

## Alaska Scientific Crime Detection Laboratory

## DataMaster Certification Form

Issued: 04/04/2012  
Effective: 04/04/2012

Version: DMCEF2012 R1  
Status: Active

Instrument S/N 100395 Analyst Colleen O'Bryant Start Date 07/23/2012

Diagnostic Test (attached)

## 1. Voltage Checks

a. Adjust voltages, if needed

i. Lamp (2.6V Maximum)

ii. Bias (80V)

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 1600 mL (1.3L to 1.7L)

## 4. Linearity Test (attached)

a. Levels Used

i. 0.020g/210L Mnf I/mo Lot 07611020A5 Exp 03/01/2013

ii. 0.040g/210L Mnf I/mo Lot 07611040A4 Exp 03/01/2013

iii. 0.080g/210L Mnf I/mo Lot 02012080A1 Exp 03/01/2014

iv. 0.100g/210L Mnf I/mo Lot 07611100A3 Exp 03/01/2013

v. 0.200g/210L Mnf Guth Lot 11120 Exp 07/19/2013

1. Simulator S/N SD1198 Date Calibrated 01/10/2012

vi. 0.300g/210L Mnf Guth Lot 11110 Exp 07/13/2013

1. Simulator S/N DR5298 Date Calibrated 9/20/2011

## 5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

i. Acetone - Mnf Guth Lot 11250 Level 0.100 Exp 12/6/2013

1. Simulator S/N SD1199 Date Calibrated 01/10/2012

ii. Isopropanol - Mnf Guth Lot 11100 Level 0.100 Exp 07/06/2013

1. Simulator S/N DR6267 Date Calibrated 01/10/2012

iii. Negative Control - Mnf Guth Lot 11220 Level 0.100 Exp 10/24/2013

1. Simulator S/N SD1202 Date Calibrated 08/17/2011

d. RFI

6. Verify stylus is calibrated

7. Verify card reader is functional

8. Reset Options

9. Clear Memory

10. Verification of Calibration

11. Non-Drinking Subject Test (attached)

12. Upload

13. Update agency information and polling status in DM Host Calling Program

End Date 07/25/12

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100395  
-----

Date: 07/23/2012  
Time: 09:32:45

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 = 4.933 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

*08/19*

Technician Screen

-----  
DATAMASTER dmt: 100395  
-----

Date: 07/25/2012  
Time: 6:44 AM

Temperatures (°C)

Sample Cell: 49.5°C  
Breath Tube: 48.0°C

Current Barometer 30.2 in  
Volume (Ltr) 1.42

Settings

Lamp: 1.83 V  
Bias: 80 V  
Cooler: 1.55 V  
Chopper: 532 Hz

Voltages (V)

Flow: 1.05 V  
Detector: 0.033 V

003/19



CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100395  
-----

Date: 04/28/2011  
Time: 15:12:14

Ca = 0.1000  
CAL = 1.002719    0.800 <= CAL < 1.200  
b1 = 0.0000    0.0000 <= b1 < 0.0040  
b2 = 0.0043    0.0010 <= b2 < 0.0100  
b3 = 0.0000    0.0000 <= b3 < 0.0040  
Xq = 0.0850    0.0500 <= Xq < 0.2000  
a21 = 1.178293    1.050 <= a21 < 1.300  
a31 = 0.368084    0.300 <= a31 < 0.800

0034/19



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmc: 100395

Date: 07/25/2012  
Time: 06:45:56

SUBJECT NAME:  
TEST TEST  
LICENSE #: VOLUME TEST

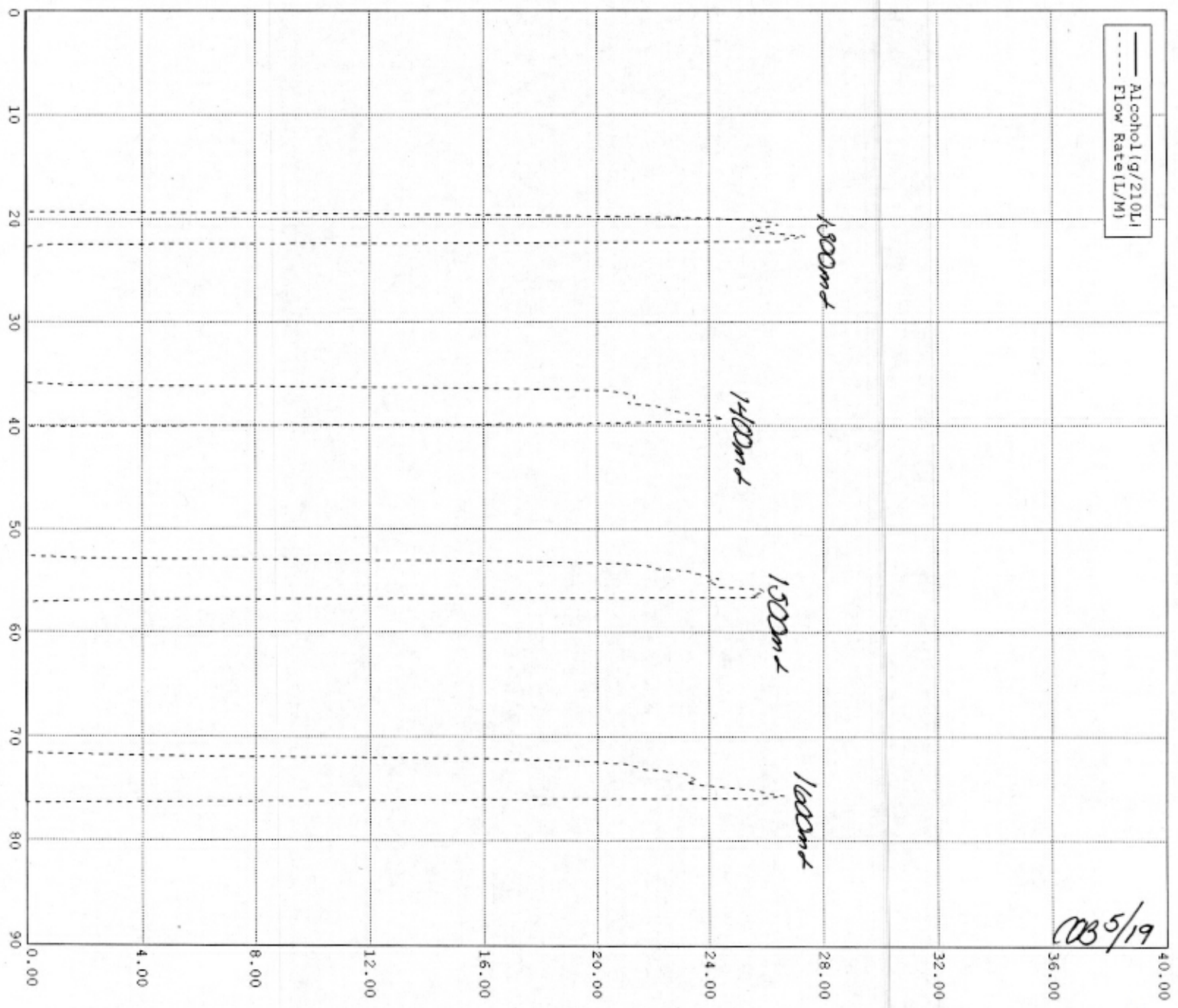
OPERATOR NAME:  
COLLEEN S OBRVANT  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAAI  
CASE/REPORT: 12-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.15: 0.080  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	06:47
BLANK TEST	0.000	06:47
INTERNAL STANDARD	VERIFIED	06:47
EXTERNAL STANDARD	0.080	06:47
BLANK TEST	0.000	06:48
SUBJECT SAMPLE	0.000	06:49
BLANK TEST	0.000	06:50
EXTERNAL STANDARD	0.081	06:50
BLANK TEST	0.000	06:51

C03



LINEARITY CHECK

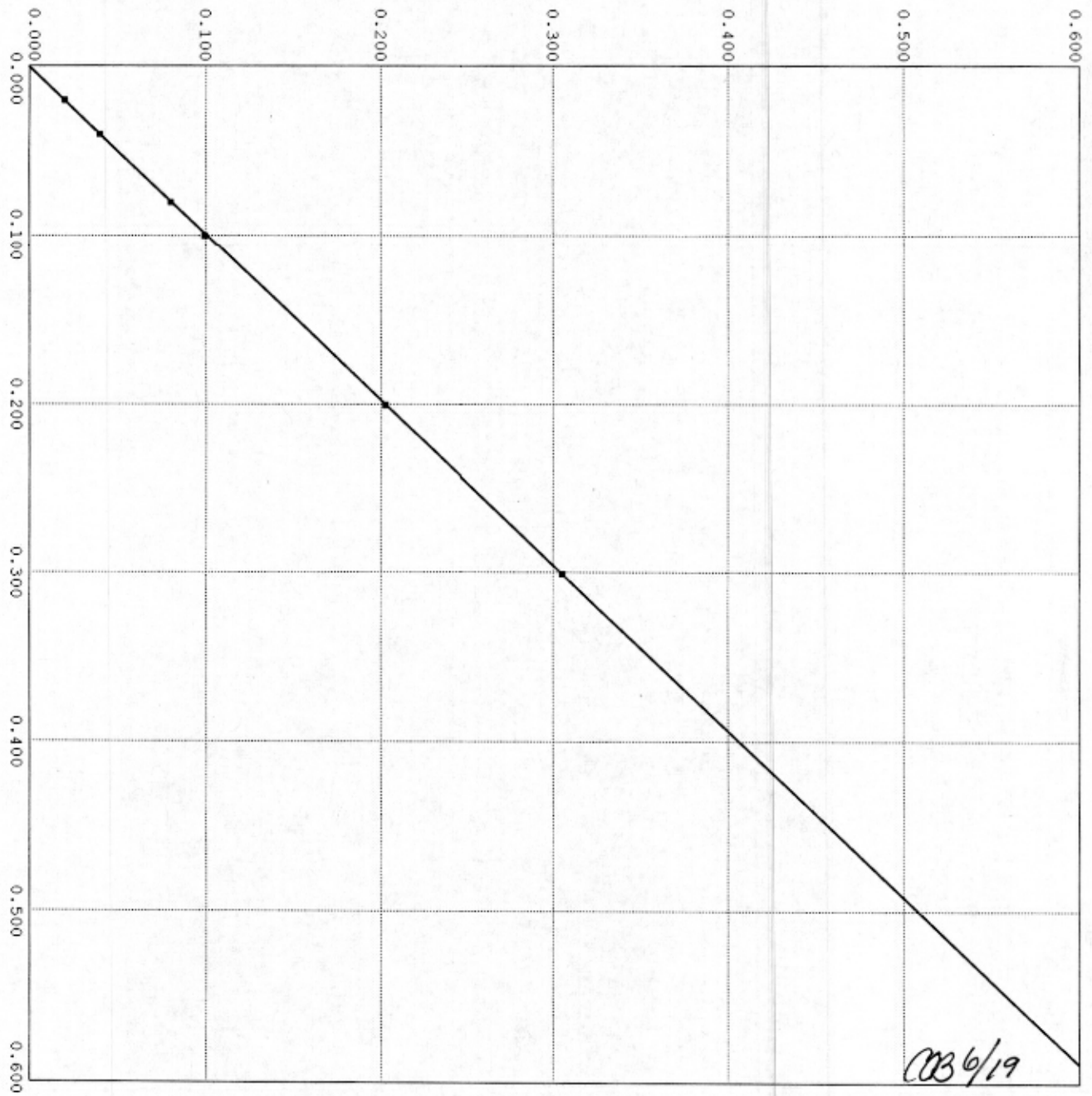
Alaska Department of Public Safety  
DATAMASTER dmt: 100395

