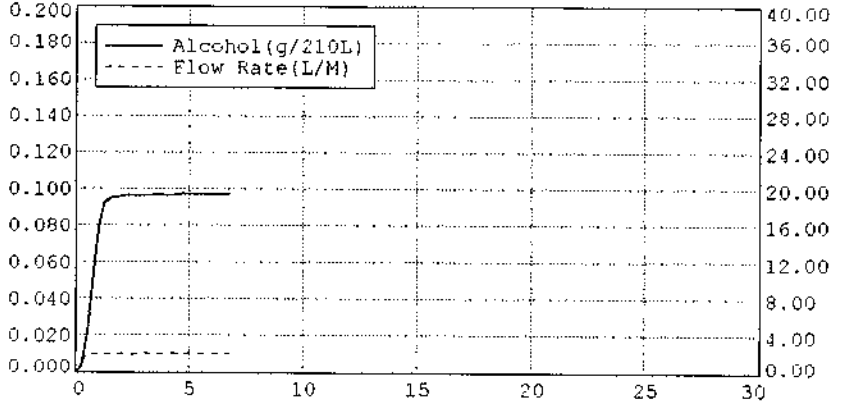
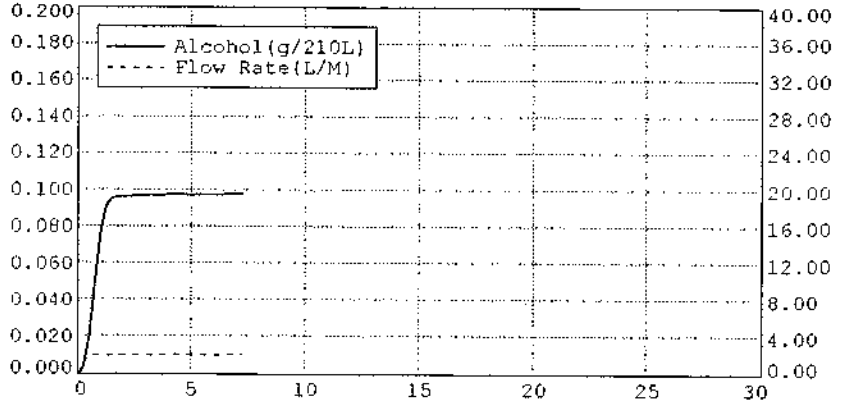
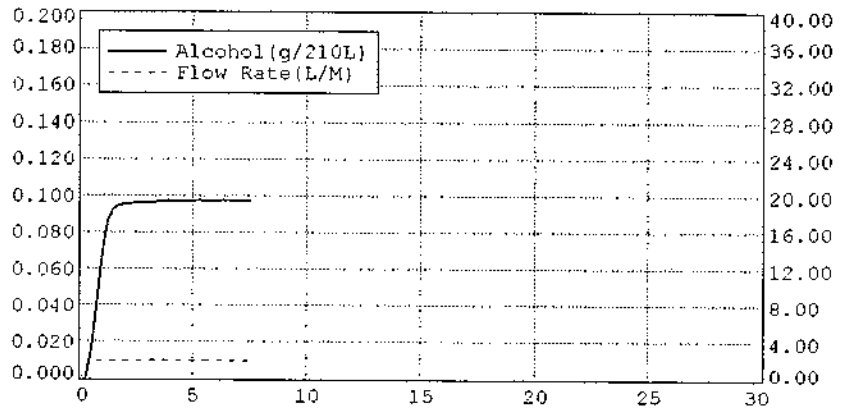
Date: 11/24/2014
 Time: 08:43:07

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	08:44
INTERNAL STANDARD	VERIFIED	08:44
EXTERNAL STANDARD	0.098	08:44
BLANK TEST	0.000	08:45
EXTERNAL STANDARD	0.098	08:45
BLANK TEST	0.000	08:46
EXTERNAL STANDARD	0.097	08:46
BLANK TEST	0.000	08:47
EXTERNAL STANDARD	0.097	08:48
BLANK TEST	0.000	08:48
EXTERNAL STANDARD	0.097	08:49
BLANK TEST	0.000	08:50

