

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 100690 Analyst Colleen OBryant 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 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 1/30/16
 1. Simulator S/N SD1198 Date Calibrated 2/20/14
- ii. Isopropanol - Mnf Guth Lot 14030 Level 0.100 Exp 1/30/16
 1. Simulator S/N SD1202 Date Calibrated 2/20/14
- iii. Negative Control - Mnf Guth Lot 14030 Level 0.100 Exp 1/30/16
 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 11/26/14
11/25/14 COB

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 11/21/2014
Time: 15:13:09

VERSIONS
DMT: 2.00
PIC: 3.03
Modem: 2.3
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.8°C PASSED
Breath Tube = 46.3°C PASSED

PUMP INFO

Flow Rate = 3.933 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: 100690

Date: 11/21/2014

Time: 3:16 PM

Temperatures (°C)

Sample Cell: 48.8°C

Breath Tube: 46.2°C

Current Barometer 28.7 in

Volume (Ltr) 1.45

Settings

Lamp: 1.78 V

Bias: 80 V

Cooler: 1.93 V

Chopper: 531 Hz

Voltages (V)

Flow: 1.04 V

Detector: 0.080 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 11/02/2011
Time: 03:39:36

Ca = 0.1000
CAL = 1.003677 0.800 <= CAL < 1.200
b1 = 0.0013 0.0000 <= b1 < 0.0040
b2 = 0.0050 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.1021 0.0500 <= Xq < 0.2000
a21 = 1.130111 1.050 <= a21 < 1.300
a31 = 0.442748 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER chmt: 100690

Date: 11/21/2014
Time: 15:18:11

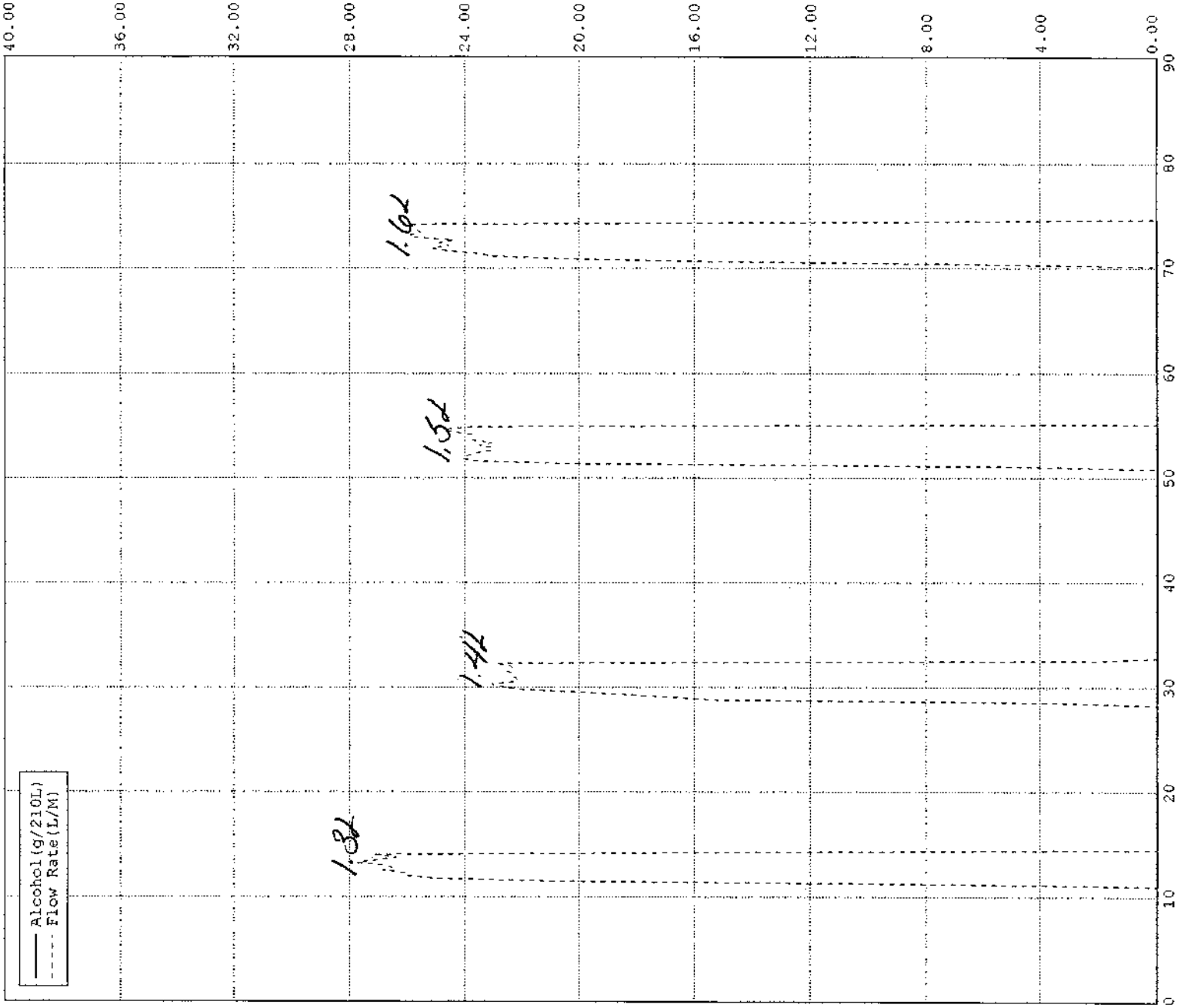
SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME

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 28.67: 0.076
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:19
BLANK TEST	0.000	15:19
INTERNAL STANDARD	VERIFIED	15:19
EXTERNAL STANDARD	0.078	15:20
BLANK TEST	0.000	15:21
SUBJECT SAMPLE	0.000	15:22
BLANK TEST	0.000	15:23
EXTERNAL STANDARD	0.077	15:23
BLANK TEST	0.000	15:24



LINEARITY CHECK

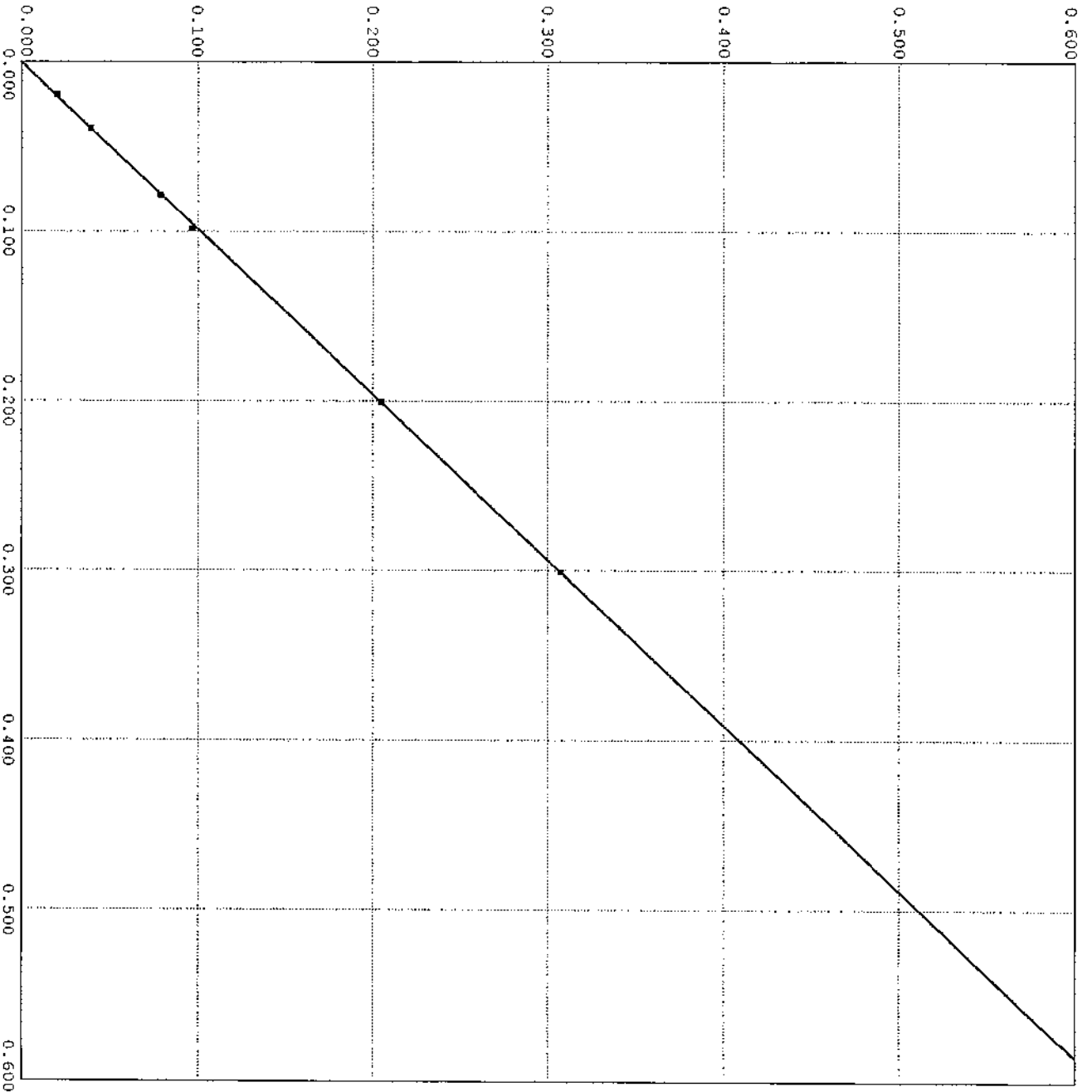
Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 11/24/2014
Time: 09:41:04