Date: 07/25/2012  
Time: 07:08:16

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0206	0.0003
0.040	0.0407	0.0003
0.080	0.0811	0.0003
0.100	0.1004	0.0002
0.200	0.2034	0.0008
0.300	0.3060	0.0003

SLOPE = 1.020257  
R<sup>2</sup> = 0.999963



CS

CS 6/19



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
DATAMASTER dmt: 100395

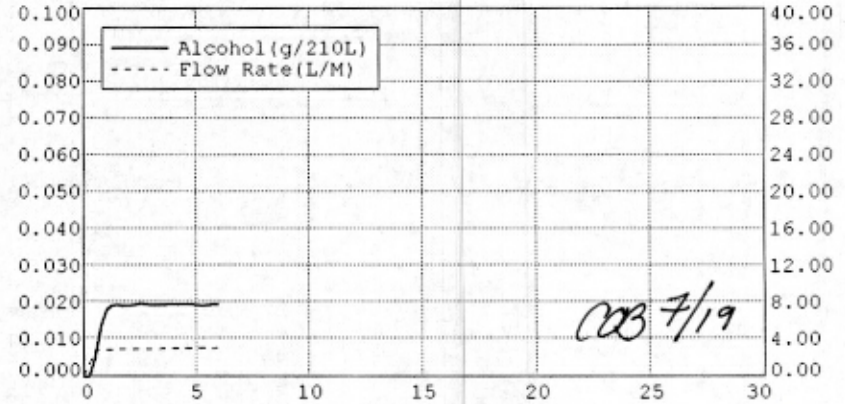
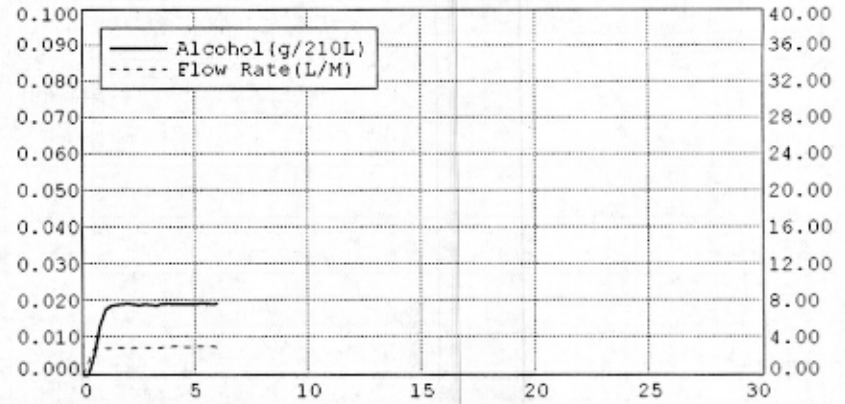
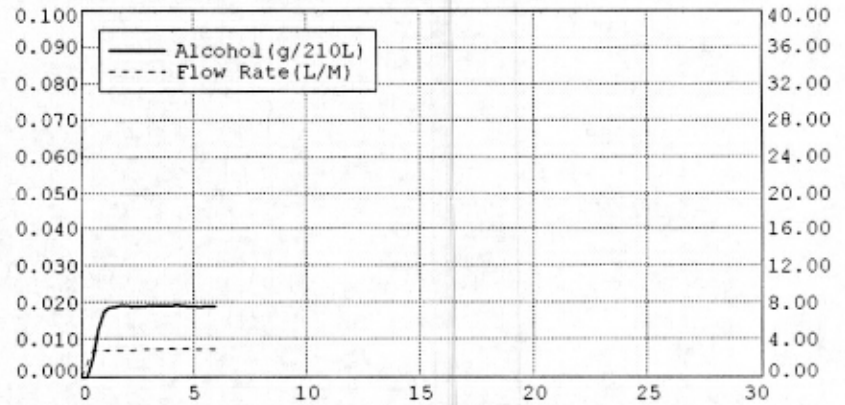
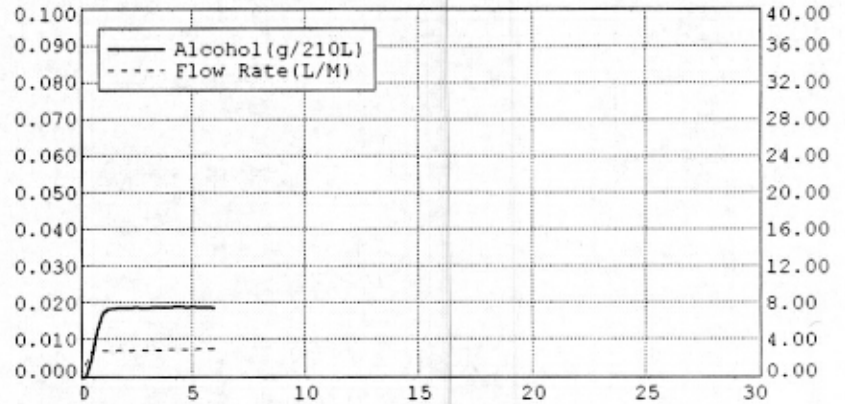
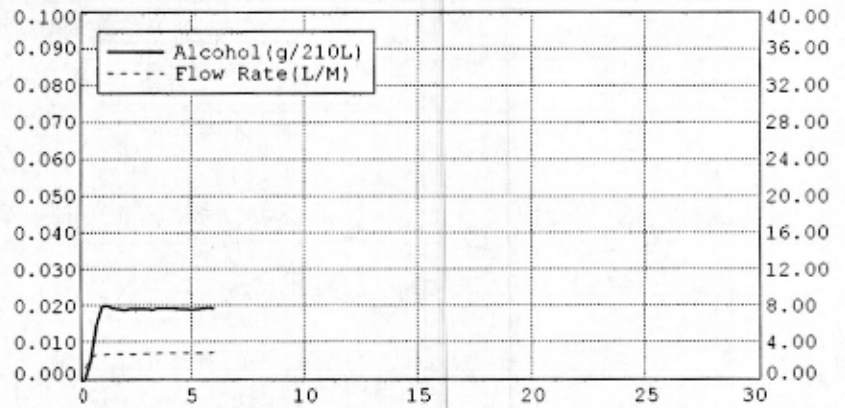
Date: 07/25/2012  
Time: 07:08:18

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
TARGET AT 30.15: 0.020  
LOT #: 07611020A5  
EXPIRATION: 03/01/2013

BLANK TEST	0.000	07:15
INTERNAL STANDARD	VERIFIED	07:16
EXTERNAL STANDARD	0.020	07:16
BLANK TEST	0.000	07:17
EXTERNAL STANDARD	0.020	07:17
BLANK TEST	0.000	07:18
EXTERNAL STANDARD	0.020	07:18
BLANK TEST	0.000	07:19
EXTERNAL STANDARD	0.020	07:19
BLANK TEST	0.000	07:20
EXTERNAL STANDARD	0.020	07:20
BLANK TEST	0.000	07:21