Average = 0.0980
 Std Dev = 0.0003



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dnt: 100687

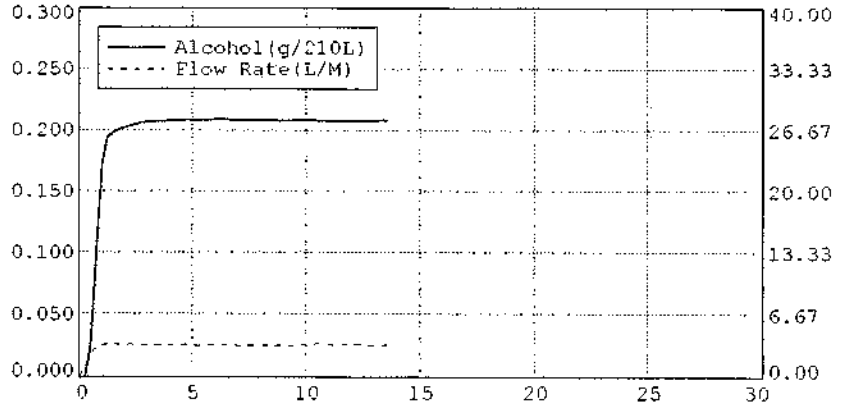
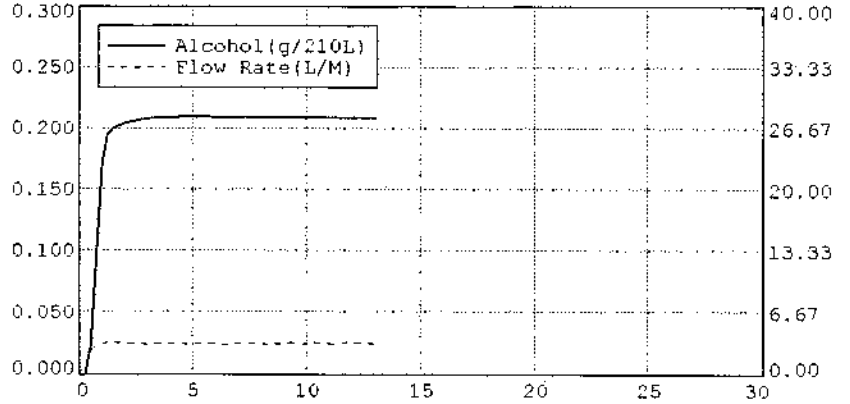
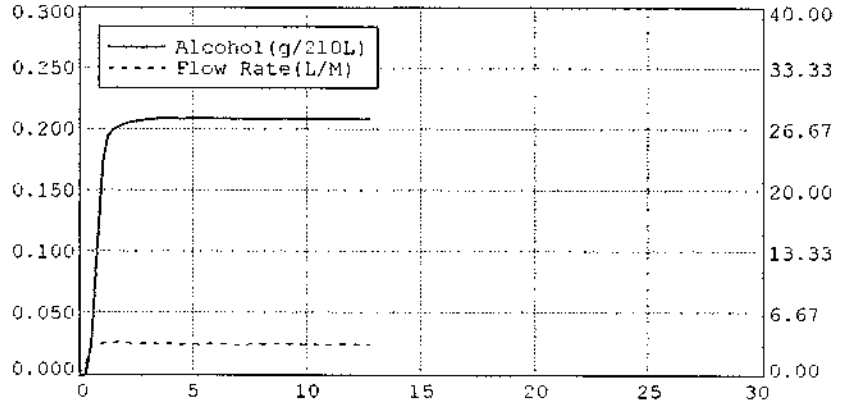
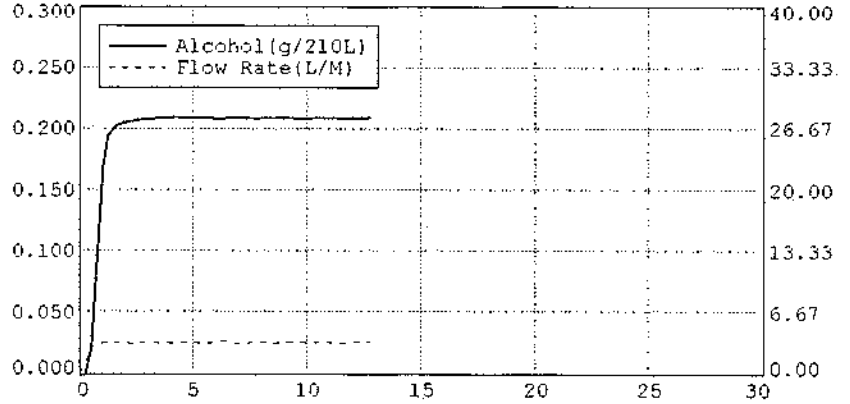
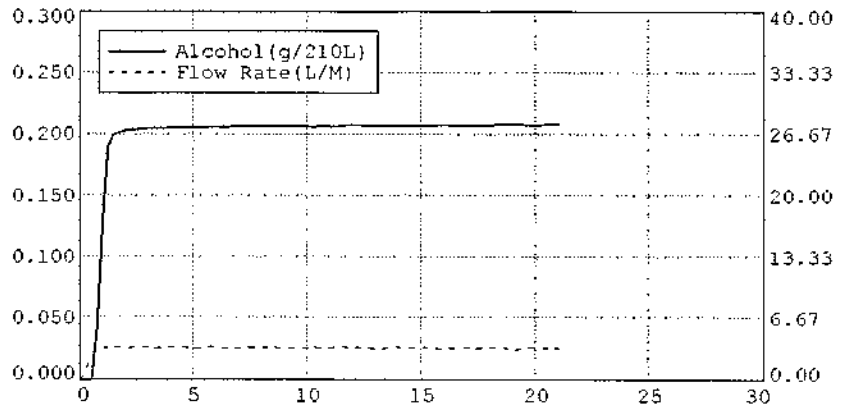
Date: 11/24/2014
 Time: 08:52:21

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	08:53
INTERNAL STANDARD	VERIFIED	08:53
EXTERNAL STANDARD	0.207	08:54
BLANK TEST	0.000	08:54
EXTERNAL STANDARD	0.208	08:55
BLANK TEST	0.000	08:56
EXTERNAL STANDARD	0.208	08:56
BLANK TEST	0.000	08:57
EXTERNAL STANDARD	0.209	08:57
BLANK TEST	0.000	08:58
EXTERNAL STANDARD	0.207	08:58
BLANK TEST	0.000	08:59