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

TARGET	AVERAGE	STD. DEV.
0.019	0.0209	0.0005
0.039	0.0402	0.0003
0.078	0.0796	0.0002
0.098	0.0979	0.0002
0.200	0.2057	0.0003
0.300	0.3079	0.0004

SLOPE = 1.025685
R² = 0.999842



CRB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100690

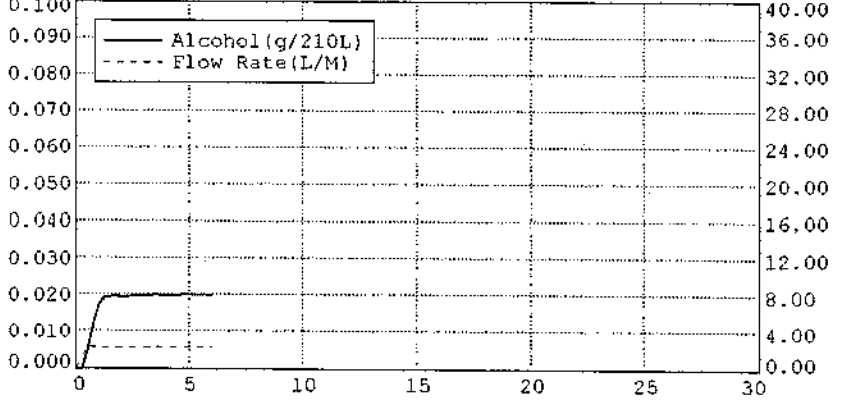
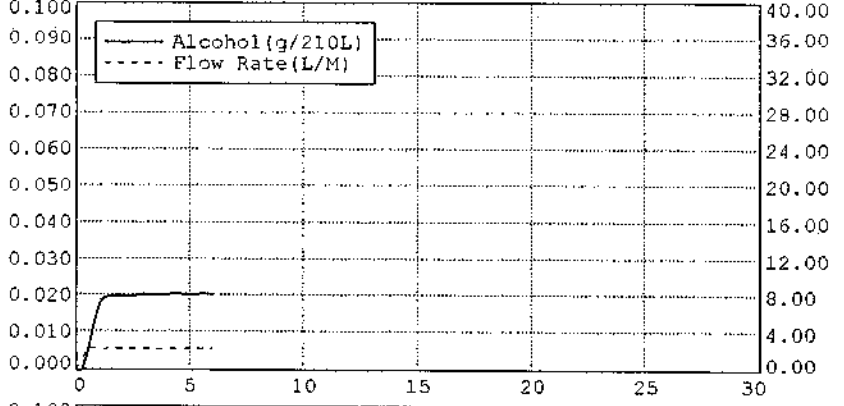
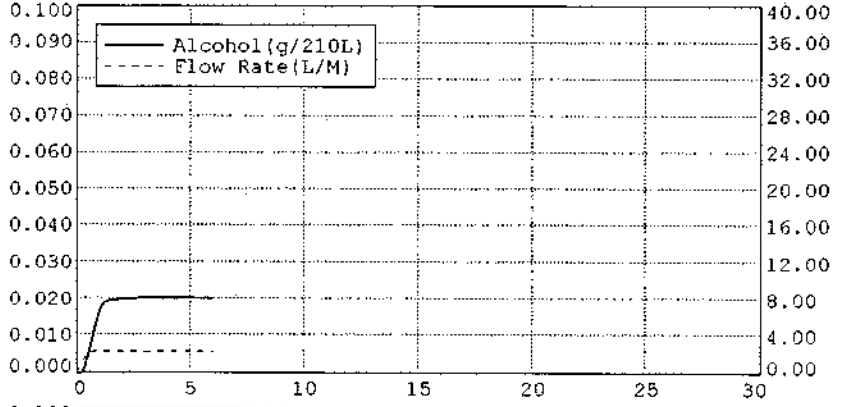
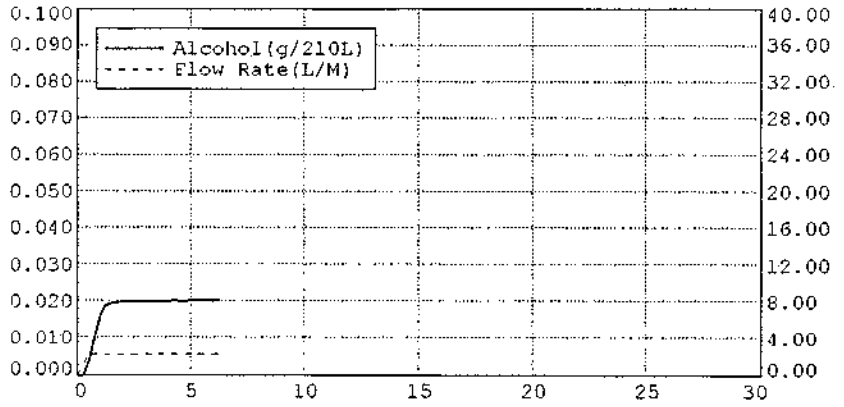
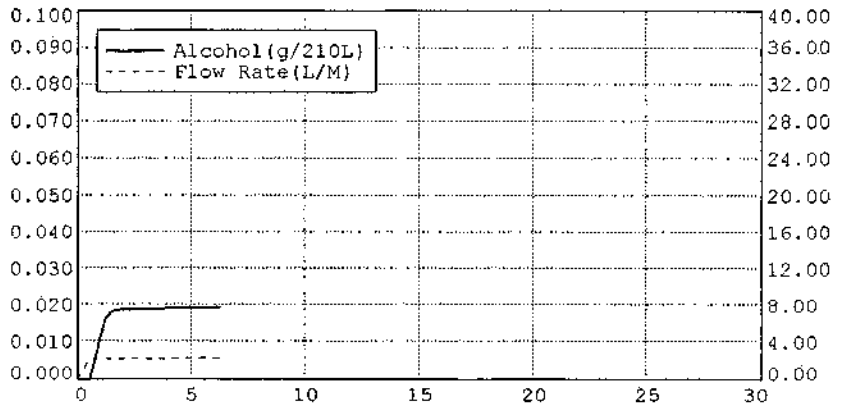
Date: 11/24/2014
 Time: 09:41:05

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.43: 0.019
 LOT #: 00813020A1
 EXPIRATION: 03/01/2015

BLANK TEST	0.000	09:42
INTERNAL STANDARD	VERIFIED	09:42
EXTERNAL STANDARD	0.020	09:42
BLANK TEST	0.000	09:43
EXTERNAL STANDARD	0.021	09:43
BLANK TEST	0.000	09:44
EXTERNAL STANDARD	0.021	09:44
BLANK TEST	0.000	09:45
EXTERNAL STANDARD	0.021	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.021	09:46
BLANK TEST	0.000	09:47