Average = 0.0206  
Std Dev = 0.0003





LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
DATAMASTER dmt: 100395

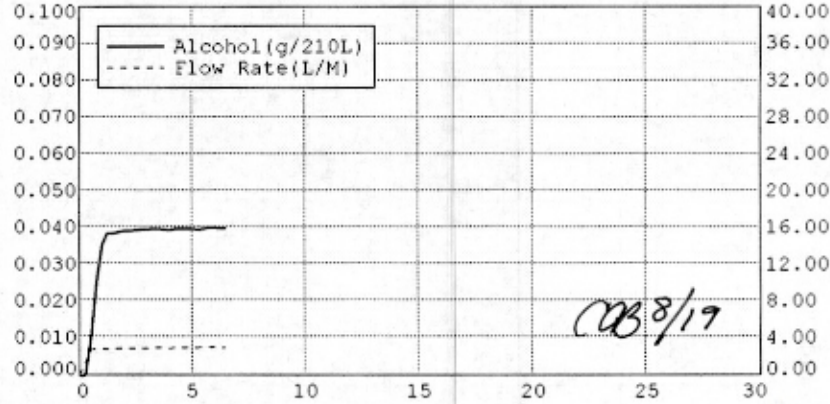
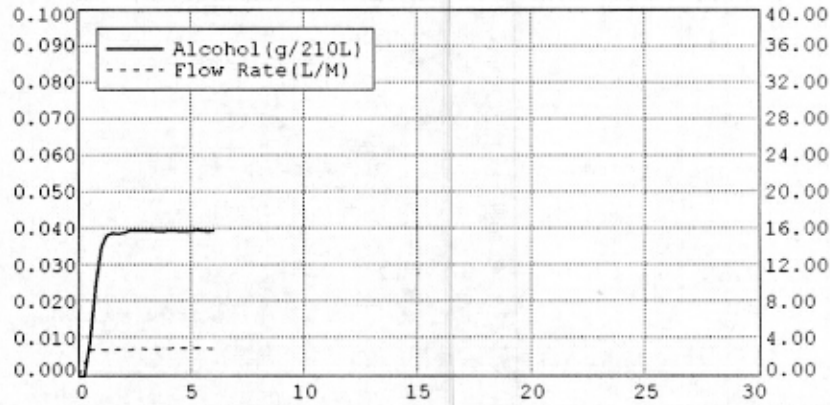
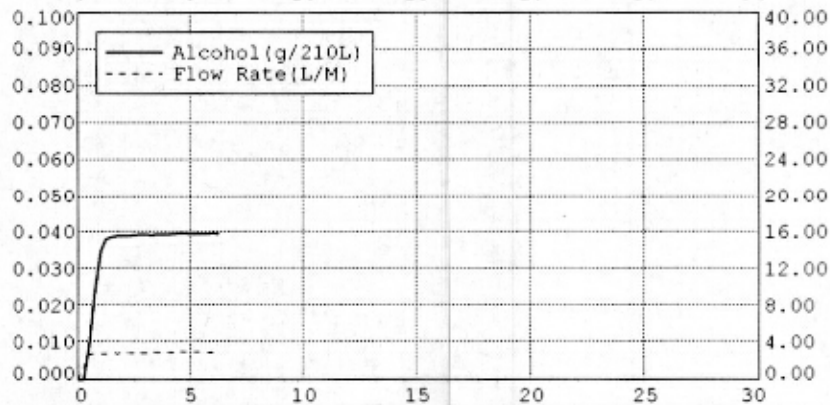
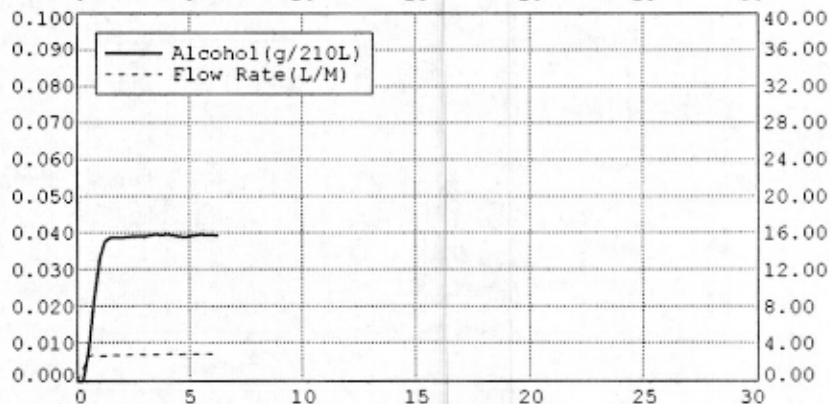
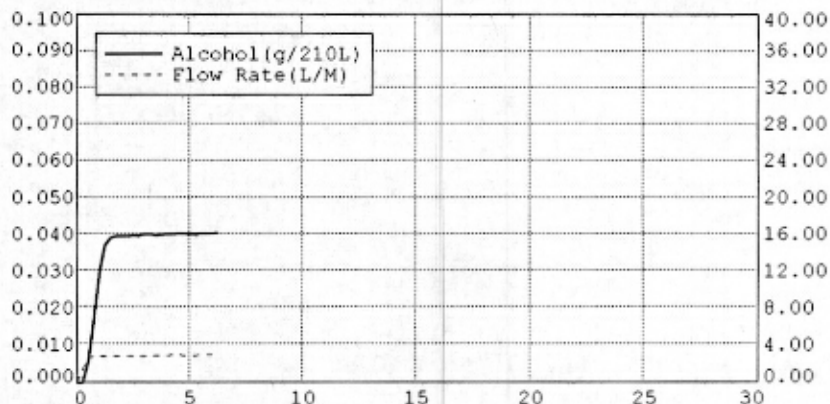
Date: 07/25/2012  
Time: 07:22:11

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
TARGET AT 30.14: 0.040  
LOT #: 07611040A4  
EXPIRATION: 03/01/2013

BLANK TEST	0.000	07:24
INTERNAL STANDARD	VERIFIED	07:25
EXTERNAL STANDARD	0.041	07:25
BLANK TEST	0.000	07:26
EXTERNAL STANDARD	0.040	07:26
BLANK TEST	0.000	07:27
EXTERNAL STANDARD	0.040	07:27
BLANK TEST	0.000	07:28
EXTERNAL STANDARD	0.040	07:28
BLANK TEST	0.000	07:29
EXTERNAL STANDARD	0.040	07:29
BLANK TEST	0.000	07:30

Average = 0.0407  
Std Dev = 0.0003



LINEARITY CHECK: Control Test 3

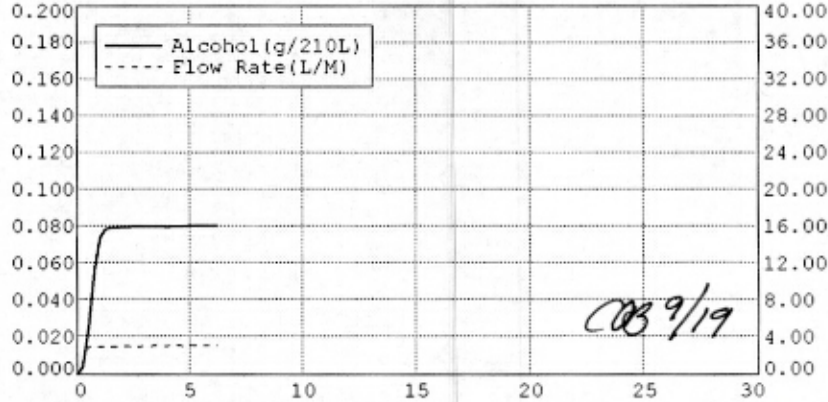
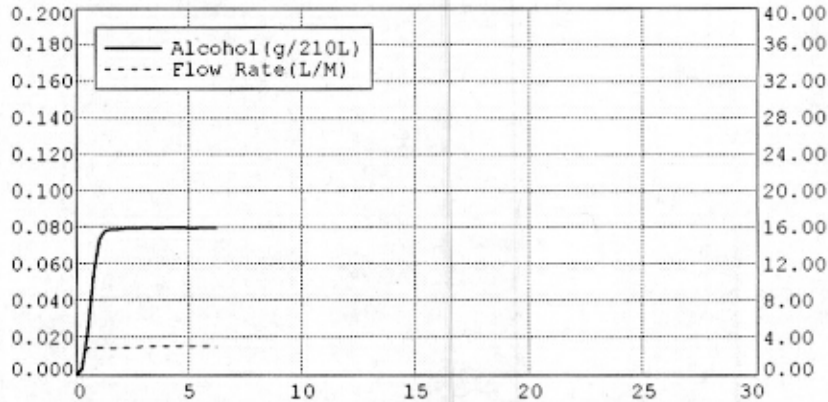
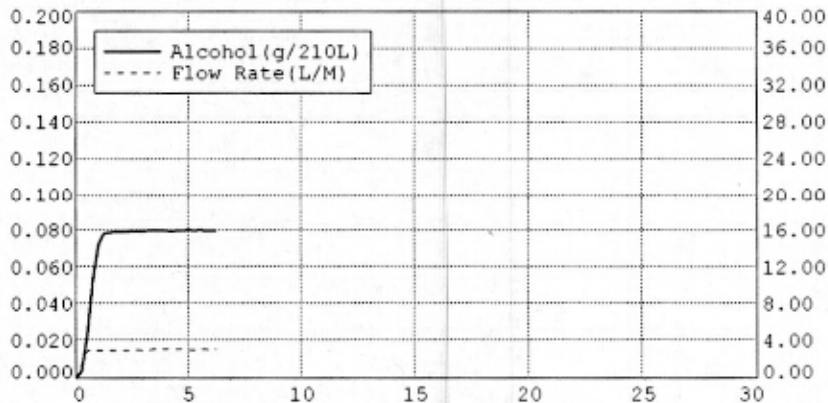
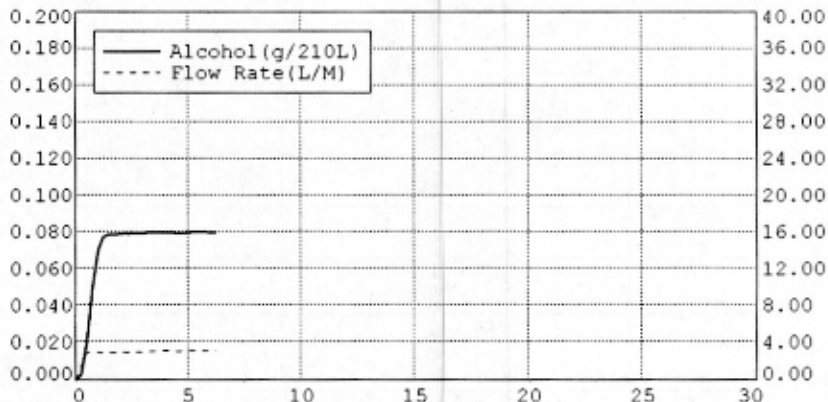
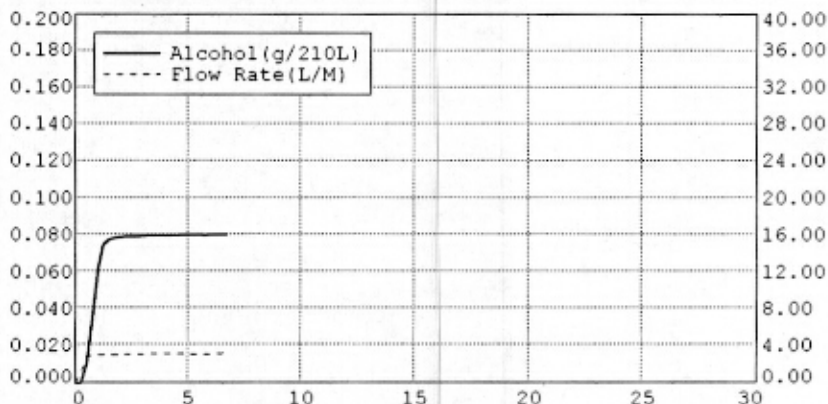
Alaska Department of Public Safety  
DATAMASTER dmt: 100395

Date: 07/25/2012  
Time: 07:31:44

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.14: 0.080  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