Average = 0.2083
 Std Dev = 0.0006



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100687

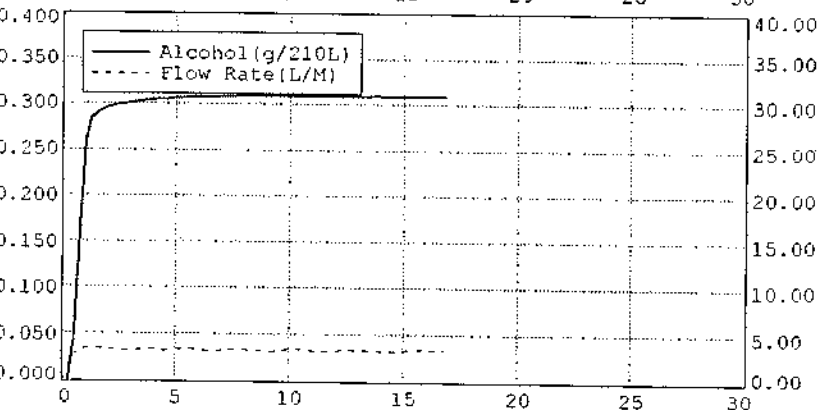
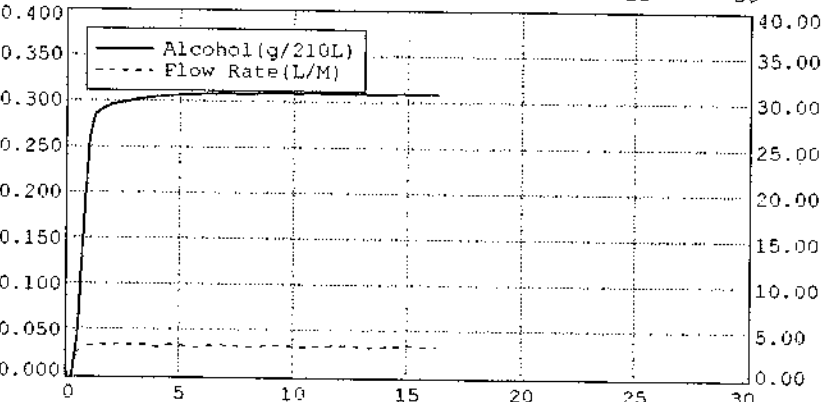
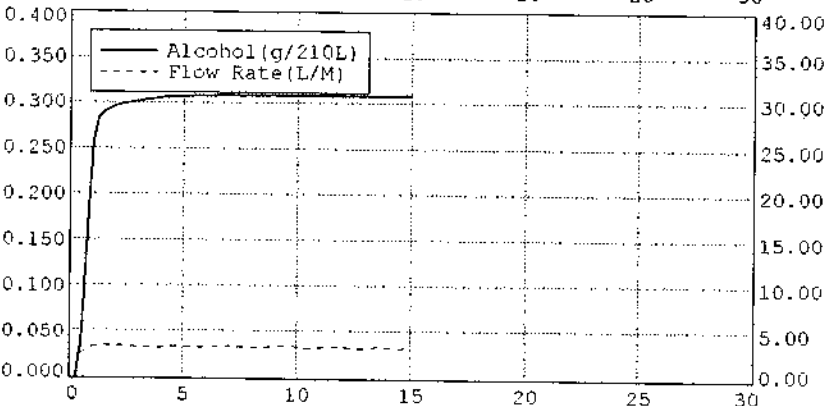
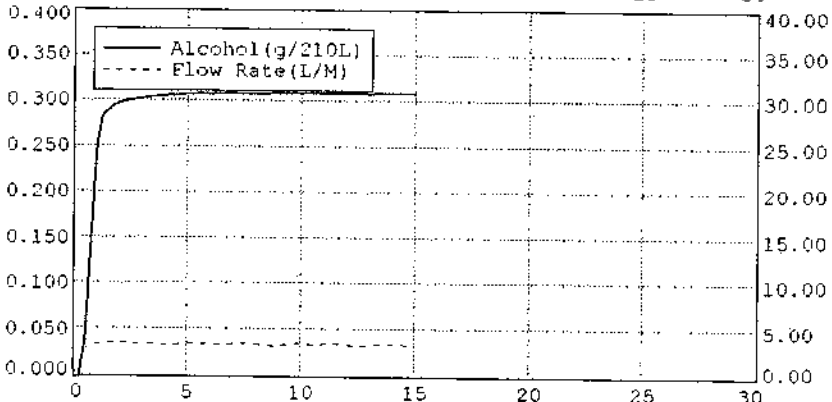
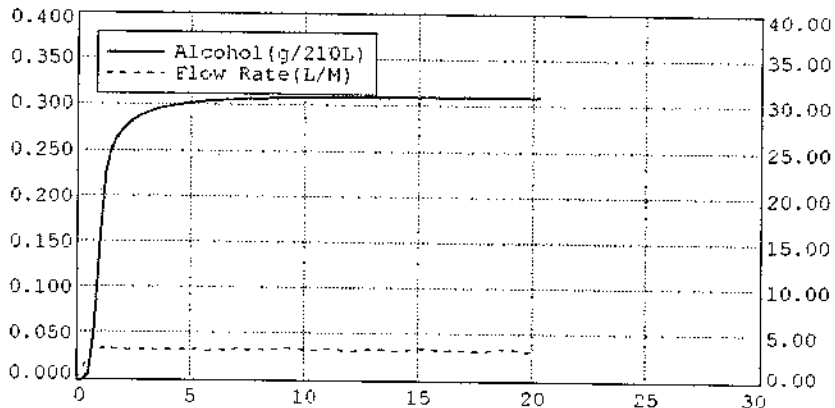
Date: 11/24/2014
 Time: 09:01:47