Average = 0.0209
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

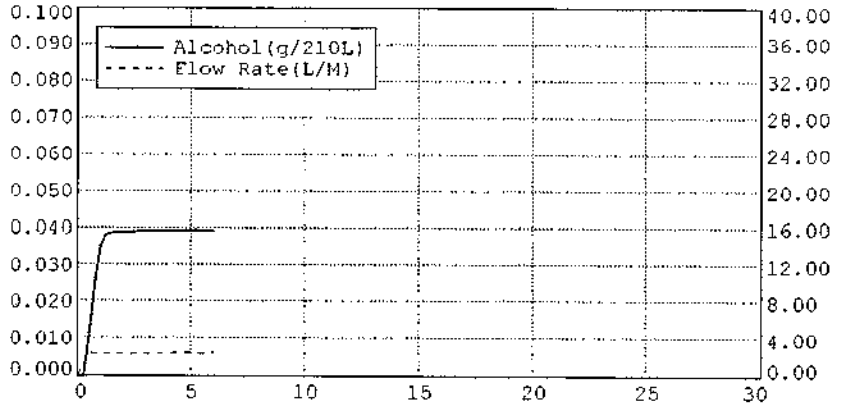
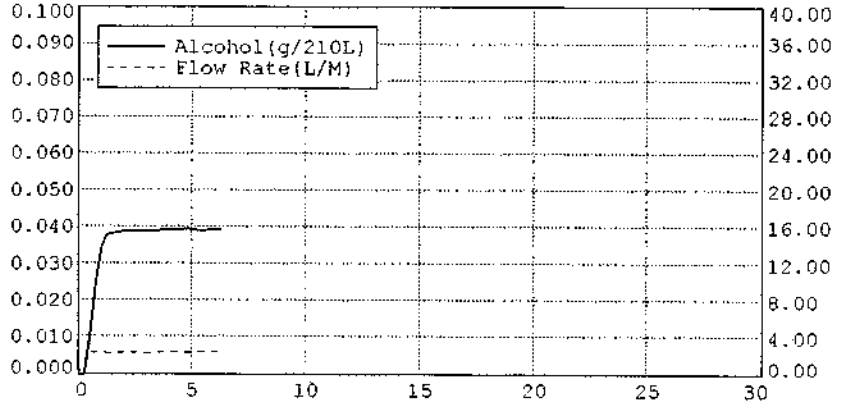
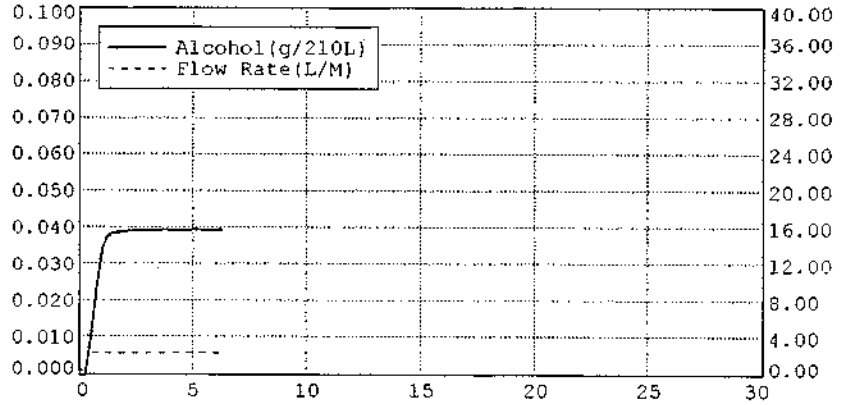
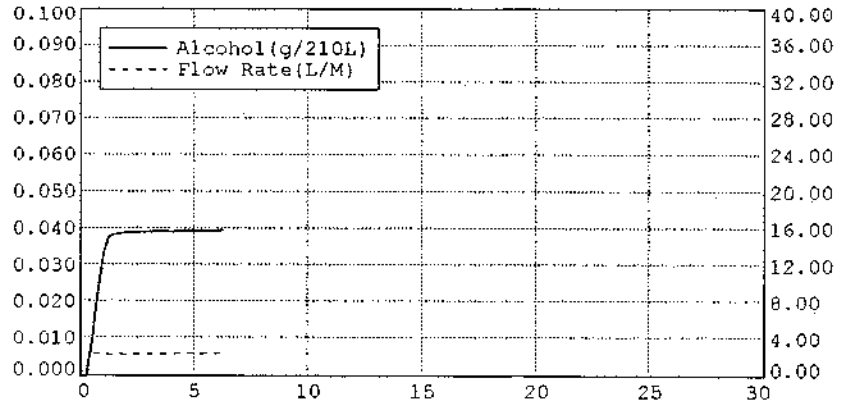
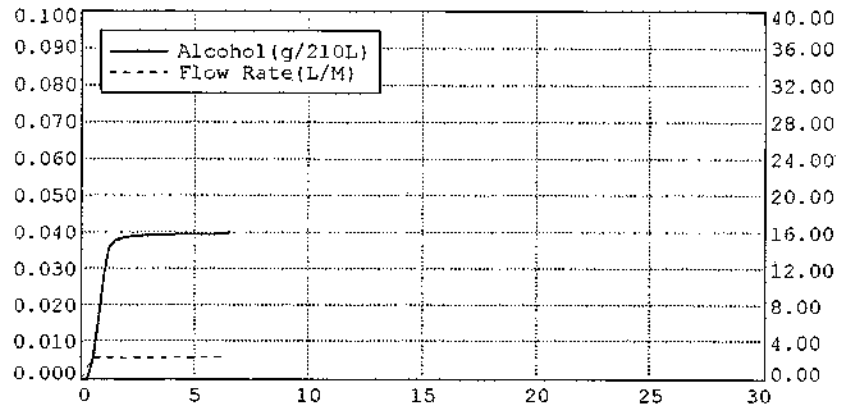
Alaska Department of Public Safety
 DATAMASTER dmt: 100690

Date: 11/24/2014
 Time: 09:49:01

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.040
 TARGET AT 29.44: 0.039
 LOT #: 00813040A2
 EXPIRATION: 03/01/2015

BLANK TEST	0.000	09:50
INTERNAL STANDARD	VERIFIED	09:50
EXTERNAL STANDARD	0.040	09:50
BLANK TEST	0.000	09:51
EXTERNAL STANDARD	0.040	09:51
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.040	09:52
BLANK TEST	0.000	09:53
EXTERNAL STANDARD	0.039	09:53
BLANK TEST	0.000	09:54
EXTERNAL STANDARD	0.040	09:54
BLANK TEST	0.000	09:55

Average = 0.0402
 Std Dev = 0.0003



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100690

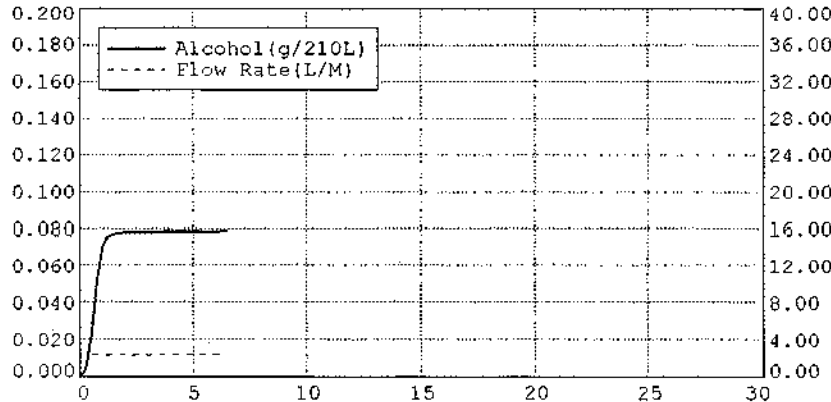
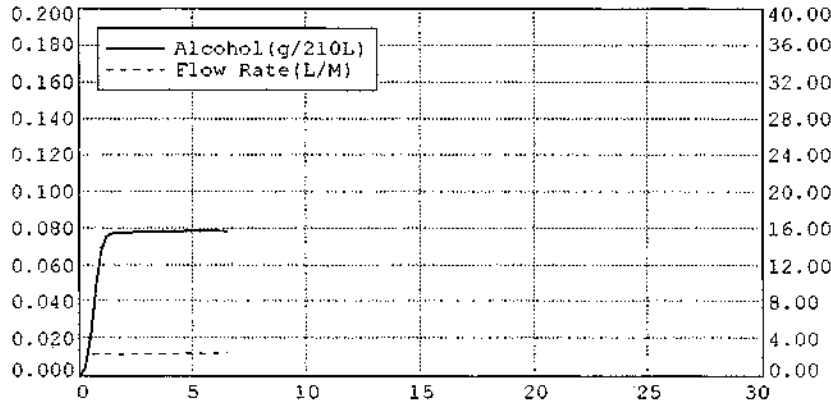
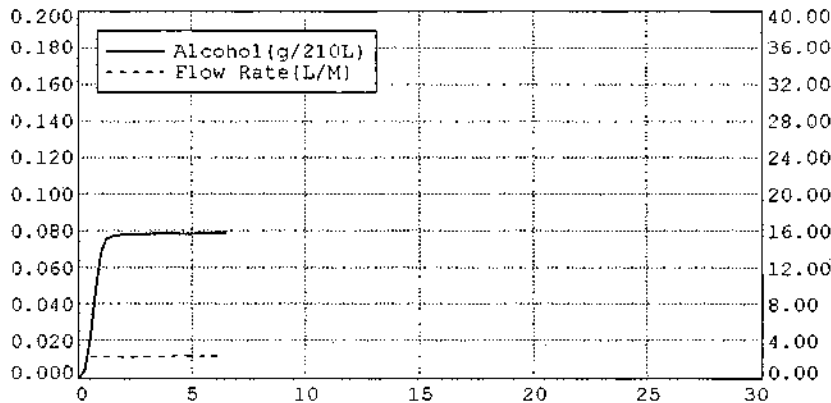
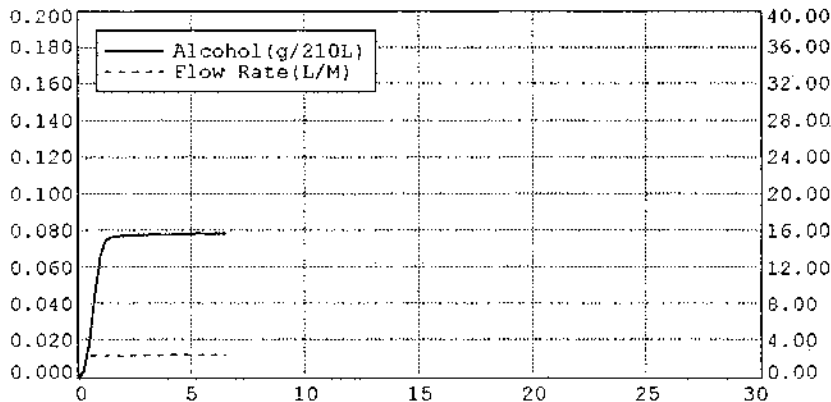
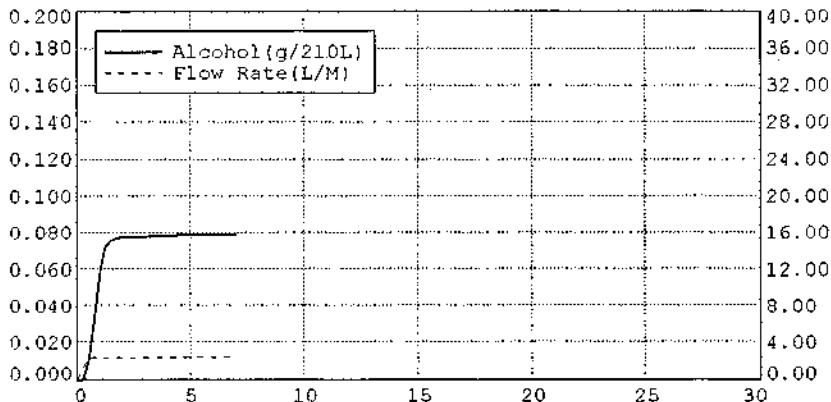
Date: 11/24/2014
 Time: 09:58:11