BLANK TEST	0.000	07:33
INTERNAL STANDARD	VERIFIED	07:34
EXTERNAL STANDARD	0.081	07:34
BLANK TEST	0.000	07:35
EXTERNAL STANDARD	0.080	07:35
BLANK TEST	0.000	07:36
EXTERNAL STANDARD	0.081	07:36
BLANK TEST	0.000	07:37
EXTERNAL STANDARD	0.081	07:37
BLANK TEST	0.000	07:38
EXTERNAL STANDARD	0.081	07:38
BLANK TEST	0.000	07:39

Average = 0.0811  
Std Dev = 0.0003





LINEARITY CHECK: Control Test 4

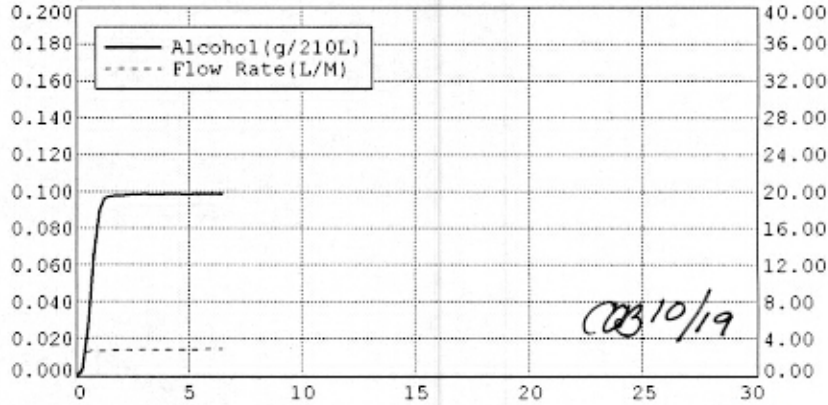
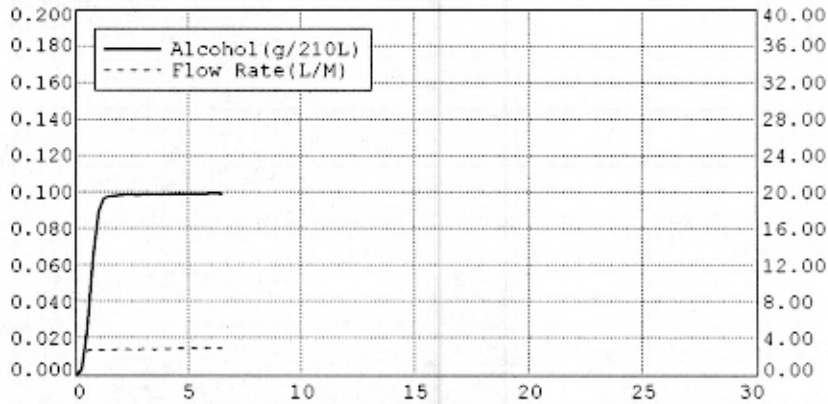
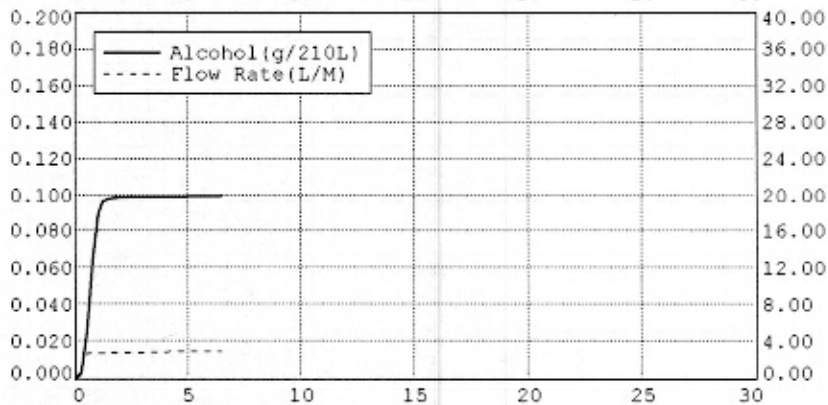
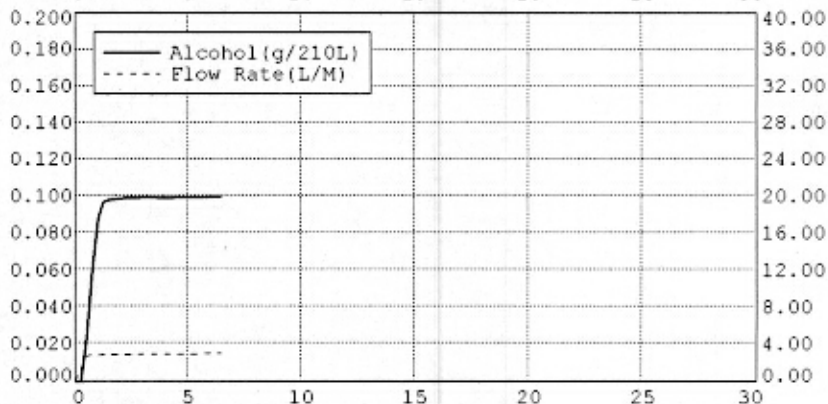
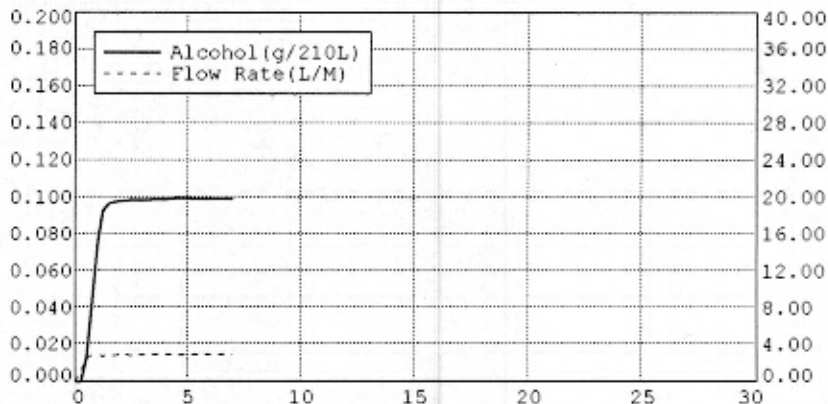
Alaska Department of Public Safety  
DATAMASTER dmt: 100395

Date: 07/25/2012  
Time: 07:42:34

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.100  
TARGET AT 30.14: 0.100  
LOT #: 07611100A3  
EXPIRATION: 03/01/2013

BLANK TEST	0.000	07:48
INTERNAL STANDARD	VERIFIED	07:48
EXTERNAL STANDARD	0.100	07:48
BLANK TEST	0.000	07:49
EXTERNAL STANDARD	0.100	07:49
BLANK TEST	0.000	07:50
EXTERNAL STANDARD	0.100	07:50
BLANK TEST	0.000	07:51
EXTERNAL STANDARD	0.100	07:51
BLANK TEST	0.000	07:52
EXTERNAL STANDARD	0.100	07:52
BLANK TEST	0.000	07:53

Average = 0.1004  
Std Dev = 0.0002





LINEARITY CHECK: Control Test 5

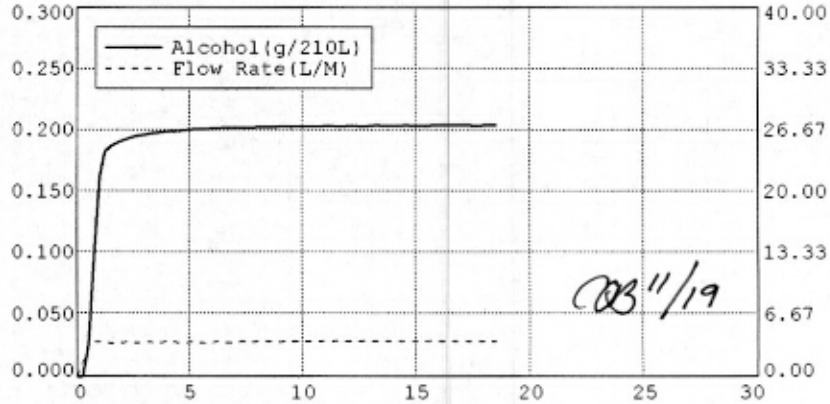
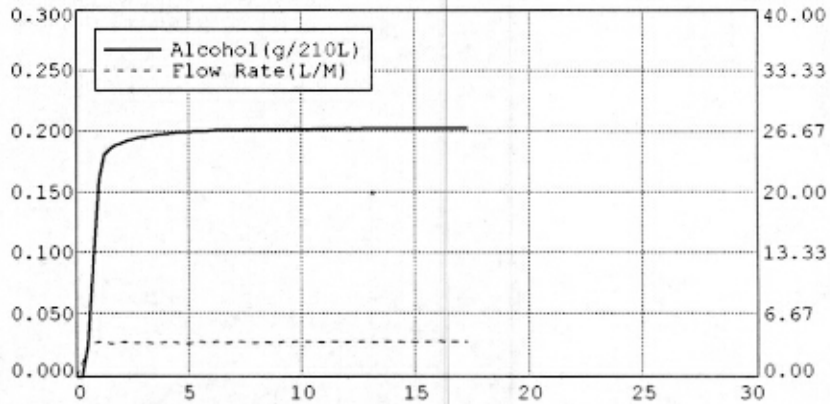
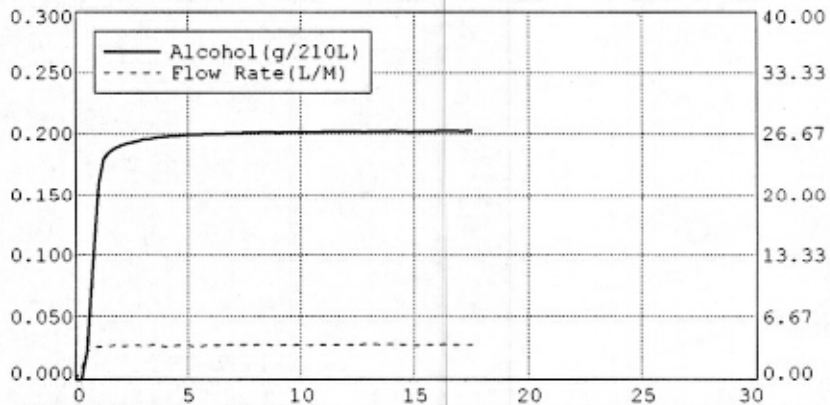
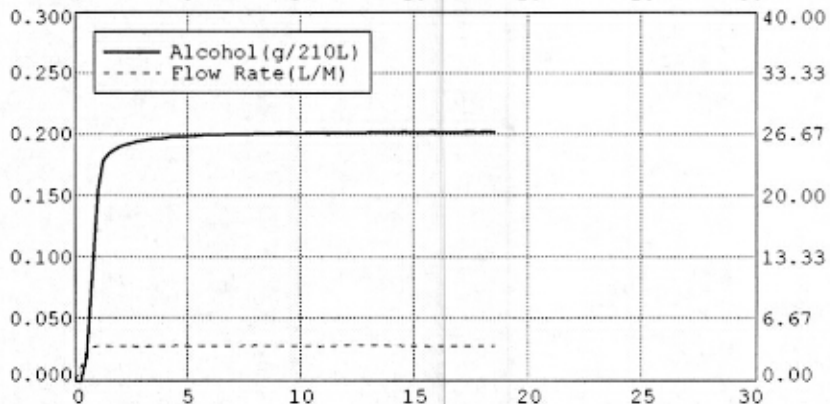
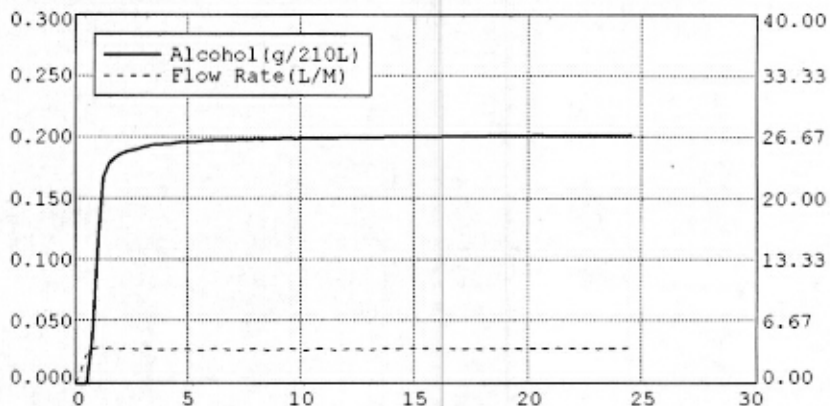
Alaska Department of Public Safety  
 DATAMASTER dmt: 100395