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	09:02
INTERNAL STANDARD	VERIFIED	09:03
EXTERNAL STANDARD	0.308	09:03
BLANK TEST	0.000	09:04
EXTERNAL STANDARD	0.308	09:04
BLANK TEST	0.000	09:05
EXTERNAL STANDARD	0.308	09:06
BLANK TEST	0.000	09:06
EXTERNAL STANDARD	0.308	09:07
BLANK TEST	0.000	09:08
EXTERNAL STANDARD	0.309	09:08
BLANK TEST	0.000	09:09

Average = 0.3086
 Std Dev = 0.0003



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 11/24/2014
Time: 09:19:05

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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

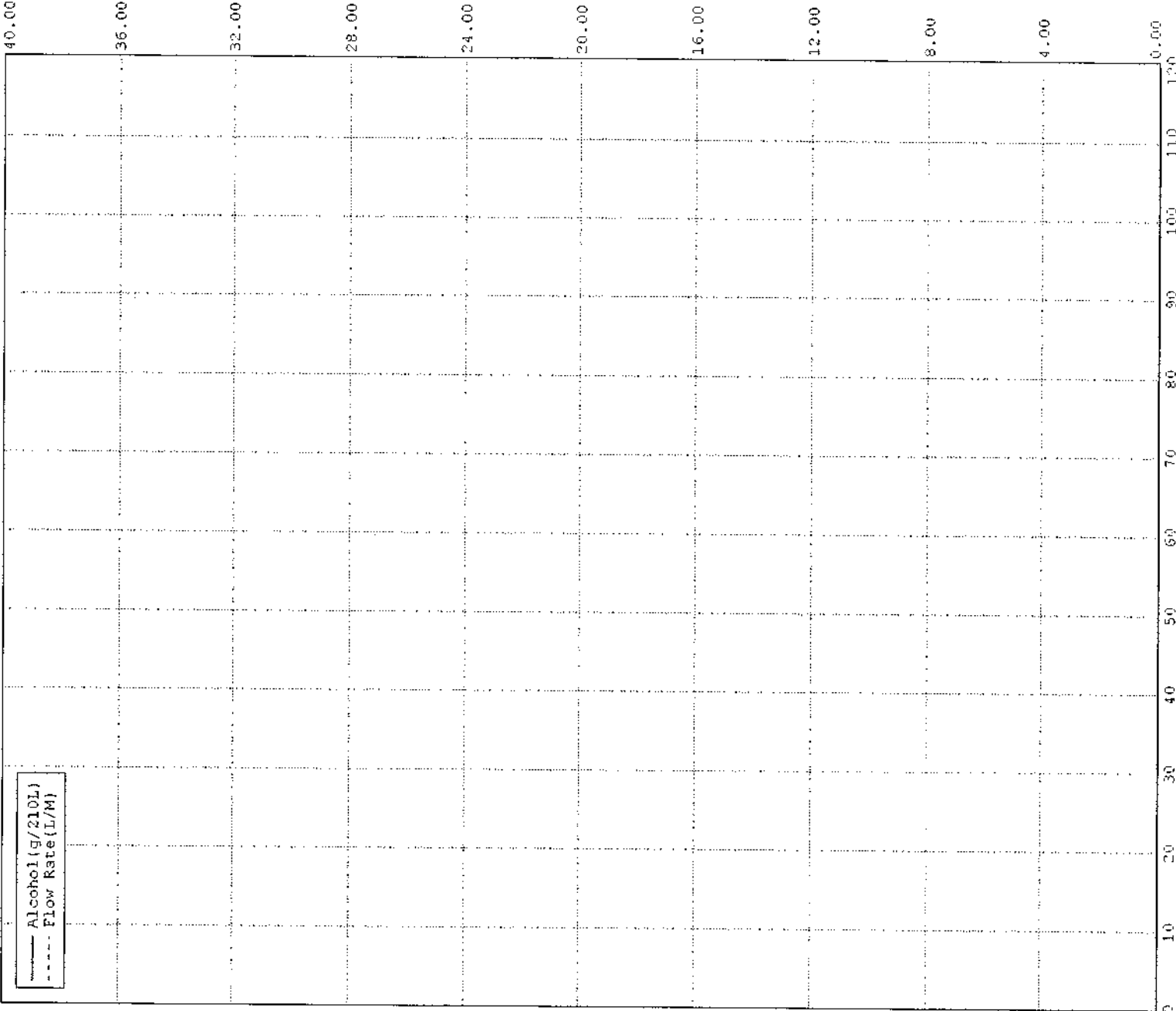
DEPT/AGENCY:
AAA1

CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.47: 0.078
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 10:20
BLANK TEST 0.000 10:20
INTERNAL STANDARD VERIFIED 10:20
EXTERNAL STANDARD 0.078 10:20
BLANK TEST 0.000 10:21
SUBJECT SAMPLE INCOMPLETE 10:23



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 11/25/2014
Time: 08:23:54

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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