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.43: 0.078
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016

BLANK TEST	0.000	09:59
INTERNAL STANDARD	VERIFIED	09:59
EXTERNAL STANDARD	0.079	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.079	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.079	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.079	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.079	10:04
BLANK TEST	0.000	10:05

Average = 0.0796
 Std Dev = 0.0002



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100690

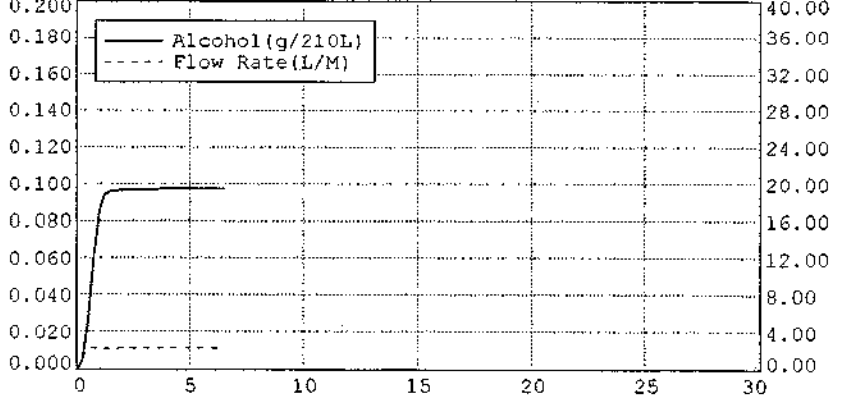
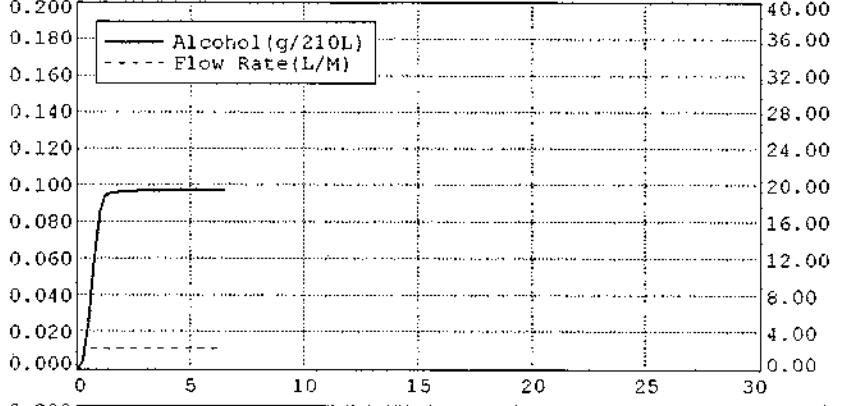
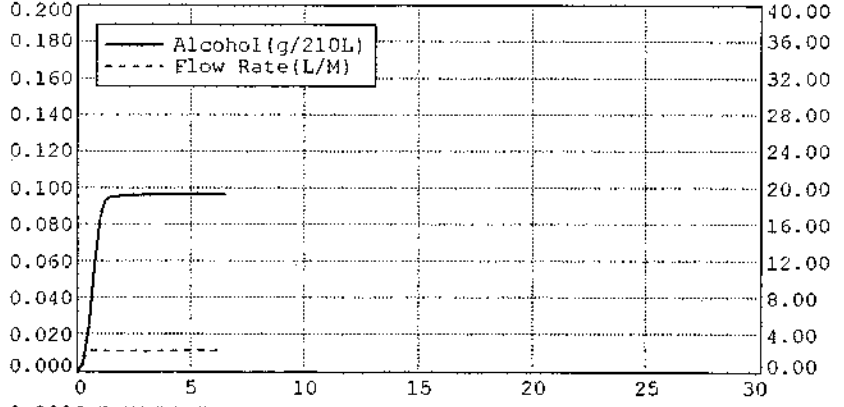
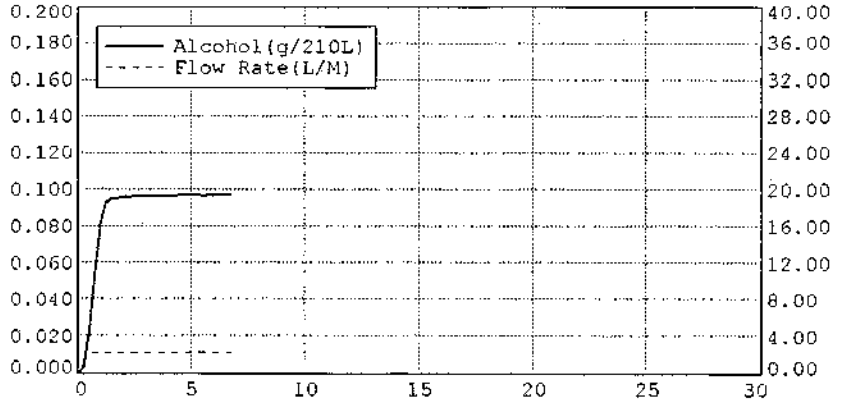
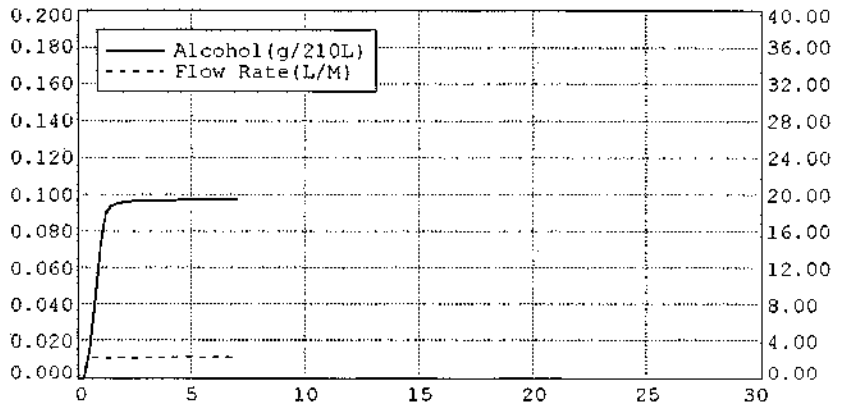
Date: 11/24/2014
 Time: 10:09:40

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.44: 0.098
 LOT #: 00813100A3
 EXPIRATION: 03/01/2015

BLANK TEST	0.000	10:11
INTERNAL STANDARD	VERIFIED	10:11
EXTERNAL STANDARD	0.098	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.097	10:12
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.097	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.097	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.098	10:15
BLANK TEST	0.000	10:16