Date: 07/25/2012  
 Time: 07:56:44

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.200  
 LOT #: 11120  
 EXPIRATION: 07/19/2013

BLANK TEST	0.000	08:00
INTERNAL STANDARD	VERIFIED	08:00
EXTERNAL STANDARD	0.202	08:01
BLANK TEST	0.000	08:02
EXTERNAL STANDARD	0.202	08:02
BLANK TEST	0.000	08:03
EXTERNAL STANDARD	0.203	08:03
BLANK TEST	0.000	08:04
EXTERNAL STANDARD	0.204	08:05
BLANK TEST	0.000	08:06
EXTERNAL STANDARD	0.204	08:06
BLANK TEST	0.000	08:07

Average = 0.2034  
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 6

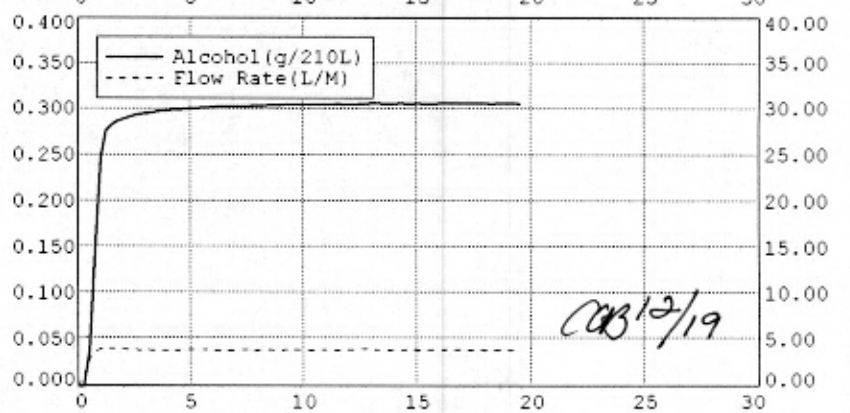
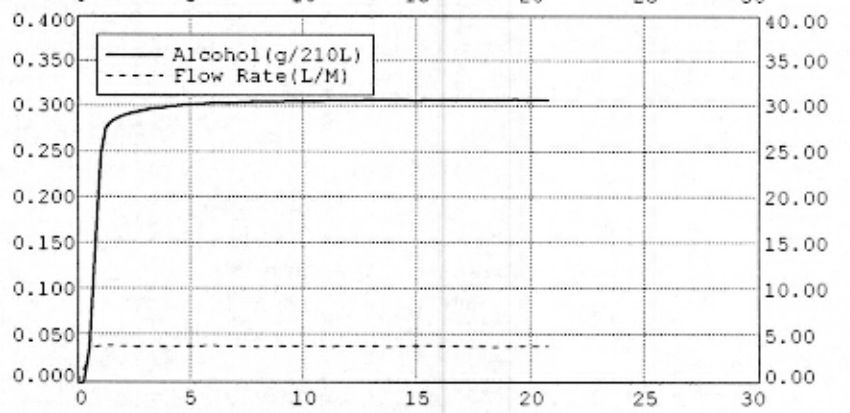
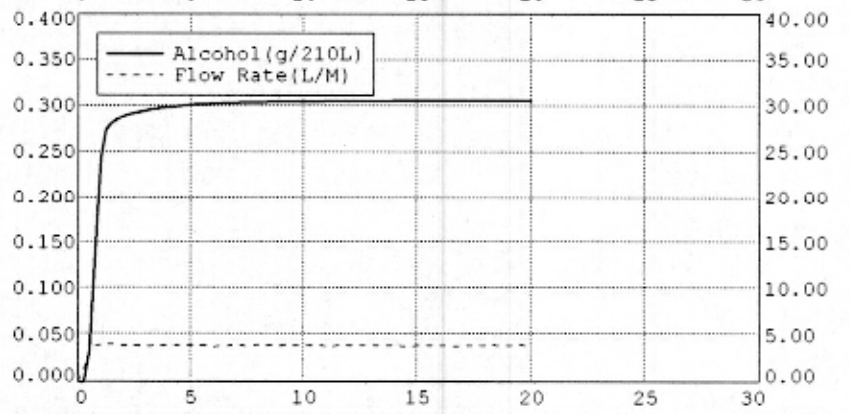
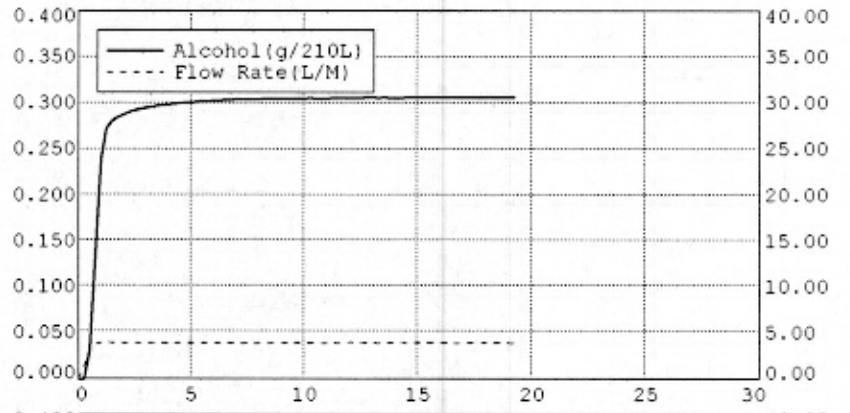
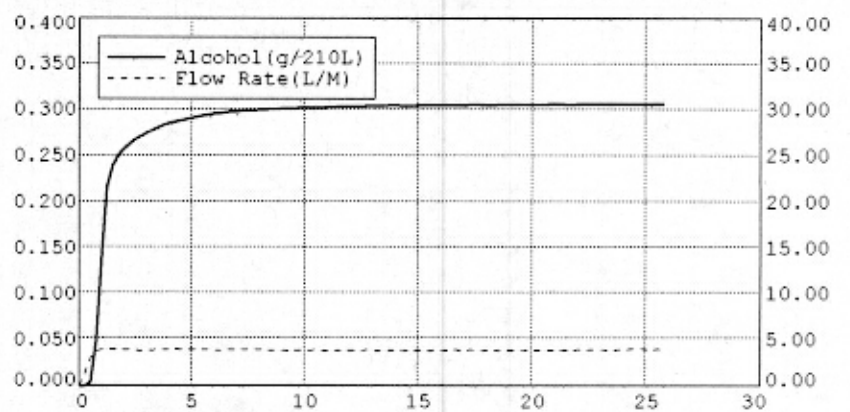
Alaska Department of Public Safety  
DATAMASTER dmt: 100395

Date: 07/25/2012  
Time: 08:11:53

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.300  
LOT #: 11110  
EXPIRATION: 07/13/2013

BLANK TEST	0.000	08:13
INTERNAL STANDARD	VERIFIED	08:13
EXTERNAL STANDARD	0.305	08:14
BLANK TEST	0.000	08:15
EXTERNAL STANDARD	0.306	08:15
BLANK TEST	0.000	08:16
EXTERNAL STANDARD	0.306	08:17
BLANK TEST	0.000	08:18
EXTERNAL STANDARD	0.306	08:18
BLANK TEST	0.000	08:19
EXTERNAL STANDARD	0.305	08:20
BLANK TEST	0.000	08:20