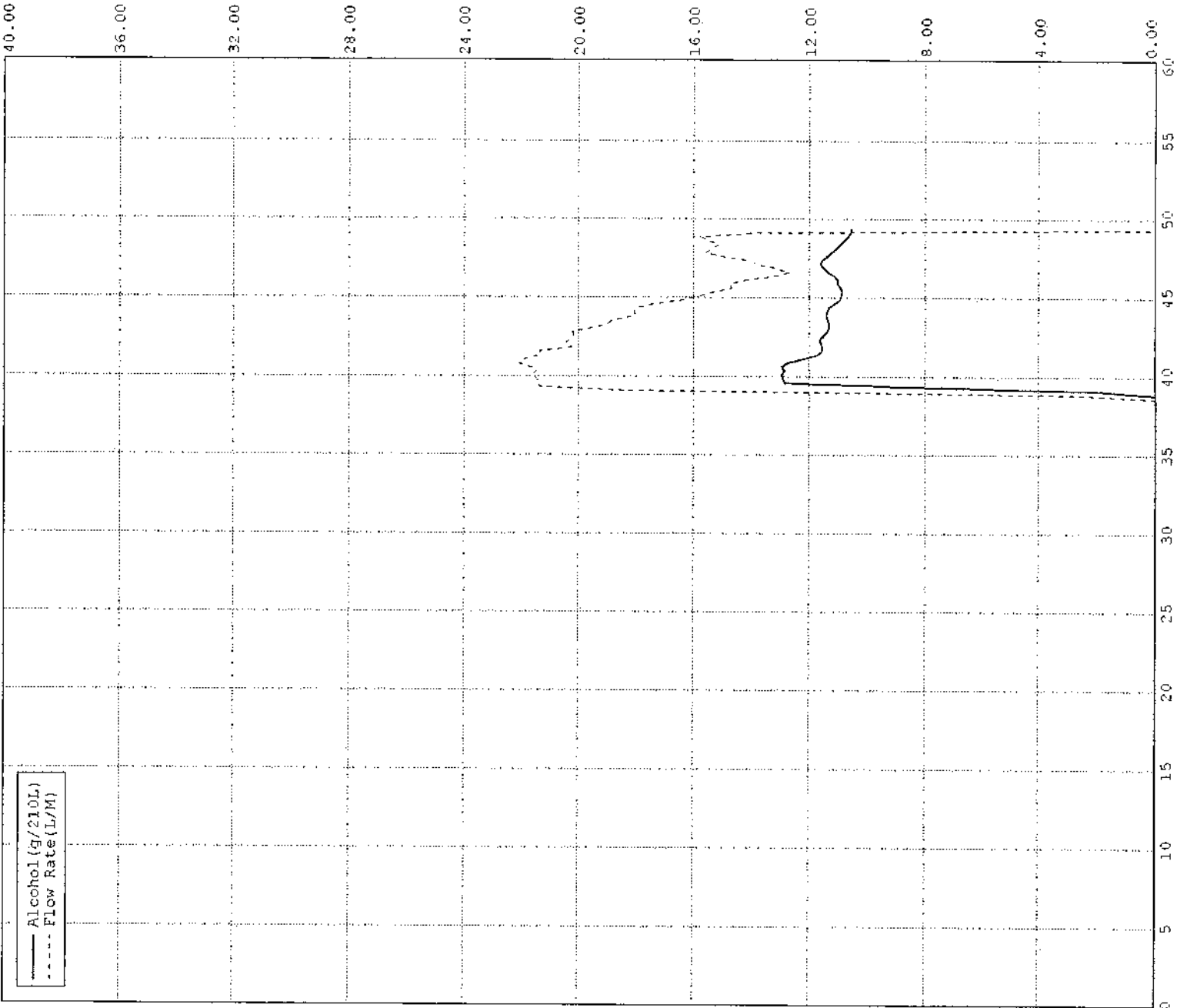
DEPT/AGENCY:
AAA1

CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.87: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	08:24
BLANK TEST	0.000	08:25
INTERNAL STANDARD	VERIFIED	08:25
EXTERNAL STANDARD	0.080	08:25
BLANK TEST	0.000	08:26
SUBJECT SAMPLE	INVALID	08:27