Average = 0.0979
 Std Dev = 0.0002



LINEARITY CHECK: Control Test 5

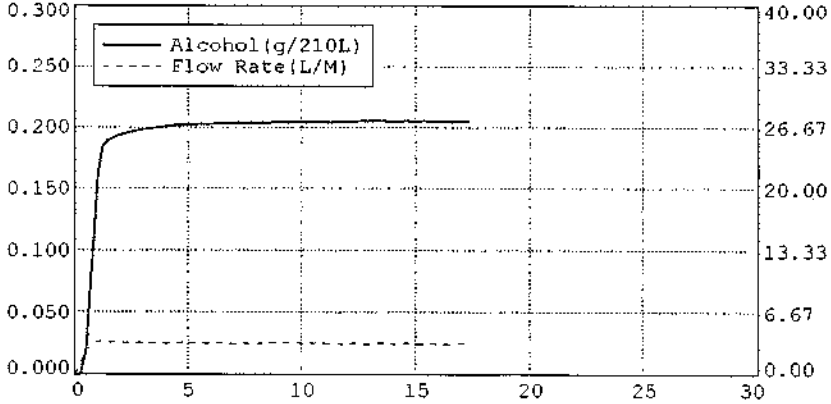
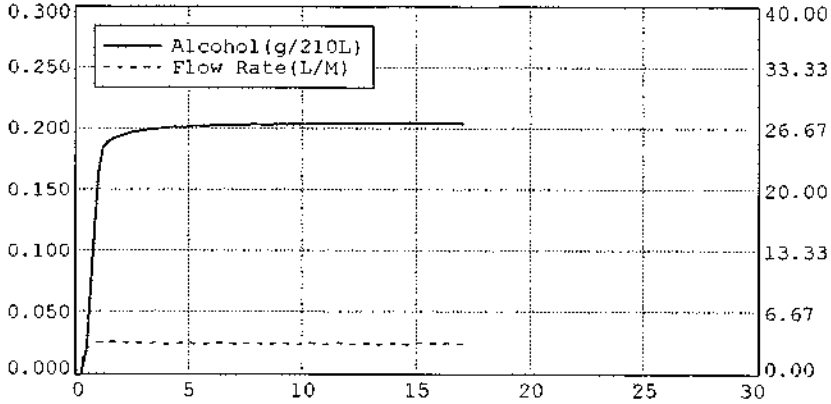
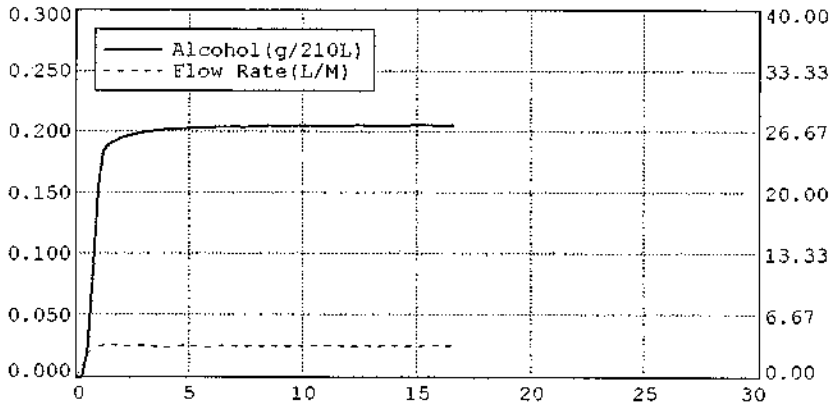
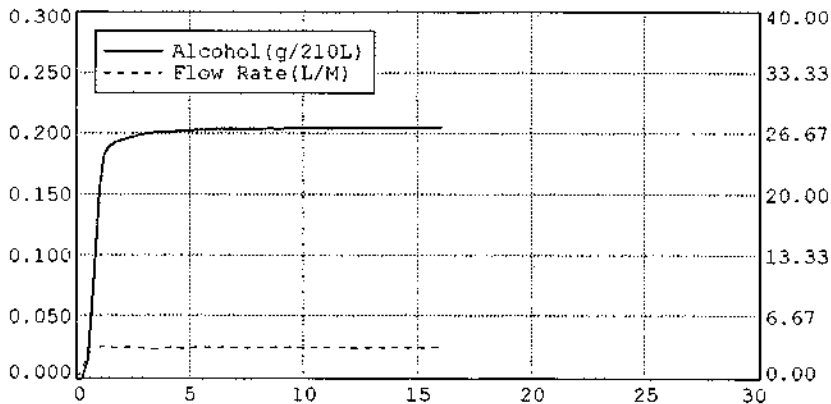
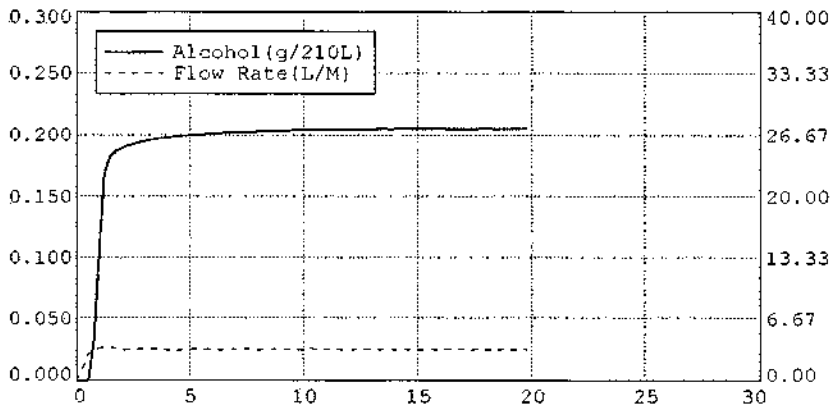
Alaska Department of Public Safety
 DATAMASTER dmt: 100690

Date: 11/24/2014
 Time: 10:18:11

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 14130
 EXPIRATION: 05/12/2016

BLANK TEST	0.000	10:19
INTERNAL STANDARD	VERIFIED	10:19
EXTERNAL STANDARD	0.206	10:19
BLANK TEST	0.000	10:20
EXTERNAL STANDARD	0.205	10:21
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.205	10:22
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.205	10:23
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.205	10:24
BLANK TEST	0.000	10:25

Average = 0.2057
 Std Dev = 0.0003



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100690

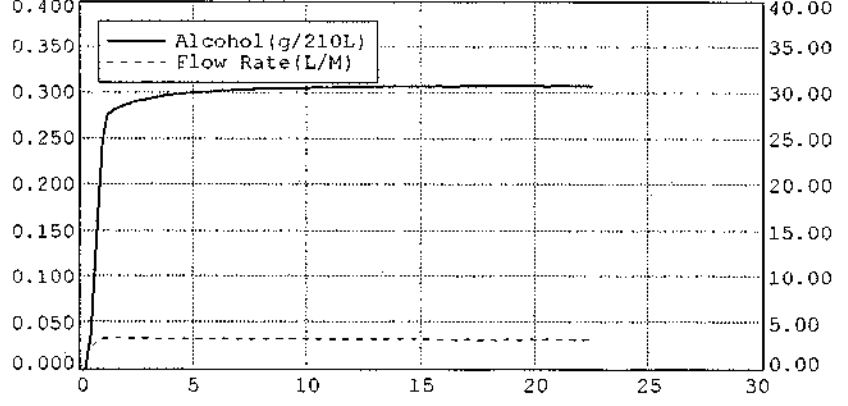
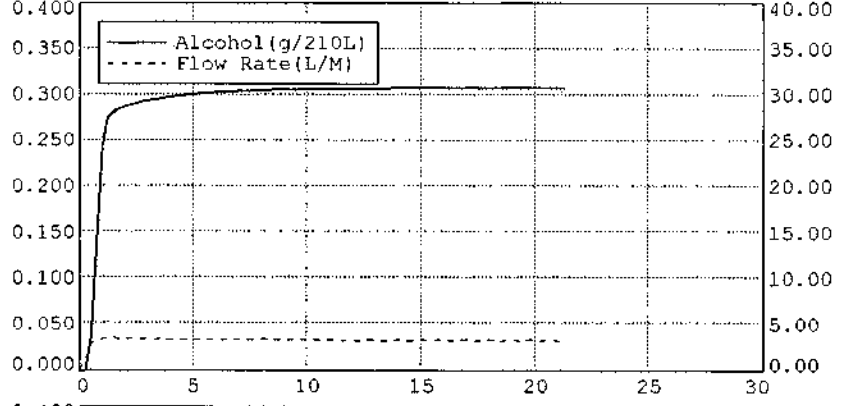
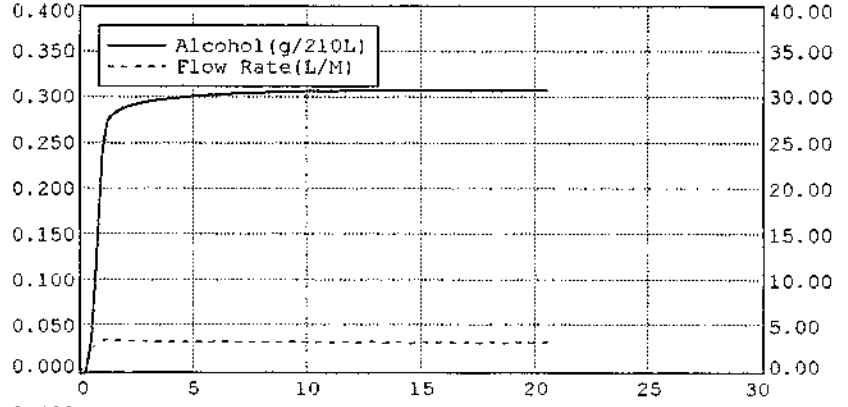
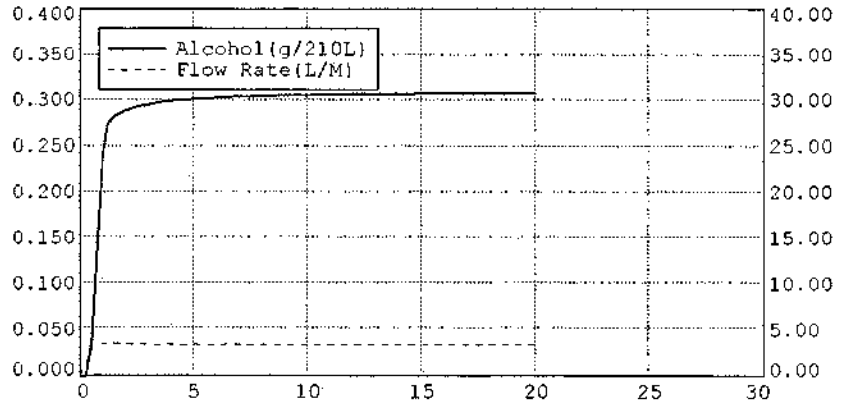
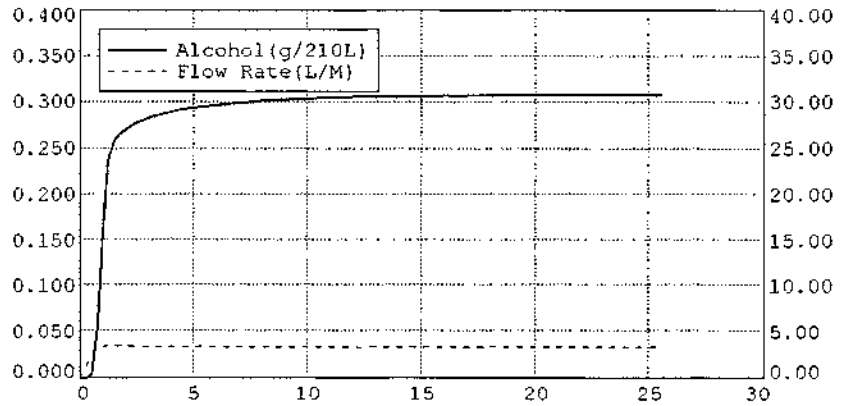
Date: 11/24/2014
 Time: 10:27:14