Average = 0.3060  
Std Dev = 0.0003





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100395

Date: 07/25/2012  
Time: 08:26:26

SUBJECT NAME:  
TEST TEST  
LICENSE #: INCOMPLETE

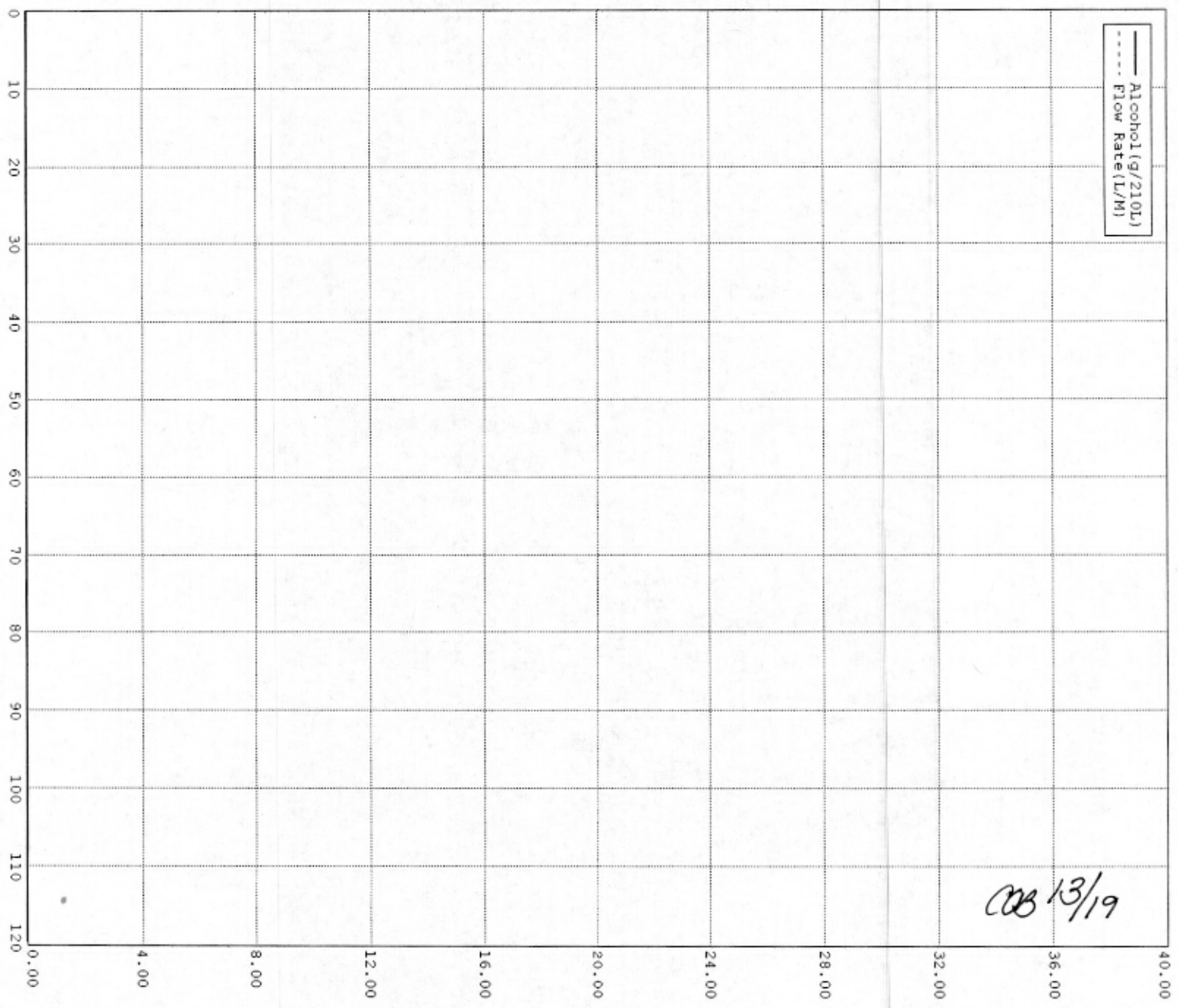
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAAI  
CASE/REPORT: 12-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.14: 0.080  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	09:00
BLANK TEST	0.000	09:00
INTERNAL STANDARD	VERIFIED	09:01
EXTERNAL STANDARD	0.081	09:01
BLANK TEST	0.000	09:02
SUBJECT SAMPLE	INCOMPLETE	09:04

COB





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100395

Date: 07/25/2012  
Time: 09:07:19

SUBJECT NAME:  
TEST TEST  
LICENSE #: INVALID

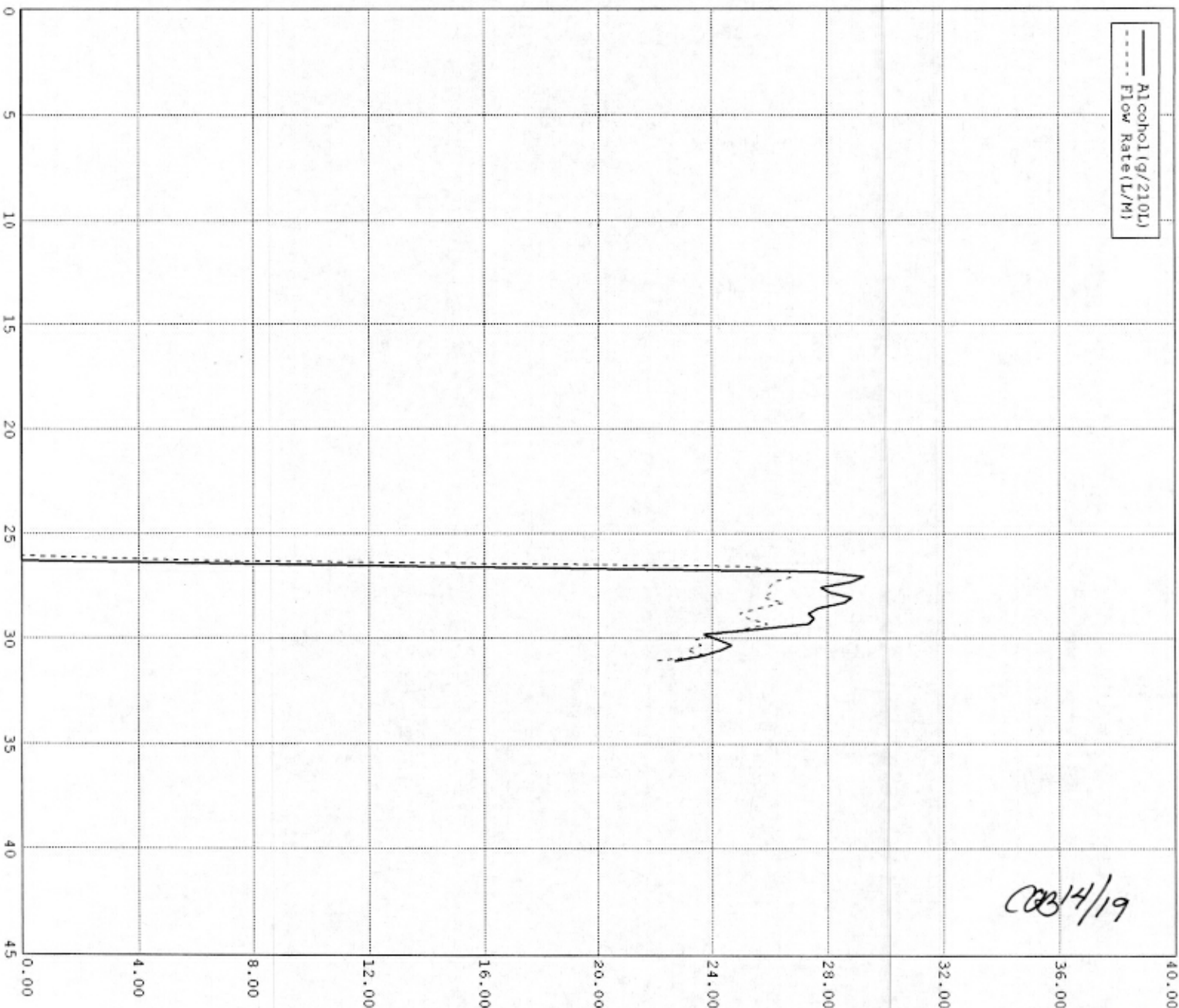
OPERATOR NAME:  
COLLEEN S OBRZYNT  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAAI  
CASE/REPORT: 12-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.14: 0.080  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	09:09
BLANK TEST	0.000	09:09
INTERNAL STANDARD	VERIFIED	09:09
EXTERNAL STANDARD	0.081	09:10
BLANK TEST	0.000	09:11
SUBJECT SAMPLE	INVALID	09:11