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 11/25/2014
Time: 08:29:18

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

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

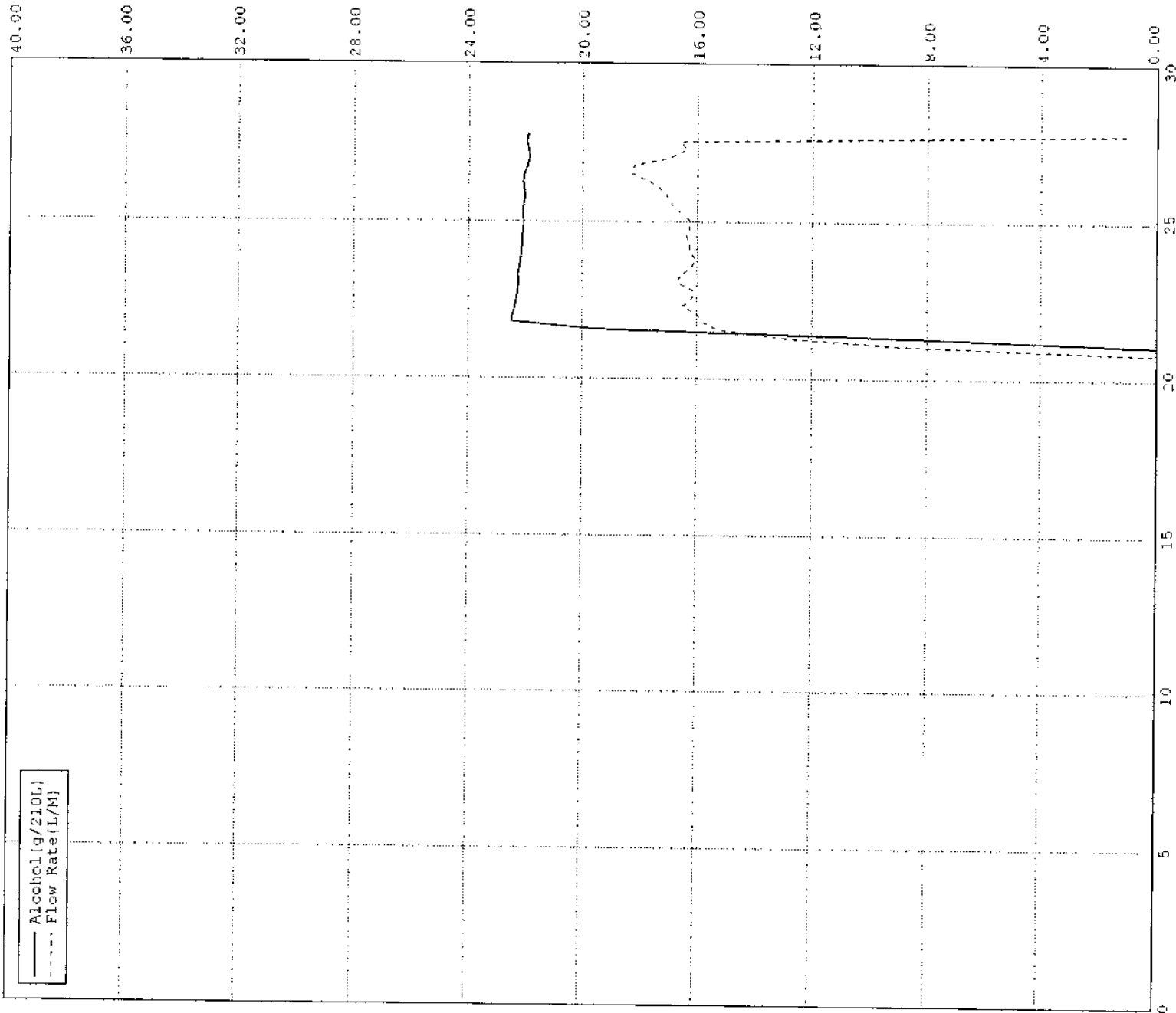
DEPT/AGENCY:
AAA1
CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.87: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 08:30
BLANK TEST 0.000 08:30
INTERNAL STANDARD VERIFIED 08:30
Xq = 0.137 (1.12%)
EXTERNAL STANDARD 0.080 08:30
X[1] = 0.0805 (-0.0018) (-0.0016)
BLANK TEST 0.000 08:31
SUBJECT SAMPLE INTERFERENCE 08:32
X[1] = 0.1096 (-0.0242) (-0.0011)

COS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 11/25/2014
Time: 08:35:09

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

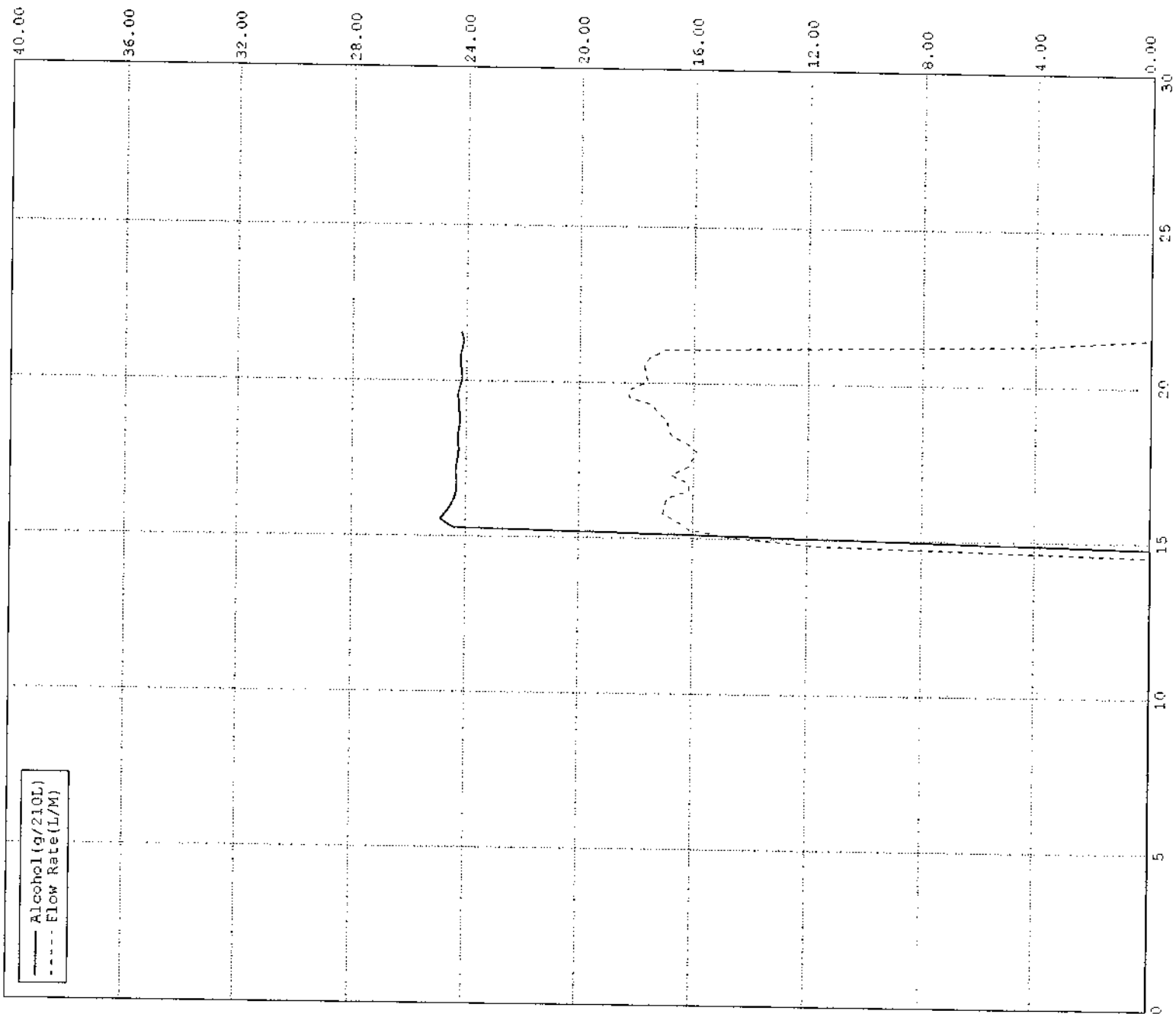
OPERATOR NAME:
COLLEEN S OBRYANT
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.89: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 08:36
BLANK TEST 0.000 08:36
INTERNAL STANDARD VERIFIED 08:36
Xq = 0.138 (2.31%)
EXTERNAL STANDARD 0.080 08:36
X[1] = 0.0804 (-0.0001) (0.0003)
BLANK TEST 0.000 08:37
SUBJECT SAMPLE INTERFERENCE 08:38
X[1] = 0.1202 (-0.0220) (0.0001)