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:28
INTERNAL STANDARD	VERIFIED	10:28
EXTERNAL STANDARD	0.308	10:29
BLANK TEST	0.000	10:29
EXTERNAL STANDARD	0.307	10:30
BLANK TEST	0.000	10:31
EXTERNAL STANDARD	0.307	10:31
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.308	10:33
BLANK TEST	0.000	10:34
EXTERNAL STANDARD	0.308	10:34
BLANK TEST	0.000	10:35

Average = 0.3079
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 11/24/2014
Time: 11:48:44

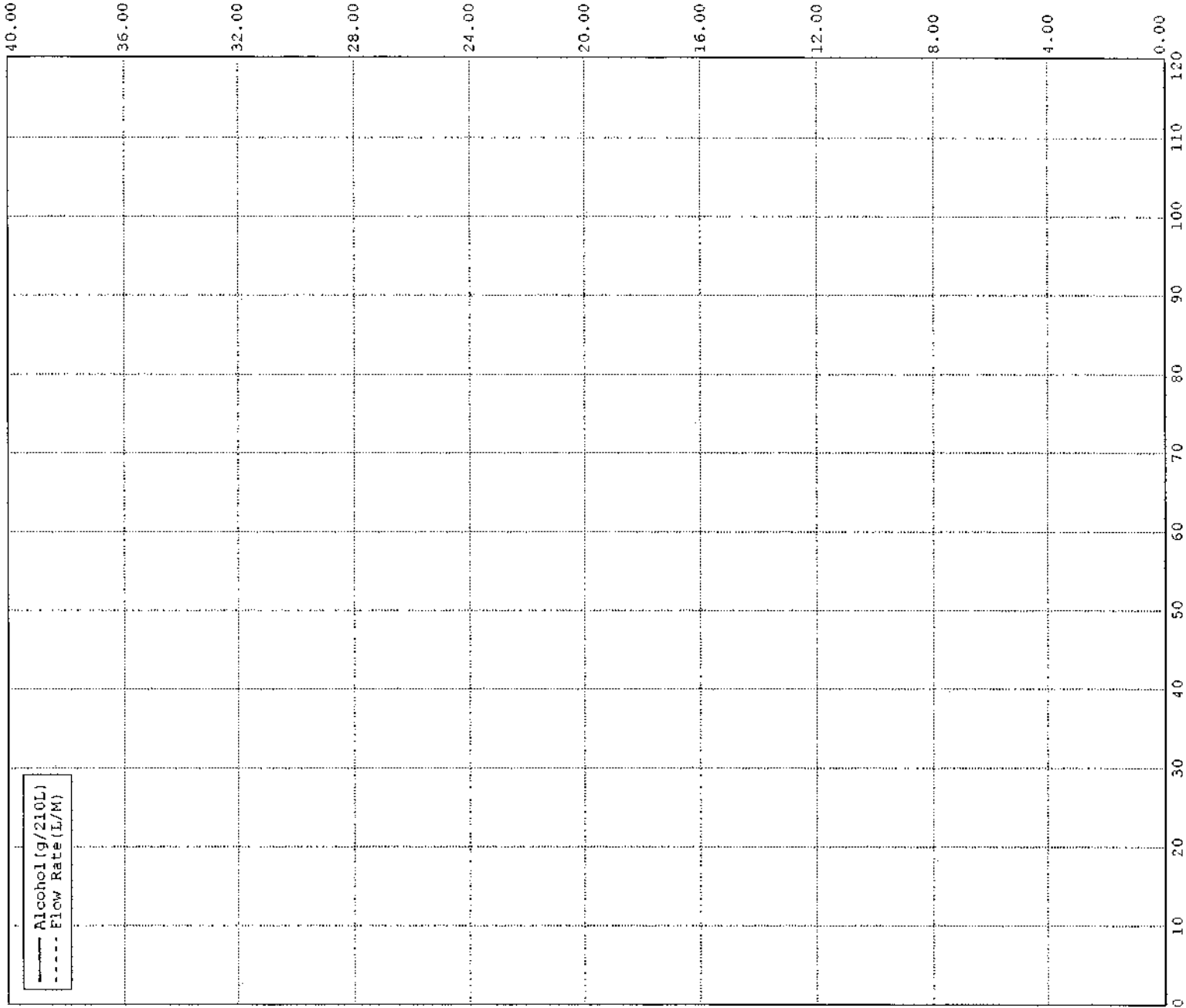
SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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 29.48: 0.078
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 11:51
BLANK TEST 0.000 11:51
INTERNAL STANDARD VERIFIED 11:51
EXTERNAL STANDARD 0.078 11:51
BLANK TEST 0.000 11:52
SUBJECT SAMPLE INCOMPLETE 11:54



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100690

Date: 11/25/2014
Time: 09:28:01

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

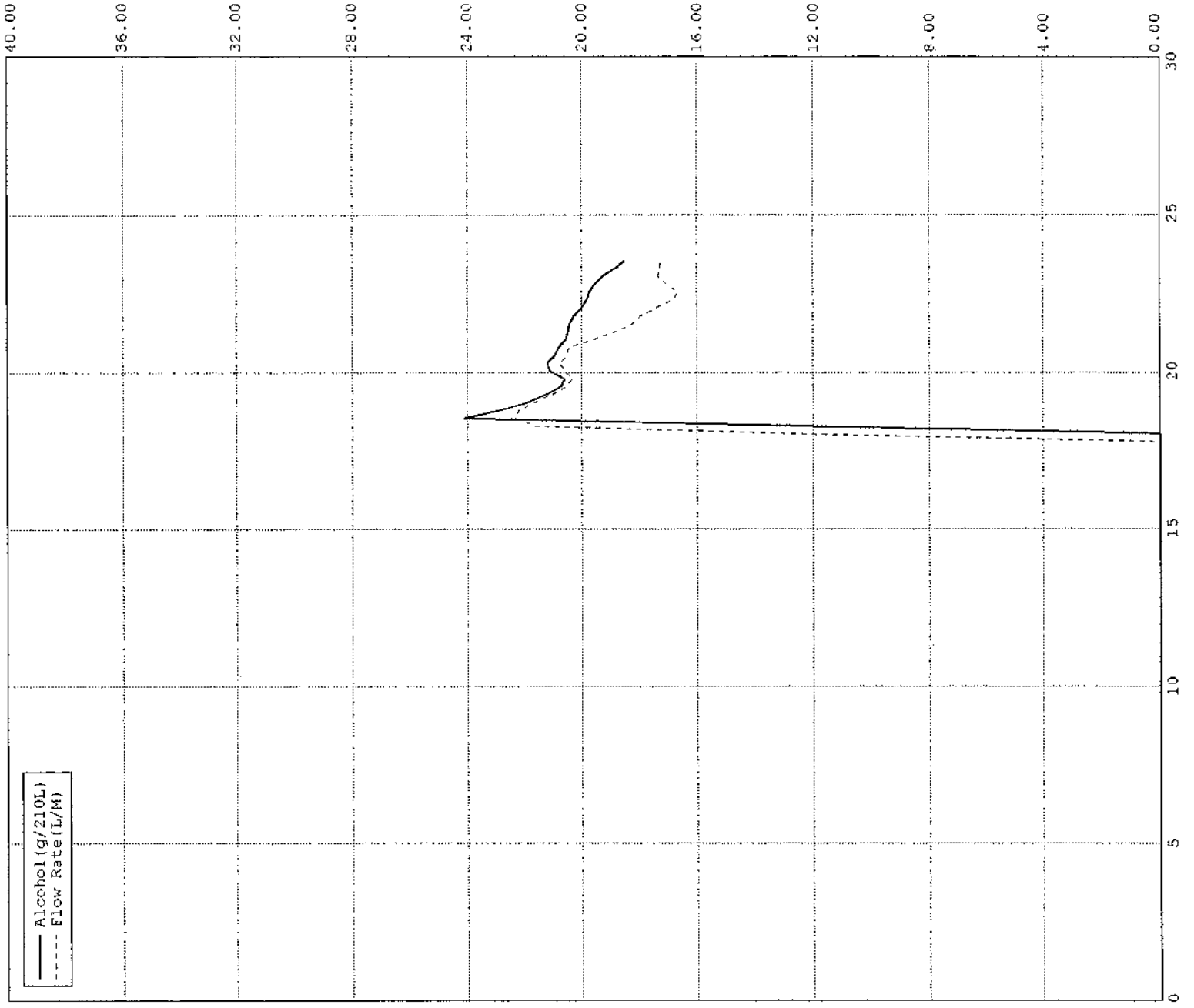
OPERATOR NAME:
COLLEEN S OBRVANT
OPERATOR'S #: 6237