CR



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100395

Date: 07/25/2012  
Time: 09:25:12

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-ACETONE

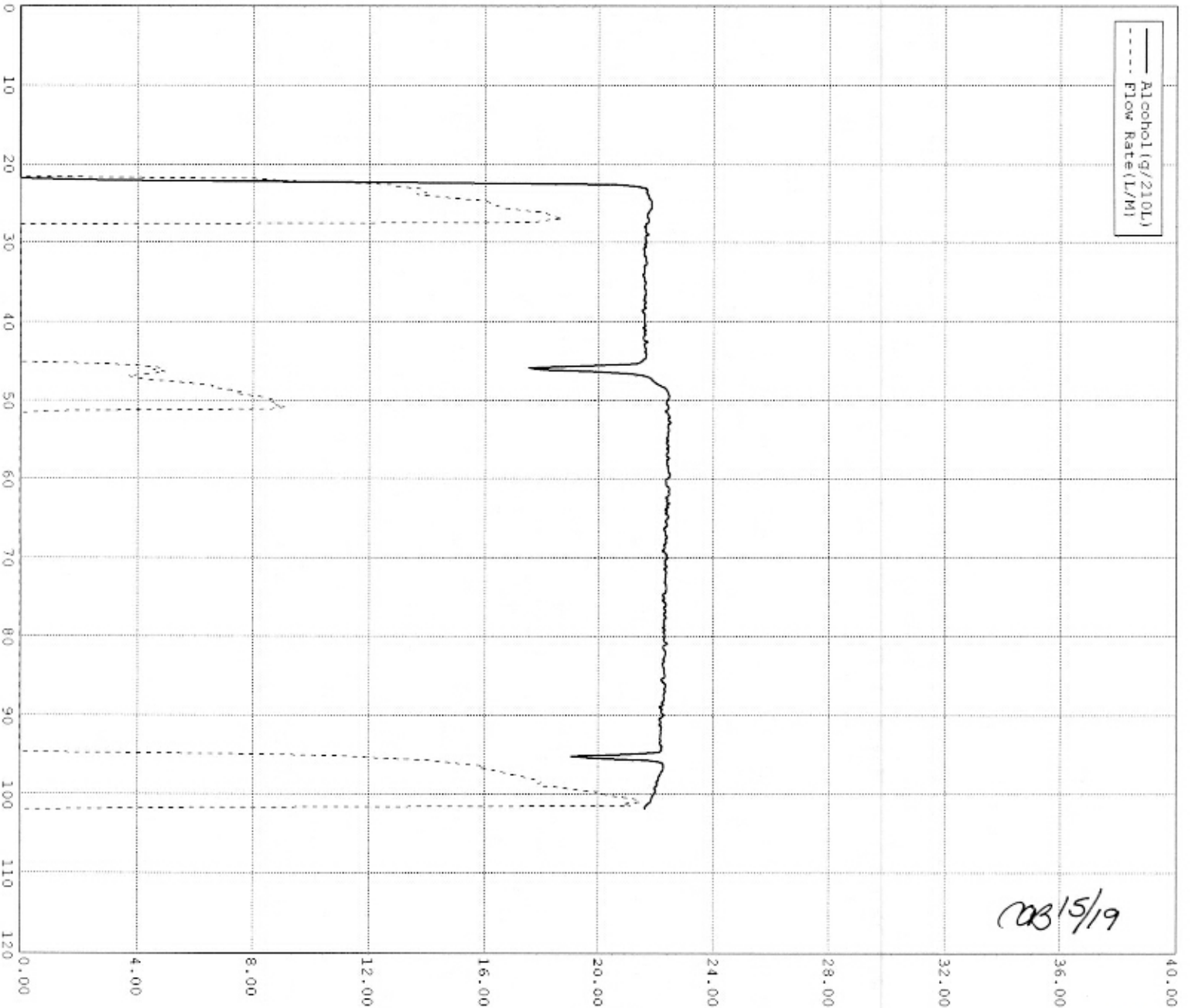
OPERATOR NAME:  
COLIEN S O'BRYANT  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 12-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 30.14: 0.080  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	09:26
BLANK TEST	0.000	09:26
INTERNAL STANDARD	VERIFIED	09:26
Xq = 0.086 (0.72%)		
EXTERNAL STANDARD	0.080	09:27
X[1] = 0.0808 (0.0002) (0.0015)		
BLANK TEST	0.000	09:27
SUBJECT SAMPLE	INTERFERENCE	09:29
X[1] = 0.1079 (-0.0169) (-0.0013)		





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100395

Date: 07/25/2012  
Time: 09:18:30

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT- IPA

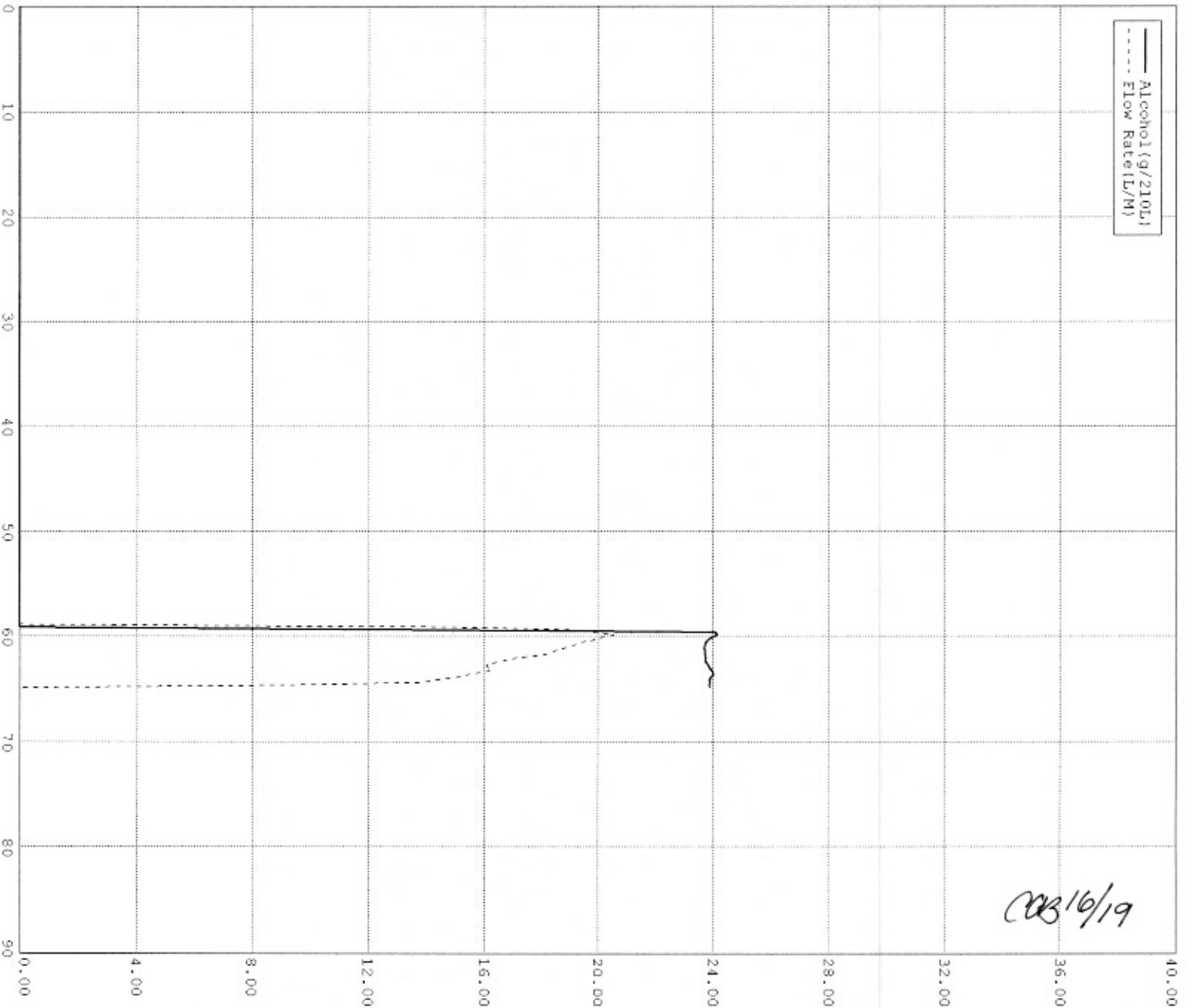
OPERATOR NAME:  
COLLEEN S O'BRYANT  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAA1  
CASE/REPORT: 12-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.14: 0.080  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK PASSED 09:20  
BLANK TEST 0.000 09:20  
INTERNAL STANDARD VERIFIED 09:20  
Xq = 0.085 (0.00%)  
EXTERNAL STANDARD 0.080 09:21  
X[1] = 0.0805 (-0.0001) (0.0021)  
BLANK TEST 0.000 09:22  
SUBJECT SAMPLE INTERFERENCE 09:23  
X[1] = 0.1198 (-0.0254) (0.0002)

CCB



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100395

Date: 07/25/2012  
Time: 09:35:38

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-NEG

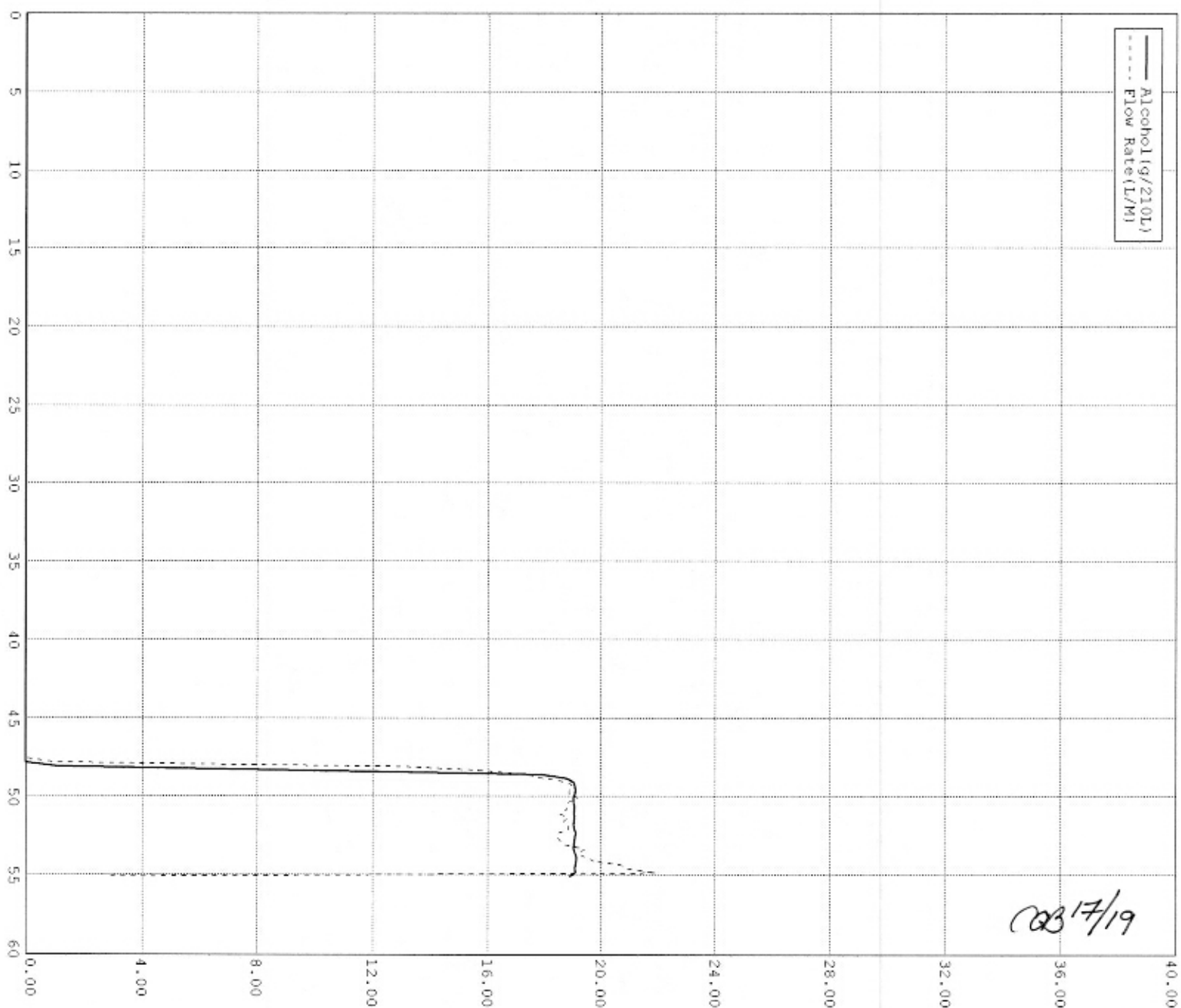
OPERATOR NAME:  
COLLEEN S O'BRYANT  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAAI  
CASE/REPORT: 12-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.14: 0.080  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK PASSED 09:36  
BLANK TEST 0.000 09:36  
INTERNAL STANDARD VERIFIED 09:37  
Xq = 0.086 (0.61%)  
EXTERNAL STANDARD 0.080 09:37  
X[1] = 0.0809 (0.0009) (0.0027)  
BLANK TEST 0.000 09:38  
SUBJECT SAMPLE (Vol=2.18L) 0.094 09:39  
X[1] = 0.0949 (-0.0002) (-0.0009)  
BLANK TEST 0.000 09:40  
EXTERNAL STANDARD 0.081 09:40  
X[1] = 0.0811 (0.0009) (0.0014)  
BLANK TEST 0.000 09:41