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 11/25/2014
Time: 08:40:14

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

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

DEPT/AGENCY:
AAA1

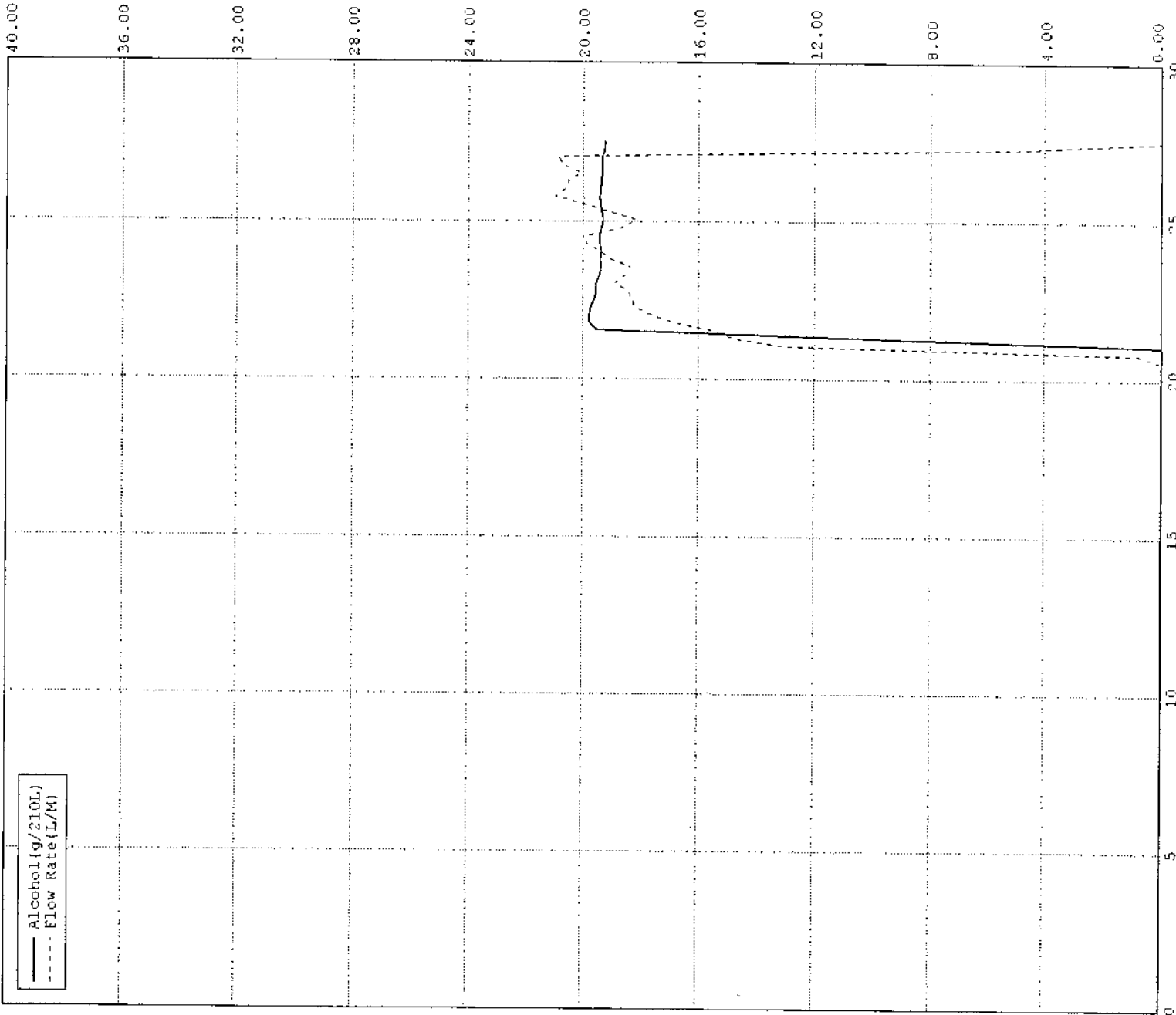
CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.89: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	08:41
BLANK TEST	0.000	08:41
INTERNAL STANDARD	VERIFIED	08:41
Xq = 0.139 (2.71%)		
EXTERNAL STANDARD	0.080	08:42
X[1] = 0.0800 (-0.0015)	(0.0007)	
BLANK TEST	0.000	08:43
SUBJECT SAMPLE (Vol=1.96L)	0.095	08:43
X[1] = 0.0958 (-0.0016)	(-0.0011)	
BLANK TEST	0.000	08:44
EXTERNAL STANDARD	0.081	08:44
X[1] = 0.0811 (-0.0005)	(-0.0008)	
BLANK TEST	0.000	08:45