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	09:29
BLANK TEST	0.000	09:29
INTERNAL STANDARD	VERIFIED	09:29
EXTERNAL STANDARD	0.080	09:30
BLANK TEST	0.000	09:31
SUBJECT SAMPLE	INVALID	09:32



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 11/25/2014
Time: 09:42:24

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

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

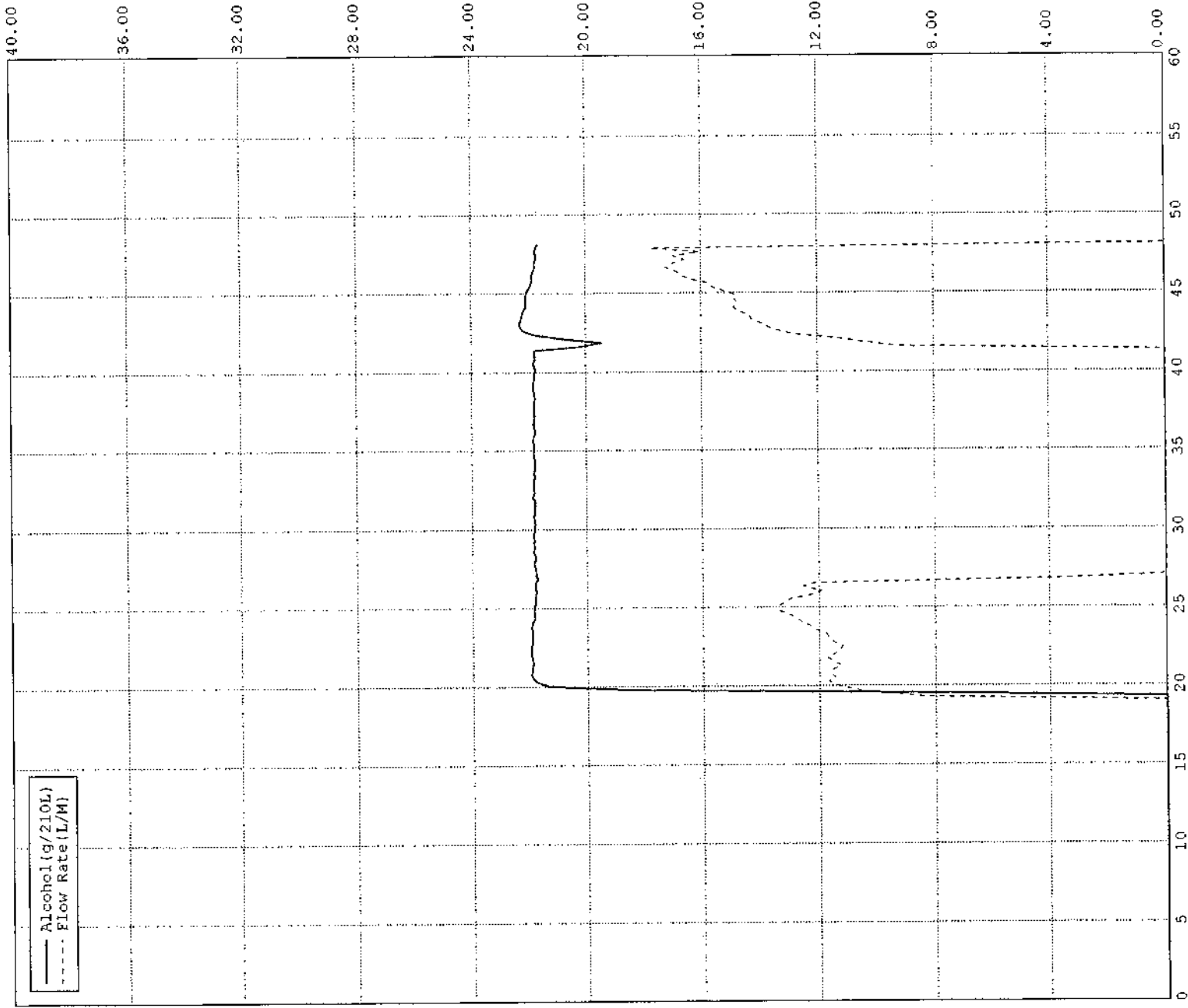
DEPT/AGENCY:
AAA1

CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	09:44
BLANK TEST	0.000	09:44
INTERNAL STANDARD	VERIFIED	09:44
Xq = 0.102 (0.52%)		
EXTERNAL STANDARD	0.080	09:44
X[1] = 0.0805 (-0.0013) (0.0035)		
BLANK TEST	0.000	09:45
SUBJECT SAMPLE	INTERFERENCE	09:46
X[1] = 0.1086 (-0.0221) (-0.0004)		



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100690

Date: 11/25/2014
Time: 09:49:34

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

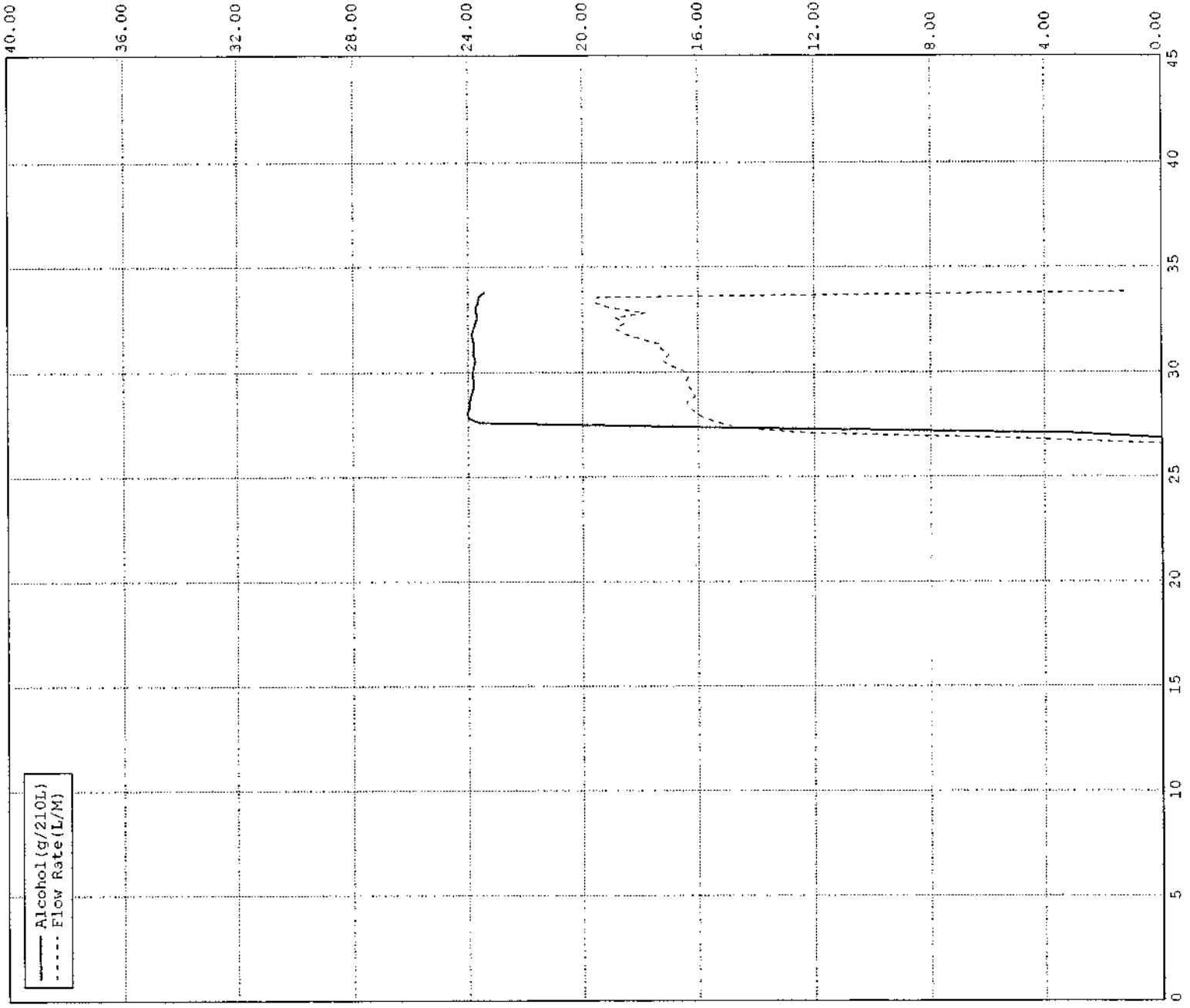
DEPT/AGENCY:
AAA1

CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.90: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 09:50
BLANK TEST 0.000 09:50
INTERNAL STANDARD VERIFIED 09:50
Xg = 0.101 (0.86%)
EXTERNAL STANDARD 0.080 09:51
X[I] = 0.0802 (-0.0014) (0.0032)
BLANK TEST 0.000 09:51
SUBJECT SAMPLE INTERFERENCE 09:52
X[I] = 0.1181 (-0.0203) (0.0015)



SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER chmt: 100690

Date: 11/25/2014
 Time: 09:55:57

SUBJECT NAME:
 TEST TEST
 LICENSE #: INT-NEGATIVE

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

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

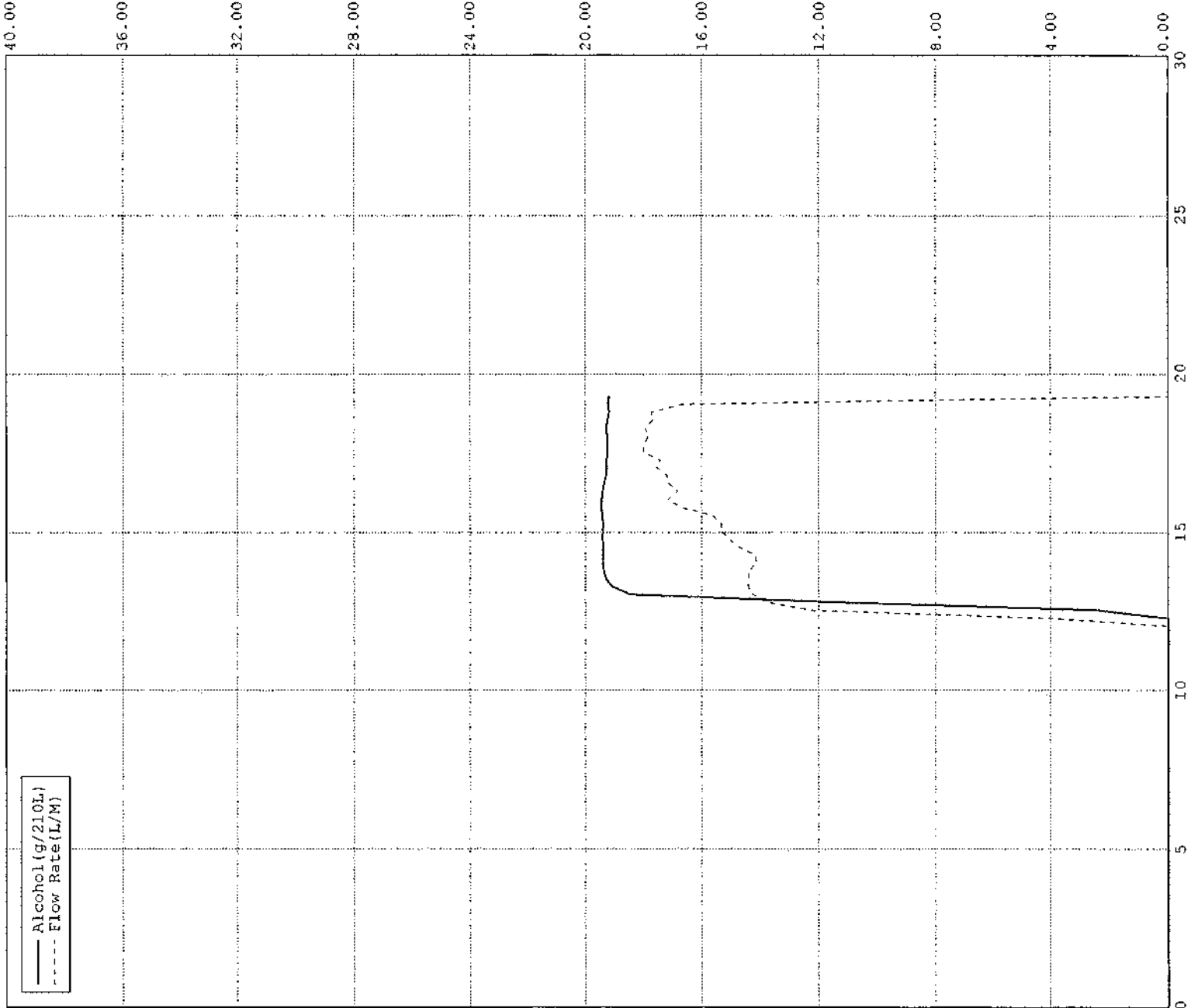
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.92: 0.079
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	09:57
BLANK TEST	0.000	09:57
INTERNAL STANDARD	VERIFIED	09:57
$\bar{x}_q = 0.101$ (1.03%)		
EXTERNAL STANDARD	0.080	09:57
$X[1] = 0.0800$ (-0.0022) (0.0033)		
BLANK TEST	0.000	09:58
SUBJECT SAMPLE (Vol=1.82L)	0.096	09:59
$X[1] = 0.0967$ (-0.0013) (0.0004)		
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.080	10:00
$X[1] = 0.0803$ (-0.0015) (0.0031)		
BLANK TEST	0.000	10:01

Filter 2 avg -0.0016

Filter 3 avg 0.0003



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100690

Date: 11/25/2014
Time: 10:08:48

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

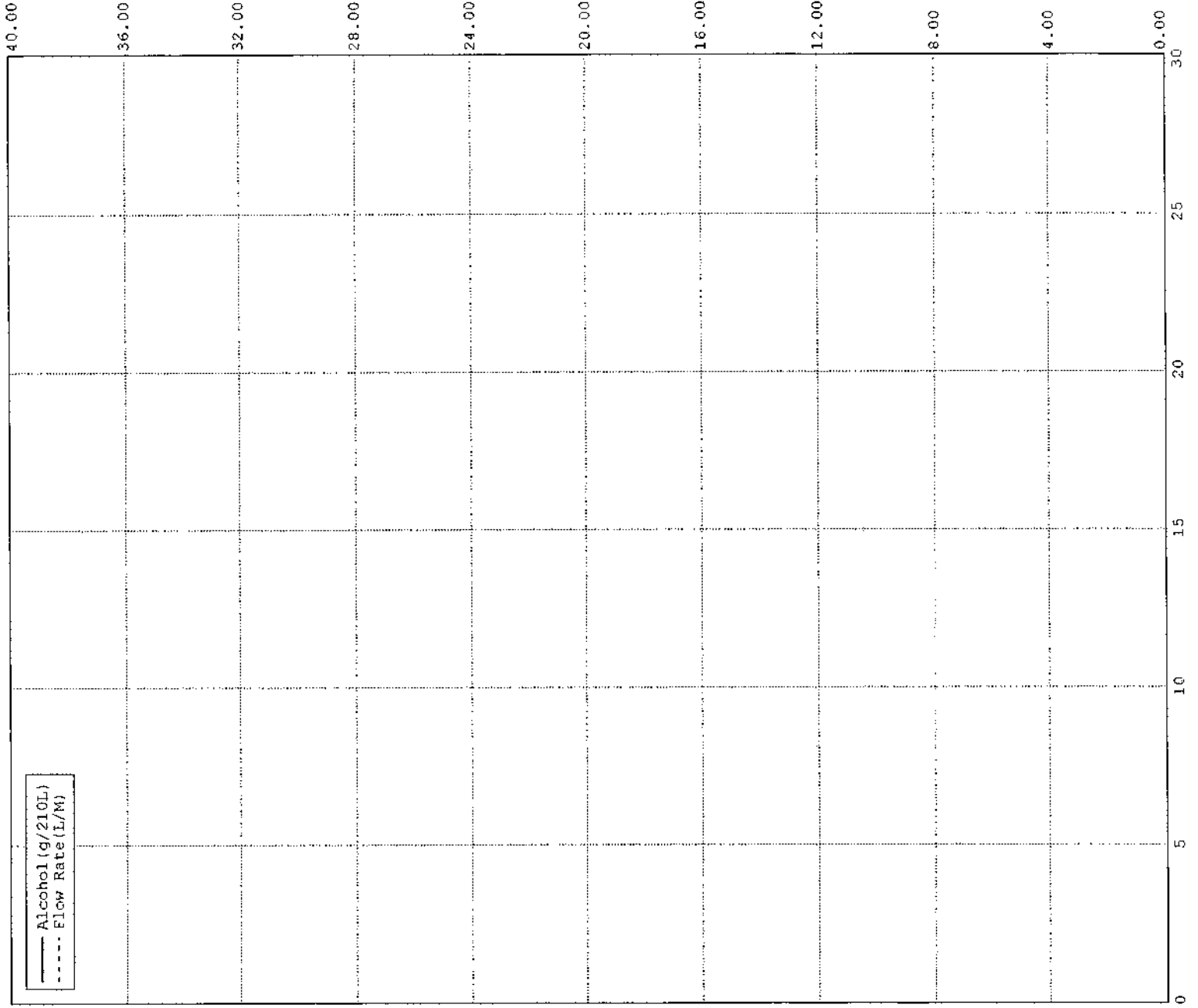
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.92: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 10:10
BLANK TEST 0.000 10:10
INTERNAL STANDARD VERIFIED 10:10
EXTERNAL STANDARD 0.080 10:10
BLANK TEST 0.000 10:11

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 11/25/2014
Time: 10:36:46

SUBJECT NAME:
TEST TEST
LICENSE #: NONDRINKING

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

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.94: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	10:37
BLANK TEST	0.000	10:38
INTERNAL STANDARD	VERIFIED	10:38
EXTERNAL STANDARD	0.081	10:38
BLANK TEST	0.000	10:39
SUBJECT SAMPLE	0.000	10:39
BLANK TEST	0.000	10:40
EXTERNAL STANDARD	0.081	10:40
BLANK TEST	0.000	10:41