*CS*





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100395

Date: 07/25/2012  
Time: 09:48:37

SUBJECT NAME:  
TEST TEST  
LICENSE #: RFI

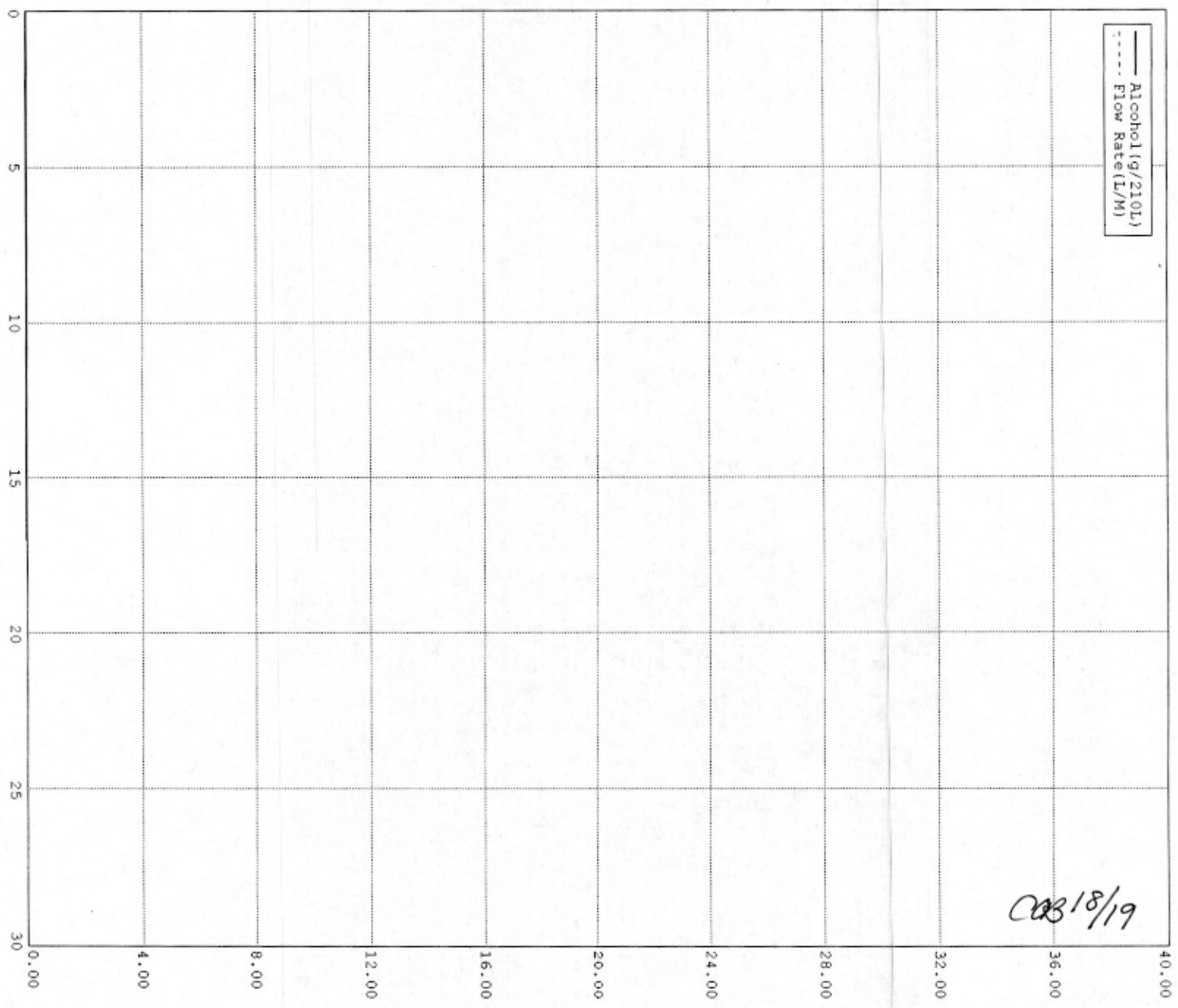
OPERATOR NAME:  
COLLEEN S O'BRYANT  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAAI  
CASE/REPORT: 12-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.14: 0.080  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	10:08
BLANK TEST	0.000	10:08
INTERNAL STANDARD	0.081	10:08
EXTERNAL STANDARD	0.000	10:09

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100395

Date: 07/25/2012  
Time: 10:21:09

SUBJECT NAME:  
TEST TEST  
LICENSE #: NON-DRINKING

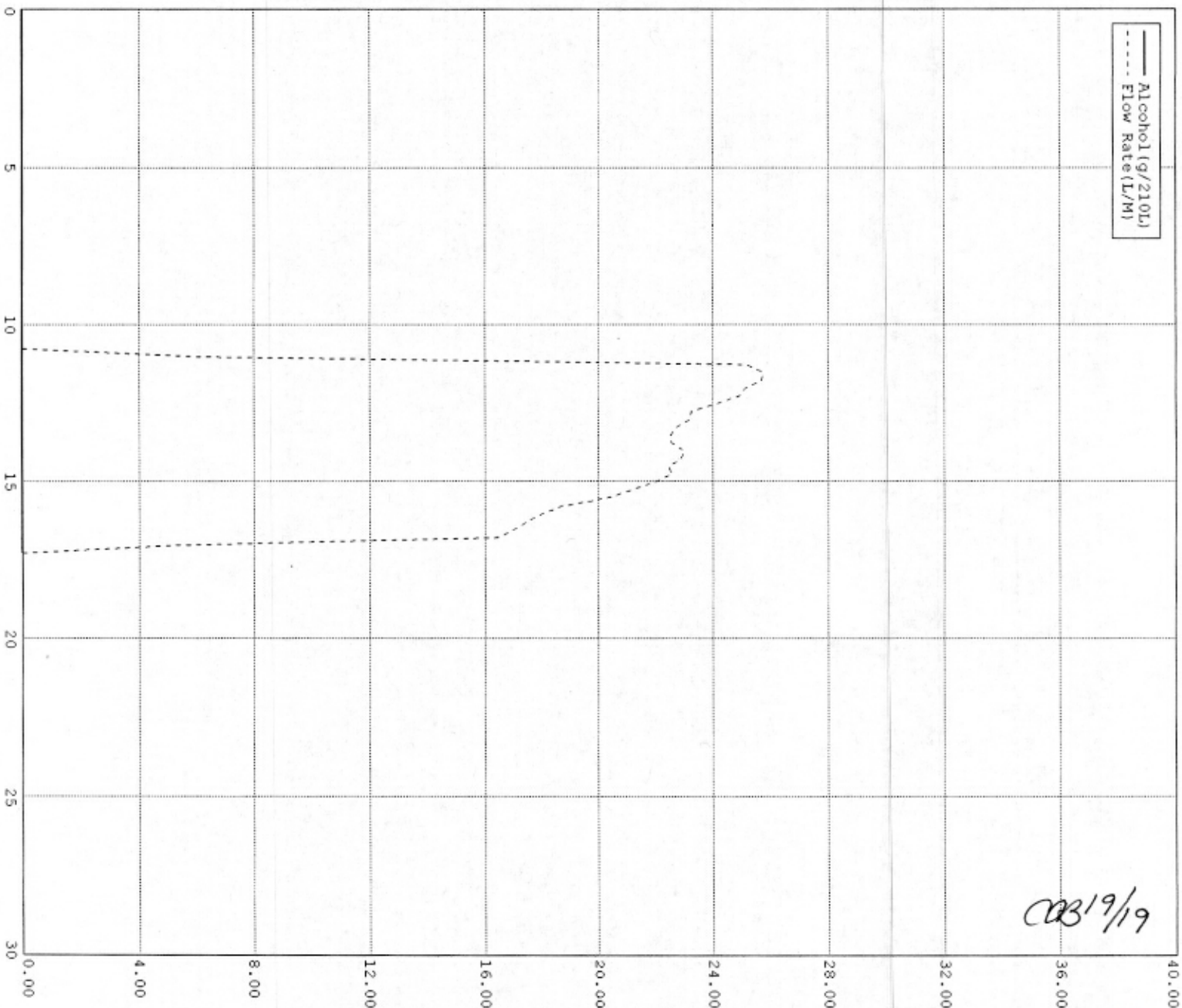
OPERATOR NAME:  
COLLEEN S OBRVANT  
OPERATOR'S #: 6237

DEPT/AGENCY:  
AAAI  
CASE/REPORT: 12-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.14: 0.080  
LOT #: 02012080A1  
EXPIRATION: 03/01/2014

DIAGNOSTIC CHECK	PASSED	10:22
BLANK TEST	0.000	10:22
INTERNAL STANDARD	VERIFIED	10:22
EXTERNAL STANDARD	0.081	10:22
BLANK TEST	0.000	10:23
SUBJECT SAMPLE	0.000	10:23
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.081	10:25
BLANK TEST	0.000	10:25

COB





Final page for report

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2/19/2014