Filter 2 avg -0.0001
Filter 3 avg -0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100687

Date: 11/25/2014
Time: 09:03:31

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

DEPT/AGENCY:
AAA1

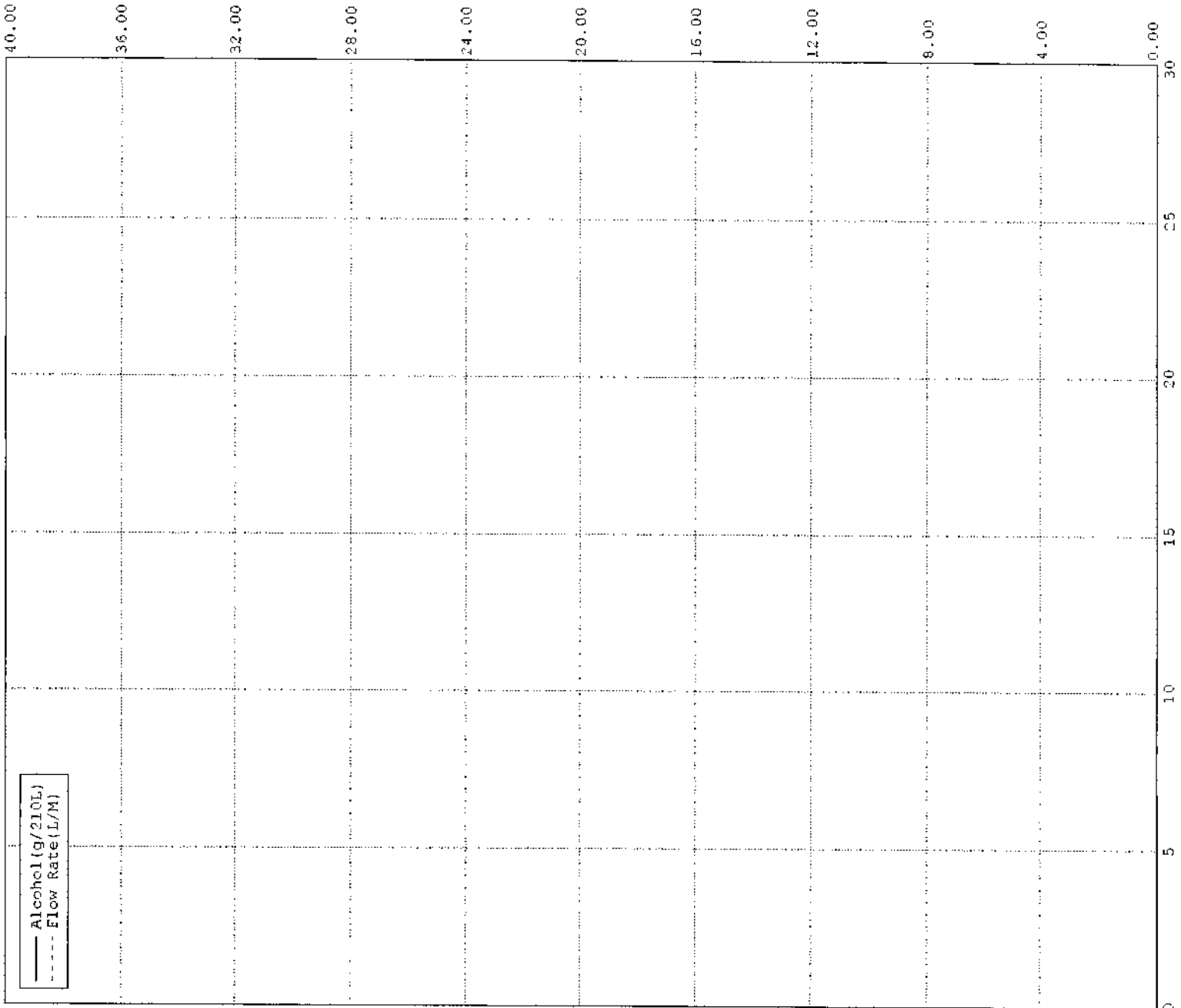
CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.91: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 09:05
BLANK TEST 0.000 09:05
INTERNAL STANDARD VERIFIED 09:05
EXTERNAL STANDARD 0.082 09:05
BLANK TEST 0.000 09:06

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100687

Date: 11/25/2014
Time: 09:31:41

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 29.92: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	09:32
BLANK TEST	0.000	09:32
INTERNAL STANDARD	VERIFIED	09:32
EXTERNAL STANDARD	0.080	09:33
BLANK TEST	0.000	09:34
SUBJECT SAMPLE	0.000	09:34
BLANK TEST	0.000	09:35
EXTERNAL STANDARD	0.081	09:35
BLANK TEST	0.000	09:36

